

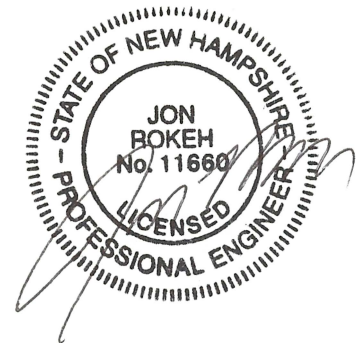
ROKEH CONSULTING LLC.

DRAINAGE SUMMARY
MAP F LOT 3-2

Isaac Frye Holdings, LLC
586 Turnpike Road
New Ipswich, NH 03071

January 4, 2022
Revised
February 28, 2023
September 25, 2023
January 11, 2024

Prepared By:
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ROKEH CONSULTING LLC.

Re: ***Stormwater Management Calculations Residential use for a Manufactured home Tax map F Lot 3-2 Isaac Frye Highway Wilton, NH***

INTRODUCTION

Please find attached the stormwater calculations for the proposed home site to be constructed on the above referenced property. This information is provided in accordance with the Town of Wilton Stormwater Management Ordinance. The following narrative provides the design parameters and findings of the analysis.

PREDEVELOPMENT CONDITIONS

The subject property is approximately 8.86 acres in size. The site currently is a moderately sloping vacant wooded lot with a narrow ROW to the back part of the lot. Drainage that is to be analyzed is divided up into three drainage sub catchments with three design nodes. Sub catchment 1 is at the front of the lot and is the extension of the common driveway into the site with some offsite drainage to the north side of the driveway. Sub catchment 2 is the driveway along the narrow ROW and a portion of drainage from the north. This area drains to a low point on the south property line. And sub catchment 3 is the area that will be developed as well a large portion to the North. This area drains to the wetland in the Northeast. The soils on the site are very suitable for this proposal as they are Colton gravelly sandy loam series with a Hydrologic Soil Rating of Class A.

POSTDEVELOPMENT CONDITIONS

The subject property is approximately 8.86 acres in size. The new construction proposed for the site is to provide a gravel driveway entrance and the gravel area for the proposed manufactured home. The lot area has been mined in the back of the lot area and has been previously cleared of vegetation. This disturbed area in the back of the manufactured home will be reclaimed and vegetated to maintain a stable natural slope.

Drainage areas as noted above will remain the same with the addition of two shallow infiltration ponds to mitigate the pre and post development drainage flows as required pre and post drainage design standards. Drainage design for the residential structure, parking area and appurtenances meet all town requirements and will have a minimum stormwater impact. A SWPPP permit will be not required as the total is under the requirement threshold for EPA of 1 acre. The overall disturbance is approximately 39,450 sf. No other permits are required about surface drainage. Two shallow infiltration ponds are provided one along the edge of the driveway accessing the site and one located at the house site. The ponds are approximately two feet deep within the B soil horizon. These ponds use infiltration and detention to mitigate stormwater. The infiltration rate for the ponds is provided from the SSSNEE publication # 5 Ksat values for NH soils. Infiltration pond 1 falls along a soil line but test pits confirm that is a Colton soil with no shwt. The Low Ksat value for Colton soil is 6 in the B horizon 50% of the lowest rate for design (3 inches per hour) Infiltration Pond 2 falls in the Monadnock soil group. The low Ksat for Monadnock in the B horizon is .6 inches per hour an infiltration rate for at 50% or .30 inches per hour is used for design purposes. Two test pits were performed at each pond area see the attached test pit report. The soils on the site are very suitable for this proposal as they are

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gravelly sandy loam series.

The drainage calculations have been prepared to determine whether stormwater management practices are sufficient.

Methodology:

The drainage analysis was completed using Hydro Cad Version 10.00-22, a stormwater modeling program utilizing TR-20 and TR-55 methodology. This program performs both the hydrologic computations for determination of runoff flows, and the hydraulic calculations for pipe, ditch, or pond design. Calculations were performed for the 2, 10, 25 and 50-year frequency storms in accordance with Town and State of NH regulations. The following design parameters were used and the results are as follows:

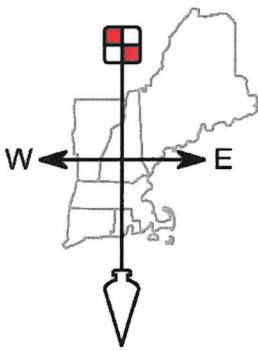
Rainfall distribution: Type III

2 yr event 2.98"
10 yr event 4.44"
25 yr event 5.57"
50 yr event 6.63"

	Pre/Post results	(CFS)		
	POA1		POA2	POA3
2 year storm event	0.16 / 0.15		0.07 / .05	0.14 / 0.14
10 year storm event	0.92 / 0.91		1.02 / 0.49	1.05 / 1.03
25 year storm event	1.82 / 1.81		2.43 / 2.01	2.22 / 2.18
50 year storm event	2.80 / 2.78		4.10 / 3.60	3.52 / 3.46

Methodology:

The drainage analysis was completed using Hydro Cad Version 10.00-22, a stormwater modeling program utilizing TR-20 and TR-55 methodology. This program performs both the hydrologic computations for determination of runoff flows, and the hydraulic calculations for pipe, ditch, or pond design. Calculations were performed for the 2, 10, 25 and 50-year frequency storms in accordance with local regulations. Based on the results of the analysis there will be no adverse effects on abutters and downstream properties.



FIELDSTONE

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LAND CONSULTANTS, PLLC

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www.FieldstoneLandConsultants.com

**TEST PIT DATA
SAN-KEN
ISAAC FRYE HIGHWAY
LOT F-3-2
WILTON, NH**

8/2/23

Test Pit #1

0-4" - 10YR 3/3 Dark brown loam, granular, friable

4-18" - 10YR 5/6 Yellowish Brown fine-to-med sand, single grain, loose

18-33" - 2.5Y 5/6 Light Olive Brown fine sand, single grain, loose

33-50" - 2.5Y 6/4 Orange brown coarse-to-fine sand, single grain, loose

50-75" - 10YR 4/6 Dark Yellowish Brown coarse sand, single grain, loose

ESHWT = 48" Observed Water = 55" Ledge/Boulders = None Roots = 48"

Est. Perc Rate = 2 min/in @ 24"

8/2/23

Test Pit #2

0-8" - 10YR 3/3 Dark brown loam, granular, friable mixed fill / disturbed

8-24" - 10YR 5/6 Yellowish Brown fine-to-med sand, single grain, loose

24-84" - 10YR 4/6 Dark Yellowish Brown med-coarse sandy gravel, single grain, loose

ESHWT = 48" Observed Water = 60" Ledge/Boulders = None Roots = 48"

Est. Perc Rate = 2 min/in @ 24"

8/2/23

Test Pit #3

0-23" - 10YR 4/6 Dark Yellowish Brown med-coarse sand, w/ fine sand lenses, single grain, loose

23-60" - 2.5Y 5/6 Light Olive Brown fine-med sand, single grain, loose

60-110" - 2.5Y 4/4 Olive Brown med-coarse sandy gravel single grain, loose

ESHWT = None Observed Water = None Ledge/Boulders = None Roots = 70"

Est. Perc Rate = 2 min/in @ 24"

8/2/23

Test Pit #4

0-20" - 2.5Y 6/6 Olive Yellow med-coarse sand, single grain, loose / disturbed

20-64" - 2.5Y 4/3 Olive Brown med-coarse sandy gravel single grain, loose

64-110" - 2.5Y 6/4 Light Yellowish Brown fine-med- sand, granular friable

ESHWT = None Observed Water = None Ledge/Boulders = None Roots = 84"

Est. Perc Rate = 2 min/in @ 24"

8/2/23

Test Pit #5

0-28" - 10YR 5/6 Yellowish Brown fine-to-med sand, single grain, loose

28-36" - 10YR 3/3 Dark brown loamy sand, granular, friable

36-44" - 10YR 5/6 Yellowish Brown fine-to-med sand, single grain, loose

44-110" - 2.5Y 6/4 Light Yellowish Brown fine-med- sand, granular friable

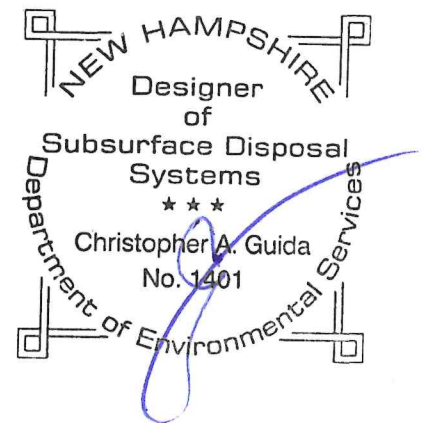
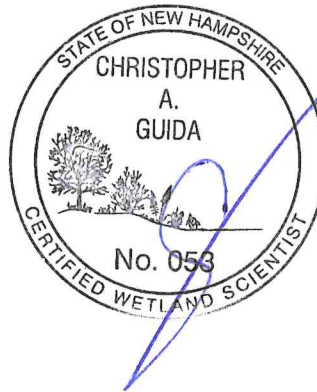
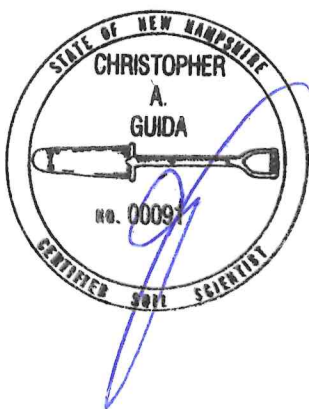
ESHWT = None Observed Water = None Ledge/Boulders = None Roots = 90"

Est. Perc Rate = 2 min/in @ 24"

Test Pits were logged by:



Christopher A. Guida, CSS, CWS
NH Certified Soils Scientist & Wetland Scientist
NH Licensed Septic Designer #1401



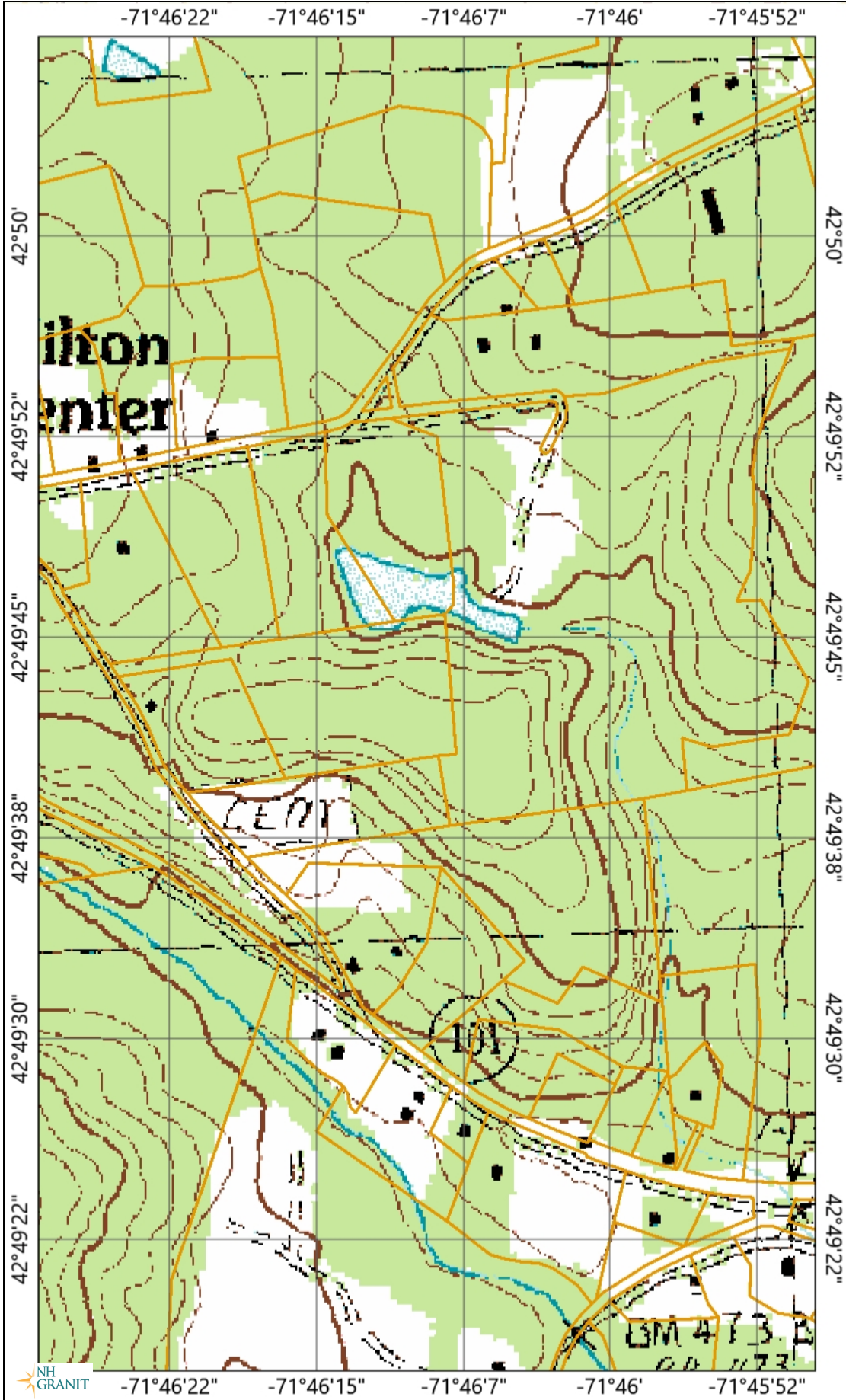
Soil Series	legend number	Ksat low - B in/hr	Ksat high - B in/hr	Ksat low - C in/hr	Ksat high - C in/hr	Hyd. Grp.	Group	Land Form	Temp.	Soil Textures	Spodosol ?	Other
Abenaki	501	0.6	2.0	6.00	99.0	B	2	Outwash and Stream Terraces	frigid	loamy over sandy-skeletal	no	loamy over gravelly
Acton	146	2.0	20.0	2.00	20.0	B	3	Loose till, sandy textures	mesic	sandy-skeletal	no	cobbly loamy sand
Adams	36	6.0	20.0	20.00	99.0	A	1	Outwash and Stream Terraces	frigid	sandy	yes	
Agawam	24	6.0	20.0	20.00	100.0	B	2	Outwash and Stream Terraces	mesic	loamy over sandy	no	loamy over sand/gravel
Allagash	127	0.6	2.0	6.00	20.0	B	2	Outwash and Stream Terraces	frigid	loamy over sandy	yes	loamy over sandy
Au Gres	516					B	5	Outwash and Stream Terraces	frigid	sandy	yes	single grain, loose
Bangor	572	0.6	2.0	0.60	2.0	B	2	Friable till, silty, schist & phyllite	frigid	loamy	yes	silt loam
Becket	56	0.6	2.0	0.06	0.6	C	3	Firm, platy, sandy till	frigid	loamy	yes	gravelly sandy loam in Cd
Belgrade	532	0.6	2.0	0.06	2.0	B	3	Terraces and glacial lake plains	mesic	silty	no	strata of fine sand
Bemis	224	0.6	0.2	0.00	0.2	C	5	Firm, platy, loamy till	cryic	loamy	no	
Berkshire	72	0.6	6.0	0.60	6.0	B	2	Loose till, loamy textures	frigid	loamy	yes	fine sandy loam
Bernardston	330	0.6	2.0	0.06	0.2	C	3	Firm, platy, silty till, schist & phyllite	mesic	loamy	no	channery silt loam in Cd
Bice	226	0.6	6.0	0.60	6.0	B	2	Loose till, loamy textures	frigid	loamy	no	sandy loam
Biddeford	234	0.0	0.2	0.00	0.2	D	6	Silt and Clay Deposits	frigid	fine	no	organic over clay
Binghamville	534	0.2	2.0	0.06	0.2	D	5	Terraces and glacial lake plains	mesic	silty	no	
Boscawen	220	6.0	20.0	20.00	100.0	A	1	Outwash and Stream Terraces	frigid	sandy-skeletal	no	loamy cap
Boxford	32	0.1	0.2	0.00	0.2	C	3	Silt and Clay Deposits	mesic	fine	no	silty clay loam
Brayton	240	0.6	2.0	0.06	0.6	C	5	Firm, platy, silty till, schist & phyllite	frigid	loamy	no	
Buckland	237	0.6	2.0	0.06	0.2	C	3	Firm, platy, loamy till	frigid	loamy	no	loam in Cd
Bucksport	895					D	6	Organic Materials - Freshwater	frigid	sapric	no	deep organic
Burnham	131	0.2	6.0	0.02	0.2	D	6	Firm, platy, silty till, schist & phyllite	frigid	loamy	no	organic over silt
Buxton	232	0.1	0.6	0.00	0.2	C	3	Silt and Clay Deposits	frigid	fine	no	silty clay
Cabot	589	0.6	2.0	0.06	0.2	D	5	Firm, platy, silty till, schist & phyllite	frigid	loamy	no	
Caesar	526	20.0	100.0	20.00	100.0	A	1	Outwash and Stream Terraces	mesic	coarse sand	no	
Canaan	663	2.0	20.0	2.00	20.0	C	4	Weathered Bedrock Till	frigid	loamy-skeletal	yes	less than 20 in. deep
Canterbury	166	0.6	2.0	0.06	0.6	C	3	Firm, platy, loamy till	frigid	loamy	no	loam in Cd
Canton	42	2.0	6.0	6.00	20.0	B	2	Loose till, sandy textures	mesic	loamy over sandy	no	loamy over loamy sand
Cardigan	357	0.6	2.0	0.60	2.0	B	4	Friable till, silty, schist & phyllite	mesic	loamy	no	20 to 40 in. deep
Catden	296					A/D	6	Organic Materials - Freshwater	mesic	sapric	no	deep organic
Champlain	35	6.0	20.0	20.00	100.0	A	1	Outwash and Stream Terraces	frigid	gravelly sand	no	
Charles	209	0.6	100.0	0.60	100.0	C	5	Flood Plain (Bottom Land)	frigid	silty	no	
Charlton	62	0.6	6.0	0.60	6.0	B	2	Loose till, loamy textures	mesic	loamy	no	fine sandy loam
Chatfield	89	0.6	6.0	0.60	6.0	B	4	Loose till, bedrock	mesic	loamy	no	20 to 40 in. deep
Chatfield Var.	289	0.6	6.0	0.60	6.0	B	3	Loose till, bedrock	mesic	loamy	no	mwd to swpd
Chesuncook	126	0.6	2.0	0.02	0.2	C	3	Firm, platy, silty till, schist & phyllite	frigid	loamy	yes	channery silt loam in Cd
Chichester	442	0.6	2.0	2.00	6.0	B		Loose till, sandy textures	frigid	loamy over sandy	no	loamy over loamy sand
Chocorua	395			6.00	20.0	D	6	Organic Materials - Freshwater	frigid	sandy or sandy-skeletal	no	organic over sand
Cohas	505	0.6	2.0	0.60	100.0	C	5	Flood Plain (Bottom Land)	frigid	co. loamy over sandy (skeletal)	no	
Colonel	927	0.6	2.0	0.06	0.6	C	3	Firm, platy, loamy till	frigid	loamy	yes	loam in Cd
Colton	22	6.0	20.0	20.00	100.0	A	1	Outwash and Stream Terraces	frigid	sandy-skeletal	yes	
Colton, gravelly	21	6.0	20.0	20.00	100.0	A	1	Outwash and Stream Terraces	frigid	sandy-skeletal	yes	gravelly surface
Croghan	613	20.0	100.0	20.00	100.0	B	3	Outwash and Stream Terraces	frigid	sandy	yes	single grain in C
Dartmouth	132	0.6	2.0	0.06	0.6	B	3	Terraces and glacial lake plains	mesic	silty	no	thin strata silty clay loam
Deerfield	313	6.0	20.0	20.00	100.0	B	3	Outwash and Stream Terraces	mesic	sandy	no	single grain in C
Dixfield	378	0.6	2.0	0.06	0.6	C	3	Firm, platy, loamy till	frigid	loamy	yes	fine sandy loam in Cd
Dixmont	578	0.6	2.0	0.60	2.0	C	3	Friable till, silty, schist & phyllite	frigid	loamy	yes	silt loam, platy in C
Duane	413	6.0	20.0	6.00	20.0	B	3	Outwash and Stream Terraces	frigid	sandy-skeletal	yes	cemented (ortstein)
Dutchess	366	0.6	2.0	0.60	2.0	B	2	Friable till, silty, schist & phyllite	mesic	loamy	no	very channery
Eldridge	38	6.0	20.0	0.06	0.6	C	3	Sandy/loamy over silt/clay	mesic	sandy over loamy	no	
Elliottsville	128	0.6	2.0	0.60	2.0	B	4	Friable till, silty, schist & phyllite	frigid	loamy	yes	20 to 40 in. deep
Elmridge	238	2.0	6.0	0.00	0.2	C	3	Sandy/loamy over silt/clay	mesic	loamy over clayey	no	
Elmwood	338	2.0	6.0	0.00	0.2	C	3	Sandy/loamy over silt/clay	frigid	loamy over clayey	no	
Finch	116					C	3	Outwash and Stream Terraces	frigid	sandy	yes	cemented (ortstein)

Soil Series	legend number	Ksat low - B in/hr	Ksat high - B in/hr	Ksat low - C in/hr	Ksat high - C in/hr	Hyd. Grp.	Group	Land Form	Temp.	Soil Textures	Spodosol ?	Other
Fryeburg	208	0.6	2.0	2.00	6.0	B	2	Flood Plain (Bottom Land)	frigid	silty	no	very fine sandy loam
Gilmanton	478	0.6	2.0	0.06	0.6	C	3	Firm, platy, loamy till	frigid	loamy	no	fine sandy loam in Cd
Glebe	671	2.0	6.0	2.00	6.0	C	4	Loose till, bedrock	cryic	loamy	yes	20 to 40 in. deep
Gloucester	11	6.0	20.0	6.00	20.0	A	1	Sandy Till	mesic	sandy-skeletal	no	loamy cap
Glover	NA	0.6	2.0	0.60	2	D	4	Friable till, silty, schist & phyllite	frigid	loamy	no	less than 20 in. deep
Grange	433	0.6	2.0	0.60	2.0	C	5	Outwash and Stream Terraces	frigid	co. loamy over sandy (skeletal)	no	
Greenwood	295					A/D	6	Organic Materials - Freshwater	frigid	hemic	no	deep organic
Groveton	27	0.6	2.0	0.60	6.0	B	2	Outwash and Stream Terraces	frigid	loamy	yes	loamy over sandy
Hadley	8	0.6	2.0	0.60	6.0	B	2	Flood Plain (Bottom Land)	mesic	silty	no	strata of fine sand
Hadley	108	0.6	2.0	0.60	6.0	B	2	Flood Plain (Bottom Land)	mesic	silty	no	strata of fine sand, occ flooded
Hartland	31	0.6	2.0	0.20	2.0	B	2	Terraces and glacial lake plains	mesic	silty	no	very fine sandy loam
Haven	410	0.6	2.0	20.00	100.0	B	2	Outwash and Stream Terraces	mesic	loamy over sandy	no	loamy over sand/gravel
Henniker	46	0.6	2.0	0.06	0.6	C	3	Firm, platy, sandy till	frigid	loamy	no	loamy sand in Cd
Hermon	55	2.0	20.0	6.00	20.0	A	1	Sandy Till	frigid	sandy-skeletal	yes	loamy cap
Hinckley	12	6.0	20.0	20.00	100.0	A	1	Outwash and Stream Terraces	mesic	sandy-skeletal	no	
Hitchcock	130	0.6	2.0	0.06	0.6	B	3	Terraces and glacial lake plains	mesic	silty	no	silt loam to silt in C
Hogback	91	2.0	6.0	2.00	6.0	C	4	Loose till, bedrock	frigid	loamy	yes	less than 20 in. deep
Hollis	86	0.6	6.0	0.60	6.0	C/D	4	Loose till, bedrock	mesic	loamy	no	less than 20 in. deep
Hoosic	510	2.0	20.0	20.00	100.0	A	1	Outwash and Stream Terraces	mesic	sandy-skeletal	no	slate, loamy cap
Houghtonville	795	0.6	6.0	0.60	6.0	B	2	Loose till, loamy textures	frigid	loamy	yes	cobbly fine sandy loam
Howland	566	0.6	2.0	0.06	0.2	C	3	Firm, platy, silty till, schist & phyllite	frigid	loamy	yes	silt loam, platy in Cd
Ipswich	397					D	6	Tidal Flat	mesic	hemic/sapric	no	deep organic
Kearsarge	359	0.6	2.0	0.60	2.0	B	4	Friable till, silty, schist & phyllite	mesic	loamy	no	less than 20 in. deep
Kinsman	614	6.0	20.0	6.00	20.0	C	5	Outwash and Stream Terraces	frigid	sandy	yes	
Lanesboro	228	0.6	2.0	0.06	0.2	C	3	Firm, platy, silty till, schist & phyllite	frigid	loamy	no	channery silt loam in Cd
Leicester	514	0.6	6.0	0.60	20.0	C	5	Loose till, loamy textures	mesic	loamy	no	
Lim	3	0.6	2.0	6.00	20.0	C	5	Flood Plain (Bottom Land)	mesic	loamy	no	
Limerick	109	0.6	2.0	0.60	2.0	C	5	Flood Plain (Bottom Land)	mesic	silty	no	
Lombard	259	0.6	6.0	2.00	20.0	C/D	2	Weathered bedrock, phyllite	frigid	loamy	no	very channery
Lovewell	307	0.6	2.0	0.60	2.0	B	3	Flood Plain (Bottom Land)	frigid	silty	no	very fine sandy loam
Lyman	92	2.0	6.0	2.00	6.0	A/D	4	Loose till, bedrock	frigid	loamy	yes	less than 20 in. deep
Lyme	246	0.6	6.0	0.60	6.0	C	5	Loose till, sandy textures	frigid	loamy	no	
Machias	520	2.0	6.0	6.00	20.0	B	3	Outwash and Stream Terraces	frigid	sandy or sandy-skeletal	yes	strata sand/gravel in C
Macomber	252	0.6	2.0	0.60	2.0	C	4	Friable till, silty, schist & phyllite	frigid	loamy-skeletal	yes	20 to 40 in. deep
Madawaska	28	0.6	2.0	6.00	20.0	B	3	Outwash and Stream Terraces	frigid	loamy over sandy	yes	sandy or sandy-skeletal
Madawaska, aquet	48	0.6	2.0	6.00	20.0	B	3	Outwash and Stream Terraces	frigid	loamy over sandy	yes	sandy or sandy-skeletal
Marlow	76	0.6	2.0	0.06	0.6	C	3	Firm, platy, loamy till	frigid	loamy	yes	fine sandy loam in Cd
Masardis	23	6.0	20.0	6.00	20.0	A	1	Outwash and Stream Terraces	frigid	sandy-skeletal	yes	slate, loamy cap
Mashpee	315	6.0	20.0	6.00	20.0	B	5	Outwash and Stream Terraces	mesic	sandy	yes	
Matunuck	797			20.00	100.0	D	6	Tidal Flat	mesic	sandy	no	organic over sand
Maybid	134	0.0	0.2	0.00	0.2	D	6	Silt and Clay Deposits	mesic	fine	no	silt over clay
Meadowsedge	894					D	6	Organic Materials - Freshwater	frigid	peat	no	deep organic
Medomak	406	0.6	2.0	0.60	2.0	D	6	Flood Plain (Bottom Land)	frigid	silty	no	organic over silt
Melrose	37	2.0	6.0	0.00	0.2	C	3	Sandy/loamy over silt/clay	frigid	loamy over clayey	no	silty clay loam in C
Merrimac	10	2.0	20.0	6.00	20.0	A	1	Outwash and Stream Terraces	mesic	gravelly sand	no	loamy cap
Metacomet	458	0.6	2.0	0.06	0.6	C	3	Firm, platy, sandy till	frigid	loamy	no	loamy sand in Cd
Metallak	404	6.0	100.0	6.00	100.0	B	3	Flood Plain (Bottom Land)	frigid	loamy over sandy	no	sandy or sandy-skeletal
Millis	39					C	3	Firm, platy, sandy till	frigid	loamy	yes	loamy sand in Cd
Millsite	251	0.6	6.0	0.60	6.0	C	4	Loose till, bedrock	frigid	loamy	no	20 to 40 in. deep
Monadnock	142	0.6	2.0	2.00	6.0	B	2	Loose till, sandy textures	frigid	loamy over sandy, sandy-skeletal	yes	gravelly loamy sand in C
Monarda	569	0.2	2.0	0.02	0.2	D	5	Firm, platy, silty till, schist & phyllite	frigid	loamy	no	
Monson	133	0.6	2.0	0.60	2.0	D	4	Friable till, silty, schist & phyllite	frigid	loamy	yes	less than 20 in. deep
Montauk	44	0.6	6.0	0.06	0.6	C	3	Firm, platy, sandy till	mesic	loamy	no	loamy sand in Cd
Moosilauke	414	6.0	20.0	6.00	20.0	C	5	Loose till, sandy textures	frigid	sandy	no	

ROKEH CONSULTING LLC.

USGS

Map by NH GRANIT



Legend

- Parcels
 - Parcel Polygons
 - Attributes for Additional Lines
- State
- County
- City/Town

Map Scale

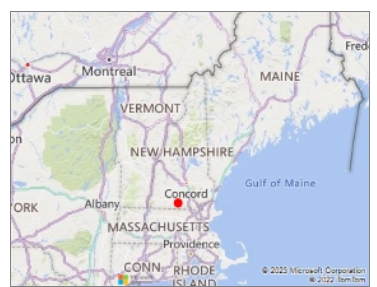
1: 6,494

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Map Generated: 2/26/2023



Notes



ROKEH CONSULTING LLC.

AERIAL PHOTO





Frye Hwy

Isaac Frye Hwy

Isaac Frye Hwy

ROKEH CONSULTING LLC.

EXTREME PRECIPITATION

Extreme Precipitation Tables

Northeast Regional Climate Center

Data represents point estimates calculated from partial duration series. All precipitation amounts are displayed in inches.

Smoothing	Yes
State	New Hampshire
Location	
Longitude	71.735 degrees West
Latitude	42.843 degrees North
Elevation	0 feet
Date/Time	Fri, 07 Jan 2022 06:02:45 -0500

Extreme Precipitation Estimates

	5min	10min	15min	30min	60min	120min	1hr	2hr	3hr	6hr	12hr	24hr	48hr	1day	2day	4day	7day	10day	
1yr	0.28	0.43	0.53	0.69	0.86	1.09	0.75	1.01	1.25	1.57	1.97	2.48	2.75	2.19	2.64	3.03	3.81	4.37	1yr
2yr	0.33	0.51	0.64	0.84	1.06	1.33	0.91	1.21	1.54	1.92	2.39	2.98	3.34	2.63	3.21	3.73	4.46	5.07	2yr
5yr	0.39	0.61	0.77	1.03	1.32	1.67	1.14	1.51	1.94	2.42	3.01	3.74	4.26	3.31	4.10	4.73	5.59	6.24	5yr
10yr	0.44	0.70	0.88	1.20	1.56	1.99	1.34	1.79	2.31	2.90	3.59	4.44	5.13	3.93	4.93	5.67	6.63	7.30	10yr
25yr	0.53	0.83	1.06	1.46	1.94	2.50	1.67	2.24	2.92	3.66	4.54	5.57	6.56	4.93	6.31	7.21	8.31	8.99	25yr
50yr	0.59	0.94	1.21	1.70	2.30	2.99	1.98	2.65	3.50	4.39	5.42	6.63	7.91	5.87	7.61	8.66	9.87	10.53	50yr
100yr	0.68	1.09	1.41	2.00	2.72	3.56	2.35	3.14	4.17	5.23	6.46	7.89	9.55	6.98	9.18	10.39	11.73	12.35	100yr
200yr	0.77	1.25	1.62	2.33	3.22	4.25	2.78	3.73	4.99	6.26	7.71	9.39	11.54	8.31	11.10	12.47	13.95	14.48	200yr
500yr	0.92	1.52	1.98	2.88	4.04	5.35	3.48	4.68	6.30	7.91	9.74	11.83	14.83	10.47	14.26	15.89	17.55	17.89	500yr

Lower Confidence Limits

	5min	10min	15min	30min	60min	120min	1hr	2hr	3hr	6hr	12hr	24hr	48hr	1day	2day	4day	7day	10day	
1yr	0.20	0.31	0.38	0.51	0.63	0.78	0.55	0.76	1.02	1.35	1.68	2.19	2.42	1.94	2.33	2.51	3.47	3.90	1yr
2yr	0.32	0.49	0.61	0.82	1.01	1.19	0.87	1.17	1.35	1.74	2.24	2.88	3.24	2.55	3.12	3.60	4.32	4.93	2yr
5yr	0.36	0.55	0.68	0.93	1.19	1.40	1.02	1.36	1.62	2.09	2.67	3.44	3.95	3.05	3.80	4.34	5.16	5.82	5yr
10yr	0.39	0.60	0.74	1.04	1.34	1.56	1.16	1.53	1.76	2.38	3.02	3.97	4.60	3.51	4.42	5.01	5.88	6.60	10yr
25yr	0.44	0.67	0.83	1.19	1.56	1.81	1.35	1.77	2.04	2.83	3.54	4.70	5.65	4.16	5.44	6.06	7.00	7.79	25yr
50yr	0.47	0.72	0.90	1.29	1.73	2.04	1.50	2.00	2.29	3.23	3.99	5.38	6.63	4.76	6.38	6.99	7.98	8.83	50yr
100yr	0.51	0.76	0.96	1.38	1.90	2.30	1.64	2.25	2.57	3.22	4.52	6.16	7.80	5.45	7.50	8.09	9.10	10.02	100yr
200yr	0.55	0.82	1.04	1.50	2.10	2.58	1.81	2.53	2.87	3.59	5.14	7.06	9.19	6.25	8.84	9.36	10.36	11.37	200yr
500yr	0.60	0.90	1.16	1.68	2.39	3.04	2.06	2.97	3.36	4.15	6.12	8.48	11.48	7.50	11.04	11.37	12.31	13.44	500yr

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WEBB SOIL



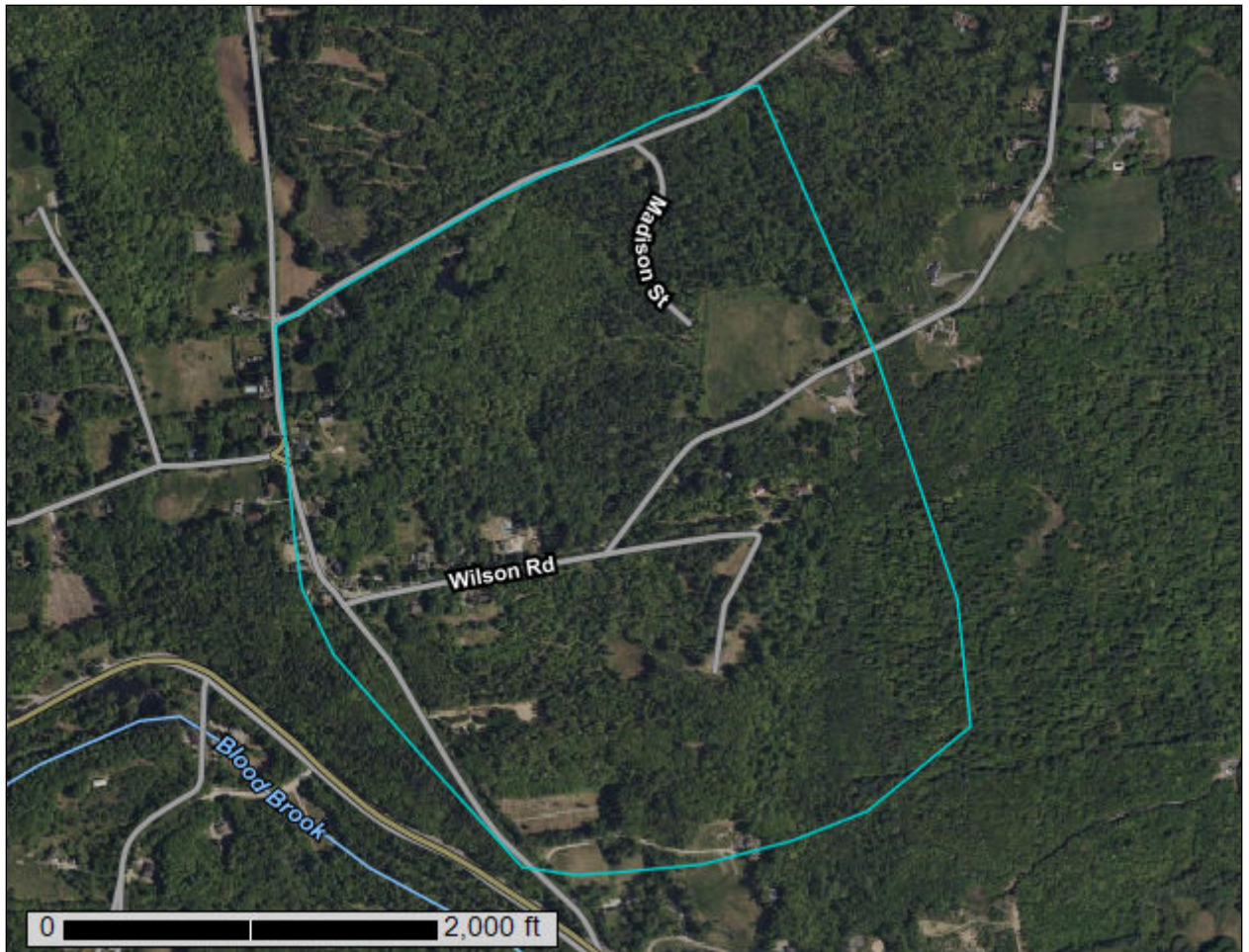
United States
Department of
Agriculture

NRCS

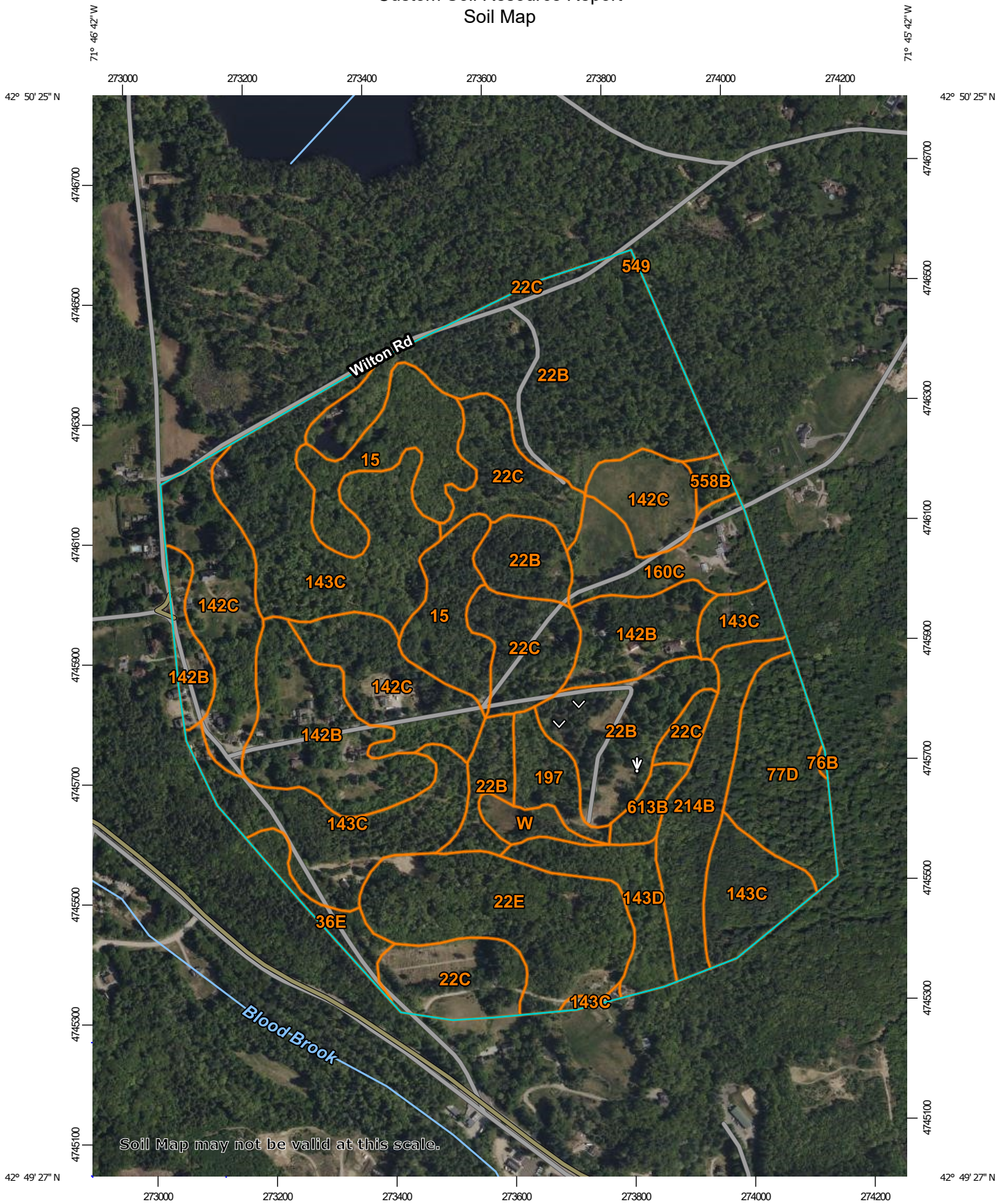
Natural
Resources
Conservation
Service

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

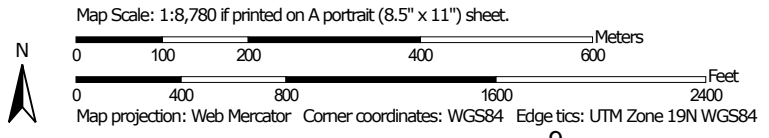
Custom Soil Resource Report for Hillsborough County, New Hampshire, Western Part



Custom Soil Resource Report Soil Map



Soil Map may not be valid at this scale.



Hillsborough County, New Hampshire, Western Part

15—Searsport muck

Map Unit Setting

National map unit symbol: 9chb
Elevation: 10 to 2,800 feet
Mean annual precipitation: 34 to 50 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 80 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition

Searsport and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Searsport

Setting

Landform: Outwash terraces
Parent material: Herbaceous organic material and/or woody organic material over outwash derived from granite and gneiss

Typical profile

O - 0 to 8 inches: muck
H - 8 to 60 inches: sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 6.00 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Available water supply, 0 to 60 inches: Low (about 5.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: A/D
Ecological site: F144BY303ME - Acidic Swamp
Hydric soil rating: Yes

Minor Components

Naumburg

Percent of map unit: 5 percent
Landform: Outwash terraces
Hydric soil rating: Yes

Chocorua

Percent of map unit: 5 percent

Custom Soil Resource Report

Landform: Bogs
Hydric soil rating: Yes

22B—Colton gravelly sandy loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2yfp
Elevation: 10 to 2,000 feet
Mean annual precipitation: 31 to 65 inches
Mean annual air temperature: 36 to 52 degrees F
Frost-free period: 90 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition

Colton and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Colton

Setting

Landform: Outwash deltas
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Base slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Sandy-skeletal glaciofluvial deposits

Typical profile

Ap - 0 to 7 inches: gravelly sandy loam
Bs - 7 to 14 inches: gravelly loamy sand
BC - 14 to 24 inches: very gravelly coarse sand
C - 24 to 65 inches: extremely gravelly coarse sand

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(1.42 to 14.17 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 2.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: A
Ecological site: F146XY071ME - Sandy

Custom Soil Resource Report

Hydric soil rating: No

Minor Components

Adams

Percent of map unit: 10 percent

Landform: Outwash deltas

Landform position (two-dimensional): Summit, backslope

Landform position (three-dimensional): Base slope

Down-slope shape: Linear

Across-slope shape: Convex

Hydric soil rating: No

Sheepscot

Percent of map unit: 3 percent

Landform: Outwash deltas

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Base slope

Down-slope shape: Concave

Across-slope shape: Linear

Hydric soil rating: No

Croghan

Percent of map unit: 2 percent

Landform: Outwash deltas

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Base slope

Down-slope shape: Linear

Across-slope shape: Concave

Hydric soil rating: No

22C—Colton gravelly sandy loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2yjf

Elevation: 10 to 2,000 feet

Mean annual precipitation: 31 to 65 inches

Mean annual air temperature: 36 to 52 degrees F

Frost-free period: 90 to 160 days

Farmland classification: Not prime farmland

Map Unit Composition

Colton and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Colton

Setting

Landform: Outwash terraces

Landform position (two-dimensional): Summit, backslope

Custom Soil Resource Report

Landform position (three-dimensional): Side slope, base slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Sandy-skeletal glaciofluvial deposits

Typical profile

Ap - 0 to 7 inches: gravelly sandy loam
Bs - 7 to 14 inches: gravelly loamy sand
BC - 14 to 24 inches: very gravelly coarse sand
C - 24 to 65 inches: extremely gravelly coarse sand

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(1.42 to 14.17 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 2.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: A
Ecological site: F146XY071ME - Sandy
Hydric soil rating: No

Minor Components

Adams

Percent of map unit: 10 percent
Landform: Outwash terraces
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Sheepscot

Percent of map unit: 3 percent
Landform: Outwash terraces
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Croghan

Percent of map unit: 2 percent
Landform: Outwash terraces
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave

Hydric soil rating: No

22E—Colton gravelly sandy loam, 15 to 60 percent slopes

Map Unit Setting

National map unit symbol: 2yjft
Elevation: 10 to 2,000 feet
Mean annual precipitation: 31 to 65 inches
Mean annual air temperature: 36 to 52 degrees F
Frost-free period: 90 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition

Colton and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Colton

Setting

Landform: Eskers, kames
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Side slope, crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Sandy-skeletal glaciofluvial deposits

Typical profile

Ap - 0 to 7 inches: gravelly sandy loam
Bs - 7 to 14 inches: gravelly loamy sand
BC - 14 to 24 inches: very gravelly coarse sand
C - 24 to 65 inches: extremely gravelly coarse sand

Properties and qualities

Slope: 15 to 60 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(1.42 to 14.17 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 2.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: F144BY601ME - Dry Sand
Hydric soil rating: No

Minor Components

Adams

Percent of map unit: 10 percent
Landform: Kames, eskers
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Side slope, crest
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Sheepscot

Percent of map unit: 3 percent
Landform: Kames, eskers
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: No

Croghan

Percent of map unit: 2 percent
Landform: Kames, eskers
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

36E—Adams loamy sand, 15 to 60 percent slopes

Map Unit Setting

National map unit symbol: 2wqnf
Elevation: 10 to 2,000 feet
Mean annual precipitation: 31 to 95 inches
Mean annual air temperature: 27 to 52 degrees F
Frost-free period: 90 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition

Adams and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Adams

Setting

Landform: Eskers
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Side slope

Custom Soil Resource Report

Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy glaciofluvial deposits

Typical profile

Ap - 0 to 7 inches: loamy sand
Bs - 7 to 21 inches: sand
BC - 21 to 27 inches: sand
C - 27 to 65 inches: sand

Properties and qualities

Slope: 15 to 60 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(1.42 to 14.17 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 3.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: F144BY601ME - Dry Sand
Hydric soil rating: No

Minor Components

Colton

Percent of map unit: 8 percent
Landform: Eskers
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Croghan

Percent of map unit: 5 percent
Landform: Eskers
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: No

Salmon

Percent of map unit: 2 percent
Landform: Eskers
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

76B—Marlow fine sandy loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2ty5f
Elevation: 590 to 1,710 feet
Mean annual precipitation: 31 to 95 inches
Mean annual air temperature: 27 to 52 degrees F
Frost-free period: 90 to 160 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Marlow and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Marlow

Setting

Landform: Mountains, hills
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountainbase, interfluve, nose slope, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy lodgment till derived from granite and/or loamy lodgment till derived from mica schist and/or loamy lodgment till derived from phyllite

Typical profile

Ap - 0 to 4 inches: fine sandy loam
E - 4 to 6 inches: fine sandy loam
Bs1 - 6 to 10 inches: fine sandy loam
Bs2 - 10 to 15 inches: fine sandy loam
Bs3 - 15 to 20 inches: fine sandy loam
BC - 20 to 24 inches: fine sandy loam
Cd - 24 to 65 inches: fine sandy loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 20 to 39 inches to densic material
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.01 to 1.42 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 3.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Custom Soil Resource Report

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: C

Ecological site: F144BY501ME - Loamy Slope (Northern Hardwoods)

Hydric soil rating: No

Minor Components

Peru

Percent of map unit: 7 percent

Landform: Mountains, hills

Landform position (two-dimensional): Backslope, footslope

Landform position (three-dimensional): Mountainbase, interfluve, nose slope, side slope

Microfeatures of landform position: Closed depressions, closed depressions

Down-slope shape: Concave

Across-slope shape: Concave

Hydric soil rating: No

Monadnock

Percent of map unit: 3 percent

Landform: Mountains, hills

Landform position (two-dimensional): Summit, shoulder, backslope

Landform position (three-dimensional): Mountainbase, interfluve, nose slope, side slope

Down-slope shape: Convex

Across-slope shape: Convex

Hydric soil rating: No

Pillsbury

Percent of map unit: 3 percent

Landform: Mountains, hills

Landform position (two-dimensional): Footslope, toeslope

Landform position (three-dimensional): Mountainbase, interfluve, nose slope, side slope

Microfeatures of landform position: Closed depressions, closed depressions

Down-slope shape: Concave

Across-slope shape: Concave

Hydric soil rating: Yes

Tunbridge

Percent of map unit: 2 percent

Landform: Mountains, hills

Landform position (two-dimensional): Summit, shoulder, backslope

Landform position (three-dimensional): Mountainbase, interfluve, nose slope, side slope

Down-slope shape: Convex

Across-slope shape: Convex

Hydric soil rating: No

77D—Marlow fine sandy loam, 15 to 35 percent slopes, very stony

Map Unit Setting

National map unit symbol: 2ty5s
Elevation: 390 to 2,030 feet
Mean annual precipitation: 31 to 95 inches
Mean annual air temperature: 27 to 55 degrees F
Frost-free period: 90 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition

Marlow, very stony, and similar soils: 86 percent
Minor components: 14 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Marlow, Very Stony

Setting

Landform: Mountains, hills
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountainflank, nose slope, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy lodgment till derived from granite and/or loamy lodgment till derived from mica schist and/or loamy lodgment till derived from phyllite

Typical profile

Oi - 0 to 2 inches: slightly decomposed plant material
A - 2 to 5 inches: fine sandy loam
E - 5 to 8 inches: fine sandy loam
Bs1 - 8 to 15 inches: fine sandy loam
Bs2 - 15 to 19 inches: fine sandy loam
BC - 19 to 33 inches: gravelly fine sandy loam
Cd - 33 to 65 inches: fine sandy loam

Properties and qualities

Slope: 15 to 35 percent
Surface area covered with cobbles, stones or boulders: 1.1 percent
Depth to restrictive feature: 20 to 41 inches to densic material
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.01 to 1.42 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 5.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Custom Soil Resource Report

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: C

Ecological site: F144BY501ME - Loamy Slope (Northern Hardwoods)

Hydric soil rating: No

Minor Components

Tunbridge, very stony

Percent of map unit: 5 percent

Landform: Mountains, hills

Landform position (two-dimensional): Summit, shoulder, backslope

Landform position (three-dimensional): Mountainflank, nose slope, side slope

Down-slope shape: Convex

Across-slope shape: Convex

Hydric soil rating: No

Peru, very stony

Percent of map unit: 4 percent

Landform: Mountains, hills

Landform position (two-dimensional): Backslope, footslope

Landform position (three-dimensional): Mountainflank, nose slope, side slope

Microfeatures of landform position: Open depressions, open depressions

Down-slope shape: Concave

Across-slope shape: Concave

Hydric soil rating: No

Berkshire, very stony

Percent of map unit: 3 percent

Landform: Mountains, hills

Landform position (two-dimensional): Summit, shoulder, backslope

Landform position (three-dimensional): Mountainflank, nose slope, side slope

Down-slope shape: Convex

Across-slope shape: Convex

Hydric soil rating: No

Pillsbury, very stony

Percent of map unit: 2 percent

Landform: Mountains, hills

Landform position (two-dimensional): Footslope, toeslope

Landform position (three-dimensional): Mountainflank, nose slope, side slope

Microfeatures of landform position: Open depressions, open depressions

Down-slope shape: Concave

Across-slope shape: Concave

Hydric soil rating: Yes

142B—Monadnock fine sandy loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2wlm3

Elevation: 390 to 1,570 feet

Mean annual precipitation: 31 to 95 inches

Custom Soil Resource Report

Mean annual air temperature: 27 to 55 degrees F

Frost-free period: 90 to 150 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Monadnock and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Monadnock

Setting

Landform: Mountains, hills

Landform position (two-dimensional): Summit, shoulder, backslope

Landform position (three-dimensional): Mountainbase, interfluve, base slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Loamy supraglacial meltout till derived from phyllite and/or granite and gneiss and/or mica schist over sandy and gravelly supraglacial meltout till derived from phyllite and/or granite and gneiss and/or mica schist

Typical profile

Ap - 0 to 7 inches: fine sandy loam

Bs1 - 7 to 9 inches: fine sandy loam

Bs2 - 9 to 19 inches: gravelly fine sandy loam

BC - 19 to 22 inches: gravelly fine sandy loam

2C1 - 22 to 42 inches: gravelly loamy sand

2C2 - 42 to 65 inches: gravelly loamy sand

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: 15 to 30 inches to strongly contrasting textural stratification

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.03 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)

Available water supply, 0 to 60 inches: Low (about 3.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2s

Hydrologic Soil Group: B

Ecological site: F144BY505ME - Loamy over Sandy

Hydric soil rating: No

Minor Components

Berkshire

Percent of map unit: 11 percent

Landform: Mountains, hills

Landform position (two-dimensional): Summit, shoulder, backslope

Landform position (three-dimensional): Mountainbase, interfluve, base slope

Down-slope shape: Convex

Custom Soil Resource Report

Across-slope shape: Convex
Hydric soil rating: No

Skerry

Percent of map unit: 6 percent
Landform: Mountains, hills
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Mountainbase, interfluve, base slope
Microfeatures of landform position: Closed depressions, closed depressions
Down-slope shape: Convex, concave
Across-slope shape: Linear, concave
Hydric soil rating: No

Cabot

Percent of map unit: 2 percent
Landform: Mountains, hills
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Mountainbase, interfluve, base slope
Microfeatures of landform position: Closed depressions, closed depressions
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Tunbridge

Percent of map unit: 1 percent
Landform: Mountains, hills
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountainbase, interfluve, base slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

142C—Monadnock fine sandy loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2wlm4
Elevation: 390 to 1,640 feet
Mean annual precipitation: 31 to 95 inches
Mean annual air temperature: 27 to 55 degrees F
Frost-free period: 90 to 150 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Monadnock and similar soils: 81 percent
Minor components: 19 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Monadnock

Setting

Landform: Mountains, hills

Custom Soil Resource Report

Landform position (two-dimensional): Summit, shoulder, backslope

Landform position (three-dimensional): Mountainflank, mountainbase, interfluve, nose slope, side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Loamy supraglacial meltout till derived from phyllite and/or granite and gneiss and/or mica schist over sandy and gravelly supraglacial meltout till derived from phyllite and/or granite and gneiss and/or mica schist

Typical profile

Ap - 0 to 7 inches: fine sandy loam

Bs1 - 7 to 9 inches: fine sandy loam

Bs2 - 9 to 19 inches: gravelly fine sandy loam

BC - 19 to 22 inches: gravelly fine sandy loam

2C1 - 22 to 42 inches: gravelly loamy sand

2C2 - 42 to 65 inches: gravelly loamy sand

Properties and qualities

Slope: 8 to 15 percent

Depth to restrictive feature: 15 to 30 inches to strongly contrasting textural stratification

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.03 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)

Available water supply, 0 to 60 inches: Low (about 3.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: B

Ecological site: F144BY505ME - Loamy over Sandy

Hydric soil rating: No

Minor Components

Berkshire

Percent of map unit: 10 percent

Landform: Mountains, hills

Landform position (two-dimensional): Summit, shoulder, backslope

Landform position (three-dimensional): Mountainflank, mountainbase, interfluve, nose slope, side slope

Down-slope shape: Convex

Across-slope shape: Convex

Hydric soil rating: No

Skerry

Percent of map unit: 6 percent

Landform: Mountains, hills

Landform position (two-dimensional): Backslope, footslope

Landform position (three-dimensional): Mountainflank, mountainbase, interfluve, nose slope, side slope

Microfeatures of landform position: Closed depressions, closed depressions, open depressions, open depressions

Custom Soil Resource Report

Down-slope shape: Convex, concave
Across-slope shape: Linear, concave
Hydric soil rating: No

Cabot

Percent of map unit: 2 percent
Landform: Mountains, hills
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Mountainflank, mountainbase, interfluve, nose slope, side slope
Microfeatures of landform position: Closed depressions, closed depressions, open depressions, open depressions
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Tunbridge

Percent of map unit: 1 percent
Landform: Mountains, hills
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountainflank, mountainbase, interfluve, nose slope, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

143C—Monadnock fine sandy loam, 8 to 15 percent slopes, very stony

Map Unit Setting

National map unit symbol: 2wlm7
Elevation: 360 to 1,670 feet
Mean annual precipitation: 31 to 95 inches
Mean annual air temperature: 27 to 55 degrees F
Frost-free period: 90 to 150 days
Farmland classification: Farmland of local importance

Map Unit Composition

Monadnock, very stony, and similar soils: 79 percent
Minor components: 21 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Monadnock, Very Stony

Setting

Landform: Mountains, hills
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountainflank, mountainbase, interfluve, nose slope, side slope
Down-slope shape: Convex
Across-slope shape: Convex

Custom Soil Resource Report

Parent material: Loamy supraglacial meltout till derived from phyllite and/or granite and gneiss and/or mica schist over sandy and gravelly supraglacial meltout till derived from phyllite and/or granite and gneiss and/or mica schist

Typical profile

Oe - 0 to 3 inches: moderately decomposed plant material
E - 3 to 8 inches: fine sandy loam
Bs1 - 8 to 10 inches: fine sandy loam
Bs2 - 10 to 12 inches: fine sandy loam
Bs3 - 12 to 22 inches: gravelly fine sandy loam
BC - 22 to 25 inches: gravelly fine sandy loam
2C1 - 25 to 45 inches: gravelly loamy sand
2C2 - 45 to 65 inches: gravelly loamy sand

Properties and qualities

Slope: 8 to 15 percent
Surface area covered with cobbles, stones or boulders: 1.1 percent
Depth to restrictive feature: 18 to 36 inches to strongly contrasting textural stratification
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.03 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: B
Ecological site: F144BY505ME - Loamy over Sandy
Hydric soil rating: No

Minor Components

Becket, very stony

Percent of map unit: 11 percent
Landform: Mountains, hills
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountainflank, mountainbase, interfluve, nose slope, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Skerry, very stony

Percent of map unit: 5 percent
Landform: Mountains, hills
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Mountainflank, mountainbase, interfluve, nose slope, side slope
Microfeatures of landform position: Closed depressions, closed depressions, open depressions, open depressions
Down-slope shape: Convex, concave
Across-slope shape: Linear, concave

Custom Soil Resource Report

Hydric soil rating: No

Tunbridge, very stony

Percent of map unit: 4 percent

Landform: Mountains, hills

Landform position (two-dimensional): Summit, shoulder, backslope

Landform position (three-dimensional): Mountainflank, mountainbase, interfluve, nose slope, side slope

Down-slope shape: Convex

Across-slope shape: Convex

Hydric soil rating: No

Lyme, very stony

Percent of map unit: 1 percent

Landform: Mountains, hills

Landform position (two-dimensional): Footslope, toeslope

Landform position (three-dimensional): Mountainflank, mountainbase, interfluve, nose slope, side slope

Microfeatures of landform position: Closed depressions, closed depressions, open depressions, open depressions

Down-slope shape: Concave

Across-slope shape: Concave

Hydric soil rating: Yes

143D—Monadnock fine sandy loam, 15 to 35 percent slopes, very stony

Map Unit Setting

National map unit symbol: 2wlm9

Elevation: 390 to 1,770 feet

Mean annual precipitation: 31 to 95 inches

Mean annual air temperature: 27 to 55 degrees F

Frost-free period: 90 to 150 days

Farmland classification: Not prime farmland

Map Unit Composition

Monadnock, very stony, and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Monadnock, Very Stony

Setting

Landform: Mountains, hills

Landform position (two-dimensional): Summit, shoulder, backslope

Landform position (three-dimensional): Mountainflank, nose slope, side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Loamy supraglacial meltout till derived from phyllite and/or granite and gneiss and/or mica schist over sandy and gravelly supraglacial meltout till derived from phyllite and/or granite and gneiss and/or mica schist

Custom Soil Resource Report

Typical profile

Oe - 0 to 3 inches: moderately decomposed plant material
E - 3 to 8 inches: fine sandy loam
Bs1 - 8 to 10 inches: fine sandy loam
Bs2 - 10 to 12 inches: fine sandy loam
Bs3 - 12 to 22 inches: gravelly fine sandy loam
BC - 22 to 25 inches: gravelly fine sandy loam
2C1 - 25 to 45 inches: gravelly loamy sand
2C2 - 45 to 65 inches: gravelly loamy sand

Properties and qualities

Slope: 15 to 35 percent
Surface area covered with cobbles, stones or boulders: 1.1 percent
Depth to restrictive feature: 18 to 36 inches to strongly contrasting textural stratification
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.03 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: B
Ecological site: F144BY505ME - Loamy over Sandy
Hydric soil rating: No

Minor Components

Berkshire, very stony

Percent of map unit: 10 percent
Landform: Mountains, hills
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountainflank, nose slope, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Tunbridge, very stony

Percent of map unit: 5 percent
Landform: Mountains, hills
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountainflank, nose slope, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Sunapee, very stony

Percent of map unit: 3 percent
Landform: Mountains, hills
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Mountainflank, nose slope, side slope

Custom Soil Resource Report

Microfeatures of landform position: Open depressions, open depressions
Down-slope shape: Convex, concave
Across-slope shape: Convex, concave
Hydric soil rating: No

Cabot, very stony

Percent of map unit: 2 percent
Landform: Mountains, hills
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Mountainflank, nose slope, side slope
Microfeatures of landform position: Open depressions, open depressions
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

160C—Tunbridge-Lyman-Monadnock complex, stony, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 9chd
Elevation: 10 to 2,500 feet
Mean annual precipitation: 35 to 50 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 60 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition

Tunbridge and similar soils: 35 percent
Lyman and similar soils: 30 percent
Monadnock and similar soils: 25 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tunbridge

Setting

Parent material: Ablation till derived from granite and gneiss

Typical profile

H1 - 0 to 4 inches: fine sandy loam
H2 - 4 to 22 inches: channery fine sandy loam
H3 - 22 to 30 inches: channery fine sandy loam
H4 - 30 to 34 inches: unweathered bedrock

Properties and qualities

Slope: 8 to 15 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Runoff class: High

Custom Soil Resource Report

Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 6.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 4.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: B

Ecological site: F144BY702ME - Shallow and Moderately-deep Till

Hydric soil rating: No

Description of Lyman

Setting

Parent material: Ablation till derived from granite and gneiss and/or ablation till derived from mica schist

Typical profile

H1 - 0 to 4 inches: sandy loam

H2 - 4 to 15 inches: gravelly fine sandy loam

R - 15 to 19 inches: unweathered bedrock

Properties and qualities

Slope: 8 to 15 percent

Surface area covered with cobbles, stones or boulders: 1.6 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Somewhat excessively drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 6.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Very low (about 2.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: D

Ecological site: F144BY702ME - Shallow and Moderately-deep Till

Hydric soil rating: No

Description of Monadnock

Setting

Parent material: Ablation till derived from granite and gneiss

Typical profile

H1 - 0 to 4 inches: fine sandy loam

H2 - 4 to 28 inches: fine sandy loam

H3 - 28 to 60 inches: gravelly loamy sand

Properties and qualities

Slope: 8 to 15 percent

Surface area covered with cobbles, stones or boulders: 1.6 percent

Custom Soil Resource Report

Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: B
Ecological site: F144BY505ME - Loamy over Sandy
Hydric soil rating: No

Minor Components

Marlow

Percent of map unit: 3 percent
Hydric soil rating: No

Not named wet

Percent of map unit: 3 percent
Landform: Depressions
Hydric soil rating: Yes

Not named

Percent of map unit: 2 percent
Hydric soil rating: No

Rock outcrop

Percent of map unit: 2 percent
Hydric soil rating: No

197—Borohemists, ponded

Map Unit Setting

National map unit symbol: 9chj
Elevation: 310 to 1,600 feet
Mean annual precipitation: 28 to 49 inches
Mean annual air temperature: 39 to 46 degrees F
Frost-free period: 60 to 155 days
Farmland classification: Not prime farmland

Map Unit Composition

Borohemists and similar soils: 80 percent
Minor components: 20 percent

Custom Soil Resource Report

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Borohemists

Setting

Landform: Bogs

Parent material: Herbaceous organic material and/or woody organic material

Typical profile

O - 0 to 65 inches: mucky peat

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Very poorly drained

Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.60 to 6.00 in/hr)

Depth to water table: About 0 inches

Frequency of flooding: None

Frequency of ponding: Frequent

Available water supply, 0 to 60 inches: Very high (about 31.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Hydrologic Soil Group: A/D

Ecological site: F144BY230ME - Acidic Peat Wetland Complex

Hydric soil rating: Yes

Minor Components

Greenwood

Percent of map unit: 10 percent

Landform: Bogs

Hydric soil rating: Yes

Chocorua

Percent of map unit: 10 percent

Landform: Bogs

Hydric soil rating: Yes

214B—Naumburg fine sandy loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9chl

Elevation: 150 to 1,800 feet

Mean annual precipitation: 30 to 50 inches

Mean annual air temperature: 37 to 45 degrees F

Frost-free period: 90 to 160 days

Farmland classification: Not prime farmland

Map Unit Composition

Naumburg and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Naumburg

Setting

Landform: Outwash terraces

Parent material: Sandy outwash derived mainly from granite, gneiss and schist

Typical profile

H1 - 0 to 9 inches: fine sandy loam

H2 - 9 to 22 inches: loamy sand

H3 - 22 to 60 inches: sand

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)

Depth to water table: About 0 to 18 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4w

Hydrologic Soil Group: A/D

Ecological site: F144BY303ME - Acidic Swamp

Hydric soil rating: Yes

Minor Components

Croghan

Percent of map unit: 15 percent

Hydric soil rating: No

549—Peacham mucky peat, 0 to 8 percent slopes, very stony

Map Unit Setting

National map unit symbol: 2ty6t

Elevation: 430 to 1,970 feet

Mean annual precipitation: 31 to 95 inches

Mean annual air temperature: 27 to 52 degrees F

Frost-free period: 70 to 135 days

Farmland classification: Not prime farmland

Map Unit Composition

Peacham, very stony, and similar soils: 78 percent

Minor components: 22 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Peacham, Very Stony

Setting

Landform: Mountains, hills

Landform position (two-dimensional): Footslope, toeslope

Landform position (three-dimensional): Mountainbase, interfluvium, base slope

Down-slope shape: Concave

Across-slope shape: Concave

Parent material: Organic material over loamy lodgment till derived from schist and/or loamy lodgment till derived from granite and gneiss and/or loamy lodgment till derived from phyllite

Typical profile

Oe - 0 to 2 inches: mucky peat

Oa - 2 to 10 inches: muck

Bg - 10 to 15 inches: fine sandy loam

Cdg1 - 15 to 31 inches: fine sandy loam

Cdg2 - 31 to 65 inches: sandy loam

Properties and qualities

Slope: 0 to 8 percent

Surface area covered with cobbles, stones or boulders: 1.1 percent

Depth to restrictive feature: 12 to 35 inches to densic material

Drainage class: Very poorly drained

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 0 inches

Frequency of flooding: None

Frequency of ponding: Frequent

Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)

Available water supply, 0 to 60 inches: Low (about 4.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: D

Ecological site: F144BY301ME - Loamy Till Swamp

Hydric soil rating: Yes

Minor Components

Cabot, very stony

Percent of map unit: 11 percent

Landform: Mountains, hills

Landform position (two-dimensional): Footslope, toeslope

Landform position (three-dimensional): Mountainbase, interfluvium, base slope

Microfeatures of landform position: Rises, rises

Down-slope shape: Concave, convex

Across-slope shape: Concave, convex

Hydric soil rating: Yes

Custom Soil Resource Report

Wonsqueak

Percent of map unit: 8 percent
Landform: Mountains, hills
Landform position (two-dimensional): Foothlope, toeslope
Landform position (three-dimensional): Mountainbase, interfluve, base slope
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Bucksport

Percent of map unit: 2 percent
Landform: Mountains, hills
Landform position (two-dimensional): Foothlope, toeslope
Landform position (three-dimensional): Mountainbase, interfluve, base slope
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Searsport

Percent of map unit: 1 percent
Landform: Mountains, hills
Landform position (two-dimensional): Foothlope, toeslope
Landform position (three-dimensional): Mountainbase, interfluve, base slope
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

558B—Skerry fine sandy loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2w9p8
Elevation: 260 to 1,210 feet
Mean annual precipitation: 31 to 65 inches
Mean annual air temperature: 36 to 52 degrees F
Frost-free period: 90 to 160 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Skerry and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Skerry

Setting

Landform: Mountains, hills
Landform position (two-dimensional): Backslope, foothlope
Landform position (three-dimensional): Mountainbase, interfluve
Down-slope shape: Convex
Across-slope shape: Linear

Custom Soil Resource Report

Parent material: Loamy lodgment till derived from granite and gneiss and/or schist
over sandy lodgment till derived from granite and gneiss and/or schist

Typical profile

Ap - 0 to 6 inches: fine sandy loam
Bs1 - 6 to 20 inches: gravelly fine sandy loam
Bs2 - 20 to 25 inches: gravelly fine sandy loam
Cd1 - 25 to 34 inches: gravelly loamy sand
Cd2 - 34 to 65 inches: gravelly loamy sand

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 21 to 43 inches to densic material
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.01 to 1.42 in/hr)
Depth to water table: About 18 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 3.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C/D
Ecological site: F144BY501ME - Loamy Slope (Northern Hardwoods)
Hydric soil rating: No

Minor Components

Colonel

Percent of map unit: 6 percent
Landform: Mountains, hills
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Mountainbase, interfluve
Microfeatures of landform position: Closed depressions, closed depressions
Down-slope shape: Linear, concave
Across-slope shape: Concave
Hydric soil rating: No

Becket

Percent of map unit: 4 percent
Landform: Mountains, hills
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountainbase, interfluve
Microfeatures of landform position: Rises, rises
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Brayton

Percent of map unit: 3 percent
Landform: Mountains, hills
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Mountainbase, interfluve
Microfeatures of landform position: Closed depressions, closed depressions

Custom Soil Resource Report

Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Hermon

Percent of map unit: 2 percent
Landform: Mountains, hills
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountainbase, interfluvium
Microfeatures of landform position: Rises, rises
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

613B—Croghan loamy fine sand, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2x1f7
Elevation: 150 to 2,300 feet
Mean annual precipitation: 40 to 55 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 90 to 135 days
Farmland classification: Farmland of local importance

Map Unit Composition

Croghan and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Croghan

Setting

Landform: Outwash deltas
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy glaciofluvial deposits

Typical profile

Ap - 0 to 7 inches: loamy fine sand
Bs - 7 to 17 inches: loamy fine sand
BC - 17 to 30 inches: fine sand
C - 30 to 65 inches: sand

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(1.42 to 14.17 in/hr)

Custom Soil Resource Report

Depth to water table: About 18 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 3.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: A
Ecological site: F144BY602ME - Sandy Toeslope
Hydric soil rating: No

Minor Components

Adams

Percent of map unit: 5 percent
Landform: Outwash deltas
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Base slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Naumburg

Percent of map unit: 5 percent
Landform: Outwash deltas
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: No

Nicholville

Percent of map unit: 3 percent
Landform: Outwash deltas
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Sheepscot

Percent of map unit: 2 percent
Landform: Outwash deltas
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

W—Water


Map Unit Composition

Water (less than 40: 100 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

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 1:20,000.

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: Hillsborough County, New Hampshire, Western Part
 Survey Area Data: Version 24, Sep 12, 2022

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

Date(s) aerial images were photographed: May 22, 2022—Jun 5, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

MAP LEGEND

MAP INFORMATION

imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

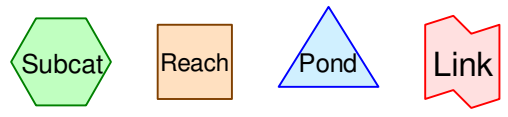
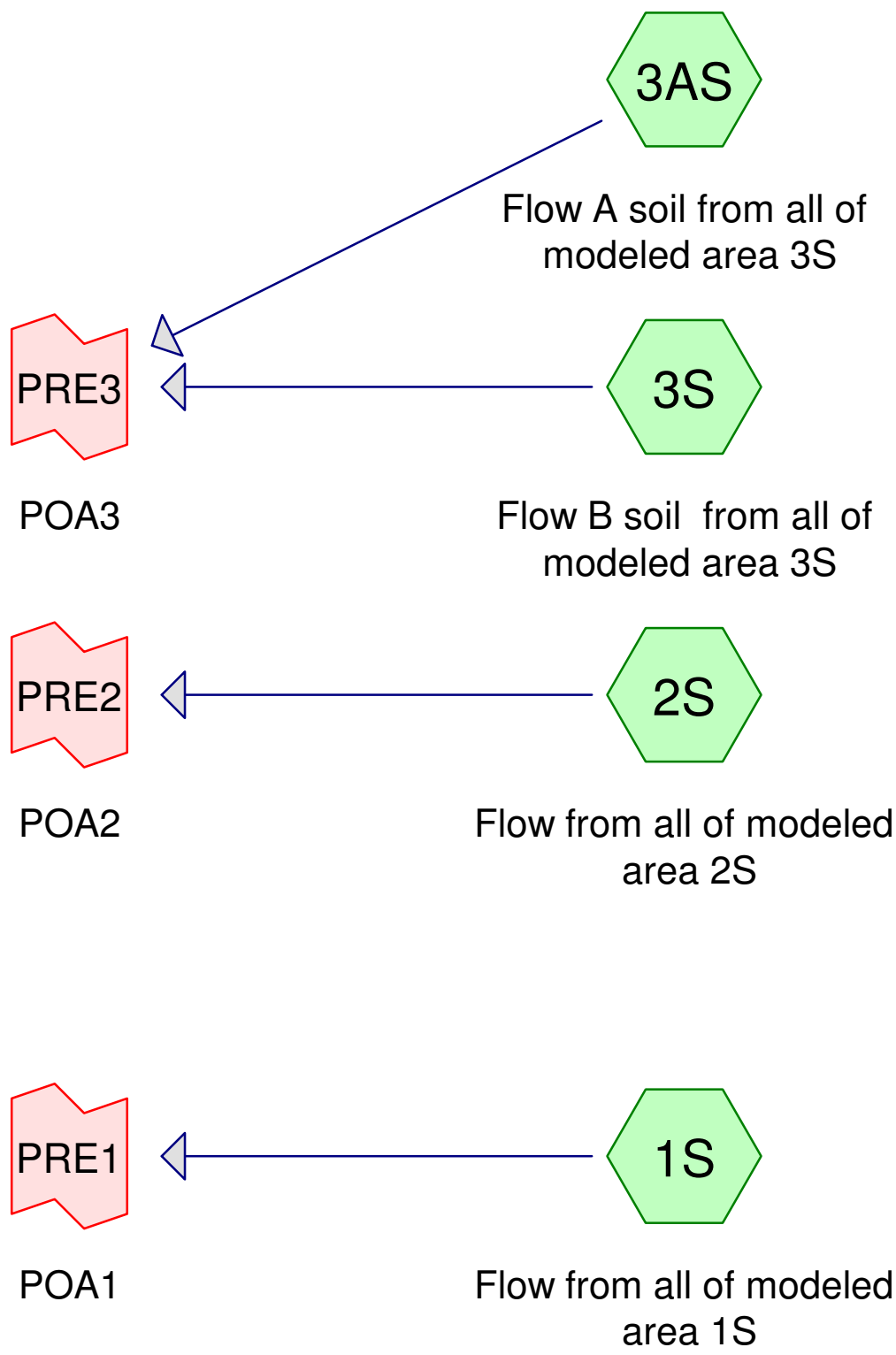
Custom Soil Resource Report

Table—Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
15	Searsport muck	A/D	17.1	6.8%
22B	Colton gravelly sandy loam, 3 to 8 percent slopes	A	49.4	19.6%
22C	Colton gravelly sandy loam, 8 to 15 percent slopes	A	22.7	9.0%
22E	Colton gravelly sandy loam, 15 to 60 percent slopes	A	18.5	7.3%
36E	Adams loamy sand, 15 to 60 percent slopes	A	3.0	1.2%
76B	Marlow fine sandy loam, 3 to 8 percent slopes	C	0.1	0.1%
77D	Marlow fine sandy loam, 15 to 35 percent slopes, very stony	C	11.5	4.5%
142B	Monadnock fine sandy loam, 3 to 8 percent slopes	B	23.9	9.5%
142C	Monadnock fine sandy loam, 8 to 15 percent slopes	B	27.2	10.8%
143C	Monadnock fine sandy loam, 8 to 15 percent slopes, very stony	B	43.2	17.2%
143D	Monadnock fine sandy loam, 15 to 35 percent slopes, very stony	B	6.6	2.6%
160C	Tunbridge-Lyman-Monadnock complex, stony, 8 to 15 percent slopes	B	9.1	3.6%
197	Borohemists, ponded	A/D	4.0	1.6%
214B	Naumburg fine sandy loam, 3 to 8 percent slopes	A/D	10.2	4.1%
549	Peacham mucky peat, 0 to 8 percent slopes, very stony	D	0.0	0.0%
558B	Skerry fine sandy loam, 3 to 8 percent slopes	C/D	1.2	0.5%
613B	Croghan loamy fine sand, 3 to 8 percent slopes	A	2.1	0.8%
W	Water		2.1	0.8%
Totals for Area of Interest			252.0	100.0%

ROKEH CONSULTING LLC.

2,10,25,&50 PRE DEVELOPMENT DRAINAGE



ROKEH WILTON SITE PRE 7-21-23

Prepared by HP

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Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
2,281	61	>75% Grass cover, Good, HSG B (1S)
1,444	96	Gravel surface, HSG A (2S)
11,210	96	Gravel surface, HSG B (1S, 2S)
880	98	Paved parking, HSG B (1S)
185	98	Roofs, HSG A (2S)
806	98	Roofs, HSG B (2S)
135,513	30	Woods, Good, HSG A (2S, 3AS)
296,366	55	Woods, Good, HSG B (1S, 2S, 3S)
448,685	49	TOTAL AREA

ROKEH WILTON SITE PRE 7-21-23

Prepared by HP

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Soil Listing (all nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
137,142	HSG A	2S, 3AS
311,543	HSG B	1S, 2S, 3S
0	HSG C	
0	HSG D	
0	Other	
448,685		TOTAL AREA

ROKEH WILTON SITE PRE 7-21-23

Type III 24-hr 2 Year Rainfall=2.98"

Prepared by HP

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Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 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 1S: Flow from all of modeled Runoff Area=77,471 sf 1.14% Impervious Runoff Depth>0.24"
Flow Length=642' Tc=18.3 min CN=57 Runoff=0.16 cfs 1,537 cf

Subcatchment 2S: Flow from all of modeled Runoff Area=158,984 sf 0.62% Impervious Runoff Depth>0.12"
Flow Length=667' Tc=20.1 min CN=52 Runoff=0.07 cfs 1,623 cf

Subcatchment 3AS: Flow A soil from all of Runoff Area=97,432 sf 0.00% Impervious Runoff Depth=0.00"
Flow Length=653' Tc=14.7 min CN=30 Runoff=0.00 cfs 0 cf

Subcatchment 3S: Flow B soil from all of Runoff Area=114,798 sf 0.00% Impervious Runoff Depth>0.19"
Flow Length=733' Tc=20.9 min CN=55 Runoff=0.14 cfs 1,794 cf

Link PRE1: POA1 Inflow=0.16 cfs 1,537 cf
Primary=0.16 cfs 1,537 cf

Link PRE2: POA2 Inflow=0.07 cfs 1,623 cf
Primary=0.07 cfs 1,623 cf

Link PRE3: POA3 Inflow=0.14 cfs 1,794 cf
Primary=0.14 cfs 1,794 cf

Total Runoff Area = 448,685 sf Runoff Volume = 4,954 cf Average Runoff Depth = 0.13"
99.58% Pervious = 446,814 sf 0.42% Impervious = 1,871 sf

Summary for Subcatchment 1S: Flow from all of modeled area 1S

Runoff = 0.16 cfs @ 12.51 hrs, Volume= 1,537 cf, Depth> 0.24"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 Year Rainfall=2.98"

Area (sf)	CN	Description
2,981	96	Gravel surface, HSG B
1,220	61	>75% Grass cover, Good, HSG B
3,093	55	Woods, Good, HSG B
1,061	61	>75% Grass cover, Good, HSG B
67,449	55	Woods, Good, HSG B
880	98	Paved parking, HSG B
167	96	Gravel surface, HSG B
620	55	Woods, Good, HSG B
77,471	57	Weighted Average
76,591		98.86% Pervious Area
880		1.14% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0900	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
5.2	450	0.0840	1.45		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.5	92	0.0500	3.26	35.85	Trap/Vee/Rect Channel Flow, Bot.W=12.00' D=0.50' Z= 20.0 '/' Top.W=32.00' n= 0.050
18.3	642	Total			

Summary for Subcatchment 2S: Flow from all of modeled area 2S

Runoff = 0.07 cfs @ 12.75 hrs, Volume= 1,623 cf, Depth> 0.12"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 Year Rainfall=2.98"

Area (sf)	CN	Description
38,081	30	Woods, Good, HSG A
110,406	55	Woods, Good, HSG B
1,444	96	Gravel surface, HSG A
8,062	96	Gravel surface, HSG B
806	98	Roofs, HSG B
185	98	Roofs, HSG A
158,984	52	Weighted Average
157,993		99.38% Pervious Area
991		0.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.2	100	0.0800	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
6.9	567	0.0740	1.36		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.1	667	Total			

Summary for Subcatchment 3AS: Flow A soil from all of modeled area 3S

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 Year Rainfall=2.98"

Area (sf)	CN	Description
97,432	30	Woods, Good, HSG A
97,432		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.1	64	0.1100	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
0.2	60	0.6600	4.06		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
6.4	529	0.0750	1.37		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
14.7	653	Total			

Summary for Subcatchment 3S: Flow B soil from all of modeled area 3S

Runoff = 0.14 cfs @ 12.60 hrs, Volume= 1,794 cf, Depth> 0.19"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 Year Rainfall=2.98"

Area (sf)	CN	Description
114,798	55	Woods, Good, HSG B
114,798		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.2	100	0.0800	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
7.7	633	0.0750	1.37		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.9	733	Total			

Summary for Link PRE1: POA1

Inflow Area = 77,471 sf, 1.14% Impervious, Inflow Depth > 0.24" for 2 Year event
Inflow = 0.16 cfs @ 12.51 hrs, Volume= 1,537 cf
Primary = 0.16 cfs @ 12.51 hrs, Volume= 1,537 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link PRE2: POA2

Inflow Area = 158,984 sf, 0.62% Impervious, Inflow Depth > 0.12" for 2 Year event
Inflow = 0.07 cfs @ 12.75 hrs, Volume= 1,623 cf
Primary = 0.07 cfs @ 12.75 hrs, Volume= 1,623 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link PRE3: POA3

Inflow Area = 212,230 sf, 0.00% Impervious, Inflow Depth > 0.10" for 2 Year event
Inflow = 0.14 cfs @ 12.60 hrs, Volume= 1,794 cf
Primary = 0.14 cfs @ 12.60 hrs, Volume= 1,794 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

ROKEH WILTON SITE PRE 7-21-23

Type III 24-hr 10 year Rainfall=4.44"

Prepared by HP

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Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 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 1S: Flow from all of modeled Runoff Area=77,471 sf 1.14% Impervious Runoff Depth>0.82"
Flow Length=642' Tc=18.3 min CN=57 Runoff=0.92 cfs 5,265 cf

Subcatchment 2S: Flow from all of modeled Runoff Area=158,984 sf 0.62% Impervious Runoff Depth>0.56"
Flow Length=667' Tc=20.1 min CN=52 Runoff=1.02 cfs 7,481 cf

Subcatchment 3AS: Flow A soil from all of Runoff Area=97,432 sf 0.00% Impervious Runoff Depth=0.00"
Flow Length=653' Tc=14.7 min CN=30 Runoff=0.00 cfs 0 cf

Subcatchment 3S: Flow B soil from all of Runoff Area=114,798 sf 0.00% Impervious Runoff Depth>0.71"
Flow Length=733' Tc=20.9 min CN=55 Runoff=1.05 cfs 6,796 cf

Link PRE1: POA1 Inflow=0.92 cfs 5,265 cf
Primary=0.92 cfs 5,265 cf

Link PRE2: POA2 Inflow=1.02 cfs 7,481 cf
Primary=1.02 cfs 7,481 cf

Link PRE3: POA3 Inflow=1.05 cfs 6,796 cf
Primary=1.05 cfs 6,796 cf

Total Runoff Area = 448,685 sf Runoff Volume = 19,542 cf Average Runoff Depth = 0.52"
99.58% Pervious = 446,814 sf 0.42% Impervious = 1,871 sf

Summary for Subcatchment 1S: Flow from all of modeled area 1S

Runoff = 0.92 cfs @ 12.32 hrs, Volume= 5,265 cf, Depth> 0.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 year Rainfall=4.44"

Area (sf)	CN	Description
2,981	96	Gravel surface, HSG B
1,220	61	>75% Grass cover, Good, HSG B
3,093	55	Woods, Good, HSG B
1,061	61	>75% Grass cover, Good, HSG B
67,449	55	Woods, Good, HSG B
880	98	Paved parking, HSG B
167	96	Gravel surface, HSG B
620	55	Woods, Good, HSG B
77,471	57	Weighted Average
76,591		98.86% Pervious Area
880		1.14% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0900	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
5.2	450	0.0840	1.45		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.5	92	0.0500	3.26	35.85	Trap/Vee/Rect Channel Flow, Bot.W=12.00' D=0.50' Z= 20.0 '/' Top.W=32.00' n= 0.050
18.3	642	Total			

Summary for Subcatchment 2S: Flow from all of modeled area 2S

Runoff = 1.02 cfs @ 12.42 hrs, Volume= 7,481 cf, Depth> 0.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 year Rainfall=4.44"

Area (sf)	CN	Description
38,081	30	Woods, Good, HSG A
110,406	55	Woods, Good, HSG B
1,444	96	Gravel surface, HSG A
8,062	96	Gravel surface, HSG B
806	98	Roofs, HSG B
185	98	Roofs, HSG A
158,984	52	Weighted Average
157,993		99.38% Pervious Area
991		0.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.2	100	0.0800	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
6.9	567	0.0740	1.36		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.1	667	Total			

Summary for Subcatchment 3AS: Flow A soil from all of modeled area 3S

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 year Rainfall=4.44"

Area (sf)	CN	Description
97,432	30	Woods, Good, HSG A
97,432		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.1	64	0.1100	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
0.2	60	0.6600	4.06		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
6.4	529	0.0750	1.37		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
14.7	653	Total			

Summary for Subcatchment 3S: Flow B soil from all of modeled area 3S

Runoff = 1.05 cfs @ 12.39 hrs, Volume= 6,796 cf, Depth> 0.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 year Rainfall=4.44"

Area (sf)	CN	Description
114,798	55	Woods, Good, HSG B
114,798		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.2	100	0.0800	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
7.7	633	0.0750	1.37		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.9	733	Total			

Summary for Link PRE1: POA1

Inflow Area = 77,471 sf, 1.14% Impervious, Inflow Depth > 0.82" for 10 year event
Inflow = 0.92 cfs @ 12.32 hrs, Volume= 5,265 cf
Primary = 0.92 cfs @ 12.32 hrs, Volume= 5,265 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link PRE2: POA2

Inflow Area = 158,984 sf, 0.62% Impervious, Inflow Depth > 0.56" for 10 year event
Inflow = 1.02 cfs @ 12.42 hrs, Volume= 7,481 cf
Primary = 1.02 cfs @ 12.42 hrs, Volume= 7,481 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link PRE3: POA3

Inflow Area = 212,230 sf, 0.00% Impervious, Inflow Depth > 0.38" for 10 year event
Inflow = 1.05 cfs @ 12.39 hrs, Volume= 6,796 cf
Primary = 1.05 cfs @ 12.39 hrs, Volume= 6,796 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

ROKEH WILTON SITE PRE 7-21-23

Type III 24-hr 25 year Rainfall=5.57"

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Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 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 1S: Flow from all of modeled Runoff Area=77,471 sf 1.14% Impervious Runoff Depth>1.41"
Flow Length=642' Tc=18.3 min CN=57 Runoff=1.82 cfs 9,129 cf

Subcatchment 2S: Flow from all of modeled Runoff Area=158,984 sf 0.62% Impervious Runoff Depth>1.06"
Flow Length=667' Tc=20.1 min CN=52 Runoff=2.43 cfs 14,092 cf

Subcatchment 3AS: Flow A soil from all of Runoff Area=97,432 sf 0.00% Impervious Runoff Depth>0.03"
Flow Length=653' Tc=14.7 min CN=30 Runoff=0.01 cfs 268 cf

Subcatchment 3S: Flow B soil from all of Runoff Area=114,798 sf 0.00% Impervious Runoff Depth>1.27"
Flow Length=733' Tc=20.9 min CN=55 Runoff=2.22 cfs 12,143 cf

Link PRE1: POA1 Inflow=1.82 cfs 9,129 cf
Primary=1.82 cfs 9,129 cf

Link PRE2: POA2 Inflow=2.43 cfs 14,092 cf
Primary=2.43 cfs 14,092 cf

Link PRE3: POA3 Inflow=2.22 cfs 12,410 cf
Primary=2.22 cfs 12,410 cf

Total Runoff Area = 448,685 sf Runoff Volume = 35,631 cf Average Runoff Depth = 0.95"
99.58% Pervious = 446,814 sf 0.42% Impervious = 1,871 sf

Summary for Subcatchment 1S: Flow from all of modeled area 1S

Runoff = 1.82 cfs @ 12.29 hrs, Volume= 9,129 cf, Depth> 1.41"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 year Rainfall=5.57"

Area (sf)	CN	Description
2,981	96	Gravel surface, HSG B
1,220	61	>75% Grass cover, Good, HSG B
3,093	55	Woods, Good, HSG B
1,061	61	>75% Grass cover, Good, HSG B
67,449	55	Woods, Good, HSG B
880	98	Paved parking, HSG B
167	96	Gravel surface, HSG B
620	55	Woods, Good, HSG B
77,471	57	Weighted Average
76,591		98.86% Pervious Area
880		1.14% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0900	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
5.2	450	0.0840	1.45		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.5	92	0.0500	3.26	35.85	Trap/Vee/Rect Channel Flow, Bot.W=12.00' D=0.50' Z= 20.0 '/' Top.W=32.00' n= 0.050
18.3	642	Total			

Summary for Subcatchment 2S: Flow from all of modeled area 2S

Runoff = 2.43 cfs @ 12.35 hrs, Volume= 14,092 cf, Depth> 1.06"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 year Rainfall=5.57"

Area (sf)	CN	Description
38,081	30	Woods, Good, HSG A
110,406	55	Woods, Good, HSG B
1,444	96	Gravel surface, HSG A
8,062	96	Gravel surface, HSG B
806	98	Roofs, HSG B
185	98	Roofs, HSG A
158,984	52	Weighted Average
157,993		99.38% Pervious Area
991		0.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.2	100	0.0800	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
6.9	567	0.0740	1.36		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.1	667	Total			

Summary for Subcatchment 3AS: Flow A soil from all of modeled area 3S

Runoff = 0.01 cfs @ 20.89 hrs, Volume= 268 cf, Depth> 0.03"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 year Rainfall=5.57"

Area (sf)	CN	Description
97,432	30	Woods, Good, HSG A
97,432		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.1	64	0.1100	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
0.2	60	0.6600	4.06		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
6.4	529	0.0750	1.37		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
14.7	653	Total			

Summary for Subcatchment 3S: Flow B soil from all of modeled area 3S

Runoff = 2.22 cfs @ 12.34 hrs, Volume= 12,143 cf, Depth> 1.27"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 year Rainfall=5.57"

Area (sf)	CN	Description
114,798	55	Woods, Good, HSG B
114,798		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.2	100	0.0800	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
7.7	633	0.0750	1.37		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.9	733	Total			

Summary for Link PRE1: POA1

Inflow Area = 77,471 sf, 1.14% Impervious, Inflow Depth > 1.41" for 25 year event
Inflow = 1.82 cfs @ 12.29 hrs, Volume= 9,129 cf
Primary = 1.82 cfs @ 12.29 hrs, Volume= 9,129 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link PRE2: POA2

Inflow Area = 158,984 sf, 0.62% Impervious, Inflow Depth > 1.06" for 25 year event
Inflow = 2.43 cfs @ 12.35 hrs, Volume= 14,092 cf
Primary = 2.43 cfs @ 12.35 hrs, Volume= 14,092 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link PRE3: POA3

Inflow Area = 212,230 sf, 0.00% Impervious, Inflow Depth > 0.70" for 25 year event
Inflow = 2.22 cfs @ 12.34 hrs, Volume= 12,410 cf
Primary = 2.22 cfs @ 12.34 hrs, Volume= 12,410 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

ROKEH WILTON SITE PRE 7-21-23

Type III 24-hr 50 year Rainfall=6.63"

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Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 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 1S: Flow from all of modeled Runoff Area=77,471 sf 1.14% Impervious Runoff Depth>2.06"
Flow Length=642' Tc=18.3 min CN=57 Runoff=2.80 cfs 13,307 cf

Subcatchment 2S: Flow from all of modeled Runoff Area=158,984 sf 0.62% Impervious Runoff Depth>1.62"
Flow Length=667' Tc=20.1 min CN=52 Runoff=4.10 cfs 21,511 cf

Subcatchment 3AS: Flow A soil from all of Runoff Area=97,432 sf 0.00% Impervious Runoff Depth>0.15"
Flow Length=653' Tc=14.7 min CN=30 Runoff=0.05 cfs 1,223 cf

Subcatchment 3S: Flow B soil from all of Runoff Area=114,798 sf 0.00% Impervious Runoff Depth>1.88"
Flow Length=733' Tc=20.9 min CN=55 Runoff=3.53 cfs 18,005 cf

Link PRE1: POA1 Inflow=2.80 cfs 13,307 cf
Primary=2.80 cfs 13,307 cf

Link PRE2: POA2 Inflow=4.10 cfs 21,511 cf
Primary=4.10 cfs 21,511 cf

Link PRE3: POA3 Inflow=3.53 cfs 19,228 cf
Primary=3.53 cfs 19,228 cf

Total Runoff Area = 448,685 sf Runoff Volume = 54,046 cf Average Runoff Depth = 1.45"
99.58% Pervious = 446,814 sf 0.42% Impervious = 1,871 sf

Summary for Subcatchment 1S: Flow from all of modeled area 1S

Runoff = 2.80 cfs @ 12.28 hrs, Volume= 13,307 cf, Depth> 2.06"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 year Rainfall=6.63"

Area (sf)	CN	Description
2,981	96	Gravel surface, HSG B
1,220	61	>75% Grass cover, Good, HSG B
3,093	55	Woods, Good, HSG B
1,061	61	>75% Grass cover, Good, HSG B
67,449	55	Woods, Good, HSG B
880	98	Paved parking, HSG B
167	96	Gravel surface, HSG B
620	55	Woods, Good, HSG B
77,471	57	Weighted Average
76,591		98.86% Pervious Area
880		1.14% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0900	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
5.2	450	0.0840	1.45		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.5	92	0.0500	3.26	35.85	Trap/Vee/Rect Channel Flow, Bot.W=12.00' D=0.50' Z= 20.0 '/' Top.W=32.00' n= 0.050
18.3	642	Total			

Summary for Subcatchment 2S: Flow from all of modeled area 2S

Runoff = 4.10 cfs @ 12.32 hrs, Volume= 21,511 cf, Depth> 1.62"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 year Rainfall=6.63"

Area (sf)	CN	Description
38,081	30	Woods, Good, HSG A
110,406	55	Woods, Good, HSG B
1,444	96	Gravel surface, HSG A
8,062	96	Gravel surface, HSG B
806	98	Roofs, HSG B
185	98	Roofs, HSG A
158,984	52	Weighted Average
157,993		99.38% Pervious Area
991		0.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.2	100	0.0800	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
6.9	567	0.0740	1.36		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.1	667	Total			

Summary for Subcatchment 3AS: Flow A soil from all of modeled area 3S

Runoff = 0.05 cfs @ 14.91 hrs, Volume= 1,223 cf, Depth> 0.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 year Rainfall=6.63"

Area (sf)	CN	Description
97,432	30	Woods, Good, HSG A
97,432		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.1	64	0.1100	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
0.2	60	0.6600	4.06		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
6.4	529	0.0750	1.37		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
14.7	653	Total			

Summary for Subcatchment 3S: Flow B soil from all of modeled area 3S

Runoff = 3.53 cfs @ 12.32 hrs, Volume= 18,005 cf, Depth> 1.88"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 year Rainfall=6.63"

Area (sf)	CN	Description
114,798	55	Woods, Good, HSG B
114,798		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.2	100	0.0800	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
7.7	633	0.0750	1.37		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.9	733	Total			

Summary for Link PRE1: POA1

Inflow Area = 77,471 sf, 1.14% Impervious, Inflow Depth > 2.06" for 50 year event
Inflow = 2.80 cfs @ 12.28 hrs, Volume= 13,307 cf
Primary = 2.80 cfs @ 12.28 hrs, Volume= 13,307 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link PRE2: POA2

Inflow Area = 158,984 sf, 0.62% Impervious, Inflow Depth > 1.62" for 50 year event
Inflow = 4.10 cfs @ 12.32 hrs, Volume= 21,511 cf
Primary = 4.10 cfs @ 12.32 hrs, Volume= 21,511 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

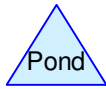
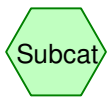
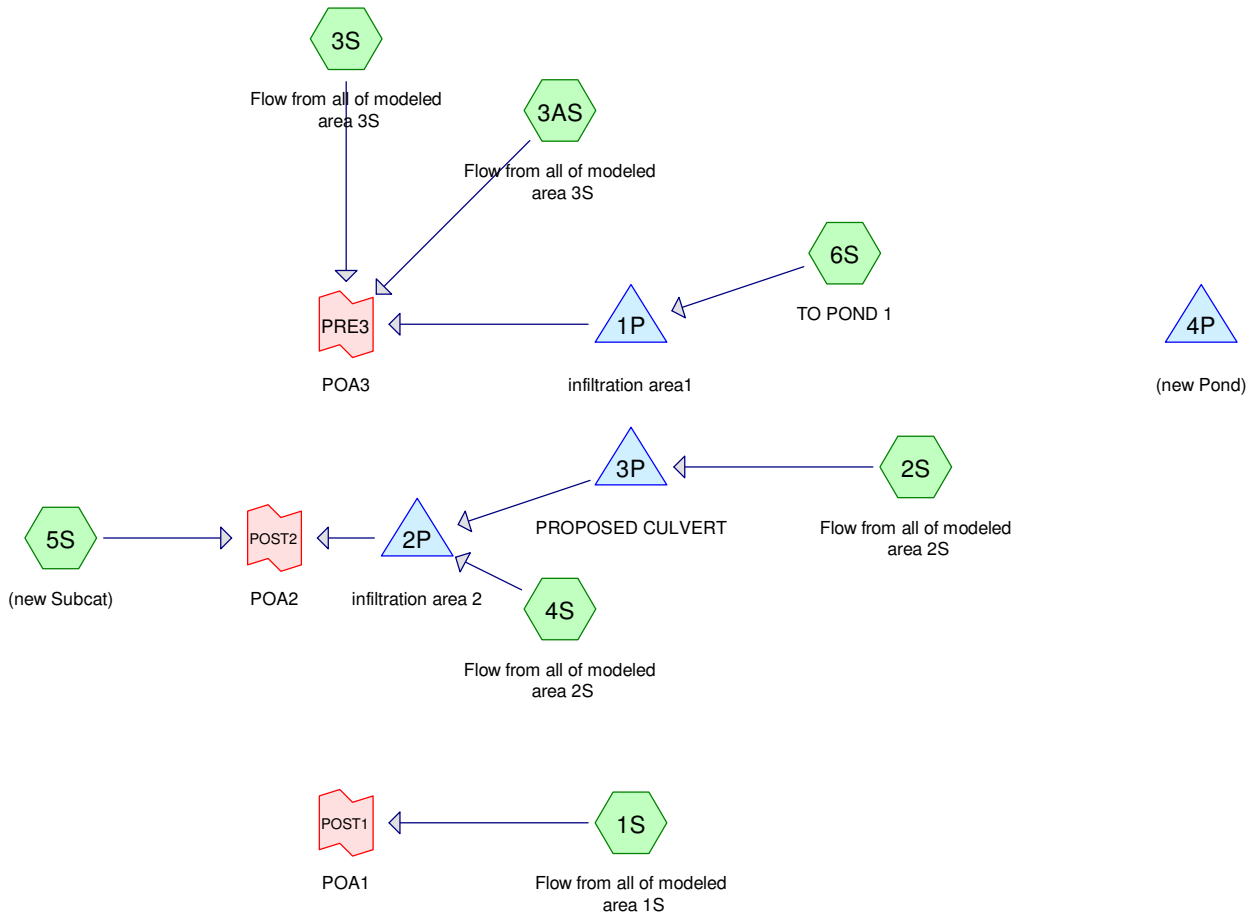
Summary for Link PRE3: POA3

Inflow Area = 212,230 sf, 0.00% Impervious, Inflow Depth > 1.09" for 50 year event
Inflow = 3.53 cfs @ 12.32 hrs, Volume= 19,228 cf
Primary = 3.53 cfs @ 12.32 hrs, Volume= 19,228 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

ROKEH CONSULTING LLC.

2,10,25,&50 POST DEVELOPMENT DRAINAGE



Routing Diagram for ROKEH WILTON SITE POST 7-21-23
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Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
20,395	39	>75% Grass cover, Good, HSG A (4S, 6S)
14,086	61	>75% Grass cover, Good, HSG B (1S, 2S, 4S, 6S)
2,879	96	Gravel surface, HSG A (4S, 6S)
10,392	96	Gravel surface, HSG B (1S, 4S, 5S)
880	98	Paved parking, HSG B (1S)
1,487	98	Roofs, HSG A (4S, 6S)
500	98	Roofs, HSG B (4S, 5S)
112,381	30	Woods, Good, HSG A (3AS, 4S, 6S)
285,686	55	Woods, Good, HSG B (1S, 2S, 3S, 4S, 5S)
448,686	50	TOTAL AREA

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Soil Listing (all nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
137,142	HSG A	3AS, 4S, 6S
311,544	HSG B	1S, 2S, 3S, 4S, 5S, 6S
0	HSG C	
0	HSG D	
0	Other	
448,686		TOTAL AREA

ROKEH WILTON SITE POST 7-21-23

Type III 24-hr 2 Year Rainfall=2.98"

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Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 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

Pond 1P: infiltration area1 Peak Elev=630.00' Storage=0 cf Inflow=0.00 cfs 10 cf
Discarded=0.00 cfs 10 cf Primary=0.00 cfs 0 cf Outflow=0.00 cfs 10 cf

Subcatchment 1S: Flow from all of modeled Runoff Area=76,883 sf 1.14% Impervious Runoff Depth>0.24"
Flow Length=642' Tc=18.3 min CN=57 Runoff=0.15 cfs 1,526 cf

Pond 2P: infiltration area 2 Peak Elev=623.16' Storage=883 cf Inflow=0.12 cfs 1,186 cf
Discarded=0.01 cfs 303 cf Primary=0.00 cfs 0 cf Outflow=0.01 cfs 303 cf

Subcatchment 2S: Flow from all of modeled Runoff Area=99,397 sf 0.00% Impervious Runoff Depth>0.19"
Flow Length=667' Tc=20.1 min CN=55 Runoff=0.12 cfs 1,554 cf

Subcatchment 3AS: Flow from all of modeled Runoff Area=65,249 sf 0.00% Impervious Runoff Depth=0.00"
Flow Length=582' Slope=0.0750 '/' Tc=17.4 min CN=30 Runoff=0.00 cfs 0 cf

Pond 3P: PROPOSED CULVERT Peak Elev=623.16' Storage=205 cf Inflow=0.12 cfs 1,554 cf
Discarded=0.01 cfs 266 cf Primary=0.12 cfs 1,083 cf Outflow=0.12 cfs 1,349 cf

Subcatchment 3S: Flow from all of modeled Runoff Area=112,519 sf 0.00% Impervious Runoff Depth>0.19"
Flow Length=733' Tc=20.9 min CN=55 Runoff=0.14 cfs 1,758 cf

Pond 4P: (new Pond) Peak Elev=0.00' Storage=0 cf

Subcatchment 4S: Flow from all of modeled Runoff Area=55,698 sf 0.77% Impervious Runoff Depth>0.02"
Flow Length=348' Tc=10.5 min CN=45 Runoff=0.00 cfs 103 cf

Subcatchment 5S: (new Subcat) Runoff Area=4,478 sf 5.58% Impervious Runoff Depth>0.57"
Tc=6.0 min CN=67 Runoff=0.05 cfs 214 cf

Subcatchment 6S: TO POND 1 Runoff Area=34,462 sf 3.79% Impervious Runoff Depth>0.00"
Tc=6.0 min CN=42 Runoff=0.00 cfs 10 cf

Link POST1: POA1 Inflow=0.15 cfs 1,526 cf
Primary=0.15 cfs 1,526 cf

Link POST2: POA2 Inflow=0.05 cfs 214 cf
Primary=0.05 cfs 214 cf

Link PRE3: POA3 Inflow=0.14 cfs 1,758 cf
Primary=0.14 cfs 1,758 cf

Total Runoff Area = 448,686 sf Runoff Volume = 5,164 cf Average Runoff Depth = 0.14"
99.36% Pervious = 445,819 sf 0.64% Impervious = 2,867 sf

Summary for Pond 1P: infiltration area1

Inflow Area = 34,462 sf, 3.79% Impervious, Inflow Depth > 0.00" for 2 Year event
 Inflow = 0.00 cfs @ 23.67 hrs, Volume= 10 cf
 Outflow = 0.00 cfs @ 23.67 hrs, Volume= 10 cf, Atten= 0%, Lag= 0.0 min
 Discarded = 0.00 cfs @ 23.67 hrs, Volume= 10 cf
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Peak Elev= 630.00' @ 0.00 hrs Surf.Area= 380 sf Storage= 0 cf

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

Volume	Invert	Avail.Storage	Storage Description
#1	630.00'	1,640 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
630.00	380	0	0
632.00	1,260	1,640	1,640

Device	Routing	Invert	Outlet Devices
#1	Discarded	630.00'	3.000 in/hr Exfiltration over Surface area
#2	Primary	631.73'	6.0' long x 4.0' breadth Broad-Crested Rectangular Weir
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.50 4.00 4.50 5.00 5.50
			Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68
			2.72 2.73 2.76 2.79 2.88 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 23.67 hrs HW=630.00' (Free Discharge)

↑**1=Exfiltration** (Passes 0.00 cfs of 0.03 cfs potential flow)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=630.00' TW=0.00' (Dynamic Tailwater)

↑**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Subcatchment 1S: Flow from all of modeled area 1S

Runoff = 0.15 cfs @ 12.51 hrs, Volume= 1,526 cf, Depth> 0.24"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2 Year Rainfall=2.98"

ROKEH WILTON SITE POST 7-21-23

Type III 24-hr 2 Year Rainfall=2.98"

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Area (sf)	CN	Description
2,999	96	Gravel surface, HSG B
1,220	61	>75% Grass cover, Good, HSG B
3,093	55	Woods, Good, HSG B
1,061	61	>75% Grass cover, Good, HSG B
65,935	55	Woods, Good, HSG B
1,496	61	>75% Grass cover, Good, HSG B
880	98	Paved parking, HSG B
56	96	Gravel surface, HSG B
45	55	Woods, Good, HSG B
98	61	>75% Grass cover, Good, HSG B
76,883	57	Weighted Average
76,003		98.86% Pervious Area
880		1.14% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0900	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
5.2	450	0.0840	1.45		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.5	92	0.0500	3.26	35.85	Trap/Vee/Rect Channel Flow, Bot.W=12.00' D=0.50' Z= 20.0 '/' Top.W=32.00' n= 0.050
18.3	642	Total			

Summary for Pond 2P: infiltration area 2

Inflow Area = 155,095 sf, 0.28% Impervious, Inflow Depth > 0.09" for 2 Year event
 Inflow = 0.12 cfs @ 12.62 hrs, Volume= 1,186 cf
 Outflow = 0.01 cfs @ 24.00 hrs, Volume= 303 cf, Atten= 93%, Lag= 682.9 min
 Discarded = 0.01 cfs @ 24.00 hrs, Volume= 303 cf
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Peak Elev= 623.16' @ 24.00 hrs Surf.Area= 1,206 sf Storage= 883 cf

Plug-Flow detention time= 353.3 min calculated for 303 cf (26% of inflow)
 Center-of-Mass det. time= 154.1 min (1,123.5 - 969.4)

Volume	Invert	Avail.Storage	Storage Description
#1	622.00'	2,937 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
622.00	320	0	0
624.00	1,851	2,171	2,171
624.35	2,526	766	2,937

ROKEH WILTON SITE POST 7-21-23

Type III 24-hr 2 Year Rainfall=2.98"

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Device	Routing	Invert	Outlet Devices
#1	Discarded	622.00'	0.300 in/hr Exfiltration over Surface area
#2	Primary	623.45'	6.0' long x 4.0' breadth Broad-Crested Rectangular Weir
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.50 4.00 4.50 5.00 5.50
			Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68
			2.72 2.73 2.76 2.79 2.88 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 24.00 hrs HW=623.16' (Free Discharge)

↑1=Exfiltration (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=622.00' TW=0.00' (Dynamic Tailwater)

↑2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Summary for Subcatchment 2S: Flow from all of modeled area 2S

Runoff = 0.12 cfs @ 12.59 hrs, Volume= 1,554 cf, Depth> 0.19"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 Year Rainfall=2.98"

Area (sf)	CN	Description
95,049	55	Woods, Good, HSG B
4,348	61	>75% Grass cover, Good, HSG B
99,397	55	Weighted Average
99,397		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.2	100	0.0800	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
6.9	567	0.0740	1.36		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.1	667	Total			

Summary for Subcatchment 3AS: Flow from all of modeled area 3S

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 Year Rainfall=2.98"

Area (sf)	CN	Description
64,609	30	Woods, Good, HSG A
640	30	Woods, Good, HSG A
65,249	30	Weighted Average
65,249		100.00% Pervious Area

ROKEH WILTON SITE POST 7-21-23

Type III 24-hr 2 Year Rainfall=2.98"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.3	80	0.0750	0.12		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
6.1	502	0.0750	1.37		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
17.4	582	Total			

Summary for Pond 3P: PROPOSED CULVERT

Inflow Area = 99,397 sf, 0.00% Impervious, Inflow Depth > 0.19" for 2 Year event
 Inflow = 0.12 cfs @ 12.59 hrs, Volume= 1,554 cf
 Outflow = 0.12 cfs @ 12.62 hrs, Volume= 1,349 cf, Atten= 1%, Lag= 1.8 min
 Discarded = 0.01 cfs @ 24.00 hrs, Volume= 266 cf
 Primary = 0.12 cfs @ 12.62 hrs, Volume= 1,083 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Peak Elev= 623.16' @ 24.00 hrs Surf.Area= 329 sf Storage= 205 cf

Plug-Flow detention time= 61.8 min calculated for 1,349 cf (87% of inflow)
 Center-of-Mass det. time= 6.5 min (986.5 - 979.9)

Volume	Invert	Avail.Storage	Storage Description
#1	622.00'	791 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
622.00	25	0	0
624.00	550	575	575
624.34	720	216	791

Device	Routing	Invert	Outlet Devices
#1	Primary	622.16'	12.0" Round Culvert L= 22.0' Ke= 0.500 Inlet / Outlet Invert= 622.16' / 622.05' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf
#2	Discarded	622.00'	1.000 in/hr Exfiltration over Surface area

Discarded OutFlow Max=0.01 cfs @ 24.00 hrs HW=623.16' (Free Discharge)
 ↑**2=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.12 cfs @ 12.62 hrs HW=622.36' TW=622.21' (Dynamic Tailwater)
 ↑**1=Culvert** (Outlet Controls 0.12 cfs @ 1.56 fps)

Summary for Subcatchment 3S: Flow from all of modeled area 3S

Runoff = 0.14 cfs @ 12.60 hrs, Volume= 1,758 cf, Depth> 0.19"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2 Year Rainfall=2.98"

ROKEH WILTON SITE POST 7-21-23

Type III 24-hr 2 Year Rainfall=2.98"

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Area (sf)	CN	Description
112,519	55	Woods, Good, HSG B
112,519		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.2	100	0.0800	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
7.7	633	0.0750	1.37		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.9	733	Total			

Summary for Pond 4P: (new Pond)

Volume	Invert	Avail.Storage	Storage Description
#1	0.50'	74 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.50	8	0	0
2.00	90	74	74

Summary for Subcatchment 4S: Flow from all of modeled area 2S

Runoff = 0.00 cfs @ 17.10 hrs, Volume= 103 cf, Depth> 0.02"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 Year Rainfall=2.98"

Area (sf)	CN	Description
36,051	30	Woods, Good, HSG A
5,892	55	Woods, Good, HSG B
1,429	96	Gravel surface, HSG A
4,093	96	Gravel surface, HSG B
1,410	39	>75% Grass cover, Good, HSG A
4,224	61	>75% Grass cover, Good, HSG B
800	96	Gravel surface, HSG B
250	98	Roofs, HSG B
1,369	96	Gravel surface, HSG B
180	98	Roofs, HSG A
55,698	45	Weighted Average
55,268		99.23% Pervious Area
430		0.77% Impervious Area

ROKEH WILTON SITE POST 7-21-23

Type III 24-hr 2 Year Rainfall=2.98"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.6	100	0.3200	0.22		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
2.9	248	0.0800	1.41		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
10.5	348	Total			

Summary for Subcatchment 5S: (new Subcat)

Runoff = 0.05 cfs @ 12.11 hrs, Volume= 214 cf, Depth> 0.57"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 Year Rainfall=2.98"

Area (sf)	CN	Description
3,153	55	Woods, Good, HSG B
1,075	96	Gravel surface, HSG B
250	98	Roofs, HSG B
4,478	67	Weighted Average
4,228		94.42% Pervious Area
250		5.58% Impervious Area

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

Summary for Subcatchment 6S: TO POND 1

Runoff = 0.00 cfs @ 23.67 hrs, Volume= 10 cf, Depth> 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 Year Rainfall=2.98"

Area (sf)	CN	Description
1,307	98	Roofs, HSG A
1,450	96	Gravel surface, HSG A
18,985	39	>75% Grass cover, Good, HSG A
11,081	30	Woods, Good, HSG A
1,639	61	>75% Grass cover, Good, HSG B
34,462	42	Weighted Average
33,155		96.21% Pervious Area
1,307		3.79% Impervious Area

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

Summary for Link POST1: POA1

Inflow Area = 76,883 sf, 1.14% Impervious, Inflow Depth > 0.24" for 2 Year event
Inflow = 0.15 cfs @ 12.51 hrs, Volume= 1,526 cf
Primary = 0.15 cfs @ 12.51 hrs, Volume= 1,526 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link POST2: POA2

Inflow Area = 159,573 sf, 0.43% Impervious, Inflow Depth > 0.02" for 2 Year event
Inflow = 0.05 cfs @ 12.11 hrs, Volume= 214 cf
Primary = 0.05 cfs @ 12.11 hrs, Volume= 214 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link PRE3: POA3

Inflow Area = 212,230 sf, 0.62% Impervious, Inflow Depth > 0.10" for 2 Year event
Inflow = 0.14 cfs @ 12.60 hrs, Volume= 1,758 cf
Primary = 0.14 cfs @ 12.60 hrs, Volume= 1,758 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

ROKEH WILTON SITE POST 7-21-23

Type III 24-hr 10 year Rainfall=4.44"

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Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 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

Pond 1P: infiltration area1 Peak Elev=630.00' Storage=0 cf Inflow=0.03 cfs 521 cf
Discarded=0.03 cfs 521 cf Primary=0.00 cfs 0 cf Outflow=0.03 cfs 521 cf

Subcatchment 1S: Flow from all of modeled Runoff Area=76,883 sf 1.14% Impervious Runoff Depth>0.82"
Flow Length=642' Tc=18.3 min CN=57 Runoff=0.91 cfs 5,225 cf

Pond 2P: infiltration area 2 Peak Elev=623.55' Storage=1,418 cf Inflow=0.91 cfs 6,453 cf
Discarded=0.01 cfs 429 cf Primary=0.46 cfs 4,729 cf Outflow=0.47 cfs 5,158 cf

Subcatchment 2S: Flow from all of modeled Runoff Area=99,397 sf 0.00% Impervious Runoff Depth>0.71"
Flow Length=667' Tc=20.1 min CN=55 Runoff=0.93 cfs 5,886 cf

Subcatchment 3AS: Flow from all of modeled Runoff Area=65,249 sf 0.00% Impervious Runoff Depth=0.00"
Flow Length=582' Slope=0.0750 '/' Tc=17.4 min CN=30 Runoff=0.00 cfs 0 cf

Pond 3P: PROPOSED CULVERT Peak Elev=623.56' Storage=359 cf Inflow=0.93 cfs 5,886 cf
Discarded=0.01 cfs 407 cf Primary=0.82 cfs 5,159 cf Outflow=0.83 cfs 5,566 cf

Subcatchment 3S: Flow from all of modeled Runoff Area=112,519 sf 0.00% Impervious Runoff Depth>0.71"
Flow Length=733' Tc=20.9 min CN=55 Runoff=1.03 cfs 6,661 cf

Pond 4P: (new Pond) Peak Elev=0.00' Storage=0 cf

Subcatchment 4S: Flow from all of modeled Runoff Area=55,698 sf 0.77% Impervious Runoff Depth>0.28"
Flow Length=348' Tc=10.5 min CN=45 Runoff=0.12 cfs 1,294 cf

Subcatchment 5S: (new Subcat) Runoff Area=4,478 sf 5.58% Impervious Runoff Depth>1.42"
Tc=6.0 min CN=67 Runoff=0.16 cfs 531 cf

Subcatchment 6S: TO POND 1 Runoff Area=34,462 sf 3.79% Impervious Runoff Depth>0.18"
Tc=6.0 min CN=42 Runoff=0.03 cfs 521 cf

Link POST1: POA1 Inflow=0.91 cfs 5,225 cf
Primary=0.91 cfs 5,225 cf

Link POST2: POA2 Inflow=0.49 cfs 5,260 cf
Primary=0.49 cfs 5,260 cf

Link PRE3: POA3 Inflow=1.03 cfs 6,661 cf
Primary=1.03 cfs 6,661 cf

Total Runoff Area = 448,686 sf Runoff Volume = 20,117 cf Average Runoff Depth = 0.54"
99.36% Pervious = 445,819 sf 0.64% Impervious = 2,867 sf

Summary for Pond 1P: infiltration area1

Inflow Area = 34,462 sf, 3.79% Impervious, Inflow Depth > 0.18" for 10 year event
 Inflow = 0.03 cfs @ 12.47 hrs, Volume= 521 cf
 Outflow = 0.03 cfs @ 12.52 hrs, Volume= 521 cf, Atten= 6%, Lag= 3.0 min
 Discarded = 0.03 cfs @ 12.52 hrs, Volume= 521 cf
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Peak Elev= 630.00' @ 12.52 hrs Surf.Area= 380 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 0.1 min (1,007.2 - 1,007.1)

Volume	Invert	Avail.Storage	Storage Description
#1	630.00'	1,640 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
630.00	380	0	0
632.00	1,260	1,640	1,640

Device	Routing	Invert	Outlet Devices
#1	Discarded	630.00'	3.000 in/hr Exfiltration over Surface area
#2	Primary	631.73'	6.0' long x 4.0' breadth Broad-Crested Rectangular Weir
Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00			
2.50 3.00 3.50 4.00 4.50 5.00 5.50			
Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68			
2.72 2.73 2.76 2.79 2.88 3.07 3.32			

Discarded OutFlow Max=0.03 cfs @ 12.52 hrs HW=630.00' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.03 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=630.00' TW=0.00' (Dynamic Tailwater)

↑**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Subcatchment 1S: Flow from all of modeled area 1S

Runoff = 0.91 cfs @ 12.32 hrs, Volume= 5,225 cf, Depth> 0.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10 year Rainfall=4.44"

ROKEH WILTON SITE POST 7-21-23

Type III 24-hr 10 year Rainfall=4.44"

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Area (sf)	CN	Description
2,999	96	Gravel surface, HSG B
1,220	61	>75% Grass cover, Good, HSG B
3,093	55	Woods, Good, HSG B
1,061	61	>75% Grass cover, Good, HSG B
65,935	55	Woods, Good, HSG B
1,496	61	>75% Grass cover, Good, HSG B
880	98	Paved parking, HSG B
56	96	Gravel surface, HSG B
45	55	Woods, Good, HSG B
98	61	>75% Grass cover, Good, HSG B
76,883	57	Weighted Average
76,003		98.86% Pervious Area
880		1.14% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0900	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
5.2	450	0.0840	1.45		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.5	92	0.0500	3.26	35.85	Trap/Vee/Rect Channel Flow, Bot.W=12.00' D=0.50' Z= 20.0 '/' Top.W=32.00' n= 0.050
18.3	642	Total			

Summary for Pond 2P: infiltration area 2

Inflow Area = 155,095 sf, 0.28% Impervious, Inflow Depth > 0.50" for 10 year event
 Inflow = 0.91 cfs @ 12.31 hrs, Volume= 6,453 cf
 Outflow = 0.47 cfs @ 12.84 hrs, Volume= 5,158 cf, Atten= 48%, Lag= 31.6 min
 Discarded = 0.01 cfs @ 12.84 hrs, Volume= 429 cf
 Primary = 0.46 cfs @ 12.84 hrs, Volume= 4,729 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Peak Elev= 623.55' @ 12.84 hrs Surf.Area= 1,508 sf Storage= 1,418 cf

Plug-Flow detention time= 130.2 min calculated for 5,147 cf (80% of inflow)
 Center-of-Mass det. time= 49.5 min (974.4 - 924.9)

Volume	Invert	Avail.Storage	Storage Description
#1	622.00'	2,937 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
622.00	320	0	0
624.00	1,851	2,171	2,171
624.35	2,526	766	2,937

ROKEH WILTON SITE POST 7-21-23

Type III 24-hr 10 year Rainfall=4.44"

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Device	Routing	Invert	Outlet Devices
#1	Discarded	622.00'	0.300 in/hr Exfiltration over Surface area
#2	Primary	623.45'	6.0' long x 4.0' breadth Broad-Crested Rectangular Weir
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.50 4.00 4.50 5.00 5.50
			Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68
			2.72 2.73 2.76 2.79 2.88 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 12.84 hrs HW=623.55' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.46 cfs @ 12.84 hrs HW=623.55' TW=0.00' (Dynamic Tailwater)

↑**2=Broad-Crested Rectangular Weir** (Weir Controls 0.46 cfs @ 0.76 fps)

Summary for Subcatchment 2S: Flow from all of modeled area 2S

Runoff = 0.93 cfs @ 12.37 hrs, Volume= 5,886 cf, Depth> 0.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 year Rainfall=4.44"

Area (sf)	CN	Description
95,049	55	Woods, Good, HSG B
4,348	61	>75% Grass cover, Good, HSG B
99,397	55	Weighted Average
99,397		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.2	100	0.0800	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
6.9	567	0.0740	1.36		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.1	667	Total			

Summary for Subcatchment 3AS: Flow from all of modeled area 3S

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 year Rainfall=4.44"

Area (sf)	CN	Description
64,609	30	Woods, Good, HSG A
640	30	Woods, Good, HSG A
65,249	30	Weighted Average
65,249		100.00% Pervious Area

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Type III 24-hr 10 year Rainfall=4.44"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.3	80	0.0750	0.12		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
6.1	502	0.0750	1.37		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
17.4	582	Total			

Summary for Pond 3P: PROPOSED CULVERT

Inflow Area = 99,397 sf, 0.00% Impervious, Inflow Depth > 0.71" for 10 year event
 Inflow = 0.93 cfs @ 12.37 hrs, Volume= 5,886 cf
 Outflow = 0.83 cfs @ 12.31 hrs, Volume= 5,566 cf, Atten= 11%, Lag= 0.0 min
 Discarded = 0.01 cfs @ 12.87 hrs, Volume= 407 cf
 Primary = 0.82 cfs @ 12.31 hrs, Volume= 5,159 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Peak Elev= 623.56' @ 12.87 hrs Surf.Area= 435 sf Storage= 359 cf

Plug-Flow detention time= 37.4 min calculated for 5,555 cf (94% of inflow)
 Center-of-Mass det. time= 10.8 min (925.2 - 914.4)

Volume	Invert	Avail.Storage	Storage Description
#1	622.00'	791 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
622.00	25	0	0
624.00	550	575	575
624.34	720	216	791

Device	Routing	Invert	Outlet Devices
#1	Primary	622.16'	12.0" Round Culvert L= 22.0' Ke= 0.500 Inlet / Outlet Invert= 622.16' / 622.05' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf
#2	Discarded	622.00'	1.000 in/hr Exfiltration over Surface area

Discarded OutFlow Max=0.01 cfs @ 12.87 hrs HW=623.56' (Free Discharge)
 ↳ **2=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.32 cfs @ 12.31 hrs HW=622.74' TW=622.70' (Dynamic Tailwater)
 ↳ **1=Culvert** (Outlet Controls 0.32 cfs @ 0.97 fps)

Summary for Subcatchment 3S: Flow from all of modeled area 3S

Runoff = 1.03 cfs @ 12.39 hrs, Volume= 6,661 cf, Depth> 0.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10 year Rainfall=4.44"

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Type III 24-hr 10 year Rainfall=4.44"

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Area (sf)	CN	Description
112,519	55	Woods, Good, HSG B
112,519		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.2	100	0.0800	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
7.7	633	0.0750	1.37		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.9	733	Total			

Summary for Pond 4P: (new Pond)

Volume	Invert	Avail.Storage	Storage Description
#1	0.50'	74 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.50	8	0	0
2.00	90	74	74

Summary for Subcatchment 4S: Flow from all of modeled area 2S

Runoff = 0.12 cfs @ 12.45 hrs, Volume= 1,294 cf, Depth> 0.28"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 year Rainfall=4.44"

Area (sf)	CN	Description
36,051	30	Woods, Good, HSG A
5,892	55	Woods, Good, HSG B
1,429	96	Gravel surface, HSG A
4,093	96	Gravel surface, HSG B
1,410	39	>75% Grass cover, Good, HSG A
4,224	61	>75% Grass cover, Good, HSG B
800	96	Gravel surface, HSG B
250	98	Roofs, HSG B
1,369	96	Gravel surface, HSG B
180	98	Roofs, HSG A
55,698	45	Weighted Average
55,268		99.23% Pervious Area
430		0.77% Impervious Area

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Type III 24-hr 10 year Rainfall=4.44"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.6	100	0.3200	0.22		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
2.9	248	0.0800	1.41		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
10.5	348	Total			

Summary for Subcatchment 5S: (new Subcat)

Runoff = 0.16 cfs @ 12.10 hrs, Volume= 531 cf, Depth> 1.42"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 year Rainfall=4.44"

Area (sf)	CN	Description
3,153	55	Woods, Good, HSG B
1,075	96	Gravel surface, HSG B
250	98	Roofs, HSG B
4,478	67	Weighted Average
4,228		94.42% Pervious Area
250		5.58% Impervious Area

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

Summary for Subcatchment 6S: TO POND 1

Runoff = 0.03 cfs @ 12.47 hrs, Volume= 521 cf, Depth> 0.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 year Rainfall=4.44"

Area (sf)	CN	Description
1,307	98	Roofs, HSG A
1,450	96	Gravel surface, HSG A
18,985	39	>75% Grass cover, Good, HSG A
11,081	30	Woods, Good, HSG A
1,639	61	>75% Grass cover, Good, HSG B
34,462	42	Weighted Average
33,155		96.21% Pervious Area
1,307		3.79% Impervious Area

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

Summary for Link POST1: POA1

Inflow Area = 76,883 sf, 1.14% Impervious, Inflow Depth > 0.82" for 10 year event
Inflow = 0.91 cfs @ 12.32 hrs, Volume= 5,225 cf
Primary = 0.91 cfs @ 12.32 hrs, Volume= 5,225 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link POST2: POA2

Inflow Area = 159,573 sf, 0.43% Impervious, Inflow Depth > 0.40" for 10 year event
Inflow = 0.49 cfs @ 12.84 hrs, Volume= 5,260 cf
Primary = 0.49 cfs @ 12.84 hrs, Volume= 5,260 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link PRE3: POA3

Inflow Area = 212,230 sf, 0.62% Impervious, Inflow Depth > 0.38" for 10 year event
Inflow = 1.03 cfs @ 12.39 hrs, Volume= 6,661 cf
Primary = 1.03 cfs @ 12.39 hrs, Volume= 6,661 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

ROKEH WILTON SITE POST 7-21-23

Type III 24-hr 25 year Rainfall=5.57"

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Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 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

Pond 1P: infiltration area1 Peak Elev=630.56' Storage=281 cf Inflow=0.16 cfs 1,360 cf
Discarded=0.04 cfs 1,360 cf Primary=0.00 cfs 0 cf Outflow=0.04 cfs 1,360 cf

Subcatchment 1S: Flow from all of modeled Runoff Area=76,883 sf 1.14% Impervious Runoff Depth>1.41"
Flow Length=642' Tc=18.3 min CN=57 Runoff=1.81 cfs 9,060 cf

Pond 2P: infiltration area 2 Peak Elev=623.71' Storage=1,667 cf Inflow=1.99 cfs 12,713 cf
Discarded=0.01 cfs 442 cf Primary=1.94 cfs 10,962 cf Outflow=1.95 cfs 11,404 cf

Subcatchment 2S: Flow from all of modeled Runoff Area=99,397 sf 0.00% Impervious Runoff Depth>1.27"
Flow Length=667' Tc=20.1 min CN=55 Runoff=1.95 cfs 10,517 cf

Subcatchment 3AS: Flow from all of modeled Runoff Area=65,249 sf 0.00% Impervious Runoff Depth>0.03"
Flow Length=582' Slope=0.0750 '/' Tc=17.4 min CN=30 Runoff=0.01 cfs 178 cf

Pond 3P: PROPOSED CULVERT Peak Elev=623.89' Storage=514 cf Inflow=1.95 cfs 10,517 cf
Discarded=0.01 cfs 423 cf Primary=1.64 cfs 9,770 cf Outflow=1.65 cfs 10,193 cf

Subcatchment 3S: Flow from all of modeled Runoff Area=112,519 sf 0.00% Impervious Runoff Depth>1.27"
Flow Length=733' Tc=20.9 min CN=55 Runoff=2.18 cfs 11,902 cf

Pond 4P: (new Pond) Peak Elev=0.00' Storage=0 cf

Subcatchment 4S: Flow from all of modeled Runoff Area=55,698 sf 0.77% Impervious Runoff Depth>0.63"
Flow Length=348' Tc=10.5 min CN=45 Runoff=0.42 cfs 2,943 cf

Subcatchment 5S: (new Subcat) Runoff Area=4,478 sf 5.58% Impervious Runoff Depth>2.21"
Tc=6.0 min CN=67 Runoff=0.26 cfs 824 cf

Subcatchment 6S: TO POND 1 Runoff Area=34,462 sf 3.79% Impervious Runoff Depth>0.47"
Tc=6.0 min CN=42 Runoff=0.16 cfs 1,360 cf

Link POST1: POA1 Inflow=1.81 cfs 9,060 cf
Primary=1.81 cfs 9,060 cf

Link POST2: POA2 Inflow=2.01 cfs 11,786 cf
Primary=2.01 cfs 11,786 cf

Link PRE3: POA3 Inflow=2.18 cfs 12,080 cf
Primary=2.18 cfs 12,080 cf

Total Runoff Area = 448,686 sf Runoff Volume = 36,784 cf Average Runoff Depth = 0.98"
99.36% Pervious = 445,819 sf 0.64% Impervious = 2,867 sf

Summary for Pond 1P: infiltration area1

Inflow Area = 34,462 sf, 3.79% Impervious, Inflow Depth > 0.47" for 25 year event
 Inflow = 0.16 cfs @ 12.31 hrs, Volume= 1,360 cf
 Outflow = 0.04 cfs @ 14.58 hrs, Volume= 1,360 cf, Atten= 73%, Lag= 135.7 min
 Discarded = 0.04 cfs @ 14.58 hrs, Volume= 1,360 cf
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Peak Elev= 630.56' @ 14.58 hrs Surf.Area= 626 sf Storage= 281 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 69.0 min (1,017.1 - 948.1)

Volume	Invert	Avail.Storage	Storage Description
#1	630.00'	1,640 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
630.00	380	0	0
632.00	1,260	1,640	1,640

Device	Routing	Invert	Outlet Devices
#1	Discarded	630.00'	3.000 in/hr Exfiltration over Surface area
#2	Primary	631.73'	6.0' long x 4.0' breadth Broad-Crested Rectangular Weir
Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00			
2.50 3.00 3.50 4.00 4.50 5.00 5.50			
Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68			
2.72 2.73 2.76 2.79 2.88 3.07 3.32			

Discarded OutFlow Max=0.04 cfs @ 14.58 hrs HW=630.56' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.04 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=630.00' TW=0.00' (Dynamic Tailwater)

↑**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Subcatchment 1S: Flow from all of modeled area 1S

Runoff = 1.81 cfs @ 12.29 hrs, Volume= 9,060 cf, Depth> 1.41"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25 year Rainfall=5.57"

ROKEH WILTON SITE POST 7-21-23

Type III 24-hr 25 year Rainfall=5.57"

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Area (sf)	CN	Description
2,999	96	Gravel surface, HSG B
1,220	61	>75% Grass cover, Good, HSG B
3,093	55	Woods, Good, HSG B
1,061	61	>75% Grass cover, Good, HSG B
65,935	55	Woods, Good, HSG B
1,496	61	>75% Grass cover, Good, HSG B
880	98	Paved parking, HSG B
56	96	Gravel surface, HSG B
45	55	Woods, Good, HSG B
98	61	>75% Grass cover, Good, HSG B
76,883	57	Weighted Average
76,003		98.86% Pervious Area
880		1.14% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0900	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
5.2	450	0.0840	1.45		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.5	92	0.0500	3.26	35.85	Trap/Vee/Rect Channel Flow, Bot.W=12.00' D=0.50' Z= 20.0 ' Top.W=32.00' n= 0.050
18.3	642	Total			

Summary for Pond 2P: infiltration area 2

Inflow Area = 155,095 sf, 0.28% Impervious, Inflow Depth > 0.98" for 25 year event
 Inflow = 1.99 cfs @ 12.46 hrs, Volume= 12,713 cf
 Outflow = 1.95 cfs @ 12.50 hrs, Volume= 11,404 cf, Atten= 2%, Lag= 2.8 min
 Discarded = 0.01 cfs @ 12.50 hrs, Volume= 442 cf
 Primary = 1.94 cfs @ 12.50 hrs, Volume= 10,962 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Peak Elev= 623.71' @ 12.50 hrs Surf.Area= 1,630 sf Storage= 1,667 cf

Plug-Flow detention time= 70.2 min calculated for 11,381 cf (90% of inflow)
 Center-of-Mass det. time= 22.7 min (923.2 - 900.5)

Volume	Invert	Avail.Storage	Storage Description
#1	622.00'	2,937 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
622.00	320	0	0
624.00	1,851	2,171	2,171
624.35	2,526	766	2,937

ROKEH WILTON SITE POST 7-21-23

Type III 24-hr 25 year Rainfall=5.57"

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Device	Routing	Invert	Outlet Devices
#1	Discarded	622.00'	0.300 in/hr Exfiltration over Surface area
#2	Primary	623.45'	6.0' long x 4.0' breadth Broad-Crested Rectangular Weir
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.50 4.00 4.50 5.00 5.50
			Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68
			2.72 2.73 2.76 2.79 2.88 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 12.50 hrs HW=623.71' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=1.94 cfs @ 12.50 hrs HW=623.71' TW=0.00' (Dynamic Tailwater)

↑**2=Broad-Crested Rectangular Weir** (Weir Controls 1.94 cfs @ 1.24 fps)

Summary for Subcatchment 2S: Flow from all of modeled area 2S

Runoff = 1.95 cfs @ 12.33 hrs, Volume= 10,517 cf, Depth> 1.27"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 year Rainfall=5.57"

Area (sf)	CN	Description
95,049	55	Woods, Good, HSG B
4,348	61	>75% Grass cover, Good, HSG B
99,397	55	Weighted Average
99,397		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.2	100	0.0800	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
6.9	567	0.0740	1.36		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.1	667	Total			

Summary for Subcatchment 3AS: Flow from all of modeled area 3S

Runoff = 0.01 cfs @ 20.98 hrs, Volume= 178 cf, Depth> 0.03"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 year Rainfall=5.57"

Area (sf)	CN	Description
64,609	30	Woods, Good, HSG A
640	30	Woods, Good, HSG A
65,249	30	Weighted Average
65,249		100.00% Pervious Area

ROKEH WILTON SITE POST 7-21-23

Type III 24-hr 25 year Rainfall=5.57"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.3	80	0.0750	0.12		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
6.1	502	0.0750	1.37		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
17.4	582	Total			

Summary for Pond 3P: PROPOSED CULVERT

Inflow Area = 99,397 sf, 0.00% Impervious, Inflow Depth > 1.27" for 25 year event
 Inflow = 1.95 cfs @ 12.33 hrs, Volume= 10,517 cf
 Outflow = 1.65 cfs @ 12.47 hrs, Volume= 10,193 cf, Atten= 15%, Lag= 8.7 min
 Discarded = 0.01 cfs @ 12.50 hrs, Volume= 423 cf
 Primary = 1.64 cfs @ 12.47 hrs, Volume= 9,770 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Peak Elev= 623.89' @ 12.50 hrs Surf.Area= 520 sf Storage= 514 cf

Plug-Flow detention time= 22.4 min calculated for 10,172 cf (97% of inflow)
 Center-of-Mass det. time= 6.4 min (899.2 - 892.8)

Volume	Invert	Avail.Storage	Storage Description
#1	622.00'	791 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
622.00	25	0	0
624.00	550	575	575
624.34	720	216	791

Device	Routing	Invert	Outlet Devices
#1	Primary	622.16'	12.0" Round Culvert L= 22.0' Ke= 0.500 Inlet / Outlet Invert= 622.16' / 622.05' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf
#2	Discarded	622.00'	1.000 in/hr Exfiltration over Surface area

Discarded OutFlow Max=0.01 cfs @ 12.50 hrs HW=623.89' (Free Discharge)
 ↑**2=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=1.56 cfs @ 12.47 hrs HW=623.88' TW=623.71' (Dynamic Tailwater)
 ↑**1=Culvert** (Inlet Controls 1.56 cfs @ 1.98 fps)

Summary for Subcatchment 3S: Flow from all of modeled area 3S

Runoff = 2.18 cfs @ 12.34 hrs, Volume= 11,902 cf, Depth> 1.27"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25 year Rainfall=5.57"

ROKEH WILTON SITE POST 7-21-23

Type III 24-hr 25 year Rainfall=5.57"

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Area (sf)	CN	Description
112,519	55	Woods, Good, HSG B
112,519		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.2	100	0.0800	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
7.7	633	0.0750	1.37		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.9	733	Total			

Summary for Pond 4P: (new Pond)

Volume	Invert	Avail.Storage	Storage Description
#1	0.50'	74 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.50	8	0	0
2.00	90	74	74

Summary for Subcatchment 4S: Flow from all of modeled area 2S

Runoff = 0.42 cfs @ 12.27 hrs, Volume= 2,943 cf, Depth> 0.63"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 year Rainfall=5.57"

Area (sf)	CN	Description
36,051	30	Woods, Good, HSG A
5,892	55	Woods, Good, HSG B
1,429	96	Gravel surface, HSG A
4,093	96	Gravel surface, HSG B
1,410	39	>75% Grass cover, Good, HSG A
4,224	61	>75% Grass cover, Good, HSG B
800	96	Gravel surface, HSG B
250	98	Roofs, HSG B
1,369	96	Gravel surface, HSG B
180	98	Roofs, HSG A
55,698	45	Weighted Average
55,268		99.23% Pervious Area
430		0.77% Impervious Area

ROKEH WILTON SITE POST 7-21-23

Type III 24-hr 25 year Rainfall=5.57"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.6	100	0.3200	0.22		Sheet Flow,
					Woods: Light underbrush n= 0.400 P2= 2.79"
2.9	248	0.0800	1.41		Shallow Concentrated Flow,
					Woodland Kv= 5.0 fps
10.5	348	Total			

Summary for Subcatchment 5S: (new Subcat)

Runoff = 0.26 cfs @ 12.10 hrs, Volume= 824 cf, Depth> 2.21"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 year Rainfall=5.57"

Area (sf)	CN	Description
3,153	55	Woods, Good, HSG B
1,075	96	Gravel surface, HSG B
250	98	Roofs, HSG B
4,478	67	Weighted Average
4,228		94.42% Pervious Area
250		5.58% Impervious Area

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

Summary for Subcatchment 6S: TO POND 1

Runoff = 0.16 cfs @ 12.31 hrs, Volume= 1,360 cf, Depth> 0.47"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 year Rainfall=5.57"

Area (sf)	CN	Description
1,307	98	Roofs, HSG A
1,450	96	Gravel surface, HSG A
18,985	39	>75% Grass cover, Good, HSG A
11,081	30	Woods, Good, HSG A
1,639	61	>75% Grass cover, Good, HSG B
34,462	42	Weighted Average
33,155		96.21% Pervious Area
1,307		3.79% Impervious Area

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

Summary for Link POST1: POA1

Inflow Area = 76,883 sf, 1.14% Impervious, Inflow Depth > 1.41" for 25 year event
Inflow = 1.81 cfs @ 12.29 hrs, Volume= 9,060 cf
Primary = 1.81 cfs @ 12.29 hrs, Volume= 9,060 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link POST2: POA2

Inflow Area = 159,573 sf, 0.43% Impervious, Inflow Depth > 0.89" for 25 year event
Inflow = 2.01 cfs @ 12.50 hrs, Volume= 11,786 cf
Primary = 2.01 cfs @ 12.50 hrs, Volume= 11,786 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link PRE3: POA3

Inflow Area = 212,230 sf, 0.62% Impervious, Inflow Depth > 0.68" for 25 year event
Inflow = 2.18 cfs @ 12.34 hrs, Volume= 12,080 cf
Primary = 2.18 cfs @ 12.34 hrs, Volume= 12,080 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

ROKEH WILTON SITE POST 7-21-23

Type III 24-hr 50 year Rainfall=6.63"

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Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 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

Pond 1P: infiltration area1 Peak Elev=631.23' Storage=796 cf Inflow=0.44 cfs 2,426 cf
Discarded=0.06 cfs 2,300 cf Primary=0.00 cfs 0 cf Outflow=0.06 cfs 2,300 cf

Subcatchment 1S: Flow from all of modeled Runoff Area=76,883 sf 1.14% Impervious Runoff Depth>2.06"
Flow Length=642' Tc=18.3 min CN=57 Runoff=2.78 cfs 13,206 cf

Pond 2P: infiltration area 2 Peak Elev=623.83' Storage=1,859 cf Inflow=3.55 cfs 19,764 cf
Discarded=0.01 cfs 455 cf Primary=3.48 cfs 17,989 cf Outflow=3.49 cfs 18,443 cf

Subcatchment 2S: Flow from all of modeled Runoff Area=99,397 sf 0.00% Impervious Runoff Depth>1.88"
Flow Length=667' Tc=20.1 min CN=55 Runoff=3.10 cfs 15,593 cf

Subcatchment 3AS: Flow from all of modeled Runoff Area=65,249 sf 0.00% Impervious Runoff Depth>0.15"
Flow Length=582' Slope=0.0750 '/' Tc=17.4 min CN=30 Runoff=0.03 cfs 817 cf

Pond 3P: PROPOSED CULVERT Peak Elev=624.38' Storage=791 cf Inflow=3.10 cfs 15,593 cf
Discarded=0.02 cfs 442 cf Primary=2.83 cfs 14,824 cf Outflow=2.85 cfs 15,266 cf

Subcatchment 3S: Flow from all of modeled Runoff Area=112,519 sf 0.00% Impervious Runoff Depth>1.88"
Flow Length=733' Tc=20.9 min CN=55 Runoff=3.46 cfs 17,647 cf

Pond 4P: (new Pond) Peak Elev=0.00' Storage=0 cf

Subcatchment 4S: Flow from all of modeled Runoff Area=55,698 sf 0.77% Impervious Runoff Depth>1.06"
Flow Length=348' Tc=10.5 min CN=45 Runoff=0.95 cfs 4,940 cf

Subcatchment 5S: (new Subcat) Runoff Area=4,478 sf 5.58% Impervious Runoff Depth>3.01"
Tc=6.0 min CN=67 Runoff=0.35 cfs 1,124 cf

Subcatchment 6S: TO POND 1 Runoff Area=34,462 sf 3.79% Impervious Runoff Depth>0.84"
Tc=6.0 min CN=42 Runoff=0.44 cfs 2,426 cf

Link POST1: POA1 Inflow=2.78 cfs 13,206 cf
Primary=2.78 cfs 13,206 cf

Link POST2: POA2 Inflow=3.60 cfs 19,112 cf
Primary=3.60 cfs 19,112 cf

Link PRE3: POA3 Inflow=3.46 cfs 18,465 cf
Primary=3.46 cfs 18,465 cf

Total Runoff Area = 448,686 sf Runoff Volume = 55,754 cf Average Runoff Depth = 1.49"
99.36% Pervious = 445,819 sf 0.64% Impervious = 2,867 sf

Summary for Pond 1P: infiltration area1

Inflow Area = 34,462 sf, 3.79% Impervious, Inflow Depth > 0.84" for 50 year event
 Inflow = 0.44 cfs @ 12.14 hrs, Volume= 2,426 cf
 Outflow = 0.06 cfs @ 15.03 hrs, Volume= 2,300 cf, Atten= 85%, Lag= 173.4 min
 Discarded = 0.06 cfs @ 15.03 hrs, Volume= 2,300 cf
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Peak Elev= 631.23' @ 15.03 hrs Surf.Area= 919 sf Storage= 796 cf

Plug-Flow detention time= 160.1 min calculated for 2,295 cf (95% of inflow)
 Center-of-Mass det. time= 134.3 min (1,053.8 - 919.4)

Volume	Invert	Avail.Storage	Storage Description
#1	630.00'	1,640 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
630.00	380	0	0
632.00	1,260	1,640	1,640

Device	Routing	Invert	Outlet Devices
#1	Discarded	630.00'	3.000 in/hr Exfiltration over Surface area
#2	Primary	631.73'	6.0' long x 4.0' breadth Broad-Crested Rectangular Weir
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.50 4.00 4.50 5.00 5.50
			Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68
			2.72 2.73 2.76 2.79 2.88 3.07 3.32

Discarded OutFlow Max=0.06 cfs @ 15.03 hrs HW=631.23' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.06 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=630.00' TW=0.00' (Dynamic Tailwater)

↑**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Subcatchment 1S: Flow from all of modeled area 1S

Runoff = 2.78 cfs @ 12.28 hrs, Volume= 13,206 cf, Depth> 2.06"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 50 year Rainfall=6.63"

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Type III 24-hr 50 year Rainfall=6.63"

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Area (sf)	CN	Description
2,999	96	Gravel surface, HSG B
1,220	61	>75% Grass cover, Good, HSG B
3,093	55	Woods, Good, HSG B
1,061	61	>75% Grass cover, Good, HSG B
65,935	55	Woods, Good, HSG B
1,496	61	>75% Grass cover, Good, HSG B
880	98	Paved parking, HSG B
56	96	Gravel surface, HSG B
45	55	Woods, Good, HSG B
98	61	>75% Grass cover, Good, HSG B
76,883	57	Weighted Average
76,003		98.86% Pervious Area
880		1.14% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0900	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
5.2	450	0.0840	1.45		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.5	92	0.0500	3.26	35.85	Trap/Vee/Rect Channel Flow, Bot.W=12.00' D=0.50' Z= 20.0 ' /' Top.W=32.00' n= 0.050
18.3	642	Total			

Summary for Pond 2P: infiltration area 2

Inflow Area = 155,095 sf, 0.28% Impervious, Inflow Depth > 1.53" for 50 year event
 Inflow = 3.55 cfs @ 12.39 hrs, Volume= 19,764 cf
 Outflow = 3.49 cfs @ 12.42 hrs, Volume= 18,443 cf, Atten= 2%, Lag= 1.7 min
 Discarded = 0.01 cfs @ 12.42 hrs, Volume= 455 cf
 Primary = 3.48 cfs @ 12.42 hrs, Volume= 17,989 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Peak Elev= 623.83' @ 12.42 hrs Surf.Area= 1,717 sf Storage= 1,859 cf

Plug-Flow detention time= 47.5 min calculated for 18,405 cf (93% of inflow)
 Center-of-Mass det. time= 14.6 min (901.0 - 886.4)

Volume	Invert	Avail.Storage	Storage Description
#1	622.00'	2,937 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
622.00	320	0	0
624.00	1,851	2,171	2,171
624.35	2,526	766	2,937

ROKEH WILTON SITE POST 7-21-23

Type III 24-hr 50 year Rainfall=6.63"

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Device	Routing	Invert	Outlet Devices
#1	Discarded	622.00'	0.300 in/hr Exfiltration over Surface area
#2	Primary	623.45'	6.0' long x 4.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 12.42 hrs HW=623.82' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=3.45 cfs @ 12.42 hrs HW=623.82' TW=0.00' (Dynamic Tailwater)

↑**2=Broad-Crested Rectangular Weir** (Weir Controls 3.45 cfs @ 1.54 fps)

Summary for Subcatchment 2S: Flow from all of modeled area 2S

Runoff = 3.10 cfs @ 12.31 hrs, Volume= 15,593 cf, Depth> 1.88"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 50 year Rainfall=6.63"

Area (sf)	CN	Description
95,049	55	Woods, Good, HSG B
4,348	61	>75% Grass cover, Good, HSG B
99,397	55	Weighted Average
99,397		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.2	100	0.0800	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
6.9	567	0.0740	1.36		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.1	667	Total			

Summary for Subcatchment 3AS: Flow from all of modeled area 3S

Runoff = 0.03 cfs @ 14.98 hrs, Volume= 817 cf, Depth> 0.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 50 year Rainfall=6.63"

Area (sf)	CN	Description
64,609	30	Woods, Good, HSG A
640	30	Woods, Good, HSG A
65,249	30	Weighted Average
65,249		100.00% Pervious Area

ROKEH WILTON SITE POST 7-21-23

Type III 24-hr 50 year Rainfall=6.63"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.3	80	0.0750	0.12		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
6.1	502	0.0750	1.37		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
17.4	582	Total			

Summary for Pond 3P: PROPOSED CULVERT

Inflow Area = 99,397 sf, 0.00% Impervious, Inflow Depth > 1.88" for 50 year event
 Inflow = 3.10 cfs @ 12.31 hrs, Volume= 15,593 cf
 Outflow = 2.85 cfs @ 12.40 hrs, Volume= 15,266 cf, Atten= 8%, Lag= 5.4 min
 Discarded = 0.02 cfs @ 12.42 hrs, Volume= 442 cf
 Primary = 2.83 cfs @ 12.40 hrs, Volume= 14,824 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Peak Elev= 624.38' @ 12.41 hrs Surf.Area= 720 sf Storage= 791 cf

Plug-Flow detention time= 16.3 min calculated for 15,266 cf (98% of inflow)
 Center-of-Mass det. time= 4.9 min (884.8 - 879.8)

Volume	Invert	Avail.Storage	Storage Description
#1	622.00'	791 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
622.00	25	0	0
624.00	550	575	575
624.34	720	216	791

Device	Routing	Invert	Outlet Devices
#1	Primary	622.16'	12.0" Round Culvert L= 22.0' Ke= 0.500 Inlet / Outlet Invert= 622.16' / 622.05' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf
#2	Discarded	622.00'	1.000 in/hr Exfiltration over Surface area

Discarded OutFlow Max=0.02 cfs @ 12.42 hrs HW=624.36' (Free Discharge)
 ↑**2=Exfiltration** (Exfiltration Controls 0.02 cfs)

Primary OutFlow Max=2.80 cfs @ 12.40 hrs HW=624.37' TW=623.82' (Dynamic Tailwater)
 ↑**1=Culvert** (Inlet Controls 2.80 cfs @ 3.56 fps)

Summary for Subcatchment 3S: Flow from all of modeled area 3S

Runoff = 3.46 cfs @ 12.32 hrs, Volume= 17,647 cf, Depth> 1.88"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 50 year Rainfall=6.63"

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Type III 24-hr 50 year Rainfall=6.63"

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Area (sf)	CN	Description
112,519	55	Woods, Good, HSG B
112,519		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.2	100	0.0800	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
7.7	633	0.0750	1.37		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.9	733	Total			

Summary for Pond 4P: (new Pond)

Volume	Invert	Avail.Storage	Storage Description
#1	0.50'	74 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.50	8	0	0
2.00	90	74	74

Summary for Subcatchment 4S: Flow from all of modeled area 2S

Runoff = 0.95 cfs @ 12.20 hrs, Volume= 4,940 cf, Depth> 1.06"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 year Rainfall=6.63"

Area (sf)	CN	Description
36,051	30	Woods, Good, HSG A
5,892	55	Woods, Good, HSG B
1,429	96	Gravel surface, HSG A
4,093	96	Gravel surface, HSG B
1,410	39	>75% Grass cover, Good, HSG A
4,224	61	>75% Grass cover, Good, HSG B
800	96	Gravel surface, HSG B
250	98	Roofs, HSG B
1,369	96	Gravel surface, HSG B
180	98	Roofs, HSG A
55,698	45	Weighted Average
55,268		99.23% Pervious Area
430		0.77% Impervious Area

ROKEH WILTON SITE POST 7-21-23

Type III 24-hr 50 year Rainfall=6.63"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.6	100	0.3200	0.22		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.79"
2.9	248	0.0800	1.41		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
10.5	348	Total			

Summary for Subcatchment 5S: (new Subcat)

Runoff = 0.35 cfs @ 12.10 hrs, Volume= 1,124 cf, Depth> 3.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 year Rainfall=6.63"

Area (sf)	CN	Description
3,153	55	Woods, Good, HSG B
1,075	96	Gravel surface, HSG B
250	98	Roofs, HSG B
4,478	67	Weighted Average
4,228		94.42% Pervious Area
250		5.58% Impervious Area

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

Summary for Subcatchment 6S: TO POND 1

Runoff = 0.44 cfs @ 12.14 hrs, Volume= 2,426 cf, Depth> 0.84"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 year Rainfall=6.63"

Area (sf)	CN	Description
1,307	98	Roofs, HSG A
1,450	96	Gravel surface, HSG A
18,985	39	>75% Grass cover, Good, HSG A
11,081	30	Woods, Good, HSG A
1,639	61	>75% Grass cover, Good, HSG B
34,462	42	Weighted Average
33,155		96.21% Pervious Area
1,307		3.79% Impervious Area

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

Summary for Link POST1: POA1

Inflow Area = 76,883 sf, 1.14% Impervious, Inflow Depth > 2.06" for 50 year event
Inflow = 2.78 cfs @ 12.28 hrs, Volume= 13,206 cf
Primary = 2.78 cfs @ 12.28 hrs, Volume= 13,206 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link POST2: POA2

Inflow Area = 159,573 sf, 0.43% Impervious, Inflow Depth > 1.44" for 50 year event
Inflow = 3.60 cfs @ 12.41 hrs, Volume= 19,112 cf
Primary = 3.60 cfs @ 12.41 hrs, Volume= 19,112 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link PRE3: POA3

Inflow Area = 212,230 sf, 0.62% Impervious, Inflow Depth > 1.04" for 50 year event
Inflow = 3.46 cfs @ 12.32 hrs, Volume= 18,465 cf
Primary = 3.46 cfs @ 12.32 hrs, Volume= 18,465 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

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OPERATION AND MAINTENANCE PLAN

DRAINAGE AREA PLANS

Inspection & Maintenance Plan
Maps/Lots F-3-2
Wilton, NH

1.0 Intent of this Plan:

The intent of this plan is to insure that all drainage systems designed, constructed, and approved by the Town of Wilton be properly maintained such that there is no detrimental effects, including obstructions, erosion, redirected flow patterns, or any other adverse condition caused by stormwater runoff.

2.0 Plan Coordinator and Responsibilities:

Plan Coordinator contact:
Isaac Frye Holdings LLC
586 Turnpike Road
New Ipswich, NH 03071

The Plan coordinator's duties include the following:

- Implement the Plan with the aid of support personnel;
- Oversee maintenance practices on the site;
- Conduct or provide for inspection and monitoring activities;
- Maintain records of maintenance activities; and
- Identify any deficiencies on the site and make sure they are corrected; and

To aid in the implementation of the plan, all personnel will ensure that all housekeeping and monitoring procedures are implemented and will ensure the integrity of the site drainage facilities.

3.0 Stormwater Management Controls

The following provides a list of recommendations and guidelines for managing the stormwater controls:

Landscaped Areas – Fertilizer Management

Function – Fertilizer management involves controlling the rate, timing and method of fertilizer application so that the nutrients are taken up by the plants thereby reducing the chance of polluting the surface and ground waters. Fertilizer management can be effective in reducing the amounts of phosphorus and nitrogen in runoff from landscaped areas, particularly lawns. Soil tests shall be conducted to determine fertilizer application rates.

Maintenance

- Have the soil tested by your landscaper or local Soil Conservation Service for nutrient requirements and follow the recommendations.
- Do not apply fertilizer to frozen ground.
- Clean up any fertilizer spills.

Inspection & Maintenance Plan

Maps/Lots F-3-2

Wilton, NH

- Do not allow fertilizer to be broadcast into water bodies.
- When fertilizing a lawn, water thoroughly, but do not create a situation where water runs off the surface of the lawn.

Landscaped Areas – Litter Control

Function – Landscaped areas tend to filter debris and contaminants that may block drainage systems and pollute the surface and ground waters.

Maintenance

- Litter Control and lawn maintenance involves removing litter such as trash, leaves, lawn clippings, pet wastes, oil and chemicals from streets, parking lots, and lawns before materials are transported into surface waters.
- Litter control shall be implemented as part of the grounds maintenance program.

Forebays

shall be inspected after major storms and every 6 months for accumulated sediment and debris. Grass and woody vegetation shall be removed from the forebay annually. Staff gage or other measuring device shall be installed to indicate the depth of the sediment.

Inlet and outlet rip rap swales and ditches

to be inspected after major storms and every 6 months for accumulated sediment and debris. Grass and woody vegetation shall be removed from the stone rip rap annually. Sediment shall be removed from the rip rap annually.

Infiltration Basins

Function – These basins are designed to store the water quality volume (WQV) from smaller rainfall events. They also attenuate the peak stormwater runoff from larger events. The sediment forebays preceding each basin are designed to capture sediment before it enters the infiltration basin, and therefore must be periodically inspected and cleared of sediment.

Maintenance

- Periodically mow embankments (one to three times annually)
- Inspect inlet and outlet structures after significant storm events and remove debris
- Annually inspect embankments, inlet/outlet structures and forebay
 - Remove woody vegetation from fill embankments
 - Repair any damaged facilities
 - Repair any erosion;
 - Fill rodent holes
 - Check for invasive species and eradicate if found
- Inspect sediment forebay twice annually and remove accumulated sediment as needed

Inspection & Maintenance Plan

Maps/Lots F-3-2

Wilton, NH

- Inspect infiltration area twice annually and following a rainfall event exceeding 2.5 inches in a 24 hour period. If the basin is not draining within 72 hours of a rainfall event, then the condition of the basin should be assessed by a qualified professional.

Forebays

Shall be inspected after major storms and every 6 months for accumulated sediment and debris. Grass and woody vegetation shall be removed from the forebay annually. Staff gage or other measuring device shall be installed to indicate the depth of the sediment.

Grass Lined Conveyance Swales / Ditches

Function – These swales promote sedimentation, filtration and some infiltration of stormwater runoff.

Maintenance

- Periodically mow embankments (one to three times annually). Do not cut shorter than 4 inches.
- Inspect annually for erosion, sediment accumulation, vegetation loss and invasive species. Remove any accumulated sediment or debris.
- Repair any eroded areas, remove invasive species and dead vegetation, reseed as needed

Exotic (Invasive) Species

Most native plant species are very beneficial to our waterbodies, providing food, shelter, and oxygen for organisms in and around the water. Unlike our native species, exotic plant species can reduce the diversity of our native plants, animals and insect species. If exotic species begin to grow in a stormwater management facility, owner shall eradicate the species per best management practices. For additional information on exotic species and procedures for managing them, reference is made to: <http://des.nh.gov/organization/divisions/water/wmb/exoticspecies/categories/publications.htm#factsheets>.

4.0 Safety

Keep safety considerations at the forefront of inspection procedures at all times. Likely hazards should be anticipated and avoided. Never enter a confined space (outlet structure, manhole, etc) without proper training or equipment. A confined space should never be entered without at least one additional person present.

5.0 Inspection and Maintenance Procedures

**Inspection & Maintenance Plan
Maps/Lots F-3-2
Wilton, NH**

Visual inspections of all areas of the site will be performed as needed throughout the year, but no less than once in the spring after snow melt-off, once in the fall, and after the end of a storm with rainfall amounts greater than one (1.0) inches. The inspection will be conducted by the Plan coordinator or designated personnel. The inspection will verify that the site drainage as shown on the plan is in good condition, and that there are no erosion problems developing on the slopes or the drainage systems. Any required repairs will be initiated as soon as possible.

6.0 Record Keeping

An Inspection and Maintenance Report will be prepared for each inspection performed throughout the year, but no less than once in the spring after snow melt-off, once in the fall. A copy of the report form to be completed is provided herein. Completed forms will be maintained at the facility, or with the Plan Coordinator.

All record keeping required by this I&M Plan shall be maintained by the responsible parties and made available upon request.

Should ownership of the property be transferred, the new owner(s) shall assume responsibility for this Plan.

**Inspection & Maintenance Plan
Maps/Lots F-3-2 Wilton, NH**

Inspection Report

General Information	
Facility Name:	
Location:	
Date of Inspection	
Inspector's Name	

Provide pictures of all BMP's

Overall Site Drainage Issues:

	Source	Adequate?	Maintenance Required?	Corrective Action needed and notes:
1	Are all slopes stable showing no signs of erosion?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2	Are ditches, swales, culverts, inlets, and outlets flowing freely?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3	Is there any sediment buildup in ditches, swales, or culverts?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4	Are catch basin sumps clean of sediment buildup?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5	Are detention basins functioning properly?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
6	Does the site drainage comply with the intent of the I&M Plan	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Describe any other issues requiring attention not described above:

Inspected By: _____ Date: _____

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DRAINAGE AREA PLANS