Waterside on Seneca - Watkins Glen

Stormwater Pollution Prevention Plan Volume I: Narrative

Prepared For: Waterside on Seneca Inc 1605 LBJ Freeway, Dallas, TX 75234

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PROJECT INFORMATION

Project Name and Description

Waterside on Seneca 157 Lembeck Lane Watkins Glen, NY 14891 Schuyler County, New York

Operator's Name and Address

Waterside on Seneca Inc c/o Dave Wilcox 1605 LBJ Freeway, Dallas, TX 75234

PROJECT DESCRIPTION

Purpose and Extent of Proposed Development

The Waterside on Seneca project is located in the Village of Watkins Glen, Schuyler County, New York (Tax Map Parcel 65.14-2-6.3). The project consists of the demolition of an existing shed, existing gravel roads, and various concrete slabs. Development of the site will consist of sixty-one (61) residential lots with a maximum of seventy (70) percent impervious cover per lot, one (1) commercial lot for a restaurant along the canal with an adjacent parking lot, a roadway system with sidewalks, and community spaces, public utilities and stormwater amenities that will serve this project. The construction activities will include grading, pavement installations, landscaping, stormwater management, and utility installation.

The stormwater management objectives focus on controlling erosion and sedimentation during construction and treatment of runoff from the post-developed site. As a residential subdivision development disturbing greater than five acres of land, a full Stormwater Pollution Prevention Plan (SWPPP) is required, including both erosion controls and permanent stormwater management practices under the regulations of the New York State Department of Environmental Conservation (DEC). Stormwater management objectives for the site include:

- Providing water quality treatment by means of a multiple Filtration Bioretention areas.
- Providing stormwater detention to meet DEC's standards for the 1-, 10-, and 100-year storm events
- Controlling sediment and erosion during construction utilizing temporary practices.

Project Disturbance Area

Total Disturbed Area: 14.78 acres
Pre-Construction Impervious Area: 1.90 acres
Proposed Impervious Area: 7.44 acres
Difference in Impervious Area: +5.54 acres

Description and Limitations of On-Site Soils

USDA Soil Surveys of Schuyler County show on-site soils consist of Teel Silt (Te) and Wayland Soils complex (Wy) and a small portion of the western edge is Castile gravel silt loam (Ce). Based upon the classification of soils defined by the Natural Resource Conservation Service, this soil is classified as Hydrologic Soil Group "B/D and A/D." As the soils are undrained, the "D" Hydrologic Soil Group was used. However, an on-site geotechnical investigation was performed, and those results supersede the USDA mapping. On-site investigations found that the site generally consisted of 2 inches of topsoil over a several foot thick layer (average 3.4 feet) of man-placed fill, predominantly of dredged spoil material from the adjacent canal, which consisted of varying amounts of sand and silt. Beneath the fill layer were glacial lake or lacustrine soils. Each boring encountered layers of fine to medium-grained sand and silt with varying quantities of clay and gravel below the fill/dredge spoil layers. (See Volume II)

Historic Places

Based on GIS mapping available from the New York State Parks, Recreation and Historic Preservation Office website the proposed project will not impact property that lies within an archeologically sensitive area or is listed or eligible for listing on the State or National Register of Historic Places. (See Volume II)

Wetlands

There are neither federal nor state wetlands located on, or adjacent to, the property. Refer to the State and Federal Wetland Maps. (See Volume II)

Name of Receiving Waters

All of the watersheds being impacted by the project ultimately drain to the canal that feeds Seneca Lake. Portion of the site site drain to Glen Creek, before reaching the canal. The creek is located along the southern property line of the project site and the canal is located along the eastern side of the project site.

Floodplains

Based on a review of the FEMA Flood Insurance Rate Map for the Village of Watkins Glen, NY (dated July 17, 1978), the Waterside on Seneca property is located in flood zone "C." The FEMA definition of flood zone "C" is "areas of minimal flooding." (See Volume II).

SEQUENCE OF MAJOR ACTIVITIES

Major activities for each phase of this site include but are not limited to:

- Installing temporary control measures as shown on plans.
- Completing site clearing and grubbing.
- Performing building, pavement and site grading earthwork operations.
- Installing utilities to the buildings.
- Installing asphalt pavements.
- Restoring existing soils, seed and mulch.
- Removing temporary practices.

It shall be the responsibility of the Contractor to make any changes to the SWPPP necessary when the Contractor or any of the subcontractors elect 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.

POST-CONSTRUCTION STORMWATER MANAGEMENT

Existing Conditions

The project site is best characterized as an existing overgrown waterfront property with an existing shed and existing gravel roads, and various concrete slabs. The existing site cover is predominantly pervious with 11.34 acres (71%) of the site being lawn/overgrown vegetation and 2.74 acres (17.16%) being wooded. The remaining 1.90 acres (11.89%) of the site consists of impervious cover such as buildings, asphalt, gravel and concrete.

There are two primary watersheds in the vicinity of the Waterside on Seneca site that will be impacted by the proposed project. Watershed #1 (PRE-A (CANAL)) consists of the eastern part of the site and flows drains primarily in an easterly direction to the existing canal. The western side of this drainage area terminates at the curb line for the adjacent Walmart parking lot. Watershed #2 (PRE-B (CREEK)) consists of the south/southwestern part of the site and flows drains primarily in a southeasterly direction to Glen Creek. The western edge of this drainage area is defined by the existing railroad line running north/south along the western edge of the property. The northern edge is defined by an embankment/curb line along Walmart's property that results in cutting off upstream runoff to our project . (See Sheet DA-PRE Drainage Areas)

Table 1. Hydrologic Data for Existing Conditions				
Watershed	Drainage Area (Acres)	Curve Number	Time of Concentration (min)	
1 PRE-A (CANAL)	6.54	80	20.5	
2 PRE-B (CREEK)	9.45	79	12.2	

Future Conditions

Development of the site will include the construction of sixty-one (61) residential lots with a maximum of seventy (70) percent impervious cover per lot, one (1) commercial lot for a restaurant along the canal with a parking lot, and a roadway system with sidewalks, and community spaces, public utilities and stormwater amenities that serve this project. The project will disturb approximately 14.76 acres and the footprint of new impervious surfaces will increase by approximately 5.54 acres.

The stormwater strategy will utilize twelve (12) Filtration Bioretention practices to treat the water quality volume staggered throughout the development to keep drainage areas small. The Filtration Bioretention practices will provide the runoff reduction requirement for the site and storage for the 1-, 10- and 100-year storm events. Practices were oversized by a minimum of two and a half (2.5) times to provide additional storage volume and provide additional Runoff Reduction Volume (RRv).

Watershed #1 (POST-A (CANAL)) will be subdivided to into seven (7) Filtration Bioretention practices and two bypass areas (POST A-BYPASS CHANNEL AND POST A-BYPASS). The POST A-BYPASS CHANNEL was used in order to drain a low point of the property that collected water in the past near the entrance to the project and now is treated by a vegetated channel. The POST A-BYPASS area is the area east of the practices that are unable to be treated by the practices and just sheet flows over vegetation before entering the canal. (Sheet DA-POST, Proposed Drainage Areas)

In Watershed 2 (POST A-CREEK) will be subdivided into five (5) Filtration Bioretention practices to and one (1) bypass area (POST B-BYPASS) attenuate post-developed peak flows. POST B-BYPASS area is the area long the creek that is unable to be treated by practices and just sheet flows over vegetation before entering the creek (Sheet DA-POST, Proposed Drainage Areas)

TABLE 2. HYDROLOGIC DATA FOR FUTURE CONDITIONS				
Watershed	Drainage Area (Acres)	Curve Number	Time of Concentration (min)	
POST A – BF 1	0.53	90	5.0	
POST A – BF 2	0.44	90	5.0	
POST A — BYPASS CHANNEL	0.36	90	5.0	
POST A — BF 3	0.68	89	5.0	
POST A — BF 4	0.48	91	5.0	
POST A — BF 5	1.53	87	5.0	
POST A – BF 6	0.66	92	5.0	
POST A — BF 7	0.70	92	5.0	
POST A — BYPASS	0.52	88	5.0	
POST B – BF 8	0.44	92	5.0	
POST B — BF 9	0.62	88	5.0	
POST B — BF 10	2.24	88	5.0	
POST B — BF 11	1.40	90	5.0	
POST B — BF 12	4.53	88	5.0	
POST B — BYPASS	0.91	79	5.0	

Water Quality Controls

The water quality strategy is designed to improve water quality by capturing and treating 90% of the average annual stormwater runoff volume. The required water quality volume is calculated from the following equation:

WQv = P*(0.05+0.009*I)*A / 12

Where:

P = 90% rainfall event (inches) = 1.00 inches (Watkins Glen, NY)

Rv = (0.05+0.009*I) (minimum allowed value = 0.20)

I = Imperviousness (%)
A = Project Area (s.f.)
= 14.76 acres

However, this project also has redevelopment areas. Per Section 9.2.1,II of the NYSDEC Stormwater Design Manual, 100% of the WQv must be captured and treated for 25% of the disturbed redeveloped impervious area. The remainder of the site must meet the 100% WQv requirements.

Therefore, for Redevelopment:

I = 0.551 acres / 0.551 acres

= 100%

Rv = (0.05+0.009*100%)

= 0.95

Required WQv = 25% (1.00" * 0.95 * 0.551 / 12)

= 0.044 acre feet = 1,900 cubic feet

Therefore, for New Construction:

I = 6.889 acres / 14.209 acres

= 48.5%

Rv = (0.05+0.009*48%)

= 0.49

Required WQv = 1.00" * 0.49 * 14.209 / 12

= 0.576 acre feet = 25,085 cubic feet

Total Required WQV: = 0.587 acre feet

= 25,560 cubic feet

Provided WQV: = 0.589 acre feet

= 25,675 cubic feet > Required WQv, OK

Runoff Reduction Volume

Runoff reduction can be achieved by infiltration, groundwater recharge, recycling, or evaporation/evapotranspiration of 100 percent of the post-development water quality volumes to replicate pre-development hydrology. This can be achieved by maintaining pre-construction

infiltration, peak runoff flows, discharge volumes, and minimizing concentrated flows through the use of runoff control techniques that will provide treatment in a distributed manner before runoff reaches the collection system. This requirement can be accomplished by application of on-site green infrastructure techniques, standard stormwater management practices with runoff reduction capacity, and good operation and maintenance.

In the case of this project high ground water, low hydrologic soil ratings and extremely flat topography preclude the installation of most green infrastructure practices. As a result of these physical limitations, 100% runoff reduction of the water quality volume cannot be achieved. Projects that cannot achieve runoff reductions to pre-construction conditions must, at a minimum, reduce a percentage of the runoff from impervious areas to be constructed on the site. The percent reduction is based on the Hydrologic Soil Groups (HSG) of the site. Additionally, runoff reduction is recommended, but not required for redeveloped impervious areas. The minimum runoff reduction volume required is calculated using the following equation:

```
Min RRv
                        [(P) (Rv*) (Ai)] / 12
                =
Where:
Ρ
       =
                90% rainfall event (inches)
                1.00 inches (Watkins Glen, NY)
               0.05+0.009(I) Where I is 100% impervious
Rv*
Αi
       =
(Aic)
                Total area of impervious cover (acres)
                7.18 acres impervious
S
       =
                HSG Specific Reduction Factor
                0.20 for HSG "D" Soils
                = (1.00" * [0.05+0.009(100)] * (0.20 * 7.18) / 12
Min RRv
                0.114 ac-ft (4,950 cubic feet)
```

In the case of this project the practices have been oversized by 2.5 times, allowing them to meet the 100% Runoff Reduction Requirement.

Water Quantity Controls

The water quantity practice is designed to reduce peak discharges for the 1, 10, and 100-year storms to below pre-developed rates at the point of analysis. In Watershed 1 (POST A-CANAL) storage will be provided in seven (7) Filtration Bioretention practices to attenuate post-developed peak flows.

Table 4 summarizes resulting peak discharge rates from within each of these watersheds. (See Volume II)

TABLE 4. HYDROLOGIC MODELING RESULTS (CANAL)						
	Runoff Volume (cubic-feet)		Peak Rate of Runoff (ff (cfs)	
	1-yr	10-yr	100-yr	1-yr	10-yr	100-yr
Pre-Developed						
1 PRE-A (CANAL)	12,717	41,661	82,699	3.33	11.96	23.94
Post-Developed (C	Controlled)					
POST A – BF 1 ROUTED	1,881	4,601	8,039	0.018	1.760	3.498
POST A – BF 2 ROUTED	1,562	3,820	6,674	0.05	1.767	3.014
POST A – BYPASS CHANNEL	1,278	3,125	5,460	0.631	1.493	2.522
POST A – BF 4 ROUTED	1,815	4,321	7,459	0.431	1.999	3.344
POST A – BF 3, 5, AND 6 ROUTED	9,395	23,728	42,099	0.393	6.45	13.45
POST A – BF 7 ROUTED	2,819	6,532	11,141	0.079	2.635	4.691
POST A – BYPASS	1,623	4,193	7,506	0.804	2.031	3.524
1 POST-A (CANAL)	12,003 <i>(-714)</i>	41,952 (+291)	80,008 (-2,691)	1.455 (-1.875)	16.87 (+4.91)	32.81 (+8.87)

As seen in Table 4, Peak Rates of Runoff for the site will increase from the existing conditions. A Downstream Analysis of the Canal was performed and included in Volume II. A Downstream Analysis allows for the Overbank (10-year) and Extreme (100-year) flood requirements to be waived if the site meets the requirements. A Downstream Analysis can be conducted using the 10% rule, meaning the analysis should extend from the point of discharge downstream to the point on the stream where the site represents 10% of the total drainage area. The Analysis is computed modeling the pre-development and post-development peak flows and velocities for design storms (e.g., 10-year and 100-year), at all downstream confluences with first order or higher streams up to and including the point where the 10% rule is met. In the particular case of this project, in a meeting between Larson Design Group and NYSDEC on 8/20/24, NYSDEC clarified that due to the large size of the canal watershed (approximately 120 square miles) that the design could compare the pre- to postdevelopment increases from the site with the overall drainage area flows. As long as the increases were minor, then no further actions were required. In the case of this site, the peak rates of runoff and the runoff volumes will increase by approximately 0.0013% for the canal drainage area. Therefore, the Downstream Analysis parameters are met, and controls are not required for the 10and 100-year storm events.

Table 5 summarizes resulting peak discharge rates from within each of these watersheds. (See Volume II)

TABLE 5. HYDROLOGIC MODELING RESULTS (GLEN CREEK)						
	Runoff	Volume (cub	ic-feet)	Peak Rate of Runoff (cfs)		
	1-yr	10-yr	100-yr	1-yr	10-yr	100-yr
Pre-Developed						
2 PRE-B (CREEK)	- 17 254 58 437 117 611 6 167 22 44 45 25					
Post-Developed	(Controlled)					
POST B – BF 8 ROUTED	1,772	4,106	7,003	0.037	1.856	3.094
POST B – BF 9 ROUTED	1,935	4,999	8,949	0.407	2.369	4.119
POST B – BF 10 ROUTED	6,991	18,060	32,333	2.805	8.199	11.07
POST B – BF 11 AND 12 ROUTED	19,109	48,678	86,622	0.704	9.798	18.04
POST B – BYPASS	1,510	5,116	10,296	0.739	2.540	5.050
2 POST-B (CREEK)	28,053 (+10,799)	77,694 (+19,257)	141,939 (+24,328)	4.144 (-2.023)	21.91 (-0.53)	40.81 (-4.44)

As seen in Table 5, Peak Rates of Runoff for the site will decrease from the existing conditions.

Practice Sizing

Filtration Bioretention

Twelve (12) Filtration Bioretention practices are spread out across the development in order to treat the stormwater for the proposed development. Each Filtration Bioretention practice is sized at a minimum of two and a half (2.5) times the required size in order to provide 100% of the Reduced Runoff Volume (RRv) and the Channel Protection Volume for the 1-year storm. The cross section of the Filtration Bioretention practices will include 30" of media below the Filtration Bioretention surface. Below the media an underdrain pipe will be provided to collect treated water. Due to the high groundwater resulting from the proximity to the canal, all of the filters will be lined. A summary of the calculations are provided in Volume II.

Underground Injection Control Permits

Stormwater drainage wells are regulated by the Environmental Protection Agency (EPA) through the Underground Injection Control (UIC) program as Class V injection wells with requirements to protect underground sources of drinking water. By definition, a Class V injection well is any bored, drilled, or driven shaft, or dug hole that is deeper than its widest surface dimension, or an improved sinkhole, or a subsurface fluid distribution system. The proposed infiltration practices have depths that are much shallower than their largest surface dimension. The proposed subsurface piping in both practices is acting as a collection system and not as a distribution system. As a result, an UIC permit is not required.

Stormwater Signage

The owner of post-construction stormwater management practices shall erect or post, in the immediate vicinity of the stormwater management practice, a conspicuous and legible sign of not less than 18 inches by 24 inches bearing the following information:

Stormwater Management Practice – (name of the practice)
Project Identification – (SPDES Construction Permit #)
Must be maintained in accordance with O&M Plan
DO NOT REMOVE OR ALTER

Soil Restoration

Soil restoration is a required practice applied across areas of a development site where soils have been disturbed and will be vegetated to recover the original properties and porosity of the soil. Soil restoration is applied in the cleanup, restoration, and landscaping phase of construction followed by the permanent establishment of an appropriate, deep-rooted groundcover to help maintain the restored soil structure. The required measures of soil restoration are outlined in Table 6.

	TABLE 6. SOIL RI	ESTORATION REQUIREM	IENTS
Type of Soil Disturbance	Soil Restoration Requirement		Comments/Examples
No soil disturbance Minimal soil disturbance	Restoration not req	•	Preservation of Natural Features Clearing and grubbing
Areas where topsoil is stripped only – no change in grade	HSG A & B Apply 6 inches of	HSG C & D Aerate ¹ and apply 6	Protect area from any ongoing construction activities
Areas of cut or fill	topsoil HSG A & B Aerate ¹ and apply		
Heavy traffic areas on site (especially in a zone 5-25 feet around buildings but not within a 5 foot perimeter around foundations walls)	6 inches of topsoil Restoration ² Apply full Soil Restoration ² (decompaction and compost enhancement)		
Areas where Runoff Reduction and/or infiltration practices are applied	Restoration not required, but may be applied to enhance the reduction specified for appropriate practices.		Keep construction equipment from crossing these areas. To protect newly installed practice from any ongoing construction activities construct a single phase operation fence area
Redevelopment Projects	Full Soil Restoration is required on redevelopment projects in areas where existing impervious area will be converted to pervious area		

^{1:} Aeration includes the use of machines such as tractor-drawn implements with coulters making a narrow slit in the soil, a roller with many spikes making indentations in the soil, or prongs which function like a minisubsoiler.

^{2:} Per "Deep Ripping and De-Compaction, DEC 2008."

The underlying soils on the project site classify as Hydrologic Soil Group "D," requiring full soil restoration. The required measures of full soil restoration, per the NYSDEC's 2008 publication of "Deep Ripping and De-Compaction" are as follows:

During periods of relatively low to moderate subsoil moisture, the disturbed subsoils are returned to rough grade and the following Soil Restoration steps applied:

- 1. Apply 3 inches of compost over subsoil.
- 2. Till compost into subsoil to a depth of at least 12 inches using a cat-mounted ripper, tractor-mounted disc, or tiller, mixing, and circulating air and compost into subsoils.
- 3. Rock-pick until uplifted stone/rock materials of four inches and larger size are cleaned off the site.
- 4. Apply topsoil to the depth specified on the landscaping plan.
- 5. Vegetate per the approved landscaping plan.

CONTROLS

Erosion and Sediment Controls

A layout of applicable erosion and sediment controls measures, together with typical installation details, are depicted on sheet(s) "C700-C703" and "C805."

Stabilization Practices

The applicable erosion and sediment control measures shall be constructed prior to clearing or grading of any portion of the project, where applicable. Where land disturbance is necessary, temporary vegetative controls must be used on areas within 7 days of the last construction activity in that area, unless construction activities will be resumed within 14 days. In frozen ground conditions, temporary vegetative measures should be implemented as soon as practical in order to control runoff during snowmelt.

Permanent vegetation should be installed within 7 days of the completion of grading activities. If the Qualified Professional determines that permanent seed cannot be applied due to climate conditions, topsoil shall not be spread and temporary mulching shall be applied to the exposed surface to stabilize soils until the next recommended seeding period.

Structural Practices

Structural erosion and sediment control practices have been classified as either temporary or permanent, according to how they are used. Temporary structural practices are used during construction to prevent offsite sedimentation. Permanent structural practices are used to convey surface water runoff to a safe outlet. Permanent structural practices will remain in place and continue to function after the completion of construction. Regardless of whether the practices are temporary or permanent, runoff control measures should be the first items constructed when grading begins, and be completely functional before land disturbance takes place. Temporary structural practices used in this project include the following:

- Rock Construction Entrance
- Compost Filter Sock
- Inlet filters

Other Controls

Waste Disposal

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

All trash and construction debris from the site will be deposited in the dumpsters. The dumpsters will be emptied a minimum of twice per week or more often if necessary, and the trash will be hauled to a landfill approved by New York State. 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.

Sanitary Waste

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

Off-Site Vehicle Tracking

Stabilized construction exits (Tracking Pads) will be provided to help reduce vehicle tracking of sediments. The paved streets adjacent to the site entrances will be inspected daily and cleaned with vacuum equipment or swept as necessary to remove any excess mud, dirt, or rock tracked from the sites. Dump trucks hauling material from the construction sites will be covered with a tarpaulin. The job site superintendent will be responsible for seeing that these procedures are followed.

Hazardous Substances and Hazardous Waste

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.

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.

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.

- 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 products 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.

Contaminated Soils

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. The job site superintendent will be responsible for seeing that these procedures are followed.

Maintenance/Inspection Procedures

Erosion and Sediment Control Inspection and Maintenance Practices

The following inspection and maintenance practices will be used to maintain erosion and sediment controls and stabilization measures.

- For construction sites where soil disturbance activities are on-going, the Operator's Qualified Professional shall conduct a site inspection at least once every 7 calendar days.
- 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.
- Filter socks will be inspected for depth of sediment, tears, and to see that the fence posts are securely in the ground. Built up sediment will be removed from silt fence when it has reached one-half the height of the sock.
- Rock Construction Entrances shall be maintained in a condition that will prevent tracking of sediment onto public rights-of-way or streets. This will require periodic top dressing with additional aggregate in most cases, and complete replacement of aggregate in extreme cases.
- Temporary and permanent seeding and all other stabilization measures will be inspected for bare spots, washouts, and healthy growth.
- The job site superintendent will be responsible for selecting and training the individuals who will be responsible for these maintenance and repair activities.
- Personnel selected for the maintenance responsibilities will receive training from the job site superintendent. They will be trained in all the 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.

- Disturbed areas and materials storage areas will be inspected for evidence of or potential for pollutants entering stormwater systems.
- Report to NYSDEC 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

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 Operator's Qualified Professional. The Inspection and Maintenance Reports found in this SWPPP shall be used by the inspector 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 Operator's Engineer, and the Operator 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 Operator for five years following the final stabilization of the site.

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 which were graded
- Dates and details concerning the installation of structural controls
- Dates when construction activities cease in an area
- Dates when an area is 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

Post-Construction Maintenance

Permanent stormwater management practices will be owned and maintained by the Waterside on Seneca. Maintenance requirements are indicated in Table 7.

Table 7. Ongoing Maintenance	
Maintenance Item	Schedule
Inspections	
Inspection	Quarterly
Filtration Bioretention	
Pruned, weeded, and mowed	Quarterly
Trash and debris removed	Quarterly
Dead, diseased or damaged plants replaced	As needed
Bare areas reseeded if applicable	As needed
Mulch replenished to required depth (3")	As needed
Planting material should be trimmed	In winter months
Practice should be inspected for snow accumulation	In winter months
Soils should be tested for appropriate pH levels	yearly
Damaged or compromised structures to be replaced	Every 2 to 3 years
Perennials should be trimmed and divided	Every 2 to 3 years
Infiltration rates should be checked to ensure proper drainage	Every 2 to 3 years

- 1: Maintenance Frequencies derived from the "New York State Stormwater Management Design Manual created by the New York State Department of Environmental Conservation.
- 2: Frequency may vary, and the need for maintenance will be determined by annual inspections.

SPILL PREVENTION CONTROL AND COUNTERMEASURES (SPCC) PLAN

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

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.

Good Housekeeping

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

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

Hazardous Products

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

- Products will be kept in original containers with the original labels in legible condition.
- Original labels and material safety data sheets (MSDS's) will be procured and used for each material.
- If surplus product must be disposed of, manufacturers or local/state/federal recommended methods for proper disposal will be followed.
- 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.

Product Specific Practices

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

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 which may occur. Any asphalt substances used onsite will be applied according to the manufacturer's recommendations.

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.

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.

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.

- 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.
- 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.).
- All 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 the hazardous substances.
- 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.

- 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.
- 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.

CONTROL OF ALLOWABLE NON-STORMWATER DISCHARGES

Certain types of discharges are allowable under the NYSDEC 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 which may occur from the job site include:

- Discharges from firefighting activities.
- Fire hydrant flushings.
- Waters used to wash vehicles or control dust in order to minimize offsite sediment tracking.
- Routine external building wash down which does not use detergents.
- Pavement wash waters where spills or leaks of hazardous materials have not occurred or detergents have not been used.
- Air conditioning condensate.
- Springs and other uncontaminated groundwater, including dewatering ground water infiltration.
- Foundation or footing drains where no contamination with process materials such as solvents is present.

COMPLIANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS

The Contractor will obtain copies of any and all local and state regulations which 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 the Operator or any agent of a regulatory body. The Contractor will comply with all conditions of the NYSDEC 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.

CERTIFICATION AND NOTIFICATION

The NYSDEC requires that certifications of knowledge of the contents of this SWPPP and agreement to follow the SWPPP be made by the Operator, Engineer, and the Contractor. The terms of the General Permit also require that each Contractor sign the SWPPP plan, thereby making them copermittees 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 job site. The Contractor certification is attached to this document.

Operator's 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 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."

Name: Dave Wilcox	
Title: Owner	
Signature:	
Date:	
Engineer's Certification on Compliances with Federa	l, State and Local Regulations:
This Stormwater Pollution Prevention Plan reflemanagement and erosion and sediment control.	ects the NYSDEC requirements for stormwater
Name: Steven R. Rowe, P.E.	
Title: Associate Project Manager	
Acting as Professional Engineer for: Larson Desig	n Group
Signature:	
Date:	

Larson Design Group 18. November 2024

CONTRACTOR CERTIFICATION LOG

FORM 1

Construction Site: Waterside on Seneca – Watkins Glen, 157 Lembeck Lane, Watkins Glen, Schuyler County, New York

Company Name	
Address	
Contact Name	
Telephone Number	
Cell Phone/Pager	
Scope of Services	
Certification Date	
Company Name	
Address	
Contact Name	
Telephone Number	
Cell Phone/Pager	
Scope of Services	
Certification Date	
Company Name	
Address	
Contact Name	
Telephone Number	
Cell Phone/Pager	
Scope of Services	
Certification Date	

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CONTRACTOR/SUBCONTRACTOR CERTIFICATION

FORM 2

Construction Site: Waterside on Seneca - Watkins Glen, 157 Lembeck Lane, Watkins Glen, Schuyler County, New York

CONTRACTOR/SUBCONTRACTOR'S CERTIFICATION:

"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. "

CONTRACTOR
Name:(Print)
Signature:
Title:
Company Name:
SUBCONTRACTOR
Name:
(Print)
Signature:
Title:

Company Name: _____

SUBCONTRACTOR

Name:
(Print)
Signature:
Title:
Company Name:
SUBCONTRACTOR
Name:
(Print)
Signature:
Title:
Company Name:
SUBCONTRACTOR
Name:
(Print)
Signature:
Title:
Company Name:
SUBCONTRACTOR
Name
Name: (Print)
6
Signature:
Title:
Company Name:

STORMWATER POLLUTION PREVENTION PLAN INSPECTION REPORT

FORM 3

Construction Site: Waterside on Seneca – Watkins Glen, 157 Lembeck Lane, Watkins Glen, Schuyler County, New York

Inspections/reports must be completed as described in Section V of the SWPPP

Project Name and Loc	ation:	Date:	Week Ending:				
		Permit # (if any): NYR10	Permit # (if any): NYR10				
		Entry Time:	Exit Time:				
Municipality:	County:						
Name of SPDES Permi	ttee:	Inspection Type:					
		Compliance Referr					
Phone Number:			Pre-Storm Storm Post-Storm				
		Routine (every 7 calenda	ar days)				
Weather/Storm Inforr	nation:						
Time Elapsed Since La	st Storm:	Approximate Amount of Rainfal	II:				
On-site Representative	e(s) and Company(s):						
Phone Number(s):							
()							
Rased on the results of	the inspection, necessary control modification	s shall he implemented within s	even (7) calendar days These				
	n site as part of the Storm Water Pollution Prev	· · · · · · · · · · · · · · · · · · ·	ever (7) calcillati days. These				
<u>Ledger</u>							
Yes No N/A							
1.	Is a copy of the NOI and Acknowledgment Le	etter available on site and access	sible for viewing?				
	is a copy of the frontial following ment as	itter available on site and access	note for viewing.				
2.	Is a copy of the MS4 SWPPP Acceptance Form	n available on site and accessibl	e for viewing?				
3.	Is an up-to-date copy of the signed SWPPP re	etained at the construction site?	,				
4.	Is a copy of the SPDES General Permit retain	ed at the construction site?					

SWPPP Content

	Yes No N/A	
5.		Does the SWPPP identify the contractor(s) and subcontractor(s) responsible for each measure?
6.		Does the SWPPP identify at least one trained individual from each contractor(s) and subcontractor(s) companies?
7.		Does the SWPPP include all the necessary Contractor Certification Statements and signatures?
8.		Are copies of previous inspections included in the ledger?
9.		Are modification reports and stabilization records in the ledger and up-to-date?
<u>Visua</u>	l Observations	
	Yes No N/A	
1.		Are all erosion and sediment control measures installed properly? If not, record details on Page 3.
2.		Are all erosion and sediment control measures being maintained properly? If not, record details on Page 3.
3.		Was written authorization issued for any disturbance greater than 5 acres?
4.		Have stabilization measures been implemented in inactive areas per Erosion and Sediment Control Standards? If not, record details on Page 3.
5.		Are post-construction stormwater management practices constructed/installed correctly? If not, record details on Page 3.
6.		Has final site stabilization been achieved and temporary E&SC measures removed prior to NOT submittal?
7.		Was there a discharge from the site on the day of inspection? If so, record details on Page 3.
8.		Is there evidence that a discharge caused or contributed to a violation of water quality standards? If so, record details on Page 3.

Inspection Areas Requires (Structural)			Provide Location or Numeric Identification	Plan Modification Required?		Notes/Corrective Action Required *	
	Yes	No	N/A	per Plan Sheet	Yes	No	
Construction Entrance/Exit							
Compost Filter Sock							
Inlet Protection							
Material Laydown/ Staging Area							
Underground Storm Sewer							
Curb/Curb & Gutter System							
Discharge Locations (i.e., ditches)							
Material Storage Areas							
Waste Storage Areas							
Permanent Stormwater Practices							

^{*} The contractor or subcontractor shall begin implementing the required corrective actions within one business day of the issuance of this report, and shall complete the corrective actions prior to the next routine inspection.

Water Quality Observations
Describe the discharge(s): location, source(s), impact on receiving water(s), etc.
Describe the quality of the receiving water(s) both upstream and downstream of the discharge
Describe any other water quality standards or permit violations
Additional Comments
☐ Sketch Attached☐ Photographs Attached
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 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."

Name of Qualified Inspector:	Name of Qualified Professional:
Signature:	Signature:

MODIFICATION REPORT

FORM 4

Construction Site: Waterside on Seneca – Watkins Glen, 157 Lembeck Lane, Watkins Glen, Schuyler County, New York

CHANGES REQUIRED FOR STORMWATER POLLUTION PREVENTION PLAN

To: Address:	Operator's Representative (to be named)	Date:		
Telephone: Sent Via:	☐ Facsimile	☐ Courier	☐ US Mail	
INSPECTOR:	(Print) (Signature)	ATE:		
QUALIFICATIONS	OF INSPECTOR:			
CHANGES REQUIF	RED TO THE STORMWATER PO	DLLUTION PREVENTION	N PLAN:	
REASONS FOR CH	ANGES:			
TO BE PERFORME	D BY: ON	N OR BEFORE:		

FORM 5

Construction Site: <u>Waterside on Seneca – Watkins Glen, 157 Lembeck Lane, Watkins Glen, Schuyler County, New York</u>

Month	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
Day												
1												
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PM Initials				1	1			1			1	1

RECORD OF STABILIZATION AND CONSTRUCTION ACTIVITIES

FORM 6

Construction Site: Waterside on Seneca – Watkins Glen, 157 Lembeck Lane, Watkins Glen, Schuyler County, New York

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, CONSTRUCTION, OR STABILIZATION ACTIVITIES

Operator's Representative_____

Description of Activity: _	
Begin Date:	_ Site Contractor:
Location:	
End Date:	
Description of Activity: _	
Begin Date:	_ Site Contractor:
Location:	
Description of Activity:	
Begin Date:	_ Site Contractor:
Location:	
End Date:	
Description of Activity: _	
Begin Date:	_ Site Contractor:
Location:	
Description of Activity: _	
Begin Date:	_ Site Contractor:
End Date:	





