New Administration Building

Stormwater Pollution Prevention Plan

Hudson Valley Community College
Troy, New York

Prepared for:
Hudson Valley Community College 80
Vandenburgh Avenue Troy, New York 12180

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PROJECT INFORMATION:

Project Name and Location
New Administration Building
Hudson Valley Community
College Rensselaer County, New
York

Owner Name and Address
Hudson Valley Community
College 80 Vandenburg
Avenue
Troy, New York 12180

PROJECT DESCRIPTION:

Purpose and Extent of Proposed Development

The proposed project involves construction of a New Administration Building at Hudson Valley Community College main campus located in the Troy, New York. The project site encompasses approximately 1.3 acres and is bound on each side by campus buildings drives, and parking areas.

Construction of the New Administration Building is scheduled to begin in mid November, 2005 with completion scheduled for December, 2006. The project area is located on an existing asphalt parking lot, which will be removed for the construction of the proposed building. The remainder of the project site (not within the building footprint) will be grassed and landscaped. A net reduction of 0.19 acres of impervious area occurs as a result of this project.

Project Disturbance Area

Total Disturbed Area: ±1.31 acres
Total Proposed Impervious Area: ±0.40 acres
Total Existing Impervious Area: ±0.59 acres
Net Change in Impervious Area: 0.19 acres reduction (32%)
SEQUENCE OF MAJOR ACTIVITIES:

This SWPPP presents erosion and sediment controls, both temporary and permanent, to assist the operator in compliance with the project's SPDES General Permit for construction activity. To the degree practicable, all temporary erosion and sediment control mitigation measures shall be installed immediately before associated project areas are disturbed in anticipation of all soil disturbing activities to follow. The project proposes to disturb a maximum of 1.3 acres of soil in compliance with the NYS DEC limit.

In general, the following lists the project phases for construction.

Projected Construction Sequencing:

- Installation of temporary erosion and sediment control measures.
- Construction of building foundation.
- Construction of building superstructure.
- Installation of site utilities.
- Establishment of permanent vegetation.
- Removal of temporary erosion and sediment control measures (coinciding with final stabilization).

Name of Receiving Waters

Stormwater entering the project area will discharge via existing closed drainage system to a Tributary of the Wynantskill Creek.

CONTROLS:

Erosion and Sediment Controls / Stabilization Practice

Construction of the project shall limit the area of disturbance to 1.3 acres or less for the duration of the project.

For a layout of applicable erosion and sediment control measures and details, see attached plan sheets (FOOO and FOOl).

Temporary Stabilization

Topsoil stockpiles, staging areas and disturbed pervious portions of the project area where construction activity temporarily ceases for at least 21 days shall be stabilized with temporary seed and mulch no later than 14 days from the last construction activity in that area.

Temporary seed shall be Rye (grain) applied at the rate of 30 pounds per acre. Prior to seeding, 2,000 pounds of ground agricultural limestone and 1,000 pounds of 5-10-10 fertilizer shall be applied at a rate per acre to be stabilized. Mulch shall be applied in conjunction with seeding and applied at the rate of 90 lbs per 1000 square feet. Mulch shall be reapplied as necessary. Areas of the project area, which are to be paved, shall be temporarily stabilized by applying temporary gravel sub base until pavement can be applied.

Proposed grades steeper than 3: 1 shall be stabilized with erosion control blankets, as indicated and detailed on the attached plan sheet (FOOl).

Silt fencing shall be installed where indicated and detailed on the attached plan sheet (FOOO).

Filter fabric drop inlet protection shall be installed on all existing and proposed catch basins within the project area where indicated and detailed on attached plan sheet (FOOO and FOOl).
Prior to commencing any earthwork, a stabilized construction entrance shall be installed as indicated and detailed on the attached plan sheet (FOOO). This entrance shall be utilized as the exclusive construction entrance and exit to the construction areas. Construction traffic shall be limited to the construction entrance. At the initiation of project activity, this entrance may be on a paved surface. Daily sweeping of this area shall be conducted to ensure that offsite tracking of sediment does not occur. If additional construction entrances are installed, they shall be stabilized as detailed on attached plan sheet (FOOO).

Permanent Stabilization

Disturbed portions of the project area where construction activities permanently cease shall be stabilized with permanent seed no later than 14 days after the last construction activity.

Where construction activity is complete over areas to be permanently vegetated, stabilize with permanent seeding. Verify seeding dates with engineer. If engineer determines that seed cannot be applied due to climate, topsoil shall not be spread and mulching shall be applied to the exposed surface to stabilize soils until the next recommended seeding period. Other project areas shall be permanently stabilized with pavement, concrete, gravel or building structures.

Stormwater Management and Water Quality Measures

Permanent stormwater management practices are not planned for the proposed redevelopment. The restrictive size of the project site, and developed nature of adjacent areas prohibits the practical installation of permanent stormwater measures. Based on the "Interim Guidelines for Redevelopment Projects" (April 30, 2004), a redevelopment project proposing a reduction of impervious area greater than 20% may waive the GP-02-01 water quality requirements, pending a 60-day DEC review. A meeting with DEC Region 4 on October 14th, 2005 was held for a preliminary review the project scope.

The project proposes replacing an existing asphalt parking lot with an administration building. Final site layout results in a net reduction of 0.19 acres (32%) of onsite impervious area. The project will improve onsite water quality not only by reducing impervious area, but also by the converting impervious area to a type with lower pollutant loading (roof area versus asphalt parking area).

Roof drainage from the proposed Administration Building will be piped directly to an existing stormwater system draining northward to a tributary of the Wynantskill Creek. Drainage from the remainder of the project area (proposed grassed area) drains overland to a catch basin network routed to the same existing stormwater system. The reduced onsite impervious area combined with unaltered grade slopes results in a decrease in peak flow rates for the 1-, 10- and 100-year storm events. As such, the project proposes no onsite water quantity controls.

Other Controls

Permanent Stabilization

Waste materials - Foreign waste materials shall be collected and stored in a secured area until removal and disposal by a licensed solid waste management company. All trash and construction debris from the project area shall be disposed of in a portable container unit. No foreign waste materials shall be buried within the project area. All personnel shall be instructed regarding the correct procedure for waste disposal. Notices stating these practices shall be posted in the project trailer and the individual who manages day-to-day project operations will be responsible for seeing that these procedures are followed.

Hazardous Waste - All hazardous waste materials shall be disposed of in a manner specified by local or state regulations or by the manufacturer. Project personnel shall be instructed in these practices and the individual who manages day-to-day project operations shall be responsible for seeing that these practices are followed.
Sanitary Waste - Any sanitary waste from portable units shall be collected from the portable units by a licensed sanitary waste management contractor, as required by NYS DEC regulations.

*Sediment Tracking by Vehicles*

A stabilized construction entrance shall be installed (where depicted on attached plan) and maintained as necessary to help reduce vehicular tracking of sediment. The entrance shall be cleaned of sediment and redressed when voids in the crushed stone become filled and vehicular tracking of sediment is occurring. Dump trucks hauling materials to and from the construction project area shall be covered with a tarpaulin to reduce dust. Any sediment and debris tracked from work area along project adjacent roadways shall be immediately removed with a street sweeper or equivalent sweeping method. Further, sweeping of streets adjacent to disturbed areas shall be performed prior to the end of each work day (at a minimum) when tracking of sediment is occurring.

*Non-Stormwater Discharges*

Non-stormwater discharges are not expected to exit the project area during construction.

**Timing of Controls/Measures**

The erosion and sediment control measures shall be constructed prior to clearing or grading of any portion of the project. Where construction activity temporarily ceases for more than 21 days, areas to be vegetated shall be stabilized with a temporary seed and mulch within 14 days of the last disturbance. Where construction activity temporarily ceases for more than 21 days, areas to be paved shall be stabilized with a crushed stone within 14 days of the last disturbance. Once construction activity ceases permanently in an area, that area shall be stabilized with permanent measures. After the entire project area is stabilized, the accumulated sediment shall be removed from the project area. Erosion control devices shall remain in place until disturbed areas are permanently stabilized.

**Certification of Compliance with Federal, State, and Local Regulations**

The stormwater pollution prevention plan reflects the New York State requirements for stormwater management and erosion and sediment control. To ensure compliance, this plan was prepared in accordance with New York State Standards. There are no other applicable State or Federal requirements for sediment and erosion plans (or permits), or stormwater management plans (or permits).

**MAINTENANCE/INSPECTION PROCEDURES:**

**Erosion and Sediment Control Inspection and Maintenance Practices**

The minimum required inspection and maintenance practices that shall be used to maintain erosion and sediment controls are listed below:

- A copy of the signed Notice of Intent (NOI) must be posted onsite, in a publicly accessible location. A copy of the SWPPP and the SPDES general permit must be retained at the construction site.
- A summary of the project area inspection activities shall be posted monthly in a publicly accessible location. A copy of the "Monthly Inspection Summary Form" is included in the "inspection forms" section of this plan.
- The operator shall prepare a written summary of the SWPPP’s status with respect to compliance with the general permit (GP-02-01) at a minimum frequency of every three months during which coverage under the permit exits.
Prior to filing of the Notice of Termination or the end of permit term, the Operator shall perform a final project area inspection. This inspection shall certify that the project area has undergone final stabilization 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. A copy of the "Final Stabilization and Retention of Records Inspection Form" is included in the "inspection forms" section of this plan.

All measures shall be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours of report or as ordered by the owner's representatives.

- Built up sediment shall be removed from any silt fence and filter fabric drop inlet protection when it has reached one-third the height of the fence.
- Silt fencing and filter fabric drop inlet protection shall be inspected for depth of sediment, and tears, to see if fabric is securely attached to the fence posts, and to see that the fence posts are firmly in the ground.
- The construction entrance shall be cleaned of sediment and redressed when voids in the crushed stone become filled and vehicular tracking of sediment is occurring.
- Dust shall be controlled on access points and other disturbed areas subject to surface dust movement and blowing.
- Erosion control blankets shall be installed on all slopes 3:1 or greater to ensure that slopes are not eroded. Blankets shall be replaced / reinstalled and rock dams added as necessary to prevent any such erosion.
- Inspection must look for evidence of soil erosion on the site, potential of pollutants entering drainage systems, problems at the discharge points, and signs of soil and mud transport from the site to adjacent roadways.
- The site operator or superintendent shall select the individuals who will be responsible for the inspections, maintenance, repair activities, and filling out the inspection and maintenance report.
- Personnel selected for inspection and maintenance responsibilities shall have received proper training in all the inspection and maintenance practices necessary for keeping the erosion and sediment control used on-site in good working order.
- The operator shall retain copies of inspection reports submitted in conjunction with this permit and records or 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.
POST-CONSTRUCTION INSPECTION AND MAINTENANCE PRACTICES

Hudson Valley Community College will maintain ownership of the site.

INVENTORY FOR POLLUTION PREVENT PLAN:

The materials or substances listed below are expected to be within the project area during construction:

- Portland cement concrete
- Fertilizers / seeding materials
- Stone
- Bituminous asphalt
- Petroleum based products
- Silt fence fabric
- Lumber
- Pavement marking paint
- HDPE and Iron piping
- Erosion control blankets

SPILL PREVENTION:

The following are the material management practices that shall be used to reduce the risk of spills or other accidental exposure of materials and substances to stormwater runoff.

Good Housekeeping

The following good housekeeping practices shall be followed within project areas during construction:

- An effort shall be made to store only enough products required to do the job.
- All materials stored within project areas shall be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure.
- Products shall be kept in their original containers with the original manufacturer's label.
- Substances shall not be mixed with one another unless recommended by the manufacturer.
- Whenever possible, all of a product shall be used up before disposing of the container.
- Manufacturers' recommendations for proper use and disposal shall be followed.
- The project superintendent shall inspect daily to ensure proper use and disposal of materials.

Hazardous Products

These practices are used to reduce the risks associated with hazardous materials:

- Products shall be kept in original containers unless they are not resealable.
- Original labels and material safety data shall be retained.
  - If surplus product must be disposed of, manufacturers' or local and state recommended methods of proper disposal shall be followed.
- Material Safety Data Sheets for all hazardous products shall be within the project area for the duration of construction.
Product Specific Practices

The following product-specific practices shall be followed within the project areas:

Petroleum Products

All project related vehicles shall be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products shall be stored in tightly sealed containers which are clearly labeled. Any asphalt substances used during construction shall be applied according to the manufacturer's recommendations.

Fertilizers

Fertilizers used shall be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer shall be worked into the soil to limit exposure to stormwater. Fertilizers shall be stored in a covered or other contained area.

Paints

All containers shall be tightly sealed and stored when not required for use. Excess paint shall not be discharged to the storm sewer system but shall be properly disposed of according to manufacturer's instructions or State regulations.

Concrete Trucks

Concrete trucks shall be allowed to wash out within project areas provided that the contractor provides an area which collects and contains any concrete / slurry material washed from trucks for recovery and disposal at a later time. No concrete / slurry shall be discharged from the property at any time of construction. If such washing is anticipated, the contractor shall submit a plan detailing the control of concrete / slurry to the engineer for approval.

Spill Control Practices

The contractor will be responsible for preparing a project area specific spill control plan in accordance with local and NYS DEC regulations. At a minimum this plan should:

- Reduce stormwater contact if there is a spill.
- Contain the spill.
- Stop the source of the spill.
- Dispose of contaminated material in accordance with manufactures procedures, and NYS DEC regulations.
- Identify responsible and trained personnel.
- Ensure spill area is well ventilated.

UPDATING THE SWPPP:

The SWPPP shall be updated/revised as conditions merit or as directed by the regulating authority. The attached inspection forms included with this document allows for the certification of any updates/revisions.