A. INTRODUCTION AND SUMMARY OF FINDINGS

This chapter assesses the potential impacts of the Proposed Project with issues related to water supply and sanitary wastewater generation. The Proposed Project is anticipated to generate approximately 47,690 gallons per day (gpd) of water/sanitary demand, an increase of 41,815 gpd from the condition when the existing office buildings were at peak usage. Correspondence with the Assistant Superintendent of the Yorktown Consolidated Water District confirmed that there is adequate pressure for water supply to the Proposed Project. New water and sewer lines would be constructed within the Project Site and would connect to existing public mains in the cul-desac at the end of East Main Street. The sanitary sewer pump station on East Main Street would be replaced to accommodate the increased flow of the Proposed Project. The design of the water and sewer system would be subject to the review and approval of the Town of Yorktown Engineering and Sewer Department, Yorktown Consolidated Water District, and the Westchester County Department of Health.

B. EXISTING CONDITIONS

B.1. WATER SUPPLY

The Project Site is served by the Yorktown Consolidated Water District, which is part of the Northern Westchester Joint Water Works (NWJWW). The NWJWW obtains its water supply from the Amawalk Reservoir in the Town of Somers, New York and the Catskill Aqueduct in the Town of Cortlandt Manor, New York. The 2022 daily average water treated and pumped into NWJWW distribution system was approximately 2.7 million gpd (MGD).

The Project Site is served by an 8-inch public water main within Old Route 6. Once onsite, the water main is reduced in size to a 6-inch main, which provides service to the two existing buildings. Water consumption at peak usage was approximately 5,875 gpd.

B.2. SANITARY SEWAGE

The Project Site is located within the Westchester County Peekskill Sanitary Sewer District. The trunk sewer line for the district runs from the northernmost portion of New York State Route 118 in Somers, New York, eastward through Jefferson Valley and the northwestern portion of the Town of Cortlandt, and finally runs southward towards Peekskill. Wastewater from the Project Site is conveyed to the Peekskill Wastewater Treatment Disposal Plant located in Peekskill, New York, which is operated by Westchester County.

An 8-inch PVC pipe sanitary sewer main runs from the two existing office buildings to the sewer in East Main Street. The existing sewer connects to a pump station, owned by the Town, which is located on Old Route 6, before its intersection with East Main Street.

C. THE FUTURE WITHOUT THE PROPOSED PROJECT

In the Future without the Proposed Project, there are no known changes to the water supply or sewage infrastructure serving the Project Site.

D. THE FUTURE WITH THE PROPOSED PROJECT

D.1. WATER SUPPLY

The Proposed Project is estimated to have a water demand of approximately 47,690 gpd (see **Table 9-1**). During peak usage of the existing office buildings' water demand was approximately 5,875 gpd. Therefore, the Proposed Project would result in a net increase in water demand of approximately 41,815 gpd.

Table 9-1 Estimated Water/Sanitary Generation

Unit Type	Number of Units	Water Usage in Gallons Per Day per Unit	Total Gallons Per Day
1 Bedroom	96	110	10,560
2 Bedroom	154	220	33,880
Clubhouse	1	3,250*	3,250
Total	-		47,690

Note:

Source: New York State Design Standards For Intermediate Sized Wastewater Treatment Systems, NYSDEC, March 4, 2014

Based on a meeting with the Assistant Superintendent of the Yorktown Consolidated Water District, the water system has adequate pressure to serve the Proposed Project. The Proposed Project would utilize two (2) water service connections, one along the southwestern frontage of the property within the driveway, and one at the public water main southeast of the Project Site near the existing cul de sac. This would allow for the water service to be looped within the Project Site, providing continuous water supply in the event of a disruption to one connection. The design and construction of any new water supply systems will meet all applicable American Water Works Association, Westchester County Health Department, and Town requirements. Pursuant to County regulations, the water mains would be owned by the Town, which would be granted an easement for access and maintenance. Fire hydrants would be placed throughout the Project Site, which would meet the requirements of the NYS Building & Fire Code as well as the Lake Mohegan Fire Department.

D.2. SANITARY SEWAGE

The anticipated sanitary wastewater generation for the Proposed Project would be approximately 47,960 gpd, an increase of approximately 41,815 gpd from the condition where the existing office buildings were fully occupied. The Proposed Project would

^{*} The calculation for the clubhouse is based on the estimation of 50 patrons per day, multiplied by the combined standard for the NYS DEC Design Standards for a health club, restaurant, and pool.

utilize the Project Site's existing 8-inch PVC sanitary sewer pipe. The design and construction of any extensions to the sanitary system will meet all applicable Ten State Standards, Westchester County Health Department, and Town requirements. Pursuant to County regulations, the sewer mains would be owned by the Town, which would be granted an easement for access and maintenance. Based on correspondence with the Town Engineer Daniel P. Ciarcia, P.E., it was determined that the pump station that serves the Project Site is not adequate to serve the increased flow generated by the Proposed Project. Therefore, the Applicant would install a new sanitary sewer pump station, adjacent to the existing station, that would be adequate to accommodate the increased flows of the Proposed Project.

E. MITIGATION MEASURES

E.1. WATER SUPPLY

The Proposed Project would incorporate water-saving technologies, including the use of low-flow plumbing fixtures. These measures would reduce the demand on the public water supply. Additionally, all water mains serving the Proposed Project would be owned by the Town, providing access for inspection, maintenance, and repair whenever necessary. The design and construction of any new water supply systems will meet all applicable American Water Works Association, Westchester County Health Department, and Town requirements. Therefore, the Proposed Project would not result in a significant adverse impact on the public water supply and additional mitigation measures are not proposed.

E.2. SANITARY SEWAGE

All mains serving the Proposed Project would be owned and maintained by the Town, allowing for access easements for the purpose of inspection, maintenance, and repair whenever necessary. The design and construction of any extensions to the sanitary system will meet all applicable Ten State Standards, Westchester County Health Department, and Town requirements.

Additionally, the existing sanitary sewer pump station that serves the Project Site would be replaced by the Applicant This would include a new pump pit, duplex pumps, electrical controls, and a new generator. The new pump station would be installed inground adjacent to the existing pump station. The existing pumps, controls, and generator would be abandoned and removed as per the Town's specifications.

With the implementation of this measure, the Proposed Project is not anticipated to have a significant adverse impact on the sanitary sewage system, and additional mitigation measures are not required.