## Stormwater Detention and Infiltration Design Data Sheet

SDI-Design Data v2.00, Released January 2020

Stormwater Facility Name: Waterview East Commercial, Pond 3

Facility Location & Jurisdiction: SEC of Powers Boulevard and Bradley Rd., Colorado Springs, Colorado

User Input: Watershed Characteristics

Extended Detention Basin (EDB)	EDB				
Watershed Area =	4.10	acres			
Watershed Length =	580	ft			
Watershed Length to Centroid =	290	ft			
Watershed Slope =	0.019	ft/ft			
Watershed Imperviousness =	83.4%	percent			
Percentage Hydrologic Soil Group A =	80.0%	percent			
Percentage Hydrologic Soil Group B =	20.0%	percent			
Percentage Hydrologic Soil Groups C/D =	0.0%	percent			
Target WQCV Drain Time =	40.0	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'.

User Defined	User Defined	User Defined	User Defined
Stage [ft]	Area [ft^2]	Stage [ft]	Discharge [cfs]
0.00	4,615	0.00	0.00
1.00	5,793	1.00	0.06
2.00	7,071	2.00	0.11
3.00	8,449	3.00	0.29
4.00	9,928	4.00	3.64
5.00	11,507	5.00	28.70

After completing and printing this worksheet to a pdf, go to: <a href="https://maperture.digitaldataservices.com/gvh/?viewer=cswdif">https://maperture.digitaldataservices.com/gvh/?viewer=cswdif</a>
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 =	N/A	1.19	1.52	1.75	2.25	2.55	in
CUHP Runoff Volume =	0.120	0.312	0.409	0.478	0.650	0.755	acre-ft
Inflow Hydrograph Volume =	N/A	0.312	0.409	0.478	0.650	0.755	acre-ft
Time to Drain 97% of Inflow Volume =	77.9	83.7	83.6	83.2	77.4	74.3	hours
Time to Drain 99% of Inflow Volume =	101.6	107.4	107.3	106.9	101.3	98.2	hours
Maximum Ponding Depth =	1.01	2.16	2.66	3.00	3.38	3.66	ft
Maximum Ponded Area =	0.13	0.17	0.18	0.19	0.21	0.22	acres
Maximum Volume Stored =	0.120	0.294	0.381	0.444	0.520	0.581	acre-ft



