

## Stormwater Detention and Infiltration Design Data Sheet

Workbook Protected

Worksheet Protected

Stormwater Facility Name: North Pond - Falcon Meadows at Bent Grass Filing No. 2

Facility Location & Jurisdiction: North of Bent Grass Meadows Drive, adjacent to Falcon Basin West Trib - El Paso County

**User Input: Watershed Characteristics**

Watershed Slope =	0.030	ft/ft
Watershed Length =	1275	ft
Watershed Area =	16.70	acres
Watershed Imperviousness =	65.0%	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	

WOCV Treatment Method = Extended Detention

User Defined Stage [ft]	User Defined Area [ft^2]	User Defined Stage [ft]	User Defined Discharge [cfs]
0.00	40	0.00	0.00
0.33	40	0.33	0.02
0.42	102	0.42	0.02
1.42	2,246	1.42	0.07
2.42	5,126	2.42	0.12
3.42	6,678	3.42	0.17
4.42	8,308	4.42	13.92
5.42	10,025	5.42	68.01
6.42	11,873	6.42	206.81

After completing and printing this worksheet to a pdf, go to:  
<https://maperture.digitaldataservices.com/qvh/?viewer=cswdif>  
create a new stormwater facility, and  
attach the pdf of this worksheet to that record.

**Routed Hydrograph Results**

	WOCV	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 =	0.354	0.926	1.210	1.473	2.127	2.527	acre-ft
OPTIONAL Override Runoff Volume =							acre-ft
Inflow Hydrograph Volume =	0.353	0.926	1.209	1.472	2.126	2.526	acre-ft
Time to Drain 97% of Inflow Volume =	27.7	24.5	23.2	22.1	19.5	18.0	hours
Time to Drain 99% of Inflow Volume =	29.7	28.3	27.7	27.1	25.9	25.1	hours
Maximum Ponding Depth =	3.55	4.18	4.44	4.54	4.77	4.91	ft
Maximum Poned Area =	0.16	0.18	0.19	0.20	0.20	0.21	acres
Maximum Volume Stored =	0.267	0.373	0.422	0.442	0.487	0.517	acre-ft

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