DIVNEY • TUNG • SCHWALBE
Intelligent Land Use

CORTLANDT PITCH

TOWN OF CORTLANDT
WESTCHESTER COUNTY, NEW YORK

EXPANDED ENVIRONMENTAL ASSESSMENT FORM

Prepared for Submission To:

TOWN OF CORTLANDT
TOWN BOARD

SEPTEMBER 2018

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LIST OF FULL-SIZE DRAWINGS

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 1is accurate and complete.

A. Project and Sponsor Information.

Name of Action or Project: Cortlandt Pitch - Rezoning and Site Plan Approval		
Project Location (describe, and attach a general location map): 2226 Crompond Rd, Town of Cortlandt, Westchester County, NY - Section 34.06, Block 1, Lot 20; See Illustrative Site Plan		
Brief Description of Proposed Action (include purpose or need): Proposed action consists of the rezoning and procuring site plan approval for a 6.32 acre parcel from R-20 Zoning District to Community Commercial (CC) Zoning District and construction of a 67,700 square foot indoor/outdoor recreational sports facility and associated site improvements. The area of disturbance will also include approximately 0.7 acres within the NYSDOT right of way along Crompond Road for the construction of a new access driveway and turn lane.		
Name of Applicant/Sponsor: NY Indoor Sports, Inc. c/o Kruzhkov Russo, PLLC, attn: Martin P. Russo	Telephone: 212-363-2000 E-Mail:	
Address: 350 Fifth Avenue, Suite 7230		
City/PO: New York	State: NY	Zip Code: 10118
Project Contact (if not same as sponsor; give name and title/role): David Steinmetz, Esq, Zarin & Steinmetz	Telephone: 914-682-7800 E-Mail:	
Address: 81 Main St, Suite 415		
City/PO: White Plains	State: NY	Zip Code: 10601
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, or Village Board of Trustees ☑Yes ☐No	Town Board - Rezoning of parcel to CC district	
b. City, Town or Village Planning Board or Commission ☑Yes ☐No	Planning Board - Site Development Plan and Wetland Permit	Date TBD
c. City Council, Town or Village Zoning Board of Appeals ☐Yes ☑No		
d. Other local agencies ☑Yes ☐No	ARB	
e. County agencies ☑Yes ☐No	Dept of Health - Onsite Sanitary Disposal and Water Connections	Dates TBD
f. Regional agencies ☐Yes ☑No		
g. State agencies ☑Yes ☐No	NYSDEC - Stormwater Mgmt Plan; NYSDOT - Driveway Access and Highway Work Permit	Dates TBD
h. Federal agencies ☑Yes ☐No	ACOE, Jurisdiction to be determined - Wetland Permit	

i. Coastal Resources.

i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? ☐Yes ☑No

ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? ☐Yes ☑No

iii. Is the project site within a Coastal Erosion Hazard Area? ☐Yes ☑No

C. Planning and Zoning

C.1. Planning and zoning actions.

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

- **If Yes,** complete sections C, F and G.
- **If No,** proceed to question C.2 and complete all remaining sections and questions in Part 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? ☑Yes ☐No
Town of Cortlandt 2016 Comprehensive Plan

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

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

If Yes, identify the plan(s):
NYC Watershed Boundary

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

If Yes, identify the plan(s):

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☑ Yes ☐ No
If Yes, what is the zoning classification(s) including any applicable overlay district?
Currently R-20; the proposed action seeks a rezoning to the CC district.

b. Is the use permitted or allowed by a special or conditional use permit? Permitted in CC district ☑ 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? Community Commercial (CC)

C.4. Existing community services.

a. In what school district is the project site located? Lakeland

b. What police or other public protection forces serve the project site?
NYS Police, Westchester County Police

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

d. What parks serve the project site?
N/A - nearest Town park is 0.9 miles west

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)? Commercial, Recreational

b. a. Total acreage of the site of the proposed action? 6.7 acres
b. Total acreage to be physically disturbed? 6.7 acres Onsite area to be disturbed: 6.0 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 6.32 acres Offsite area to be disturbed: 0.7 acres

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

d. Is the proposed action a subdivision, or does it include a subdivision? ☐ Yes ☑ No
If Yes,
i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)
ii. Is a cluster/conservation layout proposed? ☐ Yes ☑ No
iii. Number of lots proposed? _____
iv. Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____

e. Will proposed action be constructed in multiple phases? ☐ Yes ☑ No
i. If No, anticipated period of construction: 12 months
ii. If Yes:
- Total number of phases anticipated _____
- Anticipated commencement date of phase 1 (including demolition) _____ month _____ year
- Anticipated completion date of final phase _____ month _____ year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____

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

If Yes, show numbers of units proposed.

	One Family	Two Family	Three Family	Multiple Family (four or more)
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

ii. Dimensions (in feet) of largest proposed structure: 35 height; 340 width; and 165 length

iii. Approximate extent of building space to be heated or cooled: 67,700 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: Stormwater Basin

ii. If a water impoundment, the principal source of the water: ☐ Ground water ☑ Surface water streams ☐Other specify:

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

iv. Approximate size of the proposed impoundment. Volume: 0.3 million gallons; surface area: 0.5 acres*

v. Dimensions of the proposed dam or impounding structure: 0 height; N/A length Below grade

vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete):

Excavation of onsite soils to create stormwater basin.

*Within bioretention basins, excluding wetland area

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): Proposed action would include construction of a new building, parking lot, and landscaped areas on what are currently two hydric soil (non-DEC) wetlands located on the project site.

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:
Proposed action would result in the elimination of two small (non-DEC) hydric soil wetlands; these wetlands have been previously disturbed due to man-made activity and are not home to any significant natural communities per the NYSDEC Env. Resource Mapper; removal of the wetlands will result in improvement to conditions at site during stormwater events.

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: _____
New stormwater measures and landscaped areas

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: 2,000-4,000 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: Town of Cortlandt
- 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: N/A gallons/minute.

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

i. Total anticipated liquid waste generation per day: 2,000-4,000 gallons/day

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

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

- Name of wastewater treatment plant to be used: N/A - project to utilize on-site septic
- 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?

96K Square feet or 2.2 acres (impervious surface) Net new impervious on Project Site with within NYSDOT ROW

292K Square feet or 6.7 acres ~~(parcel size)~~ Within limit of disturbance, which includes Project Site and NYSDOT land

ii. Describe types of new point sources. _____

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 stormwater facilities for quantity and quality control before discharging to an existing outfall.

- 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)

Construction equipment

ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

Construction trailer to utilize natural gas or electric for heat and hot water

iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

Electric for lighting, gas for heating

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 (CO_2)
- _____Tons/year (short tons) of Nitrous Oxide (N_2O)
- _____Tons/year (short tons) of Perfluorocarbons (PFCs)
- _____Tons/year (short tons) of Sulfur Hexafluoride (SF_6)
- _____Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (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): _____

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

_____

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):

_____

_____

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

See traffic impact study prepared by Town Consultant

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 0 Proposed 175 Net increase/decrease +175

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:

The Proposed Action includes the creation of a new single driveway along the north side of Route 202/35, providing a single entry lane and separate left turn and right turn exit lanes. Future potential driveway connection to existing bowling alley driveway with project driveway to improve safety and traffic flow onto Route 202.

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

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

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

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: _____

To be determined.

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

_____

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

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

i. During Construction: Per Town of Cortlandt Town Code §197-16

- Monday - Friday: 7am-7pm
- Saturday: 7am-7pm
- Sunday: --
- Holidays: --

ii. During Operations:

*Limited use 8am-3pm on weekdays depending on Town/local needs.

- Monday - Friday: 8am-11pm*
- Saturday: 8am-11pm
- Sunday: 8am-11pm
- Holidays: _____

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:

Typical construction-related equipment, with duration limited to hours of operation in accordance with Town Code.

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

Describe: Existing perimeter trees to be maintained. Additional screening to be provided.

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:

Parking and driveway lighting. Parking lighting over 50 feet from nearest occupied structure.

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

Describe: Existing perimeter trees to be maintained. Additional screening to be provided.

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: _____

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: _____ tons per _____ (unit of time)
- Operation : _____ tons per _____ (unit of time)

ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

- Construction: _____
- Operation: _____

iii. Proposed disposal methods/facilities for solid waste generated on-site:

- Construction: _____
- Operation: _____

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

If Yes:

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

ii. Anticipated rate of disposal/processing:

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

iii. If landfill, anticipated site life: _____ years

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

If Yes:

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

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

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

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

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

If Yes: provide name and location of facility: _____

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

E. Site and Setting of Proposed Action

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

a. Existing land uses.

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

☐ Urban ☐ Industrial ☑ Commercial ☑ Residential (suburban) ☐ Rural (non-farm)
☐ Forest ☐ Agriculture ☐ Aquatic ☑ Other (specify): Institutional (school) on adjacent property

ii. If mix of uses, generally describe:

b. Land uses and covertypes on the project site.*

Land use or Covertype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	0.37	2.52	+2.2
• Forested			
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	5.3	0	-5.3
• Agricultural (includes active orchards, field, greenhouse etc.)			
• Surface water features (lakes, ponds, streams, rivers, etc.)			
• Wetlands (freshwater or tidal)	0.3	0	-0.3
• Non-vegetated (bare rock, earth or fill)			
• Other Describe: Landscaped Areas & Stormwater Basin	0.7 (existing lawn)	4.18	+3.5

*Within Limit of Disturbance. Includes 6.0 ac project parcel and 0.7 ac of NYSDOT ROW (6.7 ac total)

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:

Site abuts Lincoln Titus Elementary School (immediately to the north)

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? >5 feet

b. Are there bedrock outcroppings on the project site? ☐ Yes ☑ No
If Yes, what proportion of the site is comprised of bedrock outcroppings? _____%

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

PnB Paxton Fine Sandy Loam	64.9 %
RdB Ridgebury Loam	14.3 %
WdB Woodbridge Loam	20.6 %

d. What is the average depth to the water table on the project site? Average: 3 feet

e. Drainage status of project site soils:

☑	Well Drained:	65 % of site
☑	Moderately Well Drained:	21 % of site
☑	Poorly Drained	14 % of site

f. Approximate proportion of proposed action site with slopes:

☑	0-10%:	98 % of site
☐	10-15%:	% of site
☑	15% or greater:	2 % of site

g. Are there any unique geologic features on the project site? ☐ Yes ☑ No
If Yes, describe: _____

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? ☐ 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 non-DEC (hydric soil) wetlands are located on project site Approximate Size <1 acre
- 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: _____

m. Identify the predominant wildlife species that occupy or use the project site:
N/A

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: _____

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: _____

b. Are agricultural lands consisting of highly productive soils present? ☐ Yes ☑ No

i. If Yes: acreage(s) on project site? _____

ii. Source(s) of soil rating(s): _____

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? ☐ Yes ☑ No

If Yes:

i. Nature of historic/archaeological resource: ☐ Archaeological Site ☐ 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? ☐ Yes ☑ No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? ☐ Yes ☑ No

If Yes:

i. Describe possible resource(s): None per NYSHPO CRIS mapper; further study may be undertaken.

ii. Basis for identification: _____

h. Is the project site within fives miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? ☑ Yes ☐ No

If Yes:

i. Identify resource: Bear Mountain State Parkway

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): NYS Scenic Byway

iii. Distance between project and resource: 0.05 miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? ☐ Yes ☑ No

If Yes:

i. Identify the name of the river and its designation:

ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? ☐ Yes ☐ No

F. Additional Information

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

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

G. Verification

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

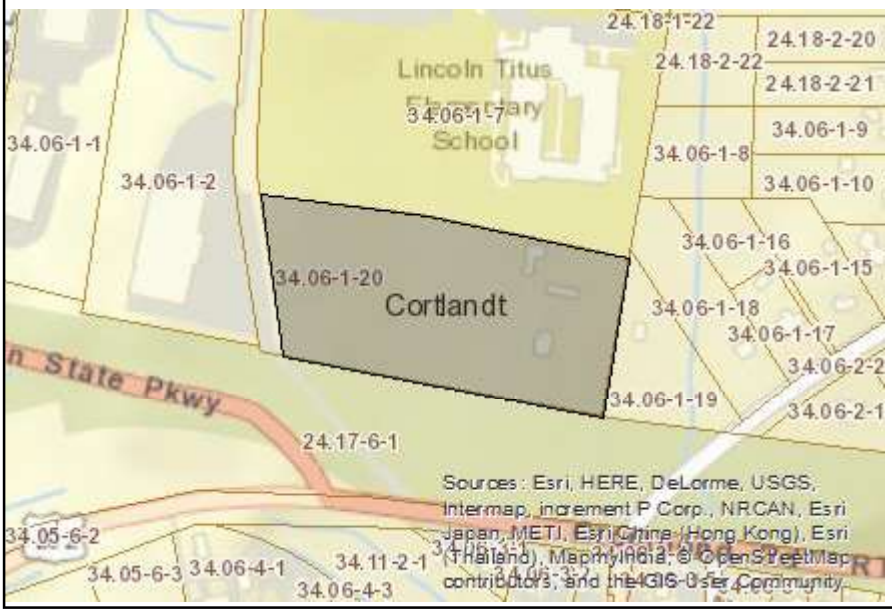
Applicant/Sponsor Name NY Indoor Sports, Inc. Date August 2016, Revised 9/17/18

Signature  Title Divney Tung Schwalbe, LLP - Applicant's Engineer

PRINT FORM

EAF Mapper Summary Report

Wednesday, June 22, 2016 3:42 PM

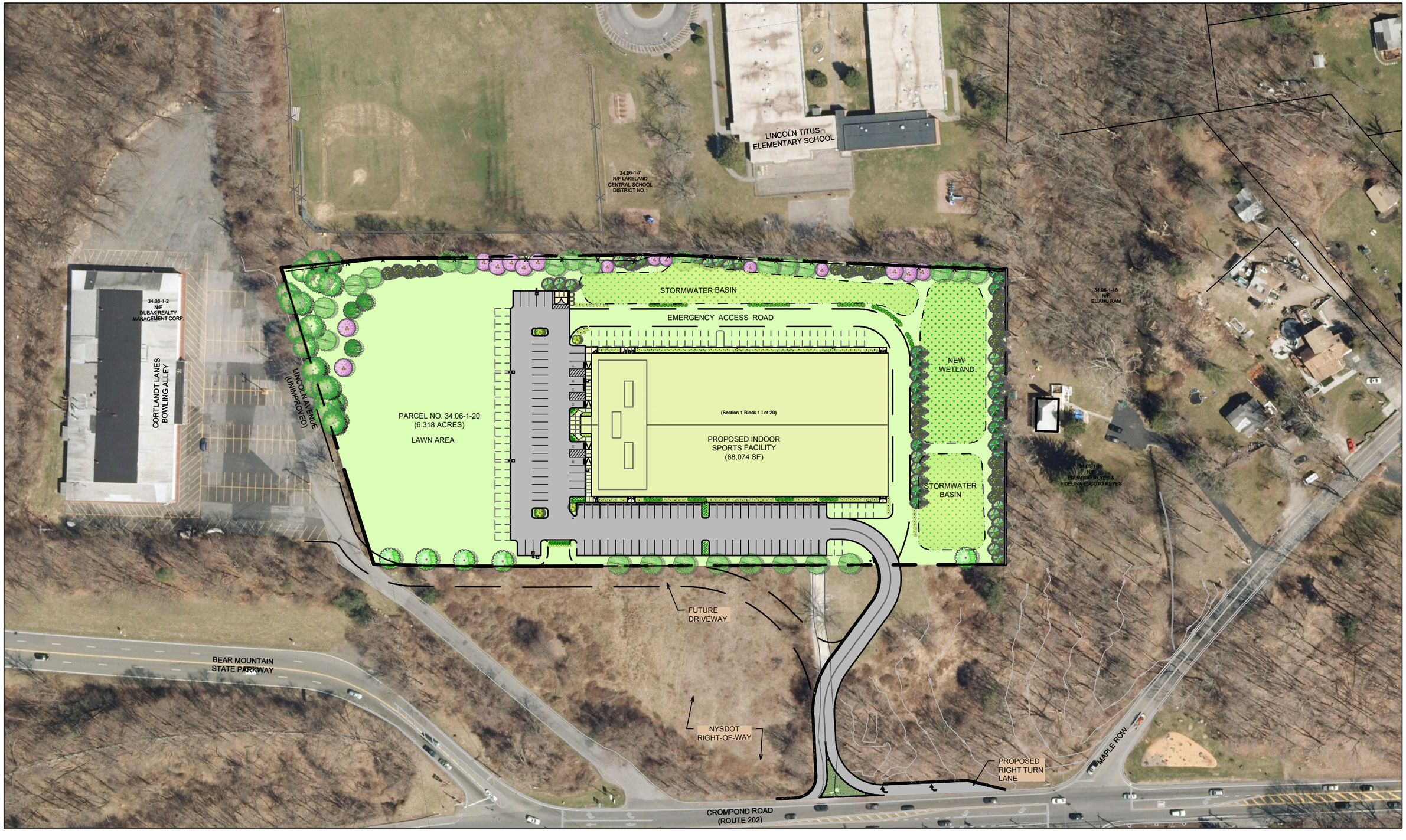


Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.

B.i.i [Coastal or Waterfront Area]	No
B.i.ii [Local Waterfront Revitalization Area]	No
C.2.b. [Special Planning District]	Yes - Digital mapping data are not available for all Special Planning Districts. Refer to EAF Workbook.
C.2.b. [Special Planning District - Name]	NYC Watershed Boundary
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	No
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	No
E.2.h.ii [Surface Water Features]	Yes
E.2.h.iii [Surface Water Features]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
E.2.h.v [Impaired Water Bodies]	No
E.2.i. [Floodway]	No
E.2.j. [100 Year Floodplain]	No
E.2.k. [500 Year Floodplain]	No
E.2.l. [Aquifers]	No
E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	No

E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	No
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	No
E.3.e. [National Register of Historic Places]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.3.f. [Archeological Sites]	No
E.3.i. [Designated River Corridor]	No

PLOTTED BY: DIVNEY TUNG SCHWALBE, LLP MAIELLO, DONNA M. 9/14/2018 2:08 PM G:\CADD\802 CORTLANDT PITCH\802 ILLUSTRATIVE SITE PLAN FIG 11X17.DWG



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NY INDOOR SPORTS INC.

DIVNEY • TUNG • SCHWALBE
Intelligent Land Use

ILLUSTRATIVE SITE PLAN

Cortlandt Pitch 09/17/18

Town of Cortlandt, New York

A. STORMWATER MANAGEMENT

CORTLANDT PITCH
EAF PART 3

A. STORMWATER MANAGEMENT

1. ***Stormwater Pollution Prevention Plan (SWPPP)***
A SWPPP has been prepared to meet the requirement of the adopted Scope of Studies for the Project, and is included with this Expanded EAF Part 3 in Tab III. The proposed stormwater management analysis is designed to be in conformance to the NYSDEC SPDES General Permit GP-0-15-002 requirements for stormwater quantity and quality control, including runoff reduction requirements to mimic existing infiltration conditions. In accordance with the NYSDEC SPDES General Permit GP-015-002 requirements, the proposed stormwater management improvements are designed based on the NYSDEC New York State Stormwater Management Design Manual (Design Manual), dated January 2015.

The proposed Project is estimated to disturb approximately 6.7 acres. Under existing conditions, impervious areas within the limit of disturbance area total approximately 0.4 acres (see Figure A-1, *Existing Conditions*), and under proposed conditions, impervious areas are estimated to be approximately 2.5 acres, an estimated 2.2-acre increase of impervious area (see full-size drawings Sheet Nos. SP-1.0, Site Geometry Plan and SP-2.0, *Site Grading, Drainage & Utility Plan*). Under developed conditions, the existing subwatershed boundaries are generally maintained and have been further divided to model catchment areas to proposed stormwater management measures. The SWPPP evaluates the potential stormwater management impacts anticipated with the proposed project and ensures that those impacts are mitigated both during and post construction with the use of temporary and permanent stormwater treatment practices.

The proposed site plan for the Project has been designed to integrate the Project into the surroundings in an environmentally sensitive manner to the extent possible. The proposed site plan reflects a layout that minimizes the proposed hard surfaces associated with the Project. The facility was designed with spectator viewing on the second floor, which minimizes the footprint. Emergency access around the building was provided where possible as a grassed stabilized road, which eliminated additional paved drive aisles. Walkways are limited to only the front of the building for adequate ADA access and passenger drop-off. In addition to maintaining stormwater runoff flow from the proposed watershed areas in a manner similar to existing drainage patterns, the peak rates of runoff at each storm event up to a 100-year storm frequency will be less than or equal to existing conditions. Further discussion and calculations of the proposed stormwater management measures are included in the SWPPP located in Tab III.

2. ***Hydraulic & Hydrologic Analysis***
The SWPPP includes the hydraulic and hydrologic analysis, and the peak rates of runoff from the developed site at each discharge point are calculated to be generally equal to or less than the peak rates under existing conditions for the 1-year, 2-year, 10-year, 25-year, 50-year and

100-year storm event frequency. Hydrograph data for these calculations has been submitted to the Department of Technical Services (DOTS) in digital format. The SWPPP includes a description of the existing drainage patterns, soil conditions, wetland and watercourses and existing stormwater conditions. A list of required Project permits and approvals is included in the SWPPP along with a discussion on the NYCDEP and NYSDOT review.

3. ***Post-Construction Measures***

The SWPPP discusses both temporary and permanent stormwater management measures. Post-construction structures and measures are discussed in greater detail in the SWPPP, but will generally include permanent erosion control practices (soil stabilization), water quality control practices (i.e. rain gardens), and related stormwater flow controlling structures (culverts, catch basins, etc.). Green infrastructure measure for the proposed on-site development include bioretention and stormwater planters. These measures will provide additional WQv to meet minimum requirements. The right-of-way area will be treated through the use of filter strips, grading to existing low point areas.

4. ***Phosphorous Loading Analysis***

As discussed in the SWPPP, primary stormwater management objectives are to replicate as close as possible pre-development hydrology and to avoid causing downstream flooding and flood damage and to employ all means practicable to mitigate increases in pollutant (total suspended solids and total phosphorus) loads that will occur as a result of the proposed Project. Acceptable measures outlined in the NYSSWM Design Manual are designed to capture and treat the water quality volume and generally provide 80% Total Suspended Solids (TSS) removals and 40% Total Phosphorus (TP) removals.

5. ***Erosion and Sediment Control Plan***

An Erosion and Sediment Control Plan has been included in the full-size drawing set (See Sheet No. SP-5.1 and SP-5.2 for details). The goal of the proposed erosion and sediment control measures at the Project Site is to prevent erosion through runoff controls and soil stabilization. If runoff controls and soil stabilization are not sufficient, sediment controls are proposed to remove sediment from water. The following describes the three methodologies.

- <u>Runoff Control</u>

  Proposed runoff controls for the Project include diversion swales to keep stormwater runoff from undisturbed areas from flowing onto the limit of work area. Within the work area, temporary swales are designed to direct water away from disturbed areas. Check dams are proposed within the swales to allow for the settling of sediment. Outlet protection is required at each of the perimeter's existing headwalls to the boundary wetlands until the site is stabilized.

- <u>Soil Stabilization</u>

  Temporary and permanent soil stabilization include mulching, seeding and slope stabilization with plantings and/or fabrics. Mulching can be performed with wood chips, spray mulching and gravel. Temporary seeding is encouraged in disturbed areas

outside of the current work area. This includes stockpiled material that is not anticipated to be used for a month or longer. Stabilizing steep slopes is imperative to protect the downstream work areas, and can include rolled matting, gabion walls, plant plugs and proprietary slope stabilization methods.

- Sediment Control
  Proposed sediment control measures on-site include stabilized construction entrances at both the northern work area and the southern village site. Concrete washout areas will be provided adjacent to the construction entrances. Sediment traps and basins are proposed, sized for the contributing drainage area (3,600 cf/acre). These measures include filtering systems at the outlet to ensure that there is no sediment transport from the site. Inlet protection is required at each of the perimeter's existing drain inlets and at any proposed inlets until the site is stabilized. Along the downhill slopes of the disturbed work areas, silt fence is required and must be properly installed and 'toed-in' to the soil.

- 5 Acre Disturbance
  No more than 5-acres of disturbance at any one time is currently proposed. No disturbance greater than five acres will occur without prior written approval from the MS4 which will be included in the SWPPP.

6. ***Post-Construction Maintenance***
   Upon final stabilization of the project site, permanent measures are required to be inspected, observed and maintained for the life of the project. The key to success of the proposed erosion and sediment control measures is regular inspections and observation and on-going maintenance for the life of the project. It is anticipated that the measures will require cleaning, replacement and maintenance as outlined in SWPPP Table No. 6, *Stormwater Management Inspections & Maintenance of Permanent Structures.* (See Tab III of this Expanded EAF Part 3).

   The project sponsor will be responsible for inspecting and maintaining permanent stormwater management structures and practices. A formal maintenance agreement and guarantee will be established between the Project Sponsor and the MS4, Town of Cortlandt. The agreement will outline the reporting procedures and action plan remediation, if required. The MS4 is required to provide on-going reporting to the NYSDEC on an annual basis.

7. ***Construction Program and Sequencing***
   The majority of the proposed project will be constructed in one phase. Construction will incorporate the clearing and demolition of existing buildings and construction of the new facility and driveway improvements. A conceptual construction phasing narrative has been included on Sheet No. 5.2, Erosion & Sediment Control Details, in the full-size drawing set accompanying this Expanded EAF.

   The construction activity is expected to be completed over approximately a one-year period and will involve the grading and construction of new access roadways, parking areas,

underground utility systems, building footing and foundation systems, building structures, stormwater management measures, landscaping and other physical improvements.

PLOTTED BY: DWNEY TUNG SCHWALBE, LLP GROSSMAN, MICHELLE R. 9/20/2018 3:46:42 PM G:\CADD\802 CORTLANDT PITCH\802 EC-1 EXISTING CONDITIONS FIG.DWG

LINCOLN TITUS ELEMENTARY SCHOOL

34.06-1-7
N/F
LAKELAND CENTRAL SCHOOL DISTRICT NO.1

34.06-1-18
N/F
ELIAHU RAM

34.06-1-2
N/F
DUBAK REALTY MANAGEMENT CORP.

34.06-1-19
N/F
EDUARDO REYES &
FIDELINA ESCOTO REYES

CORTLANDT LANES
BOWLING ALLEY

LINCOLN AVENUE

WETLAND BOUNDARY (WETLAND A)

WETLAND BOUNDARY (WETLAND B)

WETLAND BOUNDARY (WETLAND C)

SECTION 1 BLOCK 1
TAX LOT 20
PARCEL AREA = 275,191.291 SQ FT OR
6.318 ACRES

NYSDOT RIGHT-OF-WAY

BEAR MOUNTAIN STATE PARKWAY

CROMPOND ROAD
CROMPOND ROAD (ROUTE 202)

MAPLE ROW

EXISTING BROOK

20% OR GREATER STEEP SLOPES

15-20% STEEP SLOPES

N 0 20 40 80
SCALE: 1" = 40'

PLANNER/CIVIL ENGINEER:
Dwney • Tung • Schwalbe
Intelligent Land Use
Dwney Tung Schwalbe, LLP
One North Broadway
White Plains, NY 10601
P: 914.428.0010
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White Plains, New York 10601

LEGAL COUNSEL:
ZARIN & STEINMETZ
81 Main Street, Suite 415
White Plains, New York 10601

WETLAND CONSULTANT:
TIM MILLER ASSOCIATES, INC.
10 North Street
Cold Spring, NY 10516

OWNER:
NY INDOOR SPORTS, INC.
c/o Gusrae Kaplan Nusbaum PLLC
120 Wall Street, 25th Floor
New York, NY 10005

Existing Conditions

Cortlandt Pitch
Town of Cortlandt, New York

Figure No. A-1

B. TRANSPORTATION

CORTLANDT PITCH
EAF PART 3

B. TRANSPORTATION

Traffic Impact Study
The Town's traffic consultant, AKRF, has prepared a comprehensive traffic impact study to evaluate the Project. Access to the Project Site would be provided at the existing driveway on Crompond Road (Route 202/35), which would be widened and updated to accommodate two lanes of traffic (one northbound lane entering the site and one southbound right-turn lane exiting the site). The improved driveway would be limited to right turning entering vehicles from westbound Crompond Road and right turning exiting vehicles onto westbound Crompond Road. Additionally, a new westbound right turn lane on Route 202/35 would be constructed to facilitate entry to the Project Site driveway from westbound Route 202/35.

A potential future driveway leading from the Cortlandt Lanes bowling alley to the Cortlandt Pitch driveway would provide visitors from the adjacent property to enter and exit at the proposed new driveway to Crompond Road. A recommended driveway alignment and profile for the future driveway has been provided on the site plans.

Parking
Per the Town of Cortlandt Zoning Code, off-street parking for new structures is tabulated based on §307-29, *Table of Required Off-Street Parking Spaces*. As previously discussed, the Applicant has petitioned the Town Board to amend the Zoning Code to include a definition of "physical fitness facility". There is currently no parking requirement for such a use listed in §307-29. Section 307-29.C provides that, "The Planning Board will fix the appropriate number of parking spaces required for a particular use by considering the suggested standards herein, as well as information provided by the applicant as to the requirements of the use, as well as generally accepted standards of the planning and engineering professions." By special permit, the Planning Board can exercise flexibility to waive parking or land-bank parking.

The Institute of Traffic Engineers (ITE) manual *Parking Generation* (4th Ed.) does not include a land use category for an indoor multipurpose athletic field that would be similar to the definition proposed. However, the Manual includes land use category 488 – Soccer Complex, which is an outdoor park may include ancillary amenities such as fitness trails, activity shelters, aquatic center, picnic grounds, basketball, tennis courts, and a playground. Although these ancillary amenities are not proposed at the Cortlandt Pitch facility, Soccer Complex is the closest use for the purposes of this analysis. The average parking supply based on the ITE rates is 38.3 spaces per field for weekdays and 58.8 spaces per field on weekends (Saturday). For the Cortlandt Pitch facility this would result in a requirement of 115 and 176 spaces for weekday and weekends, respectively.[1] As proposed, the facility will have 175 parking spaces (104 paved and 71 grass overflow/landbanked).

[1] Based on the 85th percentile rates of 60.5 weekday and 65.2 weekend (Sat) the proposed facility would require 182 spaces and 196 spaces, respectively. As discussed, Land Use 488 – Soccer Complex may have additional ancillary uses that may draw visitors, which are not proposed at the Project Site.

In order to further estimate the peak parking demand for the proposed project, parking surveys were conducted by AKRF at a comparable facility, the Hudson Valley Sportsdome located in Milton, NY on Sunday, December 6, 2015 during tournament events. The surveys showed that during the time when there were 3 fields utilized with 5 teams playing (the same number of fields and similar number of teams expected during tournaments for the proposed project), 175 parking spaces were utilized. Therefore, it is anticipated that the 175 parking spaces that would be provided by the proposed project would meet the parking demand during tournament events. On typical weeknights, it is anticipated that between 60 and 65 parking spaces would be utilized.

On-Site Circulation

Figures B-1, *Truck Turning – HQ-L* and B-2, *Truck Turning – E-252* provide a swept path for the Town apparatus specified in the Scope of Studies. As shown on these figures, the proposed site plan would accommodate the ingress, egress and circulation of both trucks at the Project Site.

PLOTTED BY: DIVNEY TUNG SCHWALBE, LLP MAIELLO, DONNA M. 9/14/2018 2:33 PM G:\CADD\802 CORTLANDT PITCH\802 SITE PLAN W TRUCK TURN FIG.DWG

LINCOLN TITUS ELEMENTARY SCHOOL

34.06-1-7
N/F LAKELAND CENTRAL SCHOOL DISTRICT NO.1

34.06-1-2
N/F
DUBAK REALTY MANAGEMENT CORP.

CORTLANDT LANES BOWLING ALLEY

LINCOLN AVENUE (UNIMPROVED)

(Section 1 Block 1 Lot 20)

34.06-1-18
N/F
ELIAHU RAM

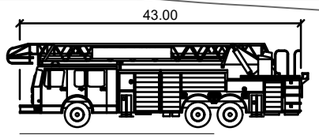
34.06-1-19
N/F
EDUARDO REYES &
FIDELINA ESCOTO REYES

MAPLE ROW

MAPLE ROW

BEAR MOUNTAIN STATE PARKWAY

CROMPOND ROAD (ROUTE 202)



Cortlandt	feet
Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 22.9

N

0 50 100

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Intelligent Land Use

NY INDOOR SPORTS INC.

TRUCK TURNING - HQ-L

Cortlandt Pitch
Town of Cortlandt, New York

9/17/18

Figure No. B-1

PLOTTED BY: DIVNEY TUNG SCHWALBE, LLP MAIELLO, DONNA M. 9/14/2018 2:39 PM G:\CADD\802 CORTLANDT PITCH\802 SITE PLAN W TRUCK TURN FIG.DWG

LINCOLN TITUS ELEMENTARY SCHOOL

34.06-1-7
N/F LAKELAND CENTRAL SCHOOL DISTRICT NO.1

34.06-1-2
N/F
DUBAK REALTY MANAGEMENT CORP.

CORTLANDT LANES BOWLING ALLEY

LINCOLN AVENUE (UNIMPROVED)

(Section 1 Block 1 Lot 20)

34.06-1-18
N/F
ELIAHU RAM

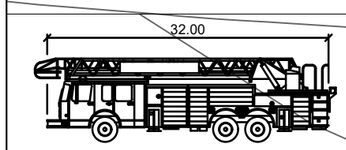
34.06-1-19
N/F
EDUARDO REYES &
FIDELINA ESCOTO REYES

MAPLE ROW

MAPLE ROW

BEAR MOUNTAIN STATE PARKWAY

CROMPOND ROAD (ROUTE 202)



Cortlandt	feet
Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 23.8

N

0 50 100

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Intelligent Land Use

NY INDOOR SPORTS INC.

TRUCK TURNING - E-252

Cortlandt Pitch
Town of Cortlandt, New York

09/17/18

Figure No. B-2

C. TREE PRESERVATION

CORTLANDT PITCH
EAF PART 3

C. TREE PRESERVATION

1. Tree Inventory

As required by the Scope of Studies, a tree inventory, showing all trees with at least a 4" dbh, was conducted on the Project Site and within the adjacent NYSDOT right-of-way.[1] The inventoried trees are shown on sheets LJ-1 through LJ-4, *Tree Preservation Plan* included in the Appendix in Tab III. Approximately 540 trees with a dbh of 4" and over were inventoried, and are detailed in Table C-1, *Tree Protection Action Key* in the Appendix in Tab III. As part of the inventory, tree health was assessed and classified by the arborist (good, fair, poor, critical, dead/stump). Based on the assessment, the following summarizes the arborist's findings:

Condition	Number of Trees	Percentage of Trees	Invasive Species
Dead/Stump	34	6%	7
Critical	52	10%	6
Poor	183	34%	29
Fair	213	39%	45
Good	61	11%	22
Total	543[2]	100%	109 (20%)

Fifty percent of the assessed trees are in dead, critical or poor condition. In general, these trees exhibited dead limbs, dead crown, decay, vine suppression, and other problems impacting the health of the trees. Thirty-nine percent of the trees were identified in fair condition. However, as indicated in the *Tree Protection Action Key* many of these trees also exhibited similar issues impacting their health. Eleven percent of trees were observed in good condition, although several these also exhibited issues such as vines growing on the trees. Approximately 20% of the trees inventoried are invasive species, including approximately one-quarter of the trees in fair and good condition.

Within the limit of disturbance approximately 262 trees would be removed as part of the Project. Half of the trees (55%) to be removed are dead or are in critical or poor condition. Approximately 10% of the trees to be removed are invasive species. Of the trees to be removed, only 115 are in fair or good condition with 82 on-site and 33 within the right-of-way. Approximately 17% of the trees to be removed that are in fair or good condition are invasive species, leaving approximately 95 non-invasive species trees. Trees outside, but near the limit of disturbance will be protected during construction activities. Tree

[1] Trees on neighboring properties were assessed visually from the Project Site to the extent possible. Defects may exist that were not visible or accessible to the arborist at the time of the assessment.
[2] There are an additional approximately 20 trees within the NYSDOT ROW that were not included in the tree inventory.

protection will be in accordance with Subsection C of Section 283-3 of the Town of Cortlandt Town Code. There are four trees that are located on the Lakeland Central School District property near the limit of disturbance. The Applicant will discuss the protection and/or removal of these trees with the School District prior to any site work. Standard tree protection protocols include creating established construction access roadways with geotextile fabric with 12 inches of woodchips. For each of the trees to be protected, barriers would be placed next to the tree to stop rolling rocks and bumps from construction equipment. As necessary, vertical 2x4s would be strapped around the trunks of the trees on the side facing construction to protect the actual trunks of the trees during construction activities. These types of tree specific procedures would be in addition to standard construction best management practices that include hay bales and/or silt fence protocols. Canopy pruning and condition monitoring inspections prior to and during construction activities would be performed by a certified arborist, as needed.

2. *Tree Clearing limitations of the NYSDEC, NYCDEP, NYSDOT*

NYSDEC – The clearing of trees in connection with soil disturbance of one (1) or more acres of land must obtain coverage under SPDES General Permit for Stormwater Discharges from Construction Activities. As part of the SWPPP developed for the project, appropriate erosion and soil control measures will be implemented. There are no other anticipated requirements related to tree clearing.

NYCDEP – Since the Project would involve less than 40,000 sf of impervious area and less than two or more acres of land clearing and grading in the Watershed it would fall under NYCDEP's review threshold.

NYSDOT – the clearing of trees within the NYSDOT right-of-way will be reviewed and discussed as part of the improvements for the proposed driveway and wetland mitigation within an existing access easement and additional highway improvements associated with the proposed Project.

3. *Tree Replacement & Landscape Plan*

A landscape plan has been developed for the project (see full-size drawing Sheet No. SP-4.0, *Landscape Plan*. The landscape plan for the Proposed Project contains a variety of shade, ornamental trees, and evergreen trees, and shrubs and groundcovers. The bioretention basin will be seeded with a native detention area mix, which includes native grasses, sedges and rushes. The eastern property boundary will be planted with a staggered row of evergreen trees of 10-12 feet in height to provide screening between the Site and the neighboring residential property. A combination of shade, ornamental, and evergreen trees will be planted along the northern property boundary adjacent to the school and will provide a visual separation. Shade trees will also be planted along the southern property line.

Per Chapter 283, *Trees* of the Town of Cortlandt Town Code, a reforestation plan requires that one (1) tree be planted for each 1,000 square feet of disturbance area. The Project will

have a disturbance area of approximately 262,000 square feet on-site and 29,000 square feet off-site. Reforestation of the off-site disturbance area within the NYSDOT right-of-way is not proposed. Much of the proposed disturbance is required to provide access to the site and to construct improvements to the highway corridor and intersection of Maple Row and Crompond Road (Route 202). The removal of trees within the right-of-way will be discussed with the NYSDOT as part of its review process. On-Site, the proposed area of disturbance would require a reforestation plan consisting of 262 trees. Based on the proposed site plan, the installation of 262 new trees would be challenging. The proposed landscape plan proposes the installation of 123 new trees. As discussed above, many of these trees have been proposed along the perimeter of the site to provide screening of the project from land uses to the north and east. The on-site planting plan would also provide shade and visual interest within the site.

D. GREEN BUILDING, ENERGY & SUSTAINABILITY

CORTLANDT PITCH
EAF PART 3

D. GREEN BUILDING, ENERGY & SUSTAINABILITY

1. *Identify proposed electrical consumption needs*

Primary electric service to the Site would be provided by Consolidated Edison, Inc. (Con Ed) via new pad mount transformer. The pad mount transformer will be located on our site and would be fed underground from the high-voltage, overhead power lines across Crompond Road, via new primary feeders. It is anticipated that the proposed facility would require a 1000Amp, 3-phase, 4 wire electrical service at 480 Volts. The facility would have an estimated load of approximately 550 KW. Calculations are as follows:

- AC load = 291 KW = (121.6 Amps x 460 x 1.732) x 3 units
- Lighting load (from NEC for industrial/commercial) = 165 KW = 2 VA/ square foot = 67,700 x 2 x 1.25 (wattage conversion)
- General Power (Assuming 1 VA/ square foot) = 85 KW = 67,700 x 1.25 (wattage conversion)

The building schedule and usage will determine annual electrical consumption. Con Ed will provide a service plan for the Project during the development of construction documents. Energy saving measures that may be incorporated into the Project are further discussed below.

2. *Provide a detailed report outlining potential green building materials, energy star and other programs as well as green site features such as the use of porous pavement, solar power, geo-thermal, etc.*

The Applicant proposes a number of sustainable measures for the project as follows:

a. Solar Wall: The building will incorporate a solar wall into the structure's southern-facing façade. A solar wall is a passive system that uses solar energy to preheat ventilation air for indoor spaces. The system is especially effective for large indoor spaces. The south facing exterior wall of the facility will use siding panels that create a plenum space between the siding and the building envelope. As the cladding is heated by solar radiation, outside air is drawn in by fan through exterior perforations and heated in the plenum.

   In winter, the sun reaches a low angle in the sky, allowing light to strike the panel close to perpendicular, and therefore maximizing heat absorption. In summer, the sun's high angle will minimize heating of the panels, and provide shading to the facility's exterior wall, reducing air conditioning loads. The solar wall will reduce greenhouse gas emissions by reducing the amount of natural gas needed for heating.

b. Solar Photovoltaics: The building's roof is capable of supporting a sizable array of photovoltaic panels that could be installed at a future date. The buildings' sloped roof

has a ridgeline oriented east-west, which will allow panels to be installed with an ideal southerly orientation.

c. Daylighting: Skylights and clerestory windows made of insulated fiberglass panels (Kalwall, or similar) will provide daylighting on the field areas. The panels have a much higher R-value (resistance to heat transfer) than glass, allowing natural light to enter the building while minimizing heat loss. Daylighting has additional benefits for occupants, having been associated with human alertness and positive mood.

d. LED Lighting: Interior and exterior light fixtures will incorporate high-efficiency LED lamps, minimizing direct electric consumption, as well as internal heat load for the cooling system. Lamps have a long-life span, which minimizes waste. The building will also be equipped with automatic lighting controls to use light only when needed and to lower the number of lights needed. Exterior lighting will be "Dark Sky" certified, with recessed sources to prevents light from trespassing across property lines and limiting night sky light pollution and wasted energy.

e. Green Building Materials: The proposed structure will be a low-rise metal building. Steel and aluminum are one-hundred percent recyclable resources. Most structural steel contains approximately 70 percent reclaimed material. As a prefabricated system, metal buildings also limit the amount of on-site construction waste. The building roof coating would contain light-colored pigments to limit solar gain, and reduce loads on the air conditioning system, and contribution to the urban heat-island effect. Other materials such as flooring, paints and finishes, and built in furniture will selected based on low emitting contaminant levels and made from renewable sources of raw material. Fill material in the artificial turf is made of recycled rubber. Materials will be sourced to minimize transportation to the site to the greatest extent possible.

f. Water Fixtures: All sinks (0.5 gpm) and toilets (1.6 gpm) will be low flow fixtures and all urinals will be of the waterless type. Showers will not be provided for general use.

g. Stormwater Infiltration: The site design will include a bioretention basin to allow runoff from the paved areas to be cleansed by vegetation and to allow stormwater to infiltrate into the ground. The building roof runoff will be collected in planters located along the north and south side of the building to both clean the stormwater and infiltrate into the ground. Once established, the landscape and buffer plantings selected will not need to be irrigated as they will include native species which are suited for this climate.

3. *Provide a detailed report on other Building Code Issues such as occupancy requirements, fire code rating, etc.*
The proposed facility will conform with the Building Code of New York State (IBC 2015) as follows:

a. Occupancy Type: A4, Sports Facility with Spectators (Chapter 3)

b. Building Construction Type: 2B (Chapter 5)
c. Area Limitations (Chapter 5):
   505.2: Mezzanines limited to one third of area below
   506: Area: Allowable area per calculations is 11,875 sf
   Actual area is 56,100 sf
   Must use provision of Sec. 507.4 for unlimited area for A4 Occupancy
   507.4: Allows unlimited area for A4 occupancy with sprinklers and public ways on 4 sides of minimum width 60 feet.
   Exception: no sprinklers required for sports areas (A4) with direct exits to outside plus fire alarm per Chapter 907.
   508.2.4: No separation between main and accessory occupancies
d. Fire Resistance Rating Requirements, Table 601: Type 2B – no requirements (Chapter 6)
e. Table 803.5: Finishes must be Class A for non-sprinklered (Chapter 8).
f. Section 903.2.1.4 requires automatic sprinklers for Group A4 Occupancy. However, Section 507.4 allows automatic sprinklers to be deleted at areas of participant sports if exit doors and manual fire alarm pull boxes are provided (Chapter 9).
g. Egress Requirements (Chapter 10):
   1004.1: Design Occupant Load = 1380 as designed
   Table 1006.3.1: more than 1000 requires 4 exits
   1009.2.1: Elevator required
   1009.3: Areas of refuge required
   1015.1: Exit Load, one leaf per 49 occupants
   1015.2.1: Two exits must be spaced minimum one half the diagonal distance of the space
   Table 1017.2: maximum travel distance 200 ft w/o sprinklers, 250 ft w/sprinklers
   1020.1: Group A – corridors 1-HR rated w/o sprinklers, 0-HR rated with sprinklers
   1029.1.1: Bleachers to comply with ICC 300
   1029.5: Balconies and galleries – occupant load of 50 or more need two means of egress, one from each side, leading directly to an exit.
h. Additional requirements will be identified and addressed as construction documents are developed.

4. *Discuss energy and building requirements of the NYS Uniform Fire Prevention and Building Code. Discuss conservation measures pertaining to HVAC and site and interior lighting.*
The building will be designed to meet or exceed the requirements of the NYS UFP, NYSBC, and NYS Energy Code. Heating, Ventilation, and Air Conditioning (HVAC): Proposed equipment includes:

- Rooftop air handlers, with energy recovery technology, to provide cooling; three units required, one for the front area, plus two for the sports area. Units will be mounted over the front area, and visually screened and noise protected;
- Gas-fired high efficiency condensing boilers to provide heating, two required
- Heated and cooled air will be delivered through ductwork;

- Heated air from the solar wall system will be delivered through ductwork to the main distribution system. Automated dampers will control flow as temperatures fluctuate;
- Direct Digital Control (DDC) and multiple zones will be provided to control the system;
- See Item #3 above for building code requirements;
- See Item #2c and 2d above regarding site and interior lighting.

5. *Describe any proposed features for reducing water usage (e.g. rain water harvesting for irrigation) and electrical consumption at the subject site.*
Water fixture usage is described in Item 2f above. As noted, facility will not provide showers for general use. Electrical generation and usage are discussed in Items 2b, 2c, and 2d above.

E. WETLANDS AND NATURAL FEATURES

CORTLANDT PITCH
EAF PART 3

E. WETLANDS AND NATURAL FEATURES

1. ***Existing Wetlands***

Based on a wetland delineation and evaluation by the Town's Wetland Consultant, Paul Jaehnig, three wetland areas have been identified within and adjacent to the Project Site (see Figure A-1, *Existing Conditions* in Section A of this EAF Part 3). The Applicant's wetland consultant, Tim Miller Associates, Inc. has further evaluated the existing wetlands (see *Wetland and Soils Survey Report* and *Wetland and Habitat Assessment* in Tab III of this Expanded EAF):

Wetland A – Wetland A (12,041 SF) is located in the central-northern portion of the Site and is a poorly drained, depression wet-meadow wetland. Wetland A is hydrologically isolated and groundwater, intermittent direct precipitation from rainfall, and intermittent stormwater runoff from the adjacent meadow areas are the sources of water for the wetland. Past disturbance from agricultural use of the property has resulted in an irregular shape of the wetland. Occasional multiflora rose, an invasive species, was observed along the perimeter of Wetland A.

Wetland B – Wetland B (9,139) is located on the south-central edge of the Site and within the NYSDOT right-of-way and is a poorly drained depression wet meadow wetland on the central-southern edge of the Site. Wetland B is also hydrologically isolated. Groundwater, intermittent direct precipitation from rainfall, and intermittent storm-water run-off from adjacent meadow areas are the sources of water for the wetland. Similar to Wetland A, Wetland B has been previously disturbed by prior man-made activities, such as agricultural use and the installation of a municipal water service line. This wetland is dominated by Phragmites, a common invasive species that is known to colonize disturbed areas.

Wetlands A & B provide the following wetland functions:

- small habitat area for dragon flies, butterflies;
- browsing habitat for dear;
- small local groundwater recharge since no direct surface drainage outlets exist;
- habitat opportunities for small song birds within Phragmites stand in Wetland B.

Wetland C – Wetland C is located off-site to the east of the Site and is a poorly drained, very gently sloped to nearly level swampland. Wetland C covers more than one acre in area, with the southwest corner of this wetland closest to the Site. The wetland has little to no micro-topography in the corner closest to the site but appears to have weakly developed micro-topography going northeast toward the core of the wetland. The wetland drainage is directed to the north and northeast, away from the site.

Off-site Wetland C provides the following wetland functions:

- local ground-water recharge area function because of its nearly level profile;

- wildlife habitat function used by Deer, Raccoon, Coyote, Squirrel, and Chipmunk for browsing;
- wildlife habitat used by small song birds for nesting opportunities in the tree canopy and thick shrub understory.

However, the Town's consultant indicates that the combination of small size, isolation, or lack of connection to other wetlands, and hydrology sensitive to drought conditions, limits these wetlands as being important potential wildlife habitat.

The wetlands are not identified as NYSDEC regulated wetlands. Based on the Applicant's wetland consultant's review, Wetlands A and B would not be USACOE jurisdictional wetlands. The vegetative community within Wetland A is not dominated by hydrophytic vegetation and would not meet USACE vegetative parameters. Wetland C would automatically be under USACOE jurisdiction since it is within the East of Hudson Watershed. There are no floodplains on or adjacent to the Project Site.

2. ***Proposed Project***

In order to construct the Project, the following wetland disturbances will occur:

Wetland A – All 12,040 SF of wetland A, would be disturbed to construct the indoor sports facility and adjunct parking lot.

Wetland B – The current plan proposed to avoid direct disturbance to Wetland B. A future driveway leading from the Cortlandt Lanes bowling alley to the Cortlandt Pitch driveway would result in approximately 1,300 SF of disturbance to Wetland B. The purpose of this driveway is to allow visitors exiting at the proposed new driveway to Crompond Road.

In total, approximately 12,040 square feet of wetlands would be disturbed to construct the Project. An additional 1,300 square feet of wetlands would be disturbed to provide a driveway connection to the adjacent Cortlandt Lanes, in the future. Per Chapter 179, *Freshwater Wetlands, Water Bodies and Watercourses* §179-10.C, for disturbance of a wetland mitigation may take the form of in-kind replacement. Per the Scope the Project should provide compensatory wetland mitigation at a ratio of 2:1. The Applicant's wetland consultant has evaluated the existing wetlands and proposed project and has developed a wetland mitigation plan, which is discussed further in the Wetland and Habitat Assessment in Tab III.

As discussed above, Wetland A and Wetland B are both isolated wetlands with limited potential to provide important habitat areas. These two wetlands have also been greatly impacted by past agricultural land use of the property. Disturbance of Wetland B is proposed as a future phase in order to provide the opportunity to improve the existing egress from the adjacent Cortlandt Lanes site. No disturbance under the Project to Wetland C is proposed. An alternative to provide a driveway to Maple Row, including any potential disturbance to Wetland C, has been evaluated as an alternative discussed further in Section K, *Alternatives* in

this Expanded EAF.

The Applicant proposes to construct a wetland to replace Wetland A in the northeastern end of the site. Hydrology will be provided by direct precipitation and treated runoff that is discharged from the proposed stormwater basin in the southeast corner of the Site. The constructed wetland is proposed to be large enough to offset the square footage of the impacted wetland at a ratio of a minimum of 1:1. Hydrology will be provided by direct precipitation and treated runoff that is discharged from the proposed stormwater basin. Native wetland plant species would be installed in the constructed wetland to enhance the overall diversity of the vegetative community. Due to the low level of function of the existing wetland, and the high possibility of success of the wetland creation, it is the Applicant's wetland consultant's opinion that proposed wetland mitigation will offset the lost wetland function.

Additional discussion on the proposed wetland mitigation is included in *Wetland and Habitat Assessment* located in Tab III.

3. ***Wildlife and biodiversity impacts***

Wetland A does not possess a diverse native plan community and does not invite desirable wildlife species. While it does function for the storage of stormwater, this function can be replicated by an engineered system providing the same function. Wetland B is similar to Wetland A, with limited functions and fewer habitat opportunities. Wetland B developed as a remnant of both the existing farm road and the installation of the water main. Regular inspection and maintenance of the water main create regular disturbances, and the compacted soils do not provide value for either groundwater discharge or recharge. Wetland C has a more diverse vegetation community and a higher canopy, adding value for some bird species. Although it is limited by its proximity to nearby roadways, a number of common birds were observed in or near the wetland. Not of these species are wetland dependent and are common in most suburban areas. The proposed watercourse crossing would be designed to allow free flow of water from the watercourse to downstream areas and minimize disturbance to the stream bed and habitat opportunities.

Based on the NYSDEC EAF and Environmental Resource Mappers, no threatened or endangered species have been identified on or within the vicinity of the Project Site. No habitat exists for such species, as until recently it was regularly maintained as managed land. Previous use of the Site and immediately surrounding areas for agricultural use and residential and commercial development has resulted in fragmented wildlife corridors. Additionally, as the Town's wetland consultant noted, the isolation and lack of connection to other wetlands limits the on-site wetland ability to serve as important potential wildlife habitat area. Wildlife species on the project site are generally those species that are more adaptable to existing disturbed site conditions, which tend to be more common species. A full list of common species identified on the site are included in *Wetland and Habitat Assessment* located in Tab III.

4. Steep Slopes

Per Chapter 259, *Steep Slopes* steep slopes are ground areas with slopes greater than 15%. There are no steep slopes located on the Property. See Section K, Alternatives, for a discussion related to potential slope impacts.

F. LAND USE

CORTLANDT PITCH
EAF PART 3

F. LAND USE

1. ***Consistency with 2016 Sustainable Comprehensive Plan***
Cortlandt's *2016 Sustainable Comprehensive Plan* was adopted by the Town Board in March 2016 (the "2016 Plan"). The 2016 Plan states that "[a]s part of the Envision Cortlandt townwide survey, the community indicated its desire for the Town to continue to preserve, maintain, and improve existing open space for trail, neighborhood parks, and sportsfields." (2016 plan, p.88). As further discussed in Chapter 8, *Community Services & Recreation* one goal of the 2016 Plan is to "Provide a wide variety of park and recreational opportunities at convenient locations." (2016 plan, p.118). The Cortlandt Pitch project is consistent with a number of policy recommendations that support the construction of new fields and sports facilities, such as:

Policy 177 – Explore opportunities to construct environmental-safe turf fields and seek cooperative partnership agreements with school districts; youth sports programs and other stakeholders

Policy 186 – Encourage the development of year-round indoor/outdoor multi-use facilities (e.g., indoor ice, indoor sports fields)

Policy 188 – Seek new partnership opportunities with neighboring municipalities, schools, as well as private sector entities, etc. to assist in developing recreational facilities.

Consistent with these goals and recommendations, the Project would provide for much needed recreation fields to support the needs of Town residents.

2. ***Compliance with Town of Cortlandt Open Space Final Report***
The Town of Cortlandt's *Open Space Final Report* was completed in May 2004 (the "2004 Open Space Report") and identified specific parcels that the Town's Open Space Committee believed were most important for the Town to preserve as open space. The 2004 Open Space Report identified the Site (2226 Crompond Road) as an underutilized open space parcel, and specifically prioritized the Site for its capacity to provide "active recreation" based on its proximity to existing parks and recreational facilities, proximity to densely developed area, and road access and parking. (2016 Open Space Report, "Active Recreation" table).

The Project is consistent with the 2004 Open Space Report, as it would increase the availability of active recreation opportunities on a parcel identified by the Town's Open Space Committee for such activities.

3. ***Consistency with Parks and Recreation Advisory Board's Long-Range Plan***
The Parks, Recreation and Conservation Advisory Board's (PRC Advisory Board) Long Range Report prepared in January 2012 identified that there is a "need for more recreational space, facilities and programs [that] can be accomplished over time without unduly burdening the Town's taxpayers".[1] In its report, the PRC Advisory Board noted that "[t]here is the desire in the community for even more programs for all age groups…" and recommended that the Town be on the "Continuous lookout for space for community recreational opportunities, including possible private/public partnerships…".

The proposed Cortlandt Pitch facility would provide additional playing fields that would serve a wide range of age groups. With its size and indoor fields, the Cortlandt Pitch facility would provide a flexible indoor recreational space that could be used for many types of sporting activities throughout the year.

4. ***Proposed Re-zoning***
The Applicant is seeking an amendment to the Zoning Map to change the zoning classification of the property from R-20, single-family residential to Community Commercial (CC), as the CC district permits Physical Fitness Facilities uses as-of-right.[2] Although a Physical Fitness Facility use is permitted by right in the CC district, the term is not defined in the Zoning Ordinance. To avoid any potential confusion, the Applicant seeks an amendment to the Zoning Ordinance to include a definition of the term "Physical Fitness Facility" as follows:

> A privately owned and operated indoor and/or outdoor recreation facility for physical fitness and sports activities, including but not limited to, group and private instruction or training, and well as competitions or games. Customary accessory uses incidental to a Physical Fitness Facility may include: a) a snack bar; b) the sale of items such as sports apparel and/or equipment; c) physical therapy and/or sports treatments; d) party or general recreation and assembly space; e) baby-sitting services for use solely by patron or employee children; and f) arcade games and vending machines.

The proposed zoning map change is consistent with the pattern of zoning and development in the immediate area, which includes an existing Community Commercial area between the Bear Mountain Parkway and Croton Avenue (See Figure F-1, *Zoning and Land Use)*. The Site is immediately adjacent to the Cortlandt Lanes bowling alley located on a parcel zoned CC. To the south of the Site, opposite the NYS right-of-way and Route 35/202 (Crompond Road), is a group of CC zoned parcels including a gas station and office buildings. Immediately to the north of the Site is the Lincoln Titus Elementary School, a non-residential institutional use in

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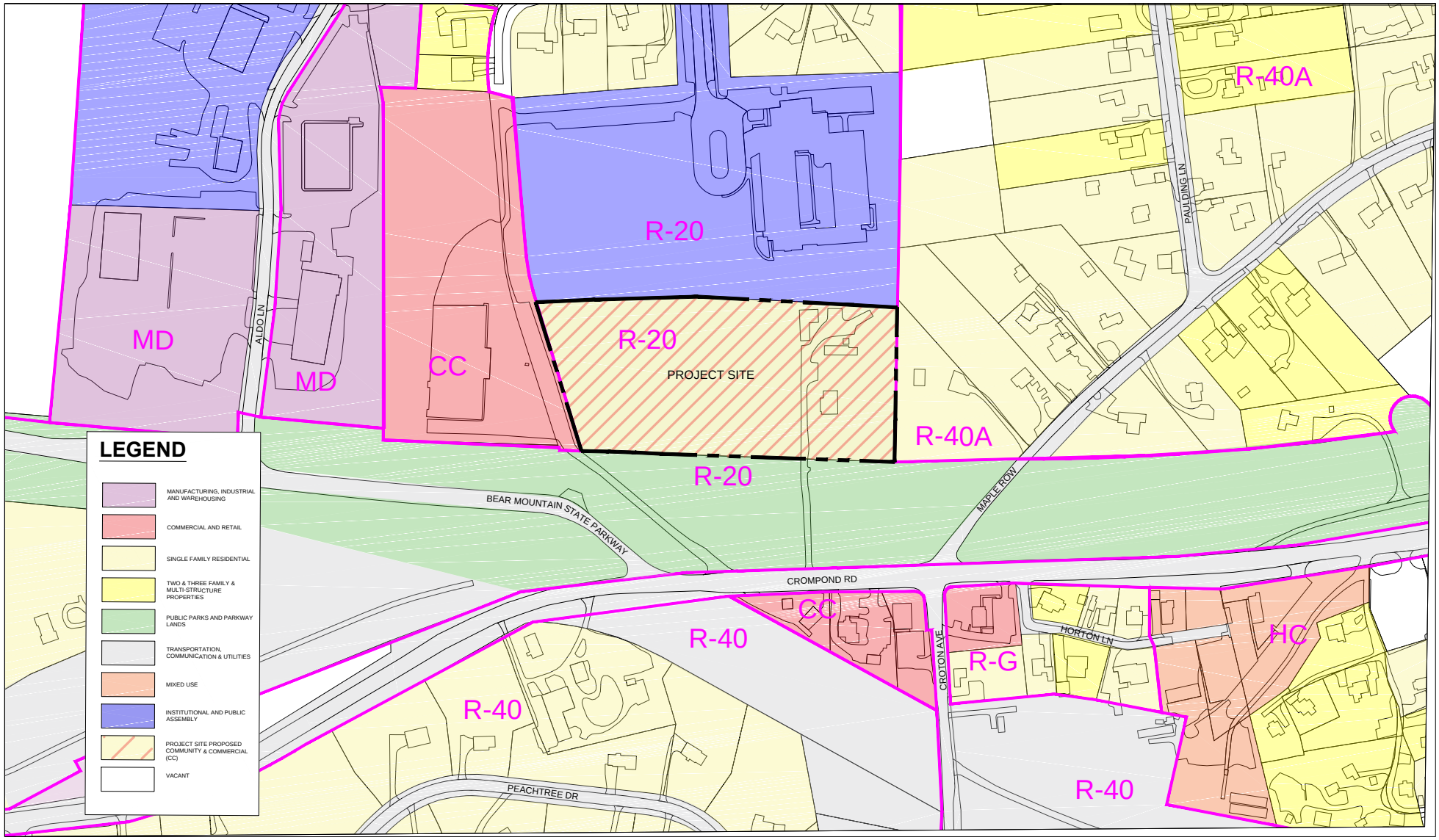
[1] Town of Cortland, Parks, Recreation and Conservation Advisory Board, *Long Range Plan for the Development of Recreational Facilities in the Town of Cortlandt, New York*. Cover letter. 01/18/12.
[2] Town of Cortlandt, Zoning Ordinance of the Town of Cortlandt, Table of Permitted Uses 307 Attachment 2:2. Last revised 08/01/16.

the R-20 district. The area along the common lot line contains playing fields and the school building.

5. ***Site Access with Bear Mountain Parkway Extension***
Site access would be evaluated if the NYSDOT proposes to construct the Bear Mountain Parkway Extension in the future. It is anticipated that Site access would be available from a frontage road adjacent to the Parkway Extension.

PLOTTED BY: DIVNEY TUNG SCHWALBE, LLP GOODSTEIN, MAX 8/9/2016 2:29:21 PM L:\1802 CORTLANDT PITCH\1802 ZONING AND LAND USES MAP.DWG



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N 0 50 100 200
SCALE: 1" = 100'

Zoning and Land Use

August 9, 2016

Cortlandt Pitch
Town of Cortlandt, New York

Figure No. F-1

G. ARCHITECTURAL & VISUAL IMPACT

CORTLANDT PITCH
EAF PART 3

G. ARCHITECTURE AND VISUAL IMPACT

1. ***Proposed Architecture***
The proposed Cortlandt Pitch facility will feature a single-story, pitched roof structure as illustrated on full-size drawing Sheet No. A-3.0, *Building Elevations* and Figure G-1, *Architectural Rendering*.

Two line-of-sight cross sections have been prepared for the Project, and are shown on full-size site plan drawing Sheet No. SP-4.2, *Site Sections*:

a. *Section A* extends from 74 Maple Row east of the Site to the western property boundary. As shown in this site section, the proposed structure will be located approximately 158 feet from the adjacent residential structure at 74 Maple Row. In addition to the distance between the proposed structure and the adjacent residence, evergreen trees of 10 to 12 feet in height will be installed along the property line to provide screening. Existing trees on the property at 74 Maple Row would also continue to provide screening. The proposed structure will be located a minimum of 180 feet from the western property line and over 320 feet from the Cortlandt Lanes building.

b. *Section B e*xtends from the Lincoln Titus Elementary School north of the Site to Crompond Road to the south. As shown in this section, the School is approximately 220 feet north of the proposed structure and Crompond Road is located approximately 350 feet to the south. Along the common property boundary with the School a combination of shade trees and evergreen trees will be planted to provide screening. The commercial structures located on the south side of Crompond Road are located over 400 feet from the proposed structure. Shade trees are proposed along the southern property line to provide visual interest and screening of the property from the south.

2. ***Photometric Plan***
A photometric plan has been prepared and is included in the full-size drawing set (see Sheet No. SP-8.0, *Site Lighting Photometric Plan*) accompanying this EAF Part 3. As the plan illustrates, there would be no light spill that would extend onto the neighboring property near the residential structure or school building.

A landscape plan has also been prepared (see Sheet No. SP-4.0, *Landscape Plan*). The landscape plan proposes a landscaped area along the eastern property boundary, adjacent to the residential property at 74 Maple Row. The area would be planted with a row of evergreen trees of 10 to 12 feet in height. The evergreen trees would be staggered in order to provide maximum screening of the Cortlandt Pitch facility from the neighboring property.

H 2 M

architects + engineers

NY INDOOR SPORTS INC.

Architectural Rendering

Figure No. G-1

H. INFRASTRUCTURE AND UTILITIES

CORTLANDT PITCH
EAF PART 3

H. INFRASTRUCTURE AND UTILITIES

1. ***Impacts to Town water supply***

In its January 4, 2017 recommendation letter, the Cortlandt Planning Board noted "[t]here is not anticipated to be any adverse impact to Town services by the proposed zoning amendment. There is sufficient public water in the vicinity" (page 3).

As shown on Table H-1, *Proposed Water Demand and Sanitary Load*, the proposed water demand for the Project will be 2,847 gallons per day (gpd). This includes the use of water saving plumbing fixtures. The proposed landscaping will include native and low-maintenance plant materials, that once established, will reduce the need for irrigation except in extreme drought conditions.

2. ***Identify existing and proposed on-site utilities.***

There is an existing water line south of the Site within the NYSDOT right-of-way. Under the proposed Project, a new 6" water service would be installed extending from the roadway to the west (adjacent to the Cortlandt Lanes) onto the site. Gas, electric service, and communication services would be installed along the improved driveway from Crompond Road. See full-size site plan Sheet No. SP-2.0, *Site Grading, Drainage, & Utility Plan* for the location of the proposed utilities.

3. ***Solid waste, refuse collection and recycling***

The Project will have a refuse area located adjacent to the parking lot to the northwest of the proposed facility. The refuse area will be screened on the north, east and south sides by evergreen shrubs. Refuse trucks will circulate through the parking lot along the west side of the facility to access the refuse area. Recyclable materials will primarily consist of glass, aluminum and plastic food and beverage containers from the concession stand and vending machines, and paper and cardboard from the concession stand and administrative offices. Solid waste will generally consist of food wastes.

The Applicant would contract with a licensed, private carter for the removal of refuse and recyclable materials for the Project. It is anticipated that the private carting service would utilize Wheelabrator Westchester, L.P. waste-to-energy facility for disposal of the collected refuse. Based on data from the New York State Department of Environmental Conservation, Wheelabrator Westchester has capacity to accept the solid waste from the project site.[1] The collection of recycling at the Project would comply with the Westchester County Source Separation law that mandates source separation of recyclable materials. It is not expected that the Project would result in significant adverse impacts related to solid

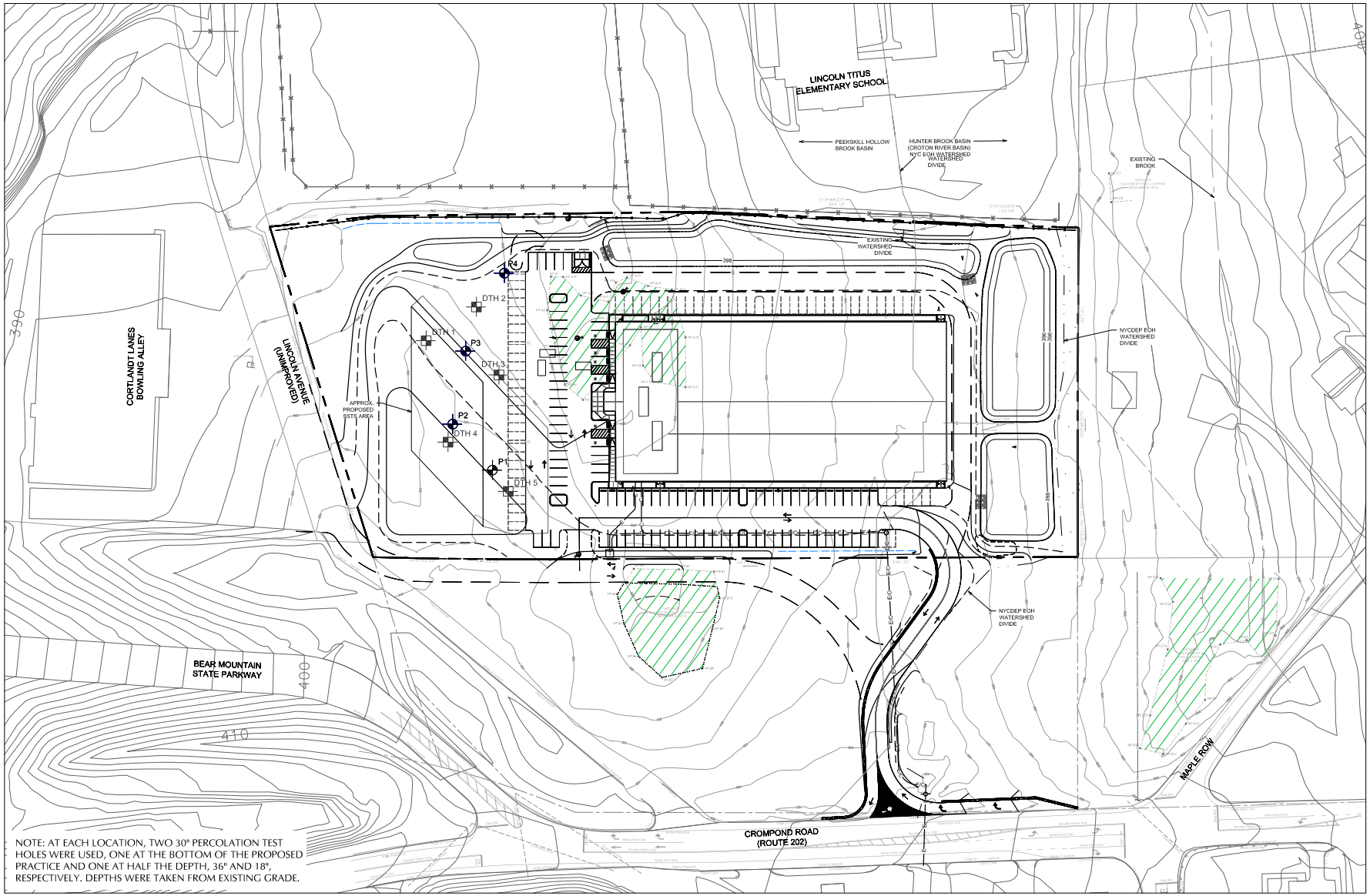
[1] Wheelabrator Westchester existing annual permit limits 710,000 tons per year with an actual waste quantity of 676,380 tons (2013). New York State Department of Conservation. "2013 Municipal Waste Combustion Facility Capacity Chart." Retrieved June 1, 2017 at http://www.dec.ny.gov/chemical/40047.html.

waste and recyclable material generation, and no additional mitigation measures are required.

4. Sanitary Sewer Loading

As shown on Table 1, *Proposed Water Demand and Sanitary Load*, the proposed sewer load for the Project will be 2,588 gallons per day (gpd) with anticipated water savings.

Soil tests were conducted in December 2016 and were witnessed by Westchester County DOH staff. Preliminary soil investigation, data logs and testing results for a proposed on-site wastewater treatment system are included with this Expanded EAF Part 3 in the *Engineering Report – Sanitary Sewer Treatment System* located in Tab III. See Figure No. H-1, *Soil Test Map*. A permit from the Westchester County Department of Health will be obtained.



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N 0 20 40 80
SCALE: 1" = 40'

DTH 1 Deep Hole Test Location with WCDOH, Performed 1/20/16

P1 Percolation Test Location with WCDOH, Performed 12/8/16

Soil Testing Location Map

Cortlandt Pitch
Cortlandt, New York

Figure No. H-1

Table No. H-2

Date: 6/8/17
By: MBG
Issue No. 1

CORTLANDT PITCH
CORTLANDT, NEW YORK

PROPOSED WATER DEMAND AND SANITARY LOAD

PROGRAM ELEMENT	AMOUNT	UNIT	WATER DEMAND					SANITARY LOAD		
			UNIT FLOW[1]	UNIT FLOW (10% Additional)[2]	AVERAGE DAILY FLOW (gpd)	AVERAGE DAILY FLOW (20% Water Savings)[3] (gpd)	UNIT FLOW[1]	AVERAGE DAILY FLOW (gpd)	AVERAGE DAILY FLOW (20% Water Savings)[3] (gpd)
Players & Coaches	210	person	5.0 gpd/person	5.50 gpd/person	1,155	924	5.0 gpd/person	1,050	840
Employees (Full-time)	2	employee	15.0 gpd/employee	16.50 gpd/employee	33	26	15.0 gpd/employee	30	24
Referees	3	person	5.0 gpd/person	5.50 gpd/person	17	13	5.0 gpd/person	15	12
Guests	234	person	5.0 gpd/person	5.50 gpd/person	1,287	1,030	5.0 gpd/person	1,170	936
Employee Showers	2	employee	5 gpd/employee	5.50 gpd/employee	11	9	5 gpd/employee	10	8
Kitchen	48	seats	20 gpd/seat	22.00 gpd/seat	1,056	845	20 gpd/seat	960	768
PROJECT TOTAL									
Average Daily Flow (GPD)					3,559	**2,847**		3,235	**2,588**
Peak Rate of Flow (GPM)[5]					10	**8**		9	**7**

[1] Unit flow values based on NYSDEC Design Standards for Intermediate Sized Wastewater Treatment Systems, Dated 3/5/2014, Table B-3, pp. B-16.
[2] 10% added to NYSDEC Design Standards for Intermediate Sized Wastewater Treatment Systems unit flow rate to obtain water demand flow rate. Additional unit flow assumed not to enter sewer system.
[3] 20% subtracted from daily flow for use of water savings plumbing per Section 15-0314 of the Environmental Conservation Law, NYSDEC Design Standards for Intermediate Sized Wastewater Treatment Systems, Dated 3/5/2014, Table B-3, pp. B-16. No reduction in flow taken for residential units as per the NYSDEC Design Standards for Intermediate Sized Wastewater Treatment Systems.
[4] Due to mixed uses of site, peak hour estimated to be distributed through day. Peaking factor=4.

I. ARCHAEOLOGICAL/HISTORIC RESOURCES

CORTLANDT PITCH
EAF PART 3

I. ARCHAEOLOGICAL/HISTORIC RESOURCES

A Phase 1A Literature Search and Sensitivity Assessment & Phase 1B Archaeological Field Reconnaissance Survey was conducted for the Project Site. A combined report is included in Tab III of this Expanded EAF Part 3. A total of 78 shovel tests were excavated on the Site and none yielded any pre-contact or historic cultural material. Additionally, the existing residential structure on the property, built in the late 19th century, was evaluated. The Applicant's historic resource consultant found that the structure has been moved from its original location and placed on a modern foundation. Many changes to the structure have been made removing some of the contributing architectural elements. In addition, the structure is not associated with persons who would have made a significant contribution to the history of the community. Therefore, the Applicant's consultant determined that the property is not National Register Eligible, and no additional work or archaeological investigations are warranted.

On April 19, 2017, the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) issued a letter stating that it has determined that the "project will have no impact on archaeological and/or historic resources listed in or eligible for the New York State or National Registers of Historic Places". A copy of the OPRHP letter is included at the end of this section of the EAF Part 3 (See Exhibit I-1) and in Correspondence in Tab IV.

Exhibit No. I-1

NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

April 19, 2017

Ms. Jo-Ann Dyckman
Town Clerk
Town of Cortlandt
Town Hall
1 Heady Street
Cortlandt Manor, NY 10567-1254

Re: DEC
Cortlandt Pitch - NY Indoor Sports
2226 Crompond Rd., Cortlandt, NY
16PR05886

Dear Ms. Dyckman:

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,

Michael F. Lynch, P.E., AIA

Director, Division for Historic Preservation

J. OTHER IMPACTS

CORTLANDT PITCH
EAF PART 3

J. OTHER IMPACTS

1. FISCAL IMPACTS

Existing Conditions

Tax Revenues

Taxes generated by the property are based on the existing Assessed Valuation for the tax lot multiplied by the Tax Rate for each of the applicable taxing districts (Town, County, School, and Special Districts). The current (2016) assessed value for the site's tax lot is as follows:

Land	$2,600
Improvements	$5,150
Total	$7,750

Real estate taxes levied on the Project Site consist of Town/County ("General") taxes and School District Taxes. For this analysis, 2016 Town and 2016/2017 School Tax Rates are provided. Figures for each applicable district along with their corresponding tax amounts are as follows:

District	Tax Rates[1]	Tax Amount
County		
Westchester County	7.04	$1,493.58
County Refuse District	17.280002	$133.92
Mohegan Fire District	89.74	$695.49
Town		
General Town	31.370001	$243.12
Highway	$179.25	$1,389.19
Library	7.04	$54.56
Special Districts		
Cortlandt Ambulance #3	5.38	$41.70
Cortlandt Consolidated Water	19.490002	$151.05
Sub-Total		**$4,202.61**
Lakeland Central School District	1,422.93	**$11,027.71**
Total		**$15,230.32**

The Project Site currently provides approximately $15,000 in Taxes to Westchester County, the Town of Cortlandt, Lakeland Central School District and other special districts.

[1] Per $1000 or unit; Based on 2017 Town Detail Report from Cortlandt Tax Receiver and 2016 School Detail Report.

Employment
Currently, the site consists of open field areas and three existing structures including a residential building and two outbuildings. Therefore, there are no employment opportunities on the existing site.

Proposed Conditions
Tax Revenues
The project is not expected to have any significant adverse impacts on the Town of Cortlandt, Westchester County, School District or other Special Districts. It is anticipated that the project would generate additional taxes and provide a net fiscal benefit, with little impacts to community services and no impacts to the school district. The Project is estimated to provide property taxes of approximately $84,000 annually[2], as presented below:

District	Tax Rates	Tax Amount
County		
Westchester County	7.04	$8,238
County Refuse District	17.280002	$738
Mohegan Fire District	89.74	$3,836
Town		
General Town	31.370001	$1,341
Highway	$179.25	$7,663
Library	7.04	$301
Special Districts		
Cortlandt Ambulance #3	5.38	$230
Cortlandt Consolidated Water	19.490002	$833
Sub-Total		**$23,181**
Lakeland Central School District	1,422.93	**$60,830**
Total		**$84,011**

The Site is not located in the Peekskill Sanitary Sewer District. The Project would have an on-site sanitary sewage disposal system, and therefore would not result in any impacts to the sewer district.

The Lakeland Central School District would receive the greatest share of the projected taxes of approximately $60,000. The Project is expected to provide a net fiscal benefit, while having no significant adverse impact on Town, School District or Special District expenditures.

[2] Based upon an estimated total market value of $2,500,000 and an assessed value of $42,750 using the Town of Cortlandt equalization rate of 1.71 (2016).

In addition to the tax generation, the Project would also provide recreational opportunities within the Town. Consistent with the Town of Cortlandt Parks, Recreation and Conservation Advisory Board's Long Range Report, the Cortlandt Pitch facility would provide additional recreational space without burdening the Town's taxpayers.

Employment
It is anticipated that the Project would generate between two (2) full-time positions (facilities director, manager/program administrator) and four (4) part-time positions (office staff and custodian). The facility would provide additional employment opportunities for local personal trainers, as contractors, to work with teams utilizing the facility. Local referees would be hired to officiate games. The Applicant also intends to employ local teens as referees and would sponsor them to obtain the necessary certifications. Additionally, during tournaments the concession stand would also be staffed.

It is expected that these positions would be filled by residents already living in the Town of Cortlandt or surrounding areas. The jobs created by the Project are not likely to induce residential growth and would not result in any adverse impacts to community services. It is estimated that the overall gross payments, not including benefits or bonuses, to employees and contractors servicing the facility would be approximately $400,000 per year, initially.

Based on the contributions of the Project compared to the limited anticipated community service impacts, the Project is expected to have a positive fiscal impact on the Town of Cortlandt, Westchester County, and Lakeland Central School District, and therefore no additional mitigation measures are required.

2. THREATENED AND ENDANGERED SPECIES

Based on the NYSDEC EAF Mapper, no threatened or endangered species have been identified on or within the vicinity of the Project Site. Previous use of the Site and immediately surrounding areas for agricultural use and residential and commercial development has resulted in fragmented wildlife corridors. Additionally, as the Town's wetland consultant noted, the isolation and lack of connection to other wetlands limits the on-site wetland ability to serve as important potential wildlife habitat area. Wildlife species on the project site are generally those species that are more adaptable to existing disturbed site conditions, which tend to be more common species.

3. NOISE

Noise is measured in A-weighted decibels (dBA). According to the decibel scale, an increase in 3 dBA results from a doubling, or 100% increase, of the noise source and is the lowest perceptible threshold of change. General background noise near the Site is attributed to

automobile traffic on adjacent roads along with the playing fields and outdoor play areas at the Lincoln Titus Elementary School.

Town of Cortlandt Noise Control Law
Per the Town of Cortlandt Noise Control Law (Chapter 197) in areas zoned residential, single-family or multidwelling units, air-conditioning and air-handing devices may not exceed fifty-five (55) dB(A) at the property line. Noise levels within any commercial/retail-zoned districts shall not exceed sixty-five (65) dB(A)s.

The Town of Cortlandt Noise Control Law prohibits "excessively or unusually loud sound which either annoys, disturbs, injures or endangers the comfort, repose, health, peace or safety of a person or which causes injury to animal life or damage to property or business."[3] Restrictions on noise are set forth as:

> "A. During the hours of 8:00 a.m. to 6:00 p.m., noise levels within any residentially zoned district shall not exceed sixty-five (65) dB(A)'s,
>
> B. During the hours of 6:00 p.m. to 8:00 a.m., noise levels within any residentially zoned district shall not exceed fifty-five (55) dB(A)'s."

Additionally, within residential areas, noise from air-conditioning or air-handling devices measured at the property line shall not exceed fifty-five (55) dB(A)'s at any point.

New York State Department of Environmental Conservation Guidance
NYSDEC published a policy and guidance document *Assessing and Mitigating Noise Impacts*[4], which provides noise impact assessment methods and identifies potential avoidance and mitigation measures to reduce or eliminate noise impacts.

The NYSDEC policy does not specifically define a limit for noise impacts. However, per the guidance, sound sources increasing the ambient sound level by 6 dB(A) may cause complaints, but that in some instances increases of greater than 6 dB(A) may be acceptable. The NYSDEC guidance indicates that "an increase in 10 dBA deserves consideration of avoidance and mitigation" (p.14). In general, the document identifies the following human reactions to increases in noise levels:

- Under 5 dBA Unnoticed to tolerable
- 5 – 10 dBA Intrusive
- 10 – 15 dBA Very noticeable
- 15 – 20 dBA Objectionable

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[3] Cortlandt, New York, Town Code, Chapter 197 Town of Cortlandt Noise Control Law. 1989, as amended.
[4] New York State Department of Environmental Conservation, DEP-00-1. Last revised February 2, 2001. http://www.dec.ny.gov/docs/permits_ej_operations_pdf/noise2000.pdf

- Over 20 dBA Very objectionable to intolerable

The following table summarizes relative noise levels and qualitative descriptions from common sources:

Typical Sound Levels

Noise Source	dB(A)	Qualitative Description
Carrier Deck Jet Operation	140	
	130	Painfully Loud
Jet Takeoff (200 feet)	120	
Auto Horn (3 feet)	110	Maximum Vocal Effort
Shout (0.5 feet)	100	
NY Subway Station (50 feet) Heavy Truck (50 feet)	90	Very Annoying, Hearing damage (8 hr, continuous exposure)
Pneumatic drill (50 feet) Freight Train (50 feet) Freeway Traffic (50 feet)	80 70-80 70	Annoying Intrusive (telephone use difficult)
Air Conditioning unit (20 feet) Light Auto Traffic (50 feet) Living Room/Bedroom	60 50 40	Quiet
Library/Soft Whisper (5 feet) Broadcasting/Recording Studio	30 20 10	Very Quiet (Just Audible)

Source: Adapted from Table E, NYSDEC DEP-00-1

Proposed Project

The primary stationary noise source will consist of the mechanical and HVAC equipment (heating, ventilation, and air conditioning) for the Project, which will be located on the western portion of the roof of the proposed structure screened from view. Typically, these types of units are designed to project noise upward. As a result, noise from these units is rarely audible at ground level or distant from the source. The distance of the mechanical equipment from the nearest residential structure, located on Maple Row, is over 435 feet and is shielded by the main portion of the sports facility structure. The equipment would also be over 250 feet from the Lincoln Titus Elementary School to the north and would also be partially shielded by the main portion of the sports facility structure. Given the distance between the location of the proposed units and the nearby surrounding land uses, it is not anticipated that there would be adverse impacts from the noise of the mechanical equipment.

Mechanical units used for heating and cooling will be placed on the roof above the front area of the building as show on full-size drawing Sheet No. A-2.0, *Roof Plan*. The roof will have parapets or walls on four sides to help contain noise. Basic unit and sound information is as follows:

- Three packaged type air handling units will be required; one to serve the front area, and two to serve the sports areas. For evaluation, Daikin packaged rooftop units have

been used as a prototype. A typical unit has a capacity of 7,500 cfm (cubic feet per minute), using a one-horsepower electric motor.

- Per manufacturer data, typical sound power measured at the unit is approximately 89 dB at full load. When multiple sound sources are present, the total level is not additive. In this case, where there are three identical units proposed, the NYSDEC guidance indicates that a total of 5 dB would be added to the highest sound level. Therefore, all three units operating simultaneously would result in a sound pressure of 94 dB in total.

Based on the NYSDEC guidance, at distances greater than 50 feet from the sound source, every doubling of the distance produces a 6-dB reduction in the sound. Therefore, the distances of over 300 and 400 feet from the proposed noise source to the nearest residential and institutional uses would result in an approximately 14 to 18 dB reduction in sound. Additionally, it is anticipated that the walls surrounding the units would further reduce the sound levels.

These units will be placed on a flat portion of the rooftop 24 feet off the ground, set back from the edge of the building by at least 16 feet and surrounded by building walls. These types of units are typically designed to project noise upward, and additional insulation will be added within the unit enclosures to ensure that sound pressure at the property lines will fall within allowable limits, as needed. Based on the distance that these units are set vertically from the ground and horizontally from the surrounding properties, it is not anticipated that these units would exceed permitted sound limits at the property lines.

4. PHASE 1 ENVIRONMENTAL SITE ASSESSMENT

A Phase I Environmental Site Assessment (ESA) was performed for the Project Site in April and May 2017 by Whitestone Associates, Inc. to identify if any environmental conditions exist. The Phase 1 ESA identified that historical use of the property and general surrounding area included agricultural uses that may have resulted in pesticide use. The investigation also observed some existing automotive parts, compressed gas cylinders, empty motor oil cans and roof tar buckets within portions of the site. Additionally, the Phase I ESA observed an existing actively used underground storage tank adjacent to the existing residential structure. The Phase I ESA did not reveal any evidence of controlled recognized environmental conditions (RECs) or historic recognized environmental conditions (HRECs) with the property.

Whitestone Associates, Inc. recommended that a Phase II ESA investigation be conducted to collect soil samples based on the initial site observations. A Phase II ESA was conducted on the Site in June 2017. The Phase II recommended that underground storage tanks be cleaned and removed in accordance with NYSDEC and/or Westchester County regulations. Soil samples from throughout the Site identified elevated lead and pesticide concentrations from the previous use of the property that only exceed Protection of Ecological Resources Soil Cleanup Objectives (SCOs) and did not exceed NYSDEC Restricted-Use SCOs. Based on

Whitestone's discussions with NYSDEC, the soils can remain on site subject to construction and geotechnical considerations without regulatory oversight or reporting. Whitestone recommended that impacted soil should not be comingled with other site soils during construction and should be segregated and evaluated for off-site treatment/disposal in accordance with applicable state and federal regulations.

5. GROWTH INDUCING IMPACTS

The Project would not require the expansion of utilities that could potential increase the development potential of the local area. As discussed by the Planning Board in its January 4, 2017 Memorandum to the Town Board, "[t]here is sufficient public water in the vicinity. Parcels in the vicinity are served by on-site septic systems as public sewer is not readily available."

The Project would generate approximately two full-time and four part-time new jobs, along with additional employment opportunities such as personal trainers and referees. However, it is anticipated that these jobs are likely to be filled by existing area residents, and it is not expected that employees are likely to move to the area for this employment. Thus, the Project would not directly generate any new residents or result in the need for resident-serving services.

Since the Project is not expected to result in the expansion of utilities that could facilitate development potential in other locations or the generation of new residents, no adverse impacts related to growth inducement are expected. Instead, positive fiscal benefits to the Town, County and School District are expected as discussed in fiscal impact analysis (see Section J.1).

6. UNAVOIDABLE OR UN-MITIGATABLE IMPACTS

Construction activities associated with the Project would result in temporary construction impacts, including noise, traffic and dust. The short duration of the construction period, in conjunction with the implementation of best management practices to mitigate construction emissions exposure off-site, would minimize negative effects from construction emissions.

The Project would result in the removal of most of the existing trees on the Site during the construction process. The Project would require the removal of approximately 262 trees on the Project Site. Although the Applicant would seek to mitigate this loss in the manner described below, this would nevertheless constitute an unavoidable construction impact. The Applicant would seek to mitigate this impact through the proposed planting of 123 shade trees, evergreen trees, ornamental flowering trees, along with shrubs and ground cover. The mix of trees and the layered planting would provide screening of the Project throughout the seasons.

7. IMPACTS ON FIRE, EMS AND POLICE SERVICES

Existing Town Services

Police protection in the Town of Cortlandt is provided by the New York State Police and Westchester County Police. The New York State Police Zone 3, Troop K, headquartered in Croton-on-Hudson has primary police enforcement duties. Additional patrol services are shared by the Westchester County Police provided from the North Command precinct located at the Cortlandt Town Hall. The New York State Police also maintain a satellite station at Cortlandt Town Center.

The Site is located within the Lake Mohegan Fire District. The District is approximately 40 square miles and covers portions of the Town of Cortlandt and Town of Yorktown. The Mohegan Volunteer Fire Association (MVFA) provides fire protection services within the Mohegan Fire District.

The Site is located within the Mohegan Emergency Medical Services District. The Mohegan Volunteer Fire Association Volunteer Ambulance Corps (MVFA-VAC) provides Basic Life Support emergency medical services for the Site. In addition to the Basic Life Support services provided by the MVFA-VAC, Advanced Life Support services are provided by Cortlandt Regional Paramedics (CRP) located at Hudson Valley Hospital Center. CRP provides paramedic services to the City of Peekskill, Town of Cortlandt, Village of Buchanan, Lake Mohegan Fire District and Verplanck Fire District. CRP works in coordination with the local ambulance corps, such as MVFA-VAC, to provide pre-hospital emergency care. The nearest hospital to the Site is NewYork Presbyterian Hudson Valley Hospital, located approximately one mile to the west.

Proposed Conditions

First aid supplies and equipment would be stored in the facility and full-time employees would receive First Aid, CPR and portable automatic external defibrillator (AED) training. As necessary, EMT's could be hired and on-site during tournament weekends.

As shown on the proposed site plan, emergency access would be provided around the perimeter of the building for fire truck and ambulance access. In March 2017, the Applicant and its architectural and engineering consultants met with Town Staff, including the Town Fire Inspector. It is not anticipated that the Project would result in significant adverse impacts on emergency services.

8. ARTIFICIAL TURF

Artificial turf will be utilized on the indoor playing fields at the Cortlandt Pitch facility. It is anticipated that the turf fields will consist of artificial grass blades stitched into a backing material with sand and/or rubber pellets layered through the grass to provide a springy padding for athletes.

A number of research studies have been conducted assessing the health and safety concerns of artificial turf on playing fields. The following is a summary of the conclusions from some studies from New York and Connecticut.

- 2010 – A compilation of studies of artificial turf fields containing crumb rubber infill was completed in 2010 through a joint agreement between the CT Department of Environmental Protection, the University of Connecticut Health Center, the CT Agricultural Experiment Station and the CT Department of Public Health. The assessment found no health concern from inhaling chemicals at outdoor crumb rubber fields tested as part of the study. The assessment found that exposures could be greater for indoor turf fields and recommended that building operators ventilate indoor fields to decrease exposures.[5]
- May 2009, NYSDEC & NYSDOH – The study analyzed crumb rubber samples and found that concentration in the crumb rubber samples were below the federal hazard standard for lead in soil and indicate that the crumb rubber would not be a significant source of lead exposure if used as infill material in synthetic turf fields. An evaluation of ambient air sampling concluded that the measured levels of chemicals in the air at the two artificial turf fields did not raise a concern for non-cancer or cancer health effects for people who use or visit the fields.[6]
- December 2008, Milone & MacBroom – The study included an evaluation of the stormwater drainage quality from synthetic turf fields in Connecticut. The study indicates that "an analysis of the concentration of metals in the actual drainage water indicates that metals do not leach in amounts that would be considered a risk to aquatic life as compared to existing water quality standards. Analysis of the laboratory based leaching potential of metals in accordance with acceptable EPA methods indicates that metals will leach from the crumb rubber but in concentrations that are within ranges that could be expected to leach from native soil."[7]

It is not anticipated the proposed artificial turf would result in any health or safety impacts.

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[5] Risk Assessment of Artificial Turn Fields. Final report is a compilation of separate State of Connecticut agency reports available at: http://www.ct.gov/deep/cwp/view.asp?A=2690&Q=463624

[6] *An Assessment of Chemical Leaching, Releases to Air and Temperature at Crumb-Rubber Infilled Synthetic Turf Fields*. New York State Department of Environmental Conservation and New York State Department of Health. May 2009. Full report available at: http://www.dec.ny.gov/docs/materials_minerals_pdf/crumbrubfr.pdf

[7] *Evaluation of the Environmental Effects of Synthetic Turf Athletic Fields.* Milone & MacBroom. December 2008. Full report avaialble at: http://www.miloneandmacbroom.com/Libraries/Documents/Evalutation_of_the_Environmental_Effects_of_Synthetic_Turf_Athletic.sflb.ashx

K. ALTERNATIVES

CORTLANDT PITCH
EAF PART 3

K. ALTERNATIVES

1. ***Alternative layout that eliminates the proposed outdoor field***
   To provide wetland mitigation in the eastern portion of the property, the proposed building and parking has been shifted further to the west, which reduces the land available for an outdoor recreation field. A smaller turn lawn area will remain available. Shifting the building further to the west provides approximately 160 feet of separation between the proposed structure and the neighboring property to the east.

2. ***Existing R-20 zoning district***
   The subject property is situated in the R-20 zoning district. Under existing zoning uses such as sing-family residential, typical accessory uses, recreational uses, agriculture, places of worship, schools and government buildings are permitted. When authorized by special permit colleges and universities, museums or art galleries, hospitals and nursing homes, golf courses, country clubs and other similar uses are permitted.

3. ***Proposed CC zoning district***
   The Applicant has petitioned the Town to rezone the parcel to CC, Community Commercial. In the CC district, the maximum building floor area is 12,000 square feet, and no single use, other than a food store, can occupy more than 4,000 square feet. The Applicant has proposed that as part of the re-zoning, that a physical fitness facility be permitted to exceed the maximum building floor area, and the maximum permitted floor area for a single-use, other than a food store.

   Single-family and 2-family dwellings are permitted in the CC when contained within a structure also used for commercial purposes, or as a principal use.[1] In general, the non-residential uses permitted in the CC district include institutional, recreational and public uses, such as places of worship, public or private schools, physical fitness facilities, recreation clubs, theaters, and municipal uses; retail stores; eating and drinking places;, automotive service stations, personal service facilities, health and social services, finance, insurance and real estate establishments, and legal, management, engineering and other professional services.[2]

   Once the building is constructed, other uses may be able to occupy the space, in addition or as an alternative to the physical fitness facility, however each use, other than a food store, would be each limited by the single-use restriction of 4,000 square feet of floor area. Portions of the proposed structure, such as the two-story element, could be utilized with the remaining indoor

[1] Town of Cortlandt, Zoning Code, Section 307 Attachment 1, Note 1.
[2] Town of Cortlandt, Zoning Code, Section 307-14 and 307-15, Table of Permitted Uses. The table also includes additional uses permitted by right and permitted by special permit

field space being demolished. An alternative use or combination of uses on the Site would be required to comply with the zoning code's off-street parking requirements.

4. ***Driveway Connection to Maple Row***

A potential driveway connection to Maple Row across the existing NYSDOT right-of-way was discussed with the Town's traffic consultant, AKRF, and NYSDOT to provide additional access to and from the intersection of Maple Row and Crompond Road. While the connection to Maple Row is not part of the proposed plan it has been studied as a potential alternative in order to provide a connection from the project site to and from Maple Row and the intersection at Route 202/35 and Maple Row/Croton Avenue. This alternative would include a two-lane driveway within the NYSDOT right-of-way from the Project driveway connecting to Maple Row along with the installation of a new southbound right-turn lane for the southbound Maple Row approach at the intersection of Route 202/35 and Maple Row.

With a proposed driveway to Maple Row, the Project would result in approximately 5,500 square feet of additional impervious surface to construct the driveway and turn lane within the NYSDOT right-of-way. The remainder of the driveway within Wetland C would be constructed with pervious pavement material. To construct the proposed driveway, turn lane and associated wetland replacement would result in approximately 32,000 square feet of additional land disturbance.

Wetland Disturbance

A proposed driveway to Maple Row would result in the disturbance of an approximately 6,230 SF portion of Wetland C. Although a portion of Wetland C would be disturbed, it is proposed that the new driveway would be constructed using pervious pavement through the wetland area. Under this alternative, the constructed wetlands to be built to replace the impacted portions Wetland C will be excavated just west of the existing wetland location.

The partial impacts to these small wetlands are unavoidable for the access drive construction, but it is possible to replace these wetlands in the same general area. By locating them proximate to the existing wetlands, the hydrology would be similar. A 1:1 replacement ratio is proposed with a more diverse and valuable vegetative community. The replacement of these wetlands would be reviewed with the NYSDOT, as they are located within the State right-of-way.

Wetland C would automatically be under USACOE jurisdiction since it is within the East of Hudson Watershed. The off-site wetland will be reviewed by USACOE to determine its jurisdiction and review. Since the Project would involve less than 40,000 sf of impervious area and less than two or more acres of land clearing and grading in the Watershed, it would fall under NYCDEP's review threshold.

Tree Removal

This alternative would result in the removal of an additional 118 trees. Overall, within the expanded limit of disturbance to construct a driveway to Maple Row, approximately 380 trees

would be removed. Half of the trees (51%) to be removed are dead or are in critical or poor condition. Approximately 18% of the trees to be removed are invasive species. Of the trees to be removed, only 192 are in fair or good condition with 82 on-site and 108 within the right-of-way. Approximately 25% of the trees to be removed that are in fair or good condition are invasive species, leaving approximately 145 non-invasive species trees. Tree protection measures for the trees to remain would be the same as described in Section C-2, *Tree Preservation*.

Steep Slope Disturbance

Per Chapter 259, *Steep Slopes* steep slopes are ground areas with slopes greater than 15%. There are no steep slopes located on the Property; however, there are approximately 2,800 square feet steep slopes greater than 15% located within the NYSDOT right-of-way along Maple Row at the proposed driveway connection and turning lane (see Figure A-1, *Existing Conditions* in Section A of this EAF Part 3). These slopes were likely man-made as part of the grading for Maple Row at the existing watercourse crossing where there are low points on either side of the roadway. With the driveway alternative from the Project to Maple Row, approximately 1,600 square feet of steep slopes would be disturbed adjacent to Maple Row. A stormwater pollution prevention plan (SWPPP) has been prepared for the Cortlandt Pitch project and describes the proposed erosion and sediment control measures that would be utilized during construction and after completion of the Project.

Section 259-6 of the Town Code includes criteria that the approving authority shall consider for a Steep Slope Permit. The following evaluates those criteria in terms of the Project:

A. *Disturbance or alterations of trees and forests and topographical disturbances or alterations on steep slopes shall be in conformance with all provisions of this steep slopes ordinance as well as with all other applicable ordinances and regulations of the Town of Cortlandt, including, by way of example only, the requirements of Chapter 175 regarding flood damage control, Chapter 283 regarding trees, and Chapter 301 regarding diversion of watercourses.*

The property was previously owned as farmland and is currently largely meadow and open space, except for the main house and two accessory buildings on-site. The main house was originally located in the Right-of-way and was relocated when the land was taken by the State for a potential future parkway extension. The right-of-way land is currently undeveloped except for separate driveways to the on-site home and adjacent Bowling Alley, with meadow and limited wooded areas along the roadways. The Project with this alternative would be designed to comply with other applicable ordinances and regulations of the Town of Cortlandt. The project site is not located within a flood plain, however, an Erosion Control Plan shall be prepared as part of the contract documents and will require that the erosion and sedimentation controls set forth thereon be implemented before the start of construction and further such controls will be monitored and maintained during construction.

B. *Activities within wetlands shall be in conformance with Chapter 179, Freshwater Wetlands, Water Bodies and Watercourses, and, whether within or outside of wetlands, will not adversely affect any wetlands, water bodies, or watercourses.*

Activities within wetland areas will be in conformance with Chapter 179 of the Town of Cortlandt Town Code. Discussion on existing Freshwater Wetlands, Water Bodies and Watercourses is located in Section III.B: *Water Resources* in this Expanded EAF, and above.

C. *The proposed activity will not result in creep, sudden slope failure, or additional erosion.*

An Erosion Control Plan shall be prepared as part of the contract documents and will require that the erosion and sedimentation controls set forth thereon be implemented before the start of construction and further such controls will be monitored and maintained during construction. Stabilization of the site shall also comply with the conditions or requirements of the Town, County and State.

D. *The proposed activity will not adversely affect existing or proposed wells or sewage disposal systems.*

There are no existing or proposed wells or septic areas within or immediately adjacent to the areas of existing steep slopes within the NYSDOT right-of-way.

E. *The proposed activity will not adversely affect any endangered or threatened species of flora or fauna.*

No threatened or endangered species of plants or animals have been identified on the Project Site.

F. *The proposed activity is in accordance with the principles and recommendations of the most recent Master Plan of the Town.*

As discussed in Section I.F.1: *Land Use*, the Project is consistent with the policies and goals of the Town of Cortlandt 2016 Sustainable Comprehensive Plan.

G. *The proposed activity constitutes the minimum disturbance necessary to allow the property owner a reasonable use of the property.*

The proposed limit of disturbance has been designed to limit proposed construction activities to areas that have been previously disturbed on the Project Site and within the NYSDOT right-of-way. Activities impacting steep slopes have been limited to those required to construct the proposed development driveway to Maple Row as part of this alternative, only.

H. Disturbance or alteration of areas with steep slopes shall additionally be in conformance with the following provisions:

(1) The planning, design and development of buildings shall provide the maximum in structural safety, slope stability and human enjoyment while adapting the affected site to, and taking advantage of, the best use of the natural terrain and aesthetic character.

The Project has been designed to avoid or minimize disturbances to existing steep slopes and the creation of new steep slopes to the greatest extent practicable. The Project development has been located within areas of the Site that have previously been developed or disturbed. Any cut and fill slopes will be constructed in accordance with recommendations of a geotechnical engineer and subject to the approval of the Town Engineer.

(2) The terracing of building sites, including the mounding of septic tile fields, shall be kept to an absolute minimum.

The floor level of the new structure proposed has been designed so that terracing is not required. No mounding of the proposed septic fields is proposed.

(3) Roads and driveways shall follow the natural topography to the greatest extent possible in order to minimize the potential for erosion and shall be consistent with all other applicable ordinances and regulations of the Town of Cortlandt and current engineering practices.

Proposed driveways have been configured to align with existing infrastructure to the greatest extent possible. Slopes at intersections with public roadways have been designed to be in compliance with applicable Town and State regulations.

(4) Replanting shall consist of indigenous vegetation and shall replicate the original vegetation on the site as much as possible.

Existing steep slopes are within the NYSDOT right-of-way. Replanting shall consist of maintenance of lawn area seed mix ±5 feet from the edge of pavement in the vicinity of the steep slope disturbance.

(5) The natural elevations and vegetative cover of ridgelines shall be disturbed only if the crest of a ridge and the tree line at the ridge remain uninterrupted. This may be accomplished either by positioning buildings and areas of disturbance below a ridgeline or by positioning buildings and areas of disturbance at a ridgeline so that

the elevation of the roofline of the building is no greater than the elevation of the natural tree line. However, under no circumstances shall more than 100 feet along the ridgeline, to a width of 100 feet generally centered on the ridgeline, be disturbed.

There are no ridgelines that would be disturbed by the Project.

(6) *Any regrading shall blend in with the natural contours and undulations of the land.*

The majority of the Project is concentrated to previously disturbed portions of the Site. Areas of regrading have been designed to blend into the existing contours of the site, to maximum extent practicable.

(7) *Cuts and fills shall be rounded off to eliminate sharp angles at the top, bottom and sides of regraded slopes. Visible construction cuts and permanent scarring should be minimized.*

Regraded slopes would be rounded at the top, bottom and sides.

(8) *The angle of cut and fill slopes shall not exceed a slope of one vertical to two horizontal except where retaining walls, structural stabilization or other methods acceptable to the Director of Technical Services are used.*

(9) *Tops and bottoms of cut and fill slopes shall be set back from structures a distance that will ensure the safety of the structure in the event of the collapse of the cut or fill slopes. Generally, such distance shall be considered to be six feet plus 1/2 the height of the cut or fill. Nevertheless, a structure built on a slope or at the toe of a slope is permitted if it is properly designed to retain the slope and withstand the forces exerted on it by the retained slope.*

The cut and fill slopes will be constructed in accordance with the recommendations of a geotechnical engineer and subject to the approval of the Town Engineer.

(10) *Disturbance of rock outcrops shall be by means of explosive only if labor and machines are not effective and only if rock blasting is conducted in accordance with all applicable laws and regulations of the Town of Cortlandt, County of Westchester, and the State of New York.*

Rock blasting is not anticipated, but should any blasting be necessary, it would be conducted in accordance with applicable Town and State regulations.

(11) Disturbance of steep slopes shall be undertaken in workable units in which the disturbance can be completed and stabilized in one construction season so that areas are not left bare and exposed during the winter and spring thaw periods (December 15 through April 15).

(12) Disturbance of existing vegetative ground cover shall not take place more than 15 days prior to grading and construction.

(13) Temporary soil stabilization, including, if appropriate, temporary stabilization measures such as netting or mulching to secure soil during the grow-in period, must be applied to an area of disturbance within two days of establishing the final grade, and permanent stabilization must be applied within 15 days of establishing the final grade.

(14) Soil stabilization must be applied within two days of disturbance if the final grade is not expected to be established within 60 days.

(15) Measures for the control of erosion and sedimentation shall be undertaken consistent with the Westchester County Soil and Water Conservation District's Best Management Practices Manual for Erosion and Sediment Control and New York State Guidelines for Urban Erosion and Sediment Control, as amended, or their equivalents satisfactory to the approval authority.

(16) All proposed disturbance of steep slopes shall be undertaken with consideration of the soils limitations characteristics contained in the Identification Legend, Westchester County Soils Survey, 1989, as prepared by the Westchester County Soil and Water Conservation District, in terms of recognition of limitation of soils on steep slopes for development and application of all mitigating measures and as deemed necessary by the approval authority.

In compliance with requirements established for the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity (Permit No. GP-0-15-002) a Stormwater Pollution Prevention Plan has been prepared for the Project and and would be implemented. As a result, an Erosion Control Plan will be included as part of the contract documents and will require that the erosion and sedimentation controls set forth thereon be implemented before the start of construction and further such controls will be monitored and maintained during construction. Stabilization of the site shall also comply with the conditions or requirements of the Town, County and State.

(17) Topsoil shall be stripped from all areas of disturbance, stockpiled and stabilized in a manner to minimize erosion and sedimentation and replaced elsewhere on the site

at the time of final grading. Stockpiling shall not be permitted on slopes of greater than 10%.

Topsoil stockpiles will not be located on slopes that are greater than 10%.

(18) No organic material or rock with a size that will not allow appropriate compaction or cover by topsoil shall be used as fill material. Fill material shall be no less granular than the soil upon which it is placed and shall drain readily.

The utilization of fill material would be conducted in accordance with the recommendations of a geotechnical engineer.

(19) Compaction of fill materials in fill areas shall be such to ensure support of proposed structures and stabilization for intended uses.

Fill materials used to support structures will be prepared and stabilized in accordance with the recommendations of a qualified geotechnical engineer.

I Burden of proof.

(1) The presumption in all cases shall be that no disturbance or alteration of any steep slope shall be approved by the approval authority. The applicant shall in all cases have the burden of proof of demonstrating, by clear and convincing evidence, that the proposed activity is fully consistent with each of the findings set forth in § 259-2 and that each of the standards for approval set forth in Subsections A through G above has been fully and completely met.

(2) With respect to applications involving proposed disturbance or alteration of any steep slope with a grade of 30% or greater, the applicant shall have the additional burden of demonstrating, again by clear and convincing evidence, that the applicant's circumstances are compelling and exceptional, including, at a minimum, demonstrating by clear and convincing evidence that no reasonable use of the site, lot, or parcel is possible without disturbance to a steep slope area having a grade of 30% or greater.

As discussed above, the proposed limit of disturbance has been designed as efficiently as possible to limit proposed construction activities only that which is necessary for the Project. The property and NYSDOT right-of-way has been previously disturbed as it was previously owned as farmland and is currently largely meadow and open space, except for the main house and two accessory buildings on-site. The total area of steep slopes is limited to a 2,800-square foot area adjacent to Maple Row. These slopes were likely man-made as part of the grading for Maple Row at the existing watercourse crossing where there are low points on either side of the roadway. A SWPPP has been prepared for the Cortlandt Pitch

project and describes the proposed erosion and sediment control measures that would be utilized during construction and after completion of the project.