

## Stormwater Detention and Infiltration Design Data Sheet

Workbook Protected

Worksheet Protected

**Stormwater Facility Name:** Dwire Storage Yard

**Facility Location & Jurisdiction:** 38.88423 Latitude, -104.67879 Longitude, El Paso County

**User Input: Watershed Characteristics**

Watershed Slope =	<input type="text" value="0.021"/>	ft/ft
Watershed Length =	<input type="text" value="1535"/>	ft
Watershed Area =	<input type="text" value="19.36"/>	acres
Watershed Imperviousness =	<input type="text" value="67.1%"/>	percent
Percentage Hydrologic Soil Group A =	<input type="text" value="0.0%"/>	percent
Percentage Hydrologic Soil Group B =	<input type="text" value="100.0%"/>	percent
Percentage Hydrologic Soil Groups C/D =	<input type="text" value="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	102	0.00	0.00
0.33	102	0.33	0.01
0.50	220	0.50	0.02
0.83	550	0.83	0.03
1.00	1,682	1.00	0.04
1.40	3,841	1.40	0.05
1.83	6,231	1.83	0.06
2.00	9,035	2.00	0.07
2.40	14,248	2.40	0.08
2.83	19,968	2.83	0.09
3.00	21,616	3.00	0.10
3.35	23,672	3.35	0.12
3.83	24,562	3.83	1.84
4.00	26,058	4.00	4.90
4.30	27,609	4.30	9.97
4.83	29,200	4.83	19.70
5.83	34,177	5.83	30.00
6.83	39,216	6.83	40.00

← .2?

← 0.3?

← 17?

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 =	0.424	1.180	1.574	2.011	2.972	3.506	acre-ft
OPTIONAL Override Runoff Volume =							acre-ft
Inflow Hydrograph Volume =	0.423	1.180	1.574	2.010	2.972	3.505	acre-ft
Time to Drain 97% of Inflow Volume =	68.1	94.9	92.3	89.6	83.8	81.0	hours
Time to Drain 99% of Inflow Volume =	70.8	101.1	100.2	99.1	96.8	95.6	hours
Maximum Ponding Depth =	2.87	3.92	4.17	4.41	4.91	5.23	ft
Maximum Poned Area =	0.47	0.58	0.62	0.64	0.68	0.71	acres
Maximum Volume Stored =	0.405	0.966	1.113	1.267	1.597	1.817	acre-ft

COMMENT ADDRESSED. FINAL  
100-YR STORAGE 2.294 AC-FT.

→ 2.296?

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