Stormwater Detention and Infiltration Design Data Sheet

Workbook Protected Worksheet Protected

Stormwater Facility Name: **Pond C4**

Facility Location & Jurisdiction: **The Hills at Lorson Ranch**

User Input: Watershed Characteristics

Watershed Slope =	0.050	ft/ft
Watershed Length =	2300	ft
Watershed Area =	81.00	acres
Watershed Imperviousness =	55.0%	percent
Percentage Hydrologic Soil Group A =		percent
Percentage Hydrologic Soil Group B =	40.0%	percent
Percentage Hydrologic Soil Groups C/D =	60.0%	percent

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

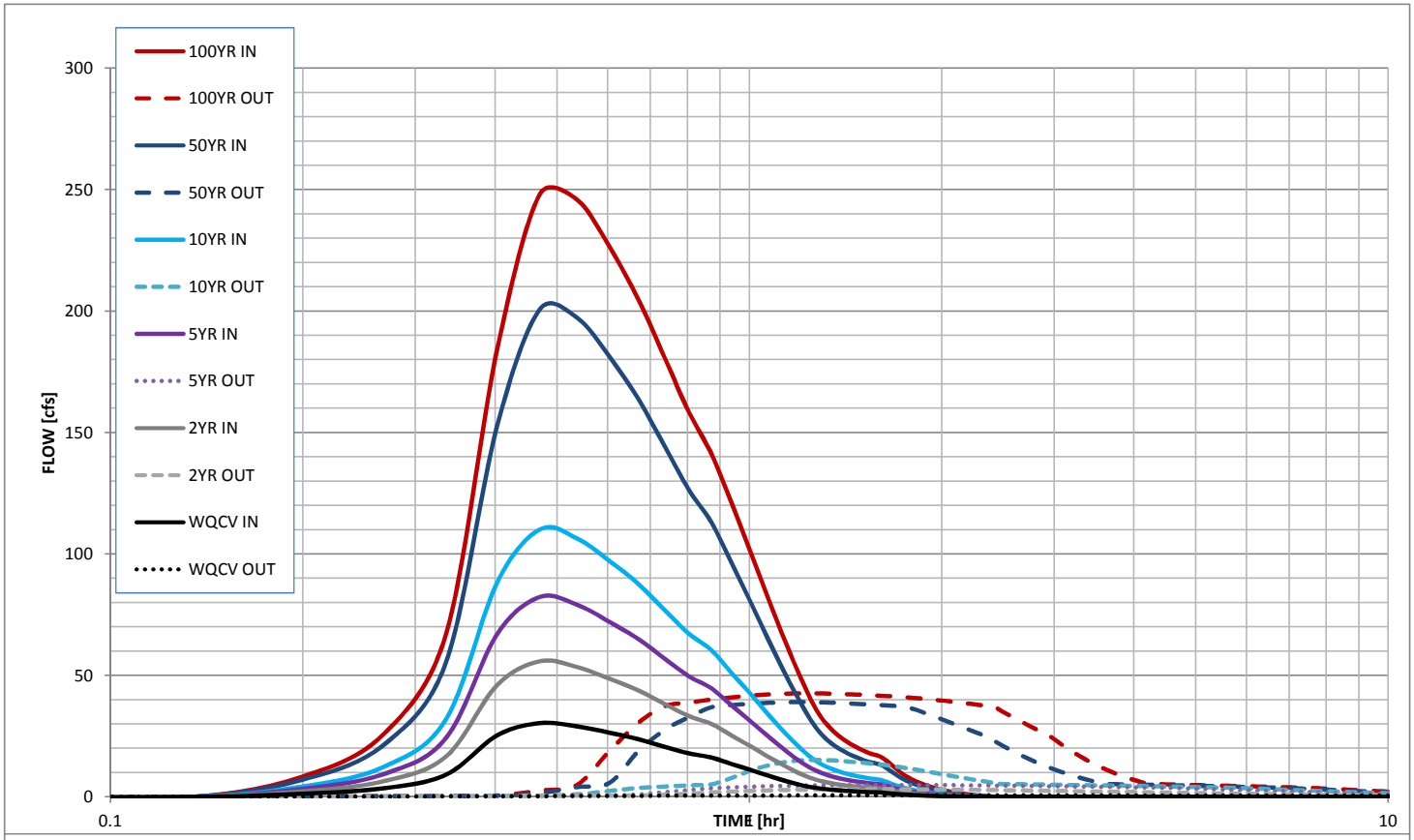
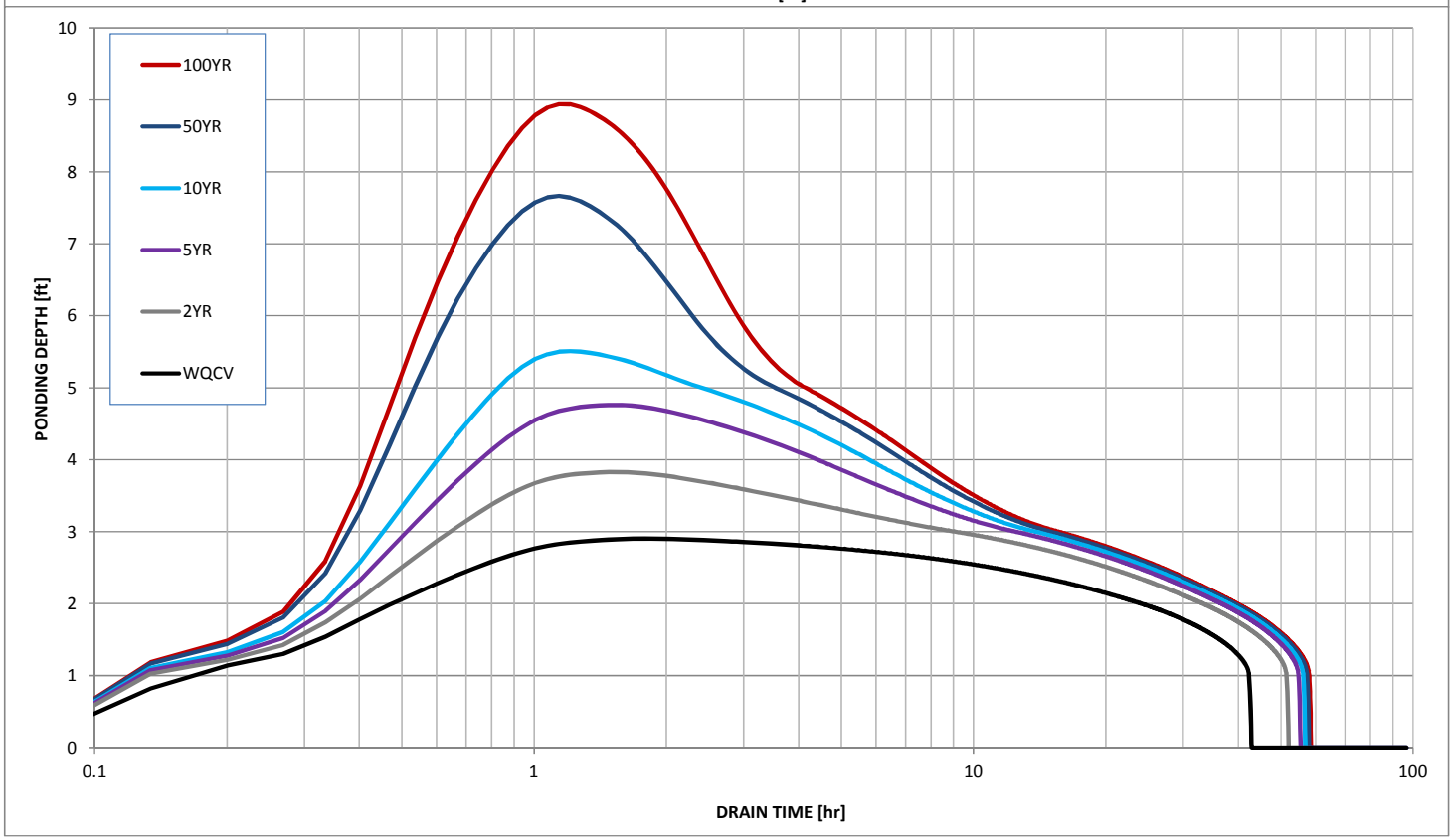
Denver - Capitol Building

WQCV Treatment Method = Extended Detention

User Defined Stage [ft]	User Defined Area [ft^2]	User Defined Stage [ft]	User Defined Discharge [cfs]
0.00	40	0.00	0.00
0.33	50	0.33	0.09
1.00	630	1.00	0.17
2.00	40,811	2.00	0.40
3.00	49,929	3.00	0.66
4.00	52,779	4.00	3.71
5.00	55,690	5.00	5.32
6.00	58,660	6.00	24.83
7.00	61,704	7.00	37.05
8.00	64,811	8.00	40.02
9.00	67,980	9.00	42.78
10.00	71,215	10.00	45.38

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 =	0.53	0.83	1.09	1.33	1.99	2.31	in
Calculated Runoff Volume =	1.488	2.754	4.087	5.506	10.207	12.709	acre-ft
OPTIONAL Override Runoff Volume =							acre-ft
Inflow Hydrograph Volume =	1.487	2.754	4.086	5.502	10.198	12.700	acre-ft
Time to Drain 97% of Inflow Volume =	40.1	47.4	**49.0**	48.6	44.6	42.7	hours
Time to Drain 99% of Inflow Volume =	41.8	50.2	52.8	53.5	52.4	**52.0**	hours
Maximum Ponding Depth =	2.90	3.83	4.76	5.51	7.67	8.94	ft
Maximum Ponded Area =	1.12	1.20	1.26	1.31	1.46	**1.56**	acres
Maximum Volume Stored =	1.404	2.481	3.626	4.592	7.587	9.506	acre-ft

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