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October 5, 2016

PROPOSED BEDFORD HILLS-KATONAH BUSINESS SEWER DISTRICT

DRAFT MAP, PLAN AND REPORT

Attached is the September 2016 draft of the Map, Plan and Report, prepared by Arcadis, the Town's consulting engineer. This document describes the sewer project, the proposed sewer district, the estimated cost for constructing the system, the estimated cost to customers of the sewer district and other aspects of the plan.

I wish to emphasize that this document is subject to material changes. As an important example, estimated project costs may increase and amounts received for the project from outside funding sources may decline, which may result in the need to issue sewer bonds leading to an increase in the estimated annual sewer rents.

I look forward to hearing from you with any questions or comments. You may reach me at supervisor@bedfordny.gov or by calling me at 666-6530.

Sincerely,

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Town of Bedford

BEDFORD HILLS - KATONAH BUSINESS SEWER DISTRICT MAP, PLAN AND REPORT

DRAFT

September 2016

BEDFORD HILLS - KATONAH BUSINESS SEWER DISTRICT MAP, PLAN AND REPORT

Bedford, New York

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Date:

September 2016

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1 INTRODUCTION

The Town of Bedford is proposing the creation of a sewer district comprised principally of the business districts (the CB Central Business zoning district) in the hamlets of Bedford Hills and Katonah. Presently wastewaters in these districts are treated by septic systems and cesspools, many of which are beyond their useful life. Under an agreement in the late 1990s with Northern Westchester municipalities, the New York City Department of Environmental Protection (DEP) established and funded a Water Quality Improvement Program (WQIP) to help finance the cost of wastewater treatment facilities, such as a sewer system. DEP also established a program (Upgrade Program) to upgrade nearby wastewater treatment facilities at Bedford Park Apartments in Bedford Hills (BPA), Katonah Elementary School (KES) and property of St. Mary of the Assumption Church in Katonah (St. Mary's) (collectively termed the Upgrade Sites).

The business districts lie within the Croton Watershed system of New York City's water supply and are close to the Cross River Reservoir. This focus area has been identified as a Priority Project by the Northern Westchester Watershed Committee (NWWC), who have committed to expend East of Hudson WQIP funds for the creation of this sewer district.

In addition to concern regarding treatment of wastewater from these areas, property owners within the proposed district have expressed concern about the vitality of their businesses, given the restrictions and in many instances inability to change or expand uses, such as from a "dry use" to a restaurant. The DEP has stated that change or expansion of use may be possible should a sewer system to be created to serve these areas. It should be noted, however, that the Town's Zoning Code and sewer system capacity, among other constraints, limit growth.

The Westchester County Department of Health issues permits for the construction of new septic systems and the repair or replacement of existing systems. Complaints of failing septic systems in the Bedford Hills - Katonah area that required some form of corrective action have been numerous. A number of studies and reports on wastewater disposal in Bedford Hills and Katonah have been prepared over the last several decades. Appendix A includes a list of these prior reports. All of these reports have acknowledged that a serious wastewater disposal problem exists and sewering these areas has been the recommended solution.

The New York State Department of Corrections and Community Supervision (DOCCS) owns and operates a wastewater treatment facility (WWTP) to serve its two correctional facilities in Bedford Hills. DOCCS has indicated an interest in having the Town take over the operation of WWTP and become a customer of the proposed sewer district.

Chapter 62 of the Consolidated Laws of New York State, referred to as "Town Law", provides a town board with the legal authority to establish a town sewer district for the purpose of planning, designing, constructing, operating and maintaining a local sewerage system. Articles 12, 12A and 12 C set forth the procedures for forming a Town Sewer District and require that a map, plan and report be prepared and filed with the Town Clerk for public inspection prior to establishing such a district. The purpose of this document is to provide the information needed by the Bedford Town Board and the potential sewer district customers to form a Town Sewer District encompassing generally the business areas of the

hamlets of the Bedford Hills and Katonah so that the long-standing subsurface disposal system problems in these areas may be definitively addressed.

1.1 Environmental Setting

The hamlets of Bedford Hills and Katonah are situated in a narrow valley formed by tributaries of the Croton River. The valley floor contains relatively deep deposits of sand and gravel while bedrock outcrops are visible along the sides of the valley.

The Metro North Railroad and the Saw Mill River Parkway run along the valley floor and pass through these hamlets, while Interstate 684 (I-684) passes to the east of Bedford Hills and intersects the Saw Mill River Parkway immediately east of Katonah. These three major transportation corridors provide easy access to employment opportunities in the New York City area and have contributed to a high density of residential development.

Bedford Hills and Katonah lie within the Croton River Watershed, which provides a portion of the water supply for New York City. A branch of the Muscoot Reservoir, one of 12 reservoirs in the Croton water system, extends along the northerly edge of Katonah and receives runoff from this hamlet and the northern portion of Bedford Hills via a small tributary which follows the railroad and the Saw Mill River Parkway. The southern portion of Bedford Hills, near the Village of Mount Kisco boundary, drains to the south through another small tributary of the reservoir. Thus, poorly treated or untreated wastewater from failing septic systems in these hamlets readily reaches the Muscoot Reservoir.

A high yielding, sand and gravel aquifer is located along the valley floor from the easterly end of the Muscoot Reservoir to the Mount Kisco village boundary. In 1986, following the identification of chemical contaminants in a town water supply well, an Aquifer Protection Zone was added to the Town's zoning code. This addition to the code recognized the value of the aquifer that provides drinking water throughout the town and prohibits certain uses such as dry cleaning, gasoline stations, printing and photo processing operations within its boundaries.

Previously, the Bedford Consolidated Water District #1 (CWD#1) which serves the hamlets of Katonah and Bedford Hills utilized wells located throughout the District for water supply. The wells are located along Haines Road, Harris Road and Jay Street and have a potential output of 1,100,000 gallons per day. Other wells located along Bedford Road and Haines Road have been taken out of service due to high levels of nitrate and manganese. Nitrate is an inorganic compound that results from both natural and manmade processes commonly associated with septic systems. Manganese is a common metallic element found in many geologic formations which can affect the flavor and color of water as well as clog water systems. Manganese in drinking water is not considered a health hazard, but rather an aesthetic problem.

The Jay Street well was experiencing elevated levels of nitrate, manganese and chloride and permanently shutting the well down would have created a significant supply shortfall in the district. The Town had investigated installing new wells in other locations throughout the district to supplement the existing wells. However, based on these investigations, potential new wells had insignificant yield or had potentially poor water quality similar to the pollutants in the Jay Street well.

Other than wells, the source of water that had the highest potential of being safe and reliable was the New York City reservoir water supply system. The Town worked with the New York City Department of

Environmental Protection (NYCDEP) to switch the Town's source water to the Delaware Aqueduct at Shaft No. 13 located on Route 35 and the adjacent Cross River Reservoir. The Town constructed a treatment facility to meet the requirements of the New York State Department of Health for surface water supplies. In addition to a treatment facility, the Town installed a transmission main from the new facility to the existing distribution system located along Jay Street in downtown Katonah.

1.2 Land Use and Zoning

Land use within the Planning Area is closely controlled by zoning and consists of a mix of single- and two-family homes, apartment complexes, public uses and business and light industrial uses. Central Business (CB) and Light Industrial (LI) zones are generally located along Bedford Road and Katonah Avenue which follow the valley floor through Katonah and Bedford Hills and Adams Street in Bedford Hills. Public land uses include town libraries, fire departments, a highway yard, and lands owned by New York City for watershed protection and operations.

1.3 Existing Underground Utility Lines

Bedford Hills and Katonah are served by public water and some natural gas. Buried telephone and electric lines also exist in some areas. Storm drains exist along the state highways and in some of the more heavily developed, downtown areas. The design of sanitary sewers would have to take these existing buried utility lines into account and comply with New York State Department of Health guidelines for separation distances between sewer lines and water mains.

1.4 Existing Water and Wastewater Systems

The Bedford Consolidated Water District #1 supplies potable water throughout most of Bedford Hills and Katonah and serves all properties within the proposed sewer district except the I-684 rest area. Drinking water is supplied to the Consolidated Water District #1 from one primary source, the Bedford Water Filtration Plant on Route 35, which draws water from New York City's Delaware Aqueduct with a backup supply from the Cross River Reservoir. Water is conveyed to the adjacent Town filter plant where it is treated and distributed to the Town's water distribution system. This water system serves approximately 9,056 people through 2,158 service connections. The total amount of water produced in 2015 was 297 million gallons. The daily average of water treated and pumped into the distribution system was 814,000 gallons per day.

The secondary supply is wells located in the highly permeable sand and gravel deposits along the valley floor. The Town has experienced pollution of some of the wells by chemical contaminants, which move rapidly through the aquifer. One well, located on Jay Street near the Muscoot Reservoir, was taken out of service in the late 1970s after dry cleaning chemicals were found in the water and remains out of service to this day. In addition, a Village of Mount Kisco well, located on Green Street in Bedford Hills, has been removed from service due to gasoline contamination.

As noted, three on-site subsurface wastewater treatment systems with surface water discharges exist at the Upgrade Sites. The WWTP owned by DOCCS is operated by a private sector contract service provider and discharges to a small tributary of the Muscoot Reservoir. A listing of the monthly average

permitted flows (defined as the highest allowable average of daily discharges over a calendar month) from these facilities under their existing SPDES permits is shown in Table 1-1.

Table 1-1. Existing Facility State Pollution Discharge Elimination System Permits

Owner	Service Area	Permitted Flow (gpd*)
Department of Corrections and Community Supervision	Bedford Hills and Taconic Correctional Facilities; I-684 Rest Area	500,000
Bedford Park at Westchester, LLC	Bedford Park Apartments Buildings D, F and G	19,500
Katonah-Lewisboro School District	Katonah Elementary School	13,000
St. Mary of the Assumption Church	Former Parochial School	10,000

*Gallons per day.

2 PROPOSED SEWER DISTRICT BOUNDARIES

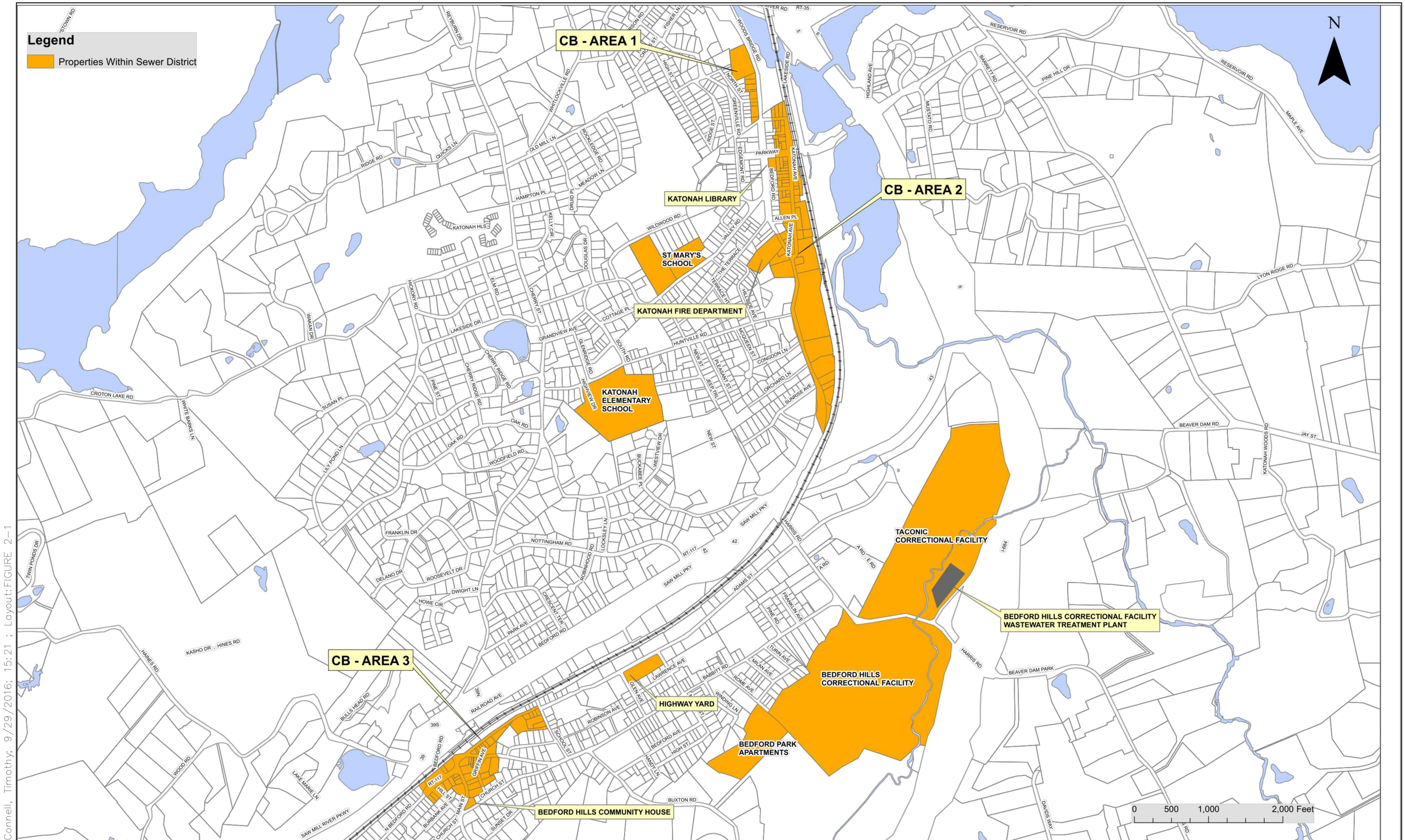
2.1 Proposed Sewer District Boundaries

The proposed sewer district would include three central business districts in the Town of Bedford, together with a number of municipal buildings, the Upgrade Sites and the Bedford Hills and Taconic Correctional Facilities.

Central Business Area 1 (CB – Area 1) would be located on Woods Bridge Road just north of Edgemont Road in the hamlet of Katonah. CB – Area 1 would be comprised of small businesses fronting the west side of Woods Bridge Road adjacent to a parking area for the Katonah Metro-North railroad station. Central Business Area 2 (CB – Area 2) would be located just south of CB – Area 1, beginning at Edgemont Road east of the intersection of Woods Bridge Road, continuing along Katonah Avenue from Edgemont Road to the intersection of Bedford Road, and ending on Bedford Road just south of Sunrise Avenue. CB – Area 2 includes many small businesses that line both sides of Katonah Avenue near the Katonah Metro-North train station. In addition, businesses and community facilities on Bedford Road south of Katonah Avenue would be served by the collection system within CB – Area 2. The Katonah Library and the Katonah Fire District would be served by the collection system in CB – Area 2.

Central Business Area 3 (CB – Area 3) would be located approximately one mile southwest of CB – Area 2 in the hamlet of Bedford Hills. The collection system within CB – Area 3 would serve businesses within the vicinity of Adams Street adjacent to the Bedford Hills Metro-North railroad station. These business are located on Hill Street, Main Street, Babbitt Road, Griffin Avenue, and School Street. CB – Area 3 would service the Bedford Hills Community House on Main Street and the Highway yard for the Town of Bedford on Adams Street.

Figure 2-1 illustrates the location of all properties in the proposed sewer district.



User: TOCONNELL Spec: AUS-NCSMOD File: G:\WHI_ENG\PROJECTS\04711007.0000\FIGURE 3-1.DWG Scale: 1:1 SavedDate: 9/20/2016 Time: 17:37
Plot Date: O'Connell, Timothy; 9/29/2016; 15:21 ; Layout: FIGURE 2-1

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TOWN OF BEDFORD

BEDFORD HILLS – KATONAH BUSINESS SEWER DISTRICT
MAP PLAN AND REPORT

PROPOSED SEWER DISTRICT

9/19/2016

FIGURE 2-1

3 PROPOSED SEWERAGE FACILITIES

3.1 General

The proposed sewage collection system consists of gravity collection sewers with pumping stations and force mains, together with a limited number of grinder pumps to serve individual properties, which are located at an elevation too low to be served by the nearest gravity sewer. To treat the wastewaters collected in the new sewer system, the Town of Bedford would acquire the DOCCS's-owned existing Bedford Hills Correctional Facility WWTP, which currently has excess capacity.

3.2 Estimated Wastewater Flows

The Town of Bedford has provided Arcadis with the most recent available average daily flow data for individual parcels that comprise the proposed sewer district. This data shows that the parcels that make up the proposed district used, on average, approximately 326,389 gallons of water per day (gpd) in total.

3.2.1 First Year of Operation

The total estimated daily average wastewater flow that would result from the district customers usually considers that not all of the water distributed would be collected in the sanitary sewer system. Especially in residential areas, a portion of the water used goes to watering lawns, washing cars, and similar purposes. However, customers in this sewer district are primarily local businesses, schools and apartments, where water usage is not anticipated to bypass the sanitary sewer system. Therefore, the estimated daily average wastewater flow in this report considers 100% of daily water usage contributing to the flow in the sanitary sewer system.

In addition to the average water use by potential consumers utilizing the collection system, water may enter the system due to infiltration. According to the *Recommended Standards for Wastewater Facilities* as part of the Ten States Standards, for which New York State is a member, a non-defective sewer system shall not have infiltration exceeding 100 gallons per inch of pipe diameter per mile per day. Therefore, the estimated flows take into account an allowance of 100 gpd per inch of pipe diameter per mile of pipe for the approximate 3.2 miles of gravity sewer. This means that an additional 2560 gpd of flow is expected for the gravity sewer system that is to be constructed.

The two correctional facilities already discharge to the WWTP and so their combined wastewater flow (together with the I-684 flow) is known. Based on Facility Monthly Operating Reports provided by DOCCS, the average monthly flow from January 2015 through June 2016 was 214,000 gpd. This value is measured at the plant so, while their collection system is very short in length and has not shown any historic infiltration, it would already be captured in this number.

The current water usage and sewer district wastewater flows projected in the first year of operation are presented in Table 3-1.

Table 3-1. Total Daily Average Recorded Water Usage and Estimated Wastewater Flow

Sewer District Customer	Total Daily Average Recorded Water Usage (gpd)	Total Daily Average Estimated Wastewater Flow (gpd) First Year
Bedford Hills and Taconic Correctional Facilities	272,000	214,000
Other Sewer District Properties	54,645	57,205
Totals	326,645	271,205

3.2.2 Future Flow Allocation

The Town Board would adopt a sewer law for the efficient, economic, environmentally safe and legal operation of the District. Among other things, it would (a) provide that all properties within the District with toilet facilities or that generate wastewater are required to connect to the sewer system, (b) establish rules and regulations regarding connection to the sewer system, the content of the effluent flowing into the sewer system and (c) provide a system for allocating uncommitted capacity of the WWTP. Table 3-2 identifies the existing capacity of the WWTP (maximum under SPDES permit), committed capacity utilizations (under agreements with DEP, DOCCS and the owners of the Upgrade Sites) and the remaining uncommitted capacity.

Table 3-2. Allocated, Reserve and Remaining Capacities

Sewer District Customer	Total Daily Average Committed Capacity (gpd)
Bedford Hills and Taconic Correctional Facilities	300,000
Bedford Park Apartments	19,500
Katonah Elementary School	13,000
St. Mary of the Assumption Church	10,000
Other District Customers	43,740
Committed Capacity	386,240
Reserve Capacity	50,000[1]
Total Committed and Reserve Capacity	436,240
Remaining Capacity (500,000 - Total Committed and Reserve Capacity)	63,760

1 – Industry best practice is to remain within 90% of SPDES permitted capacity

The sewer law also includes that an allocation of a portion of the reserve capacity be set aside for existing public uses within the District (such reserve capacity allocation would be based upon recommendations of the Planning Board, Director of Planning and Commissioner of the Department of Public Works), which public uses are the Bedford Hills Community House, the Bedford Hills Library, the Bedford Hills Fire District, the Town's Highway Yard located on Adams Street in Bedford Hills, the Katonah-Bedford Hills Volunteer Ambulance Corps, the Katonah Fire District and the Katonah Village Library. As to the remaining allocation of uncommitted capacity, any property owner requiring additional capacity would make application to the Commissioner of the Department of Public Works or his designee and any proposed change of use, or property modification resulting in generation of additional wastewater, must conform to the Zoning Code. No out of district property owners may petition for connection to the sewer system within the first five years following completion of the sewer system or the adoption of an updated Town Comprehensive Plan, whichever comes first. At such time as 50% of the uncommitted capacity has been utilized, the Town Board would review the allocation of the then remaining capacity.

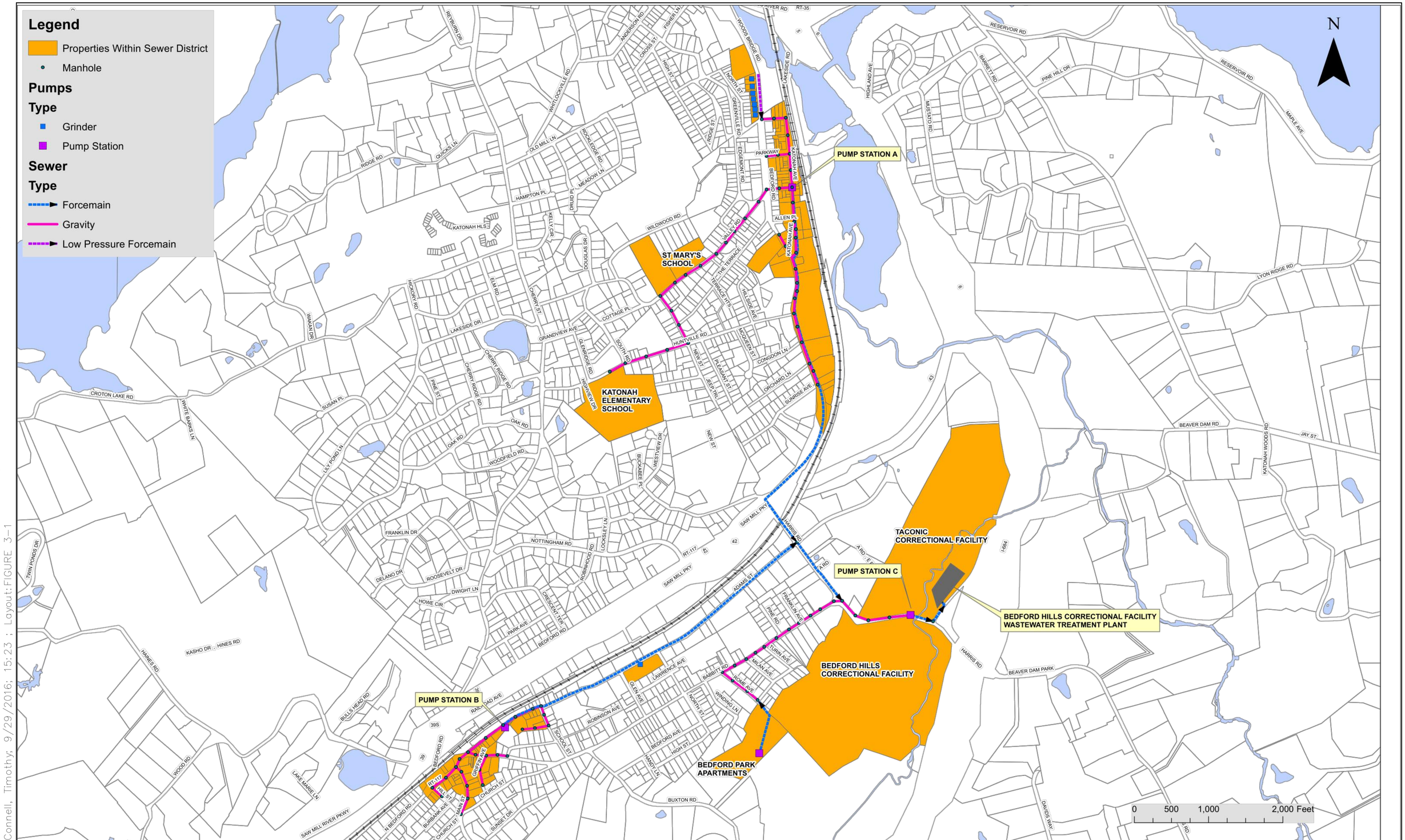
3.3 Proposed Collection System

A preliminary sewer layout for the proposed district is shown in Figure 3-1. The proposed collection system conveys flow to the WWTP through the use of gravity sewers, pumps, and forcemains. In order to meet the anticipated average and peak flow conditions as well as Ten States Standards, 8-inch gravity sewers would be utilized for the conveyance of flow. An 8-inch pipe is the minimum recommended by Ten States Standards and would provide some excess capacity for future district customers. In addition, 4-inch and 6-inch forcemains would carry flow from three proposed pump stations to the treatment facility.

The northernmost CB – Area 1 customers would be connected to the system via a 4-inch forcemain that would transport the flow from Woods Bridge Road to Edgemont Road within CB – Area 2. A series of grinder pumps for each lot along Woods Bridge Road would be capable of pumping the flow to CB – Area 2. CB – Area 2, which collects flow through use of 8-inch gravity sewers along Katonah Avenue and Bedford Road, then utilizes a pump station (Pump Station A) and 6-inch forcemain to convey flow to the highpoint on Harris Road. Flow from Katonah Elementary School and St. Mary's would also be collected with an 8-inch gravity sewer and conveyed to Pump Station A.

CB – Area 3, which includes businesses in Bedford Hills around the train station on Adams Street, uses 8-inch gravity sewers to carry flow to Pump Station B. A 4-inch forcemain would then transport the flow along Adams Street to Harris Road, where it connects with the flow from CB – Area 2, and proceeds to the highpoint on Harris Road. The Town of Bedford Highway Department garage, located on Adams Street, connects to the 4-inch forcemain through use of a grinder pump.

A 6-inch forcemain capable of carrying flows from CB – Areas 1, 2 and 3 travels uphill on Harris Road to the intersection of Babbitt Road. Flow from the Bedford Park Apartments that comprise the existing SPDES permit (Buildings D, F and G) would need to be collected and pumped to the crest of the road on Rome Avenue. An 8-inch gravity sewer then would transport this flow to the intersection of Babbitt Road and Harris Road. This junction at Babbitt Road and Harris Road then feeds an 8-inch gravity sewer, which carries the total flow downhill to a Pump Station C, where it would then be conveyed with a 6-inch forcemain the remaining short distance to the WWTP. The Bedford Hills and Taconic Correctional Facilities already have an existing collection system that discharges to the DOCCS-owned WWTP.



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TOWN OF BEDFORD

BEDFORD HILLS – KATONAH BUSINESS SEWER DISTRICT
MAP PLAN AND REPORT

PROPOSED COLLECTION SYSTEM

9/19/2016

FIGURE 3–1

User: TOCONNELL Spec: AUS-NCSMOD File: G:\WHI_ENG\PROJECTS\04711007.0000\FIGURE 3-1.DWG Scale: 1:1 SavedDate: 9/29/2016 Time: 15:23
Plot Date: O'Connell, Timothy; 9/29/2016; 15:23 ; Layout: FIGURE 3-1

Because the topography within the proposed district is so variable, three pumping stations are needed to pump the wastewater to the treatment plant site. Pump station wet wells would be designed for an average daily flow equal to approximately twice the first year average daily flow from its tributary area to account for inflow from the properties that may occur over time and future connections to the system. Pump sizing is based on a peaking factor of approximately 3 to accommodate the potential diurnal flow patterns experienced in a collection system. Table 3-3 provides preliminary sizing data for each of these pumping stations.

Table 3-3. Preliminary Design Data for Proposed Wastewater Pumping Stations

Pumping Station Designation	Future Average Daily Flow (gpd)	Proposed Pump Capacity (gpd)	Proposed Pump Capacity (gpm)*
A	84,027	271,471	200
B	19,391	64,636	100
C	122,808	361,961	300

*Gallons per minute. Firm pumping capacity shown with one pump in service.

The pump stations would include a wastewater receiving well (wet-well), two submersible pumps and motors (one duty and one standby) and piping with associated valves, an equipment control and alarm system, and a ventilation system with odor control. In order to account for power supply in times of an outage, the stations would be equipped with permanent onsite generators.

3.4 Existing Wastewater Treatment System

As noted, the Town would acquire the DOCCS's existing WWTP at the Bedford Hills Correctional Facility. The WWTP would not require any plant expansion for additional capacity needed to serve the proposed Town sewer district. The treatment plant currently serves both the Bedford Hills and Taconic Correctional Facilities plus a limited amount of flow from the New York State Department of Transportation rest area along the New York State department of Transportation's I-684. Preliminary discussions with DOCCS indicate that the Department would be willing to turn the plant over to the Town, provided that the Town is willing to operate it to treat the flow from the correctional facilities. The treatment plant is currently operated by Veolia Water North America - Northeast, LLC (Veolia), under an operating contract with DOCCS. The operating agreement between DOCCS and Veolia is included in Appendix B.

In 2002, the DOCCS-owned treatment plant was upgraded to meet the Rules and Regulations for the Protection from Contamination, Degradation and Pollution of the New York City Water Supply and its Sources. This upgrade included the installation of membrane microfiltration, ultraviolet disinfection, cascade aeration, a new grit chamber, and influent and trickling filter feed pumps. In 2003, DOCCS upgraded the remote fine screens at each of the correctional facilities with the addition of grinders and microstrainers.

Phosphorous removal at the plant is accomplished by chemical precipitation in the primary and secondary settling tanks through the addition of alum. Soda ash is added for pH control.

Emergency electrical power generators are available to run the plant in the event of a power outage. Two generators supply emergency power to different parts of the plant.

The treatment plant discharges to Broad Brook, a tributary to the Muscoot Reservoir. Broad Brook has recently been reclassified as a New York State Class C(t) stream, resulting in modification to the SPDES permit in February 2016 (see Appendix C). The WWTP SPDES permitted flow limit is 500,000 gallons per day (gpd) and the WWTP currently discharges an average daily flow of approximately 205,000 gpd (based on the 2015 Discharge Monitoring Reports (DMR's) and the Veolia report entitled Bedford Hills NY WWTP - Review of Temperature and Ammonia Data for Future NY SPDES Limit. The peak influent hydraulic loading to the plant is unknown, as the Parshall flume flow metering devices no longer operate. The peak influent hydraulic loading to the plant is unknown, as the Parshall flume flow metering devices on the raw wastewater influent lines are no longer operable. Nor have we found any information to indicate what the expected peak influent flow to the facility was and the rationale for the sizing of the equalization basins. However, the hydraulic profile from the 2002 Regulatory Upgrade drawings states that a peak flow of 1.0 mgd could occur downstream of the equalization basin. This concurs with the dowstream influent pumps having a firm capacity of 1 mgd. The hydraulic profile analysis was likely performed with one treatment unit out of service, as is customary, and demonstrated that flow could pass through the facility without overtopping any walls.

Going forward, the adequacy of the equalization basin to maintain a peak hydraulic flow through the facility to less than 1.0 mgd is not known since influent flow to the plant is not measured. A hydraulic hourly peaking factor for typical domestic facilities is 3.2, for facilities with an average annual flow of 0.5 mgd. This translate to a 1.62 mgd peak hour flow. If there were no equalization basin, the average annual flow associated with a peak hourly flow of 1.0 mgd would be 0.31 mgd (1.0 mgd/3.2) average annual flow, which is higher than the 0.27 mgd anticipated first year flows from the district. As future district customers are considered, an analysis of diurnal flows should be undertaken and the ability of the WWTP to pass the associated peak flow reviewed, together with the equalization basin capacity.

A site plan is shown in Figure 3-2, while a Process Flow Diagram is presented in Figure 3-3. A description of each unit process at the plant and its design criteria is found in Appendix D.

3.4.1 Recommended Wastewater Treatment Plant Improvements

The WWTP has sufficient capacity to serve the properties within the proposed district, and therefore no flow-related improvements to the plant should be necessary as were previously recommended. An evaluation of the treatment plant was completed by Malcolm Pirnie (now Arcadis) in 2011 and Arcadis recently performed site visits to confirm equipment physical condition and performance. In general, the condition of the facility was judged to be "fair to good" with an overall condition score of 2.3, based on a visual inspection and desktop review of reports and other information (rating scale runs from 1, which is Very Good to 5, which is Very Poor). The equipment appeared to be functionally sound but showed signs of wear and some diminished performance due to age. Renewal or replacement of some major components can be expected in the next 5-10 years, as the expected useful life of some components (concrete structures 50 years, mechanical and electrical equipment 15-25 years) has passed or is soon approaching.

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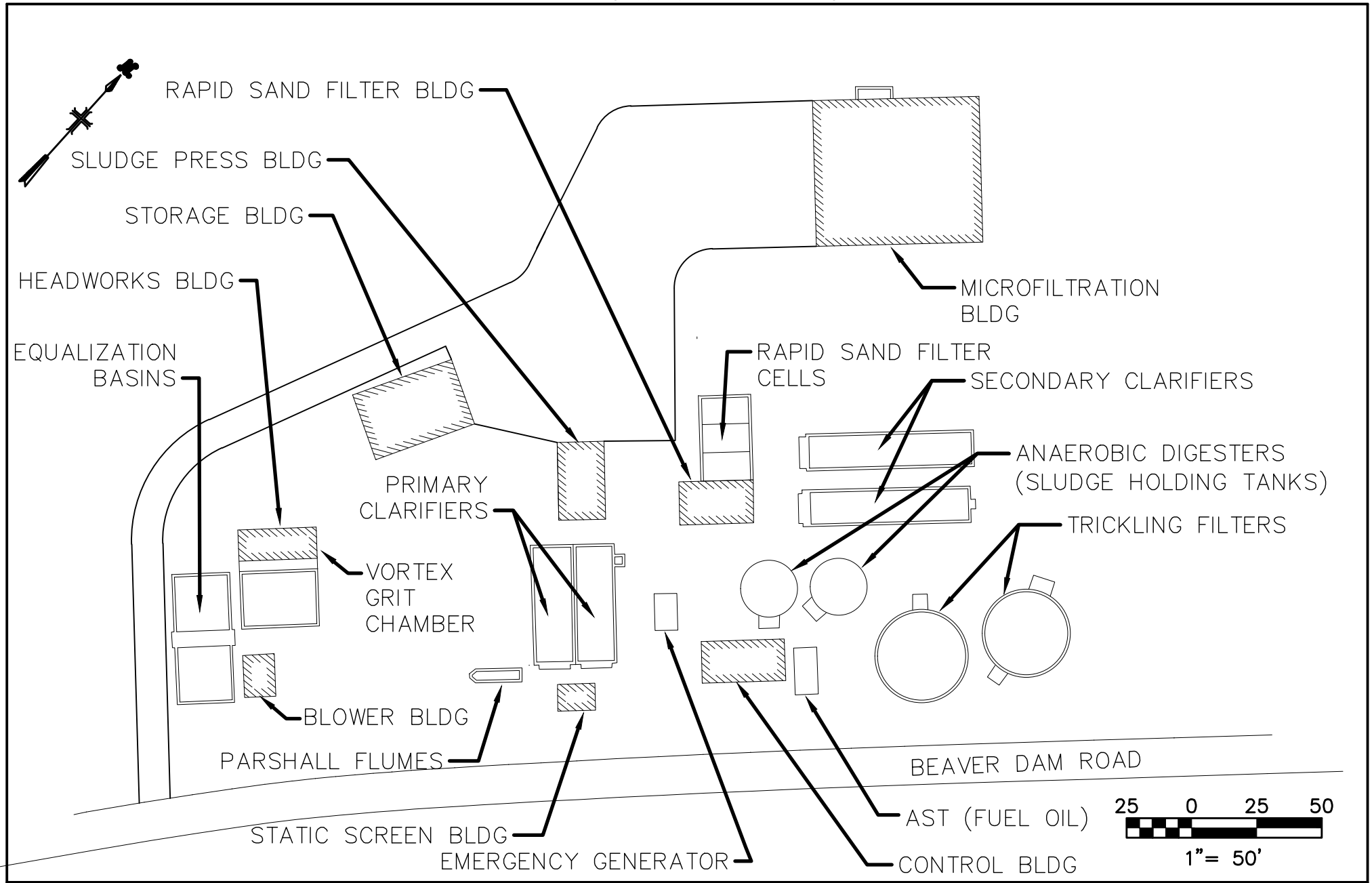
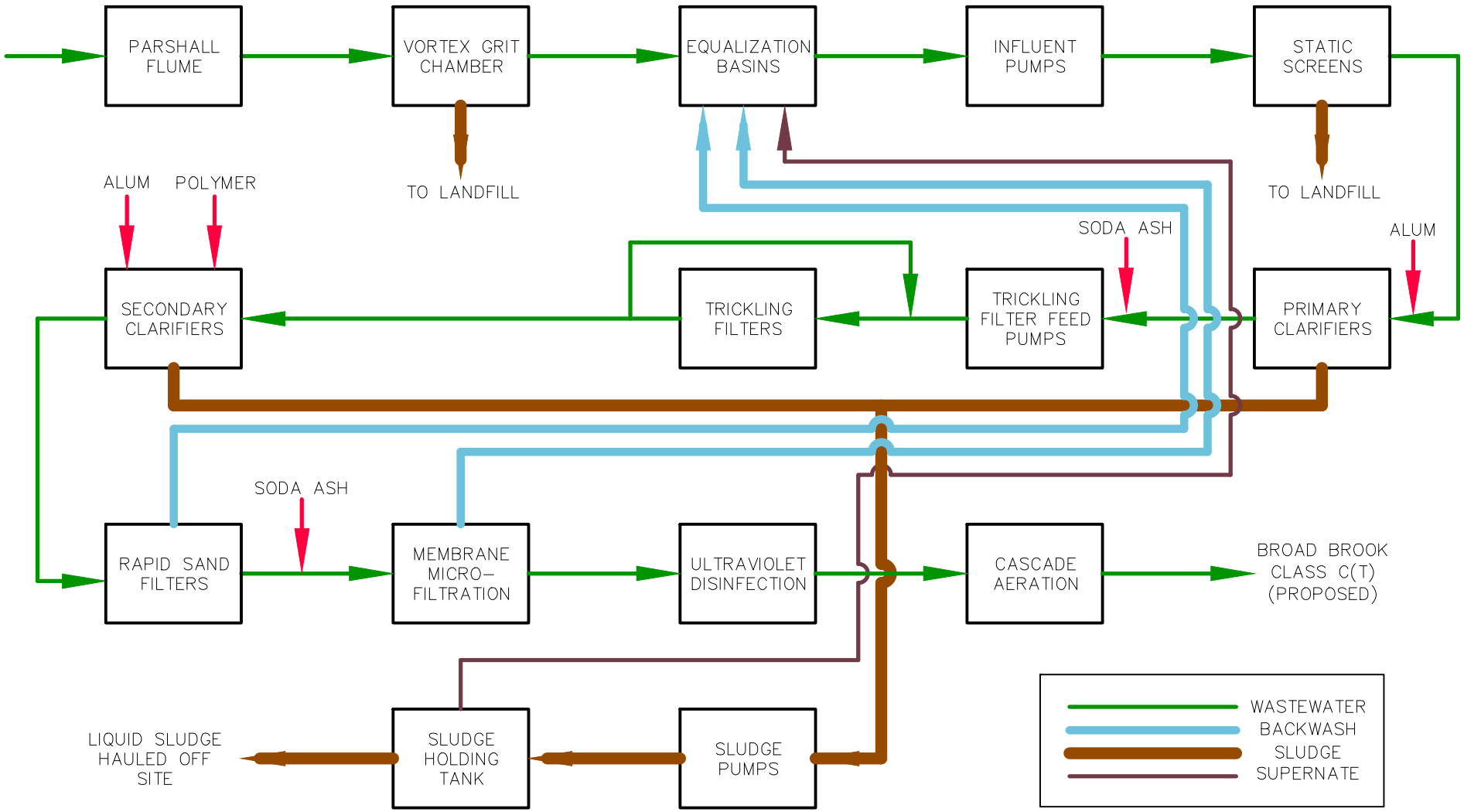
Scale: 1:1 SavedDate: 9/29/2016 Time: 14:44 Plot Date: O'Connell, Timothy; 9/29/2016; 14:44 ; Layout: FIGURE 3-2



ARCADIS Design & Consultancy for natural and built assets	TOWN OF BEDFORD BEDFORD HILLS – KATONAH BUSINESS SEWER DISTRICT MAP PLAN AND REPORT	WASTEWATER TREATMENT PLANT SITE PLAN	9/16/2016 FIGURE 3-2

User: TOCONNELL Spec: AUS-NCSMOD File: G:\WHI_ENG\PROJECTS\04711007.0000\FIGURE 3-3.DWG
Scale: 1:1 SavedDate: 9/29/2016 Time: 14:52 Plot Date: O'Connell, Timothy; 9/30/2016; 14:54 ; Layout: FIGURE 3-3



REF:

ARCADIS Design & Consultancy for natural and built assets

TOWN OF BEDFORD

BEDFORD HILLS – KATONAH BUSINESS SEWER DISTRICT
MAP PLAN AND REPORT

WASTEWATER TREATMENT PLANT PROCESS FLOW DIAGRAM

9/16/2016

FIGURE 3-3

3.4.1.1 Existing Facility Improvements

As was identified in previous reports prepared by Arcadis, the influent Parshall flumes (one per correctional facility) do not operate correctly, due to hydraulic issues, and the ultrasonic level sensors associated with them have been removed. If it is important to measure influent flow from the DOCCS facilities for billing or other purposes, then another method of measurement would need to be installed and should be located as close to the plant as possible to account for any infiltration that may be entering the lines from the prisons.

The rapid sand filters appear to need scraping and painting and the media should be replaced to achieve better performance at higher flows. Additionally, the Control Building, which was constructed in 1953, does not meet the National Fire Protection Association's guidelines for separation of process areas and electrical and heating areas. Appendix E includes a summary of the onsite evaluation performed on this building. In consultation with the Town's Building Inspector, we recommend modifications be made to allow the building to come into compliance.

3.4.1.2 Future Process Improvements

For purposes of this report, and in conjunction with conversations had with DOCCS, any upgrades needed to achieve the new SPDES limits for ammonia and temperature would be completed by DOCCS, hopefully in advance of the Town taking over the WWTP. If the upgrades are delayed, the agreement with DOCCS would include the schedule for addressing these improvements and it is assumed that DOCCS would be solely responsible for the cost.

Ammonia

Veolia produced a technical memorandum; "Bedford Hills NY WWTP - Review of Temperature and Ammonia data for Future NY SPDES limits", December 8, 2015 which is included in Appendix F. According to the report, "the high rate trickling filters were designed with the sole objective of removing BOD from the influent. In the past, actual organic load applied to the filters have been lower than the design values and low enough to allow the development of nitrifying bacteria. As a result, at these low loading conditions, nitrification with high rate of ammonia removal was sustainable (90% removal). Yet, a recent (2014 - 2015) increase in organic and nitrogen load applied to the filters has resulted in significant decrease in nitrification rate and higher effluent ammonia concentration. It seems that the effluent ammonia maximum daily limits of 1.7 mg/l (June 1 to October 31) and 3.4 mg/l (November 1 to May 31) proposed in the draft SPDES permit have been developed on the basis of data collected when the filters where nitrifying as an indirect result of the low loading conditions. These limits are not attainable anymore at current loading and influent conditions. Implementation of the new SPDES permit limits would result in immediate and almost daily exceedances of the ammonia limits. Without a better characterization of the organic and nitrogen loadings actually applied to the filters, it is not possible to predict if the trickling filters could be returned to full nitrification thanks to simple operational changes or if it would require major capital improvement."

The Veolia report, showing effluent ammonia for the past several years, particularly 2014 through 2015, indicates that these new effluent ammonia limits cannot be obtained with the current trickling filters. The data over the past two years (from 2015 and 2016 DMR's) indicates that the plant did not meet the limit for a total of 17 out of 18 months. Per the new SPDES permit, DOCCS is required to submit an

approvable Engineering Report, Plans and Specifications by February 4, 2017, which identify the facilities necessary to achieve compliance with the water quality based effluent limitation of 1.7 mg/l (June 1 to October 31) and 3.4 mg/l (November 1 to May 31) for nitrogen, ammonia (as NH_3). It is required that these effluent discharge requirements be achieved no later than February 4, 2019. A capital expenditure and ongoing O&M costs may be required to assure compliance with these ammonia limits.

Temperature

The Veolia report noted "A more detailed review of the annual temperature variations (see Fig.1B) indicates that plant effluent temperature reaches and rises above the trigger temperature of 70 degree F from May to September. Therefore, it is expected that the additional receiving stream temperature monitoring required in the new SPDES permit will have to be performed during these months each year."

For the past two years, the effluent temperature values were above the 70 degree F action level for four months a year, which requires additional temperature monitoring in the receiving stream. Per the permit requirements, Veolia has been monitoring the stream temperatures upstream and downstream of the plant effluent outfall, when effluent temperatures are above 70 degree F. A Temperature Management Plan was originally due to NYS DEC by August 2, 2016, however, DOCCS was given an extension to November 4, 2016. However, there is no clear indication of what this may mean for the plant to address these higher temperatures. It is possible that the SPDES permit could impose an effluent temperature limit. This would require cooling facilities and a heat sink and would incur ongoing O&M costs to assure compliance with the temperature limit.

3.4.2 Decommissioning of Upgrade Sites

The three Upgrade Sites would have to be decommissioned after a connection to the proposed sewer is made. New York State Department of Environmental Conservation (NYSDEC), New York State Department of Health (NYSDOH), and the Westchester County Department of Health have specific guidelines that pertain to the abandonment or removal process. These three documents can be found in Appendix G and contain the complete requirements. Since the Upgrade Sites are SPDES permitted facilities, NYSDEC 6 CRR 750-2.11 requires decommissioning of these facilities to follow a prescribed procedure. At least 60 days before taking the system is out of service, a permittee would need to submit information concerning the closure activities including:

- The date the system will cease operation;
- The date the influent and effluent pipes would be sealed;
- NYS licensed professional engineer signed and sealed plans for final disposition of the physical facilities, including all treatment units, outfall line, and all mechanical and electrical equipment and piping;
- NYS licensed professional engineer signed and sealed plans for elimination of all equipment and/or conditions that could possibly pose a safety hazard, either during or after shut-down or operations;
- Verification that there are no lines in the collection system which are cross connected (receiving both sanitary and storm water) or which do not contain adequate conveyance capacity; and

- The name of the licensed individual responsible for maintenance and operation of the wastewater pumping station and/or disposal system that may still need to be maintained.

The Katonah Elementary School currently utilizes an 8-inch cast iron service lateral to convey wastewater flow from the school to two buried septic tanks. These buried septic tanks are located on the North side of Huntville Road and subsequently release wastewater to an existing sand filter under a vegetated field. The flow is disinfected and then de-chlorinated before being discharged to a nearby stream. As part of decommissioning, the existing service lateral would be cut at Huntsville Road, where it would tie in directly to the proposed 8-inch gravity line via a manhole. The topography of the area should allow flow to enter the proposed gravity sewer without the necessity of pumps.

At St. Mary's School, there is currently a septic tank followed by two subsurface treatment areas (likely sand filters) buried on the south side of the school building. Wastewater then flows to a septic conditioning tank before exiting the property. In addition, the church rectory, located on the western portion of the property, has a septic tank in the front yard, with a small pump station that directs flow to leach fields located up the hill behind the building. The existing service laterals can be extended to connect the properties to the proposed gravity sewer on Valley Road. The topography of the area should allow flow to enter the proposed gravity sewer without the necessity of pumps.

The Bedford Park Apartments currently have three buildings that dispose of wastewater as part of the SPDES permit – buildings D, F, and G. The other buildings manage waste through use of a septic tank followed by leach fields. Buildings D, F and G also have their own septic tanks. Flow is then collected from all three tanks in a wet well outside Building F. Wastewater is pumped from the wet well to a large subsurface sand filter and then to a more advanced treatment system in the basement of Building F. The effluent is disinfected and then discharged with the site's stormwater to a stream adjacent to the property. The existing wet well would be reused to house new pumps that would discharge to a forcemain that would travel through the property and up Rome Avenue to the high point of the road, where it would connect to a gravity sewer line.

There are two options for the facilities relative to decommissioning: either abandoning the equipment and subsurface beds in place, or complete removal and disposal of all components of the facilities. Abandonment of the facilities generally requires that the entire contents of all tanks be pumped by a NYSDEC licensed septage hauler. NYSDEC 6 CRR 750-2.11 specifically requires that proof of proper management and/or removal of all residual materials (collected grit and screenings, scum, sand bed material, and sludge, filter media that may remain in the area) is required. Documentation that a NYSDEC licensed septage hauler was contracted would need to be submitted to NYSDEC. The tanks can then be broken in place and backfilled with debris-free sand to remain. Beds, trenches and other below grade structures can remain in place as long as there is no risk of collapse. Vegetative cover should be maintained. NYSDEC 6 CRR 750-2.11 requires that all residual material be removed within 180 calendar days after the system is taken out of service and that proof of proper residual management be submitted within 30 calendar days after their removal. A final site inspection by NYSDEC is also required to confirm the SPDES permitted site has sealed influent and effluent pipes and that all solid and residual materials related to the treatment process have been removed. If the facility chooses to fully remove and dispose of their equipment off site, they must follow the directions set forth in the guidelines.

The district would be abandoning the existing subsurface facilities in place. All outdoor electrical and controls equipment would be removed and process piping would be sealed to ensure that nothing exits or

enters. The costs for decommissioning the Upgrade Sites, including the modification to the BFA wet well and forcemain piping needed to connect it to the gravity line on Rome Avenue are included in Table 4-1.

4 COST INFORMATION

4.1 General

As noted in Section 1 of this document, Town Law requires that a Map, Plan and Report be prepared and filed with the Town Clerk for public inspection before a town sewer district is established. The law also requires that the maximum amount to be expended by the sewer district be stated, together with an estimate of the annual cost to a typical property owner in the district. Capital and operating cost data are provided in this section, while financing and an opinion of the annual cost to a typical property owner are addressed in Section 6.

4.2 Construction Costs

Table 4-1 presents the probable cost for constructing the sewer collection system is estimated at $12,907,000. All costs shown are estimated on the basis of the conceptual designs discussed in Section 4 and historic prices for similar projects in the area. They are presented as current (Summer 2016) costs and can be expected to increase in line with the consumer price index until such time as the project is bid.

While the grinder pumps for those select properties will be installed and owned by the district, the cost does not include installation of piping from district property basements to the grinder pumps or to the service laterals at the property line/right of way. These costs are typically borne directly by the property owner, who must arrange with a local contractor for his connection to the service lateral and for having his septic tank pumped out and removed or filled with sand and gravel.

While it is possible that DOCCS may decide to address all of the WWTP concerns identified in Section 4 of this report, it is recommended that the Town allocate $1,400,000 to address any remaining improvements that were recommended. The total construction cost for the sewage collection system and the WWTP improvements is estimated to be $14,307,000.

Table 4-1. Collection System Opinion of Probable Construction Cost

Description	Quantity		Unit Cost Installed	Total
8-inch DIP Gravity Sewer	16,900	LF	$180/lf	$3,042,000
48-inch Precast Manholes	90		$5,000 ea.	$450,000
6-inch DIP Service Laterals[1]	106		$2,400 ea.	$254,400
Pump Station A	1		Lump Sum	$500,000
Pump Station B	1		Lump Sum	$500,000
Pump Station C	1		Lump Sum	$475,000
Modifications to Bedford Park Apartments PS	1		Lump Sum	$200,000
4-inch DIP Forcemain	6,040	LF	$120/lf	$724,800
6-inch DIP Forcemain	6,200	LF	$160/lf	$992,000
6-inch DIP Forcemain (State Road)[2]	780	LF	$700/lf	$546,000
Creek Forcemain Crossing[3]	250	LF	$700/lf	$175,000
Grinder Pump Station	8		$15,000 each	$120,000
Air Relief Structures and Valves	9		$20,000 each	$180,000
Concrete and Rock Excavation[4]	14,700	CY	$150/cy	$2,205,000
Trench Repair with Temporary Pavement[5]	27,575	LF	$1.75/lf	$48,300
Pavement Overlay[6]	12,941	Ton	$90/ton	$1,164,700
Sidewalk Restoration[7]	590	SY	$45/sy	$26,550
Curb Restoration[8]	530	LF	$25/lf	$13,250
Stormwater Pollution Prevention Plan	1	LS	Lump Sum	$200,000
Maintenance and Protection of Traffic	18	mos	$30,000/month	$540,000
Allowance for Utility Relocation			Lump Sum	$400,000
Decommissioning of Upgrade Sites	1	LS	Lump Sum	$150,000
			Probable Construction Cost	**$12,907,000**

[1] Service laterals assumed to be 20 feet (10 approximate roadway width, 10 feet from curb line to property).

[2] Forcemain in Route 117 from intersection with Bedford Road to intersection with Adams Street is assumed to be constructed with trenchless technology.

[3] Forcemain crossing of creek assumed to be constructed with trenchless technology.

[4] Assumes that 80% of length of sewer would encounter a depth of 3 feet of rock/concrete to excavate. 6 foot wide trench assumed for calculation.

[5] Trench repair for all sewers (gravity and force main) and service laterals in Town roads includes 18 inches of subbase, binder and temporary pavement.

[6] Pavement overlay includes cost of paving an average roadway width of 15 feet. The remainder of the width to achieve curb to curb paving would be completed by the Town Highway Department.

[7] Sidewalk restoration is required due to service lateral construction. Cost assumes that two 5'x5', 4" thick concrete sidewalk sections are to be re-constructed.

[8] 5 feet of concrete curb expected to be replaced where service laterals impact sidewalks and curb lines.

4.3 Project Costs

Construction costs are only a part of the total capital expenditures incurred in establishing a new sewer district and building a collection system. Other necessary capital expenditures include, but are not limited to the following;

- Engineering design costs, including surveying, conducting a soil boring program, facilities planning, design and permitting, assistance in obtaining bids, and administering the construction contracts (Design Services During Construction or DSDC). Resident engineering includes conducting field oversight of the work, preparation of record documents, and operation and maintenance manuals.
- Land acquisition costs including potential purchase costs for pumping station sites and/or for easements for sewers that cross privately owned property.
- Legal, administrative, bonding and financing costs including fees associated with attending meetings, reviewing State Environmental Review Act documents, negotiating with state and other outside agencies, preparing and filing deeds and easement descriptions, underwriting bonds issued for long term financing.

The total cost for a project includes all of the above items plus an allowance for construction contingencies and is traditionally referred to as the "Total Project Cost". The Total Project Cost for the proposed sewer district is presented in Table 4-2.

Table 4-2. Opinion of Probable Project Cost

Item	Cost
Collection System Construction	$12,907,000
WWTP Improvements	$1,400,000
Subtotal	**$14,307,000**
Contingency (25%)	$3,576,800
Subtotal Construction Costs	**$17,883,800**
Land Acquisition/Easements	$100,000
Engineering Design & Design Services During Construction (12%)	$2,146,000
Resident Engineering	$500,000
Legal, Administrative and Financial Services	$350,000
Opinion of Probable Total Project Cost*	**$20,979,800**

*Exclusive of grants and other financial contributions from outside entitles

4.4 Operation and Maintenance Costs

Once the new collection system is placed in operation, the Town Sewer District would be responsible for operating and maintaining it, along with the WWTP. Operation and maintenance (O&M) costs include labor, electrical power, treatment chemicals, spare parts, the cost of contractual services such as telephone lines and alarm system monitoring services, consumable supplies and similar expenses. Typically, the cost of operating and maintaining a gravity sewer system is relatively low, especially when the system is new. O&M costs for sewers and grinder pumps are usually limited to replacing occasional broken manhole covers and responding to alarms at grinder pumping units and to complaints about clogged or plugged service laterals, and similar work. Cleaning of gravity lines is done periodically as well.

The annual O&M cost associated with the collection system has been estimated at approximately $50,650. A detailed breakdown of these quantities and associated costs is found in Table 4-3. They have been escalated 3%/yr until 2019 to reflect the first year costs. This estimate is based on the assumption that each of the pumping stations would be visited by an operator once a day and that all three stations could be visited within one hour to record flows, check pumps and controls and other routine duties. Non-routine work such as replacing pump seals or malfunctioning equipment is assumed to require twelve man-days per year.

Table 4-3. Collection System Annual Operation and Maintenance Cost

Description	Quantity		Unit Cost		Cost ($/yr)
Sewer Maintenance	3.2	miles	$930	/mile	$3,000
Pumping Station Power Costs	102,000	kw-hr/yr	$0.11	/kw-hr	$11,300
Pumping Station Labor	461	man-hr/yr	$50	/hr	$23,050
Spare Parts, Consumables, Tools, etc.			Lump Sum		$9,000
			Total Estimated Annual O&M Cost		$46,350
			Escalation to 2019 based on 3%/yr		$50,650

The annual WWTP O&M costs have been estimated at $601,000. The annual estimated O&M cost breakdown is presented in Table 4-4. These costs reflect actual budgets provided by DOCCS that were increased to reflect the costs associated with incrementally larger flows that would be experienced at the plant due to the new sewer district. They have been escalated 3%/yr until 2019 to reflect the first year costs.

Table 4-4. WWTP Annual Operation and Maintenance Cost

Description	Cost ($/yr)
Personnel	$200,000
Repair & Maintenance	$119,000
Chemicals	$30,000
Lab/Safety	$11,000
Sludge Hauling	$46,000
Utilities	$13,000
Administrative	$15,000
Maintenance Budget	$30,000
Capital Expenditures	$50,000
Electrical	$36,000
Total Estimated Annual O&M Cost	**$550,000**
Escalation to 2019 based on 3%/yr	**$601,000**

4.4.1 New York City Watershed Memorandum of Agreement (MOA)

The Town of Bedford is a signatory to the January, 1997 New York City Watershed Memorandum of Agreement which strengthened the rules and regulations that protect the City's water supply. Under Article V, Section 140 of this historic Agreement, New York City agreed to provide $68,000,000 for a water quality investment program in the watershed east of the Hudson River. The Agreement states that "These funds are to be used for planning, design and construction of water pollution reduction projects including, among other items, a potential sewage diversion project, rehabilitation or replacement of certain subsurface sewage treatment systems in areas where failing systems are prevalent, community septic systems, and sewage collection systems or extensions to sewage collection systems to the extent necessary to serve areas with concentrations of failing or soon to be failing subsurface sewage treatment systems constructed on inappropriate sites from a water quality perspective (e.g. undersized lots in lakefront communities adjacent to lakes or reservoirs) or to combine sewage flows currently treated at two or more WWTPs and expansion of existing WWTPs or construction of new WWTPs necessary to accommodate the additional flow resulting from such sewering."

The agreement provides funds for upgrading existing wastewater treatment plants to provide advanced levels of treatment and for operating the additional facilities at each plant. The DOCCS wastewater treatment plant at the Bedford Hills and Taconic Correctional Facilities was included within the Regulatory Upgrade program. A significant construction project was bid in September of 2001, which included the installation of all of the facilities necessary to meet the Watershed Rules and Regulations. The DEP is committed to paying for the annual cost of operating and maintaining the facilities installed due to the Regulatory Upgrade program. Sample agreements that the DEP has with other municipalities have been shared with the Town that identify the installed equipment at the WWTP that resulted from the DEP's Watershed Rules and Regulations and that require ongoing annual O&M costs to be paid by the DEP. The DEP has recently told the Town to assume that a minimum of 50% of the overall DOCCS-owned WWTP O&M costs would be borne by the DEP going forward and reimbursed to the district. Based on the estimated first year WWTP O&M costs calculated, we would expect that $300,500 per year would be paid by the district and the remaining $300,500 paid by the DEP.

Additionally, the three Upgrade Sites were originally slated for Regulatory Upgrades. These plans were stalled and the current belief is that a more economic and environmentally sound approach would be to collect these flows via the new district collection system and convey them to the DOCCS-owned treatment plant that would be acquired by the district. This solution is called the Alternate Upgrade.

5 FINANCING

5.1 Capital Costs

The total capital cost for establishing a new sewer district and building a collection system is estimated to be $20,979,800. It is anticipated that the Town would receive $9.25 million from Westchester County's WQIP initiative (see Appendix H for resolution) and $12.8 million from NYC DEP (see Appendix I for Draft Term Sheets with NYCDEP, DOCCS and the Upgrade Sites) to complete the Alternate Upgrade. This outside funding totals $22.05 million. Therefore, it is assumed that the project costs would be entirely funded through these sources and no additional user charge revenue would be needed to fund the initial capital investment.

5.2 O&M Costs

The anticipated annual O&M costs associated with the sewer district are summarized in Table 5-1.

Table 5-1. Anticipated First Year Annual Operations and Maintenance Costs (FY2019)

O&M Category	Annual Amount	Amount Paid by NYC DEP	Amount From District Rate Payers
Collection System	$50,650	0	$50,650
Wastewater Treatment Plant	$601,000	$300,500	$300,500
Administration (10%)	$65,165	0	$65,165
Total	**$716,815**	**$300,500**	**$416,315**

Amounts shown in FY2016 Dollars.

The collection system O&M costs would not exist until after the system has been constructed, all customers have been connected, and wastewater is flowing to the plant. Before then, however, the two DOCCS faciltiies would continue to discharge to the WWTP. When the bids for the collection system construction have been received, the project has been deemed within budget, and the successful bidder is under contract, the sewer district would take over the operation of the WWTP. The two DOCCS facilities and the I-684/NYS DOT reststop would be its only customer at that time. They would pay the full amount of any WWTP O&M not subsidized by the NYC DEP until the rest of the district is connected. This could be as long as 1.5 to 2 years. The first year typical customer cost calcluated is representative of year three, when the district is fully built out.

5.3 Typical Customer Cost – First Year of Full Operation

It is anticipated that O&M costs of the District would be allocated to customers in proportion to their wastewater flow. A summary of the allocation of O&M costs between DOCCS and other new sewer

district customers is provided in Table 5-2. Based on the estimated O&M rate, the estimated annual cost to each property is provided in Table 5-3. The average rate per property for the first year of full district operation equals approximately $424. Properties with significant water usage would experience a higher cost.

Table 5-2. Summary Allocation of First Year O&M Costs (FY2019)

Sewer District Customer	Wastewater Flow (gpd)	% of Total	O&M Cost Share
Bedford Hills and Taconic Correctional Facilities	214,000	78.9%	$328,502
Other Sewer District Properties	57,205	21.1%	$87,813
Total	**$271,205**	**100.0%**	**$416,315**

Table 5-3. Projected First Year Cost to Each Property Owner (FY2019 Estimate)

S.B.L	Address	Owner	Water Usage (gpd)	Capital	O&M
49.15-3-9	24 Woods Bridge Road	24 WB Realty Corp	144	$0	$231
49.15-3-10	22 Woods Bridge Road	Thomas Kiley and Joseph Kiley	22	$0	$35
49.15-3-12	20 Woods Bridge Road	Joseph and Jennie Rizzo	22	$0	$35
49.15-3-14	Woods Bridge Road	Rex Oil Company, Inc.		$0	$0
49.15-3-17	18 Woods Bridge Road	Rex Realty Company of Connecticut, Inc.	11	$0	$18
49.15-3-19	10 Woods Bridge Road	Doris Elman	89	$0	$143
49.15-3-22	4 Woods Bridge Road	McManos and Clark, Inc.	333	$0	$535
49.15-3-24	Edgemont Road	New York Telephone, Co.	44	$0	$71
49.15-4-2	25 Edgemont Road	Julius Mangione	489	$0	$786
49.15-4-3	19-21 Edgemont Road	Peter and Gretchen Menzies	356	$0	$572
49.15-4-4	13 Edgemont Road	Paul Berry and Peter Devy	133	$0	$214
49.15-4-5	3-5 Edgemont Road	CPJ Edgemont Inc.	56	$0	$90
49.15-4-7	28 Edgemont Road	Giusppe and Valeria Tomass	0	$0	$0
49.15-4-8	22 Edgemont Road	Robert Schilke	222	$0	$357
49.15-4-9	18 Edgemont Road	Katonah Avenue, LLC		$0	$0
49.15-4-11.1	15-31 Katonah Ave	Katonah Avenue, LLC	356	$0	$572
49.15-4-11.2	5-11 Katonah Ave	Blue Mountain Housing Development Corp.	689	$0	$1,107
49.15-4-13	37-43 Katonah Ave	Monkey Business Inc.	311	$0	$500
49.15-4-14	33 Katonah Ave	33 Katonah Ave Co.	33	$0	$53
49.15-4-17	29 Park Way	Hannelorl, Ernsteins, Harzer Trust	933	$0	$1,499
49.15-4-18	23 Park Way	25 Parkway Katonah LLC	267	$0	$429
49.15-4-19	17-19 Park Way	Giusppe and Valeria Tomass	156	$0	$251
49.15-4-20	51-63 Katonah Ave	W&S Greene Realty Co. Inc.	1,578	$0	$2,536
49.15-4-22	26-32 Park Way	26-32 Parkway LLC	189	$0	$304

S.B.L	Address	Owner	Water Usage (gpd)	Capital	O&M
49.15-4-23	24 Park Way	Goldman Development Inc.	278	$0	$447
49.15-4-24	83-89 Katonah Ave	William Holmes and Karen Kennedy	100	$0	$161
49.15-4-25	93 Katonah Ave	Lenro Assoc, LLC	244	$0	$392
49.15-4-26	95 Katonah Ave	Lenro Assoc, LLC	222	$0	$357
49.15-4-27	101 Katonah Ave	L&S Weinstein L.P.	111	$0	$178
49.15-4-28	Katonah Ave	Town of Bedford		$0	$0
49.15-4-29	Katonah Ave	NY Central RR- Harlem Division		$0	$0
49.15-4-30	120 Katonah Ave	Katonah Avenue Corp.	2,467	$0	$3,964
49.15-4-31	107-109 Katonah Ave	Goldmar Development Inc.	333	$0	$535
49.15-4-33	113 Katonah Ave	Ranerls Brothers Inc.	89	$0	$143
49.15-4-34	121 Katonah Ave	Avenue Building, Inc.	78	$0	$125
49.15-4-35	125 Katonah Ave	Michael and Debbie Properties L.L.C.	433	$0	$696
49.15-4-38	25 Valley Road	Van's Katonah Service Center Inc.	44	$0	$71
49.15-4-39	131-139 Katonah Ave	135 Katonah Ave L.L.C.	111	$0	$178
49.15-4-40	141 Katonah Ave	Baren's Realty Holding Inc.	122	$0	$196
49.15-4-41	140 Katonah Ave	Katsan Limited Partnership	89	$0	$143
49.15-4-43	Katonah Ave	JP Morgan Chase Bank		$0	$0
49.15-4-44	156 Katonah Ave	John E Posner	33	$0	$53
49.15-4-45	180-188 Katonah Ave	H.D.H. Holdings	167	$0	$268
49.15-4-48	26-32 Valley Road	Via Valle LLC	289	$0	$464
49.15-4-49	18-24 Valley Road	Hair Wharf L.L.C.	222	$0	$357
49.15-4-50	155 Katonah Ave	Honebon's Cleaners, Inc.	111	$0	$178
49.15-4-51	165 Katonah Ave	Honebon's Cleaners, Inc.	33	$0	$53
49.15-4-52	173-175 Katonah Ave	Frank and Angelina Moore	1,500	$0	$2,410
49.15-4-55	215 Katonah Ave	UB Katonah LLC	133	$0	$214
49.15-4-55.2	179-197 Katonah Ave	UB Katonah LLC	689	$0	$1,107
49.19-2-10	225-229 Katonah Ave	Chriegon Realty Inc.	378	$0	$607
49.19-2-12	245 Katonah Ave	Ganz Realty Holdings LLC	44	$0	$71

S.B.L	Address	Owner	Water Usage (gpd)	Capital	O&M
49.19-2-13	68 Bedford Road	St. Luke's Church	89	$0	$143
49.19-2-14	70 Bedford Road	St. Luke's Church	22	$0	$35
49.19-2-15	186-252 Katonah Ave	UB Katonah LLC	756	$0	$1,215
49.19-2-16	Katonah Ave	Town of Bedford		$0	$0
49.19-2-17	254-256 Katonah Ave	Beca Realty Corp	344	$0	$553
49.19-2-18	250 Katonah Ave Rear	Town of Bedford		$0	$0
49.19-2-19	262-294 Katonah Ave	Firestein Management Inc.	5,778	$0	$9,285
49.19-2-20	80 Bedford Road	CPD NY Energy Corp	200	$0	$321
49.19-2-21	Bedford Road	City of New York		$0	$0
49.19-2-44	87 Bedford Road	Eighty-Seven Bedford Road. Corp.	1,678	$0	$2,696
49.19-2-45	73-77 Bedford Road	Akonia Holdings LLC	667	$0	$1,072
49.19-2-46	71 Bedford Road	Women's Civic Club of Katonah	78	$0	$125
60.07-2-37	122-138 A Bedford Road	D.R. Katonah LLC	4,400	$0	$7,071
			1,522	$0	$2,446
60.07-2-38	140 Bedford Road	Armand and Loretta Bassi Jr.	22	$0	$35
60.07-2-39	150 Bedford Road	Armand and Lorettia Bassi JR		$0	$0
60.07-2-40	152 Bedford Road	156 Bedford Road Realty LLC	56	$0	$90
60.07-2-41	156 Bedford Road	Mary Joyce Tighe	878	$0	$1,411
60.07-2-42	160 Bedford Road	Volunteer Ambulence Corp	89	$0	$143
60.14-5-1	325 Bedford Road	Bedford Hills Fire District		$0	$0
60.14-5-2	2 Depot Plaza	Bedford Plaza Ltd	356	$0	$572
60.14-5-3	1 Adams Street	1 Adams Street Properties Inc.		$0	$0
60.14-5-4	12 Adams Street	Diana Stevens	367	$0	$590
60.14-5-5	17-19 Adams Street	Nuo and Christine Camajs	78	$0	$125
60.14-5-6	25-27 Adams Street	Laurence S. Kennedy	56	$0	$90
60.14-5-7	52 Babbitt Road	Sally Siano	111	$0	$178
60.14-5-8	35 Adams Street and 39 Adams Street	D.P.D. Rockledge Realty Corp	56	$0	$90
60.14-5-9	59 Adams Street	Edward and Nimal Pavan	44	$0	$71
60.14-5-12	4 Robinson Ave	Christine Beach 2007 Trust	244	$0	$392

S.B.L	Address	Owner	Water Usage (gpd)	Capital	O&M
60.14-5-13	61-63 Adams Street	Robert Burbank	44	$0	$71
	83 Adams Street		78	$0	$125
60.14-5-14	95 Adams Street	Town of Bedford		$0	$0
60.14-5-19	53 School St.; 109 Adams Street	Apropos Housing Opportunities and Managmenet Enterprises	1,067	$0	$1,715
60.14-5-20	153 Adams Street	153 Adams Street L.L.C. / Michael Mangione	978	$0	$1,572
60.14-5-21	155 Adams Street	James F and Beatrice Mackey	67	$0	$108
60.14-5-22	163 Adams Street	James F and Beatrice Mackey	144	$0	$231
60.14-5-23	169 Adams Street	Carolyn Fassinga	111	$0	$178
60.14-5-24	47 School Street	Caico Realty Co.	22	$0	$35
60.14-5-25	49 School Street	Salvatore and Olga Caico	200	$0	$321
60.14-5-49	51 Babbitt Road	Androse, LLC	467	$0	$750
60.14-5-53	64 Griffin Ave.	Karl and Alyce Edelman	22	$0	$35
60.14-5-54	52 Griffin Avenue	Michael Mangione	0	$0	$0
60.14-5-55	39 Babbitt Road	Craig Siano and Steven Siano and Wayne Fazzinga	78	$0	$125
60.14-5-56	23 Babbitt Road	Gale Harrison	11	$0	$18
60.14-5-57	17-19 Babbitt Road	PRM Bedford Hills LLC	22	$0	$35
60.14-5-58	25 Griffin Avenue	PRM Bedford Hills LLC		$0	$0
60.14-5-59	11-15 Babbitt Road	PRM Bedford Hills LLC	211	$0	$339
60.14-5-61	7 Babbitt Road	Micnan Corporation	167	$0	$268
60.14-5-62	1-7 Babbitt Road	Serafina Curro	133	$0	$214
60.14-5-63	9-31 Depot Plaza	Bristol Equities, LLC	222	$0	$357
60.14-5-64	14 Main Street	McRee-Gorman Inc.	100	$0	$161
60.14-5-65	26 Main Street	Bedford Hills Free Library	89	$0	$143
60.14-5-66	42 Main Street	Rothman Properties, LLC	22	$0	$35
60.14-5-67	52 Main Street	Rad Realty LLC	144	$0	$231
60.14-5-68	66 Main Street	Helen Tunick	244	$0	$392
60.14-5-74	45 Main Street	MSM Properties Management	244	$0	$392
60.14-5-77	29-31 Main Street	Susan H Thorn	244	$0	$392
60.14-5-78	21-23 Main Street	Carrot Patch Realty LLC	256	$0	$411

S.B.L	Address	Owner	Water Usage (gpd)	Capital	O&M
60.14-5-79	Intersection of Bedford Road and Main Street	Town of Bedford		$0	$0
60.14-5-80	316-318 Bedford Road (next to the fire house)	David and Chrystine Nicholas	111	$0	$178
60.14-5-81	326 Bedford Road	The Bedford Hills Fire District	356	$0	$572
60.14-5-82	332 Bedford Road	The Bedford Hills Fire Distict	56	$0	$90
60.14-5-83	352 Bedford Road	352 Bedford Road LLC	822	$0	$1,321
60.17-3-41	7 Hill Street	Thomas McCrossan	244	$0	$392
60.14-5-71	Bedford Hills Community House		148		$0
49.19-2-47	Katonah Fire Department		223	$0	$358
60.14-3-12	Bedford Highway Garage		888	$0	$1,426
49.15-4-21	Katonah Library		301	$0	$484
60.6-2-21	Katonah Elementary		1,280	$0	$2,057
49.19-1-10	St Mary's Parcel 1		474	$0	$762
49.18-3-15	St Mary's Parcel 2		256	$0	$411
60.15-3-30	Bedford Park Apartments		11,455	$0	$18,408
	Subtotal		54,645	$0	$87,813
	DOCCS		272,000*	$0	$328,502
	Grand Total		326,645	$0	$416,315

*DOCCS O&M charges are based on wastewater usage vs water consumption

APPENDIX A

HAMLETS OF BEDFORD HILLS AND KATONAH
PREVIOUS STUDIES ON WASTEWATER DISPOSAL ISSUES

A number of studies and reports on wastewater disposal in Bedford Hills and Katonah have been prepared over the last several decades. All of these reports have acknowledged that a serious wastewater disposal problem exists. A brief summary of these reports is presented below.

- **208 Northern Westchester Study, September 1977**. Water Quality Management Plan was developed for Northern Westchester County under the framework of Section 208 of the Clean Water Act. This plan and report proposed that a part-county sewer district be created in northern Westchester County to collect and treat wastewater from the heavily developed corridor running from Croton Falls in the north to Mount Kisco in the south and including Bedford Hills and Katonah. This plan was never implemented.

- **Velsy Report, 1979**. When it became apparent that the recommendations of the 208 Water Quality Management Plan for northern Westchester County would not be implemented in the near future, the Westchester County Department of Environmental Facilities retained Charles H. Velzy Associates to develop an interim solution, within the framework of the 208 Water Quality Management Plan, to collect and treat sewage from the heavily developed Bedford Hills and Katonah areas where wastewater disposal problems were considered far worse than in some of the surrounding communities. This plan proposed a system to collect and pump wastewater from the two hamlets to an existing pumping station in Mount Kisco. From this point, the wastewater was to be pumped tothe Saw Mill Valley Trunk Sewer for treatment at the Yonkers Wastewater Treatment Plant. The cost of this was considered relatively high at the time and the plan was not implemented.

- **Velsy Report, 1987**. By 1987, it became obvious that implementation of the recommendations contained in the 1977 Water Quality Management Plan for Northern Westchester County would be delayed indefinitely, The Town of Bedford retained Charles H. Velsey Associates to re-evaluate wastewater collection and disposal options for Bedford Hills and Katonah and consider the construction of a treatment plant within or near these hamlets in lieu of conveying the wastewater to the south for treatment at the Yonkers treatment plant. The study report, entitled <u>Sanitary Sewerage Study of the Katonah – Bedford Hills Area</u>, dated July 1987 (Revised May, 1988) estimated the cost for sewers and an advanced wastewater treatment plant at approximately $14 million, and a first year charge to a typical residential user of around $825. Once again, the estimated cost of this solution was considered too high, and the project was not implemented.

- **Hudson Engineering Reports, 1989 and 1990**. In 1988, in another attempt to develop a economically feasible solution to the wastewater disposal problems, the Town of Bedford retained Hudson Engineering Associates to conduct a study of Bedford Hills, Katonah and the Village of Bedford.

  The engineering report, entitled <u>Town of Bedford Sewerage Facilities, Environmental Narrative</u> was published in 1989 and proposed the creation of a town sewer encompassing Bedford Hills, Katonah and the Village of Bedford to construct sewers and wastewater treatment plants to serve these areas. The proposed wastewater treatment plant to serve Bedford Hills and Katonah was to be located at or near the existing treatment plant serving the Bedford Hills and Taconic Correctional Facilities. The proposed sewage collection system in Bedford Hills and Katonah was generally limited to the commercial and business districts in the two hamlets, but the proposed sewer district would also take

responsibility for periodically pumping out septic tanks and disposing of the sludge for homes within the district that would not be served by sewers.

In 1990, Hudson Engineering Associates produced a second report, entitled Town of Bedford Map, Plan and Report, Part-Town Sewer District No. 1, as the basis for the formation of a town sewer district. Unfortunately, this plan was voted down in a referendum on the formation of the sewer district.

- **Croton Watershed Wastewater Diversion Study, Savin Engineers, P.C. 1998**. The Westchester County Department of Public Works and Department of Planning sponsored a study of the feasibility of diverting wastewaters collected in the Croton Watershed to existing wastewater treatment plants in Peekskill and Yonkers. This study was financed by a grant from the New York City Department of Environmental Protection and concentrated on existing wastewater treatment plant discharges to local water courses and areas with known septic system problems. The hamlets of Bedford Hills and Katonah were included in the "focus area" for this study and sewers were proposed to serve approximately 771 properties, primarily located in the densely developed, downtown areas of these hamlets but also including properties served by privately owned wastewater treatment plants with SPDES permits. Implementation of this plan was complicated by environmental justice issues, and it is unlikely that it will be implemented in the foreseeable future.
- **Sanitary Sewer Extension and Plant Capacity Analysis, Malcolm Pirnie, Inc. 2003.** An evaluation of the DOCCS wastewater treatment plant and development of a map and plan for a proposed wastewater district to serve critical areas of the hamlets of Bedford Hills and Katonah. This proposed sewer district would have served just over 1,500 parcels and required an expansion to the Department of Corrections Bedford Hills Correctional Facility Wastewater Treatment Plant to accommodate the increased flow. The typical cost per customer was deemed unaffordable, given that outside funding was not fully committed nor sufficient to offset the large debt service that would result from the significant project cost.
- **Wastewater Asset Condition Assessment and Valuation, Malcolm Pirnie, Inc. 2011.** The purpose of this report was to provide the Town with an estimate of the condition and value of the DOCC's wastewater assets and also to assess the ramifications of the proposed lower nutrient limits, should the Town choose to request a variance to the Watershed Rules and Regulations prohibition to expanding an existing WWTP within the 60-day time of travel in the Croton Watershed. Lastly, the report escalated the construction and operations and maintenance costs included within the 2003 Malcolm Pirnie report to reflect 2011 dollars.

APPENDIX B

STATE OF NEW YORK

DEPARTMENT OF CORRECTIONS AND COMMUNITY SUPERVISION

BEDFORD HILLS CORRECTIONAL FACILITY
247 Harris Road
Bedford Hills, NY 10507-2499

ANTHONY ANNUCCI
ACTING COMMISSIONER

SABINA A. KAPLAN
SUPERINTENDENT

April 2, 2014

Mr. Daniel Gorka, VP Operations
Veolia Water, N.A.
1115 West Chestnut Street #303
Brockton, MA 02301

Dear Mr. Gorka:

New York State Department of Corrections and Community Supervision would like Veolia Water North America to continue operating the Bedford Hills Waste Water Treatment Plant on a month-to-month basis until a new contract can be issued. Veolia Water North America will continue operations on a month-to-month basis under the same terms and conditions and fees of the current contract #C120112 which is due to expire on 4/4/14.

If this is agreeable to Veolia Water please sign below and return an executed copy back to the New York Department of Corrections and Community Supervision.

Thank you.

Sincerely,

Alfred Mann

Alfred Mann, PUEIII
Bedford Hills Correctional Facility

Vincent Martin

Veolia Water, Authorized Agent

4/17/2014

Date

STATE OF NEW YORK
DEPARTMENT OF CORRECTIONAL SERVICES
BEDFORD HILLS CORRECTIONAL FACILITY
247 HARRIS ROAD
BEDFORD HILLS, NEW YORK 10507
914-241-3100

BRIAN FISCHER
COMMISSIONER

ELIZABETH WILLIAMS
SUPERINTENDENT

June 11, 2009

RECEIVED
JUN 15 2009
Veolia Water North America
Northeast Business Center

Veolia Water North America – Northeast, LLC
Attn: Farzin Kiani, Area Manager
1115 West Chestnut Street
Brockton, MA 02301

RE : Contract #C120112 – 4/5/09-4/4/14
Contract Amount - $1,637,220.00

Dear Mr. Kiani,

This letter is in regard to the above referenced contract between Bedford Hills Correctional Facility and Veolia Water North America-Northeast, LLC.

Attached you will find your signed copies of the new contract for the operation and maintenance of our waste water treatment plant for the period 4/5/09-4/4/14. The contract amount for this year 4/5/09-4/4/10 is the same amount as the previous year, $357,439.00.

Congratulations on the continuing of our partnership in this endeavor. We look forward to another 5years of working with you.

If you have any further questions feel free to contact me at (914)241-3100 ext 3100.

Stephen M. Connis
Institution Steward
Bedford Hills CF

STATE AGENCY (Name and Address): Bedford Hills Correctional Facility 247 Harris Road Bedford Hills, NY 10507 – 2400 ***914-241-3100*** ext. ***3100***	NYS COMPROLLER'S NUMBER: ORIGINATING AGENCY CODE: ***10120***
CONTRACTOR (Name and Address): VEOLIA WATER NORTH AMERICA – NORTHEAST, LLC 1115 West Chestnut Street, Brockton, MA 02301	TYPE OF SERVICES: Operation & Maintenance of Wastewater Treatment Facility
INITIAL CONTRACTOR PERIOD: FROM: April 5, 2009 (or upon OSC approval, if later TO: April 4, 2014 (or later to guarantee a 5 –year term)	FUNDING AMOUNT FOR INITIAL PERIOD: $1,637,220.00
STATUS: Contractor is a (x) for ( ) not for profit Corporation. Limited Liability Company	RENEWALS: ***N/A***

EXHIBITS ATTACHED AND PART OF THIS AGREEMENT:

A: Standard Clauses as Required by the Attorney General for all State contracts.
B: Policy on The Prevention of Sexual Abuse of Inmates
C: Contractor's Responsibilities
D: BHCF Responsibilities
E: Administrative Terms
F: Stipulation of Settlement, Hudson River Fishermen's Association v. Thomas A. Coughlin, Commissioner, et al. (91 CV 5535)
G: Order on Consent No. R3-1474-87-11, NYS Department of Environmental Conservation, June 1,1990
H: BHCF WWTP SPDES Permit No. NY0101885
I: Executive Order No .51: 9 NYCRR 5.51
J:
K: Operation and Maintenance Manual, Bedford Hills Correctional Wastewater Treatment Facility, prepared for OGS by Hudson Engineering Associates, P.C., Goshen, NY (1995)
L: Supplement to the 1995 Operations and Maintenance Manual for the Bedford Hills Correctional Facility Wastewater Treatment Plant (Dated "Final Draft" April 15, 2003, and revised September 2, 2003)
M: WWTP Year-End Compliance Inspection Report Issued by City of New York (SPDES No. NY-0101885)
N: Specimen Performance Bond
O: Required Declarations and Certifications

STATE OF NEW YORK
DEPARTMENT OF CORRECTIONAL SERVICES
5-YEAR AGREEMENT FOR OPERATION AND MAINTENANCE OF BEDFORD HILLS CORRECTIONAL FACILITY WASTEWATER TREATMENT PLANT

This AGREEMENT is hereby made by and between the State of New York Department of Correctional Services (hereinafter DOCS) and the CONTRACTOR identified on the face page hereof.

WITNESSETH:

WHEREAS, the DOCS has the authority to provide funding for the operation and maintenance of its facilities and desires to contract with skilled parties possessing the necessary resources to provide such services; and

Whereas, the DOCS has solicited proposals in order to procure the services of a well-qualified service provider in order to provide such services and has selected CONTRACTOR in order to provide such services for DOCS; and

WHEREAS, the CONTRACTOR is ready, willing and able to provide such services and possesses or can make available all necessary qualified personnel, licenses, facilities and expertise and perform or have performed the services required pursuant to the terms of this AGREEMENT;

NOW THEREFORE, in consideration of the promises, responsibilities and covenants herein, the DOCS and the CONTRACTOR agree as follows:

1. SERVICES: Contractor will carry out all responsibilities and services identified in its proposal attached herein as Exhibit B, as well as the responsibilities and services set forth in the RFP dated as of ***August 25, 2008***, issued by the Bedford Hills Correctional Facility, which is expressly made a part of this contract.

2. COMPENSATION and PAYMENT: DOCS shall compensate CONTRACTOR not more than the amount of $ per month for the provision of services set forth in Exhibits B and C, which shall be paid:

   MONTHLY, IN ARREARS, BASED ON
   USE OR ACTUAL SERVICE RECEIVED,
   ON PRESENTATION OF STATE VOUCHER.

3. INCORPORATED PAGES: This AGREEMENT incorporates the face pages attached and all of the marked appendices identified on the face page hereof.

4. EFFECTIVE DATE: This agreement shall become effective upon the approval of the Attorney General and Comptroller of the State of New York.

5. SUBCONTRACTING: This agreement shall be binding upon the parties, their successors and heirs. Certain responsibilities may be subcontracted with written approval of DOCS.

6. FORCE MAJEURE: Neither party hereto will be liable for losses, defaults or damages under this Agreement which result from delays in performing, or inability to perform, all or any part of the obligations or responsibilities imposed upon it pursuant to the terms and conditions of this Agreement, due to or because of acts of God, the public enemy, acts of government, earthquakes, floods, strikes, civil strife, fire or any other cause beyond the reasonable control of the party that was so delayed in performing or so unable to perform provided that such party was not negligent and shall have used reasonable efforts to avoid or overcome such cause. Such party will resume full performance of such obligations and responsibilities promptly upon removal of any such cause.

7. STATE OF LAW: This agreement shall be construed and interpreted in accordance with the Laws of the State of New York.

8. ACCOUNTING: DOCS shall be entitled to and shall receive from CONTRACTOR an accounting of its expenditures at the conclusion of the period of this agreement.

9. CIVIL-EQUAL-HUMAN RIGHTS: The contractor agrees to comply with all applicable federal, State and local Civil Rights and Human Rights laws with reference to equal employment opportunities and the provision of services.

10. LATE PAYMENT: Interest on late payment is governed by State Finance Law § 179-m.

11. TERMINATION: This AGREEMENT may be terminated (1) at any time upon mutual written consent of the DOCS and the CONTRACTOR, or (2) as specified in Exhibit "E".

IN WITNESS THEREOF, the parties hereto have executed and approved this AGREEMENT and have made the certifications on the dates below their signatures.

Contract No. C12112

CONTRACTOR

Veolia Water North America - Northeast, LLC

By: _____

Philip Ashcroft

Printed Name

Title: President

Date: November 17, 2008

STATE AGENCY

Department of Correctional Services

By: _____

ELIZABETH WILLIAMS

Title: SUPERINTENDENT

Date: 11/19/08

Contractor Certification:
" In addition to the acceptance of this contract, I also certify that all information provided to the State agency is complete, true and accurate with regard to chapter 1 of the Laws of 2005

Agency Certifications:
" In addition to the acceptance of this contract, I also certify that original copies of this signature page will be attached to all other exact copies of this contract .

STATE OF ~~NEW YORK~~ Mass.)
) ss.:
COUNTY OF Bristol)

On the 17th day of November, 2008, before me personally appeared Philip Ashcroft, to me known, who being by me duly sworn, did depose and say that he/she resides at 130 Screenhouse Lane, Dartmouth Mass that he/she is the President of the corporation described herein which executed the foregoing instrument and certification; and that he/she signed his/her name thereto by order of the board of directors of said corporation.

(Notary) Cynthia M. Silva
My Commission Expires 3/19/2010

APPROVALS

ATTORNEY GENERAL

APPROVED AS TO FORM
NYS ATTORNEY GENERAL
JAN 14 2009
PETER FAVRETTO
ASSOCIATE ATTORNEY

_____

Title: _____

Date: _____

STATE COMPTROLLER

_____

Title: _____

Date: _____

APPROVED
DEPT OF AUDIT & CONTROL
JUN 03 2009
FOR THE STATE COMPTROLLER

Attachment B

Agency Non-Capital Contract or Non-Personal Service Expenditures

I hereby certify that the following items of expenditure are critical to protect public health and/or public safety or that such expenditures involve Federal reimbursement of at least 75 percent.

Robert Williams Scott 11/19/08

Agency Head Signature

APPENDIX A

STANDARD CLAUSES FOR NEW YORK STATE CONTRACTS

**PLEASE RETAIN THIS DOCUMENT
FOR FUTURE REFERENCE.**

June, 2006

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2. Non-Assignment Clause
3. Comptroller's Approval
4. Workers' Compensation Benefits
5. Non-Discrimination Requirements
6. Wage and Hours Provisions
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8. International Boycott Prohibition
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12. Equal Employment Opportunities For Minorities and Women
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20. Omnibus Procurement Act of 1992
21. Reciprocity and Sanctions Provisions
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STANDARD CLAUSES FOR NYS CONTRACTS

The parties to the attached contract, license, lease, amendment or other agreement of any kind (hereinafter, "the contract" or "this contract") agree to be bound by the following clauses which are hereby made a part of the contract (the word "Contractor" herein refers to any party other than the State, whether a contractor, licenser, licensee, lessor, lessee or any other party):

1. **EXECUTORY CLAUSE.** In accordance with Section 41 of the State Finance Law, the State shall have no liability under this contract to the Contractor or to anyone else beyond funds appropriated and available for this contract.

2. **NON-ASSIGNMENT CLAUSE.** In accordance with Section 138 of the State Finance Law, this contract may not be assigned by the Contractor or its right, title or interest therein assigned, transferred, conveyed, sublet or otherwise disposed of without the previous consent, in writing, of the State and any attempts to assign the contract without the State's written consent are null and void. The Contractor may, however, assign its right to receive payment without the State's prior written consent unless this contract concerns Certificates of Participation pursuant to Article 5-A of the State Finance Law.

3. **COMPTROLLER'S APPROVAL.** In accordance with Section 112 of the State Finance Law (or, if this contract is with the State University or City University of New York, Section 355 or Section 6218 of the Education Law), if this contract exceeds $50,000 (or the minimum thresholds agreed to by the Office of the State Comptroller for certain S.U.N.Y. and C.U.N.Y. contracts), or if this is an amendment for any amount to a contract which, as so amended, exceeds said statutory amount, or if, by this contract, the State agrees to give something other than money when the value or reasonably estimated value of such consideration exceeds $10,000, it shall not be valid, effective or binding upon the State until it has been approved by the State Comptroller and filed in his office. Comptroller's approval of contracts let by the Office of General Services is required when such contracts exceed $85,000 (State Finance Law Section 163.6.a).

4. **WORKERS' COMPENSATION BENEFITS.** In accordance with Section 142 of the State Finance Law, this contract shall be void and of no force and effect unless the Contractor shall provide and maintain coverage during the life of this contract for the benefit of such employees as are required to be covered by the provisions of the Workers' Compensation Law.

5. **NON-DISCRIMINATION REQUIREMENTS.** To the extent required by Article 15 of the Executive Law (also known as the Human Rights Law) and all other State and Federal statutory and constitutional non-discrimination provisions, the Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, sex, national origin, sexual orientation, age, disability, genetic predisposition or carrier status, or marital status. Furthermore, in accordance with Section 220-e of the Labor Law, if this is a contract for the construction, alteration or repair of any public building or public work or for the manufacture, sale or distribution of materials, equipment or supplies, and to the extent that this contract shall be performed within the State of New York, Contractor agrees that neither it nor its subcontractors shall, by reason of race, creed, color, disability, sex, or national origin: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this contract. If this is a building service contract as defined in Section 230 of the Labor Law, then, in accordance with Section 239 thereof, Contractor agrees that neither it nor its subcontractors shall by reason of race, creed, color, national origin, age, sex or disability: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this contract. Contractor is subject to fines of $50.00 per person per day for any violation of Section 220-e or Section 239 as well as possible termination of this contract and forfeiture of all moneys due hereunder for a second or subsequent violation.

6. **WAGE AND HOURS PROVISIONS.** If this is a public work contract covered by Article 8 of the Labor Law or a building service contract covered by Article 9 thereof, neither Contractor's employees nor the employees of its subcontractors may be required or permitted to work more than the number of hours or days stated in said statutes, except as otherwise provided in the Labor Law and as set forth in prevailing wage and supplement schedules issued by the State Labor Department. Furthermore, Contractor and its subcontractors must pay at least the prevailing wage rate and pay or provide the prevailing supplements, including the premium rates for overtime pay, as determined by the State Labor Department in accordance with the Labor Law.

7. **NON-COLLUSIVE BIDDING CERTIFICATION.** In accordance with Section 139-d of the State Finance Law, if this contract was awarded based upon the submission of bids, Contractor affirms, under penalty of perjury, that its bid was arrived at independently and without collusion aimed at restricting competition. Contractor further affirms that, at the time Contractor submitted its bid, an authorized and responsible person executed and delivered to the State a non-collusive bidding certification on Contractor's behalf.

8. **INTERNATIONAL BOYCOTT PROHIBITION.** In accordance with Section 220-f of the Labor Law and Section 139-h of the State Finance Law, if this contract exceeds $5,000, the Contractor agrees, as a material condition of the contract, that neither the Contractor nor any substantially owned or affiliated person, firm, partnership or corporation has participated, is participating, or shall participate in an international boycott in violation of the federal Export Administration Act of 1979 (50 USC App. Sections 2401 et seq.) or regulations thereunder. If such Contractor, or any of the aforesaid affiliates of Contractor, is convicted or is otherwise found to have violated said laws or regulations upon the final determination of the United States Commerce Department or any other appropriate agency of the United States subsequent to the contract's execution, such contract, amendment or modification thereto shall be rendered forfeit and void. The Contractor shall so notify the State Comptroller within five (5) business days of such conviction, determination or disposition of appeal (2NYCRR 105.4).

9. **SET-OFF RIGHTS.** The State shall have all of its common law, equitable and statutory rights of set-off. These rights shall include, but not be limited to, the State's option to withhold for the purposes of set-off any moneys due to the Contractor under this contract up to any amounts due and owing to the State with regard to this contract, any other contract with any State department or agency, including any contract for a term commencing prior to the term of this contract, plus any amounts due and owing to the State for any other reason including, without limitation, tax delinquencies, fee delinquencies or monetary penalties relative thereto. The State shall exercise its set-off rights in accordance with normal State practices including, in cases of set-off pursuant to an audit, the finalization of such audit by the State agency, its representatives, or the State Comptroller.

10. **RECORDS.** The Contractor shall establish and maintain complete and accurate books, records, documents, accounts and other evidence directly pertinent to performance under this contract (hereinafter, collectively, "the Records"). The Records must be kept for the balance of the calendar year in which they were made and for six (6) additional years thereafter. The State Comptroller, the Attorney General and any other person or entity authorized to conduct an examination, as well as the agency or agencies involved in this contract, shall have access to the Records during normal business hours at an office of the Contractor

within the State of New York or, if no such office is available, at a mutually agreeable and reasonable venue within the State, for the term specified above for the purposes of inspection, auditing and copying. e State shall take reasonable steps to protect from public disclosure y of the Records which are exempt from disclosure under Section 87 of the Public Officers Law (the "Statute") provided that: (i) the Contractor shall timely inform an appropriate State official, in writing, that said records should not be disclosed; and (ii) said records shall be sufficiently identified; and (iii) designation of said records as exempt under the Statute is reasonable. Nothing contained herein shall diminish, or in any way adversely affect, the State's right to discovery in any pending or future litigation.

11. IDENTIFYING INFORMATION AND PRIVACY NOTIFICATION. (a) FEDERAL EMPLOYER IDENTIFICATION NUMBER and/or FEDERAL SOCIAL SECURITY NUMBER. All invoices or New York State standard vouchers submitted for payment for the sale of goods or services or the lease of real or personal property to a New York State agency must include the payee's identification number, i.e., the seller's or lessor's identification number. The number is either the payee's Federal employer identification number or Federal social security number, or both such numbers when the payee has both such numbers. Failure to include this number or numbers may delay payment. Where the payee does not have such number or numbers, the payee, on its invoice or New York State standard voucher, must give the reason or reasons why the payee does not have such number or numbers.

(b) PRIVACY NOTIFICATION. (1) The authority to request the above personal information from a seller of goods or services or a lessor of real or personal property, and the authority to maintain such information, is found in Section 5 of the State Tax Law. Disclosure of this information by the seller or lessor to the State is mandatory. The principal purpose for which the information is collected is to enable the e to identify individuals, businesses and others who have been delinquent in filing tax returns or may have understated their tax liabilities and to generally identify persons affected by the taxes administered by the Commissioner of Taxation and Finance. The information will be used for tax administration purposes and for any other purpose authorized by law.
(2) The personal information is requested by the purchasing unit of the agency contracting to purchase the goods or services or lease the real or personal property covered by this contract or lease. The information is maintained in New York State's Central Accounting System by the Director of Accounting Operations, Office of the State Comptroller, 110 State Street, Albany, New York 12236.

12. EQUAL EMPLOYMENT OPPORTUNITIES FOR MINORITIES AND WOMEN. In accordance with Section 312 of the Executive Law, if this contract is: (i) a written agreement or purchase order instrument, providing for a total expenditure in excess of $25,000.00, whereby a contracting agency is committed to expend or does expend funds in return for labor, services, supplies, equipment, materials or any combination of the foregoing, to be performed for, or rendered or furnished to the contracting agency; or (ii) a written agreement in excess of $100,000.00 whereby a contracting agency is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon; or (iii) a written agreement in excess of $100,000.00 whereby the owner of a State assisted housing project is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon for such project, then:

The Contractor will not discriminate against employees or applicants for employment because of race, creed, color, national origin, sex, age, disability or marital status, and will undertake or continue existing programs of affirmative action to ensure that minority group members and women are afforded equal employment opportunities without discrimination. Affirmative action shall mean recruitment, employment, job assignment, promotion, upgradings, demotion, transfer, layoff, or termination and rates of pay or other forms of compensation;

(b) at the request of the contracting agency, the Contractor shall request each employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding, to furnish a written statement that such employment agency, labor union or representative will not discriminate on the basis of race, creed, color, national origin, sex, age, disability or marital status and that such union or representative will affirmatively cooperate in the implementation of the contractor's obligations herein; and

(c) the Contractor shall state, in all solicitations or advertisements for employees, that, in the performance of the State contract, all qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed, color, national origin, sex, age, disability or marital status.

Contractor will include the provisions of "a", "b", and "c" above, in every subcontract over $25,000.00 for the construction, demolition, replacement, major repair, renovation, planning or design of real property and improvements thereon (the "Work") except where the Work is for the beneficial use of the Contractor. Section 312 does not apply to: (i) work, goods or services unrelated to this contract; or (ii) employment outside New York State; or (iii) banking services, insurance policies or the sale of securities. The State shall consider compliance by a contractor or subcontractor with the requirements of any federal law concerning equal employment opportunity which effectuates the purpose of this section. The contracting agency shall determine whether the imposition of the requirements of the provisions hereof duplicate or conflict with any such federal law and if such duplication or conflict exists, the contracting agency shall waive the applicability of Section 312 to the extent of such duplication or conflict. Contractor will comply with all duly promulgated and lawful rules and regulations of the Governor's Office of Minority and Women's Business Development pertaining hereto.

13. CONFLICTING TERMS. In the event of a conflict between the terms of the contract (including any and all attachments thereto and amendments thereof) and the terms of this Appendix A, the terms of this Appendix A shall control.

14. GOVERNING LAW. This contract shall be governed by the laws of the State of New York except where the Federal supremacy clause requires otherwise.

15. LATE PAYMENT. Timeliness of payment and any interest to be paid to Contractor for late payment shall be governed by Article 11-A of the State Finance Law to the extent required by law.

16. NO ARBITRATION. Disputes involving this contract, including the breach or alleged breach thereof, may not be submitted to binding arbitration (except where statutorily authorized), but must, instead, be heard in a court of competent jurisdiction of the State of New York.

17. SERVICE OF PROCESS. In addition to the methods of service allowed by the State Civil Practice Law & Rules ("CPLR"), Contractor hereby consents to service of process upon it by registered or certified mail, return receipt requested. Service hereunder shall be complete upon Contractor's actual receipt of process or upon the State's receipt of the return thereof by the United States Postal Service as refused or undeliverable. Contractor must promptly notify the State, in writing, of each and every change of address to which service of process can be made. Service by the State to the last known address shall be sufficient. Contractor will have thirty (30) calendar days after service hereunder is complete in which to respond.

18. PROHIBITION ON PURCHASE OF TROPICAL HARDWOODS. The Contractor certifies and warrants that all wood products to be used under this contract award will be in accordance with, but not limited to, the specifications and provisions of State Finance Law §165. (Use of Tropical Hardwoods) which prohibits purchase and use of tropical hardwoods, unless specifically exempted, by the State or any governmental agency or political subdivision or public benefit corporation. Qualification for an exemption under this law will be the responsibility of the contractor to establish to meet with the approval of the State.

In addition, when any portion of this contract involving the use of woods, whether supply or installation, is to be performed by any subcontractor, the prime Contractor will indicate and certify in the submitted bid proposal that the subcontractor has been informed and is in compliance with specifications and provisions regarding use of tropical hardwoods as detailed in §165 State Finance Law. Any such use must meet with the approval of the State; otherwise, the bid may not be considered responsive. Under bidder certifications, proof of qualification for exemption will be the responsibility of the Contractor to meet with the approval of the State.

19. MACBRIDE FAIR EMPLOYMENT PRINCIPLES. In accordance with the MacBride Fair Employment Principles (Chapter 807 of the Laws of 1992), the Contractor hereby stipulates that the Contractor either (a) has no business operations in Northern Ireland, or (b) shall take lawful steps in good faith to conduct any business operations in Northern Ireland in accordance with the MacBride Fair Employment Principles (as described in Section 165 of the New York State Finance Law), and shall permit independent monitoring of compliance with such principles.

20. OMNIBUS PROCUREMENT ACT OF 1992. It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority and women-owned business enterprises as bidders, subcontractors and suppliers on its procurement contracts.

Information on the availability of New York State subcontractors and suppliers is available from:

NYS Department of Economic Development
Division for Small Business
30 South Pearl St -- 7th Floor
Albany, New York 12245
Telephone: 518-292-5220
Fax: 518-292-5884
http://www.empire.state.ny.us

A directory of certified minority and women-owned business enterprises is available from:

NYS Department of Economic Development
Division of Minority and Women's Business Development
30 South Pearl St -- 2nd Floor
Albany, New York 12245
Telephone: 518-292-5250
Fax: 518-292-5803
http://www.empire.state.ny.us

The Omnibus Procurement Act of 1992 requires that by signing this bid proposal or contract, as applicable, Contractors certify that whenever the total bid amount is greater than $1 million:

(a) The Contractor has made reasonable efforts to encourage the participation of New York State Business Enterprises as suppliers and subcontractors, including certified minority and women-owned business enterprises, on this project, and has retained the documentation of these efforts to be provided upon request to the State;

(b) The Contractor has complied with the Federal Equal Opportunity Act of 1972 (P.L. 92-261), as amended;

(c) The Contractor agrees to make reasonable efforts to provide notification to New York State residents of employment opportunities on this project through listing any such positions with the Job Service Division of the New York State Department of Labor, or providing such notification in such manner as is consistent with existing collective bargaining contracts or agreements. The Contractor agrees to document these efforts and to provide said documentation to the State upon request; and

(d) The Contractor acknowledges notice that the State may seek to obtain offset credits from foreign countries as a result of this contract and agrees to cooperate with the State in these efforts.

21. RECIPROCITY AND SANCTIONS PROVISIONS. Bidders are hereby notified that if their principal place of business is located in a country, nation, province, state or political subdivision that penalizes New York State vendors, and if the goods or services they offer will be substantially produced or performed outside New York State, the Omnibus Procurement Act 1994 and 2000 amendments (Chapter 684 and Chapter 383, respectively) require that they be denied contracts which they would otherwise obtain. NOTE: As of May 15, 2002, the list of discriminatory jurisdictions subject to this provision includes the states of South Carolina, Alaska, West Virginia, Wyoming, Louisiana and Hawaii. Contact NYS Department of Economic Development for a current list of jurisdictions subject to this provision.

22. PURCHASES OF APPAREL. In accordance with State Finance Law 162 (4-a), the State shall not purchase any apparel from any vendor unable or unwilling to certify that: (i) such apparel was manufactured in compliance with all applicable labor and occupational safety laws, including, but not limited to, child labor laws, wage and hours laws and workplace safety laws, and (ii) vendor will supply, with its bid (or, if not a bid situation, prior to or at the time of signing a contract with the State), if known, the names and addresses of each subcontractor and a list of all manufacturing plants to be utilized by the bidder.

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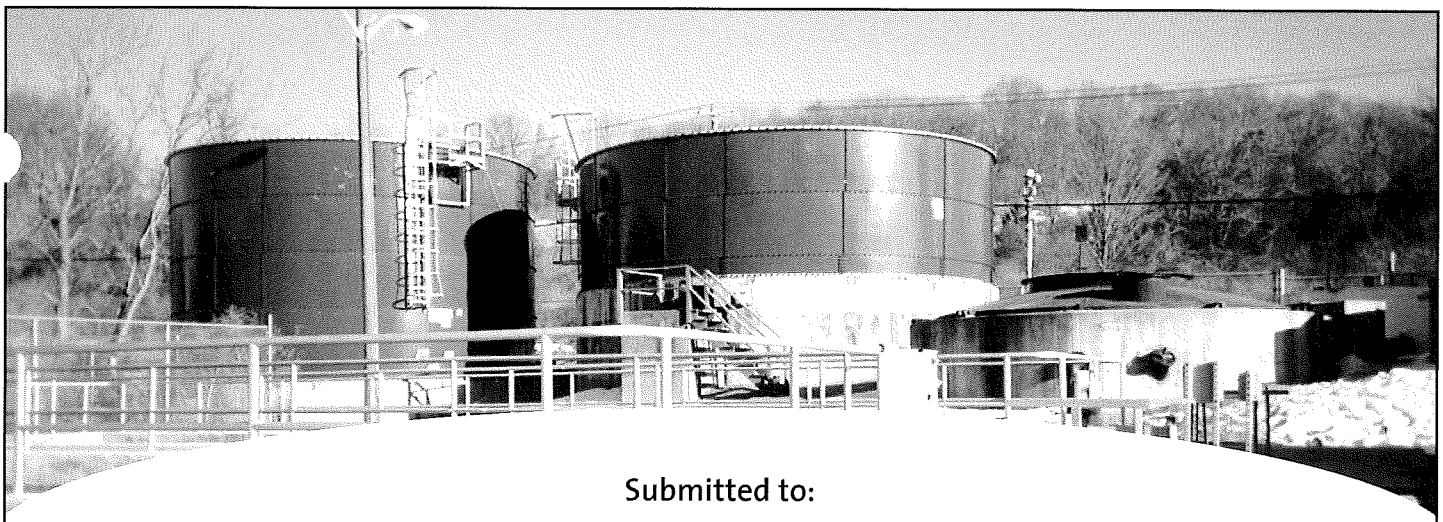

Submitted to:

Volume Two

Contract Price Proposal

Contact for Operation and Maintenance of the Bedford Hills Correctional Facility Wastewater Treatment Plant

October 21, 2008

Name of Company Submitting the Proposal:
Veolia Water North America – Northeast, LLC
Contact Person: Mr. Philip Ashcroft – President
Veolia Water North America – Northeast, LLC
1115 West Chestnut Street, Brockton, Massachusetts 02301
Telephone: 508.894.0044 - Fax: 508.894.0058
E-mail: philip.ashcroft@veoliawaterna.com

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VEOLIA WATER

VEOLIA
WATER

October 21, 2008

Mr. Larry Zwillinger
Deputy Superintendent for Administration
Bedford Hills Correctional Facility
247 Harris Road
Bedford Hills, New York 10507-2400

Subject: Volume 2 – Contract Price Proposal
Contract Operation and Maintenance of the
Bedford Hills Correctional Facility Wastewater Treatment Plant

Dear Mr. Zwillinger:

In response to your Request for Proposals (RFP), **Veolia Water North America – Northeast, LLC (Veolia Water)** is pleased to present our Contract Price Proposal for the Renewal of our contract operations, maintenance and management (O&M) services partnership with the State of New York for the wastewater treatment facilities at the Bedford Hills Correctional Facilities. This Cost Proposal is based on our separate Technical Proposal (Volume 1 and the Attachment Volume), and reflects our firm's current knowledge of the O&M requirement for your wastewater facilities.

This is a partnership that began in 1994 when the State first contracted with Envirotech Operating Services (EOS), the company that is today Veolia Water North America Operating Services, LLC (the parent company Veolia Water). Over the years, our firm has consistently delivered high-quality O&M services to meet the needs of this facility and the requirements of the State under this contract. This new Proposal allows us to renew and build on our work with you over the past 14 years, and to renew our commitment to continuing to deliver the level of high quality and cost-effective services that you have come to rely on from our firm.

Over the past three terms of this contract, Veolia Water and the New York Department of Correctional Services have created a partnership for the operation of one of the most advanced wastewater treatment facilities in the New York Watershed. Since the startup of this facility in 1994, and the modifications completed to it in 2002, our firm has provided the expertise required to effectively maintain the stringent environmental requirements for this advanced treatment facility. The value of this experience cannot be compared to that of any other proposer in this procurement.

What this all means to the State of New York as we move forward into this renewal contract, is that you will enjoy an unbroken commitment from our firm in terms of delivering O&M services, as well as in terms of providing the financial and other guarantees required under this agreement. It also ensure you that this project will continue to benefit from the rich base of resources that we bring, drawing from the national and international leader in the water and wastewater outsourcing services field.

The key commitment that Veolia Water makes as we move into this renewal contract with the State of New York is to provide continuity in staffing, service and commitment for the operations and management of the wastewater facilities at the Bedford Hills facility. Leading this will be the

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1115 West Chestnut Street, Brockton, MA 02301
TELEPHONE: 508.894.0044 – FAX: 508.894.0058
www.veoliawaterna.com

ongoing commitment of our Project Manager, **Ed Steeprock**, and the dedicated on-site O&M team that is responsible for the day-to-day operations and management of the treatment system.

Through this approach, Mr. Steeprock will continue to be your direct point of contact, and he will continue to meet with you on a regular basis to provide project updates, review and address any issues and concerns, and to maintain the regular channel of communication that has been critical to the success of our partnership in the past.

Our local O&M and management team at Bedford Hills will continue to be backed by the base of local resources that Veolia Water has in the State of New York and the New England business center as a whole.

Veolia Water has a well-established base of expertise and experience in New York State, with more than 25 years of experience and current contracts with eight municipal and industrial clients; which includes our current contract for the Bedford Hills project. Through this base of current work, our firm provides a ready pool of State-licensed and certified operators from which to draw to staff and support this project. In other parts of the Northeast, Veolia Water provides O&M and related services to clients in New England, New Jersey and surrounding areas; with a total of more than 35 municipal and industrial clients in the region. Additionally, our firm has a dedicated staff base of over 450 in the New York/Northeast area, and we employ almost 2,500 people throughout North America.

The Veolia Water companies in North America are part of Veolia Eau - Générale des Eaux S.C.A., the "Number 1" water services company in the world. This firm, which traces its history to 1853, has over $16.6 billion in revenues, generated from more than 7,000 contracts with governmental and industrial clients in some 57 countries across the globe — supplying water and wastewater services to more than 108 million people each and every day. The company also invests tens of millions of dollars annually in the research and development of new technologies, and process and management tools with "real world" applications for our customers. The Veolia Water companies globally are in turn a part of Veolia Environnement, S.A. (VE), a company that is today the only global company to offer the entire range of environmental services in the water, waste management, energy and transportation sectors. The firm realized more than $48 billion in revenues in 2007, has an employee base of nearly 300,000 in 67 countries across the globe, and is traded on the New York Stock Exchange (American Depositary Receipt Veolia Environnement, ADR, NYSE Symbol: VE).

We have prepared this Contract Price Proposal submittal to be responsive to your Request for Proposal (RFP), and it supported by our separate Technical Proposal. That volume (with Attachments) addresses all of the non-cost requirements for this submittal.

As the President of Veolia Water in the Northeast, I have executed this Proposal (and all of the required certification documents), and affirm our ongoing commitment to this project. In submitting this Proposal, Veolia Water also provides this statement of our acceptance of the Standard Clauses for all New York State Contracts.

The Veolia Water contact person during the Proposal development process will remain:

Mr. Farzin Kiani
Area Manager
Veolia Water North America – Northeast, LLC
512 Glen Road, Weston, Massachusetts 02493

Telephone: 617/699-9107 - Fax: 617/699-9107
E-mail: farzin.kiani@veoliawaterna.com

I invite you to contact Mr. Kiani or me should you have any questions with regard to this submittal or need any additional information. We very much look forward to the renewal of our partnership for this important project.

Sincerely yours,

Philip G. Ashcroft
President
Veolia Water North America – Northeast, LLC

Attachments:
- Notary Certification
- Certificate of Secretary (Signature Authority)

VEOLIA WATER

NOTARIZATION – LETTER OF TRANSMITTAL –
Volume 2 – Contract Price Proposal
Contract Operation and Maintenance of the
Bedford Hills Correctional Facility Wastewater Treatment Plant

SWORN TO AND SUBSCRIBED

BEFORE ME THIS 21st DAY OF October, 2008

Cynthia M Solomon

NOTARY PUBLIC IN AND FOR THE STATE OF Mass.

My Commission Expires 3/19/2010

VEOLIA WATER NORTH AMERICA – NORTHEAST, LLC
1115 West Chestnut Street, Brockton, MA 02301
TELEPHONE: 508.894.0044 – FAX: 508.894.0058
www.veoliawaterna.com

VEOLIA WATER NORTH AMERICA—NORTHEAST, LLC

SECRETARY'S CERTIFICATE

The undersigned, Amy E. Santiago, does hereby certify that she is Assistant Secretary of Veolia Water North America—Northeast, LLC, a limited liability company duly organized and existing under the laws of the State of Delaware (the "Company"); and that Philip Ashcroft, President, is, in such capacity, duly authorized on behalf of and in the name of the Company to negotiate and execute contracts and make related commitments with regard to the following project:

Operation and Maintenance of the
Bedford Hills Correctional Facility Wastewater Treatment Plant
Bedford Hills, New York

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of the Company this 29th day of September, 2008.

Amy E. Santiago, Assistant Secretary

SEAL

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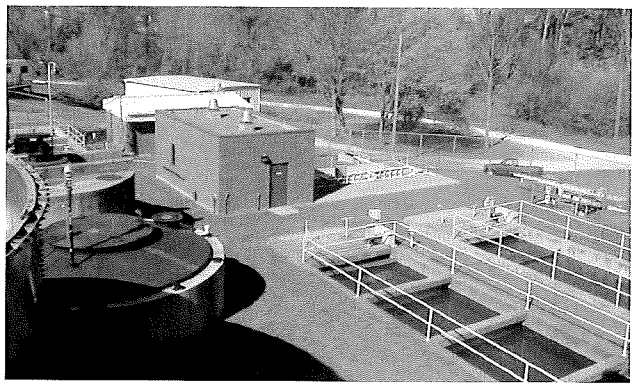
VOLUME 2 – Contract Price Proposal

Project Understanding and Commitment



As a 14-year partner to the State of New York for the operation and management of the wastewater facilities that serve the Bedford Hills Correctional Facilities, **Veolia Water North America – Northeast, LLC (Veolia Water)**, is pleased to have the opportunity to renew our commitment to this project.

Our partnership began in 1994 when the State first contracted with Envirotech Operating Services (EOS), the company that is now Veolia Water North America Operating Services, LLC (the parent company of Veolia Water). Over the years, our firm has consistently delivered high-quality operations, maintenance and management (O&M) services to meet the needs of this facility, as well as all of the requirements of the State under this contract.

The State of New York's Request for Proposal (RFP) defines the scope of services that Veolia Water now provides under the O&M services contract for the wastewater treatment facilities that serve the Bedford Hills and Taconic women's correctional facilities. This Proposal provides us with the opportunity to reaffirm our commitment to quality and responsiveness, both of which have been hallmarks of the services that we have delivered to you under multiple contract extensions and renewals.

In our separate Technical Proposal, provided as Volume One of this submittal, we provided the details with regard to our overall project plan and approach. These are based on our work experience with you, our unique understanding of the specific operations requirements for these facilities, and our firm's strong base of experience in operating wastewater facilities in the New York City watershed and the State of New York.

This solid understanding of the project, and our unmatched knowledge of your treatment systems lay the foundation for our pricing for a renewed five-year term, which is presented in this Volume.

First-Hand Knowledge of and Experience with the Treatment System at Bedford Hills

Currently the Bedford Hills treatment facility is among the largest microfiltration systems east of the Hudson River that discharge into the New York City drinking water reservoir system.

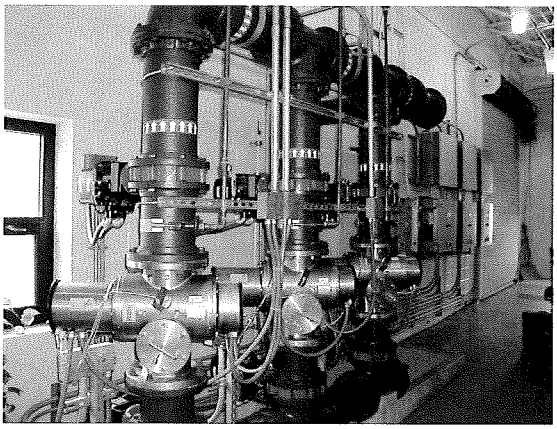
Major processes and equipment at the treatment plant include a bar screen, Parshall flume, comminutor, grit classification, equalization tanks and lift pumps, primary sedimentation, alum feed system, two trickling filters, secondary sedimentation, three gravity flow rapid sand filters and polymer feed system (optional), microfiltration, ultraviolet disinfection, chlorine and sulfur dioxide gas feed systems (backup) and a cascade post-aeration system. In addition, the sludge is stored in holding tanks prior to disposal.

Under a renewed agreement, Veolia Water will continue working with the Correctional Facility to improve the performance and cost-effectiveness of the operation of the wastewater treatment system. Some key facts to keep in mind include:

- Veolia Water has proven our ability to operate the wastewater treatment plant, to set priorities and make improvements based on those priorities, to develop ongoing compliance and good regulatory relationships.
  - ***The facility has been 100 percent compliant with effluent permit parameters and has not had one single permit excursion in the last 66 months dating to April 2003. We have been subjected to over 50 compliance inspections conducted by the Westchester County Health Department and the New York***

City Department of Environmental Protection over the past five years and have received a 100 percent satisfactory rating on all inspections.

- Veolia Water has extensive experience operating the wastewater plant during emergencies. This ability and experience makes our firm the best candidate to provide ongoing plant O&M services to the Correctional Facility. In addition to the Bedford Hills personnel who work onsite, staff from our Poughkeepsie project are cross-trained on your processes and equipment, thereby providing a ready pool of technical and emergency support to Bedford Hills. All of our Poughkeepsie staff have hands-on experience at Bedford Hills, having provided O&M coverage, maintenance assistance, groundskeeping and laboratory work. What this means is that we currently have more than 10 O&M technicians who have direct experience and are intimately familiar with the specific O&M of the Bedford Hills microfiltration facility -- not just with a similar microfiltration facility, as contemplated by other vendors.
- During the term of the renewal contract, Veolia Water will continue to maintain all operating systems in peak condition and upgrade other necessary systems to further enhance reliable and cost-effective plant operation. The past contract included a rebuild of the ultraviolet (UV) disinfection system (pictured here).
- Veolia Water also offers a unique base of knowledge and experience in the operations of your treatment systems. Since its upgrade, and for the past 14 years, we have virtually "lived" at your facilities, gaining an understanding of every facet of every component and every piece of equipment.



This base of first-hand knowledge and experience would be difficult for others to match, and has been key to the ongoing success of this partnership with you.

Proven Record of Performance in Wastewater Facilities Operations and Management

Veolia Water also has a well-established base of expertise and experience in New York State, with more than 25 years of experience and current contracts with 10 municipal and industrial clients -- including our current contract for the Bedford Hills project.

Through this base of work, our firm provides a ready pool of State-licensed and certified operators from which to draw to staff and support this project. In the Northeast, Veolia Water provides O&M and related services to clients in New England and New York, with more than 40 municipal and industrial clients in the region. Additionally, our firm has a dedicated staff base of over 500 in the New York/Northeast area, and we employ almost 3,000 people throughout North America.

Nationally, our firm serves clients in more than 650 communities across North America, and we have more than 36 years of work experience in providing O&M services to municipal/governmental clients in the U.S.

The Veolia Water companies in North America are part of Veolia Eau - Générale des Eaux S.C.A., the "Number 1" water services company in the world. This firm, which traces its history to 1853, has over $13.1 billion in revenues, generated from more than 7,000 contracts with governmental and industrial clients in some 60 countries across the globe — supplying water and wastewater services to more than 108 million people each and every day. The company also invests tens of millions of dollars annually in the research and development of new technologies, and process and management tools with "real world" applications for our customers. The Veolia Water companies globally are in turn a part of Veolia Environnement, S.A. (VE), a company that is today the only global company to offer the entire range of environmental services in the water, waste management, energy and transportation sectors. The firm realized more than $48 billion in revenues in 2007,

has an employee base of nearly 320,000 in 68 countries across the globe, and is traded on the New York Stock Exchange (American Depositary Receipt Veolia Environnement, ADR, NYSE Symbol: VE).

Continuing to Provide the Best Choice - Continuity in Service and Commitment

This new Proposal allows Veolia Water the opportunity to renew and build on our work with you over the past 14 years, and to renew our commitment to continuing to deliver the level of high quality and cost-effective services that you rely on from our firm.

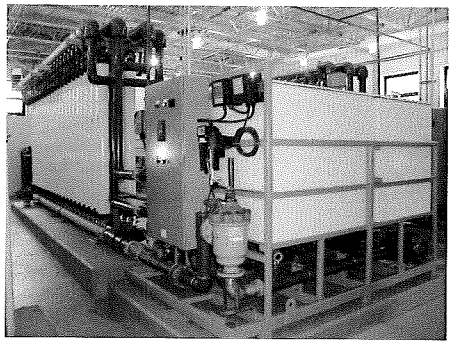
Over the past three terms of this contract, Veolia Water and the New York Department of Correctional Services have created a partnership for the operation of one of the most advanced wastewater treatment facilities in the New York Watershed.

Since the startup of this facility in 1994, and the modifications completed to it in 2002, our firm has provided the expertise required to effectively maintain the stringent environmental requirements for this advanced treatment facility. The value of this experience cannot be compared to that of any other proposer in this procurement.

What this all means to the State of New York as we move forward into this renewal contract is that you will enjoy an unbroken commitment from our firm in terms of delivering O&M services, as well as in terms of providing the financial and other guarantees required under this agreement. It also ensures you that this project will continue to benefit from the rich base of resources that we bring, drawing from the national and international leader in the water and wastewater outsourcing services field.

The key commitment that Veolia Water makes as we move into this renewal contract with the State of New York is to provide continuity in staffing, service and commitment for the operations and management of the wastewater facilities at the Bedford Hills facility. Leading this will be the ongoing commitment of our Project Manager, **Ed Steeprock**, and the dedicated on-site O&M team that is responsible for the day-to-day operations and management of the treatment system.

As discussed, this contract began in 1994 when Veolia Water assumed responsibility for O&M of facilities treating wastes from the Bedford Hills and Taconic correctional facilities. This contract was renewed in 2001 and again in 2004, maintaining a partnership that has proven to be a success.



In addition to maintaining reliable O&M services and compliance for the wastewater facility, Veolia Water has also made a number of significant improvements to the plant and the wastewater process. For example, we integrated the operation of the chemical feed pumps with operation of the influent equalization pumps. This solved a long-standing problem of chemical overdosing that often jeopardized compliance during periods when the equalization pumps were not operating (primarily in the evening). We also modified the process to allow for the recirculation of flow through the plant during the night. This greatly improved the stability of the biological population, the distribution of solids throughout the facility and the consistency of daily operations toward maintaining compliance.

At the start of the O&M partnership with Veolia Water back in 1994, the wastewater facility was out of permit compliance and was operating under a Consent Decree, and the previous facility upgrades had had little effect on effluent quality. Veolia Water "hit the ground running," assessing the facility's specific needs and implementing a detailed plan to reduce sludge inventory, implement a safety program, maintain essential equipment, and to implement housekeeping projects and a process control strategy. These efforts brought the wastewater facilities into compliance. Under this contract, our firm has also implemented a

computerized process control and maintenance system, a spare parts inventory program, and an ongoing operator training program for both safety and plant operations.

This is the type of commitment and record of performance that we have brought to you over the past three contract terms and is one that we will maintain as we move into the renewal contract — providing you with continuity in staffing, management, services and commitment.

This volume, Volume Two of our Proposal, provides our detailed Contract Price Proposal for the ongoing delivery of O&M services to the State of New York for the Bedford Hills project site. It is based on the plan and approach defined in our technical, management and implementation approach for this project, as discussed in detail in Volume One of this Proposal.

Contract Price

VI.5 – D – Contract Price/Cost

Veolia Water understands that this project for the Bedford Hills Correctional Facility involves providing complete O&M services for the wastewater treatment plant.

This Contract Price Proposal is based on our understanding of your facility, as well as our experience in operating the wastewater treatment plant over the past 14 years.

Veolia Water has prepared our Contract Price Proposal in the form and format prescribed in the RFP. The proposed Contract Price (Cost) breakdown is presented at the end of this section.

Proposal Forms

Veolia Water has completed and executed all of the required Proposal Forms and Certifications (the Acknowledgement Forms) for this Proposal submittal. These forms include:

- Offeror Certification Form
- New York State Standard Vendor Responsibility Questionnaire (Attachment B)
- Contractor Certification to Covered Agency (Form ST-220-CA)
- Non-collusive Bidding Certification Required by Section 139-D of the State Finance Law
- Nondiscrimination in Employment in Northern Ireland: MacBride Fair Employment Principles
- Model Language to Obtain Offeror's Affirmation of Understanding of and Agreement Pursuant to State Finance Law – 139-j(3) and 139-j(6)(b)
- Offeror Disclosure of Prior Non-responsibility Determinations
- Model Language to Obtain Offeror Certification of Compliance with State Finance Law – 139-k(5)
- Model Language to Obtain Contract Compliance with State Finance Law - 139-j & 139-k

The executed and certified forms are included in Appendix E of Volume One, our separate Technical Proposal response.

Price Detail

Veolia Water's approach in developing the price for this contract is to save the Correctional Facility money while providing value – the best value for the money.

To that end, we are proposing to hold our current service fee through April 2010. What this means to the Correctional Facility is approximately $10,000 in annual savings.

Veolia Water understands that this Proposal will be evaluated by comparing the Monthly Service Charge for the operation and maintenance and other responsibilities outlined in the RFP and the contract.

Our proposed Monthly Service Charge, as shown in Table V2-1 (below), is stated as a number that is "level" over the course of the 60-month commitment. The cost shown will be subject to an annual escalation (using the approach discussed in RFP Exhibit E, the Administrative Terms in Item 16, Price Adjustment).

Table V2-1. Veolia Water Contract Price* *(Cost for 60-Month Commitment)*	
Cost Element	Proposed Cost
Monthly Cost (Year One)	
Monthly Amount	$27,287 (1 Month)
Annual Level Cost (12 Months)	
Year One (Annual Amount)	$327,444 (12 Months)
Contract Amount (60 Months) - Proposed Five-Year Level Budget	
Total Contract Amount	$1,637,220 (60 Months)

* Notes:

- The annual contract price, in Years 2 through 5, will be subject to annual escalation (price adjustment) following the formula/approach described in the RFP (Exhibit E, Item 16).
- Repair and maintenance (R&M) costs are not included in the service fee, as per the instructions provided with the Acknowledgement Form.

Budget/Budget Narrative

Veolia Water has provided a fixed fee for those items that we can control, based on our established O&M plan. Our O&M plan employs efficient labor utilization, process optimization, and preventive and predictive maintenance to enhance reliability and reduce costs.

Veolia Water has provided an explanation of the elements that are the basis for our price, and this supporting detail is as follows:

- Personnel (Personal) Services - This price includes, but is not limited to, administrative staff, line staff, benefits for staff, and other personnel services costs directly attributable to employees.
- Non-Personnel (Non-personal) Services - This price includes, but is not limited to:
  - Supplies and Materials - This price includes, but is not limited to: office supplies, duplicating and photo supplies, postage, chemicals, clothing and uniforms and other materials and supplies.
  - Travel - This price includes, but is not limited to: employee travel time to State training sessions and conferences.
  - Solid Waste and Biosolids Management - This price includes solid waste removal and disposal.
  - Equipment/Laboratory - This price includes, but is not limited to: office equipment, laboratory equipment, safety equipment, tools, communication equipment, maintenance equipment, vehicles, mechanical equipment and manually operated equipment.

- **Outside Services** - This price includes, but is not limited to: equipment rentals, temporary and/or part-time help, legal fees, registrations, telephone, courier service, dues, subscriptions, postage and freight charges, advertising, printing and binding, insurance and other professional services.
- **Maintenance & Repairs** - This price includes the total of all maintenance and repair expenditures including, but not limited to: repair parts, maintenance equipment, maintenance supplies, outside maintenance services, oil and grease, packing and maintenance equipment rental. Contractor on-site labor is not included.
- **Utilities** – This price includes the price for propane and fuel oil.
- **Overhead Cost** – This price includes the company-wide overhead.

Based on the elements identified above that are required to provide the Bedford Hills Correctional Facility with safe and environmentally compliant services to its citizens, Table V2-2, below offers our estimate first-year O&M cost under the new contract term.

Table V2-2. Veolia Water - Project Budget - Year One Costs[1]
(Cost for Personnel and Non-Personnel Items)

Cost Element	Proposed Cost
Personnel (Personal) Services	
Administrative Staff	$99,476
Line Staff	(2)
Fringe Benefits	$36,371
Other Personnel Services Costs	(2)
Total for Personnel Services Costs	**$135,847**
Non-Personnel Service Costs	
Supplies and Materials	$28,610
Travel	$6,131
Equipment/Laboratory	$15,378
Utilities	$6,530
Outside Services	$43,492
Overhead Costs	$17,698
Sludge	$73,759
Repair & Maintenance	(3)
Total Non-Personnel Costs	$191,597
Total Costs	**$327,444**

Notes:

(1) Note that the costs shown on this table are subject to an annual service fee adjustment based upon a mutually agreed to indices.

(2) Costs are included with those for Administrative Staff.

(3) R&M is not included, as per the instruction provided with the Acknowledgment Form.

Clarifications and Pricing Assumptions

Veolia Water Contract Price Proposal, as presented in this volume, is based on the following assumptions:

- We assume that the term "Project Definition" in the RFP package means the contract agreement (the Contract as provided in section VII of the Request for Proposal), including Exhibits A through N. Similarly, we assume that the term "specification" means those references to specifications referenced in the Contract and Exhibits A through N.
- In our letter of November 16, 2007, we indicated our willingness to assume reasonable liability for any negligent actions on our part. The liability protection that Veolia Water can offer the State on this project is significantly higher, and surer, than any competitor on this project can provide. We expect to negotiate a mutually satisfactory limit on the liability to be assumed on the project.
- Our Annual Fee has assumed a flow of 0.315-MGD and influent characteristics of 325 lbs/day of BOD5, 310 lbs/day of TSS, and 6.7 lbs/day of phosphorus. This is the average of the past 12 months of actual operating data at the Bedford Hills Correctional Facility wastewater treatment plant.

Veolia Water has provided this Contract Price Proposal in the form and format requested, and it is presented complete in this volume.

Formula for Compensation Adjustment

As discussed in the pricing/cost tables provided with this Contract Price Proposal submittal, the prices for years two through five of the renewal contract will be subject to an annual escalation to cover costs increases.

These price adjustments will be made in line with the requirements defined in Exhibit E, Administrative Terms. These will meet the requirements specified under Item 6 (Compensation Adjustment) and use the approach specified under Item 16 (Price Adjustment).

Such price adjustments will be calculated three months prior to the end of each calendar year and will be applicable on the Anniversary Date of the contract. All applicable documentation required by the State with regard to the proposed price adjustments will be provided.

For Budgetary purpose, Veolia Water has submitted a fixed contract price for the O&M of the Bedford Hills Correctional Facility Wastewater Treatment Plant.

Section VII – The Contract

Veolia Water has reviewed the proposed Agreement provided by the State for this project, and if our firm is selected by the Department of Corrections for this renewal contract, we will effectively renew the various contracts that our firm has entered into with you over the past 14 years in connection with the operation of the wastewater treatment facility. The terms and conditions contained in the procurement are very similar to the terms and conditions contained in these prior contracts. We, therefore, do not anticipate that there will be any significant delays in negotiating a mutually acceptable contract that conforms to the foregoing proposal and the contractual concepts under which Veolia Water normally conducts operations, maintenance and management of water and wastewater facilities. Additionally, as noted on the pricing/cost tables in this section, the annual contract price in Years 2 through 5, will be subject to annual escalation (price adjustment) following the formula/approach described in the RFP (Exhibit E, Item 16).

Certification of Contractor Responsibilities

Veolia Water certifies, through the submission of this Proposal, that the information required to be disclosed pursuant to Chapter 1 of the Laws of 2005 is true, accurate and complete. This certification meets the requirements of the language provided at the Contract signature line in Section VII of the RFP.

APPENDIX C

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Region 3 Main Office
21 South Putt Corners Road, New Paltz, NY 12561-1620
P: (845) 256-3033 | F: (845) 255-3042
www.dec.ny.gov

YOUR PERMIT IS ENCLOSED

IMPORTANT NOTICE TO ALL PERMITTEES

The Department-Initiated Modification permit is enclosed. Please read it carefully and note the conditions that are included in it. Revisions have been made to the effluent limit notes and the compliance schedule and a narrative provided in response to your comments on the draft. Also enclosed is an updated Statement of Basis.

Please note the expiration date of the permit. Applications for permit renewal should be made well in advance of the expiration date (minimum of 30 days) and submitted to the Regional Permit Administrator. For SPDES, Solid Waste, and Hazardous Waste Permits, renewals must be made at least 180 days prior to the expiration date.

The DEC permit number & program ID number noted on page 1 of the permit are important and should be retained for your records. These numbers should be referenced on all correspondence related to the permit, and on any future applications for permits associated with this facility'/project area. If a permit notice sign is enclosed, you must post it at the work site with appropriate weather protection, as well as keep a copy of the permit at the facility/work site.

If you have any questions on the extent of work authorized or your obligations under the permit, please contact the staff person indicated below or the Division of Environmental Permits at the above address.

Rebecca S. Crist
Division of Environmental Permits
Telephone (845) 256-3014

Enclosure: SPDES Permit # NY0101885
Response to Comments
SPDES Permit Statement of Basis dated 12/28/15

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

Industrial Code:	**8999**	SPDES Number:	**NY0101885**
Discharge Class (CL):	**09**	DEC Number:	**3-5520-00007/00004**
Toxic Class (TX):	**N**	Effective Date (EDP):	**11/01/12**
Major Drainage Basin:	**13**	Expiration Date (ExDP):	**10/31/17**
Sub Drainage Basin:	**02**	Modification Dates: (EDPM)	**02/04/16**
Water Index Number:	**H-31-P44-36-2**		
Compact Area:	**NYC Watershed**		

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act, as amended, (33 U.S.C. §1251 et.seq.)(hereinafter referred to as "the Act").

PERMITTEE NAME AND ADDRESS					
Name:	**NYS Department of Corrections and Community Supervision**	Attention:	**Josh Krom, Superintendent**		
Street:	**247 Harris Road**				
City:	**Bedford Hills**	State:	**NY**	Zip Code:	**10507**

is authorized to discharge from the facility described below:

FACILITY NAME AND ADDRESS													
Name:	**Bedford Hills Correctional Facility WWTP**												
Location (C,T,V):	**(T) Bedford**									County:	**Westchester**		
Facility Address:	**247 Harris Road**												
City:	**Bedford Hills**				State:				**NY**	Zip Code:	**10507**		
From Outfall No.:	**001**	at Latitude:	**41**	**°**	**14**	**'**	**36**	**"**	& Longitude:	**73**	**°**	**40**	**' 39 "**
into receiving waters known as:	**Broad Brook**									Class:	**C(TS)**		

in accordance with: effluent limitations; monitoring and reporting requirements; other provisions and conditions set forth in this permit; and 6 NYCRR Part 750-1and 750-2.

DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS					
Mailing Name:	**NYS Department of Corrections**				
Street:	**247 Harris Road**				
City:	**Bedford Hills**	State:	**NY**	Zip Code:	**10507**
Responsible Official or Agent:	**Josh Krom, Superintendent**		Phone:	**(914) 241-3100**	

This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and the permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for permit renewal not less than 180 days prior to the expiration date shown above.

E-DISTRIBUTION:

EPA Region II
NYC Department of Environmental Protection
Westchester County Dept of Health
Town of Bedford
NYSDEC Bureau of Water Permits
Armand DeAngelis, NYSDEC Division of Water
Aparna Roy, NYSDEC Division of Water

Deputy Permit Administrator: Rebecca S. Crist	
Address: 21 South Putt Corners Road New Paltz, NY 12561	
Signature:	Date: 2-4-2016

PERMIT LIMITS, LEVELS AND MONITORING DEFINITIONS

OUTFALL	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
	This cell describes the type of wastewater authorized for discharge. Examples include process or sanitary wastewater, storm water, non-contact cooling water.	This cell lists classified waters of the state to which the listed outfall discharges.	The date this page starts in effect. (e.g. EDP or EDPM)	The date this page is no longer in effect. (e.g. ExDP)

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQ.	SAMPLE TYPE
e.g. pH, TRC, Temperature, D.O.	The minimum level that must be maintained at all instants in time.	The maximum level that may not be exceeded at any instant in time.	SU, °F, mg/l, etc.	See below	See below

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL	COMPLIANCE LEVEL / ML	ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE
	Limit types are defined below in Note 1. The effluent limit is developed based on the more stringent of technology-based limits, required under the Clean Water Act, or New York State water quality standards. The limit has been derived based on existing assumptions and rules. These assumptions include receiving water hardness, pH and temperature; rates of this and other discharges to the receiving stream; etc. If assumptions or rules change the limit may, after due process and modification of this permit, change.	For the purposes of compliance assessment, the permittee shall use the approved EPA analytical method with the lowest possible detection limit as promulgated under 40CFR Part 136 for the determination of the concentrations of parameters present in the sample unless otherwise specified. If a sample result is below the detection limit of the most sensitive method, compliance with the permit limit for that parameter was achieved. Monitoring results that are lower than this level must be reported, but shall not be used to determine compliance with the calculated limit. This Minimum Level (ML) can be neither lowered nor raised without a modification of this permit.	Action Levels are monitoring requirements, as defined below in Note 2, which trigger additional monitoring and permit review when exceeded.	This can include units of flow, pH, mass, temperature, or concentration. Examples include µg/l, lbs/d, etc.	Examples include Daily, 3/week, weekly, 2/month, monthly, quarterly, 2/yr and yearly. All monitoring periods (quarterly, semiannual, annual, etc) are based upon the calendar year unless otherwise specified in this Permit.	Examples include grab, 24 hour composite and 3 grab samples collected over a 6 hour period.

Notes:

1. EFFLUENT LIMIT TYPES:
   a. DAILY DISCHARGE: The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for the purposes of sampling. For pollutants expressed in units of mass, the 'daily discharge' is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the 'daily discharge' is calculated as the average measurement of the pollutant over the day.
   b. DAILY MAX: The highest allowable daily discharge. DAILY MIN: The lowest allowable daily discharge.
   c. MONTHLY AVG: The highest allowable average of daily discharges over a calendar month, calculated as the sum of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
   d. 7 DAY ARITHMETIC MEAN (7 day average): The highest allowable average of daily discharges over a calendar week.
   e. 30 DAY GEOMETRIC MEAN: The highest allowable geometric mean of daily discharges over a calendar month, calculated as the antilog of the sum of the log of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
   f. 7 DAY GEOMETRIC MEAN: The highest allowable geometric mean of daily discharges over a calendar week.
   g. RANGE: The minimum and maximum instantaneous measurements for the reporting period must remain between the two values shown.

2. ACTION LEVELS: Routine Action Level monitoring results, if not provided for on the Discharge Monitoring Report (DMR) form, shall be appended to the DMR for the period during which the sampling was conducted. If the additional monitoring requirement is triggered as noted below, the permittee shall undertake a short-term, high-intensity monitoring program for the parameter(s). Samples identical to those required for routine monitoring purposes shall be taken on each of at least three consecutive operating and discharging days and analyzed. Results shall be expressed in terms of both concentration and mass, and shall be submitted no later than the end of the third month following the month when the additional monitoring requirement was triggered. Results may be appended to the DMR or transmitted under separate cover to the same address. If levels higher than the Action Levels are confirmed, the permit may be reopened by the Department for consideration of revised Action Levels or effluent limits. The permittee is not authorized to discharge any of the listed parameters at levels which may cause or contribute to a violation of water quality standards.

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL	LIMITATIONS APPLY:	RECEIVING WATER	EFFECTIVE	EXPIRING
001	All year unless otherwise noted.	Broad Brook	02/04/16	10/31/17

PARAMETER	EFFLUENT LIMIT					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Flow	Monthly Average			0.5	mgd	Continuous	Recorder		X	
$CBOD_5$	Monthly Average	15	mg/l	63	lbs/d	2/month	6-hr. Comp.		X	
Solids, Suspended	Monthly Average	10	mg/l	42	lbs/d	2/month	6-hr. Comp.		X	
Solids, Settleable	Daily Maximum	0.1	ml/l			1/day	Grab		X	
pH	Range	6.5 – 8.5	SU			1/day	Grab		X	
Nitrogen, Ammonia (as NH_3) (June 1 – October 31)	Daily Maximum	1.7	mg/l			2/month	6-hr. Comp.		X	(1)
Nitrogen, Ammonia (as NH_3) (November 1 – May 31)	Daily Maximum	3.4	mg/l			2/month	6-hr. Comp.		X	(1)
Phosphorus (as P)	Monthly Average	0.2	mg/l			2/month	6-hr. Comp.		X	
Dissolved Oxygen	Daily Minimum	4.0	mg/l			2/month	Grab		X	
Effluent Disinfection required		[X] All Year		[ ] Seasonal from _____ to _____						
Coliform, Fecal	30-Day Geometric Mean	200	No./100 ml			2/month	Grab		X	
Coliform, Fecal	7 Day Geometric Mean	400	No./100 ml			2/month	Grab		X	
Coliform, Total	Daily Maximum	750	No./100 ml			2/month	Grab		X	
Chlorine, Total Residual	Daily Maximum	0.1	mg/l			1/day	Grab		X	(2,3)
Giardia Lamblia, Cysts		See (3)	NA			NA	NA		X	(4)
Enteric Viruses		See (3)	NA			NA	NA		X	(4)
Turbidity		See (4)	NTU			Continuous	Recorder		X	(5)

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		COMPLIANCE LEVEL/ ML	ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg	Daily Max						
Temperature				70	°F	1/day	Grab	(6)

FOOTNOTES:

(1) Limits for Nitrogen, Ammonia shall be "monitor only" during the interim period until the final limits become effective. Final Nitrogen, Ammonia limits will become effective no later than EDPM + 36 months in accordance with the Schedule of Compliance located on page 9 of 12 of this permit.

(2) Monitoring is only required if chlorine is used for disinfection.

(3) Total Residual Chlorine - When chlorine is used for disinfection, a minimum residual of 0.2 mg/l shall be maintained in the chlorine contact tank prior to dechlorination.

(4) Giardia Lamblia Cysts and Enteric Viruses - The facility must be capable of achieving a 99.9% removal and/or inactivation of giardia lamblia cysts and enteric viruses. The capability shall be demonstrated by maintaining the turbidity and chlorine levels specified and operating the microfiltration unit and the disinfection system on a continuous basis, in accordance with the provisions set forth in the WWTP's Operation and Maintenance Manual.

(5) Turbidity - The turbidity levels shall be maintained at less than or equal to 0.5 nephelometric turbidity units (NTU) in 95% of the measurements taken each month and an instantaneous maximum of 5.0 NTU shall not be exceeded.

(6) Temperature Action Level
Sampling Requirements – If the discharge temperature exceeds the Action Level of 70 degrees Fahrenheit the permittee shall, within one week, undertake the following one day monitoring program:

Monitoring Program – Temperature shall be measured at the following three locations, on the same day once in the morning and once in the afternoon:

1. effluent as close as practical to the outfall without influence from the receiving water,
2. receiving water downstream, about 200 feet downstream of the outfall,
3. receiving water 0 to 10 feet upstream of the outfall

The receiving water sampling locations shall be documented by the permittee and used for all subsequent monitoring, depicted on the Monitoring Locations page, locations 2 and 3 above, shall be used for monitoring unless a different location is approved by the Department. Temperature monitoring (i.e., collection and analysis of one round of influent, effluent, upstream, and downstream samples) shall be completed within one hour.

The permittee is exempt from this temperature monitoring program whenever conditions at or near the in-stream monitoring locations are unsafe due to weather.

Reporting - Results shall be appended to the corresponding Discharge Monitoring Report (DMR) and emailed in spreadsheet format to spdes.temperaturedata@dec.ny.gov.

DISCHARGE NOTIFICATION REQUIREMENTS

(a) Except as provided in (c) and (g) of these Discharge Notification Act requirements, the permittee shall install and maintain identification signs at all outfalls to surface waters listed in this permit. Such signs shall be installed before initiation of any discharge.

(b) Subsequent modifications to or renewal of this permit does not reset or revise the deadline set forth in (a) above, unless a new deadline is set explicitly by such permit modification or renewal.

(c) The Discharge Notification Requirements described herein do not apply to outfalls from which the discharge is composed exclusively of storm water, or discharges to ground water.

(d) The sign(s) shall be conspicuous, legible and in as close proximity to the point of discharge as is reasonably possible while ensuring the maximum visibility from the surface water and shore. The signs shall be installed in such a manner to pose minimal hazard to navigation, bathing or other water related activities. If the public has access to the water from the land in the vicinity of the outfall, an identical sign shall be posted to be visible from the direction approaching the surface water.

The signs shall have **minimum** dimensions of eighteen inches by twenty four inches (18" x 24") and shall have white letters on a green background and contain the following information:

N.Y.S. PERMITTED DISCHARGE POINT

SPDES PERMIT No.: NY_____

OUTFALL No. :____

For information about this permitted discharge contact:

Permittee Name: _____

Permittee Contact: _____

Permittee Phone: ( ) - ### - ####

OR:

NYSDEC Division of Water Regional Office Address :

NYSDEC Division of Water Regional Phone: ( ) - ### -####

(e) For each discharge required to have a sign in accordance with a), the permittee shall, concurrent with the installation of the sign, provide a repository of copies of the Discharge Monitoring Reports (DMRs), as required by the **RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS** page of this permit. This repository shall be open to the public, at a minimum, during normal daytime business hours. The repository may be at the business office repository of the permittee or at an off-premises location of its choice (such location shall be the village, town, city or county clerk's office, the local library or other location as approved by the Department). In accordance with the **RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS** page of your permit, each DMR shall be maintained on record for a period of five years

(f) The permittee shall periodically inspect the outfall identification sign(s) in order to ensure they are maintained, are still visible, and contain information that is current and factually correct. Signs that are damaged or incorrect shall be replaced within 3 months of inspection.

DISCHARGE NOTIFICATION REQUIREMENTS (continued)

(g) All requirements of the Discharge Notification Act, including public repository requirements, are waived for any outfall meeting any of the following circumstances, provided Department notification is made in accordance with (h) below:

(i) such sign would be inconsistent with any other state or federal statute;

(ii) the Discharge Notification Requirements contained herein would require that such sign could only be located in an area that is damaged by ice or flooding due to a one-year storm or storms of less severity;

(iii) instances in which the outfall to the receiving water is located on private or government property which is restricted to the public through fencing, patrolling, or other control mechanisms. Property which is posted only, without additional control mechanisms, does not qualify for this provision;

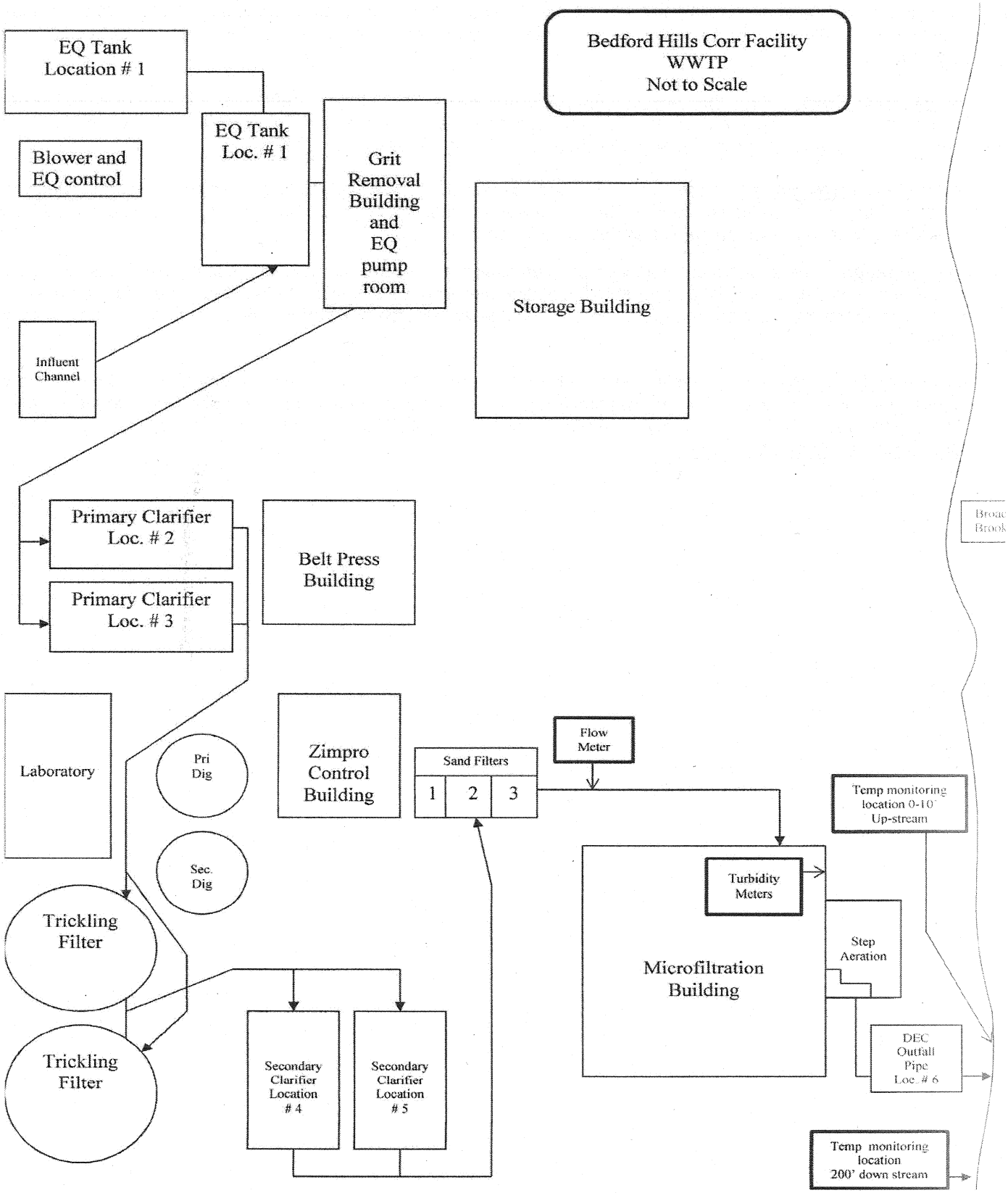
(iv) instances where the outfall pipe or channel discharges to another outfall pipe or channel, before discharge to a receiving water; or

(v) instances in which the discharge from the outfall is located in the receiving water, two-hundred or more feet from the shoreline of the receiving water.

(h) If the permittee believes that any outfall which discharges wastewater from the permitted facility meets any of the waiver criteria listed in (g) above, notification (form enclosed) must be made to the Department's Bureau of Water Permits, 625 Broadway, Albany, N.Y. 12233-3505, of such fact, and, provided there is no objection by the Department, a sign and DMR repository for the involved outfall(s) are not required. This notification must include the facility's name, address, telephone number, contact, permit number, outfall number(s), and reason why such outfall(s) is waived from the requirements of discharge notification. The Department may evaluate the applicability of a waiver at any time, and take appropriate measures to assure that the ECL and associated regulations are complied with.

MONITORING LOCATIONS

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the locations(s) specified below:



Effluent Sample Point (001) – at the outfall pipe located at the "DEC Permitted Discharge" sign at Broad Brook (location #6).

TEMPERATURE MANAGEMENT FOR POTW[1] DISCHARGES TO TROUT WATERS

The permittee is required to develop, maintain, and implement a temperature management plan. The purpose of this plan is to minimize the thermal impacts to the receiving water. The goal of the temperature management plan will be to reduce effluent temperature below the 70 degrees Fahrenheit Action Level. The permittee shall submit a plan which incorporates the following items:

1. **Thermal Track Down** – Permittee must conduct a thermal assessment of the current collection and treatment system. This is to include influent and effluent temperature monitoring data from the treatment system and each unit within the system. Any process or input source that adds heat to the system must be identified.

2. **Passive Cooling Measures** – Permittee shall assess passive cooling measures (e.g. shading of tankage) which may be implemented to reduce effluent temperature to the maximum extent practical. Such measures can be operational or physical modifications which the permittee believes will prove effective.

3. **Implementation** – The temperature management plan shall contain action items to address the assessments noted in 1 and 2 above as well as a schedule for implementation and shall be submitted to the Department for approval. The temperature management plan and schedule will become an enforceable part of the permit upon approval by the Department.

4. **Compliance Deadlines** – The permittee shall submit the temperature management plan by EDPM +6 months to the Regional office listed on the Recording, Reporting and Additional Monitoring page of this permit and to the Bureau of Water Permits, 625 Broadway, Albany, NY 12233-3505, and in electronic format to spdes.temperaturedata@dec.ny.gov.

[1] PUBLICALLY-OWNED TREATMENT WORKS

SCHEDULE OF COMPLIANCE

a) The permittee shall comply with the following schedule:

Outfall(s)	Parameter(s) Affected	Interim Effluent Limit(s)	Compliance Action	Due Date
001	Nitrogen, Ammonia (As NH3)	Monitor only	Enter into an Operations and Maintenance Agreement with the New York City Department of Environmental Protection and provide documentation to the Regional office listed on the Recording, Reporting and Additional Monitoring page of this permit.	EDPM + 12 months
			The Permittee shall submit an approvable Engineering Report, Plans and Specifications which identify the facilities necessary to achieve compliance with the water quality based effluent limitation of 1.7 mg/l from June 1 to October 31 and 3.4 mg/l from November 1 to May 31 for Nitrogen, Ammonia (As NH3).	EDPM + 12 months.
			The Permittee shall complete construction in accordance with the approved Engineering Report, Plans and Specifications	DEC approval of Plans + 12 months
			The Permittee shall meet the final SPDES effluent limits for Nitrogen, Ammonia	At construction completion + 6 months but no later than EDPM + 36 months

The above compliance actions are one time requirements. The permittee shall comply with the above compliance actions to the Department's satisfaction once. When this permit is administratively renewed by NYSDEC letter entitled "SPDES NOTICE/RENEWAL APPLICATION/PERMIT," the permittee is not required to repeat the submission(s) noted above. The above due dates are independent from the effective date of the permit stated in the "SPDES NOTICE/RENEWAL APPLICATION/PERMIT" letter.

b) For any action where the compliance date is greater than 9 months past the previous compliance due date, the permittee shall submit interim progress reports to the Department every nine (9) months until the due date for these compliance items are met.

c) The permittee shall submit a written notice of compliance or non-compliance with each of the above schedule dates no later than 14 days following each elapsed date, unless conditions require more immediate notice as prescribed in 6 NYCRR Part 750-1.2(a) and 750-2. All such compliance or non-compliance notification shall be sent to the locations listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS. Each notice of non-compliance shall include the following information:

1. A short description of the non-compliance;
2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirements without further delay and to limit environmental impact associated with the non-compliance;
3. A description or any factors which tend to explain or mitigate the non-compliance; and
4. An estimate of the date the permittee will comply with the elapsed schedule requirement and an assessment of the probability that the permittee will meet the next scheduled requirement on time.

d) The permittee shall submit copies of any document required by the above schedule of compliance to the NYSDEC Regional Water Engineer at the location listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS and to the Bureau of Water Permits, 625 Broadway, Albany, N.Y. 12233-3505, unless otherwise specified in this permit or in writing by the Department.

GENERAL REQUIREMENTS

A. The regulations in 6 NYCRR Part 750 are hereby incorporated by reference and the conditions are enforceable requirements under this permit. The permittee shall comply with all requirements set forth in this permit and with all the applicable requirements of 6 NYCRR Part 750 incorporated into this permit by reference, including but not limited to the regulations in paragraphs B through I as follows:.

B. General Conditions

1. Duty to comply	6NYCRR Part 750-2.1(e) & 2.4
2. Duty to reapply	6NYCRR Part 750-1.16(a)
3. Need to halt or reduce activity not a defense	6NYCRR Part 750-2.1(g)
4. Duty to mitigate	6NYCRR Part 750-2.7(f)
5. Permit actions	6NYCRR Part 750-1.1(c), 1.18, 1.20 & 2.1(h)
6. Property rights	6NYCRR Part 750-2.2(b)
7. Duty to provide information	6NYCRR Part 750-2.1(i)
8. Inspection and entry	6NYCRR Part 750-2.1(a) & 2.3

C. Operation and Maintenance

1. Proper Operation & Maintenance	6NYCRR Part 750-2.8
2. Bypass	6NYCRR Part 750-1.2(a)(17), 2.8(b) & 2.7
3. Upset	6NYCRR Part 750-1.2(a)(94) & 2.8(c)

D. Monitoring and Records

1. Monitoring and records	6NYCRR Part 750-2.5(a)(2), 2.5(c)(1), 2.5(c)(2), 2.5(d) & 2.5(a)(6)
2. Signatory requirements	6NYCRR Part 750-1.8 & 2.5(b)

E. Reporting Requirements

1. Reporting requirements	6NYCRR Part 750-2.5, 2.6, 2.7 & 1.17
2. Anticipated noncompliance	6NYCRR Part 750-2.7(a)
3. Transfers	6NYCRR Part 750-1.17
4. Monitoring reports	6NYCRR Part 750-2.5(e)
5. Compliance schedules	6NYCRR Part 750-1.14(d)
6. 24-hour reporting	6NYCRR Part 750-2.7(c) & (d)
7. Other noncompliance	6NYCRR Part 750-2.7(e)
8. Other information	6NYCRR Part 750-2.1(f)
9. Additional conditions applicable to a POTW	6NYCRR Part 750-2.9
10. Special reporting requirements for discharges that are not POTWs	6NYCRR Part 750-2.6

F. Planned Changes

1. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

   a. The alteration or addition to the permitted facility may meet of the criteria for determining whether facility is a new source in 40 CFR §122.29(b); or
   b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, or to notification requirements under 40 CFR §122.42(a)(1); or
   c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

   In addition to the Department, the permittee shall submit a copy of this notice to the United States Environmental Protection Agency at the following address: U.S. EPA Region 2, Clean Water Regulatory Branch, 290 Broadway, 24th Floor, New York, NY 10007-1866.

GENERAL REQUIREMENTS continued

G. Notification Requirement for POTWs

1. All POTWs shall provide adequate notice to the Department and the USEPA of the following:
   a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of CWA if it were directly discharging those pollutants; or
   b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
   c. For the purposes of this paragraph, adequate notice shall include information on:
      i. the quality and quantity of effluent introduced into the POTW, and
      ii. any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

POTWs shall submit a copy of this notice to the United States Environmental Protection Agency, at the following address:
U.S. EPA Region 2, Clean Water Regulatory Branch, 290 Broadway, 24th Floor, New York, NY 10007-1866.

H. Sludge Management

The permittee shall comply with all applicable requirements of 6 NYCRR Part 360.

I. SPDES Permit Program Fee

The permittee shall pay to the Department an annual SPDES permit program fee within 30 days of the date of the first invoice, unless otherwise directed by the Department, and shall comply with all applicable requirements of ECL 72-0602 and 6 NYCRR Parts 480, 481 and 485. Note that if there is inconsistency between the fees specified in ECL 72-0602 and 6 NYCRR Part 485, the ECL 72-0602 fees govern.

J. Water Treatment Chemicals (WTCs)

New or increased use and discharge of a WTC requires prior Department review and authorization. At a minimum, the permittee must notify the Department in writing of its intent to change WTC use by submitting a completed *WTC Notification Form* for each proposed WTC. The Department will review that submittal and determine if a SPDES permit modification is necessary or whether WTC review and authorization may proceed outside of the formal permit administrative process. The majority of WTC authorizations do not require SPDES permit modification. In any event, use and discharge of a WTC shall not proceed without prior authorization from the Department. Examples of WTCs include biocides, coagulants, conditioners, corrosion inhibitors, defoamers, deposit control agents, flocculants, scale inhibitors, sequestrants, and settling aids.

1. WTC use shall not exceed the rate explicitly authorized by this permit or otherwise authorized in writing by the Department.
2. The permittee shall **maintain a logbook** of all WTC use, noting for each WTC the date, time, exact location, and amount of each dosage, and, the name of the individual applying or measuring the chemical. The logbook must also document that adequate process controls are in place to ensure that excessive levels of WTCs are not used.
3. The permittee shall **submit a completed *WTC Annual Report Form*** each year that they use and discharge WTCs. This form shall be attached to either the December DMR or the annual monitoring report required below.

The *WTC Notification Form* and *WTC Annual Report Form* are available from the Department's website at http://www.dec.ny.gov/permits/93245.html .

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

A. The monitoring information required by this permit shall be summarized, signed and retained for a period of at least five years from the date of the sampling for subsequent inspection by the Department or its designated agent. **Also, monitoring information required by this permit shall be summarized and reported by submitting;**

[X] (if box is checked) completed and signed Discharge Monitoring Report (DMR) forms for each ____ month reporting period to the locations specified below. Blank forms are available at the Department's Albany office listed below. The first reporting period begins on the effective date of this permit and the reports will be due no later than the 28th day of the month following the end of each reporting period.

[ ] (if box is checked) an annual report to the Regional Water Engineer at the address specified below. The annual report is due by February 1 each year and must summarize information for January to December of the previous year in a format acceptable to the Department.

[X] (if box is checked) a monthly "Wastewater Facility Operation Report..." (form 92-15-7) to the:
[X] Regional Water Engineer and/or [ ] County Health Department or Environmental Control Agency specified below

Send the **original** (top sheet) of each DMR page to:

Department of Environmental Conservation
Division of Water, Bureau of Water Compliance
625 Broadway
Albany, New York 12233-3506
Phone: (518) 402-8177

Send the **first copy** (second sheet) of each DMR page to:

Department of Environmental Conservation
Regional Water Engineer, Region 3
100 Hillside Avenue, Suite 1W
White Plains, NY 10603-2860
Phone: (914) 428-2505

Send an **additional copy** of each DMR page to:

Westchester County Health Department
145 Huguenot Street
New Rochelle, NY 10801

NYC Department of Environmental Protection
465 Columbus Avenue, Suite 350
Valhalla, NY 10595

B. Monitoring and analysis shall be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

C. More frequent monitoring of the discharge(s), monitoring point(s), or waters of the State than required by the permit, where analysis is performed by a certified laboratory or where such analysis is not required to be performed by a certified laboratory, shall be included in the calculations and recording of the data on the corresponding DMRs.

D. Calculations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

E. Unless otherwise specified, all information recorded on the DMRs shall be based upon measurements and sampling carried out during the most recently completed reporting period.

F. Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section 502 of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be directed to the New York State Department of Health, Environmental Laboratory Accreditation Program.

RESPONSE TO COMMENTS
New York State Department of Corrections and Community Supervision
Bedford Hills Correctional Facility WWTP
SPDES # NY0101885 DEC ID # 3-5520-00007/00004
December 2015

Background: The above referenced SPDES permit was modified by the Department to add a temperature action level, seasonal ammonia limits and a schedule of compliance and to record a change in the receiving stream classification. A comment letter in response to the Notice of Intent to Modify a Permit was received from the permittee on 12/10/15. The issues raised in that letter are addressed below:

Comment 1: In response to the imposition of a temperature action level, The Department of Corrections and Community Supervision (DOCCS) states "... maintaining an effluent temperature below 70 F would be extremely difficult during hot summer months. DOCCS will develop a Temperature Management Plan as required by the permit (EDP + 6months) to determine if potential passive controls may prove beneficial."

DEC Response: The impetus for the addition of the 70 degree action level was the change in the receiving stream classification from "D" to "C(TS)." Discharges to streams with the TS (trout spawning) designation must meet the thermal standards in 6 NYCRR Part 704.2. The Department understands the challenges faced by many wastewater treatment plant operators in meeting this standard and has recently revised its procedures for assessing effluent discharges from wastewater treatment plants to trout and trout spawning streams. The new procedures allow the Department to more efficiently assess the WWTP's discharge and to impose reasonable requirements in the SPDES permit to assure the thermal standard is met.

Comment 2: DOCCS indicated the following regarding seasonal ammonia limits "... DOCCS is respectfully requesting the reassessment of the proposed ammonia limits in light of the recent DMR data and/or the modification of the draft permit to postpone the implementation of the ammonia limits, at a minimum, after the current permit expiration date (10/31/2017). This would allow for the performance of a pilot study and, if needed, design and construction upgrade required for meeting the future ammonia limits. In the interim, the facility would be operated to achieve the maximum nitrification feasible at existing conditions.

DEC Response: DEC has conducted a reassessment of its proposal to require compliance with seasonal water quality based effluent limitations of 1.7 mg/l from June 1 to October 31 and 3.4 mg/l from November 1 to May 31. Data from the period 9/30/12 to 11/3015 was reviewed and based on this, DEC has developed a schedule of compliance which will allow for a 36 month period during which time DOCCS will submit an approvable engineering report and complete construction to meet the above limits. During the 36 month period, Nitrogen, Ammonia limits will be "monitor only."

SPDES Permit Statement of Basis

Permittee: NYS Department of Corrections and Community Supervision Date: December 28, 2015
Facility: Bedford Hills Correctional Facility WWTP Permit Writer: Armand De Angelis
SPDES No: NY0101885

A State Pollutant Discharge Elimination System (SPDES) permit Department-initiated modification is proposed. Following is a summary of the proposed changes in the draft permit as compared to the currently effective permit, the details of these changes are specified in the draft permit: The draft permit reflects a change in the stream classification from "D" to "C(TS) triggering the need for inclusion of a 70°F temperature action level (see below). In addition, seasonal ammonia limits were added in order to effect compliance with footnote #5 on p. 4 of the original permit which reads, "The final ammonia limit will be based on an analysis of the data generated during the interim monitoring period." The ammonia limits were reassessed after the comment period and derived based on water quality and a review of data for the period 9/30/12 to 11/3015. The result of that reassessment is the imposition of seasonal Nitrogen, Ammonia limits to be implemented over a 3-year period in accordance with the schedule of compliance on page 9 of 12 of the permit. Also added to the schedule of compliance is the requirement that the permittee enter into an Operations and Maintenance agreement with the NYC Department of Environmental Protection. Lastly, a monitoring diagram was inserted on page 7 of 12. Please note that when the Department updates a permit this typically includes updated forms incorporating the latest general conditions.

70°F Temperature Action Level

Following Departmental guidance for municipal discharges to streams classified as trout or trout spawning an action level is required. While the discharge temperature is not expected to contravene the standard in 6 NYCRR Part 704, the 70°F action level will provide data to assess the actual effect of the discharge. Data collected by this monitoring program (see permit for details) may be used at a later date to determine the applicability of additional limitations or modifications in accordance with 6 NYCRR Part 704.4.

Please note temperature exceedances within the same calendar week only require 1 temperature monitoring program the following week. For example the following monitoring results would only result in the need for 1 monitoring program to be completed within the following calendar week.

Day	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Temperature	70°F	74°F	72°F	69°F	71°F	70°F	70°F

Qualitative streamflow measurements must simply indicate during the monitoring program that streamflow is either absent or present.

APPENDIX D

BEDFORD HILLS CORRECTIONAL FACILITY WWTP

DESCRIPTION OF UNIT PROCESSES

Preliminary Treatment - Remote

Preliminary treatment consists of two remote screenings facilities, located upstream of the siphon, for each of the correctional facilities. Each remote screening facility is equipped with a Rotary Fine Screen, Model No. 16 MS-0.250-75, as manufactured by Lakeside Equipment Corporation, together with an inline channel grinder, as manufactured by Monoflow, Inc. These facilities provide protection of blockage of the siphons that convey wastewater from each correctional facility under Broad Brook to the wastewater treatment plant.

Preliminary Treatment – On-site

There is a Vortex Grit Separator and Grit Classifier, as manufactured by WasteTech, and a Hayward Gordon CR4-7 grit pump. Upstream of the vortex grit chamber is an inline channel grinder, Model 3000-24, as manufactured by JWC Environmental, Inc. with a 720 gallons per minute (gpm) capacity.

Equalization Basins

After grit removal, flow is equalized in one of two equalization tanks. The two equalization tanks have an effective volumes of 65,000 gallons and 38,000 gallons, respectively. The reported total effective volume of the flow equalization facilities is 87,400 gallons. Each equalization tank is equipped with a coarse bubble aeration system for mixing purposes. There are two blowers in a lead/lag configuration that provide air to a common header. There are three discharge pumps rated at 350 gpm/unit, thus there is an ability to pump 1.0 mgd with one unit out of service. Currently, these pumps discharge to primary settling tanks.

Primary Clarifiers

There are two rectangular primary clarifiers, each primary clarifier is 41 feet in length, 14 feet in width and has a 10-foot side water depth. Each clarifier has a surface area of 560 square feet and a weir length of 28 feet. Based on the recommendations of Ten States Standards, the maximum average daily flow through the primary clarifiers is based on a peak surface overflow rate of 1000 gallons per day/ square-foot (gpd/sf) average and a peak hourly surface overflow rate of 1,500 to 2,000 gpd/sf. Therefore at average condition of 0.5 mgd with both units in-service, the surface overflow rate is 446 gpd/sf and 892 gpd/sf at 1 mgd. Thus, even with one unit out of service, the peak surface overflow rate is < 2,000 gpd/sf. As to the weir loading rate at 0.5 mgd, the weir loading rate is 8,900 gpd per linear foot and 17,800 gpd per linear foot at 1 mgd. In addition, there are provisions to add aluminum sulfate (alum) in each primary clarifier for chemical precipitation of phosphorous. This can be used as necessary.

Overall, the primary clarifier surface overflow rate and design conditions meet Ten State Standards.

Primary effluent is pumped to the trickling filters via three - 350 gpm pumps; thus having a firm capacity of 1.0 mgd.

Based on conventional primary treatment (not including a credit for alum addition), the raw influent cBOD5 and TSS primary effluent would be reduced by 30% and 60%, respectively, to an average concentration of 85 mg/l cBOD5 and 66 mg/l TSS.

Trickling Filters

There are two high rate trickling filters that achieve secondary treatment using plastic cross flow media, manufactured by Surfpac Corp. Each filter has a mechanical aeration system to assure airflow through the filters. There is no information provided on the ventilation fans. The trickling filters have diameters of 34 feet and 32.5 feet, respectively, and have a depth of 16 feet each. The trickling filters employ a rotary distributor that utilizes the dynamic reaction of wastewater discharging from the nozzles to drive the distributor arm. The total media volume is 27,400 cubic feet (cf) (14,500 cf + 12,900 cf) with both units in-service.

The organic loading on the trickling filters based on the above predicted primary effluent cBOD5 concentration and average flow of 0.3 mgd is 212 lbs cBOD/27,400 cf-d = 7.8 lbs cBOD/1000 cf-d. Assuming a specific media surface area of 42 sf/cf of media, the media surface loading rate would be 0.19 lbs cBOD5/1000 sf-d. USEPA Manual on Nitrogen Control dated September 1993 indicates that the media surface loading rates < 0.6 lbs/1000 sf-d, should be able to achieve > 90% ammonia removal. Based on a 10 mg/l influent ammonia – this would translate to approximately 1 mg/l.

Secondary Clarifiers

Trickling filter effluent flows by gravity to the secondary clarifiers. The two rectangular clarifiers each have a 60-foot length, a 12-foot width and a side water depth of 7.5 feet each. It is noted that Ten States Standards recommends a minimum side water depth of 10 feet. The secondary clarifiers have a surface area of 670 square feet, and weir length of 32 linear feet each.

At the average design flow rate of 500,000 gpd the surface overflow rate is 370 gpd/sf and the weir overflow rate is 7,810 gpd/lf and at the peak flow of 1 mgd is 740 gpd/sf and 14,500 gpd per linear foot. Ten State standard calls for a peak hourly surface overflow rate of 1,200 gpd/sf and 20,000 gpd per linear foot, thus the secondary clarifiers achieve Ten State Limits. It should be noted that the 7.5 sidewater depth does not meet Ten State Standards, however the use of alum and that the surface overflow rate is only 740 gpd/sf versus 1,200 gpd/sf peak hourly flow rate (10 ft SWD) should comply with effluent quality goals.

Rapid Sand Filtration

A prefabricated, rapid sand filter manufactured by U.S. Filter, Inc. provides tertiary treatment for suspended solids and phosphorous removal. Secondary clarifier effluent flows by gravity to the rapid sand filter. The filter has 3 cells, each with a surface area of 87 square feet. Based on a hydraulic application rate of 4 gpm per square foot, with one cell out of service, the rapid sand filter can hydraulically treat a maximum flow of 1 mgd.

Ten State Standards calls for a peak hourly loading rate with one unit out of service of 5 gpm/sf whereas the of NYSDEC's 1988 Design Standards for Wastewater Treatment Works calls for a peak hydraulic loading of 3 gpm/sf. The design appear to have been based on 4 gpm/sf (one unit out of service) and is therefore below the peak Ten State Standard requirement.

The rapid sand filter cells are backwashed at a rate of 1,040 gpm for a period of 3.5 minutes each. Each cell backwashes approximately 3 times per day, resulting in a total return flow of 32,760 gpd or approximately 10 percent of the average daily flow. The mudwell pumps are each rated at 103 gpm, with a total dynamic head of 20 feet, so backwash water is returned to the headworks over a period of 35 minutes. There is 100 percent redundancy for the low-pressure blowers, backwash pumps and mudwell pumps, thus complying with Ten State Standards.

Membrane Filtration

In order to comply with the NYC Watershed Regulations, membrane microfiltration was installed during the 2001 upgrade. There are 3 membrane microfiltration units, manufactured by Pall Corporation. Each membrane system has a module rack which holds 44 modules. At a design flux rate of 23.3 gpd per square foot specified by the watershed upgrade program, each unit can treat a peak flow of 500,000 gpd. Assuming one unit is out of service, the total flow at the design flux rate is 1 mgd.

Effluent Disinfection

Disinfection of the wastewater is accomplished by UV disinfection. Ultraviolet light within the range of 200 to 300 nanometers (nm) is known to be germicidal by disrupting the reproductive mechanism of bacteria, viruses and protozoa. There are three, In Line 1,000 UV disinfection chambers, manufactured by Aquionics, Inc. This equipment is located in the membrane microfiltration building and was installed as part of the 2001 upgrade.

Each chamber has a total of four, high intensity, medium pressure lamps that are protected from the effluent by high purity quartz sleeves. The lamps are situated perpendicular to the flow and can be removed from one end of the chamber without draining the unit. The reported headloss through the chamber is 1-inch at a flow of 1-mgd. The UV disinfection system was designed very conservatively with a UV transmittance of 60 percent and an influent TSS concentration of 20 mg/l. At a UV transmittance of 66 percent, the system is capable of treating 1 mgd. A recirculation system provides the necessary cooling flow to allow one UV unit to remain in operation during low flow periods. This addresses concerns over lamp start time and on-off cycles that shorten lamp life.

Post Aeration

Post aeration is required to raise the dissolved oxygen content of the effluent prior to discharge into Broad Brook. A cascade aeration system attached to the membrane microfiltration building accomplished this. Cascade aeration is the least costly method to raise dissolved oxygen levels in the effluent as no aeration equipment or electrical power is required. The cascade aeration system has a total fall of 5.25 feet, a 3-foot width and eight steps. The current dissolved oxygen of the effluent has been reported to be about 7 to 8 mg/l on average. The permit requires a minimum of 4 mg/l.

APPENDIX E

BEDFORD HILLS CORRECTIONAL FACILITY WWTP
CONTROL BUILDING EVALUATION

The Control Building was constructed in 1953. It is heated by an oil fired boiler located on the upper level which is at grade elevation. It heats the facility through cast iron radiators. The upper and lower level spaces communicate through an open stairwell on the north side of the facility. Ventilation is provided through window wells on the lower level and operable windows on the upper level. The lower level functions as a dry well and contains primary and secondary sludge pumps. There are three piston style plunger pumps currently in use. These pumps replaced a prior set of plunger pumps that are still located here, along with some other defunct equipment. All of the main electrical equipment on the lower level is explosion proof rated and the space is currently rated hazard classification Class 1, Division 1 or 2. The upper level includes a number of control panels, VFD's, instrumentation panels and a laboratory space. There is also a bathroom. The electrical equipment on the upper level is standard electrical construction and the space is rated Unclassified.

A review of the facility's electrical and ventilation systems has identified that they do not meet the industry standard of care. The National Fire Protection Association's standard NFPA 820, Fire Protection in Waste Water Treatment Facilities and Collection Systems, recommends that facilities and spaces with sludge pumping activities (with the potential to release and build up methane gas or other flammable vapors) be segregated from other spaces within the same facility where non-explosion proof electrical equipment is located (that can release a spark), as well as any equipment with an open flame, such as the boiler's oil burner.

Based on discussions with the Town, we recommend that the lower level be isolated from the unclassified upper level through the erection of a masonry block wall to enclose the staircase and extend to the lower level basement. This will also require that a new door be cut into the exterior wall on the north side to allow for egress from this new isolated space. Some wall mounted electrical conduit may need to be relocated and the radiator on the west wall as well. This arrangement should meet the requirements of NFPA 820.

APPENDIX F

Bedford Hills NY WWTP – Review of temperature and ammonia data for future NY SPDES limits

December 8, 2015

FROM

Christian Hoan

TO

Ed Steeprock, Tim Shea

CC: Kumar Upendrakumar, Joe Nasuta

Technical memo subject

New York State Department of Environmental Conservation (NYSDEC) is intending to modify the current State Pollutant Discharge Elimination System (SPDES) permit for the Bedford Hills Correctional Facility to include a seasonal Ammonia limit and an effluent temperature action level.

The proposed ammonia limit is a daily maximum of 1.7 mg/L as NH_3 from June 1 thru October 31 and 3.4 mg/L as NH_3 from November 1 thru May 31.

The effluent temperature action level is 70 deg F. If the effluent temperature exceeds the action level of 70 deg F additional monitoring of the receiving water temperature is required.

The Technical Support group was contacted by the Veolia project operation team to provide a review of historical process data and evaluate the impact of the future SPDES permit requirements on compliance and plant operation. The objective is for the Veolia operation team to provide recommendations to our Client for the preparation of the response to the NYSDEC. The period to comment the proposed SPDES permit has been extended to December 11, 2015.

Review of water temperature data

Review of the influent and effluent temperatures from Jan 2005 thru Oct 2015 shows seasonal variations of the temperature with higher water temperatures during the warmer months of the year (see Fig.1A). There is a strong relationship between influent and effluent temperatures.

The long term review also indicates a slight increase of the general temperature overtime as shown in Table 1 below.

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Inf. Avg Temp (deg F)	66	68	68	68	69	70	69	70	71	71
Eff. Avg Temp (deg F)	62	62	61	62	64	65	65	65	65	64

Tab 1: Evolution of the average Influent and Effluent Temperatures 2005 - 2014

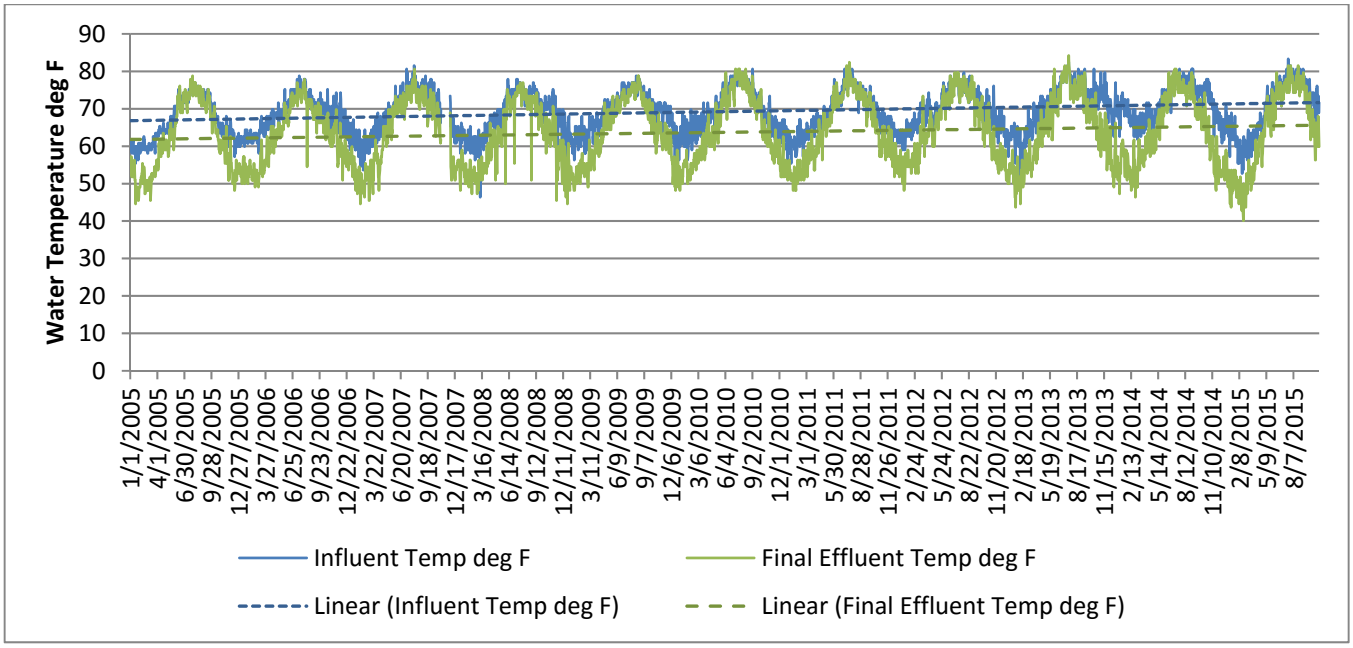


Fig.1A: Bedford Hills Influent and Effluent Temperature 2005-2015

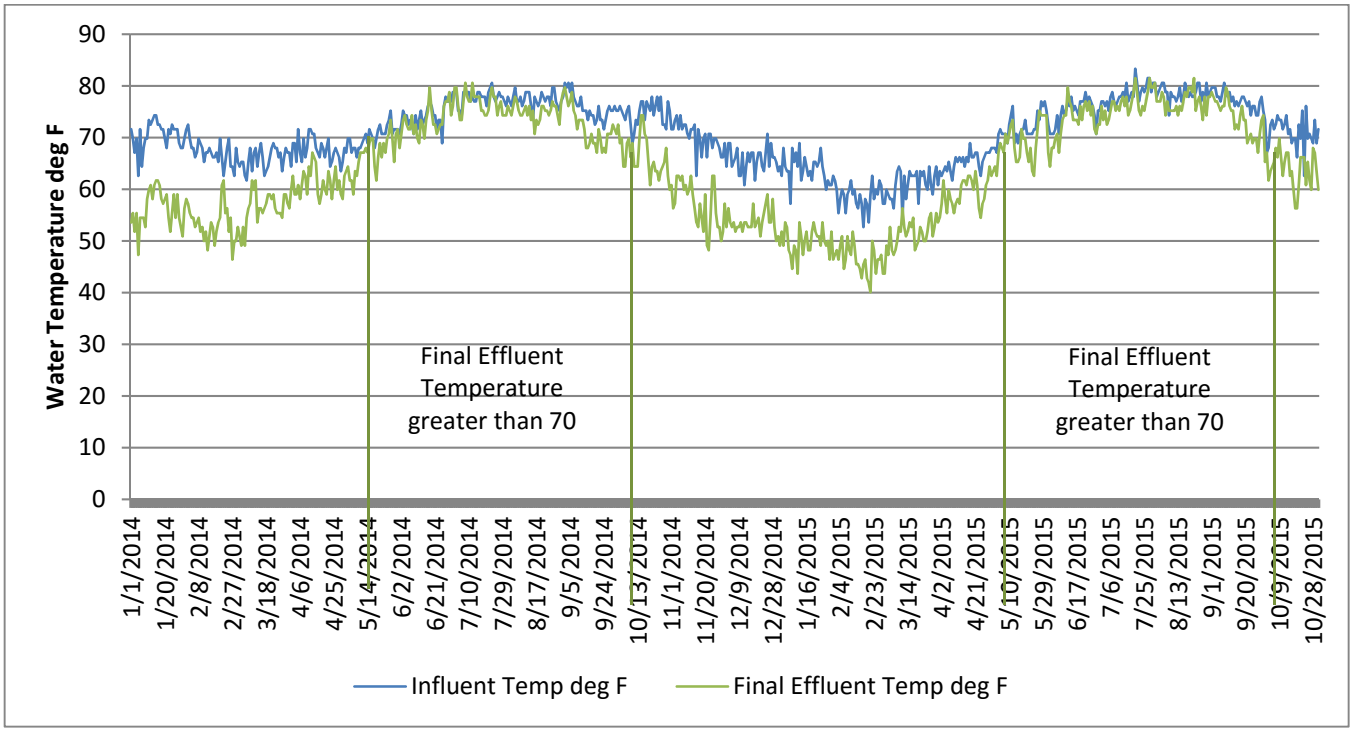


Fig.1B: Bedford Hills Influent and Effluent Temperature 2014-2015

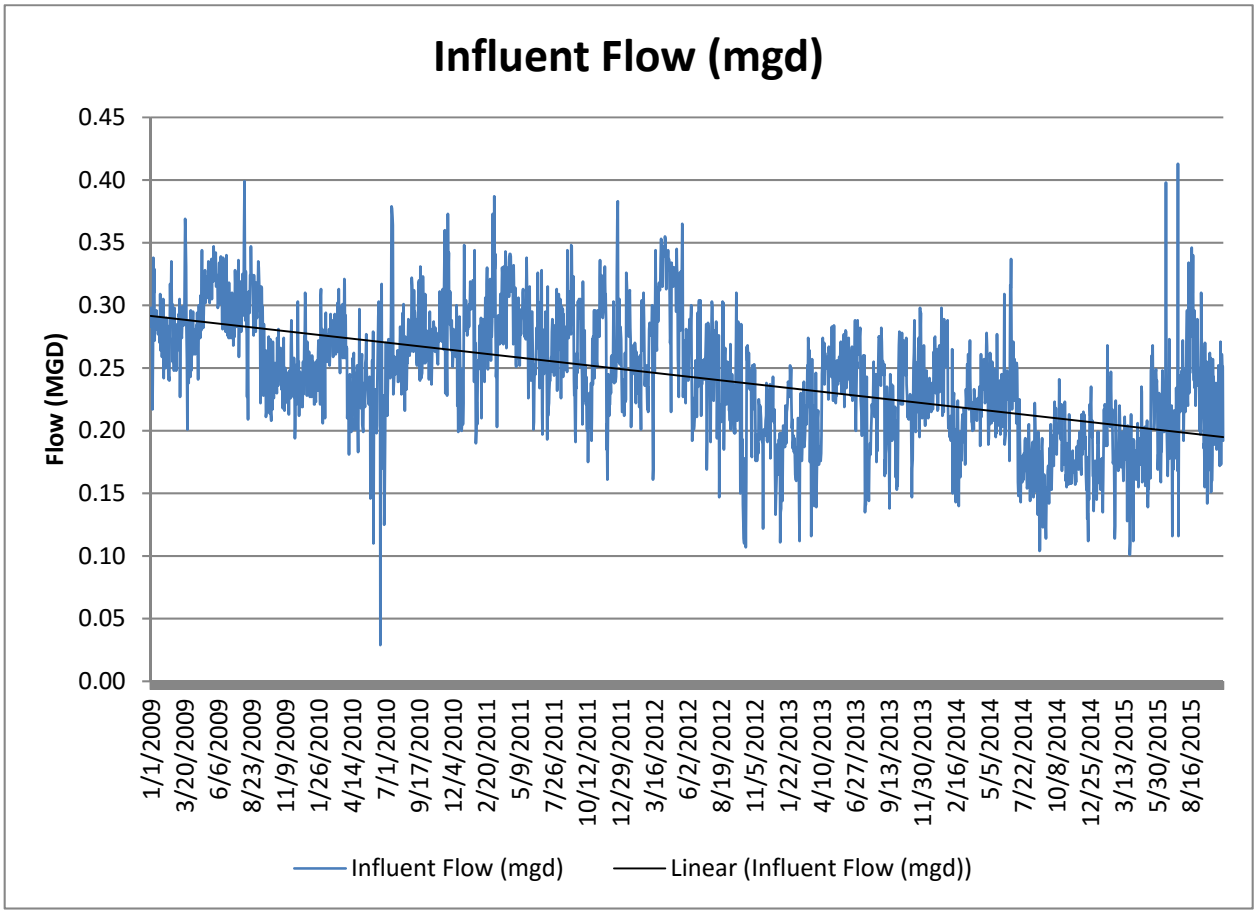


Fig.2: Bedford Hills Influent Flow 2009-2015

A more detailed review of the annual temperature variations (see Fig.1B) indicates that plant effluent temperature reaches and rises above the trigger temperature of 70 deg F from May to September. Therefore, it is expected that the additional receiving stream temperature monitoring required in the new SPDES permit will have to be performed during these months each year.

One reason for the gradual increase in influent wastewater temperature is the decreasing flow over the years. Figure 2 shows the trend in influent flow. A 34.5 percent decrease in influent flow from about 0.29 MGD to 0.19 MGD has been noticed from 2009 through 2015.

Also, the closer review of the temperatures shows that during the colder months of the year (October thru April), the effluent temperature is significantly lower than the influent temperature. It is suspected that the trickling filters provide a cooling effect of the treated water during these months when the ambient temperature is lower. This effect is obviously lost when the ambient temperature increases in the warmer months of late spring to early fall. Oxygen required for biological treatment is through an exchange between ambient air and the liquid film as it flows over the plastic cross-flow media in the biofilters. At the same time, heat transfer takes place between the air and liquid

medium. At cold air temperatures heat is transferred from the wastewater to ambient air while during hot summer months, heat is transferred from ambient air to liquid, if the difference in temperatures is significant. Consequently, maintaining an effluent temperature below 70 F will be extremely difficult during hot summer months.

Review of ammonia data

Per the wastewater plant O&M manual, the trickling filters were designed to provide a 75% reduction in applied BOD. The design hydraulic loading of 273 - 302 gpd/sq.ft. and organic loading of 25 to 275 lbs/d of BOD per 1,000 cu.ft. of media classify the filters as high-rate filters and therefore they were not designed to provide nitrification.

For combined BOD removal and nitrification (effluent concentration of <10 mg/L BOD and <3 mg/L Ammonia-N), the organic loading should be in the range of 6 to 19 lbs of BOD/d/1,000 cu.ft. of media and 0.04 to 0.2 lb/d of TKN per sq.ft. of packing surface area (Metcalf and Eddy Wastewater engineering Treatment and Reuse Fourth Edition – Table 9-5 Trickling Filter applications loadings, and effluent quality).

While the filters were designed with the sole objective of removing BOD, the review of influent and effluent ammonia concentration from 2009 thru October 2015 reveals that the wastewater treatment plant was able to achieve significant ammonia removal (90%) and low ammonia concentration until the end of 2012 (Fig.3 & Tab.2). Yet, starting in late 2012 - early 2013, effluent ammonia concentrations started to rise and the most recent data for 2015 is showing an annual average of 7.7 mg/L for effluent ammonia (43% ammonia removal). The elevated effluent ammonia concentrations coincide with the increase of the influent ammonia concentration easily noticed in 2014 and 2015.

In the same period of time, the influent flow significantly dropped while both cBOD and ammonia influent concentration increased. The influent cBOD and ammonia loadings are also on the rise, most significantly in 2015 (Fig. 4&5)

Year Average	Flow (MGD)	Influent cBOD (mg/L)	Influent cBOD (lbs/d)	Influent ammonia (mg/L)	Influent ammonia (Lbs/d)	Effluent ammonia (mg/L)	Ammonia % removal
2009	0.28	101	227	9.2	20.5	0.63	93.2%
2010	0.26	114	242	9.1	19.3	1.25	86.3%
2011	0.28	89	197	7.6	16.5	0.61	92.0%
2012	0.25	103	216	8.1	16.7	1.31	83.8%
2013	0.22	144	286	9.5	18.7	2.01	78.8%
2014	0.20	140	229	13.1	21.1	3.1	76.3%
2015	0.21	166	302	13.5	24.6	7.67	43.2%

Tab 2: Yearly averages for Flow, Influent and Effluent Characteristics 2009-2015

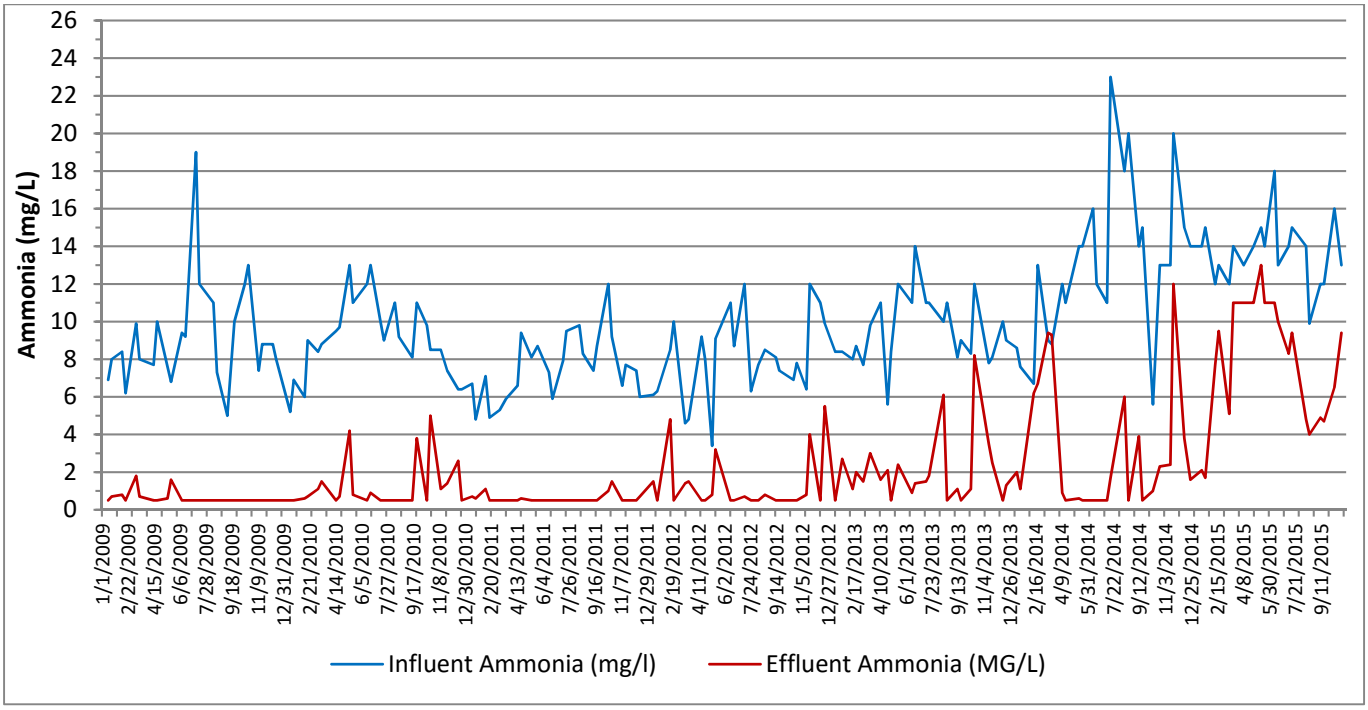


Fig.3: Bedford Hills Influent and Effluent Ammonia Concentrations 2009-2015

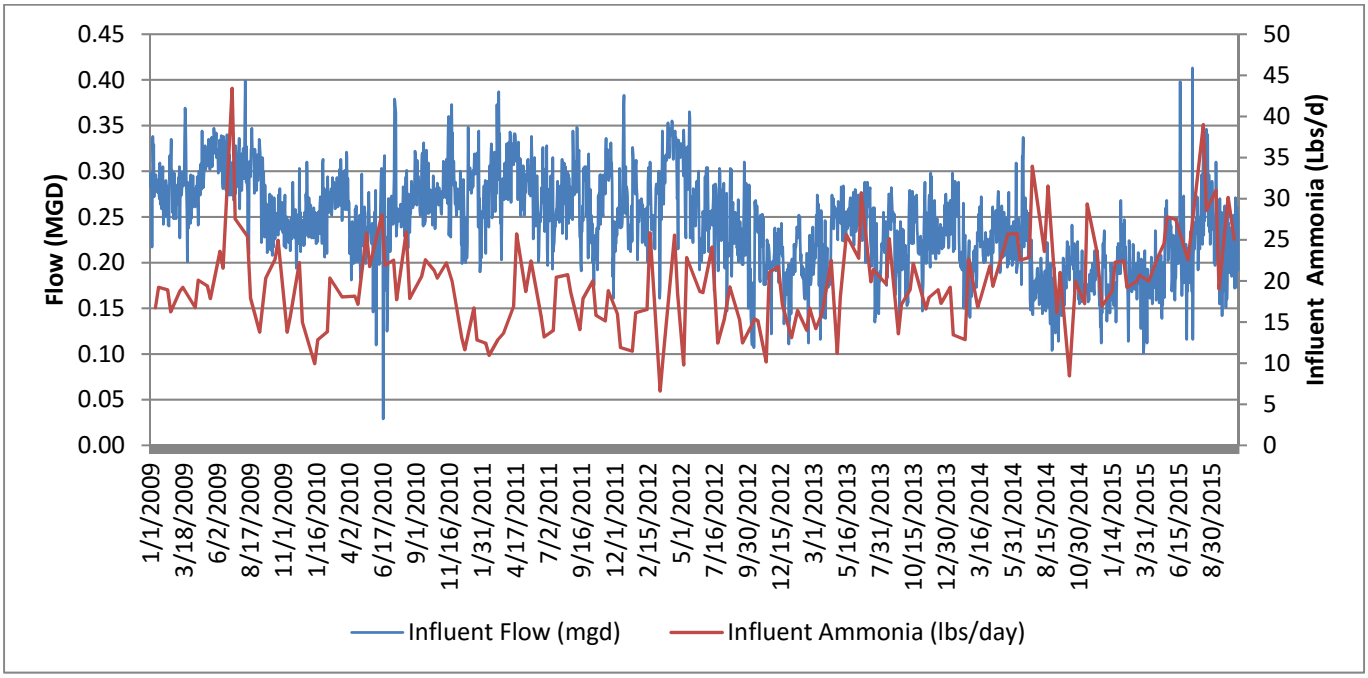


Fig.4: Bedford Hills Flow and Influent Ammonia Load 2009-2015

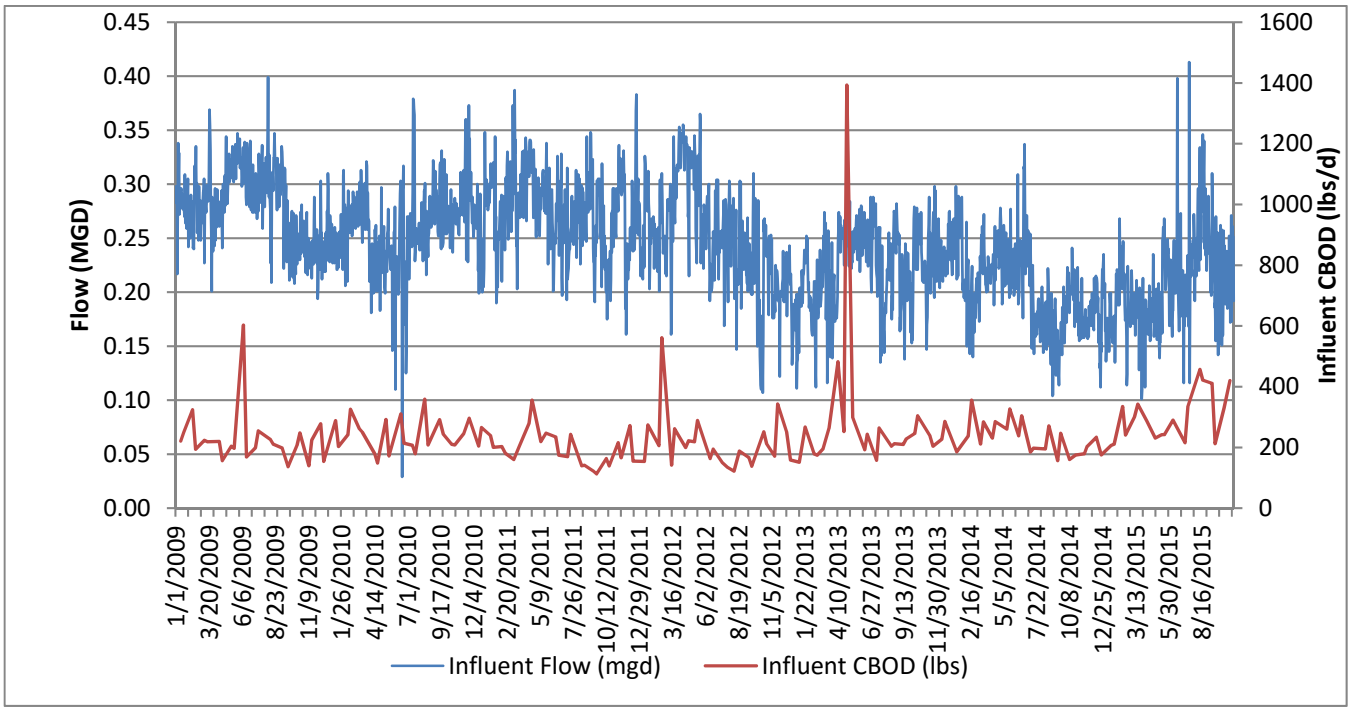


Fig.5: Bedford Hills Flow and Influent cBOD Load 2009-2015

Due to limitation in available data, the cBOD loading exiting the primary clarifiers and entering the trickling filters is not known and the organic loading applied to the trickling filters cannot be accurately calculated.

Assuming a 33% removal of cBOD in the primary clarifiers and considering a total volume of 27,800 cu.ft. of media in the trickling filters (34 ft and 32.5 ft diameter, 16 ft media depth), the estimated organic loading applied to the filters would be in the range of 6-7 lbs of cBOD/d/1,000 cu.ft of media. Therefore, the actual organic loading appears to be much lower than the design value and could be suitable for nitrification to occur.

Regarding nitrogen loading, only influent and effluent ammonia concentration are currently monitored. To calculate the nitrogen loading applied to the filters for nitrification purpose, it is essential to evaluate the nitrogen loading including the organic nitrogen and ammonia nitrogen constituents (TKN as N – Total Kjeldahl Nitrogen).

In typical municipal wastewater configuration, a large amount of the wastewater organic nitrogen is converted into ammonia nitrogen in the collection system. As the residence time in the system upstream from the Bedford Hills wastewater facility is expected to be extremely short, it is also expected to see little conversion from organic to ammonia nitrogen. As a consequence, one can expect that the influent ammonia to organic nitrogen ratio in the wastewater influent is much lower than the typical municipal wastewater ratio and that the actual quantity of nitrogen to be nitrified is much higher than the influent ammonia concentration lets suggest at the present.

Other factors may be the gradual increase in temperature and the decrease in flows over the years. Higher temperatures hydrolyze organic nitrogen to ammonia nitrogen at a faster rate. Decrease in flow increases the detention time in the sewers/wet wells/lift stations. In addition, this results in an increase in the detention time in the primary clarifiers. It is noted that the hydraulic detention time in the primary clarifiers has increase from around 7 hours in 2010 to 9.5 hours in 2015. Consequently, a higher fraction of particulate matter is solubilized resulting in a higher load on the biofilters. An operational change that may help would be to maintain a zero sludge blanket in the primary clarifiers. This would remove particulates from the primary clarifier and prevent solubilization, thereby decreasing the load on the biofilters.

In addition, anaerobic conditions in the sewers/wet wells/lift stations and in the primary clarifiers create volatile fatty acids. Consequently at lower flows, one would expect an increase in VFA concentrations that would increase the organic load on the biofilters. Also, higher VFAs would result in a decrease in pH. From data, it is noticed that there has been a steady drop in both influent and effluent pH starting in 2014. Nitrification is affected by pH – and may be a factor in the lower ammonia removals in 2015. With the current knowledge of the plant operation, it is assumed that the actual organic (cBOD) loading applied to the filters is low enough to promote nitrification. In the absence of detailed information in regard to nitrogen loading, it only can be assumed that the nitrogen loading was low during the 2009 - 2012 period and appropriate to promote nitrification at high removal rate. Yet, as the nitrogen concentration and loading increased significantly over the last 3 years and very significantly in 2015, it is assumed that the nitrogen loading is now too elevated to allow nitrification at high rate and to produce the low effluent ammonia concentration experienced during the 2009-2012 period.

Therefore, in current conditions, the wastewater plant won't be able to meet the stringent ammonia limits presented in the proposed SPDES permit renewal.

Conclusion

The review of historical data indicates that the effluent temperature limit of 70 deg F imposed in the future SPDES permit will be triggered each year during approximately six months from May to September and additional monitoring will have to be performed to evaluate the impact of the discharge on the receiving stream.

The high rate trickling filters were designed with the sole objective of removing BOD from the influent. In the past, actual organic load applied to the filters have been lower than the design values and low enough to allow the development of nitrifying bacteria. As a result, at these low loading conditions, nitrification with high rate of ammonia removal was sustainable (90% removal). Yet, a recent (2014 - 2015) increase in organic and nitrogen load applied to the filters has resulted in significant decrease in nitrification rate and higher effluent ammonia concentration. It seems that the effluent ammonia maximum daily limits of 1.7 mg/L (Jun thru Oct) and 3.4 mg/L (Nov thru May) proposed in the draft SPDES have been developed on the basis of data collected when the filters where nitrifying as an indirect result of the low loading conditions., These limits are not attainable anymore at current loading and influent conditions. Implementation of the new SPDES permit limits would result in immediate and almost daily exceedances of the ammonia limits. Without a better characterization of the organic and nitrogen loadings actually

applied to the filters, it is not possible to predict if the trickling filters could be returned to full nitrification thanks to simple operational changes or if it would require major capital improvement.

To arrive at nitrification capacity of the existing high rate biofilters, a pilot study will need to be completed. This pilot study spanning at least six months, both winter and summer conditions, will provide actual performance data to determine if the biofilters can meet the stricter ammonia limits. If data shows that the existing biofilters cannot meet the stricter ammonia limits, the plant will need to be modified. The design and construction upgrade would probably take a year or two. Consequently, it is important to push for the effective date of the stricter ammonia limits to start with the reissuance of the renewed permit in December 2017, i.e., at the end of this permit and not within this permit cycle. In the request, it should be NOTED that the facility would try its best to optimize operations to achieve the maximum nitrification feasible at existing conditions.

APPENDIX G

Robert P. Astorino
County Executive

Department of Health

March 27, 2008

To: Applicants and Design Professionals

From: Natasha Court P.E.
Associate Engineer
Bureau of Environmental Quality

Re: Guidelines for Abandoning Subsurface Sewage Treatment Systems (SSTS)

All SSTS must be properly abandoned to prevent future health and safety hazards such as, exposure to sewage; tank collapse, caving in or floating, from developing. The homeowner is responsible for the abandonment or removal process. It is important to ensure the abandonment or removal process is not a health or safety threat to those conducting the procedure, to the homeowners or to others in the community. To reduce these risks, it is strongly recommended that persons involved in the process wear appropriate personal protective gear.
Please allow the following to serve as guidance for abandoning an SSTS:

Tanks

- Disconnect power at the source to all electrical controls and remove all controls and panels. Remove all electrical lines (including buried service lines) that will not be used for other purposes.
- The entire contents of all tanks (septic, pump chamber, grease trap, overflow, cesspools, and leaching pits) in the system must be pumped by a licensed Septage Hauler.
- All tanks must be broken in place or removed so that liquid can not collect in the future.
- Back fill the hole or tanks with debris free sand, other granular material or clean fill/soil* that is compacted to prevent settling to prevent future cave-ins.
- Properly grade and establish vegetative cover.

* Free of organic material which will decay and generate gas and create voids

Absorption Fields/Beds/Galleys

- Since absorption beds and trenches are unlikely to collapse, they may be left intact. Maintain vegetative cover.
- Galleys may be left in place if there is no risk of future cave-ins.
- Sewage-contaminated soil around septic components is not required to be removed in order for the SSTS to be abandoned.
- If components of the absorption system are to be removed, a licensed Septic System Contractor must be employed to perform this work:

    a. Allow ample time after the system is taken out of service and the tanks pumped to ensure the entire absorption field is completely dry.
    b. A licensed Septage Hauler should pump all contents from all distribution/junction boxes in the system.
    c. Remove the absorption system (pipes, aggregate, etc.).
    d. Dispose of materials appropriately.
    e. Properly grade and establish vegetative cover.

Should you have any questions, please contact 914-864-7333.

Bureau Of Environmental Quality
118 No. Bedford Rd., Rm. 100
Mt. Kisco, NY 10549 Telephone: (914) 864-7333 westchestergov.com/health

WestlawNext New York Codes, Rules and Regulations

6 CRR-NY 750-2.11
NY-CRR

OFFICIAL COMPILATION OF CODES, RULES AND REGULATIONS OF THE STATE OF NEW YORK
TITLE 6. DEPARTMENT OF ENVIRONMENTAL CONSERVATION
CHAPTER X. DIVISION OF WATER RESOURCES
SUBCHAPTER A. GENERAL
ARTICLE 3. STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM
PART 750. STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES) PERMITS
SUBPART 750-2. OPERATING IN ACCORDANCE WITH A SPDES PERMIT

6 CRR-NY 750-2.11
6 CRR-NY 750-2.11

750-2.11 Closure requirements for disposal systems.

(a) This section applies to any and all disposal systems permanently removed from use or operation at SPDES permitted facilities or at facilities for which a SPDES permit has been revoked or an application for renewal denied, unless a judicial or administrative stay is in effect. The intent of this section is to protect public safety and health and to assure that no contamination of ground or surface water will occur as a result of removing such systems from service either through the act of closure or through continuing the discharge of pollutants into or through equipment; or through leaking, leaching, or discharge of pollutants from wastewater or residuals remaining in disposal systems which has been removed from use but remains on site.

(b) The *closure of a disposal system* means either the termination of the source of wastewater or storm water, or the permitted conveyance of wastewater or storm water to an alternate location (such as a regional facility) in such a manner that no further treatment storage or conveyance of wastewater or storm water is performed by the system.

(c) Disposal system closures shall conform with the following procedures:

(1) On or before 60 calendar days prior to taking the system out of service a permittee shall:

(i) submit to the regional water engineer the following information concerning closure activities:

(a) the date the system will cease operation;

(b) the date the influent and effluent pipes will be sealed;

(c) plans (signed and sealed by a New York State licensed professional engineer) for final disposition of the physical facilities, including all treatment units, outfall line, and all mechanical and electrical equipment and piping;

(d) plans (signed and sealed by a New York State licensed professional engineer) for elimination of all equipment and/or conditions that could possibly pose a safety hazard, either during or after shut-down of operations;

(e) verification that there are no lines in the collection system which are cross connected (receiving both sanitary and storm water) or which do not contain adequate conveyance capacity;

(f) the name of the licensed individual responsible for the maintenance and operation of the wastewater pumping station and/or disposal system systems that are still to be maintained; and

(ii) notify the regional water engineer, in writing, concerning any deactivated lagoons or other actual or potential discharges to ground water which may exist at the site.

(2) Proper management and/or removal of all residual materials (collected grit and screenings, scums, sand bed material, and dried or liquid sludges), as well as filter media, and all other solids from the treatment process that may remain in the abandoned treatment works is required.

(i) The permittee shall submit to the regional water engineer proof of ownership of or contractual arrangement with an operation or operations permitted to manage all such waste materials. A contract with a hauler will only be accepted as proof of proper waste management if documentation of management at an approved site or sites is included. In addition, all necessary State or Federal permits/approvals must accompany the submission.

(ii) All residual material shall be removed within 180 calendar days after the system is taken out of service. Proof of proper residuals management shall be submitted to the regional water engineer within 30 calendar days after their removal. The

dates of removal and quantities removed shall be specified.

(d) Upon satisfaction of closure requirements specified in subdivision (c) of this section, the regional water engineer shall be contacted, in writing, to schedule a final site inspection of any disposal system which had a SPDES discharge permit to verify that influent and effluent pipes have been sealed and that all solid and residual materials related to the treatment process have been removed.

6 CRR-NY 750-2.11
Current through July 31, 2016

END OF DOCUMENT

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6.13 Abandoning/Decommissioning Septic Tanks

There are no NYSDOH regulations for abandoning/decommissioning septic system tanks and other system components (such as pump and siphon tanks, ETUs, cesspools, seepage pits, distribution boxes). Contact your LHD to check for local codes or guidance. In the absence of such local codes or guidance, the following is recommended: Whenever septic tanks or other system components are to be abandoned/decommissioned because public sewers are being installed or replacing a tank(s), the tank(s) and other system components can be removed and taken to a solid waste facility or decommissioned in-place. Septic system tanks must be properly decommissioned to minimize potential health and safety hazards. Contact your local solid waste management official to discuss options for proper disposal of the tanks and used absorption field soils, stone, pipe and other components. If the tank will be left in-place, a NYSDEC permitted waste transporter should pump out the tank, wash off, and remove as much residuals as possible. The use of lime as a disinfectant is an option for treating the tank(s) and absorption area and system components. Care should be taken when accessing and cleaning septic system tanks. Properly disconnect all alarms and electrical services, if any, from septic system tanks and other system components. The top of the tank should be knocked in and the bottom punctured, if possible, to allow for drainage of rain or surface water. Backfill the tank with sand or gravel to prevent a safety hazard. The area that was disturbed should be properly graded and seeded. If settling occurs over time, it may be necessary for additional fill material. Absorption field components (soils, pipe, aggregate, etc.) can be left in place unless local laws or codes require their removal. For the purpose of future home construction projects, property improvements and/or home sale, a record of the location of the abandoned/decommissioned septic tank and other components should be made.

APPENDIX H

Resolution of the Northern Westchester Watershed Committee
Adopted July 7, 2016

COMMITMENT TO EXPEND
EAST OF HUDSON WATER QUALITY INVESTMENT PROGRAM FUNDS FOR THE KATONAH-BEDFORD HILLS SEWER PROJECT

WHEREAS, the County of Westchester retained Savin Engineers P.C. in 1997 to undertake studies for the purpose of determining the technical and financial feasibility of managing wastewater from wastewater treatment plants (WWTP) and other identified areas (Focus Areas) that currently discharge wastewater into the Croton/Kensico watersheds; and

WHEREAS, the Northern Westchester Watershed Committee (NWWC), consisting of representatives from the twelve municipalities with land within the Croton/Kensico watersheds (Bedford, Cortlandt, Harrison, Lewisboro, Mount Pleasant, Mount Kisco, New Castle, North Castle, North Salem, Pound Ridge, Somers and Yorktown), agreed to support water quality improvement projects that would correct the biggest problems in the most cost effective manner; and

WHEREAS, the NWWC worked with Savin Engineers P.C. to review the studies and prioritize projects based on water quality impacts and economic feasibility and the following five Priority Projects were identified: 1) Hallocks Mill Sewer District in Yorktown; 2) Riverwoods and Random Farms WWTPs and the Stanwood and Yeshiva Focus Areas in New Castle and Bedford; 3) Bedford Hills/Katonah focus area in the Town of Bedford; 4) Lake Shenorock focus area in the Town of Somers; and, 5) Peach Lake focus area in the Town of North Salem; and

WHEREAS, on November 14, 2006, the NWWC recommended to the Westchester County Executive and the County Board of Legislators the allocation of $50 million from the EOH WQIP Fund, in the amount of $10 million to each project (the Town of Bedford's $10,000,000 proposed allocation for its Priority Project hereafter is called "Bedford's $10,000,000 Proposed Allocation"), to assist with the implementation of the five Priority Projects listed above; and

WHEREAS, on October 14, 2008, the NWWC adopted a resolution supporting the allocation of $65,000 of EOH WQIP Funds to the Town of Bedford (Town) to assess the feasibility of forming a new sewer district to serve the hamlets of Bedford Hills and Katonah; and

WHEREAS, the Town contracted Malcom Pirnie who created a report titled "Wastewater Asset Condition Assessment and Valuation" (Report), dated June 2011, and the alternatives identified in the Report were cost prohibitive; and

WHEREAS, on May 13, 2015, the NWWC adopted a resolution supporting the allocation of $3,500,000 of EOH WQIP Funds to the Town of Bedford to implement a town-wide septic repair program; and

WHEREAS, on October 9, 2015, an Intermunicipal Agreement (the "Septic Repair Program IMA") between the County of Westchester and the Town of Bedford was executed to distribute $3,500,000 to the Town to implement a septic repair program; and

WHEREAS, pursuant to the IMA, the County has disbursed $750,000 in EOH WQIP Funds for Town of Bedford's septic repair program, and $2,750,000 has yet to be disbursed for the septic repair program; and

WHEREAS, the Town of Bedford's consulting engineer, Arcadis Design & Consultancy, prepared its Technical Memorandum, dated April 22, 2016, titled "Town of Bedford Sewer District Feasibility Study Update Preliminary Engineering Assessment" (the "Arcadis Report") that identified three new alternatives; and

WHEREAS, the Town of Bedford intends to implement Alternative No. 3 set forth in the Arcadis Report that will provide public sewers (the "Bedford Sewer Project") for the central business districts of Katonah and Bedford Hills, Katonah Elementary School and St. Mary's School (Katonah) and Bedford Park Apartments (Bedford Hills); and

WHEREAS, the Town's consulting engineer has estimated the total project construction costs of Alternative No. 3 to be approximately $22,000,000.00; and

WHEREAS, the Town of Bedford is requesting a re-allocation of Bedford's $10,000,000 Proposed Allocation as follows: $9,250,000.00 toward the costs of the Bedford Sewer Project and $750,000.00 for the septic system repair program; and

WHEREAS, the NWWC adopted a plan on May 31, 2016, to address water quality improvements in the NWWC municipalities with a recommended allocation of EOH WQIP funds that that included funding of $9,250,000 for the Bedford Sewer Project; and

WHEREAS, the NWWC discussed the Bedford Sewer Project and supports the Town of Bedford's request for the re-allocation of Bedford's $10,000,000 Proposed Allocation; and now therefore be it

RESOLVED that the NWWC requests that the Westchester County Board of Legislators: (1) amend the Septic Repair Program IMA to decrease the allocation to $750,000 and (2) approve an allocation of $9,250,000 from the East of Hudson Water Quality Investment Program Fund to the Town of Bedford for the Bedford Sewer Project.

Adopted July 7, 2016

Rick Morrissey

Rick Morrissey, Chair NWWC

APPENDIX I

TERM SHEET: TOWN OF BEDFORD WASTEWATER PROJECT

September 23, 2016

Introduction

The New York City Department of Environmental Protection ("DEP") and the Town of Bedford ("Town") agree conceptually as follows:

1. The Town intends to assume operational control of the wastewater treatment plant together with any appurtenant property, easements, lines and facilities ("Bedford Hills WWTP"), which is currently owned and operated by the New York State Department of Corrections and Community Supervision ("DOCCS") to serve DOCCS' Bedford Hills Correctional Facility and Taconic Correctional Facilities in Bedford Hills (the "Correctional Facilities"). The Town also intends to enter into an agreement with DOCCS under which DOCCS will convey the WWTP to the Town for nominal consideration and DOCCS will become a customer of the sewer district to be formed (the "DOCCS Agreement").

2. DEP, through the New York State Environmental Facilities Corporation ("EFC"), paid to upgrade the Bedford Hills WWTP to comply with the Watershed Regulations;[1] the upgrade was completed in 2002. DEP is also obligated to pay for the incremental costs associated with operation and maintenance of the Bedford Hills WWTP required solely by the Watershed Regulations and not by federal or State law ("Watershed Equipment and Methods"),[2] although DOCCS has not entered into an agreement with DEP providing for such payments.

3. The Town intends to form a non-contiguous sewer district ("Bedford Hills/Katonah Business Sewer District") to serve (a) properties within three business areas in Bedford Hills and Katonah zoned as Central Business Districts ("CBDs"), (b) two municipally owned properties, i.e., the Bedford Hills Community House and the Adams Street highway facility ("Municipal Sites"), (c) two properties adjacent to the CBDs, i.e., the Katonah Fire Department's property and the Katonah Village Library (the "Quasi Government Sites"), (d) the Correctional Facilities, (e) the New York State Department of Transportation's I-684 rest area in Bedford; and (f) three sites which are the subject of DEP's "Regulatory Upgrade" program, i.e. , the Katonah Elementary School ("KES"), the Bedford Park at Westchester ("BPA"), St. Mary of the Assumption Church ("St. Mary's"; KES, BPA and St. Mary's, collectively, the "Upgrade Sites"). All of the properties which the Bedford Hills/Katonah Business Sewer District is to serve are referred collectively as the "District Properties" and their owners, collectively, the "District Property Owners". The Bedford Hills/Katonah Business Sewer District will construct a collection system comprised of piping, pump stations, grinder pumps and such other equipment as is necessary to convey the wastewater (the "Collection System")

[1] Rules and Regulations of the City of New York for the Protection from Contamination, Degradation and Pollution of the New York City Watershed and Its Sources, 10 NYCRR Part 128;15 RCNY Chapter 18.
[2] New York State Public Health Law § 1104; New York City Watershed Memorandum of Agreement, dated January 21, 1997 ("MOA"), ¶ 143.

to the Bedford Hills WWTP from the properties in the Bedford Hills/Katonah Business Sewer District. The portion of the sewer system to be owned and operated by the Bedford Hills/Katonah Business Sewer District will be comprised of the Collection System and the Bedford Hills WWTP ("Bedford Sewer System"). The lateral lines connecting the district properties to the Collection System in the Town's right of way will be owned and operated by their respective property owners.

4. The CBDs and Municipal Sites are currently served by on-site subsurface sewage treatment systems ("SSTSs"). The Town believes that, because of the site conditions as well as the age and condition of certain of these existing SSTSs, at least some of these existing SSTSs may be subject to failure while others may not be able to provide adequate treatment. Therefore the existing SSTSs could allow the release or discharge of inadequately treated sewage into the water supply.

5. KES is currently served by an on-site wastewater facility that is owned and operated by the Katonah-Lewisboro School District ("KLSD") in Katonah. BPA owns and operates an on-site wastewater facility that serves 79 of the complex's 144 apartments on Rome Avenue in Bedford Hills. St. Mary's is served by an on-site wastewater facility, which it owns and operates.

6. The Town intends to carry out the Alternative Upgrades, as defined below in paragraph 16.

7. EFC, acting on behalf of DEP, has entered into agreements with KES, BPA, and St. Mary's ("Upgrade Agreements") to pay to upgrade these wastewater facilities to comply with the Watershed Regulations ("WWTP Upgrades").[3] Work under the Upgrade Agreements has not been completed.

8. In recognition that a single consolidated wastewater treatment plant is preferable to four stand-alone plants (serving KES, BPA, Saint Mary's, and the Correctional Facilities, respectively) from both a water quality and a financial perspective, and also based on the advantages for water quality of having wastewater from all properties to be served by the Bedford Hills/Katonah Business Sewer District treated at a single wastewater treatment plant, the Parties have agreed to pursue the project described below ("Bedford Wastewater Project" or "Project"). The following sections describe the Bedford Wastewater Project: Project Description, Timing, Capital Funding for the Project, Operation and Maintenance Funding for the Project and Regulatory Permits and Approvals.

9. DOCCS holds a State Pollutant Discharge Elimination System ("SPDES") permit for the Bedford Hills WWTP authorizing a discharge of 500,000 gallons per day (gpd). The actual flows to the Bedford Hills WWTP have averaged approximately 214,000 gpd, and the WWTP has adequate capacity to accept flow from the areas identified herein. The Town intends to enter into an agreement with DOCCS providing that DOCCS will retain a guaranteed flow capacity of 300,000 gpd. The total average daily discharge from all

[3] These agreements have been entered into pursuant to the Regulatory Upgrade Program described in MOA ¶ 141.

other district customers is approximately 84,000 gpd. Thus, no increase in capacity or other change (except for any capital repairs or improvements, as discussed below) to the Bedford Hills WWTP treatment capacity or modification of the SPDES permit is needed to implement the Project.

10. As noted below, in addition to approvals from DEP pursuant to the Watershed Regulations, the Bedford Wastewater Project is subject to the regulatory jurisdiction and approval of the New York State Department of Environmental Conservation ("NYSDEC") and the Westchester County Department of Health ("WDOH"), among other governmental entities. The Town and DEP agree to support the Project before any involved State or federal regulatory agencies and to cooperate fully with all required regulatory submissions and processes including, but not limited to, environmental review required pursuant to the State Environmental Quality Review Act ("SEQRA").

Project Description

Town of Bedford

11. The Town will assume operation of the Bedford Hills WWTP and will form the Bedford Hills/Katonah Business Sewer District. The Town will adopt a sewer use ordinance and sewer rents consistent with the terms set forth herein.

12. The Town Board has proposed to designate itself as the Lead Agency for purposes of environmental review pursuant to SEQRA for the formation of the Bedford Hills/Katonah Business Sewer District, the construction of the Bedford Sewer System, and the ownership and operation of the Bedford Hills WWTP. DEP does not object to such designation.

13. The Bedford Hills/Katonah Business Sewer District will cause the expeditious design and construction of the Bedford Sewer System, and the Town and the Bedford Hills/Katonah Business Sewer District will secure all necessary regulatory approvals for the Project. The Town and DEP agree to act diligently and expeditiously in all respects to support and complete the Project.

14. As more fully described above, the Bedford Hills/Katonah Business Sewer District will accept wastewater from the District Properties.

Timing

15. A tentative timeline for the project, identifying critical path events, is attached as Exhibit A.

Capital Funding for the Project

DEP

16. DEP, through EFC, will pay for alternative upgrades for KES, BPA, and St. Mary's ("Alternative Upgrades"), in accordance with the Upgrade Agreements, consisting of:

- Creating the Bedford Sewer System (including, without limitation, the creation of the Bedford Hills/Katonah Business Sewer District, the construction of the Collection System and the acquisition of the Bedford Hills WWTP).

- Decommissioning each WWTP in accordance with NYSDEC and WDOH guidelines;

- Terminating the SPDES permit for each WWTP ;

- Installing a sewer connection to conduct wastewater from KES, BPA, and St. Mary's to the Bedford Sewer System;

- Connecting each of the Upgrade Sites to the Bedford Sewer System.

- Any other costs of the Bedford Wastewater Project

17. DEP, through EFC, has allocated $12,800,000 for the WWTP Upgrades (the "Upgrade Allocation"). DEP (through EFC) has agreed to provide the Upgrade Allocation to the Town on a progress payment basis for the purposes of carrying out the Alternative Upgrades. The Town agrees to apply the Upgrade Allocation exclusively for the Bedford Wastewater Project.

18. Other than any capital costs related to DEP Regulatory Upgrades to the Bedford Hills WWTP and the Upgrade Allocation to the Town as described above, DEP has no financial obligations in connection with the capital costs of the Bedford Wastewater Project.

Town of Bedford

19. The Town submitted a request to the County of Westchester for $9,250,000 of East of the Hudson Water Quality Investment Program ("WQIP") funds for the Bedford Wastewater Project. The Town may use the $9,250,000 of WQIP funds allocated by the County for any purposes related to the Bedford Wastewater Project including, but not limited to, costs associated with formation of the Bedford Hills/Katonah Business Sewer District, design, permitting and construction of the Bedford Sewer System, and environmental review.

20. The Town may use the Upgrade Allocation for any purposes related to the Bedford Wastewater Project. In the event that any such funds from the Upgrade Allocation are not spent on the Project, they shall be returned to DEP.

21. Even if the total costs exceed $9,250,000 plus the Upgrade Allocation, the Town is responsible for securing funds for the Project.

22. Notwithstanding anything to the contrary (except with respect to the Town of Bedford O&M Agreement defined below and any capital costs with respect to DEP Regulatory Upgrades to the Bedford Hills WWTP), DEP will not contribute to the Bedford Hills/Katonah Business Sewer District any funds in excess of the total Project costs, including the cost of carrying out the Alternative Upgrades.

Operation and Maintenance Funding for the Project

DEP

23. DEP will enter into an operation and maintenance ("O&M") agreement with the Town ("Town of Bedford O&M Agreement") to pay for operation and maintenance of Watershed Equipment and Methods at the Bedford Hills WWTP, as what constitutes such Watershed Equipment and Methods may change over time. The Town and DEP estimate that DEP's portion of such O&M is 50% of the estimated annual operating costs for the Bedford Hills WWTP. DEP is not responsible for the costs associated with any modifications to the Bedford Hills WWTP SPDES permit required by NYSDEC due to the reclassification of the receiving stream or for any reason founded in State or federal law and not due to the Watershed Regulations. DEP agrees to provide funds to the Town, as reasonably required, in connection with DEP Regulatory Upgrades to the Bedford Hills WWTP.

Town of Bedford

24. The Bedford Hills/Katonah Business Sewer District will impose sewer rents in accordance with all applicable laws, regulations, and other agreements to the District Customers. These charges will be based on the costs (including standard contingencies) of operating and maintaining the WWTP, less the amount paid by DEP pursuant to the Town of Bedford O&M Agreement.

Regulatory Permits and Approvals

DEP Approvals

25. The Town will secure approval from DEP of the Bedford Sewer System, as well as any other necessary approvals and environmental review, which approval will not be unreasonably withheld or delayed. [DEP TO IDENTIFY THE DEP APPROVALS IT REQUIRES]

26. DEP Stormwater Pollution Prevention Plan approvals may be required for construction of the Bedford Sewer System, which approvals will not be unreasonably withheld or delayed.

Other Permits and Approvals

27. The Town and DEP agree to seek and secure any other necessary federal, State or local permits required in connection with the activities described in this Term Sheet and to support any permits or approvals needed in connection with the Alternative Upgrades to the Upgrade Sites.

Reimbursement

28. If the Town fails to complete the Bedford Wastewater Project, the Town will reimburse DEP for all funds expended in connection with the Alternative Upgrades, including work on the sites of KES, BPA, and St. Mary's as well as any funds transferred to the Town as Alternative Cost Savings and any additional costs associated with re-starting the individual WWTP Upgrades. [FORCE MAJEURE, COURT ORDER, OTHER ACTIONS BEYOND THE REASONABLE CONTROL OF THE TOWN]

Further Agreements

29. The Town and DEP understand and agree that this Term Sheet is subject to the approval of the Town Board of the Town of Bedford and the City of New York and agree to diligently and expeditiously attempt to secure such approval. The terms of this Term Sheet are intended to be incorporated into a more complete and detailed agreement to be entered into between the Town and DEP.

Town of Bedford
Department of Corrections and Community Supervision (DOCCS)
Wastewater Treatment Plant (WWTP)
9/23/16

The following is a draft term sheet for discussion purposes for an agreement between the Town and DOCCS with respect to the proposed operation and ownership of DOCCS wastewater treatment plant presently primarily serving the two correctional facilities (Taconic Correctional Facility and Bedford Hills Correctional Facility) in Bedford Hills. As background, the Town will proceed with the creation of a sewer district (District) comprised of the business districts of Bedford Hills and Katonah together with three facilities presently served by wastewater facilities under the responsibility of NYC Department of Environmental Protection (DEP) at Katonah Elementary School, St. Mary's Parochial School and Bedford Park Apartments. State Law requires the Town to take certain actions including environmental review under SEQRA; adoption of a Map, Plan and Report which describes the district, capital costs, operating costs, and estimated costs to typical property owners and assumptions upon which the estimates are based; a referendum among the property owners in the district; NYS Comptroller approval and several other regulatory approvals. The Town will move ahead expeditiously with these steps, following which it would proceed with the design and construction of a collection system for the district.

1. Initial District Operation of WWTP The Town agrees that the District would assume operation of the WWTP (as identified in Exhibit A) upon entering into a contract for construction of the collection system with DOCCS as its sole customer. DOCCS would pay all costs of operation and maintenance (O&M) of the WWTP while it is the only user, except to the extent paid by DEP under a separate operation and maintenance agreement between the Town and DEP. At such time as the first customer of the District begins use of the plant, DOCCS share of the O&M costs shall be based on a pro-rata share of use.
2. Conveyance of WWTP to District While the District initially would operate the WWTP solely for DOCCS, DOCCS would proceed, after a period of demonstrated successful operation of the plant by the District, with obtaining requisite approvals for conveying the WWTP to the District for "$10 and other good and valuable consideration". DOCCS would be responsible for the costs of any planned capital repairs, following a condition assessment of the WWTP that are judged by DOCCS to be reasonable and necessary for the continued successful operation of the WWTP, and based upon the availability of funding [TOB: we understand the fiscal constraints, but would appreciate some way of providing some assurances – perhaps good faith efforts to secure funds in the budget].
3. Retain Services of Qualified WWTP Operator The Town agrees to retain the services of a qualified WWTP Operations Contractor during the "demonstration period" until such time that the Town assumes complete ownership and responsibility of the WWTP. The Contractor shall be selected based upon a competitive selection process or through assumption of the contract with DOCCS WWTP Operator of record at the time of transfer of ownership.
4. Completion of Collection System; Rate Structure Following the completion of the collection system and all district customers utilizing the sewer system, the Town

Board of the Town will adopt a schedule of sewer rates, in accordance with a sewer ordinance which the Town Board will have adopted in accordance with law. The schedule of sewer rates will be based upon the annual operating and maintenance costs of the system (including establishment of a reasonable reserve) based upon ***drinking*** water usage. The ordinance will permit a surcharge as typically provided in such ordinances, including among other things: (a) for sewage or waste exhibiting a strength of sewage or waste greater than normal domestic usage (e.g., unit costs for treatment of biochemical oxygen demand, total suspended solids and total phosphates); and (b) charges unique to the classification of user. The foregoing rate structure is subject to the proviso that the base rate for DOCCS shall not exceed DOCCS equitable share of costs based on its ***drinking water usage*** to the WWTP as compared to all other users, and provided that DOCCS approves the parameters upon which a surcharge is based and the amount of such surcharge per unit of volume, which approval will not be unreasonably withheld or delayed.

5. Non-District Facilities DOCCS will remain responsible for the operation and maintenance of all pre-treatment facilities, with the Town collecting and disposing of all DOCCS screening materials in tandem with screened materials removed from the WWTP, and charging DOCCS accordingly.
6. Capacity; Upgrades
    a. Guaranteed Minimums DOCCS holds a State Pollutant Discharge Elimination System ("SPDES") permit for the Bedford Hills WWTP authorizing a discharge of 500,000 gallons per day (gpd). The actual flows to the Bedford Hills WWTP have averaged approximately 214,000 gpd, and the WWTP has adequate capacity to accept flow from the areas identified herein. The Town will guarantee DOCCS a minimum flow capacity of 300,000 gpd. The other District customers are guaranteed a minimum capacity of 200,000 GPD. It is anticipated that the total average daily discharge from all district customers other than DOCCS would be approximately 84,000 gpd. Thus, no increase in capacity or other change (except for any capital repairs or improvements, as discussed below) to the Bedford Hills WWTP treatment capacity or modification of the SPDES permit is needed to implement the Project.
    b. Increases in Capacity If either DOCCS or the other District customers require an increase in capacity beyond the guaranteed minimums, the other party will cooperate to attempt to make available excess capacity. To the extent that the aggregate needed capacity exceeds the total capacity of the WWTP, the party requiring the capacity expansion will be responsible for the capital cost of increased capacity.
    c. Non-Regulatory Upgrades DOCCS will be solely responsible for capital costs to rehabilitate, modernize or upgrade the WWTP during which time it is the sole user. Upon connection of other users, DOCCS share of capital costs shall be based on a pro-rata basis.
    d. Regulatory Requirements DOCCS will be responsible for any costs ~~resulting~~ required to meet regulatory requirements (other than Regulatory Upgrades paid by DEP) identified during the time which DOCCS is the sole user.

DOCCS agrees to pay the reasonable costs for carrying out any such work resulting from such regulatory requirements. Except for carrying out such work, DOCCS share of costs to meet any further regulatory requirements will be based on a pro-rata basis.

7. Closure of Prison DOCCS to provide not less than two years' notice of plans to close either prison. DOCCS will pay the District a fee equal to the costs which DOCCS otherwise would have incurred had it continued ownership of the WWTP to clean and decommission the WWTP, as reasonably determined by DOCCS. DOCCS to provide not less than two years' notice of plans for any other significant reduction in water consumption – the parties to consider a reasonable payment to the District or other means of compensating the District for lost revenue.
8. Other Terms
    a. DOCCS to grant the Town such easements and access that may be required for operation and maintenance of the WWTP.
    b. Environmental inspection of plant. DOCCS to pay remediation costs for any contamination found to exist prior to the transfer of the plant to the District.
    c. Engineering inspection of plant. Prior to transfer of the plant to the District, DOCCS to pay costs for needed repairs that are reasonably judged by DOCCS to be reasonable and necessary for the continued successful operation of the WWTP, and based upon the availability of funding [TOB: we understand the fiscal constraints, but would appreciate some way of providing some assurances – perhaps good faith efforts to secure funds in the budget]. After connection of the first user, DOCCS share shall be based on a pro-rata basis.
    d. DOCCS to comply with the Town of Bedford sewer ordinance if upon review it is determined to be reasonable in terms, and consistent to standard municipal sewer ordinances of similarly sized and situated communities.

Exhibit A

Description of the Wastewater Treatment Plan

General Terms
Town of Bedford and Bedford Park Apartments
Connection of Certain Buildings Owned by Bedford Park Apartments
to Proposed Sewer System 9/16/16

1. Sewer District as Representative for Bedford Park Apartments Bedford Park Apartments is to designate the Town of Bedford Sewer District 1 (Sewer District) as its representative under the May 1, 1998 Agreement between the NYS Environmental Facilities Corporation (EFC) and Bedford Park Apartments (EFC Agreement). The designation would become effective concurrently with the Sewer District entering into construction contracts. EFC is acting as fiscal agent of the New York City Department of Environmental Protection (DEP) whose funds are being applied to pay in part the cost of the project. The Sewer District will be responsible for carrying out the "alternative upgrade" program consisting of creating the collection system (to carry the wastewater to the wastewater treatment plant presently owned and operated by the NYS Department of Corrections and Community Supervision (DOCCS WWTP)), operating Bedford Park Apartments existing wastewater treatment plant (the Bedford Park Apartments WWTP) at Bedford Park Apartments direction, constructing the lateral lines from Bedford Park Apartments' three buildings (the "Buildings") served by the Bedford Park Apartments WWTP to the sewer main and installing any other equipment required for the connection and upon completion of the project decommissioning the Bedford Park Apartments WWTP. Decommissioning generally includes, among other things, the removal of chemical feed equipment from underground structures, the removal of the chemical storage shed, and filling any septic tanks with sand. Sand filters would be abandoned in place.
2. Project Costs The Sewer District, through funding under the EFC Agreement, will be responsible for the project costs, however, Bedford Park Apartments will be responsible for costs of operating and maintaining the Bedford Park Apartments WWTP until such time as it has been decommissioned and no longer in operation.
3. Bedford Park Apartments Share of Capital Costs of the Project Bedford Park Apartments will have no responsibility for any portion of the capital costs for constructing the sewer system or any of the other work described above. Engineers for the Town have determined that the DOCCS WWTP is in good condition and it is anticipated that any capital repairs/improvements which have been identified will be carried out at the expense of either DOCCS or DEP.
4. Bedford Park Apartments Share of Future Capital Costs of the System As a customer of the Sewer District, Bedford Park Apartments would be responsible for its proportionate share of any debt service of debt issues to finance future system capital costs (such as capital repair or replacements not a responsibility of DOCCS or DEP) after the initial system has been constructed. The proportionate share would be based upon the assessed value of Bedford Park Apartments property. Sewer District customers would not be responsible for costs related to the expansion of the system to accommodate new customers.
5. Bedford Park Apartments Share of Operating Costs Bedford Park Apartments would be a customer within the Sewer District. It would pay a quarterly sewer rent equal to its proportionate share of the operation and maintenance of the sewer system. Its sewer rent would be computed based upon Bedford Park Apartments water usage.
6. Preserving Maximum Allowable Discharge Bedford Park Apartments holds a State Pollutant Discharge Elimination System (SPDES) permit issued by the NYS Department of Environmental Conservation (DEC) which allows a maximum effluent discharge of 19,500 gallons per day

(gpd). Upon Bedford Park Apartments becoming a customer of the Sewer District, the SPDES permit will be terminated. In lieu of the permit, the Sewer District will guarantee Bedford Park Apartments a maximum discharge equal to the SPDES permit maximum of 19,500.

7. Agreements/Approvals This term sheet is not intended to be exhaustive, but to provide key elements of one or more agreements to be entered into between Bedford Park Apartments and the Town/Sewer District, all of which are subject to the approval of the Town Board and the authorized representatives of Bedford Park Apartments.

General Terms
Town of Bedford and Katonah Lewisboro School District (KLSD)
Connection of Katonah Elementary School to Proposed Sewer System 9/16/16

1. Sewer District as Representative for KLSD The Board of Education is to designate the Town of Bedford Sewer District 1 (Sewer District) as its representative under the May 4, 1998 Agreement between the NYS Environmental Facilities Corporation (EFC) and KLSD (EFC Agreement). The designation would become effective concurrently with the Sewer District entering into construction contracts. EFC is acting as fiscal agent of the New York City Department of Environmental Protection (DEP) whose funds are being applied to pay in part the cost of the project. The Sewer District will be responsible for carrying out the "alternative upgrade" program consisting of creating the collection system (to carry the wastewater to the wastewater treatment plant presently owned and operated by the NYS Department of Corrections and Community Supervision (DOCCS WWTP)), operating KLSD's existing wastewater treatment plant at KES (the KES WWTP) at KLSD direction, constructing the lateral line from KES to the sewer main and any installing any other equipment required for the connection and upon completion of the project decommissioning the KES WWTP. Decommissioning generally includes, among other things, the removal of chemical feed equipment from underground structures, the removal of the chemical storage shed, and filling any septic tanks with sand. Sand filters would be abandoned in place.
2. Project Costs The Sewer District, through funding under the EFC Agreement, will be responsible for the project costs.
3. KLSD Share of Capital Costs of the Project KLSD will have no responsibility for any portion of the capital costs for constructing the sewer system or any of the other work described above. Engineers for the Town have determined that the DOCCS WWTP is in good condition and it is anticipated that any capital repairs/improvements which have been identified will be carried out at the expense of either DOCCS or DEP.
4. KES Share of Operating Costs KLSD will be responsible for costs of operating and maintaining the KES WWTP until such time as it has been decommissioned and no longer in operation. KES would be a customer within the Sewer District. It would pay a quarterly sewer rent equal to its proportionate share of the operation and maintenance of the sewer system. Its sewer rent would be computed based upon KES water usage. The annual sewer rent for the first year of full operation of the system is estimated at $1,400.
5. KLSD Share of Future Capital Costs of the System As a customer of the Sewer District, KLSD would be responsible for its proportionate share of any debt service of debt issues to finance future system capital costs (such as capital repair or replacements not a responsibility of DOCCS or DEP) after the initial system has been constructed. The proportionate share would be based upon the assessed value of KES. Sewer District customers would not be responsible for costs related to the expansion of the system to accommodate new customers.
6. Preserving Maximum Allowable Discharge The KLSD holds a SPEDES permit issued by the NYS Department of Environmental Conservation (DEC) which allows a maximum effluent discharge of 13,000 gallons per day (gpd). Upon KES becoming a customer of the Sewer District, the SPEDES permit will be terminated. In lieu of the permit, the Sewer District will guarantee KES a maximum discharge equal to the SPEDES permit maximum of 13,000.

7. Agreements/Approvals This term sheet is not intended to be exhaustive, but to provide key elements of one or more agreements to be entered into between KLSD and the Town/Sewer District, all of which are subject to the approval of their respective governing bodies.

General Terms
Town of Bedford and St. Mary's of the Assumption Church
Katonah, New York (St. Mary's)
Connection of Church Properties to Proposed Sewer System 9/16/16

1. Sewer District as Representative for St. Mary's St. Mary's is to designate the Town of Bedford Sewer District 1 (Sewer District) as its representative under the May 1, 1998 Agreement between the NYS Environmental Facilities Corporation (EFC) and St. Mary's (EFC Agreement). The designation would become effective concurrently with the Sewer District entering into construction contracts. EFC is acting as fiscal agent of the New York City Department of Environmental Protection (DEP) whose funds are being applied to pay in part the cost of the project. The Sewer District will be responsible for carrying out the "alternative upgrade" program consisting of creating the collection system (to carry the wastewater to the wastewater treatment plant presently owned and operated by the NYS Department of Corrections and Community Supervision (DOCCS WWTP)), operating St. Mary's existing wastewater treatment plant at St. Mary's (the St. Mary's WWTP) at St. Mary's direction, constructing the lateral line from St. Mary's (including the school, rectory and single family house) to the sewer main and any installing any other equipment required for the connection and upon completion of the project decommissioning the St. Mary's WWTP. Decommissioning generally includes, among other things, the removal of chemical feed equipment from underground structures, the removal of the chemical storage shed, and filling any septic tanks with sand. Sand filters would be abandoned in place.
2. Project Costs The Sewer District, through funding under the EFC Agreement, will be responsible for the project costs, however, St. Mary's will be responsible for costs of operating and maintaining the St. Mary's WWTP until such time as it has been decommissioned and no longer in operation.
3. St. Mary's Share of Capital Costs of the Project St. Mary's will have no responsibility for any portion of the capital costs for constructing the sewer system or any of the other work described above. Engineers for the Town have determined that the DOCCS WWTP is in good condition and it is anticipated that any capital repairs/improvements which have been identified will be carried out at the expense of either DOCCS or DEP.
4. St. Mary's Share of Future Capital Costs of the System As a customer of the Sewer District, St. Mary's would be responsible for its proportionate share of any debt service of debt issues to finance future system capital costs (such as capital repair or replacements not a responsibility of DOCCS or DEP) after the initial system has been constructed. The proportionate share would be based upon the assessed value of St. Mary's property. Sewer District customers would not be responsible for costs related to the expansion of the system to accommodate new customers.
5. St. Mary's Share of Operating Costs St. Mary's would be a customer within the Sewer District. It would pay a quarterly sewer rent equal to its proportionate share of the operation and maintenance of the sewer system. Its sewer rent would be computed based upon St. Mary's water usage. The annual sewer rent for the first year of full operation of the system is estimated at $675.
6. Preserving Maximum Allowable Discharge St. Mary's holds a State Pollutant Discharge Elimination System (SPDES) permit issued by the NYS Department of Environmental Conservation (DEC) which allows a maximum effluent discharge of 10,000 gallons per day (gpd). Upon St. Mary's becoming a customer of the Sewer District, the SPDES permit will be

terminated. In lieu of the permit, the Sewer District will guarantee St. Mary's a maximum discharge equal to the SPDES permit maximum of 10,000.

7. Agreements/Approvals This term sheet is not intended to be exhaustive, but to provide key elements of one or more agreements to be entered into between St. Mary's and the Town/Sewer District, all of which are subject to the approval of their respective governing bodies.

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