

EX#2

LBM Engineering, LLC

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CIVIL ENGINEERING - LAND DEVELOPMENT - SITE PLANS - STORMWATER ANAGEMENT

**Engineering Report
For Land Use Commissions Submittals
Shewville Heights Open Space Resubdivision,
Ledyard, Connecticut**

February 24, 2026
Rev. 05-07-2026

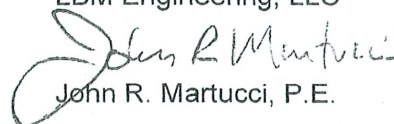
EXISTING CONDITIONS: Reference is made to the following Plan Set: "Plan Showing Shewville Heights Open Space Resubdivision Property of 84 Silas Deane LLC 84 Silas Deane Road Shewville Road and 58 & 59 Seabury Avenue, Ledyard, Connecticut" Scales as Shown February 2026, By Dieter & Gardner, Gales Ferry, CT. The property is located at the east end of Seabury Avenue, east of Seabury Circle. The property is wooded and hilly and drains to the north, east and south.

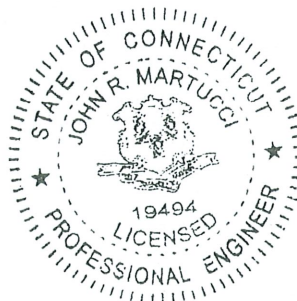
METHODOLOGY: The Rational Method was used for analyzing runoff rates per Part III of the Town of Ledyard's *Ordinance Regulating the Management of Stormwater Runoff*. The descending leg of the hydrographs are increased by a factor of 2.5 to provide additional stormwater volume. Intensity-Duration-Frequency (IDF) Curves were downloaded from the Northeast Regional Climate Center (NRCC) web site. Gutter Flow Analysis and Storm Sewer System Design calculations are attached to this report.

STORMWATER MANAGEMENT: The proposed development will not change the existing drainage patterns. 2.7 acres of the 48-acre parcel drain to the road's piped storm drain. A proposed detention/water quality basin is sized to hold the volume of up to a 100-year rainfall event. An extended detention underdrain is designed to slowly empty the basin over a 12-hour period which will allow time for suspended solids to settle out. Peak flow rate from the 6-inch PVC pipe will be less than 0.5 CFS. Discharge rate from the detention/water quality basin will be further reduced as it flows over 1,000 feet through wetlands and underbrush. The basin is designed to over-compensate for the runoff through the drainage system to make up for increases for development not associated with the road/storm drain.

CONCLUSION: The proposed development will not have adverse effects on down-gradient properties and is in keeping with the policies and goals of the Ledyard Planning and Zoning Commission.

Submitted by:
LBM Engineering, LLC


John R. Martucci, P.E.



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Land Use Department

PREPARED BY JEM	DATE PREPARED 2/2026	LBM Engineering, LLC 11 HALLY LANE COLCHESTER, CONNECTICUT 06415 TEL: (860)-416-9809 EMAIL: JOHN@LBMENGINEERING.COM	JOB NUMBER	PAGE NUMBER 1
CHECKED BY	DATE CHECKED REV 5/1/26		CLIENT NAME	TOTAL PAGES

SHEWVILLE HEIGHTS SUB, - DRAINAGE CALCS.

CB1 STA 11+82, LT (4% SLOPE)

ROAD $200' \times 14' \div 43,560$ 0.06 AC

OVERLAND $200' \times 10' \div 43,560$ 0.05 AC

WEIGHTED 'C' $[(0.06 \times 0.9) + (0.05 \times 0.3)] \div 0.11 =$ 0.11
0.63

TG = 366.72 INV 362.22

CB2 STA. 11+82, RT (4.0 %)

ROAD $200' \times 14' \div 43,560$ 0.06 AC

DRIVEWAY $75' \times 10'$ 0.02 AC

OVERLAND $5000 \text{ SF} \div 43560$ 0.11 AC

WEIGHTED 'C' $[(0.08 \times 0.9) + (0.11 \times 0.3)] \div 0.19 = 0.55$ 0.19 AC

TG 366.72 INV = 361.98

CB3 STA 14+04, LT (1%)

ROAD $212' \times 14' \div 43,560$ 0.07

OVERLAND $200 \times 20 \div 43,560$ 0.09

WEIGHTED 'C' $[(0.07 \times 0.9) + (0.09 \times 0.3)] \div 0.16$ 0.16
0.56

TG = 363.21 INV 353.95

PREPARED BY JRM	DATE PREPARED 2/2026	LBM Engineering, LLC 11 HALLY LANE COLCHESTER, CONNECTICUT 06415 TEL: (860)-416-9809 EMAIL: JOHN@LBMENGINEERING.COM	JOB NUMBER	PAGE NUMBER 2
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CB 4 STA 14+04 RT (1.0%)

ROAD $212' \times 14' \div 43,560$

0.07 AC

DRIVEWAY 120×10

0.03 AC

ROOF 1500

0.03 AC

OVERLAND $(80 \times 200 \div 43,560) = 0.06$

0.30 AC

0.43 AC

WEIGHTED 'C' $[(0.13 \times 0.9) + (0.30 \times 0.3)] \div 0.43 = 0.48$

TG 363.21 INV 358.71

CB 5 STA 17+0, LT (Low Point)

ROAD $550' \times 14' \div 43,560 + [1/2 \text{ CUL DE SAC } (50^2 \times \pi) / 2]$
(0.09 AC)

0.27 AC

AI = $0.27 \times 0.9 = 0.0.24$

TG = 360.50 INV 355.25

CB 6 STA 17+0, RT (Low Point)

ROAD $550' \times 14' \div 43,560 + 0.09 (1/2 \text{ CUL DE SAC})$

0.27 AC

DRIVEWAYS & ROOF $3 \times 3,000 \div 43,560$

0.21 AC

OVERLAND $45,000 \div 43,560$

1.03 AC

1.51

WEIGHTED 'C' $[(0.48 \times 0.9) + (1.03 \times 0.3)] \div 1.51$

AI = 0.49

TG 360.50 INV 355.75

TYPE C Double Grate

PROJECT: SHEWVILLE HEIGHTS SUBDIVISION
PROJECT NO.:
TOWN: Ledyard
ROUTE:
LOCATION: N/A

DESIGNED BY: JRM
CHECKED BY:
DATE: 02/23/26
REV: JRM
DATE: 5/1/2026

GUTTER FLOW ANALYSIS - 25 YR STORM																
n/e ID	Inlet Station and Offset	Area in Acres (A)	Runoff Coeff. (C)	Time to Inlet (min)	Rainfall Intensity (in/hr)	AC	Total AC	Q to Inlet (cfs)	Grade of Gutter ft/ft (SL)	Cross Slope Of Shoulder ft/ft (Sx)	Depth of Flow of Gutter (ft)	Gutter Flow Width (ft)	Q Bypassing Inlet (cfs)	AC Bypassing Inlet	AC Entering Catch Basin	Inlet Type
PROPOSED ROAD LEFT GUTTER																
C81	11+82, LT	0.110	0.63	10	6.20	0.069	0.069	0.473	0.040	0.043	0.104	2.415	0.000	0.000	0.069	"C"
C83	14+04, LT	0.160	0.56	10	6.20	0.090	0.090	0.611	0.010	0.043	0.148	3.449	0.046	0.007	0.082	"C"
C85	17+00, LT	0.270	0.9	10	6.20	0.243	0.250	1.708	LOW PT	0.043					0.250	"C"
PROPOSED ROAD RIGHT GUTTER																
C82	11+82, RT	0.190	0.55	10	6.20	0.105	0.105	0.713	0.040	0.043	0.121	2.818	0.009	0.001	0.103	"C"
C84	14+04, RT	0.430	0.48	10	6.20	0.206	0.208	1.418	0.010	0.043	0.203	4.729	0.315	0.051	0.157	"C"
C86	17+00, RT	1.490	0.48	10	6.20	0.715	0.767	5.234	LOW PT	0.043					0.767	"C"

STORM SEWER SYSTEM DESIGN DRAINAGE SYSTEM

Client: SHEWVILLE HEIGHTS SUBDIVISION
 Project: SHEWVILLE HEIGHTS SUBDIVISION
 Proj. No.:
 Return Period for Design: 25-YR
 Prepared By: JRM
 Date: 02/20/26 Revised: 05/01/26
 Sheet No. 1 of 1

Line Segment		Time to Inlet (min.)	Time in Pipe (min.)	Accumul. Time (min.)	A x C Entering System	Sum of A x C in System	Rainfall Intensity, R (in./hr.)	Q in System (c.f.s.)	Pipe Data						
									Size (in.)	Length (ft.)	Slope (ft./ft.)	Avg. Vel. (f.p.s.)	Full Cap. (c.f.s.)	Headwater (ft.)	Manning "n"
CB 1 11+82.LT	CB 2 11+82.RT	10	0.08	10.0	0.069	0.069	6.2	0.43	15	24	0.010	5.0	6.99	0.30	0.012
CB 2 11+82.RT	CB 4 14+04.RT	10	0.74	10.1	0.103	0.172	6.2	1.07	15	222	0.010	5.0	6.99	0.40	0.012
CB 3 14+04.LT	CB 4 14+04.RT	10	0.08	10.8	0.082	0.082	6.2	0.51	15	24	0.010	5.0	6.99	0.60	0.012
CB 4 14+04.RT	CB 6 17+00.RT	10	0.99	10.9	0.157	0.239	6.2	1.48	15	296	0.010	5.0	6.99	0.55	0.012
CB 6 17+00.RT	CB 5 17+00.LT	10	0.08	11.9	0.767	1.006	6.2	6.24	15	24	0.010	5.0	6.99	1.70	0.012
CB 5 17+00.LT	OUTLET	10	0.08	12.0	0.250	1.256	6.2	7.79	18	50	0.010	10.0	11.37	2.00	0.012

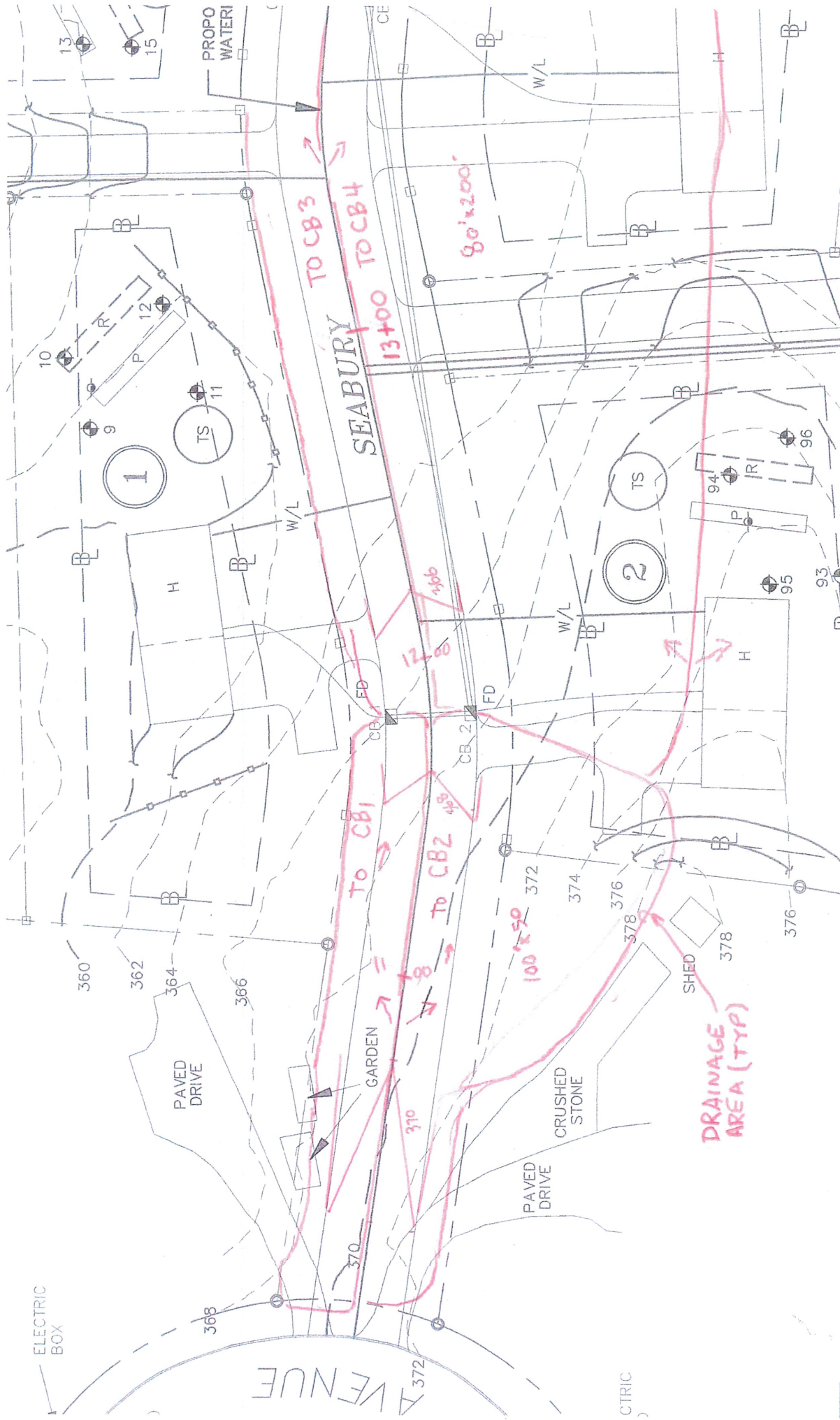
Manning's "n" for HDPE and RC pipe = 0.012

NOTE: ALL PIPES ARE BELOW FULL CAPACITY.

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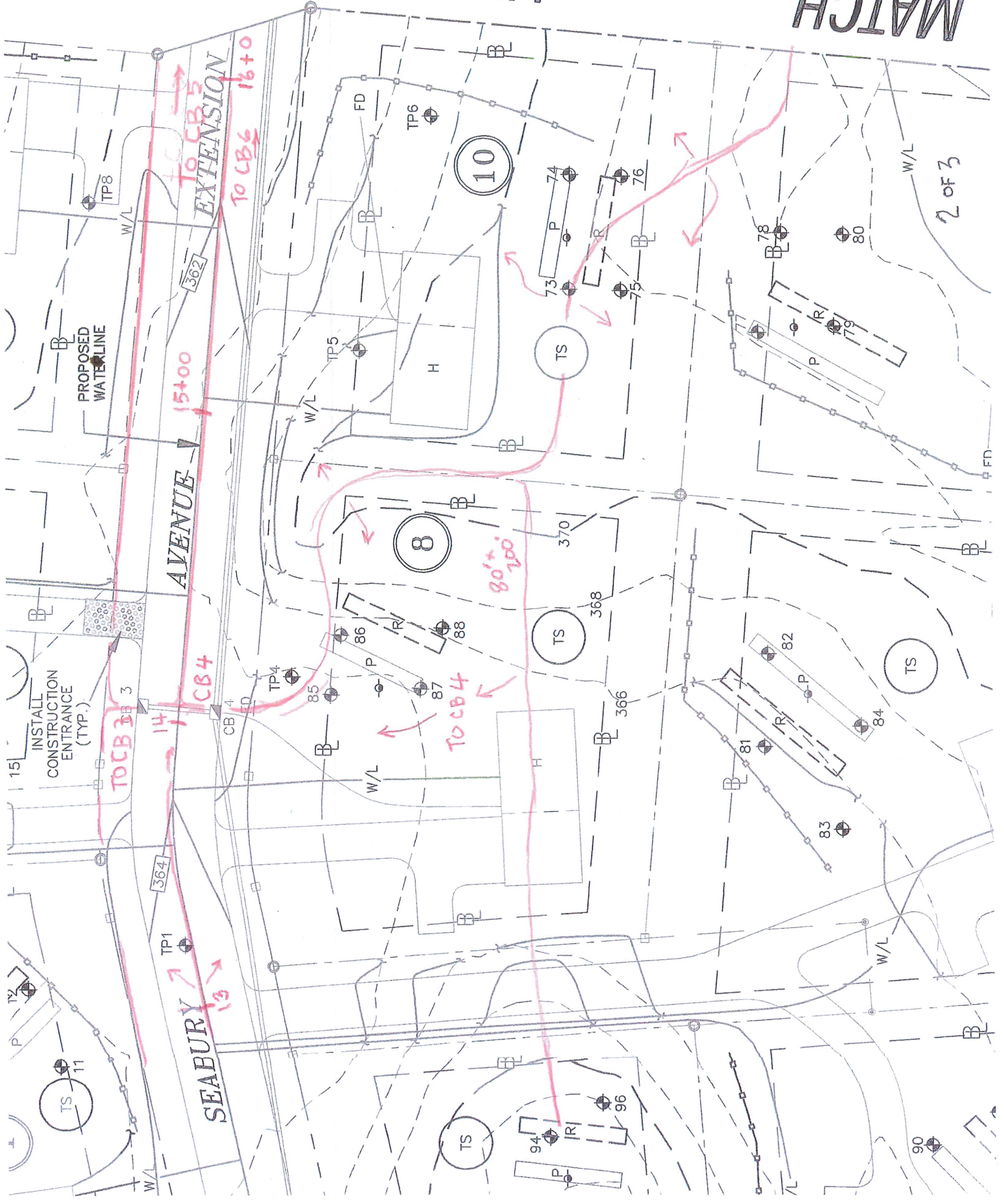
STORM DRAIN TO DETENTION BASIN

	AREA	ROOF & PAV'T	O'LAND
CB1	0.11	0.06	0.05
CB2	0.19	0.08	0.11
CB3	0.16	0.07	0.09
CB4	0.43	0.13	0.30
CB5	0.27	0.12	—
CB6	1.51	0.48	1.03
	2.67	1.09	1.58 AC



ROAD DRAINAGE AREAS
1 OF 3 1"=40'

LINE 7



COMPUTATIONS FOR: ORIFICE SIZING WORKSHEET SHEWVILLE HEIGHTS LEDYARD, CT	Project
	Made By: JRM
	Date: 5/6/2026
	Rev:
Date:	

ORIFICE SIZING FOR EXTENDED DETENTION UNDERDRAIN

BASIN VOLUME AT SPILLWAY = 15,550 CUBIC FT
 TARGET VOLUME (HALF EMPTY) = 7,775 CF

ConnDOT Drainage Manual Equation 10.32

$Q_{av} = \text{VOL.} / T$
 VOLUME (FT³) 7,775
 T (SEC.) = 12 Hrs = 43,200
 Q_{av} (CFS) = 0.1800 Target Q at Half Volume

ConnDOT Drainage Manual Equation 10.18

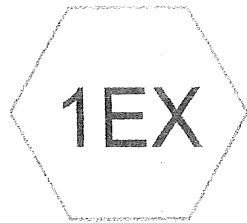
$Q = K_{or} D^2 H_o^{0.50}$ $K_{or} =$ 3.78

Q = Flow in CFS
 K_{or} = Orifice Coefficient = 3.78
 D = Orifice
 H = Head in Feet

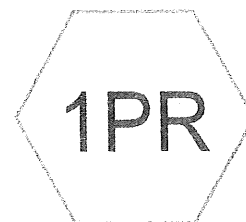
HEAD AT FULL = 3.5'

D (inch)	D (FT.)	H	Q (CFS)
2.00	0.167	2.00	0.1485
2.25	0.188	2.00	0.1879
2.50	0.208	2.00	0.2320
2.75	0.229	2.00	0.2807

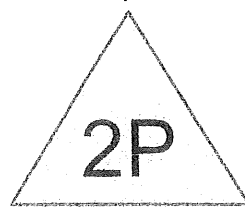
USE 2-1/4" ORIFICE



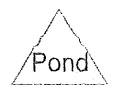
UNDEV



TO BASIN



WQ BASIN



BASIN 05-2026

GALESFERRY 2-yr Duration=12 min, Inten=3.10 in/hr

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Summary for Subcatchment 1EX: UNDEV

Runoff = 2.51 cfs @ 0.17 hrs, Volume= 2,933 cf, Depth= 0.30"

Runoff by Rational method, Rise/Fall=1.0/2.5 xTc, Time Span= 0.00-6.00 hrs, dt= 0.01 hrs

GALESFERRY 2-yr Duration=12 min, Inten=3.10 in/hr

Area (ac)	C	Description	Land Use
2.670	0.30	EXISTING UNDEVELOPED	
2.670		100.00% Pervious Area	

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

Summary for Subcatchment 1PR: TO BASINRunoff = 4.51 cfs @ 0.17 hrs, Volume= 5,279 cf, Depth= 0.54"
Routed to Pond 2P : WQ BASIN

Runoff by Rational method, Rise/Fall=1.0/2.5 xTc, Time Span= 0.00-6.00 hrs, dt= 0.01 hrs

GALESFERRY 2-yr Duration=12 min, Inten=3.10 in/hr

Area (ac)	C	Description	Land Use
1.090	0.90	PAVEMENT & ROOFS	
1.580	0.30	OVERLAND	
2.670	0.54	Weighted Average	
2.670		100.00% Pervious Area	

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

Summary for Pond 2P: WQ BASIN

Inflow Area = 116,305 sf, 0.00% Impervious, Inflow Depth = 0.54" for 2-yr event
 → Inflow = 4.51 cfs @ 0.17 hrs, Volume= 5,279 cf
 → Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 100%, Lag= 0.0 min
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-6.00 hrs, dt= 0.01 hrs
 → Peak Elev= 357.17' @ 0.62 hrs Surf.Area= 3,691 sf Storage= 5,279 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
 Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	355.50'	15,550 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

BASIN 05-2026

GALESFERRY 2-yr Duration=12 min, Inten=3.10 in/hr

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Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
355.50	2,650	0	0
357.50	3,900	6,550	6,550
359.50	5,100	9,000	15,550

Device	Routing	Invert	Outlet Devices
#1	Primary	359.00'	6.0' long x 5.0' 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) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=355.50' (Free Discharge)

1=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

BASIN 05-2026

GALESFERRY 10-yr Duration=12 min, Inten=4.62 in/hr

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Summary for Subcatchment 1EX: UNDEV

Runoff = 3.73 cfs @ 0.17 hrs, Volume= 4,362 cf, Depth= 0.45"

Runoff by Rational method, Rise/Fall=1.0/2.5 xTc, Time Span= 0.00-6.00 hrs, dt= 0.01 hrs
GALESFERRY 10-yr Duration=12 min, Inten=4.62 in/hr

Area (ac)	C	Description	Land Use
2.670	0.30	EXISTING UNDEVELOPED	
2.670		100.00% Pervious Area	

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

Summary for Subcatchment 1PR: TO BASINRunoff = 6.71 cfs @ 0.17 hrs, Volume= 7,851 cf, Depth= 0.81"
Routed to Pond 2P : WQ BASINRunoff by Rational method, Rise/Fall=1.0/2.5 xTc, Time Span= 0.00-6.00 hrs, dt= 0.01 hrs
GALESFERRY 10-yr Duration=12 min, Inten=4.62 in/hr

Area (ac)	C	Description	Land Use
1.090	0.90	PAVEMENT & ROOFS	
1.580	0.30	OVERLAND	
2.670	0.54	Weighted Average	
2.670		100.00% Pervious Area	

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

Summary for Pond 2P: WQ BASIN

Inflow Area = 116,305 sf, 0.00% Impervious, Inflow Depth = 0.81" for 10-yr event

→ Inflow = 6.71 cfs @ 0.17 hrs, Volume= 7,851 cf

→ Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 100%, Lag= 0.0 min

Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-6.00 hrs, dt= 0.01 hrs

→ Peak Elev= 357.83' @ 0.62 hrs Surf.Area= 4,095 sf Storage= 7,851 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)

Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	355.50'	15.550 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

BASIN 05-2026

GALESFERRY 10-yr Duration=12 min, Inten=4.62 in/hr

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Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
355.50	2,650	0	0
357.50	3,900	6,550	6,550
359.50	5,100	9,000	15,550

Device	Routing	Invert	Outlet Devices
#1	Primary	359.00'	6.0' long x 5.0' 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) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65
			2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=355.50' (Free Discharge)

↑1=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

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GALESFERRY 25-yr Duration=12 min, Inten=5.56 in/hr

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Summary for Subcatchment 1EX: UNDEV

Runoff = 4.49 cfs @ 0.17 hrs, Volume= 5,251 cf, Depth= 0.54"

Runoff by Rational method, Rise/Fall=1.0/2.5 xTc, Time Span= 0.00-6.00 hrs, dt= 0.01 hrs
GALESFERRY 25-yr Duration=12 min, Inten=5.56 in/hr

Area (ac)	C	Description	Land Use
2.670	0.30	EXISTING UNDEVELOPED	
2.670		100.00% Pervious Area	

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

Summary for Subcatchment 1PR: TO BASINRunoff = 8.08 cfs @ 0.17 hrs, Volume= 9,452 cf, Depth= 0.98"
Routed to Pond 2P : WQ BASINRunoff by Rational method, Rise/Fall=1.0/2.5 xTc, Time Span= 0.00-6.00 hrs, dt= 0.01 hrs
GALESFERRY 25-yr Duration=12 min, Inten=5.56 in/hr

Area (ac)	C	Description	Land Use
1.090	0.90	PAVEMENT & ROOFS	
1.580	0.30	OVERLAND	
2.670	0.54	Weighted Average	
2.670		100.00% Pervious Area	

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

Summary for Pond 2P: WQ BASIN

Inflow Area = 116,305 sf, 0.00% Impervious, Inflow Depth = 0.98" for 25-yr event
 Inflow = 8.08 cfs @ 0.17 hrs, Volume= 9,452 cf
 Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 100%, Lag= 0.0 min
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-6.00 hrs, dt= 0.01 hrs
 Peak Elev= 358.21' @ 0.62 hrs Surf.Area= 4,323 sf Storage= 9,452 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
 Center-of-Mass det. time= (not calculated: no outflow)

Volume #1	Invert	Avail.Storage	Storage Description
	355.50'	15.550 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

BASIN 05-2026

GALESFERRY 25-yr Duration=12 min, Inten=5.56 in/hr

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Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
355.50	2,650	0	0
357.50	3,900	6,550	6,550
359.50	5,100	9,000	15,550

Device	Routing	Invert	Outlet Devices
#1	Primary	359.00'	6.0' long x 5.0' 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) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=355.50' (Free Discharge)

1=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

BASIN 05-2026

GALESFERRY 100-yr Duration=12 min, Inten=6.99 in/hr

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Summary for Subcatchment 1EX: UNDEV

Runoff = 5.65 cfs @ 0.17 hrs, Volume= 6,608 cf, Depth= 0.68"

Runoff by Rational method, Rise/Fall=1.0/2.5 xTc, Time Span= 0.00-6.00 hrs, dt= 0.01 hrs
GALESFERRY 100-yr Duration=12 min, Inten=6.99 in/hr

Area (ac)	C	Description	Land Use
2.670	0.30	EXISTING UNDEVELOPED	
2.670		100.00% Pervious Area	

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

Summary for Subcatchment 1PR: TO BASINRunoff = 10.17 cfs @ 0.17 hrs, Volume= 11,895 cf, Depth= 1.23"
Routed to Pond 2P : WQ BASINRunoff by Rational method, Rise/Fall=1.0/2.5 xTc, Time Span= 0.00-6.00 hrs, dt= 0.01 hrs
GALESFERRY 100-yr Duration=12 min, Inten=6.99 in/hr

Area (ac)	C	Description	Land Use
1.090	0.90	PAVEMENT & ROOFS	
1.580	0.30	OVERLAND	
2.670	0.54	Weighted Average	
2.670		100.00% Pervious Area	

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

Summary for Pond 2P: WQ BASIN

Inflow Area = 116,305 sf, 0.00% Impervious, Inflow Depth = 1.23" for 100-yr event

→ Inflow = 10.17 cfs @ 0.17 hrs, Volume= 11,895 cf

→ Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 100%, Lag= 0.0 min

Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-6.00 hrs, dt= 0.01 hrs

→ Peak Elev= 358.75' @ 0.62 hrs Surf.Area= 4,650 sf Storage= 11,895 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)

Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	355.50'	15.550 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

BASIN 05-2026

GALESFERRY 100-yr Duration=12 min, Inten=6.99 in/hr

Prepared by LBM Engineering LLC

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Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
355.50	2,650	0	0
357.50	3,900	6,550	6,550
359.50	5,100	9,000	15,550

Device	Routing	Invert	Outlet Devices
#1	Primary	359.00'	6.0' long x 5.0' 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) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=355.50' (Free Discharge)

↑1=Broad-Crested Rectangular Weir (Controls 0.00 cfs)