

**PB# 06-18**

**NW Realty Group  
(LLC)**

**9-1-24**

TOWN OF NEW WINDSOR  
PLANNING BOARD

**APPROVED COPY**

DATE: February 2, 2007

**06-18** New Windsor Realty Group, LLC  
Windsor Hwy - Site Plan (Shaw)  
(9-1-24)

**STORM WATER POLLUTION PREVENTION PLAN**

**NEW RETAIL / OFFICE BUILDING**

**FOR**

**NEW WINDSOR REALTY GROUP, LLC**

WINDSOR HIGHWAY

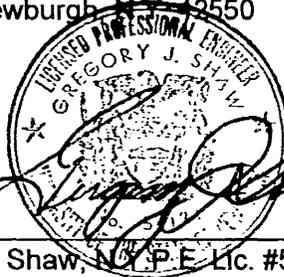
TOWN OF NEW WINDSOR, NEW YORK

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## **1.0 INTRODUCTION**

New Windsor Realty Group, LLC is proposing to construct a 21,000 SF retail/office building with associated site improvements on a 3.65 acre parcel of land in the Town of New Windsor, Orange County, New York. To mitigate storm water impacts generated during and after construction, "New York State Department of Environmental Conservation (NYSDEC) State Pollution Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity", General Permit Number GP-02-01, requires the preparation of a Storm Water Pollution Prevention Plan (SWPPP). Refer to Appendix A for a copy of the SPDES General Permit for Storm Water Discharges Associated With Construction Activities.

The purpose of this SWPPP is to identify erosion and sediment control measures, and storm water management and pollution prevention practices. An integral part of this SWPPP are the accompanying Drawings entitled "New Retail / Office Building for New Windsor Realty Group, LLC.", consisting of 6 sheets and having an date of May 8, 2006. This SWPPP is not considered complete without them.

An open sand filter and a storm water detention basin have been incorporated into the development of the site to treat the water quality volume and to detain peak runoff flows from the site. These practices and the erosion control measures have been designed in accordance with the following technical standards:

- New York State Stormwater Management Design Manual dated August 2003
- New York State Standards and Specifications for Erosion and Sediment Control dated January 2004.

Pre- and Post-development storm water discharge rates have been evaluated for the 1, 10, 25 and 100 year 24 hour storm events. Comparison of Pre- and Post-development storm water flows demonstrate that the peak rate of runoff from the proposed site will not be increased, and thus will not pose a significant adverse impact to the adjacent or downstream properties or receiving water courses. The proposed measures outlined herein have been designed to provide water quality controls by filtering the water quality volume, and quantity controls by detaining peak flows and releasing runoff at a rate equal to or less than that which existed prior to development of the project site.

## **2.0 NYSDEC SPDES GENERAL PERMIT GP-02-01**

### **2.1 Purpose**

Urban storm water discharges cause significant changes to quantity and quality of surface water as a result of runoff contributed by varying land use development. While this development will alter the existing runoff characteristics of this project site, expected impacts will be mitigated by

a sand filter and a storm water detention basin that will slowly release the water back into the environment reducing the site impacts.

Land clearing and development of any site alters its hydrology, therefore changing the characteristics of the surface and groundwater discharge. Changing the surface conditions alters a site's natural ability to store, treat, or infiltrate runoff. This change also allows for the discharge of potentially damaging pollutants and sediments to adjoining water bodies. This can occur during the project's construction phase, and after its completion if proper storm water control designs are not fully implemented. During the construction phase, graded unstabilized areas are subject to erosion which can cause the displacement of sediment to off-site receiving waters and wetlands. After development, changes in surface conditions, such as impervious surfaces (ie.: roofs and asphalt pavement) and lawn surfaces, can generate pollutants which are discharged to surrounding natural waterways. Some of the pollutants of concern are: Total Suspended Solids (TSS); Biological Oxygen Demand (BOD); Total Phosphorus (TP); and Total Nitrogen (TN), as well as oil or grease, and chloride. Vehicle traffic and impervious surfaces are major contributors of pollutants as they quickly become waterborne during even the slightest storm event.

In planning the design of a development, Post-development storm water must be properly managed to mitigate potential impacts. This SWPPP has been prepared to minimize pollution typically generated by land development. The Plan has incorporated an Erosion and Sediment Control Plan (E&SCP) to minimize storm water impacts during construction. In addition, the Plan identifies potential pollutant sources, temporary and permanent pollution control features, as well as an implementation schedule and maintenance of the controls.

## **2.2 Regulatory Obligations**

The NYSDEC through its SPDES General Permit for Storm Water Discharges Associated With Construction Activities (General Permit No. GP-02-01) regulates the discharge of storm water from this project. This permit program is pursuant to Section 402 of the Federal Clean Water Act (CWA), and the Environmental Conservation Law (ECL). The regulation(s) states "Storm Water discharges from certain construction activities to waters of the United States are unlawful unless they are authorized by a 'National Pollutant Discharge Elimination System' (NPDES) Permit or by a State Permit Program." To obtain coverage under the General Permit, a Discharger, Owner or Operator must submit a Notice of Intent (NOI) to the NYSDEC, and meet the requirements set forth under GP-02-01 (See in Appendix A).

This SPDES permit program mandates that any development which involves the disturbance of one acre must include the completion of a SWPPP along with an Erosion and Sediment Control Plan (E&SCP) unless it falls within the exceptions set forth in the GP-02-01 Permit. This proposed project requires this SWPPP to identify potential sources of pollution, and detail the design and the implementation of practices to reduce pollutant loadings both during and after construction, and the mitigation of Post-development flows.

### **2.3 Definitions**

General Permit shall mean the general storm water permit for construction activities issued by the United States Environmental Protection Agency, NYSDEC or a comparable general permit issued by local or other appropriate governmental agency.

Operator shall be any party (or parties) that has (or have) either (a) operational control over construction plans and specifications, including the ability to make modification to those plans and specifications or (b) day-to-day operational control of those activities at a project which are necessary to ensure compliance with the SWPPP for the site or other permit conditions. There may be occasions during the course of a project in which there are multiple Operators, all of which will need to file and maintain the appropriate SWPPP documents and plans, including without limitation, the Notice of Intent (NOI) and Notice of Termination (NOT).

Operator's Engineer shall be that person or entity retained by an Operator to design and oversee the implementation of the SWPPP.

Contractor shall be that person or entity identified as such in the construction contract with the Operator. The term "Contractor" shall also include the Contractor's authorized representative, as well as any and all subcontractors retained by the Contractor.

Qualified Professional shall be a person knowledgeable in the practices of erosion and sediment controls, such as a NYS professional engineer or Certified Professional in Erosion and Sediment Control (CPESC).

### **2.4 Operator's Responsibility**

- Have an authorized corporate officer sign the NOI, the SWPPP and the Operator's Certification forms (Appendix C).
- Submit the signed form along with any required fees and attachments to the following:

NYS DEC "Notice of Intent"  
Bureau of Permit  
625 Broadway  
Albany, New York 12233-3505

- Retain the services of a "Qualified Professional" to provide the services outlined in "Operator's Engineer's Responsibilities".
- Schedule a pre-construction meeting which shall include the Town of New Windsor representative, Operator's Engineer, Contractor, and their sub-contractors to discuss responsibilities as they relate to the implementation of this SWPPP.

- Require the Contractor to fully implement the SWPPP prepared for the site by the Operator's Engineer.
- Forward a copy of the original permit certificate received from the regulatory agency to the Contractor for display at the job site.
- Keep a copy of the SWPPP, all NOI's, permit certificates, permit language, inspection records, and other required records on the job site so that they may be made available to the regulatory agencies.
- Prepare a written summary of projects status with respect to compliance with the General Permit at a minimum frequency of every three months during which coverage under the Permit exists. The summary should address the status of achieving the overall goal of the SWPPP.
- Submit a Notice of Termination (NOT) form (see Appendix F) within 48 hours of receipt the Operator's Engineer's certification of final site stabilization to the following:
  - NYS DEC "Notice of Termination"
  - Bureau of Permit
  - 625 Broadway
  - Albany, New York 12233-3505
- Request and receive all SWPPP records from the Operator's Engineer and archive those records for a minimum of three years after the NOT is filed.

## **2.5 Operator's Engineer's Responsibilities**

- Prepare the SWPPP using good engineering practices, best management practices, and in compliance with all federal, state, and local regulatory requirements.
- Prepare the Notice of Intent Form (NOI) form (see Appendix B) and forward to Operator for signature.
- Prepare and forward the SWPPP Operator Certification Form for Operator's signature (see Appendix C).
- Include a signed NOI and Operator Certification forms in the SWPPP
- Provide copies of the SWPPP to the Town of New Windsor of Orange County, NY once all signatures and attachments are complete.
- Prepare a Construction Site Log Book to be used in maintaining a record of all inspection reports generated throughout the duration of construction.

- Participate at pre-construction meeting with the Town of New Windsor representative, Operator, Contractor, and their sub-contractors to discuss responsibilities as they relate to the implementation of this SWPPP.
- Conduct an initial site assessment of the site prior to the commencement of construction and certify in an inspection report that the appropriate erosion and sediment control measures described within this SWPPP have been adequately installed.
- Provide on-site inspections at least every seven (7) calendar days and within 24 hours of the end of a storm event of ½-inch or greater to determine compliance with the SWPPP. The written Inspection Reports (Appendix D) shall be provided to the Operator within 48 hours of the field inspection with any deficiencies identified.
- Update the SWPPP each time there is a significant modification to the pollution prevention measures or a change of the principal Contractor working on the project who may disturb site soil.
- Provide the Operator certification that an inspection has been completed verifying that the site has undergone final stabilization using appropriate measures and that all temporary erosion and sediment controls have been removed.
- Transfer the SWPPP documents, along with all NOI's, permit certificates, NOT's, Construction Site Log Book, and written records required by the General Permit to the Operator for archiving.

## **2.6 Contractor's Responsibilities**

- Send all notifications required by SPDES General Permit Number GP-02-01 via certified mail with return receipt. Copies of mailing receipts shall be kept on record at the project site with the SWPPP and shall be considered part of the contract documents.
- Sign the SWPPP Contractor's Certification Form contained within Appendix C and forward to the Operator's Engineer for inclusion into the SWPPP.
- Provide the names and addresses of all subcontractors working on the project site. Require all subcontractors who will be involved with the major construction activities that will result in soil disturbance sign a copy of the Contractor's Certification Form and forward to the Operator's Engineer for inclusion into the SWPPP. This information must be retained as part of the SWPPP.
- Participate in pre-construction meeting to discuss responsibilities as they relate to the implementation of this SWPPP.

- Implement site stabilization, erosion and sediment control measures, and other requirements of the SWPPP.
- Conduct weekly inspections, prepare, and retain written documentation of inspections as well as all repairs/maintenance activities performed on erosion and sediment control measures.
- Maintain a record of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated, until such time as the NOT is filed.

### **3.0 PROJECT AND SITE DESCRIPTION**

#### **3.1 Project Description**

The subject property is located in the northeastern quadrant of the Town of New Windsor, specifically on Windsor Highway, approximately 1,500 feet north of Union Avenue. The property is further identified as Tax Map Section 9, Block 1, Lot 24. For the location, refer to the Vicinity Map on the SWPPP Drawings. The character of Windsor Highway is a combination of industrial and commercial properties.

The project consists of the construction of a 21,000 SF building for either retail or office use. Site improvements consist of one access from Windsor Highway, and two parking areas totaling of 140 spaces. The Town of New Windsor will provide water and sanitary sewer services. A storm water collection system is incorporated into the design of the site to convey flows to the open sand filter and the storm water detention basin.

#### **3.2 Vegetation, Topography, And Soil Characteristics**

With the site containing a single-family residence, the vegetation is primarily grass and trees with an unpaved driveway. The topography is uniform throughout the site at approximately 5 percent, and varies from a maximum elevation of 280 feet to a minimum elevation of 245 feet.

The United States Department of Agriculture (USDA) Soil Conservation Service's (SCS) Soil Survey for Orange County was reviewed for soil conditions on the project site. The Soil Survey identified the entire site as MdB series soil type, and its characteristics are as follows:

<u>Permeability:</u>	0 inches - 8 inches	0.6 to 2.0 inches per hour
	8 inches -20 inches	0.6 to 2.0 inches per hour
	20 inches-60 inches	< 0.2

Factor: 0 inches - 8 inches 0.24  
8 inches - 20 inches 0.28  
20 inches-60 inches 0.28

Well Pot.: 0 inches - 8 inches Low  
8 inches - 20 inches Low  
20 inches – 60 inches Low

Factor: 3

Hazard: Slight

Bedrock: > 60 inches

Watertable: 18-inches to 24-inches

Frost Erosion Moderate

### **Flood Plains And Surface Water Runoff**

the National Flood Insurance Program Flood Insurance Rate Map (FIRM) for the New Windsor, New York, Community Panel Number 360628 0010 B, the project site is not located within any designated flood plains.

Storm water generated by the project site flows overland to the east onto adjoining properties. The discharge of the storm water is the Hudson River.

### **CONSTRUCTION SEQUENCE**

The project has not received written approval from NYSDEC allowing the disturbance of more than five acres of land at any one time. Therefore, if the Contractor's construction sequence involves the disturbance of more than five acres at any one time, written approval must be obtained from NYSDEC prior to the commencement of construction.

Below are the major construction activities that are the subject of this SWPPP. They are listed in the sequence they are expected to begin, but each activity will not necessarily be completed before the next begins. Also, these activities could occur in a different order if necessary to maintain adequate erosion and sediment control.

The Construction Sequence will be as follows:

Review the Erosion And Sediment Control Plan to identify the areas of disturbance and those areas that are scheduled to remain undisturbed. Limit site disturbance at all times to the smallest area possible.

2. Prior to commencing construction activities, a licensed surveyor must flag the limits of disturbance necessary to develop the site and clearly delineate the project boundary lines to protect adjacent properties. Identify and protect those trees which can remain.
3. In the area designated on the Erosion And Sediment Control Plan, construct a Stabilized Construction Entrance to mitigate the potential of vehicles tracking sediment onto local roads. Restrict traffic to this one access point. Perform periodic inspections and maintenance of the Stabilized Construction Entrance including washing, top-dressing with additional stone, reworking, and compaction. Plan for periodic street cleaning to remove any sediment that may have been tracked off-site. Transport the removed sediment to a suitable disposal area where it can be stabilized.
4. Demolish the existing structures, and clear and grub those portions of the site that are scheduled for development. Stockpile excavated topsoil, and protect stockpiled material with silt fence.
5. Along the westerly boundary of the site, place fill to the elevations indicated. Install catch basins 17, 18, 19 and 20, and the piping between them to the flared end section at the northeasterly corner of the site. Extend the (2) 18-inch pipes crossing Windsor Highway to catch basins 17 and 18.
6. Regrade the northeast corner of the site and install the Temporary Sedimentation Trap, riser pipe and outlet piping. Install silt fence along the north and east embankments of the Trap.
7. Place fill from off-site sources beginning in an east to west direction. The easterly segment shall be considered that areas from the easterly property line to the easterly face of the proposed building. The westerly segment shall be from the easterly face of the proposed building to the westerly property line.
8. Upon completion of placing of fill within the easterly segment and obtaining sub-grade elevations, install the storm drainage system (catch basins and piping) inclusive of catch basin 6 through catch basin 16, and to the flared end section outletting into the Trap. Modify the catch basins 9, 11, 13 and 15 as per Catch Basin Sediment Trap detail, and install the Temporary Diversion Swales and Silt Fence in the easterly segment. Within 7 days of completing rough grading, temporarily seed with hay mulch all embankments and disturbed areas. Avoid grading activities during the rainy season (November through March).
9. Install the concrete walls of the building's lower level. Backfill the concrete walls as soon as possible and place fill in the westerly segment of the site from off-site sources to the elevations indicated.

10. Upon completion of placing of fill within the westerly segment and obtaining sub-grade elevations, install the storm drainage system (catch basins and piping) inclusive of catch basin 1 through catch basin 5. Modify the catch basins 1, 2, 3 and 5 as per Catch Basin Sediment Trap detail, and install the Temporary Diversion Swales and Silt Fence in the westerly segment. Within 7 days of completing rough grading, temporarily seed with hay mulch all embankments and disturbed areas.
11. Install remaining site utilities. Remove Diversion Swales and Catch Basin Sediment Traps. Install concrete curbing, sub-base material lot and binder course of macadam pavement.
12. Finish grading of the Sediment Trap to the dimensions required for the Storm Water Detention Basin. Remove perforated riser pipe, install Outlet Control Structure, Emergency Spillway and Rip-Rap Outlet Protection. Install Sand Filter with inlet piping, outlet piping and overflow channel.
13. Complete final grading of the lot, spread stockpiled topsoil and permanently seed and hay mulch all disturbed surfaces. Apply seed mix and hay mulch to approximately 2 inches in thickness. If necessary, topsoil will be imported to the site for stabilization and landscaping uses. Imported soils will be seeded after two weeks storage to promote vegetative growth and its perimeter protected with silt fence. Do not remove Soil Erosion And Sediment Control measures until 30 days past stabilization
14. Stabilization measures must be initiated as soon as practicable, but in no case more than 14 days after the construction activity has ceased. In frozen ground conditions, stabilization measures must be initiated as soon as practicable.
15. Maintain erosion and sediment control practices through regular inspections. After initial groundbreaking, the Owner or its representative shall conduct site inspections at least once every 7 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater.

## **5.0 EROSION AND SEDIMENT CONTROL PRACTICES**

### **5.1 Storm Water Impacts**

Storm water discharges resulting from land development cause significant changes to the quantity and quality of surface waters. Land clearing and the development of a site alters its hydrology, therefore changing the characteristics of the surface and groundwater discharge. Changing the surface conditions alters a site's natural ability to store, treat, or infiltrate runoff. This change also allows for the discharge of potentially damaging pollutants and sediments to adjoining water bodies.

During construction, existing vegetation is removed and soils are stockpiled thereby exposing soils to erosive agents. Exposed soils, if left unstabilized, are subject to erosion either by rainfall events and severe wind conditions. Sediment discharged to adjacent sensitive areas, such as wetlands, can destroy its vegetation and natural habitat. This degradation of an environmentally sensitive area is usually irreversible and adversely affects the overall function of the ecosystem. Also, the increase of turbidity levels in open water bodies, such as streams, ponds, and lakes have adverse effects on aquatic life and organisms. The implementation of proper erosion control measures and sediment containment will minimize and possibly eliminate these potential impacts.

Upon completion of the project its storm water also has the potential to convey pollutants such as Total Suspended Solids, Total Phosphorus, Total Nitrogen, and Biochemical Oxygen Demand all of which can impact off-site water bodies. Altering existing vegetative surfaces and replacing with impervious surfaces such as roads and buildings contribute to the increase of these pollutants in storm water discharge. Landscape areas that are subject to fertilizers, weed control, and pesticide products also have a large potential for these pollutants, which if discharged untreated could have long-term downstream impacts. A full listing of the potential pollutants typically contained in storm water can be found in Table 2.1 of the New York State Stormwater Management Design Manual.

This SWPPP has been prepared to minimize pollution typically generated by land development. The SWPPP has incorporated both Temporary Erosion And Sediment Control Measures, and Permanent Erosion And Sediment Control Measures, and Inspection And Maintenance Requirements.

## **5.2 Temporary Erosion and Sediment Control Measures**

The temporary erosion and sediment control measures incorporated into the SWPPP are as follows:

### **1. Stabilized Construction Entrance**

Prior to construction, a stabilized construction entrance will be installed to reduce the tracking of sediment onto public roadways. Construction traffic must enter and exit the site at the stabilized construction entrance. The intent is to trap dust and mud that would otherwise be carried off-site by construction traffic.

The entrance shall be maintained in a condition, which will control tracking of sediment onto public rights-of-way or streets. When necessary, the placement of additional aggregate atop the filter fabric will be done to assure the minimum thickness is maintained. All sediments and soils spilled, dropped, or washed onto the public rights-of-way must be removed immediately. Periodic inspection and needed maintenance shall be provided after each substantial rainfall event.

2. Silt Fencing

Prior to the initiation of, and during construction activities, a silt fence will be established along the perimeter of areas to be disturbed as a result of the construction which lie up gradient of water courses or adjacent properties. These barriers may extend into non-impact areas to ensure adequate protection of adjacent lands.

Clearing and grubbing will be performed only as necessary for the installation of the sediment control barrier. To ensure effectiveness of the silt fencing, daily inspections and inspections immediately after significant storm events will be performed by site personnel. Maintenance of the fence will be performed as needed.

3. Diversion Swales

Diversion swales shall be installed in the locations indicated on the SWPPP Drawings for the purpose of intercepting overland storm water flows from undisturbed areas and diverting around disturbed areas. The lining of the diversion swale shall be a function of the drainage area tributary to the swale and the slope of the swale itself.

4. Temporary Sediment TrapBasin

A Temporary Sediment Trap shall be constructed to intercept sediment-laden runoff and reduce the amount of sediment leaving the disturbed areas and to protect drainage ways, properties, and rights-of-way. The Temporary Sediment Trap shall be inspected at least every seven (7) calendar days and within 24 hours of the end of a storm event of ½-inch or greater. All damages caused by soil erosion and construction equipment shall be repaired upon discovery. Accumulated sediment shall be removed from the trap when it reaches 50 percent of the design capacity.

5. Stone Check Dams

Stone check dams will be installed within diversion swales to reduce the velocity of storm water runoff, to promote settling of sediment, and to reduce sediment transport offsite. The stone check dams shall be inspected at least every seven (7) calendar days and within 24 hours of the end of a storm event of ½-inch or greater. Damage will be repaired upon discovery. If significant erosion has occurred between structures, a liner of stone or other suitable material shall be installed in that portion of the channel.

Sediment accumulated behind the stone check dam will be removed as needed to allow the channel to drain through the stone check dam and prevent large flows from carrying sediment over or around the dam. Stones shall be replaced as needed to maintain the design cross section of the structures.

6. Temporary Seeding

Within 14 days after construction activity ceases on any particular area of the site, all disturbed areas where there will not be construction for longer than 21 days shall be temporarily seeded and mulched to minimize erosion and sediment loss.

7. Catch Basin Sediment Trap

Upon installation of specific catch basins, the area around the inlet shall be excavated to the depth indicated on the SWPPP Drawings and filled with crushed stone or gravel. The perimeter or the gravel area shall be protected with silt fence, where combined they keep sediment from entering the catch basins and the storm sewer system. During construction, crushed stone and silt fence shall be replaced as necessary to ensure proper function of the measure.

8. Erosion Control Blanket

Erosion control blankets shall be installed on all slopes exceeding 3 horizontal to 1 vertical. Erosion control blankets provide temporary erosion protection, rapid vegetative establishment, and long-term erosion resistance to shear stresses associated with high runoff flow velocities associated with steep slopes.

9. Temporary Soil Stockpile

Materials, such as topsoil and excavated soil, may be temporarily stockpiled on the site during construction. Stockpiles shall be located in areas away from drainage paths, water bodies and/or water courses ,and shall be protected from erosion by a silt fence barrier around its perimeter.

10. Dust Control

Water trucks shall be used as needed during construction to reduce dust generated on the site. Dust control must be provided by the Contractor to a degree that is acceptable to the Owner, and in compliance with the applicable local and state dust control requirements.

### **5.3 Permanent Erosion and Sediment Control Measures**

Permanent erosion and sediment control measures are included as part of the construction documents and include the following:

1. Establishment of Permanent Vegetation

Disturbed areas that will be vegetated must be seeded, mulched, and maintained in accordance with the SWPPP Drawings. Upon obtaining final grade, all areas must be seeded and mulched within 14 days after completion of the major construction activity. All seeded areas should be protected with mulch.

Final site stabilization is achieved when all soil-disturbing activities at the site has been completed and a uniform, perennial vegetative cover with a density of 80 percent has been established or equivalent stabilization measures (such as the use of mulches or geotextiles) have been employed on all unpaved areas and areas not covered by permanent structures.

2. Rip-Rap Inlet And Outlet Protection

Rip Rap inlet and outlet protection shall be installed at the locations as indicated on the SWPPP Drawings. The installation of rip-rap inlet and outlet protection will reduce the depth, velocity, and energy of water, such that the flow will not erode the receiving roadway drainage swale.

**5.4 Additional Pollutant Controls**

Additional pollutant controls are as follows:

1. Solid Waste Disposal

No solid materials, including building materials, are allowed to be discharged from the site with storm water. All solid waste, including disposable materials incidental to the major construction activities, must be collected and placed in containers. The containers will be emptied periodically by a contract trash disposal service and hauled away from the site to a point of legal disposal. Additionally, substances that have the potential for polluting surface and/or groundwater must be controlled to ensure that they do not discharge from the site.

2. Sanitary Facilities

Temporary sanitary facilities will be provided by the Contractor throughout the construction phase. They must be utilized by all construction personnel and will be serviced by a licensed commercial septage hauler.

**5.5 Construction Housekeeping Practices**

During construction the Contractor will implement the following measures:

1. Material resulting from the clearing and grubbing operation will be stockpiled up gradient from sedimentation controls.
2. The Contractor will designate areas for equipment cleaning, maintenance, and repair, and shall direct subcontractors will utilize those areas. The areas will be protected by a temporary perimeter berm.
3. The use of detergents for large scale washing of vehicles, buildings, and pavement surfaces is prohibited.
4. A Spill Prevention and Response Plan shall be developed for the site by the Contractor, and the plan shall detail the steps needed to be followed in the event of an accidental spill. Plan shall identify contact names and phone numbers of people and agencies that must be notified. The Plan shall include Material Safety Data Sheets (MSDS) for all materials to be stored on-site. All workers on-site will be required to be trained on safe handling and spill prevention procedures for all materials used during construction.

5. Construction materials shall be stored in a dedicated staging area. The staging area shall be located in an area that minimizes the impacts of the construction materials effecting storm water quality. Chemicals, paints, solvents, fertilizers, and other toxic material must be stored in waterproof containers. Except during application, the contents must be kept in trucks or within storage facilities. Runoff containing such material must be collected, removed from the site, treated and disposed at an approved solid waste or chemical disposal facility.

## **5.6 Inspection and Maintenance Requirements**

1. **Pre-Construction Inspection and Certifications**

Prior to the commencement of construction, the Operator's Engineer shall conduct an assessment of the site to assure that appropriate erosion and sediment control structures have been adequately installed and implemented. The Contractor shall contact the Operator's Engineer once the erosion and sediment control measures have been installed.

2. **Construction Inspection and Maintenance**

To ensure the stability and effectiveness of all protective measures and practices during construction, all erosion and sediment control measures employed will be inspected by the Operator's Engineer at least every seven (7) calendar days and within 24 hours of the end of a storm event of ½-inch or greater.

In addition to the inspections performed by the Operator's Engineer, routine inspections shall be performed by the Contractor and include a visual check of all erosion and sediment control measures. All inspections and maintenance shall be performed in accordance with the inspection and maintenance schedule provided in this SWPPP. Sediment removed from erosion and sediment control measures will be exported from the site, stockpiled for later use, or used immediately for general non-structural fill.

3. **Post-Construction Inspection and Maintenance**

Inspections shall be performed by the Operator in accordance with this SWPPP, when all disturbed areas are stabilized and all storm water management systems are in place and operable.

## **5.7 Reporting**

### **Inspection and Maintenance Reports**

Inspection/Maintenance Reports shall be prepared prior to, and during construction in accordance with the schedule outlined herein and in the SPDES General Permit GP-02-01. The reports shall be prepared to identify and document the maintenance of the erosion and

sediment control measures. Specifically, each inspection shall record the following information:

1. On a site map, indicate the extent of all disturbed site areas and drainage pathways. Also, site areas that are expected to undergo initial disturbance or significant site work within the next 14 day period.
  2. Indicate on a site map all areas of the site that have undergone temporary or permanent stabilization.
  3. Indicate all disturbed site areas that have not undergone active site work during the previous 14 day period.
  4. Inspect all sediment control practices and record the approximate degree of sediment accumulation as a percentage of the sediment storage volume (e.g., 10 percent, 20 percent, 50 percent, etc.).
  5. Inspect and record all maintenance requirements of all erosion and sediment control practices. Identify any evidence of rill or gully erosion occurring on slopes and any loss of stabilizing vegetation or seeding/mulching. Document any excessive deposition of sediment or ponding water along barrier or diversion systems. Record the depth of sediment within containment structures, any erosion near outlet and overflow structures, and verify the ability of rock filters around perforated riser pipes to pass water.
5. All deficiencies identified with the implementation of the SWPPP.

#### Construction Site Log Book

The Operator shall retain a copy of the SWPPP required by NYSDEC SPDES General Permit GP-02-01 at the construction-site from the date of initiation of construction activities to the date of final stabilization. During construction, the Operator or Operator's representative shall maintain a record of all erosion and sediment control inspection reports at the site in a Construction Site Log Book. The Construction Site Log Book shall be maintained on-site and made available to the permitting authority.

#### Post Construction Records and Archiving

Following construction, the Operator shall retain copies of the SWPPP, the complete Construction Site Log Book, and records of all data used to complete the NOI to be covered by this Permit, for a period of at least three years from the date that the site is finally stabilized. The Operator should maintain a record of all Post-construction inspections and maintenance work performed in accordance with the requirements outlined in the SWPPP.

## **6.0 STORM WATER MANAGEMENT PRACTICES**

### **6.1 Collection System**

The storm water collection system has been designed to convey Post-development storm water generated by on-site tributary areas. Storm water discharging onto the site from property west of Windsor Highway has been diverted around the proposed improvements. The collection system will be a closed drainage system consisting of precast concrete catch basins and PVC piping.

The collection system has been designed utilizing the Rational Formula to accommodate runoff from a storm having a 25-year return frequency. Advanced Drainage Systems N-12 pipe, having a Manning's Coeff. of 0.012, was used in all pipe design calculations. Rainfall intensity values were obtained from the "Rainfall Intensity Curves For Poughkeepsie, N.Y" as issued by the NYSDOT. Details of the storm water collection system are indicated on the SWPPP Drawings.

### **6.2 Peak Storm Water Flows**

#### **Methodology**

Generally, the development of a site will accelerate storm water runoff by creating impervious areas which allow rainfall to concentrate, and travel more quickly off-site. Runoff volumes are also increased due to the elimination of vegetated areas which allow rainfall to infiltrate into the soil. Mitigation of these development impacts require storm water management practices to attenuate the increases in peak discharges and to decrease runoff volumes.

To study watershed runoff, a hydrologic model of the site has been developed using procedures outlined in the NRCS (formerly U.S. Department Of Agriculture) Soil Conservation Service Curve Number Method. This methodology was used in conjunction with Haestad Method's "Pondpack" software to generate peak runoff rates and hydrographs for analysis of Pre- and Post-development Conditions. This methodology considers rainfall events with 24-hour durations. The total rainfall amounts for various frequency storms follow a synthetic distribution based on National Weather Service duration frequency data. The analysis for the New Windsor Realty Group, LLC site is based on a Type III storm event which represents the spatial distribution of rainfall in the Atlantic Coastal Region. 24 hour rainfall amounts used in the analysis were obtained from maps provided in the NRCS Soil Conservation Service Publication TR-40 and are as follows:

<u>FREQUENCY (Years)</u>	<u>RAINFALL AMOUNTS (Inches)</u>
1	3.0
10	5.5
25	6.0
100	8.0

**Pre-Developed Conditions And Runoff**

A watershed model was developed to examine the site under Pre-developed Conditions. The model reveals one subarea tributary to Study Point A that incorporates 3.65 acres.

The contributing subarea is as follows:

Subarea On-1 encompasses 3.65 acres consisting of 1 residence and an unpaved driveway. The balance of the site is vegetated consisting of trees and brush. Storm water runoff from the site flows overland to the northeast where it discharges onto the lands of Impellittiere and Redl, hereinafter defined as Study Point A.

The following is a summary of the site's Pre Development peak discharge:

<u>Subarea On-1</u>				
<b>Time of Concentration</b> 2-Yr 24 Hr Rainfall = 3.5in	<b>Surface Cover</b> <b>Cross Section</b>	<b>Manning N</b>	<b>Flow Length</b> <b>Avg Velocity</b>	<b>Slope</b> <b>Tt</b>
<b>Sheet Flow</b>	Grass	.24	150 Ft 0.19 Ft/s	4.7% 0.22 Hrs
<b>Shallow Flow</b>	Unpaved		395 Ft 4.14 Ft/s	6.6% .03 Hrs
<b>Storm</b>	<b>Precipitation</b>	<b>Runoff</b>	<b>Peak Discharge</b>	<b>Total Volume</b>
1 Year	3.0 inches	.96 inches	2.8 cfs	.29 ac-ft
10 Year	5.5 inches	2.9 inches	8.9 cfs	.87 ac-ft
25 Year	6.0 inches	3.3 inches	10.2 cfs	.99 ac-ft
100 Year	8.0 inches	5.0 inches	15.5 cfs	1.53ac-ft

Study Point A

<u>Storm</u>	<u>Subarea On-1</u>	<u>Total Discharge-Study Point A</u>
1 Year	2.9 Cfs	2.9 Cfs
10 Year	8.9 Cfs	8.9 Cfs
25 Year	10.2 Cfs	10.2 Cfs
100 Year	15.5 Cfs	15.5 Cfs

**Post-Developed Conditions And Runoff**

Under Post-developed conditions, the character and limits of the subareas will be altered by the construction of the proposed building, parking areas, and appurtenant site improvements.

Impervious areas such as parking lots, driveways, and roofs infiltrate less rainfall than most natural ground covers and, due to their smooth surfaces, will accelerate runoff. These factors combine to increase storm water discharge rates subsequent to construction. The majority of the project storm water runoff will be collected by the on-site storm drainage system in Subarea On-1A and will be conveyed to the sand filter and ultimately to the storm water detention basin. The post-development Subareas are re-configured as follows:

Subarea On-1A encompasses the majority of the developed project site and totals 2.86 acres in size. Storm water generated by this Subarea is collected by the on-site storm drainage system and will discharge in to the sand filter system and ultimately the storm water detention basin.

Subarea On-1B is .79 acres and contains the remaining portion of the site primarily located in the southeast corner. Storm water from this subarea continues to flow overland onto the lands of Impellittiere and Redl, hereinafter defined as Study Point A. This subarea will contain only vegetated surfaces.

The following is a summary of the site's Post Development peak discharge:

Subarea On-1A

Time of Concentration 2-Yr 24 Hr Rainfall = 3.5in	Surface Cover Cross Section	Manning N	Flow Length Avg Velocity	Slope Tt
Sheet Flow	Asphalt	.011	90 Ft 1.73 ft/s	3.3% .01 Hrs
Channel Flow Hydraulic Radius = 0.31 ft	1.23 ft <sup>2</sup>	.012	765 Ft 10.65 Ft/s	3.5% 0.02 Hrs
Storm	Precipitation	Runoff	Peak Discharge	Total Volume
1 Year	3.0 inches	1.9 inches	5.6 cfs	.45 ac-ft
10 Year	5.5 inches	4.3 inches	11.9 cfs	1.01 ac-ft
25 Year	6.0 inches	4.7 inches	13.2 cfs	1.13 ac-ft
100 Year	8.0 inches	6.7 inches	18.2 cfs	1.59 ac-ft

Subarea On-1B

Time of Concentration 2-Yr 24 Hr Rainfall = 3.5 in	Surface Cover Cross Section	Manning N	Flow Length Avg Velocity	Slope Tt
Sheet Flow	Grass	.24	100 Ft 0.19 Ft/s	6.00% 0.15 Hrs
Shallow Flow	Unpaved		175 Ft 4.38 Ft/s	7.3% .01 Hrs

Storm	Precipitation	Runoff	Peak Discharge	Total Volume
1 Year	3.0 inches	.91 inches	.6 cfs	.060 ac-ft
10 Year	5.5 inches	2.8 inches	2.1 cfs	.182 ac-ft
25 Year	6.0 inches	3.2 inches	2.4 cfs	.210 ac-ft
100 Year	8.0 inches	4.9 inches	3.7 cfs	.324 ac-ft

### Storm Water Detention

Mitigation of Post-development storm water impacts will be achieved through the construction of a storm water detention basin which will be located in the northeastern portion of the site. This basin will collect storm water from majority of the developed project site, specifically Subarea On-1A. Runoff from this contributing drainage area will be held within the basin and released at a regulated rate through a controlled outlet structure consisting of a 2-inch diameter orifice, and a 8-foot wide rectangular weir. The basin will provide the required volume to satisfy the requirements of Stream Channel Protection. Also, the combined peak discharge from the site under Post-Developed Conditions will not exceed the levels of runoff discharging from the site under Pre-Developed Conditions for storms having a return frequency of 10 Years, 25 Years and 100 Years.

The table below summarizes the basin's performance characteristics with respect to detaining peak storm water flows:

#### Detention Basin Performance

Berm Top Elevation	=	Elev. 254.0
Maximum Storage	=	1.472 Ac.-Ft. @ Elev. 254.0
Outlets	=	2" Dia. Orifice @ Elev. 248.00
	=	8.0 LF Weir @ Elev. 250.50

$$\text{where } Q_{\text{orifice}} = ca (2gh)^{0.5} \quad c = 0.60$$

$$Q_{\text{weir}} = cl (h)^{1.5} \quad c = 3.0$$

<u>Storm Frequency</u>	<u>Peak Inflow</u>	<u>Peak Outflow</u>	<u>Maximum Stage</u>
1 Yr	5.6 Cfs	0.2 Cfs	Elev. 250.44
10 Yr	11.9 Cfs	5.9 Cfs	Elev. 250.85
25 Yr	13.2 Cfs	7.5 Cfs	Elev. 250.94
100 Yr	18.2 Cfs	9.7 Cfs	Elev. 251.35

Upon exiting the detention basin, the outflow combines with the runoff from Subareas On-1B. The sum of these runoffs represents the total runoff from the site to Silver Stream Road. The

following Table represents the peak runoff rates for 4 studied storm frequencies under Pre- and Post-development Conditions.

Pre- And Post-Development Storm Water Runoff

Subarea	Prop./ Exist.	Drainage Area (Acres)	Peak Runoff For Studied Storm Frequencies			
			1 Yr (Cfs)	10 Yr. (Cfs)	25 Yr. (Cfs)	100 Yr. (Cfs)
<u>Study Point A</u> (On-1)	Exist.	3.65	2.8	8.9	10.2	15.5
<u>Study Point A</u> (On-1A & On-1B)	Prop.	3.65	0.8	7.6	9.6	13.2

**6.3 Channel Protection Volume**

In order to provide stream channel protection from Post-development flows, additional storage has been incorporated into the Detention Basin to detain and release over 24 hours the 1-Year Storm Event representing 3-inches of rain. This storage from the two post-development subareas is computed at 14,026 Cf, and represents the volume in the basin from its bottom (Elev. 248.0) to Elev. 250.50. To satisfy the 24-hour requirement for discharge, storm water will be released from the basin at a rate of 0.16 Cfs. A 2-inch orifice at Elev. 248.0 in the outlet control structure will regulate this outflow, and this will be in addition to the 8-foot wide weir that detains peak flows to Pre-development rates.

**6.4 Water Quality Volume**

To mitigate the increased levels of the Post-development pollutants, the SPDES General Permit GP-02-01 requires that a specific volume of storm water runoff be captured and treated by practices described in the Storm Water Management Design Manual. This specific volume is determined utilizing the Unified Storm Water Sizing Criteria which computes the runoff volume based upon a rainfall of 90% of the average annual storm event. For the project this 90% of the average annual storm is equivalent to 1.2 inches of rain.

To the greatest extent possible, storm water will be collected and treated on-site so as to remove its pollutants prior to discharge to the lands of Impellitiere and Redl. The treatment practice selected is an open Sand Filter, and this selection was based upon the constraints of the site and its small drainage area.

Pretreatment within the Sand Filter will consist of a sedimentation chamber, which has been sized for 25% of the Water Quality Volume (WQv). The entire treatment chamber is sized to temporarily hold a minimum of 75% of the WQv prior to filtration. The filter media will have a depth of 18-inches in accordance with the Storm Water Management Design Manual and the media will be medium sand conforming to ASTM C-33. An underdrain system will be installed

in the bottom of the filter bed to collect the filtered water and return it to the natural drainage course, the lands of Redl and Impellittiere.

The followings are the design parameters and characteristics of the Sand Filter:

Percent Impervious (I)	=	86.87%
Runoff Value (Rv)	=	0.83
Water Quality Vol. (WQv)	=	0.164 Ac-Ft. (7,158 CF)

Peak Discharge To The Sand Filter	2.1 Cfs
-----------------------------------	---------

Size Of Sedimentation Chamber

Required Vol. (25% of WQv)	1,790 Cf
Provided Vol. (20 Ft x 36 Ft x 2.5 Ft)	1,800 Cf

Size Of Filtration Chamber

Required Area	526 Sf
Provided Area.	540 Sf

Total Storage In Filtration Chamber

Required Volume	5,369 Cf
Provided Volume	7,164 Cf

## 7.0 CONCLUSION

This Storm Water Pollution Prevention Plan provides the required hydrologic and hydraulic analysis necessary to manage post-development storm water flows. The selected Storm Water Management Plan will collect and detain post-development flows for 4 selected storm frequencies to insure that there will be no significant adverse impacts to the adjacent or downstream properties. The comparison of Pre- and Post-development discharges rate are presented in Section 6.2.

This Storm Water Pollution Prevention Plan selects the appropriate Storm Water Management Practice to treat the water quality volume generated by the development of the subject site. Erosion and sediment control measures have been selected to minimize the potential for discharging pollutants and sediments to adjacent properties and adjoining water bodies.

In conclusion, it is our opinion that the proposed development will not adversely impact adjacent or downstream properties if the storm water management facilities are properly constructed, and maintained in accordance with the requirements outlines herein.

## APPENDICES

- A. NYSDEC SPDES GENERAL PERMIT GP-02-01
- B. NOTICE OF INTENT FORM
- C. OPERATOR'S AND CONTRACTOR'S CERTIFICATION FORMS
- D. INSPECTION REPORT
- E. RECORD OF STABILIZATION AND CONSTRUCTION ACTIVITY
- F. NOTICE OF TERMINATION FORM
- G. STORM WATER MANAGEMENT CALCULATIONS  
- HYDROLOGIC AND HYDRAULIC -
- H. STORM WATER MANAGEMENT CALCULATIONS  
- WATER QUALITY

**APPENDIX A**

**NYSDEC SPDES GENERAL PERMIT GP-02-01**



NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SPDES GENERAL PERMIT  
FOR STORMWATER DISCHARGES

from

CONSTRUCTION ACTIVITY

Permit No. GP-02-01

Issued Pursuant to Article 17, Titles 7, 8 and Article 70  
of the Environmental Conservation Law

Effective Date: January 8, 2003

Expiration: January 8, 2008

William R. Adriance  
Chief Permit Administrator

Address: NYS DEC  
Div. Environmental Permits  
625 Broadway, 4th Floor  
Albany, N.Y. 12233-1750

Authorized Signature

*William R. Adriance*

Date: January 8, 2003

SPDES General Permit for Stormwater Runoff from Construction Activity, GP-02-01

Expiration: January 8, 2008

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**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES  
FROM CONSTRUCTION ACTIVITY**

**Preface**

Pursuant to Section 402 of the Clean Water Act ("CWA"), stormwater discharges from certain construction activities to waters of the United States<sup>1</sup> 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 groundwaters are also unlawful unless they are authorized by a SPDES permit.

A discharger, owner, or operator may<sup>2</sup> obtain coverage under this general permit by submitting a Notice of Intent ("NOI") to the Department. Copies of this General Permit and the NOI for New York are available by calling (518) 402-8109 or at any Department of Environmental Conservation (the Department) regional office (see Appendix A on Page 23). They are also available on the Department's website at:

**[www.dec.state.ny.us](http://www.dec.state.ny.us)**

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<sup>1</sup> "Waters of the United States" means:

- (a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; and
- (b) All interstate waters, including interstate "wetlands"; and
- (c) All other waters such as interstate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
  - (1) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
  - (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
  - (3) Which are used or could be used for industrial purposes by industries in interstate commerce; and
- (d) All impoundments of waters otherwise defined as waters of the United States under this definition; and
- (e) Tributaries of waters identified in paragraphs (a) through (d) of this definition; and
- (f) The territorial sea; and
- (g) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA are not waters of the United States. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the United States (such as disposal areas in wetlands) nor resulted from the impoundment of waters of the United States.

<sup>2</sup> "may" refers to circumstances under which the discharger is ineligible for coverage under this general permit because of other provisions of this permit. Dischargers which are excluded from coverage under this general permit as provided for in Part I, Section C, for example, are not authorized to discharge under this permit. This also applies to possible situations in which an NOI has been submitted and/or a regulatory fee paid pursuant to Article 72 of the ECL. The submittal of an NOI and/or regulatory fee has no bearing or relevance whatsoever on the eligibility of the construction activity discharging stormwater runoff under the authority of this permit.

### **Local Programs of a Regulated MS4**

Under the federal Phase II stormwater program, many cities, villages, towns, and other public entities in New York State which are located within "Urbanized Areas" as defined by the U.S. Census and who operate a Municipal Separate Storm Sewer System ("MS4") will be required to obtain SPDES permit coverage for stormwater discharges under their jurisdiction and control (see 40CFR Part 122 §122.26.32). Additionally, MS4s may be designated by the Department as regulated MS4s. Among other requirements, the Phase 2 NPDES stormwater regulations require regulated MS4s to address stormwater runoff from construction activities. Construction activities covered under this general permit, which are subject to stormwater runoff controls of a regulated MS4, will also need to comply with the MS4's controls.

### **Five (5) Day Coverage**

Prior to the submission of an NOI, the owner or operator must have completed a Storm Water Pollution Prevention Plan (SWPPP) that complies with all requirements of this general permit. Submitting an NOI is an affirmation that a SWPPP has been prepared and will be implemented. If an applicant certifies that the SWPPP has been developed in conformance with the Department's technical standards, the applied-for activity may obtain coverage under this general permit in five (5) business days after the Department's receipt of the NOI provided, that the activity is eligible for coverage under this general permit and that the Department has not informed the applicant otherwise.

### **Sixty (60) Day Coverage**

While the Department's technical standards are appropriate statewide, it is recognized that there may be situations where stormwater management goals can best be met by alternative means that are more suitable given local conditions.

For construction projects in these situations, applicants must identify in their NOI each of the deviations from the Department's technical standards that they are seeking. Applicants must also explain why the deviations are needed or desired and what impacts to water quality, if any, can be expected if the deviation were allowed. Applicants must also explain the actions, if any, that local board(s) have taken with respect to the deviation(s). For applicants which cannot certify conformance with the Department's technical standards, the SWPPP must also be certified by a licensed/certified professional that the SWPPP has been developed in a manner which will insure compliance with water quality standards and with the substantive intent of this permit.

In cases of deviations from the Department's technical standards, applicants must allow sixty (60) business days after the receipt by the Department of a completed NOI and certification before gaining coverage under this general permit and before initiating any construction activity. During this 60 day period, the Department may conduct further review of the NOI and SWPPP. If additional information is needed to complete the review, the NOI will be considered

incomplete and the applicant will be so advised. The intent of this provision is to require conformance the Department's technical standards wherever possible and appropriate. At the same time, alternative means to address stormwater control may be allowed under this general permit where they are more suitable for the site in question and where they will not diminish water quality protection.

There are other scenarios under which coverage under this general permit will not occur until 60 business days from the receipt of a completed NOI. For example, if the construction activity or post construction runoff causes the discharge of a pollutant of concern to a water identified on the 303(d) list or a watershed with an approved TMDL for that pollutant of concern, coverage under the general permit will not occur until sixty (60) business days from the receipt by the Department of a completed NOI. For these projects the operator may be required to submit the SWPPP and/or appropriate certification(s) to the Department for review. The flowchart shown in Figure 1 on page vi will help to describe the process under which certain conditions exist that require possible further analysis and water quality/quantity considerations.

#### **Computer Tool Available For Completion of SWPPPs and NOIs Under Development**

The Department is currently developing an interactive computer software tool entitled "How to Prepare SWPPPs and Notices of Intent" to assist applicants in both developing SWPPPs and completing NOIs. This will be available in the near future for use on the Department website as well as being packaged independently on compact discs. This tool will contain guidance as well as many useful links to reference materials and documents concerning erosion and sedimentation control, as well as to the design of stormwater management practices. The Department's website will contain the latest information and guidance on the various tools available.

#### **The Department's Technical Standards**

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*"<sup>3</sup> 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*." Both of these documents are available on the Department's website. If an applicant certifies that stormwater management practices will conform to the Department's technical standards, then coverage under the permit may occur sooner than otherwise would be the case if non-conformance with the manuals existed. See Figure 1 on page vi for more information.

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<sup>3</sup> Previously, the "*New York Guidelines for Urban Erosion and Sediment Control*", also commonly referred to as the "Blue Book".

### **Permit Valid for Any Size Disturbance**

This permit may be used for construction activities involving any amount of disturbed acreage, provided that all other eligibility conditions in subsection B of Part I are satisfactorily met (see page 2 of this permit). Thus, this permit may apply to activities identified under 40 CFR Part 122, subsection 122.26(b)(14)(x) which are also referred to as "NPDES Phase 1 construction activities" involving soil disturbances of five (5) acres or more. This permit may also apply to activities identified under 40 CFR Part 122, subsection 122.26(b)(15) which are also referred to as "NPDES Phase 2 small construction activities" involving soil disturbances of between one (1) and five (5) acres. And, this permit may also apply to construction activities involving soil disturbances of less than one (1) acre if the Department determines that a SPDES permit is required pursuant to the ECL. In any and all cases, all of the eligibility provisions of this general permit must be met in order to gain coverage.

### **Notice of Termination**

After construction is completed as defined in the general permit (see Part II beginning on Page 7), cancellation of coverage is accomplished by the submittal of a Notice of Termination ("NOT"). Failure to submit a NOT may result in the continued obligation to pay a yearly Regulatory Fee established pursuant to Article 72 of the ECL and/or may be cause for suspension of permit coverage.

Previous versions of NOIs, NOTs and Notices of Intent, Transfer and Termination ("NOITT"s) cannot be used in conjunction with this general permit. There is a new NOI required for obtaining coverage under this general permit. Failure to include information identified as "mandatory" entries on the new NOI form may prevent and/or delay discharge authorization being sought under this permit.

The new NOT will also include an identification of any permanent structures that are being left on the site after stabilization occurs and after termination of permit coverage under this general permit. The NOT will also include a certification that the structures were constructed as described in the SWPPP and that an Operation and Maintenance ("O&M") manual has been prepared and has been made available to the owner of such permanent structures who is expected to conduct the necessary O&M over the life of the structure(s).

### **Ineligible Activities**

The submittal of a completed NOI and/or the payment of an annual regulatory fee by an applicant does not necessarily mean that an applicant is covered under this permit if the applicant is ineligible for coverage under this permit under the terms cited in Part I of this permit. In other words, submitting a completed NOI and paying an annual regulatory fee does not automatically gain an applicant permit coverage if the applicant is ineligible for coverage under this permit even if the Department fails to immediately inform the applicant of such ineligibility.

### **Permit Expiration Date**

Coverage under this general permit is available January 8, 2003 and will expire five (5) years after issuance on January 8, 2008.

### **Activities Previously Covered Under GP-93-06**

In a separate proposal, the Department is also concurrently seeking to re-issue GP-93-06 with an expiration of August 1, 2003. The purpose of this action is to provide a transition period for permittees which have had SPDES permit coverage under GP-93-06 immediately prior to January 8, 2003, the effective date of GP-02-01. **Prior to August 1, 2003**, these activities will need to:

- (1) stabilize their sites in accordance with GP-93-06 and submit an NOT; or, if necessary,
- (2) gain coverage under GP-02-01 by submitting a new NOI.

For **new** construction activities, coverage under GP-93-06 will not be available after the effective date of GP-02-01, January 8, 2003. Such discharges may be eligible for coverage under GP-02-01 (see Part I.B. on page 2 of this permit).

### **Water Quality Violations Not Permitted**

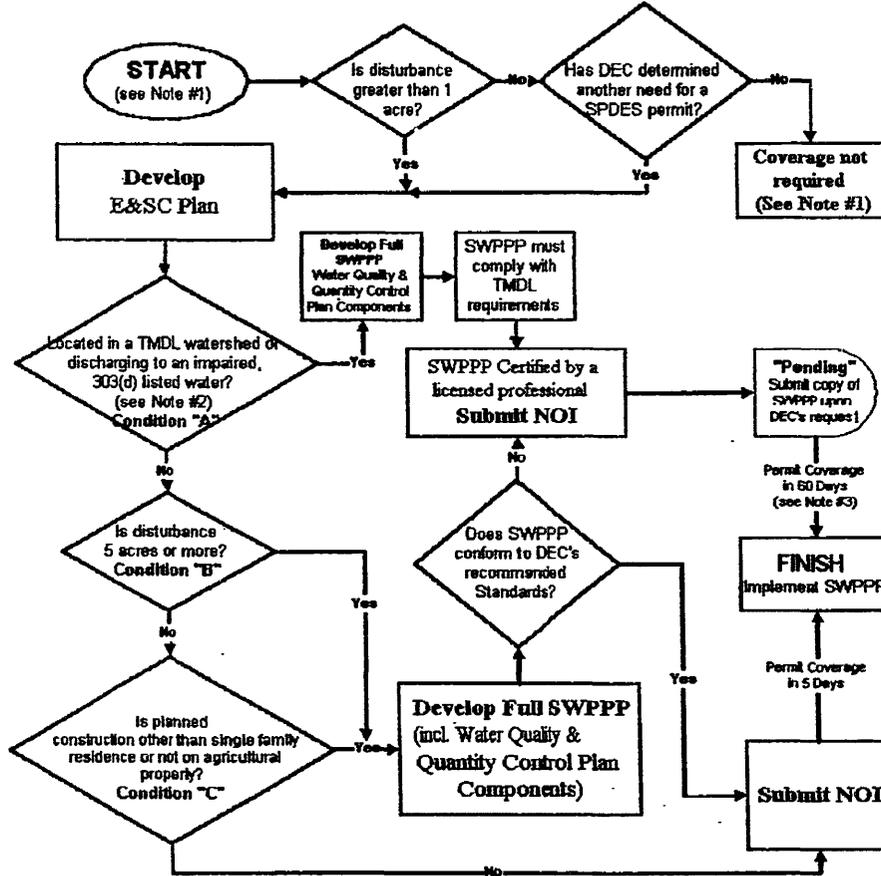
This permit does not authorize any person to cause or contribute to a condition in contravention of any water quality standards that are contained in the Rules and Regulations of the State of New York (see Part I of this permit on page 2) even if the permittee is in compliance with all other provisions of this permit. Any violations of water quality standards may be considered by the Department to be violations of this permit and/or the ECL, including its accompanying regulations.

### **Other Department Permits**

Construction activities may also require other Department permits in addition to the coverage provided by this general permit including, but not limited to, dam safety, wetlands and stream protection. Such other Department permits must be obtained separately from coverage under this general permit. Further information concerning these permits should be sought from the Regional Permit Administrator at the appropriate Department regional office (See Appendix A on page 23).

FIGURE 1

SWPPP and Stormwater Permit Process



NOTES:

1. Under any of the above conditions other environmental permits may be required. DEC may require permit for construction disturbance < 1 acre on a case by case basis.
2. and the following exists: construction and/or stormwater discharges from the construction or post-construction site contain the pollutant of concern identified in the TMDL or 303(d) listing.
3. After receipt by DEC of completed application.

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES**

**FROM CONSTRUCTION ACTIVITIES**

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## **Part I. COVERAGE UNDER THIS PERMIT**

A. **Maintaining Water Quality** - It shall be a violation of this general permit and the Environmental Conservation Law ("ECL") for any discharge authorized by this general permit to either cause or contribute to a violation of water quality standards as contained in Parts 700 through 705 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York including, but not limited to:

1. There shall be no increase in turbidity that will cause a substantial visible contrast to natural conditions;
2. There shall be no increase in suspended, colloidal and settleable solids that will cause deposition or impair the waters for their best usages; and
3. There shall be no residue from oil and floating substances, nor visible oil film, nor globules of grease.

## **B. Eligibility Under This General Permit**

1. This permit may authorize all discharges of stormwater from construction activity<sup>4</sup> to surface waters and groundwaters except for ineligible discharges identified under subparagraph C of this Part (see below). Discharge authorization under this permit requires the submittal of a completed NOI.
2. Except for non-stormwater discharges explicitly listed in the next paragraph, this permit only authorizes stormwater discharges from construction activities.
3. Notwithstanding paragraphs B.1 and B.2 above, the following non-stormwater discharges may be authorized by this permit: discharges from fire

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<sup>4</sup> This includes discharges of stormwater associated with industrial activity identified under 40 CFR Part 122, subsection 122.26(b)(14)(x), small construction activities identified under 40 CFR Part 122, subsection 122.26(b)(15) or any other stormwater from construction activities that are not otherwise ineligible for coverage under this permit (See Part I, subsection B beginning on page 2).

fighting activities; fire hydrant flushings; waters to which cleansers or other components have **not** been added that are used to wash vehicles or control dust in accordance with the SWPPP, routine external building washdown which does not use detergents; pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; air conditioning condensate; springs; and foundation or footing drains where flows are not contaminated with process materials such as solvents. For those entities required to obtain coverage under this general permit, and who discharge as noted in this paragraph, and with the exception of flows from fire fighting activities, these discharges must be identified in the SWPPP (see Part III beginning on Page 7). Under all circumstances, the permittee must still comply with water quality standards (see Part I, subsection A on Page 2).

C. **Activities Which Are Ineligible for Coverage Under This General Permit** - All of the following stormwater discharges from construction activities are **not** authorized by this permit:

1. Discharges after construction activities have been completed and the site has undergone final stabilization<sup>5</sup>;
2. Discharges that are mixed with sources of non-stormwater other than those expressly authorized under subsection B.3. of this Part (see page 3) and identified in the SWPPP required by this permit;
3. Discharges that are subject to an existing SPDES individual or general permit or which are required to obtain an individual or alternative general permit pursuant to Part V, subparagraph K (see page 21) of this permit;
4. Discharges that are likely to adversely affect a listed, or proposed to be listed, endangered or threatened species, or its critical habitat;
5. Discharges which are subject to an existing effluent (limitation) guideline addressing stormwater and/or process wastewater unless said guidelines are contained herein; or
6. Discharges which either cause or contribute to a violation of water quality standards adopted pursuant to the ECL and its accompanying regulations (See subsection A of Part I on page 2).

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<sup>5</sup> "Final Stabilization" means that all soil disturbing activities at the site have been completed, and that a uniform perennial vegetative cover with a density of 80% has been established or equivalent stabilization measures (such as the use of mulches or geotextiles) have been employed on all unpaved areas and areas not covered by permanent structures.

D. **Authorization Under This General Permit**

1. An operator<sup>6</sup> must submit a completed NOI form in order to be authorized to discharge under this general permit. The NOI form shall be one which is associated with this general permit, signed in accordance with Part V. H.(see Page 19) of this permit and submitted to the address indicated on the NOI form. NOIs and NOITTs used in association with either previous or other general permits are not valid for obtaining coverage under this general permit. The submittal of an NOI is an affirmation to the operators' understanding and belief that the activity is eligible for coverage under this permit and that a SWPPP has been prepared and will be implemented in accordance with Part III of this permit.

2. All contractors and subcontractors of the operator identified under Part III.E.1 (see page 17) must provide the certification cited under Part III.E.2 (see page 17). Such certifications shall become part of the SWPPP for the construction activity covered under this general permit.

3. Unless notified by the Department to the contrary, operators who are eligible for coverage under this permit **and** who submit an NOI in accordance with the requirements of this permit, may be authorized to discharge stormwater from construction activities under the terms and conditions of this permit, and in accordance with the following timetable:

a. For construction activities which:

(1) develop a SWPPP in conformance with the Department's technical standards (See subsection D of Part III on page 10), and do not or will not discharge a pollutant of concern to an impaired water or a TMDL watershed;

**or**

(2) as of the effective date of this general permit, GP-02-01, have obtained coverage under, and are operating in compliance with, GP-93-06; and do not or will not discharge a pollutant of concern to an impaired water or a TMDL watershed;

authorization to discharge under this permit may occur five (5) business days after the date on which the NOI is received by the Department.

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<sup>6</sup> For the purposes of this permit, the term "operator" means the person, persons, or legal entity which owns or leases the property on which the construction activity is occurring. Also, see Part V., subsection H. on page 19 of this permit.

- b. For activities which do not comply with the preceding subsection (i.e. Part I.D.3.a.), authorization to discharge under this permit will begin no sooner than sixty (60) business days from the receipt of the completed NOI unless notified differently by the Department pursuant to Part V, subsection K of this permit (see page 21). For activities not satisfying Part I.D.3.a.(1) above, or for construction site runoff subject to a TMDL (see Figure 1 on page vi), the SWPPP must be prepared by a licensed/certified professional<sup>7</sup> and include a certification stating that the SWPPP has been developed in a manner which will assure compliance with water quality standards (see Part I.A.) and with the substantive intent of this permit.
- c. For construction activities which are subject to a sixty-day period provision identified in the preceding subparagraph b., the SWPPP shall include each of the components identified in Part III.A.1.b. (see page 8).
4. At its sole discretion, the Department may deny or terminate coverage under this permit and require coverage under another SPDES permit at any time based on a review of the NOI, the SWPPP or other relevant information (see Part V, subsection K of this permit on page 21).
5. A copy of the NOI and a brief description of the project shall be posted at the construction site in a prominent place for public viewing.
6. A signed copy of the NOI, the SWPPP, and any reports required by this permit shall also be submitted concurrently to the local governing body and any other authorized agency<sup>8</sup> having jurisdiction or regulatory control over the construction project.
7. New stormwater discharges from construction activities that require any other Uniform Procedures Act permit (Environmental Conservation Law, 6 NYCRR Part 621) cannot be covered under this general permit until the other required permits are obtained. Upon satisfaction of the State Environmental Quality Review Act ("SEQRA") for the proposed action and issuance of necessary permits, the applicant may submit an NOI to obtain coverage under this general

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<sup>7</sup> A "licensed/certified professional" means a person currently licensed to practice engineering in New York State or is a Certified Professional in Erosion and Sediment Control (CPESC).

<sup>8</sup> For the purposes of this general permit, "any other authorized agency" shall include any local, regional, or state entity or agency except the Department which has authority to review stormwater discharge from the project, including authority under any approved watershed protection plan or regulations.

permit.<sup>9</sup> In order to facilitate the Department's review of a multi-permitted project, an applicant should submit, at a minimum, a copy of the SWPPP which contains the information specified in Appendix B (see page 24). This information will assist the Department in determining whether or not coverage under this general permit or another SPDES permit is the more appropriate option. The Department may also require the submission of additional information in order to determine the SWPPP's conformance with the Department's technical standards.

8. Upon renewal of this general permit or issuance of a new general permit, the permittee is required to notify the Department of its intent to be covered by the new general permit. Coverage will continue under this permit for its term unless action is taken to terminate permit coverage as provided elsewhere in this permit. See also Part V. subsection B. on page 18 of this permit.

9. In the event of a transfer of ownership or responsibility for stormwater runoff, there can be no "automatic" transfer of permit coverage from one permittee to the next without appropriate notification from the dischargers. The former permittee must submit an NOT and notify the new discharger of the possible need for the new discharger to submit a new NOI (see Section E, subparagraph 2 below).

E. **Deadlines for Notification**

1. Operators who intend to obtain coverage under this general permit for stormwater runoff from construction activities must submit an NOI in accordance with the requirements of this Part at least five (5), or sixty (60) business days, as appropriately determined from Part I, Section D.3 (see page 4) prior to the commencement of construction<sup>10</sup> activities.

2. For stormwater runoff from construction activities where the operator changes, a new NOI must be submitted by the new operator in accordance with the requirements of this permit. The former operator must submit a NOT in accordance with Part II (see page 7) of this permit and notify the new operator of the requirement to submit a new NOI to obtain coverage under this permit. The new operator must also review and sign the SWPPP in accordance with Part III.B.(see page 9) and continue implementation of the SWPPP as required by this

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<sup>9</sup> The purposes of this subsection is to assure that the requirements of SEQRA are fulfilled, if necessary, before any discharge authorization under this general permit is granted.

<sup>10</sup> "Commencement of Construction" means the initial disturbance of soils associated with clearing, grading, or excavating activities, or other construction activities.

permit.

## **Part II. TERMINATION OF COVERAGE<sup>11</sup>**

Where a site has been finally stabilized, the operator must submit a NOT form prescribed by the Department for use with this general permit. The NOT shall be signed in accordance with Part V. H.(see page 19) of this permit and submitted to the address indicated on the approved NOT form.

The permittee must identify all permanent stormwater management structures that have been constructed and provide the owner(s) of such structures with a manual describing the operation and maintenance practices that will be necessary in order for the structure to function as designed after the site has been stabilized. The permittee must also certify that the permanent structure(s) have been constructed as described in the SWPPP.

## **Part III. STORMWATER POLLUTION PREVENTION PLANS (“SWPPP”s)**

### **A. General**

#### **1. SWPPP Preparation**

a. A SWPPP shall be developed by the operator for construction activities at each site to be covered by this permit, prior to the initiation of activities requiring coverage under this permit. SWPPPs shall be prepared in accordance with sound engineering practices. The SWPPP shall identify potential sources of pollution which may reasonably be expected to affect the quality of stormwater discharges. In addition, the SWPPP shall describe and ensure the implementation of practices which will be used to reduce the pollutants in stormwater discharges and to assure compliance with the terms and conditions of this permit. Operators are encouraged to have their SWPPP reviewed for adequacy and completeness by the local soil and water conservation district (“SWCD”) and/or other professionals qualified in erosion and sediment control practices<sup>12</sup> and stormwater management. Moreover, if the construction activity is identified under Part I, subsection D.3.b. (See page 5), or for construction site runoff subject to a TMDL (see Figure 1 on page vi), the SWPPP must include a certification by a licensed/certified professional.

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<sup>11</sup> Submittal of an NOT will terminate coverage under this general permit and will also remove the permittee from subsequent billings of the annual regulatory fee levied under Article 72 of the ECL.

<sup>12</sup> For example, CPESC, Inc. administers a certified program of individuals under its CPESC (Certified Professional in Erosion and Sediment Control) program which is sponsored by the International Erosion Control Association (IECA) and the Soil and Water Conservation Society (SWCS) and is endorsed by USDA - Natural Resources Conservation Service. CPESC, Inc. also administers the CPSWQ (Certified Professional in Stormwater Quality) program.

b. All SWPPPs shall include erosion and sediment controls. For construction activities meeting either Condition "A", "B" or "C" described below, the SWPPP shall also include water quantity and water quality controls (post-construction stormwater control practices).(see Part III. D.).

(1) Condition A - Construction site or post construction runoff discharging a pollutant of concern to either an impaired water identified on DEC's 303(d) list or a TMDL watershed for which pollutants in stormwater have been identified as a source of the impairment.

(2) Condition B - Construction site runoff from Phase 1 construction activities (construction activities disturbing five (5) or more acres) identified under 40 CFR Part 122, §122.26(b)(14)(x).

(3) Condition C - Construction site runoff from construction activity disturbing between one (1) and five (5) acres of land during the course of the project, exclusive of the construction of single family residences and construction activities at agricultural properties.

2. **SWPPP Implementation** - Operators are responsible for implementing the provisions of the SWPPP and ensuring that all contractors and subcontractors who perform professional services at the site provide certification of the SWPPP in accordance with Part I.D.2. (see page 4) and Part III.E.2. (see page 17) of this permit. All contractors and subcontractors identified in the SWPPP in accordance with Part III.E.1. (see page 17) of this permit must agree to implement applicable provisions of the SWPPP and satisfy the certification requirement of Part III.E.2. (see page 17). However, contractors and subcontractors who are not operators, as defined in this permit (see page 4), are not required to submit a NOI in addition to the NOI submitted by the operator.

3. **Deadlines for SWPPP Preparation and Compliance** - The SWPPP must be developed prior to the submittal of an NOI and provide for compliance with the terms and schedule of the SWPPP beginning with the initiation of construction activities. The operator shall also certify in the SWPPP that all appropriate stormwater control measures will be in place before commencement of construction of any segment of the project that requires such measures.

4. **Local Requirements** - Developing a SWPPP that complies with the requirements listed herein does not relieve an operator from the obligation of complying with stormwater management requirements of the local government having jurisdiction over the project.

5. **Activities Previously Covered Under GP-93-06** - For construction activities which are covered by GP-93-06 as of the effective date of this permit (GP-02-01), the continued implementation of their SWPPP that was developed and implemented in accordance with GP-93-06 is acceptable until such time as:

- (a) an NOT is submitted;
- (b) the Department notifies them otherwise in accordance with this permit, including Part V, subsection K (see page 21); or
- (c) this permit expires.

B. **Signature and SWPPP Review**

1. The SWPPP shall be signed in accordance with Part V. H.(see page 19), and be retained at the site where the construction activity occurs in accordance with Part IV (see retention of records on page 17) of this permit.

2. The permittee shall submit a copy of the SWPPP and any amendments thereto to the local governing body and any other authorized agency having jurisdiction or regulatory control over the construction activity. The operator shall make SWPPPs available upon request to the Department and any local agency having jurisdiction; or in the case of a stormwater discharge associated with industrial activity which discharges through a municipal separate storm sewer system, to the municipal operator of the system.

3. The Department, or its authorized representative, may notify the permittee at any time that the SWPPP does not meet one or more of the minimum requirements of this permit. Such notification shall identify those provisions of the permit which are not being met by the SWPPP and identify which provisions of the SWPPP require modifications in order to meet the minimum requirements of this permit. Within seven (7) days of such notification, (or as otherwise provided by the Department) the permittee shall make the required changes to the SWPPP and shall submit to the Department a written certification that the requested changes have been made. Notwithstanding the foregoing, the Department reserves all rights to enforce the terms of the ECL.

C. **Keeping SWPPPs Current** - The permittee shall amend the SWPPP whenever:

1. There is a significant change in design, construction, operation, or maintenance which may have a significant effect on the potential for the discharge of pollutants to the waters of the United States and which has not otherwise been addressed in the SWPPP; or
2. The SWPPP proves to be ineffective in:
  - a. Eliminating or significantly minimizing pollutants from sources identified in the SWPPP required by this permit, or
  - b. Achieving the general objectives of controlling pollutants in stormwater discharges from permitted construction activity.
3. Additionally, the SWPPP shall be amended to identify any new contractor or subcontractor that will implement any measure of the SWPPP (see Part III.E, page 17 below). Amendments to the SWPPP may be reviewed by the Department in the same manner as provided by Part III.B (see page 9 above).

D. **General Contents of SWPPPs** -

1. **Standards for construction activities covered under this permit** - The Department's technical standards for erosion and sediment controls are detailed in the "*New York Standards and Specifications for Erosion and Sediment Control*"<sup>13</sup> published by the Empire State Chapter of the Soil and Water Conservation Society. For the design of water quality and water quantity controls (post-construction stormwater control practices), the Department's technical standards are detailed in the "*New York State Stormwater Management Design Manual*."

If an operator certifies that the SWPPP has been developed in conformance with the Department's technical standards referenced above, they may obtain coverage under this general permit in five (5) business days from the Department's receipt of the NOI, provided the construction activity does not meet Condition A in Part III.A.1.b. For SWPPPs which will not conform with the Department's technical standards, the SWPPP must be prepared by a licensed/certified professional and include a certification stating that the SWPPP has been developed in a manner which will assure compliance with the State's water quality standards and with the substantive intent of this permit. In addition, coverage under this general permit will not begin until sixty (60) business days from the receipt of a completed NOI.

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<sup>13</sup> Previously, the "*New York Guidelines for Urban Erosion and Sediment Control*," also commonly referred to as the "Blue Book."

2. **Minimum SWPPP Components** SWPPPs prepared pursuant to this general permit shall present fully designed and engineered stormwater management practices with all necessary maps, plans and construction drawings. The SWPPP must, at a minimum, include the following:

- a. **For all construction activities subject to this general permit -**
  - (1) provide background information about the scope of the project, including the location, type and size of project.
  - (2) provide a site map/construction drawing(s) for the project, including a general location map. At a minimum, the site map should show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s), wetlands and drainage patterns that could be affected by the construction activity; existing and final slopes; locations of off-site material, waste, borrow or equipment storage areas; and location(s) of the stormwater discharge(s);
  - (3) provide a description of the soil(s) present at the site;
  - (4) provide a construction phasing plan describing the intended sequence of construction activities, including clearing and grubbing, excavation and grading, utility and infrastructure installation and any other activity at the site that results in soil disturbance. Consistent with the New York Guidelines for Urban Erosion and Sediment Control, there shall not be more than five (5) acres of disturbed soil at any one time without prior written approval from the Department;
  - (5) provide a description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a pollutant source in the storm water discharges;
  - (6) provide a description of construction and waste materials expected to be stored on-site with updates as appropriate, and a description of controls to reduce pollutants from these materials including storage practices to minimize exposure of the materials to storm water, and spill prevention and response;
  - (7) describe the temporary and permanent structural and vegetative measures to be used for soil stabilization, runoff control and sediment control for each stage of the project from initial land

clearing and grubbing to project close-out;

- (8) identify and show on a site map/construction drawing(s) the specific location(s), size(s), and length(s) of each erosion and sediment control practice;
- (9) provide the dimensions, material specifications and installation details for all erosion and sediment control practices, including the siting and sizing of any temporary sediment basins;
- (10) identify temporary practices that will be converted to permanent control measures;
- (11) provide an implementation schedule for staging temporary erosion and sediment control practices, including the timing of initial placement and the duration that each practice should remain in place;
- (12) provide a maintenance schedule to ensure continuous and effective operation of the erosion and sediment control practices;
- (13) provide the names(s) of the receiving water(s);
- (14) provide a delineation of SWPPP implementation responsibilities for each part of the site;
- (15) provide a description of structural practices to divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable; and
- (16) provide any existing data that describes the stormwater runoff characteristics at the site.

b. For construction activities meeting Condition A, B or C in Part III.A.1.b.

- (1) provide all the information required in Parts III.D.2.a.1 - 16 above;
- (2) provide a description of each post-construction stormwater control practice;
- (3) identify and show on a site map/construction drawing(s) the specific location(s) and size(s) of each post-construction stormwater control practice;
- (4) provide a hydrologic and hydraulic analysis for all structural components of the stormwater control system for the applicable design storms;
- (5) provide a comparison of post-development stormwater runoff conditions with pre-development conditions;
- (6) provide the dimensions, material specifications and installation details for each post-construction stormwater control practice;
- (7) provide a maintenance schedule to ensure continuous and effective operation of each post-construction stormwater control practice.

The following three subsections, Part III.D. 3. through Part III.D. 5., apply only to construction activities covered under this general permit which meet Conditions "A", "B"<sup>14</sup> or "C" in Part III. A.1.b. Beginning with Part III.E. below (see page 17) the requirements set forth therein apply to all permittees covered under this permit.

3. Site Assessment and Inspections -

a. The operator shall have a qualified professional<sup>15</sup> conduct an assessment of the site prior to the commencement of construction and certify in an inspection report that the appropriate erosion and sediment controls described in the SWPPP and required by Part III.D. (see page 10) of this permit have been adequately installed or implemented to ensure overall preparedness of the site for the commencement of construction. Following the commencement of construction, site inspections shall be conducted by the qualified professional at least every 7 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater. During each inspection, the qualified professional shall record the following information:

- (1) On a site map, indicate the extent of all disturbed site areas and drainage pathways. Indicate site areas that are expected to undergo initial disturbance or significant site work within the next 14-day period;
- (2) Indicate on a site map all areas of the site that have undergone temporary or permanent stabilization;
- (3) Indicate all disturbed site areas that have not undergone active site work during the previous 14-day period;
- (4) Inspect all sediment control practices and record the approximate degree of sediment accumulation as a percentage of the sediment storage volume (for example, 10 percent, 20 percent, 50 percent);
- (5) Inspect all erosion and sediment control practices and record all maintenance requirements such as verifying the integrity of barrier or diversion systems (earthen berms or silt fencing) and

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<sup>14</sup> Condition "B" includes construction activities covered under GP-93-06 and, therefore, are subject to Part III.D.3 through Part III.D. 5.

<sup>15</sup> "Qualified professional" means a person knowledgeable in the principles and practice of erosion and sediment controls, such as a licensed professional engineer, Certified Professional in Erosion and Sediment Control (CPESC), or soil scientist.

containment systems (sediment basins and sediment traps). Identify any evidence of rill or gully erosion occurring on slopes and any loss of stabilizing vegetation or seeding/mulching. Document any excessive deposition of sediment or ponding water along barrier or diversion systems. Record the depth of sediment within containment structures, any erosion near outlet and overflow structures, and verify the ability of rock filters around perforated riser pipes to pass water;  
and

(6) All deficiencies that are identified with the implementation of the SWPPP.

b. The operator shall maintain a record of all inspection reports in a site log book. The site log book shall be maintained on site and be made available to the permitting authority upon request. Prior to the commencement of construction,<sup>16</sup> the operator shall certify in the site log book that the SWPPP, prepared in accordance with Part III.D. (see page 10) of this permit, meets all Federal, State and local erosion and sediment control requirements.

The operator shall post at the site, in a publicly-accessible location, a summary of the site inspection activities on a monthly basis.

c. Prior to filing of the Notice of Termination or the end of permit term, the operator shall have the qualified professional perform a final site inspection. The qualified professional shall certify that the site has undergone final stabilization<sup>17</sup> using either vegetative or structural stabilization methods and that all temporary erosion and sediment controls (such as silt fencing) not needed for long-term erosion control have been removed.

d. The operator shall certify that the requirements of Parts III.D.3., III.D.4. and III.D.5 of this permit have been satisfied within 48 hours of actually meeting such requirements.

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<sup>16</sup> "Commencement of construction" means the initial removal of vegetation and disturbance of soils associated with clearing, grading or excavating activities or other construction activities.

<sup>17</sup> "Final stabilization" means that all soil-disturbing activities at the site have been completed and a uniform, perennial vegetative cover with a density of eighty (80) percent has been established or equivalent stabilization measures (such as the use of mulches or geotextiles) have been employed on all unpaved areas and areas not covered by permanent structures.

4. **Stabilization**<sup>18</sup> - The operator shall initiate stabilization measures as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. This requirement does not apply in the following instances:

a. Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceased is precluded by snow cover or frozen ground conditions, stabilization measures shall be initiated as soon as practicable;

b. Where construction activity on a portion of the site is temporarily ceased, and earth-disturbing activities will be resumed within twenty-one (21) days, temporary stabilization measures need not be initiated on that portion of the site.

5. **Maintenance** - Sediment shall be removed from sediment traps or sediment ponds whenever their capacity has been reduced by fifty (50) percent from the design capacity.

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<sup>18</sup> "Stabilization" means covering or maintaining an existing cover over soil. Cover can be vegetative (e.g. grass, trees, seed and mulch, shrubs, or turf) or non-vegetative (e.g. geotextiles, riprap, or gabions).

E. **Contractors**

1. The SWPPP must clearly identify for each measure identified in the SWPPP, the contractor(s) and subcontractor(s) that will implement the measure. All contractors and subcontractors identified in the SWPPP must sign a copy of the certification statement in Part III.E.2 (see below) of this permit in accordance with Part V.H.(see page 19) of this permit. All certifications must be included in the SWPPP. Additionally, new contractors and subcontractors (see subsection C.3. above) need to similarly certify.

2. **Certification Statement** - All contractors and subcontractors identified in a SWPPP in accordance with Part III.E.1 (see above) of this permit shall sign a copy of the following certification statement before undertaking any construction activity at the site identified in the SWPPP:

"I certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP for the construction site identified in such SWPPP as a condition of authorization to discharge stormwater. I also understand that the operator must comply with the terms and conditions of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards."

The certification must include the name and title of the person providing the signature in accordance with Part V.H.(see page 19) of this permit; the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification is made.

**Part IV. MONITORING, REPORTING AND RETENTION OF RECORDS**

A. The Department may, at its sole discretion, require monitoring of discharge(s) from the permitted construction activity after notifying the permittee in writing of the basis for such monitoring, the parameters and frequency at which monitoring shall occur and the associated reporting requirements, if any.

B. The operator shall retain copies of SWPPPs and any reports submitted in conjunction with this permit, and records of all data used to complete the NOI to be covered by this permit, for a period of at least three years from the date that the site is finally stabilized. This period may be extended by the Department, in its sole discretion, at any time upon written notification.

C. The operator shall retain a copy of the SWPPP required by this permit at the construction site from the date of initiation of construction activities to the date of final

stabilization.

D. The operator shall also prepare a written summary of its status with respect to compliance with this general permit at a minimum frequency of every three months during which coverage under this permit exists. The summary should address the status of achieving each component of the SWPPP. This summary shall be handled in the same manner as prescribed for SWPPPs under Part III, subsection B (see Page 9).

E. **Addresses** - Except for the submittal of NOIs and NOTs, all written correspondence under this permit directed to the Department, including the submittal of individual permit applications, shall be sent to the address of the appropriate Department Office as listed in Appendix A (see page 23).

#### Part V. **STANDARD PERMIT CONDITIONS**

A. **Duty to Comply** - The operator must comply with all conditions of this permit. All contractors and subcontractors associated with the project must comply with the terms of the SWPPP. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA) and the ECL and is grounds for an enforcement action against either the operator or the contractor/subcontractor; permit revocation or modification; or denial of a permit renewal application. Upon a finding of significant non-compliance with this permit or the applicable SWPPP, the Department may order an immediate stop to all construction activity at the site until the non-compliance is remedied. The stop work order shall be in writing, shall describe the non-compliance in detail, and shall be sent to the operator or the operator's on-site representative.

B. **Continuation of the Expired General Permit** - This permit expires five (5) years after issuance on January 8, 2008. However, coverage may be obtained under the expired general permit which will continue in force and effect until a new general permit is issued. After issuance of a new general permit, those with coverage under GP-02-01 will have six (6) months from the effective date of the new general permit to complete their project or obtain coverage under the new permit. Unless otherwise notified by the Department in writing, operators seeking authorization under a new general permit must submit a new NOI in accordance with the terms of such new general permit. See also Part I, subsection D.8. on page 6.

C. **Penalties for Violations of Permit Conditions** - There are substantial criminal, civil, and administrative penalties associated with violating the provisions of this permit. Fines of up to \$25,000 per day for each violation and imprisonment for up to fifteen (15) years may be assessed depending upon the nature and degree of the offense.

D. **Need to halt or reduce activity not a defense** - It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the construction activity in order to maintain compliance with the conditions of this permit.

E. **Duty to Mitigate** - The permittee and its contractors and subcontractors shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

F. **Duty to Provide Information** - The permittee shall furnish any information requested by any agency with regulatory or review authority over this project for the purpose of determining compliance with this permit or compliance with any other regulatory requirements placed on the project in conjunction with this permit. Failure to provide requested information shall be a violation of this permit. Such regulating agencies include but are not limited to the Department, SWCDs,<sup>19</sup> local planning, zoning, health, and building departments that review and approve erosion and sediment control plans, grading plans, and Stormwater Management Plans, as well as MS4s into whose system runoff from the permitted project or activity discharges. The SWPPP and inspection reports required by this general permit are public documents that the operator must make available for inspection, review and copying by any person within five (5) business days of the operator receiving a written request by any such person to review the SWPPP and/or the inspection reports. Copying of documents will be done at the requester's expense.

G. **Other Information** - When the permittee becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the NOI or in any other report to the Department, he or she shall promptly submit such facts or information.

H. **Signatory Requirements** - All NOIs, NOTs, SWPPPs, reports, certifications or information required by this permit or submitted pursuant to this permit, shall be signed as follows:

1. All NOIs and NOTs shall be signed as follows:
  - a. For a corporation: by (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person authorized to and who performs similar policy or decision-making functions for the corporation; or (2) the manager of one or more manufacturing, production or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25,000,000 (in second-quarter 1980 dollars) if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

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<sup>19</sup> "SWCD" means Soil and Water Conservation District

- b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
- c. For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes (1) the chief executive officer of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

2. The SWPPP and all reports required by the permit and other information requested by the Department or local agency shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- a. The authorization is made in writing by a person described above and submitted to the Department.

- b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position).

- c. **Certification** - Except for NOIs and NOTs, any person signing documents in accordance with this Part shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that false statements made herein are punishable as a class A misdemeanor pursuant to Section 210.45 of the Penal Law."

I. **Property Rights** - The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

J. **Severability** - The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

K. **Denial of Coverage Under This Permit**

1. At its sole discretion, the Department may require any person authorized by this permit to apply for and/or obtain either an individual SPDES permit or an alternative SPDES general permit. Where the Department requires a discharger authorized to discharge under this permit to apply for an individual SPDES permit, the Department shall notify the discharger in writing that a permit application is required. This notification shall include a brief statement of the reasons for this decision, an application form, a statement setting a deadline for the discharger to file the application, and a statement that on the effective date of issuance or denial of the individual SPDES permit or the alternative general permit as it applies to the individual permittee, coverage under this general permit shall automatically terminate. Applications shall be submitted to the appropriate Department Office indicated in Appendix A of this permit. The Department may grant additional time to submit the application upon request of the applicant. If a discharger fails to submit in a timely manner an individual SPDES permit application as required by the Department under this paragraph, then the applicability of this permit to the individual SPDES permittee is automatically terminated at the end of the day specified by the Department for application submittal.

2. Any discharger authorized by this permit may request to be excluded from the coverage under this permit by applying for an individual permit. In such cases, the permittee shall submit an individual application in accordance with the requirements of 40 CFR 122.26(c)(1)(ii) and 6 NYCRR Part 621, with reasons supporting the request, to the Department at the address for the appropriate Department Office (see addresses in Appendix A on page 23 of this permit). The request may be granted by issuance of an individual permit or an alternative general permit at the discretion of the Department.

3. When an individual SPDES permit is issued to a discharger covered by this permit, or the discharger is authorized to discharge under an alternative SPDES general permit, the applicability of this permit to the individual SPDES permittee is automatically terminated on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit, whichever the case may be. When an individual SPDES permit is denied to an operator otherwise subject to this permit, or the operator is denied for coverage under an alternative SPDES general permit, the applicability of this permit to the individual SPDES permittee is automatically terminated on the date of such denial, unless otherwise specified by the Department.

L. **Proper Operation and Maintenance** - The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit and with the requirements of SWPPPs. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a permittee only when necessary to achieve compliance with the conditions of the permit.

M. **Inspection and Entry** - The permittee shall allow the Department or an authorized representative of EPA, the State, or, in the case of a construction site which discharges through an MS4, an authorized representative of the MS4 receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;
2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and
3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment).

N. **Permit Actions** - At the Department's sole discretion, this permit may, at any time, be modified, revoked, or renewed. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, a notification of planned changes or anticipated noncompliance does not stay compliance with any terms of this permit.

**APPENDIX A**

**List of NYS DEC Regional Offices**

<b>Region</b>	<b><u>Covering the following counties:</u></b>	<b>DIVISION OF ENVIRONMENTAL PERMITS (DEP) <u>Permit Administrators</u></b>	<b>DIVISION OF WATER (DOW) <u>Water (SPDES) Program</u></b>
1	Nassau and Suffolk	Bldg 40 - SUNY @ Stony Brook Stony Brook, NY 11790-2356 Tel. (631) 444-0365	Bldg 40 - SUNY @ Stony Brook Stony Brook, NY 11790-2356 Tel. (631) 444-0405
2	Bronx, Kings, New York, Queens and Richmond	1 Hunters Point Plaza, 47-40 21st St. Long Island City, NY 11101-5407 Tel. (718) 482-4997	1 Hunters Point Plaza, 47-40 21st St. Long Island City, NY 11101-5407 Tel. (718) 482-4933
3	Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster and Westchester	21 South Putt Corners Road New Paltz, NY 12561-1696 Tel. (845) 256-3059	200 White Plains Road, 5 <sup>th</sup> Floor Tarrytown, NY 10591-5805 Tel. (845) 332-1835
4	Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady and Schoharie	1150 North Westcott Road Schenectady, NY 12306-2014 Tel. (518) 357-2069	1150 North Westcott Road Schenectady, NY 12306-2014 Tel. (518) 357-2045
5	Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren and Washington	Route 86, PO Box 296 Ray Brook, NY 12977-0296 Tel. (518) 897-1234	232 Hudson Street Warrensburg, NY 12885-0220 Tel. (518) 623-1200
6	Herkimer, Jefferson, Lewis, Oneida and St. Lawrence	State Office Building 317 Washington Street Watertown, NY 13601-3787 Tel. (315) 785-2245	State Office Building 207 Genesee Street Utica, NY 13501-2885 Tel. (315) 793-2554
7	Broome, Cayuga, Chenango, Cortland, Madison, Onondaga, Oswego, Tioga and Tompkins	615 Erie Blvd. West Syracuse, NY 13204-2400 Tel. (315) 426-7438	615 Erie Blvd. West Syracuse, NY 13204-2400 Tel. (315) 426-7500
8	Chemung, Genesee, Livingston, Monroe, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne and Yates	6274 East Avon-Lima Road Avon, NY 14414-9519 Tel. (585) 226-2466	6274 East Avon-Lima Rd. Avon, NY 14414-9519 Tel. (585) 226-2466
9	Allegany, Cattaraugus, Chautauqua, Erie, Niagara and Wyoming	270 Michigan Avenue Buffalo, NY 14203-2999 Tel. (716) 851-7165	270 Michigan Ave. Buffalo, NY 14203-2999 Tel. (716) 851-7070

## APPENDIX B

### **Information Required of Construction Activities Which Are Identified Under Part I, subsection D.7. (see page 5)**

- A. The location (including a map) and the nature of the construction activity;
- B. The total area of the site and the area of the site that is expected to undergo excavation during the life of the permit;
- C. Proposed measures, including best management practices, to control pollutants in storm water discharges during construction, including a brief description of applicable State and local erosion and sediment control requirements;
- D. Proposed measures to control pollutants in storm water discharges that will occur after construction operations have been completed, including a brief description of applicable State or local erosion and sediment control requirements;
- E. An estimate of the runoff coefficient of the site and the increase in impervious area after the construction addressed in the permit application is completed, the nature of the fill material and existing data describing the soil or the quality of the discharge; and
- F. The name of the receiving water(s).

**APPENDIX B**

**NOTICE OF INTENT**

NOTICE OF INTENT

New York State Department of Environmental Conservation

Division of Water

625 Broadway, 4th Floor NYR

Five empty boxes for NYR use

(for DEC use only)

Albany, New York 12233-3505

Stormwater Discharges Associated with Construction Activity Under State Pollutant Discharge Elimination System (SPDES) General Permit # GP-02-01 All sections must be completed unless otherwise noted. Failure to complete all items may result in this form being returned to you, thereby delaying your coverage under this General Permit. Applicants must read and understand the conditions of the permit and prepare a Stormwater Pollution Prevention Plan prior to submitting this NOI. Applicants are responsible for identifying and obtaining other DEC permits that may be required. To properly complete this form, please refer to the Instruction Manual which can be accessed at www.dec.state.ny.us/website/dow/toolbox/instr\_man.pdf

- IMPORTANT -

THIS FORM FOR HANDPRINT ONLY

RETURN THIS FORM TO THE ADDRESS ABOVE

PRINT CAPITAL LETTERS IN BLACK INK AND AVOID CONTACT WITH THE EDGE OF BOXES

FILL IN CIRCLES COMPLETELY AND DO NOT USE CHECKMARKS

OWNER/OPERATOR MUST SIGN FORM

Owner/Operator Information

Owner/Operator (Company Name/Private Owner Name/Municipality Name)

Grid for Owner/Operator name

Owner/Operator Contact Person Last Name (NOT CONSULTANT)

Grid for Owner/Operator Contact Person Last Name

Owner/Operator Contact Person First Name

Grid for Owner/Operator Contact Person First Name

Owner/Operator Mailing Address

Grid for Owner/Operator Mailing Address

City

Grid for City

State

State grid

Zip

Zip grid

Phone (Owner/Operator)

Phone grid

Fax (Owner/Operator)

Fax grid

Email (Owner/Operator)

Grid for Email

Grid for Email

**Location Information**

**Project Site Information**

Project/Site Name

Street Address (NOT P.O. BOX)

City/Town/Village (THAT ISSUES BUILDING PERMIT)

State                      Zip  
                        -

County                                      DEC Region (if known)  
                                     

Name of Nearest Cross Street

Distance to Nearest Cross Street (Feet)                      Direction to Nearest Cross Street  
                                       North    South    East    West

1. Provide the Geographic Coordinates for the project site in NYTM Units. To do this you must go to the NYSDEC Stormwater Interactive Map on the DEC website at:

[www.dec.state.ny.us/website/imsmaps/stormwater/viewer.htm](http://www.dec.state.ny.us/website/imsmaps/stormwater/viewer.htm)

Zoom into your Project Location such that you can accurately click on the centroid of your site. Once you have located your project site go to the dropdown menu on the left and choose "Get Coordinates". Click on the center of your site and a small window containing the X, Y coordinates in UTM will pop up. Transcribe these coordinates into the boxes below. For problems with the interactive map use the help function.

<p><b>X Coordinates (Easting)</b></p> <input style="width: 100%; height: 20px;" type="text"/>	<p><b>Y Coordinates (Northing)</b></p> <input style="width: 100%; height: 20px;" type="text"/>
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2. What is the nature of this construction project?

New Construction

Redevelopment with increase in imperviousness

Redevelopment with no increase in imperviousness

Project Site Information

3. Select the predominant land use for both pre and post development conditions.  
 SELECT ONLY ONE CHOICE FOR EACH

Pre-Development Existing Land Use	Post-Development Future Land Use
<input type="radio"/> FOREST	<input type="radio"/> SINGLE FAMILY HOME
<input type="radio"/> PASTURE/OPEN LAND	<input type="radio"/> SINGLE FAMILY SUBDIVISION
<input type="radio"/> CULTIVATED LAND	<input type="radio"/> TOWN HOME RESIDENTIAL
<input type="radio"/> SINGLE FAMILY HOME	<input type="radio"/> MULTIFAMILY RESIDENTIAL
<input type="radio"/> SINGLE FAMILY SUBDIVISION	<input type="radio"/> INSTITUTIONAL/SCHOOL
<input type="radio"/> TOWN HOME RESIDENTIAL	<input type="radio"/> INDUSTRIAL
<input type="radio"/> MULTIFAMILY RESIDENTIAL	<input type="radio"/> COMMERCIAL
<input type="radio"/> INSTITUTIONAL/SCHOOL	<input type="radio"/> ROAD/HIGHWAY
<input type="radio"/> INDUSTRIAL	<input type="radio"/> RECREATIONAL/SPORTS FIELD
<input type="radio"/> COMMERCIAL	<input type="radio"/> BIKE PATH/TRAIL
<input type="radio"/> ROAD/HIGHWAY	<input type="radio"/> LINEAR UTILITY (water, sewer, gas, etc.)
<input type="radio"/> RECREATIONAL/SPORTS FIELD	<input type="radio"/> PARKING LOT
<input type="radio"/> BIKE PATH/TRAIL	<input type="radio"/> OTHER
<input type="radio"/> SUBSURFACE UTILITY	OTHER <input type="text"/>
<input type="radio"/> PARKING LOT	OTHER <input type="text"/>
<input type="radio"/> OTHER	OTHER <input type="text"/>
OTHER <input type="text"/>	

4. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law ?  Yes  No

5. Is this a project which does not require coverage under the General Permit (e.g. Project done under an Individual SPDES Permit, or department approved remediation)?  Yes  No

6. Is this property owned by a state authority, state agency or local government?  Yes  No

7. In accordance with the larger common plan of development or sale; enter the total project site acreage, the acreage to be disturbed and the future impervious area (acreage) within the disturbed area. Round to the nearest tenth of an acre.

Total Site Acreage	Acreage To Be Disturbed	Existing Impervious Area Within Disturbed	Future Impervious Area Within Disturbed
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

8. Will there be more than 5 acres disturbed at any given time?  Yes  No

9. Indicate the percentage of each Hydrologic Soil Group (HSG) at the site.

A <input type="text"/> %	B <input type="text"/> %	C <input type="text"/> %	D <input type="text"/> %
--------------------------	--------------------------	--------------------------	--------------------------



Stormwater Pollution Prevention Plan (SWPPP)

18. Has the required Erosion and Sediment Control component of the SWPPP been developed in conformance with the current NYS Standards and Specifications for Erosion and Sediment Control (aka Blue Book) ?

Yes No

19. Does this construction activity require the development of a SWPPP that includes Water Quality and Quantity Control components (Post-Construction Stormwater Management Practices) If no, Skip question 20

Yes No

20. Have the Water Quality and Quantity Control components of the SWPPP been developed in conformance with the current NYS Stormwater Management Design Manual ?

Yes No

NOTE: If you answered no to question 18 or 20, Pursuant to Part I.D.3.(b) of the permit, you must have your SWPPP prepared and certified by a licensed/certified professional and the SWPPP is subject to a 60-business day review. Please provide further details in the details/comment section on the last page of this form.

21. The Stormwater Pollution Prevention Plan (SWPPP) was prepared by:

Professional Engineer (P.E.)
Soil and Water Conservation District (SWCD)
Registered Landscape Architect (R.L.A)
Certified Professional in Erosion and Sediment Control (CPESC)
Owner/Operator
Other

SWPPP Preparer Information
SWPPP Preparer
Contact Name (Last, Space, First)
Mailing Address
City
State Zip
Phone Fax
Email





**Stormwater Pollution Prevention Plan (SWPPP)  
Water Quality and Quantity Control**

25. Provide the total water quality volume required and the total provided for the site.

<b>Total Water Quality Volume (WQv)</b>	
<b>WQv Required</b> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> acre-feet	<b>WQv Provided</b> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> acre-feet

26. Provide the following Unified Stormwater Sizing Criteria for the site.

<b>Total Channel Protection Storage Volume (CPv) - Extended detention of post-developed 1 year, 24 hour storm event</b>	
<b>CPv Required</b> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> acre-feet	<b>CPv Provided</b> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> acre-feet
The need to provide for channel protection has been waived because <input type="radio"/> Site discharges directly to fourth order stream or larger	
<b>Total Overbank Flood Control Criteria (Qp) - Peak discharge rate for the 10 year storm</b>	
<b>Pre-Development</b> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> CFS	<b>Post-development</b> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> CFS
<b>Total Extreme Flood Control Criteria (Qf) - Peak discharge rate for the 100 year storm</b>	
<b>Pre-Development</b> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> CFS	<b>Post-development</b> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> CFS
The need to provide for flood control has been waived because <input type="radio"/> Site discharges directly to fourth order stream or larger <input type="radio"/> Downstream analysis reveals that flood control is not required	

**IMPORTANT:** For questions 27 and 28 impervious area should be calculated considering the project site and all offsite areas that drain to the post-construction stormwater management practice(s) (Total Drainage Area = Project Site + Offsite areas)

27. Pre-Construction Impervious Area - As a percent of the Total Drainage Area enter the percentage of the existing impervious areas before construction begins.

%

28. Post-Construction Impervious Area - As a percent of the Total Drainage Area enter the percentage of the future impervious areas that will be created/remain on the site after completion of construction.

%

29. Indicate the total number of permanent stormwater management practices to be installed

30. Provide the total number of stormwater discharge points from the site (include discharges to either surface waters or to separate storm sewer systems)

Other Permits

31. Select any other DEC permits that are required for this project or  None

DEC Permits

<input type="radio"/> Air Pollution Control	<input type="radio"/> Stream Protection/Article 15
<input type="radio"/> Coastal Erosion	<input type="radio"/> Water Quality Certificate
<input type="radio"/> Hazardous Waste	<input type="radio"/> Dam Safety
<input type="radio"/> Long Island Wells	<input type="radio"/> Water Supply
<input type="radio"/> Mined Land Reclamation	<input type="radio"/> Freshwater Wetlands
<input type="radio"/> Other SPDES	<input type="radio"/> Tidal Wetlands
<input type="radio"/> Solid Waste	<input type="radio"/> Wild, Scenic and Recreational Rivers

Other

32. If this NOI is being submitted for the purpose of continuing coverage under a general permit for stormwater runoff from construction activities, please indicate the former SPDES number assigned.

N	Y	R							
---	---	---	--	--	--	--	--	--	--

Details/Comments

Certification

I have read or been advised of the permit conditions and believe that I understand them. I also understand that, under the terms of the permit, there may be reporting requirements. I also certify under penalty of law that this document and the corresponding documents were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person(s) who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further understand that coverage under the general permit will be identified in the acknowledgment that I will receive as a result of submitting this NOI and can be as long as sixty (60) days as provided for in the general permit. I also understand that, by submitting this NOI, I am acknowledging that the SWPPP has been developed and will be implemented as the first element of construction. and agreeing to comply with all the terms and conditions of the general permit for which this NOI is being submitted.

Print First Name	MI
<input type="text"/>	<input type="text"/>
Print Last Name	
<input type="text"/>	
Owner/Operator Signature	Date
<input type="text"/>	<input type="text"/>

**APPENDIX C**

**OPERATOR'S AND CONTRACTOR'S CERTIFICATION FORMS**

## Owner's Certification

### New Retail / Office Building

For

**New Windsor Realty Group, LLC.**

The Operator that will implement the erosion control measures described in the SWPPP must be identified below. Each must sign a statement certifying that they understand the NYSDEC general permit authorizing stormwater discharges during construction. These statements must be maintained in the SWPPP file on site.

**Owner:**

Business Name: \_\_\_\_\_

Business Address \_\_\_\_\_

Telephone No.: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**Certification:**

"I certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP for the construction site identified in such SWPPP as a condition of authorization to discharge Stormwater. I also understand that the Operator must comply with the terms and conditions of the New York State Pollution Discharge Elimination System ("SPDES") general permit for Stormwater discharges from construction discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards."

Signatory Requirements - All NOIs, NOTs, SWPPPS, reports, certifications or information required by this permit or submitted pursuant to this permit, shall be signed as follows:

1 For a corporation: by a (1) president, secretary, treasurer, or vice-president of the corporation in charge of a principle business function, or any other person authorized to and who performs similar policy or decision-making functions for the corporation; or (2) the manager of one or more manufacturing, production or operating facilities employing more than 250 persons or having a gross annual sales or expenditures exceeding \$25,000,000 (in second-quarter 1980 dollars) if authority to sign documents has been assigned or delegated to manage in accordance with corporate procedures;

2 For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.

## Contractor's Certification

### New Retail / Office Building

For

### New Windsor Realty Group, LLC.

The Contractor and/or Subcontractor(s) that will implement the erosion control measures described in the SWPPP must be identified below. Each must sign a statement certifying that they understand the NYSDEC general permit authorizing storm water discharges during construction. These statements must be maintained in the SWPPP file on site.

#### Contractor Implementing the Storm Water Pollution Prevention Plan:

Business Name: \_\_\_\_\_  
Business Address: \_\_\_\_\_  
Telephone No.: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_

#### Certification:

"I certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP for the construction site identified in such SWPPP as a condition of authorization to discharge Stormwater. I also understand that the Operator must comply with the terms and conditions of the New York State Pollution Discharge Elimination System ("SPDES") general permit for Stormwater discharges from construction discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards."

Signatory Requirements - All NOIs, NOTs, SWPPPS, reports, certifications or information required by this permit or submitted pursuant to this permit, shall be signed as follows:

1 For a corporation: by a (1) president, secretary, treasurer, or vice-president of the corporation in charge of a principle business function, or any other person authorized to and who performs similar policy or decision-making functions for the corporation; or (2) the manager of one or more manufacturing, production or operating facilities employing more than 250 persons or having a gross annual sales or expenditures exceeding \$25,000,000 (in second-quarter 1980 dollars) if authority to sign documents has been assigned or delegated to manage in accordance with corporate procedures;

2 For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.

**APPENDIX D**

**INSPECTION REPORT**

# Inspection Report

New Retail / Office Building

For

New Windsor Realty Group, LLC.

Inspection Type (Circle One):	Routine Weekly	Following 1/2" or Greater Rainfall
-------------------------------	----------------	------------------------------------

Inspectors Name (Please Print): \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

### Construction Activities Since Last Inspection:

### Temporary Erosion and Sediment Control Practices:

Practice	Condition	Conforming	Actions Req'd
Less Than 5 Acres Of Disturbance	Good / Fair / Poor / NA	Yes / No	
Disturbance Within Limits	Good / Fair / Poor / NA	Yes / No	
Downstream Water Quality	Good / Fair / Poor / NA	Yes / No	
Stabilized Construction Entrance	Good / Fair / Poor / NA	Yes / No	
Stabilized Parking Areas	Good / Fair / Poor / NA	Yes / No	
Sediment On Public Streets	Good / Fair / Poor / NA	Yes / No	
Temporary Diversion Swales	Good / Fair / Poor / NA	Yes / No	

<b>Practice</b>	<b>Condition</b>	<b>Conforming</b>	<b>Actions Req'd</b>
Silt Fence	Good / Fair / Poor / NA	Yes / No	
Stone Check Dams	Good / Fair / Poor / NA	Yes / No	
Catch Basin Sediment Traps	Good / Fair / Poor / NA	Yes / No	
Sedimentation Basin	Good / Fair / Poor / NA	Yes / No	
Slope Protection	Good / Fair / Poor / NA	Yes / No	
Sediment Traps	Good / Fair / Poor / NA	Yes / No	
Rip-Rap Outlet Protection	Good / Fair / Poor / NA	Yes / No	
Level Spreader	Good / Fair / Poor / NA	Yes / No	
Dust Protection	Good / Fair / Poor / NA	Yes / No	
Stabilized Stockpiles	Good / Fair / Poor / NA	Yes / No	
Construction Litter / Debris	Good / Fair / Poor / NA	Yes / No	
Dewatering Operations	Good / Fair / Poor / NA	Yes / No	
Temporary Seeding & Mulching	Good / Fair / Poor / NA	Yes / No	

**Erosion Control Measures In-Place:**

**Description Of Actions To Correct Deficiencies In Erosion Control Measures:**

**Inspection Notes:**

**Inspector's Signature:**

\_\_\_\_\_

\_\_\_\_\_

**(Name)**

\_\_\_\_\_

**(Date)**

**SHAW ENGINEERING**  
**744 Broadway Newburgh, New York 12550**

**APPENDIX E**  
**RECORD OF STABILIZATION**  
**AND**  
**CONSTRUCTION ACTIVITY**

**Site Stabilization & Construction Activities Dates**

**New Retail / Office Building**

**For**

**New Windsor Realty Group, LLC.**

Note: This form shall be completed by the Contractor and shall remain as part of the Stormwater Pollution Prevention Plan that is to remain at the project site for the duration of construction.

A record of dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated shall be maintained until final site stabilization is achieved and the Notice of Termination is filed.

**MAJOR GRADING ACTIVITIES:**

Description of Activity: \_\_\_\_\_  
Contractor: \_\_\_\_\_  
Location: \_\_\_\_\_  
Start Date: \_\_\_\_\_ Finish Date \_\_\_\_\_

Description of Activity: \_\_\_\_\_  
Contractor: \_\_\_\_\_  
Location: \_\_\_\_\_  
Start Date: \_\_\_\_\_ Finish Date \_\_\_\_\_

Description of Activity: \_\_\_\_\_  
Contractor: \_\_\_\_\_  
Location: \_\_\_\_\_  
Start Date: \_\_\_\_\_ Finish Date \_\_\_\_\_

Description of Activity: \_\_\_\_\_  
Contractor: \_\_\_\_\_  
Location: \_\_\_\_\_  
Start Date: \_\_\_\_\_ Finish Date \_\_\_\_\_

Description of Activity: \_\_\_\_\_  
Contractor: \_\_\_\_\_  
Location: \_\_\_\_\_  
Start Date: \_\_\_\_\_ Finish Date \_\_\_\_\_

**APPENDIX F**

**NOTICE OF TERMINATION**



**New York State Department of Environmental Conservation  
Division of Water  
625 Broadway, 4th Floor  
Albany, New York 12233-3505**

**NOTICE OF TERMINATION for Storm Water Discharges Associated with  
Construction Activity UNDER SPDES GENERAL PERMIT:  #GP-93-06 or  #GP-02-01**

**Please indicate your permit identification number:** NYR \_\_\_\_\_

**I. Permittee Information**

1. Owner/Operator Name:		
2a. Mailing Address:	2b. City/State/Zip:	
3a. Contact Person:	3b. Phone:	3c. E-mail:

**II. Site /Activity Information**

4. Facility/Project Site Name:	
5a. Street Address:	5b. City/State/Zip:
6. County:	

**III. Reason for Termination**

7a.  Site has been finally stabilized in accordance with permit and SWPPP. Date site stabilization completed: \_\_\_\_\_ month/year

7b.  Permit coverage has been transferred to new owner/operator. Indicate new owner/operator's permit identification number: NYR \_\_\_\_\_  
(Note: Permit coverage can not be terminated by permittee identified in I.1. above until new owner/operator obtains coverage under GP-02-01)

**IV. Final Site Information**

8a. Are there permanent stormwater management practices remaining on the site?  yes  no  
If the answer to question 8a. is no, go to question 8e.  
If the answer to question 8a. is yes, answer the following questions 8b., 8c., and 8d.:

8b. Is the design and function of each permanent practice described in the final SWPPP?  yes  no

8c. Who will be responsible for long-term operation and maintenance of practice(s)? \_\_\_\_\_

8d. Has the individual(s) responsible for long-term operation and maintenance been given a copy of the operation and maintenance requirements?  yes  no

8e. Provide the total acreage of impervious surface (i.e. roof, pavement, concrete, gravel, etc.) constructed within the disturbance area? \_\_\_\_\_

**V. Certification**

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person(s) who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed Name:	Title/Position:
Signature:	Date:

Reset Button

**APPENDIX G**

**STORM WATER MANAGEMENT CALCULATIONS**

**- HYDROLOGIC AND HYDRAULIC -**

**PRE-DEVELOPED CONDITIONS**

**RUNOFF CURVE NUMBERS**

**TIMES OF CONCENTRATION**

**PEAK RUNOFF RATES**

**PRE-DEVELOPMENT STORM SUMMARY**

File.... F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\NEW WINDSOR REALITY PRE.PPW

RUNOFF CURVE NUMBER DATA

.....

-----

Soil/Surface Description	CN	Area acres	Impervious Adjustment %C %UC	Adjusted CN
Impervious Areas - Paved parking lo	98	.130		98.00
Open space (Lawns,parks etc.) - Goo	74	3.520		74.00

COMPOSITE AREA & WEIGHTED CN --->                    3.650                    74.85 (75)

.....

File.... F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\NEW WINDSOR REALITY PRE.PPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----

Segment #1: Tc: TR-55 Sheet

Mannings n .2400  
Hydraulic Length 150.00 ft  
2yr, 24hr P 3.5000 in  
Slope .046700 ft/ft

Avg.Velocity .19 ft/sec

Segment #1 Time: .2241 hrs

-----

Segment #2: Tc: TR-55 Shallow

Hydraulic Length 395.00 ft  
Slope .065800 ft/ft  
Unpaved

Avg.Velocity 4.14 ft/sec

Segment #2 Time: .0265 hrs

-----

=====  
Total Tc: .2506 hrs  
=====

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 1 year storm  
 Duration = 24.0000 hrs Rain Depth = 3.0000 in  
 Rain Dir = F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\  
 Rain File -ID = - TypeIII 24hr  
 Unit Hyd Type = Default Curvilinear  
 HYG Dir = F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\  
 HYG File - ID = - SUBAREA ON-1 Pre 1  
 Tc = .2506 hrs  
 Drainage Area = 3.650 acres Runoff CN= 75

=====  
 Computational Time Increment = .03341 hrs  
 Computed Peak Time = 12.1948 hrs  
 Computed Peak Flow = 2.83 cfs

Time Increment for HYG File = .0500 hrs  
 Peak Time, Interpolated Output = 12.2000 hrs  
 Peak Flow, Interpolated Output = 2.82 cfs  
 =====

DRAINAGE AREA

-----  
 ID: SUBAREA ON-1  
 CN = 75  
 Area = 3.650 acres  
 S = 3.3333 in  
 0.2S = .6667 in

Cumulative Runoff

-----  
 .9608 in  
 .292 ac-ft

HYG Volume... .292 ac-ft (area under HYG curve)

\*\*\*\*\* SCS UNIT HYDROGRAPH PARAMETERS \*\*\*\*\*

Time Concentration, Tc = .25058 hrs (ID: SUBAREA ON-1)  
 Computational Incr, Tm = .03341 hrs = 0.20000 Tp  
  
 Unit Hyd. Shape Factor = 483.432 (37.46% under rising limb)  
 K = 483.43/645.333, K = .7491 (also, K = 2/(1+(Tr/Tp))  
 Receding/Rising, Tr/Tp = 1.6698 (solved from K = .7491)  
  
 Unit peak, qp = 16.50 cfs  
 Unit peak time, Tp = .16705 hrs  
 Unit receding limb, Tr = .66821 hrs  
 Total unit time, Tb = .83526 hrs

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 10 year storm  
Duration = 24.0000 hrs Rain Depth = 5.5000 in  
Rain Dir = F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\  
Rain File -ID = - TypeIII 24hr  
Unit Hyd Type = Default Curvilinear  
HYG Dir = F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\  
HYG File - ID = - SUBAREA ON-1 Pre 10  
Tc = .2506 hrs  
Drainage Area = 3.650 acres Runoff CN= 75

=====  
Computational Time Increment = .03341 hrs  
Computed Peak Time = 12.1948 hrs  
Computed Peak Flow = 8.89 cfs

Time Increment for HYG File = .0500 hrs  
Peak Time, Interpolated Output = 12.2000 hrs  
Peak Flow, Interpolated Output = 8.85 cfs  
=====

DRAINAGE AREA

-----  
ID: SUBAREA ON-1  
CN = 75  
Area = 3.650 acres  
S = 3.3333 in  
0.2S = .6667 in

Cumulative Runoff

-----  
2.8605 in  
.870 ac-ft

HYG Volume... .870 ac-ft (area under HYG curve)

\*\*\*\*\* SCS UNIT HYDROGRAPH PARAMETERS \*\*\*\*\*

Time Concentration, Tc = .25058 hrs (ID: SUBAREA ON-1)  
Computational Incr, Tm = .03341 hrs = 0.20000 Tp  
  
Unit Hyd. Shape Factor = 483.432 (37.46% under rising limb)  
K = 483.43/645.333, K = .7491 (also, K = 2/(1+(Tr/Tp))  
Receding/Rising, Tr/Tp = 1.6698 (solved from K = .7491)  
  
Unit peak, qp = 16.50 cfs  
Unit peak time, Tp = .16705 hrs  
Unit receding limb, Tr = .66821 hrs  
Total unit time, Tb = .83526 hrs

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 25 year storm

Duration = 24.0000 hrs Rain Depth = 6.0000 in
Rain Dir = F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\
Rain File -ID = - TypeIII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\
HYG File - ID = - SUBAREA ON-1 Pre 25
Tc = .2506 hrs
Drainage Area = 3.650 acres Runoff CN= 75

=====  
Computational Time Increment = .03341 hrs  
Computed Peak Time = 12.1948 hrs  
Computed Peak Flow = 10.21 cfs

Time Increment for HYG File = .0500 hrs  
Peak Time, Interpolated Output = 12.2000 hrs  
Peak Flow, Interpolated Output = 10.15 cfs  
=====

DRAINAGE AREA

-----  
ID: SUBAREA ON-1  
CN = 75  
Area = 3.650 acres  
S = 3.3333 in  
0.2S = .6667 in

Cumulative Runoff

-----  
3.2821 in  
.998 ac-ft

HYG Volume... .998 ac-ft (area under HYG curve)

\*\*\*\*\* SCS UNIT HYDROGRAPH PARAMETERS \*\*\*\*\*

Time Concentration, Tc = .25058 hrs (ID: SUBAREA ON-1)  
Computational Incr, Tm = .03341 hrs = 0.20000 Tp

Unit Hyd. Shape Factor = 483.432 (37.46% under rising limb)  
K = 483.43/645.333, K = .7491 (also, K = 2/(1+(Tr/Tp))  
Receding/Rising, Tr/Tp = 1.6698 (solved from K = .7491)

Unit peak, qp = 16.50 cfs  
Unit peak time, Tp = .16705 hrs  
Unit receding limb, Tr = .66821 hrs  
Total unit time, Tb = .83526 hrs

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 100 year storm  
Duration = 24.0000 hrs Rain Depth = 8.0000 in  
Rain Dir = F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\  
Rain File -ID = - TypeIII 24hr  
Unit Hyd Type = Default Curvilinear  
HYG Dir = F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\  
HYG File - ID = - SUBAREA ON-1 Pre100  
Tc = .2506 hrs  
Drainage Area = 3.650 acres Runoff CN= 75

=====  
Computational Time Increment = .03341 hrs  
Computed Peak Time = 12.1948 hrs  
Computed Peak Flow = 15.59 cfs

Time Increment for HYG File = .0500 hrs  
Peak Time, Interpolated Output = 12.2000 hrs  
Peak Flow, Interpolated Output = 15.50 cfs  
=====

DRAINAGE AREA

-----  
ID:SUBAREA ON-1  
CN = 75  
Area = 3.650 acres  
S = 3.3333 in  
0.2S = .6667 in

Cumulative Runoff

-----  
5.0417 in  
1.534 ac-ft

HYG Volume... 1.534 ac-ft (area under HYG curve)

\*\*\*\*\* SCS UNIT HYDROGRAPH PARAMETERS \*\*\*\*\*

Time Concentration, Tc = .25058 hrs (ID: SUBAREA ON-1)  
Computational Incr, Tm = .03341 hrs = 0.20000 Tp  
  
Unit Hyd. Shape Factor = 483.432 (37.46% under rising limb)  
K = 483.43/645.333, K = .7491 (also, K = 2/(1+(Tr/Tp))  
Receding/Rising, Tr/Tp = 1.6698 (solved from K = .7491)  
  
Unit peak, qp = 16.50 cfs  
Unit peak time, Tp = .16705 hrs  
Unit receding limb, Tr = .66821 hrs  
Total unit time, Tb = .83526 hrs

**PRE-DEVELOPMENT STORM SUMMARY**

MASTER DESIGN STORM SUMMARY

Network Storm Collection: OrangeCounty

Return Event	Total Depth in	Rainfall Type	RNF ID
Pre 1	3.0000	Synthetic Curve	TypeIII 24hr
Pre 10	5.5000	Synthetic Curve	TypeIII 24hr
Pre 25	6.0000	Synthetic Curve	TypeIII 24hr
Pre100	8.0000	Synthetic Curve	TypeIII 24hr

MASTER NETWORK SUMMARY  
SCS Unit Hydrograph Method

(\*Node=Outfall; +Node=Diversion;)  
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Return Type	Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
*OUT ON-1	JCT	1	.292		12.2000	2.82		
*OUT ON-1	JCT	10	.870		12.2000	8.85		
*OUT ON-1	JCT	25	.998		12.2000	10.15		
*OUT ON-1	JCT	100	1.534		12.2000	15.50		
SUBAREA ON-1	AREA	1	.292		12.2000	2.82		
SUBAREA ON-1	AREA	10	.870		12.2000	8.85		
SUBAREA ON-1	AREA	25	.998		12.2000	10.15		
SUBAREA ON-1	AREA	100	1.534		12.2000	15.50		

File.... F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\  
Title... Project Date: 9/22/2005  
Project Engineer: Gregory J. Shaw  
Project Title: Watershed  
Project Comments:

DESIGN STORMS SUMMARY

Design Storm File, ID = OrangeCounty

Storm Tag Name = Pre 1

-----  
Data Type, File, ID = Synthetic Storm TypeIII 24hr  
Storm Frequency = 1 yr  
Total Rainfall Depth= 3.0000 in  
Duration Multiplier = 1  
Resulting Duration = 24.0000 hrs  
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Storm Tag Name = Pre 10

-----  
Data Type, File, ID = Synthetic Storm TypeIII 24hr  
Storm Frequency = 10 yr  
Total Rainfall Depth= 5.5000 in  
Duration Multiplier = 1  
Resulting Duration = 24.0000 hrs  
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Storm Tag Name = Pre 25

-----  
Data Type, File, ID = Synthetic Storm TypeIII 24hr  
Storm Frequency = 25 yr  
Total Rainfall Depth= 6.0000 in  
Duration Multiplier = 1  
Resulting Duration = 24.0000 hrs  
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Storm Tag Name = Pre100

-----  
Data Type, File, ID = Synthetic Storm TypeIII 24hr  
Storm Frequency = 100 yr  
Total Rainfall Depth= 8.0000 in  
Duration Multiplier = 1  
Resulting Duration = 24.0000 hrs  
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

**POST-DEVELOPED CONDITIONS**

**RUNOFF CURVE NUMBERS**

**TIMES OF CONCENTRATION**

**PEAK RUNOFF RATES**

Name....

File.... F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\NEW WINDSOR REALITY POST.PPW

SCS UNIT HYDROGRAPH METHOD  
(Computational Notes)

DEFINITION OF TERMS: -----

At = Total area (acres):  $A_t = A_i + A_p$   
 Ai = Impervious area (acres)  
 Ap = Pervious area (acres)  
 CNi = Runoff curve number for impervious area  
 CNp = Runoff curve number for pervious area  
 fLoss = f loss constant infiltration (depth/time)  
 gKs = Saturated Hydraulic Conductivity (depth/time)  
 Md = Volumetric Moisture Deficit  
 Psi = Capillary Suction (length)  
 hK = Horton Infiltration Decay Rate ( $\text{time}^{-1}$ )  
 fo = Initial Infiltration Rate (depth/time)  
 fc = Ultimate(capacity)Infiltration Rate (depth/time)  
 Ia = Initial Abstraction (length)  
 dt = Computational increment (duration of unit excess rainfall)  
 Default dt is smallest value of  $0.1333T_c$ , rtm, and th  
 (Smallest dt is then adjusted to match up with  $T_p$ )  
 UDDt = User specified override computational main time increment  
 (only used if UDDt is =>  $.1333T_c$ )  
 D(t) = Point on distribution curve (fraction of P) for time step t  
  
 K =  $2 / (1 + (T_r/T_p))$ : default K = 0.75: (for  $T_r/T_p = 1.67$ )  
 Ks = Hydrograph shape factor  
 = Unit Conversions \* K:  
 =  $((1\text{hr}/3600\text{sec}) * (1\text{ft}/12\text{in}) * ((5280\text{ft})^2/\text{sq.mi})) * K$   
 Default Ks =  $645.333 * 0.75 = 484$   
  
 Lag = Lag time from center of excess runoff (dt) to  $T_p$ : Lag =  $0.6T_c$   
 P = Total precipitation depth, inches  
 Pa(t) = Accumulated rainfall at time step t  
 Pi(t) = Incremental rainfall at time step t  
 qp = Peak discharge (cfs) for lin. runoff, for 1hr, for 1 sq.mi.  
 =  $(K_s * A * Q) / T_p$  (where Q = lin. runoff, A=sq.mi.)  
 Qu(t) = Unit hydrograph ordinate (cfs) at time step t  
 Q(t) = Final hydrograph ordinate (cfs) at time step t  
 Rai(t) = Accumulated runoff (inches) at time step t for impervious area  
 Rap(t) = Accumulated runoff (inches) at time step t for pervious area  
 Rii(t) = Incremental runoff (inches) at time step t for impervious area  
 Rip(t) = Incremental runoff (inches) at time step t for pervious area  
 R(t) = Incremental weighted total runoff (inches)  
 Rtm = Time increment for rainfall table  
 Si = S for impervious area:  $S_i = (1000/CN_i) - 10$   
 Sp = S for pervious area:  $S_p = (1000/CN_p) - 10$   
 t = Time step (row) number  
 Tc = Time of concentration  
 Tb = Time (hrs) of entire unit hydrograph:  $T_b = T_p + T_r$   
 Tp = Time (hrs) to peak of a unit hydrograph:  $T_p = (dt/2) + \text{Lag}$   
 Tr = Time (hrs) of receding limb of unit hydrograph: Tr = ratio of  $T_p$

DESIGN STORMS SUMMARY

Design Storm File, ID = OrangeCounty

Storm Tag Name = Dev 1

-----  
Data Type, File, ID = Synthetic Storm TypeIII 24hr  
Storm Frequency = 1 yr  
Total Rainfall Depth= 3.0000 in  
Duration Multiplier = 1  
Resulting Duration = 24.0000 hrs  
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Storm Tag Name = Dev 10

-----  
Data Type, File, ID = Synthetic Storm TypeIII 24hr  
Storm Frequency = 10 yr  
Total Rainfall Depth= 5.5000 in  
Duration Multiplier = 1  
Resulting Duration = 24.0000 hrs  
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Storm Tag Name = Dev 25

-----  
Data Type, File, ID = Synthetic Storm TypeIII 24hr  
Storm Frequency = 25 yr  
Total Rainfall Depth= 6.0000 in  
Duration Multiplier = 1  
Resulting Duration = 24.0000 hrs  
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Storm Tag Name = Dev100

-----  
Data Type, File, ID = Synthetic Storm TypeIII 24hr  
Storm Frequency = 100 yr  
Total Rainfall Depth= 8.0000 in  
Duration Multiplier = 1  
Resulting Duration = 24.0000 hrs  
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

File.... F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\NEW WINDSOR REALITY POST-1.PPW

RUNOFF CURVE NUMBER DATA

.....

-----

Soil/Surface Description	CN	Area acres	Impervious Adjustment		Adjusted CN
			%C	%UC	
Buildings	98	1.790			98.00
Open space (Lawns, parks etc.) - Goo	74	1.070			74.00

COMPOSITE AREA & WEIGHTED CN --->                    2.860                    89.02 (89)

.....

File.... F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\NEW WINDSOR REALITY POST-1.PPW

RUNOFF CURVE NUMBER DATA

.....

-----

Soil/Surface Description	CN	Area acres	Impervious Adjustment %C %UC	Adjusted CN
Open space (Lawns,parks etc.) - Goo	74	.790		74.00

COMPOSITE AREA & WEIGHTED CN ---> .790 74.00 (74)

.....

File.... F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\NEW WINDSOR REALITY POST-1.PPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----  
Segment #1: Tc: TR-55 Sheet

Mannings n           .0110  
Hydraulic Length     90.00 ft  
2yr, 24hr P         3.5000 in  
Slope                .033300 ft/ft

Avg.Velocity         1.73 ft/sec

Segment #1 Time:     .0145 hrs

-----  
Segment #2: Tc: TR-55 Channel

Flow Area            1.2300 sq.ft  
Wetted Perimeter     3.93 ft  
Hydraulic Radius     .31 ft  
Slope                .034600 ft/ft  
Mannings n           .0120  
Hydraulic Length     765.00 ft

Avg.Velocity         10.65 ft/sec

Segment #2 Time:     .0200 hrs

-----  
Total Tc:            .0344 hrs  
  
Calculated Tc < Min.Tc:  
Use Minimum Tc...  
Use Tc =            .0833 hrs  
=====

File.... F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\NEW WINDSOR REALITY POST-1.PPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----  
Segment #1: Tc: TR-55 Sheet

Mannings n           .2400  
Hydraulic Length    100.00 ft  
2yr, 24hr P         3.5000 in  
Slope                .060000 ft/ft

Avg.Velocity         .19 ft/sec

Segment #1 Time:     .1465 hrs

-----  
Segment #2: Tc: TR-55 Shallow

Hydraulic Length    175.00 ft  
Slope                .073700 ft/ft  
Unpaved

Avg.Velocity         4.38 ft/sec

Segment #2 Time:     .0111 hrs

-----  
Total Tc:            .1576 hrs  
=====

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 1 year storm  
Duration = 24.0000 hrs Rain Depth = 3.0000 in  
Rain Dir = F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\  
Rain File -ID = - TypeIII 24hr  
Unit Hyd Type = Default Curvilinear  
HYG Dir = F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\  
HYG File - ID = - SUBAREA ON-1A Dev 1  
Tc (Min. Tc) = .0833 hrs  
Drainage Area = 2.860 acres Runoff CN= 89

=====  
Computational Time Increment = .01111 hrs  
Computed Peak Time = 12.1063 hrs  
Computed Peak Flow = 5.57 cfs

Time Increment for HYG File = .0500 hrs  
Peak Time, Interpolated Output = 12.1000 hrs  
Peak Flow, Interpolated Output = 5.56 cfs  
=====

DRAINAGE AREA

-----  
ID:SUBAREA ON-1A  
CN = 89  
Area = 2.860 acres  
S = 1.2360 in  
0.2S = .2472 in

Cumulative Runoff

-----  
1.8998 in  
.453 ac-ft

HYG Volume... .453 ac-ft (area under HYG curve)

\*\*\*\*\* SCS UNIT HYDROGRAPH PARAMETERS \*\*\*\*\*

Time Concentration, Tc = .08330 hrs (ID: SUBAREA ON-1A)  
Computational Incr, Tm = .01111 hrs = 0.20000 Tp  
Unit Hyd. Shape Factor = 483.432 (37.46% under rising limb)  
K = 483.43/645.333, K = .7491 (also, K = 2/(1+(Tr/Tp))  
Receding/Rising, Tr/Tp = 1.6698 (solved from K = .7491)

Unit peak, qp = 38.90 cfs  
Unit peak time, Tp = .05553 hrs  
Unit receding limb, Tr = .22213 hrs  
Total unit time, Tb = .27767 hrs

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 10 year storm

Duration = 24.0000 hrs Rain Depth = 5.5000 in

Rain Dir = F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\

Rain File -ID = - TypeIII 24hr

Unit Hyd Type = Default Curvilinear

HYG Dir = F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\

HYG File - ID = - SUBAREA ON-1A Dev 10

Tc (Min. Tc) = .0833 hrs

Drainage Area = 2.860 acres Runoff CN= 89

```

=====
Computational Time Increment = .01111 hrs
Computed Peak Time          = 12.0952 hrs
Computed Peak Flow          = 11.91 cfs

```

```

Time Increment for HYG File = .0500 hrs
Peak Time, Interpolated Output = 12.1000 hrs
Peak Flow, Interpolated Output = 11.91 cfs
=====

```

DRAINAGE AREA

-----  
ID:SUBAREA ON-1A

CN = 89

Area = 2.860 acres

S = 1.2360 in

0.2S = .2472 in

Cumulative Runoff

```

-----
4.2523 in
1.013 ac-ft

```

HYG Volume... 1.013 ac-ft (area under HYG curve)

\*\*\*\*\* SCS UNIT HYDROGRAPH PARAMETERS \*\*\*\*\*

Time Concentration, Tc = .08330 hrs (ID: SUBAREA ON-1A)  
Computational Incr, Tm = .01111 hrs = 0.20000 Tp

Unit Hyd. Shape Factor = 483.432 (37.46% under rising limb)  
K = 483.43/645.333, K = .7491 (also, K = 2/(1+(Tr/Tp))  
Receding/Rising, Tr/Tp = 1.6698 (solved from K = .7491)

Unit peak, qp = 38.90 cfs  
Unit peak time Tp = .05553 hrs  
Unit receding limb, Tr = .22213 hrs  
Total unit time, Tb = .27767 hrs

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 25 year storm  
 Duration = 24.0000 hrs Rain Depth = 6.0000 in  
 Rain Dir = F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\  
 Rain File -ID = - TypeIII 24hr  
 Unit Hyd Type = Default Curvilinear  
 HYG Dir = F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\  
 HYG File - ID = - SUBAREA ON-1A Dev 25  
 Tc (Min. Tc) = .0833 hrs  
 Drainage Area = 2.860 acres Runoff CN= 89

=====  
 Computational Time Increment = .01111 hrs  
 Computed Peak Time = 12.0952 hrs  
 Computed Peak Flow = 13.18 cfs

Time Increment for HYG File = .0500 hrs  
 Peak Time, Interpolated Output = 12.1000 hrs  
 Peak Flow, Interpolated Output = 13.17 cfs  
 =====

DRAINAGE AREA

-----  
 ID: SUBAREA ON-1A  
 CN = 89  
 Area = 2.860 acres  
 S = 1.2360 in  
 0.2S = .2472 in

Cumulative Runoff

-----  
 4.7354 in  
 1.129 ac-ft

HYG Volume... 1.129 ac-ft (area under HYG curve)

\*\*\*\*\* SCS UNIT HYDROGRAPH PARAMETERS \*\*\*\*\*

Time Concentration, Tc = .08330 hrs (ID: SUBAREA ON-1A)  
 Computational Incr, Tm = .01111 hrs = 0.20000 Tp  
 Unit Hyd. Shape Factor = 483.432 (37.46% under rising limb)  
 K = 483.43/645.333, K = .7491 (also, K = 2/(1+(Tr/Tp))  
 Receding/Rising, Tr/Tp = 1.6698 (solved from K = .7491)  
 Unit peak, qp = 38.90 cfs  
 Unit peak time, Tp = .05553 hrs  
 Unit receding limb, Tr = .22213 hrs  
 Total unit time, Tb = .27767 hrs

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 100 year storm  
 Duration = 24.0000 hrs Rain Depth = 8.0000 in  
 Rain Dir = F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\  
 Rain File -ID = - TypeIII 24hr  
 Unit Hyd Type = Default Curvilinear  
 HYG Dir = F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\  
 HYG File - ID = - SUBAREA ON-1A Dev100  
 Tc (Min. Tc) = .0833 hrs  
 Drainage Area = 2.860 acres Runoff CN= 89

=====  
 Computational Time Increment = .01111 hrs  
 Computed Peak Time = 12.0952 hrs  
 Computed Peak Flow = 18.20 cfs

Time Increment for HYG File = .0500 hrs  
 Peak Time, Interpolated Output = 12.1000 hrs  
 Peak Flow, Interpolated Output = 18.19 cfs  
 =====

DRAINAGE AREA

-----  
 ID: SUBAREA ON-1A  
 CN = 89  
 Area = 2.860 acres  
 S = 1.2360 in  
 0.2S = .2472 in

Cumulative Runoff

-----  
 6.6868 in  
 1.594 ac-ft

HYG Volume... 1.594 ac-ft (area under HYG curve)

\*\*\*\*\* SCS UNIT HYDROGRAPH PARAMETERS \*\*\*\*\*

Time Concentration, Tc = .08330 hrs (ID: SUBAREA ON-1A)  
 Computational Incr, Tm = .01111 hrs = 0.20000 Tp  
 Unit Hyd. Shape Factor = 483.432 (37.46% under rising limb)  
 K = 483.43/645.333, K = .7491 (also, K = 2/(1+(Tr/Tp))  
 Receding/Rising, Tr/Tp = 1.6698 (solved from K = .7491)  
 Unit peak, qp = 38.90 cfs  
 Unit peak time, Tp = .05553 hrs  
 Unit receding limb, Tr = .22213 hrs  
 Total unit time, Tb = .27767 hrs

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 1 year storm

Duration = 24.0000 hrs Rain Depth = 3.0000 in  
Rain Dir = F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\  
Rain File -ID = - TypeIII 24hr  
Unit Hyd Type = Default Curvilinear  
HYG Dir = F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\  
HYG File - ID = - SUBAREA ON-1B Dev 1  
Tc = .1576 hrs  
Drainage Area = .790 acres Runoff CN= 74

=====  
Computational Time Increment = .02102 hrs  
Computed Peak Time = 12.1491 hrs  
Computed Peak Flow = .65 cfs

Time Increment for HYG File = .0500 hrs  
Peak Time, Interpolated Output = 12.1500 hrs  
Peak Flow, Interpolated Output = .65 cfs  
=====

DRAINAGE AREA

-----  
ID: SUBAREA ON-1B  
CN = 74  
Area = .790 acres  
S = 3.5135 in  
0.2S = .7027 in

Cumulative Runoff

-----  
.9082 in  
.060 ac-ft

HYG Volume... .060 ac-ft (area under HYG curve)

\*\*\*\*\* SCS UNIT HYDROGRAPH PARAMETERS \*\*\*\*\*

Time Concentration, Tc = .15764 hrs (ID: SUBAREA ON-1B)  
Computational Incr, Tm = .02102 hrs = 0.20000 Tp  
Unit Hyd. Shape Factor = 483.432 (37.46% under rising limb)  
K = 483.43/645.333, K = .7491 (also, K = 2/(1+(Tr/Tp))  
Receding/Rising, Tr/Tp = 1.6698 (solved from K = .7491)

Unit peak, qp = 5.68 cfs  
Unit peak time Tp = .10510 hrs  
Unit receding limb, Tr = .42038 hrs  
Total unit time, Tb = .52548 hrs

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 10 year storm  
 Duration = 24.0000 hrs Rain Depth = 5.5000 in  
 Rain Dir = F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\  
 Rain File -ID = - TypeIII 24hr  
 Unit Hyd Type = Default Curvilinear  
 HYG Dir = F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\  
 HYG File - ID = - SUBAREA ON-1B Dev 10  
 Tc = .1576 hrs  
 Drainage Area = .790 acres Runoff CN= 74

=====  
 Computational Time Increment = .02102 hrs  
 Computed Peak Time = 12.1281 hrs  
 Computed Peak Flow = 2.10 cfs  
  
 Time Increment for HYG File = .0500 hrs  
 Peak Time, Interpolated Output = 12.1500 hrs  
 Peak Flow, Interpolated Output = 2.08 cfs  
 =====

DRAINAGE AREA

-----  
 ID:SUBAREA ON-1B  
 CN = 74  
 Area = .790 acres  
 S = 3.5135 in  
 0.2S = .7027 in

Cumulative Runoff

-----  
 2.7692 in  
 .182 ac-ft

HYG Volume... .182 ac-ft (area under HYG curve)

\*\*\*\*\* SCS UNIT HYDROGRAPH PARAMETERS \*\*\*\*\*

Time Concentration, Tc = .15764 hrs (ID: SUBAREA ON-1B)  
 Computational Incr, Tm = .02102 hrs = 0.20000 Tp  
  
 Unit Hyd. Shape Factor = 483.432 (37.46% under rising limb)  
 K = 483.43/645.333, K = .7491 (also, K = 2/(1+(Tr/Tp))  
 Receding/Rising, Tr/Tp = 1.6698 (solved from K = .7491)  
  
 Unit peak, qp = 5.68 cfs  
 Unit peak time, Tp = .10510 hrs  
 Unit receding limb, Tr = .42038 hrs  
 Total unit time, Tb = .52548 hrs

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 25 year storm  
Duration = 24.0000 hrs Rain Depth = 6.0000 in  
Rain Dir = F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\  
Rain File -ID = - TypeIII 24hr  
Unit Hyd Type = Default Curvilinear  
HYG Dir = F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\  
HYG File - ID = - SUBAREA ON-1B Dev 25  
Tc = .1576 hrs  
Drainage Area = .790 acres Runoff CN= 74

=====  
Computational Time Increment = .02102 hrs  
Computed Peak Time = 12.1281 hrs  
Computed Peak Flow = 2.41 cfs  
  
Time Increment for HYG File = .0500 hrs  
Peak Time, Interpolated Output = 12.1500 hrs  
Peak Flow, Interpolated Output = 2.40 cfs  
=====

DRAINAGE AREA

-----  
ID: SUBAREA ON-1B  
CN = 74  
Area = .790 acres  
S = 3.5135 in  
0.2S = .7027 in

Cumulative Runoff

-----  
3.1849 in  
.210 ac-ft

HYG Volume... .210 ac-ft (area under HYG curve)

\*\*\*\*\* SCS UNIT HYDROGRAPH PARAMETERS \*\*\*\*\*

Time Concentration, Tc = .15764 hrs (ID: SUBAREA ON-1B)  
Computational Incr, Tm = .02102 hrs = 0.20000 Tp  
  
Unit Hyd. Shape Factor = 483.432 (37.46% under rising limb)  
K = 483.43/645.333, K = .7491 (also, K = 2/(1+(Tr/Tp))  
Receding/Rising, Tr/Tp = 1.6698 (solved from K = .7491)  
  
Unit peak, qp = 5.68 cfs  
Unit peak time Tp = .10510 hrs  
Unit receding limb, Tr = .42038 hrs  
Total unit time, Tb = .52548 hrs

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 100 year storm  
Duration = 24.0000 hrs Rain Depth = 8.0000 in  
Rain Dir = F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\  
Rain File -ID = - TypeIII 24hr  
Unit Hyd Type = Default Curvilinear  
HYG Dir = F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\  
HYG File - ID = - SUBAREA ON-1B Dev100  
Tc = .1576 hrs  
Drainage Area = .790 acres Runoff CN= 74

=====  
Computational Time Increment = .02102 hrs  
Computed Peak Time = 12.1281 hrs  
Computed Peak Flow = 3.71 cfs  
  
Time Increment for HYG File = .0500 hrs  
Peak Time, Interpolated Output = 12.1500 hrs  
Peak Flow, Interpolated Output = 3.67 cfs  
=====

DRAINAGE AREA

-----  
ID: SUBAREA ON-1B  
CN = 74  
Area = .790 acres  
S = 3.5135 in  
0.2S = .7027 in

Cumulative Runoff

-----  
4.9257 in  
.324 ac-ft

HYG Volume... .324 ac-ft (area under HYG curve)

\*\*\*\*\* SCS UNIT HYDROGRAPH PARAMETERS \*\*\*\*\*

Time Concentration, Tc = .15764 hrs (ID: SUBAREA ON-1B)  
Computational Incr, Tm = .02102 hrs = 0.20000 Tp  
  
Unit Hyd. Shape Factor = 483.432 (37.46% under rising limb)  
K = 483.43/645.333, K = .7491 (also, K = 2/(1+(Tr/Tp))  
Receding/Rising, Tr/Tp = 1.6698 (solved from K = .7491)  
  
Unit peak, qp = 5.68 cfs  
Unit peak time Tp = .10510 hrs  
Unit receding limb, Tr = .42038 hrs  
Total unit time, Tb = .52548 hrs

**ROUTING POST-DEVELOPMENT FLOWS**  
**FROM SUBAREA ON-1A**  
**THROUGH STORM WATER DENTION POND**

File.... F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\NEW WINDSOR REALITY POST.PPW

Elevation (ft)	Planimeter (sq.in)	Area (acres)	A1+A2+sqrt(A1*A2) (acres)	Volume (ac-ft)	Volume Sum (ac-ft)
248.00	-----	.0163	.0000	.000	.000
249.00	-----	.0752	.1265	.042	.042
250.00	-----	.2555	.4693	.156	.199
250.10	-----	.2585	.7710	.026	.224
250.20	-----	.2615	.7800	.026	.250
250.30	-----	.2645	.7890	.026	.277
250.40	-----	.2674	.7978	.027	.303
250.50	-----	.2705	.8068	.027	.330
250.60	-----	.2735	.8160	.027	.357
250.70	-----	.2766	.8251	.028	.385
250.80	-----	.2796	.8343	.028	.413
250.90	-----	.2827	.8434	.028	.441
251.00	-----	.2858	.8527	.028	.469
252.00	-----	.3176	.9047	.302	.771
253.00	-----	.3505	1.0017	.334	1.105
254.00	-----	.3847	1.1024	.367	1.472

POND VOLUME EQUATIONS

\* Incremental volume computed by the Conic Method for Reservoir Volumes.

$$\text{Volume} = (1/3) * (\text{EL2}-\text{EL1}) * (\text{Areal} + \text{Area2} + \text{sq.rt.}(\text{Areal}*\text{Area2}))$$

where: EL1, EL2 = Lower and upper elevations of the increment  
 Areal,Area2 = Areas computed for EL1, EL2, respectively  
 Volume = Incremental volume between EL1 and EL2

REQUESTED POND WS ELEVATIONS:

Min. Elev.= 248.00 ft  
Increment = .50 ft  
Max. Elev.= 254.00 ft

\*\*\*\*\*  
OUTLET CONNECTIVITY  
\*\*\*\*\*

---> Forward Flow Only (UpStream to DnStream)  
<--- Reverse Flow Only (DnStream to UpStream)  
<---> Forward and Reverse Both Allowed

Structure	No.		Outfall	E1, ft	E2, ft
Weir-Rectangular	W1	--->	CV	250.500	254.000
Orifice-Circular	O1	--->	CV	248.000	254.000
Culvert-Circular	CV	--->	TW	248.000	254.000
TW SETUP, DS Channel					

OUTLET STRUCTURE INPUT DATA

Structure ID = W1  
Structure Type = Weir-Rectangular  
-----  
# of Openings = 1  
Crest Elev. = 250.50 ft  
Weir Length = 8.00 ft  
Weir Coeff. = 3.000000  
  
Weir TW effects (Use adjustment equation)

Structure ID = O1  
Structure Type = Orifice-Circular  
-----  
# of Openings = 1  
Invert Elev. = 248.00 ft  
Diameter = .1670 ft  
Orifice Coeff. = .600

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OUTLET STRUCTURE INPUT DATA

Structure ID = CV  
Structure Type = Culvert-Circular  
-----  
No. Barrels = 1  
Barrel Diameter = 1.2500 ft  
Upstream Invert = 248.00 ft  
Dnstream Invert = 246.00 ft  
Horiz. Length = 45.00 ft  
Barrel Length = 45.04 ft  
Barrel Slope = .04444 ft/ft

OUTLET CONTROL DATA...

Mannings n = .0120  
Ke = .5000 (forward entrance loss)  
Kb = .019790 (per ft of full flow)  
Kr = .5000 (reverse entrance loss)  
HW Convergence = .001 +/- ft

INLET CONTROL DATA...

Equation form = 1  
Inlet Control K = .0078  
Inlet Control M = 2.0000  
Inlet Control c = .03790  
Inlet Control Y = .6900  
T1 ratio (HW/D) = 1.114  
T2 ratio (HW/D) = 1.274  
Slope Factor = -.500

ded inlet control Form 1 equ. below T1 elev.  
ded inlet control Form 1 equ. above T2 elev.

1 zone between unsubmerged and submerged inlet control,  
between flows at T1 & T2...

249.39 ft ---> Flow = 4.80 cfs  
249.59 ft ---> Flow = 5.49 cfs

Structure ID = TW  
Structure Type = TW SETUP, DS Channel  
-----

FREE OUTFALL CONDITIONS SPECIFIED

CONVERGENCE TOLERANCES...

Maximum Iterations= 30  
Min. TW tolerance = .01 ft  
Max. TW tolerance = .01 ft  
Min. HW tolerance = .01 ft  
Max. HW tolerance = .01 ft  
Min. Q tolerance = .10 cfs  
Max. Q tolerance = .10 cfs

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = W1 (Weir-Rectangular)

Upstream ID = (Pond Water Surface)

DNstream ID = CV (Culvert-Circular)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
248.00	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
248.50	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
249.00	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
249.50	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
250.00	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
250.50	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
251.00	8.38	251.00	Free	250.45	.000	.000	Free Outfall	
		H=.50; Htw=.00; Qfree=8.38;						
251.50	10.26	251.50	251.42	251.50	.077	.000	Free Outfall	
		H=1.00; Htw=.92; Qfree=23.40;						
252.00	11.15	252.00	251.97	251.98	.007	.000	Free Outfall	
		H=1.50; Htw=1.47; Qfree=42.44;						
252.50	11.61	252.50	252.48	252.24	.247	.000	Free Outfall	
		H=2.00; Htw=1.98; Qfree=64.49;						
253.00	12.48	253.00	252.99	252.79	.203	.000	Free Outfall	
		H=2.50; Htw=2.49; Qfree=88.94;						
253.50	13.69	253.50	253.49	253.50	.009	.000	Free Outfall	
		H=3.00; Htw=2.99; Qfree=115.35;						
254.00	14.30	254.00	253.99	253.99	.005	.000	Free Outfall	
		H=3.50; Htw=3.49; Qfree=143.40;						

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = O1 (Orifice-Circular)

Upstream ID = (Pond Water Surface)

DNstream ID = CV (Culvert-Circular)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
248.00	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
248.50	.06	248.50	248.15	248.15	.004	.000	Free Outfall	
		H =.35						
249.00	.10	249.00	248.18	248.18	.007	.000	Free Outfall	
		H =.82						
249.50	.12	249.50	248.21	248.20	.007	.000	Free Outfall	
		H =1.29						
250.00	.14	250.00	248.22	248.22	.004	.000	Free Outfall	
		H =1.78						
250.50	.16	250.50	248.24	248.23	.004	.000	Free Outfall	
		H =2.26						
251.00	.08	251.00	250.45	250.45	.000	.000	Free Outfall	
		H =.55						
251.50	.03	251.50	251.42	251.50	.077	.000	Free Outfall	
		H =.08						
252.00	.02	252.00	251.97	251.98	.007	.000	Free Outfall	
		H =.03						
252.50	.01	252.50	252.48	252.24	.247	.000	Free Outfall	
		H =.02						
253.00	.05	253.00	252.76	252.79	.026	.000	Free Outfall	
		H =.24						
253.50	.01	253.50	253.49	253.50	.009	.000	Free Outfall	
		H =.01						
254.00	.01	254.00	253.99	253.99	.005	.000	Free Outfall	
		H =.01						

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = CV (Culvert-Circular)

Mannings open channel maximum capacity: 15.87 cfs

UPstream ID's= W1, O1

DNstream ID = TW (Pond Outfall)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
248.00	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
248.50	.06	248.15	Free	Free	.000	.000	Free Outfall	
		CRIT.DEPTH CONTROL	Vh= .033ft Dcr= .098ft CRIT.DEPTH					
249.00	.10	248.18	Free	Free	.000	.000	Free Outfall	
		CRIT.DEPTH CONTROL	Vh= .040ft Dcr= .117ft CRIT.DEPTH					
249.50	.12	248.20	Free	Free	.000	.000	Free Outfall	
		CRIT.DEPTH CONTROL	Vh= .045ft Dcr= .132ft CRIT.DEPTH					
250.00	.14	248.22	Free	Free	.000	.000	Free Outfall	
		CRIT.DEPTH CONTROL	Vh= .049ft Dcr= .144ft CRIT.DEPTH					
250.50	.16	248.23	Free	Free	.000	.000	Free Outfall	
		CRIT.DEPTH CONTROL	Vh= .053ft Dcr= .154ft CRIT.DEPTH					
251.00	8.46	250.45	Free	Free	.000	.000	Free Outfall	
		INLET CONTROL...	Submerged: HW =2.63					
251.50	10.29	251.50	Free	Free	.000	.000	Free Outfall	
		INLET CONTROL...	Submerged: HW =3.50					
252.00	11.17	251.98	Free	Free	.000	.000	Free Outfall	
		INLET CONTROL...	Submerged: HW =3.98					
252.50	11.63	252.24	Free	Free	.000	.000	Free Outfall	
		INLET CONTROL...	Submerged: HW =4.24					
253.00	12.53	252.79	Free	Free	.000	.000	Free Outfall	
		INLET CONTROL...	Submerged: HW =4.79					
253.50	13.70	253.50	Free	Free	.000	.082	Free Outfall	
		INLET CONTROL...	Submerged: HW =5.50					
254.00	14.31	253.99	Free	Free	.000	.000	Free Outfall	
		INLET CONTROL...	Submerged: HW =5.99					

Name.... POND 1A

File.... F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\NEW WINDSOR REALITY POST-1.PPW

LEVEL POOL ROUTING DATA

HYG Dir = F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\  
 Inflow HYG file = NONE STORED - POND 1A IN Dev 1  
 Outflow HYG file = NONE STORED - POND 1A OUT Dev 1

Pond Node Data = POND 1A  
 Pond Volume Data = POND 1A  
 Pond Outlet Data = Outlet 1

No Infiltration

INITIAL CONDITIONS

-----  
 Starting WS Elev = 248.00 ft  
 Starting Volume = .000 ac-ft  
 Starting Outflow = .00 cfs  
 Starting Infiltr. = .00 cfs  
 Starting Total Qout = .00 cfs  
 Time Increment = .0500 hrs

Elevation ft	Outflow cfs	Storage ac-ft	Area acres	Infiltr. cfs	Q Total cfs	2S/t + O cfs
248.00	.00	.000	.0163	.00	.00	.00
248.50	.06	.014	.0404	.00	.06	6.70
249.00	.10	.042	.0752	.00	.10	20.51
249.50	.12	.098	.1520	.00	.12	47.48
250.00	.14	.199	.2555	.00	.14	96.27
250.50	.16	.330	.2705	.00	.16	159.93
251.00	8.46	.469	.2858	.00	8.46	235.53
251.50	10.29	.616	.3015	.00	10.29	308.41
252.00	11.17	.771	.3176	.00	11.17	384.20
252.50	11.63	.934	.3338	.00	11.63	463.47
253.00	12.53	1.105	.3505	.00	12.53	547.17
253.50	13.70	1.284	.3674	.00	13.70	635.20
254.00	14.31	1.472	.3847	.00	14.31	726.80

File... F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\NEW WINDSOR REALITY POST-1.PPW

\*\*\*\*\* COMPOSITE OUTFLOW SUMMARY \*\*\*\*\*

WS Elev, Total Q		Converge		Notes
Elev. ft	Q cfs	TW Elev ft	Error +/-ft	Contributing Structures
248.00	.00	Free Outfall		(no Q: W1,O1,CV)
248.50	.06	Free Outfall		O1,CV (no Q: W1)
249.00	.10	Free Outfall		O1,CV (no Q: W1)
249.50	.12	Free Outfall		O1,CV (no Q: W1)
250.00	.14	Free Outfall		O1,CV (no Q: W1)
250.50	.16	Free Outfall		O1,CV (no Q: W1)
251.00	8.46	Free Outfall		W1,O1,CV
251.50	10.29	Free Outfall		W1,O1,CV
252.00	11.17	Free Outfall		W1,O1,CV
252.50	11.63	Free Outfall		W1,O1,CV
253.00	12.53	Free Outfall		W1,O1,CV
253.50	13.70	Free Outfall		W1,O1,CV
254.00	14.31	Free Outfall		W1,O1,CV

LEVEL POOL ROUTING SUMMARY

HYG Dir = F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\  
Inflow HYG file = NONE STORED - POND 1A IN Dev 1  
Outflow HYG file = NONE STORED - POND 1A OUT Dev 1

Pond Node Data = POND 1A  
Pond Volume Data = POND 1A  
Pond Outlet Data = Outlet 1

No Infiltration

INITIAL CONDITIONS

-----  
Starting WS Elev = 248.00 ft  
Starting Volume = .000 ac-ft  
Starting Outflow = .00 cfs  
Starting Infiltr. = .00 cfs  
Starting Total Qout = .00 cfs  
Time Increment = .0500 hrs

INFLOW/OUTFLOW HYDROGRAPH SUMMARY

=====  
Peak Inflow = 5.56 cfs at 12.1000 hrs  
Peak Outflow = .16 cfs at 14.6000 hrs  
-----

Peak Elevation = 250.44 ft  
Peak Storage = .314 ac-ft  
=====

MASS BALANCE (ac-ft)

-----  
+ Initial Vol = .000  
+ HYG Vol IN = .453  
- Infiltration = .000  
- HYG Vol OUT = .452  
- Retained Vol = .000  
-----  
Unrouted Vol = -.000 ac-ft (.056% of Inflow Volume)

LEVEL POOL ROUTING SUMMARY

HYG Dir = F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\  
Inflow HYG file = NONE STORED - POND 1A IN Dev 10  
Outflow HYG file = NONE STORED - POND 1A OUT Dev 10

Pond Node Data = POND 1A  
Pond Volume Data = POND 1A  
Pond Outlet Data = Outlet 1

No Infiltration

INITIAL CONDITIONS

-----  
Starting WS Elev = 248.00 ft  
Starting Volume = .000 ac-ft  
Starting Outflow = .00 cfs  
Starting Infiltr. = .00 cfs  
Starting Total Qout= .00 cfs  
Time Increment = .0500 hrs

INFLOW/OUTFLOW HYDROGRAPH SUMMARY

=====  
Peak Inflow = 11.91 cfs at 12.1000 hrs  
Peak Outflow = 5.92 cfs at 12.2500 hrs  
-----  
Peak Elevation = 250.85 ft  
Peak Storage = .426 ac-ft  
=====

MASS BALANCE (ac-ft)

-----  
+ Initial Vol = .000  
+ HYG Vol IN = 1.013  
- Infiltration = .000  
- HYG Vol OUT = 1.013  
- Retained Vol = .000  
-----  
Unrouted Vol = -.000 ac-ft (.025% of Inflow Volume)

LEVEL POOL ROUTING SUMMARY

HYG Dir = F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\  
Inflow HYG file = NONE STORED - POND 1A IN Dev 25  
Outflow HYG file = NONE STORED - POND 1A OUT Dev 25

Pond Node Data = POND 1A  
Pond Volume Data = POND 1A  
Pond Outlet Data = Outlet 1

No Infiltration

INITIAL CONDITIONS

-----  
Starting WS Elev = 248.00 ft  
Starting Volume = .000 ac-ft  
Starting Outflow = .00 cfs  
Starting Infiltr. = .00 cfs  
Starting Total Qout = .00 cfs  
Time Increment = .0500 hrs

INFLOW/OUTFLOW HYDROGRAPH SUMMARY

=====  
Peak Inflow = 13.17 cfs at 12.1000 hrs  
Peak Outflow = 7.45 cfs at 12.2000 hrs  
-----  
Peak Elevation = 250.94 ft  
Peak Storage = .452 ac-ft  
=====

MASS BALANCE (ac-ft)

-----  
+ Initial Vol = .000  
+ HYG Vol IN = 1.129  
- Infiltration = .000  
- HYG Vol OUT = 1.128  
- Retained Vol = .000  
-----  
Unrouted Vol = -.000 ac-ft (.022% of Inflow Volume)

LEVEL POOL ROUTING SUMMARY

HYG Dir            = F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\  
Inflow HYG file = NONE STORED - POND 1A      IN Dev100  
Outflow HYG file = NONE STORED - POND 1A      OUT Dev100

Pond Node    Data = POND 1A  
Pond Volume Data = POND 1A  
Pond Outlet Data = Outlet 1

No Infiltration

INITIAL CONDITIONS

-----  
Starting WS Elev    =    248.00 ft  
Starting Volume     =        .000 ac-ft  
Starting Outflow    =        .00 cfs  
Starting Infiltr.   =        .00 cfs  
Starting Total Qout =        .00 cfs  
Time Increment     =        .0500 hrs

INFLOW/OUTFLOW HYDROGRAPH SUMMARY

=====  
Peak Inflow        =        18.19 cfs    at    12.1000 hrs  
Peak Outflow       =        9.72 cfs     at    12.2500 hrs  
-----  
Peak Elevation     =        251.35 ft  
Peak Storage       =        .570 ac-ft  
=====

MASS BALANCE (ac-ft)

-----  
+ Initial Vol      =        .000  
+ HYG Vol IN       =        1.594  
- Infiltration     =        .000  
- HYG Vol OUT      =        1.593  
- Retained Vol     =        .000  
-----  
Unrouted Vol      =        -.000 ac-ft    (.016% of Inflow Volume)

SUMMARY FOR HYDROGRAPH ADDITION  
at Node: OUT 1AB

HYG Directory: F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\

```

=====
Upstream Link ID  Upstream Node ID  HYG file      HYG ID        HYG tag
-----
ROUTE 1A          POND 1A        IN            ROUTE 1A      Dev 1
ADDLINK ON-1B    SUBAREA ON-1B  SUBAREA ON-1B SUBAREA ON-1B Dev 1
=====

```

INFLOWS TO: OUT 1AB

```

----- Volume      Peak Time      Peak Flow
HYG file      HYG ID        HYG tag      ac-ft        hrs          cfs
-----
          ROUTE 1A          Dev 1        .452         14.6000     .15
          SUBAREA ON-1B  Dev 1        .060         12.1500     .65

```

TOTAL FLOW INTO: OUT 1AB

```

----- Volume      Peak Time      Peak Flow
HYG file      HYG ID        HYG tag      ac-ft        hrs          cfs
-----
          OUT 1AB          Dev 1        .512         12.1500     .79

```

SUMMARY FOR HYDROGRAPH ADDITION  
at Node: OUT 1AB

HYG Directory: F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\

```

=====
Upstream Link ID  Upstream Node ID  HYG file      HYG ID          HYG tag
-----
ROUTE 1A          POND 1A          IN              ROUTE 1A        Dev 10
ADDLINK ON-1B     SUBAREA ON-1B    SUBAREA ON-1B  SUBAREA ON-1B  Dev 10
=====

```

INFLOWS TO: OUT 1AB

```

-----
HYG file          HYG ID          HYG tag          Volume      Peak Time     Peak Flow
ac-ft             hrs             cfs
-----
ROUTE 1A          Dev 10          1.013            12.2500     5.92
SUBAREA ON-1B    Dev 10          .182              12.1500     2.08
-----

```

TOTAL FLOW INTO: OUT 1AB

```

-----
HYG file          HYG ID          HYG tag          Volume      Peak Time     Peak Flow
ac-ft             hrs             cfs
-----
OUT 1AB          Dev 10          1.195            12.2000     7.58
-----

```

SUMMARY FOR HYDROGRAPH ADDITION  
at Node: OUT 1AB

HYG Directory: F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\

```

=====
Upstream Link ID  Upstream Node ID  HYG file      HYG ID        HYG tag
-----
ROUTE 1A          POND 1A        IN              ROUTE 1A      Dev 25
ADDLINK ON-1B    SUBAREA ON-1B  SUBAREA ON-1B  SUBAREA ON-1B Dev 25
=====

```

INFLOWS TO: OUT 1AB

```

-----
HYG file          HYG ID        HYG tag        Volume      Peak Time    Peak Flow
                   ac-ft         hrs            ac-ft       hrs           cfs
-----
                ROUTE 1A      Dev 25         1.128       12.2000      7.45
                SUBAREA ON-1B  Dev 25         .210        12.1500      2.40
-----

```

TOTAL FLOW INTO: OUT 1AB

```

-----
HYG file          HYG ID        HYG tag        Volume      Peak Time    Peak Flow
                   ac-ft         hrs            ac-ft       hrs           cfs
-----
                OUT 1AB      Dev 25         1.338       12.2000      9.55
-----

```

SUMMARY FOR HYDROGRAPH ADDITION

at Node: OUT 1AB

HYG Directory: F:\Haestad Data-New\PondpackDataFiles\New Windsor Reality\

```

=====
Upstream Link ID  Upstream Node ID  HYG file      HYG ID        HYG tag
-----
ROUTE 1A          POND 1A          IN              ROUTE 1A      Dev100
ADDLINK ON-1B     SUBAREA ON-1B    SUBAREA ON-1B  SUBAREA ON-1B Dev100
=====

```

INFLOWS TO: OUT 1AB

```

-----
HYG file          HYG ID          HYG tag        Volume      Peak Time     Peak Flow
ac-ft             hrs              cfs
-----
                ROUTE 1A        Dev100         1.593       12.2500      9.72
                SUBAREA ON-1B  Dev100         .324        12.1500      3.67
-----

```

TOTAL FLOW INTO: OUT 1AB

```

-----
HYG file          HYG ID          HYG tag        Volume      Peak Time     Peak Flow
ac-ft             hrs              cfs
-----
                OUT 1AB        Dev100         1.917       12.1500      13.22
-----

```

POST-DEVELOPMENT STORM SUMMARY

MASTER DESIGN STORM SUMMARY

Network Storm Collection: OrangeCounty

Return Event	Total Depth in	Rainfall Type	RNF ID
Dev 1	3.0000	Synthetic Curve	TypeIII 24hr
Dev 10	5.5000	Synthetic Curve	TypeIII 24hr
Dev 25	6.0000	Synthetic Curve	TypeIII 24hr
Dev100	8.0000	Synthetic Curve	TypeIII 24hr

MASTER NETWORK SUMMARY  
SCS Unit Hydrograph Method

(\*Node=Outfall; +Node=Diversion;)  
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
*OUT 1AB	JCT	1	.512		12.1500	.79		
*OUT 1AB	JCT	10	1.195		12.2000	7.58		
*OUT 1AB	JCT	25	1.338		12.2000	9.55		
*OUT 1AB	JCT	100	1.917		12.1500	13.22		
POND 1A	IN POND	1	.453		12.1000	5.56		
POND 1A	IN POND	10	1.013		12.1000	11.91		
POND 1A	IN POND	25	1.129		12.1000	13.17		
POND 1A	IN POND	100	1.594		12.1000	18.19		
POND 1A	OUT POND	1	.452		14.6000	.15	250.44	.314
POND 1A	OUT POND	10	1.013		12.2500	5.92	250.85	.426
POND 1A	OUT POND	25	1.128		12.2000	7.45	250.94	.452
POND 1A	OUT POND	100	1.593		12.2500	9.72	251.35	.570

MASTER NETWORK SUMMARY  
SCS Unit Hydrograph Method

(\*Node=Outfall; +Node=Diversion;)  
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Return Type	Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
SUBAREA ON-1A	AREA	1	.453		12.1000	5.56		
SUBAREA ON-1A	AREA	10	1.013		12.1000	11.91		
SUBAREA ON-1A	AREA	25	1.129		12.1000	13.17		
SUBAREA ON-1A	AREA	100	1.594		12.1000	18.19		
SUBAREA ON-1B	AREA	1	.060		12.1500	.65		
SUBAREA ON-1B	AREA	10	.182		12.1500	2.08		
SUBAREA ON-1B	AREA	25	.210		12.1500	2.40		
SUBAREA ON-1B	AREA	100	.324		12.1500	3.67		

**APPENDIX H**

**STORM WATER MANAGEMENT CALCULATIONS**

**- WATER QUALITY -**

**WATER QUALITY CALCULATIONS**  
**- SAND FILTER -**

Water Quality Volume

$$\begin{aligned} \text{Percent Impervious (I)} &= I/A \\ &= 1.72/(1.98) \\ &= .8687 = 86.87\% \end{aligned}$$

$$\begin{aligned} \text{Runoff Value (Rv)} &= 0.05 + .009 (I) \\ &= .8318 \end{aligned}$$

$$\begin{aligned} \text{Water Quality Vol. (WQv)} &= 1.2 (Rv) (A) / 12 \\ &= 1.2 (.8318) (1.98) / 12 \\ &= 0.164 \text{ Ac-Ft. (7,158 CF)} \end{aligned}$$

Peak Discharge To The Sand Filter

Where

P	= 1.2 Inches
WQv	= 7,158 C.F.
A	= 1.98 Acres
Tc	= .10 Hours

$$Q_a = \frac{WQv}{A} = \frac{7,158 \times 12}{1.98 \times 43,560} = 0.996 \text{ Inches Say } 1.0 \text{ Inches}$$

$$\begin{aligned} CN &= \frac{1000}{[10 + 5P + 10Q_a - 10(Q_a^2 + 1.25Q_aP)^{.5}]} \\ &= \frac{1000}{[10 + 5(1.2) + 10(1.0) - 10(1.0^2 + 1.25(1.0 \times 1.2))^{.5}]} \\ &= \frac{1000}{[10 + 6 + 10 - 10(2.50)^{.5}]} = 98.14 \quad \text{Say } 98 \end{aligned}$$

$$S = \frac{1000 - 10}{CN} = \frac{1000 - 10}{98} = 0.204$$

$$I_a = .2S = .2 (.204) = .041$$

$$\frac{I_a}{P} = \frac{.041}{1.2} = .034$$

From TR-55, Page 4-7 for a Type III Storm

$$Q_u = 675 \text{ Cfs/Sq.Mi./In}$$

$$Q_{wq} = Q_u \times A \times Q_a$$

$$Q_{wq} = \frac{675 \text{ Cfs / Sq.Mi.}}{\text{In.}} \times \frac{1.98 \text{ Ac}}{640 \text{ Ac/Sq.Mi}} \times 1.0 \text{ In.} = 2.08 \text{ Cfs} \quad \text{Say } 2.1 \text{ Cfs}$$

Flow To Be Diverted To Sand Filter

Use A 8-Inch Pipe To Divert Flow To Sand Filter

$$Q = CA (2GH)^{0.5} \text{ where } c = 0.60$$
$$2.1 = .60 \times (.785 \times .67^2) (2 \times 32.2 \times H)^{0.5}$$
$$H = 1.55 \text{ Ft.}$$

Total Head Differential In Diversion Basin

$$H = 1.55 \text{ Ft.}$$
$$+ .33 \text{ Ft. (1/2 pipe dia.)}$$
$$1.88 \text{ Ft. Say 1.85 Ft.}$$

$$\begin{array}{r} \text{Invert Out Of Catch Basin No. 7} = 261.75 \text{ Ft.} \\ \text{Less Total Head Differential} \quad \underline{1.85 \text{ Ft.}} \\ \text{Invert Out To Sand Filter} \quad 259.90 \text{ Ft.} \end{array}$$

Size The Sedimentation Chamber Of The Sand Filter For 25% Of The WQv:

Assume 2.5 Feet in depth

$$\begin{array}{l} \text{Vol.} = .25 \times \text{WQv} \\ = .25 \times 7,158 = 1,790 \text{ Cf} \end{array}$$

$$\text{As} = 1,790 \text{ Cf} / 2.5 \text{ Ft.} = 716 \text{ Sf} \quad \text{Try 20 Ft by 36 Ft (720 Sq Ft)}$$

Size The Filtration Chamber Of The Sand Filter For 75% Of The WQv:

$$\begin{array}{l} \text{Vol.} = .75 \times \text{WQv} \\ = .75 \times 7,158 = 5,369 \text{ Cf} \end{array}$$

Darcy's Law

$$\begin{array}{l} A_f = \frac{\text{WQ}_v \times (d_f)}{[k \times (h_f + d_f) \times t_f]} \\ \\ = \frac{7,158 \times (1.5)}{3.5 \times (2.0 + 1.5) \times (40/24)} \\ \\ = 526 \text{ Sf} \quad \text{Try 20 Ft x 27 Ft (540 Sf)} \end{array}$$

$$\begin{array}{l} \text{where } d_f = 18 \text{ Inches (filter thickness)} \\ k = 3.5 \text{ Ft/Day (flow-through rate)} \\ h_f = 2.0 \text{ Ft (average head on filter)} \\ t_f = 40 \text{ Hours (drain time)} \end{array}$$

Volume Within Filter Bed

$$\begin{array}{l} V_f = A_f (d_f) n \\ = 540 \text{ Sf (1.5 Ft) } .4 \\ = 324 \text{ Cf} \end{array}$$

$$\begin{array}{l} \text{where } A_f = \text{filter area} \\ n = 0.4 \text{ for sand} \\ d_f = 18 \text{ Inches (filter thickness)} \end{array}$$

Temporary Storage Above Sand Filter Bed

$$\begin{array}{l} V_{f\text{-temp}} = 2 (h_f) A_f \\ = 2 (2 \text{ ft}) 540 \text{ Sf} \\ = 2,160 \text{ Cf} \end{array}$$

$$\begin{array}{l} \text{where } h_f = 2.0 \text{ Ft (average head on filter)} \\ A_f = \text{filter area} \end{array}$$

Storage In Sedimentation Chamber

$$\begin{array}{l} V_s = (2.5 \text{ Ft} \times 720) + (2 \times 2 \text{ Ft} \times 720 \text{ Sf}) \\ = 4,680 \text{ Cf} \end{array}$$

Total Storage In Chamber

$$\begin{aligned} V_{\text{tot}} &= V_f + V_{f\text{-temp}} + V_s \\ &= 324 \text{ Cf} + 2,160 \text{ Cf} + 4,680 \text{ Cf} \\ &= 7,164 \text{ Cf} > 5,369 \text{ Cf} \text{ (75\% Of WQv)} \end{aligned}$$

Size The Overflow Weirs of the Sedimentation Chamber and Filtration Chamber

Use 8-inch Orifice

$$\begin{aligned} Q &= CA(2GH)^{0.5} & \text{where } C &= 0.60 \\ &= .60 \times .3524 \times 8.02 \times (3.02)^{0.5} & A &= 0.3524 \text{ Sf} \\ &= 3.0 \text{ Cfs} & H &= 3.0 \text{ Ft} \end{aligned}$$

Weir Length

$$\begin{aligned} Q &= CL(H)^{1.5} & \text{where } c &= 3.0 \text{ and } h = 0.5 \text{ Ft} \\ 3.0 \text{ cfs} &= 3.0 \times L \times (0.5)^{1.5} \\ L &= 2.8 \text{ Ft} \quad \text{Use 3 foot long weir.} \end{aligned}$$

**RESOLUTION ADOPTING A NEGATIVE DECLARATION FOR A  
SITE PLAN APPLICATION**

*Hudson Valley Federal Credit Union Proposed Branch  
PB # 06-19*

**WHEREAS**, an application was made to the Planning Board of the Town of New Windsor for approval of a site plan by Hudson Valley Federal Credit Union (the "applicant") for a project described as "Hudson Valley Federal Credit Union Site Plan";

**WHEREAS**, the subject site consists of 2.3 acres of land and comprised of one tax map parcel in the Town of New Windsor identified on the tax map as section 42, block 1, and lot 1.1 (SBL 42-1-1.1), located at the intersection on NYS Route 32 and Willow Lane; and

**WHEREAS**, the action involves a request for a site plan approval for a bank branch office; and

**WHEREAS**, the applicant has submitted a fully executed short form Environmental Assessment Form ("EAF") pursuant to the New York State Environmental Quality Review Act ("SEQRA"); and

**WHEREAS**, the Planning Board conducted a coordinated SEQRA review for this project; and

**WHEREAS**, the Planning Board declared its intent to become the Lead Agency with respect to the Proposed Action and circulated a Notice of Intent to be Lead Agency to other involved and interested agencies; and

**WHEREAS**, having received no objection to the proposed Lead Agency designation within thirty (30) days after circulation of the Notice of Intent, the Planning Board was automatically designated the Lead Agency for environmental review of the Proposed Action; and

**WHEREAS**, during the course of the Planning Board's review of the Applicant's proposed site plan layout, the Planning Board received and considered correspondence from the public as well as the Town's consultants; and

**WHEREAS**, a duly advertised public hearing on the application for site plan approval was held on February 28, 2007 at which time all those wishing to be heard were given the opportunity to heard; and

WHEREAS, on February 28, 2007 the public hearing on the application for site plan approval was closed; and

WHEREAS, the application and related materials were submitted to the Orange County Planning Department ("OCDP") for its review pursuant to the requirements of the General Municipal Law § 239-m, and OCDP responded recommending conditional approval with a comment to reduce parking if possible; and

WHEREAS, the Planning Board has carefully considered all of the comments raised by the public, the Board's consultants, and other interested agencies, organizations and officials, including those presented at numerous meetings of the Board as well as those submitted separately in writing; and

WHEREAS, the applicant has submitted a proposed site plan consisting of 17 sheets, prepared by Chazen Engineering & Land Surveying Co., P.C. dated March 17, 2006 and last revised on September 25, 2006; and

WHEREAS, the Planning Board has determined that the Proposed Action minimizes or avoids significant environmental impacts and, therefore, the accompanying Negative Declaration is hereby adopted as part of the approval of site plan.

NOW, THEREFORE, be it resolved as follows:

1. The Planning Board is lead agency for an uncoordinated review of this action;
2. This is an Unlisted Action for SEQRA purposes;
3. The EAF submitted by the applicant has been fully reviewed and considered by the Planning Board;
4. Having reviewed with due care and diligence the EAF submitted by the applicant, the application herein and all pertinent documentation and testimony received at the public hearing, it is determined that the proposed action will not have, nor does it include, the potential for significant adverse environmental impacts;
5. The Planning Board hereby adopts the SEQRA "Negative Declaration" annexed hereto.

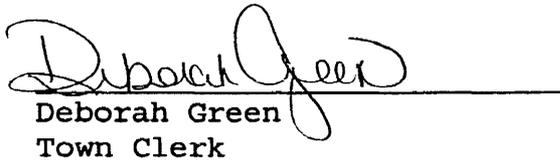
Upon motion made by Member Mr. VanLeeuwen, seconded by Member Mr. Schlessinger, the foregoing resolution was adopted as follows:

Member, Daniel Gallagher	<u>Aye</u>	Nay	Abstain	Absent
Member, Howard Brown	<u>Aye</u>	Nay	Abstain	Absent
Member, Neil Schlessinger	<u>Aye</u>	Nay	Abstain	Absent
Member, Henry Vanleeuwen	<u>Aye</u>	Nay	Abstain	Absent
Chairman, Genaro Argenio	<u>Aye</u>	Nay	Abstain	Absent
-----				
Alternate, Henry Schieble	Aye	Nay	Abstain	Absent

Dated: August 8, 2007  
New Windsor, New York

  
\_\_\_\_\_  
Genaro Argenio, Chairman

Filed in the Office of the Town Clerk on this 9<sup>th</sup> day of August, 2007.

  
\_\_\_\_\_  
Deborah Green  
Town Clerk

**TOWN OF NEW WINDSOR PLANNING BOARD  
COUNTY OF ORANGE**

**NEGATIVE DECLARATION**

*Hudson Valley Federal Credit Union Site Plan  
PB # 06-19  
(S-B-L: 42-1-1.1)*

PLEASE TAKE NOTICE that, according to the provisions of Article 8 of the Environmental Conservation Law and the New York Code of Rules and Regulations Part 617, the Town of New Windsor Planning Board has adopted a Negative Declaration for the project named below. The Planning Board is serving as Lead Agency for this Unlisted Action, for a coordinated review of this Unlisted Action.

Name of Project: Hudson Valley Federal Credit Union Site Plan  
Action Type: Unlisted Action; Coordinated Review  
Location: Town of New Windsor, County of Orange  
Location: NYS Route 32 and Willow Lane  
Tax Map Parcel: Section 42, Block 1, Lot 1.1

**Summary of Action:**

The action involves a request for a commercial site plan approval for a 2.3 acre parcel located in the Town of New Windsor. The parcel is presently vacant.

**Reasons Supporting the Negative Declaration:**

Based on its consideration of the available information, the Planning Board finds there would be no significant adverse environmental effects associated with granting site plan approval for a self storage structure and related improvements. With respect to traffic patterns, traffic safety and emergency access, the proposed lots will have access to NYS Route 32. With respect to water and sewer resources, the lots will be served by public water and sewer. With respect to grading and land disturbance, a stormwater pollution prevention plan has been developed in conjunction with the proposed site plan for the site. The site does not constitute significant habitat area for flora or fauna. The proposed site plan is considered to comply with all currently existing zoning requirements and municipal plans for the Town of New Windsor, and is consistent with the community character. Neither solid waste generation, energy consumption, nor public service demands would be significant or excessive in connection with this proposed site plan. No other potentially significant harmful environmental impacts are identified.

Date of Adoption of Negative Declaration: August 8, 2006  
Agency Address: Town of New Windsor Planning Board  
Town Hall – 555 Union Avenue  
New Windsor, New York 12553  
Tel. (845) 563-4615  
Contact Person: Genaro Argenio, Planning Board Chairman

**RESOLUTION GRANTING SITE PLAN APPROVAL**

*Hudson Valley Federal Credit Union Proposed Branch  
PB # 06-19*

**WHEREAS**, an application was made to the Planning Board of the Town of New Windsor for approval of a site plan by Hudson Valley Federal Credit Union (the "applicant") for a project described as "Hudson Valley Federal Credit Union Site Plan";

**WHEREAS**, the subject site consists of 2.3 acres of land and comprised of one tax map parcel in the Town of New Windsor identified on the tax map as section 42, block 1, and lot 1.1 (SBL 42-1-1.1), located at the intersection on NYS Route 32 and Willow Lane; and

**WHEREAS**, the action involves a request for a site plan approval for a bank branch office; and

**WHEREAS**, the applicant has submitted a fully executed short form Environmental Assessment Form ("EAF") pursuant to the New York State Environmental Quality Review Act ("SEQRA"); and

**WHEREAS**, the Planning Board conducted a coordinated SEQRA review for this project; and

**WHEREAS**, during the course of the Planning Board's review of the Applicant's proposed site plan layout, the Planning Board received and considered correspondence from the public as well as the Town's consultants; and

**WHEREAS**, a duly advertised public hearing on the application for site plan approval was held on February 28, 2007 at which time all those wishing to be heard were given the opportunity to heard; and

**WHEREAS**, on February 28, 2007 the public hearing on the application for site plan approval was closed; and

**WHEREAS**, the application and related materials were submitted to the Orange County Planning Department ("OCDP") for its review pursuant to the requirements of the General Municipal Law § 239-m, and OCDP responded recommending local determination with a comment to reduce parking if possible; and

**WHEREAS**, the Planning Board has carefully considered all of the comments raised by the public, the Board's consultants, and other interested agencies, organizations and officials,

including those presented at numerous meetings of the Board as well as those submitted separately in writing; and

WHEREAS, the applicant has submitted a proposed site plan consisting of 17 sheets, prepared by Chazen Engineering & Land Surveying Co., P.C. dated March 17, 2006 and last revised on September 25, 2006; and

WHEREAS, the Planning Board has heretofore determined that the Proposed Action minimizes or avoids significant environmental impacts and, adopted a Negative Declaration as part of the approval of site plan.

NOW, THEREFORE, the Planning Board finds that the applicant has satisfied the requirements of Town Code § 300-86 and approves the site plan subject to the following terms and conditions:

1. The applicant shall pay all outstanding fees due the Town in connection with this application;
2. The applicant shall make any required revisions to the site plan to the satisfaction of the Planning Board Engineer and Planning Board Attorney;
3. The applicant shall secure all necessary permits, approvals and authorizations required from any other agency, if required;
4. The applicant shall submit proof of satisfaction of the foregoing conditions and submit a plat for signature within six months of the date of this resolution.

Upon motion made by Member Mr. VanLeeuwen, seconded by Member Mr. Scott SINGER, the foregoing resolution was adopted as follows:

Member, Daniel Gallagher		Nay	Abstain	Absent
Member, Howard Brown		Nay	Abstain	Absent
Member, Neil Schlesinger		Nay	Abstain	Absent
Member, Henry Vanleeuwen		Nay	Abstain	Absent
Chairman, Genaro Argenio		Nay	Abstain	Absent

Alternate, Henry Schieble

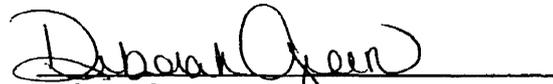
Aye Nay Abstain Absent

Dated: August 8, 2007  
New Windsor, New York



Genaro Argenio, Chairman

Filed in the Office of the Town Clerk on this 9<sup>th</sup> day  
of August, 2007.



Deborah Green  
Town Clerk

DISCUSSION

---

NW\_REALTY\_(06-18)

---

MR. ARGENIO: Discussion, NW Realty.

MR. EDSALL: Very quickly flashing back to the prior discussions with Knox about the availability of solar lighting, New Windsor Realty is a site plan on Route 32 in the town that just so happens, has an ownership relationship with the supplier, one of the suppliers who provides solar lighting and the board has discussed this already and what the applicant is proposing is a field change to install solar lighting at that location in lieu of the conventional lighting. I would characterize this as kind of the pilot site that the town is looking to investigate. Obviously, the lighting levels are different, there's a different condition where you can have two levels of lighting programmed into the fixtures and the patterns are different, I'm not telling you they're identical but I will tell you that they have provided a lighting pattern that provides lighting that they believe is appropriate for their site and I think is reasonable as far as the fixtures are in locations where they should be and I think it's a great place for us to if we really want to see if solar lighting has a future it's a great site plan to try it out because like I said they have this ownership relationship with the supplier so it can move forward.

MR. SCHLESINGER: What's the status?

MR. EDSALL: It's an proved project, it's in construction, it's out on Route 32.

MR. SCHLESINGER: Approved based on conventional lighting.

MR. EDSALL: Yes.

March 26, 2008

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MR. BABCOCK: We're now asking the projects to consider this, this project has comfort and wants to do it so we have, we really want to try to work with them.

MR. EDSALL: It's probably our pilot.

MR. ARGENIO: What do you need need from us?

MR. EDSALL: As long as the board takes no exception to the field change we'll work with them.

MR. ARGENIO: Anybody have a problem?

MR. SCHLESINGER: No.

MR. GALLAGHER: No.

MR. VAN LEEUWEN: I like solar.

MR. ARGENIO: Motion to adjourn?

MR. VAN LEEUWEN: So moved.

MR. SCHLESINGER: Second it.

ROLL CALL

MR. SCHLESINGER        AYE

MR. GALLAGHER        AYE

MR. VAN LEEUWEN      AYE

March 26, 2008

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MR. ARGENIO

AYE

Respectfully Submitted By:

Frances Roth  
Stenographer

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 02/02/2007

PAGE: 1

LISTING OF PLANNING BOARD ACTIONS

STAGE:

STATUS [Open, Withd]  
A [Disap, Appr]

FOR PROJECT NUMBER: 6-18

NAME: NEW WINSOR REALTY GROUP, LLC PA2006-120

APPLICANT: NEW WINDSOR REALTY GROUP, LLC

--DATE--	MEETING-PURPOSE-----	ACTION-TAKEN-----
02/02/2007	PLANS STAMPED	APPROVED
07/26/2006	P.B. APPEARANCE . APPROVED SUBJECT TO MARK EDSALL'S COMMENTS	LA:ND:WVE PH APP CON
05/24/2006	P.B. APPEARANCE . NEED SWPPP - NEED COLOR ELEVATION - FLAG POLE W/FLAG - . CORRECT FIRE INSPECTOR COMMENTS - SEND TO OC PLANNING - DOT . -LEAD AGENCY COORD LETTER	LA LTR; OCP; DOT
03/15/2006	WORK SHOP	SUBMIT

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 02/02/2007

PAGE: 1

LISTING OF PLANNING BOARD FEES  
4% FEE

FOR PROJECT NUMBER: 6-18

NAME: NEW WINSOR REALTY GROUP, LLC PA2006-120  
APPLICANT: NEW WINDSOR REALTY GROUP, LLC

--DATE--	DESCRIPTION-----	TRANS	--AMT-CHG	-AMT-PAID	--BAL-DUE
01/26/2007	2% OF 336,689. INSPEC FEE	CHG	6734.00		
02/02/2007	REC. CK. #1041	PAID		6734.00	
		TOTAL:	6734.00	6734.00	0.00



2-2-07

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 02/02/2007

PAGE: 1

LISTING OF PLANNING BOARD FEES  
ESCROW

FOR PROJECT NUMBER: 6-18

NAME: NEW WINSOR REALTY GROUP, LLC PA2006-120  
APPLICANT: NEW WINDSOR REALTY GROUP, LLC

--DATE--	DESCRIPTION-----	TRANS	--AMT-CHG	-AMT-PAID	--BAL-DUE
05/19/2006	REC. CK. #1027	PAID		750.00	
05/24/2006	P.B. ATTY. FEE	CHG	35.00		
05/24/2006	P.B. MINUTES	CHG	56.00		
07/26/2006	P.B. ATTY FEE	CHG	35.00		
07/26/2006	P.B. MINUTES	CHG	98.00		
01/26/2007	P.B. ENGINEER FEE	CHG	710.50		
02/02/2007	REC. CK. #1040	PAID		184.50	
		TOTAL:	934.50	934.50	0.00

*To close out Escrow*

*Thank You,*

*(2)*

*Jh*

*2/2/07*

**Town of New Windsor**  
555 Union Avenue  
New Windsor, NY 12553  
(845) 563-4611

**RECEIPT**  
**#83-2007**

02/02/2007

New Windsor Realty Group  
87 Taft Ave  
Newburgh, NY 12550

Received \$ 125.00 for Planning Board Fees, on 02/02/2007. Thank you for stopping by the Town Clerk's office.

As always, it is our pleasure to serve you.

**Deborah Green**  
Town Clerk

PB # 06-18

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 02/02/2007

PAGE: 1

LISTING OF PLANNING BOARD **FEES**  
**APPROVAL**

FOR PROJECT NUMBER: 6-18

NAME: NEW WINSOR REALTY GROUP, LLC PA2006-120  
APPLICANT: NEW WINDSOR REALTY GROUP, LLC

--DATE--	DESCRIPTION-----	TRANS	--AMT-CHG	-AMT-PAID	--BAL-DUE
01/26/2007	APPROVAL FEE	CHG	125.00		
02/02/2007	REC. CK. # 1039	PAID		125.00	
		TOTAL:	125.00	125.00	0.00



# Town of New Windsor

555 Union Avenue  
New Windsor, New York 12553  
Telephone: (845) 563-4615  
Fax: (845) 563-4689

## OFFICE OF THE PLANNING BOARD

January 26, 2007

Shaw Engineering  
P.O. Box 2569  
Newburgh, NY 12550

ATTN: GREGORY SHAW, P.E.

SUBJECT: N.W. REALTY GROUP, LLC (P.B. #06-18)

Dear Gregg:

Please find attached printouts of fees due for subject project.

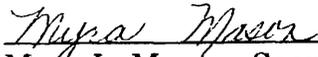
Please contact your client, the applicant, and ask that payment be submitted in separate checks, payable to the Town of New Windsor, as follows:

Check #1 - Approval Fee.....	\$	125.00
Check #2 - Amount over Escrow posted.....	\$	184.50
Check #3 - 2% of \$336,689.00 cost est - inspect fee.....	\$	6,734.00

Upon receipt of these checks, I will have the plans stamped and signed approved.

If you have any questions in this regard, please contact my office.

Very truly yours,

  
Myra L. Mason, Secretary To The  
NEW WINDSOR PLANNING BOARD

MLM

**FAXED**

1-26-07

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 01/26/2007

PAGE: 1

LISTING OF PLANNING BOARD FEES  
APPROVAL

FOR PROJECT NUMBER: 6-18

NAME: NEW WINSOR REALTY GROUP, LLC PA2006-120  
APPLICANT: NEW WINDSOR REALTY GROUP, LLC

--DATE--	DESCRIPTION-----	TRANS	--AMT-CHG	-AMT-PAID	--BAL-DUE
01/26/2007	APPROVAL FEE	CHG	125.00		
		TOTAL:	125.00	0.00	125.00

*Check #1*

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 01/26/2007

PAGE: 1

LISTING OF PLANNING BOARD FEES  
ESCROW

FOR PROJECT NUMBER: 6-18

NAME: NEW WINSOR REALTY GROUP, LLC PA2006-120

APPLICANT: NEW WINDSOR REALTY GROUP, LLC

--DATE--	DESCRIPTION-----	TRANS	--AMT-CHG	-AMT-PAID	--BAL-DUE
05/19/2006	REC. CK. #1027	PAID		750.00	
05/24/2006	P.B. ATTY. FEE	CHG	35.00		
05/24/2006	P.B. MINUTES	CHG	56.00		
07/26/2006	P.B. ATTY FEE	CHG	35.00		
07/26/2006	P.B. MINUTES	CHG	98.00		
01/26/2007	P.B. ENGINEER FEE	CHG	710.50		
		TOTAL:	934.50	750.00	184.50

Check #2

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 01/26/2007

PAGE: 1

LISTING OF PLANNING BOARD FEES  
4% FEE

FOR PROJECT NUMBER: 6-18

NAME: NEW WINSOR REALTY GROUP, LLC PA2006-120  
APPLICANT: NEW WINDSOR REALTY GROUP, LLC

--DATE--	DESCRIPTION-----	TRANS	--AMT-CHG	-AMT-PAID	--BAL-DUE
01/26/2007	2% OF 336,689. INSPEC FEE	CHG	6734.00		
			-----	-----	-----
		TOTAL:	6734.00	0.00	6734.00

*check #3*

# Shaw Engineering

Consulting Engineers

744 Broadway  
P.O. Box 2569  
Newburgh, New York 12550  
(845) 561-3695

January 30, 2007

Chairman Genaro Argenio and  
Members of the Planning Board  
**TOWN OF NEW WINDSOR**  
555 Union Avenue  
New Windsor, New York 12553

Re: New Retail/Office Building For New Windsor Realty Group, LLC  
Windsor Highway

Gentlemen:

Enclosed please find the following checks to closeout your project file:

\$ 125.00	Final Approval Fee
\$ 184.50	Escrow Fee
\$ 6,734.00	Inspection Fee

Please call when the plans are available to be picked up.

Very truly yours,

**SHAW ENGINEERING**



Gregory J. Shaw, P.E.  
Principal

GJS:mmv  
Enclosure

744 Broadway  
P.O. Box 2569  
Newburgh, New York 12550  
(845) 561-3695

November 30, 2006

Chairman Genaro Argenio and  
Members of the Planning Board  
**TOWN OF NEW WINDSOR**  
555 Union Avenue  
New Windsor, New York 12553

Re: New Retail / Office Building for New Windsor Realty Group, LLC  
Windsor Highway

Gentlemen:

We have presented below for your consideration our Construction Estimate for the site improvements for New Windsor Realty Group, LLC. Our Estimate is as follows:

## CONSTRUCTION ESTIMATE

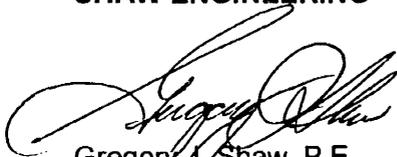
<u>ITEM</u>	<u>QUANTITY</u>	<u>UNIT PRICE</u>	<u>AMOUNT</u>
Erosion Control	3.65 Ac	\$ 1,800	\$ 6,570
Catch Basin	22	\$ 2,700	\$ 59,400
15" Storm Water Pipe	736 L.F.	\$ 30	\$ 22,080
18" Storm Water Pipe	763 L.F.	\$ 40	\$ 30,520
24" Storm Water Pipe	387 L.F.	\$ 40	\$ 15,480
Paving & Base	6,483 S.Y.	\$ 12	\$ 77,796
Parking Space Striping	2,521 L.F.	\$ .50	\$ 1,261
Handicapped Sign & Striping	4	\$ 200	\$ 800
Concrete Curbing	2,440 L.F.	\$ 18	\$ 43,920
Concrete Sidewalk	493 S.Y.	\$ 38	\$ 18,734
Flagpole	1	\$ 500	\$ 500
Masonry Retaining Wall	268 L.F.	\$ 40	\$ 10,720
Split Rail Fence	620 L.F.	\$ 8	\$ 4,960
Pole With Single Luminaire	6	\$ 1,500	\$ 9,000
Pole With Single Luminaire	2	\$ 2,000	\$ 4,000

<u>ITEM</u>	<u>QUANTITY</u>	<u>UNIT PRICE</u>	<u>AMOUNT</u>
6" Water Pipe	105 L.F.	\$ 40	\$ 4,200
Hydrants	1	\$ 2,700	\$ 2,700
Landscaping Trees	46	\$ 180	\$ 8,280
Landscaping Shrubs	168	\$ 25	\$ 4,200
Topsoil & Seeding	9,254 S.Y.	\$ 1.25	\$ 11,568
Total			\$ 336,689

Should this Estimate be acceptable, my client will pay the 2% inspection fee of \$ 6,734.00

Respectfully submitted,

**SHAW ENGINEERING**



Gregory J. Shaw, P.E.  
Principal

GJS:mmv

Cc: Samir Patel, New Windsor Realty Group, LLC

JOB: 87-56

NEW WINDSOR PLANNING BOARD (Chargeable to Applicant)

CLIENT: NEWWIN - TOWN OF NEW WINDSO

TASK: 6- 18

FOR ALL WORK ON FILE:

TASK-NO	REC	--DATE--	TRAN	EMPL	ACT DESCRIPTION-----	RATE	HRS.	-----DOLLARS-----			
								TIME	EXP.	BILLED	BALANCE
6-18	295798	03/15/06	TIME	MJE	WS N.W.REALTY SITE PLAN	115.00	0.40	46.00			
6-18	308532	05/22/06	TIME	MJE	MR NW REALTY	115.00	0.80	92.00			
6-18	308538	05/23/06	TIME	MJE	PM MFG GAGRM: COMMENTS	115.00	0.30	34.50			
6-18	308543	05/23/06	TIME	MJE	AA OODP REFERRAL	115.00	0.40	46.00			
6-18	310458	06/08/06	TIME	MJE	MC L/A LETTER & EAC	115.00	0.40	46.00			
6-18	310953	06/12/06	TIME	MM	MR NW REALTY SWPPP	99.00	1.00	99.00			
								-----			
6-18	312947	06/27/06			BILL 06-1524			363.50			
										-317.50	
								-----			
6-18	316534	07/19/06	TIME	MJE	MR NW REALTY	115.00	0.70	80.50			
6-18	316538	07/20/06	TIME	MJE	MR NW REALTY	115.00	0.30	34.50			
6-18	316540	07/20/06	TIME	MJE	MC DOT REF/MM NW REALTY	115.00	0.40	46.00			
6-18	316956	07/26/06	TIME	MJE	MM NW Rlty COND S/P APP	115.00	0.10	11.50			
6-18	324892	09/07/06	TIME	MJE	MC NW REALTY W/GJS	115.00	0.20	23.00			
								-----			
6-18	325044	09/13/06			BILL 06-2321			195.50			
										-218.50	
								-----			
6-18	332857	10/24/06	TIME	MJE	MC SANDLER:WORK START	115.00	0.30	34.50			
6-18	332863	10/24/06	TIME	MJE	PM NW REALTY EARLY STAR	115.00	0.30	34.50			
								-----			
6-18	332166	10/25/06			BILL 06-2640			69.00			
										-23.00	
								-----			
6-18	336689	11/15/06	TIME	MJE	MC SIBY DOT-NW REALTY	115.00	0.20	23.00			
								-----			
6-18	337844	11/21/06			BILL 06-2933			23.00			
										-92.00	
								-----			
6-18	346978	01/26/07	TIME	MJE	MC Closeout	119.00	0.50	59.50			
								-----			
TASK TOTAL								710.50		-651.00	59.50
									0.00		
								-----			
GRAND TOTAL								710.50		-651.00	59.50
									0.00		

**STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION  
HIGHWAY WORK PERMIT**

Permit Fee: \$ 550.00  
 Insurance Fee: \$ 175.00  
 Total Received: \$ 725.00  
 Check or M.O. No.: 1033/1034

Permit No.: **08-06-0752**  
 Project Identification No.: 06/30/2007  
 Expiration Date: 9033  
 SH No.: 0.00  
 Deposit Rec. for \$  
 Check or M.O. No.: / /  
 Dated: 11000.00  
 Chargeable to Bond No.: 70177121  
 or Undertaking on File: (\$ 5500.00)

\*Permittee: NEW WINDSOR REALTY GROUP LLC  
 87 TAFT AVE  
 NEWBURGH, NY 12550  
 att: RETURN TO:

Estimated Cost of Work Performed in the State Right-of-Way \$  
 Chargeable to Bond No. or Undertaking on File:

Billing Address: (complete if different from above)  
 SHAW ENGINEERING  
 744 BROADWAY  
 NEWBURGH, NY 12550

Return of Deposit Made Payable to: (complete if different from Permittee)

Under the provisions of the Highway Law or Vehicle & Traffic Law, permission is hereby granted to the permittee to:  
 CONSTRUCTION OF A 30 FOOT WIDE HIGHWAY ENTRANCE. ALSO, THE INSTALLATION OF TWO CATCH BASINS AND 13 L.F. OF 18 INCH  
 STROM DRAIN PIPE. ALL ATTACHMENTS APPLY.

THE PERMITTEE IS RESPONSIBLE FOR THE MAINTENANCE AND PROTECTION OF TRAFFIC. ANYONE WORKING IN THE STATE  
 HIGHWAY RIGHT-OF-WAY IS REQUIRED TO WEAR HIGH VISIBILITY APPAREL (ORANGE/YELLOW) AND A HARD HAT.

County - ORANGE Municipality - NEW WINDSOR Route # - 32

as set forth and represented in the attached application at the particular location or area, or over the routes as stated therein, if required; and  
 pursuant to the conditions and regulations general or special, and methods of performing work, if any; all of which are set forth in the application  
 and form of this permit.

Dated at: POUGHKEEPSIE, N.Y.  
 Date Signed: 12/21/2006

Commissioner of Transportation

By R.E. DILLMANN  
*R.E. Dillmann/CR*

**IMPORTANT**

THIS PERMIT, WITH APPLICATION AND DRAWING (OR COPIES THEREOF) ATTACHED SHALL BE PLACED IN THE HANDS OF THE CONTRACTOR BEFORE ANY  
 WORK BEGINS. THE HIGHWAY WORK PERMIT SHALL BE AVAILABLE AT THE SITE DURING CONSTRUCTION.  
 BEFORE WORK IS STARTED AND UPON ITS COMPLETION, THE PERMITTEE ABSOLUTELY MUST NOTIFY THE RESIDENT ENGINEER,  
 RICH GAUPMAN, P.E. 112 DICKSON STREET  
 (845)562-4020 NEWBURGH, NEW YORK 12550  
 UPON COMPLETION OF WORK AUTHORIZED, THE FOLLOWING WILL BE COMPLETED, SIGNED BY THE PERMITTEE AND DELIVERED TO THE RESIDENT ENGINEER.

Work authorized by this permit has been completed. Refund of deposit or return/release of bond is requested.

DATE PERMITTEE AUTHORIZED AGENT (If Any)

Work authorized by this permit has been satisfactorily completed and is accepted. Reverse side of this form must be completed.

- Refund of Deposit is authorized
- Return of Bond is authorized
- Amount charged against Bond may be released
- Retain Bond for future permits
- Forfeit of Guarantee Deposit is authorized
- Other

Mailing address of refund has been verified.  
If different, list new address below.

---

---

---

DATE

RESIDENT ENGINEER

The Regional Office will forward this form to the Main Office with the appropriate box checked.

- Permit closed
- Bond returned/released
- Refund of Guarantee Deposit on this permit is authorized
- Forfeit Guarantee Deposit to NYSDOT
- Other

DATE

REGIONAL TRAFFIC ENGINEER

The issuing authority reserves the right to suspend or revoke this permit at its discretion without a hearing or the necessity of showing cause, either before or during the operations authorized.

The Permittee will cause an approved copy of the application to be and remain attached hereto until all work under the permit is satisfactorily completed, in accordance with the terms of the attached application. All damaged or disturbed areas resulting from work performed pursuant to this permit will be repaired to the satisfaction of the Department of Transportation.

**\* Upon completion of the work within the state highway right-of-way authorized by the work permit, the person, firm, corporation, municipality, or state department or agency, and his or its successors in interest, shall be responsible for the maintenance and repair of such work or portion of such work as set forth within the terms and conditions of the work permit.**



# Town of New Windsor

555 Union Avenue  
New Windsor, New York 12553  
Telephone: (845) 563-4615  
Fax: (845) 563-4693

## OFFICE OF THE PLANNING BOARD

8 June 2006

SUBJECT: NEW WINDSOR REALTY GROUP LLC SITE PLAN  
TOWN OF NEW WINDSOR, ORANGE COUNTY, NEW YORK  
(NWPB REF. NO. 06-18)

To all Involved Agencies:

The Town of New Windsor Planning Board has had placed before it an application for Site Plan approval for an office and retail building, located on Windsor Highway (NYS Route 32) within the Town. The project involves, in general, the construction of a 21,000 s.f. building with associated site improvements. It is the opinion of the Town of New Windsor Planning Board that the action is an Unlisted Action under SEQRA. This letter is written as a request for Lead Agency Coordination as required under Part 617 of the Environmental Conservation Law.

A letter of response with regard to your interest in the position of Lead Agency, as defined by Part 617, Title 6 of the Environmental Conservation Law and the SEQRA review process, sent to the Planning Board at the above address, attention of Mark J. Edsall, P.E., Planning Board Engineer (contact person), would be most appreciated. Should no other involved agency desire the Lead Agency position; it is the desire of the Town of New Windsor Planning Board to assume such role. Should the Planning Board fail to receive a written response requesting Lead Agency within thirty (30) days, it will be understood that you do not have an interest in the Lead Agency position. Thank you for your attention to this matter. Should you have any questions regarding this notice, please feel free to contact the undersigned at the above number or (845) 563-4615.

Very truly yours,

*Mark J. Edsall, P.E., P.P.*

Mark J. Edsall, P.E., P.P.  
Planning Board Engineer

New York State Parks, Recreation and Historic Preservation  
NYS Department of Transportation, Poughkeepsie  
George A. Green, Town of New Windsor Supervisor (w/o encl)  
Town of New Windsor Town Clerk (w/o encl)  
Orange County Department of Planning  
Myra Mason, Planning Board Secretary  
Planning Board Attorney (w/o encl)  
Applicant (w/o encl)

NW06-18-LA Coord Letter 06-08-06.doc

*Sent 6/15/06*

May 24, 2006

5

REGULAR ITEMS:

NEW\_WINDSOR\_REALTY\_GROUP\_-\_SITE\_PLAN\_(06-18)

MR. ARGENIO: New Windsor Realty Group site plan.

Mr. Gregory Shaw of Shaw Engineering appeared before the board for this proposal.

MR. ARGENIO: This application proposes a 21,000 square foot retail office building on the 3.6 plus acre property on the east side of Route 32. The plan was reviewed on a concept basis only. For those of you who don't know this is right next to Guardian, Mr. Shaw, is that correct?

MR. SHAW: Yes, it is, it's between the storage facility and Duffer's Hideaway.

MR. ARGENIO: Mr. Shaw, the floor's yours, this is the first time we're seeing this folks, go ahead, Greg.

MR. SCHLESINGER: Is there anything there now? Is there a structure there now?

MR. VAN LEEUWEN: I think there's a house there.

MR. SHAW: Correct, there's a house there.

MR. ARGENIO: It's buried in the weeds.

MR. VAN LEEUWEN: About 300 feet, 400 feet off the road.

MR. SHAW: Thank you, Mr. Chairman. As you mentioned, we're proposing a 21,000 square foot building on a 3.65 acre parcel of land on the east side of Windsor Highway. As I just mentioned, the parcel is situated between Guardian Self Storage and Duffer's Hideaway, it's across the street from St. Joseph's School. The

May 24, 2006

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parcel is situated in the NC zone for the first 200 feet of property from Windsor Highway and the balance of the property is C zone. We're providing a dual parking area, a parking area in the front and then as you drive to the rear of the property to the lower level you would access the property from the rear and again that parking would be associated with that level. I present before you a rough architectural elevation of the building that's the view that you're going to see from Windsor Highway from the lower level two elevations would be exposed but from Windsor Highway there would just be one level exposed. With respect to the parking for the project we're obligated to provide one space for everyone 150 square feet of area we're required to provide 140 spaces and that's exactly the number that we're providing on the site 140 spaces. With respect to the utilities for the project we'll be tying into the Town's sewer system on the opposite side of the street, we'll have to pump to it to an existing force main which presently services the one residence located in the center of the property. We would also have to cross Windsor Highway with a water main because with the size of the building we're going to have to sprinkler it so we'll be doing that also.

MR. ARGENIO: Greg, the force main are you going to be able to tie into what's there or you're not going to do an open cut on 32?

MR. SHAW: No, proposing to utilize the force main presently there. The water main hopefully will be a bullet similar to what they did for Guardian, we're hoping that that works for us also as opposed to you're not going to get an open cut that's for sure and if it has to be a jacking operation that's just extremely expensive so hopefully it's just what they call a bullet underneath the highway and that will be the end of it. And finally the storm drainage system we're disturbing over one acre so therefore we have to comply with the new DEC storm water discharge regulations,

you'll have an on-site collection system which will bring the storm water to the rear of the property, there will be a diversion manhole adjacent to the sand filter which will take the water quality volume, distribute it into the sand fill to where it will be treated, filtered and the outflow from that is into the storm water detention basin, on flows greater than that of the water quality volume which I believe is 1.2 inches of rain, not only will you be having the storm water filtered but the excess storm water above that volume will go directly into the storm water detention basin and that basin has been sized for a storm that has a potential frequency of once every one hundred years, finally incorporated into the basin is a rip-rap emergency spillway. So, Mr. Chairman, this is my first presentation of this project before the board cause we're on a county highway this is going to have to be referred to the Orange County Department of Planning and what I would ask is that tonight is that you also circulate for lead agency and maybe that's the most amount of action that we can take tonight other than discussing it in a little detail.

MR. ARGENIO: You're very attentive typically to this board's needs so I'm going to dispense with comments along the lines of make sure the split rail fence has chain link on it, dispense with the garbage enclosure being in kind with the building, obviously, make sure it's high enough, Brendan, I'm going to ask you to comment just a bit on item number 2 relative to the parking on the site, can you just shed a little light for the benefit of the board?

MR. MASTERSON: In discussions with Mark when we looked all the plan together he noted that all the parking requirements are being met, however, being that the building is going to stand alone as two separate occupancies on the two levels there's an imbalance between the two lots, Mark is suggesting that the parking be better balanced or perhaps a stairwell

connect the two levels to afford access as need be.

MR. ARGENIO: How do you know there's not a stairwell now inside in the architectural plans?

MR. MASTERSON: We have not reviewed any architectural plans.

MR. ARGENIO: Can you check on that?

MR. SHAW: That's a very good point, you know, we can put a walkway in there, the reason I didn't indicate it on the plans is cause the last time the discussion I had with the architect he was proposing to put an elevator in the building, I can't guarantee that before the board but what I can tell you if there's not going to be an elevator provided that we'll have to interconnect the two parking areas and unfortunately, there's no way to redesign the site to take more parking from here, put into here.

MR. ARGENIO: You do understand the concern and it will be some kind of internal method to go up and down or external method to go up and down that doesn't involve walking around that whole loop where there's no pedestrian access anyway.

MR. SHAW: Correct.

MR. ARGENIO: Do you have any problem on the north side of the site with the setback?

MR. SHAW: No, we have a 40 yard setback in an NC zone.

MR. ARGENIO: So you're okay with that?

MR. SHAW: Side yard one is 15 feet.

MR. VAN LEEUWEN: That house is going to go?

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MR. SHAW: Yes.

MR. VAN LEEUWEN: Who is the owner?

MR. SHAW: New Windsor Realty LLC.

MR. ARGENIO: I'm going to, I'm quite sure Greg and I think that you have a flavor for this too because you've been here quite a few times since the first of the year, Joe Minuta is going to ask for some type of elevation for the front of the building.

MR. SHAW: We have an architect on board, that won't be a problem.

MR. ARGENIO: If you can just keep that in mind I don't like it when he chases an applicant late in the game because I think it's unfair but certainly we're early enough where I'm sure he's going to be looking to see, I'm sure he's going to be putting his eye to it as well.

MR. SHAW: That's fine.

MR. VAN LEEUWEN: How about a flag pole?

MR. SHAW: With a flag?

MR. ARGENIO: As Mike Lucas used to say.

MR. VAN LEEUWEN: He took it from me, that was my pet peeve for years and years.

MR. SHAW: Actually, in the middle of one of these planters would be fine.

MR. SCHLESINGER: I have a question, Greg, actually two questions, the easy one is see where you have two lights, why do you have that abutment into the parking?

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MR. SHAW: Just to break up the parking lot a little bit and it's always--

MR. SCHLESINGER: It's a pain in the neck when you plow.

MR. SHAW: Some boards like to have the islands for plantings, some people like to have the plantings to break up the parking to protect the light fixtures and the owner wants absolutely nothing so he can go in with a snow plow and go right in there.

MR. ARGENIO: I like the island for both of those reasons.

MR. VAN LEEUWEN: I have no problem with the island.

MR. SCHLESINGER: If I'm plowing, I hate those. My other question is I see the dumpster in the back of the building and that--

MR. VAN LEEUWEN: Back of the parking lot.

MR. SCHLESINGER: Back of the parking lot and what access do the people in the front of the building have to the dumpster?

MR. SHAW: There's another one for the upper level.

MR. SCHLESINGER: Okay.

MR. ARGENIO: Let's, as I said, this is the first time we've seen this, we certainly will see it quite a few more times, I'm going to try to get a few procedural things done, item number 3, I'll certainly, I'll accept a motion to authorize the issuance of a lead agency coordination letter.

MR. VAN LEEUWEN: So moved.

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MR. SCHLESINGER: Second it.

MR. ARGENIO: Motion has been made and seconded that the New Windsor Planning Board issue a lead agency coordination letter for this project to begin the SEQRA review process. No further discussion, roll call.

ROLL CALL

MR. SCHLESINGER     AYE  
MR. GALLAGHER     AYE  
MR. VAN LEEUWEN    AYE  
MR. ARGENIO        AYE

MR. ARGENIO: This has to be referred to the County, Greg, I'm sure you're aware of that.

MR. SHAW: Yes.

MR. ARGENIO: Myra, you prepared the letter and that's--

MS. MASON: Yes.

MR. ARGENIO: We don't need that in the form of a motion?

MR. KRIEGER: No.

MR. ARGENIO: You have disapproval from the fire department.

MR. SHAW: Yes, I'll take care of that.

MR. ARGENIO: Certainly we need a nod from them and Myra has also prepared a letter of transmittal to the DOT cause they're certainly going to review this project. Greg, other than that, I don't know how much further we can go.

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MR. SHAW: I don't think you can.

MR. ARGENIO: It's a high visibility place and be, just be, keep this in mind, tell your applicants that the Guardian folks, was that one of yours?

MR. SHAW: No.

MR. ARGENIO: They did a fine job on 32, in my opinion, a fine job, we're looking for something similar.

MR. SCHLESINGER: There was a problem with Guardian with the retaining wall on the south side of the building, I don't know whether you have an issue on that?

MR. ARGENIO: They cleaned it up nice.

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NEW WINDSOR REALTY GROUP - SITE PLAN WINDSOR HIGHWAY

MR. ARGENIO: Next is New Windsor Realty Group site plan. Again, Greg Shaw. Let me just read this in, this application proposes a 21,000 square foot realty and office building on a 3.6 plus acre property on the east side of Route 32. The plan was previously reviewed at the 24 May 2006 Planning Board meeting.

MR. SHAW: This has been before you once for your review. It is located in both an NC Zone and also a C zone. We are proposing a 21,000 square foot office retail building, about 21,000 square feet. It will be spread over two floors so you'll have a footprint of 10,500 square feet for the building. Along with that we are obligated to provide, according to your zoning order, 140 spaces. And we have provided 140 spaces. You notice the way the parking in the front of the building, on the side of the building and to the rear of the building.

The first time we came before your Board there was a couple of issues that came up and, you know, rather substantial issues. One was the fact that Mark had an issue that the parking wasn't balanced. And he wanted a set of stairs, some means to connect the lower parking to the upper. We have done that and that has been incorporated onto the plans.

The second issue was with the fire inspector who had some comments. Particularly he thought that the original turn through here was too much of a hairpin. We've gone back in, we've redesigned the entrance way to the lower level and I believe there should be a letter in the file stating that his department now gives approval to this project.

And finally with respect to the storm drainage, we have placed a sand filter and a storm water detention pond in the rear of the property. That pond and sand filter resulted in a stormwater plus prevention plan which was submitted to this Board. You also should have a letter in your file stating that that was found to be acceptable and that was done by Mr. Brendon Masterson of McGoey, Hauser and Edsall's office. Very simply it's a two story 10,500 square foot building with one entrance on Windsor Highway, directly across the street from St. Joseph's School. To the north of us is Duffer's Hideaway. To the south of us is the storage building. And will be connecting to the Town's water and sewer systems. And that is it, Mr. Chairman.

MR. ARGENIO: Mark, the SWPPP is good?

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MR. EDSALL: Yes.

MR. ARGENIO: Who reviewed it?

MR. EDSALL: Brendon from our office. There were some revisions along the way, but Greg and Brendon worked them out. It's all set.

MR. ARGENIO: I'm going to read this note for the benefit of the members, this project was referred to the Orange County Planning Department on May 24th. We received a response letter dated June 23rd. And the comment regarding access management to the state highway. The Board may wish to further discuss this comment from the OCDP. Review and consideration should be given to issues of transportation access management regarding the entrance onto State Route 32. A function of access management is to provide access to land development while preserving the flow of traffic on the surrounding road network in terms of safety, capacity and speed. The benefits of access management can promote improved safety, increased capacity, shorter travel times and pedestrian/bicycle/transit friendly communities. Methods to achieving this would be to avoid numerous and uncoordinated curb cuts, require interlot connections and circulation, promote shared access. Which we're not big fans of in New Windsor, that was me, that's not out of the letter, Roberta. The site plan indicates that there will only be a single access point to the office retail complex, yet adjacent to the parcel is an already existing highway entrance with an already existing curb cut. The Board should try to incorporate some access management design principles into this application.

I'm going to tell you how I feel about that.

It's somebody else's driveway. This is a lot, it's a sizeable lot on Route 32. And you're entitled to access on the property. That's how I feel about that. You guys can disagree with me or not, that's how I feel about it.

MR. VanLEEUWEN: You happen to be right.

MR. ARGENIO: Now, it's different if we're in an area like Vails Gate where the lots are on top of each other and history has left us with a bit of a mess to contend with, as we all know, on every application that we get. But I think this is different. I think this is different and that's how I feel about that. Lead agency coordination letter was issued on June 8th. I'll accept a motion --

MR. VanLEEUWEN: So moved.

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MR. ARGENIO: -- that we be lead agency.

MR. GALLAGHER: Second.

MR. ARGENIO: Motion made and seconded that Town of New Windsor Planning Board declare itself lead agency for the New Windsor Realty Group LLC site plan. If there's no further discussion from the Board members I'll have a roll call.

ROLL CALL

MR. GALLAGHER: Aye.

MR. SCHLESINGER: Aye.

MR. MINUTA: Aye.

MR. VanLEEUEWEN: Aye.

MR. ARGENIO: Aye.

MR. ARGENIO: I'd like to hear from my contemporaries on the issues. I just discussed the access. Neil?

MR. SCHLESINGER: I agree.

MR. ARGENIO: Danny, how do you feel about that?

MR. GALLAGHER: Absolutely yes.

MR. ARGENIO: Joe?

MR. MINUTA: With regard to the access?

MR. ARGENIO: What I just said.

MR. MINUTA: I concur.

MR. ARGENIO: Hank, how do you feel?

MR. SCHEIBLE: I go over to you, yes.

MR. VanLEEUEWEN: What he says is good enough for me.

MR. ARGENIO: Both Henrys agree.

MR. EDSALL: Mr. Chairman, it might be worthwhile also to have the record reflect that even if this Board felt that the plan should have common access you have no jurisdiction to approve or disapprove access to a state highway.

MR. ARGENIO: Correct.

MR. EDSALL: In all fairness, the County Planning Department should contact the DOT and make their suggestions directly.

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MR. ARGENIO: That's correct.

MR. VanLEEUEWEN: I said that before, I won't say it again, who actually owns this?

MR. SHAW: A gentleman by the name of Samire Patel (phonetic) who has a business on Taft Avenue in the Town of Newburgh. A very thriving business, SK Enterprises.

MR. VanLEEUEWEN: What does he do?

MR. SHAW: Marshal, maybe you could inject a little bit.

MR. ROSENBLOOM: They import and distribute products through QVC and Home Shopping Channel.

MR. ARGENIO: Does anybody else have any issues with this application that they want to --

MR. SCHLESINGER: I have a question. Could you just take the elevation plan out? Do you see in the front parking lot where you have two, two lights on a concrete?

MR. SHAW: It's on an island. Grass island.

MR. SCHLESINGER: In your professional opinion what is the advantages of having that island?

MR. SHAW: One, it provides an opportunity to put some landscaping in. Two, it provides a source of protection for the light. And on the negative side it's a pain in the neck to snowplow.

MR. SCHLESINGER: The first two reasons I understand what you're saying but we don't, I don't think we

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have any, any plants there. And number two, protection for the light. It could work both ways.

MR. ARGENIO: Where are you, Neil, on the plan?

MR. SHAW: Right here I believe you're referring to, aren't you, Neil?

MR. SCHLESINGER: Exactly right there. And also it could deter water flow?

MR. SHAW: Determine what?

MR. SCHLESINGER: Could deter water flow as well?

MR. SHAW: I understand.

MR. SCHLESINGER: Drainage. It takes away two parking spaces, maybe two parking spaces also. From a redesign point of view, I mean it's a significant difference.

MR. SHAW: Some planning boards that I deal with in the towns, they want a certain percentage of the parking lot to have islands for landscaping just to break it up. And in honesty that's why I put them there. They could hopefully plant something and hopefully I'm not speaking out of turn.

MR. EDSALL: You have two ornamental trees.

MR. SHAW: Just brings up the front elevation a little bit.

MR. MINUTA: A couple of things with the islands. With regard to what you're saying yes, there's pros and cons to that. What it does allow, as he said, is additional landscaping within the area. We have the light poles at those locations that's going to provide some buffer from the cars. So from that perspective I think they're, and he's got catch basins already located, I think that's probably appropriate.

MR. SHAW: There won't be a problem with grading or drainage.

MR. MINUTA: With regard to site accessibility this is a brand new building?

MR. SHAW: Yes.

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MR. MINUTA: We're going to have an elevator?

MR. ROSENBLOOM: Noncommunicating levels. The levels are noncommunicating.

MR. MINUTA: So if someone who is entering from the upper level needs to go to the back gets there how, they have to drive around the site?

MR. ROSENBLOOM: They drive around or walk down the stairs.

MR. MINUTA: A wheelchair is going to go down the stairs?

MR. ROSENBLOOM: No, not be going, it would be a separate tenancy. They would probably drive around or --

MR. BABCOCK: Basically what he's saying, everybody goes outside and goes around. There's no stairs, interior stairs.

MR. ROSENBLOOM: Accept for a secondary exit.

MR. ARGENIO: No intermingling of the businesses top to bottom at all. Two one level buildings on top of each other.

MR. MINUTA: If a disabled person parks up top, they have to drive all the way around or if they come out, if they're in the building on the upper level they have to get back in their car, drive all the way around, get back out of their car and come to the second level?

MR. VanLEEuwEN: They have to read the signs where they have to be. They have to read the sign where they have to be, either lower level or upper level.

MR. MINUTA: Typically in a situation like this I would see a ramp scenario and/or a lift for the exterior. But I'll leave that to you guys with regard to the code issues and how that's going to be applicable.

MR. ARGENIO: Mike Babcock, can you give us some --

MR. BABCOCK: Well, I haven't really reviewed it but my understanding if everybody goes outside and gets in their car and drives around there's no issue.

MR. ARGENIO: There is no requirement.

MR. BABCOCK: If I can get down there without

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driving in a handicapped person would have to then.

MR. MINUTA: We have steps there so it does become an issue.

MR. BABCOCK: I don't know if that step is a secondary, that's what he's saying. It's a secondary. I'd have to look at it.

MR. MINUTA: Okay. Let's just look into that a little further. The second item that I have here the, I think the buildings are nice design, you know, I think it flows with the existing Guardian building that's there. I think that's a real good setup for the rest of the, for the rest of the neighborhood there. What I do have concern with is the view shed on that area. There's really nice views from that location and the Guardian Self Storage, I wasn't part of this Board when that was approved, but the two story building there does remove the view from the Valley and the river at that location. I'd like that to be at least somewhat addressed, however we deem that permissible.

MR. SHAW: Joe, just on that thought, I mean when I ride by the site it's wooded, okay. And as I look to the east I really don't see anything about trees. It's not excessively high, but there are trees there. I don't see the view that you see.

With respect to the two story building there's only going to be one story exposed from Windsor Highway, okay? When you get to the lower level you will be looking at both the upper and the lower story. You'll see two stories exposed. It's not like we're going 40 feet in the air. As you're riding up Windsor Highway one story with a roof.

MR. VanLEEUEWEN: No view to the river from that point. I pass it every day.

MR. SHAW: Especially with the site being wooded.

MR. VanLEEUEWEN: No view from the river there.

MR. SCHLESINGER: I don't think it's relevant. It's one story. You can't put up a one story building?

MR. ARGENIO: The other thing here --

MR. VanLEEUEWEN: It's not 60, 70 feet high.

MR. ARGENIO: The other thing is across the street the elevation of the lot is substantially higher.

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MR. SHAW: You have the long driveway.

MR. ARGENIO: Substantially higher than what the road is. Joe, I think you have a very good point and it's a good thought for the Guardian building, but I think that the lot across the street is a lot higher. I don't think that this is going to obstruct, that that's something that we should keep in mind because it became a very germane issue with the RPA folks up on the Union Avenue hill.

MR. MINUTA: Absolutely. Can you orient me to the building that's directly across the street from this site?

MR. VanLEEuwEN: I will tell what you it is, it's the rental place.

MR. ARGENIO: St. Joseph's School.

MR. SHAW: I believe you come up the driveway and then you bear to the right a little bit which will be to the north and that's where the building would be. On the northerly part of the property.

MR. VanLEEuwEN: This building sets down. The land runs like this down, downward.

MR. MINUTA: I drive by it every day, I can't get it in my head. This evening I will take a ride by and take a look at it myself.

MR. ARGENIO: It also should be noted it's at 35 feet and 40 is what's required. But that's a point that we need to keep in mind along that corridor. I don't think it's, I don't think it should be, I don't think it should be dismissed. Does anybody have anything else?

MR. VanLEEuwEN: No.

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MR. ARGENIO: I'd like to move this forward. And it seems to me that we can take the same position with this even to a lesser extent than we did with the DOT on the other project because this is a single lot and the applicant should be well advised that he's going to need to get a DOT permit, Greg, to work in the right-of-way. Obviously I'm sure you're aware of that. Let me just say it for the benefit of the minutes though. And you're going to be subject to their requirements in the right-of-way. Andy, do you have anything to add to that?

MR. KRIEGE: No, you make it subject to the same as did you the last.

MR. ARGENIO: Okay, if nobody has anything further I'd accept a motion that we grant them final.

MR. VanLEEUWEN: So moved.

MR. GALLAGHER: Second.

MR. EDSALL: Did you, Mr. Chairman, take care of some of the procedural stuff?

MR. BABCOCK: Let me just ask you, have you identified the location of the hydrant and fire department connection?

MR. SHAW: Yes, yes.

MR. BABCOCK: You have?

MR. SHAW: That was some of the changes.

MR. EDSALL: They are on the plans.

MR. BABCOCK: They are?

MR. EDSALL: Yes.

MR. BABCOCK: Okay. So this sheet hasn't --

MR. ARGENIO: It's just for the benefit of the public. Sometimes the letter from the fire inspector doesn't come out of his office in a timely fashion as I would like and we don't have the benefit of that. Greg, you're telling me you have spoken to him, addressed these issues. This approval is obviously subject to.

MR. SHAW: Absolutely, I have no problems with that.

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MR. ARGENIO: A motion has been made and seconded that we grant final approval to the New Windsor Realty Group LLC site plan on Route --

MR. EDSALL: Mr. Chairman, have you taken care of the public hearing issue and the neg dec?

MR. ARGENIO: We have the final public hearing again.

MR. EDSALL: Just the public hearing on the site plan, if one is necessary.

MR. ARGENIO: I'm sorry, this is procedural.

MR. VanLEEuwEN: I will make a motion to --

MR. ARGENIO: Wait a second, let me read this. I think I'm missing something here. I don't see neg dec here. I'll accept a motion to declare a neg dec on the New Windsor Realty LLC site plan.

MR. VanLEEuwEN: So moved.

MR. GALLAGHER: Second.

MR. ARGENIO: Motion made and seconded by the Town of New Windsor Planning Board to declare neg dec under the SEQR process for the New Windsor Realty Group LLC site plan. If there's no further discussion from the Board members I will have a roll call.

ROLL CALL

MR. GALLAGHER: Aye.  
MR. SCHLESINGER: Aye.  
MR. MINUTA: Aye.  
MR. VanLEEuwEN: Aye.  
MR. ARGENIO: Aye.

MR. EDSALL: Jerry, if you recall we talked about this application. I told you that based on our discussion I was going to make sure that these procedural items were taken care of. If you look at the current comments versus the --

MR. ARGENIO: Which number is it, Mark?

MR. EDSALL: Well, look at the current comments versus the --

MR. ARGENIO: I see. I'm sorry, you guys have a different set of comments than me. That's the

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problem. Number 4, Planning Board should determine, for the record, if a public hearing will be required for this site plan, per its discretionary judgement in the Town Zoning Local Law. I'd like to hear from the members on that.

MR. MINUTA: Yes.

MR. ARGENIO: Yes, you feel it should have a public hearing?

MR. MINUTA: Yes.

MR. ARGENIO: Neil?

MR. SCHLESINGER: Not sure. I've got to think.

MR. ARGENIO: Danny, how do you feel about it?

MR. GALLAGHER: I'm up in the air, also. I'd like to hear Joe's, why Joe.

MR. MINUTA: Well, for projects of this size we normally have a public hearing and I think it's fitting, it would be fitting to do it.

MR. SHAW: I would ask the Board just to look at who your neighbors are. I mean you have Guardian Self Storage. You've got the driving range. You have the school across the street. You have the apple farms and then if you go further to the north you have the United Tool Rental. I don't even think they would be on the notice list.

MR. ARGENIO: Well, I'm always, I lean towards, I lean towards having them, but in this instance just because of what you said.

MR. VanLEEuwEN: I don't think it's necessary.

MR. ARGENIO: I don't think it's something we should get jerked up about. I think the Guardian people, I think, would be a welcomed improvement to the neighborhood. I don't know the man from Duffer's. And I don't think you would get any response from St. Joseph's. Or the apple orchards behind you. That's how I feel. But I'm only one guy. So, I'm going to go around the room and I'm going to say Neil, how do you feel about a public hearing for this site plan?

MR. SCHLESINGER: What do we got Duffer's and Guardian and the school across the street and nothing in the back?

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MR. ARGENIO: United Rental.

MR. VanLEEUEWEN: The railroad track in the back.

MR. SCHLESINGER: I think we may be able to let it ride.

MR. ARGENIO: Dan, you how do you feel?

MR. GALLAGHER: I think we can leave it.

MR. ARGENIO: Henry, how do you feel about it?

MR. VanLEEUEWEN: I don't think a public hearing is necessary.

MR. ARGENIO: I don't think it's necessary either. That being said I'll accept a motion we waive the public hearing on New Windsor Realty Group site plan.

MR. VanLEEUEWEN: So moved.

MR. SCHLESINGER: Second.

MR. ARGENIO: A motion has been made and seconded by the Town of New Windsor Planning Board to waive the public hearing on New Windsor Realty Group LLC site plan. If there's no further discussion from the Board members I'll have a roll call.

ROLL CALL

MR. GALLAGHER: Aye.

MR. SCHLESINGER: Aye.

MR. MINUTA: Aye.

MR. VanLEEUEWEN: Aye.

MR. ARGENIO: Aye.

MR. EDSALL: You are all done with SEQR. The only

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issue that I'll bring your attention to you should probably have the record be clear why you're not reacting to the DOT's comment or rather County Planning Department regarding access management. I think we indicated we feel it's a DOT approval.

MR. ARGENIO: I think I made that clear, Mark.

MR. EDSALL: I want to make sure it's a requirement in the statute.

MR. ARGENIO: I think that's clear.

MR. EDSALL: And we'll send back a response.

MR. ARGENIO: Andy, do you see any problem? I think it's very clear in the record.

MR. KRIEGE: No, I do not see any problem with that.

MR. ARGENIO: Now that I am back on track, I was off track a bit, Mark, we have subject to of DOT. Greg, you're going to put a flag pole on that site one way or the other, is that right?

MR. SHAW: Yes, we are.

MR. ARGENIO: Anything I missed, Mark?

MR. EDSALL: Fire inspector and site bond estimate and fee. Five items.

MR. ARGENIO: Okay, I'll accept a motion for final approval.

MR. VanLEEuwEN: So moved.

MR. SCHLESINGER: Second.

MR. ARGENIO: Motion made and seconded by the Town of New Windsor Planning Board to grant final approval to New Windsor Realty Group LLC site plan. Subject to what I will read in after we have a vote. If there's any further discussion from the Board members I will have a roll call.

ROLL CALL

MR. GALLAGHER: Aye.

MR. SCHLESINGER: Aye.

MR. MINUTA: Aye.

MR. VanLEEuwEN: Aye.

MR. ARGENIO: Aye.

JULY 26, 2006

MR. ARGENIO: This is subject to approval by the DOT which Greg at your applicant's risk you will include a flag pole on this site with a proper flag and you will, you are subject to the requirements of the fire inspector, which you told us you have already met, so that shouldn't be an issue. And the bond estimate and the payment of the fees.

MR. SHAW: Thank you and good evening.

MR. ARGENIO: Thank you.





# Town of New Windsor

555 Union Avenue  
New Windsor, New York 12553  
Telephone: (845) 563-4615  
Fax: (845) 563-4693

## OFFICE OF THE PLANNING BOARD

20 July 2006

New York State Department of Transportation  
Permit Inspection Unit Office  
112 Dickson Street  
Newburgh, New York 12550

ATT: Siby Mary Zachariah-Carbone, Permit Engineer, Orange County East

SUBJECT: NEW WINDSOR REALTY GROUP, LLC SITE PLAN  
NEW WINDSOR PLANNING BOARD NO. 06-18

Dear Ms. Zachariah-Carbone:

The Town of New Windsor Planning Board has received an application for site plan approval of a project located on NYS Route 32 within the Town. The Planning Board has determined that the applicant will be required to obtain a Highway Work Permit from your Department.

We are forwarding herewith a copy of the plan submitted with the application for your review and comment. We request that you notify the Planning Board of any concerns regarding this application, which should be considered by the Board during their review of the project.

It is not the intent that these plans be considered the plans required for the Permit application, as these will be the responsibility of the applicant following site plan approval from the Town.

We look forward to your input regarding this application before the Board.

Very truly yours,

TOWN OF NEW WINDSOR PLANNING BOARD

Mark J. Edsall, P.E., P.P.  
Planning Board Engineer

MJE/st  
NW06-18-DOT Ref 07-20-06



**McGOEY, HAUSER and EDSALL  
CONSULTING ENGINEERS P.C.**

RICHARD D. MCGOEY, P.E. (NY & PA)  
WILLIAM J. HAUSER, P.E. (NY & NJ)  
MARK J. EDSALL, P.E. (NY, NJ & PA)  
JAMES M. FARR, P.E. (NY & PA)

**MAIN OFFICE**  
33 AIRPORT CENTER DRIVE  
SUITE 202  
NEW WINDSOR, NEW YORK 12553

(845) 567-3100  
FAX: (845) 567-3232  
E-MAIL: MHENY@MHEPC.COM

**WRITER'S E-MAIL ADDRESS:**  
MJE@MHEPC.COM

**TOWN OF NEW WINDSOR**  
**PLANNING BOARD**  
**REVIEW COMMENTS**

**PROJECT NAME:** NEW WINDSOR REALTY GROUP LLC SITE PLAN  
(PROPOSED RETAIL – OFFICE BUILDING)  
**PROJECT LOCATION:** WINDSOR HIGHWAY (NYS ROUTE 32)  
SECTION 9 – BLOCK 1 – LOT 24  
**PROJECT NUMBER:** 06-18  
**DATE:** 26 JULY 2006  
**DESCRIPTION:** THE APPLICATION PROPOSES A 21,000 s.f. RETAIL AND OFFICE BUILDING ON THE 3.6+ ACRE PROPERTY ON THE EAST SIDE OF ROUTE 32. THE PLAN WAS PREVIOUSLY REVIEWED AT THE 24 MAY 2006 PLANNING BOARD MEETING.

1. The property is split by the C and NC zoning districts of the Town, with the “front” 200 ft. being in the NC district. The bulk table has been corrected, as previously requested.

As previously noted, the plan provides the correct overall parking; however, the upper level and lower level parking is imbalanced by approximately 20%. The applicant’s engineer has added a pedestrian staircase between levels, which I believe is a reasonable adjustment to mitigate the noted condition.

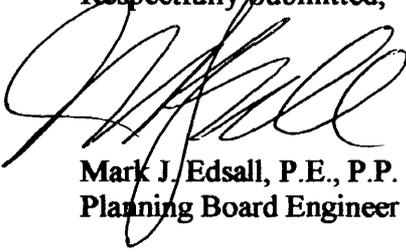
2. The applicant submitted a SWPPP for the site, since the disturbance exceeds one acre. Our office has reviewed the SWPPP, and indicates no exception to the plan.
3. The Planning Board issued a Lead Agency coordination letter on June 8<sup>th</sup>. I recommend the Board formally assume the position of Lead Agency at this time.
4. The Planning Board should determine, for the record, if a Public Hearing will be required for this Site Plan, per its discretionary judgment under Paragraph 300-86 (C) of the Town Zoning Local Law.
5. The Planning Board may wish to classify this action as an “unlisted action” under SEQRA, and consider a “negative declaration” of environmental significance, based on the information presented and reviewed.

**REGIONAL OFFICES**

• 111 WHEATFIELD DRIVE – SUITE ONE • MILFORD, PENNSYLVANIA 18337 • 570-296-2765 •  
• 540 BROADWAY • MONTICELLO, NEW YORK 12701 • 845-794-3399 •

6. This project was referred to the Orange County Planning Department on May 24<sup>th</sup>. We have received a response letter dated June 23<sup>rd</sup>, with a comment regarding "access management" to the State Highway. The Board may wish to further discuss this comment from the OCDP.
7. The Planning Board should require that a bond estimate be submitted for this Site Plan in accordance with Chapter 137 of the Town Code.
8. The application forwarded to the NYSDOT. We are awaiting a response.

Respectfully Submitted,



Mark J. Edsall, P.E., P.P.  
Planning Board Engineer

MJE/st  
NW06-18-26July06



PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 07/26/2006

PAGE: 1

LISTING OF PLANNING BOARD AGENCY APPROVALS

FOR PROJECT NUMBER: 6-18

NAME: NEW WINSOR REALTY GROUP, LLC PA2006-120

APPLICANT: NEW WINDSOR REALTY GROUP, LLC

DATE-SENT	AGENCY-----	DATE-RECD	RESPONSE-----
REV1	06/22/2006 MUNICIPAL FIRE	06/23/2006	APPROVED
REV1	06/22/2006 MUNICIPAL FIRE	/ /	
ORIG	05/19/2006 MUNICIPAL HIGHWAY	05/24/2006	APPROVED
ORIG	05/19/2006 MUNICIPAL WATER	/ /	
ORIG	05/19/2006 MUNICIPAL SEWER	/ /	
ORIG	05/19/2006 MUNICIPAL FIRE	05/24/2006	DISAPPROVED
	. IS FIRE DEPT. CONNECTION SYMBOL MISTAKENLY IDENTIFIED AS A . HYDRANT? (PG. 1) . NEED TO CORRECTLY IDENTIFY LOCATINO OF HYDRANT AND FIRE . DEPT. CONNECTION FOR SPRINKLER SYSTEM. . NEED TO IDENTIFY ANLY OF SLOPE TO REAR PARKING LOT TO . MEASURE ANGLE OF APPROACH AND ANGLE OF DEPARTURE FOR FIRE . DEPT. APPARATUS SO IT IS NOT COMPROMISED.		
ORIG	05/19/2006 NYSDOT	/ /	

PLANNING BOARD  
TOWN OF NEW WINDSOR

A06

PAGE: 1

LISTING OF PLANNING BOARD SEQRA ACTIONS

FBER: 6-18  
AME: NEW WINDSOR REALTY GROUP, LLC PA2006-120  
ANT: NEW WINDSOR REALTY GROUP, LLC

T	ACTION-----	DATE-RECD	RESPONSE-----
C06	EAF SUBMITTED	05/19/2006	WITH APPLIC
C06	CIRCULATE TO INVOLVED AGENCIES	06/15/2006	sent L.A. Ltr
C06	LEAD AGENCY DECLARED	/ /	
C06	DECLARATION (POS/NEG)	/ /	
C06	SCHEDULE PUBLIC HEARING	/ /	
C06	PUBLIC HEARING HELD	/ /	
C06	WAIVE PUBLIC HEARING	/ /	
C06	FINAL PUBLIC HEARING	/ /	
C06	PRELIMINARY APPROVAL	/ /	
C06	LEAD AGENCY LETTER SENT	/ /	

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 07/26/2006

PAGE: 1

LISTING OF PLANNING BOARD ACTIONS

STAGE:

STATUS [Open, Withd]  
O [Disap, Appr]

FOR PROJECT NUMBER: 6-18

NAME: NEW WINDSOR REALTY GROUP, LLC PA2006-120  
APPLICANT: NEW WINDSOR REALTY GROUP, LLC

--DATE--	MEETING-PURPOSE-----	ACTION-TAKEN-----
05/24/2006	P.B. APPEARANCE	LA LTR; OCP; DOT . NEED SWPPP - NEED COLOR ELEVATION - FLAG POLE W/FLAG - . CORRECT FIRE INSPECTOR COMMENTS - SEND TO OC PLANNING - DOT . -LEAD AGENCY COORD LETTER
03/15/2006	WORK SHOP	SUBMIT

**SUBMITTAL HISTORY FOR**  
**PLANNING BOARD FILE #06-18**

APPLICANT:NEW WINDSOR REALTY GROUP

DATE RECEIVED: 06-06-06

ITEM RECEIVED: 2 - STORM WATER POLLUTION PREVENTION PLANS

DISTRIBUTION: 1- MARK; 1 - FILE

RESULTS: \_\_\_\_\_



**COUNTY OF ORANGE**

**DEPARTMENT OF PLANNING**

**EDWARD A. DIANA**  
COUNTY EXECUTIVE

124 MAIN STREET  
GOSHEN, NEW YORK 10924-2124  
TEL: (845)291-2318 FAX: (845)291-2533  
www.orangecountygov.com/planning

**DAVID CHURCH, A.I.C.P.**  
COMMISSIONER

**ORANGE COUNTY DEPARTMENT OF PLANNING**  
**239 L, M OR N REPORT**

**This proposed action is being reviewed as an aid in coordinating such action between and among governmental agencies by bringing pertinent inter-community and countywide considerations to the attention of the municipal agency having jurisdiction.**

**Referred by:** New Windsor Planning Board

**Reference/County ID No.:** NWT14-06M  
**Tax Parcel ID:** 9-1-24

**Applicant:** New Windsor Realty Group

**Proposed Action:** Site Plan

**Reason for Review:** Within 500' of ST RTE 32

**Date of Full Statement:** May 30, 2006

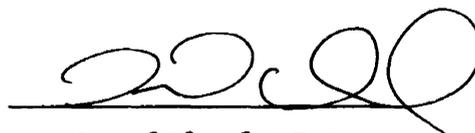
**Comments:** The Department has received the above site plan application for the construction of an office and retail complex, and offers the following:

- Review and consideration should be given to issues of transportation access management regarding the entrance onto State Route 32. A function of access management is to provide access to land development while preserving the flow of traffic on the surrounding road network in terms of safety, capacity, and speed. The benefits of access management can promote improved safety, increased capacity, shorter travel times, and pedestrian/bicycle/transit friendly communities. Methods to achieving this would be to avoid numerous and uncoordinated curb cuts, require inter-lot connections and circulation, promote shared access. The site plan indicates that there will only be a single access point into the office/retail complex, yet adjacent to the parcel is an already existing highway entrance with existing curb cut. The Board should try to incorporate some access management design principles into this application.
- It is consistent with the County Comprehensive Plan, as the site lies within the County's Priority Growth Area.

**County Recommendation:** Local Determination

**Date:** June 23, 2006

**Reviewed By:** Kathy V. Murphy, Planner

  
**David Church, AICP**  
**Commissioner of Planning**

**"IMPORTANT NOTE:** As per NYS General Municipal Law 239-m(6), within 30 days of municipal final action on the above referred project, the referring board must file a report of the final action taken with the County Planning Department. For such filing, please use the final action report form attached to this review or available on-line at [www.orangecountygov.com/planning](http://www.orangecountygov.com/planning)."

cc: H.E.

06-18



**COUNTY OF ORANGE**

**DEPARTMENT OF PLANNING**

**EDWARD A. DIANA**  
COUNTY EXECUTIVE

124 MAIN STREET  
GOSHEN, NEW YORK 10924-2124  
TEL: (845)291-2318 FAX: (845)291-2533  
www.orangecountygov.com  
planning@co.orange.ny.us

**DAVID E. CHURCH, AICP**  
COMMISSIONER

June 23, 2006

Attention: Mr. Mark Edsall, P.E., P.P. Planning Board Engineer  
555 Union Ave  
New Windsor, NY 12553

RE: Lead Agency: New Windsor Realty Group, LLC

Dear Mr. Edsall:

Our office is in receipt of a lead agency coordination request. We have no permitting authority; therefore we have no interest in becoming the lead agency on this project. We would, however like the opportunity to suggest that a traffic generating study be prepared. This is an extremely busy commercial area and the project proposes several mixed uses.

Thank you for giving us the opportunity to respond to your request and look forward to reviewing the application when it is referred to us for our comments.

Sincerely,

*David Church, AICP*  
*Planning Commissioner*

cc: M.E.

# ORANGE COUNTY DEPARTMENT OF PLANNING

124 Main Street  
Goshen, NY 10924-2124

## APPLICATION FOR MANDATORY COUNTY REVIEW OF LOCAL PLANNING ACTION

(Variances, Zone Changes, Special Permits, Subdivisions, Site Plans)

Local File No. 06-18 (Please include this number on any correspondence)

1. Municipality Town of New Windsor Public Hearing Date: not set

City, Town or Village Board \_\_\_\_\_ Planning Board  Zoning Board \_\_\_\_\_

2. Owner: Name: New Windsor Realty Group, LLC  
Address: 87 Taft Avenue, Newburgh, NY 12550

3. Applicant \* Name: same  
Address: \_\_\_\_\_

**\*If applicant is owner, leave blank**

4. Location of Site: Southeast side of Windsor Hwy (NYS Rt. 32)  
(Street or highway, plus nearest intersection)

Tax Map Identification: Section: 9 Block: 1 Lot: 24

Present Zoning District: C & NC Size of Parcel: 3.6 + Acres

5. Type of Review:

### \*\*\*Site Plan

Zone Change: From == To: ==

Zoning Amendment: To Section \_\_\_\_\_

\*\*Subdivision: Number of Lots/Units \_\_\_\_\_

\*\*\*Site Plan: Use Office and Retail Building

Date: 5-24-06

Signature & Title: Mark J. Edsall, P.E.  
Mark J. Edsall, P.E., e  
Planning Board Engineer

Sent 5/25/06



**McGOEY, HAUSER and EDSALL  
CONSULTING ENGINEERS P.C.**

RICHARD D. MCGOEY, P.E. (NY & PA)  
WILLIAM J. HAUSER, P.E. (NY & NJ)  
MARK J. EDSALL, P.E. (NY, NJ & PA)  
JAMES M. FARR, P.E. (NY & PA)

**MAIN OFFICE**  
33 AIRPORT CENTER DRIVE  
SUITE 202  
NEW WINDSOR, NEW YORK 12553

(845) 567-3100  
FAX: (845) 567-3232  
E-MAIL: MHENY@MHEPC.COM

**WRITER'S E-MAIL ADDRESS:**  
MJE@MHEPC.COM

**TOWN OF NEW WINDSOR**  
**PLANNING BOARD**  
**REVIEW COMMENTS**

**PROJECT NAME:** NEW WINDSOR REALTY GROUP LLC SITE PLAN  
(PROPOSED RETAIL – OFFICE BUILDING)  
**PROJECT LOCATION:** WINDSOR HIGHWAY (NYS ROUTE 32)  
SECTION 9 – BLOCK 1 – LOT 24  
**PROJECT NUMBER:** 06-18  
**DATE:** 24 MAY 2006  
**DESCRIPTION:** THE APPLICATION PROPOSES A 21,000 s.f. RETAIL AND OFFICE  
BUILDING ON THE 3.6+ ACRE PROPERTY ON THE EAST SIDE OF  
ROUTE 32. THE PLAN WAS REVIEWED ON A CONCEPT BASIS  
ONLY.

1. The property is split by the C and NC zoning districts of the Town, with the “front” 200 ft. being in the NC district.

The “required” bulk data appears correct for the use in the two zones, with the exception of the development coverage value, which is 85% in both zones. A proposed value should be indicated for the development coverage.

The site provides the correct number of parking spaces in total; however, they are not distributed consistent with the code requirements for each level (approximately a 20% imbalance). Further, there is no pedestrian connection between the two exterior parking levels. I would suggest further effort be made to equalize the parking distribution.

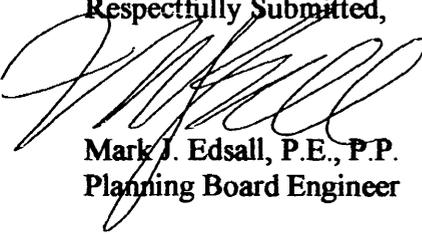
2. We have made a cursory review of the initial plan set as submitted, and the same appears to be in conformance with general Town standards. Further detailed review will be made following the Board’s concept review of the application.
3. The Planning Board may wish to authorize the issuance of a Lead Agency Coordination letter for the project, to begin the SEQRA review process. The applicant should submit six (6) sets of drawings (folded) and the environmental form for this purpose.

**REGIONAL OFFICES**

• 111 WHEATFIELD DRIVE – SUITE ONE • MILFORD, PENNSYLVANIA 18337 • 570-296-2765 •  
• 540 BROADWAY • MONTICELLO, NEW YORK 12701 • 845-794-3399 •

4. This project is along NYS Route 32 and, as such, must be referred to the Orange County Planning Department as per New York State General Municipal Law (GML 239). We have prepared the referral form for the Board's secretary.
5. Submittal of this application/plan to the NYSDOT is also required. We have prepared a transmittal letter for the Board secretary.
6. The application involves non-single family development with disturbance greater than one acre, and is subject to the State and Town regulations as they pertain to Stormwater Pollution Prevention Plans (SWPPPs). A full submittal is required.

Respectfully Submitted,



Mark J. Edsall, P.E., P.P.  
Planning Board Engineer

MJE/st  
NW06-18-24May06



RESULTS OF P.B. MEETING OF: May 24, 2006

PROJECT: New Windsor Realty Group P.B. # 06-18

**LEAD AGENCY:**

**NEGATIVE DEC:**

AUTHORIZE COORD. LETTER: Y  N

M)  S)  VOTE: A  N

TAKE LEAD AGENCY: Y  N

CARRIED: Y  N

M)  S) S VOTE: A 5 N 0

CARRIED: Y  N

**PUBLIC HEARING:** WAIVED:  CLOSED:

M)  S)  VOTE: A  N  SCHEDULE P.H.: Y  N

SEND TO O.C. PLANNING: Y

SEND TO DEPT. OF TRANSPORTATION: Y

REFER TO Z.B.A.: M)  S)  VOTE: A  N

RETURN TO WORK SHOP: Y  N

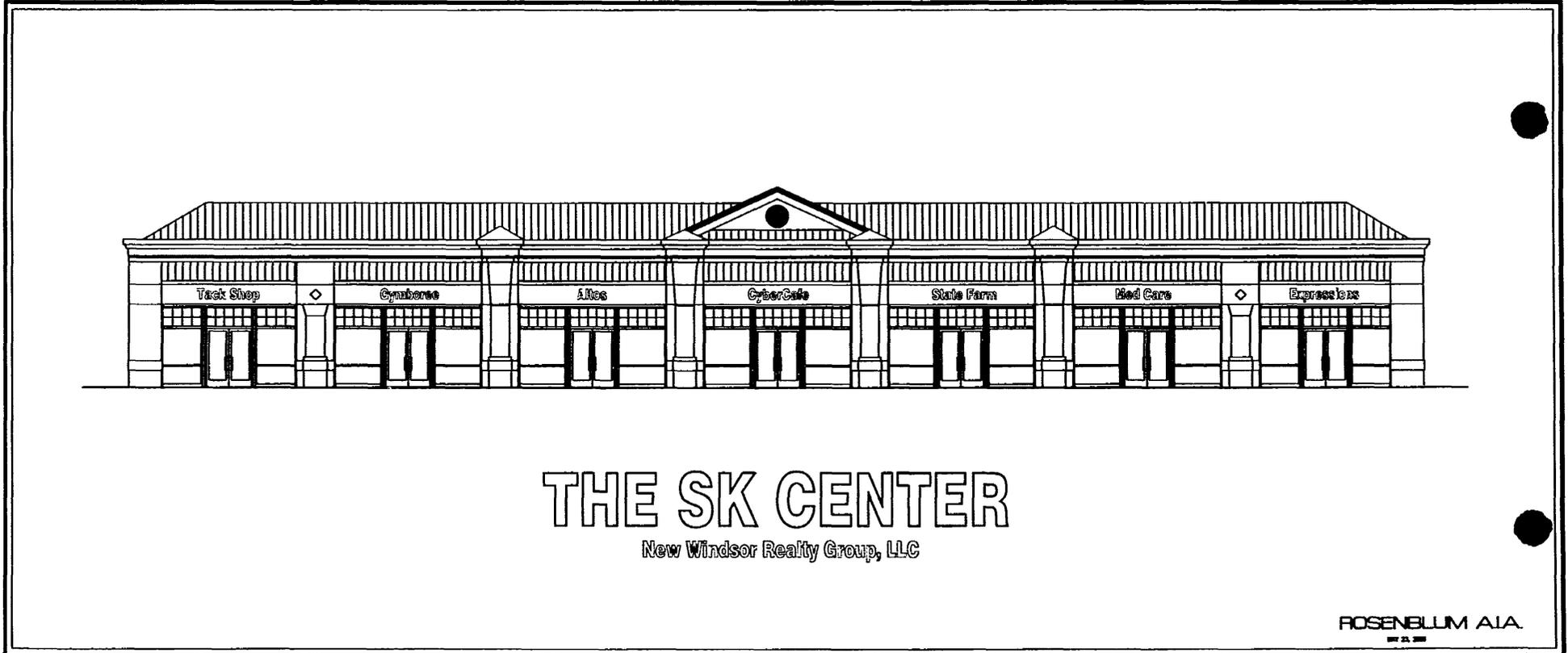
**APPROVAL:**

M)  S)  VOTE: A  N  APPROVED:

NEED NEW PLANS: Y  N

**CONDITIONS - NOTES:**

<i>Need SWPPP</i>
<i>Need Color elevation</i>
<i>Flag pole w/ flag</i>
<i>Correct w/ fire Inspector</i>
<b>DOT</b>
<b>PEES</b>



# THE SK CENTER

New Windsor Realty Group, LLC

ROSENBLUM AIA.  
REV. 23, 2005

#06-18 Received  
at meeting  
of 5/24/06

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 05/19/2006

PAGE: 1

LISTING OF PLANNING BOARD FEES  
ESCROW

FOR PROJECT NUMBER: 6-18  
NAME: NEW WINDSOR REALTY GROUP, LLC PA2006-120  
APPLICANT: NEW WINDSOR REALTY GROUP, LLC

--DATE--	DESCRIPTION-----	TRANS	--AMT-CHG	-AMT-PAID	--BAL-DUE
05/19/2006	REC. CK. #1027	PAID		750.00	
		TOTAL:	0.00	750.00	-750.00

*Received*  
*5/24/06*  
*[Signature]*

Town of New Windsor  
555 Union Avenue  
New Windsor, NY 12553  
(845) 563-4611

**RECEIPT**  
**#430-2006**

05/24/2006

New Windsor Realty Group

Received \$ 125.00 for Planning Board Fees, on 05/24/2006. Thank you for stopping by the Town Clerk's office.

As always, it is our pleasure to serve you.

**Deborah Green**  
Town Clerk

**FIRE INSPECTOR'S  
INTER-OFFICE CORRESPONDENCE**

**TO: Genaro Argenio, Planning Board Chairman**

**FROM: Wm. Horton, Asst. Fire Inspector**

**SUBJECT: PB-06-18  
New Windsor Realty Group  
SBL: 9-1-24**

**DATE: June 23, 2006**

**Fire prevention Reference Number: FPS-06-030**

**A review of the above referenced site plan has been conducted and is now acceptable.**



**FIRE INSPECTOR'S  
INTER-OFFICE CORRESPONDENCE**

**TO: Genaro Argenio, Planning Board Chairman**

**FROM: Wm. Horton, Asst. Fire Inspector**

**SUBJECT: PB-06-18  
New Windsor Realty Group  
SBL: 9-1-24**

**DATE: May 24, 2006**

**Fire Prevention Reference Number: FPS-06-021**

**A review of the above referenced site plan has been conducted and is unacceptable for the following reasons:**

- 1) Is Fire Dept. connection symbol mistakenly identified as a hydrant ? (pg. 1)**
- 2) Need to correctly identify location of hydrant and Fire Dept. connection for sprinkler system.**
- 3) Need to identify angle of slope to rear parking lot to measure angle of approach & angle of departure for Fire dept. apparatus so it is not comprised.**



**McGOEY, HAUSER and EDSALL  
CONSULTING ENGINEERS P.C.**

RICHARD D. McGOEY, P.E. (NY & PA)  
WILLIAM J. HAUSER, P.E. (NY & NJ)  
MARK J. EDSALL, P.E. (NY, NJ & PA)  
JAMES M. FARR, P.E. (NY & PA)

Main Office  
33 Airport Center Drive  
Suite #202  
New Windsor, New York 12553  
(845) 567-3100  
e-mail: mhenry@mhepc.com

Regional Office  
507 Broad Street  
Milford, Pennsylvania 18337  
(570) 296-2765  
e-mail: mhepa@mhepc.com

Writer's E-mail Address:  
mje@mhepc.com

**PLANNING BOARD WORK SESSION  
RECORD OF APPEARANCE**

100-3

TOWN / VILLAGE OF: New Windsor P/B APP. NO.: 06-18  
WORK SESSION DATE: 15 MAR 06 PROJECT: NEW  OLD   
REAPPEARANCE AT W/S REQUESTED: No RESUB. REQ'D: fill app  
PROJECT NAME: NW Realty Group  
REPRESENTATIVES PRESENT: Gress Shan

MUNICIPAL REPS PRESENT: BLDG INSP.  FIRE INSP.   
ENGINEER  PLANNER   
P/B CHMN  OTHER

ITEMS DISCUSSED: Samir Patel  
Nt 32 next to Duffer  
3 story height req -  
lower level filled  
remind me to red to  
OC DP + DOT

STND CHECKLIST: PROJECT TYPE  
DRAINAGE  SITE PLAN  
DUMPSTER  SPEC PERMIT  
SCREENING  L I CHG.  
LIGHTING  SUBDIVISION  
(Streetlights)  
LANDSCAPING  OTHER  
BLACKTOP   
ROADWAYS   
APPROVAL BOX

PROJECT STATUS:  
ZBA Referral:  Y  N  
Ready For Meeting  Y  N  
Recommended Mtg Date next aug. 1

06-18

# TOWN OF NEW WINDSOR

555 UNION AVENUE  
NEW WINDSOR, NEW YORK 12553  
Telephone: (845) 563-4615  
Fax: (845) 563-4695

## PLANNING BOARD APPLICATION

**TYPE OF APPLICATION (check appropriate item):**

Subdivision \_\_\_\_\_ Lot Line Change \_\_\_\_\_ Site Plan  Special Permit \_\_\_\_\_

Tax Map Designation: Sec. 9 Block 1 Lot 24

**BUILDING DEPARTMENT REFERRAL NUMBER** PA2006 - 120

1. Name of Project New Retail / Office Building for New Windsor Realty Group, LLC

2. Owner of Record New Windsor Realty Group, LLC Phone 845-562-1440

Address: 87 Taft Avenue Newburgh NY 12550  
(Street Name & Number) (Post Office) (State) (Zip)

3. Name of Applicant Same as Above Phone \_\_\_\_\_

Address: \_\_\_\_\_  
(Street Name & Number) (Post Office) (State) (Zip)

4. Person Preparing Plan Gregory J. Shaw, P.E. Phone 845 - 561 - 3695

Address: 744 Broadway Newburgh NY 12550  
(Street Name & Number) (Post Office) (State) (Zip)

5. Attorney \_\_\_\_\_ Phone \_\_\_\_\_

Address \_\_\_\_\_  
(Street Name & Number) (Post Office) (State) (Zip)

6. Person to be notified to appear at Planning Board meeting:

Gregory J. Shaw, P.E. 845-561-3695 845-561-3027  
(Name) (Phone) (fax)

7. Project Location: On the Southeast side of Windsor Highway

(Direction) (Street)  
8. Project Data: Acreage 3.65 Zone C E NC School Dist. Newburgh Consolidated

RECEIVED  
TOWN OF NEW WINDSOR  
MAY 17 2006  
ENGINEER & PLANNING

PLEASE DO NOT COPY 1 & 2 AS ONE PAGE TWO-SIDED

06-18

9. Is this property within an Agricultural District containing a farm operation or within 500 feet of a farm operation located in an Agricultural District? Yes \_\_\_\_\_ No X

**\*This information can be verified in the Assessor's Office.  
\*If you answer yes to question 9, please complete the attached Agricultural Data Statement.**

10. Detailed description of Project: (Use, Size, Number of Lots, etc.) \_\_\_\_\_  
Develop a 3.65 acre parcel into a 21,000 square foot  
Retail / Office Building with associated improvements

11. Has the Zoning Board of Appeals Granted any Variances for this property? yes \_\_\_\_\_ no \_\_\_\_\_  
12. Has a Special Permit previously been granted for this property? yes \_\_\_\_\_ no \_\_\_\_\_

**IF THIS APPLICATION IS SIGNED BY ANYONE OTHER THAN THE PROPERTY OWNER, A SEPARATE NOTARIZED STATEMENT OR PROXY STATEMENT FROM THE OWNER MUST BE SUBMITTED, AT THE TIME OF APPLICATION, AUTHORIZING THIS APPLICATION.**

STATE OF NEW YORK)  
SS.:  
COUNTY OF ORANGE)

THE UNDERSIGNED APPLICANT, BEING DULY SWORN, DEPOSES AND STATES THAT THE INFORMATION, STATEMENTS AND REPRESENTATIONS CONTAINED IN THIS APPLICATION AND SUPPORTING DOCUMENTS AND DRAWINGS ARE TRUE AND ACCURATE TO THE BEST OF HIS/HER KNOWLEDGE AND/OR BELIEF. THE APPLICANT FURTHER ACKNOWLEDGES RESPONSIBILITY TO THE TOWN FOR ALL FEES AND COSTS ASSOCIATED WITH THE REVIEW OF THIS APPLICATION.

SWORN BEFORE ME THIS:

*[Signature]*  
(OWNER'S SIGNATURE)

5th DAY OF May 2006

\_\_\_\_\_  
(AGENT'S SIGNATURE)

*[Signature]*  
**JEFFREY RUSSELL WEBER**  
Notary Public, State of New York  
No. 4773385  
Qualified in Orange County  
Commission Expires February 28, 2007

Please Print Agent's Name as Signed

TOWN USE ONLY  
TOWN OF NEW WINDSOR  
MAY 17 2006  
DATE APPLICATION RECEIVED

**06-18**  
APPLICATION NUMBER

**AGENT/OWNER PROXY STATEMENT**  
**(for professional representation)**

for submittal to the:  
TOWN OF NEW WINDSOR PLANNING BOARD

New Windsor Realty Group, LLC, <sup>it conducts business</sup>deposes and says that <sup>he resides</sup>  
(OWNER)

at 87 Taft Avenue, Newburgh in the County of Orange  
(OWNER'S ADDRESS)

and State of New York and that <sup>it</sup>he is the owner of property tax map

(Sec. 9 Block 1 Lot 24 )  
designation number (Sec.      Block      Lot      ) which is the premises described in  
the foregoing application and that he designates:  
it

(Agent Name & Address)

Grejory J. Shaw, P.E.

(Name & Address of Professional Representative of Owner and/or Agent)

as his agent to make the attached application.

**THIS DESIGNATION SHALL BE EFFECTIVE UNTIL WITHDRAWN BY THE OWNER OR UNTIL TWO (2) YEARS FROM THE DATE AGREED TO, WHICH EVER IS SOONER.**

SWORN BEFORE ME THIS:

\*\* [Signature]

Owner's Signature (MUST BE NOTARIZED)

5th DAY OF May 2005  
[Signature]

Agent's Signature (If Applicable)

NOTARY PUBLIC  
JEFFREY RUSSELL WERNER  
Notary Public, State of New York  
No. 4773385

Professional Representative's Signature

\*\* PLEASE NOTE: Signature MUST BE NOTARIZED.  
Qualified in Orange County  
Commission Expires February 28, 2007

**THIS PROXY SHALL BE VOID TWO (2) YEARS AFTER AGREED TO BY THE OWNER**

RECEIVED  
TOWN OF NEW WINDSOR  
MAY 15 2005  
ENGINEER & PLANNING

06-18

**TOWN OF NEW WINDSOR PLANNING BOARD**

**SITE PLAN CHECKLIST**

ITEM

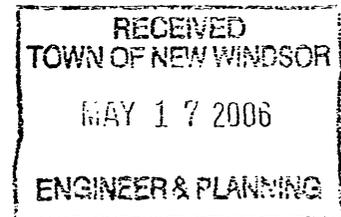
- 1.     X     Site Plan Title
- 2.     X     Provide 4" wide X 2" high box **(IN THE LOWEST RIGHT CORNER OF THE PLAN)** for use by Planning Board in affixing Stamp of Approval. (ON ALL PAGES OF SITE PLAN).

**SAMPLE:**



- 3.     X     Applicant's Name(s)
- 4.     X     Applicant's Address
- 5.     X     Site Plan Preparer's Name
- 6.     X     Site Plan Preparer's Address
- 7.     X     Drawing Date
- 8.     X     Revision Dates
- 9.     X     Area Map Inset and Site Designation
- 10.     \*     Properties within 500' of site
- 11.     \*     Property Owners (Item #10)
- 12.     X     Plot Plan
- 13.     X     Scale (1" = 50' or lesser)
- 14.     X     Metes and Bounds
- 15.     X     Zoning Designation
- 16.     X     North Arrow
- 17.     X     Abutting Property Owners
- 18.     X     Existing Building Locations
- 19.     X     Existing Paved Areas
- 20.     X     Existing Vegetation
- 21.     X     Existing Access & Egress

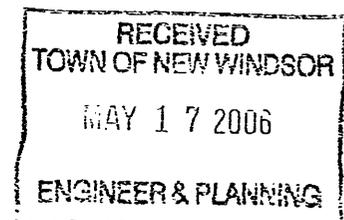
\*Denotes to be provided in a subsequent submission.



**06-18**

## PROPOSED IMPROVEMENTS

- |     |                   |                                     |
|-----|-------------------|-------------------------------------|
| 22. | <u>    X    </u>  | Landscaping                         |
| 23. | <u>    X    </u>  | Exterior Lighting                   |
| 24. | <u>    X    </u>  | Screening                           |
| 25. | <u>    X    </u>  | Access & Egress                     |
| 26. | <u>    X    </u>  | Parking Areas                       |
| 27. | <u>    NA    </u> | Loading Areas                       |
| 28. | <u>    X    </u>  | Paving Details (Items 25 - 27)      |
| 29. | <u>    X    </u>  | Curbing Locations                   |
| 30. | <u>    X    </u>  | Curbing through section             |
| 31. | <u>    X    </u>  | Catch Basin Locations               |
| 32. | <u>    X    </u>  | Catch Basin Through Section         |
| 33. | <u>    X    </u>  | Storm Drainage                      |
| 34. | <u>    X    </u>  | Refuse Storage                      |
| 35. | <u>    NA    </u> | Other Outdoor Storage               |
| 36. | <u>    X    </u>  | Water Supply                        |
| 37. | <u>    NA    </u> | Sanitary Disposal System            |
| 38. | <u>    X    </u>  | Fire Hydrants                       |
| 39. | <u>    X    </u>  | Building Locations                  |
| 40. | <u>    X    </u>  | Building Setbacks                   |
| 41. | <u>    NA    </u> | Front Building Elevations           |
| 42. | <u>    X    </u>  | Divisions of Occupancy              |
| 43. | <u>    NA    </u> | Sign Details                        |
| 44. | <u>    X    </u>  | Bulk Table Inset                    |
| 45. | <u>    x    </u>  | Property Area (Nearest 100 sq. ft.) |
| 46. | <u>    X    </u>  | Building Coverage (sq. ft.)         |
| 47. | <u>    X    </u>  | Building Coverage (% of total area) |
| 48. | <u>    x    </u>  | Pavement Coverage (sq. ft.)         |
| 49. | <u>    X    </u>  | Pavement Coverage (% of total area) |
| 50. | <u>    X    </u>  | Open Space (sq. ft.)                |
| 51. | <u>    X    </u>  | Open Space (% of total area)        |
| 52. | <u>    X    </u>  | No. of parking spaces proposed      |
| 53. | <u>    X    </u>  | No. of parking spaces required      |



**REFERRING TO QUESTION 9 ON THE APPLICATION FORM, AIS THIS PROPERTY WITHIN AN AGRICULTURAL DISTRICT CONTAINING A FARM OPERATION OR WITHIN 500 FEET OF A FARM OPERATION LOCATED IN AN AGRICULTURAL DISTRICT, PLEASE NOTE THE FOLLOWING:**

54. NA Referral to Orange County Planning Dept. is required for all applicants filing AD Statement.

55. NA A disclosure Statement, in the form set below, must be inscribed on all site plan maps prior to the affixing of a stamp of approval, whether or not the Planning Board specifically requires such a statement as a condition of approval.

APrior to the sale, lease, purchase, or exchange of property on this site which is wholly or partially within or immediately adjacent to or within 500 feet of a farm operation, the purchaser or leasee shall be notified of such farm operation with a copy of the following notification.

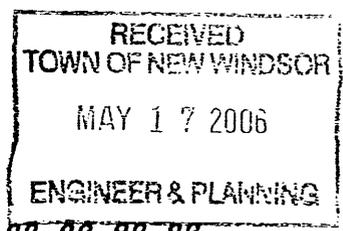
It is the policy of this State and this community to conserve, protect and encourage the development and improvement of agricultural land for the production of food, and other products, and also for its natural and ecological value. This notice is to inform prospective residents that the property they are about to acquire lies partially or wholly within an agricultural district or within 500 feet of such a district and that farming activities occur within the district. Such farming activities may include, but not be limited to, activities that cause noise, dust and odors.

This list is provided as a guide only and is for the convenience of the Applicant. The Town of New Windsor Planning Board may require additional notes or revisions prior to granting approval.

**PREPARER'S ACKNOWLEDGMENT:**

THE PLAT FOR THE PROPOSED SITE PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THIS CHECKLIST AND THE TOWN OF NEW WINDSOR ORDINANCES, TO THE BEST OF MY KNOWLEDGE.

BY: \_\_\_\_\_  
Licensed Professional Date



⌘ ⌘ ⌘ ⌘ ⌘ ⌘ **PLEASE NOTE:** ⌘ ⌘ ⌘ ⌘ ⌘ ⌘

**THE APPLICANT OR THEIR REPRESENTATIVE IS RESPONSIBLE TO KEEP TRACK OF ALL EXPIRATION DATES FOR ANY AND ALL APPROVALS GRANTED TO A PROJECT. EXTENSIONS MUST BE APPLIED FOR PRIOR TO EXPIRATION DATE.**

**06-18**

PROJECT ID NUMBER

617.20  
APPENDIX C

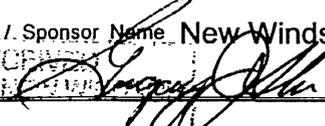
SEQR

STATE ENVIRONMENTAL QUALITY REVIEW

### SHORT ENVIRONMENTAL ASSESSMENT FORM

for UNLISTED ACTIONS Only

#### PART 1 - PROJECT INFORMATION (To be completed by Applicant or Project Sponsor)

1. APPLICANT / SPONSOR New Windsor Realty Group, LLC	2. PROJECT NAME New Retail / Office Building
3. PROJECT LOCATION: Municipality: Town of New Windsor	County: Orange
4. PRECISE LOCATION: Street Address and Road Intersections, Prominent landmarks etc - or provide map On the southeast side of Windsor Highway, located between Duffers Hideaway and Guardian Self Storage.	
5. IS PROPOSED ACTION : <input checked="" type="checkbox"/> New <input type="checkbox"/> Expansion <input type="checkbox"/> Modification / alteration	
6. DESCRIBE PROJECT BRIEFLY:  Develop a 3.65 acre parcel into a 21,000 square foot Retail / Office Building with associated site improvements.	
7. AMOUNT OF LAND AFFECTED: Initially 3.65 acres                      Ultimately 3.65 acres	
8. WILL PROPOSED ACTION COMPLY WITH EXISTING ZONING OR OTHER RESTRICTIONS? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No      If no, describe briefly:	
9. WHAT IS PRESENT LAND USE IN VICINITY OF PROJECT? (Choose as many as apply.) <input checked="" type="checkbox"/> Residential <input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Commercial <input checked="" type="checkbox"/> Agriculture <input type="checkbox"/> Park / Forest / Open Space <input type="checkbox"/> Other (describe)	
10. DOES ACTION INVOLVE A PERMIT APPROVAL, OR FUNDING, NOW OR ULTIMATELY FROM ANY OTHER GOVERNMENTAL AGENCY (Federal, State or Local) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No      If yes, list agency name and permit / approval:	
11. DOES ANY ASPECT OF THE ACTION HAVE A CURRENTLY VALID PERMIT OR APPROVAL? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No      If yes, list agency name and permit / approval:	
12. AS A RESULT OF PROPOSED ACTION WILL EXISTING PERMIT / APPROVAL REQUIRE MODIFICATION? <input type="checkbox"/> Yes <input type="checkbox"/> No	
I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE TO THE BEST OF MY KNOWLEDGE	
Applicant / Sponsor Name: New Windsor Realty, LLC	Date: April 28, 2006
Signature: 	

MAY 17 2006

If the action is a Coastal Area, and you are a state agency, complete the Coastal Assessment Form before proceeding with this assessment

ENGINEER & PLANNING

06-18

**ASSESSMENT (To be completed by Lead Agency)**

CEED ANY TYPE I THRESHOLD IN 6 NYCRR, PART 617.4? If yes, coordinate the review process and use the FULL EAF.  
 lo

EIVE COORDINATED REVIEW AS PROVIDED FOR UNLISTED ACTIONS IN 6 NYCRR, PART 617.6? If No, a negative  
 superseded by another involved agency.  
 lo

ESULT IN ANY ADVERSE EFFECTS ASSOCIATED WITH THE FOLLOWING: (Answers may be handwritten, if legible)  
 ality, surface or groundwater quality or quantity, noise levels, existing traffic pattern, solid waste production or disposal,  
 rosion, drainage or flooding problems? Explain briefly:

ultural, archaeological, historic, or other natural or cultural resources; or community or neighborhood character? Explain briefly:

fauna, fish, shellfish or wildlife species, significant habitats, or threatened or endangered species? Explain briefly:

existing plans or goals as officially adopted, or a change in use or intensity of use of land or other natural resources? Explain briefly:

requent development, or related activities likely to be induced by the proposed action? Explain briefly:

ort term, cumulative, or other effects not identified in C1-C5? Explain briefly:

including changes in use of either quantity or type of energy? Explain briefly:

OT HAVE AN IMPACT ON THE ENVIRONMENTAL CHARACTERISTICS THAT CAUSED THE ESTABLISHMENT OF A CRITICAL  
 AREA (CEA)? (If yes, explain briefly:

lo

HERE LIKELY TO BE, CONTROVERSY RELATED TO POTENTIAL ADVERSE ENVIRONMENTAL IMPACTS? If yes explain:

lo

**ATION OF SIGNIFICANCE (To be completed by Agency)**

For each adverse effect identified above, determine whether it is substantial, large, important or otherwise significant. Each  
 assessed in connection with its (a) setting (i.e. urban or rural); (b) probability of occurring; (c) duration; (d) irreversibility; (e)  
 ; and (f) magnitude. If necessary, add attachments or reference supporting materials. Ensure that explanations contain  
 show that all relevant adverse impacts have been identified and adequately addressed. If question d of part ii was checked  
 tion of significance must evaluate the potential impact of the proposed action on the environmental characteristics of the CEA.

ix if you have identified one or more potentially large or significant adverse impacts which **MAY** occur. Then proceed directly to the FULL  
 prepare a positive declaration.

ix if you have determined, based on the information and analysis above and any supporting documentation, that the proposed action  
 result in any significant adverse environmental impacts **AND** provide, on attachments as necessary, the reasons supporting this  
 1.

**Jew Windsor Planning Board**

Name of Lead Agency

Date

Genaro Argenio

Chairman

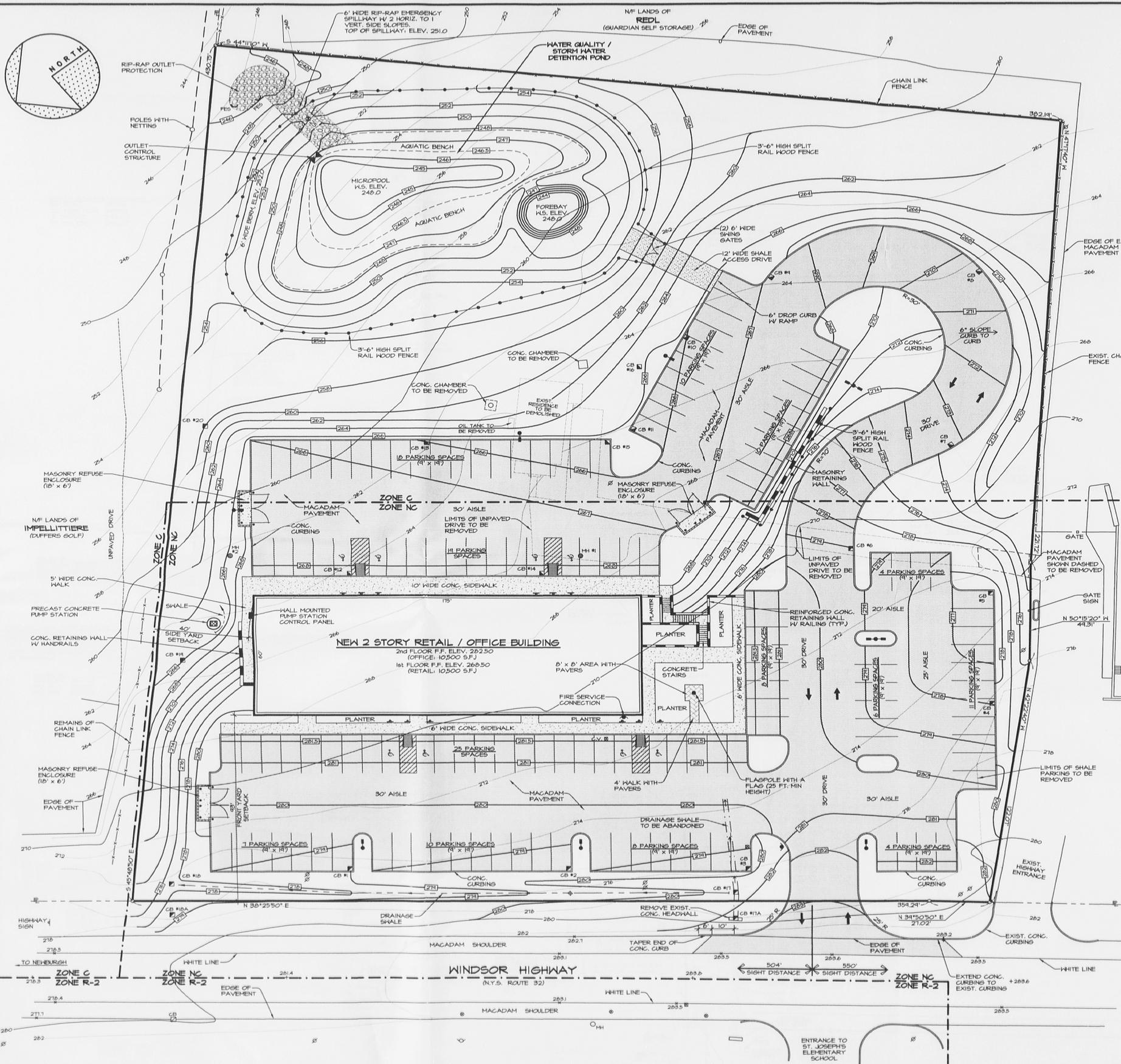
Name of Responsible Officer in Lead Agency

Title of Responsible Officer

Name of Responsible Officer in Lead Agency

Signature of Preparer (If different from responsible officer)

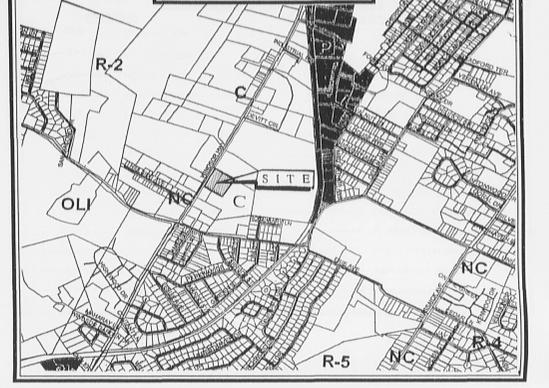
06-18



NOTES

1. ZONING DISTRICT: NC - NEIGHBORHOOD COMMERCIAL & C - DESIGN SHOPPING
2. RECORD OWNER & APPLICANT: NEW WINDSOR REALTY GROUP, LLC  
87 TAFT AVENUE  
NEWBURGH, NEW YORK 12550
3. TOTAL PARCEL AREA: 3.654 ACRES
4. TAX MAP DESIGNATION: SECTION 9, BLOCK 1, LOT 24
5. BOUNDARY, TOPOGRAPHIC AND UTILITY SURVEY INFORMATION OBTAINED FROM DRAWING ENTITLED "BOUNDARY / TOPOGRAPHIC SURVEY - NEW WINDSOR REALTY GROUP, LLC" PREPARED BY WILLIAM B. HILDRETH LAND SURVEYOR, P.C. AND DATED JUNE 25, 2009. ELEVATION DATUM USED TAKEN FROM DESIGN DRAWINGS FOR SEWER DISTRICT 12. CONTOUR INTERVAL: 1/4" (2) FEET.
6. THE LOCATION OF UNDERGROUND UTILITIES AND SEWER INVERTS SHOWN HEREON ARE BASED ON EVIDENCE VISIBLE AT GROUND SURFACE AND INFORMATION SHOWN ON THE ABOVE REFERENCED DESIGN DRAWINGS FOR SEWER DISTRICT 12.
7. THE LOCATIONS OF EXISTING UTILITIES ARE TO BE CONSIDERED AS APPROX. PRIOR TO EXCAVATION THE CONTRACTOR SHALL VERIFY THEIR LOCATIONS.
8. UNDERGROUND FACILITIES PROTECTIVE ORGANIZATION (U.F.P.O.) SECTION 118B OF THE PUBLIC SERVICE LAW, ARTICLE 36 OF THE GENERAL BUSINESS LAW AND INDUSTRIAL CODE RULE 53 REQUIRES (2) WORKING DAYS NOTICE BEFORE EXCAVATION, DRILLING OR BLASTING, UNDERGROUND UTILITIES CALL CENTER TEL. NO. 1-800-462-7162. CONTRACTOR SHALL PROTECT AND PRESERVE UTILITY MARKINGS.
9. SIGHT DISTANCES AT THE INTERSECTION OF THE PROJECT ENTRANCE AND WINDSOR HIGHWAY WERE MEASURED FROM A POINT 3.75 FEET ABOVE THE GROUND SURFACE AND 12 FEET BACK FROM THE PROJECT ENTRANCE'S INTERSECTION WITH THE EDGE OF PAVEMENT OF WINDSOR HIGHWAY TO A POINT 4.5 FEET ABOVE THE ROAD SURFACE ON WINDSOR HIGHWAY AT THE POINT SIGHTED.
10. PROJECT PARCEL IS SITUATED BETWEEN HIGHWAY MARKERS D, 0301-1133 AND 32-0301-1134.

ZONING MAP



ZONING SCHEDULE

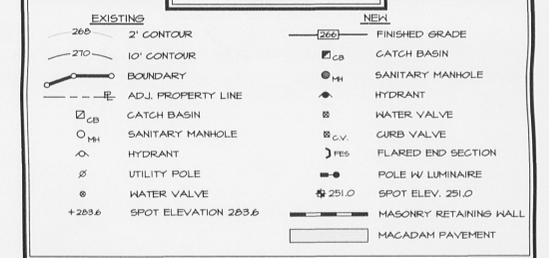
ZONE NC, NEIGHBORHOOD COMMERCIAL - USES: A-4 THROUGH A-7  
ZONE C, DESIGN SHOPPING - USES: A-1 THROUGH A-6

BULK REGULATIONS:	ZONE NC REQUIRED	ZONE C PROVIDED	PROVIDED
MIN. LOT AREA	10,000 S.F.	40,000 S.F.	19,004 S.F.
MIN. LOT WIDTH	100 FT.	200 FT.	340 FT.
MIN. FRONT YARD DEPTH	40 FT.	60 FT.	43 FT.
MIN. SIDE YARD - ONE	15 FT.	30 FT.	40 FT.
MIN. SIDE YARD - BOTH	35 FT.	70 FT.	208 FT.
MIN. REAR YARD DEPTH	15 FT.	30 FT.	255 FT.
MIN. STREET FRONTAGE	N/A	N/A	N/A
BUILDING HEIGHT (ZONE C) (12' / FT. OF DISTANCE TO NEAREST LOT LINE - 40 FT.)		40 FT.	35 FT.
BUILDING HEIGHT (ZONE NC)	35 FT.		35 FT.
MAX. FLOOR AREA RATIO	1	0.50	0.07
DEVELOPMENT COVERAGE	85 %	85 %	44.4 %

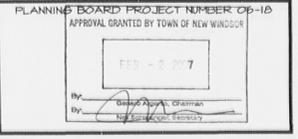
  

OFF-STREET PARKING	REQUIRED	PROVIDED
RETAIL - UPPER LEVEL (1 SPACE PER 150 S.F.) (10,500 S.F. / 1 SPACE PER 150 S.F.)	70 SPACES	83 SPACES
RETAIL - LOWER LEVEL (1 SPACE PER 150 S.F.) (10,500 S.F. / 1 SPACE PER 150 S.F.)	70 SPACES 140 SPACES	57 SPACES 140 SPACES

LEGEND



TOWN OF NEW WINDSOR PLANNING BOARD STAMP OF APPROVAL



DRAWINGS ARE INVALID AND INCOMPLETE UNLESS ACCOMPANIED BY DRAWINGS 1 OF 10 THROUGH 10 OF 10.

**Shaw Engineering**  
Consulting Engineers  
744 Broadway  
Newburgh N.Y. 12550

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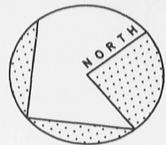
COPYRIGHT 2006 SHAW ENGINEERING

ISSUE	REVISION	DATE
2	N.Y.S.D.O.T. REVISIONS & DELETED SAND FILTER	4-27-2006
1	FIRE INSPECTOR'S COMMENTS	6-1-2006

Drawn By: J.R.J.  
Checked By: G.J.S.  
Scale: 1"=20'  
Date: 4-27-2006

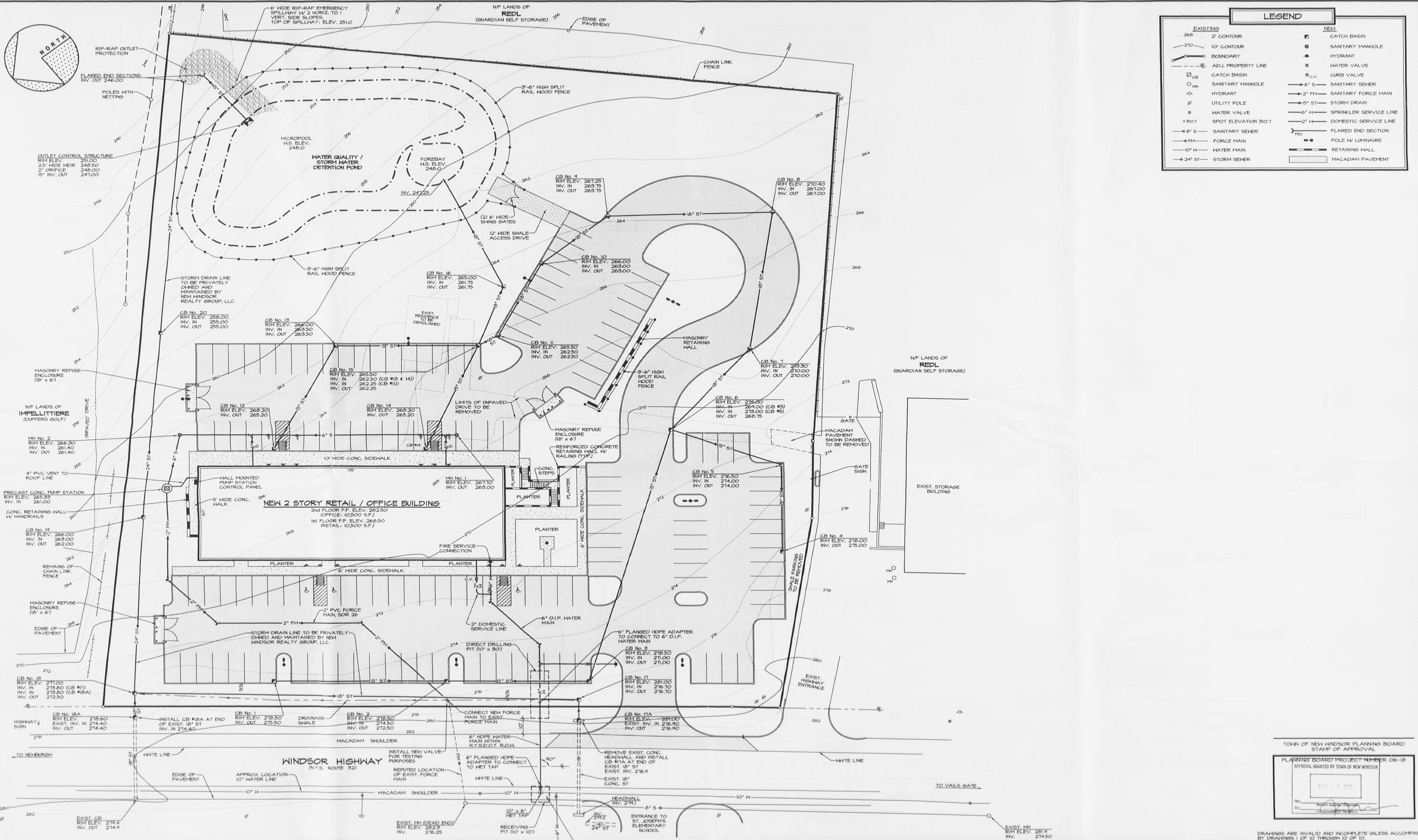
Drawing: **SITE DEVELOPMENT / GRADING PLAN**  
Project: NEW RETAIL / OFFICE BUILDING FOR **NEW WINDSOR REALTY GROUP, LLC**  
N.Y.S. ROUTE 32  
TOWN OF NEW WINDSOR, N.Y.

1 OF 10  
Project No. 0506



**LEGEND**

EXISTING	NEW		
26.0	2' CONTOUR	▣	CATCH BASIN
27.0	10' CONTOUR	●	SANITARY MANHOLE
—	BOUNDARY	○	HYDRANT
- - -	ADJ. PROPERTY LINE	⊕	WATER VALVE
▣ <sub>CB</sub>	CATCH BASIN	⊕ <sub>C.V.</sub>	CURB VALVE
○ <sub>MH</sub>	SANITARY MANHOLE	— 6" S	SANITARY SEWER
○	HYDRANT	— 2" FM	SANITARY FORCE MAIN
⊕	WATER VALVE	— 15" ST	STORM DRAIN
+30.7	SPOT ELEVATION 30.7	— 6" H	SPRINKLER SERVICE LINE
— 6" S	SANITARY SEWER	— 2" H	DOMESTIC SERVICE LINE
— 4" FM	FORCE MAIN	—	FLARED END SECTION
— 10" H	WATER MAIN	—	POLE W/ LUMINAIRE
— 24" ST	STORM SEWER	—	RETAINING WALL
		—	MACADAM PAVEMENT



TOWN OF NEW WINDSOR PLANNING BOARD  
STAMP OF APPROVAL

PLANNING BOARD PROJECT NUMBER 06-18  
APPROVAL GRANTED BY TOWN OF NEW WINDSOR

FEB - 3 2006

By: [Signature]  
By: [Signature]

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**Shaw Engineering**  
Consulting Engineers

744 Broadway Newburgh N.Y. 12550

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ISSUE	REVISION	DATE
2	N.Y.S.D.O.T. REVISIONS 4 DELETED SAND FILTER	4-21-2006
1	FIRE INSPECTOR'S COMMENTS	6-1-2006

DATE	BY	DESCRIPTION
4-27-2006	J.R.J.	DRAWING
4-27-2006	G.J.S.	CHECKED

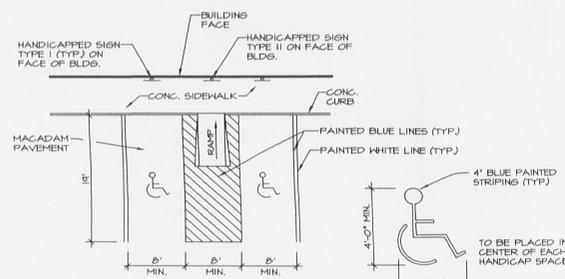
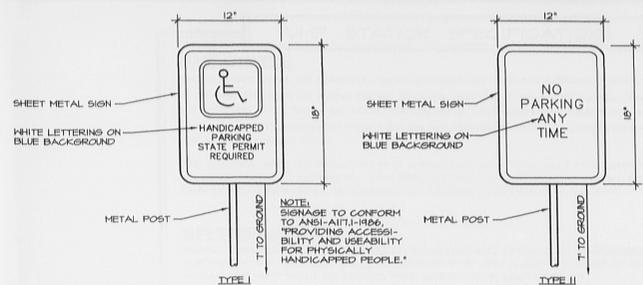
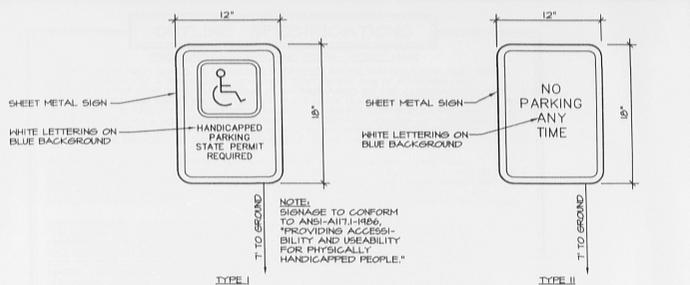
Project: NEW RETAIL / OFFICE BUILDING FOR **NEW WINDSOR REALTY GROUP, LLC**

Date: 4-27-2006

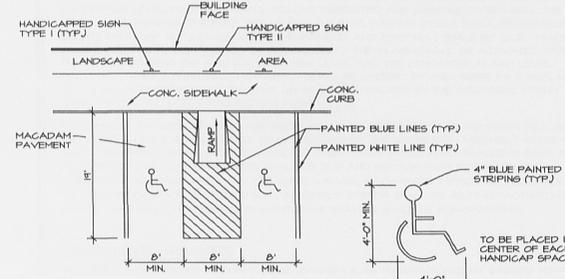
N.Y.S. ROUTE 32 TOWN OF NEW WINDSOR, N.Y.

Project No. 0506

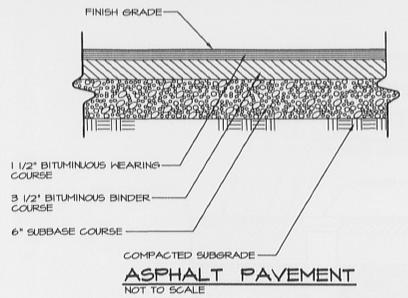
2 OF 10



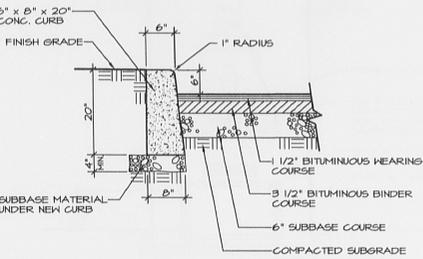
**HANDICAPPED SIGN & SPACE DETAIL**  
NOT TO SCALE



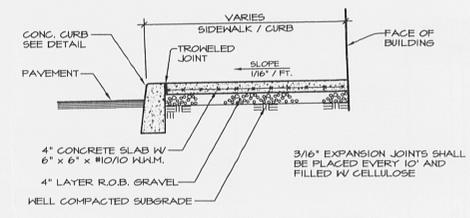
**HANDICAPPED SIGN & SPACE DETAIL**  
NOT TO SCALE



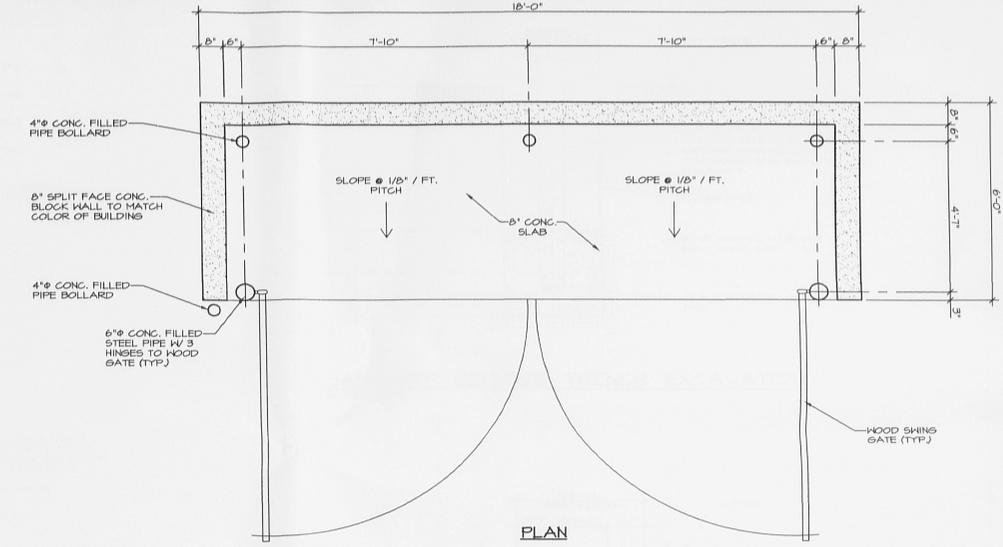
**ASPHALT PAVEMENT**  
NOT TO SCALE



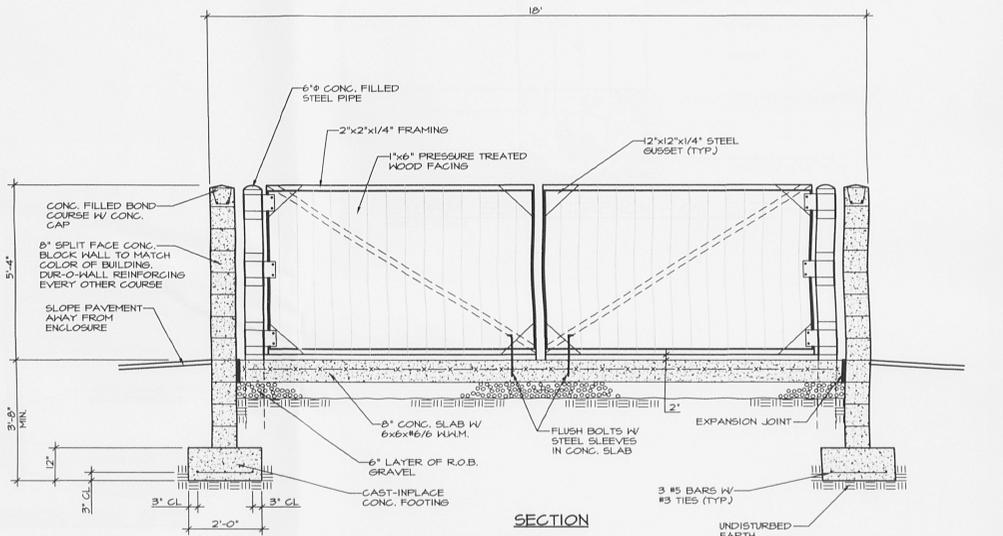
**CURB**  
NOT TO SCALE



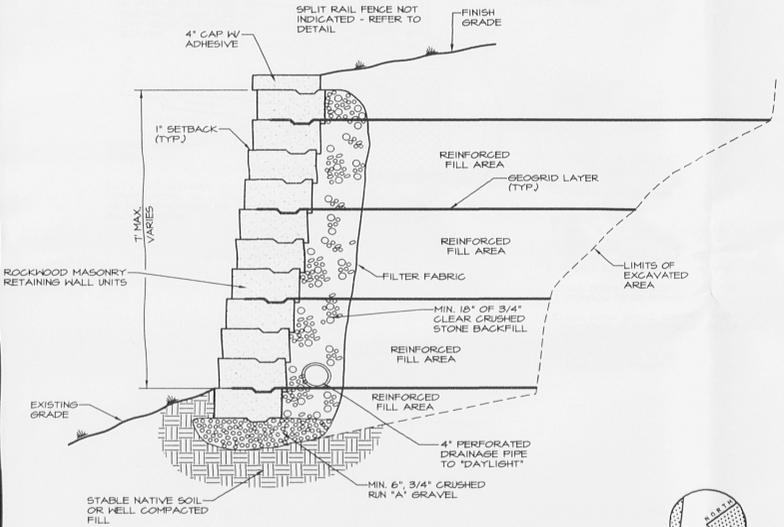
**SIDEWALK**  
NOT TO SCALE



**PLAN**

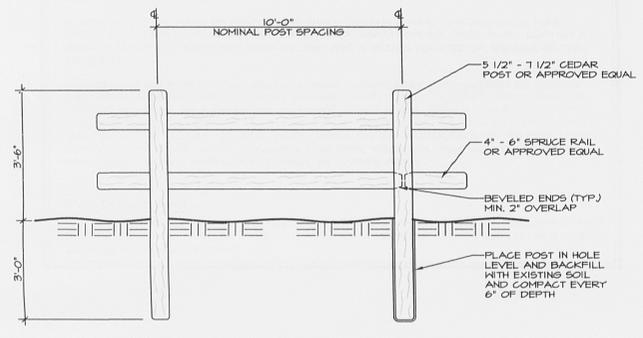


**SECTION REFUSE ENCLOSURE**  
NOT TO SCALE

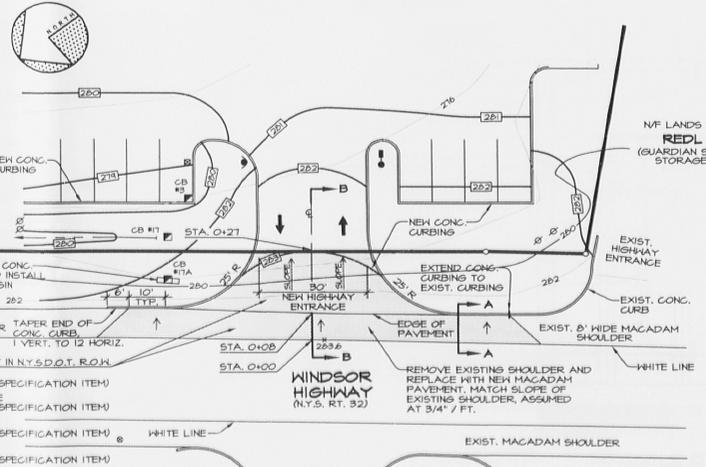


**ROCKWOOD MASONRY RETAINING WALL**  
NOT TO SCALE

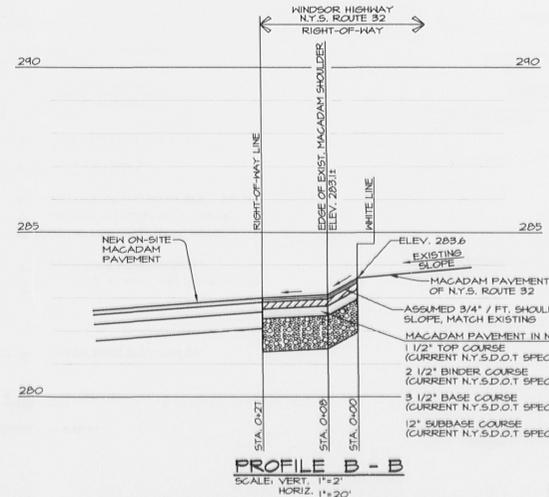
- NOTES:**
1. VERIFY MINIMUM ALLOWABLE BEARING PRESSURE OF 3,000 p.s.f.
  2. COMPACTION SHALL BE 95% STANDARD PROCTOR.
  3. NUMBER AND LENGTH OF GEOGRID LAYERS SHALL BE AS RECOMMENDED BY ROCKWOOD RETAINING WALLS, INC.



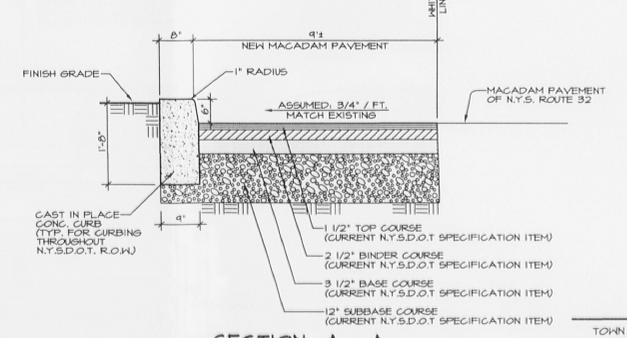
**SPLIT RAIL FENCE**  
NOT TO SCALE



**HIGHWAY ENTRANCE PLAN**  
SCALE: 1"=20'



**PROFILE B - B**  
SCALE: VERT. 1"=2' HORIZ. 1"=20'



**SECTION A - A**  
**HIGHWAY ENTRANCE - N.Y.S.D.O.T. R.O.W.**  
NOT TO SCALE

TOWN OF NEW WINDSOR PLANNING BOARD STAMP OF APPROVAL

PLANNING BOARD PROJECT NUMBER 06-18

APPROVAL GRANTED BY TOWN OF NEW WINDSOR

DATE: 4-27-2006

DRAWINGS ARE INVALID AND INCOMPLETE UNLESS ACCOMPANIED BY DRAWINGS 1 OF 10 THROUGH 10 OF 10.

**Shaw Engineering**  
Consulting Engineers

744 Broadway Newburgh N.Y. 12550

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NO.	REVISION	DATE
2	N.Y.S.D.O.T. REVISIONS	4-21-2006
1	FIRE INSPECTOR'S COMMENTS	6-1-2006
	ISSUE	
	REVISION	

Drawn By: J.R.J.  
Checked By: G.J.S.  
Scale: AS SHOWN  
Date: 4-27-2006

**SITE DEVELOPMENT DETAILS**

Project: NEW RETAIL / OFFICE BUILDING FOR NEW WINDSOR REALTY GROUP, LLC  
N.Y.S. ROUTE 32 TOWN OF NEW WINDSOR, N.Y.

3 OF 10  
Project No. 0506

**OUTLINE SPECIFICATIONS**

**PRESSURE AND LEAKAGE TESTS - FORCE MAIN**

THE 2" FORCE MAIN SHALL BE OFFICIALLY TESTED AFTER INSTALLATION. THE TEST SHALL CONSIST OF A PRESSURE / LEAKAGE TEST WHICH ARE IN ACCORDANCE WITH A WRITTEN STEP BY STEP TESTING PLAN PREPARED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. TESTING OF THE FORCE MAIN SHALL BE PERFORMED TO ESTABLISH THE ABILITY OF THE FORCE MAIN TO MAINTAIN CONTINUOUS PRESSURE, AND TO ESTABLISH THE LINES WATER TIGHTNESS. BEFORE ANY TESTING OF THE WORK IS BEGUN, ALL PARTS OF THE FORCE MAIN SHALL BE PROPERLY PROTECTED AND SUFFICIENTLY BRACED TO PREVENT MOVEMENT UNDER PRESSURE.

ALL MATERIALS AND EQUIPMENT SUCH AS PUMPS, GAGES, METERS, HOSE, AND CONNECTIONS SHALL BE FURNISHED BY THE CONTRACTOR IN ADDITION TO THE WATER REQUIRED FOR THE TEST. ALL INSTRUMENTS FOR MEASURING AND MONITORING THE TEST SHALL BE TESTED FOR ACCURACY AS FREQUENTLY AS SO DIRECTED. THEY SHALL BE AVAILABLE TO THE ENGINEER, WHEN REQUESTED, FOR INDEPENDENT TESTING.

THE PRESSURE / LEAKAGE TEST SHALL BE AT THE TEST PRESSURE OF 50 PSI, AND THE LENGTH OF THE TEST SHALL BE 2 HOURS. THE TEST SHALL BE CONDUCTED PREFERABLY BEFORE COMPLETE BACKFILLING OF THE PIPELINE. WHEN THE JOINTS ARE EXPOSED, LINES WHICH ARE DEFLECTED WILL REQUIRE BACKFILL. PRIOR TO ANY TESTING, AFTER THE TEST CONNECTIONS ARE MADE, AND THE MAIN FILLED WITH WATER, THE FORCE MAIN SHALL BE SUBJECTED TO WATER PRESSURE NORMAL TO THE AREA. BEFORE APPLYING THE SPECIFIED TEST PRESSURE, ALL AIR SHALL BE EXPELLED FROM THE PIPE. AFTER ALL THE AIR HAS BEEN EXPELLED THE TEST PRESSURE SHALL BE APPLIED. IF DEFECTS ARE FOUND, THE CONTRACTOR SHALL IMMEDIATELY MAKE THE NECESSARY REPAIRS AT HIS OWN EXPENSE, THEN REPEAT THE PRESSURE TEST UNTIL NO DEFECTS ARE FOUND.

LEAKAGE SHALL BE DEFINED AS THE QUANTITY OF WATER THAT MUST BE SUPPLIED INTO THE REBUILT LIFT PIPE TO MAINTAIN THE SPECIFIED TEST PRESSURE AFTER THE AIR IN THE PIPELINE HAS BEEN EXPELLED AND THE PIPE HAS BEEN FILLED WITH WATER. NO PIPE INSTALLATION WILL BE ACCEPTED IF THE LEAKAGE IS GREATER THAN THAT DETERMINED BY THE FOLLOWING FORMULA:

$$L = \frac{5 D (P)^2}{133,000}$$

WHERE L = ALLOWABLE LEAKAGE, IN GALLON PER HOUR  
 S = LENGTH OF PIPE TESTED, IN FEET  
 D = NOMINAL DIAMETER OF THE FORCE MAIN  
 P = AVERAGE TEST PRESSURE DURING THE TEST, IN PSI

SHOULD THE FORCE MAIN FAIL TO MEET THE LEAKAGE TEST, THE CONTRACTOR SHALL MAKE THE NECESSARY REPAIRS AT HIS OWN EXPENSE.

**PUMP STATION SPECIFICATIONS**

**PUMP CHAMBER**

THE CHAMBER SHALL BE CONSTRUCTED OF REINFORCED PRECAST CONCRETE, SHALL HAVE A MINIMUM STRENGTH OF 4,000 PSI AT 28 DAYS, AND SHALL BE AIR ENTRAINED 5.5% TO 4.5% REINFORCING STEEL SHALL BE ASTM A615 GRADE 60 AND ASTM A615 GRADE 65. THE CHAMBER SHALL BE OF THE DIMENSIONS INDICATED ON THE DRAWINGS AND SHALL BE FABRICATED BY THE FORT MILLER CO., INC.

THE CHAMBER SHALL BE PROVIDED WITH A SCHEDULE 40, 4" PVC VENT PIPE. CHAMBER JOINTS SHALL BE PROVIDED WITH BUTYL JOINT SEALANT. ALL CRACKS OR LEAKS SHALL BE REPAIRED. CHAMBER EXTERIOR SHALL BE COATED WITH KOPPER'S "SUPER SERVICE BLACK".

**SUBMERSIBLE PUMPS**

INSTALL 2 SUBMERSIBLE EFFLUENT PUMPS, EACH EQUIPPED WITH A 2 HP, SUBMERSIBLE ELECTRIC MOTOR. THE PUMP SHALL BE GRINDER TYPE WITH A SHUT OFF HEAD OF 47 FEET MINIMUM. THE PUMP SHALL BE BARNES PUMP SERIES 55VF, 3.50" IMPELLER.

THE PUMPS SHALL OPERATE IN ALTERNATE SEQUENCE. UPON THE LIQUID LEVEL REACHING THE PUMP ON LEVEL, PUMP NO. 1 SHALL BECOME ENERGIZED AND CONTINUE TO RUN UNTIL THE LIQUID LEVEL REACHES THE PUMP OFF LEVEL. THE NEXT PUMPING CYCLE SHALL BE IDENTICAL EXCEPT THAT PUMP NO. 2 SHALL BECOME ENERGIZED, AND PUMP NO. 1 SHALL BE IDLE. IN NO CASE SHALL THE TWO PUMPS OPERATE SIMULTANEOUSLY. THE ALARM SHALL BE ACTIVATED UPON THE WATER REACHING THE HIGH WATER ALARM LEVEL, AND THE LOW WATER ALARM LEVEL. PROVIDE A THIRD SUBMERSIBLE PUMP WHICH SHALL BE STORED BY THE OWNER AS A REPLACEMENT PUMP. UPON STARTUP OF THE PUMP CHAMBER, THE VALVES ON THE DISCHARGE PIPING SHALL BE THROTTLED TO REGULATE THE FLOW.

TO ELIMINATE THE NEED OF PERSONEL ENTERING THE CHAMBER, EACH OF THE PUMPS WILL BE PROVIDED WITH A STAINLESS STEEL QUICK DISCONNECT AND GUIDE RAIL ASSEMBLY SYSTEM. QUICK DISCONNECT SHALL INCLUDE STAINLESS STEEL GUIDE RAILS, HALL BRACKETS, BASE PLATE AND LIFTING CABLE. ALSO INCLUDED SHALL BE TOP AND BOTTOM PUMP BRACKET, QUICK DISCONNECT ADAPTER, CHECK VALVES, GATE VALVES, GALVANIZED PIPING AND TEE HANDLES TO OPERATE GATE VALVES. GUIDE RAIL ASSEMBLY SYSTEM SHALL BE AS MANUFACTURED BY BARNES PUMPS. ALL MOVING PARTS WITHIN PUMP STATION SHALL BE NON-SPARKING.

**LIQUID LEVEL SENSORS**

PROVIDE 5 PIPE MOUNTED MERCURY LEVEL CONTROLS AS MANUFACTURED BY BARNES PUMPS.

**PUMP CONTROL PANEL**

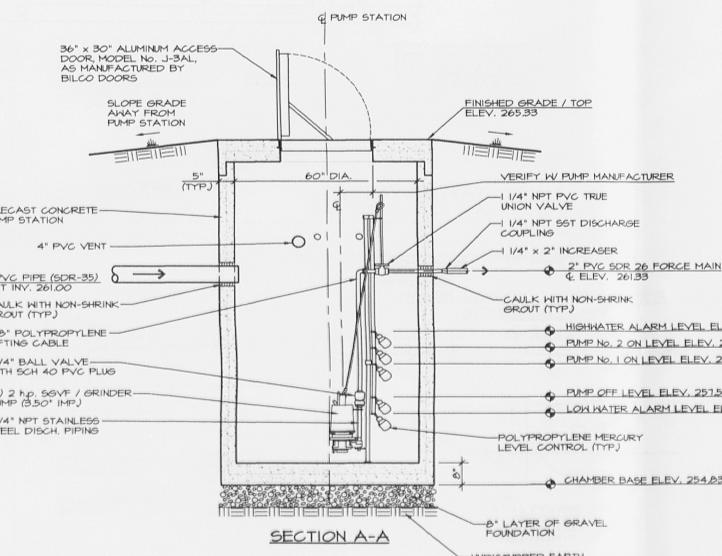
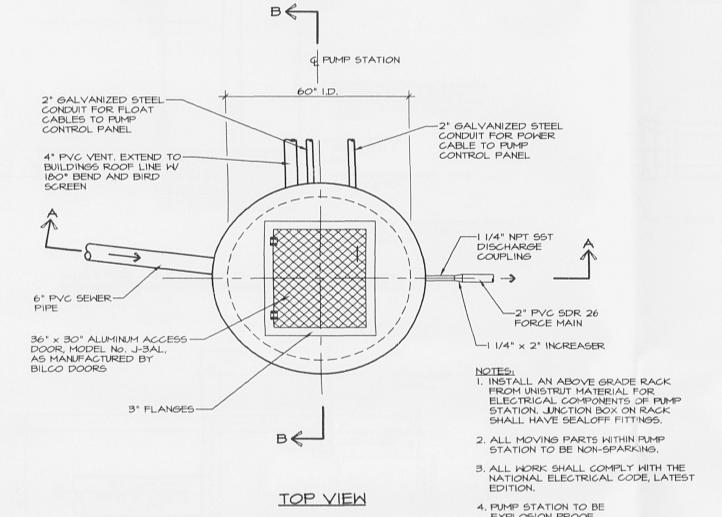
FURNISH AND INSTALL ON THE EXTERIOR OF THE BUILDING A NEW DUPLEX CONTROL PANEL FOR THE SEWAGE PUMPS. PANEL SHALL PROVIDE FOR THE FULLY AUTOMATIC OPERATION OF THE TWO PUMPS. AN ALTERNATOR SHALL BE PROVIDED TO DISTRIBUTE OPERATING TIME BETWEEN THE TWO PUMPS AND THE PANEL SHALL BE FACTORY WIRED FOR OPERATION WITH FIVE FLOAT SWITCHES. THE PUMP CONTROL PANEL SHALL BE LOCATED IN A NEMA 4X FIBERGLASS ENCLOSURE AND SHALL HAVE A PAD LOCKABLE LOCK.

FOR EACH PUMP THE FACE OF PANEL DOOR SHALL CONTAIN A HAND-OFF-AUTOMATIC PUMP SWITCH, A PUMP RUN LIGHT, AND AN ON-OFF CONTROL CIRCUIT SWITCH. PANEL SHALL CONTAIN A 25-WATT ALARM WITH NEMA WITH NEMA 4X LENS AND A BUZZER LOCATED ON THE SIDE OF THE ENCLOSURE.

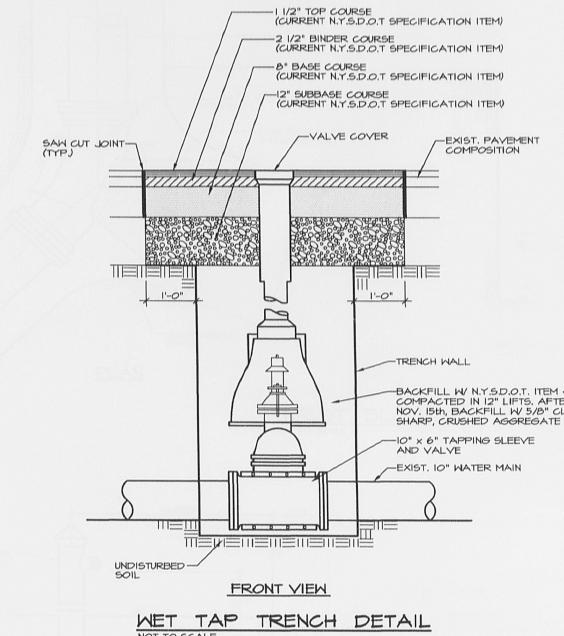
ADJACENT TO THE PUMP STATION, INSTALL A RACK CONSTRUCTED FROM UNISTRUT TO CONTAIN THE PUMP STATION JUNCTION BOX CONTAINING SEALOFF FITTINGS. TO PROTECT FROM SNOW, THE JUNCTION BOX SHALL BE A MINIMUM OF 24 INCHES ABOVE GRADE. PROVIDE POKER AND FLOAT CABLES IN SUFFICIENT LENGTH TO EXTEND FROM THE PUMPS TO THE JUNCTION BOX, AND FROM THE JUNCTION BOX TO THE PUMP CONTROL PANEL. CHECK THE CHARACTERISTICS OF THE PUMP MOTORS FOR COORDINATION OF CIRCUIT BREAKERS, STARTERS, WIRING, ETC. PUMP CONTROL PANEL SHALL BE A STEALTH DUPLEX PUMP CONTROL PANEL BY BARNES PUMPS.

**PVC FORCE MAIN**

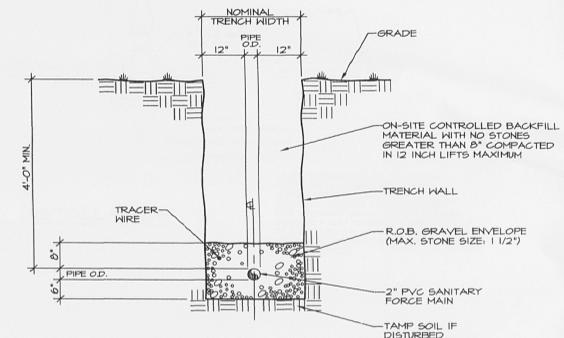
FORCE MAIN SHALL BE SDR 26 PVC PIPE WITH A PRESSURE RATING OF 160 PSI. PIPE JOINTS SHALL BE BELL AND SPIGOT "PUSH-ON" TYPE WITH A FACTORY INSTALLED ELASTOMERIC RUBBER GASKET SUITABLE FOR SEWAGE SERVICE.



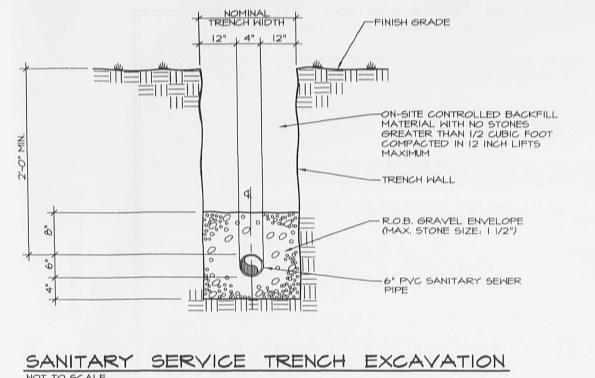
**WASTEWATER PUMP STATION**  
 NOT TO SCALE  
 BARNES PUMPS AREA REPRESENTATIVE  
 67. SMITH & ASSOCIATES (845) 782-0474



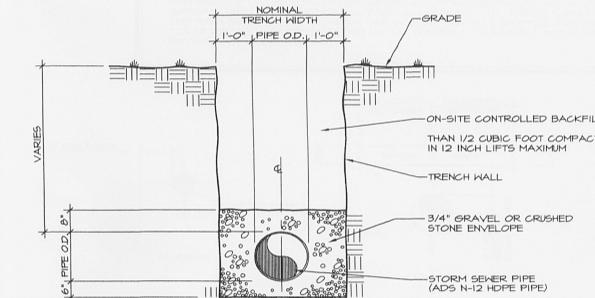
**WET TAP TRENCH DETAIL**  
 NOT TO SCALE



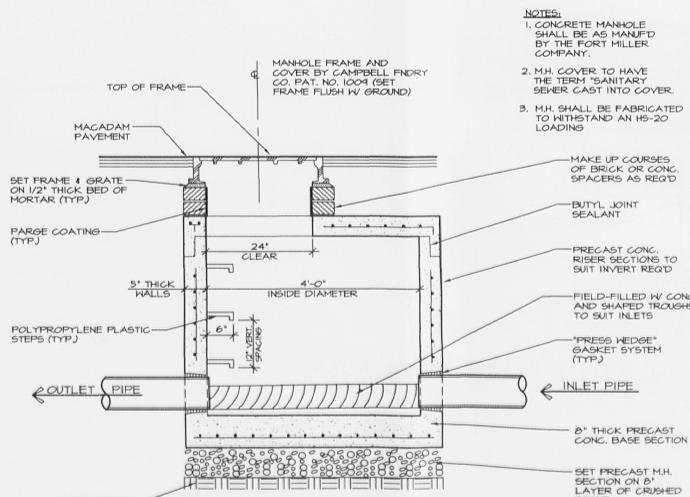
**PVC FORCE MAIN TRENCH - ON SITE**  
 NOT TO SCALE



**SANITARY SERVICE TRENCH EXCAVATION**  
 NOT TO SCALE



**STORM SEWER TRENCH - ON SITE**  
 NOT TO SCALE



**FLAT TOP MANHOLE ASSEMBLY**  
 NOT TO SCALE

**NOTES:**

1. CONCRETE MANHOLE SHALL BE AS MANUF BY THE FORT MILLER COMPANY.
2. M.H. COVER TO HAVE THE TERM "SANITARY SEWER CAST INTO COVER.
3. M.H. SHALL BE FABRICATED TO WITHSTAND AN 18-20' LOADING.

MAKE UP COURSES OF BRICK OR CON SPAGERS AS REQ'D  
 BUTYL JOINT SEALANT  
 PRECAST CONC. RISER SECTIONS TO SUIT INVERT REQ'D  
 FIELD-FILLED W/ CONC. AND SHAPED TROUGHS TO SUIT INLETS  
 "PRESS HEDGE" GASKET SYSTEM (TYP.)

TOWN OF NEW WINDSOR PLANNING BOARD  
 STAMP OF APPROVAL  
 PLANNING BOARD PROJECT NUMBER 06-18  
 APPROVAL GRANTED BY TOWN OF NEW WINDSOR  
 FEB - 9 2007

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**Shaw Engineering**  
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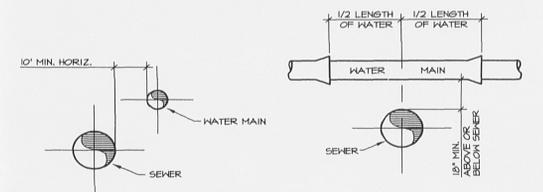
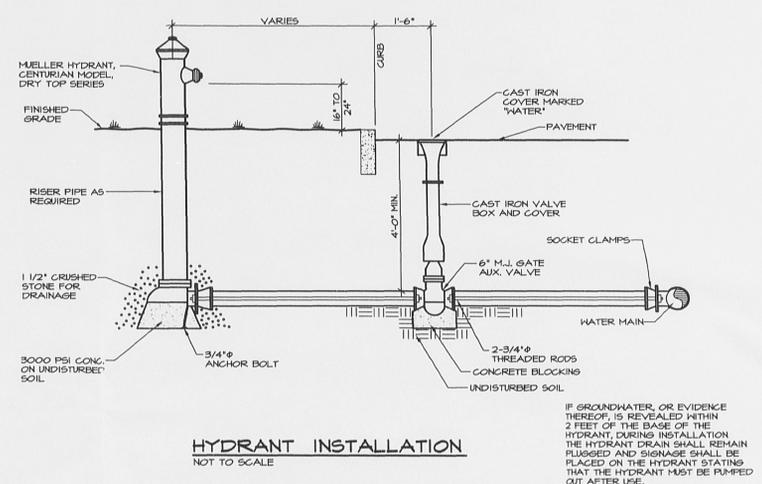
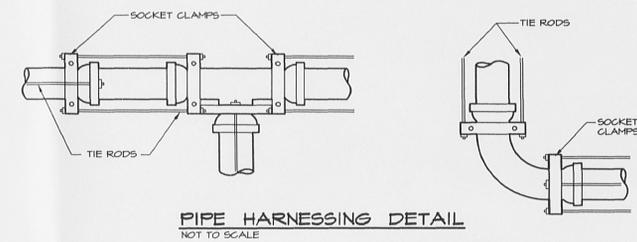
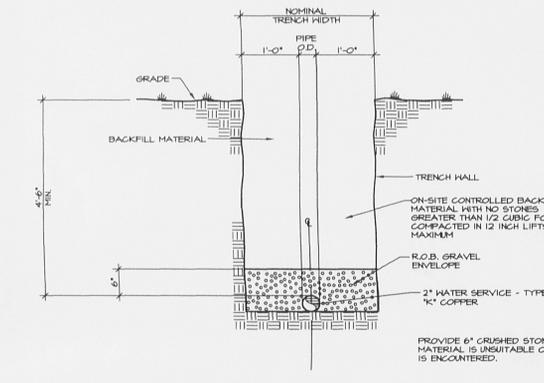
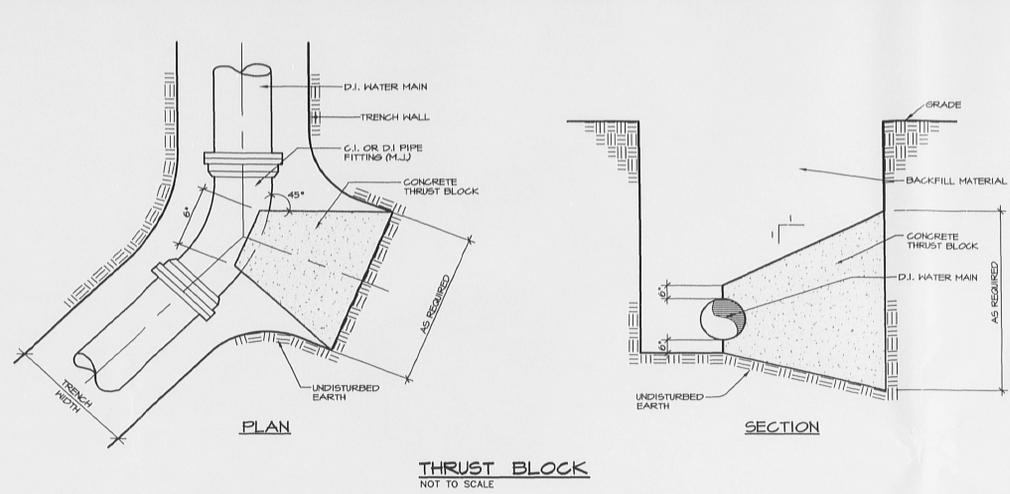
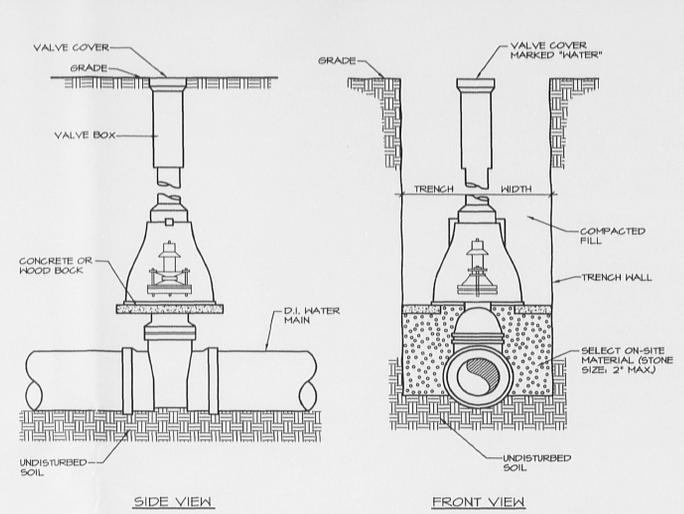
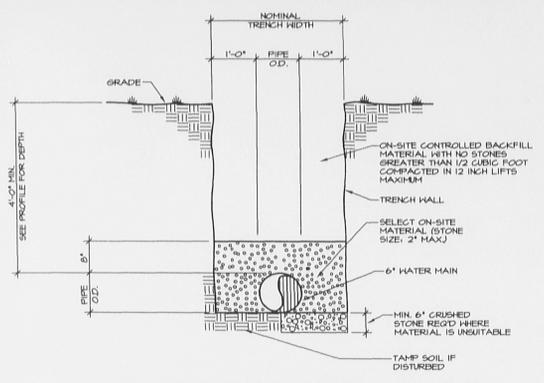
Drawn By: J.R.J.  
 Checked By: G.J.S.  
 Scale: AS SHOWN  
 Date: 4-27-2006

Project: NEW RETAIL / OFFICE BUILDING FOR  
**NEW WINDSOR REALTY GROUP, LLC**  
 N.Y.S. ROUTE 32 TOWN OF NEW WINDSOR, N.Y.

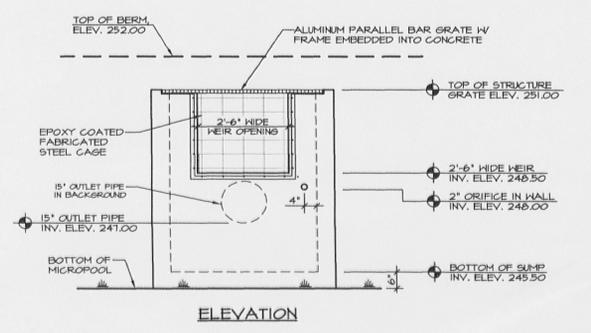
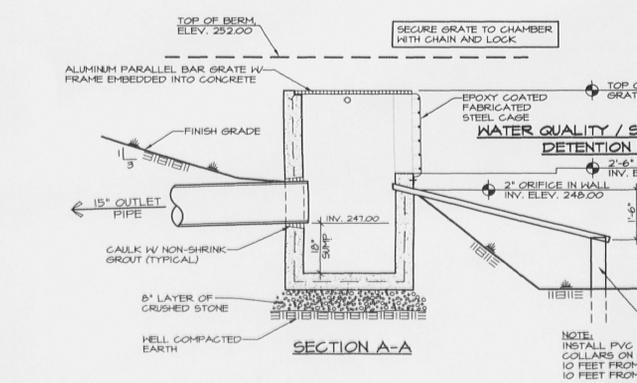
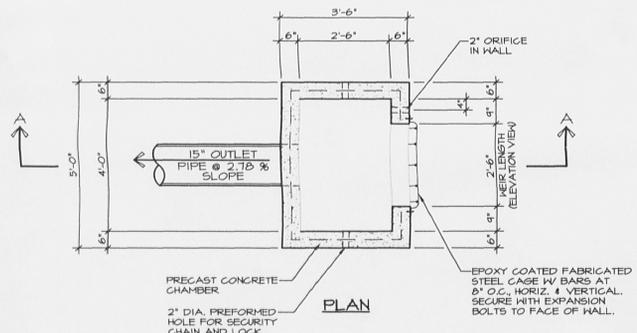
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 Project No. 0506

**UTILITY INSTALLATION NOTES**

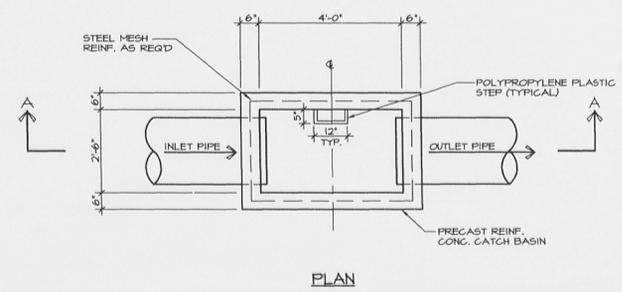
- WATER SYSTEM**
- CONSTRUCTION OF POTABLE WATER UTILITIES AND CONNECTION TO THE TOWN OF NEW WINDSOR WATER SYSTEM REQUIRES A PERMIT FROM THE TOWN OF NEW WINDSOR WATER DEPARTMENT. ALL REQUIREMENTS SHALL CONFORM TO THE REQUIREMENTS OF THE TOWN OF NEW WINDSOR.
  - OTHER THAN THE CROSSINGS UNDER N.Y.S. ROUTE 32, ALL WATER SERVICE LINES SHALL BE CEMENT LINED CLASS 52 DUCTILE IRON PIPE CONFORMING TO ANSI/AWWA C151/A21.5-41 FOR DUCTILE IRON PIPE. JOINTS SHALL BE EITHER PUSH-ON OR MECHANICAL JOINT AS REQUIRED.
  - ALL FITTINGS SHALL BE CAST IRON OR DUCTILE IRON, MECHANICAL JOINT, CLASS 250 AND CONFORM TO ANSI/AWWA C107/A210-43 FOR DUCTILE AND GRAY IRON FITTINGS OR ANSI/AWWA C153/A21.53-44, FOR DUCTILE IRON COMPACT FITTINGS.
  - ALL VALVES SHALL BE DOUBLE DISC, MECHANICAL JOINT GATE VALVES CONFORMING TO ANSI/AWWA C500-43 SUCH AS MUELLER A-2380-23 OR APPROVED EQUAL.
  - TAPPING SLEEVE SHALL BE MECHANICAL JOINT SUCH AS MUELLER H-615 OR EQUAL. TAPPING VALVE SHALL BE DOUBLE DISC, MECHANICAL JOINT BY FLANGED END SUCH AS MUELLER H-501 OR EQUAL. ALL TAPPING SLEEVES AND VALVES SHALL BE TESTED TO 150 PSI MINIMUM. TESTING OF THE TAPPING SLEEVE AND VALVE MUST BE WITNESSED AND ACCEPTED BY THE TOWN OF NEW WINDSOR WATER DEPARTMENT PRIOR TO CUTTING INTO THE PIPE.
  - ALL WATER SERVICE LINES TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE TYPE K COPPER TUBING. CORPORATION STOPS SHALL BE MUELLER H-5020 FOR 3/4 AND 1 INCH, MUELLER H-5000 OR B-25000 FOR 1 1/2 AND 2 INCH SIZES. CURB VALVES SHALL BE MUELLER H-501-2 FOR 3/4 AND 1 INCH AND MUELLER B-25204 FOR 1 1/2 AND 2 INCH SIZES. CURB BOXES SHALL BE MUELLER H-10312 FOR 3/4 AND 1 INCH AND MUELLER H-10310 FOR 1 1/2 AND 2 INCH SIZES.
  - ALL PIPE INSTALLATION SHALL BE SUBJECT TO INSPECTION BY THE TOWN OF NEW WINDSOR WATER DEPARTMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL INSPECTIONS AS REQUIRED WITH THE TOWN OF NEW WINDSOR WATER DEPARTMENT.
  - THE WATER MAIN SHALL BE TESTED, DISINFECTED, FLUSHED, AND BACTERIOLOGICAL TESTED IN ACCORDANCE WITH THE TOWN OF NEW WINDSOR REQUIREMENTS. ALL TESTING, DISINFECTION AND FLUSHING SHALL BE COORDINATED WITH THE TOWN OF NEW WINDSOR WATER DEPARTMENT. PRIOR TO PUTTING THE WATER MAIN IN SERVICE SATISFACTORY SANITARY RESULTS FROM A CERTIFIED LAB MUST BE SUBMITTED TO THE TOWN OF NEW WINDSOR WATER DEPARTMENT. THE TEST SAMPLES MUST BE COLLECTED BY A REPRESENTATIVE OF THE TESTING LABORATORY AND WITNESSED BY THE WATER DEPARTMENT.



- NOTES**
- WATER MAINS CROSSING SEWERS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 12" BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER AT CROSSINGS. ONE FULL LENGTH OF WATER PIPE SHALL BE LOCATED SO THAT JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE.
  - THE TERM SEWER IS DEFINED AS SANITARY, STORM OR SEWER SERVICE LATERALS.
  - THE TERM WATER MAINS SHALL ALSO INCLUDE WATER SERVICE LINES.
  - ANY DEVIATION FROM THE MINIMUM HORIZONTAL AND VERTICAL SEPARATION REQUIREMENTS SHALL BE SPECIFICALLY APPROVED BY THE TOWN OF NEW WINDSOR.



**WATER QUALITY / STORM WATER DETENTION POND OUTLET CONTROL STRUCTURE**  
NOT TO SCALE



**CATCH BASIN DETAIL - TYPE 1**  
NOT TO SCALE

TOWN OF NEW WINDSOR PLANNING BOARD  
STAMP OF APPROVAL

PLANNING BOARD PROJECT NUMBER 06-18  
APPROVAL GRANTED BY TOWN OF NEW WINDSOR

FEB - 2 2007

By: [Signature]  
By: [Signature]

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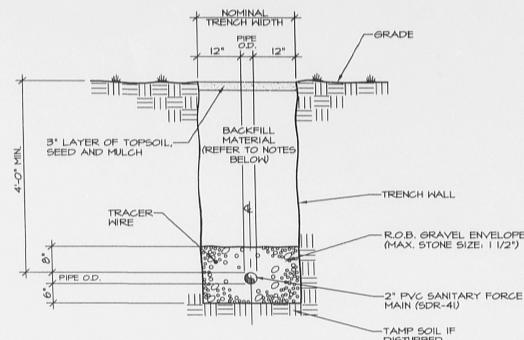
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Drawing: **UTILITY DETAILS**

Project: NEW RETAIL / OFFICE BUILDING FOR **NEW WINDSOR REALTY GROUP, LLC**  
N.Y.S. ROUTE 32 TOWN OF NEW WINDSOR, N.Y.

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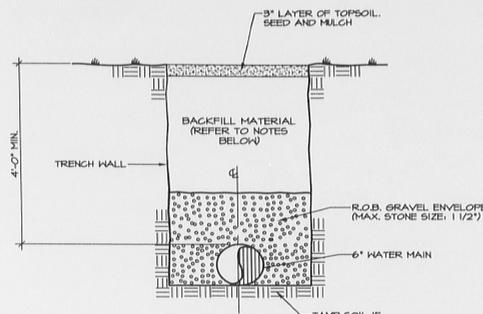


**NOTES:**  
WHENEVER THE TRENCH EXCAVATION IS WITHIN 6 FEET OR LESS OF THE CURB LINE OR THE EDGE OF THE MACADAM SHOULDER THE BACKFILL MUST BE N.Y.S.D.O.T. ITEM NO. 08304.02 AND PLACED IN 12" LIFTS AND THOROUGHLY COMPACTED BY MECHANICAL MEANS.

ALL TRENCH AREAS GREATER THAN 6 FEET FROM THE CURB LINE OR THE EDGE OF THE MACADAM SHOULDER MAY BE BACKFILLED WITH SELECT FILL MATERIAL FROM TRENCH EXCAVATION WITH ALL LARGE STONES TO BE REMOVED AND COMPACTED IN 12" LIFTS.

BACKFILL IN TRENCHES BEYOND SHOULDER AND PAVEMENT AREAS BUT WITHIN THE STATE HIGHWAY RIGHT OF WAY SHALL BE MAINTAINED LEVEL WITH THE SURROUNDING SURFACE AT ALL TIMES WITH AN APPROVED MATERIAL.

**PVC FORCE MAIN TRENCH - N.Y.S.D.O.T. R.O.W.**  
NOT TO SCALE

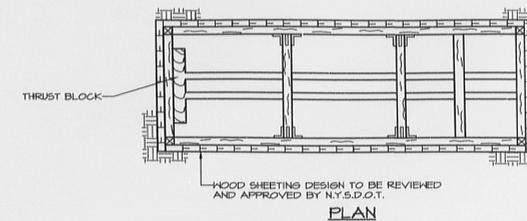


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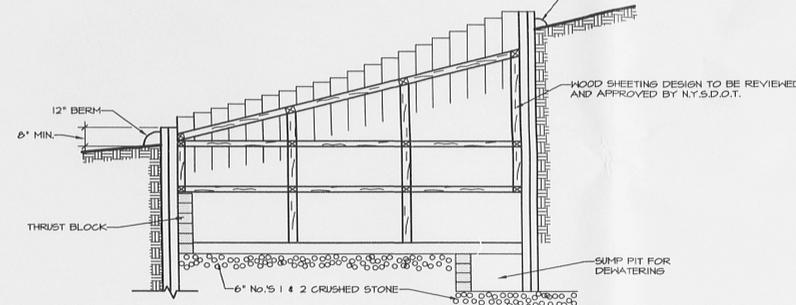
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BACKFILL IN TRENCHES BEYOND SHOULDER AND PAVEMENT AREAS BUT WITHIN THE STATE HIGHWAY RIGHT OF WAY SHALL BE MAINTAINED LEVEL WITH THE SURROUNDING SURFACE AT ALL TIMES WITH AN APPROVED MATERIAL.

**WATER MAIN TRENCH - N.Y.S.D.O.T. R.O.W.**  
NOT TO SCALE



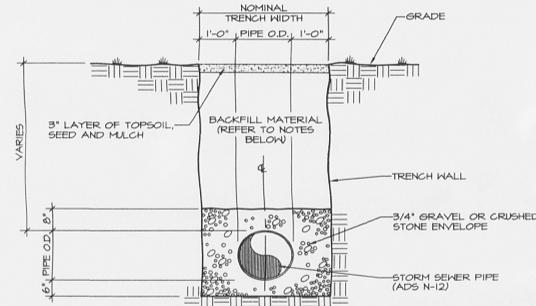
**PLAN**



**SECTION**

**NOTES:**  
1. 12" EARTH BERM TO BE PLACED AROUND SHEETING.  
2. CONTRACTOR IS TO SUBMIT SHEETINGS & SHORING PLANS FOR APPROVAL BY THE N.Y.S.D.O.T. BEFORE THE START OF CONSTRUCTION.

**DIRECT DRILLING PIT**  
NOT TO SCALE

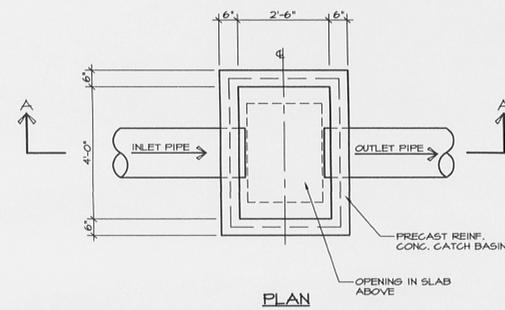


**NOTES:**  
WHENEVER THE TRENCH EXCAVATION IS WITHIN 6 FEET OR LESS OF THE CURB LINE OR THE EDGE OF THE MACADAM SHOULDER THE BACKFILL MUST BE N.Y.S.D.O.T. ITEM NO. 08304.02 AND PLACED IN 12" LIFTS AND THOROUGHLY COMPACTED BY MECHANICAL MEANS.

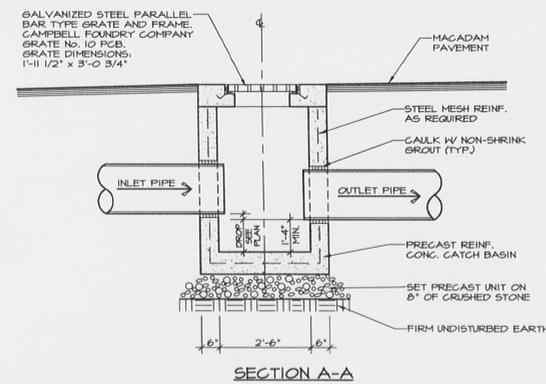
ALL TRENCH AREAS GREATER THAN 6 FEET FROM THE CURB LINE OR THE EDGE OF THE MACADAM SHOULDER MAY BE BACKFILLED WITH SELECT ON-SITE MATERIAL WELL COMPACTED AND WITH A MAXIMUM STONE SIZE OF 4". BACKFILL MATERIAL CAN ALSO BE R.O.B. GRAVEL (N.Y.S.D.O.T. ITEM NO. 203.01)

BACKFILL IN TRENCHES BEYOND SHOULDER AND PAVEMENT AREAS BUT WITHIN THE STATE HIGHWAY RIGHT OF WAY SHALL BE MAINTAINED LEVEL WITH THE SURROUNDING SURFACE AT ALL TIMES WITH AN APPROVED MATERIAL.

**STORM SEWER TRENCH - N.Y.S.D.O.T. R.O.W.**  
NOT TO SCALE

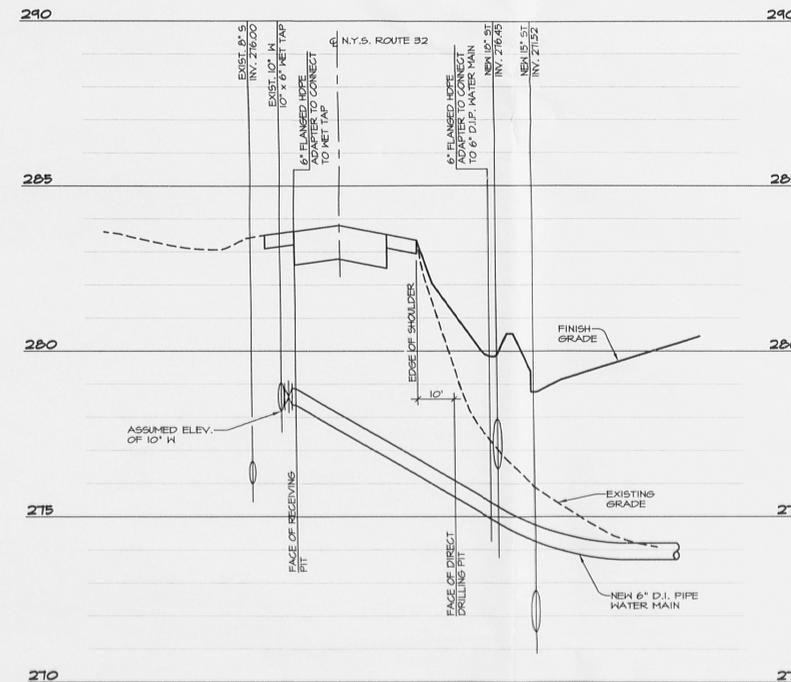


**PLAN**



**SECTION A-A**

**CATCH BASIN - N.Y.S.D.O.T. R.O.W.**  
NOT TO SCALE



**WATER MAIN PROFILE - N.Y.S.D.O.T. R.O.W.**  
SCALE: VERT. 1"=2'  
HORIZ. 1"=20'

PIPE DATA SHEET	
	PIPE DATA
CARRIERS TO BE HANDLED	WATER
NORMAL OPERATING PRESSURE	45 p.s.i.
NOMINAL SIZE OF PIPE	6 - INCHES
OUTSIDE DIAMETER	6.40 INCHES
INSIDE DIAMETER	5.835 INCHES
HALL THICKNESS	0.512 INCHES
HEIGHT PER FOOT	4.480 lbs.
MATERIAL	HDPE
PROCESS OF MANUFACTURE	EXTRUSION CAST
SPECIFICATION	ASTM F114
GRADE OR CLASS	DR 135
TEST PRESSURE	100 psi
TYPE OF JOINT	THERMAL BUTT FUSION
TYPE OF COATING	-----
DETAILS OF CATHODIC PROTECTION	-----
DETAILS OF SEALS OR PROTECTION AT ENDS OF CASING	-----
METHOD OF INSTALLATION	DIRECT DRILLING
CHARACTER OF SUBSURFACE MATERIAL AT THE CROSSING LOCATION	-----
APPROXIMATE GROUND WATER LEVEL	-----
SOURCE OF INFORMATION ON SUBSURFACE CONDITIONS (BORINGS, TEST PITS OR OTHERS)	-----

TOWN OF NEW WINDSOR PLANNING BOARD  
STAMP OF APPROVAL

PLANNING BOARD PROJECT NUMBER 06-18  
APPROVAL GRANTED BY TOWN OF NEW WINDSOR  
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By: [Signature]

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Consulting Engineers  
744 Broadway Newburgh, N.Y. 12550

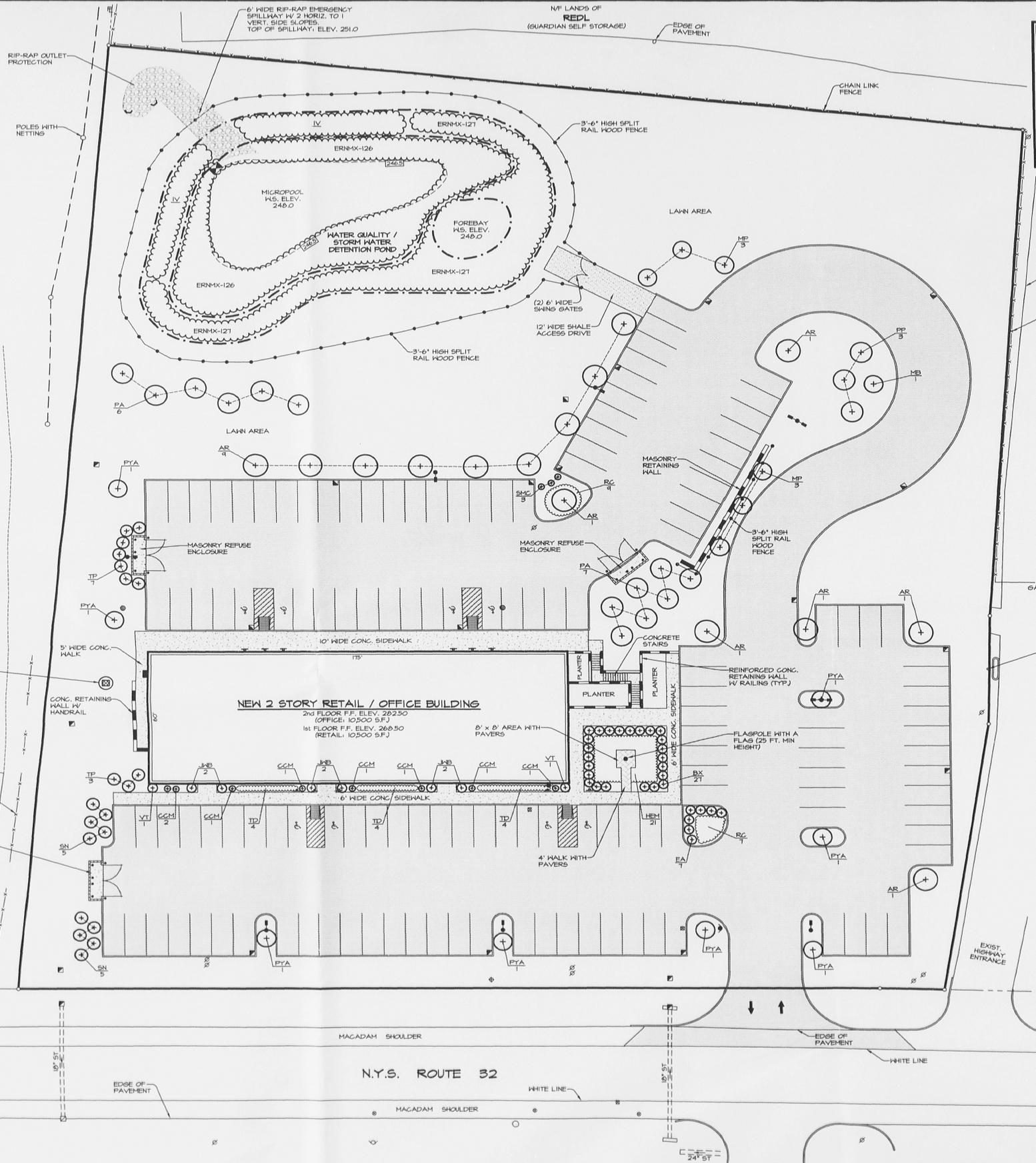
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Checked By: G.J.S.  
Scale: 1"=20'  
Date: 9-27-2006

Drawing:  
**UTILITY DETAILS**  
Project: NEW RETAIL / OFFICE BUILDING FOR  
**NEW WINDSOR REALTY GROUP, LLC**  
TOWN OF NEW WINDSOR, N.Y.

6 OF 10  
Project No. 0506

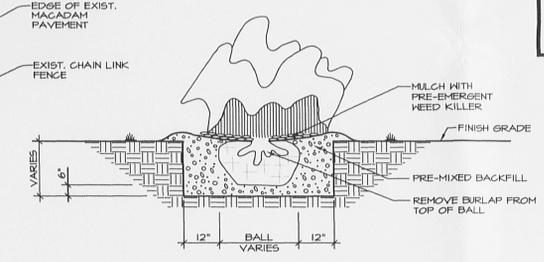


**PLANTING NOTES**

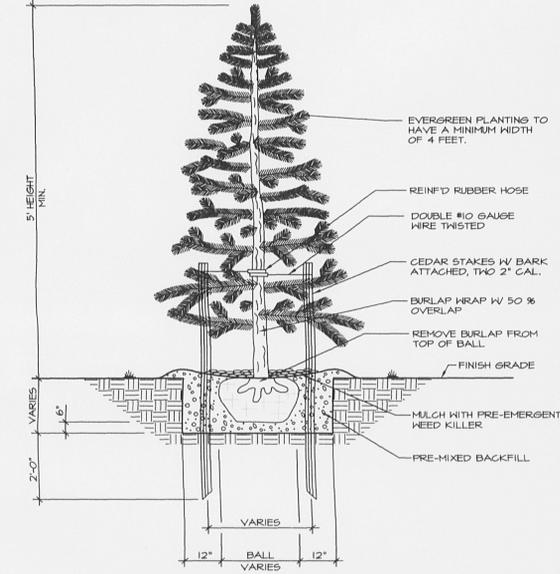
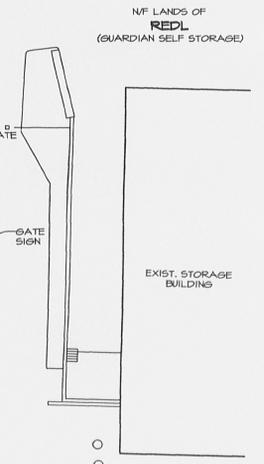
1. TOP SOIL DEPTHS FOR BEDS: 4" FOR LAWN AND GROUND COVER AREAS, 2" MIN.
2. CONTRACTOR SHALL LOCATE ALL UTILITIES PRIOR TO WORK.
3. PRIOR TO PLANTING, CONTRACTOR SHALL FIELD MODIFY LANDSCAPING SO THAT NO TREE IS WITHIN 10 FEET OF A WATER LINE, SANITARY SEWER LINE, OR A STORM DRAINAGE LINE.
4. CONTRACTOR SHALL FIELD MODIFY LANDSCAPING SO AS TO NOT CONFLICT WITH SITE LIGHTING.
5. ALL PLANTS MUST MEET AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS.
6. ALL SEEDED AREAS SHALL BE COVERED WITH STRAW AND WATERED FOR A MINIMUM OF TWO WEEKS.
7. ALL PLANT BEDS SHALL BE SLIGHTLY MOUND.

**PLANT LIST**

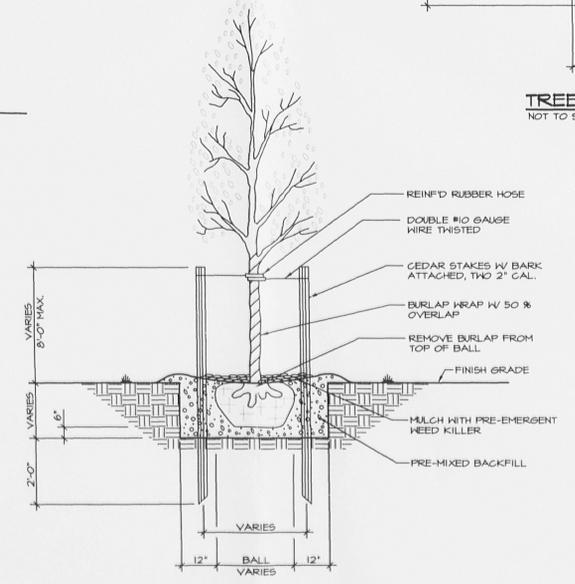
SYMBOL	BOTANICAL NAME	COMMON NAME	QUANTITY	SIZE
AR	Acer Rubrum	'October Glory' Red Maple	15	2-2 1/2 cal.
BX	Buxus Sempervirens 'Winter Gem'	Winter Gem Boxwood	24	5 gal.
CCM	Chamaecyparis Filifera Aurea	Gold Map Cypress	8	3 gal.
EA	Eucyrtus Alatus Compactus	Compact Burning bush	7	5 gal.
HEM	Hemerocallis 'Happy Returns'	'Happy Returns' Daylily	21	2 gal.
IV	Itea Virginea	'Henry's Garnet' Sweetgum	52	3 gal.
JNB	Juniperus Scopulorum	'Nichta Blue' Juniper	6	1 gal.
MP	Malus 'Prairefire'	'Praire Fire' Crabapple	6	2-2 1/2 cal.
MB	Magnolia Soulangiana 'Jane'	'Jane' Magnolia	1	7'-8'
PA	Picea Abies	Norway Spruce	13	6'-7'
PP	Picea Pungens	Colorado Blue Spruce	3	6'-7'
PrA	Pyrus Calleryana 'Aristocrate'	'Aristocrate' Pear	8	2-2 1/2 cal.
RC	Rosa Nostrum	'Carpet' Rose	16	2 gal.
SN	Sambucus Nigra 'Black Beauty'	'Black Beauty' Elderberry	10	3 gal.
TD	Taxus Media	'Dense Yew'	12	18"-24"
TP	Thuja Placata 'Green Giant'	'Green Giant' Arborvitae	10	4'-5'
VT	Viburnum Pllicatum 'Shasta'	'Shasta' Viburnum	2	3'-3 1/2'
ERNMX-126	Retention Basin Floor Seeding	Low Maintenance Grass-like Species	-	20 lb. per acre
ERNMX-127	Retention Basin Floor Seeding	Wildlife & Plant Diversity	-	15 lb. per acre



**SHRUB PLANTING DETAIL**  
NOT TO SCALE



**TREE PLANTING DETAIL**  
NOT TO SCALE



**TREE PLANTING DETAIL**

TOWN OF NEW WINDSOR PLANNING BOARD  
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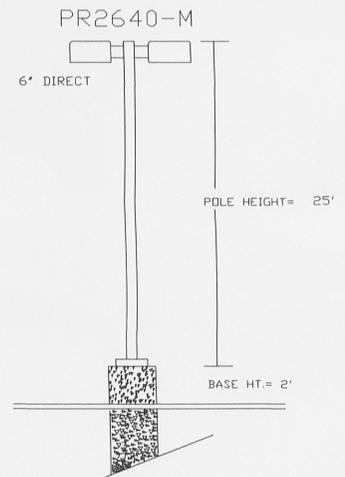
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2	POND LANDSCAPING & DELETED SAND FILTER	4-21-2006
1	FIRE INSPECTOR'S COMMENTS	6-1-2006

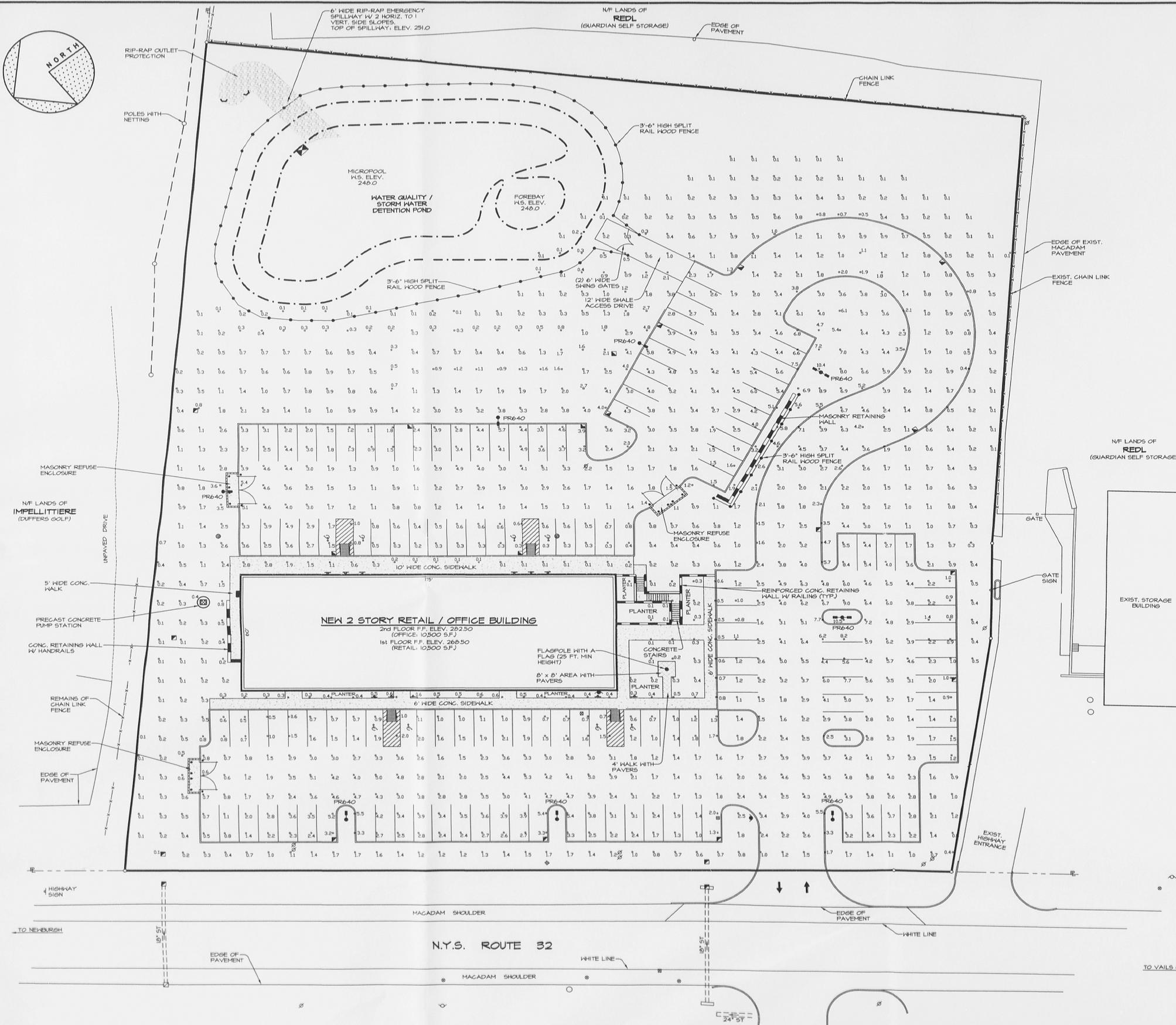
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Checked By: G.J.S.  
Scale: 1"=20'  
Date: 4-27-2006  
Project: NEW RETAIL / OFFICE BUILDING FOR NEW WINDSOR REALTY GROUP, LLC  
TOWN OF NEW WINDSOR, N.Y.  
Project No. 0506  
7 OF 10



Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Luens	LLF	Description
●	10	PR640	SINGLE	40000	0.800	PR2640-M 400W PSMH



POLE SCHEDULE  
 (6) PS4S25C1BZ (25' X 4' X 125' STEEL SQUARE POLE)  
 (2) PS4S25C2BZ (25' X 4' X 125' STEEL SQUARE POLE)  
 PROPOSED POLES MEET 110 MPH SUSTAINED WINDS.



TOWN OF NEW WINDSOR PLANNING BOARD  
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 By: [Signature]  
 Town of New Windsor

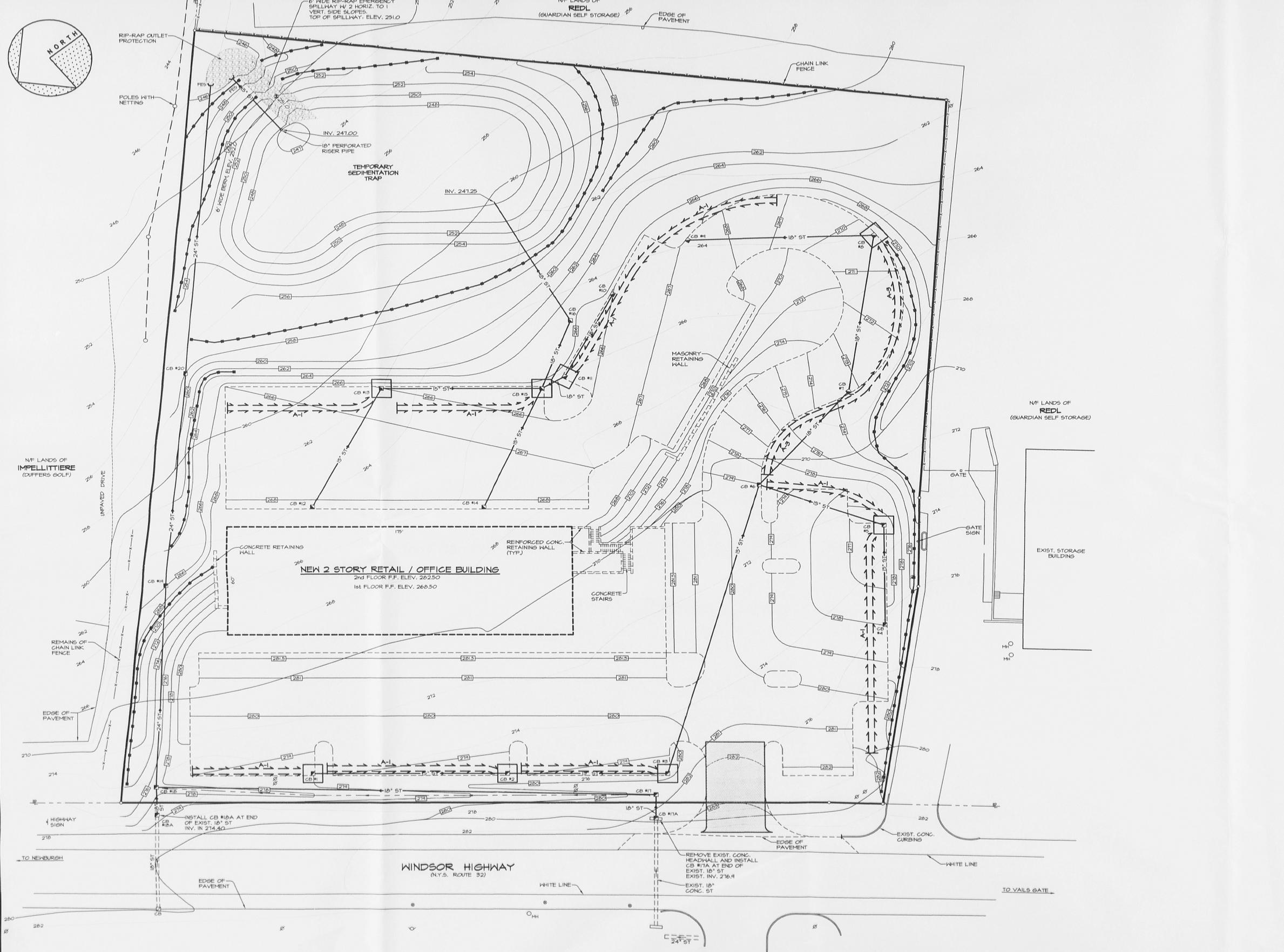
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**RUUD LIGHTING**  
 800.236.7000 USA <www.ruudlighting.com> 905.671.1991 CAN  
 Illumination results shown on this lighting design are based on project parameters provided to Ruud Lighting used in conjunction with luminaire test procedures conducted under laboratory conditions. Actual project conditions differing from these design parameters may affect field results. The customer is responsible for verifying compliance with any applicable electrical, lighting, or energy code.

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1	FIRE INSPECTOR'S COMMENTS	6-1-2006

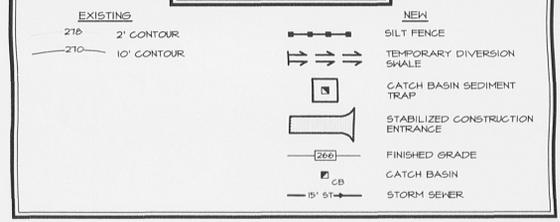
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 Checked By: G.J.S.  
 Scale: 1"=20'  
 Date: 4-27-2006  
 Drawing: LIGHTING PLAN & DETAILS  
 Project: NEW RETAIL / OFFICE BUILDING  
**NEW WINDSOR REALTY GROUP, LLC**  
 N.Y.S. ROUTE 32 TOWN OF NEW WINDSOR, N.Y.  
 8 OF 10  
 Project No. 0506



**CONSTRUCTION SEQUENCE**

1. Review the Erosion and Sediment Control Plan to identify the areas of disturbance and those areas that are scheduled to remain undisturbed. Limit site disturbance at any time to the smallest area possible.
2. Prior to commencing construction activities, a licensed surveyor must flag the limits of disturbance necessary to develop the site and clearly delineate the project boundary lines to protect adjacent properties. Identify and protect those trees which can remain.
3. In the area designated on the Erosion and Sediment Control Plan, construct a Stabilized Construction Entrance to mitigate the potential of vehicles tracking sediment onto local roads. Restrict traffic to this one access point. Perform periodic inspections and maintenance of the Stabilized Construction Entrance including washing, top-dressing with additional stone, reworking, and compaction. Plan for periodic street cleaning to remove any sediment that may have been tracked off-site. Transport the removed sediment to a suitable disposal area where it can be stabilized.
4. Demolish the existing structures, and clear and grub those portions of the site that are scheduled for development. Stockpile excavated topsoil, and protect stockpiled material with silt fence.
5. Along the westerly boundary of the site, place fill to the elevations indicated. Install catch basins 17, 16, 14 and 20, and the piping between them to the flared end section at the northeasterly corner of the site. Extend the (2) 18-inch pipes crossing Windsor Highway to catch basins 17 and 16.
6. Regrade the northeast corner of the site and install the Temporary Sedimentation Trap, riser pipe and outlet piping. Install silt fence along the north and east embankments of the Trap.
7. Place fill from off-site sources beginning in an east to west direction. The easterly segment shall be considered that area from the easterly property line to the easterly face of the proposed building. The westerly segment shall be from the easterly face of the proposed building to the westerly property line.
8. Upon completion of placing of fill within the easterly segment and obtaining sub-grade elevations, install the storm drainage system (catch basins and piping) inclusive of catch basin 6 through catch basin 16, and to the flared end section outletting into the Trap. Modify the catch basins 4, 11, 13 and 15 as per Catch Basin Sediment Trap detail, and install the Temporary Diversion Swales and Silt Fence in the easterly segment. Within 7 days of completing rough grading, temporarily seed with hay mulch all embankments and disturbed areas. Avoid grading activities during the rainy season (November through March).
9. Install the concrete walls of the building's lower level. Backfill the concrete walls as soon as possible and place fill in the westerly segment of the site from off-site sources to the elevations indicated.
10. Upon completion of placing of fill within the westerly segment and obtaining sub-grade elevations, install the storm drainage system (catch basins and piping) inclusive of catch basin 1 through catch basin 5. Modify the catch basins 1, 2, 3 and 5 as per Catch Basin Sediment Trap detail, and install the Temporary Diversion Swales and Silt Fence in the westerly segment. Within 7 days of completing rough grading, temporarily seed with hay mulch all embankments and disturbed areas.
11. Install remaining site utilities. Remove Diversion Swales and Catch Basin Sediment Traps. Install concrete curbing, sub-base material lot and binder course of macadam pavement.
12. Finish grading of the Sediment Trap to the dimensions required for the Storm Water Detention Basin. Remove perforated riser pipe, install Outlet Control Structure, Emergency Spillway and Rip-Rap Outlet Protection. Install Sand Filter with inlet piping, outlet piping and overflow channel.
13. Complete final grading of the lot, spread stockpiled topsoil and permanently seed and hay mulch all disturbed surfaces. Apply seed mix and hay mulch to approximately 2 inches in thickness. If necessary, topsoil will be imported to the site for stabilization and landscaping uses. Imported soils will be seeded after two weeks storage to promote vegetative growth and its perimeter protected with silt fence. Do not remove Soil Erosion and Sediment Control measures until 30 days post stabilization.
14. Stabilization measures must be initiated as soon as practicable, but in no case more than 14 days after the construction activity has ceased. In frozen ground conditions, stabilization measures must be initiated as soon as practicable.
15. Maintain erosion and sediment control practices through regular inspections. After initial groundbreaking, the Owner or its representative shall conduct site inspections at least once every 7 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater.

**LEGEND**



TOWN OF NEW WINDSOR PLANNING BOARD  
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PLANNING BOARD PROJECT NUMBER 06-15  
APPROVAL GRANTED BY TOWN OF NEW WINDSOR  
EES - 2 2010

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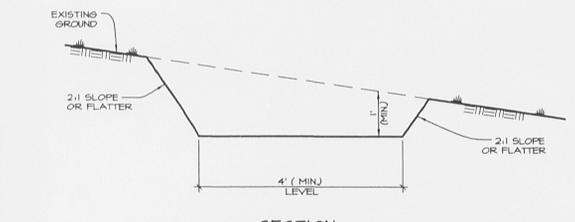
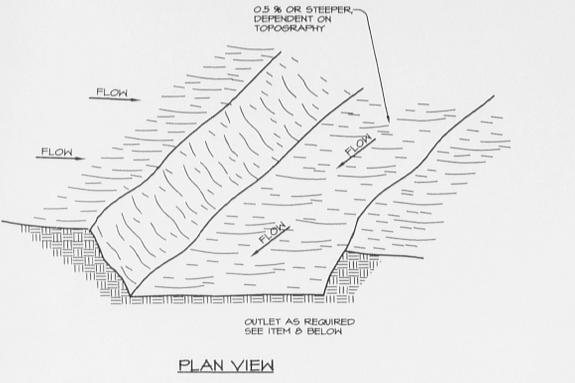
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NO.	DESCRIPTION	DATE
2	DELETED SAND FILTER	4-27-2006
1	FIRE INSPECTOR'S COMMENTS	6-1-2006
ISSUE	REVISION	DATE

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Date: 4-27-2006

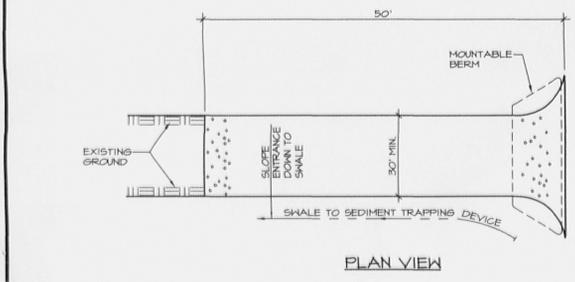
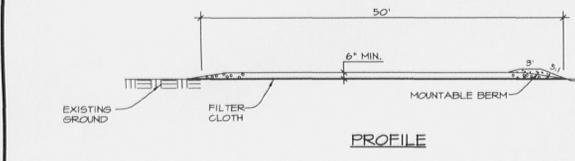
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N.Y.S. ROUTE 32 TOWN OF NEW WINDSOR, N.Y.

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Project No. 0506

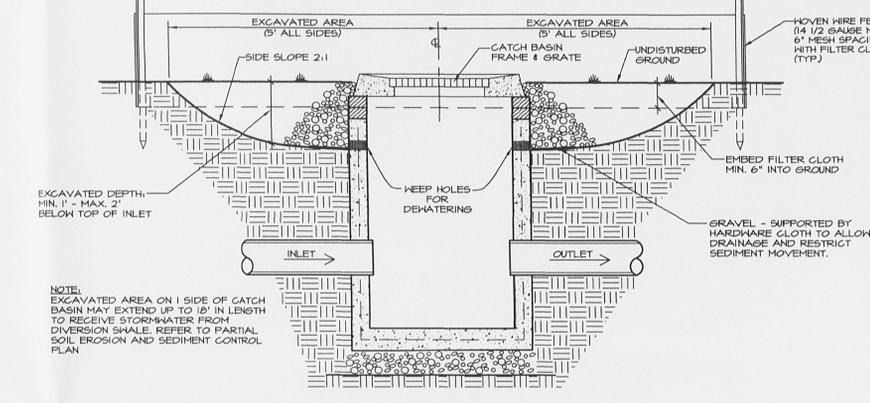
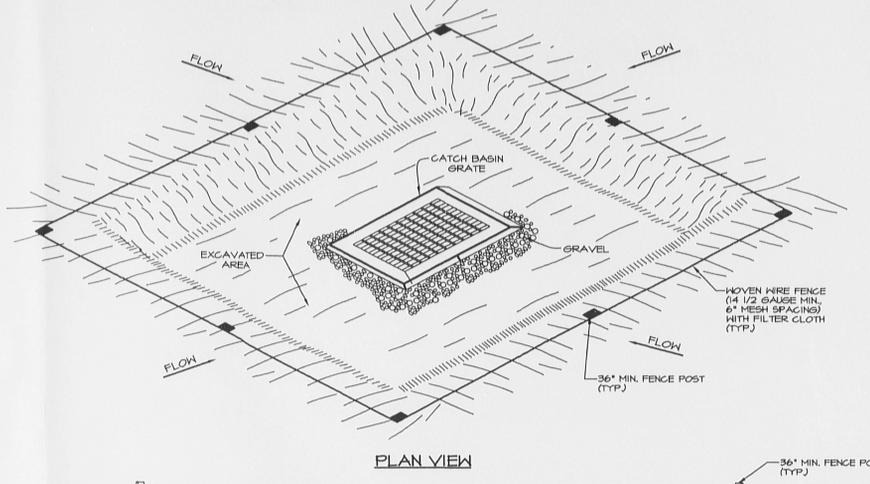


**TEMPORARY SWALE DETAIL**  
NOT TO SCALE

- CONSTRUCTION SPECIFICATIONS**
- ALL TEMPORARY SWALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
  - DIVERTED RUNOFF FROM DISTURBED AREAS SHALL BE CONVEYED TO A STORM INLET SEDIMENT TRAP.
  - DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET DIRECTLY INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSIVE VELOCITY.
  - ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SWALE.
  - THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
  - FILLS SHALL BE COMPACTED BY EARTH MOVING EQUIPMENT.
  - ALL EARTH REMOVED AND NOT NEEDED ON CONSTRUCTION SHALL BE PLACED SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE SWALE.
  - STABILIZATION SHALL BE AS PER THE CHART BELOW.
- | TYPE OF TREATMENT | CHANNEL GRADE | SWALE A (5 AC. OR LESS)          | SWALE B (5 AC. - 10 AC.)                         |
|-------------------|---------------|----------------------------------|--|
| 1                 | 0.5-3.0 %     | SEED AND STRAW MULCH             | SEED AND STRAW MULCH                             |
| 2                 | 3.1-5.0 %     | SEED AND STRAW MULCH             | SEED USING JUTE OR EXCELSIOR                     |
| 3                 | 5.1-8.0 %     | SEED WITH JUTE OR EXCELSIOR, SOD | LINED RIP-RAP 4"-8" RECYCLED CONCRETE EQUIVALENT |
| 4                 | 8.1-20 %      | LINED 4"-8" RIP-RAP              | ENGINEERED DESIGN                                |
- PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.



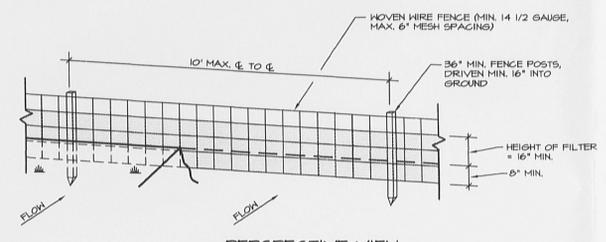
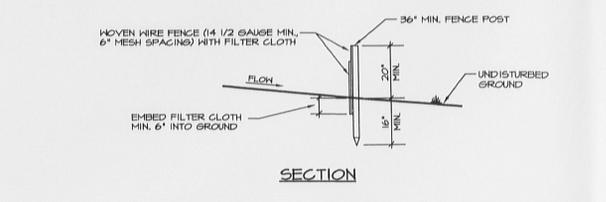
**STABILIZED CONSTRUCTION ENTRANCE DETAIL**  
NOT TO SCALE



**CATCH BASIN SEDIMENT TRAP**  
NOT TO SCALE

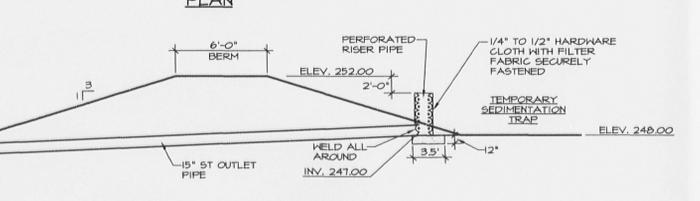
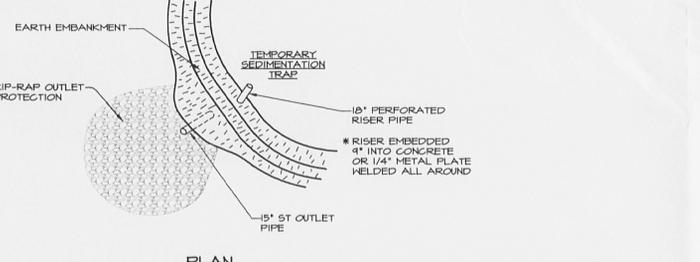
- CONSTRUCTION SPECIFICATIONS**
- SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND STABILIZED.
  - THE VOLUME OF SEDIMENT STORAGE SHALL BE 3600 CUBIC FEET PER ACRE OF CONTRIBUTORY DRAINAGE.
  - THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
  - CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND SEDIMENT ARE CONTROLLED.
  - THE SEDIMENT TRAP SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE CONTRIBUTED DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
  - ALL CUT SLOPES SHALL BE 1:1 OR FLATTER. MAXIMUM DRAINAGE AREA: 3 ACRES.
  - KEEP HOLES SHALL BE PROTECTED BY GRAVEL.
  - UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA, SEAL KEEP HOLES, FILL BASIN WITH STABLE SOIL TO FINAL GRADE, COMPACT IT PROPERLY AND STABILIZE WITH PERMANENT SEEDINGS.

- CONSTRUCTION SPECIFICATIONS**
- STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
  - LENGTH - FIFTY (50) FEET
  - THICKNESS - SIX (6) INCHES.
  - WIDTH - FIFTEEN (15) FEET, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
  - FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
  - SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE DIRECTED TO A SHALE DISCHARGING TO A SEDIMENT TRAPPING DEVICE. PROVIDE A MOUNTABLE BERM WITH 5:1 SLOPES.
  - MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACED ONTO ROADWAY MUST BE REMOVED IMMEDIATELY.
  - WHEN VEHICLE WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
  - PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.



**SILT FENCE DETAIL**  
NOT TO SCALE

- CONSTRUCTION SPECIFICATIONS**
- HOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
  - FILTER CLOTH TO BE FASTENED SECURELY TO HOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
  - WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
  - MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN 'BULGES' DEVELOP IN THE SILT FENCE.
- POSTS:** STEEL EITHER 1" OR 1 1/2" TYPE OR 2" HARDWOOD
- FENCE:** HOVEN WIRE, 14 1/2 GAUGE 6" MAX. MESH OPENING
- FILTER CLOTH:** FILTER X, MIRAFI 100K, STABILINKA 1140N OR APPROVED EQUAL
- PREFABRICATED UNIT:** SECURAS, ENVIROFENCE, OR APPROVED EQUAL



**EMBANKMENT SECTION THRU RISER**  
NOT TO SCALE

- CONSTRUCTION SPECIFICATIONS**
- AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED.
  - THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS OR OTHER WOODY VEGETATION AS WELL AS OVER-SIZED STONES, ROCKS, ORGANIC MATERIAL, OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED TO 95% DENSITY (ASTM 1557).
  - VOLUME OF SEDIMENT STORAGE SHALL BE 3600 CUBIC FEET PER ACRE OF CONTRIBUTORY DRAINAGE.
  - SEDIMENT SHALL BE REMOVED AND BASIN RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE BASIN. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND STABILIZED.
  - THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
  - CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND SEDIMENT ARE CONTROLLED.
  - THE STRUCTURE SHALL BE REMOVED AND AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
  - ALL PIPE CONNECTIONS SHALL BE WATERTIGHT.
  - THE TOP 2/3 OF THE RISER SHALL BE PERFORATED WITH ONE (1) INCH DIAMETER HOLES OR SLITS SPACED SIX (6) INCHES VERTICALLY AND HORIZONTALLY AND PLACED IN THE CONCAVE PORTION OF PIPE. NO HOLES WILL BE ALLOWED WITHIN SIX (6) INCHES OF THE HORIZONTAL BARREL.
  - THE RISER SHALL BE WRAPPED WITH 1/4 TO 1/2 INCH HARDWARE CLOTH WITH FILTER FABRIC SECURELY FASTENED.
  - STRAPS OR CONNECTING BANDS SHALL BE USED TO HOLD THE FILTER CLOTH AND WIRE FABRIC IN PLACE. THEY SHALL BE PLACED AT THE TOP AND BOTTOM OF THE CLOTH.
  - THE RISER SHALL BE ANCHORED WITH EITHER A CONCRETE BASE OR STEEL PLATE BASE TO PREVENT FLOTATION. FOR CONCRETE BASE THE DEPTH SHALL BE TWELVE (12) INCHES WITH THE RISER EMBEDDED NINE (9) INCHES. A 1/4 INCH MINIMUM THICKNESS STEEL PLATE SHALL BE ATTACHED TO THE RISER BY A CONTINUOUS WELD AROUND THE BOTTOM TO FORM A WATERTIGHT CONNECTION AND THEN PLACE TWO (2) FEET OF STONE, GRAVEL, OR TAMPED EARTH ON THE PLATE.

**TEMPORARY SEDIMENTATION TRAP OUTLET**  
NOT TO SCALE

**EROSION & SEDIMENT CONTROL MEASURES**

- Temporary Diversion Swales**  
-Temporary diversion swale will be installed in the location indicated on the drawing for the purpose of diverting stormwater. Swale shall be maintained until the regraded area is stabilized with permanent seeding.
- Silt Fence**  
-Silt fences shall be installed in the locations specified above, around topsoil stockpile areas, and at the base of all disturbed slopes.
- Land Grading**  
-Finish land surfaces will be graded as indicated on the plans. Areas to be filled shall be cleared, grubbed and stripped of topsoil. Remove trees, vegetation, roots or other objectionable material. Fill material shall be free of brush, rubbish, rocks, logs, stumps, building debris, and other objectionable material. Frozen material shall not be placed in the fill nor shall the fill material be placed on a frozen foundation.  
-Unless otherwise noted, temporary seed bare soil within 15 days of exposure unless construction will begin within 30 days. If construction is suspended, or sections completed, areas shall be seeded and mulched immediately.  
-Finish grading shall contain adequate gradients so as to prevent water from standing on the surface of lawns for more than 24 hours after the end of a rainfall.  
-Topsoil required for the establishment of vegetation will be stockpiled in amount necessary to complete finished grading of all exposed, non-soaked, areas.  
-Areas which are to be topsoiled shall be scarified to a minimum depth of three inches prior to placement of topsoil.
- Dust Control**  
-Construction operations shall be scheduled to minimize the amount of area disturbed at one time. Buffer areas of vegetation shall be left where indicated. The site can be sprinkled with water until the surface is wet. The following spray adhesives can be used on mineral soils:
- | Material        | Water Dilution | Type of nozzle | Apply Gallons per acre |
|-----------------|----------------|----------------|------------------------|
| Acrylic Polymer | 4:1            | Coarse Spray   | 500                    |
| Latex Emulsion  | 12.5:1         | Fine Spray     | 225                    |
| Resin in water  | 4:1            | Fine Spray     | 300                    |
- Temporary And Permanent Seeding**  
-Seeding preparation includes removal of debris and obstacles such as rocks and stumps, scarify soil if compacted. Adjust pH to 6.0 with lime, and fertilize with 600 lbs of 5-10-10 or equivalent per acre. All disturbed areas shall be temporarily seed if construction does not resume in 15 days.  
-Apply permanent seeding consisting of:  
Empire birdfoot trefoil or common white clover 8 lbs per acre  
Plus tall fescue 20 lbs per acre  
Plus Ryegrass 8 lbs per acre  
-Apply temporary seeding consisting of Ryegrass (annual or perennial) at 30 lbs per acre.  
-The optimum time for permanent seeding is in the spring from March 21 through May 20, and in late summer and early fall from August 15 through October 15. Permanent seedings may be made any time of year if properly mulched and adequate moisture is provided. Broadcasting, drilling with cultipack type seeder or hydroseeding are acceptable.
- Topsoil/Mulching**  
-Where vegetation will be established, preserve and apply existing topsoil and friable fine textured subsoils that are stripped during excavation. Complete rough grading and final grading, allowing for depth of topsoil to be added. Scarify all compact, slow permeable, medium and fine textured subsoils. In soil areas that are steeper than 5 percent, scarify at approximately right angles to the slope. Remove refuse, woody plant parts, stones over 3 inches in diameter, and other litter.  
-Topsoil shall have a minimum of 2 percent, and a maximum of 6 percent by weight of fine or other suitable organic material. Topsoil shall have not less than 20 percent fine textured material (passing the No. 200 sieve) and not more than 15 percent clay. Topsoil shall be relatively free of stones over 1 1/2 inches in diameter.  
-Topsoil shall be placed at a uniform depth of 2 inches for the steep slopes, and 4 inches for the lawn areas. Topsoil shall not be placed when it is partly frozen, muddy, nor on frozen slopes over 5 percent, snow, or standing water. Topsoil placed and graded on slopes steeper than 5 percent shall be promptly fertilized, seeded, mulched and stabilized by "tracking" with suitable equipment.  
-If soil is compacted or crusted, surface should be loosened to at least two inches by diking or other suitable methods. Straw mulch (small grain) is preferred applied at an application rate of 2 tons per acre, and anchored with wood fiber mulch (hydromulch) at 500-750 lbs. per acre. The wood fiber mulch must be applied through a hydroseeder immediately after mulching.

**Shaw Engineering**  
Consulting Engineers  
744 Broadway Newburgh, N.Y. 12550

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NO	REVISION	DATE
2	BERM WIDTH	9-21-2006
1	NO REVISION	6-1-2006
ISSUE	REVISION	DATE

Drawn By: J.R.J.  
Checked By: G.J.S.  
Scale: AS SHOWN  
Date: 4-27-2006

Project: NEW RETAIL / OFFICE BUILDING  
**NEW WINDSOR REALTY GROUP, LLC**  
N.Y.S. ROUTE 32 TOWN OF NEW WINDSOR, N.Y.

10 OF 10  
Project No. 0506

TOWN OF NEW WINDSOR PLANNING BOARD  
STAMP OF APPROVAL

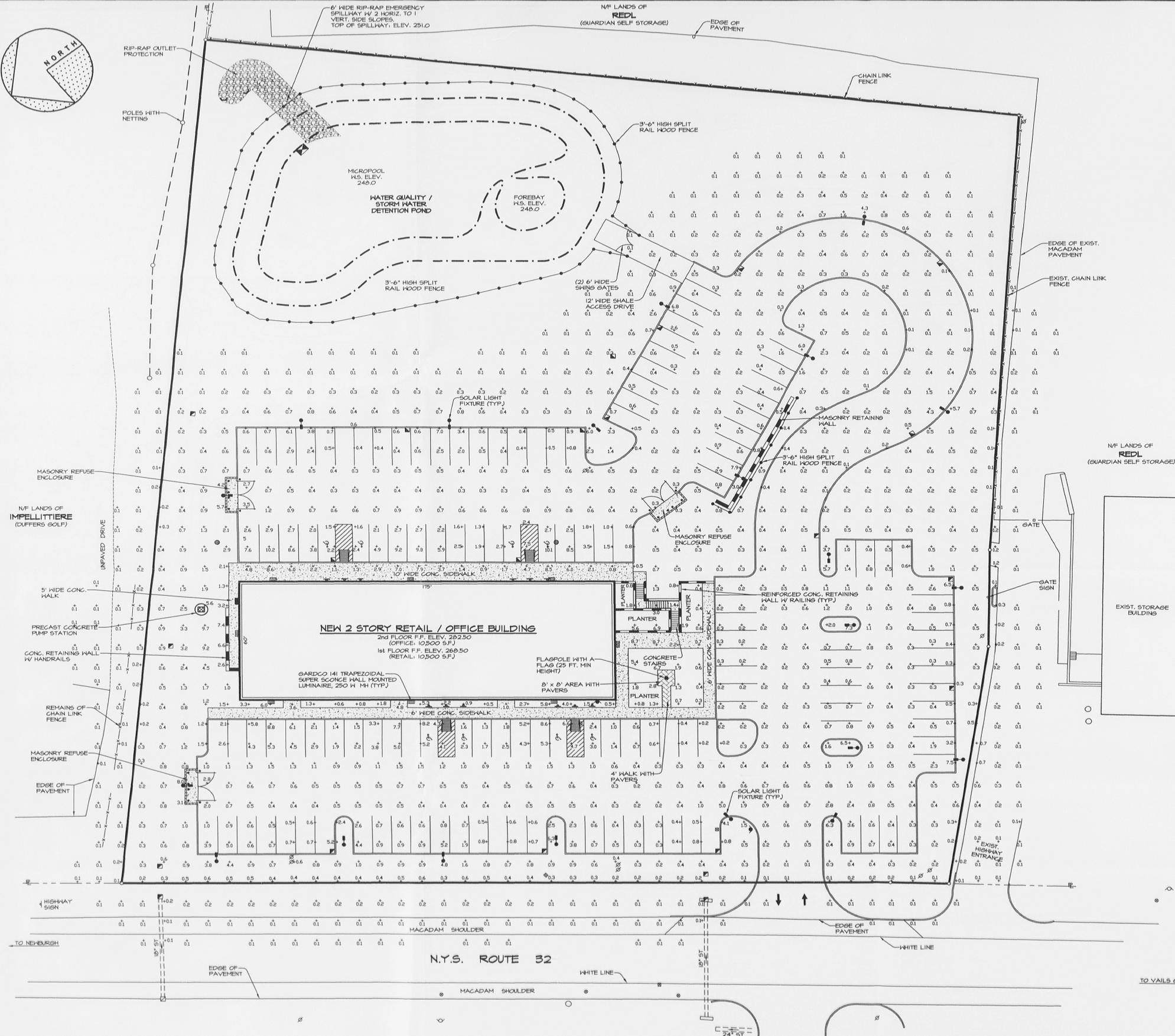
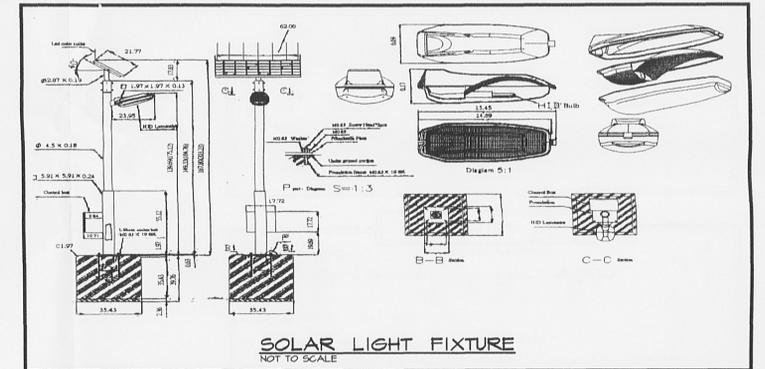
PLANNING BOARD PROJECT NUMBER 06-18  
APPROVAL GRANTED BY TOWN OF NEW WINDSOR  
FEB - 3 2007  
By: [Signature]  
Town of New Windsor, N.Y.

DRAWINGS ARE INVALID AND INCOMPLETE UNLESS ACCOMPANIED BY DRAWINGS 1 OF 10 THROUGH 10 OF 10.



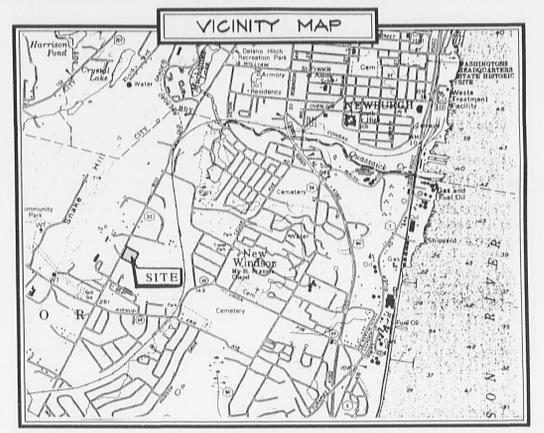
**SOLAR LIGHT FIXTURE NOTES**

- Lighting Fixture**
- Stainless Steel lamp head with shock resistant clear poly lens
  - 35W High Intensity Discharge Xenon rated for 32000 lumen
  - 35W HID rated for 15,000 hours of use (equivalent to 3.5 years routine use)
  - Multi-intensifying output reflective lamphouse insert
  - Additional (8)-eight 60W amber LED design rated for 1140 lumen
- Pole**
- Galvanized steel tube pole with optional colored urethane coating
  - Pole welded to 20mm thick steel pedestal, wind tested to 85 mph
- Control Box**
- Steel welded to pole and framework
  - Moisture and heat protected
- Solar Panel**
- Mono-crystalline technology
  - Single solar panel construction with panel rated at 130W
  - High efficiency panels at 100% effective with temperatures over 60C
  - Lowest efficiency at 11% with temperatures below -10C
- Battery**
- (1)-Silicone Recyclable 12V/180AH Battery
  - Rated for over 1,200 charges/discharges (equivalent to 3.5 years routine use)
- Control System**
- Automated light sensor activation with multiple on/off timing
  - Multiple dimming ability
  - Multiple lighting applications between HID and LED maximizing conservation
  - Power supply short-circuit protection
- Other**
- Bird deterring probes on solar panel with variable illumination
  - Illumination controlled by color and variable time intervals



**S.K. Enterprises**  
87 Taft Avenue  
Newburgh N.Y. 12550

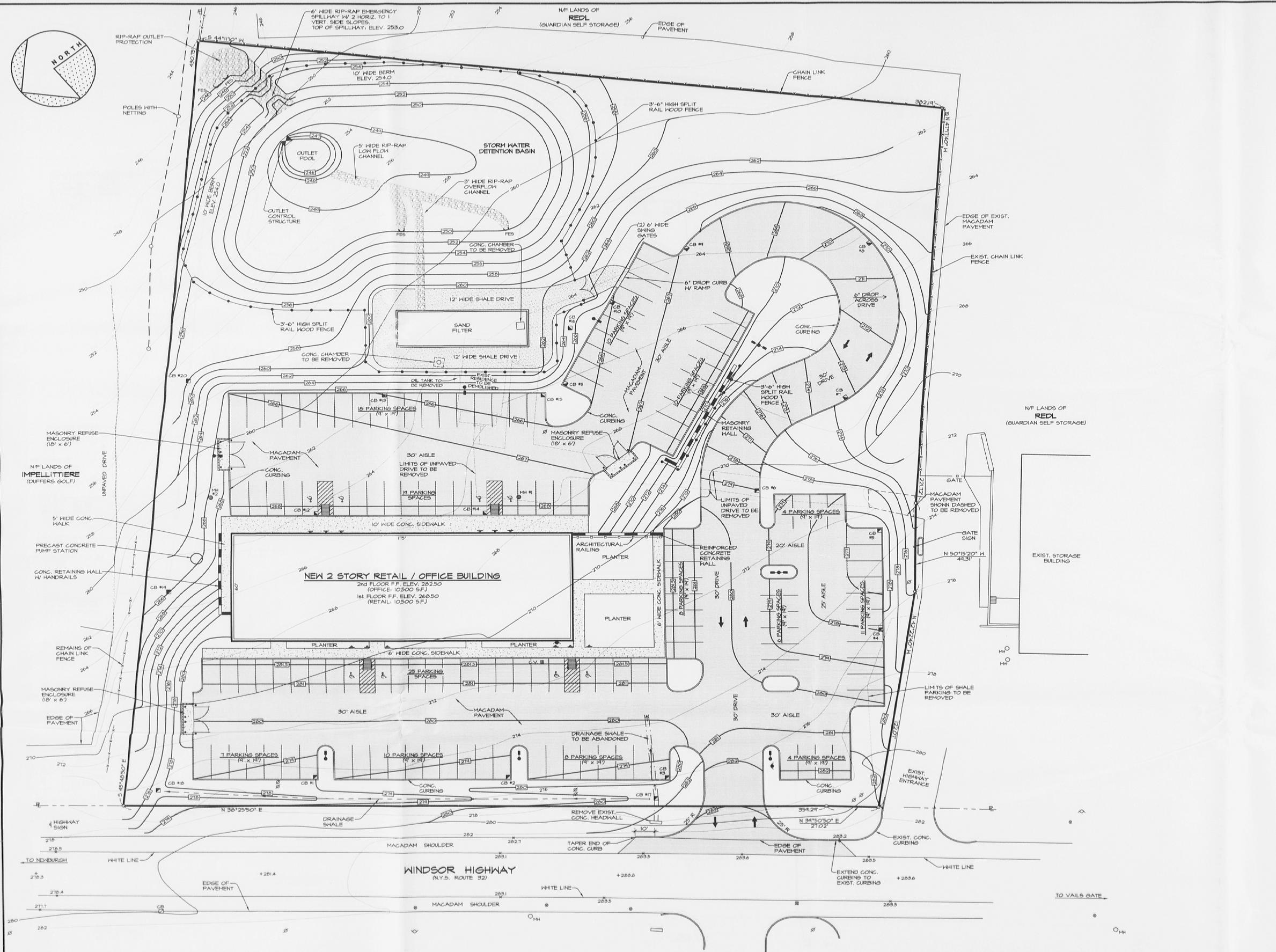
Drawn By: J.R.J.	Drawing: FIELD CHANGE LIGHTING PLAN & DETAILS	1 OF 1
Checked By: G.J.S.	Project: NEW RETAIL / OFFICE BUILDING FOR NEW WINDSOR REALTY GROUP, LLC	
Scale: 1"=20'	Project No. 0506	
Date: 3-18-2008	N.Y.S. ROUTE 32 TOWN OF NEW WINDSOR, N.Y.	



**LEGEND**

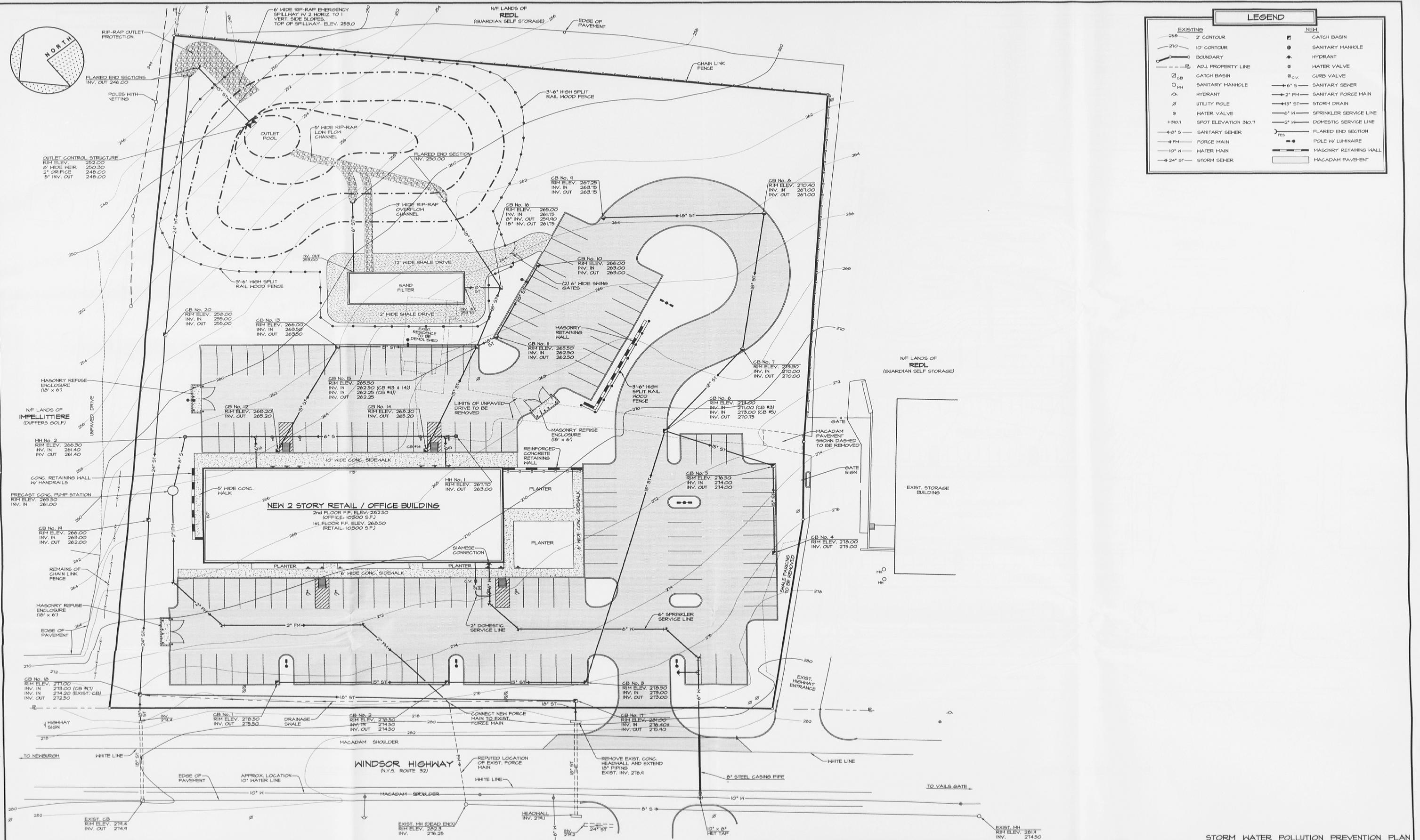
EXISTING	NEW
26.0 2' CONTOUR	266.0 FINISHED GRADE
270 10' CONTOUR	CB CATCH BASIN
BOUNDARY	HH SANITARY MANHOLE
ADJ. PROPERTY LINE	HYDRANT
CB CATCH BASIN	WATER VALVE
HH SANITARY MANHOLE	C.V. CURB VALVE
HYDRANT	FES FLARED END SECTION
UTILITY POLE	POLE W/ LUMINAIRE
WATER VALVE	MASONRY RETAINING WALL
+283.6 SPOT ELEVATION 283.6	MACADAM PAVEMENT

- NOTES**
- ZONING DISTRICT: C - DESIGN SHOPPING
  - RECORD OWNER & APPLICANT: NEH WINDSOR REALTY GROUP, LLC  
81 TAFT AVENUE  
NEWBURGH, NEW YORK 12550
  - TOTAL PARCEL AREA: 3.65± ACRES
  - TAX MAP DESIGNATION: SECTION 9, BLOCK 1, LOT 24
  - BOUNDARY, TOPOGRAPHIC AND UTILITY SURVEY INFORMATION OBTAINED FROM DRAWING ENTITLED "BOUNDARY / TOPOGRAPHIC SURVEY - NEH WINDSOR REALTY GROUP, LLC" PREPARED BY WILLIAM B. HILDRETH LAND SURVEYOR, P.C. AND DATED JUNE 25, 2005. ELEVATION DATUM USED TAKEN FROM DESIGN DRAWINGS FOR SEWER DISTRICT 12. CONTOUR INTERVAL: TWO (2) FEET.





EXISTING		NEW	
26.0	2' CONTOUR	□	CATCH BASIN
27.0	10' CONTOUR	●	SANITARY MANHOLE
—	BOUNDARY	○	HYDRANT
- - -	ADJ. PROPERTY LINE	⊗	WATER VALVE
□ <sub>CB</sub>	CATCH BASIN	⊗ <sub>C.V.</sub>	CURB VALVE
○ <sub>MH</sub>	SANITARY MANHOLE	— 6" S	SANITARY SEWER
○ <sub>H</sub>	HYDRANT	— 2" FM	SANITARY FORCE MAIN
⊗	UTILITY POLE	— 15" ST	STORM DRAIN
⊗	WATER VALVE	— 6" H	SPRINKLER SERVICE LINE
+90.7	SPOT ELEVATION 90.7	— 2" H	DOMESTIC SERVICE LINE
— 4" S	SANITARY SEWER	—	FLARED END SECTION
— 4" FM	FORCE MAIN	—	POLE W/ LUMINAIRE
— 10" H	WATER MAIN	—	MASONRY RETAINING WALL
— 24" ST	STORM SEWER	—	MACADAM PAVEMENT



**Shaw Engineering**  
Consulting Engineers  
744 Broadway Newburgh, N.Y. 12550

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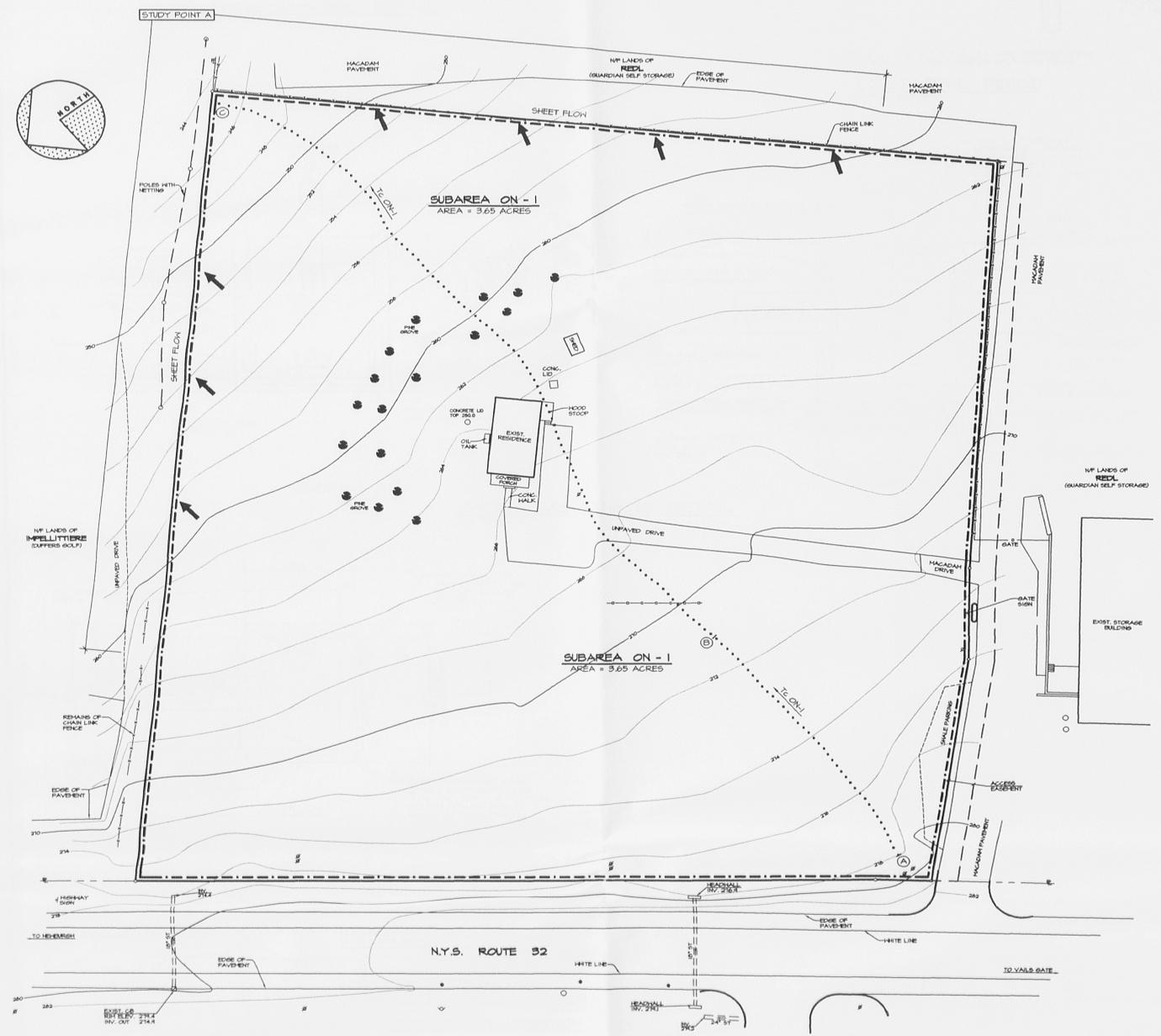
ISSUE	REVISION	DATE

Drawn By: J.R.J.	Project: NEW RETAIL / OFFICE BUILDING FOR NEW WINDSOR REALTY GROUP, LLC
Checked By: G.J.S.	TOWN OF NEW WINDSOR, N.Y.
Scale: 1"=20'	Project No. 0506
Date: 6-1-2006	

STORM WATER POLLUTION PREVENTION PLAN  
UTILITY PLAN  
2 OF 6  
N.Y.S. ROUTE 32

**LEGEND**

- LIMITS OF SUBAREA
- ..... TIME OF CONCENTRATION PATH TO ON-1

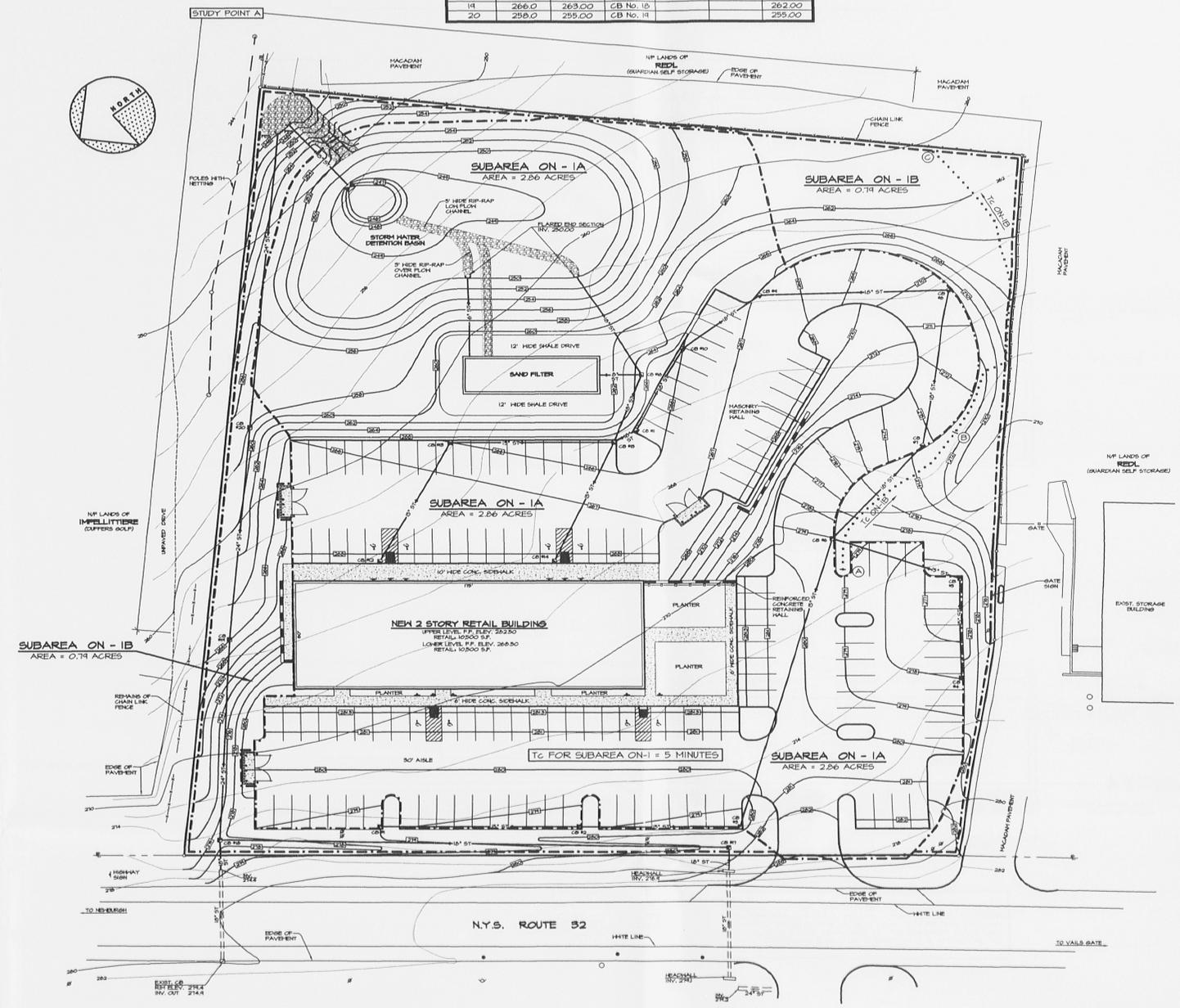


**CATCH BASIN SCHEDULE**

CATCH BASIN NO.	RIM ELEV.	INV. IN	FROM	INV. IN	FROM	INV. OUT
1	218.5					215.50
2	218.5	214.50	CB No. 1			214.50
3	218.5	213.00	CB No. 2			213.00
4	218.0					215.00
5	216.5	214.00	CB No. 4			214.00
6	218.0	213.00	CB No. 5			212.75
7	215.3	210.00	CB No. 6	211.00	CB No. 3	210.00
8	210.4	261.00	CB No. 7			261.00
9	261.25	265.75	CB No. 8			265.75
10	266.0	263.00	CB No. 9			263.00
11	265.5	262.50	CB No. 10			262.50
12	266.2					265.20
13	266.0	263.50	CB No. 12			263.50
14	266.2					265.20
15	265.5	262.50	CB No. 13 & 14	262.25	CB No. 11	262.25
16	265.0	261.75	CB No. 15	(B7) INV. CUT 254.40		261.75
17	231.0	216.40	EXIST. 18" ST			218.40
18	211.0	213.00	CB No. 17	214.20	EXIST. CB	212.50
19	266.0	263.00	CB No. 18			262.00
20	259.0	255.00	CB No. 19			255.00

**LEGEND**

- LIMITS OF SUBAREA
- ..... TIME OF CONCENTRATION PATH TO ON-1



**Shaw Engineering**  
Consulting Engineers  
744 Broadway  
Newburgh, N.Y. 12550

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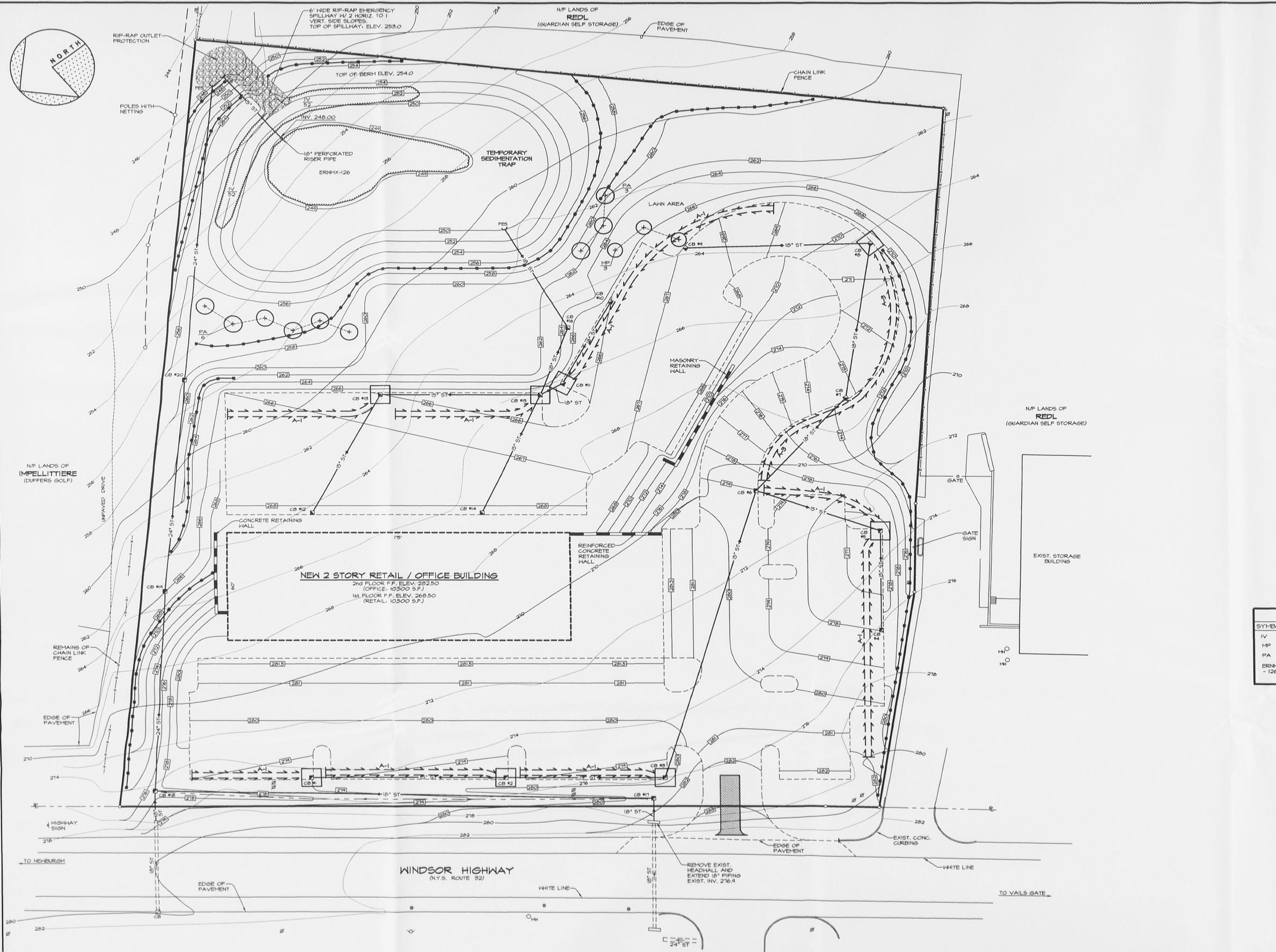
ISSUE	REVISION	DATE

Drawn By: J.R.J.  
Checked By: G.J.S.  
Scale: 1"=30'  
Date: 6-1-2006

Project: PRE - DEVELOPMENT & POST DEVELOPMENT DRAINAGE PLAN FOR NEW WINDSOR REALTY GROUP, LLC  
N.Y.S. ROUTE 32 TOWN OF NEW WINDSOR, N.Y.

3 OF 6  
Project No. 0506

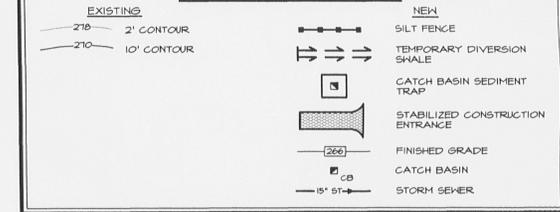




**CONSTRUCTION SEQUENCE**

1. Review the Erosion And Sediment Control Plan to identify the areas of disturbance and those areas that are scheduled to remain undisturbed. Limit site disturbance at any time to the smallest area possible.
2. Prior to commencing construction activities, a licensed surveyor must flag the limits of disturbance necessary to develop the site and clearly delineate the project boundary lines to protect adjacent properties. Identify and protect those trees which can remain.
3. In the area designated on the Erosion And Sediment Control Plan, construct a Stabilized Construction Entrance to mitigate the potential of vehicles tracking sediment onto local roads. Restrict traffic to this one access point. Perform periodic inspections and maintenance of the Stabilized Construction Entrance including watering, top-dressing with additional stone, reworking and compaction. Plan for periodic street cleaning to remove any sediment that may have been tracked off-site. Transport the removed sediment to a suitable disposal area where it can be stabilized.
4. Demolish the existing structures, and clear and grub those portions of the site that are scheduled for development. Stockpile excavated topsoil and protect stockpiled material with silt fence.
5. Along the westerly boundary of the site, place fill to the elevations indicated. Install catch basins 17, 18, 19 and 20, and the piping between them to the hared end section at the northeasterly corner of the site. Extend the (2) 18-inch pipes crossing Windsor Highway to catch basins 17 and 18.
6. Regrade the northeast corner of the site and install the Temporary Sedimentation Trap, riser pipe and outlet piping. Install silt fence along the north and east embankments of the Trap.
7. Place fill from off-site sources beginning in an east to west direction. The easterly segment shall be considered that areas from the easterly property line to the easterly face of the proposed building. The westerly segment shall be from the easterly face of the proposed building to the westerly property line.
8. Upon completion of placing of fill within the easterly segment and obtaining sub-grade elevations, install the storm drainage system (catch basins and piping) inclusive of catch basin 6 through catch basin 16, and to the flared end section outletting into the Trap. Modify the catch basins 5, 11, 13 and 15 as per Catch Basin Sediment Trap detail, and install the Temporary Diversion Swales and Silt Fence in the easterly segment. Within 7 days of completing rough grading, temporarily seed with hay mulch all embankments and disturbed areas. Avoid grading activities during the rainy season (November through March).
9. Install the concrete walls of the building's lower level. Backfill the concrete walls as soon as possible and place fill in the westerly segment of the site from off-site sources to the elevations indicated.
10. Upon completion of placing of fill within the westerly segment and obtaining sub-grade elevations, install the storm drainage system (catch basins and piping) inclusive of catch basin 1 through catch basin 5. Modify the catch basins 1, 2, 3 and 5 as per Catch Basin Sediment Trap detail, and install the Temporary Diversion Swales and Silt Fence in the westerly segment. Within 7 days of completing rough grading, temporarily seed with hay mulch all embankments and disturbed areas.
11. Install remaining site utilities. Remove Diversion Swales and Catch Basin Sediment Traps. Install concrete curbing, sub-base material lot and binder course of macadam pavement.
12. Finish grading of the Sediment Trap to the dimensions required for the Storm Water Detention Basin. Remove perforated riser pipe, install Outlet Control Structure, Emergency Spillway and Rip-Rap Outlet Protection. Install Sand Filter with inlet piping, outlet piping and overflow channel.
13. Complete final grading of the lot, spread stockpiled topsoil and permanently seed and hay mulch all disturbed surfaces. Apply seed mix and hay mulch to approximately 2 inches in thickness. If necessary, topsoil will be imported to the site for stabilization and landscaping uses. Imported soils will be seeded after two weeks storage to promote vegetative growth and its perimeter protected with silt fence. Do not remove Soil Erosion And Sediment Control measures until 30 days past stabilization.
14. Stabilization measures must be initiated as soon as practicable, but in no case more than 14 days after the construction activity has ceased. In frozen ground conditions, stabilization measures must be initiated as soon as practicable.
15. Maintain erosion and sediment control practices through regular inspections. After initial groundbreaking, the Owner or its representative shall conduct site inspections at least once every 7 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater.

**LEGEND**



**PLANT LIST**

SYMBOL	BOTANICAL NAME	COMMON NAME	QUANTITY	SIZE
IV	Itea Virginea	Henry's Garnet Sweetgale	52	3 gal.
MP	Malus Prairiefire	Prairie Fire Crabapple	3	2-2 1/2 cal.
PA	Picea Abies	Norway Spruce	9	6'-7'
ERNMX-126	Retention Bosh Floor Seeding Low Maintenance Grass-like Species			20 lb. per acre

**PLANTING NOTES**

1. TOP SOIL DEPTHS FOR BEDS: 4"; FOR LAWN AND GROUND COVER AREAS: 2" MIN.
2. CONTRACTOR SHALL LOCATE ALL UTILITIES PRIOR TO WORK.
3. PRIOR TO PLANTING, CONTRACTOR SHALL FIELD MODIFY LANDSCAPING SO THAT NO TREE IS WITHIN 10 FEET OF A WATER LINE, SANITARY SEWER LINE, OR A STORM DRAINAGE LINE.
4. CONTRACTOR SHALL FIELD MODIFY LANDSCAPING SO AS TO NOT CONFLICT WITH SITE LIGHTING.
5. ALL PLANTS MUST MEET AMERICAN ASSOCIATION OF NURSERYMENS STANDARDS.
6. ALL SEEDED AREAS SHALL BE COVERED WITH STRAW AND WATERED FOR A MINIMUM OF TWO WEEKS.
7. ALL PLANT BEDS SHALL BE SLIGHTLY MOUND.

**STORM WATER POLLUTION PREVENTION PLAN**

**Shaw Engineering**  
Consulting Engineers  
744 Broadway Newburgh N.Y. 12550

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ISSUE	REVISION	DATE

Drawn By: J.R.J.  
Checked By: G.J.S.  
Scale: 1"=20'  
Date: 6-1-2006

Project: NEW RETAIL / OFFICE BUILDING FOR NEW WINDSOR REALTY GROUP, LLC  
N.Y.S. ROUTE 92 TOWN OF NEW WINDSOR, N.Y.

5 OF 6  
Project No. 0506

**EROSION & SEDIMENT CONTROL MEASURES**

**Temporary Diversion Swales**  
 -Temporary diversion swale will be installed in the location indicated on the drawing for the purpose of diverting stormwater. Swale shall be maintained until the graded area is stabilized with permanent seeding.

**Silt Fence**  
 -Silt fences shall be installed in the locations specified above, around topsoil stockpile areas, and at the base of all disturbed slopes.

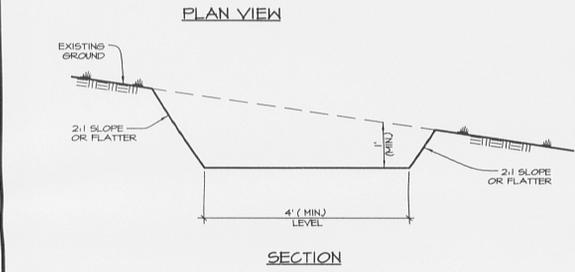
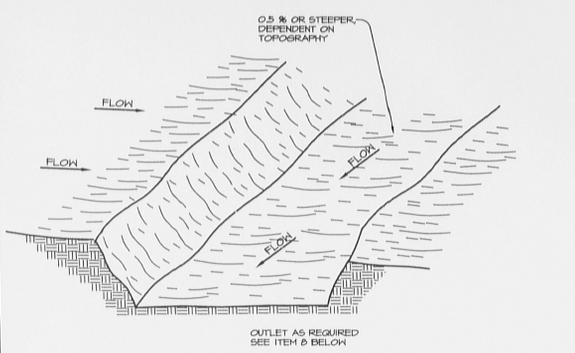
**Land Grading**  
 -Finish land surfaces will be graded as indicated on the plans. Areas to be filled shall be cleared, grubbed, and stripped of topsoil. Remove trees, vegetation, roots or other objectionable material. Fill material shall be free of brush, rocks, logs, stumps, building debris, and other objectionable material. Frozen material shall not be placed in the fill nor shall the fill material be placed on a frozen foundation.  
 -Unless otherwise noted, temporary seed bare soil within 15 days of exposure unless construction will begin within 30 days. If construction is suspended, or sections completed, areas shall be seeded and mulched immediately.  
 -Finish grading shall contain adequate gradients so as to prevent water from standing on the surface of lawns for more than 24 hours after the end of a rainfall.  
 -Topsell required for the establishment of vegetation will be stockpiled in amount necessary to complete finished grading of all exposed, non-sodded, areas.  
 -Areas which are to be topsoiled shall be scarified to a minimum depth of three inches prior to placement of topsoil.

**Dust Control**  
 -Construction operations shall be scheduled to minimize the amount of area disturbed at one time. Buffer areas of vegetation shall be left where indicated. The site can be sprinkled with water until the surface is wet. The following spray additives can be used on mineral soils:

Material	Water Dilution	Type of nozzle	Apply Gallons per acre
Acrylic Polymer	4:1	Coarse Spray	500
Latic Emulsion	12.5:1	Fine Spray	235
Resin in water	4:1	Fine Spray	300

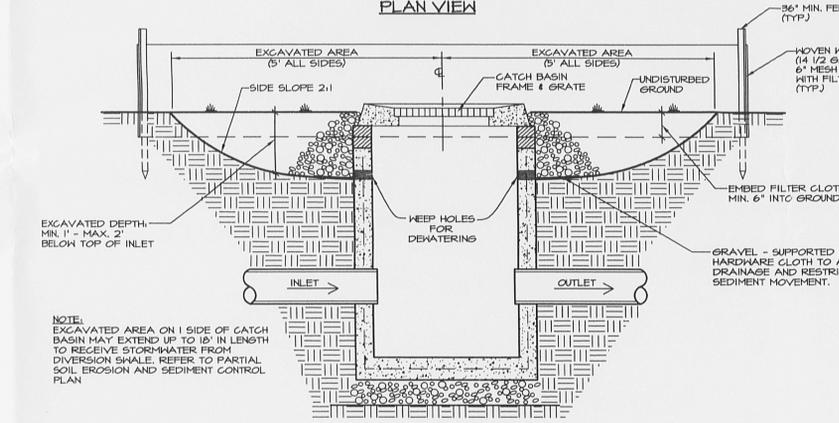
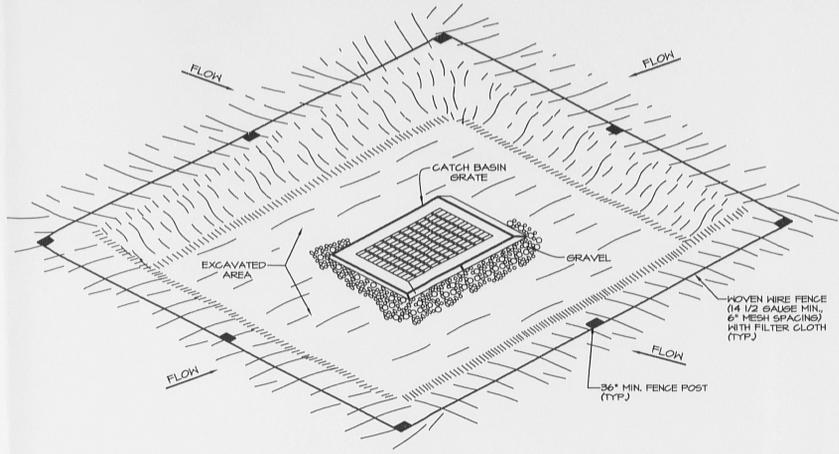
**Temporary And Permanent Seeding**  
 -Seeding preparation includes removal of debris and obstacles such as rocks and stumps, scarify soil if compacted. Adjust pH to 6.0 with lime, and fertilize with 600 lbs of 5-10-10 or equivalent per acre. All disturbed areas shall be temporarily seeded if construction does not resume in 15 days.  
 -Apply permanent seeding consisting of:  
 Empire brodiae or trefoil or common white clover 8 lbs per acre  
 Plus tall fescue 20 lbs per acre  
 Plus Ryegrass 8 lbs per acre  
 -Apply temporary seeding consisting of Ryegrass (annual or perennial) at 30 lbs per acre.  
 -The optimum time for permanent seeding is in the spring from March 21 through May 20, and in late summer and early fall from August 25 to October 15. Permanent seedings may be made any time of year if properly mulched and adequate moisture is provided. Broadcasting, drilling with cultipack type seeder or hydroseeding are acceptable.

**Topsoil/Mulching**  
 -Where vegetation will be established, preserve and apply existing topsoil and friable fine textured subsoil that are stripped during excavation. Complete rough grading and final grading, allowing for depth of topsoil to be added. Scarify all compact, slow permeable, medium and the textured subsoil areas. In soil areas that are steeper than 5 percent, scarify at approximately right angles to the slope. Remove refuse, woody plant parts, stones over 3 inches in diameter, and other litter.  
 -Topsoil shall have a minimum of 2 percent, and a maximum of 6 percent by weight of fine textured stable organic material. Topsoil shall have not less than 20 percent fine textured material (passing the No. 200 sieve) and not more than 15 percent clay. Topsoil shall be relatively free of stones over 1 1/2 inches in diameter.  
 -Topsoil shall be placed at a uniform depth of 2 inches for the steep slopes, and 4 inches for the low areas. Topsoil shall not be placed when it is partly frozen, muddy, nor on frozen slopes or over snow. Topsoil shall be placed, mulched and stabilized by "tracking" with suitable equipment.  
 -If soil is compacted or crusted, surface should be loosened to at least two inches by disking or other suitable methods. Straw mulch (small grain) is preferred applied at an application rate of 2 tons per acre, and anchored with wood fiber mulch (hydromulch) at 500-750 lbs. per acre. The wood fiber mulch must be applied through a hydroseeder immediately after mulching.



**TEMPORARY SWALE DETAIL**  
 NOT TO SCALE

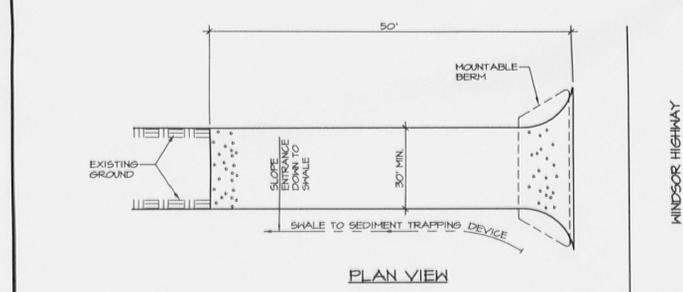
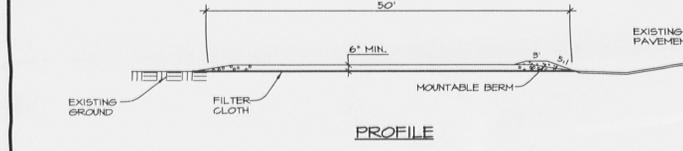
- CONSTRUCTION SPECIFICATIONS**
- ALL TEMPORARY SWALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
  - DIVERTED RUNOFF FROM DISTURBED AREAS SHALL BE CONVEYED TO A STORM INLET SEDIMENT TRAP.
  - DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET DIRECTLY INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSIVE VELOCITY.
  - ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SWALE.
  - THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
  - FILLS SHALL BE COMPACTED BY EARTH MOVING EQUIPMENT.
  - ALL EARTH REMOVED AND NOT NEEDED ON CONSTRUCTION SHALL BE PLACED SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE SWALE.
  - STABILIZATION SHALL BE AS PER THE CHART BELOW:
- | TYPE OF TREATMENT | CHANNEL GRADE | SWALE A (6" AG. OR LESS)        | SWALE B (8" AG. - 10" AG.)                       |
|-------------------|---------------|---------------------------------|--|
| 1                 | 0.5-3.0 %     | SEED AND STRAW MULCH            | SEED AND STRAW MULCH                             |
| 2                 | 3.1-5.0 %     | SEED AND STRAW MULCH            | SEED USING JUTE OR EXCELSIOR                     |
| 3                 | 5.1-8.0 %     | SEED WITH JUTE OR EXCELSIOR/50D | LINED RIP-RAP 4"-6" RECYCLED CONCRETE EQUIVALENT |
| 4                 | 8.1-20 %      | LINED 4"-6" RIP-RAP             | ENGINEERED DESIGN                                |
4. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.



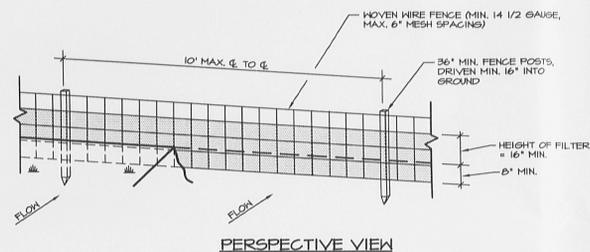
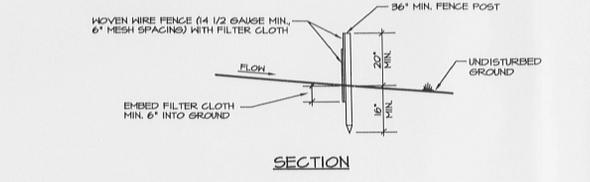
**CATCH BASIN SEDIMENT TRAP**  
 NOT TO SCALE

- CONSTRUCTION SPECIFICATIONS**
- SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND STABILIZED.
  - THE VOLUME OF SEDIMENT STORAGE SHALL BE 3600 CUBIC FEET PER ACRE OF CONTRIBUTORY DRAINAGE.
  - THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
  - CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND SEDIMENT ARE CONTROLLED.
  - THE SEDIMENT TRAP SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE CONSTRUCTED DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
  - ALL CUT SLOPES SHALL BE 1:1 OR FLATTER. MAXIMUM DRAINAGE AREA: 3 ACRES.
  - KEEP HOLES SHALL BE PROTECTED BY GRAVEL.
  - UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA, SEAL KEEP HOLES, FILL BASIN WITH STABLE SOIL TO FINAL GRADE, COMPACT IT PROPERLY AND STABILIZE WITH PERMANENT SEEDING.

- CONSTRUCTION SPECIFICATIONS**
- STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
  - LENGTH - FIFTY (50) FEET
  - THICKNESS - SIX (6) INCHES.
  - WIDTH - FIFTEEN (15) FEET, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
  - FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
  - SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE DIRECTED TO A SWALE DISCHARGING TO A SEDIMENT TRAPPING DEVICE. PROVIDE A MOUNTABLE BERM WITH 5:1 SLOPES.
  - MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACED ONTO ROADWAY MUST BE REMOVED IMMEDIATELY.
  - WHEN VEHICLE WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
  - PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

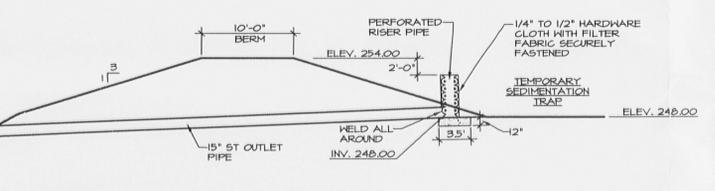
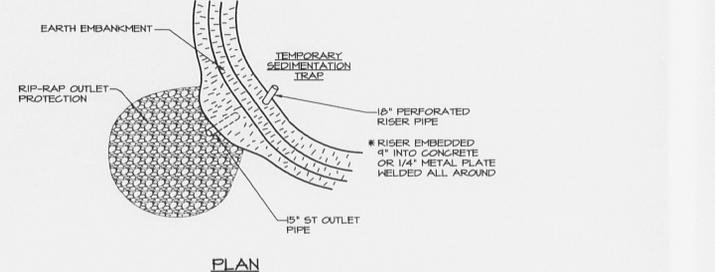


**STABILIZED CONSTRUCTION ENTRANCE DETAIL**  
 NOT TO SCALE



**SILT FENCE DETAIL**  
 NOT TO SCALE

- CONSTRUCTION SPECIFICATIONS**
- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
  - FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
  - WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
  - MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
- POSTS:**  
 STEEL, EITHER 1" OR 1 1/2" TYPE OR 2" HARDWOOD
- FENCE:**  
 WOVEN WIRE, 14 1/2 GAUGE, 6" MAX. MESH OPENING
- FILTER CLOTH:**  
 FILTER # MIRAFL 100% STABILINA 1140N OR APPROVED EQUAL
- PREFABRICATED UNIT:**  
 GEOFAB, ENVIROFENCE, OR APPROVED EQUAL



**EMBANKMENT SECTION THRU RISER**  
 SIZE OF PIPE NEEDED, BARREL DIAMETER: 15" RISER DIAMETER: 15"

**TEMPORARY SEDIMENTATION TRAP OUTLET**  
 NOT TO SCALE

- CONSTRUCTION SPECIFICATIONS**
- AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED.
  - THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS OR OTHER WOODY VEGETATION AS WELL AS OVER-SIZED STONES, ROCKS, ORGANIC MATERIAL, OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED TO 95% DENSITY (ASTM 1557).
  - VOLUME OF SEDIMENT STORAGE SHALL BE 3600 CUBIC FEET PER ACRE OF CONTRIBUTORY DRAINAGE.
  - SEDIMENT SHALL BE REMOVED AND BASIN RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE BASIN. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND STABILIZED.
  - THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
  - CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND SEDIMENT ARE CONTROLLED.
  - THE STRUCTURE SHALL BE REMOVED AND AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
  - ALL PIPE CONNECTIONS SHALL BE WATERTIGHT.
  - THE TOP 2/3 OF THE RISER SHALL BE PERFORATED WITH ONE (1) INCH DIAMETER HOLES OR SLITS SPACED SIX (6) INCHES VERTICALLY AND HORIZONTALLY AND PLACED IN THE CONCAVE PORTION OF PIPE. NO HOLES WILL BE ALLOWED WITHIN SIX (6) INCHES OF THE HORIZONTAL BARREL.
  - THE RISER SHALL BE WRAPPED WITH 1/4 TO 1/2 INCH HARDWARE CLOTH WIRE THEN WRAPPED WITH FILTER CLOTH (AN EQUIVALENT GIVE SIZE OF 40-80). THE FILTER CLOTH SHALL EXTEND SIX (6) INCHES ABOVE THE HIGHEST HOLE AND SIX (6) INCHES BELOW THE LOWEST HOLE. WHERE ENDS OF THE FILTER CLOTH COME TOGETHER, THEY SHALL BE OVERLAPPED, FOLDED AND STAPLED TO PREVENT BYPASS.
  - STRAPS OR CONNECTING BANDS SHALL BE USED TO HOLD THE FILTER CLOTH AND WIRE FABRIC IN PLACE. THEY SHALL BE PLACED AT THE TOP AND BOTTOM OF THE CLOTH.
  - THE RISER SHALL BE ANCHORED WITH EITHER A CONCRETE BASE OR STEEL PLATE BASE TO PREVENT FLOTATION. FOR CONCRETE BASE THE DEPTH SHALL BE TWELVE (12) INCHES WITH THE RISER EMBEDDED NINE (9) INCHES. A 1/4 INCH MINIMUM THICKNESS STEEL PLATE SHALL BE ATTACHED TO THE RISER BY A CONTINUOUS WELD AROUND THE BOTTOM TO FORM A WATERTIGHT CONNECTION AND THEN PLACE TWO (2) FEET OF STONE, GRAVEL, OR TAMPED EARTH ON THE PLATE.

**STORM WATER POLLUTION PREVENTION PLAN**

**Shaw Engineering**  
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ISSUE	REVISION	DATE

Drawn By: J.R.J.  
 Checked By: G.J.S.  
 Scale: AS SHOWN  
 Date: 6-1-2006

Project: NEW RETAIL / OFFICE BUILDING FOR NEW WINDSOR REALTY GROUP, LLC  
 N.Y.S. ROUTE 32 TOWN OF NEW WINDSOR, N.Y.

6 OF 6  
 Project No. 0506