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	5.810	1	761	48,750	------	------	------	Existing Area 1
2	SCS Runoff	7.712	2	768	66,899	------	------	------	Proposed Area 1
3	Reservoir	7.693	2	770	66,898	2	206.03	1,484	forebay
4	Reservoir	4.046	2	818	66,836	3	207.77	29,364	Water Quality Basin
5	SCS Runoff	4.716	1	767	43,168	------	------	------	Existing Area 2
6	SCS Runoff	2.751	1	767	25,181	------	------	------	Proposed Area 2
8	Rational	7.855	1	7	3,299	------	------	------	Runoff to Swale

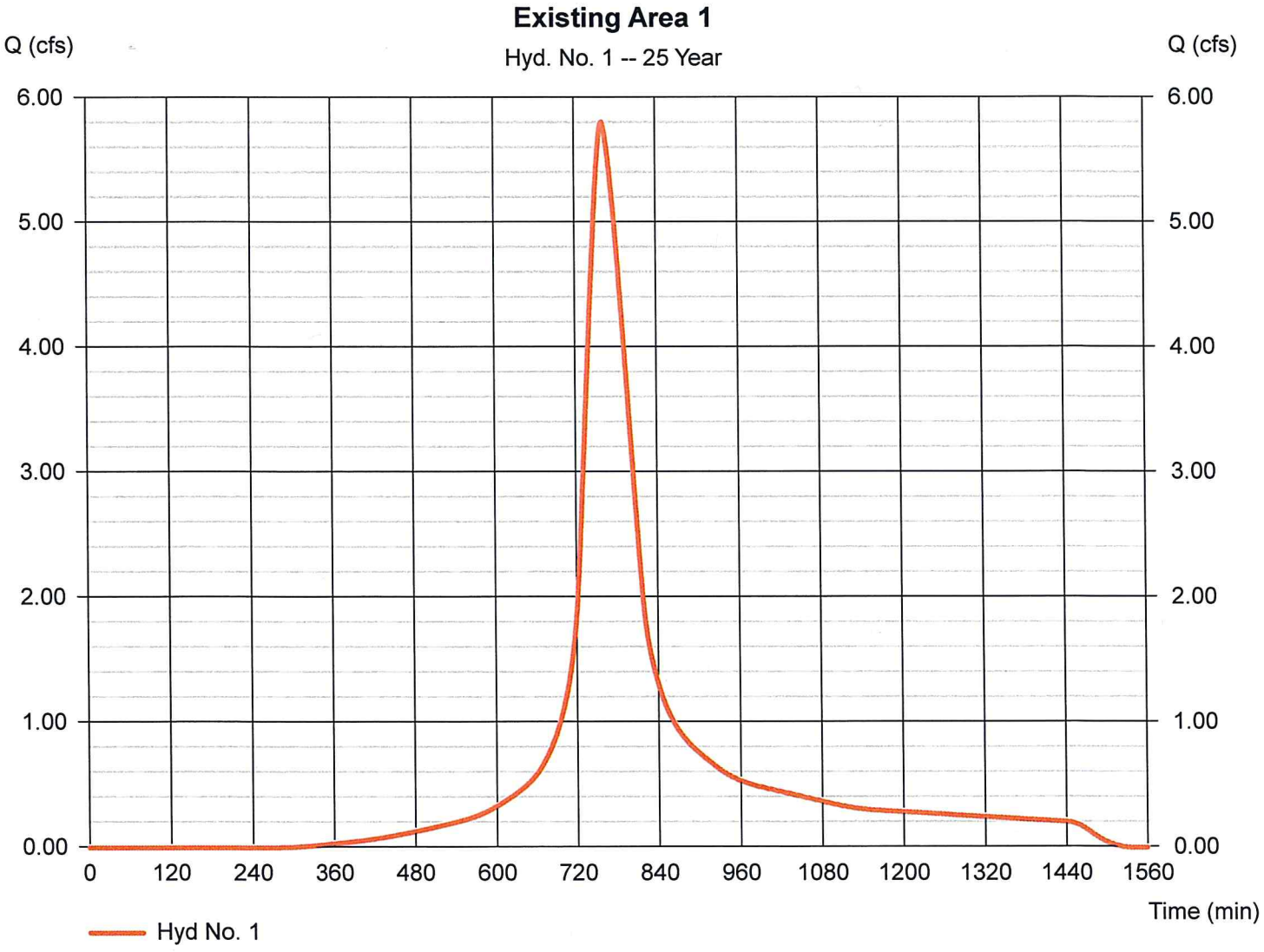
Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066 Monday, Jun 10, 2024

Hyd. No. 1

Existing Area 1

Hydrograph type	= SCS Runoff	Peak discharge	= 5.810 cfs
Storm frequency	= 25 yrs	Time to peak	= 761 min
Time interval	= 1 min	Hyd. volume	= 48,750 cuft
Drainage area	= 2.980 ac	Curve number	= 85
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 62.20 min
Total precip.	= 6.20 in	Distribution	= Custom
Storm duration	= NOAA Type D Distribution 1 min.cds	Shape factor	= 484

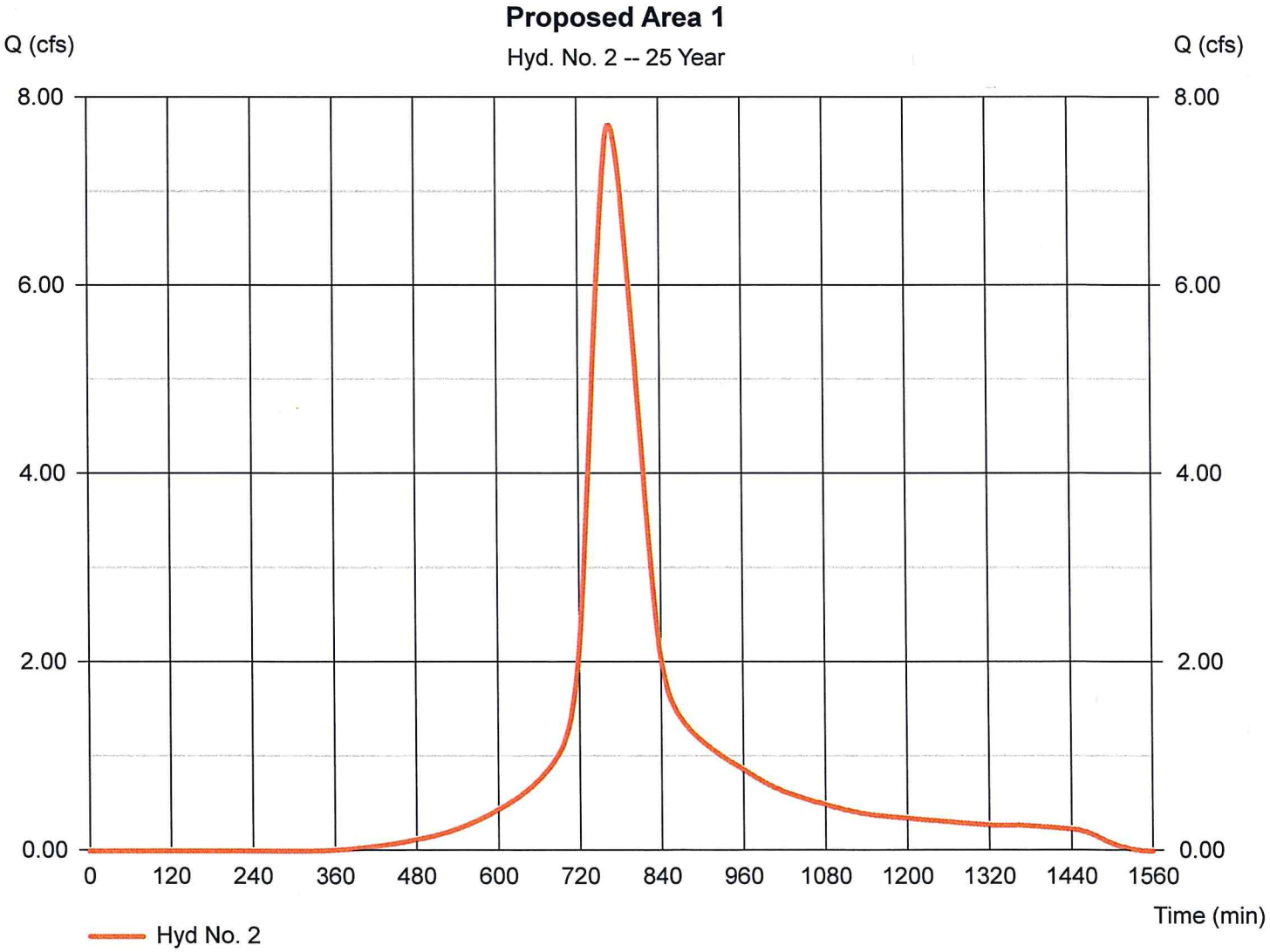


Hydrograph Report

Hyd. No. 2

Proposed Area 1

Hydrograph type	= SCS Runoff	Peak discharge	= 7.712 cfs
Storm frequency	= 25 yrs	Time to peak	= 768 min
Time interval	= 2 min	Hyd. volume	= 66,899 cuft
Drainage area	= 4.080 ac	Curve number	= 85
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 72.50 min
Total precip.	= 6.20 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484



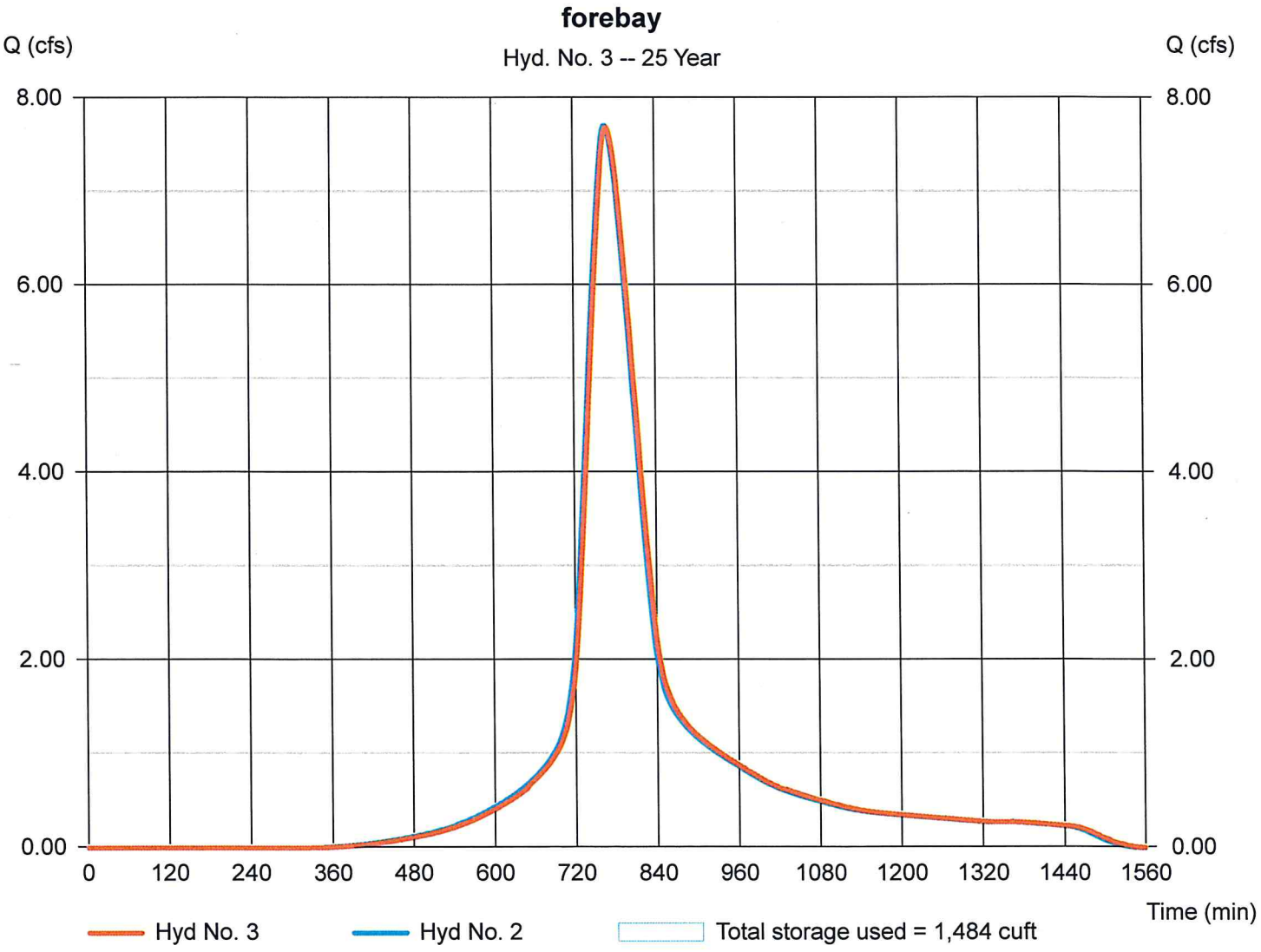
Hydrograph Report

Hyd. No. 3

forebay

Hydrograph type	= Reservoir	Peak discharge	= 7.693 cfs
Storm frequency	= 25 yrs	Time to peak	= 770 min
Time interval	= 2 min	Hyd. volume	= 66,898 cuft
Inflow hyd. No.	= 2 - Proposed Area 1	Max. Elevation	= 206.03 ft
Reservoir name	= forbay	Max. Storage	= 1,484 cuft

Storage Indication method used.



Hydrograph Report

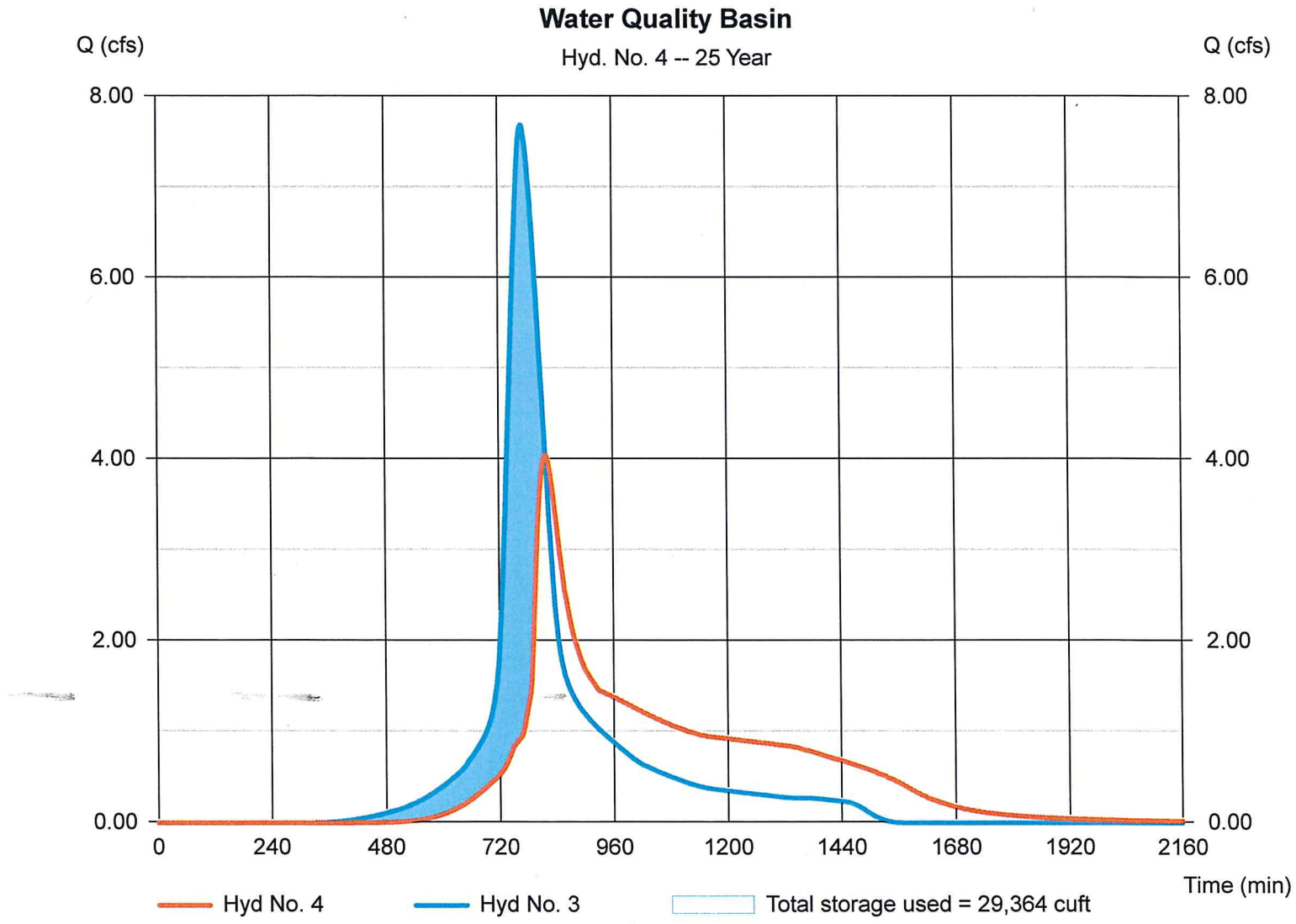
Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066 Monday, Jun 10, 2024

Hyd. No. 4

Water Quality Basin

Hydrograph type	= Reservoir	Peak discharge	= 4.046 cfs
Storm frequency	= 25 yrs	Time to peak	= 818 min
Time interval	= 2 min	Hyd. volume	= 66,836 cuft
Inflow hyd. No.	= 3 - forebay	Max. Elevation	= 207.77 ft
Reservoir name	= Pond 1	Max. Storage	= 29,364 cuft

Storage Indication method used.

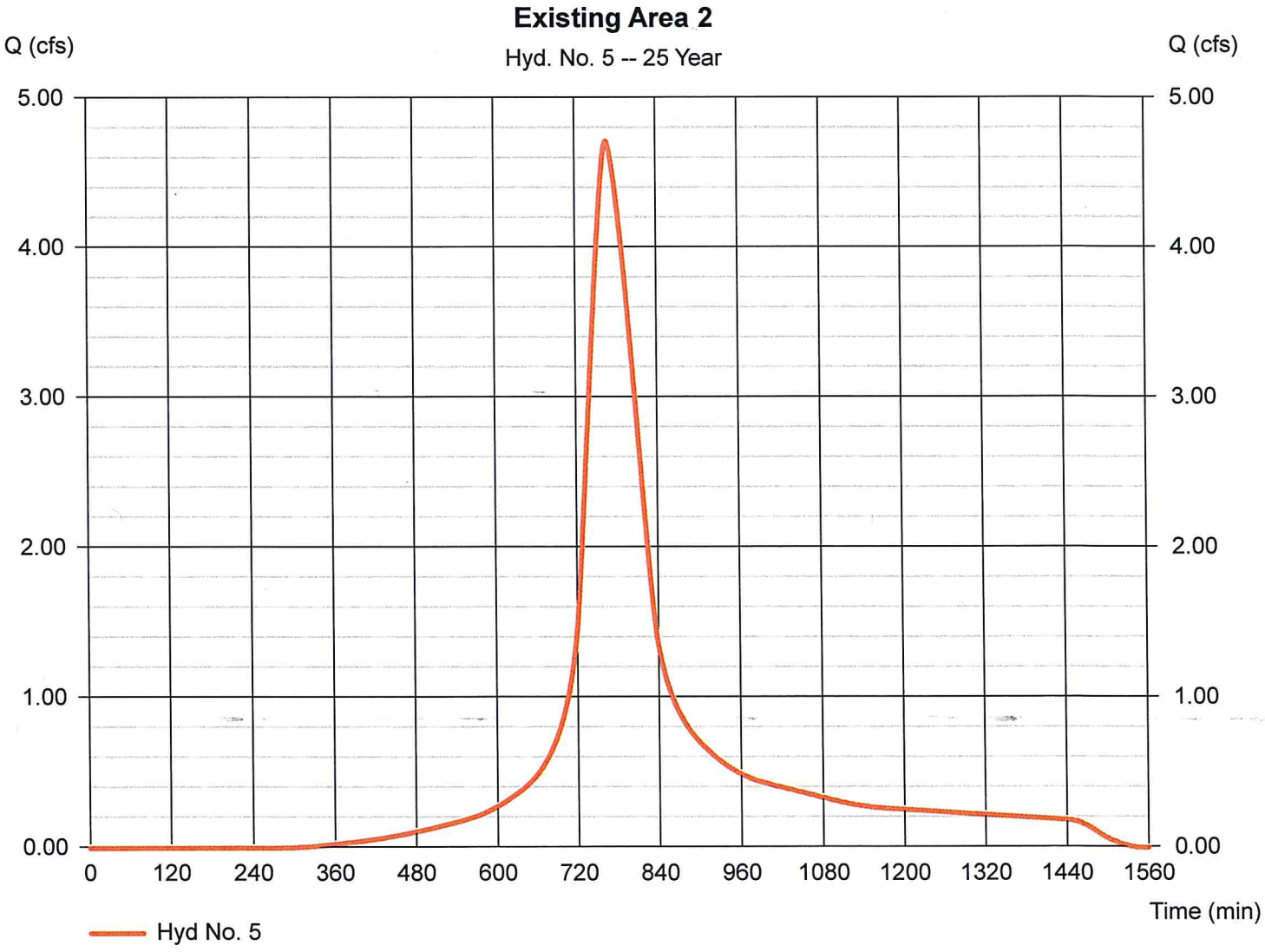


Hydrograph Report

Hyd. No. 5

Existing Area 2

Hydrograph type	= SCS Runoff	Peak discharge	= 4.716 cfs
Storm frequency	= 25 yrs	Time to peak	= 767 min
Time interval	= 1 min	Hyd. volume	= 43,168 cuft
Drainage area	= 2.640 ac	Curve number	= 85
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 72.50 min
Total precip.	= 6.20 in	Distribution	= Custom
Storm duration	= NOAA Type D Distribution 1 min.cds	Shape factor	= 484

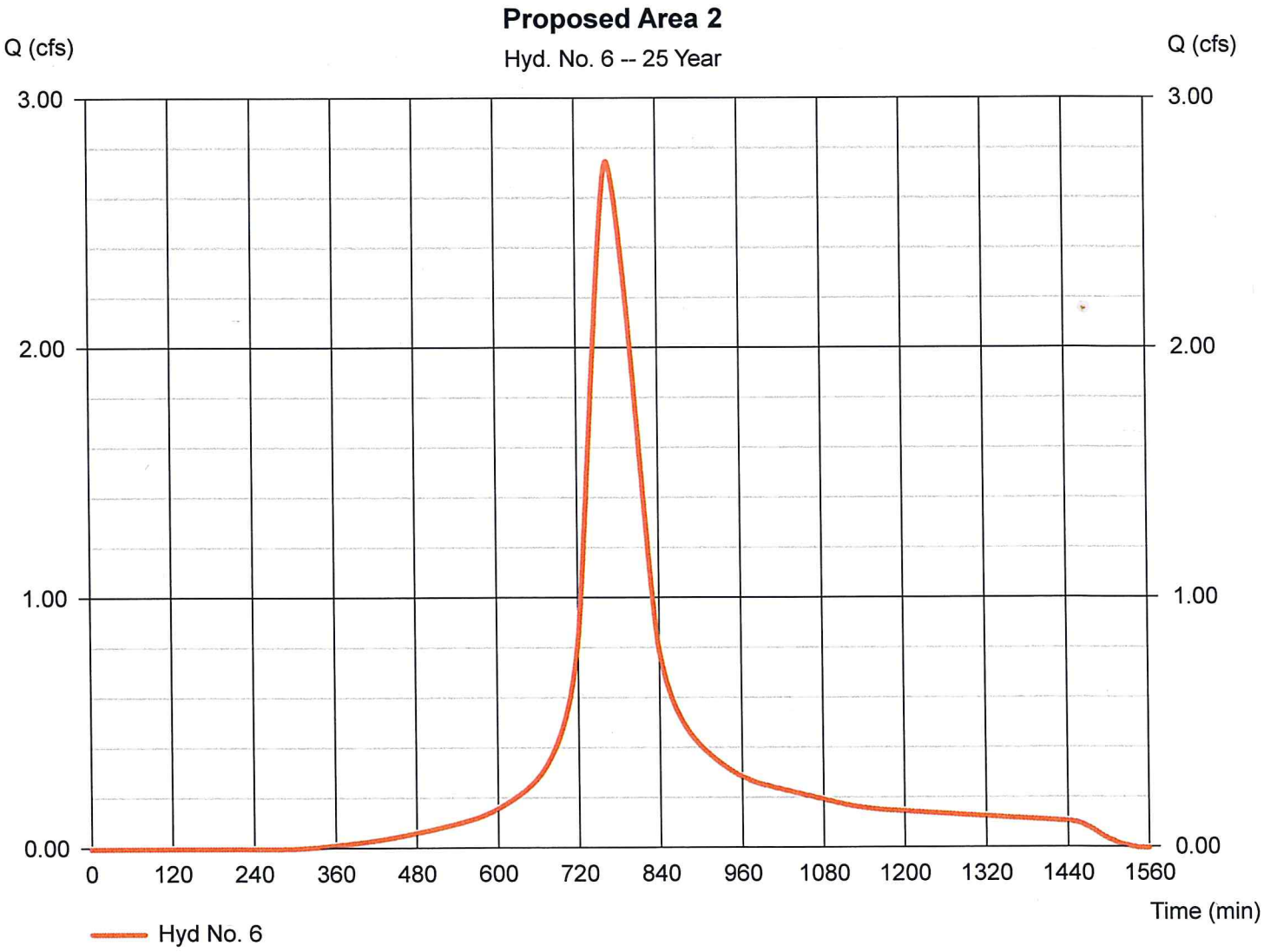


Hydrograph Report

Hyd. No. 6

Proposed Area 2

Hydrograph type	= SCS Runoff	Peak discharge	= 2.751 cfs
Storm frequency	= 25 yrs	Time to peak	= 767 min
Time interval	= 1 min	Hyd. volume	= 25,181 cuft
Drainage area	= 1.540 ac	Curve number	= 85
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 72.50 min
Total precip.	= 6.20 in	Distribution	= Custom
Storm duration	= NOAA Type D Distribution 1 min.cds	Shape factor	= 484

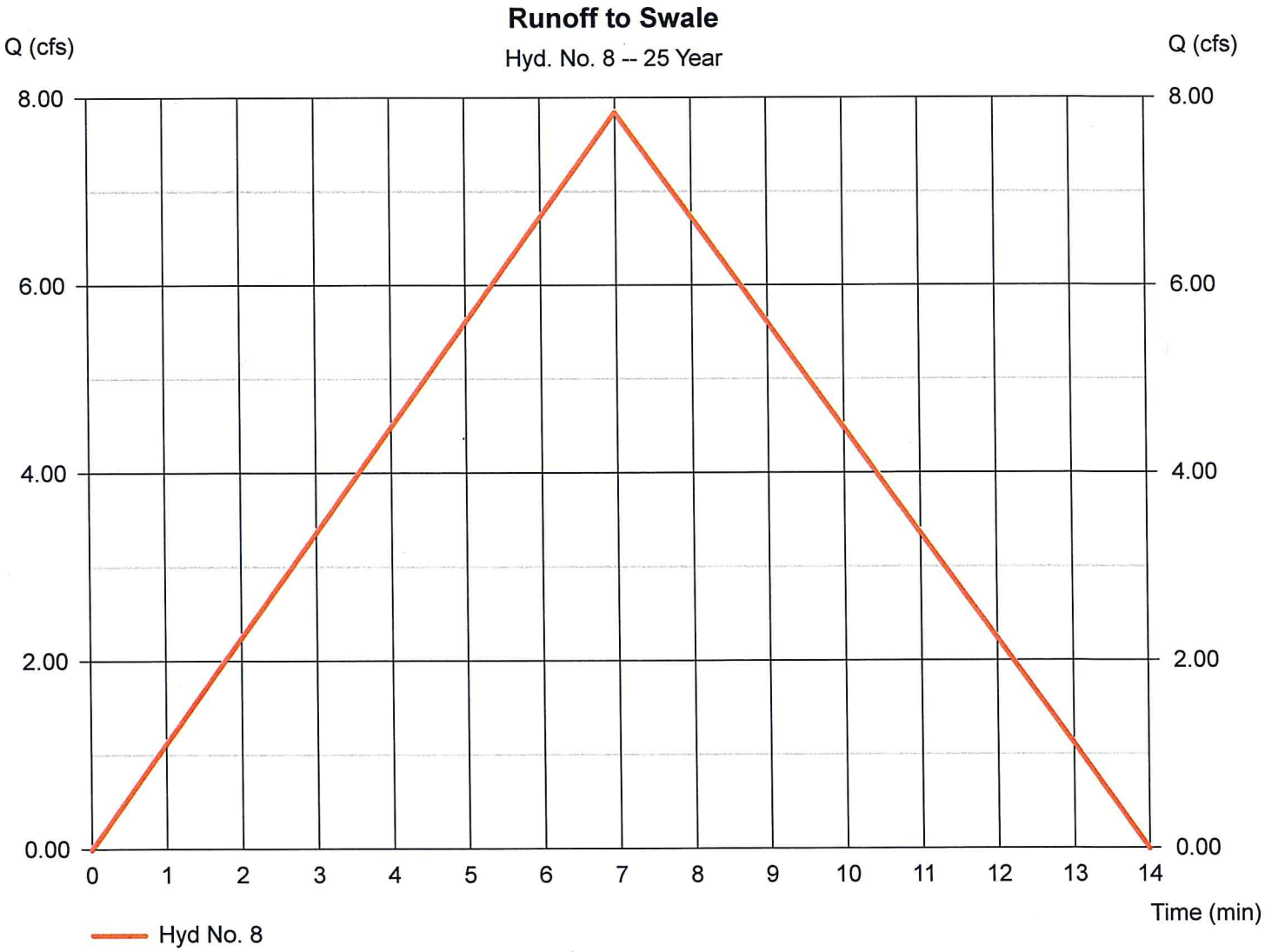


Hydrograph Report

Hyd. No. 8

Runoff to Swale

Hydrograph type	= Rational	Peak discharge	= 7.855 cfs
Storm frequency	= 25 yrs	Time to peak	= 7 min
Time interval	= 1 min	Hyd. volume	= 3,299 cuft
Drainage area	= 1.300 ac	Runoff coeff.	= 0.8
Intensity	= 7.553 in/hr	Tc by User	= 7.00 min
IDF Curve	= GSD-60 NOAA.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Summary Report

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

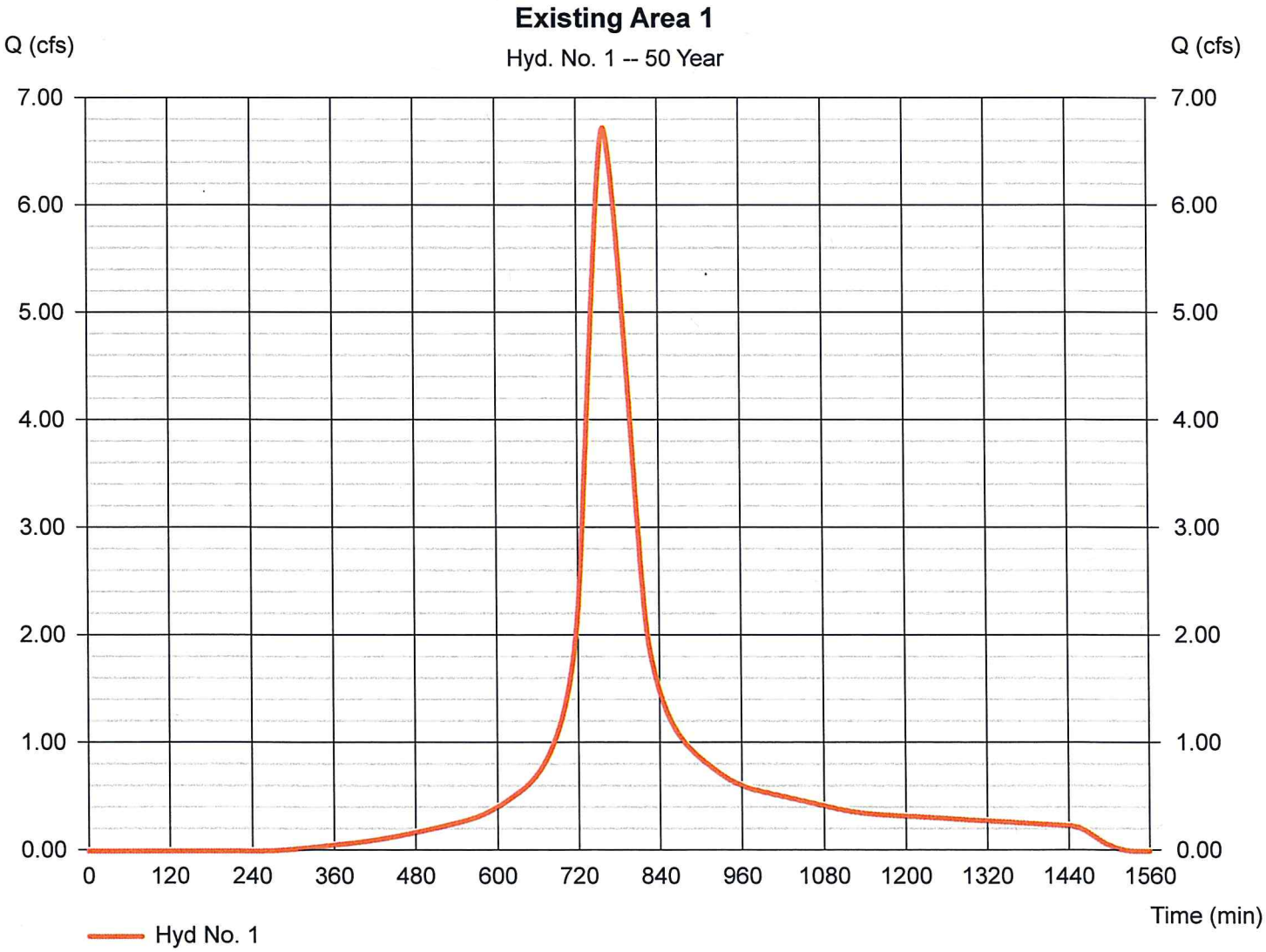
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph description
1	SCS Runoff	6.732	1	761	56,804	------	------	------	Existing Area 1
2	SCS Runoff	8.944	2	766	77,950	------	------	------	Proposed Area 1
3	Reservoir	8.919	2	770	77,950	2	206.08	1,639	forebay
4	Reservoir	5.663	2	810	77,887	3	207.88	31,213	Water Quality Basin
5	SCS Runoff	5.467	1	767	50,299	------	------	------	Existing Area 2
6	SCS Runoff	3.189	1	767	29,341	------	------	------	Proposed Area 2
8	Rational	8.844	1	7	3,715	------	------	------	Runoff to Swale

Hydrograph Report

Hyd. No. 1

Existing Area 1

Hydrograph type	= SCS Runoff	Peak discharge	= 6.732 cfs
Storm frequency	= 50 yrs	Time to peak	= 761 min
Time interval	= 1 min	Hyd. volume	= 56,804 cuft
Drainage area	= 2.980 ac	Curve number	= 85
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 62.20 min
Total precip.	= 6.98 in	Distribution	= Custom
Storm duration	= NOAA Type D Distribution 1 min.cds	Shape factor	= 484

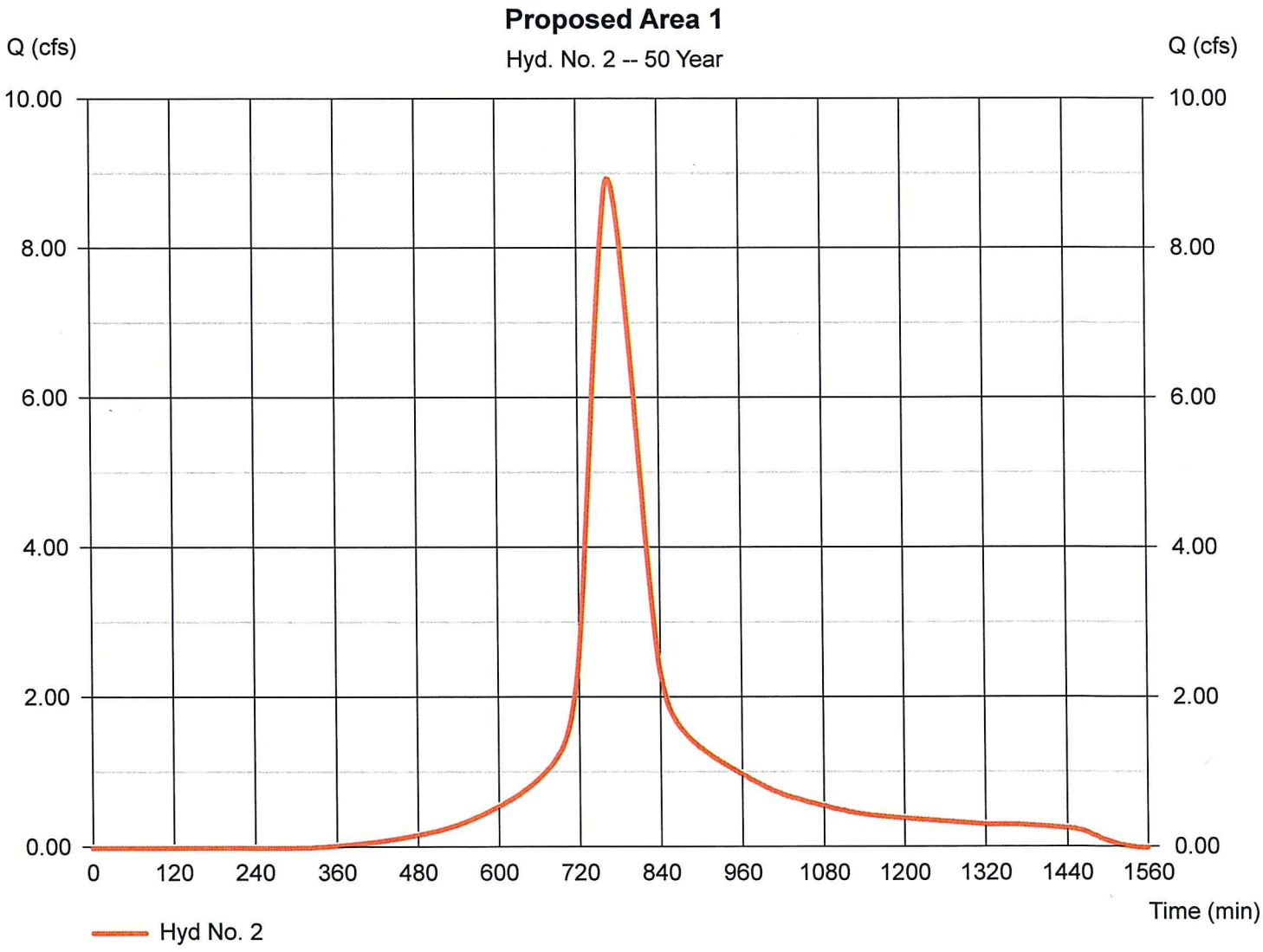


Hydrograph Report

Hyd. No. 2

Proposed Area 1

Hydrograph type	= SCS Runoff	Peak discharge	= 8.944 cfs
Storm frequency	= 50 yrs	Time to peak	= 766 min
Time interval	= 2 min	Hyd. volume	= 77,950 cuft
Drainage area	= 4.080 ac	Curve number	= 85
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 72.50 min
Total precip.	= 6.98 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Report

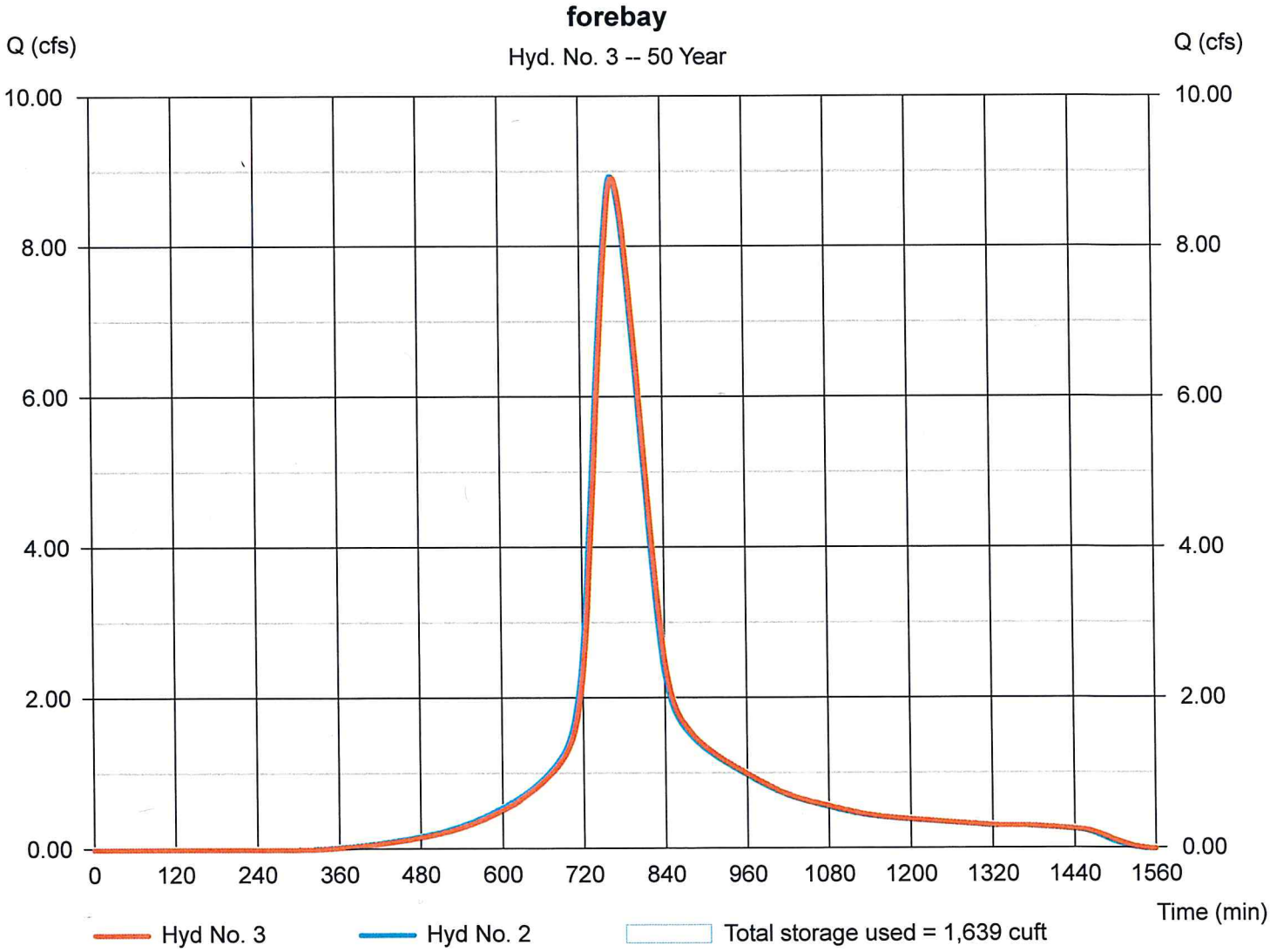
Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066 — Monday, Jun 10, 2024

Hyd. No. 3

forebay

Hydrograph type	= Reservoir	Peak discharge	= 8.919 cfs
Storm frequency	= 50 yrs	Time to peak	= 770 min
Time interval	= 2 min	Hyd. volume	= 77,950 cuft
Inflow hyd. No.	= 2 - Proposed Area 1	Max. Elevation	= 206.08 ft
Reservoir name	= forbay	Max. Storage	= 1,639 cuft

Storage Indication method used.



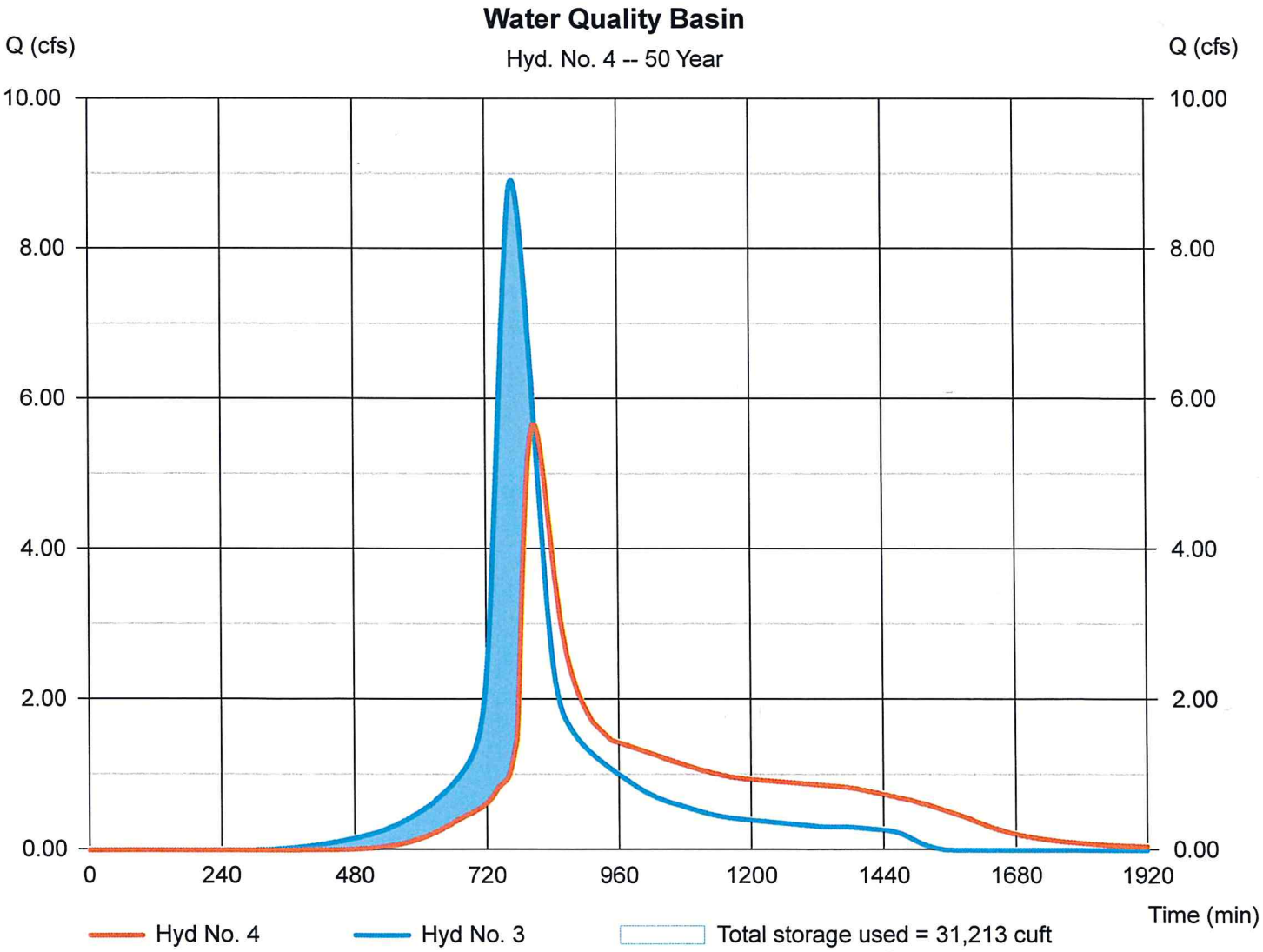
Hydrograph Report

Hyd. No. 4

Water Quality Basin

Hydrograph type	= Reservoir	Peak discharge	= 5.663 cfs
Storm frequency	= 50 yrs	Time to peak	= 810 min
Time interval	= 2 min	Hyd. volume	= 77,887 cuft
Inflow hyd. No.	= 3 - forebay	Max. Elevation	= 207.88 ft
Reservoir name	= Pond 1	Max. Storage	= 31,213 cuft

Storage Indication method used.

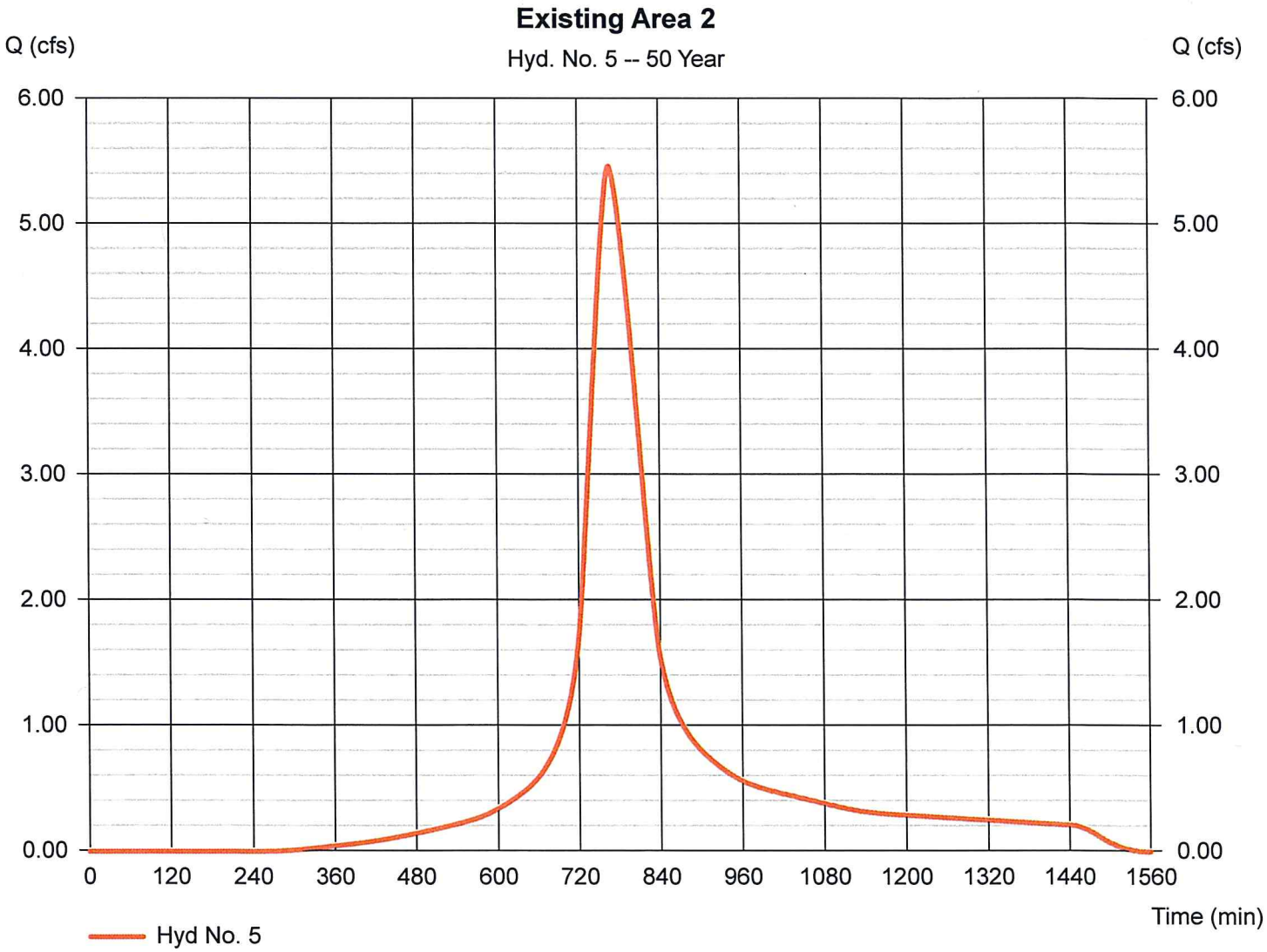


Hydrograph Report

Hyd. No. 5

Existing Area 2

Hydrograph type	= SCS Runoff	Peak discharge	= 5.467 cfs
Storm frequency	= 50 yrs	Time to peak	= 767 min
Time interval	= 1 min	Hyd. volume	= 50,299 cuft
Drainage area	= 2.640 ac	Curve number	= 85
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 72.50 min
Total precip.	= 6.98 in	Distribution	= Custom
Storm duration	= NOAA Type D Distribution 1 min.cds	Shape factor	= 484

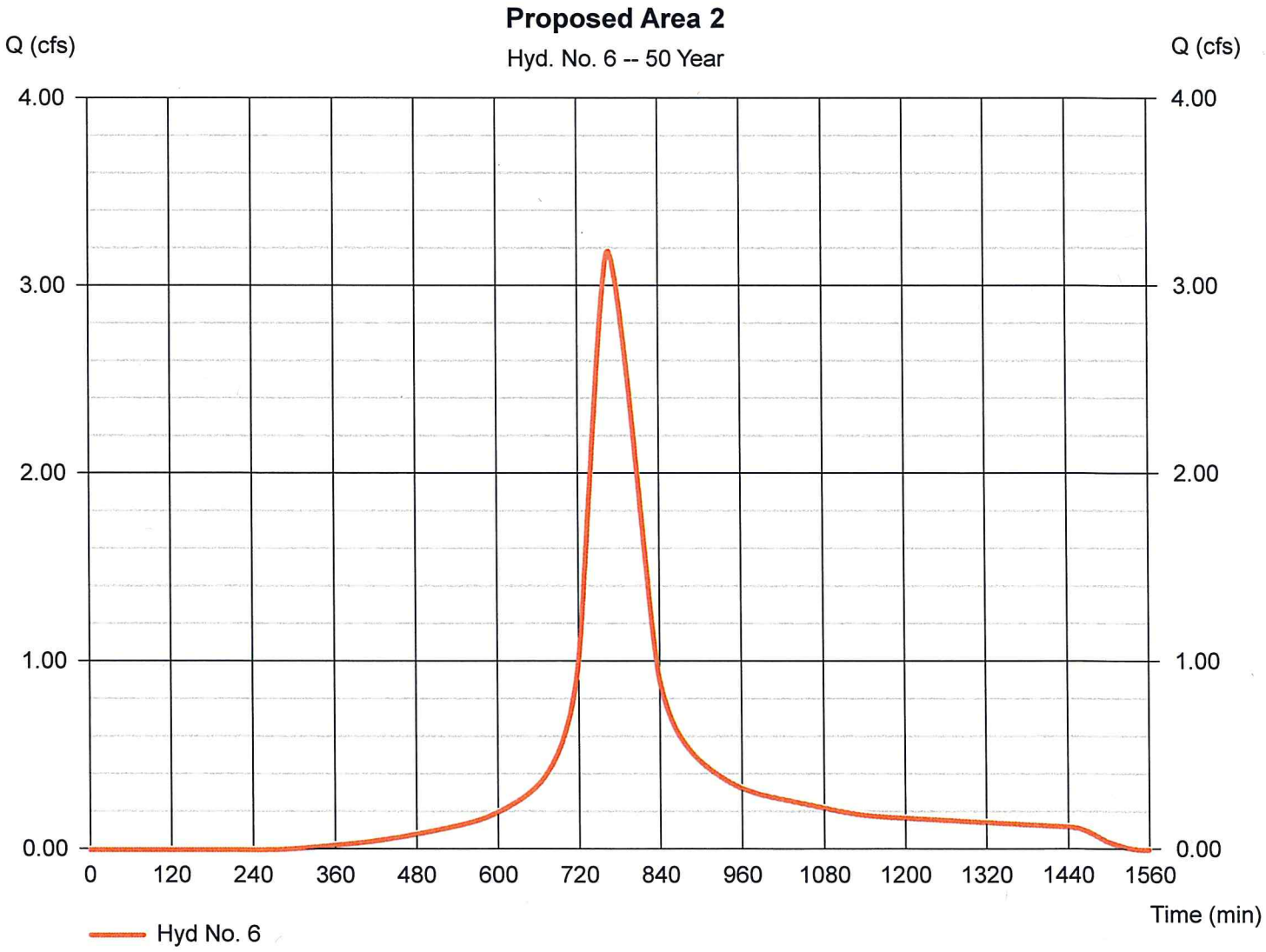


Hydrograph Report

Hyd. No. 6

Proposed Area 2

Hydrograph type	= SCS Runoff	Peak discharge	= 3.189 cfs
Storm frequency	= 50 yrs	Time to peak	= 767 min
Time interval	= 1 min	Hyd. volume	= 29,341 cuft
Drainage area	= 1.540 ac	Curve number	= 85
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 72.50 min
Total precip.	= 6.98 in	Distribution	= Custom
Storm duration	= NOAA Type D Distribution 1 min.cds	Shape factor	= 484

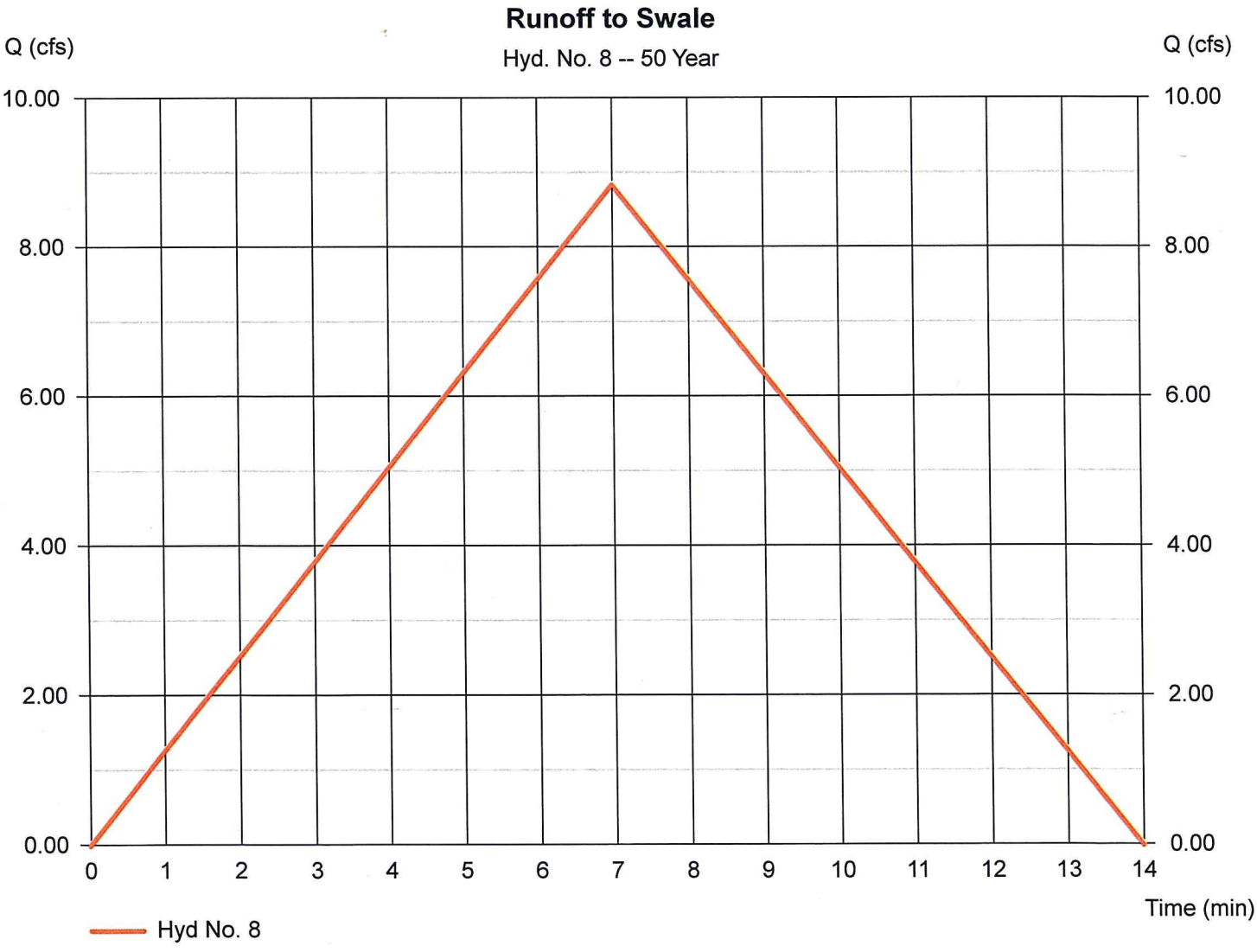


Hydrograph Report

Hyd. No. 8

Runoff to Swale

Hydrograph type	= Rational	Peak discharge	= 8.844 cfs
Storm frequency	= 50 yrs	Time to peak	= 7 min
Time interval	= 1 min	Hyd. volume	= 3,715 cuft
Drainage area	= 1.300 ac	Runoff coeff.	= 0.8
Intensity	= 8.504 in/hr	Tc by User	= 7.00 min
IDF Curve	= GSD-60 NOAA.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Summary Report

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

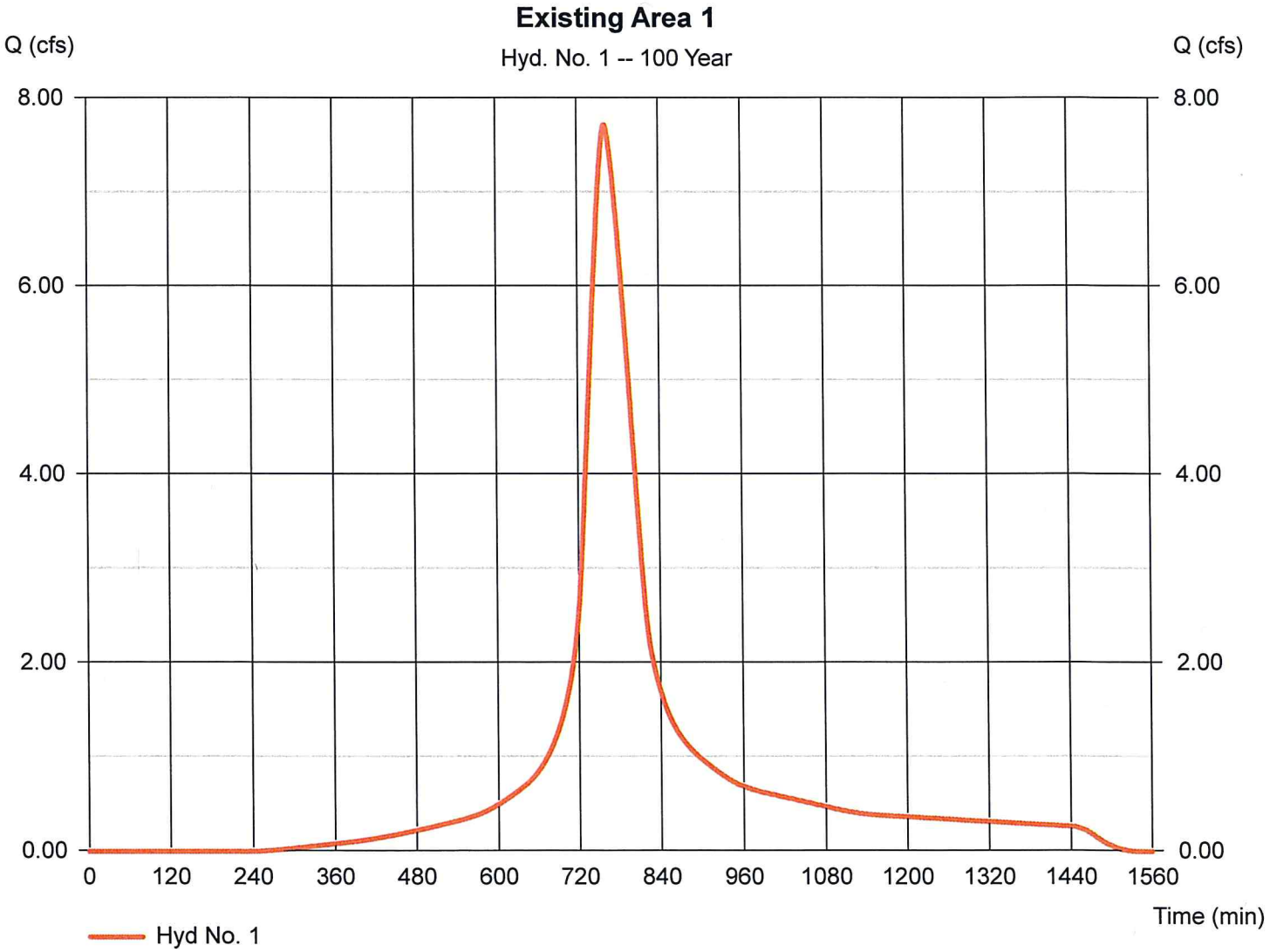
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph description
1	SCS Runoff	7.724	1	761	65,554	------	------	------	Existing Area 1
2	SCS Runoff	10.27	2	766	89,958	------	------	------	Proposed Area 1
3	Reservoir	10.24	2	768	89,958	2	206.14	1,796	forebay
4	Reservoir	7.351	2	802	89,896	3	207.98	32,912	Water Quality Basin
5	SCS Runoff	6.274	1	767	58,048	------	------	------	Existing Area 2
6	SCS Runoff	3.660	1	767	33,861	------	------	------	Proposed Area 2
8	Rational	9.904	1	7	4,160	------	------	------	Runoff to Swale

Hydrograph Report

Hyd. No. 1

Existing Area 1

Hydrograph type	= SCS Runoff	Peak discharge	= 7.724 cfs
Storm frequency	= 100 yrs	Time to peak	= 761 min
Time interval	= 1 min	Hyd. volume	= 65,554 cuft
Drainage area	= 2.980 ac	Curve number	= 85
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 62.20 min
Total precip.	= 7.82 in	Distribution	= Custom
Storm duration	= NOAA Type D Distribution 1 min.cds	Shape factor	= 484

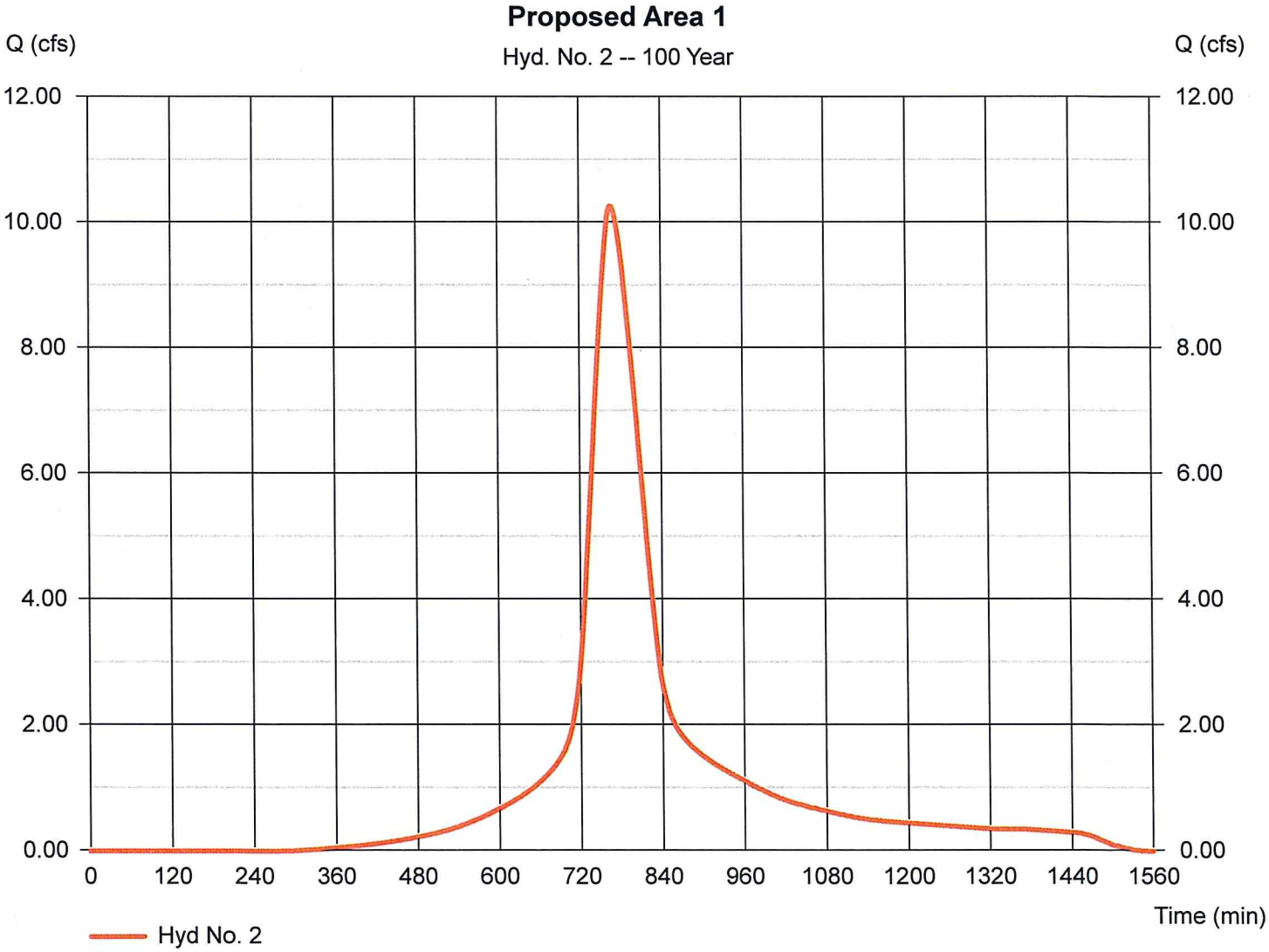


Hydrograph Report

Hyd. No. 2

Proposed Area 1

Hydrograph type	= SCS Runoff	Peak discharge	= 10.27 cfs
Storm frequency	= 100 yrs	Time to peak	= 766 min
Time interval	= 2 min	Hyd. volume	= 89,958 cuft
Drainage area	= 4.080 ac	Curve number	= 85
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 72.50 min
Total precip.	= 7.82 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484



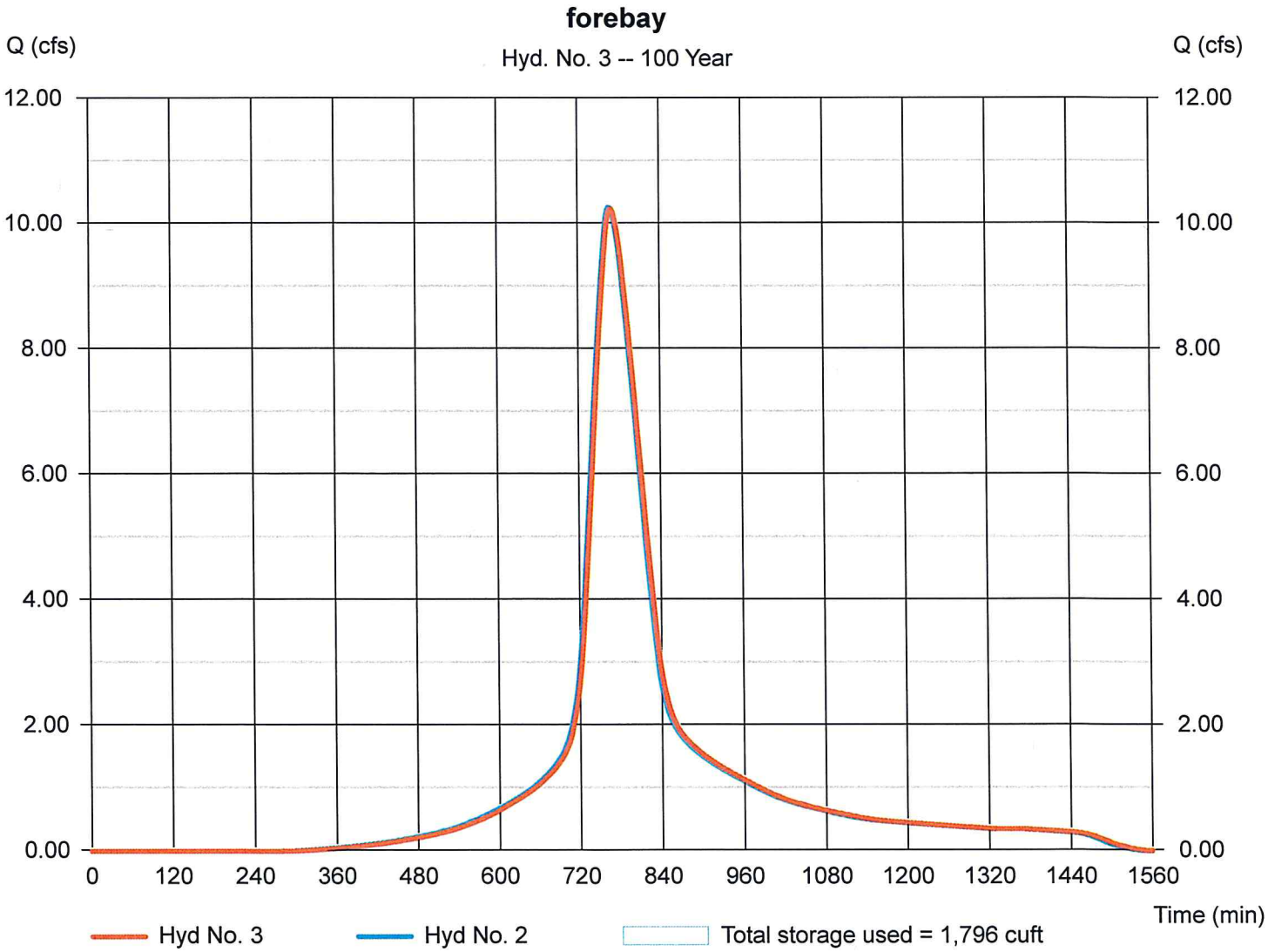
Hydrograph Report

Hyd. No. 3

forebay

Hydrograph type	= Reservoir	Peak discharge	= 10.24 cfs
Storm frequency	= 100 yrs	Time to peak	= 768 min
Time interval	= 2 min	Hyd. volume	= 89,958 cuft
Inflow hyd. No.	= 2 - Proposed Area 1	Max. Elevation	= 206.14 ft
Reservoir name	= forbay	Max. Storage	= 1,796 cuft

Storage Indication method used.



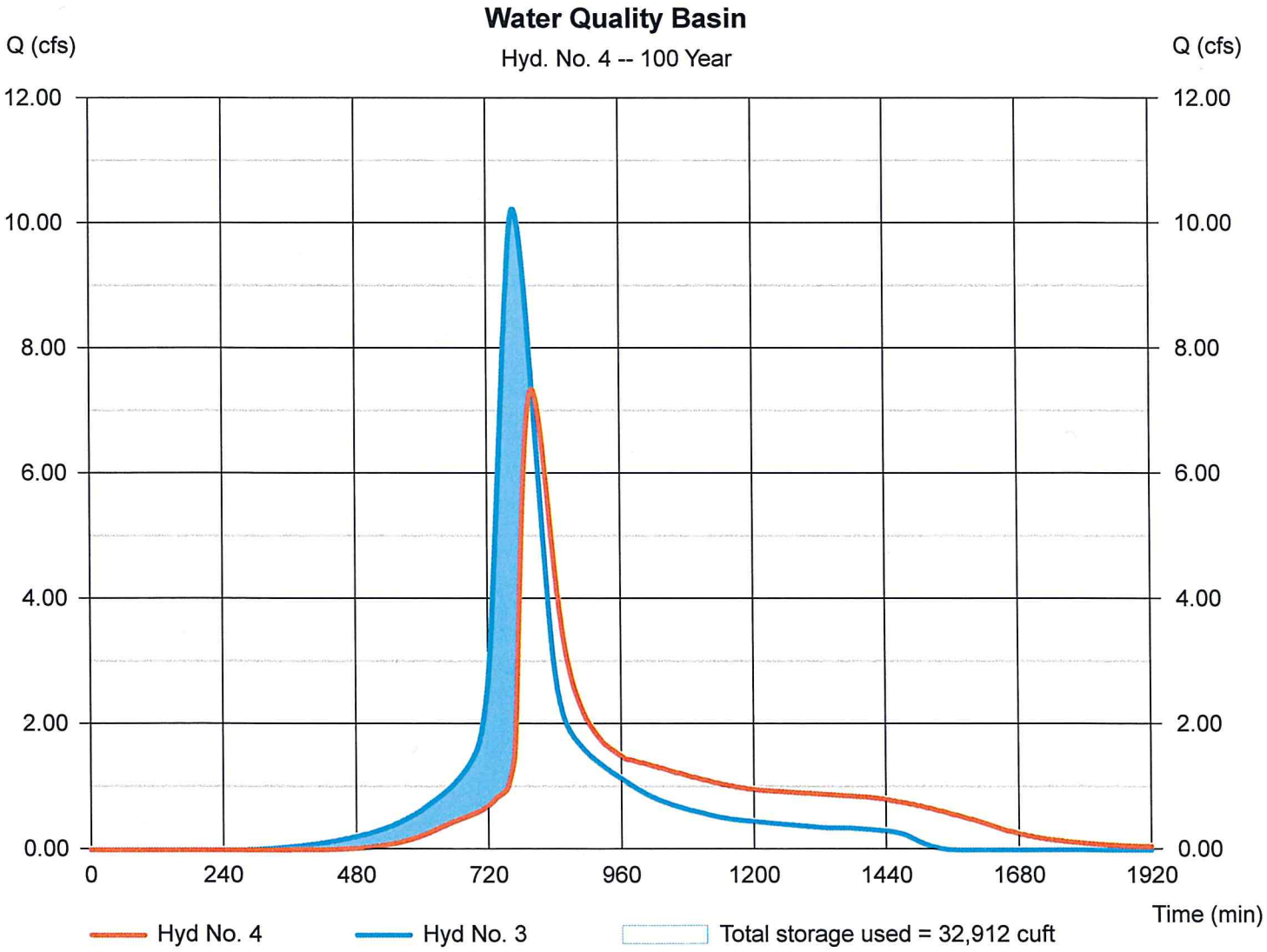
Hydrograph Report

Hyd. No. 4

Water Quality Basin

Hydrograph type	= Reservoir	Peak discharge	= 7.351 cfs
Storm frequency	= 100 yrs	Time to peak	= 802 min
Time interval	= 2 min	Hyd. volume	= 89,896 cuft
Inflow hyd. No.	= 3 - forebay	Max. Elevation	= 207.98 ft
Reservoir name	= Pond 1	Max. Storage	= 32,912 cuft

Storage Indication method used.

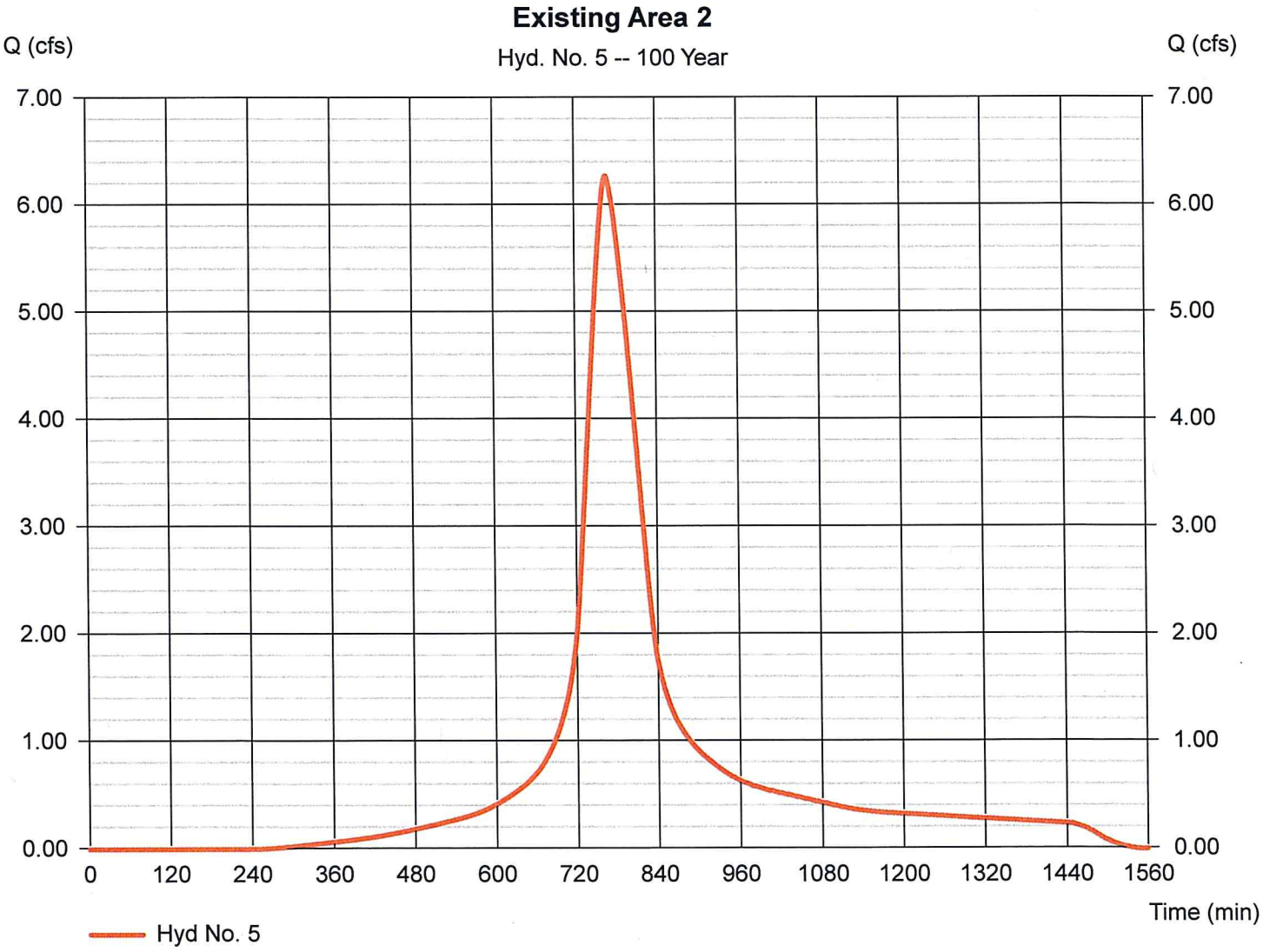


Hydrograph Report

Hyd. No. 5

Existing Area 2

Hydrograph type	= SCS Runoff	Peak discharge	= 6.274 cfs
Storm frequency	= 100 yrs	Time to peak	= 767 min
Time interval	= 1 min	Hyd. volume	= 58,048 cuft
Drainage area	= 2.640 ac	Curve number	= 85
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 72.50 min
Total precip.	= 7.82 in	Distribution	= Custom
Storm duration	= NOAA Type D Distribution 1 min.cds	Shape factor	= 484



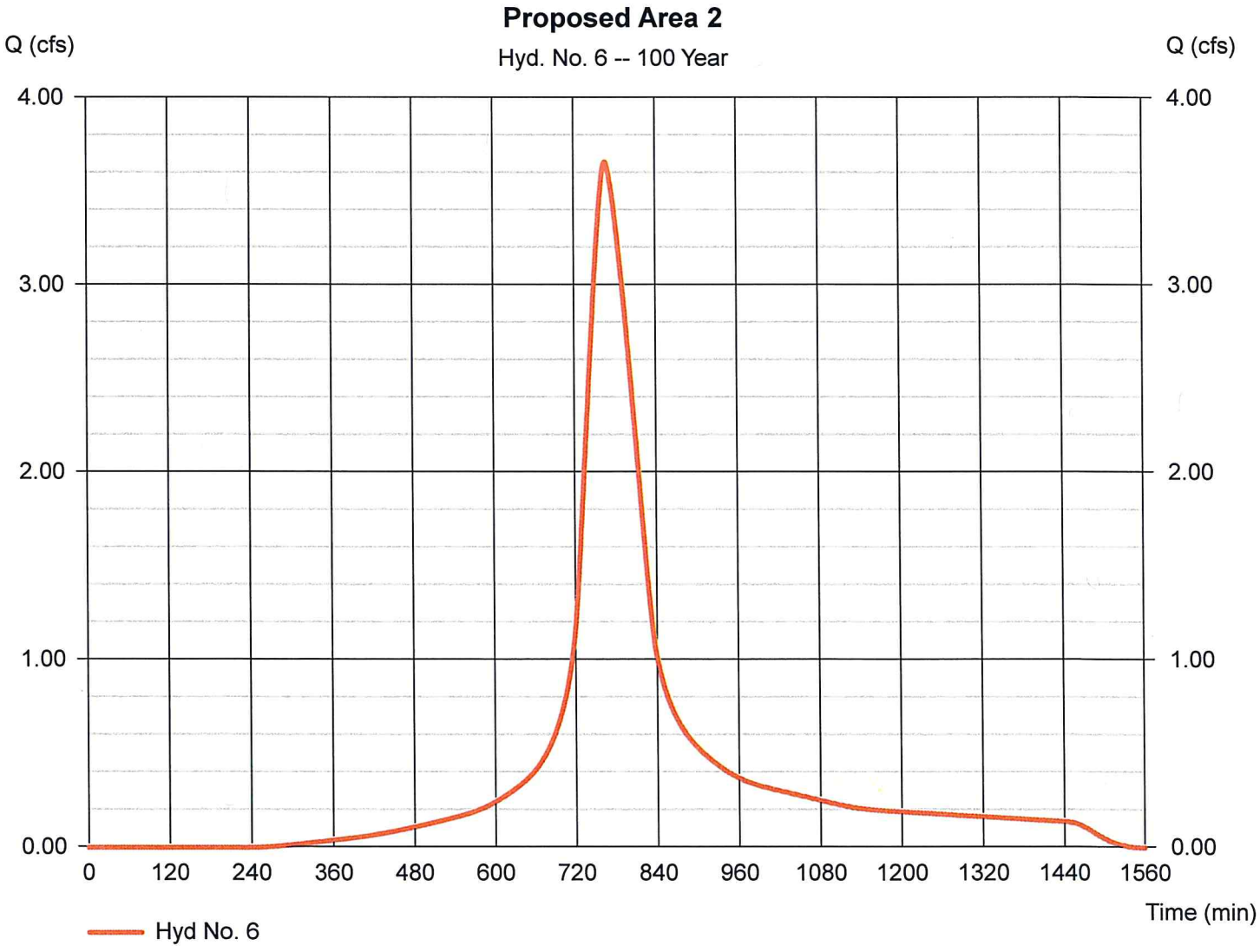
Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066 Monday, Jun 10, 2024

Hyd. No. 6

Proposed Area 2

Hydrograph type	= SCS Runoff	Peak discharge	= 3.660 cfs
Storm frequency	= 100 yrs	Time to peak	= 767 min
Time interval	= 1 min	Hyd. volume	= 33,861 cuft
Drainage area	= 1.540 ac	Curve number	= 85
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 72.50 min
Total precip.	= 7.82 in	Distribution	= Custom
Storm duration	= NOAA Type D Distribution 1 min.cds	Shape factor	= 484



Hydrograph Report

Hyd. No. 8

Runoff to Swale

Hydrograph type	= Rational	Peak discharge	= 9.904 cfs
Storm frequency	= 100 yrs	Time to peak	= 7 min
Time interval	= 1 min	Hyd. volume	= 4,160 cuft
Drainage area	= 1.300 ac	Runoff coeff.	= 0.8
Intensity	= 9.523 in/hr	Tc by User	= 7.00 min
IDF Curve	= GSD-60 NOAA.IDF	Asc/Rec limb fact	= 1/1