Stormwater Detention and Infiltration Design Data Sheet

SDI-Design Data v2.00, Released January 2020

Stormwater Facility Name: **208 Cunningham Drive**

Facility Location & Jurisdiction: **208 Cunningham Drive, El Paso County**

User Input: Watershed Characteristics

Rain Garden (RG) - Bioretention =	RG	
Watershed Area =	2.04	acres
Watershed Length =	632	ft
Watershed Length to Centroid =	316	ft
Watershed Slope =	0.031	ft/ft
Watershed Imperviousness =	32.8%	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
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	0	0.00	0.00
1.00	3,958	1.00	0.08
2.00	5,232	2.00	0.11
3.00	6,606	3.00	0.14

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 =	0.022	0.068	0.108	0.144	0.239	0.293	acre-ft
Inflow Hydrograph Volume =	N/A	0.068	0.108	0.144	0.239	0.293	acre-ft
Time to Drain 97% of Inflow Volume =	7.8	14.8	**19.2**	22.8	31.3	35.7	hours
Time to Drain 99% of Inflow Volume =	8.6	16.0	20.8	24.7	33.7	**38.3**	hours
Maximum Ponding Depth =	0.69	1.10	1.47	1.78	2.51	2.88	ft
Maximum Ponded Area =	0.06	0.09	0.10	0.11	0.14	**0.15**	acres
Maximum Volume Stored =	0.022	0.054	0.091	0.124	0.216	0.269	acre-ft

Stormwater Detention and Infiltration Design Data Sheet