Stormwater Detention and Infiltration Design Data Sheet

Workhook Protected

Worksheet Protected

Stormwater Facility Name: Colorado Kids Ranch - Detention Pond A

Facility Location & Jurisdiction: 18065 Saddlewood Road, Monument, CO 80132 (El Paso County)

User Input: Watershed Characteristics								
Watershed Slope =	0.049	ft/ft						
Watershed Length =	1670	ft						
Watershed Area =	10.80	acres						
Watershed Imperviousness =	30.0%	percent						
Percentage Hydrologic Soil Group A =	0.0%	percent						
Percentage Hydrologic Soil Group B =	100.0%	percent						
Percentage Hydrologic Soil Groups C/D =		percent						
Location for 1-hr Rainfall Depths (use dropdown):								
User Input	•							

WQCV Treatment Method = Extended Detention

User Defined	User Defined	User Defined	User Defined
Stage [ft]	Area [ft^2]	Stage [ft]	Discharge [cfs]
0.00	10	0.00	0.00
1.00	9,174	1.00	0.06
3.00	12,763	3.00	5.48
4.00	15,193	4.00	11.47
6.00	20,050	6.00	111.16

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 Hydro	graph Results					_
Design Storm Return Period =	WQCV	2 Year	5 Year	10 Year	50 Year	100 Year	
One-Hour Rainfall Depth =	0.60	1.19	1.50	1.75	2.25	2.52	in
Calculated Runoff Volume =	0.136	0.255	0.363	0.554	1.171	1.491	acre-ft
OPTIONAL Override Runoff Volume =							acre-ft
Inflow Hydrograph Volume =	0.136	0.254	0.363	0.553	1.171	1.491	acre-ft
Time to Drain 97% of Inflow Volume =	38.0	36.0	34.2	31.5	24.8	21.8	hours
Time to Drain 99% of Inflow Volume =	41.6	40.9	40.0	38.7	35.2	33.5	hours
Maximum Ponding Depth =	1.06	1.34	1.57	1.97	3.11	3.54	ft
Maximum Ponded Area =	0.21	0.22	0.23	0.25	0.30	0.32	acres
Maximum Volume Stored =	0.117	0.178	0.232	0.328	0.642	0.774	acre-ft

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