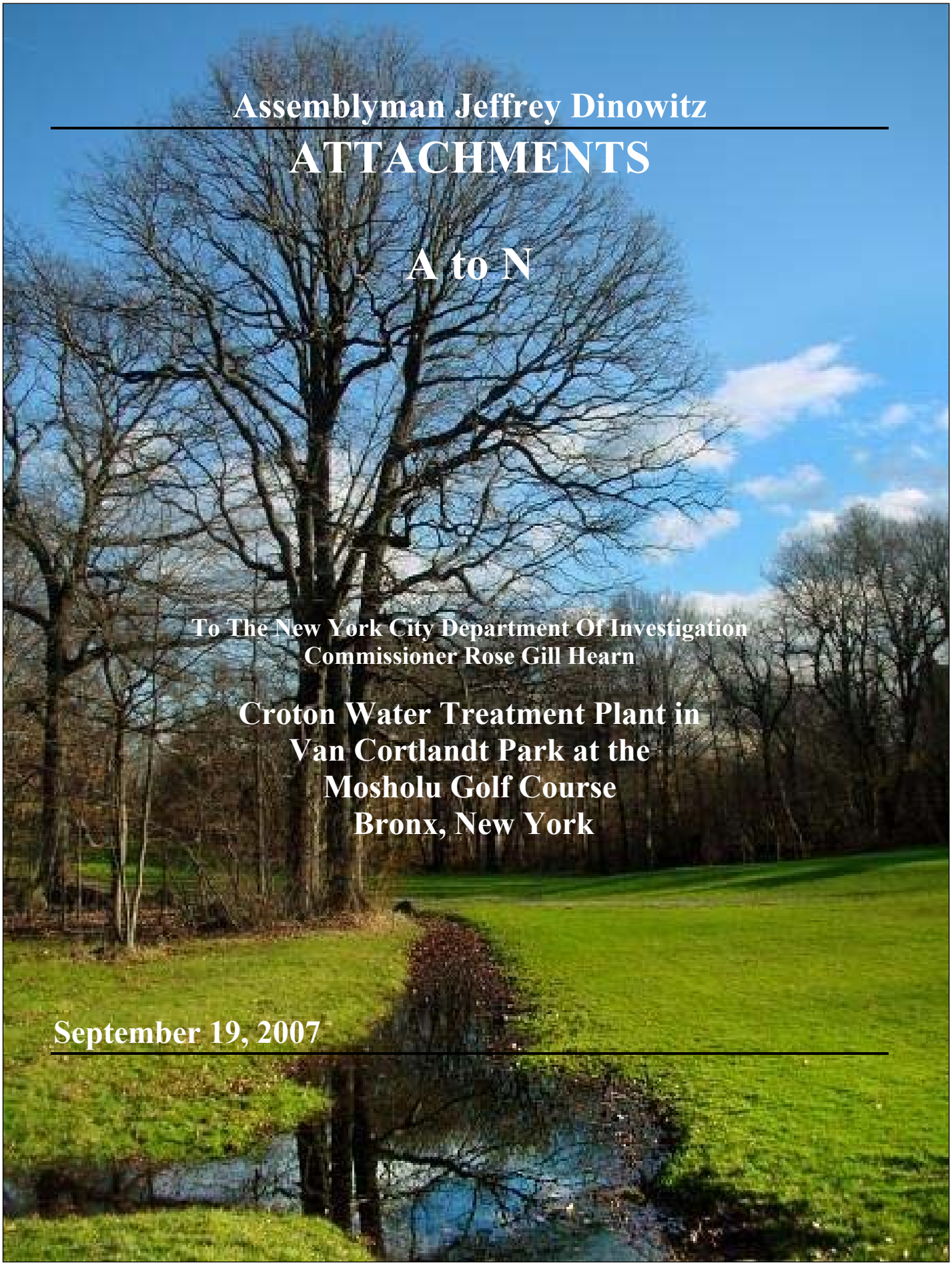

Assemblyman Jeffrey Dinowitz

ATTACHMENTS

A to N

To The New York City Department Of Investigation
Commissioner Rose Gill Hearn

Croton Water Treatment Plant in Van Cortlandt Park at the Mosholu Golf Course Bronx, New York

September 19, 2007

Attachment A

THE CITY OF NEW YORK
INDEPENDENT BUDGET OFFICE

WM-11: Capital Commitments for Construction of Croton Filtration Plant and Ancillary Work

Dollars in thousands

	Committed, 2000-2007	Planned Commitments, 2008-2013	TOTAL
Croton Filtration Plant			
Capital Commitments	$1,950,412	$248,100	$2,198,512
IFA	8,115	-	8,115
Subtotal	$1,958,528	$248,100	$2,206,628
New Croton Aqueduct			
Capital Commitments	41,843	92,750	134,593
IFA	800	-	800
Subtotal	$42,643	$92,750	$135,393
Parks, Mitigation, etc.			
Capital Commitments	87,911	163,794	251,705
IFA	10,047	10,894	20,941
Subtotal	$97,958	$174,688	$272,646
TOTAL, WM-11			
Capital Commitments	**2,080,166**	**504,644**	**2,584,810**
IFA	**18,963**	**10,894**	**29,857**
Subtotal	**$2,099,129**	**$515,538**	**$2,614,667**

SOURCE: IBO; Executive 2008 Capital Commitment Plan (April 2007).

NOTES: Capital commitments are for contractual spending from the Capital Fund.
IFA (Inter-Fund Agreement) indicates expense budget spending reimbursed from the Capital Fund.

From: "Preston Niblack" <PRESTONN@ibo.nyc.ny.us>
To: <YCCcom@aol.com>
Cc: <annemarie@att.net>,
"Patryk Drozdzik" <Patrykd@ibo.nyc.ny.us>
References: <c30.12dd228c.3383747f@aol.com>
Subject: Croton Filtration Project
Date: Thu, 24 May 2007 18:02:41 -0400

Attached is a table detailing capital spending for the Croton Filtration Plant and associated work (the Project). Note that we also include work on the New Croton Aqueduct (NCA) in the total, as described in the Final SEIS for the project, as well as parks and other mitigation spending agreed to with the community.

As of the April 2007 capital commitment plan, total capital commitments for the Project are projected to be $2.6 billion. Of this total, $628

million had been committed as of the end of 2006 (obviously not including the recently-signed construction contract), with the bulk of spending -- $1.47 billion total -- projected for the current fiscal year as construction gets underway. The balance of $516 million will be committed mostly in fiscal years 2008 through 2011, with a final $10 million in 2013.

Note that in-house design, construction supervision, and legal work (indicated in the "IFA" line) is a fairly small percentage of the total, since many of these services will be provided by outside contractors rather than by DEP employees.

With respect to the associated Parks projects, a total of $98 million is projected through the end of 2007, with another $175 million, for a total of $273 million. This includes a projected $21 million in IFA spending -- about 8 percent of total spending -- although thus far IFA spending has constituted about 11 percent of capital spending for this component of the Project.

With respect to contingency funds, the Filtration Plant and NCA work do not currently include any contingency funding. While this is somewhat unusual, it may be that the Department at this point feels that sufficient preparatory work has been done, and contingencies have already been included in signed contracts, such that further provision for future contingencies is not needed. I have not seen the contracts, but we can seek further clarification from DEP regarding this matter if you would like.

I have taken the liberty of copying Anne Marie Garti on this e-mail as well. You may cite and/or circulate this e-mail and attached table as you see fit. If you have any further questions, please don't hesitate to get in contact. The IBO staff contact for this request is Patryk Drozdzik, who may be reached at (212) 442-8617; I have also cc:'ed him on this e-mail.

Preston Niblack
Deputy Director
NYC Independent Budget Office
110 William Street, 14th Floor
New York, NY 10038
T: 212-442-0220
F: 212-442-0350

Attachment B

AGENDA
Croton Facility Monitoring Committee Meeting

Thursday, May 17, 2007 – 7:00 PM
DEP Community Office–3660 Jerome Avenue
Bronx NY 10467 (718)231-8470

I. Welcome	Greg Faulkner
II. Comments from the Public – Sign up to Speak	3 Minute Maximum - 30 Minutes.
III. Refer to Adoption of Minutes of 2-15-07 CFMC Meeting (*Father Gorman abstained*) – on DEP Web Page	CFMC Principals
IV. DEP Report on Status of Croton Construction Contracts	Steve Lawitts, 1st Deputy Commissioner, DEP
V. DEP Report on Jobs & Training	Anne Canty, Deputy Commissioner, DEP
VI. CFMC Discussion & Set Next CFMC Meeting	Greg Faulkner & CFMC Principals
VII. Adjourn	

May 2005
John Cantor
NYC DOI/DEP
"Intergrity Mont Prog"
DEP funded
of
Stean Anderson;
Joe Pyala

Current Estimate of Construction Costs

Construction is currently estimated to cost $2.096 billion:

Contract	Cost ($ in Millions)
CRO-312G General contract	$1,327
CRO-312E1 Electrical contract	$135
CRO-312E2 Electrical contract	$38
CRO-312H HVAC contract	$106
CRO-312P Plumbing contract	$56
CRO-311 Site Preparation	$128
Subtotal	**$1,789**
CRO-313 Water Conveyance & Connecting Tunnels	$212
Off-site work (Metering Chamber, Force Main, etc)	$95
Subtotal	**$307**
Total	**$2,096**

Croton Filter Plant: Construction Fact Sheet

As of May 1, 2007

Description: The Croton Filter Plant is a complex municipal construction project comprised of multiple, individual contracts. Plant construction is mandated by federal and state agencies to ensure that Croton water continues to meet federal drinking water standards.

Cost: The overall cost of the project was estimated at $1.989 billion in December 2006. This estimate reflected three primary contracts for site preparation, tunneling and general plant construction, as well as several contracts for smaller items. On April 2, 2007 the Perini tri-venture withdrew their bid for the plant construction contract, and DEP now expects the combined Croton contracts to total approximately $2.2 billion.

Schedule: Construction was originally scheduled for completion in October 2011. Because of delays in award of the general contract, completion is now anticipated in 2012.

Major Contracts:

CRO-311, Site Preparation: The Croton project began in 2004 with selection of the lowest bidder, Schiavone, to excavate and prepare the construction site. Schiavone began work in 2004, and completion is scheduled for July 2007. Due to less soil and rock removal than anticipated, the final cost of site preparation is expected to be less than Schiavone's initial bid of $127,660,000.

CRO-313, Tunneling: In June 2006, the tunneling contract was awarded to the low bidder, Schiavone/Picone JV, whose bid price was $212,227,000. The tunneling contract provides for the construction of two tunnel systems, a raw water tunnel from the New Croton Aqueduct to the Croton Filter Plant and two treated water tunnels from the Croton Filter Plant to the Jerome Park Reservoir. The contract is underway, overlapping completion of site preparation, and completion is scheduled for 2011.

CRO-312G, Construction: CRO-312G provides for the general construction of the Filter Plant, and is the largest component of the Croton project. Perini/Tutor-Saliba/O+G was the initial low bidder, with a bid $1,127,000,000, however, after intensive negotiation with DEP, they officially withdrew their bid on April 2, 2007. DEP is currently negotiating with the second lowest bidder, Slattery-Skanska/Gottlieb-Skanska/Tully, which initially bid $1,327,700,000, and is hopeful that the City will issue a notice to proceed and that construction can begin in late summer 2007. Once underway, DEP will try to accelerate the CRO-312G schedule, but an overall completion delay of 6 months is currently expected.

5/11 begin Summer

Bonds + insurance

In response to CFMC's request for information about the Skanska Companies past work, DEP is in the process of preparing a document that details their industry credentials and highlights several notable and relevant projects. Information is also available via their website, at www.skanska.com.

Other Contracts:

In addition to the three major contracts noted above, several others are required to construct and install specialized systems for the plant.

The following four contracts are all scheduled for completion in 2012:

CRO-312E1, Electrical Low-Voltage: Awarded to Schlesinger-Siemens on January 19, 2007 at a bid price of $134,680,000.

CRO-312E2, Electrical High-Voltage: Awarded to Schlesinger-Siemens on January 19, 2007 at a bid price of $37,678,000.

CRO-312H, Heating Ventilation Air Conditioning (HVAC): Durr Mechanical was the low bidder, with a bid price of $105,700,000, and the contract should be awarded shortly.

CRO-312P, Plumbing: Only one bid was received in response to the request for bids. As a result, DEP decided to rebid this contract in the interest of having more responses. The following schedule pertains to the plumbing contract:

Advertise for bids - May 2007
Bids due date - June 2007
Notice to Proceed - December 2007

DEP has contacted city-wide plumbing firms including those located in the Bronx in order to encourage multiple responses.

Additionally, DEP has awarded several contracts related to the demolition and modification of structures at the Jerome Park Reservoir. These include:

CRO-315G, Construction: Awarded to Angelakis Construction on October 16, 2006 at a bid price of $3,641,000. — Demo plant

CRO-315E, Electrical: Awarded to Interphase Electric on January 30, 2007 at a bid price of $807,317.

Several additional contracts not mentioned in this document relate to the Croton Filter Plant, but will be bid later. These contracts provide for the improvement of Jerome Park facilities and the construction of a small diameter force main from the Filter Plant to the Hunts Point Water Pollution Control Plant for treatment of residuals.

Attachment C

COMPARISON OF FSEIS COSTS VS. ACTUAL COSTS - MOSHOLU AND EASTVIEW SITES

Description	MOSHOLU SITE Final Supplemental EIS (FSEIS) Estimated Costs (Nov 2003 $)	MOSHOLU SITE FSEIS Estimated Costs Escalated to Mid-Point of Construction (June 2009)(2)	MOSHOLU SITE Actual Costs	EASTVIEW SITE Final Supplemental EIS (FSEIS) Estimated Costs (Nov 2003 $)	EASTVIEW SITE FSEIS Estimated Costs Escalated to Mid-Point of Construction (June 2009)(2)
PLANT CONSTRUCTION	$ 823	not broken out	$ 1,789	$ 713	not broken out
TUNNELS	$ 169	not broken out	$ 212	$ 418	not broken out
OFF-SITE	not broken out	not broken out	$ 95	$ 65	not broken out
subtotal	$ 992	$ 1,686	$ 2,096	$ 1,196	$ 2,032
CONTRACT STAGING/ INCENTIVES/ CONTINGENCY ALLOWANCE /ENVIRONMENTALINITATIVES		$ 73	included above		$ 76
COST OF AWARD TO SKANSKA		$ 200	included above		$ 200
subtotal	$ 992	$ 273		$ -	$ 276
TOTAL		$ 1,959	$ 2,096		$ 2,308

VARIANCE BETWEEN MOSHULU NUMBERS	$ 137

Attachment D

August 11, 2007

U.S. Fines the City $30,000 a Day Over Delay in Water Filtration Project

By TIMOTHY WILLIAMS

One of the costliest construction projects in city history, a $2.1 billion water filtration plant in the Bronx that has been troubled by delays, community opposition and charges of mismanagement, is now being fined $30,000 a day by the federal government because there is no primary contractor to start the work.

The city's Department of Investigation has hired a law firm to monitor the project, which has more than doubled in price from the estimated cost in 2004.

For the past two years the city has been building, 100 feet below Van Cortlandt Park, the Croton Water Filtration Plant, which is scheduled to become operational in 2012. A large swath of the southeast portion of the park has been cleared of grass and trees, and digging is under way. But work on the filtration plant itself has not begun, officials said, even though the city was required by a federal court consent decree to hire a contractor for the job by February.

The price of the project will be passed on to consumers through higher water rate bills for property owners, city officials said.

The city's Department of Environmental Protection, which is overseeing construction of the Croton plant, said yesterday that a $1.3 billion deal to build the filtration plant would be completed by the end of this month. The agreement with a construction consortium led by the Skanska Corporation would be the largest single construction contract in city history, according to city officials.

Emily Lloyd, commissioner of the Department of Environmental Protection, said the complexity of the work was a major reason for the delays. "This is an enormous project and a very complicated process," Ms. Lloyd said. "It was very difficult to site and design. It will be one of the largest filtration plants in the world."

Critics of the project say they believe the plant's price could climb as high as $3 billion. "There certainly appears to be the possibility of fraud or waste or mismanagement," said Jeffrey Dinowitz, who represents the area in the State Assembly and who has called for an independent investigation. "There are costs that cannot be explained away by inflation and rising labor costs."

Opponents of the project, citing what they say is improper oversight, have pressed for an independent investigation and a detailed accounting of the budget. "You have cost overruns that are astronomical," said Gary Axelbank, a neighborhood resident and opponent. Officials at the Department of Environmental Protection said they had already provided an accounting of the agency's spending, which has included contracts for tunneling, site preparation and electrical, plumbing and ventilation work.

Steve Lawitts, the agency's first deputy commissioner, said the plant's 2003 projected cost of $992 million had been determined without calculating for inflation, which would have put the cost at $1.7 billion in 2007 dollars.

In addition, Mr. Lawitts said, the original model for the filtration plant had been "based on a conceptual plan, not a detailed design," a common practice when planning large projects.

Opponents said they were also concerned that the law firm hired by the Department of Investigation to monitor the project, Stier Anderson L.L.C., was not an objective party because it was being paid by the Department of Environmental Protection. But city officials said that Stier Anderson had performed similar duties for the city, including monitoring construction work at the World Trade Center site.

The long-running dispute over the filtration plant illustrates the key role the Croton watershed system plays in the life of the city.

The watershed, made up of reservoirs in Dutchess, Putnam and Westchester Counties, provides 100 million gallons of water to the city each day, or about 10 percent of the city's drinking water.

Runoff is collected from an area that extends into western Connecticut and is chlorinated as it flows downstream. It is then stored in the Jerome Park Reservoir in the Bronx before being distributed to homes, most of them in the Bronx and Manhattan.

The rest of the city's drinking water is supplied by the Catskill and Delaware watersheds. The water from those systems, which are in upstate counties far more rural than those in the Croton system, is of a higher quality than Croton's and so far has not needed filtering.

The Croton system's water, however, is often plagued by discoloration, odor, bad taste and occasional fly larvae, according to the city, though none of those conditions pose public health risks.

The tangled path toward erecting the Croton filtration plant, which was suggested as early as 1913, was set in motion by a 1989 federal law requiring surface water systems to be filtered unless there is a compelling reason for a waiver.

The city did not seek a waiver for the Croton watershed and agreed to filter the system's water, but the federal government sued the city in 1997 after the Giuliani administration failed to meet filtration deadlines.

The lawsuit was resolved by a federal court consent decree that imposed a $1 million fine on the city and a time line for construction of a filtration system that was to be completed by September 2006.

Since then, planning and construction of the plant have been dogged by opposition to its being built under Van Cortlandt Park, which the city chose after opposition arose to placing it at the Jerome Park Reservoir.

The city has long maintained that building the Croton facility beneath Van Cortlandt Park would be less expensive and make more sense in terms of water distribution than other locations that it had studied, including an industrial section of Mount Pleasant in Westchester County.

Acting on a lawsuit filed by residents near Van Cortlandt Park, the State Court of Appeals ruled in 2001 that construction could not begin until the Legislature voted specifically to allow parkland to be used for the project, as it eventually did. In exchange for building at Van Cortlandt Park, the city agreed to spend $243 million for park improvements in the Bronx.

After the city failed to meet the court-mandated deadline to hire the main contractor by February, the federal government imposed the daily $30,000 fine.

Then, two months later, negotiations between the city and the project's low bidder, a joint venture led by the Perini Corporation, abruptly broke off after the Department of Investigation became concerned about the company's ability to meet city requirements for hiring women and minority subcontractors, officials said. A spokesman for Perini did not return a call seeking comment.

The project's only other bidder was the Skanska Construction joint venture, whose $1.3 billion bid was $200 million more than the Perini consortium's price.

Referring to the prospect of even higher costs, Assemblyman Dinowitz said, "Everybody in my community thinks the worst."

Attachment E

TABLE 7. SUMMARY OF COST ESTIMATES ($2003 MILLION)

Capital Costs	Eastview with KCT	Eastview with NCA[1]	Mosholu	Harlem River
Construction Costs, 2003[4] $million	$1,546	1,196	$992	1,174
Estimated Mitigation/Attenuation 2003 $ million	$23	$23	$43	$11
Amenities 2003 $ million	$28	$28	$200	$30
Total Capital Costs 2003 $million	$1,597	$1,247	$1,235	$1,215
Annual Operating Costs, 2003 $million	$33	$33	$22	$25
Life Cycle Costs, 2003 $million	$1, 814	$1,521	$1,352	$1,378

Notes:
[1]NCA as the finished water conveyance. Includes $558,000,000 cost of aqueduct pressurization plus $125,000,000 for the Treated Water Tunnel.
[2] Kensico-City Tunnel. This is a proposed new City Water Tunnel to connect Kensico Reservoir, the Eastview Site, and the Van Cortlandt Valve Chamber. The New Croton Aqueduct would only be used for plant overflows.
[3] The Mosholu Design requires a passageway around the perimeter of the underground WTP to move equipment that is accomplished at the other sites by an exterior roadway.
[4] Costs are based on 2.75% inflation, 6.4% interest, and 30-year life cycle. All costs are from Conceptual Designs. Estimates of amenities and mitigation costs are included. Baseline NCA rehabilitation is not included

TABLE 8. POTENTIAL IMPACTS ON WATER AND SEWER RATES

	Eastview with KCT[1]	Eastview with NCA[2]	Mosholu[3]	Harlem River[4]
Combined Water and Sewer Rate increase, NYC users (% increase over 2016 base rate, $1,066)	$45 (4.2%)	$52 (4.9%)	$44 (4.1%)	$46 (4.3%)
Uniform Water Rate increase, upstate users (% increase over 2016 base rate, $116)	$39 (33.6%)	$47 (40.5%)	$0 (0%)	$0 (0%)

Notes:
1. Including $28 million amenities package and using a 4% tax inflator.
2. Not including amenities package (since $558,000,000 cost of aqueduct pressurization plus $125,000,000 for the Treated Water Tunnel is included) and using a 4% tax inflator.
3. Including $200 amenities package.
4. Including $30 amenities package.

Attachment F

Opinions

Editorial comment

The $31 million question

When News 12 the Bronx caught city workers stuffing the electronic ballot box for the station's poll on building a filtration plant in Van Cortlandt Park, it discovered something about the mindset at City Hall. Nevertheless, the effort at manipulation amounted to little more than a prank.

But if the Department of Environmental Protection cooked the books to produce a soaring estimate for the cost of building the plant in Westchester, that's far more serious.

Our elected representatives have an obligation to investigate, and we have an obligation to hold them accountable if they don't.

The DEP was embarrassed when its draft environmental impact statement disclosed that it would be cheaper to build the plant on city land in Westchester than to build it in Van Cortlandt Park. The estimate also showed that while operating costs in Westchester would be higher, because the city would have to pay local real estate taxes, city residents would wind up paying less for their water, because they would share its cost with Westchester water users.

Why did the estimated price of building a filtration plant in Westchester rise steeply? The city Department of Environmental Protection has not offered a credible explanation. Could political, not financial, considerations have driven the numbers?

While the estimated cost of building in Van Cortlandt remained unchanged in the final environmental impact statement, released at the end of June, the estimated cost of building in Westchester skyrocketed. The alternative favored by this newspaper and by local environmentalists, park advocates and neighborhood civic organizations rose $31 million.

The difference was just enough to raise the estimated price of water to city residents so that instead of taking a bit less out of their pockets, it would take a bit more than if the plant were built in Van Cortlandt.

The DEP has not offered a credible explanation for the ballooning cost. Last week the agency's spokesman told *The Press* that Westchester town officials had cannily negotiated for $51 million to repair environmental damage done by construction and to provide "amenities" in exchange for permission to build. Not so, said the supervisors of Mount Pleasant and Greenburgh.

The $51 million figure so stunned Mount Pleasant supervisor Robert F. Meehan that he remained silent on the phone for more than a minute before saying of the money, "I couldn't tell you what it was for." His Greenburgh counterpart, Paul Feiner, said flatly, "We never got to serious negotiations." The last talks he could remember were held years ago, before the draft impact statement was issued.

On its face, it seems improbable that it would cost more to replace plantings, keep traffic flowing and check noise and dust in and around a sparsely-populated commercial and industrial park than to do the same in a dense urban corridor while rebuilding a golf course destroyed by the digging of a 380,000 square foot pit.

The question is inescapable: did the DEP manipulate the figures to undermine a strong arguments for building the plant in Westchester?

Will Bronx Borough President Adolfo Carrion Jr., City Comptroller Bill Thompson or Public Advocate Betsy Gotbaum accept the challenge of finding out? Mr. Carrion is the borough's highest elected official; Mr. Thompson is the city's chief fiscal officer; and Ms. Gotbaum is the city's ombudsman. Although they have all lined up behind the decision to build the plant in the park, they each have a particular obligation to insure that the city is being honest with its residents; they each have an obligation to protect the pocketbooks of New Yorkers; and they each have an obligation to themselves to base their decisions on facts, not spoon-fed fictions.

The many arguments for building the plant in Westchester have become familiar: no neighborhood would be disrupted; no park would be taken out of service; no school would suffer. To this list could be added — until the DEP changed the estimate last month — building in Westchester would save ordinary New Yorkers money, year after year after year. Could that still be true? That's the $31 million question.

Attachment G

My favorite section of the DSEIS can be found in the Hazardous Materials section for the Mosholu site. In it, the DEP expresses its concern that the massive filtration plant might "float" - and could possibly pop out of the huge hole in the ground because of buoyancy. This idea was just amazing to me.

The DSEIS says that groundwater is about 7 feet below the surface. But as anyone who walks around the golf course knows, the water doesn't stay underground. There are wetlands to the north of the site, and streams flow down the west banks of the hill, often making the Old Croton Aqueduct trail impassible.

The DEP offers three methods to "ensure" that the plant does not "float."

Jim Morgan submitted testimony to the DEP on the issue of building the filtration plant in a pool, or stream, of ground water. Here is his letter:

11 March 2004
Hon. Christopher Ward, Commissioner
c/o Angela Liccata and Mark Page, Jr.
NYC/DEP, 11th Floor 59-17 Junction Blvd.
Flushing, NY 11373

To the NYC Department of Environmental Protection:

I am pleased to submit a written version of my comments made on March 3, 2004 at Dewitt Clinton High School, W. Mosholu Parkway S., Bronx, NY 10468.

I am Jim Morgan, registered architect and adjunct professor at New York University. I am a member of two unions (AFT and UAW) although, after my brothers' shameful behavior at your public hearing on March 3rd, I'm somewhat embarrassed to admit it. More important, as a resident of Alphabet City, I am a consumer of your Low Level Service, that is to say, Croton water, which I happily drink every day from my tap; thus my interest in the Filtration Plant issue.

I focus on Sections 6.13, Hazardous Materials, and 6.15, Water Resources, of the DEIS in order to illustrate that, in hydrological terms, building this plant in Van Cortlandt Park, as it has been proposed, is RIDICULOUS. My point is that, having offered to push it deep underground in order to convince the New York State Legislature that it will be "invisible," you have created technical problems that can only be justified if there is no other alternative but to build it there. As the DEIS makes extremely clear, however, there is another viable site, namely, at Eastview.

The issue is groundwater management, a far more risky business than the writer of those two sections seems willing to acknowledge. We are discussing a huge hole to be dug and, mostly, blasted out of the living rock: essentially two football fields long on each side and nine building stories at its deepest point: 1,125,000 cubic yards.

Once the planned structure has been placed in this pit, the DEIS writer acknowledges that groundwater will constantly flow around and under it as long as the hole exists. If you imagine trying to submerge a cakepan into a bucket of water, you know that when you stop pushing it down, it pops up and floats on the surface. In spite of the dimensions and weight of the vast structure you intend to submerge in that hole, the principle of hydrostatic pressure dictates that, unless the groundwater accumulation is somehow dealt with, your plant will eventually bob up to the surface just as surely as a cakepan does.

The DEIS proposes three mitigation techniques: using drains and pumps; increasing the shell's mass by making the base thicker; and anchoring it into the rock below. Although any or all in combination are technically possible, they add both cost and time complications, which are not required at Eastview.

On reflection since the public hearing, however, one realizes that there is a more serious objection. The projection of one hundred gallons per minute of groundwater flow into the excavation may be dangerously optimistic.

Having overseen excavation for many buildings, I recognize that no one can be sure of what will be found once digging begins. It's not just a matter of how soon rock will be struck but, in the case of your mammoth pit on that Van Cortlandt Park hillside, how much water will actually appear.

The projected flow fills one cubic yard of volume in about two-and-a-half minutes. Suppose an underground stream is discovered flowing west from Woodlawn Cemetery, for instance. In addition, given the dimensions of your excavation, there might be many more small sources springing from the overburden and rock. The flow could easily be twenty times that estimated in the DEIS. Calculate twenty times their estimate and this is the result: two thousand gallons per minute deposits a foot of water across that entire pit in little more than a day; it overflows your hole in less than twelve weeks.

You'll be told, no doubt, that technology exists to handle whatever magnitude of flow is ultimately discovered. And assurances will certainly be made that waterproofing techniques are available to resist this exceptionally intense hydrostatic pressure so that a tight and dry shell will be delivered to the NYC/DEP once construction is complete.

In fact what you're buying, if you persist on building this thing in Van Cortlandt Park, is the mother of all leaky basements. Even though waterproofing materials are guaranteed for about twenty years, it will take constant, costly maintenance to keep the bottom level of your structure functional. In other words, if the Mosholu site is chosen, like it or not, Bronx water is going to insist on getting into the act of filtering Croton water.

Be smart, Commissioner Ward, don't build it in Van Cortlandt Park.

Sincerely,
Jim Morgan, R.A.
Adjunct Professor of Urban Design and Architecture Studies, NYU

P.S.: Response to your DEIS does not imply my acceptance of this unnecessary project on any site. I strongly oppose filtration over watershed protection and maintenance in the case of the Croton reservoir and distribution system. There is absolutely no reason to spend the presently projected $1.5 billion for this industrial plant and process. Should the sustainable principles on which the Croton system was established in the 1830's continue to be applied, the result is both practical and, if recent court decisions-such as the one involving Boston's municipal water supply--are taken into account, legally defensible.

This is a message from Anne Marie Garti, President of the Jerome Park Conservancy. If you would like your name removed from this list, just send me a note.

Attachment H

Staff: Bikku Kuruvila, Counsel

THE COUNCIL

REPORT OF THE HUMAN SERVICES DIVISION
Marcel Van Ooyen, Legislative Director

COMMITTEE ON STATE & FEDERAL LEGISLATION

Hon. Joel Rivera, Chair

September 28, 2004

Preconsidered M___: Communication from the Mayor dated September 9, 2004 transmitting the memorandum of understanding entered into pursuant to chapter 175 of the laws of 2003 in connection with the Croton water filtration facility and the funding of certain eligible projects in the borough of the Bronx.

Preconsidered Res__: By Council Member Rivera (by request of the Mayor) - Resolution – ratifying the memorandum of understanding entered into pursuant to chapter 175 of the laws of 2003 in connection with the Croton water filtration facility and the funding of certain eligible projects in the borough of the Bronx.

The Committee on State and Federal Legislation will meet to consider the above referenced legislation.

I. Background

New York City's drinking water supply is primarily served by a system of nineteen reservoirs in a 1,969 square-mile watershed that extends through Westchester, Putnam,

Delaware, Greene, Schoharie, Sullivan and Ulster counties.[1][1] These reservoirs provide approximately 1.3 billion gallons of drinking water each day to nine million people throughout New York City and parts of four counties north of the City.[2][2]

The watershed is comprised of two distinct sections – "East of Hudson," also known as the Croton Watershed, and "West of Hudson," also known as the Catskill/Delaware Watershed.[3][3] The Croton Watershed consists of twelve reservoirs and three controlled lakes. This watershed regularly supplies ten percent of the City's drinking water, and may supply up to thirty percent of its water in times of drought. Due to intense development pressure in Putnam, Westchester and Dutchess Counties, the Croton Watershed faces the threat of pollution, particularly from stormwater runoff resulting from the increased creation of impervious surfaces in the area.

In 1989, pursuant to the Safe Drinking Water Act Amendments of 1986, the federal Environmental Protection Agency (EPA) promulgated the Surface Water Treatment Rule (SWTR) to protect drinking water sources. These rules require that all surface drinking water sources, such as New York City's, meet objective, "stringent water quality, disinfection and site-specific avoidance criteria" or be filtered.[4][4] Moreover, the federal Safe Drinking Water Act requires that all surface water systems were to be filtered by June 1993, unless stringent public health criteria are met to make filtration unnecessary.

1[1] http://www.ci.nyc.ny.us/html/dep/html/agreementlhtm

2[2] Id.

3[3] The Catskill/Delaware Watershed consists of six reservoirs that are located over an area of over 1,900 square miles, and provides approximately ninety percent of the drinking water to the New York areas mentioned above. The Department of Environmental Protection is charged with operating and protecting these critical resources for New York City.

Although the Catskill/Delaware Watershed is actually comprised of two separate watersheds – the Catskill Watershed and Delaware Watershed – it is typically referred to as one watershed, particularly due to the mixing of water from both watersheds in the Kensico Reservoir.

4[4] New York City Filtration Avoidance Determination, USEPA – May 2002, Surface Water Treatment Rule Determination for New York City's Catskill/Delaware Water Supply System (2002 FAC), p.2.

In July 1992, the New York City Department of Environmental Protection (DEP) submitted an application to the EPA to avoid filtration of its Catskill/Delaware water system. The EPA concluded that this system met the objective criteria for filtration avoidance and issued the first Filtration Avoidance Determination (FAD) for this system in January 1993.[5][5] Although New York City applied for and obtained such a filtration waiver for its Catskill/Delaware water supply, it did not apply for a waiver for the Croton Watershed.

In 1993, the EPA determined that the Surface Water Treatment Rule required the City to filter and disinfect its Croton water supply.[6][6] Without challenging the EPA's determination, the City began designing a water treatment plant. In 1997, impatient with the City's lack of progress, the federal government brought suit in the District Court for the Eastern District of New York against the City and the City's DEP for violation of federal law. The State intervened as a plaintiff, alleging noncompliance with the State Sanitary Code.[7][7]

Recognizing that the public interest would be best served by resolving the litigation, in 1998, the City, the United States and New York State entered into a Consent Decree pursuant to which the City was required to build a filtration plant for its Croton water supply by certain deadlines listed in the decree.[8][8] Under that Consent Decree, the City initially selected the Mosholu Golf Course site, located at Van Cortlandt Park, in the Bronx, for construction of a filtration plant. A site selection application for the Mosholu site was reviewed and approved pursuant to Sections 197-c and 197-d of the City Charter, commonly known as the Uniform Land Use Review Procedure, or ULURP.[9][9]

5[5] Additional FADS were subsequently issued for the Catskill/Delaware water system. *See* New York City Council Committee on Environmental Protection Committee Report, June 14, 2002, p.3-4.
6[6] *Friends of Van Cortlandt Park, et al. v. City of New York, et al.*, 95 N.Y.2d 623 (Feb. 8, 2001).
7[7] Id.
8[8] Id.
9[9] On July 21, 1999, the City Council approved a proposed plan for building the water filtration plant on the Mosholu Golf course by a vote of 32-10.

Subsequently, concerned citizens and community groups sued the City for failing to seek State legislative approval for construction and operation of the water treatment plant at the Van Cortlandt site. While the district court found in favor of the City, the plaintiff's appealed and the question of whether State legislative approval was required for the proposed used of the Mosholu site was certified to the New York State Court of Appeals. The New York State Court of Appeals ruled, in February 2001, that the City must obtain State legislative approval in order for the City to build a water filtration plant at that site. Although the Court of Appeals ruled that the proposed use of the park would require State legislation for the alienation of parkland, it did not invalidate the site selection made pursuant to the ULURP.

After the ruling by the New York State Court of Appeals, the federal government instructed the DEP to propose two additional sites – one in the City and one outside the City – for the Croton filtration plant. The federal government further instructed that the DEP create milestones for the construction process, such as designating when each proposed plant would be operational. In 2001, the parties to the original Consent Decree entered into a Supplement to the 1998 Consent Decree, where such milestones were memorialized. Pursuant to that Supplement, the City was supposed to complete a number of activities by April 2003, which varied with respect to whether or not a particular site was chosen for construction of the filtration plant. For example, if the Mosholu site was the designated location, State legislative approval was to have been obtained by April 15, 2003. According to testimony by the DEP Commissioner before the Assembly Standing Committee on Cities on May 23, 2003, the DEP was in discussions with the federal government regarding the extension of that deadline, and the federal government appeared to be amendable to such extension if short in duration.

In May and June of 2003, and once again on September 15, 2004, the City Council held, in total, four extensive hearings concerning the City's proposal to build a federally mandated water filtration plant in Van Cortlandt Park. At these hearings, the Council heard testimony regarding the alienation of parkland for the purpose of such construction from DEP Commissioner Christopher Ward, the New York City Department of Parks and Recreation, elected officials and over 50 representatives of various environmental groups, parks organizations, community groups and unions.

After considering many of the objections raised by a number of environmental and parks organizations at the hearings, the Council indicated to the State Legislature that it would not consider any home rule request regarding the alienation of parkland in Van Cortlandt Park until the Legislature included in its legislation the requirement that the City complete a supplemental environmental impact statement (SEIS) with respect to project at the Van Cortlandt site. After the State Legislature made that amendment, the Council passed the home rule message and the State passed the alienation legislation on July 22, 2003. The State passed A.8069-C and S.4791-C (attached) – that would authorize New York City to alienate the Mosholu site for the Croton filtration plant. Such authorization is contingent upon the City acquiring additional parklands of "equal or greater fair market value" and/or performing "capital improvements to existing park and recreational facilities which are equal to or greater than the fair market value of those lands."[10][10] With respect to such improvements, the DEP has stated that the City will provide $243 million for parks and related projects if the Mosholu site is approved – an amount they predict will be saved by the construction of water and sewer systems.

The State legislation authorizes the City to discontinue the use of parkland located on the Mosholu Golf Course in Van Cortlandt park in the Bronx for the purpose of constructing and

10[10] *See* A.8069-C § 2 and S.4791-C § 2.

operating a water treatment facility. This authorization is contingent on (1) the City acquiring additional parklands of equal or greater fair market value and/or performing capital improvements to existing park and recreational facilities equal to or greater than the fair market value of those lands discontinued, (2) the execution of a Memorandum of Understanding (MOU) between the City, the temporary president of the Senate and the speaker of the Assembly, which must be ratified by the City Council,[11][11] (3) the City completing an SEIS on the construction, installation, operation and maintenance of a water filtration facility and (4) the City giving due consideration to the dedication of Jerome Park Reservoir as parkland.

A draft SEIS was prepared in December 2003. Two public hearings were held by the New York City DEP for comment on the draft SEIS. A final SEIS was issued on June 30, 2004. The MOU was signed by the Mayor and Assembly and Senate on September 3, 2004.

II. Results of the SEIS for the Croton Water Treatment Plant

The SEIS of the potential sites for the filtration plant evaluated and compared three sites, Eastview, Harlem River and Moshulu, on seventeen primary criteria. The criteria included the impacts to: (1) land use, (2) visual character of the areas surrounding the filtration plant site, (3) community facilities, (4) open spaces, (5) neighborhood character, (6) socioeconomic conditions, public health and noise. The SEIS found certain significant advantages to the Mosholu Site. The advantages cited by the SEIS include the fact that construction at Moshulu will have the least impact on the existing road network, will not require much hazardous material removal, would result in the least overall impact on the surrounding natural resources, would provide for a large

11[11] The MOU must identify (i) the sum of money that the City will dedicate for the purpose of implementing eligible projects to acquire and/or improve park lands in the Bronx and (ii) a list of such eligible projects.

investment in Bronx parks and recreational facilities, and would require the fewest permits and approvals.

Engineering and Operation Advantages

According to the SEIS, the Mosholu site is closer to the raw water supply and the distribution system connections, making potential tunnel routes shorter than at the other sites. The proximity of the proposed plant to the distribution system reduces the probability that water from the plant could be contaminated. Furthermore, building at the Mosholu Site would require only one dose of chlorine to treat the water. The other sites have much greater potential for contamination and would require additional chlorine treatments.

Security Advantages

According to the SEIS, the Mosholu site represents the most secure of the three proposed filtration plant sites. In addition to being the only site that would be constructed underground, locating the filtration plant at Mosholu would keep critical facilities associated with the City's water supply system separated, providing redundancy in the System, unlike the Eastview Site which would centralize much of the City's water supply infrastructure in one place.

Economic Benefits

According to the SEIS, the Mosholu site, overall, provides the greatest economic benefit of the three sites. The City states that the Mosholu site has the lowest life cycle costs at $1.352 billion and the lowest annual operating costs at $22 million. In addition, an in-city filtration plant would keep construction worker jobs associated with the project in the City, capturing the income tax revenue from the project which would be lost if the Eastview Site were chosen. An in-city site

would also eliminate the need for the City to pay additional property taxes to the Westchester municipalities on which the Eastview Site is located. Finally, 600 construction jobs would be created if the plant is built at the Moshulu site, over a period of seven and a half years.

Below is a chart comparing the capital costs of the projects under consideration.

CAPITAL COSTS (ALL $ IN 2003 MILLIONS)	**EASTVIEW W/ KENSICO-CITY TUNNEL**	**EASTVIEW W/ NEW CROTON AQUEDUCT**	**MOSHOLU**	**HARLEM RIVER**
Construction Costs	$1,196	$1,546	$992	$1,174
Estimated Mitigation / Attenuation	$23	$23	$43	$11
Amenities	$28	$28	$200	$30
Total Capital Costs	**$1,247**	**$1,597**	**$1,235**	**$1,215**
Annual Operating Costs	$33	$33	$22	$25
Life Cycle Costs	**$1,521**	**$1,814**	**$1,352**	**$1,378**

Adverse Impacts and Mitigation at the Moshulu Site

The SEIS notes that the proposed plant at the Moshulu site incorporates many features designed to address a variety of environmental concerns including traffic, noise, loss of vegetation, trees, wetlands, and public health matters. For example, financial estimates for the proposed project anticipate allowing the replacement and enhancement of existing park uses. Costs of burying the proposed facilities and redesigning the site are included in the project

design. In terms of traffic, a designated truck route plan has been created to help address congestion. The SEIS also recommends a variety of measures to mitigate traffic, including suggestions such as widening ramps, adding turn signals, conducting a signal timing warrant analysis after physical changes are completed, optimizing signal timings and improving signage.

With regard to noise, the SEIS suggests that a vibration prevention or monitoring program would be implemented during construction. Additionally, an ornamental wall could be placed along the construction boundary to screen the construction site from public view. Noise barriers, the paving of interior construction roadways and dust suppression techniques are incorporated in construction plans to eliminate nuisances to the extent feasible. Contractors would be required to adhere to standards of acceptability established by the City's Noise Code. Finally, DEP would establish a monitoring program and dedicated complaint response system to address any unforeseen construction or operations related noise impacts.

With regard to natural resources, the necessary clearing and grading for the proposed facility would result in the direct loss of 278 trees. While these trees are replaceable, since trees require many years to mature, their loss would represent a significant adverse impact. Still a comprehensive reforestation and monitoring program has been developed in association with the Department of Parks and Recreation. The program would begin prior to construction and extend for at least three years after the proposed water treatment plant operations commence. The program would monitor groundwater levels monthly, tree health and growth annually, rare, threatened and endangered species twice annually, vegetation plots twice annually and regular seasonal recording of soil moisture at 200 feet intervals around the excavation. In terms of wetlands, the dewatering of the water treatment plant foundation would lower the water table locally. To mitigate this impact, a variety of actions would be taken. Any fractures that leak

water into the excavation would be sealed with grout under pressure. Infiltration structures would be constructed adjacent to the site access road and to the south of the forested wetland. These structures would allow water to infiltrate to groundwater and would not be discharged to wetlands, thus preventing the lowering of water levels in the wetland.

In terms of public health, DEP has developed a rodent control and monitoring plan that would be implemented at the site. An active program would be instituted to control the existing rodent population. A hygiene program would also be created during construction to prevent the creation of new food sources for rodents.

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http://webdocs.nyccouncil.info/attachments/62940.htm

Attachment I

STATE OF NEW YORK
DEPARTMENT OF HEALTH

Corning Tower The Governor Nelson A. Rockefeller Empire State Plaza Albany, New York 12237

Richard F. Daines, M.D.
Commissioner

Wendy E. Saunders
Chief of Staff

August 16, 2007

Karen Argenti and Jane Sokolow
Two Spaulding Lane
Bronx, New York 10471

Re: FOIL Request #07-06-013

Dear Ms. Argenti and Ms. Sokolow:

Your request, under the Freedom of Information Law, regarding plans, designs, costs, constructions, and scheduling of the Croton Water Treatment Plant in Van Cortlandt Park in the Bronx from January 2004 to present as detailed in your inquiry dated June 3, 2007 has been reviewed by the Department's Records Access Office.

The responsible program area, the Bureau of Water Supply Protection (BWSP) advises that you visited their office on July 31, 2007 to review records. During the visit you identified records for copying. The Department has reviewed these records and determined a portion of the materials are exempt from disclosure in order to insure public safety. The remaining materials are being released and are included with this correspondence.

Please be advised by the Records Access Office that a portion of the record you identified contain significant detail about the engineering infrastructure of the water treatment facility and the content of these records contain more than collateral information regarding the project. Specifically, the portion of the identified record containing engineering design information which could be used by malefactors to target or disrupt operation of the water treatment facility or identifying vulnerabilities within the plant are being withheld. While the Department is not suggesting that you would intentionally seek this information for any nefarious purpose, the Department is not in a position to disclose information that could place innocent lives at risk.

The BWSP advises that the enclosed documents are marked in the upper right hand corner as documents 1 through 5. Attached are cover sheets on documents 1 and 2 that are photo copies of the title bars for those pages that were redacted and/or removed because they contain detailed location or facility plans. In document 1, BWSP redacted 6 sheets labeled A through F and in document 2, the program staff redacted and/or removed 3 sheets labeled A through C. No pages were redacted or removed from documents 3

through 5. Additionally, the Department for public safety purposes shall not release the following reports and plans:

- Conceptual Design Report & Plans dated August 2003
- Preliminary Design and Plans dated July 2004
- Design Report Tunnels and Shafts dated November 2005
- Final Design Report Revised February 2007

The denial of this information is pursuant to the New York Public Officers Law section 87(2)(f), because their disclosure could endanger the life or safety of one or more persons. Please note, that the Department need not prove that there will be an actual danger if the information is disclosed, only that there need be a possibility that such information would endanger the lives or safety of individuals.

You may appeal this denial of access in writing within 30 days to the Records Access Appeals Officer, Public Affairs Office, Empire State Plaza, 1455 Corning Tower, Albany New York 12237-0002.

Under the rules and regulations of the New York State Department of Health for implementation of the Freedom of Information Law, there is a fee of $.25 per page for providing copies of documents and/or computer printouts. Please submit a check to my attention payable to the New York State Department of Health (Corning Tower, Room 2348, Albany, New York 12237-0044) in the amount of $33.50 and for the 134 pages of responsive materials mailed to you. If we do not receive your payment within 30 days any future requests for information will require an initial deposit before processing.

Very Truly Yours,

Robert "Jake" LoCicero; Esq.
Records Access Officer
(518) 474-8734

Cc: Records Access Appeals Officer

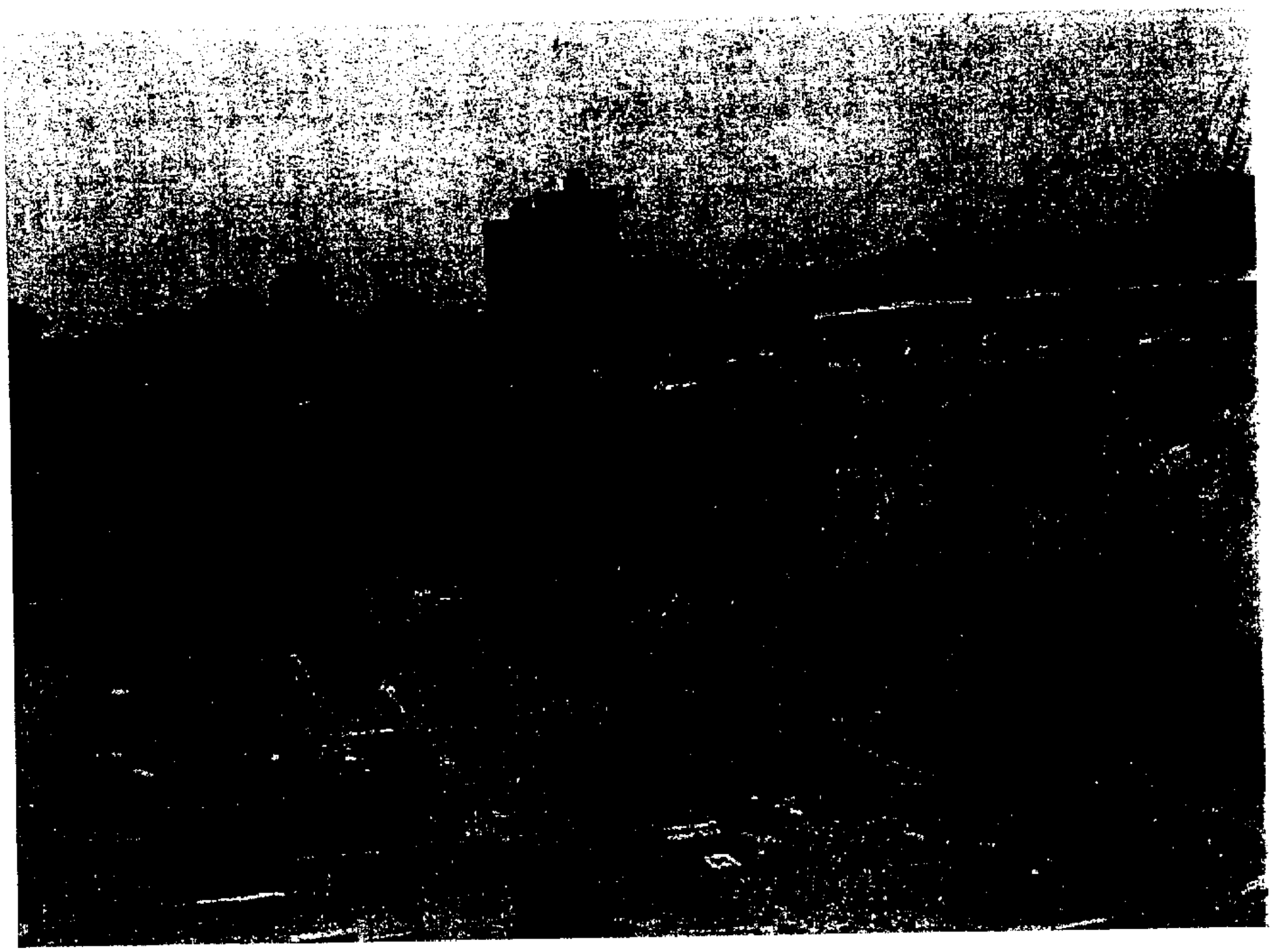
THE NEW YORK CITY DEPARTMENT

OF

ENVIRONMENTAL PROTECTION

BUREAU OF ENGINEERING DESIGN AND CONSTRUCTION

WM-11 Croton Water Treatment Plant



MONTHLY REPORT No. 32

For

May 2007

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2.0 MAJOR ACTIVITIES TO BE PERFORMED JUNE 1-30, 2007:

- 3D coordination drawing meetings
- CPM scheduling meeting
- Submittal of Dewatering Plan (SWPPP) by Skanska/Tully JV
- Survey of main excavation pit existing rock elevations

3.0 SCHEDULE:

Consent Decree Milestones for the CRO-312 contracts are as follows:

CONSENT ORDER MILESTONE DATES CRO 312		
Description of Work	**Consent Order Date**	**Anticipated Date Based on an 8/21/2007 NTP**
Advertise for Bid for WTP	6/1/2006 (A)	6/1/2006(A)
Issue Notice to Proceed for WTP (G,E, & H Contracts)	2/8/2007	8/21/2007
Start Structural Concrete Placement for WTP (G,E, & H Contracts)	11/30/2007	5/12/2008
Issue Notice to Proceed for WTP (P Contract)	12/31/2007	12/31/2007
Place 15% of Structural Concrete for WTP	5/31/2008	11/11/2008
Place 40% of Structural Concrete for WTP	10/31/2008	5/13/2009
Place 65% of Structural Concrete for WTP	4/30/2009	10/11/2009
Place 95% of Structural Concrete for WTP	4/15/2010	9/26/2010
Complete Installation of Flocculators (without Start-up or Testing)	10/31/2010	5/13/2011
Substantial Completion (G,E,P & H Contracts) – Begin Start-up and Testing	5/1/2011	11/11/2011
Commence Operation of the WTP	10/31/2001	5/13/2012

(A) Actual Date (Item Complete)

4.0 MAJOR ISSUES:

A. The DEP has decided to re-bid the CRO-312P contract. Portions of the CRO-312P contract work which will be required early on in the project will be moved to the 312G contract through a change order. The draft change order was issued on May 29, 2007 to DEP.

B. The consent order date for issuing a Notice to Proceed for the CRO-312 contracts was February 8, 2007. As of May 31, 2007, the CRO-312G, CRO-312H, CRO-312E1, and CRO-312E2 contracts have been awarded. Notices to proceed are anticipated to be issued by August 21, 2007. The consent order date for issuing NTP for the CRO-312P contract has been revised to December 31, 2007.

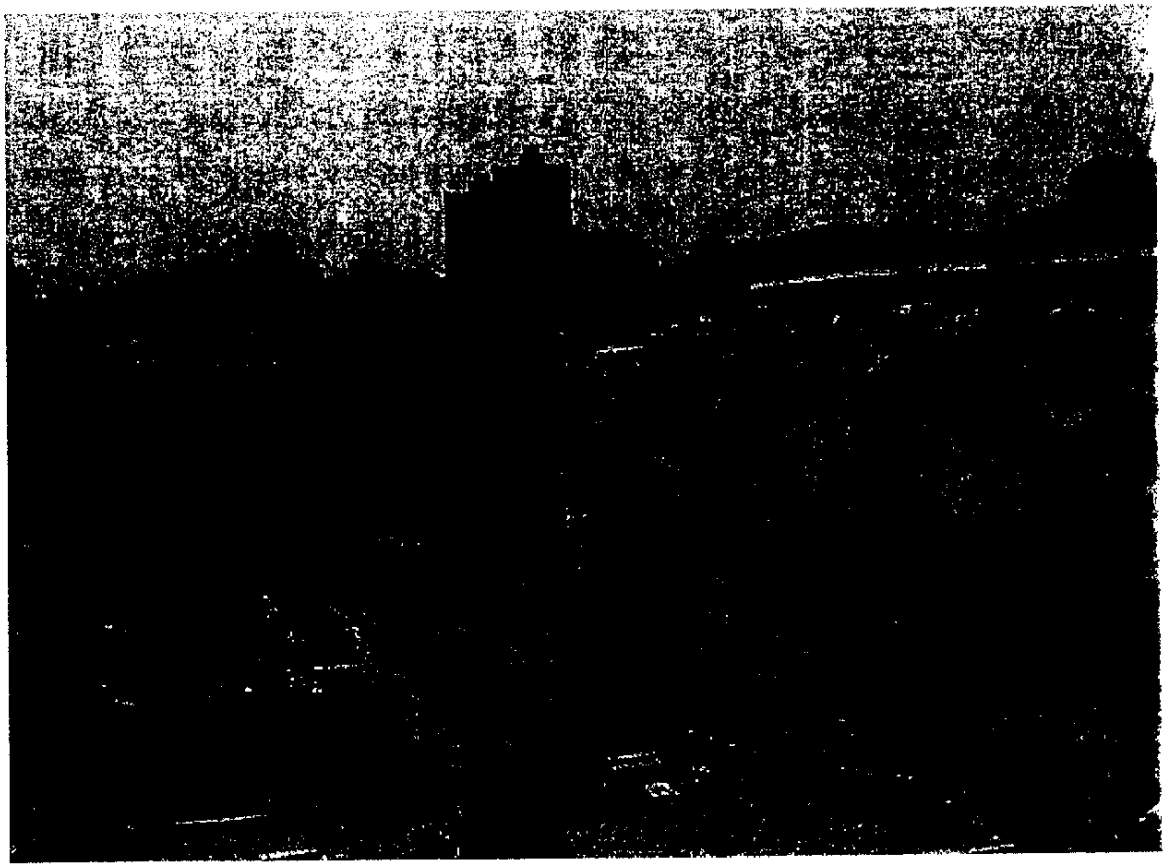
C. The projected maximum dewatering flows for the CRO-313 tunnel project and the main excavation pit for the CRO-312 Water Treatment Plant are greater than the

current NYCDEP sewer discharge permit capacity of 1,196,000 gallons per day. A meeting was held on May 24, 2007 to discuss dewatering options. Skanska/Tully JV is working on determining their anticipated dewatering flows and will submit a dewatering plan that will be reviewed by M&E/H&S and then submitted for approval to DEP.

CRO 313 – WATER TUNNELS AND ASSOCIATED WORKS

1.0 SUMMARY OF CONSTRUCTION ACTIVITIES

- Continued temporary utility installation
- Continued excavation of the Combined Raw Water and Treated Water Shaft
- Geophysical testing by USGS continued
- Continued construction of CRO-313 substation
- Continued excavation and conduit installation for electrical ductbanks
- Completed survey of NCA from Gate House #1 to the Raw Water Tunnel connection
- Started re-drilling for vibration monitor (VM1)



Attachment J

Committee Staff: ALLISON SACKS
Counsel to the Committee

JAMES F. GENNARO
Legislative Policy Analyst

THE COUNCIL

COMMITTEE ON ENVIRONMENTAL PROTECTION
STANLEY E. MICHELS, CHAIRMAN

BRIEFING PAPER OF THE INFRASTRUCTURE DIVISION
KATHLEEN CUDAHY, DIRECTOR

DECEMBER 8, 2000

OVERSIGHT HEARING ON THE STATUS OF THE PHYSICAL CONDITION AND THE REPORTED LEAKS IN THE DELAWARE AQUEDUCT

On December 8, 2000, the Committee on Environmental Protection will hear testimony from the New York City Department of Environmental Protection on the status of the physical condition and the reported leaks in the Delaware Aqueduct.

BACKGROUND

On November 2nd and 3rd, 2000, WNBC TV "News 4" reported that the city's Delaware Aqueduct has been leaking upwards of one billion gallons of water per month from at least two leaks near the upstate city of Newburgh for at least a decade. The leaks, which are at a depth of approximately 600 feet underground, produce enough water to create ponds and other wetlands up at the surface above the leaks. In addition, it was reported that the leaking water may have eroded the limestone bedrock surrounding the underground aqueduct to such an extent that the aqueduct itself may be in danger of collapse.

The New York City Department of Environmental Protection (DEP) has confirmed that at least two leaks exist in the aqueduct west of the Hudson River in Ulster County, one in Roseton and the other in Wawarsing. The DEP has indicated that it has known about the leaks

for years, but did not report anything to the public about the leaks until it issued a press release on October 2, 2000 regarding some repair work it was about to commence on a gate valve just east of the Roseton and Wawarsing leaks. The press release made reference to the leaks because the purpose of the valve repair was to give DEP the ability to investigate and assess the leaks in the Aqueduct. The press release was also issued the same week that DEP released documents about the leaks to the environmental group Riverkeeper pursuant to the Freedom of Information Law. The release of the documents to the group came fifteen months after the initial request was made.

THE IMPORTANCE OF THE DELAWARE AQUEDUCT TO NEW YORK CITY'S WATER SUPPLY SYSTEM

This issue of the Delaware Aqueduct leaks is a very significant one for the consumers of the New York City water supply because the Delaware Aqueduct currently delivers approximately 70% of the City's drinking water (950 million gallons per day out of a total of 1.35 billion gallons per day) from the City's upstate Delaware Water Supply System to the City. The Delaware Aqueduct is the only conduit between the Delaware System and the City. The City's other two upstate water systems are the Catskill Water Supply System, which is adjacent to and east of the Delaware System, and the Croton Water Supply System, which is located east of Hudson in the counties of Westchester and Putnam. Both the Catskill and Croton Systems have dedicated aqueducts to bring water from those systems to the City.

At today's hearing, the DEP will explain to the Committee the steps it intends to take to assess the scope of the leaks, the deterioration of the aqueduct and the condition of the bedrock in the area of the leaks. DEP will also describe, to the extent that it can at this time, what may be involved in effecting a repair or replacement of part of the aqueduct. The critical question associated with the repair of the aqueduct is the amount of time that the aqueduct will remain out

of service. As stated above, the Delaware Aqueduct is the only link between the City and the water system that has been supplying 70% of its drinking water. If the Delaware Aqueduct must remain out of service for any significant duration, the City's water supply needs will have to be served by its remaining two water supply systems, the Catskill and Croton Systems, and any additional water sources that the DEP is able to access.

THE NEED FOR ADDITIONAL WATER SOURCES

Unfortunately, the Catskill and Croton Systems – plus any available water sources that DEP may be able to access – cannot replace the volume that will be lost if the Delaware System goes off-line for an extended period. The City's water supply currently delivers approximately 1.35 billion gallons of water per day in New York City and Westchester. Westchester draws about 125 million gallons per day (mgd) and, according to DEP, has alternate sources of water, which it will be called upon to use. That leaves the New York City demand of approximately 1.2 billion to 1.25 billion gallons per day. The Catskill System can produce 500 mgd. According to DEP, the Croton System can produce 275 mgd, somewhat higher than its historic maximum capacity of 240 mgd. Therefore, the Croton and the Catskill can collectively produce approximately 740 mgd, significantly short of the 1.2 billion gallon City demand. DEP has stated that it believes that City demand can be "substantially" reduced through the imposition of conservation measures normally taken in a drought emergency, but has not provided an estimate of reductions in demand it believes are attainable.

With regard to additional water sources, DEP has stated that could obtain 140 mgd of water from the following sources. These sources are:

- **60 MGD FROM THE CROTON FALLS RESERVOIR**

The Croton Falls Reservoir, which is part of the Croton Water Supply System, has a pump station that would enable it to pump 60 mgd from Croton Falls to the lower portion of the Delaware Aqueduct, below the area that will be closed because of the leaks. Because Croton Falls is part of the Croton System, water from this reservoir is normally delivered to the City via the Croton Aqueduct. Pumping this water to the Delaware Aqueduct would increase by 60 mgd the amount of water that could be delivered to the City from the Croton System per day. This would, of course, draw down the volume of the Croton System faster than usual.

- **60 MGD FROM THE DEP'S JAMAICA WATER SUPPLY**

  DEP acquired the Jamaica Water Supply (JWS) System by condemnation by several years ago. Since that time, DEP has been systematically shutting down the Jamaica Water Supply groundwater wells in favor of supplying the former JWS customers with higher quality upstate reservoir water. DEP has reduced the production of these wells by about 75 mgd over the last few years. Returning the JWS wells to full production would mean delivering the lower quality water that DEP has sought reduce from its distribution system since it acquired the JWS.

- **20 MGD FROM THE JWS SECTION UNDER NASSAU COUNTY OWNERSHIP**

  The Committee will ask DEP what arrangement, if any, it has with Nassau County officials regarding obtaining this water from Nassau and whether or not the infrastructure exists to transfer this amount of water from the Nassau side to the Queens side of the JWS service area. The portion of the JWS in Nassau County was not part of the condemnation proceeding by the City.

DEP has indicated that in addition the above-mentioned water sources, it would investigate its ability to use water from the Brooklyn-Queens Aquifer. This aquifer was recently the focus of an intensive study by DEP. The Committee will ask DEP about what role the Brooklyn-Queens Aquifer could play in supplementing the City's water supply. The Committee will also ask about other water sources, if any, the DEP could consider drawing upon. However, even if all these water sources could be made available, there is still a deficit of several hundred million gallons per day that DEP will be hard pressed to supply if the Delaware Aqueduct is off line for a significant period of time.

Moreover, this scenario assumes that the Catskill and Delaware Systems, their respective aqueducts and any additional water sources will be able to deliver their maximum flows at all times. This is not always the case. For example, the Croton Aqueduct is currently operating at only 40 mgd because of aqueduct maintenance being conducted that, according to anonymous DEP sources, is related to chemical contaminants seeping into the aqueduct in northern Manhattan. One of the benefits of having the three separate water systems that the City has enjoyed through the years is that brief interruptions or slowdowns in one of the systems are compensated by the other two systems. Taking the Delaware System out of service for a prolonged period of time, however, would not allow for any interruptions in the Catskill or Croton Systems or in any of the additional systems that that DEP can draw upon.

REPORT OF THE ENVIRONMENTAL GROUP RIVERKEEPER

Attached to this briefing paper is a draft report on the Delaware Aqueduct leaks by the environmental group Riverkeeper, which has been very active on water supply issues for many years.

Attachment K

NY OBSERVER, 3/10/03

Why an Aqueduct? Despite Fiscal Crisis, Bloomberg Decides to Spend $2.5 Billion On 16-Mile Plan to Bring Water to City

Mayor's Big Dig: Money Drains Out, Water Flows
Greg Sargent

At a time of budget cuts and work-force reductions, Mayor Michael Bloomberg has committed billions of dollars to an enormous new capital project that rivals, in scope and complexity, the great public works of Robert Moses, the legendary builder of parks, highways and beaches.

The Observer has learned that the Bloomberg administration has decided to build a new $2.5 billion, 16-mile-long underground aqueduct from the upstate reservoir system to the city. The Mayor made the decision, which has not been publicly announced, several weeks ago, and Christopher Ward, the commissioner of the city's Department of Environmental Protection, is expected to reveal key details at a City Council hearing on March 6. The new aqueduct is to be named the Kensico Aqueduct.

"We've committed the money for this project," Mr. Ward told The Observer. "It's going to happen."

As befits its name, the new aqueduct will originate in the upstate Kensico Reservoir, travel through Westchester County at a depth of around 700 feet, and finish at an underground valve chamber in the North Bronx that is the gateway to the entire city system. It will take 10 years to build, and design and engineering contracts are expected to be awarded within the next few months.

The Kensico Aqueduct is an entirely separate initiative from the Third Water Tunnel, a decades-old project that is being carved out of bedrock hundreds of feet beneath the city. The tunnel is confined to the five boroughs, whereas the aqueduct will transport water from upstate. There are signs, though, that the Third Water Tunnel has awakened in Mr. Bloomberg an interest in great public-works projects: Just before the end of the year, the Mayor made an unpublicized, impromptu visit to the tunnel, donning a hard hat and taking a construction elevator hundreds of feet into the bowels of Manhattan to drop in on the sandhogs, the tunnel workers who burrow through bedrock. Mr. Bloomberg came away awed by what he had seen.

The decision to build the new aqueduct comes as the city's water-supply system is nearing its 100th anniversary. At present, the 1.3 billion gallons of water that the city consumes each day are transported from upstate in three majestic but aging aqueductsâ€“the New Croton, Catskill and Delaware aqueducts, all of which are between 60 and 100 years old and are plagued by leaks or valve failures. It's impossible to undertake extensive repairs to the aqueducts, however, because the city needs them to keep pumping at all times. Construction of the new aqueduct will make such repairs possible without major service interruptions.

"We're witnessing the snap, crackle and pop of an aging system," Mr. Ward said. "While there are no imminent calamities, it's critical that we launch the Kensico Aqueduct now, so we can care for the system's other aqueducts. It will take at least a decade to build the new one, and we can't defer

those repairs forever."

The decision is a bold step for Mr. Bloomberg and Mr. Ward. It will require a huge public expenditure amid the worst fiscal crisis in a generation. What's more, Mr. Bloomberg is committing the money to a project that has been regarded as something less than a priority by a string of previous Mayors. The proposal for a new aqueduct was first floated in the 1950's, and since then it has been all but forgotten, filed away by successive administrations in that most useful of bureaucratic categories, "needs further study."

But now Mr. Bloomberg and Mr. Ward have taken the unexpected step of committing billions of dollars to a project that won't see its ribbon-cutting until well after the Mayor has left City Hall. And they're fully aware that they may pay a short-term political price for their efforts to secure the long-term health of the water system. Because funding for DEP capital projects comes from water and sewer fees and not from general tax revenues, the new project is all but certain to cause a long-term rise in those fees. And that very likely will anger homeowners who are already furious about recent hikes in property taxes.

"While water and sewer rates will rise, we will do all that we can to keep them as low as possible," Mr. Ward said. "But if we don't build now, what will we have left New Yorkers with 50 years from now?"

A Huge Task

To grasp the magnitude of the task at hand, consider that the construction of the city's three current aqueducts were milestones in the hidden but spectacular history of New York's underground infrastructure. The birth of the modern water-supply system took place in 1905 with the completion of the New Croton Aqueduct, a turn-of-the-century engineering marvel of iron and brick that today continues to transport water from a patchwork of lakes and reservoirs in Westchester. A decade later, the city took a dramatic step forward when it opened the Catskill Aqueduct in 1915, which reached much farther north to tap the Catskills for the first time. The Delaware Aqueduct expanded the system's reach deep into the Western Catskills when it opened in 1944.

These aqueducts have been carrying torrents of water to the city continuously since their collective inception, so it's not surprising that they're showing scattered signs of wear and tear. The Delaware Aqueduct has a decades-old leak some 700 feet beneath Roseton, NY, a tiny rural town. Both the Catskills and New Croton aqueducts have been plagued by all manner of stresses and strains, such as minor leaks and oil intrusionsâ€”not harbingers of chaos, perhaps, but nonetheless in need of care.

The problem for Mr. Ward and the other men and women who maintain the city's water-supply system is that it's impossible to undertake extensive repairs to the existing aqueducts without shutting them down. And that's simply not an option, because closing even one aqueduct would leave millions of New Yorkers without water.

Then there's the remote possibility of terrorism. If somehow one of the aqueducts were to be ruptured, a scenario which city officials believe is virtually impossible, ”half the city could be left temporarily without

water until the aqueduct was repaired. A new aqueduct would nullify that threat.

The new aqueduct is part of a 10-year, $16 billion capital plan designed to protect the city's water supply for decades to come. The plan, which was made available to The Observer, also includes funding for the extensive study of a new technique that may help the city in times of future drought.

The technique, which has never been tried in New York, is extraordinary: It entails injecting hundreds of millions of gallons of fresh water into an underground aquifer on the Queensâ€“Long Island border. If the water is injected by huge pumps, engineers believe, it will sit undisturbed inside an enormous underground bubble for an undetermined amount of time. In times of aquatic plenty, the city would thus be able to store fresh water in the aquifer, to be pumped out again during water shortages. City engineers are planning to begin testing the idea this summer, Mr. Ward said, and if it flies, it will be put to use in approximately a decade.

The engineering challenge of building the Kensico Aqueduct is no less daunting. On March 4, a crew of DEP engineers met to map out what lies ahead. The first step is to work out an exact route. That entails doing an extensive study of the geology of the possible routes to search out and avoid faults, underground rivers and other geological flaws that could complicate the tunneling process.

The next step will be to fix on a designer who will work out logistics, such as hooking up the aqueduct to the Kensico Reservoir and finding points of entry for machinery. The actual tunneling will be done by a huge tunnel-boring machine known as "the Mole," a formidable, 70-foot-long contraption with spinning blades that chip away at the rock. The Mole is connected to a conveyor belt that carries the rubble back to the entry point, where it is raised to the surface and carried away. This technique is a significant advance on earlier techniques, such as the dynamite blasting that was used on the Delaware Aqueduct and the "cut-and-cover" method used to excavate the Catskill Aqueduct.

Once the aqueduct is complete, it is lined with thick walls of concrete. When finished, the aqueduct will be about 20 feet in diameter. At present, city engineers are grappling with a key issue: trying to determine just how much water the aqueduct should be designed to carry. It may be built on such a grand scale that it'll be able to carry the city's entire daily water supply.

Attachment L

DEP chief disputes case for building plant at Eastview
Letters to the editor
The op-ed page
The Riverdale Press
Thursday, February 26, 2004 – A13

To the editor:

I write in response to your Jan. 22 editorial "A new look at the filtration plant," and Joe Ryan's article of Jan. 15, "Filter study finds Westchester cheaper." Yet again, I am amazed at how your newspaper laid out a position unsupported by the facts.

As you must be aware, it would be irresponsible to abandon, as you suggest, any site under consideration until the environmental review process is complete and all relevant factors have been evaluated and taken into account.

While the Draft Supplement Environmental Impact Statement (DSEIS) has been released, DEP still intends to review all comments submitted and respond to all legitimate concerns. That being the case, it behooves me to comment on some of your more egregious misstatements.

Your editorial begins with a lengthy description of how "comical" (your word) it is that the DSEIS alleges that building the filtration plant at Eastview would cause a significant degrading to that "neighborhood's character," while building at Mosholu would not cause such a degradation. Unfortunately, not only is your understanding of the term "neighborhood character" incorrect ("neighborhood character" is a specific term of art that is a composite of different elements), but the DSEIS did not even reach this conclusion.

What the DSEIS concluded is that because the Mosholu site will be returned to its current condition after the filtration plant is constructed while the Eastview will not, and because the building of the filtration plant at Eastview would coincide with the construction of the Catskill/Delaware ultraviolet (UV) facility at Eastview, building at Eastview would have more of a permanent negative impact on the surrounding neighborhood than building at Mosholu.

Most significantly, your editorial continued by claiming that construction costs would be cheaper at Eastview than at the two Bronx sites and that this would have a cost and rate impact on city consumers. If your contention was that the city should build the plant where it is the cheapest, with the least amount of rate impact and risk, then you should have reached the conclusion that the filtration plant should be built at the Mosholu site.

Unfortunately, it would be the Mosholu site without the benefit of $243 million of significant park improvements in the Bronx. As you should understand, these monies are included in the costs estimates for the Mosholu site.

Therefore, taking the current savings and adding to it the $243 million of park improvements, the total cost savings would be approximately $400 million, which would have

the net effect of making the rate for the average rate payer $9 per year less expensive at Mosholu than what it would be at Eastview.

As the DSEIS makes clear, even with money for Bronx parks, Mosholu is still $140 million cheaper than Eastview, without having the significant cost risks that the Westchester site has that could significantly increase the long term rate exposure to New York City consumers. These cost avoidance risks are not included in the rate impacts but figure significantly in our water supply planning.

Attachment M

On *BronxTalk PrimeTime* this week, DEP Commissioner Christopher Ward sat down with Gary Axelbank for an exclusive interview about the siting of the Croton water filtration plant. This is the transcription of that interview:

Gary Axelbank: Is this a done deal? Is the entire exercise a scam? Is it all for show? Many people believe that the DEP has already made up its mind where this plant is going to be.
Christopher Ward: No, it's not a done deal and it's definitely not for show. The measure of that is the amount of information that we have provided to both the Bronx communities and the Westchester communities, which have prompted a lot of discussion and the debate that we found ourselves at Dewitt Clinton discussing and elsewhere around the city. No decision has been made. A decision will be made after the end and the completion of the SEIS. As we said in the beginning of the process, this is a transparent exercise. We're providing all the information to the various communities. It's been that very information which makes clear that this isn't a done deal by any means.

GA: You wrote a letter to Council member Koppell and the Riverdale Press, similar kinds of letters, accusing them of prejudging the process. Mayor Bloomberg prejudged the process, indicating in the State of the City Address that this is a planned construction in Van Cortlandt Park in the Bronx. You could understand that many people would base that coming from the city's number one citizen that it's a done deal, that already the DEP is planning to do this.
CW: To be fair to the mayor, the new odds of the SEIS process was overcome by his enthusiasm for the potential for what could be done for the Bronx if the Mosholu site were chosen. He misspoke to be quite candid, because it's not a done deal. We do need to complete the SEIS. Rather, what he was referring to was the fact that there is an opportunity for the Bronx, given the $243 million which would be made available should the Mosholu site be chosen, is an unbelievable legacy for him or any mayor to potentially leave for the Bronx. That was the context that he was answering the question.

GA: Of course, that $243 million is going to be paid for by somebody, so he may appreciate the fact that it's a nice legacy, but he could raise taxes or raise that money in any form that he wanted if he wanted to add $243 million to the cost of any city agency.

CW: Right, but that doesn't mean that necessarily that money that was raised would be available for this sort of project. One of the things that makes Mosholu unique is due to the alienation requirement for securing the Mosholu site, the necessary mitigation plus the necessary parkland enhancements which go with alienation presents that unique combination of both park opportunity and, at the same time, park funding.

GA: Is that a reason to build a plant in the Bronx?
CW: No, and I appreciate the opportunity to answer that question. Where do you build a plant which is best for the long-term interests for the City of New York in terms of its water supply? That is the fundamental question that needs to be asked. It's not about park money. People always say, "Which is cheaper? Which is not?" That's obviously a concern. It's not just about jobs, although jobs are a concern. It's what's best for the city's long-term water supply interest.

GA: You're talking about the process and how important the process is. At the hearing a year ago at Dewitt Clinton H.S., you insisted we didn't even need this process. You had said, "Do we need a new environmental impact statement?" You phrased it in a number of ways and each time you said no. But now, all of a sudden, you think this is a good process.
CW: It's a good process that came out of the fact that there was the need for additional information that the local communities, both in Westchester and here in the Bronx, did not feel that they had. There was the need for the kind of cross-comparison that people were concerned about. The framework for answering the type of information and the types of public policy questions that needed to be answered earlier was there before. This gave all the communities more time, more information, and a chance to look at things from a different perspective. But the necessary information was there nine months ago.

GA: Who was responsible for the hearing at Dewitt Clinton last Wednesday?
CW: This was the responsibility of the Department of Environmental Protection.

GA: When union members were sitting right next to where the microphone was located, often at the edge of their seats or on the armrests making comments and intimidating community members, why didn't you intervene and put a stop to it so the community members, some of

whom were seniors and children, would have a fair and respectful view for participating in the process?

CW: I don't think that's fair. If you look at the tape, you'll see the DEP police who were there at the scene went up to a number of people, both those in favor of the project and those who were opposed to the project, and asked them to be cordial and respectful. Talking to the entire group time and time again, I exhorted both groups to be equally respectful of the public process. Obviously, passions were running high on both sides. But if you look at where DEP police were intervening, staff were intervening and my request to both sides of the aisle for mutual respect, we attempted to conduct that hearing in a fair way.

GA: There were many children who wanted to speak. In fact, some came on our show two days later and couldn't believe that they had been booed. There were seniors who were so intimidated that they were scheduled to speak but just felt really intimidated by it. If that was the community's one chance to speak, many people felt like they were really unfairly intimidated. Maybe, had you moved the microphone, had you protected them and really were concerned about the process that they were trying to participate in, maybe that wouldn't have been the case.

CW: As you saw, the children from The Cove group came up and were brought forward in a very respectful way and we allowed them to express their views. While the community has certain levels of concerns which are obviously legitimate, the working man and woman in the City of New York can have similar concerns about long-term livelihood and the economic future that they have. Many of the people who were speaking in favor of the project were in fact Bronx residents.

GA: Community people are not working people?

CW: I was referring that in terms of the way you characterized the union groups.

GA: Let's talk about the environmental impact statement. It seems inconceivable that in the executive summary, when it lists disadvantages for the Mosholu site, it does not list impacts of construction as one of the clear downsides of this immense project. It's either a direct attempt to influence the decision or maybe the most inept report any city agency could issue. It is the

central issue for community members and it was not listed as disadvantages of construction in the Bronx.

CW: In terms of the overall approach of the EIS, and this has been something which has vexed a lot of the advocates in the Bronx, the construction and the construction location is occurring below grade and it's not building construction above ground that would then be permanent. In terms of the construction impact—in terms of truck traffic, in terms of noise—it's within the SEIS. What was of concern was the lasting community-based impacts compared between Westchester and compared to Mosholu. Mosholu would be returned as a golf course, and the structures in Westchester would be above grade. The EIS was referring to that long-term impact.

GA: What about the concerns between the years 2005 and 2011? If you're digging a hole in the ground, that would have much more significant impact than building above ground. One would think that was a much more difficult and loud and consuming process for the people in the area.
CW: If you read through the SEIS, all of those issues are set forth.

GA: Other than in the executive summary, which is the most important place, where it doesn't list that the impact of construction is of great concern.
CW: The EIS is looking at during construction—truck impacts, noise impacts, air impacts—all of that is detailed in a major volume for the SEIS. It isn't accurate to say that's not something that was considered within the SEIS.

GA: The mayor of the City of New York came to Norwood and said, "People in the immediate area of the Mosholu golf course site would be seriously disadvantaged by the construction of the water filtration plant at the Mosholu golf course." This would be a huge regional project in a residential area. It seems a rather absurd notion that since that's the leading complaint of community residents, that wouldn't be of the utmost concern to the DEP.
CW: One of the things that is throughout this SEIS was the revalidation of the earlier EIS, the delineation of any changes in terms of construction impacts and the building of that project. The whole point of the SCIS was to lay out the very issues that you described and to weigh them against the alternative sites.

GA: What's the difference between constructing a plant underground, which would mean all the excavation and the blasting, and constructing a complex building above ground? Aren't there concerns about water levels and other things once you go that deep, as well as the entire process of excavating all that much more dirt? Doesn't that complicate the process and make it much more expensive and detrimental to the community?
CW: It doesn't make it more expensive. The plant built in Mosholu would be about $400 million cheaper than it would be in Westchester over the lifecycle of the project. Each one of the issues that you raise is a concern (either in) Westchester (or) Mosholu. Can those issues be addressed? Are they manageable? Do they need to be mitigated? What are the pros and cons of each one of these sites? That's the very reason we conducted the SEIS and an earlier EIS was created. No construction project comes without impact. Are those impacts acceptable, mitigatable? Can you build that project in a way which is manageable fort the City of New York?

GA: Do you believe the impacts for a potential plant in the Bronx are acceptable?
CW: The EIS will show us whether or not they can be mitigated, whether they can be addressed through parks or mediation. All projects fundamentally have to answer that question, and that's what the SEIS is there for. Throughout the city's history, there are a lot of very large-scale projects that communities obviously are concerned about that have successfully been built and that have been built good for the long-term health of the city—transportation projects, sanitation projects.

GA: Then why does this project create such discord and anger amongst community residents? We've built a mall in the Marble Hill section of the Bronx. If they were to redo the Kingsbridge Armory, which would be a massive project and create many jobs, there would be immense support for that. Yet, this project doesn't have that support because of the nature of trying to excavate that amount of ground and in a park that needed to be alienated, maybe one of the largest park alienation bills in the history of the state.
CW: I'm not sure that's true. Remember, there was a proposal for it to take place here at Jerome Reservoir. The earlier DEP proposal was Jerome, and it wasn't successful there. Obviously, the

Gun Hill Road-Jerome community is concerned about a large-scale construction project. There's been an enormous amount of debate over the need for filtration. That was a 10 or 15 year debate. Clearly now, all health advocates and water supply advocates recognize the need for filtration and then the sighting becomes the last issue. It is a legitimate concern in terms of what large-scale construction will do in a community. But that's not to say that you can't build large projects adjacent to communities if you approach them in an environmentally sensitive way. That's been proven around the city.

GA: You mentioned the notion of cost. The cost analysis in the draft Environmental Impact Statement is woefully incomplete. There's a page or two of bottom-line prices, very little support material on how those numbers were derived. You say it could be a $300 or $500 million savings. It would be silly for anyone to try and debate it with you because we don't have the information. I would be thrilled to be able to go through point-by-point what costs what. But you could make a two a three or four and I wouldn't know the difference of what it was. If you had put out detailed information, I, other journalists, and members of the community would have a real chance to understand what's going on. At this point, people are doing it on their home calculators trying to figure out what this costs.

CW: I'm not sure where you get that. You have the construction costs. You have the operating costs. You have land taxes. You have the mitigation costs associated with the project. To a certain extent, the public debate and the questions that you're asking beg the fundamental public policy questions that we're dealing with here. If the numbers are correct, assuming that they are, and that this project is committed to providing the money which is available to the Bronx, $200 million plus $43 million, and if you know that the long-term risk for water supply in terms of conveyance down to the city or anywhere from $529 to do the new Croton aqueduct or potentially $4 billion for the Kensico City Tunnel, and that if all the project were to be built in Eastchester or up in Westchester, put in all of the city water supply eggs in one basket, if you ask all of those public policy questions and not be cynical and think that someone is misleading the public in providing that information, we're engaging in that public debate by saying that the DEP is misleading people because all of the final construction estimates for them. That's been the problem in terms of how people have approached this.

GA: Or has it been a problem because they've tracked the way the DEP has handled it and they have no confidence in it.
CW: I don't know why. There's another good one where people say, "Is that $200 million real?"

GA: I'll give you a perfect example. In the environmental impact statement, it says there are no community centers in the study area. The Mosholu Montefiore Community Center is one of the largest in the City of New York. Kingsbridge Heights Community Center serves 5,000 people. When they read that, they say, "This DEP doesn't know anything about our community where they're talking about building this project."
CW: When they read that there's $200 million built into the capital construction costs in the Mosholu project and people say, "Is that money real?" …..

GA: But it's not listed anywhere in the environmental impact statement.
CW: It's right in the cost estimates for where Mosholu is. It is in the spread sheet which is available for Mosholu.

GA: But it's not in the environmental impact statement.
CW: Sure it is. That's the public policy question that I wanted to get across today. What are we talking about in terms of the city's long-term water supply? What are we talking about (in terms of) the future of the Bronx? Where are potential long-term risks? Is there a commitment there to provide $243 million? If it is there, is that potentially a good thing for the city as a whole?

GA: That may be a good thing, but we don't have to answer that again. But is that a good reason to build a filtration plant? That's not the reason to build the plant. The reason to build the plant in whatever location is if it's the best plan. Building the Kensico City tunnel is part of the same consent decree that orders building the filtration plant.
CW: No, it's not. It's not a consent decree on building the Kensico City Tunnel at all.

GA: You were quoted in the New York Observer as saying it's going to be built and that you thought it was a good project. The mayor certainly is behind it. What flexibility does the Kensico City Tunnel provide for the distribution of the city's water supply?
CW: Without a doubt, it is a lynchpin of the city's long-term water supply. The city is reliant upon the Catskill and Delaware aqueducts to bring water into the city and they're 50 to 75 years old. We would not have a capacity to turn one of those off in able to repair it in the next 50 years. The Kensico City Tunnel brings this redundancy for that water supply. That's why we advanced it within the city's capital plan. This is the kind of long-term water supply planning that you need, which is a long-term vision, not a short-term vision.

GA: If you build the Croton plant in the Bronx, don't you miss a chance to include the Croton water in that flexibility, in that long-term plan that could give depending on changing environmental factors, whether it be turbidity in the Cat-Del or drought or any number of other considerations? It could give you more flexibility in the long run.
CW: No, it would give us the exact opposite. That's one of the major concerns for building it in Westchester in the Kensico City Tunnel. The Kensico City Tunnel is a project which has been on the DEP's books for probably 30 or 40 years now. It's a $4 billion project. If we're lucky, it might take 20 years to build. Will the city financially be able to build it? Will Westchester allow us to builds it or will there be other long-term engineering problems?

GA: That 20 years conflicts with what your previous statements have been.
CW: I just said generally, it's a long-term project.

GA: Ten years is not 20 years.
CW: OK, so it might be done by 2017. It might be done by 2025.
GA: or 2015.
CW: There's an enormous set of risks there of whether or not that tunnel should be built. If that tunnel doesn't get built, then you're going to have to bring the water through the new Croton aqueduct, which is going to cost you half a billion dollars to end up pressurizing so you can bring the water. Last, you will have then put in Eastview all of the city's water supply eggs in one single basket. Unfortunately, we do now live in a world where people do threaten cities' water

supply. Having both of them in one location jeopardized by some type of security thing is not flexible. It's losing flexibility.

GA: That doesn't address the real water delivery problems, but is it easier to secure one location or five locations or two locations or three locations?
CW: It's better for a water supply to have diversity of supply options. God forbid you lose the Kensico Delaware system. You would, at least, have the Croton system coming down in an independent manner, available within the city, adjacent to Jerome Park, and close to the Hillview Reservoir.

GA: But isn't putting the Croton plant in Westchester a better plan because it gives you more versatility as to which water supply you use or you can use more Croton water as necessary?
CW: No, it would be putting all of those water supply eggs in one basket. Wherever the Croton filtration plant goes, we'll be able to maximize and that's one of the benefits.

GA: Then, what are the advantages to building it in Eastview in your point of view?
CW: The advantages to building at Eastview are the fact that it is a city-owned piece of property that we will control and that it will be a part of a complex in Westchester that with above-grade construction…..

GA: You've talked down the notion of the Kensico City Tunnel and said, "It might or it might not get built." Yet, this is one of the choices. Anybody who would listen to this show would say right now that the commissioner has already made up his mind and he's not seriously considering the Kensico City tunnel, and the plan that's in the EIS is one of the alternatives when you're establishing that this is a fair process and that you are seriously considering it.
CW: Just to be clear here, you have asked me five or six pointed questions on what are the advantages or disadvantages or Mosholu. I have been really setting forth the public policy justifications that were going through now for the Mosholu site. So, when you ask me why is it even in consideration, I'm giving you all the reasons why it is in consideration. There are some other potential advantages of the Harlem River site, and there are potentially some other

advantages of the Eastview site. There are advantages of the Eastview site as a new Croton aqueduct project or an Eastivew site as a Kensico City Tunnel project.

GA: Which one gives the city the greatest flexibility in the long run out of those two Eastview select choices?
CW: In terms of Eastview choices versus new Croton aqueduct versus Kensico City Tunnel, the Kensico City Tunnel would give you greater flexibility. Having said that, you have to ask yourself, "Should the city absorb, from a waters supply perspective, that long-term risk?" If you can avoid the risk of not having to build the new Croton aqueduct, or if you could eliminate the risk of delaying….

GA: Why make the announcement that this is going to be built if, right now, you're saying it might not get built and that it's a risk?
CW: I'm only being practical here.

GA: But you made an announcement that this is going to be built in March, last March.
CW: Unfortunately, commissioners have announced that this phase of the water tunnel was going to get built. If you know that there's a reasonable set of risks for one of your major conveyances, that if things don't always get built on time, particularly a large tunnel which are going to require shaft sites, and you're then going to put all of your water supply options within a single location, there's a reasonable set of risks that you should assess in terms of that being an appropriate site for the Croton system. That's all that's being discussed here.

GA: What will the Jerome Park reservoir look like, and what opportunities for recreation and other access for the community would be there if the plant is built and Eastview and the reservoir is taken off line?
CW: First of all, when Jerome could ever be taken off line—if you wanted to take it off line—would occur when the Kensico City Tunnel is built. If it's ever coming off line, and no decision has been made on that, it's going to be in the 2017 to 2020 perspective. You're not going to take that reservoir out of service until you've built that tunnel because you're going to still use it as a water supply system.

GA: You said it might be a very good system for delivering the water. You announced it a year ago. If that's a good system for doing it, why not pursue that aggressively, take the Jerome Park reservoir offline, give it a greater access for the community?
CW: Because you can't do it until you build the tunnel.

GA: So, why not aggressively pursue building the Kensico City Tunnel?
CW: I'm not getting this. Obviously, we are aggressively pursuing it. We can be aggressive today as we possibly can. For the city to be able to afford a $4 billion tunnel over the next 20 years, given a potential fiscal reality, might be very difficult. I would hope that all Bronx rate payers are as equally appreciative as water rates and sewer rates go up to build that $4 billion project for the next 20 years. If, for whatever reason, the city cannot afford it and you don't build that tunnel, Jerome Park Reservoir stays a part of water supply. You can't take it off until the Kensico City Tunnel is built.

GA: You mentioned the rates according to the chart that you did put in. Building the plant in Mosholu would cost more for water rate payers than it would for building a plant in Eastview.
CW: No, there's a construction cost, there's life-cycle costs, and then there is the rate impacts. There is $380 million worth of savings. If people simply want to build it in the cheapest place, they should build it in the Bronx.

GA: If we had the information, I'd be glad to discuss that with you. Commissioner, thank you for your time this evening.
CW: Thank you.

Attachment N

February 18, 2004

Hon. G. Oliver Koppell
New York City Council
3636 Waldo Avenue
Bronx, NY 10463

Dear Mr. Koppell:

I am writing in response to your letter to Mayor Bloomberg regarding the siting of the Croton filtration plant. At the outset, I am sure you would agree that it would be entirely inappropriate to circumvent the SEIS process and not complete the assessment of the three sites. The Administration's commitment to a full and complete SEIS process will be maintained. The communities surrounding each of the sites deserve no less. I am frankly surprised you would want otherwise.

In your letter and at the City Council hearing you raised as your primary concern or contention that the siting for the Catskill/Delaware Ultraviolet (UV) plant at Eastview presents significant cost savings that would make the Eastview site for the Croton filtration plant economically more favorable. I am not sure how you reached such a conclusion; I can assure you that this is not the case. The incremental cost savings of eliminating the UV component in the Croton plant and using the Cat/Del facility is estimated to be approximately $10-$15 million. However, the site for the Croton Plant at Eastview is based on its hydrological proximity to the aqueducts and its elevation to the City's water system. As you should know, the beauty of the City 's system is that it is essentially gravity-diverted to the Cat/Del plant, a major pumping component would have to be added with significant long–term energy supply needs, all of which would greatly exceed the marginal savings from the UV component. As a result, there is no additional economic advantage for the Eastview site.

The second major issue you raised is the cost and rate impacts on City consumers. If your contention is that the City should build the plant where it is the cheapest with the least amount of rate impact and cost, then it would be the Mosholu site. Unfortunately, it would be at the Mosholu site *without* the benefit at $243 million in significant park improvements and greening for the Mosholu site. Therefore, the total cost savings would be approximately $400 million, which would have the net effect of making the rate for the average rate payer $9 per year less expensive at Mosholu than what it would be at Eastview. As the DSEIS makes clear, Mosholu is still $140 million cheaper than Eastview, without the significant cost risks that the Westchester site has, which could significantly increase the exposure to New York City consumers. These cost avoidance risks are not included in the rate impacts, but should, and do, figure significantly in our water supply planning. In the DSEIS, we assume a very conservative land tax or PILOT to be paid to Westchester of $6 million per year. This has a net present value of approximately $82.6 million over 30 years. If this amount were to grow to $10 million or $15 million, as well it might given Westchester's own revenue and tax needs, this would increase NPV costs by $55 million or $123.9 million respectively.

Moreover, there is an even greater long-term risk found in the conveyance needs for the plant and City as a whole. While this Administration is committed to construction of the Kensico-City Tunnel, history tells us that such large size projects often take decades to complete. As you are no doubt aware, the Kensico-City Tunnel has been in the planning stage for over three decades. For whatever reasons—the costs are too high (it is estimated to be as much as $4 billion); the rate impacts too great; the shaft siting opposition in Westchester too strong; or simply construction barriers—completion of the Kensico-City Tunnel may be delayed. If this occurs, the New Croton Aqueduct would have to be pressurized at a cost of $511 million in order to convey filtered water from the Croton plant into the City. If costs are truly your concern, then these significant risks at the Eastview site should be seriously considered.

One final point—DEP is not in a position today to reach a decision on the future of the Jerome Park Reservoir. The future role of the reservoir is contingent on whether the Kensico-City Tunnel is built, which as you can ascertain from the above, is by no means guaranteed. Only once the KCT is put online—at some date no earlier than 2017—will we be able to ascertain what further function the reservoir should have in the City's water system.

If you have any additional questions regarding the selection of a preferred site for the Croton filtration plant, please let me know.

Sincerely,

Christopher O. Ward