

# Stormwater Detention and Infiltration Design Data Sheet

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Workbook Protected

Worksheet Protected

Stormwater Facility Name: 16140 Old Denver Road, All About Outdoor Storage, El Paso County

Facility Location & Jurisdiction: Full Spectrum Detention Pond O.E. Watts 10-23-19

### User Input: Watershed Characteristics

Watershed Slope = 0.024 ft/ft  
 Watershed Length = 1130 ft  
 Watershed Area = 11.56 acres  
 Watershed Imperviousness = 70.0% 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  
 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	0	0.00	0.00
0.01	3,340	0.01	0.12
0.50	3,718	0.50	0.14
1.00	4,112	1.00	0.15
1.50	4,522	1.50	0.17
1.84	4,812	1.84	0.19
2.00	4,984	2.00	2.67
2.50	8,381	2.50	20.92
3.00	13,262	3.00	36.05
3.50	13,942	3.50	41.02
4.00	14,636	4.00	45.46
4.50	15,345	4.50	49.49
5.00	16,068	5.00	53.22

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 =	0.53	1.19	1.50	1.75	2.25	2.52	in
Calculated Runoff Volume =	0.262	0.760	1.056	1.301	1.881	2.188	acre-ft
OPTIONAL Override Runoff Volume =							acre-ft
Inflow Hydrograph Volume =	0.262	0.760	1.055	1.301	1.880	2.187	acre-ft
Time to Drain 97% of Inflow Volume =	41.9	38.4	36.2	34.5	30.3	28.1	hours
Time to Drain 99% of Inflow Volume =	43.1	42.1	41.4	40.8	39.4	38.7	hours
Maximum Ponding Depth =	1.97	2.33	2.48	2.64	2.95	3.14	ft
Maximum Poned Area =	0.114	0.165	0.190	0.223	0.293	0.309	acres
Maximum Volume Stored =	0.185	0.234	0.262	0.294	0.375	0.431	acre-ft

