| **AGENDA PACKET**<br><br>**JANUARY 15, 2019 MEETING** | | |
|---|---|---|
| | ***CAL#*** | ***PAGE*** |
| ***AGENDA*** | | **3** |
| | | |
| ***OAKRIDGE COMMONS, 450 OAKRIDGE COMMON, SOUTH SALEM*** | **Cal #08-17PB** | **Cal#16-17SW** |
| Kellard Sessions Review Memo, dated | | **5** |
| CAC Review Memo, dated January 9, 2019 | | **8** |
| Kellard Sessions Review Memo, dated November 14, 2018 | | **10** |
| Cover letter with attachments; Bob Eberts, RA; dated December 28, 2018 | | **13** |
| Comment emails and letters: J. Holbrook (12/5/18, 12/6/18 & 1/9/19) | | **32** |
| | | |
| ***MERCEDES BENZ OF GOLDENS BRIDGE, 321 MAIN STREET, GOLDENS BRIDGE*** | **Cal # 10-17PB** | |
| Kellard Sessions Review Memo, dated January 9, 2019 | | **34** |
| Cover letter and responses, JMC Site Development Consultants, dated December 26, 2018 | | **38** |
| Engineering drawings, JMC Site Development Consultants, dated December 26, 2018 | | **47** |
| Architectural drawing, Sullivan Architecture, dated December 26, 2018 | | **56** |
| SWPPP, JMC Site Development Consultants, dated December 26, 2018 | | **57** |
| Expanded Environmental Assessment, JMC Site Development Consultants, dated December 26, 2018 | | **107** |
| Referral Review, Westchester County Planning Board, dated November 30, 2018 | | **178** |
| F. P. Clark, Review of Traffic Study, dated January 6, 2019 | | **179** |
| Memo from the Building Inspector, dated January 8, 2019 | | **185** |
| | | |
| ***SANZ RESIDENCE, 15 SULLIVAN ROAD, WACCABUC*** | **Cal# 10-18PB** | |
| Kellard Sessions Review Memo, dated January 9, 2019 | | **187** |
| Planning Board application, dated December 17, 2018 | | **189** |
| Lot line change plan, Insite Engineering, dated October 25, 2017 | | **198** |
| | | |
| ***GROFF RESIDENCE, 5 SCHOOLHOUSE ROAD, WACCABUC*** | **Cal# 92-18WP** | **Cal# 12-18SW** |
| Kellard Sessions Review Memo, dated January 9, 2019 | | **199** |
| CAC Review Memo, dated December 5, 2018 | | **203** |
| Stormwater and Wetland permit applications, dated November 19, 2018 | | **204** |

| | | |
|---|---|---|
| Survey, Insite Engineering, dated August 21, 2017 | | **217** |
| Existing Conditions Survey and Topography, TC Merritts Land Surveyors, dated January 12, 2018 | | **218** |
| Wetland Mitigation Plan, Wesley Stout, dated May 8, 2018 | | **220** |
| SWPPP and plan, John Petroccione, P.E., dated November 2018 | | **221** |
| | | |
| ***LEAN-TO AT ONATRU PRESERVE, ELMWOOD ROAD, SOUTH SALEM*** | **Cal #92-18WP** | |
| Kellard Sessions Review Memo, dated January 9, 2019 | | **379** |
| Wetland permit application, dated January 5, 2019 | | **380** |
| CAC Review Memo, dated January 9, 2019 | | **381** |
| | | |
| ***TOWN BOARD TO AMEND SECTIONS 220-2, 220-23(A), 220-32(B) AND TO ENACT SECTION 220-43.6*** | | |
| Cover letter and attachments; Jason Krellenstein, Esq.; dated December 11, 2018 | | **413** |
| | | |
| ***POTZ RESIDENCE, 1178 ROUTE 35, SOUTH SALEM*** | **Cal# 1-18WV** | |
| Kellard Sessions Inspection Report, dated December 20, 2018 | | **481** |
| Photo and email, Jack Potz, dated December 17, 2018 | | **485** |
| | | |
| ***LORDI RESIDENCE, 2 CHEYENNE COURT, KATONAH*** | **Cal #04-18WV** | |
| No new materials | | **-** |
| | | |
| ***PETRUCELLI/BADAGLIACCA, OSCALETA ROAD, SOUTH SALEM*** | **Cal# 8-12PB** | |
| No new materials | | **-** |
| | | |
| ***LICHTMAN RESIDENCE, KITCHAWAN ROAD, SOUTH SALEM*** | **Cal# 1-16WP, 1-16SW** | |
| No new materials | | **-** |
| | | |
| ***REQUESTS FOR RELAXATION ON SEPTIC REQUIREMENTS PER PLANNING BOARD RESOLUTIONS AND WETLAND PERMITS*** | **Various Cal #s** | |
| No new materials | | **-** |
| | | |
| ***DISCUSSIONS*** | | |
| 2019 Meeting dates and deadlines | | **487** |

**TOWN OF LEWISBORO**
**Westchester County, New York**

**Planning Board**
**79 Bouton Road**
**South Salem, New York 10590**

**Tel: (914) 763-5592**
**Fax: (914) 875-9148**
**Email: planning@lewisborogov.com**

**AGENDA**

**Tuesday, January 15, 2019**

**79 Bouton Road, South Salem**
**Justice Court**

Note: Meeting will start at 7:30 p.m. and end at or before 11:00 p.m.

## I. PUBLIC HEARING

***Cal #08-17PB***
**Oakridge Commons, 450 Oakridge Common, South Salem, NY 10590, Sheet 49D, Block 9829, Lot 10 (Smith Ridge Associates, owner of record) -** Application for Site Plan Review for installation of a car wash bay and day care center.

## II. SKETCH PLAN REVIEWS

***Cal #10-17PB***
**Mercedes Benz of Goldens Bridge, 321 Main Street, Goldens Bridge, NY 10526, Sheet 4E, Block 11135, Lots 1, 2, 3, 4, 6 & 7 (Charisma Holding Corp., owner of record); Sheet 4E, Block 11135, Lot 5 (Spencemorg, LLC., owner of record) and Sheet 4E, Block 11137, Lot 42 (Robert Castelli, owner of record)** – Application for Site Plan Review for additions to existing auto showroom and service buildings, additional parking spaces and construction of a parking garage.

***Cal#10-18PB***
**Sanz Residence, 15 Sullivan Road, Waccabuc, NY 10597, Sheet 12, Block 11137, Lot 31 (Stephanie and Parris Sanz, owner of record) and Sheet 12, Block 11137, Lot 117 (North Salem Open Land Foundation, owner of record) -** Application for lot line change.

## III. WETLAND PERMIT REVIEWS

***Cal# 92-18WP, Cal# 12-18SW***
**Groff Residence, 5 Schoolhouse Road, Waccabuc, NY 10597, Sheet 22, Block 10802, Lot 69 (Christine Groff, owner of record) –** Application for Wetland Activity Permit and Stormwater Permit for the construction of a new 6-bedroom house, barn, garage, pool and patios.

***Cal# 92-18WP***
**Lean to in Onatru Preserve, Elmwood Road, South Salem, NY 10590, Sheet 44, Block 10302, Lot 14 (Town of Lewisboro, owner of record) –** Application from an Eagle Scout for a lean to.

## IV. DISCUSSIONS OF TOWN BOARD PROPOSALS TO AMEND LEWISBORO TOWN CODE

**Town Board to amend Sections 220-2, 220-23(A), 220-32(B) and to enact Section 220-43.6 -** in order to allow accessory winery as a Special Use in residential districts.

## V. WETLAND VIOLATIONS

***Cal #01-18WV, #76-18WP***
**Potz Residence, 1178 Route 35, South Salem, NY 10590, Sheet 27, Block 10805, Lot 29 (Siegfried and Karen Potz, owner of record)**

***Cal #04-18WV***
**Lordi Residence, 2 Cheyenne Court, Katonah, NY 10536, Sheet 10, Block 11152, Lot 140 (William and Marianne Lordi, owners of record)**

## VI. EXTENSION OF TIME REQUESTS

***Cal #8-12PB***

**Petruccelli/Badagliacca, Oscaleta Road, South Salem, NY 10590 Sheet 33B, Block 11157, Lot 46 (Steven Petruccelli and Teresa Badagliacca, owners of record) -** Request for a 90-day Extension of Time to resolution granting Preliminary/Final Subdivision Plat, Negative Declaration Under SEQRA, dated October 21, 2014.

***Cal #1-16 SW, Cal#1-16 WP***

**Lichtman Residence, 192 Kitchawan Road, South Salem, NY 10590, Sheet 45, Block 10300, Lot 012 (Aaron Lichtman, owners of record) -** Application for demolition and removal of existing five-bedroom house and cottage. Application for Wetland Activity Permit and Stormwater Permit for the construction of a new five-bedroom house, garage, courtyard and modified driveway.

## VII. REQUESTS FOR RELAXATION ON SEPTIC REQUIREMENTS PER PLANNING BOARD RESOLUTIONS AND WETLAND PERMITS

## VIII. DISCUSSION

**2019 Meeting Dates and Memos**

## IX. MINUTES OF January 16, 2018; MINUTES OF February 27, 2018; MINUTES OF March 20, 2018; MINUTES OF March 27, 2018; MINUTES OF April 17, 2018, MINUTES OF June 19, 2018, MINUTES OF July 21, 2018 MINUTES OF August 14, 2018; MINUTES OF August 21, 2018; MINUTES OF September 11, 2018; MINUTES OF October 16, 2018; MINUTES OF November 20, 2018 and MINUTES OF December 18, 2018.

KELLARD SESSIONS

John Kellard, P.E.
David Sessions, RLA, AICP
Joseph M. Cermele, P.E., CFM
Jan K. Johannessen, AICP

# MEMORANDUM

TO: Chairman Jerome Kerner, AIA and
Members of Lewisboro Planning Board

CC: Ciorsdan Conran
Judson Siebert, Esq.
Joseph Angiello

FROM: Jan K. Johannessen, AICP
Joseph M. Cermele, P.E., CFM
Town Consulting Professionals

DATE: January 9, 2019

RE: Oakridge Commons Shopping Center – Car Wash
450 Oakridge Commons
Sheet 49, Block 9829, Lot 10

---

## PROJECT DESCRIPTION

The applicant is proposing improvements to the Oakridge Commons Shopping Center to occur in four (4) phases; Phases 1, 2 and 4 have been previously approved by the Planning Board. This memorandum relates to Phase 3 only, which includes the construction of a 17.3' x 36' car wash to adjoin the existing gas station building, along with an expansion and reconfiguration of the parking lot and related signage.

## SEQRA

The proposed action is an Unlisted Action under the State Environmental Quality Review Act (SEQRA) and a coordinated review is not required. The Planning Board issued a Negative Declaration on February 27, 2018 in connection with Phases 3 and 4.

**PHASE 3: CAR WASH**

1. As previously stated, it is our opinion that the applicant has adequately demonstrated that there is adequate water/sewer capacity to serve the proposed use; this has been confirmed by the Westchester County Department of Health (WCDH), the applicant's Design Engineer, and VRI Environmental Services, the system operator.

2. The applicant has provided an expanded evaluation of the proposed car wash effluent and the ability of the Oakridge Sewage Treatment Plant to process the additional flows. The evaluation, however, continues to only utilize theoretical wastewater flow concentrations for total suspended solids (TSS), free oils and grease (FOG), and biological oxygen demand (BOD) for both the wastewater plant influent and car wash effluent, as opposed to actual concentrations as previously requested. Further, no evaluation of the projected removals and treatment capability for the specific compounds and chemicals utilized in the car wash system were included in the analysis as requested by the Board. We note that the Reclaim Effluent Quality Estimate for PurWater Reclaim Systems, prepared by New Wave Industries, specifically states that "the reclaim system is not designed to meet a specific effluent quality of discharge" and that "it may or may not be acceptable for direct discharge to sanitary waste" without additional treatment depending on the local municipality. We recommend that any future evaluation be provided to the Westchester County Department of Health (WCDH), as well as to the wastewater treatment plant operator, VRI, for their review and consideration.

3. The applicant provided a PurWater Reclaim System Design guideline, prepared by New Wave Industries, that provides typical sizing calculations to determine the appropriate working volume and quantity of reclaim tanks to be utilized. The analysis also determined the treatment frequency to ensure that the entire reclaim tank working volume is treated 2-3 times per day as recommended by the manufacturer. These calculations shall be performed specific to this site to verify that the proposed reclamation system configuration provides the manufacturer recommended working volume and treatment frequency. These volumes shall account for sludge and grease accumulation.

4. The application has been referred to the Vista Fire Department. A response letter, dated November 16, 2018, indicates that the fire department has no concerns.

In order to expedite the review of subsequent submissions, the applicant should provide annotated responses to each of the comments outlined herein.

**DOCUMENTS REVIEWED:**

- Letter, prepared by Cross River Architects, LLC, dated December 28, 2018
- Report, prepared by Bibbo Associates, LLP, dated December 28, 2018

- Purwater Water Recovery Systems Specifications
- New Wave Industries PurWater Reclaim System Design
- New Wave Industries Reclaim Effluent Quality Estimate for PurWater Reclaim System

JKJ/JMC/dc

T:\Lewisboro\Correspondence\2019-01-10_LWPB-OakridgeCarWash&DayCare-Review-Memo.docx-

**TO:** Town of Lewisboro Planning Board

**FROM:** Lewisboro Conservation Advisory Council

**SUBJECT:** Oakridge Commons,
450 Oakridge Common
South Salem, NY 10290
Sheet 49D, Block 9829, Lot 10

**DATE:** January 9, 2019

---

The Conservation Advisory Council (CAC) reviewed the applicant's submission document of the Pure Water filtration system which is understood to be the filtration system for the car wash water output.

The CAC continues to have concerns with two aspects of the Oakridge Commons car wash. The first concern is with information about the car wash filtration system. It is clear from the PureWater documentation provided, that the system is primarily designed to provide recycled clean water to the car wash and not for the quality of the water discharged to the Oakridge septic system and watershed.

"*The primary purpose of the reclaim system is to provide quality water to the wash so that the water can be re-used within the wash…"*

*"The reclaim system is not designed to meet a specific effluent…"*

*"TSS, FOG, and BOD are typically the main concerns of municipalities receiving the effluent from a car wash. Given the type of processes used by PureWater Reclaim System,* ***there is no effect on total dissolved solids (TDS), pH or temperature. There may be little or no effect on certain chemicals dissolved in the water, emulsified or dissolved oils and non-settleable solids".***

**"***The discharge is sent to a separate, customer supplied wastewater treatment device, or directly to sewer or leach field. The PureWater Reclaim System does not treat or affect minerals or chemicals dissolved in the water, emulsified or dissolved oils, non-settleable solids, the BOD/COD content, ph, or temperature of the water that is discharged."*

*"The estimated discharge quality from the PureWater Reclaim System may or may not be acceptable for direct discharge to sewer or a leach field"*

***(TSS = Total Suspended Solids, FOG = Fat, Oil and Grease and BOD = Biochemical Oxygen Demand which is an indicator of Organic content. Missing altogether is COD which is Chemical Oxygen Demand)***

The CAC presumes that the Oakridge sewer/septic system was designed for typical household effluents and not for chemicals (**unknown at this time**), wax, grease, oil and other substances used in a car wash. Therefore, the CAC is concerned that effluent coming from the car wash could pose a risk to the water system and watershed at Oakridge. The CAC would like to see further analysis of the effluent being discharged into the Oakridge septic system and watershed. The CAC would like to know who makes the determination if the discharge is consistent with the Oakridge septic system capabilities.

Second, the CAC has concerns about the outflow capacity calculations. The following excerpt from the January CAC minutes summarizes the CAC's concern: "*The document titled " Site Engineering Report" prepared by Redniss & Mead, Inc only addresses the waste water management for the addition of the day care center and does not address the impact of adding a car wash. Even so, this report indicates that with the addition of the day care center, the waste water system would be in the 80% + range of capacity using average daily out flow. If the calculation used maximum average out flow for the calculation, the waste water system would be over 90% of capacity, again without the addition of the car wash. The CAC would like the site engineering to include the impact of the car wash and use maximum average sewage out flow and the water demand."*

KELLARD SESSIONS

John Kellard, P.E.
David Sessions, RLA, AICP
Joseph M. Cermele, P.E., CFM
Jan K. Johannessen, AICP

# MEMORANDUM

TO: Chairman Jerome Kerner, AIA and
Members of Lewisboro Planning Board

CC: Ciorsdan Conran
Judson Siebert, Esq.
Joseph Angiello

FROM: Jan K. Johannessen, AICP
Joseph M. Cermele, P.E., CFM
Town Consulting Professionals

DATE: November 14, 2018

RE: Oakridge Commons Shopping Center – Car Wash
450 Oakridge Commons
Sheet 49, Block 9829, Lot 10

---

## PROJECT DESCRIPTION

The applicant is proposing improvements to the Oakridge Commons Shopping Center to occur in four (4) phases; Phases 1, 2 and 4 have been previously approved by the Planning Board. This memorandum relates to Phase 3 only, which includes the construction of a 17.3' x 36' car wash to adjoin the existing gas station building, along with an expansion and reconfiguration of the parking lot and related signage.

## SEQRA

The proposed action is an Unlisted Action under the State Environmental Quality Review Act (SEQRA) and a coordinated review is not required. The Planning Board issued a Negative Declaration on February 27, 2018 in connection with Phases 3 and 4.

**PHASE 3: CAR WASH**

1. As previously stated, it is our opinion that the applicant has adequately demonstrated that there is adequate water/sewer capacity to serve the proposed use; this has been confirmed by the Westchester County Department of Health (WCDH), the applicant's Design Engineer, and VRI Environmental Services, the system operator.

2. During the public hearing, the applicant was asked to evaluate any impacts to the sewer plant from the effluent that would be discharged from the proposed car wash. This includes the plant's ability to process any chemicals that may be introduced from detergents and other cleaning products, impact on plant equipment and operation of the system, and impact on water quality at the sewer plants' discharge location. It does not appear that the most recent submission addresses this concern.

3. This office agrees with the sight distance improvements recommended by Tim Miller Associates, Inc., which have been incorporated into the site plan.

4. During the public hearing, the Planning Board requested that the site plan for the car wash be referred to the Vista Fire Department; the Planning Board Secretary should coordinate this referral.

In order to expedite the review of subsequent submissions, the applicant should provide annotated responses to each of the comments outlined herein.

**PLANS REVIEWED, PREPARED BY CROSS RIVER ARCHITECTS, LLC, DATED JUNE 27, 2018:**

- Site Plan Phase 3 – Car Wash (SP/1C)
- Enlarged Car Wash Site & Landscape Plans (SP/2C)
- Signage (SP/3C)
- Site Details (SP/4C)
- Car Wash Lighting Plan and Details (SP/5C)
- Car Wash Existing Floor Plan and Elevations (C/1), dated February 3, 2018
- Car Wash Proposed Floor Plan (C/2), dated February 3, 2018
- Car Wash Proposed Floor Plan and Elevations (C/3), dated February 3, 2018

**PLANS REVIEWED, PREPARED BY REDNISS & MEAD, DATED JUNE 27, 2018:**

- Site Development Plan (SE-1C)
- Notes and Details (SE-2C)
- Details (SE-3C)

**DOCUMENTS REVIEWED:**

- Letter, prepared by Cross River Architects, LLC, dated October 31, 2018
- Sunday Parking for Grace Church, prepared by Tim Miller Associates, Inc., dated October 30, 2018
- Car Wash Sight Distance, prepared by Tim Miller Associates, Inc., dated October 31, 2018
- 2015-2018 Oakridge Water and Sewer Daily Volumes, prepared by Redniss & Mead, dated October 31, 2018
- NYS Department of Health Water System Operation Report, dated January 2018
- Map and Plan 202(b) Report, prepared by Delaware Engineering, P.C., dated August 2018
- Annual Drinking Water Quality Report for 2017

JKJ/JMC/dc

T:\Lewisboro\Correspondence\2018-11-14_LWPB-OakridgeCarWash&DayCare-Review-Memo.docx

CROSS
RIVER
ARCHITECTS,
LLC

ROBERT J. EBERTS, R.A.
PRINCIPAL

# TRANSMITTAL

DATE: 12/28/2018

TO: Jerome Kerner, Chairman
Lewisboro Planning Board

FROM: Bob Eberts
Cross River Architects, LLC

RE: Oakridge Commons
Car Wash

COMMENTS:

Attached please find additional submission documents for the Oakridge Carwash.

In an effort to demonstrate to the Lewisboro Planning Board that the effluent from the proposed Oakridge Carwash can be handled by the existing sewer treatment plant, please find the following items:

1. Reclaim Effluent Quality Estimate for PurWater Reclaim Systems.
2. PurWater Reclaim System Design Letter
3. PurWater 100 Spec Sheet
4. Letter from Bibbo Associates dated 122818

We feel these documents indicate the anticipated effluent contaminants can be handled without negative impact to the existing Oakridge Sewer Treatment facility.

We believe that all the concerns voiced by the board members and public have adequately been addressed and request that the board vote to close the public hearing and request that a resolution on this matter be prepared.

We appreciate all the time and effort the board has taken to address this proposal.

Happy New Year!

PO Box 384
19 NO. SALEM RD. 2nd FL.
CROSS RIVER, NY 10518
914.763.5887
Email RJE@CRARCH.com

Specifications

PURWATER™
WATER RECOVERY SYSTEMS

# PURWATER™ WATER RECOVERY SYSTEM

## 100-5M12O Series (30GPM)

### Features:

- VFD Driven Continuous Duty Motor
- Self Priming Pump
- High Efficiency Cyclonic Separators
- 5 Micron Water Output
- 12 Gram Ozone
- Stainless Steel Frame
- Control Signal Activation
- Automatic Fresh Water Bypass
- HMI - User Friendly Text Screen for Instant Access to System Status
- Self Flushing Underflow Orifice
- Motorized Ball Valve Monitoring
- Breathers - Keeps Components Cool and Increases Life
- ETL Approved


| Water Requirements | |
|---|---|
| PVC | (2) 2" PVC Suction lines, one for use and one for spare, to come up from settling tanks to the right of the PurWater reclaim unit with 2" PVC full flapper check valves at end, 2" unions above water line. (1) 2" line out to the wash manifold. (1) 1" Line to return to the first chamber of the second reclaim tank for ozone. (1) 1" freshwater line (40PSI) to the right of the system four feet up from the bottom of the floor. (1) 1" Line to return to the catch basin or first incoming reclaim tank for the underflow of the PurWater succession filters. |
| Reclaim Maximum Output | 30GPM |
| Reclaim Pump | 3HP - Amp draw at (208/230 Volt = 7.6 ) / 3HP - Amp draw at (460/480 Volt = 3.8) |
| Pump Voltage | 208-230 Volts or 460-480 Volts (depending on site specifications) |
| Dimensions | 48" Wide X 84" Tall X 16" Deep |
| Net Weight | 700 Lbs. (including crate) |

| Electrical Requirements | |
|---|---|
| Reclaim Pump and VFD | (1) 208/230 Volt 20 Amp or 460/480 Volt 20 Amp Three phase circuits to be hard wired 5 feet up from the floor to the right of the system. |
| Control Voltage for (PLC) Logic Controller and Ozone | (1) 120 Volt 20 Amp Single phase |
| Conduit | (1) 1" Conduit from reclaim equipment control box to front of the last tank (for floats). (1) ½" Conduit from each carwash equipment control box to send a control voltage signal to PurWaters repressurization power box. Control wiring from carwash controller (110V is default, 110vac, 24vac and 24vdc available) to be wired into control box on frame. |
| Tank Configuration Recommendation | Double tank configuration (oil/water separator may be required - please check with your local municipality) |

NEWWAVE INDUSTRIES LTD.
New Wave Industries
3315 Orange Grove Avenue
North Highlands, CA 95660
www.purclean.com



**PurWater Reclaim System Design**

The PurWater Reclaim System consists of two primary components the underground reclaim tank(s) and the above ground PurWater unit. The below ground tanks are normally supplied by a local concrete vault vendor, with their capacity and lay-out per PurWater specifications. (See attached drawing.) The primary purpose of the reclaim system is to provide quality water to the wash so that the water can be re-used within the wash and still provide a clean car. The re-use of the water allows the operator to minimize the amount of incoming fresh water to the wash and the amount that is discharged from the wash. The reclaim system is not designed to meet a specific effluent quality of the discharge, although in many cases the water discharged from the system goes directly to sewer or a leach field.

As the primary purpose of the PurWater Reclaim System is to provide quality water for re-use within the wash, the system is designed to separate settleable solids (typically sand, grit) and free hydrocarbons, from fat oil and greases, from the water going to the wash. These solids and hydrocarbons can affect the wash quality, and increase the maintenance on wash pumps, piping, and nozzles. The large settleable solids are settled within the underground tanks prior to entering the above ground PurWater unit. The free hydrocarbons float to the surface within the underground tanks and are trapped within the tanks. Accumulated settleable solids and free hydrocarbons are periodically (normally every 6-12 months) removed from the reclaim system by pumping out the underground tanks and replacing with fresh water. **This is a recommendation only; local regulations may require more frequent service.**

There are two factors we use in determining the size of the reclaim tanks for use with our PurWater Reclaim Units. The first consideration is the size of solid particle we want to separate within the reclaim tanks and the second consideration is how often we treat the water in the tanks using the continuous recirculation. The following will provide details on both of these factors:

1) Particle Removal: In the reclaim tank system, we are typically looking to remove solid particles between 60 – 75 microns in size. This ensures large particles are not going through the PurWater unit, which can cause excessive wear and / or plugging. Also, the size of the tanks needed for this removal allows for a relatively large volume for a sludge layer to build so that tanks do not need frequent clean-out. Particle size removal is determined by Stoke's Law:

   V (R/S) = (g x (Rho1 – Rho2) x D^2) / 18 Nu

   Where:
   V (R/S) = Rise or Settling Velocity of a Particle (cm / sec)
   g = Acceleration by Gravity (cm / sec^2)
   Rho1 = Density of Medium (g / cm^3)
   Rho2 = Density of Particle (g / cm^3)
   D = Particle Diameter (cm)
   Nu = Viscosity of Medium (g / cm / sec)

   We assume a water temperature of 68 DegF, which provides a water density of 1.0 g / cm^3 and a viscosity of 1 cp (0.01 g / cm / sec). The solids density we use is 1.2 g / cm^3, which is typically the lighter solids (silt) found in car washes. The acceleration of gravity is 980 cm / sec^2.

   For a 60 micron (0.006 cm) particle, the settling velocity is 0.039 cm / sec, or 0.93 in / min. For a 75 micron (0.0075 cm) particle, the settling velocity is 0.061 cm / sec, or 1.45 in / min. We now use these velocities to determine the tank volume.

CONTINUED NEXT PAGE

We typically recommend using a tank that is 11 ft long (I.D.) by 5 ft wide (I.D.) with a 4.5 ft water depth. We allow for 1 foot at the bottom to be sludge accumulation, so we assume a solids particle must travel a maximum of 3.5 feet (42 in) to be removed. This leaves us with approximately 1440 gallons per tank of working volume (excluding the sludge layer).

For example, we will assume the maximum flow to the reclaim unit is 90 gpm (our PW300 series). To remove 60 micron particles, it will take a working tank volume of 4065 gallons (90 gpm x 42 in travel distance / 0.93 in per minute settling velocity), or 2.8 tanks (4065 gallons / 1440 gallons per tank of working volume). To remove 75 micron particles, it will take a working tank volume of 2606 gallons, or 1.8 tanks. We typically recommend using three tanks for this flow rate.

2) Treatment Frequency: One of the functions of the PurWater system is to continuously recirculate water through the reclaim tanks to provide odor control and to keep the water in the tanks from going stagnant. We recommend treating the entire reclaim tank working volume at least 2-3 times per day. On average, the PurWater unit recirculates water at 12 gpm. Using three tanks (per our example above), the entire working volume will be treated every 6 hours (3 tanks x 1440 gallons per tank / 12 gpm), or 4 times per day. This treatment frequency is well within our guidelines.

Some amount of water is continuously discharged from the reclaim system in order to satisfy the water balance for the wash. The volume of discharge is dependent on the amount of fresh water used by the wash, less any water that is lost to evaporation and carry-out. The discharge is sent to a separate, customer supplied wastewater treatment device, or directly to sewer or a leach field. The PurWater Reclaim System does not treat or affect minerals or chemicals dissolved in the water, emulsified or dissolved oils, non-settleable solids, the BOD / COD content, pH, or temperature of the water that is discharged.

The second component of the reclaim system is the above ground treatment system, which further removes solids from the reclaim water so that it is acceptable for the high pressure pumps and nozzles within the wash. The PurWater reclaim unit has a suction pump that brings water up from the reclaim tank to be treated. The pump speed is controlled by a Variable Frequency Drive (VFD) to either continuously recirculate water (low speed) or to provide water to the wash (high speed). Several pump speeds can be programmed into the VFD to meet various or multiple demands. The PurWater unit uses high efficiency cyclones to remove down to 5 micron settleable solids prior to the wash. The cyclones create nearly 1000 G's of centrifugal force to obtain this fine particle separation. The treated (cleaned) water is sent to the wash and / or back to the reclaim tank as part of its continual recirculation mode. The solids-laden water from the PurWater unit is re-introduced into the reclaim water at the front end of the underground tanks, where some solids settle and some continue with the water phase to be re-treated or go out with the effluent.

The above ground reclaim system also has the function of providing odor control for the reclaim water. Reclaim water is a great environment for growing bacteria which can create plugging and odor problems. Typically, anaerobic bacteria (bacteria that grow in the absence of oxygen) will grow beneath the settled solids in the reclaim water tank. This type of bacteria produces hydrogen sulfide which produces an odor similar to rotten eggs. To control this bacterial growth, the PurWater reclaim system continuously recirculates water through the tanks to keep the water moving so that it does not go septic. The PurWater system also incorporates one of three odor control devices to further keep the bacterial growth in check. The first method uses an Air Sparger, which brings in air as the recirculation water passes through it. This puts oxygen in the water stream and helps control the anaerobic bacteria. The second method adds an enzyme into the recirculation water, plus uses the Air Sparger. The enzyme breaks down the dissolved organic material in the water, which takes away the bacteria's food source to keep their population controlled. The third method used is the addition of ozone, which is a powerful disinfectant similar to chlorine. The ozone kills the bacteria to provide a nearly bacteria free water. Also, ozone oxidizes dyes in the water, so it will remove the color created by wash chemicals (i.e. triple foams).

Attached are spec sheets and drawings of typical underground reclaim tanks and PurWater reclaim systems. If you have any questions or comments on the above, please contact our Sacramento office.

Sincerely,

Teresa Borchard

Teresa Borchard
Director of Technical Sales and Project Management
New Wave Industries
PurClean/PurWater

NEWWAVE INDUSTRIES LTD.

**New Wave Industries**
3315 Orange Grove Avenue
North Highlands, CA 95660

www.purclean.com

PURCLEAN SPOT-FREE RINSE SYSTEMS
PURWATER WATER RECOVERY SYSTEMS

June 18, 2018

**Reclaim Effluent Quality Estimate for**
**PurWater Reclaim Systems**

Vehicles will attract contaminants predicated on the region of the country, and the roads traveled. These contaminants will consist of soil, road film, tree sap, bird droppings, pollen, insects, oil, and greases. Depending on if the region has snow and ice, then whatever will stick in the snow and ice will also stick to the vehicle. Snow and ice removal materials, which include but are not limited to sand, salt, liquid magnesium chloride which is often applied with a molasses to help it adhere to the road can and will stick to your vehicle as well. All of these contaminants will wash from the vehicle and will end up in the water reclamation tanking system.

The PurWater Reclaim System consists of two primary components … the underground reclaim tank(s) and the above ground PurWater unit. The below ground tanks are normally supplied by a local concrete vault vendor, with their capacity and lay-out per PurWater specifications. The primary purpose of the reclaim system is to provide quality water to the wash so that the water can be re-used within the wash and still provide a clean car. The re-use of the water allows the operator to minimize the amount of incoming fresh water to the wash and the amount that is discharged from the wash. The reclaim system is not designed to meet a specific effluent quality of the discharge, although in many cases the water discharged from the system goes directly to sewer or a leach field.

As the primary purpose of the PurWater Reclaim System is to provide quality water for re-use within the wash, the system is designed to separate settleable solids (typically sand, grit) and free oils from the water going to the wash. These solids and oils can affect the wash quality, and increase the maintenance on wash pumps, piping, and nozzles. The large settleable solids (60-70 micron and larger) are settled within the underground tanks prior to entering the above ground PurWater unit. The PurWater unit uses high efficiency cyclones to remove down to 5 micron settleable solids prior to the wash. The solids-laden water from the PurWater unit is re-introduced into the reclaim water at the front end of the underground tanks, where some solids settle and some continue with the water phase to be re-treated or go out with the effluent. The free oils (60-70 micron and larger) float to the surface within the underground tanks and are trapped within the tanks. Accumulated settleable solids and free oils are periodically (normally every 3-6 months) removed from the reclaim system by pumping out the underground tanks and replacing with fresh water.

Some amount of water is continuously discharged from the reclaim system in order to satisfy the water balance for the wash. The volume of discharge is dependent on the amount of fresh water used by the wash, less any water that is lost to evaporation and carry-out. Depending upon local municipal requirements, the discharge can be sent directly to sewer or to a leach field, or may require additional treatment before final discharge. As each municipality will have its own discharge requirements, it is important to understand what contaminants the PurWater Reclaim System can and cannot affect.

The PurWater Reclaim system uses two processes to reduce contaminant loading. The first is physical separation using centrifugal force (the cyclones) and gravity settling (the reclaim tanks). Physical separation will directly affect the amount of free oil & grease (FOG) and total suspended solids (TSS) left in the discharge water, and indirectly affect the BOD / COD level as it removes oil & grease. The second process is chemical, oxidation using ozone. Ozone will affect the bacterial count, BOD / COD, total suspended solids (primarily bacterial), and some dissolved oils and chemicals. From field testing and experience, the PurWater Reclaim system has been shown to produce effluent qualities as follows:

CONTINUED NEX PAGE

Total Suspended Solids (TSS): 15-100 ppm
Free Oil & Grease (FOG): 10-25 ppm
BOD: 15-50 ppm

TSS, FOG, and BOD are typically the main concerns by municipalities receiving an effluent from a car wash. Given the type of processes used by the PurWater Reclaim system, there is no effect on total dissolved solids (TDS), pH, or temperature. There may also be little to no effect on certain chemicals dissolved in the water, emulsified or dissolved oils, and non-settleable solids.

The above effluent qualities are going to be similar for other types of systems that incorporate physical separation (plate separators, screen / bag filters, media filters, etc.) and chemical oxidation. Biological processes, when operating properly, may produce lower TSS, FOG, and BOD levels than the above, but still will not affect dissolved minerals and some dissolved chemicals in the water.

The above effluent quality estimates are based on normal contaminant loadings seen by car washes. The estimates are not a guarantee of performance. The estimated discharge quality from the PurWater Reclaim System may or may not be acceptable for direct discharge to sewer or a leach field. Local authorities and municipalities should be consulted to determine whether additional treatment is required to meet discharge permits.

If you have any questions or comments on the above, please contact our Sacramento office.

Sincerely,

*Teresa Borchard*

Teresa Borchard
Director of Technical Sales and Project Management
New Wave Industries
PurClean / PurWater

**BIBBO ASSOCIATES, L.L.P.**
*Consulting Engineers*

Timothy S. Allen, P.E.
Sabri Barisser, P.E.

December 28, 2018

Town of Lewisboro Planning Board
79 Bouton Road
South Salem, New York 10590-1430

Attn: Mr. Jerome Kerner, Chairman, AIA

Re: Oakridge Commons
Car Wash

Dear Chairman and Members of the Board:

Reference is made to our office's letter to your Board dated November 20, 2018. This letter will bring more clarification to that letter and as well as to be a continuation of the same. It also specifically addresses the Kellard Sessions letter dated November 14, 2018, Item #2 under Phase 3 – Car Wash.

In our continuing evaluation of the car wash effluent quality and quantity and its effects on the Oakridge Sewage Treatment Plant's ability to process the additional flows and the effluent concentrations from the proposed car wash, we performed and found the following:

- Oakridge Sewage Treatment Plant (STP) has a SPDES Permit for 80,000 gpd or 302,833 Lt/day.
- Based on this theoretical flow and based on the residential raw sewage concentrations are based on "NYSDEC – Design Standards for Intermediate Sized Wastewater Treatment Systems – March 4, 2014" page B-13, the following STP concentration capacities exist: *(Please note that conservatively the lower component concentrations values are used. Lower component concentrations generate lower STP treatment capacity; therefore they are more conservative)*

| | Residential Raw Sewage Concentrations – Low Value | Sewage Treatment Plant SPDES Capacity | | Total Sewage Treatment Plant Treatment Capacity | | |
|---|---|---|---|---|---|---|
| | (mg/Lt) | GPD | Lt/day | mg/day | kg/day | lbs/day |
| Total Suspended Solids (TSS) | 155 | 80,000 | 302,833 | 46,939,115 | 46.94 | 103.48 |
| Free Oil & Grease (FOG) | 70 | | | 21,198,310 | 21.20 | 46.73 |
| Biological Oxygen Demand (BOD) | 155 | | | 46,939,115 | 46.94 | 103.48 |

Total sewage treatment plant treatment capacity for TSS is 103.48 lbs/day, since the STP is operating with 50,505 gpd capacity it is only treating 65.330 lbs/day TSS and therefore an additional TSS of 0.044 lbs/day from the proposed car wash would be acceptable. Similarly, STP FOG capacity is 46.73 lbs/day and treating 29.504 lbs/day, with an addition of 0.0292 lbs/day from car wash is acceptable, and BOD capacity is 103.48 lbs/day and treating 65.330 lbs/day, an addition of 0.0437 lbs/day from car wash is acceptable. Additional car wash discharge numbers were generated earlier in the November 20, 2018 letter from Bibbo Associates, LLP (see attached).

The above chart outlines STP has the capacity for all three components well exceeding the very minimal increases originated from the car wash proposal.

Another comparison would be evaluating the car wash effluent concentrations to a typical two bedroom residential unit which is mostly exists in the project area;

- Two bedroom single family residence 220 gpd sewage flow as per NYSDEC.
- Based on this theoretical flow and based on the residential raw sewage concentrations are based on "NYSDEC – Design Standards for Intermediate Sized Wastewater Treatment Systems – March 4, 2014" page B-17, the following STP concentration capacities exist: *(Please note that conservatively the lower component concentrations values are used. Lower component concentrations generate lower STP treatment capacity; therefore they are more conservative)*

| | Residential Raw Sewage Concentrations – Low Value | Sewage Treatment Plant SPDES Capacity | | Total Sewage Treatment Plant Treatment Capacity | | |
|---|---|---|---|---|---|---|
| | (mg/Lt) | GPD | Lt/day | mg/day | kg/day | lbs/day |
| Total Suspended Solids (TSS) | 155 | 220 | 832.79 | 129,082.48 | 0.129 | 0.285 |
| Free Oil & Grease (FOG) | 70 | | | 58,295.30 | 0.058 | 0.129 |
| Biological Oxygen Demand (BOD) | 155 | | | 129,082.48 | 0.129 | 0.285 |

In conclusion from the above chart the car wash loadings are much less than a two bedroom residence per day which actually varies between 15.33% to 22.6% of a two bedroom. The Oakridge Sewage Treatment Plant has the capacity of treating the minimal additional flows.

The potential issue of water quality as an influent has no bearing on this application. The water quantity and quality (influent) cannot and will not be comprised with this proposal.

As always, if there are any questions or concerns regarding the above, please do not hesitate to contact our office.

Very truly yours,

STATE OF NEW YORK
SABRI BARISSER
75545
LICENSED PROFESSIONAL ENGINEER

Sabri Barisser, P.E.
Partner, Bibbo Associates, LLP

SB/mme
Enclosures

cc: Philip Pine
Robert Eberts
File

# Appendices

A. Bibbo Associates, LLP – Letter dated November 20, 2018 submitted to the Town of Lewisboro Planning Board

B. NYSDEC – Design Standards for Intermediate Sized Wastewater Treatment Systems, March 4, 2014, pages B-13 & B-17

C. New Wave Industries letter dated June 18, 2018

# APPENDIX A

Bibbo Associates, LLP – Letter dated November 20, 2018
submitted to the Town of Lewisboro Planning Board

**BIBBO ASSOCIATES, L.L.P.**
*Consulting Engineers*

Joseph J. Buschynski, P.E.
Timothy S. Allen, P.E.
Sabri Barisser, P.E.

November 20, 2018

Town of Lewisboro Planning Board
79 Bouton Road
South Salem, New York 10590-1430

Attn: Mr. Jerome Kerner, Chairman

Re: Oakridge Commons
Car Wash

Dear Chairman and Members of the Board:

Bibbo Associates, LLP has been retained to evaluate the impacts of the Oakridge Sewer Treatment Plant for the proposed car wash construction.

We have reviewed plans, engineer's reports, laboratory analyses from various professionals and manufacturer's system outlines and calculated the contaminants such as Total Suspended Solids (TSS), Free Oil & Grease (FOG), and Biological Oxygen Demand (BOD) impacts to the sewage treatment plant (STP). Our findings are as follows:

- From the manufacturer's (New Wave Industries) using Pur-Water recovery system for the car wash, it is expected to have the following effluent qualities to discharge to the municipal sewer collection system:
  Total Suspended Solids (TSS): 15-100 ppm
  Free Oil & Grease (FOG): 10-25 ppm
  Biological Oxygen Demand (BOD): 15-50 ppm

These figures are based on 20 car washes per day and contribution 347 gpd which is 20% of the total water used per day. 80% will be recycled. Chart #1 shows existing Total Suspended Solids (TSS), Free Oil & Grease (FOG), and Biological Oxygen Demand (BOD) levels to the sewage treatment plant and compares with the car wash addition:

**CHART #1 – EFFLUENT QUALITIES COMPARISON – CAR WASH/STP**

| | Car Wash | | Sewage Treatment Plant Existing | | |
|---|---|---|---|---|---|
| | Typical Car Wash Effluent Concentration (mg/Lt) | Total Discharge to STP (lbs/day) (*) | Residential Raw Sewage Concentrations Average (mg/Lt) (**) | Total Discharge to STP (lbs/day) (***) | Concentration Increase Percent to the STP |
| Total Suspended Solids (TSS) | 15 | 0.044 | 155 | 65.330 | 0.000674 |
| | 100 | 0.2921 | 330 | 139.090 | 0.00210 |

| | Car Wash | | Sewage Treatment Plant Existing | | |
|---|---|---|---|---|---|
| | Typical Car Wash Effluent Concentration (mg/Lt) | Total Discharge to STP (lbs/day) (*) | Residential Raw Sewage Concentrations Average (mg/Lt) (**) | Total Discharge to STP (lbs/day) (***) | Concentration Increase Percent to the STP |
| Free Oil & Grease (FOG) | 10 | 0.0292 | 70 | 29.504 | 0.00099 |
| | 25 | 0.0727 | 105 | 44.256 | 0.001640 |
| Biological Oxygen Demand (BOD) | 15 | 0.0437 | 155 | 65.330 | 0.000669 |
| | 50 | 0.1461 | 286 | 120.544 | 0.001210 |

(*) Based on 347 gpd carwash contribution to the STP
(**) Residential concentrations are based on "NYSDEC – Design Standards for Intermediate Sized Wastewater Treatment Systems – March 4, 2014" page B-13
(***) 50,505 gpd 2018 average water use of STP

As it can be seen from the comparison, the impact from the car wash will be extremely minimal on all counts. The sewage treatment plant can handle the additional flows and minimally increased concentrations. Sewage Treatment Plant has SPDES permit for 80,000 gpd and operates with 50,505 gpd actual flow.

Additionally, we concur with the water usage analysis performed by the Redniss & Mead Civil Engineers that; in our opinion, the car wash will not affect the water supply quality and quantity.

As always, if there are any questions or concerns regarding the above, please do not hesitate to contact our office.

Very truly yours,

Sabri Barisser, P.E.
Partner, Bibbo Associates, LLP

SB/mme

cc: Philip Pine
Robert Eberts
File

# APPENDIX B

NYSDEC – Design Standards for Intermediate Sized Wastewater Treatment Systems, March 4, 2014, pages B-13 & B-17

| Parameter | Concentration, mg/L[12] |
|---|---|
| $BOD_5$ | 155 – 286 |
| TSS | 155 – 330 |
| FOG | 70 – 105 |
| TP | 6 – 12 |
| $NH_4$ | 4 – 13 |

Commercial and institutional facilities may generate nonresidential (high strength) wastewater from activities such as garbage disposal use, food preparation, food service, hair care, on-site linen service or sanitary dump stations. Nonresidential wastewater typically has higher concentrations of BOD, TSS and FOG than those listed above. High strength wastewater is generated by many types of facilities, including:

- Hospitals, nursing homes, and other medical institutions
- Hotels, motels, schools, and prisons
- Kennels, veterinary clinics, and animal shelters
- Sanitary dump stations serving roadside rest areas, campgrounds, or other recreational facilities
- Food-service establishments
- Laundromats or facilities with on-site linen laundry
- Supermarkets, butcher shops, and bakeries

The facilities listed above may generate other waste streams deserving special consideration due to elevated concentrations of wastewater constituents, toxics, or hazardous substances. Some typical activities include:

- Floor stripping[13]

---

[12] EPA 625/R-00/008-Chapter 3, Table 3-7, 2002.

[13] Frequency of floor stripping and type and frequency of disinfection of surfaces in institutional facilities is often mandated by law.

| | | |
|---|---|---|
| Single Family Residence | Per Bedroom | 110 / 130/ 150[17] |

***Campgrounds***

| *Type of Use* | *Unit* | *Gallons per Day* |
|---|---|---|
| Day Camp | Per Person | 15 |
| | Add for Shower | 5 |
| | Add for Lunch | 5 |
| Campground | Per Unsewered Site[18] | 55(includes showers) |
| | Per Sewered Site – with water hookups | 100 |
| | Per Sewered Site – without water hookups | 55 |
| Campground Day Use | Per Person | 5 |
| Dumping Station [19] | Per Unsewered Site | 10 |
| | Per Sewered Site | 5 |

| *Type of Use* | *Unit* | *Gallons per Day* |
|---|---|---|
| Assisted Living Facility/Complex | Per Bed[20,21] – add 10 gpd for in room kitchen | 110/130/150 |
| Group Home (residential-style building) | Per Bed[20] - add 150 gpd per house for garbage grinder | 110/130/150 |
| Nursing Home (hospital care) | Per Bed[20,21] | 175 |

[17] For individual household systems under 1,000 gpd, use design flows in the NYSDOH's *Wastewater Treatment Standards Residential Onsite Systems - Appendix 75- A.*

[18] Additional wastewater flow due to food service or laundry shall be accounted for. Structures available for overnight occupancy other than those meeting the definition of a camping unit shall be based on 150 gpd / unit for design flow purposes, pursuant to NYSDOH – *Chapter 1 State Sanitary Code Subpart 7-3 Campgrounds.*

[19] The addition of flow for dump station sewage may be prorated by using an estimated percentage of sites suited for RV use based on historical data. No reduction for low flow fixture usage should be applied here.

[20] Add 15 gpd per employee

[21] Add for Food Service (e.g. 24-hour restaurant; refer to Food Service Operations Table)

# APPENDIX C

New Wave Industries letter dated June 18, 2018

NEWWAVE INDUSTRIES

**New Wave Industries**
3315 Orange Grove Avenue
North Highlands, CA 95660

www.purclean.com

PURCLEAN SPOT-FREE RINSE SYSTEMS
PURWATER WATER RECOVERY SYSTEMS

June 18, 2018

**Reclaim Effluent Quality Estimate for**
**PurWater Reclaim Systems**

Vehicles will attract contaminants predicated on the region of the country, and the roads traveled. These contaminants will consist of soil, road film, tree sap, bird droppings, pollen, insects, oil, and greases. Depending on if the region has snow and ice, then whatever will stick in the snow and ice will also stick to the vehicle. Snow and ice removal materials, which include but are not limited to sand, salt, liquid magnesium chloride which is often applied with a molasses to help it adhere to the road can and will stick to your vehicle as well. All of these contaminants will wash from the vehicle and will end up in the water reclamation tanking system.

The PurWater Reclaim System consists of two primary components ... the underground reclaim tank(s) and the above ground PurWater unit. The below ground tanks are normally supplied by a local concrete vault vendor, with their capacity and lay-out per PurWater specifications. The primary purpose of the reclaim system is to provide quality water to the wash so that the water can be re-used within the wash and still provide a clean car. The re-use of the water allows the operator to minimize the amount of incoming fresh water to the wash and the amount that is discharged from the wash. The reclaim system is not designed to meet a specific effluent quality of the discharge, although in many cases the water discharged from the system goes directly to sewer or a leach field.

As the primary purpose of the PurWater Reclaim System is to provide quality water for re-use within the wash, the system is designed to separate settleable solids (typically sand, grit) and free oils from the water going to the wash. These solids and oils can affect the wash quality, and increase the maintenance on wash pumps, piping, and nozzles. The large settleable solids (60-70 micron and larger) are settled within the underground tanks prior to entering the above ground PurWater unit. The PurWater unit uses high efficiency cyclones to remove down to 5 micron settleable solids prior to the wash. The solids-laden water from the PurWater unit is re-introduced into the reclaim water at the front end of the underground tanks, where some solids settle and some continue with the water phase to be re-treated or go out with the effluent. The free oils (60-70 micron and larger) float to the surface within the underground tanks and are trapped within the tanks. Accumulated settleable solids and free oils are periodically (normally every 3-6 months) removed from the reclaim system by pumping out the underground tanks and replacing with fresh water.

Some amount of water is continuously discharged from the reclaim system in order to satisfy the water balance for the wash. The volume of discharge is dependent on the amount of fresh water used by the wash, less any water that is lost to evaporation and carry-out. Depending upon local municipal requirements, the discharge can be sent directly to sewer or to a leach field, or may require additional treatment before final discharge. As each municipality will have its own discharge requirements, it is important to understand what contaminants the PurWater Reclaim System can and cannot affect.

The PurWater Reclaim system uses two processes to reduce contaminant loading. The first is physical separation using centrifugal force (the cyclones) and gravity settling (the reclaim tanks). Physical separation will directly affect the amount of free oil & grease (FOG) and total suspended solids (TSS) left in the discharge water, and indirectly affect the BOD / COD level as it removes oil & grease. The second process is chemical, oxidation using ozone. Ozone will affect the bacterial count, BOD / COD, total suspended solids (primarily bacterial), and some dissolved oils and chemicals. From field testing and experience, the PurWater Reclaim system has been shown to produce effluent qualities as follows:

CONTINUED NEX PAGE

Total Suspended Solids (TSS): 15-100 ppm
Free Oil & Grease (FOG): 10-25 ppm
BOD: 15-50 ppm

TSS, FOG, and BOD are typically the main concerns by municipalities receiving an effluent from a car wash. Given the type of processes used by the PurWater Reclaim system, there is no effect on total dissolved solids (TDS), pH, or temperature. There may also be little to no effect on certain chemicals dissolved in the water, emulsified or dissolved oils, and non-settleable solids.

The above effluent qualities are going to be similar for other types of systems that incorporate physical separation (plate separators, screen / bag filters, media filters, etc.) and chemical oxidation. Biological processes, when operating properly, may produce lower TSS, FOG, and BOD levels than the above, but still will not affect dissolved minerals and some dissolved chemicals in the water.

The above effluent quality estimates are based on normal contaminant loadings seen by car washes. The estimates are not a guarantee of performance. The estimated discharge quality from the PurWater Reclaim System may or may not be acceptable for direct discharge to sewer or a leach field. Local authorities and municipalities should be consulted to determine whether additional treatment is required to meet discharge permits.

If you have any questions or comments on the above, please contact our Sacramento office.

Sincerely,

*Teresa Borchard*

Teresa Borchard
Director of Technical Sales and Project Management
New Wave Industries
PurClean / PurWater

**planning@lewisborogov.com**

**From:** Holbrook, Jeffrey S <Jeffrey.Holbrook@bnymellon.com>
**Sent:** Wednesday, December 5, 2018 7:03 PM
**To:** Ciorsdan Conran
**Subject:** RE: Follow Up to Oct 16 meeting

Hi... I hit send too fast.. can you please replace the below with this:

Planning board,

The petitioners for the proposed car wash have failed woefully to provide any data driven evidence to support their proposal. They have relied strictly on anecdotal observations and supporting statements from non-independent sources (ie: the equipment manufacturer). You should be very skeptical about the estimated volume of annual car washes. All of the projections around water and sewer usage are derived from the (seemingly improbably) estimate of 20 car washes per day. While I understand it is not your role to judge the viability of a business – it absolutely is your role to consider the validity of all evidence presented. Any independent observer would conclude that the proposal is a sham.

I urge you to reject their proposal at the next schedule meeting unless they have met and/or exceeded a reasonable burden of providing clear, independent data around water usage, sewer usage, traffic and aesthetics.

As the local residents have very clearly stated – we are tired of picking up the tab for the Oakridge water/sewer district.

Thanks for your service to the community,

Jeff Holbrook
17 Split Rock Rd

---

**From:** Holbrook, Jeffrey S
**Sent:** Thursday, December 06, 2018 12:50 AM
**To:** Ciorsdan Conran
**Subject:** RE: Follow Up to Oct 16 meeting

Planning board,

The petitioners for the proposed car wash have failed woefully to provide any data driven evidence to support their proposal. They have relied strictly on anecdotal observations and supporting statements from non-independent sources (ie: the equipment manufacturer). You should be very skeptical about the estimated volume of annual car washes. All of the projections around water and sewer usage are derived from the (seemingly improbably) estimate of 20 car washes per day. While I understand it is not your role to judge the viability of a business – it absolutely is your role to consider the validity of all evidence presented. Any independent observer would conclude that the proposal is a sham.

## planning@lewisborogov.com

**From:** Holbrook, Jeffrey S <Jeffrey.Holbrook@bnymellon.com>
**Sent:** Wednesday, January 9, 2019 7:08 PM
**To:** planning@lewisborogov.com
**Subject:** FW: The Grant

Hi – the planning board should be aware that the town was not successful in obtaining the grant that they applied for in order to mitigate the 400K + work to be done on Oakridge water.

As this has been referenced multiple times during the discussions, I hope that the planning board is aware. Of course, this is going to make the water bills of the residents increase even more.

Please reject the Car Wash proposal once and for all.

Thanks, Jeff

**From:** Jane Crimmins [mailto:jane.crimmins@gmail.com]
**Sent:** Wednesday, January 09, 2019 2:09 PM
**To:** Holbrook, Jeffrey S
**Subject:** The Grant

Mr. Holbrook,

We did not get the grant we applied for. I don't know if you or others had been made aware. I think it would be wise to get a group of people together, including residents and town officials/employees, to hash out next steps. What do you think?

Thanks,
Jane Crimmins

KELLARD SESSIONS

John Kellard, P.E.
David Sessions, RLA, AICP
Joseph M. Cermele, P.E., CFM
Jan K. Johannessen, AICP

# MEMORANDUM

TO: Chairman Jerome Kerner, AIA and
Members of Lewisboro Planning Board

CC: Ciorsdan Conran
Judson Siebert, Esq.
Joseph Angiello

FROM: Jan K. Johannessen, AICP
Joseph M. Cermele, P.E., CFM
Town Consulting Professionals

DATE: January 9, 2019

RE: Mercedes-Benz of Goldens Bridge
321 Main Street
Sheet 4E, Block 11135, Lot 1,2,3,4,5,6 and 7
Sheet 4E, Block 11137, Lot 42

---

## PROJECT DESCRIPTION

The subject property is comprised of several tax parcels that have a combined acreage of ±4.9 acres and located in the GB, RB and R-1/2A Zoning Districts. The majority of the property is developed with an auto dealership known as Mercedes-Benz of Goldens Bridge. The applicant is in contract to purchase a commercial parcel to the south (5 Anderson Lane - Lot 5) and a residential parcel to the east (46 Green Hill Road - Lot 42). The applicant is proposing to redevelop the property by expanding the showroom and service buildings, constructing a parking garage to be attached to the showroom building, constructing a parking lot for vehicle storage on an adjacent residential parcel (Lot 42), reconfiguring the existing curb cuts and parking lots and installing new drainage, lighting, landscaping, and other ancillary improvements.

## SEQRA

The proposed action has been preliminarily identified as a Type 1 Action under the State Environmental Quality Review Act (SEQRA) and a coordinated review is underway. Prior to taking action on this pending application, a determination of significance must be adopted by the Planning Board as lead agency.

**REQUIRED APPROVALS/REFERRALS**

1. Site Development Plan Approval is required from the Planning Board; it is recommended that a public hearing be conducted.

2. Several area variances will be required from the Zoning Board of Appeals (ZBA).

3. Town Board Approval is required to amend the underlying Zoning District of Lots 5 and 42 from RB and R-1/2A, respectively, to GB. If this is to be considered by the Town Board, it is recommended that the adjacent Lot 9 (not part of the application) also be rezoned from RB to GB.

4. The application has been referred to the Architecture and Community Appearance Review Council (ACARC) for review and approval of the proposed building expansions and signage.

6. Approval is required from the Westchester County Department of Health (WCDH) for the proposed septic system and potable wells.

7. Approval is required from the New York City Department of Environmental Protection (NYCDEP) for review of a Stormwater Pollution Prevention Plan (SWPPP).

8. Approval from the New York State Department of Transportation (NYSDOT) is required for access onto NYS Route 22 and work within the right-of-way.

9. The owner/applicant will require coverage under the SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002).

10. If the sewage design flow from the site is greater than 1,000 gpd, coverage is required under GP-0-05-001.

11. The application has been referred to the Westchester County Planning Board under Section 239-m of General Municipal Law; the County Planning Board offered no comments.

**Parts 2 and 3 EAF Review** – This office is in agreement with Parts 2 and 3 of the EAF as prepared by the applicant; however, the Planning Board should determine its completeness.

**SITE PLAN REVIEW COMMENTS:**

1. We continue to recommend that the submitted lighting plan be revised to provide the minimal amount of lighting necessary to provide a safe and secure site, while protecting neighboring properties and public streets/places from over-lighting and glare. While some minor adjustments

have been made, we continue to be concerned regarding light intensity along the front of the showroom building (exceeds 19 f.c.). The applicant should consider reducing the illuminance levels in this area to be consistent with the remainder of the site. We offer the following additional comments regarding the lighting plan:

a. As previously requested, please provide manufacturer cut sheets for each proposed light fixture.
b. A note is provided on the lighting plan which identifies a "15-degree tilt pole quick mount bracket." All fixtures must be permanently positioned in the downward facing position; therefore, no tilt brackets should be utilized. Please provide a detail of the proposed mounting bracket.
c. A building mounted light has been included proximate to the driveway off Anderson Lane; however, it is not reflected in the photometric analysis (0.0 fc under light fixture).
d. There appears to be some inconsistency in photometric analysis, particularly between illuminance levels shown on and off-site. For instance, within the southerly driveway, the proposed illuminance level is 6.2 fc on one side of the property line and 2.5 just 5-feet away on the other side of the line; this situation is repeated elsewhere on-site. Further, several of the building-mounted lights are not included within the photometric analysis.
e. We note that no building mounted lights are provided on the service building; please confirm.

2. As previously noted, neither entry drive provides the required platform area and exceeds maximum permitted grades. Further, both the NYSDOT and the Planning Board's consulting traffic engineer have recommended the elimination of one (1) of the two (2) driveways off NYS Route 22. The Planning Board should continue to evaluate access to the site.

3. As previously noted, the plan proposes "No-Parking Fire Lane" signs along the property frontage on Route 22. The ability to enforce this shall be confirmed with the Planning Board Attorney.

4. As previously noted, the applicant has prepared a SWPPP and Erosion and Sediment Control Plan to comply with Chapter 189, Stormwater Management and Erosion and Sediment Control of the Town Code. The project will require review and approval of the SWPPP by the NYCDEP for compliance with the "Rules & Regulations for the Protection from Contamination, Degradation and Pollution of the New York City Water Supply and its Sources". Finally, the project will require coverage under NYSDEC General Permit, GP-0-15-002 for Stormwater Discharges from Construction Activity. We will reserve comment until the necessary reports and analysis are provided and initially reviewed by the NYCDEP. Preliminarily, we offer the following:

a. The previously proposed rain gardens have been replaced with planted depressions to provide water quality treatment. The stormwater improvements located in Route 22 will likely require a license agreement from the NYSDOT. The applicant should continue to

update the Board in this regard. As requested, a landscape plan has been provided for the Board's consideration.

b. Given the level of disturbance and terrain of the site, the applicant has acknowledged the need to provide temporary sediment basins at strategic locations to prevent the off-site transport of sediment laden stormwater runoff. Sizing calculations in accordance with the New York State Stormwater Management Design Manual shall be provided as the SWPPP is developed.

c. As previously requested, the applicant has provided a draft post-construction stormwater management maintenance agreement for review by the Town.

5. As previously requested, the plans shall include drainage profiles for all conveyance systems. The applicant has indicated that they will be provided as the SWPPP is further developed.

6. As previously requested, the plan proposes a retaining wall and safety fence at several locations that shall be detailed on the plans.

In order to expedite the review of subsequent submissions, the applicant should provide annotated responses to each of the comments outlined herein.

**PLANS REVIEWED, PREPARED BY JMC, DATED DECEMBER 26, 2018:**

- Cover Sheet (C-000)
- Existing Conditions (C-010)
- Demolition Plan (C-020)
- Tree Removal Plan (C-030)
- Layout Plan (C-100)
- Grading & Drainage Plan (C-200)
- Utilities Plan (C-300)
- Lighting Plan (C-600)
- Landscaping Plan (L-100)

**PLAN REVIEWED, PREPARED BY SULLIVAN ARCHITECTURE, P.C., DATED DECEMBER 26, 2018:**

- Showroom Building Exterior Elevations (A3.04)

**DOCUMENTS REVIEWED:**

- Response Letter, prepared by JMC, dated December 26, 2018
- Letter from Westchester Cty. Planning Board, dated November 30, 2018
- Expanded Environmental Assessment, prepared by JMC, dated December 26, 2018
- Stormwater Pollution Prevention Plan Report, dated December 26, 2018

JKJ/JMC/dc
T:\Lewisboro\Correspondence\2019-01-10_LWPB-MercedesBenz_Review Memo.docx

Site Planning
Civil Engineering
Landscape Architecture
Land Surveying
Transportation Engineering

Environmental Studies
Entitlements
Construction Services
3D Visualization
Laser Scanning

December 26, 2018

Chairman Jerome Kerner and Members of the Board
Town of Lewisboro Planning Board
79 Bouton Road
South Salem, NY 10590

RE: JMC Project 16124
Mercedes-Benz of Goldens Bridge
321 Main Street (NYS Rte. 22)
Town of Lewisboro, New York

Dear Chairman Kerner and Members of the Board:

We are pleased to provide nine (9) sets of the following information in response to the memorandum prepared by Kellard Sessions, dated December 13, 2018 for the above noted project to address the comments and receive a Negative Declaration and complete the SEQRA process:

1. JMC Planning Engineering Landscape Architecture & Land Surveying ,PLLC Drawings (5 full sets, 4 half scale sets):

| Dwg. No. | Title | Rev. #/Date |
|---|---|---|
| C-000 | "Cover Sheet" | 4 12/26/2018 |
| C-010 | "Existing Conditions" | 4 12/26/2018 |
| C-020 | "Demolition Plan" | 4 12/26/2018 |
| C-030 | "Tree Removal Plan" | 3 12/26/2018 |
| C-100 | "Layout Plan" | 6 12/26/2018 |
| C-200 | "Grading & Drainage Plan" | 6 12/26/2018 |
| C-300 | "Utilities Plan" | 5 12/26/2018 |
| C-600 | "Site Lighting Plan" | 1 12/26/2018 |
| L-100 | "Landscape Plan" | 1 12/26/2018 |

2. Sullivan Architecture, P.C. Drawing A3.04 "Showroom Building Exterior Elevations", last revised 12/26/2018 (5 full sets, 4 half scale sets).

3. SEQRA Expanded Environmental Assessment, revised December 26, 2018.

4. Text Portion of the Stormwater Pollution Prevention Plan (SWPPP) prepared by JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC, revised December 26, 2018.

5. Letter from the Westchester County Planning Board, dated November 30, 2018.

For your convenience we have identified the comments noted in the memorandum prepared by Kellard Sessions, dated December 13, 2018 below, which are followed by our responses:

## ***Required Approvals/Referrals***

*Comment No. 1*

*Site Development Plan Approval is required from the Planning Board; it is recommended that a public hearing be conducted.*

Response No. 1

So noted.

*Comment No. 2*

*Several area variances will be required from the Zoning Board of Appeals (ZBA).*

Response No. 2

We are awaiting the official list of variances and a letter of denial from the Building Inspector. The Planning Board indicated at the December 18th meeting that they will direct the Building Inspector to issue the list of variances prior to the January 15th meeting.

*Comment No. 3*

*Town Board Approval is required to amend the underlying Zoning District of Lots 5 and 42 from RB and R-1/2A, respectively, to GB. If this is to be considered by the Town Board, it is recommended that the adjacent Lot 9 (not part of the application) also be rezoned from RB to GB.*

Response No. 3

We are looking forward to proceeding to the Town Board once the negative declaration is issued and will request the rezoning as stated above.

*Comment No. 4*

*The application will require referral to the Architecture and Community Appearance Review Council (ACARC) for review and approval of the proposed building expansions and signage.*

Response No. 4

The project appeared before the ACARC last July and was conceptually approved contingent upon submission of a landscaping plan and a negative declaration by the Planning Board. Once the negative declaration is issued, we will proceed to the ACARC for approval.

*Comment No. 6*

*Approval is required from the Westchester County Department of Health (WCDH) for the proposed septic system and potable wells.*

Response No. 6

Submissions have been made and comments are being addressed with the health department and NYCDEP regarding the septic system. We have also discussed the existing wells with the health

department and have been directed that a separate submission for that permit can be made at a later time once the buildings are designed since the permit will depend on internal water treatment systems, water storage equipment, etc.

Comment No. 7

*Approval is required from the New York City Department of Environmental Protection (NYCDEP) for review of a Stormwater Pollution Prevention Plan (SWPPP).*

Response No. 7

The SWPPP, Site Plans and Building Drawings have been provided to the NYCDEP for review.

Comment No. 8

*Approval from the New York State Department of Transportation (NYSDOT) is required for access onto NYS Route 22 and work within the right-of-way.*

Response No. 8

The project has been submitted to NYSDOT for the roadway work permit and the use and occupancy permit for improvements within the right of way.

Comment No. 9

*The owner/applicant will require coverage under the SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002).*

Response No. 9

So noted, coverage will be applied for once the SWPPP has been approved by the MS4.

Comment No. 10

*If the sewage design flow from the site is greater than 1,000 gpd, coverage is required under GP-0-05-001.*

Response No. 10

A sewage design flow greater than 1,000 gallons per day is not anticipated therefore this permit will not be required.

Comment No. 11

*Referral to the Westchester County Planning Board is required under Section 239-m of General Municipal Law. The Planning Board secretary will coordinate this referral.*

Response No. 11

The project was approved by the Westchester County Planning Board on November 30, 2018 and the letter is enclosed.

***Part 2 EAF Review***

There were no comments regarding the Part 2 EAF during the December 18th Planning Board meeting therefore we feel it is complete and acceptable.

***Part 3 EAF Review***

*Comment No. 1*

*Regarding impact on groundwater (Page 7), Well #1 is identified in the EAF to remain, while this well is shown to be removed on the site development plans; please clarify. Further, the well identification numbers (Well #1 - #3) do not appear to be consistent with the labeling of the wells on the plans. The site development plan illustrates additional wells to be removed on Lot 5 and Lot 42; however, these wells are not discussed. While significant detail is provided regarding each well and the anticipated increase in capacity is described, the EAF provides no summary conclusion or supporting documentation regarding sufficient capacity to serve the intensification of use. Further, the applicant must submit written confirmation from the WCDH relating to the adequacy of the existing water and sewage services to serve the use, as proposed.*

Response No. 1

The Expanded Environmental Assessment has been revised to discuss the removal of the existing wells located on lot 5 and lot 42. As stated in the past, a separate permit application will be made for the wells to continue to serve the project. Once the buildings are designed and the water systems are designed, a submission will be made to the health department. Well flow/yield tests may be required to confirm adequacy.

*Comment No. 2*

*Regarding impact to groundwater (Page 12), the applicant should identify/describe any containment practices that will be implemented in connection with the two (2) proposed 5,000 gallon above-ground fuel tanks. Further, the EAF indicates that an underground fuel storage tank is proposed to be removed on Lot 5; however, this removal is not identified on the plans.*

Response No. 2

Note number 14 has been added to JMC Drawing C–020 "Demolition Plan" indicating that the existing oil storage tanks for lot 5, lot 42 and the Service Building shall be removed. The labels for the proposed above ground oil storage tanks have been revised to indicate that they will be double wall tanks and note number 30 has been added to JMC Drawing C–300 "Utilities Plan" indicating that the proposed exterior above ground oil storage tanks will be double walled.

*Comment No. 3*

*Regarding impact on transportation, it is understood that the Planning Board is retaining a professional traffic engineer to review the submitted traffic report and, therefore, we have not reviewed the report from a technical standpoint.*

Response No. 3

JMC has provided Frederick P Clark Associates Inc. with hardcopies of the traffic study and site plans as well as all electronic files. The Planning Board indicated that a review letter will be provided prior to the January 15th meeting so that it can be discussed.

***Site Plan Review Comments:***

*Comment No. 1*

*In general, we recommend that the submitted lighting plan be revised to provide the minimal amount of lighting necessary to provide a safe and secure site, while protecting neighboring properties and public streets/places from over-lighting and glare. We note that proposed illuminance levels within portions of parking areas and driveways approach 20 f.c. which seems to exceed the minimum necessary.*

Response No. 1

JMC Drawing C–600 "Site Lighting Plan" has been updated to provide lower illuminance levels within portions of parking areas. The plan also shows the proposed building mounted lights.

*Comment No. 2*

*We note that no exterior lighting is proposed at the northern driveway on NYS Route 22 or the driveway off Anderson Lane.*

Response No. 2

One building mounted light is proposed above the vehicle driveway entry into the building on the south side along Anderson Lane so there will be adequate light in that area.

*Comment No. 3*

*While the landscaping plan is generally acceptable, consideration should be given to planting additional shade trees along Green Hill Road, as previously proposed and approved as part of the Estate Motors application. We note that the parking garage along Green Hill Road is three (3) stories and some taller trees between the building and the street may assist in breaking up views. It may be beneficial to locate the proposed drainage pipe in this area immediately adjacent to the edge of pavement so as not to conflict with tree plantings. As discussed, the landscape plan must be prepared and signed by a Registered Landscape Architect.*

Response No. 3

JMC Drawing L–100 "Landscape Plan" has been revised slightly to add one more Black Tupelo tree and two more American Holly trees along Green Hill Road. Some additional shrubs and groundcover were also added. It is our feeling that this plan strongly resembles the previously approved plan for the landscaping along Green Hill Road. We believe that the proposed deciduous and evergreen trees will effectively soften the view of the building from Green Hill Road. The plan

has been signed and sealed by a registered landscape architect. The proposed drainage along Green Hill Road has also been slightly shifted towards Green Hill Road to avoid any conflict with the proposed tree root systems. Sullivan Architecture, P.C. Drawing A3.04 "Showroom Building Exterior Elevations" is provided to show the elevation views along Green Hill Road and Anderson Lane.

*Comment No. 4*

*While no known occurrences exist on-site, the NYSDEC is requiring that all tree removal take place between November lst and March 31st to reduce impacts to the long-eared bat, a State and federally listed threatened species. A note to this effect shall be added to the tree removal plan.*

Response No. 4

A note has been added to JMC Drawing C–030 "Tree Removal Plan".

*Comment No. 5*

*Regarding the submitted lighting plan, we note that the applicant intends on illuminating "around the buildings" and within the upper parking areas (north and east of the showroom building) after business hours for security purposes; any remaining exterior lighting is proposed to be turned off at close of business. The applicant should specifically designate security lighting that will remain on after business hours. The Board should discuss this aspect of the plan as is may impact adjacent residential properties. As previously requested, the applicant shall confirm that all building mounted lights are shown, provide cut sheets for all proposed exterior light fixtures, and specifically identify fixtures proposed to remain on after the close of business.*

Response No. 5

The applicant has agreed to revise the proposed lighting so that all lights will be turned off at close of business. Note number 3 on JMC Drawing C–600 "Site Lighting Plan" has been revised accordingly and also indicates that the dealership shall install night cameras for security purposes instead of having the lights on overnight.

*Comment No. 6*

*The plans illustrate a timber guiderail along the west side of the upper lot access driveway and the south side of the Interior connecting driveway, as requested. The limits, however, shall be extended south to the showroom building.*

Response No. 6

JMC Drawing C–100 "Layout Plan" has been revised to show the extended guide rail.

*Comment No. 7*

*As previously noted, one of the variances sought for this project is for the grade of the driveway*

*entrances. Town Code requires a maximum grade of 3% for the first 30 feet of the entry drive. Based on previous comment, the applicant has modified the driveway grades and is now proposing grades of 10% and 7.4% for the southern and northern entrances, respectively. The required variances shall be updated to reflect this.*

Response No. 7

JMC Drawing C-000 "Cover Sheet" and the Expanded Environmental Assessment have been updated to list the specific variances based on changes to the plans.

*Comment No. 8*

*As noted above, neither entry drive provides the required platform area and exceeds maximum permitted grades. As previously requested, the applicant has further modified the building elevation and driveway grades to improve the proposed driveway access. The applicant has stated that the current vehicle delivery carrier has verified that the proposed access drives are adequate and will permit safe loading and off-loading of vehicles on-site. The Planning Board should consider whether the recent modifications are adequate. We note, however, that the modified entry grades resulted in grades of 10% in the area of the trash enclosure and three (3) parking spaces furthest south. The parking stalls should have grades of no more than 5%. We recommend that the applicant consider retaining walls or other means to further adjust the proposed grades in this area to satisfy this.*

Response No. 8

A small retaining wall was added just south of the southern Showroom Building front service entrance to flatten the proposed parking spaces to 5% slope. The slope has also been slightly modified around the trash enclosure area to provide a 4.2% slope across the trash enclosure pad.

*Comment No. 9*

*The plan has been revised to include a 6-foot tall chain link fence to be mounted on a 2'-8" concrete barrier along the western side of the upper parking lot. The combined height will exceed the six (6) foot maximum fence height within a zoning setback and a variance will be required. Unless the plan is modified, the list of required variances shall be updated accordingly.*

Response No. 9

A variance will be required since a very small portion of the fence encroaches slightly within the setback. Therefore, the list of variances shown on JMC Drawing C-000 "Cover Sheet" and the Expanded Environmental Assessment have been updated accordingly.

*Comment No. 10*

*As previously noted, the plan proposes "No-Parking Fire Lane" signs along the property frontage on Route 22. The ability to enforce this shall be confirmed with the Planning Board Attorney.*

Response No. 10

So noted, we will await confirmation.

Comment No. 11

*As previously requested, the plan and SWPPP (Sections VI and VII) shall clarify inspection requirements for the Certified Professional for erosion and sediment control and postconstruction stormwater management. We note that the SWPPP currently requires only one qualified inspection per week. Because the project is located within the watershed, disturbing more than .one (1) acre, qualified inspections shall be performed twice in a seven (7) day period.*

Response No. 11

The SWPPP has been revised accordingly. The text only portion of the SWPPP is provided.

Comment No. 12

*As previously noted, the applicant has prepared a SWPPP and Erosion and Sediment Control Plan to comply with Chapter 189, Stormwater Management and Erosion and Sediment Control of the Town Code. The project will require review and approval of the SWPPP by the NYCDEP for compliance with the "Rules & Regulations for the Protection from Contamination, Degradation and Pollution of the New York City Water Supply and its Sources". Finally, the project will require coverage under NYSDEC General Permit, GP-0-15-002 for Stormwater Discharges from Construction Activity. We will reserve comment until the necessary reports and analysis are provided and initially reviewed by the NYCDEP. Preliminarily, we offer the following:*

a. *The previously proposed rain gardens have been replaced with planted depressions to provide water quality treatment. The stormwater improvements located in Route 22 will likely require a license agreement from the NYSDOT. The applicant should continue to update the Board in this regard. As requested, a landscape plan has been provided for tire Board's consideration.*

b. *Given the level of disturbance and terrain of the site, the applicant has acknowledged the need to provide temporary sediment basins at strategic locations to prevent the off-site transport of sediment laden stormwater runoff. Sizing calculations in accordance with the New York State Stormwater Management Design Manual shall be provided as the SWPPP is developed.*

c. *As previously requested, the applicant has provided a draft post-construction stormwater management maintenance agreement for review by the Town.*

Response No. 12

The SWPPP has been revised accordingly. The text only portion of the SWPPP is provided.

Comment No. 13

*As previously requested, the plans shall include drainage profiles for all conveyance systems. The applicant has indicated that they will be provided as the SWPPP is further developed.*

Response No. 13

Drainage profiles for the conveyance system will be provided under separate cover as the SWPPP is developed in coordination with the Town Engineering Consultant and NYCDEP.

*Comment No. 14*

*As previously requested, the plan proposes a retaining wall and safety fence at several locations that shall be detailed on the plans.*

Response No. 14

Similar to the previous approval process for the project, the retaining wall and safety fence design drawings will be prepared by a licensed structural engineer and submitted for review the under separate cover once the above technical comments are addressed, the lots are rezoned, variances are received, etc.

We trust that the enclosed information is sufficient for your review and we look forward to discussing this matter at the January 15th meeting. In the interim, if you have questions or require additional information, please do not hesitate to contact our office at (914) 273-5225.

Sincerely,

JMC, PLLC

Stephen Spina, P.E.
Project Manager

cc: Mr. Tom Maoli
Ms. Bernadette Kopec
Mr. Chris Pelella, AIA
Mr. John Sullivan, FAIA
Michael Sirignano, Esq.
Goldens Bridge Fire Department
Lewisboro Library
Katonah Village Library
Pound Ridge Library

*P:\2016\16124\ADMIN\ltKerner 12-26-2018.doc/*

# SITE PLAN APPROVAL DRAWINGS

# MERCEDES BENZ OF GOLDENS BRIDGE

## WESTCHESTER COUNTY
## NYS ROUTE 22
## TOWN OF LEWISBORO, NY


**Applicant:**
CELEBRITY MOTOR CAR, LLC
130 ROUTE 10
WHIPPANY, NJ 07981
(973) 727-7016

**Site Planner, Civil & Traffic Engineer, Surveyor and Landscape Architect:**
120 BEDFORD ROAD
ARMONK, NY 10504
(914) 273-5225

**Architect:**
SULLIVAN ARCHITECTURE, P.C.
31 MAMARONECK AVENUE
WHITE PLAINS, NY 10601
(914) 761-4919

**Attorney:**
MICHAEL SIRIGNANO, ESQ.
OLD POST PROFESSIONAL/ ROUTE 35
P.O. BOX 784
CROSS RIVER, NY 10518
(914) 763-5500

**Surveyor:**
INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.
3 GARRETT PLACE, CARMEL, NY 10512
(845) 225-9690

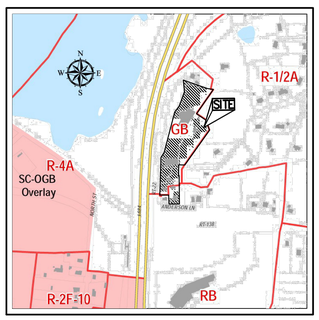

**JMC Drawing List:**



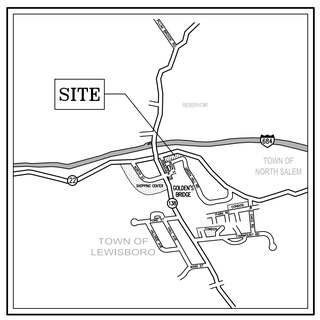
**Sullivan Architecture Drawing List:**




**AREA MAP**
SCALE: 1" = 200'
SOURCE: NEAR MAP / 2017




**ZONING MAP**
SCALE: 1" = 2,000'
SOURCE: TOWN OF LEWISBORO ZONING MAP
DATED: MARCH 1, 2012




**VICINITY MAP**
SCALE: 1" = 2,000'

**Mercedes Benz of Goldens Bridge**
**General Business (GB) Zoning Districts**
**Zoning Conformance Table**

| Zoning Bulk Regulation | Required | Existing | Proposed | Total |
|---|---|---|---|---|
| **MINIMUM LOT AREA** (ACRES)(SF) | 0.5/21,780 | 4.966/216,319 | No Change | 4.966/216,319 |
| **MINIMUM STREET FRONTAGE** (LF) | 100 | ±350 | No Change | 350 |
| **MINIMUM YARDS** (LF) | | | | |
| **FRONT FROM STREET TO CENTER LINE** | | | | |
| (SHOWROOM BLDG) | 45 | 70 | No Change | 70 |
| (SERVICE BLDG) | 45 | 130 | No Change | 130 |
| **FRONT FROM LOT LINE** | | | | |
| (SHOWROOM BLDG) | 20 | ±25 | No Change | 25 |
| (SERVICE BLDG) | 20 | ±39 | No Change | 39 |
| **SIDE** | | | | |
| (SHOWROOM BLDG) | 15 | ±245 | 19 | 19 |
| (SERVICE BLDG) | 15 | ±209 | No Change | 209 |
| **REAR** | | | | |
| (SHOWROOM BLDG) | 30 | ±3 (1) | 2 (2) | 2 (2) |
| (SERVICE BLDG) | 30 | ±23 (1) | No Change | 23 (1) (2) |
| **MINIMUM LANDSCAPE BUFFERS** (LF) | | | | |
| **FRONT** | | | | |
| (SHOWROOM BLDG) | 15 | 0 (1) | 0 (2)(4) | 0 (2) (4) |
| (SERVICE BLDG) | 15 | 0 (3) | 15 | 15 |
| **SIDE** | | | | |
| (SHOWROOM BLDG) | 15 | 0 (3) | 19 | 19 |
| (SERVICE BLDG) | 15 | ±35 | 37 | 37 |
| **REAR** | | | | |
| (SHOWROOM BLDG) | 30 | 0 (1) | 2 (1) (2) | 2 (1) (2) |
| (SERVICE BLDG) | 30 | ±20(1) | 20 (1) (2) | 20 (1) (2) |
| **GROSS FLOOR AREA** (SF) | | | | |
| SHOWROOM BUILDING | | 12,400 | 38,500 | 50,900 |
| SERVICE BUILDING | | 18,200 (5) | 2,700 | 20,900 (5) |
| 2 STORY BUILDING & 1 STORY GARAGE ON PARCEL IV | | 3,091 | -3,091 (6) | 0 |
| 2 STORY BUILDING ON PARCEL V/1 | | 1,806 | -1,806 (6) | 0 |
| **SITE TOTAL** | | **35,497** | **36,303** | **71,800** |
| **MAXIMUM SINGLE STRUCTURE (SF)** | 10,000 | 18,200 (1) | 36,707 (2)(7) | 36,707 (2)(7) |
| **MAXIMUM BUILDING COVERAGE** (% OF LOT) | 20 | 10.9 | 15.2 | 24.7 (2) (6) |
| **MAXIMUM BUILDING HEIGHT** | | | | |
| **SHOWROOM** | | | | |
| FEET | 30 | 25.5 | 34 (2)(8) | 34 (2)(8) |
| STORIES | 2 ½ | 2 | 2 | 2 |
| **SERVICE BUILDING** | | | | |
| FEET | 30 | 20 | 23 (8) | 23 (8) |
| STORIES | 2 ½ | 1 1/2 | 1 1/2 | 1 1/2 |
| **MAXIMUM FLOOR AREA RATIO** (TOTAL GROSS FLOOR AREA/TOTAL LOT AREA) | 0.40 | 0.16 | 0.17 | 0.33 |
| **PARKING SPACES** | | | | |
| 1 SP./EMPLOYEE +1SP./500 S.F. OF GROSS FLOOR AREA (65 EMPLOYEES + 71,800 S.F./500 S.F.) | 209 | 130 | 195 (2) (9) | 195 (2) (9) |
| **LOADING SPACES** (1/4,000 SF GFA + 1/10,000 SF GFA FOR ADDITIONAL SF ) | 8 | 0 | 2 | 2 |
| **MAXIMUM SITE COVERAGE** (% OF LOT AREA) | 60 | 52 (10) | 64.4 (2) | 64.4 (2) |

(1) Existing non-conformance to remain, based on approved site plan revised July 1982 and Amended Approved Site Plan revised 09/24/2012.
(2) Variance required.
(3) Existing non-conformance to be removed.
(4) Modified entrances onto NYS Route 22 with a landscape island.
(5) Includes existing Mezzanine.
(6) Existing buildings to be demolished.
(7) Includes Showroom Building Covered Display.
(8) Per Section 220-2B of the Zoning Code, Building Height equals the mean vertical distance measured from the mean average level of the finished grade adjacent to exterior walls of the building to the level of the highest point of the roof if the roof is flat, or to the mean level between the eaves and the highest point of the roof if the roof is of any other type. Mean building height includes the Showroom Covered Display and is 33.45 feet according to definition.
(9) Includes new and pre-owned storage and display, service department, service customer, showroom customer and employee parking both inside and outside. Does not include additional 225 storage spaces. See Parking Data Table on JMC Drawing C-101 "Parking Plan".
(10) Existing site coverage does not include gravel driveways and gravel parking areas.

I:\2016\16124\acad\mercedes benz zoning conformance table.docx

**REQUIRED VARIANCES**

| ZONING CODE SECTION | DESCRIPTION | REQUIRED | PROVIDED | DIFFERENCE |
|---|---|---|---|---|
| § 220-90(1)A(2) | INCREASE IN NON-CONFORMITY OTHER THAN USE | – | – | – |
| § 220-24E(A) | REAR YARD SETBACK | MINIMUM 30' | 2' PROPOSED | 28' |
| § 220-24E | GROSS FLOOR AREA OF A SINGLE STRUCTURE | MAXIMUM 10,000 S.F. | 50,900 S.F. PROPOSED | 40,900 S.F. |
| § 220-24E | MAXIMUM BUILDING COVERAGE | MAXIMUM 20% | 24.7% PROPOSED | 4.7% |
| § 220-24E | MAXIMUM SITE COVERAGE | MAXIMUM 60% | 64.4% PROPOSED | 4.4% |
| § 220-24E | MAXIMUM BUILDING HEIGHT | MAXIMUM 30' | 34' PROPOSED | 4' |
| § 220-55C(3) | MINIMUM AISLE WIDTH | MINIMUM 25' | 20' PROPOSED | 5' |
| § 220-55D(2) | MAXIMUM ENTRANCE/EXIT GRADE WITHIN 30' OF STREET LINE | MAXIMUM 3% | 10% AND 7.4% PROPOSED | 7% AND 4.4% |
| § 220-55D(2) | MAXIMUM DRIVEWAY GRADE | MAXIMUM 12% | 14.5% PROPOSED | 2.5% |
| § 220-12E(1) | HEIGHT OF WALLS WITHIN REQUIRED YARD SETBACKS | MAXIMUM 6' | 11' PROPOSED | 5' |
| § 220-12E(1) | HEIGHT OF FENCE WITHIN REQUIRED YARD SETBACKS | MAXIMUM 6' | 8'-8" PROPOSED | 2'-8" |
| § 185-5F(3)(A) | LENGTH OF WALL SIGNS | MAXIMUM 20' | 46'-0" | 26'-0" |
| § 185-5F(3)(A) | HEIGHT OF WALL SIGNS | MAXIMUM 2' | 3'-3⅝" | 1'-3⅝" |
| § 185-5F(3)(A) | ALLOWS FOR NO MORE THAN TWO (2) WALL SIGNS SO LONG AS THE SECOND WALL SIGN MEETS THE STANDARDS PROVIDED IN § 185-5F(4) | 2 | 8 | 6 |
| § 185-5F(4) | PROVIDES STANDARDS FOR SECONDARY WALL SIGNS | 6 S.F. IN AREA | (5) SIGNS: 16.5 S.F. (2) SIGNS: 7.8 S.F. | (5) SIGNS: 10.5 S.F. (2) SIGNS: 1.8 S.F. |
| § 185-6C(4) | PROHIBITS WALL SIGNS FROM EXTENDING BEYOND THE SECOND STORY | 0 | 33'-1⅜" | 33'-1⅜" |
| § 185-6C(6) | PROHIBITS LETTERS ON WALL SIGNS IN EXCESS OF 12" | MAX. LETTER HEIGHT 12" | 24 ⅝" | 12 ⅝" |
| § 220-57B | TO ALLOW PROPOSED OFF-STREET LOADING AREAS TO TEMPORARILY BLOCK PARKING STALLS | – | – | – |
| § 220-24E | AUTO LIFTS ARE WITHIN THE REQUIRED SETBACKS. | 30' | 17' | 13' |
| § 220-55D(1) | ACCESS TO UPPER PARKING MUST BE A MINIMUM OF 20' WIDE | 20' | 16' | 4' |
| § 220-55D(2) | ACCESS TO UPPER PARKING SHALL NOT EXCEED A GRADE OF 3% WITHIN 30' OF THE STREET LINE OR 12% AT ANY OTHER POINT | 12% | 16% | 4% |
| § 220-55E(3) | IN ALL OFF-STREET PARKING AREAS CONTAINING 25 OR MORE PARKING SPACES, AT LEAST 10% OF THE SURFACE WITHIN THE PARKING PERIMETER SHALL CONSIST OF PLANTING ISLANDS. | 10% | < 10% | – |
| § 220-57C(1) | REQUIRES 1 LOADING SPACE FOR THE FIRST 4,000 S.F. OF GROSS FLOOR AREA OR MAJOR PORTION THEREOF AND 1 ADDITIONAL SPACE FOR 10,000 S.F. OF GROSS FLOOR AREA OR MAJOR PORTIONTHEREOF IN EXCESS OF 4,000 S.F. SHALL BE PROVIDED. 2 SPACES ARE INDICATED, A TOTAL OF 6 AREA REQUIRED | 6 | 2 | 4 |
| § 220-56 | REQUIRES 1 SPACE PER EMPLOYEE PLUS 1 SPACE PER 500 S.F. OF GROSS FLOOR AREA FOR MOTOR VEHICLE SALES. | 209 | 195 | 14 |

**REQUIRED WAIVERS**

1. SEC. 220-15B – TO PERMIT A DEVIATION FROM THE STANDARDS REQUIRING LANDSCAPE BUFFERS WHERE EXISTING NON-CONFORMITIES EXIST AND SHALL REMAIN.

**GENERAL CONSTRUCTION NOTES APPLY TO ALL WORK HEREIN:**

1. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CALL 811 "DIG SAFELY" (1-800-962-7962) TO HAVE UNDERGROUND UTILITIES LOCATED. EXPLORATORY EXCAVATIONS SHALL COMPLY WITH CODE 753 REQUIREMENTS. NO WORK SHALL COMMENCE UNTIL ALL THE OPERATORS HAVE NOTIFIED THE CONTRACTOR THAT THEIR UTILITIES HAVE BEEN LOCATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PRESERVATION OF ALL PUBLIC AND PRIVATE UNDERGROUND AND SURFACE UTILITIES AND STRUCTURES AT OR ADJACENT TO THE SITE OF CONSTRUCTION, INSOFAR AS THEY MAY BE ENDANGERED BY THE CONTRACTOR'S OPERATIONS. THIS SHALL HOLD TRUE WHETHER OR NOT THEY ARE SHOWN ON THE CONTRACT DRAWINGS. IF THEY ARE SHOWN ON THE DRAWINGS, THEIR LOCATIONS ARE NOT GUARANTEED EVEN THOUGH THE INFORMATION WAS OBTAINED FROM THE BEST AVAILABLE SOURCES, AND IN ANY EVENT, OTHER UTILITIES ON THESE PLANS MAY BE ENCOUNTERED IN THE FIELD. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, IMMEDIATELY REPAIR OR REPLACE ANY STRUCTURES OR UTILITIES THAT HE DAMAGES, AND SHALL CONSTANTLY PROCEED WITH CAUTION TO PREVENT UNDUE INTERRUPTION OF UTILITY SERVICE.

2. CONTRACTOR SHALL HAND DIG TEST PITS TO VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL VERIFY EXISTING UTILITIES DEPTHS AND ADVISE OF ANY CONFLICTS WITH PROPOSED UTILITIES. IF CONFLICTS ARE PRESENT. THE OWNER'S FIELD REPRESENTATIVE, JMC, PLLC AND THE APPLICABLE MUNICIPALITY OR AGENCY SHALL BE NOTIFIED IN WRITING. THE EXISTING/PROPOSED UTILITIES RELOCATION SHALL BE DESIGNED BY JMC, PLLC.

3. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY AND ALL LOCAL PERMITS REQUIRED.

4. ALL WORK SHALL BE DONE IN STRICT COMPLIANCE WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES, STANDARDS, ORDINANCES, RULES, AND REGULATIONS. ALL CONSTRUCTION WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL SAFETY CODES. APPLICABLE SAFETY CODES MEAN THE LATEST EDITION INCLUDING ANY AND ALL AMENDMENTS, REVISIONS, AND ADDITIONS THERETO, TO THE FEDERAL DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION'S OCCUPATIONAL SAFETY AND HEALTH STANDARDS (OSHA); AND APPLICABLE SAFETY, HEALTH REGULATIONS AND BUILDING CODES FOR CONSTRUCTION IN THE STATE OF NEW YORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR GUARDING AND PROTECTING ALL OPEN EXCAVATIONS IN ACCORDANCE WITH THE PROVISION OF SECTION 107-05 (SAFETY AND HEALTH REQUIREMENTS) OF THE NYSDOT STANDARD SPECIFICATIONS. IF THE CONTRACTOR PERFORMS ANY HAZARDOUS CONSTRUCTION PRACTICES, ALL OPERATIONS IN THE AFFECTED AREA SHALL BE DISCONTINUED AND IMMEDIATE ACTION SHALL BE TAKEN TO CORRECT THE SITUATION TO THE SATISFACTION OF THE APPROVAL AUTHORITY HAVING JURISDICTION.

5. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES AFFECTED BY THE SCOPE OF WORK SHOWN HEREON AT ALL TIMES TO THE SATISFACTION OF THE OWNERS REPRESENTATIVE. RAMPING CONSTRUCTION TO PROVIDE ACCESS MAY BE CONSTRUCTED WITH SUBBASE MATERIAL EXCEPT THAT TEMPORARY ASPHALT CONCRETE SHALL BE PLACED AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFE PEDESTRIAN ACCESS AT ALL TIMES.

6. CONTRACTOR SHALL MAINTAIN THE INTEGRITY OF EXISTING PAVEMENT TO REMAIN.

NOT FOR CONSTRUCTION



ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW, EXCEPT AS PROVIDED FOR BY SECTION 7209, SUBSECTION 2.

SUBSURFACE UTILITY LOCATIONS ARE BASED ON A COMPILATION OF FIELD EVIDENCE, AVAILABLE RECORD PLANS AND/OR UTILITY MARK-OUTS. THE LOCATION OR COMPLETENESS OF UNDERGROUND INFORMATION CANNOT BE GUARANTEED. VERIFY THE ACTUAL LOCATION OF ALL UTILITIES PRIOR TO EXCAVATION OR CONSTRUCTION.

811 Know what's below. Call before you dig.

| No. | Revision | Date | By |
|---|---|---|---|
| 1. | WCDH SUBMISSION | 06/26/2018 | SMN |
| 2. | TOWN PLANNING BOARD SUBMISSION | 09/06/2018 | SMN |
| 3. | REVISED PER TOWN COMMENTS | 11/29/2018 | MT |
| 4. | REVISED PER TOWN COMMENTS | 12/26/2018 | TC |
| | *Previous Editions Obsolete* | | |


JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC
JMC Site Development Consultants, LLC
John Meyer Consulting, Inc.
120 BEDFORD ROAD • ARMONK, NY 10504
voice 914.273.5225 • fax 914.273.2102
www.jmcpllc.com

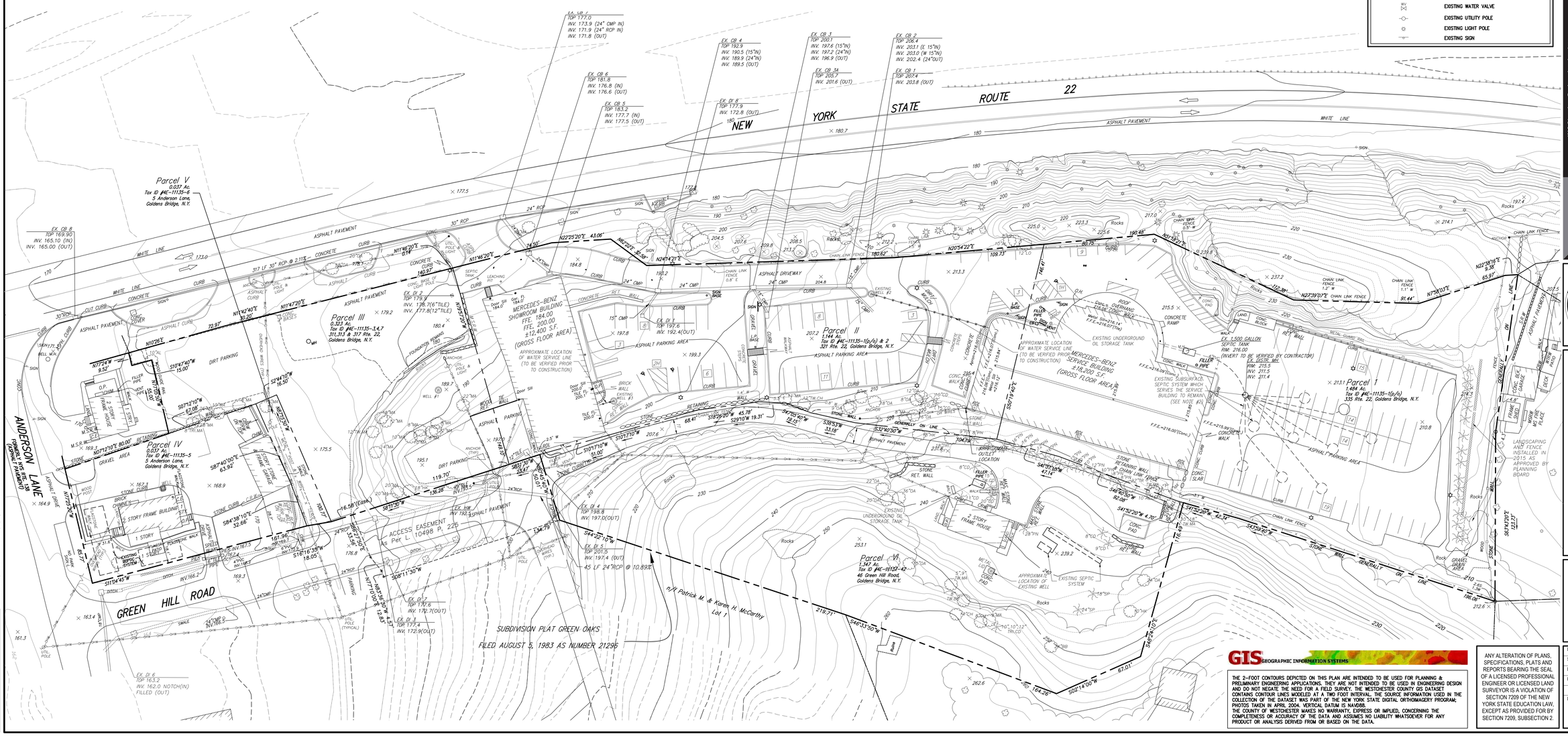

| | | | |
|---|---|---|---|
| Drawn: | SS | Approved: | AN |
| Scale: | VARIES | | |
| Date: | 11/30/2017 | | |
| Project No: | 16124 | | |
| 16124-SITE | COVER | COVER.scr | |
| Drawing No: | C-000 | | |

## NOTE:

1. EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM SURVEY TITLED, "TOPOGRAPHIC SURVEY OF PROPERTY," PREPARED BY INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C., DATED 8/17/2017.
2. THE LOCATION OF THE EXISTING SUBSURFACE SEPTIC AND UTILITY INFORMATION WAS TAKEN FROM AN AS-BUILT AS SHOWN ON DRAWING SI-5 "SEWAGE PROPOSAL AND WATER SUPPLY", LAST REVISED 08/31/1983, AS ACCEPTED BY THE WESTCHESTER COUNTY DEPARTMENT OF HEALTH ON 09/27/1983.

## LEGEND

- EXISTING PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING EASEMENT LINE
- EXISTING WETLAND LINE AND DELINEATION
- EXISTING BUILDING OVERHANG
- EXISTING BUILDING LINE
- EXISTING PAVEMENT EDGE
- EXISTING CURB LINE
- EXISTING CONTOUR
- EXISTING INDEX CONTOUR
- EXISTING STONE WALL
- EXISTING RETAINING WALL
- EXISTING GUIDE RAIL
- EXISTING FENCE
- EXISTING TREE AND DESIGNATION
- EXISTING TREE LINE
- EXISTING DIRECTIONAL ARROWS
- EXISTING PAINT
- EXISTING PARKING WITH NUMBER OF SPACES
- EXISTING ACCESSIBLE PARKING WITH NUMBER OF SPACES
- EXISTING PEDESTRIAN CROSSING
- EXISTING STORM DRAIN LINE AND SIZE
- EXISTING SANITARY LINE AND SIZE
- EXISTING WATER LINE
- EXISTING GAS LINE
- EXISTING OVERHEAD WIRES
- EXISTING DRAIN INLET
- EXISTING MANHOLE
- EXISTING FIRE HYDRANT
- EXISTING GAS VALVE
- EXISTING WATER VALVE
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING SIGN




GIS GEOGRAPHIC INFORMATION SYSTEMS

THE 2-FOOT CONTOURS DEPICTED ON THIS PLAN ARE INTENDED TO BE USED FOR PLANNING & PRELIMINARY ENGINEERING APPLICATIONS. THEY ARE NOT INTENDED TO BE USED IN ENGINEERING DESIGN AND DO NOT NEGATE THE NEED FOR A FIELD SURVEY. THE WESTCHESTER COUNTY GIS DATASET CONTAINS CONTOUR LINES MODELED AT A TWO FOOT INTERVAL. THE SOURCE INFORMATION USED IN THE COLLECTION OF THE DATASET WAS PART OF THE NEW YORK STATE DIGITAL ORTHOIMAGERY PROGRAM; PHOTOS TAKEN IN APRIL 2004. VERTICAL DATUM IS NAVD88.
THE COUNTY OF WESTCHESTER MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE COMPLETENESS OR ACCURACY OF THE DATA AND ASSUMES NO LIABILITY WHATSOEVER FOR ANY PRODUCT OR ANALYSIS DERIVED FROM OR BASED ON THE DATA.



| No. | Revision | Date | By |
|---|---|---|---|
| 1. | WCDH SUBMISSION | 06/22/2018 | SMR |
| 2. | TOWN PLANNING BOARD SUBMISSION | 09/06/2018 | SMR |
| 3. | REVISED PER TOWN COMMENTS | 11/29/2018 | MT |
| 4. | REVISED PER TOWN COMMENTS | 12/26/2018 | TC |

Previous Editions Obsolete

APPLICANT/OWNER:
CELEBRITY MOTOR CAR, LLC
130 ROUTE 10
WHIPPANY, NJ 07981

ARCHITECT:
SULLIVAN ARCHITECTURE
31 MAMARONECK AVENUE
WHITE PLAINS, NY 10601

JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC
JMC Site Development Consultants, LLC
John Meyer Consulting, Inc.
120 BEDFORD ROAD • ARMONK, NY 10504
voice 914.273.5225 • fax 914.273.2102
www.jmcpllc.com

# EXISTING CONDITIONS

MERCEDES BENZ OF GOLDENS BRIDGE
NYS ROUTE 22
TOWN OF LEWISBORO, NY

| | | | |
|---|---|---|---|
| Drawn: | DK | Approved: | AN |
| Scale: | 1" = 30' | | |
| Date: | 11/30/2017 | | |
| Project No: | 16124 | | |
| N124-SIE | EXIST | EXIST.scr | |
| Drawing No: | C-010 | | |

## NOTES:

1. EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM SURVEY TITLED, "TOPOGRAPHIC SURVEY OF PROPERTY," PREPARED BY INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C., DATED 8/17/2017.
2. THE LOCATION OF THE EXISTING SUBSURFACE SEPTIC AND UTILITY INFORMATION WAS TAKEN FROM AN AS-BUILT AS SHOWN ON DRAWING SI-5 "SEWAGE PROPOSAL AND WATER SUPPLY", LAST REVISED 08/31/1983, AS ACCEPTED BY THE WESTCHESTER COUNTY DEPARTMENT OF HEALTH ON 09/27/1983.
3. PRIOR TO THE START OF ANY DEMOLITION, THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND/OR APPROVALS FROM THE TOWN OF LEWISBORO AND ALL OTHER AUTHORITIES HAVING JURISDICTION.
4. ALL CONSTRUCTION/DEMOLITION DEBRIS NOT PROPOSED TO BE RECYCLED SHALL BE REMOVED AND LEGALLY DISPOSED OF OFF-SITE IN ACCORDANCE WITH THE REGULATIONS OF ALL LOCAL, STATE AND FEDERAL AGENCIES HAVING JURISDICTION.
5. ALL MATERIAL TO BE USED AS FILL SHALL BE APPROVED BY THE PROJECT GEOTECHNICAL ENGINEER.
6. PRIOR TO THE START OF SITE DEMOLITION, EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE NEW YORK STATE STANDARD AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL, AS REQUIRED AND/OR DIRECTED BY THE TOWN OF LEWISBORO OR JMC, PLLC.
7. ANY UNSUITABLE MATERIAL FOUND ON-SITE DURING CONSTRUCTION SHALL BE DISPOSED OF OFF-SITE IN A MANNER APPROVED BY ALL AUTHORITIES HAVING JURISDICTION AND REPLACED WITH SUITABLE MATERIAL AS REQUIRED. ALL REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL SHALL BE COMPLETED UNDER THE DIRECT SUPERVISION OF A GEOTECHNICAL ENGINEER.
8. EXISTING DRAINAGE PATTERNS ON SITE SHALL BE MAINTAINED TO THE MAXIMUM EXTENT PRACTICABLE.
9. THIS PLAN IS TO BE PROVIDED TO BOTH THE DEMOLITION CONTRACTOR AND SITE CONTRACTOR FOR THEIR USE, INFORMATION AND COORDINATION. ANY QUESTIONS OF CONTRACTOR RESPONSIBILITY AND/OR SEPARATION OF WORK SHALL BE DIRECTED TO THE GENERAL CONTRACTOR IN WRITING PRIOR TO ISSUANCE OF BID.
10. CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES TO BE DEMOLISHED AND EXISTING UTILITIES TO BE PROTECTED. IF ANY DISCREPANCIES ARE FOUND, THE CONTRACTOR SHALL NOTIFY THE GENERAL CONTRACTOR AND JMC, PLLC PRIOR TO THE START OF CONSTRUCTION.
11. ALL SANITARY SEWER AND WATER UTILITIES THAT MUST BE REMOVED AND/OR ABANDONED MUST BE DONE IN ACCORDANCE WITH WESTCHESTER COUNTY HEALTH DEPARTMENT RULES AND REGULATIONS.
12. THE EXISTING OWTS SERVICING THE CURRENT SERVICE BUILDING IS TO REMAIN AND BE PROTECTED DURING CONSTRUCTION TO SERVE THE PROPOSED SHOWROOM AND SERVICE BUILDING EXPANSION.
13. LOCATIONS OF EXISTING SEPTIC SYSTEMS ON PARCELS IV & VI SHALL BE DETERMINED PRIOR TO CONSTRUCTION AND THE SYSTEMS SHALL BE REMOVED AND/OR ABANDONED IN ACCORDANCE WITH WESTCHESTER COUNTY HEALTH DEPARTMENT RULES AND REGULATIONS.
14. THE EXISTING OIL STORAGE TANKS FOR LOT 5, LOT 42 AND THE SERVICE BUILDING ARE PROPOSED TO BE REMOVED IN ACCORDANCE WITH NYS, COUNTY HEALTH DEPARTMENT AND TOWN STANDARDS. PROPER DOCUMENTATION FOR SOIL TESTING AND REMOVAL SHALL BE PROVIDED.

## LEGEND

- EXISTING PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING EASEMENT LINE
- EXISTING BUILDING OVERHANG
- EXISTING BUILDING LINE
- EXISTING PAVEMENT EDGE
- EXISTING CURB LINE
- EXISTING CONTOUR
- EXISTING INDEX CONTOUR
- EXISTING STONE WALL
- EXISTING RETAINING WALL
- EXISTING GUIDE RAIL
- EXISTING FENCE
- EXISTING TREE AND DESIGNATION
- EXISTING TREE TO BE REMOVED
- EXISTING TREE LINE
- EXISTING DIRECTIONAL ARROWS
- EXISTING PAINT
- EXISTING PARKING WITH NUMBER OF SPACES
- EXISTING ACCESSIBLE PARKING WITH NUMBER OF SPACES
- EXISTING PEDESTRIAN CROSSING
- EXISTING STORM DRAIN LINE AND SIZE
- EXISTING SANITARY LINE AND SIZE
- EXISTING WATER LINE
- EXISTING GAS LINE
- EXISTING OVERHEAD WIRES
- EXISTING DRAIN INLET
- EXISTING MANHOLE
- EXISTING FIRE HYDRANT
- EXISTING GAS VALVE
- EXISTING WATER VALVE
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING SIGN

| No. | Revision | Date | By |
|---|---|---|---|
| 1. | WCDH SUBMISSION | 06/26/2018 | SMR |
| 2. | TOWN PLANNING BOARD SUBMISSION | 09/06/2018 | SMR |
| 3. | REVISED PER TOWN COMMENTS | 11/29/2018 | MT |
| 4. | REVISED PER TOWN COMMENTS | 12/26/2018 | TC |

Previous Editions Obsolete

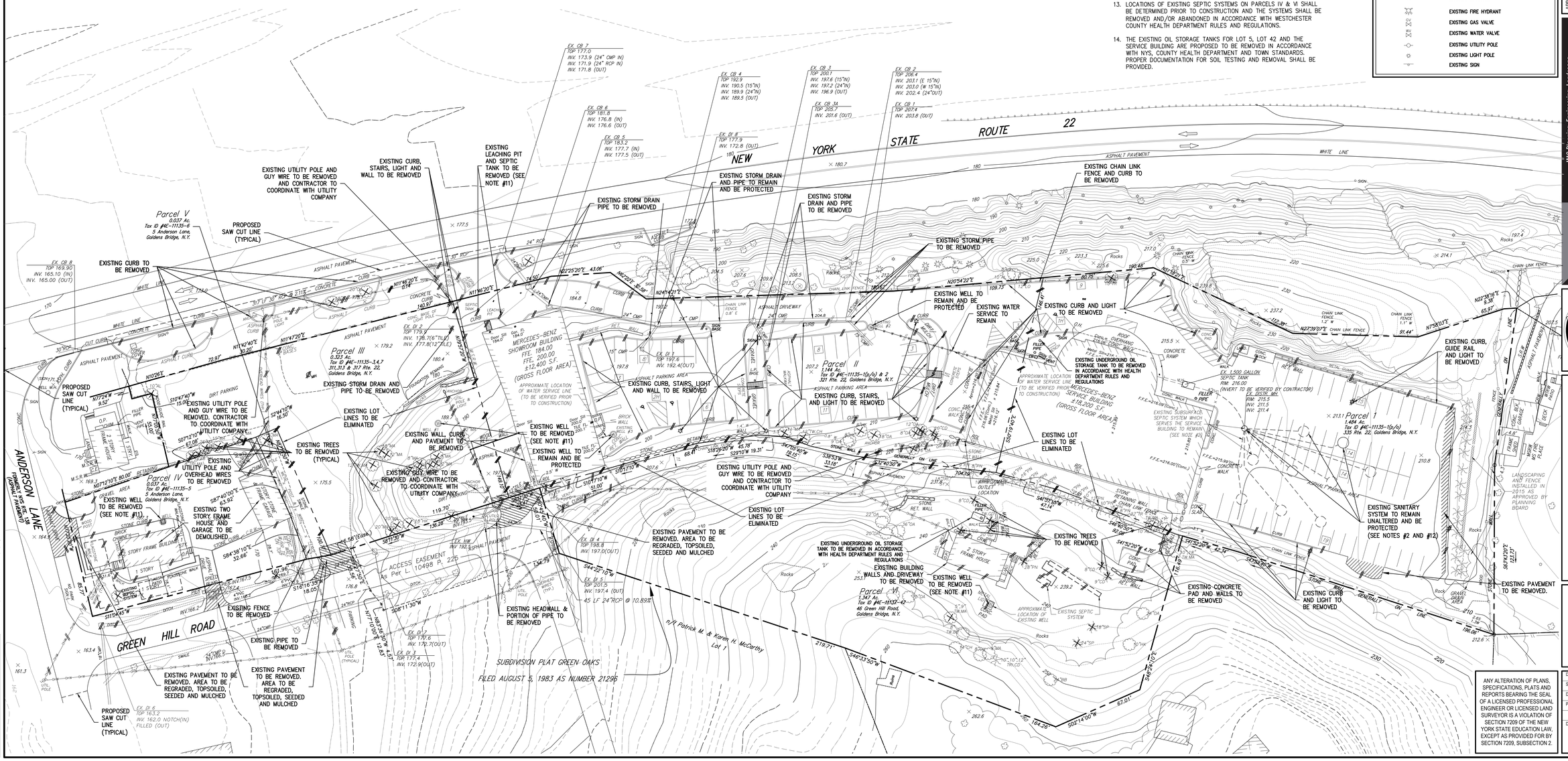
APPLICANT/OWNER:
CELEBRITY MOTOR CAR, LLC
130 ROUTE 10
WHIPPANY, NJ 07981

ARCHITECT:
SULLIVAN ARCHITECTURE
31 MAMARONECK AVENUE
WHITE PLAINS, NY 10601


JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC
JMC Site Development Consultants, LLC
John Meyer Consulting, Inc.
120 BEDFORD ROAD • ARMONK, NY 10504
voice 914.273.5225 • fax 914.273.2102
www.jmcpllc.com


# DEMOLITION PLAN

MERCEDES BENZ OF GOLDENS BRIDGE
NYS ROUTE 22
TOWN OF LEWISBORO, NY




ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW, EXCEPT AS PROVIDED FOR BY SECTION 7209, SUBSECTION 2.

| | | | |
|---|---|---|---|
| Drawn: | SS | Approved: | AN |
| Scale: | 1" = 30' | | |
| Date: | 11/30/2017 | | |
| Project No: | 16124 | | |
| NR24-SITE | DEMO | DEMO.scr | |
| Drawing No: | C-020 | | |

NOT FOR CONSTRUCTION

# TREE LEGEND

DECIDUOUS TREE

EVERGREEN TREE

| TREE CODE | SPECIES | QUANTITY TO BE REMOVED |
|---|---|---|
| AL | AILANTHUS | 4 |
| BB | BLACK BIRCH | – |
| BR | BIRCH | – |
| CD | CEDAR | 8 |
| CH | CHERRY | 1 |
| HK | HICKORY | 2 |
| JM | JAPANESE MAPLE | 1 |
| LO | LOCUST | – |
| MA | MAPLE | 24 |
| OA | OAK | 7 |
| PN | PINE | 1 |
| PO | POPLAR | – |
| TR | TREE UNKNOWN | 1 |
| SP | SPRUCE | – |
| SY | SYCAMORE | – |
| | TOTAL | 46 |

## NOTES:

1. EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM SURVEY TITLED, "TOPOGRAPHIC SURVEY OF PROPERTY," PREPARED BY INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C., DATED 8/17/2017.
2. PRIOR TO THE START OF SITE DEMOLITION, EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE NEW YORK STATE STANDARD AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL, AS REQUIRED AND/OR DIRECTED BY THE TOWN OF LEWISBORO OR JMC, PLLC.
3. THIS PLAN IS TO BE PROVIDED TO BOTH THE DEMOLITION CONTRACTOR AND SITE CONTRACTOR FOR THEIR USE, INFORMATION AND COORDINATION. ANY QUESTIONS OF CONTRACTOR RESPONSIBILITY AND/OR SEPARATION OF WORK SHALL BE DIRECTED TO THE GENERAL CONTRACTOR IN WRITING PRIOR TO ISSUANCE OF BID.
4. CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES TO BE DEMOLISHED AND EXISTING UTILITIES TO BE PROTECTED. IF ANY DISCREPANCIES ARE FOUND, THE CONTRACTOR SHALL NOTIFY THE GENERAL CONTRACTOR AND JMC, PLLC PRIOR TO THE START OF CONSTRUCTION.
5. TREE SYMBOLS ARE SHOWN TO REPRESENT THE RELATIVE SIZE OF TREE STEMS AND ARE NOT INTENDED TO REPRESENT THE ACTUAL SIZE OF THE TREE CANOPY.
6. PER NYSDEC REQUIREMENTS, ALL TREE REMOVAL SHALL TAKE PLACE BETWEEN NOVEMBER 1ST AND MARCH 31ST TO REDUCE IMPACTS TO THE LONG-EARED BAT, WHICH IS A STATE AND FEDERALLY LISTED THREATENED SPECIES.
7. UPON TREE REMOVAL AND ROUGH GRADING, THE BARE SOIL SHALL BE PLANTED WITH A NATIVE SEED MEADOW MIX OF GRASSES AND WILD FLOWERS TO BE SPECIFIED BY THE PROJECT LANDSCAPE ARCHITECT.
8. TREE LOCATIONS, TYPES AND SIZES SHOWN ON THIS PLAN WERE TAKEN FROM THE SURVEY TITLED "TREE SURVEY OF PROPERTY", PREPARED BY INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C., DATED 01/29/2018.

2.

## LEGEND

- EXISTING PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING EASEMENT LINE
- EXISTING BUILDING OVERHANG
- EXISTING BUILDING LINE
- EXISTING PAVEMENT EDGE
- EXISTING CURB LINE
- EXISTING CONTOUR
- EXISTING INDEX CONTOUR
- EXISTING STONE WALL
- EXISTING RETAINING WALL
- EXISTING GUIDE RAIL
- EXISTING FENCE
- EXISTING TREE AND DESIGNATION
- EXISTING TREE TO BE REMOVED
- EXISTING TREE LINE
- EXISTING DIRECTIONAL ARROWS
- EXISTING PAINT
- EXISTING PARKING WITH NUMBER OF SPACES
- EXISTING ACCESSIBLE PARKING WITH NUMBER OF SPACES
- EXISTING PEDESTRIAN CROSSING
- EXISTING STORM DRAIN LINE AND SIZE
- EXISTING SANITARY LINE AND SIZE
- EXISTING WATER LINE
- EXISTING GAS LINE
- EXISTING OVERHEAD WIRES
- EXISTING DRAIN INLET
- EXISTING MANHOLE
- EXISTING FIRE HYDRANT
- EXISTING GAS VALVE
- EXISTING WATER VALVE
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING SIGN

| No. | Revision | Date | By |
|---|---|---|---|
| 1. | TOWN PLANNING BOARD SUBMISSION | 09/06/2018 | SMN |
| 2. | REVISED PER TOWN COMMENTS | 11/29/2018 | MT |
| 3. | REVISED PER TOWN COMMENTS | 12/26/2018 | TC |

Previous Editions Obsolete

APPLICANT/OWNER:
CELEBRITY MOTOR CAR, LLC
130 ROUTE 10
WHIPPANY, NJ 07981

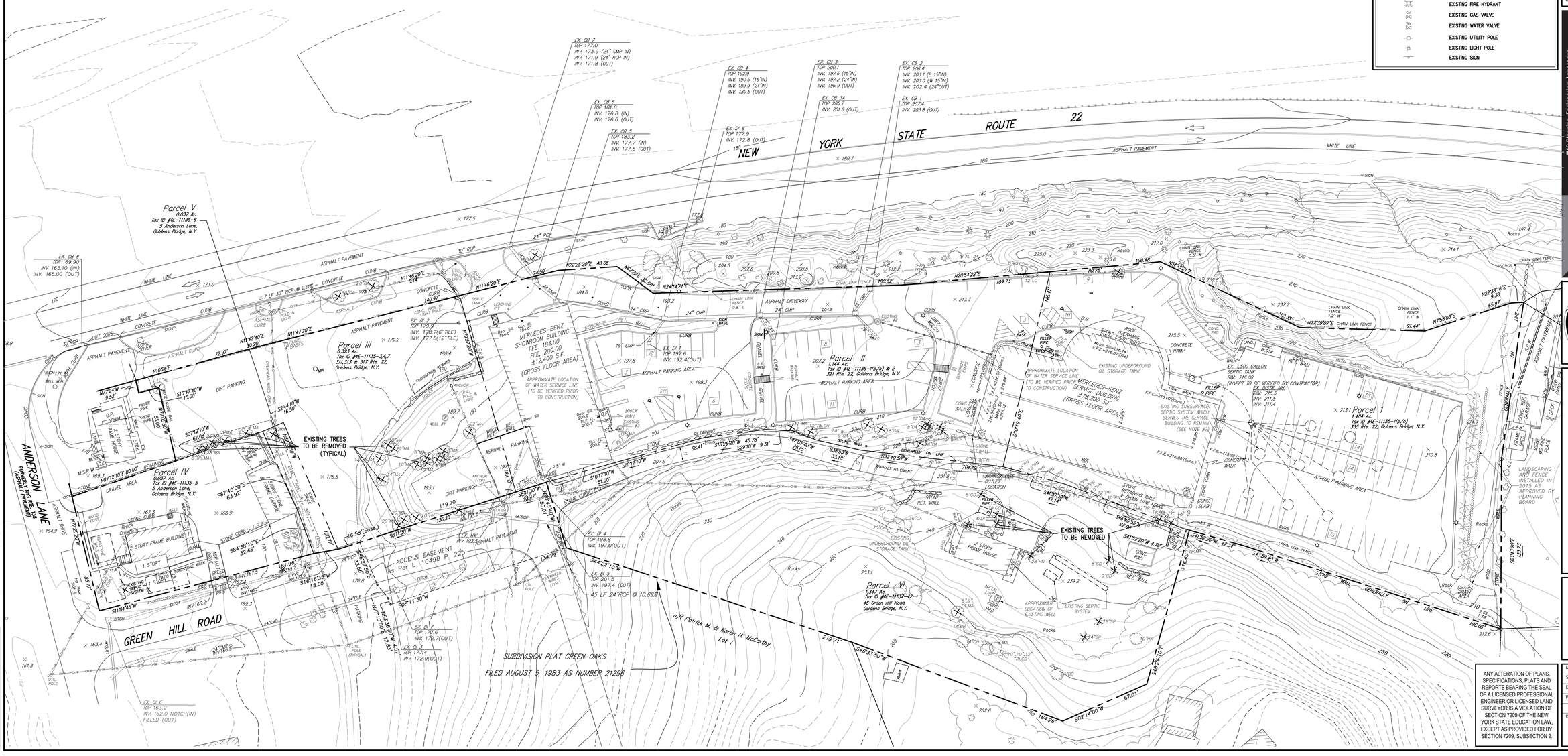
ARCHITECT:
SULLIVAN ARCHITECTURE
31 MAMARONECK AVENUE
WHITE PLAINS, NY 10601


JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC
JMC Site Development Consultants, LLC
John Meyer Consulting, Inc.
120 BEDFORD ROAD • ARMONK, NY 10504
voice 914.273.5225 • fax 914.273.2102
www.jmcpllc.com


JMC

# TREE REMOVAL PLAN

MERCEDES BENZ OF GOLDENS BRIDGE
NYS ROUTE 22
TOWN OF LEWISBORO, NY




ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW, EXCEPT AS PROVIDED FOR BY SECTION 7209, SUBSECTION 2.

| | | | |
|---|---|---|---|
| Drawn: | SS | Approved: | AN |
| Scale: | 1" = 30' | | |
| Date: | 02/06/2018 | | |
| Project No: | 16124 | | |
| 16124-SITE | TREE REMOVAL | TREE DEMO.DWG | |
| Drawing No: | C–030 | | |



NOT FOR CONSTRUCTION

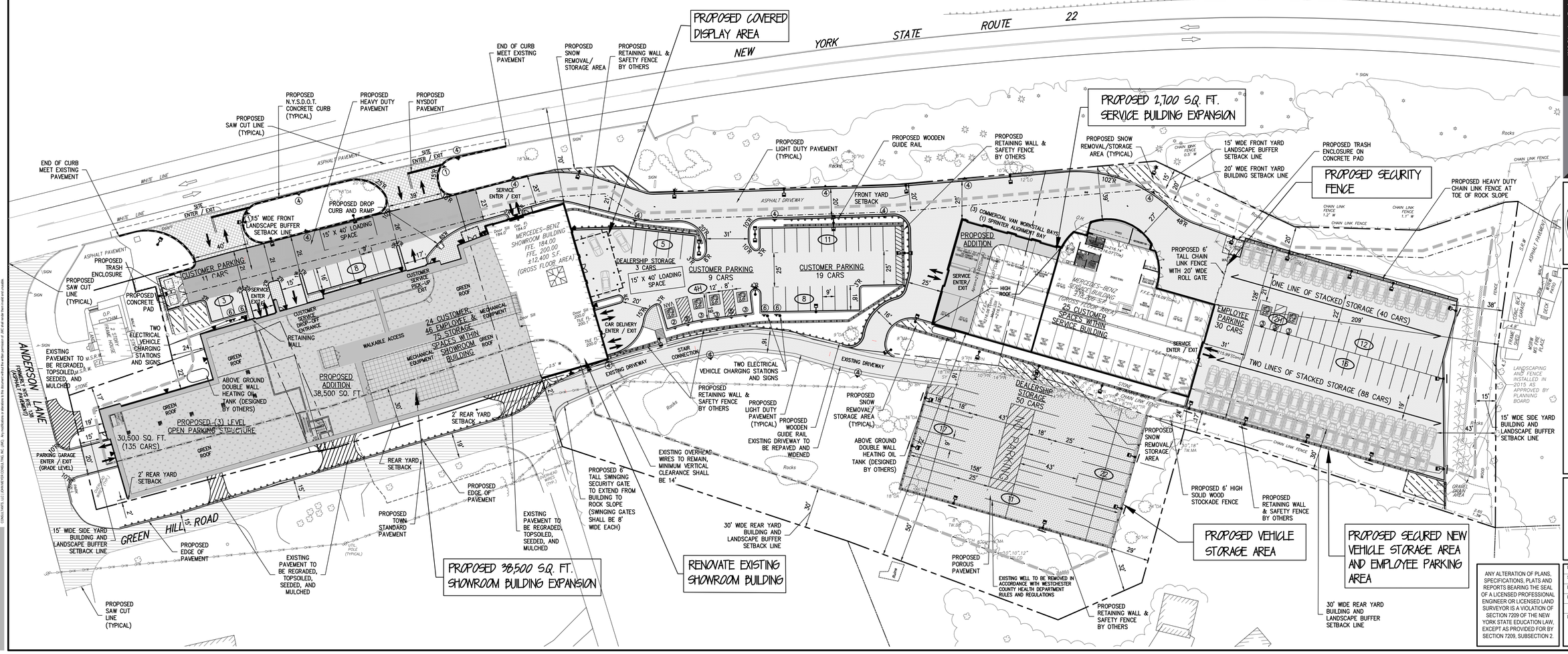
| DESIGNATION NUMBER | SIGN | SIZE | DESCRIPTION | MOUNTING TYPE | MOUNTING HEIGHT | REGULATORY | REFLECTORIZED |
|---|---|---|---|---|---|---|---|
| 1 | STOP | 30"X30" | WHITE ON RED | STEEL CHANNEL | 7'-0" | R1-1 | X |
| 2 | RESERVED PARKING / VAN ACCESSIBLE | 12"X18" 12"X6" | GREEN & BLUE ON WHITE | STEEL CHANNEL | 7'-0" | R7-8 R7-8A | X |
| 3 | RESERVED PARKING | 12"X18" | GREEN & BLUE ON WHITE | STEEL CHANNEL | 7'-0" | R7-8 | X |
| 4 | NO PARKING FIRE LANE | 12"X18" | RED ON WHITE | STEEL CHANNEL | 7'-0" | P1-1C | X |
| 5 | NO PARKING ANY TIME | 12"X18" | RED ON WHITE | STEEL CHANNEL | 7'-0" | NYP1-2 | X |
| 6 | ELECTRIC VEHICLE PARKING ONLY CHARGING STATION | 12"X18" | GREEN ON WHITE | STEEL CHANNEL | 7'-0" | NYP1-2 | X |

NOTES:

1. EXISTING INFORMATION WAS TAKEN FROM "SURVEY OF PROPERTY" FOR CELEBRITY OF WESTCHESTER, LLC AS PREPARED BY INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C., DATED AUGUST 17, 2017.
2. PROPOSED BUILDING INFORMATION PROVIDED BY SULLIVAN ARCHITECTURE.
3. LOADING OPERATIONS SHALL BE PERFORMED DURING OFF PEAK HOURS.
4. ALL LOADING AND PARKING SHALL BE CONDUCTED ON THE PREMISES. THERE SHALL BE NO LOADING OR PARKING ON OR WITHIN AREA ROADWAYS AND STREETS.
5. ANY SIGN LOCATED WITHIN THE NYSDOT R.O.W. SHALL HAVE A BREAK AWAY OR SLIP IMPACT MOUNTING POST, IN ACCORDANCE WITH NYSDOT STANDARD DRAWINGS AND SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS.
6. DURING THE WINTER SEASON, THERE SHALL NOT BE ANY PLOWING OF SNOW ONTO OR ACROSS NYS RTE. 22, IN ACCORDANCE WITH THE NYS VEHICLE AND TRAFFIC LAW. SNOW PILES SHALL BE CONTAINED WITHIN THE SUBJECT PROPERTY IN THE AREAS SHOWN ON THIS PLAN WHICH ARE LOCATED SO AS NOT TO CREATE A DRAINAGE PROBLEM DURING SNOW MELT.
7. THE PROPOSED ACCESSIBLE PARKING SPACES ARE BASED ON THE TOTAL NUMBER OF CUSTOMER AND SERVICE DEPARTMENT PARKING SPACES AND DO NOT INCLUDE THE VEHICLE DISPLAY AND STORAGE PARKING AREAS.
8. NO OUTDOOR VEHICLE WASHING IS PERMITTED.
9. TO REDUCE NOISE RELATED IMPACTS, NO MORE THAN ONE EXTERIOR VEHICLE LIFT SHALL BE IN OPERATION AT ANY GIVEN TIME.
10. VEHICLE DELIVERY TRUCKS SHALL UNLOAD IN FRONT OF THE SHOWROOM BUILDING; VEHICLE DELIVERY TRUCKS SHALL NOT ENTER THE UPPER PARKING AREAS.
    VEHICLE DELIVERIES SHALL TAKE PLACE AFTER HOURS BETWEEN 7:00 P.M. AND 8:00 P.M.
    THE HOURS OF OPERATION HAVE BEEN IDENTIFIED BY THE APPLICANT TO BE:
    SERVICE DEPARTMENT – MONDAY THROUGH FRIDAY 7:30 A.M. TO 6:00 P.M.
    SALES DEPARTMENT – MONDAY THROUGH THURSDAY 9:00 A.M. TO 7:00 P.M., FRIDAY 9:00 A.M. TO 6:00 P.M. AND SATURDAY 9:00 A.M. TO 5:00 P.M.
11. THE EXISTING INTERIOR LOT LINES AND THE EXISTING PROPERTY LINES OF THE ADJOINING PROPERTIES IN CONTRACT SHALL BE MERGED TO FORM ONE OVERALL PROPERTY TO SERVICE THE AUTO DEALERSHIP.
12. ALL RETAINING WALLS IN EXCESS OF FOUR (4) FEET SHALL BE DESIGNED BY A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER, AND INSPECTED AND CERTIFIED FOR PROPER CONSTRUCTION BY THE DESIGN ENGINEER.

## LAYOUT LEGEND

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING BUILDING LINE
- BUILDING SETBACK LINE
- LANDSCAPE BUFFER SETBACK LINE
- EXISTING PAVEMENT EDGE OR CURB LINE
- EXISTING FENCE
- EXISTING FENCE
- EXISTING STONE WALL
- EXISTING RETAINING WALL
- EXISTING LIGHT STANDARD
- EXISTING UTILITY POLE
- EXISTING ROCK LEDGE
- PROPOSED BUILDING LINE
- PROPOSED BUILDING OVERHANG
- PROPOSED CONCRETE CURB
- PROPOSED N.Y.S.D.O.T. CONCRETE CURB
- PROPOSED MONOLITHIC CURB & SIDEWALK
- TRAFFIC SIGN LOCATION & DESIGNATION
- PROPOSED RETAINING WALL & CHAIN LINK SAFETY FENCE
- 18" WIDE WHITE STOP LINE WITH DOUBLE YELLOW LINE
- ARROW MARKING ON PAVEMENT
- PROPOSED SAW CUT LINE
- PROPOSED CHAIN LINK FENCE
- PROPOSED POROUS PAVEMENT
- LIGHT DUTY PAVEMENT
- HEAVY DUTY PAVEMENT
- TOWN STANDARD PAVEMENT
- NYSDOT STANDARD PAVEMENT
- SLM (SLICE MEDIUM)
- DOUBLE SLM (SLICE MEDIUM)
- SLM WITH SHEILD (SLICE MEDIUM)
- BUILDING MOUNTED LIGHT




| No. | Revision | Date | By |
|---|---|---|---|
| 1. | TOWN CONSULTANT & PLANNING BOARD COMMENTS | 12/28/2017 | SS |
| 2. | REVISED PER FIRE DEPARTMENT COMMENTS | 05/23/2018 | SMR |
| 3. | WCDH SUBMISSION | 06/26/2018 | SMR |
| 4. | TOWN PLANNING BOARD SUBMISSION | 09/06/2018 | SMR |
| 5. | REVISED PER TOWN COMMENTS | 11/29/2018 | MT |
| 6. | REVISED PER TOWN COMMENTS | 12/26/2018 | TC |

*Previous Editions Obsolete*

APPLICANT/OWNER:
CELEBRITY MOTOR CAR, LLC
130 ROUTE 10
WHIPPANY, NJ 07981

ARCHITECT:
SULLIVAN ARCHITECTURE
31 MAMARONECK AVENUE
WHITE PLAINS, NY 10601


JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC
JMC Site Development Consultants, LLC
John Meyer Consulting, Inc.
120 BEDFORD ROAD • ARMONK, NY 10504
voice 914.273.5225 • fax 914.273.2102
www.jmcpllc.com


# LAYOUT PLAN

MERCEDES BENZ OF GOLDENS BRIDGE
NYS ROUTE 22
TOWN OF LEWISBORO, NY

ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW, EXCEPT AS PROVIDED FOR BY SECTION 7209, SUBSECTION 2.

| | | | |
|---|---|---|---|
| Drawn: | SS | Approved: | AN |
| Scale: | 1" = 30' | | |
| Date: | 11/30/2017 | | |
| Project No: | 16124 | | |
| W24-SIE | LAY | LAY.scr | |

Drawing No: C-100



NOT FOR CONSTRUCTION

## BORING TABLE

| BORING # | SURFACE ELEVATION | DEPTH TO BEDROCK (FEET) | DEPTH TO GROUNDWATER (FEET) |
|---|---|---|---|
| 1 | 211.8 | NOT ENCOUNTERED | 15 |
| 2 | 211.6 | 5 | NOT ENCOUNTERED |
| 3 | 210.2 | 19 | 10 |
| 4 | 202.1 | 6 | NOT ENCOUNTERED |
| 5 | 197.6 | 20.5 | 8.50 |
| 6 | 199.2 | 2 | NOT ENCOUNTERED |
| 7 | 189.0 | 4 | NOT ENCOUNTERED |
| 7b | 189.1 | 3 | NOT ENCOUNTERED |
| 8 | 179.8 | 9.5 | 8.50 |
| 9 | 180.3 | 3 | NOT ENCOUNTERED |
| 10 | 195.0 | 13 | NOT ENCOUNTERED |
| 11 | 175.5 | 11 | NOT ENCOUNTERED |
| 12 | 175.4 | 22 | 10.50 |
| 13 | 176.0 | 16.5 | 15 |
| 14 | 173.0 | NOT ENCOUNTERED | 10 |

## NOTES:

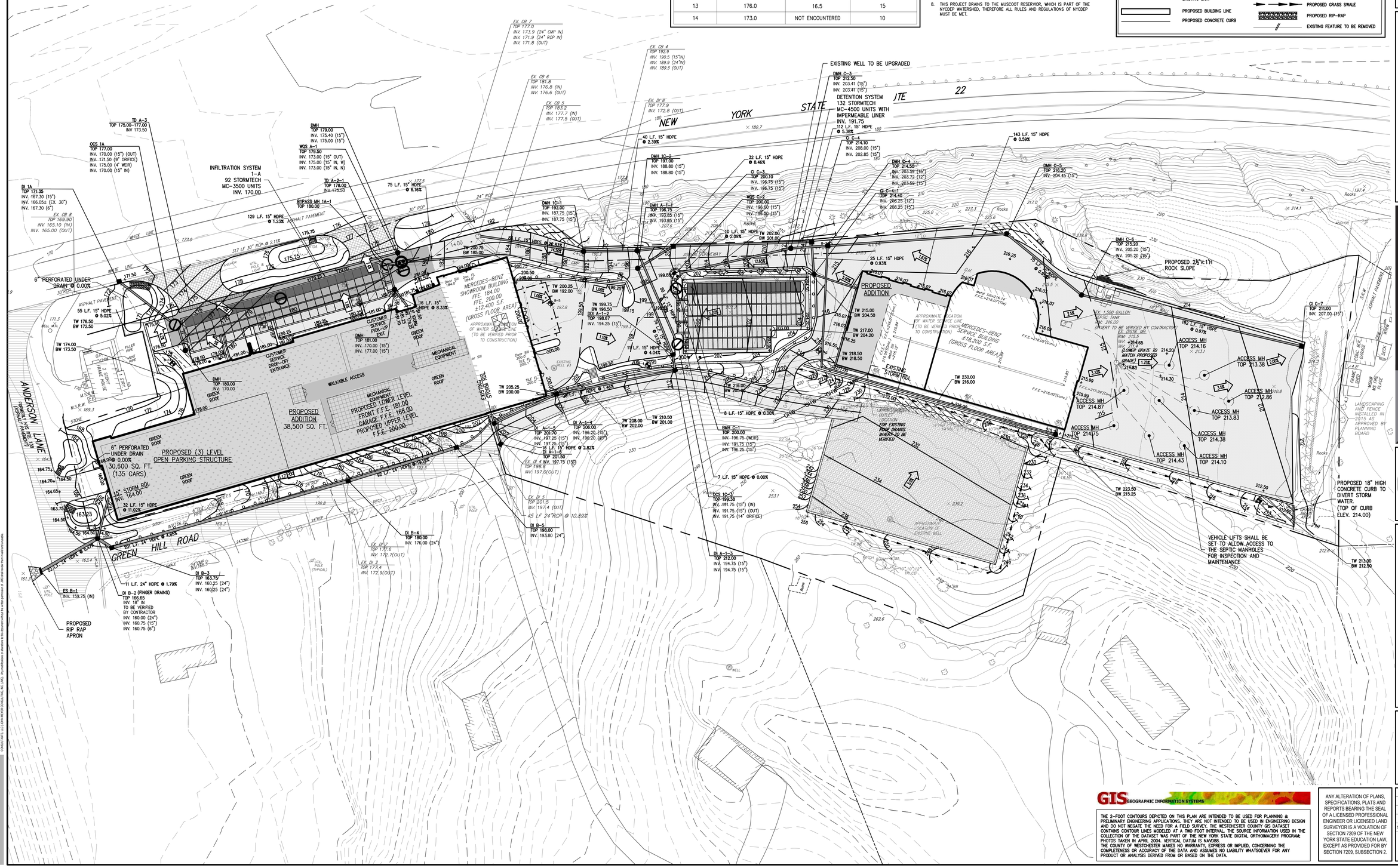
1. EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM SURVEY TITLED, "TOPOGRAPHIC SURVEY OF PROPERTY," PREPARED BY INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C., DATED 8/17/2017.
2. THE LOCATION OF THE EXISTING SUBSURFACE SEPTIC UTILITY INFORMATION WAS TAKEN FROM AS BUILTS ON DRAWING SI-5 "SEWAGE PROPOSAL AND WATER SUPPLY", LAST REVISED 08/31/1983 AS ACCEPTED BY THE WESTCHESTER COUNTY DEPARTMENT OF HEALTH ON 09/27/1983.
3. ALL EXISTING STRUCTURES TO REMAIN SHALL HAVE THEIR TOPS AND GRATES ADJUSTED TO PROPOSED FINISHED GRADE.
4. PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL ROOF DRAIN LEADERS AND FOUNDATION DRAINS FOR CONNECTION INTO THE NEW STORMWATER MANAGEMENT SYSTEM.
5. AS REQUIRED BY THE TOWN ENGINEER, THE DESIGN ENGINEER SHALL CERTIFY PROPER INSTALLATION AND OPERATION OF THE STORMWATER SYSTEMS. THE TOWN OF LEWISBORO ENGINEER SHALL INSPECT ALL WORK ASSOCIATED WITH THE PROPOSED DRAINAGE SYSTEM AND DETERMINE THE SYSTEM SUBSTANTIALLY COMPLETE PRIOR TO THE ISSUANCE OF A BUILDING PERMIT. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FIX, REPAIR OR REPLACE ANY AND ALL ITEMS NECESSARY IN THE EVENT IT IS DETERMINED BY THE TOWN ENGINEER THAT THE DRAINAGE SYSTEM IS NOT COMPLETED PER TOWN STANDARDS.
6. THE BORING LOCATIONS, DESIGNATIONS AND INFORMATION SHOWN ON THIS PLAN WERE TAKEN FROM THE "GEOTECHNICAL REPORT" DATED JULY 2011, PREPARED BY MCLAREN ENGINEERING GROUP.
7. UNLESS OTHERWISE SPECIFIED, PIPE FOR STORM DRAINS SHALL BE HIGH DENSITY POLYETHYLENE PIPE (HDPE) WITH A SMOOTH INTERIOR AND ANNULAR EXTERIOR CORRUGATIONS IN ACCORDANCE WITH ASTM F-2648. JOINTS SHALL BE WATERTIGHT IN ACCORDANCE WITH ASTM D-3212.
8. THIS PROJECT DRAINS TO THE MUSCOOT RESERVIOR, WHICH IS PART OF THE NYCDEP WATERSHED, THEREFORE ALL RULES AND REGULATIONS OF NYCDEP MUST BE MET.

## LEGEND

EXISTING PROPERTY LINE
ADJACENT PROPERTY LINE
EXISTING EASEMENT LINE
EXISTING BUILDING LINE
EXISTING PAVEMENT EDGE
EXISTING CURB LINE
EXISTING CONTOUR
EXISTING INDEX CONTOUR
EXISTING STONE WALL
EXISTING RETAINING WALL
EXISTING FENCE
EXISTING DRAIN INLET
EXISTING MANHOLE
EXISTING UTILITY POLE
EXISTING LIGHT POLE
EXISTING SIGN
PROPOSED BUILDING LINE
PROPOSED CONCRETE CURB
PROPOSED CONCRETE SIDEWALK
PROPOSED FINISHED GRADE
PROPOSED SPOT GRADE
PROPOSED SANITARY SEWER MANHOLE
PROPOSED STORM DRAIN MANHOLE
PROPOSED TYPE CI DRAIN INLET
PROPOSED TYPE DI DRAIN INLET
PROPOSED TRENCH DRAIN
PROPOSED HEADWALL
PROPOSED WATER QUALITY STRUCTURE
PROPOSED SUBSURFACE DRAINAGE OUTLET CONTROL STRUCTURE
PROPOSED CLEANOUT
PROPOSED RETAINING WALL (DESIGN BY OTHERS)
BORING LOCATION AND DESIGNATION
PROPOSED GRASS SWALE
PROPOSED RIP-RAP
EXISTING FEATURE TO BE REMOVED

## RETAINING WALL SPOT GRADE LEGEND

(PROPOSED GRADE) TW
BW (PROPOSED GRADE)




| No. | Revision | Date | By |
|---|---|---|---|
| 1. | TOWN CONSULTANT & PLANNING BOARD COMMENTS | 12/28/2017 | SS |
| 2. | REVISED PER FIRE DEPARTMENT COMMENTS | 05/23/2018 | SMR |
| 3. | WCDH SUBMISSION | 06/26/2018 | SMR |
| 4. | TOWN PLANNING BOARD SUBMISSION | 09/06/2018 | SMR |
| 5. | REVISED PER TOWN COMMENTS | 11/29/2018 | SMR |
| 6. | REVISED PER TOWN COMMENTS | 12/26/2018 | TC |

Previous Editions Obsolete

APPLICANT/OWNER:
CELEBRITY MOTOR CAR, LLC
130 ROUTE 10
WHIPPANY, NJ 07981

ARCHITECT:
SULLIVAN ARCHITECTURE
31 MAMARONECK AVENUE
WHITE PLAINS, NY 10601


JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC
JMC Site Development Consultants, LLC
John Meyer Consulting, Inc.
120 BEDFORD ROAD • ARMONK, NY 10504
voice 914.273.5225 • fax 914.273.2102
www.jmcpllc.com


# GRADING & DRAINAGE PLAN

MERCEDES BENZ OF GOLDENS BRIDGE
NYS ROUTE 22
TOWN OF LEWISBORO, NY

GIS GEOGRAPHIC INFORMATION SYSTEMS

THE 2-FOOT CONTOURS DEPICTED ON THIS PLAN ARE INTENDED TO BE USED FOR PLANNING & PRELIMINARY ENGINEERING APPLICATIONS. THEY ARE NOT INTENDED TO BE USED IN ENGINEERING DESIGN AND DO NOT NEGATE THE NEED FOR A FIELD SURVEY. THE WESTCHESTER COUNTY GIS DATASET CONTAINS CONTOUR LINES MODELED AT A TWO FOOT INTERVAL. THE SOURCE INFORMATION USED IN THE COLLECTION OF THE DATASET WAS PART OF THE NEW YORK STATE DIGITAL ORTHOIMAGERY PROGRAM; PHOTOS TAKEN IN APRIL 2004. VERTICAL DATUM IS NAVD88.
THE COUNTY OF WESTCHESTER MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE COMPLETENESS OR ACCURACY OF THE DATA AND ASSUMES NO LIABILITY WHATSOEVER FOR ANY PRODUCT OR ANALYSIS DERIVED FROM OR BASED ON THE DATA.



Drawn: SS Approved: AN
Scale: 1" = 30'
Date: 11/30/2017
Project No: 16124
16124-GRAD-SITE GRAD DRAIN GRAD-DRAIN.scr
Drawing No: C-200



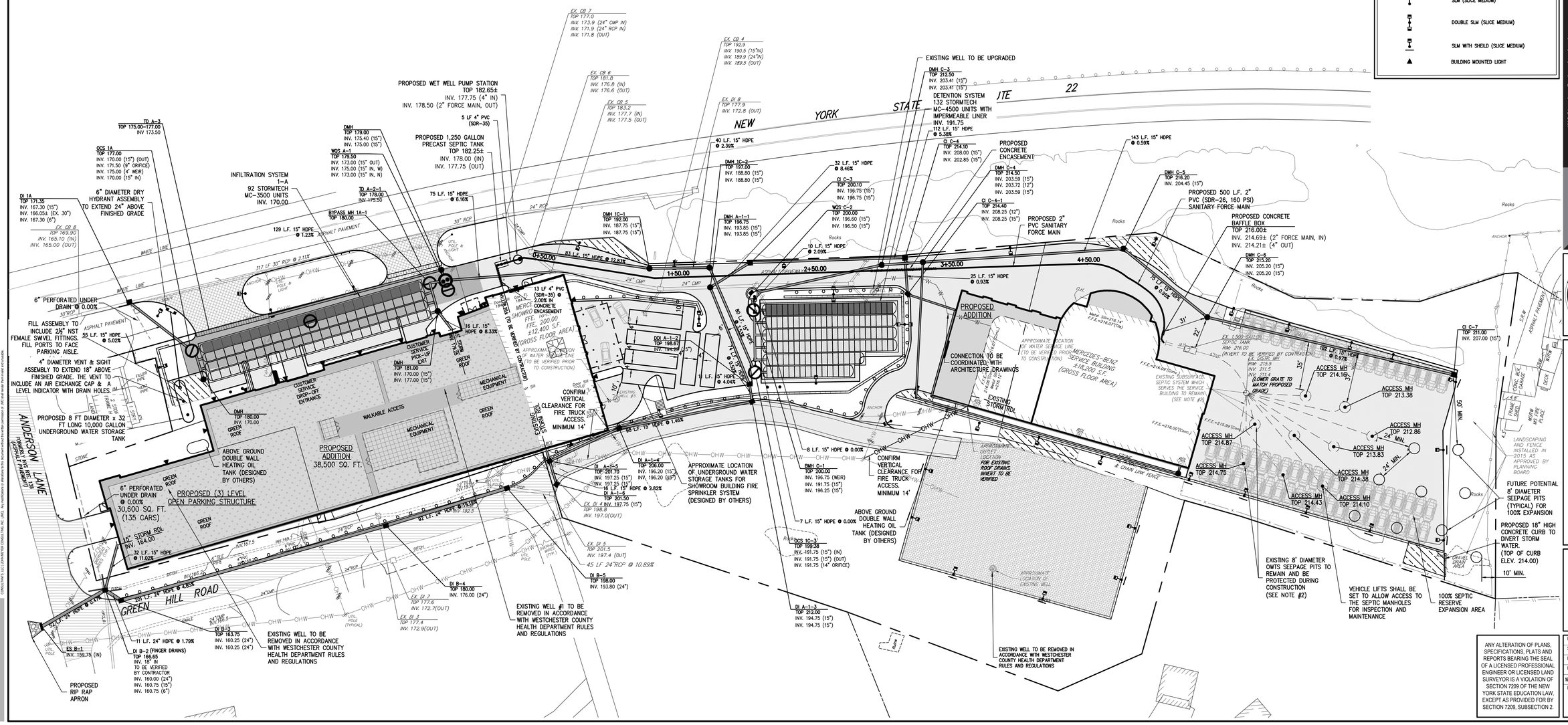
NOT FOR CONSTRUCTION

## NOTES:

1. EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM SURVEY TITLED, "TOPOGRAPHIC SURVEY OF PROPERTY," PREPARED BY INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C., DATED 8/17/2017.
2. THE LOCATION OF THE EXISTING SUBSURFACE SEPTIC UTILITY INFORMATION WAS TAKEN FROM AS BUILTS ON DRAWING S-5 "SEWAGE PROPOSAL AND WATER SUPPLY", LAST REVISED 08/31/1983 AS ACCEPTED BY THE WESTCHESTER COUNTY DEPARTMENT OF HEALTH ON 09/27/1983.
3. ALL EXISTING STRUCTURES TO REMAIN SHALL HAVE THEIR TOPS AND GRATES ADJUSTED TO PROPOSED FINISHED GRADE.
4. PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL ROOF DRAIN LEADERS AND FOUNDATION DRAINS FOR CONNECTION INTO THE NEW STORMWATER MANAGEMENT SYSTEM.
5. AS REQUIRED BY THE TOWN ENGINEER, THE DESIGN ENGINEER SHALL CERTIFY PROPER INSTALLATION AND OPERATION OF THE STORMWATER SYSTEMS. THE TOWN OF LEWISBORO ENGINEER SHALL INSPECT ALL WORK ASSOCIATED WITH THE PROPOSED DRAINAGE SYSTEM AND DETERMINE THE SYSTEM SUBSTANTIALLY COMPLETE PRIOR TO THE ISSUANCE OF A BUILDING PERMIT. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FIX, REPAIR OR REPLACE ANY AND ALL ITEMS NECESSARY IN THE EVENT IT IS DETERMINED BY THE TOWN ENGINEER THAT THE DRAINAGE SYSTEM IS NOT COMPLETED PER TOWN STANDARDS.
6. ALL SANITARY SEWER AND WATER UTILITIES MUST BE REMOVED AND/OR ABANDONED IN ACCORDANCE WITH WESTCHESTER COUNTY HEALTH DEPARTMENT RULES AND REGULATIONS.
7. THE MAINTENANCE OF THE UNDERGROUND WATER STORAGE TANK SHALL BE THE RESPONSIBILITY OF THE APPLICANT. YEARLY INSPECTIONS/TESTING OF THE TANK SHALL BE CONDUCTED BY THE APPLICANT; PROOF OF INSPECTION/TESTING SHALL BE SUBMITTED TO THE PLANNING BOARD SECRETARY.
8. ALL PROPOSED STORMWATER INFRASTRUCTURE SHALL BE MAINTAINED BY THE APPLICANT IN ACCORDANCE WITH THE MAINTENANCE PROCEDURES SPECIFIED ON THE SITE DEVELOPMENT PLANS AND WITHIN THE SWPPP.
9. UNLESS OTHERWISE SPECIFIED, PIPE FOR STORM DRAINS SHALL BE HIGH DENSITY POLYETHYLENE PIPE (HDPE) WITH A SMOOTH INTERIOR AND ANNULAR EXTERIOR CORRUGATIONS IN ACCORDANCE WITH ASTM F-2648. JOINTS SHALL BE WATERTIGHT IN ACCORDANCE WITH ASTM D-3212.
10. UNLESS OTHERWISE SPECIFIED, PIPE FOR SANITARY SEWER GRAVITY LINES SHALL BE POLYVINYL CHLORIDE PIPE (PVCP), SDR-35, WITH PUSH-ON JOINTS IN ACCORDANCE WITH ASTM D-3034 AND D-3212.
11. UNLESS OTHERWISE SPECIFIED, PIPE FOR SANITARY SEWER FORCE MAINS SHALL BE POLYVINYL CHLORIDE PRESSURE PIPE (PVCPP), SDR-26, 160 PSI, WITH PUSH-ON JOINTS IN ACCORDANCE WITH ASTM D-2241.
12. UNLESS OTHERWISE SPECIFICED, PIPE FOR WATER LINES SHALL BE HIGH DENSITY POLYETHYLENE PIPE (HDPE), SDR-9 WITH BARD JOINTS IN ACCORDANCE WITH AWWA C-901.
13. ELECTRIC AND TELEPHONE LINES, FIRE ALARM AND CABLE TELEVISION LINES SHALL BE INSTALLED UNDERGROUND IN CONDUIT IN ACCORDANCE WITH THE REQUIREMENTS OF THE UTILITY COMPANY HAVING JURISDICTION.
14. THERE SHALL BE NO TREES WITHIN 10 FEET OF THE OWTS.
15. THERE ARE NO WELLS WITHIN 200' OF OWTS UNLESS OTHERWISE SHOWN ON PLAN.
16. THERE ARE NO OWTS WITHIN 200' OF A WELL UNLESS OTHERWISE SHOWN ON PLAN.
17. THE EXISTING OWTS AREA SHALL BE ISOLATED AND PROTECTED AGAINST DAMAGE BY EROSION, STORAGE OF EARTH OR MATERIALS, DISPLACEMENT, COMPACTION OR OTHER ADVERSE PHYSICAL CHANGE IN THE CHARACTERISTICS OF THE SOIL OR IN THE DRAINAGE OF THE AREA.
18. IF FOR ANY REASON THE APPROVED CONSTRUCTION PLAN CANNOT BE FOLLOWED, A REVISED PLAN MUST BE PREPARED, SUBMITTED AND APPROVED BY WCDH.
19. THE DESIGN PROFESSIONAL SHALL SUPERVISE THE CONSTRUCTION OF THE OWTS AND MAKE AN OPEN WORKS INSPECTION.
20. WITHIN 24-HOURS OF THE COMPLETION OF THE OWTS, THE DESIGN PROFESSIONAL MUST NOTIFY THE WESTCHESTER COUNTY DEPARTMENT OF HEALTH (WCDH) THAT THE OWTS IS READY FOR INSPECTION BY SUBMITTING A COMPLETED REQUEST FOR AN OPEN WORKS INSPECTION ON THE APPROPRIATE FORM TO WCDH.
21. THE INSTALLATION OF THE OWTS SHALL BE IN ACCORDANCE WITH THE RULES AN REGULATIONS FOR THE DESIGN AND CONSTRUCTION OF RESIDENTIAL SUBSURFACE SEWAGE TREATMENT SYSTEMS AND DRILLED WELLS IN WESTCHESTER COUNTY, NY.
22. ALL PIPES CONNECTING TO TANK AND BOXES SHALL BE CUT FLUSH WITH THE INSIDE WALL OF THE BOX.
23. THE PROPOSED OWTS SHALL BE INSTALLED BY A WESTCHESTER COUNTY LICENSED SEPTIC CONTRACTOR.
24. PRIOR TO ANY EXCAVATION ALL UNDERGROUND UTILITIES MUST BE LOCATED. CALL 1-800-962-7962.
25. THE WESTCHESTER COUNTY HEALTH DEPARTMENT APPROVAL EXPIRES ONE YEAR FROM THE DATE ON THE APPROVAL STAMP AND IS REQUIRED TO BE RENEWED ON OR BEFORE THE EXPIRATION DATE. THE APPROVAL IS REVOCABLE FOR CAUSE OR MAY BE AMENDED OR MODIFIED WHEN CONSIDERED NECESSARY BY THE DEPARTMENT.
26. THERE ARE NO RESERVOIRS, RESERVOIR STEMS OR CONTROLLED LAKE WITHIN 500 FEET OF THE PROPOSED OWTS UNLESS OTHERWISE SHOWN ON PLAN.
27. THERE ARE NO NYSDEC WETLANDS OR WATERCOURSES WITHIN 200 FEET OF THE PROPOSED OWTS UNLESS OTHERWISE SHOWN ON PLAN.
28. NYCDEP MUST BE CONTACTED AT LEAST TWO DAYS PRIOR TO START OF CONSTRUCTION OF THE OWTS SO THAT THE NYCDEP MAY INSPECT AND MONITOR THE INSTALLATION.
29. INTERNAL OIL-WATER SEPARATORS WILL BE INSTALLED IN EACH BUILDING AND WILL FLOW INTO THE SANITARY SEWER. OIL-WATER SEPARATORS WILL BE SHOWN ON THE ARCHITECTURAL BUILDING DRAWINGS.
30. THE EXTERIOR ABOVE GROUND DOUBLE WALL HEATING OIL STORAGE TANKS SHOWN ON THE PLAN SHALL BE SIZED AND DESIGNED BY THE BUILDING MEP ENGINEER.

## LEGEND

- EXISTING PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING BUILDING LINE
- EXISTING PAVEMENT EDGE
- EXISTING CURB LINE
- EXISTING CONTOUR
- EXISTING INDEX CONTOUR
- EXISTING STONE WALL
- EXISTING RETAINING WALL
- EXISTING FENCE
- EXISTING STORM DRAIN LINE AND SIZE
- EXISTING SANITARY LINE AND SIZE
- EXISTING WATER LINE
- EXISTING OVERHEAD WIRES
- EXISTING DRAIN INLET
- EXISTING MANHOLE
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING SIGN
- PROPOSED BUILDING LINE
- PROPOSED CONCRETE CURB
- MH PROPOSED STORM DRAIN MANHOLE
- PROPOSED TYPE CI DRAIN INLET
- DI PROPOSED TYPE DI DRAIN INLET
- PROPOSED TRENCH DRAIN
- PROPOSED HEADWALL
- WQS PROPOSED WATER QUALITY STRUCTURE
- OCS PROPOSED SUBSURFACE DRAINAGE OUTLET CONTROL STRUCTURE
- PROPOSED STORM DRAIN LINE
- PROPOSED SANITARY SEWER LINE
- PROPOSED WATER LINE
- PROPOSED RIP-RAP APRON
- PROPOSED RETAINING WALL (DESIGN BY OTHERS)
- EXISTING FEATURE TO BE REMOVED
- SLM (SLICE MEDIUM)
- DOUBLE SLM (SLICE MEDIUM)
- SLM WITH SHEILD (SLICE MEDIUM)
- BUILDING MOUNTED LIGHT




| No. | Revision | Date | By |
|---|---|---|---|
| 1. | TOWN CONSULTANT & PLANNING BOARD COMMENTS | 12/28/2017 | SS |
| 2. | REVISED PER FIRE DEPARTMENT COMMENTS | 05/23/2018 | SMR |
| 3. | WCDH SUBMISSION | 06/26/2018 | SMR |
| 4. | REVISED PER TOWN COMMENTS | 11/29/2018 | SMR |
| 5. | REVISED PER TOWN COMMENTS | 12/26/2018 | TC |

*Previous Editions Obsolete*

APPLICANT/OWNER:
CELEBRITY MOTOR CAR, LLC
130 ROUTE 10
WHIPPANY, NJ 07981

ARCHITECT:
SULLIVAN ARCHITECTURE
31 MAMARONECK AVENUE
WHITE PLAINS, NY 10601


JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC
JMC Site Development Consultants, LLC
John Meyer Consulting, Inc.
120 BEDFORD ROAD • ARMONK, NY 10504
voice 914.273.5225 • fax 914.273.2102
www.jmcpllc.com


# UTILITIES PLAN

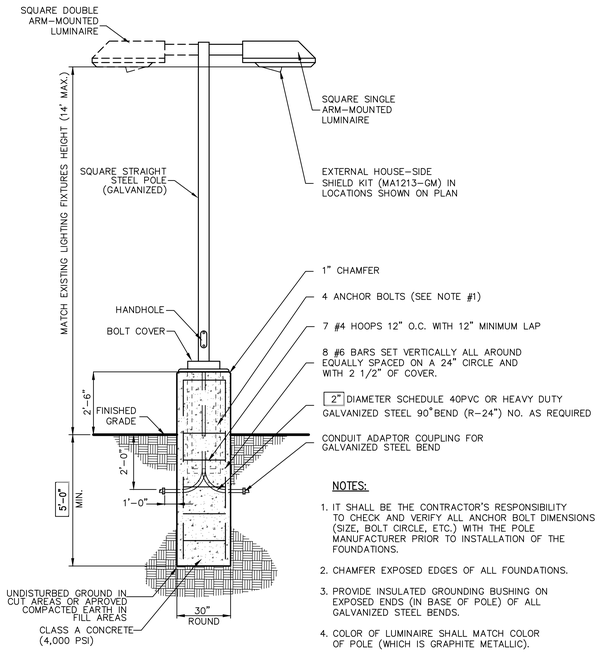
## MERCEDES BENZ OF GOLDENS BRIDGE

NYS ROUTE 22
TOWN OF LEWISBORO, NY

ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW, EXCEPT AS PROVIDED FOR BY SECTION 7209, SUBSECTION 2.

| | | |
|---|---|---|
| Drawn: SS | Approved: AN | |
| Scale: 1" = 30' | | |
| Date: 11/30/2017 | | |
| Project No: 16124 | | |
| 16124-GMD-UTL | UTIL | UTIL.scr |
| Drawing No: C-300 | | |

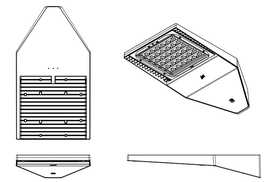
NOT FOR CONSTRUCTION




NOTES:

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CHECK AND VERIFY ALL ANCHOR BOLT DIMENSIONS (SIZE, BOLT CIRCLE, ETC.) WITH THE POLE MANUFACTURER PRIOR TO INSTALLATION OF THE FOUNDATIONS.
2. CHAMFER EXPOSED EDGES OF ALL FOUNDATIONS.
3. PROVIDE INSULATED GROUNDING BUSHING ON EXPOSED ENDS (IN BASE OF POLE) OF ALL GALVANIZED STEEL BENDS.
4. COLOR OF LUMINAIRE SHALL MATCH COLOR OF POLE (WHICH IS GRAPHITE METALLIC).

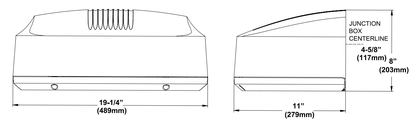
SITE LIGHT FIXTURE



LUMINAIRE & POLE SPECIFICATIONS

1. SITE LIGHTING FIXTURES & POLES
   SLM (SLICE MEDIUM)
   LIGHTS: SLM
   LUMINAIRE: LSI SLM-LED-18L-SIL-FT-UNV-DIM-50-70CRI
   POLE: SQUARE
2. LUMINAIRE AND POLE TO BE GRAPHITE METALLIC.
3. 15' TILT POLE QUICK MOUNT BRACKET - SQUARE POLE10 688003CLR
4. LIGHTING STANDARDS ADJACENT TO RESIDENTIAL ZONING DISTRICTS SHALL HAVE EXTERNAL HOUSE-SIDE SHIELD KIT (MA1213-GM).
5. BUILDING MOUNTED FIXTURE
   LIGHTS: XPWS3
   LUMINAIRE: LSI XPWS3-FT-LED-48-450-CW-UE
6. BUILDING LIGHTS ARE MOUNTED 12 FEET ABOVE GRADE.

BUILDING MOUNTED FIXTURE




| Luminaire Schedule | | | | | | |
|---|---|---|---|---|---|---|
| Symbol | Qty | Label | Arrangement | Total Lamp Lumens | LLF | Description |
| | 56 | SLM-LED-18L-SIL-FTA-50-70CRI- | SINGLE | N.A. | 0.900 | SLM-LED-18L-SIL-FTA-50-70CRI-IL |

| Calculation Summary | | | | | | | |
|---|---|---|---|---|---|---|---|
| Label | CalcType | Units | Avg | Max | Min | Avg/Min | Max/Min |
| Central Lot_Planar_2 | Illuminance | Fc | 6.57 | 13.4 | 0.9 | 7.30 | 14.89 |
| Eastern Lot_Planar_2 | Illuminance | Fc | 4.72 | 11.9 | 0.1 | 47.20 | 119.00 |
| Rear Driveway_Planar | Illuminance | Fc | 4.58 | 10.0 | 0.1 | 45.80 | 100.00 |
| Roadway_Planar | Illuminance | Fc | 7.64 | 19.3 | 0.1 | 76.40 | 193.00 |
| Southern Lot_Planar_2 | Illuminance | Fc | 5.00 | 11.3 | 0.2 | 25.00 | 56.50 |
| Total Property | Illuminance | Fc | 0.83 | 19.8 | 0.0 | N.A. | N.A. |

LIGHTING LEGEND

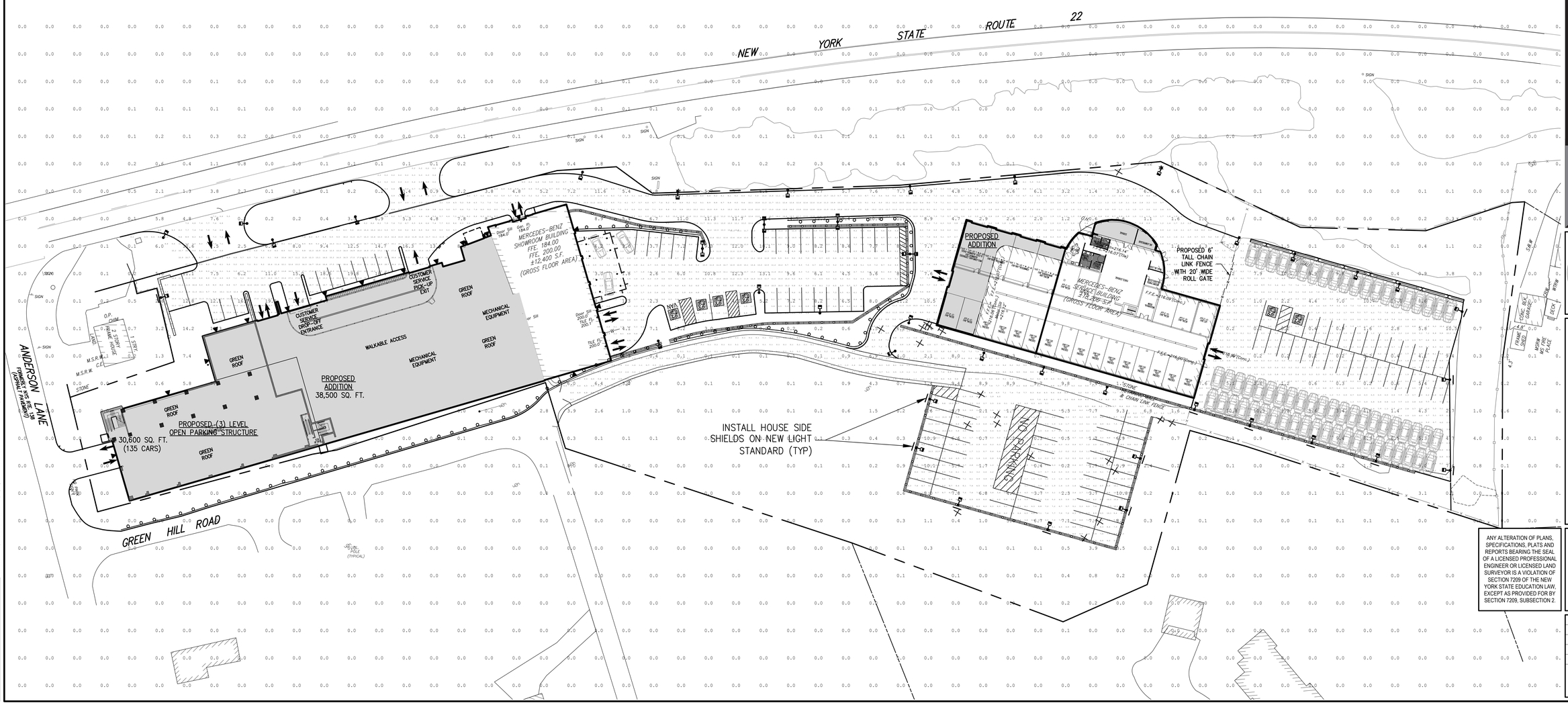
- PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING BUILDING LINE
- EXISTING PAVEMENT EDGE OR CURB LINE
- EXISTING FENCE
- EXISTING STONE WALL
- EXISTING RETAINING WALL
- EXISTING ROCK LEDGE
- PROPOSED BUILDING LINE
- PROPOSED BUILDING OVERHANG
- PROPOSED CONCRETE CURB
- PROPOSED RETAINING WALL

PROPOSED LIGHTS

- SLM (SLICE MEDIUM)
- DOUBLE SLM (SLICE MEDIUM)
- SLM WITH SHEILD (SLICE MEDIUM)
- BUILDING MOUNTED LIGHT
- ILLUMINANCE FOOTCANDLE VALUES

NOTES:

1. EXISTING INFORMATION WAS TAKEN FROM "SURVEY OF PROPERTY" FOR CELEBRITY OF WESTCHESTER, LLC AS PREPARED BY INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C., DATED AUGUST 17, 2017.
2. THE ILLUMINANCE FOOTCANDLE LIGHTING LEVELS SHOWN ON THIS PLAN ARE MEASURED AT FINISHED GRADE.
3. ALL OF THE LIGHTING FIXTURES WILL BE ILLUMINATED FROM DUSK UNTIL CLOSE OF BUSINESS. THE DEALERSHIP SHALL INSTALL NIGHT CAMERAS FOR SECURITY PURPOSES.
4. ALL EXISTING LIGHT FIXTURES WILL BE REMOVED.




ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW, EXCEPT AS PROVIDED FOR BY SECTION 7209, SUBSECTION 2.

| No. | Revision | Date | By |
|---|---|---|---|
| 1. | REVISED PER TOWN COMMENTS | 12/26/2018 | TC |

Previous Editions Obsolete

APPLICANT/OWNER:
CELEBRITY MOTOR CAR, LLC
130 ROUTE 10
WHIPPANY, NJ 07981

ARCHITECT:
SULLIVAN ARCHITECTURE
31 MAMARONECK AVENUE
WHITE PLAINS, NY 10601


JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC
JMC Site Development Consultants, LLC
John Meyer Consulting, Inc.
120 BEDFORD ROAD • ARMONK, NY 10504
voice 914.273.5225 • fax 914.273.2102
www.jmcpllc.com


LIGHTING PLAN

MERCEDES BENZ OF GOLDENS BRIDGE
NYS ROUTE 22
TOWN OF LEWISBORO, NY

| | | | |
|---|---|---|---|
| Drawn: | SS | Approved: | AN |
| Scale: | 1" = 30' | | |
| Date: | 11/29/2018 | | |
| Project No: | 16124 | | |
| 16124-LIGHTING | LIGHTING | LIGHT.scr | |
| Drawing No: | C-600 | | |

NOT FOR CONSTRUCTION

## PLANT SCHEDULE

| DECIDUOUS TREES | QTY | COMMON NAME / BOTANICAL NAME | CAL./HT. | ROOT COND. | REMARKS |
|---|---|---|---|---|---|
| AAA | 1 | Armstrong Red Maple / Acer rubrum 'Armstrong' | 2 1/2" – 3" Cal. | B & B | |
| AR | 4 | Red Maple / Acer rubrum 'Red Sunset' | 3" – 3 1/2" Cal. | B & B | |
| NS | 7 | Black Tupelo / Nyssa Sylvatica | 3" – 3 1/2" Cal. | B & B | |

| EVERGREEN TREES | QTY | COMMON NAME / BOTANICAL NAME | CAL./HT. | ROOT COND. | REMARKS |
|---|---|---|---|---|---|
| IOK | 3 | Male American Holly / Ilex Opaca 'Jersey Knight' | 5'–6' HT. | B & B | |
| IOP | 9 | Female American Holly / Ilex Opaca 'Jersey Princess' | 7'–8' HT. | B & B | |
| PM | 3 | Douglas Fir / Pseudotsuga Menziesii | 10' – 12' HT. | B & B | |
| TG | 28 | Green Giant Arborvitae / Thuja standishii x plicata 'Green Giant' | 8'–10' HT | B & B | |

| FLOWERING TREES | QTY | COMMON NAME / BOTANICAL NAME | CAL./HT. | ROOT COND. | REMARKS |
|---|---|---|---|---|---|
| AM | 1 | Shadblow Serviceberry / Amelanchier canadensis | 2" – 2 1/2" Cal. | B & B | |
| PK | 8 | Kwanzan Cherry / Prunus Serrulata 'Kwanzan' | 2" – 2 1/2" Cal. | B & B | |

| SHRUBS | QTY | COMMON NAME / BOTANICAL NAME | CAL./HT. | ROOT COND. | REMARKS |
|---|---|---|---|---|---|
| BS | 42 | English Boxwood / Buxus sempervirens | 15"–18" HT. | Cont. | |
| CS | 15 | Redosier Dogwood / Cornus sericea | 18" – 24" HT | Cont. | |
| FSW | 10 | Weeping Forsythia / Forsythia suspensa | 3' – 4' HT. | B & B | |
| IGC | 92 | Compact Inkberry / Ilex glabra 'Compacta' | 4' – 6' HT. | B & B | |
| KL | 78 | Mountain Laurel / Kalmia latifolia | 3' – 4' HT. | B & B | |
| PE | 41 | Fountain Grass / Pennisetum Alopecuroides | 12" – 18" HT. | Cont. | |
| RM | 48 | Rose Bay / Rhododendron Maximum | 4' – 5' HT. | B & B | |
| SB | 41 | Snowmound Nippon Spirea / Spiraea Nipponica 'Snow Mound' | 30" – 36" HT. | Cont. | |

| ANNUALS/PERENNIALS | QTY | COMMON NAME / BOTANICAL NAME | CAL./HT. | ROOT COND. | REMARKS |
|---|---|---|---|---|---|
| HO2 | 12 | Stella de Oro Daylily / Hemerocallis x 'Stella de Oro' | 2 gal | Cont. | |

| SHRUB AREAS | QTY | COMMON NAME / BOTANICAL NAME | CONT | ROOT COND. | REMARKS |
|---|---|---|---|---|---|
| JP | 131 | Parson's Juniper / Juniperus davurica 'Parsonii' | FLAT @ 65" O.C. | Cont. | |
| LA | 10 | Coastal Leucothoe / Leucothoe axillaris | 1 GAL. @ 60" O.C. | Cont. | |
| RF | 23 | Mary Rose (Pink) / Rosa Mary Rose | 1 GAL. @ 30" O.C. | Cont. | |

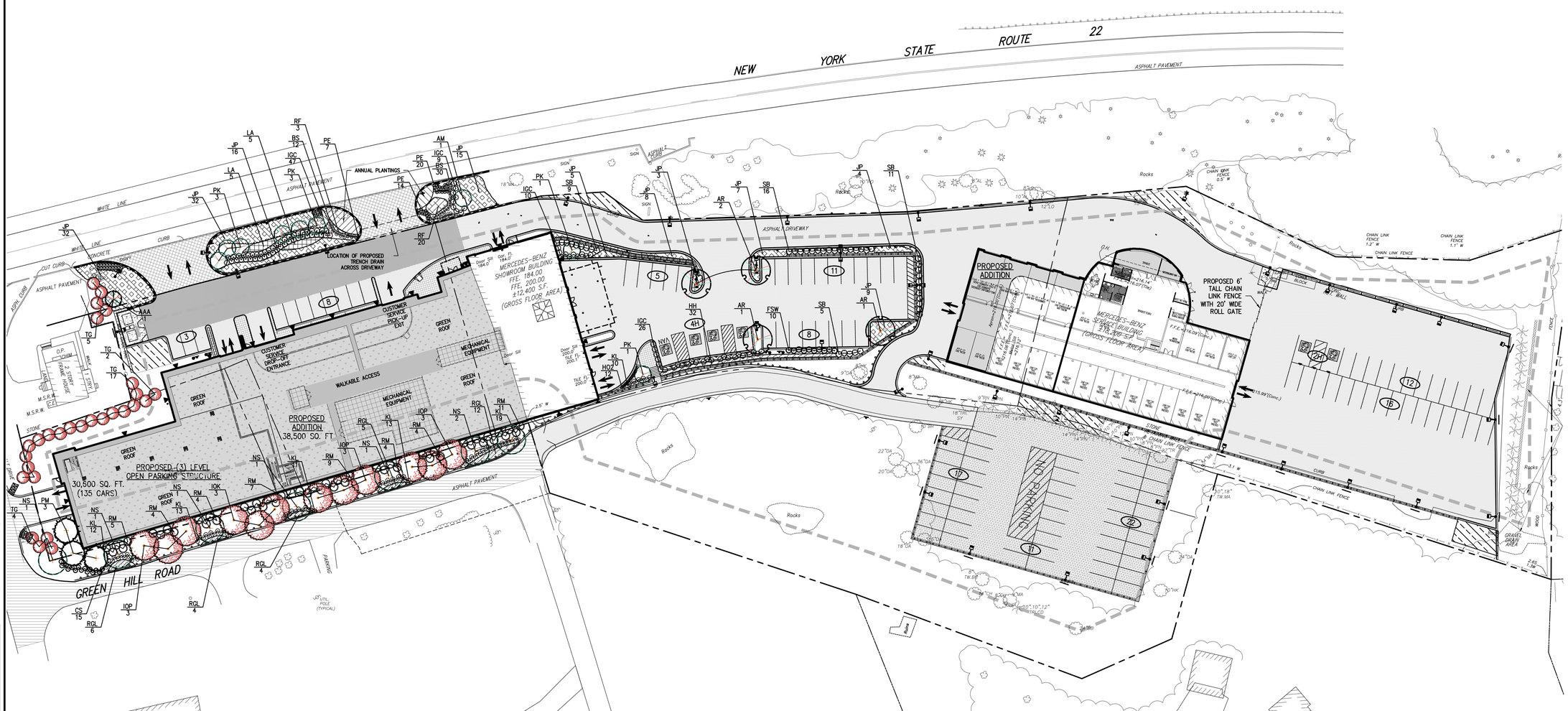
| GROUND COVERS | QTY | COMMON NAME / BOTANICAL NAME | CONT | | REMARKS |
|---|---|---|---|---|---|
| HH | 32 | Baltic Ivy / Hedera helix 'Baltica' | FLAT @ 37" O.C. | | |
| RGL | 31 | Gro-Low Fragrant Sumac / Rhus aromatica 'Gro-Low' | 12"–18" HT. | | |

## LANDSCAPE NOTES

1. ALL PLANT MATERIAL SHALL BE FIRST QUALITY STOCK. PLANTED MATERIAL AND METHODS OF INSTALLATION SHALL CONFORM TO THE AMERICAN ASSOCIATION OF NURSERYMEN, AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION.
2. ALL AREAS OF THE SITE NOT OCCUPIED BY BUILDING OR PAVEMENT AND NOT SPECIFIED AS BEING PLANTED WITH TREES, SHRUBS OR GROUND COVER SHALL BE LAWN.
3. ALL PLANTING BEDS SHALL BE MULCHED WITH 3" OF BARK CHIPS.
4. PLANT MATERIALS AS SPECIFIED ON THE DRAWINGS AND DELIVERED TO THE SITE SHALL BE NURSERY GROWN AND CERTIFIED TRUE TO THEIR GENUS, SPECIES AND VARIETY. SUBSTITUTIONS ARE NOT PERMITTED WITHOUT THE PROJECT LANDSCAPE ARCHITECTS WRITTEN APPROVAL.
5. ALL LANDSCAPING SHALL CONTINUE TO BE MAINTAINED IN A HEALTHY GROWING CONDITION THROUGHOUT THE DURATION OF THE PROJECT. ANY PLANTING NOT SO MAINTAINED SHALL BE REPLACED WITH NEW PLANTS AT THE BEGINNING OF THE NEXT, IMMEDIATELY FOLLOWING, GROWING SEASON.
6. ALL TREES AND SHRUBS SHALL BE PRUNED AND SHAPED AND BE SUBJECT TO THE APPROVAL OF THE PROJECT LANDSCAPE ARCHITECT AND GOVERNMENTAL AUTHORITIES HAVING JURISDICTION.
7. PLANTING STOCK SHALL BE WELL-BRANCHED AND WELL-FORMED, SOUND, VIGOROUS, HEALTHY, FREE FROM DISEASE, SUN-SCALE, WINDBURN, ABRASION, AND HARMFUL INSECTS OR INSECTS EGGS; AND SHALL HAVE HEALTHY, NORMAL UNBROKEN ROOT SYSTEMS. DECIDUOUS TREES AND SHRUBS SHALL BE SYMMETRICALLY DEVELOPED, OF UNIFORM HABIT OF GROWTH, WITH STRAIGHT TRUNKS OR STEMS, AND FREE FROM OBJECTIONABLE DISFIGUREMENTS. EVERGREEN TREES AND SHRUBS SHALL HAVE WELL-DEVELOPED SYMMETRICAL TOPS WITH TYPICAL SPREAD OF BRANCHES FOR EACH PARTICULAR SPECIES OR VARIETY. ONLY VINES AND GROUND COVER PLANTS WELL ESTABLISHED IN REMOVAL CONTAINERS, INTEGRAL CONTAINERS, OR FORMED HOMOGENEOUS SOIL SECTIONS SHALL BE USED. PLANTS SHALL BE GROWN UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT.
8. ALL STOCK SHALL BE BALLED AND BURLAPPED OR CONTAINER GROWN STOCK, UNLESS OTHERWISE SPECIFIED. BAREROOT STOCK OF ANY KIND IS UNACCEPTABLE UNLESS SPECIFIED.
9. ALL PLANTING BEDS, LAWNS AND LANDSCAPED AREAS SHALL RECEIVE A MINIMUM 4" THICK LAYER OF TOPSOIL, UNLESS OTHERWISE SPECIFIED.
10. ALL LANDSCAPING ADDED BY THIS PROJECT WITHIN NYS R.O.W. SHALL BE MAINTAINED BY ESTATE MOTORS.
11. ALL PROPOSED LANDSCAPE MATERIAL WITHIN THE NYS ROUTE 22 R.O.W. SHALL NOT EXCEED A 4" DIAMETER AT BREAST HEIGHT.
12. THE APPLICANT SHALL SUBMIT A PLANTING COST ESTIMATE FOR PLANTINGS PROPOSED WITHIN THE GREEN STREET RIGHT-OF-WAY, TO BE APPROVED BY THE TOWN PLANNER. PROPOSED PLANTINGS WITHIN THE GREEN STREET RIGHT-OF-WAY SHALL BE BONDED IN AN AMOUNT EQUAL TO THE APPROVED PLANTING COST ESTIMATE. SAID BOND, OR OTHER SECURITY ACCEPTABLE TO THE PLANNING BOARD, SHALL BE SUBMITTED TO THE PLANNING BOARD SECRETARY AND SHALL BE RELEASED AFTER A PERIOD OF FIVE YEARS, AS MEASURED FROM THE ISSUANCE DATE OF THE CERTIFICATE OF OCCUPANCY. YEARLY INSPECTIONS SHALL BE CONDUCTED BY THE APPLICANT AND YEARLY WRITTEN REPORTS SHALL BE SUBMITTED TO THE PLANNING BOARD SECRETARY; THE FIRST REPORT SHALL BE SUBMITTED ONE YEAR FROM THE ISSUANCE DATE OF THE CERTIFICATE OF OCCUPANCY. YEARLY REPORTS SHALL ITEMIZE THE SPECIE TYPE AND QUANTITY OF ALL ORIGINALLY PLANTED MATERIAL AND SHALL IDENTIFY WHETHER THE TREE OR SHRUB IS CURRENTLY HEALTHY/LIVING OR DEAD/DISEASED/MISSING. EACH YEAR, FOR A TOTAL OF FIVE YEARS, THE APPLICANT SHALL BE RESPONSIBLE FOR REPLACING, IN KIND, ANY TREE, SHRUB OR OTHER PLANTING THAT DOES NOT SURVIVE, AT HIS/HER SOLE EXPENSE. SHOULD THE APPLICANT FAIL TO REPLACE DEAD, DISEASED OR MISSING LANDSCAPING, THE TOWN SHALL UTILIZE THE BOND TO CARRY OUT SAME. THIS CONDITION SHALL BE IN ADDITION TO ANY MAINTENANCE RESPONSIBILITIES OF THE APPLICANT SPECIFIED IN THE LICENSE AGREEMENT MADE BETWEEN THE APPLICANT AND THE TOWN OF LEWISBORO TOWN BOARD.
13. ALL PROPOSED LANDSCAPING SHALL BE INSTALLED BETWEEN APRIL 1ST AND OCTOBER 15TH, UNLESS OTHERWISE APPROVED BY THE TOWN PLANNER. PLANT SUBSTITUTIONS, IF ANY, SHALL BE APPROVED BY THE TOWN PLANNER PRIOR TO INSTALLATION.

## LEGEND

- EXISTING TREE
- EXISTING TREE TO BE REMOVED
- PROPOSED SHRUB PLANTING
- PROPOSED GROUND COVER PLANTING
- PROPOSED ORNAMENTAL TREE
- PROPOSED DECIDIOUS TREE
- PROPOSED CONIFEROUS TREE




| No. | Revision | Date | By |
|---|---|---|---|
| | Previous Editions Obsolete | | |

APPLICANT/OWNER:
CELEBRITY MOTOR CAR, LLC
130 ROUTE 10
WHIPPANY, NJ 07981

ARCHITECT:
SULLIVAN ARCHITECTURE
31 MAMARONECK AVENUE
WHITE PLAINS, NY 10601

JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC
JMC Site Development Consultants, LLC
John Meyer Consulting, Inc.
120 BEDFORD ROAD • ARMONK, NY 10504
voice 914.273.5225 • fax 914.273.2102
www.jmcpllc.com

# LANDSCAPING PLAN

MERCEDES BENZ OF GOLDENS BRIDGE
NYS ROUTE 22
TOWN OF LEWISBORO, NY

ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW, EXCEPT AS PROVIDED FOR BY SECTION 7209, SUBSECTION 2.

| | |
|---|---|
| Drawn: | SS |
| Approved: | AN |
| Scale: | 1" = 30' |
| Date: | 11/29/2018 |
| Project No: | 16124 |
| N124-LAND | LAND | LAND.scr |
| Drawing No: | L–100 |

NOT FOR CONSTRUCTION


1 EAST ELEVATION
3/32"=1'-0"


2 SOUTH ELEVATION
3/32"=1'-0"



**Sullivan** Architecture, P.C.
31 Mamaroneck Avenue
White Plains, New York 10601
914-761-6006 (F) 914-761-4919

| | |
|---|---|
| Project Title | Mercedes□e□□o□□o□de□s□□ridge<br>□rep□red□or□□e□e□rit□Motors<br>□o□de□s□□ridge□□ew□□or□ |
| Date Issue | 6.26.18 ACARC SUBMISSION<br>12.26.18 PLANNING BD. SUBMISSION |
| Project No. | 1701 |
| Date | 06.01.18 |
| Drawing By | SA |
| Scale | AS NOTED |
| Drawing Title | SHOWROOM BUILDING<br>EXTERIOR ELEVATIONS |
| Drawing No. | □□.□□ |

# STORMWATER POLLUTION PREVENTION PLAN

# *MERCEDES BENZ OF GOLDENS BRIDGE*

## NYS ROUTE 22
## TOWN OF LEWISBORO, NEW YORK

*Applicant/Operator/* **Celebrity Motor Car, LLC**
**130 Route 10**
**Whippany, NJ 07981**

*Owner:* **c/o Mr. Tom Maoli**
973-727-7016

*Prepared by:*

JMC Project 16124

*Dated:* 09/06/2018
*Revised:* 11/29/2018
*Revised:* 12/26/2018

TABLE OF CONTENTS



APPENDICES

**REFERENCED DRAWINGS FOR SWPPP DESIGN AND DETAILS**

## 1. JMC SITE PLANS

| Dwg. No. | Title |
|---|---|
| C-000 | "Cover Sheet" |
| C-010 | "Existing Conditions Plan" |
| C-020 | "Demolition Plan" |
| C-030 | "Tree Removal Plan" |
| C-100 | "Layout Plan" |
| C-101 | "Parking Plan" |
| C-200 | "Grading & Drainage Plan" |
| C-201 | "Site Sections Plan" |
| C-300 | "Utilities Plan" |
| C-313 | "Sanitary Force Main Profiles" |
| C-314 | "Road Profiles" |
| C-315 | "Road Profiles" |
| C-401 | "Phase 1 Plan" |
| C-402 | "Phase 2 Plan" |
| C-403 | "Phase 3 Plan" |
| C-600 | "Site Lighting Plan" |
| C-700 | "Vehicle Delivery Truck Plan" |
| C-701 | "Fire Truck Plan" |
| C-702 | "Fire Truck Plan" |
| C-900 | "Construction Details" |
| C-901 | "Construction Details" |
| C-902 | "Construction Details" |
| C-903 | "Construction Details" |
| C-904 | "Construction Details" |
| C-905 | "Construction Details" |
| C-906 | "Construction Details" |
| C-907 | "Construction Details" |
| C-908 | "Construction Details" |
| L-100 | "Landscaping Plan" |

## 2. Sullivan Architecture, P.C. Building Drawings:

| | |
|---|---|
| A1.01 | "Service Building Proposed Lower Level" |
| A2.02 | "Showroom Building Proposed Garage Level (Lower Level Parking)" |
| A2.03 | "Showroom Building Proposed Lower Level" |
| A2.04 | "Showroom Building Proposed Lower Level (Middle Level Parking)" |

# I. INTRODUCTION

This Stormwater Pollution Prevention Plan has been prepared for the 4.966-acre Mercedes Benz of Goldens Bridge site, located in the Town of Lewisboro, Westchester County, New York (hereinafter referred to as the "Site"). The site is bordered by residences to the north and east, Anderson Road to the south, and Route 22 to the west. The proposed development includes an expansion and updating to the existing automobile dealership on the site. The development has been designed in accordance with the following:

- Requirements of the New York State Department of Environmental Conservation (NYSDEC) SPDES General Permit No. GP-0-15-002, effective January 29, 2015, last modified November 23, 2016.
- New York City Environmental Protection (NYCEP, formerly NYCDEP) Rules and Regulations for the Protection from Contamination, Degradation and Pollution of the New York City Water Supply and its Sources, amended April 4, 2010.
- Chapter 188 "Storm Sewer System" of the Town of Lewisboro Zoning Code
- Chapter 189 "Stormwater Management and Erosion and Sediment Control" of the Town of Lewisboro Zoning Code

The project includes a Showroom Building expansion of 38,500 s.f., to the existing 12,400 s.f. Showroom Building, bringing the new Showroom Building total to 50,900 s.f. A 2,700 s.f. expansion is also proposed to the existing 18,200 s.f. Service Building, bringing the new Service Building total to 20,900 s.f. The Service Building was planned to be demolished under the previous approval. A 3 level parking garage is also proposed attached to the Showroom Building expansion. The total net increase in building area is approximately 41,200 s.f. An inventory storage parking lot is also proposed on the adjacent residential lot in contract.

The proposed project will also include various site upgrades including new parking and vehicle storage areas, site drainage, site lighting and extensive landscaping improvements. The modified design of the project will likely require all of the same or similar variances and will require approvals from the same outside agencies. The SWPPP was approved by the Town of Lewisboro

on May 15, 2012 and NYCDEP on September 26, 2012. The SWPPP approval was recently renewed by NYCDEP on September 27, 2017.

## II. STORMWATER MANAGEMENT PLANNING

In order to be eligible for coverage under the NYSDEC SPDES General Permit No. GP-0-15-002 for Stormwater Discharges from Construction Activities, the Stormwater Pollution Prevention Plan (SWPPP) includes stormwater management practices (SMP's) from the publication "New York State Stormwater Management Design Manual," last revised January 2015.

A Stormwater Pollution Prevention Plan has been prepared for this project because it is a construction activity that involves soil disturbances of one (1) or more acres of land.

The proposed stormwater facilities have been designed such that the quantity and quality of stormwater runoff during and after construction are not adversely altered or are enhanced when compared to pre-development conditions.

Based on the GIS information provided by the website of the New York State Office of Parks, Recreation and Historic Places, the site does not contain, nor is it immediately adjacent to any properties listed on the State or National Register of Historic Places.

### The Six Step Process for Stormwater Site Planning and Practice Selection

Stormwater management using green infrastructure is summarized in the six step process described below. The six step process was adhered to when developing this SWPPP. Information is provided in this SWPPP which documents compliance with the required process as follows:

#### Step 1: Site Planning

Implement planning practices that protect natural resources and utilize the hydrology of the site. Strong consideration must be given to reducing impervious cover to aid in the preservation of

natural resources including protecting natural areas, avoiding sensitive areas and minimizing grading and soil disturbance.

Step 2: Determine Water Quality Treatment Volume (WQv)

Determine the required WQv for the site based on the site layout, impervious areas and sub-catchments. This initial calculation of WQv will have to be revised after green infrastructure techniques are applied. The following method has been used to calculate the WQv.

- **Enhanced Phosphorus Removal Standard -** Since the project is located within the New York City watershed, enhanced phosphorus removal must be achieved by the stormwater improvements. For enhanced phosphorus removal, the water quality volume is sized for the 1 year, 24 hour storm event. Standard stormwater measures must be sized to treat the 1 year, 24 hour storm for 25% of existing impervious areas plus 100% of new impervious areas.

The NYSDEC Redevelopment Standards include specific criteria for the implementation of surface water quality improvements. A combination of standard and non-standard practices are proposed and all facilities will treat the required water quality volume from the entire contributing area. Therefore, Water Quality Treatment Options II & III will be utilized. According to Option III of the Redevelopment Standards, alternative or non-standard practices such as manufactured treatment devices are acceptable if they treat 75% of the water quality volume from the disturbed areas as well as any additional runoff directed to the practice. According to Option II, standard practices such as subsurface infiltration systems can be sized to treat the water quality volume generated from 25% of the existing impervious area plus 100% of the new impervious area. Green practices such as green roofs and porous pavement can be used towards credit in meeting the water quality volume requirements.

Proposed standard SMP's will effectively treat 100% of the 1 year storm for all existing and new impervious areas and the proposed alternative SMP's will also treat 100% of the 1 year storm for all existing impervious areas which is above and beyond the water quality requirements for

Redevelopment Projects.

Step 3: Runoff Reduction Volumes (RRv) by Applying Green Infrastructure Techniques and Standard SMP's

RRv is required for this project since it is a combination of both new development and redevelopment.

Green infrastructure techniques or standard SMP's with RRv capacity can potentially reduce the required WQv by incorporating combinations of green infrastructure techniques and standard SMP's within each drainage area on the site.

Green infrastructure techniques are grouped into two categories:

- Practices resulting in a reduction of contributing area such as preservation/restoration of conservation areas, vegetated channels, etc.
- Practices resulting in a reduction of contributing volume such as green roofs, stormwater planters, and rain gardens.

Apply a combination of green infrastructure techniques and standard SMPs with RRv capacity to provide 100% of the WQv calculated in Step 2. If the RRv calculated in this step is greater than or equal to the WQv in Step 2, the RRv requirement has been met and Step 4 can be skipped. If the RRv provided cannot meet or exceed 100% of the WQv, the project 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 Group(s) (HSG) of the site and is defined as Specific Reduction Factor (S).

The following green infrastructure techniques and practices are provided in the Design Manual:

- **Conservation of Natural Areas**
  - The entire site is developed and has been for decades. There are no undisturbed areas that could be planned to be included within a conservation easement. Therefore, there is no area to be subtracted from the contributing area for the WQv calculation.
- **Sheet flow to Riparian Buffers or Filter Strips**
  - There are no well vegetated areas on-site with acceptable slopes that lend an opportunity as a buffer and still meet the minimum contributing length of flow. This practice is not practical for this project since these items are typically used in a residential application.
- **Vegetated Swales**
  - The use of sheet flow into vegetated swales cannot be implemented along the existing driveways and roadways because of the steep slopes or throughout the parking areas due to the limited flow lengths, rock outcroppings, etc.
- **Tree Planting / Tree Pits**
  - The project includes extensive tree planting around its perimeter as part of the proposed landscaping plan. Trees will be planted adjacent to the new impervious site entrances located in the DOT right-of-way as a runoff reduction technique.
- **Disconnection of Rooftop Runoff**
  - This practice is not practical for this project since these items are typically used in a residential application for small rooftop areas.
- **Stream Daylighting**
  - This practice is not possible for this project since there are no existing streams.
- **Rain Gardens**
  - This practice is not practical for this project since a contributing drainage area is limited to 1,000 square feet of rooftop. This practice is typically used in a residential application.
- **Green Roofs**
  - This practice is proposed for the Showroom Building expansion. An extensive green roof will provide RRv for the Showroom Building Expansion. This proposed green infrastructure technique is well suited and effective to treat the rooftop runoff for this type of project.

- **Stormwater Planters**
  - Stormwater planters are not used on this project due to the roofs already being treated using green roofs. Steep slopes along the Showroom Building and limited space also make it difficult to proposed planters.
- **Rain Barrels and Cisterns**
  - Underground storage tanks installed to collect stormwater runoff to be used for irrigation purposes are impractical since the project will not have an irrigation system for the landscaped areas.
- **Porous Paving**
  - This practice is being utilized at the upper vehicle storage area east of the Service Building. Porous pavement can be used to provide RRv because the soil on-site is classified as hydrologic soil group B. Soil tests have been performed that show adequate groundwater/bedrock separation and infiltration rates. The other paved areas of the site are not acceptable for porous pavement because they will be high traffic areas, have steep slopes, or are over a septic field.
- **Standard Practices with RRv Capacity**
  - **Biofilters and Bioretention Basins –** These practices are not proposed because other practices more suitable to treat RRv are provided.
  - **Infiltration Practices –** A subsurface infiltration system is proposed to treat and retain runoff from the majority of the site.

The Minimum RRv capacity required must be provided by green infrastructure techniques to verify that the RRv requirement has been met. The RRv that is provided by the green infrastructure techniques can then be subtracted from the Total Required WQv that must be provided by the SMP's.

<u>Step 4: Determine the minimum RRv Required</u>

The minimum RRv is calculated similar to the WQV. However, it is determined using only the new impervious cover and accounts for the hydrologic soil group present. In no case shall the runoff reduction achieved from the newly constructed impervious area be less than the minimum runoff reduction volume ($RRv_{min}$).

Step 5: Apply Standard Stormwater Management Practices to Address Remaining Water Quality Volume

Apply the standard SMP's to meet additional water quality volume requirements that cannot be addressed by applying the green infrastructure techniques. The standard SMP's with RRv capacity must be implemented to verify that the RRv requirement has been met.

- **Green Roofs –** A green roof consists of a layer of vegetation and soil installed on a conventional roof. The rooftop vegetation captures rainwater allowing evaporation and evapotranspiration processes to reduce the amount of runoff entering downstream systems, effectively reducing stormwater runoff volumes and attenuating peak flows. This project makes use of existing roofs and turns them into extensive green roofs that have a thin soil layer and require low maintenance.

- **Subsurface Infiltration System –** This practice captures and temporary stores the WQv before allowing it to infiltrate into the soil. Smaller storms are completely infiltrated while the overflow from the larger storms is released into the storm sewer system using an overflow weir.

- **Porous Pavement** – Permeable paving provides an alternative to conventional asphalt and concrete surfaces and are designed to convey rainfall through the surface into an underlying reservoir where it can infiltrate, thereby reducing stormwater runoff from a site. This project is proposing pervious pavement on the dealership storage parking area.

Step 6: Apply Volume and Peak Rate Control Practices to Meet Water Quantity Requirements

The Channel Protection Volume (CPv), Overbank Flood Control (Qp) and Extreme Flood Control (Qf) must be met for the plan to be completed. This is accomplished by using practices such as subsurface infiltration systems detention systems, etc. to meet water quantity requirements. The following standards must be met:

## 1. Stream Channel Protection (CPv)

Stream Channel Protection Volume Requirements (CPv) are designed to protect stream channels from erosion. In New York State this goal is accomplished by providing 24-hour extended detention of the one-year, 24-hour storm event, remained from runoff reduction. Reduction of runoff for meeting stream channel protection objectives, where site conditions allow, is encouraged and the volume reduction achieved through green infrastructure can be deducted from CPv. Trout waters may be exempted from the 24-hour ED requirement, with only 12 hours of extended detention required to meet this criterion. Detention time may be calculated using either a center of mass method or plug flow calculation method.

- CPv for a redevelopment project is not required if there is no increase in impervious area or changes to hydrology that increase the discharge rate. This criterion, as defined in Chapter 4 of New York State Stormwater Design Manual, is not based on a pre versus post-development comparison. However, for a redevelopment project this requirement is relaxed. If the hydrology and hydraulic study shows that the post-construction 1-year 24 hour discharge rate and velocity are less than or equal to the pre-construction discharge rate, providing 24 hour detention of the 1-year storm to meet the channel protection criteria is not required.
- According to Section 10.4.3 of the Design Manual, infiltration practices sized for enhanced phosphorus removal automatically meet channel protection requirements.

## 2. Overbank Flood (Qp) which is the 10 year storm.

Overbank control requires storage to attenuate the post development 10-year, 24-hour peak discharge rate (Qp) to predevelopment rates.

The overbank flood control requirement (Qp) does not apply in certain conditions, including:

- The site discharges directly tidal waters or fifth order (fifth downstream) or larger streams.

- A downstream analysis reveals that overbank control is not needed.

- If redevelopment results in an increase in impervious area or changes to hydrology that increase the discharge rate from the site, the ten year criteria does not apply.

3. **Extreme Storm (Qf) which is the 100 year storm.**

   100 Year Control requires storage to attenuate the post development 100-year, 24-hour peak discharge rate (Qf) to predevelopment rates.

   The 100-year storm control requirement can be waived if:

- The site discharges directly tidal waters or fifth order (fifth downstream) or larger streams.

- Development is prohibited within the ultimate 100-year floodplain

- A downstream analysis reveals that 100-year control is not needed.

- If redevelopment results in no increase in impervious area or changes to hydrology that increase the discharge rate from the site the hundred-year criteria does not apply.

Based on the foregoing, this project is eligible for coverage under NYSDEC SPDES General Permit No. GP-0-15-002.

## III. STUDY METHODOLOGY

Runoff rates were calculated based upon the standards set forth by the United States Department of Agriculture Natural Resources Conservation Service Technical Release 55, Urban Hydrology for Small Watersheds (TR-55), dated June 1986. The methodology set forth in TR-55 considers a multitude of characteristics for watershed areas including soil types, soil permeability, vegetative cover, time of concentration, topography, rainfall intensity, ponding areas, etc.

The 1, 10 & 100 year storm recurrence intervals were reviewed in the design of the stormwater management facilities (see Appendices A & B Existing/Proposed Hydrologic Calculations).

Anticipated drainage conditions were analyzed taking into account the rate of runoff which will result from the construction of buildings, parking areas and other impervious surfaces associated with the site development.

Base Data and Design Criteria

For the stormwater management analysis, the following base information and methodology were used:

1. The site drainage patterns and outfall facilities were reviewed by JMC personnel for the purpose of gathering background data and confirming existing mapping of the watershed areas.

2. An Existing Drainage Area Map was developed from the topographical survey. The drainage area map reflects the existing conditions within and around the project area.

3. A Proposed Drainage Area Map was developed from the proposed grading design superimposed over the topographical survey. The drainage area map reflects the proposed conditions within the project area and the existing conditions to remain in the surrounding area.

4. The United States Department of Agriculture (USDA) Web Soil Survey of the site available on its website at http://websoilsurvey.nrcd.usda.gov.

5. The United States Department of Agriculture Natural Resources Conservation Service National Engineering Handbook, Section 4 - Hydrology", dated March 1985.

6. The United States Department of Agriculture Natural Resources Conservation Service Technical Report No. 55, Urban Hydrology for Small Watersheds (TR-55), dated June 1986.

7. United States Department of Commerce Weather Bureau Technical Release No. 40 Rainfall Frequency Atlas of the United States.

The time of concentration was calculated using the methods described in Chapter 3 of TR-55, Second Edition, June 1986. Manning's kinematics wave equation was used to determine the travel time of sheet flow. The 2-year 24 hour precipitation amount of 3.44 inches was used in the equation for all storm events. The travel time for shallow concentrated flow was computed using Figure 3-1 and Table 3-1 of TR-55. Manning's Equation was used to determine the travel time for channel reaches.

8. All hydrologic calculations were performed with the Bentley PondPack software package version 10.0.

9. All hydraulic calculations were performed with the Civil 3D Storm Sewer Analysis software package version 2018.

10. The New York State Stormwater Management Design Manual, revised January 2015.

11. New York Standards and Specifications for Erosion and Sediment Control, November 2016.

12. The NYCEP Rules and Regulations for the Protection from Contamination, Degradation and Pollution of the New York City Water Supply and its Sources, as amended April 4, 2010.

13. New York City Department of Environmental Protection, 2009 Watershed Water Quality Annual Report, Updated May 2011.

14. The storm flows for the 1, 10 & 100 year recurrence interval storms were analyzed for the total watershed areas. The Type III distribution design storm for a 24 hour duration was used and the mass rainfall for each design storm was taken from the Extreme Precipitation in New York & New England developed by the Natural Resource Conservation Service (NRCS) and the Northeast Regional Climate Center (NRCC) as follows:

**24 Hour Rainfall Amounts**

| Design Storm Recurrence Interval | Inches of Rainfall |
|---|---|
| 1 Year | 3.00 |
| 10 Year | 5.50 |
| 100 Year | 9.00 |

## IV. EXISTING CONDITIONS

The site is currently developed as a Mercedes-Benz dealership of which a majority of the property is impervious. The site also consists of an existing residence to the east and a commercial business to the south. The site is located within the drainage basin of the Muscoot Reservoir and the New York City Watershed. Stormwater runoff is collected on-site and conveyed via corrugated metal pipes to the New York State Department of Transportation storm drainage system off-site within NYS Route 22 which eventually discharges to the Muscoot Reservoir.

The following natural features, conservation areas, resource areas and drainage patterns of the project site have been identified and utilized to develop Drawing DA-1 "Existing Drainage Area Map" which is included in Appendix G:

- Forest, vegetative cover
- Topography (contour lines, existing flow paths, steep slopes, etc.)
- Soil (hydrologic soil groups, highly erodible soils, etc.)
- Bedrock, significant geology features

Based on the USDA Web soil survey, most of the on-site soils are moderately drained and belong to hydrological group B, with a small area belonging to the hydrological group D. The soil types, boundaries and drainage areas/designations are depicted on Drawing DA-1 within Appendix G.

Three separate Design Points (DP-1 through DP-3) were identified for comparing peak rates of runoff in existing and proposed conditions. Similarly, four separate drainage areas were identified in existing conditions based on the existing drainage divides at the site. The numbers included in the name of each drainage area correspond to the Design Point they drain towards.

The following is a description of each of the drainage areas analyzed in the existing conditions analysis:

Existing Drainage Area 1A (EDA-1A) is 0.89 acres in size and is located on the southwestern portion of the site along NYS Route 22. This area consists of existing pavement and a small amount of landscaping. This drainage area drains towards the storm sewer system on NYS Route 22. The Curve Number (CN) and Time of Concentration (Tc) for this drainage area are 87 and 5 minutes, respectively. Refer to Drawing DA-1 in Appendix G.

Existing Drainage Area 1B (EDA-1B) is 1.22 acres in size and is located on the western portion of the site along the western property line near NYS Route 22. This area consists of existing pavement and a portion of the existing Service Building. This drainage area drains towards the storm sewer system on NYS Route 22. The Curve Number (CN) and Time of Concentration (Tc) for this drainage area are 86 and 5 minutes, respectively. Refer to Drawing DA-1 in Appendix G.

Existing Drainage Area 2 (EDA-2) is 3.26 acres in size and is located on the southern and eastern portions of the site and off-site along Anderson Lane and Green Hill Road. This area consists of the existing commercial property south of the dealership and about half of the large uphill residential area off-site to the east of the dealership. This drainage area drains towards the vegetated area south of the property along Anderson Lane. The Curve Number (CN) and Time of Concentration (Tc) for this drainage area are 68 and 16 minutes, respectively. Refer to Drawing DA-1 in Appendix G.

Existing Drainage Area 3 (EDA-3) is 2.77 acres in size and is located on the northern and eastern portions of the site and off-site including a portion of the uphill residential area. This area consists of the existing northern dealership parking lot and about half of the large uphill residential area to the east of the dealership. This drainage area drains towards the adjacent residential lots south of the property. The Curve Number (CN) and Time of Concentration (Tc) for this drainage area are 72 and 15 minutes, respectively. Refer to Drawing DA-1 in Appendix G.

The peak rates of runoff to the design points from the drainage areas for each storm are shown in the table below:

**Table 1**
**Summary of Peak Rates of Runoff in Existing Conditions**
**(Cubic Feet per Second)**

| Storm Recurrence Interval | DP-1 | DP-2 | DP-3 |
|---|---|---|---|
| 1 year | 3.72 | 1.42 | 1.73 |
| 10 year | 8.42 | 6.00 | 6.05 |
| 100 year | 14.98 | 13.86 | 13.01 |

## V. PROPOSED CONDITIONS

The project includes a Showroom Building expansion and Service Building expansion as well as the redevelopment of adjacent residential and commercial lots in contract. The proposed

project will also include various site upgrades including new parking and vehicle storage areas, site drainage, site lighting and landscaping improvements.

The proposed drainage improvements include a variety of stormwater practices, such as green roofs, porous pavement, rain gardens and an underground infiltration system. The vegetated practices and overland discharges provide multiple opportunities for water quality enhancement and infiltration in addition to the proposed stormwater management basins.

On October 29th and 30th, 2018 soil percolation tests were done within the future 100% expansion area within the upper/northern parking lot. The pre-soaks were done on October 29th and the two separate percolation tests were done on October 30th. The tests resulted in acceptable percolation rates. The tests were witnessed by JMC, the Westchester County Health Department, The Town Engineer Consultant and performed by Carlin-Simpson Associates. On November 2, 2018 a soil boring was advanced in the same location. It was witnessed by NYCDEP, WCDH, Town Engineer Consultant, JMC and Carlin-Simpson Associates. The soil is sandy, groundwater and bedrock were not encountered within 5 feet of the bottom of the future seepage pits therefore the location is suitable for future use. Refer to the Soil Testing Data Sheet and the Report on Subsurface Soil Investigation prepared by Carlin-Simpson Associates in Appendix D.

This section describes the design and analysis of the proposed conditions used to demonstrate that the SWPPP meets the requirements of the General Permit.

## The Six Step Process For Stormwater Site Planning and Practice Selection

### Step 1: Site Planning

The following practices and site features were incorporated in the site design:

- Preserving hydrology - Maintaining drainage divides

- Forest, vegetative cover – The maximum amount of forest and vegetative cover has been maintained and/or provided.
- Critical areas have been preserved.
- Topography (contour lines, existing flow paths, steep slopes, etc.) has been maintained or disturbed to the minimum extent practicable.
- Soil (hydrologic soil groups, highly erodible soils, etc.)
- Bedrock, significant geology features have been accounted for.

Step 2: Determine Water Quality Treatment Volume (WQv)

Step 3: Runoff Reduction Volumes (RRv) by Applying Green Infrastructure Techniques and Standard SMP's

- Green Roofs
- Subsurface Infiltration System
- Permeable Paving

Step 4: Determine the minimum RRv Required

$RRv_{min}$ calculations can be found in Appendix 'C'. $RRv_{min}$ was met through

- Green Roofs
- Subsurface Infiltration System
- Permeable Paving

Step 5: Apply Standard Stormwater Management Practices to Address Remaining Water Quality Volume

- **INFILTRATION SYSTEMS**

Subsurface Infiltration System (I-2)

Description

An infiltration practice that stores the water quality volume in an underground system, before it is infiltrated it into the ground.

Non Standard/Alternative SMP's to Address Remaining Water Quality Volume (for Redevelopment Projects)

- **Hydrodynamic Separators**

Step 6: Apply Volume and Peak Rate Control Practices to Meet Water Quantity Requirements

- **INFILTRATION SYSTEMS**

Subsurface Infiltration System (I-2)

Description

An infiltration practice that stores the water quality volume in an underground system, before it is infiltrated it into the ground.

All practices exceed the required elements of SMP criteria as outlined in Chapter 6 of the NYS Stormwater Management Design Manual. A summary of each category is provided below.

1. Feasibility – Ponds are designed based upon unique physical environmental considerations noted in the NYS Stormwater Management Design Manual (NYSSMDM) Table 7.2 "Physical Feasibility Matrix".

2. Conveyance – The design conveys runoff to the designed pond in a manner that is safe, minimizes erosion and disruption to natural drainage channel and promotes filtering and infiltration.

3. Pretreatment – All pond provide pretreatment in accordance with NYSSMDM design guidelines.

4. Treatment Geometry – The plan provides water quality treatment in accordance with NYSSMDM guidelines noted Table 6.1 "Water Quality Volume Distributing in Pond Design".

5. Environmental/Landscaping –Extensive landscaping has been provided for each proposed practice to enhance pollutant removal and provide aesthetic enhancement to the property.

6. Maintenance – Maintenance for the environment practices has been provided and is detain the SWPPP Report as required. Maintenance access is provided in the design plans.

In order to determine the post-development rates of runoff generated on-site, the following drainage areas were analyzed in the post-development conditions. These areas are graphically depicted on Drawing DA-2 "Proposed Drainage Area Map" located in Appendix "G".

Three separate Design Points (DP-1 through DP-3) were identified for comparing peak rates of runoff in existing and proposed conditions. Similarly, seven separate drainage areas were identified in proposed conditions based on the proposed drainage divides at the site. The numbers included in the name of each drainage area correspond to the Design Point they drain towards.

The following is a description of each of the drainage areas analyzed in the proposed conditions analysis:

<u>Proposed Drainage Area 1A (PDA-1A)</u> is 1.97 acres in size and is located on the western portion of the site on the north and west sides of the proposed Showroom Building, the addition of the Maintenance Building, and the stormwater which drains onto the existing driveway along the east side of the site. This area consists of the parking areas associated with the Showroom Building, as well as some landscaping and existing brush area to remain and the driveway to the uphill storage area. This drainage area drains towards a proposed subsurface infiltration system consisting of 92 StormTech MC-3500 Chambers where it receives treatment. Prior to entering the system, the

runoff is pre-treated by a water quality structure, then an isolator row of chambers wrapped in filter fabric. Excess stormwater is directed to the exiting storm sewer system located on New York State Route 22. The Curve Number (CN) and Time of Concentration (Tc) for this drainage area are 84 and 11 minutes, respectively. Refer to Drawing DA-2 in Appendix G.

Proposed Drainage Area 1B (PDA-1B) is 3.09 acres in size and is located on the northeastern portion of the site. This area consists of the Service Building and vehicle storage areas to the north and east. This drainage area also includes the existing uphill forested area to remain. This drainage area drains towards a proposed subsurface detention system consisting of 132 StormTech MC-4500 chambers with a liner where it is held and released slowly over time. Prior to entering the system, stormwater runoff is treated by a water quality structure. The stormwater is then directed to the portion of the on-site stormwater system that discharges to the existing storm sewer system located on New York State Route 22. The Curve Number (CN) and Time of Concentration (Tc) for this drainage area are 75 and 14 minutes, respectively. Refer to Drawing DA-2 in Appendix G.

Proposed Drainage Area 1C (PDA-1C) is 0.50 acres in size and is located on the western frontage of the site along New York State Route 22. This area consists of a portion of NYS Route 22, the entrance driveways and a landscape area which separates the site from the road. This impervious area is directly connected to tree plantings which are used as an area reduction technique. After passing through the tree plantings, the stormwater flows into the existing storm sewer system located on New York State Route 22 similar to existing conditions. The Curve Number (CN) and Time of Concentration (Tc) for this drainage area are 83 and 5 minutes, respectively. Refer to Drawing DA-2 in Appendix G.

Proposed Drainage Area 1D (PDA-1D) is 0.45 acres in size and is located on the south-center portion of the site. This area consists of the proposed Showroom Building expansion not including the attached parking garage. The Showroom Building will include an extensive green roof which will provide initial stormwater treatment. After passing through the green roof, the stormwater will be directed to the proposed subsurface infiltration system This drainage area drains towards the existing storm sewer system located on New York State Route 22 similar to

existing conditions. Excess stormwater is directed to the exiting storm sewer system located on New York State Route 22. The Curve Number (CN) and Time of Concentration (Tc) for this drainage area are 98 and 12 minutes, respectively. Refer to Drawing DA-2 in Appendix G.

Proposed Drainage Area 2A (PDA-2A) is 0.22 acres in size and is located on the south-center portion of the site. This area consists of the proposed Showroom Building parking garage. The parking garage will include an extensive green roof which will provide initial stormwater treatment. After passing through the green roof, the stormwater will be directed to the proposed stormwater conveyance system along Green Hill Road and Anderson Lane. The Curve Number (CN) and Time of Concentration (Tc) for this drainage area are 98 and 12 minutes, respectively. Refer to Drawing DA-2 in Appendix G. The proposed pipes and structures replace the existing inadequate conveyance system along Green Hill Road.

Proposed Drainage Area 2B (PDA-2B) is 1.75 acres in size and is located on the southeastern portion of the site. This area consists of Green Hill Road and the forested uphill area which drains onto Green Hill Road. This area also consists of Anderson Lane and the landscaped areas which drain onto Anderson Lane. There is a reduction of impervious area and no new impervious within PDA-2B so green infrastructure practices were not required. The stormwater will be directed to the existing drainage ditch located on the south side of Anderson Lane, similar to existing conditions. The Curve Number (CN) and Time of Concentration (Tc) for this drainage area are 63 and 14 minutes, respectively. Refer to Drawing DA-2 in Appendix G.

Proposed Drainage Area 2C (PDA-2C) is 0.08 acres in size and is located on the southern portion of the site. This area consists of the new access driveway to the proposed parking garage and the landscaping along the road. This drainage area makes use of tree planting along both sides of the driveway to apply an area reduction to the new impervious. After passing through the tree plantings, the stormwater will be directed to the existing drainage ditch located on the south side of Anderson Lane, similar to existing conditions. The Curve Number (CN) and Time of Concentration (Tc) for this drainage area are 71 and 5 minutes, respectively. Refer to Drawing DA-2 in Appendix G.

Proposed Drainage Area 3 (PDA-3) is 0.10 acres in size and is located on the north end of the site. This area consists of the landscaped areas which separate the Site from the residential property to the north. The area has been greatly reduced from existing conditions. The stormwater will sheet flow off the site to the north, similar to existing conditions. The Curve Number (CN) and Time of Concentration (Tc) for this drainage area are 60 and 5 minutes, respectively. Refer to Drawing DA-2 in Appendix G.

The peak rates of runoff to the design point of each of the analyzed drainage areas for each storm are shown on the table below:

**Table 2**
**Summary of Proposed Peak Rates of Runoff in Proposed Conditions**
**(Cubic Feet per Second)**

| Storm Recurrence Interval | DP-1 | DP-2 | DP-3 |
|---|---|---|---|
| 1 year | 1.52 | 0.57 | 0.02 |
| 10 year | 7.17 | 3.40 | 0.15 |
| 100 year | 14.80 | 8.20 | 0.41 |

The reductions in peak rates of runoff from proposed to existing conditions are shown on the table below:

**Table 3**
**Percent Reductions in Peak Rates of Runoff (Existing vs. Proposed Conditions)**
**(Cubic Feet per Second)**

| Design Point | Storm Recurrence Frequency (Years) | Existing Peak Runoff Rate (cfs) | Proposed Peak Runoff Rate (cfs) | Percent Reduction (%) |
|---|---|---|---|---|
| 1 | 1 year | 3.72 | 1.52 | 59.1 |
| | 10 year | 8.42 | 7.17 | 14.8 |
| | 100 year | 14.98 | 14.80 | 1.2 |
| 2 | 1 year | 1.42 | 0.57 | 59.9 |
| | 10 year | 6.00 | 3.40 | 43.3 |
| | 100 year | 13.86 | 8.20 | 40.8 |
| 3 | 1 year | 1.73 | 0.02 | 98.8 |
| | 10 year | 6.05 | 0.15 | 97.5 |
| | 100 year | 13.01 | 0.41 | 96.8 |

As demonstrated in Table 3, the proposed stormwater improvements will result in significant reductions of peak rates of runoff for all storms and design points analyzed.

## VI. SOIL EROSION & SEDIMENT CONTROL

A potential impact of the proposed development on any soils or slopes will be that of erosion and transport of sediment during construction. An Erosion and Sediment Control Management Program will be established for the proposed development, beginning at the start of construction and continuing throughout its course, as outlined in the "New York State Standards and Specifications for Erosion and Sediment Control," November 2016. A continuing maintenance program will be implemented for the control of sediment transport and erosion control after construction and throughout the useful life of the project.

The Operator shall have a qualified professional conduct an assessment of the site prior to the commencement of construction and certify that the appropriate erosion and sediment controls, as shown on the Sediment & Erosion Control Plans, have been adequately installed to ensure overall preparedness of the site for the commencement of construction. In addition, the Operator shall have a qualified professional conduct two site inspections at least every seven calendar days.

Prior to the commencement of construction activity, the owner or operator must identify the contractor(s) and subcontractor(s) that will be responsible for installing, constructing, repairing, replacing, inspecting and maintaining the erosion and sediment control practices included in the SWPPP; and the contractor(s) and subcontractor(s) that will be responsible for constructing the post-construction stormwater management practices included in the SWPPP. The owner or operator shall have each of the contractors and subcontractors identify at least one person from their company that will be responsible for implementation of the SWPPP. This person shall be known as the trained contractor. The owner or operator shall ensure that at least one trained contractor is on site on a daily basis when soil disturbance activities are being performed.

The owner or operator shall have each of the contractors and subcontractors identified above sign a copy of the certification statement to be provided in before they commence any construction activity.

Soil Description

As provided by the United States Department of Agriculture, Soil Conservation Service "Web Soil Survey," soil classifications which exist on the subject site are described below.

Soils are placed into four hydrologic groups: A, B, C, and D. In the definitions of the classes, infiltration rate is the rate at which water enters the soil at the surface and is controlled by the surface conditions. Transmission rate is the rate at which water moves in the soil and is controlled by soil properties. Definitions of the classes are as follows:

A. (Low runoff potential). The soils have a high infiltration rate even when thoroughly wetted. They chiefly consist of deep, well drained to excessively drained sands or gravels. They have a high rate of water transmission.

B. The soils have a moderate infiltration rate when thoroughly wetted. They chiefly are moderately deep to deep, moderately well drained to well drained soils that have moderately fine to moderately coarse textures. They have a moderate rate of water transmission.

C. The soils have a slow infiltration rate when thoroughly wetted. They chiefly have a layer that impedes downward movement of water or have moderately fine to fine texture. They have a slow rate of water transmission.

D. (High runoff potential). The soils have a very slow infiltration rate when thoroughly wetted. They chiefly consist of clay soils that have a high swelling potential, soils that have a permanent high water table, soils that have a claypan or clay layer at or near the surface, and shallow soils over nearly impervious material. They have a very slow rate of water transmission.

A soil's tendency to erode is also described in the USDA web soil survey. The ratings in this interpretation indicate the hazard of soil loss from unsurfaced areas. The ratings are based on soil erosion factor K, slope, and content of rock fragments. The hazard is described as "slight," "moderate," or "SEVERE." A rating of "slight" indicates that little or no erosion is likely; "moderate" indicates that some erosion is likely, that the temporarily unsurfaced / unstabilized during construction may require occasional maintenance, and that simple erosion-control measures are needed; and "SEVERE" indicates that significant erosion is expected, that the roads or trails require frequent maintenance, and that erosion-control measures are needed.
Per the Soil Survey, the following soils listed below are present at the site. Following this list is a detailed description of each soil type found on the property:

| SYM. | HYDRO. SOIL GROUP | DESCRIPTION |
|---|---|---|
| **CrC** | **B** | **Charlton-Chatfield Complex Rolling, 0 to 15%** |
| **CsD** | **B** | **Chatfield-Charlton Complex Hilly, 15 to 35%** |
| **CtC** | **B** | **Chatfield-Hollis-Rock Outcrop Complex, 0 to 15%** |
| **CuD** | **D** | **Chatfield-Hollis-Rock Outcrop Complex, 15 to 35%** |

**CrC, Charlton-Chatfield complex, rolling, very rocky, 0 to 15 percent slopes**

This unit consists of the very deep and moderately deep, well drained and somewhat excessively drained Chatfield soil and the well drained Charlton soil. It is on hilltops and hillsides that are underlain by highly folded bedrock. Slopes range from 0 to 15 percent. Individual areas are highly irregular in shape and range from 3 to 100 acres in size. They are about 50 percent Charlton soil, 30 percent Chatfield soil, and 20 percent other soils and rock outcrop. The rock outcrop covers 2 to 10 percent of the surface. Depth to the top of a seasonal high water table is more than 6 feet throughout the year. Available water capacity is low to moderate.

Hydrologic group: **B**

Erosion Hazard Rating: **Moderate**

**CsD, Chatfield-Charlton complex, hilly, very rocky, 15 to 35 percent slopes**

This unit consists of the very deep and moderately deep, well drained and somewhat excessively drained Chatfield soil and the well drained Charlton soil. It is on the tops and sides of hills that

are underlain by highly folded bedrock. Slopes range from 15 to 35 percent. Individual areas are highly irregular in shape and range from 3 to 75 acres in size. They are about 45 percent Chatfield soil, 35 percent Chatfield soil, and 20 percent other soils and rock outcrop. The rock outcrop covers 2 to 10 percent of the surface. Depth to the top of a seasonal high water table is more than 6 feet throughout the year. Available water capacity is low to moderate.

Hydrologic group: **B**
Erosion Hazard Rating: **Severe**

**CtC, Chatfield-Hollis-Rock outcrop complex, rolling, 0 to 15 percent slopes**

This unit consists of the rolling, moderately deep, well drained and somewhat excessively drained Chatfield soil, the shallow, well drained and somewhat excessively drained Hollis soil, and areas of Rock outcrop, dominate granite, gneiss, and schist. This unit is on hilltops and narrow ridges in bedrock-controlled landscapes. Slopes dominantly range from 3 to 15 percent. Individual areas of this unit are mostly irregular in shape and range from 2 to 100 acres in size. They are typically about 30 percent Chatfield soil, 20 percent Hollis soil, 20 percent rock outcrop, and 20 percent other soils. Depth to the top of a seasonal high water table is more than 6 feet throughout the year. Available water capacity is low.

Hydrologic group: **B**
Erosion Hazard Rating: **Moderate**

**CuD, Chatfield-Hollis-Rock outcrop complex, hilly, 15 to 35 percent slopes**

This unit consists of the moderately deep, well drained and somewhat excessively drained Chatfield soil, the shallow, well drained and somewhat excessively drained Hollis soil, and areas of Rock outcrop, dominantly granite, schist, and gneiss. The unit is on hillsides in bedrock-controlled landscapes. Slopes are dominantly 15 to 35 percent. Very steep or nearly vertical bedrock escarpments are common landscape features. Individual areas of this unit are mostly long and narrow and range from 2 to 200 acres in size. They are typically about 30 percent Chatfield soil, 30 percent Hollis soil, 25 percent Rock outcrop, and 15 percent other soils. Depth

to the top of a seasonal high water table is more than 6 feet throughout the year. Available water capacity is low.

Hydrologic group: **D**
Erosion Hazard Rating: **Severe**

## Phases of Construction

Prior to the start of any grading or construction on the subject property, temporary sediment and erosion control measures will be installed. Storm drain inlet protection shall be provided for all existing and proposed stormwater catch basins and inlets with the use of stone and block inlet protection and curb gutter inlet protection structures that keep silt, sediment and construction litter and debris out of the stormwater drainage system. As construction progresses, inlet protection, silt fence and silt traps will be installed consistent with the progress of each phase of construction.

Construction shall be sequenced in such a manner that any area which is disturbed shall first be protected with Sediment & Erosion Controls as indicated on each Phasing Plan. Particular requirements are given as follows:

Phase 1:

1A. Installation of Phase 1 Sediment & Erosion Controls required for Phase 1.

1B. Demolition of existing frame houses, curbs, pavements and utility services as required. Provide staging area as required. The existing drainage pipe connecting EX. CB 5 and EX. CB 6 should remain and be protected.

1C. Install Infiltration System 1A, its pretreatment water quality structure and the drainage conveyance pipes from the existing catch basin (EX. CB 5). Place a cap on the drainage pipe outlet leaving Ex. CB 5 until the uphill areas are stabilized.

1D. Install the drainage conveyance pipes from DMH A-1-1 to DI A-1-2, leaving a stub to the future DI A-1-3 through the proposed retaining wall. Install the drainage

conveyance pipes from the existing catch basin (EX. CB 6) to CI C-7, including the two temporary 15" storm pipes which allow the stormwater to be directed around the future Detention system. Place a cap on the drainage pipe between CI C-3 and DMH A-1-1 and the drainage pipe between DMH C-2C and DMH C-2B until the uphill areas are stabilized. Install the proposed drainage system along Green Hill Road. Install inlet protection on all new drain inlets.

1E. Remove or abandon existing drainage structures and pipes along Green Hill Road as indicated.

1F. Install the RDL on the existing Showroom Building and allow the stormwater to run overland into the proposed DI B-4 structure until DI A-1-5 is installed in Phase 3.

1G. Install the precast septic tank and wet well pump station by the Showroom Building. Install the sanitary line from the Showroom Building to the existing 1,500 gallon septic tank by the Service Building. Repair and regrade the OWTS seepage pits in the upper parking lot.

1H. The lower parking lot above Infiltration System 1A shall be rough graded and stabilized with pavement sub-base on top of the facility to protect the soils surrounding the infiltration system.

1I. Make the connection of the proposed drainage system to the existing NYSDOT drainage system along NYS Route 22. The proposed Infiltration System 1A will not be connected to the pipe conveyance system until all upstream contributing drainage areas are stabilized.

1J. Inspection of all work associated with the proposed drainage system by the Town Engineer to determinate the system substantially complete prior to the issuance of a building permit to renovate the existing Showroom Building.

1K. Clear and excavate south of existing Showroom Building and begin Showroom Building expansion construction.

1L. Fill and finish grade the area behind the building expansion, redistribute top soil, establish vegetation and install landscaping.

1M. Construct parking area on north side of the existing Showroom Building, proposed retaining walls along the existing driveway, proposed retaining walls and fences surrounding the middle parking area.

IN. Install Detention System 1C, its pretreatment water quality structure, inlet and outlet pipes. Connect to the remainder of the previously installed portion of the drainage system from earlier in Phase 1 and remove or abandon and plug the temporary pipe installed in between CI C-4-1 and CI C-4 in Phase 1.

1O. Install public utilities (gas, electric and telephone) as required.

1P. Finish grading, redistribute topsoil and establish vegetation and/or landscaping. Complete asphalt paving top course for Phase 1 and apply pavement striping.

1Q. Clean all new drain inlets, trench drains, conveyance pipes, etc. of any sediment and debris. Remove cap between EX. CB 5 and proposed Infiltration System 1A and remove or abandon and plug the existing drainage pipe between EX. CB 5 and EX. CB 6.

<u>Phase 2:</u>

2A. Installation of Phase 2 Sediment & Erosion Controls required for Phase 2.

2B. Install proposed water service line to water service Well No.2, underground water storage tank and dry hydrant.

2C. Begin retaining wall and fence construction along the east side of the service building continuing through the northern parking area. Temporary shoring shall be implemented where required. Install roof drain leaders and connections to previously installed portion of the drainage system. Install inlet protection on all new drain inlets.

2D. Inspection of all work associated with the proposed drainage system by the Town Engineer to determinate the system substantially complete prior to the issuance of a building permit to renovate the existing Service Building.

2E. Clear and excavate south of existing Service Building and begin Service Building expansion construction.

2F. Install public utilities (gas, electric and telephone) as required.

2G. Fill and finish grade the area on east side of behind the Service Building, redistribute top soil, establish vegetation and install landscaping.

2H. Begin construction of parking areas and roadways on north, west, and south sides of the Service Building.

2I. Complete remaining parking lot construction, fine grading, and install asphalt concrete pavement. Remove or abandon and plug the temporary pipe installed in between CI C-3 and DMH 1C-2 in Phase 1.

2J. Finish grading, redistribute topsoil, and establish vegetation and/or landscaping. Complete asphalt paving top course for Phase 2 and apply pavement striping.

2K. Clean pavements and storm drain system of all accumulated sediment in conjunction with the removal of all temporary sediment and erosion control devices.

Phase 3:

3A. Installation of Phase 3 Sediment & Erosion Controls required for Phase 3.

3B. Demolition of existing frame house, curbs, pavements and utility services as required. Provide staging area as required.

3C. Install proposed retaining wall and fence along the north, east, and south sides of the upper parking lot area.

3D. Install the drainage conveyance pipes from DI A-1-3 to DI A-1-6, leaving the inlets covered until the uphill areas are stabilized. Tie in previously relocated RDL from the existing Showroom Building into DI A-1-5.

3E. Construct the upper parking lot and driveway expansion. Complete asphalt paving and porous concrete placement.

3F. Remove caps from inlets located in driveway leading to upper parking area.

3G. Complete all necessary improvements to Anderson Lane and Green Hill Road.

3H. Clean pavements and storm drain system of all accumulated sediment in conjunction with the removal of all temporary sediment and erosion control devices.

All phases of the site construction are to be inspected by the Town Engineer and determined to be complete prior to the issuance of building certificates of occupancy.

On-Site Pollution Prevention

There are temporary pollution prevention measures used to control litter and construction debris on site, such as:

- Silt Fence
- Silt Sack
- Excavated Drop Inlet Protection
- Haybales

There will be inlet protection provided for all storm drains and inlets with the use of curb gutter inlet protection structures, stone & block drop inlet protection and silt sacks, which keep silt, sediment and construction litter and debris out of the on-site and stormwater drainage system.

Temporary Control Measures

Temporary control measures and facilities will include silt fences, interceptor swales, stabilized construction entrances, temporary seeding, mulching, haybales, etc.

Throughout the construction of the proposed redevelopment, temporary control facilities will be implemented to control on-site erosion and sediment transfer. Interceptor swales, if required, will be used to direct stormwater runoff to temporary sediment traps for settlement. Descriptions of the temporary sediment & erosion controls that will be used during the development of the site are as follows:

1. Silt Fence is constructed using a geotextile fabric. The fence will be either 18 inches or 30 inches high. The height of the fence can be increased in the event of placing these devices on uncompacted fills or extremely loose undisturbed soils. The fences will not be placed in areas which receive concentrated flows such as ditches, swales and channels nor will the filter

fabric material be placed across the entrance to pipes, culverts, spillway structures, sediment traps or basins.

2. Stabilized Construction Entrance consists of AASHTO No. 1 rock. The rock entrance will be a minimum of 50 feet in length by 20 feet in width by 8 inches in depth.

3. Seeding will be used to create a vegetative surface to stabilize disturbed earth until at least 70% of the disturbed area has a perennial vegetative cover. This amount is required to adequately function as a sediment and erosion control facility. Grass lining will also be used to line temporary channels and the surrounding disturbed areas.

4. Mulching is used as an anchor for seeding and disturbed areas to reduce soil loss due to storm events. These areas will be mulched with straw at a rate of 3 tons per acre such that the mulch forms a continuous blanket. Mulch must be placed after seeding or within 48 hours after seeding is completed.

5. Inlet Protection will be provided for all stormwater basins and inlets with the use of curb & gutter inlet protection and stone & block inlet protection structures, which will keep silt, sediment and construction debris out of the storm system. Existing structures within existing paved areas will be protected using "Silt Sacks" inside the structures.

6. Dust Control will be used and consists of spraying the ground surface with water to prevent dust emissions from vehicular and construction traffic.

7. Temporary Swales may be created to prevent stormwater runoff from flowing into construction areas where disturbed soil is present. The swales can intercept and divert runoff to stabilized, undisturbed areas of the site or into a sediment pit.

8. Sediment Sump Pits are temporary excavations constructed to capture and filter runoff and accumulated water for pumping to stabilized areas or catch basins.

9. Haybales may be used along existing paved areas to intercept sediment from stormwater runoff generated by upstream soil disturbance. Haybales may also be placed around temporary soil stockpile areas on pavement.

10. Sediment Traps may be used instead of the permanent SMP's until their contributing drainage areas are stabilized. Once stabilized, the temporary traps will be removed and final grading/plantings will be completed.

The contractor shall be responsible for maintaining the temporary sediment and erosion control measures throughout construction. This maintenance will include, but not be limited to, the following tasks:

1. For dust control purposes, moisten all exposed graded areas with water at least twice a day in those areas where soil is exposed and cannot be planted with a temporary cover due to construction operations or the season (December through March).

2. Inspection of erosion and sediment control measures shall be performed at the end of each construction day and immediately following each rainfall event. All required repairs shall be immediately executed by the contractor.

3. Sediment deposits shall be removed when they reach approximately ⅓ the height of the silt fence. All such sediment shall be properly disposed of in fill areas on the site, as directed by the Owner's Field Representative. Fill shall be protected following disposal with mulch, temporary and/or permanent vegetation and be completely circumscribed on the downhill side by silt fence.

4. Rake all exposed areas parallel to the slope during earthwork operations.

5. Following final grading, the disturbed area shall be stabilized with a permanent surface treatment (i.e. turf grass, pavement or sidewalk). During rough grading, areas which are not to be disturbed for fourteen or more days shall be stabilized with the temporary seed

mixture, as defined on the plans. Seed all piles of dirt in exposed soil areas that will not receive a permanent surface treatment.

Concrete Material and Equipment Management

Concrete washouts shall be used to contain concrete and liquids when the chutes of concrete mixers and hoppers of concrete pumps are rinsed out after delivery. The washout facilities consolidate solid for easier disposal and prevent runoff of liquids. The wash water is alkaline and contains high levels of chromium, which can leach into the ground and contaminate groundwater. It can also migrate to a storm drain, which can increase the pH of area waters and harm aquatic life. Solids that are improperly disposed of can clog storm drain pipes and cause flooding. Installing concrete washout facilities not only prevents pollution but also is a matter of good housekeeping at your construction site.

Prefabricated concrete washout containers can be delivered to the site to provide maintenance and disposal of materials. Regular pick-ups of solid and liquid waste materials will be necessary. To prevent leaks on the job site, ensure that prefabricated washout containers are watertight. A self installed concrete washout facility can be utilized although they are much less reliable than prefabricated containers and are prone to leaks. There are many design options for the washout, but they are preferably built below-grade to prevent breaches and reduce the likelihood of runoff. Above-grade structures can also be used if they are sized and constructed correctly and are diligently maintained. One of the most common problems with self-installed concrete washout facilities is that they can leak or be breached as a result of constant use, therefore the contractor shall be sure to use quality materials and inspect the facilities on a daily basis.

Washouts must be sized to handle solids, wash water, and rainfall to prevent overflow. Concrete Washout Systems, Inc. estimates that 7 gallons of wash water are used to wash one truck chute and 50 gallons are used to wash out the hopper of a concrete pump truck.

For larger sites, a below-grade washout should be at least 10 feet wide and sized to contain all liquid and solid waste expected to be generated in between cleanout periods. A minimum of 12-inches of freeboard must be provided. The pit must be lined with plastic sheeting of at least 10-mil thickness without holes or tears to prevent leaching of liquids into the ground. Concrete wash water should never be placed in a pit that is connected to the storm drain system or that drains to nearby waterways.

An above-grade washout can be constructed at least 10 feet wide by 10 feet long and sized to contain all liquid and solid waste expected to be generated in between cleanout periods. A minimum of 4-inches of freeboard must be provided. The washout structures can be constructed with staked straw bales or sandbags double-or triple lined with plastic sheeting of at least 10-mil thickness without holes or tears.
Concrete washout facilities shall not be located within 50 feet of storm drains, open ditches, or water bodies and should be placed in locations that allow for convenient access for concrete trucks. The contractor shall check all concrete washout facilities daily to determine if they have been filled to 75 percent capacity, which is when materials need to be removed. Both above-and below-ground self-installed washouts should be inspected daily to ensure that plastic linings are intact and sidewalls have not been damaged by construction activities. Prefabricated washout containers should be inspected daily as well as to ensure the container is not leaking or nearing 75 percent capacity. Inspectors should also note whether the facilities are being used regularly. Additional signage for washouts may be needed in more convenient locations if concrete truck operators are not utilizing them.

The washout structures must be drained or covered prior to predicted rainstorms to prevent overflows. Hardened solids either whole or broken must be removed and then they may be reused onsite or hauled away for recycling.

Once materials are removed from the concrete washout, a new structure must be built or excavated, or if the previous structure is still intact, inspect it for signs of weakening or damage and make any necessary repairs. Line the structure with new plastic that is free of holes or tears

and replace signage if necessary. It is very important that new plastic be used after every cleaning because pumps and concrete removal equipment can damage the existing liner.

Construction Site Chemical Control

The purpose of this management measure is to prevent the generation of nonpoint source pollution from construction sites due to improper handling and usage of nutrients and toxic substances, and to prevent the movement of toxic substances from the construction site.

Many potential pollutants other than sediment are associated with construction activities. These pollutants include pesticides; fertilizers used for vegetative stabilization; petrochemicals; construction chemicals such as concrete products, sealers, and paints; wash water associated with these products; paper; wood; garbage; and sanitary waste.
Disposal of excess pesticides and pesticide-related wastes should conform to registered label directions for the disposal and storage of pesticides and pesticide containers set forth in applicable Federal, State and local regulations that govern their usage, handling, storage, and disposal.

Pesticides should be disposed of through either a licensed waste management firm or a treatment, storage and disposal (TSD) facility. Containers should be triple-rinsed before disposal, and rinse waters should be reused as product.
Other practices include setting aside a locked storage area, tightly closing lids, storing in a cool, dry place, checking containers periodically for leaks or deterioration, maintaining a list of products in storage, using plastic sheeting to line the storage areas, and notifying neighboring property owners prior to spraying.

When storing petroleum products, follow these guidelines:

- Create a shelter around the area with cover and wind protection;
- Line the storage area with a double layer of plastic sheeting or similar material;

- Create an impervious berm around the perimeter with a capacity of 110 percent greater than that of the largest container;
- Clearly label all products;
- Keep tanks off the ground; and
- Keep lids securely fastened.

Post spill procedure information and have persons trained in spill handling on site or on call at all times. Materials for cleaning up spills should be kept on site and easily available. Spills should be cleaned up immediately and the contaminated material properly disposed of. Maintain and wash equipment and machinery in confined areas specifically designed to control runoff.

Thinners or solvents should not be discharged into sanitary or storm systems when cleaning machinery. Use alternative methods for cleaning larger equipment parts, such as high-pressure, high-temperature water washes, or steam cleaning. Equipment-washing detergents can be used, and wash water may be discharged into sanitary sewers if solids are removed from the solution first. (This practice should be verified with the local sewer authority.) Small parts can be cleaned with degreasing solvents, which can then be reused or recycled.

Solid Waste Management and Portable Sanitary Management

The purpose of this management measure is to prevent the potential for solid waste such as construction debris, trash, etc. from construction sites due to improper handling and storage. Debris and litter should be removed periodically from the BMP's and surrounding areas to prevent clogging of pipes and structures. All construction material shall be stored in designated staging areas. Roll-off containers shall be placed on site and all empty containers, construction debris and litter shall be placed in the containers.

Portable sanitary units may be utilized on-site or bathrooms will be provided within construction trailers. A sanitation removal company will be hired to pump/remove any sanitary waste. In the event that portable sanitary units are used and then cleaned after being emptied, the rinse water may not be disposed of to the storm drain system. It shall be contained for later disposal if it

can't be disposed of on-site. Remove paper and trash before cleaning the portable sanitary units. The portable sanitary units shall be located away from the storm drain system if possible. Provide over head cover for wash areas if possible. Maintain spill response material and equipment on site to eliminate the potential for contaminants and wash water from entering the storm drain system.

Permanent Control Measures and Facilities for Long Term Protection

Towards the completion of construction, permanent sediment and erosion control measures will be developed for long term erosion protection. The following permanent control measures and facilities have been proposed to be implemented for the project:

1. The CDS Water Quality Structures must provide water quality for 75% of existing impervious areas for the 1 year, 24 hour storm in accordance with the requirements of the New York State Department of Conservation (NYSDEC). The CDS Water Quality Structures have been designed to treat up to the required water quality volume and appropriately handle all storm frequencies without the resuspension of solids. The systems will provide 80% TSS removal rate for particles having a mean particle size of 125 microns for stormwater runoff. The treated stormwater will then be discharged into the subsurface detention system and then piped to the existing storm drainage system along NYS Route 22.

2. Detention System (StormTech Chambers) which is a standard SMP that will be used to treat the runoff volume generated from a portion of the developed area. The StormTech MC-4500 Recharge Chambers are domed shaped fully opened bottom corrugated chambers with perforated side walls. Chambers allow stormwater to be stored within the dome void and released slowly. They are able to be used for residential, commercial or industrial applications and provide an easy way to treat and dispose of stormwater runoff underground. Water is detained underground through the chambers and surrounding crushed stone and will release through an orifice to control peak flows leaving the site.

3. Infiltration System (StormTech Recharge Chambers)

   The StormTech MC-3500 Recharge Chambers are domed shaped fully opened bottom

corrugated chambers with perforated side walls. Chambers allow stormwater to be stored within the dome void until it can infiltrate into the ground. They are able to be used for residential, commercial or industrial applications and provide an easy way to treat and dispose of stormwater runoff underground. Water is infiltrated into the ground through the chambers and surrounding crushed stone and will replenish the groundwater as a natural condition.

The Isolator Row is a row of StormTech chambers that is surrounded with filter fabric and connected to a closely located manhole for easy access. The fabric-wrapped chambers provide for settling and filtration of sediment as stormwater rises in the Isolator Row and ultimately passes through the filter fabric. The open bottom chambers and perforated sidewalls allow stormwater to flow both vertically and horizontally out of the chambers. Sediments are captured in the Isolator Row protecting the storage access of the adjacent stone and chambers from sediment accumulation.

The Isolator Row is designed to capture the "first flush" and offers the versatility to be sized on a volume basis or flow rate basis. An upstream manhole not only provides access to the Isolator Row but includes a high flow weir such that stormwater flow rates or volumes that exceed the capacity of the Isolator Row overtop the over flow weir and discharge through a manifold to the other standard chambers. By treating stormwater prior to entry into the chamber system, the service life can be extended and pollutants such as hydrocarbons can be captured.

4. Vegetated Swales will function to provide additional treatment of stormwater runoff by removal of pollutants and will promote a reduction of peak flows and provide runoff infiltration.

5. Catch Basins and trench drains will be used to remove some of the coarse sand and grit sediment before entering the drainage system. Each catch basin will be constructed with an 18 inch deep sump and the trench drain will be constructed with a 24 inch deep sump.

6. Seeding of at least 70% perennial vegetative cover will be used to produce a permanent uniform erosion resistant surface. The seeded areas will be mulched with straw at a rate of 3 tons per acre such that the mulch forms a continuous blanket.

7. Green Roof - The proposed building will be constructed with an extensive green roof which will provide hydrologic source control and water quality volume for the rooftop runoff. The green roof must provide volume reduction equal to or greater than the required minimum RRv. This reduction is achieved when runoff is captured, routed through green infrastructure, infiltrated to the ground, reused, reduced by evapotranspiration and eventually removed from the stormwater discharge from the site. After determining the minimum RRv required, which depends on factors such as the Hydrologic Soil Group (HSG) and the amount of impervious area within the targeted drainage area, the remaining water quality volume is directed to a standard practice.

8. Porous Pavement is proposed in the upper parking lot to capture and treat/infiltrate stormwater runoff. Porous pavement can be used to provide RRv because the soil on-site is classified as hydrologic soil group B. The project is proposing the use of Stormcrete Modular Precast Porous Concrete which is typically 5 foot by 5 foot panels of precast porous concrete laid on top of a thick crushed stone bed that acts as a reservoir. These panels will account for the new impervious area and will receive the stormwater runoff from within the parking lot.

## Specifications for Soil Restoration

Prior to the final stabilization of the disturbed areas, soil restoration will be required for all vegetated areas to recover the original properties and porosity of the soil. Soil Restoration Requirements are provided on Table 4 below:

**Table 4**
**Soil Restoration Requirements**

| Type of Soil Disturbance | Soil Restoration Requirement | | Comments/Examples |
|---|---|---|---|
| No soil disturbance | Restoration not permitted | | Preservation of Natural Features |
| Minimal soil disturbance | Restoration not required | | Clearing and grubbing |
| Areas where topsoil is stripped only – no change in grade | HSG A&B | HSG C&D | Protect area from any ongoing construction activities |
| | apply 6 inches of topsoil | Aerate* and apply 6 inches of topsoil | |
| Areas of cut or fill | HSG A&B | HSG C&D | Clearing and grubbing |
| | Aerate and apply 6 inches of topsoil | Apply full Soil Restoration** | |
| Heavy traffic areas on site (especially) in a zone 5-25 feet around buildings but not within a 5 foot perimeter around foundation walls) | Apply full Soil Restoration (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 | Soil Restoration is required on redevelopment projects in areas where existing impervious area will be converted to pervious area. | | |

* 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 mini-subsoiler.

** Per "Deep Ripping and De-compaction, DEC 2008."

During periods of relatively low to moderate subsoil moisture, the disturbed subsoils are returned to rough grade and the following full 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.

**Specifications for Final Stabilization of Graded Areas**

Final stabilization of graded areas consists of the placement of topsoil and installation of landscaping (unless the area is to be paved, or a building is to be constructed in the location). Topsoil is to be spread as soon as grading operations are completed. Topsoil is to be placed to a minimum depth of six inches on all embankments, planting areas and seeding/sod areas. The subgrade is to be scarified to a depth of two inches to provide a bond of the topsoil with the subsoil. Topsoil is to be raked to an even surface and cleared of all debris, roots, stones and other unsatisfactory material.

Planting operations shall be conducted under favorable weather conditions as follows:

- Permanent Lawns - April 15 (provided soil is frost-free and not excessively moist) to May 15; August 15 to October 15.
- Temporary Lawn Seeding - if outside of the time periods noted above, the areas shall be seeded immediately on completion of topsoil operations with annual ryegrass (Italian rye) at a rate of six pounds per 1,000 square feet. Temporary lawn installation is permitted provided the soil is frost-free and not excessively moist. The permanent lawn is to be installed the next planting season.

On slopes with a grade of 3 horizontal to 1 vertical or greater, and in swales, a geotextile netting or mat shall be installed for stabilization purposes as shown on the Plans. Seeded areas are to be mulched with straw or hay at an application rate of 70-90 pounds per 1,000 s.f. Straw or hay

mulch must be spread uniformly and anchored immediately after spreading to prevent wind blowing. Mulches must be inspected periodically and in particular after rainstorms to check for erosion. If erosion is observed, additional mulch must be applied. Netting shall be inspected after rainstorms for dislocation or failure; any damage shall be repaired immediately.

All denuded surfaces which will be exposed for a period of over two months or more shall be temporarily hydroseeded with (a) perennial ryegrass at a rate of 40 lbs per acre (1.0 lb per 1000 square feet ); (b) Certified "Aroostook" winter rye (cereal rye) @ 100 lb per acre (2.5 lb/1000 s.f.) to be used in the months of October and November.

Permanent turfgrass cover is to consist of a seed mixture as follows:

(a) <u>Sunny sites</u>

| | |
|---|---|
| Kentucky Bluegrass | 2.0-2.6 pounds/1000 square feet |
| Perennial Ryegrass | 0.6-0.7 pounds/1000 square feet |
| Fine Fescue | 0.4-0.6 pounds/1000 square feet |

(b) <u>Shady sites</u>

| | |
|---|---|
| Kentucky Bluegrass | 0.8-1.0 pounds/1000 square feet |
| Perennial Ryegrass | 0.6-0.7 pounds/1000 square feet |
| Fine Fescue | 2.6-3.3 pounds/1000 square feet |

All plant materials shall comply with the standards of the American Association Of Nurserymen with respect to height and caliper as described in its publication American Standard for Nursery Stock, latest edition.

## VII. CONSTRUCTION PHASE AND POST-CONSTRUCTION MAINTENANCE

During the construction phase and following construction of the project, a number of maintenance measures will be taken with respect to the site maintenance. Measures to be taken included the following:

### 1. During Construction

A comprehensive sediment and erosion control plan will be in place during the construction period. Maintenance measures for sediment and erosion controls will include:

A qualified professional acceptable to the municipality will be hired by the owner or operator to monitor the installation and maintenance of the sediment and erosion control plans. The qualified professional shall report directly to the Engineering Consultant and shall be responsible for ensuring compliance with the design of the sediment and erosion control plans.

The qualified professional so hired will inspect all sediment and erosion control measures at least two times every seven calendar days. In the event that there has been a variance with the design of the sediment and erosion control measures so that the ability of the measures to adequately perform the intended function is lessened or compromised and/or the facilities are not adequately maintained, the qualified professional shall be required to report such variance to the Engineering Consultant within 48 hours and shall be empowered to order immediate repairs to the sediment and erosion control measures.

The qualified professional will also be responsible for observing the adequacy of the vegetation growth (trees, shrubs, groundcovers and turfgrasses) in newly graded areas and for ordering additional plantings in the event that the established plant materials do not adequately protect the ground surface from erosion.

## 2. Following Construction

Site maintenance activities on the property will include:

- Grounds maintenance, including mowing of lawns;
- Planting of trees, shrubs and groundcovers; pruning of trees and shrubs;
- Application of fertilizer and herbicides;
- Maintenance of stormwater management practices;

Grounds maintenance on the site will be performed by a landscaping contractor and a qualified stormwater management practice maintenance contractor will be hired to clean, monitor and maintain all post-construction practices.

Fertilizer is typically applied twice in the year - once in the spring and once in the fall. The application of fertilizer is usually necessary to maintain healthy lawn growth due to competition for nutrients with trees and shrubs and since the clippings are often removed. It is not recommended that fertilizer be applied during the summer. It is at this time that lawns are typically dormant.

Fertilizers come in three basic types: (1) Organic; (2) Soluble synthetic and (3) Slow release.

Organic fertilizers are derived from plant or animal waste. Since they are heavier and bulkier than other fertilizers, it is necessary to apply a much greater amount at one time. Soluble synthetic fertilizers are predictable with determining the exact impact on a lawn. However more applications are necessary since their effect is often short term. Slow release fertilizers have a high percentage of nitrogen so quantities that need be handled at one time are smaller. Slow release fertilizers will be utilized by the project.

A complete fertilizer contains all three of the primary nutrients - nitrogen (N), phosphorus (P) and potassium in the form of potash (K). Typically, a 3-1-2 ratio of nutrients (N-P-K) is used for lawn applications.

Fertilizer shall be applied by the landscape contractor in accordance with the manufacturer's instructions. The application of fertilizer does require some skill on the part of the operator. Should there be a spill of fertilizer, the landscape contractor shall be required to scrape or vacuum it up. The area will then be watered in accordance with the manufacturer's instructions to ensure that the fertilizer becomes soluble and available to plants and does not run off.

Mercedes Benz of Goldens Bridge will be responsible for the long-term operation and maintenance of the permanent stormwater management practices. The permanent stormwater management practices shall be maintained in accordance with the Maintenance Inspection Checklists provided in Appendix E.

## VIII. CONCLUSION

This Stormwater Pollution Prevention Plan has been prepared to describe the project's pre and post-development stormwater management improvements and its sediment and erosion control improvements to be utilized during construction. The proposed permanent improvements and the interim improvements to be utilized during construction have been designed in accordance with the requirements of the:

- New York State Department of Environmental Conservation (NYSDEC) SPDES General Permit No. GP-0-15-002, effective January 29, 2015, last modified November 23, 2016.
- New York City Environmental Protection (NYCEP, formerly NYCDEP) Rules and Regulations for the Protection from Contamination, Degradation and Pollution of the New York City Water Supply and its Sources, amended April 4, 2010.
- Chapter 188 "Storm Sewer System" of the Town of Lewisboro Zoning Code
- Chapter 189 "Stormwater Management and Erosion and Sediment Control" of the Town of Lewisboro Zoning Code

The project employs a variety of practices to enhance stormwater quality and reduce peak rates of runoff associated with the proposed building expansion and improvements. These measures

include green roofs, subsurface detention and infiltration systems, and rain gardens. These improvements will also mitigate runoff volumes from the proposed improvements as runoff volumes will be slightly reduced or maintained in all the analyzed storms.

Based on the foregoing, it is our professional opinion that the proposed improvements will provide water quantity and quality enhancements which exceed the above mentioned requirements and are not anticipated to have any adverse impacts to the site or any surrounding areas.

# EXPANDED ENVIRONMENTAL ASSESSMENT

# *MERCEDES-BENZ OF GOLDENS BRIDGE*

**321 MAIN STREET (NY ROUTE 22)**
**TOWN OF LEWISBORO**
**WESTCHESTER COUNTY, NY**

*Prepared for:* **Celebrity Motor Car, LLC**
130 Route 10 West
Whippany, NJ 07981

*Prepared by:*

120 Bedford Road
Armonk, NY 10504
JMC Project 16124

*Dated:* *November 29, 2018*
*Revised:* *December 26, 2018*

*p:\2016\16124\admin\eea report 12-26-2018.doc*

# EXPANDED ENVIRONMENTAL ASSESSMENT
## MERCEDES-BENZ OF GOLDENS BRIDGE
## 321 MAIN STREET (NY ROUTE 22)

## TABLE OF CONTENTS



## LIST OF FIGURES



## APPENDICES

# I. INTRODUCTION AND PROJECT DESCRIPTION

The Mercedes-Benz of Goldens Bridge, formerly Estate Motors Mercedes-Benz, is now owned and operated by Celebrity Motor Car, LLC which has experience with several luxury auto dealerships. The dealership is located at 321 Main Street (NYS Route 22) in Goldens Bridge, NY (Figure 1). The site is bordered by residences to the north and east, Anderson Road to the south, and Route 22 to the west. This current dealership property is also known and designated on the tax assessment map of the Town of Lewisboro as Sheet 4E, Block 11135, Lots 1, 2, 3, 4, 6 and 7. Celebrity Motor Car, LLC is currently in contract to purchase the adjacent commercial property to the south (Sheet 4E, Block 11135, Lot 5) and the adjacent residential property to the east (Sheet 4E, Block 11137, Lot 42). The total of all above lots is referred to as the property.

A Full Environmental Assessment Form (EAF) Part 1 was previously submitted to the Town (Appendix A). An EAF Part 2 is attached as Appendix B.

The property is approximately 4.97 acres in size, which includes the two lots in contract. The remainder of the lots make up the Mercedes-Benz auto dealership which includes separate Showroom and Service buildings. The auto dealership portion of the property has been used for automobile sales and service since 1969. According to the map entitled "Town of Lewisboro Zoning", February 2012, the dealership portion of the property is located in the "GB- General Business District" zoning district. The commercial lot in contract is within the "RB Retail Business District" zoning district. The residential lot in contract is within the "R-1/2A One-Family Residence District". Once the Applicant has ownership of Lot 5 and Lot 42, the Applicant proposes to rezone both lots to the "GB- General Business" zoning district.

The project was previously approved by the Planning Board on October 11, 2011 and required several variances from the Zoning Board of Appeals which were granted on May 11, 2011. The project involved approvals from several other outside agencies such as NYSDEC, NYCDEP, NYSDOT and the health department. Since the approvals were granted, the previous owner (Charisma Holding Corp.) did not begin construction due to economic constraints, as well as internal decisions and disagreements with Mercedes-Benz USA. The Planning Board also granted

an Amended Site Development Plan Approval on September 16, 2014 for the demolition of two abandoned structures, site parking and landscaping improvements.

The property was purchased by Celebrity Motor Car, LLC and is planned for a modified redevelopment. The project resembles the previously approved design except that there are two new lots to be redeveloped. Celebrity Motor Car, LLC had to purchase the new lots to design a project that could meet their and Mercedes-Benz USA requirements.

The project includes a showroom building expansion of 38,500 s.f., to the existing 12,400 s.f. showroom building, bringing the new showroom building total to 50,900 s.f. A 2,700 s.f. expansion is also proposed to the existing 18,200 s.f. service building, bringing the new service building total to 20,900 s.f. The service building was planned to be demolished under the previous approval. A 3-level 30,000 s.f. open parking garage for 135 cars is also proposed attached to the showroom building expansion. The total net increase in building area is approximately 41,200 s.f. A 41-vehicle inventory storage parking lot is also proposed on the adjacent residential lot in contract. Figure 2 illustrates the changes to impervious coverages.

The proposed project will also include various site upgrades including new parking and vehicle storage areas, site drainage, site lighting and extensive landscaping improvements. The modified design of the project will likely require all of the same or similar variances and will require approvals from the same outside agencies.

## II. IDENTIFICATION OF POTENTIAL PROJECT IMPACTS

The EAF Part 2 – *Identification of Potential Project Impacts,* notes the following items may result in a small to moderate impact as a result of the construction of the proposed project. These are described below, along with proposed mitigation measures to minimize adverse environmental impacts to the maximum extent practicable.

1. Impact on Land:

Approximately 1.33 acres of slopes ≥15% are proposed to be disturbed. (Regulated slopes are considered to be those areas with slopes of and greater than 15% per the Town Zoning Code §220-21.B(3)). Most of the slope disturbance is due to removal of additional rock from the slope south of the Showroom Building, the slope south of the Service Building and the upper overflow parking lot east of the Service Building.

Disturbance to these slopes is necessary because of the configuration of the site, which precludes the siting of the proposed action in a different location. However, regulated practices can permit environmentally sound disturbance of steep slopes conducted in accordance with acceptable management and engineering practices to permit reasonable use of private property.

No disturbance to hilltops or ridgelines is proposed.

Mitigation measures would include the following, as well as any other measures required by the Town Engineer:

a. Areas of steep slope disturbance will be stabilized during one construction season to avoid exposure during the winter and spring months.

b. Disturbance to vegetation will not occur more than fifteen days prior to grading or construction activity.

c. Temporary soil stabilization, such as mulching or geotextile installation, will be completed within two days of establishing final grade, and permanent stabilization will occur within fifteen days of establishing the final grade.

d. In areas of disturbance where final grade is not expected to be achieved within 60 days, soil stabilization will occur within two days of disturbance.

e. Soil erosion and sedimentation control measures will be consistent with the Westchester County Soil and Water Conservation District's Best Management Practices Manual for Erosion and Sediment Controls and the New York State Standards and Specifications for Erosion and Sediment Control.

f. Disturbance to steep slopes is being undertaken with consideration of soil limitations characterized by the Westchester County Soil Survey, 1989.

g. Soil will be stockpiled in level areas of the site (no greater than 10%) to minimize erosion potential.

h. The disturbance to slopes will be under the supervision of a licensed professional geotechnical engineer.

Other mitigation measures taken to minimize potential adverse environmental impacts to land include:

Project Compliance with NYSDEC SPDES General Permit No. GP-0-15-002

A Stormwater Pollution Prevention Plan (SWPPP) has been prepared in accordance with the requirements of the NYSDEC State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002) and the NYCEP Rules and Regulations for the Protection from Contamination, Degradation and Pollution of the New York City Water Supply and its Sources. The SWPPP analyzes the conveyance of stormwater runoff from impervious and graded surfaces within the project site and adjacent properties to a stormwater management system consisting of subsurface storage chambers and water quality structures. Since this project is a "redevelopment project," the NYSDEC's requirements included in Chapter 9 "Redevelopment Projects" of the New York State Stormwater Management Design Manual, (herein after referred to as the Design Manual) have also been incorporated into the proposed improvements. The Redevelopment Standards include criteria for the implementation of surface water quantity and quality improvements for redevelopment projects. It analyzes the existing and proposed drainage conditions to demonstrate that the development of the property will improve the current site conditions. Anticipated stormwater impacts of the proposed building expansion and other site changes related to the development of the project have been examined. This study demonstrates that the quantity of stormwater runoff during and after development are not substantially altered

from that of pre-development conditions. In addition, the plan will result in significant improvement in the water quality, as discussed below under 3. "Impact on Flooding".

Sediment and Erosion Control Plan

The principal impact of the proposed expansion and remodel of the existing development on soils and slopes will be the erosion and transport of sediment from the site. A Sediment and Erosion Control Management Program will be established for the proposed redevelopment, beginning at the start of construction and continuing throughout its course, as outlined in "NYS Standards and Specifications for Erosion and Sediment Control (Blue Book)", last revised November 2016. A continuing maintenance program will be implemented for the control of sediment transport and erosion control after construction and throughout the useful life of the project.

The Sediment and Erosion controls that will be used during the development of the site including silt fence, stabilized construction entrance, seeding, mulching and inlet protection. The purpose of these facilities is to control stormwater runoff by removing sediment and reducing soil erosion. These measures are described in the SWPPP.

Until the site is stabilized, all erosion and sedimentation must be maintained properly in accordance with the notes and procedures depicted on the site plans. Maintenance must include inspections of all erosion and sedimentation control at the end of each construction day and immediately following each runoff event. All preventative and remedial maintenance work, including clean up, repair, replacement, regrading, reseeding, remulching and renetting must be performed by the contractor immediately.

Cut and Fill

An earthwork analysis was performed based on the topographical survey, information gathered regarding the depth to bedrock and the proposed conditions design. The results are as follows:

Earth Excavation Placed as Compacted Fill (15% Compaction) 2,125 cubic yards
Rock Excavation Placed as Compacted Fill (50% Swell) 2,425 cubic yards*
Excess Rock Excavation Disposed Off-Site (50% Swell) 4,175 cubic yards*
*Total Unadjusted Excavated Rock =4,400 cubic yards

Therefore, approximately 4,175 cubic yards of rock will be removed from the site. A typical trailer dump truck can hold 25 cubic yards, resulting in approximately 167 truckloads (334 trips for each load entering and exiting the site) required to remove the excess material from the site. If one trailer dump truck moves 8 loads per day, then the material can be removed from the site in approximately 21 days. If the truck will be heading north, it will most likely turn onto NY Route 22 northbound. If the truck will be heading south, it will most likely turn onto NY Route 22 southbound, turn east onto North Street, then west onto NY Route 138 and south onto Interstate I-684 southbound. These roadways are State Highways and a Federal Interstate capable of accommodating heavy truck traffic.

Removal of rock will be required as part of the proposed action, including modification of the existing rock slope along the northwesterly portion of the property. The rock slope is proposed to be modified at a maximum of one (1) horizontal to two and one-half (2.5) vertical. There will be a geotechnical engineer on-site who may recommend additional measures that may be required for stabilization depending upon encountered conditions.

Potential rock blasting is discussed below under "Noise and Odor Impacts".

Depth to Bedrock

Depth to bedrock where rock excavation is proposed to take place varies from zero feet in the area of the existing rock slope to depths of 8"-12" and 18" - 24". Depth to bedrock was determined from a combination of the Engineering Report by Joseph

Coleman Consulting Engineer, revised April 1982, the UST Closure Report by Ira D. Conklin & Sons, Inc., dated 03/31/2000, and on-site observations.

Quantity of Rock to be Removed

The volume of Excess Rock Excavation Disposed Off-Site (50% Swell) is approximately 4,175 cubic yards, as discussed above under "Cut and Fill".

2. Impact on Groundwater:

The proposed project does not require any new drilled water supply wells but is anticipated to require additional water from the existing wells currently serving the dealership. The existing water system at the site consists of three (3) separate wells. The following are the details for each well:

Well #1:

Well #1, is situated in Lot 3, Zoning District GB. Well #1 was abandoned in 2015 as part of the demolition of the existing residences located to the south of the Showroom Building. Records from P.F. Beal & Sons, Inc. shows that this well was drilled in 1985 and is approximately 200 feet deep.

Well #2

Well #2, referred to as the "Service Building Well-Upper Well," is located just off the west bullnose at the entrance to the parking lot south of the Service Building. An existing water service line brings water from Well #2 into the Service Building at the west wall into the utility room which is located in the south west corner of the building. At this point it is pressurized using one (1) Well-X-Trol pre-pressurized diaphragm tank and distributed throughout the existing building.

Well Completion Report from P.F. Beal & Sons, Inc. indicates that this well was drilled in 1982 and is 305 feet deep. The length of the seamless steel casing used was 30 feet with a diameter of 6 inches.

When this well was originally drilled it yielded 5 gallons per minute. A pump test was performed by P.F. Beal & Sons, Inc. in February 2006 to determine its current yield. This test confirmed that this well now produces a yield of four (4) gallons per minute.

Well #3:

Well #3, referred to as the "Showroom Building Well-Lower Well" is located approximately 11 feet from the north side of the Showroom Building, adjacent to the main entrance to the Showroom. An existing water service line brings water from Well #3 into the northeast corner of the lower level of the Showroom Building. Water is pressurized with a single Well-X-Trol pre-pressurized diaphragm tank and distributed throughout the existing building.

Well Completion Report from P.F. Beal & Sons, Inc. indicates that this well was drilled in 1977 and is approximately 500 feet deep. Records revealed this well initially provided a yield of 1.5 gallons per minute and has been in use since it was drilled by P.F. Beal & Sons, Inc.

A pump test was performed by P.F. Beal & Sons, Inc. in February 2006 to determine its current yield. This test confirmed that this well now produces a yield of one (1) gallon per minute.

The existing wells serving the existing buildings on Parcel 4 and 6 will be removed in accordance with Westchester County Department of Health requirements.

The Westchester County Department of Health, Bureau of Environmental Quality (WCDOH) issued the Approval of Plans for Public Water Supply Improvement on

09/05/2008 which involved water storage and treatment systems for each building. The systems were installed in 2009 and have been in successful operation. The proposed expansion project will involve designing expansions/upgrades to the current water supply and treatment systems for each building.

Current/existing water usage is monitored for both the Showroom and Service buildings. Existing water usage was determined by monitoring the daily water readings at both the Showroom and Service Buildings as reported to WCDOH for the period from January 2017 thru June 2018. The records confirm a long-term average combined demand of 493 gallons per day (gpd) with a maximum of 931 gpd and a minimum of 265 gpd (within Appendix D - "Engineering Report - Onsite Wastewater Treatment System"). The maximum monthly average of 931 gpd is for April 2018, where bathroom and kitchen fixtures were left running and were detected after a few days.

Water demand is calculated as total domestic usage ÷ number of employees = usage per employee. As stated in the Mercedes Benz of Goldens Bridge letter, dated February 5, 2018 (Appendix B within Appendix D - "Engineering Report - Onsite Wastewater Treatment System"), a total of 58 employees currently work for the dealership. Of the 58 employees, 9 of them are drivers who are not at the dealership most of the time. In addition, 3 employees are located at the Celebrity Motor Car, LLC corporate headquarters in New Jersey. The remaining number of employees on-site is 46. Although the 9 drivers may use restrooms at the beginning and end of the day, they have been excluded to provide a more conservative rate of flow per employee. Thus, the average daily domestic consumption per employee is as follows:

493 gpd ÷ 46 employees = 10.72 gpd per employee.

Refer to the Existing and Projected Employee Plus Customer Data (Appendix I within Appendix D - "Engineering Report - Onsite Wastewater Treatment System"), the dealership anticipates an additional 7 employees, for a total of 65 employees. Like current conditions, there would be 9 drivers but only 2 off-site employees. Therefore,

only 54 of the 65 employees will be on-site. 54 employees x 10.72 gpd per employee = 578.88, say 579 gpd. This would increase the usage to 579 gpd. Therefore, a modest average increase of 86 gallons per day is anticipated based on the current usage and the increase in employees. It is fully anticipated that the existing water supply wells can accommodate the slight increase in demand.

However, in addition, as part of the renovation work, the existing plumbing fixtures and devices will be replaced with modern water saving fixtures which are expected to reduce water consumption by approximately 20%. The vehicles are proposed to be washed by hand only, like the current operations. The project does not propose any automated vehicle washing systems. The proposed improvements will also include gray water reclamation systems to recycle water from sinks to be re-used within toilet tanks. The car wash/detail bays in the building will be for hand washing the vehicles only. The floor drains will also be connected to the gray water reclamation system to help reuse the water for washing down vehicles. The reclamation system is anticipated to reuse approximately 50% of the water. However, for the purpose of a conservative engineering analysis, the daily flow per employee based on the current empirical data is used.

The On-site Wastewater Treatment System (OWTS) serving the existing Showroom Building is located just west of the existing building within a paved driveway. The system is relatively old, and its condition and capacity are unknown, although it presently is effective in serving the 192 gallon average daily wastewater discharge from the Showroom Building which includes the water from washing vehicles that drains to floor drains and out to the septic tank. The existing OWTS at the Showroom Building will be removed as part of the renovation project.

The newer existing OWTS which serves the Service Building is located at the northern end of the site and is topographically higher than the finished floor elevation of the renovated Showroom Building. The Service Building OWTS was constructed in the mid 1980's. The existing system consists of a 1,500 gallon concrete septic tank and nine (9) – eight (8) foot diameter seepage pits. The WCDOH approved capacity of the existing

system is 810 gpd as indicated on the approved record Drawing No. 5 in (Appendix F within Appendix D - "Engineering Report - Onsite Wastewater Treatment System"). The approved 100% reserve septic expansion area is indicated on Drawing No. 5 and shown to accommodate the required separation distances on JMC Drawing C-300 "Utilities Plan." The seepage pits of the existing OWTS at the Service Building are proposed to be protected during the renovation project to remain and serve the renovated buildings. The existing 1,500 gallon septic tank will remain and a new pre-cast concrete baffle box is proposed to be installed before it for a proposed force main from the Showroom Building. A new 1,250 gallon septic tank and wet well pump station are proposed at the renovated Showroom Building, as described below.

As previously noted, the property included two houses on Parcel 3 served by one OWTS, which have been demolished and removed as part of a previous Site Plan Approval from the Town in 2014. In addition, the existing 2 story frame commercial/office house on Parcel 4 and the existing house on Parcel 6 will also be demolished, along with their associated OWTS's. The removal of 5 out of 6 existing OWTS's (Showroom Building, the two previously removed homes on Parcel 3, Parcel 4 commercial/office house, Parcel 6 house) will greatly reduce the overall wastewater effluent and eliminate forever a potential source of pollution, which is a significant benefit to the environment and the NYCDEP watershed.

The existing underground oil storage tank servicing the existing Service Building is proposed to be removed as part of the project. The existing underground oil storage tank servicing the residential home on Lot 42 (46 Green Hill Road) is proposed to be removed as part of the project. The existing oil storage tank servicing the commercial business on Lot 5 (5 Anderson Lane) is proposed to be removed as part of the project. There is an existing above ground oil storage tank within the existing Showroom Building that may remain. There are existing above ground oil storage tanks within the existing Service Building that may remain. Each existing oil storage tank is registered with NYSDEC and labeled appropriately. The proposed oil storage tanks will be double walled

to provide secondary containment and will also be registered with NYSDEC and labeled appropriately.

New above ground oil tanks will be proposed within and outside the buildings. The Showroom Building design drawings will be finalized after Site Plan Approval but preliminary heating, mechanical and plumbing design requires two oil storage tanks to heat the conditioned area of the building. The heating system will be fully engineered after Site Plan Approval as part of the building drawings. The Showroom Building requires two oil tanks. Used motor oil is planned to be part of the heating system fuel supply. However, it is likely that the dealership will not be able to produce enough used motor oil for both buildings. For the preliminary mechanical system design of the buildings, it is anticipated that each building will have a double walled 3,000 gallon internal used motor oil storage tank for the heating system of each building. The International Fire Code allows a maximum of 3,000 gallons to be stored inside of a building, as long as it is properly protected. Therefore only the recycled motor oil tank for each building will be located inside the building. If the existing above ground oil storage tank within the existing Showroom Building is to remain, then the total volume of the existing tank plus a new tank would not exceed allowable limits. The remaining required oil supply to heat the buildings will be clean #2 oil stored within a double walled 5,000 gallon exterior above ground tank for each building. The 5,000 gallon tanks are approximately 16 feet long by x 8 foot diameter and will be screened from view but still provide appropriate access for maintenance, inspections, deliveries, etc.

An evaluation of the existing OWTS serving the existing Service Building was conducted in November 2011 which was observed by a representative of JMC. The existing OWTS is located north of the Service Building within the paved parking area. The evaluation included an inspection of the septic tank and distribution box which were found to be in good condition and working order. The evaluation also included the excavation of three (3) of the nine (9) existing cylindrical seepage pits as indicated on the Drawing No. 5 in (Appendix F within Appendix D - "Engineering Report - Onsite Wastewater Treatment System"). The excavation exposed the top and partial side wall area of the three (3)

seepage pits. All three (3) seepage pits were found to be holding wastewater, although the system had never backed up to provide any indication of partial failure, since the seepage pits were still capable of discharging the small volume of daily wastewater generated by the Service Building. However, the wastewater in the seepage pits pools also exhibited an oil "sheen" on its surface. Accordingly, a qualified environmental consultant, Environmental Maintenance Contractors, Inc. (EMC) was retained by the dealership to conduct an investigation. (Appendix D within Appendix D - "Engineering Report - Onsite Wastewater Treatment System"). The consultant collected readings with a Photo Ionization Detector (PID) and concluded that there was a form of oil contamination. The consultant opined that at the time of the inspection there was no appearance that the environment had been impacted by oil product, but was rather contained within the seepage pits and the leach field. A NYSDEC Spill Number was assigned (1110538) and a clean-up was conducted under the supervision of EMC and JMC. EMC submitted its report to NYSDEC on December 12, 2012. EMC noted in its report *"It is our understanding that the possible source of oil had been abated in 2008 as part of the NYSDEC Spill Number 0813260 project. It is possible that some of the oil contamination from the previous spill may have made its way into leachate basin #4 and the worked its way into each of the other leachate basins, #1-3 and #5-9, through the network of PVC piping that interconnects the leachate field*".

Following the environmental investigation, the dealership retained MTEK Contracting, a WCDOH licensed septic system contractor (License No. 508). MTEK proceeded with repairing the existing seepage pits and leach field under the observation of JMC and EMC to confirm the area was not contaminated with oil. The repair work included removal of all wastewater, followed by removal of all gravel and native soil around each of the nine (9) seepage pits. Each concrete seepage pit was power washed clean. New 1 ½ to 2 ½ inch diameter clean stone was placed to a minimum thickness of 12 inches around the full perimeter and height of each seepage pit, which were then backfilled with run-of-bank soil. In addition, each of the 4-inch diameter PVC connecting pipes were televised, inspected and cleaned. The contractor tested the system to confirm proper percolation, repaved the disturbed area and placed the system back in normal service. The contractor

also filed a Repair and Remediation Data Form and Sketch with the WCDOH on January 20, 2012 (Appendix E within Appendix D - "Engineering Report - Onsite Wastewater Treatment System").

A Phase I Site Assessment was completed by SSG-BARCO, Inc. on June 8, 2016 (Appendix E) that states that there are no open environmental incidents or case numbers assigned to the property. However, the Phase I study concluded that there were three (3) recognized environmental conditions (REC's) that required a Phase II investigation. A subsequent Phase II Subsurface Investigation (Appendix F) was completed by SSG-BARCO, Inc. on June 21, 2016 regarding the three REC's, which were:

- HIST REC-1: Overflow of oil/water separator into a series of drywells
- HIST REC-2: Former Gasoline USTs
- REC-7: Abandoned #2 fuel oil UST

Soil samples were collected at each of the areas of concern and based on an analysis of those samples the report concluded that soil samples associated with REC-7 were within acceptable NYSDEC soil standards. Soil samples associated with HIST REC-1 and HIST REC-2 were not within acceptable NYSDEC soil standards, but because the samples were only slightly above the NYSDEC Recommended Soil Cleanup Objectives, and past reports show consistent results in which the NYSDEC granted case closure, the report concluded that soil remediation and/or additional soil sampling is not necessary at this time.

3. <u>Impact on Flooding:</u>

None of the proposed improvements are situated within floodplain areas. Therefore, there are no impacts on flooding associated with the proposed project. A Stormwater Pollution Prevention Plan (SWPPP) was prepared for the 4.966 acre Mercedes-Benz of Goldens Bridge site (Appendix C under separate cover) because it is a construction activity that involves soil disturbances of one (1) or more acres of land and involves the creation of new impervious area within a Designated Main Street Area.

The proposed stormwater facilities have been designed such that the quantity and quality of stormwater runoff during and after construction are not adversely altered or are enhanced when compared to pre-development conditions.

Since the project is located within the New York City watershed, enhanced phosphorus removal must be achieved by the stormwater improvements. The site is located within the drainage basin of the Muscoot Reservoir, which is within the New York City Watershed. Stormwater runoff under existing conditions is collected on-site and conveyed via corrugated metal pipes to the New York State Department of Transportation storm drainage system off-site within NYS Route 22 which eventually discharges to the Muscoot Reservoir without any treatment or attenuation.

The proposed drainage improvements include a variety of stormwater practices, such as a green roof, porous pavement, tree planting areas, vegetated swales, an underground infiltration system, an underground detention system and hydrodynamic separator filtration manholes. The vegetated practices and overland discharges provide multiple opportunities for water quality enhancement and infiltration.

As demonstrated in Table 3 of the SWPPP, the proposed stormwater improvements will result in significant reductions of peak rates of runoff for all storms and design points analyzed.

A potential impact of the proposed development on any soils or slopes will be that of erosion and transport of sediment during construction. An Erosion and Sediment Control Management Program will be established for the proposed development, beginning at the start of construction and continuing throughout its course, as outlined in the "New York State Standards and Specifications for Erosion and Sediment Control," November 2016. A continuing maintenance program will be implemented for the control of sediment transport and erosion control after construction and throughout the useful life of the project.

The Operator shall have a qualified professional conduct an assessment of the site prior to the commencement of construction and certify that the appropriate erosion and sediment controls, as shown on the Sediment & Erosion Control Plans, have been adequately installed to ensure overall preparedness of the site for the commencement of construction. In addition, the Operator shall have a qualified professional conduct two site inspections at least every seven calendar days.

Temporary control measures and facilities will include silt fences, interceptor swales, stabilized construction entrances, temporary seeding, mulching, haybales, etc. Throughout the construction of the proposed redevelopment, temporary control facilities will be implemented to control on-site erosion and sediment transfer. Interceptor swales, if required, will be used to direct stormwater runoff to temporary sediment traps for settlement.

Towards the completion of construction, permanent sediment and erosion control measures will be developed for long term erosion protection. These include CDS water quality structures, detention system (StormTech chambers), infiltration system (StormTech recharge chambers), vegetated swales, catch basins and trench drains, seeding, green roof, and porous pavement.

Based on the SWPPP, the proposed improvements will provide water quantity and quality enhancements which exceed the pertinent regulations and are not anticipated to have any adverse impacts to the site or any surrounding areas.

4. Impact on Plants and Animals:

The Project will not result in a significant adverse impact on plants or animals, because the proposed improvements occur on existing manicured lawn and developed areas. The NYSDEC Division of Regional Permits issued a memorandum, dated 02/20/2018, indicating that a review of the NYS Natural Heritage records concludes that the site is located within or near known occurrences of the Northern long-eared bat (Myotis septentrionalis) which is a threatened species.

Although there are no signs or evidence of the above threatened species, any potential impacts of the proposed project on this species will be fully evaluated prior to construction. During the previous approval and SEQRA process for the previous version of the project, the NYSDEC Natural Heritage Program issued a letter dated 10/30/2009 indicating there are no endangered or threatened species on-site.

All tree removal must be conducted during the winter time frame of November 1st to March 31st to avoid adverse impacts to the northern long-eared bat. If tree removal is planned outside of this time frame, then a site assessment by a bat biologist or a qualified bat surveyor will be performed. Surveys for bats help determine potential environmental concerns around and near prospective projects.

According to the U.S. Fish and Wildlife Service (USFWS), once a ubiquitous, commonly-encountered species in the Eastern United States, the northern long-eared bat (Myotis septentrionalis) has suffered drastic declines due to a fungal disease called White-Nose Syndrome (WNS), which affects bats while they hibernate. In April 2015, the USFWS listed the northern long-eared bat as a threatened species under the Endangered Species Act (ESA). The listing became effective May 4, 2015.

On January 14, 2016, the USFWS published a final Section 4(d) rule for the northern long-eared bat. The most noteworthy change is that the update does not prohibit incidental take resulting from most tree clearing activities. Incidental taking of northern long-eared bats associated with tree clearing activities is only prohibited where it involves clearing of known, occupied maternity roosts or any trees within 150 feet of those roosts during the pup season (June 1 – July 31) or within 0.25 miles of known, occupied hibernacula. The rule provides for protection of northern long-eared bats where and when they are most vulnerable, particularly while hibernating and rearing young—allowing the focus of research and recovery efforts to be targeted on the true threat.

5. Impact on Transportation:

The Project will not have a significant adverse impact on transportation as discussed below. A Traffic Study was prepared to assess existing conditions as well as future traffic operations in association with the proposed expansion of the Mercedes Benz of Goldens Bridge car dealership located at 321 NY 22 in the Town of Lewisboro. The Traffic Study has been submitted to the Town on November 16, 2018.

There are four existing curb cuts located along the property's NY 22 frontage and there are two curb cuts along Green Hill Road. Access to the property is mainly served by one of the four existing curb cuts along NY 22. The subject development area also contains a 2 story building and garage located at 5 Anderson Lane which currently has two driveways with one connecting to Anderson Lane and the other connecting to Green Hill Road. Additionally, the subject development area contains a single family house located at 46 Green Hill Road with a driveway connecting to Green Hill Road.

As discussed above, the subject development area has 9 total curb cuts with four along NY 22, one along Anderson Lane, and four along Green Hill Road. As part of the proposed expansion, the curb cuts along NY 22 are proposed to be consolidated from four existing to two proposed curb cuts. Additionally, the four curb cuts along Green Hill Road are proposed to be reduced to one proposed curb cut. The two proposed driveways along NY 22 will serve as the main access to the property and provide full turning movements from both driveways. The proposed driveway along Anderson Lane will be relocated from its existing location to provide access to an open parking structure for employee parking and vehicle inventory parking. The proposed driveway along Green Hill Road will improve the existing driveway serving the 46 Green Hill Road property and will provide access to the proposed vehicle inventory parking lot and a secondary access to the service building.

JMC performed field reconnaissance at the site and adjoining roadway network in order to gather existing conditions data. The field work included a determination of lane

widths, striping, horizontal and vertical alignments, signs, traffic signal phasing and timings, speed limits, pedestrian activities, traffic flows, on street parking, sidewalks, curbing, etc.

In order to evaluate the changes in traffic associated with the proposed expansion, the following intersections were analyzed:

1. NY 22 & Connector Road
2. NY 22 & Anderson Lane
3. NY 22 & Site Driveway A
4. NY 22 & Site Driveway B
5. NY 138 & Connector Road

Site Driveway A is a proposed driveway to be constructed as part of the proposed expansion which connects to NY 22. NY 22 provides one travel lane in each direction and would have shared turning movements into the proposed site driveway. The proposed site driveway would be controlled by a stop sign and provide a single lane approach with shared turning movements.

Site Driveway B is an existing driveway which connects to NY 22 and would be reconstructed as part of the proposed expansion. NY 22 provides one travel lane in each direction with shared turning movements into the existing site driveway. The existing site driveway provides a single lane approach with shared turning movements. Under proposed conditions, the site driveway would be controlled by a stop sign.

Manual traffic counts were performed in order to quantify and analyze existing peak hour volumes as well as to establish base conditions for projecting future operations. The counts included pedestrian activities and truck traffic.

Traffic counts were conducted from 7:00 – 9:00 AM and 4:00 – 6:00 PM for all the studied intersections on Thursday, September 27, 2018 except for the Site Driveway B intersection. The intersection of NY 22 and Site Driveway B was counted on Friday,

September 28, 2018 from 7:00 to 9:00 AM as well as on Thursday, September 27, 2018 from 4:00 to 6:00 PM. Additionally, the Connector Road intersections with NY 22 and NY 138 were counted on Saturday, September 29, 2018 from 12:00 to 3:00 PM while the Site Driveway B and Anderson Lane intersections with NY 22 were counted on Saturday, September 22, 2018 from 12:00 to 3:00 PM. The traffic counts were performed while schools were in session. The peak hour volumes of the roadways occurred between 7:15 – 8:15 AM during the weekday morning, 4:30 – 5:30 PM during the weekday afternoon and 12:15 – 1:15 PM during the Saturday midday. The volumes are shown on Figures 1 thru 3 "2018 Existing Volumes" of the Traffic Study. All figures are included in Appendix B of the Traffic Study.

The intersection capacity analyses based on existing volumes and conditions are shown on Tables 3 thru 5 of the Traffic Study. The specific volume/capacity ratios, delay for average vehicle in seconds and the associated levels of service are summarized for each lane group, the approach as well as the overall intersection as applicable are depicted on Tables 3 - 5. All tables are included in Appendix A of the Traffic Study.

During the peak weekday morning hour, the left turn movement onto NY 22 at the intersection of NY 22 and Connector Road operates over capacity and at a level of service F. The Anderson Lane approach to its intersection with NY 22 operate at a level of service C. Site Driveway B operates at a level of service B. The overall intersection of NY 138 and Connector Road operates at a level of service A with the Connector Road approach and lanes operating at a level of service B. All other movements at the studied intersections operate at a level of service A during the peak weekday AM hour.

During the peak weekday afternoon hour, the left turn movement onto NY 22 at the intersection of NY 22 and Connector Road operates at a level of service C while the right turn movement onto NY 22 operates at a level of service B. The Anderson Lane approach to its intersection with NY 22 operate at a level of service B. Site Driveway B operates at a level of service B. The overall intersection of NY 138 and Connector Road operates at a level of service A with the NY 138 westbound left turn lane operating at a

level of service B. All other movements at the studied intersections operate at a level of service A during the peak weekday PM hour.

During the peak Saturday midday hour, the left turn and right turn movements onto NY 22 at the intersection of NY 22 and Connector Road operate at a level of service B. The Anderson Lane approach to its intersection with NY 22 operate at a level of service B. Site Driveway B operates at a level of service A. The overall intersection of NY 138 and Connector Road operates at a level of service A. All other movements at the studied intersections operate at a level of service A during the peak Saturday midday hour.

In order to project future traffic increases to the 2021 design year, the existing volumes were increased by a general growth rate of 0.5% per year compounded annually. Based on discussions with Town's planning consultant, this study incorporates the traffic volumes associated with the Goldens Bridge Village Centre expansion and the WBP AFFH Multi-Family development. The general growth volumes plus the other development volumes result in the 2021 No-Build volumes.

The projected traffic associated with the proposed dealership expansion are based on traffic counts that were conducted at the existing dealership driveway along NY 22. The net additional traffic volumes generated by the proposed car dealership compared with the existing car dealership are 49, 77, and 58 trips during the peak weekday AM, weekday PM, and Saturday midday hours, respectively.

Intersection capacity analysis computed based on the 2021 Build volumes with proposed dealership expansion indicate that the intersections will operate at the same levels of service as projected for the No-Build volumes except for one turning movement. During the peak Saturday midday hour, the Connector Road left turn movement onto NY 22 is projected to increase in delay by 0.8 seconds from a level of service B under No-Build conditions to operate at a level of service C under Build conditions. Projected operations with the proposed car dealership expansion are shown on Tables 3 thru 5 of the Traffic Study.

The two proposed site driveways are projected to operate at a level of service B or better during all studied peak hours.

6. Impact on Energy:

Due to the scale of the proposed improvements, additional electricity and heating fuel is anticipated for the expanded buildings. However, upgrading the mechanical, electrical, lighting, HVAC, plumbing systems, etc. with modern construction which is significantly more energy efficient will result is a similar energy use even with a significant increase in building size.

7. Impact on Noise, Odor, and Light:

During Project construction, noise will be within the normal range of such noise for construction projects of a similar nature. Construction hours will be limited as specified in §160-5.D of the Town Noise Code, which are 7:00 AM to 7:00 PM weekdays and Saturdays, and no construction is permitted on Sundays.

Any blasting will be conducted in accordance with all applicable local, state and federal regulations, including §92-18 of the Town Code "Blasting Permits", and the applicant will obtain a blasting permit from the Building Inspector.

Zones of hard rock and fractured rock may exist from location to location. To excavate this rock, it is expected that blasting may be required. Should areas of soft fractured rock exist, rock ripping and other structure removal methods will be used as practicable, given rock faults and fractures. The rippability of the site bedrock may be limited in depth. The blasting of rock will be monitored by a seismologist using a seismograph. The peak particle velocity emanating from any blasts will be restricted to two inches per second. By restricting blast vibrations to this level there is virtually no chance of causing damage to nearby existing structures.

A blasting plan will be prepared as a part of the final construction plans which will outline anticipated locations of proposed blasting, and methods that will be undertaken to perform the rock removal.

The licensed blasting specialist will use the utmost care and caution to prevent excessive shock waves or stones and other material from flying and endangering life and property. Immediately after loading and tamping each hole, and before firing the blast, except in the case of authorized ditching or drainage operations, the material to be blasted will be covered completely on all exposed surfaces with a strong woven matting or rope or wire and timber cribbing, held securely together by chains or steel wire cables. After the material has been thus covered, the blast will be fired without unnecessary delay. All blasting is to be done by means of approved detonators. No blasting operations will occur between 7:00 p.m. and 7:00 a.m., or at any time on Sunday, except in an emergency and then only under authority of a special approval issued by the Building Inspector. The blasting of material contiguous to any building or other structure or pipeline will be so conducted so as not to cause any damage. All blasting will be under the direct supervision of persons approved and licensed by New York State.

In conformance with Town requirements, the applicant will file with the Building Inspector a certificate of insurance evidencing comprehensive general liability insurance on an occurrence basis insuring against bodily injury and property damage in the amount of at least $1,000,000, by an insurance carrier licensed by the Insurance Department of the State of New York, with the certificate to include the Town of Lewisboro as an additional named insured. The applicant will also file evidence of payment of the premium for the insurance coverage.

Blasting Locations

The locations that blasting would take place, if needed, are at the new building expansion area adjacent to the showroom building and in the north end of the middle parking area.

Number of Blasts and/or Duration of Rock Hammering

The number of blasts will be determined once a blasting specialist has an opportunity to review the approved final plans, inspect the rock to be removed once it has been exposed by excavation, and has evaluated whether alternative methods to blasting, such as rock chipping, may be appropriate in any particular location due to rock weathering, the composition of the rock, etc.

Likewise, rock hammering is subject to similar constraints and would have to be evaluated once the specific conditions on the site are evaluated by a rock removal professional.

It is anticipated that the rock removal will be performed by chipping and hammering. In this case the rock removal contractor will need to line drill around the perimeter to set the extent of the rock.

Noise Levels from Blasting and Rock Removal

Because blasting charges are placed within drilled holes within rock, blasting noise, while audible, is muffled in nature (like a thump) and not overly intrusive. Blasting noise is also short term in nature.

Rock removal by mechanical means such as a chipping hammer produces a typical noise level of 88 dBA at 50 feet from the source. Sound level decreases with distance, and the noise level at greater distances such as off of the property will be less. Mitigation measures include adhering to the Town of Lewisboro Code §160 "Noise", which prohibits in the process of any construction, drilling or demolition operations, between the hours of 7:00 p.m. and 7:00 a.m. the following day or at any time on Sunday, the operation or use any tools, pile driver, pneumatic hammer, tractor, derrick, electrical hoist, gasoline or electric powered saw or other mechanical apparatus or equipment the use of which is attended by noise.

Duration and Hours of Construction Operation

The applicant will comply with the Town of Lewisboro Code as specified in §160-5.D of the Town Noise Code. which prohibits construction between the hours of 6:00 p.m. and 7:00 a.m., nor any time on Sunday.

Construction is anticipated to last 18-24 months.

Hydraulic Vehicle Lifts

A noise analysis was completed by our office to demonstrate that the hydraulic vehicle storage lifts meet Town of Lewisboro Code § 220-60B for allowable noise. JMC visited two locations to perform noise meter readings at various distances from the same manufacturer and model (Harding Steel SUV-XL) type of vehicle lift that is proposed on the site. The distances that the noise meter readings were taken at are equal to the distances that the proposed vehicle lifts are located from the various property boundaries as shown on the Site Plans.

On 10/23/2018, JMC went to the Celebrity Motor Cars storage facility in Mount Kisco. The purpose of the visit was to take sound readings from the lifts at various distances, to simulate the sound level from the proposed lifts and their proximity to the property line. The facility only has interior lifts. The following are the findings:

No Lifts Running:

The ambient noise level in the interior storage facility was taken as a benchmark, with no lifts running. The lowest dB reading the meter provides is 20 dB, and with no lifts running there was no reading on the meter. Therefore, the ambient noise level was less than 20 dB.

17 Feet from Lift (distance from lifts to eastern property boundary):

At 17 feet from the lift, the sound pressure level fluctuated between 50 and 60 dB during the operation of the lift and the peak reading was 76 dB as the lift locked at the top of the movement. The sound pressure levels measured at the various frequencies (octaves) ranged as follows:

| Frequency (Hz) | Sound Level (dB) |
|---|---|
| 63 | 45 |
| 125 | 50 |
| 250 | 55 |
| 500 | 62 |
| 1k | 72 |
| 2k | 76 |
| 4k | 62 |
| 6k | 50 |
| 8k | 32 |
| 16k | 30 |

<u>38 Feet From Lift (distance from lifts to northern property boundary):</u>

At 38 feet from the lift, the sound pressure level fluctuated between 45 and 55 dB during the operation of the lift and the peak reading was 68 dB as the lift locked at the top of the movement. The sound pressure levels measured at the various frequencies (octaves) ranged as follows:

| Frequency (Hz) | Sound Level (dB) |
|---|---|
| 63 | 38 |
| 125 | 44 |
| 250 | 50 |
| 500 | 56 |
| 1k | 67 |
| 2k | 70 |
| 4k | 56 |
| 6k | 44 |
| 8k | 27 |
| 16k | 25 |

On 11/05/2018 JMC went to the enterprise Rent-A-Car facility in New Rochelle. The purpose of the visit was to take sound readings from the exterior lifts within the parking lot at various distances, to simulate the sound level from the proposed lifts and their proximity to the property line. The following are the findings:

No Lifts Running:

The ambient noise level in the parking lot was taken as a benchmark, with no lifts running. The lowest dB reading the meter provides is 20 dB, and with no lifts running the meter measured the ambient noise at 40 dB.

17 Feet From Lift (distance from lifts to eastern property boundary):

At 17 feet from the lift, the sound pressure level fluctuated between 46 and 54 dB during the operation of the lift and the peak reading was 65 dB as the lift locked at the top of the movement. It should be noted that the sound levels measured when nearby employees were starting vehicles, closing vehicle doors, etc. peaked at 65 dB from similar distances. The sound pressure levels measured at the various frequencies (octaves) ranged as follows:

| **Frequency (Hz)** | **Sound Level (dB)** |
|---|---|
| 63 | 38 |
| 125 | 43 |
| 250 | 47 |
| 500 | 55 |
| 1k | 65 |
| 2k | 64 |
| 4k | 54 |
| 6k | 42 |
| 8k | 33 |
| 16k | 30 |

38 Feet From Lift (distance from lifts to northern property boundary):

At 38 feet from the lift, the sound pressure level fluctuated between 43 and 52 dB during the operation of the lift and the peak reading was 62 dB as the lift locked at the top of the movement. The sound pressure levels measured at the various frequencies (octaves) ranged as follows:

| Frequency (Hz) | Sound Level (dB) |
|---|---|
| 63 | 35 |
| 125 | 38 |
| 250 | 44 |
| 500 | 50 |
| 1k | 59 |
| 2k | 58 |
| 4k | 50 |
| 6k | 38 |
| 8k | 29 |
| 16k | 25 |

Based on the above readings taken at two locations, the exterior readings taken will more accurately portray the proposed lifts since they will also be located outside of the building. The interior storage lifts within the Mount Kisco storage facility resulted in higher than anticipated sound levels do to no ambient noise and echoes from the building walls.

The reading taken outside in New Rochelle are less than the required maximum sound levels, even at the 1 kHz and 2 kHz frequencies which are the most sensitive frequencies to the human ear. Regarding the peak sound levels within the movements from the locking of the lift at the end of the movement are considered impulse noises which should be omitted from the readings. However, they are discussed here since they were observed.

The conclusion is that the hydraulic vehicle lifts will meet the Town of Lewisboro Code § 220-60B for allowable noise.

The existing facility also experiences vehicle alarms being set off by employees to locate vehicles that have been serviced or will be serviced within the northern/upper parking lot. It is important to note that the proposed facility will store the service vehicles within the proposed Showroom Building and within the existing Service Building. The upper parking lot which currently stores service vehicles that must be retrieved frequently will no longer store those vehicles. Instead sales inventory vehicles will be stored in aligned bays and on lifts in a much more orderly fashion that will not require employees to search for vehicles with flashing lights and then resorting to setting off the alarm in order to find a vehicle. Based on the above analysis, we anticipate that existing noise impacts will be mitigated.

Any proposed exterior lighting will be shielded to mitigate light trespass off of the Project properties. No odors are anticipated to be generated. The Project will therefore not have a significant adverse impact from objectionable noise, odor, and light.

8. Consistency with Community Plans:

Proposed Rezoning

The majority of the subject property (lots 1, 2, 3, 4, 6, 7 and 8) is located in the GB "General Business District;" however, lots 5 and 42 are located in the RB "Retail Business District" zone. While "sales and service agencies for motor vehicles" is a permitted use within the GB Zoning District, this use is prohibited in the RB District, and therefore the applicant is proposing to re-zone Lots 5 and 42 to GB, requiring approval of the Town Board.

Lot 5 is 0.323 acres and Lot 42 is 1.347 acres for a total of approximately 1.67 acres, which is approximately 34% of the total approximately 4.966 acre site. Lot 5 currently operates as commercial contracting business and Lot 42 is not visible from surrounding roadways, this is not considered a significant change.

The existing car dealership is incorporated into the Town's Master Plan as Hamlet Business and no change in use is being proposed. The proposed re-zoning of lots 5 and 42 is consistent with the Master Plan, which depicts this area in the Master Plan Map as within the Hamlet Business zone.

Comparison of Permitted/Special Permit Uses Within the RB and GB Zones

a. Permitted Uses

i. RB Retail Business District

- Stores and shops for the conduct of retail businesses, excluding automobile service.
- Restaurants and taverns, excluding fast-food establishments and outdoor counter, drive-in or curb service.
- Personal service businesses, such as but not limited to hairdressers, shoemakers and tailors serving the public directly.
- Professional, banking, governmental and business offices.
- Indoor recreation facilities.
- Separate dwelling unit or units on floors above any permitted principal nonresidential use if separated by unpierced fire walls and ceilings and provided with an exterior entrance separate from the nonresidential use.
- Child day care complying with any applicable New York State laws and regulations.
- One-family detached dwellings.
- Public schools.
- Town of Lewisboro municipal uses.
- Two-family dwellings.

ii. GB General Business District

- All principal permitted uses permitted within the RB District (see above).

- Sales and service agencies for motor vehicles, provided that any outdoor storage or display of vehicles offered or intended for sale complies with the requirements for accessory outdoor storage or display. Overnight outdoor storage of vehicles awaiting servicing is to be limited to the number of parking spaces designated for such use on an approved site development plan.

- Landscape nurseries.

- Storage and sale of building materials, provided that any outdoor storage or display complies with the requirements for accessory outdoor storage or display.

b. Special Permitted Uses

i. RB Retail Business District

- Laundry, dry-cleaning, furniture stripping/refinishing and photo/printing processing establishments.

- Gasoline service stations.

- Ranching, and the raising of field and garden crops.

- Landfilling, regrading and removal of earth material.

- Places of worship or religious instruction, including parish houses and riding academies.

- Hospitals, nursing homes and eleemosynary institutions.

- Private kennels.

- Temporary storage of contractors' equipment.

- Temporary stands for the sale and display of field and garden crops grown on the premises.

- Public utilities, except a communication facility.

- Professional offices.

ii. GB General Business District

- Commercial kennels.

- Fast-food establishments.

- Manufacturing, fabricating, finishing or assembling of products, and research laboratories.

In general, the GB General Business District permits those uses permitted in the RB District plus commercial uses that depend upon a larger regional area from which to attract customers.

Proposed Variances

According to the Town Building Inspector, the following variances are required:

1. Section 220-9D(l) and (2) - nonconformities other than use.

2. Section 220-24E(A) Rear yard setback (minimum 30' required/2' proposed) for the continuation of existing non-conforming Showroom Building and expansion of Showroom Building.

3. Section 220-24E Gross Floor Area of a single structure (maximum of 10,000 s.f. permitted/50,900 s.f. proposed) for the continuation of existing non-conforming Service Building and expansion of Service Building and Showroom Building.

4. Section 220-24E Maximum building coverage (20% permitted/24.7% proposed) for the expansions to Showroom and Service Buildings.

5. Section 220-24E Maximum site coverage (maximum 60% permitted/64.4% proposed) for the expansion of buildings, driveways and parking areas.

6. Section 220-24E Maximum building height (maximum 30' permitted/34' proposed) for the proposed Showroom Building height.

7. Section 220-55C(3) Minimum aisle width (minimum 25' required/20' proposed) for the proposed drive aisles within the gated upper parking lot for employee parking and vehicle storage.

8. Section 220-55D(2) Maximum entrance/exit grade within 30' of street line (maximum permitted 3%/10% & 7.4% proposed) where slopes in excess of 3% are needed at both driveway entrances from NYS Route 22 to meet the existing and proposed Showroom Building entrance elevations. The proposed Showroom Building expansion has been lowered by 12 inches to help achieve flatter slopes.

9. Section 220-55D(2) Maximum driveway grade (maximum 12%) for the existing non-conforming driveway to the Service Building is to remain and be slightly modified. Design is consistent with existing non-conforming slopes.

10. Section 220-12E(l)- Walls within required setbacks cannot exceed 6'. The proposed retaining wall behind the Service Building will replace soil, boulders and vegetation against the rear of the Service Building. It is partly within the rear yard setback and ranges from approximately 11 feet high to 1 foot high within the setback.

11. Section 220-12E(l)- Fences within required setbacks cannot exceed 6'. The proposed heavy duty fence adjacent to the vehicle lifts is 8'-8" tall and has one small portion located in the setback.

12. Section 185-5F(3)(a) prohibits wall signs in excess of 20' in length. The main "Mercedes-Benz of Goldens Bridge" sign on the west side of the Showroom Building in between the service entrance/exit doors is 46 feet long.

13. Section 185-5F(3)(a) allows for no more than 2 wall signs so long as the second wall sign meets the standards provided in Section 185-5F(4)/6 wall signs are proposed. This is for the Showroom Building main sign, service entrance/exit signs plus Mercedes Benz logos shown on top of the north, south and west sides of Showroom Building.

14. Section 185-5F( 4) provides standards for secondary wall signs. The additional proposed wall signs do not meet these standards. This is for the "Service Entrance" and "Service Exit" signs on the west side of the Showroom Building.

15. Section 185-6C(4) prohibits wall signs from extending beyond the second story. Mercedes Benz logos shown on top of the north, south and west sides of Showroom Building extend approximately 33 feet, 1 ½ inches above the second story as shown on Sullivan Architecture Drawing A3.0 (under separate cover).

16. Section 185-6C(6) prohibits letters on wall signs in excess of 12" for the main "Mercedes-Benz of Goldens Bridge" sign on west side of Showroom Building in between service entrance/exit doors.

17. Section 220-57B prohibits off-street loading areas to block parking stalls for the loading spaces on the west side/front of Showroom Building and on the north side/upper portion of Showroom Building.

18. Section 220-24E Auto lifts are within the required setbacks. The proposed vehicle lifts are approximately 17 feet from the rear property line, 38 feet from the side property line and 20 feet from the front property line as shown on JMC Drawing C-100 "Layout Plan."

19. Section 220-SSD(l) Access to upper parking must be a minimum of 20' wide. The existing driveway to the vehicle storage parking area east of the Service Building is proposed to be increased from approximately 11 feet wide to 16 feet wide as requested and approved by the Goldens Bridge Fire District.

20. Section 220-55D(2) Access to upper parking shall not exceed a grade of 3% within 30' of the street line or 12% at any other point. This is an existing non-conforming driveway to be improved and remain non-conforming.

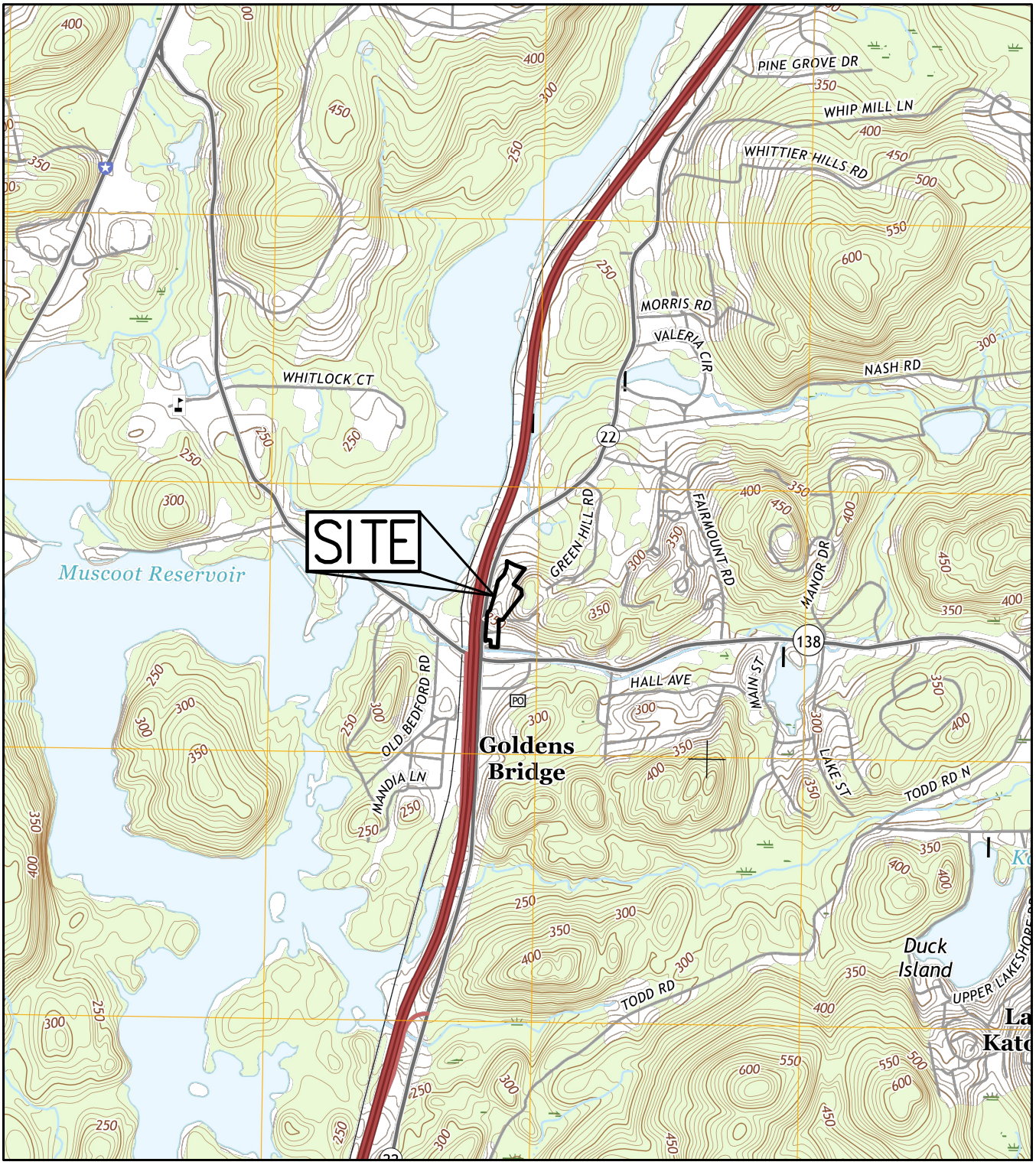
21. Section 220-55E(3) In all off-street parking areas containing 25 or more parking spaces, at least 10% of the surface within the parking perimeter shall consist of planting islands for the upper employee and storage parking area north of the Service Building and storage parking area east of the Service Building.

22. Section 220-57C(l) requires 1 loading space for the first 4,000 s.f. of gross floor area or major portion thereof and 1 additional space for 10,000 s.f. of gross floor area or major portion thereof in excess of 4,000 s.f. shall be provided. 2 spaces are indicated, a total of 6 are required. Loading spaces are proposed in the only locations that the dealership has indicated. The two areas are all that is required by the dealership.

<u>Required Waivers:</u>

1. Section 220-15B-To permit a deviation from the standards requiring landscape buffers where existing non-conformities exist and shall remain. The waiver is for along the front and rear of the Showroom Building, driveway up to Service Building and rear of upper parking area north of Service Building.

Many of the variances listed above are similar to those previously granted by the Zoning Board of Appeals on 05/11/2011. Others are minor additional variances needed because of the addition of 2 lots.




# MERCEDES BENZ OF GOLDENS BRIDGE

NYS ROUTE 22 — TOWN OF LEWISBORO, NY

## SITE LOCATION MAP

DATE: 09/04/2018 — JMC PROJECT: 16124

FIGURE: 01 — SCALE: 1" = 2,000'

120 BEDFORD RD
ARMONK
NY 10504

(914) 273-5225
fax 273-2102

JMCPLLC.COM



16124–SLM.dwg; SLM.tab


# MERCEDES BENZ OF GOLDENS BRIDGE

NYS ROUTE 22 — TOWN OF LEWISBORO, NY

## IMPERVIOUS COVERAGE AREAS

DATE: 09/06/2018 — JMC PROJECT: 16124

FIGURE: 2 — SCALE: 1"=80'

120 BEDFORD RD
ARMONK
NY 10504

(914) 273-5225
fax 273-2102

JMCPLLC.COM



16124-Drainage.dwg; IMPERVIOUS COVERAGE AREAS.tab BUILDING-COVERAGE.LS

# *APPENDIX A*

# *"Full Environmental Assessment Form Part 1" by JMC, dated 01/19/2018*

## Instructions for Completing Part 1

**Part 1 is to be completed by the applicant or project sponsor.** Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the project sponsor to verify that the information contained in Part 1is accurate and complete.

**A. Project and Sponsor Information.**

| | | |
|---|---|---|
| Name of Action or Project:<br>Mercedes Benz of Goldens Bridge | | |
| Project Location (describe, and attach a general location map):<br>321 Main Street (NY Route 22), Goldens Bridge, NY 10526 | | |
| Brief Description of Proposed Action (include purpose or need):<br>The Applicant proposes to redevelop the property with:<br>a. A 38,500 s.f. expansion to the existing ±12,400 s.f. showroom building;<br>b. A 2,700 square foot expansion to the ±18,200 s.f. service building;<br>c. Construction of a 30,500 s.f. 3-level open parking structure for 135 cars next to the expanded showroom building onto an acquired adjacent residential parcel (5 Anderson Lane-Lot 5);<br>d. Construction of a 41 vehicle storage parking lot on an acquired adjacent residential parcel (46 Green Hill Road-Lot 42);<br>e. Reconfiguring an existing parking lot to accommodate stacked car storage;<br>f. Reconfigure existing curb cuts, and installing new drainage, landscaping, and other ancillary improvements.<br>In addition, two adjoining residential properties in the RB district, and one adjoining residential property in the R-1/2A district, will be rezoned to the GB district. | | |
| Name of Applicant/Sponsor:<br>Celebrity Motor Car, LLC | Telephone: (914) 463-3054<br>E-Mail: bkopec@lexusofroute10.com | |
| Address: 130 Route 10 West | | |
| City/PO: Whippany | State: NJ | Zip Code: 07981 |
| Project Contact (if not same as sponsor; give name and title/role):<br>Same as sponsor | Telephone:<br>E-Mail: | |
| Address: | | |
| City/PO: | State: | Zip Code: |
| Property Owner (if not same as sponsor):<br>Same as sponsor | Telephone:<br>E-Mail: | |
| Address: | | |
| City/PO: | State: | Zip Code: |

**B. Government Approvals**

**B. Government Approvals, Funding, or Sponsorship.** ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)

| Government Entity | If Yes: Identify Agency and Approval(s) Required | Application Date (Actual or projected) |
|---|---|---|
| a. City Council, Town Board, or Village Board of Trustees ☑Yes ☐No | Rezoning<br>R.O.W. Planting | TBD |
| b. City, Town or Village Planning Board or Commission ☑Yes ☐No | Site Plan Approval | 09/19/2017 |
| c. City Council, Town or Village Zoning Board of Appeals ☑Yes ☐No | Setbacks, area, parking dimensions, site coverage and signage | TBD |
| d. Other local agencies ☑Yes ☐No | Subsurface sewage disposal, Non community Public Wtr. Supply, ARARC | TBD |
| e. County agencies ☑Yes ☐No | Westchester County Planning Board Municipal Law Referral, Westchester County Health Dept. | TBD |
| f. Regional agencies ☑Yes ☐No | NYCDEP SWPPP Approval | TBD |
| g. State agencies ☑Yes ☐No | NYSDEC SPDES General Permit, NYSDOT Curb Cut Permit | TBD |
| h. Federal agencies ☐Yes ☑No | | |

i. Coastal Resources.

*i.* Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? ☐Yes ☑No

*ii.* Is the project site located in a community with an approved Local Waterfront Revitalization Program? ☐Yes ☑No

*iii.* Is the project site within a Coastal Erosion Hazard Area? ☐Yes ☑No

**C. Planning and Zoning**

**C.1. Planning and zoning actions.**

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? ☐Yes ☑No

- **If Yes,** complete sections C, F and G.
- **If No,** proceed to question C.2 and complete all remaining sections and questions in Part 1

**C.2. Adopted land use plans.**

a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? ☑Yes ☐No

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? ☐Yes ☑No

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) ☑Yes ☐No

If Yes, identify the plan(s):

NYC Watershed Boundary

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? ☐Yes ☑No

If Yes, identify the plan(s):

**C.3. Zoning**

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☑ Yes ☐ No
If Yes, what is the zoning classification(s) including any applicable overlay district?
GB-General Business, RB - Residential Business, R-1/2A One-Family Residence

b. Is the use permitted or allowed by a special or conditional use permit? ☑ Yes ☐ No

c. Is a zoning change requested as part of the proposed action? ☑ Yes ☐ No
If Yes,
*i.* What is the proposed new zoning for the site? GB-General Business

**C.4. Existing community services.**

a. In what school district is the project site located? Katonah-Lewisboro

b. What police or other public protection forces serve the project site?
Lewisboro Town Police, NY State Police

c. Which fire protection and emergency medical services serve the project site?
Goldens Bridge FD

d. What parks serve the project site?
Mt. Holly Sanctuary, Fox Valley Park

**D. Project Details**

**D.1. Proposed and Potential Development**

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)?
Commercial

b. a. Total acreage of the site of the proposed action? 4.966 acres
b. Total acreage to be physically disturbed? ±4 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 3.296* acres
*Lot 5 and Lot 42 are under contract

c. Is the proposed action an expansion of an existing project or use? ☑ Yes ☐ No
*i.* If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % 135 Units: Square Feet

d. Is the proposed action a subdivision, or does it include a subdivision? ☐ Yes ☑ No
If Yes,
*i.* Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)

*ii.* Is a cluster/conservation layout proposed? ☐ Yes ☐ No
*iii.* Number of lots proposed? _____
*iv.* Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____

e. Will proposed action be constructed in multiple phases? ☐ Yes ☑ No
*i.* If No, anticipated period of construction: 18-24 months
*ii.* If Yes:
- Total number of phases anticipated _____
- Anticipated commencement date of phase 1 (including demolition) _____ month _____ year
- Anticipated completion date of final phase _____ month _____year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____

f. Does the project include new residential uses? ☐ Yes ☑ No
If Yes, show numbers of units proposed.

| | One Family | Two Family | Three Family | Multiple Family (four or more) |
|---|---|---|---|---|
| Initial Phase | _____ | _____ | _____ | _____ |
| At completion of all phases | _____ | _____ | _____ | _____ |

g. Does the proposed action include new non-residential construction (including expansions)? ☑ Yes ☐ No
If Yes,
*i.* Total number of structures 2
*ii.* Dimensions (in feet) of largest proposed structure: 34'-0" height; ±157' width; and ±368' length
*iii.* Approximate extent of building space to be heated or cooled: 71,800 square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? ☐ Yes ☑ No
If Yes,
*i.* Purpose of the impoundment: _____
*ii.* If a water impoundment, the principal source of the water: ☐ Ground water ☐ Surface water streams ☐ Other specify: _____
*iii.* If other than water, identify the type of impounded/contained liquids and their source. _____
*iv.* Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres
*v.* Dimensions of the proposed dam or impounding structure: _____ height; _____ length
*vi.* Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete): _____

**D.2. Project Operations**

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite) ☐ Yes ☑ No
If Yes:
*i* .What is the purpose of the excavation or dredging? _____
*ii.* How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?
- Volume (specify tons or cubic yards): _____
- Over what duration of time? _____

*iii.* Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them. _____
*iv.* Will there be onsite dewatering or processing of excavated materials? ☐ Yes ☐ No
If yes, describe. _____
*v.* What is the total area to be dredged or excavated? _____ acres
*vi.* What is the maximum area to be worked at any one time? _____ acres
*vii.* What would be the maximum depth of excavation or dredging? _____ feet
*viii.* Will the excavation require blasting? ☐ Yes ☐ No
*ix.* Summarize site reclamation goals and plan: _____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? ☐ Yes ☑ No
If Yes:
*i.* Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____

*ii.* Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

_____

*iii.* Will proposed action cause or result in disturbance to bottom sediments? ☐ Yes ☐ No

If Yes, describe: _____

*iv.* Will proposed action cause or result in the destruction or removal of aquatic vegetation? ☐ Yes ☐ No

If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____
- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

*v.* Describe any proposed reclamation/mitigation following disturbance: _____

c. Will the proposed action use, or create a new demand for water? ☑ Yes ☐ No

If Yes:

*i.* Total anticipated water usage/demand per day: 785 gallons/day

*ii.* Will the proposed action obtain water from an existing public water supply? ☐ Yes ☑ No

If Yes:

- Name of district or service area: _____
- Does the existing public water supply have capacity to serve the proposal? ☐ Yes ☐ No
- Is the project site in the existing district? ☐ Yes ☐ No
- Is expansion of the district needed? ☐ Yes ☐ No
- Do existing lines serve the project site? ☐ Yes ☐ No

*iii.* Will line extension within an existing district be necessary to supply the project? ☐ Yes ☐ No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____
- Source(s) of supply for the district: _____

*iv.* Is a new water supply district or service area proposed to be formed to serve the project site? ☐ Yes ☑ No

If, Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

*v.* If a public water supply will not be used, describe plans to provide water supply for the project: Existing private wells.

*vi.* If water supply will be from wells (public or private), maximum pumping capacity: 1 & 4 gallons/minute.

d. Will the proposed action generate liquid wastes? ☑ Yes ☐ No

If Yes:

*i.* Total anticipated liquid waste generation per day: 785 gallons/day

*ii.* Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): Sanitary wastewater.

*iii.* Will the proposed action use any existing public wastewater treatment facilities? ☐ Yes ☑ No

If Yes:

- Name of wastewater treatment plant to be used: _____
- Name of district: _____
- Does the existing wastewater treatment plant have capacity to serve the project? ☐ Yes ☐ No
- Is the project site in the existing district? ☐ Yes ☐ No
- Is expansion of the district needed? ☐ Yes ☐ No

- Do existing sewer lines serve the project site? ☐Yes ☐No
- Will line extension within an existing district be necessary to serve the project? ☐Yes ☐No

  If Yes:
  - Describe extensions or capacity expansions proposed to serve this project: _____

*iv.* Will a new wastewater (sewage) treatment district be formed to serve the project site? ☐Yes ☑No

If Yes:
- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- What is the receiving water for the wastewater discharge? _____

*v.* If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge, or describe subsurface disposal plans):

Existing on-site septic system.

*vi.* Describe any plans or designs to capture, recycle or reuse liquid waste: None.

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? ☑Yes ☐No

If Yes:

*i.* How much impervious surface will the project create in relation to total size of project parcel?

_____ Square feet or 0.62 acres (impervious surface)

_____ Square feet or 4.97 acres (parcel size)

*ii.* Describe types of new point sources. Additional Impervious surfaces

*iii.* Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

Infiltration and Detention systems to mitigate the increase in impervious surfaces. Size to be determined.

- If to surface waters, identify receiving water bodies or wetlands: _____
- Will stormwater runoff flow to adjacent properties? ☑Yes ☐No

*iv.* Does proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? ☑Yes ☐No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? ☑Yes ☐No

If Yes, identify:

*i.* Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

Construction vehicles & delivery vehicles

*ii.* Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

N/A

*iii.* Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

N/A

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? ☐Yes ☑No

If Yes:

*i.* Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) ☐Yes ☑No

*ii.* In addition to emissions as calculated in the application, the project will generate:
- _____Tons/year (short tons) of Carbon Dioxide ($CO_2$)
- _____Tons/year (short tons) of Nitrous Oxide ($N_2O$)
- _____Tons/year (short tons) of Perfluorocarbons (PFCs)
- _____Tons/year (short tons) of Sulfur Hexafluoride ($SF_6$)
- _____Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (HFCs)
- _____Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? ☐Yes ☑No

If Yes:

*i.* Estimate methane generation in tons/year (metric): _____

*ii.* Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? ☐Yes ☑No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? ☑Yes ☐No

If Yes:

*i.* When is the peak traffic expected (Check all that apply): ☐ Morning ☐ Evening ☐Weekend

☑ Randomly between hours of 7:30 AM to 7:00 PM.

*ii.* For commercial activities only, projected number of semi-trailer truck trips/day: 2/week car carriers 2/week box trucks

*iii.* Parking spaces: Existing 130 Proposed 256 Net increase/decrease +126

*iv.* Does the proposed action include any shared use parking? ☐Yes ☑No

*v.* If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe:

N/A

*vi.* Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? ☑Yes ☐No

*vii* Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? ☐Yes ☑No

*viii.* Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? ☐Yes ☑No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? ☑Yes ☐No

If Yes:

*i.* Estimate annual electricity demand during operation of the proposed action: To be provided at a later date when an MEP evaluation of the final building design has been completed.

*ii.* Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other):

Local utility.

*iii.* Will the proposed action require a new, or an upgrade to, an existing substation? ☐Yes ☑No

l. Hours of operation. Answer all items which apply.

*i.* During Construction:

- Monday - Friday: 7am-3pm
- Saturday: _____
- Sunday: _____
- Holidays: _____

*ii.* During Operations:

- Monday - Friday: 7:30 - 7pm
- Saturday: 9am - 5pm
- Sunday: _____
- Holidays: _____

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? ☑ Yes ☐ No

If yes:

*i.* Provide details including sources, time of day and duration:

Monday - Friday 7am - 3pm construction

*ii.* Will proposed action remove existing natural barriers that could act as a noise barrier or screen? ☐ Yes ☑ No

Describe: _____

n.. Will the proposed action have outdoor lighting? ☑ Yes ☐ No

If yes:

*i.* Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:

Parking lot lights and building mounted lights are proposed. Design to be determined.

*ii.* Will proposed action remove existing natural barriers that could act as a light barrier or screen? ☐ Yes ☑ No

Describe: _____

o. Does the proposed action have the potential to produce odors for more than one hour per day? ☐ Yes ☑ No

If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: _____

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? ☐ Yes ☑ No

If Yes:

*i.* Product(s) to be stored _____

*ii.* Volume(s) _____ per unit time _____ (e.g., month, year)

*iii.* Generally describe proposed storage facilities: _____

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? ☑ Yes ☐ No

If Yes:

*i.* Describe proposed treatment(s):

For general landcaping maintenance.

*ii.* Will the proposed action use Integrated Pest Management Practices? ☑ Yes ☐ No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? ☑ Yes ☐ No

If Yes:

*i.* Describe any solid waste(s) to be generated during construction or operation of the facility:

- Construction: _____ tons per _____ (unit of time)
- Operation : 4.8 tons per Month (unit of time)

*ii.* Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

- Construction: _____
- Operation: Recycling

*iii.* Proposed disposal methods/facilities for solid waste generated on-site:

- Construction: _____
- Operation: Private carter to Peekskill Wheelabrator Westchester Facility.

s. Does the proposed action include construction or modification of a solid waste management facility? ☐ Yes ☑ No

If Yes:

*i.* Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____

*ii.* Anticipated rate of disposal/processing:

- _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
- _____ Tons/hour, if combustion or thermal treatment

*iii.* If landfill, anticipated site life: _____ years

t. Will proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? ☐ Yes ☑ No

If Yes:

*i.* Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

*ii.* Generally describe processes or activities involving hazardous wastes or constituents: _____

*iii.* Specify amount to be handled or generated _____ tons/month

*iv.* Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

*v.* Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? ☐ Yes ☐ No

If Yes: provide name and location of facility: _____

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:

**E. Site and Setting of Proposed Action**

**E.1. Land uses on and surrounding the project site**

a. Existing land uses.

*i.* Check all uses that occur on, adjoining and near the project site.

☐ Urban ☐ Industrial ☑ Commercial ☑ Residential (suburban) ☐ Rural (non-farm)
☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other (specify): _____

*ii.* If mix of uses, generally describe:

b. Land uses and covertypes on the project site.

| Land use or Covertype | Current Acreage | Acreage After Project Completion | Change (Acres +/-) |
|---|---|---|---|
| • Roads, buildings, and other paved or impervious surfaces | 2.58 | 3.20 | +0.62 |
| • Forested | | | |
| • Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural) | 1.91 | 1.77 | -0.14 |
| • Agricultural (includes active orchards, field, greenhouse etc.) | | | |
| • Surface water features (lakes, ponds, streams, rivers, etc.) | | | |
| • Wetlands (freshwater or tidal) | | | |
| • Non-vegetated (bare rock, earth or fill) | 0.48 | 0 | -0.48 |
| • Other Describe: _____ | | | |

c. Is the project site presently used by members of the community for public recreation? ☐ Yes ☑ No

*i.* If Yes: explain: _____

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? ☐ Yes ☑ No

If Yes,

*i.* Identify Facilities:

_____

_____

e. Does the project site contain an existing dam? ☐ Yes ☑ No

If Yes:

*i.* Dimensions of the dam and impoundment:

- Dam height: _____ feet
- Dam length: _____ feet
- Surface area: _____ acres
- Volume impounded: _____ gallons OR acre-feet

*ii.* Dam's existing hazard classification: _____

*iii.* Provide date and summarize results of last inspection:

_____

_____

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? ☐ Yes ☑ No

If Yes:

*i.* Has the facility been formally closed? ☐ Yes ☐ No

- If yes, cite sources/documentation: _____

*ii.* Describe the location of the project site relative to the boundaries of the solid waste management facility:

_____

_____

*iii.* Describe any development constraints due to the prior solid waste activities: _____

_____

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? ☐ Yes ☑ No

If Yes:

*i.* Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

_____

_____

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? ☑ Yes ☐ No

If Yes:

*i.* Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: ☑ Yes ☐ No

☑ Yes – Spills Incidents database — Provide DEC ID number(s): 0813260; 1110538

☐ Yes – Environmental Site Remediation database — Provide DEC ID number(s): _____

☐ Neither database

*ii.* If site has been subject of RCRA corrective activities, describe control measures: Waste oil spills remediated, and NYSDEC closed spills on 05/14/2009 and 02/01/2012, respectively.

_____

*iii.* Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? ☐ Yes ☑ No

If yes, provide DEC ID number(s): _____

*iv.* If yes to (i), (ii) or (iii) above, describe current status of site(s):

_____

_____

*v.* Is the project site subject to an institutional control limiting property uses? ☐ Yes ☑ No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? ☐ Yes ☐ No
- Explain: _____

**E.2. Natural Resources On or Near Project Site**

a. What is the average depth to bedrock on the project site? 0-5 feet

b. Are there bedrock outcroppings on the project site? ☑ Yes ☐ No
If Yes, what proportion of the site is comprised of bedrock outcroppings? 0.7 %

c. Predominant soil type(s) present on project site:

| | |
|---|---|
| CcD - Chatfield - Charlton Complex | 65 % |
| CC - Charlton - Chatfield Complex | 30 % |
| CHC - Chatfield-Hollis-Rock Complex | 5 % |

d. What is the average depth to the water table on the project site? Average: >6 feet

e. Drainage status of project site soils:
☑ Well Drained: ____% of site
☐ Moderately Well Drained: ____% of site
☐ Poorly Drained ____% of site

f. Approximate proportion of proposed action site with slopes:
☑ 0-10%: 47 % of site
☑ 10-15%: 12 % of site
☑ 15% or greater: 41 % of site

g. Are there any unique geologic features on the project site? ☐ Yes ☑ No
If Yes, describe: _____

h. Surface water features.

*i.* Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? ☐ Yes ☑ No

*ii.* Do any wetlands or other waterbodies adjoin the project site? ☑ Yes ☐ No

If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

*iii.* Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? ☑ Yes ☐ No

*iv.* For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name _____ Classification _____
- Lakes or Ponds: Name Muscoot Reservoir Classification NYC reservoir
- Wetlands: Name _____ Approximate Size _____
- Wetland No. (if regulated by DEC) _____

*v.* Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? ☐ Yes ☑ No

If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? ☐ Yes ☑ No

j. Is the project site in the 100 year Floodplain? ☐ Yes ☑ No

k. Is the project site in the 500 year Floodplain? ☐ Yes ☑ No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? ☐ Yes ☑ No
If Yes:

*i.* Name of aquifer: _____

m. Identify the predominant wildlife species that occupy or use the project site: _____

_____ _____ _____

_____ _____ _____

n. Does the project site contain a designated significant natural community? ☐ Yes ☑ No

If Yes:

*i.* Describe the habitat/community (composition, function, and basis for designation): _____

*ii.* Source(s) of description or evaluation: _____

*iii.* Extent of community/habitat:

- Currently: _____ acres
- Following completion of project as proposed: _____ acres
- Gain or loss (indicate + or -): _____ acres

o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? ☐ Yes ☑ No

p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? ☐ Yes ☑ No

q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? ☐ Yes ☑ No

If yes, give a brief description of how the proposed action may affect that use: _____

**E.3. Designated Public Resources On or Near Project Site**

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? ☐ Yes ☑ No

If Yes, provide county plus district name/number: _____

b. Are agricultural lands consisting of highly productive soils present? ☐ Yes ☑ No

*i.* If Yes: acreage(s) on project site? _____

*ii.* Source(s) of soil rating(s): _____

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? ☐ Yes ☑ No

If Yes:

*i.* Nature of the natural landmark: ☐ Biological Community ☐ Geological Feature

*ii.* Provide brief description of landmark, including values behind designation and approximate size/extent: _____

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? ☐ Yes ☑ No

If Yes:

*i.* CEA name: _____

*ii.* Basis for designation: _____

*iii.* Designating agency and date: _____

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on, or has been nominated by the NYS Board of Historic Preservation for inclusion on, the State or National Register of Historic Places? ☐ Yes ☑ No

If Yes:

*i.* Nature of historic/archaeological resource: ☐ Archaeological Site ☐ Historic Building or District

*ii.* Name: _____

*iii.* Brief description of attributes on which listing is based:

_____

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? ☐ Yes ☑ No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? ☐ Yes ☑ No

If Yes:

*i.* Describe possible resource(s): _____

*ii.* Basis for identification: _____

h. Is the project site within fives miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? ☐ Yes ☑ No

If Yes:

*i.* Identify resource: _____

*ii.* Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): _____

*iii.* Distance between project and resource: _____ miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? ☐ Yes ☑ No

If Yes:

*i.* Identify the name of the river and its designation: _____

*ii.* Is the activity consistent with development restrictions contained in 6NYCRR Part 666? ☐ Yes ☐ No

**F. Additional Information**

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

**G. Verification**

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name JMC Planning Engineering Landscape Architecture & Land Surveying, PLLC, Agent Date Revised 01/19/2018

Signature Stephen Spina Title Project Manager

Stephen Spina, PE

PRINT FORM

Established in 1995
NYS DOL Asbestos Handling License #05-0348
EPA Lead Paint Certification #NY-62470-1
NYS DEC Waste Transporter Permit #3A-812

Richard Stumbo
President

# ENVIRONMENTAL MAINTENANCE CONTRACTORS, INC.

***Environmental Consulting, Testing, Reporting and Remedial / Abatement Services***

December 12, 2011

Todd Ghiosay
**New York State Department of Environmental Conservation**
**Division of Environmental Remediation, Region 2**
One Hunters Point Plaza
47-40 21st Street, Long Island City
New York, New York 11101-5407

**RE: NYS DEC Spill Number 1110538**
**Estate Motors, 321 Route 22, Goldens Bridge, New York 10526**

**November 14, 2011**

- Environmental Maintenance Contractors, Inc. (EMC) was called to inspect and assess the water in the Leachate Field (which was currently under repair by the ownerships contractor) at the rear of the Service Building of the above referenced property address.
- The visual inspection and Photo Ionization Detector (PID) readings indicated that there was a form of oil contamination sitting on top of the water in each of the leachate basins of the Leachate Field inspected. This conclusion was based on a visible oil type "sheen" sitting on the water in each basin and the PID readings collected in excess of 50 ppm.
- At the time of the inspection it did not appear that the environment had been impacted by oil product but was rather contained within the leachate basins of the Leachate Field.

**November 21, 2011**

- EMC retained Enviro Waste whom mobilized a truck to vacuum out the oil contaminated water from each of the leachate basins where the oil type "sheen" was visible.
- All visible oil type products was removed from each of the leachate basins, however it did appear that the oil may have made its way outside each of the leachate basins impacting the subsurface soils surrounding them.
- After further review of the circumstances of the project with the ownership, contractor and construction management firm a call was made to the NYS DEC Spill Hotline and NYS DEC Spill Number 1110538 was generated.

**November 29, 2011**

- After reviewing the current site conditions and proposed scope of work with Mr. Todd Ghiosay of the NYS DEC EMC scheduled with the ownerships contractor to excavate the subsurface soils surrounding the leachate basins that appeared to have been most effected (#5 and #9) and further assess the subsurface soils surrounding them.

**December 5, 2011**

- EMC mobilized an environmental field technician(s) to the Subject Site to further assess the Leachate Field including removing soils from around leachate basin #5 and #9.
- EMC screened subsurface soils excavated from leachate basin #5 and #9 utilizing a PID.
- EMC collected the soil sample (from leachate basin #9) that indicated the highest PID reading (3.2 ppm) for analysis via Volatile Organic Compounds (VOC's) and Semil-Volatile Organic Compounds (SVOC's) by NYSTARS 8260 and 8270 respectively.
- Soil sample(s) was containerized and transported to a New York State accredited/approved laboratory, PHOENIX Environmental Laboratories, Inc., with a certified chain of custody for analysis via VOC's and SVOC's by NYSTARS 8260 and 8270. Please find attached a copy of the drawing indicating the location of samples collected.

**Results**

- Based on the review of the field data presented there were no visible observations of oil contamination in subsurface soils surrounding the two leachate basins #5 and #9 at the time of the inspection.
- PID readings of soils screened were not indicative of oil contamination (<5 ppm) during the inspection.
- Laboratory data reported for the soil sample collected indicate that levels of contaminants were at Non-Detect or below the NYS DEC Recommended Soil Cleanup Objectives (Groundwater Standard Criteria). Please find attached a copy of the laboratory data for the sample analyzed.

**Recommendations**

- It is our understanding that the possible source of the oil had been abated in 2008 as part of the NYS DEC Spill Number 0813260 project. It is possible that some of the oil contamination form the previous spill may have made its way into leachate basin #4 and then worked its way into each of the other leachate basins, #1-3 and # 5-9, through the network of PVC piping that interconnects the Leachate Field.
- EMC recommends that the PVC pipe system be inspected to ensure that there is no contamination within the piping itself and if so either be cleaned out of its contents or removed and replaced.
- EMC also recommends further assessment via visual inspection and PID reading collection during the repair work of the Leachate Field in order to confirm that the subsurface soils surrounding the remaining leachate basins have not been compromised with oil contamination.

Should you have any questions or require additional information please do not hesitate to contact me.

Sincerely,
**Environmental Maintenance Contractors, Inc.**
Richard Stumbo
President

Attachment: Drawings, Laboratory Sample Results

Cc: John Lennon

Westchester gov.com

P#1 OF 4

# ONSITE WASTEWATER TREATMENT SYSTEM (OWTS) REPAIR AND REMEDIATION DATA FORM

Municipality: WESTCHESTER

Property Mailing Address (No. & Street): ESTATE MOTORS 321 ROUTE 22

Town/ Village: GOLDENS BRIDGE State: N.Y. Zip: 10526

Owner: CHARISMA HOLDING INC

Owner Mailing Address (No. & Street) (if different): PO BOX 711

Town/ Village: GOLDENS BRIDGE State: NY Zip: 10526

Property Use: [] Single Family [] Multi-Family [] Industrial [X] Commercial

[] Other - Describe:

**OWTS Remediation** ☐ **WCDH File #:** N/A

***Remediation*** shall mean installation, replacement, or expansion of onsite wastewater treatment system components to correct an OWTS failure, or impending failure, resulting in, or that may result in, the discharge of sewage or domestic wastes or trade wastes or offensive material on to the surface of the ground, into a storm sewer, or into a watercourse or water body. Remediation shall not include repairs, as defined above, to correct an OWTS failure.

**OR**

**OWTS Repair** ☒ **Complete the following information.**

***Repair*** shall mean the repair, maintenance, and replacement in kind and in situ; of broken, damaged, or worn onsite wastewater treatment system components.

Number of Bedrooms N/A Number of Bathrooms: 3 Water Supply Type: Public ☐ Well ☒

**Please note below only components that have been repaired or replaced.**

| Repaired | Replaced | |
|---|---|---|
| ☒ | ☐ | House Sewer or other Solid Pipe(s) |
| ☐ | ☐ | Septic Tank#1 Size(gallons): _____ |
| ☐ | ☐ | Septic Tank#2: Size (gallons): _____ |
| ☐ | ☐ | Junction/Distribution Box(es) |
| ☐ | ☐ | Sewage Pump(s) or other Dosing Equipment |
| ☐ | ☐ | Absorption Trench Length _____ ft. X Trench Width _____ ft. |
| ☒ | ☐ | Seepage Pit(s) |
| ☐ | ☐ | Galley(s) |
| ☐ | ☐ | Gravelless Trench(es) |
| ☐ | ☐ | 75-A Alternative System |
| ☐ | ☐ | Other Advanced Alternative System |
| ☐ | ☐ | Other System Component(s) - Describe: |

**DRAW BUILDING AND LOCATION OF WORK PERFORMED ON BACK OF THIS FORM**

SEE ATTACHED FORM PAGE #2

☐ **Entire System Replaced**

Contractor's Name (print): MTEK CONTRACTING Date Repair/Remediation Completed: 01-20-12

Contractor's Signature: [signature] License No.: 508

Upon completion please remit to:

Westchester County Department of Health- BEQ
118 North Bedford Road, RM 100
Mt. Kisco, NY 1049
Attn: Patricia Tornello-Adams

Repair File #: REP_____
(WCDH Staff only)

(1/10)

P#2 of 4

MONDAY
01-23-12

| | | | |
|---|---|---|---|
| 7 | 102.0 | 73.6 | – |
| 8 | 126.6 | 103.0 | – |
| 9 | SEE NOTE | SEE NOTE | – |
| S.T. | – | 18.8 | 22.4 |
| DIST. BOX | 69.5 | 20 | – |

LEWIS A. VISCONTI
LICENSE #
508

# OWTS REPAIR

EXISTG SWALE

ZONING DISTRICT BOUNDRY

MIN. 15' TO FTG. ROOF DRAIN

NO CURB

EXPAN-SION AREA

REMOVED AND REPLACED SILTED STONE TYPICAL AROUND NINE DRYWELLS

REPLACE 3 EACH SOLID PIPES TYPICAL

TP#1
TP#2
TP#3
TP#4

NEW SEEPAGE PIT (TYPICAL)

EXISTING SERVICE BUILDING

DISTRIBUTION BOX

EXISTING SEPTIC TANK 1500 GAL TANK

OWNER
CHARISMA HOLDING INC.

P #3 OF 4

Westchester gov.com

# WESTCHESTER COUNTY DEPARTMENT OF HEALTH
# SEPTIC SYSTEM CONTRACTOR LICENSE

## LICENSE NO. 508

This is to certify that: Lewis Visconti is granted permission to construct, install, remediate, repair and service.

## ONSITE WASTEWATER TREATMENT SYSTEMS

**Pursuant to Chapter 873, Article VIII of the Laws of Westchester County for use in the County of Westchester, State of New York under the following conditions:**

- THAT the licensee shall comply with all applicable provisions of Chapter 873, Article VIII of the Laws of Westchester County and with rules and regulations of the Westchester County Department of Health.
- THAT the licensee shall perform construction, installation and remediation work in complete conformity with plans approved by the Department of Health, or approved amendments thereof, and with rules, regulations and standards of the Department of Health.
- THAT the license is granted subject to any and all applicable, state, local and municipal laws, ordinances, codes, rules and regulations.

Sherlita Amler M.D

SHERLITA AMLER, M.D.

Sherlita Amler, M.D.
Commissioner of Health

Lou Carrea, PE., Associate Engineer
Bureau of Environmental Quality

Date of Issue: 11/14/2011

This license expires on 10/31/2013 and may be revoked or suspended for cause.

**This license is non-transferable.**

P # 4 of 4

LICENSE # 508

Westchester gov.com

Westchester County

# HEALTH DEPARTMENT

## LICENSED SEPTIC SYSTEM CONTRACTOR

EXPIRES: 10/31/2013

Westchester gov.com

Department of Health

Septic System Contractor

License No. 508

Lewis Visconti
(name)

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

# Spill Incidents Database Search Details

## Spill Record

### Administrative Information

**DEC Region:** 3
**Spill Number:** 0813260

### Spill Date/Time

**Spill Date:** 03/09/2009 **Spill Time:** 03:00:00 PM
**Call Received Date:** 03/10/2009 **Call Received Time:** 09:36:00 AM

### Location

**Spill Name:** ESTATE MOTORS
**Address:** 321 RT 22
**City:** GOLDENS BRIDGE **County:** Westchester

### Spill Description

| Material Spilled | Amount Spilled | Resource Affected |
|---|---|---|
| waste oil/used oil | UNKNOWN | Soil |

**Cause:** Equipment Failure
**Source:** Commercial/Industrial
**Waterbody:**

### Record Close

**Date Spill Closed:** 05/14/2009

"Date Spill Closed" means the date the spill case was closed by the case manager in the Department of Environmental Conservation (the Department). The spill case was closed because either; a) the records and data submitted indicate that the necessary cleanup and removal actions have been completed and no further remedial activities are necessary, or b) the case was closed for administrative reasons (e.g., multiple reports of a single spill consolidated into a single spill number). The Department however reserves the right to require additional remedial work in relation to the spill, if in the future it determines that further action is necessary.

If you have questions about this reported incident, please contact the Regional Office where the incident occurred.

Refine This Search

# Spill Incidents Database Search Details

## Spill Record

### Administrative Information

**DEC Region:** 3
**Spill Number:** 1110538

### Spill Date/Time

**Spill Date:** 11/21/2011 **Spill Time:** 09:00:00 AM
**Call Received Date:** 11/28/2011 **Call Received Time:** 10:49:00 AM

### Location

**Spill Name:** ESTATE MOTORS
**Address:** 321 RT 22
**City:** GOLDENS BRIDGE **County:** Westchester

### Spill Description

| Material Spilled | Amount Spilled | Resource Affected |
|---|---|---|
| waste oil/used oil | UNKNOWN | Soil , Surface Water |

**Cause:** Unknown
**Source:** Commercial/Industrial
**Waterbody:**

### Record Close

**Date Spill Closed:** 02/01/2012

"Date Spill Closed" means the date the spill case was closed by the case manager in the Department of Environmental Conservation (the Department). The spill case was closed because either; a) the records and data submitted indicate that the necessary cleanup and removal actions have been completed and no further remedial activities are necessary, or b) the case was closed for administrative reasons (e.g., multiple reports of a single spill consolidated into a single spill number). The Department however reserves the right to require additional remedial work in relation to the spill, if in the future it determines that further action is necessary.

If you have questions about this reported incident, please contact the Regional Office where the incident occurred.

Refine This Search

# *APPENDIX B*

# *"Full Environmental Assessment Form Part 2" by JMC, dated 11/29/2018*

## *Full Environmental Assessment Form*
## *Part 2 - Identification of Potential Project Impacts*

**Part 2 is to be completed by the lead agency.** Part 2 is designed to help the lead agency inventory all potential resources that could be affected by a proposed project or action. We recognize that the lead agency's reviewer(s) will not necessarily be environmental professionals. So, the questions are designed to walk a reviewer through the assessment process by providing a series of questions that can be answered using the information found in Part 1. To further assist the lead agency in completing Part 2, the form identifies the most relevant questions in Part 1 that will provide the information needed to answer the Part 2 question. When Part 2 is completed, the lead agency will have identified the relevant environmental areas that may be impacted by the proposed activity.

If the lead agency is a state agency **and** the action is in any Coastal Area, complete the Coastal Assessment Form before proceeding with this assessment.

**Tips for completing Part 2:**

- Review all of the information provided in Part 1.
- Review any application, maps, supporting materials and the Full EAF Workbook.
- Answer each of the 18 questions in Part 2.
- If you answer "**Yes**" to a numbered question, please complete all the questions that follow in that section.
- If you answer "**No**" to a numbered question, move on to the next numbered question.
- Check appropriate column to indicate the anticipated size of the impact.
- Proposed projects that would exceed a numeric threshold contained in a question should result in the reviewing agency checking the box "Moderate to large impact may occur."
- The reviewer is not expected to be an expert in environmental analysis.
- If you are not sure or undecided about the size of an impact, it may help to review the sub-questions for the general question and consult the workbook.
- When answering a question consider all components of the proposed activity, that is, the "whole action".
- Consider the possibility for long-term and cumulative impacts as well as direct impacts.
- Answer the question in a reasonable manner considering the scale and context of the project.

**1. Impact on Land**
Proposed action may involve construction on, or physical alteration of, the land surface of the proposed site. (See Part 1. D.1) ☐ NO ☒ YES
*If "Yes", answer questions a - j. If "No", move on to Section 2.*

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|---|---|---|
| a. The proposed action may involve construction on land where depth to water table is less than 3 feet. | E2d | ☒ | ☐ |
| b. The proposed action may involve construction on slopes of 15% or greater. | E2f | ☒ | ☐ |
| c. The proposed action may involve construction on land where bedrock is exposed, or generally within 5 feet of existing ground surface. | E2a | ☒ | ☐ |
| d. The proposed action may involve the excavation and removal of more than 1,000 tons of natural material. | D2a | ☒ | ☐ |
| e. The proposed action may involve construction that continues for more than one year or in multiple phases. | D1e | ☒ | ☐ |
| f. The proposed action may result in increased erosion, whether from physical disturbance or vegetation removal (including from treatment by herbicides). | D2e, D2q | ☒ | ☐ |
| g. The proposed action is, or may be, located within a Coastal Erosion hazard area. | B1i | ☒ | ☐ |
| h. Other impacts: _____ | | ☐ | ☐ |

| **2. Impact on Geological Features**<br>The proposed action may result in the modification or destruction of, or inhibit access to, any unique or unusual land forms on the site (e.g., cliffs, dunes, minerals, fossils, caves). (See Part 1. E.2.g)<br>*If "Yes", answer questions a - c. If "No", move on to Section 3.* | ☒ NO | ☐ YES | |
|---|---|---|---|
| | **Relevant Part I Question(s)** | **No, or small impact may occur** | **Moderate to large impact may occur** |
| a. Identify the specific land form(s) attached: _____ | E2g | ☐ | ☐ |
| b. The proposed action may affect or is adjacent to a geological feature listed as a registered National Natural Landmark.<br>Specific feature: _____ | E3c | ☐ | ☐ |
| c. Other impacts: _____ | | ☐ | ☐ |

| **3. Impacts on Surface Water**<br>The proposed action may affect one or more wetlands or other surface water bodies (e.g., streams, rivers, ponds or lakes). (See Part 1. D.2, E.2.h)<br>*If "Yes", answer questions a - l. If "No", move on to Section 4.* | ☒ NO | ☐ YES | |
|---|---|---|---|
| | **Relevant Part I Question(s)** | **No, or small impact may occur** | **Moderate to large impact may occur** |
| a. The proposed action may create a new water body. | D2b, D1h | ☐ | ☐ |
| b. The proposed action may result in an increase or decrease of over 10% or more than a 10 acre increase or decrease in the surface area of any body of water. | D2b | ☐ | ☐ |
| c. The proposed action may involve dredging more than 100 cubic yards of material from a wetland or water body. | D2a | ☐ | ☐ |
| d. The proposed action may involve construction within or adjoining a freshwater or tidal wetland, or in the bed or banks of any other water body. | E2h | ☐ | ☐ |
| e. The proposed action may create turbidity in a waterbody, either from upland erosion, runoff or by disturbing bottom sediments. | D2a, D2h | ☐ | ☐ |
| f. The proposed action may include construction of one or more intake(s) for withdrawal of water from surface water. | D2c | ☐ | ☐ |
| g. The proposed action may include construction of one or more outfall(s) for discharge of wastewater to surface water(s). | D2d | ☐ | ☐ |
| h. The proposed action may cause soil erosion, or otherwise create a source of stormwater discharge that may lead to siltation or other degradation of receiving water bodies. | D2e | ☐ | ☐ |
| i. The proposed action may affect the water quality of any water bodies within or downstream of the site of the proposed action. | E2h | ☐ | ☐ |
| j. The proposed action may involve the application of pesticides or herbicides in or around any water body. | D2q, E2h | ☐ | ☐ |
| k. The proposed action may require the construction of new, or expansion of existing, wastewater treatment facilities. | D1a, D2d | ☐ | ☐ |

| | | | |
|---|---|---|---|
| l. Other impacts: _____ | | ☐ | ☐ |

**4. Impact on groundwater**
The proposed action may result in new or additional use of ground water, or may have the potential to introduce contaminants to ground water or an aquifer. ☐ NO ☒ YES
(See Part 1. D.2.a, D.2.c, D.2.d, D.2.p, D.2.q, D.2.t)
*If "Yes", answer questions a - h. If "No", move on to Section 5.*

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|---|---|---|
| a. The proposed action may require new water supply wells, or create additional demand on supplies from existing water supply wells. | D2c | ☒ | ☐ |
| b. Water supply demand from the proposed action may exceed safe and sustainable withdrawal capacity rate of the local supply or aquifer. Cite Source: _____ | D2c | ☒ | ☐ |
| c. The proposed action may allow or result in residential uses in areas without water and sewer services. | D1a, D2c | ☒ | ☐ |
| d. The proposed action may include or require wastewater discharged to groundwater. | D2d, E2l | ☒ | ☐ |
| e. The proposed action may result in the construction of water supply wells in locations where groundwater is, or is suspected to be, contaminated. | D2c, E1f, E1g, E1h | ☒ | ☐ |
| f. The proposed action may require the bulk storage of petroleum or chemical products over ground water or an aquifer. | D2p, E2l | ☒ | ☐ |
| g. The proposed action may involve the commercial application of pesticides within 100 feet of potable drinking water or irrigation sources. | E2h, D2q, E2l, D2c | ☒ | ☐ |
| h. Other impacts: _____ | | ☐ | ☐ |

**5. Impact on Flooding**
The proposed action may result in development on lands subject to flooding. ☒ NO ☐ YES
(See Part 1. E.2)
*If "Yes", answer questions a - g. If "No", move on to Section 6.*

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|---|---|---|
| a. The proposed action may result in development in a designated floodway. | E2i | ☐ | ☐ |
| b. The proposed action may result in development within a 100 year floodplain. | E2j | ☐ | ☐ |
| c. The proposed action may result in development within a 500 year floodplain. | E2k | ☐ | ☐ |
| d. The proposed action may result in, or require, modification of existing drainage patterns. | D2b, D2e | ☐ | ☐ |
| e. The proposed action may change flood water flows that contribute to flooding. | D2b, E2i, E2j, E2k | ☐ | ☐ |
| f. If there is a dam located on the site of the proposed action, is the dam in need of repair or upgrade? | E1e | ☐ | ☐ |

| | | | |
|---|---|---|---|
| g. Other impacts: _____ | | ☐ | ☐ |

**6. Impacts on Air**

The proposed action may include a state regulated air emission source. (See Part 1. D.2.f., D,2,h, D.2.g) ☒ NO ☐ YES

*If "Yes", answer questions a - f. If "No", move on to Section 7.*

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|---|---|---|
| a. If the proposed action requires federal or state air emission permits, the action may also emit one or more greenhouse gases at or above the following levels: | | | |
| i. More than 1000 tons/year of carbon dioxide ($CO_2$) | D2g | ☐ | ☐ |
| ii. More than 3.5 tons/year of nitrous oxide ($N_2O$) | D2g | ☐ | ☐ |
| iii. More than 1000 tons/year of carbon equivalent of perfluorocarbons (PFCs) | D2g | ☐ | ☐ |
| iv. More than .045 tons/year of sulfur hexafluoride ($SF_6$) | D2g | ☐ | ☐ |
| v. More than 1000 tons/year of carbon dioxide equivalent of hydrochloroflourocarbons (HFCs) emissions | D2g | ☐ | ☐ |
| vi. 43 tons/year or more of methane | D2h | ☐ | ☐ |
| b. The proposed action may generate 10 tons/year or more of any one designated hazardous air pollutant, or 25 tons/year or more of any combination of such hazardous air pollutants. | D2g | ☐ | ☐ |
| c. The proposed action may require a state air registration, or may produce an emissions rate of total contaminants that may exceed 5 lbs. per hour, or may include a heat source capable of producing more than 10 million BTU's per hour. | D2f, D2g | ☐ | ☐ |
| d. The proposed action may reach 50% of any of the thresholds in "a" through "c", above. | D2g | ☐ | ☐ |
| e. The proposed action may result in the combustion or thermal treatment of more than 1 ton of refuse per hour. | D2s | ☐ | ☐ |
| f. Other impacts: _____ | | ☐ | ☐ |

**7. Impact on Plants and Animals**

The proposed action may result in a loss of flora or fauna. (See Part 1. E.2. m.-q.) ☒ NO ☐ YES

*If "Yes", answer questions a - j. If "No", move on to Section 8.*

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|---|---|---|
| a. The proposed action may cause reduction in population or loss of individuals of any threatened or endangered species, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site. | E2o | ☐ | ☐ |
| b. The proposed action may result in a reduction or degradation of any habitat used by any rare, threatened or endangered species, as listed by New York State or the federal government. | E2o | ☐ | ☐ |
| c. The proposed action may cause reduction in population, or loss of individuals, of any species of special concern or conservation need, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site. | E2p | ☐ | ☐ |
| d. The proposed action may result in a reduction or degradation of any habitat used by any species of special concern and conservation need, as listed by New York State or the Federal government. | E2p | ☐ | ☐ |

| | | | |
|---|---|---|---|
| e. The proposed action may diminish the capacity of a registered National Natural Landmark to support the biological community it was established to protect. | E3c | ☐ | ☐ |
| f. The proposed action may result in the removal of, or ground disturbance in, any portion of a designated significant natural community. Source: _____ | E2n | ☐ | ☐ |
| g. The proposed action may substantially interfere with nesting/breeding, foraging, or over-wintering habitat for the predominant species that occupy or use the project site. | E2m | ☐ | ☐ |
| h. The proposed action requires the conversion of more than 10 acres of forest, grassland or any other regionally or locally important habitat. Habitat type & information source: _____ | E1b | ☐ | ☐ |
| i. Proposed action (commercial, industrial or recreational projects, only) involves use of herbicides or pesticides. | D2q | ☐ | ☐ |
| j. Other impacts: _____ | | ☐ | ☐ |

**8. Impact on Agricultural Resources**

The proposed action may impact agricultural resources. (See Part 1. E.3.a. and b.) ☒ NO ☐ YES

*If "Yes", answer questions a - h. If "No", move on to Section 9.*

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|---|---|---|
| a. The proposed action may impact soil classified within soil group 1 through 4 of the NYS Land Classification System. | E2c, E3b | ☐ | ☐ |
| b. The proposed action may sever, cross or otherwise limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc). | E1a, Elb | ☐ | ☐ |
| c. The proposed action may result in the excavation or compaction of the soil profile of active agricultural land. | E3b | ☐ | ☐ |
| d. The proposed action may irreversibly convert agricultural land to non-agricultural uses, either more than 2.5 acres if located in an Agricultural District, or more than 10 acres if not within an Agricultural District. | E1b, E3a | ☐ | ☐ |
| e. The proposed action may disrupt or prevent installation of an agricultural land management system. | El a, E1b | ☐ | ☐ |
| f. The proposed action may result, directly or indirectly, in increased development potential or pressure on farmland. | C2c, C3, D2c, D2d | ☐ | ☐ |
| g. The proposed project is not consistent with the adopted municipal Farmland Protection Plan. | C2c | ☐ | ☐ |
| h. Other impacts: _____ | | ☐ | ☐ |

**9. Impact on Aesthetic Resources**

The land use of the proposed action are obviously different from, or are in sharp contrast to, current land use patterns between the proposed project and a scenic or aesthetic resource. (Part 1. E.1.a, E.1.b, E.3.h.) ☒ NO ☐ YES

*If "Yes", answer questions a - g. If "No", go to Section 10.*

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|---|---|---|

| | | | |
|---|---|---|---|
| a. Proposed action may be visible from any officially designated federal, state, or local scenic or aesthetic resource. | E3h | ☐ | ☐ |
| b. The proposed action may result in the obstruction, elimination or significant screening of one or more officially designated scenic views. | E3h, C2b | ☐ | ☐ |
| c. The proposed action may be visible from publicly accessible vantage points:<br>i. Seasonally (e.g., screened by summer foliage, but visible during other seasons)<br>ii. Year round | E3h | <br>☐<br>☐ | <br>☐<br>☐ |
| d. The situation or activity in which viewers are engaged while viewing the proposed action is:<br>i. Routine travel by residents, including travel to and from work<br>ii. Recreational or tourism based activities | E3h<br>E2q,<br>E1c | <br>☐<br>☐ | <br>☐<br>☐ |
| e. The proposed action may cause a diminishment of the public enjoyment and appreciation of the designated aesthetic resource. | E3h | ☐ | ☐ |
| f. There are similar projects visible within the following distance of the proposed project:<br>0-1/2 mile<br>½ -3 mile<br>3-5 mile<br>5+ mile | D1a, E1a, D1f, D1g | ☐ | ☐ |
| g. Other impacts: _____ | | ☐ | ☐ |

**10. Impact on Historic and Archeological Resources**

The proposed action may occur in or adjacent to a historic or archaeological resource. (Part 1. E.3.e, f. and g.) ☒ NO ☐ YES

*If "Yes", answer questions a - e. If "No", go to Section 11.*

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|---|---|---|
| a. The proposed action may occur wholly or partially within, or substantially contiguous to, any buildings, archaeological site or district which is listed on or has been nominated by the NYS Board of Historic Preservation for inclusion on the State or National Register of Historic Places. | E3e | ☐ | ☐ |
| b. The proposed action may occur wholly or partially within, or substantially contiguous to, an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory. | E3f | ☐ | ☐ |
| c. The proposed action may occur wholly or partially within, or substantially contiguous to, an archaeological site not included on the NY SHPO inventory.<br>Source: _____ | E3g | ☐ | ☐ |
| d. Other impacts: _____ | | ☐ | ☐ |
| e. If any of the above (a-d) are answered "Yes", continue with the following questions to help support conclusions in Part 3: | | | |
| i. The proposed action may result in the destruction or alteration of all or part of the site or property. | E3e, E3g, E3f | ☐ | ☐ |
| ii. The proposed action may result in the alteration of the property's setting or | E3e, E3f, E3g, E1a, | ☐ | ☐ |

| | | | |
|---|---|---|---|
| integrity.<br><br>iii. The proposed action may result in the introduction of visual elements which are out of character with the site or property, or may alter its setting. | E1b<br>E3e, E3f, E3g, E3h, C2, C3 | ☐ | ☐ |

**11. Impact on Open Space and Recreation**

The proposed action may result in a loss of recreational opportunities or a reduction of an open space resource as designated in any adopted municipal open space plan. ☒ NO ☐ YES

(See Part 1. C.2.c, E.1.c., E.2.q.)

*If "Yes", answer questions a - e. If "No", go to Section 12.*

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|---|---|---|
| a. The proposed action may result in an impairment of natural functions, or "ecosystem services", provided by an undeveloped area, including but not limited to stormwater storage, nutrient cycling, wildlife habitat. | D2e, E1b E2h, E2m, E2o, E2n, E2p | ☐ | ☐ |
| b. The proposed action may result in the loss of a current or future recreational resource. | C2a, E1c, C2c, E2q | ☐ | ☐ |
| c. The proposed action may eliminate open space or recreational resource in an area with few such resources. | C2a, C2c E1c, E2q | ☐ | ☐ |
| d. The proposed action may result in loss of an area now used informally by the community as an open space resource. | C2c, E1c | ☐ | ☐ |
| e. Other impacts: _____ | | ☐ | ☐ |

**12. Impact on Critical Environmental Areas**

The proposed action may be located within or adjacent to a critical environmental area (CEA). (See Part 1. E.3.d) ☒ NO ☐ YES

*If "Yes", answer questions a - c. If "No", go to Section 13.*

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|---|---|---|
| a. The proposed action may result in a reduction in the quantity of the resource or characteristic which was the basis for designation of the CEA. | E3d | ☐ | ☐ |
| b. The proposed action may result in a reduction in the quality of the resource or characteristic which was the basis for designation of the CEA. | E3d | ☐ | ☐ |
| c. Other impacts: _____ | | ☐ | ☐ |

**13. Impact on Transportation**

The proposed action may result in a change to existing transportation systems. ☐ NO ☒ YES

(See Part 1. D.2.j)

*If "Yes", answer questions a - g. If "No", go to Section 14.*

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|---|---|---|
| a. Projected traffic increase may exceed capacity of existing road network. | D2j | ☒ | ☐ |

| | | | |
|---|---|---|---|
| b. The proposed action may result in the construction of paved parking area for 500 or more vehicles. | D2j | ☒ | ☐ |
| c. The proposed action will degrade existing transit access. | D2j | ☒ | ☐ |
| d. The proposed action will degrade existing pedestrian or bicycle accommodations. | D2j | ☒ | ☐ |
| e. The proposed action may alter the present pattern of movement of people or goods. | D2j | ☒ | ☐ |
| f. Other impacts: _____ | | ☐ | ☐ |

**14. Impact on Energy**

The proposed action may cause an increase in the use of any form of energy. ☐ NO ☒ YES
(See Part 1. D.2.k)
*If "Yes", answer questions a - e. If "No", go to Section 15.*

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|---|---|---|
| a. The proposed action will require a new, or an upgrade to an existing, substation. | D2k | ☒ | ☐ |
| b. The proposed action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two-family residences or to serve a commercial or industrial use. | D1f, D1q, D2k | ☒ | ☐ |
| c. The proposed action may utilize more than 2,500 MWhrs per year of electricity. | D2k | ☒ | ☐ |
| d. The proposed action may involve heating and/or cooling of more than 100,000 square feet of building area when completed. | D1g | ☒ | ☐ |
| e. Other Impacts: _____ | | | |

**15. Impact on Noise, Odor, and Light**

The proposed action may result in an increase in noise, odors, or outdoor lighting. ☐ NO ☒ YES
(See Part 1. D.2.m., n., and o.)
*If "Yes", answer questions a - f. If "No", go to Section 16.*

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|---|---|---|
| a. The proposed action may produce sound above noise levels established by local regulation. | D2m | ☒ | ☐ |
| b. The proposed action may result in blasting within 1,500 feet of any residence, hospital, school, licensed day care center, or nursing home. | D2m, E1d | ☒ | ☐ |
| c. The proposed action may result in routine odors for more than one hour per day. | D2o | ☒ | ☐ |
| d. The proposed action may result in light shining onto adjoining properties. | D2n | ☒ | ☐ |
| e. The proposed action may result in lighting creating sky-glow brighter than existing area conditions. | D2n, E1a | ☒ | ☐ |
| f. Other impacts: _____ | | ☐ | ☐ |

**16. Impact on Human Health**

The proposed action may have an impact on human health from exposure ☒ NO ☐ YES

to new or existing sources of contaminants. (See Part 1.D.2.q., E.1. d. f. g. and h.)
*If "Yes", answer questions a - m. If "No", go to Section 17.*

| | Relevant Part I Question(s) | No,or small impact may cccur | Moderate to large impact may occur |
|---|---|---|---|
| a. The proposed action is located within 1500 feet of a school, hospital, licensed day care center, group home, nursing home or retirement community. | E1d | ☐ | ☐ |
| b. The site of the proposed action is currently undergoing remediation. | E1g, E1h | ☐ | ☐ |
| c. There is a completed emergency spill remediation, or a completed environmental site remediation on, or adjacent to, the site of the proposed action. | E1g, E1h | ☐ | ☐ |
| d. The site of the action is subject to an institutional control limiting the use of the property (e.g., easement or deed restriction). | E1g, E1h | ☐ | ☐ |
| e. The proposed action may affect institutional control measures that were put in place to ensure that the site remains protective of the environment and human health. | E1g, E1h | ☐ | ☐ |
| f. The proposed action has adequate control measures in place to ensure that future generation, treatment and/or disposal of hazardous wastes will be protective of the environment and human health. | D2t | ☐ | ☐ |
| g. The proposed action involves construction or modification of a solid waste management facility. | D2q, E1f | ☐ | ☐ |
| h. The proposed action may result in the unearthing of solid or hazardous waste. | D2q, E1f | ☐ | ☐ |
| i. The proposed action may result in an increase in the rate of disposal, or processing, of solid waste. | D2r, D2s | ☐ | ☐ |
| j. The proposed action may result in excavation or other disturbance within 2000 feet of a site used for the disposal of solid or hazardous waste. | E1f, E1g E1h | ☐ | ☐ |
| k. The proposed action may result in the migration of explosive gases from a landfill site to adjacent off site structures. | E1f, E1g | ☐ | ☐ |
| l. The proposed action may result in the release of contaminated leachate from the project site. | D2s, E1f, D2r | ☐ | ☐ |
| m. Other impacts: _____ | | | |

**17. Consistency with Community Plans**
The proposed action is not consistent with adopted land use plans. ☒ NO ☐ YES
(See Part 1. C.1, C.2. and C.3.)
*If "Yes", answer questions a - h. If "No", go to Section 18.*

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|---|---|---|
| a. The proposed action's land use components may be different from, or in sharp contrast to, current surrounding land use pattern(s). | C2, C3, D1a E1a, E1b | ☐ | ☐ |
| b. The proposed action will cause the permanent population of the city, town or village in which the project is located to grow by more than 5%. | C2 | ☐ | ☐ |
| c. The proposed action is inconsistent with local land use plans or zoning regulations. | C2, C2, C3 | ☐ | ☐ |
| d. The proposed action is inconsistent with any County plans, or other regional land use plans. | C2, C2 | ☐ | ☐ |
| e. The proposed action may cause a change in the density of development that is not | C3, D1c, | ☐ | ☐ |

| | | | |
|---|---|---|---|
| supported by existing infrastructure or is distant from existing infrastructure. | D1d, D1f, D1d, Elb | | |
| f. The proposed action is located in an area characterized by low density development that will require new or expanded public infrastructure. | C4, D2c, D2d D2j | ☐ | ☐ |
| g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action) | C2a | ☐ | ☐ |
| h. Other: _____ | | ☐ | ☐ |

**18. Consistency with Community Character**

The proposed project is inconsistent with the existing community character. (See Part 1. C.2, C.3, D.2, E.3) ☒ NO ☐ YES

*If "Yes", answer questions a - g. If "No", proceed to Part 3.*

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|---|---|---|
| a. The proposed action may replace or eliminate existing facilities, structures, or areas of historic importance to the community. | E3e, E3f, E3g | ☐ | ☐ |
| b. The proposed action may create a demand for additional community services (e.g. schools, police and fire) | C4 | ☐ | ☐ |
| c. The proposed action may displace affordable or low-income housing in an area where there is a shortage of such housing. | C2, C3, D1f D1g, E1a | ☐ | ☐ |
| d. The proposed action may interfere with the use or enjoyment of officially recognized or designated public resources. | C2, E3 | ☐ | ☐ |
| e. The proposed action is inconsistent with the predominant architectural scale and character. | C2, C3 | ☐ | ☐ |
| f. Proposed action is inconsistent with the character of the existing natural landscape. | C2, C3 E1a, E1b E2g, E2h | ☐ | ☐ |
| g. Other impacts: _____ | | ☐ | ☐ |

Westchestergov.com

**Referral Review**
**Pursuant to Section 239 L, M and N of the General Municipal Law and Section 277.61 of the County Administrative Code**

**George Latimer**
**County Executive**

**County Planning Board**

November 30, 2018

Ciorsdan Conran, Planning Board Secretary
Town of Lewisboro
P.O. Box 725
Cross River, NY 10518

Subject: **Referral File No. LEW 18-001B – Mercedes Benz of Goldens Bridge, Site Plan Approval and Zoning Map Amendments**

Dear Ms. Conran:

The Westchester County Planning Board has received a revised site plan (dated revised November 29, 2018) for an application to redevelop a property comprised of several tax parcels with a combined acreage of approximately 4.9 acres located within the GB, RB and R-1/2A zoning districts. The majority of the property is currently developed with an auto dealership and the applicant will purchase a commercial property to the south and a residential parcel to the east, both of which the applicant is seeking to rezone to RB. The applicant proposes to redevelop the property by expanding the showroom and service buildings, constructing a parking garage to be attached to the showroom building, and constructing an additional parking lot for vehicle storage. Curb cuts, drainage, lighting and landscaping would also be modified or improved. The subject site is located on the east side of NYS Route 22, north of NYS Route 138.

We previously reviewed this matter under the provisions of Section 239 L, M and N of the General Municipal Law and Section 277.61 of the County Administrative Code and we responded to the Town in a letter dated January 26, 2018. At this time we have no additional comments.

Thank you for calling this matter to our attention.

Respectfully,
WESTCHESTER COUNTY PLANNING BOARD

By:

Norma V. Drummond
Commissioner

NVD/MV

432 Michaelian Office Building
148 Martine Avenue
White Plains, New York 10601 Telephone: (914) 995-4400 Fax: (914) 995-9098 Website: westchestergov.com

**FREDERICK P. CLARK ASSOCIATES, INC.**
PLANNING, TRANSPORTATION, ENVIRONMENT AND DEVELOPMENT
RYE, NEW YORK FAIRFIELD, CONNECTICUT

**MICHAEL A. GALANTE**
MANAGING PRINCIPAL

**DAVID H. STOLMAN**
AICP, PP, PRINCIPAL

350 THEO. FREMD AVE.
RYE, NEW YORK 10580
914 967-6540
FAX: 914 967-6615

CONNECTICUT
203 255-3100

HUDSON VALLEY
845 297-6056

LONG ISLAND
516 364-4544

www.fpclark.com

email@fpclark.com

January 8, 2019

Chairman Jerome Kerner, AIA and
Members of the Planning Board
Town of Lewisboro
79 Bouton Road
South Salem, New York 10590

Subject: **Review of Traffic Impact Study and Site Plan – Mercedes Benz of Goldens Bridge, Town of Lewisboro, New York**

Dear Mr. Kerner:

As requested, we completed a review of the Traffic Impact Study and Site Plan prepared by JMC, dated November 16, 2018 and November 30, 2018, respectively for a proposed Car Dealership Expansion. The development is located on the easterly side of NYS Route 22 north of Anderson Lane. The site currently has five curb cuts along NYS Route 22, four curb cuts along Green Hill Road and one curb cut along Anderson Lane. Based on our field observations of the Dealership, one curb cut is used along NYS Route 22 with four unpaved curb cuts blocked by vehicle inventory, one curb cut is used along Green Hill Road and one curb cut is used along Anderson Lane. The proposal is for two curb cuts along NYS Route 22 as the main access to the site, one curb cut along Green Hill Road for access to 46 Green Hill Road, a vehicle inventory parking lot and secondary access to the Service Building and the existing curb cut along Anderson Lane will be relocated to the north of its current location and provide access to an open parking structure for employee and inventory parking.

**Project Description**

Based on a review of the Application and information provided to our office, the proposal is to expand the existing 12,400 square-foot Showroom Building to 50,900 square feet and the existing 18,200 square-foot Service Building to 20,900 square feet. The total expansion is from 30,600 square feet to 71,800 square feet.

Currently, the site is generating a total of 36, 57 and 43 vehicle trip ends during the weekday morning, weekday afternoon and Saturday midday peak hours, respectively. Utilizing the trip rates found at the existing Dealership, the Applicant estimates that the proposed site will generating a total of 85, 134 and 101 vehicle trip

ends during the weekday morning, weekday afternoon and Saturday midday peak hours, respectively. This is a net increase in total site traffic of 49, 77 and 58 vehicle trip ends during the weekday morning, weekday afternoon and Saturday midday peak hours, respectively.

**Traffic Review Comments**

Based on our review of the Applicant's Traffic Report, we offer the following comments:

1. *Existing Conditions* – The eastbound right turn volume at the intersection of NYS Route 138 and Connector Road should be 113 vehicles not 13 vehicles during the weekday morning peak hour. This should also be corrected in the analysis.

2. *Accident History* – The latest available three-years of accident data should be provided and summarized in a tabular format for all Study Area intersections and links. Any high accident locations should be identified.

3. *2021 No-Build Traffic Volumes* – The Applicant used an annual growth rate of 0.5 percent, which is acceptable. They have also added traffic for the Goldens Bridge Village Centre Expansion and the WBP AFFH Multi-Family development. It should be noted that the former IBM property is currently vacant and there are preliminary discussions for a Private Boarding School to reoccupy the property.

   Review of the assignment for the Goldens Bridge Village Centre Expansion traffic indicated that during the weekday afternoon peak hour that the through movements at the NYS Route 22 intersections of Anderson Road, Site Driveway A and Site Driveway B should be 27 vehicles not 10 vehicles. The weekday afternoon no-build volumes for these through movements should be corrected. As noted in Comment #1, the eastbound right turn volume at the intersection of NYS Route 138 and Connector Road during the weekday morning peak hour should be corrected.

4. *Site Traffic Generation* – Based on comments provided by New York State Department of Transportation (NYSDOT), below find a comparison table between the trip rates found at the existing Dealership and the Institute of Transportation Engineers (ITE), Trip Generation Manual, 10th Edition, 2017 trip rates for Land Use Code #840, Automobile Sales (New):

| LAND USE | SIZE | TOTAL VEHICLE TRIP ENDS | | | | | |
|---|---|---|---|---|---|---|---|
| | | Weekday Morning | | Weekday Afternoon | | Saturday Midday | |
| | | TMC | ITE | TMC | ITE | TMC | ITE |
| Existing Car Dealership | 30,600 S.F. | 36 | 57 | 57 | 74 | 43 | 123 |
| Proposed Car Dealership | 71,800 S.F. | 85 | 134 | 134 | 174 | 101 | 288 |
| Net Increase Site Traffic | 41,200 S.F. | 49 | 77 | 77 | 100 | 58 | 166 |

Based on the existing/proposed development being a high end vehicle dealership, we believe the methodologies used by the Applicant are acceptable for purposes of completing this study.

5. *Site Traffic Distribution* – The site traffic distribution used in the analysis is reasonable.

6. *2021 Build Traffic Volumes* – See comments 1, 3 and 4.

7. *Capacity Analysis* – Based on our review of the SYNCHRO files, the appropriate peak hour factors (PHF) and heavy vehicle percentages were used, with the exception of the intersection of NYS Route 22 at Site Driveway B during the weekday morning peak hour. The PHF should be 0.82 not 0.92. NYSDOT noted that the speed limit on that segment of NYS Route 22 is 45mph, not 55mph. It drops to 40mph in only the northbound direction at the project site. Also, NYSDOT noted that the phasing was incorrect in the model. It should be Phase 1 for both eastbound and westbound NYS Route 138 and Phase 3 for the Connecter Road. This should be revised.

   Table 3 provides the results of the HCM 6th Edition for the signalized intersection. The Applicant should also provide the Synchro results for the signalized intersection. Lastly, a storage/queue analysis table should be provided and include the existing storages/link lengths, in feet.

**Site Plan Review Comments**

As noted above, the Applicant proposed to eliminate driveways along both Route 22 and along Green Hill Road, as part of the proposed expansion of the Dealership. On NYS Route 22, two, two-way, two-lane access drives are proposed to serve both the expanded Showroom and Service Building. Secondary access will be provided from Anderson Lane to a parking structure, with access to the main Showroom Building. Access to the rear Service Building and vehicle storage facility will also have access from Green Hill Road located to the rear of the proposed and expanded buildings.

1. *Site Access to NYS Route 22* – Typically, the NYSDOT prefers only one access drive to a State Highway. However, the Applicant is proposed two, two-lane, two-way driveways to serve the same site. Further, these two proposed driveways are located in close proximity. It is our recommendation that the Applicant consider only constructing the southerly driveway, which has a more reasonable change in grade between NYS Route 22 and internal to the site.

   As part of the development of the proposed access drive(s) to NYS Route 22 the Applicant should provide the available and required Intersection Sight Distance (ISD) based on criteria followed by NYSDOT.

2. *Site Access Drive to Anderson Lane* – As part of the modifications and improvements to the Subject Property the existing access drive from Anderson Lane to the Subject Property will be shifted closer to Green Hill Road. As part of the relocation of the existing driveway to align with the expanded building, appropriate landscaping should be installed and maintained not to restrict sight lines for motorists exiting the facility and looking towards Green Hill Road or from Green Hill Road.

3. *Overall Site Plan Comments* – The Applicant has provided a significant detailed Plan showing access points to each of the building, parking areas, internal circulation for both vehicles and delivery trucks and although not noted appropriate radii to accommodate emergency vehicles. It is our opinion that the proposed improvements to the Subject Property are appropriate and will improve overall circulation internal to the site and minimize conflicts on NYS Route 22 and Green Hill Road.

It is a difficult site due to the topographical characteristics of the site, which limit providing large paved areas; however, the Applicant has maximized the use of the site to serve the needs of this Dealership.

**Findings**

The proposal is to expand the existing Dealership from a 30,600 square foot development to 71,800 square feet of floor area for the Showroom and service facilities. The current facility generates 36, 57 and 43 vehicle trip ends during the typical weekday morning, weekday afternoon and Saturday midday peak hours, respectively. The Applicant estimates that the proposed site will generate a total of 85, 134 and 101 vehicle trip ends during the same three peak hours noted above after completion of the proposed expansion. This indicates an increase in site traffic of 49, 77 and 58 vehicle trip ends during the three peak hours noted above.

If ITE Trip Generation Rates were referenced for the proposed expansion as proposed, these trip rates indicate that 77, 100 and 166 vehicle trip ends would be generated for the new space for the weekday morning, weekday afternoon and Saturday midday peak hours, respectively. It is our opinion that the Applicant's estimates for site traffic based on its current traffic generation is appropriate for estimating future traffic and potential impacts to area roadways. This opinion is based on the type of automobiles being sold at this existing facility. It is acknowledged that this Dealership provides services for a large area throughout Northern Westchester and potentially into Northern Fairfield County in Connecticut.

We are in agreement with the elimination of existing unimproved, unused, access drives to both NYS Route 22 and Green Hill Road. However, we recommend that the Applicant consider eliminating the proposed northerly access drive to the site from NYS Route 22 and only maintain a relocated and improved southerly access drive to the site. The Applicant has indicated that large tractor trailer trucks can access the site, turn around and exit the site to NYS Route 22; therefore, the two access drives to NYS Route 22 are not needed for circulation of large trucks.

The results of the analyses indicate that area roads and intersections serving the Subject Property can maintain acceptable Levels of Service at each of the intersections included in the analysis and also the three peak hours included in the analysis. However, the left turn movements from the Connector Road to NYS Route 22 will continue to operate at Level of Service "F" during the weekday morning peak hour, which is unrelated to the proposed expansion of the Dealership.

Although we have minor comments on the traffic volumes and analyses, the overall results of the analyses, with any updates, will not change the results.

Our findings as it relates to the proposed development is to minimize the number of curb cuts to NYS Route 22 in addition to the curb cuts already proposed to be eliminated by the Applicant. However, it is important to note that many of the existing curb cuts to NYS Route 22 are currently blocked and not used and; therefore, the overall benefit of eliminating these driveways, as proposed, has a minimal additional benefit to area operations along NYS Route 22.

The Applicant should consider providing only one curb cut and access drive to NYS Route 22. This driveway should also include available and required ISD based on NYSDOT standards.

Sincerely,

Michael A. Galante
Managing Principal

Steven T. Cipolla, E.I.T.
Senior Associate/Transportation

cc: Jan K. Johannessen, AICP

g:\791.000 mercedes benz of goldens bridge\word\mgb18-000.stc.docx

**TOWN OF LEWISBORO**
**Westchester County, New York**

**Building Department**
**79 Bouton Road**
**South Salem, New York 10590**

**Tel: (914) 763-3060**
**Fax: (914) 875-9148**
**Email:** jangiello@lewisborogov.com

January 8, 2019

Mr. Jerome Kerner, Chairman
Town of Lewisboro Planning Board

Re: Application of Mercedes Benz of Goldens Bridge

Dear Mr. Kerner and Members of the Board,

I have reviewed the plans from Stephen Spina, P.E. latest revision dated 12/26/18 and the plans from Sullivan Architecture latest revision dated 9/6/18 as well as additional sheet A3.04 dated 12/26/18. I have the following comments based upon the assumption that the applicant will acquire lots 5 and 42. It is also assumed that the Town will approve the rezoning of these lots to GB:

1. A variance is required for Nonconformities other than use per Section 220-9D(1)&(2). The specific nonconformities are to follow.
2. The proposed showroom/parking building has a rear yard setback whereas 30' are required per Section 220-24E(A).
3. The proposed showroom/parking building has a gross floor area of 50,900 square ft. whereas 10,000 square ft. is the maximum permitted per Section 220-24E.
4. The proposed building coverage is 24.7% whereas 20% is the maximum permitted per Section 220-24E.
5. The proposed site coverage is 64.4% whereas 60% is the maximum per Section 220-24E.
6. The proposed showroom/parking building has a height of 51'-5.5" whereas the maximum permitted is 30'.
7. The northern parking/storage lot has aisle widths of 19' and 21' whereas 25' are required per Section 220-55C(3).
8. The proposed grade within 30' of the street line for the southern exit/entrance is 10% and the northern is 7.4% whereas the maximum permitted is 3% per Section 220-55D(2).
9. The proposed driveway grade is14.5% whereas the maximum permitted per 220-55D(2) is 12%.
10. The proposed retaining wall on the northeastern corner of the service building has a height of 11' whereas the maximum permitted within a required setback is 6' per 220-12E(1).

11. The proposed fence located on the western side of the northern parking/storage lot has a height of 8'-8" whereas the maximum permitted within a required setback is 6' per 220-12E(1).
12. The proposed wall sign has a length of 46' whereas the maximum permitted is 20' per Section 185-5F(3)(A).
13. The proposed wall sign has a height of 3'-3.5" whereas the maximum permitted is 2' per Section 185-5F(3)(A).
14. There are seven additional proposed wall signs whereas only one is permitted per Section 185-5F(4).
15. Of the seven additional proposed wall signs, five signs have an area of 16.5 square ft. each and two signs have an area of 7.8 square ft. each whereas the maximum permitted area of a secondary sign is 6 square ft. per Section 185-F(4)(a).
16. Four of the proposed wall signs extend above the second story whereas it is not permitted per Section 185-6C(4).
17. The proposed wall sign has letters with a height of 24.5" whereas the maximum permitted is 12" per Section 185-6(C)6.
18. The proposed off-street loading areas will temporarily block a portion of the required parking spaces whereas this is not permitted per Section 220-57B.
19. The proposed auto storage lifts on the northwest side of the northern parking/storage area has a rear yard setback of 17' whereas 30' are required per Section 220-24E(A).
20. The access to the proposed upper parking/storage lots has an access width of 16' whereas 20' are required per Section 220-55D(1).
21. The access to the proposed upper parking/storage lots has a grade of 16% whereas no entrance or exit for any off-street parking shall exceed a grade of 3% within 30' of the street line or 12% at any other point per Section 220-55D(2).
22. The proposed parking areas containing more than 25 spaces do not have planting islands whereas in all off-street parking areas containing 25 or more parking spaces, at least 10% of the surface within the parking area perimeter shall consist of planting islands per Section 220-55E(3)
23. The applicant proposes two loading spaces whereas six are required per Section 220-57C(1).
24. The applicant proposes 88 parking spaces for customers whereas one space per 500 square ft. of gross floor area is required (71,800 sq. ft. / 500=144 spaces) per Section 220-56D.
25. The applicant is seeking a waiver to permit a deviation from the standards requiring landscape buffers per 220-15B(7).

Please do not hesitate to contact me with any questions.

Sincerely,

Joe Angiello
Building Inspector

KELLARD SESSIONS

John Kellard, P.E.
David Sessions, RLA, AICP
Joseph M. Cermele, P.E., CFM
Jan K. Johannessen, AICP

# MEMORANDUM

TO: Chairman Jerome Kerner, AIA and
Members of Lewisboro Planning Board

CC: Ciorsdan Conran
Judson Siebert, Esq.
Joseph Angiello

FROM: Jan K. Johannessen, AICP
Joseph M. Cermele, P.E., CFM
Town Consulting Professionals

DATE: January 9, 2019

RE: Lot Line Change
Sanz/North Salem Open Land Foundation
15 Sullivan Road Sheet 12, Block 11137, Lot 31
Waccabuc Road Sheet 12, Block 11137, Lot 117

---

## PROJECT DESCRIPTION

The proposed action involves the conveyance of land between two (2) adjacent properties owned by Parris Sanz (Lot 31) and the North Salem Open Land Foundation (Lot 117). Lot 31 currently consists of ±11.84 acres of land and is developed with the single-family residence; Lot 117 currently consists of ±99.9 acres of land and is vacant open space. As proposed, Lot 31 will convey ±1.6 acres of land to Lot 117 and Lot 117 will convey ±0.95 acre of land to Lot 31. As a result of the proposed action, Lots 31 and 117 will total ±11.15 acres and ±99.92 acres, respectively. No construction or physical improvements to the subject parcels are proposed.

## SEQRA

The proposed action has been preliminarily identified as an Unlisted Action under the State Environmental Quality Review Act (SEQRA). Prior to acting on this pending application, the Planning Board must issue a Determination of Significance.

**REQUIRED APPROVALS**

1. Final Subdivision Plat Approval is required from the Planning Board.

2. Unless waived by the Planning Board under Section 195-13 of the Subdivision Regulations, a public hearing is required.

3. Westchester County Department of Health (WCDH) approval is required.

**COMMENTS:**

1. On behalf of the Planning Board, the applicant should complete Part 2 of the Short EAF for review.

2. The applicant has inadvertently marked the incorrect Planning Board applications that apply; Waiver of Site Development Plan Procedures is not required. The application form should be revised to check Steps 1 and 3 Subdivision Plat Approval. Historically, the Planning Board has not required applicants to submit Step 2 of the application form and has not issued Preliminary Subdivision Approval for lot line realignments.

3. The subdivision plat has been prepared in compliance with Town requirements; we have no comments on the plat at this time.

In order to expedite the review of subsequent submissions, the applicant should provide annotated responses to each of the comments outlined herein.

**PLAN REVIEWED, PREPARED BY INSITE ENGINEERING, DATED OCTOBER 25, 2017:**

- Lot Line Change Map

**DOCUMENTS REVIEWED:**

- Waiver of Site Development Plan Procedures Application
- Short EAF, dated December 17, 2018

JKJ/JMC/dc

T:\Lewisboro\Correspondence\2019-01-10_LWPB-Sanz & N. Salem Open Land-Review-Memo.docx

# TOWN OF LEWISBORO PLANNING BOARD

79 Bouton Road, South Salem , NY 10590 Tel: (914) 763-5592 Email: planning@lewisborogov.com

11-1BPB
Step I app fee pd 12/17/18 & escrow established

**Site Development Plan/Subdivision Plat Application – Check all that apply:**

| | | | |
|---|---|---|---|
| Waiver of Site Development Plan Procedures | ☑ | | |
| Site Development Plan Approval | Step I ☐ | Step II ☐ | |
| Special Use Permit Approval | Step I ☐ | Step II ☐ | |
| Subdivision Plat Approval | Step I ☐ | Step II ☐ | Step III ☐ |

**Project Information**

Project Name: Sanz/North Salem Open Land Foundation Lot Line Change

Project Address: 15 Sullivan Road (Tax Lot 31) & No# Waccabuc Road (Tax Lot 117)

Gross Parcel Area: 111 ac. Zoning District: R4 Sheet(s): 12 Block (s): 11137 Lot(s): 31 & 117

Project Description: Both parties wish to change the configuration of a portion of their mutual property. The property swap is not equal. Tax Lot 31 intends to convey 1.634 acres while Tax Lot 117 will convey 0.950 acres.

| | | |
|---|---|---|
| Is the site located within 500 feet of any Town boundary? | YES ☑ | NO ☐ |
| Is the site located within the New York City Watershed? | YES ☑ | NO ☐ |
| Is the site located on a State or County Highway? | YES ☑ | NO ☐ |

Does the proposed action require any other permits/approvals from other agencies/departments?

| | | | |
|---|---|---|---|
| Town Board ☐ | ZBA ☐ | Building Dept. ☐ | Town Highway ☐ |
| ACARC ☐ | NYSDEC ☐ | NYCDEP ☐ | WCDH ☑ |
| NYSDOT ☐ | Town Wetland ☐ | Town Stormwater ☐ | |

Other

**Owner's Information**

Name: Parris Sanz Email: parris.sanz@gmail.com

Address: 15 Sullivan Road, Goldens Brdige, NY 10526 Phone: (914)874-3352

**Applicant's Information (if different)**

Name: Email:

Address: Phone:

**Authorized Agent's Information**

Name: Jeffrey DeRosa Email: jderosa@insite-eng.com

Address: 3 Garrett Place, Carmel, NY 10512 Phone: (845)225-9690

THE APPLICANT understands that any application is considered complete only when all information and documents required have been submitted and received by the Planning Board. The applicant further understands that the applicant is responsible for the payment of all application and review fees incurred by the Planning Board.

THE UNDERSIGNED WARRANTS the truth of all statements contained herein and in all supporting documents according to the best of his/her knowledge and belief, and authorizes visitation and inspection of the subject property by the Town of Lewisboro and its agents.

APPLICANT'S SIGNATURE DATE

OWNER'S SIGNATURE DATE 12/17/18

# TOWN OF LEWISBORO PLANNING BOARD

**79 Bouton Road, South Salem, NY 10590**
**Email: planning@lewisborogov.com**
**Tel: (914) 763-5592**
**Fax: (914) 763-3637**

## Affidavit of Ownership

State of : New York

County of: Westchester

Parris Sanz, being duly sworn, deposes and says that he/she

resides at 15 Sullivan Road Goldens Bridge, NY

in the County of Westchester, State of New York

and that he/she is (check one) ☑ the owner, or ☐ the _____
*Title*

of _____
*Name of corporation, partnership, or other legal entity*

which is the owner, in fee of all that certain log, piece or parcel of land situated, lying and being in the Town of Lewisboro, New York, aforesaid and know and designated on the Tax Map in the Town of Lewisboro as:

Block 11137, Lot 31, on Sheet 12.

*Owner's Signature*

**Sworn to before me this**

17th **day of** December, 2018

Alicia Hansen
Notary Public, State of New York
Reg. # 01HA6086470
Qualified in Dutchess County
Commission Expires January 21, 2019

Alicia Hansen

***Notary Public – affix stamp***

# TOWN OF LEWISBORO PLANNING BOARD

**79 Bouton Road, South Salem, NY 10590**
**Email: planning@lewisborogov.com**
**Tel: (914) 763-5592**
**Fax: (914) 763-3637**

## Affidavit of Ownership

State of : New York

County of: Westchester

Jocko McKean, being duly sworn, deposes and says that he/she

resides at 9 June Road North Salem, NY

in the County of Westchester, State of New York

and that he/she is (check one) ☑ the owner, or ☐ the Executive Director
*Title*

of North Salem Open Land Foundation, Inc.
*Name of corporation, partnership, or other legal entity*

which is the owner, in fee of all that certain log, piece or parcel of land situated, lying and being in the Town of Lewisboro, New York, aforesaid and know and designated on the Tax Map in the Town of Lewisboro as:

Block 11137, Lot 117, on Sheet 12.

*Owner's Signature*

**Sworn to before me this**

17th **day of** December, 2 018

Alicia Hansen
Notary Public, State of New York
Reg. # 01HA6086470
Qualified In Dutchess County
Commission Expires January 21, 2019

Alicia Hansen

***Notary Public – affix stamp***

# *Short Environmental Assessment Form*
## *Part 1 - Project Information*

### Instructions for Completing

**Part 1 - Project Information. The applicant or project sponsor is responsible for the completion of Part 1.** Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

**Part 1 - Project and Sponsor Information**

Name of Action or Project:
Proposed Lot Line Change for Sanz and NSOLF

Project Location (describe, and attach a location map):
Properties located at 15 Sullivan Road (Tax Lot 31) & No# Waccabuc Road (Tax Lot 117) located in the Town of Lewisboro

Brief Description of Proposed Action:
The parties wish to change the property line between them. Tax Lot 31 (15 Sullivan Road) intends to convey 1.634 acres while Tax Lot 117 (Waccabuc Road) will convey 0.950 acres.

| Name of Applicant or Sponsor: | Telephone: (914)874-3352 |
|---|---|
| Parris Sanz | E-Mail: parris.sanz@gmail.com |

Address:
15 Sullivan Road

| City/PO: | State: | Zip Code: |
|---|---|---|
| Goldens Bridge | NY | 10526 |

| | NO | YES |
|---|---|---|
| 1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2. | ☑ | ☐ |
| 2. Does the proposed action require a permit, approval or funding from any other governmental Agency? If Yes, list agency(s) name and permit or approval: | ☑ | ☐ |

3.a. Total acreage of the site of the proposed action? 2.6 acres
b. Total acreage to be physically disturbed? 0.00 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 111.08 acres

4. Check all land uses that occur on, adjoining and near the proposed action.
☐ Urban ☐ Rural (non-agriculture) ☐ Industrial ☐ Commercial ☑ Residential (suburban)
☐ Forest ☑ Agriculture ☐ Aquatic ☑ Other (specify): Nature Preserve
☐ Parkland

| | NO | YES | N/A |
|---|---|---|---|
| 5. Is the proposed action, | | | |
| a. A permitted use under the zoning regulations? | ☐ | ☐ | ☑ |
| b. Consistent with the adopted comprehensive plan? | ☐ | ☐ | ☑ |

| | NO | YES |
|---|---|---|
| 6. Is the proposed action consistent with the predominant character of the existing built or natural landscape? | ☐ | ☑ |
| 7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: _____ | ☑ | ☐ |
| 8. a. Will the proposed action result in a substantial increase in traffic above present levels? | ☑ | ☐ |
| b. Are public transportation service(s) available at or near the site of the proposed action? | ☑ | ☐ |
| c. Are any pedestrian accommodations or bicycle routes available on or near site of the proposed action? | ☑ | ☐ |
| 9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies: _____ | ☑ | ☐ |
| 10. Will the proposed action connect to an existing public/private water supply? If No, describe method for providing potable water: _____ | ☑ | ☐ |
| 11. Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment: _____ | ☑ | ☐ |
| 12. a. Does the site contain a structure that is listed on either the State or National Register of Historic Places? | ☑ | ☐ |
| b. Is the proposed action located in an archeological sensitive area? | ☑ | ☐ |
| 13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency? | ☐ | ☑ |
| b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody? If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____ | ☑ | ☐ |

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply:
☐ Shoreline ☑ Forest ☐ Agricultural/grasslands ☐ Early mid-successional
☐ Wetland ☐ Urban ☐ Suburban

| | NO | YES |
|---|---|---|
| 15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered? Northern Long-eared Bat | ☐ | ☑ |
| 16. Is the project site located in the 100 year flood plain? | ☑ | ☐ |
| 17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes, a. Will storm water discharges flow to adjacent properties? ☐ NO ☐ YES | ☑ | ☐ |
| b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe: ☐ NO ☐ YES _____ | | |

| | NO | YES |
|---|---|---|
| 18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)?<br>If Yes, explain purpose and size: | ☑ | ☐ |
| 19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility?<br>If Yes, describe: | ☑ | ☐ |
| 20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?<br>If Yes, describe: | ☑ | ☐ |

**I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE**

Applicant/sponsor name: PARRIS J. SANZ Date: 12/17/18

Signature:

PRINT FORM

# EAF Mapper Summary Report

Monday, December 17, 2018 1:41 PM


**Disclaimer:** The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.


| | |
|---|---|
| Part 1 / Question 7 [Critical Environmental Area] | No |
| Part 1 / Question 12a [National Register of Historic Places] | No |
| Part 1 / Question 12b [Archeological Sites] | No |
| Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies] | Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook. |
| Part 1 / Question 15 [Threatened or Endangered Animal] | Yes |
| Part 1 / Question 15 [Threatened or Endangered Animal - Name] | Northern Long-eared Bat |
| Part 1 / Question 16 [100 Year Flood Plain] | No |
| Part 1 / Question 20 [Remediation Site] | No |

# TOWN OF LEWISBORO PLANNING BOARD

79 Bouton Road, South Salem, NY 10590
Email: planning@lewisborogov.com
Tel: (914) 763-5592 Fax: (914) 763-3637

## Tax Payment Affidavit Requirement

*This form must accompany all applications to the Planning Board.*

***Under regulations adopted by the Town of Lewisboro, the Planning Board may not accept any application unless an affidavit from the Town of Lewisboro Receiver of Taxes is on file in the Planning Board office. The affidavit must show that all amounts due to the Town of Lewisboro as real estate taxes and special assessments on the total area encompassed by the application, together with all penalties and interest thereon, have been paid.***

***Under New York State law, the Westchester County Clerk may not accept any subdivision map for filing unless the same type of affidavit from the Town of Lewisboro Receiver of Taxes is submitted by the applicant at the time of filing.***

This form must be completed by the applicant and must accompany all applications to the Planning Board. Upon receipt, the Planning Board Secretary will send the form to the Receiver of Taxes for signature and notarization. If preferred, the applicant may directly obtain the signature of the Receiver of Taxes and notarization prior to submission.

**To Be Completed by Applicant**
**(Please type or print)**

Parris Sanz
*Name of Applicant*

Sanz/NSOLF Lot Line Change
*Project Name*

**Property Description**

Tax Block(s): 11137

Tax Lot(s): 31

Tax Sheet(s): 12

**Property Assessed to:**

Parris & Stephanie Sanz
*Name*

15 Sullivan Road
*Address*

Goldens Bridge NY 10526
*City State Zip*

The undersigned, being duly sworn deposes and says that a search of the tax records in the office of the Receiver of Taxes, Town of Lewisboro, reveals that all amounts due to the Town of Lewisboro as real estate taxes and special assessments, together with all penalties and interest thereon, affecting the premises described below, have been paid.

**Signature - Receiver of Taxes:** _____ 12-18-2018
*Date*

**Sworn to before me this**
18th **day of** December, 2018

JANET L. DONOHUE
NOTARY PUBLIC, STATE OF NEW YORK
No. 01DO6259627
Qualified in Westchester County
Commission Expires April 16, 2020

***Signature - Notary Public (affix stamp)***

# TOWN OF LEWISBORO PLANNING BOARD

79 Bouton Road, South Salem, NY 10590
Email: planning@lewisborogov.com
Tel: (914) 763-5592 Fax: (914) 763-3637

## Tax Payment Affidavit Requirement

*This form must accompany all applications to the Planning Board.*

***Under regulations adopted by the Town of Lewisboro, the Planning Board may not accept any application unless an affidavit from the Town of Lewisboro Receiver of Taxes is on file in the Planning Board office. The affidavit must show that all amounts due to the Town of Lewisboro as real estate taxes and special assessments on the total area encompassed by the application, together with all penalties and interest thereon, have been paid.***

***Under New York State law, the Westchester County Clerk may not accept any subdivision map for filing unless the same type of affidavit from the Town of Lewisboro Receiver of Taxes is submitted by the applicant at the time of filing.***

This form must be completed by the applicant and must accompany all applications to the Planning Board. Upon receipt, the Planning Board Secretary will send the form to the Receiver of Taxes for signature and notarization. If preferred, the applicant may directly obtain the signature of the Receiver of Taxes and notarization prior to submission.

**To Be Completed by Applicant**
**(Please type or print)**

Parris Sanz
*Name of Applicant*

Sanz/NSOLF Lot Line Change
*Project Name*

**Property Description**

Tax Block(s): 11137

Tax Lot(s): 117

Tax Sheet(s): 12

**Property Assessed to:**

North Salem Open Land Foundation, Inc
*Name*

P.O. Box 176
*Address*

North Salem NY 10560
*City State Zip*

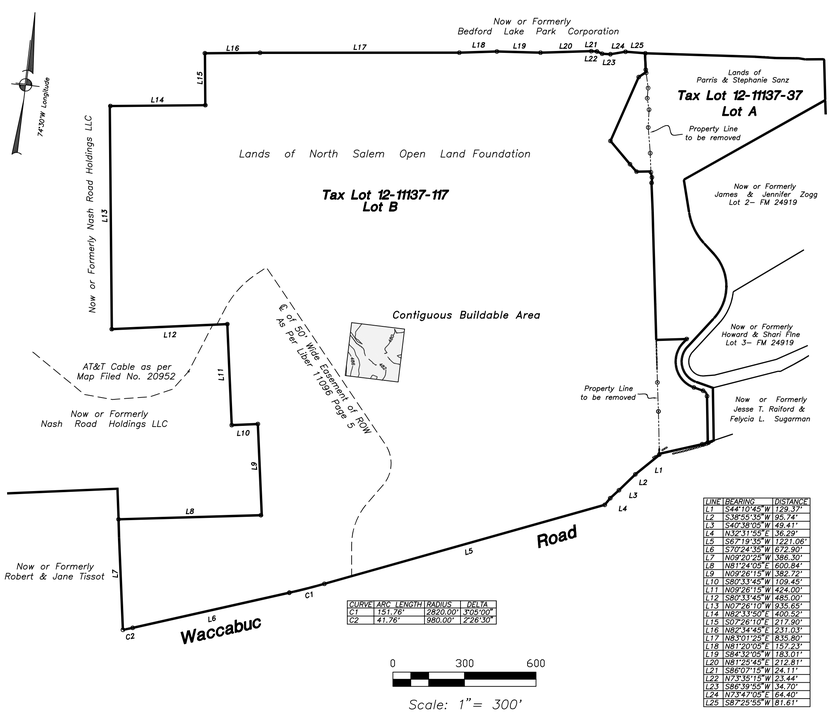
The undersigned, being duly sworn deposes and says that a search of the tax records in the office of the Receiver of Taxes, Town of Lewisboro, reveals that all amounts due to the Town of Lewisboro as real estate taxes and special assessments, together with all penalties and interest thereon, affecting the premises described below, have been paid.

**Signature - Receiver of Taxes:** _____ 12·18·2018
*Date*

**Sworn to before me this**
18th **day of** December, 2018

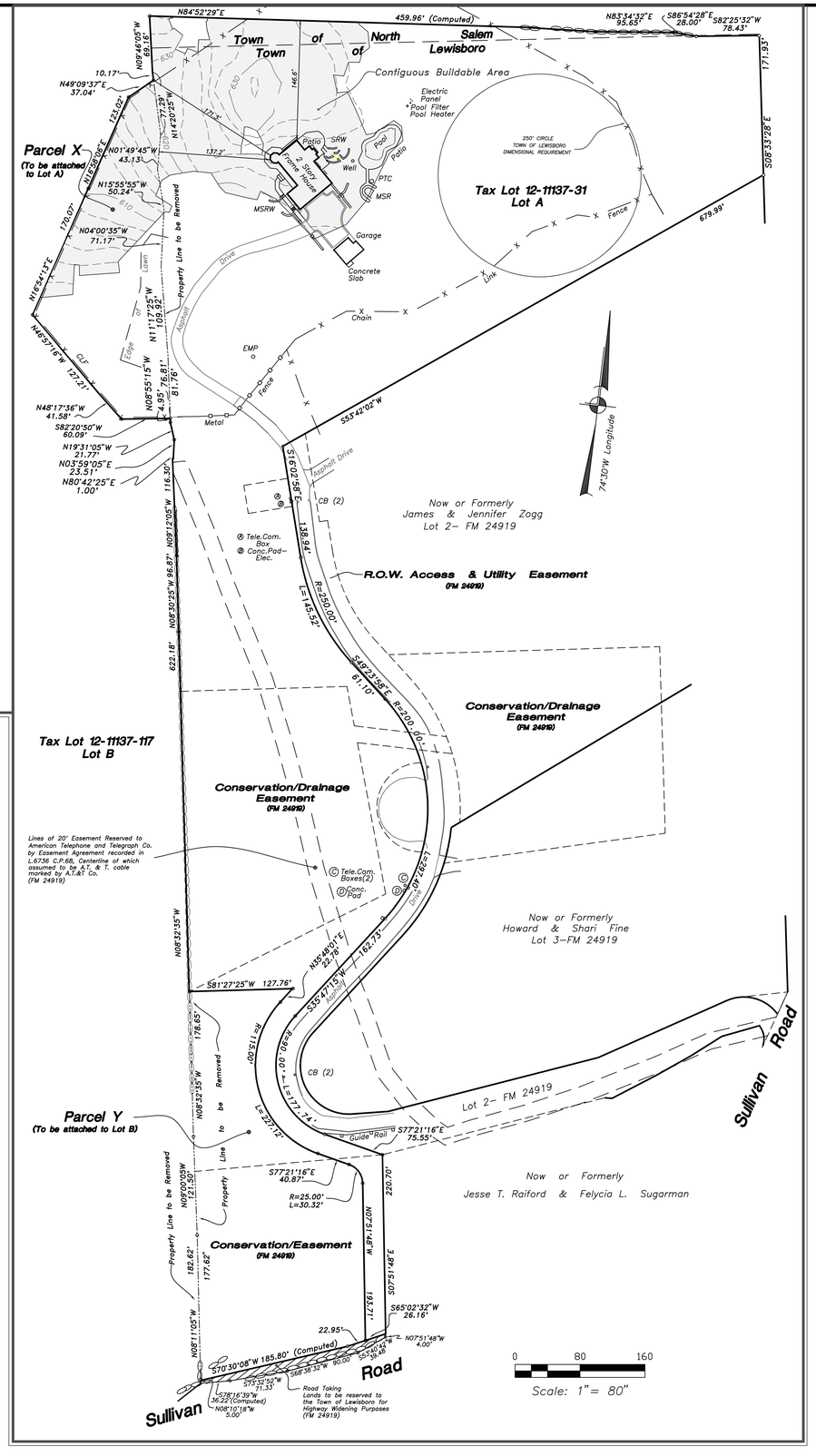
JANET L. DONOHUE
NOTARY PUBLIC, STATE OF NEW YORK
No. 01DO6259627
Qualified in Westchester County
Commission Expires April 16, 2020

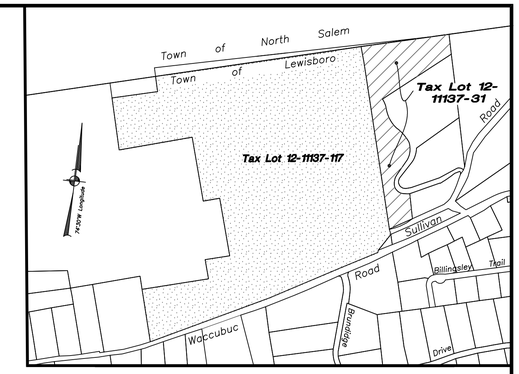
Janet L Donohue
***Signature - Notary Public (affix stamp)***




| CURVE | ARC LENGTH | RADIUS | DELTA |
|---|---|---|---|
| C1 | 151.76' | 5820.00' | 1°45'50" |
| C2 | 41.76' | 980.00' | 2°26'30" |

| LINE | BEARING | DISTANCE |
|---|---|---|
| L1 | S44°10'45"W | 129.37' |
| L2 | S38°55'35"W | 95.74' |
| L3 | S40°38'05"W | 49.41' |
| L4 | N10°31'05"E | 36.29' |
| L5 | S67°19'35"W | 1021.06' |
| L6 | S70°24'35"W | 672.30' |
| L7 | N09°20'25"W | 386.30' |
| L8 | N81°24'05"E | 600.84' |
| L9 | N09°26'15"W | 382.72' |
| L10 | S80°33'45"W | 109.45' |
| L11 | N09°26'15"W | 424.00' |
| L12 | S80°33'45"W | 485.00' |
| L13 | N07°26'10"W | 935.65' |
| L14 | N89°33'20"E | 400.53' |
| L15 | S07°26'10"E | 217.90' |
| L16 | N89°34'45"E | 231.03' |
| L17 | N83°01'25"E | 835.89' |
| L18 | N81°20'05"E | 157.23' |
| L19 | S84°32'05"W | 183.01' |
| L20 | N81°25'45"E | 212.81' |
| L21 | S86°07'15"W | 24.11' |
| L22 | N73°35'15"W | 23.44' |
| L23 | S86°39'55"W | 34.70' |
| L24 | N73°47'05"E | 64.40' |
| L25 | S87°25'55"W | 81.61' |




Area Inset Map Scale: 1"=400'

## Westchester County Dept. of Health

Approved pursuant to Chapter 873, Article X, Sections 873.951 and 873.1011 and Articles VII and VIII of the Westchester County Sanitary Code subject to the provision of private water supply and separate sewage treatment facilities to serve each habitable building hereafter constructed. These facilities are to be installed in accordance with land improvement plans and specifications approved by and filed in this office prior to the construction of such building.

Each purchaser of property shown hereon shall be furnished a true copy of this plat showing this endorsement. Any erasures, changes, additions or alterations of any kind, except the addition of signatures of other approving authority and the date thereof made on this plan after this approval, shall invalidate this approval.

Approved by the Assistant Commissioner of Health on Behalf of the Department of Health

Property shown hereon is subject to the "Rules and Regulations for the Protection from Contamination of the City of Lewisboro Water Supply and its Sources".

## R-4 Acre Zone (ONE FAMILY RESIDENCE) ZONE REQUIREMENTS:

| | Lot A: Tax Lot 12-11137-31 | | | Lot B Tax Lot 12-11137-117 | |
|---|---|---|---|---|---|
| | Required: | Existing: | Proposed: | Existing: | Proposed: |
| Min. Lot Area: | 4 Acres | 11.8403 Acres | 11.1551 AC. | 99.2433 Acres | 99.9285 Ac. |
| Min. Lot Width/Circle: | 250' | 250' | 250' | 250' | 250' |
| Min. Yard Setbacks: | | | | | |
| Front: | | | | | |
| From Street Center Line: | 75' | >75' | >75' | N/A | N/A |
| From Front Lot Line: | 50' | >50' | >50' | N/A | N/A |
| Side: | 75' | 137.2' | 171.3' | N/A | N/A |
| Rear: | 50' | 146.6' | 146.6' | N/A | N/A |
| Max. Building Height: | | | | | |
| Stories: | 2 1/2 | 2 | 2 | N/A | N/A |
| Feet: | 35' | <35' | <35' | N/A | N/A |
| | | | | | |

## TABLE OF LOT AREAS:

| LOT A (TAX LOT 31) | | LOT B (TAX LOT 117) | |
|---|---|---|---|
| EXISTING | 11.8403 AC | EXISTING | 99.2433 AC. |
| Parcel X | +0.9495 AC. | Parcel X | -0.9495 AC. |
| Parcel Y | -1.6347 AC. | Parcel Y | +1.6347 AC. |
| TOTAL | 11.1551 AC. | TOTAL | 99.9285 Ac. |

## TABLE OF BUILDABLE AREAS:

| Section-Block-Lot | Required | Provided |
|---|---|---|
| 12-11137-31 | 50,000 Sq.Ft. | 74,075 Sq.Ft. |
| 12-11137-117 | 50,000 Sq.Ft. | Greater Than 50,000 |

DEED REFERENCE:
Lot A
Tax ID 12-11137-31
Control # 561323284

DEED REFERENCE:
Lot B
Tax ID 12-11137-17
Liber 7371, Page 322

FILED MAP REFERENCE:
Tax ID 12-11137-31

Subject Lot: 1
"Subdivision of Property prepared for Riina Bros. Construction, Ltd." filed in the Westchester County Clerk's Office on July 8, 1993 as Map No. 24919.

## Legend

| | |
|---|---|
| CB | Catch Basin |
| DI | Drop Inlet |
| EMP | Electric Meter Post |
| SW | Stone Wall |
| SRW | Stone Retaining Wall |
| WRW | Wood Retaining Wall |
| MSRW | Masonry Stone Retaining Wall |
| | Utility Pole |
| | Telephone/ Communication |

## Town of Lewisboro Approval

Approved by resolution of the Planning Board of the Town of Lewisboro, New York on the _____ day of _____, _____, subject to all requirements and conditions of said resolution. Any change, erasure, modification or revision of this Plat, as approved, shall void this approval.

Chairman _____ Date _____

Secretary _____ Date _____

## Consent to File

The undersigned owner of the property hereon state that they are familiar with this map, its contents and its legends, and hereby consent to all its said terms and conditions as stated hereon, and to the filing of this map in the Office of the Clerk of the County of Westchester.

Signed this _____ day of _____, _____.

By: _____

Tax Lot 12-11137-31
Parris Sanz & Stephanie Bohner Sanz
15 Sullivan Road, Goldens Bridge, NY 10526

Tax Lot 12-11137-117
North Salem Open Land Foundation
PO Box 176
North Salem, NY 10560

## TOWN ENGINEER'S CERTIFICATION

Reviewed for compliance with the Planning Board Resolution.

Joseph Cermele, P.E. _____ Date _____
Town Consulting Engineer

## Land Surveyor's Certification

I hereby certify that the survey shown hereon was completed on _____; that this map was completed October 20, 2017; and that this survey has been prepared in accordance with the existing Code of Practice for Land Surveys as adopted by the New York State Association of Professional Land Surveyors, Inc.

Jeffrey DeRosa
New York State License No. 50749


Prepared By:

INSITE
ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.

3 Garrett Place • Carmel, New York 10512
Phone (845) 225-9690 • Fax (845) 225-9717
www.insite-eng.com




# Lot Line Change Map
Prepared for
## Parris and Stephanie Sanz
and
## North Salem Open Land Foundation, Inc
Situate in the
## Town of Lewisboro
## Westchester County, New York

Scale: As Noted October 25, 2017

17144.200 T601 P3-15
Lot Line Change Sanz & NSOLF.dwg

KELLARD SESSIONS

John Kellard, P.E.
David Sessions, RLA, AICP
Joseph M. Cermele, P.E., CFM
Jan K. Johannessen, AICP

# MEMORANDUM

TO: Chairman Jerome Kerner, AIA and
Members of Lewisboro Planning Board

CC: Ciorsdan Conran
Judson Siebert, Esq.
Joseph Angiello

FROM: Jan K. Johannessen, AICP
Joseph M. Cermele, P.E., CFM
Town Consulting Professionals

DATE: January 9, 2019

RE: Wetland & Stormwater Permit Applications
Groff Residence
5 Schoolhouse Road
Sheet 22, Block 10802, Lot 69

---

## PROJECT DESCRIPTION

The subject property is located at 5 Schoolhouse Road, on ±20.8 acres of land, located within the R-4A Zoning District. The application involves the demolition of the existing residence and construction of a new six (6) bedroom house, pool, detached garage, private potable well, geothermal wells, septic systems (for the house and barn) and other ancillary residential improvements. The existing driveway is proposed to be modified to serve the new dwelling. In February 2018, Administrative Wetland and Stormwater Permits were granted for modifications of the existing dwelling (located partially within the wetland buffer); however, during construction it was determined that the existing foundation would need to be completely replaced and, therefore, the applicant has elected to construct a new residence located entirely outside of the wetland buffer. On-site wetlands consist of a pond and watercourse located to the north of the residence and a pocket wetland located along the westerly property line.

## SEQRA

The proposed action is a Type II Action and is categorically exempt from the State Environmental Quality Review Act (SEQRA)

**REQUIRED APPROVALS**

1. Wetland and Stormwater Permits are required from the Planning Board; a public hearing is required to be held on the Wetland Permit.

2. Coverage under the New York State Department of Environmental Conservation (NYSDEC) SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002) is required.

3. Approval from the Westchester County Department of Health (WCDH) is required for the proposed well and septic systems.

**COMMENTS:**

1. Based on discussions with the Town Assessor, all internal property lines have been merged as the subject property consists of one (1) tax lot, identified as Lot 69. All application forms and plans shall be updated accordingly.

2. The applicant applied for site development plan approval; this application/approval is not relevant or required.

3. The Wetland Delineation Report must be revised to include the items required, per Section 217-7A(5) and (6) of the Wetland Ordinance. The wetland boundary line has been confirmed by this office.

4. The wetland mitigation plan shall become part of the plan set and shall be prepared on a 24" x 36" plan sheet, signed and sealed by the preparer. It is recommended that the mitigation plan be expanded to include a "no-mow zone" on the south side of the watercourse and adjacent to the pond, and that a physical demarcation be provided to demarcate this naturalized area (boulders, fencing, monuments, etc.).

5. It is recommended that the existing flagstone walkway and patio, located proximate to the wetland boundary, be removed.

6. The soil stockpile shall be located entirely outside of the wetland buffer.

7. A landscaping/restoration plan shall be provided for all disturbed areas.

8. Please identify if any horses or other farm animals will be boarded on-site.

9. The site plan shall illustrate any proposed generators or above/below-ground fuel sources.

10. To the extent that the subject property consists of more than one (1) tax lot, it is recommended that tax lots/internal property lines be merged.

11. There is a stem of the existing eastern driveway shown to remain. The intended use of the area shall be clarified as it doesn't appear to be wide enough for a vehicle to maneuver. Please illustrate all sidewalks that may connect this area to the house.

12. The erosion and sediment control plan shall include controls to be employed during the drilling of geothermal wells, including sediment traps and/or filter bags.

13. The SWPPP Report shall be revised to include an updated Notice of Intent (NOI), SWPPP Acceptance Form, and Maintenance Agreement based on the current proposal. Further, the SWPPP narrative shall be corrected to state that the existing well will be abandoned and a new well drilled.

14. It is understood that under the previous approval, stormwater runoff from existing barn was treated in order to offset the runoff increase from the modified house and to also limit wetland buffer disturbance. However, since a new structure is proposed, it's runoff will need to be captured and mitigated. The applicant may consider installing a stormwater practice in the area of the demolished house, as this area will is already disturbed.

15. The hydrologic analysis should be refined to study the impacts on the existing swale.

16. The site plan currently shows the entire roof draining to the west. The roof leader system shall be sized to handle the 25-year storm; provide supporting documentation. If any portion of the roof drainage system discharges to the east, an additional Design Point shall be added to analyze the potential impacts to the on-site pond.

17. Soil testing will be required for any stormwater management systems that were not previously approved; this office must witness all deep and percolation tests.

18. Subcatchment B1 in Appendix K shall be revised to reflect the net increase of 5,028 s.f. of building coverage as shown on Sheet 1 of 5.

19. It is recommended that the application be referred to the Building Inspector for review.

20. The applicant shall submit the plans and permit approved by the WCDH; the WCDH shall review the revised building and site plans.

21. A partial topography and tree plan has been submitted; this survey shall be expanded to include (at a minimum) all portions of the site within the limits of disturbance and 50 feet beyond.

22. Architectural elevations and floor plans of all new buildings shall be provided as shall an existing and proposed floor plan of the barn. A determination shall be made by the Building Inspector as to whether the barn, which is proposed to contain two (2) bedrooms, will qualify as an accessory apartment.

23. It is recommended that a site visit be conducted.

In order to expedite the review of subsequent submissions, the applicant should provide annotated responses to each of the comments outlined herein.

**PLANS REVIEWED, PREPARED BY JOHN PETRIOCCIONE, P.E., DATED NOVEMBER 1, 2018:**

- Site Plan (1 of 5)
- Stormwater Pollution Prevention Plan (2 of 5)
- Details (3 of 5)
- Existing Conditions & Removals Plan (4 of 5)
- Original Conditions & Removals Plan (5 of 5)

**OTHER PLANS REVIEWED:**

- Wetland Mitigation Plan, prepared by Wesley Stout Associates, dated May 8, 2018
- Survey of Property, prepared by Insite Engineering, dated August 21, 2017
- Existing Conditions Survey, prepared by TC Merritts, dated October 17, 2018
- Topography, prepared by TC Merritts, dated December 15, 2017

**DOCUMENTS REVIEWED:**

- Letter, prepared by Rain Concepts, dated November 20, 2018
- Wetland Permit Application
- Stormwater Permit Application
- Site Development Plan Approval Application
- Short EAF, dated November 19, 2018
- Project Narrative
- Wetland/Watercourse Delineation Report and Assessment, prepared by Pfizer-Jahnig, dated November 16, 2018
- Stormwater Pollution Prevention Plan Report, prepared by John Petrioccione, P.E., dated November 2018

JKJ/JMC/dc

T:\Lewisboro\Correspondence\2019-01-10_LWPB-Groff-Review-Memo.docx

**TO:** Town of Lewisboro Planning Board

**FROM:** Lewisboro Conservation Advisory Council

**SUBJECT:** Groff Residence, 5 Schoolhouse Road

**DATE:** December 5, 2018

---

The Conservation Advisory Council (CAC) reviewed the applicant's recent submission documents.

The CAC is happy with the plan to remove existing structures from the wetland buffer. Having said this, The CAC's concern is with the disturbance to the wetland and buffer associated with the removal of the existing dwellings, barn and pool. The CAC would like to see the proposed mitigation plan reviewed to ensure that the wetland is adequately protected.

Application No.:_____
Fee:_____ Date:_____

# TOWN OF LEWISBORO
# STORMWATER PERMIT APPLICATION

Town Offices @ Orchard Square, Suite L (Lower Level), 20 North Salem Road, Cross River, NY 10518
Phone: (914) 763-5592
Fax: (914) 763-3637

**Project Information**

Project Address: 5 Schoolhouse Road, Waccabuc NY, 10597

Sheet: 22 Block: 10802 Lot(s): 68

Project Description (describe overall project including all proposed land development activities):
Removal of existing foundation an impervious improvements.
Construction of a new residence and improvements, Pool, patios, etc.

**Owner's Information**

Owner's Name: Christine Groff Phone: 914-815-3054

Owner's Address: 5 Schoolhouse Road, Waccabuc NY, 10597 Email: Whola3@me.com

**Applicant's Information** (if different)

Applicant's Name:_____ Phone:_____

Applicant's Address:_____ Email:_____

**Authorized Agent's Information**

Agent's Name: Jeremy Rainato Phone: 845-494-2551

Agent's Adress: 487 E. Main Street, Suite 230, Mount Kisco NY, 10549 Email: info@rain-concepts.com

**To Be Completed By Owner/Applicant/Agent**

1. The approval authority is? (see §189-5 of the Town Code)

   ☐ Town Engineer and SMO ☒ Planning Board

2. Is the project located within the NYCDEP Watershed? ☒ Yes ☐ No

3. Total area of proposed disturbance: ☐ 5,000 s.f. - < 1 acre ☒ ≥1 acre

4. Will the project require coverage under the NYSDEC General Permit for Stormwater Discharges from Construction Activity? ☒ Yes ☐ No ☒ Requires post-construction stormwater practice

5. Does the proposed action require any other permits/approvals from other agencies/departments? (Wetland Inspector, Planning Board, Town Board, Zoning Board of Appeals, Building Department, Town Highway, ACARC, NYSDEC, NYCDEP, WCDOH, NYSDOT, etc): Identify all other permits/approvals required: WCDOH, NYSDEC

Note: The applicant, owner and/or agent is responsible for reviewing and complying with Chapter 189, "Stormwater Management and Erosion and Sediment Control," of the Town Code. This application must be submitted with all applicable plans, reports and documentation specified under §189-8, "SWPPP requirements," of the Town Code; all SWPPP's shall be prepared in conformance with Chapter 189 and shall be prepared by a qualified professional, as defined therein. The provision for obtaining a Town Stormwater Permit is in addition to the requirement of obtaining coverage under the SPDES General Permit for Stormwater Discharges from Construction Activity, if applicable.

Owner/Applicant Signature: Christine Groff Date: Nov 19, 2018
Christine Groff (Nov 19, 2018)

Application No.:_____
Fee:_____ Date:_____

# TOWN OF LEWISBORO
# WETLAND PERMIT APPLICATION

Town Offices @ Orchard Square, Suite L (Lower Level), 20 North Salem Road, Cross River, NY 10518
Phone: (914) 763-3060
Fax: (914)533-0097

**Project Information**

Project Address: 5 Schoolhouse Road, Waccabuc NY, 10597

Sheet: 22 Block: 10802 Lot(s): 68

Project Description (identify the improvements proposed within the wetland/wetland buffer and the approximate amount of wetland/wetland buffer disturbance):
Removal of existing foundation within existing wetland buffer, approximately 11,000 sf of disturbance
Construction of a new residence and improvements outside of the existing wetland buffer.

**Owner's Information**

Owner's Name: Christine Groff Phone: 914-815-3054

Owner's Address: 5 Schoolhouse Road, Waccabuc NY, 10597 Email: whola3@me.com

**Applicant's Information** (if different)

Applicant's Name:_____ Phone:_____

Applicant's Address:_____ Email:_____

**Authorized Agent's Information** (if applicable)

Agent's Name: Jeremy Rainato Phone: 845-494-2551

Agent's Adress: 487 E. Main Street, suite 230, Mount Kisco NY, 10549 Email: info@rain-concepts.com

**To Be Completed By Owner/Applicant**

1. What type of Wetland Permit is required? (see §217-5C and §217-5D of the Town Code)

   ☐ Administrative ☒ Planning Board

2. Is the project located within the NYCDEP Watershed? ☒ Yes ☐ No

3. Total area of proposed disturbance: ☐ < 5,000 s.f. ☐ 5,000 s.f. - < 1 acre ☒ ≥1 acre

4. Does the proposed action require any other permits/approvals from other agencies/departments? (Planning Board, Town Board, Zoning Board of Appeals, Building Department, Town Highway, ACARC, NYSDEC, NYCDEP, WCDOH, NYSDOT, etc): Identify all other permits/approvals required: WCDOH, NYSDEC

Note: Initially, all applications shall be submitted with a plan that illustrates the existing conditions and proposed improvements. Said plan must include a line which encircles the total area of proposed land disturbance and the approximate area of disturbance must be calculated (square feet). The Planning Board and/or Town Wetland Inspector may require additional materials, information, reports and plans, as determined necessary, to review and evaluate the proposed action. If the proposed action requires a Planning Board Wetland Permit, the application materials outlined under §217-7 of the Town Code must be submitted, unless waived by the Planning Board. The Planning Board may establish an initial escrow deposit to cover the cost of application/plan review and inspections conducted by the Town's consultants.

**For administrative wetland permits, see attached Administrative Wetland Permit Fee Schedule.**

Owner/Applicant Signature: Christine Groff Date: Nov 19, 2018
Christine Groff (Nov 19, 2018)

**PROJECT NARRATIVE**

**5 SCHOOLHOUSE ROAD**

**GROFF RESIDENCE**

## 1. PROJECT DESCRIPTION

This project consists of the redevelopment of an existing parcel located at 5 Schoolhouse Road in the Town of Lewisboro NY. The property is further identified as Sheet 22, Block 10802, Lot 68 on the Town of Lewisboro tax maps. The subject property is 20.822 acres located within the R-4A zone. The property is serviced by existing septic systems and existing well which will be abandoned and replaced. The proposed development will also include the placement of geothermal wells for heating and cooling.

EXISTING CONDITIONS

*(original conditions and removals plan – sheet 5 of 5)*

*(existing conditions and removal plan – sheet 4 of 5)*

The subject property is currently developed with an existing dwelling, frame barn, Gravel driveway, swimming pool, patios, and improvements. The existing residence located approximately 500' North from the driveway entrance at School house Road and is generally centered within the property and almost entirely within the 150' Wetland Buffer. There is a swimming pool and patio improvements located off the rear of the dwelling to the North, also within the restrictive wetland buffer. There is a frame barn located in the Southeast portion of the property. The Southern and Eastern portions of the property are fenced horse paddocks which were utilized by the former owner.

The subject property is irregularly shaped with the main portion of the lot being rectangular in shape and consisting of approximately 14 acres and a small portion of approximately 6 acres which juts off to the Northwest. The previous owner had these parcels on two separate lots which were combined by the present owner recently. The existing property is gently sloped from East to West consisting mainly of maintained lawn areas and fenced horse paddocks. There is a small pocket wetland in the Southeast portion of the parcel to the right of the existing driveway located in a horse paddock. A man-made pond is located in the Northeast portion of the property which is fed by a stream to the North and exits to a stream which flows East to West approximately 200' from the rear property line. The area containing and surrounding the pond and stream is a locally regulated wetland. Wetlands were flagged on December 21, 2017 by Pfizer–Jaehnig Environmental Consulting, off-site Wetlands were flagged on April 13th, 2018 and are further described in the attached report. The wetland boundaries delineated as described above have been further confirmed on-site by the town Wetland Consultant.

The original plan of construction for this parcel was to provide additions the existing residence and removals as described on the "original conditions and removals" plan. During the start of construction, the foundation of the existing residence was severely damaged, and a choice was made by the owner to seek planning board approval to relocate the residence. With a new foundation construction now being proposed the property owner elected to locate all new improvements entirely outside of the restrictive 150' wetland buffer. Some improvements have already been removed from the site, and current conditions are now described on the "existing conditions and removals" plan provided.

PROPOSED CONDITIONS

*(site plan – sheet 1 of 5)*

*(stormwater pollution prevention plan – sheet 2 of 5)*

*(details – sheet 3 of 5)*

The proposed redevelopment of this existing parcel will include the construction of a new 6 bedroom residential home and site improvements described with the Site Plan. The new residence, detached garage and improvements are proposed entirely outside of the regulated 150' Wetland buffer.

The existing septic system in place for the 6 Bedroom main house has been abandoned in its current location and will be replaced within a new area on the property described on the attached "site plan". A new septic system for the 2 bedroom frame Barn will also be installed for a potential future use. These new septic installations will include new septic tanks, pump chambers, and absorption fields and have received approval by the Westchester County Department of Health Rules & Regulations. The proposed new septic areas are in the Southern portion of the property within an existing horse paddock and are included within the limit of disturbance.

The total amount of land disturbance related to all site and construction work will be approximately 82,000 sf (1.88 acres). The SWPPP Plan describes various erosion controls which have been implemented on site to minimize disturbances and protect from unnecessary sedimentation disbursement. Strict adherence to erosion control practices and standards have been maintained on site and enforced throughout with two (2) site inspections by a contracted CPESC occurring each and every week, separated by 2 days.

Some of the described areas containing existing patios, pool, etc. have been removed during construction, these items are further described within the Original Existing Conditions & Removals Plan. The improvements surrounding the existing dwelling which are located North and East of the residence will occur within the existing wetland buffer. The proposed development plan has considered disturbance related to improvements on the property within this wetland buffer to cause minimal impact. The proposed site plan has also been designed to reduce the total amount of impervious within the wetland buffer by removing the existing dwelling and other hardscape areas, returning them to natural landscape. The total net reduction of impervious hardscape within the 150' Wetland Buffer will be approximately 7000 sf.

Various measures have been taken in the course of planning this project to minimize erosion and reduce stormwater impacts during and after construction. Considerations have also been made to protect the Wetland areas by reducing impervious coverage within the 150' buffer and locating all new construction outside of the 150' wetland buffer.

November 16, 2018

**Wetland/Watercourse Delineation Report and Assessment**
5 Schoolhouse Road
Lewisboro, New York

Introduction:
A wetland delineation was conducted at 5 Schoolhouse Road on December 21, 2017 by Mary Jaehnig, certified soil scientist. The property is located on the northern side of Schoolhouse Road and supports a dwelling with barn. The topography is gently rolling. A man made pond is located in the northeastern portion of the site. Flow from the pond drains to the west along a well defined intermittent watercourse. The site is within the watershed to the Cross River Reservoir.

A New York State Dept. of Environmental Conservation (NYSDEC) regulated wetland, F-6, is located approximately 500 feet to the west of the property. There are no wetlands observed at least 150 feet to the west of the property.

The limits of the locally regulated wetlands and watercourses were flagged in the field using chronologically labeled ribbon or wire stakes. The extreme northeastern portion of the intermittent watercourse that flows to the pond was not flagged at this time.

The pond and watercourse were delineated with flags labeled 1 thru 41. A small area of wetland within the field in the southeastern portion of the site was delineated with flags labeled B1 thru B7.

The western edge of the adjoining meadow on the adjacent property to the east and along Schoolhouse Road was visually inspected for wetlands on April 13, 2018. The approximate wetland edge was marked on a sketch. Hydrophytic spp.including sensitive fern (Onoclea sensibilis) FACW were observed within the offsite wetland.

Wetland Watercourse Hydrology:
The pond is fed from an intermittent watercourse that originates off site to the northeast and enters the northern edge of the pond. Additional recharge is provided by subsoil runoff at depth within the pond. Field underdrains from the pastures to the east and south of the pond also contribute flow to the pond. Excess pond water flows over a weir and enters a well defined intermittent watercourse that follows a linear route to the west and off site. The channel cuts through mainly upland soils. Wetlands are present as small pockets along the route of the intermittent watercourse. Flow within the watercourse may cease during the summer months of the growing season.

The small wetland in the field in the southeastern corner of the site has a water table near the surface from fall into spring. The water table descends several feet during the summer months of the growing season.

Soils:
Soil samples were obtained using a spade and auger. Features noted include color, texture and depth to hydric indicators. Soils were classified according to guidelines established by the USDA NRCS.

The upland soils on site are Paxton fine sandy loam and Woodbridge fine sandy loam. Both soils are deep, and formed in glacial till with a firm substratum. The depth to the water table usually exceeds 6 feet below grade in Paxton loam and may perch at 20 inches below grade during the early spring in Woodbridge loam. The lower subsoil displays mottling in Woodbridge loam. The depth to bedrock usually exceeds 5 feet below grade for both loams.

The hydric soil on site is Ridgebury fine sandy loam. This soil is deep, poorly drained and has a firm substratum. The subsoil is mottled and the water table is close to the surface from fall into early spring. The depth to bedrock usually exceeds 5 feet below grade.

The dredged material from the pond dredging was placed and smoothed around the perimeter of the pond.

Vegetation:
The property is maintained as open fields with mature trees. Light woods are located in the northern portion of the site. The mature trees within upland buffers include white oak (Quercus alba) FACU, red oak (Quercus rubra) FACU, shagbark hickory (Carya ovata) FACU, white ash (Fraxinus americana FACU, sweet birch (Betula lenta) FACU, weeping willow (Salix

babylonica FACW, red maple (Acer rubrum) FAC, white pine (Pinus strobus FACU.

The wetland area in the southeastern field is planted with red stem dogwood (Cornus sericea) FACW.

The wetland edge of the pond supports purple loosestrife (Lythrum salicaria) OBL, highbush blueberry (Vaccinium corymbosum) FACW, sensitive fern (Onoclea sensibilis) FACW, and jewelweed (Impatiens capensis) FACW.

The wetland pockets located sporadically along the edge of the intermittent watercourse support the occasional highbush blueberry, jewelweed, sensitive fern, and lurid sedge (Carex lurida) OBL, fox tail sedge (Carex alopecoidea) FACW and goldenrod (Solidago canadensis) FACW.

Fauna:
The proximity to large spans of forested open space would suggest large mammals including white tail deer, and coyote. Small mammals include gray squirrel, raccoon, skunk, gray fox, woodpeckers, woodcock.

The shrub areas and open meadows support avian species including song birds, birds of prey, wild turkey, and meadow vole, cottontail and red fox.

The pond would likely support amphibians and reptiles as well as invertebrates, and waterfowl.

Wetland/Watercourse and Buffer Functions:
The wetland and buffer provide the following hydrologic functions:

-recharge to the underlying fractured bedrock aquifer from the pond and watercourse as well as wetland pocket during the non growing season, limited recharge to the stream from the aquifer during the growing season.

-the pond and wetland provide storage of excess surface runoff and the intermittent stream provides velocity attenuation and both mechanical and biological filtering and pretreatment of surface runoff.

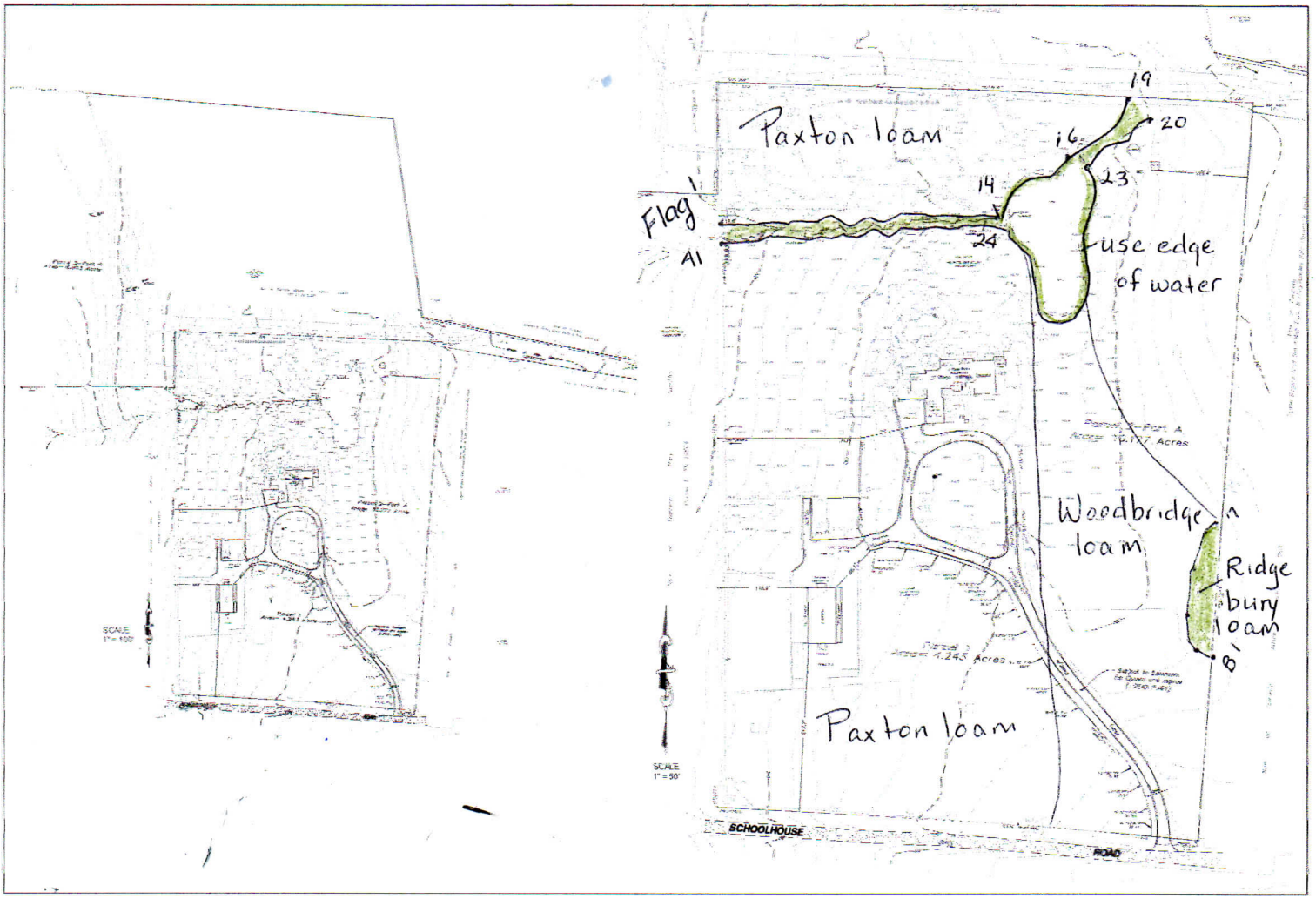
-the major function of the upland buffer along with the pond, stream and wetland pocket is wildlife habitat. The mix of surface water features with light woods and open meadow provides the habitat for diverse flora and fauna.

Sincerely,

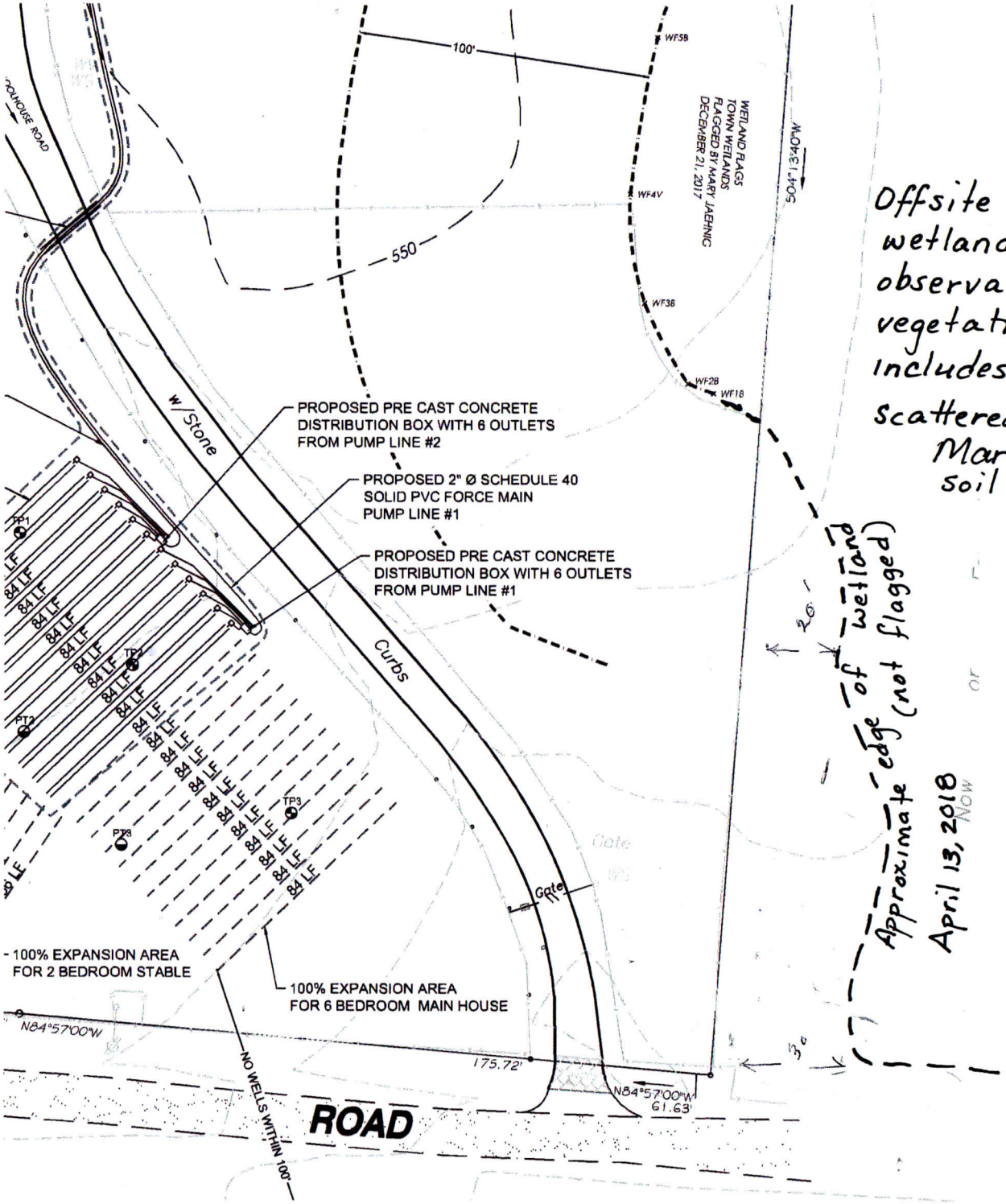
Mary Jaehnig

Mary Jaehnig
soil scientist

**17 FAIRVIEW AVE.** **RIDGEFIELD, CT 06877** **TEL. (203) 431-8113**
**MaryJaehnigSoils@gmail.com**




5 Schoolhouse Road
Delineated Dec. 21, 2017
Mary Jaehnig, soil sci.
203 431 8113




Offsite extension of wetland based on observation of vegetation. Wetland includes sensitive fern, scattered –
Mary Jaehnig
soil scientist

# *Short Environmental Assessment Form*
## *Part 1 - Project Information*

## Instructions for Completing

**Part 1 - Project Information. The applicant or project sponsor is responsible for the completion of Part 1.** Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

**Part 1 - Project and Sponsor Information**
Groff Residence - Christine Groff

Name of Action or Project:
Groff Residence

Project Location (describe, and attach a location map):
5 Schoolhouse Road, Waccabuc, NY 10597

Brief Description of Proposed Action:
Removal of a residential home foundation, existing pool, patios, and other impervious areas, to be restored to lawn.
Construction of a new residential home and related improvements, patios, steps, & walkways, etc.
Construction of a new septic system and related improvements.
Construction of a residential pool
installation of Stormwater post construction improvements

| Name of Applicant or Sponsor: | Telephone: 914-518-3054 |
|---|---|
| Cristine Groff | E-Mail: whola3@me.com |

Address:
5 Schoolhouse Road

| City/PO: | State: | Zip Code: |
|---|---|---|
| Waccabuc | NY | 10597 |

| | NO | YES |
|---|---|---|
| 1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2. | ☑ | ☐ |
| 2. Does the proposed action require a permit, approval or funding from any other governmental Agency? If Yes, list agency(s) name and permit or approval: | ☐ | ☑ |

3.a. Total acreage of the site of the proposed action? 20.822 acres
b. Total acreage to be physically disturbed? 1.88 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 20.822 acres

4. Check all land uses that occur on, adjoining and near the proposed action.
☐ Urban ☐ Rural (non-agriculture) ☐ Industrial ☐ Commercial ☑ Residential (suburban)
☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other (specify): _____
☐ Parkland

| | NO | YES | N/A |
|---|---|---|---|
| 5. Is the proposed action, | | | |
| a. A permitted use under the zoning regulations? | ☐ | ☑ | ☐ |
| b. Consistent with the adopted comprehensive plan? | ☐ | ☑ | ☐ |

| | NO | YES |
|---|---|---|
| 6. Is the proposed action consistent with the predominant character of the existing built or natural landscape? | ☐ | ☑ |
| 7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: _____ | ☑ | ☐ |
| 8. a. Will the proposed action result in a substantial increase in traffic above present levels? | ☑ | ☐ |
| b. Are public transportation service(s) available at or near the site of the proposed action? | ☑ | ☐ |
| c. Are any pedestrian accommodations or bicycle routes available on or near site of the proposed action? | ☑ | ☐ |
| 9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies: _____ | ☐ | ☑ |
| 10. Will the proposed action connect to an existing public/private water supply? If No, describe method for providing potable water: New well to provide water service | ☑ | ☐ |
| 11. Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment: New Septic System to be installed to service residence | ☑ | ☐ |
| 12. a. Does the site contain a structure that is listed on either the State or National Register of Historic Places? | ☑ | ☐ |
| b. Is the proposed action located in an archeological sensitive area? | ☑ | ☐ |
| 13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency? | ☑ | ☐ |
| b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody? If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____ | ☑ | ☐ |

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply:

☐ Shoreline ☐ Forest ☐ Agricultural/grasslands ☐ Early mid-successional

☑ Wetland ☐ Urban ☑ Suburban

| | NO | YES |
|---|---|---|
| 15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered? | ☑ | ☐ |
| 16. Is the project site located in the 100 year flood plain? | ☑ | ☐ |
| 17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes, | | |
| a. Will storm water discharges flow to adjacent properties? ☑ NO ☐ YES | ☐ | ☑ |
| b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe: ☐ NO ☑ YES Proposed post construction stormwater improvements to be installed. | | |

| | NO | YES |
|---|---|---|
| 18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)?<br>If Yes, explain purpose and size: bio-retention practice to be installed as a post construction Stormwater practice. | ☐ | ☑ |
| 19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility?<br>If Yes, describe: | ☑ | ☐ |
| 20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?<br>If Yes, describe: | ☑ | ☐ |

**I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE**

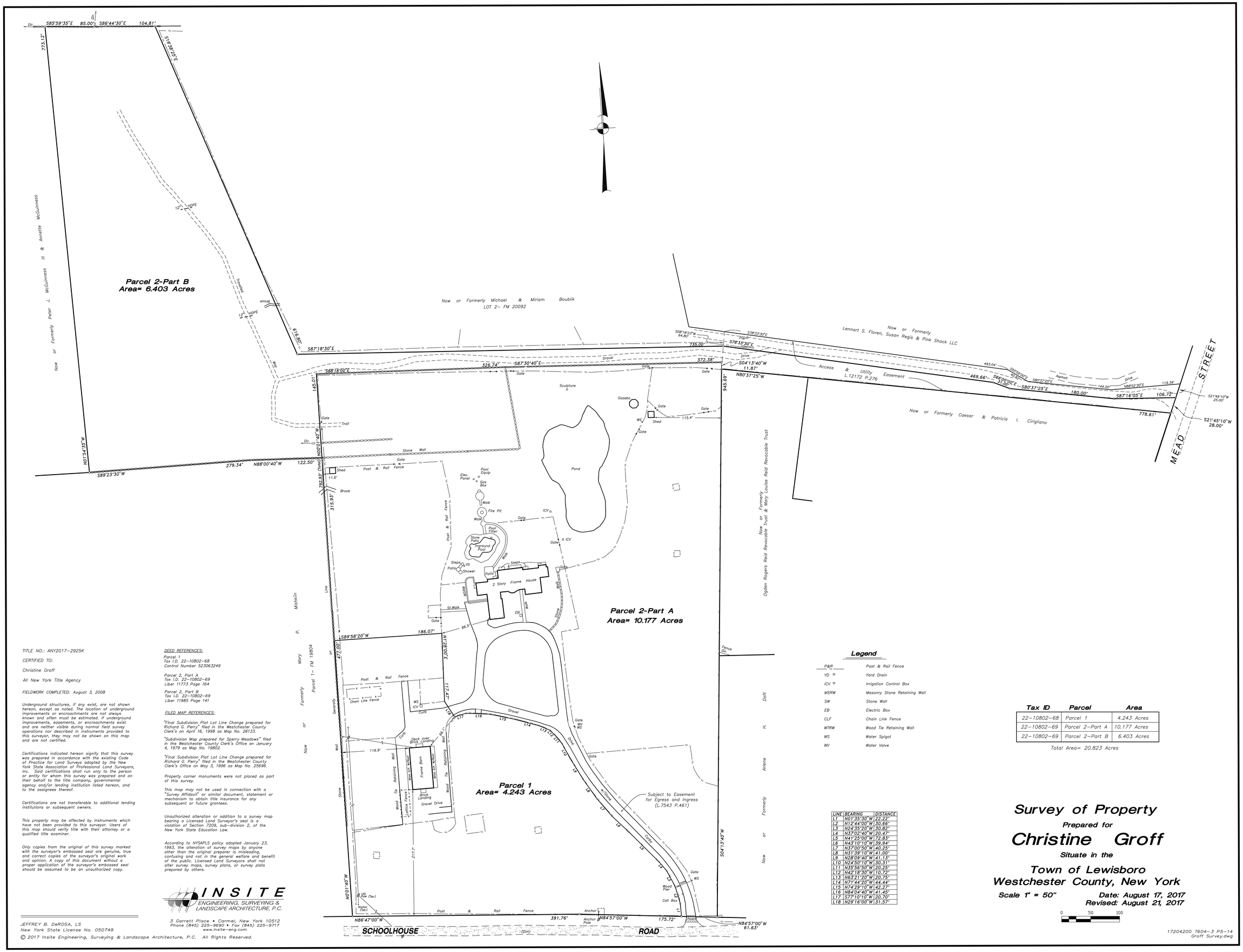
Applicant/sponsor name: Christine Groff Date: Nov 19, 2018

Signature: Christine Groff

Christine Groff (Nov 19, 2018)

.

PRINT FORM




TITLE NO.: ANY2017-2925K

CERTIFIED TO:

Christine Groff

All New York Title Agency

FIELDWORK COMPLETED: August 3, 2008

Underground structures, if any exist, are not shown hereon, except as noted. The location of underground improvements or encroachments are not always known and often must be estimated. If underground improvements, easements, or encroachments exist and are neither visible during normal field survey operations nor described in instruments provided to this surveyor, they may not be shown on this map and are not certified.

Certifications indicated hereon signify that this survey was prepared in accordance with the existing Code of Practice for Land Surveys adopted by the New York State Association of Professional Land Surveyors, Inc. Said certifications shall run only to the person or entity for whom this survey was prepared and on their behalf to the title company, governmental agency and/or lending institution listed hereon, and to the assignees thereof.

Certifications are not transferable to additional lending institutions or subsequent owners.

This property may be affected by instruments which have not been provided to this surveyor. Users of this map should verify title with their attorney or a qualified title examiner.

Only copies from the original of this survey marked with the surveyor's embossed seal are genuine, true and correct copies of the surveyor's original work and opinion. A copy of this document without a proper application of the surveyor's embossed seal should be assumed to be an unauthorized copy.

JEFFREY B. DeROSA, LS
New York State License No. 050749



DEED REFERENCES:

Parcel 1
Tax I.D. 22-10802-68
Control Number 523063249

Parcel 2, Part A
Tax I.D. 22-10802-69
Liber 11773 Page 164

Parcel 2, Part B
Tax I.D. 22-10802-69
Liber 11985 Page 141

FILED MAP REFERENCES:

"Final Subdivision Plat Lot Line Change prepared for Richard G. Perry" filed in the Westchester County Clerk's on April 16, 1998 as Map No. 26133.

"Subdivision Map prepared for Sperry Meadows" filed in the Westchester County Clerk's Office on January 4, 1979 as Map No. 19802.

"Final Subdivision Plat Lot Line Change prepared for Richard G. Perry" filed in the Westchester County Clerk's Office on May 3, 1996 as Map No. 25696.

Property corner monuments were not placed as part of this survey.

This map may not be used in connection with a "Survey Affidavit" or similar document, statement or mechanism to obtain title insurance for any subsequent or future grantees.

Unauthorized alteration or addition to a survey map bearing a Licensed Land Surveyor's seal is a violation of Section 7209, sub-division 2, of the New York State Education Law.

According to NYSAPLS policy adopted January 23, 1993, the alteration of survey maps by anyone other than the original preparer is misleading, confusing and not in the general welfare and benefit of the public. Licensed Land Surveyors shall not alter survey maps, survey plans, or survey plats prepared by others.

INSITE
ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.
3 Garrett Place • Carmel, New York 10512
Phone (845) 225-9690 • Fax (845) 225-9717
www.insite-eng.com

## Legend

| | |
|---|---|
| P&R | Post & Rail Fence |
| YD | Yard Drain |
| ICV | Irrigation Control Box |
| MSRW | Masonry Stone Retaining Wall |
| SW | Stone Wall |
| EB | Electric Box |
| CLF | Chain Link Fence |
| WTRW | Wood Tie Retaining Wall |
| WS | Water Spigot |
| WV | Water Valve |

| LINE | BEARING | DISTANCE |
|---|---|---|
| L1 | N01°35'30"W | 22.22' |
| L2 | N12°44'00"W | 30.66' |
| L3 | N24°35'20"W | 30.82' |
| L4 | N37°02'40"W | 20.47' |
| L5 | N41°25'00"W | 72.83' |
| L6 | N43°10'10"W | 39.94' |
| L7 | N37°00'50"W | 40.25' |
| L8 | N31°39'10"W | 41.00' |
| L9 | N28°09'40"W | 41.13' |
| L10 | N24°50'10"W | 30.31' |
| L11 | N35°56'50"W | 20.25' |
| L12 | N42°18'30"W | 10.72' |
| L13 | N63°21'20"W | 20.75' |
| L14 | N71°44'20"W | 44.44' |
| L15 | N74°29'10"W | 42.27' |
| L16 | N84°04'40"W | 41.45' |
| L17 | S77°10'10"W | 20.70' |
| L18 | N29°16'00"W | 31.57' |

| Tax ID | Parcel | Area |
|---|---|---|
| 22-10802-68 | Parcel 1 | 4.243 Acres |
| 22-10802-69 | Parcel 2-Part A | 10.177 Acres |
| 22-10802-69 | Parcel 2-Part B | 6.403 Acres |

Total Area= 20.823 Acres

# Survey of Property

Prepared for

# Christine Groff

Situate in the

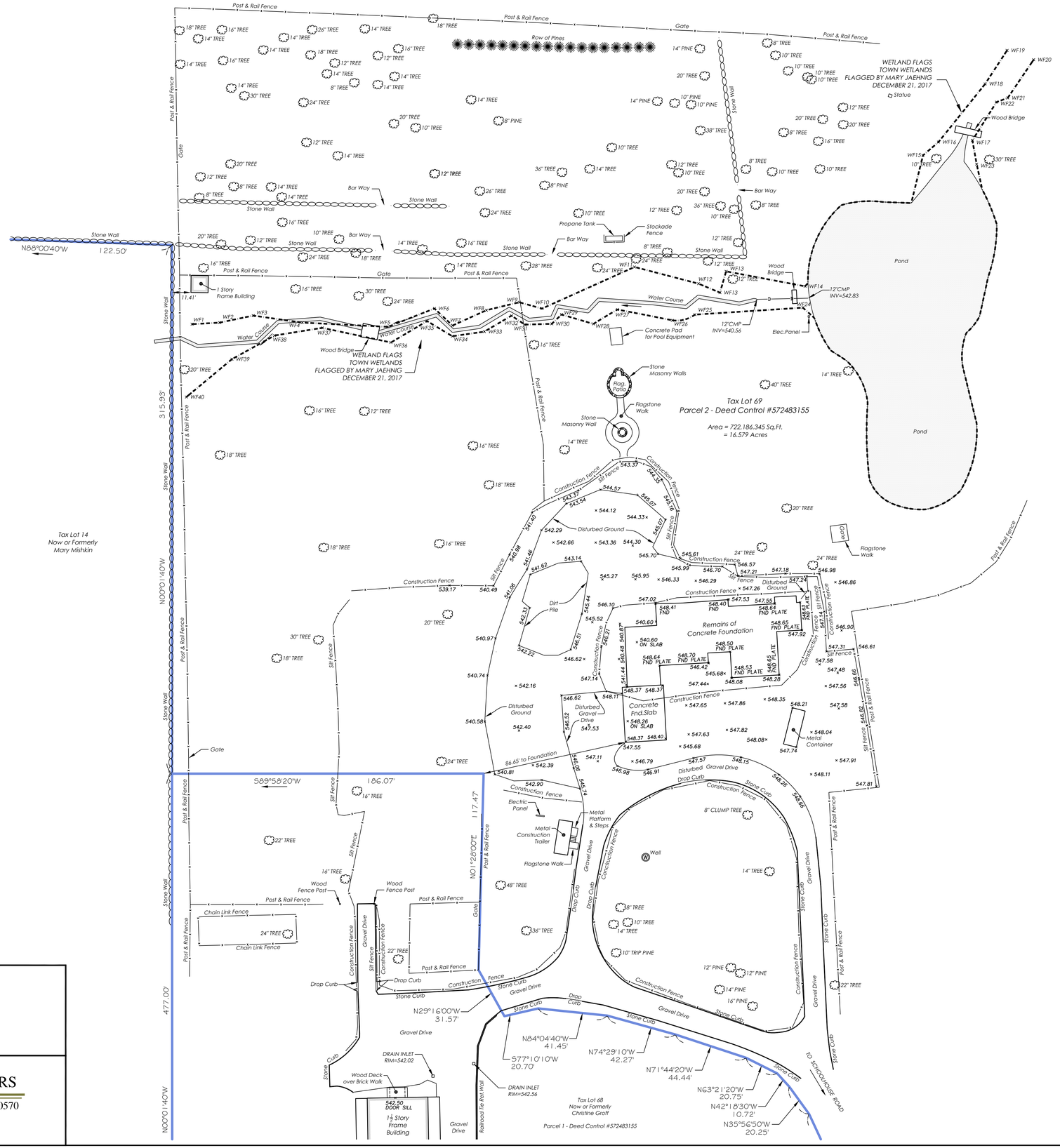
## Town of Lewisboro
## Westchester County, New York

Scale 1" = 50"

Date: August 17, 2017
Revised: August 21, 2017

0 50 100

17204200 T604-3 P5-14
Groff Survey.dwg




*Only copies from the original of this topography map marked with an original of the Land Surveyors embossed seal shall be considered to be true, valid copies.*

*Unauthorized alteration or addition to a map bearing a licensed Land Surveyors seal is a violation of Section 7209, Subdivision 2 of the New York State Education Law.*

*Possession only where indicated.*

*Adjacent property lines and easements not surveyed or certified.*
*Access to adjacent rights of way, easements and public or private lands not guaranteed or certified.*

*Underground utilities shown hereon are approximate and should be verified before excavating.*
*Additional underground utilities are not shown or certified.*
*Encroachments and structures below grade, if any, not shown or certified.*

*Subject to covenants, easements, restrictions, conditions and agreements of record.*

*This map is prepared to show topography only and is not to be used for title transfer purposes. Map may not be certified to title companies and/or banks.*

*Tree species shown hereon to be verified by a licensed arborist and are not certified by surveyor.*

*Elevations shown hereon generally in accordance with North American Vertical Datum 88.*

*Surveyed in accordance with Deed Control Number 572483155.*

*Premises shown hereon designated on the Town of Lewisboro Tax Maps as: Section 22, Block 10802, Lot 69.*

*Property Address: 5 Schoolhouse Road*
*Waccabuc, NY 10597*

*Surveyed: December 13, 2017*
*Map Prepared: December 15, 2017*
*Map Revised: October 17, 2018 to show update of existing conditions*

By: Daniel T. Merritts
*New York State Licensed Land Surveyor No.050604*

| | | |
|---|---|---|
| *Project:* 17-460 | *COPYRIGHT © 2018* *TC MERRITTS LAND SURVEYORS* *ALL RIGHTS RESERVED. UNAUTHORIZED DUPLICATION OR ELECTRONIC TRANSMISSION WITHOUT PRIOR PERMISSION IS A VIOLATION OF APPLICABLE LAWS.* | |
| *Field Survey By:* BC/CR | | |
| *Drawn By:* DA | | |
| *Checked By:* DM | | |


TC MERRITTS LAND SURVEYORS
394 BEDFORD ROAD • PLEASANTVILLE • NY 10570
(914) 769-8003 • (203) 622-8899


# *EXISTING CONDITIONS SURVEY PREPARED FOR CHRISTINE GROFF*

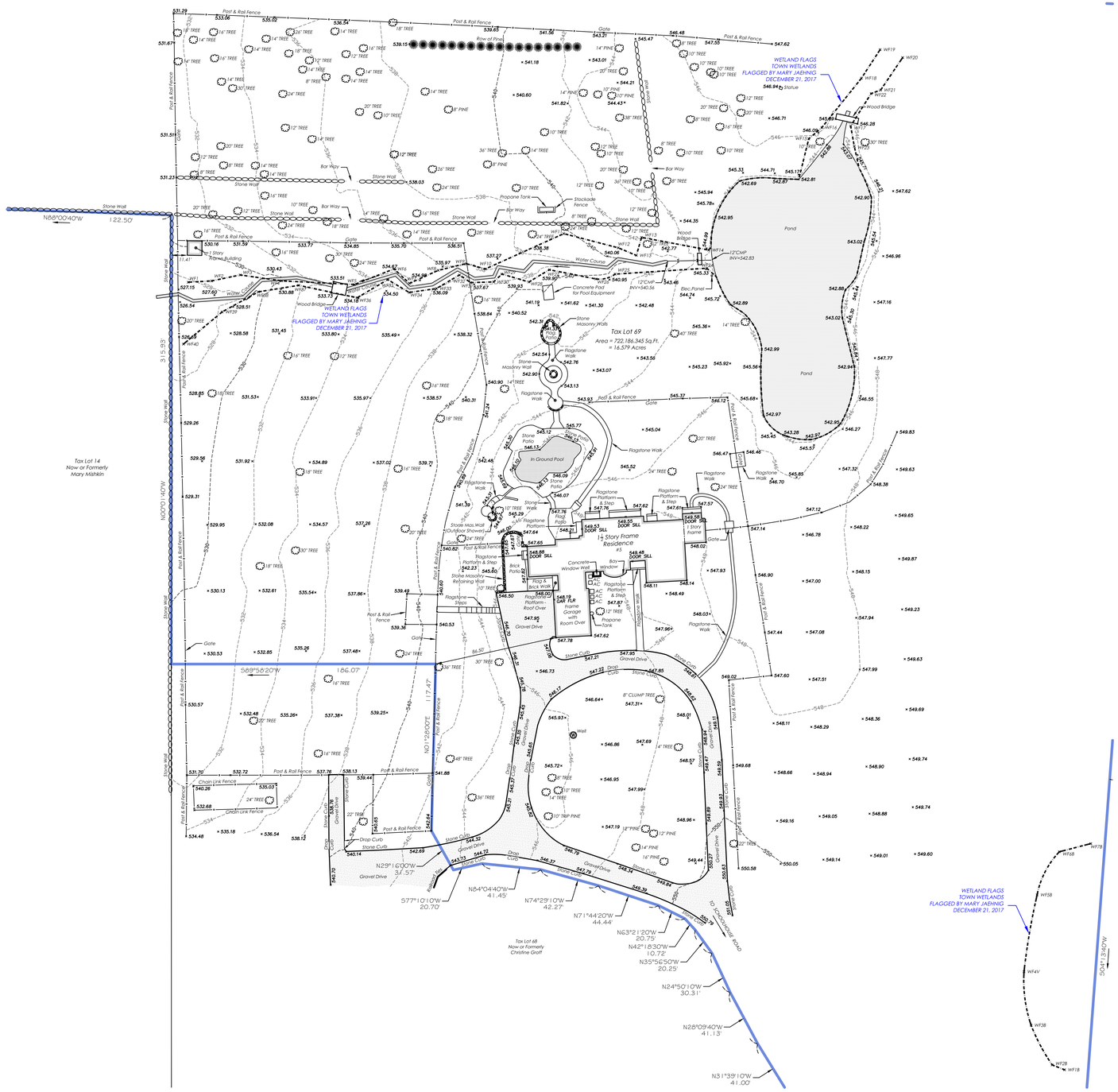
*SITUATE IN THE*
*TOWN OF LEWISBORO*
*WESTCHESTER COUNTY, NEW YORK*

*SCALE: 1" = 30'*

GRAPHIC SCALE

30 0 15 30 60 120

( IN FEET )
1 inch = 30 ft.




*Only copies from the original of this topography map marked with an original of the Land Surveyors embossed seal shall be considered to be true, valid copies.*

*Unauthorized alteration or addition to a map bearing a licensed Land Surveyors seal is a violation of Section 7209, Subdivision 2 of the New York State Education Law.*

*Possession only where indicated.*

*Adjacent property lines and easements not surveyed or certified.*
*Access to adjacent rights of way, easements and public or private lands not guaranteed or certified.*

*Underground utilities shown hereon are approximate and should be verified before excavating.*
*Additional underground utilities are not shown or certified.*
*Encroachments and structures below grade, if any, not shown or certified.*

*Subject to covenants, easements, restrictions, conditions and agreements of record.*

*This map is prepared to show topography only and is not to be used for title transfer purposes. Map may not be certified to title companies and/or banks.*

*Tree species shown hereon to be verified by a licensed arborist and are not certified by surveyor.*

*Elevations shown hereon generally in accordance with North American Vertical Datum 88.*

*Surveyed in accordance with Deed Control Number 5724831555.*

*Premises shown hereon designated on the Town of Lewisboro Tax Maps as: Section 22, Block 10802, Lot 69.*

*Property Address: 5 Schoolhouse Road*
*Waccabuc, NY 10597*

# *TOPOGRAPHY PREPARED FOR CHRISTINE GROFF*

*SITUATE IN THE*
*TOWN OF LEWISBORO*
*WESTCHESTER COUNTY, NEW YORK*

*SCALE: 1" = 40'*

GRAPHIC SCALE

40 0 20 40 80 160

( IN FEET )
1 inch = 40 ft.

*Surveyed: December 13, 2017*
*Map Prepared: December 15, 2017*
*Map Revised: January 12, 2018 to show wetland flags*

*By:*
*New York State Licensed Land Surveyor No.050604*

| | | |
|---|---|---|
| *Project:* *17-460* | *COPYRIGHT © 2017* *TC MERRITTS LAND SURVEYORS* *ALL RIGHTS RESERVED. UNAUTHORIZED DUPLICATION OR ELECTRONIC TRANSMISSION WITHOUT PRIOR PERMISSION IS A VIOLATION OF APPLICABLE LAWS.* | |
| *Field Survey By:* *BC\JK* | | |
| *Drawn By:* *DA -\- CMP* | | |
| *Checked By:* *DM* | | |


TC MERRITTS LAND SURVEYORS
394 BEDFORD ROAD • PLEASANTVILLE • NY 10570
(914) 769-8003 • (203) 622-8899

GROFF RESIDENCE
5 S□□□□□□□□□□ Rd,
L□□ □□□r□ NY, 10590

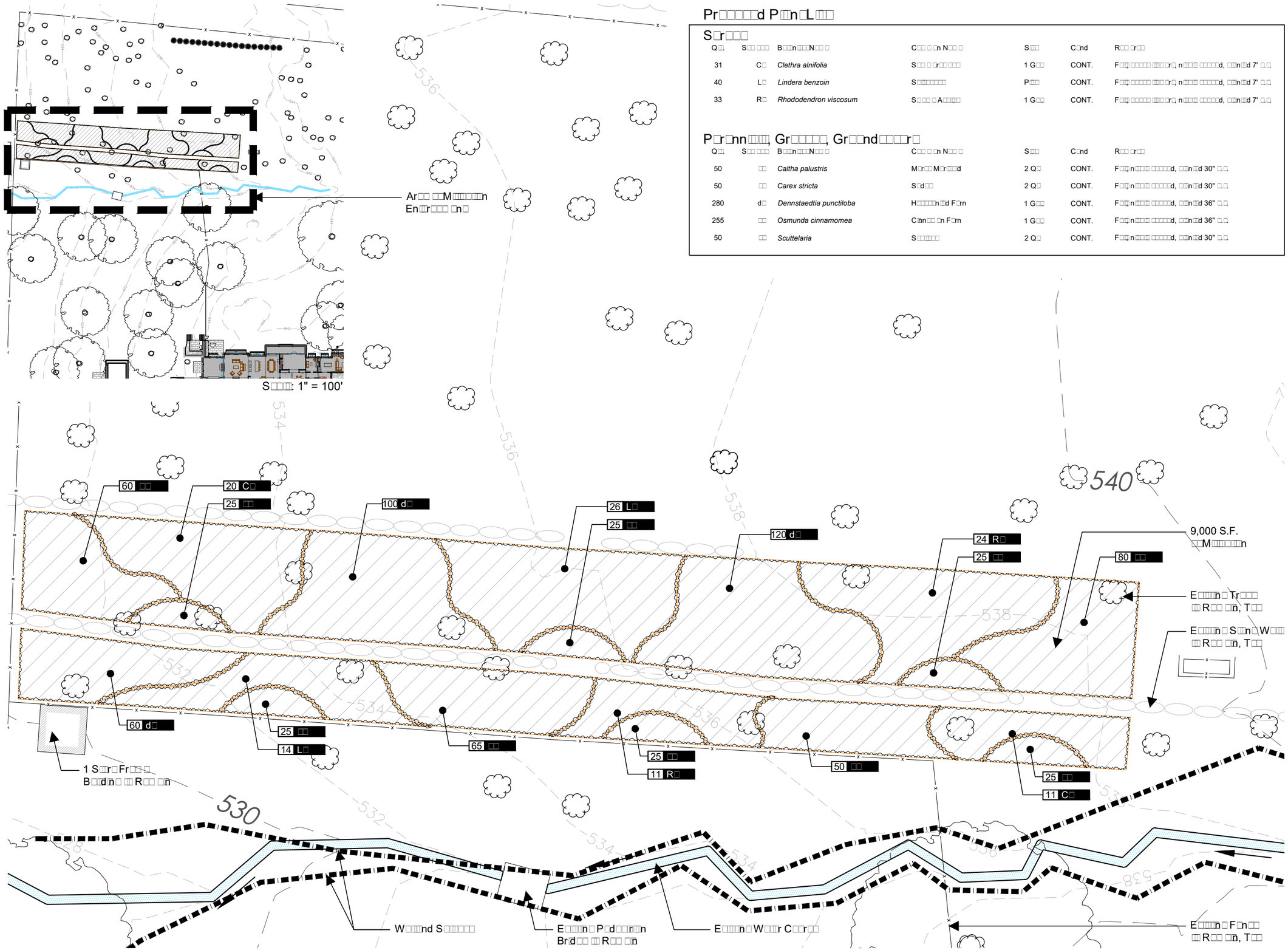
## Pr□□□□□d P□n□L□□□

### S□r□□□

| Q□□ | S□□ □□□ | B□□n□□□N□□ □ | C□□ □ □n N□□ □ | S□□ | C□nd | R□□ □r□□ |
|---|---|---|---|---|---|---|
| 31 | C□ | *Clethra alnifolia* | S□□ □ □r□□ □□□ | 1 G□□ | CONT. | F□□, □□□□□ □□□ □r□, n□□□□ □□□□□d, □□n□d 7' □.□ |
| 40 | L□ | *Lindera benzoin* | S□□□□□□□□ | P□□ | CONT. | F□□, □□□□□ □□□ □r□, n□□□□ □□□□□d, □□n□d 7' □.□ |
| 33 | R□ | *Rhododendron viscosum* | S□□□ □ A□□□□ | 1 G□□ | CONT. | F□□, □□□□□ □□□ □r□, n□□□□ □□□□□d, □□n□d 7' □.□ |

### P□r□nn□□□□, Gr□□□□□, Gr□□nd□□□□r□

| Q□□ | S□□ □□□ | B□□n□□□N□□ □ | C□□ □ □n N□□ □ | S□□ | C□nd | R□□ □r□□ |
|---|---|---|---|---|---|---|
| 50 | □□ | *Caltha palustris* | M□r□□ M□r□□d | 2 Q□ | CONT. | F□□, n□□□□ □□□□□d, □□n□d 30" □.□ |
| 50 | □□ | *Carex stricta* | S□d□□ | 2 Q□ | CONT. | F□□, n□□□□ □□□□□d, □□n□d 30" □.□ |
| 280 | d□ | *Dennstaedtia punctiloba* | H□□□□□n □d F□rn | 1 G□□ | CONT. | F□□, n□□□□ □□□□□d, □□n□d 36" □.□ |
| 255 | □□ | *Osmunda cinnamomea* | C□nn□□ □n F□rn | 1 G□□ | CONT. | F□□, n□□□□ □□□□□d, □□n□d 36" □.□ |
| 50 | □□ | *Scuttelaria* | S□□□□□□ | 2 Q□ | CONT. | F□□, n□□□□ □□□□□d, □□n□d 30" □.□ |




N□ R□□□□n: D□□□

0 10 20 40

WESLEY STOUT ASSOCIATES
96 M□□n S□□□□N□□ C□n□□n, CT 06840
203 966-3100 FAX 203 966-3131

W□□□□nd M□□□□□□□n
P□□n□□n□ P□□n

D□□□ 05-08-2018
S□□□□ 1" = 20'
S□□□□

SP-1.0

# STORMWATER POLLUTION PREVENTION PLAN

Prepared for:
GROFF RESIDENCE
5 SCHOOL HOUSE ROAD
LEWISBORO, NY

Prepared By:
JOHN PETROCCIONE P.E.
129 NEPTUNE DRIVE
MONROE, NY 10950

Prepared - May 2018
Revised - November 2018

## TABLE OF CONTENTS



## APPENDICES



## PLANS

## 1. INTRODUCTION

This following report has been prepared as part of a permit application for a Stormwater Pollution Prevention Plan (SWPPP) for a residential property located at 5 School House Road, within in the Town of Lewisboro NY.

This report has been prepared in accordance with the Following:

- New York State Department of Environmental Conservation SPDES general permit for stormwater discharges from construction activity GP-0-15-02 (January 29, 2015)
- New York State Stormwater Design Manual (January 2015)
- New York State Standards and Specifications for Erosion and Sediment Control (November 2016)

All construction activity involving any practice or control which is not listed specifically within this report, if utilized, should be in accordance with the above publications.

## 2. PROJECT DESCRIPTION

The project consists of the redevelopment of an existing parcel located at 5 Schoolhouse Road in the Town of Lewisboro NY. The property is further identified as Sheet 22, Block 10802, Lot 68 on the Town of Lewsiboro tax maps. The subject property is 20.822 acres located within the R-4A zone. The property is serviced by an existing septic system which will be abandoned and replaced, there is an existing well which will remain. The proposed development of the property will also include the removal of an existing foundation, swimming pool, and other improvements. The project will also include the construction of a new dwelling, swimming pool and improvements within a new area. The proposed development will also include the placement of geothermal wells for heating and cooling. The proposed project was analyzed based on redevelopment requirements.

EXISTING CONDITIONS

The subject property is currently developed with an existing dwelling, frame barn, Gravel driveway, swimming pool, patios, and improvements. The existing residence is located approximately 500’ North from the driveway entrance at School house Road and is generally centered within the property and located almost entirely within a 150' regulated Wetland Buffer. There is an in ground swimming pool and patio improvements located off the rear of the dwelling to the North near a wetland area. The dwelling is serviced by a septic system located downslope to the West of the dwelling. There is an existing well South of the residence located in a center island surrounded by the existing gravel driveway. There is a frame barn located in the Southeast portion of the property. The Southern and Eastern portions of the property are fenced horse paddocks which were previously in use by a former owner

The subject property is irregularly shaped with the main portion of the lot being rectangular in shape and consisting of approximately 14 acres and a small portion of approximately 6 acres which juts off to the Northwest. For the purposes of this report and corresponding plans the references within will be mostly to the main 14 acre portion of land described above. The previous owner had these parcels on two separate lots which were combined by the present owner recently.

The existing property is gently sloped from East to West consisting mainly of maintained lawn areas and fenced horse paddocks. The gravel driveway leads North into the property and serves a frame barn in the Southwest corner of the lot and the existing residence in the center of the parcel. There is a small pocket wetland in the Southeast portion of the parcel to the right of the existing driveway located in a horse paddock. A man-made pond is located in the Northeast portion of the property which is fed by a stream to the North and exits to a stream which flows East to West approximately 200' from the rear property line. The area containing and surrounding the pond and stream is a locally regulated wetland. Upon the request of the town SMO on site wetlands were flagged on December 21, 2017 and off-site Wetlands were flagged on April 13th, 2018 by Pfizer–Jaehnig Environmental Consulting and are further described in the attached report located in the appendices. The town of Lewisboro has a 150' restrictive buffer extending from the edge of these wetlands. The existing stormwater runoff from the site currently drains from Southeast to Northwest to a point in the Northwest portion of the property into the existing stream.

Current Site Development

| | |
|---|---|
| Existing Impervious Surfaces | = 15,714 SF |
| Existing Gravel Driveway | = 25,326 SF |

PROPOSED CONDITIONS

The proposed redevelopment of this existing parcel is the construction of a new 6 bedroom residential home and site improvements described with the Site Plan. The new residence, detached garage and improvements are proposed entirely outside of the regulated 150' Wetland buffer. There will also be placement of a new pool and patios to the East of the proposed addition located downslope within a maintained lawn area of the property. The entirety of new construction will occur outside of the regulatory 150' wetland buffer. Some of these improvements will occur over previous developed areas and are considered redevelopment activity. the Northern portion of the existing gravel driveway will be removed. Geothermal wells are proposed to provide heating and cooling for the residence

The existing septic system in place for the 6 Bedroom main house will be abandoned in its current location and replaced within a new area on the property, A new septic system for the 2 bedroom frame Barn will also be installed. These new septic installations will include new septic tanks, pump chambers, and absorption fields and have received approval by the Westchester County Department of Health Rules & Regulations. The proposed new septic areas are in the Southern portion of the property within an existing horse paddock and are included within the limit of disturbance.

The total amount of land disturbance related to all site and construction work will be approximately 82,000 sf (1.88 acres). The SWPPP Plan describes various erosion controls which will be implemented on site to minimize disturbances and protect from unnecessary sedimentation disbursement. Strict adherence to erosion control practices and standards will be maintained on site and enforced throughout with two (2) site inspections by a contracted CPESC occurring each and every week, separated by 2 days.

| | |
|---|---|
| Proposed Site Development | |
| Proposed Impervious Surfaces | = 18,482 SF |
| Proposed Gravel Driveway | = 22,563 SF |

Some of the described areas containing existing patios, pool, etc. have been removed during construction, these items are further described within the Original Existing Conditions & Removals Plan. The improvements surrounding the existing dwelling which are located North and East of the residence will occur within the existing wetland buffer. The proposed development plan has considered disturbance related to improvements on the property within this wetland buffer to cause minimal impact. The proposed site plan has also been designed to reduce the total amount of impervious within the wetland buffer by removing the existing dwelling and other hardscape areas, returning them to natural landscape. The total net reduction of impervious hardscape within the 150' Wetland Buffer will be approximately 7000 sf.

| | |
|---|---|
| Proposed Wetland Buffer Disturbance(s) | |
| Total Land Disturbance within 50' Buffer | = 0 SF |
| Total Land Disturbance within 150' Buffer | = 11,000 SF |
| Total Impervious removal within buffer area | = 7,000 SF |
| Total New Building Coverage within Buffer | (approximate) = 0 SF |

Various measures have been taken in the course of planning this project to minimize erosion and reduce stormwater impacts during and after construction. Considerations have also been made to protect the Wetland areas by reducing impervious coverage within the 150' buffer and locating all new construction outside of the 150' wetland buffer.

## 3. STORMWATER MANAGEMENT PLAN (SWPPP)

The subject property is located in the Croton River Basin within the New York City watershed and will disturb more than 5,000 sf during construction activities, requiring coverage under NYS SPDES general permit for stormwater discharges from construction activity No. GP-0-15-002. The Stormwater management plan has been designed in accordance with the NYS SPDES general permit for stormwater discharges from construction activity No. GP-0-15-002.

This property is located within the watershed identified in Figure 1 of Appendix C identified in NYS SPDES general permit for stormwater discharges from construction activity No. GP-0-15-002 and thus is required to prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the applicable sizing criteria in Part I.C.2. b., c. or d. of the

NYS SPDES general permit for stormwater discharges from construction activity No. GP-0-15-002 including performance criteria for Enhanced Phosphorus Removal Standards included in Chapter 10 of the New York State Stormwater Design Manual (January 2015). The design criteria for all post-construction stormwater practices within the property has been designed in accordance with the enhanced phosphorus removal standards described above.

The proposed site redevelopment plan will increase the existing impervious surface coverage by 2,768 sf (0.06 acres). The proposed stormwater treatment area will be taken from the roof of an existing frame barn on site with a surface area of 3,611 sf (0.08 acres). The frame barn roof area is greater than the proposed increase in impervious thus satisfying the contributing area treatment requirements for increase in impervious area.

The existing frame barn roof leaders are picked up and routed to the West where they outlet in a 6" PVC pipe near an existing utility pole. This runoff then travels North, down an existing natural grass swale where it eventually drains into a point on the existing stream on site. The point at which this stormwater drains is shown in the hydrological report as Analysis Point AP (located with the appendices). It is proposed within the Stormwater management plan to intercept the existing roof leader discharge from the frame barn and route it through a bioretention practice, cultec detention chambers, and an outlet control structure, before traveling down the existing swale.

Water Quality Treatment

The proposed site redevelopment plan for the above property is located within the Croton River Basin which is a regulated Watershed requiring Enhanced Phosphorus Removal in accordance with Chapter 10 of the New York State Stormwater Design Manual (January 2015). The methods of reducing phosphorus within these chapters was analyzed and have been implemented within the proposed design practices. The proposed improvements within the property are considered a redevelopment activity and were designed in accordance with chapter 9 of the New York State Stormwater Design Manual.

Reducing site imperviousness or hydrological source control has been achieved through hydraulic disconnection of 0.08 acres of roof area from an existing frame barn which will be intercepted and routed through a bioretention area to maximize evapotranspiration and filtration. The proposed biofiltration practice has been sized to treat 100% of the water quality volume requirement. Designing the biofiltration area to provide treatment of 100% of the water quality volume satisfies the requirements for enhanced phosphorus removal as described in Chapter 10 of the New York State Stormwater Design Manual (January 2015). Due to site constraints of a seasonable high water table and existing hydraulic soils group C located throughout the proposed stormwater design area, the bioretention area has been designed for filtration with an underdrain and liner to minimize the risk of groundwater contamination. This system will be designed to outlet and overflow to a secondary Water Quantity Treatment area, which will maintain pre-development conditions through an outlet control device.

Water Quantity Treatment

The second level of stormwater quality and quantity treatment will be provided with detention of stormwater within a designed cultec chamber system and outlet control structure to attenuate the release of stormwater. The system has been designed to provide Channel Protection Volume (CPv), Overbank Flood control (Qp), and Extreme Flood Control (Qf), with reduction in discharges from pre and post conditions. The existing and proposed conditions are listed in the table below;

| **Design Criteria** | **Pre-developement** | **Post-Development** |
|---|---|---|
| Channel Protection Volume CPv | 553.2 cf *(required)* | 656 cf *(provided)* |
| Overbank Flood Control Qp | 35.88 cfs | 35.76 cfs |
| Extreme Flood Control Qf | 81.94 cfs | 81.59 cfs |

The existing and proposed stormwater runoff rates were computed for comparison of the 1-year, 10-year, and 100-year storm events using Type III, 24 hour rainfall events. The computer software used to determine these runoff rates is entitled "HydroCAD 10.00-20" released 2017 by HydroCAD Software Solutions LLC. The existing and proposed conditions and full hydrological calculations for pre and post development are provided in the appendices within this report. The summary table below also shows the existing and proposed hydrological conditions as determined by the above;

**SUMMARY OF HYDROLOGICAL ANALYSIS**

| WATERSHED CONDITION | PEAK DISCHARGE BY STORM FREQUENCY (cfs) Storm Frequency | | |
|---|---|---|---|
| | 1 year | 10 year | 100 year |
| Existing Condition *(Pre-Development)* | 13.63 cfs | 35.88 cfs | 81.94 cfs |
| Proposed Condition *(Post-Development)* | 13.44 cfs | 35.76 cfs | 81.59 cfs |

Stormwater Management Planning

The current design regulations within the New York State Stormwater Design Manual (January 2015) outline a required planning process in Chapter 3 which must be followed when addressing stromwwater management in new development and redevelopment projects. The following five step process which was followed in the preparation of the SWPPP is outlined below along with techniques implemented in each step.

1. Site Planning to Preserve Natural Features and Reduce Impervious Cover
2. Calculation of the Water Quality Volume (WQv) for the site
3. Incorporation of runoff reduction techniques and standard SMPs with Runoff Reduction Volume (RRv) Capacity.
4. Use of standards SMP's, where applicable, to treat the portion of water quality volume not addressed by runoff reduction techniques and standard SMP's with RRv capacity.
5. Design of volume and peak rate control practices where required.

STEP ONE – SITE PLANNING

The site design process has included minimizing grading and clearing practices to preserve natural features and preserve exiting land cover. The proposed site plan has been prepared with identification and preservation of vegetative cover, critical environmental areas, existing topography, existing oils quality and conditions. This process has been followed to preserve the natural features and hydrology existing on site. The proposed addition to the existing residence has been proposed mainly outside of an existing wetland buffer zone to preserve natural features and hydrology within the buffer zone. In addition to this, various hardscapes currently located within the wetland buffer area will be removed and restored to natural conditions. Green infrastructure practices have been utilized in accordance with Planning Practices for Preservation and Natural Features and Conservation, the specific practices which have been implemented are outlined within the following chart;

| **Practice** | **Application of Practice** |
|---|---|
| Preservation of undisturbed areas | The proposed limit of disturbance has been clearly noted within the design plans and Existing wetlands on site have been delineated in an effort to minimize disturbance near the wetland limit lines. Although the wetland buffer has not been placed into a permanent conservation easement, efforts have been made to minimize disturbance to these area and reduce existing impervious within the buffer. |
| Preservation of Buffers | Natural wetland buffer has been delineated along a perennial stream located on site. Measures in site planning have been taken to reduce existing hardscape impervious features within this buffer area while also planning new development outside of the existing buffer. |
| Reduction of clearing and grading | Most development is proposed near the existing dwelling which will reduce the amount of clearing and grading on site. Efforts have been made to reduce grading by maintaining natural grades throughout the site. |
| Locating development in less sensitive areas | New site development has been located entirely outside of an existing wetland buffer area and away from an existing pond. In addition to this, a reduction in the impervious area within this wetland buffer has also been achieved through the development plan. |
| Soils restoration | Soils restoration plans are outlined in the SWPPP and will include restoring soils in the area of disturbance which become compacted areas of the site. |

STEP TWO – WATER QUALITY VOLUME CALCULATION

The proposed water quality volume was designed to capture the runoff resulting from the 1-year, 24 hour design storm over the post-development watershed. The increase in post-development impervious coverage on the site will be 0.06 acres and total area of the project which is redevelopment is 0.03 acres with a total required water quality volume of 348.14 cubic feet. The contributing area to the proposed stormwater system will be 0.15 acres and water quality volume has been sized for the 0.15 acre contributing area or 433 cubic feet which exceeds the WQv required. The proposed Boi-retention area has been designed to treat 100% of this water quality volume which satisfies the requirements for

enhanced phosphorus removal as described in Chapter 10 of the New York State Stormwater Design Manual (January 2015). Water quality calculations showing the required volumes for each area have been included in the appendices

STEP THREE – RUNOFF REDUCTION TECHNIQUES

Various green infrastructure techniques have been utilized within the design of the development project. Steps have been implemented throughout the design process to preserve and protect the natural features and hydrology of the site. Existing roof top runoff from an onsite frame barn which currently runs untreated to an existing swale will be disconnected and routed through a storm water bio-retention area. Efforts have been made to restore natural areas within a wetland buffer which presently contain hardscape or impervious surfaces. Below is a chart which indicates the specific practices implemented in Green Infrastructure Techniques for Runoff Reduction;

| **Practice** | **Application of Practice** |
|---|---|
| Conservation of Natural Areas | Existing pre-development hydraulic and quality conditions have been improved. Impervious areas within a wetland buffer area will be removed and replaced with natural features, promoting groundwater recharge and quality. |
| Sheetflow to Riparian Buffers or Filter Strips | Reduction of pre-development impervious areas within a regulated wetland buffer zone to be restored will increase the vegetated buffer area and promote treatment. |
| Disconnection of rooftop runoff | Direct runoff from existing rooftop frame barn has been disconnected and re-routed through a stormwater retention and attenuation system to increase quality and reduce outfall intensity. |

STEP FOUR – USE OF STANDARD SMP's TO TREAT WATER QUALITY VOLUME

The proposed Biofiltration are has been sized to treat 100% of the water quality volume for enhanced phosphorus removal. Treatment of 100% of the water quality volume within a bio-retention area satisfies the requirements for enhanced phosphorus removal as described in Chapter 10 of the New York State Stormwater Design Manual (January 2015).

Runoff Reduction Volume has been achieved within the design by calculating the minimum runoff reduction volume required from the contributing impervious area and achieving a greater value of reduction through a bio-filtration practice. This method was utilized due to the C classification soils types on site. Underdrains have been designed within the biofiltration practice as stated within the design guidelines and a 40% reduction in water quality treatment was applied. Runoff Reduction Calculations (RRv) are located in the appendicies.

STEP FIVE – VOLUME AND PEAK RATE CONTROL PRACTICES

Peak rate control practices have been designed to detain stormwater within a designed cultec chamber system which is then released through an outlet control structure to attenuate the release of stormwater. This system has been designed within the planning of the proposed site development. The system has been designed to provide Channel Protection Volume (CPv), Overbank Flood control (Qp),

and Extreme Flood Control (Qf), with reduction in discharges from pre and post conditions. The existing and proposed conditions are listed within the hydrological calculations (HydroCAD Report) and other included calculations located in the appendices.

## 4. EROSION AND SEDIMENT CONTROLS

Erosion and sediment controls & practices proposed in relation to this project have been designed in accordance with;

- New York State Department of Environmental Conservation SPDES general permit for Stormwater discharges from construction activity GP-0-15-02 (January 29, 2015)
- New York State Standards and Specifications for Sediment and Erosion Control (November 2016)
- New York State Stormwater Design Manual (January 2015)
- Town of Lewisboro Code Chapter 189 "Stormwater Management and Erosion and Sediment Control, adopted on December 18, 2007, & amended on November 19, 2012

The owner or operator must select, design, install, implement and maintain the proposed erosion control measures to minimize the discharge of pollutants and prevent a violation of water quality standards. The selection, design, installation, implementation, and maintenance of these control measures must be in accordance with the New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016, and using sound engineering judgment.

Erosion and Sediment Controls shall be designed, installed, and maintained to minimize the discharge of pollutants and prevent a violation of the water quality standards. At a minimum, such controls must be designed, installed and maintained to:

- Minimize soil erosion through application of runoff control and soil stabilization control measure to minimize pollutant discharges;
- Control stormwater discharges to minimize channel and streambank erosion and scour in the immediate vicinity of the discharge points;
- Minimize the amount of soil exposed during construction activity;
- Minimize the disturbance of steep slopes;
- Minimize sediment discharges from the site;
- Provide and maintain natural buffers around surface waters, direct stormwater to vegetated areas and maximize stormwater infiltration to reduce pollutant discharges, unless infeasible;
- Minimize soil compaction. Minimizing soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted; and unless infeasible, preserve a sufficient amount of topsoil to complete soil restoration and establish a uniform, dense vegetative cover.

Each contractor involved in the disturbance of soils or stormwater management practices shall be trained in accordance with GP-0-15-002, with 4 hours of NYSDEC endorsed training, provide certification of such, and sign the contractor certification form prior to start of any soils disturbing activities. The contractor form to be utilized is located in the appendices of this document.A certified contractor must be on site at all times when construction activity involving grading is underway.

A qualified inspector (CPESC) shall conduct at least two (2) site inspections every seven (7) calendar days for the duration of soils disturbing activities. The two (2) inspections shall be separated by a minimum of two (2) full calendar days. The qualified inspector shall prepare a report which documents the effectiveness of each and every erosion and sediment control practice in place and prepare a report subsequent to each inspection. The reports will be sent to the owner/operator, Town SMO officer, and kept on site within a log book.

The owner/operator shall maintain on site at all times until all construction activities have been completed, final stabilization has been achieved, the Notice of Termination (NOT) has been filed and accepted, copies of the following:

- New York State Department of Environmental Conservation SPDES general permit for Stormwater discharges from construction activity GP-0-15-02 (January 29, 2015)
- Notice of Intent (NOI) & acknowledgement letter
- MS4 Acceptance letter
- SWPPP Plan and this report
- Inspection reports from the qualified inspector (CPESC)

The proposed soil erosion and sedimentation controls which are included within the SWPPP are outlined below. Maintenance procedures are included and all measures must be maintained in operating condition at all times.

**SILT FENCE**

Silt fencing shall be installed within all locations shown on the approved plans and in accordance with details provided within the plan. The purpose of silt fence installation is to intercept sediment laded runoff from areas of disturbed soils by creating a temporary ponding which allows for settlement to occur. Silt fence must always be installed parallel to existing contours and generally, the silt fence will be utilized at the perimeter of disturbed areas or toe of slopes. Silt fence must be installed as shown within the details of the corresponding plan.

Silt fence must be maintained on site to be effective as an erosion control device and should be spot checked by trained contractors visually prior to disturbing soils uphill of any fence in place. Visible budges, sediment buildup, or damage which is noticed within any portion of the silt fencing on site shall be fixed immediately by replacement of fence sections or removal of sediment.

## ANTI-TRACKING PAD

Anti-tracking pad(s) shall be installed within all locations shown on the approved plans and in accordance with details provided within the plan. The purpose of a vehicle anti-tracking pad installation is to reduce or eliminate the amount of sediment which exits a proposed site from vehicle traffic. Anti-tracking pads shall be installed within any point of entry or exit into the site ensuring all vehicles entering or leaving the site will be required to travel over top.

Anti-tracking pads must be maintained on site to be effective as an erosion control device and should be visually spot checked by trained contractors visually whenever entering or exiting the site. Buildup of sediment within the stone which provides sediment removal from tires shall be monitored. Stone may require top dressing or stone replacement whenever necessary at the discretion of the trained contractor of qualified inspector.

## SOIL STOCKPILING

Topsoil and soils stripped during grubbing or excavated during construction shall be stockpiled within the locations shown on the approved plans and in accordance with the details provided within the plan. If they cannot be located as shown on the plans they should be located in a practical location. The purpose of stockpiling is to keep soils needed for filling or grading at a later date in a protected location.

Stockpiles shall be protected by rapidly-germinating vegetation or covered with erosion control blankets or approved covers at all times to ensure protection from erosion and soil slide. All stockpiles shall be surrounded with silt fence and visually inspected by the trained contractor whenever activity is present near the stockpiles or whenever visually within line of site.

## POLLUTION PREVENTION DURING CONSTRUCTION ACTIVITIES

Measure to control litter, construction chemicals, and construction debris from becoming a pollutant source should be practiced and maintained throughout any land disturbance and during the entire duration of all open permits. Daily physical pickup of debris should be conducted during and checked at the end of every work day. Maintenance, construction and waste materials must be stored in suitable, appropriate areas to minimize exposure to stormwater and provide spill prevention. Areas used for storage that are exposed to precipitation shall be inspected for evidence or potential of pollutants dispersant form these materials. Maintenance and construction waste shall be disposed of in a safe controlled manor and in accordance with regulations.

## LAND GRADING – TEMPORARY SEEDING

A trained contractor or qualified inspector shall be on site at all times when land clearing or grading activities are taking place. Erosion control measures on or near any location where land clearing or grading is to take place shall be inspected prior to clearing or grading. Temporary seeding shall occur in all areas of disturbed earth which will not be continually disturbed. Seeding should happen immediately after areas are cleared or graded if applicable and should include seeding and mulch.

## SOIL RESTORATION

Soils restoration shall occur on site in all areas where heavy vehicle traffic has occurred prior to final stabilization. The purpose of soils restoration is to provide decompaction in areas where soils have been overly compacted, affecting the porosity of the substrate. Soil restoration areas will be selected by the qualified inspector once construction activities have stopped and final stabilization will occur. Soils restoration may combine or include tilling, top soiling, aeration and will be completed to the satisfaction of the qualified inspector.

## 5. INSPECTION REQUIREMENTS

The proposed site location is within the New York City Watershed and has a proposed limit if disturbance of more than 5000 sf which requires coverage under the New York State Department of Environmental Conservation SPDES general permit for Stormwater discharges from construction activity GP-0-15-02. All inspections shall be performed in accordance with the SPDES permit and at a minimum will require the below.

Due to a disturbance of more than 1 acre and location of the subject property with a the New York City East of Hudson Watershed (see appendices) a qualified inspector (CPESC) shall conduct at least two (2) site inspections every seven (7) calendar days for the duration of soils disturbing activities. The two (2) inspections shall be separated by a minimum of two (2) full calendar days. The qualified inspector shall prepare a report which documents the effectiveness of each and every erosion and sediment control practice in place and prepare a report subsequent to each inspection. The reports will be sent to the owner/operator, Town SMO officer, and kept on site within a log book.

## 6. CONSTRUCTION SEQUENCING

The below will outline a general construction sequence for the proposed site;

1. Obtain Permits from Town of Lewisboro
2. Obtain NOI Coverage
3. Hold a pre-construction meeting with owner/operator and contractors
4. Field stake limits of disturbance and install silt fence as shown on plan
5. Stake 150' wetland limit line from physical boundary or survey
6. Install Anti-tracking Pad in location shown on plan
7. Provide tree removal as shown on plans
8. Perform demolition of building or removals as shown on plans in all areas which are not to be disturbed again during construction
9. Temporarily stabilize all areas disturbed during removals
10. Excavate and install new foundations
11. Excavate and install new footing drains
12. Repair existing footing drains as needed
13. Backfill and rough grade around foundations
14. Install or replace small patios and steps in rear of dwelling
15. Excavate and install geothermal wells
16. Backfill, grade, and stabilize disturbed geothermal well location immediately
17. Install new septic systems and related improvements
18. Call for required inspection from the Westchester County Health Department
19. Backfill and perform final stabilization in disturbed septic system areas
20. Perform construction of dwelling related to structural elements and interior work
21. Install patios, steps, and pools as shown on plans
22. Provide grading and soils stabilization for all exposed earth areas near pool and patios and surrounding dwelling
23. Install post-construction stormwater improvements as detailed within plans
24. Stabilize areas disturbed during construction of stormwater improvements
25. Install pool and related patio areas as shown on plan
26. Excavate and grade for new expanded driveway portions
27. Backfill driveway areas and finish with stone to match existing
28. Complete all interior construction
29. Achieve final site stabilization (80%) coverage
30. Remove anti-tracking pad, grade, and replace with matching stone
31. File Notice of Termination (NOT)
32. Receive NOT and close out permits with SMO and Town of Lewisboro

# APPENDIX – A

# CONTRACTOR and SUBCONTRACTOR CERTIFICATION STATEMENT

*for the New York State Department of Environmental Conservation (DEC) State Pollutant Discharge Elimination System Permit for Stormwater Discharges from Construction Activity (GP-0-15-002)*

'Prior to the *commencement of construction activity*, the *owner or operator* must identify the contractor(s) and subcontractor(s) that will be responsible for installing, constructing, repairing, replacing, inspecting and maintaining the erosion and sediment control practices included in the SWPPP; and the contractor(s) and subcontractor(s) that will be responsible for constructing the post-construction stormwater management practices included in the SWPPP. The *owner or operator* shall have each of the contractors and sub-contractors identify at least one person from their company that will be responsible for implementation of the SWPPP. This person shall be known as the *trained contractor*. The *owner or operator* shall ensure that at least one *trained contractor* is on site on a daily basis when soil disturbance activities are being performed.'

**The *owner or operator* shall have each contractor and subcontractor involved in soil disturbance sign a copy of the following certification statement before they commence <u>any</u> *construction activity*:**

| _____ | **NYR** _____ | _____ |
|---|---|---|
| *Name of Construction Site* | *DEC Permit ID* | *Municipality (MS4)* |

*"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 most current version 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.*

| | |
|---|---|
| Responsible Corporate Officer/Partner Signature | Date |
| Name of above Signatory | Name of Company |
| Title of above Signatory | Mailing Address |
| Telephone of Company | City, State and Zip |

| **Identify the specific elements of the SWPPP the contractor or subcontractor is responsible for:** |
|---|
| |
| |
| |
| |

***'TRAINED CONTRACTOR'* FOR THE CERTIFIED CONTRACTOR OR SUBCONTRACTOR**

| _____ | _____ | _____ |
|---|---|---|
| *Name of Trained Employee* | *Title of Trained Employee* | *NYSDEC SWT #* |

*A copy of this signed contractor certification statement must be maintained at the SWPPP on site*

# APPENDIX – B

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

**NYS Department of Environmental Conservation**
**Division of Water**
**625 Broadway, 4th Floor**
**Albany, New York 12233-3505**

# MS4 Stormwater Pollution Prevention Plan (SWPPP) Acceptance Form

**for**

**Construction Activities Seeking Authorization Under SPDES General Permit**

*(NOTE: Attach Completed Form to Notice Of Intent and Submit to Address Above)

| | |
|---|---|
| **I. Project Owner/Operator Information** | |
| 1. Owner/Operator Name: | Christine Groff |
| 2. Contact Person: | Christine Groff |
| 3. Street Address: | 5 School House Road |
| 4. City/State/Zip: | Waccabuc, New York 10597 |
| **II. Project Site Information** | |
| 5. Project/Site Name: | Groff Residence |
| 6. Street Address: | 5 School House Road |
| 7. City/State/Zip: | Waccabuc, New York 10597 |
| **III. Stormwater Pollution Prevention Plan (SWPPP) Review and Acceptance Information** | |
| 8. SWPPP Reviewed by: | Joseph M. Cermele, P.E., CFM |
| 9. Title/Position: | Town Engineer |
| 10. Date Final SWPPP Reviewed and Accepted: | June 11, 2018 |
| **IV. Regulated MS4 Information** | |
| 11. Name of MS4: | Town of Lewisboro |
| 12. MS4 SPDES Permit Identification Number: | NYR20A 227 |
| 13. Contact Person: | Joseph Angiello |
| 14. Street Address: | 79 Bouton Road |
| 15. City/State/Zip: | South Salem, New York 10590 |
| 16. Telephone Number: | (914)763-3060 |

## MS4 SWPPP Acceptance Form - continued

**V. Certification Statement - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative**

I hereby certify that the final Stormwater Pollution Prevention Plan (SWPPP) for the construction project identified in question 5 has been reviewed and meets the substantive requirements in the SPDES General Permit For Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s). Note: The MS4, through the acceptance of the SWPPP, assumes no responsibility for the accuracy and adequacy of the design included in the SWPPP. In addition, review and acceptance of the SWPPP by the MS4 does not relieve the owner/operator or their SWPPP preparer of responsibility or liability for errors or omissions in the plan.

Printed Name: Joseph Angiello

Title/Position: Building Inspector

Signature:

Date: June 25, 2018

**VI. Additional Information**

(NYS DEC - MS4 SWPPP Acceptance Form - January 2015)

# APPENDIX – C

0644089821

# NOTICE OF INTENT

**New York State Department of Environmental Conservation**
**Division of Water**
**625 Broadway, 4th Floor**
**Albany, New York 12233-3505**

NYR [ ] (for DEC use only)

Stormwater Discharges Associated with Construction Activity Under State Pollutant Discharge Elimination System (SPDES) General Permit # GP-0-15-002

**All sections must be completed unless otherwise noted.** Failure to complete all items may result in this form being returned to you, thereby delaying your coverage under this General Permit. Applicants must read and understand the conditions of the permit and prepare a Stormwater Pollution Prevention Plan prior to submitting this NOI. Applicants are responsible for identifying and obtaining other DEC permits that may be required.

**-IMPORTANT-**

**RETURN THIS FORM TO THE ADDRESS ABOVE**

OWNER/OPERATOR MUST SIGN FORM

**Owner/Operator Information**

Owner/Operator (Company Name/Private Owner Name/Municipality Name)
CHRISTINE GROFF

Owner/Operator Contact Person Last Name (NOT CONSULTANT)
GROFF

Owner/Operator Contact Person First Name
CHRISTINE

Owner/Operator Mailing Address
5 SCHOOL HOUSE ROAD

City
WACCABUC

State
NY

Zip
10597 -

Phone (Owner/Operator)
914 - 815 - 3054

Fax (Owner/Operator)
- -

Email (Owner/Operator)
WHOLA3@ME.COM

FED TAX ID
- (not required for individuals)

## Project Site Information

Project/Site Name
GROFF RESIDENCE

Street Address (NOT P.O. BOX)
5 SCHOOL HOUSE ROAD

Side of Street
● North ○ South ○ East ○ West

City/Town/Village (THAT ISSUES BUILDING PERMIT)
LEWISBORO

State NY
Zip 10597 -
County WESTCHESTER
DEC Region 3

Name of Nearest Cross Street
MEAD STREET

Distance to Nearest Cross Street (Feet)
300

Project In Relation to Cross Street
○ North ○ South ○ East ● West

Tax Map Numbers
Section-Block-Parcel
22-10802-68

Tax Map Numbers

1. Provide the Geographic Coordinates for the project site in NYTM Units. To do this you **must** go to the NYSDEC Stormwater Interactive Map on the DEC website at:

**www.dec.ny.gov/imsmaps/stormwater/viewer.htm**

Zoom into your Project Location such that you can accurately click on the centroid of your site. Once you have located your project site, go to the tool boxes on the top and choose "i"(identify). Then click on the center of your site and a new window containing the X, Y coordinates in UTM will pop up. Transcribe these coordinates into the boxes below. For problems with the interactive map use the help function.

**X Coordinates (Easting)**
617375

**Y Coordinates (Northing)**
4571327

2. What is the nature of this construction project?

○ **New Construction**

● **Redevelopment with increase in impervious area**

○ **Redevelopment with no increase in impervious area**

3. Select the predominant land use for both pre and post development conditions.
**SELECT ONLY ONE CHOICE FOR EACH**

**Pre-Development Existing Land Use**

- ○ FOREST
- ○ PASTURE/OPEN LAND
- ○ CULTIVATED LAND
- ● SINGLE FAMILY HOME
- ○ SINGLE FAMILY SUBDIVISION
- ○ TOWN HOME RESIDENTIAL
- ○ MULTIFAMILY RESIDENTIAL
- ○ INSTITUTIONAL/SCHOOL
- ○ INDUSTRIAL
- ○ COMMERCIAL
- ○ ROAD/HIGHWAY
- ○ RECREATIONAL/SPORTS FIELD
- ○ BIKE PATH/TRAIL
- ○ LINEAR UTILITY
- ○ PARKING LOT
- ○ OTHER

**Post-Development Future Land Use**

- ● SINGLE FAMILY HOME
- ○ SINGLE FAMILY SUBDIVISION — Number of Lots
- ○ TOWN HOME RESIDENTIAL
- ○ MULTIFAMILY RESIDENTIAL
- ○ INSTITUTIONAL/SCHOOL
- ○ INDUSTRIAL
- ○ COMMERCIAL
- ○ MUNICIPAL
- ○ ROAD/HIGHWAY
- ○ RECREATIONAL/SPORTS FIELD
- ○ BIKE PATH/TRAIL
- ○ LINEAR UTILITY (water, sewer, gas, etc.)
- ○ PARKING LOT
- ○ CLEARING/GRADING ONLY
- ○ DEMOLITION, NO REDEVELOPMENT
- ○ WELL DRILLING ACTIVITY *(Oil, Gas, etc.)
- ○ OTHER

***Note:** for gas well drilling, non-high volume hydraulic fractured wells only

4. In accordance with the larger common plan of development or sale, enter the total project site area; the total area to be disturbed; existing impervious area to be disturbed (for redevelopment activities); and the future impervious area constructed within the disturbed area. (Round to the nearest tenth of an acre.)

| Total Site Area | Total Area To Be Disturbed | Existing Impervious Area To Be Disturbed | Future Impervious Area Within Disturbed Area |
|---|---|---|---|
| 20.8 | 1.7 | 0.1 | 0.6 |

5. Do you plan to disturb more than 5 acres of soil at any one time? ○ Yes ● No

6. Indicate the percentage of each Hydrologic Soil Group(HSG) at the site.

| A | B | C | D |
|---|---|---|---|
| % | % | 100 % | % |

7. Is this a phased project? ○ Yes ● No

8. Enter the planned start and end dates of the disturbance activities.

Start Date 06/26/2018 – End Date 09/15/2019

9. Identify the nearest surface waterbody(ies) to which construction site runoff will discharge.

Name

UNNAMED STREAM ON PROPERTY

9a. Type of waterbody identified in Question 9?

- ○ Wetland / State Jurisdiction On Site (Answer 9b)
- ○ Wetland / State Jurisdiction Off Site
- ○ Wetland / Federal Jurisdiction On Site (Answer 9b)
- ○ Wetland / Federal Jurisdiction Off Site
- ● Stream / Creek On Site
- ○ Stream / Creek Off Site
- ○ River On Site
- ○ River Off Site
- ○ Lake On Site
- ○ Lake Off Site
- ○ Other Type On Site
- ○ Other Type Off Site

9b. How was the wetland identified?

- ○ Regulatory Map
- ○ Delineated by Consultant
- ○ Delineated by Army Corps of Engineers
- ○ Other (identify)

10. Has the surface waterbody(ies) in question 9 been identified as a 303(d) segment in Appendix E of GP-0-15-002? ○ Yes ● No

11. Is this project located in one of the Watersheds identified in Appendix C of GP-0-15-002? ● Yes ○ No

12. Is the project located in one of the watershed areas associated with AA and AA-S classified waters? ● Yes ○ No
**If no, skip question 13.**

13. Does this construction activity disturb land with no existing impervious cover and where the Soil Slope Phase is identified as an E or F on the USDA Soil Survey? ○ Yes ● No
**If Yes, what is the acreage to be disturbed?**

14. Will the project disturb soils within a State regulated wetland or the protected 100 foot adjacent area? ○ Yes ● No

15. Does the site runoff enter a separate storm sewer system (including roadside drains, swales, ditches, culverts, etc)? ○ Yes ● No ○ Unknown

16. What is the name of the municipality/entity that owns the separate storm sewer system?

N / A

17. Does any runoff from the site enter a sewer classified as a Combined Sewer? ○ Yes ● No ○ Unknown

18. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law? ○ Yes ● No

19. Is this property owned by a state authority, state agency, federal government or local government? ○ Yes ● No

20. Is this a remediation project being done under a Department approved work plan? (i.e. CERCLA, RCRA, Voluntary Cleanup Agreement, etc.) ○ Yes ● No

21. Has the required Erosion and Sediment Control component of the SWPPP been developed in conformance with the current NYS Standards and Specifications for Erosion and Sediment Control (aka Blue Book)? ● Yes ○ No

22. Does this construction activity require the development of a SWPPP that includes the post-construction stormwater management practice component (i.e. Runoff Reduction, Water Quality and Quantity Control practices/techniques)? ● Yes ○ No
**If No, skip questions 23 and 27-39.**

23. Has the post-construction stormwater management practice component of the SWPPP been developed in conformance with the current NYS Stormwater Management Design Manual? ● Yes ○ No

24. The Stormwater Pollution Prevention Plan (SWPPP) was prepared by:

- ● Professional Engineer (P.E.)
- ○ Soil and Water Conservation District (SWCD)
- ○ Registered Landscape Architect (R.L.A)
- ○ Certified Professional in Erosion and Sediment Control (CPESC)
- ○ Owner/Operator
- ○ Other

SWPPP Preparer
JOHN PETROCCIONE P.E.

Contact Name (Last, Space, First)
PETROCCIONE, JOHN

Mailing Address
129 NEPTUNE DRIVE

City
MONROE

State Zip
NY 10950-

Phone
845-782-7725

Fax

Email
JPETROCCIONEPE@YAHOO.COM

**SWPPP Preparer Certification**

I hereby certify that the Stormwater Pollution Prevention Plan (SWPPP) for this project has been prepared in accordance with the terms and conditions of the GP-0-15-002. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of this permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

First Name
JOHN

MI

Last Name
PETROCCIONE

Signature

Date / /

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

# SWPPP Preparer Certification Form

*SPDES General Permit for Stormwater Discharges From Construction Activity (GP-0-15-002)*

## Project Site Information

**Project/Site Name**

GROFF RESIDENCE

## Owner/Operator Information

**Owner/Operator (Company Name/Private Owner/Municipality Name)**

CHRISTINE GROFF

## Certification Statement – SWPPP Preparer

I hereby certify that the Stormwater Pollution Prevention Plan (SWPPP) for this project has been prepared in accordance with the terms and conditions of the GP-0-15-002. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of this permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

| JOHN | | PETROCCIONE |
|---|---|---|
| First name | MI | Last Name |

Signature

6/9/18

Date

Revised: April 2015

25. Has a construction sequence schedule for the planned management practices been prepared? ○ Yes ○ No

26. Select **all** of the erosion and sediment control practices that will be employed on the project site:

## Temporary Structural

- ● Check Dams
- ○ Construction Road Stabilization
- ● Dust Control
- ○ Earth Dike
- ○ Level Spreader
- ○ Perimeter Dike/Swale
- ○ Pipe Slope Drain
- ○ Portable Sediment Tank
- ○ Rock Dam
- ○ Sediment Basin
- ○ Sediment Traps
- ● Silt Fence
- ● Stabilized Construction Entrance
- ○ Storm Drain Inlet Protection
- ○ Straw/Hay Bale Dike
- ○ Temporary Access Waterway Crossing
- ○ Temporary Stormdrain Diversion
- ● Temporary Swale
- ○ Turbidity Curtain
- ○ Water bars

## Biotechnical

- ○ Brush Matting
- ○ Wattling

## Vegetative Measures

- ○ Brush Matting
- ○ Dune Stabilization
- ● Grassed Waterway
- ● Mulching
- ● Protecting Vegetation
- ○ Recreation Area Improvement
- ● Seeding
- ○ Sodding
- ○ Straw/Hay Bale Dike
- ○ Streambank Protection
- ● Temporary Swale
- ● Topsoiling
- ○ Vegetating Waterways

## Permanent Structural

- ○ Debris Basin
- ○ Diversion
- ● Grade Stabilization Structure
- ● Land Grading
- ○ Lined Waterway (Rock)
- ○ Paved Channel (Concrete)
- ○ Paved Flume
- ● Retaining Wall
- ○ Riprap Slope Protection
- ● Rock Outlet Protection
- ○ Streambank Protection

Other

**Post-construction Stormwater Management Practice (SMP) Requirements**

**Important: Completion of Questions 27-39 is not required if response to Question 22 is No.**

27. Identify all site planning practices that were used to prepare the final site plan/layout for the project.

- ● **Preservation of Undisturbed Areas**
- ● **Preservation of Buffers**
- ● **Reduction of Clearing and Grading**
- ● **Locating Development in Less Sensitive Areas**
- ○ **Roadway Reduction**
- ○ **Sidewalk Reduction**
- ○ **Driveway Reduction**
- ○ **Cul-de-sac Reduction**
- ○ **Building Footprint Reduction**
- ○ **Parking Reduction**

27a. Indicate which of the following soil restoration criteria was used to address the requirements in Section 5.1.6("Soil Restoration") of the Design Manual (2010 version).

- ● All disturbed areas will be restored in accordance with the Soil Restoration requirements in Table 5.3 of the Design Manual (see page 5-22).
- ○ Compacted areas were considered as impervious cover when calculating the **WQv Required**, and the compacted areas were assigned a post-construction Hydrologic Soil Group (HSG) designation that is one level less permeable than existing conditions for the hydrology analysis.

28. Provide the total Water Quality Volume (WQv) required for this project (based on final site plan/layout).

**Total WQv Required**

0.008 **acre-feet**

29. Identify the RR techniques (Area Reduction), RR techniques(Volume Reduction) and Standard SMPs with RRv Capacity in Table 1 (See Page 9) that were used to reduce the Total WQv Required(#28).

Also, provide in Table 1 the total impervious area that contributes runoff to each technique/practice selected. For the Area Reduction Techniques, provide the total contributing area (includes pervious area) and, if applicable, the total impervious area that contributes runoff to the technique/practice.

**Note:** Redevelopment projects shall use Tables 1 and 2 to identify the SMPs used to treat and/or reduce the WQv required. If runoff reduction techniques will not be used to reduce the required WQv, skip to question 33a after identifying the SMPs.

Table 1 - Runoff Reduction (RR) Techniques and Standard Stormwater Management Practices (SMPs)

| | Total Contributing Area (acres) | | Total Contributing Impervious Area (acres) |
|---|---|---|---|
| **RR Techniques (Area Reduction)** | | | |
| ○ Conservation of Natural Areas (RR-1) | | and/or | |
| ○ Sheetflow to Riparian Buffers/Filters Strips (RR-2) | | and/or | |
| ○ Tree Planting/Tree Pit (RR-3) | | and/or | |
| ○ Disconnection of Rooftop Runoff (RR-4) | | and/or | |
| **RR Techniques (Volume Reduction)** | | | |
| ○ Vegetated Swale (RR-5) | | | |
| ○ Rain Garden (RR-6) | | | |
| ○ Stormwater Planter (RR-7) | | | |
| ○ Rain Barrel/Cistern (RR-8) | | | |
| ○ Porous Pavement (RR-9) | | | |
| ○ Green Roof (RR-10) | | | |
| **Standard SMPs with RRv Capacity** | | | |
| ○ Infiltration Trench (I-1) | | | |
| ○ Infiltration Basin (I-2) | | | |
| ○ Dry Well (I-3) | | | |
| ○ Underground Infiltration System (I-4) | | | |
| ● Bioretention (F-5) | 0 | | 0.08 |
| ○ Dry Swale (O-1) | | | |
| **Standard SMPs** | | | |
| ○ Micropool Extended Detention (P-1) | | | |
| ○ Wet Pond (P-2) | | | |
| ○ Wet Extended Detention (P-3) | | | |
| ○ Multiple Pond System (P-4) | | | |
| ○ Pocket Pond (P-5) | | | |
| ○ Surface Sand Filter (F-1) | | | |
| ○ Underground Sand Filter (F-2) | | | |
| ○ Perimeter Sand Filter (F-3) | | | |
| ○ Organic Filter (F-4) | | | |
| ○ Shallow Wetland (W-1) | | | |
| ○ Extended Detention Wetland (W-2) | | | |
| ○ Pond/Wetland System (W-3) | | | |
| ○ Pocket Wetland (W-4) | | | |
| ○ Wet Swale (O-2) | | | |

**Table 2 - Alternative SMPs (DO NOT INCLUDE PRACTICES BEING USED FOR PRETREATMENT ONLY)**

| Alternative SMP | Total Contributing Impervious Area (acres) |
|---|---|
| ○ Hydrodynamic | |
| ○ Wet Vault | |
| ○ Media Filter | |
| ○ Other | |

Provide the name and manufacturer of the Alternative SMPs (i.e. proprietary practice(s)) being used for WQv treatment.

Name

Manufacturer

**Note**: Redevelopment projects which do not use RR techniques, shall use questions 28, 29, 33 and 33a to provide SMPs used, total WQv required and total WQv provided for the project.

30. Indicate the Total RRv provided by the RR techniques (Area/Volume Reduction) and Standard SMPs with RRv capacity identified in question 29.

**Total RRv provided**

0.004 acre-feet

31. Is the Total RRv provided (#30) greater than or equal to the total WQv required (#28).

○ Yes ● No

**If Yes, go to question 36.**
**If No, go to question 32.**

32. Provide the Minimum RRv required based on HSG.
[Minimum RRv Required = (P)(0.95)(Ai)/12, Ai=(S)(Aic)]

**Minimum RRv Required**

0.002 acre-feet

32a. Is the Total RRv provided (#30) greater than or equal to the Minimum RRv Required (#32)?

● Yes ○ No

**If Yes, go to question 33.**
**Note**: Use the space provided in question #39 to summarize the specific site limitations and justification for not reducing 100% of WQv required (#28). A detailed evaluation of the specific site limitations and justification for not reducing 100% of the WQv required (#28) must also be included in the SWPPP.
**If No, sizing criteria has not been met, so NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.**

33. Identify the Standard SMPs in Table 1 and, if applicable, the Alternative SMPs in Table 2 that were used to treat the remaining total WQv(=Total WQv Required in 28 - Total RRv Provided in 30).

Also, provide in Table 1 and 2 the total impervious area that contributes runoff to each practice selected.

**Note**: Use Tables 1 and 2 to identify the SMPs used on Redevelopment projects.

33a. Indicate the Total WQv provided (i.e. WQv treated) by the SMPs identified in question #33 and Standard SMPs with RRv Capacity identified in question 29.

**WQv Provided**

0.005 **acre-feet**

**Note**: For the standard SMPs with RRv capacity, the WQv provided by each practice = the WQv calculated using the contributing drainage area to the practice - RRv provided by the practice. (See Table 3.5 in Design Manual)

34. Provide the sum of the Total RRv provided (#30) and the WQv provided (#33a). 0.009

35. Is the sum of the RRv provided (#30) and the WQv provided (#33a) greater than or equal to the total WQv required (#28)? ● **Yes** ○ **No**

**If Yes, go to question 36.**
**If No, sizing criteria has not been met, so NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.**

36. Provide the total Channel Protection Storage Volume (CPv) required and provided or select waiver (36a), if applicable.

**CPv Required** 0.013 **acre-feet**

**CPv Provided** 0.015 **acre-feet**

36a. The need to provide channel protection has been waived because:

○ Site discharges directly to tidal waters or a fifth order or larger stream.

○ Reduction of the total CPv is achieved on site through runoff reduction techniques or infiltration systems.

37. Provide the Overbank Flood (Qp) and Extreme Flood (Qf) control criteria or select waiver (37a), if applicable.

**Total Overbank Flood Control Criteria (Qp)**

**Pre-Development** 35.88 **CFS**

**Post-development** 35.76 **CFS**

**Total Extreme Flood Control Criteria (Qf)**

**Pre-Development** 81.94 **CFS**

**Post-development** 81.59 **CFS**

37a. The need to meet the Qp and Qf criteria has been waived because:

- ○ Site discharges directly to tidal waters or a fifth order or larger stream.
- ○ Downstream analysis reveals that the Qp and Qf controls are not required

38. Has a long term Operation and Maintenance Plan for the post-construction stormwater management practice(s) been developed? ● Yes ○ No

If Yes, Identify the entity responsible for the long term Operation and Maintenance

PRIVATE LAND OWNER

39. Use this space to summarize the specific site limitations and justification for not reducing 100% of WQv required(#28). (See question 32a) This space can also be used for other pertinent project information.

HYDRAULIC GROUP C SOILS PRESENT ON SITE

40. Identify other DEC permits, existing and new, that are required for this project/facility.

- ○ Air Pollution Control
- ○ Coastal Erosion
- ○ Hazardous Waste
- ○ Long Island Wells
- ○ Mined Land Reclamation
- ○ Solid Waste
- ○ Navigable Waters Protection / Article 15
- ○ Water Quality Certificate
- ○ Dam Safety
- ○ Water Supply
- ○ Freshwater Wetlands/Article 24
- ○ Tidal Wetlands
- ○ Wild, Scenic and Recreational Rivers
- ○ Stream Bed or Bank Protection / Article 15
- ○ Endangered or Threatened Species(Incidental Take Permit)
- ○ Individual SPDES
- ○ SPDES Multi-Sector GP N Y R
- ○ Other
- ● None

41. Does this project require a US Army Corps of Engineers Wetland Permit? ○ Yes ● No
**If Yes, Indicate Size of Impact.** .

42. Is this project subject to the requirements of a regulated, traditional land use control MS4? ● Yes ○ No
**(If No, skip question 43)**

43. Has the "MS4 SWPPP Acceptance" form been signed by the principal executive officer or ranking elected official and submitted along with this NOI? ● Yes ○ No

44. If this NOI is being submitted for the purpose of continuing or transferring coverage under a general permit for stormwater runoff from construction activities, please indicate the former SPDES number assigned. N Y R

## Owner/Operator Certification

I have read or been advised of the permit conditions and believe that I understand them. I also understand that, under the terms of the permit, there may be reporting requirements. I hereby certify that this document and the corresponding documents were prepared under my direction or supervision. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further understand that coverage under the general permit will be identified in the acknowledgment that I will receive as a result of submitting this NOI and can be as long as sixty (60) business days as provided for in the general permit. I also understand that, by submitting this NOI, I am acknowledging that the SWPPP has been developed and will be implemented as the first element of construction, and agreeing to comply with all the terms and conditions of the general permit for which this NOI is being submitted.

**Print First Name**: CHRISTINE

**MI**:

**Print Last Name**: GROFF

**Owner/Operator Signature**:

**Date**: / /

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**

**Division of Water, Bureau of Permits**
625 Broadway, Albany, New York 12233-3505
P: (518) 402-8111 | F: (518) 402-9029
www.dec.ny.gov

6/27/2018

CHRISTINE GROFF
CHRISTINE GROFF
5 SCHOOL HOUSE ROAD
WACCABUC, NY 10597

**Re ACKNOWLEDGMENT of NOTICE of INTENT for Coverage Under SPDES General Permit for Storm Water Discharges from CONSTRUCTION ACTIVITY General Permit No. GP-0-15-002**

Dear Prospective Permittee:

This is to acknowledge that the New York State Department of Environmental Conservation (Department) has received a complete Notice of Intent (NOI) for coverage under General Permit No. GP-0-15-002 for the construction activities located at:

**GROFF RESIDENCE**
**5 SCHOOL HOUSE ROAD**
**LEWISBORO, NY 10597** County: **WESTCHESTER**

Pursuant to Environmental Conservation Law (ECL) Article 17, Titles 7 and 8, ECL Article 70, discharges in accordance with GP-0-15-002 from the above construction site will be authorized **5** business days from **06/26/2018**, which is the date we received your final NOI, unless notified differently by the Department.

The permit identification number for this site is: **NYR11D872**. Be sure to include this permit identification number on any forms or correspondence you send us. When coverage under the permit is no longer needed, you must submit a Notice of Termination to the Department.

This authorization is conditioned upon the following:

1. The information submitted in the NOI received by the Department on **06/26/2018** is accurate and complete.

2. You have developed a Stormwater Pollution Prevention Plan (SWPPP) that complies with GP-0-15-002 which must be implemented as the first element of construction at the above-noted construction site.

3. Activities related to the above construction site comply with all other requirements of GP-0-15-002.

**4. Payment of the annual $110 regulatory fee, which is billed separately by the Department in the late fall. The regulatory fee covers a period of one calendar year. In addition, since September 1, 2004, construction stormwater permittees have been assessed an initial authorization fee which is now $110 per acre of land disturbed and $675 per acre of future impervious area. The initial authorization fee covers the duration of the authorized disturbance.**

5. Your SWPPP has been reviewed by the regulated, traditional land use control MS4 where your project is located and has been determined to be in substantive conformance with the requirements in the SPDES General Permit for Stormwater Discharges from MS4s.

6. When applicable, project review pursuant to the State Environmental Quality Review Act (SEQRA) has been satisfied.

7. You have obtained all necessary Department permits subject to the Uniform Procedures Act (UPA). You should check with your Regional Permit Administrator for further information.

***Note: Construction activities cannot commence until project review pursuant to SEQRA has been satisfied, when SEQRA is applicable; and, where required, all necessary Department permits subject to the UPA have been obtained.**

Please be advised that the Department may request a copy of your SWPPP for review.

Should you have any questions regarding any aspect of the requirements specified in GP-0-15-002, please contact Dave Gasper at (518) 402-8114 or the undersigned at (518) 402-8109.

Sincerely,

Toni Cioffi

Toni Cioffi
Environmental Program Specialist 1

**PLEASE NOTE: EPA HAS FINALIZED THE eREPORTING RULE; AND, IN THE NEAR FUTURE, ALL NOIs WILL HAVE TO BE SUBMITTED ELECTRONICALLY.**
**BY FILING AN NOI ELECTRONICALLY, A PROJECT CAN TYPICALLY GAIN COVERAGE IN 5 BUSINESS DAYS COMPARED TO 10 BUSINESS DAYS FOR THE PAPER NOI.**
**INFORMATION ON THE eNOI CAN BE FOUND ON OUR WEBSITE AT:**
**http://www.dec.ny.gov/chemical/43133.html UNDER "FORMS."**

cc RWE - **3**
SWPPP Preparer

JOHN PETROCCIONE P.E.
PETROCCIONE, JOHN
129 NEPTUNE DRIVE
MONROE, NY 10950

# APPENDIX – D

# Bioretention Construction Inspection Checklist

Project:
Location:
Site Status:

Date:

Time:

Inspector:

| CONSTRUCTION SEQUENCE | SATISFACTORY/ UNSATISFACTORY | COMMENTS |
|---|---|---|
| **1. Pre-Construction** | | |
| Pre-construction meeting | | |
| Runoff diverted | | |
| Facility area cleared | | |
| If designed as exfilter, soil testing for permeability | | |
| Facility location staked out | | |
| **2. Excavation** | | |
| Size and location | | |
| Lateral slopes completely level | | |
| If designed as exfilter, ensure that excavation does not compact susoils. | | |
| Longitudinal slopes within design range | | |

| CONSTRUCTION SEQUENCE | SATISFACTORY / UNSATISFACTORY | COMMENTS |
|---|---|---|
| **3. Structural Components** | | |
| Stone diaphragm installed correctly | | |
| Outlets installed correctly | | |
| Underdrain | | |
| Pretreatment devices installed | | |
| Soil bed composition and texture | | |
| **4. Vegetation** | | |
| Complies with planting specs | | |
| Topsoil adequate in composition and placement | | |
| Adequate erosion control measures in place | | |
| **5. Final Inspection** | | |
| Dimensions | | |
| Proper stone diaphragm | | |
| Proper outlet | | |
| Soil/ filter bed permeability testing | | |
| Effective stand of vegetation and stabilization | | |
| Construction generated sediments removed | | |
| Contributing watershed stabilized before flow is diverted to the practice | | |

**Comments:**

**Actions to be Taken:**

# Bioretention Operation, Maintenance and Management Inspection Checklist

Project:
Location:
Site Status:

Date:

Time:

Inspector:

| MAINTENANCE ITEM | SATISFACTORY / UNSATISFACTORY | COMMENTS |
|---|---|---|
| **1. Debris Cleanout (Monthly)** | | |
| Bioretention and contributing areas clean of debris | | |
| No dumping of yard wastes into practice | | |
| Litter (branches, etc.) have been removed | | |
| **2. Vegetation (Monthly)** | | |
| Plant height not less than design water depth | | |
| Fertilized per specifications | | |
| Plant composition according to approved plans | | |
| No placement of inappropriate plants | | |
| Grass height not greater than 6 inches | | |
| No evidence of erosion | | |
| **3. Check Dams/Energy Dissipaters/Sumps (Annual, After Major Storms)** | | |
| No evidence of sediment buildup | | |

| MAINTENANCE ITEM | SATISFACTORY / UNSATISFACTORY | COMMENTS |
|---|---|---|
| Sumps should not be more than 50% full of sediment | | |
| No evidence of erosion at downstream toe of drop structure | | |
| **4. Dewatering (Monthly)** | | |
| Dewaters between storms | | |
| No evidence of standing water | | |
| **5. Sediment Deposition (Annual)** | | |
| Swale clean of sediments | | |
| Sediments should not be > 20% of swale design depth | | |
| **6. Outlet/Overflow Spillway (Annual, After Major Storms)** | | |
| Good condition, no need for repair | | |
| No evidence of erosion | | |
| No evidence of any blockages | | |
| **7. Integrity of Filter Bed (Annual)** | | |
| Filter bed has not been blocked or filled inappropriately | | |

**Comments:**

**Actions to be Taken:**

# APPENDIX – E

# STORMWATER CONTROL FACILITY MAINTENANCE AGREEMENT

Whereas, the Town of Lewisboro ("Municipality") has requested Christine Groff ("facility owner") to provide access to and for the long term maintenance and continuation of stormwater control measures approved by the Municipality for the below named project:

Name: Groff Residence

Location: 5 School House Road, Lewisboro NY, 10597

; and

Whereas, the Municipality has required that the stormwater control measures be built in accordance with the approved project plans and thereafter be maintained, cleaned, repaired, replaced and continued in perpetuity in order to ensure optimum performance of the components. Therefore, the facility owner agrees as follow:

1. This agreement binds the facility owner and its successors and assigns to the maintenance provisions depicted in the approved project plans which are attached as Schedule A of this agreement.
2. The facility owner shall maintain, clean, repair, replace and continue the stormwater control measures depicted in Schedule A as necessary to ensure optimum performance of the measures to design specifications. The stormwater control measures shall include, but shall not be limited to, the following: Bioretention, Cultec Chambers, Outlet Control Structure & Piping
3. The facility owner shall be responsible for all expenses related to the maintenance of the stormwater control measures and shall establish a means for the collection and distribution of expenses among parties for any commonly owned facilities.

4. The facility owner shall provide for the periodic inspection of the stormwater control measures, not less than once in every five year period, to determine the condition and integrity of the measures. Such inspection shall be performed by a Professional Engineer licensed by the State of New York. The inspecting engineer shall prepare and submit to the Municipality, within 30 days of the inspection, a written report of findings, including recommendations for those actions necessary for the viability and continuation of the stormwater control measures.
5. The facility owner shall not authorize, undertake or permit alteration, abandonment, modification or discontinuation of the stormwater control measures except in accordance with written approval of the Municipality.
6. The facility owner shall undertake necessary repairs and replacement of the stormwater control measures, as necessary; in accordance with the recommendations of the inspecting engineer; or at the direction of the Municipality.
7. If required, the facility owner shall provide to the Municipality within 30 days of the date of this agreement, security for the maintenance and continuation of the stormwater control measures in the form of (a Bond, letter of credit or escrow account).
8. This agreement shall be recorded in the Office of the County Clerk, County of Westchester, together with the deed for the property.
9. If ever the Municipality determines that the facility owner has failed to construct or maintain the stormwater control measures in accordance with the project plan or has failed to undertake corrective action specified by the Municipality or by the inspecting

engineer, the Municipality is authorized to undertake such steps as reasonably necessary for the preservation, continuation or maintenance of the stormwater control measures and to affix the expenses thereof as a lien against the property.

10. For the purpose of enforcement of this agreement, the facility owner shall permit the Municipality or its designee access to the property shown on Schedule A for inspection or for those actions set forth in paragraph 9 above.

11. This agreement is effective May 7th, 2018.

Facility Owner

STATE OF NEW YORK )
) ss.:
COUNTY OF WESTCHESTER)

On the 4th day of May, 2018 before me, the undersigned, a Notary Public in and for the State, personally appeared Christine Groff personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he/she executed it in his/her capacity, and that by his/her signature on the instrument, the individual executed the instrument.

NINA KELLOGG
Notary Public - State of New York
NO. 01KE6007572
Qualified in Westchester County
My Commission Expires 05/26/2022

Nina Kellogg
Notary Public

Westchester
County

1217/03/436964v1 1/17/13

Office of the Westchester County Clerk

*2018081400291001001E*

# Payment Cover Page

## Submitter Information

| | | | |
|---|---|---|---|
| Name: | Attorney's Title Insurance Agency, Inc. | Phone: | 914-244-3738 |
| Address 1: | 126 Barker Street | Fax: | 914-244-3814 |
| Address 2: | | Email: | patrick@attorneystitle.biz |
| City/State/Zip: | Mount Kisco NY 10549 | Reference for Submitter: | ACC18-7554W / GROFF |

## Payment Due

| Control Number | Document Type | Fees | Transfer Tax | Mortgage Tax | Total |
|---|---|---|---|---|---|
| 582263612 | Agreement (AGR) | $80.00 | $0.00 | $0.00 | $80.00 |
| | | | | **Total Due :** | **$80.00** |

RECEIVED
18 SEP 17 PM 3:31
TERRY GORN
WESTCHESTER COUNTY CLERK

## Payment Details

| | | | |
|---|---|---|---|
| Fees | CHECK # 11381 (ATTORNEYS TITLE INSURANCE AGENCY, INC) | PENDING | $80.00 |
| | | **Total Amount :** | **$80.00** |

# APPENDIX – F

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

# Custom Soil Resource Report for Westchester County, New York

## 5 SCHOOL HOUSE ROAD


February 3, 2018

# Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

# Contents

# Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

# Custom Soil Resource Report
## Soil Map (5 SCHOOL HOUSE ROAD)


Map Scale: 1:2,060 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 30 60 120 180

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

## 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 1:12,000.

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: Westchester County, New York
Survey Area Data: Version 13, Oct 8, 2017

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

Date(s) aerial images were photographed: Dec 31, 2009—Oct 5, 2016

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 (5 SCHOOL HOUSE ROAD)

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|---|---|---|---|
| PnB | Paxton fine sandy loam, 3 to 8 percent slopes | 9.1 | 60.0% |
| W | Water | 0.4 | 2.7% |
| WdB | Woodbridge loam, 3 to 8 percent slopes | 5.7 | 37.3% |
| **Totals for Area of Interest** | | **15.2** | **100.0%** |

# Map Unit Descriptions (5 SCHOOL HOUSE ROAD)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

# Westchester County, New York

## PnB—Paxton fine sandy loam, 3 to 8 percent slopes

### Map Unit Setting

*National map unit symbol:* 2t2qp
*Elevation:* 0 to 1,570 feet
*Mean annual precipitation:* 36 to 71 inches
*Mean annual air temperature:* 39 to 55 degrees F
*Frost-free period:* 140 to 240 days
*Farmland classification:* All areas are prime farmland

### Map Unit Composition

*Paxton and similar soils:* 80 percent
*Minor components:* 20 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Paxton

#### Setting

*Landform:* Hills, drumlins, ground moraines
*Landform position (two-dimensional):* Backslope, summit, shoulder
*Landform position (three-dimensional):* Side slope, crest, nose slope
*Down-slope shape:* Linear, convex
*Across-slope shape:* Convex
*Parent material:* Coarse-loamy lodgment till derived from gneiss, granite, and/or schist

#### Typical profile

*Ap - 0 to 8 inches:* fine sandy loam
*Bw1 - 8 to 15 inches:* fine sandy loam
*Bw2 - 15 to 26 inches:* fine sandy loam
*Cd - 26 to 65 inches:* gravelly fine sandy loam

#### Properties and qualities

*Slope:* 3 to 8 percent
*Depth to restrictive feature:* 18 to 39 inches to densic material
*Natural drainage class:* Well drained
*Runoff class:* Medium
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.14 in/hr)
*Depth to water table:* About 18 to 37 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Salinity, maximum in profile:* Nonsaline (0.0 to 1.9 mmhos/cm)
*Available water storage in profile:* Low (about 3.1 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 2s
*Hydrologic Soil Group:* C
*Hydric soil rating:* No

### Minor Components

#### Woodbridge

*Percent of map unit:* 9 percent
*Landform:* Drumlins, ground moraines, hills
*Landform position (two-dimensional):* Backslope, footslope, summit
*Landform position (three-dimensional):* Side slope
*Down-slope shape:* Concave
*Across-slope shape:* Linear
*Hydric soil rating:* No

#### Ridgebury

*Percent of map unit:* 6 percent
*Landform:* Ground moraines, drainageways, hills, depressions
*Landform position (two-dimensional):* Backslope, footslope, toeslope
*Landform position (three-dimensional):* Head slope, base slope, dip
*Down-slope shape:* Concave
*Across-slope shape:* Concave
*Hydric soil rating:* Yes

#### Charlton

*Percent of map unit:* 5 percent
*Landform:* Hills
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Hydric soil rating:* No

## W—Water

### Map Unit Setting

*National map unit symbol:* bd7z
*Mean annual precipitation:* 46 to 50 inches
*Mean annual air temperature:* 46 to 52 degrees F
*Frost-free period:* 115 to 215 days
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Water:* 100 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

## WdB—Woodbridge loam, 3 to 8 percent slopes

### Map Unit Setting

*National map unit symbol:* 2w688
*Elevation:* 0 to 1,280 feet
*Mean annual precipitation:* 36 to 71 inches
*Mean annual air temperature:* 39 to 55 degrees F

*Frost-free period:* 145 to 240 days
*Farmland classification:* All areas are prime farmland

**Map Unit Composition**

*Woodbridge, loam, and similar soils:* 85 percent
*Minor components:* 15 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Woodbridge, Loam**

**Setting**

*Landform:* Drumlins, ground moraines, hills
*Landform position (two-dimensional):* Summit, backslope, footslope
*Landform position (three-dimensional):* Side slope, crest
*Down-slope shape:* Convex
*Across-slope shape:* Linear
*Parent material:* Coarse-loamy lodgment till derived from gneiss, granite, and/or schist

**Typical profile**

*Ap - 0 to 6 inches:* loam
*Bw1 - 6 to 18 inches:* gravelly loam
*Bw2 - 18 to 29 inches:* gravelly loam
*Cd - 29 to 65 inches:* gravelly loam

**Properties and qualities**

*Slope:* 3 to 8 percent
*Depth to restrictive feature:* 20 to 39 inches to densic material
*Natural drainage class:* Moderately well drained
*Runoff class:* Very high
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.14 in/hr)
*Depth to water table:* About 18 to 30 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Salinity, maximum in profile:* Nonsaline (0.0 to 1.9 mmhos/cm)
*Available water storage in profile:* Low (about 4.7 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 2w
*Hydrologic Soil Group:* C/D
*Hydric soil rating:* No

**Minor Components**

**Paxton**

*Percent of map unit:* 7 percent
*Landform:* Hills, drumlins, ground moraines
*Landform position (two-dimensional):* Summit, shoulder, backslope
*Landform position (three-dimensional):* Crest, side slope
*Down-slope shape:* Linear, convex
*Across-slope shape:* Convex
*Hydric soil rating:* No

**Ridgebury**

*Percent of map unit:* 7 percent

*Landform:* Ground moraines, drainageways, hills, depressions, drumlins
*Landform position (two-dimensional):* Toeslope, footslope
*Landform position (three-dimensional):* Base slope, head slope
*Down-slope shape:* Concave
*Across-slope shape:* Concave
*Hydric soil rating:* Yes

**Sutton**

*Percent of map unit:* 1 percent
*Landform:* Ground moraines, hills
*Landform position (two-dimensional):* Footslope
*Landform position (three-dimensional):* Base slope
*Down-slope shape:* Concave
*Across-slope shape:* Linear
*Hydric soil rating:* No

# References


American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

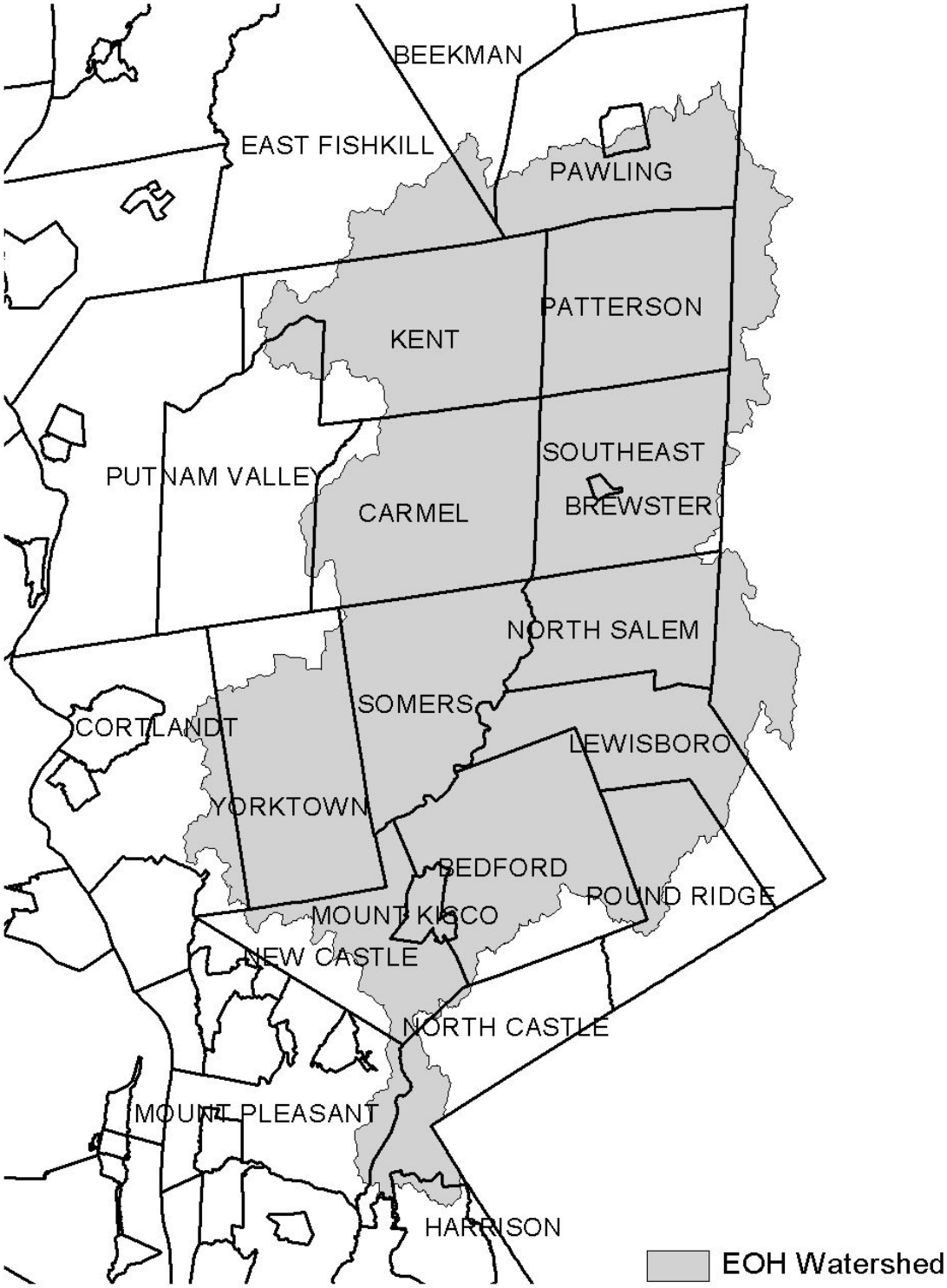
United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

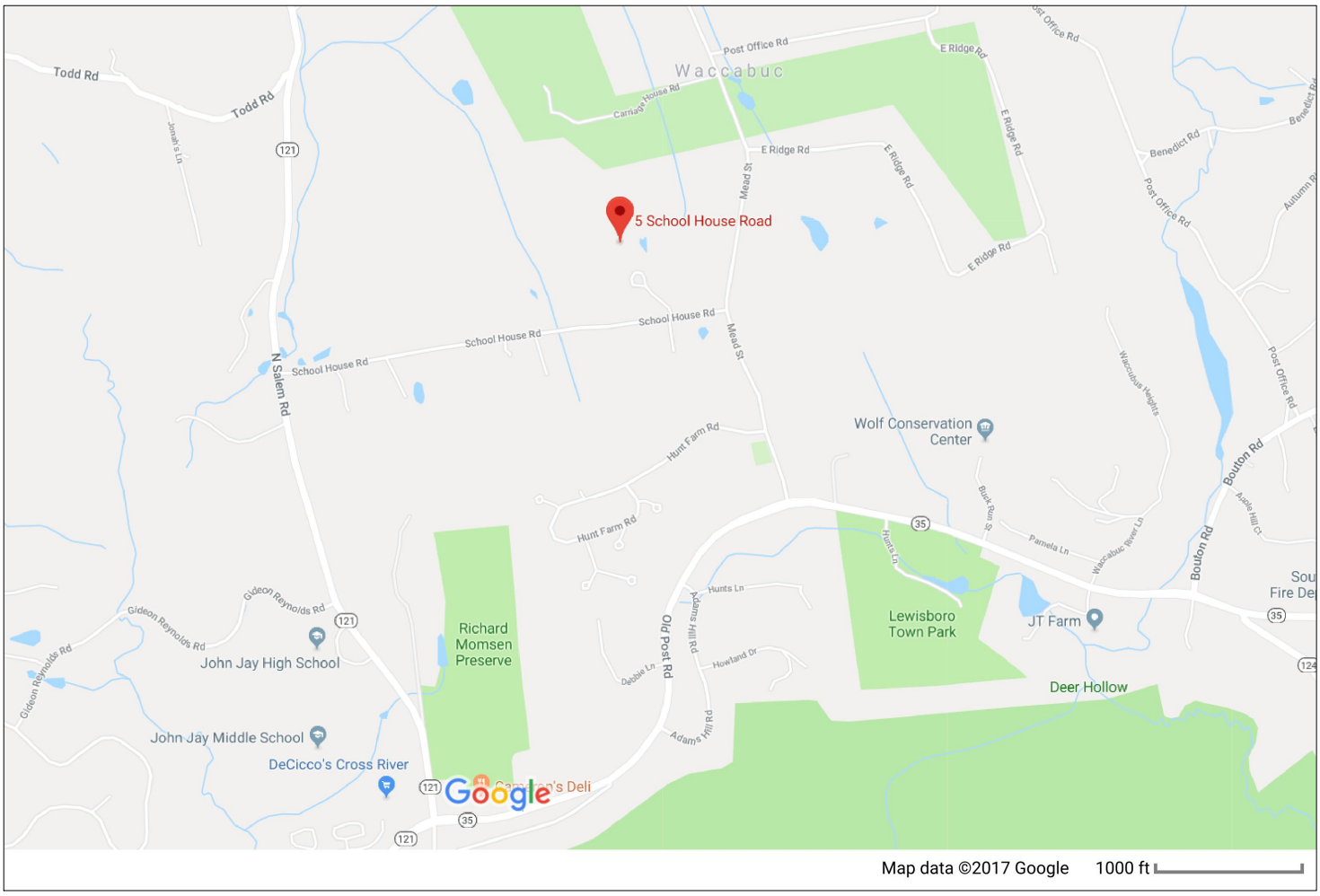
United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

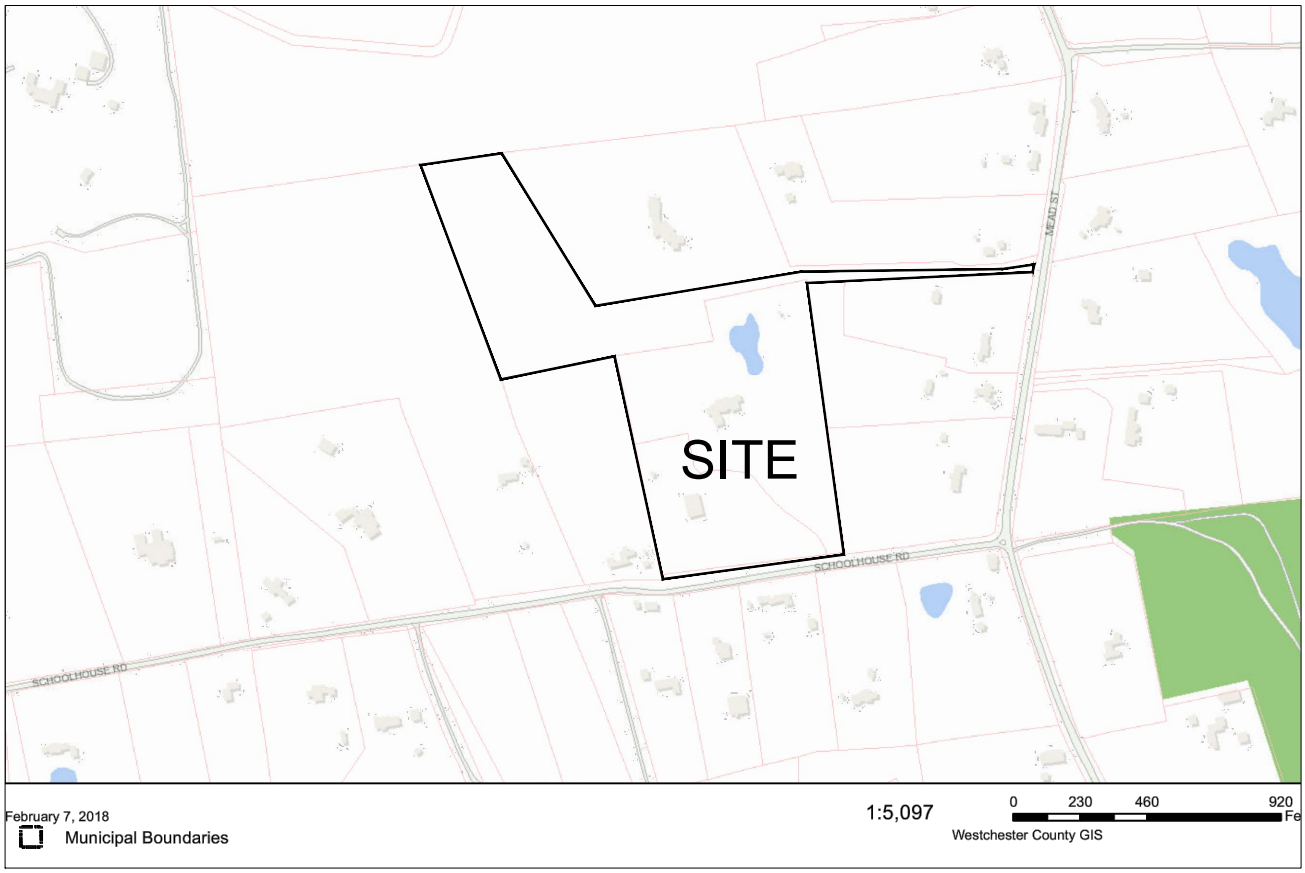
# APPENDIX – G

**Figure 1 - New York City Watershed East of the Hudson**



# APPENDIX - H


5 School House Road
Waccabuc
Post Office Rd
E Ridge Rd
Todd Rd
Jonah's Ln
121
Mead St
Benedict Rd
School House Rd
N Salem Rd
Wolf Conservation Center
Hunt Farm Rd
Boulton Rd
35
Pamela Ln
Waccabuc River Ln
Hunts Ln
Lewisboro Town Park
JT Farm
Deer Hollow
Richard Momsen Preserve
Old Post Rd
Adams Hill Rd
Howland Dr
Debbie Ln
Gideon Reynolds Rd
John Jay High School
John Jay Middle School
DeCicco's Cross River
Google
Map data ©2017 Google
1000 ft


SITE
MEAD ST
SCHOOLHOUSE RD
February 7, 2018
Municipal Boundaries
1:5,097
0 230 460 920
Westchester County GIS

# APPENDIX – I

November 16, 2018

**Wetland/Watercourse Delineation Report and Assessment**
5 Schoolhouse Road
Lewisboro, New York

Introduction:
A wetland delineation was conducted at 5 Schoolhouse Road on December 21, 2017 by Mary Jaehnig, certified soil scientist. The property is located on the northern side of Schoolhouse Road and supports a dwelling with barn. The topography is gently rolling. A man made pond is located in the northeastern portion of the site. Flow from the pond drains to the west along a well defined intermittent watercourse. The site is within the watershed to the Cross River Reservoir.

A New York State Dept. of Environmental Conservation (NYSDEC) regulated wetland, F-6, is located approximately 500 feet to the west of the property. There are no wetlands observed at least 150 feet to the west of the property.

The limits of the locally regulated wetlands and watercourses were flagged in the field using chronologically labeled ribbon or wire stakes. The extreme northeastern portion of the intermittent watercourse that flows to the pond was not flagged at this time.

The pond and watercourse were delineated with flags labeled 1 thru 41. A small area of wetland within the field in the southeastern portion of the site was delineated with flags labeled B1 thru B7.

The western edge of the adjoining meadow on the adjacent property to the east and along Schoolhouse Road was visually inspected for wetlands on April 13, 2018. The approximate wetland edge was marked on a sketch. Hydrophytic spp.including sensitive fern (Onoclea sensibilis) FACW were observed within the offsite wetland.

Wetland Watercourse Hydrology:
The pond is fed from an intermittent watercourse that originates off site to the northeast and enters the northern edge of the pond. Additional recharge is provided by subsoil runoff at depth within the pond. Field underdrains from the pastures to the east and south of the pond also contribute flow to the pond. Excess pond water flows over a weir and enters a well defined intermittent watercourse that follows a linear route to the west and off site. The channel cuts through mainly upland soils. Wetlands are present as small pockets along the route of the intermittent watercourse. Flow within the watercourse may cease during the summer months of the growing season.

The small wetland in the field in the southeastern corner of the site has a water table near the surface from fall into spring. The water table descends several feet during the summer months of the growing season.

Soils:
Soil samples were obtained using a spade and auger. Features noted include color, texture and depth to hydric indicators. Soils were classified according to guidelines established by the USDA NRCS.

The upland soils on site are Paxton fine sandy loam and Woodbridge fine sandy loam. Both soils are deep, and formed in glacial till with a firm substratum. The depth to the water table usually exceeds 6 feet below grade in Paxton loam and may perch at 20 inches below grade during the early spring in Woodbridge loam. The lower subsoil displays mottling in Woodbridge loam. The depth to bedrock usually exceeds 5 feet below grade for both loams.

The hydric soil on site is Ridgebury fine sandy loam. This soil is deep, poorly drained and has a firm substratum. The subsoil is mottled and the water table is close to the surface from fall into early spring. The depth to bedrock usually exceeds 5 feet below grade.

The dredged material from the pond dredging was placed and smoothed around the perimeter of the pond.

Vegetation:
The property is maintained as open fields with mature trees. Light woods are located in the northern portion of the site. The mature trees within upland buffers include white oak (Quercus alba) FACU, red oak (Quercus rubra) FACU, shagbark hickory (Carya ovata) FACU, white ash (Fraxinus americana FACU, sweet birch (Betula lenta) FACU, weeping willow (Salix

babylonica FACW, red maple (Acer rubrum) FAC, white pine (Pinus strobus FACU.

The wetland area in the southeastern field is planted with red stem dogwood (Cornus sericea) FACW.

The wetland edge of the pond supports purple loosestrife (Lythrum salicaria) OBL, highbush blueberry (Vaccinium corymbosum) FACW, sensitive fern (Onoclea sensibilis) FACW, and jewelweed (Impatiens capensis) FACW.

The wetland pockets located sporadically along the edge of the intermittent watercourse support the occasional highbush blueberry, jewelweed, sensitive fern, and lurid sedge (Carex lurida) OBL, fox tail sedge (Carex alopecoidea) FACW and goldenrod (Solidago canadensis) FACW.

Fauna:
The proximity to large spans of forested open space would suggest large mammals including white tail deer, and coyote. Small mammals include gray squirrel, raccoon, skunk, gray fox, woodpeckers, woodcock.

The shrub areas and open meadows support avian species including song birds, birds of prey, wild turkey, and meadow vole, cottontail and red fox.

The pond would likely support amphibians and reptiles as well as invertebrates, and waterfowl.

Wetland/Watercourse and Buffer Functions:
The wetland and buffer provide the following hydrologic functions:

-recharge to the underlying fractured bedrock aquifer from the pond and watercourse as well as wetland pocket during the non growing season, limited recharge to the stream from the aquifer during the growing season.

-the pond and wetland provide storage of excess surface runoff and the intermittent stream provides velocity attenuation and both mechanical and biological filtering and pretreatment of surface runoff.

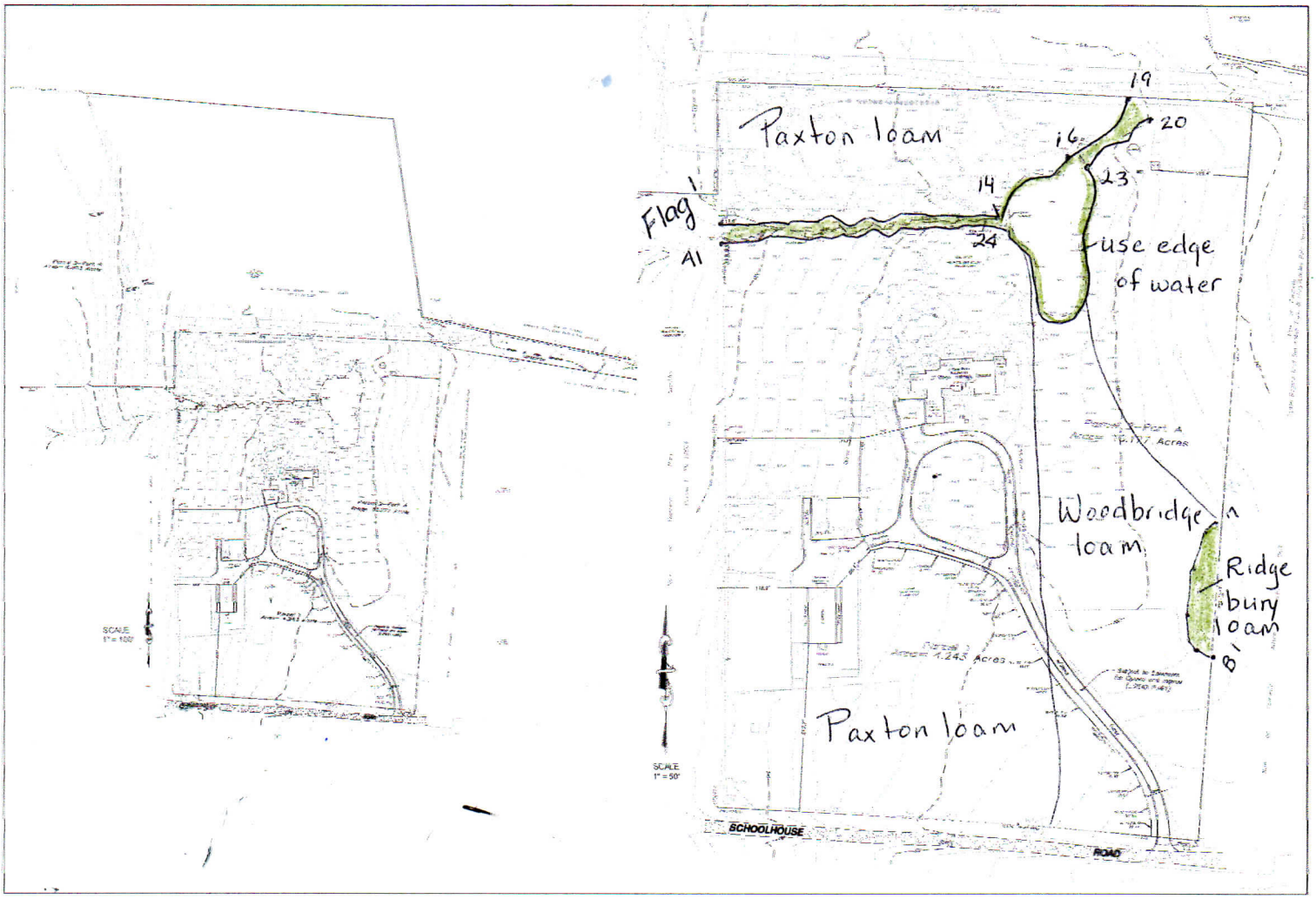
-the major function of the upland buffer along with the pond, stream and wetland pocket is wildlife habitat. The mix of surface water features with light woods and open meadow provides the habitat for diverse flora and fauna.

Sincerely,

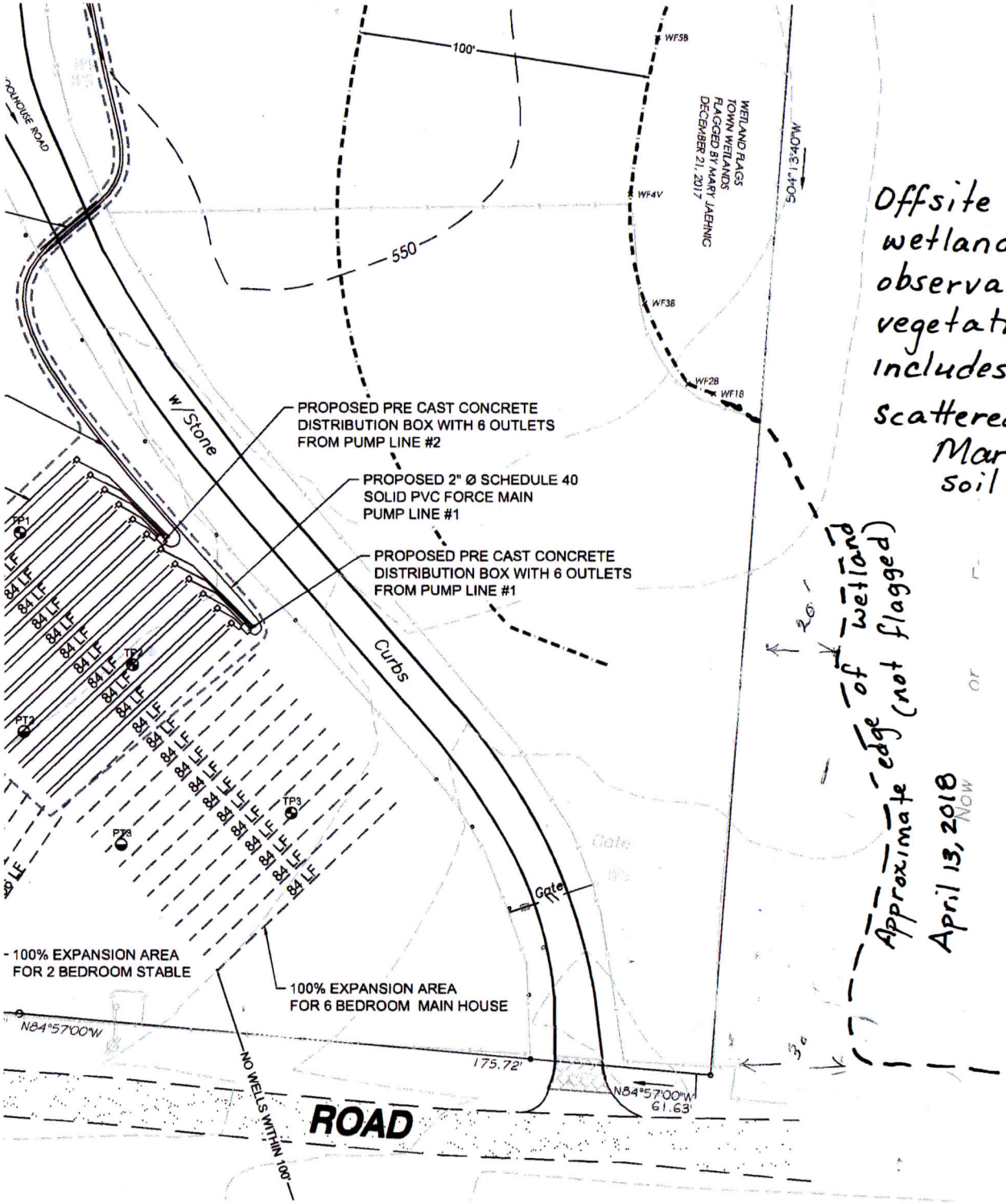
Mary Jaehnig

Mary Jaehnig
soil scientist

**17 FAIRVIEW AVE.** **RIDGEFIELD, CT 06877** **TEL. (203) 431-8113**
**MaryJaehnigSoils@gmail.com**

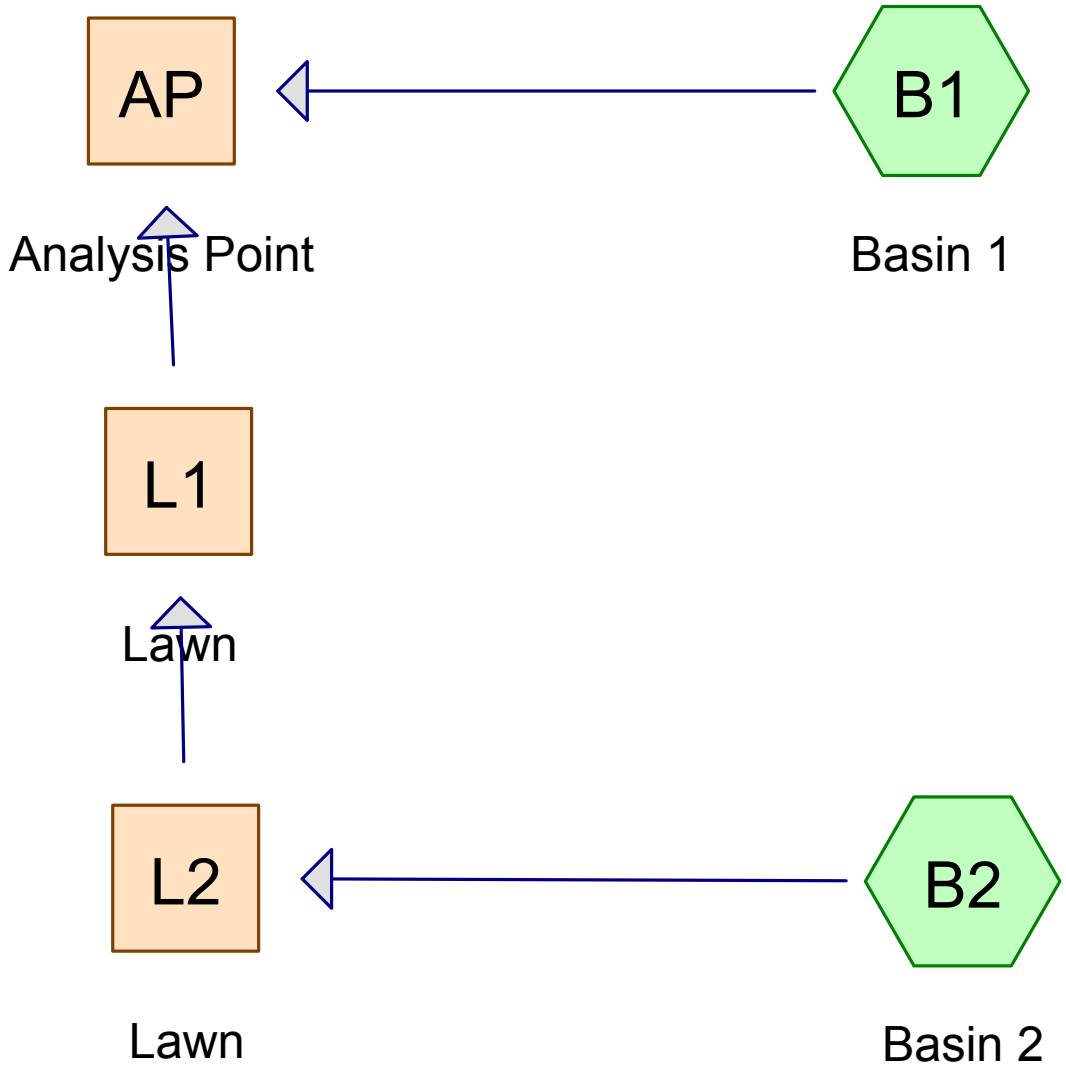


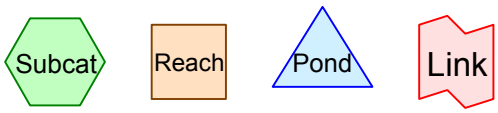

5 Schoolhouse Road
Delineated Dec. 21, 2017
Mary Jaehnig, soil sci.
203 431 8113




Offsite extension of wetland based on observation of vegetation. Wetland includes sensitive fern, scattered –
Mary Jaehnig
soil scientist

# APPENDIX – J




**Routing Diagram for GROFF PRE-DEVELOPED4**
Prepared by Microsoft, Printed 5/19/2018
HydroCAD® 10.00-20 s/n 02530 © 2017 HydroCAD Software Solutions LLC

## Area Listing (all nodes)

| Area (acres) | CN | Description (subcatchment-numbers) |
|---|---|---|
| 0.080 | 98 | (B2) |
| 4.370 | 74 | >75% Grass cover, Good, HSG C (B1, B2) |
| 0.580 | 96 | Gravel surface, HSG C (B1, B2) |
| 0.280 | 98 | Impervious surfaces (B1) |
| 6.650 | 79 | Pasture/grassland/range, Fair, HSG C (B1) |
| 0.710 | 80 | Wetlands Area (B1) |
| 1.750 | 76 | Woods/grass comb., Fair, HSG C (B1) |
| **14.420** | **78** | **TOTAL AREA** |

## Soil Listing (all nodes)

| Area (acres) | Soil Group | Subcatchment Numbers |
|---|---|---|
| 0.000 | HSG A | |
| 0.000 | HSG B | |
| 13.350 | HSG C | B1, B2 |
| 0.000 | HSG D | |
| 1.070 | Other | B1, B2 |
| **14.420** | | **TOTAL AREA** |

## Ground Covers (all nodes)

| HSG-A (acres) | HSG-B (acres) | HSG-C (acres) | HSG-D (acres) | Other (acres) | Total (acres) | Ground Cover | Subcatchment Numbers |
|---|---|---|---|---|---|---|---|
| 0.000 | 0.000 | 0.000 | 0.000 | 0.080 | 0.080 | | B2 |
| 0.000 | 0.000 | 4.370 | 0.000 | 0.000 | 4.370 | >75% Grass cover, Good | B1, B2 |
| 0.000 | 0.000 | 0.580 | 0.000 | 0.000 | 0.580 | Gravel surface | B1, B2 |
| 0.000 | 0.000 | 0.000 | 0.000 | 0.280 | 0.280 | Impervious surfaces | B1 |
| 0.000 | 0.000 | 6.650 | 0.000 | 0.000 | 6.650 | Pasture/grassland/range, Fair | B1 |
| 0.000 | 0.000 | 0.000 | 0.000 | 0.710 | 0.710 | Wetlands Area | B1 |
| 0.000 | 0.000 | 1.750 | 0.000 | 0.000 | 1.750 | Woods/grass comb., Fair | B1 |
| **0.000** | **0.000** | **13.350** | **0.000** | **1.070** | **14.420** | **TOTAL AREA** | |

## Pipe Listing (all nodes)

| Line# | Node Number | In-Invert (feet) | Out-Invert (feet) | Length (feet) | Slope (ft/ft) | n | Diam/Width (inches) | Height (inches) | Inside-Fill (inches) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | B2 | 0.00 | 0.00 | 160.0 | 0.0500 | 0.010 | 6.0 | 0.0 | 0.0 |

Time span=5.00-36.00 hrs, dt=0.05 hrs, 621 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment B1: Basin 1** Runoff Area=13.080 ac 2.14% Impervious Runoff Depth=1.12"
Flow Length=980' Tc=14.2 min CN=79 Runoff=12.77 cfs 1.216 af

**Subcatchment B2: Basin 2** Runoff Area=1.340 ac 5.97% Impervious Runoff Depth=0.95"
Flow Length=660' Tc=11.8 min CN=76 Runoff=1.14 cfs 0.106 af

**Reach AP: Analysis Point** Inflow=13.63 cfs 1.322 af
Outflow=13.63 cfs 1.322 af

**Reach L1: Lawn** Avg. Flow Depth=0.20' Max Vel=1.79 fps Inflow=1.14 cfs 0.106 af
n=0.025 L=375.0' S=0.0133 '/' Capacity=34.33 cfs Outflow=1.07 cfs 0.106 af

**Reach L2: Lawn** Avg. Flow Depth=0.21' Max Vel=2.99 fps Inflow=1.14 cfs 0.106 af
n=0.030 L=80.0' S=0.0500 '/' Capacity=16.81 cfs Outflow=1.14 cfs 0.106 af

**Total Runoff Area = 14.420 ac Runoff Volume = 1.322 af Average Runoff Depth = 1.10"**
**97.50% Pervious = 14.060 ac 2.50% Impervious = 0.360 ac**

## Summary for Subcatchment B1: Basin 1

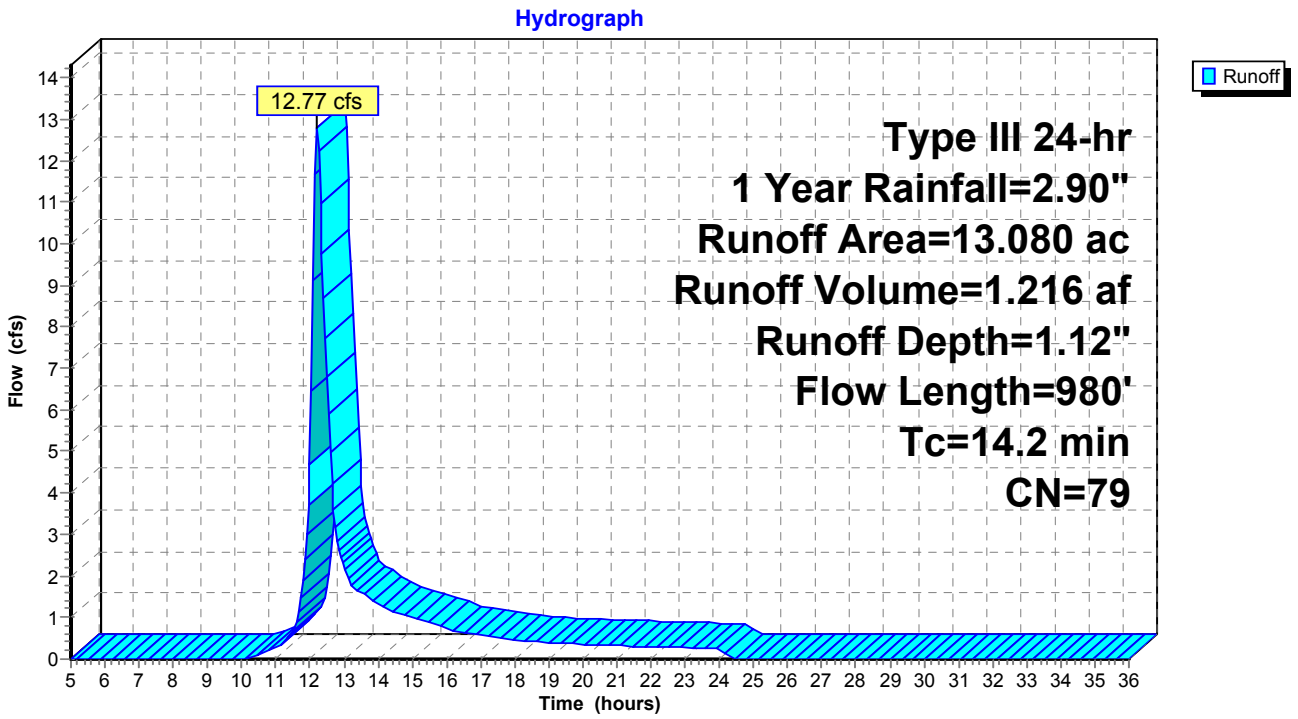
Runoff = 12.77 cfs @ 12.21 hrs, Volume= 1.216 af, Depth= 1.12"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 1 Year Rainfall=2.90"

| | Area (ac) | CN | Description |
|---|---|---|---|
| | 0.520 | 96 | Gravel surface, HSG C |
| * | 0.280 | 98 | Impervious surfaces |
| | 1.750 | 76 | Woods/grass comb., Fair, HSG C |
| * | 0.710 | 80 | Wetlands Area |
| | 6.650 | 79 | Pasture/grassland/range, Fair, HSG C |
| | 3.170 | 74 | >75% Grass cover, Good, HSG C |
| | 13.080 | 79 | Weighted Average |
| | 12.800 | | 97.86% Pervious Area |
| | 0.280 | | 2.14% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 9.4 | 100 | 0.0200 | 0.18 | | **Sheet Flow,**<br>Grass: Short n= 0.150 P2= 3.50" |
| 4.4 | 520 | 0.0150 | 1.97 | | **Shallow Concentrated Flow,**<br>Unpaved Kv= 16.1 fps |
| 0.4 | 360 | 0.0440 | 13.78 | 146.97 | **Parabolic Channel,**<br>W=8.00' D=2.00' Area=10.7 sf Perim=9.2'<br>n= 0.025 Earth, clean & winding |
| 14.2 | 980 | Total | | | |

## Subcatchment B1: Basin 1



## Summary for Subcatchment B2: Basin 2

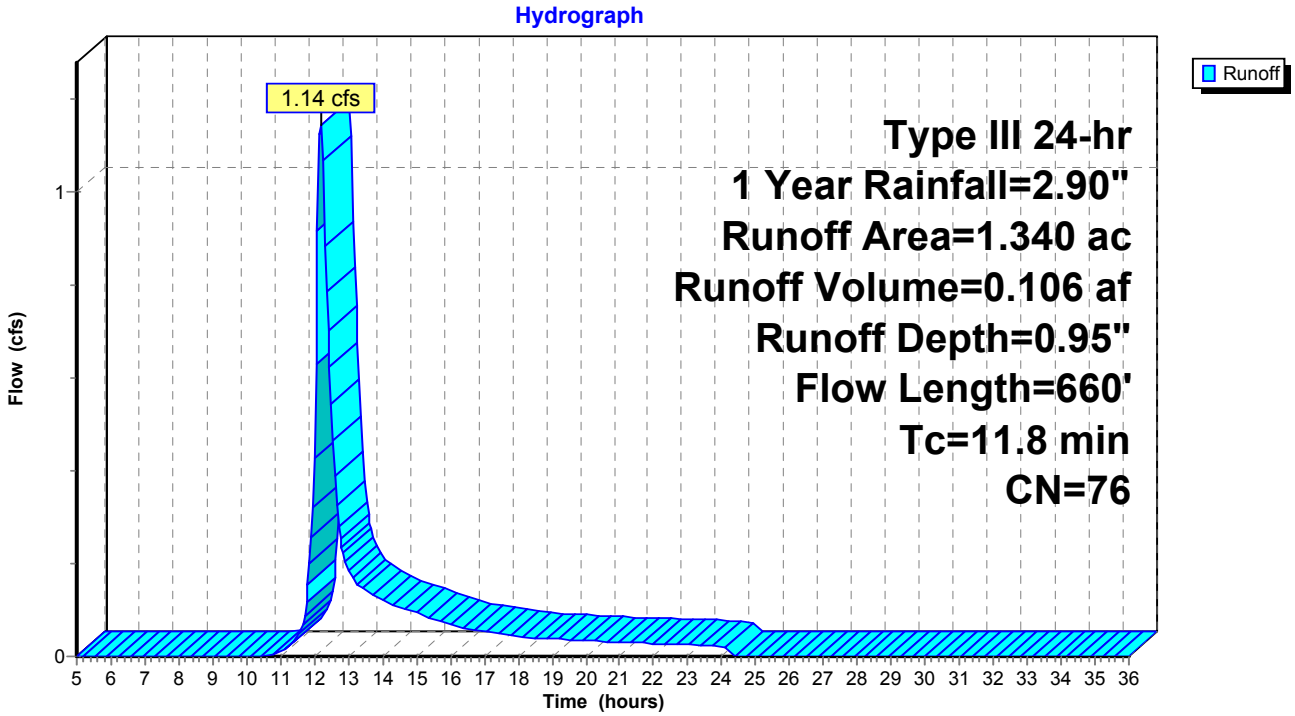
Runoff = 1.14 cfs @ 12.18 hrs, Volume= 0.106 af, Depth= 0.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 1 Year Rainfall=2.90"

| | Area (ac) | CN | Description |
|---|---|---|---|
| | 0.060 | 96 | Gravel surface, HSG C |
| | 1.200 | 74 | >75% Grass cover, Good, HSG C |
| * | 0.080 | 98 | |
| | 1.340 | 76 | Weighted Average |
| | 1.260 | | 94.03% Pervious Area |
| | 0.080 | | 5.97% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 9.4 | 100 | 0.0200 | 0.18 | | **Sheet Flow,** Grass: Short n= 0.150 P2= 3.50" |
| 2.1 | 400 | 0.0400 | 3.22 | | **Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps |
| 0.3 | 160 | 0.0500 | 8.31 | 1.63 | **Pipe Channel,** 6.0" Round Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.010 |
| 11.8 | 660 | Total | | | |

## Subcatchment B2: Basin 2

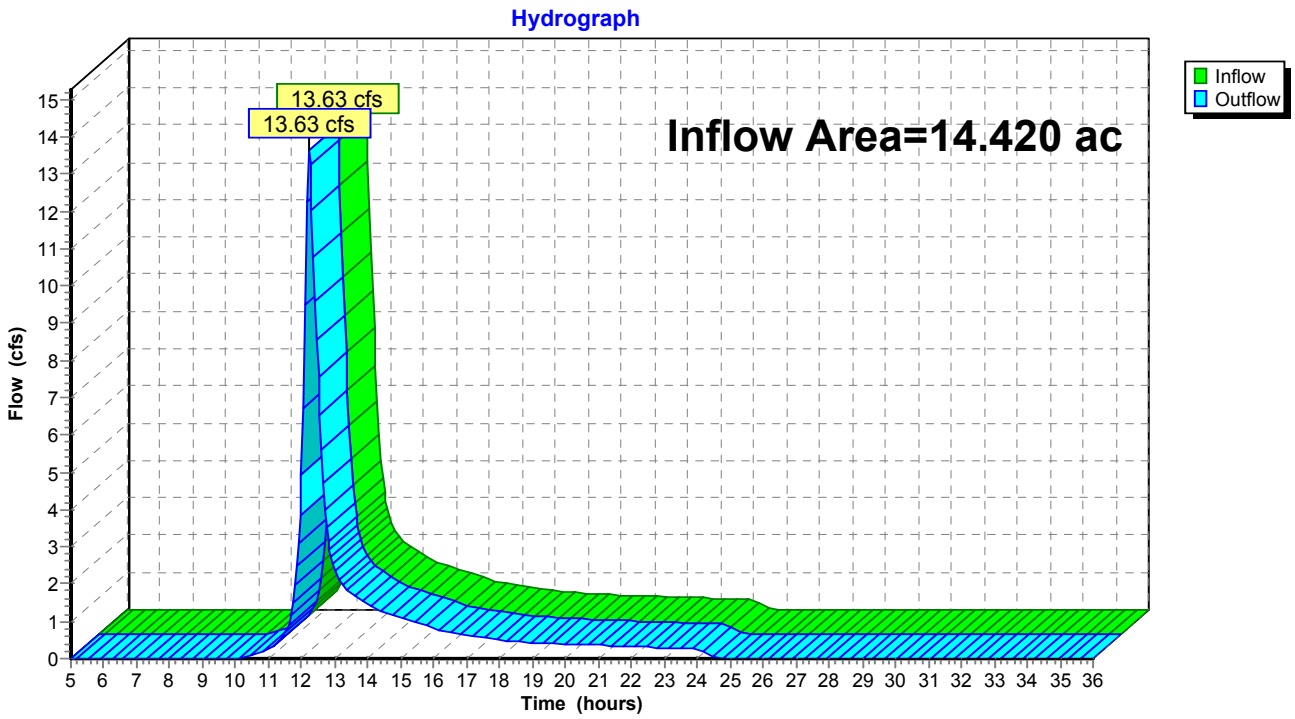


## Summary for Reach AP: Analysis Point

Inflow Area = 14.420 ac, 2.50% Impervious, Inflow Depth = 1.10" for 1 Year event
Inflow = 13.63 cfs @ 12.22 hrs, Volume= 1.322 af
Outflow = 13.63 cfs @ 12.22 hrs, Volume= 1.322 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs

## Reach AP: Analysis Point



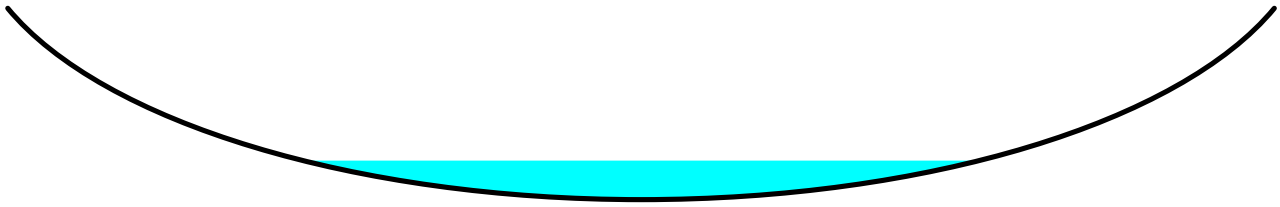
## Summary for Reach L1: Lawn

Inflow Area = 1.340 ac, 5.97% Impervious, Inflow Depth = 0.95" for 1 Year event
Inflow = 1.14 cfs @ 12.19 hrs, Volume= 0.106 af
Outflow = 1.07 cfs @ 12.30 hrs, Volume= 0.106 af, Atten= 6%, Lag= 6.4 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 1.79 fps, Min. Travel Time= 3.5 min
Avg. Velocity = 0.67 fps, Avg. Travel Time= 9.3 min

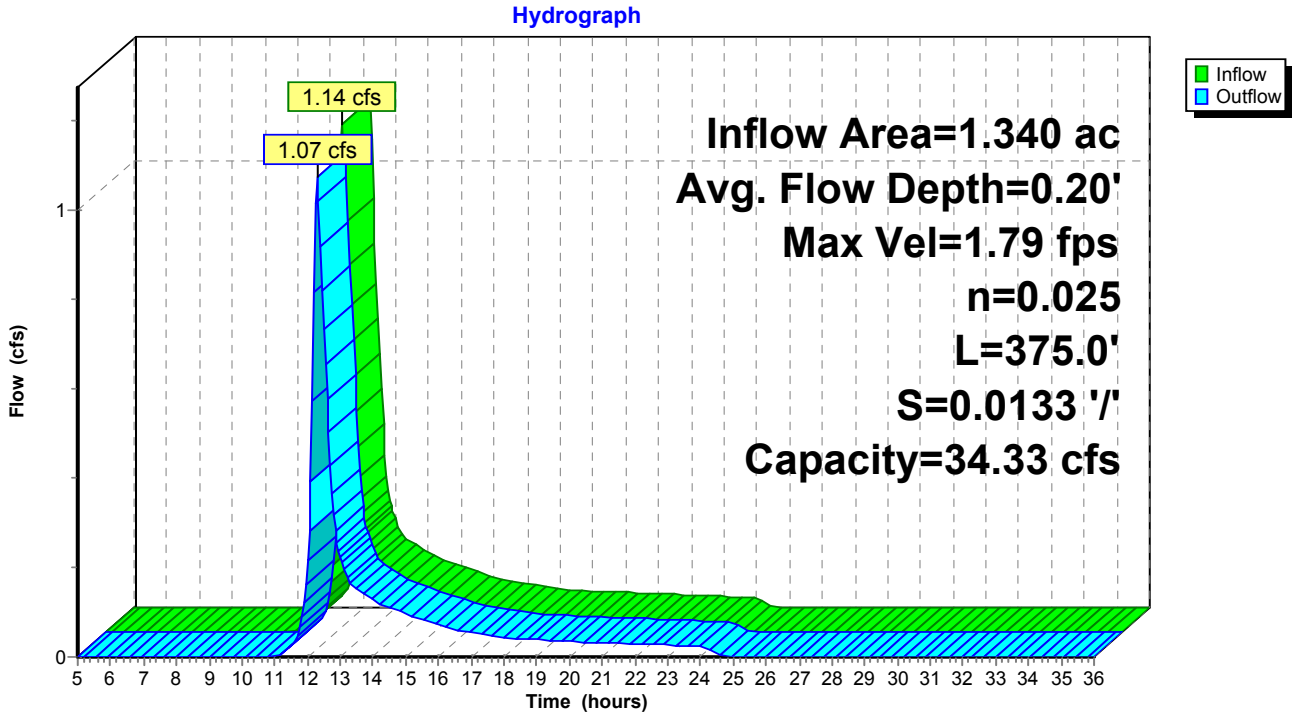
Peak Storage= 226 cf @ 12.24 hrs
Average Depth at Peak Storage= 0.20'
Bank-Full Depth= 1.00' Flow Area= 6.7 sf, Capacity= 34.33 cfs

10.00' x 1.00' deep Parabolic Channel, n= 0.025
Length= 375.0' Slope= 0.0133 '/'
Inlet Invert= 531.00', Outlet Invert= 526.00'



‡

### Reach L1: Lawn



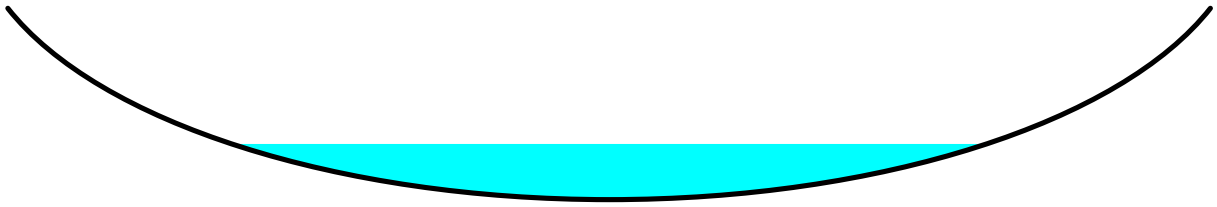
## Summary for Reach L2: Lawn

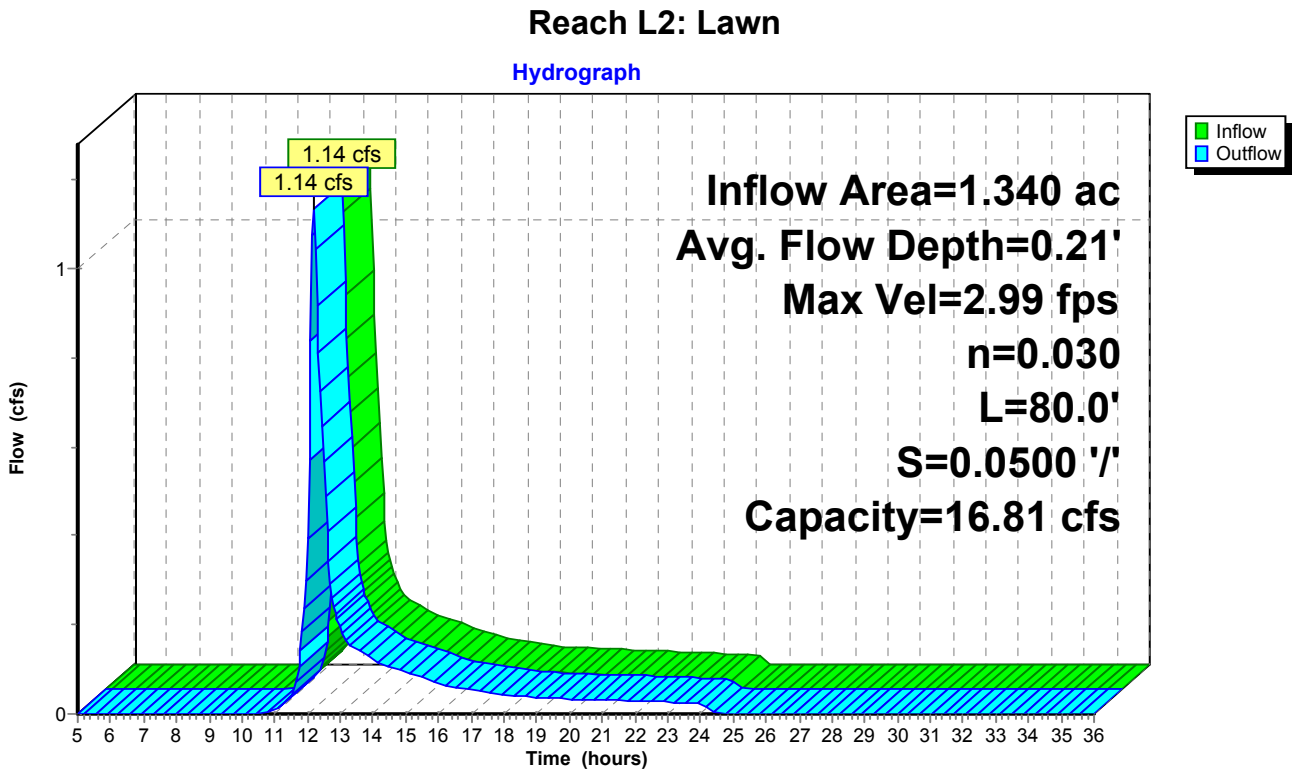
Inflow Area = 1.340 ac, 5.97% Impervious, Inflow Depth = 0.95" for 1 Year event
Inflow = 1.14 cfs @ 12.18 hrs, Volume= 0.106 af
Outflow = 1.14 cfs @ 12.19 hrs, Volume= 0.106 af, Atten= 1%, Lag= 1.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 2.99 fps, Min. Travel Time= 0.4 min
Avg. Velocity = 1.19 fps, Avg. Travel Time= 1.1 min

Peak Storage= 31 cf @ 12.18 hrs
Average Depth at Peak Storage= 0.21'
Bank-Full Depth= 0.75' Flow Area= 2.5 sf, Capacity= 16.81 cfs

5.00' x 0.75' deep Parabolic Channel, n= 0.030
Length= 80.0' Slope= 0.0500 '/'
Inlet Invert= 535.00', Outlet Invert= 531.00'





Time span=5.00-36.00 hrs, dt=0.05 hrs, 621 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment B1: Basin 1** Runoff Area=13.080 ac 2.14% Impervious Runoff Depth=2.80"
Flow Length=980' Tc=14.2 min CN=79 Runoff=33.01 cfs 3.054 af

**Subcatchment B2: Basin 2** Runoff Area=1.340 ac 5.97% Impervious Runoff Depth=2.54"
Flow Length=660' Tc=11.8 min CN=76 Runoff=3.26 cfs 0.283 af

**Reach AP: Analysis Point** Inflow=35.88 cfs 3.337 af
Outflow=35.88 cfs 3.337 af

**Reach L1: Lawn** Avg. Flow Depth=0.33' Max Vel=2.48 fps Inflow=3.21 cfs 0.283 af
n=0.025 L=375.0' S=0.0133 '/' Capacity=34.33 cfs Outflow=3.12 cfs 0.283 af

**Reach L2: Lawn** Avg. Flow Depth=0.35' Max Vel=4.09 fps Inflow=3.26 cfs 0.283 af
n=0.030 L=80.0' S=0.0500 '/' Capacity=16.81 cfs Outflow=3.21 cfs 0.283 af

**Total Runoff Area = 14.420 ac Runoff Volume = 3.337 af Average Runoff Depth = 2.78"**
**97.50% Pervious = 14.060 ac 2.50% Impervious = 0.360 ac**

## Summary for Subcatchment B1: Basin 1

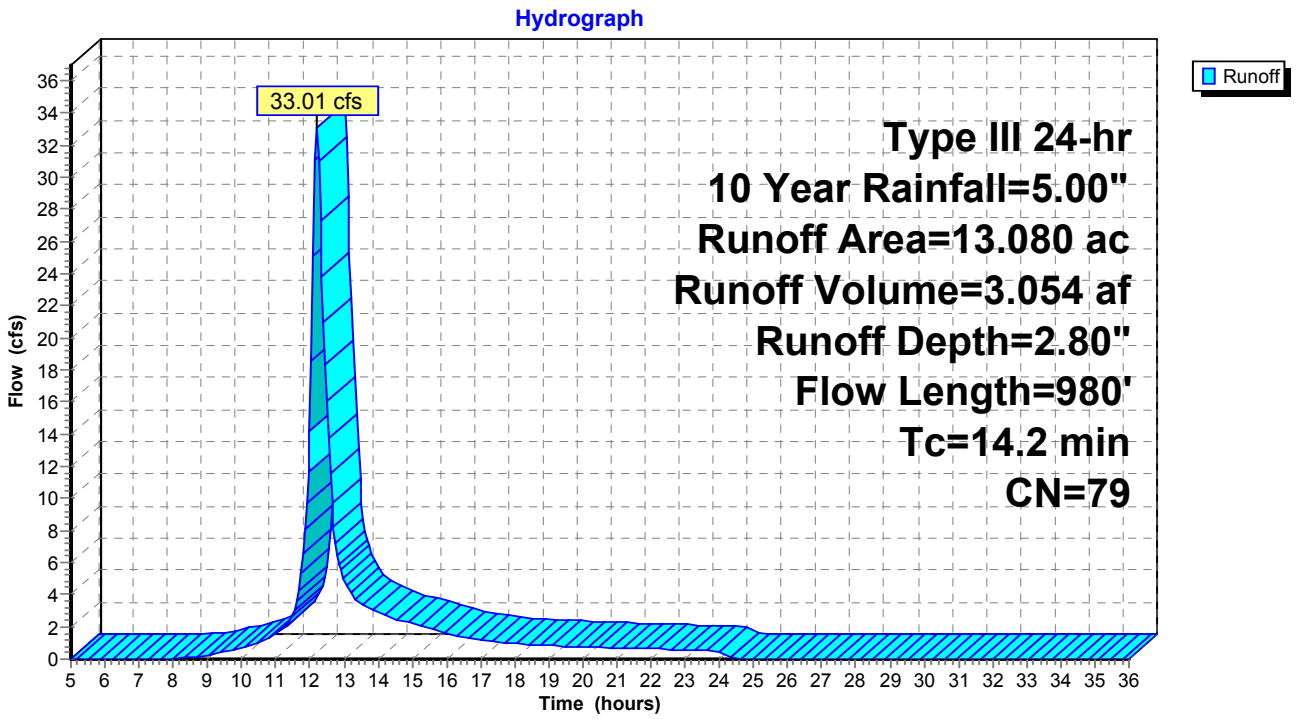
Runoff = 33.01 cfs @ 12.20 hrs, Volume= 3.054 af, Depth= 2.80"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 Year Rainfall=5.00"

| | Area (ac) | CN | Description |
|---|---|---|---|
| | 0.520 | 96 | Gravel surface, HSG C |
| * | 0.280 | 98 | Impervious surfaces |
| | 1.750 | 76 | Woods/grass comb., Fair, HSG C |
| * | 0.710 | 80 | Wetlands Area |
| | 6.650 | 79 | Pasture/grassland/range, Fair, HSG C |
| | 3.170 | 74 | >75% Grass cover, Good, HSG C |
| | 13.080 | 79 | Weighted Average |
| | 12.800 | | 97.86% Pervious Area |
| | 0.280 | | 2.14% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 9.4 | 100 | 0.0200 | 0.18 | | **Sheet Flow,**<br>Grass: Short n= 0.150 P2= 3.50" |
| 4.4 | 520 | 0.0150 | 1.97 | | **Shallow Concentrated Flow,**<br>Unpaved Kv= 16.1 fps |
| 0.4 | 360 | 0.0440 | 13.78 | 146.97 | **Parabolic Channel,**<br>W=8.00' D=2.00' Area=10.7 sf Perim=9.2'<br>n= 0.025 Earth, clean & winding |
| 14.2 | 980 | Total | | | |

## Subcatchment B1: Basin 1



## Summary for Subcatchment B2: Basin 2

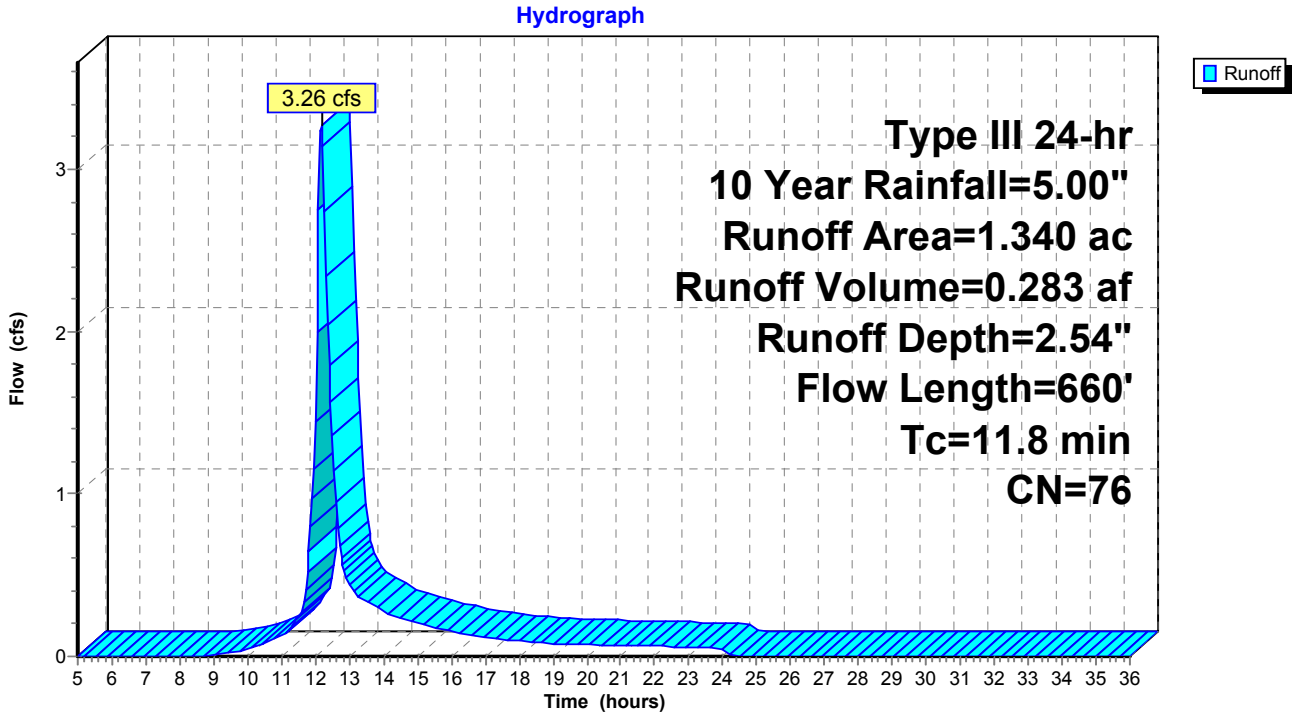
Runoff = 3.26 cfs @ 12.17 hrs, Volume= 0.283 af, Depth= 2.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 Year Rainfall=5.00"

| | Area (ac) | CN | Description |
|---|---|---|---|
| | 0.060 | 96 | Gravel surface, HSG C |
| | 1.200 | 74 | >75% Grass cover, Good, HSG C |
| * | 0.080 | 98 | |
| | 1.340 | 76 | Weighted Average |
| | 1.260 | | 94.03% Pervious Area |
| | 0.080 | | 5.97% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 9.4 | 100 | 0.0200 | 0.18 | | **Sheet Flow,** Grass: Short n= 0.150 P2= 3.50" |
| 2.1 | 400 | 0.0400 | 3.22 | | **Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps |
| 0.3 | 160 | 0.0500 | 8.31 | 1.63 | **Pipe Channel,** 6.0" Round Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.010 |
| 11.8 | 660 | Total | | | |

## Subcatchment B2: Basin 2

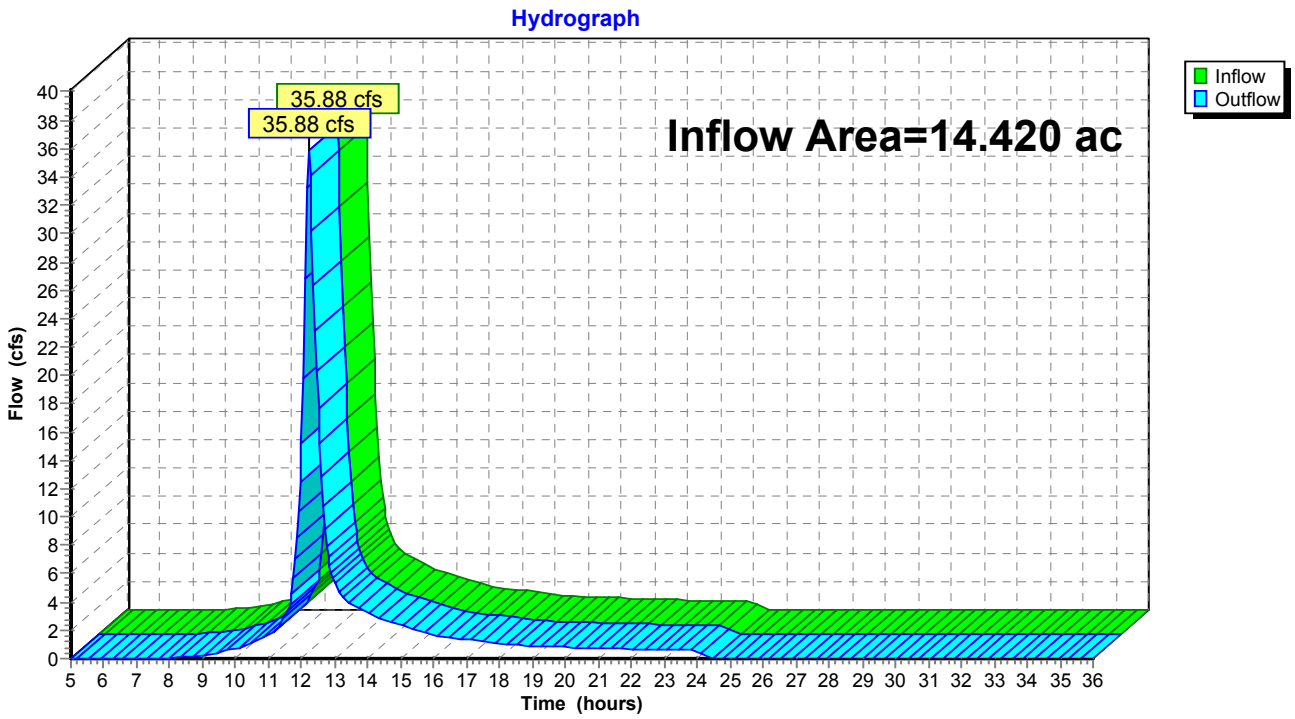


## Summary for Reach AP: Analysis Point

Inflow Area = 14.420 ac, 2.50% Impervious, Inflow Depth = 2.78" for 10 Year event
Inflow = 35.88 cfs @ 12.20 hrs, Volume= 3.337 af
Outflow = 35.88 cfs @ 12.20 hrs, Volume= 3.337 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs

## Reach AP: Analysis Point



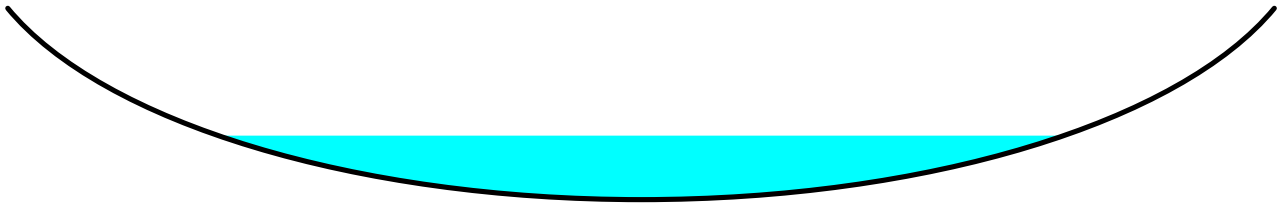
## Summary for Reach L1: Lawn

Inflow Area = 1.340 ac, 5.97% Impervious, Inflow Depth = 2.54" for 10 Year event
Inflow = 3.21 cfs @ 12.18 hrs, Volume= 0.283 af
Outflow = 3.12 cfs @ 12.26 hrs, Volume= 0.283 af, Atten= 3%, Lag= 4.7 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 2.48 fps, Min. Travel Time= 2.5 min
Avg. Velocity = 0.84 fps, Avg. Travel Time= 7.4 min

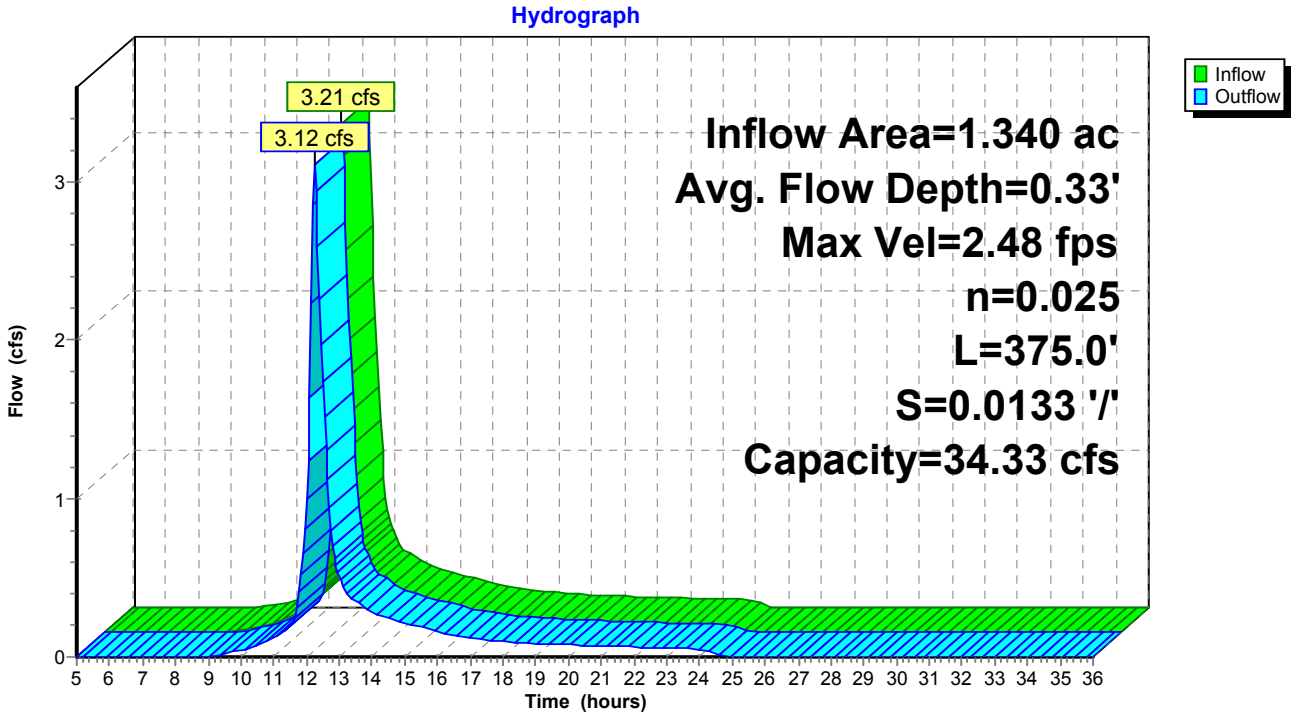
Peak Storage= 474 cf @ 12.21 hrs
Average Depth at Peak Storage= 0.33'
Bank-Full Depth= 1.00' Flow Area= 6.7 sf, Capacity= 34.33 cfs

10.00' x 1.00' deep Parabolic Channel, n= 0.025
Length= 375.0' Slope= 0.0133 '/'
Inlet Invert= 531.00', Outlet Invert= 526.00'



‡

### Reach L1: Lawn



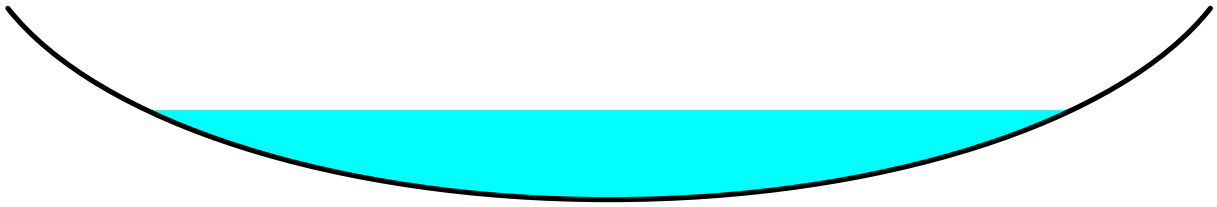
## Summary for Reach L2: Lawn

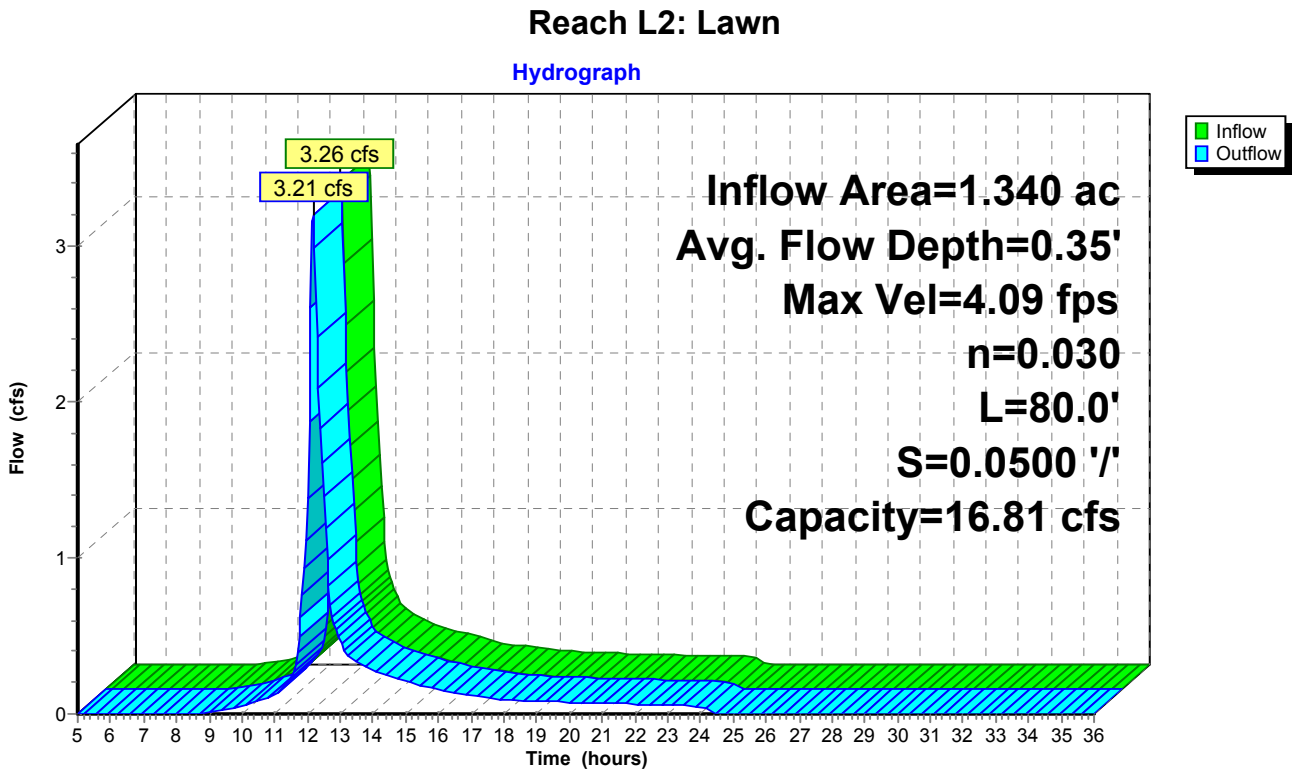
Inflow Area = 1.340 ac, 5.97% Impervious, Inflow Depth = 2.54" for 10 Year event
Inflow = 3.26 cfs @ 12.17 hrs, Volume= 0.283 af
Outflow = 3.21 cfs @ 12.18 hrs, Volume= 0.283 af, Atten= 2%, Lag= 0.6 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 4.09 fps, Min. Travel Time= 0.3 min
Avg. Velocity = 1.50 fps, Avg. Travel Time= 0.9 min

Peak Storage= 63 cf @ 12.17 hrs
Average Depth at Peak Storage= 0.35'
Bank-Full Depth= 0.75' Flow Area= 2.5 sf, Capacity= 16.81 cfs

5.00' x 0.75' deep Parabolic Channel, n= 0.030
Length= 80.0' Slope= 0.0500 '/'
Inlet Invert= 535.00', Outlet Invert= 531.00'





Time span=5.00-36.00 hrs, dt=0.05 hrs, 621 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment B1: Basin 1** Runoff Area=13.080 ac 2.14% Impervious Runoff Depth=6.45"
Flow Length=980' Tc=14.2 min CN=79 Runoff=74.72 cfs 7.025 af

**Subcatchment B2: Basin 2** Runoff Area=1.340 ac 5.97% Impervious Runoff Depth=6.08"
Flow Length=660' Tc=11.8 min CN=76 Runoff=7.78 cfs 0.678 af

**Reach AP: Analysis Point** Inflow=81.94 cfs 7.704 af
Outflow=81.94 cfs 7.704 af

**Reach L1: Lawn** Avg. Flow Depth=0.50' Max Vel=3.25 fps Inflow=7.72 cfs 0.678 af
n=0.025 L=375.0' S=0.0133 '/' Capacity=34.33 cfs Outflow=7.42 cfs 0.678 af

**Reach L2: Lawn** Avg. Flow Depth=0.52' Max Vel=5.33 fps Inflow=7.78 cfs 0.678 af
n=0.030 L=80.0' S=0.0500 '/' Capacity=16.81 cfs Outflow=7.72 cfs 0.678 af

**Total Runoff Area = 14.420 ac Runoff Volume = 7.704 af Average Runoff Depth = 6.41"**
**97.50% Pervious = 14.060 ac 2.50% Impervious = 0.360 ac**

## Summary for Subcatchment B1: Basin 1

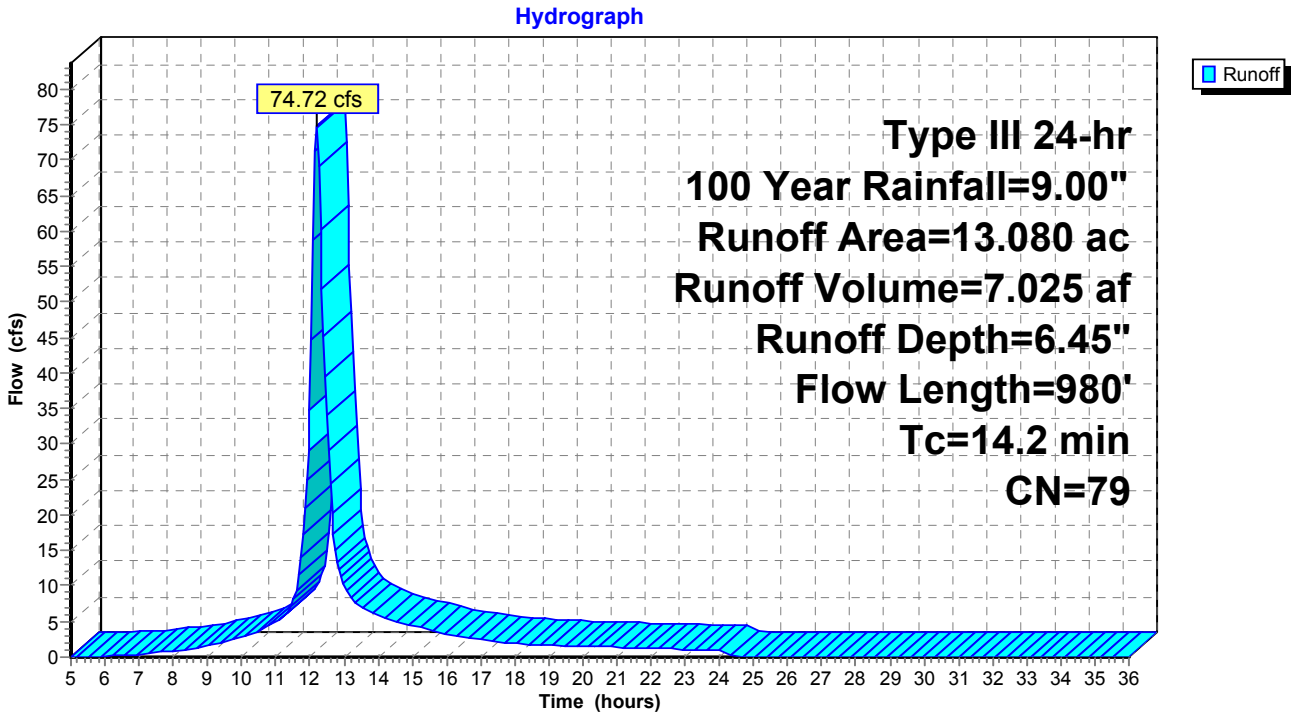
Runoff = 74.72 cfs @ 12.19 hrs, Volume= 7.025 af, Depth= 6.45"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 100 Year Rainfall=9.00"

| | Area (ac) | CN | Description |
|---|---|---|---|
| | 0.520 | 96 | Gravel surface, HSG C |
| * | 0.280 | 98 | Impervious surfaces |
| | 1.750 | 76 | Woods/grass comb., Fair, HSG C |
| * | 0.710 | 80 | Wetlands Area |
| | 6.650 | 79 | Pasture/grassland/range, Fair, HSG C |
| | 3.170 | 74 | >75% Grass cover, Good, HSG C |
| | 13.080 | 79 | Weighted Average |
| | 12.800 | | 97.86% Pervious Area |
| | 0.280 | | 2.14% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 9.4 | 100 | 0.0200 | 0.18 | | **Sheet Flow,**<br>Grass: Short n= 0.150 P2= 3.50" |
| 4.4 | 520 | 0.0150 | 1.97 | | **Shallow Concentrated Flow,**<br>Unpaved Kv= 16.1 fps |
| 0.4 | 360 | 0.0440 | 13.78 | 146.97 | **Parabolic Channel,**<br>W=8.00' D=2.00' Area=10.7 sf Perim=9.2'<br>n= 0.025 Earth, clean & winding |
| 14.2 | 980 | Total | | | |

## Subcatchment B1: Basin 1



## Summary for Subcatchment B2: Basin 2

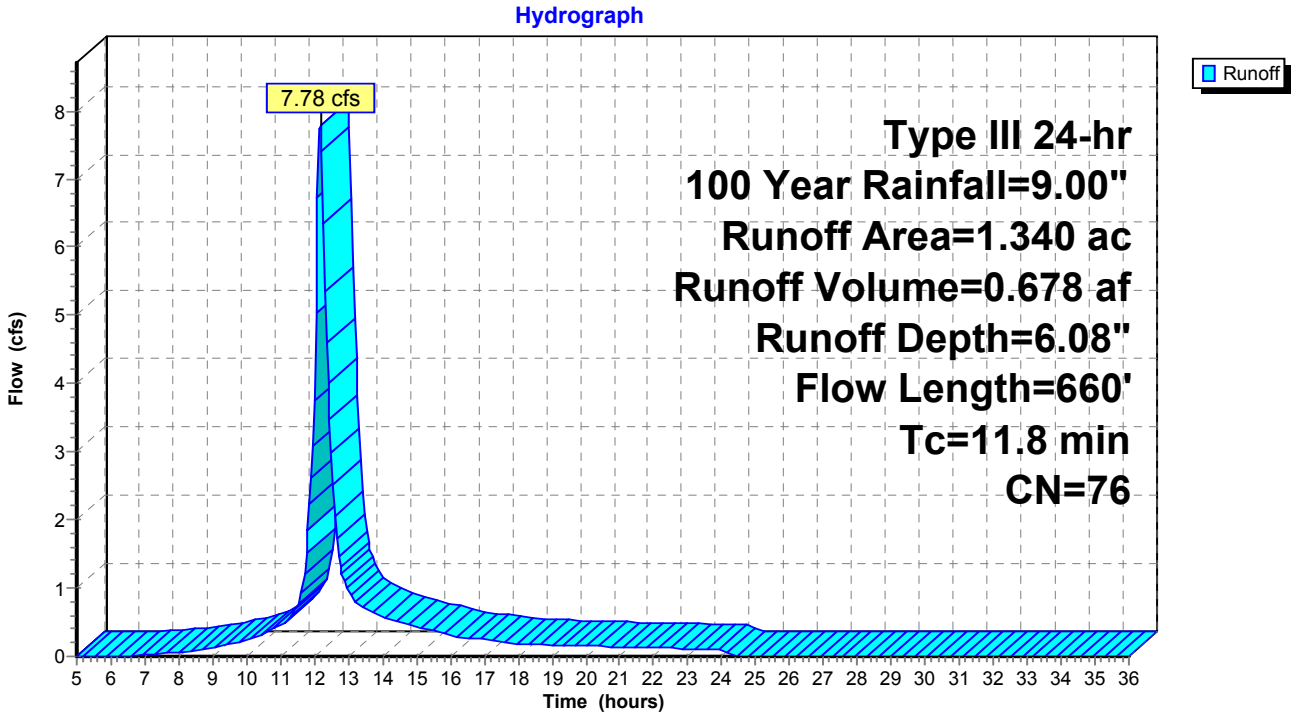
Runoff = 7.78 cfs @ 12.16 hrs, Volume= 0.678 af, Depth= 6.08"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 100 Year Rainfall=9.00"

| | Area (ac) | CN | Description |
|---|---|---|---|
| | 0.060 | 96 | Gravel surface, HSG C |
| | 1.200 | 74 | >75% Grass cover, Good, HSG C |
| * | 0.080 | 98 | |
| | 1.340 | 76 | Weighted Average |
| | 1.260 | | 94.03% Pervious Area |
| | 0.080 | | 5.97% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 9.4 | 100 | 0.0200 | 0.18 | | **Sheet Flow,** Grass: Short n= 0.150 P2= 3.50" |
| 2.1 | 400 | 0.0400 | 3.22 | | **Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps |
| 0.3 | 160 | 0.0500 | 8.31 | 1.63 | **Pipe Channel,** 6.0" Round Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.010 |
| 11.8 | 660 | Total | | | |

## Subcatchment B2: Basin 2

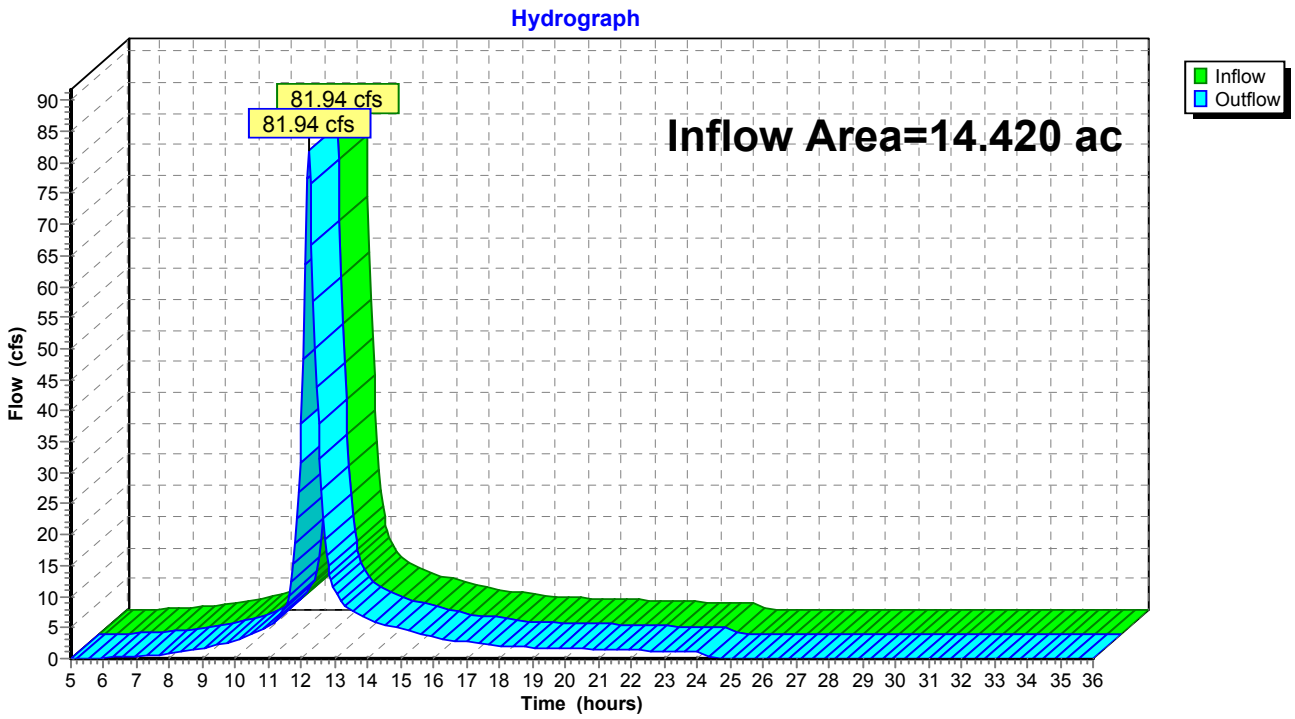


## Summary for Reach AP: Analysis Point

Inflow Area = 14.420 ac, 2.50% Impervious, Inflow Depth = 6.41" for 100 Year event
Inflow = 81.94 cfs @ 12.20 hrs, Volume= 7.704 af
Outflow = 81.94 cfs @ 12.20 hrs, Volume= 7.704 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs

## Reach AP: Analysis Point



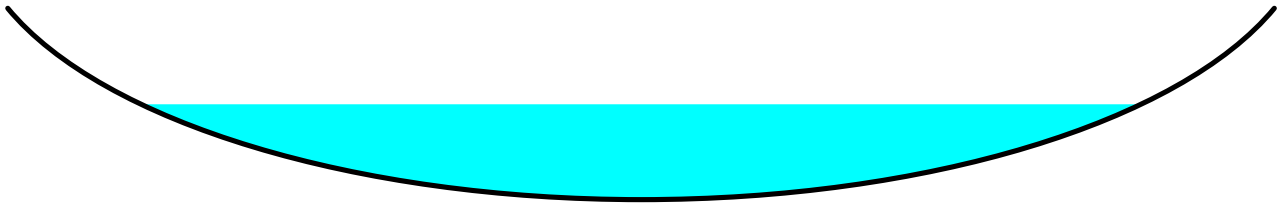
## Summary for Reach L1: Lawn

Inflow Area = 1.340 ac, 5.97% Impervious, Inflow Depth = 6.08" for 100 Year event
Inflow = 7.72 cfs @ 12.17 hrs, Volume= 0.678 af
Outflow = 7.42 cfs @ 12.23 hrs, Volume= 0.678 af, Atten= 4%, Lag= 3.6 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 3.25 fps, Min. Travel Time= 1.9 min
Avg. Velocity = 1.04 fps, Avg. Travel Time= 6.0 min

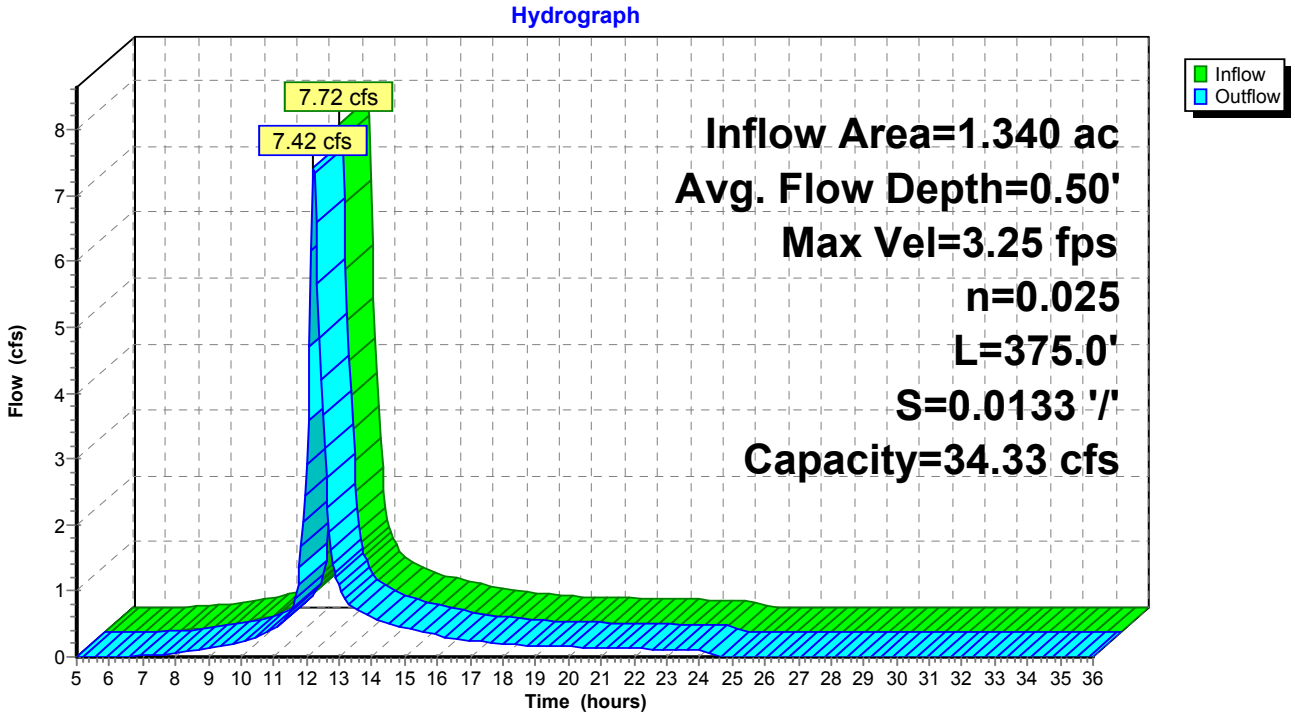
Peak Storage= 873 cf @ 12.20 hrs
Average Depth at Peak Storage= 0.50'
Bank-Full Depth= 1.00' Flow Area= 6.7 sf, Capacity= 34.33 cfs

10.00' x 1.00' deep Parabolic Channel, n= 0.025
Length= 375.0' Slope= 0.0133 '/'
Inlet Invert= 531.00', Outlet Invert= 526.00'



‡

### Reach L1: Lawn



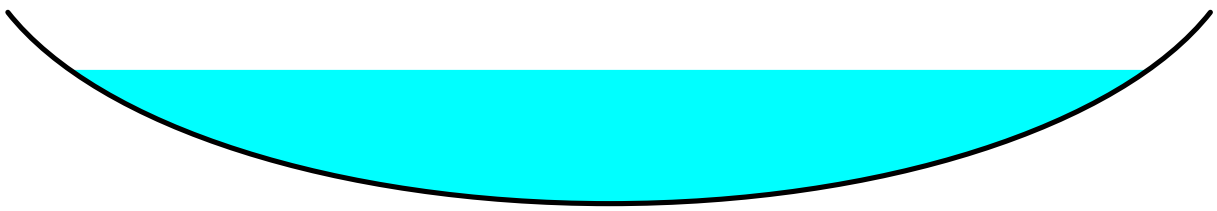
## Summary for Reach L2: Lawn

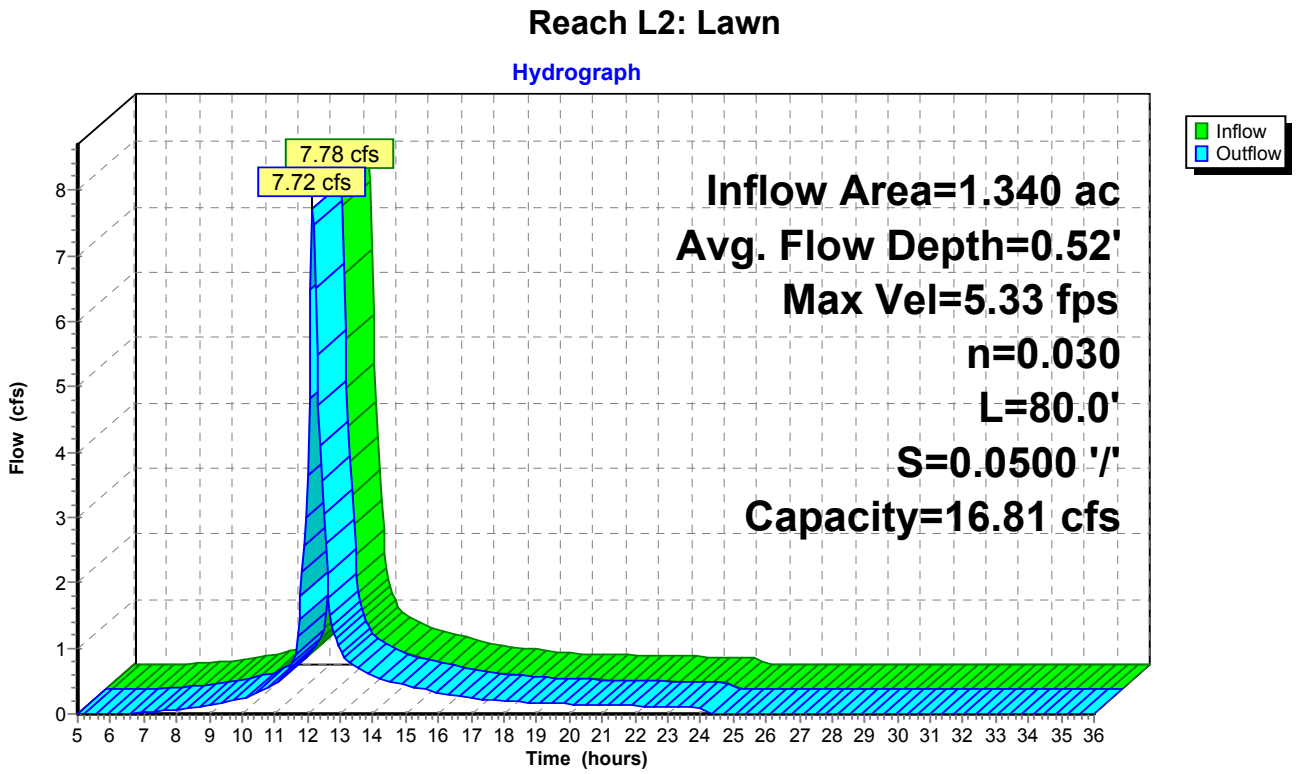
Inflow Area = 1.340 ac, 5.97% Impervious, Inflow Depth = 6.08" for 100 Year event
Inflow = 7.78 cfs @ 12.16 hrs, Volume= 0.678 af
Outflow = 7.72 cfs @ 12.17 hrs, Volume= 0.678 af, Atten= 1%, Lag= 0.4 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 5.33 fps, Min. Travel Time= 0.3 min
Avg. Velocity = 1.83 fps, Avg. Travel Time= 0.7 min

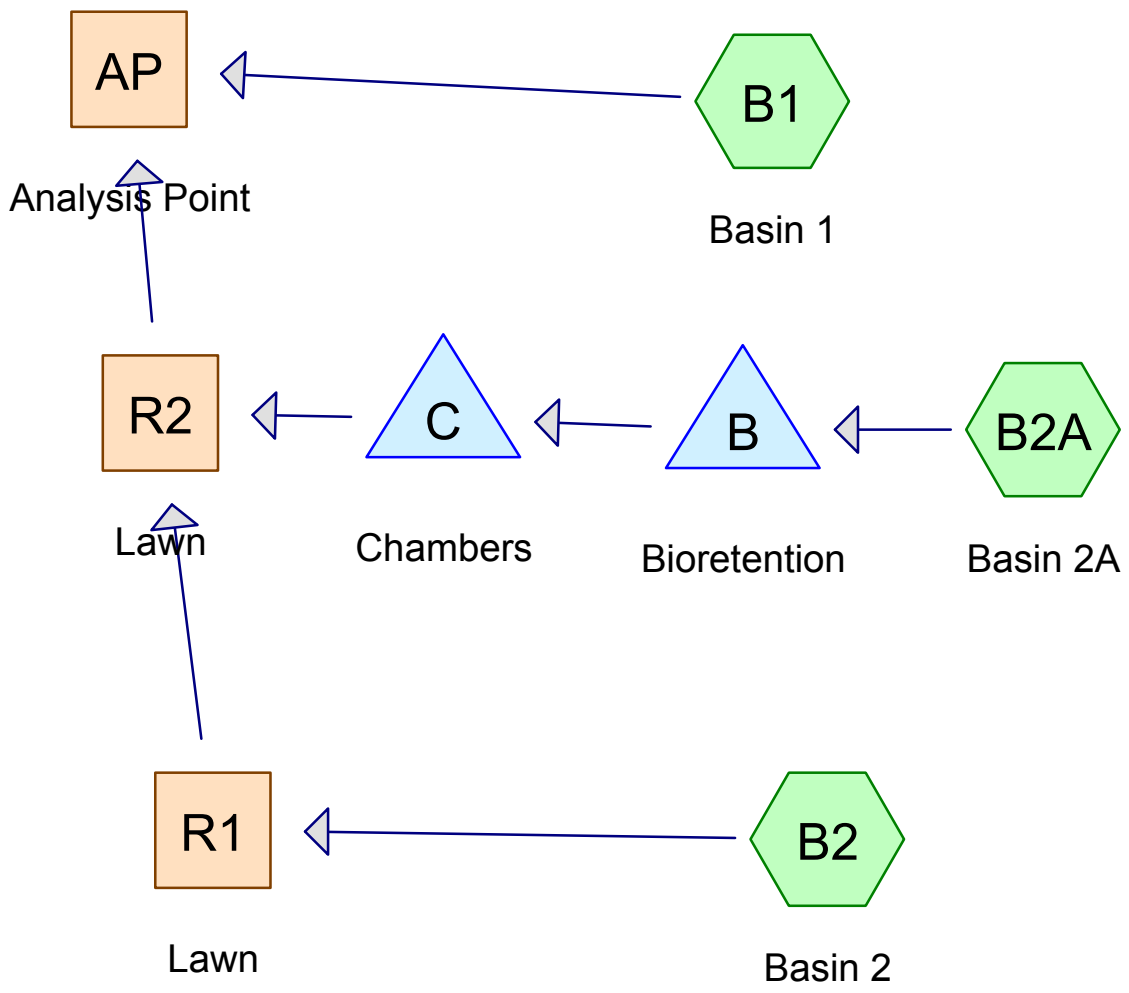
Peak Storage= 116 cf @ 12.17 hrs
Average Depth at Peak Storage= 0.52'
Bank-Full Depth= 0.75' Flow Area= 2.5 sf, Capacity= 16.81 cfs

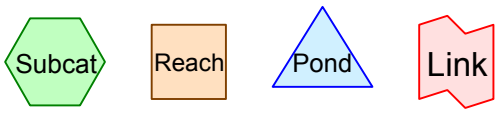
5.00' x 0.75' deep Parabolic Channel, n= 0.030
Length= 80.0' Slope= 0.0500 '/'
Inlet Invert= 535.00', Outlet Invert= 531.00'





# APPENDIX – K




**Routing Diagram for GROFF POST-DEVELOPED5**
Prepared by Microsoft, Printed 12/12/2018
HydroCAD® 10.00-20 s/n 02530 © 2017 HydroCAD Software Solutions LLC

## Area Listing (all nodes)

| Area (acres) | CN | Description (subcatchment-numbers) |
|---|---|---|
| 4.350 | 74 | >75% Grass cover, Good, HSG C (B1, B2, B2A) |
| 0.540 | 96 | Gravel surface, HSG C (B1, B2) |
| 0.080 | 98 | Impervious Surfaces (B2A) |
| 0.340 | 98 | Impervious surfaces (B1) |
| 6.650 | 79 | Pasture/grassland/range, Fair, HSG C (B1) |
| 0.710 | 80 | Wetlands Area (B1) |
| 1.750 | 76 | Woods/grass comb., Fair, HSG C (B1) |
| **14.420** | **78** | **TOTAL AREA** |

## Soil Listing (all nodes)

| Area (acres) | Soil Group | Subcatchment Numbers |
|---|---|---|
| 0.000 | HSG A | |
| 0.000 | HSG B | |
| 13.290 | HSG C | B1, B2, B2A |
| 0.000 | HSG D | |
| 1.130 | Other | B1, B2A |
| **14.420** | | **TOTAL AREA** |

## Ground Covers (all nodes)

| HSG-A (acres) | HSG-B (acres) | HSG-C (acres) | HSG-D (acres) | Other (acres) | Total (acres) | Ground Cover | Subcatchment Numbers |
|---|---|---|---|---|---|---|---|
| 0.000 | 0.000 | 4.350 | 0.000 | 0.000 | 4.350 | >75% Grass cover, Good | B1, B2, B2A |
| 0.000 | 0.000 | 0.540 | 0.000 | 0.000 | 0.540 | Gravel surface | B1, B2 |
| 0.000 | 0.000 | 0.000 | 0.000 | 0.080 | 0.080 | Impervious Surfaces | B2A |
| 0.000 | 0.000 | 0.000 | 0.000 | 0.340 | 0.340 | Impervious surfaces | B1 |
| 0.000 | 0.000 | 6.650 | 0.000 | 0.000 | 6.650 | Pasture/grassland/range, Fair | B1 |
| 0.000 | 0.000 | 0.000 | 0.000 | 0.710 | 0.710 | Wetlands Area | B1 |
| 0.000 | 0.000 | 1.750 | 0.000 | 0.000 | 1.750 | Woods/grass comb., Fair | B1 |
| **0.000** | **0.000** | **13.290** | **0.000** | **1.130** | **14.420** | **TOTAL AREA** | |

## Pipe Listing (all nodes)

| Line# | Node Number | In-Invert (feet) | Out-Invert (feet) | Length (feet) | Slope (ft/ft) | n | Diam/Width (inches) | Height (inches) | Inside-Fill (inches) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | B2 | 0.00 | 0.00 | 160.0 | 0.0500 | 0.010 | 6.0 | 0.0 | 0.0 |
| 2 | B | 533.50 | 532.50 | 34.0 | 0.0294 | 0.012 | 12.0 | 0.0 | 0.0 |
| 3 | C | 531.50 | 531.00 | 70.0 | 0.0071 | 0.012 | 12.0 | 0.0 | 0.0 |

Time span=5.00-36.00 hrs, dt=0.05 hrs, 621 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment B1: Basin 1** Runoff Area=13.010 ac 2.61% Impervious Runoff Depth=1.12"
Flow Length=980' Tc=14.2 min CN=79 Runoff=12.70 cfs 1.210 af

**Subcatchment B2: Basin 2** Runoff Area=1.260 ac 0.00% Impervious Runoff Depth=0.90"
Flow Length=660' Tc=11.8 min CN=75 Runoff=1.00 cfs 0.094 af

**Subcatchment B2A: Basin 2A** Runoff Area=0.150 ac 53.33% Impervious Runoff Depth=1.65"
Flow Length=30' Slope=0.0600 '/' Tc=0.3 min CN=87 Runoff=0.33 cfs 0.021 af

**Reach AP: Analysis Point** Inflow=13.44 cfs 1.319 af
Outflow=13.44 cfs 1.319 af

**Reach R1: Lawn** Avg. Flow Depth=0.20' Max Vel=2.88 fps Inflow=1.00 cfs 0.094 af
n=0.030 L=80.0' S=0.0500 '/' Capacity=16.81 cfs Outflow=1.00 cfs 0.094 af

**Reach R2: Lawn** Avg. Flow Depth=0.19' Max Vel=1.72 fps Inflow=1.00 cfs 0.109 af
n=0.025 L=375.0' S=0.0133 '/' Capacity=34.33 cfs Outflow=0.94 cfs 0.109 af

**Pond B: Bioretention** Peak Elev=537.00' Storage=0 cf Inflow=0.33 cfs 0.021 af
Outflow=0.33 cfs 0.021 af

**Pond C: Chambers** Peak Elev=533.51' Storage=613 cf Inflow=0.33 cfs 0.021 af
Outflow=0.01 cfs 0.015 af

**Total Runoff Area = 14.420 ac Runoff Volume = 1.325 af Average Runoff Depth = 1.10"**
**97.09% Pervious = 14.000 ac 2.91% Impervious = 0.420 ac**

## Summary for Subcatchment B1: Basin 1

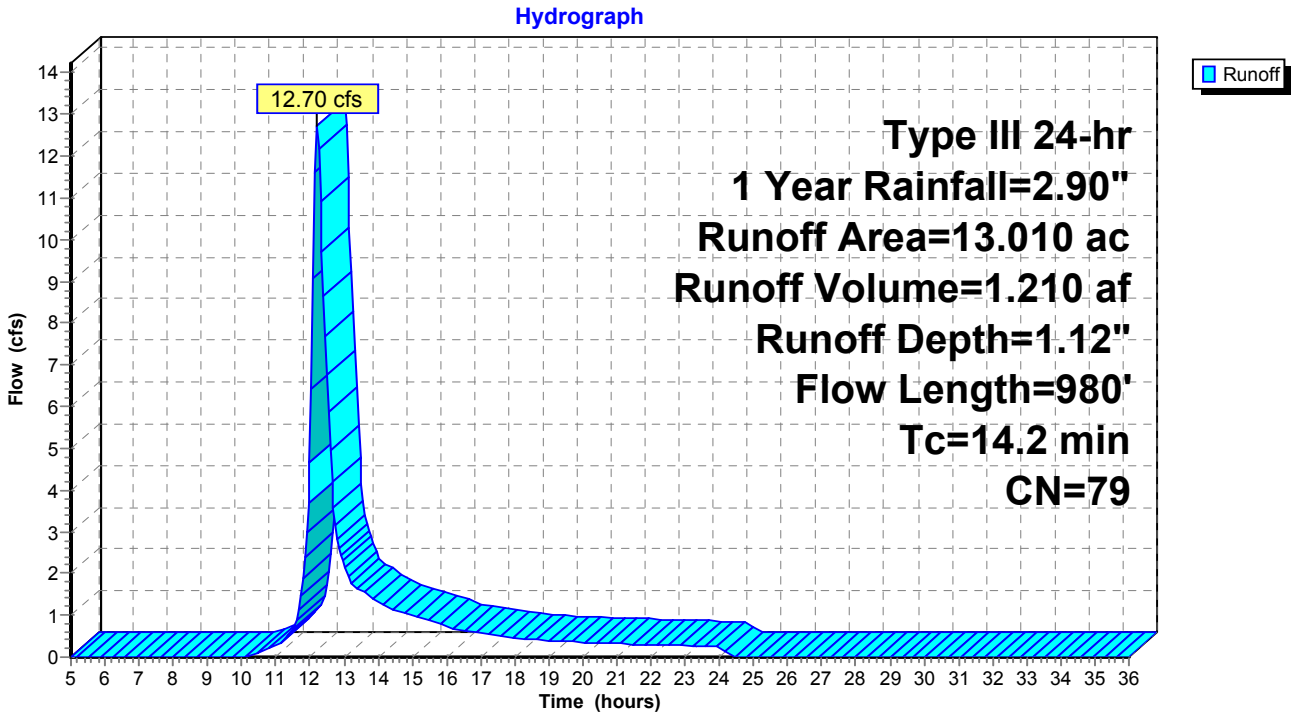
Runoff = 12.70 cfs @ 12.21 hrs, Volume= 1.210 af, Depth= 1.12"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 1 Year Rainfall=2.90"

| | Area (ac) | CN | Description |
|---|---|---|---|
| | 0.480 | 96 | Gravel surface, HSG C |
| * | 0.340 | 98 | Impervious surfaces |
| | 1.750 | 76 | Woods/grass comb., Fair, HSG C |
| * | 0.710 | 80 | Wetlands Area |
| | 6.650 | 79 | Pasture/grassland/range, Fair, HSG C |
| | 3.080 | 74 | >75% Grass cover, Good, HSG C |
| | 13.010 | 79 | Weighted Average |
| | 12.670 | | 97.39% Pervious Area |
| | 0.340 | | 2.61% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 9.4 | 100 | 0.0200 | 0.18 | | **Sheet Flow,** Grass: Short n= 0.150 P2= 3.50" |
| 4.4 | 520 | 0.0150 | 1.97 | | **Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps |
| 0.4 | 360 | 0.0440 | 14.19 | 189.19 | **Parabolic Channel,** W=10.00' D=2.00' Area=13.3 sf Perim=11.0' n= 0.025 Earth, clean & winding |
| 14.2 | 980 | Total | | | |

## Subcatchment B1: Basin 1



## Summary for Subcatchment B2: Basin 2

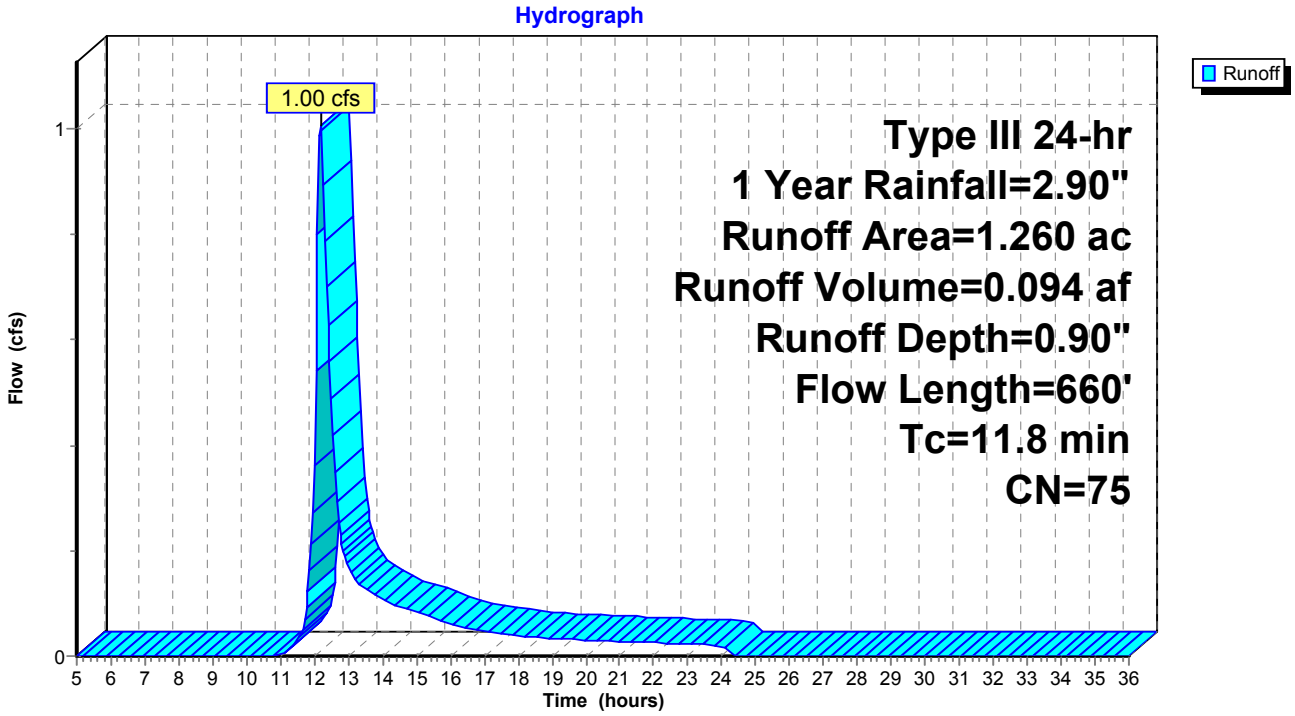
Runoff = 1.00 cfs @ 12.18 hrs, Volume= 0.094 af, Depth= 0.90"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 1 Year Rainfall=2.90"

| Area (ac) | CN | Description |
|---|---|---|
| 0.060 | 96 | Gravel surface, HSG C |
| 1.200 | 74 | >75% Grass cover, Good, HSG C |
| 1.260 | 75 | Weighted Average |
| 1.260 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 9.4 | 100 | 0.0200 | 0.18 | | **Sheet Flow,** Grass: Short n= 0.150 P2= 3.50" |
| 2.1 | 400 | 0.0400 | 3.22 | | **Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps |
| 0.3 | 160 | 0.0500 | 8.31 | 1.63 | **Pipe Channel,** 6.0" Round Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.010 |
| 11.8 | 660 | Total | | | |

## Subcatchment B2: Basin 2



## Summary for Subcatchment B2A: Basin 2A

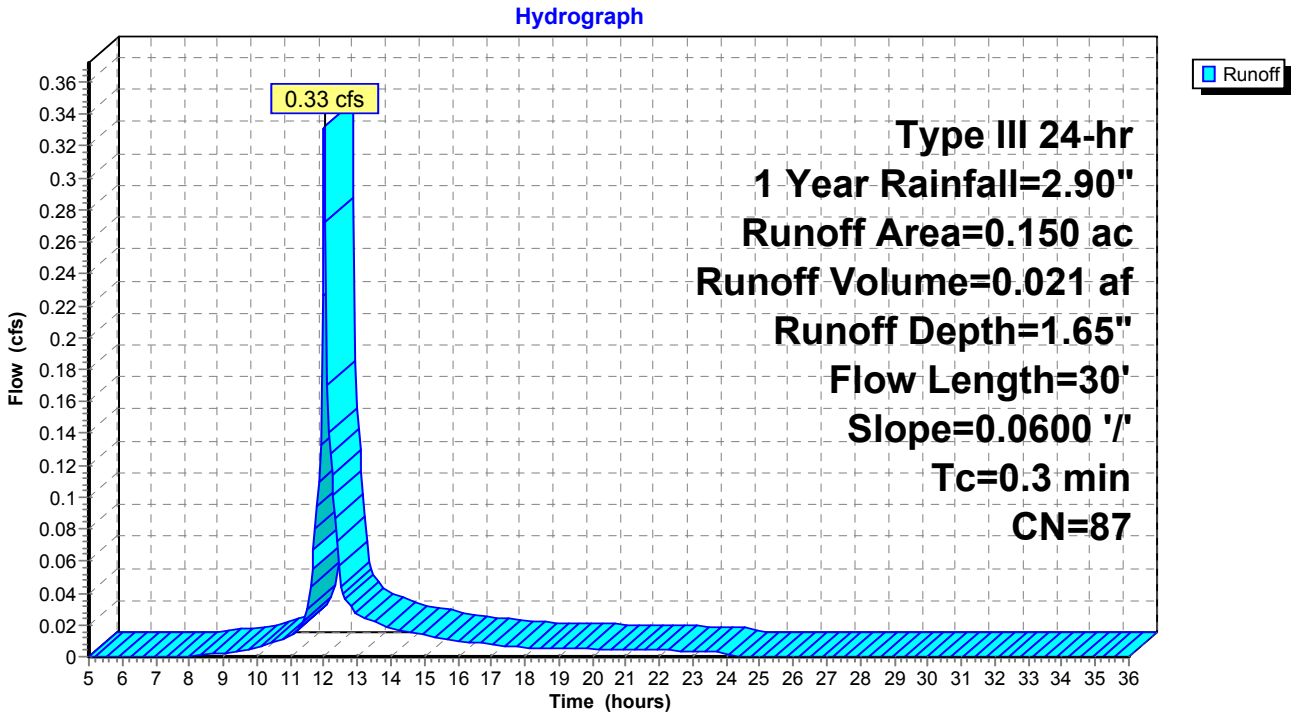
Runoff = 0.33 cfs @ 12.01 hrs, Volume= 0.021 af, Depth= 1.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 1 Year Rainfall=2.90"

| | Area (ac) | CN | Description |
|---|---|---|---|
| * | 0.080 | 98 | Impervious Surfaces |
| | 0.070 | 74 | >75% Grass cover, Good, HSG C |
| | 0.150 | 87 | Weighted Average |
| | 0.070 | | 46.67% Pervious Area |
| | 0.080 | | 53.33% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 30 | 0.0600 | 1.75 | | **Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.50" |

## Subcatchment B2A: Basin 2A

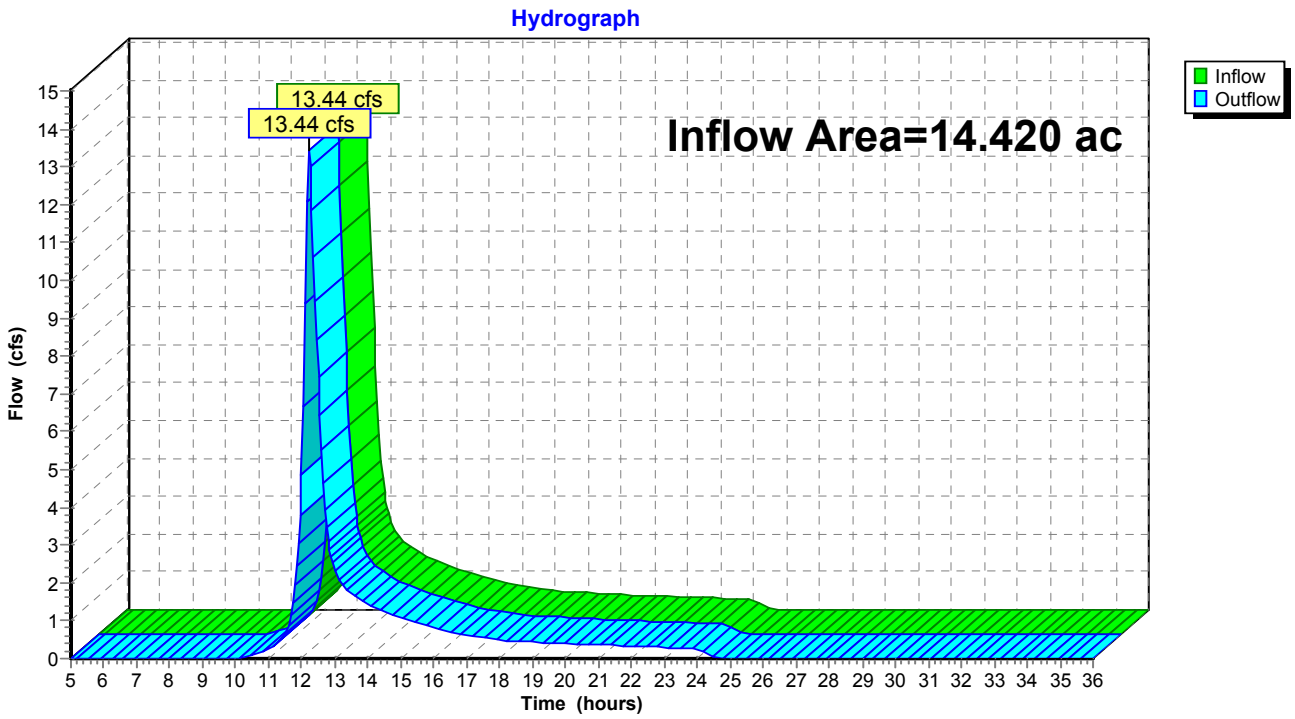


## Summary for Reach AP: Analysis Point

Inflow Area = 14.420 ac, 2.91% Impervious, Inflow Depth > 1.10" for 1 Year event
Inflow = 13.44 cfs @ 12.21 hrs, Volume= 1.319 af
Outflow = 13.44 cfs @ 12.21 hrs, Volume= 1.319 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs

## Reach AP: Analysis Point



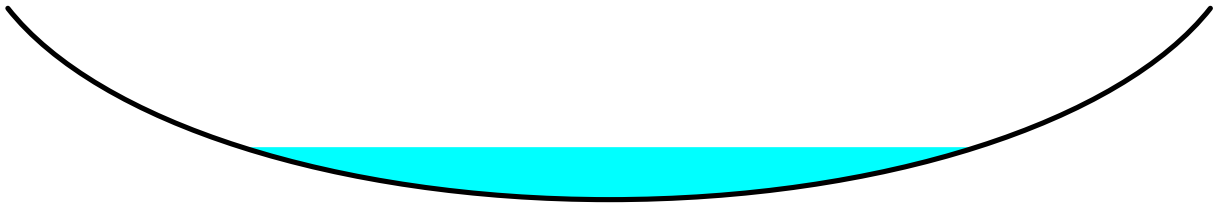
## Summary for Reach R1: Lawn

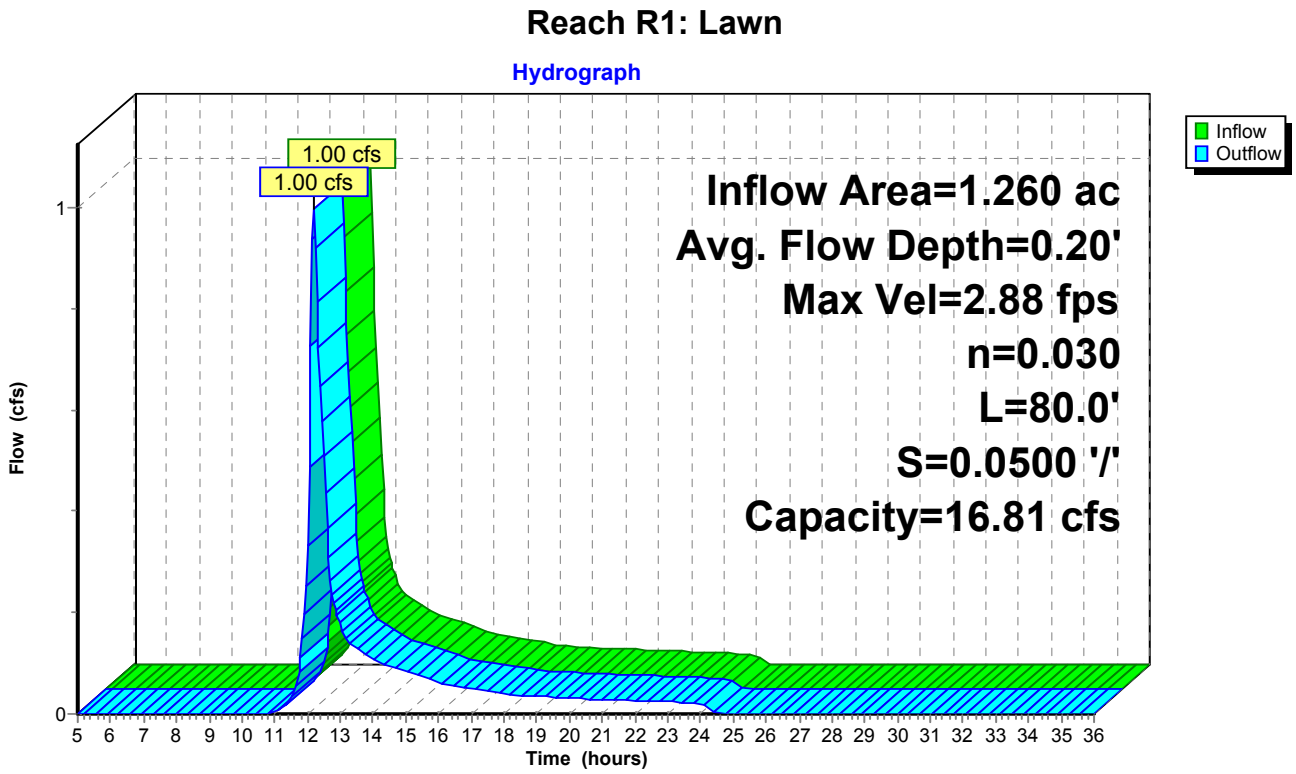
Inflow Area = 1.260 ac, 0.00% Impervious, Inflow Depth = 0.90" for 1 Year event
Inflow = 1.00 cfs @ 12.18 hrs, Volume= 0.094 af
Outflow = 1.00 cfs @ 12.20 hrs, Volume= 0.094 af, Atten= 1%, Lag= 1.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 2.88 fps, Min. Travel Time= 0.5 min
Avg. Velocity = 1.16 fps, Avg. Travel Time= 1.2 min

Peak Storage= 28 cf @ 12.19 hrs
Average Depth at Peak Storage= 0.20'
Bank-Full Depth= 0.75' Flow Area= 2.5 sf, Capacity= 16.81 cfs

5.00' x 0.75' deep Parabolic Channel, n= 0.030
Length= 80.0' Slope= 0.0500 '/'
Inlet Invert= 535.00', Outlet Invert= 531.00'





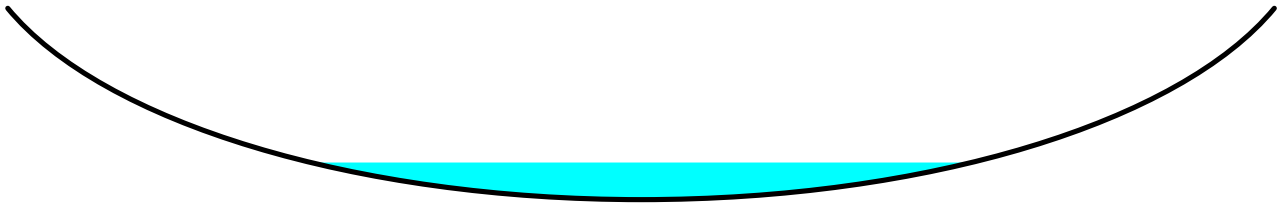
## Summary for Reach R2: Lawn

Inflow Area = 1.410 ac, 5.67% Impervious, Inflow Depth > 0.93" for 1 Year event
Inflow = 1.00 cfs @ 12.20 hrs, Volume= 0.109 af
Outflow = 0.94 cfs @ 12.31 hrs, Volume= 0.109 af, Atten= 6%, Lag= 6.7 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 1.72 fps, Min. Travel Time= 3.6 min
Avg. Velocity = 0.58 fps, Avg. Travel Time= 10.8 min

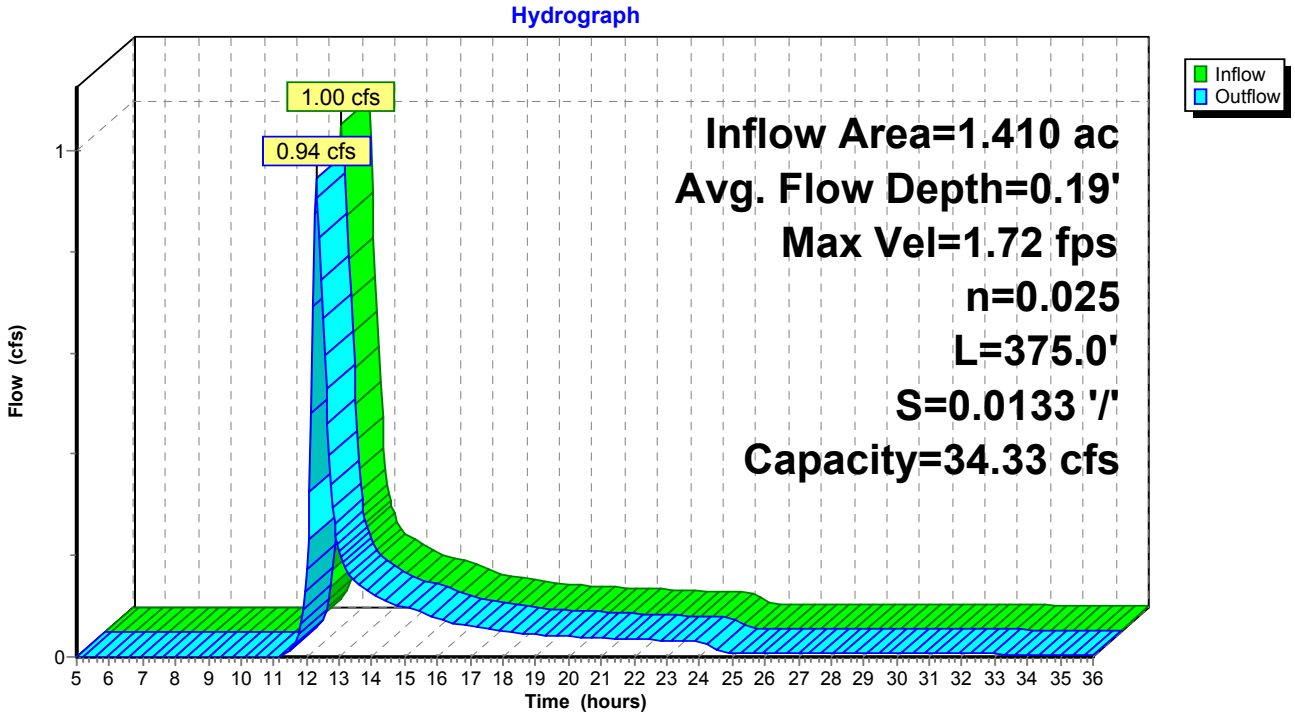
Peak Storage= 207 cf @ 12.25 hrs
Average Depth at Peak Storage= 0.19'
Bank-Full Depth= 1.00' Flow Area= 6.7 sf, Capacity= 34.33 cfs

10.00' x 1.00' deep Parabolic Channel, n= 0.025
Length= 375.0' Slope= 0.0133 '/'
Inlet Invert= 531.00', Outlet Invert= 526.00'



‡

### Reach R2: Lawn



## Summary for Pond B: Bioretention

Inflow Area = 0.150 ac, 53.33% Impervious, Inflow Depth = 1.65" for 1 Year event
Inflow = 0.33 cfs @ 12.01 hrs, Volume= 0.021 af
Outflow = 0.33 cfs @ 12.01 hrs, Volume= 0.021 af, Atten= 0%, Lag= 0.0 min
Primary = 0.33 cfs @ 12.01 hrs, Volume= 0.021 af

Routing by Stor-Ind method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Peak Elev= 537.00' @ 12.01 hrs Surf.Area= 350 sf Storage= 0 cf

Plug-Flow detention time=0.0 min calculated for 0.021 af (100% of inflow)
Center-of-Mass det. time=0.0 min ( 817.8 - 817.8 )

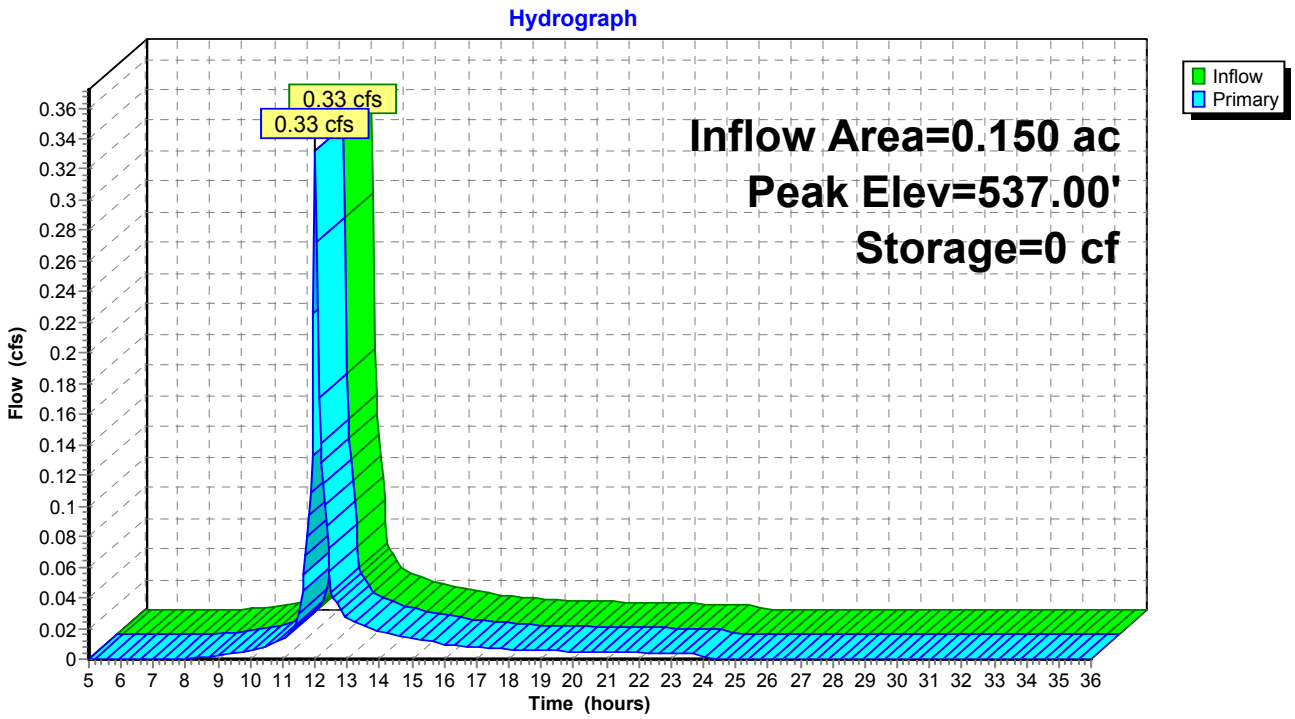
| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 537.00' | 590 cf | **Custom Stage Data (Prismatic)** Listed below (Recalc) |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 537.00 | 350 | 0 | 0 |
| 538.00 | 830 | 590 | 590 |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 533.50' | **12.0" Round Culvert** L= 34.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 533.50' / 532.50' S= 0.0294 '/' Cc= 0.900<br>n= 0.012, Flow Area= 0.79 sf |
| #2 | Primary | 537.50' | **24.0" x 24.0" Horiz. Orifice/Grate** C= 0.600<br>Limited to weir flow at low heads |

**Primary OutFlow** Max=6.55 cfs @ 12.01 hrs HW=537.00' (Free Discharge)
└─**1=Culvert** (Inlet Controls 6.55 cfs @ 8.34 fps)
└─**2=Orifice/Grate** ( Controls 0.00 cfs)

## Pond B: Bioretention



## Summary for Pond C: Chambers

Inflow Area = 0.150 ac, 53.33% Impervious, Inflow Depth = 1.65" for 1 Year event
Inflow = 0.33 cfs @ 12.01 hrs, Volume= 0.021 af
Outflow = 0.01 cfs @ 15.22 hrs, Volume= 0.015 af, Atten= 96%, Lag= 192.7 min
Primary = 0.01 cfs @ 15.22 hrs, Volume= 0.015 af

Routing by Stor-Ind method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Peak Elev= 533.51' @ 15.22 hrs Surf.Area= 336 sf Storage= 613 cf

Plug-Flow detention time=627.8 min calculated for 0.015 af (72% of inflow)
Center-of-Mass det. time=536.4 min ( 1,354.3 - 817.8 )

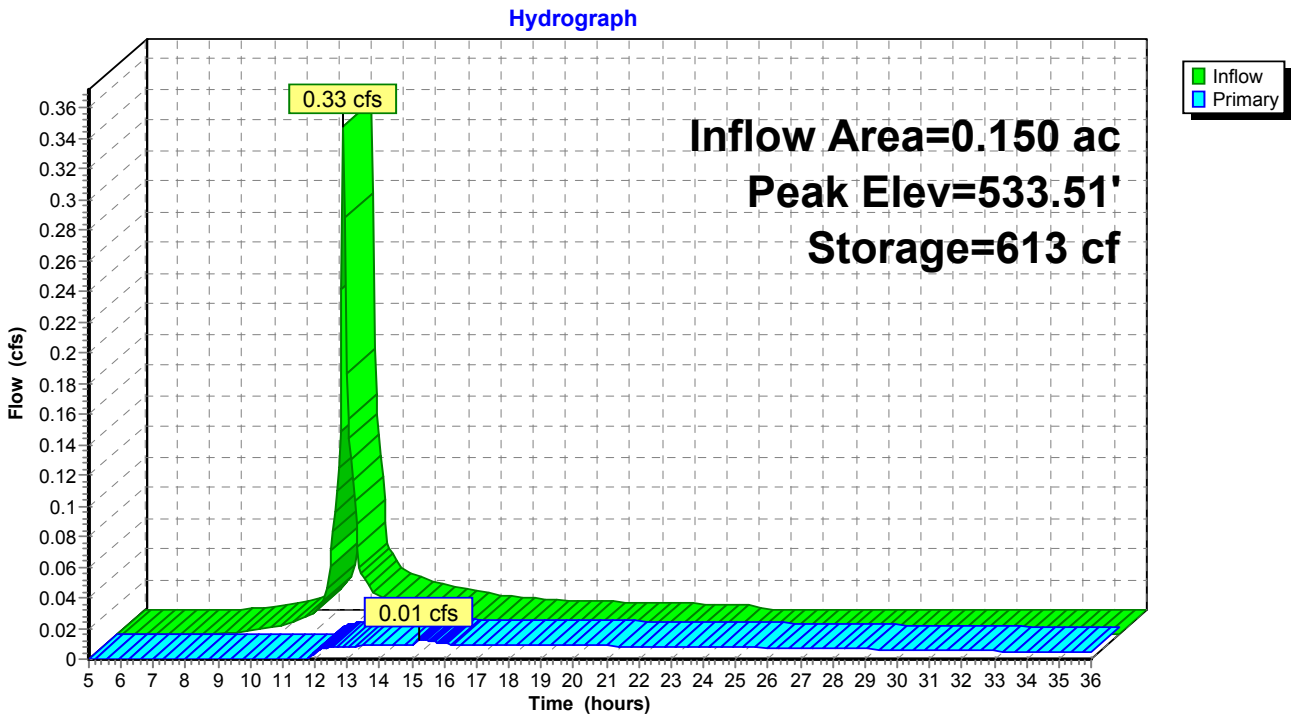
| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1A | 530.50' | 357 cf | **10.83'W x 31.00'L x 3.71'H Field A**<br>1,245 cf Overall - 352 cf Embedded = 893 cf x 40.0% Voids |
| #2A | 531.50' | 352 cf | **Cultec R-280HD** x 8 Inside #1<br>Effective Size= 46.9"W x 26.0"H => 6.07 sf x 7.00'L = 42.5 cf<br>Overall Size= 47.0"W x 26.5"H x 8.00'L with 1.00' Overlap<br>Row Length Adjustment= +1.00' x 6.07 sf x 2 rows |
| | | 709 cf | Total Available Storage |

Storage Group A created with Chamber Wizard

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 531.50' | **12.0" Round Culvert** L= 70.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 531.50' / 531.00' S= 0.0071 '/' Cc= 0.900<br>n= 0.012, Flow Area= 0.79 sf |
| #2 | Device 1 | 531.50' | **0.5" Vert. Orifice/Grate** C= 0.600 |
| #3 | Device 1 | 533.50' | **2.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)<br>1.0' Crest Height |

**Primary OutFlow** Max=0.01 cfs @ 15.22 hrs HW=533.51' (Free Discharge)
└─**1=Culvert** (Passes 0.01 cfs of 4.21 cfs potential flow)
  ├─**2=Orifice/Grate** (Orifice Controls 0.01 cfs @ 6.78 fps)
  └─**3=Sharp-Crested Rectangular Weir** (Weir Controls 0.00 cfs @ 0.24 fps)

## Pond C: Chambers



Time span=5.00-36.00 hrs, dt=0.05 hrs, 621 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment B1: Basin 1** Runoff Area=13.010 ac 2.61% Impervious Runoff Depth=2.80"
Flow Length=980' Tc=14.2 min CN=79 Runoff=32.83 cfs 3.037 af

**Subcatchment B2: Basin 2** Runoff Area=1.260 ac 0.00% Impervious Runoff Depth=2.45"
Flow Length=660' Tc=11.8 min CN=75 Runoff=2.96 cfs 0.257 af

**Subcatchment B2A: Basin 2A** Runoff Area=0.150 ac 53.33% Impervious Runoff Depth=3.57"
Flow Length=30' Slope=0.0600 '/' Tc=0.3 min CN=87 Runoff=0.70 cfs 0.045 af

**Reach AP: Analysis Point** Inflow=35.76 cfs 3.332 af
Outflow=35.76 cfs 3.332 af

**Reach R1: Lawn** Avg. Flow Depth=0.33' Max Vel=3.97 fps Inflow=2.96 cfs 0.257 af
n=0.030 L=80.0' S=0.0500 '/' Capacity=16.81 cfs Outflow=2.91 cfs 0.257 af

**Reach R2: Lawn** Avg. Flow Depth=0.33' Max Vel=2.48 fps Inflow=3.21 cfs 0.295 af
n=0.025 L=375.0' S=0.0133 '/' Capacity=34.33 cfs Outflow=3.10 cfs 0.295 af

**Pond B: Bioretention** Peak Elev=537.00' Storage=0 cf Inflow=0.70 cfs 0.045 af
Outflow=0.70 cfs 0.045 af

**Pond C: Chambers** Peak Elev=533.73' Storage=645 cf Inflow=0.70 cfs 0.045 af
Outflow=0.71 cfs 0.038 af

**Total Runoff Area = 14.420 ac Runoff Volume = 3.339 af Average Runoff Depth = 2.78"**
**97.09% Pervious = 14.000 ac 2.91% Impervious = 0.420 ac**

## Summary for Subcatchment B1: Basin 1

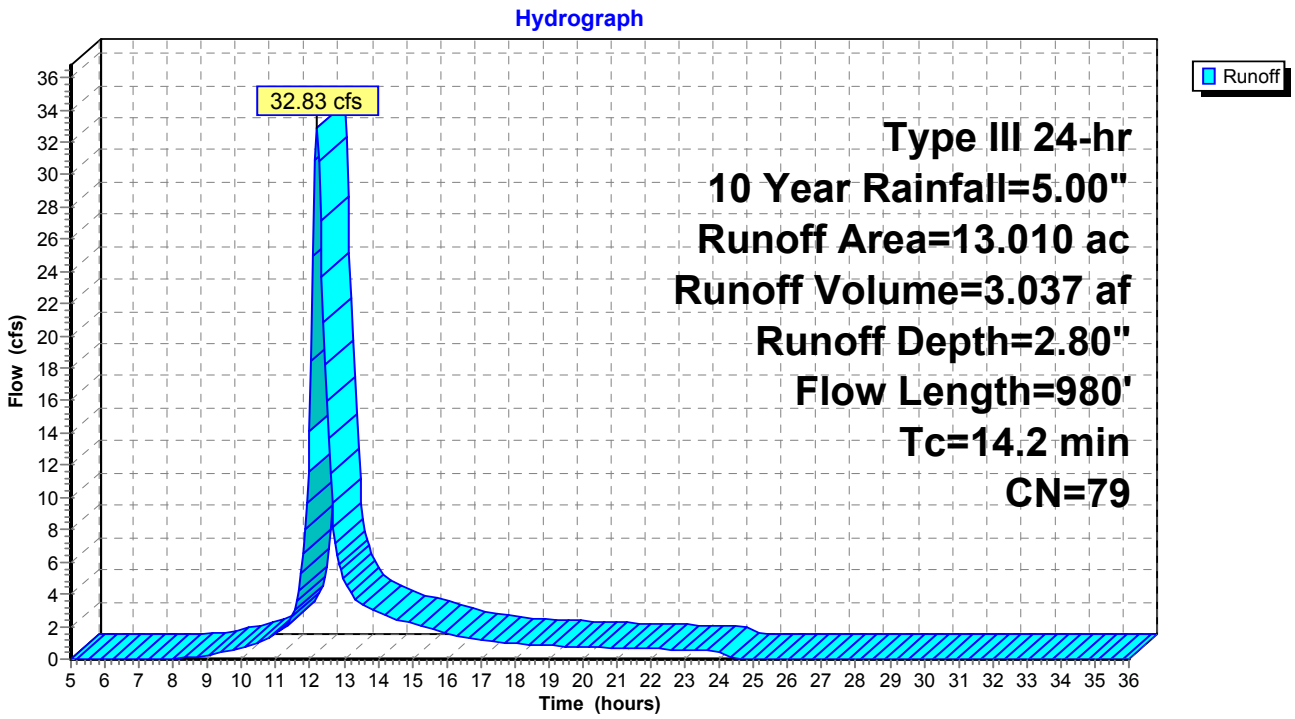
Runoff = 32.83 cfs @ 12.20 hrs, Volume= 3.037 af, Depth= 2.80"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 Year Rainfall=5.00"

| | Area (ac) | CN | Description |
|---|---|---|---|
| | 0.480 | 96 | Gravel surface, HSG C |
| * | 0.340 | 98 | Impervious surfaces |
| | 1.750 | 76 | Woods/grass comb., Fair, HSG C |
| * | 0.710 | 80 | Wetlands Area |
| | 6.650 | 79 | Pasture/grassland/range, Fair, HSG C |
| | 3.080 | 74 | >75% Grass cover, Good, HSG C |
| | 13.010 | 79 | Weighted Average |
| | 12.670 | | 97.39% Pervious Area |
| | 0.340 | | 2.61% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 9.4 | 100 | 0.0200 | 0.18 | | **Sheet Flow,** Grass: Short n= 0.150 P2= 3.50" |
| 4.4 | 520 | 0.0150 | 1.97 | | **Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps |
| 0.4 | 360 | 0.0440 | 14.19 | 189.19 | **Parabolic Channel,** W=10.00' D=2.00' Area=13.3 sf Perim=11.0' n= 0.025 Earth, clean & winding |
| 14.2 | 980 | Total | | | |

## Subcatchment B1: Basin 1



## Summary for Subcatchment B2: Basin 2

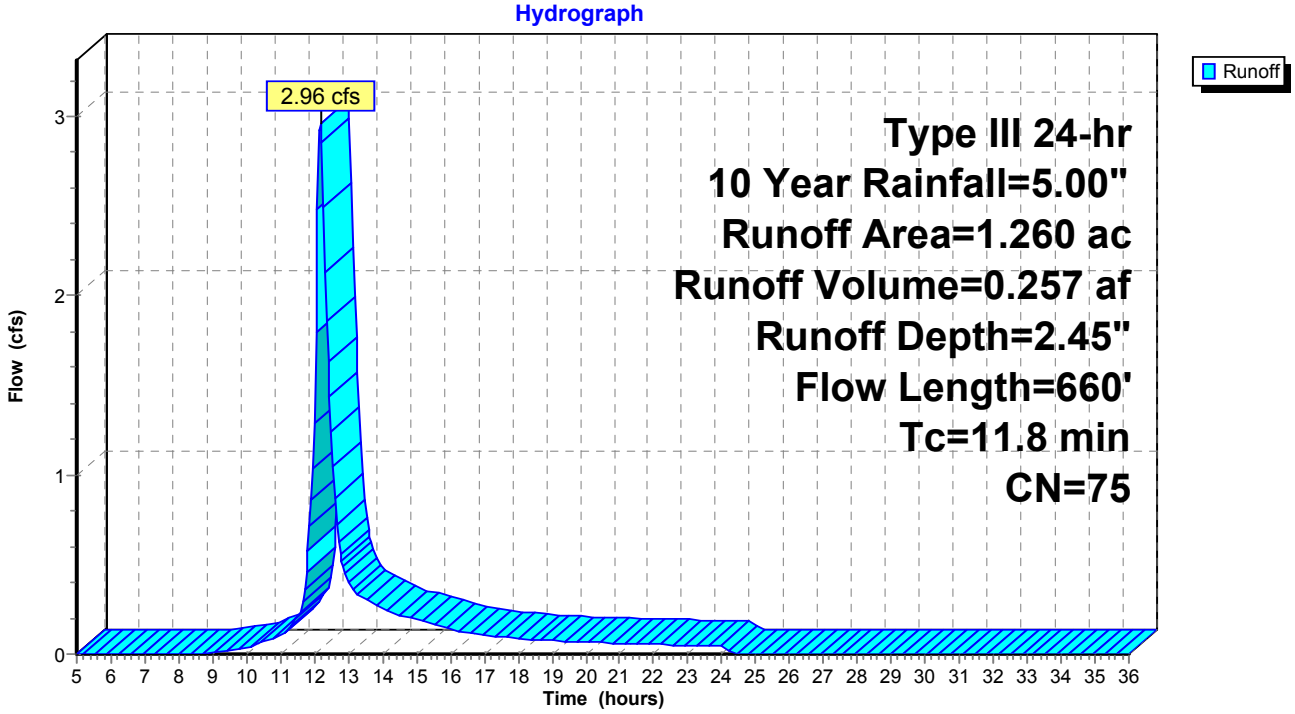
Runoff = 2.96 cfs @ 12.17 hrs, Volume= 0.257 af, Depth= 2.45"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 Year Rainfall=5.00"

| Area (ac) | CN | Description |
|---|---|---|
| 0.060 | 96 | Gravel surface, HSG C |
| 1.200 | 74 | >75% Grass cover, Good, HSG C |
| 1.260 | 75 | Weighted Average |
| 1.260 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 9.4 | 100 | 0.0200 | 0.18 | | **Sheet Flow,** Grass: Short n= 0.150 P2= 3.50" |
| 2.1 | 400 | 0.0400 | 3.22 | | **Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps |
| 0.3 | 160 | 0.0500 | 8.31 | 1.63 | **Pipe Channel,** 6.0" Round Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.010 |
| 11.8 | 660 | Total | | | |

## Subcatchment B2: Basin 2



## Summary for Subcatchment B2A: Basin 2A

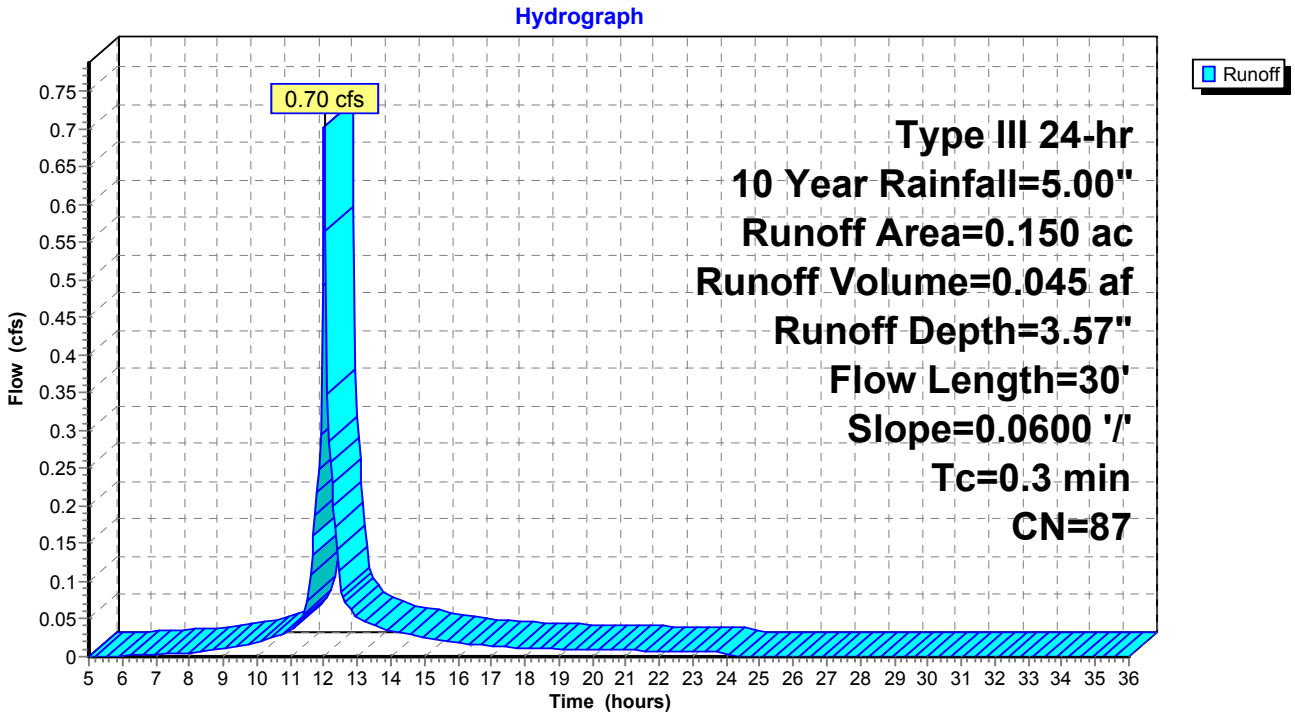
Runoff = 0.70 cfs @ 12.01 hrs, Volume= 0.045 af, Depth= 3.57"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 Year Rainfall=5.00"

| | Area (ac) | CN | Description |
|---|---|---|---|
| * | 0.080 | 98 | Impervious Surfaces |
| | 0.070 | 74 | >75% Grass cover, Good, HSG C |
| | 0.150 | 87 | Weighted Average |
| | 0.070 | | 46.67% Pervious Area |
| | 0.080 | | 53.33% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 30 | 0.0600 | 1.75 | | **Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.50" |

## Subcatchment B2A: Basin 2A

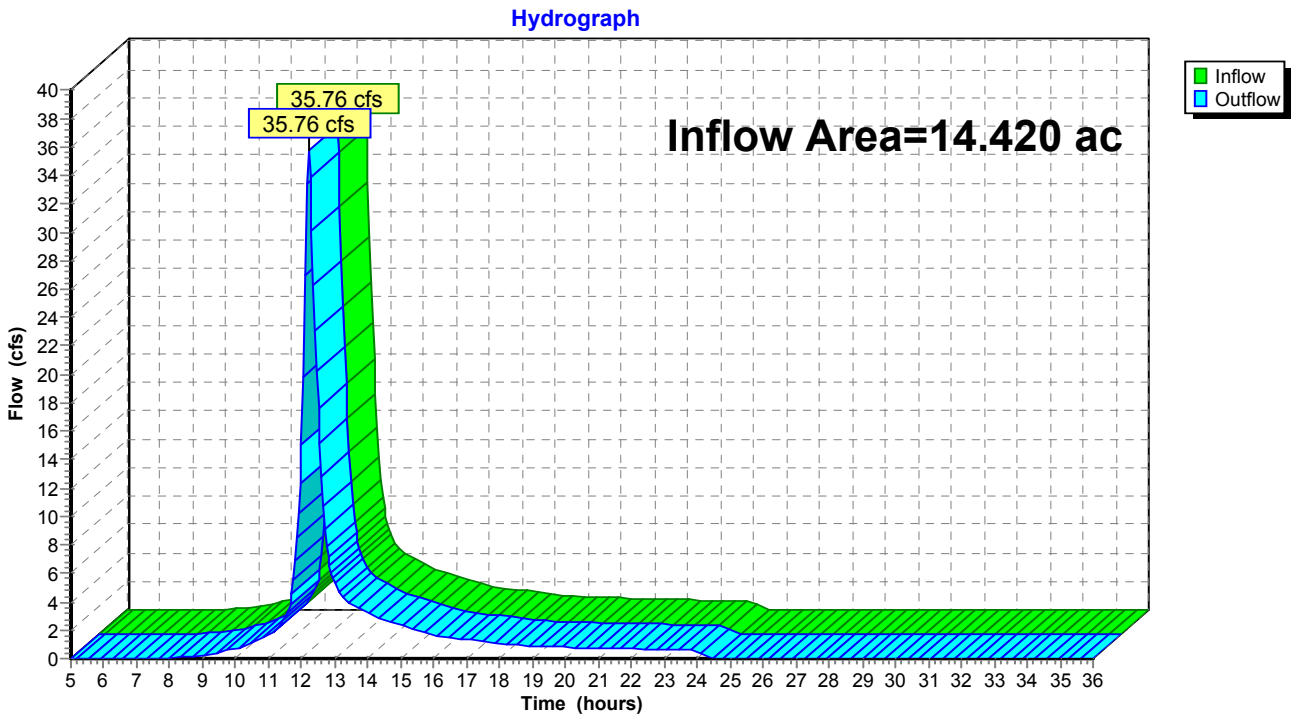


## Summary for Reach AP: Analysis Point

Inflow Area = 14.420 ac, 2.91% Impervious, Inflow Depth > 2.77" for 10 Year event
Inflow = 35.76 cfs @ 12.20 hrs, Volume= 3.332 af
Outflow = 35.76 cfs @ 12.20 hrs, Volume= 3.332 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs

## Reach AP: Analysis Point



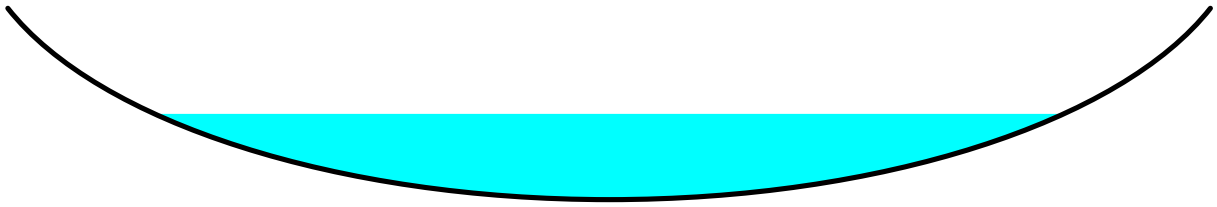
## Summary for Reach R1: Lawn

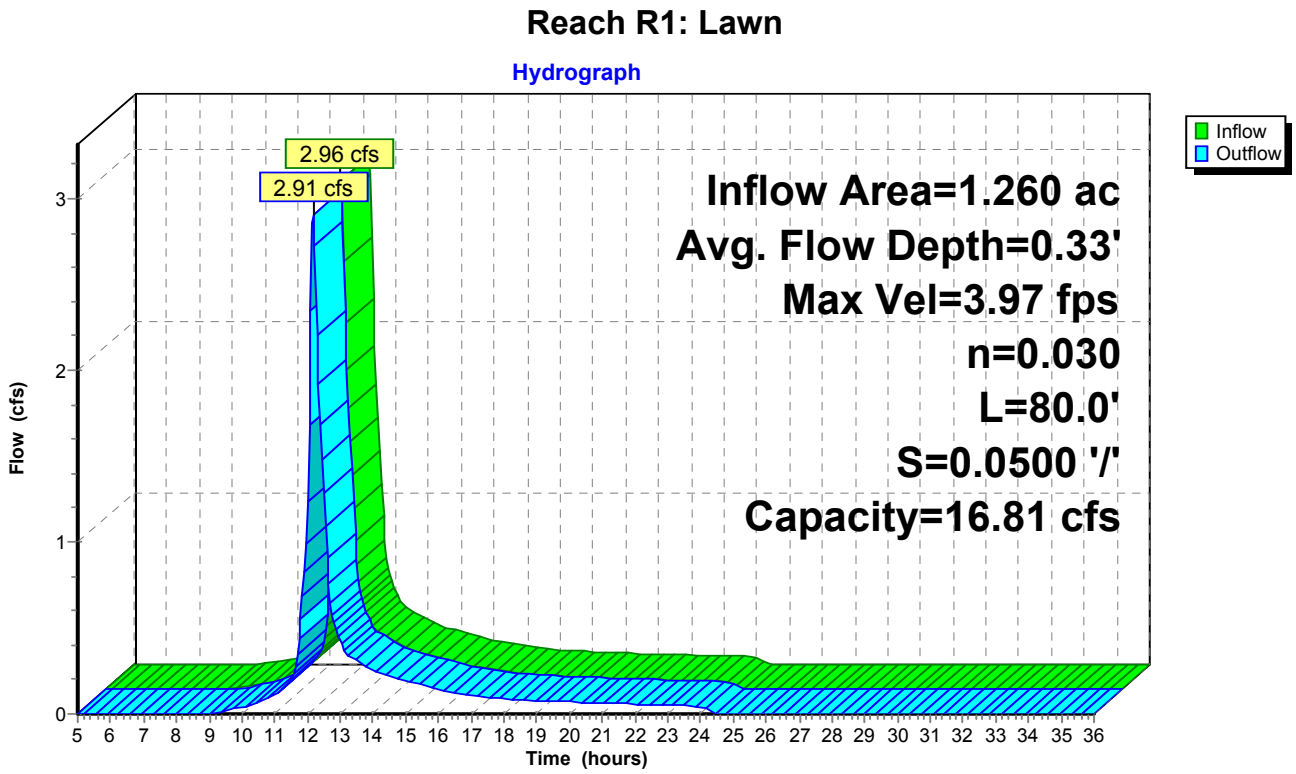
Inflow Area = 1.260 ac, 0.00% Impervious, Inflow Depth = 2.45" for 10 Year event
Inflow = 2.96 cfs @ 12.17 hrs, Volume= 0.257 af
Outflow = 2.91 cfs @ 12.18 hrs, Volume= 0.257 af, Atten= 2%, Lag= 0.6 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 3.97 fps, Min. Travel Time= 0.3 min
Avg. Velocity = 1.47 fps, Avg. Travel Time= 0.9 min

Peak Storage= 59 cf @ 12.17 hrs
Average Depth at Peak Storage= 0.33'
Bank-Full Depth= 0.75' Flow Area= 2.5 sf, Capacity= 16.81 cfs

5.00' x 0.75' deep Parabolic Channel, n= 0.030
Length= 80.0' Slope= 0.0500 '/'
Inlet Invert= 535.00', Outlet Invert= 531.00'





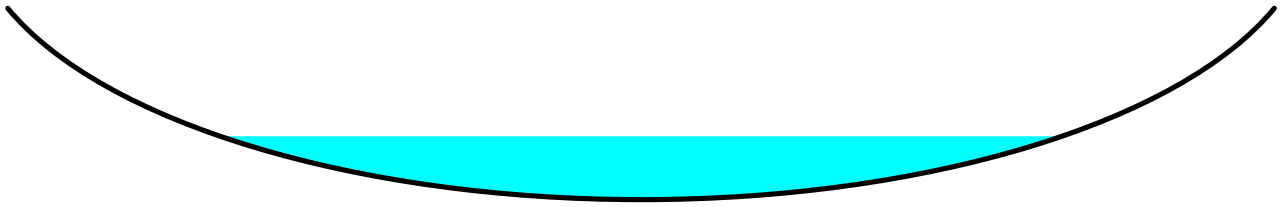
## Summary for Reach R2: Lawn

Inflow Area = 1.410 ac, 5.67% Impervious, Inflow Depth > 2.51" for 10 Year event
Inflow = 3.21 cfs @ 12.17 hrs, Volume= 0.295 af
Outflow = 3.10 cfs @ 12.25 hrs, Volume= 0.295 af, Atten= 3%, Lag= 4.7 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 2.48 fps, Min. Travel Time= 2.5 min
Avg. Velocity = 0.70 fps, Avg. Travel Time= 8.9 min

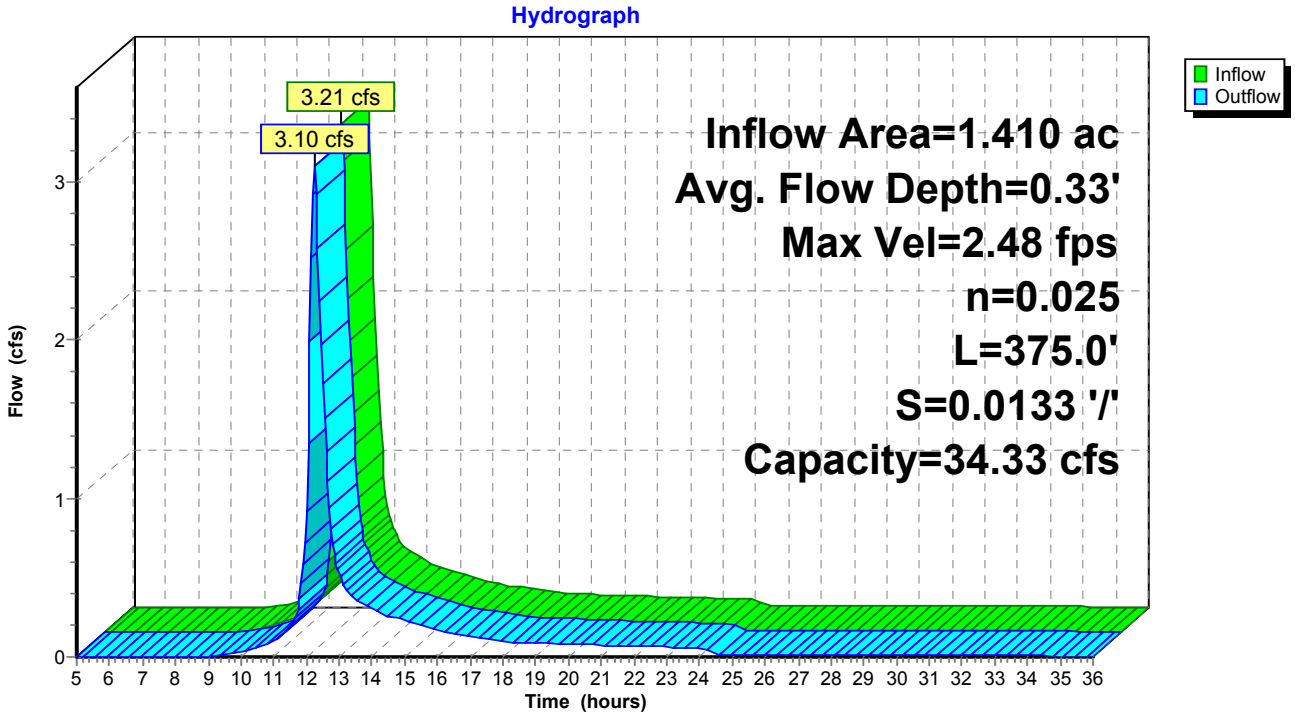
Peak Storage= 473 cf @ 12.21 hrs
Average Depth at Peak Storage= 0.33'
Bank-Full Depth= 1.00' Flow Area= 6.7 sf, Capacity= 34.33 cfs

10.00' x 1.00' deep Parabolic Channel, n= 0.025
Length= 375.0' Slope= 0.0133 '/'
Inlet Invert= 531.00', Outlet Invert= 526.00'



‡

### Reach R2: Lawn



## Summary for Pond B: Bioretention

Inflow Area = 0.150 ac, 53.33% Impervious, Inflow Depth = 3.57" for 10 Year event
Inflow = 0.70 cfs @ 12.01 hrs, Volume= 0.045 af
Outflow = 0.70 cfs @ 12.01 hrs, Volume= 0.045 af, Atten= 0%, Lag= 0.0 min
Primary = 0.70 cfs @ 12.01 hrs, Volume= 0.045 af

Routing by Stor-Ind method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Peak Elev= 537.00' @ 12.01 hrs Surf.Area= 351 sf Storage= 0 cf

Plug-Flow detention time=0.0 min calculated for 0.045 af (100% of inflow)
Center-of-Mass det. time=0.0 min ( 795.9 - 795.9 )

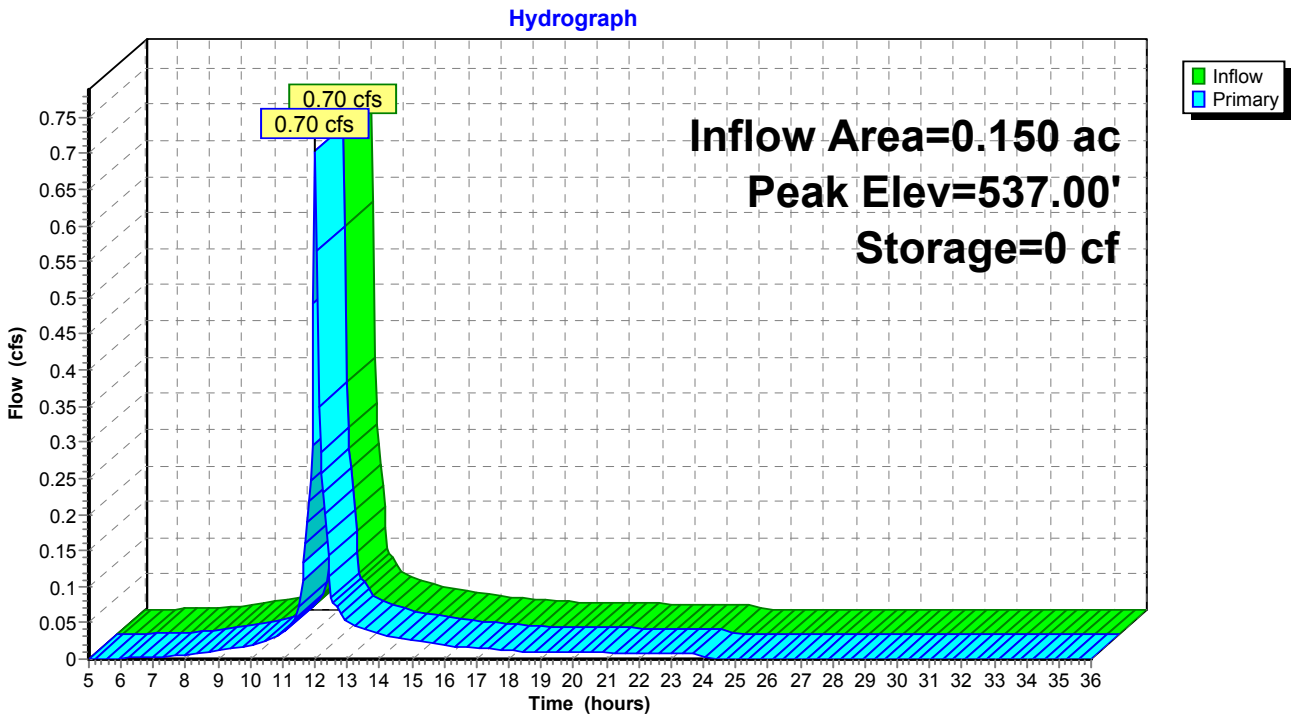
| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 537.00' | 590 cf | **Custom Stage Data (Prismatic)** Listed below (Recalc) |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 537.00 | 350 | 0 | 0 |
| 538.00 | 830 | 590 | 590 |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 533.50' | **12.0" Round Culvert** L= 34.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 533.50' / 532.50' S= 0.0294 '/' Cc= 0.900<br>n= 0.012, Flow Area= 0.79 sf |
| #2 | Primary | 537.50' | **24.0" x 24.0" Horiz. Orifice/Grate** C= 0.600<br>Limited to weir flow at low heads |

**Primary OutFlow** Max=6.55 cfs @ 12.01 hrs HW=537.00' (Free Discharge)
└─**1=Culvert** (Inlet Controls 6.55 cfs @ 8.34 fps)
└─**2=Orifice/Grate** ( Controls 0.00 cfs)

## Pond B: Bioretention



## Summary for Pond C: Chambers

Inflow Area = 0.150 ac, 53.33% Impervious, Inflow Depth = 3.57" for 10 Year event
Inflow = 0.70 cfs @ 12.01 hrs, Volume= 0.045 af
Outflow = 0.71 cfs @ 12.04 hrs, Volume= 0.038 af, Atten= 0%, Lag= 2.3 min
Primary = 0.71 cfs @ 12.04 hrs, Volume= 0.038 af

Routing by Stor-Ind method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Peak Elev= 533.73' @ 12.04 hrs Surf.Area= 336 sf Storage= 645 cf

Plug-Flow detention time=295.9 min calculated for 0.038 af (85% of inflow)
Center-of-Mass det. time=233.6 min ( 1,029.5 - 795.9 )

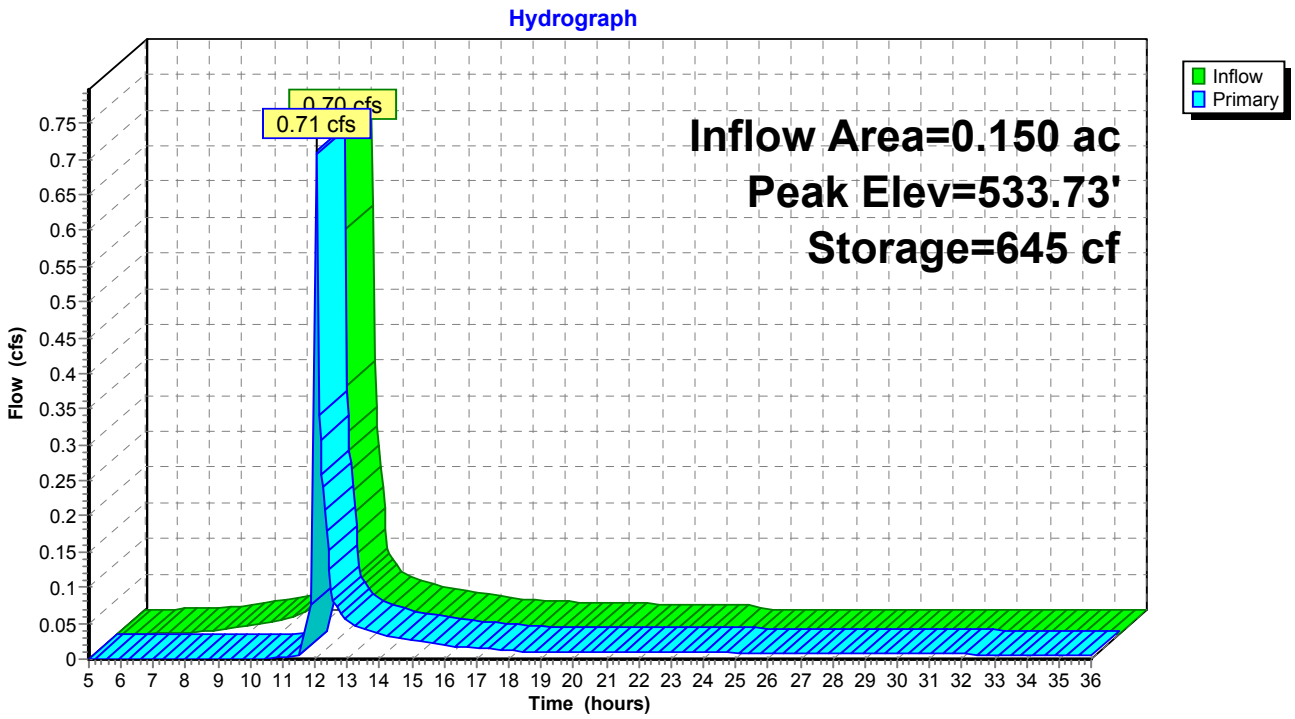
| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1A | 530.50' | 357 cf | **10.83'W x 31.00'L x 3.71'H Field A**<br>1,245 cf Overall - 352 cf Embedded = 893 cf x 40.0% Voids |
| #2A | 531.50' | 352 cf | **Cultec R-280HD** x 8 Inside #1<br>Effective Size= 46.9"W x 26.0"H => 6.07 sf x 7.00'L = 42.5 cf<br>Overall Size= 47.0"W x 26.5"H x 8.00'L with 1.00' Overlap<br>Row Length Adjustment= +1.00' x 6.07 sf x 2 rows |
| | | 709 cf | Total Available Storage |

Storage Group A created with Chamber Wizard

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 531.50' | **12.0" Round Culvert** L= 70.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 531.50' / 531.00' S= 0.0071 '/' Cc= 0.900<br>n= 0.012, Flow Area= 0.79 sf |
| #2 | Device 1 | 531.50' | **0.5" Vert. Orifice/Grate** C= 0.600 |
| #3 | Device 1 | 533.50' | **2.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)<br>1.0' Crest Height |

**Primary OutFlow** Max=0.68 cfs @ 12.04 hrs HW=533.72' (Free Discharge)
└─**1=Culvert** (Passes 0.68 cfs of 4.50 cfs potential flow)
  ├─**2=Orifice/Grate** (Orifice Controls 0.01 cfs @ 7.14 fps)
  └─**3=Sharp-Crested Rectangular Weir** (Weir Controls 0.67 cfs @ 1.57 fps)

## Pond C: Chambers



Time span=5.00-36.00 hrs, dt=0.05 hrs, 621 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment B1: Basin 1** Runoff Area=13.010 ac 2.61% Impervious Runoff Depth=6.45"
Flow Length=980' Tc=14.2 min CN=79 Runoff=74.32 cfs 6.988 af

**Subcatchment B2: Basin 2** Runoff Area=1.260 ac 0.00% Impervious Runoff Depth=5.95"
Flow Length=660' Tc=11.8 min CN=75 Runoff=7.18 cfs 0.625 af

**Subcatchment B2A: Basin 2A** Runoff Area=0.150 ac 53.33% Impervious Runoff Depth>7.40"
Flow Length=30' Slope=0.0600 '/' Tc=0.3 min CN=87 Runoff=1.41 cfs 0.093 af

**Reach AP: Analysis Point** Inflow=81.59 cfs 7.698 af
Outflow=81.59 cfs 7.698 af

**Reach R1: Lawn** Avg. Flow Depth=0.50' Max Vel=5.20 fps Inflow=7.18 cfs 0.625 af
n=0.030 L=80.0' S=0.0500 '/' Capacity=16.81 cfs Outflow=7.12 cfs 0.625 af

**Reach R2: Lawn** Avg. Flow Depth=0.49' Max Vel=3.25 fps Inflow=7.65 cfs 0.711 af
n=0.025 L=375.0' S=0.0133 '/' Capacity=34.33 cfs Outflow=7.40 cfs 0.710 af

**Pond B: Bioretention** Peak Elev=537.00' Storage=1 cf Inflow=1.41 cfs 0.093 af
Outflow=1.41 cfs 0.093 af

**Pond C: Chambers** Peak Elev=533.85' Storage=662 cf Inflow=1.41 cfs 0.093 af
Outflow=1.39 cfs 0.086 af

**Total Runoff Area = 14.420 ac Runoff Volume = 7.705 af Average Runoff Depth = 6.41"**
**97.09% Pervious = 14.000 ac 2.91% Impervious = 0.420 ac**

## Summary for Subcatchment B1: Basin 1

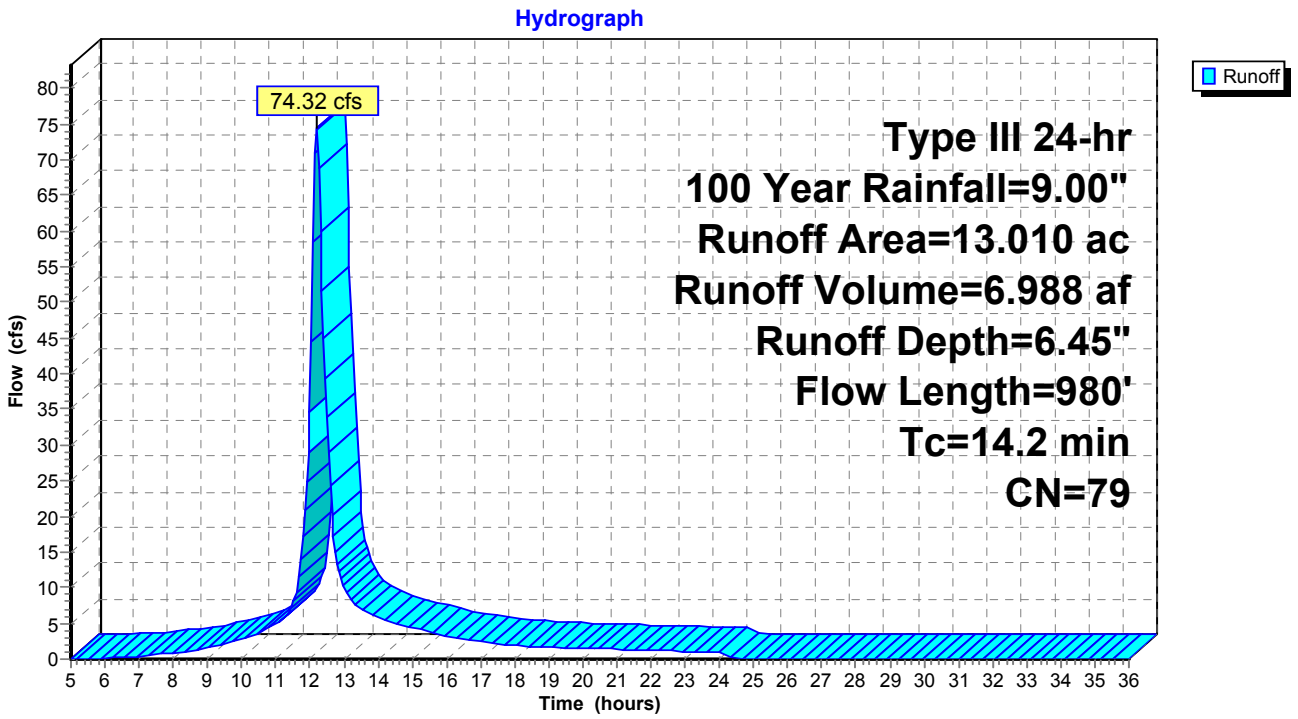
Runoff = 74.32 cfs @ 12.19 hrs, Volume= 6.988 af, Depth= 6.45"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 100 Year Rainfall=9.00"

| | Area (ac) | CN | Description |
|---|---|---|---|
| | 0.480 | 96 | Gravel surface, HSG C |
| * | 0.340 | 98 | Impervious surfaces |
| | 1.750 | 76 | Woods/grass comb., Fair, HSG C |
| * | 0.710 | 80 | Wetlands Area |
| | 6.650 | 79 | Pasture/grassland/range, Fair, HSG C |
| | 3.080 | 74 | >75% Grass cover, Good, HSG C |
| | 13.010 | 79 | Weighted Average |
| | 12.670 | | 97.39% Pervious Area |
| | 0.340 | | 2.61% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 9.4 | 100 | 0.0200 | 0.18 | | **Sheet Flow,**<br>Grass: Short n= 0.150 P2= 3.50" |
| 4.4 | 520 | 0.0150 | 1.97 | | **Shallow Concentrated Flow,**<br>Unpaved Kv= 16.1 fps |
| 0.4 | 360 | 0.0440 | 14.19 | 189.19 | **Parabolic Channel,**<br>W=10.00' D=2.00' Area=13.3 sf Perim=11.0'<br>n= 0.025 Earth, clean & winding |
| 14.2 | 980 | Total | | | |

## Subcatchment B1: Basin 1



## Summary for Subcatchment B2: Basin 2

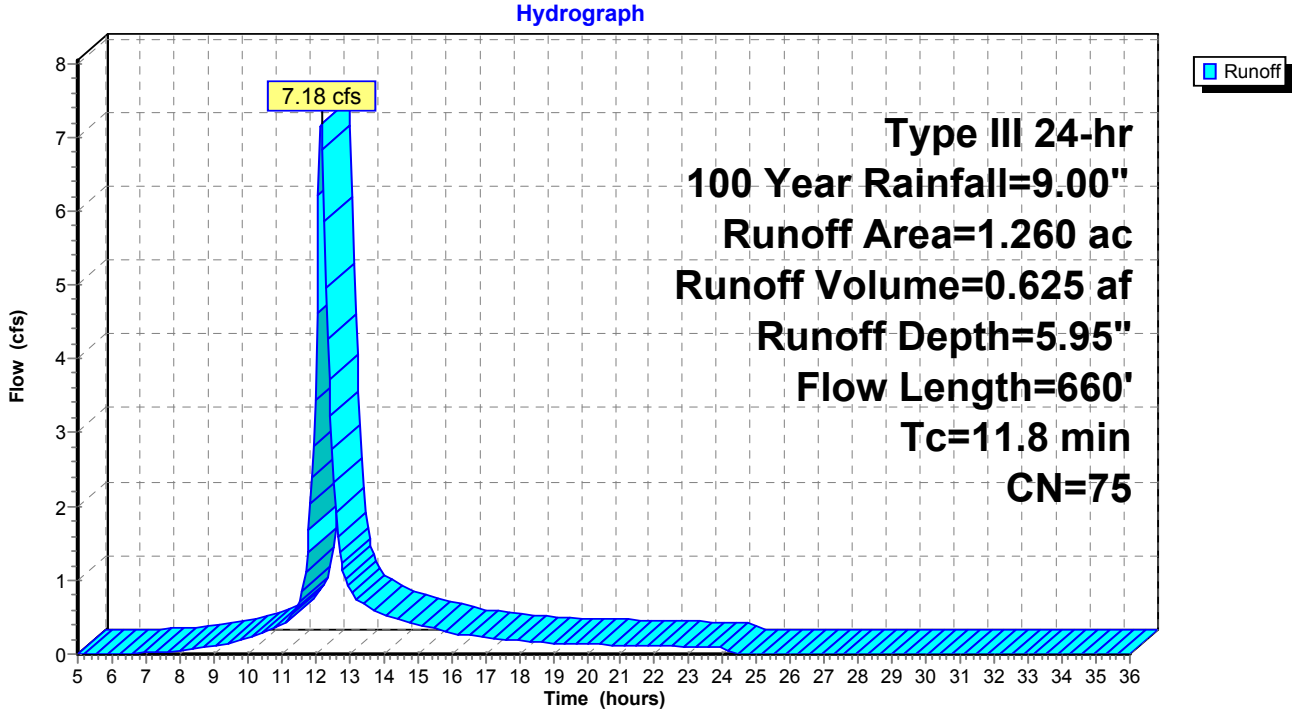
Runoff = 7.18 cfs @ 12.16 hrs, Volume= 0.625 af, Depth= 5.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 100 Year Rainfall=9.00"

| Area (ac) | CN | Description |
|---|---|---|
| 0.060 | 96 | Gravel surface, HSG C |
| 1.200 | 74 | >75% Grass cover, Good, HSG C |
| 1.260 | 75 | Weighted Average |
| 1.260 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 9.4 | 100 | 0.0200 | 0.18 | | **Sheet Flow,** Grass: Short n= 0.150 P2= 3.50" |
| 2.1 | 400 | 0.0400 | 3.22 | | **Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps |
| 0.3 | 160 | 0.0500 | 8.31 | 1.63 | **Pipe Channel,** 6.0" Round Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.010 |
| 11.8 | 660 | Total | | | |

## Subcatchment B2: Basin 2



## Summary for Subcatchment B2A: Basin 2A

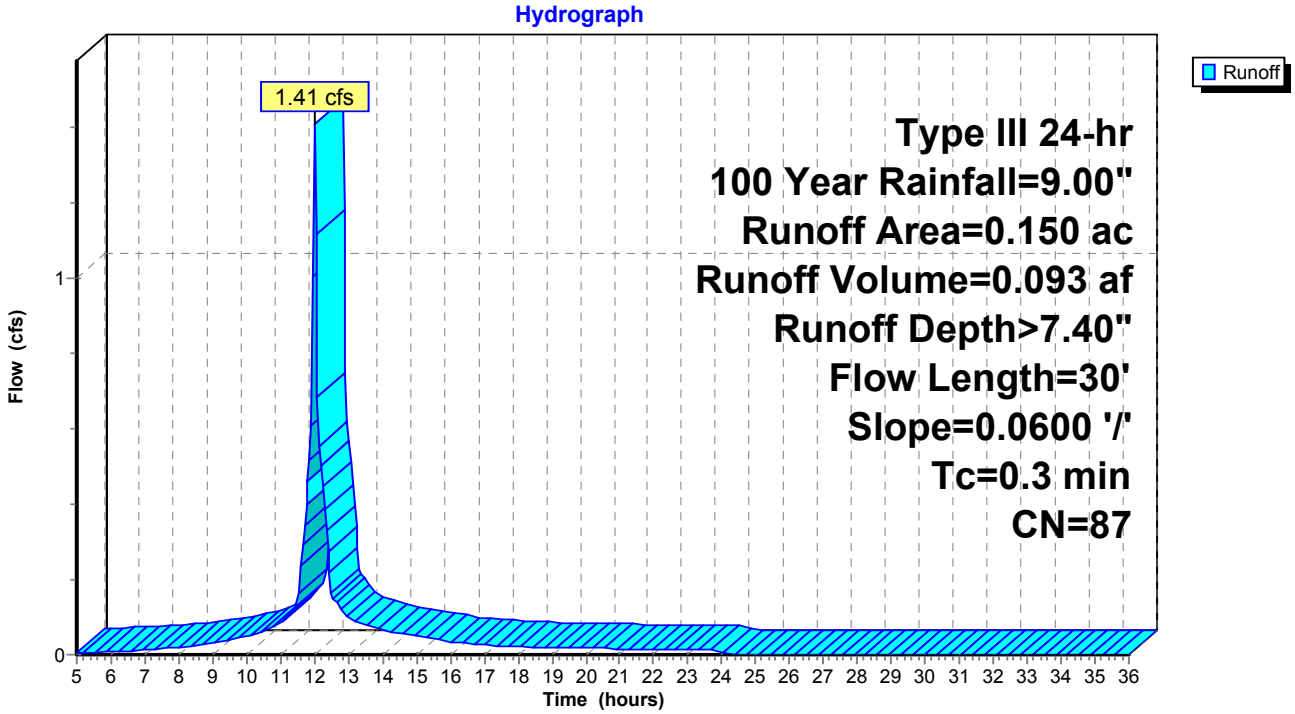
Runoff = 1.41 cfs @ 12.00 hrs, Volume= 0.093 af, Depth> 7.40"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 100 Year Rainfall=9.00"

| | Area (ac) | CN | Description |
|---|---|---|---|
| * | 0.080 | 98 | Impervious Surfaces |
| | 0.070 | 74 | >75% Grass cover, Good, HSG C |
| | 0.150 | 87 | Weighted Average |
| | 0.070 | | 46.67% Pervious Area |
| | 0.080 | | 53.33% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 30 | 0.0600 | 1.75 | | **Sheet Flow,** Smooth surfaces n= 0.011 P2= 3.50" |

## Subcatchment B2A: Basin 2A

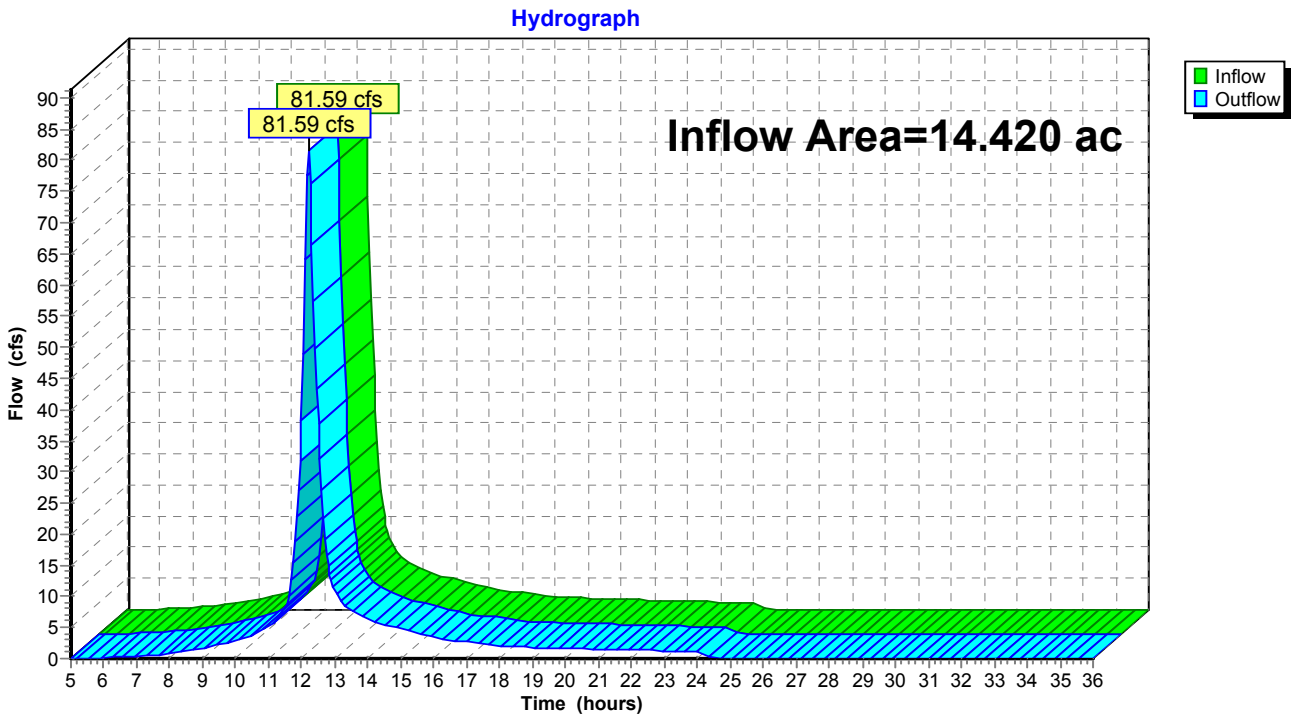


## Summary for Reach AP: Analysis Point

Inflow Area = 14.420 ac, 2.91% Impervious, Inflow Depth = 6.41" for 100 Year event
Inflow = 81.59 cfs @ 12.20 hrs, Volume= 7.698 af
Outflow = 81.59 cfs @ 12.20 hrs, Volume= 7.698 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs

## Reach AP: Analysis Point



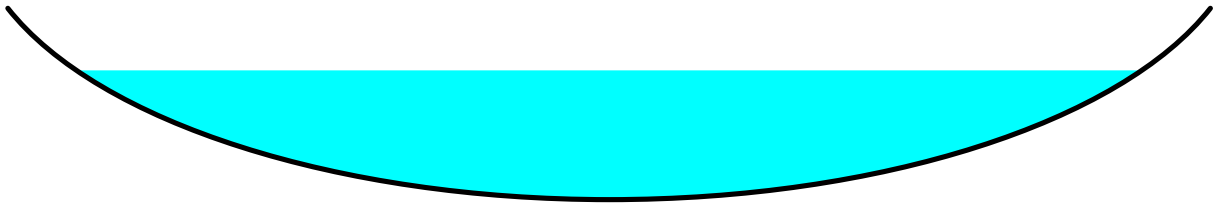
## Summary for Reach R1: Lawn

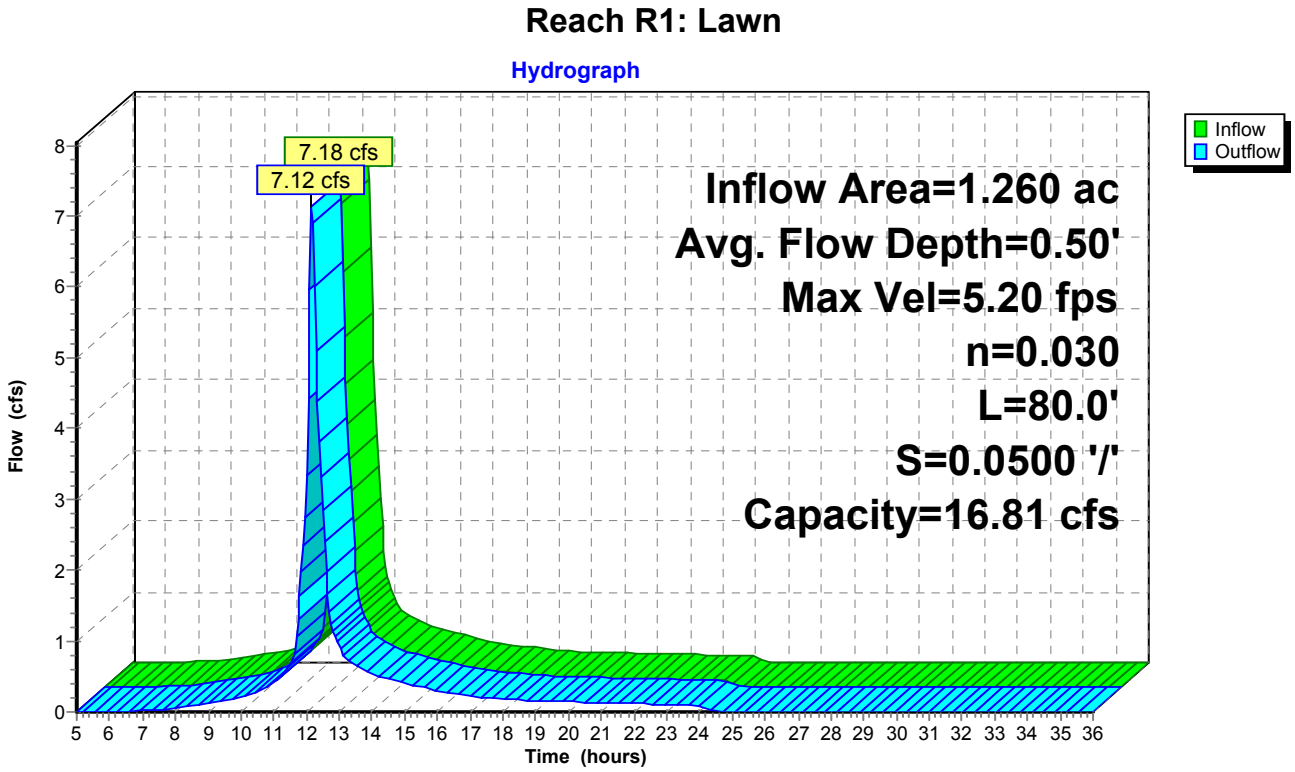
Inflow Area = 1.260 ac, 0.00% Impervious, Inflow Depth = 5.95" for 100 Year event
Inflow = 7.18 cfs @ 12.16 hrs, Volume= 0.625 af
Outflow = 7.12 cfs @ 12.17 hrs, Volume= 0.625 af, Atten= 1%, Lag= 0.4 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 5.20 fps, Min. Travel Time= 0.3 min
Avg. Velocity = 1.79 fps, Avg. Travel Time= 0.7 min

Peak Storage= 110 cf @ 12.17 hrs
Average Depth at Peak Storage= 0.50'
Bank-Full Depth= 0.75' Flow Area= 2.5 sf, Capacity= 16.81 cfs

5.00' x 0.75' deep Parabolic Channel, n= 0.030
Length= 80.0' Slope= 0.0500 '/'
Inlet Invert= 535.00', Outlet Invert= 531.00'





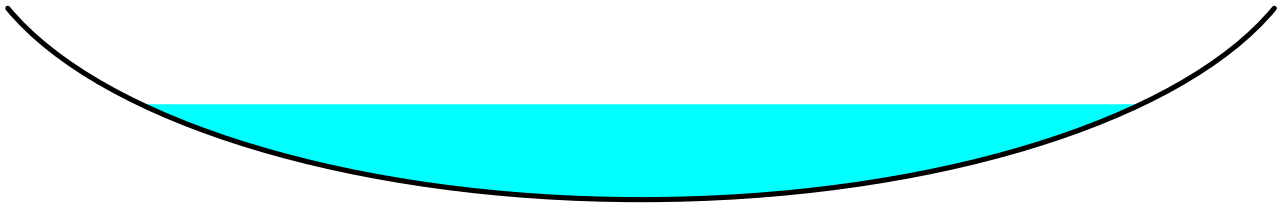
## Summary for Reach R2: Lawn

Inflow Area = 1.410 ac, 5.67% Impervious, Inflow Depth > 6.05" for 100 Year event
Inflow = 7.65 cfs @ 12.17 hrs, Volume= 0.711 af
Outflow = 7.40 cfs @ 12.22 hrs, Volume= 0.710 af, Atten= 3%, Lag= 3.5 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 3.25 fps, Min. Travel Time= 1.9 min
Avg. Velocity = 0.85 fps, Avg. Travel Time= 7.3 min

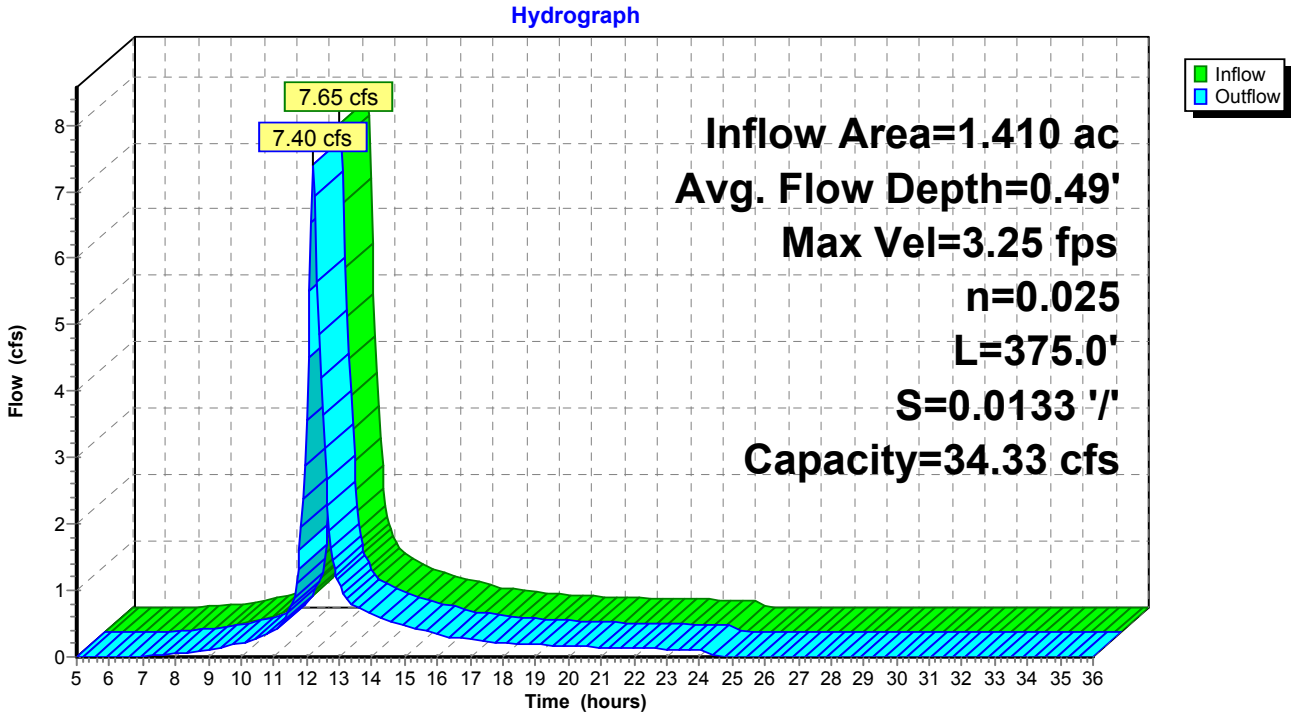
Peak Storage= 870 cf @ 12.19 hrs
Average Depth at Peak Storage= 0.49'
Bank-Full Depth= 1.00' Flow Area= 6.7 sf, Capacity= 34.33 cfs

10.00' x 1.00' deep Parabolic Channel, n= 0.025
Length= 375.0' Slope= 0.0133 '/'
Inlet Invert= 531.00', Outlet Invert= 526.00'



‡

### Reach R2: Lawn



## Summary for Pond B: Bioretention

Inflow Area = 0.150 ac, 53.33% Impervious, Inflow Depth > 7.40" for 100 Year event
Inflow = 1.41 cfs @ 12.00 hrs, Volume= 0.093 af
Outflow = 1.41 cfs @ 12.00 hrs, Volume= 0.093 af, Atten= 0%, Lag= 0.0 min
Primary = 1.41 cfs @ 12.00 hrs, Volume= 0.093 af

Routing by Stor-Ind method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Peak Elev= 537.00' @ 12.00 hrs Surf.Area= 351 sf Storage= 1 cf

Plug-Flow detention time=0.0 min calculated for 0.092 af (100% of inflow)
Center-of-Mass det. time=0.0 min ( 777.7 - 777.7 )

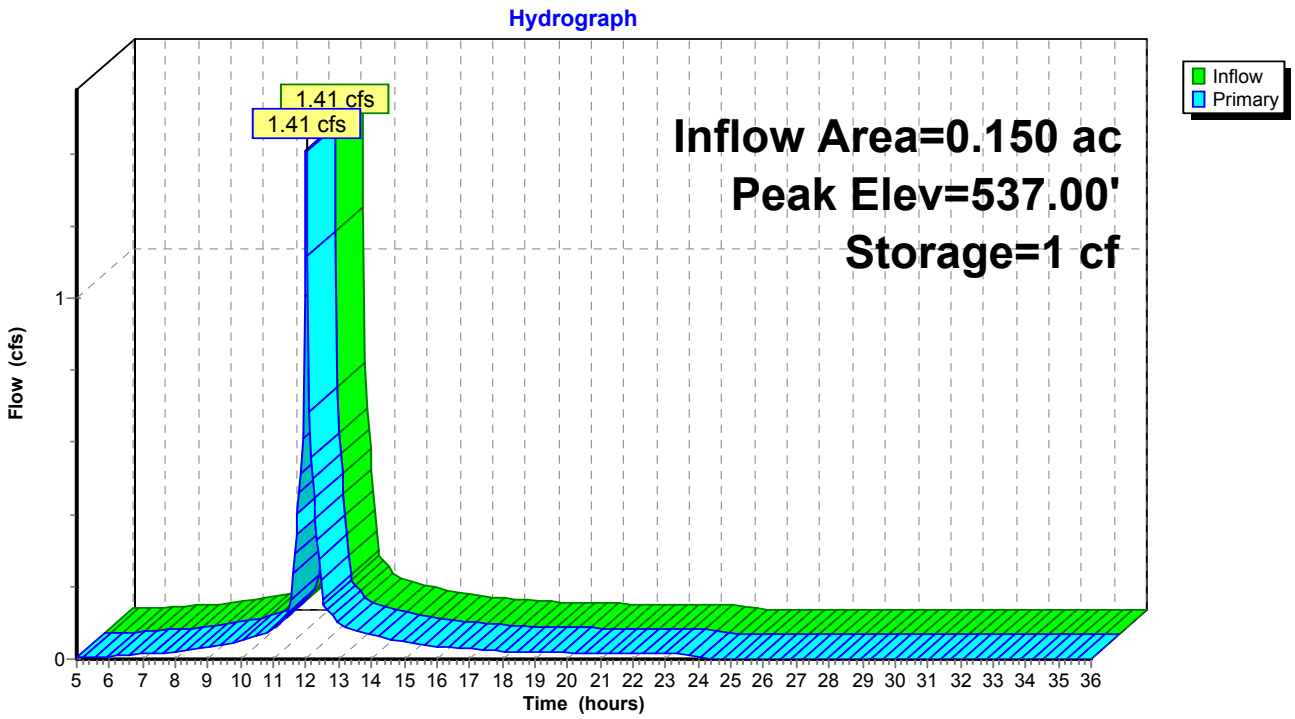
| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 537.00' | 590 cf | **Custom Stage Data (Prismatic)** Listed below (Recalc) |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 537.00 | 350 | 0 | 0 |
| 538.00 | 830 | 590 | 590 |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 533.50' | **12.0" Round Culvert** L= 34.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 533.50' / 532.50' S= 0.0294 '/' Cc= 0.900<br>n= 0.012, Flow Area= 0.79 sf |
| #2 | Primary | 537.50' | **24.0" x 24.0" Horiz. Orifice/Grate** C= 0.600<br>Limited to weir flow at low heads |

**Primary OutFlow** Max=6.55 cfs @ 12.00 hrs HW=537.00' (Free Discharge)
└─**1=Culvert** (Inlet Controls 6.55 cfs @ 8.34 fps)
└─**2=Orifice/Grate** ( Controls 0.00 cfs)

## Pond B: Bioretention



## Summary for Pond C: Chambers

Inflow Area = 0.150 ac, 53.33% Impervious, Inflow Depth > 7.40" for 100 Year event
Inflow = 1.41 cfs @ 12.00 hrs, Volume= 0.093 af
Outflow = 1.39 cfs @ 12.01 hrs, Volume= 0.086 af, Atten= 2%, Lag= 0.4 min
Primary = 1.39 cfs @ 12.01 hrs, Volume= 0.086 af

Routing by Stor-Ind method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Peak Elev= 533.85' @ 12.01 hrs Surf.Area= 336 sf Storage= 662 cf

Plug-Flow detention time= 157.4 min calculated for 0.086 af (92% of inflow)
Center-of-Mass det. time= 117.7 min ( 895.5 - 777.7 )

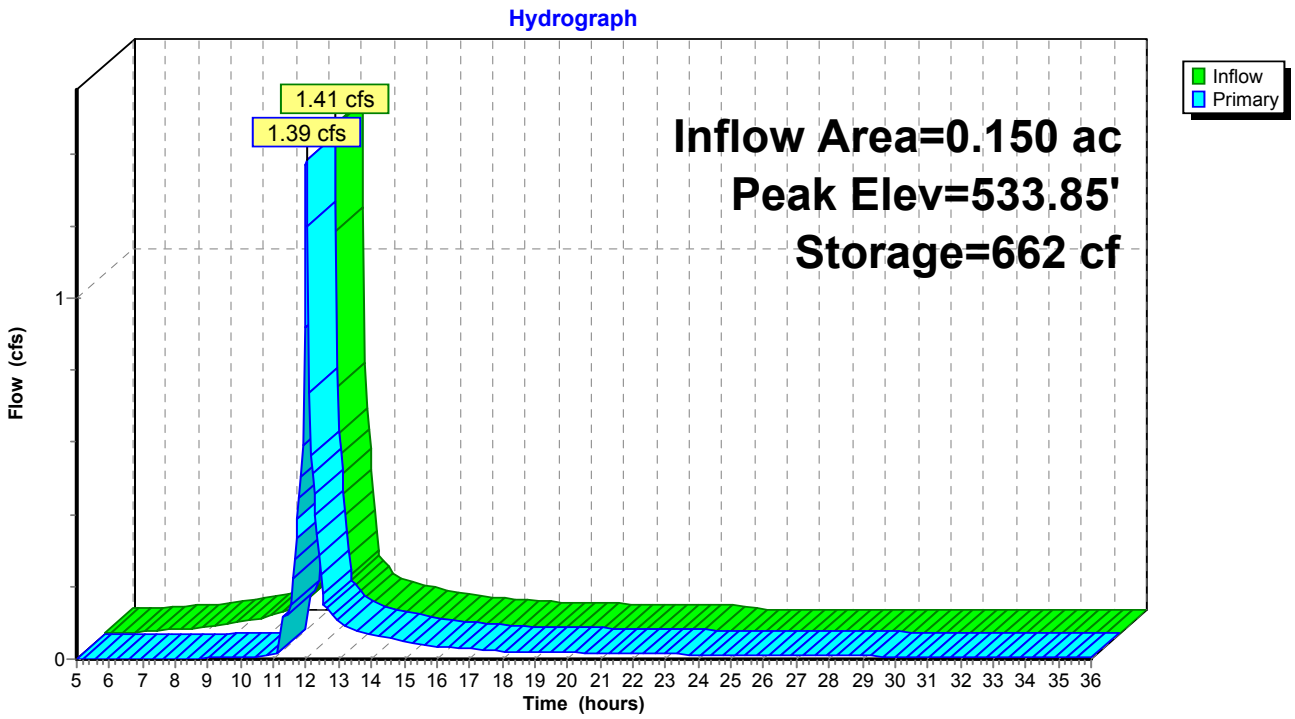
| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1A | 530.50' | 357 cf | **10.83'W x 31.00'L x 3.71'H Field A**<br>1,245 cf Overall - 352 cf Embedded = 893 cf x 40.0% Voids |
| #2A | 531.50' | 352 cf | **Cultec R-280HD** x 8 Inside #1<br>Effective Size= 46.9"W x 26.0"H => 6.07 sf x 7.00'L = 42.5 cf<br>Overall Size= 47.0"W x 26.5"H x 8.00'L with 1.00' Overlap<br>Row Length Adjustment= +1.00' x 6.07 sf x 2 rows |
| | | 709 cf | Total Available Storage |

Storage Group A created with Chamber Wizard

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 531.50' | **12.0" Round Culvert** L= 70.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 531.50' / 531.00' S= 0.0071 '/' Cc= 0.900<br>n= 0.012, Flow Area= 0.79 sf |
| #2 | Device 1 | 531.50' | **0.5" Vert. Orifice/Grate** C= 0.600 |
| #3 | Device 1 | 533.50' | **2.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)<br>1.0' Crest Height |

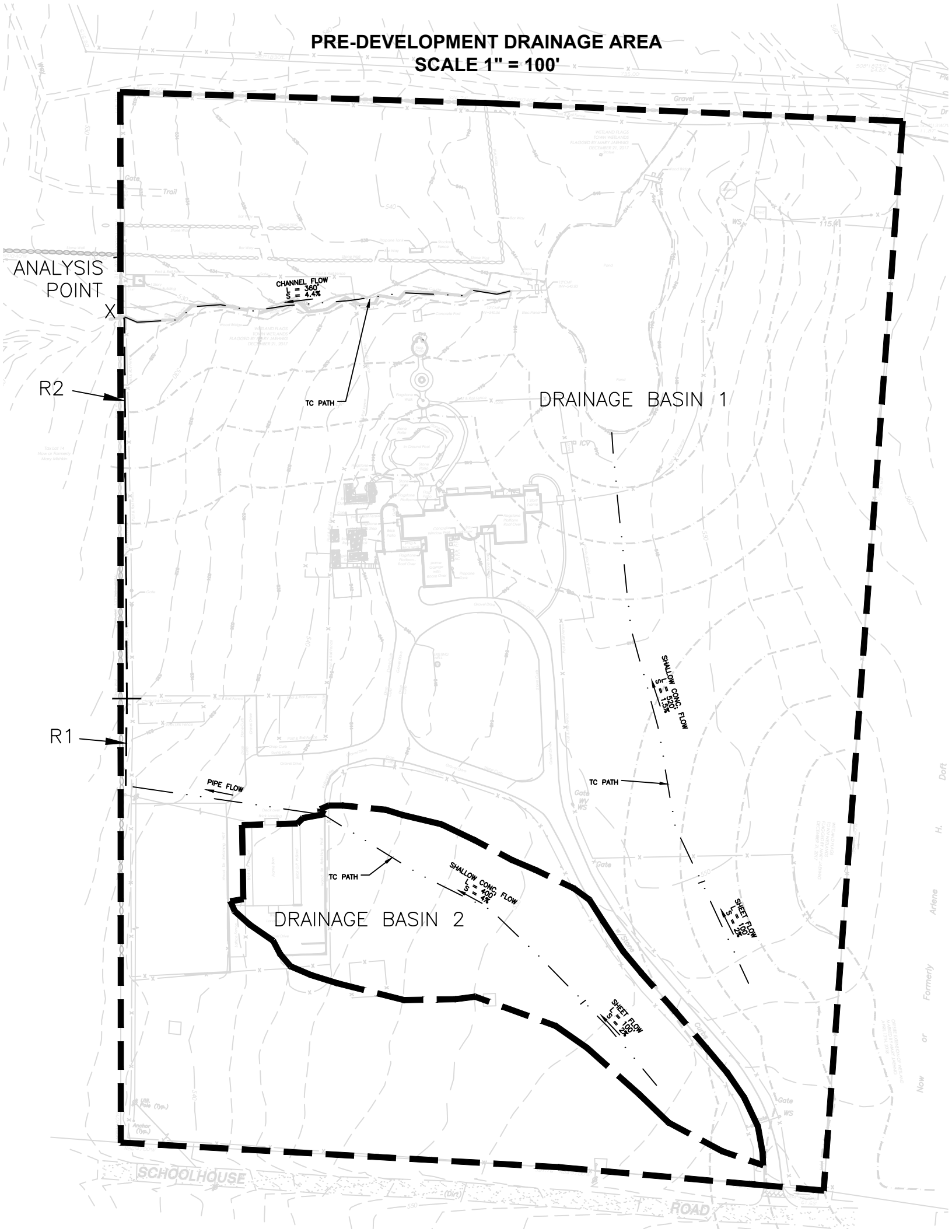
**Primary OutFlow** Max=1.33 cfs @ 12.01 hrs HW=533.84' (Free Discharge)
└─**1=Culvert** (Passes 1.33 cfs of 4.66 cfs potential flow)
  ├─**2=Orifice/Grate** (Orifice Controls 0.01 cfs @ 7.34 fps)
  └─**3=Sharp-Crested Rectangular Weir** (Weir Controls 1.32 cfs @ 1.99 fps)

## Pond C: Chambers

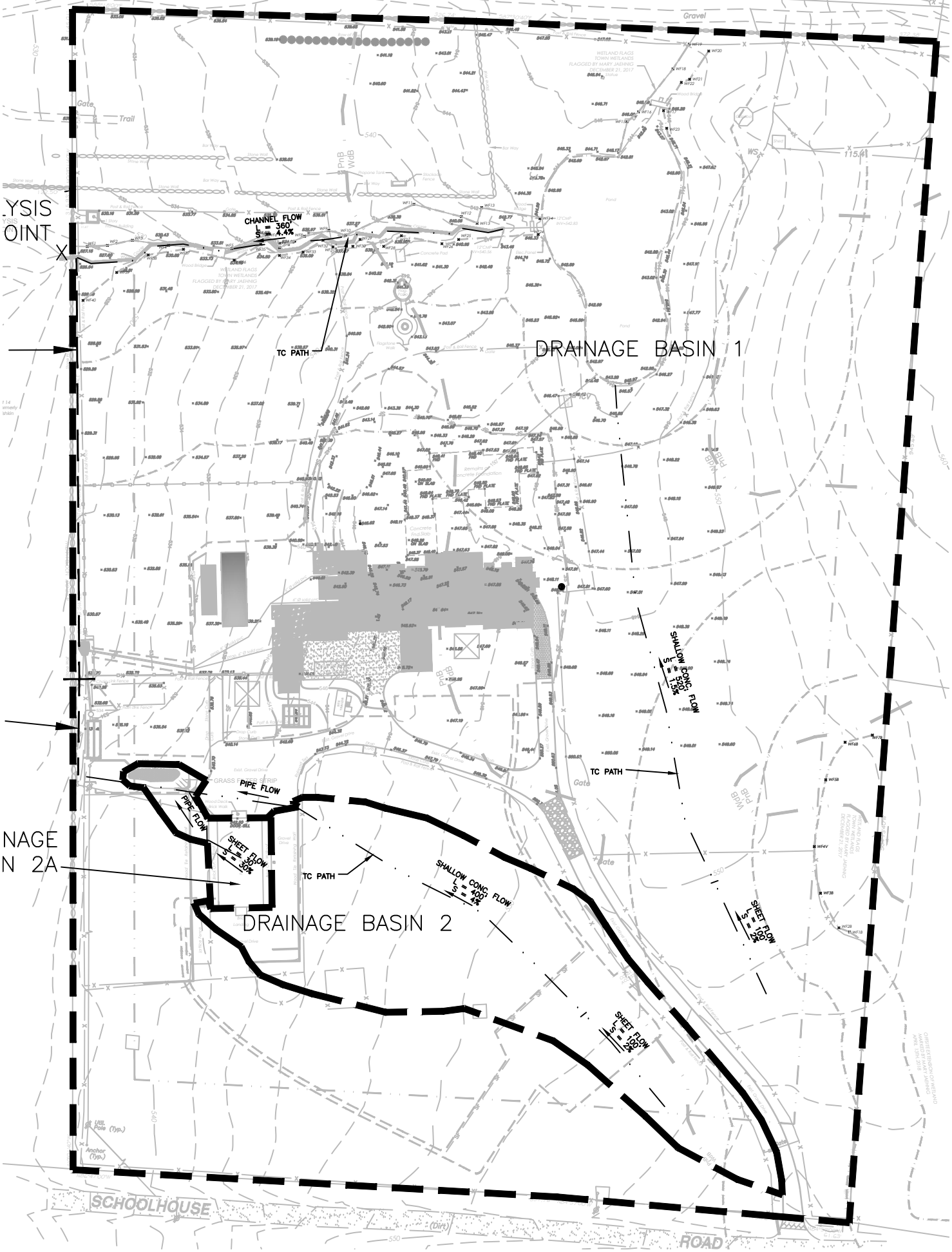


# APPENDIX – L

# PRE-DEVELOPMENT DRAINAGE AREA
## SCALE 1" = 100'



# POST–DEVELOPMENT DRAINAGE AREA
SCALE 1" = 100'



# APPENDIX – M

# Groff

## Total Required Water Quality Volume

### PROPOSED NEW DEVELOPMENT

**Total New Impervious Area** = **0.06 ac.**

**I,** % Impervious Area **= 100%**
**P**, Westchester Cty = 1.5 in. = **0.125 ft.**
**Rv** = 0.05+0.009 I = 0.05 + (0.009)(100) = **0.95**

**WQv1** = (P)(Rv)(A) = (.125)(.95)(0.03) = 0.0071 acre-ft = **309.26 c.f. = WQv**

### PROPOSED REDEVELOPMENT

**Total Redeveloped Impervious Area** = **0.03 ac.**

**I,** % Impervious Area **= 100%**
**P**, Westchester Cty = 1.5 in. = **0.125 ft.**
**Rv** = 0.05+0.009 I = 0.05 + (0.009)(100) = **0.95**

**WQv1** = (P)(Rv)(A) = (.125)(.95)(0.03) = 0.00356 acre-ft = **155.18 c.f. (0.25) = 38.8 c.f. WQv**

**Total Water Quality Volume required = 348.14 c.f.**

## Groff - Proposed Bioretention area

## Total Provided Water Quality Volume

**Total Tributary Impervious Area** = **0.08 ac.**

**Total Impervious Area** Tributary to Bioretention = **0.08 acre**
**Total Site Area** Tributary to bioretention = **0.15 acre**

**I,** % Impervious Area = 0.08/0.15 **= 53%**
**P**, Westchester Cty = 1.5 in. = **0.125 ft.**
**Rv** = 0.05+0.009 I = 0.05 + (0.009)(53) = **0.53**

**WQv1** = (P)(Rv)(A) = (.125)(.53)(0.15) = 0.00994 acre-ft = **432.9 c.f. = WQv**

**Filter Bed Area Required** = (433 cf) (2ft) / [(0.5ft/day) (0.5ft + 2ft) (2)]
= 866/ (.5)(2.5)(2)
= 866 / 2.5

**Filter Bed Area Required = 346.4 s.f.**
**Filter Bed Area Provided = 350 s.f.**

**RRv Applied** = **180 sf**
(40% of total water Quality Volume provided)

**Bio Retention bed area is computed using the following equation**
$A_f = (WQ_v)(d_f) / [(k)(h_f + d_f)(t_f)]$
**Where:**
$A_f$ = Surface area of filter bed ($ft^2$)
WQv=Water Quality Volume(cf)
$d_f$ = Filter bed depth (ft)
k = Coefficient of permeability of filter media (ft/day)
$h_f$ = Average height of water above filter bed (ft)
$t_f$ = Design filter bed drain time (days)

# Groff - Proposed Bioretention area

## Runoff Reduction Volume

**Aic - Total Proposed Increase in Impervious area = 0.064 acre**
**S - Hydraulic Soils Group Reduction = 0.30 acre**
**P – 24 hour rainfall amount = 1.5 inch**

**P**, Westchester Cty = 1.5 in. = **0.125 ft.**
**Rv** = 0.05+0.009 I = 0.05 + (0.009)(100) = **0.95**
**Aic**= **0.064**
**S** = Hydraulic Soils Group C = **0.30**

**RRv min**= (P)(Rv)(Aic)(S) = (.125)(.95)(0.064)(0.30)= **0.00228 acre-ft** = **RRv Min. required**

**Total Water Quality Volume treatment provided in Bioretention = 450 sf**

**RRv Applied = 180 sf**
*(40% of total water Quality Volume provided)*

**Meeting Minimum Requirements**

**RRv provided = 0.0041 acre-ft**

**Min RRv required = 0.0023 acre-ft**

# Groff

## Site Plan

Westchester County

## Channel Protection Volume Calculation

Curve Number for Drainage Basin tributary to SMP = **87**

Initial Abstraction (Ia) = [(200/CN)-2]
**Ia** = [(200/87)-2] = [2.3-2] = **0.30**

1 Year Rainfall in inches (**P**) = **2.8** inches for Westchester County
**Ia/P** = 0.30/2.8 = **0.11**

Time of Concentration (**Tc**) = **0.1** hours

Using the above Data and Exhibit 4-III from TR-55
Unit peak discharge (qu) for SCS Type III rainfall distribution
Unit Peak Discharge = (**qu**) = **650 csm/in**
Using a (qu) of 650 csm/in the Ratio of Outflow to Inflow (qo/qi) = **0.035**
**qo/qi = 0.035**

Channel Protection Storage Volume (Vs) / Volume of Runoff in Inches (Vr) =
$Vs / Vr = 0.683 - 1.43(qo/qi) + 1.64(qo/qi)^2 - 0.804(qo/qi)^3 =$
$Vs / Vr = 0.683 - 1.43(0.035) + 1.64(0.035)^2 - 0.804(0.035)^3 =$
$Vs / Vr = 0.683 - 1.43(0.035) + 1.64(0.0012) - 0.804(0.00004) =$
$Vs / Vr = 0.683 - 0.0500 + 0.001968 - 0.00003$
**Vs / Vr** = **0.635**

Vs = (Vs/Vr) (Post Developed Runoff in inches) (1/12) (Total Drainage Area in Acres)
Vs = (0.635) (1.6") (1/12) (0.15 ac.)
**Vs** = **0.0127 a.f.** = **553.2 c.f.**

**Channel Protection Volume Required = 553.2 c.f.**
**Channel Protection Volume Provided = 656 c.f.**

**PROJECT NOTES:**

1. OWNER & MAILING ADDRESS:
   CHRISTINE GROFF
   5 SCHOOL HOUSE ROAD
   LEWISBORO, NY 10597

2. PROJECT SITE ADDRESS:
   5 SCHOOL HOUSE ROAD
   LEWISBORO, NY 10597

3. SURVEY BOUNDARY INFORMATION FROM MAP PREPARED BY:
   INSIGHT ENGINEERING & SURVEYING, CARMEL NY 10512
   -SURVEY TOPOGRAPHICAL INFORMATION FROM MAP PREPARED BY:
   THOMAS C. MERRITTS LAND SURVEYORS P.C., PLEASANTVILLE NY 10570
   -ADDITIONAL TOPOGRAPHICAL INFORMATION FROM:
   WESTCHESTER COUNTY GEOGRAPHIC INFORMATION SYSTEMS
   <http://giswww.westchestergov.com/>

4. TOWN OF LEWISBORO TAX MAP INFORMATION:
   SHEET 22 BLOCK 10802 LOT 68
   TOTAL AREA OF PARCEL = 20.822 ACRES

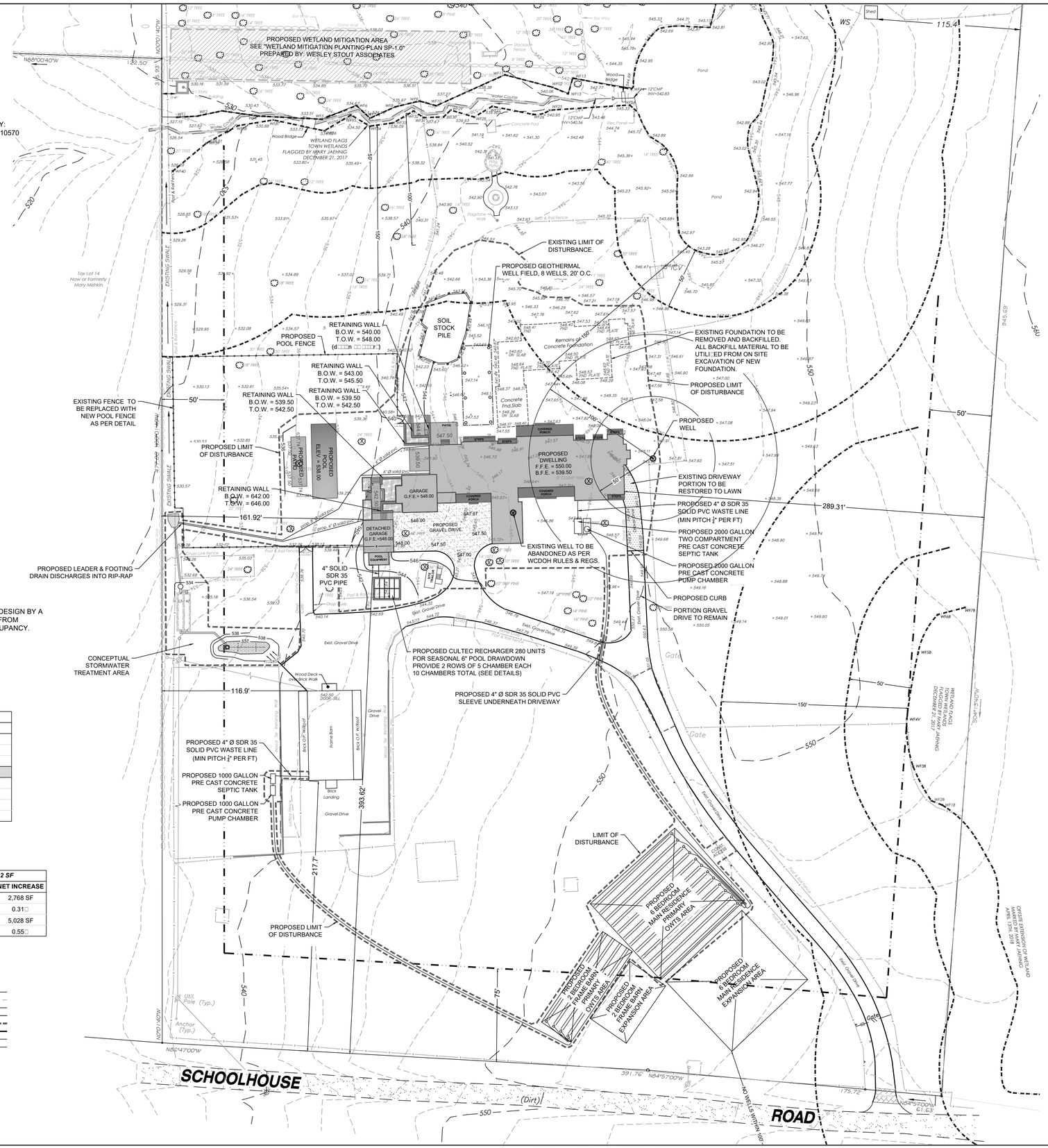
6. WATERSHED BASIN:
   CROTON RIVER BASIN

7. USDA SOIL TYPE(S) WITHIN PROPERTY BOUNDARIES:
   PnB- PAXTON FINE SANDY LOAM, 3 TO 8 PERCENT SLOPES
   WdB- WOODBRIDGE LOAM, 3 TO 8 PERCENT SLOPES
   AS PER WESTCHESTER COUNTY SOIL
   CONSERVATION SERVICE SOIL SURVEY MAPS

8. TOTAL AREA OF DISTURBANCE = 82,000 SF
   -DISTURBACE WITHIN 50' WETLAND BUFFER = 0 SF
   -DISTURBANCE WITHIN 150' WETLAND BUFFER = 11,000 SF
   -DISTURBANCE, OTHER AREAS = 71,000 SF

9. ESTIMATED START DATE: 04/01/2019
   ESTIMATED FINISH DATE: 09/15/2021

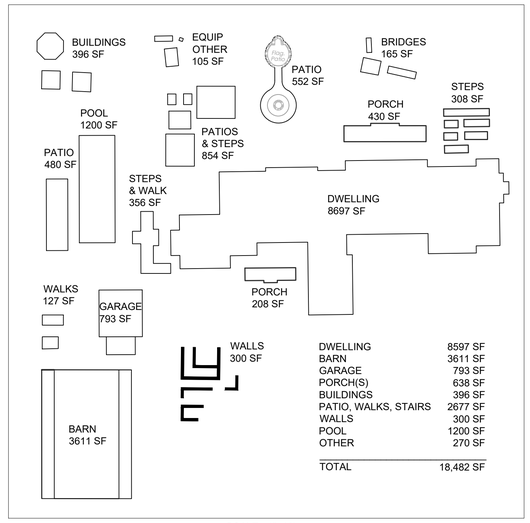
RETAINING WALLS GREATER THAN 4' IN HEIGHT WILL REQUIRE DESIGN BY A NY CERTIFIED ENGINEER AND WILL REQUIRE CERTIFICATION FROM ENGINEER PRIOR TO ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.





LOCATION MAP
N.T.S.

SITE COVERAGE - PROPOSED IMPERVIOUS




| | |
|---|---|
| DWELLING | 8597 SF |
| BARN | 3611 SF |
| GARAGE | 793 SF |
| PORCH(S) | 638 SF |
| BUILDINGS | 396 SF |
| PATIO, WALKS, STAIRS | 2677 SF |
| WALLS | 300 SF |
| POOL | 1200 SF |
| OTHER | 270 SF |
| TOTAL | 18,482 SF |

SCALE 1"=40'

| ZONING TABLE R-4A DISTRICT | | | |
|---|---|---|---|
| LOT | MINIMUM | EXISTING | PROPOSED |
| AREA | 4.0 ACRES | 20.882 ACRES | NO CHANGE |
| WIDTH | 250' | 660' | NO CHANGE |
| YARDS | | | |
| FRONT | 50' | 217.7' | 393.62' |
| SIDE | 50' | 116.9' | 161.92' |
| SIDE | 50' | 295.98' | 289.31' |
| REAR | 50' | 300' | 300' |

| R-4A DISTRICT - TOTAL LOT AREA = 20.882 ACRES / 907,006.32 SF | | | | |
|---|---|---|---|---|
| COVERAGE | MAXIMUM | EXISTING | PROPOSED | NET INCREASE |
| LAND COVERAGE | | 15,714 SF | 18,482 SF | 2,768 SF |
| | | 1.73 | 2.04 | 0.31 |
| BUILDING COVERAGE | 37,748 SF | 9,107 SF | 14,135 SF | 5,028 SF |
| | 6.00 | 1.00 | 1.55 | 0.55 |

LEGEND

EXISTING PROPERTY LINE
EXISTING 2' CONTOUR LINE
EXISTING 10' CONTOUR LINE
PROPOSED CONTOUR LINE
LIMIT OF DISTURBANCE
ZONING SETBACK LINE
PROPOSED SILT FENCE
PROPOSED POOL FENCE
PROPOSED SPOT ELEVATION
EXISTING TREE
EXISTING TREE TO BE REMOVED
PROPOSED LANDSCAPE PLANTINGS

# SITE PLAN
## GROFF RESIDENCE

5 SCHOOL HOUSE ROAD
TOWN OF LEWISBORO
WESTCHESTER COUNTY, NY


487 E MAIN STREET
SUITE # 230
MOUNT KISCO, NY 10549

P/F: 1-800-786-1909

WWW.RAIN-CONCEPTS.COM
INFO@RAIN-CONCEPTS.COM

RAIN CONCEPTS
STORM WATER | EROSION CONTROL MANAGEMENT SOLUTIONS

JOHN PETROCCIONE P.E. LICENSE NO 078516 DATE





JOHN PETROCCIONE P.E.
LICENSE NO. 078516
129 NEPTUNE DRIVE, MONROE, NEW YORK 10950


REVISIONS:

| | |
|---|---|
| 11/01/18 | PLANNING BOARD SUBMISSION |
| 05/08/18 | ENGINEERING COMMENTS 4/30/18 |
| 01/12/18 | INITIAL PREPARATION |

SCALE 1"=40' | SHEET 1 OF 5

**PROJECT NOTES:**

1. OWNER & MAILING ADDRESS:
   CHRISTINE GROFF
   5 SCHOOL HOUSE ROAD
   LEWISBORO, NY 10597

2. PROJECT SITE ADDRESS:
   5 SCHOOL HOUSE ROAD
   LEWISBORO, NY 10597

3. SURVEY BOUNDARY INFORMATION FROM MAP PREPARED BY:
   INSIGHT ENGINEERING & SURVEYING, CARMEL NY 10512
   -SURVEY TOPOGRAPHICAL INFORMATION FROM MAP PREPARED BY:
   THOMAS C. MERRITTS LAND SURVEYORS P.C., PLEASANTVILLE NY 10570
   -ADDITIONAL TOPOGRAPHICAL INFORMATION FROM:
   WESTCHESTER COUNTY GEOGRAPHIC INFORMATION SYSTEMS
   <http://giswww.westchestergov.com/>

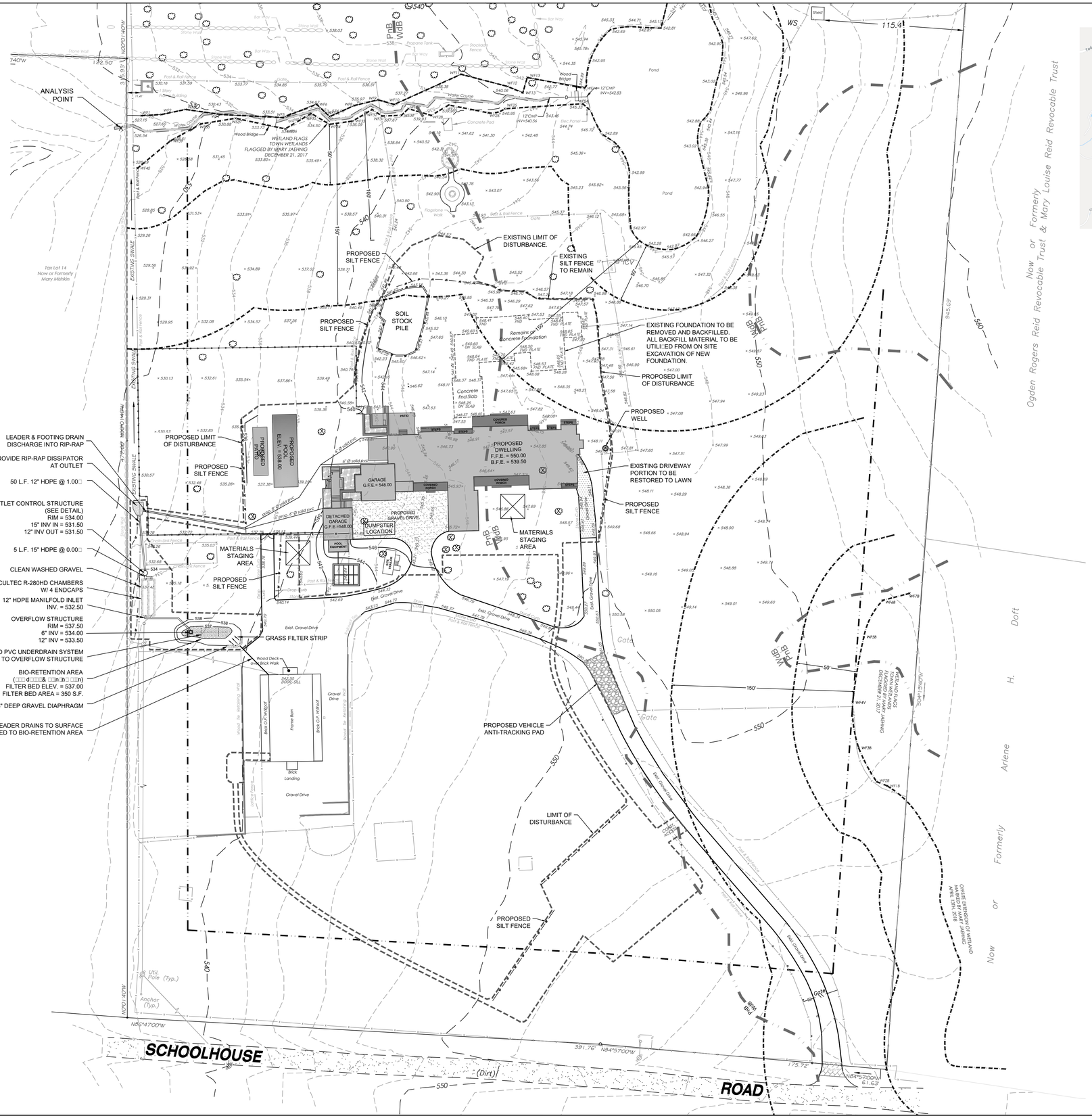
4. TOWN OF LEWISBORO TAX MAP INFORMATION:
   SHEET 22 BLOCK 10802 LOT 68
   TOTAL AREA OF PARCEL = 20.822 ACRES

6. WATERSHED BASIN:
   CROTON RIVER BASIN

7. USDA SOIL TYPE(S) WITHIN PROPERTY BOUNDARIES:
   PnB- PAXTON FINE SANDY LOAM, 3 TO 8 PERCENT SLOPES
   WdB- WOODBRIDGE LOAM, 3 TO 8 PERCENT SLOPES
   AS PER WESTCHESTER COUNTY SOIL
   CONSERVATION SERVICE SOIL SURVEY MAPS

8. TOTAL AREA OF DISTURBANCE = 82,000 SF
   -DISTURBANCE WITHIN 50' WETLAND BUFFER = 0 SF
   -DISTURBANCE WITHIN 150' WETLAND BUFFER = 11,000 SF
   -DISTURBANCE, OTHER AREAS = 71,000 SF

9. ESTIMATED START DATE: 04/01/2019
   ESTIMATED FINISH DATE: 09/15/2021





LOCATION MAP
N.T.S.

LEGEND

- EXISTING PROPERTY LINE
- EXISTING 2' CONTOUR LINE
- EXISTING 10' CONTOUR LINE
- PROPOSED CONTOUR LINE (640)
- LIMIT OF DISTURBANCE
- □ONING SETBACK LINE
- PROPOSED SILT FENCE (SF)
- PROPOSED POOL FENCE
- PROPOSED SPOT ELEVATION (548 550)
- EXISTING TREE
- EXISTING TREE TO BE REMOVED
- PROPOSED LANDSCAPE PLANTINGS

# STORMWATER POLLUTION PREVENTION PLAN

## GROFF RESIDENCE

5 SCHOOL HOUSE ROAD
TOWN OF LEWISBORO
WESTCHESTER COUNTY, NY


487 E MAIN STREET
SUITE # 230
MOUNT KISCO, NY 10549

P/F: 1-800-786-1909

WWW.RAIN-CONCEPTS.COM
INFO@RAIN-CONCEPTS.COM

RAIN CONCEPTS
CLEAN WATER | DESIGN CRITICAL MANAGEMENT SOLUTIONS


JOHN PETROCCIONE P.E. LICENSE NO 078516 DATE



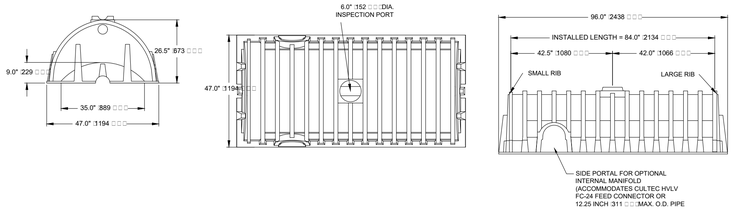

JOHN PETROCCIONE P.E.
LICENSE NO. 078516
129 NEPTUNE DRIVE, MONROE, NEW YORK 10950

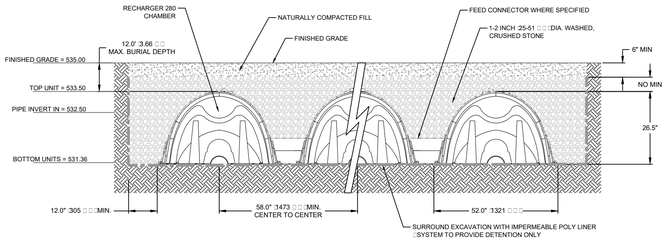

REVISIONS:

| | |
|---|---|
| 11/01/18 | PLANNING BOARD SUBMISSION |
| 05/08/18 | ENGINEERING COMMENTS 4/30/18 |
| 01/12/18 | INITIAL PREPARATION |

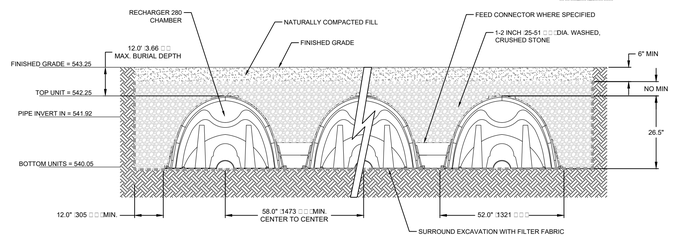
SCALE 1"=40' | SHEET 2 OF 5

## CULTEC RECHARGER 280 CHAMBERS DETAIL - STORMWATER DETENTION SYSTEM




## CULTEC RECHARGER 280 CHAMBERS DETAIL - POOL MITIGATION SYSTEM




**POOL DRAW DOWN CALCULATIONS**

PROPOSED POOL 20' X 60'
SURFACE AREA =1200 SF
1200 SF X 6" DRAW DOWN = 600 CF

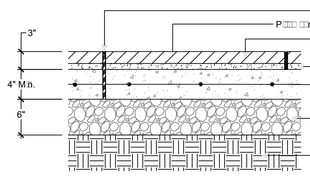
**TOTAL STORAGE AMOUNT REQUIRED = 600 CF**

**TOTAL VOLUME PROVIDED = 645 CF**

**CULTEC SIZING CALCULATIONS**

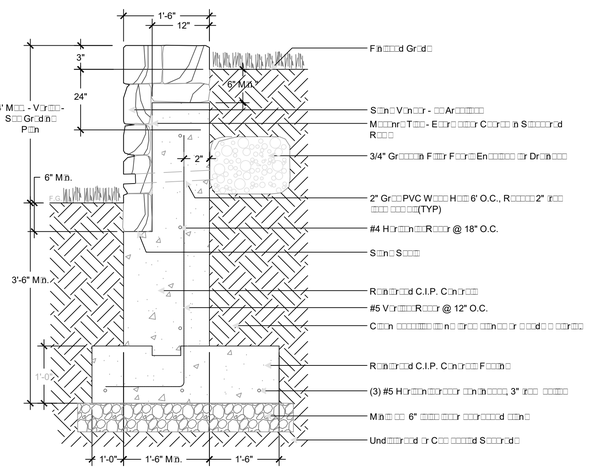
CULTEC MODEL 280 RECHARGER
TOTAL STORAGE CF PER UNIT= 64.46 CF
TOTAL UNITS PROVIDED = 10

**TOTAL STORAGE PROVIDED = 645 CF**




## 2 S□□n□ P□□□

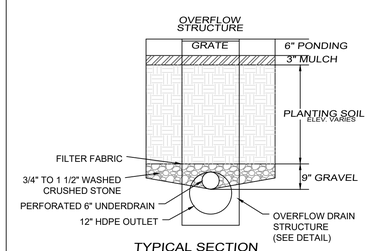
N□□□□ S□□□



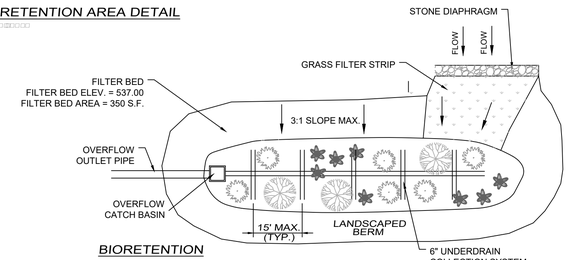

## S□□n□ W□□□

N□□□□ S□□□

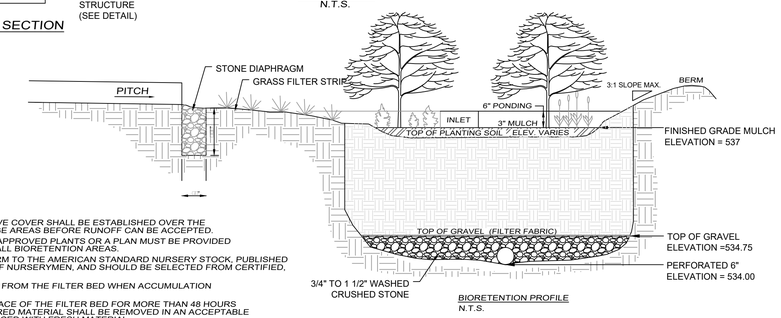
## BIORETENTION AREA DETAIL




TYPICAL SECTION
N.T.S.




BIORETENTION PLAN VIEW
N.T.S.



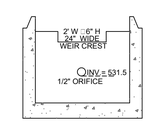

BIORETENTION PROFILE
N.T.S.

NOTES:

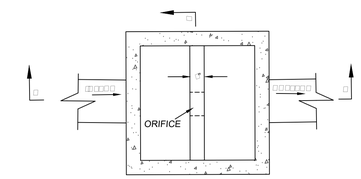
1. A DENSE AND VIGOROUS VEGETATIVE COVER SHALL BE ESTABLISHED OVER THE CONTRIBUTING PERVIOUS DRAINAGE AREAS BEFORE RUNOFF CAN BE ACCEPTED.
2. LANDSCAPING SHALL FOLLOW THE APPROVED PLANTS OR A PLAN MUST BE PROVIDED BY A LANDSCAPE ARCHITECT FOR ALL BIORETENTION AREAS.
3. PLANT MATERIALS SHOULD CONFORM TO THE AMERICAN STANDARD NURSERY STOCK, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, AND SHOULD BE SELECTED FROM CERTIFIED, REPUTABLE NURSERIES.
4. SILT/SEDIMENT SHALL BE REMOVED FROM THE FILTER BED WHEN ACCUMULATION EXCEEDS ONE INCH.
5. WHEN WATER PONDS ON THE SURFACE OF THE FILTER BED FOR MORE THAN 48 HOURS THE TOP FEW INCHES OF DISCOLORED MATERIAL SHALL BE REMOVED IN AN ACCEPTABLE MANNER (□□□, LANDFILL) AND REPLACED WITH FRESH MATERIAL.
6. AREAS DEVOID OF MULCH SHALL BE RE-MULCHED ANNUALLY.
7. DEAD OR DISEASED PLANTS SHALL BE REMOVED AND REPLACED AS NECESSARY.
8. GRASS AROUND BIORETENTION AREA SHALL BE MOWED A MINIMUM OF 3 TIMES PER YEAR TO MAINTAIN MAX. GRASS HEIGHT OF 12"
9. FILTER BED AREA SHALL BE INSPECTED FOR SAND BUILD-UP FOLLOWING THE SPRING MELT EVENT.
10. THE MULCH LAYER SHOULD BE STANDARD LANDSCAPE STYLE, SINGLE OR DOUBLE, SHREDDED HARDWOOD MULCH OR CHIPS. THE MULCH LAYER SHOULD BE WELL AGED (STOCKPILED OR STORED FOR AT LEAST 12 MONTHS), UNIFORM IN COLOR, AND FREE OF OTHER MATERIALS, SUCH AS WEED SEEDS, SOIL, ROOTS, ETC. THE MULCH SHOULD BE APPLIED TO A MAXIMUM DEPTH OF THREE INCHES. GRASS CLIPPINGS SHOULD NOT BE USED AS A MULCH MATERIAL.

## OUTLET CONTROL STRUCTURE DETAIL

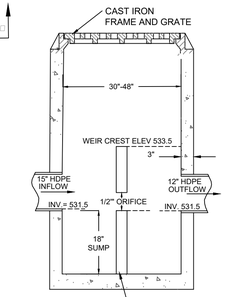
"Fr□□ C□□□□S□r□ □□□□r D□□n□□n"



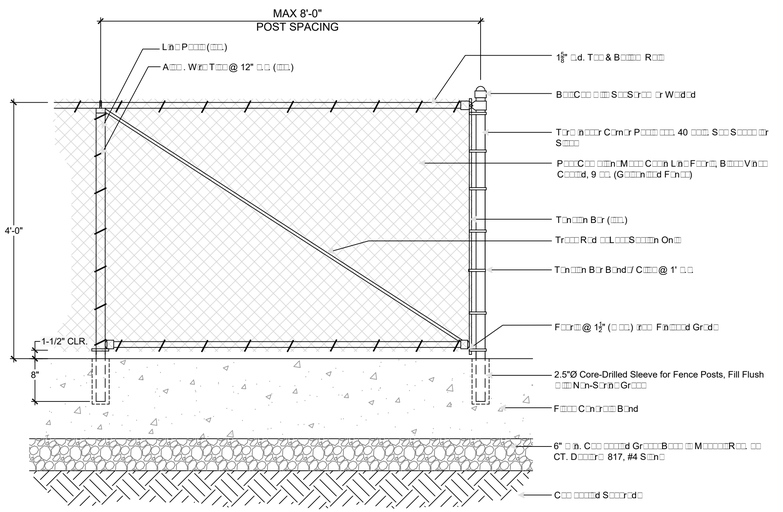

SECTION B-B




PLAN VIEW




SECTION A-A

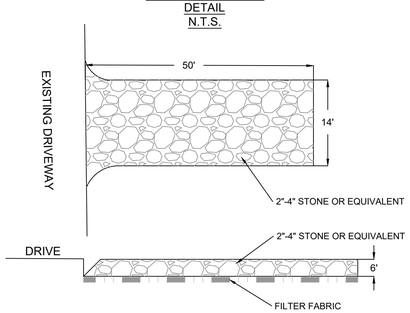



## 7 P□□□En□□□□r□

N□□□□ S□□□

N□□□: P□□□□□□□ □r□ □□ □□ □□□□□□□n□ □nd □□□□ □□□□n□ □ □□ □□□ □□□□ 48" □□□□ □r□d□ □nd □n□□□□d □n □□□ □□□n□□ □ □□ NY S□□□□ □□d□r□□□r□□ □n□□

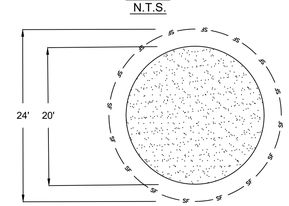
## ANTI-TRACKING PAD DETAIL
N.T.S.



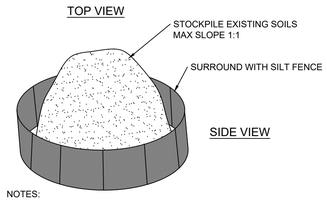

NOTES:

1. USE 2" TO 4" STONE OR RECLAIMED CONCRETE EQUIVALENT.
2. MINIMUM ENTRANCE LENGTH 10' , MINIMUM ENTRANCE WIDTH 10', FOR RESIDENTIAL APPLICATIONS
3. MINIMUM GRAVEL DEPTH NOT LESS THAN 6"
4. WOVEN GEO-TEXTILE FABRIC TO BE PLACED OVER ENTIRE AREA BEFORE STONE IS PLACED.
5. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACING OF SOILS OR SEDIMENT ONTO PUBLIC ROADWAYS. ANY OR ALL SEDIMENT TRACKED ONTO ROADWAY SHOULD BE REMOVED ACCORDINGLY.
6. NO VEHICLE WASHING IS PERMITTED ON OR AROUND CONSTRUCTION ENTRANCE.
7. PERFORM PERIODIC INSPECTIONS AS NEEDED, REMOVE AND REPLACE GRAVEL AS RECOMMENDED FROM SUCH INSPECTIONS.

## SOIL STOCKPILE DETAIL
N.T.S.




TOP VIEW

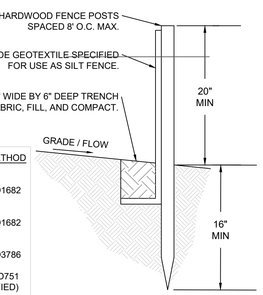



SIDE VIEW

NOTES:

1. STOCKPILE SOILS MAX SLOPE 1:1
2. SURROUND SOIL STOCKPILE COMPLETELY WITH SILT FENCE TO BE INSTALLED AS PER SILT FENCE DETAIL PROVIDED.
3. WHEN REMOVAL OF SILT FENCE IS REQUIRED TO ACCESS SOILS SILT FENCE MUST BE REPLACED IMMEDIATELY OR BEFORE END OF WORK SAME DAY. SILT FENCE IS TO BE REPLACED IF BULGES OR DAMAGE APPEARS.
4. IF STOCKPILE WILL REMAIN DORMANT FOR PERIOD OF 3 MONTHS OR MORE IT SHOULD BE COVERED WITH TARP OR SEEDED TEMPORARILY TO REDUCE POSSIBLE EROSION.

| SLOPE STEEPNESS | MAX LENGTH |
|---|---|
| 2:1 | 25 |
| 3:1 | 50 |
| 4:1 | 75 |
| 5:1 OR FLATTER | 100 |




| FABRIC PROPERTIES | MIN VALUE | TEST METHOD |
|---|---|---|
| GRAB TENSILE STRENGTH (LBS) | 90 | ASTM D1682 |
| ELONGATION AT FAILURE (□) | 50 | ASTM D1682 |
| MULLEN BURST STRENGTH (PSI) | 190 | ASTM D3786 |
| PUNCTURE STRENGTH (LBS) | 40 | ASTM D751 (MODIFIED) |
| EQUIVALENT OPENING SI□E | 40-80 | US STD SIEVE CW-02215 |
| SLURRY FLOW RATE | 0.3 | (GAL/MIN/SF) |
| ULTRAVIOLET RADIATION STABILITY (□) | 90 | ASTM G-26 |

FILTER FABRIC
SILT FENCE DETAIL
N.T.S.

SILT FENCE NOTES:

1. FILTER FABRIC TO BE FASTENED SECURELY TO POSTS WITH STAPLES WITH MAXIMUM SPACING 8' ON CENTER.
2. ALL SILT FENCE SHALL RUN PARALLEL TO CONTOURS.
3. ALL SILT FENCE SHALL MEET THE MINIMUM REQUIREMENTS AS STATED UNLESS OTHERWISE NOTED AND APPROVED BY THE BUILDING INSPECTOR OR ENGINEER
4. WHEN TWO SECTIONS OF SILT FENCE ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6" AND FOLDED.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN SEDIMENT LEVELS REACH 1/2 HEIGHT OF EXPOSED FENCE OR BULGES APPEAR.
6. PREFABRICATED UNITS: ENVIROFENCE, GEOFAB, OR APPROVED EQUAL, MAY E USED IN LIEU OF THE ABOVE METHOD PROVIDING THE UNIT IS INSTALLED AS PER ABOVE DETAIL.
7. FENCE POSTS (FOR PREFAB UNITS): THE LENGTH SHALL BE MIN 36" WITH WOOD POSTS OF SOUND HARDWOOD WITH A MINIMUM CROSS SECTIONAL AREA OF 3.0 SQ/IN. STEEL POSTS SHALL BET AND U SECTIONS WEIGHING NO LESS THAN 1 LB PER LINEAL FT.

# DETAILS
## GROFF RESIDENCE

5 SCHOOL HOUSE ROAD
TOWN OF LEWISBORO
WESTCHESTER COUNTY, NY


487 E MAIN STREET
SUITE # 230
MOUNT KISCO, NY 10549

P/F: 1-800-786-1909

WWW.RAIN-CONCEPTS.COM
INFO@RAIN-CONCEPTS.COM

RAIN CONCEPTS
STORM WATER & EROSION CONTROL MANAGEMENT SOLUTIONS

JOHN PETROCCIONE P.E. LICENSE NO 078516 DATE





JOHN PETROCCIONE P.E.
LICENSE NO. 078516
129 NEPTUNE DRIVE, MONROE, NEW YORK 10950


| REVISIONS: | |
|---|---|
| 11/01/18 | PLANNING BOARD SUBMISSION |
| 05/08/18 | ENGINEERING COMMENTS 4/30/18 |
| 01/12/18 | INITIAL PREPARATION |

SCALE N.T.S. | SHEET 3 OF 5

**PROJECT NOTES:**

1. OWNER & MAILING ADDRESS:
   CHRISTINE GROFF
   5 SCHOOL HOUSE ROAD
   LEWISBORO, NY 10597

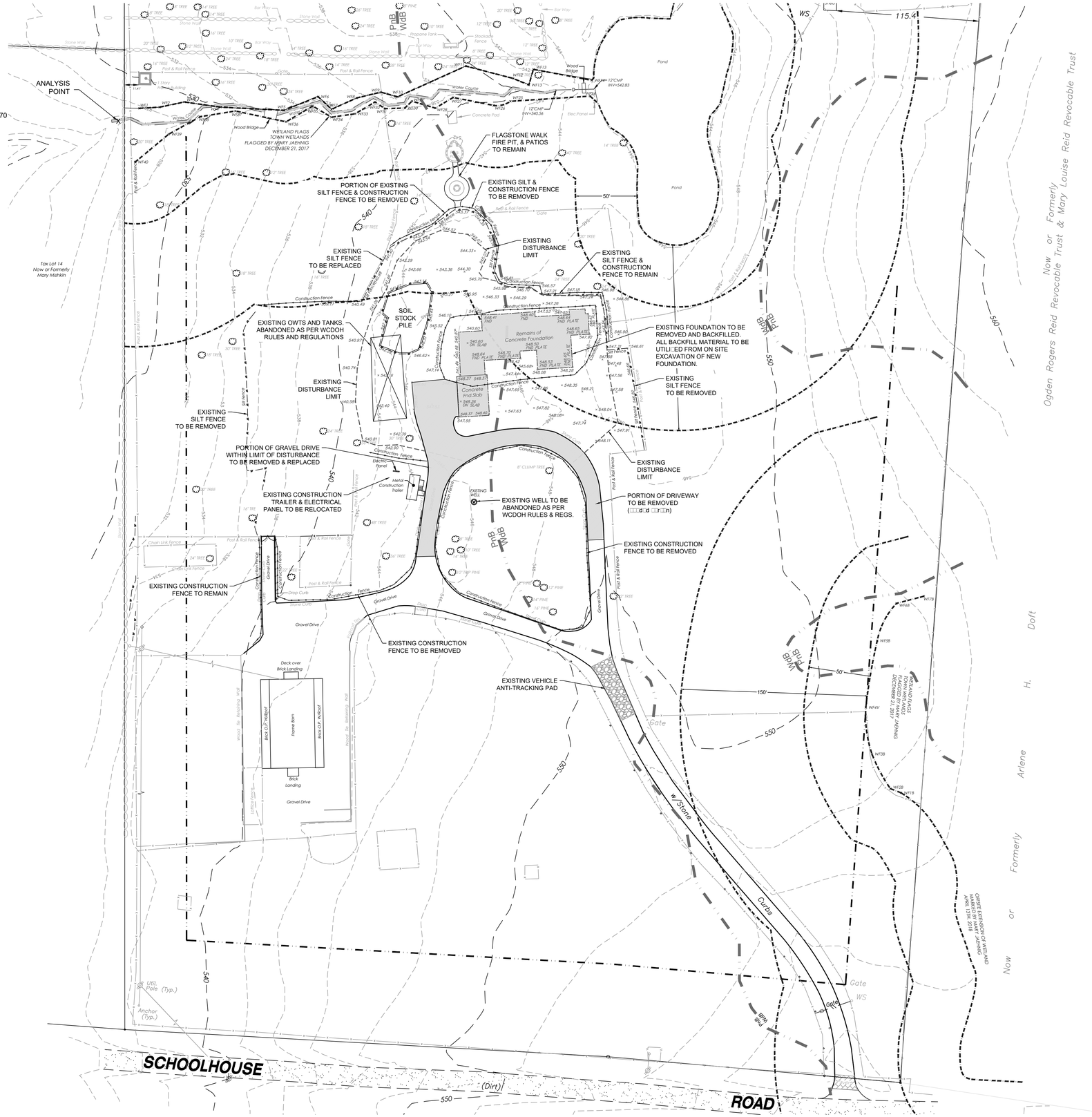
2. PROJECT SITE ADDRESS:
   5 SCHOOL HOUSE ROAD
   LEWISBORO, NY 10597

3. SURVEY BOUNDARY INFORMATION FROM MAP PREPARED BY:
   INSIGHT ENGINEERING & SURVEYING, CARMEL NY 10512
   -SURVEY TOPOGRAPHICAL INFORMATION FROM MAP PREPARED BY:
   THOMAS C. MERRITTS LAND SURVEYORS P.C., PLEASANTVILLE NY 10570
   -ADDITIONAL TOPOGRAPHICAL INFORMATION FROM:
   WESTCHESTER COUNTY GEOGRAPHIC INFORMATION SYSTEMS
   <http://gis.www.westchestergov.com/>

4. TOWN OF LEWISBORO TAX MAP INFORMATION:
   SHEET 22 BLOCK 10802 LOT 68
   TOTAL AREA OF PARCEL = 20.822 ACRES

6. WATERSHED BASIN:
   CROTON RIVER BASIN

7. USDA SOIL TYPE(S) WITHIN PROPERTY BOUNDARIES:
   PnB- PAXTON FINE SANDY LOAM, 3 TO 8 PERCENT SLOPES
   WdB- WOODBRIDGE LOAM, 3 TO 8 PERCENT SLOPES
   AS PER WESTCHESTER COUNTY SOIL
   CONSERVATION SERVICE SOIL SURVEY MAPS





LOCATION MAP
N.T.S.

LEGEND

| | |
|---|---|
| EXISTING PROPERTY LINE | |
| EXISTING 2' CONTOUR LINE | |
| EXISTING 10' CONTOUR LINE | |
| EXISTING CONSTRUCTION FENCE | |
| PROPOSED SILT FENCE | SF SF SF SF |
| SOILS BOUNDARY LINE | |
| EXISTING TREE TO REMAIN | |
| EXISTING TREE TO BE REMOVED | |
| PATIO, WALK, ETC. TO BE REMOVED | |

# EXISTING CONDITIONS & REMOVALS PLAN

## GROFF RESIDENCE

5 SCHOOL HOUSE ROAD
TOWN OF LEWISBORO
WESTCHESTER COUNTY, NY


487 E MAIN STREET
SUITE # 230
MOUNT KISCO, NY 10549

P/F: 1-800-786-1909

WWW.RAIN-CONCEPTS.COM
INFO@RAIN-CONCEPTS.COM

RAIN CONCEPTS
STORM WATER | EROSION CONTROL MANAGEMENT SOLUTIONS


JOHN PETROCCIONE P.E. LICENSE NO 078516 DATE




JOHN PETROCCIONE P.E.
LICENSE NO. 078516
129 NEPTUNE DRIVE, MONROE, NEW YORK 10950


REVISIONS:

| | |
|---|---|
| | |
| 11/01/18 | PLANNING BOARD SUBMISSION |
| 05/08/18 | ENGINEERING COMMENTS 4/30/18 |
| 01/12/18 | INITIAL PREPARATION |

SCALE 1"=40' SHEET 4 OF 5

**PROJECT NOTES:**

1. OWNER & MAILING ADDRESS:
   CHRISTINE GROFF
   5 SCHOOL HOUSE ROAD
   LEWISBORO, NY 10597

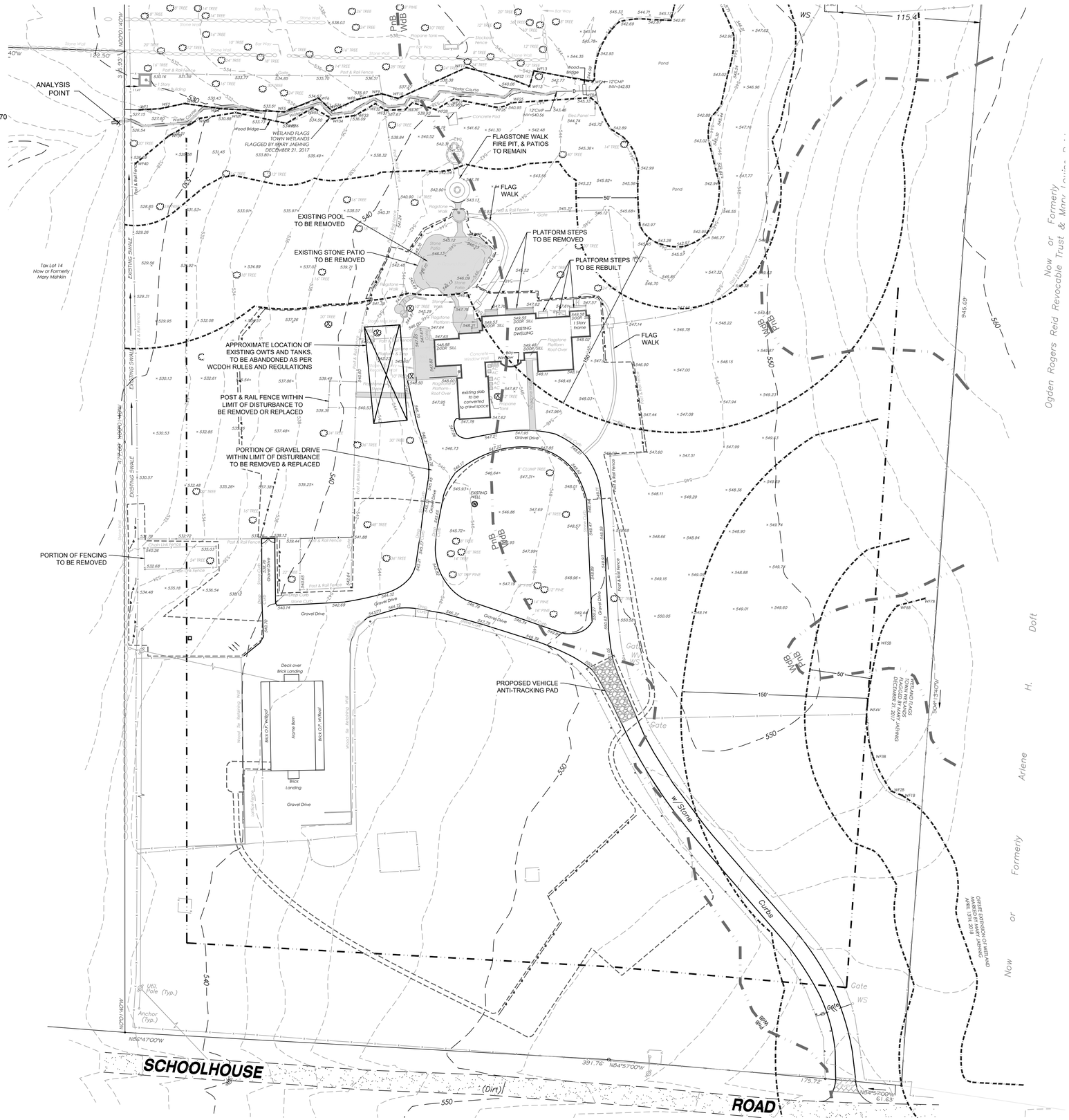
2. PROJECT SITE ADDRESS:
   5 SCHOOL HOUSE ROAD
   LEWISBORO, NY 10597

3. SURVEY BOUNDARY INFORMATION FROM MAP PREPARED BY:
   INSIGHT ENGINEERING & SURVEYING, CARMEL NY 10512
   -SURVEY TOPOGRAPHICAL INFORMATION FROM MAP PREPARED BY:
   THOMAS C. MERRITTS LAND SURVEYORS P.C., PLEASANTVILLE NY 10570
   -ADDITIONAL TOPOGRAPHICAL INFORMATION FROM:
   WESTCHESTER COUNTY GEOGRAPHIC INFORMATION SYSTEMS
   <http://giswww.westchestergov.com/>

4. TOWN OF LEWISBORO TAX MAP INFORMATION:
   SHEET 22 BLOCK 10802 LOT 68
   TOTAL AREA OF PARCEL = 20.822 ACRES

6. WATERSHED BASIN:
   CROTON RIVER BASIN

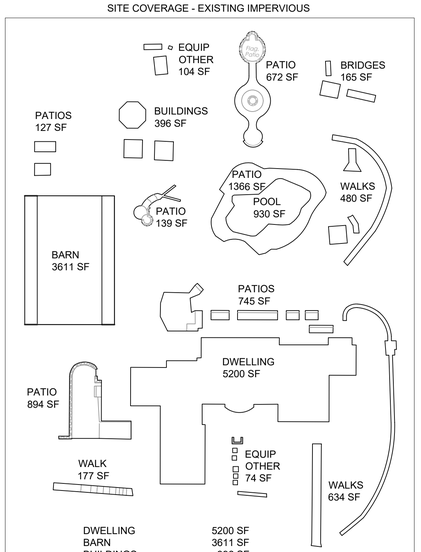
7. USDA SOIL TYPE(S) WITHIN PROPERTY BOUNDARIES:
   PnB- PAXTON FINE SANDY LOAM, 3 TO 8 PERCENT SLOPES
   WdB- WOODBRIDGE LOAM, 3 TO 8 PERCENT SLOPES
   AS PER WESTCHESTER COUNTY SOIL
   CONSERVATION SERVICE SOIL SURVEY MAPS





LOCATION MAP
N.T.S.

SITE COVERAGE - EXISTING IMPERVIOUS




| | |
|---|---|
| DWELLING | 5200 SF |
| BARN | 3611 SF |
| BUILDINGS | 396 SF |
| TERRACE & PATIO | 3943 SF |
| WALKWAY & STAIRS | 1291 SF |
| POOL | 930 SF |
| OTHER | 343 SF |
| TOTAL | 15,714 SF |

LEGEND

- EXISTING PROPERTY LINE
- EXISTING 2' CONTOUR LINE
- EXISTING 10' CONTOUR LINE
- PROPOSED SILT FENCE — SF — SF —
- SOILS BOUNDARY LINE
- EXISTING TREE TO REMAIN
- EXISTING TREE TO BE REMOVED
- PATIO, WALK, ETC. TO BE REMOVED

# ORIGINAL CONDITIONS & REMOVALS PLAN

## GROFF RESIDENCE

5 SCHOOL HOUSE ROAD
TOWN OF LEWISBORO
WESTCHESTER COUNTY, NY


487 E MAIN STREET
SUITE # 230
MOUNT KISCO, NY 10549

P/F: 1-800-786-1909

WWW.RAIN-CONCEPTS.COM
INFO@RAIN-CONCEPTS.COM

RAIN CONCEPTS
STORM WATER & EROSION CONTROL MANAGEMENT SOLUTIONS


JOHN PETROCCIONE P.E. LICENSE NO 078516 DATE




JOHN PETROCCIONE P.E.
LICENSE NO. 078516
129 NEPTUNE DRIVE, MONROE, NEW YORK 10950


REVISIONS:

| | |
|---|---|
| 11/01/18 | PLANNING BOARD SUBMISSION |
| 05/08/18 | ENGINEERING COMMENTS 4/30/18 |
| 01/12/18 | INITIAL PREPARATION |

SCALE 1"=40' SHEET 5 OF 5

KELLARD SESSIONS

John Kellard, P.E.
David Sessions, RLA, AICP
Joseph M. Cermele, P.E., CFM
Jan K. Johannessen, AICP

# MEMORANDUM

TO: Chairman Jerome Kerner, AIA and
Members of Lewisboro Planning Board

CC: Ciorsdan Conran
Judson Siebert, Esq.
Joseph Angiello

FROM: Jan K. Johannessen, AICP
Joseph M. Cermele, P.E., CFM
Town Consulting Professionals

DATE: January 9, 2019

RE: Wetland Permit Application
Onatru Preserve – Proposed Eagle Scout Lean-to Project
Elmwood Road
Sheet 44, Block 10302, Lot 14

---

The proposed Eagle Scout project consists of the construction of one (1) 8' x 12' Adirondack style lean-to to be located at the Onatru Preserve. The project location is within the Special Character Overlay Zone and the plans have been approved by the ACARC. The structure is proposed within the Town of Lewisboro 150-foot regulated wetland buffer and, therefore, requires a wetland permit as issued by the Planning Board. The applicant has obtained written confirmation from the NYSDEC that the lean-to will be located outside of the 100-foot NYSDEC wetland adjacent area and that a NYSDEC wetland permit is not required. This office has visited the site and has no objections to the location or design of the structure, as proposed.

**DOCUMENTS REVIEWED:**

- Wetland Permit Application
- ACARC Resolution, dated May 9, 2018
- Town Board Resolution, dated June 11, 2018
- Message from Chief Scout Executive
- Eagle Scout Service Project Workbook
- Site Photos
- Lean-To Specifications

JKJ/JMC/dc
T:\Lewisboro\Correspondence\2019-01-10_LWPB-Onatru Farm Lean-To-Review-Memo.docx

**TO:** Town of Lewisboro Planning Board

**FROM:** Lewisboro Conservation Advisory Council

**SUBJECT:** Lean to in Onatru Preserve
Elmwood Road, South Salem, NY 10590

**DATE:** January 9, 2019

---

The Conservation Advisory Council (CAC) reviewed the applicant's submission for a lean to in Onatru Preserve.

The portion of the Onatru Preserve on which the lean to is proposed to be built is within a wetland buffer. There are no bathroom facilities on that part of Onatru, on the west side of Elmwood Road. The CAC applauds the initiative of the Eagle Scout to construct the lean to. The CAC encourages the scouts to be respectful of the nearby wetlands and encourage participants to use the bathroom facilities at Onatru on the other side of Elmwood Road.

Application No: 95-18WP

Fee: ∅ Date: 12/5/18

fees waived per TB Res. 6/11/18

# TOWN OF LEWISBORO
# WETLAND PERMIT APPLICATION

79 Bouton Road, South Salem, NY 10590
Phone: 914-763-5592
Fax: 914-763-3637
planning@lewisborogov.com

**Project Information**

Project Address: Onatru Park Elmwood Rd South Salem NY

Sheet: 44 Block: 10302 Lot(s): 14

Project Description (identify the improvements proposed within the wetland/wetland buffer and the approximate amount of wetland/wetland buffer disturbance): CONSTRUCTION OF A LEAN TO.

**Owner's Information**

Owner's Name: Town Of Lewisboro Phone:

Owner's Address: Onatru Park Elmwood Rd Email:

**Applicant's Information** (if different)

Applicant's Name: Christopher Castellon Phone: 914-772-7589

Applicant's Address: 19 Bl. Ferris Rd South Salem NY Email: CC101@optimum.net

**Authorized Agent's Information** (if applicable)

Agent's Name: Peter Parsons Town Supervisor Phone:

Agent's Adress: Email:

**To Be Completed By Owner/Applicant**

1. What type of Wetland Permit is required? (see §217-5C and §217-5D of the Town Code)

   ☐ Administrative ☑ Planning Board

2. Is the project located within the NYCDEP Watershed? ☐ Yes ☐ No

3. Total area of proposed disturbance: ☐ < 5,000 s.f. ☐ 5,000 s.f. - < 1 acre ☐ ≥1 acre

4. Does the proposed action require any other permits/approvals from other agencies/departments? (Planning Board, Town Board, Zoning Board of Appeals, Building Department, Town Highway, ACARC, NYSDEC, NYCDEP, WCDOH, NYSDOT, etc): Identify all other permits/approvals required:

Note: Initially, all applications shall be submitted with a plan that illustrates the existing conditions and proposed improvements. Said plan must include a line which encircles the total area of proposed land disturbance and the approximate area of disturbance must be calculated (square feet). The Planning Board and/or Town Wetland Inspector may require additional materials, information, reports and plans, as determined necessary, to review and evaluate the proposed action. If the proposed action requires a Planning Board Wetland Permit, the application materials outlined under §217-7 of the Town Code must be submitted, unless waived by the Planning Board. The Planning Board may establish an initial escrow

95-18 WP

My Eagle Project is the construction of a Lean To at Onatru Farm Park. Onatru Farm Park is a park that is used by scouts, other organizations, and members of the community on a regular basis. It is host to town events, sporting events, and numerous camp-outs. However the community lacks a shelter at Onatru. This lean to will act as a shelter or pavilion that can be used by many different groups in the community. Although a lean to is usually used as a shelter for camping only this one can be used for much more. It can be used as an outdoor classroom by the various organizations in the community. It can be a pavilion in which families can spend quality time in a beautiful environment. It can be used for outdoor demonstrations and meetings by various scouting organizations in the area. And of course it can be used by all as a shelter to camp out in.

# TOWN OF LEWISBORO PLANNING BOARD

79 Bouton Road, South Salem, NY 10590
Email: planning@lewisborogov.com
Tel: (914) 763-5592 Fax: (914) 763-3637

## Tax Payment Affidavit Requirement

*This form must accompany all applications to the Planning Board.*

***Under regulations adopted by the Town of Lewisboro, the Planning Board may not accept any application unless an affidavit from the Town of Lewisboro Receiver of Taxes is on file in the Planning Board office. The affidavit must show that all amounts due to the Town of Lewisboro as real estate taxes and special assessments on the total area encompassed by the application, together with all penalties and interest thereon, have been paid.***

***Under New York State law, the Westchester County Clerk may not accept any subdivision map for filing unless the same type of affidavit from the Town of Lewisboro Receiver of Taxes is submitted by the applicant at the time of filing.***

This form must be completed by the applicant and must accompany all applications to the Planning Board. Upon receipt, the Planning Board Secretary will send the form to the Receiver of Taxes for signature and notarization. If preferred, the applicant may directly obtain the signature of the Receiver of Taxes and notarization prior to submission.

**To Be Completed by Applicant**
**(Please type or print)**

CHRIS CASTELLON — *Name of Applicant*

LEAN TO @ ONATRU PRESERVE EAGLE SCOUT PROJECT — *Project Name*

**Property Description**

Tax Block(s): 10302

Tax Lot(s): 14

Tax Sheet(s): 44

**Property Assessed to:**

TOWN of LEWISBORO — *Name*

*Address*

*City* *State* *Zip*

The undersigned, being duly sworn deposes and says that a search of the tax records in the office of the Receiver of Taxes, Town of Lewisboro, reveals that all amounts due to the Town of Lewisboro as real estate taxes and special assessments, together with all penalties and interest thereon, affecting the premises described below, have been paid.

**Signature - Receiver of Taxes:** No taxes assessed on this Town property. *Date* 12/5/2018

**Sworn to before me this** 5 **day of** December, 2018

Janet L Donohue

***Signature - Notary Public (affix stamp)***

JANET L. DONOHUE
NOTARY PUBLIC, STATE OF NEW YORK
No. 01DO6259627
Qualified in Westchester County
Commission Expires April 16, 2020

# TOWN OF LEWISBORO PLANNING BOARD

**79 Bouton Road, South Salem, NY 10590**
**Email: planning@lewisborogov.com**
**Tel: (914) 763-5592**
**Fax: (914) 763-3637**

## Affidavit of Ownership

State of: New York

County of: Westchester

Peter Parsons, being duly sworn, deposes and says that he/she resides at _____

in the County of Westchester, State of NY

and that he/she is (check one) ____ the owner, or ____ the _____ *Title*

of Town of Lewisboro
*Name of corporation, partnership, or other legal entity*

which is the owner, in fee of all that certain log, piece or parcel of land situated, lying and being in the Town of Lewisboro, New York, aforesaid and know and designated on the Tax Map in the Town of Lewisboro as:

Block 10302, Lot 14, on Sheet 44.

*Owner's Signature*

**Sworn to before me this**

5 **day of** December, **2** 018

JANET L. DONOHUE
NOTARY PUBLIC, STATE OF NEW YORK
No. 01DO6259627
Qualified in Westchester County
Commission Expires April 16, 2020

Janet L. Donohue

***Notary Public – affix stamp***

Revised 5-2017

My Eagle Project is the construction of a Lean To at Onatru Farm Park. Onatru Farm Park is a park that is used by scouts, other organizations, and members of the community on a regular basis. It is host to town events, sporting events, and numerous camp-outs. However the community lacks a shelter at Onatru. This lean to will act as a shelter or pavilion that can be used by many different groups in the community. Although a lean to is usually used as a shelter for camping only this one can be used for much more. It can be used as an outdoor classroom by the various organizations in the community. It can be a pavilion in which families can spend quality time in a beautiful environment. It can be used for outdoor demonstrations and meetings by various scouting organizations in the area. And of course it can be used by all as a shelter to camp out in.

RESOLUTION ADOPTED BY THE TOWN BOARD
OF THE TOWN OF LEWISBORO
AT A MEETING HELD ON June 11, 2018

RESOLVED that the Town Board does approve Troop 101 member Chris Castelhano's Eagle Scout project of building a lean-to shelter on the Reservation portion of Onatru Farm and be it further

RESOLVED that the Town Board does approve that any Town fees associated with said project be waived and be it further

RESOLVED that the Town Board does give authorization for Chris Castelhano to sell patriotic items at the Town fireworks on June 30, 2018 at Onatru Farm to raise money for said project.

STATE OF NEW YORK
COUNTY OF WESTCHESTER

I, JANET L. DONOHUE, Town Clerk of the Town of Lewisboro, County of Westchester, State of New York, do hereby certify that I have compared the preceding copy of a Resolution adopted by the Town Board of the Town Board of Lewisboro at a meeting held on the 11th day of June, 2018, to the original thereof, and that the same is a true and exact copy of said original and of the whole thereof.

_____
Janet L. Donohue
Town Clerk

Dated at South Salem, New York
this 12th day of June, 2018


# Eagle Scout Service Project Workbook

BOY SCOUTS OF AMERICA®

**Eagle Scout candidate's name** Chris Castellon

# Message From the Chief Scout Executive

Congratulations on attaining the rank of Life Scout. Each year, approximately 57,000 Scouts just like you reach this milestone. And, since you're reading this, I know you are looking forward to achieving the pinnacle of your Scouting experience: the rank of Eagle Scout.

Think of your Eagle Scout service project as the ultimate "application phase" of what you have learned thus far in Scouting: leadership. . . responsibility. . . managing projects. . . applying your Scout Oath—"to help other people." An Eagle Scout project is a crowning achievement following years of fun, adventure, and advancement. In completing it, you provide an example for others that they can do the same thing.

Some may suggest how big your project should be, or how many hours should be spent on it, but that is entirely up to you. Service, impact, and leadership are the objectives and measurements. Use these as your criteria to consider, select, develop, and evaluate your project. For most, the Eagle Scout service project becomes a truly defining moment in your quest for excellence. Planning and leadership skills utilized and memories of outcomes achieved will last you a lifetime. You will want to share those stories with others, so make it a worthy project!

Legendary hall-of-fame basketball coach John Wooden said, "It's not so important who starts the game but who finishes it." Let me be among the first to encourage you to take Mr. Wooden's remark to heart. You have made it to Life Scout, but Eagle represents the finish line. Keep striving. I know you will cross it, and you will be glad you did!

Robert J. Mazzuca
Chief Scout Executive

***Scouts and Parents or Guardians***

Be sure to read "Message to Scouts and Parents or Guardians" on page 21 and "Excerpts and Summaries From the *Guide to Advancement"* on page 22. Those pages contain important information that will help you ensure requirements are properly administered according to National Council policies and procedures.

## Completing This Workbook

If you are working from a printed copy of the *Eagle Scout Service Project Workbook,* you may complete it legibly in ink, or with a typewriter. Feel free to add as many pages as you wish. This may be necessary if more space is needed, or as you include photographs, photocopies, maps, or other helpful printed materials.

A fillable version of the new workbook is available at www.scouting.org (click on "Youth," then "Boy Scout," then "Advancement, Awards, Recognition"). If you experience difficulties with the fillable PDF, you may need to download a more recent version of Adobe Acrobat reader (available free online). Or, it might be necessary to use a printed copy.

At the time of this printing, the national Advancement Team was actively coordinating the production of a new electronic version of the workbook. If testing proves successful, we will replace the fillable PDF version with it. Regardless, the workbook will continue to be available for printing a hard copy that can be completed by hand or with a typewriter.

# Eagle Scout Service Project Workbook

## Contents



### *Only the Official Workbook May Be Used*

Eagle Scout candidates must use the official *Eagle Scout Service Project Workbook*, No. 512-927, as produced by the Boy Scouts of America. The official fillable PDF version can be found at www.scouting.org. Although it is acceptable to copy and distribute the workbook, it must maintain the same appearance with nothing changed, added, or deleted.

**No council, district, unit, or individual has the authority to produce or require additional forms, or to add or change requirements, or to make any additions, deletions, or changes in the text, outlines, links, graphics, or other layout or informational elements of the workbook. It is permissible, however, to print, copy, or send individual pages or forms within the workbook as long as they are not changed in the process.**

### *Attention: Unit, District, and Council Reviewers*

Eagle Scout projects must be evaluated primarily on impact: the extent of benefit to the religious institution, school, or community, and on the leadership provided by the candidate. There must also be evidence of planning and development. This is not only part of the requirement but relates to practicing the Scout motto, “Be Prepared.” **However,** in determining if a project meets Eagle Scout requirement 5, reviewers must not require more planning and development than necessary to execute the project. These elements must not overshadow the project itself, as long as the effort was well led and resulted in otherwise worthy results acceptable to the beneficiary.

# Meeting Eagle Scout Requirement 5

## Eagle Scout Requirement 5

*While a Life Scout, plan, develop, and give leadership to others in a service project helpful to any religious institution, any school, or your community. (The project must benefit an organization other than Boy Scouting.) A project proposal must be approved by the organization benefiting from the effort, your unit leader and unit committee, and the council or district before you start. You must use the* Eagle Scout Service Project Workbook, *No. 512-927, in meeting this requirement.*

## Project Purpose

In addition to providing service and fulfilling the part of the Scout Oath, "to help other people at all times," one of the primary purposes of the Eagle Scout service project is to demonstrate or hone, or to learn and develop, leadership skills. Related to this are important lessons in project management and taking responsibility for a significant accomplishment.

## Choosing a Project

Your project must be for any religious institution, any school, or your community. It is important to note, however, that the Boy Scouts of America has recently redefined "your community" to include the "community of the world." Normally, "your community" would not refer to individuals, although a council or district advancement committee may consider scenarios in which an individual in need can affect a community. It is then a matter of identifying a source representing the "community" who will provide approvals. For more information, see the *Guide to Advancement*, No. 33088, section 9.0.2.5.

Your project must present an opportunity for planning, development, and leadership. For example, if a blood drive is chosen and the blood bank provides a set of "canned" instructions to be implemented with no further planning, the planning effort would not meet the test. You may need to meet with blood bank officials and work out an approach that requires planning, development, and leadership. This might involve developing and carrying out a marketing and logistics plan, or coordinating multiple events.

An Internet search can reveal hundreds of service project ideas. Your project doesn't have to be original, but it could be. It might be a construction, conservation, or remodeling project, or it could be the presentation of an event with a worthwhile purpose. Conversations with your unit leader, teachers, your religious leader, or the leaders of various community organizations can also uncover ideas. In any case, be sure the project presents a challenge that requires leadership, but also something that you can do with unskilled helpers, and within a reasonable period of time.

## Restrictions

- There are no required minimum hours for a project. No one may tell you how many hours must be spent on it.
- Routine labor is not normally appropriate for a project. This might be defined as a job or service you may provide as part of your daily life, or a routine maintenance job normally done by the beneficiary (for example, pulling weeds on the football field at your school.)
- While projects may not be of a commercial nature or for a business, this is not meant to disallow work for community institutions, such as museums and service agencies (like homes for the elderly, for example), that would otherwise be acceptable. Some aspect of a business operation provided as a community service may also be considered—for example, a park open to the public that happens to be owned by a business.
- A project may not be a fundraiser. In other words, it may not be an effort that primarily collects money, even for a worthy charity. Fundraising is permitted only for securing materials and facilitating a project, and it may need to be approved by your council. See "Eagle Scout Service Project Fundraising Application" on page 17.
- No more than one Eagle Scout candidate may receive credit for working on the same Eagle Scout service project.
- Projects may not be performed for the Boy Scouts of America, or its councils, districts, units, or properties.

# How to Use This Workbook

This workbook includes valuable information that can help ensure your success. It also includes four forms: a proposal, a final plan, a fundraising application, and a project report.

Before completing any of the forms, read with your parent or guardian the "Message to Scouts and Parents or Guardians" found on page 21. If your project is worthy and meets Eagle Scout requirement 5 as it is written, the message will help you successfully present your proposal through the approval process.

## Preparing the Project Proposal (Pages 7–10)

Your proposal must be completed first. It is an overview, but also the beginnings of planning. It shows your unit leader, unit committee, and council or district that the following tests can be met. For your proposal to be approved, it must show the following:

1. ***It provides sufficient opportunity to meet the Eagle Scout service project requirement.*** You must show that planning, development, and leadership will take place; and how the three factors will benefit a religious institution, a school, or your community.
2. ***It appears to be feasible.*** You must show the project is realistic for you to complete.
3. ***Safety issues will be addressed.*** You must show you have an understanding of what must be done to guard against injury, and what will be done if someone does get hurt.
4. ***Action steps for further detailed planning are included.*** You must make a list of the key steps you will take to make sure your plan has enough details to be carried out successfully.
5. ***You are on the right track with a reasonable chance for a positive experience.***

Your proposal need only be detailed enough to show a reviewer that you can meet the tests above. If you find in order to do that, the proposal must be lengthy and complicated, your project might be more complex than necessary.

If your project does not require materials or supplies, etc., simply mark those spaces "not applicable." Remember, do not begin any work or raise any money or obtain any materials until your project proposal has been approved. If you submit your proposal too close to your 18th birthday, it may not be approved in time to finish planning and executing the project.

## The Final Plan (Pages 11–16)

Complete the Eagle Scout Service Project Final Plan after your proposal has been approved. This is a tool for your use—*no one approves it*—and it can be important in showing your Eagle Scout board of review that you have planned and developed your project as required. For this reason you are ***strongly encouraged*** to share the final plan with a project coach. This might be the council or district person who approved your proposal, or perhaps someone who has agreed to work with you. A coach can help you avoid many problems associated with service projects, and thus improve your chance of passing the Eagle board of review. If materials, etc., were not needed, mark those spaces "not applicable."

## The Fundraising Application (Pages 17–18)

If your fundraising effort involves contributions ***only*** from the beneficiary or you, your parents or relatives, your unit or its chartered organization, or parents or members in your unit, submitting the fundraising application is not necessary. If you will be obtaining money or materials from any other sources, you must submit a completed application to the local council service center. For more information, see "Procedures and Limitations on Eagle Scout Service Project Fundraising" on page 18.

## The Project Report (Pages 19–20)

Complete this portion after the project has been finished. Note the space for you to sign (confirming that you led and completed the project), and also the signature lines for the beneficiary and your unit leader's approval that your project met Eagle Scout requirement 5. As with the proposal and final plan, if materials, etc., were not required, mark those spaces "not applicable."

# Contact Information

**Eagle Scout Candidate**

| | | | |
|---|---|---|---|
| Full legal name: Christopher Michael Castellon | Birth date: 10/01/2002 | BSA PID No.*: 121127896 | |
| Email address: cc101@optimum.net | | | |
| Address: 19 Col Ferris Rd | City: South Salem | State: New York | Zip: 10590 |
| Preferred phone Nos.: 914-772-7589 | | Life board of review date: | |

**Personal ID No., found on the BSA membership card*

**Current Unit Information**

| | |
|---|---|
| Check one: ☑ Troop ☐ Team ☐ Crew ☐ Ship | Unit No. 101 |
| District name: Muscoot | Council name: Westchester-Putnam |

**Unit Leader** Check one: ☑ Scoutmaster ☐ Varsity Coach ☐ Crew Advisor ☐ Skipper

| | | | |
|---|---|---|---|
| Name: Bernie Kuehl | Preferred phone Nos.: 914-760-8794 | | |
| Address: 21 West Rd | City: South Salem | State: New York | Zip: 10590 |
| Email address: bekuehl@gmail.com | | BSA PID No.: | |

**Unit Committee Chair**

| | | | |
|---|---|---|---|
| Name: Rich Healy | Preferred phone Nos.: 914-533-5226 | | |
| Address: 96 Lockwood Rd | City: South Salem | State: New York | Zip: 10590 |
| Email address: rich.healy@hotmail.com | | BSA PID No.: | |

**Unit Advancement Coordinator**

| | | | |
|---|---|---|---|
| Name: Gilbert Castellon | Preferred phone Nos.: 914-705-1109 | | |
| Address: 19 Col Ferris Rd | City: South Salem | State: New York | Zip: 10590 |
| Email address: gil.cast@optimum.net | | | |

**Project Beneficiary** *(Name of religious institution, school, or community)*

| | | | |
|---|---|---|---|
| Name: Dana Mayclim/ Town of Lewisboro | Preferred phone Nos.: 914-232-6162 | | |
| Address: 11 Main St | City: South Salem | State: New York | Zip: 10590 |
| Email address: dmayclim@lewisborogov.com | | | |

**Project Beneficiary Representative** (Name of contact for the project beneficiary)

| | | | |
|---|---|---|---|
| Name: Dana Mayclim | Preferred phone Nos.: 914-232-9192 | | |
| Address: 11 Main St | City: South Salem | State: New York | Zip: 10590 |
| Email address: dmayclim@lewisborogov.com | | | |

**Your Council Service Center**

| | | | |
|---|---|---|---|
| Council name: Westchester-Putnam Council BSA | | Phone No.: 914-773-1135 | |
| Address: 41 Saw Mill River Rd | City: Hawthorne | State: New York | Zip: 10532 |
| Email address: www.wpcbsa.org | | | |

**Council or District Project Approval Representative**
*(Your unit leader, unit advancement coordinator, or council or district advancement chair may help you learn who this will be.)*

| | | | |
|---|---|---|---|
| Name: | Preferred phone Nos.: | | |
| Address: | City: | State: | Zip: |
| Email address: | | | |

**Project Coach**
(Your council or district project approval representative may help you learn who this will be.)

| | | | |
|---|---|---|---|
| Name: | Preferred phone Nos.: | | |
| Address: | City: | State: | Zip: |
| Email address: | | | |


# Eagle Scout Service Project Proposal

BOY SCOUTS OF AMERICA®

**Eagle Scout candidate's name** Chris Castellon

**Eagle Scout Requirement 5**

While a Life Scout, plan, develop, and give leadership to others in a service project helpful to any religious institution, any school, or your community. (The project must benefit an organization other than Boy Scouting.) A project proposal must be approved by the organization benefiting from the effort, your unit leader and unit committee, and the council or district before you start. You must use the *Eagle Scout Service Project Workbook*, No. 512-927, in meeting this requirement.

# Eagle Scout Service Project Proposal

## Project Description and Benefit

**Eagle Scout candidate:** Christopher Michael Castellon

Briefly describe the project. Attach sketches or "before" photographs if these will help others visualize it.

My Eagle Project is the construction of a Lean To at Onatru Farm Park. Onatru Farm Park is a park that is used by scouts, other organizations, and members of the community on a regular basis. It is host to town events, sporting events, and numerous camp-outs. However the community lacks a shelter at Onatru. This lean to will act as a shelter or pavilion that can be used by many different groups in the community. Although a lean to is usually used as a shelter for camping only this one can be used for much more. It can be used as an outdoor classroom by the various organizations in the community. It can be a pavilion in which families can spend quality time in a beautiful environment. It can be used for outdoor demonstrations and meetings by various scouting organizations in the area. And of course it can be used by all as a shelter to camp out in.

Tell how your project will be helpful to the beneficiary. Why is it needed?

The beneficiary of this project is the Town of Lewisboro. This project will improve the camping site and encourage the community to use the site more. It will also encourage community groups to use this as an outdoor classroom, camp site shelter, or as a pavilion for family recreation. Our town lacks an area in which you can accomplish all of these activities. Therefore there is a need to provide the town with and area and structure that makes these activities possible.

When do you plan to begin work on the project? I plan to start this project in the fall of 2018

How long do you think it will take to complete? It will take 2 months to complete

## Giving Leadership

Approximately how many people will be needed to help on your project? 20 people

Where will you recruit them (unit members, friends, neighbors, family, others)? Explain:

I will recruit them through our unit members and their families. I would organize groups of approximately 8 for various shifts during the project. At each shift we will have at least one adult experienced in this type of construction overseeing the quality of the project. The members of our troop are great when it comes to volunteering for eagle projects and I believe there will be no problem getting our troop members to volunteer.

What do you think will be most difficult about leading them?

I think the most difficult part about leading the project is making sure that the younger boys in our troop are on task and doing the work safely. Because of the nature of this project I will have to keep a closer eye on the younger boys, making sure that they are operating the equipment correctly and are staying away from the equipment they should not be using. Many of the adults in our troop and our troop leaders are well versed in this type of construction and should be a big help when it comes to making sure the younger boys are safe and doing the work correctly.

## Materials

*(Materials are things that become part of the finished project, such as lumber, nails, and paint.)*

What types of materials, if any, will you need? You do not yet need a detailed list of exact quantities, but you must show you have a reasonable idea of what is required.

See the attached materials list

## Supplies

*(Supplies are things you use up, such as masking tape, tarps, and garbage bags.)*

What kinds of supplies, if any, will you need? You do not yet need a detailed list or exact quantities, but you must show you have a reasonable idea of what is required.

I will need a tarp to set up a dining fly over a picnic table which will act as my command center where I will keep supplies such as garbage bags to make clean up easy and efficient, site project maps, blue prints, first aid kit, tools, and other materials needed on each project day in one centralized location.

# Eagle Scout Service Project Proposal

## Tools

What kinds of tools, if any, will you need?

The lean to I am constructing comes from a pre-cut kit which makes assembly easier and safer. I will need power tools such as power drills to help construct the lean to. I will also need hand tools such as basic screw drivers, hammers, and wrenches. Along with that I will need rakes, brooms, shovels, a wheel barrel to help clear debris and spread gravel.

## Permits and Permissions

*(Note that property owners normally secure permits.)*

Will you need to secure permissions or permits (for example, building permits)? Who will obtain them? How much will they cost? How long will it take to secure them?

I will need approval by the town supervisor, town board, architectural review board, and the town wetlands commission. The town is waiving the cost of permits and approvals. It will take one month to secure these permits and permissions.

## Preliminary Cost Estimate

*(You do not need exact costs. Reviewers will just want to see if you can reasonably expect to raise enough money to cover an initial estimate of expenses.)*

*(Enter your estimated expenses)*

| Items | Cost |
|---|---|
| Materials | $4500 |
| Supplies | $200 |
| Tools | $0 |
| Other* | $240 |
| **Total costs:** | 4940 |

**Fundraising** *Explain where you will get the money for total costs indicated below, left.*

I will employ more than one fundraising effort in order to secure the funding:

1) The logs being used to build the Lean To can be purchased & each Family or Scout's name will be etched in history.
2) Tag Sale with all proceeds going toward the project.
3) Silent Auction with all proceeds going towards the project (Local merchants will be asked to donate a Gift Certificate that I will offer to our troop members, family, & friends at a discounted price). The merchants benefit from this by gaining new and returning customers who will be loyal to scout friendly merchants now and in the future.
4) Any shortfall will be made up through donations from family & friends

**Such costs as food, water, gasoline, parking, permits, equipment rental, sales tax, etc.*

## Project Phases

Think of your project in terms of phases and list what they might be. The first might be to complete your final plan. Others might include fundraising, preparation, execution, and reporting. You may have as many phases as you want, but it is not necessary to become overly complicated.

1. Securing all Permits and Approvals
2. Complete the final plan
3. Fundraise for the project
4. Prepare materials for the project
5. Prepare the site for the project
6. Carrying out the project
7. Reporting the project
8.

## Logistics

*(A Tour Plan has also been called a "Tour Permit." Check with your council service center to determine if one is required.)*

How will you handle transportation of materials, supplies, tools, and helpers? Will you need a Tour Plan?

Unit leaders and adult volunteers will transport all of the materials, supplies, tools, and helpers. A Tour Plan is not needed for my project.

## Eagle Scout Service Project Proposal, continued

### Safety Issues

*(The* Guide to Safe Scouting *is an important resource in considering safety issues.)*

Describe the hazards and safety concerns you and your helpers should be aware of as this project is conducted.

Some of the safety concerns I have regarding this project is making sure that everyone is handling the tools and materials with care and caution. With a project like this it is very easy to cut yourself or hurt yourself while using the tools or handling the materials.

### Further Planning

*(You do not have to list* every *step, but it must be enough to show you have a reasonable idea of how to complete a final plan.)*

List some action steps you will take to complete a final plan. For example, "Complete a more detailed set of drawings."

1. Confirm what type of foundation the town recommends.
2. Create a more exact cost estimate.
3. Confirm the final location of the Lean to within the property after the wetlands approval.
4. Steak out the foot print on the property.
5. Search for competitive pricing on all materials and supplies.
6. Confirm the lending of the tools with adult leaders, volunteers, and the town maintenance department.
7. Conduct a safety class with the scouts and volunteers on the project scope and how to properly use the tools to avoid injuries.

**Candidate's Promise** *(Signed before approvals below are granted)*

On my honor as a Scout, I have read this entire workbook, including the "Message to Scouts and Parents or Guardians" on page 21. I promise to be the leader of this project, and to do my best to carry it out for the maximum benefit to the religious institution, school, or community I have chosen as beneficiary.

Signed Date

| **Unit Leader Approval*** | **Unit Committee Approval*** |
|---|---|
| I have reviewed this proposal and discussed it with the candidate. I believe it provides impact worthy of an Eagle Scout service project, and will involve planning, development, and leadership. I am comfortable the Scout understands what to do, and how to lead the effort. I will see that the project is monitored, and that adults or others present will not overshadow him. | This Eagle Scout candidate is a Life Scout, and registered in our unit. I have reviewed this proposal, I am comfortable the project is feasible, and I will do everything I can to see that our unit measures up to the level of support we have agreed to provide (if any). I certify that I have been authorized by our unit committee to provide its approval for this proposal. |
| Signed Date | Signed Date |

| **Beneficiary Approval*** | **Council or District Approval** |
|---|---|
| This service project will provide significant benefit, and we will do all we can to see it through. We realize funding on our part is not required, but we have informed the Scout of the financial support (if any) that we have agreed to. We understand any fundraising he conducts will be in our name and that funds left over will come to us. We will provide receipts to donors as required. | I have read sections 9.0.2.0 through 9.0.2.15, regarding the Eagle Scout Service Project, in the *Guide to Advancement,* No. 33088. I agree on my honor to apply the procedures as written, and in compliance with the policy on "Unauthorized Changes to Advancement." Accordingly, I approve this proposal. I will encourage the candidate to complete a final plan and further encourage him to share it with a project coach. |
| Signed Date | Signed Date |

**While it makes sense to obtain them in the order they appear, there shall be no required sequence for the order of obtaining approvals marked with an asterisk (*). However, council or district approval must come after the others.*


# Eagle Scout Service Project Final Plan

BOY SCOUTS OF AMERICA®

**Eagle Scout candidate's name:** Chris Castellon

**Project start date:** _____ **Projected completion date:** _____

*Eagle Scout requirement 5 says you must "plan" and "develop" your service project. Though this final plan is a tool for your use, and is not approved or signed, it is important in helping to show you have done the required planning and development. Note, however, that it is not necessary to provide details that are not necessary to the accomplishment of your project.*

*A Scout who is prepared will complete the final plan and ask a project coach to review it with him. The council or district representative who approved your proposal may have agreed to serve as your project coach, or someone else may take on this important role. His or her involvement and review of your final plan is optional, but it can help you avoid many problems or mistakes. This can also improve your chances of passing the Eagle Scout board of review.*

## Eagle Scout Service Project Final Plan, continued

### Comments From Your Proposal Review

What suggestions were offered by the council or district representative who approved your proposal?

### Project Description and Benefit—Changes From the Proposal

*As projects are planned, changes usually are necessary. If they are major, it is important to confirm they are acceptable to the beneficiary. You should also share major changes with those who approved your proposal, and also with your coach to be sure you still have a chance of passing the board of review. If more space is needed to describe changes, please add an attachment.*

How will your project be different from your approved proposal?

Will the changes make the project more or less helpful to the beneficiary? Explain:

### Present Condition or Situation

*(It is extremely helpful to have "before" photographs to show the board of review.)*

Describe the present condition of the worksite (for an event or activity, describe your biggest obstacles).

### Project Phases

*(You may have more than eight phases, or fewer, as needed; if more, place in an attachment.)*

Look at the phases from your proposal. Make any changes, then provide a little more detail, including timing.

Phase 1: _____

Phase 2: _____

Phase 3: _____

Phase 4: _____

Phase 5: _____

Phase 6: _____

Phase 7: _____

Phase 8: _____

## Eagle Scout Service Project Final Plan, continued

### Work Processes

Prepare a step-by-step list of what must be done and how everything will come together: site preparations, sizing, assembly, and fastening of materials; uses of supplies and tools; finishes to be used (paint, varnish, etc.); and so forth. Consider asking your project coach for assistance with this.

Attach further plans as necessary, with drawings, diagrams, maps, or pictures that will help you succeed and that might be helpful to your workers, your coach, the project beneficiary, and your board of review. Drawings should be to scale. If you are planning an event or activity, a program outline or script might be appropriate.

### Permits and Permissions

*(The Tour Plan has also been called the "Tour Permit.")*

Will a Tour Plan be needed (this must be confirmed with local council policies)? No Tour Plan is Needed for this project.

If you will need permissions or permits*, what is being done to obtain them, and when will they be issued?

**Permissions and permits could include building or electrical permits, dig permits, event permits, permission to access property, etc.*

### Materials

List each item, and its description, quantity, unit cost, total cost, and source. For example:

| | | | | | |
|---|---|---|---|---|---|
| Plywood | 3/4", 4' X 8', B-C interior grade | 3 sheets | $20.00 | $60.00 | ABC Hardware donation* |

| Item | Description | Quantity | Unit Cost | Total Cost | Source |
|---|---|---|---|---|---|
| | | | | 0 | |
| | | | | 0 | |
| | | | | 0 | |
| | | | | 0 | |
| | | | | 0 | |
| | | | | 0 | |
| | | | | 0 | |
| | | | | 0 | |
| | | | | 0 | |
| | | | | 0 | |
| | | | **Total cost of materials** | 0 | |

**If you plan for donations such as the one shown in the sample, you will most likely need to complete the Eagle Scout Service Project Fundraising Application on page 17.*

## Eagle Scout Service Project Final Plan, continued

### Supplies

List each item and its description, quantity, unit cost, total cost, and source. For example:

| | | | | | |
|---|---|---|---|---|---|
| Plastic tarp | 9' X 12', 2ml thick | 2 tarps | $4.00 | $8.00 | ABC Hardware purchase |

| Item | Description | Quantity | Unit Cost | Total Cost | Source |
|---|---|---|---|---|---|
| | | | | 0 | |
| | | | | 0 | |
| | | | | 0 | |
| | | | | 0 | |
| | | | | 0 | |
| | | | | 0 | |
| | | | | 0 | |
| | | | | 0 | |
| | | | | 0 | |
| | | | | 0 | |
| | | | **Total cost of supplies** | 0 | |

### Tools

List each tool, with its quantity, unit cost, total cost, source, and who will operate or use it. For example:

| | | | | | |
|---|---|---|---|---|---|
| Circular power saw* | 1 | $0 | $0 | Mr. Smith | Mr. Smith |

| Tool | Quantity | Unit Cost | Total Cost | Source | Who will operate/use? |
|---|---|---|---|---|---|
| | | | 0 | | |
| | | | 0 | | |
| | | | 0 | | |
| | | | 0 | | |
| | | | 0 | | |
| | | | 0 | | |
| | | | 0 | | |
| | | **Total cost of tools** | 0 | | |

**Power tools considered hazardous, like circular saws, must be operated by adults who are experienced in their use. See the* Guide to Safe Scouting.

### Expenses

| Item | Projected Cost |
|---|---|
| Total materials *(from above)* | 0 |
| Total supplies *(from above)* | 0 |
| Total tools *(from above)* | 0 |
| Other expenses | |
| | |
| | |
| | |
| | |
| | |
| | |
| **Total cost** | 0 |

### Revenue

Total to be raised: $ _____

Contribution from beneficiary: $ _____

*Describe in detail how you will get the money for your project. Include what any helpers will do to assist with the effort.*

## Eagle Scout Service Project Final Plan, continued

### Giving Leadership

Complete the chart below, telling about specific jobs that need to be done, the skills needed to do them, whether they must be adults or may be youth, how many helpers are needed, and how many you have so far (if any). For example:

| | | | | |
|---|---|---|---|---|
| *Work at car wash* | *Able to drive or wash cars* | *Adult drivers/supervisors, youth to wash* | *2 adults, 10 youth* | *1 adult, 5 youth* |

| Job to Be Done | Skills Needed (If any) | Adult or Youth | Helpers Needed | Helpers So Far |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

What are your plans for briefing helpers, or making sure they know how to do what you want them to do?

What is your plan for communicating with your workers to make sure they know how to get where they need to be, that they will be on time, and they will have with them what they need?

### Logistics

How will the workers get to and from the place where the work will be done?

How will you transport materials, supplies, and tools to and from the site?

How will the workers be fed?

Will restrooms be conveniently located?

## Eagle Scout Service Project Final Plan, continued

### Logistics, continued

What will be done with leftover materials and supplies?

What will be done with the tools?

### Safety

Will a first-aid kit be needed for this project? If so, where will it be kept?

Will any hazardous materials or chemicals be used? If so, how will you see that they are properly handled?

List hazards you might face. (These could include severe weather, wildlife, hazardous tools or equipment, sunburn, etc.) What will you do to prevent problems (for example, hazardous tools operated only by qualified adults)?

| Potential Hazard | What will you do to prevent problems? |
|---|---|
| | |
| | |
| | |
| | |
| | |
| | |
| | |

How do you plan to communicate these safety issues and hazards to your helpers?

Will you hold a safety briefing? If so, when?

Who will conduct it?

Who will be your first-aid specialist?

### Contingency Plans

What could cause postponement or cancellation of the project? What will you do should this happen?

### Comments From Your Project Coach About Your Final Plan

*(A project coach is not required but can be extremely helpful.)*

# Eagle Scout Service Project Fundraising Application

Before completing this application, it is important to read the "Procedures and Limitations on Eagle Scout Service Project Fundraising." It can be found at the back of this application. Once completed, you must obtain approval from the project beneficiary and your unit leader, and then submit the fundraising application to your council service center at least two weeks in advance of your fundraising efforts. You will be contacted if it cannot be approved or if adjustments must be made. Use this form, not the Unit Money Earning Application.

## Eagle Scout Candidate

| | | | |
|---|---|---|---|
| Name: | Preferred phone Nos.: | | |
| Address: | City: | State: | Zip: |
| Email address: | | | |
| Check one: ☐ Troop ☐ Team ☐ Crew ☐ Ship | Unit No. 101 | | |
| District name: Muscoot | Council name: Westchester-Putnam | | |

## Project Beneficiary (Name of religious institution, school, or community)

| | | | |
|---|---|---|---|
| Name: | Preferred phone Nos.: | | |
| Address: | City: | State: | Zip: |
| Email address: | | | |

## Project Beneficiary Representative (Name of contact for the project beneficiary)

| | | | |
|---|---|---|---|
| Name: | Preferred phone Nos.: | | |
| Address: | City: | State: | Zip: |
| Email address: | | | |

Describe how funds will be raised:

Proposed date the service project will begin:

Proposed dates for the fundraising efforts:

How much money do you expect to raise?:

If people or companies will be asked for donations of money, materials, supplies, or tools*, how will this be done and who will do it?

**You must attach a list of prospective donor names and what they will be asked to donate. This is not required for an event like a car wash.*

Are any contracts to be signed? If so, by whom?

Contract details:

*See "Procedures and Limitations" following this application.*

## Approvals

*(The beneficiary and unit leader sign below, in any order, before authorized council approval is obtained.)*

| Beneficiary | Unit Leader | Authorized Council Approval* |
|---|---|---|
| Signed Date | Signed Date | Signed Date |

**Councils may delegate approval to districts or other committees according to local practices.*

# Procedures and Limitations on Eagle Scout Service Project Fundraising

The Eagle Scout Service Project Fundraising Application must be used in obtaining approval for service project fundraising or securing donations of materials*. Send the completed form to your local council service center, where it will be routed to those responsible for approval. This may be a district executive or another staff member, the council or district advancement committee, a finance committee, etc., as determined appropriate.

**This application is not necessary for contributions from the candidate, his parents or relatives, his unit or its chartered organization, parents or members of his unit, or the beneficiary. All money left over, regardless of the source, goes to the beneficiary.*

If the standards below are met, your fundraising effort likely will be approved.

1. Eagle Scout service projects may not be fundraisers. In other words, the candidate may not stage an effort that primarily collects money, even if it is for a worthy charity. Fundraising is permitted only for securing materials, and otherwise facilitating a project. Unless the effort involves contributions only from the beneficiary, the candidate, his parents or relatives, his unit or its chartered organization, or from parents or members in his unit, it must be approved by the local council. This is achieved by submitting the Eagle Scout Service Project Fundraising Application.

2. It must be clear to all donors or event participants that the money is being raised on behalf of the project beneficiary. Once collected, money raised must be turned over for deposit to an account of the beneficiary or the candidate's unit, until needed for the project. If the unit receives the funds, it must release them to the beneficiary once expenses have been paid.

3. Any contracts must be signed by a responsible adult, acting as an individual, without reference to the Boy Scouts of America. The person who signs the contract is personally liable. Contracts must not and cannot bind the local council, Boy Scouts of America, or the unit's chartered organization.

4. If something is to be sold, we want people to buy it because it is a quality product, not just because of an association with Scouting. Buyers or donors must be informed that the money will be used for an Eagle Scout service project to benefit the school, religious institution, or community chosen, and any funds left over will go to that beneficiary.

5. Any products sold or fundraising activities conducted must be in keeping with the ideals and principles of the BSA. For example, they must not include raffles or other games of chance.

6. Should any donors want documentation of a gift, this must be provided through the project beneficiary, not the Boy Scouts of America. If a donor or fundraising participant wants a receipt, this, too, must be provided in the name of the beneficiary.

7. Youth are not normally permitted to solicit funds on behalf of other organizations. However, a local council may allow an exception for Eagle Scout service projects.

# Eagle Scout Service Project Report

*To be completed after the service project has been concluded. It is not necessary to provide lengthy answers.*
*Please be prepared to discuss your responses at your board of review.*

**Eagle Scout candidate:** _____

Once planning was completed, when did the work begin? _____ When was it finished? _____

## Summary

What went well?

What was challenging?

## Changes

What changes were made as the project was conducted?

## Leadership

In what ways did you demonstrate leadership?

What was most difficult about being the leader?

What was most rewarding about being the leader?

What did you learn about leadership, or how were your leadership skills further developed?

## Materials, Supplies, Tools

Were there significant shortages or overages or materials, supplies, and tools? If so, what effect did this have?

## Eagle Scout Service Project Report, continued

### Entering Service Project Data

The Boy Scouts of America collects information on the hours worked* on Eagle Scout service projects because it points to achievement on our citizenship aim. So that you can assist with the data collection, please keep a list of the people who help on your project, and a log of the number of hours they work. Then, please provide the information requested below. Be sure to include yourself, and the time spent on planning.

| | No. | Hours |
|---|---|---|
| **The Eagle Scout candidate** | 1 | |
| **Registered BSA youth members** | | |
| **Other youth** *(brothers, sisters, friends, etc., who are not BSA members)* | | |
| **Registered BSA adult Scout leaders** | | |
| **Other adults** *(parents, grandparents, etc., who are not BSA members)* | | |
| **Totals** | 1 | 0 |

***There is no requirement for a minimum number of hours that must be worked on an Eagle Scout service project.**
*If you have been told you must meet a minimum number of hours then you may lodge a complaint with your district or council. If you have given leadership to an* **otherwise worthy** *project and are turned down by your board of review solely because of a lack of hours, you should appeal the decision.*

### Funding

Describe your fundraising efforts:

How much was collected? How much was spent?

If your expenses exceeded funds available, explain why this happened, and how excess expenses were paid.

If you had money left over after the project completion, did you turn it over to the project beneficiary? If "No," when and how long will that take place?

How were the donors thanked?

### Photos and Other Documentation

If you have them, attach any "before," "during," and "after" photographs. Attach letters, maps, handouts, printed materials, or similar items that might be helpful to your board of review.

### Candidate's Promise

*On my honor as a Scout, I was the leader of my Eagle Scout service project and completed it as reported here.*

Signed: Date:

### Completion Approvals

*In my opinion, this Eagle Scout service project meets Eagle Scout requirement 5, as stated on page 4 of this workbook.*

| ***Beneficiary name:*** | ***Unit leader name:*** |
|---|---|
| Signed: Date: | Signed: Date: |

# Message to Scouts and Parents or Guardians

The Eagle Scout service project requirement has been widely interpreted—both properly and improperly. This message is designed to share with the Eagle Scout candidate and his parents or guardians the same information we provide to council and district volunteers responsible for project approvals throughout the Boy Scouts of America. You will learn what they can and cannot require.

In addition to reading this entire workbook, the candidate and his parent or guardian should consult the *Guide to Advancement,* No. 33088, beginning with section 9.0.2.0, "The Eagle Scout Service Project."

The *Guide to Advancement*, along with the *Boy Scout Requirements* book, No. 34765, and this workbook, are the only official sources on policies and procedures for Eagle Scout service projects. The *Guide to Advancement* and *Boy Scout Requirements* book are available in Scout shops or on www.scoutstuff.org. Your local council and district are important resources for information and guidance and can tell you where to submit service project proposals.

The council and district may also establish limited local procedures as necessary. However, all of this must be done in harmony with the official sources mentioned above. Councils, districts, units, and individuals may not add requirements or ask you to do anything that runs contrary to or exceeds the policies, procedures, or requirements of the Boy Scouts of America.

## What an Eagle Scout Candidate Should Expect

First, the Eagle Scout service project belongs to the Eagle Scout candidate. His parents and others may help, but the Scout must be the leader. Nonetheless, while working toward completion of the project, especially during the proposal approval process, a candidate has the right to expect the following, as reprinted from the *Guide to Advancement,* section 9.0.2.1.

1. Questioning and probing for his understanding of the project, the proposal, and what must be done, shall be conducted in a *helpful, friendly, courteous,* and *kindhearted* manner. We will respect the Scout's dignity. He will be allowed, if he chooses, to have a parent, unit leader, or other adult present as an observer at any time he is discussing his proposal or project with someone who is reviewing it.

2. Project expectations will match Eagle Scout requirement 5, and we will not require proposals to include more than described in the *Eagle Scout Service Project Workbook*.

3. If requested by the Scout or his parent or guardian, an explanation of a proposal rejection will be provided in writing, with a copy sent to the council advancement chair and staff advisor. It will indicate reasons for rejection and suggestions concerning what can be done to achieve approval.

4. Guidance that maximizes the opportunity for completion of a worthwhile project will be readily available and strongly recommended. Ultimately, however, the responsibility for success belongs to the Scout, and final evaluation is left to the board of review.

5. If the candidate believes he has been mistreated or his proposal wrongfully rejected, he will be provided a method of redress. This will include the opportunity for a second opinion and approval, either through another volunteer or professional advancement administrator*, or the Scout executive, as determined by the council advancement committee or executive board.

**An "advancement administrator" is a member or chair of a council or district advancement committee, or a volunteer or professional designated according to local practices, to assist in advancement administration.*

# Excerpts and Summaries From the *Guide to Advancement**

## Eagle Scout Service Project Coaches

Many units, districts, and councils use Eagle Scout service project "coaches." They may or may not be part of the proposal approval. Though it is a Scout's option, coaches are highly recommended—especially those from the council or district level who are knowledgeable and experienced with project approvals. Their greatest value comes in the advice they provide after approval of a proposal as a candidate completes his planning. A coach can help him see that, if a plan is not sufficiently developed, then projects can fail. Assistance can come through evaluating a plan and discussing its strengths, weaknesses, and risks, but coaches shall *not* have the authority to dictate changes, withdraw approval, or take any other such directive action. Instead, coaches must use the BSA method of positive adult association, logic, and common sense to help the candidate make the right decisions.

It is up to the council to determine who may serve as project coaches and how they might be assigned or otherwise provided to candidates. Coaches must be registered with the BSA (in any position) and have taken BSA Youth Protection training, and may come from the unit, district, or council level.

## What Is Meant by *"Give Leadership to Others …"?*

"Others" means at least two people in addition to the Scout. Helpers may be involved in Scouting or not, and of any age appropriate for the work. Councils, districts, and units shall not establish requirements for the number of people led, or their make-up, or for the time worked on a project. The most important thing here is that the Eagle Scout candidate exhibits leadership.

## Evaluating the Project After Completion

Eagle Scout projects must be evaluated primarily on impact—the extent of benefit to the religious institution, school, or community, and on the leadership provided by the candidate. There must also be evidence of planning and development. This is not only part of the requirement, but relates to practicing our motto to, "Be Prepared." ***However,*** in determining if a project meets Eagle Scout requirement 5, reviewers must not require more planning and development than necessary to execute the project. These elements must not overshadow the project itself, as long as the effort was well led, and resulted in otherwise worthy results acceptable to the beneficiary.

There may be instances where upon its completion, the unit leader or project beneficiary chooses not to approve a project. One or the other may determine modifications were so material that the extent of service or the impact of the project was insufficient to warrant approval. The candidate may be requested to do more work or even start over with another project. He may choose to meet these requests, or he may decide—if he believes his completed project worthy and in compliance—to complete his Eagle Scout Rank application and submit his project workbook without final approval. He must be granted a board of review should he request it. If it is thought a unit board may not provide a fair hearing, a "board of review under disputed circumstances" may be initiated. See the *Guide to Advancement* for more information.

## Risk Management and Eagle Scout Service Projects

All Eagle Scout service projects constitute official Scouting activity and thus are subject to Boy Scouts of America policies and procedures. Projects are considered part of a unit's program and are treated as such with regard to policies, procedures, and requirements regarding Youth Protection, two-deep leadership, etc. The health and safety of those working on Eagle projects must be integrated with project execution. As with any Scouting activity, the *Guide to Safe Scouting* applies. The "Sweet 16 of BSA Safety" must also be consulted as an appropriate planning tool. It can be found online at "Scouting Safely," www.scouting.org/scoutsource/healthandsafety/sweet16.aspx.

**At the time of publication of this workbook, changes were being made to the *Guide to Safe Scouting* that will affect how service projects are conducted. The changes limit the use of hazardous power tools, machinery, and equipment, and also such activities as working at heights or on ladders, and driving motor vehicles.**

## Insurance and Eagle Scout Projects

The Boy Scouts of America General Liability Policy provides general liability insurance coverage for official Scouting activities. Registered adult leaders are provided primary coverage. Unregistered adults participating in a Scouting activity are provided coverage in excess of their personal insurance. Every council has the opportunity to participate in the BSA accident and sickness insurance program. It provides insurance for medical and dental bills arising from Scouting activities. If councils do not purchase this, then units may contract for it. In some cases, chartered organizations might provide insurance, but this must not be assumed. Most of these programs provide insurance, but this must not be assumed. Most of these programs provide only secondary coverage and are limited to registered youth and adults and those interested in becoming members.

**The Guide to Advancement* is available in Scout shops or from www.scoutstuff.org.

Prepared. For Life.™

512-927
2011 Printing


N

1 in = 20 ft

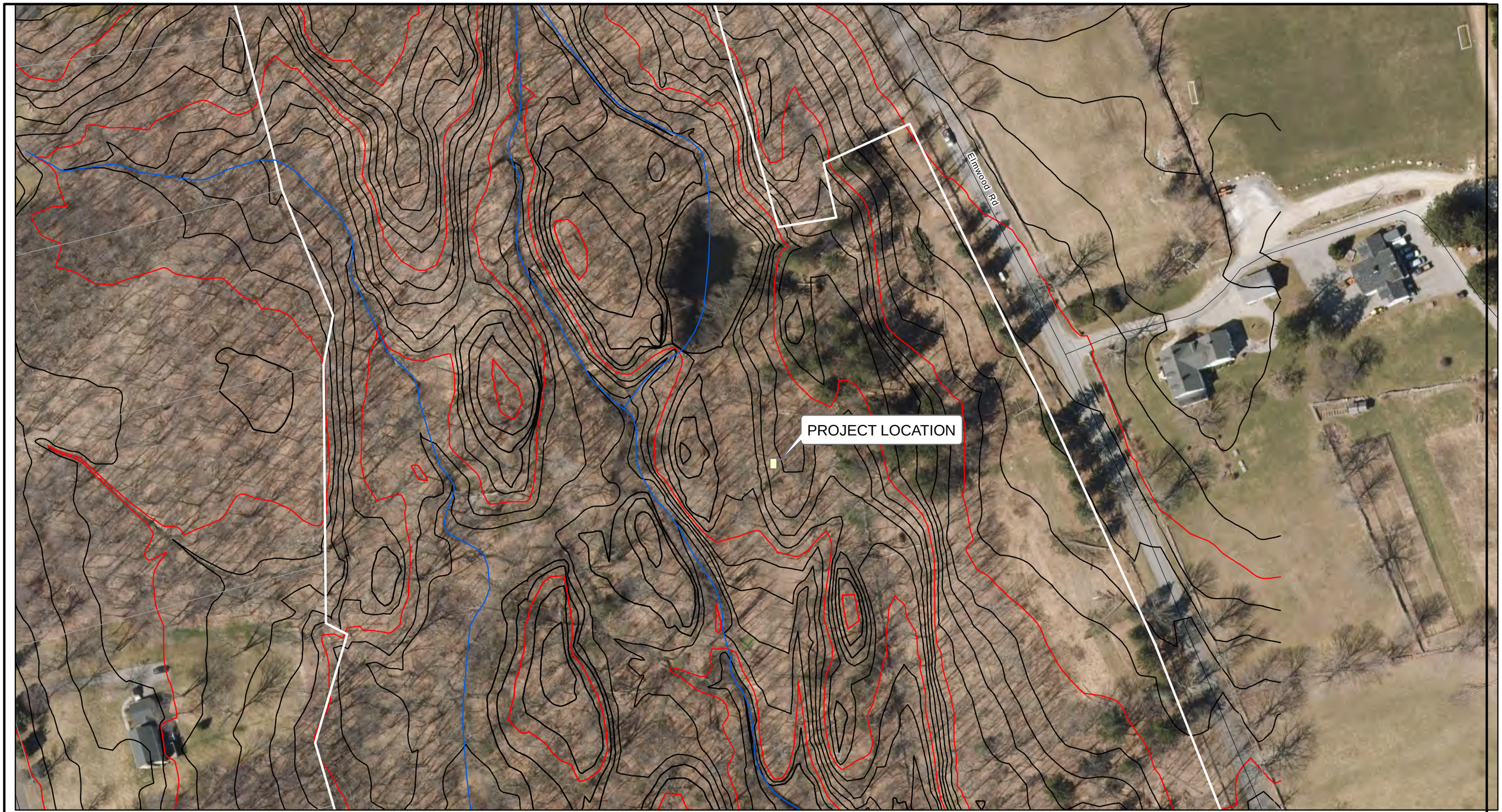
NOTES:

1. ALL INFORMATION SHOWN HEREON IS TAKEN FROM WESTCHESTER COUNTY GIS
2. THE SUBJECT SITE CONTAINS WETLANDS REGULATED BY THE NYSDEC; A WETLAND DELINEATION HAS NOT BEEN CONDUCTED
3. THE LOCATION OF THE LEAN-TO AS SHOWN HEREON SHALL BE CONSIDERED APPROXIMATE

# ONATRU FARM

## EAGLE SCOUT LEAN-TO

Town of Lewisboro, Westchester County, NY




N

1 in = 100 ft

NOTES:

1. ALL INFORMATION SHOWN HEREON IS TAKEN FROM WESTCHESTER COUNTY GIS
2. THE SUBJECT SITE CONTAINS WETLANDS REGULATED BY THE NYSDEC; A WETLAND DELINEATION HAS NOT BEEN CONDUCTED
3. THE LOCATION OF THE LEAN-TO AS SHOWN HEREON SHALL BE CONSIDERED APPROXIMATE

# ONATRU FARM

## EAGLE SCOUT LEAN-TO

Town of Lewisboro, Westchester County, NY

**ARCHITECTURE AND COMMUNITY APPEARANCE REVIEW COUNCIL**

**TOWN OF LEWISBORO**

RECEIVED
MAY 21 2018
TOWN CLERK
TOWN OF LEWISBORO

**CAL. NO. 10-18-ACARC**

| | |
|---|---|
| Applicant(s): | Christopher Castellon, Eagle Scout candidate |
| Reason for Referral: | Special Character District |
| Address: | Elmwood Road (west side), South Salem |
| Tax Map I.D.s and Zone | Sheet 44, Block ~~10057~~ 10302, Lot 14; SCR-4A |
| Owner(s) of Record: | Town of Lewisboro |
| Decision Date: | May 9, 2018 |
| The Vote: To Approve: | Virginia LoBosco, Chair<br>Christine Carrié<br>Craig Pillon |
| Absent: | Rose Bonanno and Alan Kaufman |
| Presentation by: | Christopher Castellon, Eagle Scout candidate |
| Nature of Application: | Installation of a lean to at the Onatru Preserve |
| Evidence Presented: | Narrative, photographs and diagrams provided by the applicant. |

Based on the foregoing, the members of ACARC resolved to approve the installation of one 12' (l) x 8' (w) x 10' (h) Adirondack log kit lean to on a plateau within the east side of the Onatru Preserve. The wood lean to is to have: an open front elevation, a gravel base and wood floor.

By motion Virginia LoBosco; seconded by Christine Carrié; In favor: Christine Carrié, Virginia LoBosco and Craig Pillon. Absent: Rose Bonanno and Alan Kaufman To deny: none.

Virginia LoBosco, Chair

Dated in South Salem, New York
This 18th day of May, 2018

## planning@lewisborogov.com

**From:** Jan Johannessen <jjohannessen@kelses.com>
**Sent:** Wednesday, January 9, 2019 2:09 PM
**To:** Ciorsdan Conran (planning@lewisborogov.com)
**Subject:** FW: Eagle Scout Project

Ciorsdan,

Please find the below email from the NYSDEC regarding the Eagle Scout project at Onatru; I do not believe this was included with the applicant's submission.

Regards,

Jan

**JAN K. JOHANNESSEN, AICP**
Principal

KELLARD SESSIONS

**KELLARD SESSIONS CONSULTING**
500 Main Street | Armonk, New York 10504
**T:** 914.273.2323| **F:** 914.273.2329
jjohannessen@kelses.com | www.kelses.com

CIVIL ENGINEERING | LANDSCAPE ARCHITECTURE
SITE & ENVIRONMENTAL PLANNING

-----Original Message-----
From: Fisher, Joshua M (DEC) [mailto:Joshua.Fisher@dec.ny.gov]
Sent: Tuesday, August 28, 2018 2:08 PM
To: Chris Castellon <cc101@optimum.net>
Cc: Jan Johannessen <jjohannessen@kelses.com>
Subject: RE: Eagle Scout Project

Chris,

It was nice meeting you today. Based on my site visit, the proposed lean to location is outside of the state regulated wetland 100' adjacent area, so no freshwater wetlands permit is required from New York State Department of Environmental Conservation. If plans change and any disturbance is to occur within 100' of the wetland then a permit will be required.

Josh Fisher
Biologist, Bureau of Ecosystem Health
New York State Department of Environmental Conservation
21 South Putt Corners Rd., New Paltz, NY 12561
Office: (845) 256-3113 | joshua.fisher@dec.ny.gov
Cell: (845) 220-8570
www.dec.ny.gov

JASON M. KRELLENSTEIN, PLLC
ATTORNEY AT LAW
892 ROUTE 35
P.O. BOX 393
CROSS RIVER, NEW YORK 10518

TELEPHONE: (914) 763-6323
FACSIMILE: (914) 763-6331
JMKRELL@KRELLAW.COM

via hand delivery

December 11, 2018

Planning Board
Town of Lewisboro
79 Bouton Road
South Salem, New York 10590

RE: Amendment to the Town Code
'Accessory Winery'

Ladies and Gentlemen:

I represent Gossett Brothers Nursery, John Vuolo and J.Vuolo, Corp. d/b/a South Salem Winery ("Co-Petitioners"). As you are aware, Co-Petitioners have petitioned the Lewisboro Town Board to amend the Town Code of the Town of Lewisboro to include, as a permitted use, "accessory wineries." Our Petition included a draft of the amending language.

At its meeting on October 22, 2018, the Town Board referred our Petition to the Westchester County Planning Board and your Board for comment. The Westchester Planning Board provided its response on October 26, 2018.

Co-Petitioners appeared before your Board on November 20, 2018, at which meeting you requested certain additional information from Co-Petitioners.

Accordingly, please see attached the following:

1. A copy of the Powerpoint presentation made before the Town Board on October 22, 2018. A copy of this presentation was given to the Planning Board's secretary on November 20, 2018;

2. Excerpts from the Town Codes of the Towns of Southold; Perth; Cazenovia; Chatham; and Geneva (each located in New York); and

3. A list of Westchester County designated Agricultural District Parcels in Lewisboro as of 2017. You will recall that your Board did not specifically request this of Co-Petitioners; however, we believe it may be of assistance in considering our Petition.

With particular reference to the several statutes included herewith, the Board's attention is called to the varying approaches and degrees of rigor implicit in such laws.

For example, a "winery" is a permitted use in the Town of Southold, with most of the criteria contained in the definition. See § 280-13(A)(4). As with our proposed statute, Southold permits sale of accessory items related to wine. See § 280(C)(10).

In Cazenovia, too, it is the Town's definition of "Winery" that contains most of the criteria for these kinds of operations. Wineries are permitted n most of Cazenovia's special districts by means of a special permit. See § 165-61; § 165-37; § 165-41; § 165-51; § 165-25. "Farm wineries" are a particular special use in "Agricultural Overly Districts," with additional defining language, including – as we have proposed for Lewisboro – reference to qualification under the New York Agriculture & Markets Law. See § 165-25(A)(16).

Geneva's code is similar. "Wineries" are discussed within Geneva's broad definition of "Agricultural Commerce." Site plan approval is required for "Agricultural Commerce," but Geneva's code provides for "agricultural districts," again, in accord with the New York Agriculture & Markets Law. See § 165-16 2, 4(a).

The Town of Perth permits "Agricultural Distillery/Farm Winery" operations pursuant to a special permit and site plan approval; critically, however – and consistent with the idea that the key regulatory elements of these businesses are within the purview of state, not local, law -- Perth waives the special permit requirement if the business is located within a New York State certified agricultural district. See Definitions at p. 8; p. 71; Chart at pp. 69, 113.

As part of a broad overhall of its agricultural policies, the Town of Chatham has drafted amendments to its town code employing a less rigorous approach. "Farm Winery" is defined in simple terms, though its reference to the New York's Alcoholic Beverage Control Law (again, a concept we have employed as well) providing the primary regulatory and administrative regime. See § 180-9. These operations are permitted with "modified site plan approval." See Chart at pp. 46-47.

As we sought to point out at the Planning Board's November 20 meeting, Co-Petitioner's proposed statute contains a regulatory component consistent with analogous statutes, most of which require some combination of local special permit approval and compliance with New York's Agricultural & Markets law and its Alcoholic Beverage Control law. We believe that New York State law and Westchester County regulations relating to agricultural operations, including farm wineries, provide a tested, functioning and careful regulatory framework.

As evidenced by the statutes of other towns, this framework is easily engrafted into town codes. For this reason, Co-Petitioners believe that streamlining the local regulatory regime is appropriate, including expedited site plan review and special permit review by the Board of Appeals – consistent, for example, with special permits for "Ranching and raising of field and garden crops," and "stands for sale and display of field and garden crops grown on the premises," each of which is consigned to the Board of Appeals. This is exactly the kind of practical approach that animates the statutes for Cazenovia, Chatham, Geneva, and Perth. We submit that the Town of Lewisboro, too, is capable of succeeding within this charter.

Please contact me should you have any questions or require any further information.

We thank the Planning Board for its consideration of this matter.

Respectfully submitted,

Jason M. Krellenstein

cc: Hon. Janet Donohue
Town Clerk (for distribution to the Town Board)

# GOSSETT BROTHERS NURSERY AND SOUTH SALEM WINERY

## LEWISBORO'S OWN ACCESSORY WINERY

# LEGISLATIVE COLLABORATION TO ENHANCE LOCAL BUSINESS OPPORTUNITIES

# LEWISBORO'S RURAL LEGACY

-- Provides our town with continuity and context.

-- Provides accessible jobs, pride in our local bounty and supports a sustainable, eco-friendly form of entrepreneurship.

--Differentiates Lewisboro from other bedroom communities based on our successful home-grown agribusinesses.

# THE HARD FACTS

--MORE THAN 4000 FARMS -- A HALF MILLION ACRES OF FARMLAND LOST IN NY SINCE 80s
(most to real estate development)

--30% OF NEW YORK'S FARMERS ARE OVER 65 Y/O

--LESS THAN 5% OF NEW YORK'S FARMLAND IS PERMANTENTLY PROTECTED

# CREATIVE RESPONSES

--STATEWIDE GROWTH OF FARM WINERIES OVER 70 PERCENT FROM 2011 THROUGH 2017

-- MORE THAN 333 WINERIES STATE WIDE (CONCEPT INTRODUCED IN 1976 LEGISLATION)

-- LEGISLATIVE ASSISTANCE IN THE FORM OF FARM WINERY BILL (2011); NEW YORK CRAFT ACT (2014); MODERNIZATION OF ABC LAW (2016) – EACH FOCUSED ON PRO-ACTIVE, THOUGHTFUL GOVERNMENT COOPERATION TO ENHANCE GROWTH

# DEMONSTRATED ECONOMIC IMPACT IN FINGER LAKES REGION

## CAYUGA WINE TRAIL:

9,510 TOTAL ATTENDEES ACROSS 4 SEPARATE EVENTS IN 2016

4222 INSTALLS OF CAYUGA LAKES WINE TRAIL MOBIL APP IN 2017

48,875 UNIQUE VISITORS TO MOBIL WEBSITE

## HUDSON BERKSHIRE BERVERAGE TRAIL

7200 WINE FEST GUESTS

53 TOUR ITINERARIES

17 GROUPS OF 8 OR MORE RESERVED GUESTS

## KEUKA LAKE WINE TRAIL

8 SEPARATE EVENTS IN 2017

6409 VISITORS

# DEMONSTRATED ECONOMIC IMPACT IN FINGER LAKES REGION

- **CAYUGA WINE TRAIL:**
- 9,510 TOTAL ATTENDEES ACROSS 4 SEPARATE EVENTS IN 2016
- 4222 INSTALLS OF CAYUGA LAKES WINE TRAIL MOBIL APP IN 2017
- 48,875 UNIQUE VISITORS TO MOBIL WEBSITE

- **HUDSON BERKSHIRE BERVERAGE TRAIL**
- 7200 WINE FEST GUESTS
- 53 TOUR ITINERARIES
- 17 GROUPS OF 8 OR MORE RESERVED GUESTS

- **KEUKA LAKE WINE TRAIL**
- 8 SEPARATE EVENTS IN 2017
- 6409 VISITORS

# SOURCES OF ECONOMIC DEVELOPMENT IN THE FINGER LAKES REGION: THE CRITICAL IMPORTANCE OF TOURISM

SUSAN M. CHRISTOPHERSON, PH.D (2015)

- Economic impact of wine and grape industry within NY State = $4.6 billion per year.
- NY Wineries received 5.29 million visits in 2012, accounting for $401 million in revenue.
- 60% of sales of NY wines occur in wine tasting rooms.
- "The tasting rooms draw in tourists already in the region for other leisure activities, as well as new tourists interested particularly in wine-making or who are wine enthusiasts."
- Multiple marketing organizations supported by wineries (e.g., Seneca Lakes Wine Trail; Finger Lakes Wine Country) "promote a consistent brand for the region, focused on wineries and tourism is a scenic lakeside setting."

# PRAGMATIC LEGISLATION FOCUSED ON CRITERIA SPECIFIC TO LEWISBORO

-- Appropriate licensing by State liquor authority;

-- Located in "Agricultural District";

--"Farm Operation" certified by NY State and Westchester County;

--Wine to be made on the premises, from predominantly NY State grapes;

--Compliance with County Health Department Regulations;

-- Premises to be located on state road;

-- No full meals be served on premises;

-- Other goods and products to feature local themes and logos.

# PRAGMATIC LEGISLATION FOCUSED ON CRITERIA SPECIFIC TO LEWISBORO

- Appropriate licensing by State liquor authority;
- "Farm Operation" certified by NY State and Westchester County;
- Located in "Agricultural District";
- Wine to be made on the premises, from predominantly NY State grapes;
- Compliance with County Health Department Regulations;
- Premises to be located on state road;
- No full meals be served on premises; and
- Other goods and products to feature local themes and logos.

# GOSSETT BROTHERS NURSERY

**THIRD GENERATION FARM OPERATION**

**FOURTH GENERATION PRESENTLY STUDYING AGRICULTURE AND LABOR RELATIONS**

**POPULAR AND SUCCESSFUL 'DESTINATION' FARM MARKET**

**STAUNCH SUPPORTER OF TOWN CAUSES AND EXCELLENT RELATIONS WITH SCHOOL, TOWN, NEIGHBORS**

**DEMONSTRATED SUPPORT OF VARIOUS NY AGRICULTURAL AGENCIES**

# SOUTH SALEM WINERY

**JOHN VUOLO, ONE OF OUR OWN**

**CRAFT WINE MAKER PRODUCING 600 GALLONS PER YEAR BY HAND**

**WESTCHESTER MAGAZINE'S "BEST WINE TASTING EXPERIENCE"**

**HAND-BUILT HIS BAR, FIXTURES, EQUIPMENT**

**SUCCESSFULLY RAN HIS OPERATION WITHOUT INCIDENT AND TO GREAT ACCLAIM**

**SOUGHT AND RECEIVED ALL APPROPRIATE STATE LIQUOR AUTHORITY QUALIFICATIONS AND LICENSES**

# ACHIEVABLE GROWTH FOR OUR COMMUNITY

**FOSTERS A 'LEWISBORO' BRAND**

**HIGHLIGHTS AND COMPLIMENTS OTHER ARTISANAL AGRI-BUSINESSES IN TOWN: HONEY, CHEESE, PRODUCE**

**CONSISTENT WITH DEVELOPMENT OF CULINARY TRAIL**

**ILLUMINATES OUR LOCAL BOUNTY AND THE CREATIVITY OF OUR LOCAL ENTREPRENEURS**

# Chapter 280. Zoning

## Article III. Agricultural-Conservation (A-C) District and Low-Density Residential R-80, R-120, R-200 and R-400 Districts

### § 280-12. Purpose.

The purpose of the Agricultural-Conservation (A-C) District and the Low-Density Residential R-80, R-120, R-200 and R-400 Districts is to reasonably control and, to the extent possible, prevent the unnecessary loss of those currently open lands within the Town containing large and contiguous areas of prime agricultural soils which are the basis for a significant portion of the Town's economy and those areas with sensitive environmental features, including aquifer recharge areas and bluffs. In addition, these areas provide the open rural environment so highly valued by year-round residents and those persons who support the Town of Southold's recreation, resort and second-home economy. The economic, social and aesthetic benefits which can be obtained for all citizens by limiting loss of such areas are well documented and have inspired a host of governmental programs designed, with varying degrees of success, to achieve this result. For its part, the Town is expending large sums of money to protect existing farm acreage. At the same time, the Town has an obligation to exercise its authority to reasonably regulate the subdivision and development of this land to further the same purposes while honoring the legitimate interests of farmers and other farmland owners.

### § 280-13. Use regulations.

[Amended 3-14-1989 by L.L. No. 3-1989]
In A-C, R-80, R-120, R-200 and R-400 Districts, no building or premises shall be used and no building or part of a building shall be erected or altered which is arranged, intended or designed to be used, in whole or in part, for any uses except the following:

A. Permitted uses.
[Amended 5-23-1989 by L.L. No. 8-1989; 11-29-1994 by L.L. No. 25-1994; 11-29-1994 by L.L. No. 26-1994; 5-13-1997 by L.L. No. 8-1997; 7-17-2007 by L.L. No. 15-2007; 6-15-2010 by L.L. No. 2-2010]

(1) One-family detached dwellings, not to exceed one dwelling on each lot.

(2) The following agricultural operations and accessory uses thereto, including irrigation, provided that there shall be no storage of manure, fertilizer or other odor- or dust-producing substance or use, except spraying and dusting to protect vegetation, within 150 feet of any lot line:

(a) The raising of field and garden crops, vineyard and orchard farming, the maintenance of nurseries and the seasonal sale of products grown on the premises.

(b) The keeping, breeding, raising and training of horses, domestic animals and fowl (except ducks)[1] on lots of 10 acres or more.
[1] *Editor's Note: See also Ch. 83, Art. I, Ducks.*

(c) Barns, storage buildings, greenhouses (including plastic-covered) and other related structures, provided that such buildings shall conform to the yard requirements for principal buildings.

(d) The retail sale of local produce from structures of less than 20 square feet floor area shall be set back at least 10 feet from any lot line.

(3) Buildings, structures and uses owned or operated by the Town of Southold, school districts, park districts and fire districts.

(4) Wineries which meet the following standards:

(a) The winery shall be a place or premises on which wine made from primarily Long Island grapes is produced and sold;

(b) The winery shall be on a parcel on which at least 10 acres are devoted to vineyard or other agricultural purposes, and which is owned by the winery owner;

(c) The winery structures shall be set back a minimum of 100 feet from a major road; and

(d) The winery shall obtain site plan approval.

(5) Small wind energy systems on parcels greater than seven acres in size, which parcels are dedicated primarily to uses necessary for bona fide agricultural production, and subject to the standards provided in Chapter **277** of this Town Code.

(6) One accessory apartment in an existing one-family dwelling, subject to the issuance of a rental permit in accordance with § **280-13D** and the following requirements:

(a) The accessory apartment shall be located in the principal building.

(b) The owner of the existing dwelling shall occupy one of the dwelling units as the owner's principal residence. The other dwelling unit shall be leased for year-round occupancy, evidenced by a written lease for a term of one or more years.

(c) The existing one-family dwelling shall contain not less than 1,600 square feet of livable floor area.

(d) The accessory apartment shall contain not less than 450 square feet of livable floor area.

(e) The accessory apartment shall not exceed 40% of the livable floor area of the existing dwelling unit and any addition thereto permitted under § **280-13B(13)(j)** hereof.

(f) A minimum of three off-street parking spaces shall be provided.

(g) Not more than one accessory apartment shall be permitted on a lot.

(h) The accessory apartment shall meet the requirements of an apartment as defined in § **280-4** hereof.

(i) The exterior entry to the accessory apartment shall, to the maximum extent possible, retain the existing exterior appearance of a one-family dwelling.

(j) Subject to all other restrictions and requirements in this Code, a reasonable expansion of the existing foundation, not to exceed 25% of the living space of the existing dwelling unit, may be permitted to accommodate the creation of an accessory apartment.

(k) All conversions shall be subject to the inspection of the Building Inspector and issuance of a certificate of compliance.

(l) The dwelling which is converted to permit an accessory apartment shall be in existence and be eligible for or have a valid certificate of occupancy issued prior to January 1, 2004, or proof of legal occupancy prior to that date.

(m) The existing building, together with the accessory apartment, shall comply with all other requirements of Chapter **280** of the Town Code of the Town of Southold.

(n) Notwithstanding the provisions of § **280-13B** hereof, no site plan approval by the Planning Board shall be required for the establishment of an accessory apartment.

(o) Approval by the Suffolk County Department of Health Services of the water supply and sewage disposal systems shall be required.

(p) No bed-and-breakfast facilities, as authorized by § **280-13B(14)** hereof, shall be permitted in or on premises for which an accessory apartment is authorized or exists.

(7) Land-based aquaculture operations, including research and development, which meet the following standards:
[Added 9-22-2015 by L.L. No. 8-2015]

(a) The land-based aquaculture operations shall be on a parcel that is at least seven acres, owned by the land-based aquaculture operator.

(b) The structures used for land based aquaculture operations shall be set back a minimum of 100 feet from any road and 200 feet from any contiguous parcel.

(c) Any land-based aquaculture operation shall take place in a fully enclosed structure.

(d) Any land-based aquaculture operation shall be entitled to a retail area not more than 10% of the gross floor area of the structure in which the land-based aquaculture takes place for the direct marketing of its products.

(e) Land-based aquaculture operations shall be subject to site plan approval by the Planning Board.

B. Uses permitted by special exception by the Board of Appeals. The following uses are permitted as special exception by the Board of Appeals, as hereinafter provided, and, except for the uses set forth in Subsections **B(1), (13)** and **(14)** hereof, are subject to site plan approval by the Planning Board:
[Amended 3-14-1989 by L.L. No. 3-1989; 5-20-1993 by L.L. No. 6-1993; 12-21-1993 by L.L. No. 3-1989; 11-29-1994 by L.L. No. 26-1994; 12-27-1994 by L.L. No. 30-1994; 2-7-1995 by L.L. No. 3-1995; 11-12-1996 by L.L. No. 20-1996; 11-12-1997 by L.L. No. 26-1997; 12-8-1998 by L.L. No. 26-1998; 10-25-2005 by L.L. No. 18-2005; 6-15-2010 by L.L. No. 2-2010]

(1) Two-family dwellings not to exceed one such dwelling on each lot.

(2) Places of worship, including parish houses (but excluding a rectory or parsonage, which shall conform to the requirements for a one-family dwelling), subject to the following requirements:

(a) No building or part thereof shall be erected nearer than 50 feet to any street line and nearer than 20 feet to any lot line.

(b) The total area covered by all principal and accessory buildings shall not exceed 20% of the area of the lot.

(3) Private elementary or high schools, colleges and other educational institutions, subject to the following requirements:

(a) No building shall be less than 50 feet from any street or lot line.

(b) The total area occupied by all principal and accessory buildings shall not exceed 20% of the area of the lot.

(c) Any school shall be a nonprofit organization within the meaning of the Internal Revenue Act and shall be registered effectively thereunder as such.

(d) Any such school shall occupy a lot with an area of not less than five acres plus one acre for each 25 pupils for which the building is designed.

(4) Nursery schools.

(5) Philanthropic, eleemosynary or religious institutions, health care, continuing care and life facilities, but excluding facilities for the treatment of all types of drug addiction, subject to the following requirements:

(a) No building or part thereof or any parking or loading area shall be located within 100 feet of any street line nor within 50 feet of any lot line.

(b) The total area covered by principal and accessory buildings shall not exceed 20% of the area of the lot.

(c) The maximum height shall be 35 feet or 2 1/2 stories.

(d) The entire lot, except areas occupied by buildings or parking or loading areas, shall be suitably landscaped and properly maintained.

(e) Any health care, continuing care or life care facility shall meet the following standards:

[1] All buildings shall be of fire-resistive construction.

[2] All such uses shall be served by adequate water and sewer systems approved by the Suffolk County Department of Health.

[3] Patients suffering from communicable diseases shall not be permitted in any nursing home or sanatorium. (Communicable diseases are defined by the Sanitary Code of the Public Health Council of the State of New York.)

[4] Eight thousand square feet of lot area shall be provided for each patient bed.

(6) Public utility rights-of-way as well as structures and other installations necessary to serve areas within the Town, except that wireless communication facilities must obtain approval pursuant to Article **XVII**, subject to such conditions as the Board of Appeals may impose in order to protect and promote the health, safety, appearance and general welfare of the community and the character of the neighborhood in which the proposed structure is to be constructed.

(7) Beach clubs, tennis clubs, country clubs, golf clubs and annual membership clubs and accessory playgrounds, beaches, swimming pools, tennis courts, recreational buildings and maintenance buildings catering exclusively to members and their guests, subject to the following requirements:

(a) No building or part thereof or any parking or loading area shall be located within 100 feet of any street line or within 50 feet of any lot line.

(b) The total area covered by principal and accessory buildings shall not exceed 20% of the area of the lot.

(c) No such use shall occupy a lot with an area of less than three acres.

(8) Children's recreation camps organized primarily for seasonal use and subject to the following requirements:

(a) No building, tent, activity area or recreation facility shall be less than 200 feet from any lot line, and any such building, tent, activity area or recreation facility shall be effectively screened therefrom as required by the Planning Board. Buildings intended for use as sleeping quarters shall be not less than 30 feet from each other, except tents, which shall be not less than 10 feet apart.

(b) The minimum lot area shall be not less than 10,000 square feet for each cottage, tent or other principal building and not less than 3,000 square feet of land area shall be provided for each person accommodated in the buildings or tents on the premises.

(c) The sound level of all outdoor public-address systems shall not exceed the intensity tolerable in a residential neighborhood.

(9) Farm labor camps, subject to the following requirements:

(a) All farm labor camps on farms shall be construed in conformance with applicable laws and shall not be located nearer to any other residence than the residence of the employer, except by specific review and approval of the Planning Board.

(10) Veterinarian's offices and animal hospitals, subject to the following requirements:

(a) The housing of all animals shall be in a fully enclosed structure, if nearer than 150 feet to any lot line.

(11) Cemeteries.

(12) Stables and riding academies.

(13) One accessory apartment in a lawfully existing detached accessory garage, barn or storage building, subject to the following requirements:
[Amended 4-24-2018 by L.L. No. 3-2018]

(a) The accessory apartment shall contain no less than 450 square feet and shall not exceed 750 square feet of livable floor area and shall have no more than one bathroom.

(b) A minimum of three off-street parking spaces shall be provided on the premises.

(c) Not more than one accessory apartment shall be permitted on a lot.

(d) The accessory apartment shall meet the requirements of an apartment as defined in § **280-4** hereof.

(e) The entirety of the living floor area of the accessory apartment must be on one floor of the accessory structure.

(f) The existing accessory structure shall comply with all other requirements of this chapter.

(g) Approval by the Suffolk County Department of Health Services of the water supply and sewage disposal systems shall be required.

(h) No bed-and-breakfast facilities, as authorized by § **280-13B(14)** hereof, shall be permitted in or on premises for which an accessory apartment is authorized or exists.

(i) Occupancy of resident structures on the premises shall be subject to the issuance of an annual rental permit in accordance with § **280-13D** and the following requirements:

[1] The owner of the premises shall occupy either the existing single-family dwelling unit or the accessory apartment in the detached accessory structure as the owner's principal residence. The other dwelling unit shall be leased for year-round occupancy evidenced by a written lease for a term of one or more years to:

[a] A family member; or

[b] A resident who is currently on the Southold Town Affordable Housing Registry and eligible for placement.

[2] Rents charged to a resident on the Affordable Housing Registry shall not exceed the rent established by the Town Board annually pursuant to § **280-30F** of this Code.

[3] No accessory apartment shall be occupied by more than the number of persons permitted to occupy the dwelling unit under Section 404 of the Property Maintenance Code of the New York State Uniform Fire Prevention and Building Code.

[4] An accessory apartment shall only be occupied or otherwise utilized in accordance with the certificate of occupancy issued for the dwelling unit.

(j) The Chief Building Inspector, Zoning Inspector, and Town personnel who are engaged in the enforcement of the provisions of this chapter are authorized to make or cause to be made inspections to determine compliance with this chapter and are authorized to enter upon any property for the purpose of said inspections.

(k) No special exception shall be granted unless the Zoning Board of Appeals, in addition to the considerations, determinations and findings required in §§ **280-142** and **280-143**, specifically finds and determines the following:

[1] That the granting of the special exception will not adversely impact the privacy and use and enjoyment of any adjoining parcel.

[2] That the granting of the special exception will not adversely impact the character of the neighborhood in which it is located.

[3] That the cumulative effect of approving the present application along with previously approved applications will not have a cumulative adverse impact on the surrounding neighborhood.

[4] That the cumulative effect of approving the present application along with previously approved applications will not have a cumulative adverse impact on the school district in which the property is located.

[5] That sufficient off-street parking exists on the subject property to accommodate the proposed accessory apartment.

[6] Whether adequate buffer yards and screening can and will be provided to protect adjacent properties from possible detrimental impacts of the proposed use.

(14) Bed-and-breakfasts which have been issued a bed-and-breakfast permit by the Building Inspector. Said permit shall be issued for a term of one year if the following conditions are met:

(a) A smoke alarm shall be provided on each floor and in every guest room.

(b) The dwelling shall have at least two exits and there shall be a window large enough for emergency egress in each guest room.

(c) The identification sign shall be no larger than two square feet in areas zoned Residential-Office or higher, but there shall be no exterior signage identifying the use as a bed-and-breakfast in residential areas.

(d) No accessory apartment, as authorized by § **280-13B(13)** hereof, shall be permitted in or on premises for which a bed-and-breakfast facility is authorized or exists.

(15) Historical society.

(16) Preservation and use of a federal or state designated historic building for the purpose of hosting community events, together with the use of part of such building for professional offices and/or one apartment, not to exceed a total of three uses per building, provided that such building is owned and

maintained by a not-for-profit historic organization. In no event shall there be more than one apartment per building.

(17) Conversion of existing space to affordable residential housing.
[Added 12-5-2017 by L.L. No. 20-2017]

(a) Tenants shall be reserved to moderate-income individuals and families who do not have any ownership interest in any other residence or vacant lot. Tenants must work or reside in the Town of Southold at the time they take possession. The eligible applicants must be registered in the Town of Southold Housing Registry, administered by the Government Liaison Officer prior to the commencement of any tenancy.

(b) Converted space shall be limited to a maximum of six moderate-income residential rental units.

(c) As a condition of the granting of a special exception by the Zoning Board of Appeals, property owners must convert said applied-for space to residential use within six months, rent the units at a rate at or below the maximum allowable monthly rent for affordable housing units, and maintain the excepted residential units as affordable residential housing for a minimum period of eight years from the date of granting.

(d) All converted affordable residential housing shall be subject to all Town and county building code and septic specifications.

(e) All converted affordable residential housing must have at least one parking space per unit.

(f) The premises must be located within a designated hamlet locus (HALO) zone.

C. Accessory uses, limited to the following uses and subject to the conditions listed in § **280-15** herein:

(1) Any customary structures or uses which are customarily incidental to the principal use, except those prohibited by this chapter.

(2) Home occupation, including home professional office and home business office. In permitting these uses, the Town Board recognizes that the residents historically have operated small businesses which provide services to the community from their homes. The Board finds that these businesses have not impacted negatively on the appearance of these residential zones. In the Board's judgment, it finds that in order to maintain the economic viability of the Town, to maintain the rural quality of life and in the interests of the welfare of the residents, these businesses (or home occupations) should be permitted to continue. In setting forth the following subsections, the Board intends to permit as of right certain business uses in residential zones with the understanding that these uses are to be conducted in a manner that will not alter the character of the residential neighborhoods. The Board believes that the following subsections provide sufficient safeguards to accomplish that aim. These uses shall be permitted, provided that:
[Amended 4-9-1991 by L.L. No. 10-1991; 7-28-1992 by L.L. No. 14-1992]

(a) No display of products shall be visible from the street, and no stock-in-trade shall be kept on the premises.

(b) Such occupation is incidental to the residential use of the premises and is carried on in the main building by the residents therein with not more than one nonresident assistant for whom off-street parking must be provided on site.

(c) Such occupation is carried on in an area not to exceed 25% of the area of all floors of the main building, and in no event shall such use occupy more than 500 square feet of floor area.

(d) There shall be no exterior effect at the property line, such as noise, traffic, odor, dust, smoke, gas, fumes or radiation.

(e) Studios where dancing or music instruction is offered to groups in excess of five pupils at one time or where concerts or recitals are held are prohibited.

(f) In no manner shall the appearance of the building be altered, nor shall the occupation be conducted in a manner that would cause the premises to lose its residential character, including but not limited to the use of colors, materials, construction or lighting.

(g) Notwithstanding anything set forth elsewhere in this article, home occupations, home business offices and home professional offices shall in no event be deemed to include animal hospitals, kennels, barbershops, beauty parlors, clinics or hospitals, mortuaries, nursery schools, clubs, auto repair shops, restaurants, tourist homes, rooming houses or boardinghouses and uses similar to those listed above.[2]

[2] *Editor's Note: Former Subsection C(2)(h), regarding signs, which previously followed this subsection, was repealed 11-29-1994 by L.L. No. 25-1994. For current sign provisions, see Art. **XIX**, Signs.*

(h) Home occupations, home business office and home professional offices shall not include manufacturing, fabrication or construction of any type on the site.

(i) The outdoor storage of equipment necessary for residents connected with aquaculture shall be screened from view and shall conform to the setbacks for accessory structures.

(3) Boat docking facilities for the docking, mooring or accommodation of noncommercial boats, subject to the following requirements:

(a) There shall be docking or mooring facilities for no more than two boats other than those owned and used by the owner of the premises for his personal use.

(b) The Town Trustees shall approve new boat docking facilities.

(c) Boats at such docking facilities shall not be used for overnight sleeping purposes.

(4) Garden house, toolhouse, storage building, playhouse, wading pool, swimming pool or tennis court incidental to the residential use of the premises and not operated for gain, subject to the following requirements:

(a) Any swimming pool shall be completely enclosed with a permanent chain link (or similar type) fence of not more than two-inch mesh, not less than four feet in height, erected, maintained and provided with a self-closing, self-latching gate to prevent unauthorized use of the pool and to prevent accidents. However, if said pool is located more than four feet above the ground, then a fence is not required, provided that all points of access to said pool are adequately protected by a self-closing, self-latching gate. Any swimming pool in existence at the effective date of the provisions of this subsection shall, within one year from such date, comply with all of the provisions hereof.

(b) Individual outdoor tennis court related to residential use on a lot containing a single-family detached dwelling, provided that the same is set back not less than six feet from all lot lines and that there is no lighting for after dark use.

(5) Private garages; provided, however, that not more than two passenger automobile spaces in such garages may be leased to persons not resident on the premises.

(6) Off-street parking spaces accessory to uses on the premises. Not more than four off-street parking spaces shall be permitted within the minimum front yard.

(7) The storage of either a boat or travel trailer owned and used by the owner or occupant of the premises on which such boat or travel trailer is stored, for his personal use, subject to § 280-78Q, Supplemental parking regulations,[3] and the following requirements:

(a) Such boat or trailer shall not exceed 30 feet in length.

(b) Such boat or trailer shall be stored only in the required rear yard, and the area occupied thereby, together with the area of all buildings in the rear yard, shall not exceed 40% of the area of the required rear yard.

(c) Such boat or trailer shall not be located within 15 feet of any street or lot line.

[3] *Editor's Note: See now § **280-78P**.*

(8) Horses and domestic animals other than household pets, provided that such animals shall not be housed within 40 feet of any lot line. Housing for flocks of more than 25 fowl shall not be constructed within 50 feet of any line.[4]

[4] *Editor's Note: Former Subsection C(9), as amended, regarding signs, which previously followed this subsection, was repealed 11-29-1994 by L.L. No. 25-1994. For current sign provisions, see Art. **XIX**, Signs.*

(9) Yard sales, attic sales, garage sales, auction sales or similar types of sales of personal property owned by the occupant of the premises and located thereon, subject to the following requirements:
[Amended 6-2-2009 by L.L. No. 6-2009]

(a) No more than two such sales shall be conducted on any lot in any one calendar year.

(b) Adequate supervised parking facilities shall be provided.

(c) No signs, except one on-premises sign not larger than six square feet in size, displayed for a period of not longer than one week immediately prior to the day of such sale, shall be permitted.

(d) A permit shall be obtained therefor from the Town Clerk upon the payment of a fee of $15.

(e) The display permit issued by the Town Clerk shall be posted on the premises so it can be read from the street and removed before sundown on the day of the sale.

(10) Wineries may have an accessory gift shop on the premises which may sell items accessory to wine, such as corkscrews, wine glasses, decanters, items for the storage and display of wine, books on winemaking and the region and nonspecific items bearing the insignia of the winery. Wineries may not have a commercial kitchen as an accessory use but may have a noncommercial kitchen facility for private use by the employees.
[Added 11-29-1994 by L.L. No. 26-1994]

(11) Child care.
[Added 11-12-1996 by L.L. No. 20-1996]

(12) Use of aircraft in agricultural operations, provided that:
[Added 7-31-2018 by L.L. No. 9-2018]

(a) The use has been granted a special exception from the Zoning Board of Appeals.

(b) In addition to the criteria for a special exception set forth in §§ **280-142** and **280-143**, the ZBA shall consider the following criteria:

[1] The anticipated frequency of flights.

[2] The location of the proposed landing and takeoff zone.

[3] The location of residences.

[4] The type of aircraft being used.

(c) Notwithstanding the forgoing, the use of aircraft shall be limited to spraying crops, surveying fields and transporting employees and shall not be used for transporting nonemployees to and from the subject premises.

D. Rental permit for accessory apartments. Notwithstanding any prior course of conduct or permission granted, no owner of property shall cause, permit, or allow the occupancy or use of an accessory apartment created pursuant to § **280-13A(6)** or § **280-13B(13)** without a valid rental permit issued upon application to the Chief Building Inspector.
[Added 6-15-2010 by L.L. No. 2-2010]

(1) Content of application. An application for a rental permit or for a renewal of a rental permit shall bear the notarized signature of the owner and contain the following information:

(a) The name, date of birth and telephone number of the owner.

(b) The address of the subject property including street address and Suffolk County Tax Map number.

(c) In the event the owner is a corporation, partnership, limited liability company or other business entity, the name, address and telephone number of each owner, principal, officer, shareholder, partner or member of such business.

(d) The name(s) and telephone number(s) of all tenants.

(e) A copy of the lease agreement between owner and tenant.

(f) A copy of the certificate of occupancy or preexisting certificate of occupancy for the property.

(2) The owner of an accessory apartment within an existing one-family dwelling shall, in addition to the information required in § **280-13D(1)(a)** through **(f)**, provide a certification that the existing dwelling or accessory apartment is occupied by the owner and that the premises is in compliance with all of the provisions of the Code of the Town of Southold, the laws and sanitary and housing regulations of the County of Suffolk and the laws of the State of New York.

(3) The owner of an accessory apartment in an accessory structure lawfully existing pursuant to § **280-13B(13)** shall, in addition to the information required in § **280-13D(1)(a)** through **(f)**, provide a certification that:
[Amended 12-5-2017 by L.L. No. 20-2017]

(a) The existing single-family dwelling or the accessory apartment in the accessory structure is occupied by the owner as the owner's principal residence.

(b) The other dwelling unit on the subject property is to be occupied by either a family member or an individual who is currently on the Southold Town Affordable Housing Registry and eligible for placement.

(c) Rents charged to a tenant from the Affordable Housing Registry shall not exceed the rent established by the Town Board annually pursuant to § **280-30F** of this Code.

(d) The dwelling unit is in compliance with all of the provisions of the Code of the Town of Southold, the laws and sanitary and housing regulations of the County of Suffolk and the laws of the State of New York.

(4) Review of application. The application for a rental permit shall be reviewed for completeness and accuracy by the Chief Building Inspector and, in the case of applications pertaining to accessory apartments in accessory structures, by the Government Liaison Officer. The Chief Building Inspector shall not issue a rental permit unless the application includes all of the requisite information enumerated in § **280-13D(1)** through **(3)** and written approval by the Government Liaison Officer that the requirements of § **280-13B(13)(j)** have been satisfied. The Chief Building Inspector shall have the

right to inspect the property to confirm compliance with the New York State Uniform Fire Prevention and Building Code and this Code.
[Amended 5-3-2016 by L.L. No. 4-2016]

(5) Fees. A nonrefundable annual permit application fee in the amount of $150 shall be paid at the time of filing of an application for a rental permit or a renewal rental permit for an accessory apartment in an existing single-family dwelling. A nonrefundable annual permit application fee in the amount of $100 shall be paid at the time of filing of an application for a rental permit or a renewal rental permit for an accessory apartment in an accessory structure.

(6) Registry of permits. It shall be the duty of the Chief Building Inspector to maintain a register of permits issued pursuant to this chapter. Such register shall be kept by name of applicant and street address and set forth the date of expiration of the rental permit.

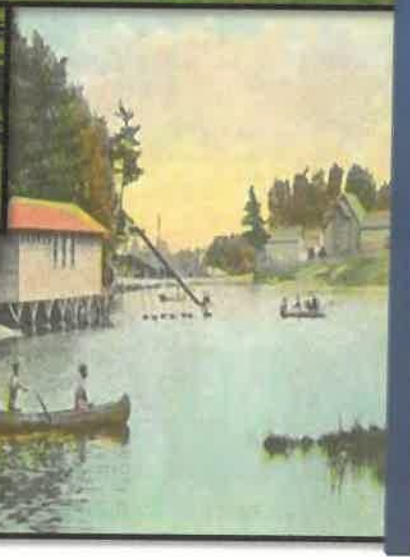
(7) Annual renewal. Rental permits issued pursuant to this chapter shall be valid for a period of one year from the date of issuance and must be renewed by application to the Chief Building Inspector in accordance with the procedures for the issuance of the initial rental permit within 10 days of expiration.

(8) Penalties for offenses. In addition to any other penalties for violations of this chapter, the Chief Building Inspector or Zoning Inspector shall revoke a permit when he or she finds that the owner has caused, permitted or allowed to exist and remain upon the premises a violation of any provision of the Code of the Town of Southold for a period of 14 days or more after written notice has been given to the owner. Should the owner permit any such violation of this Code, the laws and sanitary and housing regulations of the County of Suffolk and the laws of the State of New York to remain uncured for a period of 30 days or more after written notice has been given to the owner, the Chief Building Inspector may revoke the certificate of compliance for the accessory apartment.

(9) Appeal by owner. An appeal of a denial, revocation or renewal of a rental permit by the Chief Building Inspector based upon the owner's failure to satisfy the requirements of § 280-13B(13)(j)[1] and [2] may be taken to the Housing Advisory Commission, by written request, made within 30 days from the date of such revocation. The Housing Advisory Commission shall hold a public hearing on such appeal within 30 days after receipt of written notice of such appeal and, after such hearing, shall make written findings and a decision either sustaining such denial or revocation or issuing or reinstating such permit within 30 days after close of such public hearing. Any appeal of the revocation of a certificate of compliance must be presented to the Zoning Board of Appeals within 30 days from the date of revocation.

2017

# TOWN OF PERTH, NY
# FULTON COUNTY
# ZONING LAW

Adopted: 11/2/2017

Resolution: 109 of 2017

# TOWN OF PERTH

**ZONING COMMISSION MEMBERS**

**RON CETNAR, CHAIRMAN**
**JUDY MANZI, VICE CHAIRMAN**
**JEFFREY DUMAIS**
**FRAN SIKORSKI**
**RICHARD WOOD**
**BOB GORDON**
**JEFF GREEN**

**FORMER ZONING COMMISSION MEMBERS**

**HARVEY HEMSTREET**
**DEREK QUACKENBUSH**

**TOWN BOARD**

**GREG FAGAN, SUPERVISOR**
**JUDY ENGLISH, CLERK**
**TIMOTHY KORONA, COUNCILMAN**
**PETER BETZ, COUNCILMAN**
**WALTER KOWALCZYK, COUNCILMAN**
**GAY LEWANDOWSKI, COUNCILWOMAN**

**FULTON COUNTY PLANNING DEPARTMENT STAFF SUPPORT**

**SEAN M. GERAGHTY, SENIOR PLANNER**
**SCOTT HENZE, PLANNER/GIS COORDINATOR**
**CAROL ELLIS, SR. STENOGRAPHER**

**ADDITIONAL CONTRIBUTIONS**

**MARK CONCILLA, CODE ENFORCEMENT OFFICER**

## TABLE OF CONTENTS

**Page #**

## LIST OF ACRONYMS

| | |
|---|---|
| ADA | Americans with Disability Act |
| AM | Amplitude Modulation |
| BTZ | Business Technology Zone |
| CAFO | Concentrated Animal Feed Operation |
| CEO | Code Enforcement Officer |
| dc | Direct Current |
| DEIS | Draft Environmental Impact Statement |
| EAF | Environmental Assessment Form |
| FAA | Federal Aviation Administration |
| FCC | Federal Communications Commission |
| HVAC | Heating, Ventilation and Air Conditioning |
| Kw | Kilowatt |
| NYCRR | New York Codes, Rules and Regulations |
| NYSDEC | New York State Department of Environmental Conservation |
| NYSDOH | New York State Department of Health |
| PV | Photovoltaic |
| RV | Recreational Vehicle |
| SEQR | State Environmental Quality Review |
| Sq. Ft. | Square Feet |
| SWPPP | Stormwater Pollution Prevention Plan |
| ZBA | Zoning Board of Appeals |

## ARTICLE 1 GENERAL PROVISIONS

A. **Title.** This Local Law shall be known and cited as the "Zoning Law of the Town of Perth".

B. **Authority.** This Local Law is enacted pursuant to Article 16 of the Town Law of New York State and Article 2 of the Municipal Home Rule Law of New York State.

C. **Purpose.** The purpose of this Local Law is to:

1. Assist in the implementation of the overall goal of the Town's Comprehensive Plan, which is to preserve our residents' quality of life, enhance the character of the community, encourage growth and diversification in the local economy, a variety of residential living options and, at the same time, protect and conserve our natural environment and invaluable natural resources.
2. Protect and promote the public health, safety and general welfare of the Town for the benefit of its citizens.
3. Prevent the pollution of air, surface and groundwater, to assure the adequacy of drainage facilities, and to encourage the wise use and sound management of the Town's natural resources in order to preserve the integrity, stability and beauty of the community and the value of the land.
4. To facilitate the adequate provision of transportation, water, sewage, schools, parks and other public requirements.
5. To foster orderly change in the community conserving the value of property and encouraging the appropriate use of the land throughout the Town, with reasonable consideration, among other things to the character of the districts and their particular suitability for specific uses.
6. Encourage the continuation and diversification of agricultural activities.
7. Ensure that the design of new developments protect open space, environmentally sensitive areas, community character and other important natural resources in the Town.
8. Enhance the overall appearance of the Town of Perth.

D. **Applicability.** No building or structure shall be erected, constructed, moved, altered, rebuilt or enlarged nor shall any land, water or building be used, designed or arranged to be used for any purpose except in compliance with this Zoning Law.

E. **Severability.** Should any clause, sentence, subdivision, paragraph, section or part of this Local Law be decided by a Court of competent jurisdiction to be unconstitutional or invalid, such decision shall not affect the validity of the Local Law as a whole, only the clause, sentence, subdivision, paragraph, section or part so decided to be unconstitutional or invalid.

F. **Conflicting Provisions.** The provisions of this Local Law shall be held to be the minimum requirements for the promotion of public health, safety and general welfare. When this Local Law imposes a greater restriction on the use of buildings or land or the height of buildings or requires larger open spaces or makes any other greater requirement than is imposed or required by any other law, rule or regulation or by easements, covenants or agreements this Local Law shall apply.

# ARTICLE 2

# DEFINITIONS

The following terms whenever used in this Article shall have the meanings as set forth below. Any such terms used in the singular shall be held to include the plural. Any such terms or any other terms not defined in this section used in the masculine shall be held to include the feminine. In this Article, any references to a governmental agency, official, or entity, shall also include any subsequent name designation, successors in interest or in jurisdiction. Terms used in this Article and not herein defined shall be interpreted to have their commonly understood meaning.

**Accessory Dwelling Unit** shall mean a residential dwelling unit, located on the same lot as a single-family dwelling unit, either within the same building as the single-family dwelling unit or in a detached building. An accessory dwelling unit shall have one or more rooms with provisions for living, cooking, sanitary and sleeping facilities. A travel trailer or manufactured home shall not be considered an accessory dwelling. Any dwelling unit having an attached accessory dwelling and served by separate utility meters from the primary dwelling unit shall be considered by the Town to be a two-family dwelling/duplex.

**Accessory Structure** shall mean a structure subordinate to the principal use of a lot, or of a principal building on the same lot, and serving a purpose clearly incidental to a permitted principal use of the lot or of the building and which accessory structure is compatible with the principal permitted uses or structures authorized under zoning regulations applicable to the property.

**Accessory Use** shall mean a use customarily incidental to the principal use or occupancy of a building. In a multiple family dwelling, such accessory uses may include, among others, the following: offices for the building management; dining rooms, banquet rooms, public kitchens, and ballrooms; recreation and play rooms; laundries for the use of tenants and occupants, and in connection with the management and operation of the multiple dwelling; maintenance and workshops, storage rooms for linen, bedding, furniture, supplies and tenants' equipment and effects; rooms or space for the incidental sale or display of merchandise to occupants and tenants, such as newspaper, candy and cigar stands; and garages within the multiple dwellings or on the premises thereof used primarily for the storage of passenger-type motor vehicles.

**Adult Uses** Defined in Article 14 for this Law.

**Agricultural Distillery** shall mean and include any premises located on a farm where liquor is manufactured primarily from farm and food products and sold. A not insignificant portion of the production shall consist of agricultural products produced on the farm. Such use shall conform with applicable New York State rules, regulations, and licensing requirements.

**Agricultural Processing Plant** shall mean a facility used for the cooking, dehydrating, refining, bottling, canning, or other treatment of agricultural products, which may change the naturally grown product for consumer use. May include warehousing, cold storage and packaging as secondary uses.

**Agricultural Services** shall mean a use primarily engaged in the sale or rental of farm tools and implements, feed, grain, tack, animal care products, and farm supplies. This definition excludes the sale of large implements, such as tractors and combines, but includes sales incidental to the primary use such as food sales and farm machinery repair services.

**Aquaculture Facility** The hatching, raising, and breeding of fish or other aquatic plants or animals for sale or personal use.

**Animal Pound or Shelter** a facility used to house or contain stray, homeless, abandoned or unwanted animals that is owned, operated or maintained by a public body, an established humane society, animal welfare society, society for the prevention of cruelty to animals or other non-profit organization devoted to the welfare and protection and humane treatment of animals.

**Assisted Living Residence** a housing facility for people with disabilities. These facilities provide supervision or assistance with activities of daily living, coordination of services by outside health care providers; and monitoring of resident activities to help to ensure their health, safety, and well-being. Assistance may include the administration or supervision of medication, or personal care services provided by a trained staff person. Assisted living is an eldercare alternative on the continuum of care for people, for whom independent living is not appropriate but who do not need the 24-hour medical care provided by a nursing home.

**Auto Body and Paint Shop** shall mean a facility which provides repair services for collision and other repairs to the auto body including body frame straightening, replacement of damaged parts, undercoating, and painting. Such repairs do not include mechanical engine or power train repair.

**Auto Dealership** shall mean any establishment that sells or leases new or used automobiles, trucks, vans, trailers, recreational vehicles, boats, or motorcycles or other similar motorized transportation vehicles. An automobile dealership may maintain an inventory of the vehicles for sale or lease on-site or at a nearby location and may provide on-site facilities for the repair and servicing of the vehicles sold or leased by the dealership.

**Automobile Rental/Leasing** Rental of automobiles and light trucks and vans, including incidental parking and servicing of vehicles for rent or lease.

**Automobile Repair Services** The use of a site for the repair of automobiles, noncommercial trucks, motorcycles, motor-homes, recreational vehicles, or boats, including the sale, installation, and servicing of equipment and parts. This use includes muffler shops, tire sales and installation, wheel and brake shops, body and fender shops and similar repair and service activities, but excludes dismantling or salvage. May also include gasoline sales.

**Bakery, Retail** shall mean an establishment primarily engaged in the retail sale of baked products for consumption on and off site. The products may be prepared either on or off site. If the production area is onsite, it cannot exceed 1,500 sq. ft. Such use may include incidental food service.

**Bakery, Wholesale** shall mean a bakery primarily engaged in the production and/or wholesaling of baked goods, with or without over-the-counter retail dispensing of baked goods.

10. **Expiration, Change of Use, Revocation, and Enforcement.**

a. A Special Use Permit shall expire if the Special Use Permit use or uses cease for more than 12 consecutive months for any reason, if the applicant fails to obtain the necessary Certificate of Compliance or fails to comply with the conditions of the Special Use Permit within 12 months of its issuance, or if its time limit specified in the Special Use Permit expires without renewal.

b. A Special Use Permit shall apply to the use for which it has been granted, as well as to any subsequent similar use of the property which complies with all terms and conditions of the Special Use Permit (as determined by the CEO in issuing a Certificate of Compliance) and which does not involve any new construction, enlargement, exterior alteration of existing structures, or changed use of outdoor areas. Any other change to a use allowed by Special Use Permit shall require the granting of a new Special Use Permit or a Special Use Permit amendment.

c. A Special Use Permit may be revoked by the Town CEO if the permittee violates the conditions of the Special Use Permit or engages in any construction or alteration not authorized by the Special Use Permit.

d. Any violation of the conditions of a Special Use Permit shall be deemed a violation of this Law, and shall be subject to enforcement action as provided herein.

E. **Findings Required.** In granting or denying Special Use Permits, the Planning Board shall take into consideration the type, scale and intensity of the proposed project, the surrounding area, the possible impact of the proposed project on nearby properties and uses, the criteria set forth in this Article, any applicable requirements and purposes of this Law, and the policies and goals of the current Master Plan. The Planning Board shall set forth its findings in writing as part of its decision-making process.

F. **Amendments.** The terms and conditions of any Special Use Permit may be amended in the same manner as required to grant a Special Use Permit, following the criteria and procedures in this Article. Any enlargement, alteration, or construction of accessory structures subject to a valid special use permit shall require a Special Use Permit amendment.

G. **Special Criteria.** In addition to what is set forth in Section D(8) of this Article, there are additional standards and requirements that apply to the following uses:

**Special Permit Uses**

| |
|---|
| Accessory Dwelling – detached |
| Adult Uses – within Article 14 |
| Agricultural Distillery/Farm Winery |
| Agricultural Processing Plant |
| Agricultural Services |
| Aquaculture Facility |
| Auto Body and Paint Shop |

1. Accessory Dwelling – detached:

   a. A maximum of one (1) detached accessory dwelling unit shall be allowed per lot.
   b. The floor area of a detached accessory dwelling shall not exceed 50% of the floor area of the primary dwelling up to 1,000 sq. ft.
   c. A lot occupied by two (2) or more dwelling units shall not be permitted a detached accessory apartment.
   d. One (1) additional parking space must be available on a lot for a detached accessory dwelling.
   e. Detached accessory dwellings constructed in the AR-Agricultural Residence District shall be no closer to the street than 15' behind the plane of the façade of the principal dwelling. Detached accessory dwellings in the Commercial-Residential District shall either be recessed behind or flush with the plane of the façade of the principal building.
   f. The height of a detached accessory dwelling shall not exceed the height of the primary dwelling.
   g. All applicable setbacks for the Zoning District in which the accessory unit is proposed, shall apply likewise for detached accessory dwellings.
   h. The orientation of the proposed detached accessory dwelling shall, to the maximum extent practical, maintain the privacy of residents in adjoining dwellings as determined by the character of the surrounding neighborhood, including landscape screening, fencing and window and door placement.
   i. Exterior finish materials, roof pitch, eves, trim, doors and windows for detached accessory dwellings shall be similar in kind, style and proportion to the principal building.
   j. No detached accessory dwelling shall be subdivided from portions of the parcel where the principal dwelling unit is located, if such subdivision results in a lot or residence that fails to meet applicable minimum bulk requirements in the Zoning District.

2. Adult Uses:

   a. See Article 14.

3. Agricultural Distillery/Farm Winery:

   a. Must have off-street parking spaces available for every employee working during the shift of greatest employment.
   b. Deliveries must take place Monday through Saturday between 7:00 a.m. and 8:00 p.m. There shall be no Sunday deliveries.
   c. Outdoor storage of any materials used in the distillery process must be screened from view of adjacent property owners.
   d. If there is a retail component or a tasting room associated with this use, the applicant will be required to identify the hours of operation and occupancy capacity for that area so that the off-street parking standards can be established by the Planning Board.

4. Agricultural Processing Plant:

   a. In an Agriculture/Residence Zone, a minimum of ten (10) acres must be available to operate this type of business.

| LAND USE | ZONING DISTRICT | | | |
|---|---|---|---|---|
| | A-R | P | C-R | BTZ |
| Home Occupation - Off-site Service | P | | P | |
| Home Occupation - Onsite Service | SUP | | P | |
| Hotel, Conference Center or Motel | | | SPR | SPR |
| Kennel | SUP | | | |
| Laundromat | | | SPR | |
| Microbrewery | SUP | | SPR | SPR |
| Private Club or Lodge | SUP | | SUP | |
| Professional Offices | SPR | | SPR | SPR |
| Restaurant | SUP | | SPR | SPR |
| Restaurant, Fast Food | | | SPR | SPR |
| Retail Store | SUP | | SPR | |
| Retail Store, Household | | | SPR | |
| Shopping Center | | | SPR | |
| Tanning Studio | SUP | | SUP | |
| Tattoo Parlor | | | SUP | |
| Theater | | | SPR | |
| Truck Stop | | | SPR | |
| Veterinary Hospital | SPR | | SPR | |
| Wireless Communication Towers | SPR | SPR | SPR | SPR |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| **Commercial Auto Services:** | | | | |
| Auto Body and Paint Shop | SUP | | SPR | |
| Automobile Repair Service | SUP | | SPR | |
| Automobile Rental/Leasing | | | SPR | |
| Auto Dealership | | | SPR | |
| Car Wash | | | SPR | |
| Equipment Sales and Rental | | | SPR | |
| Heavy Equipment Repair | | | SPR | |
| Small Engine Repair | SUP | | SPR | |
| Recreational Vehicle Sales and Service | | | SPR | |
| Taxi Service | | | SPR | |
| | | | | |
| | | | | |
| | | | | |
| **Agricultural:** | | | | |
| Agricultural Distillery/Farm Winery* | SUP | | SPR | SPR |
| Agricultural Processing Plant | SUP | | SPR | |
| Agricultural Services | SUP | | SUP | |
| Aquaculture Facility* | SUP | | SPR | |
| | | | | |

* Shall not be subject to Special Permit conditions if property is located within a State-certified Agricultural District.

P: Permitted Use
SPR: Site Plan Review
SUP: Special Use Permit

*Town of Cazenovia, NY*
*Thursday, December 6, 2018*

# Chapter 165. Zoning

# Article XVI. Definitions and Rules of Interpretation

## § 165-61. Definitions.

As used in this chapter, the following terms shall have the meanings indicated:

**ACCESSORY STRUCTURE**

A structure subordinate to a principal building and used in conjunction with and for purposes customarily incidental to those of the principal building or use.

**ACCESSORY USE**

A use customarily incidental and subordinate to the principal use or building and used in conjunction with such principal use or building.

**ACCESS STRIP**

A strip of land abutting a public or platted private road, providing access to a rear lot.

**ADULT ARCADE**

An establishment where, for any form of consideration, one or more still or motion-picture projectors, slide projectors, or similar machines or other image-producing machines, for viewing for five or fewer persons each, are regularly used to show films, motion pictures, videocassettes, slides or other photographic reproductions which are characterized by the depiction or description of specified sexual activities or specified anatomical activities.

**ADULT BOOKSTORE OR VIDEO STORE**

A business which derives 25% or more of its gross income from the sale, or rental, or utilizes 25% or more of its retail selling area for, or has stock comprised of 25% or more of any of the following: books, magazines, periodicals, films, motion pictures, videocassettes, DVDs, slides, compact discs and/or computer generation or their visual representations which are characterized by the depiction and description of specified sexual activities or specified anatomical areas.

**ADULT CABARET**

A nightclub, bar, restaurant, bottle club, juice bar, club or similar commercial establishment, whether or not alcoholic beverages are served, which features:

A. Persons who appear nude or in a state of nudity or semi-nudity; or

B. Live performances which are characterized by the exposure of specified anatomical activities or by specified sexual activities; or

C. Films, motion pictures, videocassettes, slides or other photographic reproductions which are characterized by the depiction or description of specified sexual activities or specified anatomical activities.

**ADULT LIVE ENTERTAINMENT**

A business where an adult male or female exposes parts of his or her body identified in specified anatomical activities.

One person, or a group of two or more persons living and cooking together in the same dwelling unit as a single housekeeping entity. A roomer, boarder, lodger, occupant of supervised group quarters, or grouping of unrelated students shall not be considered a member of a family.

**FAMILY DAY-CARE HOME**

Any place, however designated, which has been issued a permit to operate a family day-care home by the New York State Department of Social Services pursuant to Part 417 of the New York State Department of Social Services regulations and generally serving 12 or fewer children.

**FARM AND FARMING**

Any lot or parcel of land at least seven acres in area which is used in conjunction with a farm operation and where the utilization of land and structures for the production, preservation, nonindustrial processing, storage and sale of agricultural commodities such as crops, plants, vines, flowers, grapes, products, trees, sod, shrubs, livestock, honey, Christmas trees, compost, poultry, dairy products, animals, including commercial horse boarding operations, equine operations, timber operations and compost/biomass operations as defined by Agriculture and Markets Law (AML) § 301, but not including uses of land primarily for the disposal of offal or garbage. There are no acreage limitations for farm operations located within a county agricultural district and such farms also include commercial horse boarding operations, equine operations, timber operations and compost/biomass operations as defined in AML § 301.

**FARM BREWERY, CIDERY, DISTILLERY AND/OR WINERY**

Any brewery, cidery, distillery and/or winery associated with and in connection with the marketing of farm products as recognized under the New York State Agriculture and Markets Law. A farm brewery, cidery, distillery and/or winery must be licensed by the State Liquor Authority; as defined in the Alcoholic Beverage Control Law.

**FARM EQUIPMENT SALES AND REPAIR BUSINESS**

An open area, with or without an associated enclosed structure or structures, which displays for sale, lease or rent new or used farm equipment with associated retail sales. Such use shall not include the displaying or sale of gasoline or oil to the public generally.

**FARM OPERATION**

As defined in the New York Agriculture and Markets Law, Article 25-AA, § 301(11), as amended, land and on-farm buildings, equipment, manure processing and handling facilities and practices which contribute to the production, preparation and marketing of crops, livestock and livestock products as a commercial enterprise, including a commercial horse boarding operation; a timber operation; compost, mulch or other biomass crops; and a commercial equine operation. Such farm operation may consist of one or more parcels of owned or rented land, which parcels may be contiguous or noncontiguous to each other. In consideration of any approvals or interpretations relative to farm operations, the reviewing officer or body may consider the applicability of Article 25-AA, § 301(11) of the New York State Agriculture and Markets Law along with the Department of Agriculture and Markets guidance with respect to such uses. A farm operation may include a farm stand, subject to the granting of site plan approval.

**FARM STAND**

An incidental and subordinate activity of a farm involving a building or lot or portions of a building or lot used for the seasonal retail sale of agricultural products and may include activities in which retail customers pick or select their own produce from the fields or growing areas. A farm stand is deemed to be an accessory use to a farm operation. Farm stands with an area greater than 144 square feet but less than 1,000 square feet shall require the granting of a site plan approval from the Planning Board. A farm stand in excess of 1,000 square feet shall only be allowed upon the issuance of a special use permit. Farm stands with an area less than 144 square feet are allowed as an accessory use as of right.

**FCC**

The Federal Communications Commission.

**FENCE**

A structure or partition consisting of wood or traditional and commonly accepted fencing materials erected for the purpose of partitioning or enclosing a piece of land or to divide a piece of land into distinct portions

**WINERY**

Any business established for the conversion of grapes or other fruits and foods into wines, grown on the premises or consistent with applicable New York State Alcoholic Beverage Control (ABC) Law, Agriculture and Markets Law. A winery may also include a farm winery licensed under the New York State Alcoholic Beverage Control (ABC) Law and a farm operation subject to the requirements of the guidelines of the New York State Department of Agriculture and Markets associated with a farm operation subject to the requirements of the guidelines of the New York State Department of Agriculture and Markets. Such uses may also provide wine tasting, wine sales and sales of related wine products. Such use shall require the issuance of a special use permit by the Zoning Board of Appeals, site plan approval from the Planning Board and, unless otherwise permitted pursuant to New York State's ABC and Agriculture and Markets Laws, may only be established in the Rural B (RB), New Woodstock Central Business Overlay (NWCBO), Commercial Overlay (CO), Industrial Overlay (IO) and Village Edge Overlay (VEO) Districts.

**YARD**

An open space on the same lot with a structure.

**YARD, FRONT**

An open space extending across the full width of the lot between the front building line and the street line.

**YARD, LAKE**

An open space extending across the full width of the lot between the lakeshore and the principal building.

**YARD, REAR**

An open space extending across the full width of the lot between the rear lot line and the rear of the principal building nearest the rear lot line.

**YARD, REQUIRED**

That portion of any yard required to satisfy minimum yard setbacks. No part of such yard can be included as part of a yard required for structures on another lot.

**YARD, SIDE**

An open space on the same lot with a principal building between the principal building and side line of the lot and extending from the front yard to the rear yard.

**ZONE OF CONTRIBUTION**

The land area overlying that portion of the local sand and gravel aquifer where all recharge and groundwater directly flows toward the pumping well(s).

**ZONING LAW; THIS LOCAL LAW; THIS CHAPTER**

The officially adopted Zoning Law of the Town of Cazenovia, together with any and all amendments thereto, in accordance with Article 16 of the Town Law and Articles 2 and 3 of the Municipal Home Rule Law.

**ZONING ORDINANCE**

Chapter **165** of the Town Code of the Town of Cazenovia, as amended.

[1] *Editor's Note: See Real Property Law § 339-d et seq.*

*Town of Cazenovia, NY*
*Thursday, December 6, 2018*

# Chapter 165. Zoning

## Article XI. Commercial Overlay (COMO) District

### § 165-37. Permitted uses by special use permit.

The following structures and uses shall be permitted in the COMO District only upon the issuance of a special use permit (and, where applicable, site plan approval from the Planning Board) by the Zoning Board of Appeals as provided in § **165-114** of this chapter:

A. Animal day care, kennel or shelter.

B. Hotel and motel.

C. Outdoor seating/assembly area.

D. Restaurant.

E. Retail sales (solely for parcels bounded by the north side of Route 20).

F. Temporary outdoor sales.

G. Brewery.

H. Cidery.

I. Distillery.

J. Nursery or greenhouse.

K. Winery.

*Town of Cazenovia, NY*
*Thursday, December 6, 2018*

# Chapter 165. Zoning

## Article XII. Industrial Overlay (IO) District

### § 165-41. Permitted uses by special use permit.

The following structures and uses shall be permitted in the IO District only upon the issuance of a special use permit (and, where applicable, site plan approval from the Planning Board) by the Zoning Board of Appeals as provided in § **165-114** of this chapter:

A. Adult uses.

B. Animal day care, kennel or shelter.

C. Assembly, fabrication or packaging of previously prepared materials.

D. Hotel and motel.

E. Light manufacturing.

F. Manufacturing.

G. Outdoor seating/assembly area.

H. Packaging of pharmaceutical and/or food products.

I. Recreational and entertainment facilities (indoor/outdoor).

J. Restaurant.

K. Sawmill.

L. Self-storage.

M. Temporary outdoor sales.

N. Transportation.

O. Warehousing.

P. Welding.

Q. Brewery.

R. Cidery.

S. Distillery.

T. Nursery or greenhouse.

U. Winery.

*Town of Cazenovia, NY*
*Thursday, December 6, 2018*

# Chapter 165. Zoning

## Article XIV. Village Edge Overlay (VEO) District

### § 165-51. Permitted uses by special use permit.

All specially permitted uses allowed in the Rural A District shall be specially permitted uses in the Village Edge Overlay District[1] and the following additional specially permitted uses:

A. Administrative and management services.

B. Apartment complex and senior housing.

C. Business office.

D. Continuing-care and nursing home.

E. Day-care center.

F. Extended-care facility.

G. Funeral home/mortuary.

H. Home occupation in a previously existing principal residential structure (subject to the provisions of § **165-100**).

I. Hotel and motel.

J. Recreational and entertainment facilities (indoor/outdoor).

K. Retail sales (solely for parcels bounded by the north side of Route 20).

L. Brewery.

M. Cidery.

N. Distillery.

O. Nursery or greenhouse.

P. Winery.

[1] *Editor's Note: See § **165-9**, Permitted uses by special use permit.*

*Town of Cazenovia, NY*
*Thursday, December 6, 2018*

# Chapter 165. Zoning

## Article VIII. Agriculture Overlay (AO) District

### § 165-25. Permitted uses by special use permit.

A. Certain farm-compatible structures and uses will enhance the validity of farmland operations. The following farm-compatible structures and uses shall be permitted in the AO District only upon the issuance of a special use permit by the Zoning Board of Appeals as provided in Subsection **B** and § **165-114** of this chapter (and, where applicable, site plan approval from the Planning Board), including, but not limited to:

(1) Agricultural composting.

(2) Animal day care, kennel or shelter.

(3) Bed-and-breakfast.

(4) Butcher/Meat shop.

(5) Commercial bakery in home.

(6) Farm equipment repair.

(7) Migrant labor housing for more than one family.

(8) Milk processing for on- and off-farm milk.

(9) Nurseries, lawn/landscape services, orchards, greenhouses, vineyards.

(10) Parks.

(11) Permanent produce stands for the sale of agricultural products grown principally by the operator during the harvest season.

(12) Portable saw mill.

(13) Public stable.

(14) Veterinary practice (animal hospital, animal clinic).

(15) Welding assembly (when secondary to an agricultural use).

(16) Farm wineries, farm breweries, farm cideries, farm distilleries. The growing of crops, processing and making alcoholic beverages, and the sale of such beverages via a tasting room, are permitted uses when the farm is considered to be a "farm operation" by the Department of Agriculture and Markets. However, events and other marketing uses (other than a tasting room) shall be a specially permitted use.

B. Additional criteria for specially permitted uses. In addition to the criteria set forth for specially permitted uses (see § **165-114**), the following additional criteria must be demonstrated by the applicant and found by the reviewing board:

(1) That the use will be of a nature, intensity, scope, size, appearance, type and quality conforming to existing residential or agricultural structures.

(2) That new structures will be located in a way that minimize negative impacts on future operation and expansion of agricultural uses and does not interfere with current agricultural operations or displace farms or farming.

(3) The use as proposed is related to agriculture, forestry or open spaces or will not impede such uses.

# TOWN OF CHATHAM

# UPDATED DRAFT ZONING LAW

# July 20, 2018

Table of Contents

DWELLING UNIT - One room, or rooms connected together, constituting a separate, independent housekeeping establishment for owner occupancy, rental or lease, and physically separated from any other rooms or dwelling units which may be in the same structure, and containing independent cooking, sleeping and toilet facilities. A dormitory, hotel, motel, nursing home, fraternity or sorority house or other similar building shall not be deemed to be a dwelling unit.

EMERGENCY - A public calamity or the exposure of any person or property to imminent danger.

EMERGENCY DEMOLITION: A demolition authorized pursuant to the New York State Uniform Building Code and Town of Chatham Chapter 127, when after inspection, it is determined by the Building Inspector or other authorized official, after consultation with the Town Engineer, that a regulated structure poses an imminent threat to the health or safety of the community that cannot be adequately mitigated, and that immediate demolition is necessary to protect public health and safety.

ENVIRONMENTAL PERMIT or LAND DEVELOPMENT PERMIT - That form of approval required to conduct regulated activities involving land development, timber harvesting, stormwater, soil erosion and sediment control, pollutant discharge to air and any activity within wetland, watercourse or controlled areas.

EROSION - The wearing away of the land surface by action of wind, water, gravity or other natural forces.

ESSENTIAL SERVICES - The erection, construction, alteration or maintenance by public utilities or municipal or other governmental agencies of underground or overhead gas, electrical, water transmission, or distribution systems, waste removal systems and telecommunications facilities including poles, wires, mains, drains, sewers, pipes, conduit cables traffic signals, hydrants, street signs and similar equipment and accessories in connection with those facilities, but not including buildings reasonably necessary for the furnishing of adequate service by such public utilities or municipal or other governmental agencies or for the public health or safety or general welfare.

EV CHARGING STATION – An electric vehicle charging station, electric recharging point, charging point, charge point and EVSE (electric vehicle supply equipment) that supplies electric energy for the recharging of electric vehicles, such as plug-in electric vehicles, including electric cars, neighborhood electric vehicles and plug-in hybrids.

EXCAVATION - The permanent removal of overburden and minerals, as defined herein, from the ground in the affected area– or any activity which removes or significantly disturbs rock, gravel, sand, soil or other natural deposits.

EXTRACTIVE OPERATION – See Mining Operation.

FAMILY - One or more persons related by blood, marriage or adoption, living and cooking together, exclusive of household servants; a number of persons living together as a single housekeeping unit, although not related by blood, adoption or marriage, shall be deemed to constitute a family unit.

FARM MARKET – The seasonal or year-round retail selling of farm products in a permanent structure grown on site on a farm operation or from other farm operations in the area along with other non-farm products. (See also Stand, Farm)

FARMLAND - Land used in agricultural production, as defined in Subdivision 4 of § 301 of Article 25-AA of the State Agriculture and Markets Law.

FARM BREWERY, WINERY, CIDERY OR DISTILLERY - Any place, premises, or use located on a farm operation, in which New York State labeled beer, wine, cider or liquor is manufactured, stored and sold, as defined in the NYS Alcoholic Beverage Control Law.

FARM OPERATION - Shall include the land and on-farm buildings, equipment, manure processing and handling facilities, and practices which contribute to the production, preparation and marketing of crops, livestock and livestock products including a commercial horse boarding operation as a commercial enterprise. See also Agriculture.

FARM OR RESIDENTIAL POND - A man-made or artificially created body of water to be used for fire protection, recreation, beautification or agricultural purposes.

FARM STAND – See Stand, Farm.

FARM WORKER HOUSING - An accessory residential dwelling or other dwelling used to house hired farm workers on a parcel of land used as a farm operation. Single-wide and double-wide manufactured homes may be used as farm worker housing as per 180-36 (A).

FILL - Any clean soil or rock materials (sand or clay) used to raise the ground elevation.

FILLING - Any activity which deposits natural or artificial material so as to modify the surface or subsurface conditions of land, lakes, ponds, wetlands or watercourses.

FINAL STABILIZATION - When all soil disturbing activities at the site have been completed and a uniform perennial vegetative cover with a density of 80% has been established or equivalent stabilization measures (such as the use of mulches, riprap or geotextiles) have been employed on all areas not permanently improved by pavement, concrete or structures.

FINISHED GRADE - The elevation at which the finished surface of the surrounding lot intersects the walls or supports of a building or other structure. If the line of intersection is not reasonably horizontal, the finished grade--in computing height of building and other structures or for other purposes--shall be the average elevation of all finished grade elevations around the periphery of the building.

FISCAL IMPACT ANALYSIS - an analysis of the projected total costs and revenues associated with a specific development application where the costs include, but are not limited to, those related to town, fire, ambulance, police, school, highway and other municipal infrastructure.

FLOOD HAZARD, AREA OF - Land within a community subject to a one percent (1%) or greater chance of flooding in any given year as shown on the Flood Insurance Rate Maps developed by the Federal Emergency Management Agency. Also, commonly referred to as base floodplain or 100-year floodplain. See also flood related terms included in Chapter 140 (Flood Damage Prevention).

FLOOD, 100-YEAR - The highest level of flood that, on the average, is likely to occur once every 100 years (i.e., that has a 1% chance of occurring each year). See also flood related terms included in Chapter 140 (Flood Damage Prevention.

Table 2: Table of Permitted Uses in all Districts

P=Permitted Use with No Planning Board Review Required. A Building Permit may be required.
SPR=Site Plan Review and Approval by the Planning Board required.
SUP= Special Use Permit Review and Approval by the Planning Board required.
X= Prohibited Use
X-(P2)= Prohibited Use and Under Further Review by Town of Chatham as Part of Phase 2 Ongoing Implementation of Comprehensive Plan
MSP= Modified Site Plan Review and Approval by the Planning Board required.
All uses not included in the table shall be deemed to be prohibited.

| Use | H-1 | H-2 | RL1 | RL2 | RL3 | B | I | Other Use-Specific Requirements |
|---|---|---|---|---|---|---|---|---|
| Accessory residential dwelling in existing or new accessory building | SUP | SUP | SUP | SUP | SUP | X | X | 180-36 |
| Accessory residential dwelling in existing single-family dwelling | SUP | SUP | SUP | SUP | SUP | SUP | X | 180-36 |
| Accessory buildings used for residential uses: garages, sheds, pool house, personal workshop | P if ≤200 sf; SPR if >200 sf | P if ≤200 sf; SPR if >200 sf | P if ≤700 sf; SPR if >700 sf | P if ≤700 sf; SPR if >700 sf | P if ≤700 sf; SPR if >700 sf | P if ≤700 sf; SPR if >700 sf | P if ≤700 sf; SPR if >700 sf | 180-36 |
| Accessory buildings used for commercial uses: office, studio, workshop for business, < 2000 sf in size or <50% of primary use building footprint, whichever is smaller | SUP | SUP | SUP | SUP | SUP | SPR | SPR | 180-36 |
| Adaptive reuse of buildings with an allowed use | P if new use is Permitted, SPR for Change of Use, SUP if new use requires special | P if new use is Permitted, SPR for Change of Use, SUP if new use requires special | P if new use is Permitted, SPR for Change of Use, SUP if new use requires special | P if new use is Permitted, SPR for Change of Use, SUP if new use requires special | P if new use is Permitted, SPR for Change of Use, SUP if new use requires special | P if new use is Permitted, SPR for Change of Use, SUP if new use requires special | P if new use is Permitted, SPR for Change of Use, SUP if new use requires special use | 180-29 (C) |

| Use | H-1 | H-2 | RL1 | RL2 | RL3 | B | I | Other Use-Specific Requirements |
|---|---|---|---|---|---|---|---|---|
| | use permit | use permit | use permit | use permit | use permit | use permit | permit | |
| Agriculture, Agricultural Land Uses, farm operation | MSP | MSP | P | P | P | P | P | 180-32, 35, 52, 29 (C) |
| Agri-tourism on and related to a Farm Operation with no overnight accommodations | MSP | MSP | MSP | MSP | MSP | X | X | 180-58 (Y) and 29 (C) |
| Animal Camp | X | X | SUP | SUP | X | SPR | X | 180-58 (A), Maximum of 10 dogs in RL1 and RL2, 25 dogs in B |
| Animal hospital/Veterinary Office | X | X | SUP | SUP | SUP | SPR | SPR | 180-58 (A), 30 (H), Only with access from a State or County highway |
| Automotive repair | X | X | X | X | X | SUP | SPR | 180-58 (B) and (C) |
| Bank | X | X | X | X | X | SPR | X | |
| Bed & breakfast located on farm as part of farm operation (agri-tourism) | MSP if in a NYS Ag District; SPR If Not | SUP | MSP if in a NYS Ag District; SPR If Not | MSP if in a NYS Ag District; SPR If Not | MSP if in a NYS Ag District; SPR If Not | X | X | 180-58 (D) and (Y) |
| Bed and breakfast (not as part of a farm operation) | SUP | SUP | SUP | SUP | SUP | X | X | 180-58 (D) and (Y) |
| Brewery, Cidery, Winery, Distillery (as part of a farm operation) | MSP if on a farm operation in NYS Ag District | MSP if on a farm operation in NYS Ag District | MSP if on a farm operation in NYS Ag District | MSP if on a farm operation in NYS Ag District | MSP if on a farm operation in NYS Ag District | SPR | SPR | |
| Brewery, Cidery, Winery, Distillery (not as part of a farm operation) | X | X | SUP | SUP | SUP | SPR | SPR | Only with access from a State or County highway |
| Campground | X | X | SUP | SUP | X | X | X | 180-58 (HH) |

# New Zoning Code
for the
# Town of Geneva, NY
## March 12, 2018

George R. Frantz & Associates
Land Use & Environmental Planning
Ithaca, New York

March 12, 2018

# Table of Contents

**March 12, 2018**

# Article I: General Provisions

## Section 165-1 Authority and Purpose.

This chapter is enacted pursuant to the Town Law of the State of New York, Chapter 62 of the Consolidated Laws, Article 16, to protect and promote public health, safety, morals, comfort, convenience, economy, town aesthetics and the general welfare and for the following additional purposes:

A. To promote and effectuate the orderly physical development of the town in accordance with the Comprehensive Plan.

B. To ensure a more ecologically and economically sustainable community for the benefit of future generations through:

   a. Encouraging the most appropriate use of land in the community in order to conserve and enhance the value of property;
   b. Creating a suitable system of open spaces and recreation areas and to protect and enhance existing wooded areas, scenic areas and waterways;
   c. Regulating building densities in order to assure access of light and circulation of air, in order to facilitate the prevention and fighting of fires, in order to promote appropriate concentration of population and in order to provide efficient municipal utility services;
   d. Improving transportation facilities and traffic circulation and to provide adequate off-street parking and loading facilities, and safe walking and biking infrastructure where appropriate;
   e. Realizing a sustainable development plan designed to conserve valued natural ecological resources such as water, habitat and soil resources;
   f. Realizing a sustainable development plan designed to optimize the cost of municipal services.

C. Decrease community energy use, reduce greenhouse gas emissions and promote an energy-independent and secure community through more efficient land use and community use of renewable energy.

D. Enhance community resilience and preparation for the potential effects of climate change.

E. To assure privacy for residences and reasonable freedom from nuisances and things harmful to the senses.

F. To reasonably protect the community against unsightly, obtrusive and noisome land uses and operations.

G. To enhance the aesthetic aspects throughout the entire community and maintain its present character and natural beauty while allowing positive change.

In order to provide adequate open spaces for access of light and circulation of air, to facilitate the prevention and fighting of fires, to prevent undue concentration of population and to lessen congestion on streets, no building or premises shall be erected, altered or used except in accordance with the regulations and standards set forth below.

## Section 165-2 Word Usage.

A. Except where specifically defined herein, all words used in this chapter shall carry their customary meanings. Words used in the present tense shall include the future. Words used in the singular number include the plural, and words used in the plural number include the singular, unless the context clearly indicates the contrary.

B. The word "shall" is always mandatory. The word "may" is permissive. "Building" or "structure" includes any part thereof. The word "lot" includes the word "plot" or "parcel." The word "person" includes an individual person, a firm, a corporation, a co-partnership and any other agency of voluntary action.

C. The phrase "used for" includes "arranged for," "designed for," "intended for," maintained for" and "occupied for."

D. The words "include," "includes" and "including" mean to comprise or contain as part of a group or total, or to incorporate, encompass, cover, or embrace.

## Section 165-3 Definitions.

As used in this chapter, the following terms shall have the meanings indicated:

**ACCESSORY BUILDING**
A building detached from and subordinate to a main building on the same lot and used for purposes customarily incidental to those of the main building.

**ACCESSORY USE**
A use customarily incidental and subordinate to the principal use or building and located on the same lot with such principal use or building.

**AGRICULTURE**
The use of land and on-farm buildings, equipment, manure processing and handling facilities, and practices which contribute to the production, preparation and marketing of crops, animal husbandry, livestock and livestock products as a commercial enterprise, including a commercial horse-boarding operation as defined in the Agriculture and Markets Law Article 25-AA, Section 301, and timber processing as defined in this zoning law.

**AGRICULTURAL COMMERCE**
A retail or wholesale enterprise operated as an accessory use to an active farm on the same premises, providing products or services principally utilized in agricultural production, including structures, agricultural equipment and agricultural equipment parts, batteries and tires, livestock, feed, seed, fertilizer and equipment repairs, or the sale of grain, fruit, produce, trees, shrubs, flowers or other products of agricultural operations, and including breweries, cideries, distilleries, wineries, and juice production that are not otherwise specifically defined as a farm operation.

**AGRICULTURAL TOURISM**
An agriculture-related enterprise, operated as an accessory use to an active farm operation, which brings together tourism and agriculture for the education and enjoyment of the public, and which may include: hay rides, corn mazes, hay mazes, petting zoos (farm animals only), farm tours and agriculture themed festivals and other public or private events.

**ANIMAL HUSBANDRY**
The care of and/or breeding of domestic livestock and other animals, excluding the care and breeding of dogs and cats.

**AREA, BUILDING**
The total of areas taken on a horizontal plane at the main grade level of the principal building and all accessory buildings exclusive of balconies, eaves, windows, roofs and floors projecting two feet or less from the main structure, terraces, uncovered steps and decks less than 2 feet above main grade level.

**BARNYARD**
A fenced area inhabited, occupied or used by livestock where vegetation is not maintained.

**BASEMENT**
A story that is not a story above the average of the finished ground level adjoining the building at all exterior walls. A basement shall be counted as one story in determining the height of a building in stories.

**BED AND BREAKFAST**
An owner-occupied residence resulting from a conversion of a single unit dwelling, used for providing overnight accommodations and a morning meal to transient lodgers and containing not more than three (3) bedrooms for such lodgers.

**BILLBOARD**
A sign or structure which directs attention to an idea, product, business activity, service or entertainment which is conducted, sold or offered elsewhere than upon the lot on which such sign is situated.

**BREEDING FACILITY, COMMERCIAL**
Any building or lot in the Town of Geneva wherein a person or persons keep eight or more dogs or eight or more cats over 12 months of age, breed three or more litters of dogs or three or more litters of cats in a calendar year or sell or transfer any dog or cat to a dog or cat dealer or pet shop.

**BREEDING FACILITY, NONCOMMERCIAL**
Any building or lot in the Town of Geneva wherein a person or persons keep fewer than eight dogs or fewer than eight cats over 12 months of age, breed two or fewer litters of dogs or two or fewer litters of cats in a calendar year or sell or transfer any dog or cat to any person or entity other than a dog or cat dealer or pet shop.

**BUFFER AREA**
An additional required setback area on any lot, generally on the boundary between two zoning districts, where through use of vegetation, earth, wall, fence or combination of such elements a visual screen is created and maintained between properties.

**BUILDING**
Any structure which has one or more floors and a roof and is intended for the shelter, housing or enclosure of persons, animals or chattel.

**BUILDING, ACCESSORY**
See "accessory building."

**BUILDING, DETACHED**
A building surrounded by open space on the same lot. [1]

**BUILDING LINE**
The line beyond which the face of a building may not extend, including sun porches, garages, decks, covered porches and covered walking patios, terraces, entrances and balconies, whether enclosed or unenclosed, but not including steps or overhanging eaves under two feet in width.

**BUILDING, PRINCIPAL**
A building in which is conducted the main or principal use of the lot on which said building is situated.

**BULK**
A term used to describe the size, volume, area and shape of buildings and structures and the physical relationship of their exterior walls or their location to lot lines, other buildings and structures or other walls of the same building; and all open spaces required in connection with a building, other structure or tract of land.

**CAMP**
Any parcel of land on which are located two or more cabins, tents, shelters or other accommodations of a design or character suitable for seasonal or other more or less temporary living purposes, including summer colony, resort and day camp, but not including a manufactured home park, hotel or motel or bungalow colony.

**CHILD CARE CENTER**
A facility, or other establishment providing child care for seven or more children for hire, and which is operated in accordance with the state and county regulations governing operations of such facilities.

**CHILD CARE-FAMILY**
A facility operated within a family home by an occupant of said home providing child care for up to 6 children for hire, for more than three hours per day per child, and which is operated in accordance with the state and county regulations governing operations of such facilities.

**CLUB, MEMBERSHIP**
An organization catering exclusively to members and their guests, or premises and buildings for, social, fraternal, civic, recreational or athletic purposes, which are not conducted primarily for gain, provided that there are not conducted any vending stands, merchandising or commercial activities, except as required generally for the membership and purposes of such club.

**COMMERCIAL VEHICLE**
A vehicle of more than one-ton capacity used for the transportation of persons or goods primarily for gain or a vehicle of any capacity carrying a permanent affixed sign exceeding one square foot in area or lettering of a commercial nature.

**COMMUNITY POLE**
A type of sign owned and maintained by the Town Board or by a group of business persons, as approved by the Town Board, and which sign contains several directional signs for the purpose of directing persons to business and community establishments within the community.

**COMPOSTING**
An aerobic method of decomposing solid wastes such as vegetable food scraps, lawn clippings, leaves and shrub clippings that results in the decomposition of such organic waste into humus, also known as compost, for the use in enriching and enhancing soils.

**CONGREGATE CARE FACILITY**
A residential facility licensed by the State of New York designed to provide nursing care and medical services under the general direction of persons licensed to practice in the State of New York, for the accommodation of convalescent or other persons who are not in need of hospital care but who do require, on a twenty-four-hour basis, nursing care and related medical services. This definition shall include skilled nursing facilities, intermediate care facilities, nursing facilities and hospices.

**CONTRACTOR'S YARD**
Any space, whether inside or outside a building, used for the storage or keeping of construction materials and inventory, construction equipment, machinery or vehicles or parts thereof, which are in active use by a construction operator.

**COVERAGE**
That lot area or percentage of a lot area covered by buildings or structures, as defined in "Area, Building" above.

**CUSTOMARY HOME OCCUPATION**
Any use customarily conducted entirely within a dwelling and carried on solely by the inhabitants thereof, which use is clearly secondary to the use of the dwelling for dwelling purposes and does not change the character.

**DEVELOPMENT**
The use of land in such a manner that it in any way affects the stormwater or surface water drainage characteristics of the property used.

**DWELLING**
A self-contained unit of accommodation containing sleeping, sanitary and cooking facilities for one or more families. The term "dwelling," "one-family dwelling," "two-family dwelling," "multifamily dwelling," "multiple-dwelling" or "dwelling group" shall not be deemed to include motel, hotel, rooming house or other accommodations used for more or less transient occupancy. (See "residence.")

**DWELLING, ASSISTED LIVING**
A dwelling within a multifamily structure designed for occupancy by one or more persons, living independently but for which additional services may be provided, such as prepared meals, including meals in group dining facilities, transportation, recreation and social programs and outpatient medical services.

## Section 165-15 AG Agricultural District

### 1. Purpose:

The purpose of the AG Agricultural District is to protect the agricultural land resources and the character of rural areas of the Town of Geneva, promote the wise stewardship of the soil and water resources of the Town, reduce greenhouse gas emissions, promote an energy-independent and secure community, enhance community resilience, and to promote the long term economic viability of the agricultural sector.

### 2. Right to Farm

Within the AG Agricultural District the practice of agriculture is determined to be the preeminent land use and any agricultural practice determined to be a sound agricultural practice by the New York State Commissioner of Agriculture and Markets pursuant to Article 25-AA, Section 308, including but not limited to practices necessary for on-farm production, preparation and marketing of agricultural commodities, such as the operation of farm equipment; proper use of agricultural chemicals and other crop protection methods; direct sale to consumers of agricultural commodities or foods containing agricultural commodities produced on-farm; and the construction and use of farm structures, shall not constitute a private nuisance.

### 3. Permitted Uses:

a. 1-family detached dwellings;
b. 1-family semi-detached dwelling;
c. Agriculture;
d. Roadside stand;
e. Short-term rental in compliance with § 165-39;
f. Farm worker residence as regulated by New York State Uniform Code or other applicable laws.

### 4. Permitted with Site Plan Approval:

a. Agricultural commerce;
b. Agricultural tourism;
c. Cemetery in compliance with § 165-26;
d. Church or other place of worship;
e. Commercial greenhouse, plant nursery and retail sales of plant and gardening products and equipment;
f. Commercial stable;
g. Solar energy system, community, subject to provisions of Chapter 130;
h. Kennel;
i. Outdoor recreation club or recreation use;
j. Public and private parks and preserves;
k. Private, academic or parochial school, provided said facility shall not exceed more than 3,000 square feet in floor area;
l. Veterinarian office, animal hospital.

# 2017 Westchester County Agricultural District Parcels

| Municipality/Farm Name | AppID/SBL | Address | Total Acres |
|---|---|---|---|
| **Lewisboro** | | | **174.3** |
| **Cipriano Farm** | 2017-03 | | |
| | **09833-13-53** | 25 East Street | 4.8 |
| **Echo Farm** | 2009-9 | | |
| | **31-10805-15** | 14 Main Street | 25.3 |
| | **31-10805-62** | 62 Spring Street | 3.7 |
| **Edition Farm** | 2009-76 | | |
| | **22-10802-68** | 5 Schoolhouse Road | 4.1 |
| | **22-10802-69** | Schoolhouse Road | 16.6 |
| **Good Hope Farm** | 2017-05 | | |
| | **10300-27-43** | 75 Mill River Road | 19.4 |
| | **10300-9-43** | 75 Mill River Road | 4.6 |
| **Gossett Brothers Nursery** | 2013-02 | | |
| | **43.03-2-24** | 1202 Route 35 | 5.8 |
| **Hazelnut Farm** | 2011-03 | | |
| | **10803-110-26** | 27 Waccabus River Lane | 7.7 |
| **JT Stables** | 2009-90 | | |
| | **26-10541-27** | 1125 Rte 35 | 26.3 |
| | **26-10541-28** | 1145 Rte 35 | 11.8 |
| | **26-10541-70** | Rte 35 | 5.9 |
| | **26-10541-71** | Rte 35 | 8.2 |
| **Sassafras Farm** | 2009-47 | | |
| | **10810-2-36** | 44 Boway | 20.1 |
| **V V Greenhouses** | 2016-01 | | |
| | **10056-016-0047** | 229 Smith Ridge Road | 9.0 |
| | **10056-036-0047** | 229 Smith Ridge Road | 1.2 |

## CONSTRUCTION INSPECTION REPORT

| | |
|---|---|
| **Date:** December 20, 2018 | **Permit #:** Cal. 1-18WV and 76-18WP |
| **Day:** ☐ S ☐ M ☐ T ☐ W ☑ Th ☐ F ☐ S | **Weather:** ☐ Clear ☑ Overcast ☐ Rain ☐ Snow 45 °F |
| **Property Owner:** Potz<br>**Property Address:** 1178 Route 35<br>**Property SBL:** 27-10805-29<br>**Email:** | **Town Contact Person:** Ciorsdan Conran<br>**Phone:** 914-763-5592<br>**Email:** planning@lewisborogov.com |
| **Contractor:**<br>**Phone:**<br>**Email:** | **KSC Inspector Name:** Jan K. Johannessen, AICP<br>**Phone:** 914-273-2323<br>**Email:** jjohannessen@kelses.com<br>**Address:** 500 Main St, Armonk, NY 10504 |

**INSPECTION CONDUCTED FOR:**

☑ **Photos/Sketch Attached**

☐ **Erosion and Sediment Control** ☐ **Rough Grading** ☑ **Follow-Up**
☐ **Grading/Drainage** ☐ **Final Inspection** ☐ **Other:**

**Inspection Report Distributed To:** ☑ **Owner** ☐ **Contractor** ☑ **Town** ☐ **Other:**

## CONSTRUCTION ACTIVITIES

At the request of the Planning Board, a follow-up inspection was performed on December 20, 2018 to observe current conditions and the extent of work conducted by the owner.

## COMMENTS / REMARKS

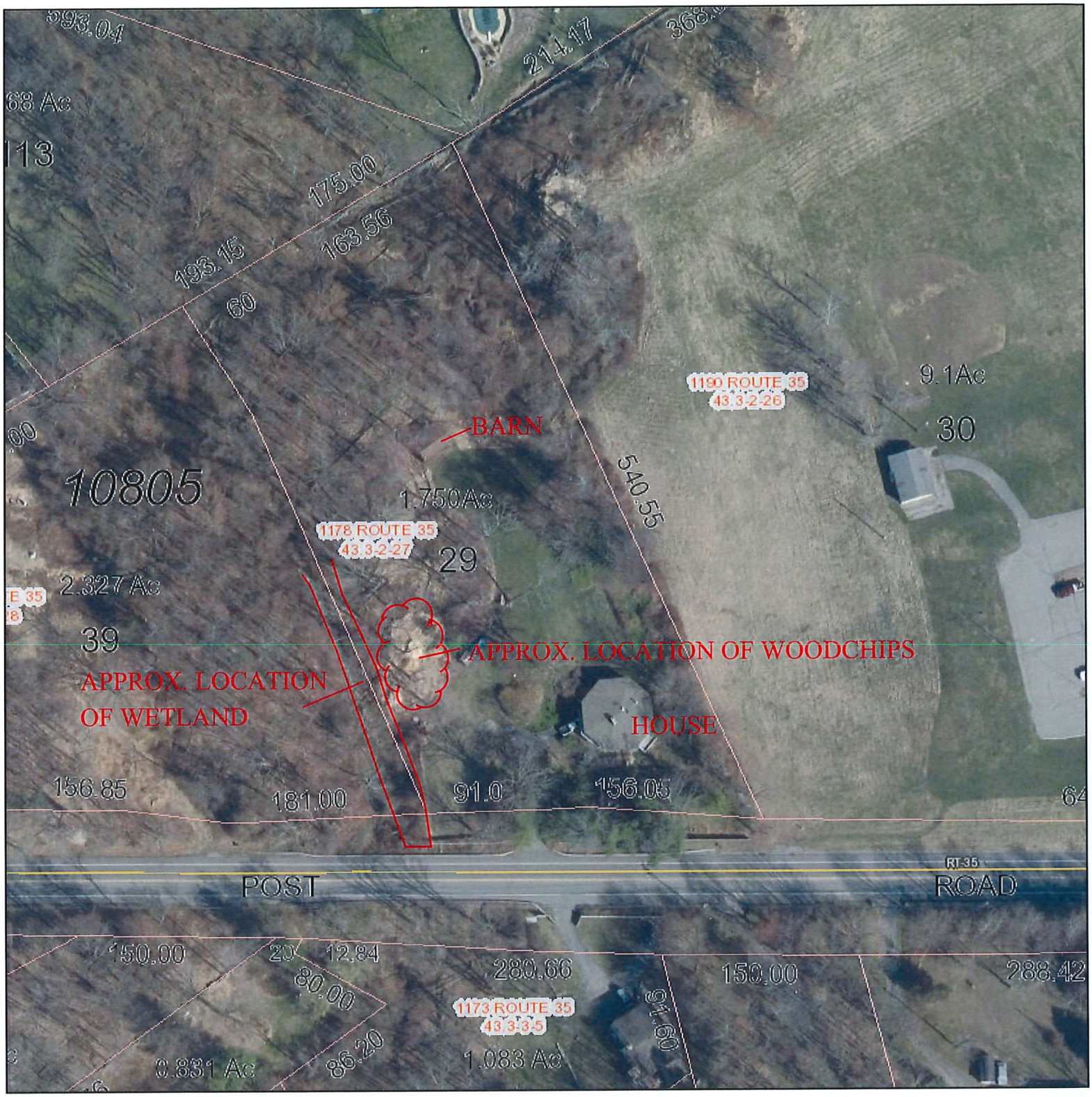
Present at the inspection was Jan K. Johannessen, Building Inspector Joseph Angiello and Mr. ad Mrs. Potz. The larger stockpiles of woodchips have been distributed evenly within the rear yard area and in front of the barn, approximately 2-4 inches in depth. Woodchips and woody debris remain along the westerly edge of the yard and on the slope between the yard and the wetland; maximum depth of woodchips in this area is estimated to be 2-feet deep. The site is considered stable at this time. See attached aerial image and site photographs taken at the time of inspection.

Jan K. Johannessen, AICP
Inspector (print name)

Inspector (signature)

KELLARD SESSIONS

# Mapping Westchester County




January 9, 2019

1:1,215

0 55 110 220 Feet

Municipal Boundaries

N

GIS

http://giswww.westchestergov.com
Michaelian Office Building
148 Martine Avenue Rm 214
White Plains, New York 10601

Photo Above: Looking north towards barn; woodchips have been spread in front of the barn

Photo Below: Looking north toward barn; wetland is on the right; maximum depth of woodchips along the westerly edge of the lawn is approx. 2-feet

Photo Above: Looking south west toward Route 35; wetland is located at bottom of slope

Photo Below: Looking north towards barn; wetland is located to the left and woodchips on the right

PUTZ 1-18 WW
76-18 WP

From: Jack jkpz@optonline.net
Subject: Photo of wood chips
Date: Dec 17, 2018 at 5:47:01 PM
To: Jack Potz jkpz@optonline.net

---

I have attached a recent photo depicting the work done by distributing local organic wood chips on my property in accordance with my submitted plan.

Much of the work was done by hand and had a minimum effect on the surrounding environment.I was able to remove invasive briers and provide  a clear access to my barn . But most important , Karen thinks it came out great and gives us  a place to walk Copper.

Thank you..

Jack Potz

Sent from my iPad

# 2019 PLANNING BOARD
# MEETING DATES /
# SUBMISSION DEADLINES

## Town of Lewisboro

**Planning Board meetings are typically held on the third Tuesday of the month.**

| Meeting Date 7:30 p.m. | Initial Submission Deadline by 10:00 a.m. - 5 Tuesdays before meeting - | Re-submission Deadline by 10:00 a.m. - 3 Tuesdays before meeting - |
|---|---|---|
| January 15 | December 11 | December 26 |
| February 26 | January 29 | February 5 |
| March 19 | February 12 | February 26 |
| April 16 | March 12 | March 26 |
| May 21 | April 23 | April 30 |
| June 18 | May 14 | May 28 |
| July 16 | June 11 | June 25 |
| August 20 | July 16 | July 30 |
| September 17 | August 13 | August 27 |
| October 15 | September 10 | September 24 |
| November 19 | October 15 | October 29 |
| December 17 | November 12 | November 26 |

**Special meetings: 1/24**

1/10/2019