BIBBO ASSOCIATES, L.L.P.
Consulting Engineers

Timothy S. Allen, P.E.
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November 9, 2020

Town of North Castle
Residential Project Review Committee
17 Bedford Road
Armonk, NY 10504-1898

ATTN: Mr. Adam Kaufman, Chairman

RE: Pool Plan
Brandon Yasgur
4 Hardscrabble Circle

Dear Members of the Committee:

Please find attached the following materials in support of the Building Permit Application for the above referenced project:

- 1 copy – R.P.R.C. Checklist
- 1 copy – R.P.R.C. Application (w/ scan of check)
- 1 copy – Pool Plan (2 Sheets)
- 1 copy – Drainage Calculations
- 1 copy – Aerial Map
- 1 copy – Gross Land Coverage Worksheet

Our client is proposing to construct a new in-ground pool and associated mechanical equipment located at the above address.

We respectfully request this matter be placed on your next available meeting agenda for your review. Please feel free to contact us with any questions or comments you may have.

Very truly yours,

Nicholas Gaboury, P.E.

NG/aw
Enclosures
cc: B. Yasgur

Drainage Calculations

Yasgur Addition
4 Hardscrabble Circle

Prepared By:

Nicholas Gaboury, P.E.
N.Y.S. License #: 099349

Rev.
Date: 11/4/2020

Enclosed herewith are stormwater calculations for the proposed site improvements at 4 Hardscrabble Circle, located in the Town of North Castle.

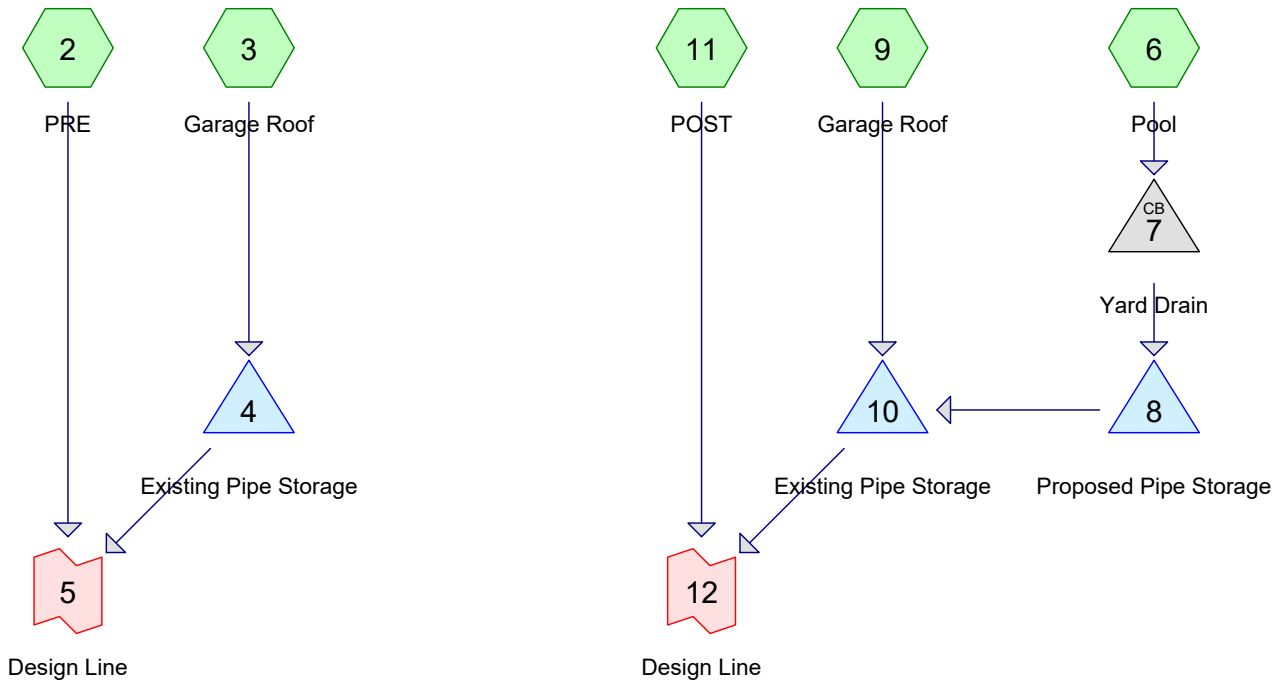
Currently at the site there is an existing single family residence serviced by a public water supply and an onsite sewage disposal system. A ridgeline is located on the western side of the site and the site slopes towards the east. The property is located in the Mianus River Watershed Basin and the total area of disturbance is 0.43 Acres. Soils identified within the area of disturbance consist of Charlton-Chatfield, Chatfield-Charlton, and Paxton Loam. Charlton-Chatfield and Chatfield-Charlton belong to hydrologic group B. Paxton Loam belongs to hydrologic group C. A soil map has been provided herewith.

The applicant is proposing to construct a new in-ground pool with minimal associated patio edging. The project will result in an addition of 809 sqft. of impervious coverage on the site. In order to mitigate the additional impervious surfaces, a stormwater management system has been designed for the site. Runoff will be collected from the new impervious areas with a proposed trench drain. The stormwater enters a yard drain which then conveys it to an underground pipe detention system. The underground pipe system consists of one (1) row of 24" HDPE pipe on a bed of gravel. The row of pipe shall be 52 feet in length and shall be set level. The length of pipe shall connect to the existing pipe detention system which has an outlet structure to control the release of stormwater to the existing rock outlet protection pad located behind the existing garage. All proposed stormwater conveyance piping shall be high density polyethylene pipe (HDPE) unless otherwise noted.

The proposed pipe detention system has been sized to attenuate the post-development peak discharge from the 25-year storm to predevelopment rates, as required by the North Castle Town Code. In order to analyze the impact of the proposed construction, a stormwater model of the pool area was developed for both pre-development and post-development conditions. A design line was selected on the neighboring property to the east where runoff from the Yasgur site collects at the existing low point. Please see the Watershed Map attached with this report.

HydroCAD v. 10.0, a computer-modeling program based upon TR-20, was used to generate peak flows from the subcatchments. In the program, the user inputs various characteristics for each subcatchment including a curve number and time of concentration. These two parameters relate runoff to the specific land characteristics of the subcatchment. Based upon the inputted data, peak flows are generated for the 25-year storm events for the pre-development and post-development subcatchments. HydroCAD output reports are located at the end of this report. The HydroCAD reports demonstrate that the stormwater management design will result in reduced peak flows from the project site under the post-construction conditions.

HydroCAD Output Reports



Subcat Reach Pond Link

Routing Diagram for Yasgur Pool Drainage Analysis
Prepared by {enter your company name here}, Printed 11/9/2020

Time span=0.00-360.00 hrs, dt=0.01 hrs, 36001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 2: PRE Runoff Area=110,111 sf 15.46% Impervious Runoff Depth=2.90"
Flow Length=378' Tc=18.5 min CN=71 Runoff=5.94 cfs 26,599 cf

Subcatchment 3: Garage Roof Runoff Area=658 sf 100.00% Impervious Runoff Depth=5.76"
Tc=6.0 min CN=98 Runoff=0.09 cfs 316 cf

Pond 4: Existing Pipe Storage Peak Elev=643.95' Storage=73 cf Inflow=0.09 cfs 316 cf
Outflow=0.03 cfs 316 cf

Link 5: Design Line Inflow=5.97 cfs 26,915 cf
Primary=5.97 cfs 26,915 cf

Subcatchment 6: Pool Runoff Area=2,718 sf 29.76% Impervious Runoff Depth=3.88"
Tc=0.0 min CN=81 Runoff=0.35 cfs 880 cf

Pond 7: Yard Drain Peak Elev=648.89' Inflow=0.35 cfs 880 cf
6.0" Round Culvert n=0.013 L=16.8' S=0.3274 '/' Outflow=0.35 cfs 880 cf

Pond 8: Proposed Pipe Storage Peak Elev=644.92' Storage=161 cf Inflow=0.35 cfs 880 cf
6.0" Round Culvert n=0.013 L=10.6' S=0.0000 '/' Outflow=0.20 cfs 880 cf

Subcatchment 9: Garage Roof Runoff Area=658 sf 100.00% Impervious Runoff Depth=5.76"
Tc=6.0 min CN=98 Runoff=0.09 cfs 316 cf

Pond 10: Existing Pipe Storage Peak Elev=644.88' Storage=153 cf Inflow=0.29 cfs 1,196 cf
Outflow=0.28 cfs 1,196 cf

Subcatchment 11: POST Runoff Area=107,393 sf 15.85% Impervious Runoff Depth=2.90"
Flow Length=378' Tc=18.5 min CN=71 Runoff=5.80 cfs 25,942 cf

Link 12: Design Line Inflow=5.94 cfs 27,138 cf
Primary=5.94 cfs 27,138 cf

Total Runoff Area = 221,538 sf Runoff Volume = 54,052 cf Average Runoff Depth = 2.93"
83.67% Pervious = 185,371 sf 16.33% Impervious = 36,167 sf

Summary for Subcatchment 2: PRE

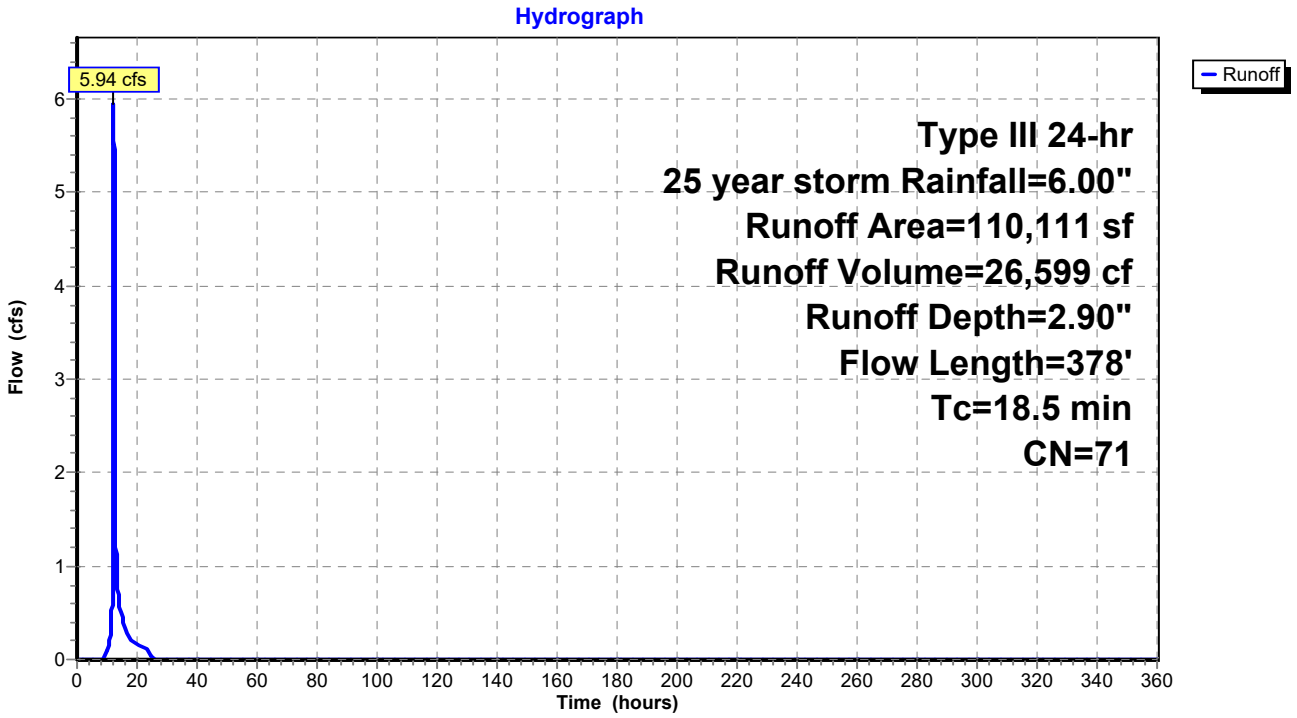
Runoff = 5.94 cfs @ 12.26 hrs, Volume= 26,599 cf, Depth= 2.90"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-360.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 year storm Rainfall=6.00"

Area (sf)	CN	Description
17,021	98	Paved parking & roofs
36,607	74	>75% Grass cover, Good, HSG C
16,066	61	>75% Grass cover, Good, HSG B
18,967	70	Woods, Good, HSG C
21,450	55	Woods, Good, HSG B
110,111	71	Weighted Average
93,090		84.54% Pervious Area
17,021		15.46% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.5	100	0.0300	0.10		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.50"
1.0	278	0.0755	4.42		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
18.5	378	Total			

Subcatchment 2: PRE



Summary for Subcatchment 3: Garage Roof

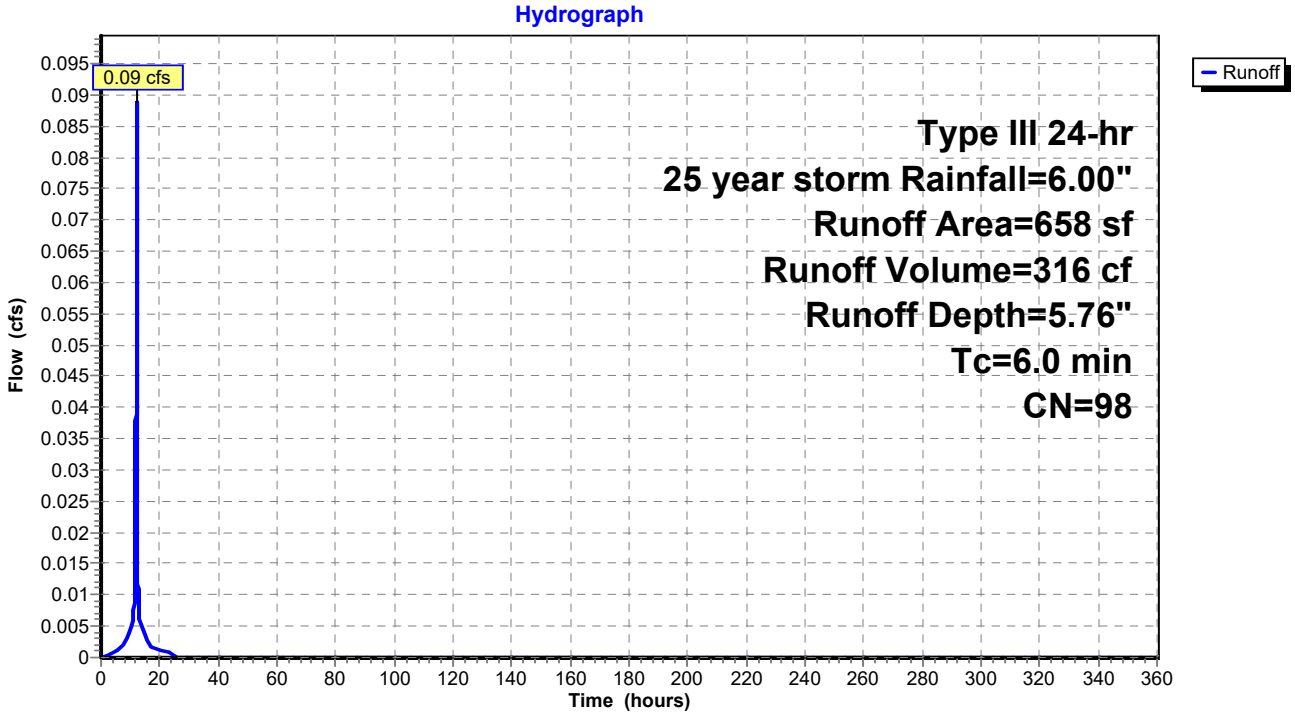
Runoff = 0.09 cfs @ 12.08 hrs, Volume= 316 cf, Depth= 5.76"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-360.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 year storm Rainfall=6.00"

Area (sf)	CN	Description
658	98	Unconnected roofs, HSG C
658		100.00% Impervious Area
658		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 3: Garage Roof



Summary for Pond 4: Existing Pipe Storage

Inflow Area = 658 sf,100.00% Impervious, Inflow Depth = 5.76" for 25 year storm event
Inflow = 0.09 cfs @ 12.08 hrs, Volume= 316 cf
Outflow = 0.03 cfs @ 12.42 hrs, Volume= 316 cf, Atten= 72%, Lag= 20.0 min
Primary = 0.03 cfs @ 12.42 hrs, Volume= 316 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-360.00 hrs, dt= 0.01 hrs
Peak Elev= 643.95' @ 12.42 hrs Surf.Area= 100 sf Storage= 73 cf
Flood Elev= 647.00' Surf.Area= 0 sf Storage= 157 cf

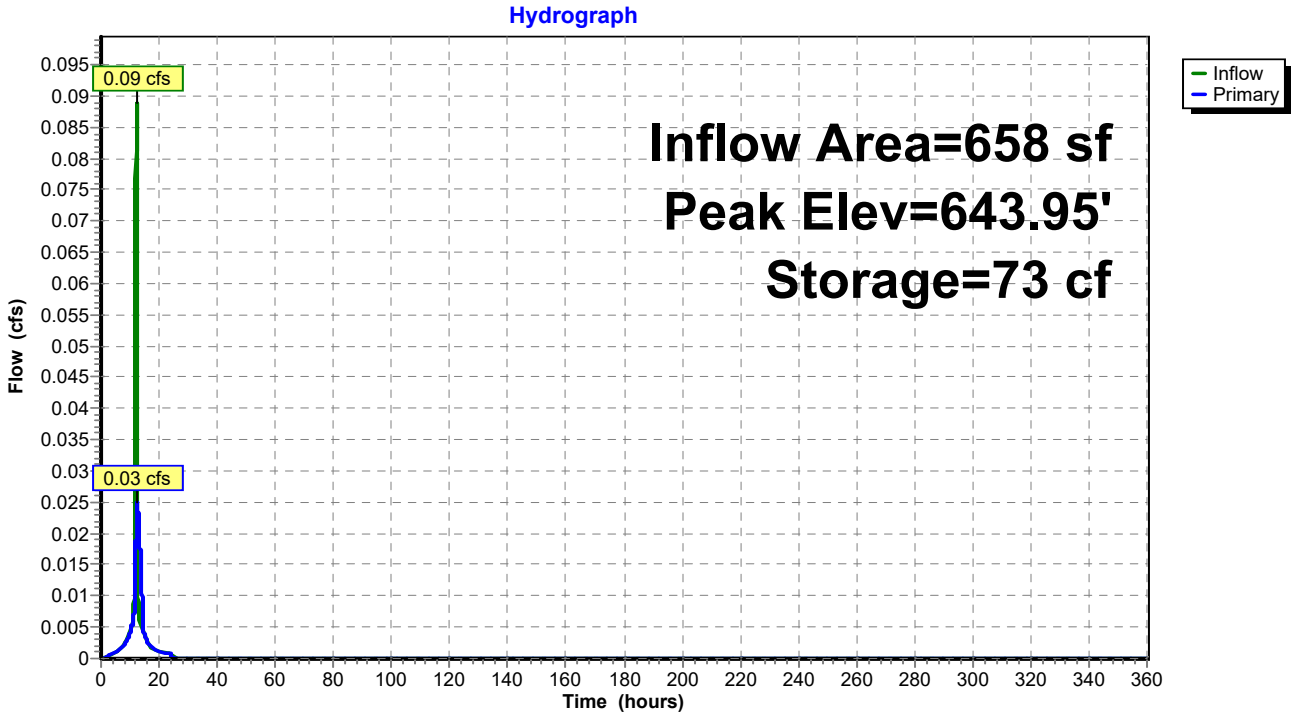
Plug-Flow detention time= 21.7 min calculated for 316 cf (100% of inflow)
Center-of-Mass det. time= 21.7 min (766.8 - 745.1)

Volume	Invert	Avail.Storage	Storage Description
#1	643.00'	157 cf	**24.0" Round Pipe Storage** L= 50.0'

Device	Routing	Invert	Outlet Devices
#1	Primary	643.00'	**6.0" Round Culvert** L= 24.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 643.00' / 642.00' S= 0.0417 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#2	Device 1	644.80'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#3	Device 1	643.00'	**1.0" Vert. Orifice/Grate** C= 0.600

Primary OutFlow Max=0.03 cfs @ 12.42 hrs HW=643.95' TW=0.00' (Dynamic Tailwater)
└─**1=Culvert** (Passes 0.03 cfs of 0.79 cfs potential flow)
  ├─**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
  └─**3=Orifice/Grate** (Orifice Controls 0.03 cfs @ 4.58 fps)

Pond 4: Existing Pipe Storage

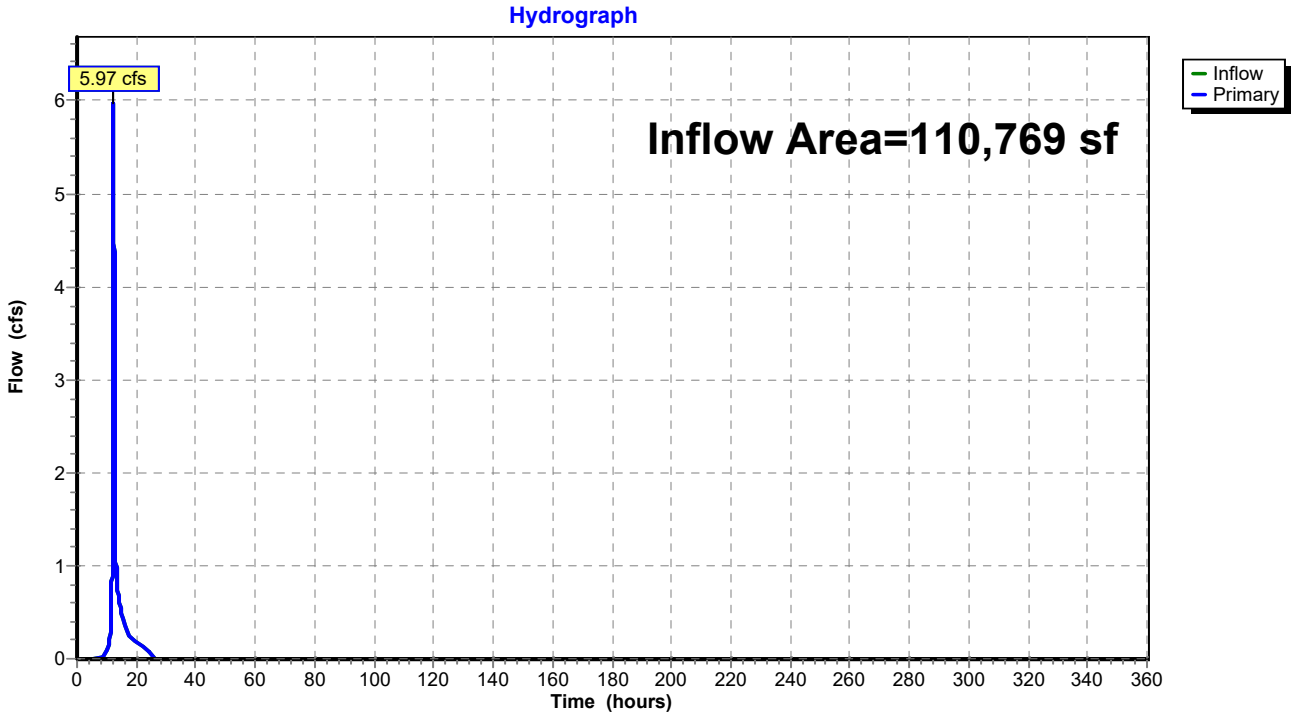


Summary for Link 5: Design Line

Inflow Area = 110,769 sf, 15.96% Impervious, Inflow Depth = 2.92" for 25 year storm event
Inflow = 5.97 cfs @ 12.27 hrs, Volume= 26,915 cf
Primary = 5.97 cfs @ 12.27 hrs, Volume= 26,915 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-360.00 hrs, dt= 0.01 hrs

Link 5: Design Line



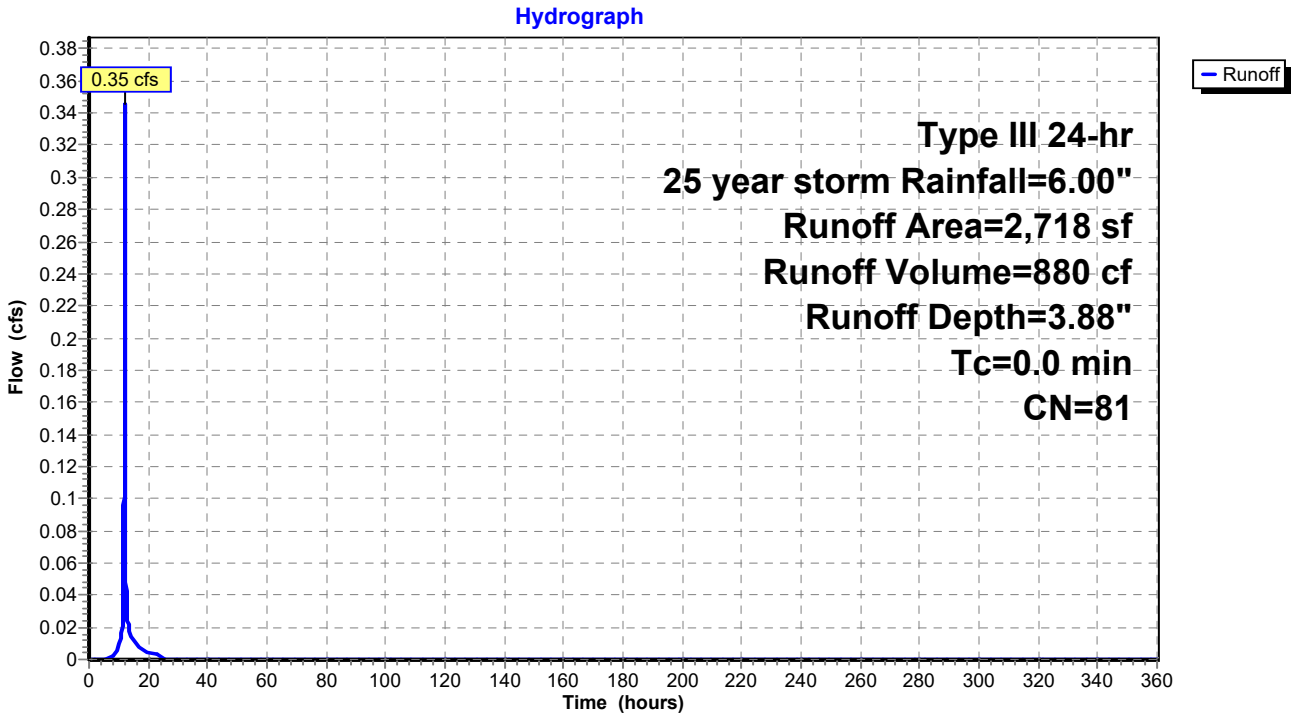
Summary for Subcatchment 6: Pool

Runoff = 0.35 cfs @ 12.00 hrs, Volume= 880 cf, Depth= 3.88"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-360.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 year storm Rainfall=6.00"

	Area (sf)	CN	Description
*	809	98	Pool & Equip Pad
	1,909	74	>75% Grass cover, Good, HSG C
	2,718	81	Weighted Average
	1,909		70.24% Pervious Area
	809		29.76% Impervious Area

Subcatchment 6: Pool



Summary for Pond 7: Yard Drain

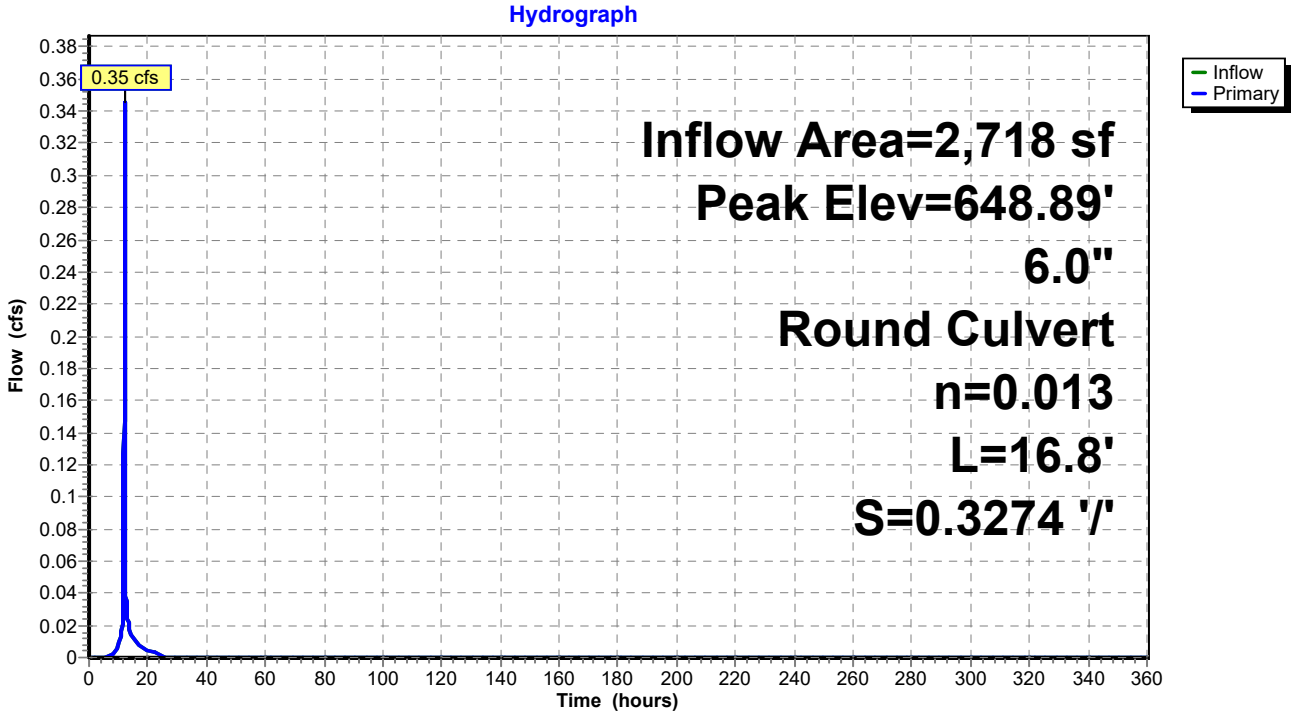
Inflow Area = 2,718 sf, 29.76% Impervious, Inflow Depth = 3.88" for 25 year storm event
Inflow = 0.35 cfs @ 12.00 hrs, Volume= 880 cf
Outflow = 0.35 cfs @ 12.00 hrs, Volume= 880 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.35 cfs @ 12.00 hrs, Volume= 880 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-360.00 hrs, dt= 0.01 hrs
Peak Elev= 648.89' @ 12.00 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	648.50'	**6.0" Round Culvert** L= 16.8' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 648.50' / 643.00' S= 0.3274 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf

Primary OutFlow Max=0.34 cfs @ 12.00 hrs HW=648.89' TW=644.43' (Dynamic Tailwater)
1=Culvert (Inlet Controls 0.34 cfs @ 2.12 fps)

Pond 7: Yard Drain



Summary for Pond 8: Proposed Pipe Storage

Inflow Area = 2,718 sf, 29.76% Impervious, Inflow Depth = 3.88" for 25 year storm event
Inflow = 0.35 cfs @ 12.00 hrs, Volume= 880 cf
Outflow = 0.20 cfs @ 12.07 hrs, Volume= 880 cf, Atten= 42%, Lag= 4.3 min
Primary = 0.20 cfs @ 12.07 hrs, Volume= 880 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-360.00 hrs, dt= 0.01 hrs
Peak Elev= 644.92' @ 12.08 hrs Surf.Area= 42 sf Storage= 161 cf
Flood Elev= 647.00' Surf.Area= 0 sf Storage= 163 cf

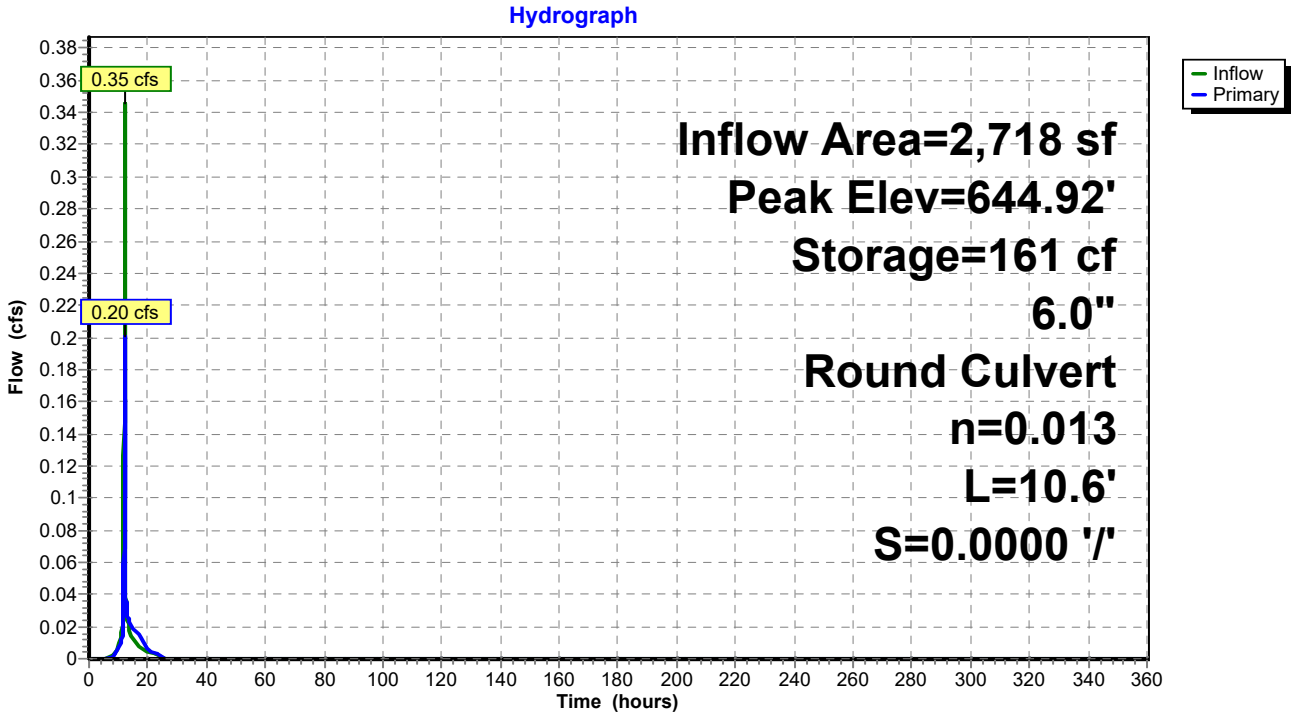
Plug-Flow detention time= 52.6 min calculated for 880 cf (100% of inflow)
Center-of-Mass det. time= 53.1 min (859.1 - 806.0)

Volume	Invert	Avail.Storage	Storage Description
#1	643.00'	163 cf	**24.0" Round Pipe Storage** L= 52.0'

Device	Routing	Invert	Outlet Devices
#1	Primary	643.00'	**6.0" Round Culvert** L= 10.6' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 643.00' / 643.00' S= 0.0000 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf

Primary OutFlow Max=0.17 cfs @ 12.07 hrs HW=644.91' TW=644.88' (Dynamic Tailwater)
1=Culvert (Inlet Controls 0.17 cfs @ 0.88 fps)

Pond 8: Proposed Pipe Storage



Summary for Subcatchment 9: Garage Roof

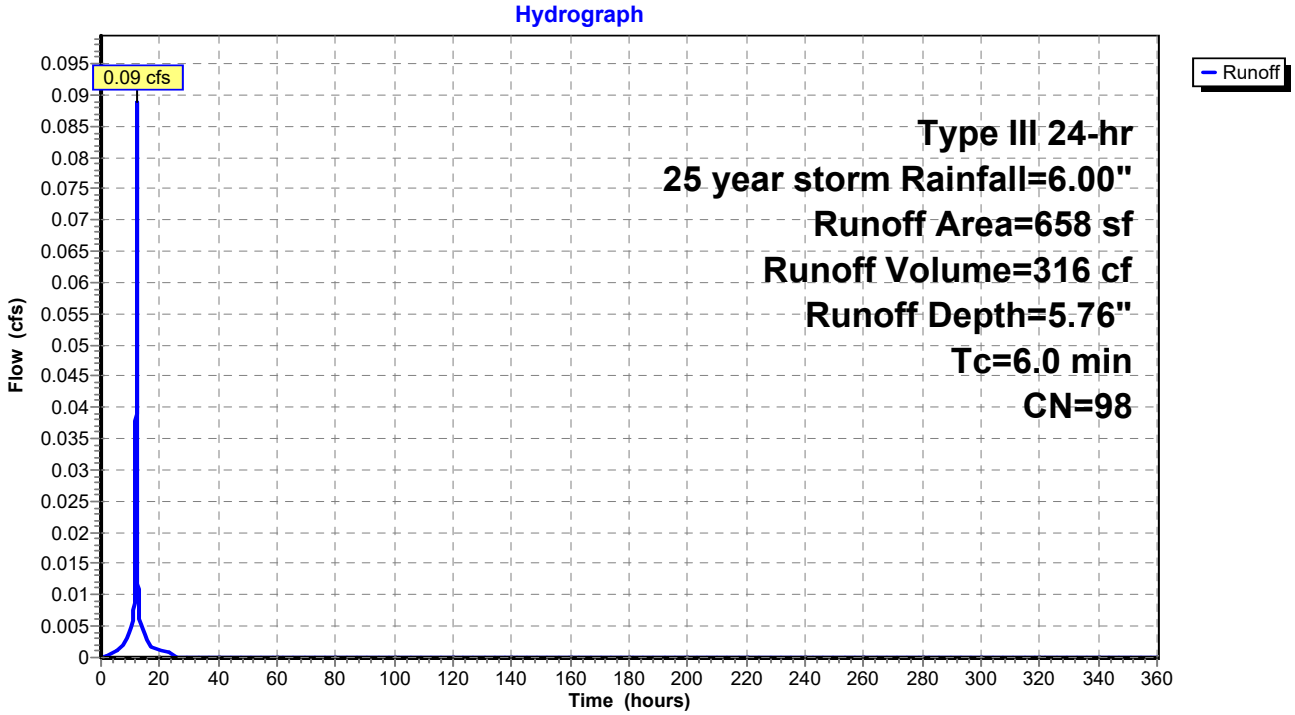
Runoff = 0.09 cfs @ 12.08 hrs, Volume= 316 cf, Depth= 5.76"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-360.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 year storm Rainfall=6.00"

Area (sf)	CN	Description
658	98	Unconnected roofs, HSG C
658		100.00% Impervious Area
658		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 9: Garage Roof



Summary for Pond 10: Existing Pipe Storage

Inflow Area = 3,376 sf, 43.45% Impervious, Inflow Depth = 4.25" for 25 year storm event
Inflow = 0.29 cfs @ 12.07 hrs, Volume= 1,196 cf
Outflow = 0.28 cfs @ 12.08 hrs, Volume= 1,196 cf, Atten= 2%, Lag= 0.3 min
Primary = 0.28 cfs @ 12.08 hrs, Volume= 1,196 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-360.00 hrs, dt= 0.01 hrs
Peak Elev= 644.88' @ 12.08 hrs Surf.Area= 48 sf Storage= 153 cf
Flood Elev= 647.00' Surf.Area= 0 sf Storage= 157 cf

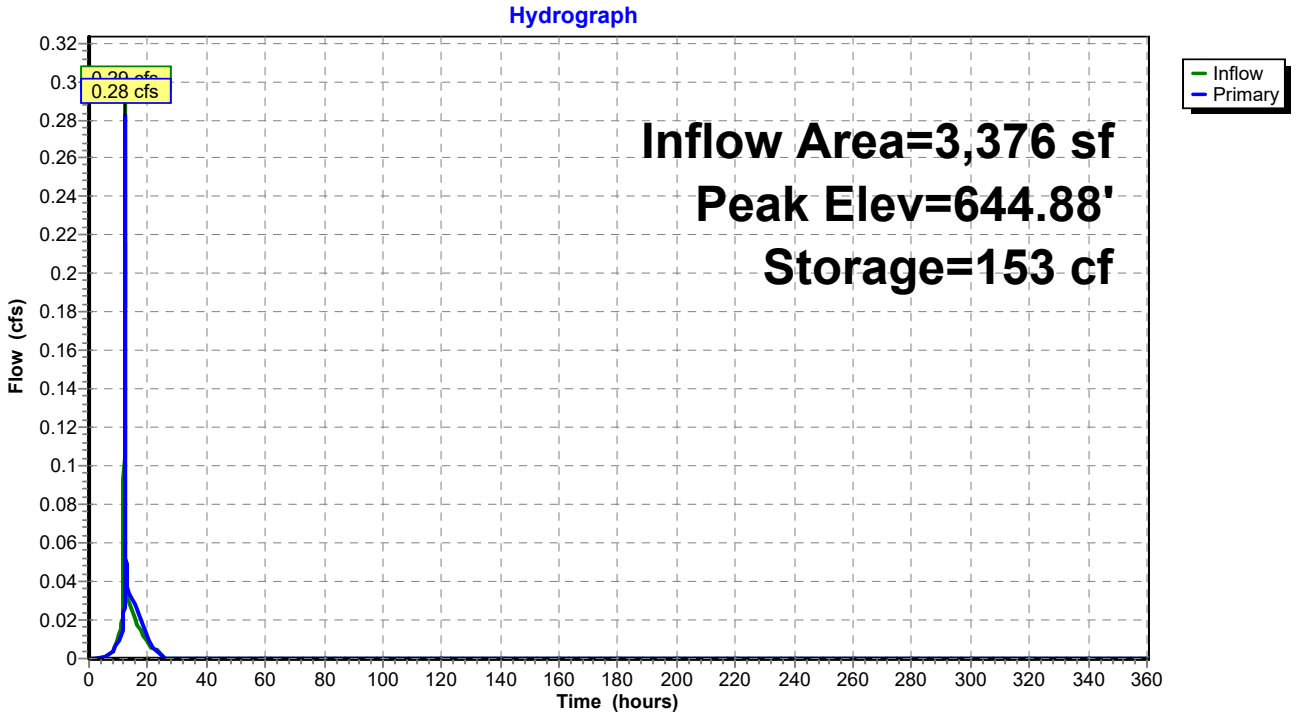
Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 37.8 min (866.8 - 829.0)

Volume	Invert	Avail.Storage	Storage Description
#1	643.00'	157 cf	**24.0" Round Pipe Storage** L= 50.0'

Device	Routing	Invert	Outlet Devices
#1	Primary	643.00'	**6.0" Round Culvert** L= 24.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 643.00' / 642.00' S= 0.0417 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#2	Device 1	644.80'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#3	Device 1	643.00'	**1.0" Vert. Orifice/Grate** C= 0.600

Primary OutFlow Max=0.28 cfs @ 12.08 hrs HW=644.88' TW=0.00' (Dynamic Tailwater)
└─**1=Culvert** (Passes 0.28 cfs of 1.21 cfs potential flow)
  ├─**2=Broad-Crested Rectangular Weir** (Weir Controls 0.24 cfs @ 0.78 fps)
  └─**3=Orifice/Grate** (Orifice Controls 0.04 cfs @ 6.53 fps)

Pond 10: Existing Pipe Storage



Summary for Subcatchment 11: POST

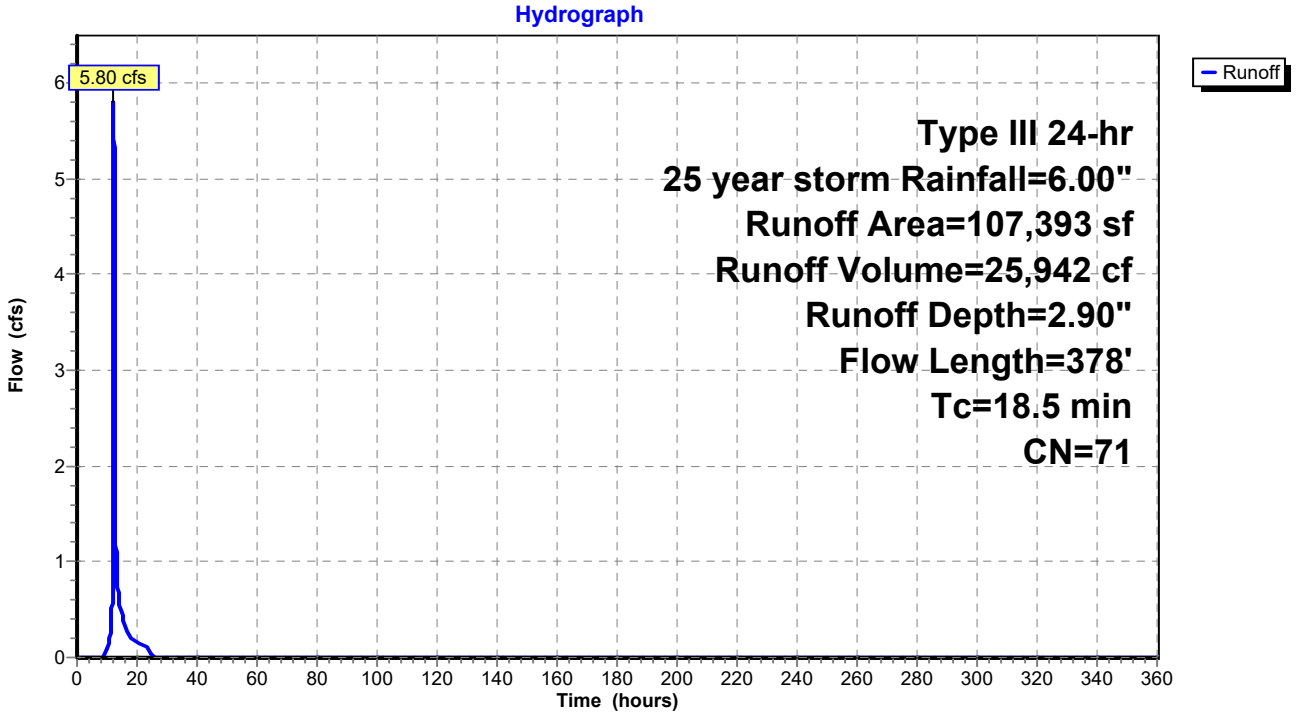
Runoff = 5.80 cfs @ 12.26 hrs, Volume= 25,942 cf, Depth= 2.90"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-360.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 year storm Rainfall=6.00"

Area (sf)	CN	Description
17,021	98	Paved parking & roofs
33,889	74	>75% Grass cover, Good, HSG C
16,066	61	>75% Grass cover, Good, HSG B
18,967	70	Woods, Good, HSG C
21,450	55	Woods, Good, HSG B
107,393	71	Weighted Average
90,372		84.15% Pervious Area
17,021		15.85% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.5	100	0.0300	0.10		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.50"
1.0	278	0.0755	4.42		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
18.5	378	Total			

Subcatchment 11: POST

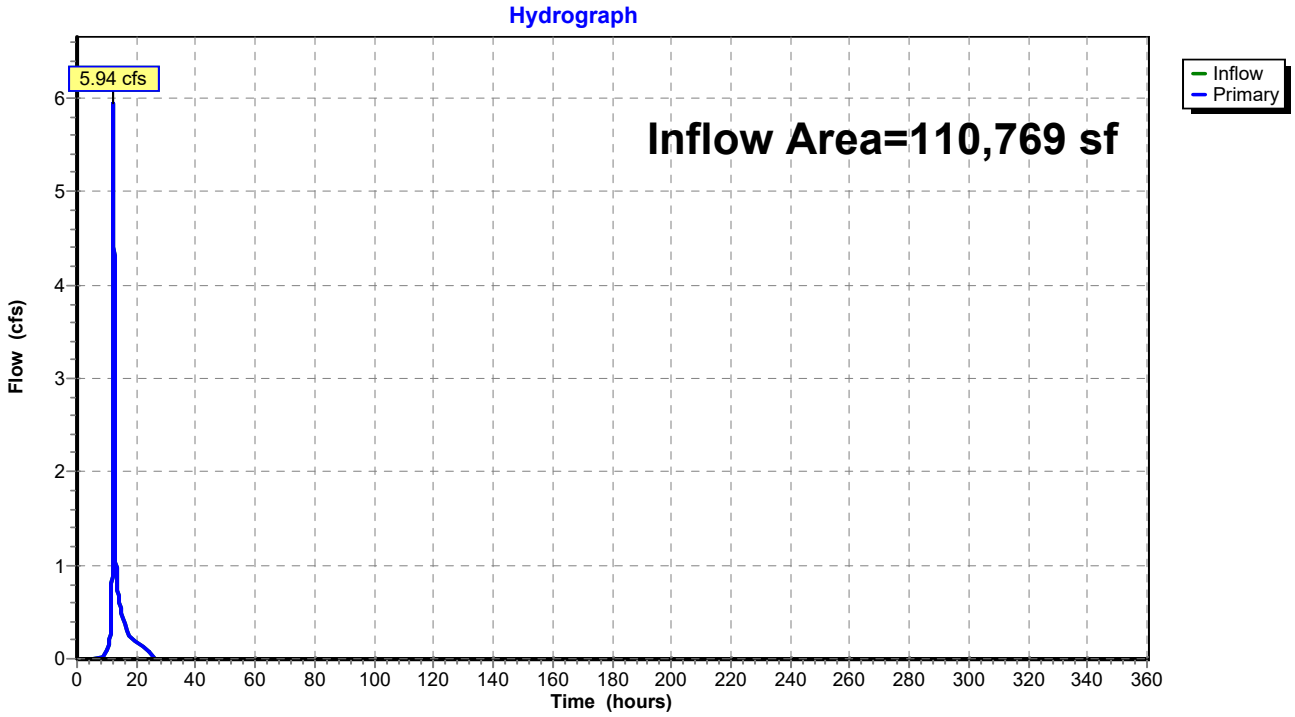


Summary for Link 12: Design Line

Inflow Area = 110,769 sf, 16.69% Impervious, Inflow Depth = 2.94" for 25 year storm event
Inflow = 5.94 cfs @ 12.26 hrs, Volume= 27,138 cf
Primary = 5.94 cfs @ 12.26 hrs, Volume= 27,138 cf, Atten= 0%, Lag= 0.0 min

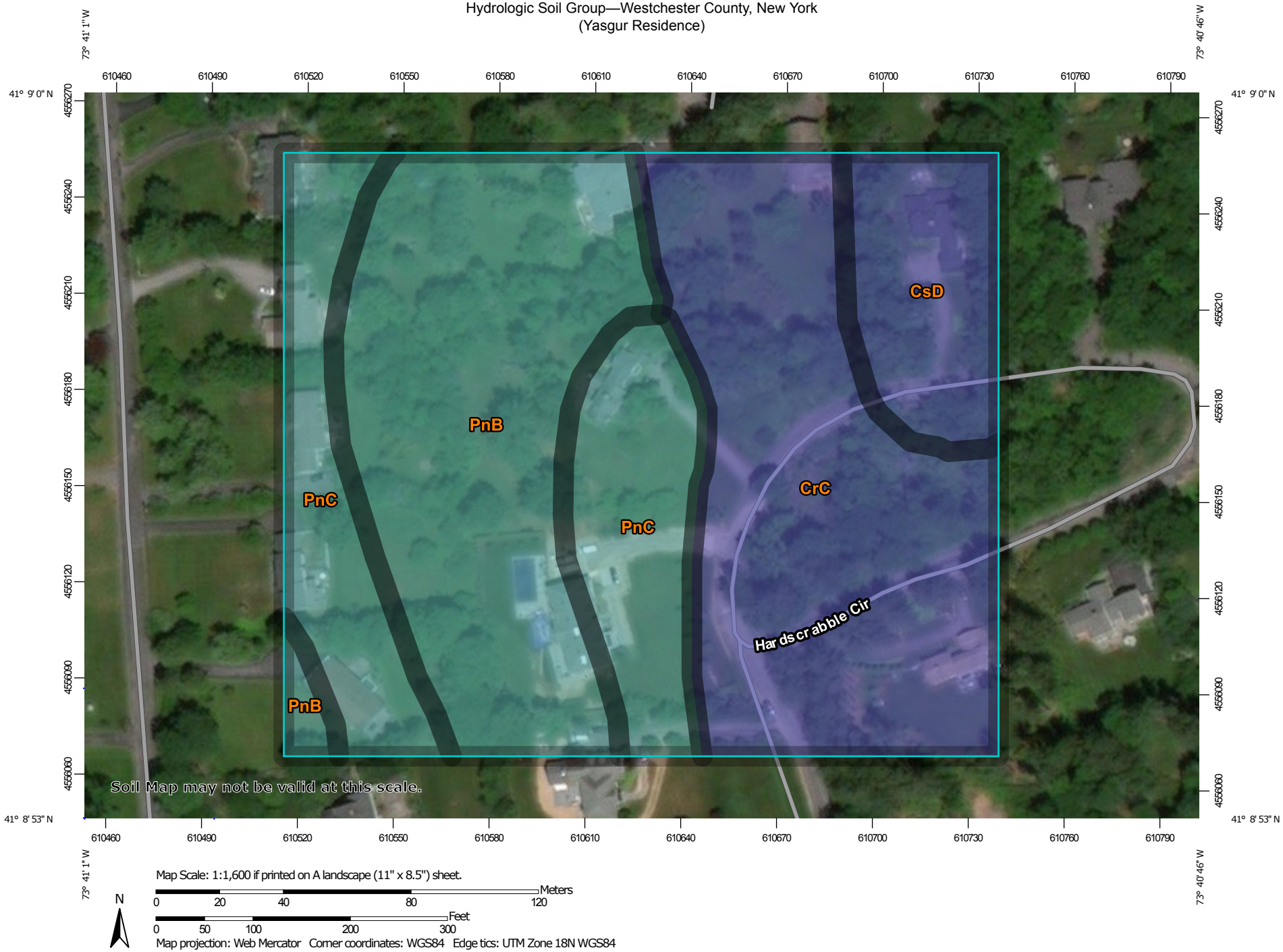
Primary outflow = Inflow, Time Span= 0.00-360.00 hrs, dt= 0.01 hrs

Link 12: Design Line



Soil Map

Hydrologic Soil Group—Westchester County, New York
(Yasgur Residence)



Map Scale: 1:1,600 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 20 40 80 120

Feet
0 50 100 200 300

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 Rating Polygons

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

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.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
CrC	Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky	B	3.6	34.5%
CsD	Chatfield-Charlton complex, 15 to 35 percent slopes, very rocky	B	1.0	9.8%
PnB	Paxton fine sandy loam, 3 to 8 percent slopes	C	3.5	33.5%
PnC	Paxton fine sandy loam, 8 to 15 percent slopes	C	2.3	22.3%
Totals for Area of Interest			**10.5**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

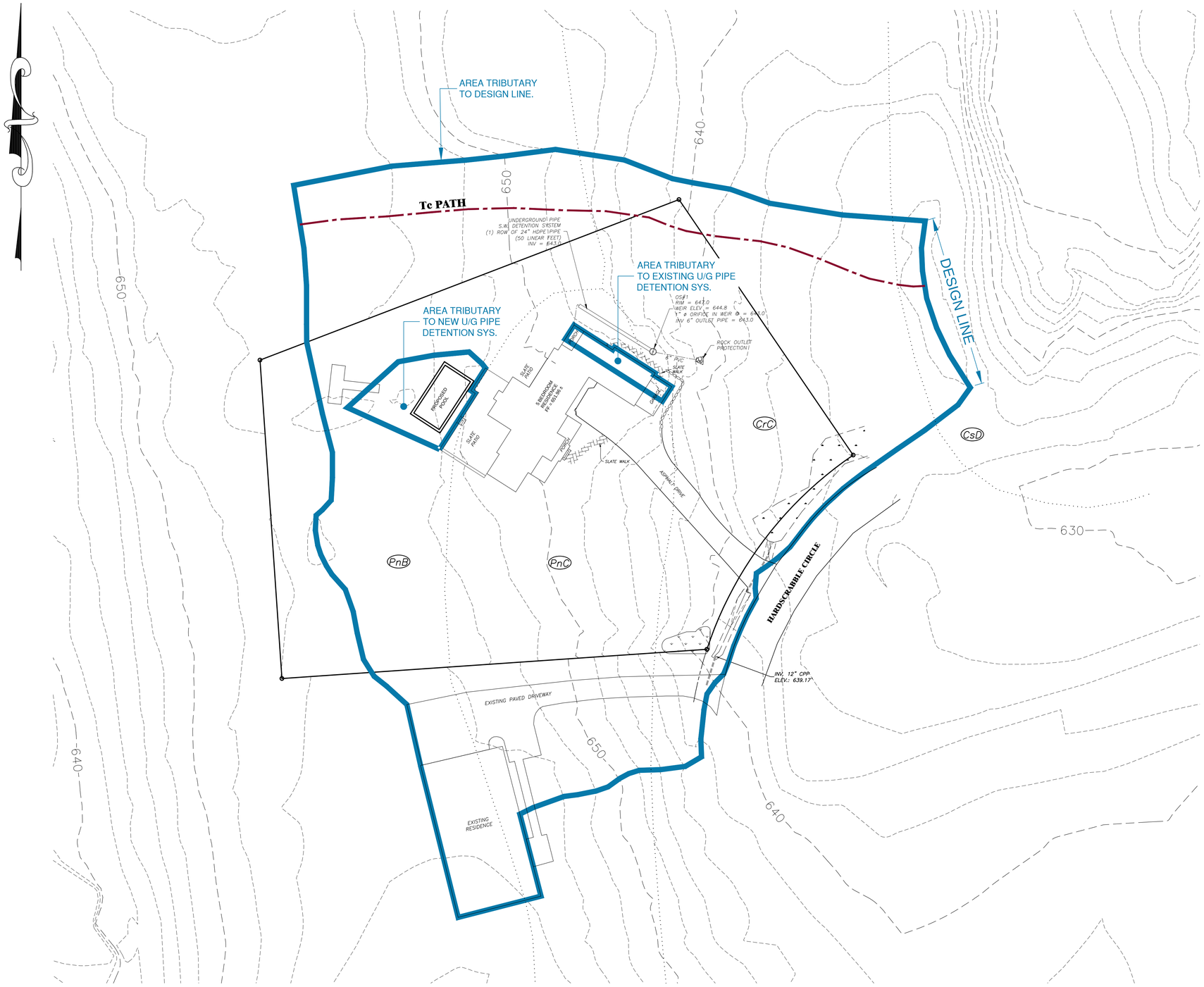
Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Watershed Map



LOCATION MAP
NTS

LEGEND

- EXISTING PROPERTY LINE
- 640 EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- WATERSHED BOUNDARY LINE
- Tc PATH
- SOIL BOUNDARY LINE
- PnB NRCS SOIL CLASSIFICATION

NOTE: TOPOGRAPHY SHOWN BEYOND THE PROPERTY LINES WAS TAKEN FROM WESTCHESTER COUNTY GIS MAPPING AND IS USED FOR THE APPROXIMATE DEFINITION OF OFF-SITE CONTRIBUTING WATERSHEDS.

PLAN
GRAPHIC SCALE

30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

REVISIONS						
DATE:	DESCRIPTION	BY/CK	DATE:	DESCRIPTION	BY/CK	

WATERSHED MAP

BRANDON & LAUREN YASGUR
4 HARDSCRABBLE CIRCLE
TOWN OF NORTH CASTLE , WESTCHESTER COUNTY, NY.

DATE:	11-4-20
SCALE:	1" = 30'
FILE:	-
DSGN / CHK:	TSA
DRN. BY	NG
SHT NO.	FIGURE 1
DWG NO.	WM

BIBBO ASSOCIATES, LLP
293 ROUTE 100 SUITE 203
SOMERS, NEW YORK 10589
TEL. 914 277 5805

TOWN OF NORTH CASTLE
WESTCHESTER COUNTY
17 Bedford Road
Armonk, New York 10504-1898

PLANNING DEPARTMENT
Adam R. Kaufman, AICP
Director of Planning

Telephone: (914) 273-3542
Fax: (914) 273-3554
www.northcastleny.com

GROSS LAND COVERAGE CALCULATIONS WORKSHEET

Application Name or Identifying Title: Yasgur Date: 11/9/2020

Tax Map Designation or Proposed Lot No.: 101.02-3-42

Gross Lot Coverage

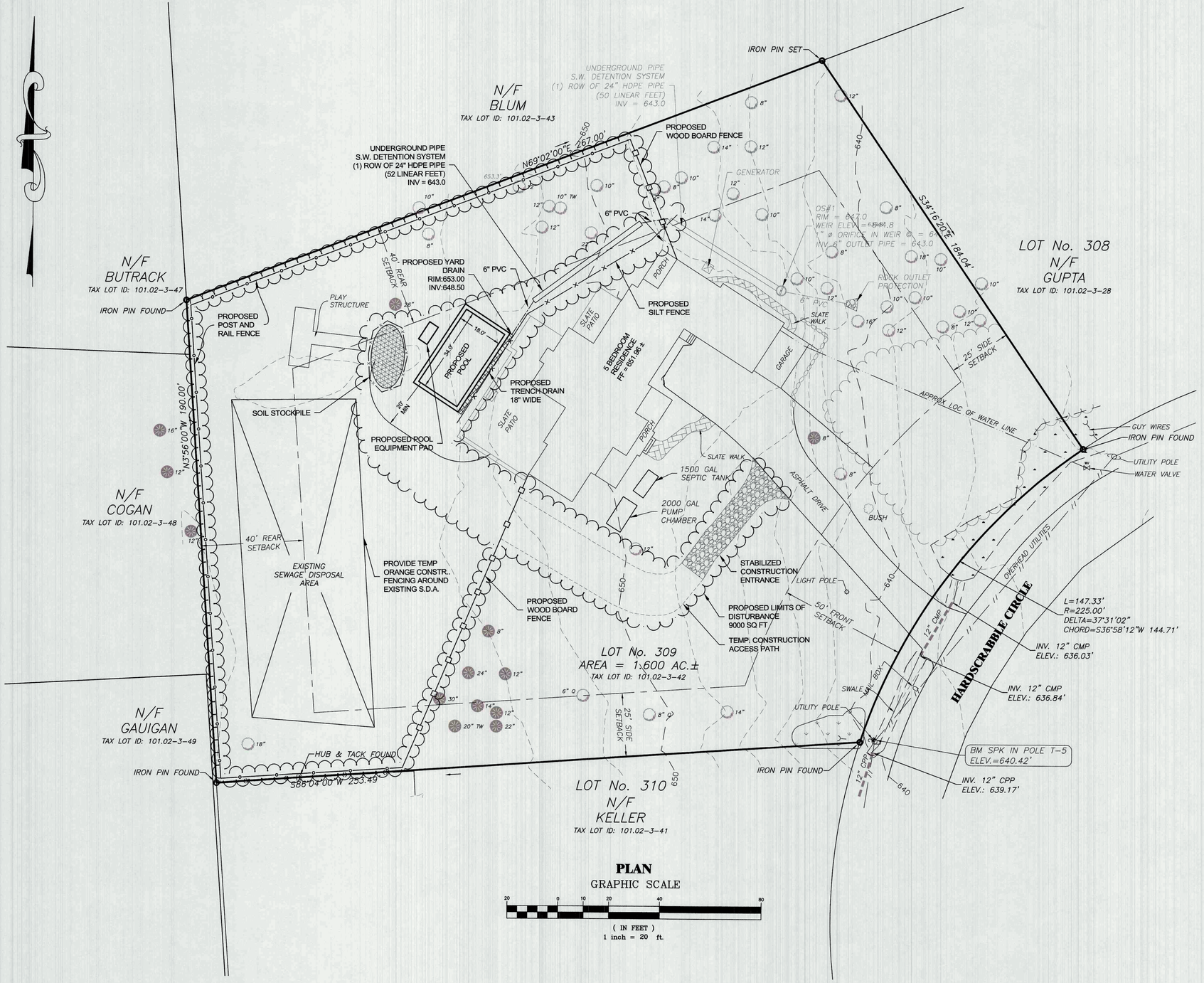
1.	Total lot Area (Net Lot Area for Lots Created After 12/13/06):	69697
2.	**Maximum** permitted gross land coverage (per Section 355-26.C(1)(b)):	9350
3.	**BONUS** maximum gross land cover (per Section 355-26.C(1)(b)):	2352
	Distance principal home is beyond minimum front yard setback 47 x 10 = 470	470
4.	**TOTAL Maximum Permitted gross land coverage** = Sum of lines 2 and 3	12172
5.	Amount of lot area covered by **principal building:** 3686 existing + 0 proposed =	3686
6.	Amount of lot area covered by **accessory buildings:** 0 existing + 0 proposed =	0
7.	Amount of lot area covered by **decks:** 0 existing + 0 proposed =	0
8.	Amount of lot area covered by **porches:** 405 existing + 0 proposed =	405
9.	Amount of lot area covered by **driveway, parking areas and walkways:** 2987 existing + 0 proposed =	2987
10.	Amount of lot area covered by **terraces:** 1534 existing + 0 proposed =	1534
11.	Amount of lot area covered by **tennis court, pool and mechanical equip:** 0 existing + 809 proposed =	809
12.	Amount of lot area covered by **all other structures:** 0 existing + 0 proposed =	0
13.	Proposed **gross land coverage:** Total of Lines 5 – 12 =	4021

If Line 13 is less than or equal to Line 4, your proposal **complies** with the Town's maximum gross land coverage regulations and the project may proceed to the Residential Project Review Committee for review. If Line 13 is greater than Line 4 your proposal does not comply with the Town's regulations.

STATE OF NEW YORK
NICHOLAS GARBURY
LICENSED PROFESSIONAL ENGINEER
099349
EXCELSIOR

Signature and Seal of Professional Preparing Worksheet

11-9-20
Date



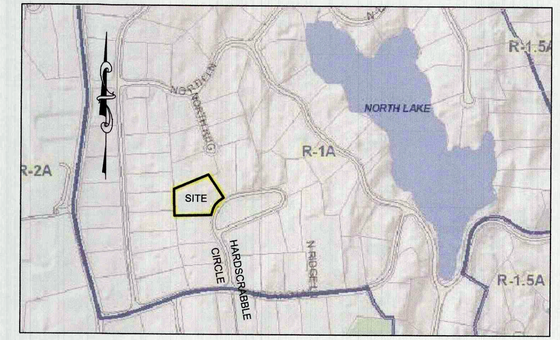
PLAN

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

1 inch = 20 ft.



LOCATION MAP

NTS

CONSTRUCTION SEQUENCE:

1. A PRE-CONSTRUCTION MEETING SHALL BE HELD WITH THE TOWN ENGINEER, TOWN BUILDING DEPARTMENT, SITE CONTRACTOR, AND PROJECT ENGINEER PRIOR TO CONSTRUCTION.

2. INSTALL SILT FENCE WHERE INDICATED ON PLANS.

3. STAKE LIMITS OF DISTURBANCE FOR THE PROPOSED IMPROVEMENTS AND PLACE PROTECTIVE FENCING AROUND EXISTING SEWAGE DISPOSAL AREA.

4. GRUB LOT AND STRIP TOPSOIL. STOCKPILE TOPSOIL WHERE INDICATED ON PLANS, AND STABILIZED TOPSOIL AS INDICATED ON TOPSOIL STOCKPILE DETAIL.

5. ROUGH GRADING AND BEGIN POOL EXCAVATION. INSTALL NEW POOL FENCE AS DETAILED.

6. INSTALL NEW PIPE DETENTION SYSTEM AND CONNECT TO EXISTING DETENTION SYSTEM AS SHOWN ON THE PLANS. DO NOT CONNECT STORMWATER PIPING TO PIPE DETENTION SYSTEM UNTIL THE TRIBUTARY AREAS HAVE BEEN STABILIZED.

7. FINAL GRADE LAWN AREAS.

8. SEED AND MULCH LAWN AREAS.

9. REMOVE SILT FENCE WHEN FINAL STABILIZATION IS ACHIEVED.

ZONING DATA			
TAX MAP DESIGNATION		SECTION 1, BLOCK 3, LOT 42	
ZONING DISTRICT		R-1A – RESIDENTIAL	
		MINIMUM REQUIREMENTS	PROVIDED
LOT AREA	(ACRES)	1.0	1.600 (69,696sf)
WIDTH	(FT)	125	257.5
DEPTH	(FT)	150	250
FRONT YARD	(FT)	50	93.6
SIDE YARD	(FT)	25	101.2 / 65.6
REAR YARD	(FT)	40	130.0 / 47.1
MAXIMUM BLDG. COVERAGE	(%)	12%	5.3%
MAX. GROSS LAND COV.		12,172 S.F.	4,021 S.F.

LEGEND:

- 640 — EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- 640 — PROPOSED 10' CONTOUR
- 642 — PROPOSED 2' CONTOUR
- BUILDING SETBACK LINE
- 12" — EXISTING TREE
- 12" — EXISTING TREE TO BE REMOVED
- LIMIT OF DISTURBANCE LINE
- SILT FENCE
- SOIL STOCKPILE
- WOOD BOARD FENCE
- POST AND RAIL FENCE

SITE DATA

1.TOTAL AREA OF PARCEL: 1.6 Ac ±

2. OWNER/APPLICANT:
BRANDON YASGUR
49 W PATENT ROAD
BEDFORD , NY 10507

3. ZONING DISTRICT: R-1A RESIDENTIAL

4. TAX I.D. #: SHEET 101.02, BLOCK 3, LOT 42

5. SURVEYOR:
EVAN J. FOGLE , PLS
LAND SURVEING COMPANY
MOUNT KISCO, NY.

6. SURVEY LAST UPDATE: MARCH 29, 2018

REVISIONS

DATE:	DESCRIPTION	BY/CK	DATE:	DESCRIPTION	BY/CK

NICHOLAS GABOURY P.E.

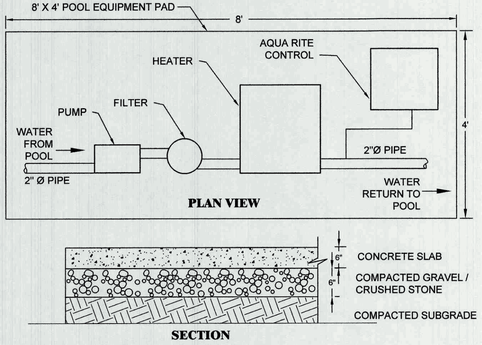
POOL PLAN

BRANDON & LAUREN YASGUR
4 HARDSCRABBLE CIRCLE
TOWN OF NORTH CASTLE , WESTCHESTER COUNTY, NY.

BIBBO ASSOCIATES, LLP
293 ROUTE 100 SUITE 203
SOMERS, NEW YORK 10589
TEL. 914 277 5805

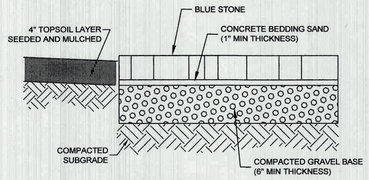
DATE:	10-8-2020
SCALE:	1" = 20'
FILE:	-
DSGN / CHK	TSA
DRN. BY:	NT
SHT NO.	1 OF 2
DWG NO.	PP-1

P:\Projects\YASGUR,NORTH CASTLE\dwg\YASGUR-SITE 9-22-20.dwg, DRAINAGE PLAN, 11/9/2020 11:09:52 AM, BIBBOGUEST, 1:1



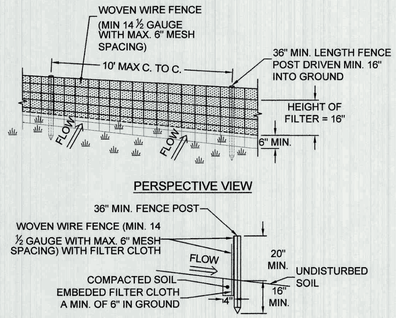
POOL EQUIPMENT & CONC. PAD DETAIL

N.T.S.



TYPICAL POOL PATIO SECTION

N.T.S.

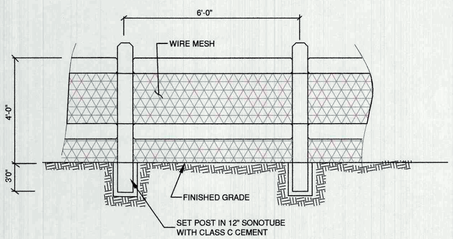


CONSTRUCTION SPECIFICATIONS:

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL WITHER "T" OR "U" TYPE OR HARDWOOD
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

SILT FENCE DETAIL

N.T.S.

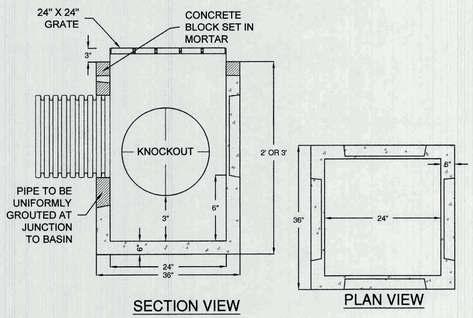


SPLIT RAIL FENCE DETAIL

NTS

OR APPROVED EQUAL

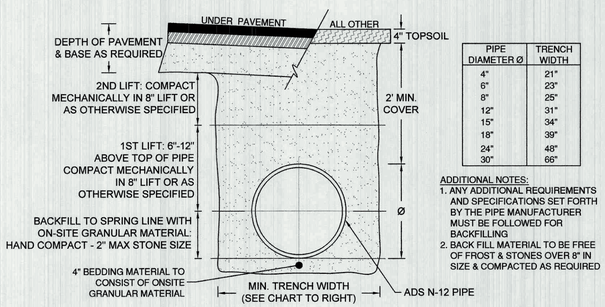
PLEASE NOTE: THE PROPOSED POOL FENCE GATES ON EACH SIDE OF THE EXISTING RESIDENCE SHALL OPEN OUTWARD (AWAY FROM POOL), BE SELF-CLOSING, SELF-LATCHING, AND EQUIPPED WITH MAGNALATCH AT 54" OFF OF GRADE.



YARD DRAIN DETAIL

N.T.S.

(RESIDENTIAL DRAIN AS MANUFACTURED BY CONNECTICUT PRECAST CO. H-20 LOADING REQUIRED)



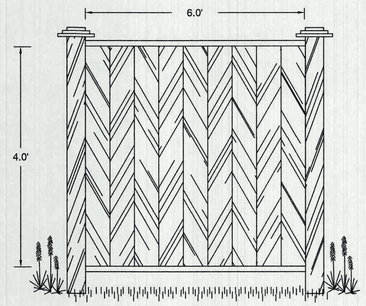
PIPE DIAMETER Ø	TRENCH WIDTH
4"	21"
6"	23"
8"	25"
12"	31"
15"	34"
18"	39"
24"	48"
30"	66"

ADDITIONAL NOTES:

1. ANY ADDITIONAL REQUIREMENTS AND SPECIFICATIONS SET FORTH BY THE PIPE MANUFACTURER MUST BE FOLLOWED FOR BACKFILLING
2. BACK FILL MATERIAL TO BE FREE OF FROST & STONES OVER 8" IN SIZE & COMPACTED AS REQUIRED

DRAINAGE PIPE INSTALLATION

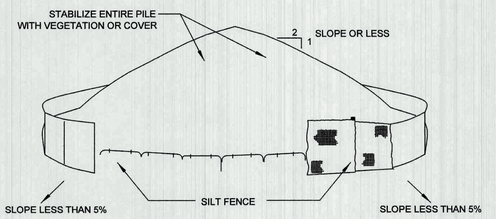
N.T.S.



BOARD FENCE DETAIL

N.T.S.

OR APPROVED EQUAL

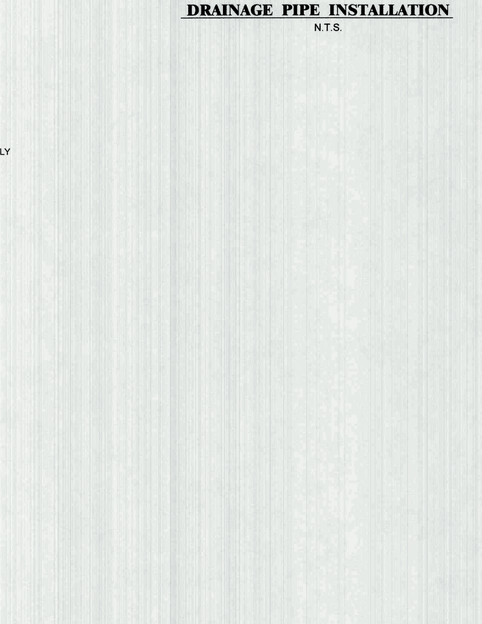


INSTALLATION NOTES:

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE
2. MAXIMUM SLOPE OF STOCKPILING SHALL BE 1:2
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH SILT FENCING, THEN STABILIZED WITH VEGETATION OR COVERED.
4. SEE SILTATION FENCE DETAIL.

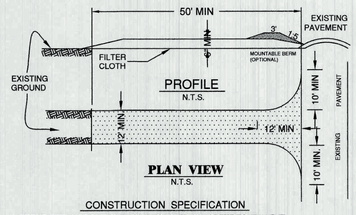
SOIL STOCKPILE DETAIL

N. T. S.



UNDERGROUND PIPE DETENTION SYSTEM DETAIL

N.T.S.

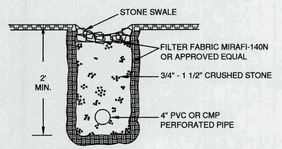


CONSTRUCTION SPECIFICATION

1) STONE SIZE- USE 2" STONE, OR RECYCLED CONCRETE EQUIVALENT.
2) LENGTH LESS THAN 50' (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.)
3) THICKNESS- NOT LESS THAN SIX (6) INCHES.
4) WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5) FILTER CLOTH- WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6) SURFACE WATER- ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7) MAINTENANCE- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8) WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE & WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9) PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE DETAIL

N. T. S.



TRENCH DRAIN w/SWALE

N.T.S.

REVISIONS					
DATE:	DESCRIPTION	BY/CK	DATE:	DESCRIPTION	BY/CK

NICHOLAS GABOURY P.E.

POOL PLAN DETAILS

BRANDON & LAUREN YASGUR
4 HARDSCRABBLE CIRCLE
TOWN OF NORTH CASTLE , WESTCHESTER COUNTY, NY.

BIBBO ASSOCIATES, LLP
293 ROUTE 100 SUITE 203
SOMERS, NEW YORK 10589
TEL. 914 277 5805

DATE:	10-8-2020
SCALE:	1" = 20'
FILE:	-
DSGN / CHK:	TSA
DRN. BY:	NG
SHT NO.	2 OF 2
DWG NO.	PP-1

TOWN OF NORTH CASTLE

WESTCHESTER COUNTY
17 Bedford Road
Armonk, New York 10504-1898

RESIDENTIAL PROJECT
REVIEW COMMITTEE
Adam R. Kaufman AICP, Chair

Telephone: (914) 273-3000 x 43
Fax: (914) 273-3554
www.nortcastleny.com

RESIDENTIAL PROJECT REVIEW COMMITTEE (RPRC) APPLICATION

Section I- PROJECT

ADDRESS: 4 HARDSCRABBLE CIRCLE, NORTH CASTLE, NY, 10504

Section III- DESCRIPTION OF WORK:

CONSTRUCTION OF NEW INGROUND SWIMMING POOL AND ASSOCIATED PATIO AREA

Section III- CONTACT INFORMATION:

APPLICANT: BRANDON YASGUR

ADDRESS: 4 HARDSCRABBLE CIRCLE, NORTH CASTLE, NY, 10504

PHONE: _____ MOBILE: _____ EMAIL: _____

PROPERTY OWNER: BRANDON YASGUR

ADDRESS: 4 HARDSCRABBLE CIRCLE, NORTH CASTLE, NY, 10504

PHONE: _____ MOBILE: _____ EMAIL: _____

PROFESSIONAL:: NICHOLAS GABOURY, P.E.

ADDRESS: 293 ROUTE 100 SUITE 203, SOMERS, NY 10589

PHONE: 914-277-5805 MOBILE: _____

EMAIL: NGABOURY@BIBBOASSOCIATES.COM

Section IV- PROPERTY INFORMATION:

Zone: R-1A Tax ID (lot designation) 101.02-3-42

Town of North Castle
Residential Project Review Committee
17 Bedford Road Armonk, New York 10504
(914) 273-3542 (914) 273-3554 (fax)

RPRC COMPLETENESS REVIEW FORM

This form represents the standard requirements for a completeness review for all Residential Project Review Committee submissions. Failure to provide all of the information requested will result in a determination that the application is incomplete.

Project Name on Plan: YASGUR

☒ Initial Submittal ☐ Revised Preliminary

Street Location: 4 HARDSCRABBLE CIRCLE, NORTH CASTLE, NY, 10504

Zoning District: R-1A Property Acreage: 1.6 Tax Map Parcel ID: 101.02-3-42

Date: Yasgur

DEPARTMENTAL USE ONLY

Date Filed: _____ Staff Name: _____

Preliminary Plan Completeness Review Checklist
Items marked with a ☒ are complete, items left blank ☐ are incomplete and must be completed, "NA" means not applicable.

☐ 1. Plan prepared by a registered architect or professional engineer

☐ 2. Aerial photo (Google Earth) showing the applicant's entire property and adjacent properties and streets

☐ 3. Map showing the applicant's entire property and adjacent properties and streets

☐ 4. A locator map at a convenient scale

☐ 5. The proposed location, use and design of all buildings and structures

☐ 6. Existing topography and proposed grade elevations

☐ 7. Location of drives

☐ 8. Location of all existing and proposed site improvements, including drains, culverts, retaining walls and fences

☐ 9. Description of method of water supply and sewage disposal and location of such facilities

☐ 10. The name and address of the applicant, property owner(s) if other than the applicant and of the planner, engineer, architect, surveyor and/or other professionals engaged to work

☐ 11. Submission of a Zoning Conformance Table depicting the plan's compliance with the minimum requirements of the Zoning District

☐ 12. If a tree removal permit is being sought, submission of a plan depicting the location and graphical removal status of all Town-regulated trees within the proposed area of disturbance. In addition, the tree plan shall be accompanied by a tree inventory includes a unique ID number, the species, size, health condition and removal status of each tree.

☐ 13. If a wetlands permit is being sought, identification of the wetland and the 100-foot wetland buffer.

More information about the items required herein can be obtained from the North Castle Planning Department. A copy of the Town Code can be obtained from Town Clerk or on the North Castle homepage: http://www.northcastleny.com/townhall.html

_____ On this date, all items necessary for a technical review of the proposed site plan have been submitted and constitute a COMPLETE APPLICATION.

LOCATION MAP
NTS

PLAN
GRAPHIC SCALE

40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

REVISIONS					
DATE:	DESCRIPTION	BY/CK	DATE:	DESCRIPTION	BY/CK

AERIAL MAP

BRANDON & LAUREN YASGUR
4 HARDSCRABBLE CIRCLE
TOWN OF NORTH CASTLE , WESTCHESTER COUNTY, NY.

BIBBO ASSOCIATES, LLP
293 ROUTE 100 SUITE 203
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DATE:	11-9-20
SCALE:	1" = 40'
FILE:	-
DSGN / CHK:	TSA
DRN. BY	NT
SHT NO.	FIGURE 1
DWG NO.	AM