

Watershed Model Schematic

Hydraflow Hydrographs by Intelisolve v9.02



Legend

<u>Hyd.</u>	<u>Origin</u>	<u>Description</u>
1	SCS Runoff	Developed Lot 3
2	Reservoir	<no description>
3	SCS Runoff	Existing Lot 3

Hydrograph Return Period Recap

Hydraflow Hydrographs by Intelisolve v9.02

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	-----	-----	42.61	-----	39.29	71.02	-----	-----	114.21	Developed Lot 3
2	Reservoir	1	-----	21.73	-----	19.53	41.28	-----	-----	72.50	<no description>
3	SCS Runoff	-----	-----	16.77	-----	14.46	39.20	-----	-----	79.17	Existing Lot 3
Proj. file: NPond.gpw										Friday, Jun 29, 2007	

Hydrograph Summary Report

Hydraflow Hydrographs by Intelisolve v9.02

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Hyd. volume (acft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (acft)	Hydrograph description
1	SCS Runoff	42.61	2	722	2.765	----	-----	-----	Developed Lot 3
2	Reservoir	21.73	2	732	2.765	1	1349.56	0.854	<no description>
3	SCS Runoff	16.77	2	724	1.163	----	-----	-----	Existing Lot 3
NPond.gpw					Return Period: 2 Year			Friday, Jun 29, 2007	

Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.02

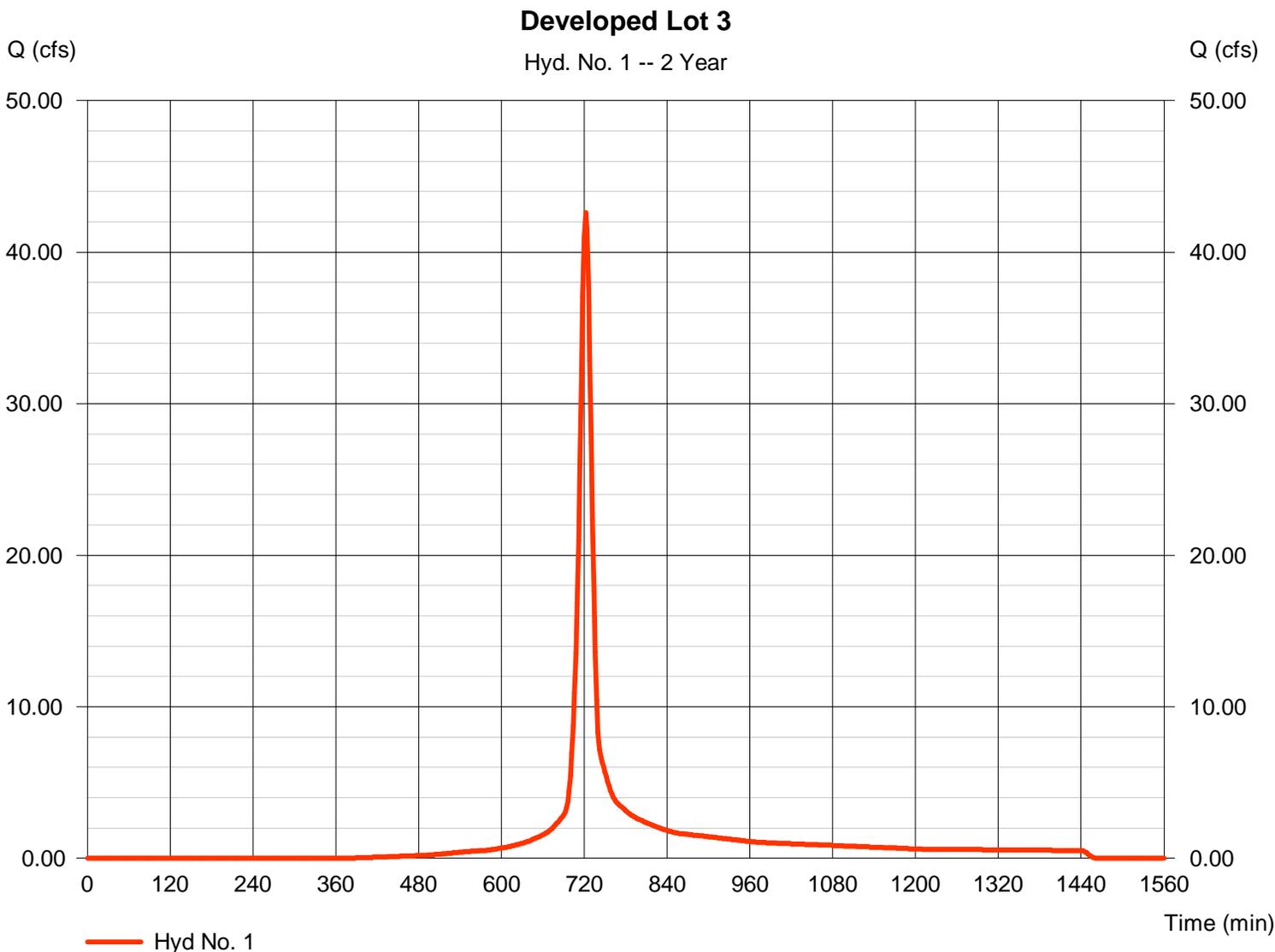
Friday, Jun 29, 2007

Hyd. No. 1

Developed Lot 3

Hydrograph type = SCS Runoff
 Storm frequency = 2 yrs
 Time interval = 2 min
 Drainage area = 15.000 ac
 Basin Slope = 0.0 %
 Tc method = USER
 Total precip. = 3.50 in
 Storm duration = 24 hrs

Peak discharge = 42.61 cfs
 Time to peak = 722 min
 Hyd. volume = 2.765 acft
 Curve number = 88
 Hydraulic length = 0 ft
 Time of conc. (Tc) = 15.00 min
 Distribution = Type II
 Shape factor = 484



Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.02

Friday, Jun 29, 2007

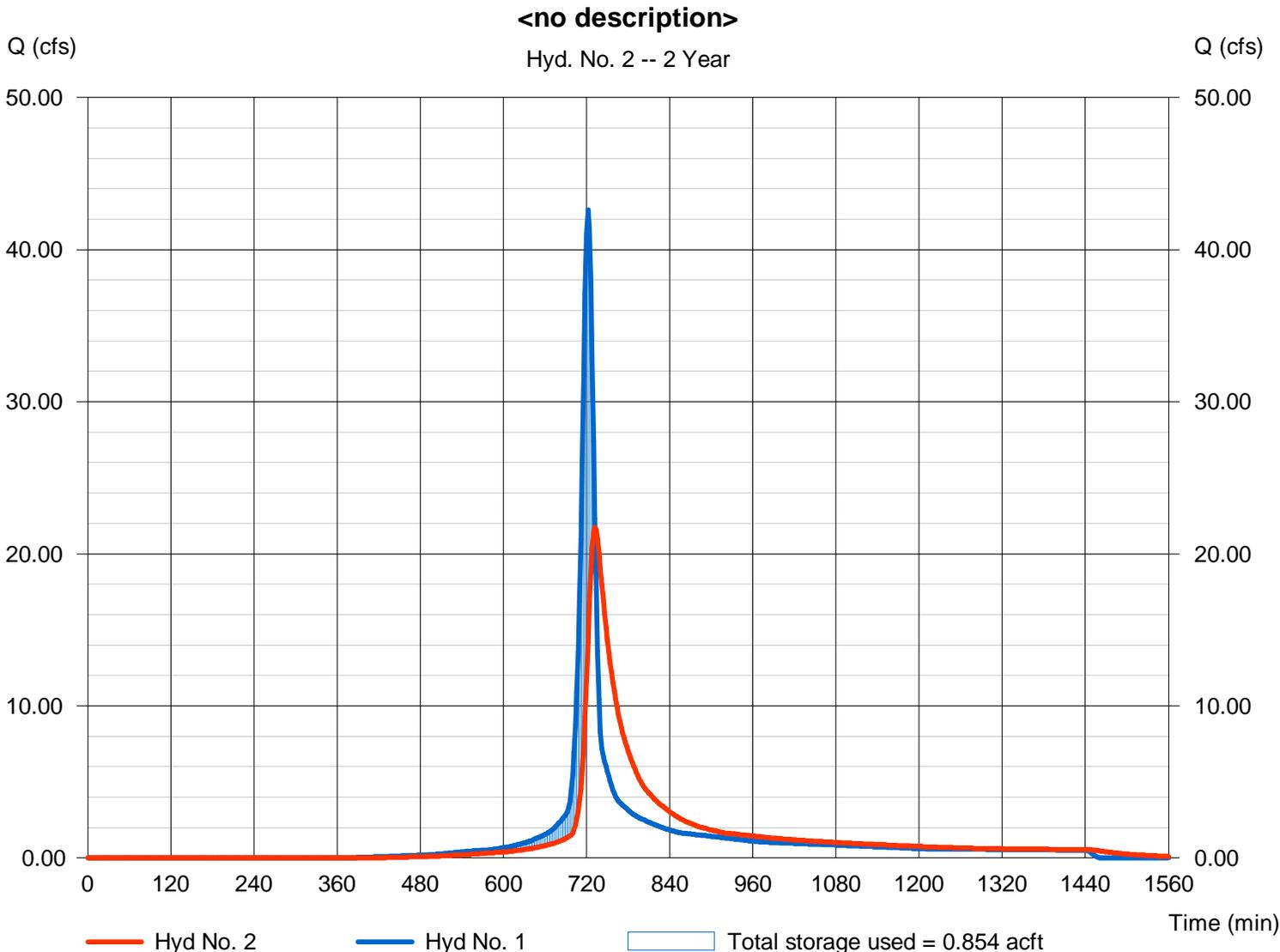
Hyd. No. 2

<no description>

Hydrograph type = Reservoir
Storm frequency = 2 yrs
Time interval = 2 min
Inflow hyd. No. = 1 - Developed Lot 3
Reservoir name = <New Pond>

Peak discharge = 21.73 cfs
Time to peak = 732 min
Hyd. volume = 2.765 acft
Max. Elevation = 1349.56 ft
Max. Storage = 0.854 acft

Storage Indication method used.



Pond No. 1 - <New Pond>

Pond Data

Contours - User-defined contour areas. Conic method used for volume calculation. Beginning Elevation = 1349.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (acft)	Total storage (acft)
0.00	1349.00	64,300	0.000	0.000
1.00	1350.00	69,100	1.531	1.531
2.00	1351.00	74,100	1.643	3.174
3.00	1352.00	79,100	1.758	4.932
4.00	1353.00	84,300	1.875	6.807

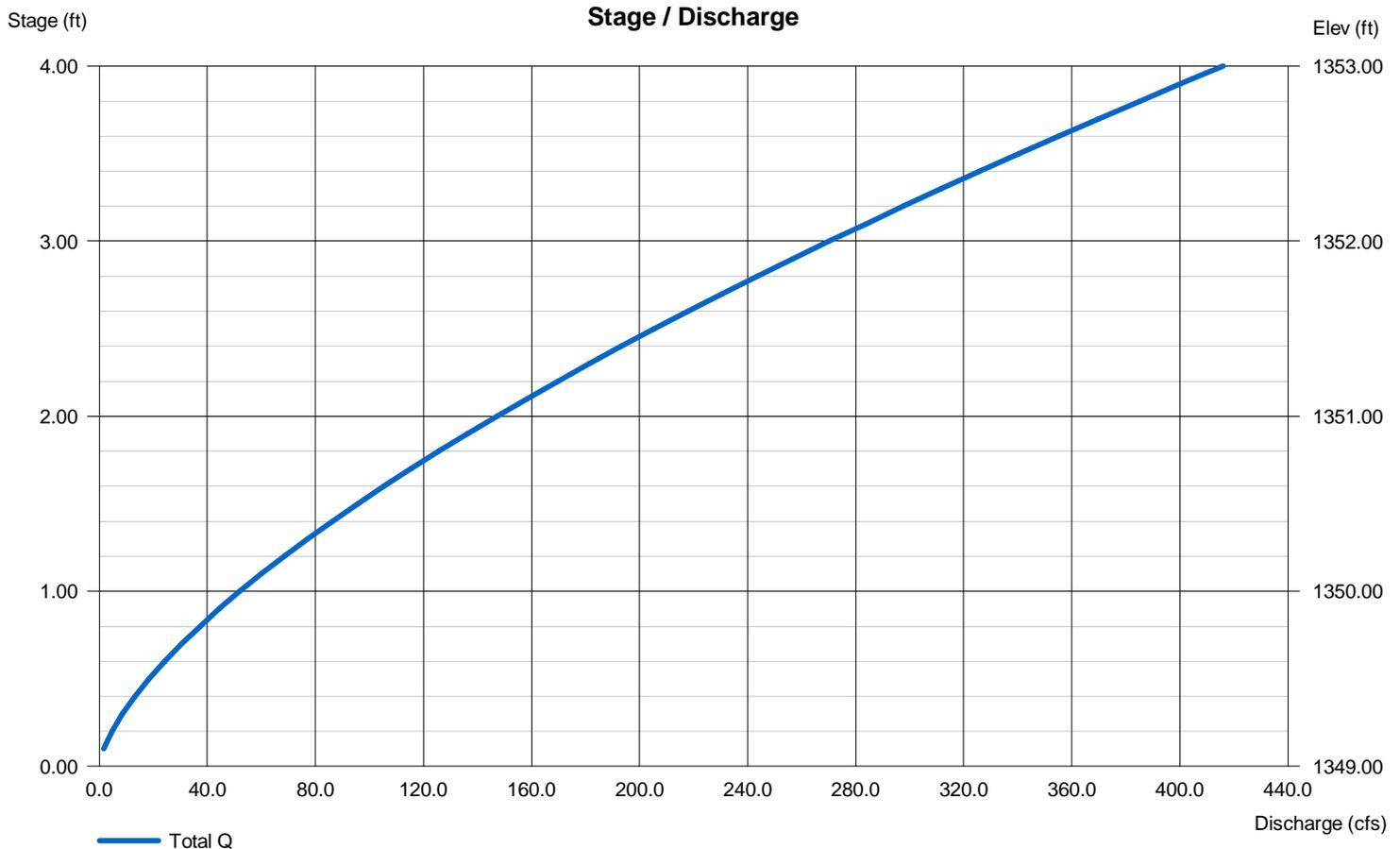
Culvert / Orifice Structures

	[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)	= 0.00	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)	= 20.00	0.00	0.00	0.00
Crest El. (ft)	= 1349.00	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 and outlet control. Weir risers are checked for orifice conditions.



Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.02

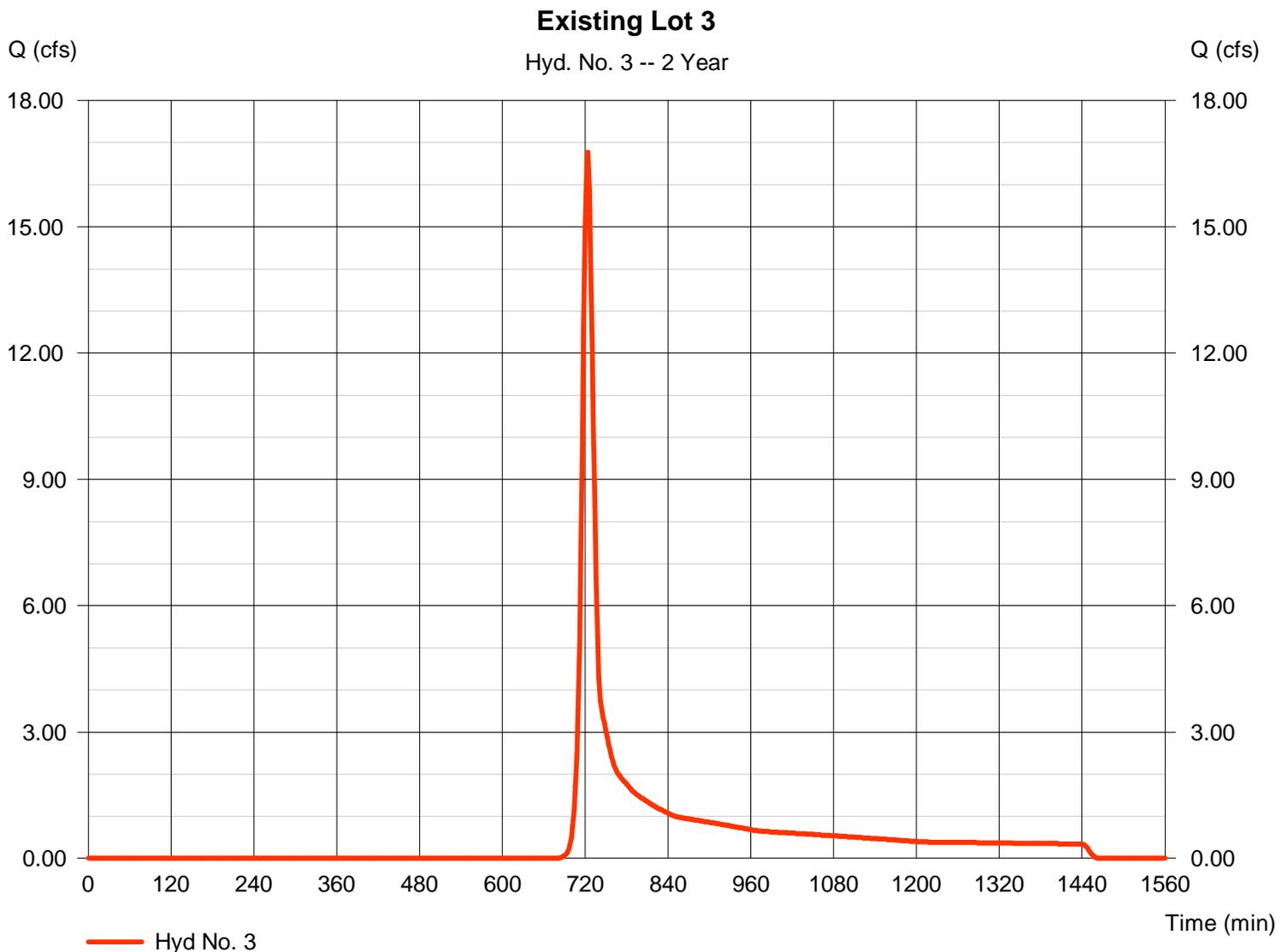
Friday, Jun 29, 2007

Hyd. No. 3

Existing Lot 3

Hydrograph type = SCS Runoff
 Storm frequency = 2 yrs
 Time interval = 2 min
 Drainage area = 15.000 ac
 Basin Slope = 0.0 %
 Tc method = USER
 Total precip. = 3.50 in
 Storm duration = 24 hrs

Peak discharge = 16.77 cfs
 Time to peak = 724 min
 Hyd. volume = 1.163 acft
 Curve number = 69
 Hydraulic length = 0 ft
 Time of conc. (Tc) = 15.00 min
 Distribution = Type II
 Shape factor = 484



Hydrograph Summary Report

Hydraflow Hydrographs by Intelisolve v9.02

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Hyd. volume (acft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (acft)	Hydrograph description
1	SCS Runoff	39.29	2	722	2.544	----	-----	-----	Developed Lot 3
2	Reservoir	19.53	2	732	2.544	1	1349.52	0.796	<no description>
3	SCS Runoff	14.46	2	724	1.019	----	-----	-----	Existing Lot 3
NPond.gpw					Return Period: 5 Year			Friday, Jun 29, 2007	

Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.02

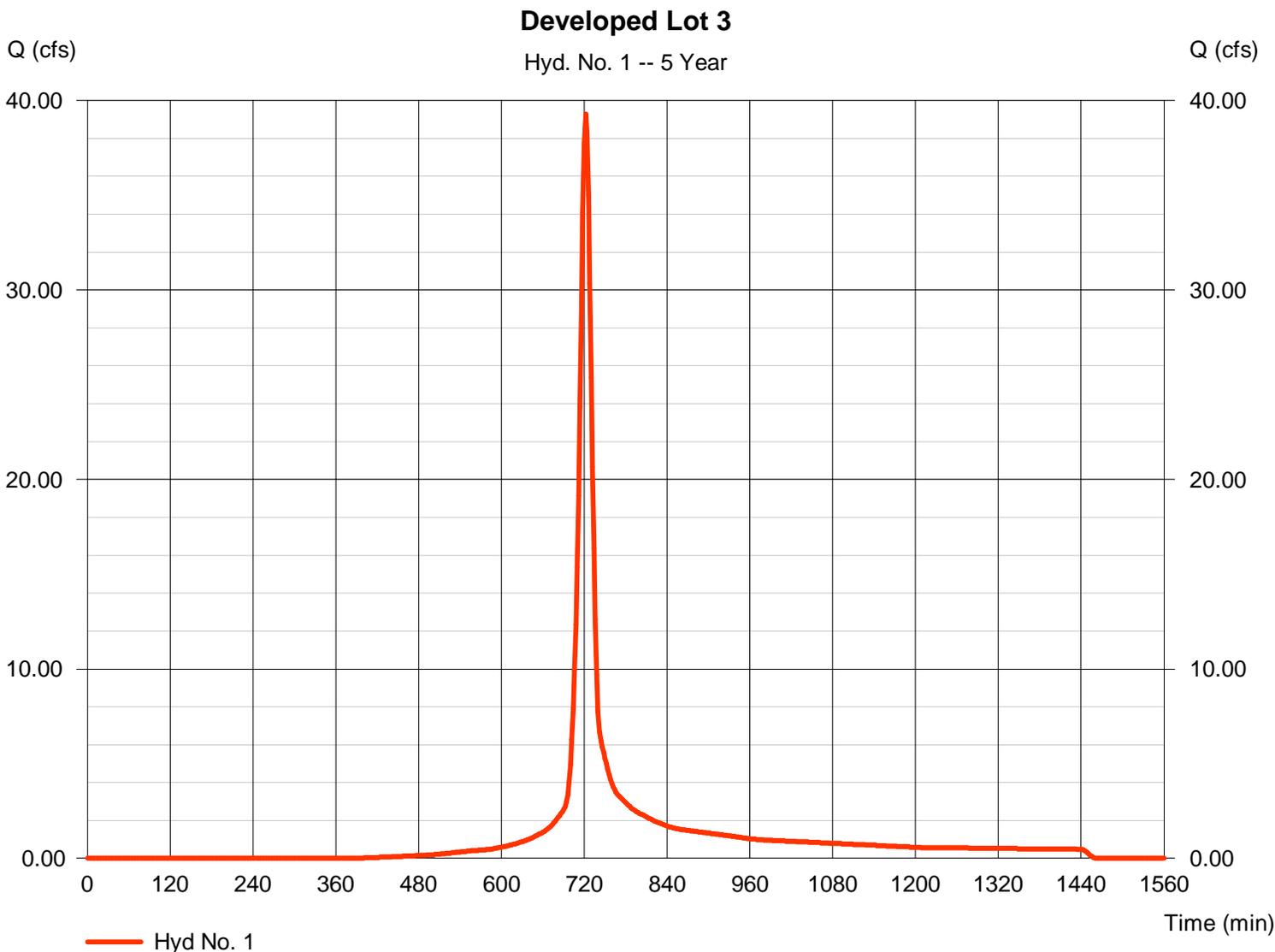
Friday, Jun 29, 2007

Hyd. No. 1

Developed Lot 3

Hydrograph type = SCS Runoff
 Storm frequency = 5 yrs
 Time interval = 2 min
 Drainage area = 15.000 ac
 Basin Slope = 0.0 %
 Tc method = USER
 Total precip. = 3.30 in
 Storm duration = 24 hrs

Peak discharge = 39.29 cfs
 Time to peak = 722 min
 Hyd. volume = 2.544 acft
 Curve number = 88
 Hydraulic length = 0 ft
 Time of conc. (Tc) = 15.00 min
 Distribution = Type II
 Shape factor = 484



Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.02

Friday, Jun 29, 2007

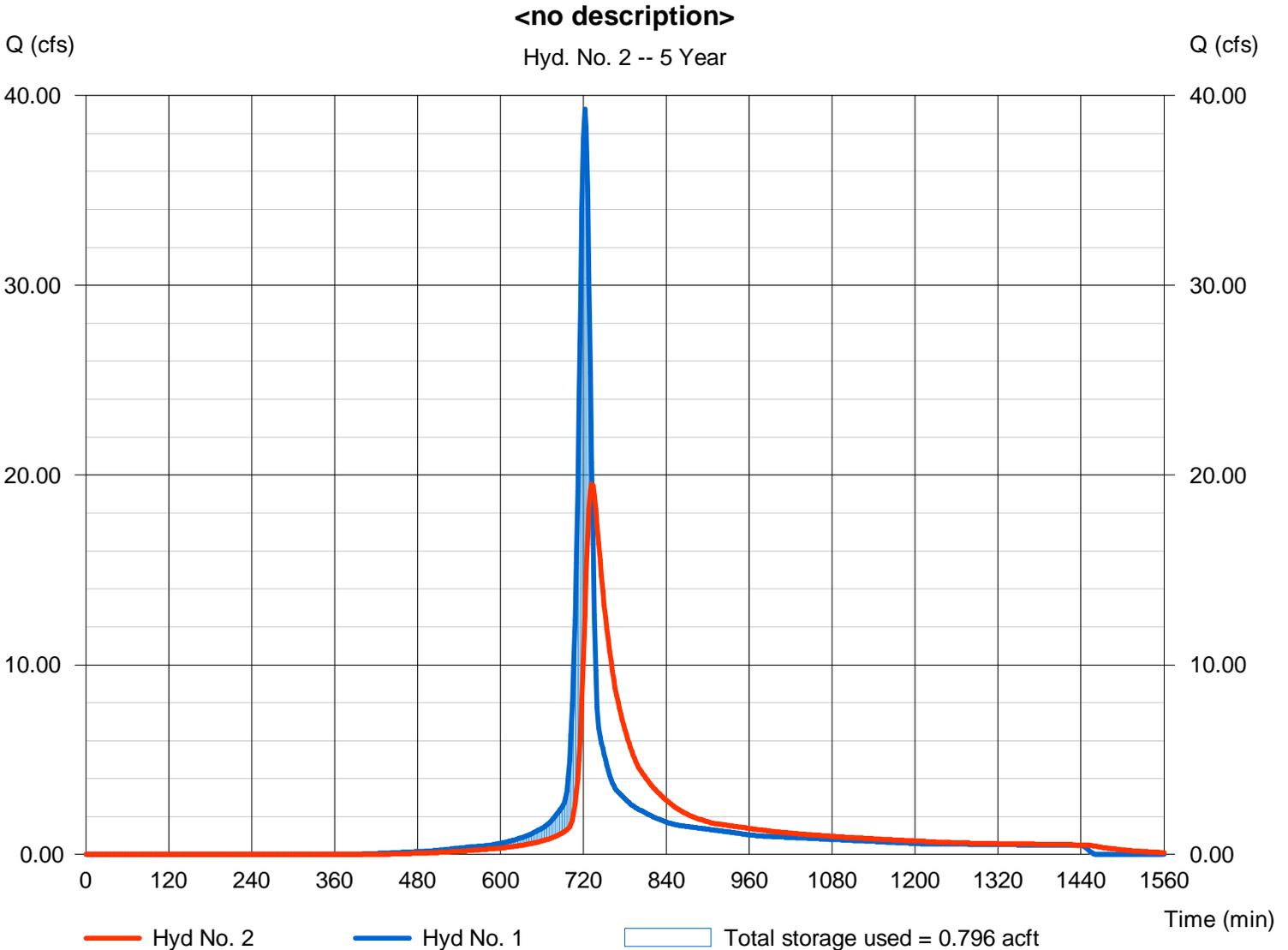
Hyd. No. 2

<no description>

Hydrograph type = Reservoir
Storm frequency = 5 yrs
Time interval = 2 min
Inflow hyd. No. = 1 - Developed Lot 3
Reservoir name = <New Pond>

Peak discharge = 19.53 cfs
Time to peak = 732 min
Hyd. volume = 2.544 acft
Max. Elevation = 1349.52 ft
Max. Storage = 0.796 acft

Storage Indication method used.



Pond No. 1 - <New Pond>

Pond Data

Contours - User-defined contour areas. Conic method used for volume calculation. Beginning Elevation = 1349.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (acft)	Total storage (acft)
0.00	1349.00	64,300	0.000	0.000
1.00	1350.00	69,100	1.531	1.531
2.00	1351.00	74,100	1.643	3.174
3.00	1352.00	79,100	1.758	4.932
4.00	1353.00	84,300	1.875	6.807

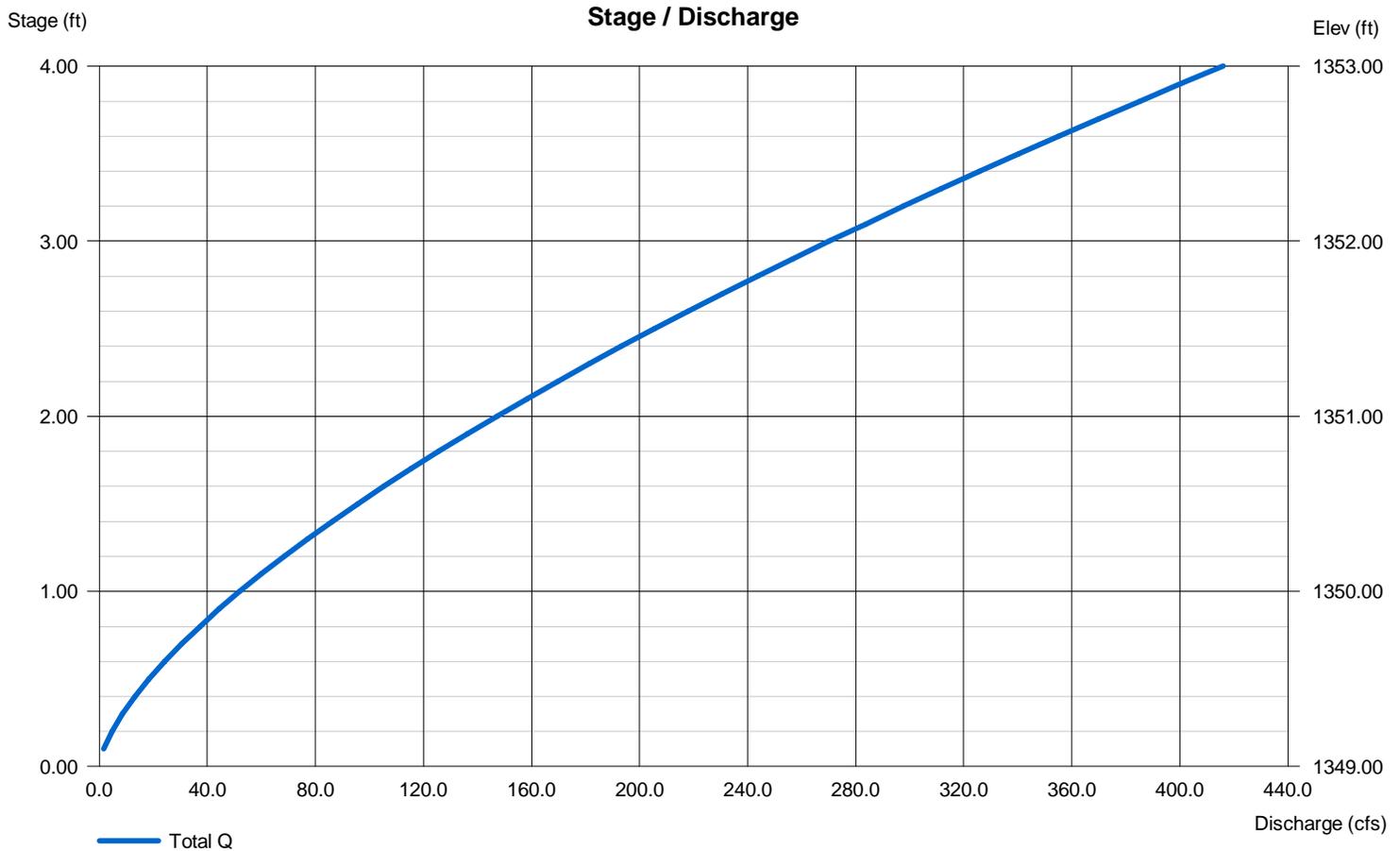
Culvert / Orifice Structures

	[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)	= 0.00	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)	= 20.00	0.00	0.00	0.00
Crest El. (ft)	= 1349.00	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 and outlet control. Weir risers are checked for orifice conditions.



Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.02

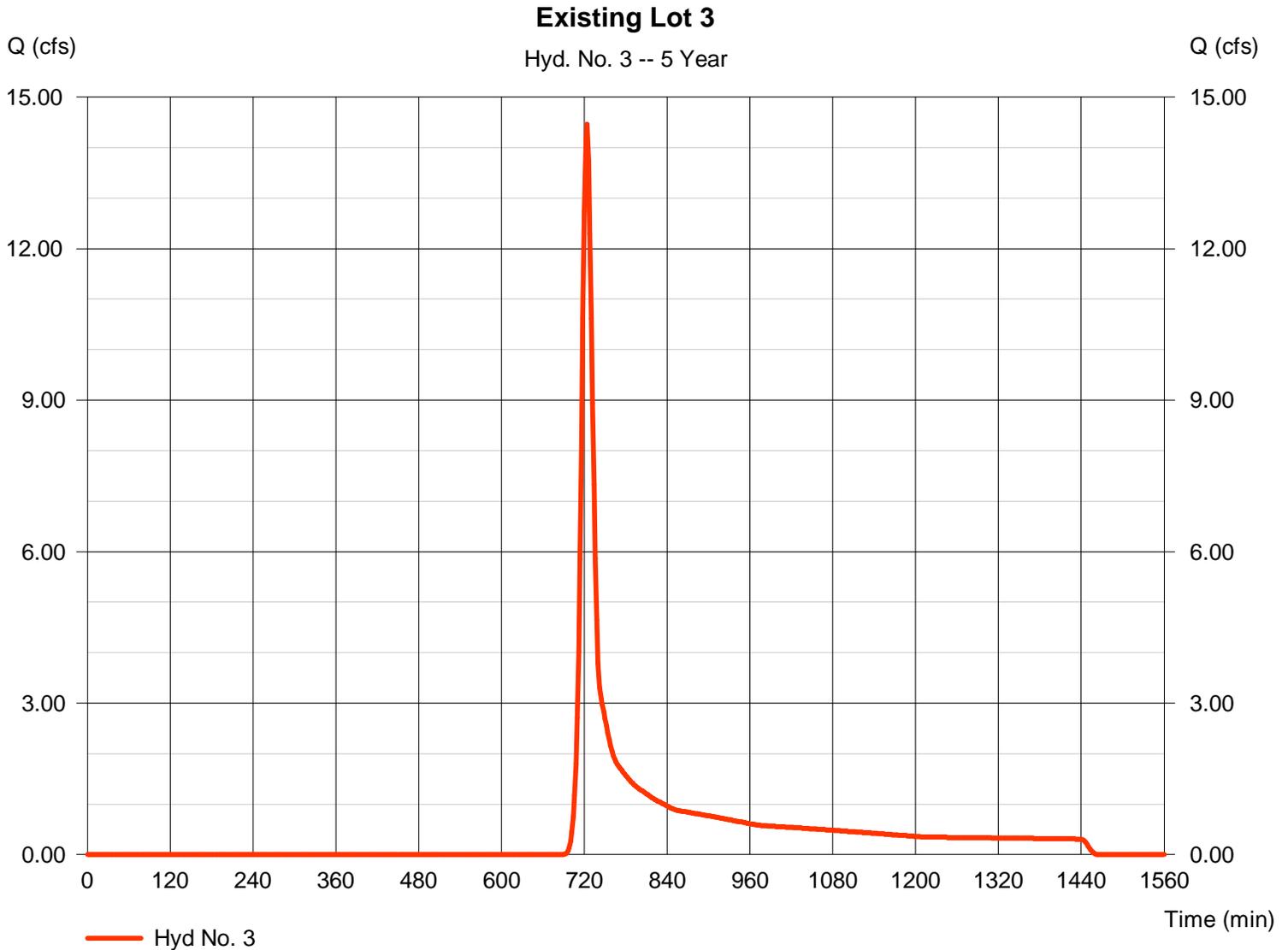
Friday, Jun 29, 2007

Hyd. No. 3

Existing Lot 3

Hydrograph type = SCS Runoff
 Storm frequency = 5 yrs
 Time interval = 2 min
 Drainage area = 15.000 ac
 Basin Slope = 0.0 %
 Tc method = USER
 Total precip. = 3.30 in
 Storm duration = 24 hrs

Peak discharge = 14.46 cfs
 Time to peak = 724 min
 Hyd. volume = 1.019 acft
 Curve number = 69
 Hydraulic length = 0 ft
 Time of conc. (Tc) = 15.00 min
 Distribution = Type II
 Shape factor = 484



Hydrograph Summary Report

Hydraflow Hydrographs by Intelisolve v9.02

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Hyd. volume (acft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (acft)	Hydrograph description
1	SCS Runoff	71.02	2	722	4.703	----	-----	-----	Developed Lot 3
2	Reservoir	41.28	2	730	4.703	1	1349.86	1.31	<no description>
3	SCS Runoff	39.20	2	722	2.564	----	-----	-----	Existing Lot 3
NPond.gpw					Return Period: 10 Year			Friday, Jun 29, 2007	

Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.02

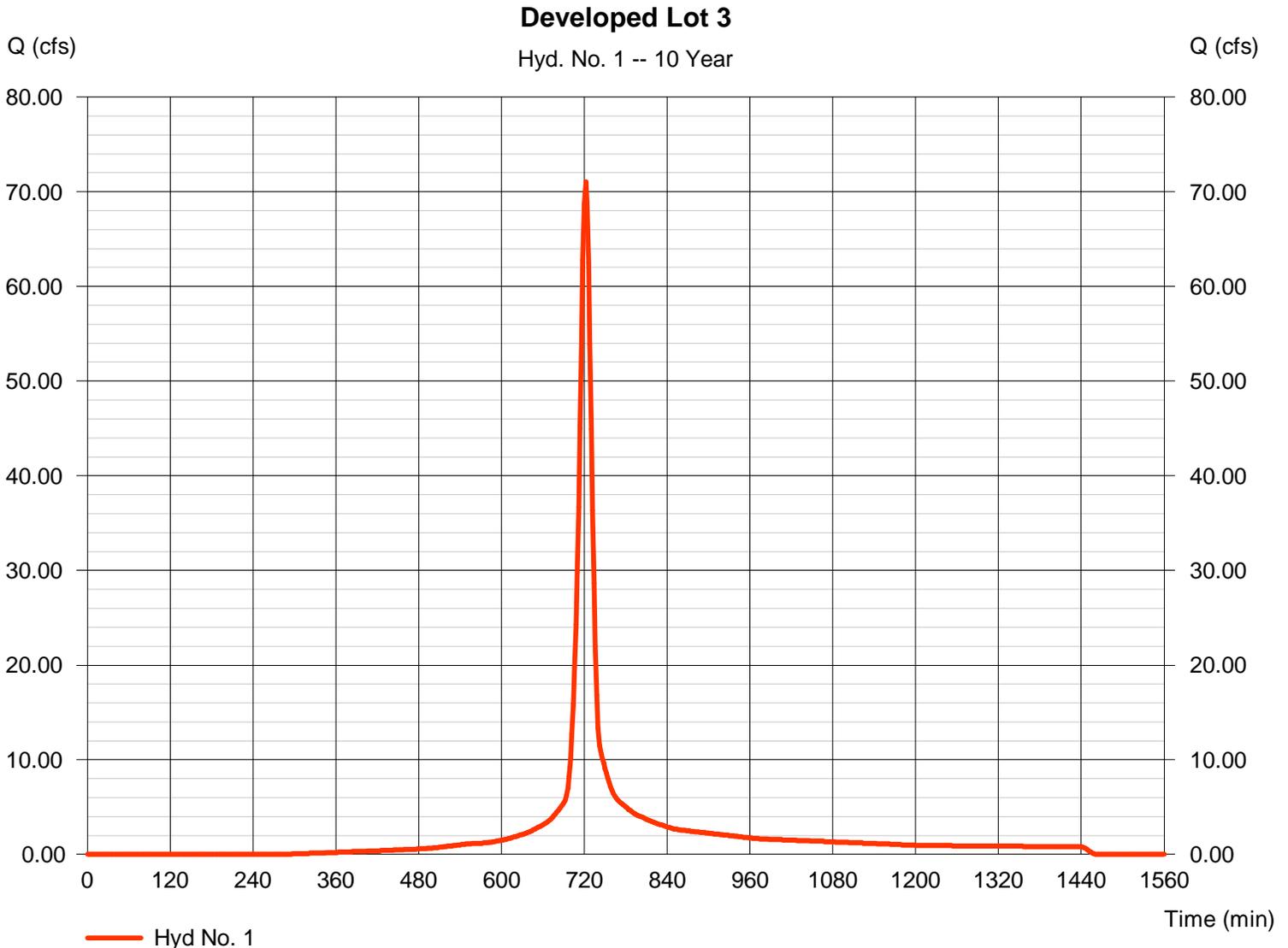
Friday, Jun 29, 2007

Hyd. No. 1

Developed Lot 3

Hydrograph type = SCS Runoff
Storm frequency = 10 yrs
Time interval = 2 min
Drainage area = 15.000 ac
Basin Slope = 0.0 %
Tc method = USER
Total precip. = 5.20 in
Storm duration = 24 hrs

Peak discharge = 71.02 cfs
Time to peak = 722 min
Hyd. volume = 4.703 acft
Curve number = 88
Hydraulic length = 0 ft
Time of conc. (Tc) = 15.00 min
Distribution = Type II
Shape factor = 484



Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.02

Friday, Jun 29, 2007

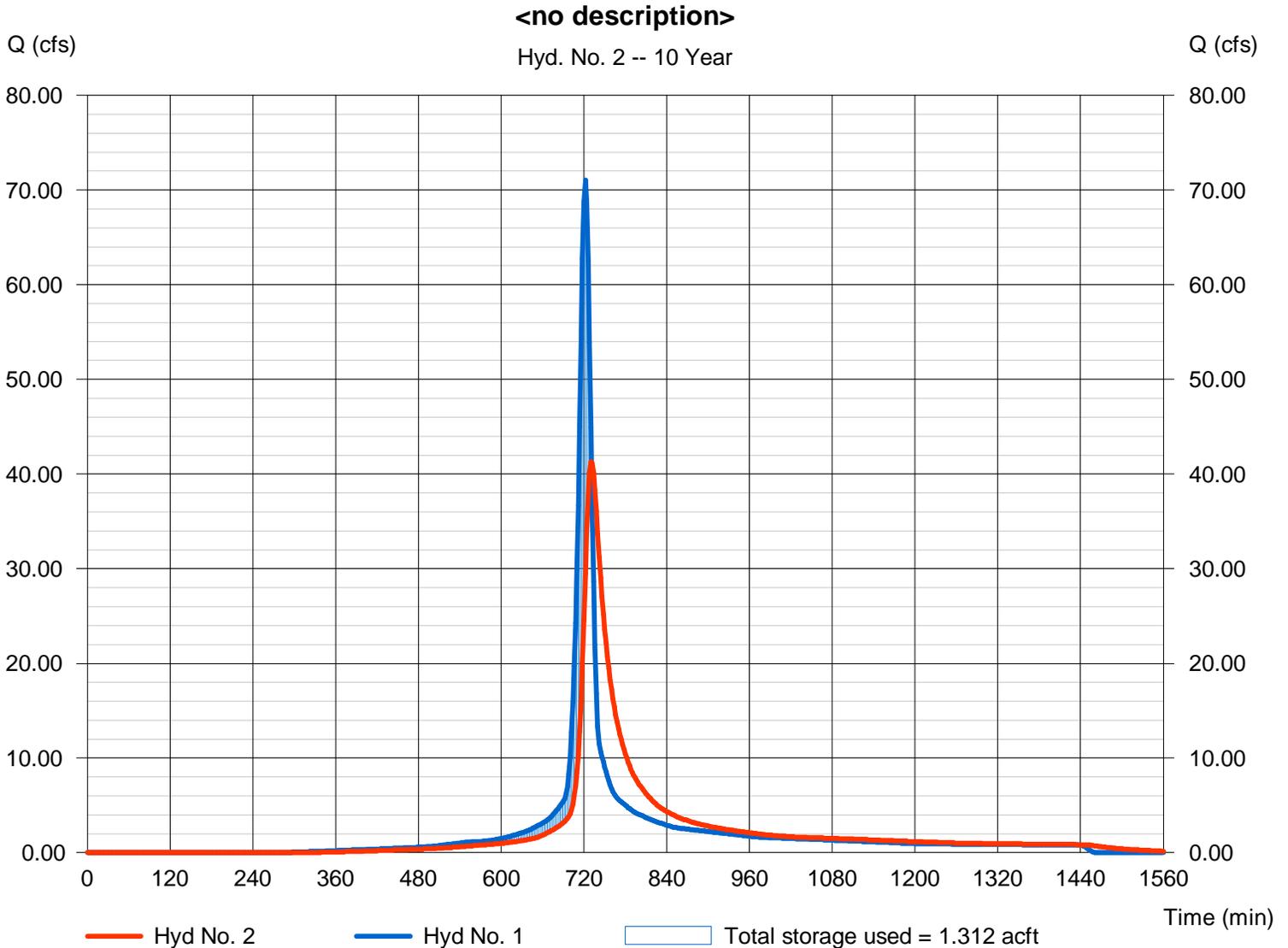
Hyd. No. 2

<no description>

Hydrograph type = Reservoir
Storm frequency = 10 yrs
Time interval = 2 min
Inflow hyd. No. = 1 - Developed Lot 3
Reservoir name = <New Pond>

Peak discharge = 41.28 cfs
Time to peak = 730 min
Hyd. volume = 4.703 acft
Max. Elevation = 1349.86 ft
Max. Storage = 1.312 acft

Storage Indication method used.



Pond No. 1 - <New Pond>

Pond Data

Contours - User-defined contour areas. Conic method used for volume calculation. Beginning Elevation = 1349.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (acft)	Total storage (acft)
0.00	1349.00	64,300	0.000	0.000
1.00	1350.00	69,100	1.531	1.531
2.00	1351.00	74,100	1.643	3.174
3.00	1352.00	79,100	1.758	4.932
4.00	1353.00	84,300	1.875	6.807

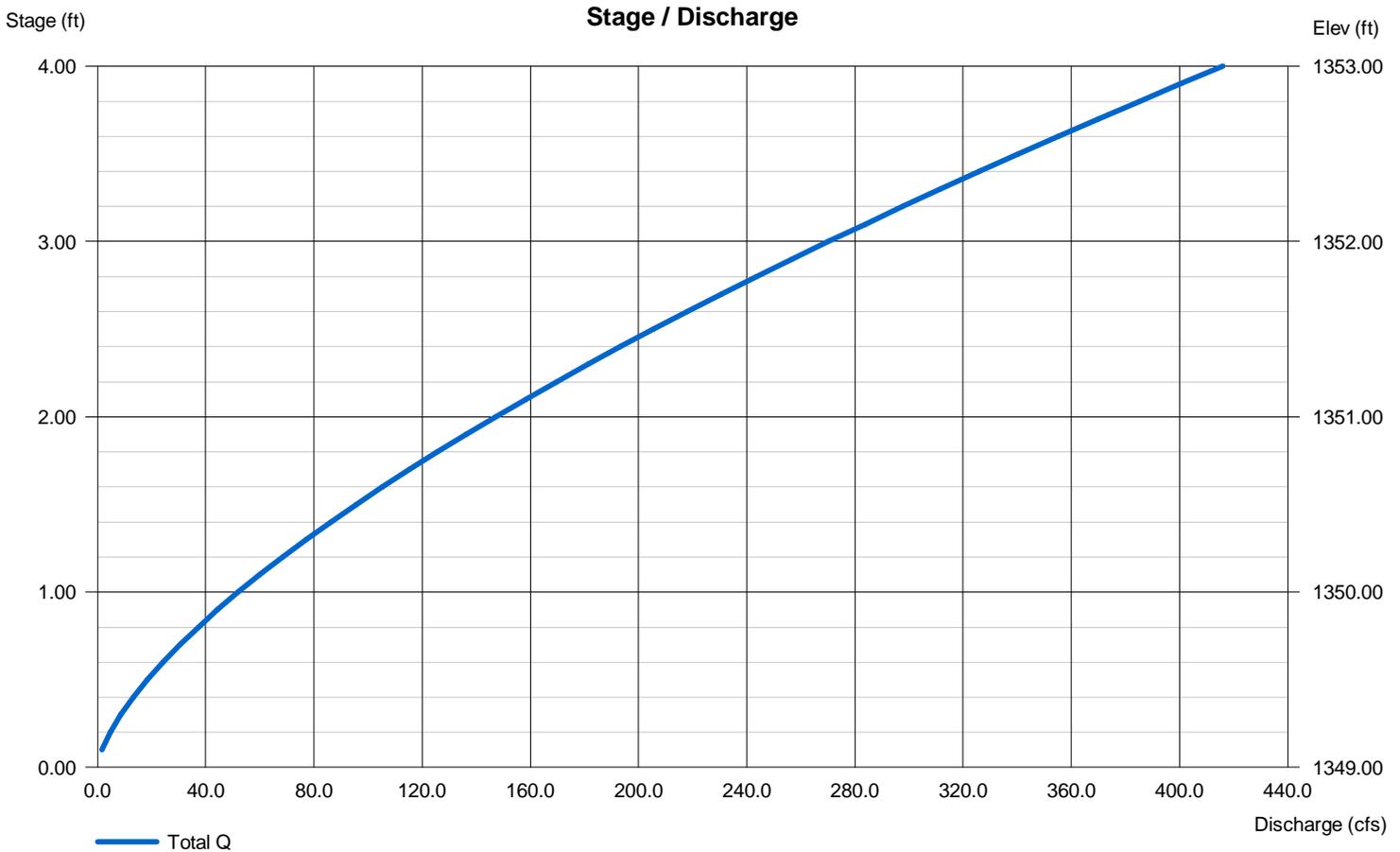
Culvert / Orifice Structures

	[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)	= 0.00	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)	= 20.00	0.00	0.00	0.00
Crest El. (ft)	= 1349.00	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 and outlet control. Weir risers are checked for orifice conditions.



Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.02

Friday, Jun 29, 2007

Hyd. No. 3

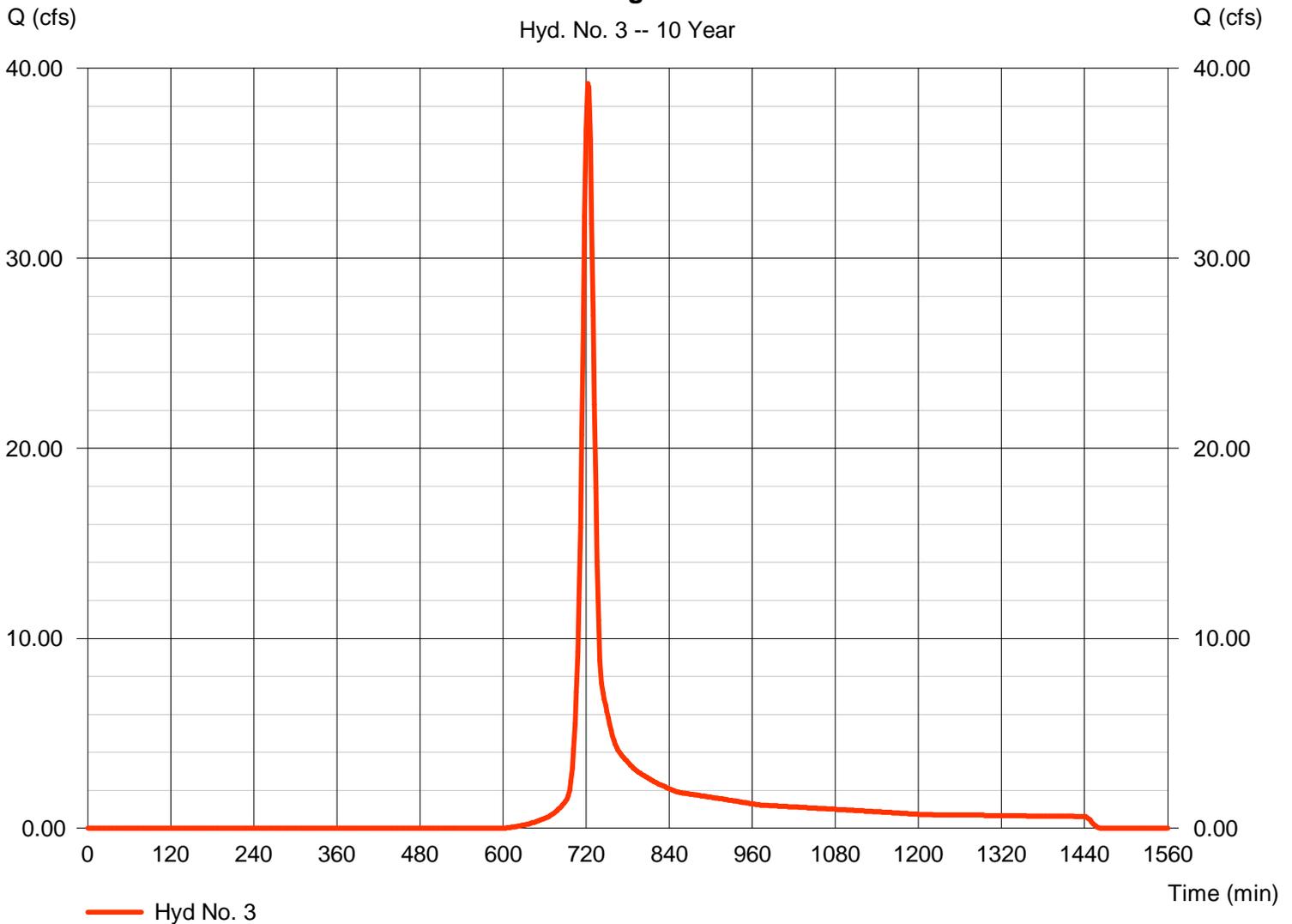
Existing Lot 3

Hydrograph type = SCS Runoff
 Storm frequency = 10 yrs
 Time interval = 2 min
 Drainage area = 15.000 ac
 Basin Slope = 0.0 %
 Tc method = USER
 Total precip. = 5.20 in
 Storm duration = 24 hrs

Peak discharge = 39.20 cfs
 Time to peak = 722 min
 Hyd. volume = 2.564 acft
 Curve number = 69
 Hydraulic length = 0 ft
 Time of conc. (Tc) = 15.00 min
 Distribution = Type II
 Shape factor = 484

Existing Lot 3

Hyd. No. 3 -- 10 Year



Hydrograph Summary Report

Hydraflow Hydrographs by Intelisolve v9.02

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Hyd. volume (acft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (acft)	Hydrograph description
1	SCS Runoff	114.21	2	722	7.767	----	-----	-----	Developed Lot 3
2	Reservoir	72.50	2	730	7.767	1	1350.25	1.94	<no description>
3	SCS Runoff	79.17	2	722	5.095	----	-----	-----	Existing Lot 3
NPond.gpw					Return Period: 100 Year			Friday, Jun 29, 2007	

Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.02

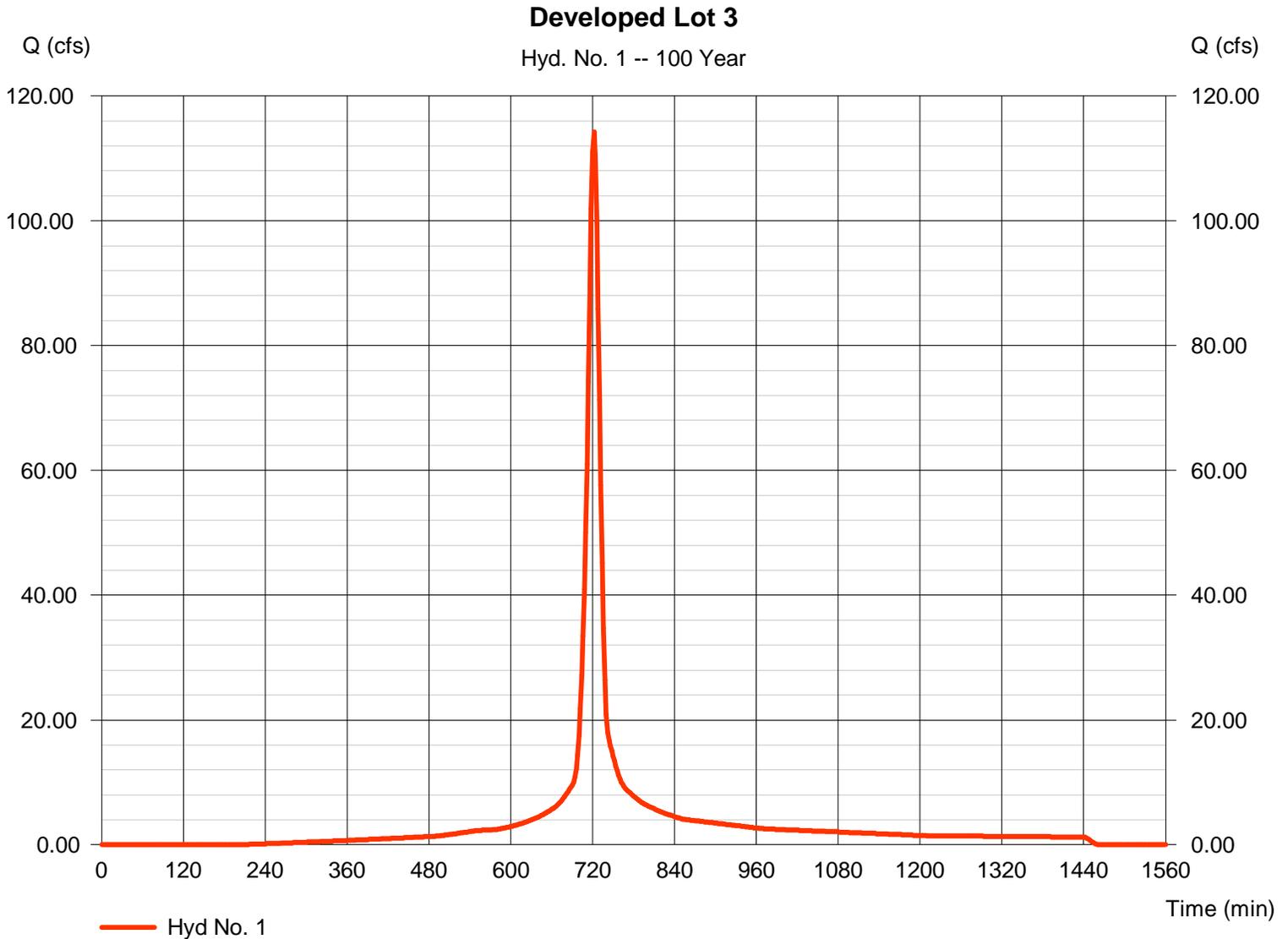
Friday, Jun 29, 2007

Hyd. No. 1

Developed Lot 3

Hydrograph type = SCS Runoff
Storm frequency = 100 yrs
Time interval = 2 min
Drainage area = 15.000 ac
Basin Slope = 0.0 %
Tc method = USER
Total precip. = 7.80 in
Storm duration = 24 hrs

Peak discharge = 114.21 cfs
Time to peak = 722 min
Hyd. volume = 7.767 acft
Curve number = 88
Hydraulic length = 0 ft
Time of conc. (Tc) = 15.00 min
Distribution = Type II
Shape factor = 484



Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.02

Friday, Jun 29, 2007

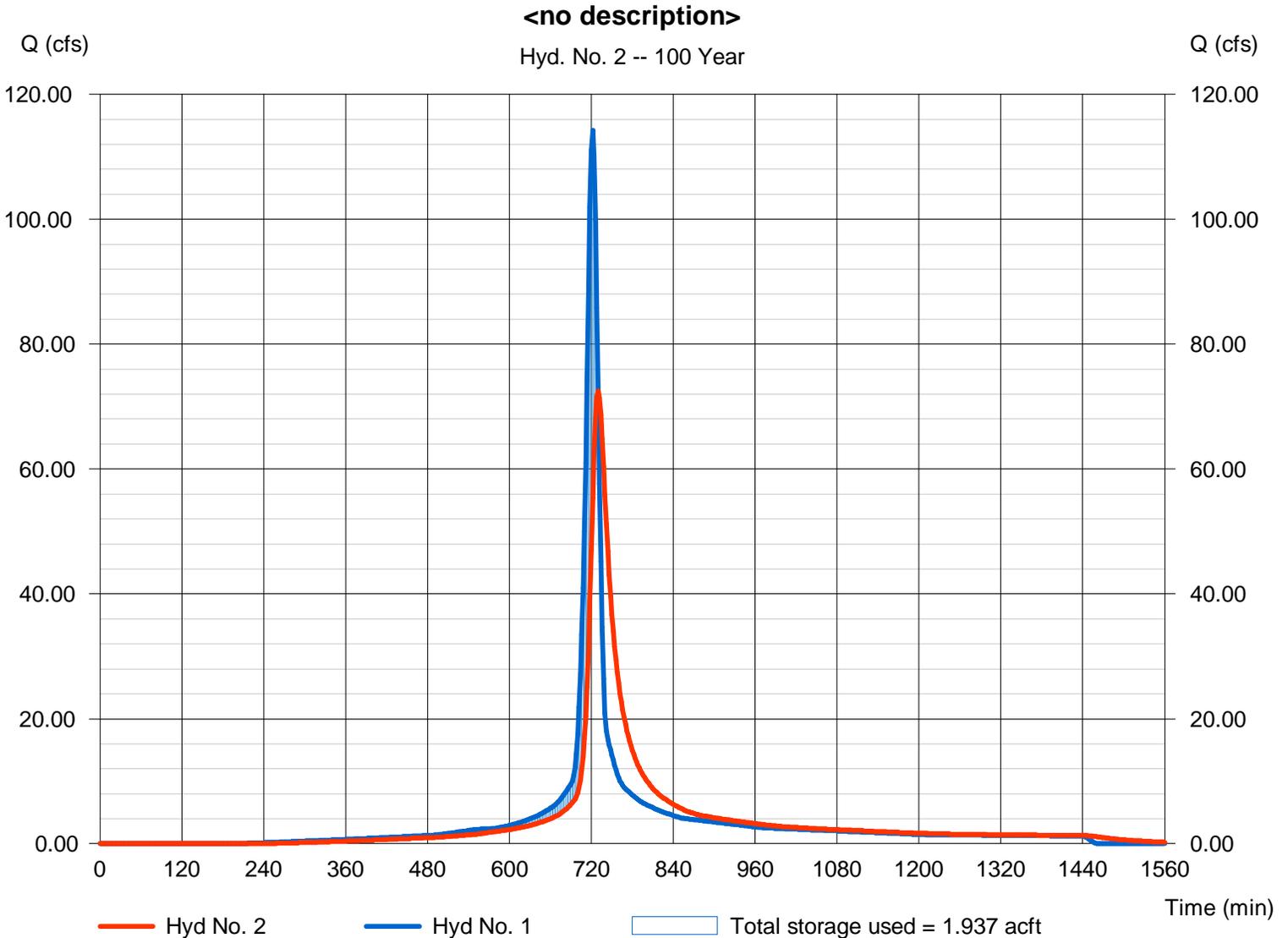
Hyd. No. 2

<no description>

Hydrograph type = Reservoir
Storm frequency = 100 yrs
Time interval = 2 min
Inflow hyd. No. = 1 - Developed Lot 3
Reservoir name = <New Pond>

Peak discharge = 72.50 cfs
Time to peak = 730 min
Hyd. volume = 7.767 acft
Max. Elevation = 1350.25 ft
Max. Storage = 1.937 acft

Storage Indication method used.



Pond No. 1 - <New Pond>

Pond Data

Contours - User-defined contour areas. Conic method used for volume calculation. Beginning Elevation = 1349.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (acft)	Total storage (acft)
0.00	1349.00	64,300	0.000	0.000
1.00	1350.00	69,100	1.531	1.531
2.00	1351.00	74,100	1.643	3.174
3.00	1352.00	79,100	1.758	4.932
4.00	1353.00	84,300	1.875	6.807

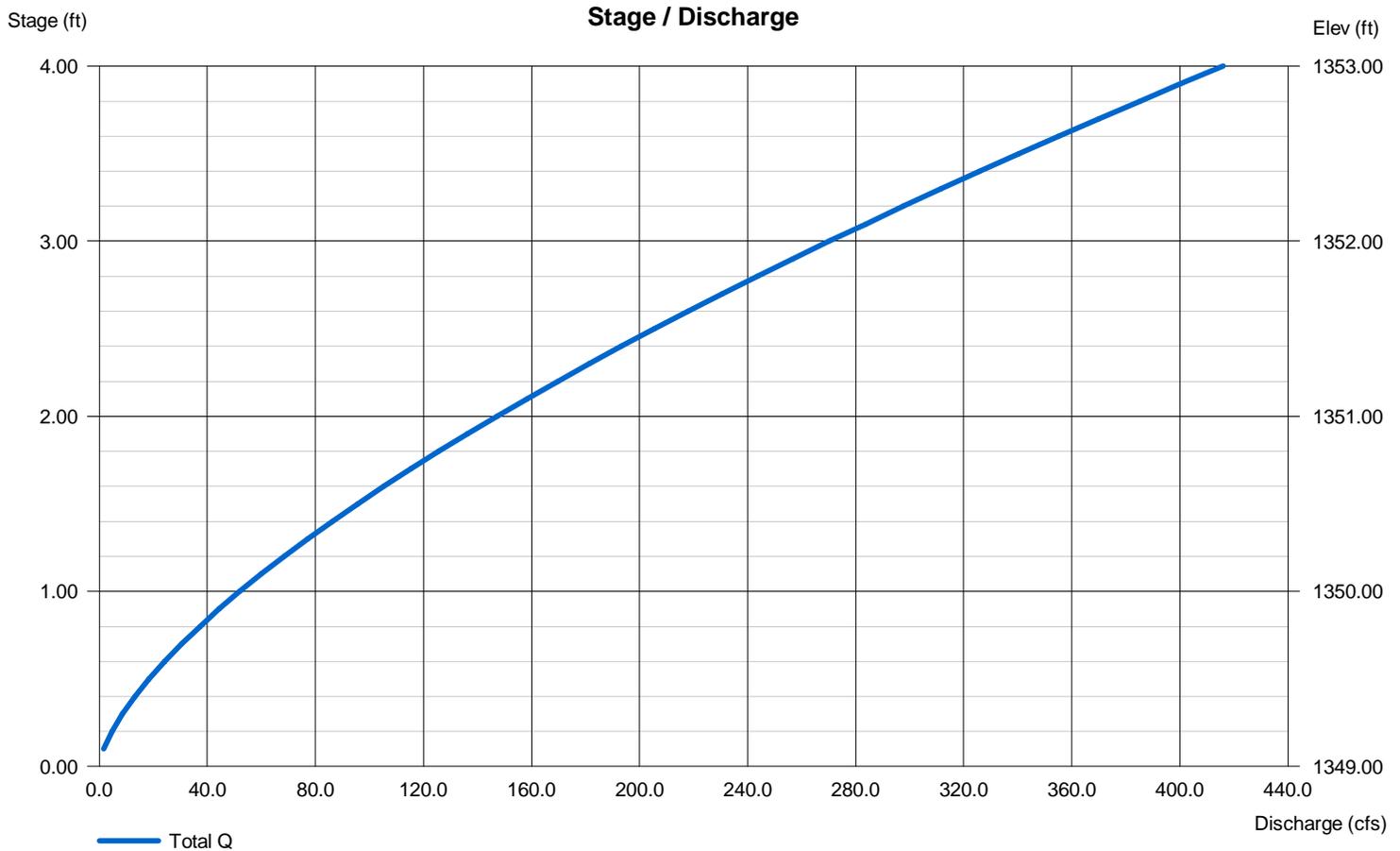
Culvert / Orifice Structures

	[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)	= 0.00	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)	= 20.00	0.00	0.00	0.00
Crest El. (ft)	= 1349.00	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 and outlet control. Weir risers are checked for orifice conditions.



Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.02

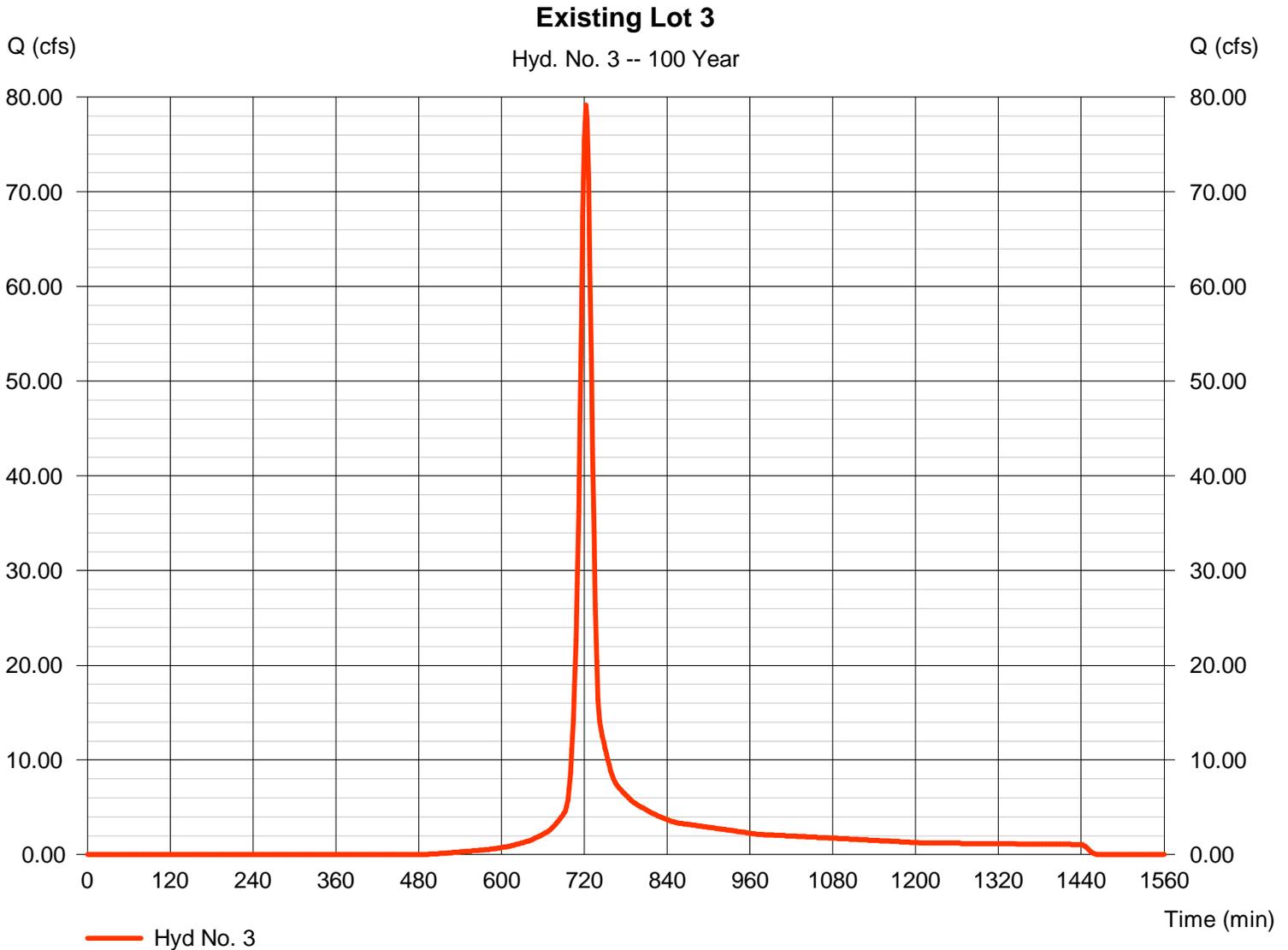
Friday, Jun 29, 2007

Hyd. No. 3

Existing Lot 3

Hydrograph type = SCS Runoff
Storm frequency = 100 yrs
Time interval = 2 min
Drainage area = 15.000 ac
Basin Slope = 0.0 %
Tc method = USER
Total precip. = 7.80 in
Storm duration = 24 hrs

Peak discharge = 79.17 cfs
Time to peak = 722 min
Hyd. volume = 5.095 acft
Curve number = 69
Hydraulic length = 0 ft
Time of conc. (Tc) = 15.00 min
Distribution = Type II
Shape factor = 484



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