

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 =	0.021	ft/ft
Watershed Length =	1535	ft
Watershed Area =	19.36	acres
Watershed Imperviousness =	67.1%	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	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

Tried these values it reduced the values in WQCV, 2 yr, 5yr, 100yr maximum value stored.

.2?

0.3?

17?

Changed to 18 to achieve 2.294 acre-ft

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

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

→ 2.296?

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