Stormwater Detention and Infiltration Design Data Sheet

Workbook Protected Worksheet Protected

Stormwater Facility Name: **Walden - Detention Basin C8**

Facility Location & Jurisdiction: **Walden Preserve 2 Filing No. 5, El Paso County, CO**

ACCEPTED for FILE
Engineering Review
09/15/2022 11:51:47 AM
dsdnijkamp
EPC Planning & Community Development Department

User Input: Watershed Characteristics

Watershed Slope =	0.042	ft/ft
Watershed Length =	2570	ft
Watershed Area =	40.59	acres
Watershed Imperviousness =	17.7%	percent
Percentage Hydrologic Soil Group A =		percent
Percentage Hydrologic Soil Group B =	100.0%	percent
Percentage Hydrologic Soil Groups C/D =		percent

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

User Input

WQCV Treatment Method = Extended Detention

User Defined Stage [ft]	User Defined Area [ft^2]	User Defined Stage [ft]	User Defined Discharge [cfs]
0.00	10	0.00	0.00
0.90	10	0.90	0.05
1.00	6,258	1.00	0.06
3.00	10,299	3.00	0.20
5.00	14,948	5.00	28.51
7.00	20,501	7.00	41.08
9.00	26,643	9.00	45.62
11.00	32,800	11.00	256.79

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

Routed Hydrograph Results

Design Storm Return Period =	WQCV	2 Year	5 Year	10 Year	50 Year	100 Year	
One-Hour Rainfall Depth =	0.60	1.19	1.50	1.75	2.25	2.52	in
Calculated Runoff Volume =	0.357	0.513	0.762	1.371	3.793	5.025	acre-ft
OPTIONAL Override Runoff Volume =							acre-ft
Inflow Hydrograph Volume =	0.357	0.512	0.762	1.371	3.793	5.020	acre-ft
Time to Drain 97% of Inflow Volume =	35.8	38.8	**37.6**	34.7	25.2	21.4	hours
Time to Drain 99% of Inflow Volume =	37.3	40.8	40.5	39.5	35.4	**33.6**	hours
Maximum Ponding Depth =	2.75	3.12	3.37	3.87	5.90	7.08	ft
Maximum Ponded Area =	0.22	0.24	0.26	0.28	0.40	**0.48**	acres
Maximum Volume Stored =	0.327	0.415	0.475	0.612	1.298	1.811	acre-ft

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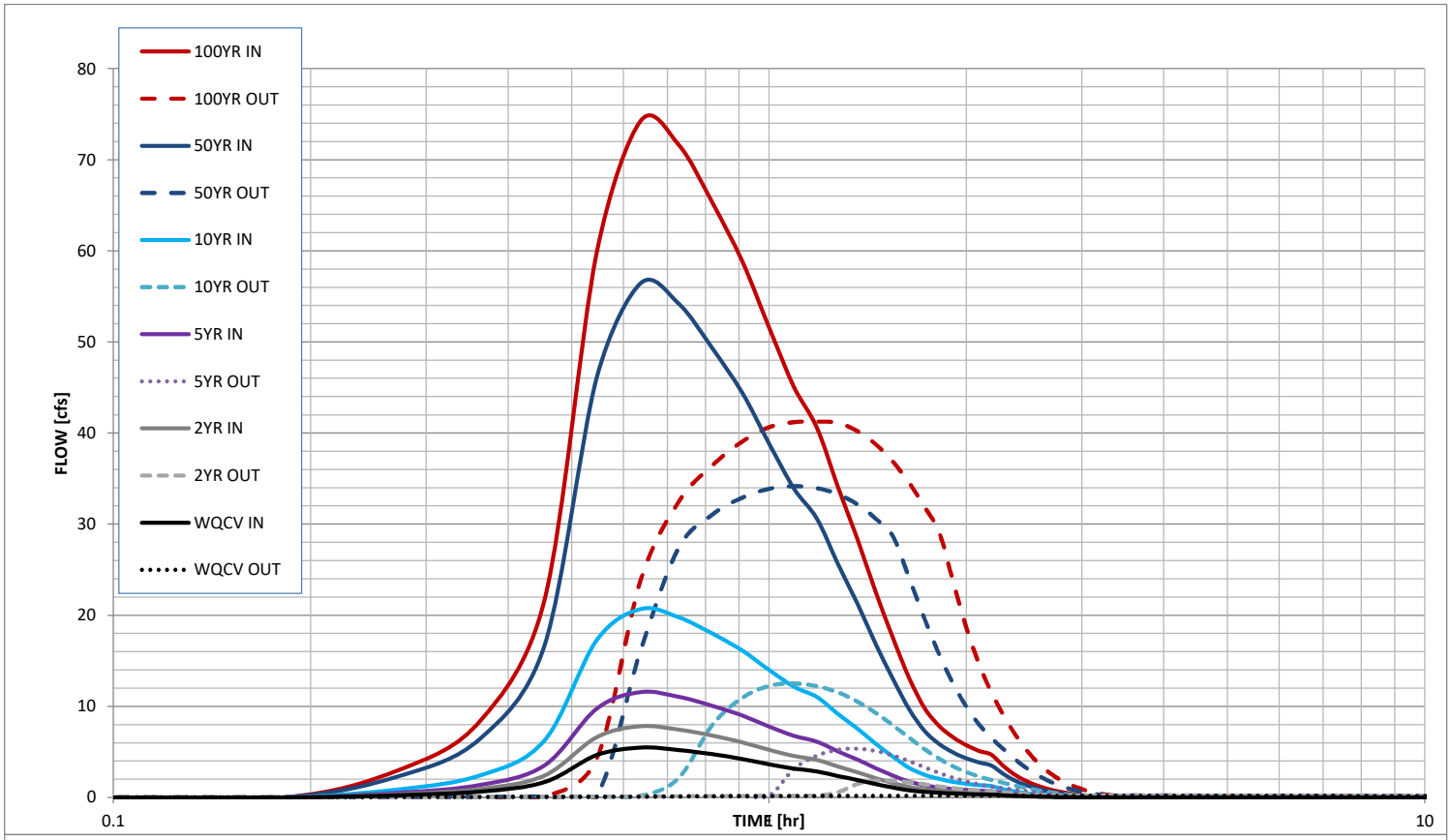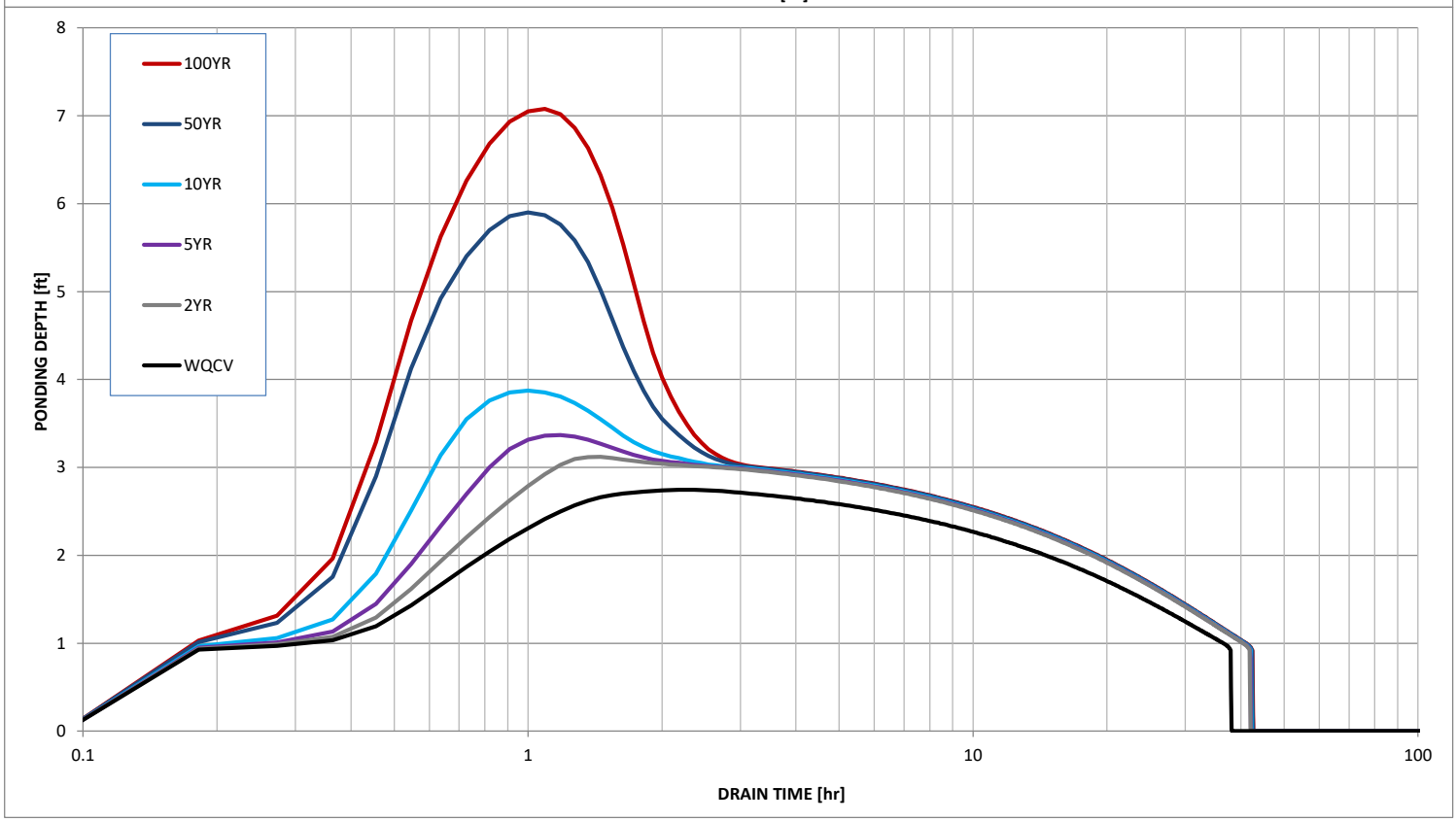
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