

## **I. Stormwater Management**

### **1. Additional Technical Studies**

An updated Stormwater Management Report has been prepared to reflect the modified FEIS plan and is included in the Appendix. The Stormwater Management Report evaluates potential changes in stormwater quantity and quality and the measures proposed to improve the stormwater conditions on the project site.

Redevelopment of the former HVPC site will increase the impervious surfaces on the site from approximately 60 acres to 111 acres. This increase in impervious area will cause an associated increase in stormwater peak flow rates and an increase in nutrient and contaminant loads discharging to surface waters. However, the proposed action proposes the implementation of both structural and non-structural best management practices to mitigate the potential impacts from the proposed development. Present development of the site does not provide for any water quality treatment or detention of surface water runoff (including buildings, roads, parking lots, and a 9-hole golf course) prior to discharging into the Swamp River.

The project's stormwater quality management objective is to meet or exceed the requirements set forth in the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity (Permit No. GP-0-08-001) regarding post-development stormwater quantity and stormwater quality. As such, a combination of Stormwater Management Practices (SMPs) is proposed, including the installation of stormwater ponds and stormwater wetlands to detain and treat the site's stormwater runoff. The SMPs are designed to treat the entire runoff from 90 percent of expected rain events, as defined by the New York State Stormwater Management Design Manual. The SMPs will also provide detention for storm events up to and including the 100-year storm.

### **2. Plan Changes and Impact Summary**

Since publication of the DEIS, the modified FEIS plan has been revised to remove stormwater basins from the wetland buffers and 100-year flood zone, with the exception of the redevelopment area between the Swamp River and Route 22, where water quality measures are proposed in previously disturbed areas. Beyond these changes in basin locations, the general treatment methodology, goals, and types of stormwater quantity and quality management measures utilized remain the same as detailed in the DEIS.

### **3. Comments and Responses**

#### *Comment I.1*

We ask that the Applicant provide a comprehensive stormwater management plan which would show where the various stormwater prevention structures and techniques will be located. Section III describes a number of standard and low impact stormwater techniques which the Applicant states will be incorporated into the development. However, only the detention ponds and the hydro dam wet separators are shown on the maps.

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In order to fully evaluate what the potential environmental impact might be, additional drawings displaying where these structures, drain pipes, culverts and detention bays would be located would be helpful for all of us to calculate potential impacts.

We recommend that the Applicant use bridges instead of culverts to cross wetlands and streams. This will minimize impacts to fish and other wildlife.

We ask that the Board consider requesting more detailed techniques committed for low impact development.

(Elaine LaBella, Director of Land Protection, Housatonic Valley Association, Public Hearing Transcript, 6/3/09, Pg. 95-97; Tonia Shoumatoff, New York Watershed Coordinator, Housatonic Valley Association, Public Hearing Transcript, Pg. 105, 107; Elaine LaBella, Director of Land Protection, Housatonic Valley Association, Letter, Pg. 4; Graham Trelstad, AKRF, Letter to the Town Board, 7/30/09, Pg. 9)

#### *Response I.1*

***A detailed Stormwater Management Report is included in the Appendix of the FEIS and the FEIS Site Plan, Site Grading & Drainage Plan drawings show the locations of the proposed Stormwater Management measures. Such measures include the use of both water quality and detention basins, a stormwater collection system consisting of a network of underground storm drain pipes and surface swales, catch basins with sumps, porous pavement, curbing and the preparation of a Stormwater Pollution Prevention Plan in full compliance with DEC SPDES Permit requirements to establish temporary and permanent on-site erosion control measures. The Applicant has eliminated two (2) wetland crossings under the modified FEIS plan, and the one major on-site Swamp River crossing will be accomplished with a bridge crossing at the same location of the existing Wheeler Road bridge.***

#### *Comment I.2*

We recommend several measures that should be implemented into pond design. Test holes should be provided for each basin to determine the depth to ledge and the projected height of the water table during the dry season. If a liner is proposed, a water budget must be provided to insure that there will be water to the design level, especially during dry summer months. Unlined ponds that intercept groundwater have the potential to impact groundwater quality if dissolved pollutants are in the runoff. Typically, there are dissolved pollutants from roadway systems. The applicant should address this issue.

The high and low water elevation should be determined. The actual size of the pond wetlands should be designed based upon the desired pollutant removal efficiencies and the proposed depth of the permanent water available for wetland plantings and pollution renovation. Standard safety benches and aquatic benches for the basins should be provided. The aquatic bench is a critical part of the basin design. Flat benches should be extended 10 feet from the water edge to the toe or slopes. The plan should include forbays, four to six feet deep to ensure settling out of the coarse sediments and prevent resuspension of collected sediments.

(Elaine LaBella, Director of Land Protection, Housatonic Valley Association, Letter, Pg. 4-5)

*Response I.2*

***The stormwater ponds (or micropool extended detention ponds) will be designed in accordance with the latest edition of the New York State Stormwater Management Design Manual and will incorporate the required NYSDEC design elements including sediment forebays, safety and aquatic benches, permanent pools and overflow spillways. Passively controlled outlets from the basins extend the discharge duration to 24 hours or more to promote the settling out of pollutants from the collected stormwater runoff. On-site stormwater runoff from roadways and other paved or impervious surfaces will be collected in a closed drainage system consisting of storm drain pipes and storm drain inlets (or manholes.) Basins are sized to meet the 90 percent treatment requirement of the NYSDEC for average runoff events. Energy dissipators (or level spreaders) are also shown on the plans to mitigate potential erosion and protect vegetation.***

***Test holes to locate ledge and/or groundwater will be performed during the preparation of the site plan approval documents. Should a liner be required it will be shown on the plans including the proper selection of basin plantings to accommodate the anticipated hydrology of each basin.***

*Comment I.3*

We also request that a narrative that includes a program for post-construction inspection and maintenance, a specific program responding to inspection issues, a complete budget and recommendations for repairs and maintenance if necessary. If not properly maintained and managed stormwater facilities will eventually fail.

(Elaine LaBella, Director of Land Protection, Housatonic Valley Association, Public Hearing Transcript, 6/3/09, Pg. 95-96; Elaine LaBella, Director of Land Protection, Housatonic Valley Association, Letter, Pg. 5; Scott Ballard, Environmental Analyst, NYSDEC, Letter, 6/30/09, Pg. 11)

*Response I.3*

***A Stormwater Pollution Prevention Plan (SWPPP) must be prepared by the Applicant to obtain coverage under SPDES General Permit for Stormwater Discharges From Construction Activities (Permit No. 0-08-001) and must be reviewed and approved by both NYSDEC and the Town prior to the start of construction. The SWPPP will specify the post-construction inspection and maintenance program details and must identify the entity that will be required to inspect and maintain the systems.***

*Comment I.4*

We applaud the Applicant's commitment to low impact stormwater designs and techniques.

(Elaine LaBella, Director of Land Protection, Housatonic Valley Association, Public Hearing Transcript, 6/3/09, Pg. 96)

*Response I.4*

***Comment noted.***

Comment I.5

I think the most important area to implement LID techniques is the parking area behind the power plant. This is a particularly sensitive area, so polluted runoff should not be allowed to empty into the Swamp River. This area will also be susceptible to increased chloride levels as a result of road salting. This would be a perfect area to put in dry swales, vegetated buffers and rain gardens. Using these techniques in this highly visible area could be used as a marketing tool with signs and passive recreation space.

(Tonia Shoumatoff, New York Watershed Coordinator, Housatonic Valley Association, Public Hearing Transcript, Pg. 109-110)

Response I.5

*The Applicant is proposing the use of porous asphalt in portions of the parking lot to be located between the Power Plant and the Swamp River. This has several potential benefits including groundwater recharge augmentation through a decrease in surface water runoff and water quality treatment benefits providing effective treatments for solids, metals, nutrients (including Phosphorous and Nitrogen) and hydrocarbons. Additionally, where permitted, portions of non-porous pavements will be directed to water quality basins to improve water quality.*

*FEIS Exhibit II.I-1, Proposed Stormwater Best Management Practices, will be added to the Stormwater Management Report. The figure shows the locations of stormwater basins, wetland creation and enhancement areas, road side swales, and potential rain garden and porous pavements locations. The specific design and locations of the rain gardens and porous pavement will be determined during the site plan approval process.*

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Comment I.6

The proposed porous paved parking lot for the train station should help with water quantity control, but provides little for water quality. The parking lot should have additional stormwater controls to protect wetlands and the Swamp River. Bioretention areas could double as stormwater management and landscaping elements in the parking lot.

(Town of Dover Planning Board, Letter, 7/20/09, Pg. 5, 8)

Response I.6

*Porous pavement allows stormwater to infiltrate into an underlying stone reservoir and percolate into underlying soil. The process recharges the groundwater and removes stormwater pollutants. In addition to the porous pavement, stormwater runoff from the new parking areas will be directed to stormwater basins to treat the runoff.*

*The porous asphalt pavement design will incorporate recommendations as outlined in the National Asphalt Pavement Association (NAPA) material, including installation and maintenance specifications outlined in its Design, Construction, and Maintenance Guide For*

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*Porous Asphalt Pavements, Information Series 131. Other manufacturer and New York State Department of Transportation specifications, if applicable, may also be used in the design of the porous pavement section.*

*Comment I.7*

Implementing LID techniques can result in preserving the natural environment and significant cost savings.

LID techniques represent the future of land development. While some are resistant to change, developers who implement such techniques have been pleased with the results and savings.

LID techniques are also a potential marketing tool. We encourage that further techniques be implemented into site design.

(Tonia Shoumatoff, New York Watershed Coordinator, Housatonic Valley Association, Public Hearing Transcript, Pg. 111-113, 116; Elaine LaBella, Director of Land Protection, Housatonic Valley Association, Letter, Pg. 5; Graham Trelstad, AKRF, Letter to the Town Board, 7/30/09, Pg. 9)

*Response I.7*

***LID techniques are proposed to the extent practical, while maintaining compliance with other regulatory requirement. Best management practices which are included in the Proposed Action consist of the use of porous pavement, rain gardens and roadside swales in lieu of a closed drainage system.***

*Comment I.8*

Stormwater detention basins must not be constructed in the wetland buffer zones because that (a) reduces the amount of habitat dedicated to protecting the wetland and (b) places the stormwater holding pool next to the wetland, increasing the risk that incompletely treated stormwater will be dumped directly into the wetland if capacity is exceeded or the berm fails. It also alters the critical wildlife habitat corridor that intact natural vegetation provides.

(James Utter, Chairman, Friends of the Great Swamp, Letter, 6/30/09, Pg. 4)

*Response I.8*

***Stormwater basins have been removed from the wetland buffers and 100-year flood zone, with the exception of the redevelopment area between the Swamp River and Route 22, where water quality measures are proposed in previously disturbed areas.***

*Comment I.9*

All stormwater treatment structures must be located outside the wetland and adjacent area. Wetlands perform a necessary function to filter out any of the fine particulates and other materials from the stormwater. For the wetlands to function properly there must be at least 100 feet of natural vegetation between the wetland and the stormwater outfall.

(Scott Ballard, Environmental Analyst, NYSDEC, Letter, 6/30/09, Pg. 4)

Response I.9

See Response I.8 above.

Comment I.10

Storage volumes of retention basins in the stormwater management plan seem to have enough capacity to minimize runoff from the combination of existing and new impervious surfaces in all but the largest precipitation events. However, the quantities of stormwater to be generated only seem to take into account runoff from impervious surfaces. There is no indication in the DEIS that the applicant has factored in the decrease in canopy storage of precipitation associated with the conversion of forests to grasslands or lawns. The reduction in interception will contribute to greater potential surface runoff (especially in late spring through mid fall) whenever rainfall intensity or amount exceed the ability of water to infiltrate into the soils. We could not find the amount of forest cover reduction (by forest type) or the anticipated increase in lawn area in the documents available on the Town of Dover website.

What is the forest type and acreage of forest cover reduction, and what reduction will be included in runoff calculations?

(Stephen P. Dolce, President, Mid-Hudson Trout Unlimited, Letter, 6/24/09, Pg. 2-3)

Response I.10

**The Stormwater Management Report accounts for the change in land use, not just the increase in impervious coverage. Refer to Table No. 5 and Table No. 6 within the Stormwater Management Report located in the Appendix of the FEIS for the net change in land use area from pre- and post-development conditions. The approximate 937-acre Dover Knolls site is comprised of approximately 676 acres of wooded area located across both the West and East Parcels. The Proposed Action is expected to result in a combined reduction of approximately 98 acres of forest cover from the site.**

Comment I.11

Our calculations indicate that the proposed development would contain approximately 13 percent impervious surfaces. This figure is well above the 10 percent level which is often cited in watershed management literature as a major threshold beyond which streams exhibit significant deterioration in water and habitat quality associated with the urban stream syndrome.

The impervious surface coverage would result in significant amount of dissolved materials like road salts which will impact water quality. The proposed stormwater retention basins will not be affective in the fall, winter and spring months, as the plants will either die or be in a senescent state.

The anticipated increase in lawn area could not be found in the DEIS. However, an increase in lawn area will result in the increased use of fertilizer, herbicides and insecticides. Runoff of these chemicals will likely increase thereby making a greater contribution to nonpoint source pollution in stormwater runoff. Depending on the handling of the stormwater, these chemicals will either be discharged into the Swamp River directly or via groundwater inputs after

infiltration and groundwater transport. This will result in increased algae growth or rooted aquatic plants, and the pesticides could have toxic impacts on plants and wildlife.

What steps will be taken to reduce the quantity of dissolved materials and chemicals prior to them entering the stormwater detention ponds and watershed system?

(Stephen P. Dolce, President, Mid-Hudson Trout Unlimited, Letter, 6/24/09, Pg. 2-3; Graham Trelstad, AKRF, Letter to the Town Board, 7/30/09, Pg. 9)

*Response I.11*

***We estimate that at full build-out approximately 9 percent of the watershed will consist of impervious surfaces.. Stormwater runoff from all developed areas, not just impervious areas, will be treated by a variety of measures to include grass swales, dry swales, rain gardens, and wet ponds to treat stormwater runoff prior to entering wetlands and streams.***

*Comment I.12*

The DEIS indicates that salt-tolerant vegetation will be used in the stormwater detention basins. More detail as to the type of plants and quantity should be provided.

(Graham Trelstad, AKRF, Letter to the Town Board, 7/30/09, Pg. 9)

*Response I.12*

***Table H.5, Appendix H of the NYS Stormwater Design Manual provides a list of native plants for stormwater management areas with information on salt tolerance where necessary. In addition, the Greenbelt Native Plant Center of the New York City Parks and Recreation list a number of species that have been found to be salt tolerant, some of which are listed on the NYSDEC list. During the final design of the basins, a detailed plant list will be prepared utilizing a number of these plants. A copy of the salt tolerant plant list is included in the FEIS Appendix.***

*Comment I.13*

The project's proximity to the Great Swamp requires that the project demonstrate aggressive sediment and erosion control measures. The project must also address all of the required elements of each type of chosen Stormwater Management practice as outlined in Chapter 5, List of Acceptable Stormwater Management Practices, of the "NYS Stormwater Management Design Manual."

(Scott Ballard, Environmental Analyst, NYSDEC, Letter, 6/30/09, Pg. 10)

*Response I.13*

***The Applicant will prepare for the Town's approval a Stormwater Pollution Prevention Plan to mitigate any potential impacts from erosion to the Reservoir, the Swamp River and the surrounding wetlands. The Stormwater Pollution Prevention Plan will include details of specific permanent stormwater management practices that will be implemented, detailed in full***

***compliance with the latest edition of the New York State Stormwater Management Design Manual.***

*Comment I.14*

The Project must meet all the substantive requirements of Chapter 4, unified Stormwater Sizing Criteria of the “NYS Stormwater Management Design Manual.” All calculations must be shown.

(Scott Ballard, Environmental Analyst, NYSDEC, Letter, 6/30/09, Pg. 10)

*Response I.14*

***The permanent stormwater management practices will comply with New York State Stormwater Management Design Manual. Calculations are provided in the Stormwater Management Report found in the Appendix of this FEIS.***

*Comment I.15*

No more than five (5) acres of soil may be disturbed at any one time without prior written permission from the Department. SWPPP and Site Plans must clearly include a detailed construction sequence for each proposed construction phase limiting disturbance to the aforementioned criteria for each phase.

(Scott Ballard, Environmental Analyst, NYSDEC, Letter, 6/30/09, Pg. 10)

*Response I.15*

***Prior to construction and submission of the Notice of Intent, a Stormwater Pollution Prevention Plan, SWPPP, will be prepared. The SWPPP will include a detailed construction phasing plan and, if necessary, the Applicant will seek a waiver of the 5-acre limit of disturbance. A detailed construction phase limit of disturbance will be included in the request for such a waiver.***

*Comment I.16*

A narrative must be included stating how each sub-watershed will be treated, both pre-construction and post-construction. The discussion must include the size of each sub-watershed.

(Scott Ballard, Environmental Analyst, NYSDEC, Letter, 6/30/09, Pg. 10)

*Response I.16*

***A description of each of the sub-watersheds and method for treatment and detention is included in the Stormwater Management Report. Refer to the Appendix of this FEIS.***

*Comment I.17*

A Site Plan, indicating all proposed sediment and erosion controls, must be included in the eventual SWPPP/Site Plan submissions to DEC. The Site Plan must include a detail drawing of

all proposed sediment and erosion control measures, and must be in conformance with those found in “NY Standards and Specifications for Erosion and Sediment Control.”

(Scott Ballard, Environmental Analyst, NYSDEC, Letter, 6/30/09, Pg. 10)

*Response I.17*

***The Stormwater Pollution Prevention Plan, SWPPP, will include plans and details of all sediment and erosion control measures to be employed and will demonstrate conformance with those measures detailed in the latest version of the NY Standards and Specifications for Erosion and Sediment Control.***

*Comment I.18*

The DEIS does not mention what type of sediment basin(s) or trap(s) are proposed. These must be specified and it must be demonstrated that any proposed temporary basin or trap is appropriately sized to hold the required 3600 cubic feet per acre drained. Note that where infiltration is the chosen stormwater control measure, such controls cannot be used as temporary measures. In addition, it must be demonstrated that the required soil testing has been conducted for any proposed infiltration measure. Finally, the construction sequence must indicate these infiltration measures will not go online until after the contributory area is stabilized.

(Scott Ballard, Environmental Analyst, NYSDEC, Letter, 6/30/09, Pg. 10)

*Response I.18*

***Temporary construction sediment basins will be used for drainage areas in excess of five (5) acres. Temporary construction Sediment Traps will be used for smaller drainage areas. The sediment basins and sediment traps will both be sized to provide a minimum of 3600 cubic feet of storage per acre. No infiltration measures are proposed for the locations of the sediment basins and sediment traps.***

*Comment I.19*

Temporary roads, road cuts and fills, and drainage ditches must be stabilized early in the construction sequence and constructed in conformance with the standards contained in the “NYS Standards and Specifications for Erosion and Sediment Control.”

(Scott Ballard, Environmental Analyst, NYSDEC, Letter, 6/30/09, Pg. 10)

*Response I.19*

***Comment noted. The stabilization requirements of these items will be further defined in the SWPPP.***

*Comment I.20*

The SWPPP must clearly indicate how stormwater will be conveyed to the temporary detention measures during the construction phase.

(Scott Ballard, Environmental Analyst, NYSDEC, Letter, 6/30/09, Pg. 10)

*Response I.20*

***The project's SWPPP will indicate how stormwater will be conveyed to the temporary detention measures during the construction phase.***

*Comment I.21*

A profile detail of all the proposed stormwater management measures must be included in the SWPPP. All requirements and/or features of any proposed stormwater management facility must conform to NYS design standards and must be included in the Site Plan.

(Scott Ballard, Environmental Analyst, NYSDEC, Letter, 6/30/09, Pg. 11)

*Response I.21*

***Cross sections of all proposed stormwater management ponds will be included in the project's SWPPP. All features of the stormwater management measures will conform to NYS design standards and will be reviewed and approved by NYSDEC and the Town of Dover.***

*Comment I.22*

Rain gardens and other "credit" or alternative treatment methods proposed for new construction will require submission of the Notice of Intent to the Department and must undergo the required 60 day review process.

(Scott Ballard, Environmental Analyst, NYSDEC, Letter, 6/30/09, Pg. 11)

*Response I.22*

***Comment noted.***

*Comment I.23*

Any proposed hydrodynamic proprietary measure must come from the approved list and must be installed for the accepted purpose. The list of approved measures can be found on the DEC website. Each measure would also have to demonstrate proper sizing.

(Scott Ballard, Environmental Analyst, NYSDEC, Letter, 6/30/09, Pg. 11)

*Response I.23*

***Comment noted.***

*Comment I.24*

Based on the proposed FEMA floodplain boundary, several of the stormwater ponds are proposed within the floodplain. Ponds W7A, W8A, E1A, and E2A are all located below FEMA's 321 foot floodplain elevation; all but W8A are below the 419 foot floodplain elevation cited in the DEIS. Thus, none of these ponds will be able to provide detention or treatment during large storm events.

(Graham Trelstad, AKRF, Letter to the Town Board, 7/30/09, Pg. 8)

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Response I.24

Site constraints dictate that several of the proposed water quality basins be designed at or below the level of the proposed FEMA 100-year flood elevation as a result of the location of existing development to remain which is located within the flood zone. These basins will still function during periods of lesser storm events. The Applicant has removed other basins from the proposed flood zone to improve their operational efficiency. During the site plan review, each outlet control structure will be detailed and backflow prevention measures will be shown when required.

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Comment I.25

The following stormwater ponds, as proposed, will not function properly due to flooding: W6golf1, W6A, W6B, W7A, W8A, W8B, E1A, E2A, E4A, E5A, E7A, and E8B. These ponds drain to the Swamp River or surrounding wetlands which will be flooded during large storm events, preventing the pond from discharging as designed.

(Graham Trelstad, AKRF, Letter to the Town Board, 7/30/09, Pg. 8)

Response I.25

Stormwater ponds have been located above the 100-year flood plain such that they will continue to discharge over top of designed spillways even during the largest storm events. The channel protection volume, or 1- year storm, will be piped out for the vast majority of storm events. During the site plan review, each outlet control structure will be detailed and backflow prevention measures will be shown when required.

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Comment I.26

Based on USGS mapping and the contour data provided by the Applicant, the existing watershed boundaries appear accurate. The existing drainage conditions east of Route 22 should be enlarged to include the extents of the drainage boundaries.

(Graham Trelstad, AKRF, Letter to the Town Board, 7/30/09, Pg. 9)

Response I.26

The Figure has been revised in the Stormwater Management Report to show the extents of the watershed.

Comment I.27

The discharge point for watershed W4 should be included as a design point.

(Graham Trelstad, AKRF, Letter to the Town Board, 7/30/09, Pg. 9)

Response I.27

The sub-watershed area for W4 will remain undeveloped.

*Comment I.28*

All 6 Route 22 crossings should be evaluated as design points.

(Graham Trelstad, AKRF, Letter to the Town Board, 7/30/09, Pg. 9)

*Response I.28*

***Under existing stormwater runoff conditions, stormwater from large storm events pond in the central wetland (East of Route 22). The proposed plan will direct runoff into the central wetland similar to current conditions. A comparison of the NYS Route 22 crossing flows is provided on Table No. 3 of the Stormwater Management Report found in the Appendix of this FEIS.***

*Comment I.29*

The proposed area of disturbance needs to be adjust to include the proposed grading within the golf course.

(Graham Trelstad, AKRF, Letter to the Town Board, 7/30/09, Pg. 9)

*Response I.29*

***The area of disturbance has been updated. Refer to Exhibit II.PA-2, Areas Of Potential Steep Slope Disturbance presented in this FEIS and the revised FEIS Site Plan Grading and Drainage Plans which shows an approximate limit of disturbance line.***

*Comment I.30*

For redevelopment projects, the NYSDEC requires that 25 percent of the existing impervious area be treated by standard practices, 75 percent of the existing impervious area be treated by alternative practices, or a combination of the two. The proposed development does not appear to treat any of the existing impervious surfaces.

(Graham Trelstad, AKRF, Letter to the Town Board, 7/30/09, Pg. 9)

*Response I.30*

***Wherever feasible standard best management practices will be used to treat the stormwater runoff, in other areas hydrodynamic separators will be used. The plans and report have been updated to clarify where each treatment measure will be employed.***

*Comment I.31*

Several portions of the map denoted as E6exist, E5B, E7A, W2exist, W8exist, and E1exist contain proposed development and do not show any proposed treatment.

(Graham Trelstad, AKRF, Letter to the Town Board, 7/30/09, Pg. 9)

*Response I.31*

***The Stormwater Management Plan has been revised so that all new development will employ stormwater treatment measures in conformity with Chapter 9 of NYSDEC's Stormwater Design Manual with specific reference to redevelopment sites.***

*Comment I.32*

In Watershed E5B, several of the portions labeled E6 exist, W2exist, W7exist, and W8exist have proposed development with no proposed treatment shown. Any existing impervious areas such as watersheds E1exist, E2exist, E5exist, E6exist, and E8ecist must treat a portion of the water quality volume as outlined in Chapter 9 on NYSDEC's Stormwater Design Manual.

(Graham Trelstad, AKRF, Letter to the Town Board, 7/30/09, Pg. 9)

*Response I.32*

***See Response I.31.***

*Comment I.33*

Detention basins W6golf1 and W8golf2 do not have the required one foot of free board between the 100-year high water elevation and the top of the pond.

(Graham Trelstad, AKRF, Letter to the Town Board, 7/30/09, Pg. 9)

*Response I.33*

***All stormwater basins have been redesigned to provide a minimum of one foot of freeboard.***

*Comment I.34*

It should be noted that ponds W6B, W8B, W9A, E8A, and E8C exceed 10 feet in depth and may require a NYSDEC permit.

(Graham Trelstad, AKRF, Letter to the Town Board, 7/30/09, Pg. 9)

*Response I.34*

***None of the ponds require a NYSDEC Dam Permit since none of the ponds both exceed 10' in height from top of berm to toe of slope and exceed 1,000,000 gallons.***

*Comment I.35*

Restricting building to slopes less than 15 percent helps mitigate the impacts of erosion and wetlands damage from increased stormwater runoff.

(Constance I. DuHamel, Deuell Hollow Conservation Association, Letter, 6/30/09, Pg. 2)

*Response I.35*

***All disturbed areas including those on steep slopes will require adequate stabilization both during and after construction. On steep slopes additional protection will be provided to***

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*minimize erosion. Of the approximate 301 acres of sloped areas 15 percent and greater, only approximately 55 acres of sloped areas may be affected. This represents only 18 percent of all slopes in excess of 15 percent.*