

**ITHACA GUN FACILITY DEMOLITION
STORMWATER POLLUTION PREVENTION PLAN
SECTION 1 - EROSION AND SEDIMENT CONTROL**

1 GENERAL

This Section includes temporary erosion and sediment control measures intended to minimize erosion of soils and sedimentation of adjacent waterways and lands adjacent to or affected by the proposed Ithaca Gun Facility Demolition Project.

1.01 REFERENCES

All work shall be performed in conformance with this Stormwater Pollution Prevention Plan (SWPPP) and the New York State Department of Environmental Conservation (NYSDEC) State Pollutant Discharge Elimination System (SPDES) General Permit No. GP-0-08-001 for Stormwater Discharges from Construction Activities. General Permit No. GP-0-08-001 replaces General Permit No. GP-02-01 on May 1, 2008.

The soil amendments and vegetative plantings associated with the proposed project are expected to decrease stormwater runoff from the site under developed conditions. In accordance with Permit No. GP-0-08-001, projects involving ground disturbance that will not result in an increase in impervious surface area are not required to install permanent facilities to manage the water quality and quantity volumes from the project area. In accordance with Permit No. GP-0-08-001, no more than five acres of the project area will be disturbed at one time. The contractor shall apply for written authorization from the NYSDEC prior to disturbing more than five acres of soil at any one time.

Materials and installation shall be in accordance with the latest revisions of the following codes, standards, and specifications:

1. NYSDEC Standards and Specifications for Erosion and Sediment Control. (NYSDEC 2005).
2. New York State Stormwater Management Design Manual (the design Manual) prepared by the Center for Watershed Protection for the NYSDEC (2003).

A copy of the SWPPP will be maintained on-site throughout construction and for a minimum of three years from the completion of construction.

1.02 SUBMITTALS

The contractor shall submit shop drawings of silt fencing.

2 MATERIALS

2.01 GENERAL

Contractors shall provide all necessary supervision, labor, equipment and materials as needed to perform the specified work.

Materials shall include silt fence, vegetation, stone, erosion control fabric, and other manufactured products to reduce erosion and control sedimentation.

2.02 SILT FENCE

Posts shall be steel (either T or U type) or 2-inch square hardwood with 10-foot spacing.

Geotextile filter cloth sizing shall be as recommended by the manufacturer. The material shall have a minimum tensile strength of 120 pounds (test procedure ASTM D1682 G).

2.03 STABILIZED CONSTRUCTION ENTRANCE

Stone used for stabilized construction entrances shall be a minimum of 2-inch stone.

Equivalent material (*i.e.*, reclaimed concrete) may be used with approval from the Engineer.

Geotextile bedding shall consist of Mirafi 500X or equivalent.

Overall dimensions and installation notes are as shown on the details.

2.04 TEMPORARY VEGETATION

Site shall not be idle for more than 21 days or temporary vegetation is required. Temporary vegetation shall consist of a mixture of quick germinating, fast growing grasses such as annual and perennial rye grass mixed with sweet or white clover with an application rate of 50 pounds per acre.

Mulch shall be a moist straw or hay and applied at the rate of 2 tons per acre.

The seed furnished by the Contractor shall not be more than two years old. When directed by the Engineer, the above mixture may be varied to suit any special condition of soil peculiar to the areas to be seeded. Seed which has become wet, moldy, or otherwise damaged in transit or storage shall not be acceptable.

2.05 TEMPORARY SEDIMENT TRAP

A temporary sediment trap is only required if there is a direct discharge from the site. There is no direct discharge from the site.

3 CONSTRUCTION DETAILS

3.01 SEQUENCE

A temporary stabilized construction entrance shall be installed and maintained at each access point to unpaved portions of the site. If vehicles/equipment are washed, wash-down water shall be directed to a stormwater sediment trap prior to discharging off-site.

Silt fencing shall be installed along toes of embankments, on downstream portions of the site perimeter, and around spoil piles and stockpiles. Double layers of silt fence shall be installed if adjacent to wetlands or streams.

Additional erosion and sediment control (ESC) facilities shall be installed as shown on the Contract Drawings or as directed by the Engineer. These facilities shall remain in place until construction activities are completed and the site is stabilized.

Staging areas for construction vehicles, equipment, and supplies shall be located in areas that are stabilized with stone.

The site shall be cleared and grubbed within the limits of work only. Care will be taken to minimize impacts to vegetation. Cleared vegetation, soil, and other debris shall be stockpiled in approved areas for disposal at an approved location.

Topsoil shall be stripped and stockpiled for use on-site or for disposal off-site in approved locations.

Exposed soil shall be stabilized, topsoiled, seeded, and mulched in accordance with this SWPPP.

Upon stabilization of the site and approval of final site inspection, temporary ESC measures shall be removed.

3.02 STABILIZATION

The following stabilization practices will be utilized:

Temporary stabilization – Stabilization by seeding and mulching shall occur in portions of the project area where construction activity is temporarily ceased and earth-disturbing activities will not resume within 21-days. It is recommended that seeding not occur after October 15 or before April 15 of any year. Temporary seeding shall include:

1. Spread seed by hand or approved sowing equipment at a rate of 50 pounds per acre.
2. After sowing has been completed, apply mulch evenly over the entire seeded area at a rate of 2 tons per acre. Wet mulch immediately after placing.

Permanent stabilization – Disturbed portions of the site where construction activities permanently cease shall be stabilized with topsoil and permanent seed or sod no later than 14 days after the last construction activity. Six inches of topsoil and seed as specified in section 2.04 above. Permanent vegetation is not required if areas are stabilized with stone or crushed concrete.

3.03 ADDITIONAL STORMWATER CONTROLS

Listed below is a description of additional controls and measures that shall be implemented at the site to minimize pollutant transport.

Proper precautions shall be taken so materials do not spill onto public thoroughfares. If materials are dropped onto these areas they shall be removed as soon as practicable so that they do not enter surface and subsurface drainage systems.

Contractor shall provide dust control measures before dust migrates off-site. Measures may include water application or mulching but shall not include use of chemical additives.

Building materials on the site shall be properly stored and/or contained.

Chemicals with spill potential shall have appropriate secondary containment.

3.04 MAINTENANCE

Construction period operation and maintenance:

1. Cleaning and/or repairing or replacing silt fences as necessary.
2. Stabilized construction entrances shall be resurfaced as necessary.
3. Cleaning and/or sweeping affected roadways as necessary, or as directed by the Engineer.

4. Removing debris and litter on a weekly basis or more frequently if necessary.

Post-construction operation and maintenance:

1. Vegetation within the project area will be monitored and maintained in accordance with the Demolition Work Plan. Dead vegetation shall be replaced as necessary.
2. Seeded areas shall be maintained and/or reseeded or stabilized to protect against erosion.
3. Repair sloughing or erosion of embankments.

3.05 INSPECTION DURING CONSTRUCTION

The Contractor will provide qualified personnel to inspect disturbed areas of the construction site for compliance with the control measures. This qualified professional shall assess the site prior to construction beginning and certify in an inspection report that the appropriate erosion and sediment control facilities have been properly installed. Once construction begins, an inspection shall be completed at least every 7-days.

In addition, the Contractor shall inspect site erosion and sediment controls after each rain event. If soil disturbance activities have been temporarily suspended (*e.g.*, winter shutdown) and temporary stabilization measures have been applied to all disturbed areas, inspections are to be performed at least once every 30 calendar days. Fall Creek Redevelopment shall notify the regional NYSDEC office in writing prior to reducing the frequency of inspections. Inspections can be suspended when soil disturbance activities have been shut down with partial project completion (*i.e.*, end of a project phase) if all disturbed areas have achieved final stabilization. Again, notification of the regional NYSDEC office is required.

The inspection report will include the inspector's name, date, findings of the inspections, notes, and actions taken to repair/replace defective control measures. A site map indicating locations of areas of concern shall also be included. Deficiencies noted during any inspection shall be corrected by the Contractor as soon as practicable. Further mitigation measures shall be taken by the Contractor if warranted.

The Contractor shall maintain the SWPPP onsite to include of site inspection activities on a monthly basis. Each inspection report is to remain on file at the site as part of the SWPPP.

3.06 NON-STORMWATER DISCHARGES

The Contractor will be responsible for identifying areas at the site dedicated for construction vehicle transit or equipment staging which shall be monitored and where runoff can be controlled.

Cleaning water for construction vehicles and activities shall occur in designated staging/laydown areas. Chemicals and detergents shall not be used.

Water used for dust control measures shall be applied using proper quantities and equipment to avoid runoff to the extent practicable. No chemical additives will be used.

3.07 SPILL PREVENTION

Materials with potential for spillage, stored on-site, will be stored in a neat, orderly manner in their appropriate containers and in secondary containment.

Products will be kept in their original containers with the original manufacturer's label.

Substances will not be mixed with one another unless recommended by the substance manufacturer.

Whenever possible, product will be used up or packages resealed before proper disposal of contents and containers off site.

Manufacturers' recommendations for proper use and disposal will be followed.

Inspection will be made for proper use and disposal of materials.

On-site vehicles will be monitored for leaks and receive regular preventative maintenance to reduce the chance of leakage of petroleum products. Petroleum products will be stored in closed containers which are clearly labeled. Used oils will be disposed of properly.

Materials will be brought on-site in the minimum quantities required to limit on-site storage.

Refueling of vehicles and equipment shall occur at a minimum of 50-feet from streams and wetlands. If it is necessary to operate equipment such as bypass pumps within streams or wetlands, refueling shall occur within a contained area such as a temporary revetment.

3.08 SPILL CONTROL PRACTICES

Spills of petroleum, toxins, or hazardous material will be reported to the NYSDEC or local government agencies immediately, regardless of size.

Manufacturers' recommended methods for spill cleanup will be clearly posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.

Materials and equipment necessary for spill cleanup will be kept in an on-site material storage area that is identified by the Contractor. Equipment and materials will include but not be limited to shovels, rags, gloves, goggles, spill control materials, sand, sawdust, and trash containers specifically for this purpose.

Spills will be cleaned up immediately after discovery.

The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.

A spill report will be completed and will include a description of the spill, what caused it, and the corrective measures taken.

3.09 CERTIFICATIONS

Contractor Certification - Each responsible Contractor shall understand and sign a form containing the following certification statement:

"I hereby certify that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the qualified inspector during a site inspection. I also understand that the owner or 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. Furthermore, I understand that certifying false, incorrect, or inaccurate information is a violation of the referenced permit and the laws

of the State of New York and could subject me to criminal, civil, and/or administrative proceedings.”

Fall Creek Redevelopment shall understand and sign a form containing the following certification statement:

“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.”

3.10 NOTICE OF INTENT/TERMINATION

The SPDES General Permit No. GP-0-08-001 Notice of Intent (NOI) has been submitted to the NYSDEC. Prior to initiation of construction activities, the contractor must receive the acknowledgement letter that site will be covered under the General Permit No. GP-0-08-001. The Notice of Termination shall be completed and submitted by the owner to the NYSDEC upon completion of construction and stabilization of the project area.

4 METHOD OF MEASUREMENT

The quantity to be measured for payment for erosion and sediment control will be made in accordance with the Contract Documents

5 BASIS OF PAYMENT

Payment will be made in accordance with the Contract Documents.