

**Bulfamante Composting Facility
Full Environmental Assessment Form**

Submitted by: Anthony Bulfamante

Submitted to: Town of Amenia

December 2015

Full Environmental Assessment Form
Part 1 - Project and Setting

Instructions for Completing Part 1

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

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

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

A. Project and Sponsor Information.

Name of Action or Project: Bulfamante Composting Facility		
Project Location (describe, and attach a general location map): 3501 State Route 22, Dover Plains, NY 12522 (Location Map Attached)		
Brief Description of Proposed Action (include purpose or need): Two proposed actions are being considered concurrently for this project: 1) Text amendment to Town of Amenia Zoning Code to allow composting on property in Zoning District OC: Office, Commercial, Industry Mixed-Use District. 2) Construction and then operation of a 60,000 "as-is" ton per year yard waste composting facility. It will occupy 12 acres of the lot and use the Aerated Static Pile (ASP) composting method, which uses controlled blowers to deliver air to the base of the composting pile. Air delivery will be designed and regulated to maintain an aerobic condition within the pile, allowing for efficient decomposition of organic compounds. Each ASP will be covered with a biofiltration layer consisting of 6 to 12 inches of finished compost to facilitate biological destruction of organic compounds not fully treated within the pile itself. The process will consist of yard waste drop-off, grinding/mixing, composting, curing, storage, screening, and finally bagging of finished compost for off-site sale and distribution. Composting will take place on an impervious surface to mitigate potential impacts to groundwater. Material deliveries will use, whenever possible, back hauling and large 100 cubic yard trailers to minimize truck traffic. The entrance to the site will be landscaped.		
Name of Applicant/Sponsor: Anthony Bulfamante	Telephone: (914) 636-5000	E-Mail: anthony@bulfamantelandscaping.com
Address: 68 Marion Drive		
City/PO: New Rochelle	State: New York	Zip Code: 10804
Project Contact (if not same as sponsor; give name and title/role):	Telephone:	
	E-Mail:	
Address:		
City/PO:	State:	Zip Code:
Property Owner (if not same as sponsor):	Telephone:	
	E-Mail:	
Address:		
City/PO:	State:	Zip Code:

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. (“Funding” includes grants, loans, tax relief, and any other forms of financial assistance.)		
Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Council, Town Board, <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No or Village Board of Trustees	T. of Amenia Town Board, Zoning Code Text Amendment & Approval of Site Plans	Projected January 2016
b. City, Town or Village Planning Board or Commission <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	T. of Amenia Planning Board, Zoning Code Text Amendment & Approval of Site Plans	Projected January 2016
c. City Council, Town or Village Zoning Board of Appeals <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	T. of Amenia ZBA, Zoning Code Text Amendment & Approval of Site Plans	Projected January 2016
d. Other local agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	T. of Amenia Dept. of Buildings, Construction T. of Amenia Fire Dept., Fire Protection Plan	Projected January 2016
e. County agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Dutchess Co. Planning Board, Zoning Code Text Amendment	Projected January 2016
f. Regional agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
g. State agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	NYSDOT, Curb-Cut Approval NYSDEC, Part 360 Solid Waste & Stormwater NOI	Projected March 2016
h. Federal agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
i. Coastal Resources. <ul style="list-style-type: none"> i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? <input type="checkbox"/> Yes<input checked="" type="checkbox"/> No ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? <input type="checkbox"/> Yes<input checked="" type="checkbox"/> No iii. Is the project site within a Coastal Erosion Hazard Area? <input type="checkbox"/> Yes<input checked="" type="checkbox"/> No 		

C. Planning and Zoning

C.1. Planning and zoning actions.	
Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> • If Yes, complete sections C, F and G. • If No, proceed to question C.2 and complete all remaining sections and questions in Part 1 	
C.2. Adopted land use plans.	
a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If Yes, identify the plan(s):	
Housatonic River Basin, Sub-Basin: Tenmile River (Direct Drainage) Watershed	
Portion of site located in Aquifer Overlay District (see Question C.3.a.)	
Portion of site located in Scenic Protection Overlay District (see Question C.3.a.)	
c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes, identify the plan(s):	

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. Yes No
If Yes, what is the zoning classification(s) including any applicable overlay district?
Property on which the proposed action is located is zoned as both OC (Office, Commercial/Industrial) and RA (Residential Agricultural)
Scenic Protection Overlay District, Aquifer Overlay District (see attached "Supporting Information")

b. Is the use permitted or allowed by a special or conditional use permit? Yes No

c. Is a zoning change requested as part of the proposed action? Yes No
If Yes,
i. What is the proposed new zoning for the site? Zoning code text amendment to allow composting in "OC" districts per Town requirements.

C.4. Existing community services.

a. In what school district is the project site located? Webutuck Central School District

b. What police or other public protection forces serve the project site?
NY State Police Dover (3265 Route 22, Dover Plains, NY 12594) per Dutchess Co. InfoAccess GIS-based Map

c. Which fire protection and emergency medical services serve the project site?
Dover Fire Department St. 1 (3133 Route 22, Dover Plains, NY 12522); EMS Station, NDP St. 3 (6 Dover Village Plaza, Dover, NY 12572)

d. What parks serve the project site?
N/A (not adjacent to parkland)

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)?
Industrial/Commercial as Yard Waste Composting Facility

b. a. Total acreage of the site of the proposed action? _____ 51 acres
b. Total acreage to be physically disturbed? _____ 8.5 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? _____ 51 acres

c. Is the proposed action an expansion of an existing project or use? Yes No
i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % _____ Units: _____

d. Is the proposed action a subdivision, or does it include a subdivision? Yes No
If Yes,
i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)

ii. Is a cluster/conservation layout proposed? Yes No
iii. Number of lots proposed? _____
iv. Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____

e. Will proposed action be constructed in multiple phases? Yes No
i. If No, anticipated period of construction: _____ months
ii. If Yes:
• Total number of phases anticipated _____ 3
• Anticipated commencement date of phase 1 (including demolition) May month 2016 year
• Anticipated completion date of final phase Dec. month 2019 year
• Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: See attached "Supporting Information"
The timeline to reach the three phases of development will depend on: 1) obtaining all necessary permits and complying with state composting regulations; 2) construction of processing facilities and infrastructure; 3) operations training; 4) demonstrated ability to process increasing volumes of feedstock materials; and 5) market demand for finished compost product.

f. Does the project include new residential uses? Yes No

If Yes, show numbers of units proposed.

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

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

If Yes,

i. Total number of structures 1 building, up to 3 composting pads

ii. Dimensions (in feet) of largest proposed structure: 35 ft height; 60 ft width; and 160 ft length ("bagging building")

iii. Approximate extent of building space to be heated or cooled: N/A: outdoor, cold-storage square feet

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

If Yes,

i. Purpose of the impoundment: Manage and control compost pile runoff and stormwater onsite.

ii. If a water impoundment, the principal source of the water: Ground water Surface water streams Other specify: Stormwater runoff from the new impervious areas of the project site.

iii. If other than water, identify the type of impounded/contained liquids and their source.

iv. Approximate size of the proposed impoundment. Volume: 1 to 1.5 million gallons; surface area: approximately 1 acres

v. Dimensions of the proposed dam or impounding structure: 3 to 5 feet height; 200 feet length

vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete): Use onsite fill material to construct berms, swales and ditching, provide liner system(s) (liner provided, if required by NYSDEC) Sediment forebays, vegetated swales, "green infrastructure" and micro-pools provided for beneficial water quality management.

D.2. Project Operations

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

If Yes:

i. What is the purpose of the excavation or dredging? _____

ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?

- Volume (specify tons or cubic yards): _____
- Over what duration of time? _____

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.

iv. Will there be onsite dewatering or processing of excavated materials? Yes No
If yes, describe. _____

v. What is the total area to be dredged or excavated? _____ acres

vi. What is the maximum area to be worked at any one time? _____ acres

vii. What would be the maximum depth of excavation or dredging? _____ feet

viii. Will the excavation require blasting? Yes No

ix. Summarize site reclamation goals and plan: _____

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

If Yes:

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

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

iii. Will proposed action cause or result in disturbance to bottom sediments? Yes No

If Yes, describe: _____

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

If Yes:

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

v. Describe any proposed reclamation/mitigation following disturbance: _____

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

If Yes:

i. Total anticipated water usage/demand per day: _____ Approximately 5,000 gallons/day

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

If Yes:

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

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

If Yes:

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

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

If Yes:

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

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

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

d. Will the proposed action generate liquid wastes? Yes No

If Yes:

i. Total anticipated liquid waste generation per day: _____ gallons/day

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

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

If Yes:

- Name of wastewater treatment plant to be used: _____
- Name of district: _____
- Does the existing wastewater treatment plant have capacity to serve the project? Yes No
- Is the project site in the existing district? Yes No
- Is expansion of the district needed? Yes No

• Do existing sewer lines serve the project site? Yes No
 • Will line extension within an existing district be necessary to serve the project? Yes No
 If Yes:
 • Describe extensions or capacity expansions proposed to serve this project: _____

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? Yes No
 If Yes:
 • Applicant/sponsor for new district: _____
 • Date application submitted or anticipated: _____
 • What is the receiving water for the wastewater discharge? _____

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge, or describe subsurface disposal plans):

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? Yes No
 If Yes:
 i. How much impervious surface will the project create in relation to total size of project parcel?
 _____ Square feet or _____ 3 acres (impervious surface)
 _____ Square feet or _____ 51 acres (parcel size)
 ii. Describe types of new point sources. [Controlled overflow from new stormwater features to mitigate peak flows to predevelopment conditions.](#)
[Stormwater features to incorporate "green infrastructure" design techniques for enhanced water quality benefits and treatment.](#)
 iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?
[Onsite management of stormwater, and controlled release to existing natural drainage channels less than pre-developed condition hydrology.](#)

 • If to surface waters, identify receiving water bodies or wetlands: _____

 • Will stormwater runoff flow to adjacent properties? Yes No

iv. Does proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? Yes No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? Yes No
 If Yes, identify:
 i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)
[Trucks delivering materials, front-end loaders moving material onsite](#)
 ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)
[Not anticipated](#)
 iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)
[Grinder for bulky wood waste, screener for finished compost, bagger for bagging compost](#)

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? Yes No
 If Yes:
 i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) Yes No
 ii. In addition to emissions as calculated in the application, the project will generate:
 • _____ Tons/year (short tons) of Carbon Dioxide (CO₂)
 • _____ Tons/year (short tons) of Nitrous Oxide (N₂O)
 • _____ Tons/year (short tons) of Perfluorocarbons (PFCs)
 • _____ Tons/year (short tons) of Sulfur Hexafluoride (SF₆)
 • _____ Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflouorocarbons (HFCs)
 • _____ Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

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

If Yes:

i. Estimate methane generation in tons/year (metric): Approximately 137 tons/year (net generation is negligible, natural waste decomposition)

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): Biofiltration layer of finished compost over active composting piles to mitigate emissions (see Attachment 9).

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

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):
See attached "Supporting Information"

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

If Yes:

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

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

iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

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

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

vi. Are public/private transportation service(s) or facilities available within 1/2 mile of the proposed site? Yes No

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

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

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

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____
Approximately 200,000 kilowatt-hours per year

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other):
Continued use of existing single-phase service for office; anticipated new three-phase service by local utility for compost facility (if needed).

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

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

<p>i. During Construction:</p> <ul style="list-style-type: none"> • Monday - Friday: <u>6 AM to 5 PM</u> • Saturday: <u>6 AM to 5 PM</u> • Sunday: <u>Closed</u> • Holidays: <u>Closed</u> 	<p>ii. During Operations:</p> <ul style="list-style-type: none"> • Monday - Friday: <u>6 AM to 5 PM</u> • Saturday: <u>6 AM to 5 PM</u> • Sunday: <u>Closed</u> • Holidays: <u>Closed</u>
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m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? Yes No
 If yes:
 i. Provide details including sources, time of day and duration:
See attached "Supporting Information"

ii. Will proposed action remove existing natural barriers that could act as a noise barrier or screen? Yes No
 Describe: _____

n.. Will the proposed action have outdoor lighting? Yes No
 If yes:
 i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:
Minimal onsite lighting provided for site safety and security purposes - See attached "Supporting Information"

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? Yes No
 Describe: _____

o. Does the proposed action have the potential to produce odors for more than one hour per day? Yes No
 If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: See attached "Supporting Information"

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? Yes No
 If Yes:
 i. Product(s) to be stored _____
 ii. Volume(s) _____ per unit time _____ (e.g., month, year)
 iii. Generally describe proposed storage facilities: _____

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? Yes No
 If Yes:
 i. Describe proposed treatment(s):

ii. Will the proposed action use Integrated Pest Management Practices? Yes No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? Yes No
 If Yes:
 i. Describe any solid waste(s) to be generated during construction or operation of the facility:
 • Construction: 5 to 15 tons per 6 months (unit of time)
 • Operation : 50 tons per 1 year (unit of time)
 ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:
 • Construction: Potentially use asphalt millings or RCA for construction of paved asphalt surfaces.

 • Operation: Seek to recycle "bulky" non-process material that is screened from finished compost back through the composting process. Processing and recycling of yard waste to produce a beneficial compost product.

 iii. Proposed disposal methods/facilities for solid waste generated on-site:
 • Construction: NYS permitted solid waste landfill

 • Operation: NYS permitted solid waste landfill

s. Does the proposed action include construction or modification of a solid waste management facility? Yes No
 If Yes:
 i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): Composting
 ii. Anticipated rate of disposal/processing:
 • Avg. 5,000 Tons/month, if transfer or other non-combustion/thermal treatment, or (60,000 tons/year / 12-month average)
 • _____ Tons/hour, if combustion or thermal treatment
 iii. If landfill, anticipated site life: _____ years

t. Will proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? Yes No
 If Yes:
 i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

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

 iii. Specify amount to be handled or generated _____ tons/month
 iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

 v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? Yes No
 If Yes: provide name and location of facility: _____

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

E. Site and Setting of Proposed Action

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

a. Existing land uses.
 i. Check all uses that occur on, adjoining and near the project site.
 Urban Industrial Commercial Residential (suburban) Rural (non-farm)
 Forest Agriculture Aquatic Other (specify): _____
 ii. If mix of uses, generally describe:
Proposed composting facility will primarily occupy existing commercial land use, residential land use consists of an existing house, which will be used as the location of an office/administration building, forest areas will be maintained. Existing agriculture will be used for composting.

b. Land uses and covertypes on the project site. *Note: The following estimates are for the project site; although, the tax parcel is much larger.*

Land use or Covertypes	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	0.6	2.9 (add: compost pad, bagging building, roads)	+2.3
• Forested	0	0	0, no change
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	5.8	4.6	-1.2
• Agricultural (includes active orchards, field, greenhouse etc.)	2.1	0	-2.1
• Surface water features (lakes, ponds, streams, rivers, etc.)	0	1 (stormwater pond)	+1
• Wetlands (freshwater or tidal)	0	0	0, no change
• Non-vegetated (bare rock, earth or fill)	0	0	0, no change
• Other Describe: _____ _____			

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

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? Yes No
If Yes,
i. Identify Facilities:
There is a residence to the south of the site that is within 1500 feet and is used as a residence for the disabled.

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

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? Yes No
If Yes:
i. Has the facility been formally closed? Yes No
• If yes, cite sources/documentation: _____
ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:

iii. Describe any development constraints due to the prior solid waste activities: _____

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? Yes No
If Yes:
i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? Yes No
If Yes:
i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: Yes No
 Yes – Spills Incidents database Provide DEC ID number(s): _____
 Yes – Environmental Site Remediation database Provide DEC ID number(s): _____
 Neither database
ii. If site has been subject of RCRA corrective activities, describe control measures: _____

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? Yes No
If yes, provide DEC ID number(s): _____
iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):

v. Is the project site subject to an institutional control limiting property uses? Yes No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? Yes No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? Varies from 2 to 6+ feet (per Web Soil Survey data)

b. Are there bedrock outcroppings on the project site? (located primarily in unchanged forested areas) Yes No
 If Yes, what proportion of the site is comprised of bedrock outcroppings? 10 to 20 %

c. Predominant soil type(s) present on project site:

<u>Copake gravelly silt loam (CuB)</u>	<u>72</u> %
<u>Hollis-Chatfield-Rock outcrop, hilly</u>	<u>5</u> %
<u>Hollis-Chatfield-Rock outcrop, steep</u>	<u>23</u> %

d. What is the average depth to the water table on the project site? Average: >6.5 feet (per Web Soil Survey data)

e. Drainage status of project site soils: Well Drained: 100 % of site
 Moderately Well Drained: _____ % of site
 Poorly Drained _____ % of site

f. Approximate proportion of proposed action site with slopes: 0-10%: 72 % of site
 10-15%: _____ % of site
 15% or greater: 28 % of site

g. Are there any unique geologic features on the project site? Yes No
 If Yes, describe: Aquifer, see attached "Supporting Information" for anticipated mitigation measures and environmental controls

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? Yes No

ii. Do any wetlands or other waterbodies adjoin the project site? Yes No

If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? Yes No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name _____ Classification _____
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name _____ Approximate Size _____
- Wetland No. (if regulated by DEC) _____

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? Yes No
 If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? Yes No

j. Is the project site in the 100 year Floodplain? Yes No

k. Is the project site in the 500 year Floodplain? Yes No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? Yes No
 If Yes:
 i. Name of aquifer: Principal Aquifer and Upland Aquifer as per "Aquifer Overlay District" map by Town of Amenia (see Supporting Information)

m. Identify the predominant wildlife species that occupy or use the project site: _____
Wildlife species are not generally anticipated to occupy open site areas, but adjacent forested areas might include habitat for small mammals, birds and/or insect populations native to the local region.
Note: New York Natural Heritage Program informational request submitted, request is attached, response is forthcoming (see Attachment 15)

n. Does the project site contain a designated significant natural community? Yes No
If Yes:
i. Describe the habitat/community (composition, function, and basis for designation): _____
ii. Source(s) of description or evaluation: _____
iii. Extent of community/habitat:
• Currently: _____ acres
• Following completion of project as proposed: _____ acres
• Gain or loss (indicate + or -): _____ acres

o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? Yes No

p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? Yes No

q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? Yes No
If yes, give a brief description of how the proposed action may affect that use: _____
Proposed action will occur in existing open areas of the site, and action is not anticipated to significantly affect areas used for hunting or trapping. Potential impacts could include noise, but as discussed in Question D.2.m, site noise will be buffered at operating boundary.

E.3. Designated Public Resources On or Near Project Site

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? Yes No
If Yes, provide county plus district name/number: DUTC021

b. Are agricultural lands consisting of highly productive soils present? Yes No
i. If Yes: acreage(s) on project site? Approximately 7 to 8 acres.
ii. Source(s) of soil rating(s): Copake gravelly silt loam (CuB) rating as "All areas are prime farmland" as per Web Soil Survey

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? Yes No
If Yes:
i. Nature of the natural landmark: Biological Community Geological Feature
ii. Provide brief description of landmark, including values behind designation and approximate size/extent: _____

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? Yes No
If Yes:
i. CEA name: _____
ii. Basis for designation: _____
iii. Designating agency and date: _____

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on, or has been nominated by the NYS Board of Historic Preservation for inclusion on, the State or National Register of Historic Places?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes: <ul style="list-style-type: none"> i. Nature of historic/archaeological resource: <input type="checkbox"/> Archaeological Site <input type="checkbox"/> Historic Building or District ii. Name: _____ iii. Brief description of attributes on which listing is based: _____ 	
f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <small>SHPO letter of "No Impact" included as Attachment 14.</small>
g. Have additional archaeological or historic site(s) or resources been identified on the project site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes: <ul style="list-style-type: none"> i. Describe possible resource(s): _____ ii. Basis for identification: _____ 	
h. Is the project site within five miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If Yes: <ul style="list-style-type: none"> i. Identify resource: <u>See attached "Supporting Information"</u> ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): _____ iii. Distance between project and resource: _____ miles. 	
i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes: <ul style="list-style-type: none"> i. Identify the name of the river and its designation: _____ ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? <input type="checkbox"/> Yes <input type="checkbox"/> No 	

F. Additional Information

Attach any additional information which may be needed to clarify your project.

See attached "Supporting Information"

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name Anthony Bulfamante Date 12/17/15

Signature  Title Owner

PRINT FORM

SUPPORTING INFORMATION

Bulfamante Composting Facility

Full Environmental Assessment Form

SUPPORTING INFORMATION

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Full Environmental Assessment Form (Full EAF)
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GENERAL INFORMATION

The following information has been prepared by the Project Applicant (“Applicant”), Anthony Bulfamante, in support of the Full Environmental Assessment Form (Full EAF) for the proposed Bulfamante Composting Facility located at the Applicant’s property at 3501 State Route 22, Dover Plains, NY. The site is located in the Town of Amenia (“Town”) in Dutchess County (“County”). A location map is included as **Attachment 1**, and an aerial photograph of the project site is included as **Attachment 2**. As described in the Full EAF, the Proposed Action consists of two components (1) a Text Amendment to Town’s Zoning Code and (2) the permitting, construction and operation of a yard waste composting facility.

The SEQR Handbook, 3rd Edition, dated 2010, (“SEQR Handbook”) prepared by the New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Permits notes in Chapter 7, item B.14, that “...if the zoning change is proposed by a project sponsor, in conjunction with a proposal, the impacts of both the rezoning and the specific development must be considered in determining environmental impacts.” Therefore, the Proposed Action consists of both the rezoning and the specific site development:

1. **Text Amendment to Town’s Zoning Code:** A text amendment is required to the Town’s Zoning Code to allow composting on property within the Town that is zoned as Zoning District OC: Office, Commercial, Industry Mixed-Use District. The text amendment is required because Section §121-10C of the Town’s Zoning Code currently prohibits solid waste management facilities, the definition of which includes “composting of solid wastes,” as defined by 6NYCRR Part 360-1.2 per Article XII of the Town’s Zoning Code.

Relative to the text amendment, the Action is considered a Type I Action as per 6 NYCRR Part 617.4(b)(2):

- a. As per 6 NYCRR Part 617.4(b)(2), “the adoption of changes in the allowable uses within a zoning district, affecting 25 or more acres of the district;....”

Applicability: As the text amendment will be anticipated to include property within the Town that is currently zoned as Zoning District OC, the total area is expected to exceed 25 acres.

2. **Construction and Operation of Yard Waste Composting Facility:** The Applicant is proposing permitting, construction and operation of a yard waste composting facility to be called the Bulfamante Composting Facility that will be constructed on the Applicant’s property at 3501 State Route 22, Dover Plains, NY. Although yard waste is recognized under New York State Regulations as a “solid waste,” it should also be noted that yard waste is not allowed to be disposed of under traditional waste management practices such as landfilling, incineration, or Waste-to-Energy methods. Instead, New York State regulates yard waste as a “recyclable” product suitable for beneficial reuse as a soil amendment (compost).

Relative to the construction and operation of a yard waste composting site, the Action is considered a Type I Action as per 6NYCRR Part 671.4(b)(8) and (b)(6)(i):

- a. As per 6 NYCRR Part 617(b)(8), “any Unlisted action that includes a nonagricultural use occurring wholly or partially within an agricultural district (certified pursuant to Agriculture and Markets Law, article 25-AA, sections 303 and 304) and exceeds 25 percent of any threshold established by this section;....”

Applicability: Independent of the text amendment, the construction and operation action is considered to be Unlisted, but the site is shown to be partially within Agricultural District 21 per the 2012 map prepared by the New York State Department of Agriculture and Markets for Dutchess County (**Attachment 3**).

- b. Furthermore, as per 6 NYCRR Part 617(b)(6), “activities, other than the construction of residential facilities, that meet or exceed any of the following thresholds; or the expansion of existing nonresidential facilities by more than 50 percent of any of the following thresholds: (i) a project or action that involves the physical alteration of 10 acres;....”

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Applicability: The proposed project is anticipated to occupy approximately 8.5 acres. Twenty-five percent (25%) of the 10-acre threshold under 6 NYCRR Part 617(b)(6)(i) is only 2.5 acres, and 8.5 acres exceeds the threshold of 2.5 acres.

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LIST OF ATTACHMENTS

- Attachment 1** USGS Location Map
GHD Consulting Services Inc.
- Attachment 2** Aerial Location Map
GHD Consulting Services Inc.
- Attachment 3** Dutchess County Agricultural Districts (2012)
Cornell IRIS for the NYS Department of Agriculture and Markets
- Attachment 4** Tenmile Watershed, Dutchess County, NY (March 2010)
Vassar College Computing and Information Services-GIS
- Attachment 5** Town of Amenia, Zoning Map (December 13, 2012)
Dutchess County Department of Planning & Development
- Attachment 6** Parcel Lines, Dutchess County, NY (November 18, 2015)
Dutchess County ParcelAccess Internet
- Attachment 7** Town of Amenia, Scenic Visual Protection Overlay District (November 2, 2011)
Dutchess County Department of Planning & Development
- Attachment 8.1** Town of Amenia, Aquifer Overlay District (July 19, 2007)
Dutchess County Department of Planning & Development
- Attachment 8.2** Figure 1 – Site Location and Aquifer Proximity (Based on 1:250,000 NYSDEC GIS)
GHD Consulting Services Inc.
- Attachment 8.3** Figure 2 – Site Location and Aquifer Proximity (Based on 1:250,000 NYSDEC GIS)
GHD Consulting Services Inc.
- Attachment 9** Proposal and Application Narrative, Bulfamante Compost (December 14, 2015)
O2Compost
- Attachment 10.1** Estimate of Potential Peak Hour Traffic Volume (December 2015)
GHD Consulting Services Inc.
- Attachment 10.2** NYSDOT Traffic Data Viewer – Traffic Count Hourly Report (April 7, 2008)
New York State Department of Transportation
- Attachment 11** SEQR FEAF Part 1 Question D.2.o. (November 19, 2015)
O2Compost
- Attachment 12** Custom Soil Resource Report for Project Site
Web Soil Survey, USDA Natural Resource Conservation Service
- Attachment 13** Historic Resource Survey 1986 (August 1986, accessed online November 2015)
Dutchess County: Historic Resource Survey Viewer
- Attachment 14** Letter of “No Impact” from OPRHP (December 7, 2015)
Office of Parks, Recreation and Historic Preservation (OPRHP)
- Attachment 15** Informational Request to New York Natural Heritage Program (November 24, 2015)
GHD Consulting Services Inc.

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SUPPORTING INFORMATION

The following paragraphs are provided as additional supporting information for “yes” responses indicated in the attached completed Full EAF:

C. Planning and Zoning – C.2. Adopted land use plans

- a. *Do any municipally-adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located?*

Yes. The site where the proposed action would be located is within the Town’s comprehensive land use plan. It is expected that as part of the proposed Zoning Code text amendment, the Town will review the most recent revision of the comprehensive land use plan to confirm consistency of the proposed action with the plan. The intent is for the proposed action to be consistent with the comprehensive plan. The composting operation will create new job opportunities for Town residents as machine/equipment operators, facility supervisors, and/or laborers.

- b. *Is the site of the proposed action within any local or regional special planning district (for example: Greenway Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?)*

Yes. The site of the proposed action is within local special planning districts. These include the “Aquifer Overlay District” and “Scenic Protection Overlay District,” as further discussed in the answer to Question “C. 3 Zoning,” below.

In addition, the site of the proposed action is within a sub-basin of the Housatonic River Basin that is known as the Tenmile River (Direct Drainage) Watershed. A map of this watershed is included as **Attachment 4** as prepared by the Vassar College Computing and Information Services-GIS (March 2010).

Considering the proposed site development, the proposed composting facility seeks to minimize potential impacts to the watershed by managing stormwater runoff using operational Best Management Practices designed and implemented in accordance with New York State Erosion and Sediment Control specifications and standards during construction.

The proposed facility will accommodate green infrastructure design concepts for stormwater management such as forebays, inlet protection, landscaping, bioswales, compost blankets, and other stormwater control measures and runoff mitigation measures.

In addition, a Stormwater Pollution Prevention Plan (SWPPP) will be prepared prior to construction activities to further obtain permit coverage under the SPDES General Permit for Stormwater Discharges from Construction Activity. Coverage under this permit is anticipated to be required as the disturbance is anticipated to exceed one acre. The SWPPP will identify design requirements for post-construction Stormwater Management Practices (SMPs), if required, as designed in accordance with the current revision of the New York State Stormwater Management Design Manual for management of the Water Quality volume in accordance with NYS stormwater design standards.

Furthermore, active compost processing activities, including aerated static pile (ASP) composting, will occur on new impervious surfaces such as asphalt pavement or concrete. The intent of these impervious surfaces will be to mitigate potential impacts to groundwater by reducing the potential for subsurface infiltration. It is understood that impervious surfaces can create additional surface runoff, so surface runoff from the active compost processing areas will be managed to a dedicated storage impoundment designed in accordance with applicable NYS standards for yard waste composting facilities.

Please see answer to Question E.2.g. below relative to proposed environmental controls for the site.

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Finally, considering site operations, periodic site clean-up and daily operations, monitoring will be an essential component of responsible site management and integrated as part of the daily operations management plan. In review of the foregoing, significant adverse environmental impacts on local resources are not anticipated.

C. Planning and Zoning – C.3. Zoning

- a. *Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance?*

Yes. The property on which the proposed action will be located is within the Town of Amenia zoning map. A copy of the zoning map prepared by the Dutchess County Department of Planning and Development is included as **Attachment 5**. The proposed composting facility will extend over two lots that are both owned by the Applicant. These two lots include: Lot #1, 132000-7064-00-420372 (30.7 acres) and Lot #2, 132000-7064-00-432313 (20.27 acres). A tax parcel map showing the parcel lines, as obtained from the Dutchess County online tool *ParcelAccess*, is included as **Attachment 6**.

Two screen-captures of the attached zoning map and tax parcel map that highlight the owner's property are provided below as **Figures 1** and **2**, respectively. The project site is proposed within approximately **8.5 acres** of the lot area, and will be located on previously disturbed and existing, cleared areas of the site.

As shown in **Figure 1**, the tax parcels are zoned as both OC (Office Commercial/Industrial) and RA (Rural Agricultural). It is important to clarify, however, that active yard waste compost processing activities are expected to be primarily in OC. Some storage activities, for curing and stockpiling of finished compost, will occur in the RA District, and the existing house that will be used as an office/administrative building is located in the RA District, but active compost processing areas of the site will be located within the OC District.

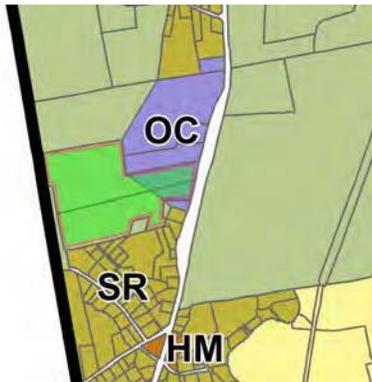


Figure 1 Screen-capture of "Town of Amenia, Zoning Map" (**Attachment 5**)



Figure 2 Screen-capture of "ParcelAccess Parcel Lines" (**Attachment 6**)

Note: Relevant tax parcels are shaded green in the above figures for presentation purposes only.

Additionally, the proposed action is within two local overlay districts, including the Town of Amenia "Special Protection Overlay District" and the "Aquifer Overlay District"—maps of these districts are included as **Attachments 7** and **8**, respectively. Screen-captures in the vicinity of the project site are shown in **Figures 3** and **4** below.

It is important to also note that the proposed project area does not appear to be within the Town's "Hydrological Overlay Districts" or the "Land Use and Development Overlay Districts Zoning Map," so these two maps were not included as attachments to this Full EAF.

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Figure 3 Screen-capture of “Scenic Visual Protection Overlay District” (**Attachment 7**)



Figure 4 Screen-capture of “Aquifer Overlay District” (**Attachment 8.1**)

Note: Relevant tax parcels are shaded green in the above figures for presentation purposes only. The Aquifer Overlay District map appears to use a different tax parcel map than present-day parcel lines.

As shown in **Figure 3** above, a portion of the project site is within a “Road Visual Protection Corridor” (shaded blue) along State Route 22, and also a “Scenic Visual Protection Zone” (shaded dark green). To the greatest extent practical, existing trees along the site’s frontage with SR-22 will remain unchanged in the proposed condition. A very limited number of existing trees might need to be removed at the site’s entrance. This change is required for traffic control and safety, so as to improve site distance for vehicles entering and exiting the facility. Also shown in **Figure 3**, the “Scenic Visual Protection Zone” is not anticipated to be modified as part of the proposed project. This zone is believed to be located to the west of the existing house on the wooded embankment, and will remain unchanged in the proposed condition. With the exception of removing limited trees at the site’s entrance, the Scenic Visual Protection Zone and Road Visual Corridor will remain unchanged in the proposed condition, so impacts to these resources are not anticipated to result from the proposed project.

As shown in **Figure 4** above, a portion of the project site that is located at the eastern extent of the project area is over a “Primary Valley Bottom Aquifer” (shaded yellow) along State Route 22. The western extents of the project site are located over an “Upland Aquifer” (shaded dark blue/grey). The proposed development will seek to minimize impacts to the aquifer by operating composting processing features on impervious surfaces such as asphalt pavement.

Aquifer Mapping: Available aquifer mapping obtained from NYSDEC was cross-referenced with the Town’s aquifer map to further assess the potential limits of the mapped aquifers in the vicinity of the project area. Two data sources were considered, including aquifer mapping at 1:250,000 and 1:24,000 spatial resolutions:

- **1:250,000 spatial resolution aquifer data** – A NYSDEC GIS shapefile of this data set was downloaded from NYSDEC and reviewed as an overlay of aerial imagery in the vicinity of the project area. This review showed that the project site overlays a “High Yield, Unconsolidated Aquifer.” The basis for this data set appears to be mapping originally prepared by the United States Department of the Interior, United States Geological Survey as referenced from the “Water-Resources Investigations Report 87-4274, Potential Yields of Wells in Unconsolidated Aquifers in Upstate New York, Lower Hudson Sheet.”

The following is a description of the aquifer data set used, provided by the NYSGIS Clearinghouse: “These aquifers are those in upstate NY that consist of sand and gravel and yield large supplies of water to wells. Bedrock aquifers, although significant in some areas, are not addressed here. Source data is 1:250,000, same scale as the NYS Geological Survey surficial and bedrock geology maps on which they were based. Together these maps form a consistent

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set of geologic and groundwater maps for use in regional management of the groundwater resources of the State.”

- **1:24,000 spatial resolution aquifer data** – As per NYSDEC metadata, the 1:24,000 spatial resolution aquifer data set only supports “highly productive primary aquifers,” which do not appear to be shown to be in the vicinity of the project area.

This data set was obtained from the NYSGIS clearinghouse and is described by the following: “This layer shows the location of primary aquifers in New York State. Primary aquifers are highly productive aquifers presently being utilized as sources of water supply by major municipal water supply systems.”

Screen captures of the 1:250,000 spatial resolution maps are provided below as **Figures 5** (project location) and **6** (vicinity). These are also included as **Attachments 8.2** and **8.3**, respectively:



Figure 5 Screen-capture of Site Location “Aquifer 1:250,000 Spatial Resolution” (**Attachment 8.2**)



Figure 6 Screen-capture of Vicinity “Aquifer 1:250,000 Spatial Resolution” (**Attachment 8.3**)

Note: Approximate project area highlighted yellow in above figures for presentation purposes only.
The aquifer limits are shown as red transparent overlay.

Relative to potential environmental considerations, composting site infrastructure will be designed and operations permitted in accordance with 6 NYCRR Part 360 requirements for a yard waste composting facility, and NYSDEC will be afforded the opportunity to provide input on the design requirements as part of the State permitting process. The active compost processing activities will be located on impervious surfaces, and surface water runoff management will be in accordance with the NYS permit requirements. Additional environmental controls and mitigation measures are discussed in the answer to Question E.2.g. below.

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

Yes. A zoning change will be required to the Town’s Zoning Code to allow Solid Waste Management Facilities, specifically a composting facility, to be permissible within the Town’s limits. It is anticipated that the Town, as Lead Agency, will consider potential zoning impacts as part of their review of the required Zoning Code text amendment.

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The project site extends over two lots that are owned by the Applicant (as discussed in the response to Question C.3.a. above). Additionally, the project site is over areas zoned as both OC and RA districts. Current zoning district designations are anticipated to remain unchanged in the proposed condition. Active compost processing features that are proposed for the composting facility will be located within the OC District limits of the project site, and operational support and finished compost storage will be located in the RA District limits of the project site. The RA limits include an existing house and detached garage, which will both remain in the proposed condition for use as an office/administration area for the project site.

D. Project Details – D.1. Proposed and Potential Development

e. Will proposed action be constructed in multiple phases?

Yes. The proposed action is anticipated to be constructed in multiple phases. For additional clarification, please refer to **Attachment 9**, which is a narrative of proposed composting operations prepared by O2Compost dated December 14, 2015. This narrative includes an overview of construction phasing.

g. Does the proposed action include new non-residential construction (including expansions)?

Yes. The proposed action will include construction of impervious composting pads for Aerated Static Pile (ASP) composting, construction of a widened site entrance for improved access and site distance, construction of stormwater and onsite drainage management systems, and construction of a bagging building. The bagging building will be outdoor, covered storage (unheated), and is anticipated to be a fabric-membrane covered steel-framed superstructure on concrete foundations, similar to a salt storage shed. The bagging building will be used to store and bag finished compost. For additional clarification refer to **Attachment 9**, which is a narrative of proposed operations prepared by O2Compost dated December 14, 2015.

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage?

Yes. The proposed action will include construction of new stormwater management features, such as stormwater wetlands or stormwater pond(s). The stormwater features will be designed to accommodate nutrient removal and sediment control. Controlled outlet structures will be designed to convey stormwater at pre-development hydrologic flow rates.

In addition to controlling stormwater management onsite, and providing improved drainage conditions as part of the site development, the new stormwater pond(s) can provide a non-potable source of water for composting operations for onsite dust control and wetting of composting piles to provide improved moisture conditions for compost processing. Surface waters will be controlled on the site, and proper run-on and run-off management systems will be designed in accordance with NYS standards.

The size of the stormwater pond will be determined based on standard requirements for stormwater management design guidance.

Design requirements will be further reviewed with New York State Department of Environmental Conservation (NYSDEC) as part of the composting facility permitting process. For additional clarification refer to **Attachment 9**, which is a narrative of proposed operations prepared by O2Compost dated December 14, 2015.

The proposed project is not anticipated to have a significant adverse environmental impact by providing stormwater management and runoff control features consistent with NYS design requirements.

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D. Project Details – D.2. Project Operations

- c. *Will the proposed action use, or create a new demand for water?*

Yes. The proposed action will require water to support the composting operation. Processing compost material requires a typical “optimum” moisture content in the range of 50 to 60 percent moisture at the start of processing. Yard waste materials, including wood chips, can have limited moisture content, so water addition is required to facilitate organic decomposition.

Considering water sources available to the site, there is an existing onsite irrigation well that can be used to supplement water requirements. In addition, the proposed stormwater management pond can be used as a source of non-potable water for wetting compost piles. A pump station can be provided to obtain water from the stormwater pond. Supplemental water needs could be further supplied by construction of additional irrigation wells as part of future phases of construction (if required).

In review of the foregoing, the proposed project is not anticipated to have a significant adverse impact with respect to the need for increased water demand. The facility construction will occur in phases so as to appropriately step-up composting operations with sensitivity to water needs. The water requirements can be supplemented via recycling of stormwater (if feasible), which is generally understood to be an encouraged stormwater best management practice relative to water reclamation and reuse.

- e. *Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction?*

Yes. The total proposed project area is anticipated to exceed one acre, so disturbance is anticipated to be more than one acre. Stormwater management will be improved by providing new stormwater management features consistent with NYS stormwater design requirements. No appreciable increase in stormwater volume or flow is anticipated to result from the proposed development. Moreover, simultaneous disturbances will be kept to a minimum so as to minimize potential impacts consistent with construction Best Management Practices (BMPs), and a Stormwater Pollution Prevention Plan (SWPPP) will be prepared for construction.

Compared to the existing condition, the post-developed condition is intended to improve on-site stormwater management in the following ways: (1) by providing water quality treatment for stormwater runoff from both existing and new impervious surfaces (as is feasible); (2) by improving site drainage patterns in order to minimize site ponding (standing water); and (3) by providing additional landscaping features.

In accordance with NYSDEC requirements, a SWPPP will be completed and a “Notice of Intent” (NOI) submitted to NYSDEC for permit coverage under a SPDES General Permit for Stormwater Discharges from Construction Activity. Coverage under this permit is required because the soil disturbance is anticipated to exceed one acre. An erosion and sediment control plan will be prepared for the proposed work activities (in support of the SWPPP), and will be designed to minimize site impacts due to sediment and erosion. Erosion and sediment control practices will be designed and provided during construction in accordance with New York State’s stormwater management guidelines and design criteria.

The proposed project will seek to minimize the amount of impervious surfaces required, including the maintenance of existing pervious surfaces and creation of new landscaped areas, and will seek to recycle stormwater onsite. As such, the proposed project is not anticipated to have a significant adverse impact resulting from stormwater in the proposed condition.

- f. *Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations?*

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Yes. The proposed project will require the following anticipated equipment to support composting operations, which is typical for composting facilities of similar size and complexity:

- i. Mobile sources during project operations:
 - Trucks that deliver yard waste and pick up finished compost
 - Front-end loaders that are used to move material onsite
- ii. Stationary sources during construction are not anticipated onsite.
- iii. Stationary sources during operations:
 - Grinder is required to grind yard waste received at the facility to a suitable size
 - Trommel screen is required to screen finished compost
 - Bagger is required to bag finished compost

Equipment used onsite will be operated in accordance with the permit requirements, and, as such, the proposed project is not anticipated to have a significant adverse impact resulting from operation of equipment.

- h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)?*

Yes. As a yard waste composting site, there is potential for methane generation. However, it is important to clarify that yard waste naturally decomposes; therefore, "net" impacts are anticipated to be negligible. Moreover, an aerated static pile (ASP) composting process will mitigate methane generation by aerobic decomposition of yard wastes, which inhibits methane generation as an aerobic process. As such, the total "net" methane generation is anticipated to be equivalent to or less than the natural methane generation that would occur otherwise from the same yard waste if it decomposes naturally.

The estimate of 137 tons per year (metric) that is noted on the Full EAF is based on the following conceptual calculation as based on projections per the composting technology designer:

Calculation 1 Estimate of methane generation in tons/year (metric), composting process:

$$\begin{aligned} (5.05 \text{ lbs methane}/2000 \text{ lbs}) \times 2200 \text{ lbs/Mton} &= 5.55 \text{ lbs per metric ton} \\ 60,000 \text{ tons} &= 54,431 \text{ metric tons/year} \\ 5.55 \text{ lbs} &= 0.002522 \text{ metric tons methane per metric ton} \\ 0.002522 \times 54,431 &= 137 \text{ metric tons of methane per year} \end{aligned}$$

Reference:

Greenwaste Compost Site Emissions Reductions from Solar-powered Aeration and Biofilter; Layer Report from the contract team 5/14/2013; Funded by and prepared for the San Joaquin Valley Technology Advancement Program "5.05 lbs methane per ton of green waste"

- i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations?*

Yes. Similar with typical yard waste composting facilities, the standard operation of the project site does have the potential to emit air pollutants such as carbon dioxide or dust. During anticipated site operations, a grinder (for yard waste chipping/shredding), a screener, up to three (3) front-end loaders, and up to 24 aeration blowers may operate. A summary of estimated carbon dioxide emissions due to standard open-air machine operations can be found below.

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 Bulfamante Composting Facility
 3501 State Route 22, Dover Plains, NY

Operation	Diesel Fuel Emission Factor (bs/hp-hr)*	Hp	Hr/Year	Emission (lbs/year)	Emission (tons/year)
Grinder	1.16	1,000	1,200	1,392,000	696.0
Screener	1.08	200	1,200	259,200	129.6
Loaders (3)	1.08	400	7,200	3,110,400	1555.2
Blowers (24)	1.08	3	57,600	186,624	93.3
Total				4,948,224	2,474.1

*Values obtained from EPA AP-42, "Compilation of Air Pollutant Emission Factor"

The emission factors and formulas used to estimate the carbon dioxide emissions were obtained from the EPA AP-42. The formula used to estimate the emission estimates above is as follows:

$$E = A * EF * \left(1 - \frac{ER}{100}\right)$$

Where: *E* = emissions, *A* = activity rate, *EF* = emission factor, and *ER* = overall emission reduction efficiency

The results summarized in the table were calculated assuming 300 operational days per year with the grinder and screener operating 4 hours per day and the loaders and blowers operating 8 hours per day.

As seen from the summary table above, the primary air-pollutant of concern will be carbon dioxide. This is to be expected since carbon dioxide emission is the primary by-product of diesel engine operation. Modern compost processing equipment has improved emissions controls and could be implemented at the project site.

The aerated static pile composting process also generates carbon dioxide by nature, being an aerobic process. However, because yard waste naturally decomposes, it is anticipated that "net" impacts will be equivalent to or less than the natural carbon dioxide generation that would otherwise occur from the same yard waste.

In addition to carbon dioxide, dust is a potential emission source from typical yard waste composting activities. Without implementation of proper facility housekeeping practices and Best Management Practices, dust can be generated from driving surfaces, compost piles, high wind, and hot weather. This being said, there are multiple techniques that can be implemented to mitigate the issue, e.g., applying water to driving surfaces (as needed or scheduled), wetting compost piles (water truck application or onsite irrigation hoses), wetting feedstock during mixing and receiving processes, controlling the flow of material onsite, and maintaining "good housekeeping" practices at the end of each operations day. In review of the foregoing, significant adverse environmental impacts are not anticipated to result from potential carbon dioxide or dust emissions during composting operations.

- j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services?

No. It is understood that the Town requested that a traffic estimate be prepared for the Full EAF. The traffic volume estimate is included as **Attachment 10.1**. The estimated peak hour traffic volume is anticipated to be 30 vehicles per peak hour. The answer to this question is "No" because the SEQR manual quantifies a "substantial increase" as resulting in equal to or more than 100 vehicles in the peak hour. This traffic volume is anticipated to be fewer than 100 vehicles in the peak hour, as further shown in

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the traffic volume estimate included as **Attachment 10.1**, so there is not anticipated to be a “substantial increase” to traffic, and the answer provided is “No.”

In addition, the New York State Department of Transportation’s (NYSDOT) Functional Class Viewer online tool was referenced. This indicated that State Route 22 is assigned an NYSDOT Function Class (FC) 4 as “Principal Arterial (Other)” as a rural area classification.

The NYSDOT Traffic Data Viewer online tool was also referenced and indicated that a segment of road in front of the site had an annual average daily traffic estimate of 6,676 vehicles based on 2013 data. The NYSDOT Traffic Data Viewer provides the “Traffic Count Hourly Report” for Northbound and Southbound lanes from the intersection of NY343 to CR 81 for a study completed April 7, 2008 (**Attachment 10.2**). The traffic counter was placed 1000 feet south of Sinpatch Road on State Route 22. The combined average weekday high (peak) hour total for Northbound and Southbound traffic was about 622 vehicles. Relative to the April 2008 estimate, the additional 30 vehicles during the peak hour could result in less than a 5% increase, which is not anticipated to be a significant increase.

The nearest intersections to the site on State Route 22 include the following:

- **To the south (0.4 miles) – no stop light:** Tinker Town Road (NY343, Functional Class 7 Major Collector)
- **To the north (0.5 miles) – no stop light:** Butt Hollows Road (NYSDOT Functional Classification not assigned)

NYSDOT permitting will be completed by the Applicant relative to the required curb cut to increase the width of the access driveway, and site distance will be increased for improved access. Based on the aforementioned, the proposed project is not anticipated to have a significant adverse impact on traffic.

- k. *Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy?*

Yes. The proposed action will include additional electrical loads to support the onsite composting operation. There is an existing single-phase electrical service at the site that services the existing house and garage. This is anticipated to remain in the proposed condition. Furthermore, there is potential for a three-phase service to be extended to the site in the proposed condition.

The estimate of 200,000 kilowatt-hours per year that is noted on the Full EAF is based on the following conceptual calculation as based on projections per the composting technology designer:

Calculation 2 Estimate of annual electricity demand during operation of the proposed action:

Approximately 8,280 kW-hrs per month for blowers:

Anticipated 3 horsepower aeration blowers (15 Amps, 230 Volts)

Operating cycle: 10 min/hr

24 blowers anticipated

20 blowers in-use at the same time (max)

Approximately 16,560 kW-hrs per month for service

Likely 300 Amp service upgrade

Approximately 198,720 kW-hrs per year for facility

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- m. *Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both?*

Yes. There is potential for noise during construction and operation of the compost facility. Considering the existing condition, the site has been used in recent years as an operating tree nursery with existing operation of machinery as part of the tree harvesting and planting operation. Therefore, existing ambient noise levels can be attributed to tree planting, harvesting and other truck activities. Currently, there are approximately one to two large trucks that access the facility on a weekly basis, and the levels of noise have not been shown to result in a disruption to local resources.

Existing natural buffers surround the site (trees and landscaping), and these will remain in the proposed condition. These serve to provide a natural sound buffering capacity. In addition, site operations will be limited to the times permitted by NYSDEC, so sound impacts are anticipated to be mitigated by implementation of the operating protocol approved by NYSDEC.

In consideration of potential noise mitigation measures, the following clarification is offered relative to construction and operations:

Construction

Potential sources of noise during construction might include truck noise during delivery of building materials and/or earth moving equipment, since grading activities are anticipated.

Noise during construction would most likely result from the use of excavating equipment. If grading or surface preparation are required, then earth-moving equipment could generate, within a few feet of the equipment, noise levels above New York State Sound Pressure Level in decibels (dB) or "Leq" levels. This noise would be temporary and attenuated between the construction location and property boundary.

As a rural area, there are limits to Leq between the hours of 10pm and 7am. It is important to clarify that construction would take place between the hours of 7am and 5pm. Truck noise during construction would also be attenuated with distance to the boundary and be similar to traffic noise on the adjacent highway. Construction will be in phases, but any single phase would not be anticipated to exceed a 6- to 8-month time period.

Noise impacts due to construction would be temporary, and mitigation methods can be employed using new equipment technologies for noise attenuation, if required.

Operations

Sources of noise during operation will include grinding/shredding of incoming feedstock, screening of the product, material movement with front-end loaders, operation of electric blowers for compost aeration, and material delivered to and removed from the site by truck.

Noise during operation will satisfy 6 NYCRR Part 360 requirements and limitations. The facility hours of operation will be specified in the permit application to NYSDEC. The hours of operation are anticipated to be set during normal business hours, which are anticipated to be from 6am to 5pm, but will be established in the NYSDEC permit.

Issues such as attenuation, existing background levels, point-of-compliance, land designation, and equipment selection will influence the need for and degree of noise mitigation required. Mitigation may include separation distances, earth berms, constructed noise reduction walls, added equipment mufflers, times of operation, or equipment location during operation. Aeration blowers will be sequenced to minimize simultaneous operation (reducing electrical loads) and can be housed in wooden or steel enclosures for sound mitigation. Aeration blowers will operate 24 hours per day to

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maintain aerobic conditions in the piles, so the blowers can be designed with sound-attenuating systems (if required) to satisfy noise limits.

Composting operations will be all year around and will continue for 10 years or longer. However, the “peak” processing seasons will be from early Spring through late Fall (when the most yard waste is generated).

The facility will seek to mitigate potential noise impacts through implementation of the above-listed attenuation approaches.

n. Will the proposed action have outdoor lighting?

Yes. Minimal onsite lighting will be provided on the north and south sides of the site. This lighting will be used primarily for site safety and operational support. The intent will be to avoid light being shed into offsite areas, and to minimize the usage of lighting. Therefore, the proposed action is not anticipated to have an impact on the environment as a result of new outdoor lighting. Under the anticipated operations schedule, the facility will not generally operate after dark, but the intent of the lighting is to provide a source of light for facility shut-down and site security purposes.

o. Does the proposed action have the potential to produce odors for more than one hour per day?

Yes. As a composting facility, there is potential for odors, but these will be mitigated as part of the operations plan and further described in **Attachment 11**.

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)?

Yes. As a composting facility, there will be onsite management of solid waste. As already discussed, the site will be permitted in accordance with 6 NYCRR Part 360 requirements, and the facility design will be reviewed with NYSDEC. Moreover, the proposed action includes construction of a yard waste composting facility. For additional clarification refer to **Attachment 9**, which is a narrative of proposed operations prepared by O2Compost dated December 14, 2015.

s. Does the proposed action include construction or modification of a solid waste management facility?

Yes, the proposed action includes construction of a yard waste composting facility. For additional clarification refer to **Attachment 9**, which is a narrative of proposed operations prepared by O2Compost dated December 14, 2015.

E. Site and Setting of Proposed Action – E.2. Natural Resources On or Near Project Site

- a. What is the average depth to bedrock on the project site? (*)*
- b. Are there bedrock outcroppings on the project site? (*)*
- c. Predominant soil type(s) present on project site: (*)*
- d. What is the average depth to the water table on the project site? (*)*
- e. Drainage status of project site soils: (*)*
- f. Approximate proportion of proposed action site with slopes: (*)*

(*) The information provided in response to the above questions a through f was based on the USDA Natural Resources Conservation Service (NRCS) online tool *Web Soil Survey*. The information referenced is included in **Attachment 12**.

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g. Are there any unique geologic features on the project site?

Yes. A portion of the project site appears to overlay an aquifer, as described further in the answer to Question C.a., above. When left alone in nature, yard waste naturally decomposes and produces nutrient-rich leachate. However, the benefit of a composting site that recycles yard waste material is that the decomposition process can be monitored and controlled by implementation of environmental control systems. There is understandably a need to provide environmental controls when operating a composting facility over or adjacent to sensitive environmental areas, such as an aquifer. As such, the following is offered as clarification relative to anticipated mitigation measures and environmental controls to be implemented at the project site:

- **Implementation of NYSDEC-Acceptable Operations Plan** - The site will operate in accordance with the NYSDEC-approved Operations & Maintenance Plan that will be provided to NYSDEC as part of the permit application package. This Plan will highlight essential operational Best Management Practices (BMPs) and “good housekeeping” requirements for successful and responsible operation of the compost facility.
- **Impervious Composting Pad** - As “first line of defense,” active compost processing of all yard waste materials will occur over a new impervious service, called the impervious composting pad, constructed of either paved asphalt and/or concrete surfaces. Active compost processing represents the greatest potential for nutrients in runoff. As such, these activities are to occur on the impervious composting pad, and will include unloading and mixing of yard wastes, shredding of feedstocks to achieve proper bulk density and particle size, and aerated static pile (ASP) composting. Existing yard waste composting facilities of similar size and scale in New York State are generally shown to have a net water demand, requiring water addition during the compost process. There is anticipated to be limited amount of liquid release from yard waste compost piles.
- **Surface Water Run-off and Run-on Controls** – Rain water that falls over the impervious composting pad and “touches” compost piles will either be absorbed into the pile (water loss due to aeration process and net-water demand), run off the surface of the “biofiltration layer” (therefore not penetrating the pile or touching yard waste, remaining as clean stormwater), and/or pass through the pile and come in contact with yard waste materials. Rain water that touches yard waste materials during the active compost processing phase will be considered compost-contact water. The compost-contact water will be contained on the impervious composting pad and managed as surface water runoff. The impervious composting pad will create a physical barrier between the compost and subsurface soils—reducing the potential for migration into subsurface soils below the pad. The integrity of the impervious composting pad to contain runoff on the surface can be inspected as part of operations monitoring. Maintenance of the “impervious” nature of the composting pad will be of primary importance.
- **Stormwater Management Practices for Pre-Treatment and Treatment** - Surface water runoff that is contained on the surface of the impervious composting pad will be conveyed to a surface water stormwater management area that will include the following:
 - Sediment trapping forebays for removal of compost fines from runoff (anticipated treatment via reduction of suspended solids)
 - Wetland plantings for enhanced nutrient removal and bioremediation (anticipated treatment via reduction of nitrogen, phosphorus and other organic compounds)
 - Shallow marsh zones for enhanced biological activity and sustained wetland plant growth
 - Deep pools for water temperature control (anticipated improved water quality)
 - Staged stormwater outlet structure for hydrologic rate control to mitigate peak flows

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The stormwater system will be designed in accordance with NYSDEC requirements and specifications.

- l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer?*

Yes. Refer to answers above for Questions C.3.a. and E.2.g.

E. Site and Setting of Proposed Action – E.3. Designated Public Resources On or Near Project Site

- a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304?*

Yes. A portion of the project site is shown to be located in an area identified as a Dutchess County Agricultural District, DUC021, District 21 certified 4/16/2008, which includes Amenia, Northeast, Pine Plains, Washington and Stanford as shown on the attached map, **Attachment 3**.

After acquiring the land from the previous owner, the present-day owner (Applicant) discovered that the site was no longer suitable for continued use as a tree farm or nursery. As such, the need to find a suitable use for the site is a driving factor in the proposed repurposing of the site to a yard waste composting facility. As the existing soil was determined to be no longer suitable for tree farming, a negative impact is not anticipated due to the repurposing of this land for a more suitable land use as composting.

- b. Are agricultural lands consisting of highly productive soils present?*

As referenced to the USDA Natural Resources Conservation Service (NRCS) *Web Soil Survey*, the majority of the site consists of Copake gravelly silt loam, undulating (CuB) with a soil rating of “prime farmland” as based on the attached Farmland Classification printout in **Attachment 12**.

- h. Is the project site within five miles of any officially designated and publically accessible federal, state, or local scenic or aesthetic resource?*

Yes. The following publicly accessible federal, state or local scenic or aesthetic resources were identified through a desktop analysis of the vicinity of the project site:

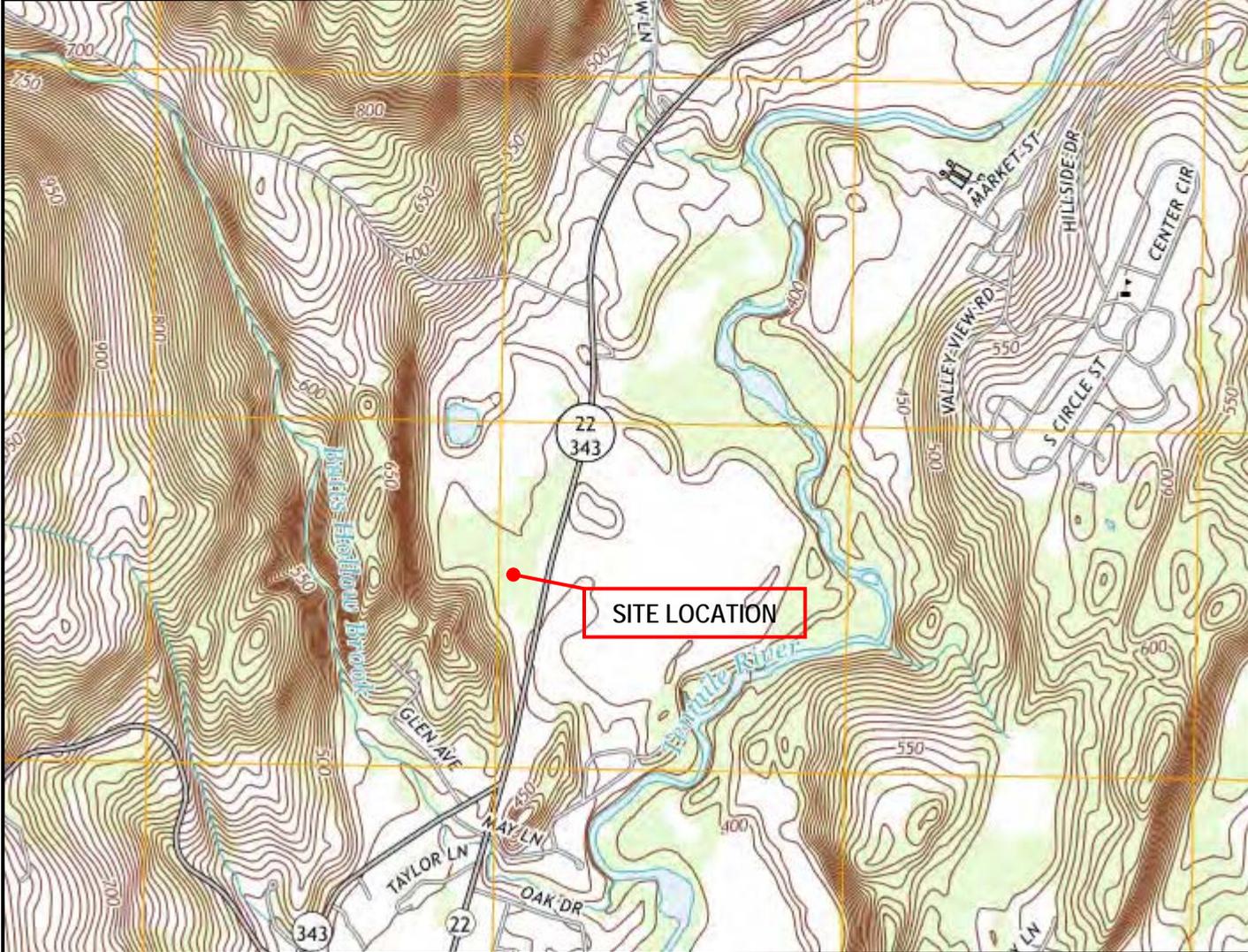
- Park - Wassaic Multiple Use Area is approximately 2,000 feet north
- Cemetery - Valley View Cemetery (Dover Plains, NY) approximately 2 miles south
- Park - Macedonia Brook State Park (Connecticut) is approximately 3.6 miles east
- Park - Pond Mountain Natural Area (Connecticut) is approximately 4.9 miles east
- Lake - Swift Pond is approximately 1.4 miles east
- Park - Stone Church Park is approximately 2 miles south
- Viewpoint – Cornfields east of State Route 22, approximately 500 feet east; identified as a “significant viewpoint” per Dutchess County online GIS-based tool *Historic Resource Survey 1986* (**Attachment 13**).
- Historic Structure – Farm residence approximately 500 feet north of the site; identified as a “historic structure” per Dutchess County online GIS-based tool *Historic Resource Survey 1986*. As per **Attachment 13**, this farm residence was identified by the Dutchess County Historical Society. A description of this residence is also included in **Attachment 13**.

SUPPORTING INFORMATION

State Environmental Quality Review (SEQR)
Full Environmental Assessment Form (Full EAF)
Bulfamante Composting Facility
3501 State Route 22, Dover Plains, NY

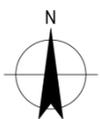
The potential impacts to these nearby resources are anticipated to be negligible because odors, noise and other operational impacts will be managed in accordance with a NYSDEC Part 360 Solid Waste Management permit for yard waste composting operations. The facility will operate in strict accordance with the permit requirements and maintain detailed operating records, while seeking to minimize community impacts as generally outlined in **Attachment 9**.

Attachment 1
USGS Location Map



CAZENOVIA, NEW YORK
DATE: 11/2015
JOB No.: 11109254

A. BULFAMANTE LANDSCAPING, INC.
BULFAMANTE COMPOSTING FACILITY

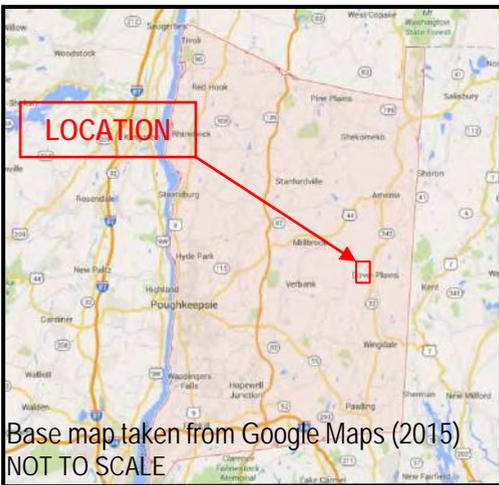


0 1000
feet

ATTACHMENT 1
USGS TOPOGRAPHIC MAP

Base map credit: United States Geological Survey, Amenia, NY-CT 2013, 7.5' Quadrangle

Attachment 2
Aerial Location Map

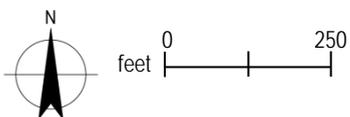


Base map credit: Bing Maps, 2015 Microsoft Corporation, 2015 HERE



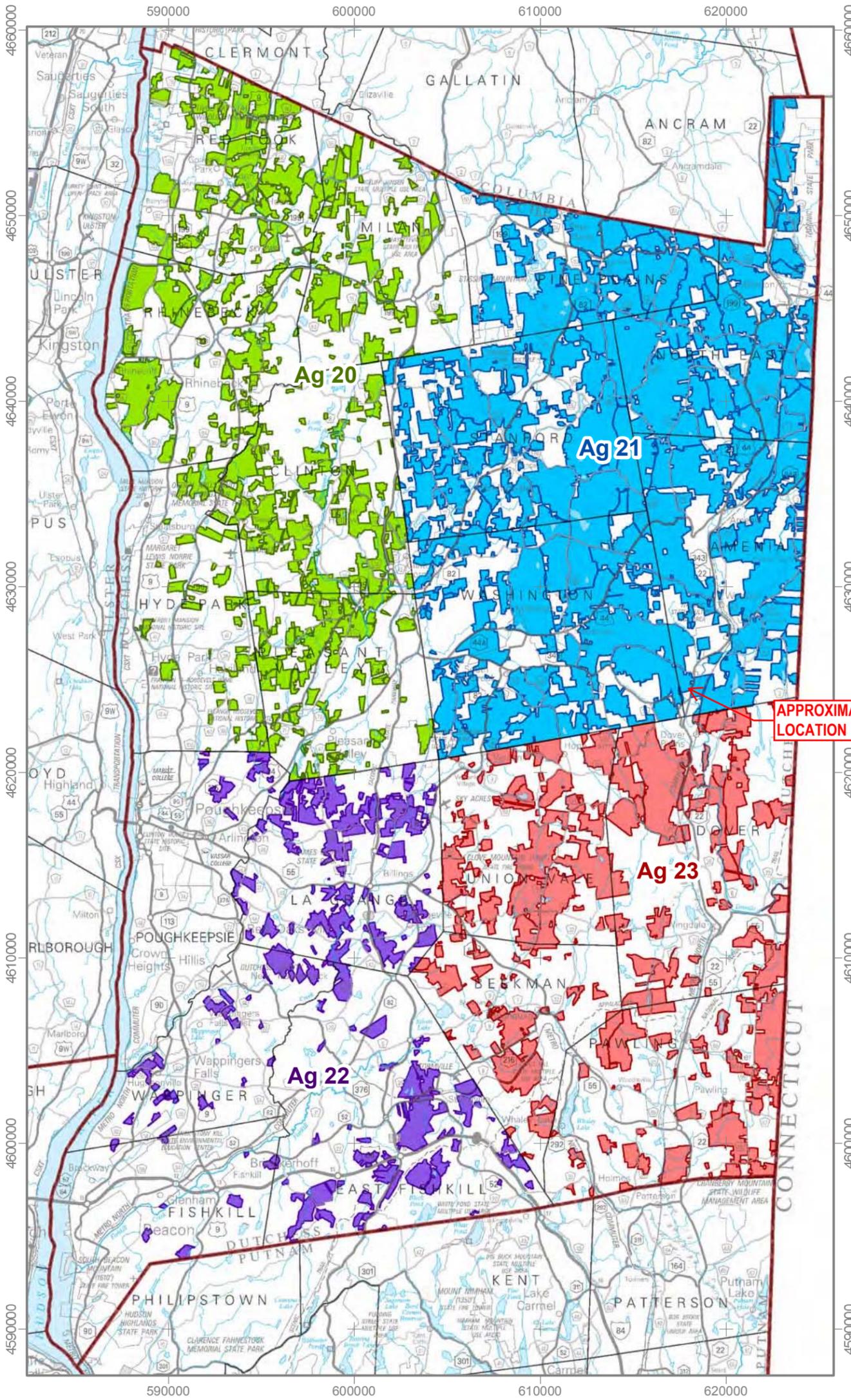
CAZENOVIA, NEW YORK
DATE: 11/2015
JOB No.: 11109254

A. BULFAMANTE LANDSCAPING, INC.
BULFAMANTE COMPOSTING FACILITY



ATTACHMENT 2
AERIAL LOCATION MAP

Attachment 3
Dutchess County Agricultural Districts
(2012)



KEY

- Ag. District 20
- Ag. District 21
- Ag. District 22
- Ag. District 23

DISTRICT CERTIFICATIONS and TOWNS

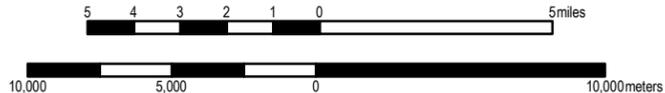
DISTRICT 20
 CERTIFIED 4/16/2008
 Clinton Pleasant Valley
 Hyde Park Red Hook
 Milan Rhinebeck

DISTRICT 21
 CERTIFIED 4/16/2008
 Amenia Stanford
 Northeast Washington
 Pine Plains

DISTRICT 22
 CERTIFIED 4/16/2008
 East Fishkill Poughkeepsie
 Fishkill Wappinger
 LaGrange

DISTRICT 23
 CERTIFIED 4/16/2008
 Beekman
 Dover
 Pawling
 Unionvale

MAP PROJECTION
 UTM Zone 18, NAD83 meters



MAP SOURCE INFORMATION

Map created at Cornell IRIS (Institute for Resource Information Sciences) <<http://iris.css.cornell.edu>> for the NYS Department of Agriculture and Markets
 Agricultural Districts boundary data is available at CUGIR (Cornell University Geospatial Information Repository) website: <<http://cugir.mannlib.cornell.edu>>

Base Map: state250_bw.tif 1998
 Scale: 1:250,000; County boundaries imported from the file nyshore.e00 from the NYSGIS Clearinghouse website: <<http://gis.ny.gov>>

Contains data copyrighted by the NYS Office of Cyber Security

DISCLAIMER

This is a general reference to Agricultural District boundaries; not a legal substitute for actual tax parcel information.

Boundaries as certified prior to January 2012

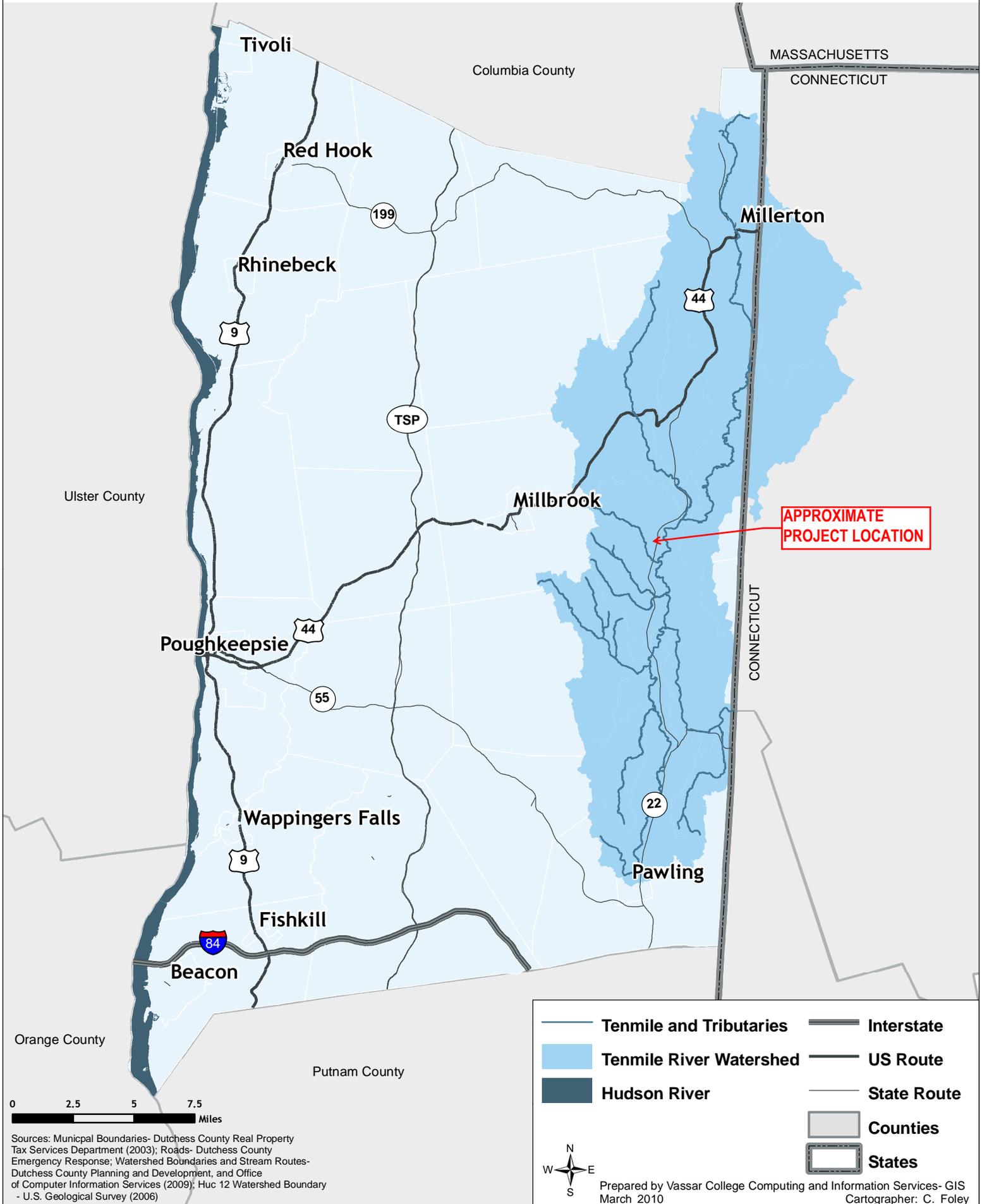
Open Enrollment Annual Additions through 2011 are included in this data. Check with county agencies to confirm the status of individual parcels.

Attachment 4

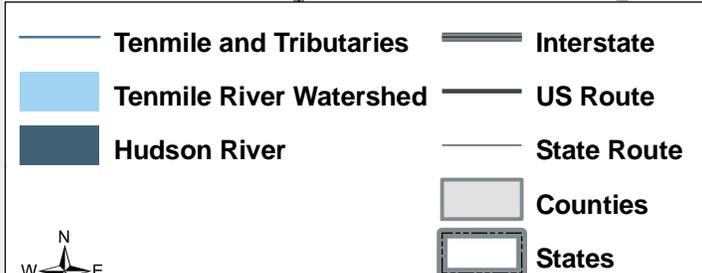
Tenmile Watershed, Dutchess County, NY

(March 2010)

Tenmile Watershed, Dutchess County, NY



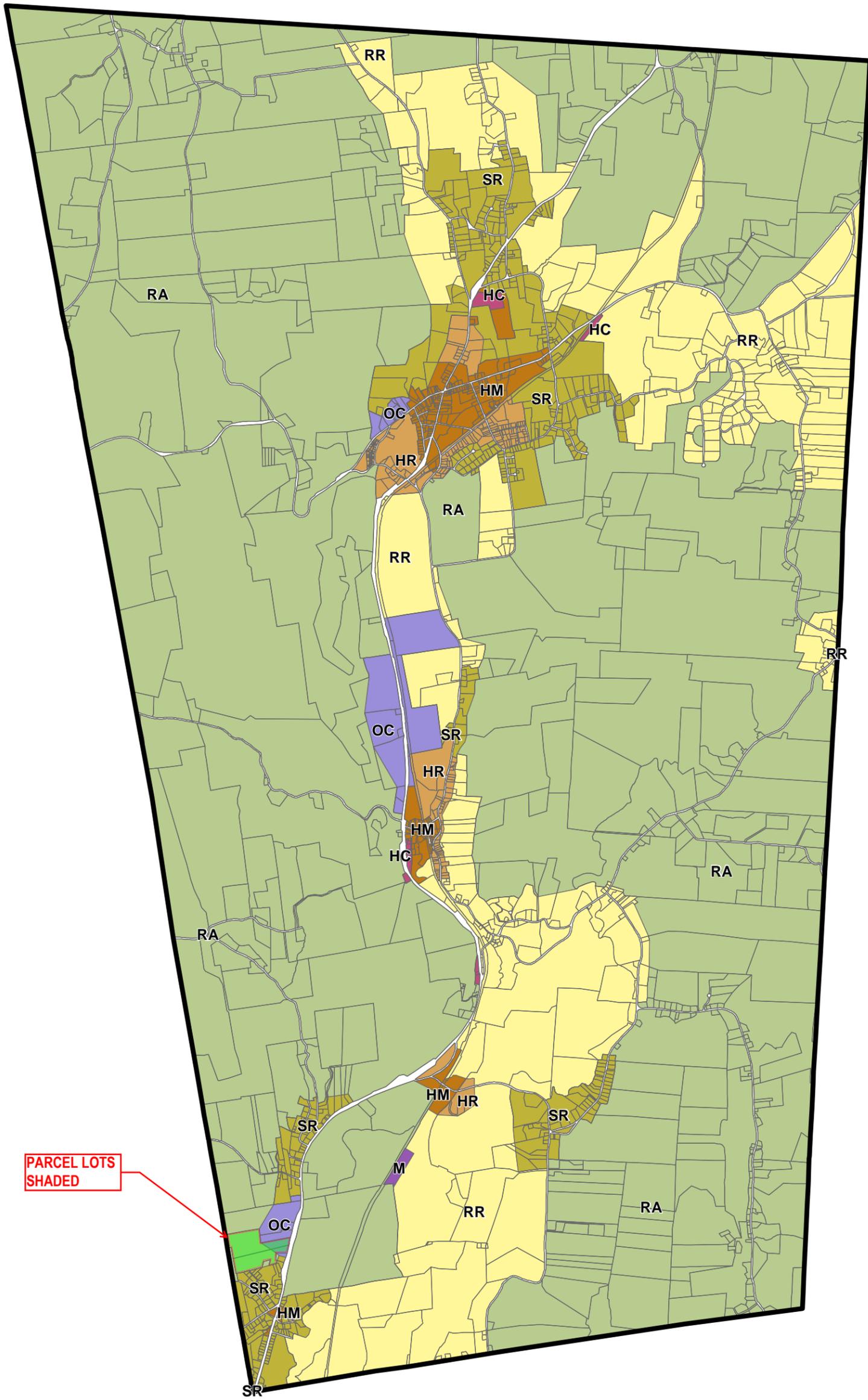
Sources: Municipal Boundaries- Dutchess County Real Property Tax Services Department (2003); Roads- Dutchess County Emergency Response; Watershed Boundaries and Stream Routes- Dutchess County Planning and Development, and Office of Computer Information Services (2009); Huc 12 Watershed Boundary - U.S. Geological Survey (2006)



Prepared by Vassar College Computing and Information Services- GIS
March 2010
Cartographer: C. Foley

Attachment 5
Town of Amenia, Zoning Map
(December 13, 2012)

TOWN OF AMENIA ZONING MAP



Legend

- Municipal Boundaries
- Parcel Boundaries

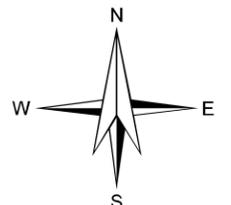
Zoning Districts

Representation: ZoningMaps

- HC, HIGHWAY COMMERCIAL
- HM, HAMLET MIXED USE
- HR, HAMLET RESIDENTIAL
- M, INDUSTRIAL/MANUFACTURING
- OC, OFFICE COMMERCIAL/INDUSTRIAL
- RA, RURAL AGRICULTURAL
- RR, RURAL RESIDENTIAL
- SR, SUBURBAN RESIDENTIAL

Map Prepared By Dutchess County Department of Planning and Development
December 13, 2012

Zoning district boundaries are enacted by Municipality. These maps are produced by Dutchess County Planning & Development per agreement with the Municipality, and are updated at the pleasure of the Municipality. These Zoning Maps are posted for information only, and may not reflect the current configuration of district lines. Check with local Zoning Enforcement Officer for current boundary delineation.

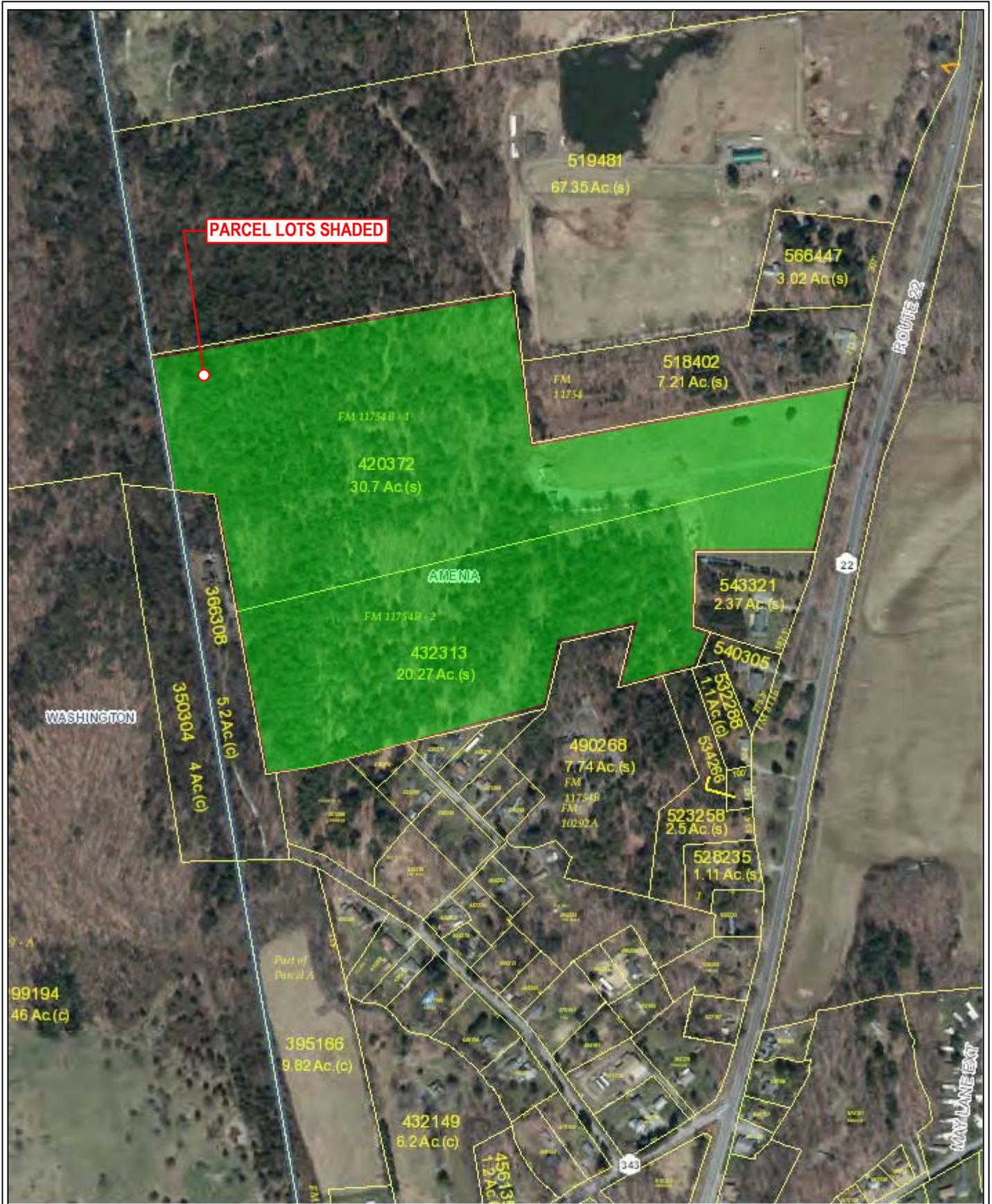


1 inch = 4,000 feet

Attachment 6

Parcel Lines, Dutchess County, NY

(Downloaded: November 18, 2015)



Dutchess County
New York

Parcel Lines

Dutchess County, NY

Printed by:

ParcelAccess



ParcelAccess
Internet
11/18/2015

Attachment 7

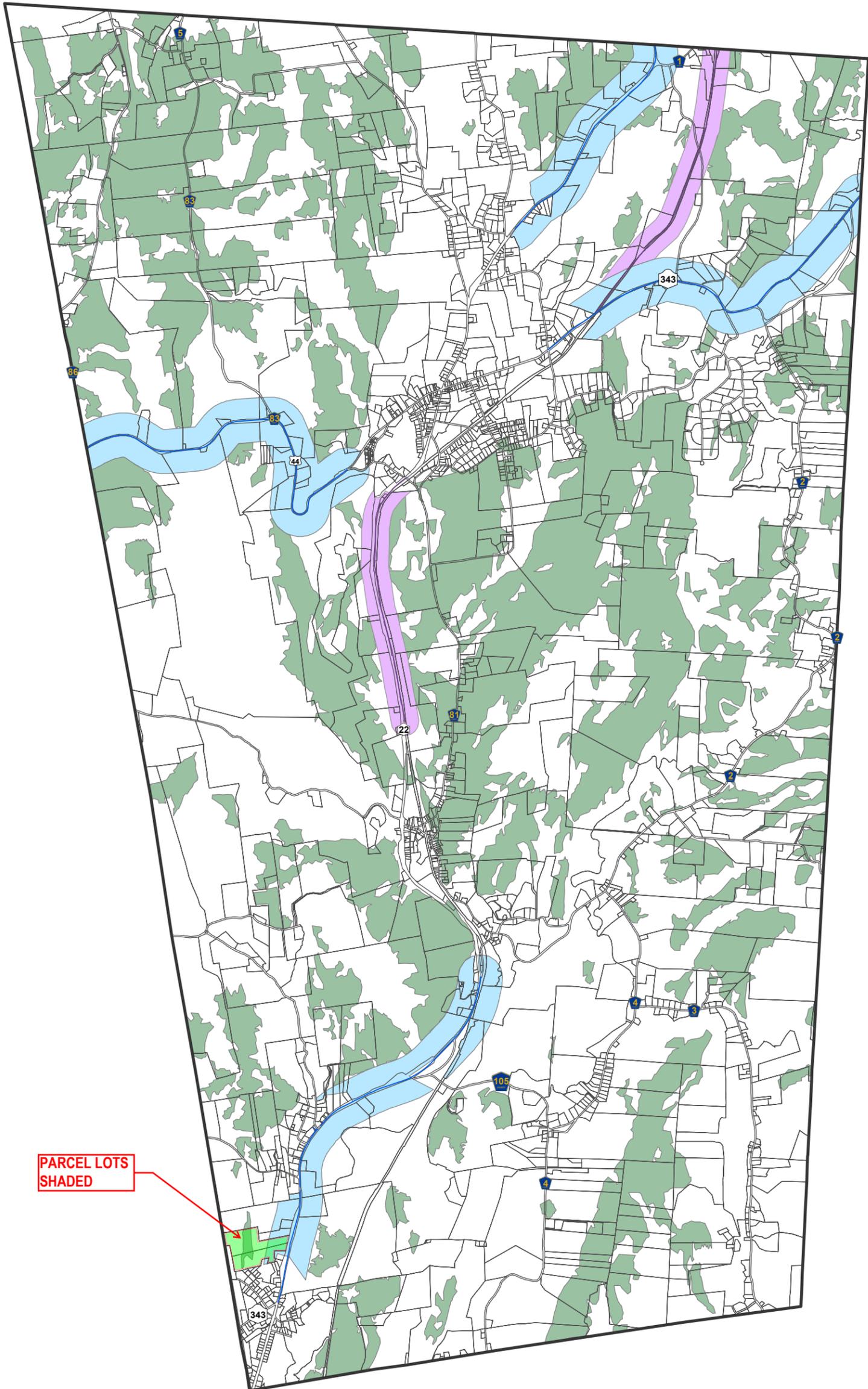
Town of Amenia, Scenic Visual Protection Overlay District

(November 2, 2011)

Town of Amenia

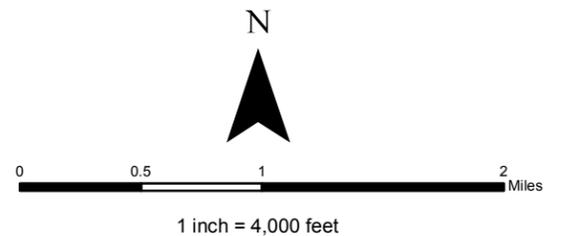
Scenic Visual Protection Overlay District

Prepared By Dutchess County Department of Planning & Development
Adopted Date: November 2, 2011



Legend

- Trails with Visual Protection Corridor
- Roads with Visual Protection Corridor
- Parcel Boundaries
- Trail Visual Protection Corridor
- Road Visual Protection Corridor
- Scenic Visual Protection Zone



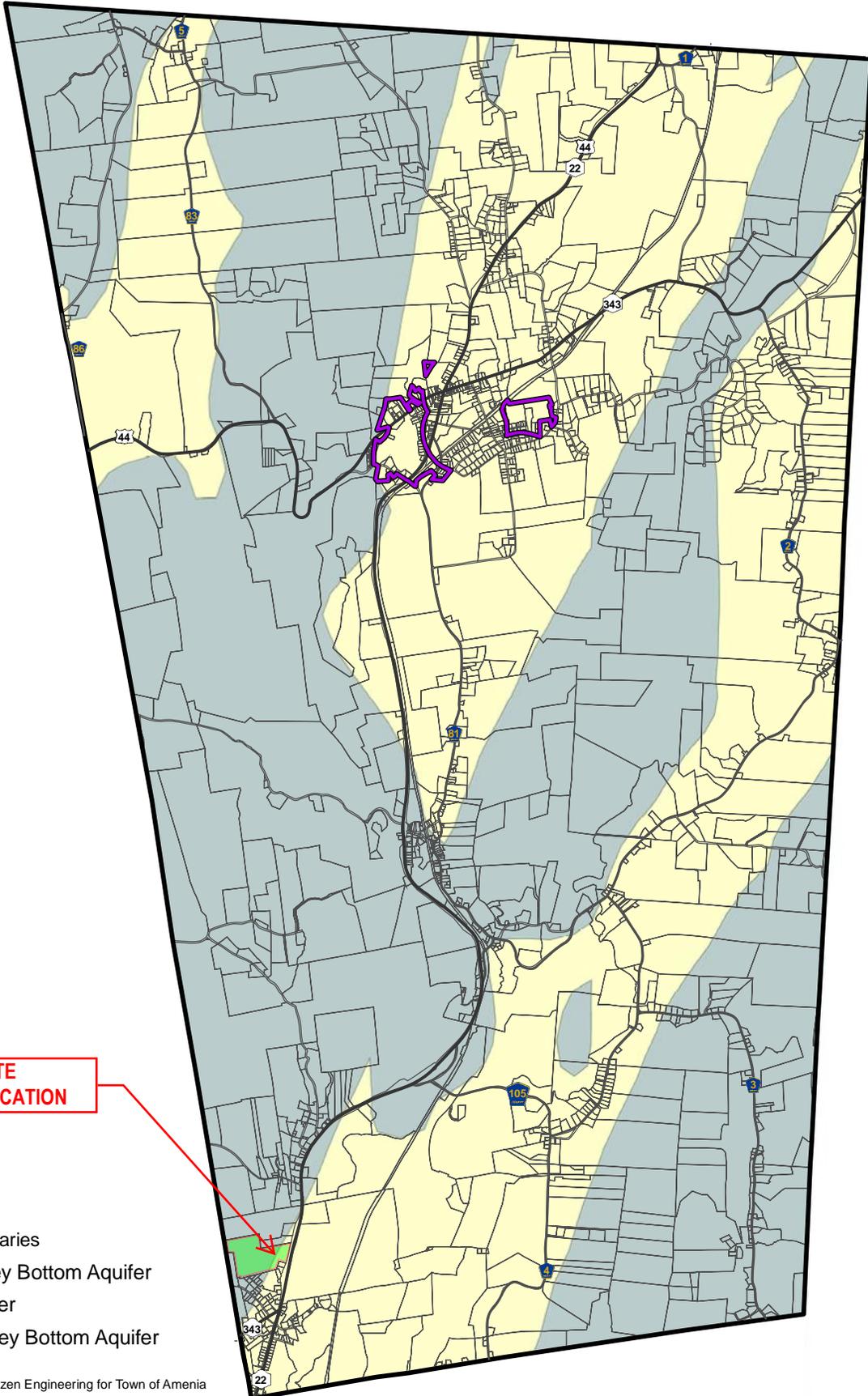
Attachment 8.1

Town of Amenia, Aquifer Overlay District

(July 19, 2007)

Town of Amenia Aquifer Overlay District

Prepared By Dutchess County Department of Planning & Development
Adopted Date: July 19, 2007



**APPROXIMATE
PROJECT LOCATION**

Legend

- Parcel Boundaries
- Primary Valley Bottom Aquifer
- Upland Aquifer
- Buffered Valley Bottom Aquifer

Aquifer data developed by Chazen Engineering for Town of Amenia



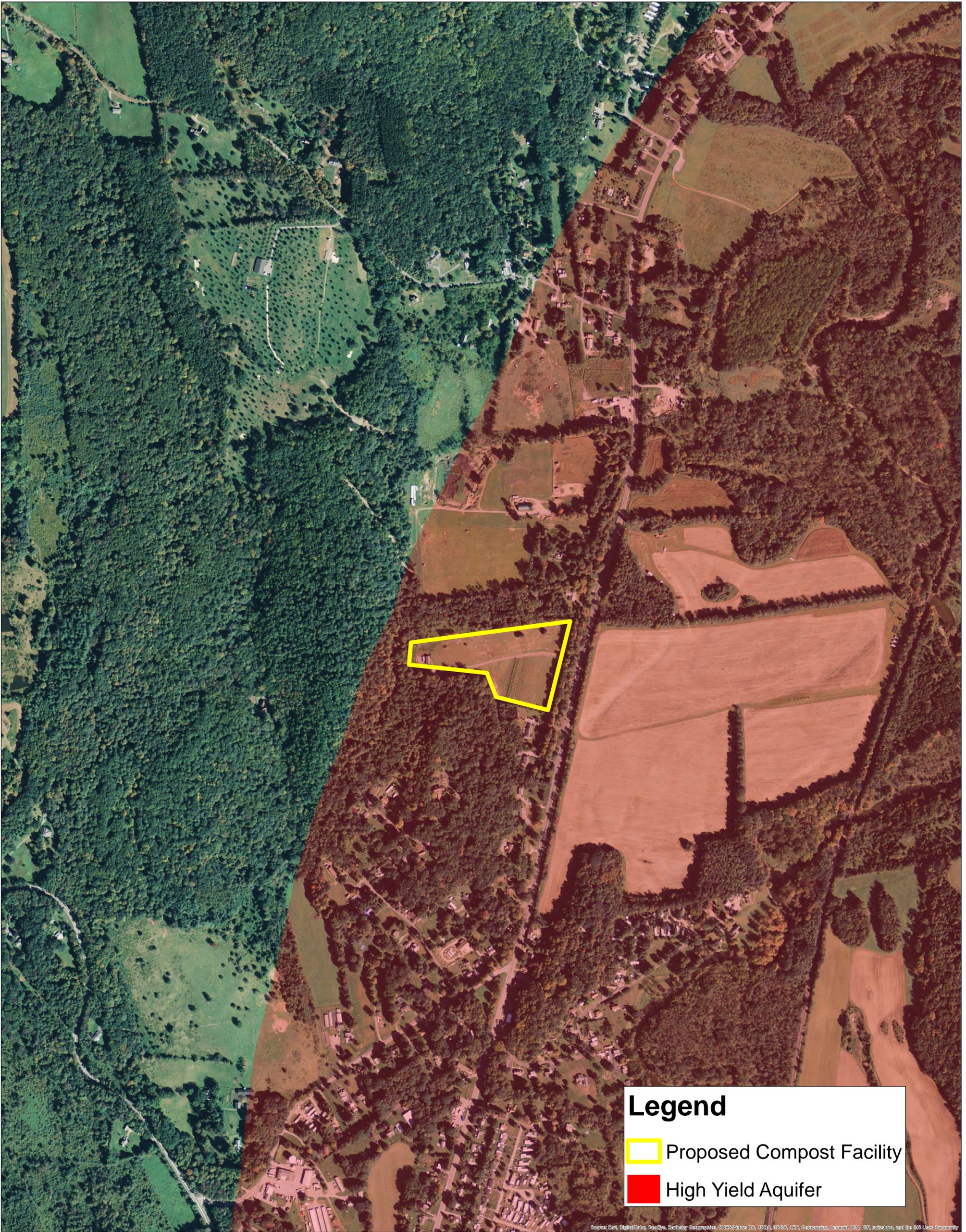
Not To Scale

Attachment 8.2

Figure 1 – Site Location and Aquifer Proximity

Location Map

(December 2015)



Legend

- Proposed Compost Facility
- High Yield Aquifer



Paper Size A1
 Map Projection: Mercator Auxiliary Sphere
 Horizontal Datum: WGS 1984
 Grid: WGS 1984 Web Mercator Auxiliary Sphere



Town of Amenia, New York
 Bulfamante Composting Facility
 Site Location and Aquifer Proximity
 Location Map

Job Number 11109254
 Revision A
 Date 02 Dec 2015

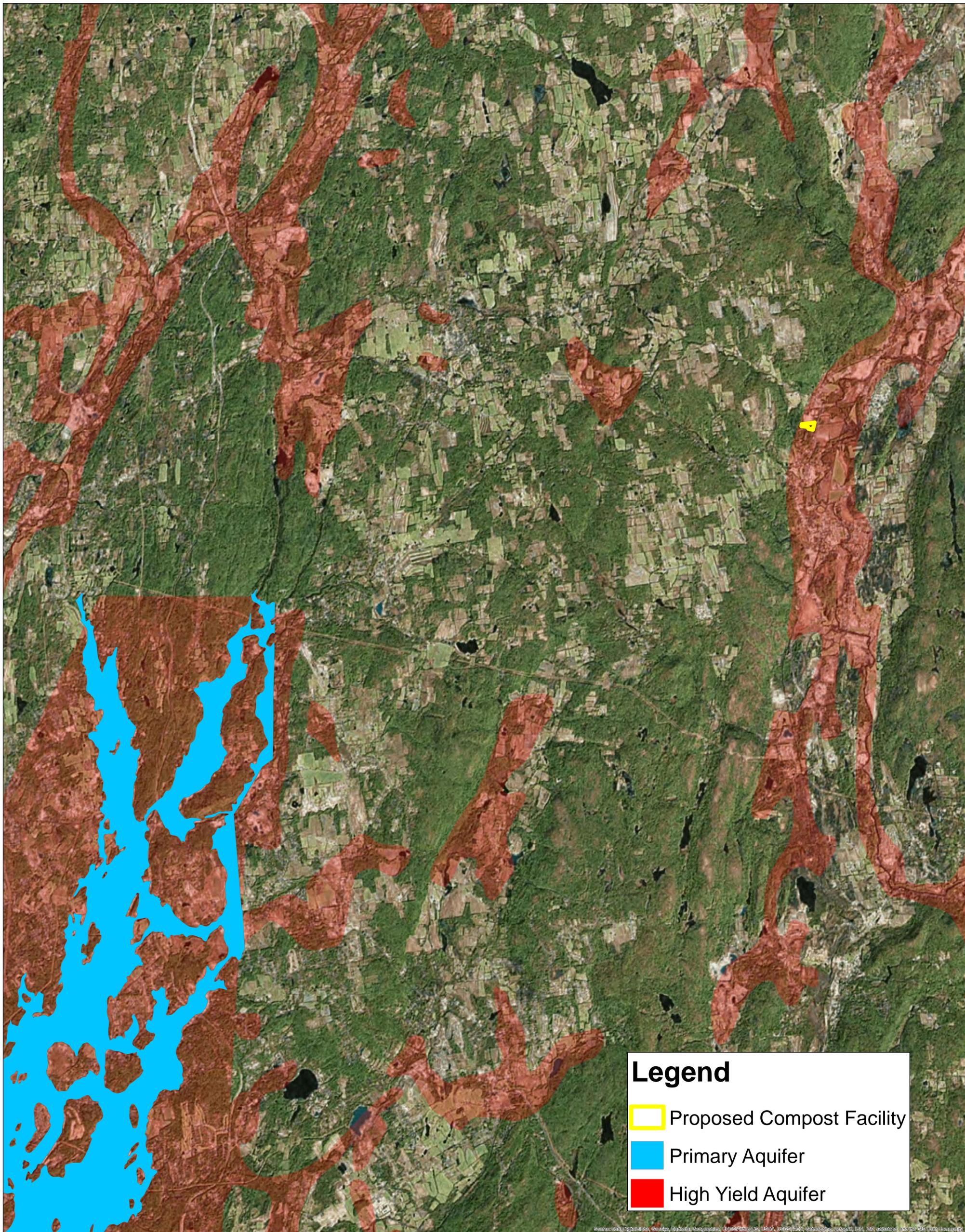
Figure 1

Attachment 8.3

Figure 2 – Site Location and Aquifer Proximity

Vicinity Map

(December 2015)

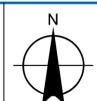


Legend

- Proposed Compost Facility
- Primary Aquifer
- High Yield Aquifer

0 0.75 1.5 3 4.5 6 Miles

Paper Size A1
 Map Projection: Mercator Auxiliary Sphere
 Horizontal Datum: WGS 1984
 Grid: WGS 1984 Web Mercator Auxiliary Sphere



Town of Amenia, New York
 Bulfamante Composting Facility
 Site Location and Aquifer Proximity
 Vicinity Map

Job Number 11109254
 Revision A
 Date 02 Dec 2015

Figure 2

Attachment 9

Proposal and Application Narrative, Bulfamante Compost

(December 14, 2015)



PROPOSAL
AND
APPLICATION NARRATIVE

BULFAMANTE COMPOST

AMENIA, NEW YORK

DECEMBER 14, 2015
(REVISION 2)

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Prepared by Peter Moon, P.E.
President and Principal Engineer

O₂Compost



December 14, 2015 (Revision 2)

New York State
Department of Environmental Conservation
21 S. Putt Corners Road
New Paltz, NY 12561-1696

Attn: Ms. Tracey O'Malley - Environmental Analyst, Division of Environmental Permits

Re: Written Project Description & Purpose
Yard Waste Compost Facility in Amenia, New York

Dear Ms. O'Malley:

I am writing on behalf of Mr. Anthony Bulfamante with A. Bulfamante Landscaping, Inc in New Rochelle, New York. This letter serves as our proposal for a yard waste composting facility located in Amenia, Dutchess County, New York.

The goal of this project is to compost yard waste generated in Westchester County and the surrounding region. The purpose of this project is to produce a high quality, certified organic compost product for use in ornamental horticulture, landscaping, public works projects and agriculture. The finished compost will be distributed locally as a bulk product and regionally as bagged compost and blended potting media.

There will be two key objectives in operating this facility: 1) protecting surface and ground water resources; and 2) mitigating odor impacts to neighbors and passersby.

The proposed site is owned by Mr. Bulfamante and is located in Amenia, New York. The property is zoned Office-Commercial / Industry Mixed-Use. Mr. Bulfamante has confirmed with Amenia City Officials that recycling / composting is an acceptable activity in this zone.

The following discussion provides the concept for this project in greater detail. The methods and approach that we plan to take will be conducted in strict compliance with State of New York regulations (Subpart 360-5: Composting Facilities).

We want to thank you in advance for considering this proposal and project description. We welcome your comments and questions and are available to attend a pre-application meeting at your office.

Respectfully yours,

Peter Moon, P.E.
President / Principal Engineer
O2Compost

Executive Summary

This proposal is submitted to The New York Department of Environmental Conservation (DEC) for a yard waste composting facility located in Amenia, New York. The working title of this new venture is Bulfamante Compost, and the owner, Mr. Anthony Bulfamante, is fully responsible and committed to the project's long-term success.

Project Goals and Objectives

The goals and objectives for Bulfamante Compost include the following:

- Capture and recycle organic landscape debris and thereby reduce illegal dumping and landfill disposal of these materials;
- Produce a high quality compost product(s) for use in home gardens, commercial and institutional landscapes, state and municipal projects and local agriculture;
- Support local efforts to develop new and successful business ventures;
- Create a new source of tax revenue;
- Create local employment opportunities; and
- Operate in a responsible manner that mitigates adverse impacts to neighbors and the environment.

Project Owner

Mr. Anthony Bulfamante, President
Bulfamante Landscaping
68 Marion Drive
New Rochelle, NY 10804

Tel: 914-636-5000

E-mail: anthony@bulfamantelandscaping.com

Project Location & Designation

3501 State Route 22
Dover Plains, NY 12522

Location Map:	Figure 1, attached
Map Coordinates:	41.764624, -73.579500
Property Tax Numbers:	Lot #1 – 132000-7064-00-420372 (30.7 acres) Lot #2 - 132000-7064-00-432313 (20.27 acres)
Land Use Zone:	OC – Office Commercial / Industry Mixed Use

Phased Project Development

As currently envisioned, Bulfamante Compost will be developed in three phases:

- Phase I – Start-up: Yard Waste Only – Bulk Product Distribution
Maximum 20,000 tons per year
- Phase II – Intermediate Scale: Yard Waste – Bulk & Bagged Product Distribution
Maximum 40,000 tons per year
- Phase III – Full Scale: Yard Waste – Bulk & Bagged Product Distribution
Maximum 60,000 tons per year

The timeline for each of these three phases will depend on: 1) obtaining all necessary permits and complying with state composting regulations; 2) construction of processing facilities and infrastructure; 3) operator training; 4) demonstrated ability to process increasing volumes of feedstock materials; and 5) market demand for the finished compost product.

The three phases of development are illustrated in Figures 2 – 4, attached.

Site Development & Features

With all three phases of development, the site will include the following features:

- Improved access from SR 22
- Site security: gates, fencing, soil berms, landscaping along SR 22, lighting and signage
- A certified scale at the entrance to the compost facility
- Uncovered paved area for receiving and grinding landscape debris
- Receiving building and paved surface for feedstocks
- Uncovered paved surface for active compost piles
- Run-on and run-off surface water control systems
- A lined leachate management pond, sized for Phase 3 projected volumes
- A 25-foot set-back from property lines (providing vehicle access on all sides of the facility)
- Unpaved area for short / long-term storage of screened compost

Phase II features will also include

- A product blending and bagging building
- A bagged product staging area

Phase III features will include:

- Expanded paved areas for active compost piles
- Expanded drainage facilities for storm water and leachate management

Materials to be Processed

- Municipal yard waste: grass clippings, tree & shrub trimmings, leaves, etc.
- This facility will not receive and process food waste.
- This facility will also not receive and process biosolids, septage or any form of industrial sludge.

Proposed Method of Composting

The method of composting that will be used at Bulfamante Compost is referred to as Extended Aerated Static Pile (Extended ASP) Composting. This simply means that we will induce airflow through a prepared mix of materials using an electric blower – we do not turn the pile during the first 30 days (the active phase) of composting.

ASP composting was originally developed by the U.S. Department of Agriculture in the mid-1970's and is used throughout the country to process a wide variety of municipal organic waste materials. O₂Compost uses ASP Composting in virtually all of our designs, and to process all varieties of feedstocks.

With aerated composting, we will be able to maintain aerobic conditions throughout the compost pile and manage pile temperatures. This approach expedites the composting process and yields a high-quality compost product that is effectively free of pathogens, parasites and weed seeds. The finished product is safe to use as a soil amendment or mulch product in all applications.

By composting in this manner, we are also able to control offensive odors and vectors, improve the aesthetics of the waste handling area, quickly produce a superior product, and reduce labor and operating expenses.

Nuisance Odor Management Plan

Introduction

All living systems, both plant and animal, excrete odorous molecules on a nearly continuous basis.

The end products of anaerobic metabolism include methane, carbon dioxide, water and heat, along with odorous compounds such as hydrogen sulfide (H₂S), volatile organic acids, mercaptans, and methyl sulfides.

The obvious odor from anaerobic metabolism has led to a widely held belief that if composting is fully aerobic there will be no odors. This simply is not true. All composting facilities produce some odor.

The main products of aerobic composting are carbon dioxide, water and heat. Many low molecular weight, odorous intermediates may also be produced during aerobic composting, including ammonia (NH₃), acetic acid, and citric acid.

For this reason, it is essential in designing and operating a compost facility to implement a thorough and active odor management program.

Compost Facility Odor Management

Managing odors at Bulfamante Compost includes the following elements:

- Feedstock receiving, proper initial mixing of compost materials;
- Positive aeration of the compost pile to maintain aerobic conditions;
- Compost curing
- Good housekeeping practices to minimize sources of odor
- Compost storage

Mix ratio development and characteristics are critical to successful composting. Mix ratio refers to the ratio or portion of each feedstock in the initial mix. The initial mix impacts a number of processing parameters including: processing time, aeration requirements, odor generation, leachate production and final product quality. The following parameters are significant in the initial mix:

- Nutrient Content (i.e., C:N Ratio)
- Porosity
- Moisture Content
- Available Carbon Content

Porosity is of primary importance for initial mixing. A mix with insufficient porosity will limit aeration. Porosity is provided in a mix by large particle size materials such as chipped brush and wood chips, also referred to as "bulking agents". In general, the porosity of the initial mix is considered optimal if the bulk density ranges between 900 and 1,200 pounds per cubic yard.

Maintaining the moisture content of a compost pile within the optimum range is critical to successful composting. Sufficient water must be available for microbial activity. Excessive moisture content reduces porosity, promotes odor producing anaerobic conditions and slows the decomposition process. Excessive moisture also acts as a heat sink, reducing pile temperatures. The optimum initial moisture content for composting is considered to be 60 to 65 percent, although experience shows that some feedstocks may successfully be composted with higher initial moisture contents (e.g., separated dairy solids).

Heat is generated during the composting process as a result of the rapid decomposition of organic compounds that are readily available as substrate for microbial growth. Readily available forms of carbon include sugars, starches, fats and proteins. Less available forms of carbon include hemicellulose, cellulose and lignin, all of which decompose much more slowly. The composting process requires a certain fraction of readily available compounds to be present. For example, a pile of sawdust will not generate much heat compared to a similar sized pile of sawdust mixed with poultry manure.

Inorganic nutrients such as nitrogen, potassium and phosphorous are required for microbial growth. In some mixes, nitrogen can be limiting. For example, yard waste collected during the winter months can have low nitrogen content, while all other nutrients are typically present in sufficient quantity. As a general rule of thumb, the ratio of carbon to nitrogen (C:N ratio) should be approximately 30:1. A lower C:N ratio (i.e., high nitrogen content) can result in the production of odorous nitrogen containing compounds such as amines and ammonia during composting. At higher C:N ratios, nitrogen may not be sufficient for active, thermophilic composting.

Positive Aeration of the Compost Pile to Maintain Aerobic Conditions

In an EASP compost system, the blowers are operated to either push air into the pile (forced or positive aeration) or pull air through the pile (drawn or negative aeration). Bulfamante Compost will utilize positive aeration. The following discussion elaborates on positive aeration.

The frequency and duration of blower operation is adjusted to maintain aerobic conditions throughout the pile. An on/off cycle is typically used to optimize pile temperatures, and at the same time maintain aerobic conditions. Time/temperature controls (programmable logic controllers) may also be used to achieve these conditions.

With positive aeration, the blower outlet is connected to the aeration manifold and ambient air is pushed through the pile beginning at the aeration base (i.e., plenum). The air then passes up through the compost mix and is finally emitted through the finished compost cover. One of the functions of the compost cover is to serve as a biofilter to treat potentially odorous off-gasses that are emitted from the compost pile.

Leachate Management Plan

Bulfamante Compost will construct a lined leachate pond to manage the projected quantity of compost leachate from a 1-hour 10-year storm event. This facility is intended to be a zero discharge system, however a discharge permit will be arranged as a back-up plan.

Good Housekeeping Practices to Minimize Sources of Odor

Odor reduction is accomplished by practicing "good house-keeping" in all areas of the compost facility. It is essential to clean up the feedstock receiving and mixing areas daily and eliminate areas of standing water. A daily walk-through of the compost facility is important to identify potential sources of odor as well as problems with disconnected aeration pipes. In addition, equipment used to mix and process feedstock materials should be routinely cleaned to minimize exposure of raw materials to the open air.

A checklist for daily walk-through inspections and monthly detailed site inspections is shown in the "Inspection Plan and Logs" section of this Permit Application. These will be kept on file for review by GCHD.

The primary means to keeping odor minimized is aeration. This is done using blowers. Bulfamante Compost will have the necessary number of blowers, increasing in number as the volume of materials received increases.

Odor Complaint Response

Bulfamante Compost staff will treat each neighbor with respect and record any complaint received. Odor complaints will be acted upon promptly.

The person making a complaint will be given a follow-up call with the results of an inspection. Corrective actions taken will also be noted and shared with the caller. An odor complaint check sheet has been prepared to assure this procedure is followed.

Bulfamante Compost staff will review operational information and weather information and take the following steps:

- An on-site meteorological station will be installed and maintained
- All complaint calls will be recorded, analyzed, and reported on a monthly basis.
- Immediate action will be taken to identify and correct an odor source, if possible.
- Local regulators and the DEC will be notified if 5 calls have been received within the previous seven days.
- A written analysis will be generated explaining the suspected cause and corrective actions taken and placed in the facility operation records.
- Complaint records will be shared with the community when requested.

This response system is designed to insure that Bulfamante Compost is listening to the surrounding community. It will also serve to inform the GCHD and community of Bulfamante Compost's response to any community concern.

Odor Complaint Records

Odor complaints will be recorded on a form and kept in a master record file that is maintained in the facility office. These complaints can be from individuals or relayed to Bulfamante from a regulatory agency. At the end of the month this record will be tabulated and reviewed. Complaints will be noted as to time and location. They will be compared to meteorological data as recorded by the on-site recording station. The number of confirmed complaints will be tracked each month and trends will be observed. Records will be kept for 5 years.

Neighbor Relations Plan

Bulfamante Compost personnel will treat each neighbor courteously and record any issues and concerns they have reported. The facility will host periodic tours of the facility for neighbors and anyone else who expresses an interest in the operation. Plans and status reports will also be posted on one or more social media sites.

Specifically, odor issues will be acted upon promptly. Bulfamante Composts will record each odor complaint received that could be caused by the site composting activity. A check sheet has been prepared, Odor Response Check Sheet Form, which will be filled in by site management or supervisory staff. Information will be recorded including: time, date, person's name, address, distance from site, wind direction, odor description, frequency, begin time, end time, etc. Also, on the check sheet will be an area for recording results of the inspection including site activity, unusual odors, or any observation of activities off site. The person making a complaint should be given a follow-up call with the results of the inspection. Corrective actions taken should also be noted.

Conclusion

Mr. Bulfamante is committed to the successful outcome of this business venture. He is equally committed to being a leader in the development of new businesses in the region and to being a good neighbor to those living in Amenia, Dover Plains and surrounding communities.

Attachment 10.1
Estimate of Potential Peak Hour Traffic Volume
(December 2015)

ESTIMATE OF POTENTIAL PEAK HOUR TRAFFIC VOLUME

Bulfamante Composting Facility

Site Location: 3501 State Route 22, Dover Plains, NY (Town of Amenia, Dutchess County)

Owner: A. Bulfamante Landscaping, Inc.

Prepared by: GHD Consulting Services Inc.

Key:

Input
Intermediate Result
Result

No.	Description	Estimated Value	Unit	Comment(s)
1.0	Baseline			
	Capacity (tons delivered)	60,000	tons/yr	Build-out projected processing capacity for "Phase 3"
	Average density of yard waste delivered	600	lbs/cy	Based on typical mixture of "green" and "brown" yard wastes (as delivered)
	Capacity (cubic yards delivered)	200,000	cy/yr	
	Weeks of operation per year	50	wks/yr	2 weeks estimated for vacation(s) and/or holiday(s)
	Days of operation per week	6	days/wk	6 days based on anticipated operating schedule (Mon. through Sat.)
2.0	Residential Vehicles			
	Town population	4,436	people	Town of Amenia population, 2010 (per Appendix A: Table 1 of Dutchess County "Rethinking Waste" Final LSWMP, 2012 - 2022)
	Town population over 18	66%	--	66% of the population over the age of 18 (per 2010 US Census data)
	Town population w/vehicles	95%	--	95% based on conservative estimate
	Potential Town population participation rate	30%	--	30% based on anticipated participation rates (back-yard composting anticipated to remain as prevalent practice)
	Town population participating at site	834	people	= 4,436 people x 66% x 95% x 30%
	County annual yard waste generation	19,868	tons/yr	"Yard Trimmings" waste generation (per Appendix B: Table 5 of Dutchess County "Rethinking Waste" Final LSWMP, 2012 - 2022)
	Weighted average percentage "residential"	55%	--	per p. 10 of Dutchess County "Rethinking Waste" Final LSWMP, 2012 - 2022
	County population	297,488	people	per p. 9 of Dutchess County "Rethinking Waste" Final LSWMP, 2012 - 2022
	County annual yard waste generation (per capita)	0.04	tons/person/yr	= (19,868 tons/yr x 55%) / 297,488 people
	Town annual yard waste generation	31	tons/yr	= 0.04 tons/person/yr x 834 people
		102	cy/yr	= 31 tons/yr x 600 lbs/cy
	Contingency "generation" factor	1.5	--	
	Town annual yard waste generation (per capita) to site	153	cy/yr	= 102 cy/yr x 1.5
	Percentage to site	85%	--	85% of yard waste generated by residents could be delivered to the site for composting
	Total annual yard waste delivered	130	cy/yr	= 85% x 153 cy/yr
	Approximate residential vehicle capacity	0.30	cy/veh	Based on partial filling of a small truck "bed," applicable for rural community, anticipating primarily small truck deliveries (conservative)
	Annual total number of vehicles	434	veh/yr	
	Ave. daily number of vehicles	1	veh/day	
	Peak daily number of vehicles	7	veh/day	Ave. x 5.0 (anticipating peak day on Saturday)
	Peak hour number of vehicles	7	veh/peak hr	If all "peak daily" comes over 1 hr (anticipating peak hour on Saturday morning, shorter time for conservatism)
3.0	Commercial/Institutional Vehicles			
	Commercial/Institutional yard waste delivered	199,870	--	200,000 c.y./year less Residential
	Intermediate-size trucks	20	cy/veh	Based on ave. small packer trucks or roll-off containers
	Fraction of total commercial/instit. vehicles	30%	--	Estimated based on anticipated truck distribution
	Annual total number of vehicles	2,998	veh/yr	Intermediate-size trucks
	Ave. daily number of vehicles	10	veh/day	
	Peak daily number of vehicles	20	veh/day	Ave. x 2.0
	Peak hour number of vehicles	5	veh/peak hr	If all "peak daily" comes over 4 hrs
	Large-size haul trucks	80	cy/veh	Based on ave. large tractor trailer
	Fraction of total commercial/instit. vehicles	70%	--	Estimated based on anticipated truck distribution
	Annual total number of vehicles	1,749	veh/yr	Large-size haul trucks
	Ave. daily number of vehicles	6	veh/day	
	Peak daily number of vehicles	12	veh/day	Ave. x 2.0
	Peak hour number of vehicles	3	veh/peak hr	If all "peak daily" comes over 4 hrs
	Landscaper finished compost "pick-up"	200	cy/day	Back-hauling not included for landscapers for conservatism (approximately 200 CY/day based on concept)
	Landscaper truck volume	10	cy/veh	Estimated based on typical small landscaping end dump truck capacity
	Ave. daily number of vehicles	20	veh/day	
	Peak day	40	veh/day	Ave. x 2.0
	Peak hour	10	veh/peak hr	If all "peak daily" comes over 4 hrs
4.0	Result			
	Estimate of Total Peak Hour Number of Vehicles	25	veh/hr	If < 100 peak hour trips, "Traffic Impact Analysis" not typically required per SEQRA guidance per NYSDEC EAF Workbook

Notes:

- 1 Vehicle Trips defined as "The number of inbound or outbound trips made by vehicles" (NYSDEC, EAF Workbooks Glossary).
- 2 SEQR guidance for Question D.2.j., "... assumes that a project generating fewer than 100 peak hour vehicle trips per day will not result in any significant increases in traffic."
- 3 "Back-hauling" assumed for residential, intermediate-size trucks and large-size trucks; additional one-way traffic added-in for landscaper pick-ups of finished compost
- 4 Traffic volume estimate based on anticipated estimates; actual peak hour volumes might vary.
- 5 Values shown in table are estimates as based on potential projections as based on current project expectations.

Attachment 10.2
NYSDOT Traffic Data Viewer –
Traffic Count Hourly Report
(April 7, 2008)

Attachment 11

SEQR FEAF Part 1 Question D.2.o.

(November 19, 2015)

SEQR FEAR Part 1 D.2.o.

Does the proposed action have the potential to produce odors for more than one hour per day?

Yes

If yes, describe possible sources, potential frequency and duration of odor emissions and proximity to nearest occupied structures.

Odor Sources:

1)Receiving area for yard waste:

Odor is created typically by the lack of oxygen and creation of intermediate compounds. Intermediate compounds are not the large organic molecules originally in the plant nor are they CO₂ or other the final products of complete oxidation. Odorous compounds include hydrogen sulfide (H₂S), volatile organic acids, mercaptans, and methyl sulfides. Bacteria that thrive in oxygen deficient environments are called anaerobic bacteria and typically emit these compounds. An anaerobic environment is created by either a period of time where oxygen is kept from reaching the interior of the material pile or the material has a high oxygen demand and oxygen is quickly consumed. Material with higher nitrogen content has a higher oxygen demand and therefore higher potential for odor generation.

Mitigation:

In the design of the Bulfamante Composting Facility it will become the practice to incorporate the high nitrogen yard waste into an aerated pile on the same day the material is delivered. No yard waste containing high nitrogen will be allowed to sit in piles overnight or over the weekend without being placed on aeration.

Delivered yard waste that is high in carbon content or contains a high percentage of large wood particles has a lower oxygen need and higher porosity allowing natural (convective) air flow. High carbon and highly porous material can sit for long durations without air and not be odorous. Wood residual used in bulking can be stored for months without generating excessive odors.

2)Composting process

As described above if the composting process is oxygen is deficient it can generate odors detectable offsite. If the composting pile is dense, air flow is restricted, oxygen demand exceeds supply, or no air is available at the base of the pile the pile will become anaerobic. Oxygen within a pile can be consumed as quickly as 15 minutes after pile construction..

Mitigation:

Bulfamante Composting will use a technology referred to as Aerated Static Pile (ASP). Blowers will be used to force air into the base of the pile providing air to the areas deficient in oxygen. Air will be provided at a frequency and distributed to prevent the process from becoming anaerobic. The air is also provided considering pile moisture content, pile size, and pile temperature.

In addition a 6 - 12 inch biofilter cover will be used over the top of the pile. This is composed stable composted material with a moisture content to support bacterial growth. This biofilter layer has proven to be very efficient in destruction of residual intermediate compounds that cause excess odor.

Potential Frequency: The composting process at Bulfamante Composting will take place 24 hours per day 7 days per week. Therefore potential for odor is always present. The mitigation measures proposed which is the aerated process and biofilter cover will be used consistently.

Distance from Occupied Structures:

Structure to the North:

130 ft from property line

220 ft from proposed aerated compost system

Structure to the South:

175 ft from property line

580 ft from proposed aerated compost system

Distances are approximate, based on Google Earth.

Attachment 12

Custom Soil Resource Report for Project Site

(November 2015)



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for **Dutchess County, New York**



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<http://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the

Custom Soil Resource Report

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

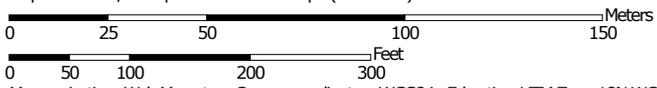
Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



Map Scale: 1:1,900 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Dutchess County, New York
 Survey Area Data: Version 12, Sep 23, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 28, 2011—Oct 9, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Dutchess County, New York (NY027)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CuB	Copake gravelly silt loam, undulating	8.4	72.1%
HoD	Hollis-Chatfield-Rock outcrop complex, hilly	0.6	5.4%
HoF	Hollis-Chatfield-Rock outcrop complex, very steep	2.6	22.5%
Totals for Area of Interest		11.6	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments

Custom Soil Resource Report

on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Dutchess County, New York

CuB—Copake gravelly silt loam, undulating

Map Unit Setting

National map unit symbol: 9rfb
Mean annual precipitation: 41 to 47 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 115 to 195 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Copake and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Copake

Setting

Landform: Deltas, outwash plains, terraces
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy over calcareous sandy and gravelly glaciofluvial deposits

Typical profile

H1 - 0 to 6 inches: gravelly silt loam
H2 - 6 to 36 inches: gravelly loam
H3 - 36 to 80 inches: stratified very gravelly coarse sand to gravelly loamy fine sand

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Available water storage in profile: Moderate (about 6.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: A

Minor Components

Hoosic

Percent of map unit: 10 percent

Halsey

Percent of map unit: 5 percent
Landform: Depressions

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Fredon

Percent of map unit: 5 percent

Landform: Depressions

HoD—Hollis-Chatfield-Rock outcrop complex, hilly

Map Unit Setting

National map unit symbol: 9rgf

Elevation: 100 to 1,000 feet

Mean annual precipitation: 41 to 47 inches

Mean annual air temperature: 45 to 50 degrees F

Frost-free period: 115 to 195 days

Farmland classification: Not prime farmland

Map Unit Composition

Hollis and similar soils: 40 percent

Chatfield and similar soils: 30 percent

Rock outcrop: 15 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hollis

Setting

Landform: Hills, ridges

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: A thin mantle of loamy till derived mainly from schist, granite, and gneiss

Typical profile

H1 - 0 to 3 inches: loam

H2 - 3 to 15 inches: loam

H3 - 15 to 19 inches: unweathered bedrock

Properties and qualities

Slope: 15 to 30 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Natural drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to high (0.00 to 5.95 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Very low (about 1.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

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Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D

Description of Chatfield

Setting

Landform: Hills, ridges
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy till derived mainly from granite, gneiss, or schist

Typical profile

H1 - 0 to 9 inches: fine sandy loam
H2 - 9 to 30 inches: loam
H3 - 30 to 34 inches: unweathered bedrock

Properties and qualities

Slope: 15 to 30 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to high (0.00 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 1 percent
Available water storage in profile: Low (about 4.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: B

Description of Rock Outcrop

Typical profile

H1 - 0 to 60 inches: unweathered bedrock

Properties and qualities

Slope: 15 to 30 percent
Depth to restrictive feature: 0 inches to lithic bedrock
Capacity of the most limiting layer to transmit water (Ksat): Very low to very high (0.00 to 19.98 in/hr)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s

Minor Components

Charlton

Percent of map unit: 10 percent

Sun

Percent of map unit: 5 percent
Landform: Depressions

HoF—Hollis-Chatfield-Rock outcrop complex, very steep

Map Unit Setting

National map unit symbol: 9rgh
Elevation: 100 to 1,000 feet
Mean annual precipitation: 41 to 47 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 115 to 195 days
Farmland classification: Not prime farmland

Map Unit Composition

Hollis and similar soils: 40 percent
Rock outcrop: 25 percent
Chatfield and similar soils: 25 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hollis

Setting

Landform: Hills, ridges
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: A thin mantle of loamy till derived mainly from schist, granite, and gneiss

Typical profile

H1 - 0 to 3 inches: loam
H2 - 3 to 15 inches: loam
H3 - 15 to 19 inches: unweathered bedrock

Properties and qualities

Slope: 45 to 60 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Natural drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to high (0.00 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Very low (about 1.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s

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Hydrologic Soil Group: D

Description of Chatfield

Setting

Landform: Hills, ridges

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Loamy till derived mainly from granite, gneiss, or schist

Typical profile

H1 - 0 to 9 inches: fine sandy loam

H2 - 9 to 30 inches: loam

H3 - 30 to 34 inches: unweathered bedrock

Properties and qualities

Slope: 45 to 70 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to high (0.00 to 5.95 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum in profile: 1 percent

Available water storage in profile: Low (about 4.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: B

Description of Rock Outcrop

Typical profile

H1 - 0 to 60 inches: unweathered bedrock

Properties and qualities

Slope: 45 to 70 percent

Depth to restrictive feature: 0 inches to lithic bedrock

Capacity of the most limiting layer to transmit water (Ksat): Very low to very high (0.00 to 19.98 in/hr)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Minor Components

Charlton

Percent of map unit: 5 percent

Sun

Percent of map unit: 5 percent

Landform: Depressions

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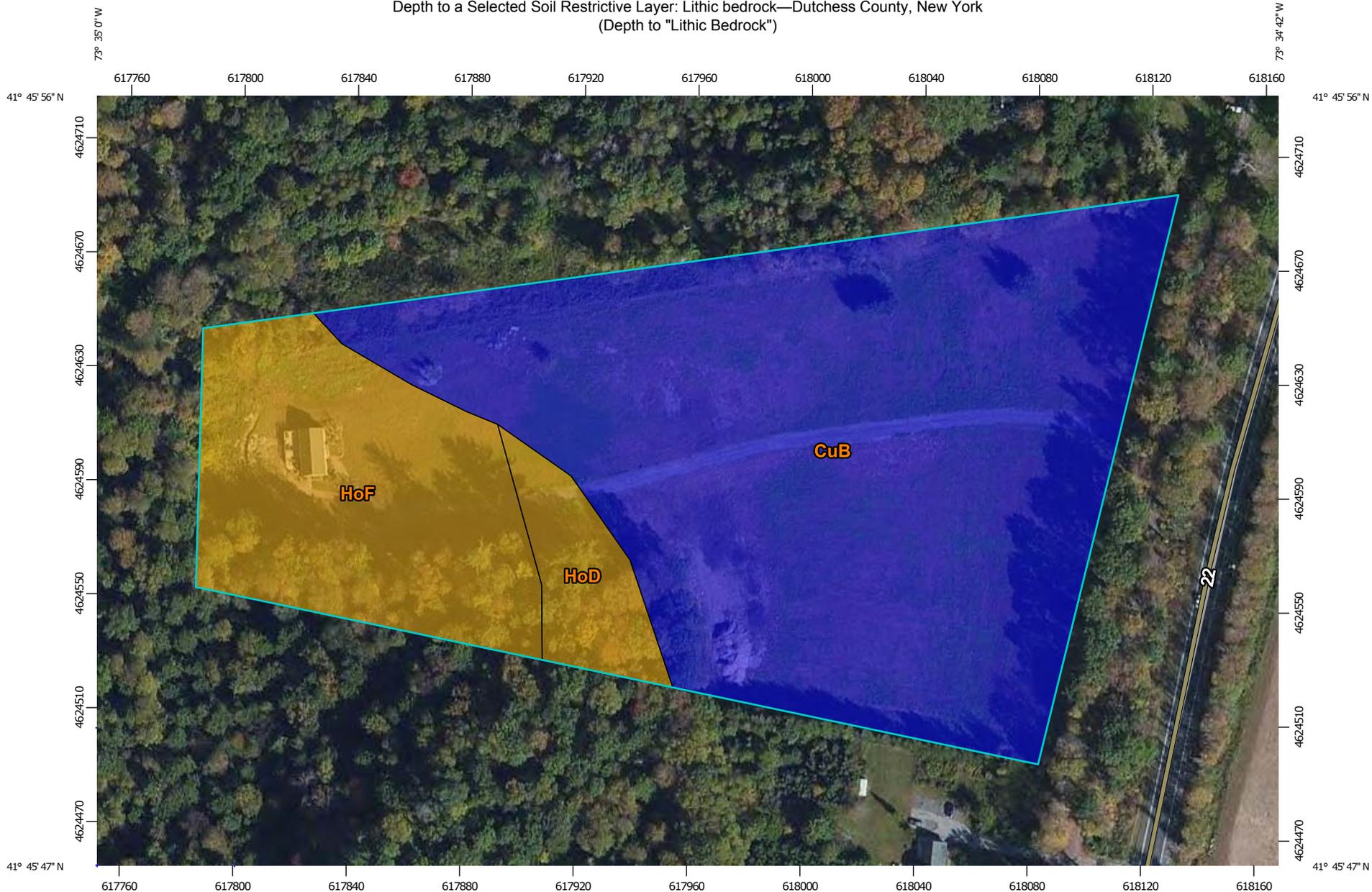
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Depth to a Selected Soil Restrictive Layer: Lithic bedrock—Dutchess County, New York
(Depth to "Lithic Bedrock")



Map Scale: 1:1,900 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

Depth to a Selected Soil Restrictive Layer: Lithic bedrock—Dutchess County, New York
(Depth to "Lithic Bedrock")

MAP LEGEND

Area of Interest (AOI)	 Not rated or not available
 Area of Interest (AOI)	
Soils	Water Features
Soil Rating Polygons	 Streams and Canals
 0 - 25	Transportation
 25 - 50	 Rails
 50 - 100	 Interstate Highways
 100 - 150	 US Routes
 150 - 200	 Major Roads
 > 200	 Local Roads
 Not rated or not available	Background
	 Aerial Photography
Soil Rating Lines	
 0 - 25	
 25 - 50	
 50 - 100	
 100 - 150	
 150 - 200	
 > 200	
 Not rated or not available	
Soil Rating Points	
 0 - 25	
 25 - 50	
 50 - 100	
 100 - 150	
 150 - 200	
 > 200	

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: Web Mercator (EPSG:3857)

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This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Dutchess County, New York
Survey Area Data: Version 12, Sep 23, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 28, 2011—Oct 9, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Depth to a Selected Soil Restrictive Layer: Lithic bedrock

Depth to a Selected Soil Restrictive Layer: Lithic bedrock— Summary by Map Unit — Dutchess County, New York (NY027)				
Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
CuB	Copake gravelly silt loam, undulating	>200	8.4	72.1%
HoD	Hollis-Chatfield-Rock outcrop complex, hilly	38	0.6	5.4%
HoF	Hollis-Chatfield-Rock outcrop complex, very steep	38	2.6	22.5%
Totals for Area of Interest			11.6	100.0%

Description

A "restrictive layer" is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers.

This theme presents the depth to the user selected type of restrictive layer as described in for each map unit. If no restrictive layer is described in a map unit, it is represented by the "> 200" depth class.

This attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Rating Options

Units of Measure: centimeters

Restriction Kind: Lithic bedrock

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Interpret Nulls as Zero: No

Depth to Water Table—Dutchess County, New York
(Depth to Water Table)



Map Scale: 1:1,900 if printed on A landscape (11" x 8.5") sheet.

0 25 50 100 150 Meters

0 50 100 200 300 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  0 - 25
-  25 - 50
-  50 - 100
-  100 - 150
-  150 - 200
-  > 200
-  Not rated or not available

Soil Rating Lines

-  0 - 25
-  25 - 50
-  50 - 100
-  100 - 150
-  150 - 200
-  > 200
-  Not rated or not available

Soil Rating Points

-  0 - 25
-  25 - 50
-  50 - 100
-  100 - 150
-  150 - 200
-  > 200

 Not rated or not available

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

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Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Dutchess County, New York
Survey Area Data: Version 12, Sep 23, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 28, 2011—Oct 9, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Depth to Water Table

Depth to Water Table— Summary by Map Unit — Dutchess County, New York (NY027)				
Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
CuB	Copake gravelly silt loam, undulating	>200	8.4	72.1%
HoD	Hollis-Chatfield-Rock outcrop complex, hilly	>200	0.6	5.4%
HoF	Hollis-Chatfield-Rock outcrop complex, very steep	>200	2.6	22.5%
Totals for Area of Interest			11.6	100.0%

Description

"Water table" refers to a saturated zone in the soil. It occurs during specified months. Estimates of the upper limit are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

This attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Rating Options

Units of Measure: centimeters

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

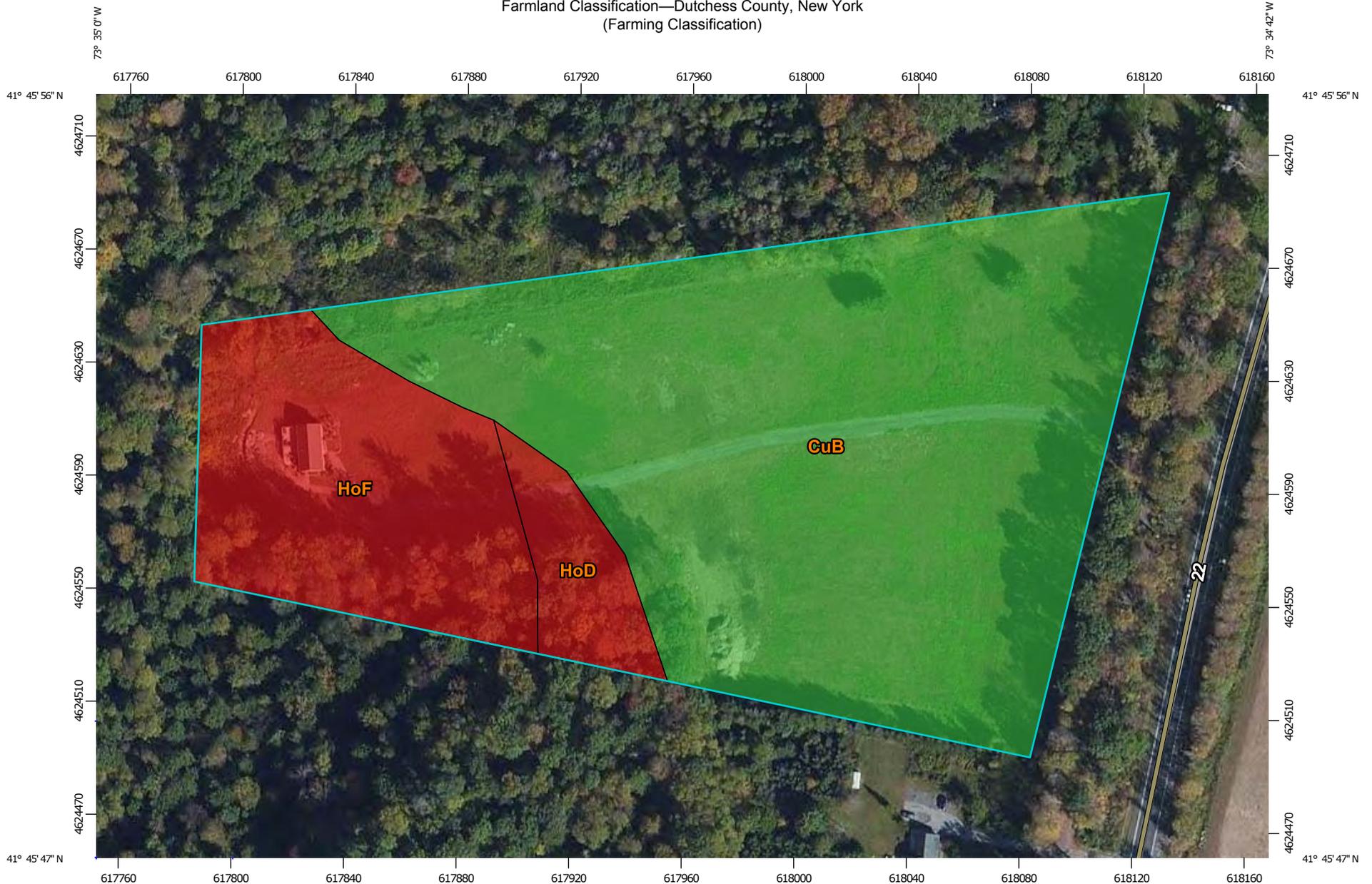
Tie-break Rule: Lower

Interpret Nulls as Zero: No

Beginning Month: January

Ending Month: December

Farmland Classification—Dutchess County, New York
(Farming Classification)



Map Scale: 1:1,900 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

Farmland Classification—Dutchess County, New York
(Farming Classification)

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of local importance
-  Farmland of unique importance
-  Not rated or not available

Soil Rating Lines

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained

-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of local importance
-  Farmland of unique importance
-  Not rated or not available

Soil Rating Points

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season

-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of local importance
-  Farmland of unique importance
-  Not rated or not available

Water Features

Farmland Classification—Dutchess County, New York
(Farming Classification)

MAP INFORMATION

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Dutchess County, New York
Survey Area Data: Version 12, Sep 23, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 28, 2011—Oct 9, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Farmland Classification

Farmland Classification— Summary by Map Unit — Dutchess County, New York (NY027)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
CuB	Copake gravelly silt loam, undulating	All areas are prime farmland	8.4	72.1%
HoD	Hollis-Chatfield-Rock outcrop complex, hilly	Not prime farmland	0.6	5.4%
HoF	Hollis-Chatfield-Rock outcrop complex, very steep	Not prime farmland	2.6	22.5%
Totals for Area of Interest			11.6	100.0%

Description

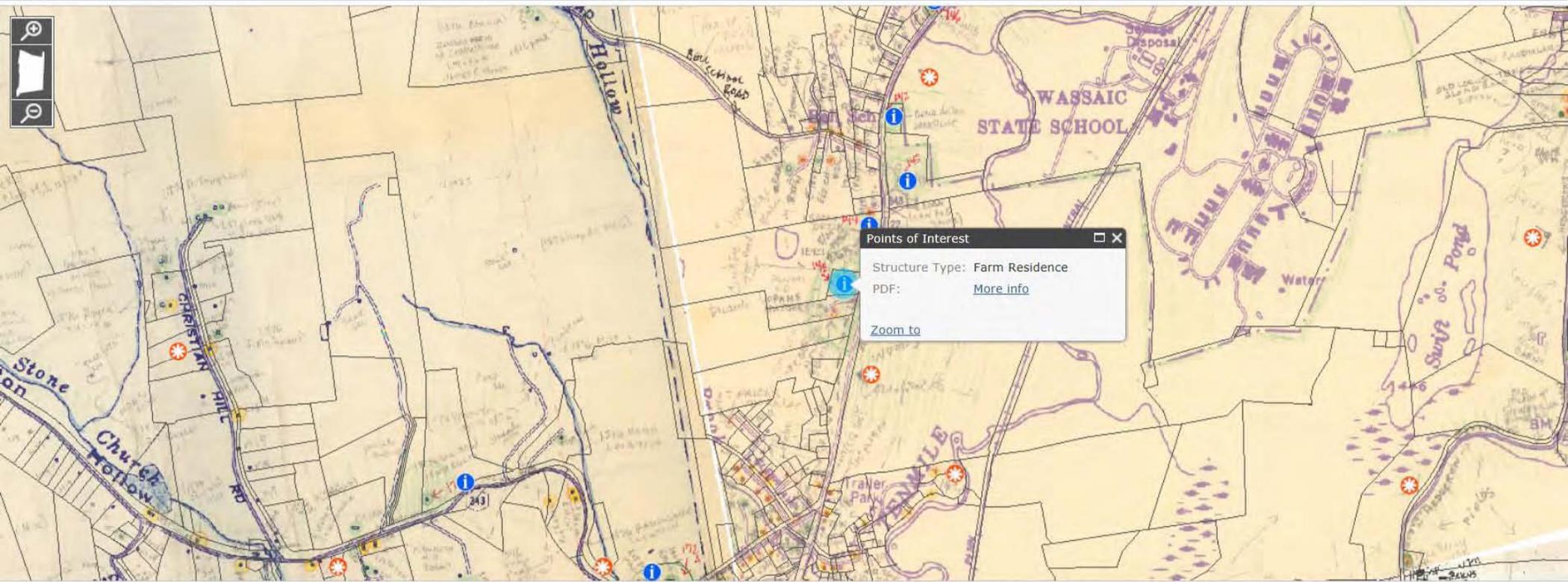
Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Rating Options

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower

Attachment 13
Historic Resource Survey 1986
(August 1986)



Points of Interest

Structure Type: Farm Residence

PDF: [More info](#)

[Zoom to](#)

Historic Resource Survey
An "Old" Mapping Project Renewed

The Historic Resource Survey was conducted in the 1980s and resulted in a set of maps, photos, and detailed documentation of the location of historic resources such as buildings, structures, landscapes, and objects. Compiled by Stephanie Mauri from the Dutchess County Historical Society, John Clarke from the Dutchess County Department of Planning and Development, and other architectural

historians, they were the product of a comprehensive field survey of almost every road in the County. Voluminous in detail, quaint in description, and beautifully colored, they included many subjective notes about the structures and natural features observed. In addition, an extensive architectural inventory accompanies the included photographs and formal descriptions of each resource.

-An excerpt from the Dutchess County Planning Federation [Plan On It eNewsletter](#) by Robert Wills, Sr GIS Project Coordinator



Stephanie Mauri and John Clarke work on the original Historic Resource Survey (1985)

-  Click on this icon within the map above to view the Historic Site Documentation and related photos.
-  This icon denotes areas determined to be significant viewpoints in the County.

14. THREATS TO BUILDING: a. none known b. zoning c. roads
d. developers e. deterioration
f. other: _____

15. RELATED OUTBUILDINGS AND PROPERTY:
a. barn b. carriage house c. garage TO WEST END
d. privy e. sheds f. greenhouse
g. shop h. gardens ? SMOKE HOUSE ? SPRING HOUSE
i. landscape features: MANY OLD TREES & SHRUBS
j. other: GARDEN REMNANTS

16. SURROUNDINGS OF THE BUILDING (check more than one if necessary):
a. open land b. woodland
c. scattered buildings
d. densely built-up e. commercial NURSERY/LANDSCAPE BUSINESS TO SOUTH
f. industrial g. residential
h. other: Agricultural

17. INTERRELATIONSHIP OF BUILDING AND SURROUNDINGS:
(Indicate if building or structure is in an historic district)

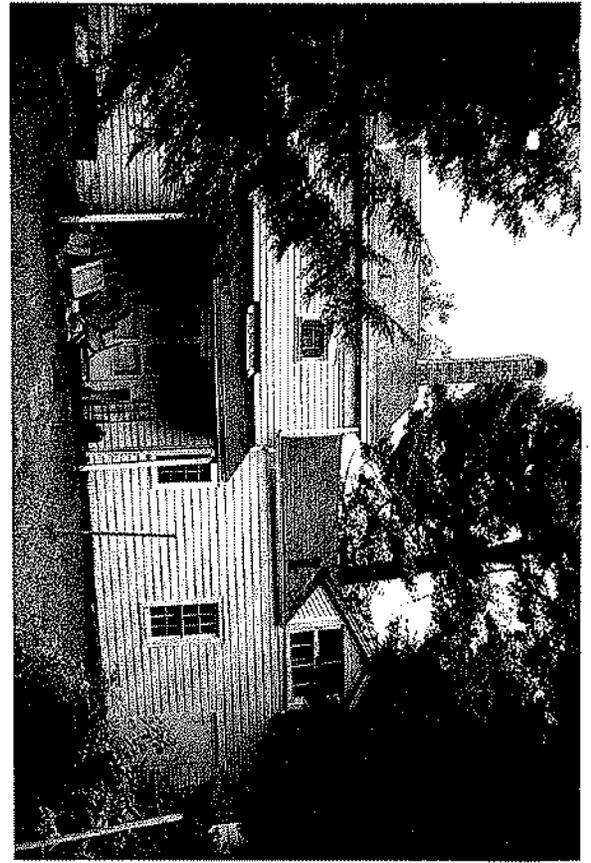
18. OTHER NOTABLE FEATURES OF BUILDING AND SITE (including interior features if known):
2 Story, PEDIMENTED, 4 COLUMN PORCH w/ CIRCULAR CORNER PEDIMENT, WIDE BOARD CORNER & PILASTERS, FULL ENTABLATURE ON HOUSE & 2 STORY WINGS; "COL. REVIVAL" DETAILS IN 1STORY ADDITIONS —
? EARLIER HOUSE (FED./GR. REV. DETAILS) TO REAR (WEST) OF "HIGH-STYLE" SECTION.

SIGNIFICANCE
19. DATE OF INITIAL CONSTRUCTION: E/M 1800'S
ARCHITECT: UNK.
BUILDER: UNK.

20. HISTORICAL AND ARCHITECTURAL IMPORTANCE:
? RELATIONSHIP TO OTHER E/M 1800'S GR. REV. HOUSE JUST TO NORTH?
A Complex House w/ MANY HIGH-QUALITY GR. REVIVAL DETAILS THAT ARE UNALTERED, & SYMPATHETIC HIGH-QUALITY "COL. REVIVAL" ADDITIONS - OUTSTANDING FARMHOUSE COMPLEX w/ MANY APPARENTLY ORIGINAL OUTBUILDINGS INTACT & MUCH APPROPRIATE LANDSCAPE.

21. SOURCES:

22. THEME:



Attachment 14
Letter of “No Impact” from OPRHP
(December 7, 2015)



Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

December 07, 2015

Mr. David Wright
GHD Consulting Services, Inc.
150 Grand St, 4th Floor
White Plains, NY 10601

Re: DEC
Bulfamante Composting Facility
3501 Route 22, Dover Plains, NY 12522
15PR06995

Dear Mr. Wright:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the project in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the OPRHP and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617).

Based upon this review, it is the New York State Office of Parks, Recreation and Historic Preservation's opinion that your project will have no impact on archaeological and/or historic resources listed in or eligible for the New York State and National Registers of Historic Places.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

Ruth L. Pierpont

Deputy Commissioner for Historic Preservation

Attachment 15
Information Request –
New York Natural Heritage Program
(November 24, 2015)



Sent via email: NaturalHeritage@dec.ny.gov

November 24, 2015

NY Natural Heritage Program - Information Services
NYSDEC
625 Broadway, 5th Floor
Albany, NY 12233-4757

Re: Informational Request for the
Proposed Bulfamante Composting Facility Project
Town of Amenia, Dutchess County, New York
GHD No. 11109254.5

Dear Sir/Madam:

On behalf of A. Bulfamante Landscaping, Inc. (Owner), GHD Consulting Services Inc. (GHD) is in the process of performing an environmental review pursuant to the environmental impact assessment requirements prescribed by 6 NYCRR Part 617 State Environmental Quality Review (SEQR).

The project site is located in the Town of Amenia, Dutchess County, NY. The Town of Amenia is anticipated to serve as Lead Agency for SEQR. For additional details, please refer to the attached project description included as Attachment 1. A site location map and photographs are also attached for your reference as Attachments 2 and 3, respectively.

In an effort to understand the potential impacts of the project, we are hereby requesting your review of Attachment 4 titled "Supporting Information" (enclosed) regarding the presence of rare, threatened, or endangered species on or within the vicinity of the project site as based on the U.S. Fish and Wildlife Service's "Species by County Report" for Dutchess County. This summary document itemizes species of concern and notes that the site's habitat within the proposed limits of disturbance is not generally believed to be suitable for the listed species. We note the following:

- There are trees that surround the site, and the proposed project will seek to minimize impacts to existing wooded areas to maintain existing habitat and natural buffers around the site. That is, the existing trees around the site will remain in the developed condition. Limited tree trimming may be required at the site entrance at State Route 22, but only to the extent to establish suitable setback to accommodate a widened access road per standard NYSDOT requirements for improved site distance and truck access. This widening will also occur in the NYSDOT right-of-way and not on the project site.
- The existing site is primarily open lawn, which was once used as a tree nursery (continuously disturbed use for tree harvesting and new planting). In the present-day condition, the tree nursery is no longer in operation, and these areas have been cleared of trees and are now grassed and maintained by bi-monthly mowing.



In addition, we have reviewed the New York State Department of Environmental Conservation's (NYSDEC) online tool *Environmental Resource Mapper*, and this appears to show that the site is within an overlay for rare plants and rare animals. A printout of this map is included as Attachment 4-2.

Based on our review and any other information you may have, we are requesting your response as to whether you believe the proposed project would adversely affect rare or endangered species or designated critical habitat.

If you have any questions regarding this request, please feel free to contact me directly at (914) 703-4671 or by email at david.wright@ghd.com. Thank you in advance for any efforts that you can make to expedite this request. We look forward to your prompt response.

Sincerely,

GHD CONSULTING SERVICES INC.

A handwritten signature in black ink that reads "David B. Wright".

David Wright, EIT
Project Engineer

DBW/jfs
Enclosures

cc (by email):
Anthony Bulfamante, A. Bulfamante Landscaping, Inc. (w/enc.)
Peter Moon, O2Compost (w/enc.)
Harold Ruppert, O2Compost (w/enc.)
Jeffrey Heath, GHD (w/enc.)
File 11109254.5

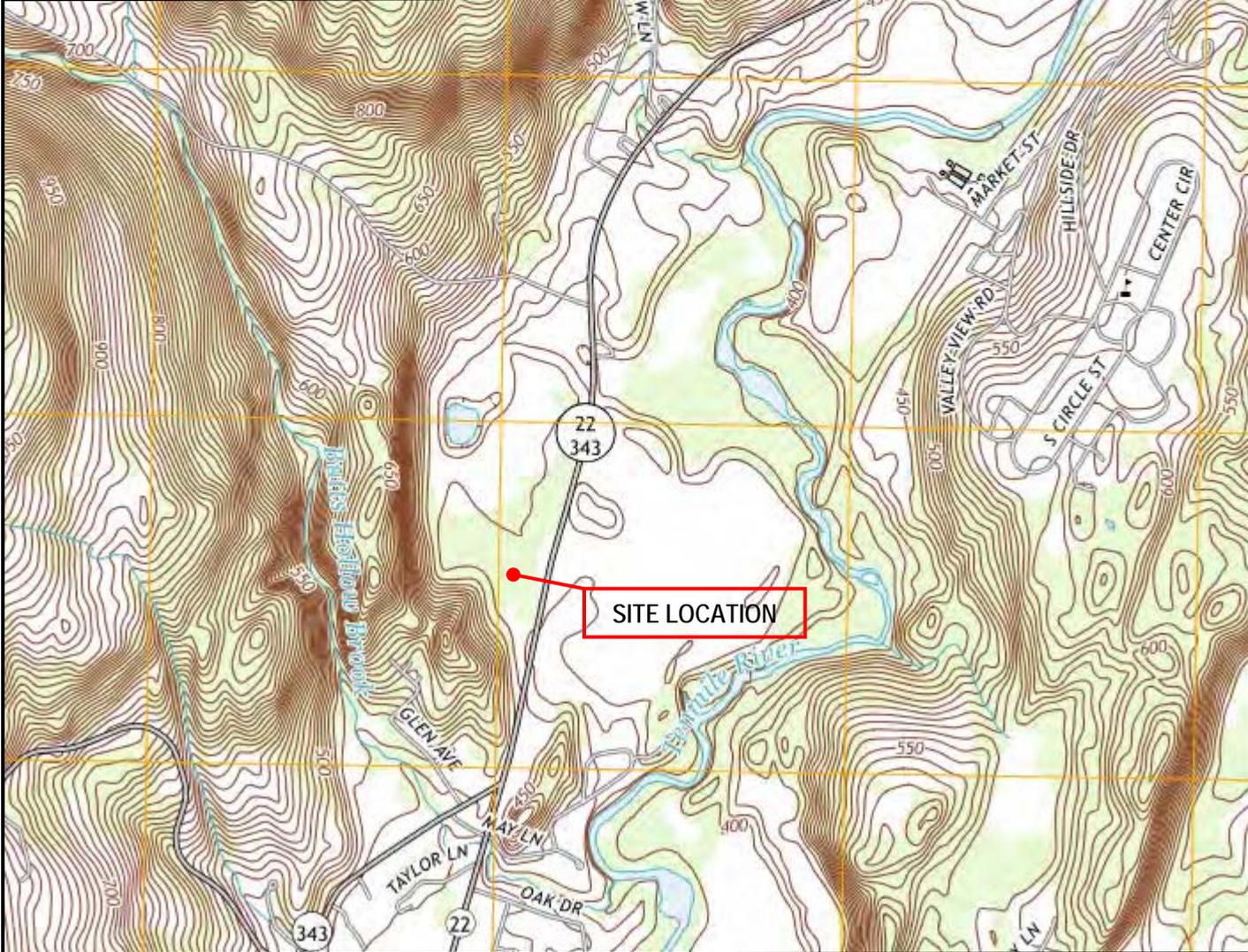
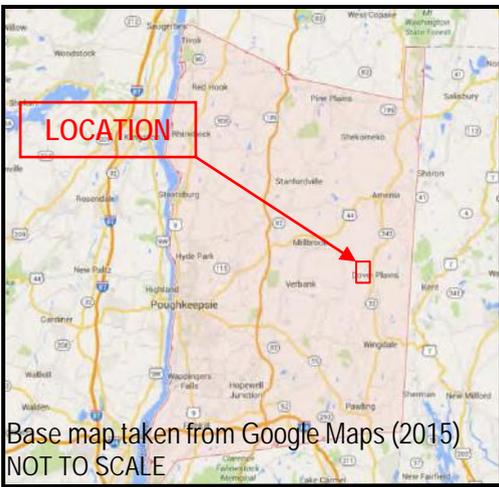


A. Existing conditions: The project site is located at 3501 State Route 22 (SR-22), Dover Plains, NY, in the Town of Amenia, Dutchess County, NY. In recent years, the site was used as a tree farm/nursery. When the present-day owner purchased the land, any remaining nursery trees were harvested or cleared. Currently, the project site consists of primarily open areas, and these open areas are mowed approximately two times per month to maintain the surface vegetation which is short grass. As based on the USDA Natural Resource Conservation Service's online *Web Soil Survey* the subsurface soil type is "Copake gravelly silt loam, undulating Copake" (CuB) and most likely Hydrologic Soil Group A. In the present-day condition, surface soils at the site are considered well-draining, but no longer suitable to sustain nursery tree plantings.

The site is surrounded by trees and wooded areas on all four sides; the entrance is located on SR-22 to the east. A small house with separate garage is located at the western extents of the open areas of the site, and the property line continues well beyond the wooded property behind the back of the house. The property is presently zoned Office-Commercial, Industry Mixed-Use. The proposed development areas of the site include two lots: Lot #1, 132000-7064-00-420372 (30.7 acres) and Lot #2, 132000-7064-00-432313 (20.27 acres). There is an existing small electrical service for the house, and two water supply wells (one potable for the house, one for irrigation).

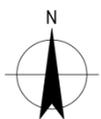
B. Proposed improvements: The proposed project is seeking to improve existing site conditions by repurposing the existing open areas of the site that were historically used for tree nursery operations to serve as a NYS permitted yard waste composting facility. Materials received could include grass clippings, tree and shrub trimmings, leaves, and other typical yard wastes. The operations of the facility will be configured in up to three potential development phases. Development phasing will depend on permitting, construction staging, and facility operational requirements. Taking into account the anticipated build-out condition of the site, the site will ultimately accommodate the following beneficial enhancements:

- **Capture and recycle organic landscape debris:** The site will serve as a recycling facility for composting of yard waste materials, converting yard wastes into a high quality compost product for various end-users such as institutional landscapers, state and/or municipal projects, and local agriculture uses.
- **Maintain existing wooded areas for site buffering:** In the areas that are adjacent to the compost facility operations, existing trees and wooded areas will be maintained to the greatest extent possible, so as to maintain a vegetative/natural buffer around the site.
- **Support local efforts to develop new and successful business ventures:** The benefits to the local municipality could include creating a new source of tax revenue, creating local employment opportunities, and providing a local yard waste recycling "hub" to achieve reduced environmental impacts from landfilling disposal and/or illegal dumping.
- **Provide necessary site improvements to provide a successful composting operation:**
 - An extended aerated static pile (EASP) composting system for aerobic compost processing
 - Improved site access from SR-22
 - Improved site security such as gates/fencing, berms, landscaping, lighting and signage
 - A certified weigh scale at the entrance to the compost facility
 - Uncovered paved area for receiving and grinding landscape debris
 - Receiving building and paved surfaces for compost feedstocks
 - Uncovered paved surface for active compost piles and compost processing
 - Run-on and run-off surface water control systems: ditching/swales, or stormwater control features
 - A lined storage pond, sized for ultimate capacity processing volumes
 - A 25-foot set-back from property lines (providing vehicle access on all sides of the facility)
 - Unpaved area for short / long-term storage of screened compost
 - A product blending and bagging building (anticipated as an interim development step)
 - A bagged product staging area (anticipated as an interim development step)



CAZENOVIA, NEW YORK
DATE: 11/2015
JOB No.: 11109254

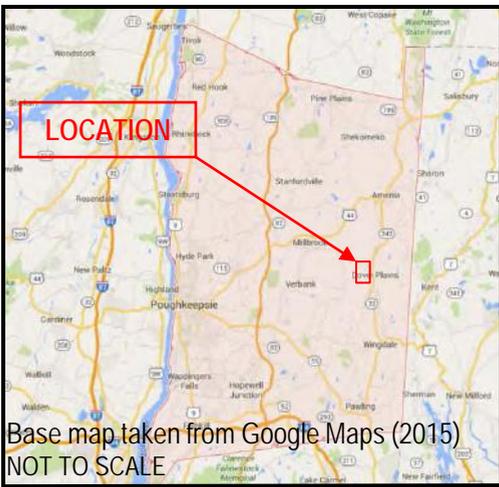
A. BULFAMANTE LANDSCAPING, INC.
BULFAMANTE COMPOSTING FACILITY



0 1000
feet

FIGURE 1
USGS TOPOGRAPHIC MAP

Base map credit: United States Geological Survey, Amenia, NY-CT 2013, 7.5' Quadrangle



Base map credit: Bing Maps, 2015 Microsoft Corporation, 2015 HERE



CAZENOVIA, NEW YORK
DATE: 11/2015
JOB No.: 11109254

A. BULFAMANTE LANDSCAPING, INC.
BULFAMANTE COMPOSTING FACILITY

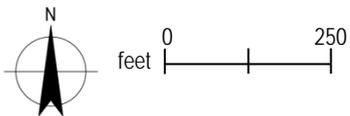


FIGURE 2
AERIAL LOCATION MAP



Attachment 3
Project Photographs
Bulfamante Composting Facility
Town of Amenia, Dutchess County, New York



1. Facing west from site's entrance.



2. Facing northwest from center of site.



3. Facing east from center of site.



4. Facing south from center of site.



5. Facing west from site's entrance.



6. Facing southwest from center of site.



Attachment 3
Project Photographs
Bulfamante Composting Facility
Town of Amenia, Dutchess County, New York



7. Facing east/southeast from center of site.



8. Northeast corner of site.



9. Facing east (near site entrance).



10. Facing towards northeast from center of site.



11. Facing north on SR-22.



12. Facing south on SR-22.



Attachment 4 Supporting Information

Bulfamante Composting Facility
Town of Amenia, Dutchess County, New York

In an effort to determine the potential impacts of the proposed project on rare species, a review was performed by GHD of the “Species by County Report,” as provided by the U.S. Fish & Wildlife Service for Dutchess County (Attachment 4-1), and the Environmental Resource Mapper (Attachment 4-2), which was provided by the New York State Department of Environmental Conservation (NYSDEC), for the site.

We note that the proposed construction work for the project site will be primarily limited to previously disturbed areas of the site. Additional clarification is provided in the accompanying information.

To the greatest extent practical the project will seek to maintain existing vegetation, and the proposed landscaping improvements at the site are intended to provide additional suitable habitat for local species. The composting facility will be sensitive to operating in such a way to minimize environmental impacts and responsibility for an improved ecosystem in the developed condition in support of continued sustainable use of the site.

As referenced to the attachments, it is believed that the existing site does not provide suitable habitat for the following species:

Species (U.S. FWS List)	Status	Habitat Required (per NYSDEC guidance)	Habitat Present On-Site?
Indiana bat <i>(Myotis sodalis)</i>	NYS: Endangered Federal: Endangered	Winter Habitat: Wintering locations includes caves and mines in which they hibernate. Summer Habitat: Roost underneath bark, in cavities, or in crevices of both live and dead trees.	Unlikely within proposed project area
Northern Long-Eared Bat <i>(Myotis septentrionalis)</i>	NYS: Threatened Federal: Threatened	Winter Habitat: Caves and mines with large passages and entrances with high humidity and no air currents Summer Habitat: Roost underneath bark, in cavities, or in crevices of both live and dead trees	Unlikely within proposed project area
Dwarf Wedgemussel <i>(Alasmidonta heterodon)</i>	NYS: Endangered Federal: Endangered	Small streams less than five meters wide to large rivers more than 100 meters wide; found in a variety of substrate types including clay, sand, gravel and pebble; hydrologically stable areas.	Unlikely within proposed project area
Bog turtle <i>(Clemmys muhlenbergii)</i>	NYS: Endangered Federal: Threatened	Prefers habitat with cool, shallow, slow-moving water, deep soft muck soils, and tussock-forming herbaceous vegetation. Generally found in open, early successional types of habitats such as wet meadows or open calcareous boggy areas generally dominated by sedges or sphagnum moss.	Unlikely within proposed project area



U.S. Fish & Wildlife Service | Species by County Report | Dutchess County, NY

Group	Name	Population	Status	Lead Office	Recovery Plan Name	Recovery Plan Action Status	Recovery Plan Stage
Mammals	Indiana Bat (<i>Myotis sodalis</i>)	Entire	Endangered	Bloomington Ecological Services Field Office	<i>Indiana Bat (Myotis sodalis) Draft Recovery Plan: First Revision</i>	Implementation Progress	Draft Revision 1
Clams	Dwarf Wedgemussel (<i>Alasmidonta heterodon</i>)	Entire	Endangered	New York Ecological Services Field Office	Dwarf Wedge Mussel	Implementation Progress	Final
Mammals	Northern Long-Eared Bat (<i>Myotis septentrionalis</i>)	-	Threatened	Twin Cities Ecological Services Field Office	-	-	-
Reptiles	Bog (=Muhlenberg) Turtle (<i>Clemmys muhlenbergii</i>)	Northern	Threatened	New York Ecological Services Field Office	<i>Recovery Plan for the Bog Turtle, Northern Population</i>	Implementation Progress	Final



U.S. Fish & Wildlife Service

ECOS
[ECOS](#) / [Species Reports](#) / Species By County Report

Species By County Report

The following report contains Species that are known to or are believed to occur in this county. Species with range unrefined past the state level are now excluded from this report. If you are looking for the Section 7 range (for Section 7 Consultations), please visit the [IPaC](#) application.

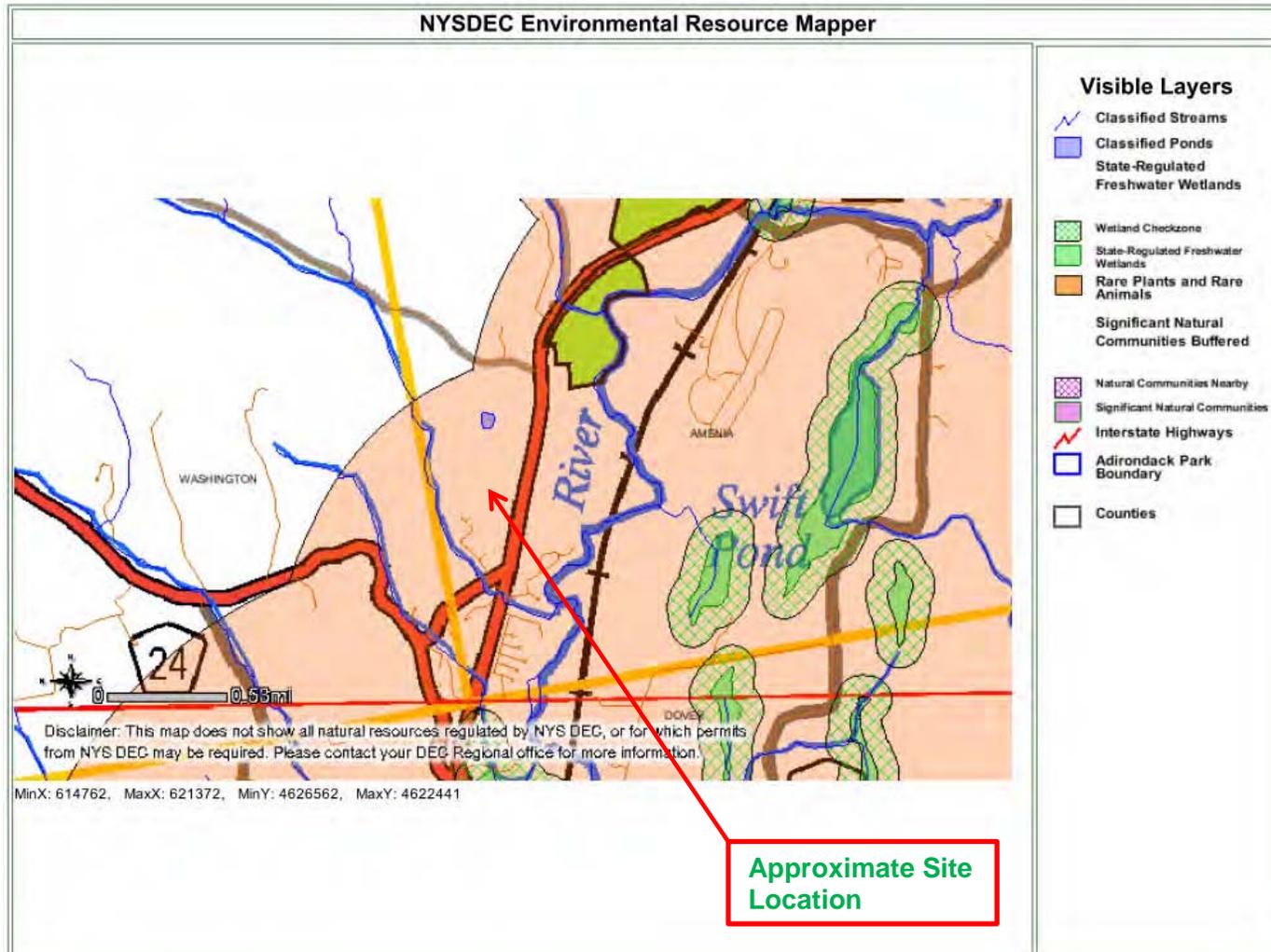
County: Dutchess, NY

Group	Name	Population	Status	Lead Office	Recovery Plan Name	Recovery Plan Action Status	Recovery Plan Stage
Clams	<u>Dwarf wedgemussel</u> (<i>Alasmidonta heterodon</i>)	Entire	Endangered	<u>New York Ecological Services Field Office</u>	<u>Dwarf Wedge Mussel</u>	<u>Implementation Progress</u>	Final
Mammals	<u>Indiana bat</u> (<i>Myotis sodalis</i>)	Entire	Endangered	<u>Bloomington Ecological Services Field Office</u>	<u>Indiana Bat (Myotis sodalis) Draft Recovery Plan: First Revision</u>	<u>Implementation Progress</u>	Draft Revision 1
	<u>Northern Long-Eared Bat</u> (<i>Myotis septentrionalis</i>)		Threatened	<u>Twin Cities Ecological Services Field Office</u>	-	-	-
Reptiles	<u>Bog (=Muhlenberg) turtle</u> (<i>Clemmys muhlenbergii</i>)	northern	Threatened	<u>New York Ecological Services Field Office</u>	<u>Recovery Plan for the Bog Turtle. Northern Population</u>	<u>Implementation Progress</u>	Final

Export options: [CSV](#) | [EXCEL](#) | [XML](#) | [PDF](#)



Attachment 4-2
NYSDEC Environmental Resources Mapper
Bulfamante Composting Facility
Town of Amenia, Dutchess County, New York



Disclaimer: This map was prepared by the New York State Department of Environmental Conservation using the most current data available. It is deemed accurate but is not guaranteed. NYS DEC is not responsible for any inaccuracies in the data and does not necessarily endorse any interpretations or products derived from the data.