

Stormwater Detention and Infiltration Design Data Sheet

Workbook Protected

Worksheet Protected

Stormwater Facility Name: Falcon Acres Retention Area A

Facility Location & Jurisdiction: 14655 Davis Road, El Paso County

User Input: Watershed Characteristics

Watershed Slope = ft/ft
 Watershed Length = ft
 Watershed Area = acres
 Watershed Imperviousness = percent
 Percentage Hydrologic Soil Group A = percent
 Percentage Hydrologic Soil Group B = percent
 Percentage Hydrologic Soil Groups C/D = percent

Location for 1-hr Rainfall Depths (use dropdown):

User Input

WQCV Treatment Method =

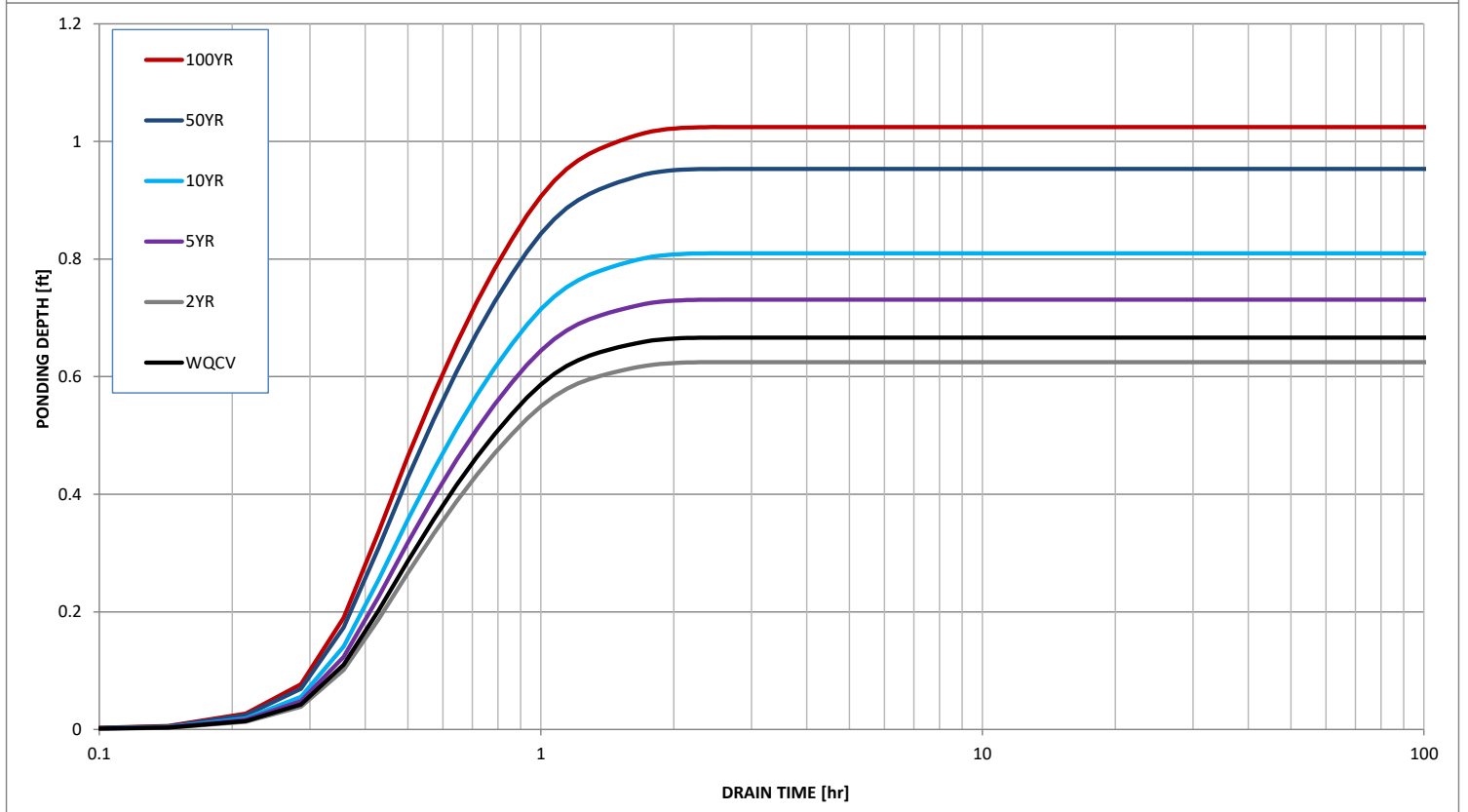
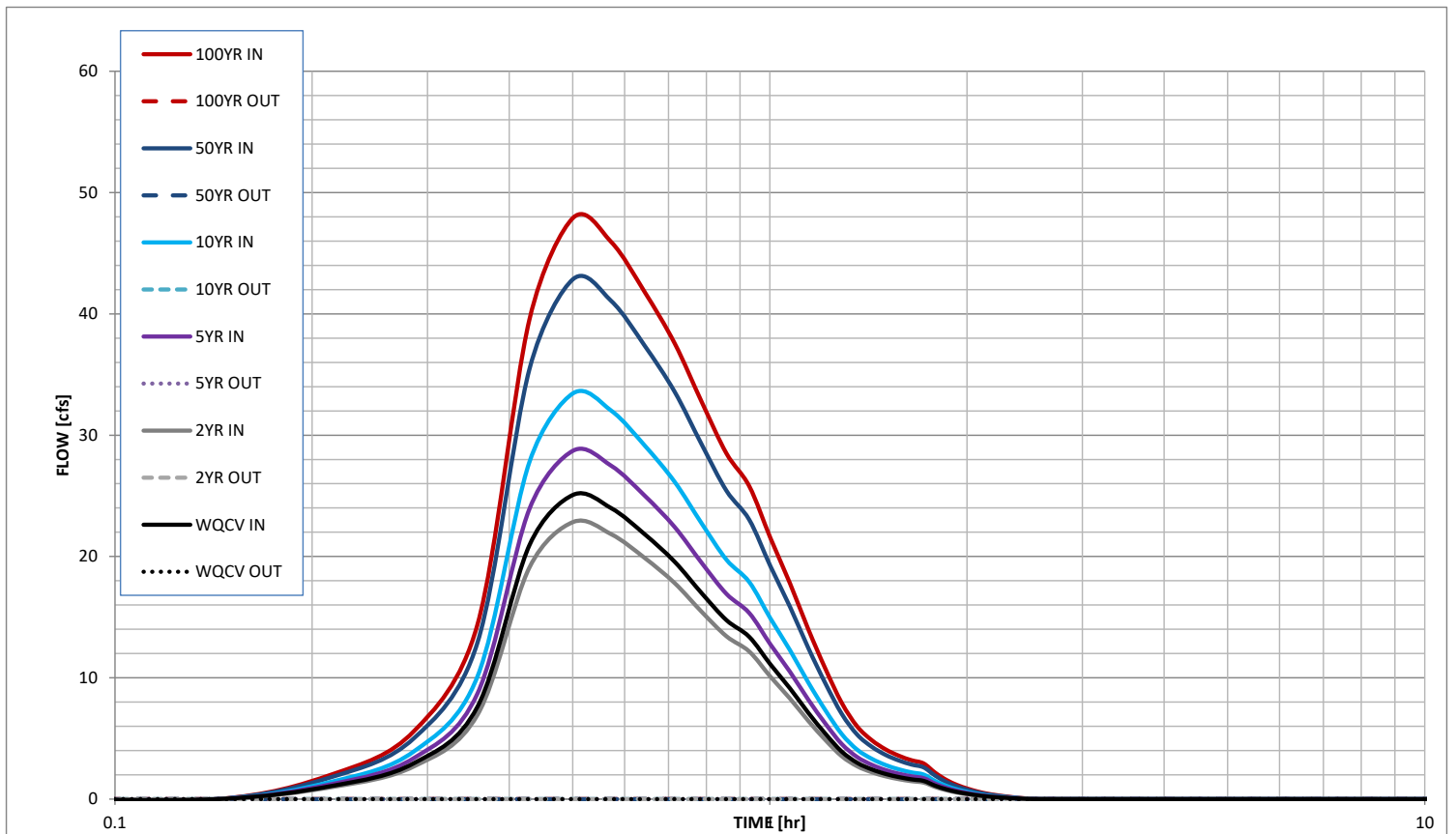
User Defined Stage [ft]	User Defined Area [ft^2]	User Defined Stage [ft]	User Defined Discharge [cfs]
0.00	45,179	0.00	0.00
1.00	166,526	1.00	0.00
2.00	287,872	2.00	0.00
3.00	410,178	3.00	0.00
4.00	532,483	4.00	0.00
5.00	630,062	5.00	0.00
6.00	727,640	6.00	0.00

After completing and printing this worksheet to a pdf, go to:
<https://maperture.digitaldataservices.com/gvh/?viewer=csdwif>
 create a new stormwater facility, and
 attach the pdf of this worksheet to that record.

Routed Hydrograph Results

	WQCV	2 Year	5 Year	10 Year	50 Year	100 Year	
Design Storm Return Period =							
One-Hour Rainfall Depth =	0.53	1.19	1.50	1.75	2.25	2.52	in
Calculated Runoff Volume =	1.308	1.080	1.863	9.536	56.535	79.901	acre-ft
OPTIONAL Override Runoff Volume =		1.19	1.50	1.75	2.25	2.52	acre-ft
Inflow Hydrograph Volume =	1.307	1.189	1.500	1.750	2.250	2.519	acre-ft
Time to Drain 97% of Inflow Volume =	>103	>103	>103	>103	>103	>103	hours
Time to Drain 99% of Inflow Volume =	>103	>103	>103	>103	>103	>103	hours
Maximum Ponding Depth =	0.67	0.62	0.73	0.81	0.95	1.02	ft
Maximum Ponded Area =	2.88	2.77	3.06	3.28	3.68	3.88	acres
Maximum Volume Stored =	1.305	1.189	1.488	1.747	2.246	2.517	acre-ft

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This project proposes to maintain two existing drainage retention areas. These retention areas are so large that 100-year flows are not expected to leave the site. The Stormwater Detention and Infiltration Design Data Sheet has been completed for both of these depressions although it seems not to apply to them.

Stormwater Detention and Infiltration Design Data Sheet

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Stormwater Facility Name: Falcon Acres Retention Area B

Facility Location & Jurisdiction: 14655 Davis Road, El Paso County

User Input: Watershed Characteristics

Watershed Slope =	0.026	ft/ft
Watershed Length =	1080	ft
Watershed Area =	16.48	acres
Watershed Imperviousness =	18.9%	percent
Percentage Hydrologic Soil Group A =	0.0%	percent
Percentage Hydrologic Soil Group B =	100.0%	percent
Percentage Hydrologic Soil Groups C/D =	0.0%	percent

Location for 1-hr Rainfall Depths (use dropdown):

User Input

WQCV Treatment Method =

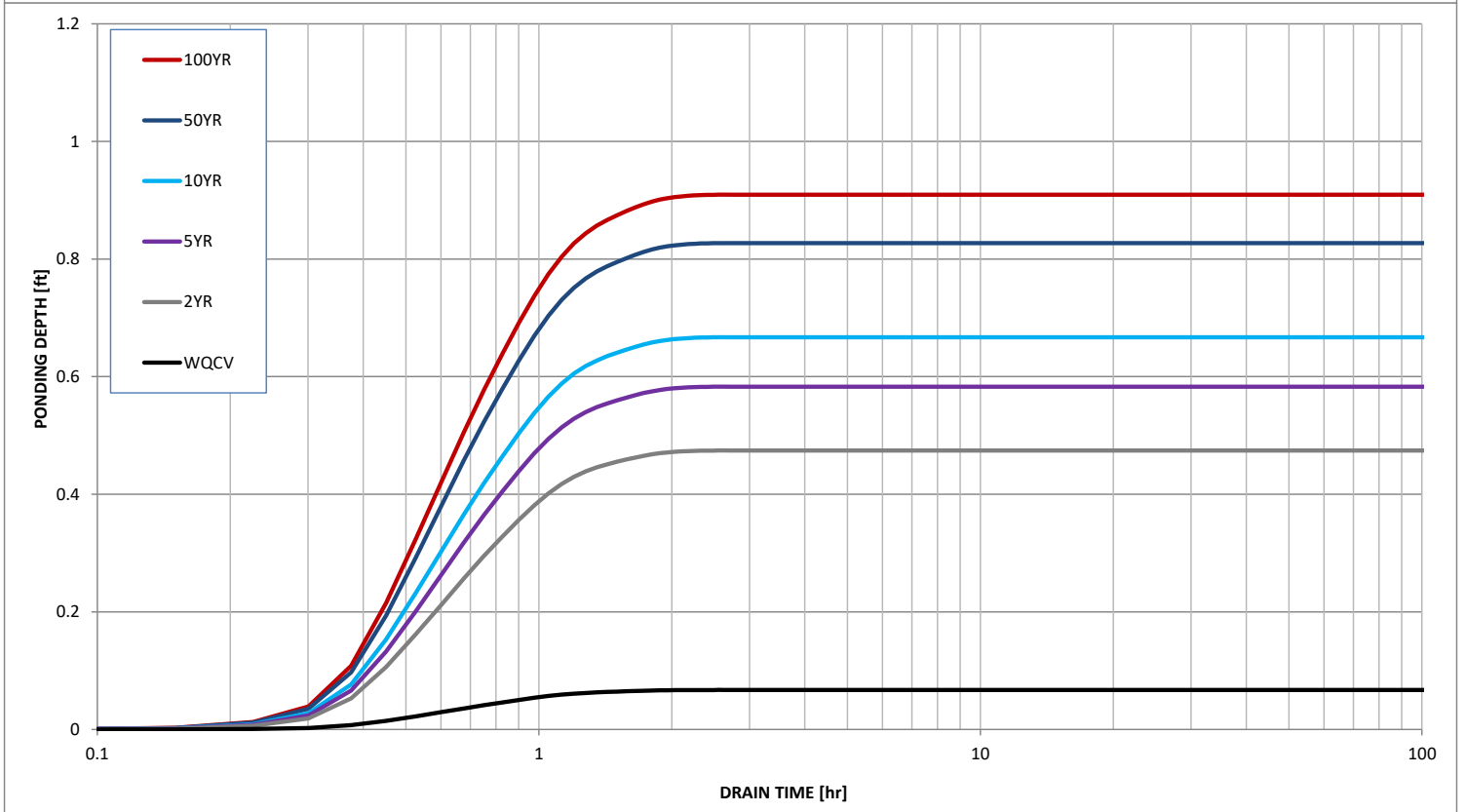
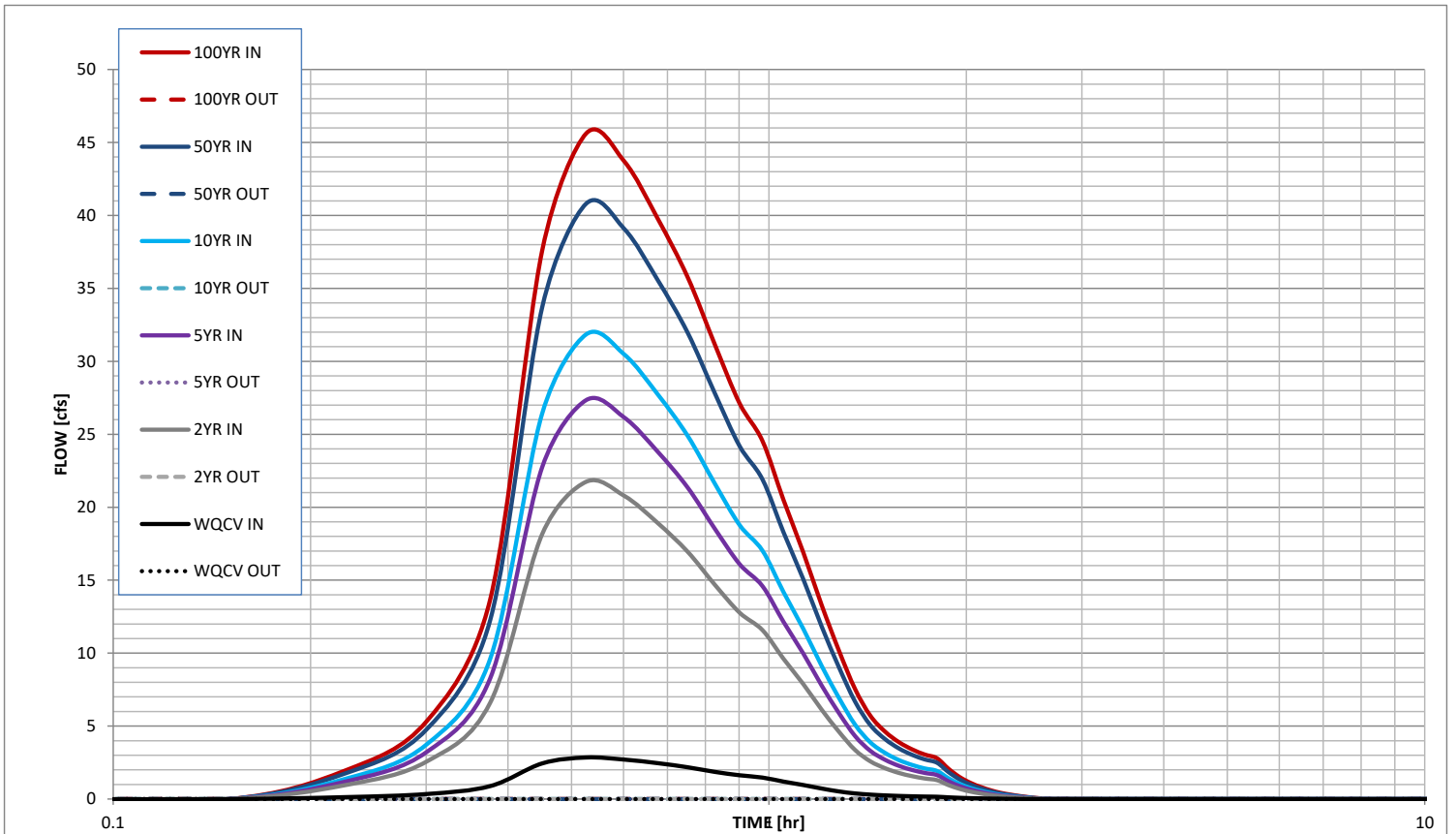
User Defined Stage [ft]	User Defined Area [ft^2]	User Defined Stage [ft]	User Defined Discharge [cfs]
0.00	96,750	0.00	0.00
1.00	149,445	1.00	0.00
2.00	175,792	2.00	0.00

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Routed Hydrograph Results

	WQCV	2 Year	5 Year	10 Year	50 Year	100 Year	
Design Storm Return Period =	0.53	1.19	1.50	1.75	2.25	2.52	in
One-Hour Rainfall Depth =	0.153	0.226	0.333	0.586	1.565	2.064	acre-ft
OPTIONAL Override Runoff Volume =	0.152	1.19	1.50	1.75	2.25	2.52	acre-ft
Inflow Hydrograph Volume =	>108	>108	>108	>108	>108	>108	hours
Time to Drain 97% of Inflow Volume =	0.07	0.47	0.58	0.67	0.83	0.91	ft
Time to Drain 99% of Inflow Volume =	2.30	2.79	2.92	3.02	3.22	3.32	acres
Maximum Ponding Depth =	0.150	1.185	1.497	1.746	2.246	2.514	acre-ft
Maximum Pondered Area =							
Maximum Volume Stored =							

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