

Stormwater Detention and Infiltration Design Data Sheet

Workbook Protected

Worksheet Protected

Stormwater Facility Name: Judge Orr Road RV and Storage Development

Facility Location & Jurisdiction: 14010 Judge Orr Road, Peyton, Colorado (El Paso County)

User Input: Watershed Characteristics

Watershed Slope = ft/ft
 Watershed Length = ft
 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):

WQCV Treatment Method =

The table does not match the values in the UD-Detention worksheet.

User Defined Stage [ft]	User Defined Area [ft^2]	User Defined Stage [ft]	User Defined Discharge [cfs]
0.00	0	0.00	0.00
0.33	10	0.33	0.30
0.50	50	0.50	0.30
0.90	203	0.90	0.30
1.00	817	1.00	0.30
1.50	9,974	1.50	0.30
2.00	17,195	2.00	0.30
2.50	18,052	2.50	0.30
3.00	18,910	3.00	0.30
3.50	19,787	3.50	0.30
4.00	20,681	4.00	0.30
4.50	21,594	4.50	0.40
5.00	22,524	5.00	1.00
5.50	23,473	5.50	6.00
6.00	24,439	6.00	15.00
6.50	25,423	6.50	24.00
7.00	26,426	7.00	33.00
7.50	27,446	7.50	37.70
8.00	28,485	8.00	65.00
9.00	30,616	9.00	100.00

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

Routed Hydrograph Results

Design Storm Return Period =	WQCV	2 Year	5 Year	10 Year	50 Year	100 Year	in
One-Hour Rainfall Depth =	0.53	1.19	1.50	1.75	2.25	2.52	
Calculated Runoff Volume =	0.470	1.099	1.517	2.109	3.720	4.576	acre-ft
OPTIONAL Override Runoff Volume =							acre-ft
Inflow Hydrograph Volume =	0.470	1.099	1.517	2.108	3.719	4.575	acre-ft
Time to Drain 97% of Inflow Volume =	18.6	43.2	55.4	57.5	56.0	55.1	hours
Time to Drain 99% of Inflow Volume =	18.9	44.0	56.6	59.2	59.0	58.7	hours
Maximum Ponding Depth =	2.49	3.90	4.71	5.40	6.47	6.96	ft
Maximum Poned Area =	0.41	0.47	0.50	0.53	0.58	0.60	acres
Maximum Volume Stored =	0.416	1.036	1.433	1.788	2.387	2.679	acre-ft

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