Stormwater Detention and Infiltration Design Data Sheet

Workbook Protected Worksheet Protected

Stormwater Facility Name: Retreat at TimberRidge Filing No. 3 - Rain Garden 1

Facility Location & Jurisdiction: Approx. 1200' East of int. of Vollmer Rd. and Arroya Lane, El Paso County

User (Input) Watershed Characteristics

Watershed Slope =	0.044	ft/ft
Watershed Length-to-Width Ratio =	2.00	L:W
Watershed Area =	5.00	acres
Watershed Imperviousness =	22.4%	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

User Input: Detention Basin Characteristics

WQCV Design Drain Time =	12.00	hours

User Defined Stage [ft]	User Defined Area [ft^2]	User Defined Stage [ft]	User Defined Discharge [cfs]
0.00	1,935	0.00	0.00
1.00	2,718	1.00	0.05
2.00	3,613	2.00	6.95
3.00	4,621	3.00	19.73
4.00	5,745	4.00	83.61

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

Design Storm Return Period =	WQCV	2 Year	5 Year	10 Year	25 Year	50 Year	100 Year	
One-Hour Rainfall Depth =	0.53	1.19	1.50	1.75	2.00	2.25	2.52	in
Calculated Runoff Volume =	0.041	0.086	0.182	0.275	0.433	0.551	0.688	acre-ft
OPTIONAL Override Runoff Volume =								acre-ft
Inflow Hydrograph Volume =	0.041	0.086	0.182	0.275	0.433	0.550	0.688	acre-ft
Time to Drain 97% of Inflow Volume =	40	37	**29**	24	19	17	14	hours
Time to Drain 99% of Inflow Volume =	52	49	41	36	32	29	**26**	hours
Maximum Ponding Depth =	0.72	1.10	1.40	1.67	2.08	2.29	2.53	ft
Maximum Ponded Area =	0.057	0.064	0.070	0.076	0.085	0.090	0.095	acres
Maximum Volume Stored =	0.037	0.060	0.080	0.100	0.133	0.151	0.173	acre-ft

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