

C. STORMWATER

Comment C-1

The Stormwater Management Report is acceptable. Cleaning of the Authority ditches and drains impacted by the development may be required after the completion of construction.

(Letter from New York State Thruway Authority, dated 10/12/2005)

Response C-1

Authority ditches and drains impacted by the development will be inspected and cleaned as necessary after the completion of construction. The applicant is to provide verification to the New York State Thruway Authority that drains have been inspected and cleaned.

Comment C-2

The proposed construction calls for the relocation of the existing 72" pipe located in the northern portion of the property. This pipe is owned and maintained by the Authority through a drainage easement. While there are no objections to the relocation of the drainage pipe and easement the developer will be required to complete a NYSTA Real Property Application to transfer rights to the relocated easement location. All costs associated with the drainage and easement relocation will be borne by the developer. All details associated with the drainage relocation will require the approval of the Authority.

(Letter from New York State Thruway Authority, dated 10/12/2005)

Response C-2

Comment noted.

The applicant will complete as required a NYSTA Real Property Application to transfer rights to the relocated easement location. All costs associated with the drainage and easement relocation will be borne by the developer. The applicant will provide details of the drainage relocation to the Thruway Authority for their review and approval.

Comment C-3

A Thruway Work Permit will be required for any construction activity that will take place on Thruway property or on the facilities owned by the Thruway.

(Letter from New York State Thruway Authority, dated 10/12/2005)

Response C-3

So noted.

A Thruway Work Permit will be obtained prior to any construction activity proposed on Thruway property or on any facilities owned by the Thruway.

Comment C-4

p. 136—Is the proposed semi-annual maintenance-sweeping program sufficient for a facility of this size to prevent the entrance of debris into the stormwater management facilities?

(Letter from New York State Thruway Authority, dated 10/12/2005)

Response C-4

The proposed semi-annual maintenance is proposed as an additional measure to remove sediment and debris from the proposed stormwater management system. The proposed Vortechs devices will be utilized throughout the year and will treat all stormwater from the parking areas before it is discharged off-site. The intention of the proposed

sweeping is to remove sediment from the parking areas before and after the winter months when road salting and sanding occurs. The Vortechs devices will also be maintained to remove sediment twice per year to keep the devices functioning properly. The combination of sweeping the parking lot and cleaning the proposed water quality devices semi-annually will keep the proposed water quality systems functioning properly.

Comment C-5

We assume Vortechs devices are being selected under the redevelopment guidelines put forth by NYSDEC; see comment 10 below as well.

(Memorandum from HDR/LMS, dated 10/24/2005)

Response C-5

The proposed Vortechs devices have been selected based on the criteria included in the NYSDEC's "Interim Strategy for Redevelopment Projects". The devices are sized to treat peak rates of runoff resulting from 100% of the contributing area's water quality volume as defined by NYSDEC.

Comment C-6

The difference in impervious area between EDA-1 and PDA-1A and PDA-1b is missing. This information should be provided.

(Memorandum from HDR/LMS, dated 10/24/2005)

Response C-6

The impervious area that currently exists in EDA-1 totals 48.39 acres. The impervious areas which will exist in PDA-1a and PDA-1b total 48.68 acres. Therefore, the proposed improvements result in an additional 0.29 acres within these drainage areas when compared to existing conditions.

Comment C-7

The description of the soils is missing from the text; it is a required part of the SWPPP plan.

(Memorandum from HDR/LMS, dated 10/24/2005)

Response C-7

The on-site soils are as follows (Source: Soil Survey of Westchester County, New York):

- 1. SuA – Sutton loam, 0 to percent slopes (Approximately 3% of site)*
- 2. Ub – Udorthents, smoothed (Approximately 2% of site)*
- 3. Uf – Urban land (Approximately 84% of site)*
- 4. UIC – Urban land-Charlton-Chatfield, complex, rolling, very rocks (Approximately 11% of site).*

Comment C-8

There is no mention of the closest water body or any wetlands near area (probably a distance away, but should be mentioned).

(Memorandum from HDR/LMS, dated 10/24/2005)

Response C-8

Volume IV “Stormwater Management Plan” mentions the site ultimately contributes most of its stormwater runoff to the Bronx River, which is approximately ½ mile east of the site. The Hillview Reservoir is located approximately one mile south of the site. However, the site is not located within the reservoir’s watershed. The portions of the site which drain to the south enter the existing stormwater infrastructure in Yonkers Avenue which is downstream of the Hillview Reservoir.

Comment C-9

Erosion control map does show silt fencing, stabilized construction entrance, temporary swales. Also, plan should address project phasing.

(Memorandum from HDR/LMS, dated 10/24/2005)

Response C-9

The Sediment and Erosion Controls to be used during each phase on construction is depicted on Figure C-9.

Comment C-10

A copy of the inspection forms to be used should be provided.

(Memorandum from HDR/LMS, dated 10/24/2005)

Response C-10

A copy of the NYSDEC inspection forms to be used during construction has been included in the Volume II Appendix CCC.

Comment C-11

The Notice of Intent was not included in the plan.

(Memorandum from HDR/LMS, dated 10/24/2005)

Response C-11

The completed Notice of Intent has been provided in the Volume II Appendix DDD.

Comment C-12

It is also recommended a copy of the GP-02-01 permit be included in the SWPPP as a reference.

(Memorandum from HDR/LMS, dated 10/24/2005)

Response C-12

A copy of the SPDES General Permit GP-02-01 has been provided in the Volume II Appendix BBB.

Comment C-13

It appears this NOI will require a 60 day review due to the use of non-standard practices, this should be confirmed with the DEC.

(Memorandum from HDR/LMS, dated 10/24/2005)

Response C-13

It is the applicant's understanding that the NYSDEC will require a 60 day review period. A meeting will be held with the NYSDEC to discuss the project's requirements under the SPDES General Permit. The required 60-day review period will be confirmed with NYSDEC at this meeting.

Comment C-14

STORMWATER

The draft EIS notes that there are currently no stormwater quality measures at the site due to the shopping center being originally constructed before such measures were required. As part of the rehabilitation and redevelopment of the site, stormwater infrastructure will be upgraded to current engineering standards and in compliance with both State and local codes. The new collection system as proposed will collect and convey runoff from existing and proposed buildings, parking structures and on-grade parking areas to the proposed water quantity and quality facilities, and ultimately off-site. The maintenance of the facilities will be the responsibility of the property owner in perpetuity.

Westchester County promotes the use of best management practices to manage and treat stormwater runoff. A wide variety of best management practices exist and the New York State Stormwater Management Design Manual includes an evaluation of typical practices and a list of accepted practices that meet the state requirements for management and treatment. We recommend that the applicant make all efforts to incorporate best management practices into the project design.

(Letter from Westchester County Planning Board, dated 11/15/2005)

Response C-14

Best Management Practices have been incorporated into the proposed stormwater management improvements to be used both during and after construction.

Comment C-15

Page 8

Abandonment of Storm water pipes — what determines abandonment versus removal of pipes? Will abandoned pipes present voids underground and future settling problems?

(Memorandum from City of Yonkers Planning Bureau, dated 11/18/2005)

The DEIS notes that some storm water pipes may be abandoned in place. Will this cause a potential for parking lot settlement in the future?

(Memorandum from City of Yonkers Planning Bureau, dated 11/18/2005)

Response C-15

Abandonment versus removal of storm drainage pipes will be determined based on the depth of the pipe and the improvements planned in the subject location. For example, existing utilities beneath proposed buildings which will be supported on shallow spread footings will be removed. Existing utilities beneath a proposed building that will pile supported will be abandoned in place and the ends will be plugged with concrete. Existing pipes outside of proposed building areas will be removed or abandoned in the place as directed by the project geotechnical engineer. If pipes are to be abandoned in place, they will be filled with grout, crushed in place or the ends will be plugged with concrete to prevent soil infiltration and possible settlement.

Comment C-16

Define SPDES for the lay reader.

(Memorandum from City of Yonkers Planning Bureau, dated 11/18/2005)

Response C-16

Pursuant to Section 402 of the Clean Water Act (“CWA”), stormwater discharges from certain construction activities to waters of the United States are unlawful unless they are authorized by a NPDES (National Pollutant Discharge Elimination System) permit or by a state permit program. New York’s SPDES (State Pollutant Discharge Elimination System) is a NPDES-approved program with permits issued in accordance with the Environmental Conservation Law (“ECL”). Discharges of pollutants to all other “Waters of New York State” such as groundwater are also unlawful unless they are authorized by a SPDES permit.

A discharger, owner, or operator may obtain coverage under this general permit by submitting a Notice of Intent (“NOI”) to the NYSDEC. Submission of a NOI by an operator is confirmation that discharges of stormwater runoff, both during and after construction, will comply with the technical and procedural requirements of the New York State Department of Environmental Conservation.

The Department’s technical standards for erosion and sediment control are contained in the document, “New York Standards and Specifications for Erosion and Sediment - Control” published by the Empire State Chapter of the Soil and Water Conservation Society. For the design of water quantity and water quality controls (post-construction stormwater control practices), the Department’s technical standards are detailed in the “New York State Stormwater Management Design Manual.”

Comment C-17

Municipal Water Service — can reliance on COY water be reduced by “green bldg” techniques to capture and re use storm water for landscaping uses? Given the nature of the site, can reliance on municipal water for landscaping and other non-contact uses be satisfied by wells?

(Memorandum from City of Yonkers Planning Bureau, dated 11/18/2005)

Response C-17

The Applicant will not be exploring alternative forms of "Green Technology." The redevelopment of the Shopping Center will include the installation of new water system infrastructure in accordance with City of Yonkers Water Bureau and Westchester County Health Department requirements which will include new piping and backflow prevention. It is not advisable to develop a supplemental well water supply on a site with municipal water service due to the potential for inadvertent cross connection of the systems in the future.

Comment C-18

- 1) The first sentence does not make sense; it appears as if the word “pipe” was not supposed to be in the sentence.

(Memorandum from City of Yonkers Planning Bureau, dated 11/18/2005)

Response C-18

The applicant concurs.

Comment C-19

- 2) Explain what a “4th order stream” is and the impact of that designation on storm water design.

(Memorandum from City of Yonkers Planning Bureau, dated 11/18/2005)

Response C-19

Hierarchical ordering of streams based on the degree of upstream branching. A first-order stream is an unforked or unbranched stream. Two first-order streams flow together to form a second-order stream, two second-order streams combine to make a third-order stream, etc. (Strahler 1957). This ordering method starts at zero at each upstream terminal segment, and proceeds towards the root stream. Each time a node or stream junction is encountered, if both upstream branches have the same order, then the order is increased by one, otherwise the largest order is used. The NYSDEC regulations provide exceptions to the stormwater system design for discharges into fourth order streams. Fourth order streams require water quality treatment for inflowing stormwater, but do not require stream channel protection, overbank flood control, or extreme flood control measures.

Comment C-20

- 3) Explain how a “vortechinics” device provides” 80% removal of total “suspended solids”. Does this removal rate apply to grease and oil as well?

(Memorandum from City of Yonkers Planning Bureau, dated 11/18/2005)

Response C-20

The following is an excerpt from the Vortechs product manual, which addresses this comment:

“Most storm events (85 percent) do not exceed the two-month storm intensity. During this low intensity storm flow, the water level within the Vortechs® System will rise above the top of the inlet pipe, reducing inflow velocity and turbulence. Oil and fine sediments are usually washed off paved surfaces during these events, and the Vortechs® System treatment efficiencies are in the 80 to 90 percent range for typical urban runoff sediment. During a medium intensity storm, which occurs with a frequency of one to two years, remaining oil washes off pavement, and larger sediment particles and debris are now transported into the Vortechs® System. As flow increases, the water level rises above the low flow control and the tank begins to fill. With the inlet submerged, the oily layer is above the influent flow path, preventing re-entrainment of floating pollutants. Swirling action increases at this stage, which increases sediment removal rates. High intensity storms are infrequent, and storm flows have sufficient energy to wash off the largest sediment particles and pieces of debris. When the high flow control approaches full discharge within the Vortechs® System, storm drains are flowing at peak capacity. The Vortechs® System can accommodate flows up to the specified design storm (i.e. 10-year storm). Treatment efficiencies remain constant during this phase. Treated runoff is decanted out of the Vortechs® System at a controlled rate, restoring the water level to a low, dry-weather volume. This reveals a conical pile of accumulated sediment in the center of the grit chamber. Besides facilitating inspection and cleaning, the low water level significantly reduces maintenance costs by reducing pump-out volume.”

Comment C-21

Paved areas “swept twice per year” seems low in general and lower than what is likely the center's maintenance schedule. How often are the lots swept today?

(Memorandum from City of Yonkers Planning Bureau, dated 11/18/2005)

Response C-21

The parking lots are currently swept on a daily basis, and this schedule will be maintained in the future.

Comment C-22

Will the proposed increase in water usage have any impact on City of Yonkers per capita water rates as calculated by NYCDEP?

(Memorandum from City of Yonkers Planning Bureau, dated 11/18/2005)

Response C-22

The proposed increase in water usage will have an impact on City of Yonkers per capita water rates as calculated by NYCDEP. The Yonkers Water Bureau has advised that all non residential uses that are not included in the Year 2000 Census Population Data purchase water at the "in-city" rate which is higher than the "wholesale" rate. The Yonkers Water Bureau reported that as of December 2005, the "in-city" rate was \$2,205.88 per million gallons and the "wholesale" rate was \$617.79 per million gallons. However, it is estimated that the future shopping center will result in an increased average daily water demand of only approximately 8,360 gallons per day (gpd) or 4.1% over existing conditions. Since the "in-city" rate results in a premium of \$1,588.09 per million gallons ($\$2,205.88 - \$617.79 = \$1,588.09$), the premium cost for the additional 8,360 gallons per day will be approximately \$4,845.90 per year. The cost difference

between the "in-city" and "wholesale" rates is borne by the City, not the water customers. Therefore, there will be no increase in water bills to residents as a result of the project.

Comment C-23

No information is given about impacts of the water system construction upon area residents and businesses. Will the connections to the City of Yonkers water mains require water to be shut off to area residents? If yes, how will they be notified? Will connection cause "brown water" problems as sediment is disturbed? If yes, how will residents be notified?

(Memorandum from City of Yonkers Planning Bureau, dated 11/18/2005)

Response C-23

It is anticipated that the connections to the existing water mains along Central Park Avenue and Kimball Avenue will be a "wet taps" which should not require shutting off the main. In the unlikely event that the connections to any of the existing water mains require the water main to be shut down temporarily, in accordance with Yonkers Water Bureau requirements, the contractor is will be responsible to notify all affected residents via the local newspaper or other media a minimum of two days prior to the shut down of a water main. The notification will advise that there is the potential for the shut down to cause a temporary "brown water" condition as a result of disturbed sediment in the main. The Yonkers Water Bureau has advised that if "brown water" occurs, they will flush the mains to remediate the situation.

If the main is required to be shut down, it is anticipated that the work would be done within an eight hour, off-peak water usage shift.