Stormwater Detention and Infiltration Design Data Sheet

Workbook Protected Worksheet Protected

Stormwater Facility Name: Bent Grass East Commercial Filing No. 3 (Ex. Pond 2 in Bent Grass East Commercial Fil. 2 - Tract A)

Facility Location & Jurisdiction: Approx. 850' Southwest of int. of Meridian Road and Bent Grass Meadows Dr., El Paso County

User (Input) Watershed Characteristics

Watershed Slope =	0.020	ft/ft
Watershed Length-to-Width Ratio =	4.00	L:W
Watershed Area =	16.88	acres
Watershed Imperviousness =	71.0%	percent
Percentage Hydrologic Soil Group A =	100.0%	percent
Percentage Hydrologic Soil Group B =	0.0%	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 =	40.00	hours

User Defined Stage [ft]	User Defined Area [ft^2]	User Defined Stage [ft]	User Defined Discharge [cfs]
0.00	12,284	0.00	0.00
0.30	23,391	0.30	0.32
1.30	46,783	1.30	4.69
3.30	114,650	3.30	11.88
5.30	199,243	5.30	13.53

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 =	0.389	1.030	1.339	1.653	2.101	2.445	2.843	acre-ft
OPTIONAL Override Runoff Volume =								acre-ft
Inflow Hydrograph Volume =	0.389	1.030	1.339	1.653	2.100	2.444	2.842	acre-ft
Time to Drain 97% of Inflow Volume =	13	12	**12**	11	11	11	11	hours
Time to Drain 99% of Inflow Volume =	17	16	16	15	15	15	**15**	hours
Maximum Ponding Depth =	0.55	1.08	1.30	1.50	1.75	1.93	2.12	ft
Maximum Ponded Area =	0.668	0.955	1.069	1.222	1.423	1.560	1.708	acres
Maximum Volume Stored =	0.271	0.704	0.919	1.147	1.488	1.751	2.062	acre-ft

Stormwater Detention and Infiltration Design Data Sheet