

November 11, 2024

Thomas Hopper  
The Garrett Company  
401 Pennsylvania Parkway, Suite 300  
Indianapolis, IN 46280

Re: **Citizen on Constitution Filing No. 1 - Detention Pond Certification Letter  
El Paso County, Colorado**

Dear Mr. Hopper:

This letter serves as the certification for the Detention Pond at Citizen on Constitution Filing No. 1, El Paso County, CO consistent with El Paso County Engineering Manual (“ECM”) Section 5.10.B, which states that Engineering Record Drawings shall be accompanied by a certification letter from the Engineer of Record which shall state that the site and adjacent properties (as affected by work performed under the County permit) are stable and that the improvements (public improvements, common development improvements, site grading and paving) meet or exceed the minimum design requirements.

Based upon this information and information gathered during periodic site visits to the site during significant/key phases of the infrastructure installation, Kimley-Horn is of the opinion that the detention pond work performed under the County Permit, per Section 5.10.B of the ECM, have been constructed in general compliance with the approved Construction Plans as filed with the County dated November 21, 2022.

Attached to this letter are Record Drawings which certify that the public improvements meet or exceed the minimum design requirements, except as noted on the Record Drawings, and do not adversely affect the adjacent properties.

**Statement Of Engineer In Responsible Charge:**

I, Mitchell O. Hess, a registered Professional Engineer in the State of Colorado, in accordance with Sections 5.2 and 5.3 of the Bylaws and Rules of the State Board of Registration for Professional Engineers and Professional Land Surveyors, do hereby certify that I or a person under my responsible charge periodically observed the construction of the above-mentioned project. Based on the on-site field observations and review of pertinent documentation, it is my professional opinion that the required infrastructure improvements have been installed and are in general compliance with the approved Construction Plans as filed with El Paso County.

Mitchell O. Hess, P.E.  
Colorado No. 53916

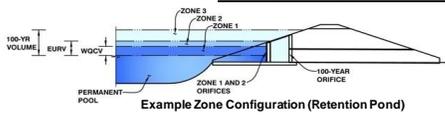




# DETENTION BASIN STAGE-STORAGE TABLE BUILDER

MHFD-Detention, Version 4.04 (February 2021)

Project: Citizen On Constitution (El Paso)  
Basin ID: Extended Detention Basin



### Watershed Information

Selected BMP Type =	<b>EDB</b>	
Watershed Area =	11.25	acres
Watershed Length =	1,200	ft
Watershed Length to Centroid =	600	ft
Watershed Slope =	0.020	ft/ft
Watershed Imperviousness =	71.00%	percent
Percentage Hydrologic Soil Group A =	66.5%	percent
Percentage Hydrologic Soil Group B =	33.5%	percent
Percentage Hydrologic Soil Groups C/D =	0.0%	percent
Target WQC Drain Time =	40.0	hours
Location for 1-hr Rainfall Depths =	User Input	

After providing required inputs above including 1-hour rainfall depths, click "Run CUHP" to generate runoff hydrographs using the embedded Colorado Urban Hydrograph Procedure.

Water Quality Capture Volume (WQCV) =	0.262	acre-feet
Excess Urban Runoff Volume (EURV) =	0.970	acre-feet
2-yr Runoff Volume (P1 = 1.19 in.) =	0.746	acre-feet
5-yr Runoff Volume (P1 = 1.52 in.) =	0.986	acre-feet
10-yr Runoff Volume (P1 = 1.75 in.) =	1.177	acre-feet
25-yr Runoff Volume (P1 = 2 in.) =	1.437	acre-feet
50-yr Runoff Volume (P1 = 2.25 in.) =	1.663	acre-feet
100-yr Runoff Volume (P1 = 2.55 in.) =	1.974	acre-feet
500-yr Runoff Volume (P1 = 3.14 in.) =	2.537	acre-feet
Approximate 2-yr Detention Volume =	0.671	acre-feet
Approximate 5-yr Detention Volume =	0.894	acre-feet
Approximate 10-yr Detention Volume =	1.077	acre-feet
Approximate 25-yr Detention Volume =	1.241	acre-feet
Approximate 50-yr Detention Volume =	1.339	acre-feet
Approximate 100-yr Detention Volume =	1.466	acre-feet

### Optional User Overrides

	acre-feet
	acre-feet
	1.19 inches
	1.52 inches
	1.75 inches
	2.00 inches
	2.25 inches
	2.55 inches
	inches

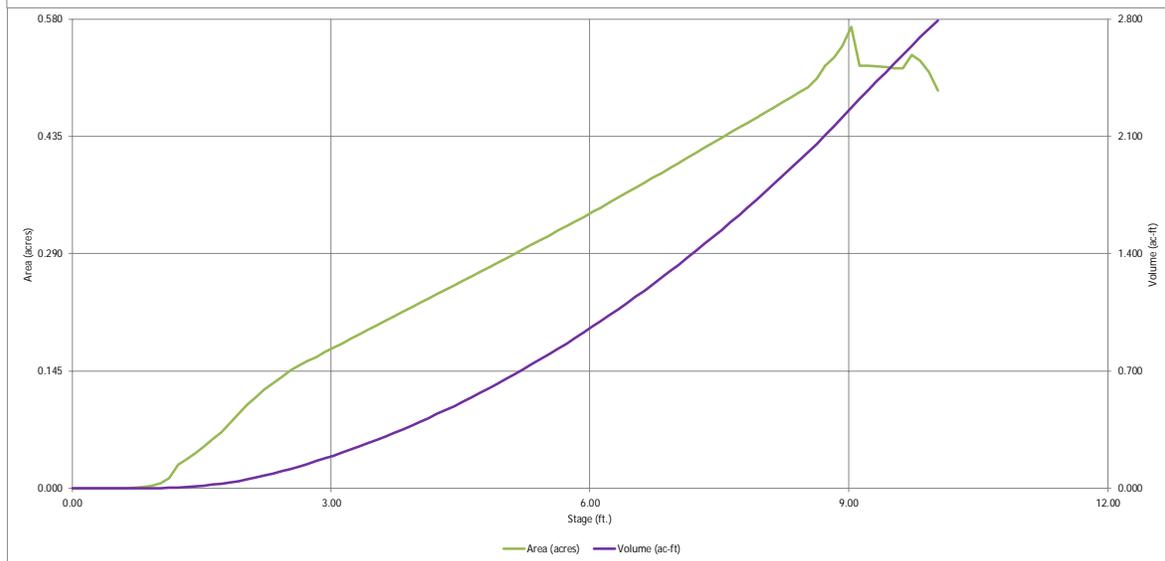
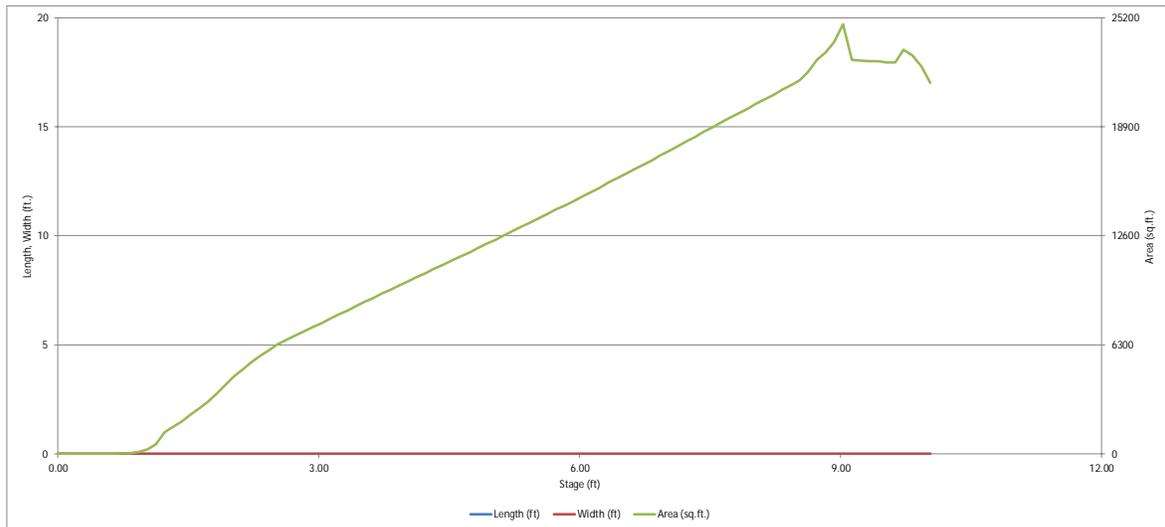
### Define Zones and Basin Geometry

Zone 1 Volume (WOCV) =	0.262	acre-feet
Zone 2 Volume (EURV - Zone 1) =	0.708	acre-feet
Zone 3 Volume (100-year - Zones 1 & 2) =	0.496	acre-feet
Total Detention Basin Volume =	1.466	acre-feet
Initial Surcharge Volume (ISV) =	user	ft <sup>3</sup>
Initial Surcharge Depth (ISD) =	user	ft
Total Available Detention Depth (H <sub>total</sub> ) =	user	ft
Depth of Trickle Channel (H <sub>tc</sub> ) =	user	ft
Slope of Trickle Channel (S <sub>tc</sub> ) =	user	ft/ft
Slopes of Main Basin Sides (S <sub>main</sub> ) =	user	H:V
Basin Length-to-Width Ratio (R <sub>L/W</sub> ) =	user	
Initial Surcharge Area (A <sub>ISV</sub> ) =	user	ft <sup>2</sup>
Surcharge Volume Length (L <sub>ISV</sub> ) =	user	ft
Surcharge Volume Width (W <sub>ISV</sub> ) =	user	ft
Depth of Basin Floor (H <sub>FLOOR</sub> ) =	user	ft
Length of Basin Floor (L <sub>FLOOR</sub> ) =	user	ft
Width of Basin Floor (W <sub>FLOOR</sub> ) =	user	ft
Area of Basin Floor (A <sub>FLOOR</sub> ) =	user	ft <sup>2</sup>
Volume of Basin Floor (V <sub>FLOOR</sub> ) =	user	ft <sup>3</sup>
Depth of Main Basin (H <sub>MAIN</sub> ) =	user	ft
Length of Main Basin (L <sub>MAIN</sub> ) =	user	ft
Width of Main Basin (W <sub>MAIN</sub> ) =	user	ft
Area of Main Basin (A <sub>MAIN</sub> ) =	user	ft <sup>2</sup>
Volume of Main Basin (V <sub>MAIN</sub> ) =	user	ft <sup>3</sup>
Calculated Total Basin Volume (V <sub>total</sub> ) =	USER	acre-feet

Stage - Storage Description	Stage (ft)	Optional Override Stage (ft)	Length (ft)	Width (ft)	Area (ft <sup>2</sup> )	Optional Override Area (ft <sup>2</sup> )	Area (acre)	Volume (ft <sup>3</sup> )	Volume (ac-ft)
Top of Micropool	--	0.00	--	--	--	10	0.000		
6425.4	--	0.33	--	--	--	10	0.000	3	0.000
6425.5	--	0.43	--	--	--	10	0.000	4	0.000
6425.6	--	0.53	--	--	--	10	0.000	5	0.000
6425.7	--	0.63	--	--	--	10	0.000	6	0.000
6425.8	--	0.73	--	--	--	23	0.001	8	0.000
6425.9	--	0.83	--	--	--	51	0.001	11	0.000
6426	--	0.93	--	--	--	121	0.003	19	0.000
6426.1	--	1.03	--	--	--	258	0.006	37	0.001
6426.2	--	1.13	--	--	--	546	0.013	74	0.002
6426.3	--	1.23	--	--	--	1,259	0.029	157	0.004
6426.4	--	1.33	--	--	--	1,575	0.036	296	0.007
6426.5	--	1.43	--	--	--	1,884	0.043	466	0.011
6426.6	--	1.53	--	--	--	2,274	0.052	670	0.015
6426.7	--	1.63	--	--	--	2,632	0.060	911	0.021
6426.8	--	1.73	--	--	--	3,021	0.069	1,190	0.027
6426.9	--	1.83	--	--	--	3,493	0.080	1,511	0.035
6427	--	1.93	--	--	--	4,018	0.092	1,881	0.043
6427.1	--	2.03	--	--	--	4,487	0.103	2,302	0.053
6427.2	--	2.13	--	--	--	4,909	0.113	2,767	0.064
6427.3	--	2.23	--	--	--	5,306	0.122	3,274	0.075
6427.4	--	2.33	--	--	--	5,663	0.130	3,819	0.088
6427.5	--	2.43	--	--	--	6,008	0.138	4,399	0.101
6427.6	--	2.53	--	--	--	6,328	0.145	5,013	0.115
6427.7	--	2.63	--	--	--	6,597	0.151	5,656	0.130
6427.8	--	2.73	--	--	--	6,841	0.157	6,326	0.145
6427.9	--	2.83	--	--	--	7,069	0.162	7,019	0.161
6428	--	2.93	--	--	--	7,333	0.168	7,737	0.178
6428.1	--	3.03	--	--	--	7,557	0.173	8,479	0.195
6428.2	--	3.13	--	--	--	7,788	0.179	9,244	0.212
6428.3	--	3.23	--	--	--	8,040	0.185	10,033	0.230
6428.4	--	3.33	--	--	--	8,289	0.190	10,847	0.249
6428.5	--	3.43	--	--	--	8,537	0.196	11,685	0.268
6428.6	--	3.53	--	--	--	8,782	0.202	12,549	0.288
6428.7	--	3.63	--	--	--	9,022	0.207	13,437	0.308
6428.8	--	3.73	--	--	--	9,259	0.213	14,348	0.329
6428.9	--	3.83	--	--	--	9,496	0.218	15,284	0.351
6429	--	3.93	--	--	--	9,733	0.223	16,243	0.373
6429.1	--	4.03	--	--	--	9,971	0.229	17,226	0.395
6429.2	--	4.13	--	--	--	10,210	0.234	18,232	0.419
6429.3	--	4.23	--	--	--	10,449	0.240	19,263	0.442
6429.4	--	4.33	--	--	--	10,688	0.245	20,317	0.466
6429.5	--	4.43	--	--	--	10,927	0.251	21,396	0.491
6429.6	--	4.53	--	--	--	11,166	0.256	22,498	0.516
6429.7	--	4.63	--	--	--	11,404	0.262	23,624	0.542
6429.8	--	4.73	--	--	--	11,642	0.267	24,774	0.569
6429.9	--	4.83	--	--	--	11,882	0.273	25,948	0.596
6430	--	4.93	--	--	--	12,124	0.278	27,146	0.623
6430.1	--	5.03	--	--	--	12,369	0.284	28,368	0.651
6430.2	--	5.13	--	--	--	12,617	0.290	29,615	0.680
6430.3	--	5.23	--	--	--	12,866	0.295	30,886	0.709
6430.4	--	5.33	--	--	--	13,118	0.301	32,183	0.739
6430.5	--	5.43	--	--	--	13,368	0.307	33,505	0.769
6430.6	--	5.53	--	--	--	13,616	0.313	34,852	0.800
6430.7	--	5.63	--	--	--	13,863	0.318	36,223	0.832
6430.8	--	5.73	--	--	--	14,109	0.324	37,619	0.864
6430.9	--	5.83	--	--	--	14,357	0.330	39,040	0.896
6431	--	5.93	--	--	--	14,609	0.335	40,486	0.929
6431.1 (EURV)	--	6.03	--	--	--	14,866	0.341	41,957	0.963
6431.2	--	6.13	--	--	--	15,126	0.347	43,452	0.998
6431.3	--	6.23	--	--	--	15,390	0.353	44,977	1.033
6431.4	--	6.33	--	--	--	15,657	0.359	46,527	1.068
6431.5	--	6.43	--	--	--	15,921	0.366	48,103	1.104
6431.6	--	6.53	--	--	--	16,184	0.372	49,706	1.141
6431.7	--	6.63	--	--	--	16,444	0.378	51,335	1.178
6431.8	--	6.73	--	--	--	16,705	0.383	52,990	1.216
6431.9	--	6.83	--	--	--	16,969	0.390	54,671	1.255
6432	--	6.93	--	--	--	17,235	0.396	56,378	1.294
6432.1	--	7.03	--	--	--	17,510	0.402	58,113	1.334
6432.2	--	7.13	--	--	--	17,784	0.408	59,875	1.375
6432.3	--	7.23	--	--	--	18,057	0.415	61,664	1.416
6432.4	--	7.33	--	--	--	18,331	0.421	63,481	1.457
6432.5 (100-YR)	--	7.43	--	--	--	18,604	0.427	65,325	1.501
6432.6	--	7.53	--	--	--	18,875	0.433	67,196	1.543
6432.7	--	7.63	--	--	--	19,146	0.440	69,094	1.586
6432.8	--	7.73	--	--	--	19,415	0.446	71,020	1.630
6432.9	--	7.83	--	--	--	19,684	0.452	72,972	1.675
6433	--	7.93	--	--	--	19,951	0.458	74,951	1.721
6433.1	--	8.03	--	--	--	20,218	0.464	76,957	1.767
6433.2	--	8.13	--	--	--	20,487	0.470	78,989	1.813
6433.3	--	8.23	--	--	--	20,759	0.477	81,049	1.861
6433.4	--	8.33	--	--	--	21,033	0.483	83,136	1.909
6433.5	--	8.43	--	--	--	21,309	0.489	85,250	1.957
6433.6	--	8.53	--	--	--	21,585	0.496	87,392	2.006
6433.7	--	8.63	--	--	--	21,862	0.502	89,571	2.056
6433.8	--	8.73	--	--	--	22,139	0.508	91,786	2.108
6433.9	--	8.83	--	--	--	22,417	0.514	94,037	2.160
6434	--	8.93	--	--	--	22,691	0.520	96,324	2.214
6434.1	--	9.03	--	--	--	22,964	0.526	98,646	2.270
6434.2	--	9.13	--	--	--	23,238	0.532	101,002	2.326
6434.3	--	9.23	--	--	--	23,512	0.538	103,393	2.383
6434.4	--	9.33	--	--	--	23,787	0.544	105,818	2.441
6434.5	--	9.43	--	--	--	24,061	0.550	108,278	2.499
6434.6	--	9.53	--	--	--	24,336	0.556	110,772	2.558
6434.7	--	9.63	--						

# DETENTION BASIN STAGE-STORAGE TABLE BUILDER

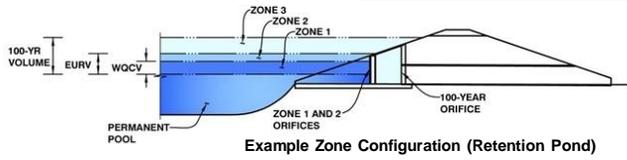
MHFD-Detention, Version 4.04 (February 2021)



# DETENTION BASIN OUTLET STRUCTURE DESIGN

MHFD-Detention, Version 4.04 (February 2021)

Project: Citizen On Constitution (El Paso)  
Basin ID: Extended Detention Basin



	Estimated Stage (ft)	Estimated Volume (ac-ft)	Outlet Type
Zone 1 (WQCV)	3.39	0.262	Orifice Plate
Zone 2 (EURV)	6.04	0.708	Orifice Plate
Zone 3 (100-year)	7.35	0.496	Weir&Pipe (Restrict)
<b>Total (all zones)</b>		<b>1.466</b>	

**User Input: Orifice at Underdrain Outlet (typically used to drain WQCV in a Filtration BMP)**

Underdrain Orifice Invert Depth =  ft (distance below the filtration media surface)  
Underdrain Orifice Diameter =  inches

**Calculated Parameters for Underdrain**  
Underdrain Orifice Area =  ft<sup>2</sup>  
Underdrain Orifice Centroid =  feet

**User Input: Orifice Plate with one or more orifices or Elliptical Slot Weir (typically used to drain WQCV and/or EURV in a sedimentation BMP)**

Invert of Lowest Orifice =  ft (relative to basin bottom at Stage = 0 ft)  
Depth at top of Zone using Orifice Plate =  ft (relative to basin bottom at Stage = 0 ft)  
Orifice Plate: Orifice Vertical Spacing =  inches  
Orifice Plate: Orifice Area per Row =  inches

**Calculated Parameters for Plate**  
WQ Orifice Area per Row =  ft<sup>2</sup>  
Elliptical Half-Width =  feet  
Elliptical Slot Centroid =  feet  
Elliptical Slot Area =  ft<sup>2</sup>

**User Input: Stage and Total Area of Each Orifice Row (numbered from lowest to highest)**

	Row 1 (required)	Row 2 (optional)	Row 3 (optional)	Row 4 (optional)	Row 5 (optional)	Row 6 (optional)	Row 7 (optional)	Row 8 (optional)
Stage of Orifice Centroid (ft)	0.00	2.86	4.25	5.25				
Orifice Area (sq. inches)	1.35	2.00	3.30	3.30				

	Row 9 (optional)	Row 10 (optional)	Row 11 (optional)	Row 12 (optional)	Row 13 (optional)	Row 14 (optional)	Row 15 (optional)	Row 16 (optional)
Stage of Orifice Centroid (ft)								
Orifice Area (sq. inches)								

**User Input: Vertical Orifice (Circular or Rectangular)**

Invert of Vertical Orifice =  ft (relative to basin bottom at Stage = 0 ft)  
Depth at top of Zone using Vertical Orifice =  ft (relative to basin bottom at Stage = 0 ft)  
Vertical Orifice Diameter =  inches

**Calculated Parameters for Vertical Orifice**  
Vertical Orifice Area =  ft<sup>2</sup>  
Vertical Orifice Centroid =  feet

**User Input: Overflow Weir (Dropbox with Flat or Sloped Grate and Outlet Pipe OR Rectangular/Trapezoidal Weir (and No Outlet Pipe))**

	Zone 3 Weir	Not Selected	
Overflow Weir Front Edge Height, Ho =	6.03	N/A	ft (relative to basin bottom at Stage = 0 ft)
Overflow Weir Front Edge Length =	4.00	N/A	feet
Overflow Weir Grate Slope =	0.00	N/A	H:V
Horiz. Length of Weir Sides =	4.00	N/A	feet
Overflow Grate Type =	Type C Grate	N/A	
Debris Clogging % =	50%	N/A	%

**Calculated Parameters for Overflow Weir**

	Zone 3 Weir	Not Selected	
Height of Grate Upper Edge, H <sub>t</sub> =	6.03	N/A	feet
Overflow Weir Slope Length =	4.00	N/A	feet
Grate Open Area / 100-yr Orifice Area =	29.65	N/A	
Overflow Grate Open Area w/o Debris =	11.14	N/A	ft <sup>2</sup>
Overflow Grate Open Area w/ Debris =	5.57	N/A	ft <sup>2</sup>

**User Input: Outlet Pipe w/ Flow Restriction Plate (Circular Orifice, Restrictor Plate, or Rectangular Orifice)**

	Zone 3 Restrictor	Not Selected	
Depth to Invert of Outlet Pipe =	1.35	N/A	ft (distance below basin bottom at Stage = 0 ft)
Outlet Pipe Diameter =	24.00	N/A	inches
Restrictor Plate Height Above Pipe Invert =	4.25	N/A	inches

**Calculated Parameters for Outlet Pipe w/ Flow Restriction Plate**

	Zone 3 Restrictor	Not Selected	
Outlet Orifice Area =	0.38	N/A	ft <sup>2</sup>
Outlet Orifice Centroid =	0.21	N/A	feet
Half-Central Angle of Restrictor Plate on Pipe =	0.87	N/A	radians

**User Input: Emergency Spillway (Rectangular or Trapezoidal)**

Spillway Invert Stage =  ft (relative to basin bottom at Stage = 0 ft)  
Spillway Crest Length =  feet  
Spillway End Slopes =  H:V  
Freeboard above Max Water Surface =  feet

**Calculated Parameters for Spillway**

Spillway Design Flow Depth =	0.31	feet
Stage at Top of Freeboard =	9.99	feet
Basin Area at Top of Freeboard =	0.50	acres
Basin Volume at Top of Freeboard =	2.78	acre-ft

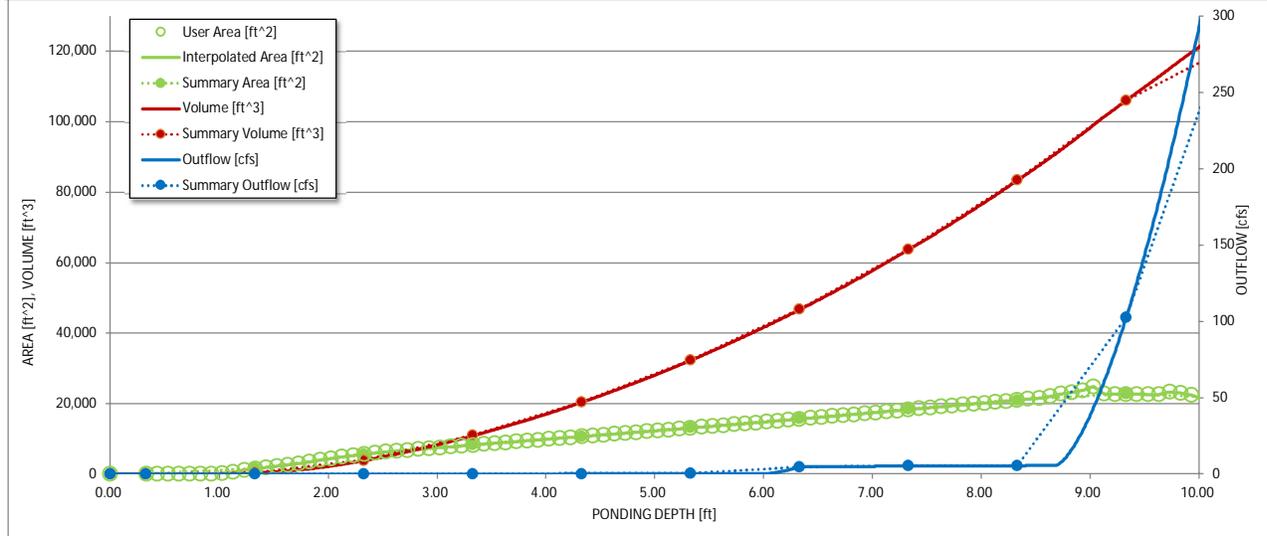
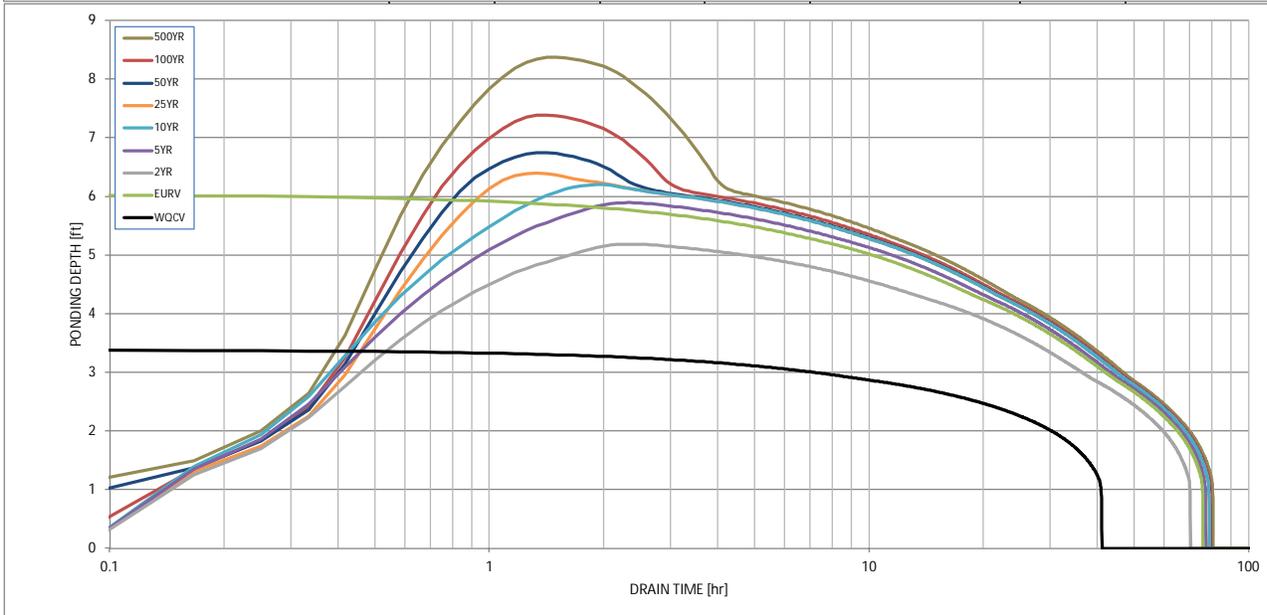
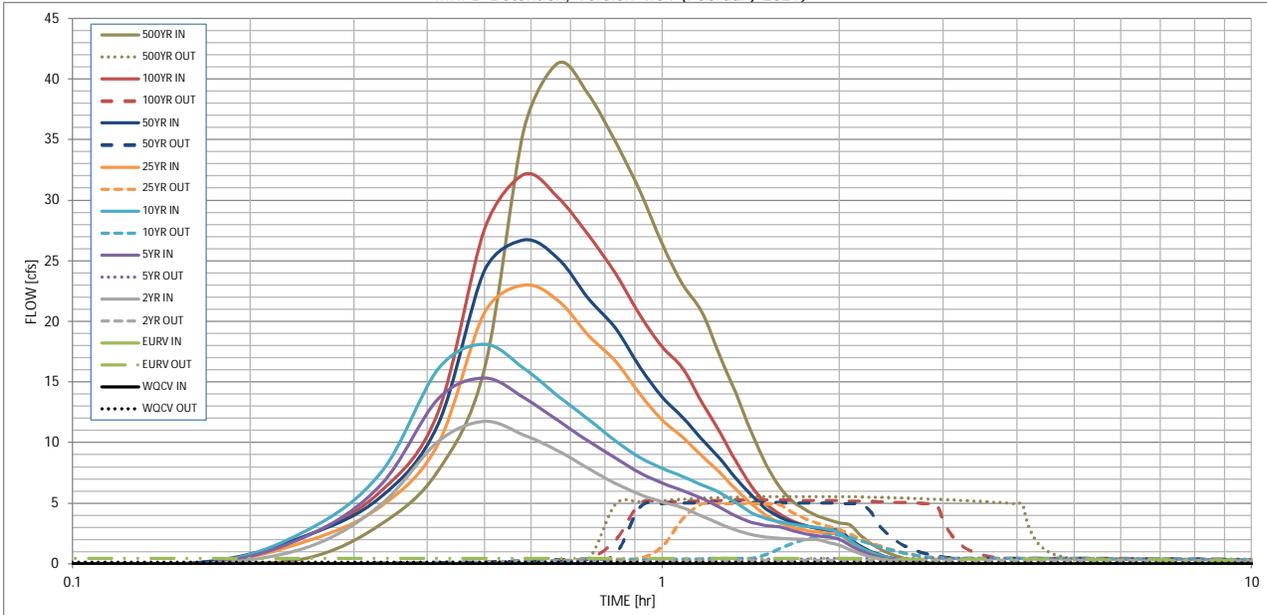
## Routed Hydrograph Results

*The user can override the default CUHP hydrographs and runoff volumes by entering new values in the Inflow Hydrographs table (Columns W through AF).*

	WQCV	EURV	2 Year	5 Year	10 Year	25 Year	50 Year	100 Year	500 Year
Design Storm Return Period =									
One-Hour Rainfall Depth (in) =	N/A	N/A	1.19	1.52	1.75	2.00	2.25	2.55	3.14
CUHP Runoff Volume (acre-ft) =	0.262	0.970	0.746	0.986	1.177	1.437	1.663	1.974	2.537
Inflow Hydrograph Volume (acre-ft) =	N/A	N/A	0.746	0.986	1.177	1.437	1.663	1.974	2.537
CUHP Predevelopment Peak Q (cfs) =	N/A	N/A	0.1	0.2	1.4	4.4	6.2	9.3	14.2
OPTIONAL Override Predevelopment Peak Q (cfs) =	N/A	N/A		5.4	7.8			16.9	
Predevelopment Unit Peak Flow, q (cfs/acre) =	N/A	N/A	0.01	0.48	0.69	0.39	0.55	1.50	1.27
Peak Inflow Q (cfs) =	N/A	N/A	11.8	15.3	18.1	23.0	26.7	32.2	41.4
Peak Outflow Q (cfs) =	0.1	0.5	0.3	0.5	2.4	5.0	5.1	5.3	5.6
Ratio Peak Outflow to Predevelopment Q =	N/A	N/A	N/A	0.1	0.3	1.1	0.8	0.3	0.4
Structure Controlling Flow =	Plate	Overflow Weir 1	Plate	Plate	Overflow Weir 1	Outlet Plate 1	Outlet Plate 1	Outlet Plate 1	Outlet Plate 1
Max Velocity through Gate 1 (fps) =	N/A	0.00	N/A	N/A	0.2	0.4	0.4	0.4	0.4
Max Velocity through Gate 2 (fps) =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Time to Drain 97% of Inflow Volume (hours) =	39	69	65	71	71	70	68	67	65
Time to Drain 99% of Inflow Volume (hours) =	40	73	68	75	76	75	75	75	75
Maximum Ponding Depth (ft) =	3.39	6.04	5.19	5.90	6.21	6.40	6.75	7.40	8.38
Area at Maximum Ponding Depth (acres) =	0.19	0.34	0.29	0.33	0.35	0.36	0.38	0.42	0.49
Maximum Volume Stored (acre-ft) =	0.262	0.970	0.700	0.919	1.025	1.097	1.228	1.487	1.933

# DETENTION BASIN OUTLET STRUCTURE DESIGN

MHFD-*Detention*, Version 4.04 (February 2021)



S-A-V-D Chart Axis Override	X-axis	Left Y-Axis	Right Y-Axis
minimum bound			
maximum bound			

# DETENTION BASIN OUTLET STRUCTURE DESIGN

Outflow Hydrograph Workbook Filename: \_\_\_\_\_

**Inflow Hydrographs**

The user can override the calculated inflow hydrographs from this workbook with inflow hydrographs developed in a separate program.

Time Interval	SOURCE	CUHP	CUHP	CUHP	CUHP	CUHP	CUHP	CUHP	CUHP	CUHP
	TIME	WQCV [cfs]	EURV [cfs]	2 Year [cfs]	5 Year [cfs]	10 Year [cfs]	25 Year [cfs]	50 Year [cfs]	100 Year [cfs]	500 Year [cfs]
5.00 min	0:00:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0:05:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0:10:00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.04	0.51
	0:15:00	0.00	0.00	1.40	2.34	2.83	1.90	2.36	2.36	3.29
	0:20:00	0.00	0.00	4.91	6.54	7.55	4.75	5.52	6.01	7.69
	0:25:00	0.00	0.00	10.11	13.61	16.08	9.90	11.52	12.51	16.16
	0:30:00	0.00	0.00	11.77	15.33	18.15	20.78	24.25	27.63	35.91
	0:35:00	0.00	0.00	10.64	13.70	16.11	23.01	26.72	32.15	41.35
	0:40:00	0.00	0.00	9.33	11.82	13.85	21.72	25.19	30.22	38.75
	0:45:00	0.00	0.00	7.87	10.13	11.95	18.88	21.92	27.14	34.81
	0:50:00	0.00	0.00	6.65	8.75	10.16	16.73	19.45	23.97	30.77
	0:55:00	0.00	0.00	5.73	7.52	8.79	14.02	16.27	20.55	26.42
	1:00:00	0.00	0.00	5.13	6.70	7.91	11.89	13.78	17.90	23.05
	1:05:00	0.00	0.00	4.65	6.04	7.22	10.46	12.09	16.16	20.83
	1:10:00	0.00	0.00	3.97	5.42	6.54	8.92	10.31	13.37	17.22
	1:15:00	0.00	0.00	3.33	4.67	5.89	7.57	8.74	10.93	14.07
	1:20:00	0.00	0.00	2.80	3.95	5.05	6.15	7.08	8.48	10.87
	1:25:00	0.00	0.00	2.42	3.45	4.24	4.98	5.70	6.45	8.21
	1:30:00	0.00	0.00	2.22	3.19	3.77	3.99	4.55	4.97	6.31
	1:35:00	0.00	0.00	2.13	3.05	3.47	3.40	3.87	4.10	5.18
	1:40:00	0.00	0.00	2.07	2.74	3.26	3.03	3.44	3.56	4.47
	1:45:00	0.00	0.00	2.04	2.51	3.11	2.79	3.15	3.18	3.98
	1:50:00	0.00	0.00	2.01	2.33	3.00	2.62	2.96	2.93	3.64
	1:55:00	0.00	0.00	1.75	2.20	2.85	2.51	2.83	2.74	3.40
	2:00:00	0.00	0.00	1.54	2.04	2.59	2.43	2.74	2.62	3.24
	2:05:00	0.00	0.00	1.16	1.53	1.93	1.82	2.05	1.95	2.41
	2:10:00	0.00	0.00	0.85	1.12	1.40	1.33	1.49	1.42	1.75
	2:15:00	0.00	0.00	0.62	0.81	1.02	0.97	1.09	1.04	1.28
	2:20:00	0.00	0.00	0.45	0.58	0.73	0.70	0.78	0.76	0.93
	2:25:00	0.00	0.00	0.32	0.40	0.52	0.49	0.55	0.54	0.66
	2:30:00	0.00	0.00	0.22	0.28	0.36	0.35	0.39	0.38	0.46
	2:35:00	0.00	0.00	0.14	0.19	0.25	0.24	0.27	0.26	0.32
	2:40:00	0.00	0.00	0.09	0.12	0.15	0.16	0.17	0.17	0.21
	2:45:00	0.00	0.00	0.04	0.07	0.08	0.09	0.10	0.10	0.12
	2:50:00	0.00	0.00	0.02	0.03	0.04	0.04	0.04	0.04	0.05
	2:55:00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	3:00:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:05:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:10:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:15:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:20:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:25:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:30:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:35:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:40:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:45:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:50:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:55:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4:00:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4:05:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4:10:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4:15:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4:20:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4:25:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4:30:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4:35:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4:40:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4:45:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4:50:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4:55:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
5:00:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
5:05:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
5:10:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
5:15:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
5:20:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
5:25:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
5:30:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
5:35:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
5:40:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
5:45:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
5:50:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
5:55:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6:00:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

