

El Paso County MS4 Post Construction Detention / Water Quality Facility Documentation Form

This document **must be completed and submitted** with required attachments to the County for projects requiring a detention and/or a water quality facility. A separate completed form must be submitted for each facility.

Project name: SADDLEHORN RANCH FIL	.ING 1 – POND (6	
Owner name: GORILLA CAPITAL SADDLE	EHORN RANCH	CO, LLC	
Location Address: APPROX 5200 FT SOL	JTHEAST OF INT	Γ. OF CURTIS RD. AND J	JDGE ORR RD.
Latitude and Longitude:			
38deg56min12sec N, 104deg32min49se	ec W		
Assessor's Parcel #: 4300000601	Section: 10	Township: 13S Range	e: 64W
Expected Completion date: 12/2021			
Project acreage: 178 (33.57 cont.)	Design	Ponding Acres: 0.66	Design Storm: 100 YEAR
Design Engineer Email Address: MBRAN	VILETT@JRENGI	NEERING.COM	
To ensure compliance with C.R.S. 37-92 Detention and Infiltration Design Data S <u>https://maperture.digitaldataservices.c</u>	Sheet must be a	ttached. The form can	
List all permanent water quality control	measure(s) (ED)Bs, rain gardens, etc):	

EXTENDED DETENTION BASIN

For all projects for which the constrained redevelopment sites standard is applied, provide an explanation of why it is

not practicable to meet the full design standards.

Attach Operations and Maintenance (O&M) Plan describing the operation and maintenance procedures that ensure the long-term observation, maintenance, and operation of control measure(s), including routine inspection frequencies and maintenance activities. If multiple, different water quality control measures are used at the same location, a separate O & M Plan must be provided for each facility.

Attach Private Detention Basin / Stormwater Quality Best Management Practice Maintenance Agreement and **Easement** addressing maintenance of BMPs that shall be binding on all subsequent owners of the permanent BMPs.

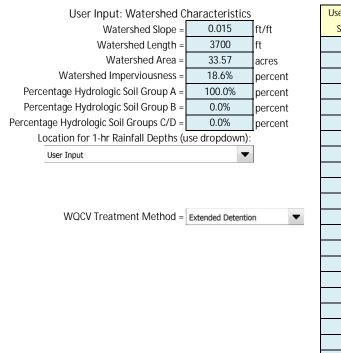
Attachments:	Review Engineer	JDR
Stormwater Detention and Infiltration Design Data Sheet	EPC Project File No.	SP-19-006/
O & M Plan		SF-19-012 /
Maintenance and Access Agreement		EGP-21-001

Workbook Protected

Worksheet Protected

Stormwater Facility Name: SADDLEHORN RANCH - FILING 1 - POND G

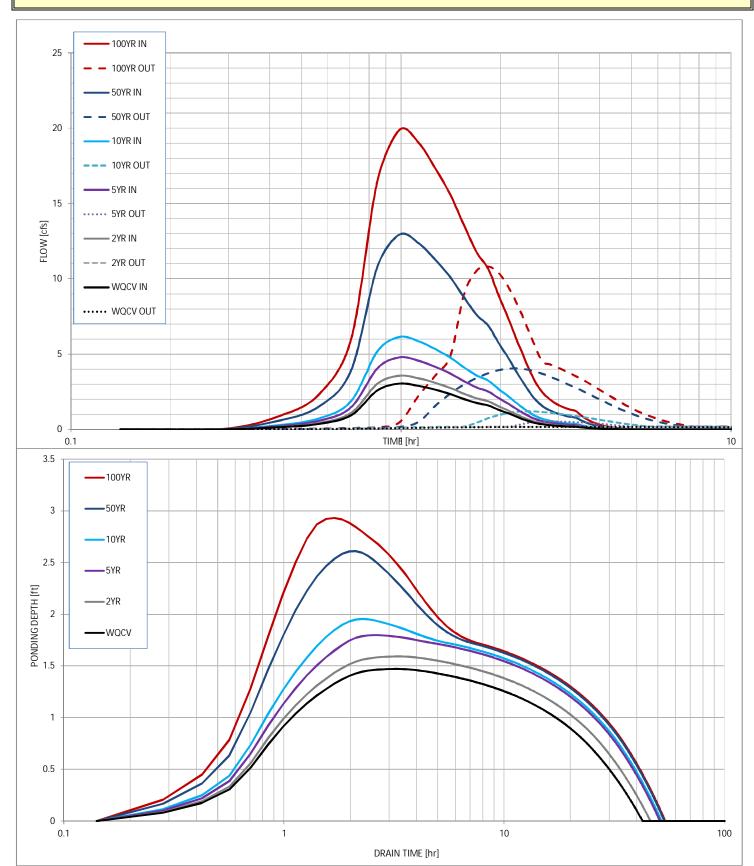
Facility Location & Jurisdiction: EL PASO COUNTY - SADDLEHORN RANCH METROPOLITAN DISTRICT



User Defined	User Defined	User Defined	User Defined
Stage [ft]	Area [ft^2]	Stage [ft]	Discharge [cfs]
0.00	0	0.00	0.00
0.00	-	0.00	
	7,201		0.08
1.72	20,625	1.72	0.19
2.72	27,717	2.72	4.52
3.72	31,904	3.72	34.41
4.72	36,248	4.72	151.29
4.92	37,319	4.92	184.37

After completing and printing this worksheet to a pdf, go to: <u>https://maperture.digitaldataservices.com/gvh/?viewer=cswdif</u> 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 =	0.53	1.19	1.50	1.75	2.25	2.52	in
Calculated Runoff Volume =	0.307	0.361	0.487	0.627	1.331	2.058	acre-ft
OPTIONAL Override Runoff Volume =							acre-ft
Inflow Hydrograph Volume =	0.307	0.361	0.486	0.626	1.331	2.057	acre-ft
Time to Drain 97% of Inflow Volume =	35.6	38.6	42.2	41.8	38.8	35.6	hours
Time to Drain 99% of Inflow Volume =	38.6	41.8	46.0	46.0	45.1	43.4	hours
Maximum Ponding Depth =	1.47	1.59	1.80	1.95	2.61	2.93	ft
Maximum Ponded Area =	0.40	0.43	0.49	0.51	0.62	0.66	acres
Maximum Volume Stored =	0.269	0.320	0.415	0.492	0.862	1.069	acre-ft





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Project name: SADDLEHORN RANCH FIL	ING 1 – POND	Н	
Owner name: GORILLA CAPITAL SADDLI	EHORN RANCH	CO, LLC	
Location Address: APPROX 3000 FT SO	UTHEAST OF IN	T. OF CURTIS RD. AND JU	JDGE ORR RD.
Latitude and Longitude:			
38deg56min12sec N, 104deg33min01se	ec W		
Assessor's Parcel #: 4300000601	Section: 3	Township: 13S Range	:: 64W
Expected Completion date: 12/2021			
Project acreage: 178 (21.16 cont.)	Desig	n Ponding Acres: 0.45	Design Storm: 100 YEAR
Design Engineer Email Address: MBRA	MLETT@JRENG	INEERING.COM	
To ensure compliance with C.R.S. 37-92 Detention and Infiltration Design Data S <u>https://maperture.digitaldataservices.c</u>	Sheet must be a	attached. The form can b	
List all permanent water quality control	l measure(s) (El	DBs, rain gardens, etc):	
EXTENDED DETENTION BASIN			

For all projects for which the constrained redevelopment sites standard is applied, provide an explanation of why it is

not practicable to meet the full design standards.

Attach Operations and Maintenance (O&M) Plan describing the operation and maintenance procedures that ensure the long-term observation, maintenance, and operation of control measure(s), including routine inspection frequencies and maintenance activities. If multiple, different water quality control measures are used at the same location, a separate O & M Plan must be provided for each facility.

Attach Private Detention Basin / Stormwater Quality Best Management Practice Maintenance Agreement and **Easement** addressing maintenance of BMPs that shall be binding on all subsequent owners of the permanent BMPs.

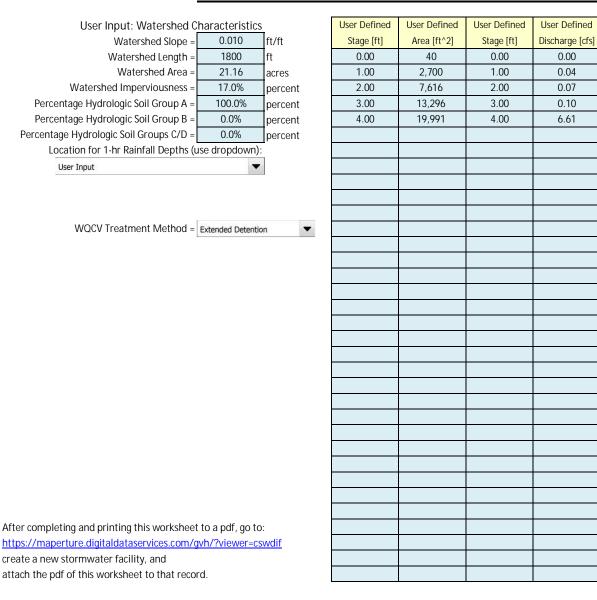
Attachments:	Review Engineer	JDR
Stormwater Detention and Infiltration Design Data Sheet	EPC Project File No.	SP-19-006/
O & M Plan		SF-19-012 /
Maintenance and Access Agreement		EGP-21-001

Workbook Protected

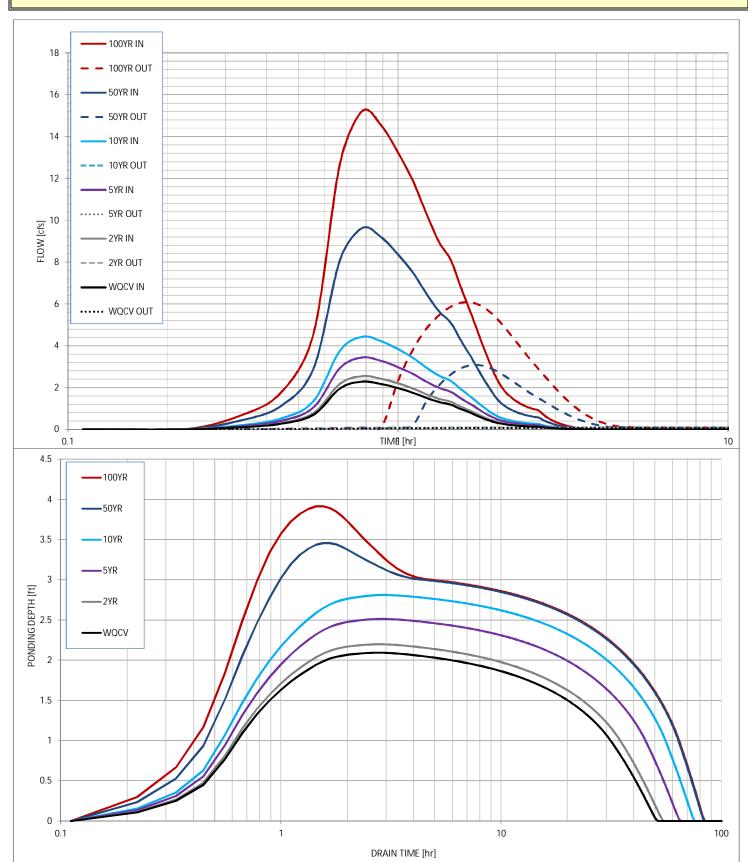
Worksheet Protected

Stormwater Facility Name: SADDLEHORN RANCH - FILING 1 - POND H

Facility Location & Jurisdiction: EL PASO COUNTY - SADDLEHORN RANCH METROPOLITAN DISTRICT



	Routed Hydro	ograph Results					-
Design Storm Return Period =	WQCV	2 Year	5 Year	10 Year	50 Year	100 Year	
One-Hour Rainfall Depth =	0.53	1.19	1.50	1.75	2.25	2.52	in
Calculated Runoff Volume =	0.181	0.202	0.274	0.353	0.775	1.231	acre-ft
OPTIONAL Override Runoff Volume =							acre-ft
Inflow Hydrograph Volume =	0.180	0.201	0.273	0.353	0.774	1.231	acre-ft
Time to Drain 97% of Inflow Volume =	42.7	45.6	54.7	63.9	66.6	62.7	hours
Time to Drain 99% of Inflow Volume =	46.1	49.2	58.9	68.6	73.6	71.4	hours
Maximum Ponding Depth =	2.09	2.20	2.51	2.81	3.46	3.91	ft
Maximum Ponded Area =	0.19	0.20	0.24	0.28	0.37	0.45	acres
Maximum Volume Stored =	0.166	0.186	0.256	0.333	0.543	0.731	acre-ft





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Project name: SADDLEHORN RANCH FIL	ING 1 – POND I		
Owner name: GORILLA CAPITAL SADDLE	HORN RANCH	CO, LLC	
Location Address: APPROX 5200 FT SOL	JTHEAST OF INT	. OF CURTIS RD. AND JU	JDGE ORR RD.
Latitude and Longitude:			
38deg56min12sec N, 104deg32min54se	e W		
Assessor's Parcel #: 4300000601	Section: 10	Township: 13S Range	e: 64W
Expected Completion date: 12/2021			
Project acreage: 178 (38.04 cont.)	Design	Ponding Acres: 0.88	Design Storm: 100 YEAR
Design Engineer Email Address: MBRAN	ALETT@JRENGI	NEERING.COM	
To ensure compliance with C.R.S. 37-92 Detention and Infiltration Design Data S https://maperture.digitaldataservices.co	sheet must be a	ttached. The form can	
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0.00

0.07

0.13

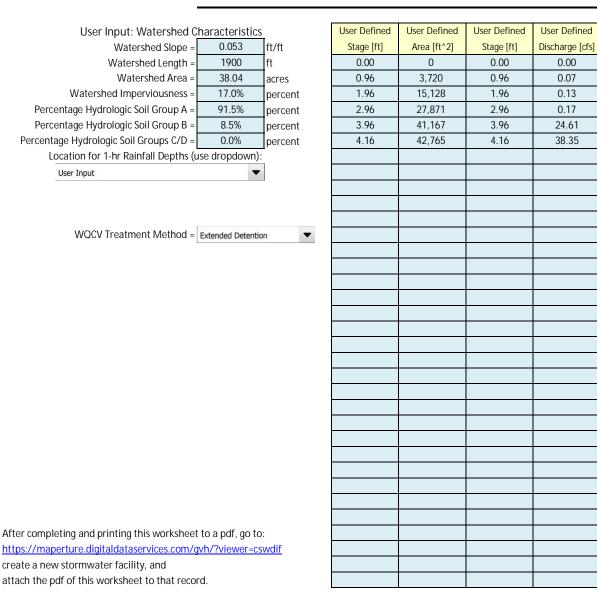
0.17

24.61

38.35

Stormwater Facility Name: SADDLEHORN RANCH - FILING 1 - POND I

Facility Location & Jurisdiction: EL PASO COUNTY - SADDLEHORN RANCH METROPOLITAN DISTRICT



_	Routed Hydro	ograph Results					_
Design Storm Return Period =	WQCV	2 Year	5 Year	10 Year	50 Year	100 Year	
One-Hour Rainfall Depth =	0.53	1.19	1.50	1.75	2.25	2.52	in
Calculated Runoff Volume =	0.325	0.372	0.508	0.687	1.575	2.423	acre-ft
OPTIONAL Override Runoff Volume =							acre-ft
Inflow Hydrograph Volume =	0.325	0.371	0.508	0.687	1.574	2.423	acre-ft
Time to Drain 97% of Inflow Volume =	39.2	42.8	52.7	64.9	66.7	63.1	hours
Time to Drain 99% of Inflow Volume =	42.2	45.9	56.4	69.1	73.1	71.2	hours
Maximum Ponding Depth =	2.10	2.21	2.50	2.82	3.39	3.76	ft
Maximum Ponded Area =	0.39	0.42	0.50	0.60	0.77	0.88	acres
Maximum Volume Stored =	0.306	0.350	0.484	0.662	1.047	1.358	acre-ft

