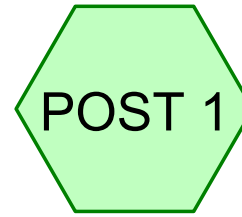
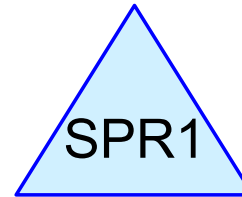


PRE 1

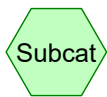


POST 1



SPR1

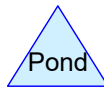
SPREADER



Subcat



Reach



Pond



Link

Routing Diagram for MIKE STEEVES UNDERHILL

Prepared by {enter your company name here}, Printed 1/3/2024
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MIKE STEEVES UNDERHILL

Prepared by {enter your company name here}
HydroCAD® 10.10-4b s/n 05093 © 2020 HydroCAD Software Solutions LLC

Type II 24-hr 1-YEAR Rainfall=2.10"
Printed 1/3/2024

Summary for Subcatchment PRE 1: PRE 1

[46] Hint: Tc=0 (Instant runoff peak depends on dt)

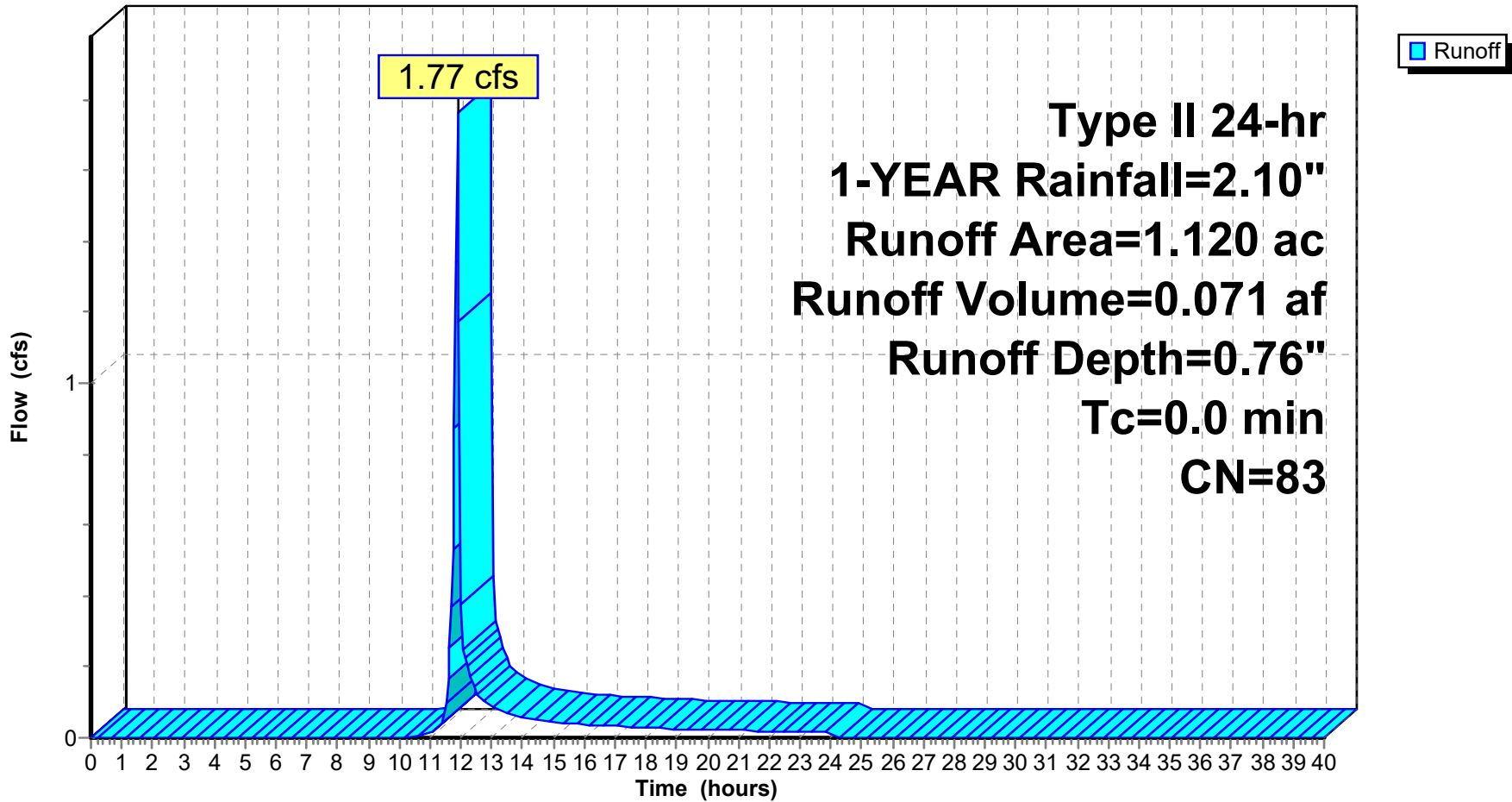
Runoff = 1.77 cfs @ 11.90 hrs, Volume= 0.071 af, Depth= 0.76"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-YEAR Rainfall=2.10"

Area (ac)	CN	Description
1.120	83	Woods, Poor, HSG D
1.120		100.00% Pervious Area

Subcatchment PRE 1: PRE 1

Hydrograph



MIKE STEEVES UNDERHILL

Prepared by {enter your company name here}
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Type II 24-hr 1-YEAR Rainfall=2.10"
Printed 1/3/2024

Summary for Subcatchment POST 1: POST 1

[46] Hint: Tc=0 (Instant runoff peak depends on dt)

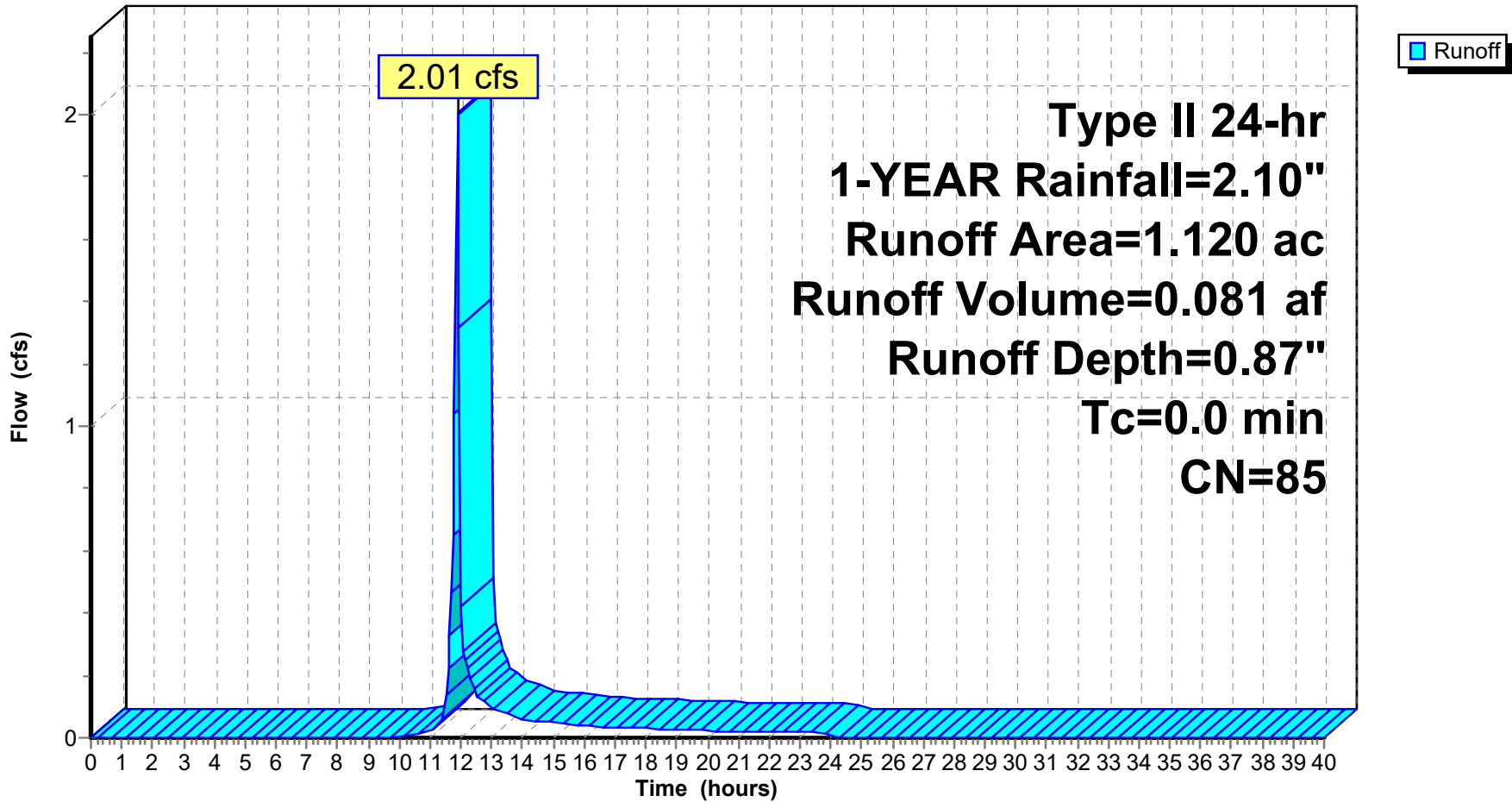
Runoff = 2.01 cfs @ 11.89 hrs, Volume= 0.081 af, Depth= 0.87"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-YEAR Rainfall=2.10"

Area (ac)	CN	Description
0.980	83	Woods, Poor, HSG D
* 0.140	98	Proposed Impervious
1.120	85	Weighted Average
0.980		87.50% Pervious Area
0.140		12.50% Impervious Area

Subcatchment POST 1: POST 1

Hydrograph



MIKE STEEVES UNDERHILL

Prepared by {enter your company name here}
 HydroCAD® 10.10-4b s/n 05093 © 2020 HydroCAD Software Solutions LLC

Type II 24-hr 1-YEAR Rainfall=2.10"
 Printed 1/3/2024

Summary for Pond SPR1: SPREADER

Inflow Area = 1.120 ac, 12.50% Impervious, Inflow Depth = 0.87" for 1-YEAR event
 Inflow = 2.01 cfs @ 11.89 hrs, Volume= 0.081 af
 Outflow = 0.05 cfs @ 15.22 hrs, Volume= 0.081 af, Atten= 98%, Lag= 199.5 min
 Primary = 0.05 cfs @ 15.22 hrs, Volume= 0.081 af

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 915.27' @ 15.22 hrs Surf.Area= 1,002 sf Storage= 2,057 cf

Plug-Flow detention time= 533.0 min calculated for 0.081 af (100% of inflow)
 Center-of-Mass det. time= 531.4 min (1,369.1 - 837.7)

Volume	Invert	Avail.Storage	Storage Description
#1	912.00'	2,852 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

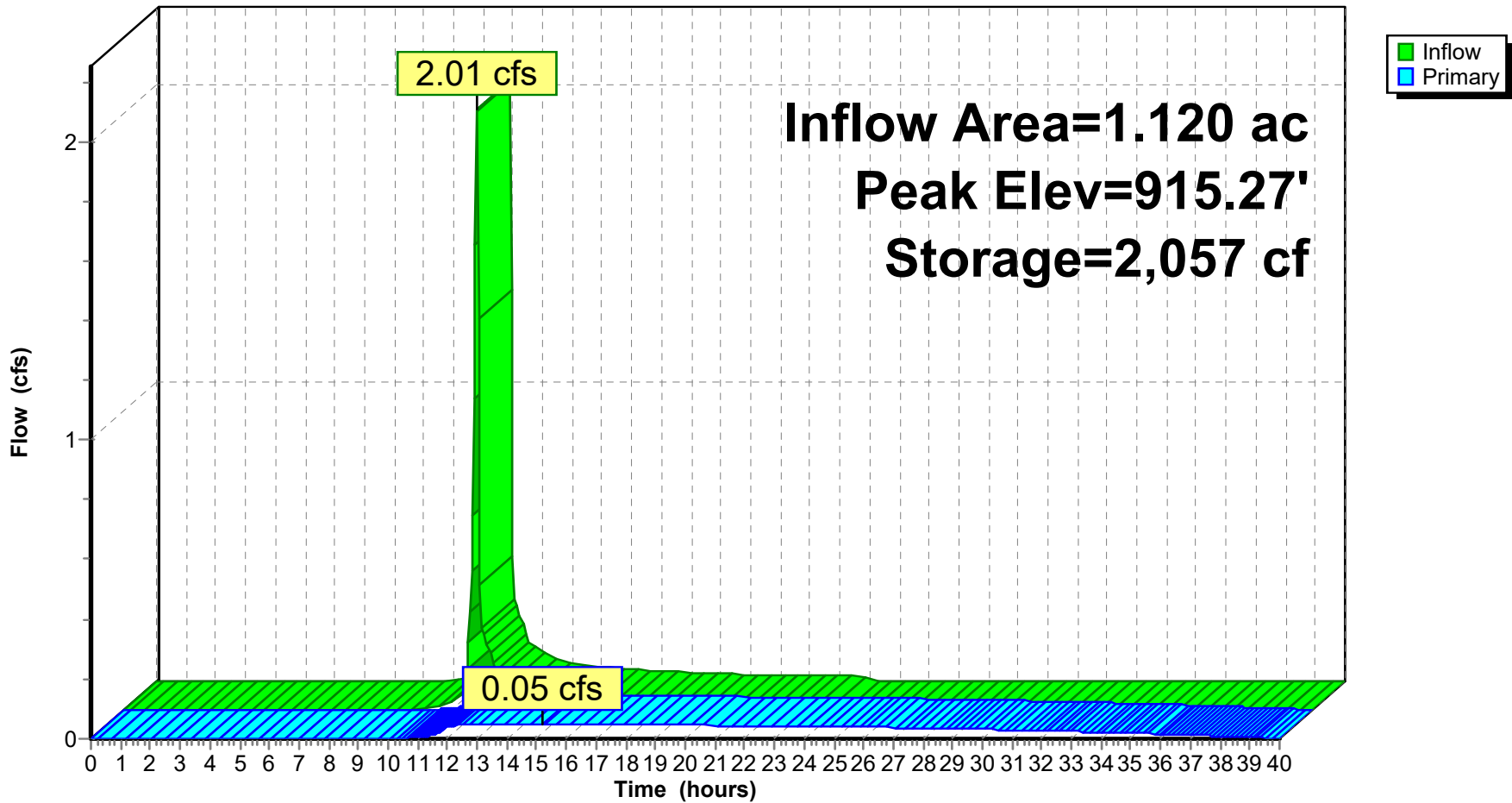
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
912.00	294	0	0
914.00	688	982	982
916.00	1,182	1,870	2,852

Device	Routing	Invert	Outlet Devices
#1	Primary	912.00'	1.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#2	Primary	915.50'	6.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.05 cfs @ 15.22 hrs HW=915.27' (Free Discharge)
 1=Orifice/Grate (Orifice Controls 0.05 cfs @ 8.65 fps)
 2=Orifice/Grate (Controls 0.00 cfs)

Pond SPR1: SPREADER

Hydrograph



MIKE STEEVES UNDERHILL

Prepared by {enter your company name here}
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Type II 24-hr 10-YEAR Rainfall=3.20"

Printed 1/3/2024

Summary for Subcatchment PRE 1: PRE 1

[46] Hint: Tc=0 (Instant runoff peak depends on dt)

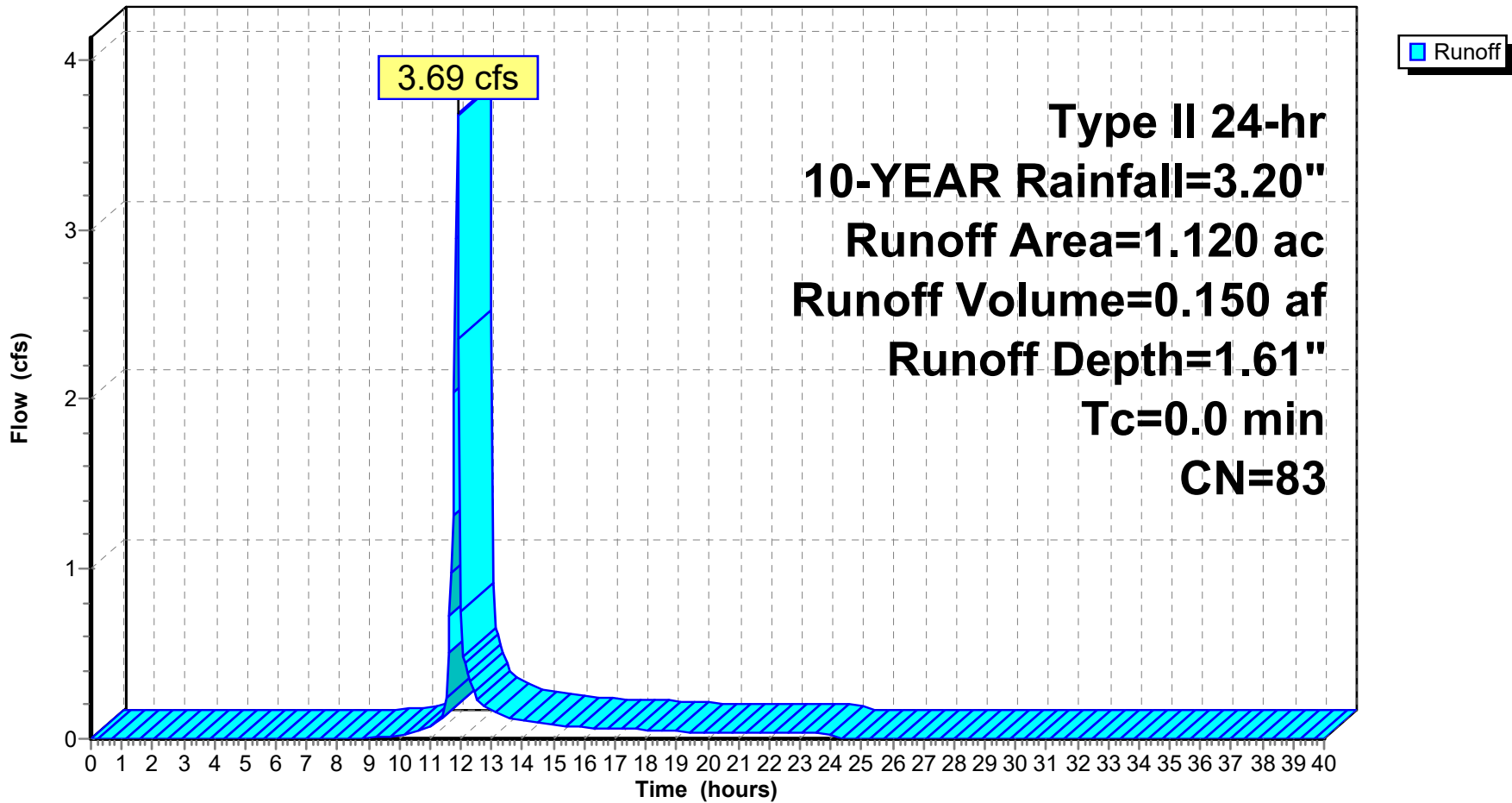
Runoff = 3.69 cfs @ 11.89 hrs, Volume= 0.150 af, Depth= 1.61"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-YEAR Rainfall=3.20"

Area (ac)	CN	Description
1.120	83	Woods, Poor, HSG D
1.120		100.00% Pervious Area

Subcatchment PRE 1: PRE 1

Hydrograph



MIKE STEEVES UNDERHILL

Prepared by {enter your company name here}

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Type II 24-hr 10-YEAR Rainfall=3.20"

Printed 1/3/2024

Summary for Subcatchment POST 1: POST 1

[46] Hint: Tc=0 (Instant runoff peak depends on dt)

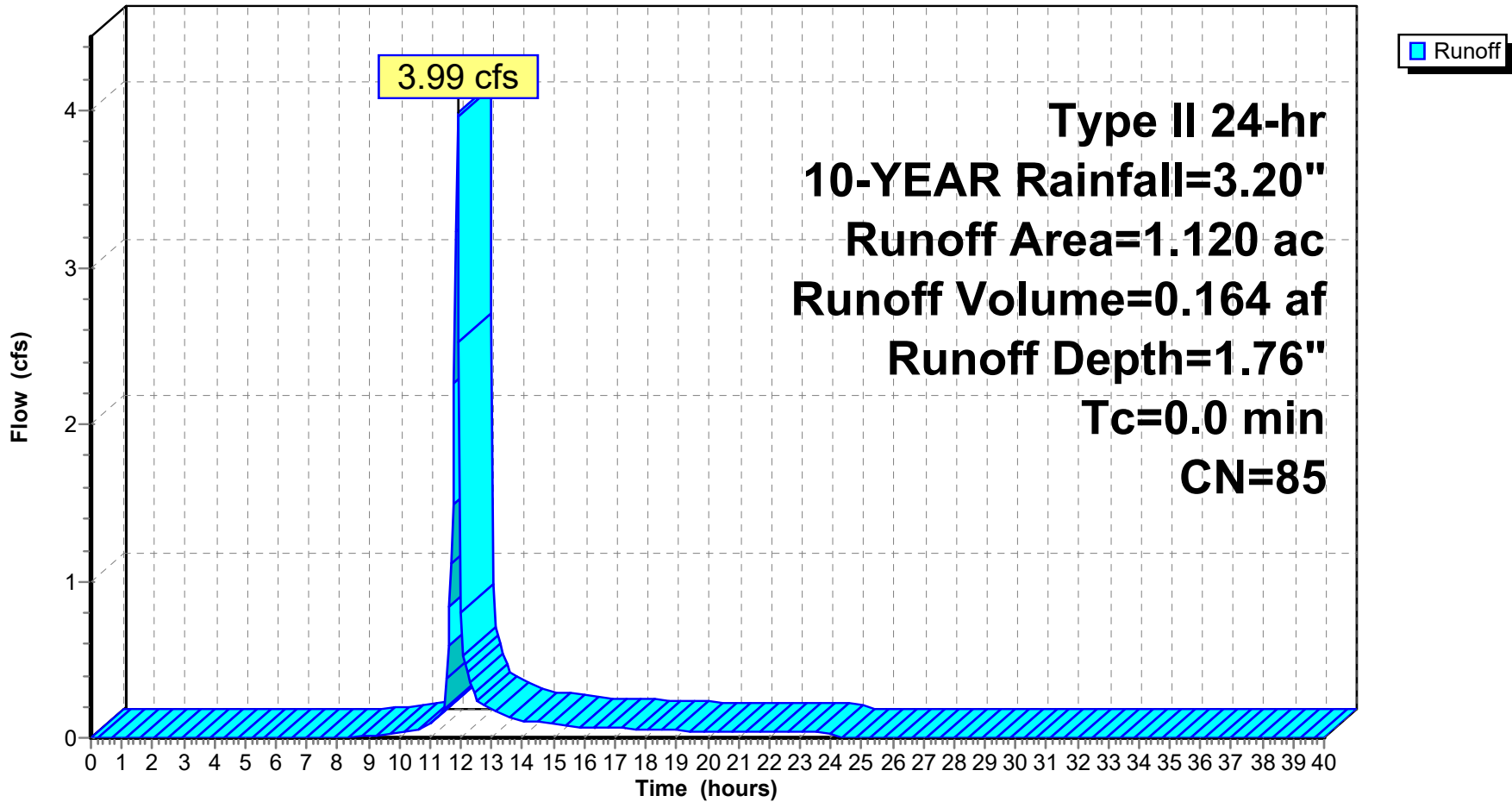
Runoff = 3.99 cfs @ 11.89 hrs, Volume= 0.164 af, Depth= 1.76"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-YEAR Rainfall=3.20"

Area (ac)	CN	Description
0.980	83	Woods, Poor, HSG D
* 0.140	98	Proposed Impervious
1.120	85	Weighted Average
0.980		87.50% Pervious Area
0.140		12.50% Impervious Area

Subcatchment POST 1: POST 1

Hydrograph



MIKE STEEVES UNDERHILL

Prepared by {enter your company name here}
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Type II 24-hr 10-YEAR Rainfall=3.20"
 Printed 1/3/2024

Summary for Pond SPR1: SPREADER

[93] Warning: Storage range exceeded by 3.40'

Inflow Area = 1.120 ac, 12.50% Impervious, Inflow Depth = 1.76" for 10-YEAR event
 Inflow = 3.99 cfs @ 11.89 hrs, Volume= 0.164 af
 Outflow = 1.98 cfs @ 11.96 hrs, Volume= 0.161 af, Atten= 50%, Lag= 4.2 min
 Primary = 1.98 cfs @ 11.96 hrs, Volume= 0.161 af

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 919.40' @ 11.96 hrs Surf.Area= 1,182 sf Storage= 2,852 cf

Plug-Flow detention time= 358.1 min calculated for 0.161 af (98% of inflow)
 Center-of-Mass det. time= 347.9 min (1,165.3 - 817.4)

Volume	Invert	Avail.Storage	Storage Description
#1	912.00'	2,852 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
912.00	294	0	0
914.00	688	982	982
916.00	1,182	1,870	2,852

Device	Routing	Invert	Outlet Devices
#1	Primary	912.00'	1.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#2	Primary	915.50'	6.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.81 cfs @ 11.96 hrs HW=918.89' (Free Discharge)

- 1=Orifice/Grate (Orifice Controls 0.07 cfs @ 12.60 fps)
- 2=Orifice/Grate (Orifice Controls 1.74 cfs @ 8.86 fps)

Pond SPR1: SPREADER

Hydrograph

