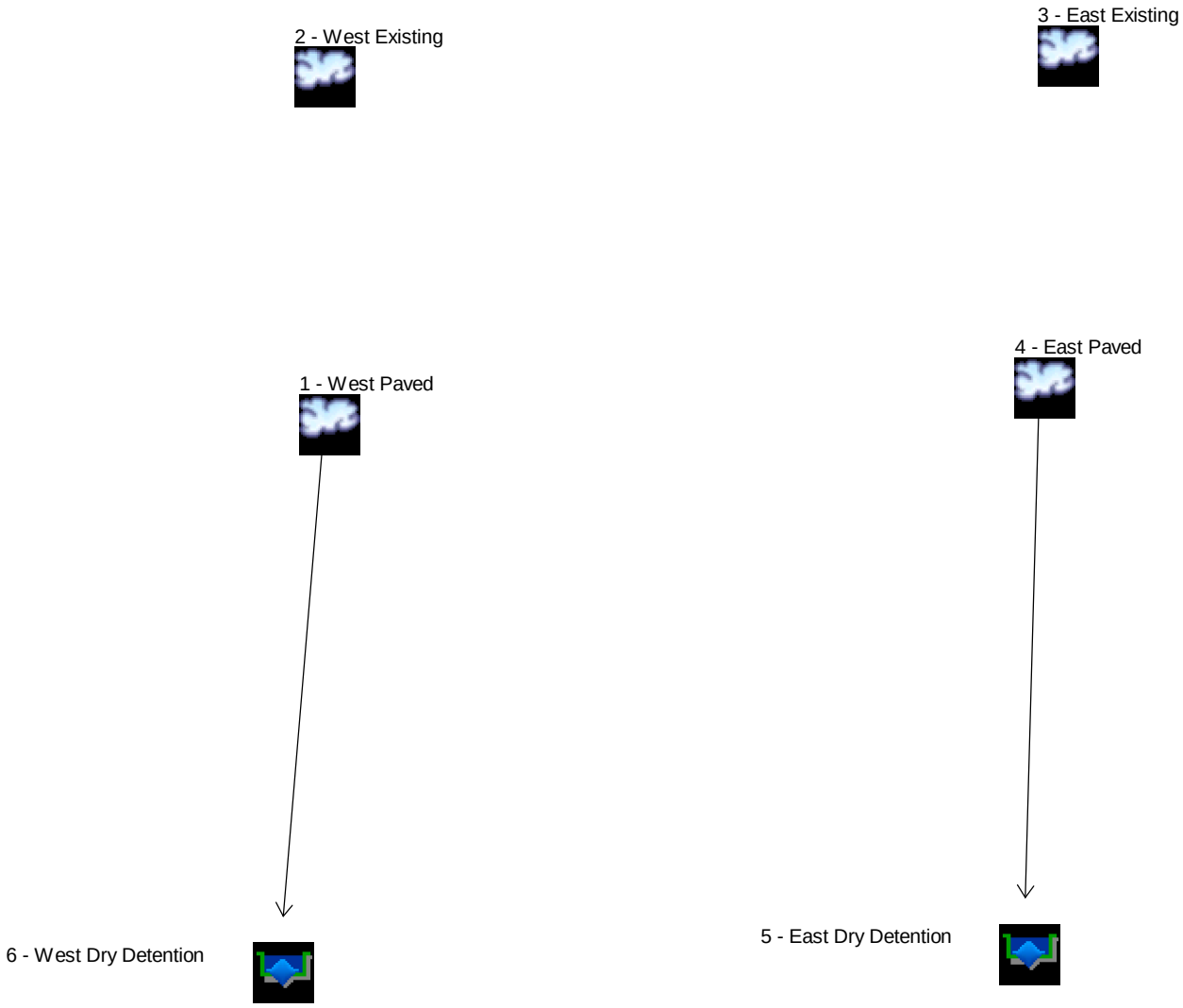
Watershed Model Schematic



Legend

Hyd.	Origin	Description
1	SCS Runoff	West Paved
2	SCS Runoff	West Existing
3	SCS Runoff	East Existing
4	SCS Runoff	East Paved
5	Reservoir	East Dry Detention
6	Reservoir	West Dry Detention

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	SCS Runoff	------	-------	3.676	-------	5.862	7.728	10.69	12.68	14.90	West Paved
2	SCS Runoff	------	-------	0.907	-------	2.413	3.949	6.626	8.517	10.67	West Existing
3	SCS Runoff	------	-------	1.920	-------	5.110	8.362	14.03	18.04	22.59	East Existing
4	SCS Runoff	------	-------	8.143	-------	12.39	16.03	21.84	25.78	30.16	East Paved
5	Reservoir	4	-------	2.007	-------	5.314	8.083	11.53	13.72	16.15	East Dry Detention
6	Reservoir	1	-------	0.259	-------	0.445	1.098	2.262	2.777	3.262	West Dry Detention

Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066

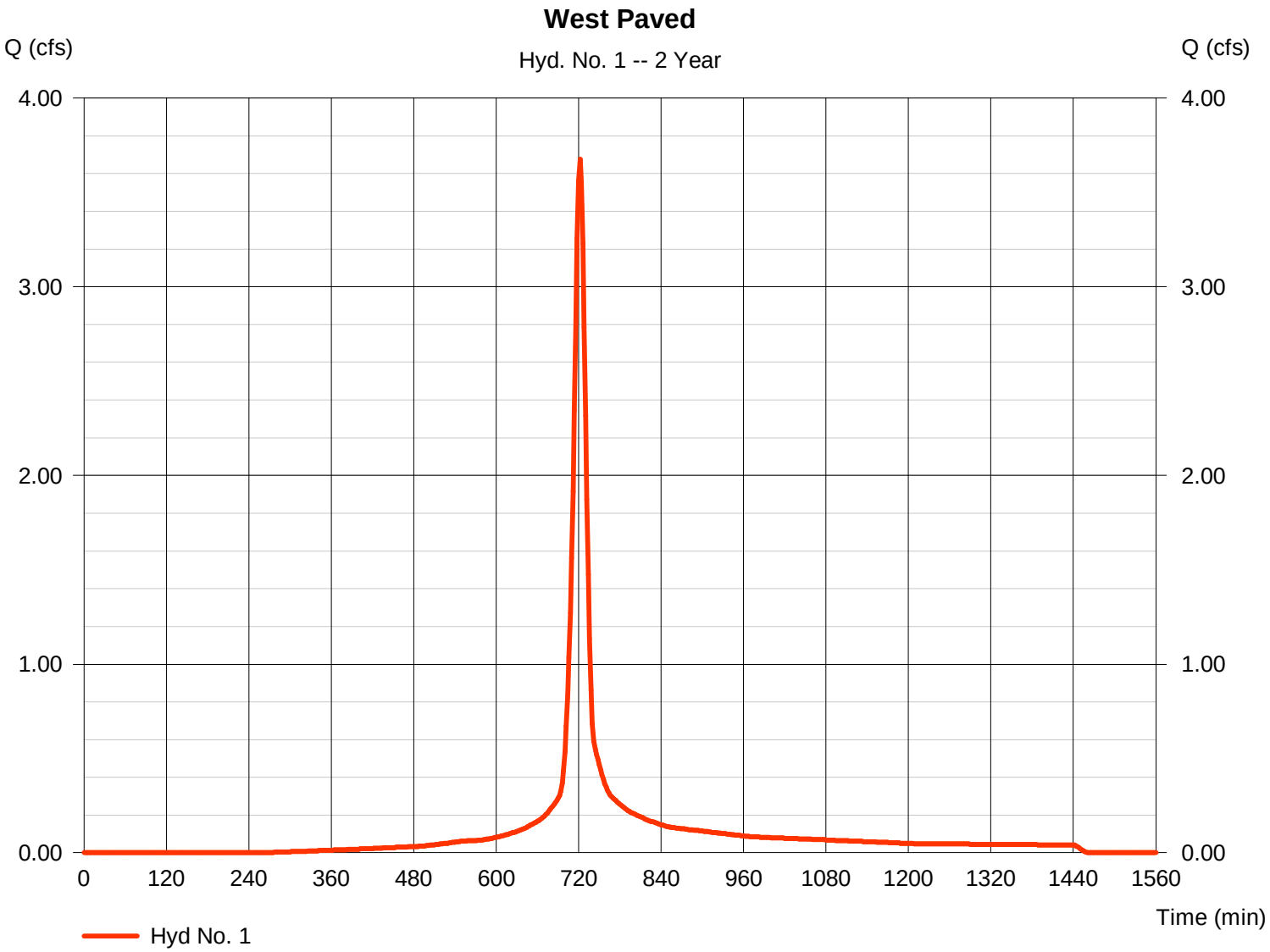
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph description
1	SCS Runoff	3.676	2	722	10,665	------	------	------	West Paved
2	SCS Runoff	0.907	2	724	2,907	------	------	------	West Existing
3	SCS Runoff	1.920	2	724	6,155	------	------	------	East Existing
4	SCS Runoff	8.143	2	722	25,135	------	------	------	East Paved
5	Reservoir	2.007	2	738	24,757	4	1320.75	14,091	East Dry Detention
6	Reservoir	0.259	2	780	10,598	1	1320.54	6,418	West Dry Detention

Hydrograph Report

Hyd. No. 1

West Paved

Hydrograph type	=	SCS Runoff	Peak discharge	=	3.676 cfs
Storm frequency	=	2 yrs	Time to peak	=	722 min
Time interval	=	2 min	Hyd. volume	=	10,665 cuft
Drainage area	=	1.800 ac	Curve number	=	95
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	USER	Time of conc. (Tc)	=	15.00 min
Total precip.	=	2.20 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

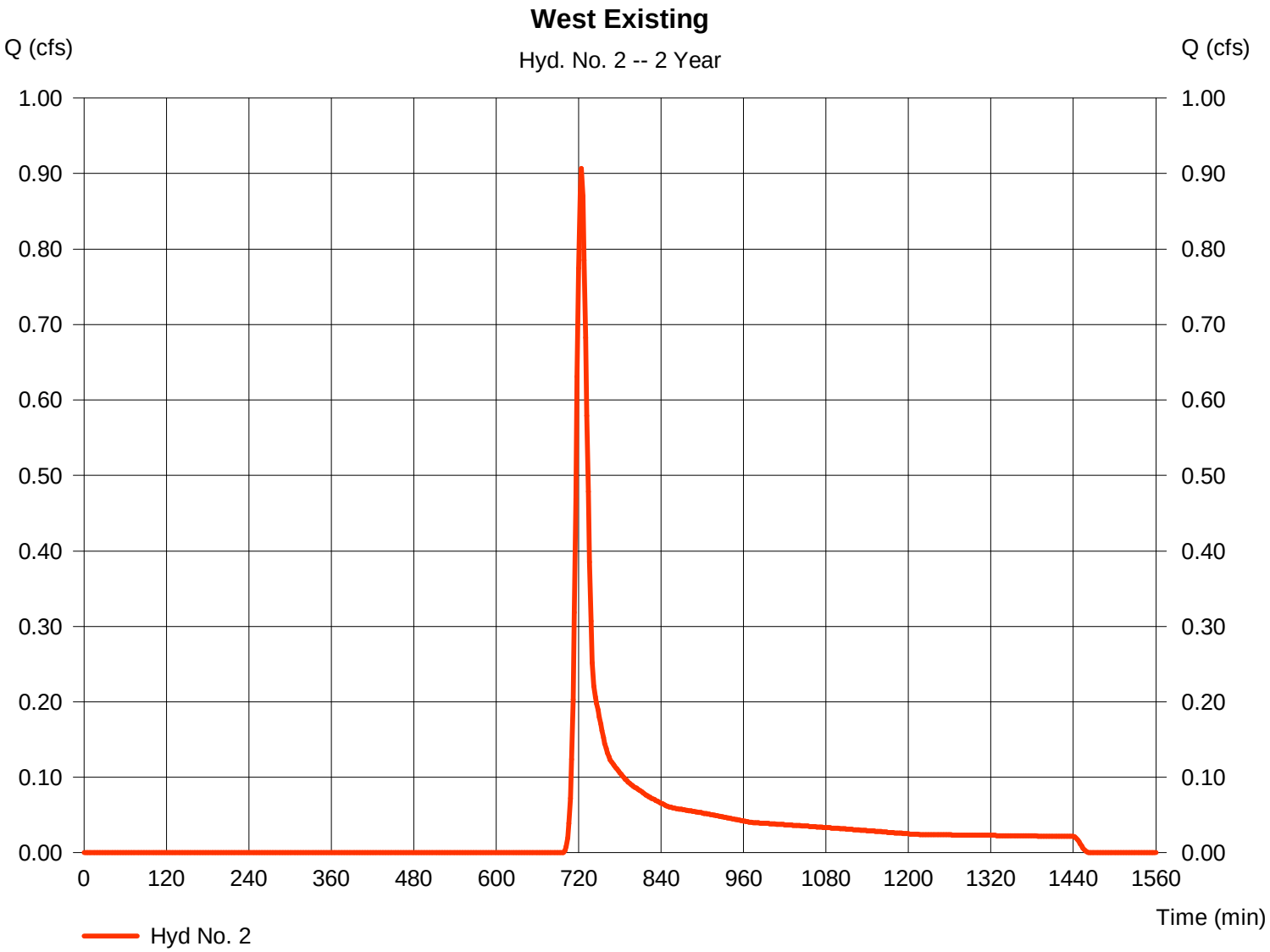


Hydrograph Report

Hyd. No. 2

West Existing

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.907 cfs
Storm frequency	=	2 yrs	Time to peak	=	724 min
Time interval	=	2 min	Hyd. volume	=	2,907 cuft
Drainage area	=	1.700 ac	Curve number	=	75
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	USER	Time of conc. (Tc)	=	15.00 min
Total precip.	=	2.20 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

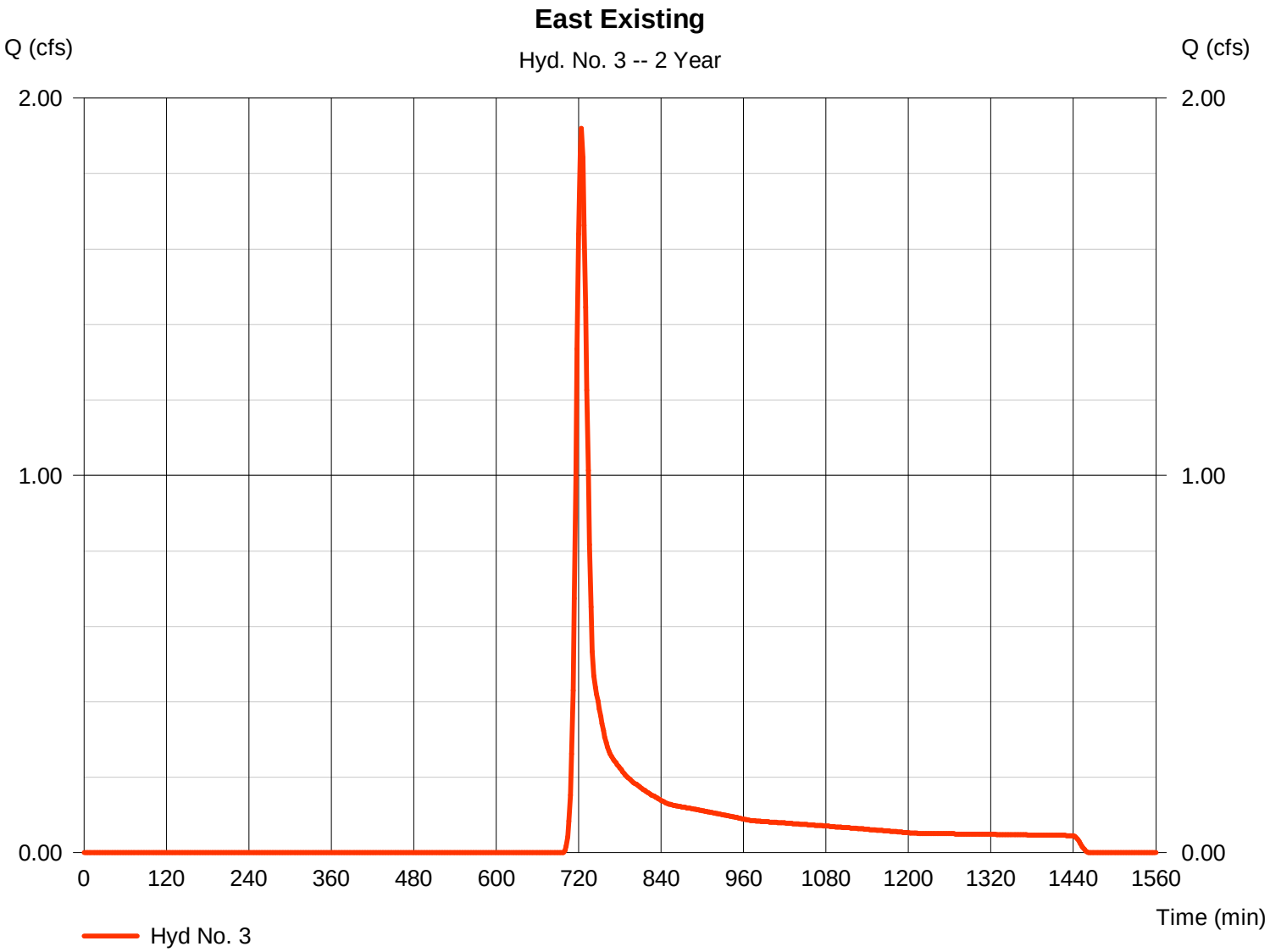


Hydrograph Report

Hyd. No. 3

East Existing

Hydrograph type	=	SCS Runoff	Peak discharge	=	1.920 cfs
Storm frequency	=	2 yrs	Time to peak	=	724 min
Time interval	=	2 min	Hyd. volume	=	6,155 cuft
Drainage area	=	3.600 ac	Curve number	=	75
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	USER	Time of conc. (Tc)	=	15.00 min
Total precip.	=	2.20 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

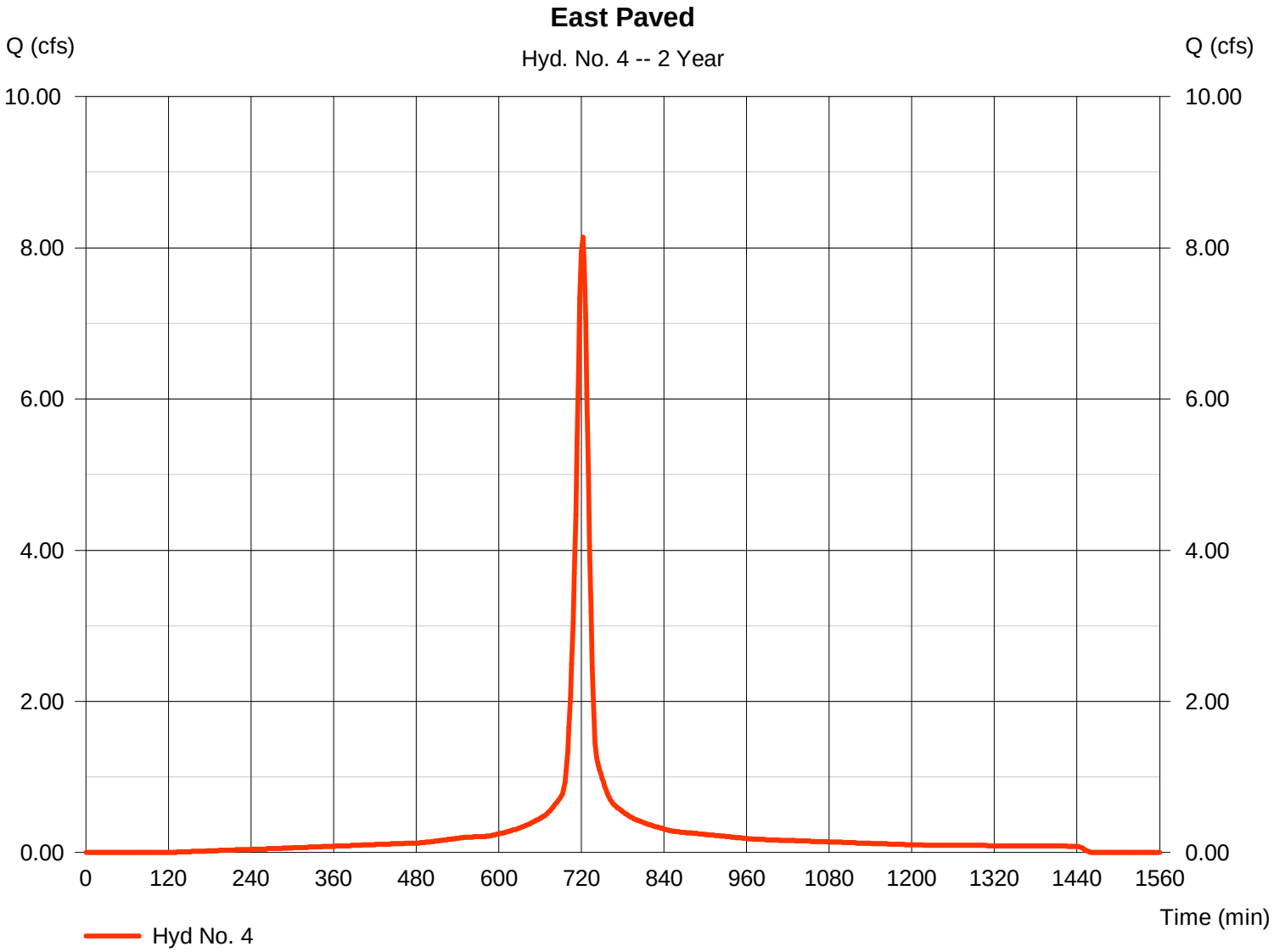


Hydrograph Report

Hyd. No. 4

East Paved

Hydrograph type	=	SCS Runoff	Peak discharge	=	8.143 cfs
Storm frequency	=	2 yrs	Time to peak	=	722 min
Time interval	=	2 min	Hyd. volume	=	25,135 cuft
Drainage area	=	3.600 ac	Curve number	=	98
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	USER	Time of conc. (Tc)	=	15.00 min
Total precip.	=	2.20 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



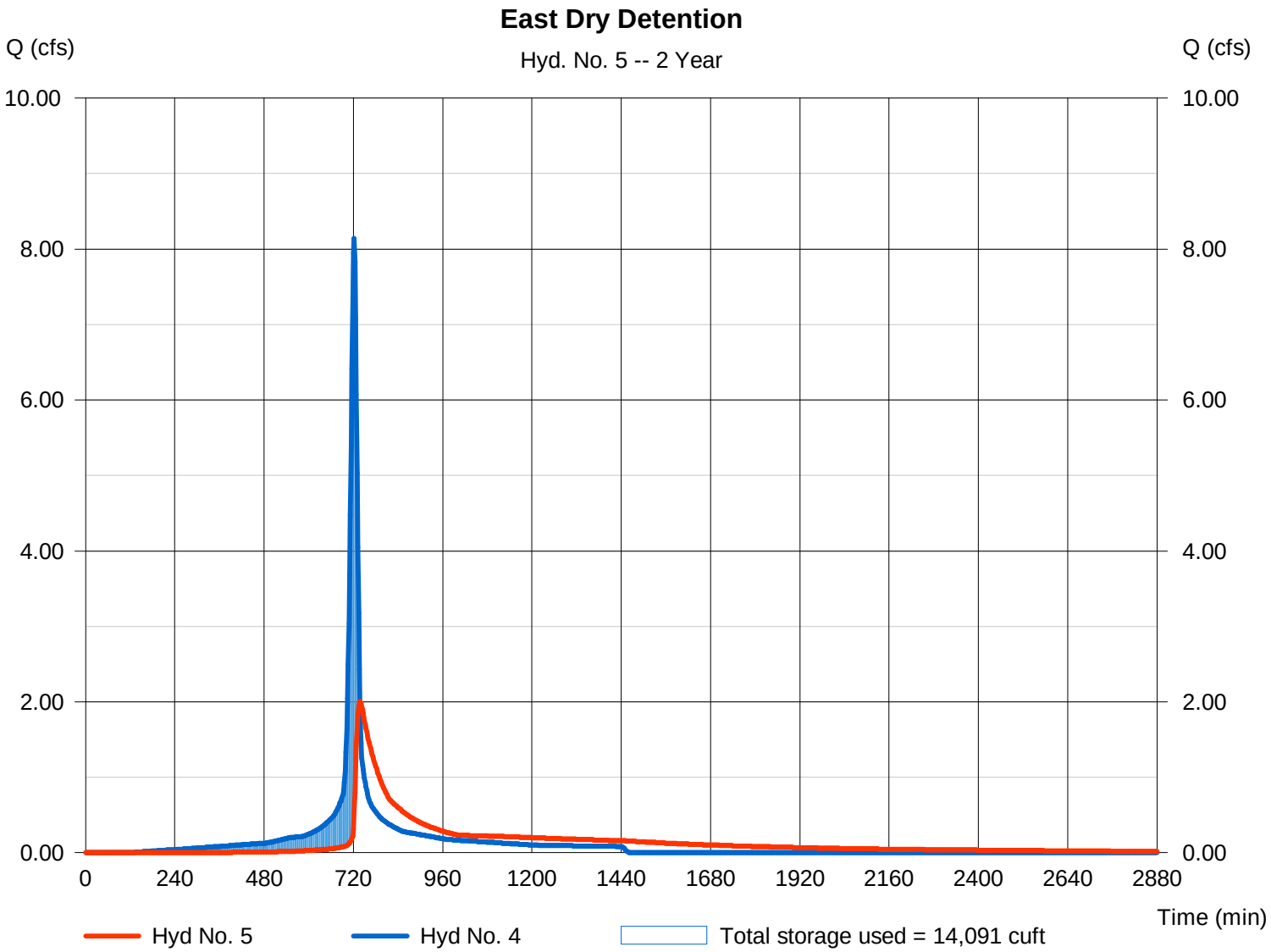
Hydrograph Report

Hyd. No. 5

East Dry Detention

Hydrograph type	=	Reservoir	Peak discharge	=	2.007 cfs
Storm frequency	=	2 yrs	Time to peak	=	738 min
Time interval	=	2 min	Hyd. volume	=	24,757 cuft
Inflow hyd. No.	=	4 - East Paved	Max. Elevation	=	1320.75 ft
Reservoir name	=	East Dry Detention	Max. Storage	=	14,091 cuft

Storage Indication method used.



Pond Report

Pond No. 1 - East Dry Detention

Pond Data

Contours - User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 1320.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	1320.00	11,000	0	0
1.00	1321.00	28,000	18,848	18,848
1.50	1321.50	35,000	15,716	34,564

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 12.00	0.00	0.00	0.00
Span (in)	= 12.00	0.00	0.00	0.00
No. Barrels	= 1	0	0	0
Invert El. (ft)	= 1320.00	0.00	0.00	0.00
Length (ft)	= 10.00	0.00	0.00	0.00
Slope (%)	= 0.10	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

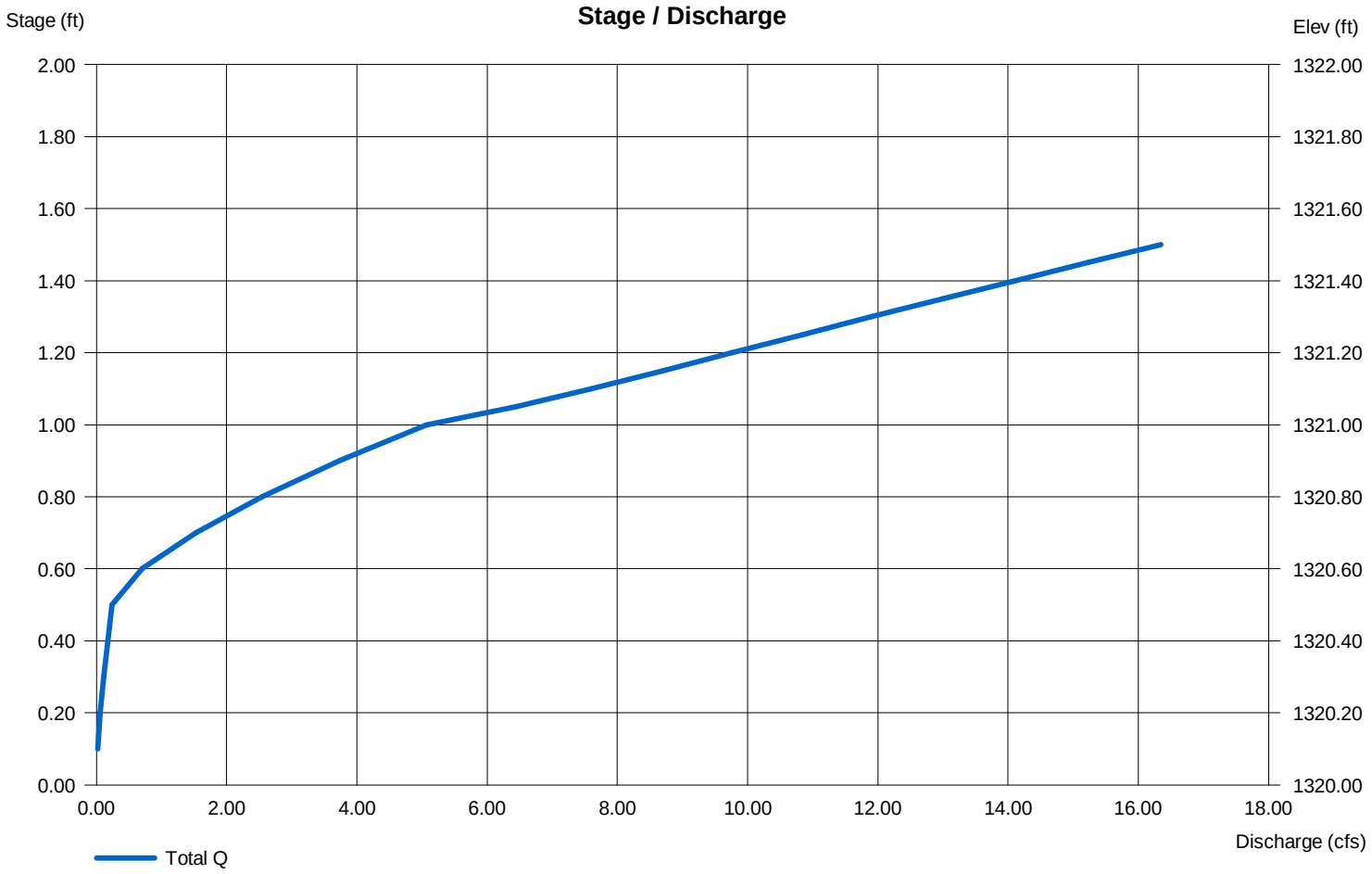
Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 5.00	0.00	0.00	0.00
Crest El. (ft)	= 1320.50	0.00	0.00	0.00
Weir Coeff.	= 2.60	3.33	3.33	3.33
Weir Type	= Broad	---	---	---
Multi-Stage	= No	No	No	No

Exfil.(in/hr) = 0.000 (by Contour)

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).



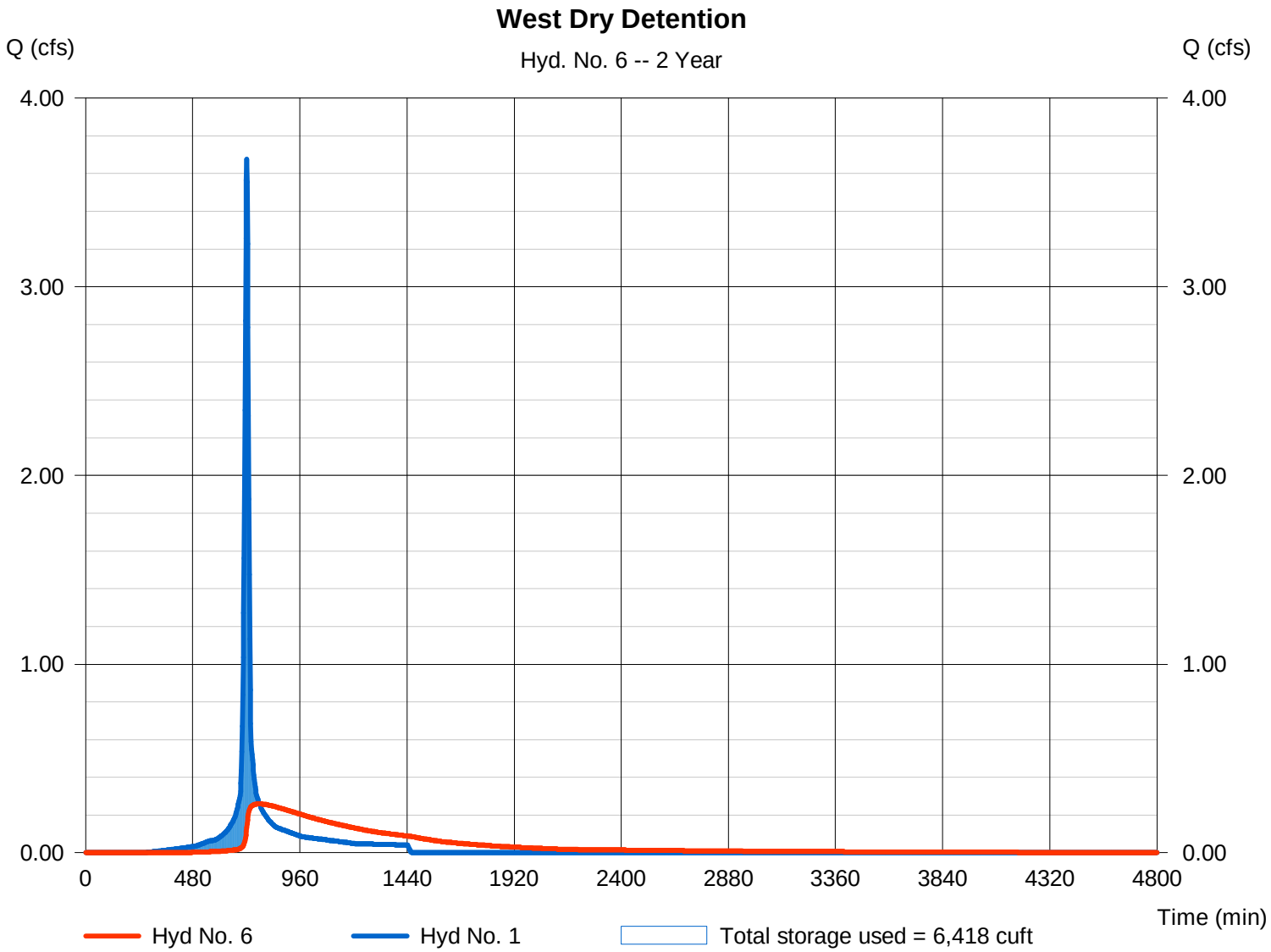
Hydrograph Report

Hyd. No. 6

West Dry Detention

Hydrograph type	=	Reservoir	Peak discharge	=	0.259 cfs
Storm frequency	=	2 yrs	Time to peak	=	780 min
Time interval	=	2 min	Hyd. volume	=	10,598 cuft
Inflow hyd. No.	=	1 - West Paved	Max. Elevation	=	1320.54 ft
Reservoir name	=	West Dry Basin	Max. Storage	=	6,418 cuft

Storage Indication method used.



Pond Report

Pond No. 3 - West Dry Basin

Pond Data

Contours - User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 1320.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	1320.00	6,000	0	0
1.00	1321.00	19,000	11,891	11,891
2.00	1322.00	33,000	25,677	37,569

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 12.00	0.00	0.00	0.00
Span (in)	= 12.00	0.00	0.00	0.00
No. Barrels	= 1	0	0	0
Invert El. (ft)	= 1320.00	0.00	0.00	0.00
Length (ft)	= 10.00	0.00	0.00	0.00
Slope (%)	= 0.10	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

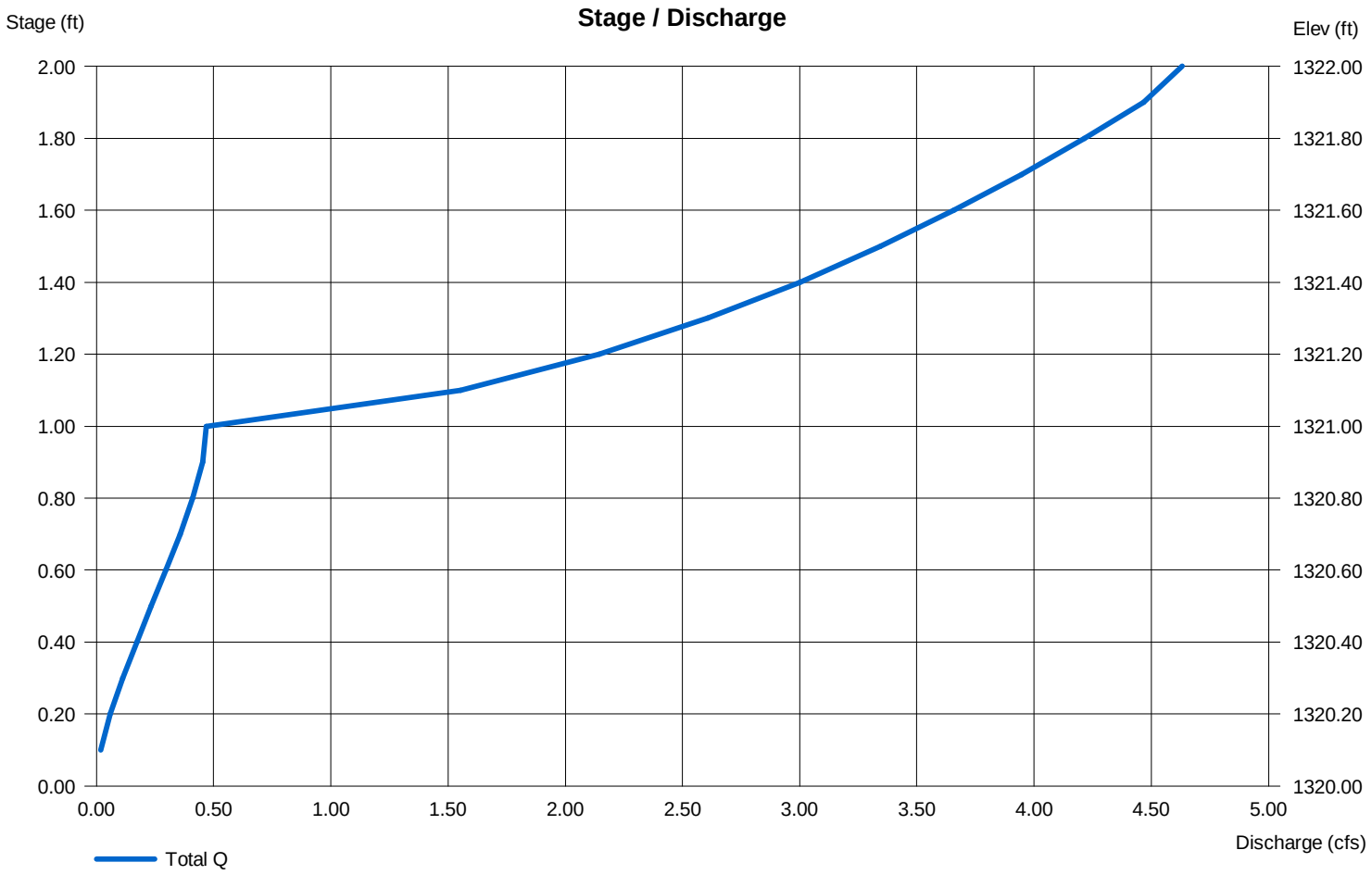
Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 0.00	0.00	0.00	0.00
Crest El. (ft)	= 0.00	0.00	0.00	0.00
Weir Coeff.	= 3.33	3.33	3.33	3.33
Weir Type	= ---	---	---	---
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 AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066

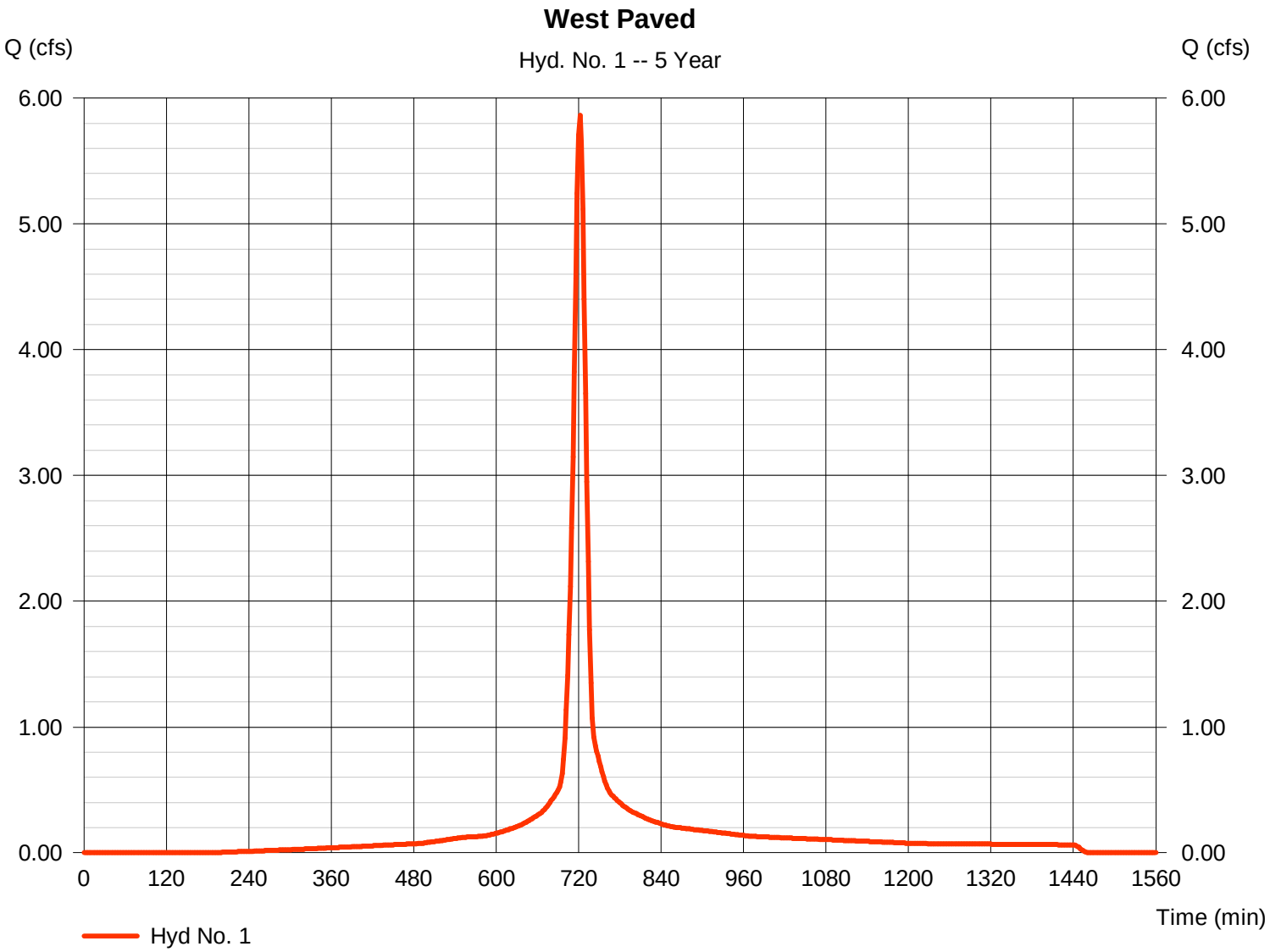
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph description
1	SCS Runoff	5.862	2	722	17,474	------	------	------	West Paved
2	SCS Runoff	2.413	2	724	6,993	------	------	------	West Existing
3	SCS Runoff	5.110	2	724	14,808	------	------	------	East Existing
4	SCS Runoff	12.39	2	722	39,079	------	------	------	East Paved
5	Reservoir	5.314	2	734	38,680	4	1321.01	19,131	East Dry Detention
6	Reservoir	0.445	2	770	17,407	1	1320.88	10,499	West Dry Detention

Hydrograph Report

Hyd. No. 1

West Paved

Hydrograph type	=	SCS Runoff	Peak discharge	=	5.862 cfs
Storm frequency	=	5 yrs	Time to peak	=	722 min
Time interval	=	2 min	Hyd. volume	=	17,474 cuft
Drainage area	=	1.800 ac	Curve number	=	95
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	USER	Time of conc. (Tc)	=	15.00 min
Total precip.	=	3.30 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

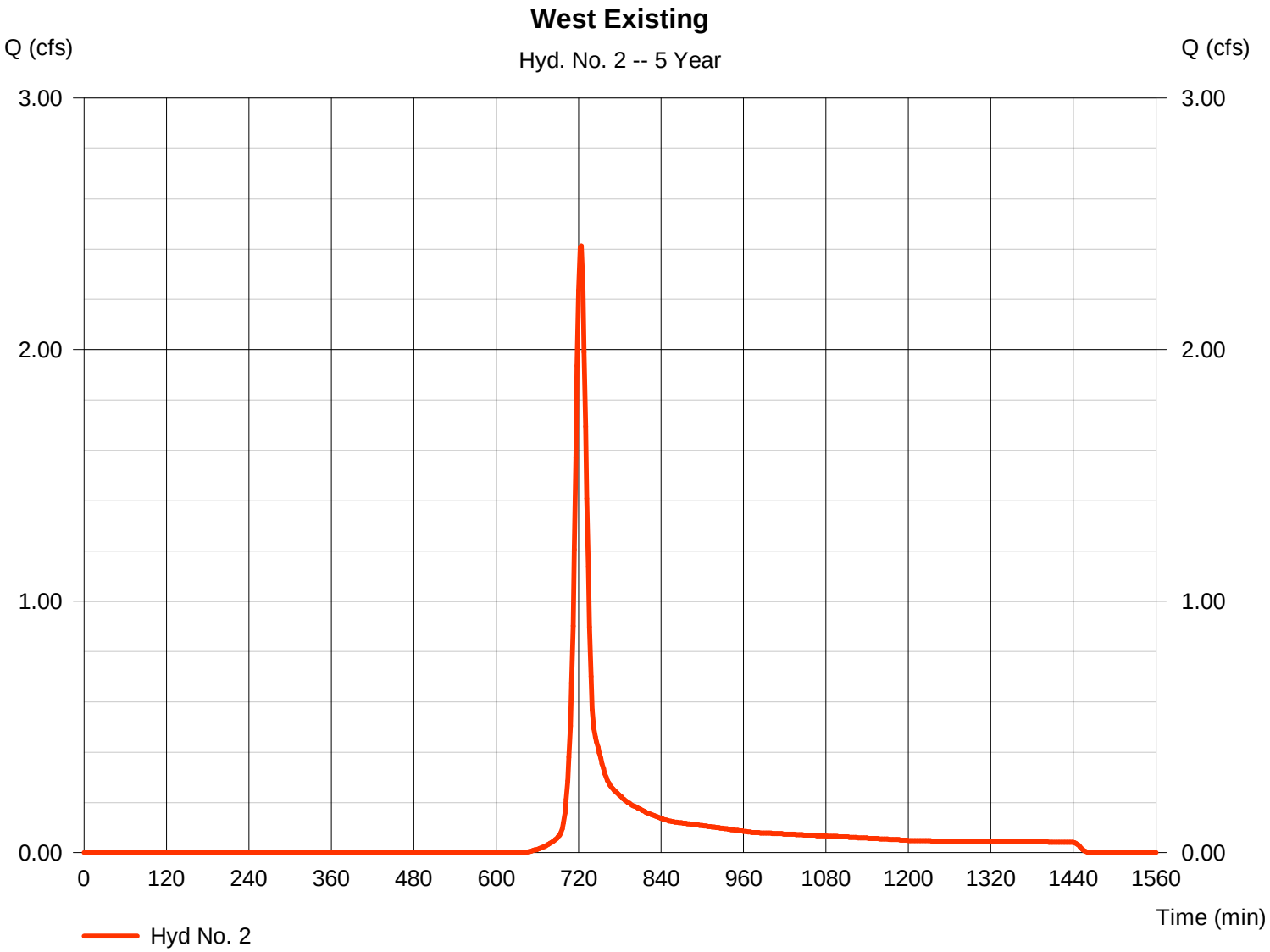


Hydrograph Report

Hyd. No. 2

West Existing

Hydrograph type	=	SCS Runoff	Peak discharge	=	2.413 cfs
Storm frequency	=	5 yrs	Time to peak	=	724 min
Time interval	=	2 min	Hyd. volume	=	6,993 cuft
Drainage area	=	1.700 ac	Curve number	=	75
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	USER	Time of conc. (Tc)	=	15.00 min
Total precip.	=	3.30 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

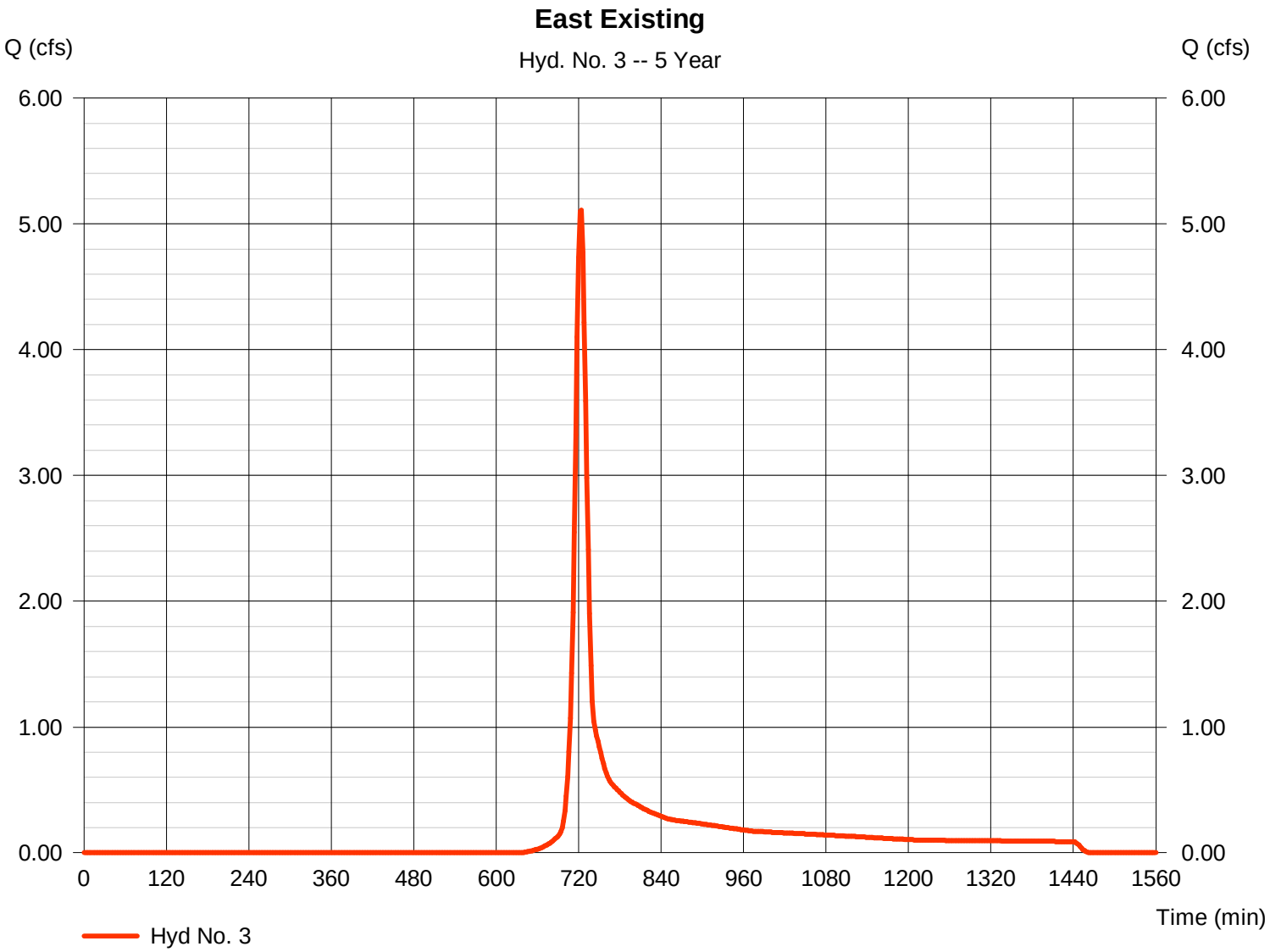


Hydrograph Report

Hyd. No. 3

East Existing

Hydrograph type	=	SCS Runoff	Peak discharge	=	5.110 cfs
Storm frequency	=	5 yrs	Time to peak	=	724 min
Time interval	=	2 min	Hyd. volume	=	14,808 cuft
Drainage area	=	3.600 ac	Curve number	=	75
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	USER	Time of conc. (Tc)	=	15.00 min
Total precip.	=	3.30 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

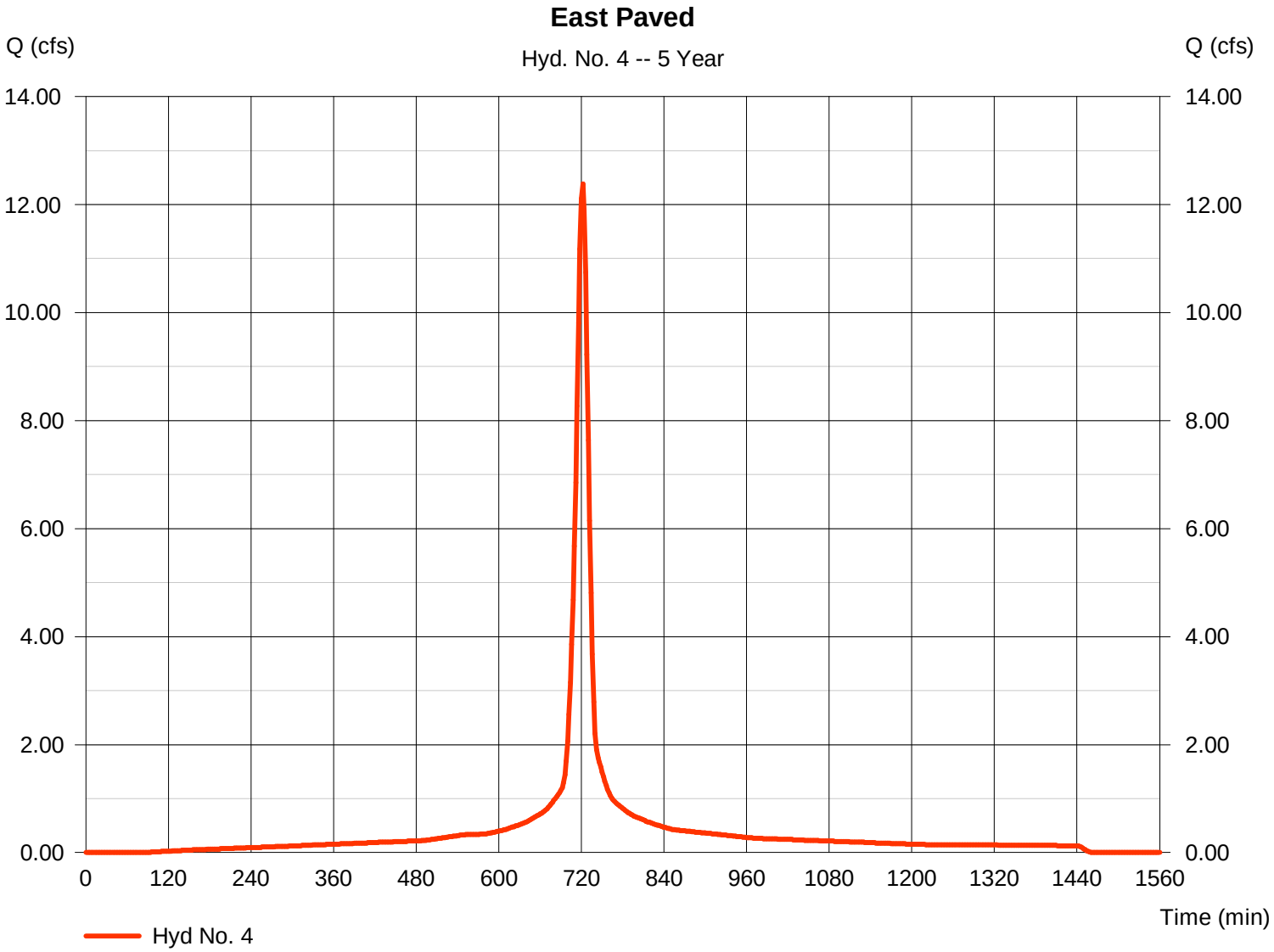


Hydrograph Report

Hyd. No. 4

East Paved

Hydrograph type	=	SCS Runoff	Peak discharge	=	12.39 cfs
Storm frequency	=	5 yrs	Time to peak	=	722 min
Time interval	=	2 min	Hyd. volume	=	39,079 cuft
Drainage area	=	3.600 ac	Curve number	=	98
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	USER	Time of conc. (Tc)	=	15.00 min
Total precip.	=	3.30 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



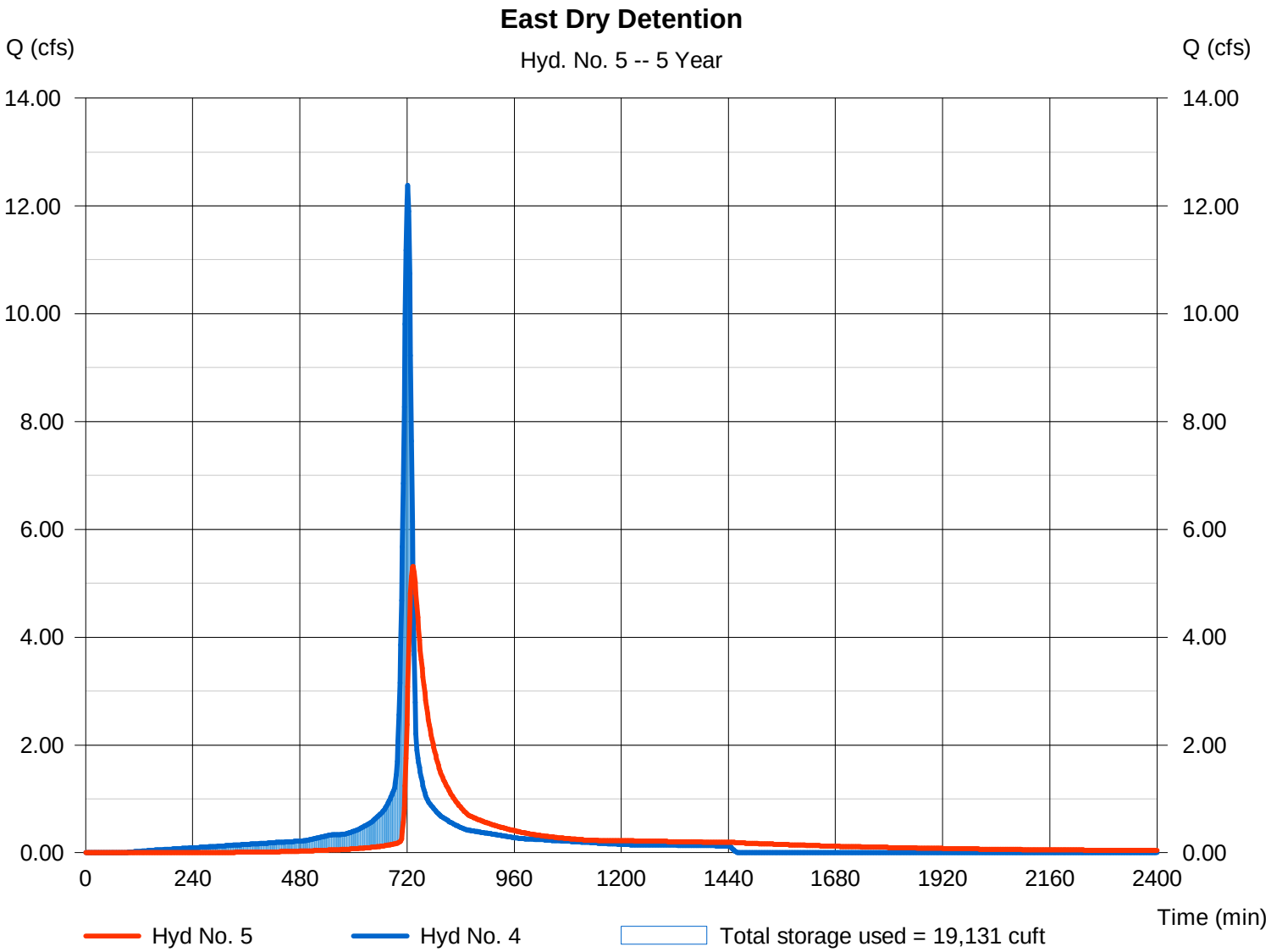
Hydrograph Report

Hyd. No. 5

East Dry Detention

Hydrograph type	=	Reservoir	Peak discharge	=	5.314 cfs
Storm frequency	=	5 yrs	Time to peak	=	734 min
Time interval	=	2 min	Hyd. volume	=	38,680 cuft
Inflow hyd. No.	=	4 - East Paved	Max. Elevation	=	1321.01 ft
Reservoir name	=	East Dry Detention	Max. Storage	=	19,131 cuft

Storage Indication method used.



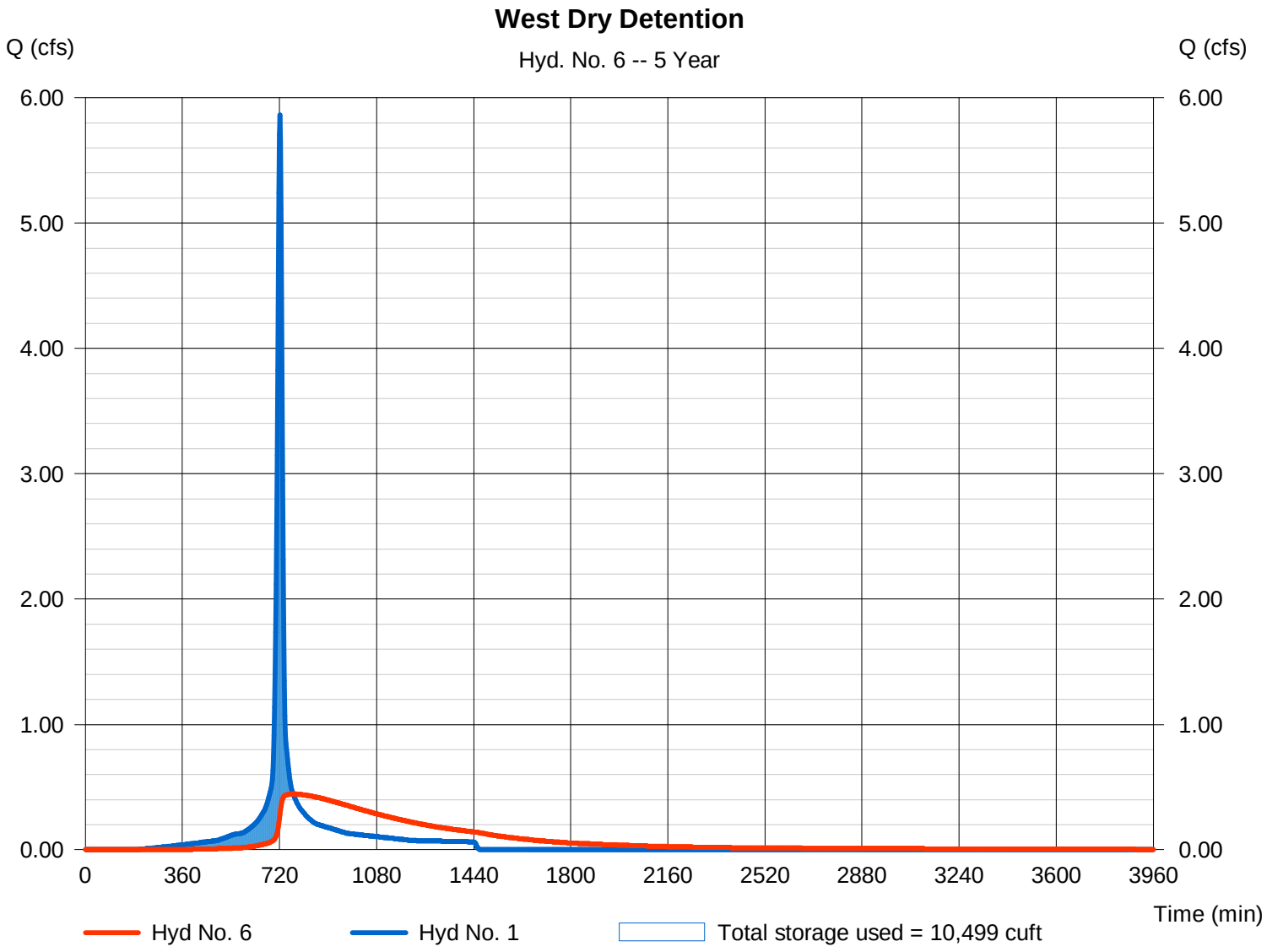
Hydrograph Report

Hyd. No. 6

West Dry Detention

Hydrograph type	=	Reservoir	Peak discharge	=	0.445 cfs
Storm frequency	=	5 yrs	Time to peak	=	770 min
Time interval	=	2 min	Hyd. volume	=	17,407 cuft
Inflow hyd. No.	=	1 - West Paved	Max. Elevation	=	1320.88 ft
Reservoir name	=	West Dry Basin	Max. Storage	=	10,499 cuft

Storage Indication method used.



Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066

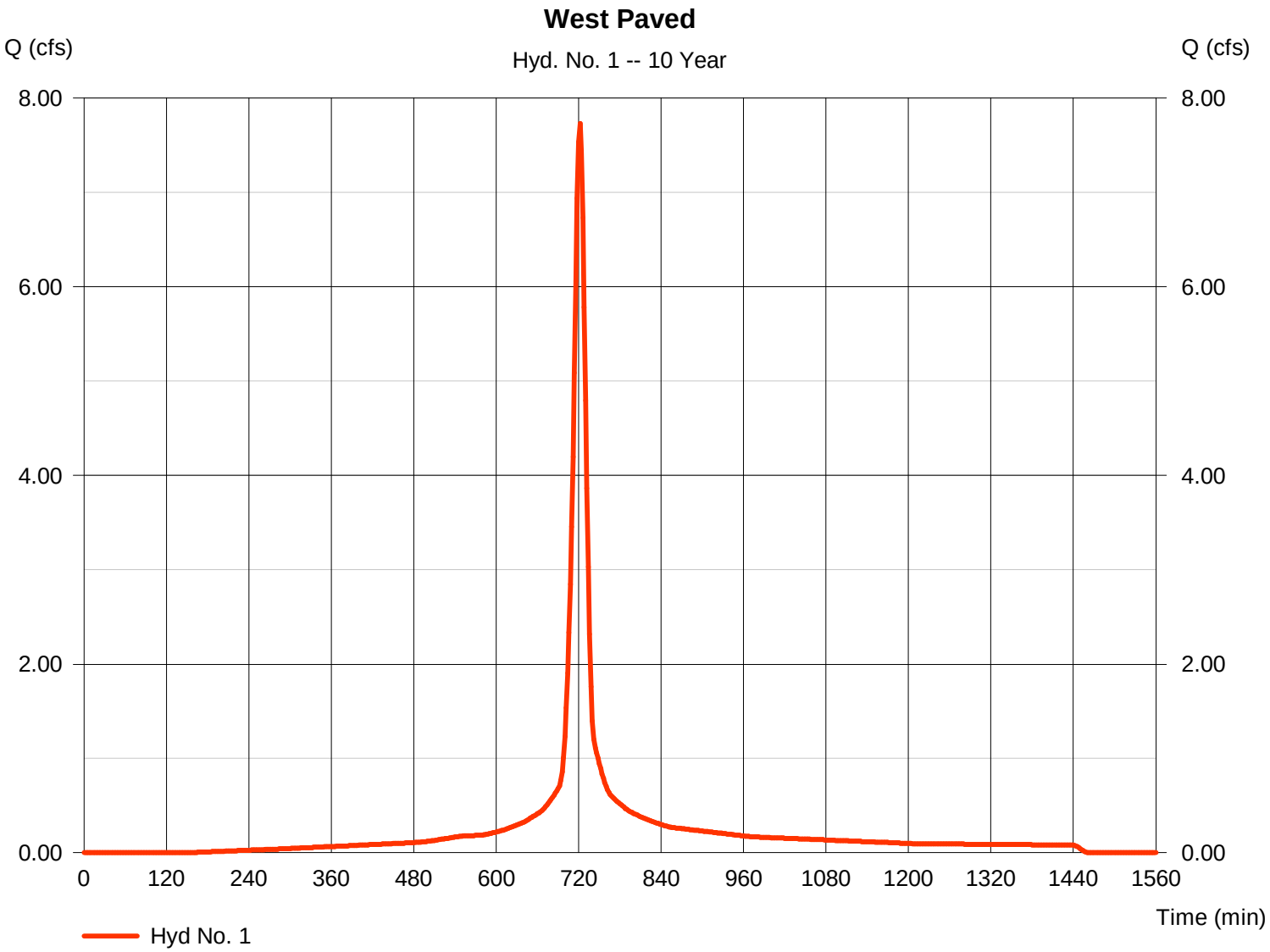
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph description
1	SCS Runoff	7.728	2	722	23,430	------	------	------	West Paved
2	SCS Runoff	3.949	2	722	11,170	------	------	------	West Existing
3	SCS Runoff	8.362	2	722	23,653	------	------	------	East Existing
4	SCS Runoff	16.03	2	722	51,150	------	------	------	East Paved
5	Reservoir	8.083	2	732	50,739	4	1321.12	22,689	East Dry Detention
6	Reservoir	1.098	2	744	23,363	1	1321.06	13,381	West Dry Detention

Hydrograph Report

Hyd. No. 1

West Paved

Hydrograph type	=	SCS Runoff	Peak discharge	=	7.728 cfs
Storm frequency	=	10 yrs	Time to peak	=	722 min
Time interval	=	2 min	Hyd. volume	=	23,430 cuft
Drainage area	=	1.800 ac	Curve number	=	95
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	USER	Time of conc. (Tc)	=	15.00 min
Total precip.	=	4.25 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

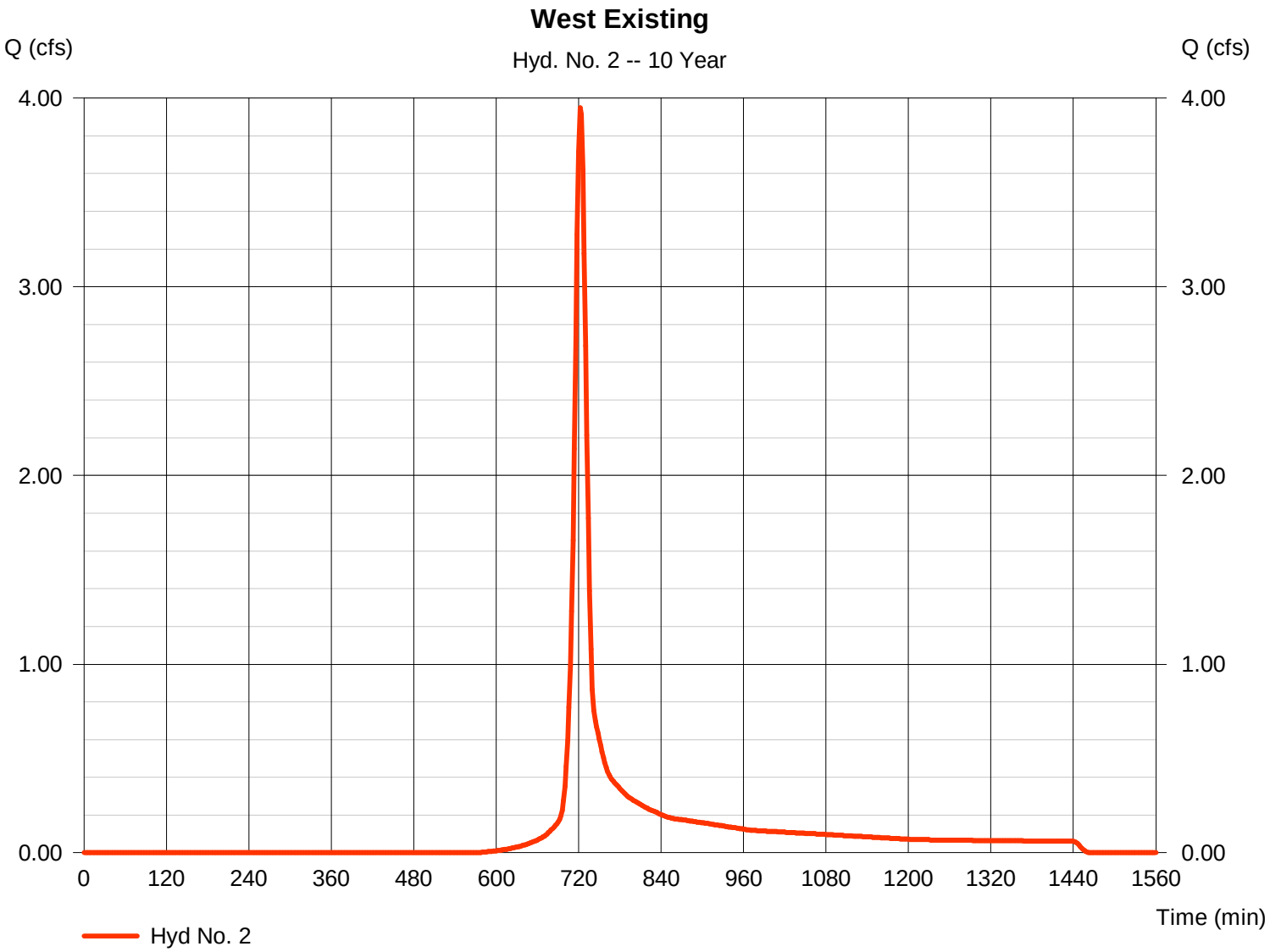


Hydrograph Report

Hyd. No. 2

West Existing

Hydrograph type	=	SCS Runoff	Peak discharge	=	3.949 cfs
Storm frequency	=	10 yrs	Time to peak	=	722 min
Time interval	=	2 min	Hyd. volume	=	11,170 cuft
Drainage area	=	1.700 ac	Curve number	=	75
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	USER	Time of conc. (Tc)	=	15.00 min
Total precip.	=	4.25 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

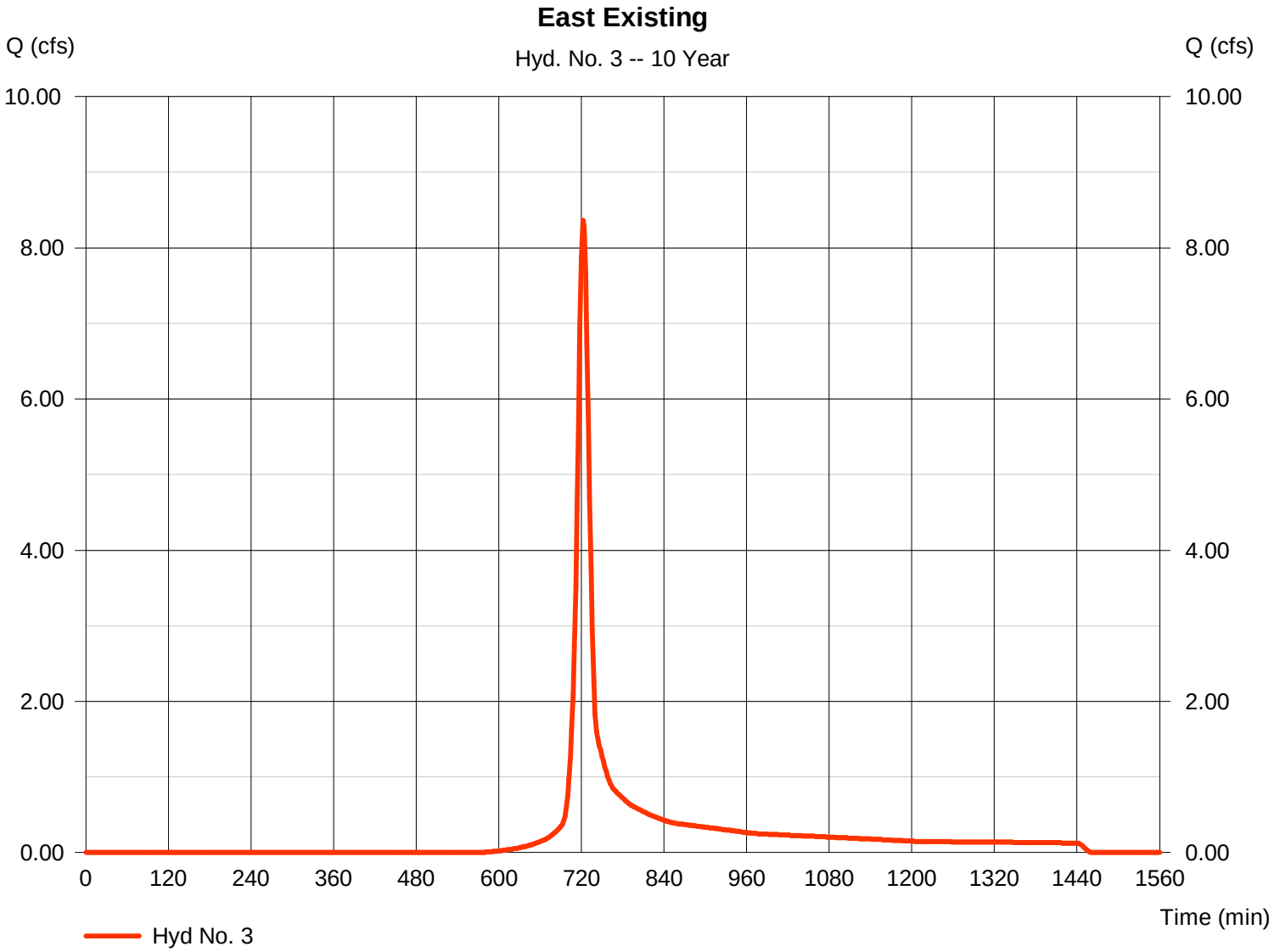


Hydrograph Report

Hyd. No. 3

East Existing

Hydrograph type	=	SCS Runoff	Peak discharge	=	8.362 cfs
Storm frequency	=	10 yrs	Time to peak	=	722 min
Time interval	=	2 min	Hyd. volume	=	23,653 cuft
Drainage area	=	3.600 ac	Curve number	=	75
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	USER	Time of conc. (Tc)	=	15.00 min
Total precip.	=	4.25 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

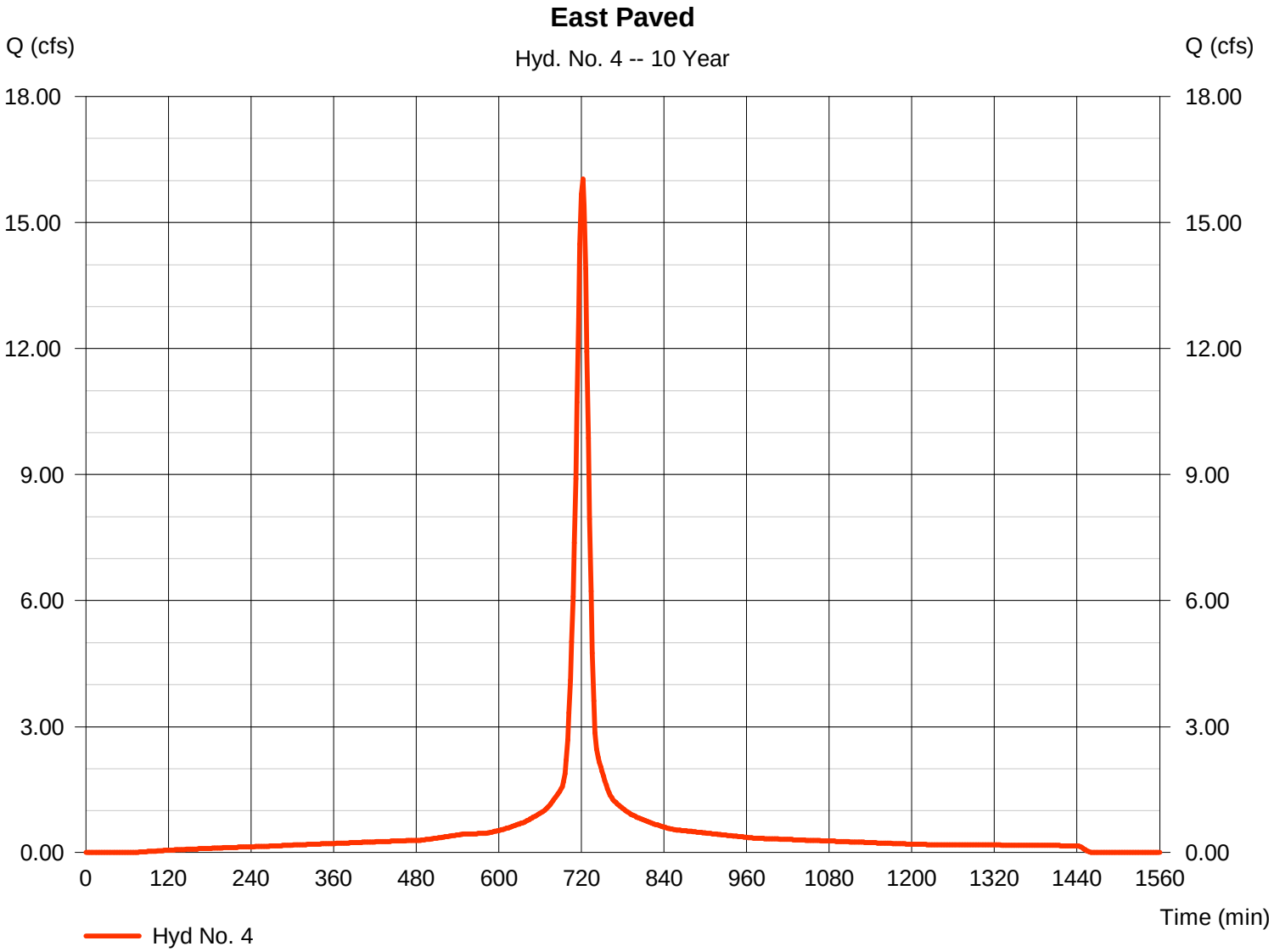


Hydrograph Report

Hyd. No. 4

East Paved

Hydrograph type	=	SCS Runoff	Peak discharge	=	16.03 cfs
Storm frequency	=	10 yrs	Time to peak	=	722 min
Time interval	=	2 min	Hyd. volume	=	51,150 cuft
Drainage area	=	3.600 ac	Curve number	=	98
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	USER	Time of conc. (Tc)	=	15.00 min
Total precip.	=	4.25 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



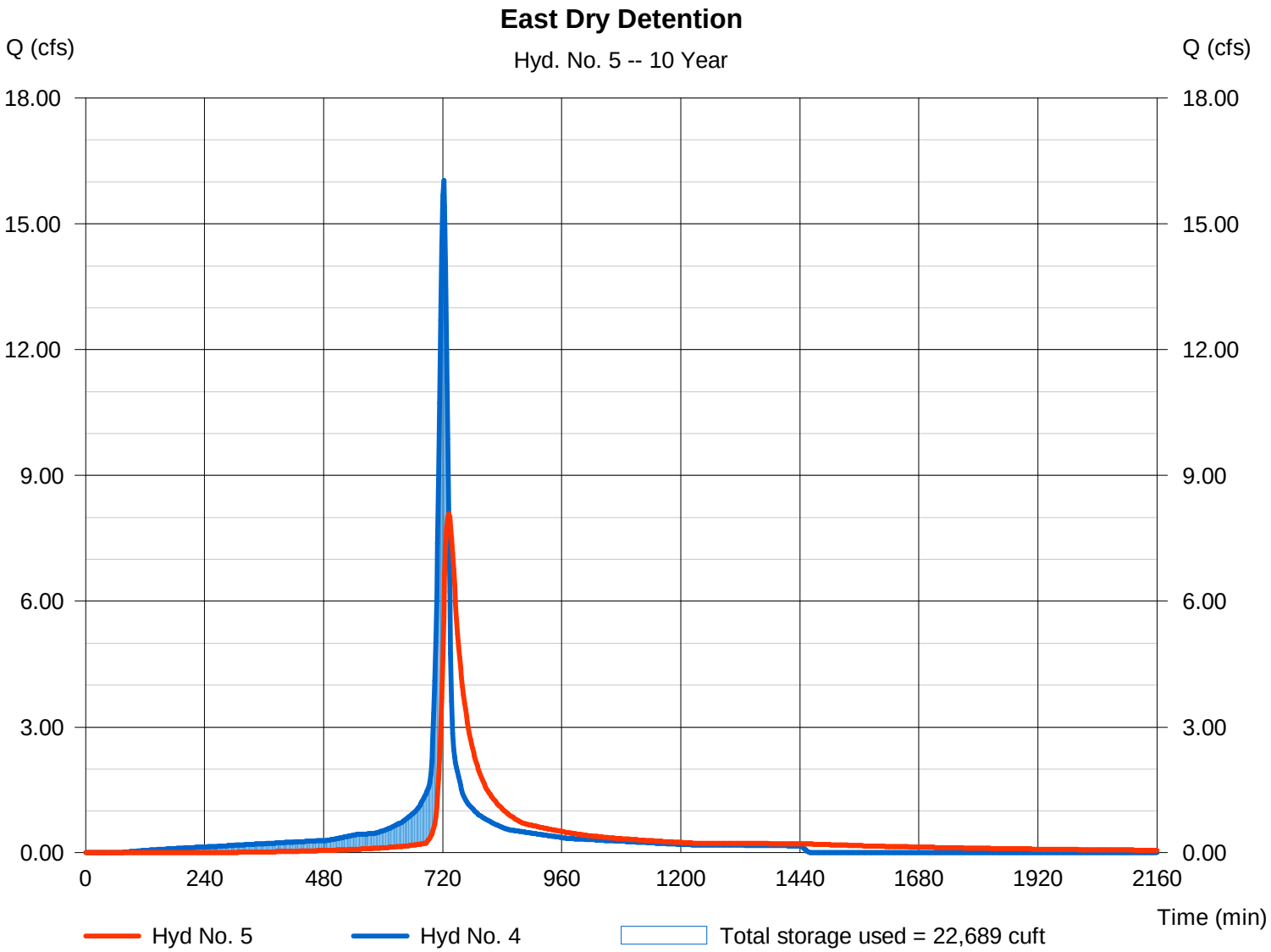
Hydrograph Report

Hyd. No. 5

East Dry Detention

Hydrograph type	=	Reservoir	Peak discharge	=	8.083 cfs
Storm frequency	=	10 yrs	Time to peak	=	732 min
Time interval	=	2 min	Hyd. volume	=	50,739 cuft
Inflow hyd. No.	=	4 - East Paved	Max. Elevation	=	1321.12 ft
Reservoir name	=	East Dry Detention	Max. Storage	=	22,689 cuft

Storage Indication method used.



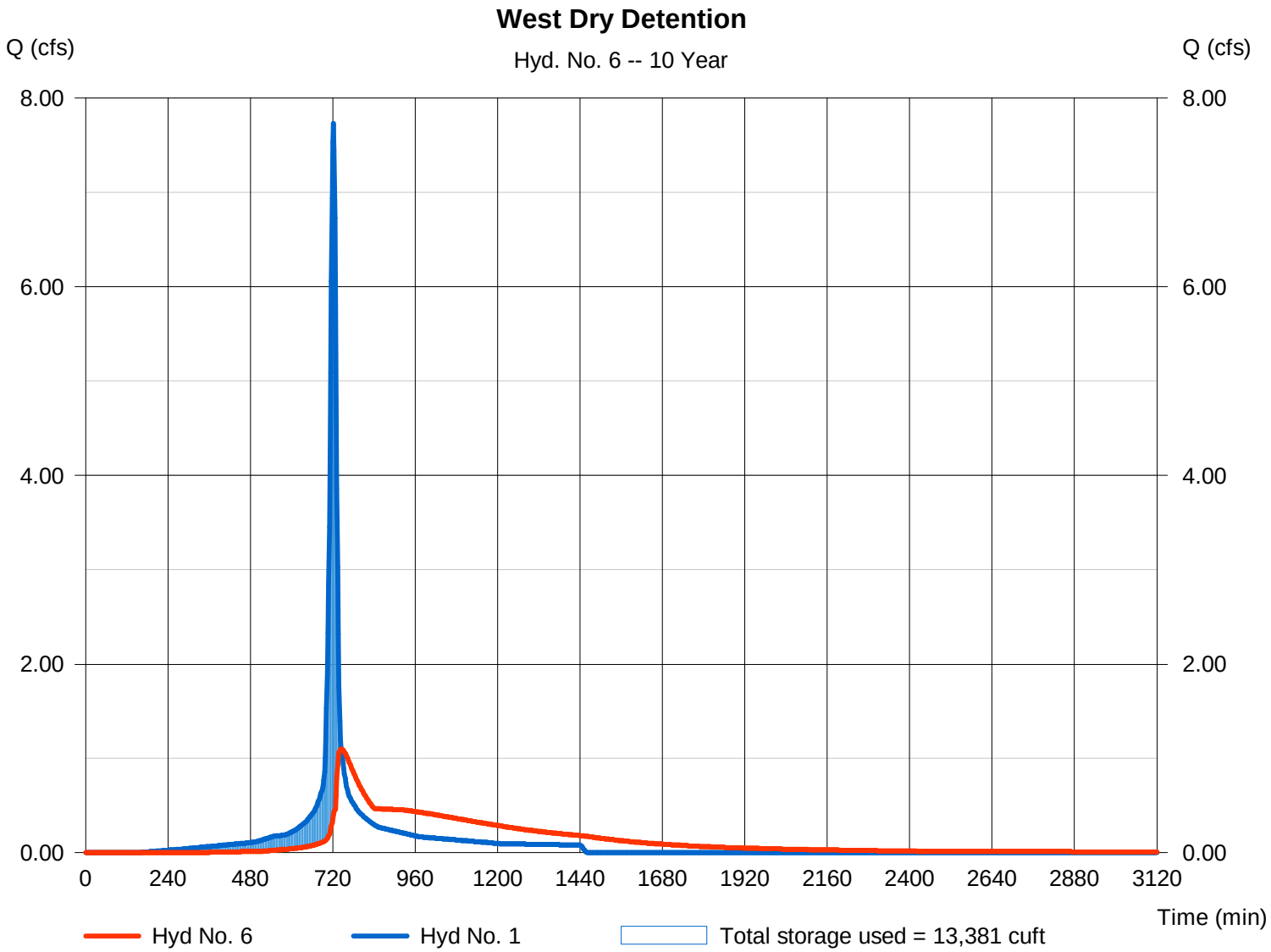
Hydrograph Report

Hyd. No. 6

West Dry Detention

Hydrograph type	=	Reservoir	Peak discharge	=	1.098 cfs
Storm frequency	=	10 yrs	Time to peak	=	744 min
Time interval	=	2 min	Hyd. volume	=	23,363 cuft
Inflow hyd. No.	=	1 - West Paved	Max. Elevation	=	1321.06 ft
Reservoir name	=	West Dry Basin	Max. Storage	=	13,381 cuft

Storage Indication method used.



Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066

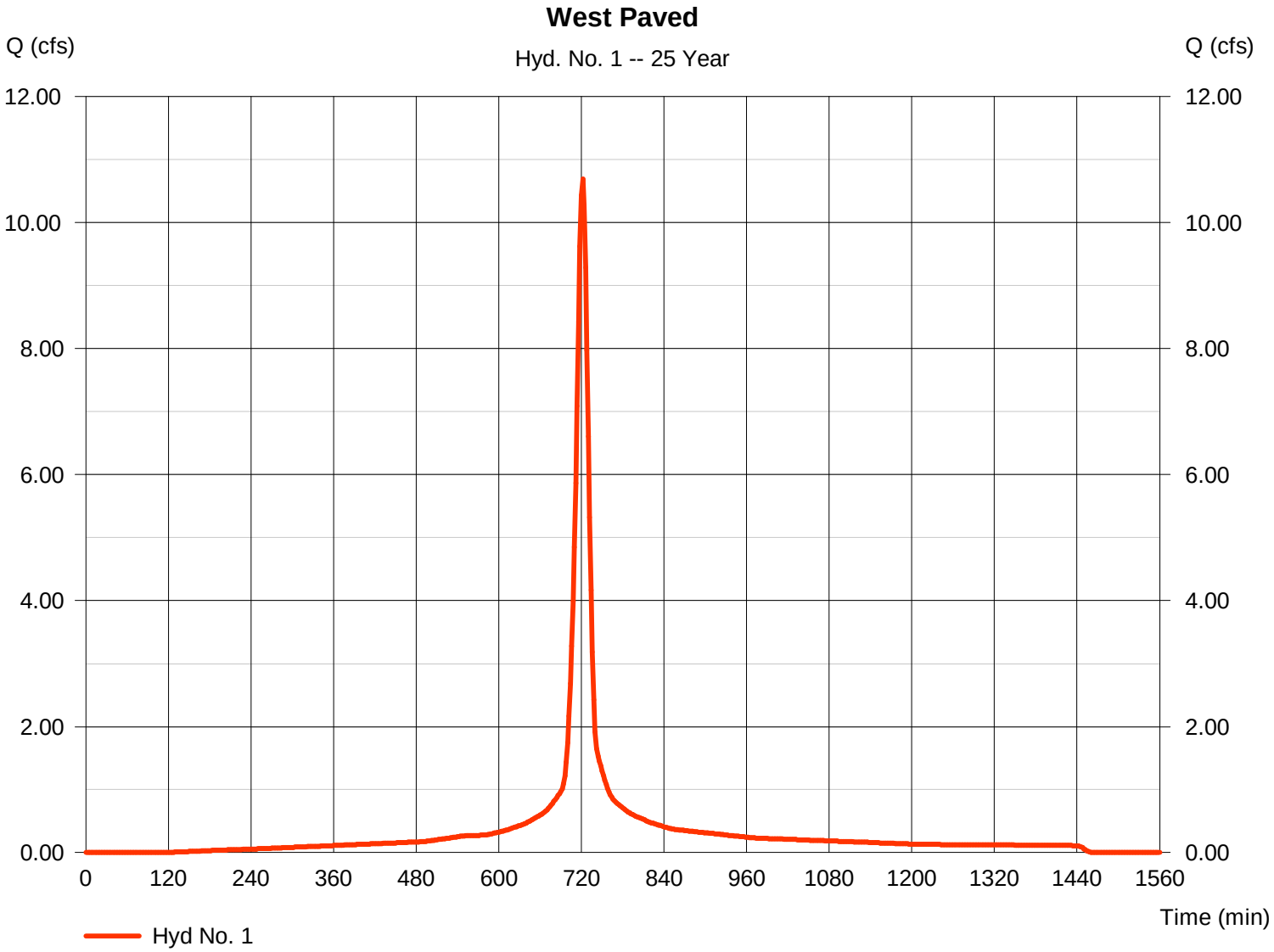
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph description
1	SCS Runoff	10.69	2	722	33,020	------	------	------	West Paved
2	SCS Runoff	6.626	2	722	18,574	------	------	------	West Existing
3	SCS Runoff	14.03	2	722	39,332	------	------	------	East Existing
4	SCS Runoff	21.84	2	722	70,486	------	------	------	East Paved
5	Reservoir	11.53	2	732	70,064	4	1321.28	27,721	East Dry Detention
6	Reservoir	2.262	2	738	32,953	1	1321.23	17,670	West Dry Detention

Hydrograph Report

Hyd. No. 1

West Paved

Hydrograph type	=	SCS Runoff	Peak discharge	=	10.69 cfs
Storm frequency	=	25 yrs	Time to peak	=	722 min
Time interval	=	2 min	Hyd. volume	=	33,020 cuft
Drainage area	=	1.800 ac	Curve number	=	95
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	USER	Time of conc. (Tc)	=	15.00 min
Total precip.	=	5.77 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

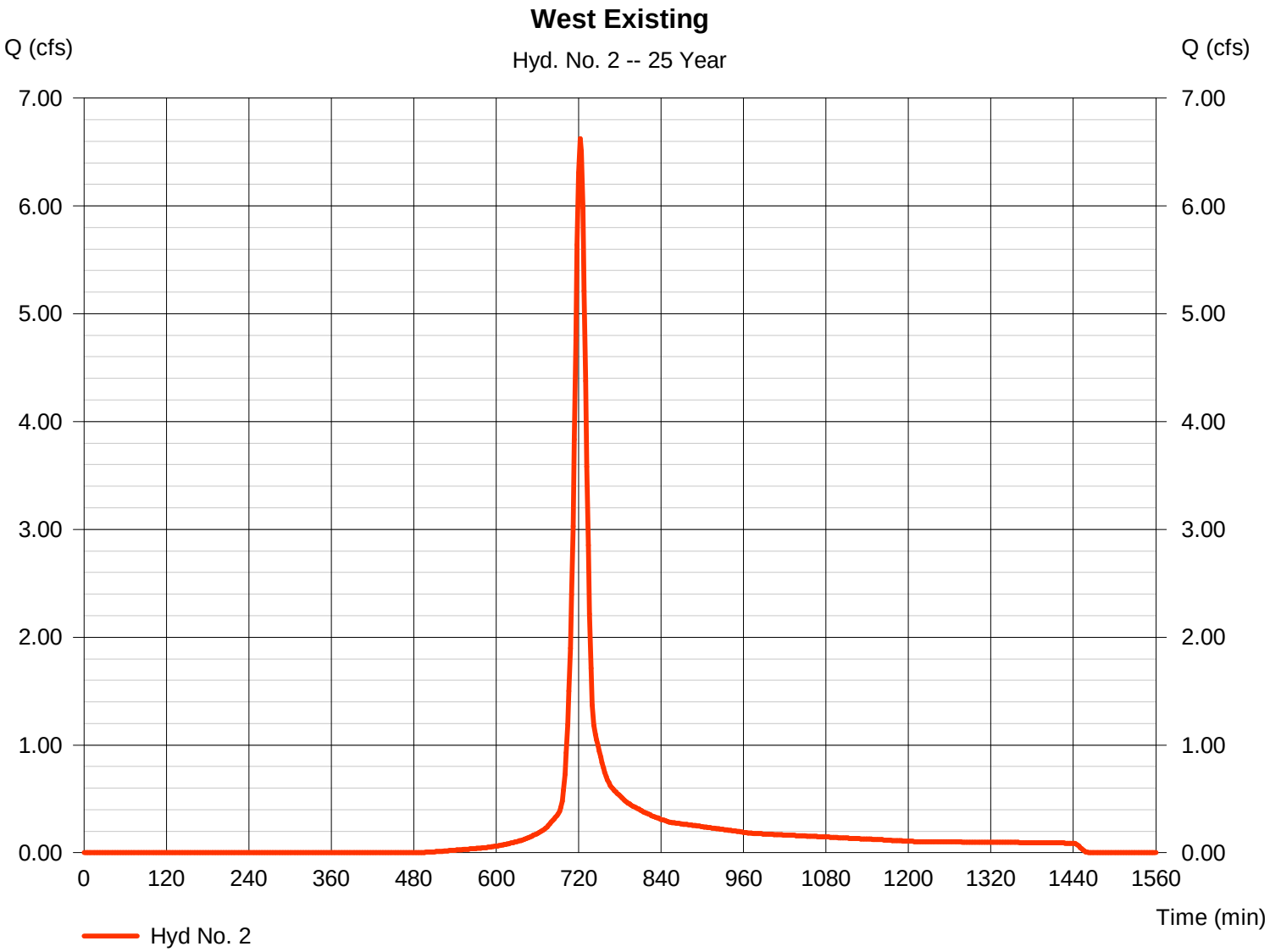


Hydrograph Report

Hyd. No. 2

West Existing

Hydrograph type	=	SCS Runoff	Peak discharge	=	6.626 cfs
Storm frequency	=	25 yrs	Time to peak	=	722 min
Time interval	=	2 min	Hyd. volume	=	18,574 cuft
Drainage area	=	1.700 ac	Curve number	=	75
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	USER	Time of conc. (Tc)	=	15.00 min
Total precip.	=	5.77 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

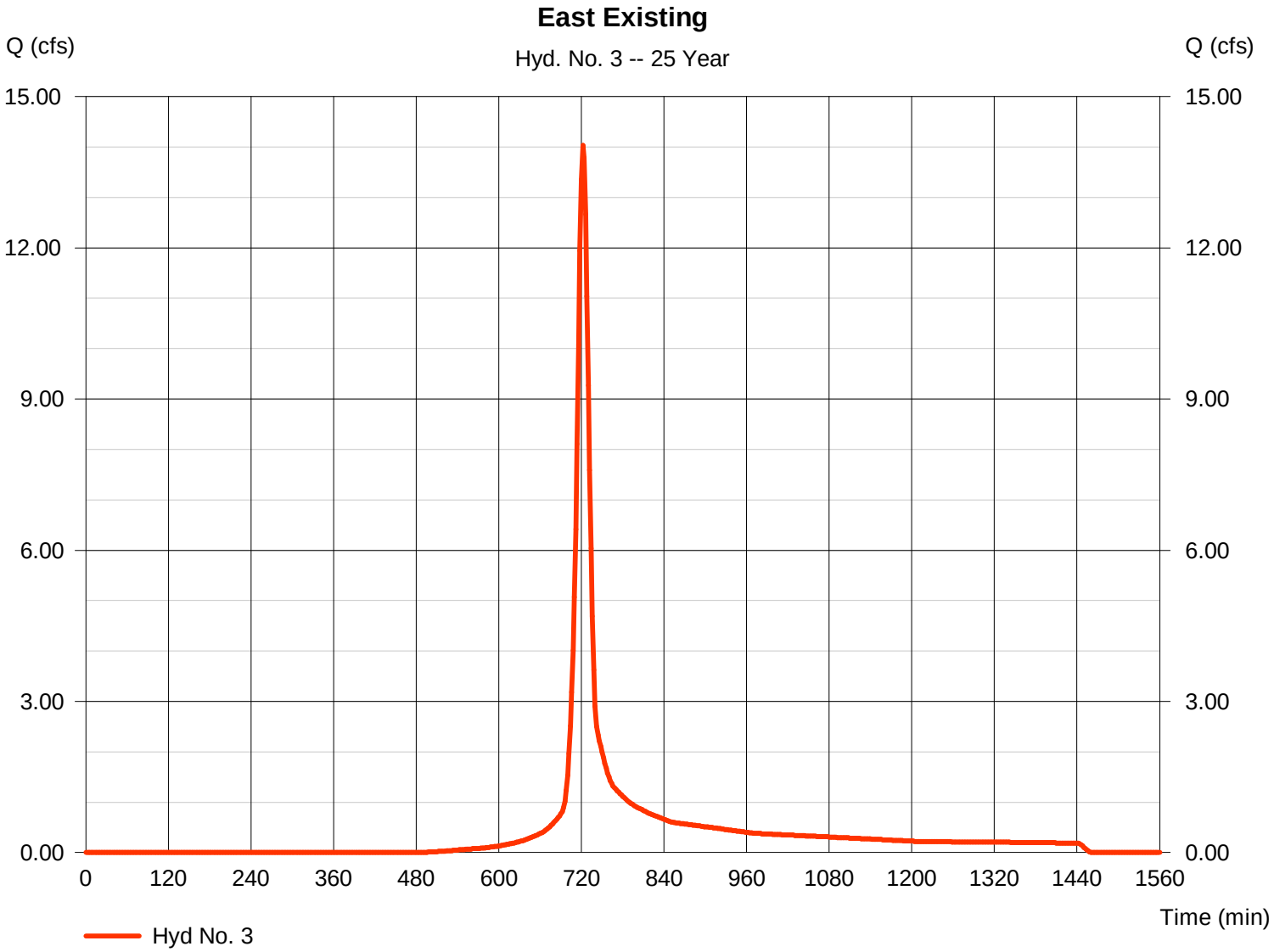


Hydrograph Report

Hyd. No. 3

East Existing

Hydrograph type	=	SCS Runoff	Peak discharge	=	14.03 cfs
Storm frequency	=	25 yrs	Time to peak	=	722 min
Time interval	=	2 min	Hyd. volume	=	39,332 cuft
Drainage area	=	3.600 ac	Curve number	=	75
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	USER	Time of conc. (Tc)	=	15.00 min
Total precip.	=	5.77 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

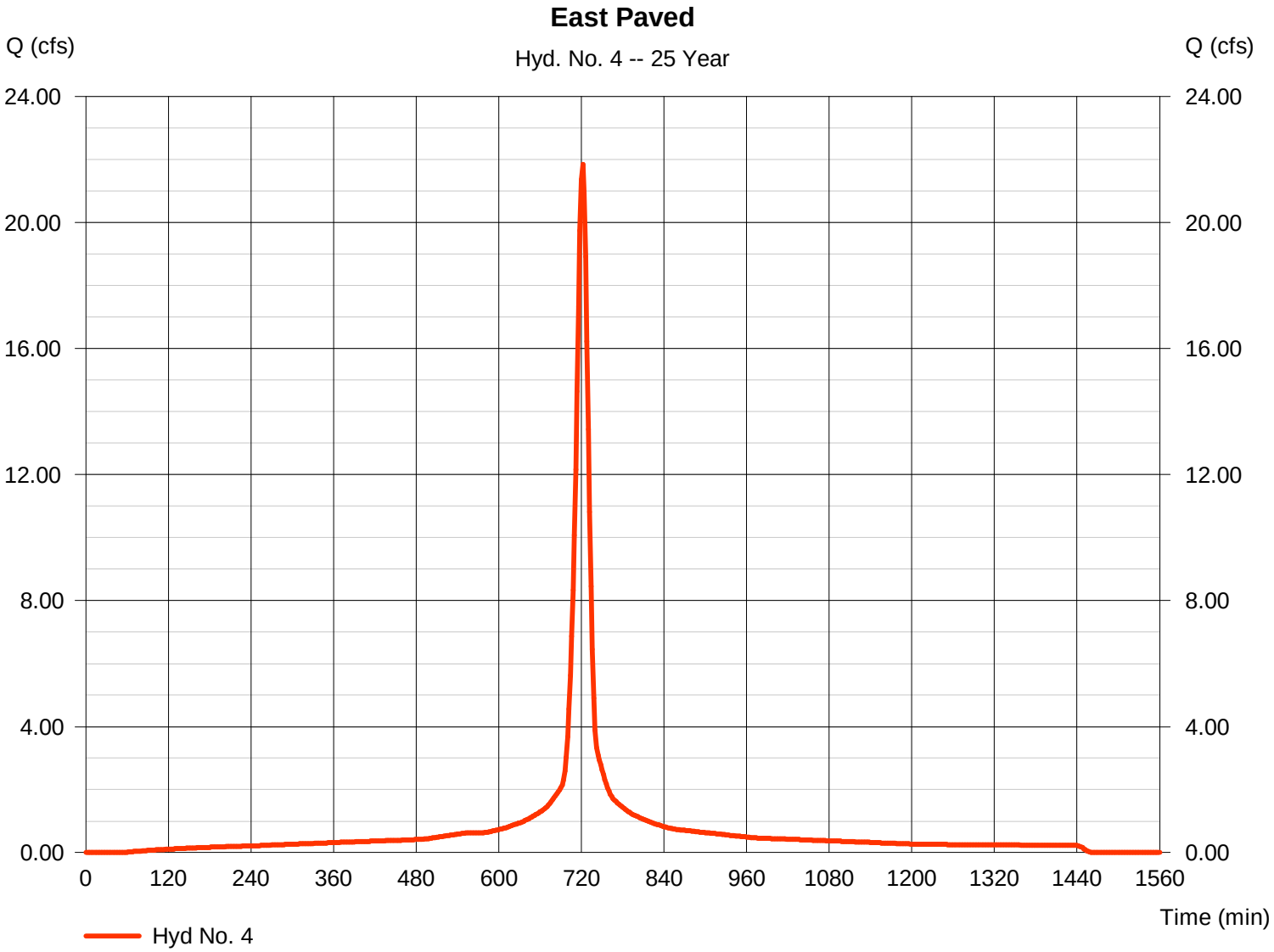


Hydrograph Report

Hyd. No. 4

East Paved

Hydrograph type	=	SCS Runoff	Peak discharge	=	21.84 cfs
Storm frequency	=	25 yrs	Time to peak	=	722 min
Time interval	=	2 min	Hyd. volume	=	70,486 cuft
Drainage area	=	3.600 ac	Curve number	=	98
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	USER	Time of conc. (Tc)	=	15.00 min
Total precip.	=	5.77 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



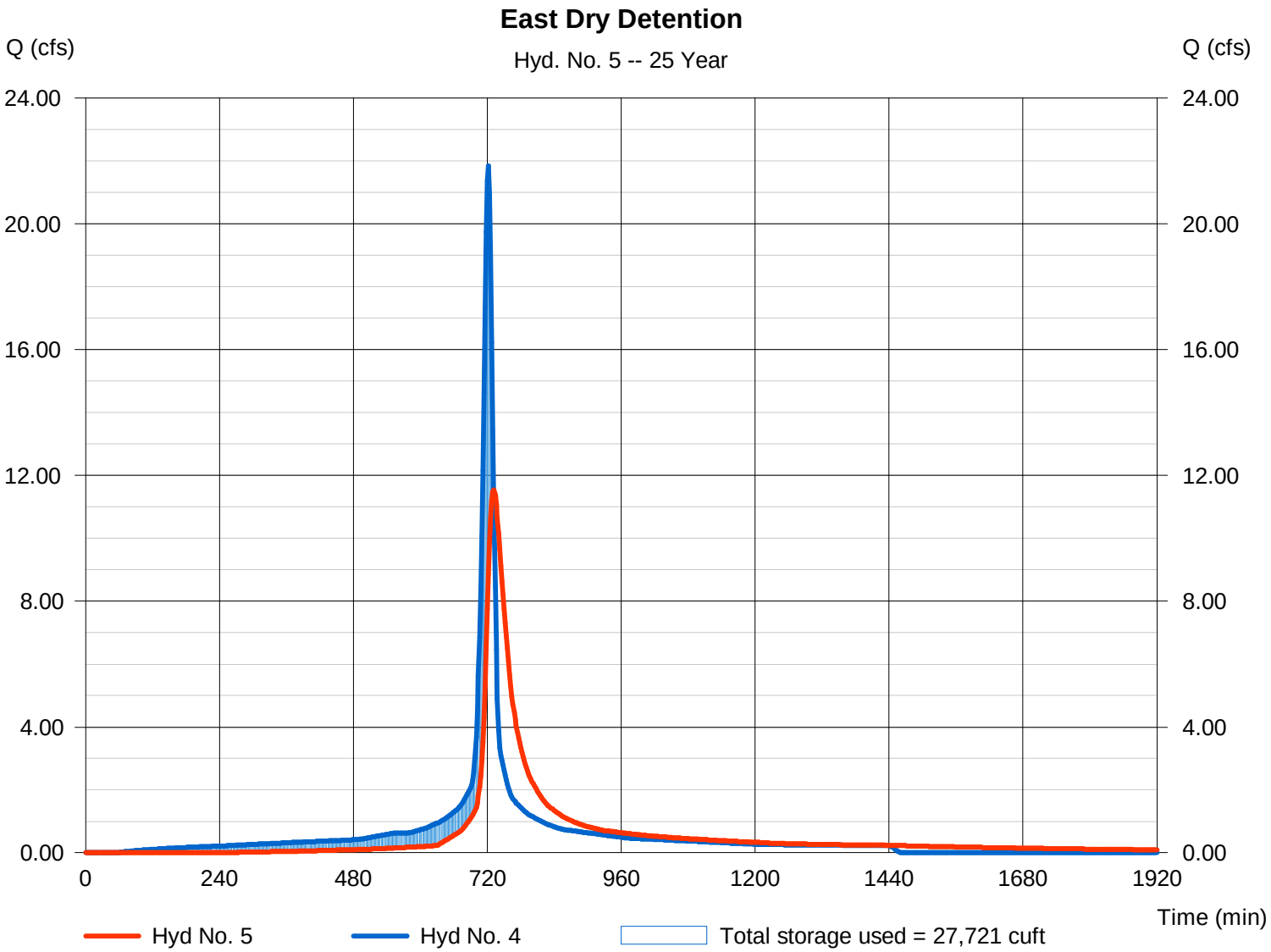
Hydrograph Report

Hyd. No. 5

East Dry Detention

Hydrograph type	=	Reservoir	Peak discharge	=	11.53 cfs
Storm frequency	=	25 yrs	Time to peak	=	732 min
Time interval	=	2 min	Hyd. volume	=	70,064 cuft
Inflow hyd. No.	=	4 - East Paved	Max. Elevation	=	1321.28 ft
Reservoir name	=	East Dry Detention	Max. Storage	=	27,721 cuft

Storage Indication method used.



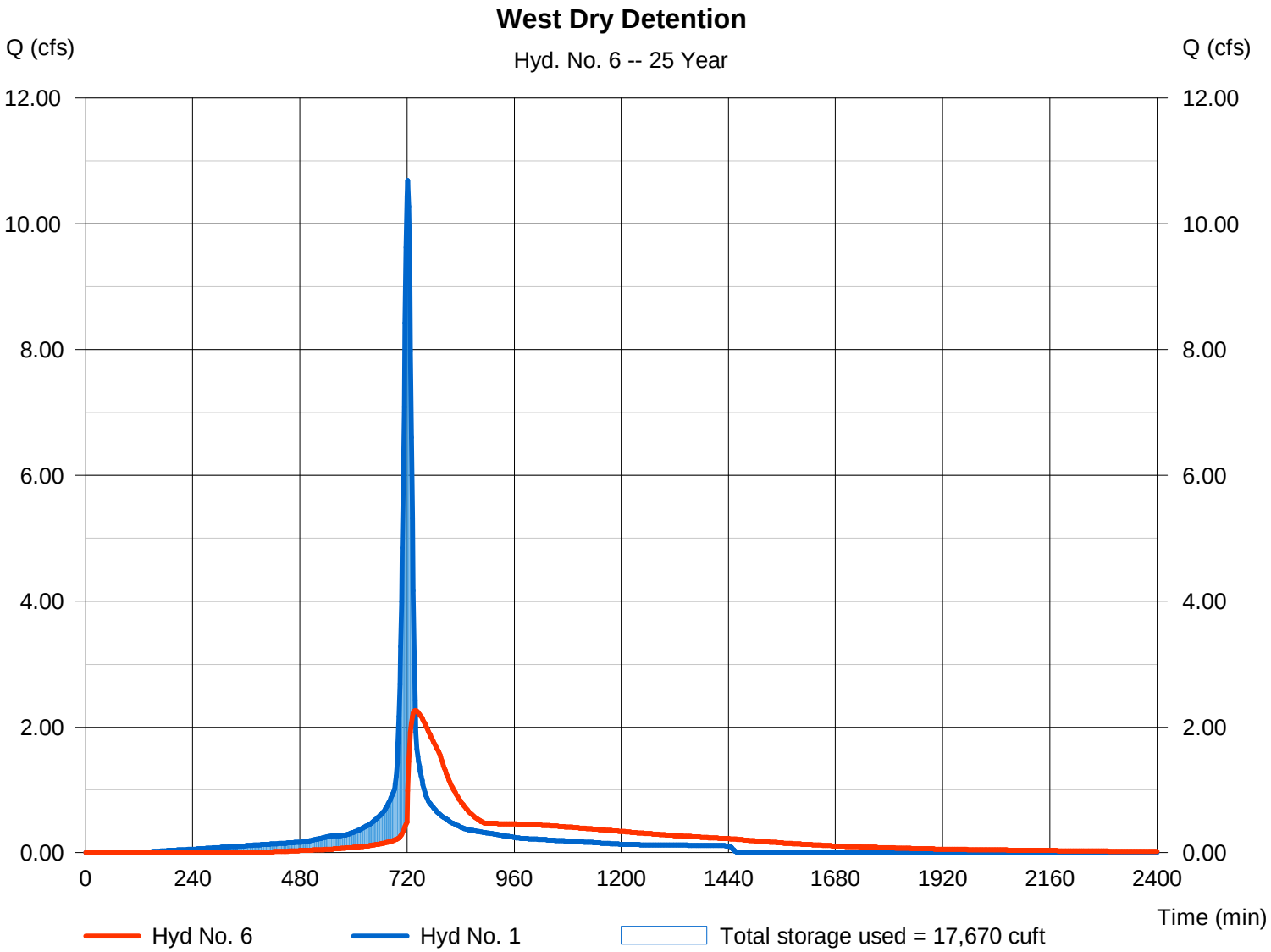
Hydrograph Report

Hyd. No. 6

West Dry Detention

Hydrograph type	=	Reservoir	Peak discharge	=	2.262 cfs
Storm frequency	=	25 yrs	Time to peak	=	738 min
Time interval	=	2 min	Hyd. volume	=	32,953 cuft
Inflow hyd. No.	=	1 - West Paved	Max. Elevation	=	1321.23 ft
Reservoir name	=	West Dry Basin	Max. Storage	=	17,670 cuft

Storage Indication method used.



Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066

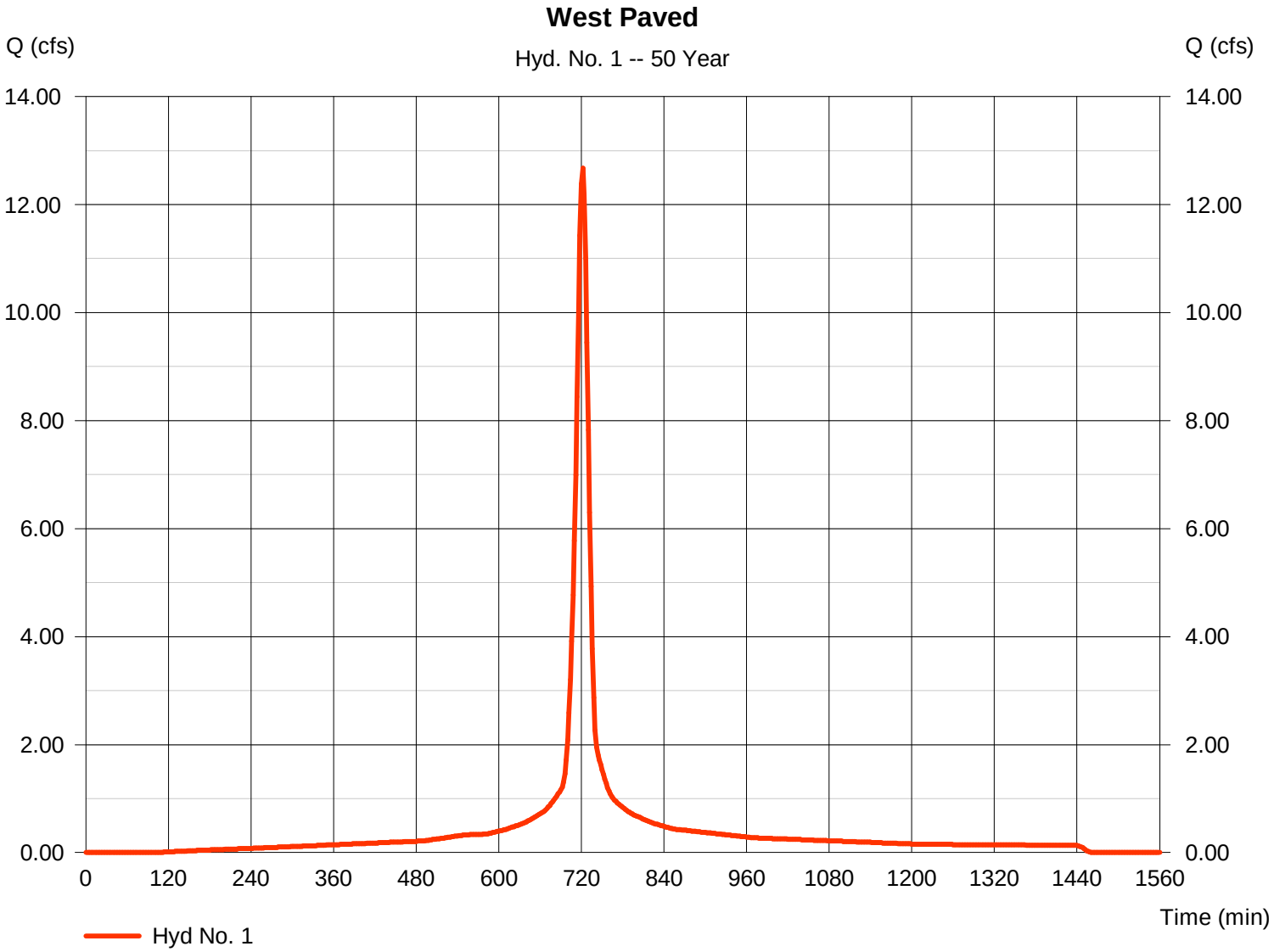
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph description
1	SCS Runoff	12.68	2	722	39,541	------	------	------	West Paved
2	SCS Runoff	8.517	2	722	23,909	------	------	------	West Existing
3	SCS Runoff	18.04	2	722	50,630	------	------	------	East Existing
4	SCS Runoff	25.78	2	722	83,597	------	------	------	East Paved
5	Reservoir	13.72	2	732	83,171	4	1321.38	30,873	East Dry Detention
6	Reservoir	2.777	2	738	39,475	1	1321.34	20,701	West Dry Detention

Hydrograph Report

Hyd. No. 1

West Paved

Hydrograph type	=	SCS Runoff	Peak discharge	=	12.68 cfs
Storm frequency	=	50 yrs	Time to peak	=	722 min
Time interval	=	2 min	Hyd. volume	=	39,541 cuft
Drainage area	=	1.800 ac	Curve number	=	95
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	USER	Time of conc. (Tc)	=	15.00 min
Total precip.	=	6.80 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

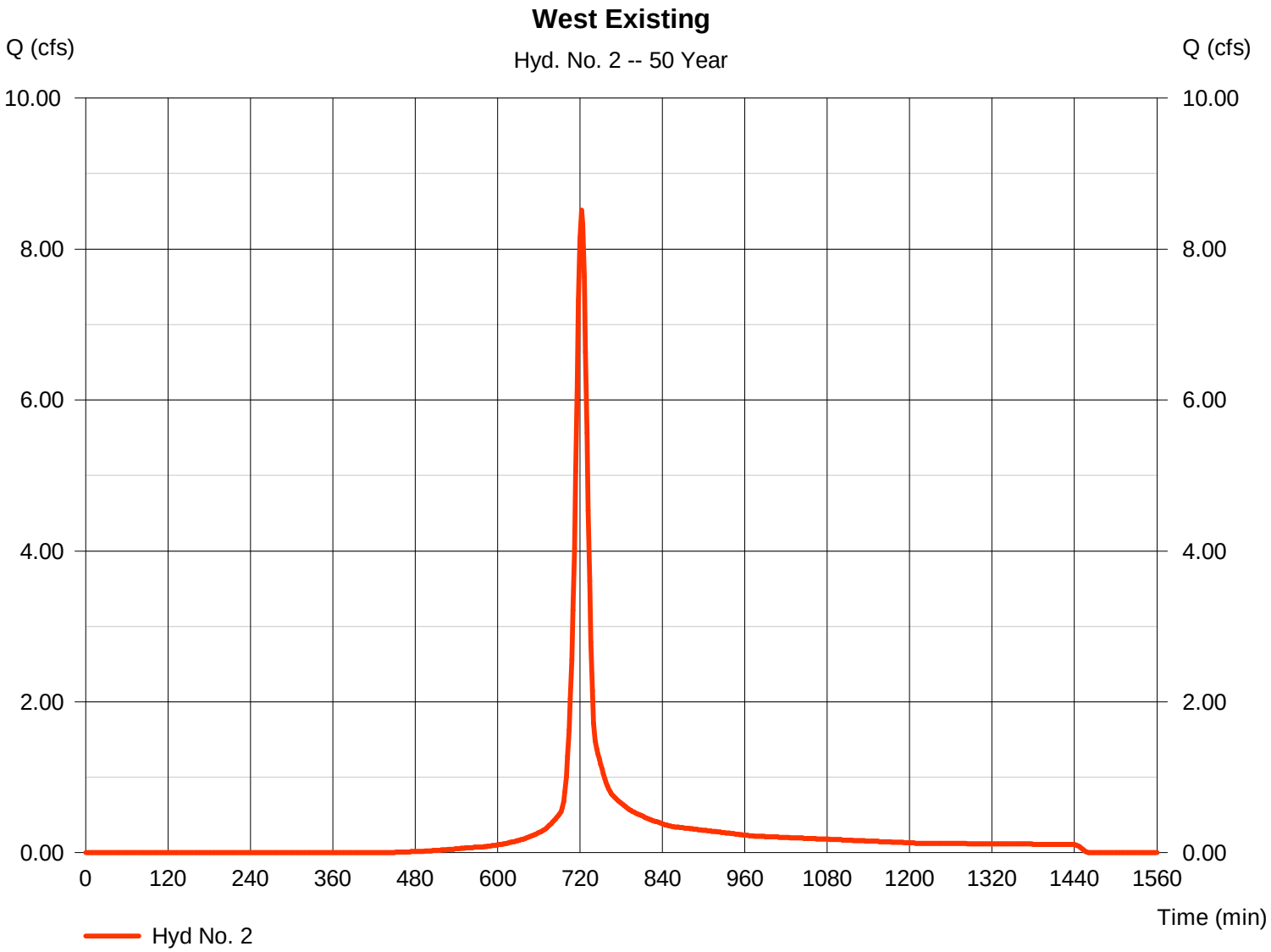


Hydrograph Report

Hyd. No. 2

West Existing

Hydrograph type	=	SCS Runoff	Peak discharge	=	8.517 cfs
Storm frequency	=	50 yrs	Time to peak	=	722 min
Time interval	=	2 min	Hyd. volume	=	23,909 cuft
Drainage area	=	1.700 ac	Curve number	=	75
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	USER	Time of conc. (Tc)	=	15.00 min
Total precip.	=	6.80 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

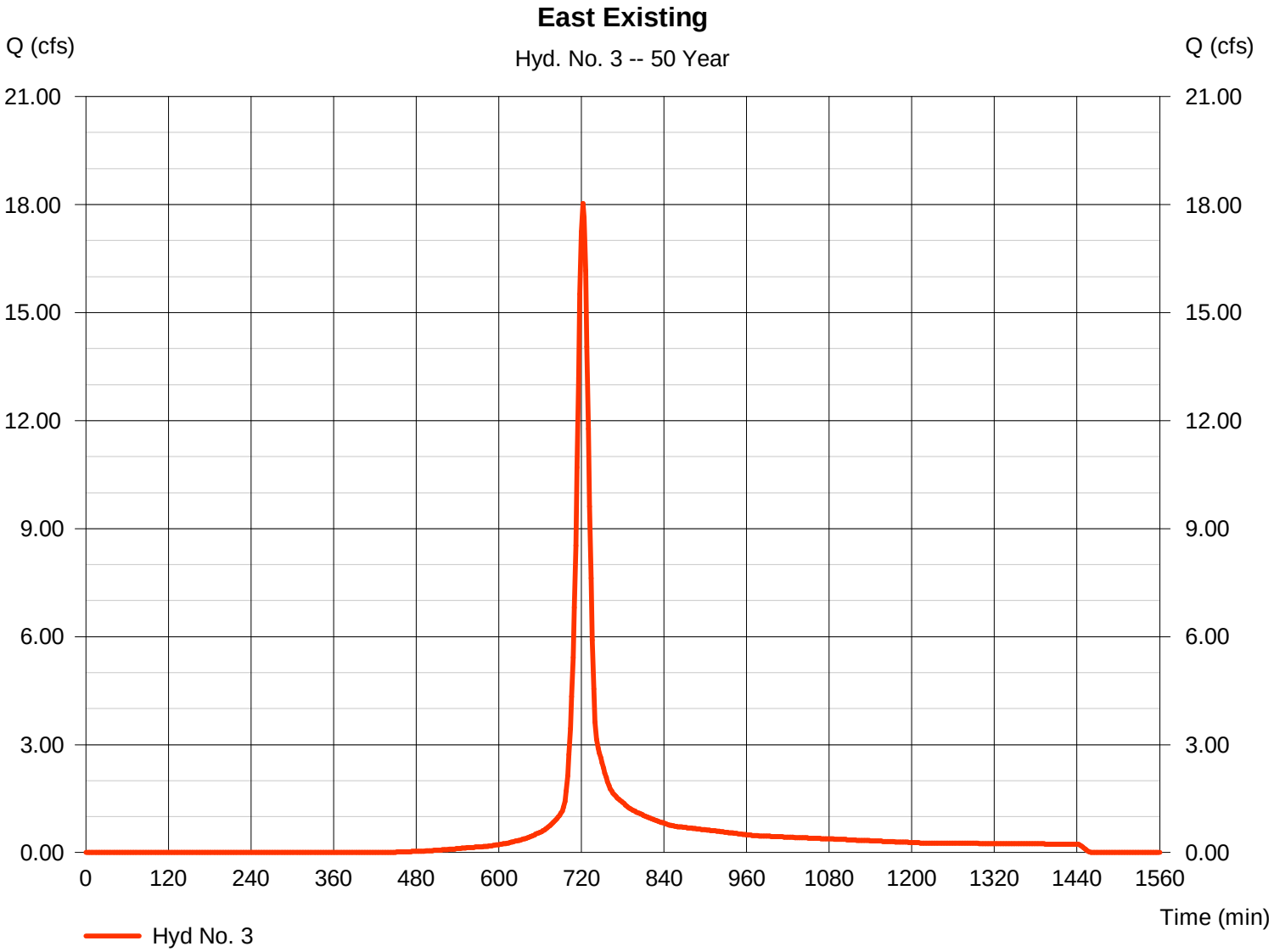


Hydrograph Report

Hyd. No. 3

East Existing

Hydrograph type	=	SCS Runoff	Peak discharge	=	18.04 cfs
Storm frequency	=	50 yrs	Time to peak	=	722 min
Time interval	=	2 min	Hyd. volume	=	50,630 cuft
Drainage area	=	3.600 ac	Curve number	=	75
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	USER	Time of conc. (Tc)	=	15.00 min
Total precip.	=	6.80 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

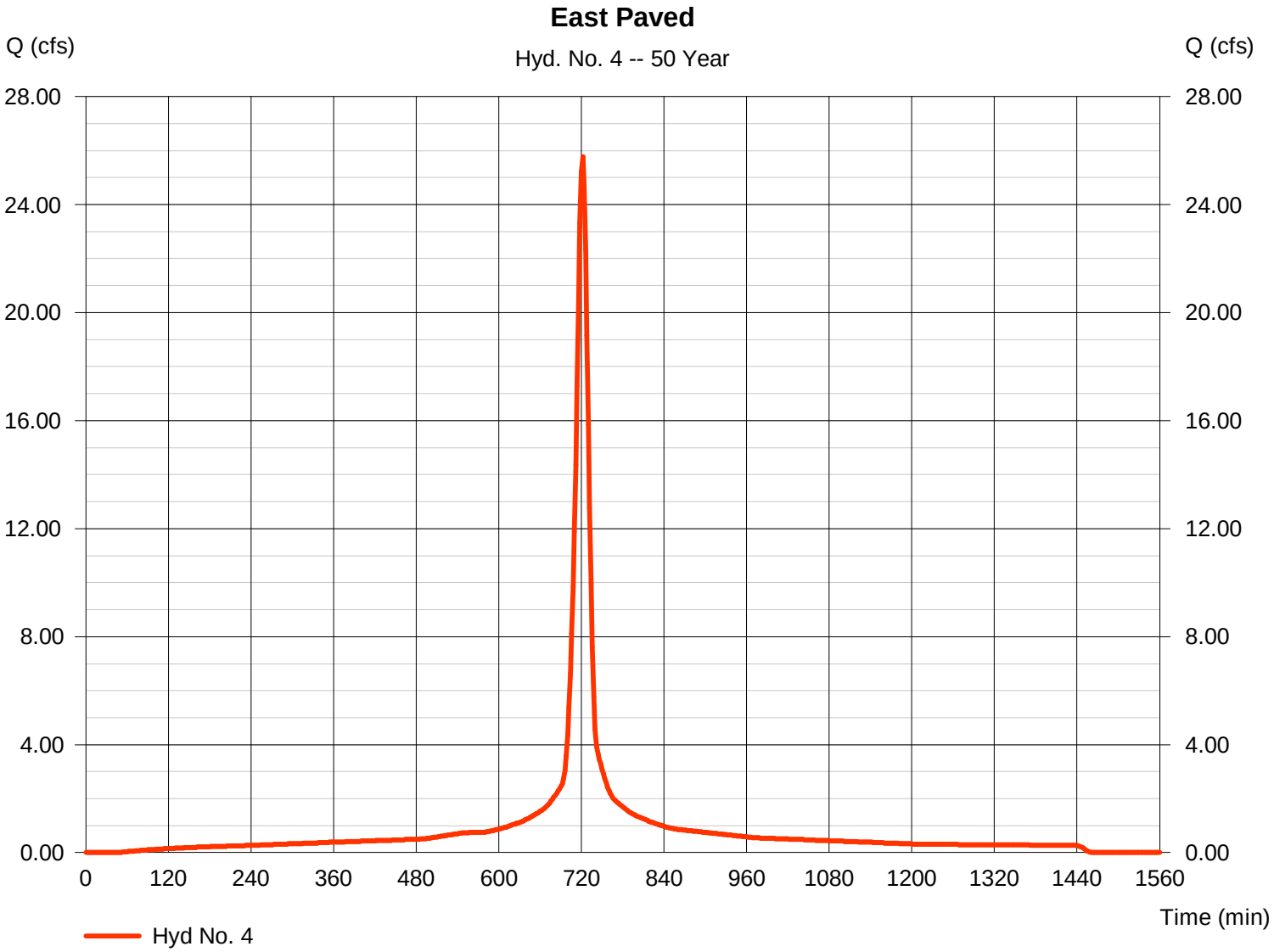


Hydrograph Report

Hyd. No. 4

East Paved

Hydrograph type	=	SCS Runoff	Peak discharge	=	25.78 cfs
Storm frequency	=	50 yrs	Time to peak	=	722 min
Time interval	=	2 min	Hyd. volume	=	83,597 cuft
Drainage area	=	3.600 ac	Curve number	=	98
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	USER	Time of conc. (Tc)	=	15.00 min
Total precip.	=	6.80 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



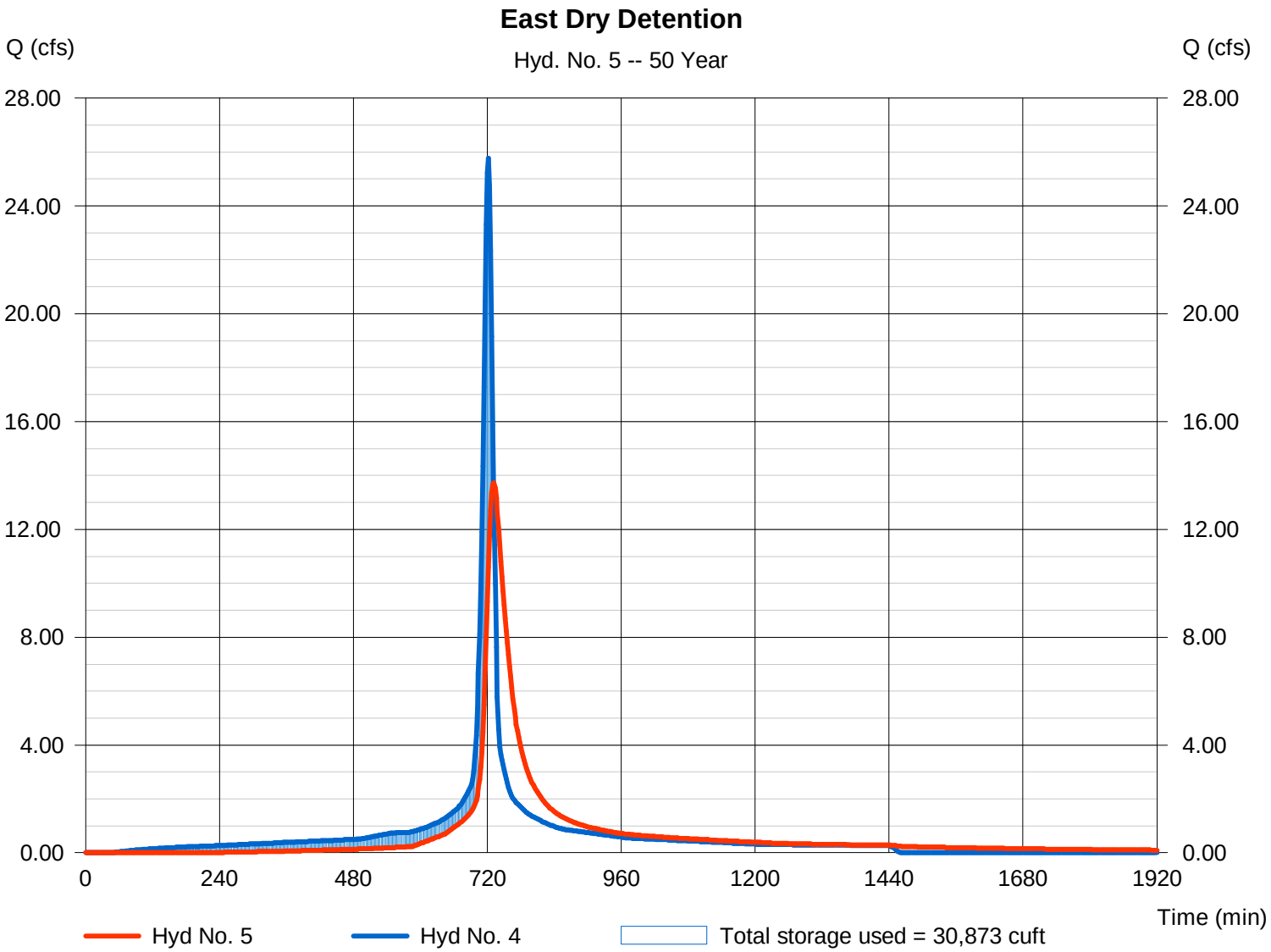
Hydrograph Report

Hyd. No. 5

East Dry Detention

Hydrograph type	=	Reservoir	Peak discharge	=	13.72 cfs
Storm frequency	=	50 yrs	Time to peak	=	732 min
Time interval	=	2 min	Hyd. volume	=	83,171 cuft
Inflow hyd. No.	=	4 - East Paved	Max. Elevation	=	1321.38 ft
Reservoir name	=	East Dry Detention	Max. Storage	=	30,873 cuft

Storage Indication method used.



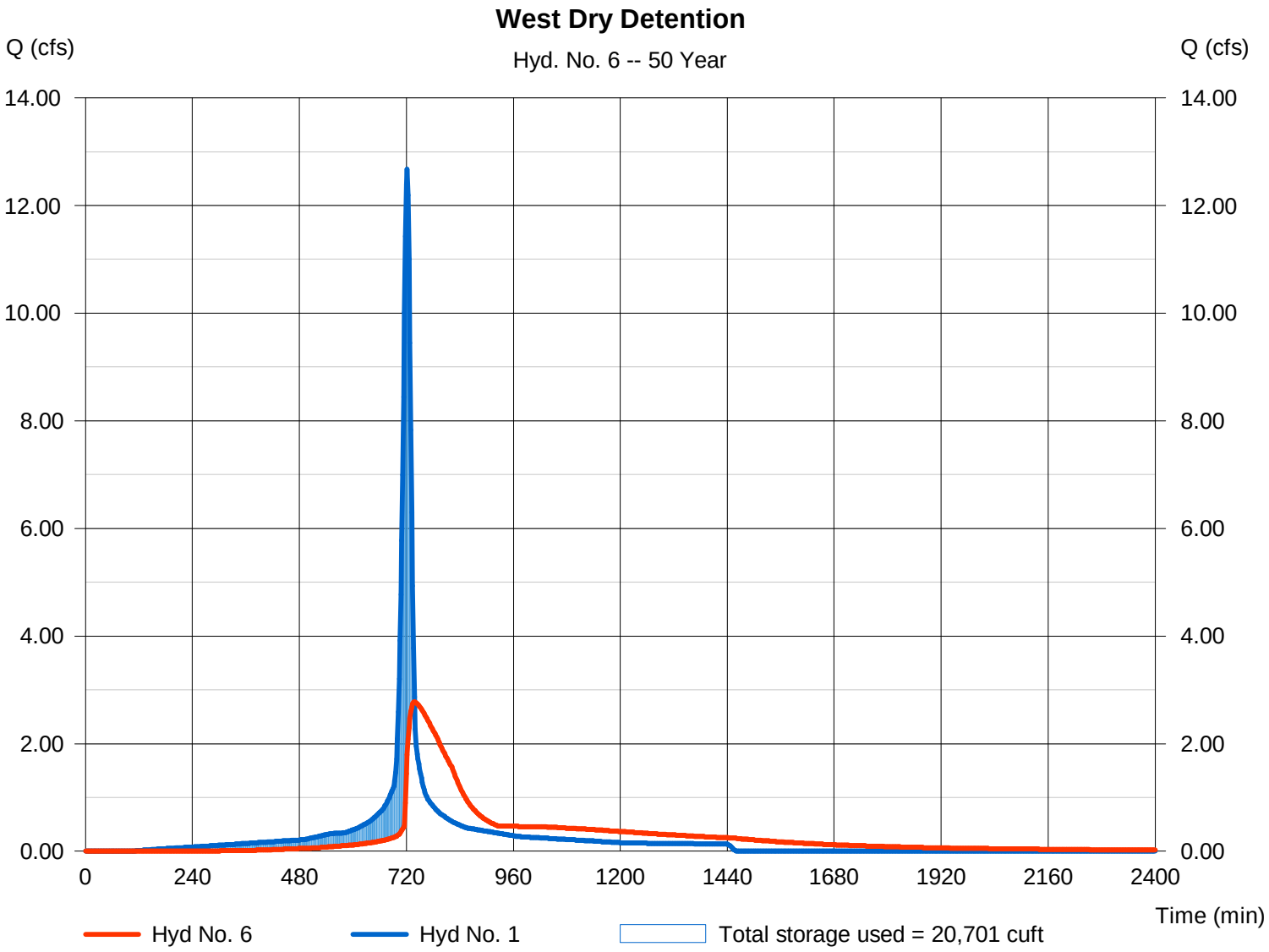
Hydrograph Report

Hyd. No. 6

West Dry Detention

Hydrograph type	=	Reservoir	Peak discharge	=	2.777 cfs
Storm frequency	=	50 yrs	Time to peak	=	738 min
Time interval	=	2 min	Hyd. volume	=	39,475 cuft
Inflow hyd. No.	=	1 - West Paved	Max. Elevation	=	1321.34 ft
Reservoir name	=	West Dry Basin	Max. Storage	=	20,701 cuft

Storage Indication method used.



Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066

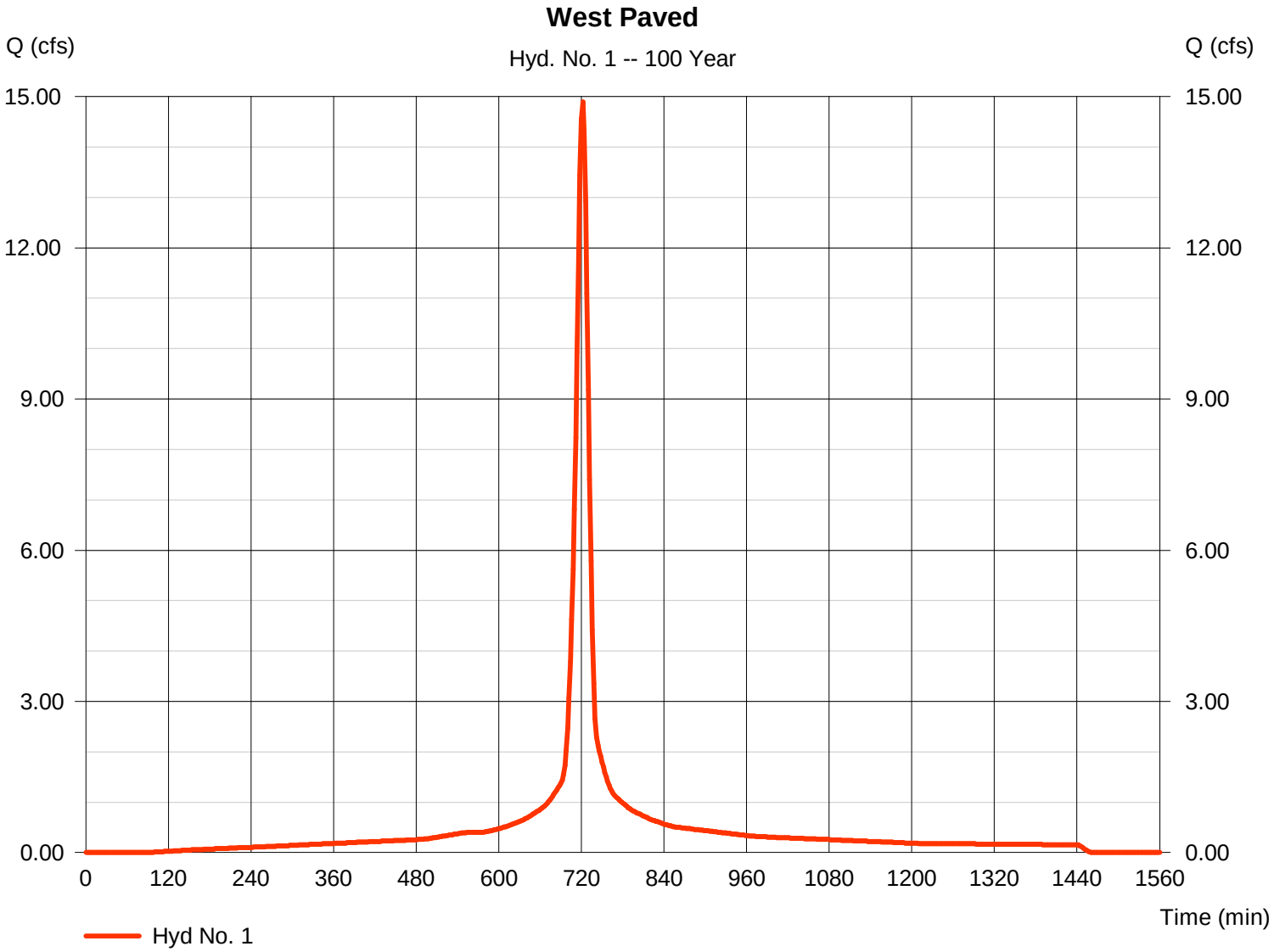
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph description
1	SCS Runoff	14.90	2	722	46,834	------	------	------	West Paved
2	SCS Runoff	10.67	2	722	30,063	------	------	------	West Existing
3	SCS Runoff	22.59	2	722	63,663	------	------	------	East Existing
4	SCS Runoff	30.16	2	722	98,238	------	------	------	East Paved
5	Reservoir	16.15	2	732	97,811	4	1321.49	34,292	East Dry Detention
6	Reservoir	3.262	2	738	46,767	1	1321.48	24,117	West Dry Detention

Hydrograph Report

Hyd. No. 1

West Paved

Hydrograph type	=	SCS Runoff	Peak discharge	=	14.90 cfs
Storm frequency	=	100 yrs	Time to peak	=	722 min
Time interval	=	2 min	Hyd. volume	=	46,834 cuft
Drainage area	=	1.800 ac	Curve number	=	95
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	USER	Time of conc. (Tc)	=	15.00 min
Total precip.	=	7.95 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

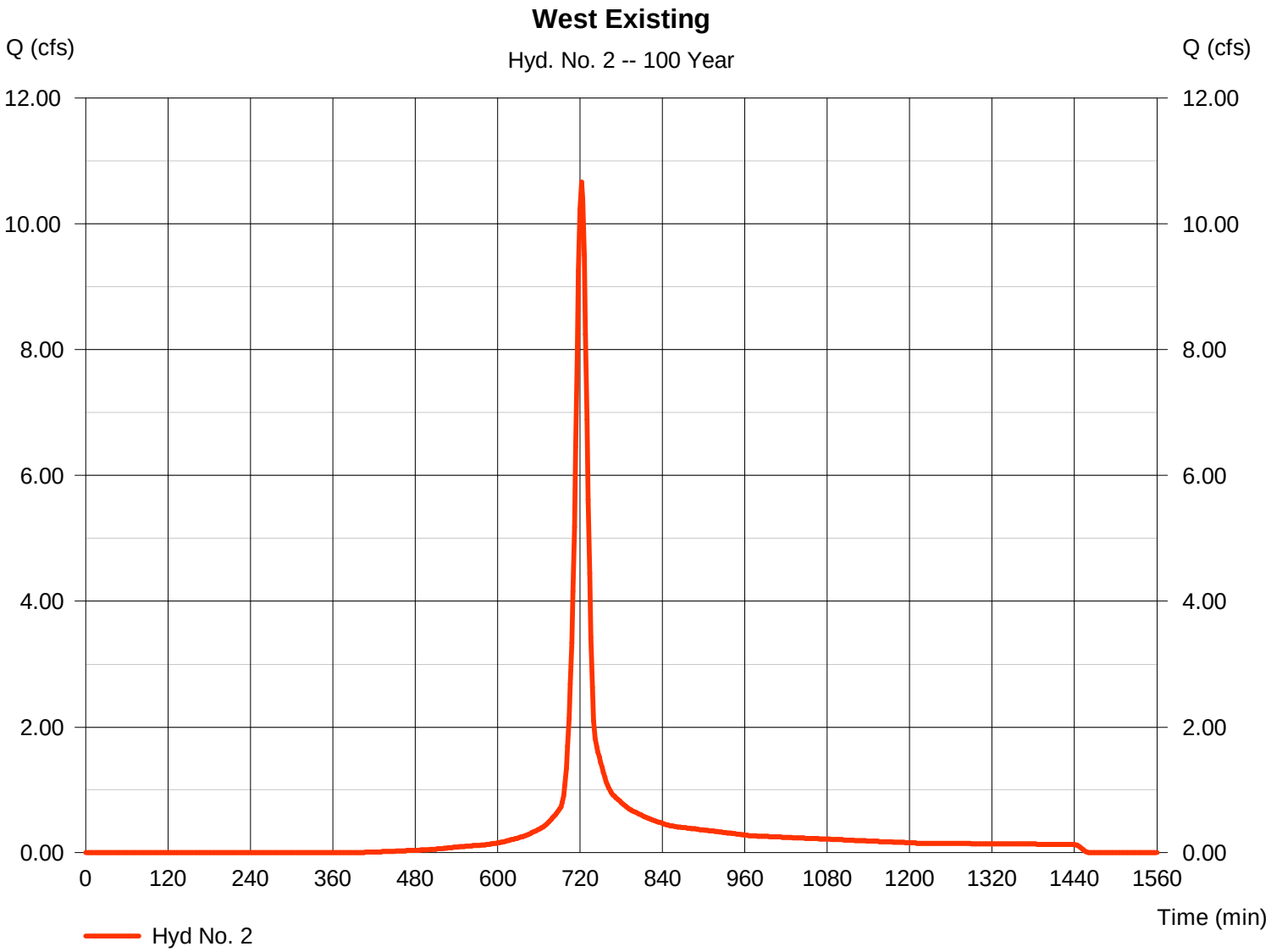


Hydrograph Report

Hyd. No. 2

West Existing

Hydrograph type	=	SCS Runoff	Peak discharge	=	10.67 cfs
Storm frequency	=	100 yrs	Time to peak	=	722 min
Time interval	=	2 min	Hyd. volume	=	30,063 cuft
Drainage area	=	1.700 ac	Curve number	=	75
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	USER	Time of conc. (Tc)	=	15.00 min
Total precip.	=	7.95 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

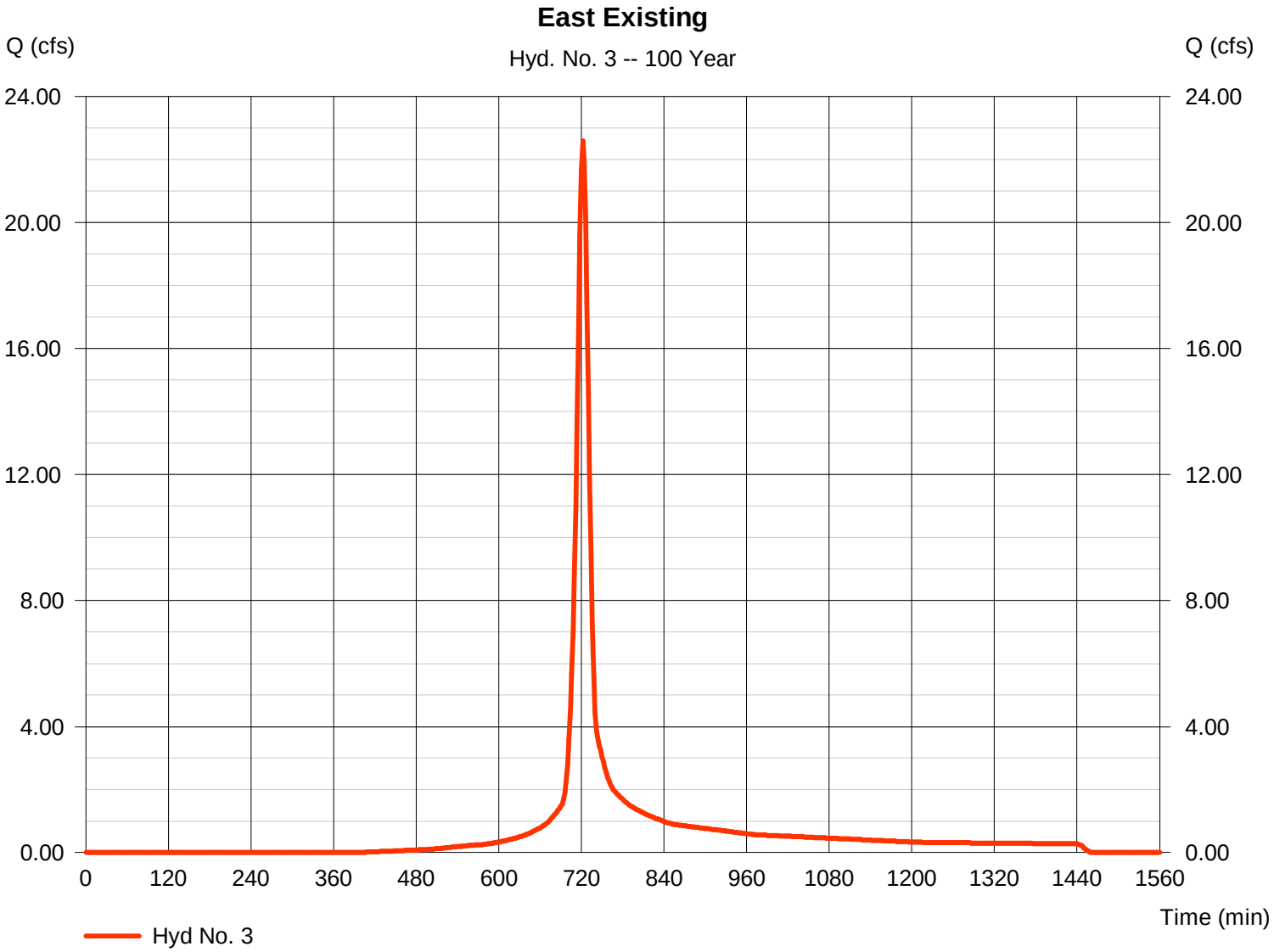


Hydrograph Report

Hyd. No. 3

East Existing

Hydrograph type	=	SCS Runoff	Peak discharge	=	22.59 cfs
Storm frequency	=	100 yrs	Time to peak	=	722 min
Time interval	=	2 min	Hyd. volume	=	63,663 cuft
Drainage area	=	3.600 ac	Curve number	=	75
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	USER	Time of conc. (Tc)	=	15.00 min
Total precip.	=	7.95 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

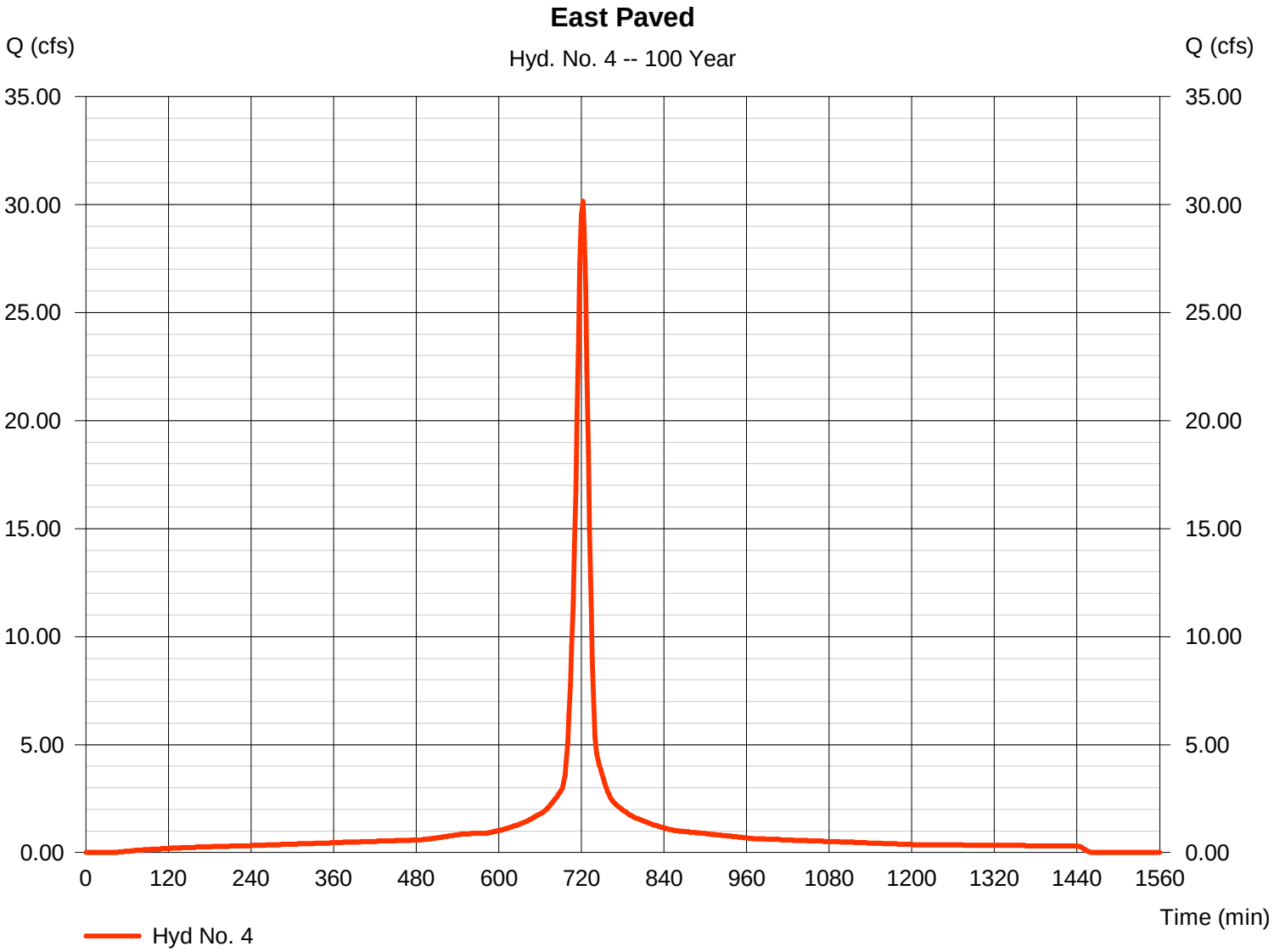


Hydrograph Report

Hyd. No. 4

East Paved

Hydrograph type	=	SCS Runoff	Peak discharge	=	30.16 cfs
Storm frequency	=	100 yrs	Time to peak	=	722 min
Time interval	=	2 min	Hyd. volume	=	98,238 cuft
Drainage area	=	3.600 ac	Curve number	=	98
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	USER	Time of conc. (Tc)	=	15.00 min
Total precip.	=	7.95 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



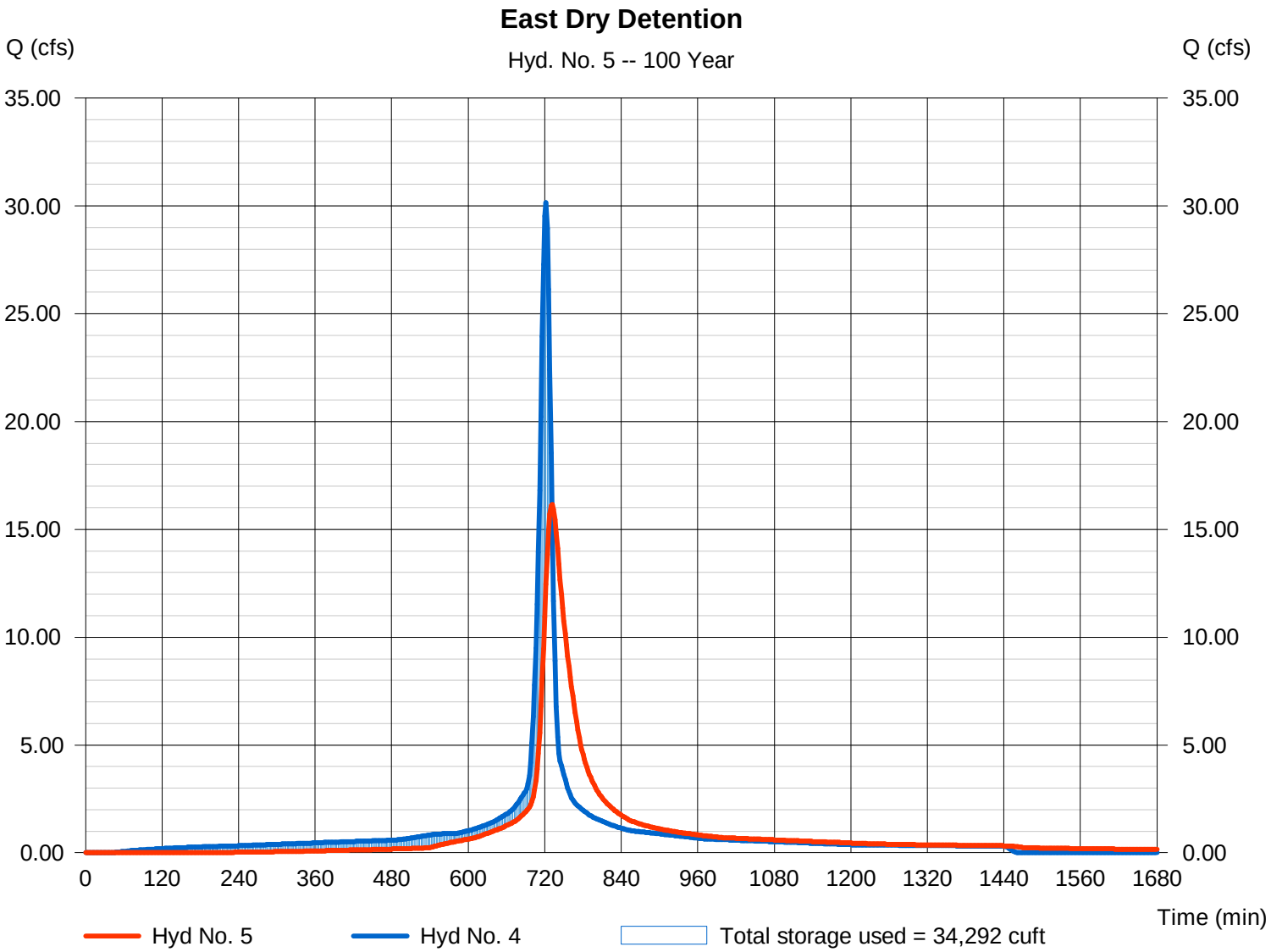
Hydrograph Report

Hyd. No. 5

East Dry Detention

Hydrograph type	=	Reservoir	Peak discharge	=	16.15 cfs
Storm frequency	=	100 yrs	Time to peak	=	732 min
Time interval	=	2 min	Hyd. volume	=	97,811 cuft
Inflow hyd. No.	=	4 - East Paved	Max. Elevation	=	1321.49 ft
Reservoir name	=	East Dry Detention	Max. Storage	=	34,292 cuft

Storage Indication method used.



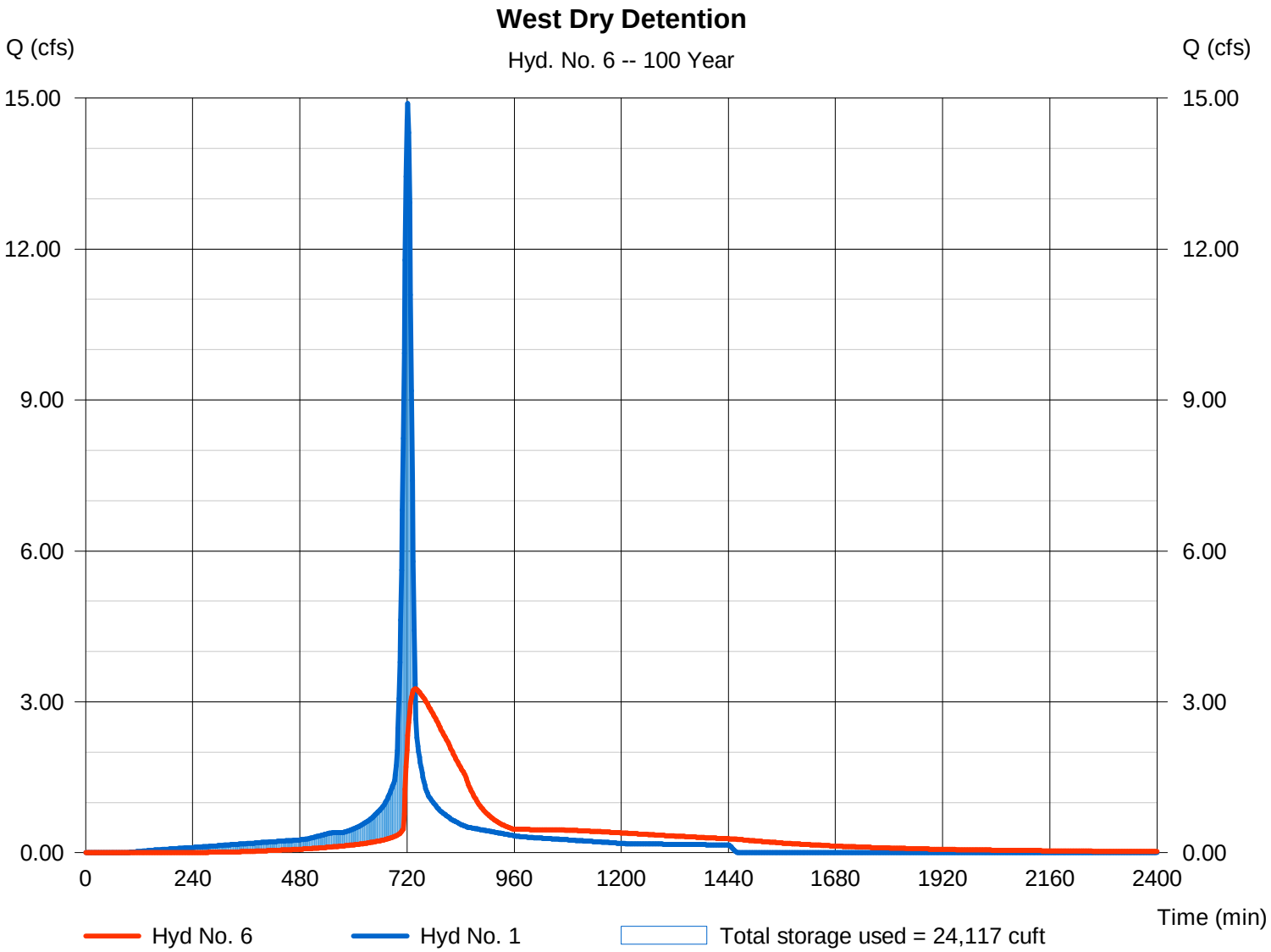
Hydrograph Report

Hyd. No. 6

West Dry Detention

Hydrograph type	=	Reservoir	Peak discharge	=	3.262 cfs
Storm frequency	=	100 yrs	Time to peak	=	738 min
Time interval	=	2 min	Hyd. volume	=	46,767 cuft
Inflow hyd. No.	=	1 - West Paved	Max. Elevation	=	1321.48 ft
Reservoir name	=	West Dry Basin	Max. Storage	=	24,117 cuft

Storage Indication method used.



Hydraflow Rainfall Report

Return Period (Yrs)	Intensity-Duration-Frequency Equation Coefficients (FHA)			
	B	D	E	(N/A)
1	0.0000	0.0000	0.0000	--------
2	69.8703	13.1000	0.8658	--------
3	0.0000	0.0000	0.0000	--------
5	79.2597	14.6000	0.8369	--------
10	88.2351	15.5000	0.8279	--------
25	102.6072	16.5000	0.8217	--------
50	114.8193	17.2000	0.8199	--------
100	127.1596	17.8000	0.8186	--------

File name: wich_IDF.IDF

Intensity = B / (Tc + D)^E

Return Period (Yrs)	Intensity Values (in/hr)											
	5 min	10	15	20	25	30	35	40	45	50	55	60
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	5.69	4.61	3.89	3.38	2.99	2.69	2.44	2.24	2.07	1.93	1.81	1.70
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	6.57	5.43	4.65	4.08	3.65	3.30	3.02	2.79	2.59	2.42	2.27	2.15
10	7.24	6.04	5.21	4.59	4.12	3.74	3.43	3.17	2.95	2.77	2.60	2.46
25	8.25	6.95	6.03	5.34	4.80	4.38	4.02	3.73	3.48	3.26	3.07	2.91
50	9.04	7.65	6.66	5.92	5.34	4.87	4.49	4.16	3.88	3.65	3.44	3.25
100	9.83	8.36	7.30	6.50	5.87	5.36	4.94	4.59	4.29	4.03	3.80	3.60

Tc = time in minutes. Values may exceed 60.

Precip. file name: Sample.pcp

Storm Distribution	Rainfall Precipitation Table (in)							
	1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr
SCS 24-hour	0.00	2.20	0.00	3.30	4.25	5.77	6.80	7.95
SCS 6-Hr	0.00	1.80	0.00	0.00	2.60	0.00	0.00	4.00
Huff-1st	0.00	1.55	0.00	2.75	4.00	5.38	6.50	8.00
Huff-2nd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-3rd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-4th	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-Indy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Custom	0.00	1.75	0.00	2.80	3.90	5.25	6.00	7.10

Hydraflow Table of Contents