

# STORMWATER POLLUTION PREVENTION PLAN

FOR

## SMITH SUBDIVISION

FIRST STREET

TOWN OF MARLBOROUGH  
ULSTER COUNTY, NEW YORK

PREPARED BY



71 Clinton Street  
Montgomery, NY 12549

FEBRUARY 2019

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## APPENDIX 1: SOILS MAP

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## 1.0 PROJECT DESCRIPTION

The Smith Subdivision project site is  $10.77 \pm$  acres in size and is located in the Town of Marlborough as Section 103.1 Block 4 Lot 47.13. The parcel to be subdivided is a rectangular shaped area of land and has approximately 546 feet of frontage along First Street. The existing site cover is primarily treed with areas of open meadow. A site location map is depicted on the Realty Subdivision plan on sheet RS-1.

As proposed, the Smith Subdivision project involves the subdivision of the parcel into five separate lots, and the construction of five individual private homes, driveways, wells and septic systems. A hammerhead turnaround is proposed to service improve access for snow plowing and as an emergency vehicle turn-a-round.

Based on the proposed subdivision plan, it is estimated that the total area of disturbance for the proposed construction is approximately  $\pm 4.01$  acres. The proposed impervious ground cover percentage is 7.58% up from the 0% currently on the property. In accordance with the NYSDEC Stormwater General Permit (GP 0-15-002) for stormwater discharge, residential subdivisions with less than 5 acres of disturbance are not required to provide peak rate control but must prepare a Stormwater Pollution Prevention plan (SWPPP) that includes erosion and sediment controls.

## 2.0 TOPOGRAPHY AND SOILS

The existing topography on the site slopes from the southwest to the northeast across the site with elevations ranging from approximately 248 feet above mean sea level (AMSL) to 352 feet AMSL. The majority of the site slopes ( $\pm 33.08\%$ ) is gently sloped (0%-10%), and moderate sloped areas (10%-15%) consist of approximately  $\pm 25.93\%$  of the site. The area of significant slope (15%-25%) on site represents only  $\pm 30.97\%$  of the site area. The area of severe slopes (>25%) on site are approximately 10.02% of the project site.

Soils information for the Smith Subdivision project area was assembled from data provided by the U.S. Department of Agriculture Soil Conservation Service printed in the Soil Survey of Ulster County. This information identifies the presence of Bath-Nassau channery silt loams, ranging from slopes of 8 to 15 percent slopes. This soil is classified within the C/D hydrologic group. A soil map is included in Appendix 1.

### **3.0 WATER QUALITY & QUANTITY CONTROL MEASURES**

#### **3.1- WATER QUALITY**

Water quality control measures have been detailed on the plans and outlined herein. The following are measures that will be implemented.

- a. Grassed swales along each side the proposed driveways will divert stormwater runoff toward 12" HDPE drainage pipes that run underneath the driveway at various locations throughout the property. The locations of these pipes are shown on the plans. These driveway swales for lots 1 and 2 will be lined with rolled erosion control fabric to ensure stabilization.
- b. Rip-Rap aprons will be installed at the end of each drainage pipe to control potential point discharge erosion and slow stormwater before it enters the level spreader.
- c. Silt Fence will be installed below all disturbed areas.
- d. A Stabilized Construction Entrance will be installed a minimum 50 feet from the edge of pavement into the site.

#### **3.2- WATER QUANTITY**

All stormwater point discharge will be directed to either wooded areas away from adjoining residences or to level spreaders to allow the storm water to return to sheet flow and to promote natural infiltration in undisturbed areas.

### **4.0 EROSION AND SEDIMENT CONTROL MEASURES**

Soil erosion and sediment control measures have been detailed on the plans on sheet C-102 and outlined herein. The following are general measures that should be implemented:

- a. Damage to surface waters resulting from erosion and sedimentation shall be minimized by stabilizing disturbed areas as soon as final grades are achieved.
- b. Site preparation activities shall be planned to minimize the area and duration of soil disturbance. Sheet C-102 depicts the limits of disturbance, silt fence locations and topsoil stockpile locations. The plans proposed for construction contain detailed "Grading, Drainage and Erosion Control Notes" and

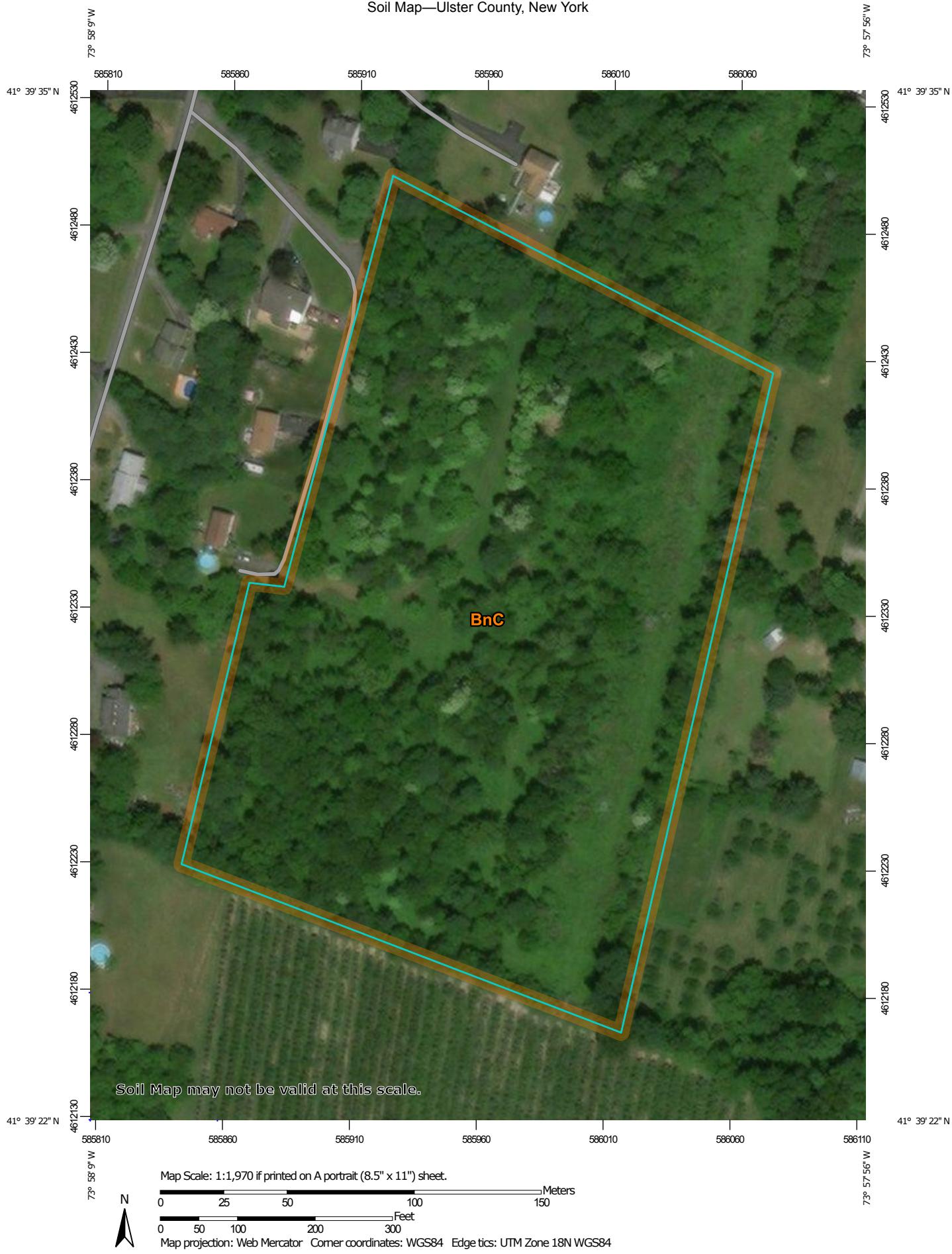
“Sequence of Construction Activity” notes on sheet C-302. In addition, the following site specific erosion control measures are shown on the approved plans for construction.

1. Prior to any disturbance on site, silt fence shall be installed in accordance with the approved plans. Siltation barriers shall be maintained in good condition and reinforced, extended, repaired or replaced as necessary.
2. Stabilized construction entrance will be installed at all points of construction ingress and egress to eliminate the tracking of sediment onto public rights-of-way or streets.
3. Stone Check Dams: Until such time as final site stabilization is completed, the swales/ditches shall receive treatment with stone check dams so as to effectively trap sediment and minimize its release off-site. Stone check dams shall be constructed within each driveway swale beginning at its downstream terminus and should be placed at intervals as shown on plans.
4. To promote sheet flow, infiltration, and stormwater treatment, structural level spreaders have been proposed at the terminus of all swales and end sections of pipes. This sheet flow will reduce the potential for erosion and will allow point discharges to return to sheet flow within woodland buffer areas to promote the further benefits of infiltration and treatment of stormwater through existing vegetated areas.
5. Seeding and mulching is necessary on site to protect any area where final grading is complete. Any seeding method may be used that will provide uniform application of seed to the area and result in good soil to seed contact.
6. In areas where disturbance has temporarily or permanently ceased, stabilization shall be implemented within fourteen (14) days from the ceasing of soil disturbance activity.

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# APPENDIX 1

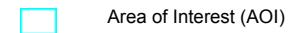
## Soil Map—Ulster County, New York



Natural Resources  
Conservation Service

Web Soil Survey  
National Cooperative Soil Survey

9/6/2018  
Page 1 of 3

**MAP LEGEND****Area of Interest (AOI)**

Area of Interest (AOI)

**Soils**

Soil Map Unit Polygons



Soil Map Unit Lines



Soil Map Unit Points

**Special Point Features**

Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot

Spoil Area

Stony Spot

Very Stony Spot

Wet Spot

Other

Special Line Features

**Water Features**

Streams and Canals

**Transportation**

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

**Background**

Aerial Photography

**MAP INFORMATION**

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Ulster County, New York

Survey Area Data: Version 16, Feb 24, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 7, 2013—Feb 26, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.



## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BnC	Bath-Nassau complex, 8 to 25 percent slopes	11.8	100.0%
<b>Totals for Area of Interest</b>		<b>11.8</b>	<b>100.0%</b>