

Stormwater Detention and Infiltration Design Data Sheet

Workbook Protected

Worksheet Protected

Stormwater Facility Name: Private FSD Pond - Constitution Storage

Facility Location & Jurisdiction: 6855 Constitution Ave; Colorado Springs, CO 80915 Sand Creek Basin - El Paso County

User Input: Watershed Characteristics

Watershed Slope = 0.020 ft/ft
 Watershed Length = 520 ft
 Watershed Area = 2.95 acres
 Watershed Imperviousness = 71.5% 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

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	35	0.00	0.00
1.00	2,555	1.00	0.02
1.52	5,663	1.52	0.03
2.00	7,777	2.00	0.07
3.00	9,210	3.00	0.12
3.25	9,263	3.25	0.62
3.40	9,295	3.40	2.97
4.00	9,423	4.00	2.97
5.00	9,604	5.00	2.97
6.00	9,713	6.00	2.97

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

	WQCV	2 Year	5 Year	10 Year	50 Year	100 Year	
Design Storm Return Period =							
One-Hour Rainfall Depth =	0.60	0.99	1.27	1.53	2.29	2.67	in
Calculated Runoff Volume =	0.069	0.154	0.204	0.256	0.419	0.512	acre-ft
OPTIONAL Override Runoff Volume =							acre-ft
Inflow Hydrograph Volume =	0.069	0.154	0.204	0.255	0.419	0.511	acre-ft
Time to Drain 97% of Inflow Volume =	46.3	63.6	69.3	74.1	82.4	80.4	hours
Time to Drain 99% of Inflow Volume =	50.6	69.9	76.4	82.1	92.4	91.4	hours
Maximum Ponding Depth =	1.41	1.96	2.22	2.48	3.16	3.34	ft
Maximum Ponded Area =	0.11	0.17	0.19	0.19	0.21	0.21	acres
Maximum Volume Stored =	0.065	0.145	0.193	0.242	0.381	0.418	acre-ft

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