Stormwater Detention and Infiltration Design Data Sheet

SDI-Design Data v2.00, Released January 2020

Stormwater Facility Name: East Pond

Facility Location & Jurisdiction: Lot 2, Block 1, Space Village Filing No. 4., El Paso County, CO

User Input: Watershed Characteristics

Sand Filter (SF)	SF	
Watershed Area =	9.45	acres
Watershed Length =	750	ft
Watershed Length to Centroid =	375	ft
Watershed Slope =	0.025	ft/ft
Watershed Imperviousness =	70.0%	percent
Percentage Hydrologic Soil Group A =	100.0%	percent
Percentage Hydrologic Soil Group B =	0.0%	percent
Percentage Hydrologic Soil Groups C/D =	0.0%	percent
Target WQCV Drain Time =	12.0	hours

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

User Input

After providing required inputs above including 1-hour rainfall depths, click 'Run CUHP' to generate runoff hydrographs using the embedded Colorado Urban Hydrograph Procedure.

Once CUHP has been run and the Stage-Area-Discharge information has been provided, click 'Process Data' to interpolate the Stage-Area-Volume-Discharge data and generate summary results in the table below. Once this is complete, click 'Print to PDF'.

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.

User Defined Stage [ft]	User Defined Area [ft^2]	User Defined Stage [ft]	User Defined Discharge [cfs]
0.00	14,195	0.00	0.86
0.50	15,994	0.50	0.92
1.50	19,611	1.50	1.03
2.50	23,340	2.50	1.14
3.00	25,238	3.00	1.19

Routed Hydrograph Results

Design Storm Return Period =	WQCV	2 Year	5 Year	10 Year	50 Year	100 Year	
One-Hour Rainfall Depth =	N/A	1.19	1.50	1.75	2.25	2.52	in
CUHP Runoff Volume =	0.173	0.585	0.764	0.907	1.263	1.474	acre-ft
Inflow Hydrograph Volume =	N/A	0.585	0.764	0.907	1.263	1.474	acre-ft
Time to Drain 97% of Inflow Volume =	2.3	7.5	9.5	11.0	14.7	16.8	hours
Time to Drain 99% of Inflow Volume =	2.3	7.7	9.7	11.3	15.0	17.2	hours
Maximum Ponding Depth =	0.50	1.15	1.54	1.83	2.51	2.89	ft
Maximum Ponded Area =	0.37	0.42	0.45	0.48	0.54	0.57	acres
Maximum Volume Stored =	0.174	0.428	0.598	0.734	1.079	1.288	acre-ft

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