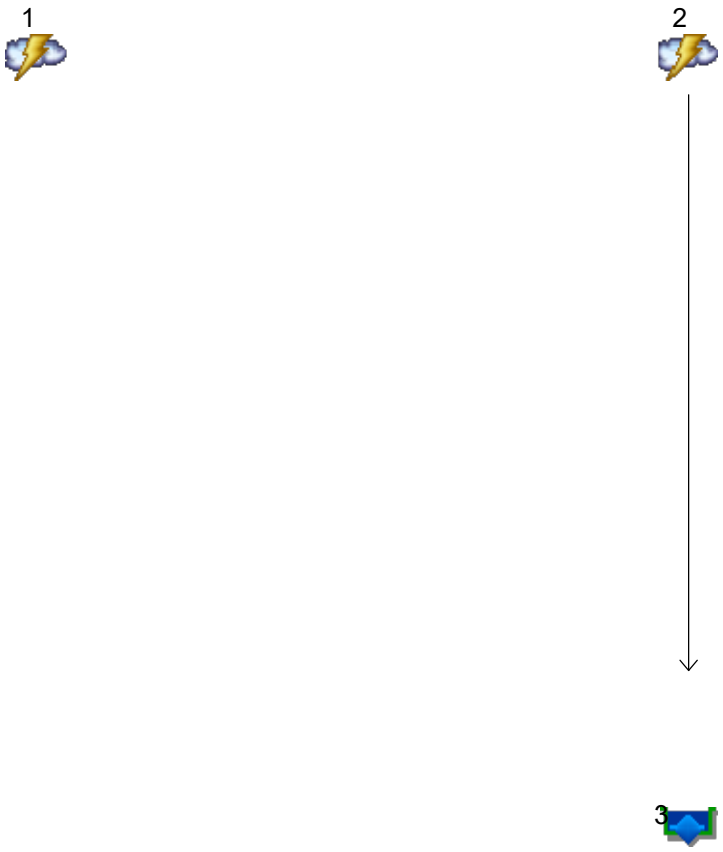
Watershed Model Schematic



Hydrograph Return Period Recap

Hyd. No.	Hydrograph type (origin)	Inflow hyd(s)	Peak Outflow (cfs)								Hydrograph Description
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
1	Rational	------	-------	13.83	-------	16.30	18.12	20.84	22.96	25.08	PRE
2	Rational	------	-------	32.45	-------	37.45	41.26	47.01	51.53	56.05	POST
3	Reservoir	2	-------	10.29	-------	11.98	13.29	15.43	19.16	23.12	2 EAST POND 2

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	13.83	1	10	8,297	------	------	------	PRE
2	Rational	32.45	1	5	9,735	------	------	------	POST
3	Reservoir	10.29	1	8	9,731	2	398.35	6,846	2 EAST POND 2

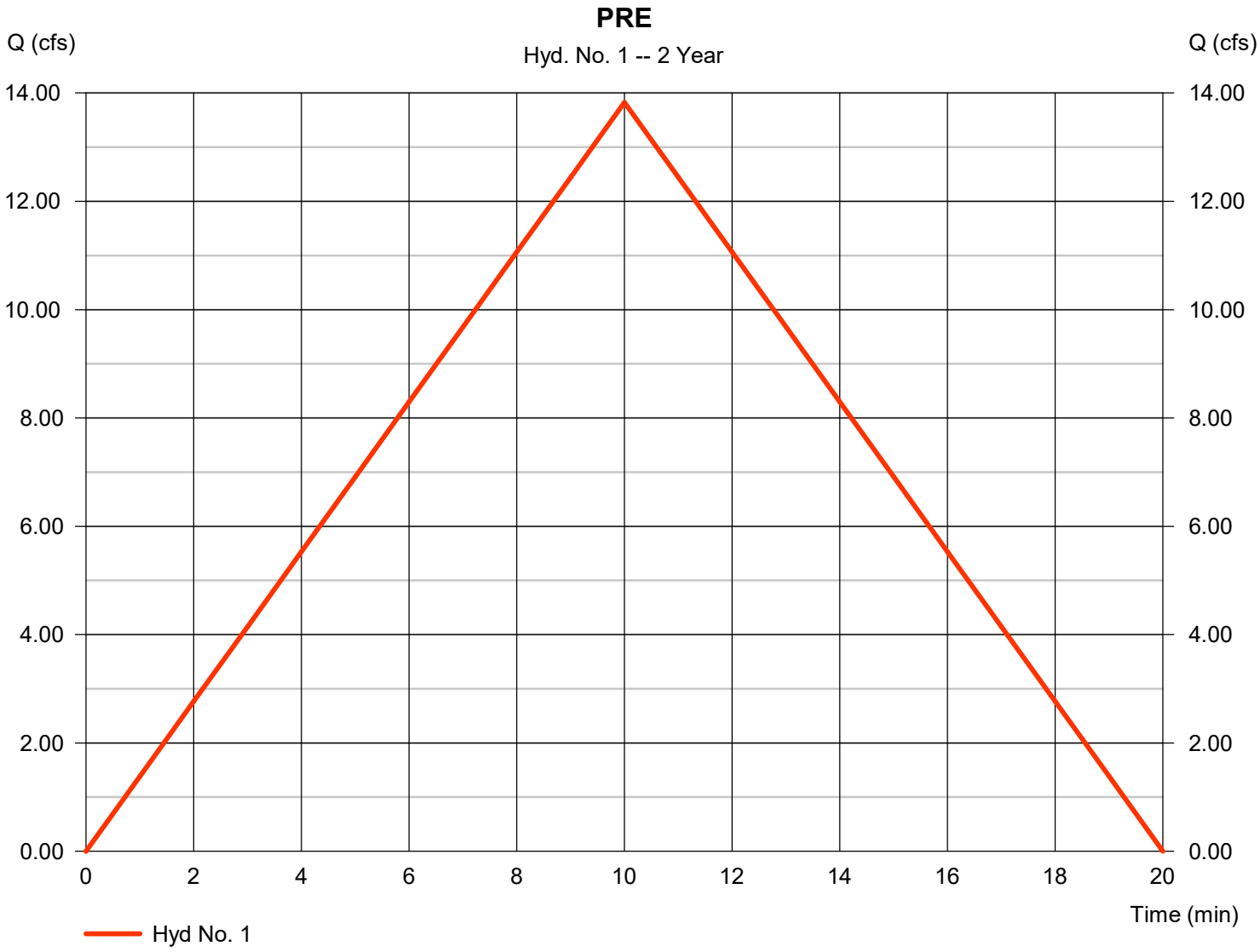
Hydrograph Report

Hyd. No. 1

PRE

Hydrograph type	=	Rational	Peak discharge	=	13.83 cfs
Storm frequency	=	2 yrs	Time to peak	=	10 min
Time interval	=	1 min	Hyd. volume	=	8,297 cuft
Drainage area	=	6.000 ac	Runoff coeff.	=	0.5*
Intensity	=	4.609 in/hr	Tc by User	=	10.00 min
IDF Curve	=	Littlerock.IDF	Asc/Rec limb fact	=	1/1

* Composite (Area/C) = [(1.600 x 0.40) + (0.160 x 0.95)] / 6.000



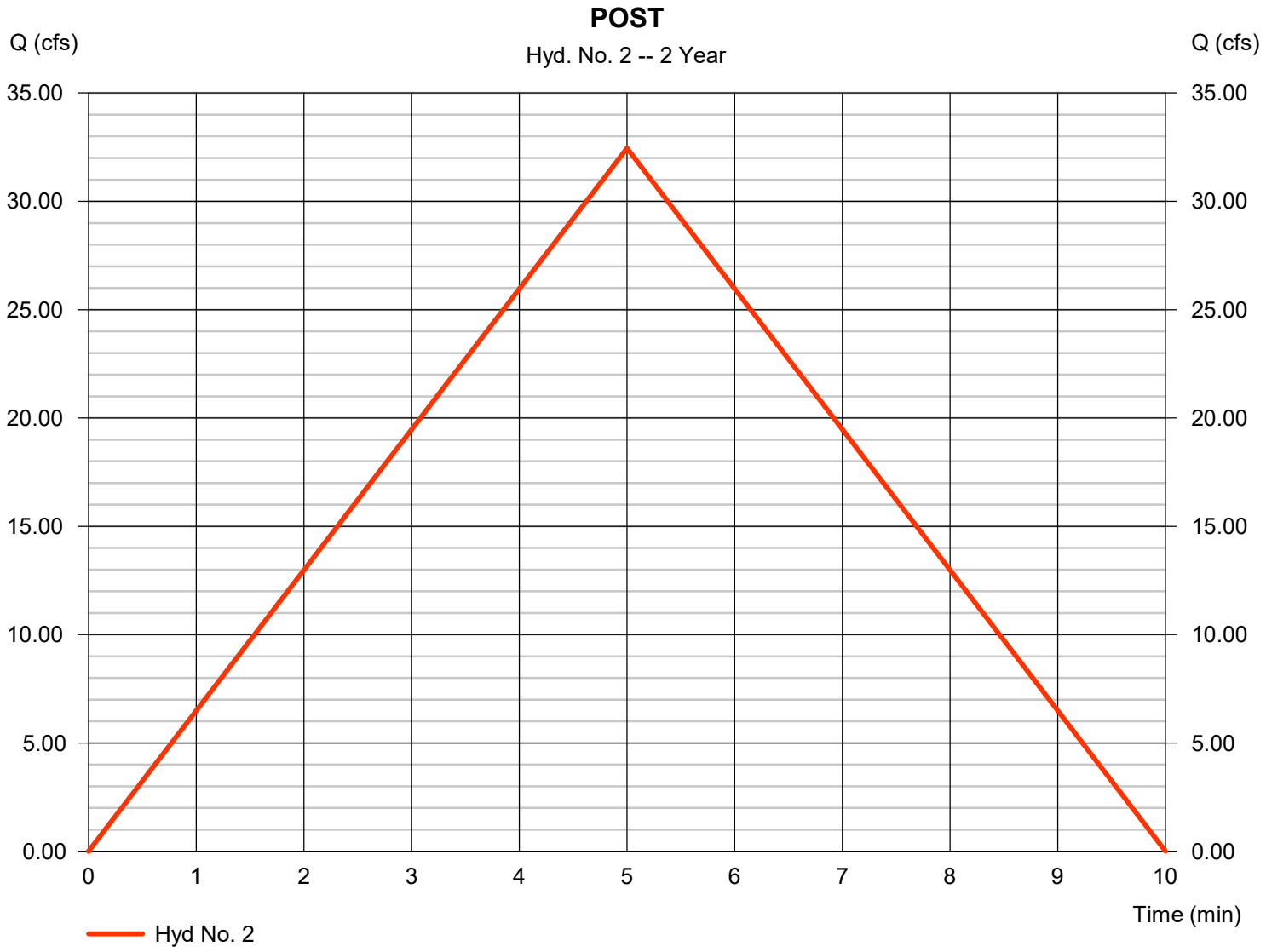
Hydrograph Report

Hyd. No. 2

POST

Hydrograph type	=	Rational	Peak discharge	=	32.45 cfs
Storm frequency	=	2 yrs	Time to peak	=	5 min
Time interval	=	1 min	Hyd. volume	=	9,735 cuft
Drainage area	=	6.000 ac	Runoff coeff.	=	0.95*
Intensity	=	5.693 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Littlerock.IDF	Asc/Rec limb fact	=	1/1

* Composite (Area/C) = [(0.300 x 0.40) + (1.460 x 0.95)] / 6.000



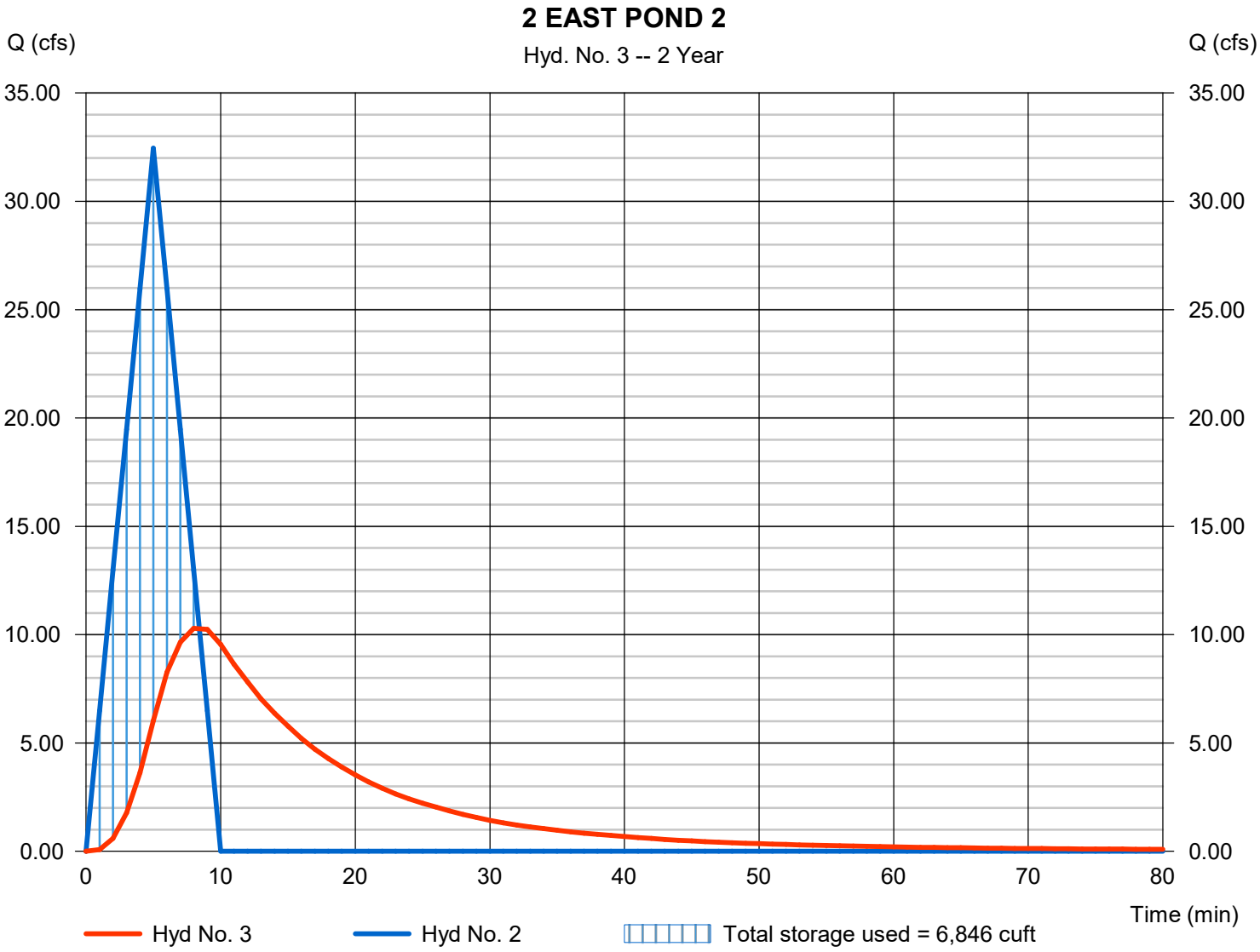
Hydrograph Report

Hyd. No. 3

2 EAST POND 2

Hydrograph type	= Reservoir	Peak discharge	= 10.29 cfs
Storm frequency	= 2 yrs	Time to peak	= 8 min
Time interval	= 1 min	Hyd. volume	= 9,731 cuft
Inflow hyd. No.	= 2 - POST	Max. Elevation	= 398.35 ft
Reservoir name	= EAST POND 2	Max. Storage	= 6,846 cuft

Storage Indication method used.



Pond Report

Pond No. 2 - EAST POND 2

Pond Data

Trapezoid -Bottom L x W = 100.0 x 20.0 ft, Side slope = 3.00:1, Bottom elev. = 396.00 ft, Depth = 4.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	396.00	2,000	0	0
0.40	396.40	2,294	858	858
0.80	396.80	2,599	978	1,837
1.20	397.20	2,916	1,103	2,939
1.60	397.60	3,244	1,232	4,171
2.00	398.00	3,584	1,365	5,536
2.40	398.40	3,935	1,503	7,039
2.80	398.80	4,298	1,646	8,686
3.20	399.20	4,673	1,794	10,480
3.60	399.60	5,059	1,946	12,425
4.00	400.00	5,456	2,103	14,528

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 0.00	0.00	0.00	0.00
Span (in)	= 0.00	0.00	0.00	0.00
No. Barrels	= 0	0	0	0
Invert El. (ft)	= 380.00	0.00	0.00	0.00
Length (ft)	= 0.00	0.00	0.00	0.00
Slope (%)	= 0.00	0.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	No	No	No

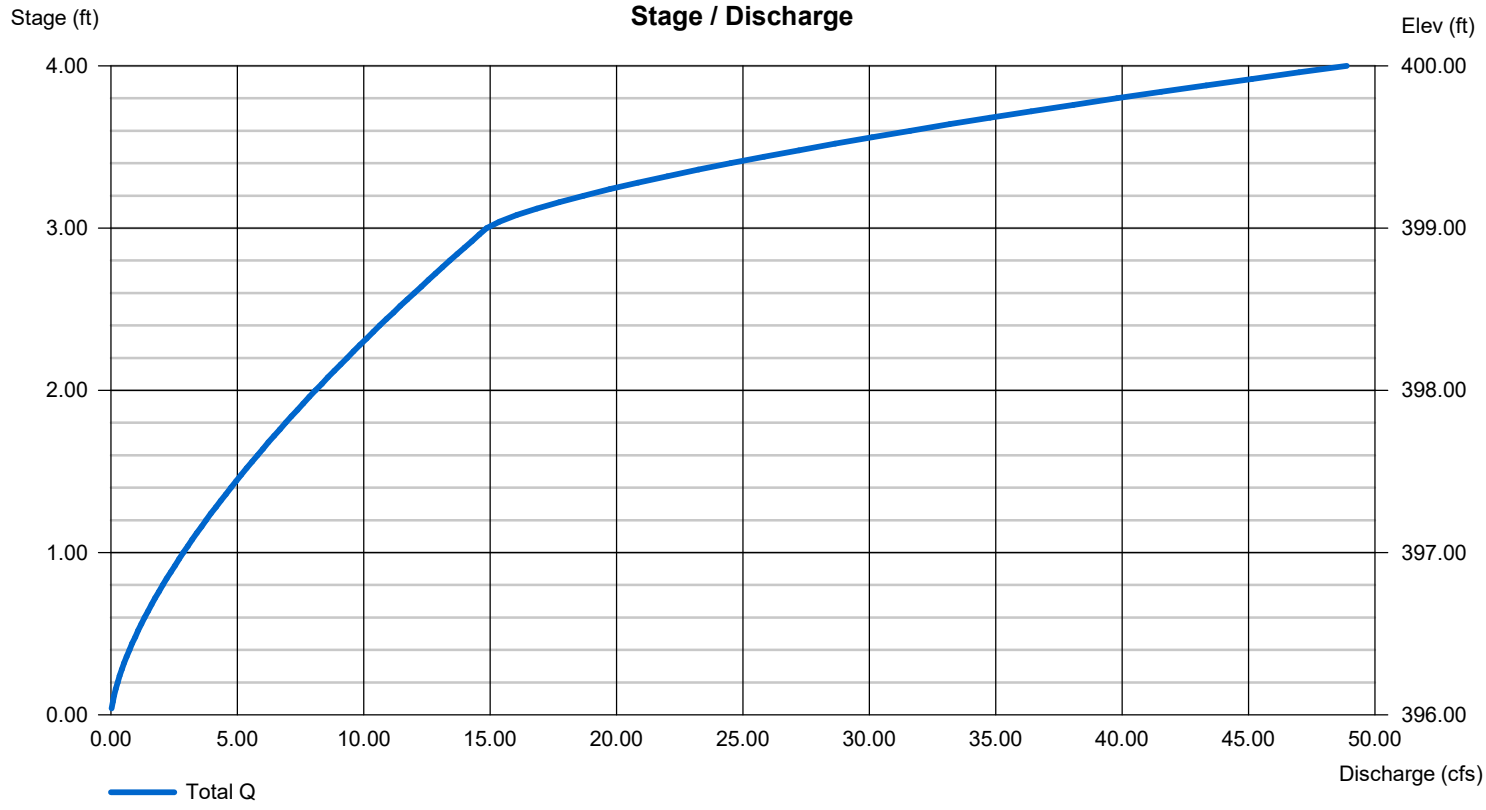
Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 1.10	10.00	0.00	0.00
Crest El. (ft)	= 396.00	399.00	0.00	0.00
Weir Coeff.	= 2.60	2.60	3.33	3.33
Weir Type	= Broad	Broad	---	---
Multi-Stage	= No	No	No	No

Exfil.(in/hr) = 0.000 (by Wet area)

TW Elev. (ft) = 0.00

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	16.30	1	10	9,778	------	------	------	PRE
2	Rational	37.45	1	5	11,235	------	------	------	POST
3	Reservoir	11.98	1	8	11,231	2	398.60	7,857	2 EAST POND 2

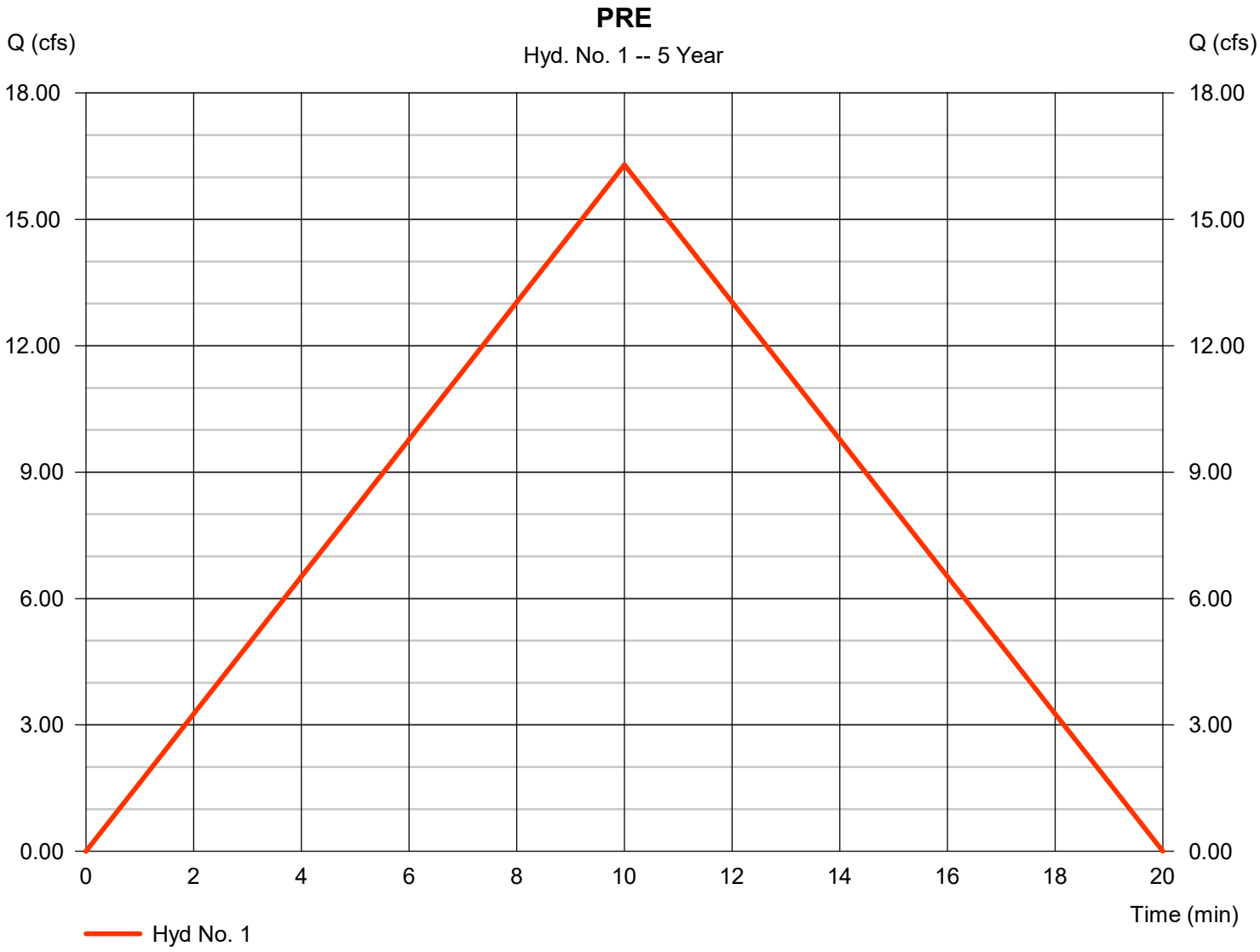
Hydrograph Report

Hyd. No. 1

PRE

Hydrograph type	=	Rational	Peak discharge	=	16.30 cfs
Storm frequency	=	5 yrs	Time to peak	=	10 min
Time interval	=	1 min	Hyd. volume	=	9,778 cuft
Drainage area	=	6.000 ac	Runoff coeff.	=	0.5*
Intensity	=	5.432 in/hr	Tc by User	=	10.00 min
IDF Curve	=	Littlerock.IDF	Asc/Rec limb fact	=	1/1

* Composite (Area/C) = [(1.600 x 0.40) + (0.160 x 0.95)] / 6.000



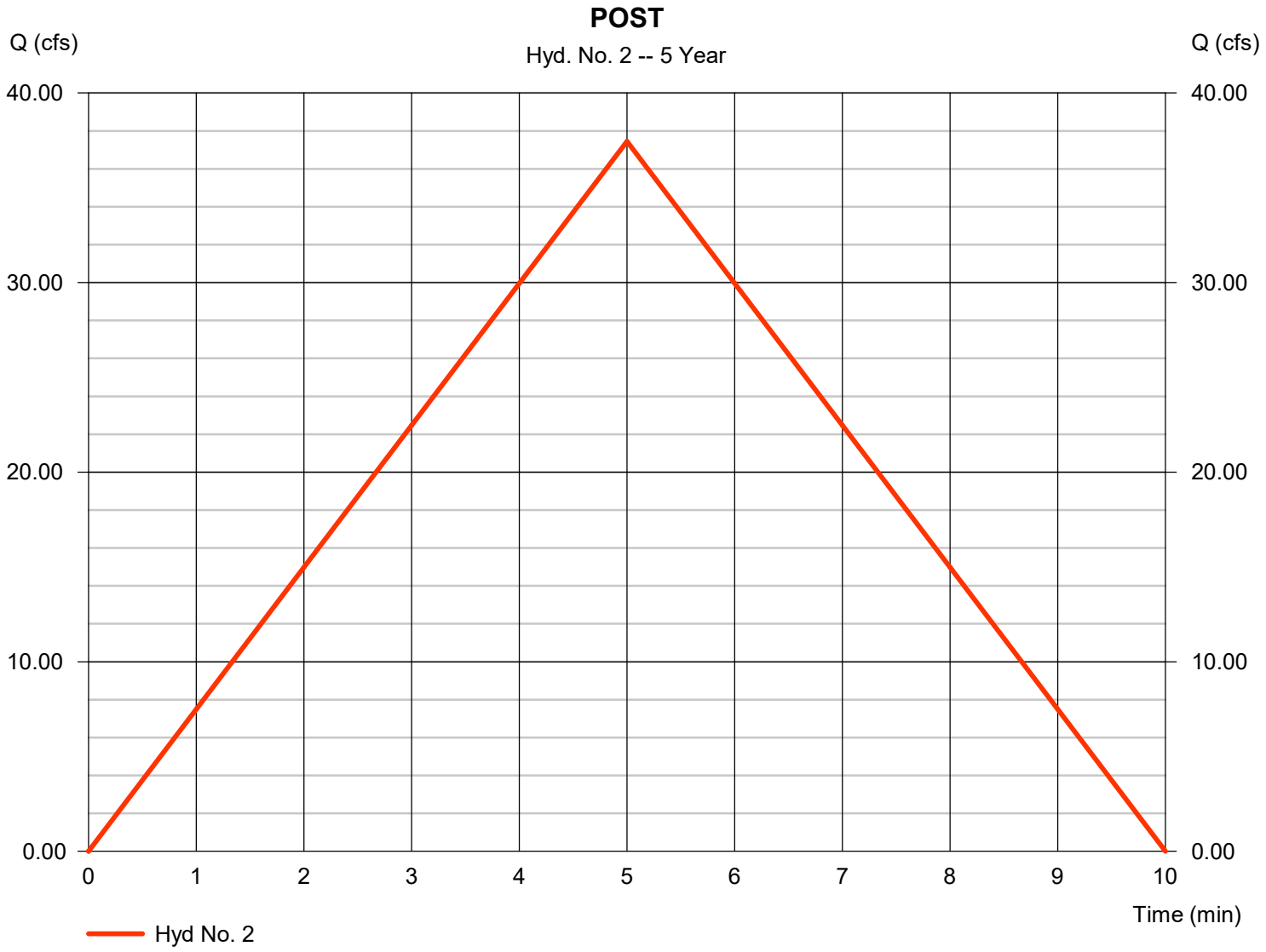
Hydrograph Report

Hyd. No. 2

POST

Hydrograph type	=	Rational	Peak discharge	=	37.45 cfs
Storm frequency	=	5 yrs	Time to peak	=	5 min
Time interval	=	1 min	Hyd. volume	=	11,235 cuft
Drainage area	=	6.000 ac	Runoff coeff.	=	0.95*
Intensity	=	6.570 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Littlerock.IDF	Asc/Rec limb fact	=	1/1

* Composite (Area/C) = [(0.300 x 0.40) + (1.460 x 0.95)] / 6.000



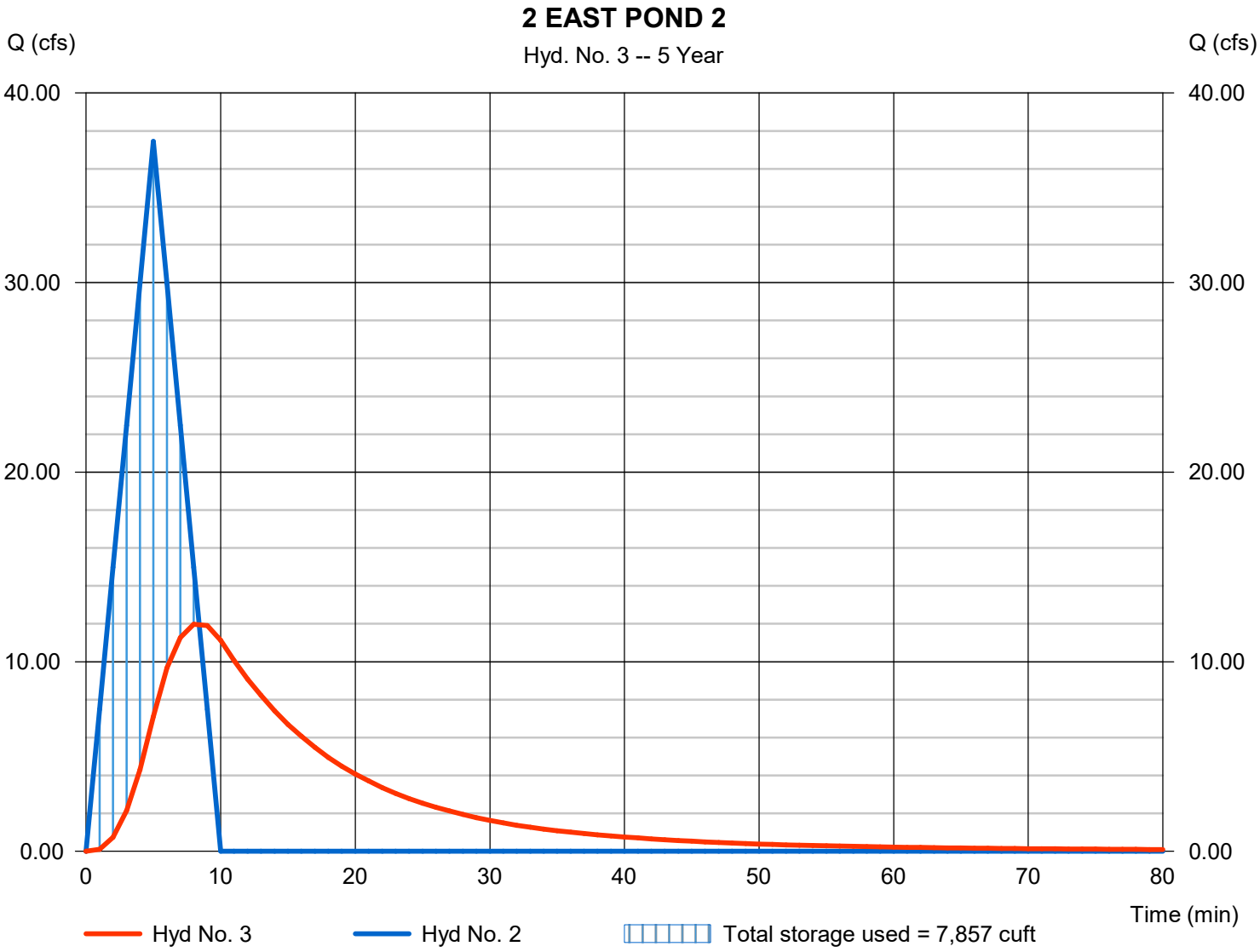
Hydrograph Report

Hyd. No. 3

2 EAST POND 2

Hydrograph type	=	Reservoir	Peak discharge	=	11.98 cfs
Storm frequency	=	5 yrs	Time to peak	=	8 min
Time interval	=	1 min	Hyd. volume	=	11,231 cuft
Inflow hyd. No.	=	2 - POST	Max. Elevation	=	398.60 ft
Reservoir name	=	EAST POND 2	Max. Storage	=	7,857 cuft

Storage Indication method used.



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	18.12	1	10	10,875	------	------	------	PRE
2	Rational	41.26	1	5	12,377	------	------	------	POST
3	Reservoir	13.29	1	8	12,373	2	398.78	8,623	2 EAST POND 2

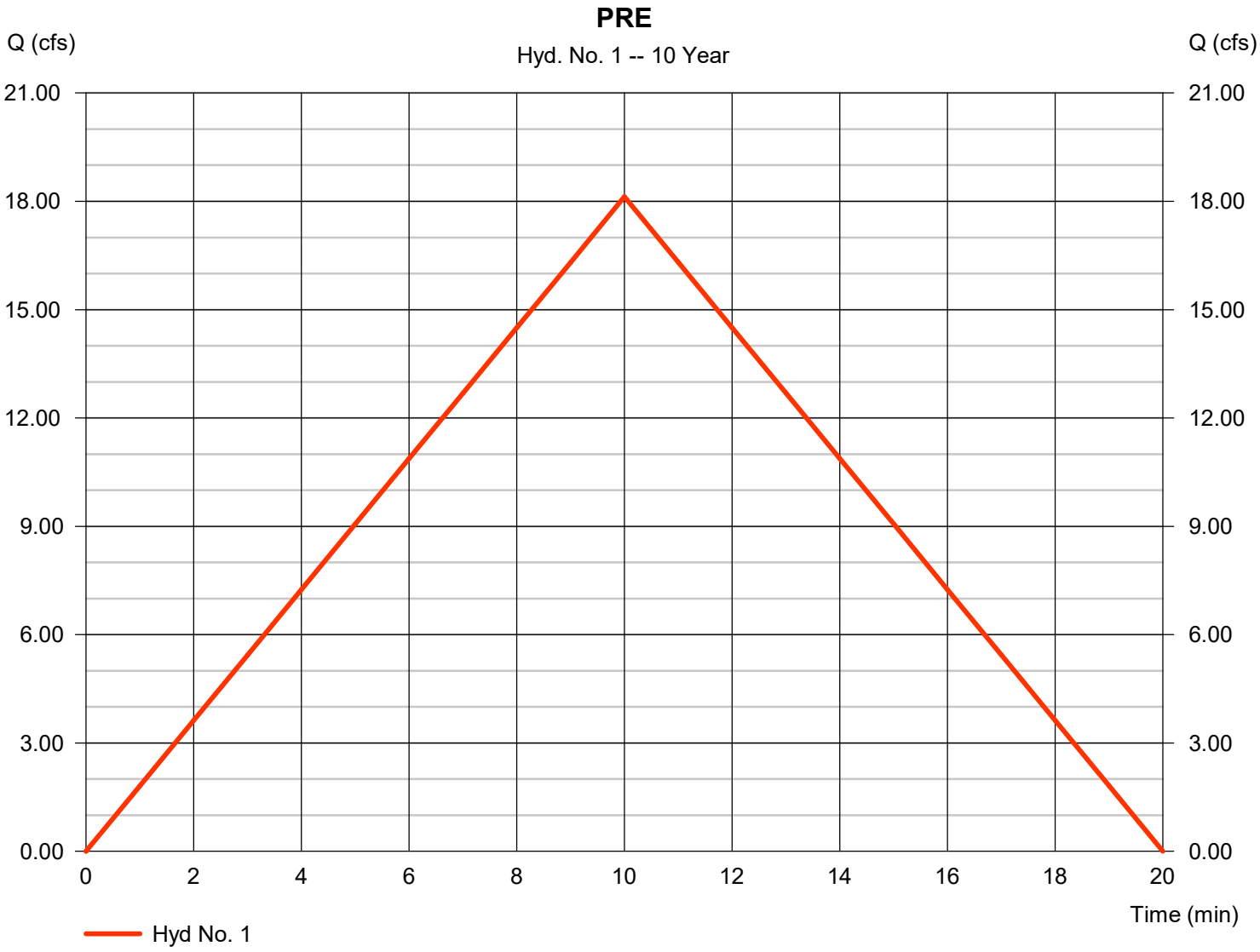
Hydrograph Report

Hyd. No. 1

PRE

Hydrograph type	=	Rational	Peak discharge	=	18.12 cfs
Storm frequency	=	10 yrs	Time to peak	=	10 min
Time interval	=	1 min	Hyd. volume	=	10,875 cuft
Drainage area	=	6.000 ac	Runoff coeff.	=	0.5*
Intensity	=	6.042 in/hr	Tc by User	=	10.00 min
IDF Curve	=	Littlerock.IDF	Asc/Rec limb fact	=	1/1

* Composite (Area/C) = [(1.600 x 0.40) + (0.160 x 0.95)] / 6.000



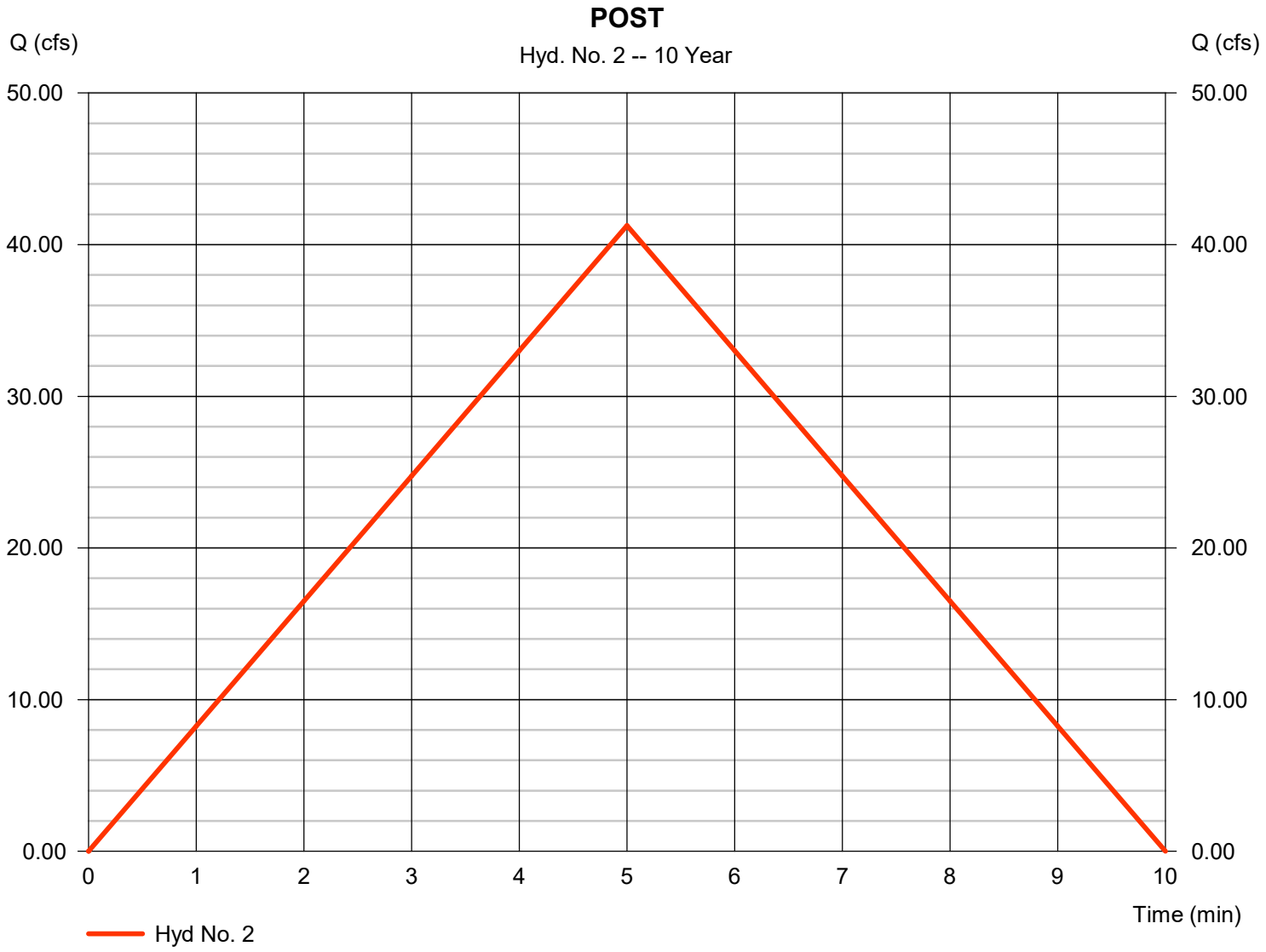
Hydrograph Report

Hyd. No. 2

POST

Hydrograph type	=	Rational	Peak discharge	=	41.26 cfs
Storm frequency	=	10 yrs	Time to peak	=	5 min
Time interval	=	1 min	Hyd. volume	=	12,377 cuft
Drainage area	=	6.000 ac	Runoff coeff.	=	0.95*
Intensity	=	7.238 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Littlerock.IDF	Asc/Rec limb fact	=	1/1

* Composite (Area/C) = [(0.300 x 0.40) + (1.460 x 0.95)] / 6.000



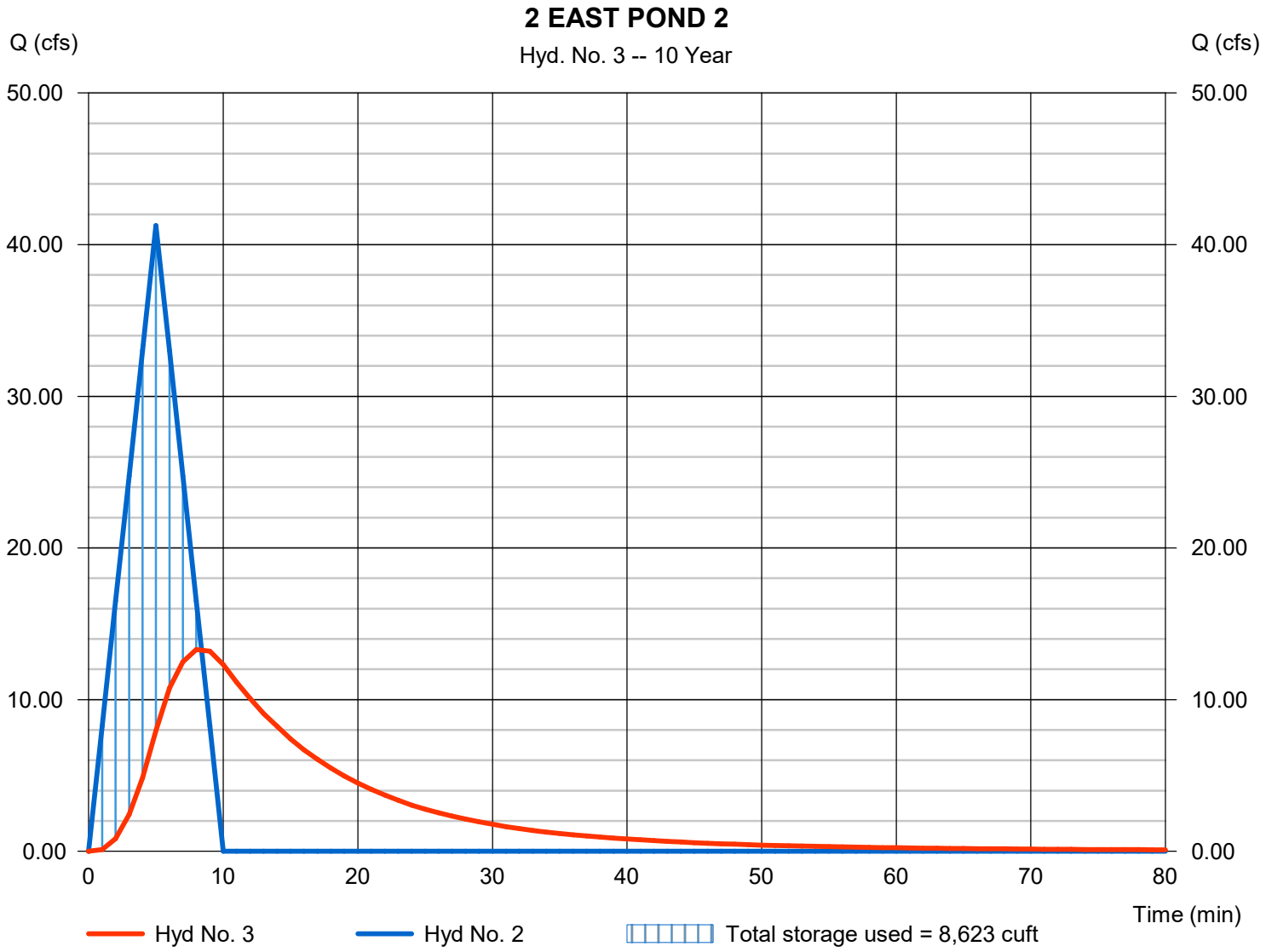
Hydrograph Report

Hyd. No. 3

2 EAST POND 2

Hydrograph type	=	Reservoir	Peak discharge	=	13.29 cfs
Storm frequency	=	10 yrs	Time to peak	=	8 min
Time interval	=	1 min	Hyd. volume	=	12,373 cuft
Inflow hyd. No.	=	2 - POST	Max. Elevation	=	398.78 ft
Reservoir name	=	EAST POND 2	Max. Storage	=	8,623 cuft

Storage Indication method used.



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	20.84	1	10	12,502	------	------	------	PRE
2	Rational	47.01	1	5	14,103	------	------	------	POST
3	Reservoir	15.43	1	8	14,099	2	399.04	9,779	2 EAST POND 2

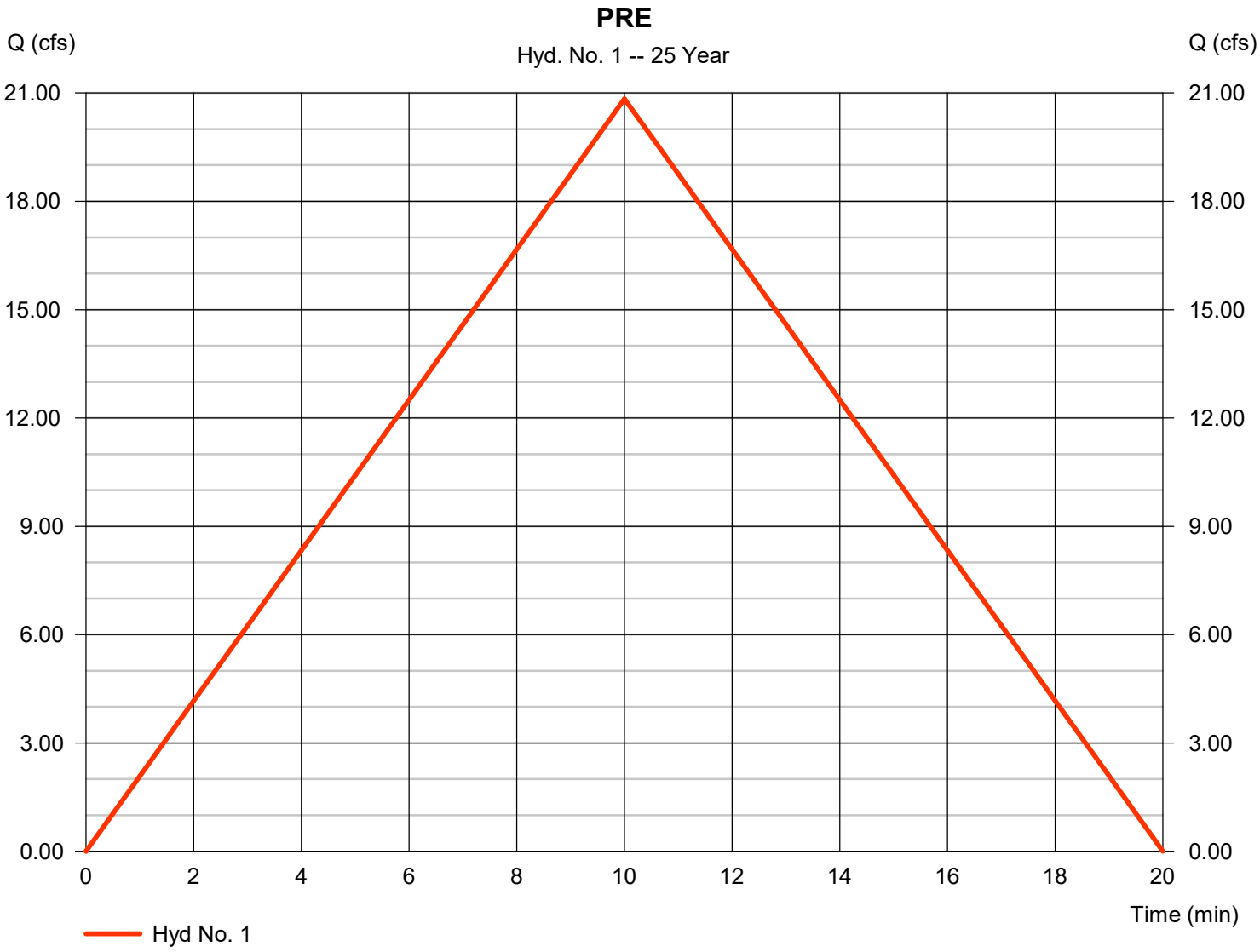
Hydrograph Report

Hyd. No. 1

PRE

Hydrograph type	=	Rational	Peak discharge	=	20.84 cfs
Storm frequency	=	25 yrs	Time to peak	=	10 min
Time interval	=	1 min	Hyd. volume	=	12,502 cuft
Drainage area	=	6.000 ac	Runoff coeff.	=	0.5*
Intensity	=	6.945 in/hr	Tc by User	=	10.00 min
IDF Curve	=	Littlerock.IDF	Asc/Rec limb fact	=	1/1

* Composite (Area/C) = [(1.600 x 0.40) + (0.160 x 0.95)] / 6.000



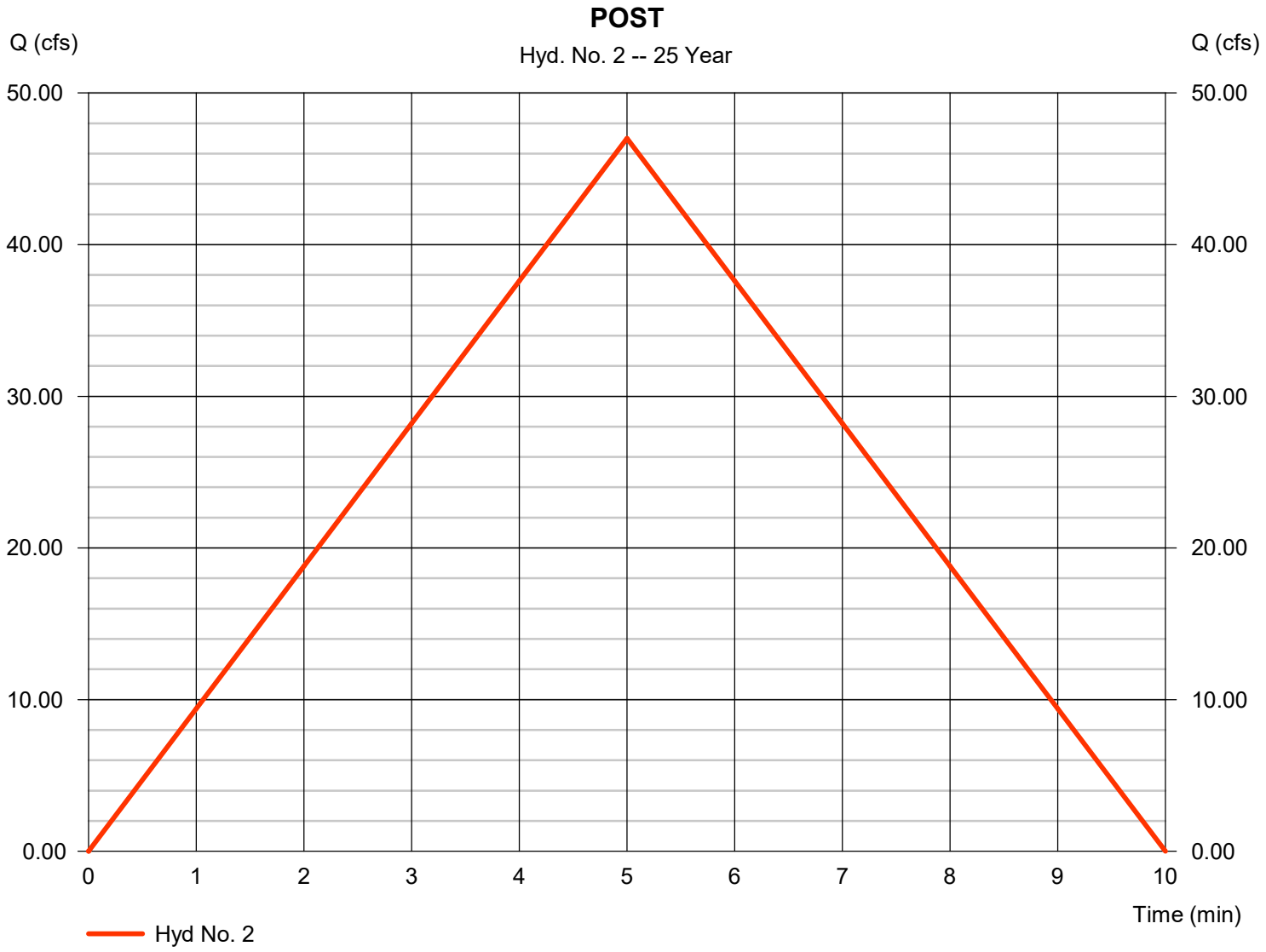
Hydrograph Report

Hyd. No. 2

POST

Hydrograph type	=	Rational	Peak discharge	=	47.01 cfs
Storm frequency	=	25 yrs	Time to peak	=	5 min
Time interval	=	1 min	Hyd. volume	=	14,103 cuft
Drainage area	=	6.000 ac	Runoff coeff.	=	0.95*
Intensity	=	8.247 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Littlerock.IDF	Asc/Rec limb fact	=	1/1

* Composite (Area/C) = [(0.300 x 0.40) + (1.460 x 0.95)] / 6.000



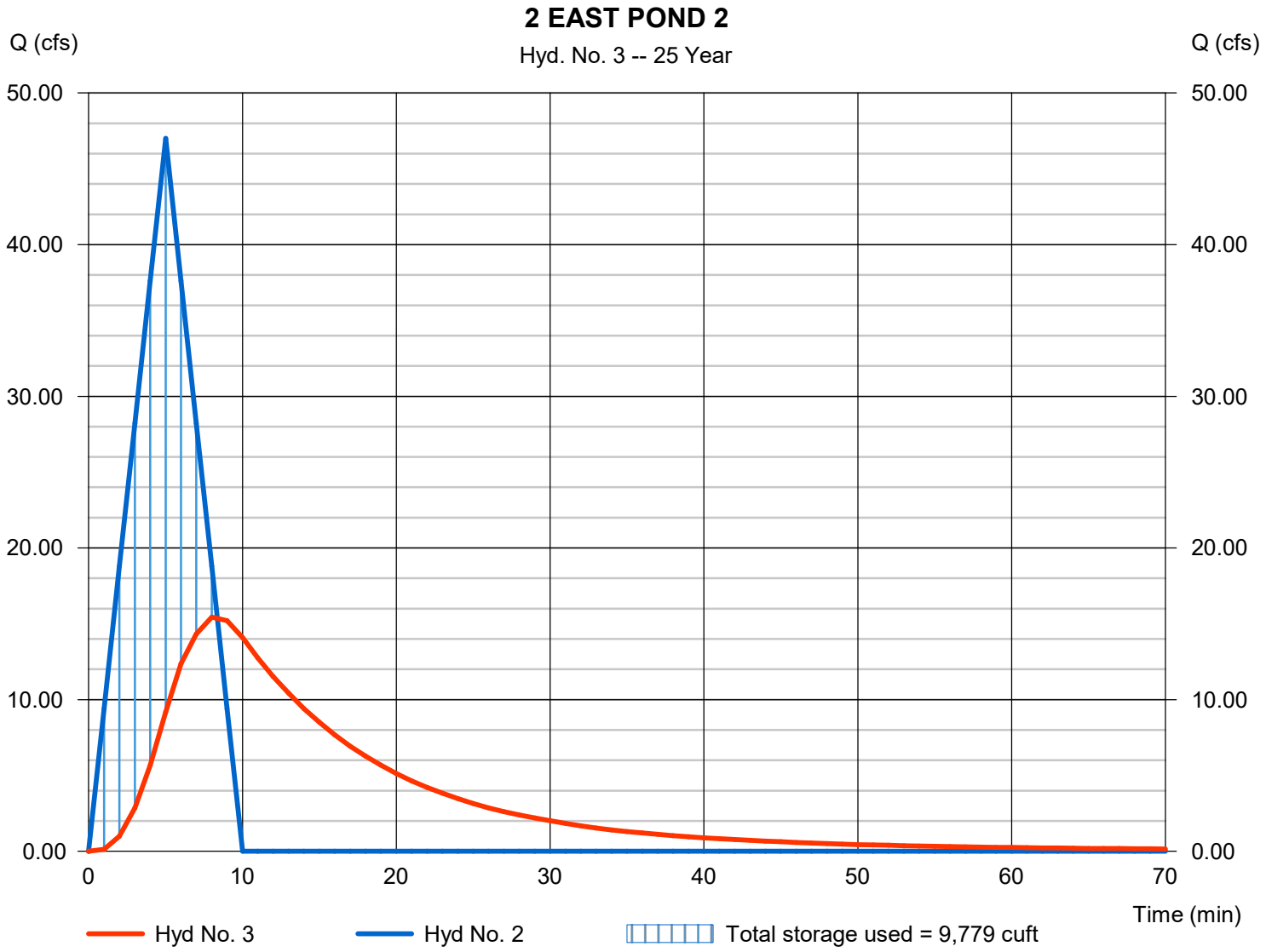
Hydrograph Report

Hyd. No. 3

2 EAST POND 2

Hydrograph type	=	Reservoir	Peak discharge	=	15.43 cfs
Storm frequency	=	25 yrs	Time to peak	=	8 min
Time interval	=	1 min	Hyd. volume	=	14,099 cuft
Inflow hyd. No.	=	2 - POST	Max. Elevation	=	399.04 ft
Reservoir name	=	EAST POND 2	Max. Storage	=	9,779 cuft

Storage Indication method used.



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	22.96	1	10	13,777	------	------	------	PRE
2	Rational	51.53	1	5	15,460	------	------	------	POST
3	Reservoir	19.16	1	8	15,456	2	399.22	10,566	2 EAST POND 2

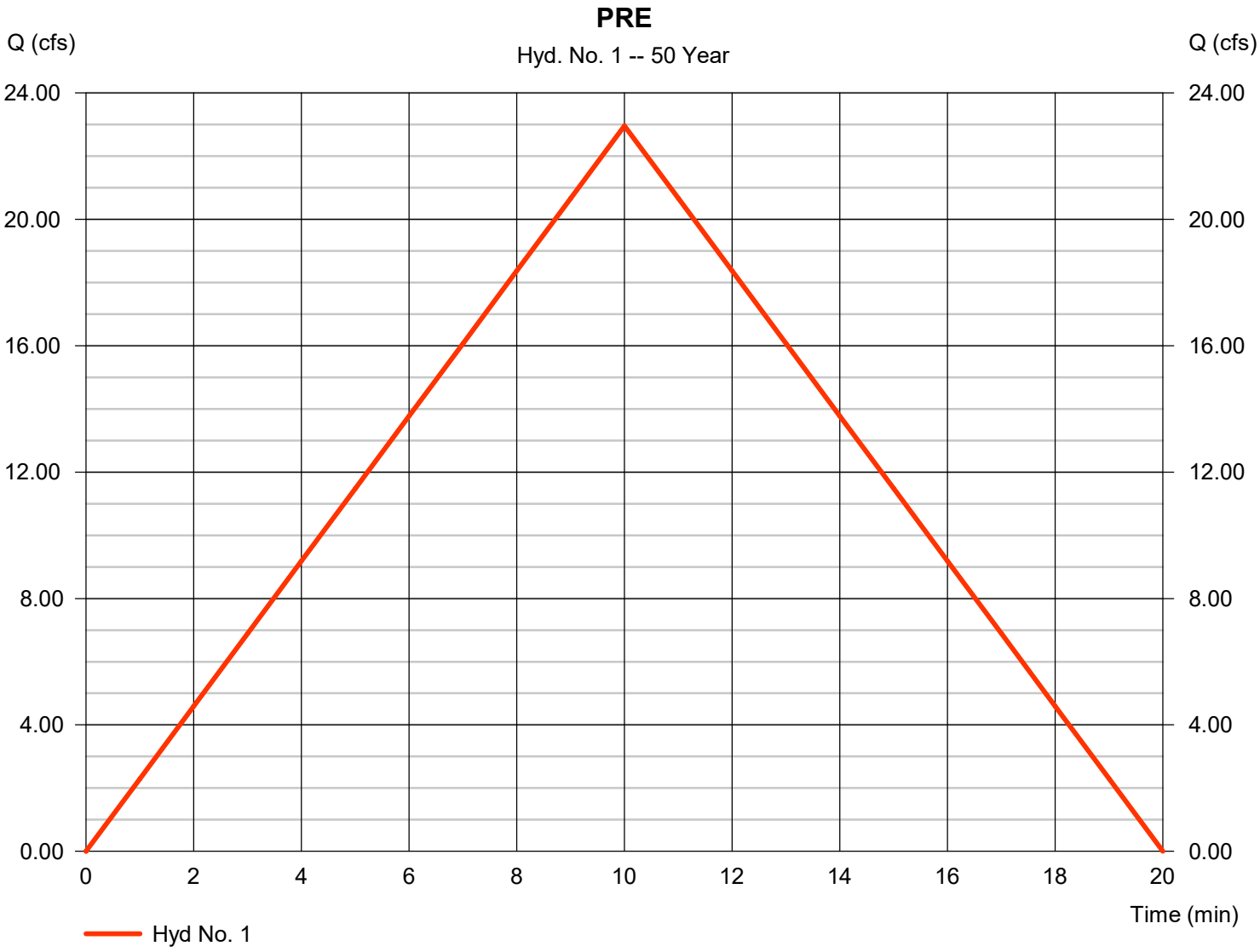
Hydrograph Report

Hyd. No. 1

PRE

Hydrograph type	=	Rational	Peak discharge	=	22.96 cfs
Storm frequency	=	50 yrs	Time to peak	=	10 min
Time interval	=	1 min	Hyd. volume	=	13,777 cuft
Drainage area	=	6.000 ac	Runoff coeff.	=	0.5*
Intensity	=	7.654 in/hr	Tc by User	=	10.00 min
IDF Curve	=	Littlerock.IDF	Asc/Rec limb fact	=	1/1

* Composite (Area/C) = [(1.600 x 0.40) + (0.160 x 0.95)] / 6.000



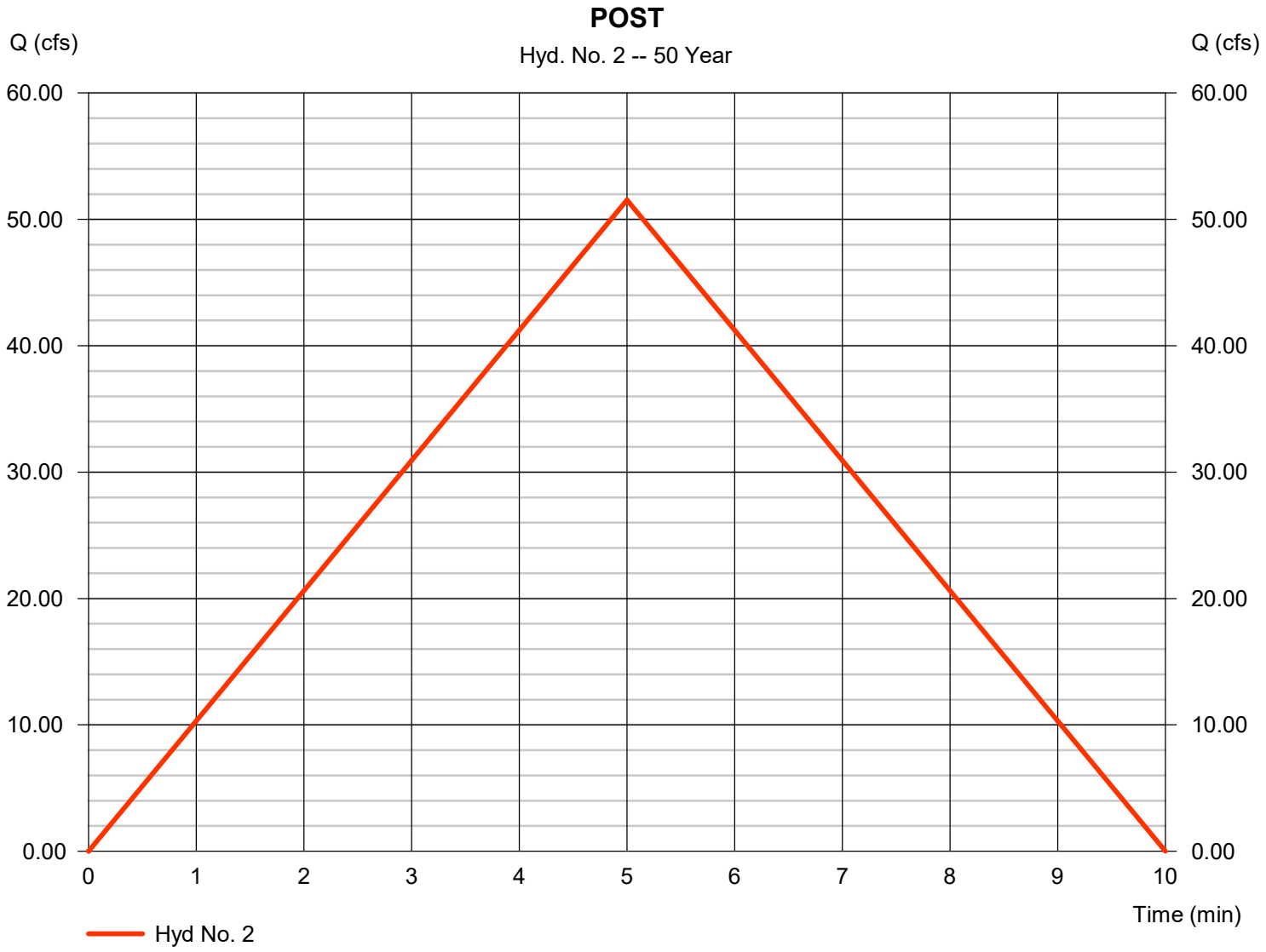
Hydrograph Report

Hyd. No. 2

POST

Hydrograph type	=	Rational	Peak discharge	=	51.53 cfs
Storm frequency	=	50 yrs	Time to peak	=	5 min
Time interval	=	1 min	Hyd. volume	=	15,460 cuft
Drainage area	=	6.000 ac	Runoff coeff.	=	0.95*
Intensity	=	9.041 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Littlerock.IDF	Asc/Rec limb fact	=	1/1

* Composite (Area/C) = [(0.300 x 0.40) + (1.460 x 0.95)] / 6.000



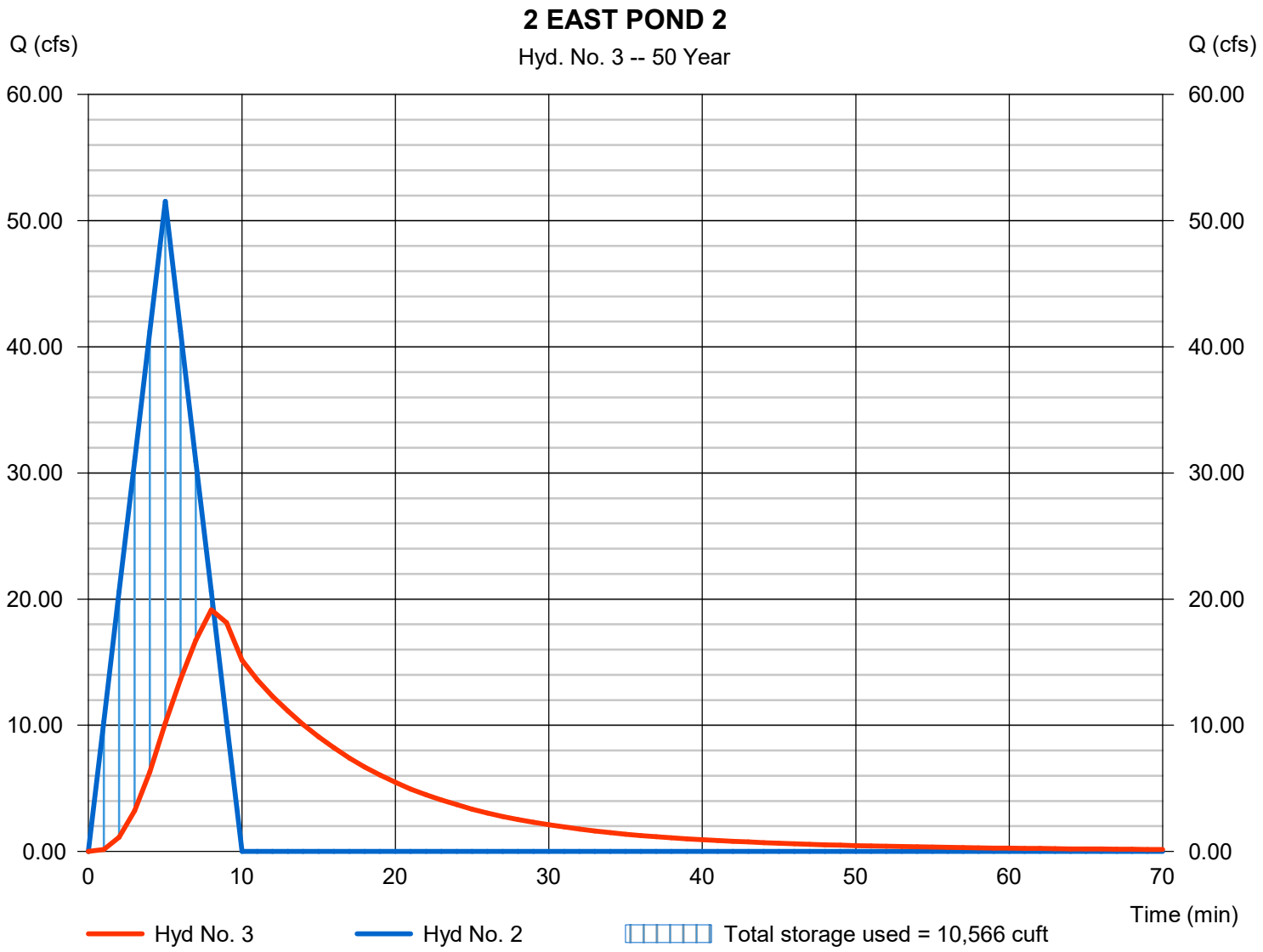
Hydrograph Report

Hyd. No. 3

2 EAST POND 2

Hydrograph type	=	Reservoir	Peak discharge	=	19.16 cfs
Storm frequency	=	50 yrs	Time to peak	=	8 min
Time interval	=	1 min	Hyd. volume	=	15,456 cuft
Inflow hyd. No.	=	2 - POST	Max. Elevation	=	399.22 ft
Reservoir name	=	EAST POND 2	Max. Storage	=	10,566 cuft

Storage Indication method used.



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	25.08	1	10	15,047	------	------	------	PRE
2	Rational	56.05	1	5	16,814	------	------	------	POST
3	Reservoir	23.12	1	8	16,810	2	399.36	11,240	2 EAST POND 2

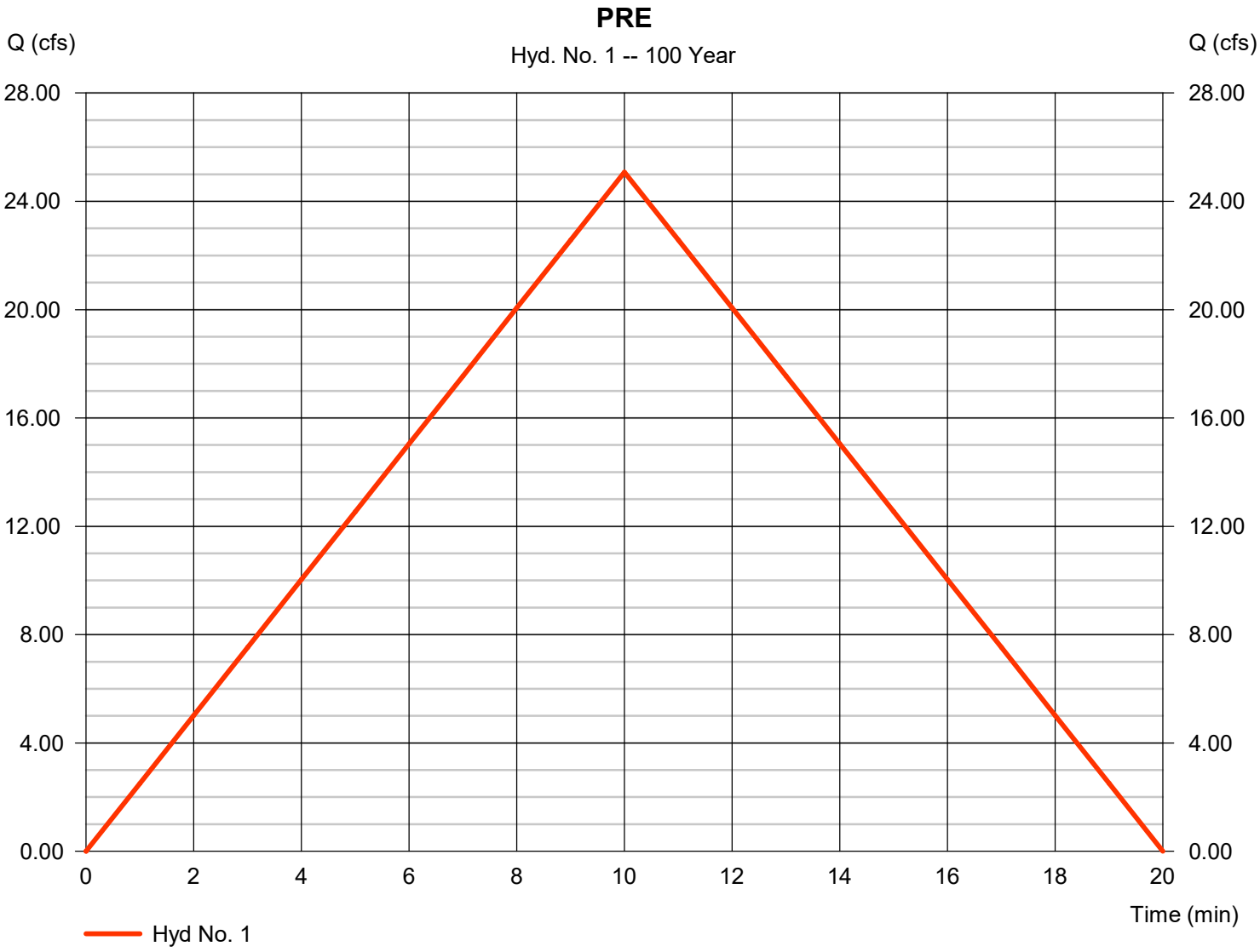
Hydrograph Report

Hyd. No. 1

PRE

Hydrograph type	=	Rational	Peak discharge	=	25.08 cfs
Storm frequency	=	100 yrs	Time to peak	=	10 min
Time interval	=	1 min	Hyd. volume	=	15,047 cuft
Drainage area	=	6.000 ac	Runoff coeff.	=	0.5*
Intensity	=	8.360 in/hr	Tc by User	=	10.00 min
IDF Curve	=	Littlerock.IDF	Asc/Rec limb fact	=	1/1

* Composite (Area/C) = [(1.600 x 0.40) + (0.160 x 0.95)] / 6.000



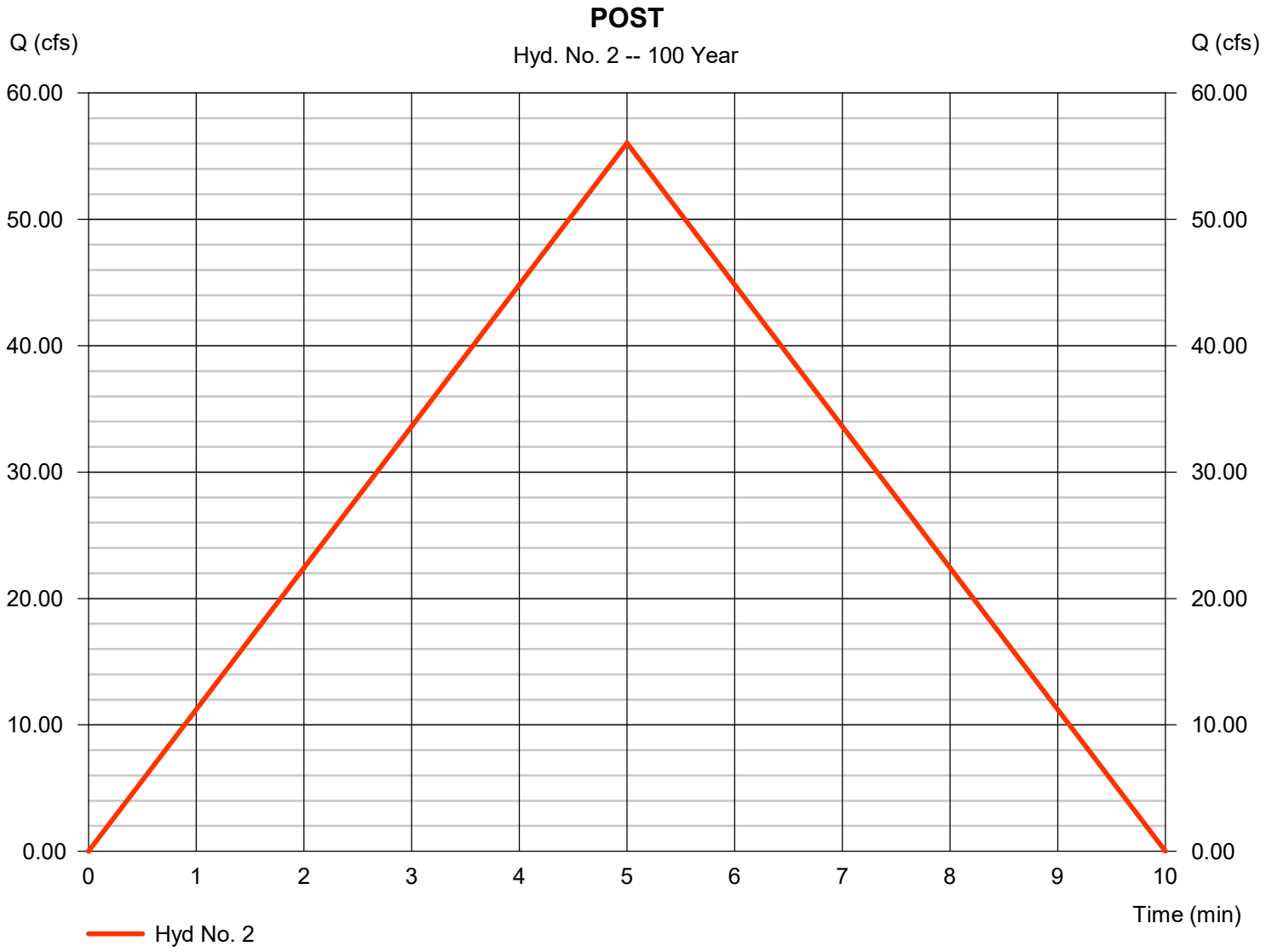
Hydrograph Report

Hyd. No. 2

POST

Hydrograph type	=	Rational	Peak discharge	=	56.05 cfs
Storm frequency	=	100 yrs	Time to peak	=	5 min
Time interval	=	1 min	Hyd. volume	=	16,814 cuft
Drainage area	=	6.000 ac	Runoff coeff.	=	0.95*
Intensity	=	9.833 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Littlerock.IDF	Asc/Rec limb fact	=	1/1

* Composite (Area/C) = [(0.300 x 0.40) + (1.460 x 0.95)] / 6.000



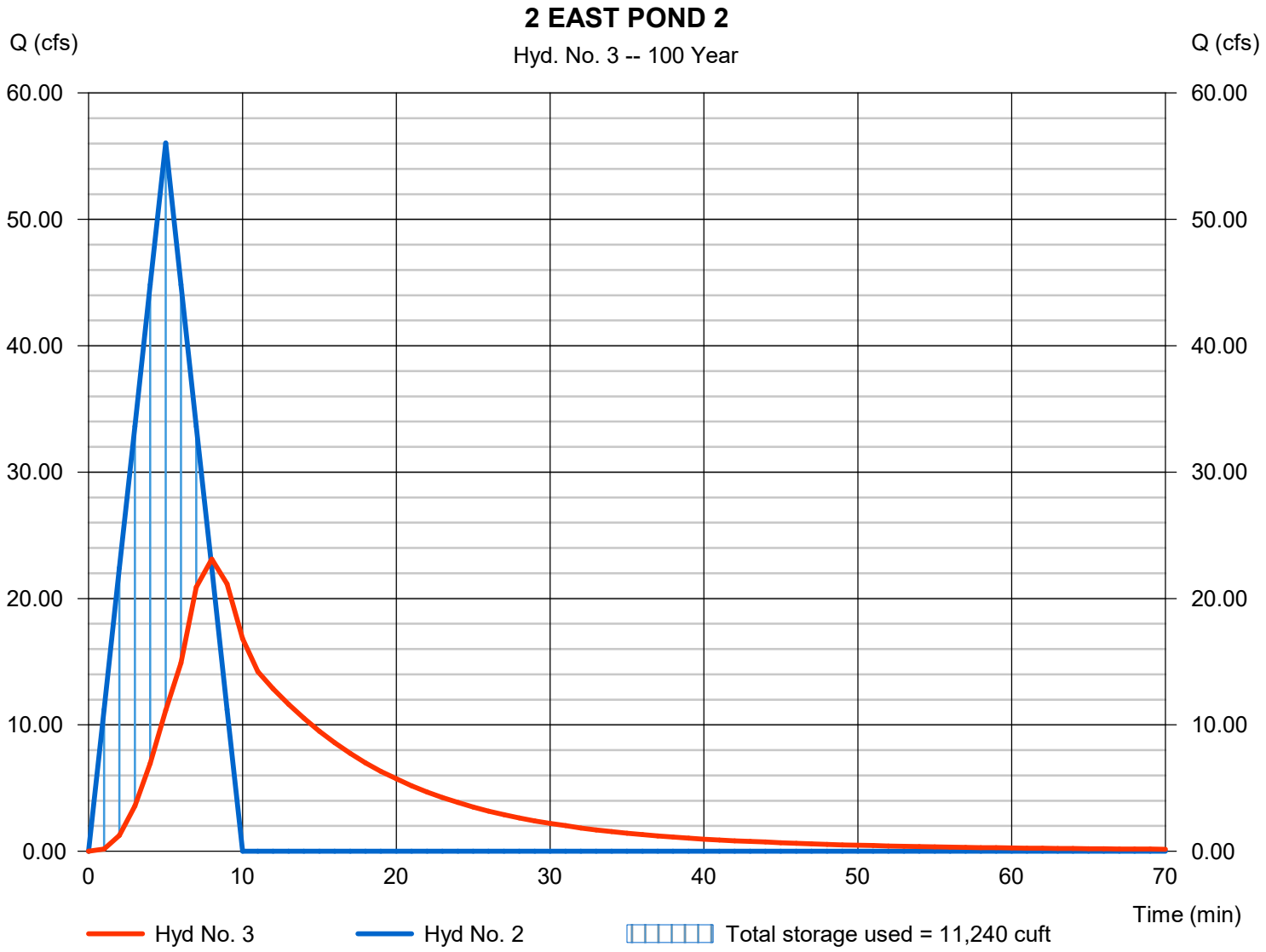
Hydrograph Report

Hyd. No. 3

2 EAST POND 2

Hydrograph type	=	Reservoir	Peak discharge	=	23.12 cfs
Storm frequency	=	100 yrs	Time to peak	=	8 min
Time interval	=	1 min	Hyd. volume	=	16,810 cuft
Inflow hyd. No.	=	2 - POST	Max. Elevation	=	399.36 ft
Reservoir name	=	EAST POND 2	Max. Storage	=	11,240 cuft

Storage Indication method used.



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