

Appendix C.8

Site Due Diligence

Site Due Diligence

**Contrail Associates of Wappinger
LLC Property**
All Angels Hill Road
Town of Wappinger
Dutchess County, New York

July 29, 2004

THE
Chazen
COMPANIES

Prepared by:

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July 29, 2004

Mr. Dick Powell
Superintendent
Wappingers Central School District
Hollowbrook Park Bldg. 3
29 Marshall Road
Wappingers Falls, NY 12590

*Re: Site Due Diligence
Conrail Property
Town of Wappinger, Dutchess County, New York*

Job # 40366.01

Dear Mr. Powell:

In accordance with your request and authorization of Wappingers Central School District, The Chazen Companies (TCC) has completed Site Due Diligence associated with the above referenced property. The purpose of this Site Due Diligence was to evaluate the site based on access, floodplain review, aerial mapping, limited geotechnical investigation, water and sanitary supply analysis. Based on preliminary discussion with the District and their architects, we understand that the current conceptual development will include construction of approximately 250,000 square foot (SF) buildings for school/admin staff, 50,000 SF bus garage, 1,500 SF outdoor bathroom/concession, and athletic fields for baseball/softball (2) and soccer (2).

1.0 Project Site Description

The Conrail Associates of Wappinger LLC property is an irregularly shaped 149.32 acre vacant parcel of land located one mile south of the intersection of All Angels Hill Road and Kent Road in the Town of Wappinger, Dutchess County, New York (see Figures 1 and 2). The subject property is adjoined by All Angels Hill Road to the northeast. Angel Brook Drive is the only road into the property (see attached Survey Map prepared by Povall Engineering, PLLC). Cul-de-sacs at the ends of Sylvan Drive and Rich Drive also abut the property to the south and southeast.

2.0 Access

A 60' wide right-of way extends on to the eastern portion of the property over to the northern adjoining Flavormatic building. TCC contacted Mr. Roy Garricks, engineer with the Dutchess County Department of Public Works (DCDPW) regarding the County jurisdiction for access from County Route 94 (All Angels Hill Road). Mr. Garricks said that a traffic study will be required for the intersection of the private Road (Angel Brook Drive) and County Route 94, based on future traffic expectations for this site. Mr. Garricks also indicated that the District may need road construction approval from the New York State Department of Transportation (NYSDOT).

TCC also contacted Mr. Graham Foster, Highway Superintendent of the Town of Wappinger for information regarding access through Town roads (Sylvia Drive and Baldwin Drive) that can be used for the emergency purposes. TCC will pass on to the Wappingers Central School District (WCSD) at later date any pertinent comments from the Town. It should be noted that there would be a small area of wetland disturbance to ACOE Wetland F/6 as shown on the Povall Engineering drawing SK-1, dated February 25, 2004, if Sylvia Drive is used as an emergency access road.

3.0 Water

The preliminary estimate for the facility's water demand based on information provided by DCLWA Associates Architects is approximately 30,000 gallons per day based on 1,500 students, 150 teachers, administrators and other staff, 260 bus drivers and bus garage staff. In response to TCC's request, Mr. Joseph Paggi, P.E., Town Engineer, stated that the property is located within the Central Wappinger Water Improvement Area and Wappinger Water Improvement 99-2(9). As per Mr. Paggi, the available water supply for the proposed property, is considered to be 43,000 GPD based on average daily flow. Therefore, there is adequate supply to meet the estimated flow of 30,000 GPD.

The locations of existing water mains to which the facility may reasonably connect are the dead ends of Rich Drive or Sylvia Drive. The type of pipe and size of pipe vary for each street and would need to be verified with the system operators and /or actual test pit information; however, it can be safely assumed that it would be either 6" or 8" in diameter and cast iron or "transite" construction. According to Mr. Paggi, the general conditions of the mains are good, and they are reportedly used on a daily basis to provide domestic water and fire flows to the nearby residents.

As per Mr. Paggi, fire flows would appear to be available for the property. However, there are elevations of the property that are only 74 foot lower than the water supply pump station. This area may not have enough discharge head to receive fire flow of 150 gallon per minute (GPM). The District may be required to construct a supplemental pump station, at their cost, to achieve the necessary fire flow rate.

4.0 Wastewater

For planning purposes, wastewater generation is estimated be 30,000 gallons per day, which is same as the estimated water demand based on 1,500 students, 150 teachers, administrators and other staff, 260 bus drivers and bus garage staff. In accordance with TCC's request the following information regarding wastewater system was provided by Mr. Joseph Paggi, P.E., Town Engineer, Town of Wappinger:

- The property is located in Phase 1 and 2 of the Wappinger Sewer Transmission/Treatment Improvement area and is part of the Rockingham Farms Sewer District Collection System. The available treatment capacity for Phase 1 and 2 is estimated at 1.0 MGD. The specific allocation for this property was done based on current zoning, which is R-40 and COP.
- The location of the existing sanitary sewer collection facilities and manholes that this facility might reasonable connect to are located on dead end of Rich and Sylvia Drive. It should be noted that the majority of this property drains from north to south and that is the location of the points of connection. The general condition of the sanitary sewers are good.
- The collection system in the area drains directly to the south and consists mainly of 8" transite sewer mains, and eventually flows into a pump station located just east of Regency Drive. The pump station would appear to have no problem with handling the average daily flow of 30,000 GPD for this property. The individual sewer lines would need to be checked to ensure that there are no flat sections of pipe that may exhibit high flows during peak times.
- The collection system in this area would need to be studied to determine if it had the capacity for an additional 30,000 GPD. The specific sizes and slopes of the pipes are not known. These will need to be determined to know if available capacity exists in the collection system. Infiltration/inflow is an issue especially, during high groundwater and wet weather condition.

Based on Town's information, TCC recommends that existing sanitary collection system be analyzed to determine the capacity for an additional 30,000 GPD or any specific amount of wastewater generation for the proposed development.

5.0 Geotechnical Investigation (Limited)

TCC performed limited geotechnical investigation to determine rock depth within the property. A total of 20 borings were performed using a direct push Geoprobe® rig to depths varying between 13 and 32 foot below the existing grade. During the field inspection, rock outcrops were also observed in several locations within the site. It is noted that boring locations were selected based on access from trails and paths within the highly vegetated site. "See Geotech Soil Boring Plan" for boring location details.

Based on limited subsurface information related to rock depth, it appears that the construction of buildings, associated parking and other structures would be feasible. However, a more through geotechnical investigation is required to assess subsurface geologic conditions and the amount of soil and/or rock that need to be undercut from the site. This also depends on location of buildings, type of foundation and finish floor elevation, etc.

6.0 Floodplain Review

The property is not situated within the 100 Year Flood Zone boundaries. There are 500 Year Flood Zone areas located on the East and West sides of the property. However, there are no regulatory requirements or significant concerns that may restrict construction on a property located within the boundaries of 500 Year Flood Zone. Flood Zone Map was located based on USGS Topographic maps of Hopewell Junction and Wappinger Falls, NY Quadrangles (see Figure 3).

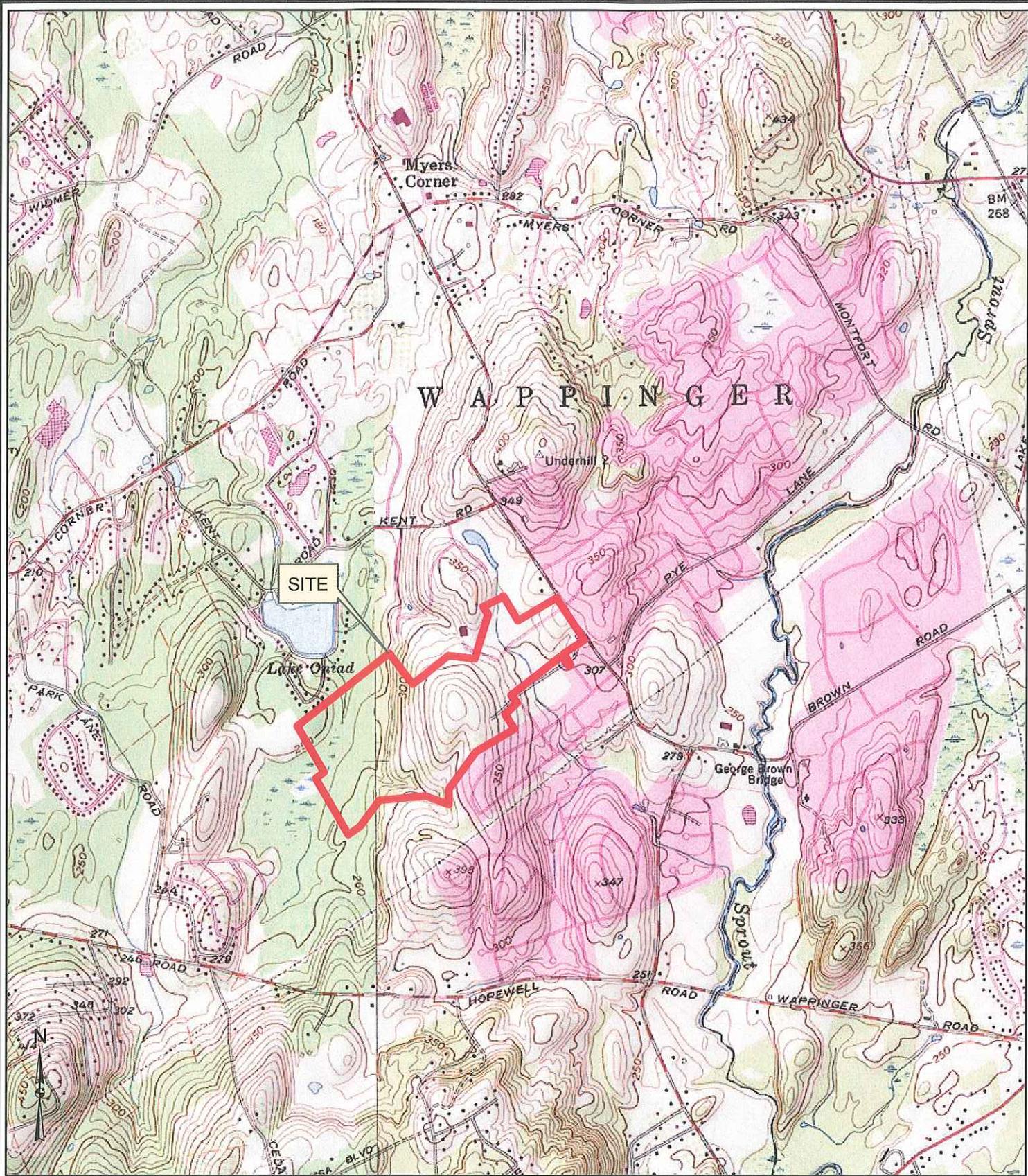
If you have any further questions related to the site due diligence, please feel free to contact me or Chuck Alongi at (845) 454-3980. Thank you.

Sincerely,


Abdul M. Mannan, P.E.
Engineer

Enc: As noted.

cc: Charles Alongi
Susan Blickstein, AICP, PP
Greg Mapstone, P.E.
File



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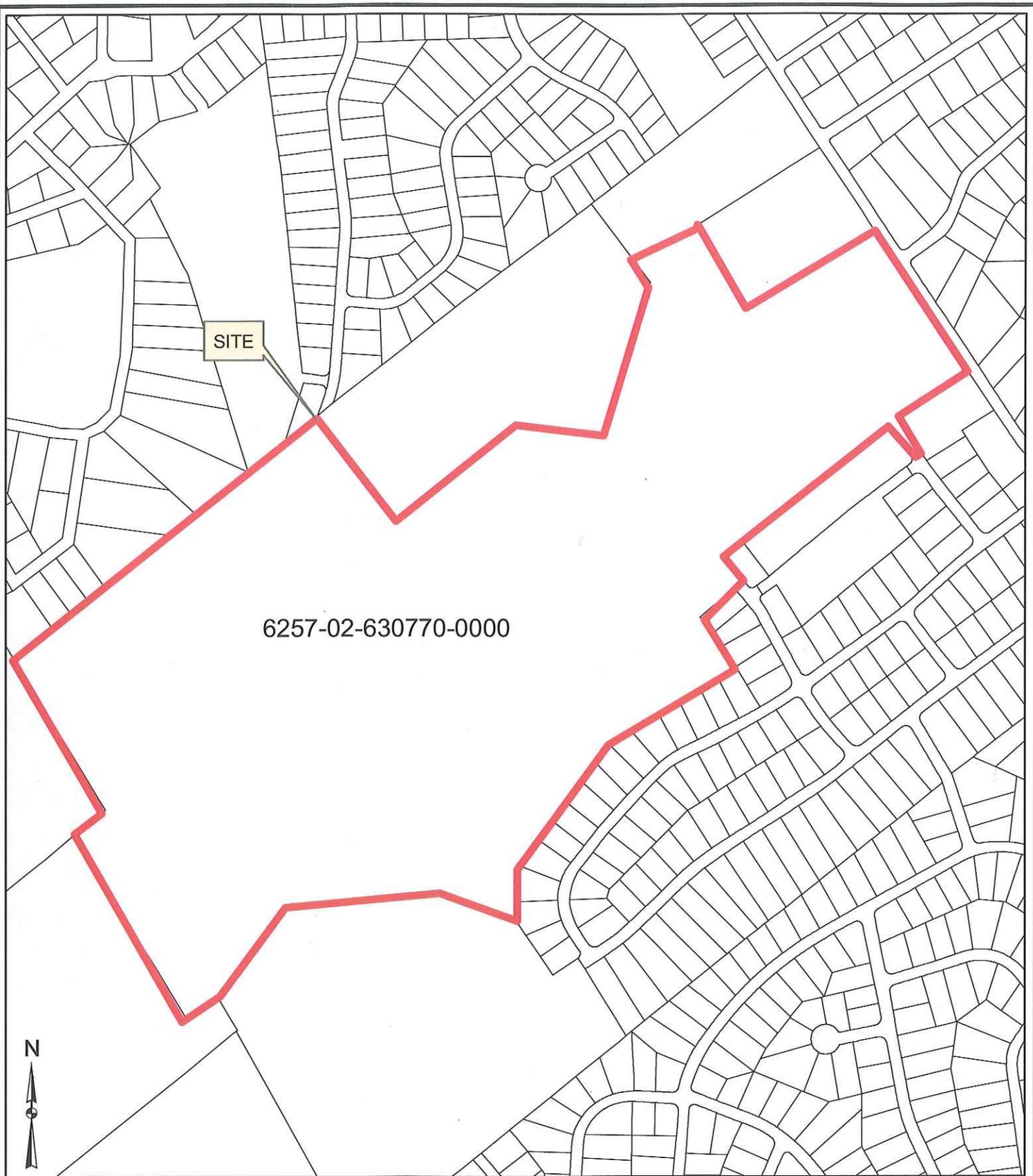
FIGURE 1-SITE LOCATION MAP
Contrail, LLC Property
All Angels Hill Road
Town of Wappinger, Dutchess County, New York

USGS Topographic Maps of the Hopewell Junction and Wappinger Falls, NY Quadrangles. Photos Dated 1981. 7.5 Minute Series. Dutchess County Real Property Services - Tax Parcel Data

Date:
July 2004

Scale:
1 inch:2,000 feet

Project #:
40366.01



SITE

6257-02-630770-0000



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FIGURE 2-TAX MAP
Contrail, LLC Property
All Angels Hill Road
Town of Wappinger, Dutchess County, New York

Dutchess County Real Property Services - Tax Parcel Data

Date:
 July 2004

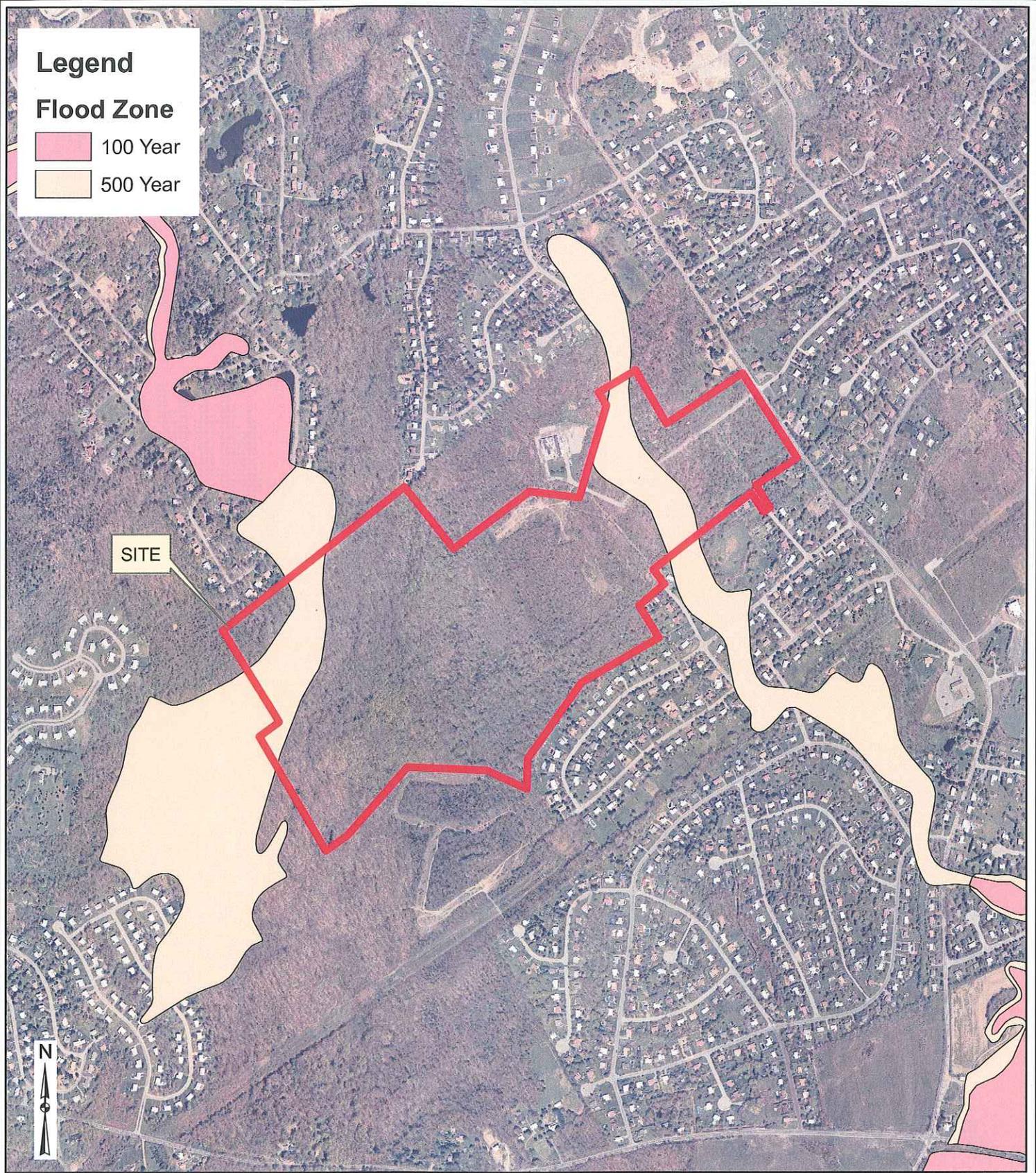
Scale:
 1 inch:600 feet

Project #:
 40366.01

Legend

Flood Zone

- 100 Year
- 500 Year



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FIGURE 3- FLOOD ZONE MAP

Contrail, LLC Property
All Angels Hill Road
Town Wappinger, Dutchess County, New York

Dutchess County Real Property Services - Orthophoto Data
Dutchess County Real Property Services - Tax Parcel Data

Date:
July 2004

Scale:
1 inch:1,000 feet

Project #:
40366.01

Legend

● Boring Location



Engineers/Surveyors
Planners
Environmental Scientists
GIS Consultants

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FIGURE 1 - GEOTECH SOIL BORING PLAN

Wappingers Central School District
Conrail LLC, Property

Dutchess County Real Property Service 2000 Orthophoto

Created by:

S.T.F

Date:

July 2004

Scale:

1 inch: 200 feet

Project #:

40366.01

