

## Stormwater Detention and Infiltration Design Data Sheet

Workbook Protected

Worksheet Protected

**Stormwater Facility Name:** Retreat at TimberRidge Filing No. 4 - Pond 4

**Facility Location & Jurisdiction:** Approx. 1400' east of int. of Vollmer Rd. and Arroya Lane, El Paso County

### User (Input) Watershed Characteristics

Watershed Slope =  ft/ft  
Watershed Length-to-Width Ratio =  L:W  
Watershed Area =  acres  
Watershed Imperviousness =  percent  
Percentage Hydrologic Soil Group A =  percent  
Percentage Hydrologic Soil Group B =  percent  
Percentage Hydrologic Soil Groups C/D =  percent  
Location for 1-hr Rainfall Depths (use dropdown):

User Input ▼

### User Input: Detention Basin Characteristics

WQCV Design Drain Time =  hours

User Defined Stage [ft]	User Defined Area [ft^2]	User Defined Stage [ft]	User Defined Discharge [cfs]
0.00	106	0.00	0.00
1.00	1,547	1.00	0.03
2.00	2,988	2.00	0.06
3.00	10,267	3.00	0.11
4.00	17,546	4.00	4.58
5.00	19,716	5.00	29.26
6.00	21,886	6.00	60.58
7.00	24,268	7.00	146.79
8.00	26,651	8.00	321.23

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	25 Year	50 Year	100 Year	
Design Storm Return Period =								
One-Hour Rainfall Depth =	0.53	1.19	1.50	1.75	2.00	2.25	2.52	in
Calculated Runoff Volume =	0.199	0.218	0.907	1.774	3.386	4.526	5.873	acre-ft
OPTIONAL Override Runoff Volume =								acre-ft
Inflow Hydrograph Volume =	0.199	0.217	0.907	1.773	3.385	4.526	5.872	acre-ft
Time to Drain 97% of Inflow Volume =	40	41	36	29	20	15	10	hours
Time to Drain 99% of Inflow Volume =	44	46	44	40	35	32	28	hours
Maximum Ponding Depth =	2.84	2.92	4.11	4.73	5.72	6.24	6.62	ft
Maximum Poned Area =	0.207	0.222	0.408	0.439	0.488	0.515	0.536	acres
Maximum Volume Stored =	0.185	0.204	0.585	0.848	1.307	1.567	1.768	acre-ft

These results do not match the MHFD results.

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