

**STORMWATER POLLUTION
PREVENTION PLAN
for
CONSTRUCTION ACTIVITIES
at**

**PROPOSED SINGLE FAMILY SUBDIVISION
LANDS OF SPENCER
CITY OF SARATOGA SPRINGS, NY**

Prepared for

**BELMONTE BUILDERS, LLC
1743 ROUTE 9
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**NOI Permittee: BELMONTE BUILDERS, LLC
PROPOSED SINGLE FAMILY SUBDIVISION – LANDS OF SPENCER**

PROPOSED SINGLE FAMILY SUBDIVISION – LANDS OF SPENCER

I. SCOPE

- A. **PURPOSE:** BELMONTE BUILDERS, LLC intends to implement the appropriate Stormwater Pollution Prevention Plan measures in accordance with the SPDES general permit governing stormwater discharges during construction, and in accordance with erosion control practices. This section provides a descriptive explanation of the means by which BELMONTE BUILDERS, LLC will comply with the National Stormwater Pollution Prevention Program.
- B. **NPDES GENERAL PERMITS FOR STORMWATER DISCHARGE FROM CONSTRUCTION SITES:** Regulations promulgated by the New York State Department of Environmental Conservation (NYSDEC) regulate the discharge of storm water from construction activities on sites where one (1) or more acres of soil is disturbed. One of the ways to comply with these regulations for affected sites is to request coverage under the General Permit for Construction Activities. (Copy enclosed herewith) In order to be authorized to discharge under the General Permit, a Stormwater Pollution Prevention Plan (SWPPP) for the site must be prepared in accordance with all applicable requirements of this permit and followed during the construction activities. If the construction activity is **not** subject to the requirements of a regulated, traditional land use control MS4 a Notice of Intent (NOI) form must be completed and received by the New York State Department of Environmental Conservation at least 5-days prior to any earth-disturbing activities. If the construction activity is subject to the requirements of a regulated, traditional land use control MS4, then the owner/operator must have its SWPPP reviewed and accepted by the MS4 prior to submitting the NOI to the Department. The owner/operator shall have the “MS4 SWPPP Acceptance” form signed and then submit that form along with the NOI to the Department.
- C. **RESPONSIBILITIES OF CONTRACTOR REGARDING THE GENERAL PERMIT:** The CONTRACTOR shall manage the discharge of stormwater from the site in accordance with the SPDES General Permit for Construction Activities conditions and the following provisions of this section of the specifications. The CONTRACTOR shall be responsible for conducting the stormwater management practices in accordance with the permit. The CONTRACTOR shall be responsible for providing qualified inspectors to conduct the inspections required by the SWPPP. The CONTRACTOR shall be responsible for any enforcement action taken or imposed by federal, state, or local agencies, including the cost of fines, construction delays, and remedial actions resulting from the CONTRACTOR’S failure to comply with the permit provisions. It shall be the responsibility of the CONTRACTOR to make any changes to the SWPPP necessary when the CONTRACTOR or any of his subcontractors elects to use borrow or fill or material storage sites, either contiguous to or remote from the construction site, when such sites are used solely for this construction site. Such sites are considered to be part of the construction site covered by the permit and this SWPPP. Off-site borrow, fill, or material storage sites which are used for multiple construction projects are not subject to this requirement, unless specifically required by state or local jurisdictional entity regulations. The CONTRACTOR should consider this requirement in negotiating with earthwork subcontractors, since the choice of an off-site borrow, fill, or material storage site may impact their duty to implement, make changes to, and perform inspections required by the SWPPP for the site.
- D. **NOTICE OF INTENT:** The NOI Permittee petitions the New York State Department of Environmental Conservation for the stormwater discharges during construction at this site to be covered by the SPDES General Permit for Construction Activity for the State of New York. A Notice of Intent (NOI) (using the form required by the NYSDEC) to be covered under this permit is hereby filed. An Erosion and Sediment Control Plan has been prepared and is attached herewith.
- E. **CONTRACTOR RESPONSIBILITIES:** The SWPPP and associated Erosion and Sediment Control Plans represent the **MINIMUM** erosion and sediment control measures that will be required to protect the site during construction. BELMONTE BUILDERS, LLC and the CONTRACTOR understand that additional erosion and sediment control measures will be necessary during construction. It will be the responsibility of the

CONTRACTOR to implement additional erosion and sediment control measures as necessary to protect the site during construction. BELMONTE BUILDERS, LLC and the CONTRACTOR shall designate a Project Manager prior to commencing construction. The Project Manager will ensure that all construction managers and sub-contractors are appropriately assigned and understand the importance of the following topics:

- Erosion and Sedimentation Control for Water Quality Protection
- Implementation of the Erosion and Sedimentation Control Plan
- The Importance to Proper Installation of Erosion and Sedimentation Control Measures
- Regular Inspection by qualified personnel of Erosion and Sedimentation Control Measures
- Diligent Maintenance of Erosion and Sedimentation Control Measures
- Contemporaneous preparation of accurate and complete records regarding inspection and maintenance of Erosion and Sedimentation Control Measures
- Record Keeping for Inspections and Maintenance activities

- F. **REQUIREMENTS FOR THE CONTRACTOR AND SUBCONTRACTOR(S):** The *SWPPP Ledger* shall provide a “Contractor’s Certification Log” (**Form 2**), identifying the Company Name, Business Address and Telephone Number along with the Responsible Person for the CONTRACTOR and all subcontractors’ who will implement the measures identified in the SWPPP. Each of the entities identified on **Form 2** shall sign a “Contractor’s Certification” (**Form 3**), verifying they have been instructed and fully understand the requirements of the New York State Department of Environmental Conservation and SWPPP. **This certification must be signed, by a fully qualified individual on behalf of each entity, prior to the beginning of any construction activities and shall be filed in the project’s SWPPP Ledger.**

Additionally, the “Trained Contractor” must be identified on Form 3 and his/her credentials should be kept on-site in the SWPPP ledger.

- G. **STORMWATER POLLUTION PREVENTION PROGRAM LOCATION REQUIREMENTS:** The *SWPPP Ledger* is meant to be a working document that shall be maintained at the site of the Construction Activities at all times throughout the project, shall be readily available upon request by the NOI Permittee’s personnel or New York State Department of Environmental Conservation or any other agency with regulatory authority over stormwater issues, and shall be kept on-site until the site complies with the Final Stabilization section of this document. Refer to Part VII., F., Duty to Provide Information, of the General Permit for additional public viewing requirements.

- H. **SWPPP LEDGER:** The SWPPP Ledger shall be a 3-ring Binder, tabbed and indexed for the following sections:

SECTION 1:

- **Written SWPPP**

SECTION 2:

- **Site Map and General Location Map**
- **Erosion and Sediment Control Plan(s)**

SECTION 3:

- **New York State Notice of Intent**
- **New York State NOI Acknowledgement Letter**
- **New York State MS4 SWPPP Acceptance Form**

SECTION 4:

- **New York State SPDES General Permit**

SECTION 5:

- **NOI Permittee’s Certification (Form 1)**
- **Contractor’s/Subcontractor’s Certification Log (Form 2)**
- **Contractor’s Certification for each contractor listed on Form 2 (Form 3)**
- **Inspection Report (Form 4)**
- **Modification Report (Form 5)**
- **Record of Stabilization and Construction Activities Report (Form 6)**
- **Record of Temporary Erosion and Sediment Control Practices (Form 6A)**
- **Project Rainfall Log (Form 7)**
- **Final Stabilization/Termination Checklist (Form 8)**

SECTION 6:

- **Supplemental Information**
 - Stormwater Management Design Narrative
 - NHP “No records” response letter, dated March 17, 2015

SECTION 7:

- **Completed Inspection Forms**

The Project Manager must review and evaluate for compliance the *SWPPP Ledger* at each Project Review meeting. All Inspection and Maintenance Forms (*Forms 4 - 7*) will be initialed by the Project Manager at each reporting interval.

- I. **INSPECTIONS AND RECORD KEEPING:** Inspections are required at least weekly by a “Qualified Inspector”. Sites that have a waiver to disturb greater than five (5) acres require two (2) inspections every seven (7) days with at least two (2) days between inspections. Inspections shall continue until the site complies with the “Final Stabilization” section of this document and a Notice of Termination (NOT) has been filed with the NYSDEC. Each inspection must be followed up by a report documenting the inspector’s findings and request the required maintenance and/or repair for the erosion and sedimentation control measures. The inspector shall notify the Project Manager within one day of the inspection of any deficiencies. Within one day of this notification the Project Manager must commence with corrective measures. It is imperative that the Project Manager documents the Inspection and Maintenance of all erosion and sedimentation control measures as soon as possible after the inspection and/or maintenance is completed. These records are used to prove that the required inspection and maintenance were performed and shall be placed in the *SWPPP Ledger*. In addition to inspection and maintenance reports, records should be kept of the Construction Activities that occur on the site. The Project Sponsor shall retain copies of the SWPPP, all reports and data for a minimum of five (5) years after the project is complete. The following list identifies the **required** Inspection and Maintenance documentation that must be maintained by the Project Manager under this SWPPP.

- **Form 4 Inspection Report for SWPPP**
- **Form 5 Requested Changes to the SWPPP (Modification Report)**
- **Form 6 Record of Stabilization and Construction Activities**
- **Form 6A Record of Temporary Erosion and Sediment Control Practices**
- **Form 7 Project Rainfall Log**

- J. **SWPPP MODIFICATIONS:** The inspection report should also identify if any revisions to the SWPPP are warranted due to unexpected conditions. The SWPPP is meant to be a dynamic working guide that is to be kept current and amended whenever the design, construction, operation, or maintenance of the site changes in a way which significantly affects the potential for the discharge of pollutants or when the plan proves to be ineffective

in eliminating or significantly minimizing pollutant discharges. Any such changes to the SWPPP must be made in writing on the Modification Report Form (**Form 5**) within 7 days of the date such modification or amendment is made. The CONTRACTOR'S failure to monitor or report deficiencies to the NOI Permittee will result in the CONTRACTOR being liable for fines and construction delays resulting from any federal, state, or local agency enforcement action.

- K. **FINAL STABILIZATION AND TERMINATION OF PERMIT COVERAGE:** The site will be considered finally stabilized when all soil disturbing activities have been completed and a uniform perennial vegetative cover for the unpaved areas and areas not covered by permanent structures has been established or equivalent permanent stabilization measures have been established and the development area no longer discharges stormwater associated with construction activities and a Notice of Termination (NOT) form filed by the NOI Permittee with the New York State Department of Environmental Conservation. This filing terminates coverage under the General Permit and terminates the CONTRACTOR'S responsibility to implement the SWPPP. Requirements of the SWPPP, including periodic inspections, must be continued until the NOT is filed.

II. SITE DESCRIPTION

A. PROJECT NAME AND LOCATION

The PROPOSED SINGLE-FAMILY SUBDIVISION – LANDS OF SPENCER project site is geographically situated at Latitude N 43° 02' 53", Longitude W 73° 44' 11" in the CITY OF SARATOGA SPRINGS, SARATOGA COUNTY, NEW YORK. The site is located on the east side of ARROWHEAD ROAD south of the intersection with CRESCENT AVE. The project site is comprised of 12.63+/- acres of land. The overall disturbance area is approximately 5.48 acres. The project is bounded on the west by ARROWHEAD ROAD, and on the north, east and south by PRIVATE PROPERTY. Access to the project during construction will be from KAYDEROSS PARK ROAD. The proposed lots will remain privately owned and maintained. Approximately 2.2 acres of impervious surfaces, including travel surfaces and buildings will be constructed. Reclamation of disturbed areas will be conducted at an ongoing basis as construction progresses.

B. NOI PERMITTEE'S NAME AND ADDRESS

**BELMONTE BUILDERS, LLC
1743 ROUTE 9
CLIFTON PARK, NY 12065**

C. PROJECT DESCRIPTION

This project will involve the construction of a 22-lot subdivision with approximately 700 linear feet of new public road, sidewalks, driveways and an entrance from JULIAN'S WAY and KAYDEROSS PARK ROAD, as approved by the CITY OF SARATOGA SPRINGS. Also included, as permanent elements of the development are connections to municipal sewer and water and on-site stormwater management practices. The estimated time for completion of the construction project is approximately one (1) year. Soil disturbing activities will include:

1. Construction of stabilized construction access points
2. Clearing and grubbing
3. Installation of storm sewer pipes and inlets
4. Construction of sediment basins
5. Construction of utilities on site
6. Construction of curbs, roadways, and residential buildings and travel surfaces
7. Construction of landscaped areas

8. Final grading

D. RUNOFF COEFFICIENT, SOILS, AND RAINFALL INFORMATION

The predevelopment Curve Number (CN) for the existing wooded areas was determined to be 30. Soils within the project area consist of excessively drained loamy sand and sand that fall in the hydrologic soil group A, as described by the Soil Conservation Service. The post development CN for disturbed green areas is 39 and the weighted CN for the post development contributing area of the closed drainage system is 43. A CN of 98 was used for all post-development impervious surface areas. A detailed description of the soil and groundwater conditions is presented in the Stormwater Management Report, included in Section 6: Supplemental Information of the SWPPP.

The site is in Saratoga County, which receives an average of 36 inches of rainfall annually with the highest amounts of rainfall received in the months of June and July.

E. NAME OF RECEIVING WATERS

Drainage will be directed via on-site stormwater catch basins and storm sewer through a series of stormwater management areas (underground infiltration chambers and shallow grass depressions) as described in the Stormwater Management Report. The drainage corridor is tributary to Saratoga Lake. A detailed description of the overall drainage areas is presented in the Stormwater Management Report, included in Section 6: Supplemental Information of the SWPPP.

F. INDIAN COUNTRY LANDS

The site is not located on any known current or previously designated Indian Country lands.

G. ENDANGERED OR THREATENED SPECIES

A review of the New York State Department of Environmental Conservation's (NYSDEC) Environmental Resource Mapper (<http://www.dec.ny.gov/imsmaps/ERM/viewer.htm>) indicated no known State regulated rare plants, rare animals or significant natural communities on-site. A letter was directed to NYSDEC New York Natural Heritage Program requesting they provide us with a determination as to whether the proposed activity is likely to result in the take or taking of any species listed as endangered or threatened in 6 NYCRR Part 182. A response letter, dated March 17, 2015 was received indicated NHP had "No Records" of known State regulated rare plants, rare animals or significant natural communities on-site. The US Fish and Wildlife Service has reviewed the project and agreed that no take of threatened or endangered species will occur.

H. HISTORIC PLACES

A review of the New York State Historic Preservation Office (OPRHP) Geographic Information System Mapper (<http://www.oprhp.state.ny.us/nr/main.asp>) indicated that the site is located in an archeo sensitive area. A letter has been directed to the OPRHP Historic Preservation Field Services Bureau requesting they provide us with a determination as to whether the proposed activity is likely to result in any adverse effects on cultural resources. In response to correspondence with OPRHP, Curtin Archaeological has performed a Phase 1B and Phase II study at the site. After further review, Curtin Archaeological determined South Parcel Site 2 and South Parcel Site 3 have low artifact density and density. In addition, they determined no further archaeological investigation or site avoidance is required in these areas. Curtin Archaeological redrew the boundary for South Parcel Site 1 based on their investigation. They recommended this area be avoided and cordoned off during construction activities. Belmonte Builders agreed to comply with recommended restrictions including fencing off the restricted area with appropriate signage reading,

“Environmentally Sensitive Area – No Admittance” and will avoid disturbing these areas. An updated archaeological report by Curtain Archaeological Consulting, Inc. is enclosed.

III. CONTROLS

A. EROSION AND SEDIMENT CONTROLS

The following section describes the anticipated Erosion and Sediment Controls required for use during construction of the proposed site. These controls represent the **MINIMUM** erosion and sediment control measures that will be required to protect the site during construction. **Additional erosion and sediment control measures will be necessary during construction.** It will be the responsibility of the NOI permittee to authorize the CONTRACTOR to implement all additional erosion and sediment control measures necessary to protect the site during construction.

1. Stabilization practices include (but not limited to):
 - a) Land clearing activities shall be done only in areas where earthwork will be performed and shall progress as earthwork is needed
 - b) Frequent watering of excavation and fill areas to minimize wind erosion during construction.
 - c) Use of stabilization fabric for all slopes having a slope of 1V:3H or greater.
 - d) Seeding and planting of all unpaved areas
 - Temporary seedings should be made within 24 hours of construction or disturbance. If not, the soil must be scarified prior to seeding.
 - Broadcasting or hydroseeding may be used as seeding methods.
 - Seeding mixtures should be as follows
 - a) Ryegrass (annual or perennial) applied at 30 lbs. per acre (0.7 lbs./1000 sq. ft.)
 - b) Certified "Aroostook" winter rye (cereal rye) applied at 100 lbs. per acre (2.5 lbs./1000 sq. ft.) *Winter rye shall be used if seeding in October/November.
 - e) Topsoiling
 - Scarify all compact, slowly permeable, medium and fine textured subsoil areas. Scarify at approximately right angles to the slope direction in soil areas that are steeper than 5 percent.
 - Remove refuse, woody plant parts, stones over 3 inches in diameter, and other liter.
 - Topsoil material shall have at least 2 percent by weight of fine textured stable organic material, and no greater than 6 percent.
 - Topsoil shall have no less than 20 percent fine textured material (passing the No. 200 sieve) and not more than 15 percent clay.
 - Topsoil shall not be placed when it is partly frozen, muddy, or on frozen slopes or over ice, snow, or standing water.
 - f) Mulching
 - For grass / legume establishment apply straw mulch applied at 2 ton/acre (90 lbs./1000 sq. ft.) and anchor with wood fiber mulch (hydromulch) at 500-750 lbs./acre (11 – 17 lbs./1000 sq. ft.)
 - g) Protecting Vegetation During Construction
 - Limit soil placement over existing tree and shrub roots to a maximum of 3 inches.
 - Use retaining walls and terraces to protect roots of trees and shrubs when grades are lowered. Lowered grades should start no closer than the dripline of the tree.
 - Avoid trenching within the dripline of the tree.
 - Construction limits should be identified and clearly marked to exclude equipment.
2. Structural practices include (but not limited to):
 - a) Inlet protection and outlet protection using silt fences

- See detail on Erosion and Sediment Control Plans
- b) Perimeter protection using silt fences
- c) Sediment basin(s)
- d) Stabilized construction exit points
 - Aggregate size shall be 2-inch stone or reclaimed / recycled concrete equivalent
 - Thickness shall be not less than 6 inches
 - Width to be the full width of the access point, but not less than 12 ft
 - Length shall be as required, but not less than 50 ft.
 - Filter cloth shall be applied over the entire area to be covered with aggregate
 - The entrance shall be maintained in a condition which will prevent tracking of sediment onto public rights-of-way or streets. When necessary, wheels must be cleaned to remove sediment prior to entrance onto public rights-of-way.
- e) Storm sewer, curbs and gutters
- f) Water Bar
 - Used where runoff protection is needed to prevent erosion on access roads or other narrow sloping areas (generally less than 100 ft in width).
 - Water bars shall cross at approximately 60 degrees with stable outlets.
 - Constructed with a minimum height of 18 inches from the channel bottom to the ridge top.
 - Horizontal spacing shall be 125 ft for slopes less than 5 percent, 100 ft for slopes between 5 and 10 percent, 75 ft for slopes between 10 and 20 percent, and 50 ft for slopes between 20 and 35 percent.
- h) Straw Bale Dike
 - Straw bale dikes have an estimated design life of three months.
 - Shall only be used where no other practice is feasible
- i) Stone Check Dam
 - Use graded stone 2 to 15 inches in size
 - Sediment accumulated behind the check dam shall be removed as needed to allow drainage through the check dam and prevent large flows from carrying sediment over the dam.

3. Sequence of Major Activities

The CONTRACTOR will be responsible for implementing erosion and sediment control measures outlined in the SWPPP and any additional erosion and sediment control measures required to stabilize the site. The CONTRACTOR may designate these tasks to certain subcontractors as appropriate, but the ultimate responsibility for implementing these controls and ensuring their proper functioning remains with the CONTRACTOR. The order of activities will be as follows (refer to Stormwater Pollution Prevention Plan Sheet contained in this SWPPP for additional details):

- a) Construct temporary construction exits at locations shown on the SWPPP plan sheet.
- b) Install perimeter silt fences.
- c) Begin clearing and grubbing operations. Clearing and grubbing shall be done only in areas where earthwork will be performed and only in areas where building is planned to commence within 7 days after clearing and grubbing. Clearing and grubbing operations shall be limited so that no more than 5 acres of disturbed soil exists at any one time without prior written approval from the NYS DEC.
- d) Frequent watering of the excavation and fill areas shall be done to minimize wind erosion.
- e) Commence site grading and new building construction.

- f) Disturbed areas of the site where construction activity has ceased for more than 7 days should be temporarily seeded and watered.
- g) Install protective silt fences at all grate inlets, curb inlets, and at the ends of all exposed storm sewer pipes.
- h) Finalize pavement subgrade preparation.
- i) Construct all curb and gutter, gutter inlets, area inlets, and storm sewer manholes, as shown on the plans.
- j) Remove silt fences around inlets and manholes no more than 48 hours prior to placing stabilized base course.
- k) Install base material as required for pavement.
- l) Carry out final grading and seeding and planting, including stormwater management basins.
- m) Remove silt fencing only after all paving is complete and exposed surfaces are stabilized.
- n) Remove temporary construction exits only prior to pavement construction in these areas (These areas are to be paved last).

4. Stormwater Management

The proposed stormwater management system was designed by The Environmental Design Partnership, Clifton Park, NY. The following paragraphs summarize the stormwater management measures to be incorporated on the site to control pollutants in stormwater discharges after construction is completed. A copy of the Stormwater Management Report is enclosed under Section 6 – Supplemental Information.

Six (6) stormwater management areas, constructed as underground infiltration chambers and a infiltration trench, will be constructed to provide attenuation, treatment and recharge for storm events up to an including the 100-year design storm. The underground infiltration chambers have separate “Pretreatment Chambers” designed with sufficient volume to storage and infiltrate the “Water Quality Volume”, specified by the NYSDEC Stormwater Management Design Manual.

5. Post-Construction Maintenance of the Stormwater Management System

Post construction maintenance and protection of the Stormwater Management System shall be performed in accordance with Section VI. LONG TERM OPERATION AND MAINTENANCE PROCEDURES of the SWPPP.

B. OTHER CONTROLS

1. Waste Disposal

All waste materials will be collected and stored in a securely lidded metal dumpster rented from a local waste management company which must be a solid waste management company licensed to do business in New York State. The dumpster will comply with all local and state solid waste management regulations.

All trash and construction debris from the site will be deposited in the dumpster. The dumpster will be emptied as often as necessary, and the trash will be hauled to a landfill approved by New York State and the local government authority. No construction waste materials will be buried on site. All personnel will be instructed regarding the correct procedures for waste disposal. Notices

stating these practices will be posted in the job site construction office trailer, and the job site superintendent will be responsible for seeing that these procedures are followed.

2. Sanitary Waste

All sanitary waste will be collected from the portable units a minimum of two times per week by a licensed portable facility provider in complete compliance with local and state regulations.

3. Off-Site Vehicle Tracking

A stabilized construction exit will be provided to help reduce vehicle tracking of sediments. The paved streets adjacent to the site entrance will be inspected daily and swept as necessary to remove any excess mud, dirt, or rock tracked from the site. Dump trucks hauling material from the construction site will be covered with a tarpaulin. The job site superintendent will be responsible for seeing that these procedures are followed.

4. Concrete Waste From Concrete Trucks

- a) Emptying of excess concrete and/or washout from concrete delivery trucks will be allowed on the job site, but only in either (1) specifically designated diked areas which have been prepared to prevent contact between the concrete and/or washout and stormwater which will be discharged from the site or (2) in locations where waste concrete can be poured into forms to make riprap or other useful concrete products.
- b) The hardened residue from the concrete washout diked areas will be disposed of in accordance with the procedures given in the Spill Prevention Control and Countermeasures (SPCC) Plan and in accordance with applicable state and federal regulations. The job site superintendent will be responsible for seeing that these procedures are followed.

5. Hazardous Substances and Hazardous Waste

- a) All hazardous waste materials will be disposed of by the CONTRACTOR in the manner specified by local, state, and/or federal regulations and by the manufacturer of such products. Site personnel will be instructed in these practices by the job site superintendent, who will also be responsible for seeing that these practices are followed. Material Safety Data Sheets (MSDS's) for each substance with hazardous properties that is used on the job site will be obtained and used for the proper management of potential wastes that may result from these products. An MSDS will be posted in the immediate area where such product is stored and/or used and another copy of each MSDS will be maintained in the SWPPP file at the job site construction trailer office. Each employee who must handle a substance with hazardous properties will be instructed on the use of MSDS sheets and the specific information in the applicable MSDS for the product he/she is using, particularly regarding spill control techniques.
- b) The CONTRACTOR will implement the Spill Prevention Control and Countermeasures (SPCC) Plan found within this SWPPP and will train all personnel in the proper cleanup and handling of spilled materials. No spilled hazardous materials or hazardous wastes will be allowed to come in contact with stormwater discharges. If such contact occurs, the stormwater discharge will be contained on site until appropriate measures in compliance with state and federal regulations are taken to dispose of such contaminated stormwater. It shall be the responsibility of the job site superintendent to properly train all personnel in the use of the SPCC plan.

- c) Any spills of hazardous materials which are in quantities in excess of Reportable Quantities as defined by EPA regulations shall be immediately reported to the EPA National Response Center 1-800-424-8802.
- d) In order to minimize the potential for a spill of hazardous materials to come into contact with stormwater, the following steps will be implemented:
 - All materials with hazardous properties (such as pesticides, petroleum products, fertilizers, detergents, construction chemicals, acids, paints, paint solvents, cleaning solvents, additives for soil stabilization, concrete curing compounds and additives, etc.) will be stored in a secure location, under cover, when not in use. All such materials shall have secondary containment to prevent contamination of soil and runoff.
 - The minimum practical quantity of all such materials will be kept on the job site.
 - A spill control and containment kit (containing, for example, absorbent such as kitty litter or sawdust, acid neutralizing powder, brooms, dust pans, mops, rags, gloves, goggles, plastic and metal trash containers, etc.) will be provided at the storage site.
 - All of the product in a container will be used before the container is disposed of. All such containers will be triple-rinsed with water prior to disposal. The rinse water used in these containers will be disposed of in a manner in compliance with state and federal regulations and will not be allowed to mix with stormwater discharges.
 - All products will be stored in and used from the original container with the original product label.
 - All products will be used in strict compliance with instructions on the product label.
 - The disposal of excess or used products will be in strict compliance with instructions on the product label.

6. Contaminated Soils

- a) Any contaminated soils (resulting from spills of materials with hazardous properties) which may result from construction activities will be contained and cleaned up immediately in accordance with the procedures given in the Spill Prevention Control and Countermeasures (SPCC) Plan and in accordance with applicable state and federal regulations.
- b) The job site superintendent will be responsible for seeing that these procedures are followed.

IV. COMPLIANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS

- A. The CONTRACTOR will obtain copies of any and all local and state regulations that are applicable to stormwater management, erosion control, and pollution minimization at this job site and will comply fully with such regulations. The CONTRACTOR will submit written evidence of such compliance if requested by any agent of a regulatory body. The CONTRACTOR will comply with all conditions of the New York State Department of Environmental Conservation SPDES General Permit for Construction Activities, including the conditions related to maintaining the SWPPP and evidence of compliance with the SWPPP at the job site and allowing regulatory personnel access to the job site and to records in order to determine compliance.

V. MAINTENANCE/INSPECTION PROCEDURES DURING CONSTRUCTION

A. Erosion and Sediment Control and Stabilization Measures Maintenance and Inspection Practices

1. The following is a list of erosion and sediment controls to be used on this site during construction practice.
 - a) Stabilization practices for this site include:
 - o Land clearing activities shall be done only in areas where earthwork will be performed and shall progress as earthwork is needed
 - o Frequent watering of excavation and fill areas to minimize wind erosion during construction.
 - o Use of stabilization fabric for all slopes having a slope of 1V:3H or greater.
 - o Permanent seeding and planting of all unpaved areas using the hydromulching grass seeding technique.
 - b) Structural practices for this site include:
 - o Perimeter protection using silt fences
 - o Inlet protection and outlet protection using silt fences
 - o Storm sewer, curbs and gutters
 - o Stabilized construction exit points
2. The following inspection and maintenance practices will be used to maintain erosion and sediment controls and stabilization measures.
 - a) All control measures will be inspected once every seven (7) days at a minimum. Sites that have a waiver to disturb greater than five (5) acres require two (2) inspections every seven (7) days with at least two (2) days between inspections.
 - b) All measures will be maintained in good working order; if repairs are found to be necessary, they will be initiated within 24 hours of report.
 - c) Built up sediment will be removed from silt fence when it has reached one-third the height of the fence.
 - d) Silt fences will be inspected for depth of sediment, tears, etc., to see if the fabric is securely attached to the fence posts, and to see that the fence posts are securely in the ground.
 - e) Temporary and permanent seeding and all other stabilization measures will be inspected for bare spots, washouts, and healthy growth.
 - f) A maintenance inspection report will be made after each inspection. Copies of the report forms to be completed by the inspector are included in this SWPPP.
 - g) The job site superintendent will be responsible for selecting and training the individuals who will be responsible for these inspections, maintenance and repair activities, and filling out inspection and maintenance reports.
 - h) Personnel selected for the inspection and maintenance responsibilities will receive appropriate instruction from the job site superintendent. They will be trained in all the inspection and maintenance practices necessary for keeping the erosion and sediment controls that are used onsite in good working order. They will also be trained in the completion of, initiation of actions required by, and the filing of the inspection forms. Documentation of this personnel training will be kept on site with the SWPPP.
 - i) Disturbed areas and material storage areas will be inspected for evidence of or potential for pollutants entering stormwater systems.
 - j) Report to the NYS Department of Environmental Conservation within 24 hours any noncompliance with the SWPPP that will endanger public health or the environment. Follow up with a written report within 5 days of the noncompliance event.

B. Inspection and Maintenance Report Forms

Once installation of any required or optional erosion control device or measure has been implemented, weekly inspections of each measure shall be performed by the CONTRACTOR'S inspection personnel. The Inspection and Maintenance Reports found in this SWPPP shall be used by the inspectors to inventory and report the condition of each measure to assist in maintaining the erosion and sediment control measures in good working order.

These report forms shall become an integral part of the SWPPP and shall be made readily accessible to governmental inspection officials, the NOI Permittee's Engineer, and the NOI Permittee for review upon request during visits to the project site. In addition, copies of the reports shall be provided to any of these persons, upon request, via mail or facsimile transmission. Inspection and maintenance report forms are to be maintained by the NOI Permittee for five years following the final stabilization of the site.

C. Other Record-Keeping Requirements

The CONTRACTOR shall keep the following records related to construction activities at the site:

- Dates when major grading activities occur and the areas that were graded
- Dates and details concerning the installation of structural controls
- Dates when construction activities cease in an area
- Dates when areas are stabilized, either temporarily or permanently
- Dates of rainfall and the amount of rainfall
- Dates and descriptions of the character and amount of any spills of hazardous materials
- Records of reports filed with regulatory agencies if reportable quantities of hazardous materials spilled

D. Winter Operations

The following is a list of erosion and sediment controls and inspection and maintenance practices for winter operations for this site.

- a) **Prior to November 1st of any given year all exposed soil areas must be covered with:**
 - o Mulch
 - o Seed and mulch
 - o Geotextile
 - o Erosion control matting
 - o Rock or
 - o Other approved mulch to prevent soil from eroding
- b) Install sediment barriers (silt fence or drop inlet protection) at ALL necessary perimeter and sensitive locations BEFORE SOIL FREEZES.
- c) Slopes and Stockpiles:
 - o Protect slopes and stockpiles with anchored straw or mulch, rolled erosion control product or other durable covering.
 - o Sediment barrier must be installed around piles and at slope toes to prevent soil transport from the pile or slope.
 - o Stabilize exposed areas BEFORE snow covers them.
- d) All entrance/exit locations must be properly stabilized and maintained to accommodate snow management.
- e) Inspections:
 - o If soil disturbance is COMPLETELY suspended AND site is PROPERLY STABILIZED, qualified inspection frequency may be reduced with written notification to NYSDEC or MS4.
 - o Confirmation must be received from NYSDEC prior to reducing inspection frequency.
 - o Monthly inspections must be performed at a minimum.

- Sediment control measures should be checked after rain or snowmelt events.
- Regular inspections must resume by March 15th.

VI. LONG TERM OPERATION AND MAINTENANCE PROCEDURES

Stormwater management practices for this project are located within the Right-of-Way and will be owned and maintained by the City of Saratoga Springs.

The entire Stormwater Management System shall be inspected on a yearly basis to ensure that the system operates in the manner originally intended. Specific components of the system shall require additional attention as described below.

1. Shallow Grass Depressions and Infiltration Trenches
 - a. Depressions shall be inspected annually and following major storm events to ensure the system operates in the manner originally intended. The inspection should include, but not be limited to, the following components; embankment, accumulation of sediment, and general erosion control measures.
 - b. Re-grading and re-vegetation shall be performed as necessary
 - c. Embankments shall be mowed regularly as part of lawn maintenance.
 - d. Debris and litter shall be removed during regular mowing operations or more frequently as necessary.

2. Closed Drainage System
 - a. Catch basins and pipes shall be inspected annually and following major storm events to ensure the system operates in the manner originally intended.
 - b. Catch basin sumps should be cleaned at least once per year in addition to the annual sweeping and cleaning of the roadway surface.

3. StormTech Chamber Systems
 - a. StormTech “Pretreatment Chambers” should be maintained on a bi-annual basis including sediment removal typically performed through jet vacuuming.
 - a. In addition, general maintenance of all stormwater system catch basins and manholes should be performed as necessary to prevent sediment and debris buildup.
 - b. Subterranean Stormwater Chambers

Refer to the Inspection & Maintenance Procedures of StormTech Design Manual for MP-4500 Chambers (copy attached in Section 6 - Supplemental Information) as summarized below:

 - i. Inspect ports and isolator rows for sediment.
 - ii. Remove accumulated sediment using JetVac process.

Inspect and clean catch basins and manholes upstream of the StormTech system

4. Soil Restoration
 - a. Initial inspections for the first six (6) months (once after each storm greater than half-inch)
 - b. Reseeding to repair bare or eroding areas to ensure grass stabilization.
 - c. Water once every three (3) days for first month, then provide a half inch of water per week during first year. Irrigation plan to be adjusted according to rain events.
 - d. Fertilization may be needed in the fall after the first growing season to increase plant vigor.
 - e. Plant appropriate ground cover with deep roots to maintain soil structure
 - f. Keep decompacted areas free of vehicular and foot traffic or other weight loads.
 - g. Dethatch turf every few years or as necessary.

STORMWATER POLLUTION PREVENTION PLAN
SUMMARY OF EROSION AND SEDIMENT CONTROL AND STABILIZATION MEASURES
MAINTENANCE/INSPECTION PROCEDURES

- All control measures will be inspected at least once every seven (7) days. Sites that have a waiver to disturb greater than five (5) acres require two (2) inspections every seven (7) days with at least two (2) days between inspections.
- All measures will be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours of report.
- Built-up sediment will be removed from silt fences when it has reached one-third the height of the fence.
- Silt fences will be inspected for depth of sediment, tears, to see if the fabric is securely attached to the fence posts, and to see that the fence posts are firmly in the ground.
- Sediment basins, if present, will be inspected for depth of sediment, and built-up sediment will be removed when it reaches 50% of the design capacity or at the end of the job.
- Diversion dikes, if present, will be inspected and any breaches promptly repaired.
- Temporary and permanent seeding and planting and other stabilization measures will be inspected for bare spots, washouts, and healthy growth.
- A maintenance inspection report will be made after each inspection. Copies of the report forms to be used are included in this SWPPP.
- The site job superintendent will select the individuals who will be responsible for inspections, maintenance and repair activities, and filling out the inspection and maintenance reports.
- Personnel selected for inspection and maintenance responsibilities will receive training from the site job superintendent. They will be trained in all the inspection and maintenance practices necessary for keeping the erosion and sediment controls used onsite in good working order.
- Disturbed areas and materials storage areas will be inspected for evidence of or potential for pollutants entering stormwater systems.
- Report to The Department of Environmental Conservation within 24 hours any noncompliance with the SWPPP that will endanger public health or the environment. Follow up with a written report within 5 days of the noncompliance event.

STORMWATER POLLUTION PREVENTION PLAN
CONSTRUCTION/IMPLEMENTATION CHECKLIST

1. Maintain Records (Project Manager) of Construction Activities, including:
 - Dates when major grading activities occur
 - Dates when construction activities temporarily cease on a portion of the site
 - Dates when construction activities permanently cease on a portion of the site
 - Dates when stabilization measures are initiated on the site
 - Dates of rainfall and the amount of rainfall
 - Dates and descriptions of the character and amount of any spills of hazardous materials
 - Records of reports filed with regulatory agencies if reportable quantities of hazardous materials spilled

2. Prepare Inspection Reports (Qualified Inspector) summarizing:
 - Name of inspector
 - Qualifications of inspector
 - Measures/areas inspected
 - Observed conditions
 - Changes necessary to the SWPPP

3. Report Releases of Reportable Quantities of Oil or Hazardous Materials (Project Manager, if they occur):
 - Notify National Response Center (1-800-424-8802) immediately
 - Notify permitting authority in writing within 14 days
 - Modify the pollution prevention plan to include:
 - the date of release
 - circumstances leading to the release
 - steps taken to prevent reoccurrence of the release

4. Modify Pollution Prevention Plan (per Qualified Inspector) as necessary to:
 - Comply with the minimum permit requirements when notified by The Department of Environmental Conservation that the plan does not comply
 - Address a change in design, construction operation, or maintenance that has an effect on the potential for discharge of pollutants
 - Prevent reoccurrence of reportable quantity releases of a hazardous material or oil

VII. SPILL PREVENTION CONTROL AND COUNTERMEASURES (SPCC) PLAN

A. MATERIALS COVERED

The following materials or substances with known hazardous properties are expected to be present onsite during construction:

Concrete	Cleaning solvents
Detergents	Petroleum based products
Paints	Pesticides
Paint solvents	Acids
Fertilizers	Concrete additives
Soil stabilization additives	

B. MATERIAL MANAGEMENT PRACTICES

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

1. Good Housekeeping

The following good housekeeping practices will be followed onsite during the construction project.

- a) An effort will be made to store only enough product required to do the job.
- b) All materials stored onsite will be stored in a neat, orderly manner and, if possible, under a roof or other enclosure.
- c) Products will be kept in their original containers with the original manufacturer's label in legible condition.
- d) Substances will not be mixed with one another unless recommended by the manufacturer.
- e) Whenever possible, all of a product will be used up before disposing of the container.
- f) Manufacturer's recommendations for proper use and disposal will be followed.
- g) The job site superintendent will be responsible for daily inspections to ensure proper use and disposal of materials.

2. Hazardous Products

These practices will be used to reduce the risks associated with hazardous materials.

- a) Products will be kept in original containers with the original labels in legible condition.
- b) Original labels and material safety data sheets (MSDS's) will be procured and used for each material.
- c) If surplus product must be disposed of, manufacturer's or local/state/federal recommended methods for proper disposal will be followed.
- d) A spill control and containment kit (containing, for example, absorbent such as kitty litter or sawdust, acid neutralizing powder, brooms, dust pans, mops, rags, gloves, goggles, plastic and metal trash containers, etc.) will be provided at the storage site.

- e) All of the product in a container will be used before the container is disposed of. All such containers will be triple-rinsed with water prior to disposal. The rinse water used in these containers will be disposed of in a manner in compliance with state and federal regulations and will not be allowed to mix with stormwater discharges.

3. Product Specific Practices

The following product specific practices will be followed on the job site.

a) Petroleum Products

All onsite vehicles will be monitored for leaks and receive regular preventative maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers which are clearly labeled. Any petroleum storage tanks used onsite will have a dike or berm containment structure constructed around it to contain any spills that may occur. Any asphalt substances used onsite will be applied according to the manufacturer's recommendations.

b) Fertilizers

Fertilizers will be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer will be worked in the soil to limit exposure to stormwater. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

c) Paints, Paint Solvents, and Cleaning Solvents

All containers will be tightly sealed and stored when not in use. Excess paint and solvents will not be discharged to the storm sewer system but will be properly disposed of according to manufacturer's instructions or state and federal regulations.

d) Concrete Trucks

Concrete trucks will be allowed to wash out or discharge surplus concrete or drum wash water on the site, but only in either (1) specifically designated diked areas which have been prepared to prevent contact between the concrete and/or washout and stormwater which will be discharged from the site or (2) in locations where waste concrete can be poured into forms to make riprap or other useful concrete products.

The hardened residue from the concrete washout diked areas will be disposed of in the same manner as other non-hazardous construction waste materials or may be broken up and used on site as deemed appropriate by the CONTRACTOR. The job site superintendent will be responsible for seeing that these procedures are followed.

4. Spill Prevention Practices

In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanup.

- a) Manufacturer's recommended methods for spill cleanup will be clearly posted and site personnel will be trained regarding these procedures and the location of the information and cleanup supplies.
- b) Materials and equipment necessary for spill cleanup will be kept in the material storage area onsite in spill control and containment kit (containing, for example, absorbent such as kitty

litter or sawdust, acid neutralizing powder, brooms, dust pans, mops, rags, gloves, goggles, plastic and metal trash containers, etc.).

- c) All spills will be cleaned up immediately after discovery.
- d) The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with the hazardous substances.
- e) Spills of toxic or hazardous materials will be reported to the appropriate federal, state, and/or local government agency, regardless of the size of the spill. Spills of amounts that exceed Reportable Quantities of certain substances specifically mentioned in federal regulations (40 CFR 302 list and oil) will be immediately reported to the EPA National Response Center, telephone 1-800-424-8802. Reportable Quantities of some substances which may be used at the job site are as follows:
 - oil - appearance of a film or sheen on water
 - pesticides - usually 1 lb.
 - acids - 5000 lb.
 - solvents, flammable - 100 lb.
- f) The SPCC plan will be adjusted to include measures to prevent this type of spill from recurring and how to clean up the spill if there is another one. A description of the spill, what caused it, and the cleanup measures will also be included. If the spill exceeds a Reportable Quantity, all federal regulations regarding reports of the incident will be complied with.
- g) The job site superintendent will be the spill prevention and cleanup coordinator. He will designate the individuals who will receive spill prevention and cleanup training. These individuals will each become responsible for a particular phase of prevention and cleanup. The names of these personnel will be posted in the material storage area and in the office trailer onsite.

VIII. CONTROL OF ALLOWABLE NON-STORMWATER DISCHARGES

- A. Certain types of discharges are allowable under the NYS Department of Environmental Conservation SPDES General Permit for Construction Activity, and it is the intent of this SWPPP to allow such discharges. These types of discharges will be allowed under the conditions that no pollutants will be allowed to come in contact with the water prior to or after its discharge. The control measures, which have been outlined previously in this SWPPP, will be strictly followed to ensure that no contamination of these non-stormwater discharges takes place. The following allowable non-stormwater discharges that may occur from the job site include:
 - a) Discharges from fire fighting activities
 - b) Fire hydrant flushings (see note below)
 - c) Waters used to wash vehicles or control dust in order to minimize offsite sediment tracking
 - d) Potable water sources such as waterline flushings (see note below), irrigation drainage from watering vegetation, routine exterior building washdown (without detergents present) (See Note below)
 - e) Pavement washwaters where spills or leaks of hazardous materials have not occurred or detergents have not been used

- f) Springs and other uncontaminated groundwater, including dewatering ground water infiltration
- g) Foundation or footing drains where no contamination with process materials such as solvents is present

NOTE: CONTRACTOR shall neutralize any super-chlorinated water from water distribution pipes before releasing it into the environment. Neutralization techniques are available from the Operator's Engineer.

IX. CERTIFICATION AND NOTIFICATION

- A. The NYS Department of Environmental Conservation requires that certifications of knowledge of the contents of this SWPPP and agreement to follow the SWPPP be made by the NOI Permittee and the CONTRACTOR. The terms of the General Permit also require that each CONTRACTOR sign the SWPPP plan, (Form 3) thereby making them co-permittees and acknowledging their responsibility for certain operational aspects of the plan. These certifications should be signed before the CONTRACTOR begins activities and should be filed with the site's SWPPP at the jobsite. These certifications are provided within this document, see Table of Contents for location.