4.3 25 Year Storm Pipe Analysis & HGL Reports

25-YEAR RETURN PERIOD

STORM PIPE ANALYSIS

RESERVE @ MITCHELL MILL

5109 MITCHELL MILL ROAD, TOWN OF ROLESVILLE, WAKE COUNTY, NORTH CAROLINA

PREPARED BY: TOM TAYLOR
STRONG ROCK ENGINEERING GROUP, PLLC | COMPANY LICENSE # P-2166
305 CHURCH AT NORTH HILLS STREET, SUITE 1110 RALEIGH, NC 27609 |
INFORMATION@STRONGROCKGROUP.COM

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TABLE OF CONTENTS

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STUDY DESCRIPTION.

This study utilized:

- Auto Desk Storm and Sanitary Analysis Program for analyzing and designing stormwater sewers.

Calculation requirements:

- Auto Desk Storm and Sanitary Analysis Program for analyzing and designing stormwater sewers.
- The program used to model the storm sewer system utilizes the rational method for the quantity of stormwater input.

The results of the storm sewer analysis shows that the 10-year event stays within the pipe and the 25-year event does not top the structures.

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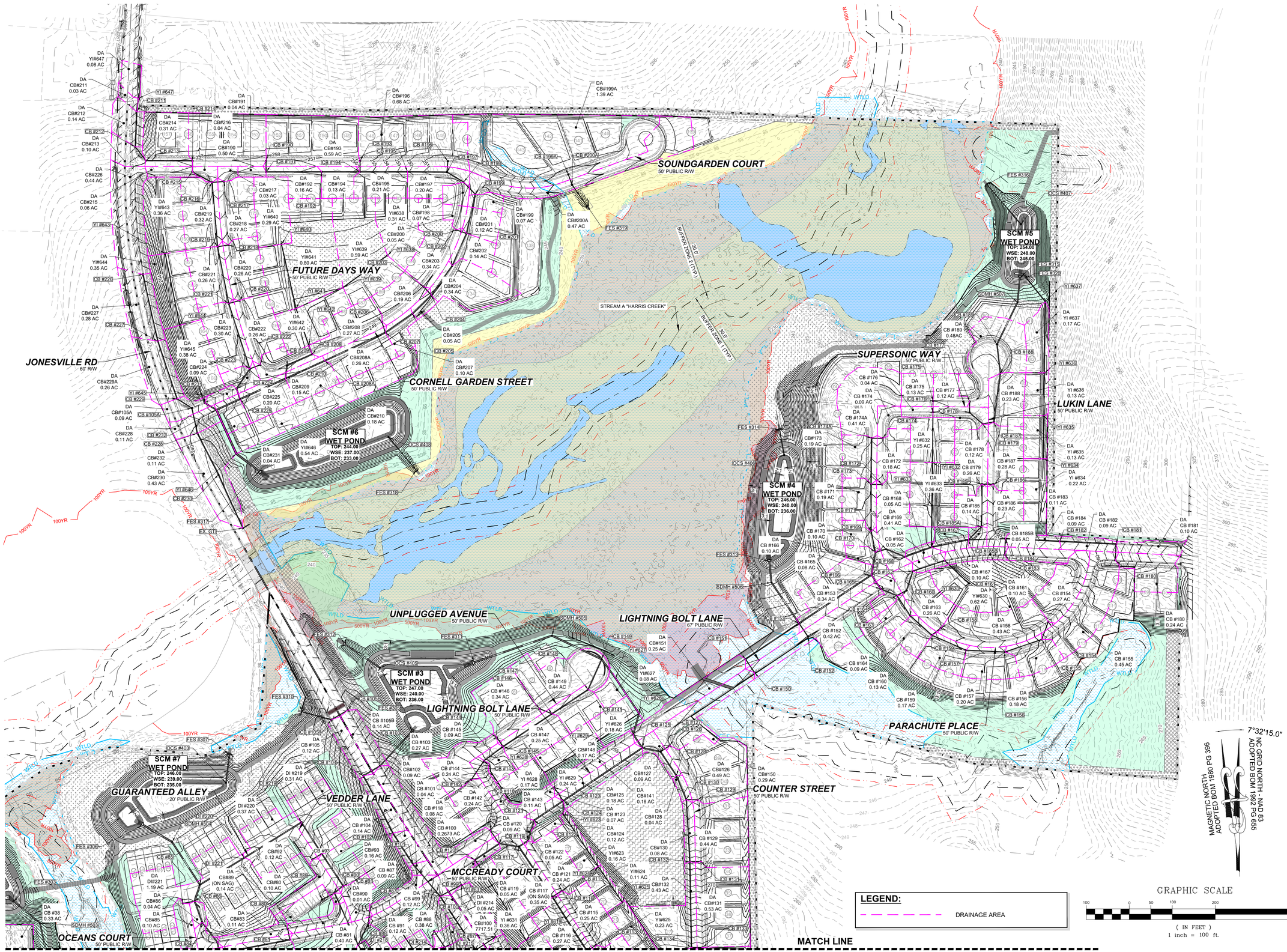
DRAINAGE MAP

PROGRESS PLOT DATE: 11/01/2024



No.	REVISIONS	DATE	BY
01	PRELIMINARY SUBDIVISION PLAT PSP-23-03	08/01/2023	SREG
02	TOWN OF ROLESVILLE PSP-23-05	12/05/2023	SREG
03	TOWN OF ROLESVILLE PSP V3-23-03	03/01/2024	SREG
04	TOWN OF ROLESVILLE PSP V4-23-03	06/04/2024	SREG
05	TOWN OF ROLESVILLE PSP V5-23-03	09/03/2024	SREG
06	TOWN OF ROLESVILLE PSP V6-23-03	11/01/2024	SREG

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 036225 ENGINEER JOSHUA W. LAMBERT

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STRONG ROCK PROJECT	PSP-23-03
NOT FOR CONSTRUCTION	
SCALE	AS SHOWN
DESIGNED BY	JWL
DRAWN BY	SRG
CHECKED BY	JWL

RESERVE @ MITCHELL MILL

TOWN OF ROLESVILLE, WAKE COUNTY, NORTH CAROLINA

PRELIMINARY SUBDIVISION PLAT

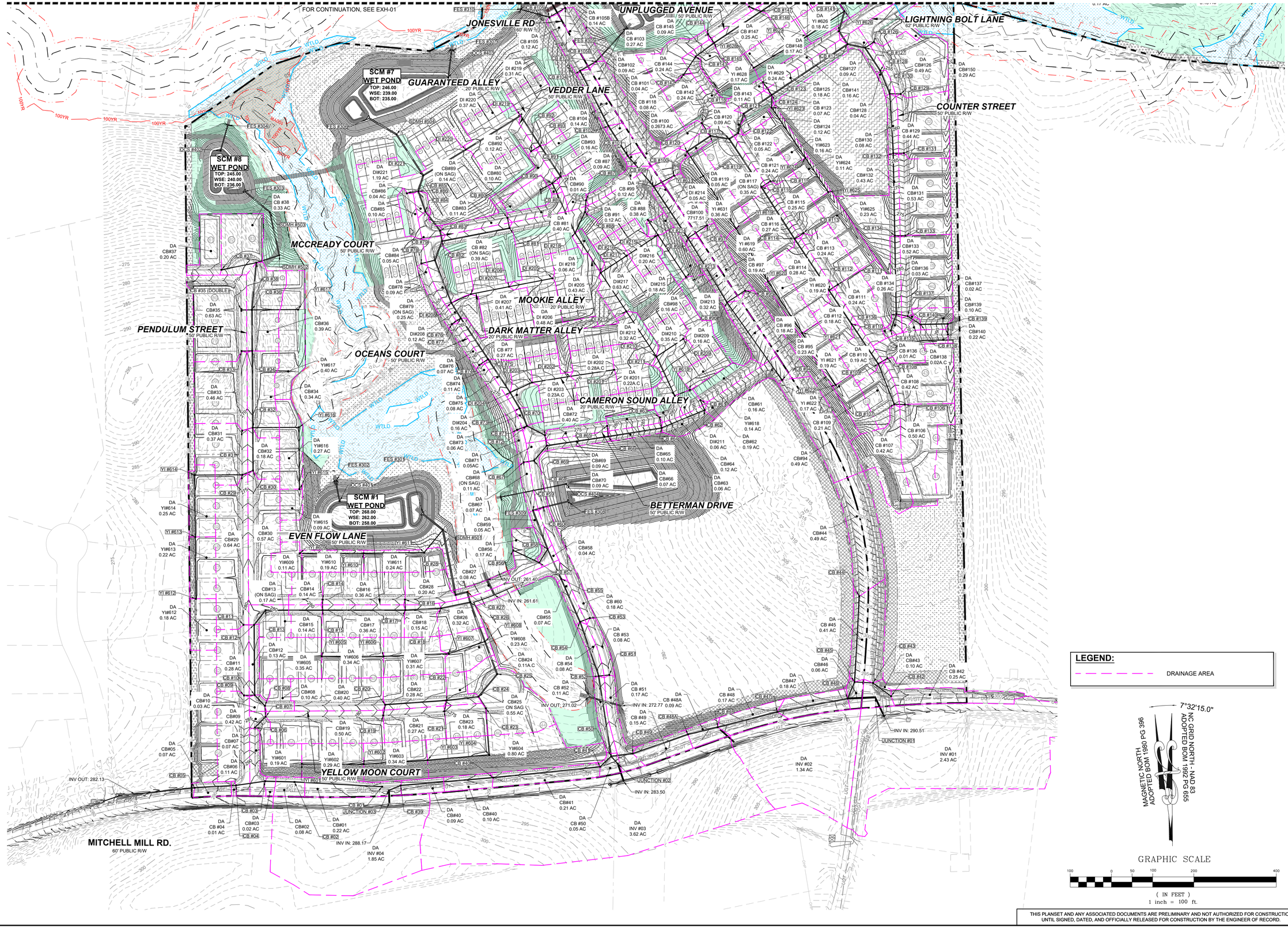
THE DRAINAGE MAP
EXHIBIT - 01

DRAWING SHEET

EX-01

01 OF 02

MATCH LINE
FOR CONTINUATION, SEE EXH-01



LEGEND:

DRAINAGE AREA

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

THIS PLANSET AND ANY ASSOCIATED DOCUMENTS ARE PRELIMINARY AND NOT AUTHORIZED FOR CONSTRUCTION UNTIL SIGNED, DATED, AND OFFICIALLY RELEASED FOR CONSTRUCTION BY THE ENGINEER OF RECORD.

No.	REVISIONS	DATE	BY
01	PRELIMINARY SUBDIVISION PLAT PSP-23-03	08/01/2023	SREG
02	TOWN OF ROLESVILLE PSP-23-05	12/05/2023	SREG
03	TOWN OF ROLESVILLE PSP V3-23-03	03/01/2024	SREG
04	TOWN OF ROLESVILLE PSP V4-23-03	06/04/2024	SREG
05	TOWN OF ROLESVILLE PSP V5-23-03	09/03/2024	SREG
06	TOWN OF ROLESVILLE PSP V6-23-03	11/01/2024	SREG

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 036225 ENGINEER JOSHUA W. LAMBERT

STRONG ROCK ENGINEERING GROUP, PLLC | COMPANY LICENSE # P-2165
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STRONG ROCK PROJECT	PSP-23-03
	NOT FOR CONSTRUCTION
SCALE	AS SHOWN
DESIGNED BY	JWL
DRAWN BY	SRG
CHECKED BY	JWL

RESERVE @ MITCHELL MILL
TOWN OF ROLESVILLE, WAKE COUNTY, NORTH CAROLINA
PRELIMINARY SUBDIVISION PLAT
THE DRAINAGE MAP
EXHIBIT - 02

DRAWING SHEET
EX-02

02 OF 02

RAINFALL DATA

NOAA Atlas 14, Volume 2, Version 3
Location name: Wake Forest, North Carolina, USA*
Latitude: 35.8807°, Longitude: -78.4771°
Elevation: 282 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

G.M. Bonnin, D. Martin, B. Lin, T. Parzybok, M.Yekta, and D. Riley

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches/hour)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	**4.85** (4.44-5.30)	**5.63** (5.16-6.16)	**6.42** (5.89-7.01)	**7.21** (6.59-7.86)	**7.99** (7.28-8.71)	**8.62** (7.81-9.40)	**9.17** (8.27-10.0)	**9.66** (8.66-10.5)	**10.2** (9.07-11.1)	**10.7** (9.43-11.7)
10-min	**3.87** (3.55-4.24)	**4.50** (4.13-4.92)	**5.14** (4.72-5.61)	**5.76** (5.27-6.29)	**6.37** (5.80-6.94)	**6.86** (6.22-7.48)	**7.29** (6.57-7.94)	**7.66** (6.86-8.35)	**8.07** (7.18-8.81)	**8.42** (7.42-9.21)
15-min	**3.22** (2.95-3.53)	**3.77** (3.46-4.12)	**4.34** (3.98-4.73)	**4.86** (4.44-5.30)	**5.38** (4.90-5.87)	**5.79** (5.25-6.31)	**6.14** (5.54-6.69)	**6.44** (5.78-7.03)	**6.77** (6.02-7.40)	**7.04** (6.21-7.71)
30-min	**2.21** (2.02-2.42)	**2.61** (2.39-2.85)	**3.08** (2.82-3.36)	**3.52** (3.22-3.84)	**3.99** (3.63-4.35)	**4.36** (3.96-4.75)	**4.70** (4.24-5.12)	**5.02** (4.49-5.47)	**5.39** (4.79-5.88)	**5.70** (5.03-6.24)
60-min	**1.38** (1.26-1.51)	**1.64** (1.50-1.79)	**1.98** (1.81-2.16)	**2.29** (2.10-2.50)	**2.65** (2.42-2.89)	**2.96** (2.68-3.22)	**3.24** (2.92-3.53)	**3.52** (3.15-3.84)	**3.87** (3.44-4.22)	**4.16** (3.67-4.56)
2-hr	**0.806** (0.732-0.889)	**0.959** (0.875-1.05)	**1.17** (1.07-1.29)	**1.38** (1.25-1.51)	**1.62** (1.46-1.77)	**1.83** (1.64-2.00)	**2.03** (1.81-2.22)	**2.24** (1.98-2.44)	**2.50** (2.20-2.74)	**2.74** (2.38-3.00)
3-hr	**0.568** (0.516-0.629)	**0.677** (0.618-0.747)	**0.830** (0.755-0.915)	**0.981** (0.890-1.08)	**1.16** (1.05-1.28)	**1.33** (1.19-1.46)	**1.49** (1.32-1.63)	**1.66** (1.46-1.82)	**1.88** (1.64-2.06)	**2.09** (1.80-2.30)
6-hr	**0.342** (0.312-0.377)	**0.407** (0.373-0.448)	**0.500** (0.456-0.549)	**0.591** (0.538-0.648)	**0.705** (0.637-0.771)	**0.807** (0.725-0.882)	0.909 (0.810-0.992)	**1.02** (0.897-1.11)	**1.16** (1.01-1.27)	**1.30** (1.11-1.42)
12-hr	**0.200** (0.183-0.220)	**0.238** (0.219-0.262)	**0.294** (0.269-0.322)	**0.350** (0.319-0.383)	**0.420** (0.380-0.459)	**0.484** (0.435-0.527)	**0.549** (0.488-0.597)	**0.619** (0.544-0.672)	**0.715** (0.619-0.776)	**0.804** (0.685-0.873)
24-hr	**0.119** (0.111-0.128)	**0.144** (0.134-0.155)	**0.181** (0.168-0.195)	**0.211** (0.195-0.227)	**0.251** (0.232-0.270)	**0.283** (0.261-0.305)	**0.316** (0.290-0.341)	**0.351** (0.321-0.378)	**0.398** (0.363-0.430)	**0.436** (0.395-0.472)
2-day	**0.069** (0.064-0.074)	**0.083** (0.077-0.089)	**0.103** (0.096-0.112)	**0.120** (0.111-0.129)	**0.142** (0.131-0.153)	**0.160** (0.147-0.172)	**0.178** (0.163-0.192)	**0.197** (0.180-0.212)	**0.222** (0.203-0.241)	**0.243** (0.220-0.263)
3-day	**0.048** (0.045-0.052)	**0.058** (0.054-0.063)	**0.073** (0.068-0.078)	**0.084** (0.078-0.090)	**0.099** (0.092-0.106)	**0.111** (0.103-0.120)	**0.124** (0.114-0.133)	**0.137** (0.126-0.147)	**0.155** (0.141-0.167)	**0.169** (0.153-0.182)
4-day	**0.038** (0.036-0.041)	**0.046** (0.043-0.049)	**0.057** (0.053-0.061)	**0.066** (0.061-0.070)	**0.078** (0.072-0.083)	**0.087** (0.081-0.093)	**0.097** (0.089-0.104)	**0.107** (0.098-0.115)	**0.121** (0.110-0.130)	**0.132** (0.120-0.142)
7-day	**0.025** (0.024-0.027)	**0.030** (0.028-0.032)	**0.037** (0.035-0.039)	**0.042** (0.040-0.045)	**0.050** (0.046-0.053)	**0.056** (0.052-0.059)	**0.062** (0.057-0.066)	**0.068** (0.063-0.073)	**0.076** (0.070-0.082)	**0.083** (0.076-0.089)
10-day	**0.020** (0.019-0.021)	**0.024** (0.022-0.025)	**0.029** (0.027-0.031)	**0.033** (0.031-0.035)	**0.038** (0.036-0.041)	**0.042** (0.039-0.045)	**0.046** (0.043-0.050)	**0.051** (0.047-0.054)	**0.057** (0.052-0.061)	**0.061** (0.056-0.066)
20-day	**0.013** (0.012-0.014)	**0.016** (0.015-0.017)	**0.019** (0.018-0.020)	**0.021** (0.020-0.022)	**0.024** (0.023-0.026)	**0.027** (0.025-0.029)	**0.029** (0.027-0.031)	**0.032** (0.030-0.034)	**0.035** (0.033-0.038)	**0.038** (0.035-0.041)
30-day	**0.011** (0.010-0.012)	**0.013** (0.012-0.014)	**0.015** (0.014-0.016)	**0.017** (0.016-0.018)	**0.019** (0.018-0.020)	**0.021** (0.019-0.022)	**0.023** (0.021-0.024)	**0.024** (0.023-0.026)	**0.027** (0.025-0.028)	**0.028** (0.026-0.030)
45-day	**0.009** (0.009-0.010)	**0.011** (0.010-0.011)	**0.012** (0.012-0.013)	**0.014** (0.013-0.015)	**0.015** (0.015-0.016)	**0.017** (0.016-0.018)	**0.018** (0.017-0.019)	**0.019** (0.018-0.020)	**0.021** (0.019-0.022)	**0.022** (0.020-0.023)
60-day	**0.008** (0.008-0.009)	**0.010** (0.009-0.010)	**0.011** (0.010-0.012)	**0.012** (0.011-0.013)	**0.013** (0.013-0.014)	**0.014** (0.014-0.015)	**0.015** (0.014-0.016)	**0.016** (0.015-0.017)	**0.018** (0.016-0.019)	**0.018** (0.017-0.020)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAAAtlas 14 document for more information.

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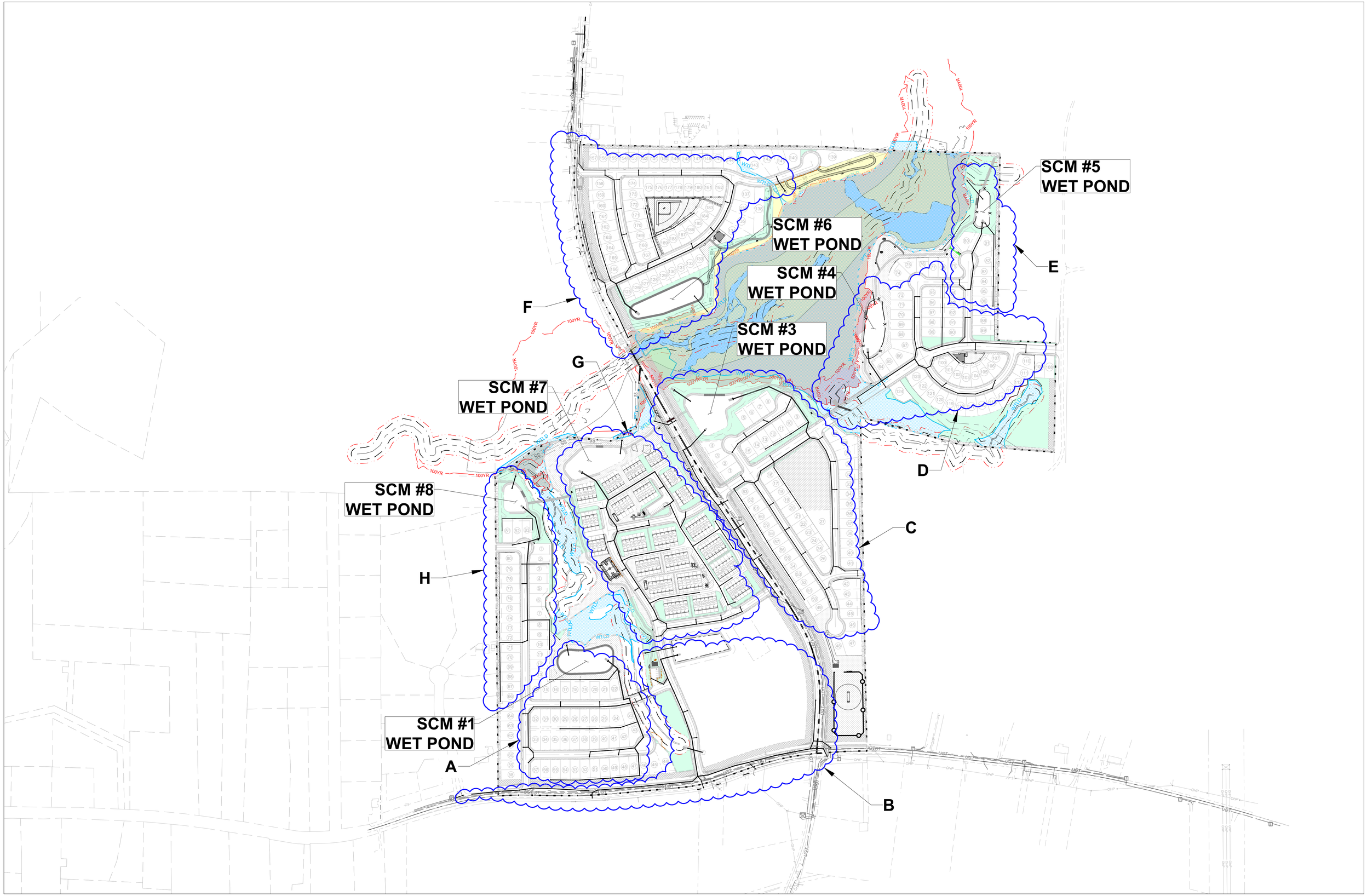
PF graphical

THE TABLE REPORT & PROFILE HGL OUTPUTS


SCM #5
WET POND
SCM #6
WET POND
SCM #4
WET POND
SCM #3
WET POND
SCM #7
WET POND
SCM #8
WET POND
SCM #1
WET POND
E
F
G
D
C
H
A
B

S T O R M W A T E R AREA " A "

STORMWATER PIPING AND HYDRAULIC GRADE LINE FOR 25-YR STORM

PLAN VIEW

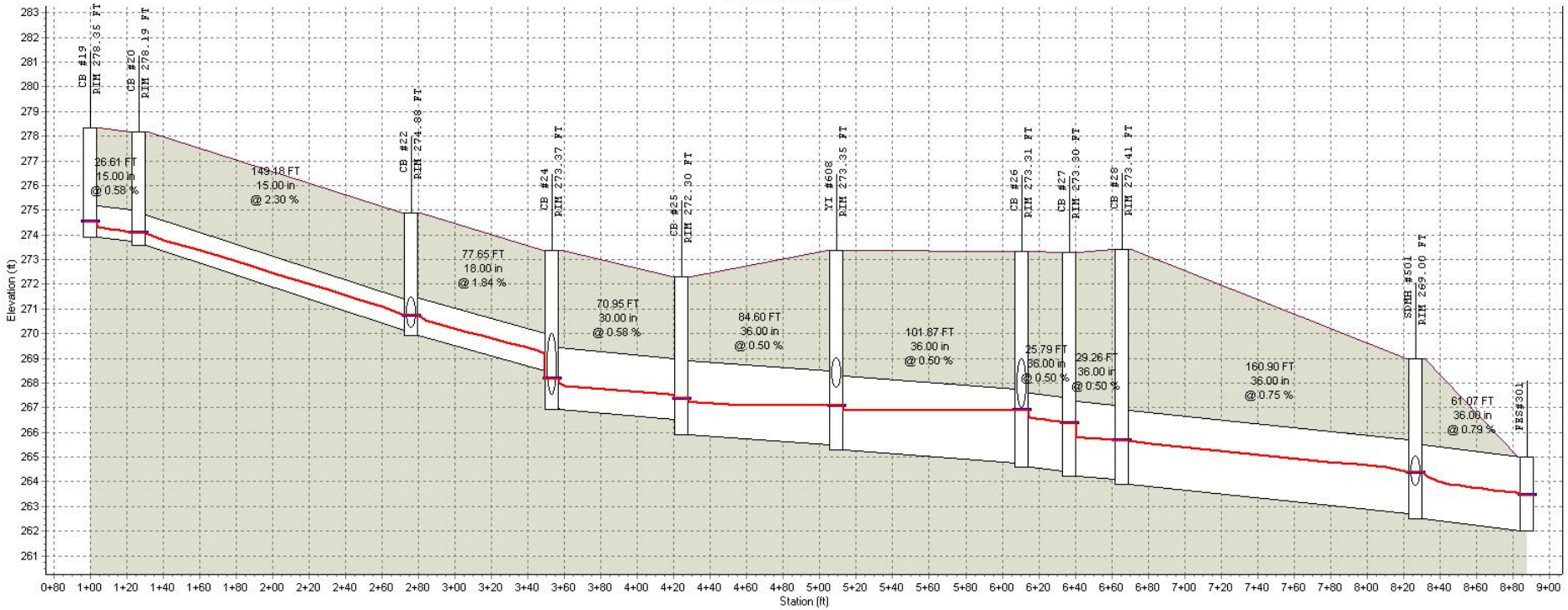
DRAINAGE AREA

SN	Element ID	Area (acres)	Drainage Node ID	Weighted Runoff Coefficient	Accumulated Precipitation (inches)	Total Runoff (inches)	Peak Runoff (cfs)	Rainfall Intensity (inches/hr)	Time of Concentration (days hh:mm:ss)
1	Sub-CB#06	0.11	CB #06	0.8300	0.67	0.55	0.73	7.990	0 00:05:00
2	Sub-CB#07	0.07	CB #07	0.4900	0.67	0.33	0.27	7.990	0 00:05:00
3	Sub-CB#08	0.10	CB #08	0.4900	0.67	0.33	0.39	7.990	0 00:05:00
4	Sub-CB#09	0.42	CB #09	0.5400	0.67	0.36	1.81	7.990	0 00:05:00
5	Sub-CB#10	0.03	CB #10	0.8300	0.67	0.55	0.20	7.990	0 00:05:00
6	Sub-CB#11	0.28	CB #11	0.5400	0.67	0.36	1.21	7.990	0 00:05:00
7	Sub-CB#12	0.13	CB #12	0.4900	0.67	0.33	0.51	7.990	0 00:05:00
8	Sub-CB#13	0.17	CB #13	0.5400	0.67	0.36	0.73	7.990	0 00:05:00
9	Sub-CB#14	0.14	CB #14	0.5400	0.67	0.36	0.60	7.990	0 00:05:00
10	Sub-CB#15	0.14	CB #15	0.5400	0.67	0.36	0.60	7.990	0 00:05:00
11	Sub-CB#16	0.36	CB #16	0.5900	0.67	0.39	1.70	7.990	0 00:05:00
12	Sub-CB#17	0.36	CB #17	0.5900	0.67	0.39	1.70	7.990	0 00:05:00
13	Sub-CB#18	0.15	CB #18	0.5400	0.67	0.36	0.65	7.990	0 00:05:00
14	Sub-CB#19	0.50	CB #19	0.5400	0.67	0.36	2.16	7.990	0 00:05:00
15	Sub-CB#20	0.40	CB #20	0.5400	0.67	0.36	1.73	7.990	0 00:05:00
16	Sub-CB#21	0.27	CB #21	0.5900	0.67	0.39	1.27	7.990	0 00:05:00
17	Sub-CB#22	0.28	CB #22	0.5900	0.67	0.39	1.32	7.990	0 00:05:00
18	Sub-CB#23	0.18	CB #23	0.5900	0.67	0.39	0.85	7.990	0 00:05:00
19	Sub-CB#24	0.11	CB #24	0.5900	0.67	0.39	0.52	7.990	0 00:05:00
20	Sub-CB#25	0.55	CB #25	0.5900	0.67	0.39	2.59	7.990	0 00:05:00
21	Sub-CB#26	0.32	CB #26	0.5400	0.67	0.36	1.38	7.990	0 00:05:00
22	Sub-CB#27	0.08	CB #27	0.8300	0.67	0.55	0.53	7.990	0 00:05:00
23	Sub-CB#28	0.20	CB #28	0.5900	0.67	0.39	0.94	7.990	0 00:05:00
24	Sub-YI#601	0.19	YI #601	0.3500	0.67	0.23	0.53	7.990	0 00:05:00
25	Sub-YI#602	0.29	YI #602	0.3500	0.67	0.23	0.81	7.990	0 00:05:00
26	Sub-YI#603	0.34	YI #603	0.3500	0.67	0.23	0.95	7.990	0 00:05:00
27	Sub-YI#604	0.80	YI #604	0.3500	0.67	0.23	2.24	7.990	0 00:05:00
28	Sub-YI#605	0.35	YI #605	0.3500	0.67	0.23	0.98	7.990	0 00:05:00
29	Sub-YI#606	0.34	YI #606	0.3500	0.67	0.23	0.95	7.990	0 00:05:00
30	Sub-YI#607	0.31	YI #607	0.3000	0.67	0.20	0.74	7.990	0 00:05:00
31	Sub-YI#608	0.23	YI #608	0.3000	0.67	0.20	0.55	7.990	0 00:05:00
32	Sub-YI#609	0.11	YI #609	0.3000	0.67	0.20	0.26	7.990	0 00:05:00
33	Sub-YI#610	0.19	YI #610	0.3500	0.67	0.23	0.53	7.990	0 00:05:00
34	Sub-YI#611	0.24	YI #611	0.3500	0.67	0.23	0.67	7.990	0 00:05:00

MODEL INPUT										MODEL OUTPUT									
SN	Element ID	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Pipe Diameter or Height (inches)	Manning's Roughness	Peak Flow (cfs)	Time of Peak Flow Occurrence (days hh:mm)	Max Flow Velocity (ft/sec)	Travel Time (min)	Design Flow Capacity (cfs)	Max Flow / Design Flow Ratio	Max Flow Depth / Total Depth Ratio	Total Time Surcharged (min)	Max Flow Depth (ft)	Reported Condition
1	P #06	YI #601	YI #602	150.01	278.05	273.94	2.7400	15.000	0.0130	0.50	0 00:05	4.39	0.57	10.69	0.05	0.15	0.00	0.19	Calculated
2	P #07	YI #602	YI #603	155.38	273.30	271.71	1.0300	15.000	0.0130	1.23	0 00:05	3.96	0.65	6.54	0.19	0.30	0.00	0.38	Calculated
3	P #08	YI #603	YI #604	150.02	271.51	269.29	1.4800	18.000	0.0130	2.07	0 00:05	5.11	0.49	12.78	0.16	0.28	0.00	0.42	Calculated
4	P #09	YI #604	CB #23	113.04	268.75	268.18	0.5000	24.000	0.0130	4.06	0 00:05	3.95	0.48	16.00	0.25	0.36	0.00	0.73	Calculated
5	P #10	CB #23	CB #24	33.68	267.73	267.49	0.6900	30.000	0.0130	4.91	0 00:05	4.22	0.13	33.96	0.14	0.30	0.00	0.74	Calculated
6	P #11	CB #19	CB #20	26.61	273.92	273.76	0.5800	15.000	0.0130	1.66	0 00:05	3.18	0.14	4.93	0.34	0.44	0.00	0.55	Calculated
7	P #12	CB #20	CB #22	149.18	273.56	270.13	2.3000	15.000	0.0130	3.06	0 00:05	6.16	0.40	9.79	0.31	0.44	0.00	0.54	Calculated
8	P #13	CB #21	CB #22	26.71	270.54	270.22	1.2100	15.000	0.0130	1.54	0 00:05	3.59	0.12	7.11	0.22	0.40	0.00	0.50	Calculated
9	P #14	CB #22	CB #24	77.65	269.93	268.50	1.8400	18.000	0.0130	5.88	0 00:05	6.87	0.19	14.26	0.41	0.49	0.00	0.73	Calculated
10	P #15	CB #24	CB #25	70.95	266.91	266.50	0.5800	30.000	0.0130	11.34	0 00:05	5.16	0.23	31.26	0.36	0.46	0.00	1.15	Calculated
11	P #16	CB #25	YI #608	84.60	265.90	265.48	0.5000	36.000	0.0130	13.58	0 00:05	4.26	0.33	47.16	0.29	0.51	0.00	1.53	Calculated
12	P #17	YI #605	YI #606	150.00	275.34	272.76	1.7200	15.000	0.0130	0.93	0 00:05	4.42	0.57	8.48	0.11	0.23	0.00	0.28	Calculated
13	P #18	YI #606	YI #607	158.24	272.44	270.24	1.3800	15.000	0.0130	1.78	0 00:05	4.88	0.54	7.60	0.23	0.34	0.00	0.42	Calculated
14	P #19	YI #607	YI #608	92.62	270.04	267.78	2.4500	15.000	0.0130	2.45	0 00:05	6.37	0.24	10.10	0.24	0.35	0.00	0.44	Calculated
15	P #20	YI #608	CB #26	101.87	265.28	264.77	0.5000	36.000	0.0130	15.77	0 00:06	3.48	0.49	47.16	0.33	0.65	0.00	1.96	Calculated
16	P #21	CB #06	CB #07	36.60	281.29	279.14	5.8800	15.000	0.0130	0.71	0 00:05	6.09	0.10	15.66	0.05	0.15	0.00	0.19	Calculated
17	P #22	CB #07	CB #08	26.75	278.94	278.66	1.0400	15.000	0.0130	0.96	0 00:05	3.43	0.13	6.60	0.15	0.28	0.00	0.35	Calculated
18	P #23	CB #08	CB #10	35.96	278.46	277.34	3.1300	15.000	0.0130	1.32	0 00:05	4.91	0.12	11.43	0.12	0.28	0.00	0.35	Calculated
19	P #24	CB #09	CB #10	25.98	277.58	277.34	0.9200	15.000	0.0130	1.59	0 00:05	3.71	0.12	6.21	0.26	0.38	0.00	0.47	Calculated
20	P #25	CB #10	CB #12	170.21	277.14	275.39	1.0300	18.000	0.0130	3.11	0 00:05	4.61	0.62	10.65	0.29	0.41	0.00	0.61	Calculated
21	P #26	CB #11	CB #12	25.86	275.76	275.63	0.5000	15.000	0.0130	1.16	0 00:05	2.79	0.15	4.56	0.26	0.37	0.00	0.47	Calculated
22	P #27	CB #12	CB #13	45.42	275.19	274.69	1.1000	18.000	0.0130	4.68	0 00:05	5.20	0.15	11.02	0.42	0.51	0.00	0.76	Calculated
23	P #28	CB #13	CB #15	138.04	274.49	273.80	0.5000	24.000	0.0130	5.17	0 00:06	4.24	0.54	16.00	0.32	0.41	0.00	0.83	Calculated
24	P #29	CB #14	CB #15	25.72	274.71	274.58	0.5000	15.000	0.0130	0.57	0 00:05	2.32	0.18	4.57	0.12	0.25	0.00	0.32	Calculated
25	P #30	CB #15	CB #17	200.76	273.60	270.05	1.7700	24.000	0.0130	6.18	0 00:06	6.59	0.51	30.06	0.21	0.34	0.00	0.68	Calculated
26	P #31	CB #16	CB #17	25.83	270.89	270.76	0.5000	15.000	0.0130	1.35	0 00:05	2.89	0.15	4.56	0.30	0.41	0.00	0.51	Calculated
27	P #32	CB #17	CB #18	87.06	269.85	268.60	1.4300	24.000	0.0130	8.45	0 00:06	6.76	0.21	27.10	0.31	0.42	0.00	0.84	Calculated
28	P #33	CB #18	CB #26	71.92	268.40	266.98	1.9800	24.000	0.0130	9.18	0 00:06	7.62	0.16	31.84	0.29	0.41	0.00	0.82	Calculated
29	P #34	CB #26	CB #27	25.79	264.57	264.44	0.5000	36.000	0.0130	25.87	0 00:06	4.83	0.09	47.04	0.55	0.71	0.00	2.13	Calculated
30	P #35	CB #27	CB #28	29.26	264.24	264.10	0.5000	36.000	0.0130	26.29	0 00:06	5.69	0.09	47.16	0.56	0.62	0.00	1.87	Calculated
31	P #36	CB #28	SDMH #501	160.90	263.90	262.68	0.7500	36.000	0.0130	27.20	0 00:06	6.46	0.42	57.90	0.47	0.58	0.00	1.73	Calculated
32	P #37	YI #609	YI #610	155.00	273.50	270.00	2.2600	15.000	0.0130	0.24	0 00:05	3.21	0.80	9.71	0.03	0.11	0.00	0.14	Calculated
33	P #38	YI #610	YI #611	146.69	269.80	266.56	2.2100	15.000	0.0130	0.73	0 00:05	4.52	0.54	9.60	0.08	0.19	0.00	0.24	Calculated
34	P #39	YI #611	SDMH #501	71.25	266.36	263.80	3.5900	15.000	0.0130	1.40	0 00:05	6.15	0.19	12.24	0.11	0.33	0.00	0.41	Calculated
35	P #40	SDMH #501	FES#301	61.07	262.48	262.00	0.7900	36.000	0.0130	28.25	0 00:07	6.97	0.15	59.32	0.48	0.56	0.00	1.67	Calculated

Profile Plot

Main Street Storm Sewer



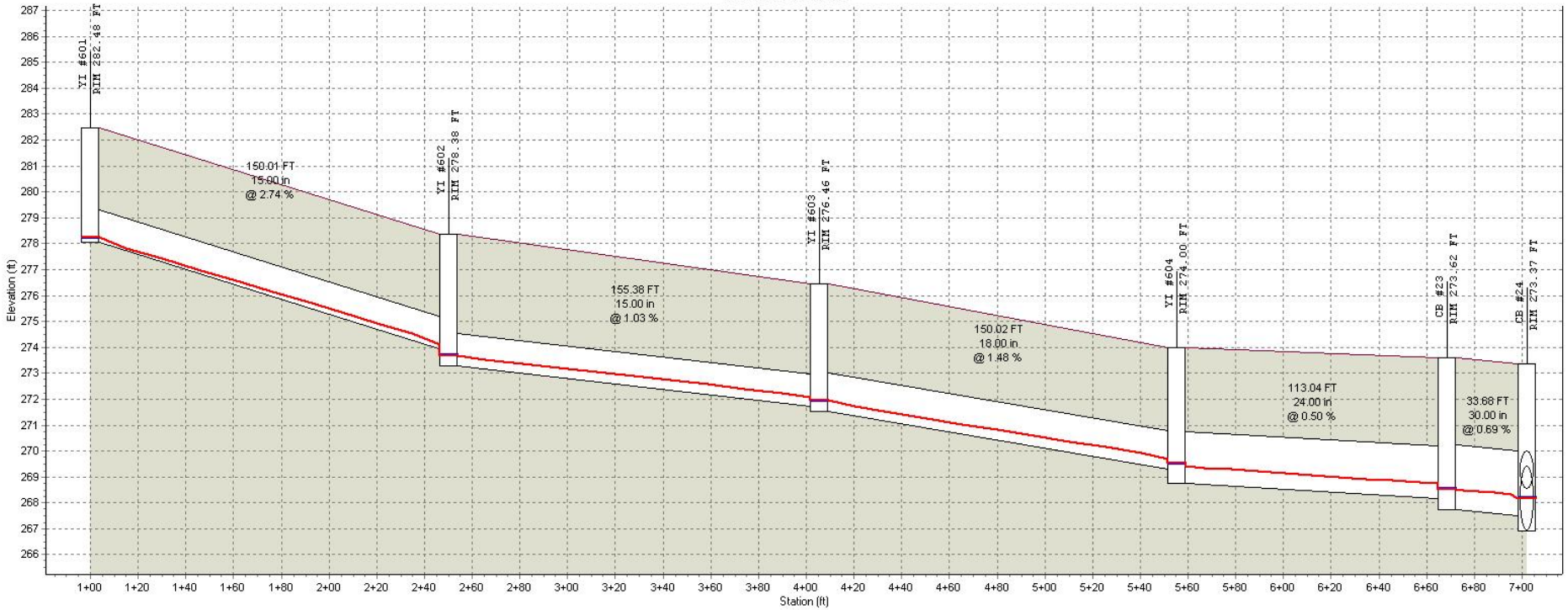
:	CB #19	CB #20	CB #22	CB #24	CB #25	YI #608	CB #26	CB #27	CB #28	SDMH #501	FES#301
RIM (FT):	278.35	278.19	274.88	273.37	272.30	273.35	273.31	273.30	273.41	269.00	
Invert (ft):	273.92	273.56	269.93	266.91	265.90	265.28	264.57	264.24	263.90	262.48	262.00
Min Pipe Cover (ft):										3.32	
Max HGL (ft):	274.52	274.06	270.73	268.17	267.36	267.08	266.89	266.37	265.67	264.37	263.46

Link ID:	P #11	P #12	P #14	P #15	P #16	P #20	P #34	P #35	P #36	P #40
(FT):	26.61	149.18	77.65	70.95	84.60	101.87	25.79	29.26	160.90	61.07
(in):	15.00	15.00	18.00	30.00	36.00	36.00	36.00	36.00	36.00	36.00
@ (%):	0.58	2.30	1.84	0.58	0.50	0.50	0.50	0.50	0.75	0.79
Up Invert (ft):	273.92	273.56	269.93	266.91	265.90	265.28	264.57	264.24	263.90	262.48
Dn Invert (ft):	273.76	270.13	268.50	266.50	265.48	264.77	264.44	264.10	262.68	262.00
Max Q (cfs):	1.66	3.06	5.88	11.34	13.58	15.77	25.87	26.29	27.20	28.25
Max Vel (ft/s):	3.18	6.16	6.87	5.16	4.26	3.48	4.83	5.69	6.46	6.97
Max Depth (ft):	0.55	0.54	0.73	1.15	1.53	1.96	2.13	1.87	1.73	1.67

HGL

Profile Plot

Main Street Storm Sewer



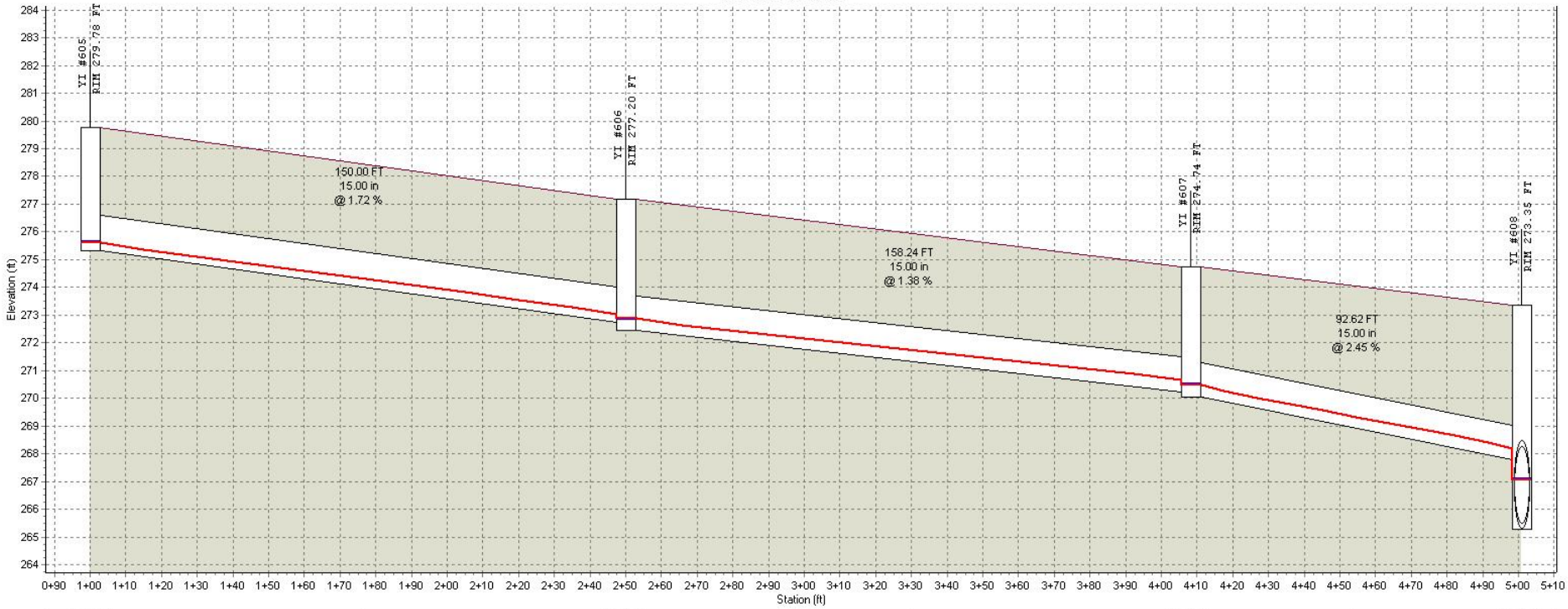
:	YI #601	YI #602	YI #603	YI #604	CB #23	CB #24
RIM (FT):	282.48	278.38	276.46	274.00	273.62	273.37
Invert (ft):	278.05	273.30	271.51	268.75	267.73	266.91
Min Pipe Cover (ft):						
Max HGL (ft):	278.23	273.69	271.94	269.52	268.52	268.17

Link ID:	P #06	P #07	P #08	P #09	P #10
(FT):	150.01	155.38	150.02	113.04	33.68
(in):	15.00	15.00	18.00	24.00	30.00
@ (%):	2.74	1.03	1.48	0.50	0.69
Up Invert (ft):	278.05	273.30	271.51	268.75	267.73
Dn Invert (ft):	273.94	271.71	269.29	268.18	267.49
Max Q (cfs):	0.50	1.23	2.07	4.06	4.91
Max Vel (ft/s):	4.39	3.96	5.11	3.95	4.22
Max Depth (ft):	0.19	0.38	0.42	0.73	0.74

HGL

Profile Plot

Main Street Storm Sewer



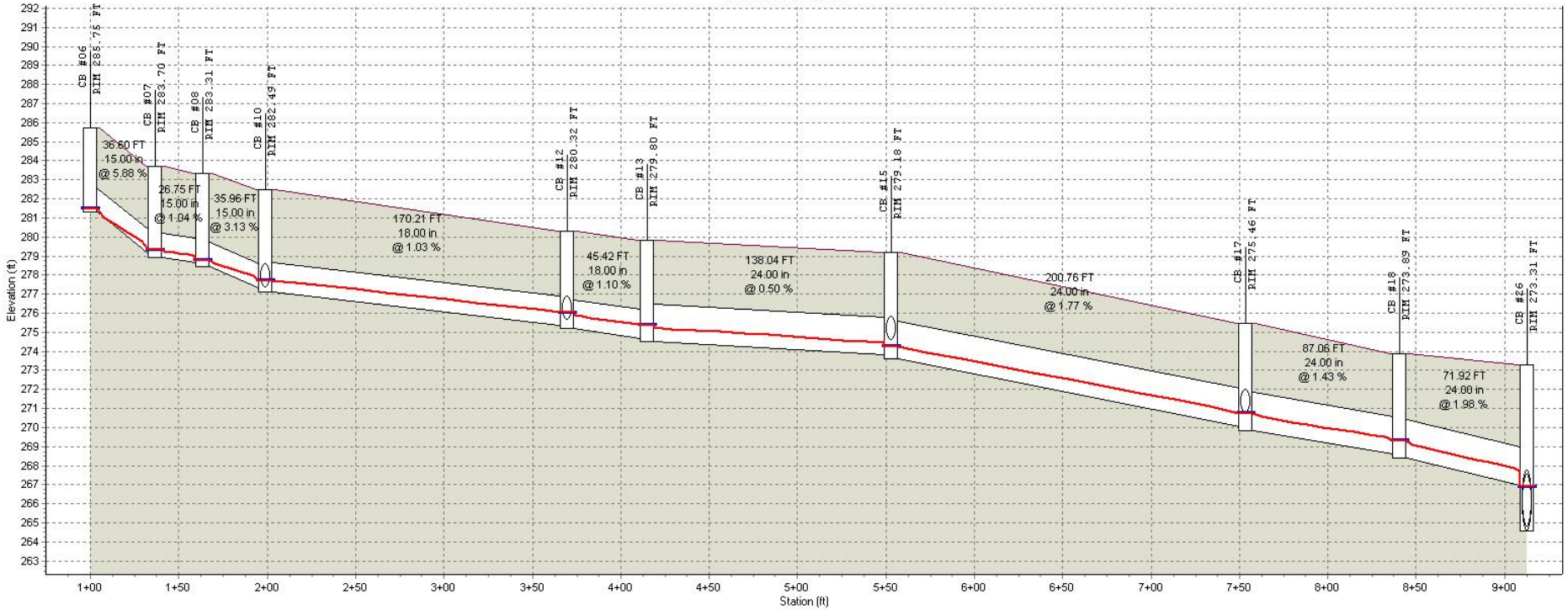
	YI #605	YI #606	YI #607	YI #608
RIM (FT):	279.78	277.20	274.74	273.35
Invert (ft):	275.34	272.44	270.04	265.28
Min Pipe Cover (ft):				
Max HGL (ft):	275.63	272.87	270.50	267.08

Link ID:	P #17	P #18	P #19
(FT):	150.00	158.24	92.62
(in):	15.00	15.00	15.00
@ (%):	1.72	1.38	2.45
Up Invert (ft):	275.34	272.44	270.04
Dn Invert (ft):	272.76	270.24	267.78
Max Q (cfs):	0.93	1.78	2.45
Max Vel (ft/s):	4.42	4.88	6.37
Max Depth (ft):	0.28	0.42	0.44

HGL

Profile Plot

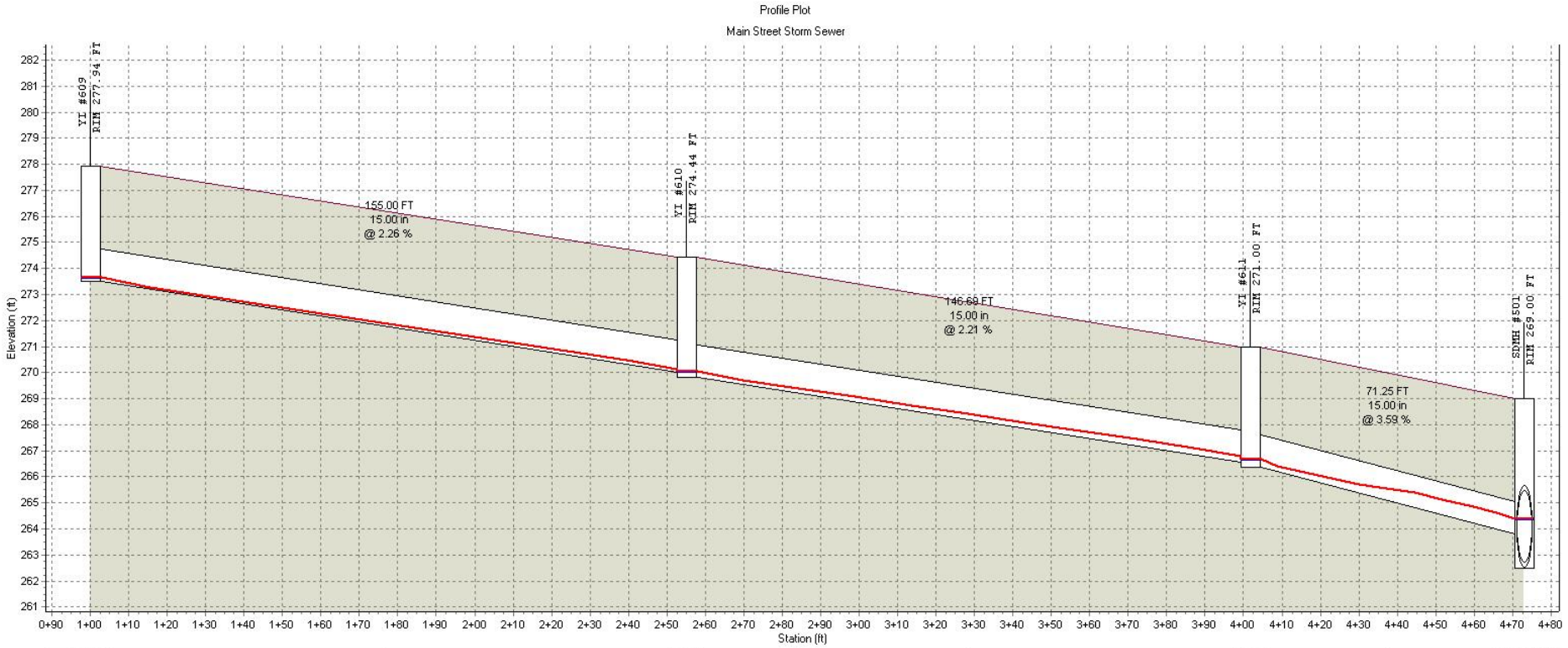
Main Street Storm Sewer



:	CB #06	CB #07	CB #08	CB #10	CB #12	CB #13	CB #15	CB #17	CB #18	CB #26
RIM (FT):	285.75	283.70	283.31	282.49	280.32	279.80	279.18	275.46	273.89	273.31
Invert (ft):	281.29	278.94	278.46	277.14	275.19	274.49	273.60	269.85	268.40	264.57
Min Pipe Cover (ft):										
Max HGL (ft):	281.49	279.32	278.78	277.73	276.03	275.36	274.25	270.76	269.30	266.89

Link ID:	P #21	P #22	P #23	P #25	P #27	P #28	P #30	P #32	P #33
(FT):	36.60	26.75	35.96	170.21	45.42	138.04	200.76	87.06	71.92
(in):	15.00	15.00	15.00	18.00	18.00	24.00	24.00	24.00	24.00
@ (%):	5.88	1.04	3.13	1.03	1.10	0.50	1.77	1.43	1.98
Up Invert (ft):	281.29	278.94	278.46	277.14	275.19	274.49	273.60	269.85	268.40
Dn Invert (ft):	279.14	278.66	277.34	275.39	274.69	273.80	270.05	268.60	266.98
Max Q (cfs):	0.71	0.96	1.32	3.11	4.68	5.17	6.18	8.45	9.18
Max Vel (ft/s):	6.09	3.43	4.91	4.61	5.20	4.24	6.59	6.76	7.62
Max Depth (ft):	0.19	0.35	0.35	0.61	0.76	0.83	0.68	0.84	0.82

HGL



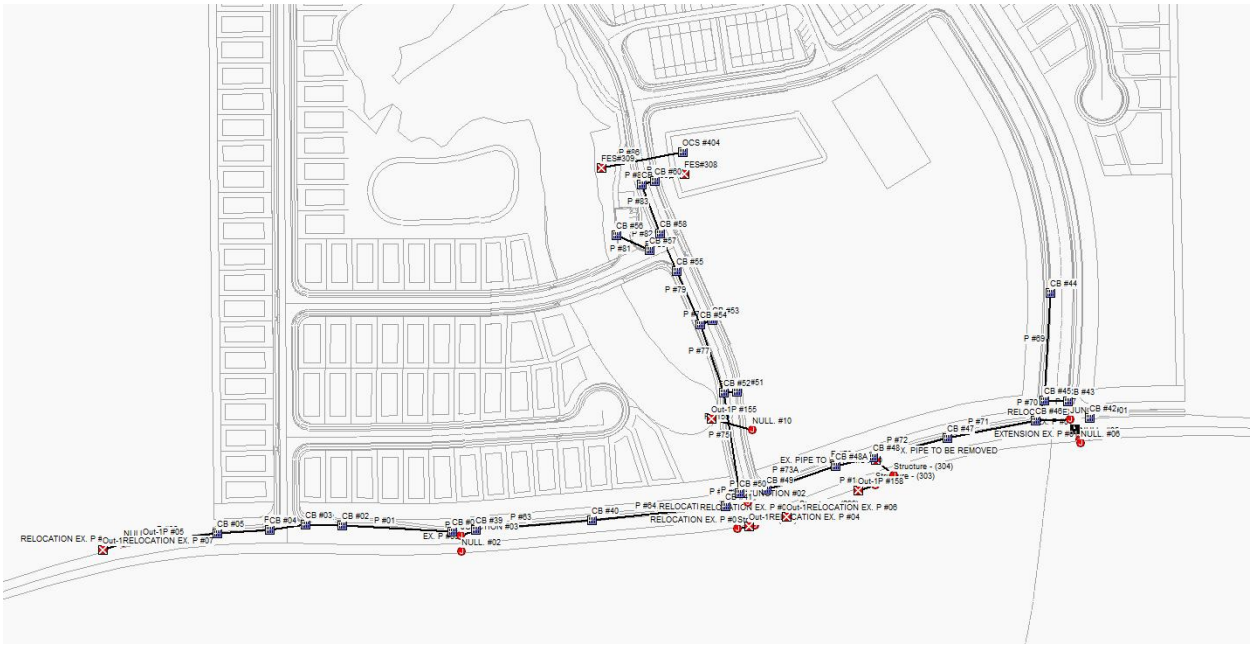
:	YI #609	YI #610	YI #611	SDMH #501
RIM (FT):	277.94	274.44	271.00	269.00
Invert (ft):	273.50	269.80	266.36	262.48
Min Pipe Cover (ft):				3.32
Max HGL (ft):	273.64	270.04	266.66	264.37

Link ID:	P #37	P #38	P #39
(FT):	155.00	146.69	71.25
(in):	15.00	15.00	15.00
@ (%):	2.26	2.21	3.59
Up Invert (ft):	273.50	269.80	266.36
Dn Invert (ft):	270.00	266.56	263.80
Max Q (cfs):	0.24	0.73	1.40
Max Vel (ft/s):	3.21	4.52	6.15
Max Depth (ft):	0.14	0.24	0.41

HGL

S T O R M W A T E R AREA " B "

STORMWATER PIPING AND HYDRAULIC GRADE LINE FOR 25-YR STORM

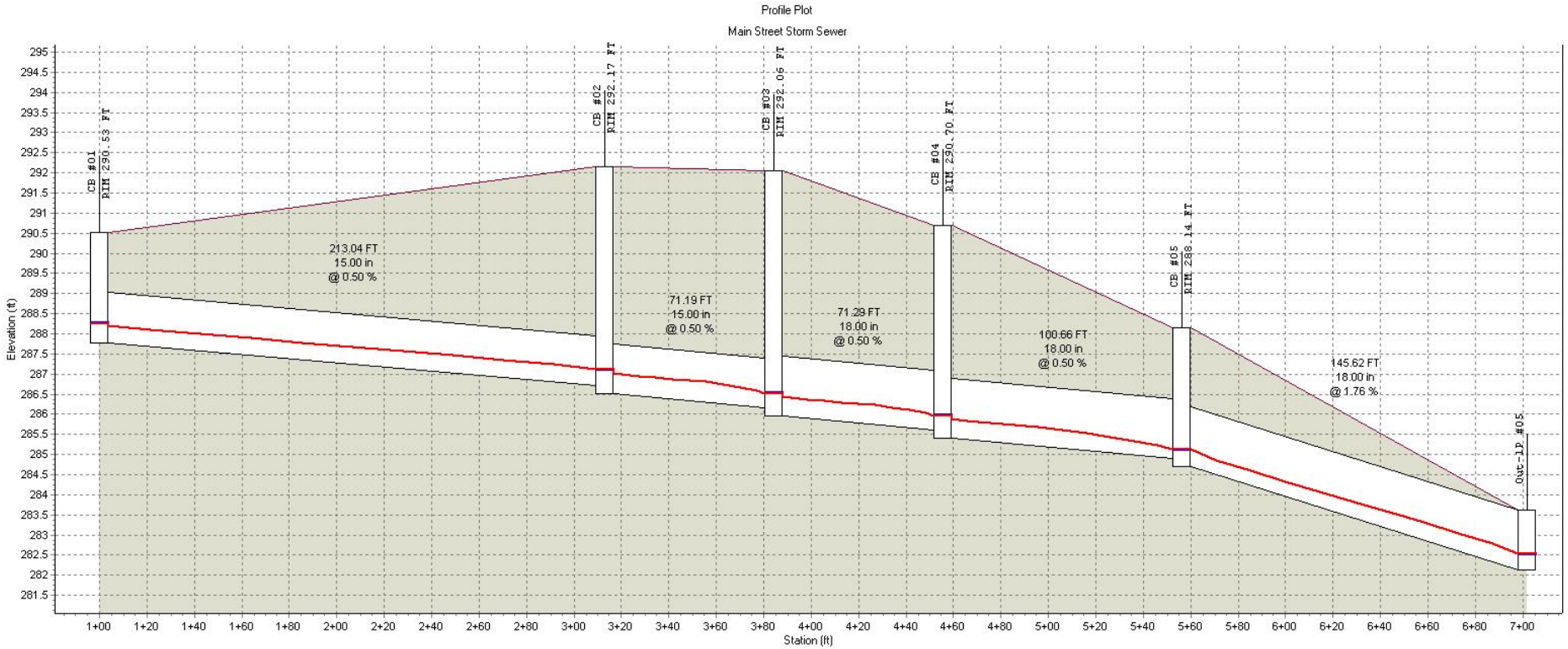


PLAN VIEW

DRAINAGE AREA

SN	Element ID	Area (acres)	Drainage Node ID	Weighted Runoff Coefficient	Accumulated Precipitation (inches)	Total Runoff (inches)	Peak Runoff (cfs)	Rainfall Intensity (inches/hr)	Time of Concentration (days hh:mm:ss)
1	Sub-CB#01	0.22	CB #01	0.8300	0.67	0.55	1.46	7.990	0 00:05:00
2	Sub-CB#02	0.08	CB #02	0.8300	0.67	0.55	0.53	7.990	0 00:05:00
3	Sub-CB#03	0.02	CB #03	0.8300	0.67	0.55	0.13	7.990	0 00:05:00
4	Sub-CB#04	0.01	CB #04	0.8300	0.67	0.55	0.07	7.990	0 00:05:00
5	Sub-CB#05	0.07	CB #05	0.8300	0.67	0.55	0.46	7.990	0 00:05:00
6	Sub-CB#39	0.09	CB #39	0.8300	0.67	0.55	0.60	7.990	0 00:05:00
7	Sub-CB#40	0.10	CB #40	0.8300	0.67	0.55	0.66	7.990	0 00:05:00
8	Sub-CB#41	0.21	CB #41	0.8300	0.67	0.55	1.39	7.990	0 00:05:00
9	Sub-CB#42	0.25	CB #42	0.8300	0.67	0.55	1.66	7.990	0 00:05:00
10	Sub-CB#43	0.10	CB #43	0.8300	0.67	0.55	0.66	7.990	0 00:05:00
11	Sub-CB#44	0.49	CB #44	0.8300	0.67	0.55	3.25	7.990	0 00:05:00
12	Sub-CB#45	0.41	CB #45	0.8300	0.67	0.55	2.72	7.990	0 00:05:00
13	Sub-CB#46	0.06	CB #46	0.8300	0.67	0.55	0.40	7.990	0 00:05:00
14	Sub-CB#47	0.18	CB #47	0.8300	0.67	0.55	1.19	7.990	0 00:05:00
15	Sub-CB#48	0.17	CB #48	0.8300	0.67	0.55	1.13	7.990	0 00:05:00
16	Sub-CB#48A	0.09	CB #48A	0.8300	0.67	0.55	0.60	7.990	0 00:05:00
17	Sub-CB#49	0.15	CB #49	0.8300	0.67	0.55	1.00	7.990	0 00:05:00
18	Sub-CB#50	0.05	CB #50	0.8300	0.67	0.55	0.33	7.990	0 00:05:00
19	Sub-CB#51	0.17	CB #51	0.8300	0.67	0.55	1.13	7.990	0 00:05:00
20	Sub-CB#52	0.11	CB #52	0.8300	0.67	0.55	0.73	7.990	0 00:05:00
21	Sub-CB#53	0.08	CB #53	0.8300	0.67	0.55	0.53	7.990	0 00:05:00
22	Sub-CB#54	0.08	CB #54	0.8300	0.67	0.55	0.53	7.990	0 00:05:00
23	Sub-CB#55	0.07	CB #55	0.8300	0.67	0.55	0.46	7.990	0 00:05:00
24	Sub-CB#56	0.17	CB #56	0.7900	0.67	0.53	1.07	7.990	0 00:05:00
25	Sub-CB#57	0.01	CB #57	0.7000	0.67	0.47	0.06	7.990	0 00:05:00
26	Sub-CB#58	0.04	CB #58	0.8300	0.67	0.55	0.27	7.990	0 00:05:00
27	Sub-CB#59	0.05	CB #59	0.8300	0.67	0.55	0.33	7.990	0 00:05:00
28	Sub-CB#60	0.18	CB #60	0.8300	0.67	0.55	1.19	7.990	0 00:05:00

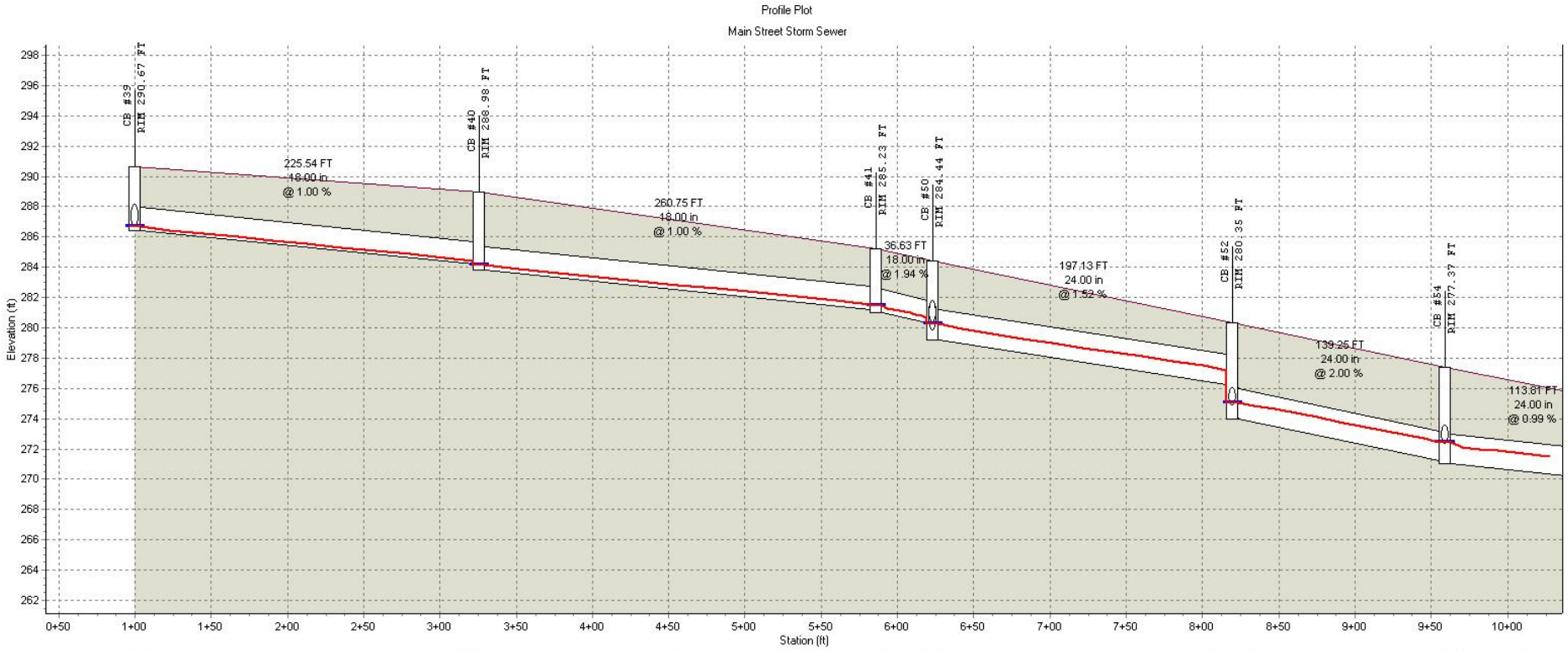
MODEL INPUT									MODEL OUTPUT									
SN	Element ID	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Pipe Diameter or Height (inches)	Manning's Roughness	Peak Flow (cfs)	Time of Peak Flow Occurrence (days hh:mm)	Max Flow Velocity (ft/sec)	Travel Time (min)	Design Flow Capacity (cfs)	Max Flow / Design Flow Ratio	Max Flow Depth / Total Depth Ratio	Total Time Surcharged (min)	Max Flow Depth (ft)	Reported Condition
1	P #01	CB #01	CB #02	213.04	287.77	286.71	0.5000	15.000	0.0130	1.29	0 00:05	3.14	1.13	4.57	0.28	0.37	0.00	0.46	Calculated
2	P #02	CB #02	CB #03	71.19	286.51	286.15	0.5000	15.000	0.0130	1.74	0 00:06	3.25	0.37	4.57	0.38	0.45	0.00	0.56	Calculated
3	P #03	CB #03	CB #04	71.29	285.95	285.60	0.5000	18.000	0.0130	1.84	0 00:06	3.22	0.37	7.43	0.25	0.36	0.00	0.54	Calculated
4	P #04	CB #04	CB #05	100.66	285.40	284.89	0.5000	18.000	0.0130	1.87	0 00:06	3.29	0.51	7.43	0.25	0.36	0.00	0.54	Calculated
5	P #05	CB #05	Out-1P #05	145.62	284.69	282.13	1.7600	18.000	0.0130	2.18	0 00:06	5.52	0.44	13.94	0.16	0.28	0.00	0.41	Calculated
6	P #63	CB #39	CB #40	225.54	286.44	284.19	1.0000	18.000	0.0130	0.52	0 00:06	3.05	1.23	10.50	0.05	0.15	0.00	0.23	Calculated
7	P #64	CB #40	CB #41	260.75	283.83	281.22	1.0000	18.000	0.0130	1.01	0 00:06	3.70	1.17	10.50	0.10	0.21	0.00	0.32	Calculated
8	P #65	CB #41	CB #50	36.63	281.02	280.31	1.9400	18.000	0.0130	1.95	0 00:05	5.10	0.12	14.63	0.13	0.27	0.00	0.40	Calculated
9	P #67	CB #42	CB #43	54.24	289.66	289.34	0.5800	15.000	0.0130	1.64	0 00:05	3.20	0.28	4.94	0.33	0.44	0.00	0.55	Calculated
10	P #68	CB #43	CB #45	44.83	289.14	288.92	0.5100	15.000	0.0130	2.23	0 00:05	3.39	0.22	4.59	0.48	0.53	0.00	0.66	Calculated
11	P #69	CB #44	CB #45	208.09	300.49	288.32	5.8500	15.000	0.0130	2.44	0 00:05	6.60	0.53	15.62	0.16	0.45	0.00	0.57	Calculated
12	P #70	CB #45	CB #46	43.41	288.12	287.37	1.7200	18.000	0.0130	7.15	0 00:05	6.61	0.11	13.79	0.52	0.59	0.00	0.88	Calculated
13	P #71	CB #46	CB #47	174.15	287.17	285.45	0.9900	24.000	0.0130	7.53	0 00:06	6.02	0.48	22.45	0.34	0.42	0.00	0.84	Calculated
14	P #72	CB #47	CB #48	149.18	285.25	283.20	1.3800	24.000	0.0130	8.37	0 00:06	6.92	0.36	26.54	0.32	0.41	0.00	0.82	Calculated
15	P #73	CB #48	CB #48A	73.98	282.79	281.66	1.5300	24.000	0.0130	9.27	0 00:06	5.96	0.21	27.95	0.33	0.52	0.00	1.04	Calculated
16	P #73A	CB #48A	CB #49	142.39	281.46	280.75	0.5000	24.000	0.0130	9.72	0 00:06	4.89	0.49	16.00	0.61	0.61	0.00	1.21	Calculated
17	P #74	CB #49	CB #50	52.38	280.55	279.78	1.4700	24.000	0.0130	10.30	0 00:06	6.81	0.13	27.40	0.38	0.49	0.00	0.97	Calculated
18	P #75	CB #50	CB #52	197.13	279.23	276.24	1.5200	24.000	0.0130	12.48	0 00:07	8.00	0.41	27.85	0.45	0.50	0.00	1.00	Calculated
19	P #76	CB #51	CB #52	25.77	275.08	274.82	1.0000	15.000	0.0130	1.15	0 00:05	3.51	0.12	6.46	0.18	0.31	0.00	0.39	Calculated
20	P #77	CB #52	CB #54	139.25	273.99	271.20	2.0000	24.000	0.0130	13.77	0 00:07	7.55	0.31	31.99	0.43	0.56	0.00	1.13	Calculated
21	P #78	CB #53	CB #54	25.70	272.44	272.31	0.5000	15.000	0.0130	0.63	0 00:05	2.39	0.18	4.57	0.14	0.27	0.00	0.34	Calculated
22	P #79	CB #54	CB #55	113.81	271.00	269.87	0.9900	24.000	0.0130	14.52	0 00:07	6.79	0.28	22.56	0.64	0.65	0.00	1.29	Calculated
23	P #80	CB #55	CB #58	79.16	269.67	266.25	4.3200	24.000	0.0130	14.79	0 00:07	7.90	0.17	47.01	0.31	0.59	0.00	1.17	Calculated
24	P #81	CB #56	CB #57	69.63	267.04	266.64	0.5600	15.000	0.0130	1.14	0 00:05	2.78	0.42	4.85	0.24	0.70	0.00	0.87	Calculated
25	P #82	CB #57	CB #58	38.34	266.44	266.25	0.5000	18.000	0.0130	0.84	0 00:05	2.16	0.30	7.43	0.11	0.91	0.00	1.36	Calculated
26	P #83	CB #58	CB #59	100.52	266.05	265.55	0.5000	30.000	0.0130	15.53	0 00:07	4.74	0.35	29.00	0.54	0.63	0.00	1.59	Calculated
27	P #84	CB #59	CB #60	26.17	265.35	265.22	0.5000	30.000	0.0130	15.64	0 00:07	5.03	0.09	29.00	0.54	0.61	0.00	1.51	Calculated
28	P #85	CB #60	FES#308	60.67	265.02	264.00	1.6800	30.000	0.0130	16.21	0 00:07	7.88	0.13	53.13	0.31	0.44	0.00	1.09	Calculated



:	CB #01		CB #02	CB #03	CB #04	CB #05	Out-1P #05
RIM (FT):	290.53		292.17	292.06	290.70	288.14	
Invert (ft):	287.77		286.51	285.95	285.40	284.69	282.13
Min Pipe Cover (ft):							
Max HGL (ft):	288.25		287.11	286.52	285.96	285.12	282.53

Link ID:	P #01	P #02	P #03	P #04	P #05
(FT):	213.04	71.19	71.29	100.66	145.62
(in):	15.00	15.00	18.00	18.00	18.00
@ (%):	0.50	0.50	0.50	0.50	1.76
Up Invert (ft):	287.77	286.51	285.95	285.40	284.69
Dn Invert (ft):	286.71	286.15	285.60	284.89	282.13
Max Q (cfs):	1.29	1.74	1.84	1.87	2.18
Max Vel (ft/s):	3.14	3.25	3.22	3.29	5.52
Max Depth (ft):	0.46	0.56	0.54	0.54	0.41

HGL



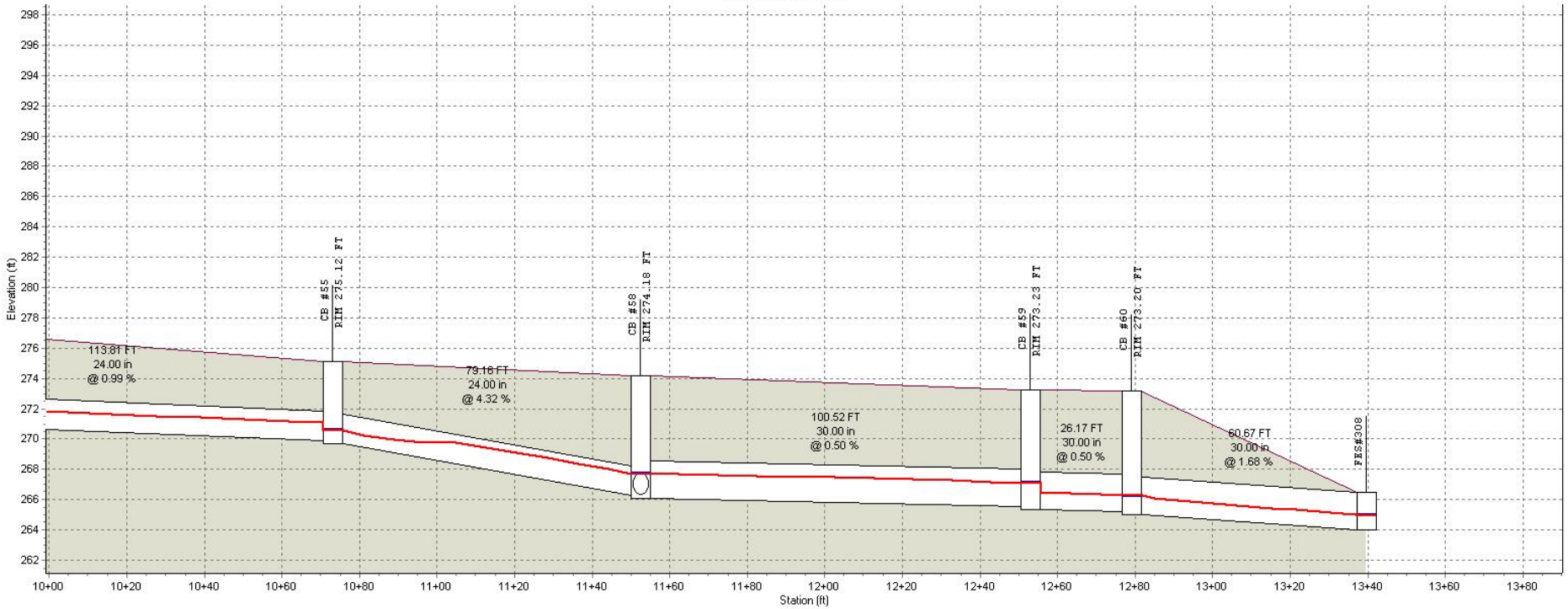
:	CB #39	CB #40	CB #41	CB #50	CB #52	CB #54	
RIM (FT):	290.67	288.98	285.23	284.44	280.35	277.37	
Invert (ft):	286.44	283.83	281.02	279.23	273.99	271.00	
Min Pipe Cover (ft):							
Max HGL (ft):	286.67	284.15	281.46	280.28	275.03	272.42	

Link ID:	P #63	P #64	P #65	P #75	P #77	P #79
(FT):	225.54	260.75	36.63	197.13	139.25	113.81
(in):	18.00	18.00	18.00	24.00	24.00	24.00
@ (%):	1.00	1.00	1.94	1.52	2.00	0.99
Up Invert (ft):	286.44	283.83	281.02	279.23	273.99	271.00
Dn Invert (ft):	284.19	281.22	280.31	276.24	271.20	269.87
Max Q (cfs):	0.52	1.01	1.95	12.48	13.77	14.52
Max Vel (ft/s):	3.05	3.70	5.10	8.00	7.55	6.79
Max Depth (ft):	0.23	0.32	0.40	1.00	1.13	1.29

HGL

Profile Plot

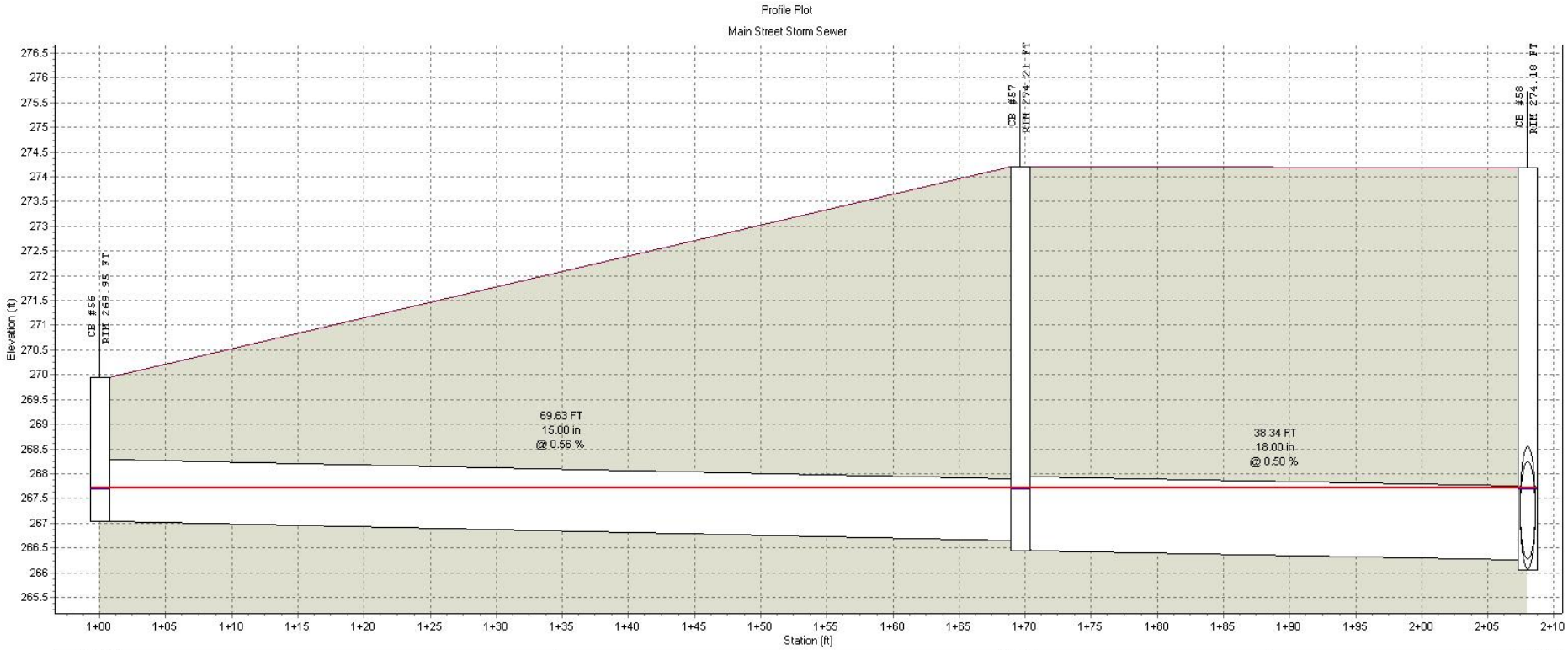
Main Street Storm Sewer



:	CB #55	CB #58	CB #59	CB #60	FES#308
RIM (FT):	275.12	274.18	273.23	273.20	
Invert (ft):	269.67	266.05	265.35	265.02	264.00
Min Pipe Cover (ft):					
Max HGL (ft):	270.56	267.71	267.07	266.25	264.95

Link ID:	P #79	P #80	P #83	P #84	P #85	
(FT):	113.81	79.16	100.52	26.17	60.67	
(in):	24.00	24.00	30.00	30.00	30.00	
@ (%):	0.99	4.32	0.50	0.50	1.68	
Up Invert (ft):	271.00	269.67	266.05	265.35	265.02	
Dn Invert (ft):	269.87	266.25	265.55	265.22	264.00	
Max Q (cfs):	14.52	14.79	15.53	15.64	16.21	
Max Vel (ft/s):	6.79	7.90	4.74	5.03	7.88	
Max Depth (ft):	1.29	1.17	1.59	1.51	1.09	

HGL

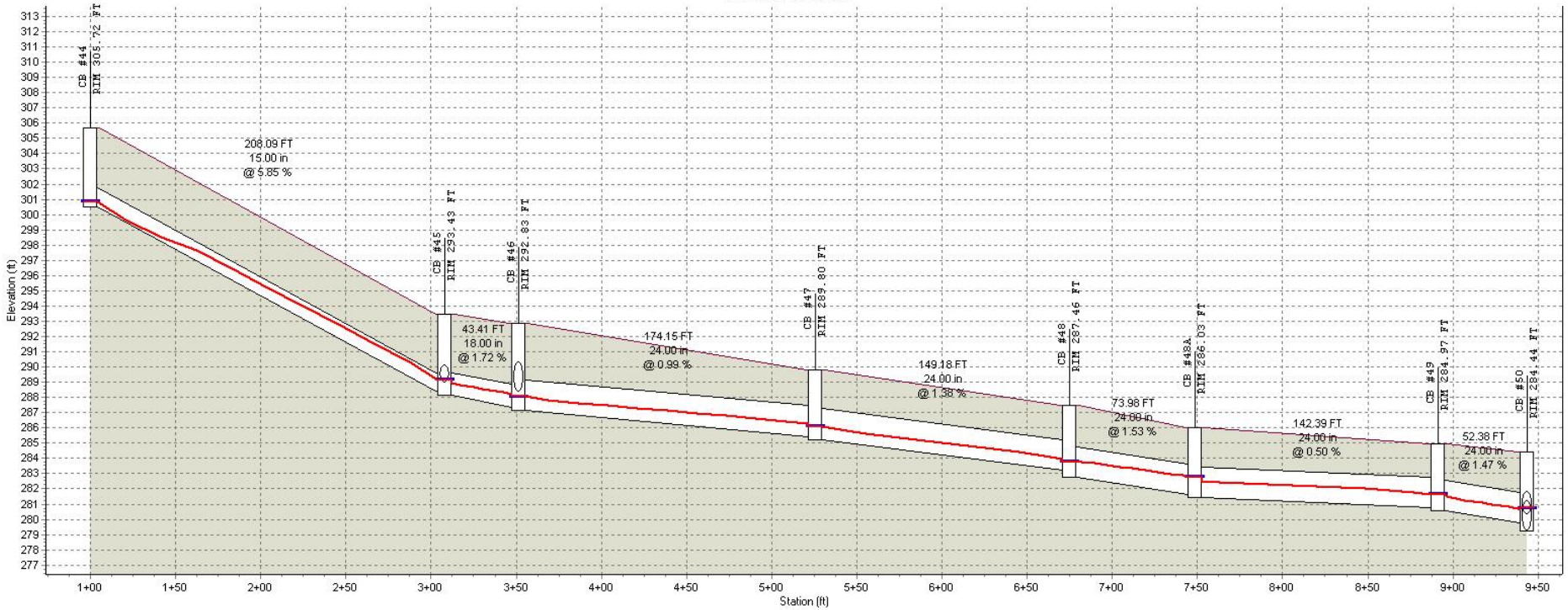


:	CB #56		CB #57		CB #58
RIM (FT):	269.95		274.21		274.18
Invert (ft):	267.04		266.44		266.05
Min Pipe Cover (ft):					
Max HGL (ft):	267.71		267.71		267.71
Link ID:		P #81		P #82	
(FT):		69.63		38.34	
(in):		15.00		18.00	
@ (%):		0.56		0.50	
Up Invert (ft):		267.04		266.44	
Dn Invert (ft):		266.64		266.25	
Max Q (cfs):		1.14		0.84	
Max Vel (ft/s):		2.78		2.16	
Max Depth (ft):		0.87		1.36	

HGL

Profile Plot

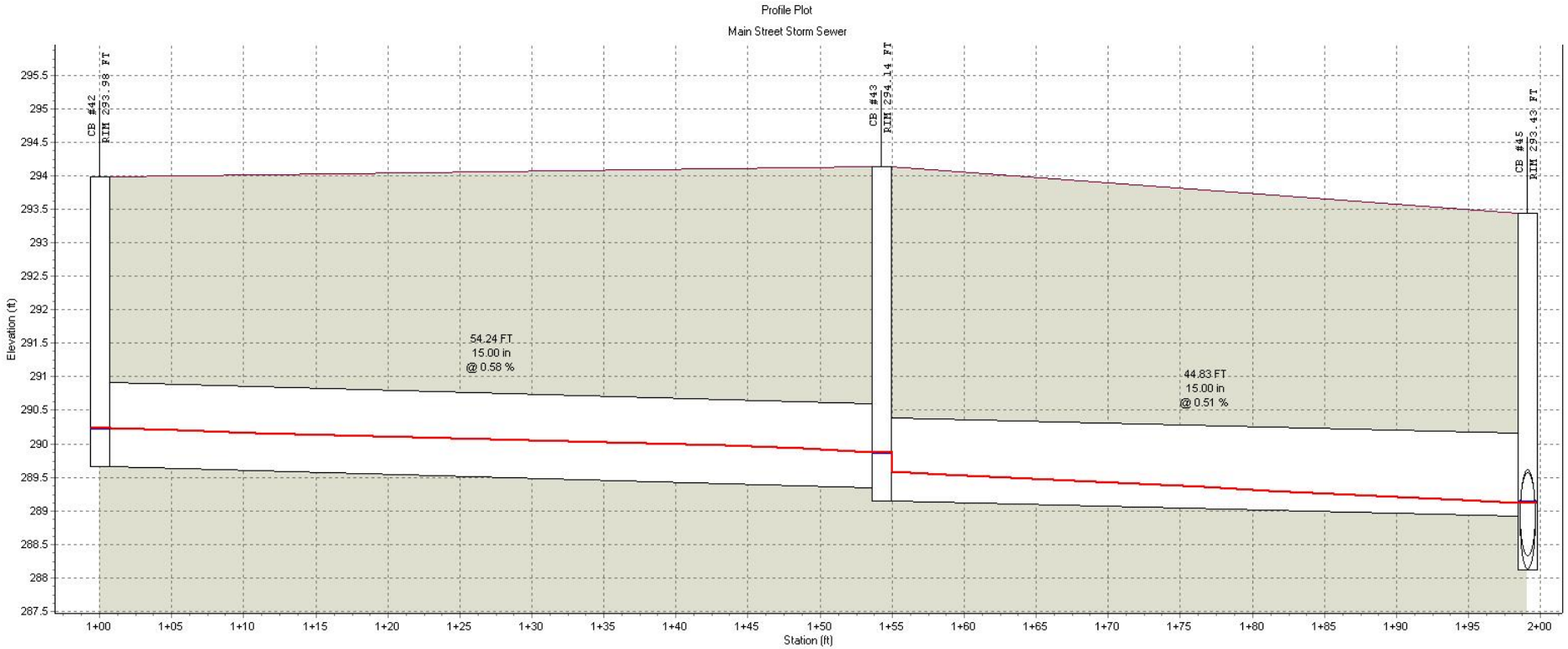
Main Street Storm Sewer



:	CB #44	CB #45	CB #46	CB #47	CB #48	CB #48A	CB #49	CB #50
RIM (FT):	305.72	293.43	292.83	289.80	287.46	286.03	284.97	284.44
Invert (ft):	300.49	288.12	287.17	285.25	282.79	281.46	280.55	279.23
Min Pipe Cover (ft):								
Max HGL (ft):	300.82	289.12	288.05	286.12	283.77	282.77	281.65	280.74

Link ID:	P #69	P #70	P #71	P #72	P #73	P #73A	P #74
(FT):	208.09	43.41	174.15	149.18	73.98	142.39	52.38
(in):	15.00	18.00	24.00	24.00	24.00	24.00	24.00
@ (%):	5.85	1.72	0.99	1.38	1.53	0.50	1.47
Up Invert (ft):	300.49	288.12	287.17	285.25	282.79	281.46	280.55
Dn Invert (ft):	288.32	287.37	285.45	283.20	281.66	280.75	279.78
Max Q (cfs):	2.44	7.15	7.53	8.37	9.27	9.72	10.30
Max Vel (ft/s):	6.60	6.61	6.02	6.92	5.96	4.89	6.46
Max Depth (ft):	0.57	0.88	0.84	0.82	1.04	1.21	1.03

HGL

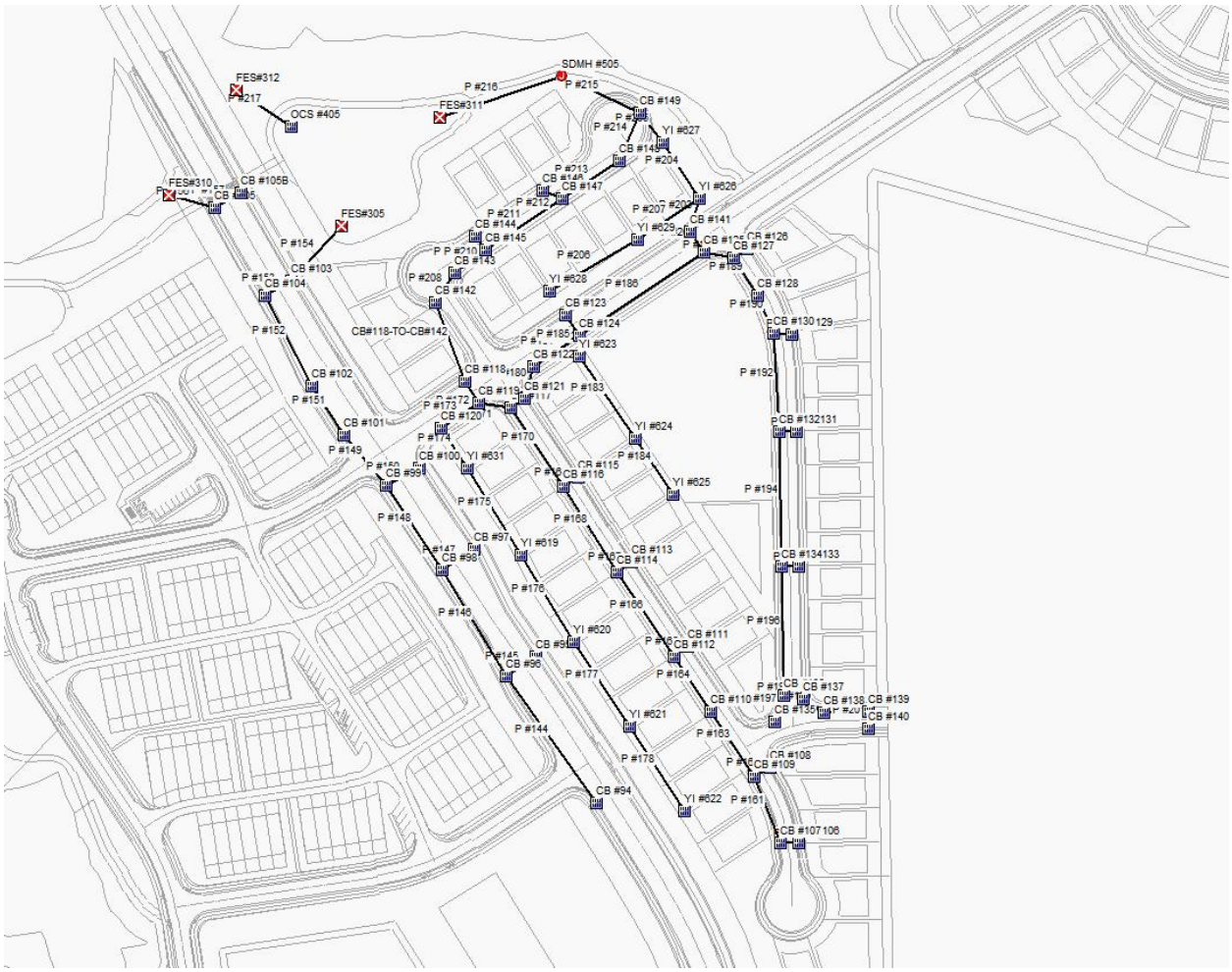


:	CB #42		CB #43		CB #45
RIM (FT):	293.98		294.14		293.43
Invert (ft):	289.66		289.14		288.12
Min Pipe Cover (ft):					
Max HGL (ft):	290.23		289.87		289.12
Link ID:		P #67		P #68	
(FT):		54.24		44.83	
(in):		15.00		15.00	
@ (%):		0.58		0.51	
Up Invert (ft):		289.66		289.14	
Dn Invert (ft):		289.34		288.92	
Max Q (cfs):		1.64		2.23	
Max Vel (ft/s):		3.20		3.39	
Max Depth (ft):		0.55		0.66	

HGL

S T O R M W A T E R AREA " C "

STORMWATER PIPING AND HYDRAULIC GRADE LINE FOR 25-YR STORM



PLAN VIEW

DRAINAGE AREA

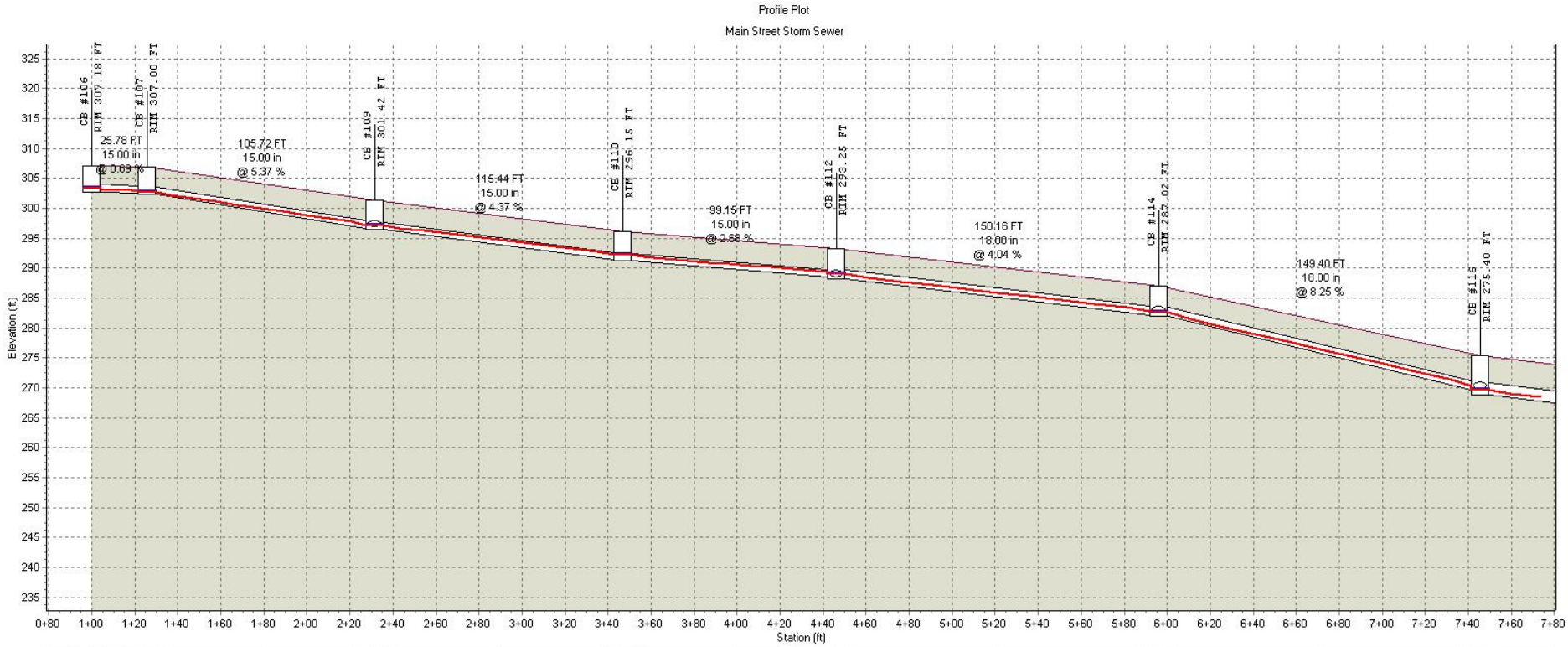
SN	Element ID	Area (acres)	Drainage Node ID	Weighted Runoff Coefficient	Accumulated Precipitation (inches)	Total Runoff (inches)	Peak Runoff (cfs)	Rainfall Intensity (inches/hr)	Time of Concentration (days hh:mm:ss)
1	Sub-CB#100	0.18	CB #100	0.8300	0.67	0.55	1.19	7.990	0 00:05:00
2	Sub-CB#101	0.04	CB #101	0.8300	0.67	0.55	0.27	7.990	0 00:05:00
3	Sub-CB#102	0.09	CB #102	0.8300	0.67	0.55	0.60	7.990	0 00:05:00
4	Sub-CB#103	0.27	CB #103	0.8300	0.67	0.55	1.79	7.990	0 00:05:00
5	Sub-CB#104	0.14	CB #104	0.8300	0.67	0.55	0.93	7.990	0 00:05:00
6	Sub-CB#105	0.12	CB #105	0.8300	0.67	0.55	0.80	7.990	0 00:05:00
7	Sub-CB#105B	0.14	CB #105B	0.8300	0.67	0.55	0.93	7.990	0 00:05:00
8	Sub-CB#106	0.50	CB #106	0.6900	0.67	0.46	2.76	7.990	0 00:05:00
9	Sub-CB#107	0.42	CB #107	0.5500	0.67	0.37	1.85	7.990	0 00:05:00
10	Sub-CB#108	0.42	CB #108	0.6900	0.67	0.46	2.32	7.990	0 00:05:00
11	Sub-CB#109	0.21	CB #109	0.5000	0.67	0.33	0.84	7.990	0 00:05:00
12	Sub-CB#110	0.19	CB #110	0.5400	0.67	0.36	0.82	7.990	0 00:05:00
13	Sub-CB#111	0.24	CB #111	0.5900	0.67	0.39	1.13	7.990	0 00:05:00
14	Sub-CB#112	0.18	CB #112	0.5400	0.67	0.36	0.78	7.990	0 00:05:00
15	Sub-CB#113	0.24	CB #113	0.5400	0.67	0.36	1.04	7.990	0 00:05:00
16	Sub-CB#114	0.28	CB #114	0.5400	0.67	0.36	1.21	7.990	0 00:05:00
17	Sub-CB#115	0.25	CB #115	0.5400	0.67	0.36	1.08	7.990	0 00:05:00
18	Sub-CB#116	0.27	CB #116	0.5400	0.67	0.36	1.17	7.990	0 00:05:00
19	Sub-CB#117	0.35	CB #117	0.5900	0.67	0.39	1.65	7.990	0 00:05:00
20	Sub-CB#118	0.08	CB #118	0.8300	0.67	0.55	0.53	7.990	0 00:05:00
21	Sub-CB#119	0.05	CB #119	0.8300	0.67	0.55	0.33	7.990	0 00:05:00
22	Sub-CB#120	0.09	CB #120	0.8300	0.67	0.55	0.60	7.990	0 00:05:00
23	Sub-CB#121	0.24	CB #121	0.5400	0.67	0.36	1.04	7.990	0 00:05:00
24	Sub-CB#122	0.05	CB #122	0.8300	0.67	0.55	0.33	7.990	0 00:05:00
25	Sub-CB#123	0.07	CB #123	0.8300	0.67	0.55	0.46	7.990	0 00:05:00
26	Sub-CB#124	0.12	CB #124	0.5900	0.67	0.39	0.57	7.990	0 00:05:00
27	Sub-CB#125	0.18	CB #125	0.8300	0.67	0.55	1.19	7.990	0 00:05:00
28	Sub-CB#126	0.49	CB #126	0.6400	0.67	0.43	2.51	7.990	0 00:05:00
29	Sub-CB#127	0.09	CB #127	0.8300	0.67	0.55	0.60	7.990	0 00:05:00
30	Sub-CB#128	0.04	CB #128	0.8300	0.67	0.55	0.27	7.990	0 00:05:00
31	Sub-CB#129	0.44	CB #129	0.6900	0.67	0.46	2.43	7.990	0 00:05:00
32	Sub-CB#130	0.08	CB #130	0.8300	0.67	0.55	0.53	7.990	0 00:05:00
33	Sub-CB#131	0.53	CB #131	0.7400	0.67	0.49	3.13	7.990	0 00:05:00
34	Sub-CB#132	0.43	CB #132	0.7900	0.67	0.53	2.71	7.990	0 00:05:00
35	Sub-CB#133	0.52	CB #133	0.6900	0.67	0.46	2.87	7.990	0 00:05:00

DRAINAGE AREA

SN	Element ID	Area (acres)	Drainage Node ID	Weighted Runoff Coefficient	Accumulated Precipitation (inches)	Total Runoff (inches)	Peak Runoff (cfs)	Rainfall Intensity (inches/hr)	Time of Concentration (days hh:mm:ss)
36	Sub-CB#134	0.26	CB #134	0.5900	0.67	0.39	1.23	7.990	0 00:05:00
37	Sub-CB#135	0.01	CB #135	0.8300	0.67	0.55	0.07	7.990	0 00:05:00
38	Sub-CB#136	0.03	CB #136	0.8300	0.67	0.55	0.20	7.990	0 00:05:00
39	Sub-CB#137	0.02	CB #137	0.8300	0.67	0.55	0.13	7.990	0 00:05:00
40	Sub-CB#138	0.02	CB #138	0.8300	0.67	0.55	0.13	7.990	0 00:05:00
41	Sub-CB#139	0.10	CB #139	0.5900	0.67	0.39	0.47	7.990	0 00:05:00
42	Sub-CB#140	0.22	CB #140	0.5900	0.67	0.39	1.04	7.990	0 00:05:00
43	Sub-CB#141	0.16	CB #141	0.8300	0.67	0.55	1.06	7.990	0 00:05:00
44	Sub-CB#142	0.24	CB #142	0.5900	0.67	0.39	1.13	7.990	0 00:05:00
45	Sub-CB#143	0.11	CB #143	0.8300	0.67	0.55	0.73	7.990	0 00:05:00
46	Sub-CB#144	0.24	CB #144	0.6400	0.67	0.43	1.23	7.990	0 00:05:00
47	Sub-CB#145	0.09	CB #145	0.5900	0.67	0.39	0.42	7.990	0 00:05:00
48	Sub-CB#146	0.34	CB #146	0.7900	0.67	0.53	2.15	7.990	0 00:05:00
49	Sub-CB#147	0.25	CB #147	0.5900	0.67	0.39	1.18	7.990	0 00:05:00
50	Sub-CB#148	0.17	CB #148	0.5900	0.67	0.39	0.80	7.990	0 00:05:00
51	Sub-CB#149	0.44	CB #149	0.6900	0.67	0.46	2.43	7.990	0 00:05:00
52	Sub-CB#94	0.49	CB #94	0.8300	0.67	0.55	3.25	7.990	0 00:05:00
53	Sub-CB#95	0.23	CB #95	0.8300	0.67	0.55	1.53	7.990	0 00:05:00
54	Sub-CB#96	0.18	CB #96	0.8300	0.67	0.55	1.19	7.990	0 00:05:00
55	Sub-CB#97	0.19	CB #97	0.8300	0.67	0.55	1.26	7.990	0 00:05:00
56	Sub-CB#98	0.16	CB #98	0.8300	0.67	0.55	1.06	7.990	0 00:05:00
57	Sub-CB#99	0.12	CB #99	0.8300	0.67	0.55	0.80	7.990	0 00:05:00
58	Sub-YI#619	0.60	YI #619	0.3500	0.67	0.23	1.68	7.990	0 00:05:00
59	Sub-YI#620	0.19	YI #620	0.3500	0.67	0.23	0.53	7.990	0 00:05:00
60	Sub-YI#621	0.19	YI #621	0.3500	0.67	0.23	0.53	7.990	0 00:05:00
61	Sub-YI#622	0.17	YI #622	0.3100	0.67	0.21	0.42	7.990	0 00:05:00
62	Sub-YI#623	0.16	YI #623	0.5400	0.67	0.36	0.69	7.990	0 00:05:00
63	Sub-YI#624	0.11	YI #624	0.3500	0.67	0.23	0.31	7.990	0 00:05:00
64	Sub-YI#625	0.23	YI #625	0.3500	0.67	0.23	0.64	7.990	0 00:05:00
65	Sub-YI#626	0.18	YI #626	0.3100	0.67	0.21	0.45	7.990	0 00:05:00
66	Sub-YI#627	0.08	YI #627	0.3100	0.67	0.21	0.20	7.990	0 00:05:00
67	Sub-YI#628	0.17	YI #628	0.3100	0.67	0.21	0.42	7.990	0 00:05:00
68	Sub-YI#629	0.24	YI #629	0.3100	0.67	0.21	0.59	7.990	0 00:05:00
69	Sub-YI#631	0.36	YI #631	0.3500	0.67	0.23	1.01	7.990	0 00:05:00

MODEL INPUT										MODEL OUTPUT									
SN	Element ID	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Pipe Diameter or Height (inches)	Manning's Roughness	Peak Flow (cfs)	Time of Peak Flow Occurrence (days hh:mm)	Max Flow Velocity (ft/sec)	Travel Time (min)	Design Flow Capacity (cfs)	Max Flow / Design Flow Ratio	Max Flow Depth / Total Depth Ratio	Total Time Surcharged (min)	Max Flow Depth (ft)	Reported Condition
1	P #144	CB #94	CB #96	230.73	308.82	293.73	6.5400	15.000	0.0130	2.39	0 00:05	9.38	0.41	16.52	0.14	0.26	0.00	0.33	Calculated
2	P #145	CB #95	CB #96	52.50	294.25	293.73	0.9900	15.000	0.0130	1.41	0 00:05	3.86	0.23	6.44	0.22	0.34	0.00	0.42	Calculated
3	P #146	CB #96	CB #98	182.60	293.53	280.57	7.1000	15.000	0.0130	5.66	0 00:05	12.06	0.25	17.21	0.33	0.41	0.00	0.51	Calculated
4	P #147	CB #97	CB #98	55.78	280.74	280.46	0.5000	15.000	0.0130	1.23	0 00:05	2.94	0.32	4.57	0.27	0.37	0.00	0.47	Calculated
5	P #148	CB #98	CB #99	150.42	279.82	270.99	5.8700	15.000	0.0130	7.81	0 00:05	11.98	0.21	15.65	0.50	0.53	0.00	0.66	Calculated
6	P #149	CB #99	CB #101	97.68	270.79	265.64	5.2700	18.000	0.0130	9.62	0 00:05	11.63	0.14	24.12	0.40	0.48	0.00	0.71	Calculated
7	P #150	CB #100	CB #99	55.99	271.95	271.50	0.8100	15.000	0.0130	1.14	0 00:05	3.41	0.27	5.80	0.20	0.32	0.00	0.40	Calculated
8	P #151	CB #101	CB #102	85.87	265.10	260.15	5.7600	18.000	0.0130	9.85	0 00:05	11.94	0.12	25.21	0.39	0.47	0.00	0.71	Calculated
9	P #152	CB #102	CB #104	150.45	259.12	252.01	4.7200	18.000	0.0130	10.33	0 00:06	11.71	0.21	22.83	0.45	0.50	0.00	0.75	Calculated
10	P #153	CB #104	CB #103	44.68	251.21	248.90	5.1600	24.000	0.0130	11.07	0 00:06	10.66	0.07	51.37	0.22	0.37	0.00	0.73	Calculated
11	P #154	CB #103	FES#305	107.20	247.75	240.00	7.2300	24.000	0.0130	12.40	0 00:06	13.83	0.13	60.82	0.20	0.33	0.00	0.66	Calculated
12	P #156	CB #105	FES#310	70.12	242.73	237.90	6.8900	15.000	0.0130	1.84	0 00:05	8.57	0.14	16.95	0.11	0.23	0.00	0.29	Calculated
13	P #157	CB #105B	CB #105	44.68	246.24	243.55	6.0400	15.000	0.0130	1.08	0 00:05	6.89	0.11	15.87	0.07	0.19	0.00	0.23	Calculated
14	P #160	CB #106	CB #107	25.78	302.74	302.56	0.6900	15.000	0.0130	2.13	0 00:05	3.58	0.12	5.35	0.40	0.49	0.00	0.61	Calculated
15	P #161	CB #107	CB #109	105.72	302.36	296.68	5.3700	15.000	0.0130	3.71	0 00:05	8.80	0.20	14.97	0.25	0.39	0.00	0.48	Calculated
16	P #162	CB #108	CB #109	25.90	296.91	296.76	0.5700	15.000	0.0130	2.45	0 00:05	3.46	0.12	4.90	0.50	0.56	0.00	0.70	Calculated
17	P #163	CB #109	CB #110	115.44	296.48	291.43	4.3700	15.000	0.0130	7.23	0 00:05	9.66	0.20	13.51	0.53	0.59	0.00	0.74	Calculated
18	P #164	CB #110	CB #112	99.15	291.23	288.57	2.6800	15.000	0.0130	7.83	0 00:05	8.48	0.19	10.58	0.74	0.71	0.00	0.88	Calculated
19	P #165	CB #111	CB #112	25.69	288.57	288.44	0.5000	15.000	0.0130	1.00	0 00:05	2.31	0.19	4.57	0.22	0.44	0.00	0.55	Calculated
20	P #166	CB #112	CB #114	150.16	288.24	282.18	4.0400	18.000	0.0130	9.39	0 00:05	10.79	0.23	21.10	0.45	0.49	0.00	0.74	Calculated
21	P #167	CB #113	CB #114	25.64	282.61	282.48	0.5000	15.000	0.0130	1.10	0 00:05	2.74	0.16	4.57	0.24	0.36	0.00	0.45	Calculated
22	P #168	CB #114	CB #116	149.40	281.98	269.65	8.2500	18.000	0.0130	11.41	0 00:05	14.84	0.17	30.18	0.38	0.45	0.00	0.67	Calculated
23	P #169	CB #115	CB #116	26.09	271.06	269.74	5.0700	15.000	0.0130	1.05	0 00:05	6.20	0.07	14.55	0.07	0.20	0.00	0.24	Calculated
24	P #170	CB #116	CB #117	140.40	268.89	262.95	4.2300	24.000	0.0130	13.35	0 00:05	7.64	0.31	46.53	0.29	0.55	0.00	1.09	Calculated
25	P #171	CB #119	CB #117	46.45	264.70	263.36	2.8800	24.000	0.0130	5.17	0 00:05	5.86	0.13	38.41	0.13	0.41	0.00	0.81	Calculated
26	P #172	CB #118	CB #119	37.73	266.54	266.35	0.5000	15.000	0.0130	0.51	0 00:05	2.32	0.27	4.57	0.11	0.24	0.00	0.30	Calculated
27	P #173	CB #120	CB #119	67.91	265.52	264.92	0.8900	24.000	0.0130	4.36	0 00:05	4.80	0.24	21.32	0.20	0.33	0.00	0.66	Calculated
28	P #174	YI #631	CB #120	71.13	266.07	265.72	0.5000	18.000	0.0130	3.85	0 00:05	3.88	0.31	7.40	0.52	0.55	0.00	0.82	Calculated
29	P #175	YI #619	YI #631	150.08	275.15	266.27	5.9100	15.000	0.0130	2.94	0 00:05	6.91	0.36	15.71	0.19	0.43	0.00	0.53	Calculated
30	P #176	YI #620	YI #619	150.17	285.63	275.35	6.8500	15.000	0.0130	1.37	0 00:05	8.10	0.31	16.90	0.08	0.20	0.00	0.24	Calculated
31	P #177	YI #621	YI #620	150.00	290.09	285.83	2.8400	15.000	0.0130	0.88	0 00:05	5.23	0.48	10.89	0.08	0.20	0.00	0.24	Calculated
32	P #178	YI #622	YI #621	150.03	296.78	290.29	4.3200	15.000	0.0130	0.40	0 00:05	4.82	0.52	13.43	0.03	0.12	0.00	0.15	Calculated
33	P #179	CB #117	CB #121	25.67	262.75	262.45	1.1900	30.000	0.0130	19.92	0 00:06	6.99	0.06	44.67	0.45	0.56	0.00	1.41	Calculated
34	P #180	CB #121	CB #122	49.06	262.25	259.63	5.3400	30.000	0.0130	20.73	0 00:06	11.50	0.07	94.75	0.22	0.39	0.00	0.99	Calculated
35	P #181	CB #122	CB #124	81.56	259.43	256.17	3.9900	30.000	0.0130	21.08	0 00:06	11.81	0.12	81.93	0.26	0.39	0.00	0.98	Calculated

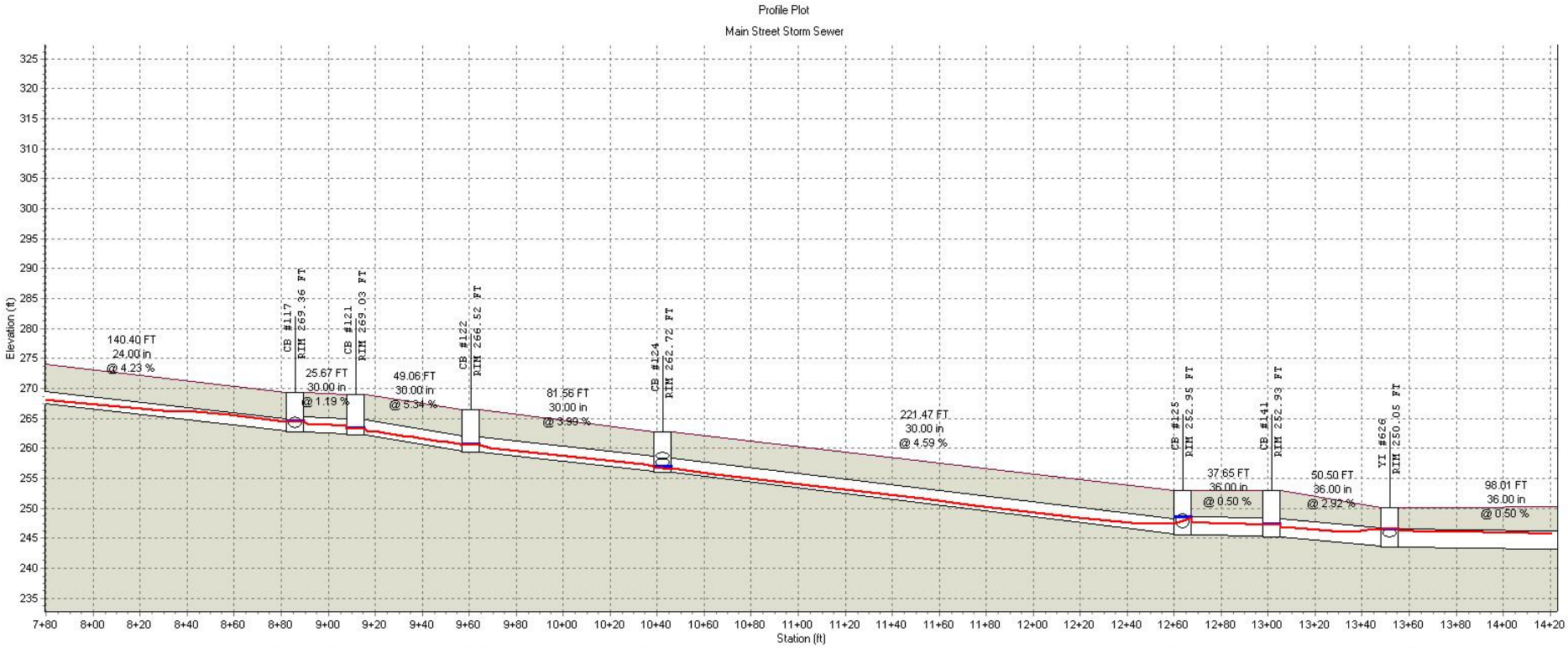
MODEL INPUT										MODEL OUTPUT									
SN	Element ID	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Pipe Diameter or Height (inches)	Manning's Roughness	Peak Flow (cfs)	Time of Peak Flow Occurrence (days hh:mm)	Max Flow Velocity (ft/sec)	Travel Time (min)	Design Flow Capacity (cfs)	Max Flow / Design Flow Ratio	Max Flow Depth / Total Depth Ratio	Total Time Surcharged (min)	Max Flow Depth (ft)	Reported Condition
36	P #182	YI #623	CB #124	30.37	259.34	256.91	8.0000	18.000	0.0130	1.56	0 00:05	8.05	0.06	29.71	0.05	0.17	0.00	0.25	Calculated
37	P #183	YI #624	YI #623	146.93	270.25	260.64	6.5400	15.000	0.0130	0.91	0 00:05	7.09	0.35	16.52	0.05	0.16	0.00	0.20	Calculated
38	P #184	YI #625	YI #624	100.00	278.45	270.45	8.0000	15.000	0.0130	0.63	0 00:05	6.81	0.24	18.27	0.03	0.13	0.00	0.16	Calculated
39	P #185	CB #123	CB #124	37.69	258.29	258.11	0.5000	15.000	0.0130	0.45	0 00:05	2.24	0.28	4.57	0.10	0.22	0.00	0.28	Calculated
40	P #186	CB #124	CB #125	221.47	255.97	245.81	4.5900	30.000	0.0130	23.32	0 00:06	6.61	0.56	87.87	0.27	0.68	0.00	1.69	Calculated
41	P #187	CB #127	CB #125	43.66	247.38	246.61	1.7600	30.000	0.0130	16.56	0 00:05	6.76	0.11	54.35	0.30	0.66	0.00	1.64	Calculated
42	P #188	CB #126	CB #127	25.73	248.69	248.56	0.5000	15.000	0.0130	2.44	0 00:05	3.40	0.13	4.57	0.53	0.57	0.00	0.71	Calculated
43	P #189	CB #128	CB #127	66.31	249.22	247.58	2.4700	24.000	0.0130	13.72	0 00:05	7.34	0.15	35.56	0.39	0.59	0.00	1.17	Calculated
44	P #190	CB #130	CB #128	60.56	250.74	249.42	2.1900	24.000	0.0130	13.45	0 00:05	8.28	0.12	33.44	0.40	0.51	0.00	1.03	Calculated
45	P #191	CB #129	CB #130	26.65	252.12	251.99	0.5000	15.000	0.0130	2.47	0 00:05	3.42	0.13	4.57	0.54	0.57	0.00	0.71	Calculated
46	P #192	CB #132	CB #130	144.82	258.13	250.94	4.9600	18.000	0.0130	10.27	0 00:05	10.12	0.24	23.40	0.44	0.56	0.00	0.84	Calculated
47	P #193	CB #131	CB #132	25.82	259.42	259.29	0.5000	15.000	0.0130	2.95	0 00:05	3.60	0.12	4.57	0.65	0.63	0.00	0.79	Calculated
48	P #194	CB #134	CB #132	199.91	273.19	259.20	7.0000	15.000	0.0130	5.30	0 00:05	11.84	0.28	17.09	0.31	0.39	0.00	0.49	Calculated
49	P #195	CB #133	CB #134	25.63	274.92	274.00	3.6100	15.000	0.0130	2.27	0 00:05	6.47	0.07	12.27	0.19	0.33	0.00	0.41	Calculated
50	P #196	CB #136	CB #134	190.24	281.82	274.00	4.1100	15.000	0.0130	2.23	0 00:06	7.75	0.41	13.10	0.17	0.28	0.00	0.36	Calculated
51	P #197	CB #135	CB #136	42.41	285.38	282.41	7.0000	18.000	0.0130	0.06	0 00:05	3.20	0.22	27.79	0.00	0.04	0.00	0.05	Calculated
52	P #198	CB #137	CB #136	28.13	282.16	282.02	0.5000	15.000	0.0130	2.04	0 00:06	3.25	0.14	4.57	0.45	0.51	0.00	0.64	Calculated
53	P #199	CB #138	CB #137	37.57	282.55	282.36	0.5000	15.000	0.0130	1.94	0 00:05	3.24	0.19	4.57	0.42	0.49	0.00	0.61	Calculated
54	P #200	CB #139	CB #138	65.53	283.08	282.75	0.5000	15.000	0.0130	1.83	0 00:05	3.28	0.33	4.57	0.40	0.47	0.00	0.58	Calculated
55	P #201	CB #140	CB #139	25.78	283.41	283.28	0.5000	15.000	0.0130	1.41	0 00:05	2.93	0.15	4.57	0.31	0.42	0.00	0.52	Calculated
56	P #202	CB #125	CB #141	37.65	245.61	245.42	0.5000	36.000	0.0130	39.74	0 00:06	6.42	0.10	47.16	0.84	0.82	0.00	2.45	Calculated
57	P #203	CB #141	YI #626	50.50	245.22	243.75	2.9200	36.000	0.0130	40.43	0 00:06	7.09	0.12	114.04	0.35	0.80	0.00	2.40	Calculated
58	P #204	YI #626	YI #627	98.01	243.55	243.05	0.5000	36.000	0.0130	39.61	0 00:07	5.90	0.28	47.16	0.84	0.91	0.00	2.74	Calculated
59	P #205	YI #627	CB #149	55.09	242.85	242.35	0.9200	36.000	0.0130	39.77	0 00:07	6.33	0.15	64.11	0.62	0.84	0.00	2.51	Calculated
60	P #206	YI #628	YI #629	149.99	247.99	246.02	1.3100	15.000	0.0130	0.39	0 00:06	3.14	0.80	7.41	0.05	0.34	0.00	0.43	Calculated
61	P #207	YI #629	YI #626	109.82	245.82	245.09	0.6700	18.000	0.0130	1.96	0 00:07	2.69	0.68	8.58	0.23	0.77	0.00	1.16	Calculated
62	P #208	CB #142	CB #143	53.21	255.38	251.12	8.0000	15.000	0.0130	1.09	0 00:05	7.77	0.11	18.27	0.06	0.17	0.00	0.21	Calculated
63	P #209	CB #143	CB #145	55.73	249.94	247.82	3.8100	15.000	0.0130	1.80	0 00:05	6.75	0.14	12.61	0.14	0.27	0.00	0.34	Calculated
64	P #210	CB #144	CB #145	26.08	248.13	248.00	0.5000	15.000	0.0130	0.97	0 00:05	2.66	0.16	4.57	0.21	0.34	0.00	0.42	Calculated
65	P #211	CB #145	CB #147	136.75	247.62	245.62	1.4600	18.000	0.0130	3.14	0 00:05	4.15	0.55	12.69	0.25	0.47	0.00	0.71	Calculated
66	P #212	CB #146	CB #147	31.19	246.51	246.35	0.5000	15.000	0.0130	1.70	0 00:05	3.10	0.17	4.57	0.37	0.46	0.00	0.57	Calculated
67	P #213	CB #147	CB #148	101.24	245.42	244.91	0.5000	18.000	0.0130	5.49	0 00:05	4.33	0.39	7.43	0.74	0.68	0.00	1.01	Calculated
68	P #214	CB #148	CB #149	77.32	244.71	244.32	0.5000	24.000	0.0130	6.23	0 00:06	4.29	0.30	16.08	0.39	0.47	0.00	0.94	Calculated
69	P #215	CB #149	SDMH #505	128.18	242.15	241.17	0.7600	42.000	0.0130	47.90	0 00:06	6.75	0.32	87.88	0.55	0.70	0.00	2.44	Calculated
70	P #216	SDMH #505	FES#311	191.19	240.97	240.00	0.5100	42.000	0.0130	47.90	0 00:07	7.03	0.45	71.55	0.67	0.67	0.00	2.34	Calculated



:	CB #106	CB #107	CB #109	CB #110	CB #112	CB #114	CB #116
RIM (FT):	307.18	307.00	301.42	296.15	293.25	287.02	275.40
Invert (ft):	302.74	302.36	296.48	291.23	288.24	281.98	268.89
Min Pipe Cover (ft):							
Max HGL (ft):	303.41	302.80	297.20	292.20	289.02	282.69	269.63

Link ID:	P #160	P #161	P #163	P #164	P #166	P #168	
(FT):	25.78	105.72	115.44	99.15	150.16	149.40	
(in):	15.00	15.00	15.00	15.00	18.00	18.00	
@ (%):	0.69	5.37	4.37	2.68	4.04	8.25	
Up Invert (ft):	302.74	302.36	296.48	291.23	288.24	281.98	
Dn Invert (ft):	302.56	296.68	291.43	288.57	282.18	269.65	
Max Q (cfs):	2.13	3.71	7.23	7.83	9.39	11.41	
Max Vel (ft/s):	3.58	8.80	9.66	8.48	10.79	14.84	
Max Depth (ft):	0.61	0.48	0.74	0.88	0.74	0.67	

HGL

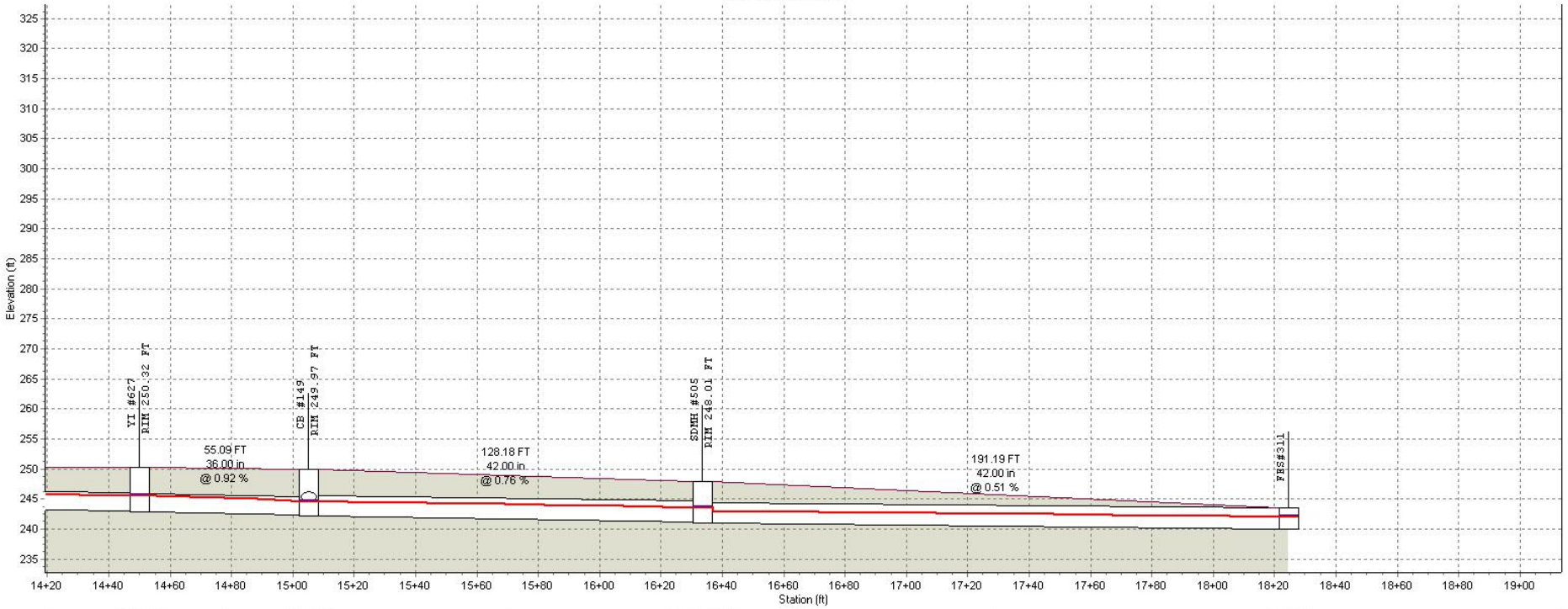


:		CB #117	CB #121	CB #122	CB #124	CB #125	CB #141	YI #626	
RIM (FT):		269.36	269.03	266.52	262.72	252.95	252.93	250.05	
Invert (ft):		262.75	262.25	259.43	255.97	245.61	245.22	243.55	
Min Pipe Cover (ft):									
Max HGL (ft):		264.40	263.32	260.52	256.85	248.46	247.27	246.52	

Link ID:	P #170	P #179	P #180	P #181	P #186	P #202	P #203	P #204
(FT):	140.40	25.67	49.06	81.56	221.47	37.65	50.50	98.01
(in):	24.00	30.00	30.00	30.00	30.00	36.00	36.00	36.00
@ (%):	4.23	1.19	5.34	3.99	4.59	0.50	2.92	0.50
Up Invert (ft):	268.89	262.75	262.25	259.43	255.97	245.61	245.22	243.55
Dn Invert (ft):	262.95	262.45	259.63	256.17	245.81	245.42	243.75	243.05
Max Q (cfs):	13.35	19.93	20.73	21.08	23.32	39.74	40.43	39.62
Max Vel (ft/s):	7.64	6.99	11.50	11.81	6.61	6.42	7.09	5.90
Max Depth (ft):	1.09	1.41	0.99	0.98	1.69	2.45	2.40	2.74

Profile Plot

Main Street Storm Sewer



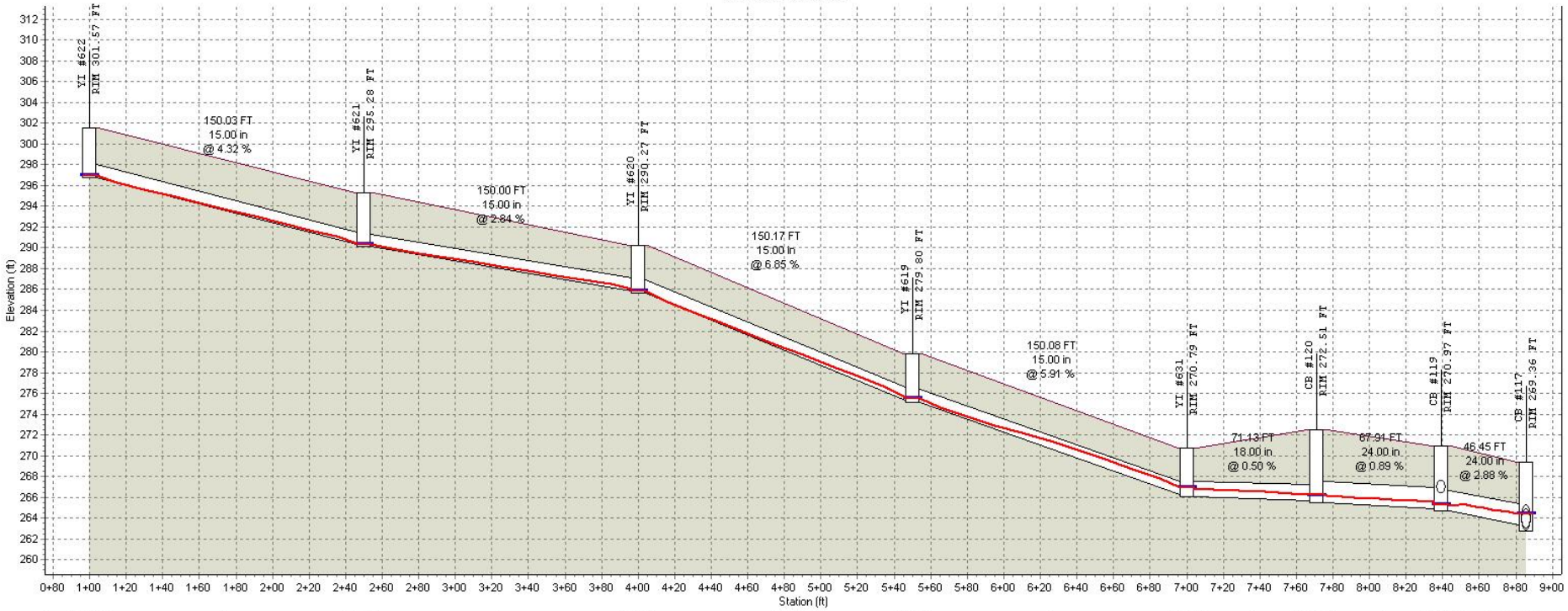
:	YI #627	CB #149	SDMH #505	FES#311
RIM (FT):	250.32	249.97	248.01	
Invert (ft):	242.85	242.15	240.97	240.00
Min Pipe Cover (ft):			3.35	
Max HGL (ft):	245.57	244.66	243.55	242.10

Link ID:	P #205	P #215	P #216	
(FT):	55.09	128.18	191.19	
(in):	36.00	42.00	42.00	
@ (%):	0.92	0.76	0.51	
Up Invert (ft):	242.85	242.15	240.97	
Dn Invert (ft):	242.35	241.17	240.00	
Max Q (cfs):	39.77	47.91	47.91	
Max Vel (ft/s):	6.33	6.75	7.03	
Max Depth (ft):	2.51	2.44	2.34	

HGL

Profile Plot

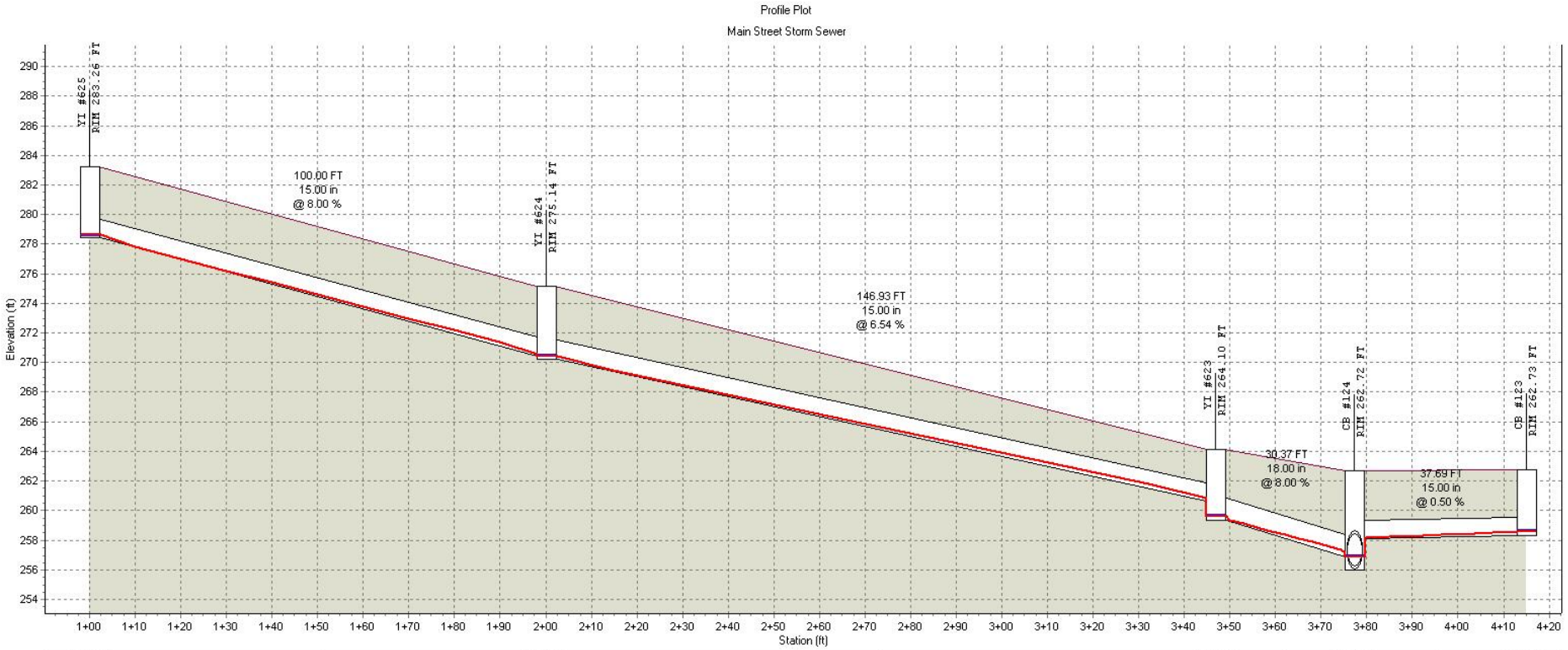
Main Street Storm Sewer



:	YI #622	YI #621	YI #620	YI #619	YI #631	CB #120	CB #119	CB #117
RIM (FT):	301.57	295.28	290.27	279.80	270.79	272.51	270.97	269.36
Invert (ft):	296.78	290.09	285.63	275.15	266.07	265.52	264.70	262.75
Min Pipe Cover (ft):								
Max HGL (ft):	296.93	290.34	285.88	275.52	266.97	266.23	265.29	264.40

Link ID:	P #178	P #177	P #176	P #175	P #174	P #173	P #171
(FT):	150.03	150.00	150.17	150.08	71.13	67.91	46.45
(in):	15.00	15.00	15.00	15.00	18.00	24.00	24.00
@ (%):	4.32	2.84	6.85	5.91	0.50	0.89	2.88
Up Invert (ft):	296.78	290.09	285.63	275.15	266.07	265.52	264.70
Dn Invert (ft):	290.29	285.83	275.35	266.27	265.72	264.92	263.36
Max Q (cfs):	0.40	0.88	1.37	2.94	3.85	4.36	5.17
Max Vel (ft/s):	4.82	5.23	8.10	6.91	3.88	4.80	5.86
Max Depth (ft):	0.15	0.24	0.24	0.53	0.82	0.66	0.81

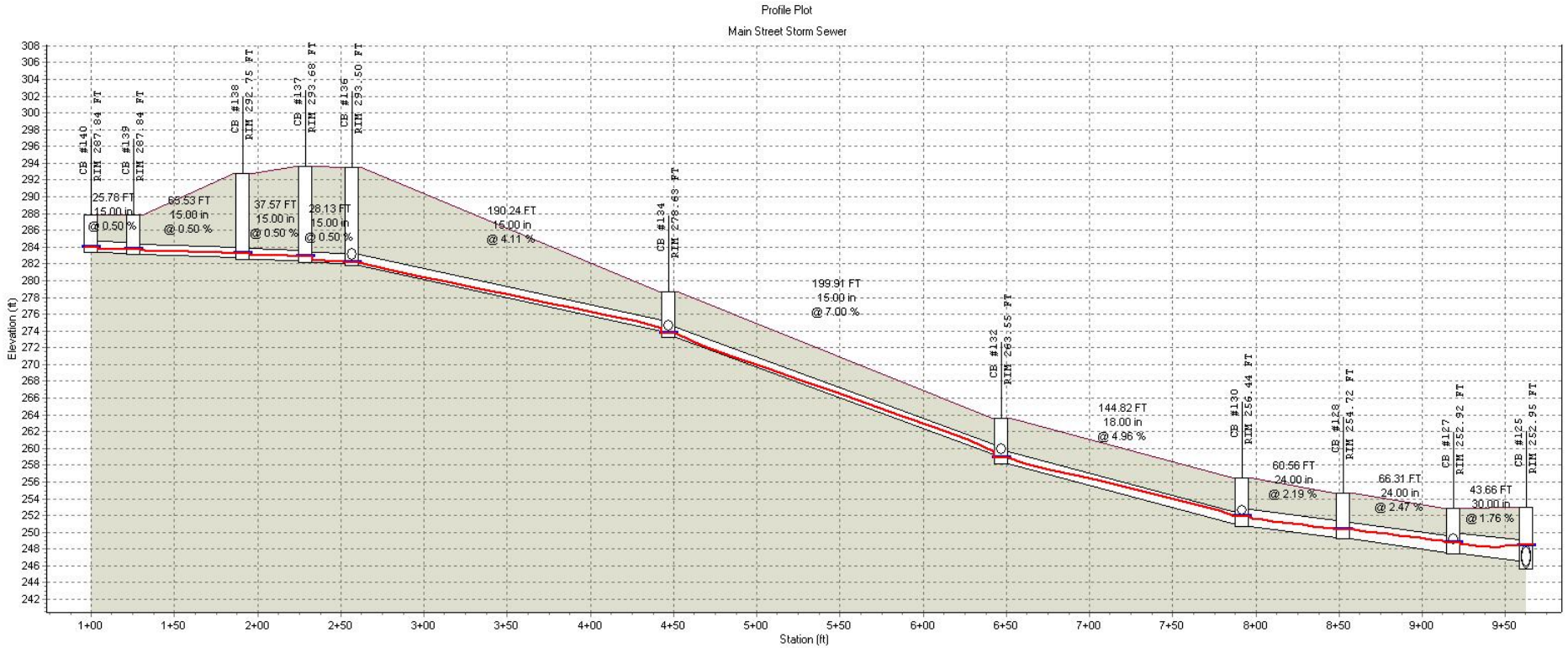
HGL



	YI #625	YI #624	YI #623	CB #124	CB #123
RIM (FT):	283.26	275.14	264.10	262.72	262.73
Invert (ft):	278.45	270.25	259.34	255.97	258.29
Min Pipe Cover (ft):					
Max HGL (ft):	278.61	270.45	259.60	256.85	258.59

Link ID:	P #184	P #183	P #182	P #185
(FT):	100.00	146.93	30.37	37.69
(in):	15.00	15.00	18.00	15.00
@ (%):	8.00	6.54	8.00	0.50
Up Invert (ft):	278.45	270.25	259.34	258.29
Dn Invert (ft):	270.45	260.64	256.91	258.11
Max Q (cfs):	0.63	0.91	1.56	0.45
Max Vel (ft/s):	6.81	7.09	8.05	2.24
Max Depth (ft):	0.16	0.20	0.25	0.28

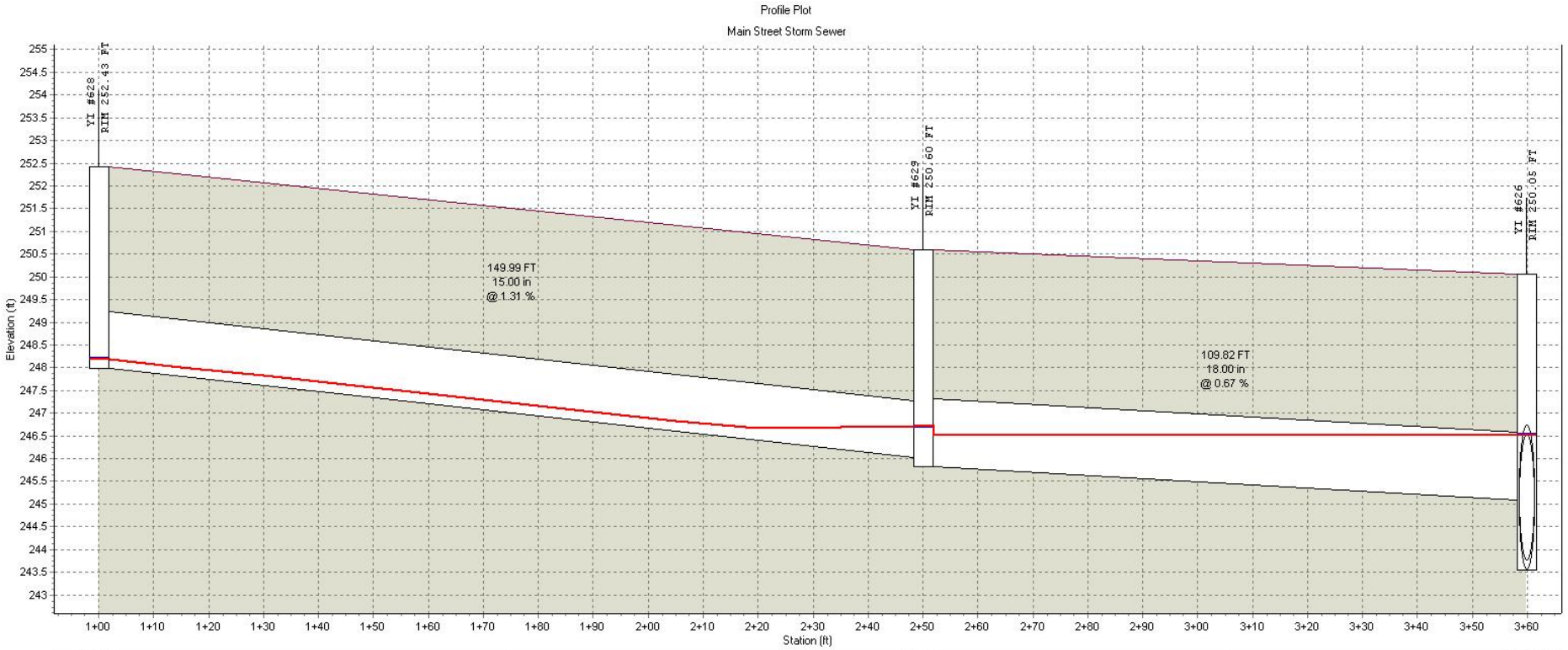
HGL



	CB #140	CB #139	CB #138	CB #137	CB #136	CB #134	CB #132	CB #130	CB #128	CB #127	CB #125
RIM (FT):	287.84	287.84	292.75	293.68	293.50	278.63	263.55	256.44	254.72	252.92	252.95
Invert (ft):	283.41	283.08	282.55	282.16	281.82	273.19	258.13	250.74	249.22	247.38	245.61
Min Pipe Cover (ft):											
Max HGL (ft):	283.98	283.71	283.22	282.87	282.19	273.70	258.86	251.89	250.32	248.82	248.46

Link ID:	P #201	P #200	P #199	P #198	P #196	P #194	P #192	P #190	P #189	P #187
(FT):	25.78	65.53	37.57	28.13	190.24	199.91	144.82	60.56	66.31	43.66
(in):	15.00	15.00	15.00	15.00	15.00	15.00	18.00	24.00	24.00	30.00
@ (%):	0.50	0.50	0.50	0.50	4.11	7.00	4.96	2.19	2.47	1.76
Up Invert (ft):	283.41	283.08	282.55	282.16	281.82	273.19	258.13	250.74	249.22	247.38
Dn Invert (ft):	283.28	282.75	282.36	282.02	274.00	259.20	250.94	249.42	247.58	246.61
Max Q (cfs):	1.41	1.83	1.94	2.04	2.23	5.30	10.27	13.45	13.72	16.56
Max Vel (ft/s):	2.93	3.28	3.24	3.25	7.75	11.84	10.12	8.28	7.34	6.76
Max Depth (ft):	0.52	0.58	0.61	0.64	0.36	0.49	0.84	1.03	1.17	1.64

HGL



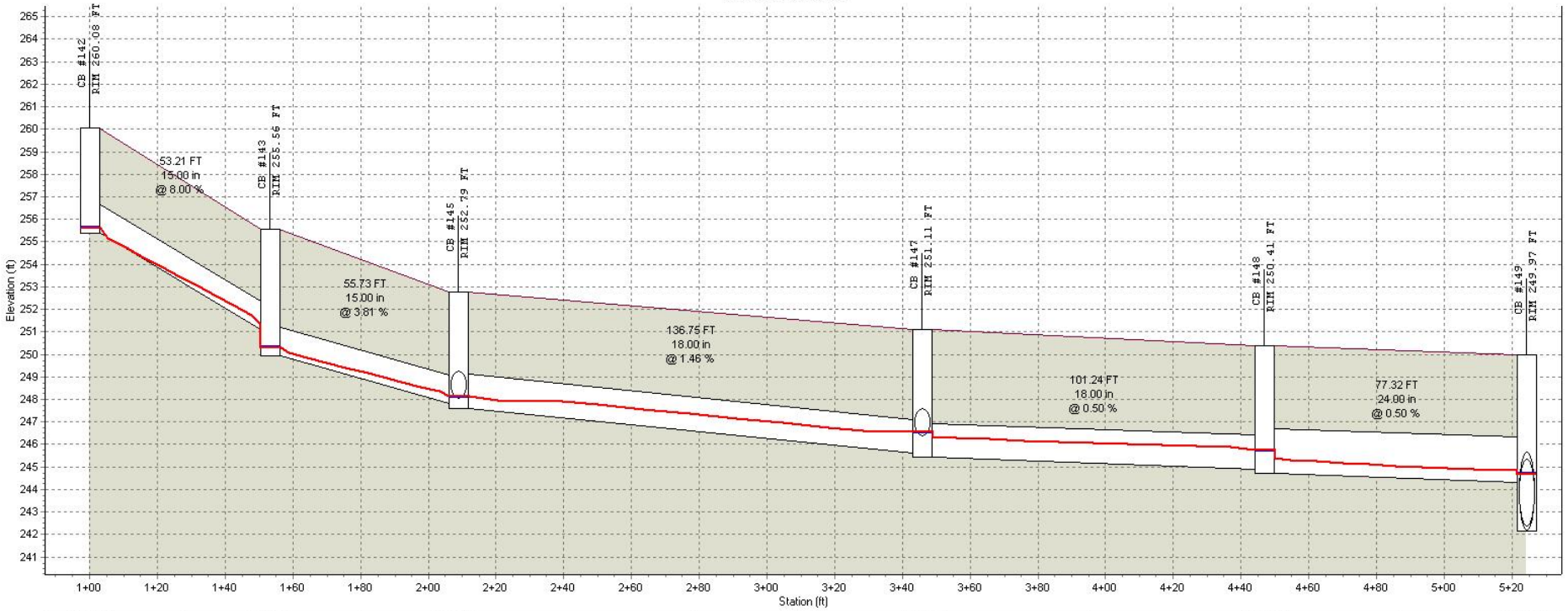
	YI #628	YI #629	YI #626
RIM (FT):	252.43	250.60	250.05
Invert (ft):	247.99	245.82	243.55
Min Pipe Cover (ft):			
Max HGL (ft):	248.19	246.70	246.52

Link ID:	P #206	P #207
(FT):	149.99	109.82
(in):	15.00	18.00
@ (%):	1.31	0.67
Up Invert (ft):	247.99	245.82
Dn Invert (ft):	246.02	245.09
Max Q (cfs):	0.39	1.96
Max Vel (ft/s):	3.14	2.69
Max Depth (ft):	0.43	1.16

HGL

Profile Plot

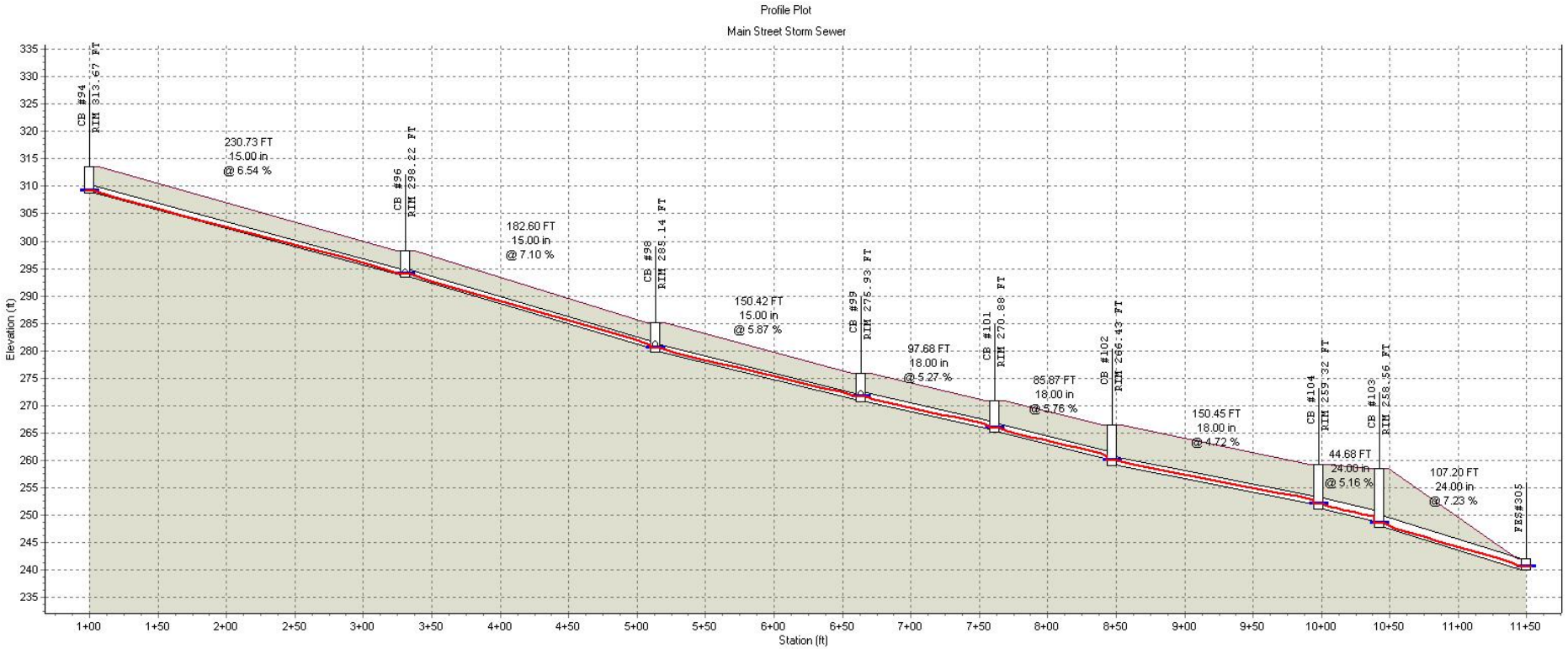
Main Street Storm Sewer



	CB #142	CB #143	CB #145	CB #147	CB #148	CB #149
RIM (FT):	260.08	255.56	252.79	251.11	250.41	249.97
Invert (ft):	255.38	249.94	247.62	245.42	244.71	242.15
Min Pipe Cover (ft):						
Max HGL (ft):	255.60	250.30	248.12	246.54	245.73	244.66

Link ID:	P #208	P #209	P #211	P #213	P #214
(FT):	53.21	55.73	136.75	101.24	77.32
(in):	15.00	15.00	18.00	18.00	24.00
@ (%):	8.00	3.81	1.46	0.50	0.50
Up Invert (ft):	255.38	249.94	247.62	245.42	244.71
Dn Invert (ft):	251.12	247.82	245.62	244.91	244.32
Max Q (cfs):	1.09	1.80	3.14	5.49	6.23
Max Vel (ft/s):	7.77	6.75	4.15	4.33	4.29
Max Depth (ft):	0.21	0.34	0.71	1.01	0.94

HGL



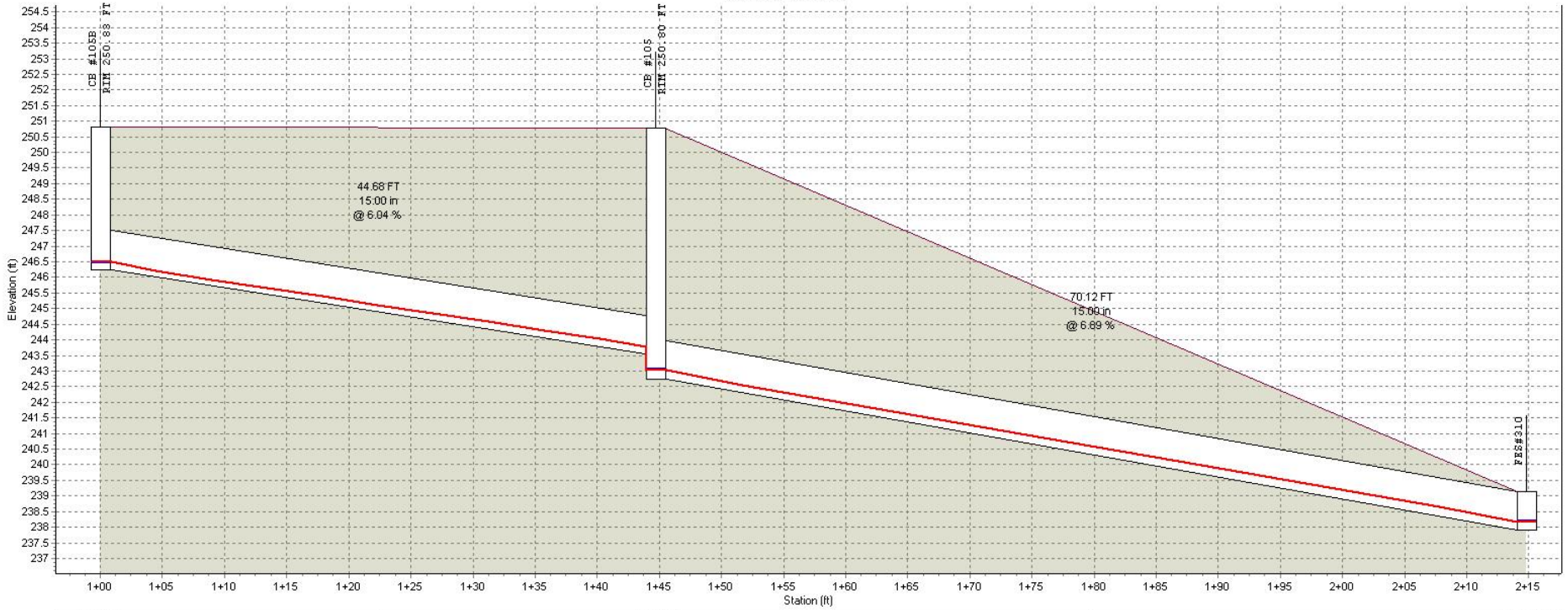
:	CB #94	CB #96	CB #98	CB #99	CB #101	CB #102	CB #104	CB #103	FES#305
RIM (FT):	313.67	298.22	285.14	275.93	270.88	266.43	259.32	258.56	
Invert (ft):	308.82	293.53	279.82	270.79	265.10	259.12	251.21	247.75	240.00
Min Pipe Cover (ft):									
Max HGL (ft):	309.15	294.05	280.51	271.56	265.87	259.91	252.04	248.45	240.61

Link ID:	P #144	P #146	P #148	P #149	P #151	P #152	P #153	P #154
(FT):	230.73	182.60	150.42	97.68	85.87	150.45	44.68	107.20
(in):	15.00	15.00	15.00	18.00	18.00	18.00	24.00	24.00
@ (%):	6.54	7.10	5.87	5.27	5.76	4.72	5.16	7.23
Up Invert (ft):	308.82	293.53	279.82	270.79	265.10	259.12	251.21	247.75
Dn Invert (ft):	293.73	280.57	270.99	265.64	260.15	252.01	248.90	240.00
Max Q (cfs):	2.39	5.66	7.81	9.62	9.85	10.33	11.07	12.40
Max Vel (ft/s):	9.38	12.06	11.98	11.63	11.94	11.71	10.66	13.83
Max Depth (ft):	0.33	0.51	0.66	0.71	0.71	0.75	0.73	0.66

HGL

Profile Plot

Main Street Storm Sewer

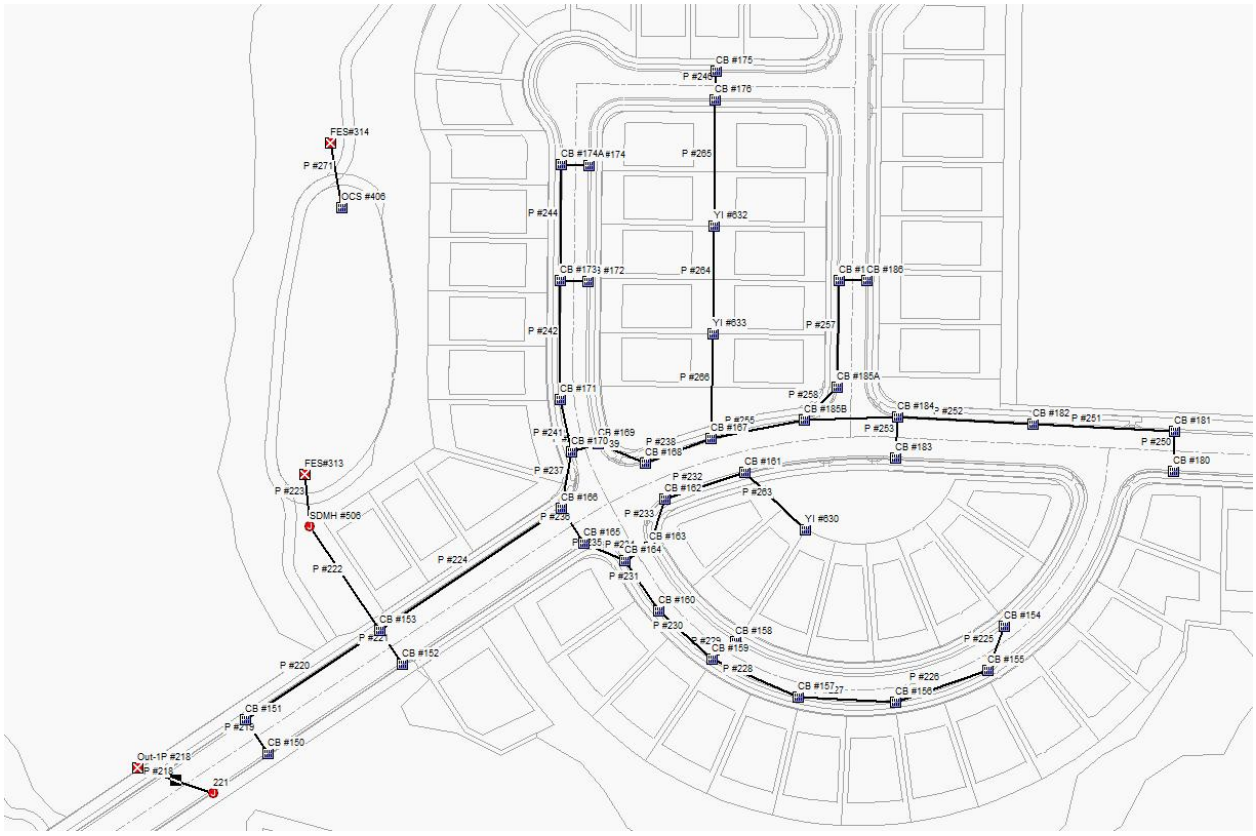


	CB #105B		CB #105		FES#310
RIM (FT):	250.83		250.80		
Invert (ft):	246.24		242.73		237.90
Min Pipe Cover (ft):					
Max HGL (ft):	246.48		243.03		238.18
Link ID:		P #157		P #156	
(FT):		44.68		70.12	
(in):		15.00		15.00	
@ (%):		6.04		6.89	
Up Invert (ft):		246.24		242.73	
Dn Invert (ft):		243.55		237.90	
Max Q (cfs):		1.08		1.84	
Max Vel (ft/s):		6.89		8.57	
Max Depth (ft):		0.23		0.29	

HGL

S T O R M W A T E R AREA " D "

STORMWATER PIPING AND HYDRAULIC GRADE LINE FOR 25-YR STORM

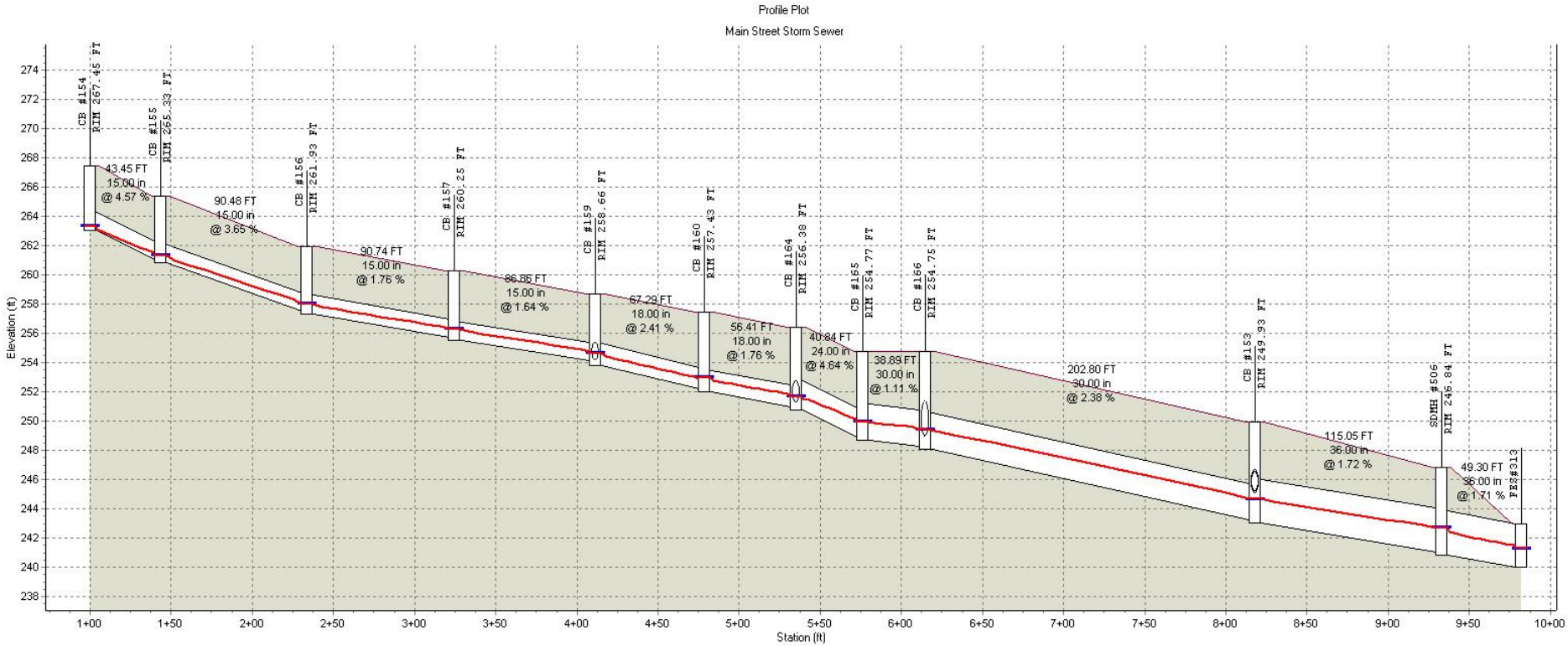


PLAN VIEW

DRAINAGE AREA

SN	Element ID	Area (acres)	Drainage Node ID	Weighted Runoff Coefficient	Accumulated Precipitation (inches)	Total Runoff (inches)	Peak Runoff (cfs)	Rainfall Intensity (inches/hr)	Time of Concentration (days hh:mm:ss)
1	Sub-CB#150	0.29	CB #150	0.5900	0.67	0.39	1.37	7.990	0 00:05:00
2	Sub-CB#151	0.25	CB #151	0.8300	0.67	0.55	1.66	7.990	0 00:05:00
3	Sub-CB#152	0.42	CB #152	0.5500	0.67	0.37	1.85	7.990	0 00:05:00
4	Sub-CB#153	0.34	CB #153	0.5400	0.67	0.36	1.47	7.990	0 00:05:00
5	Sub-CB#154	0.27	CB #154	0.5900	0.67	0.39	1.27	7.990	0 00:05:00
6	Sub-CB#155	0.45	CB #155	0.5400	0.67	0.36	1.94	7.990	0 00:05:00
7	Sub-CB#156	0.18	CB #156	0.5400	0.67	0.36	0.78	7.990	0 00:05:00
8	Sub-CB#157	0.20	CB #157	0.5400	0.67	0.36	0.86	7.990	0 00:05:00
9	Sub-CB#158	0.43	CB #158	0.5900	0.67	0.39	2.03	7.990	0 00:05:00
10	Sub-CB#159	0.17	CB #159	0.5900	0.67	0.39	0.80	7.990	0 00:05:00
11	Sub-CB#160	0.13	CB #160	0.5400	0.67	0.36	0.56	7.990	0 00:05:00
12	Sub-CB#161	0.10	CB #161	0.8300	0.67	0.55	0.66	7.990	0 00:05:00
13	Sub-CB#162	0.05	CB #162	0.8300	0.67	0.55	0.33	7.990	0 00:05:00
14	Sub-CB#163	0.26	CB #163	0.5900	0.67	0.39	1.23	7.990	0 00:05:00
15	Sub-CB#164	0.09	CB #164	0.5900	0.67	0.39	0.42	7.990	0 00:05:00
16	Sub-CB#165	0.08	CB #165	0.4900	0.67	0.33	0.31	7.990	0 00:05:00
17	Sub-CB#166	0.10	CB #166	0.5900	0.67	0.39	0.47	7.990	0 00:05:00
18	Sub-CB#167	0.14	CB #167	0.7900	0.67	0.53	0.88	7.990	0 00:05:00
19	Sub-CB#168	0.05	CB #168	0.8300	0.67	0.55	0.33	7.990	0 00:05:00
20	Sub-CB#169	0.41	CB #169	0.5000	0.67	0.33	1.64	7.990	0 00:05:00
21	Sub-CB#170	0.10	CB #170	0.4900	0.67	0.33	0.39	7.990	0 00:05:00
22	Sub-CB#171	0.19	CB #171	0.5400	0.67	0.36	0.82	7.990	0 00:05:00
23	Sub-CB#172	0.18	CB #172	0.5400	0.67	0.36	0.78	7.990	0 00:05:00
24	Sub-CB#173	0.19	CB #173	0.5400	0.67	0.36	0.82	7.990	0 00:05:00
25	Sub-CB#174	0.09	CB #174	0.4900	0.67	0.33	0.35	7.990	0 00:05:00
26	Sub-CB#174A	0.41	CB #174A	0.5900	0.67	0.39	1.93	7.990	0 00:05:00
27	Sub-CB#175	0.41	CB #175	0.5900	0.67	0.39	1.93	7.990	0 00:05:00
28	Sub-CB#176	0.04	CB #176	0.8300	0.67	0.55	0.27	7.990	0 00:05:00
29	Sub-CB#180	0.24	CB #180	0.5900	0.67	0.39	1.13	7.990	0 00:05:00
30	Sub-CB#181	0.10	CB #181	0.8300	0.67	0.55	0.66	7.990	0 00:05:00
31	Sub-CB#182	0.09	CB #182	0.8300	0.67	0.55	0.60	7.990	0 00:05:00
32	Sub-CB#183	0.09	CB #183	0.8300	0.67	0.55	0.60	7.990	0 00:05:00
33	Sub-CB#184	0.09	CB #184	0.8300	0.67	0.55	0.60	7.990	0 00:05:00
34	Sub-CB#185	0.14	CB #185	0.5400	0.67	0.36	0.60	7.990	0 00:05:00
35	Sub-CB#185A	0.01	CB #185A	0.7000	0.67	0.47	0.06	7.990	0 00:05:00
36	Sub-CB#185B	0.05	CB #185B	0.8300	0.67	0.55	0.33	7.990	0 00:05:00
37	Sub-CB#186	0.23	CB #186	0.5400	0.67	0.36	0.99	7.990	0 00:05:00
38	Sub-YI#630	0.62	YI #630	0.3500	0.67	0.23	1.73	7.990	0 00:05:00
39	Sub-YI#632	0.25	YI #632	0.3500	0.67	0.23	0.70	7.990	0 00:05:00
40	Sub-YI#633	0.36	YI #633	0.3500	0.67	0.23	1.01	7.990	0 00:05:00

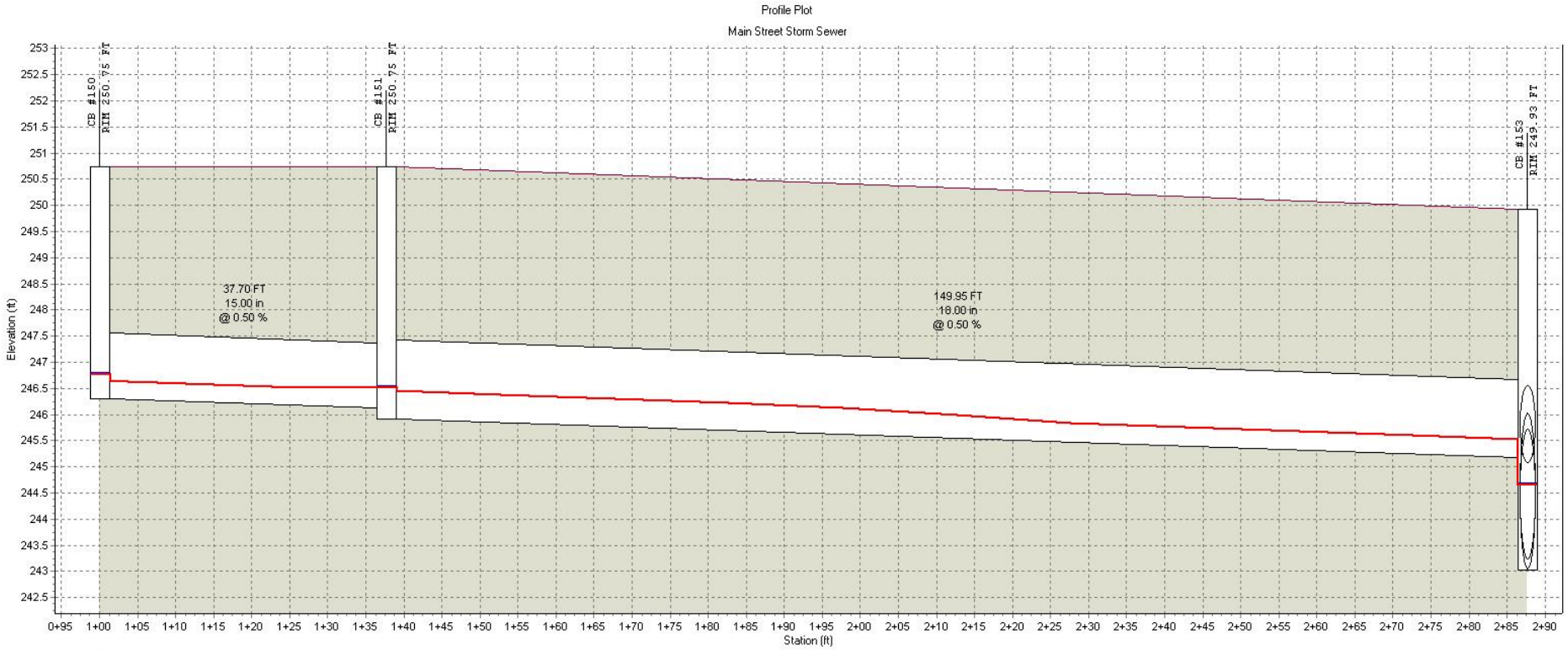
MODEL INPUT										MODEL OUTPUT									
SN	Element ID	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Pipe Diameter or Height (inches)	Manning's Roughness	Peak Flow (cfs)	Time of Peak Flow Occurrence (days hh:mm)	Max Flow Velocity (ft/sec)	Travel Time (min)	Design Flow Capacity (cfs)	Max Flow / Design Flow Ratio	Max Flow Depth / Total Depth Ratio	Total Time Surcharged (min)	Max Flow Depth (ft)	Reported Condition
1	P #219	CB #150	CB #151	37.70	246.31	246.12	0.5000	15.000	0.0130	1.04	0 00:05	2.76	0.23	4.57	0.23	0.35	0.00	0.43	Calculated
2	P #220	CB #151	CB #153	149.95	245.92	245.17	0.5000	18.000	0.0130	2.16	0 00:05	3.47	0.72	7.43	0.29	0.38	0.00	0.57	Calculated
3	P #221	CB #152	CB #153	37.73	245.24	245.05	0.5000	18.000	0.0130	1.91	0 00:05	3.14	0.20	7.43	0.26	0.38	0.00	0.57	Calculated
4	P #222	CB #153	SDMH #506	115.05	243.02	241.04	1.7200	36.000	0.0130	33.34	0 00:06	8.48	0.23	87.49	0.38	0.55	0.00	1.63	Calculated
5	P #223	SDMH #506	FES#313	49.30	240.84	240.00	1.7100	36.000	0.0130	33.36	0 00:06	8.98	0.09	87.27	0.38	0.52	0.00	1.56	Calculated
6	P #224	CB #166	CB #153	202.80	248.06	243.22	2.3800	30.000	0.0130	27.68	0 00:06	10.08	0.34	63.31	0.44	0.55	0.00	1.37	Calculated
7	P #225	CB #154	CB #155	43.45	263.02	261.03	4.5700	15.000	0.0130	1.19	0 00:05	6.40	0.11	13.81	0.09	0.21	0.00	0.26	Calculated
8	P #226	CB #155	CB #156	90.48	260.83	257.52	3.6500	15.000	0.0130	2.93	0 00:05	7.40	0.20	12.34	0.24	0.36	0.00	0.45	Calculated
9	P #227	CB #156	CB #157	90.74	257.32	255.72	1.7600	15.000	0.0130	3.80	0 00:05	6.24	0.24	8.58	0.44	0.50	0.00	0.62	Calculated
10	P #228	CB #157	CB #159	86.86	255.52	254.10	1.6400	15.000	0.0130	4.52	0 00:05	6.28	0.23	8.28	0.55	0.57	0.00	0.71	Calculated
11	P #229	CB #158	CB #159	27.12	254.24	254.10	0.5300	15.000	0.0130	1.59	0 00:05	3.04	0.15	4.71	0.34	0.44	0.00	0.55	Calculated
12	P #230	CB #159	CB #160	67.29	253.80	252.18	2.4100	18.000	0.0130	6.74	0 00:05	7.17	0.16	16.31	0.41	0.53	0.00	0.79	Calculated
13	P #231	CB #160	CB #164	56.41	251.98	250.98	1.7600	18.000	0.0130	7.27	0 00:05	6.85	0.14	13.95	0.52	0.58	0.00	0.87	Calculated
14	P #232	CB #161	CB #162	77.51	253.23	252.57	0.8500	18.000	0.0130	2.27	0 00:05	4.16	0.31	9.71	0.23	0.35	0.00	0.52	Calculated
15	P #233	CB #162	CB #163	47.01	252.37	251.59	1.6400	18.000	0.0130	2.57	0 00:05	3.90	0.20	13.47	0.19	0.43	0.00	0.65	Calculated
16	P #234	CB #163	CB #164	25.73	251.39	251.26	0.5000	18.000	0.0130	4.13	0 00:05	3.79	0.11	7.43	0.56	0.59	0.00	0.89	Calculated
17	P #235	CB #164	CB #165	40.84	250.78	248.89	4.6400	24.000	0.0130	11.77	0 00:05	7.93	0.09	48.72	0.24	0.48	0.00	0.96	Calculated
18	P #236	CB #165	CB #166	38.89	248.69	248.26	1.1100	30.000	0.0130	12.04	0 00:05	5.33	0.12	43.13	0.28	0.47	0.00	1.17	Calculated
19	P #237	CB #170	CB #166	53.43	251.39	248.87	4.7200	30.000	0.0130	15.14	0 00:06	11.10	0.08	89.10	0.17	0.32	0.00	0.80	Calculated
20	P #238	CB #167	CB #168	65.21	253.47	252.71	1.1700	24.000	0.0130	8.84	0 00:05	5.68	0.19	24.43	0.36	0.50	0.00	1.01	Calculated
21	P #239	CB #168	CB #169	47.73	252.51	251.92	1.2300	24.000	0.0130	9.11	0 00:06	4.39	0.18	25.11	0.36	0.63	0.00	1.26	Calculated
22	P #240	CB #169	CB #170	25.80	251.72	251.59	0.5000	24.000	0.0130	10.57	0 00:06	4.68	0.09	16.00	0.66	0.68	0.00	1.35	Calculated
23	P #241	CB #171	CB #170	49.61	252.72	251.72	2.0100	18.000	0.0130	4.38	0 00:05	6.32	0.13	14.89	0.29	0.42	0.00	0.62	Calculated
24	P #242	CB #173	CB #171	109.56	255.46	252.92	2.3300	18.000	0.0130	3.64	0 00:05	6.88	0.27	16.02	0.23	0.34	0.00	0.51	Calculated
25	P #243	CB #172	CB #173	25.73	256.01	255.88	0.5000	15.000	0.0130	0.72	0 00:05	2.47	0.17	4.57	0.16	0.29	0.00	0.36	Calculated
26	P #244	CB #174A	CB #173	107.41	258.29	255.66	2.4400	18.000	0.0130	1.83	0 00:05	5.87	0.30	16.42	0.11	0.23	0.00	0.35	Calculated
27	P #245	CB #174	CB #174A	25.60	258.69	258.56	0.5000	15.000	0.0130	0.34	0 00:05	2.05	0.21	4.57	0.07	0.19	0.00	0.24	Calculated
28	P #246	CB #175	CB #176	26.23	258.56	258.43	0.5000	15.000	0.0130	1.38	0 00:05	2.91	0.15	4.57	0.30	0.41	0.00	0.51	Calculated
29	P #250	CB #180	CB #181	37.71	277.52	276.95	1.5000	15.000	0.0130	1.06	0 00:05	4.09	0.15	7.92	0.13	0.26	0.00	0.33	Calculated
30	P #251	CB #181	CB #182	131.27	276.75	271.30	4.1500	18.000	0.0130	1.68	0 00:05	6.99	0.31	21.39	0.08	0.19	0.00	0.29	Calculated
31	P #252	CB #182	CB #184	126.56	271.10	265.16	4.7000	18.000	0.0130	2.21	0 00:05	7.88	0.27	22.77	0.10	0.22	0.00	0.32	Calculated
32	P #253	CB #183	CB #184	37.71	267.23	267.04	0.5000	15.000	0.0130	0.58	0 00:05	2.38	0.26	4.57	0.13	0.25	0.00	0.32	Calculated
33	P #254	CB #184	CB #185B	85.93	264.96	260.39	5.3100	18.000	0.0130	3.33	0 00:05	9.01	0.16	24.20	0.14	0.26	0.00	0.39	Calculated
34	P #255	CB #185B	CB #167	88.06	257.93	253.67	4.8400	18.000	0.0130	5.00	0 00:05	7.05	0.21	23.11	0.22	0.44	0.00	0.66	Calculated
35	P #256	CB #186	CB #185	25.73	259.37	259.24	0.5000	15.000	0.0130	0.83	0 00:05	2.56	0.17	4.57	0.18	0.31	0.00	0.39	Calculated
36	P #257	CB #185	CB #185A	98.73	259.04	258.55	0.5000	15.000	0.0130	1.34	0 00:05	3.09	0.53	4.57	0.29	0.39	0.00	0.48	Calculated
37	P #258	CB #185A	CB #185B	43.39	258.35	258.13	0.5000	15.000	0.0130	1.39	0 00:05	2.99	0.24	4.57	0.30	0.40	0.00	0.50	Calculated
38	P #263	YI #630	CB #161	77.97	253.82	253.43	0.5000	15.000	0.0130	1.67	0 00:05	3.23	0.40	4.57	0.36	0.44	0.00	0.55	Calculated
39	P #264	YI #632	YI #633	100.00	256.27	254.35	1.9200	15.000	0.0130	2.26	0 00:05	4.75	0.35	8.94	0.25	0.45	0.00	0.56	Calculated
40	P #265	CB #176	YI #632	116.89	258.23	256.56	1.4300	15.000	0.0130	1.59	0 00:05	4.74	0.41	7.72	0.21	0.32	0.00	0.40	Calculated
41	P #266	YI #633	CB #167	97.52	254.15	253.67	0.5000	15.000	0.0130	3.12	0 00:05	3.50	0.46	4.57	0.68	0.69	0.00	0.86	Calculated



:	CB #154	CB #155	CB #156	CB #157	CB #159	CB #160	CB #164	CB #165	CB #166	CB #153	SDMH #506	FES#313
RIM (FT):	267.45	265.33	261.93	260.25	258.66	257.43	256.38	254.77	254.75	249.93	246.84	
Invert (ft):	263.02	260.83	257.32	255.52	253.80	251.98	250.78	248.69	248.06	243.02	240.84	240.00
Min Pipe Cover (ft):											2.79	
Max HGL (ft):	263.29	261.27	257.99	256.29	254.61	252.95	251.66	249.93	249.36	244.66	242.68	241.29

Link ID:	P #225	P #226	P #227	P #228	P #230	P #231	P #235	P #236	P #224	P #222	P #223
(FT):	43.45	90.48	90.74	86.86	67.29	56.41	40.84	38.89	202.80	115.05	49.30
(in):	15.00	15.00	15.00	15.00	18.00	18.00	24.00	30.00	30.00	36.00	36.00
@ (%):	4.57	3.65	1.76	1.64	2.41	1.76	4.64	1.11	2.38	1.72	1.71
Up Invert (ft):	263.02	260.83	257.32	255.52	253.80	251.98	250.78	248.69	248.06	243.02	240.84
Dn Invert (ft):	261.03	257.52	255.72	254.10	252.18	250.98	248.89	248.26	243.22	241.04	240.00
Max Q (cfs):	1.19	2.93	3.80	4.52	6.74	7.27	11.77	12.04	27.68	33.34	33.36
Max Vel (ft/s):	6.40	7.40	6.24	6.28	7.17	6.85	7.93	5.33	10.08	8.48	8.98
Max Depth (ft):	0.26	0.45	0.62	0.71	0.79	0.87	0.96	1.17	1.37	1.63	1.56

HGL



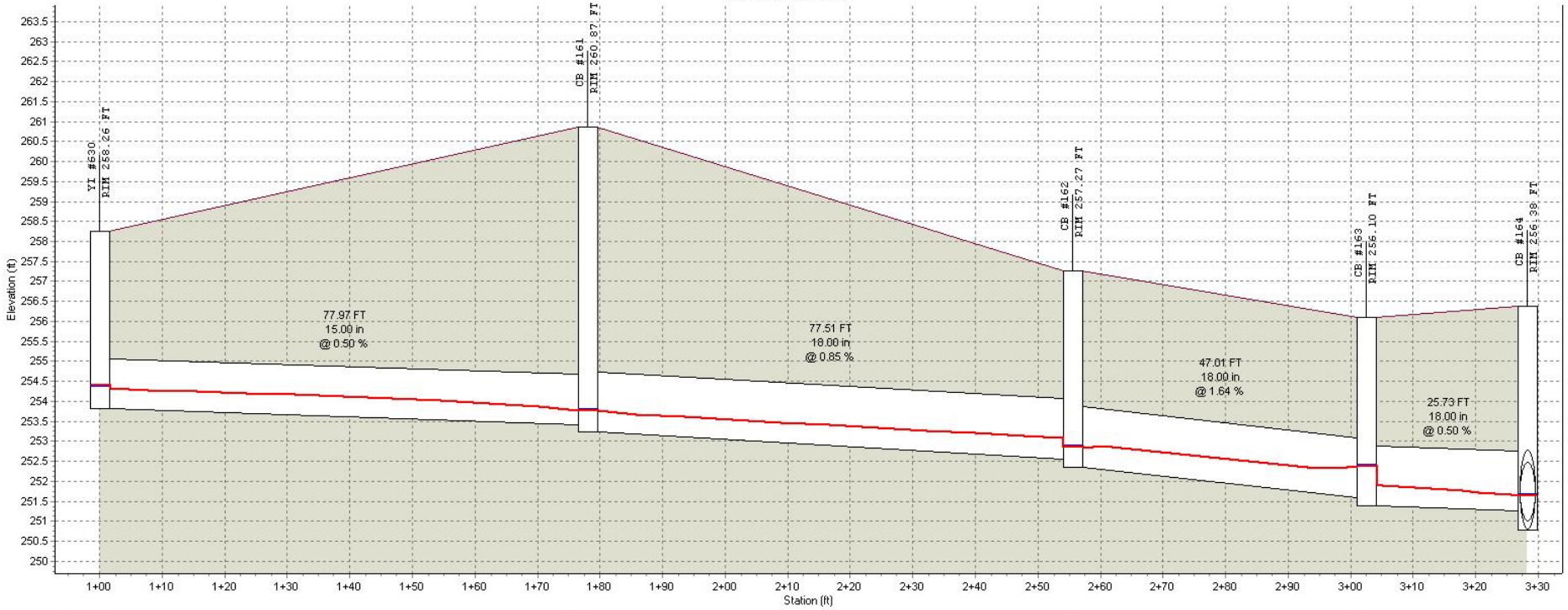
:	CB #150	CB #151	CB #153
RIM (FT):	250.75	250.75	249.93
Invert (ft):	246.31	245.92	243.02
Min Pipe Cover (ft):			
Max HGL (ft):	246.77	246.52	244.66

Link ID:	P #219	P #220
(FT):	37.70	149.95
(in):	15.00	18.00
@ (%):	0.50	0.50
Up Invert (ft):	246.31	245.92
Dn Invert (ft):	246.12	245.17
Max Q (cfs):	1.04	2.16
Max Vel (ft/s):	2.76	3.47
Max Depth (ft):	0.43	0.57

HGL

Profile Plot

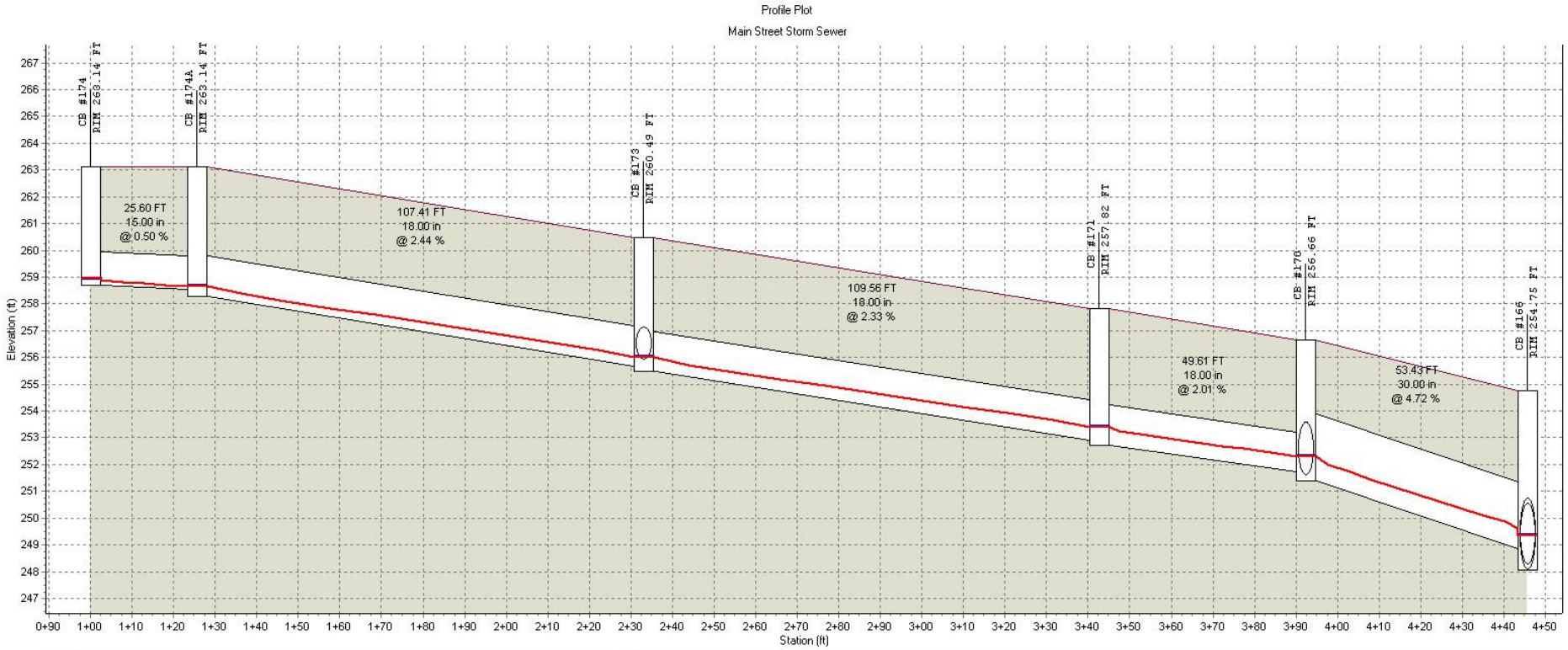
Main Street Storm Sewer



	YI #630	CB #161	CB #162	CB #163	CB #164
RIM (FT):	258.26	260.87	257.27	256.10	256.38
Invert (ft):	253.82	253.23	252.37	251.39	250.78
Min Pipe Cover (ft):					
Max HGL (ft):	254.40	253.78	252.87	252.39	251.66

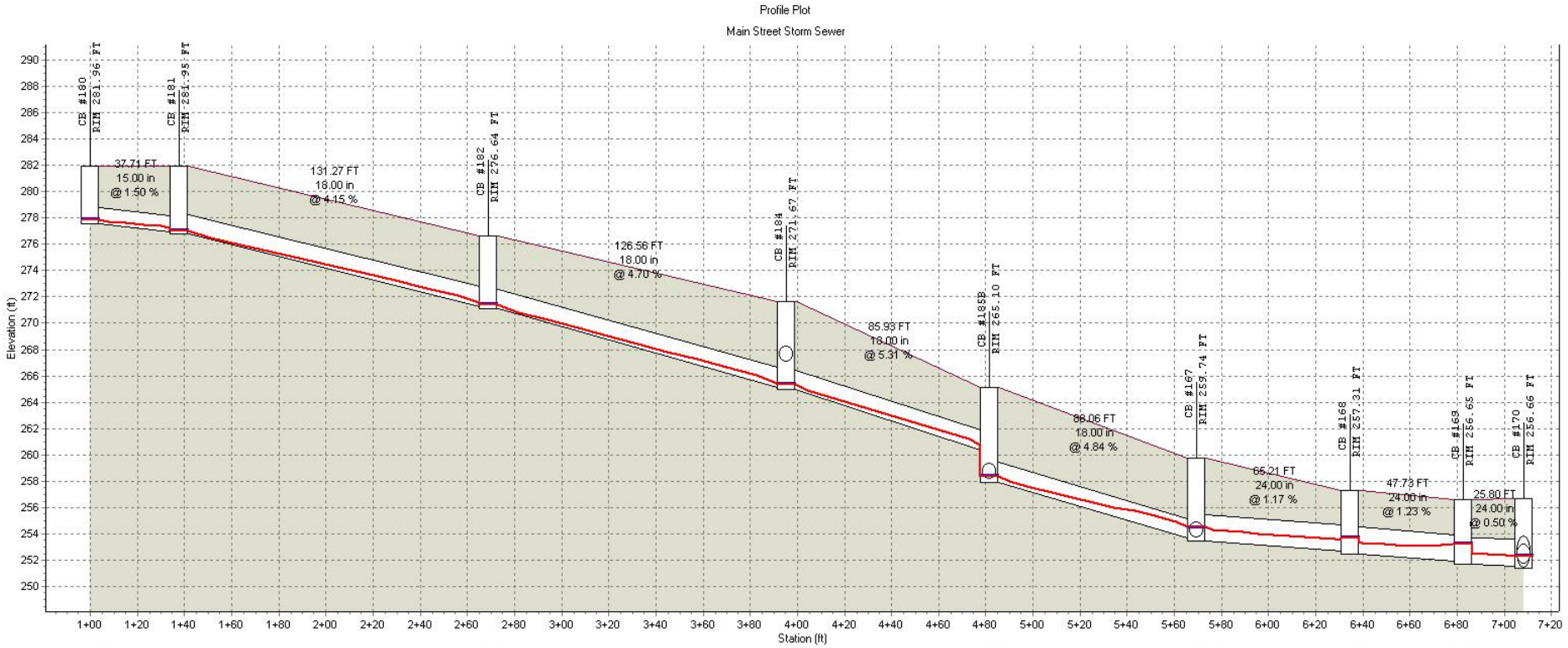
Link ID:	P #263	P #232	P #233	P #234
(FT):	77.97	77.51	47.01	25.73
(in):	15.00	18.00	18.00	18.00
@ (%):	0.50	0.85	1.64	0.50
Up Invert (ft):	253.82	253.23	252.37	251.39
Dn Invert (ft):	253.43	252.57	251.59	251.26
Max Q (cfs):	1.67	2.27	2.57	4.13
Max Vel (ft/s):	3.23	4.16	3.90	3.79
Max Depth (ft):	0.55	0.52	0.65	0.89

HGL



:	CB #174	CB #174A	CB #173	CB #171	CB #170	CB #166
RIM (FT):	263.14	263.14	260.49	257.82	256.66	254.75
Invert (ft):	258.69	258.29	255.46	252.72	251.39	248.06
Min Pipe Cover (ft):						
Max HGL (ft):	258.94	258.65	256.00	253.39	252.30	249.36

Link ID:	P #245	P #244	P #242	P #241	P #237
(FT):	25.60	107.41	109.56	49.61	53.43
(in):	15.00	18.00	18.00	18.00	30.00
@ (%):	0.50	2.44	2.33	2.01	4.72
Up Invert (ft):	258.69	258.29	255.46	252.72	251.39
Dn Invert (ft):	258.56	255.66	252.92	251.72	248.87
Max Q (cfs):	0.34	1.83	3.64	4.38	15.14
Max Vel (ft/s):	2.05	5.87	6.88	6.32	11.10
Max Depth (ft):	0.24	0.35	0.51	0.62	0.80



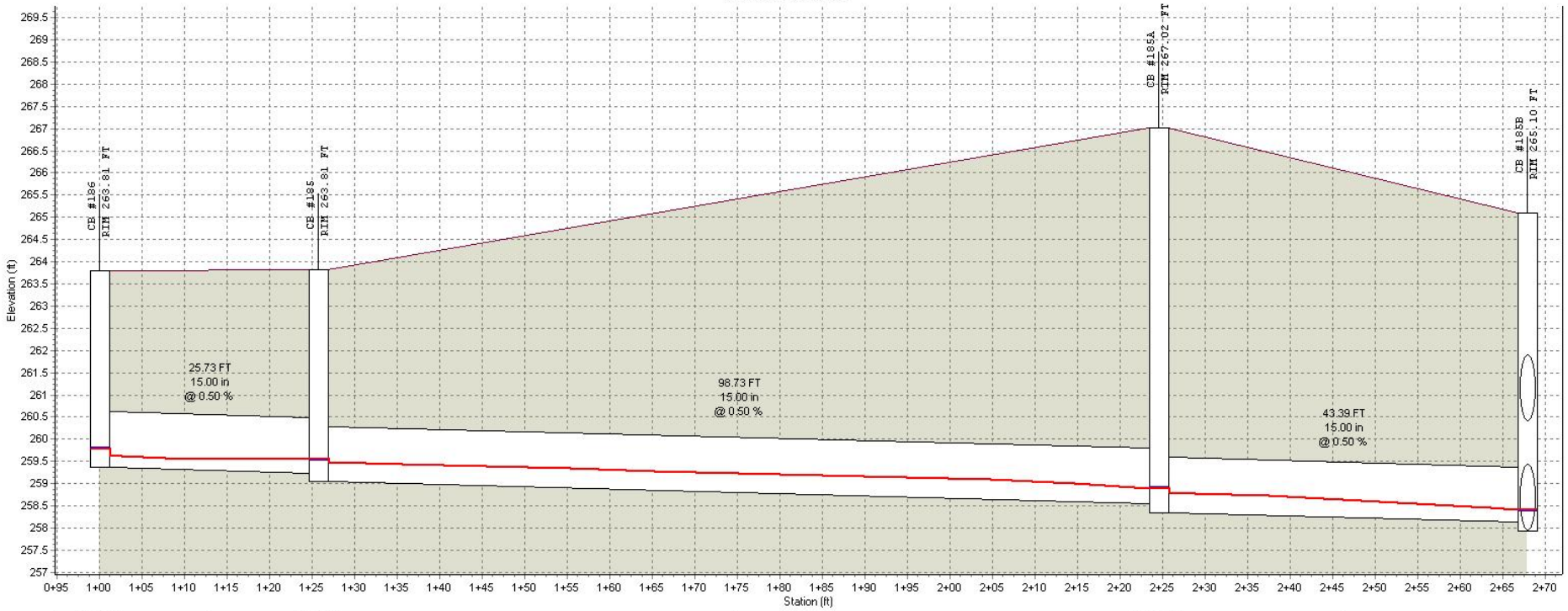
:	CB #180	CB #181	CB #182	CB #184	CB #185B	CB #167	CB #168	CB #169	CB #170
RIM (FT):	281.96	281.95	276.64	271.67	265.10	259.74	257.31	256.65	256.66
Invert (ft):	277.52	276.75	271.10	264.96	257.93	253.47	252.51	251.72	251.39
Min Pipe Cover (ft):									
Max HGL (ft):	277.87	277.04	271.43	265.37	258.41	254.51	253.68	253.26	252.30

Link ID:	P #250	P #251	P #252	P #254	P #255	P #238	P #239	P #240
(FT):	37.71	131.27	126.56	85.93	88.06	65.21	47.73	25.80
(in):	15.00	18.00	18.00	18.00	18.00	24.00	24.00	24.00
@ (%):	1.50	4.15	4.70	5.31	4.84	1.17	1.23	0.50
Up Invert (ft):	277.52	276.75	271.10	264.96	257.93	253.47	252.51	251.72
Dn Invert (ft):	276.95	271.30	265.16	260.39	253.67	252.71	251.92	251.59
Max Q (cfs):	1.06	1.68	2.21	3.33	5.00	8.84	9.11	10.57
Max Vel (ft/s):	4.09	6.99	7.88	9.01	7.05	5.68	4.39	4.68
Max Depth (ft):	0.33	0.29	0.32	0.39	0.66	1.01	1.26	1.35

HGL

Profile Plot

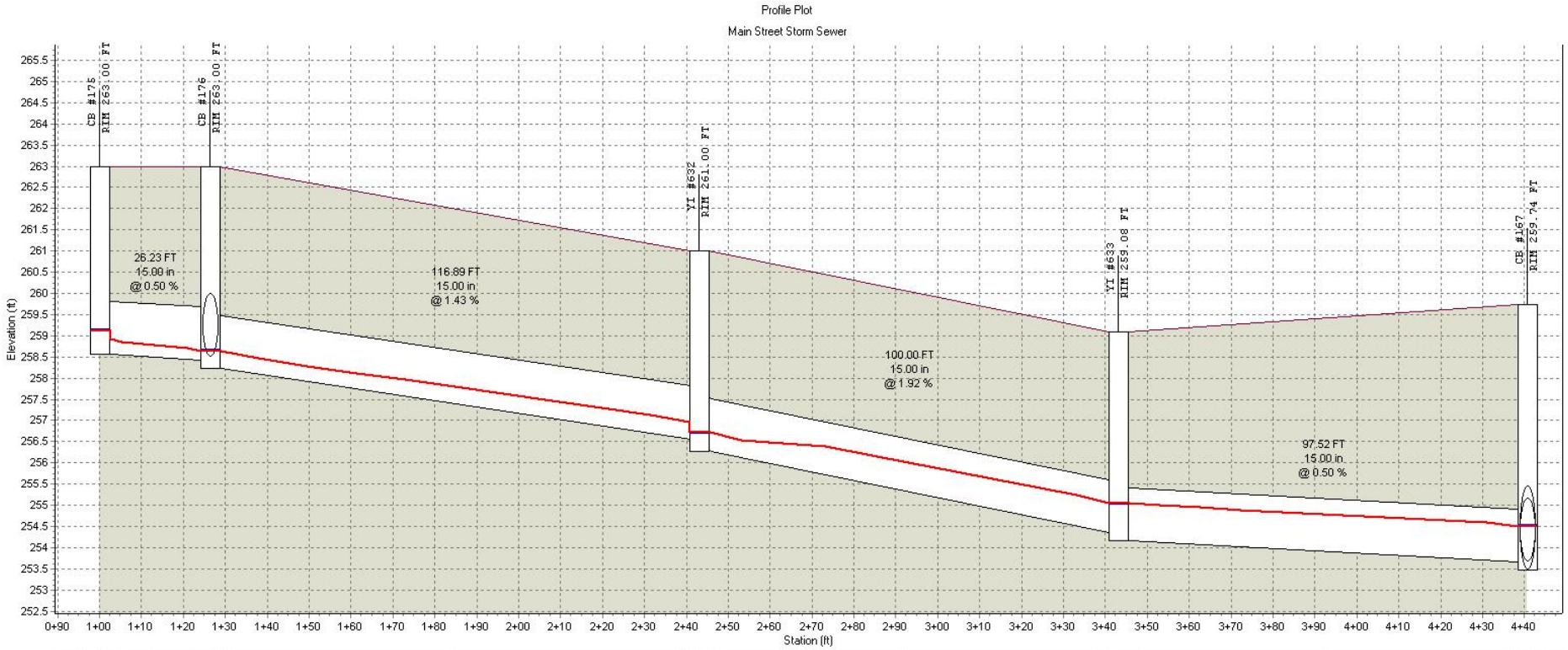
Main Street Storm Sewer



	CB #186	CB #185	CB #185A	CB #185B
RIM (FT):	263.81	263.81	267.02	265.10
Invert (ft):	259.37	259.04	258.35	257.93
Min Pipe Cover (ft):				
Max HGL (ft):	259.79	259.55	258.89	258.41

Link ID:	P #256	P #257	P #258
(FT):	25.73	98.73	43.39
(in):	15.00	15.00	15.00
@ (%):	0.50	0.50	0.50
Up Invert (ft):	259.37	259.04	258.35
Dn Invert (ft):	259.24	258.55	258.13
Max Q (cfs):	0.83	1.34	1.39
Max Vel (ft/s):	2.56	3.09	2.99
Max Depth (ft):	0.39	0.48	0.50

HGL



:	CB #175	CB #176	YI #632	YI #633	CB #167
RIM (FT):	263.00	263.00	261.00	259.08	259.74
Invert (ft):	258.56	258.23	256.27	254.15	253.47
Min Pipe Cover (ft):					
Max HGL (ft):	259.12	258.64	256.71	255.04	254.51

Link ID:	P #246	P #265	P #264	P #266
(FT):	26.23	116.89	100.00	97.52
(in):	15.00	15.00	15.00	15.00
@ (%):	0.50	1.43	1.92	0.50
Up Invert (ft):	258.56	258.23	256.27	254.15
Dn Invert (ft):	258.43	256.56	254.35	253.67
Max Q (cfs):	1.38	1.59	2.26	3.12
Max Vel (ft/s):	2.91	4.74	4.75	3.50
Max Depth (ft):	0.51	0.40	0.56	0.86

HGL

S T O R M W A T E R AREA " E "

STORMWATER PIPING AND HYDRAULIC GRADE LINE FOR 25-YR STORM

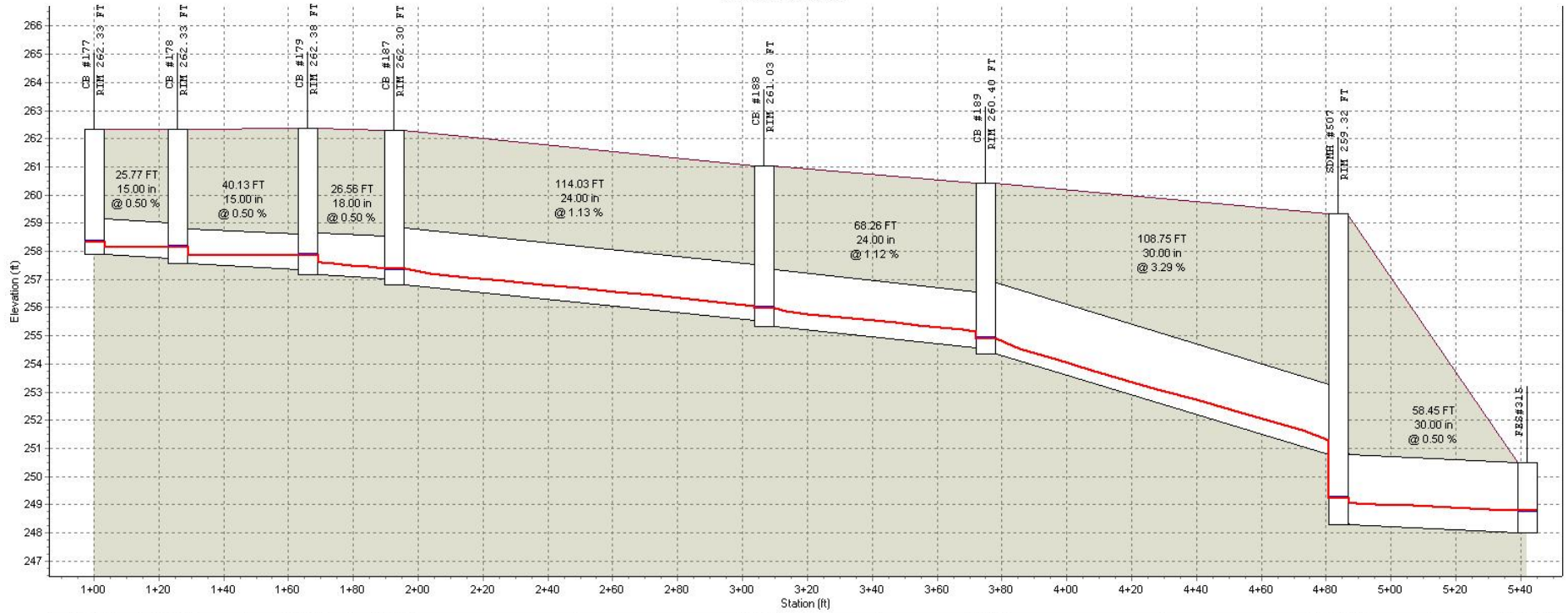
PLAN VIEW

DRAINAGE AREA									
SN	Element ID	Area (acres)	Drainage Node ID	Weighted Runoff Coefficient	Accumulated Precipitation (inches)	Total Runoff (inches)	Peak Runoff (cfs)	Rainfall Intensity (inches/hr)	Time of Concentration (days hh:mm:ss)
1	Sub-CB#177	0.12	CB #177	0.4900	0.67	0.33	0.47	7.990	0 00:05:00
2	Sub-CB#178	0.12	CB #178	0.4900	0.67	0.33	0.47	7.990	0 00:05:00
3	Sub-CB#179	0.26	CB #179	0.5400	0.67	0.36	1.12	7.990	0 00:05:00
4	Sub-CB#187	0.28	CB #187	0.5400	0.67	0.36	1.21	7.990	0 00:05:00
5	Sub-CB#188	0.23	CB #188	0.5400	0.67	0.36	0.99	7.990	0 00:05:00
6	Sub-CB#189	0.48	CB #189	0.5400	0.67	0.36	2.07	7.990	0 00:05:00
7	Sub-YI#634	0.22	YI #634	0.3500	0.67	0.23	0.62	7.990	0 00:05:00
8	Sub-YI#635	0.13	YI #635	0.3500	0.67	0.23	0.36	7.990	0 00:05:00
9	Sub-YI#636	0.13	YI #636	0.3500	0.67	0.23	0.36	7.990	0 00:05:00
10	Sub-YI#637	0.17	YI #637	0.3000	0.67	0.20	0.41	7.990	0 00:05:00

MODEL INPUT										MODEL OUTPUT								
SN	Element ID	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Pipe Diameter or Height (inches)	Manning's Roughness	Peak Flow (cfs)	Time of Peak Flow Occurrence (days hh:mm)	Max Flow Velocity (ft/sec)	Travel Time (min)	Design Flow Capacity (cfs)	Max Flow / Design Flow Ratio	Max Flow Depth / Total Depth Ratio	Total Time Surcharged (min)	Max Flow Depth (ft)	Reported Condition
1	P #247	CB #177	CB #178	25.77	257.89	257.76	0.5000	15.000	0.0130	0.93	0 00:05	2.63	0.16	4.57	0.20	0.33	0.00	0.41	Calculated
2	P #248	CB #178	CB #179	40.13	257.56	257.36	0.5000	15.000	0.0130	1.47	0 00:05	2.87	0.23	4.57	0.32	0.43	0.00	0.54	Calculated
3	P #249	CB #179	CB #187	26.56	257.16	257.03	0.5000	18.000	0.0130	2.37	0 00:05	3.25	0.14	7.43	0.32	0.43	0.00	0.65	Calculated
4	P #259	CB #187	CB #188	114.03	256.83	255.54	1.1300	24.000	0.0130	3.26	0 00:05	5.03	0.38	24.07	0.14	0.26	0.00	0.52	Calculated
5	P #260	CB #188	CB #189	68.26	255.34	254.57	1.1200	24.000	0.0130	4.19	0 00:06	5.16	0.22	23.96	0.18	0.31	0.00	0.61	Calculated
6	P #261	CB #189	SDMH #507	108.75	254.37	250.79	3.2900	30.000	0.0130	6.20	0 00:06	8.55	0.21	74.42	0.08	0.21	0.00	0.51	Calculated
7	P #261A	SDMH #507	FES#315	58.45	248.29	248.00	0.5000	30.000	0.0130	6.22	0 00:06	4.16	0.23	29.00	0.21	0.34	0.00	0.86	Calculated
8	P #267	YI #634	YI #635	100.00	257.20	255.70	1.5000	15.000	0.0130	0.59	0 00:05	3.67	0.45	7.91	0.07	0.19	0.00	0.24	Calculated
9	P #268	YI #635	YI #636	100.00	255.50	253.85	1.6500	15.000	0.0130	0.92	0 00:05	4.29	0.39	8.30	0.11	0.23	0.00	0.29	Calculated
10	P #269	YI #636	YI #637	165.48	253.61	252.26	0.8200	15.000	0.0130	1.20	0 00:06	3.63	0.76	5.83	0.21	0.32	0.00	0.39	Calculated
11	P #270	YI #637	FES#320	71.67	249.76	248.00	2.4600	18.000	0.0130	1.54	0 00:06	5.51	0.22	16.46	0.09	0.22	0.00	0.32	Calculated

Profile Plot

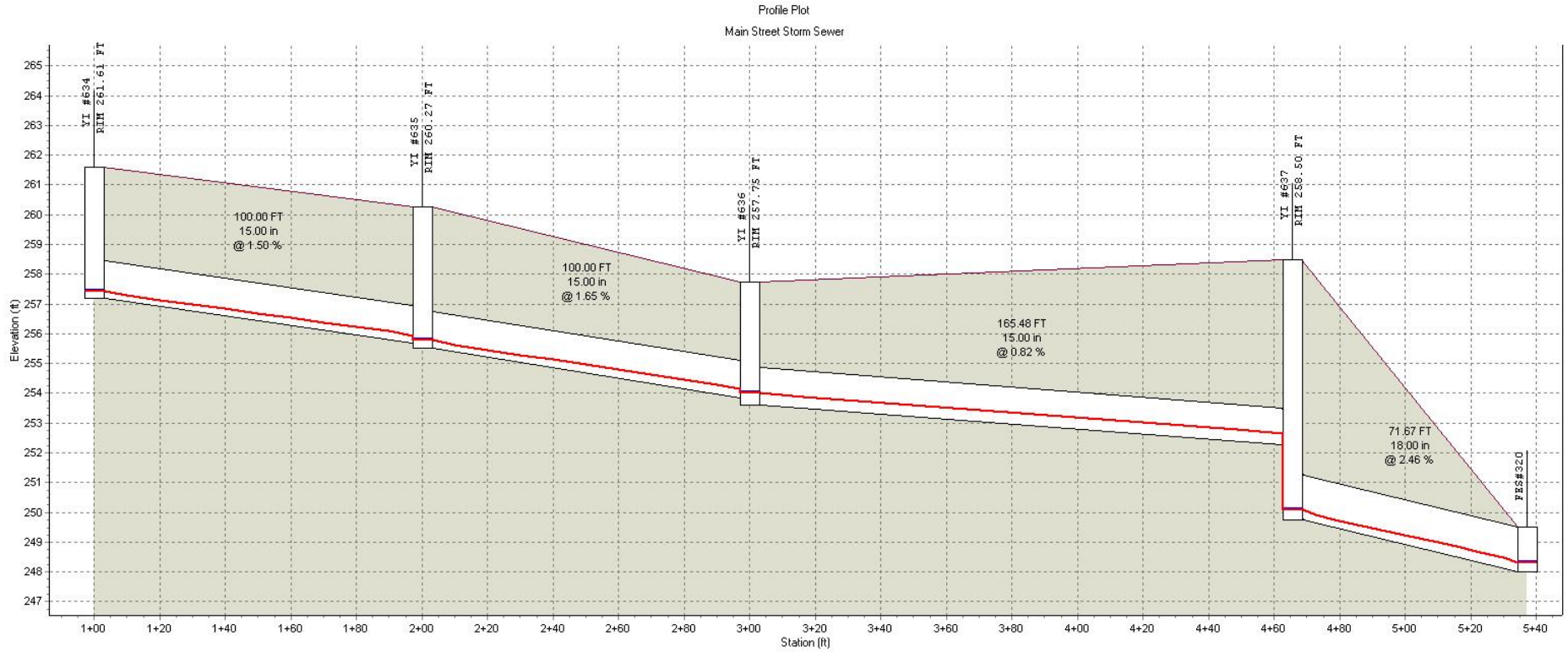
Main Street Storm Sewer



:	CB #177	CB #178	CB #179	CB #187	CB #188	CB #189	SDMH #507	FES#315
RIM (FT):	262.33	262.33	262.38	262.30	261.03	260.40	259.32	
Invert (ft):	257.89	257.56	257.16	256.83	255.34	254.37	248.29	248.00
Min Pipe Cover (ft):							6.03	
Max HGL (ft):	258.34	258.14	257.87	257.37	255.99	254.91	249.23	248.79

Link ID:	P #247	P #248	P #249	P #259	P #260	P #261	P #261A
(FT):	25.77	40.13	26.56	114.03	68.26	108.75	58.45
(in):	15.00	15.00	18.00	24.00	24.00	30.00	30.00
@ (%):	0.50	0.50	0.50	1.13	1.12	3.29	0.50
Up Invert (ft):	257.89	257.56	257.16	256.83	255.34	254.37	248.29
Dn Invert (ft):	257.76	257.36	257.03	255.54	254.57	250.79	248.00
Max Q (cfs):	0.93	1.47	2.37	3.26	4.19	6.20	6.22
Max Vel (ft/s):	2.63	2.87	3.25	5.03	5.16	8.55	4.16
Max Depth (ft):	0.41	0.54	0.65	0.52	0.61	0.51	0.86

HGL



	YI #634	YI #635	YI #636	YI #637	FES#320
RIM (FT):	261.61	260.27	257.75	258.50	
Invert (ft):	257.20	255.50	253.61	249.76	248.00
Min Pipe Cover (ft):					
Max HGL (ft):	257.44	255.80	254.01	250.10	248.31

Link ID:	P #267	P #268	P #269	P #270
(FT):	100.00	100.00	165.48	71.67
(in):	15.00	15.00	15.00	18.00
@ (%):	1.50	1.65	0.82	2.46
Up Invert (ft):	257.20	255.50	253.61	249.76
Dn Invert (ft):	255.70	253.85	252.26	248.00
Max Q (cfs):	0.59	0.92	1.20	1.54
Max Vel (ft/s):	3.67	4.29	3.63	5.51
Max Depth (ft):	0.24	0.29	0.39	0.32

HGL

S T O R M W A T E R AREA " F "

STORMWATER PIPING AND HYDRAULIC GRADE LINE FOR 25-YR STORM

PLAN VIEW

DRAINAGE AREA

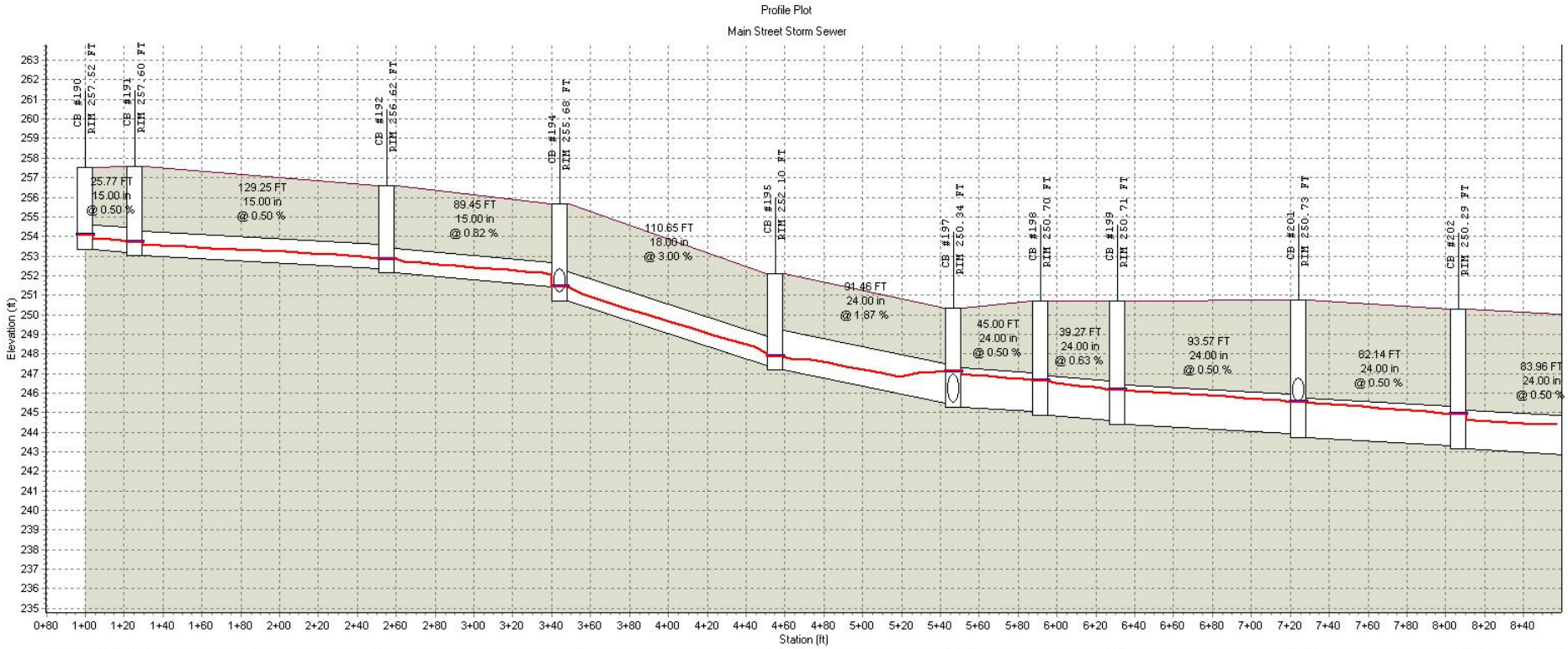
SN	Element ID	Area (acres)	Drainage Node ID	Weighted Runoff Coefficient	Accumulated Precipitation (inches)	Total Runoff (inches)	Peak Runoff (cfs)	Rainfall Intensity (inches/hr)	Time of Concentration (days hh:mm:ss)
1	Sub-CB#105A	0.09	CB #105A	0.8300	0.67	0.55	0.60	7.990	0 00:05:00
2	Sub-CB#190	0.50	CB #190	0.6900	0.67	0.46	2.76	7.990	0 00:05:00
3	Sub-CB#191	0.04	CB #191	0.8300	0.67	0.55	0.27	7.990	0 00:05:00
4	Sub-CB#192	0.16	CB #192	0.5400	0.67	0.36	0.69	7.990	0 00:05:00
5	Sub-CB#193	0.59	CB #193	0.7900	0.67	0.53	3.72	7.990	0 00:05:00
6	Sub-CB#194	0.13	CB #194	0.5400	0.67	0.36	0.56	7.990	0 00:05:00
7	Sub-CB#195	0.21	CB #195	0.5400	0.67	0.36	0.91	7.990	0 00:05:00
8	Sub-CB#196	0.68	CB #196	0.6900	0.67	0.46	3.75	7.990	0 00:05:00
9	Sub-CB#197	0.20	CB #197	0.5400	0.67	0.36	0.86	7.990	0 00:05:00
10	Sub-CB#198	0.07	CB #198	0.4900	0.67	0.33	0.27	7.990	0 00:05:00
11	Sub-CB#199	0.07	CB #199	0.4900	0.67	0.33	0.27	7.990	0 00:05:00
12	Sub-CB#199A	1.39	CB #199A	0.6900	0.67	0.46	7.66	7.990	0 00:05:00
13	Sub-CB#200	0.05	CB #200	0.4900	0.67	0.33	0.20	7.990	0 00:05:00
14	Sub-CB#200A	0.47	CB #200A	0.5900	0.67	0.39	2.22	7.990	0 00:05:00
15	Sub-CB#201	0.12	CB #201	0.4900	0.67	0.33	0.47	7.990	0 00:05:00
16	Sub-CB#202	0.14	CB #202	0.4900	0.67	0.33	0.55	7.990	0 00:05:00
17	Sub-CB#203	0.34	CB #203	0.5500	0.67	0.37	1.49	7.990	0 00:05:00
18	Sub-CB#204	0.34	CB #204	0.6900	0.67	0.46	1.87	7.990	0 00:05:00
19	Sub-CB#205	0.05	CB #205	0.8300	0.67	0.55	0.33	7.990	0 00:05:00
20	Sub-CB#206	0.19	CB #206	0.5900	0.67	0.39	0.90	7.990	0 00:05:00
21	Sub-CB#207	0.10	CB #207	0.4400	0.67	0.29	0.35	7.990	0 00:05:00
22	Sub-CB#208	0.27	CB #208	0.5400	0.67	0.36	1.17	7.990	0 00:05:00
23	Sub-CB#208A	0.26	CB #208A	0.5400	0.67	0.36	1.12	7.990	0 00:05:00
24	Sub-CB#209	0.15	CB #209	0.4900	0.67	0.33	0.59	7.990	0 00:05:00
25	Sub-CB#210	0.18	CB #210	0.5400	0.67	0.36	0.78	7.990	0 00:05:00
26	Sub-CB#211	0.03	CB #211	0.8300	0.67	0.55	0.20	7.990	0 00:05:00
27	Sub-CB#212	0.14	CB #212	0.8300	0.67	0.55	0.93	7.990	0 00:05:00
28	Sub-CB#213	0.10	CB #213	0.8300	0.67	0.55	0.66	7.990	0 00:05:00
29	Sub-CB#214	0.31	CB #214	0.6900	0.67	0.46	1.71	7.990	0 00:05:00
30	Sub-CB#215	0.06	CB #215	0.8300	0.67	0.55	0.40	7.990	0 00:05:00

DRAINAGE AREA

SN	Element ID	Area (acres)	Drainage Node ID	Weighted Runoff Coefficient	Accumulated Precipitation (inches)	Total Runoff (inches)	Peak Runoff (cfs)	Rainfall Intensity (inches/hr)	Time of Concentration (days hh:mm:ss)
31	Sub-CB#216	0.04	CB #216	0.8300	0.67	0.55	0.27	7.990	0 00:05:00
32	Sub-CB#217	0.03	CB #217	0.8300	0.67	0.55	0.20	7.990	0 00:05:00
33	Sub-CB#218	0.27	CB #218	0.5400	0.67	0.36	1.17	7.990	0 00:05:00
34	Sub-CB#219	0.32	CB #219	0.5900	0.67	0.39	1.51	7.990	0 00:05:00
35	Sub-CB#220	0.26	CB #220	0.5400	0.67	0.36	1.12	7.990	0 00:05:00
36	Sub-CB#221	0.26	CB #221	0.5400	0.67	0.36	1.12	7.990	0 00:05:00
37	Sub-CB#222	0.26	CB #222	0.5400	0.67	0.36	1.12	7.990	0 00:05:00
38	Sub-CB#223	0.30	CB #223	0.5400	0.67	0.36	1.29	7.990	0 00:05:00
39	Sub-CB#224	0.09	CB #224	0.4300	0.67	0.29	0.31	7.990	0 00:05:00
40	Sub-CB#225	0.20	CB #225	0.5400	0.67	0.36	0.86	7.990	0 00:05:00
41	Sub-CB#226	0.44	CB #226	0.8300	0.67	0.55	2.92	7.990	0 00:05:00
42	Sub-CB#227	0.28	CB #227	0.8300	0.67	0.55	1.86	7.990	0 00:05:00
43	Sub-CB#228	0.11	CB #228	0.7800	0.67	0.52	0.69	7.990	0 00:05:00
44	Sub-CB#229	0.26	CB #229	0.8300	0.67	0.55	1.72	7.990	0 00:05:00
45	Sub-CB#230	0.43	CB #230	0.7800	0.67	0.52	2.68	7.990	0 00:05:00
46	Sub-CB#231	0.04	CB #231	0.8300	0.67	0.55	0.27	7.990	0 00:05:00
47	Sub-CB#232	0.11	CB #232	0.5900	0.67	0.39	0.52	7.990	0 00:05:00
48	Sub-YI#638	0.31	YI #638	0.2100	0.67	0.14	0.52	7.990	0 00:05:00
49	Sub-YI#639	0.59	YI #639	0.2100	0.67	0.14	0.99	7.990	0 00:05:00
50	Sub-YI#640	0.29	YI #640	0.2600	0.67	0.17	0.60	7.990	0 00:05:00
51	Sub-YI#641	0.80	YI #641	0.2100	0.67	0.14	1.34	7.990	0 00:05:00
52	Sub-YI#642	0.30	YI #642	0.3100	0.67	0.21	0.74	7.990	0 00:05:00
53	Sub-YI#643	0.36	YI #643	0.3100	0.67	0.21	0.89	7.990	0 00:05:00
54	Sub-YI#644	0.35	YI #644	0.3100	0.67	0.21	0.87	7.990	0 00:05:00
55	Sub-YI#645	0.38	YI #645	0.3100	0.67	0.21	0.94	7.990	0 00:05:00
56	Sub-YI#646	0.54	YI #646	0.2600	0.67	0.17	1.12	7.990	0 00:05:00
57	Sub-YI#647	0.08	YI #647	0.8300	0.67	0.55	0.53	7.990	0 00:05:00

MODEL INPUT										MODEL OUTPUT									
SN	Element ID	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Pipe Diameter or Height (inches)	Manning's Roughness	Peak Flow (cfs)	Time of Peak Flow Occurrence (days hh:mm)	Max Flow Velocity (ft/sec)	Travel Time (min)	Design Flow Capacity (cfs)	Max Flow / Design Flow Ratio	Max Flow Depth / Total Depth Ratio	Total Time Surcharged (min)	Max Flow Depth (ft)	Reported Condition
1	P #273	CB #190	CB #191	25.77	253.33	253.20	0.5000	15.000	0.0130	2.16	0 00:05	3.28	0.13	4.57	0.47	0.53	0.00	0.66	Calculated
2	P #274	CB #191	CB #192	129.25	253.00	252.36	0.5000	15.000	0.0130	2.31	0 00:05	3.59	0.60	4.57	0.51	0.52	0.00	0.65	Calculated
3	P #275	CB #192	CB #194	89.45	252.16	251.43	0.8200	15.000	0.0130	2.85	0 00:06	4.38	0.34	5.84	0.49	0.52	0.00	0.65	Calculated
4	P #276	CB #193	CB #194	25.79	251.24	251.11	0.5000	15.000	0.0130	3.43	0 00:05	3.77	0.11	4.57	0.75	0.70	0.00	0.87	Calculated
5	P #277	CB #194	CB #195	110.65	250.71	247.39	3.0000	18.000	0.0130	6.62	0 00:05	8.72	0.21	18.19	0.36	0.45	0.00	0.67	Calculated
6	P #278	CB #195	CB #197	91.46	247.19	245.49	1.8700	24.000	0.0130	7.42	0 00:05	4.66	0.33	30.92	0.24	0.57	0.00	1.15	Calculated
7	P #279	CB #196	CB #197	25.72	245.90	245.48	1.6200	18.000	0.0130	4.77	0 00:05	3.48	0.12	13.38	0.36	0.94	0.00	1.41	Calculated
8	P #280	CB #197	CB #198	45.00	245.28	245.06	0.5000	24.000	0.0130	12.40	0 00:05	4.48	0.17	16.00	0.78	0.85	0.00	1.70	Calculated
9	P #281	CB #198	CB #199	39.27	244.86	244.61	0.6300	24.000	0.0130	12.51	0 00:05	4.73	0.14	17.94	0.70	0.83	0.00	1.66	Calculated
10	P #282	CB #199	CB #201	93.57	244.41	243.95	0.5000	24.000	0.0130	12.57	0 00:06	4.61	0.34	16.00	0.79	0.83	0.00	1.66	Calculated
11	P #283	CB #199A	CB #200A	25.71	239.39	239.26	0.5000	24.000	0.0130	7.61	0 00:05	4.24	0.10	16.00	0.48	0.56	0.00	1.11	Calculated
12	P #284	CB #200	CB #201	25.74	247.51	245.52	7.7200	15.000	0.0130	0.18	0 00:05	4.53	0.09	17.95	0.01	0.07	0.00	0.09	Calculated
13	P #285	CB #201	CB #202	82.14	243.75	243.33	0.5000	24.000	0.0130	12.84	0 00:06	4.60	0.30	16.00	0.80	0.84	0.00	1.69	Calculated
14	P #286	CB #202	CB #204	83.96	243.13	242.71	0.5000	24.000	0.0130	13.15	0 00:06	4.78	0.29	16.00	0.82	0.82	0.00	1.64	Calculated
15	P #287	CB #203	CB #204	25.86	244.04	243.91	0.5000	18.000	0.0130	1.13	0 00:05	2.69	0.16	7.42	0.15	0.29	0.00	0.43	Calculated
16	P #288	CB #204	CB #205	61.50	242.51	242.21	0.5000	30.000	0.0130	15.04	0 00:06	4.68	0.22	29.00	0.52	0.63	0.00	1.58	Calculated
17	P #289	CB #205	CB #207	77.00	242.01	241.62	0.5000	30.000	0.0130	15.51	0 00:06	4.90	0.26	29.00	0.53	0.62	0.00	1.55	Calculated
18	P #290	CB #206	CB #207	26.32	243.86	242.75	4.2200	15.000	0.0130	1.07	0 00:05	5.82	0.08	13.27	0.08	0.21	0.00	0.26	Calculated
19	P #291	CB #207	CB #208A	155.59	241.42	240.64	0.5000	30.000	0.0130	16.35	0 00:07	4.97	0.52	29.00	0.56	0.64	0.00	1.60	Calculated
20	P #292	CB #208A	CB #210	100.15	240.44	239.94	0.5000	30.000	0.0130	16.77	0 00:07	4.90	0.34	29.00	0.58	0.69	0.00	1.73	Calculated
21	P #293	CB #208	CB #209	64.48	241.00	240.68	0.5000	24.000	0.0130	4.72	0 00:05	3.88	0.28	16.00	0.30	0.46	0.00	0.92	Calculated
22	P #294	CB #209	CB #210	29.97	240.48	240.33	0.5000	30.000	0.0130	5.13	0 00:05	3.67	0.14	29.00	0.18	0.50	0.00	1.25	Calculated
23	P #295	CB #210	CB #225	116.27	239.74	239.16	0.5000	36.000	0.0130	21.61	0 00:07	5.30	0.37	47.16	0.46	0.63	0.00	1.89	Calculated
24	P #296	CB #211	CB #212	81.77	261.63	257.68	4.8400	15.000	0.0130	0.70	0 00:05	5.85	0.23	14.21	0.05	0.15	0.00	0.19	Calculated
25	P #297	YI #647	CB #211	31.64	262.22	261.83	1.2400	15.000	0.0130	0.52	0 00:05	3.15	0.17	7.19	0.07	0.19	0.00	0.24	Calculated
26	P #298	CB #212	CB #213	40.41	257.48	255.42	5.1000	15.000	0.0130	1.57	0 00:05	7.09	0.09	14.58	0.11	0.24	0.00	0.29	Calculated
27	P #299	CB #213	CB #214	108.34	255.05	253.58	1.3600	15.000	0.0130	2.17	0 00:05	3.88	0.47	7.52	0.29	0.46	0.00	0.58	Calculated
28	P #300	CB #214	CB #215	25.67	253.38	253.25	0.5000	18.000	0.0130	3.38	0 00:05	3.58	0.12	7.44	0.45	0.53	0.00	0.79	Calculated
29	P #301	CB #215	CB #216	51.86	253.05	252.79	0.5200	18.000	0.0130	3.71	0 00:05	3.80	0.23	7.54	0.49	0.54	0.00	0.81	Calculated
30	P #302	CB #217	CB #216	27.75	253.14	252.72	1.5000	15.000	0.0130	0.19	0 00:05	2.11	0.22	7.91	0.02	0.18	0.00	0.23	Calculated

MODEL INPUT										MODEL OUTPUT									
SN	Element ID	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Pipe Diameter or Height (inches)	Manning's Roughness	Peak Flow (cfs)	Time of Peak Flow Occurrence (days hh:mm)	Max Flow Velocity (ft/sec)	Travel Time (min)	Design Flow Capacity (cfs)	Max Flow / Design Flow Ratio	Max Flow Depth / Total Depth Ratio	Total Time Surcharged (min)	Max Flow Depth (ft)	Reported Condition
31	P #303	CB #216	CB #219	150.37	252.52	248.50	2.6700	18.000	0.0130	4.09	0 00:06	7.58	0.33	17.17	0.24	0.35	0.00	0.52	Calculated
32	P #304	CB #218	CB #219	25.74	249.46	248.94	2.0000	15.000	0.0130	1.01	0 00:05	4.35	0.10	9.13	0.11	0.25	0.00	0.31	Calculated
33	P #305	CB #219	CB #221	134.57	248.30	244.57	2.7800	18.000	0.0130	6.09	0 00:05	7.13	0.31	17.50	0.35	0.51	0.00	0.77	Calculated
34	P #306	CB #220	CB #221	25.74	245.35	245.22	0.5000	15.000	0.0130	1.11	0 00:05	2.75	0.16	4.57	0.24	0.36	0.00	0.46	Calculated
35	P #307	CB #221	CB #223	159.82	244.37	242.60	1.1000	18.000	0.0130	8.18	0 00:06	6.33	0.42	11.03	0.74	0.69	0.00	1.03	Calculated
36	P #308	CB #222	CB #223	26.17	243.56	243.25	1.1600	15.000	0.0130	1.10	0 00:05	3.67	0.12	6.95	0.16	0.29	0.00	0.37	Calculated
37	P #309	CB #223	CB #224	55.08	242.40	240.43	3.5800	24.000	0.0130	10.16	0 00:06	9.17	0.10	42.82	0.24	0.39	0.00	0.77	Calculated
38	P #310	CB #224	CB #225	25.93	240.23	239.27	3.7000	30.000	0.0130	10.60	0 00:06	6.91	0.06	78.90	0.13	0.53	0.00	1.32	Calculated
39	P #311	CB #225	CB #232	60.41	238.90	238.30	1.0000	36.000	0.0130	31.00	0 00:07	5.94	0.17	66.70	0.46	0.69	0.00	2.08	Calculated
40	P #312	CB #227	CB #229	141.32	240.55	238.16	1.6900	15.000	0.0130	4.20	0 00:05	6.45	0.37	8.40	0.50	0.53	0.00	0.66	Calculated
41	P #313	CB #226	CB #227	159.11	245.74	240.75	3.1400	15.000	0.0130	2.15	0 00:05	6.32	0.42	11.44	0.19	0.34	0.00	0.43	Calculated
42	P #314	CB #105A	CB #228	59.71	236.92	236.62	0.5000	18.000	0.0130	6.49	0 00:05	4.18	0.24	7.43	0.87	0.86	0.00	1.29	Calculated
43	P #315	CB #231	CB #232	31.49	238.46	238.30	0.5000	30.000	0.0130	2.16	0 00:05	2.24	0.23	29.00	0.07	0.77	0.00	1.92	Calculated
44	P #316	YI #646	FES#317	68.05	237.34	237.00	0.5000	42.000	0.0130	33.72	0 00:07	6.18	0.18	71.14	0.47	0.55	0.00	1.94	Calculated
45	P #317	YI #638	YI #639	127.22	244.91	242.96	1.5300	15.000	0.0130	0.50	0 00:05	2.93	0.72	8.00	0.06	0.21	0.00	0.26	Calculated
46	P #318	YI #639	YI #641	119.97	242.76	242.16	0.5000	15.000	0.0130	1.43	0 00:05	2.81	0.71	4.57	0.31	0.43	0.00	0.54	Calculated
47	P #319	YI #640	YI #641	153.42	248.39	243.41	3.2400	15.000	0.0130	0.57	0 00:05	4.84	0.53	11.63	0.05	0.15	0.00	0.19	Calculated
48	P #320	YI #641	YI #642	90.63	241.96	241.51	0.5000	18.000	0.0130	3.14	0 00:06	3.73	0.40	7.43	0.42	0.48	0.00	0.72	Calculated
49	P #321	YI #642	CB #208	22.18	241.31	241.20	0.5000	24.000	0.0130	3.77	0 00:05	3.43	0.11	16.00	0.24	0.38	0.00	0.77	Calculated
50	P #322	YI #643	YI #644	170.44	249.76	245.96	2.2300	15.000	0.0130	0.84	0 00:05	4.74	0.60	9.65	0.09	0.20	0.00	0.25	Calculated
51	P #323	YI #644	YI #645	168.05	245.69	240.78	2.9200	18.000	0.0130	1.63	0 00:05	6.15	0.46	17.95	0.09	0.21	0.00	0.31	Calculated
52	P #324	YI #645	CB #231	21.66	238.78	238.66	0.5700	24.000	0.0130	2.34	0 00:05	2.90	0.12	17.07	0.14	0.79	0.00	1.59	Calculated
53	P #327	CB #232	YI #646	111.86	238.10	237.54	0.5000	42.000	0.0130	33.14	0 00:07	5.54	0.34	71.14	0.47	0.60	0.00	2.09	Calculated
54	P #328	CB #228	CB #230	108.29	236.42	235.88	0.5000	18.000	0.0130	6.98	0 00:06	4.54	0.40	7.43	0.94	0.81	0.00	1.22	Calculated
55	P #329	CB #230	EX. GTI	136.94	235.68	235.00	0.5000	24.000	0.0130	9.03	0 00:06	4.79	0.48	16.00	0.56	0.58	0.00	1.16	Calculated
56	P #330	CB #200A	FES#319	60.40	239.06	238.51	0.9000	24.000	0.0130	9.79	0 00:05	5.82	0.17	21.48	0.46	0.53	0.00	1.06	Calculated
57	P #331	CB #229	CB #105A	40.93	237.32	237.12	0.5000	18.000	0.0130	5.71	0 00:05	3.80	0.18	7.43	0.77	0.84	0.00	1.26	Calculated
58	P #333	EX. GTI	OUT-PIPE#333	18.55	234.80	234.65	0.7800	24.000	0.0130	9.03	0 00:06	5.12	0.06	20.01	0.45	0.55	0.00	1.10	Calculated



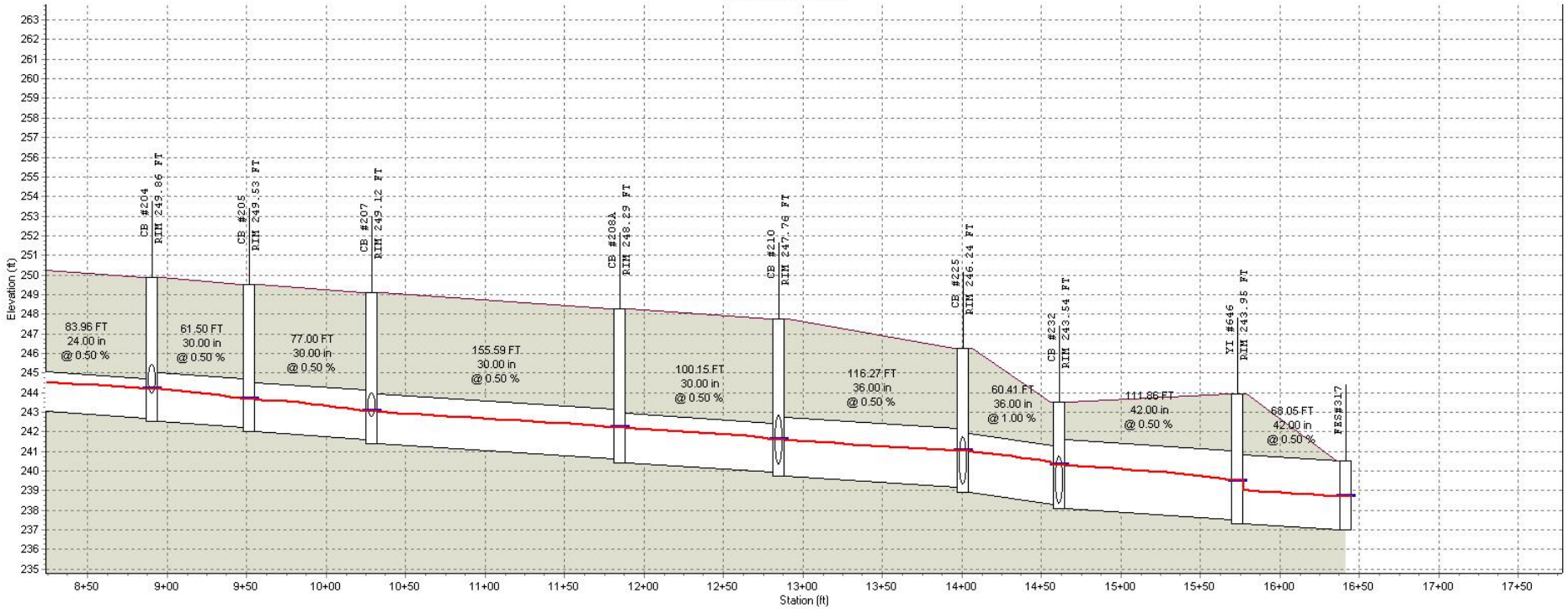
:	CB #190	CB #191	CB #192	CB #194	CB #195	CB #197	CB #198	CB #199	CB #201	CB #202
RIM (FT):	257.52	257.60	256.62	255.68	252.10	250.34	250.70	250.71	250.73	250.29
Invert (ft):	253.33	253.00	252.16	250.71	247.19	245.28	244.86	244.41	243.75	243.13
Min Pipe Cover (ft):										
Max HGL (ft):	254.07	253.70	252.85	251.42	247.86	247.12	246.64	246.15	245.54	244.92

Link ID:	P #273	P #274	P #275	P #277	P #278	P #280	P #281	P #282	P #285	P #286
(FT):	25.77	129.25	89.45	110.65	91.46	45.00	39.27	93.57	82.14	83.96
(in):	15.00	15.00	15.00	18.00	24.00	24.00	24.00	24.00	24.00	24.00
@ (%):	0.50	0.50	0.82	3.00	1.87	0.50	0.63	0.50	0.50	0.50
Up Invert (ft):	253.33	253.00	252.16	250.71	247.19	245.28	244.86	244.41	243.75	243.13
Dn Invert (ft):	253.20	252.36	251.43	247.39	245.49	245.06	244.61	243.95	243.33	242.71
Max Q (cfs):	2.16	2.31	2.85	6.62	7.42	12.40	12.51	12.57	12.84	13.15
Max Vel (ft/s):	3.28	3.59	4.38	8.72	4.66	4.48	4.73	4.61	4.60	4.78
Max Depth (ft):	0.66	0.65	0.65	0.67	1.15	1.70	1.66	1.66	1.69	1.64

HGL

Profile Plot

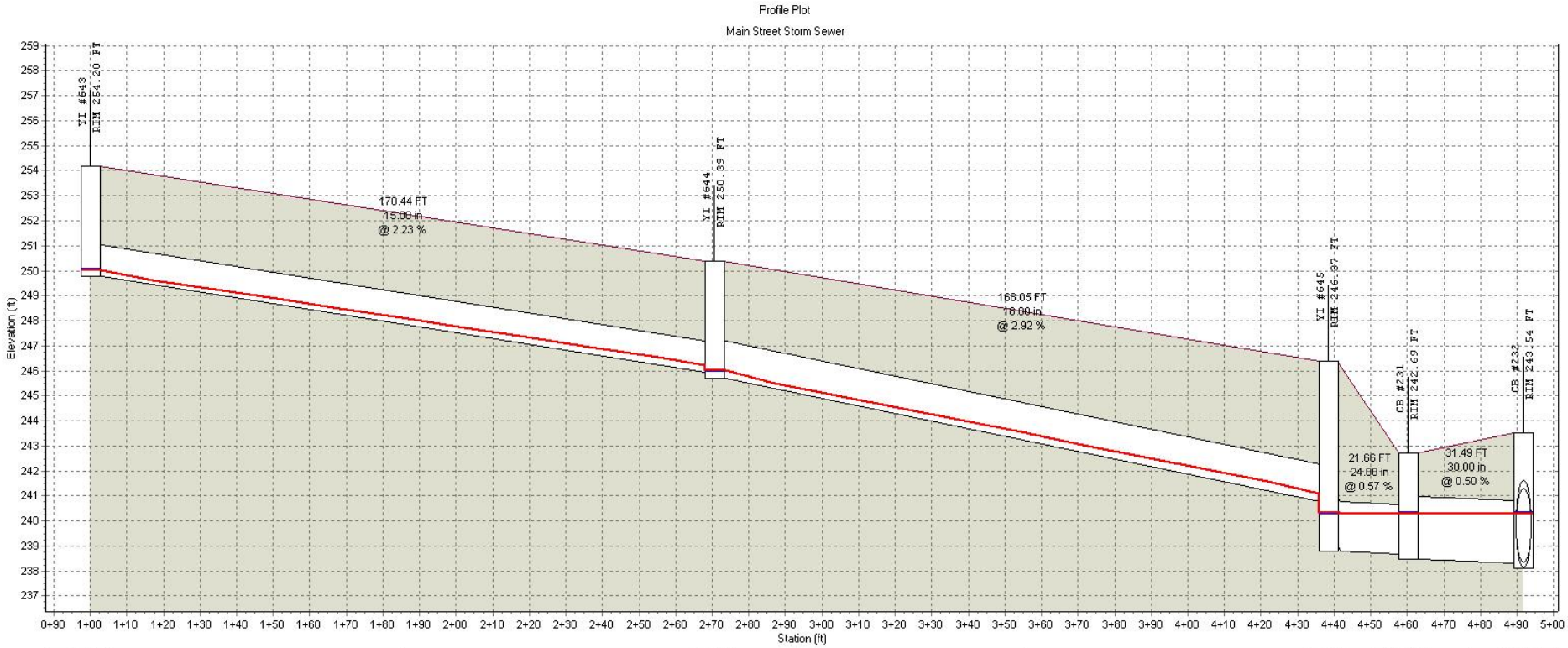
Main Street Storm Sewer



	CB #204	CB #205	CB #207	CB #208A	CB #210	CB #225	CB #232	YI #646	FES#317
RIM (FT):	249.86	249.53	249.12	248.29	247.76	246.24	243.54	243.95	
Invert (ft):	242.51	242.01	241.42	240.44	239.74	238.90	238.10	237.34	237.00
Min Pipe Cover (ft):									
Max HGL (ft):	244.21	243.67	243.05	242.23	241.63	241.06	240.30	239.51	238.70

Link ID:	P #286	P #288	P #289	P #291	P #292	P #295	P #311	P #327	P #316	
(FT):	83.96	61.50	77.00	155.59	100.15	116.27	60.41	111.86	68.05	
(in):	24.00	30.00	30.00	30.00	30.00	36.00	36.00	42.00	42.00	
@ (%):	0.50	0.50	0.50	0.50	0.50	0.50	1.00	0.50	0.50	
Up Invert (ft):	243.13	242.51	242.01	241.42	240.44	239.74	238.90	238.10	237.34	
Dn Invert (ft):	242.71	242.21	241.62	240.64	239.94	239.16	238.30	237.54	237.00	
Max Q (cfs):	13.15	15.04	15.51	16.35	16.77	21.61	31.00	33.14	33.72	
Max Vel (ft/s):	4.78	4.68	4.90	4.97	4.90	5.30	5.94	5.54	6.18	
Max Depth (ft):	1.64	1.58	1.55	1.60	1.73	1.89	2.08	2.09	1.94	

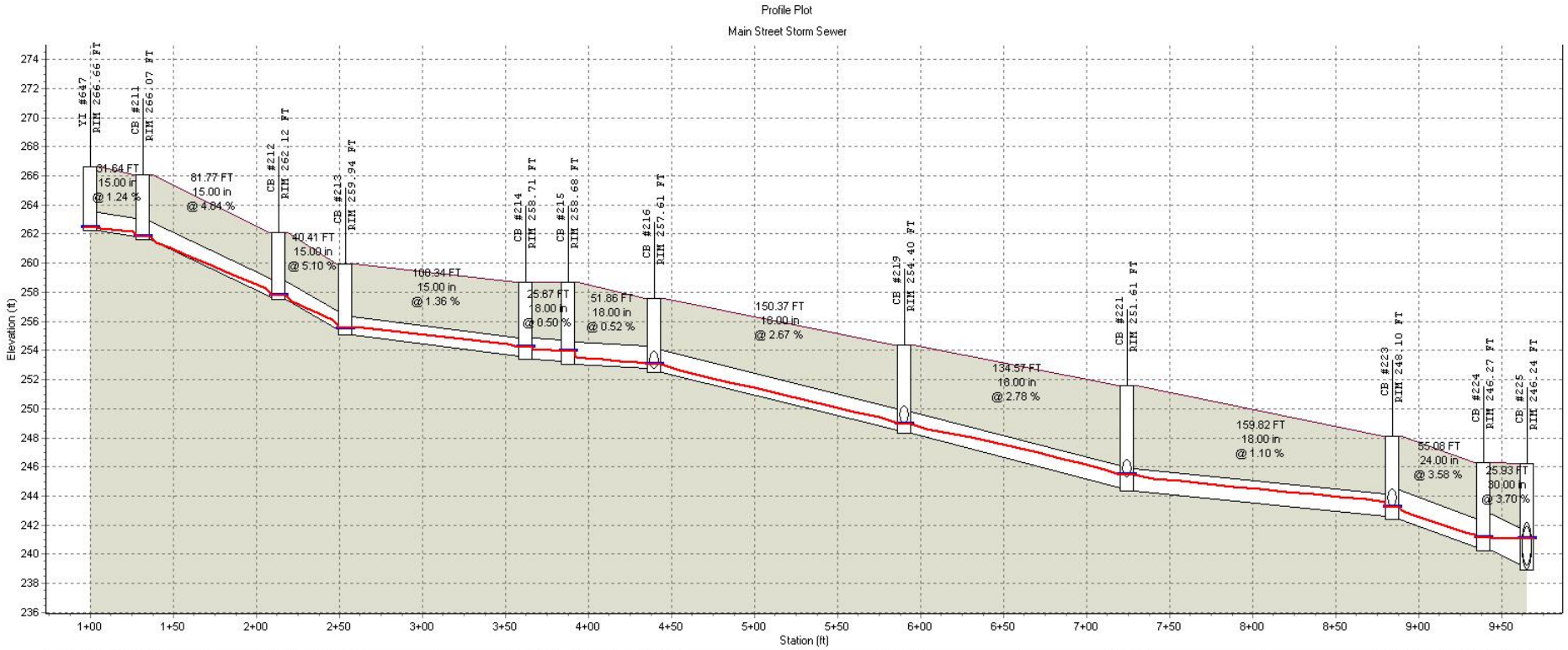
HGL



	YI #643	YI #644	YI #645	CB #231	CB #232
RIM (FT):	254.20	250.39	246.37	242.69	243.54
Invert (ft):	249.76	245.69	238.78	238.46	238.10
Min Pipe Cover (ft):					
Max HGL (ft):	250.02	246.00	240.31	240.30	240.30

Link ID:	P #322	P #323	P #324	P #315
(FT):	170.44	168.05	21.66	31.49
(in):	15.00	18.00	24.00	30.00
@ (%):	2.23	2.92	0.57	0.50
Up Invert (ft):	249.76	245.69	238.78	238.46
Dn Invert (ft):	245.96	240.78	238.66	238.30
Max Q (cfs):	0.84	1.63	2.34	2.16
Max Vel (ft/s):	4.74	6.15	2.90	2.24
Max Depth (ft):	0.25	0.31	1.59	1.92

HGL

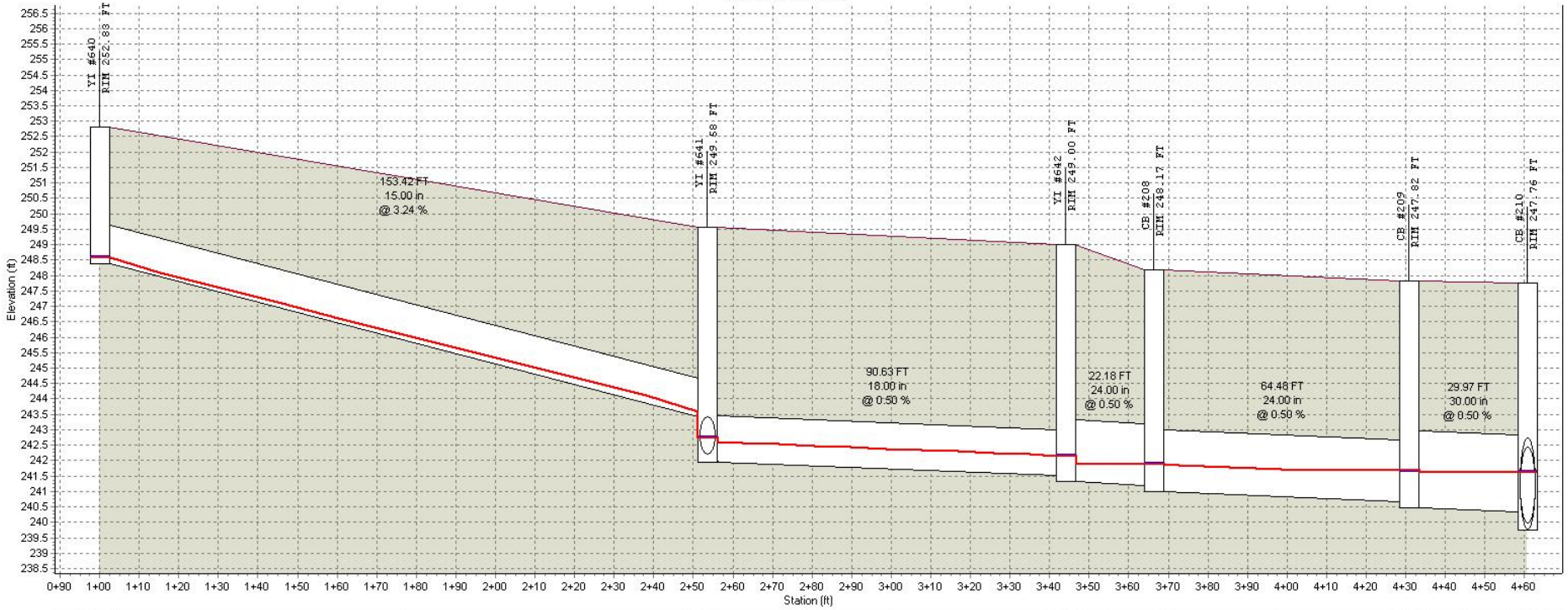


:	YI #647	CB #211	CB #212	CB #213	CB #214	CB #215	CB #216	CB #219	CB #221	CB #223	CB #224	CB #225
RIM (FT):	266.66	266.07	262.12	259.94	258.71	258.68	257.61	254.40	251.61	248.10	246.27	246.24
Invert (ft):	262.22	261.63	257.48	255.05	253.38	253.05	252.52	248.30	244.37	242.40	240.23	238.90
Min Pipe Cover (ft):												
Max HGL (ft):	262.48	261.83	257.79	255.53	254.26	253.94	253.05	248.94	245.47	243.24	241.14	241.06

Link ID:	P #297	P #296	P #298	P #299	P #300	P #301	P #303	P #305	P #307	P #309	P #310
(FT):	31.64	81.77	40.41	108.34	25.67	51.86	150.37	134.57	159.82	55.08	25.93
(in):	15.00	15.00	15.00	15.00	18.00	18.00	18.00	18.00	18.00	24.00	30.00
@ (%):	1.24	4.84	5.10	1.36	0.50	0.52	2.67	2.78	1.10	3.58	3.70
Up Invert (ft):	262.22	261.63	257.48	255.05	253.38	253.05	252.52	248.30	244.37	242.40	240.23
Dn Invert (ft):	261.83	257.68	255.42	253.58	253.25	252.79	248.50	244.57	242.60	240.43	239.27
Max Q (cfs):	0.52	0.70	1.57	2.17	3.38	3.71	4.09	6.09	8.18	10.16	10.60
Max Vel (ft/s):	3.15	5.85	7.09	3.88	3.58	3.80	7.58	7.13	6.33	9.17	6.91
Max Depth (ft):	0.24	0.19	0.29	0.58	0.79	0.81	0.52	0.77	1.03	0.77	1.32

Profile Plot

Main Street Storm Sewer



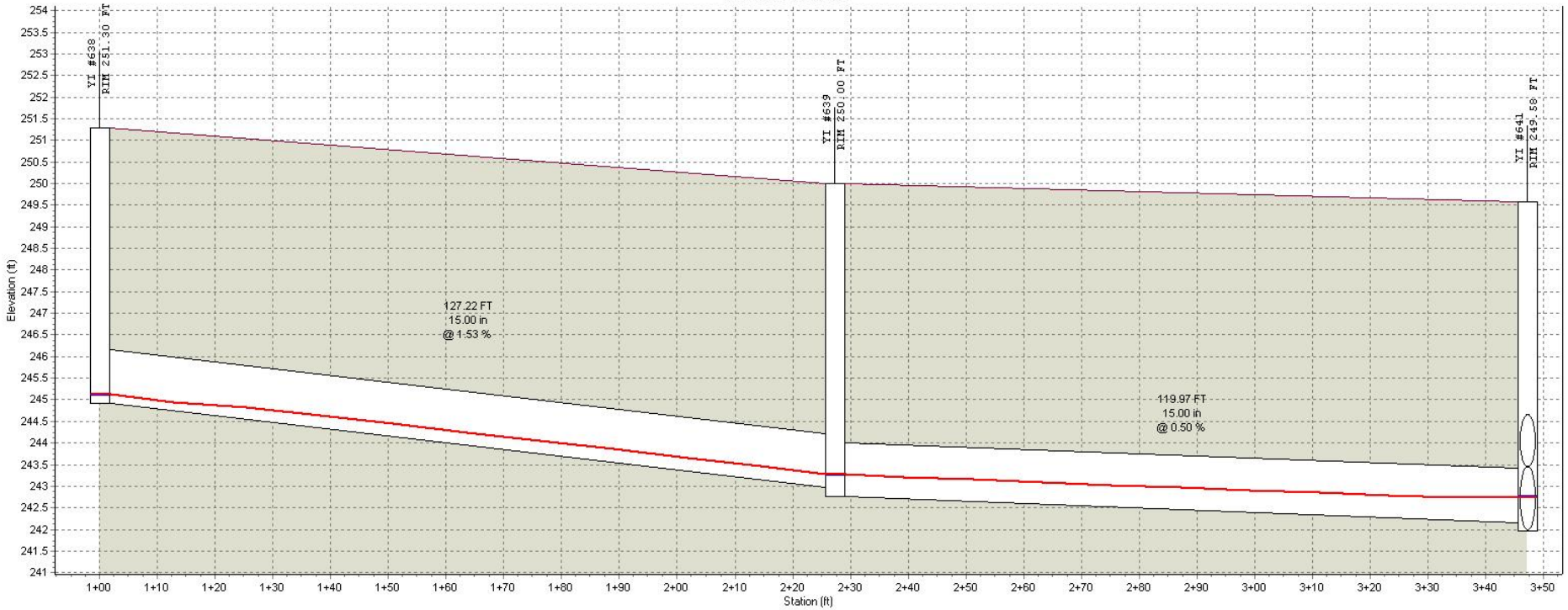
:	YI #640	YI #641	YI #642	CB #208	CB #209	CB #210
RIM (FT):	252.83	249.58	249.00	248.17	247.82	247.76
Invert (ft):	248.39	241.96	241.31	241.00	240.48	239.74
Min Pipe Cover (ft):						
Max HGL (ft):	248.58	242.74	242.15	241.89	241.67	241.63

Link ID:	P #319	P #320	P #321	P #293	P #294
(FT):	153.42	90.63	22.18	64.48	29.97
(in):	15.00	18.00	24.00	24.00	30.00
@ (%):	3.24	0.50	0.50	0.50	0.50
Up Invert (ft):	248.39	241.96	241.31	241.00	240.48
Dn Invert (ft):	243.41	241.51	241.20	240.68	240.33
Max Q (cfs):	0.57	3.14	3.77	4.72	5.13
Max Vel (ft/s):	4.84	3.73	3.43	3.88	3.67
Max Depth (ft):	0.19	0.72	0.77	0.92	1.25

HGL

Profile Plot

Main Street Storm Sewer



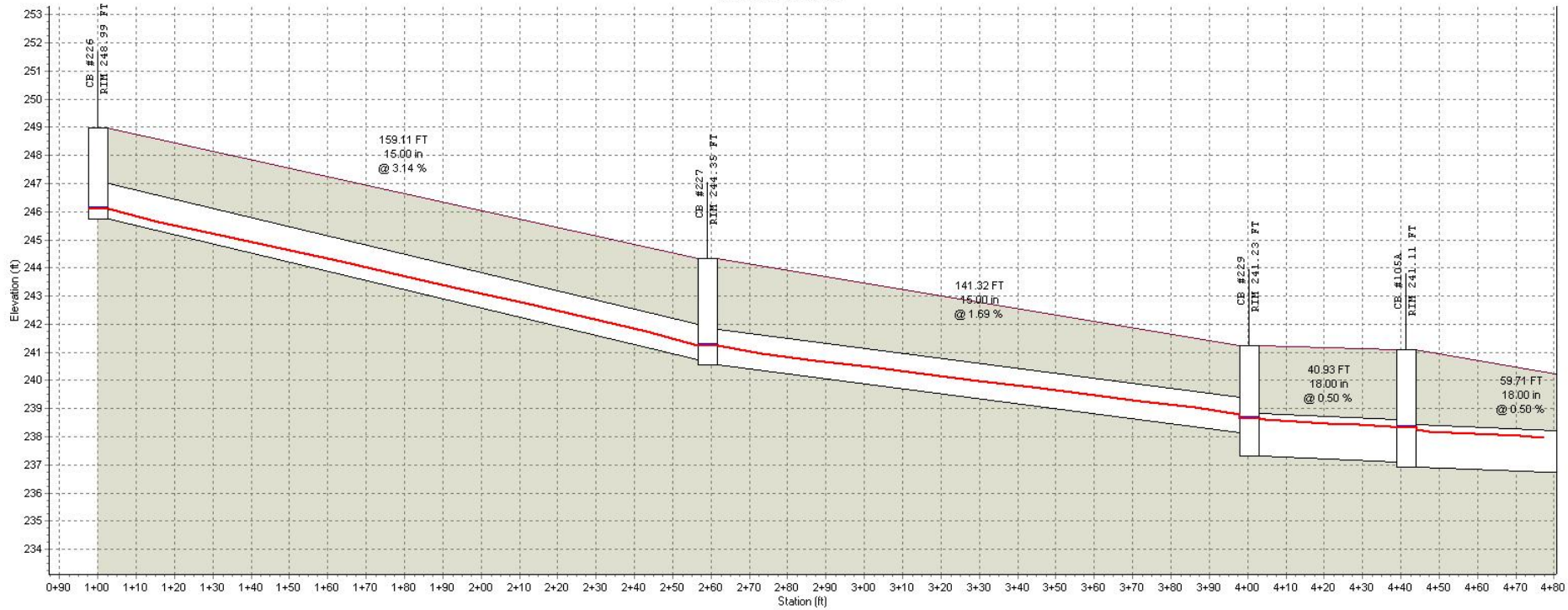
:	YI #638	YI #639	YI #641
RIM (FT):	251.30	250.00	249.58
Invert (ft):	244.91	242.76	241.96
Min Pipe Cover (ft):			
Max HGL (ft):	245.12	243.27	242.74

Link ID:	P #317	P #318
(FT):	127.22	119.97
(in):	15.00	15.00
@ (%):	1.53	0.50
Up Invert (ft):	244.91	242.76
Dn Invert (ft):	242.96	242.16
Max Q (cfs):	0.50	1.43
Max Vel (ft/s):	2.93	2.81
Max Depth (ft):	0.26	0.54

HGL

Profile Plot

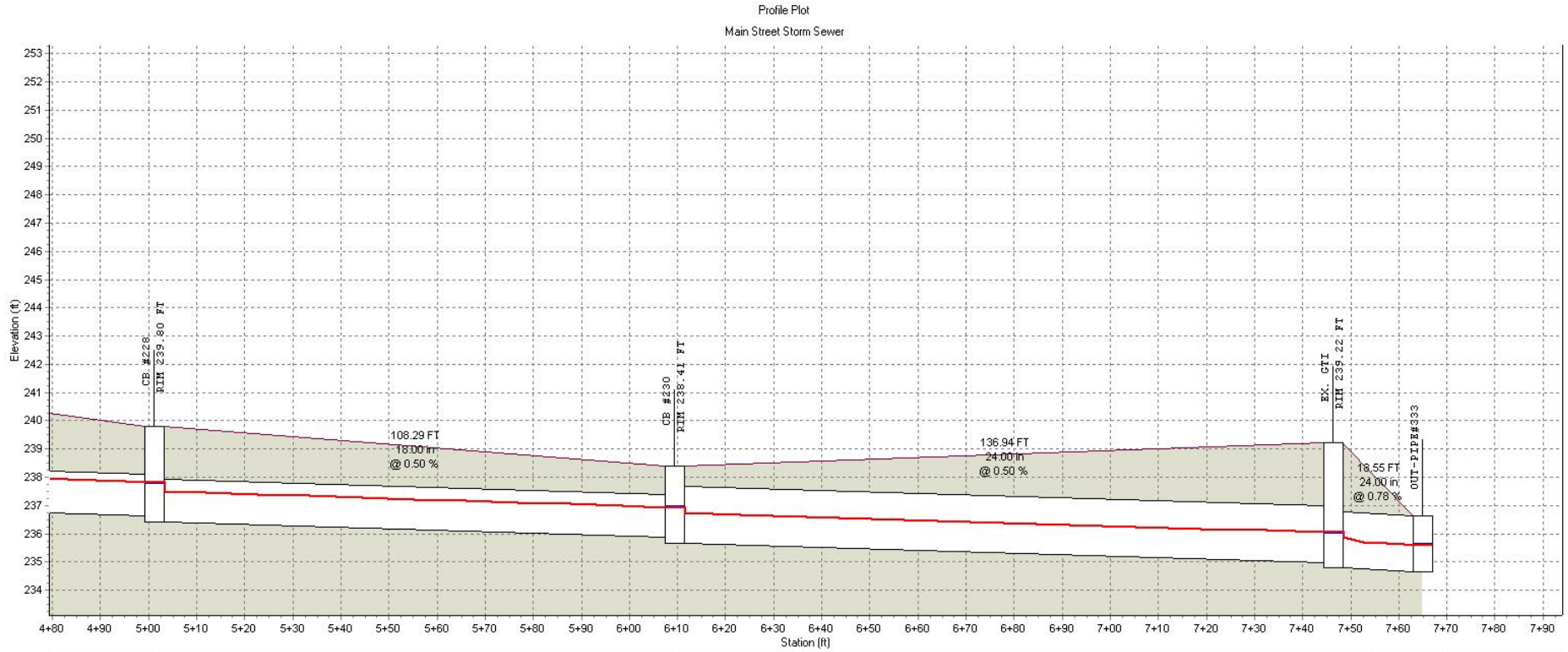
Main Street Storm Sewer



	CB #226	CB #227	CB #229	CB #105A	
RIM (FT):	248.99	244.35	241.23	241.11	
Invert (ft):	245.74	240.55	237.32	236.92	
Min Pipe Cover (ft):					
Max HGL (ft):	246.11	241.24	238.66	238.32	

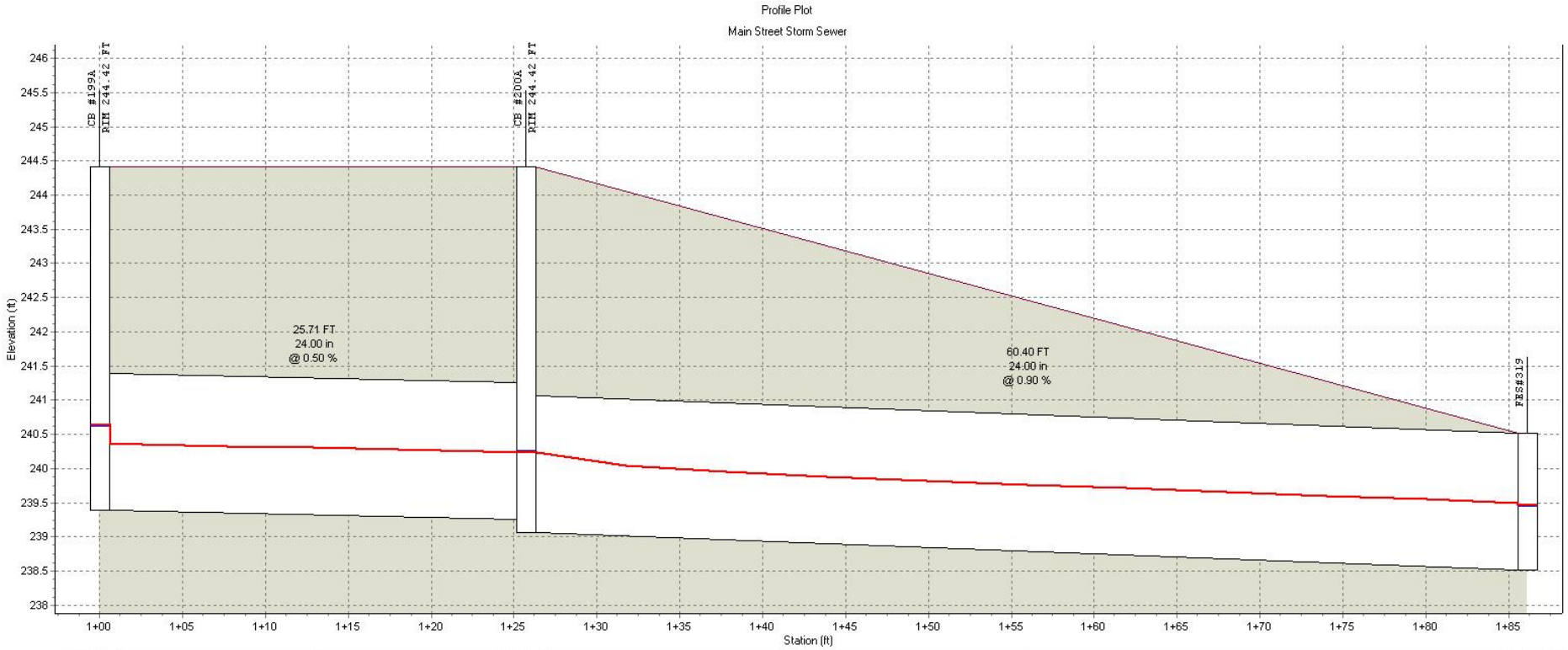
Link ID:	P #313	P #312	P #331	P #314
(FT):	159.11	141.32	40.93	59.71
(in):	15.00	15.00	18.00	18.00
@ (%):	3.14	1.69	0.50	0.50
Up Invert (ft):	245.74	240.55	237.32	236.92
Dn Invert (ft):	240.75	238.16	237.12	236.62
Max Q (cfs):	2.15	4.20	5.71	6.49
Max Vel (ft/s):	6.32	6.45	3.80	4.18
Max Depth (ft):	0.43	0.66	1.26	1.29

HGL



	CB #228	CB #230	EX. GTI	OUT-PIPE#333
RIM (FT):	239.80	238.41	239.22	
Invert (ft):	236.42	235.68	234.80	234.65
Min Pipe Cover (ft):				
Max HGL (ft):	237.81	236.93	236.05	235.59

Link ID:	P #328	P #329	P #333
(FT):	108.29	136.94	18.55
(in):	18.00	24.00	24.00
@ (%):	0.50	0.50	0.78
Up Invert (ft):	236.42	235.68	234.80
Dn Invert (ft):	235.88	235.00	234.65
Max Q (cfs):	6.98	9.03	9.03
Max Vel (ft/s):	4.54	4.79	5.12
Max Depth (ft):	1.22	1.16	1.10



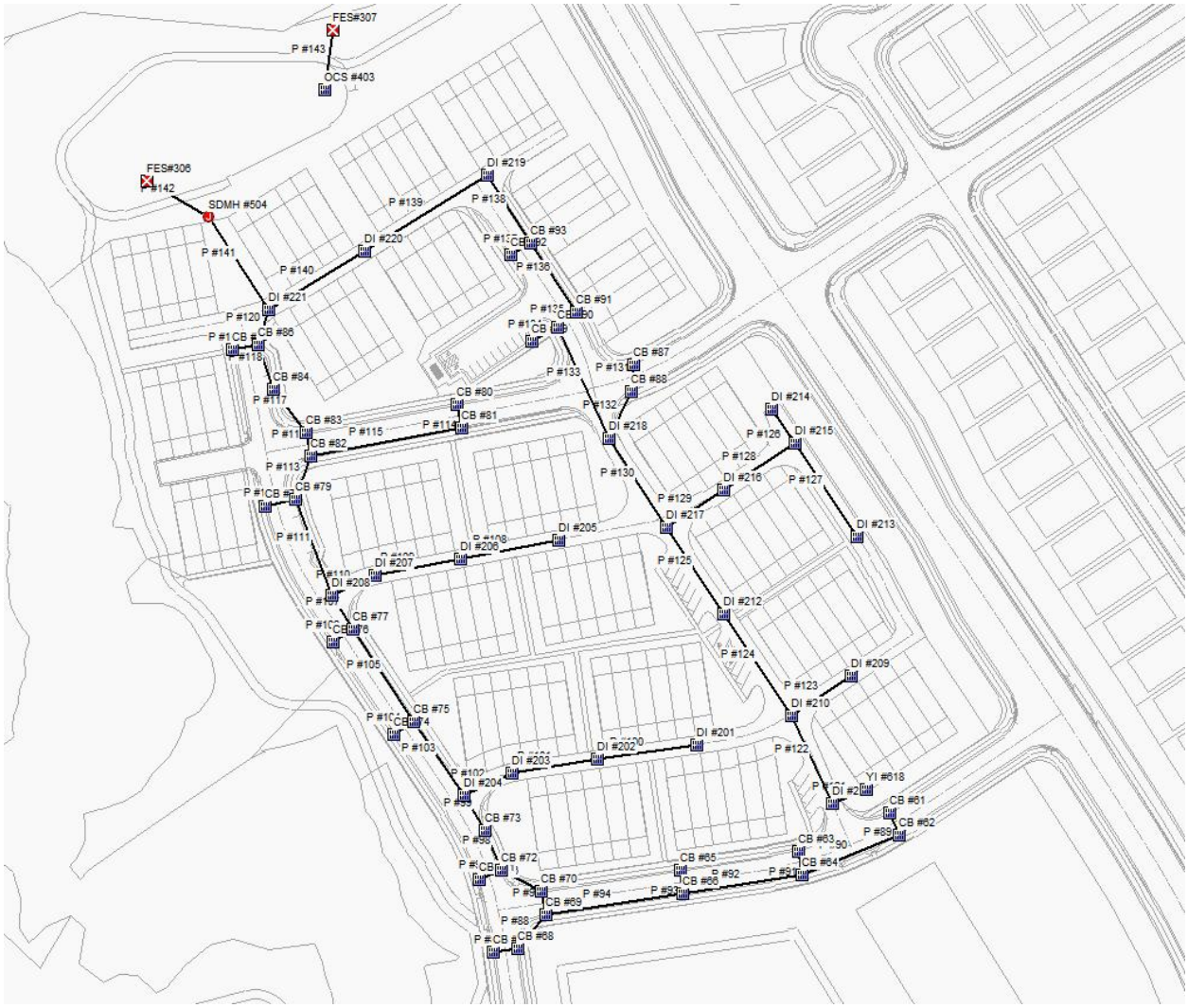
:	CB #199A	CB #200A	FES#319
RIM (FT):	244.42	244.42	
Invert (ft):	239.39	239.06	238.51
Min Pipe Cover (ft):			
Max HGL (ft):	240.63	240.24	239.46

Link ID:	P #283	P #330
(FT):	25.71	60.40
(in):	24.00	24.00
@ (%):	0.50	0.90
Up Invert (ft):	239.39	239.06
Dn Invert (ft):	239.26	238.51
Max Q (cfs):	7.61	9.79
Max Vel (ft/s):	4.24	5.82
Max Depth (ft):	1.11	1.06

HGL

S T O R M W A T E R AREA " G "

STORMWATER PIPING AND HYDRAULIC GRADE LINE FOR 25-YR STORM



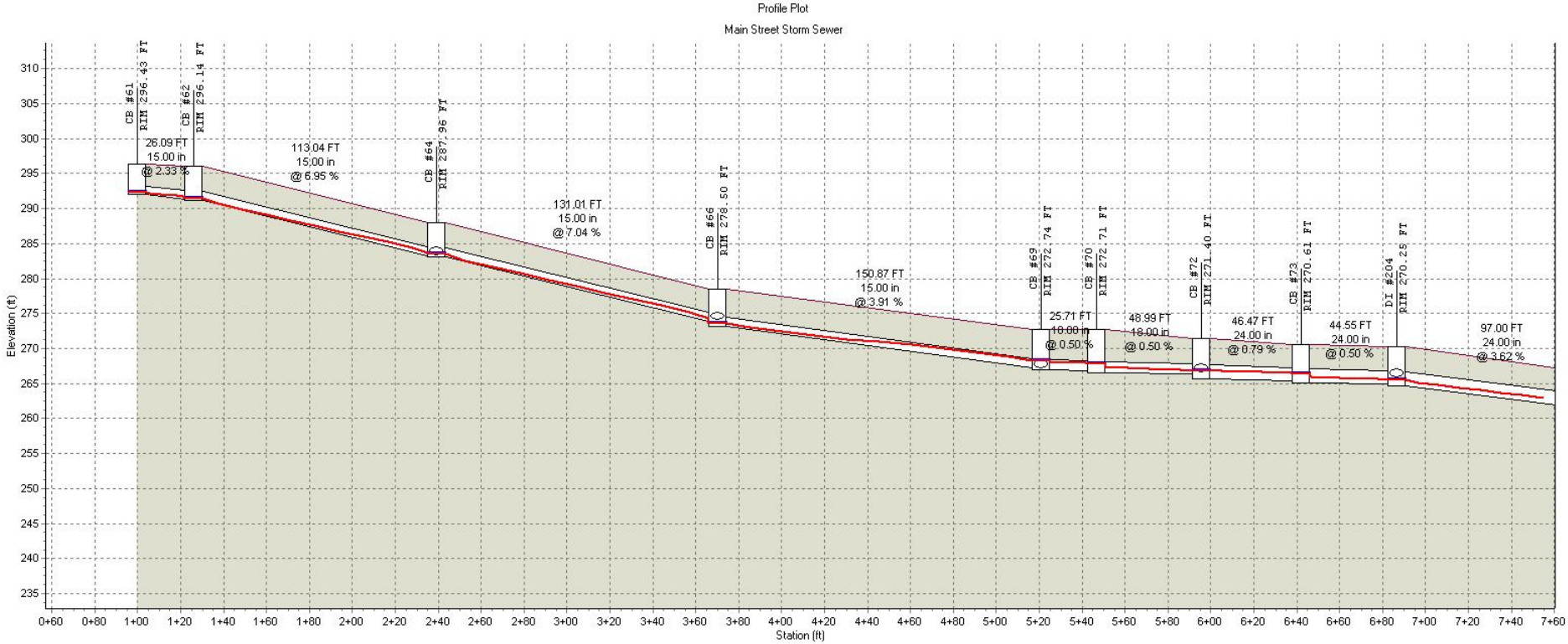
PLAN VIEW

DRAINAGE AREA

SN	Element ID	Area (acres)	Drainage Node ID	Weighted Runoff Coefficient	Accumulated Precipitation (inches)	Total Runoff (inches)	Peak Runoff (cfs)	Rainfall Intensity (inches/hr)	Time of Concentration (days hh:mm:ss)
1	Sub-CB#61	0.16	CB #61	0.8300	0.67	0.55	1.06	7.990	0 00:05:00
2	Sub-CB#62	0.19	CB #62	0.8300	0.67	0.55	1.26	7.990	0 00:05:00
3	Sub-CB#63	0.06	CB #63	0.8300	0.67	0.55	0.40	7.990	0 00:05:00
4	Sub-CB#64	0.12	CB #64	0.7800	0.67	0.52	0.75	7.990	0 00:05:00
5	Sub-CB#65	0.10	CB #65	0.8300	0.67	0.55	0.66	7.990	0 00:05:00
6	Sub-CB#66	0.07	CB #66	0.8300	0.67	0.55	0.46	7.990	0 00:05:00
7	Sub-CB#67	0.07	CB #67	0.8300	0.67	0.55	0.46	7.990	0 00:05:00
8	Sub-CB#68	0.11	CB #68	0.8300	0.67	0.55	0.73	7.990	0 00:05:00
9	Sub-CB#69	0.09	CB #69	0.8300	0.67	0.55	0.60	7.990	0 00:05:00
10	Sub-CB#70	0.09	CB #70	0.8300	0.67	0.55	0.60	7.990	0 00:05:00
11	Sub-CB#71	0.05	CB #71	0.8300	0.67	0.55	0.33	7.990	0 00:05:00
12	Sub-CB#72	0.40	CB #72	0.5900	0.67	0.39	1.89	7.990	0 00:05:00
13	Sub-CB#73	0.06	CB #73	0.8300	0.67	0.55	0.40	7.990	0 00:05:00
14	Sub-CB#74	0.11	CB #74	0.8300	0.67	0.55	0.73	7.990	0 00:05:00
15	Sub-CB#75	0.08	CB #75	0.8300	0.67	0.55	0.53	7.990	0 00:05:00
16	Sub-CB#76	0.07	CB #76	0.8300	0.67	0.55	0.46	7.990	0 00:05:00
17	Sub-CB#77	0.27	CB #77	0.5900	0.67	0.39	1.27	7.990	0 00:05:00
18	Sub-CB#78	0.09	CB #78	0.8300	0.67	0.55	0.60	7.990	0 00:05:00
19	Sub-CB#79	0.25	CB #79	0.5900	0.67	0.39	1.18	7.990	0 00:05:00
20	Sub-CB#80	0.10	CB #80	0.8300	0.67	0.55	0.66	7.990	0 00:05:00
21	Sub-CB#81	0.40	CB #81	0.5900	0.67	0.39	1.89	7.990	0 00:05:00
22	Sub-CB#82	0.39	CB #82	0.5900	0.67	0.39	1.84	7.990	0 00:05:00
23	Sub-CB#83	0.11	CB #83	0.8300	0.67	0.55	0.73	7.990	0 00:05:00
24	Sub-CB#84	0.05	CB #84	0.8300	0.67	0.55	0.33	7.990	0 00:05:00
25	Sub-CB#85	0.10	CB #85	0.8300	0.67	0.55	0.66	7.990	0 00:05:00
26	Sub-CB#86	0.04	CB #86	0.8300	0.67	0.55	0.27	7.990	0 00:05:00
27	Sub-CB#87	0.09	CB #87	0.8300	0.67	0.55	0.60	7.990	0 00:05:00
28	Sub-CB#88	0.38	CB #88	0.5900	0.67	0.39	1.79	7.990	0 00:05:00
29	Sub-CB#89	0.14	CB #89	0.8300	0.67	0.55	0.93	7.990	0 00:05:00
30	Sub-CB#90	0.01	CB #90	0.8300	0.67	0.55	0.07	7.990	0 00:05:00
31	Sub-CB#91	0.12	CB #91	0.5900	0.67	0.39	0.57	7.990	0 00:05:00
32	Sub-CB#92	0.12	CB #92	0.8300	0.67	0.55	0.80	7.990	0 00:05:00
33	Sub-CB#93	0.16	CB #93	0.5400	0.67	0.36	0.69	7.990	0 00:05:00
34	Sub-DI#201	0.22	DI #201	0.5400	0.67	0.36	0.95	7.990	0 00:05:00
35	Sub-DI#202	0.28	DI #202	0.4800	0.67	0.32	1.07	7.990	0 00:05:00
36	Sub-DI#203	0.23	DI #203	0.4800	0.67	0.32	0.88	7.990	0 00:05:00
37	Sub-DI#204	0.16	DI #204	0.5300	0.67	0.35	0.68	7.990	0 00:05:00
38	Sub-DI#205	0.43	DI #205	0.6400	0.67	0.43	2.20	7.990	0 00:05:00
39	Sub-DI#206	0.48	DI #206	0.5200	0.67	0.35	1.99	7.990	0 00:05:00
40	Sub-DI#207	0.41	DI #207	0.5200	0.67	0.35	1.70	7.990	0 00:05:00
41	Sub-DI#208	0.12	DI #208	0.8300	0.67	0.55	0.80	7.990	0 00:05:00
42	Sub-DI#209	0.16	DI #209	0.5400	0.67	0.36	0.69	7.990	0 00:05:00
43	Sub-DI#210	0.35	DI #210	0.4800	0.67	0.32	1.34	7.990	0 00:05:00
44	Sub-DI#211	0.06	DI #211	0.8300	0.67	0.55	0.40	7.990	0 00:05:00
45	Sub-DI#212	0.32	DI #212	0.5900	0.67	0.39	1.51	7.990	0 00:05:00
46	Sub-DI#213	0.32	DI #213	0.8300	0.67	0.55	2.12	7.990	0 00:05:00
47	Sub-DI#214	0.05	DI #214	0.8300	0.67	0.55	0.33	7.990	0 00:05:00
48	Sub-DI#215	0.18	DI #215	0.8300	0.67	0.55	1.19	7.990	0 00:05:00
49	Sub-DI#216	0.20	DI #216	0.5400	0.67	0.36	0.86	7.990	0 00:05:00
50	Sub-DI#217	0.63	DI #217	0.6900	0.67	0.46	3.47	7.990	0 00:05:00
51	Sub-DI#218	0.06	DI #218	0.8300	0.67	0.55	0.40	7.990	0 00:05:00
52	Sub-DI#219	0.31	DI #219	0.5900	0.67	0.39	1.46	7.990	0 00:05:00
53	Sub-DI#220	0.37	DI #220	0.5900	0.67	0.39	1.74	7.990	0 00:05:00
54	Sub-DI#221	1.19	DI #221	0.6900	0.67	0.46	6.56	7.990	0 00:05:00
55	Sub-YI#618	0.14	YI #618	0.5900	0.67	0.39	0.66	7.990	0 00:05:00

MODEL INPUT										MODEL OUTPUT									
SN	Element ID	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Pipe Diameter or Height (inches)	Manning's Roughness	Peak Flow (cfs)	Time of Peak Flow Occurrence (days hh:mm)	Max Flow Velocity (ft/sec)	Travel Time (min)	Design Flow Capacity (cfs)	Max Flow / Design Flow Ratio	Max Flow Depth / Total Depth Ratio	Total Time Surcharged (min)	Max Flow Depth (ft)	Reported Condition
1	P #100	DI #201	DI #202	108.13	274.23	270.74	3.2300	15.000	0.0130	0.92	0 00:05	5.49	0.33	11.61	0.08	0.19	0.00	0.24	Calculated
2	P #101	DI #202	DI #203	93.47	270.54	267.72	3.0100	15.000	0.0130	1.94	0 00:05	6.49	0.24	11.21	0.17	0.29	0.00	0.37	Calculated
3	P #102	DI #203	DI #204	58.16	267.52	265.82	2.9300	15.000	0.0130	2.78	0 00:05	6.80	0.14	11.06	0.25	0.37	0.00	0.46	Calculated
4	P #103	DI #204	CB #75	97.00	264.70	261.19	3.6200	24.000	0.0130	11.61	0 00:06	10.36	0.16	43.02	0.27	0.39	0.00	0.77	Calculated
5	P #104	CB #74	CB #75	24.86	261.91	261.79	0.5200	15.000	0.0130	0.72	0 00:05	2.48	0.17	4.65	0.15	0.29	0.00	0.36	Calculated
6	P #105	CB #75	CB #77	119.40	260.99	253.64	6.1600	24.000	0.0130	12.69	0 00:06	12.17	0.16	56.13	0.23	0.37	0.00	0.73	Calculated
7	P #106	CB #76	CB #77	25.73	254.46	254.33	0.5000	15.000	0.0130	0.45	0 00:05	2.20	0.19	4.57	0.10	0.23	0.00	0.28	Calculated
8	P #107	CB #77	DI #208	43.63	253.44	250.97	5.6600	24.000	0.0130	14.13	0 00:06	11.50	0.06	53.83	0.26	0.41	0.00	0.83	Calculated
9	P #108	DI #205	DI #206	107.29	256.03	253.94	1.9500	15.000	0.0130	2.18	0 00:05	4.82	0.37	9.02	0.24	0.41	0.00	0.51	Calculated
10	P #109	DI #206	DI #207	94.54	253.74	252.62	1.1800	15.000	0.0130	4.08	0 00:05	4.81	0.33	7.01	0.58	0.66	0.00	0.83	Calculated
11	P #110	DI #207	DI #208	51.61	252.42	251.79	1.2300	15.000	0.0130	5.62	0 00:05	5.64	0.15	7.17	0.78	0.76	0.00	0.95	Calculated
12	P #111	DI #208	CB #79	110.84	250.39	245.22	4.6700	30.000	0.0130	20.63	0 00:06	7.14	0.26	88.61	0.23	0.62	0.00	1.55	Calculated
13	P #112	CB #78	CB #79	33.72	246.80	246.63	0.5100	15.000	0.0130	0.63	0 00:06	2.27	0.25	4.59	0.14	0.62	0.00	0.78	Calculated
14	P #113	CB #79	CB #82	49.58	245.02	244.77	0.5000	30.000	0.0130	22.13	0 00:06	4.64	0.18	29.00	0.76	0.93	0.00	2.33	Calculated
15	P #114	CB #80	CB #81	25.62	250.87	250.74	0.5000	15.000	0.0130	0.62	0 00:05	2.38	0.18	4.57	0.14	0.27	0.00	0.33	Calculated
16	P #115	CB #81	CB #82	166.52	250.54	246.42	2.4700	18.000	0.0130	2.12	0 00:05	6.13	0.45	16.52	0.13	0.30	0.00	0.44	Calculated
17	P #116	CB #82	CB #83	25.74	244.57	244.44	0.5000	30.000	0.0130	25.36	0 00:06	5.86	0.07	29.00	0.87	0.82	0.00	2.06	Calculated
18	P #117	CB #83	CB #84	59.02	244.24	242.63	2.7300	30.000	0.0130	25.90	0 00:06	7.69	0.13	67.80	0.38	0.68	0.00	1.70	Calculated
19	P #118	CB #84	CB #86	51.80	242.39	241.81	1.1200	30.000	0.0130	26.04	0 00:06	6.74	0.13	43.38	0.60	0.77	0.00	1.92	Calculated
20	P #119	CB #85	CB #86	28.32	243.66	243.51	0.5500	15.000	0.0130	0.62	0 00:05	2.45	0.19	4.79	0.13	0.26	0.00	0.32	Calculated
21	P #120	CB #86	DI #221	39.96	241.61	240.80	2.0400	36.000	0.0130	26.63	0 00:06	5.04	0.13	95.17	0.28	0.73	0.00	2.20	Calculated
22	P #121	YI #618	DI #211	39.48	278.86	278.67	0.5000	15.000	0.0130	0.64	0 00:05	2.45	0.27	4.57	0.14	0.27	0.00	0.33	Calculated
23	P #122	DI #211	DI #210	104.64	278.47	277.75	0.6800	15.000	0.0130	1.00	0 00:05	3.19	0.55	5.34	0.19	0.30	0.00	0.38	Calculated
24	P #123	DI #209	DI #210	78.10	280.26	277.75	3.2200	15.000	0.0130	0.67	0 00:05	4.97	0.26	11.58	0.06	0.17	0.00	0.21	Calculated
25	P #124	DI #210	DI #212	132.27	277.55	268.14	7.1100	15.000	0.0130	2.87	0 00:05	10.02	0.22	17.23	0.17	0.28	0.00	0.35	Calculated
26	P #125	DI #212	DI #217	112.22	267.60	262.26	4.7600	15.000	0.0130	4.32	0 00:05	8.52	0.22	14.09	0.31	0.46	0.00	0.58	Calculated
27	P #126	DI #214	DI #215	43.95	272.53	272.31	0.5000	15.000	0.0130	0.32	0 00:05	1.94	0.38	4.57	0.07	0.20	0.00	0.25	Calculated
28	P #127	DI #213	DI #215	122.71	279.45	274.43	4.0900	15.000	0.0130	2.07	0 00:05	7.48	0.27	13.07	0.16	0.28	0.00	0.35	Calculated
29	P #128	DI #215	DI #216	91.42	272.10	267.59	4.9400	15.000	0.0130	3.53	0 00:05	9.05	0.17	14.35	0.25	0.35	0.00	0.44	Calculated
30	P #129	DI #216	DI #217	75.06	267.33	262.54	6.3800	15.000	0.0130	4.35	0 00:05	10.34	0.12	16.31	0.27	0.38	0.00	0.47	Calculated

MODEL INPUT										MODEL OUTPUT									
SN	Element ID	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Pipe Diameter or Height (inches)	Manning's Roughness	Peak Flow (cfs)	Time of Peak Flow Occurrence (days hh:mm)	Max Flow Velocity (ft/sec)	Travel Time (min)	Design Flow Capacity (cfs)	Max Flow / Design Flow Ratio	Max Flow Depth / Total Depth Ratio	Total Time Surcharged (min)	Max Flow Depth (ft)	Reported Condition
31	P #130	DI #217	DI #218	114.75	261.87	258.35	3.0700	18.000	0.0130	11.88	0 00:05	9.91	0.19	18.39	0.65	0.64	0.00	0.96	Calculated
32	P #131	CB #87	CB #88	28.76	260.31	259.45	3.0000	18.000	0.0130	0.59	0 00:05	3.50	0.14	18.18	0.03	0.16	0.00	0.24	Calculated
33	P #132	CB #88	DI #218	56.37	259.25	258.52	1.2900	18.000	0.0130	2.14	0 00:05	4.36	0.22	11.92	0.18	0.37	0.00	0.55	Calculated
34	P #133	DI #218	CB #90	132.70	258.06	252.81	3.9600	18.000	0.0130	14.24	0 00:05	11.47	0.19	20.89	0.68	0.66	0.00	1.00	Calculated
35	P #134	CB #89	CB #90	32.17	252.76	252.60	0.5000	15.000	0.0130	0.88	0 00:06	2.17	0.25	4.57	0.19	0.81	0.00	1.01	Calculated
36	P #135	CB #90	CB #91	26.11	251.70	251.57	0.5000	24.000	0.0130	15.09	0 00:06	5.32	0.08	16.00	0.94	0.85	0.00	1.69	Calculated
37	P #136	CB #91	CB #93	89.40	251.37	250.06	1.4700	24.000	0.0130	15.57	0 00:06	7.79	0.19	27.42	0.57	0.61	0.00	1.22	Calculated
38	P #137	CB #92	CB #93	25.70	250.82	250.70	0.5000	15.000	0.0130	0.75	0 00:05	2.50	0.17	4.57	0.17	0.30	0.00	0.37	Calculated
39	P #138	CB #93	DI #219	87.13	249.73	246.63	3.5600	24.000	0.0130	16.78	0 00:06	10.98	0.13	42.68	0.39	0.49	0.00	0.98	Calculated
40	P #139	DI #219	DI #220	156.57	244.13	242.95	0.7500	30.000	0.0130	17.91	0 00:06	6.58	0.40	35.58	0.50	0.55	0.00	1.36	Calculated
41	P #140	DI #220	DI #221	120.83	242.40	241.45	0.7800	36.000	0.0130	19.16	0 00:06	5.80	0.35	58.96	0.32	0.55	0.00	1.64	Calculated
42	P #141	DI #221	SDMH #504	118.84	240.60	239.74	0.7200	42.000	0.0130	50.20	0 00:06	6.82	0.29	85.36	0.59	0.72	0.00	2.51	Calculated
43	P #142	SDMH #504	FES#306	77.61	239.54	239.00	0.6900	42.000	0.0130	50.17	0 00:07	7.66	0.17	83.68	0.60	0.65	0.00	2.26	Calculated
44	P #87	CB #67	CB #68	25.72	268.28	267.55	2.8300	15.000	0.0130	0.45	0 00:05	3.39	0.13	10.87	0.04	0.35	0.00	0.44	Calculated
45	P #88	CB #68	CB #69	47.54	267.35	267.11	0.5000	15.000	0.0130	1.20	0 00:06	1.70	0.47	4.57	0.26	0.82	0.00	1.03	Calculated
46	P #89	CB #61	CB #62	26.09	291.99	291.38	2.3300	15.000	0.0130	1.03	0 00:05	4.63	0.09	9.87	0.10	0.24	0.00	0.30	Calculated
47	P #90	CB #62	CB #64	113.04	291.18	283.33	6.9500	15.000	0.0130	2.20	0 00:05	9.21	0.20	17.03	0.13	0.25	0.00	0.31	Calculated
48	P #91	CB #63	CB #64	25.86	283.66	283.33	1.2700	15.000	0.0130	0.39	0 00:05	2.92	0.15	7.29	0.05	0.17	0.00	0.21	Calculated
49	P #92	CB #64	CB #66	131.01	283.13	273.91	7.0400	15.000	0.0130	3.30	0 00:05	10.35	0.21	17.13	0.19	0.31	0.00	0.38	Calculated
50	P #93	CB #65	CB #66	25.76	274.09	273.96	0.5000	15.000	0.0130	0.65	0 00:05	2.40	0.18	4.57	0.14	0.27	0.00	0.34	Calculated
51	P #94	CB #66	CB #69	150.87	273.15	267.25	3.9100	15.000	0.0130	4.36	0 00:05	7.04	0.36	12.78	0.34	0.59	0.00	0.74	Calculated
52	P #95	CB #69	CB #70	25.71	266.91	266.78	0.5000	18.000	0.0130	5.78	0 00:06	3.79	0.11	7.43	0.78	0.81	0.00	1.21	Calculated
53	P #96	CB #70	CB #72	48.99	266.58	266.34	0.5000	18.000	0.0130	6.25	0 00:06	4.38	0.19	7.43	0.84	0.75	0.00	1.13	Calculated
54	P #97	CB #71	CB #72	25.84	266.68	266.55	0.5000	15.000	0.0130	0.33	0 00:05	2.00	0.22	4.57	0.07	0.21	0.00	0.27	Calculated
55	P #98	CB #72	CB #73	46.47	265.69	265.32	0.7900	24.000	0.0130	7.73	0 00:06	4.28	0.18	20.10	0.38	0.56	0.00	1.13	Calculated
56	P #99	CB #73	DI #204	44.55	265.12	264.90	0.5000	24.000	0.0130	8.45	0 00:06	4.45	0.17	16.00	0.53	0.58	0.00	1.16	Calculated

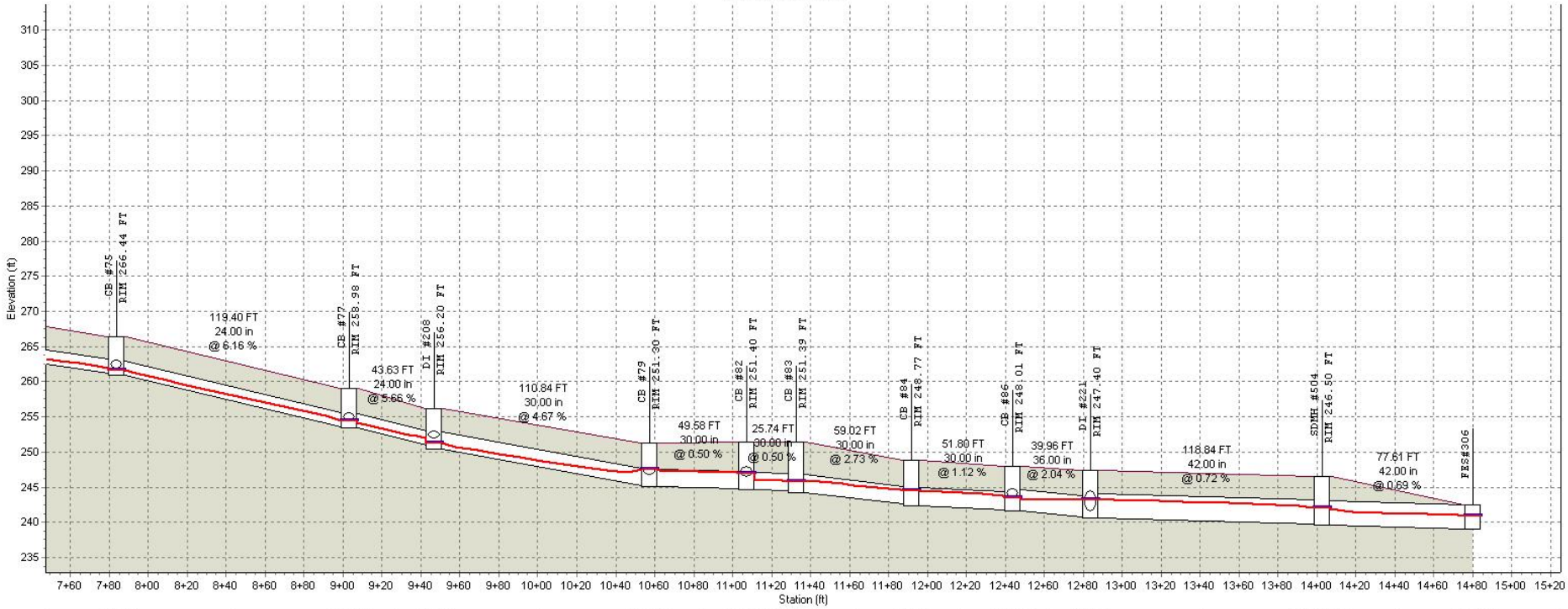


:	CB #61	CB #62	CB #64	CB #66	CB #69	CB #70	CB #72	CB #73	DI #204
RIM (FT):	296.43	296.14	287.96	278.50	272.74	272.71	271.40	270.61	270.25
Invert (ft):	291.99	291.18	283.13	273.15	266.91	266.58	265.69	265.12	264.70
Min Pipe Cover (ft):									
Max HGL (ft):	292.31	291.50	283.52	273.66	268.24	267.88	266.85	266.42	265.53

Link ID:	P #89	P #90	P #92	P #94	P #95	P #96	P #98	P #99	P #103
(FT):	26.09	113.04	131.01	150.87	25.71	48.99	46.47	44.55	97.00
(in):	15.00	15.00	15.00	15.00	18.00	18.00	24.00	24.00	24.00
@ (%):	2.33	6.95	7.04	3.91	0.50	0.50	0.79	0.50	3.62
Up Invert (ft):	291.99	291.18	283.13	273.15	266.91	266.58	265.69	265.12	264.70
Dn Invert (ft):	291.38	283.33	273.91	267.25	266.78	266.34	265.32	264.90	261.19
Max Q (cfs):	1.03	2.20	3.30	4.36	5.78	6.25	7.73	8.45	11.61
Max Vel (ft/s):	4.63	9.21	10.35	7.04	3.79	4.38	4.28	4.45	10.36
Max Depth (ft):	0.30	0.31	0.38	0.74	1.21	1.13	1.13	1.16	0.77

Profile Plot

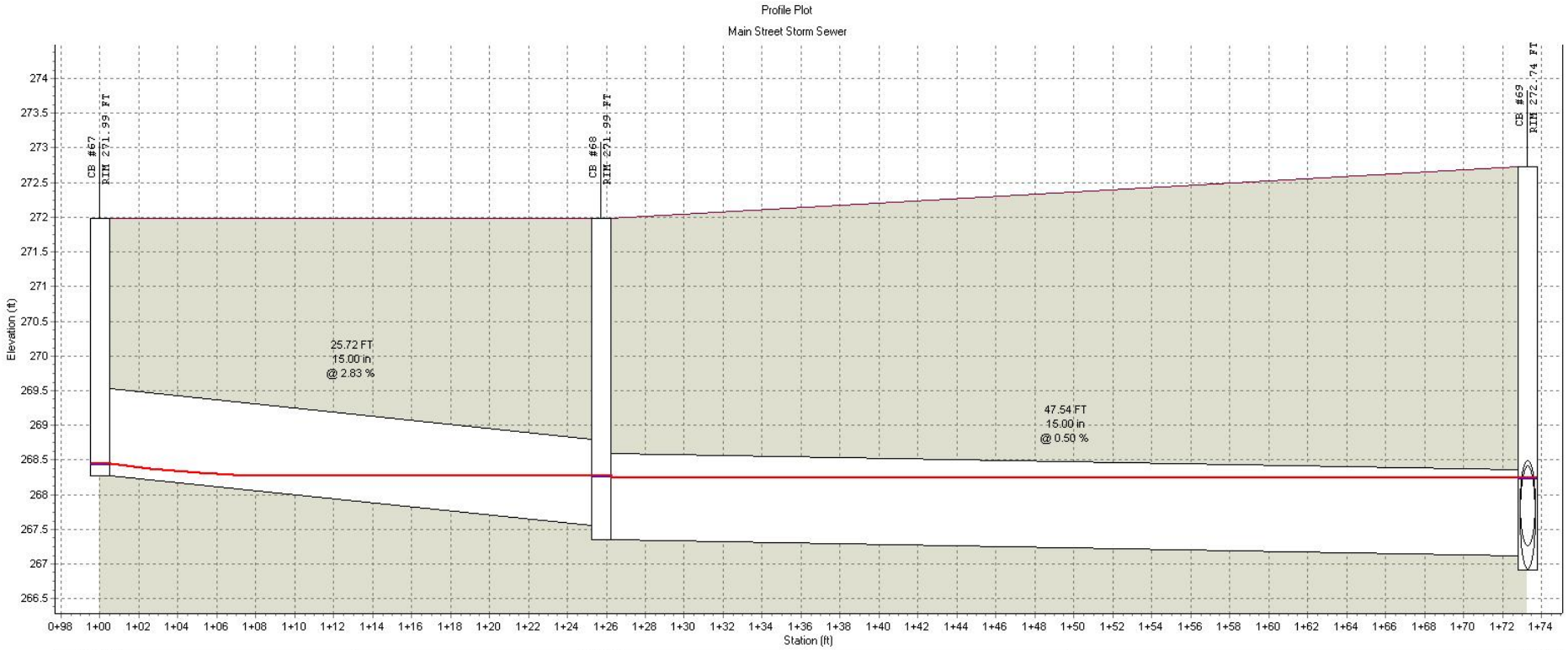
Main Street Storm Sewer



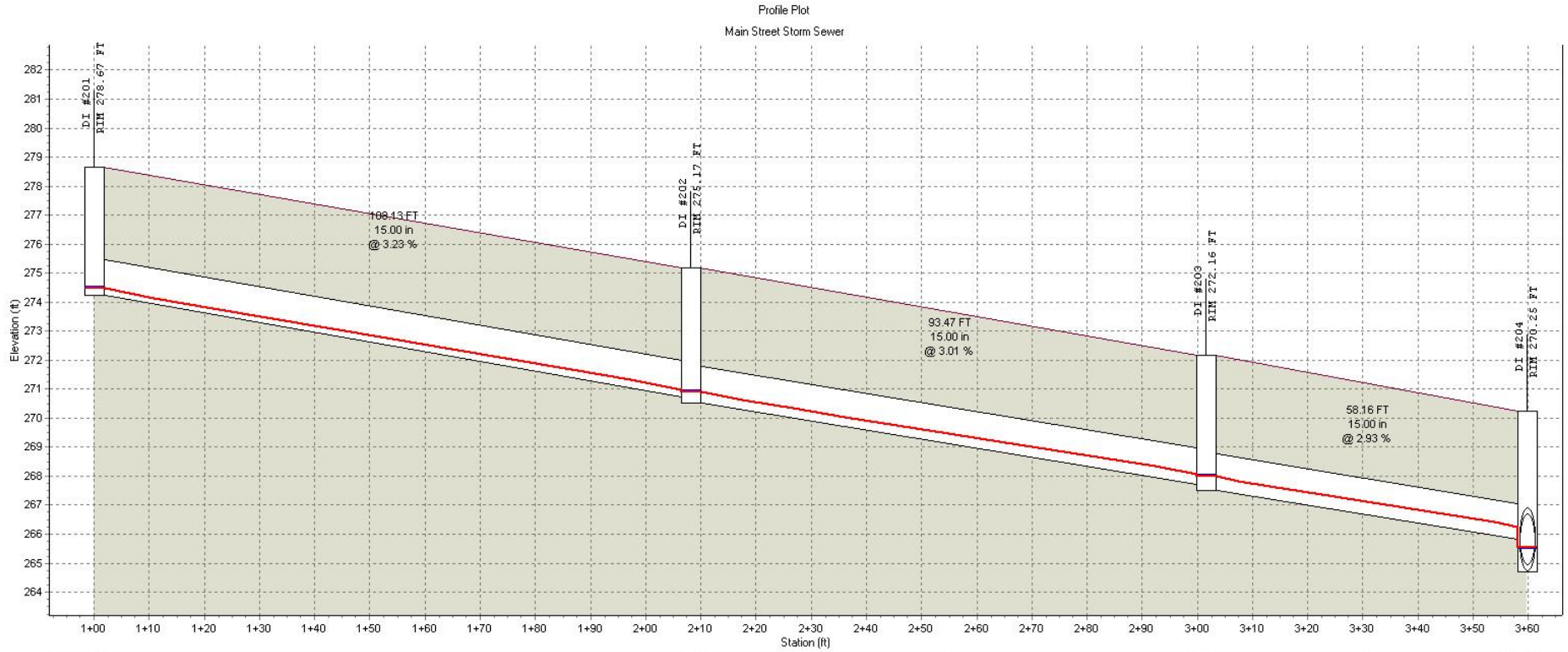
:	CB #75	CB #77	DI #208	CB #79	CB #82	CB #83	CB #84	CB #86	DI #221	SDMH #504	FES#306
RIM (FT):	266.44	258.98	256.20	251.30	251.40	251.39	248.77	248.01	247.40	246.50	
Invert (ft):	260.99	253.44	250.39	245.02	244.57	244.24	242.39	241.61	240.60	239.54	239.00
Min Pipe Cover (ft):										3.26	
Max HGL (ft):	261.70	254.40	251.26	247.48	246.98	245.80	244.48	243.56	243.25	242.10	240.95

Link ID:	P #105	P #107	P #111	P #113	P #116	P #117	P #118	P #120	P #141	P #142
(FT):	119.40	43.63	110.84	49.58	25.74	59.02	51.80	39.96	118.84	77.61
(in):	24.00	24.00	30.00	30.00	30.00	30.00	30.00	36.00	42.00	42.00
@ (%):	6.16	5.66	4.67	0.50	0.50	2.73	1.12	2.04	0.72	0.69
Up Invert (ft):	260.99	253.44	250.39	245.02	244.57	244.24	242.39	241.61	240.60	239.54
Dn Invert (ft):	253.64	250.97	245.22	244.77	244.44	242.63	241.81	240.80	239.74	239.00
Max Q (cfs):	12.69	14.13	20.63	22.13	25.36	25.90	26.04	26.63	50.20	50.17
Max Vel (ft/s):	12.17	11.50	7.14	4.64	5.86	7.69	6.74	5.04	6.82	7.66
Max Depth (ft):	0.73	0.83	1.55	2.33	2.06	1.70	1.92	2.20	2.51	2.26

HGL

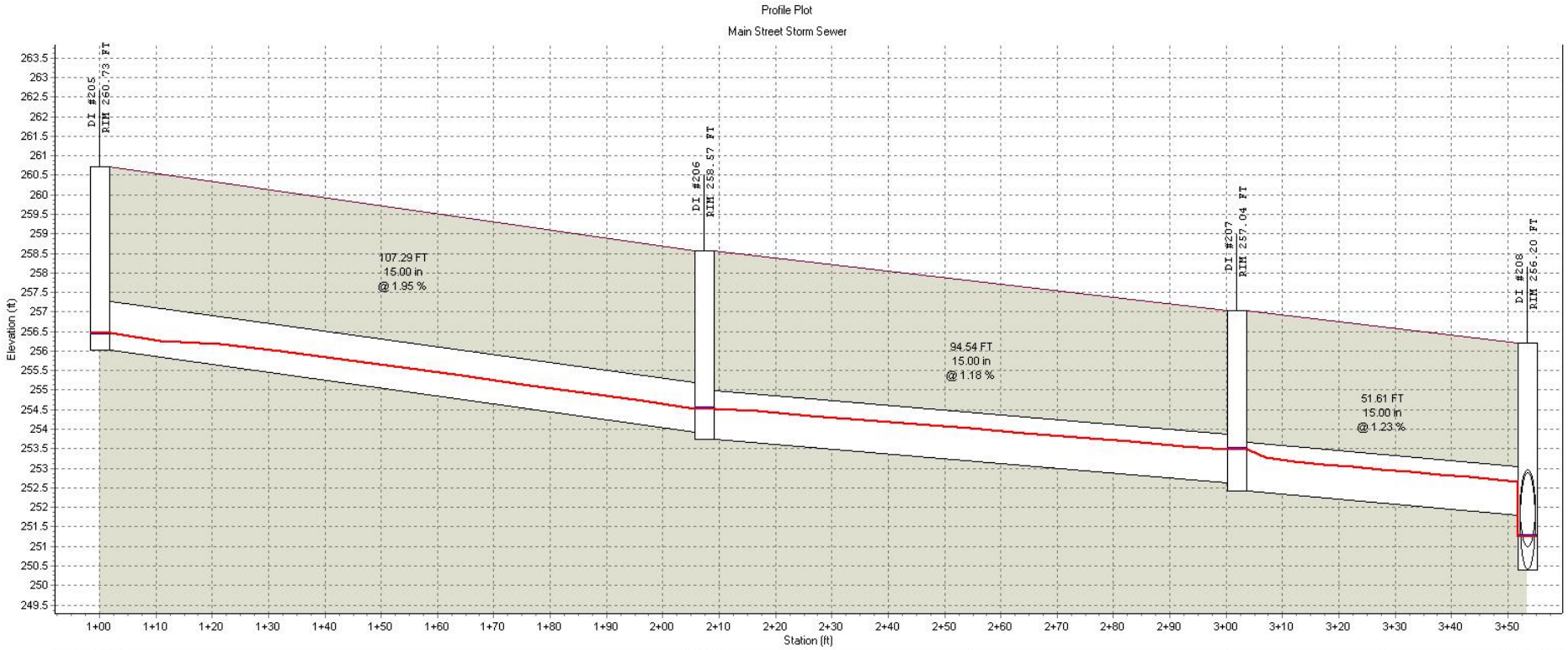


	CB #67		CB #68		CB #69
RIM (FT):	271.99		271.99		272.74
Invert (ft):	268.28		267.35		266.91
Min Pipe Cover (ft):					
Max HGL (ft):	268.45		268.27		268.24
Link ID:		P #87		P #88	
(FT):		25.72		47.54	
(in):		15.00		15.00	
@ (%):		2.83		0.50	
Up Invert (ft):		268.28		267.35	
Dn Invert (ft):		267.55		267.11	
Max Q (cfs):		0.45		1.20	
Max Vel (ft/s):		3.39		1.70	
Max Depth (ft):		0.44		1.03	



:	DI #201	DI #202	DI #203	DI #204
RIM (FT):	278.67	275.17	272.16	270.25
Invert (ft):	274.23	270.54	267.52	264.70
Min Pipe Cover (ft):				
Max HGL (ft):	274.48	270.91	268.01	265.53

Link ID:	P #100	P #101	P #102
(FT):	108.13	93.47	58.16
(in):	15.00	15.00	15.00
@ (%):	3.23	3.01	2.93
Up Invert (ft):	274.23	270.54	267.52
Dn Invert (ft):	270.74	267.72	265.82
Max Q (cfs):	0.92	1.94	2.78
Max Vel (ft/s):	5.49	6.49	6.80
Max Depth (ft):	0.24	0.37	0.46



	DI #205	DI #206	DI #207	DI #208
RIM (FT):	260.73	258.57	257.04	256.20
Invert (ft):	256.03	253.74	252.42	250.39
Min Pipe Cover (ft):				
Max HGL (ft):	256.46	254.53	253.49	251.26

Link ID:	P #108	P #109	P #110
(FT):	107.29	94.54	51.61
(in):	15.00	15.00	15.00
@ (%):	1.95	1.18	1.23
Up Invert (ft):	256.03	253.74	252.42
Dn Invert (ft):	253.94	252.62	251.79
Max Q (cfs):	2.18	4.08	5.62
Max Vel (ft/s):	4.82	4.81	5.64
Max Depth (ft):	0.51	0.83	0.95

HGL

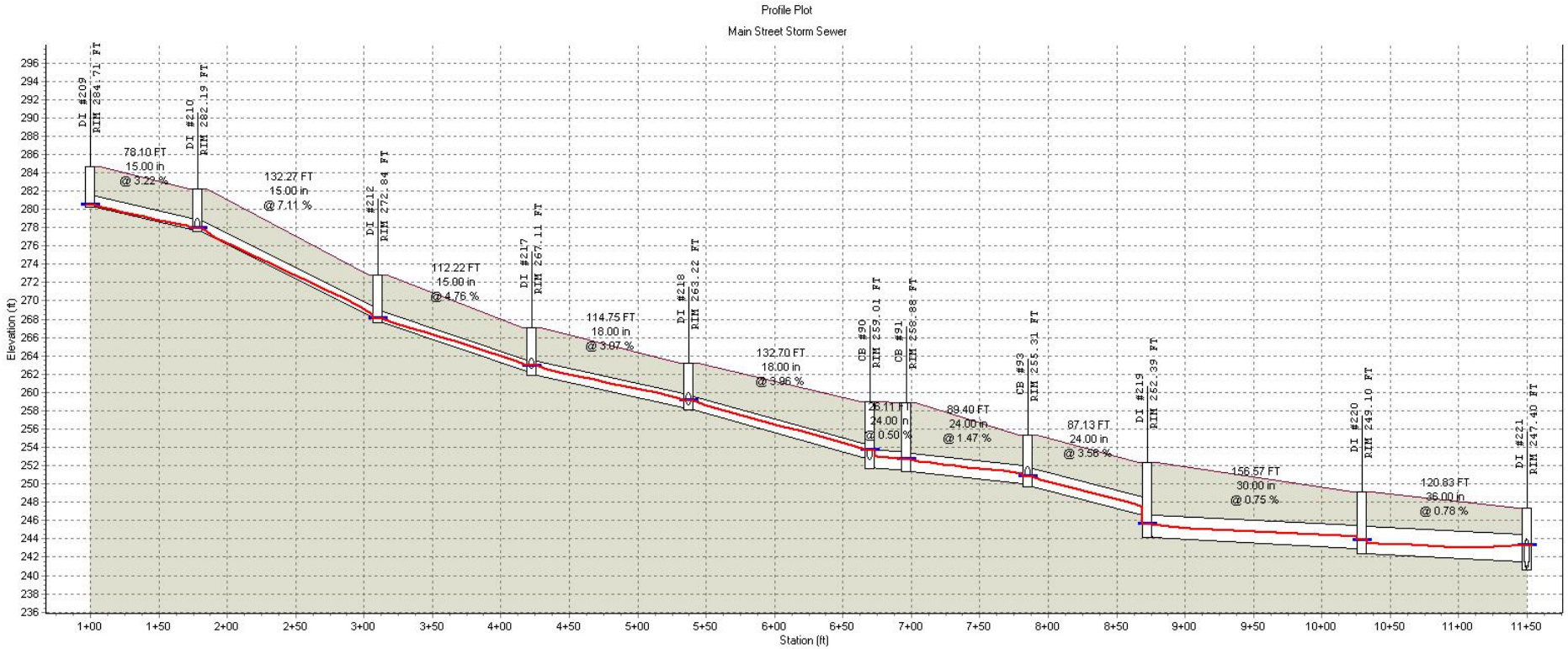
Profile Plot

Main Street Storm Sewer

:	CB #80	CB #81	CB #82
RIM (FT):	255.33	255.32	251.40
Invert (ft):	250.87	250.54	244.57
Min Pipe Cover (ft):			
Max HGL (ft):	251.23	250.92	246.98

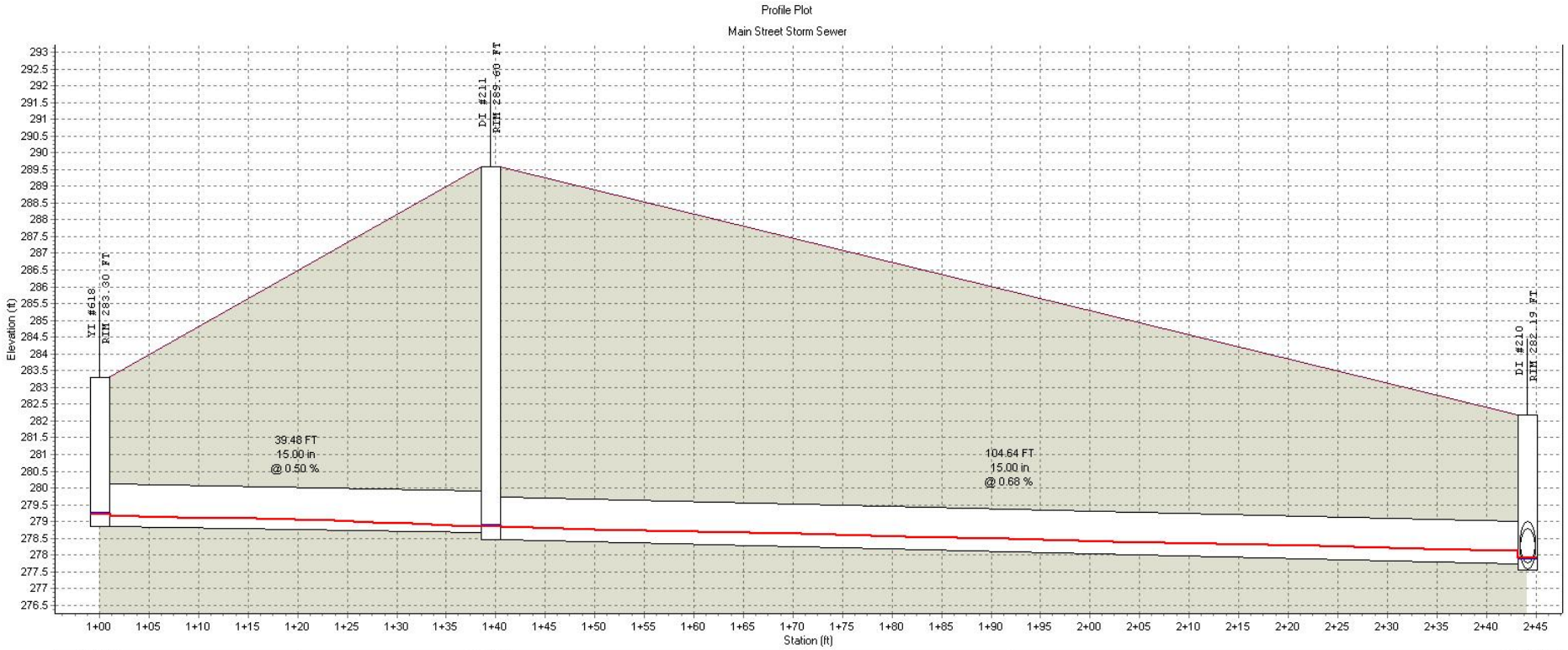
Link ID:	P #114	P #115
(FT):	25.62	166.52
(in):	15.00	18.00
@ (%):	0.50	2.47
Up Invert (ft):	250.87	250.54
Dn Invert (ft):	250.74	246.42
Max Q (cfs):	0.62	2.12
Max Vel (ft/s):	2.38	6.13
Max Depth (ft):	0.33	0.44

HGL



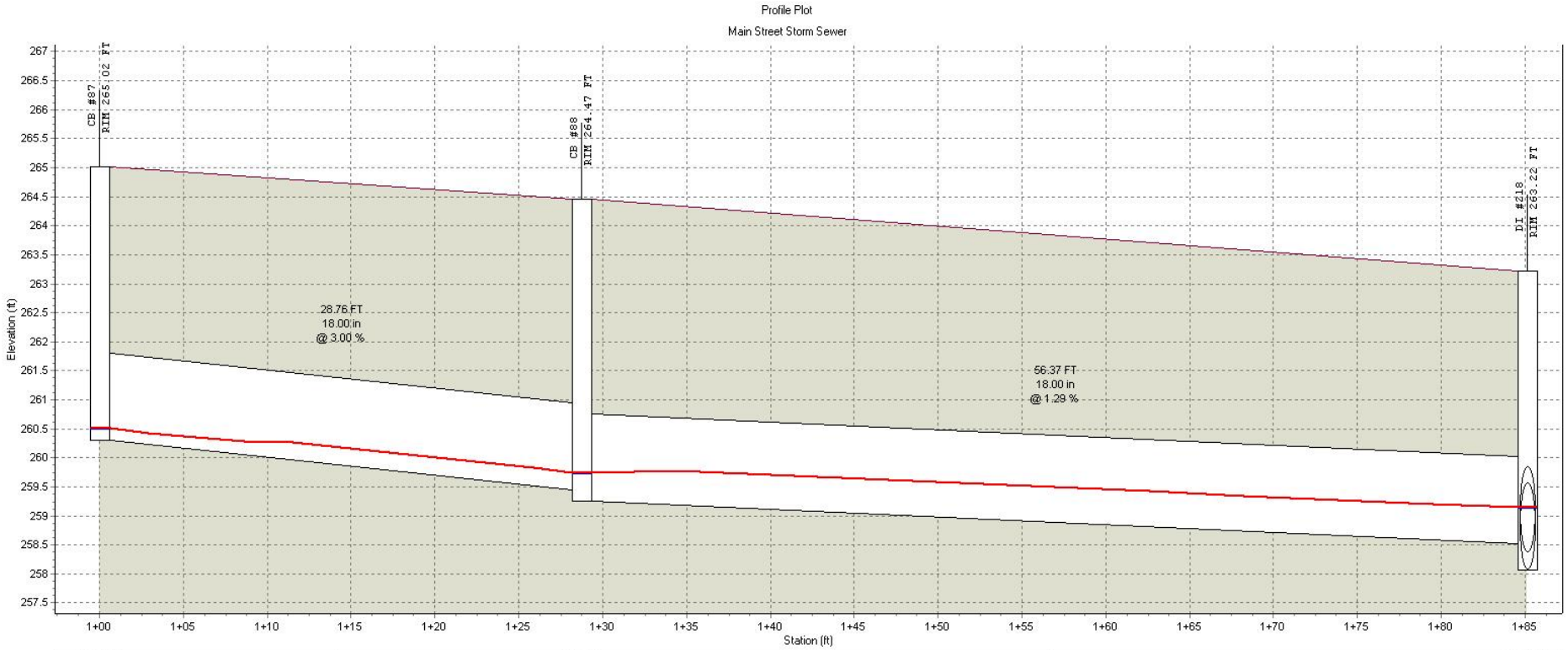
:	DI #209	DI #210	DI #212	DI #217	DI #218	CB #90	CB #91	CB #93	DI #219	DI #220	DI #221
RIM (FT):	284.71	282.19	272.84	267.11	263.22	259.01	258.88	255.31	252.39	249.10	247.40
Invert (ft):	280.26	277.55	267.60	261.87	258.06	251.70	251.37	249.73	244.13	242.40	240.60
Min Pipe Cover (ft):											
Max HGL (ft):	280.47	277.91	268.09	262.92	259.15	253.69	252.73	250.82	245.60	243.88	243.25

Link ID:	P #123	P #124	P #125	P #130	P #133	P #135	P #136	P #138	P #139	P #140
(FT):	78.10	132.27	112.22	114.75	132.70	26.11	89.40	87.13	156.57	120.83
(in):	15.00	15.00	15.00	18.00	18.00	24.00	24.00	24.00	30.00	36.00
@ (%):	3.22	7.11	4.76	3.07	3.96	0.50	1.47	3.56	0.75	0.78
Up Invert (ft):	280.26	277.55	267.60	261.87	258.06	251.70	251.37	249.73	244.13	242.40
Dn Invert (ft):	277.75	268.14	262.26	258.35	252.81	251.57	250.06	246.63	242.95	241.45
Max Q (cfs):	0.67	2.87	4.32	11.88	14.24	15.09	15.57	16.78	17.91	19.16
Max Vel (ft/s):	4.97	10.02	8.52	9.91	11.47	5.32	7.79	10.98	6.58	5.80
Max Depth (ft):	0.21	0.35	0.58	0.96	1.00	1.69	1.22	0.98	1.36	1.64



	YI #618	DI #211	DI #210
RIM (FT):	283.30	289.60	282.19
Invert (ft):	278.86	278.47	277.55
Min Pipe Cover (ft):			
Max HGL (ft):	279.22	278.85	277.91

Link ID:	P #121	P #122
(FT):	39.48	104.64
(in):	15.00	15.00
@ (%):	0.50	0.68
Up Invert (ft):	278.86	278.47
Dn Invert (ft):	278.67	277.75
Max Q (cfs):	0.64	1.00
Max Vel (ft/s):	2.45	3.19
Max Depth (ft):	0.33	0.38



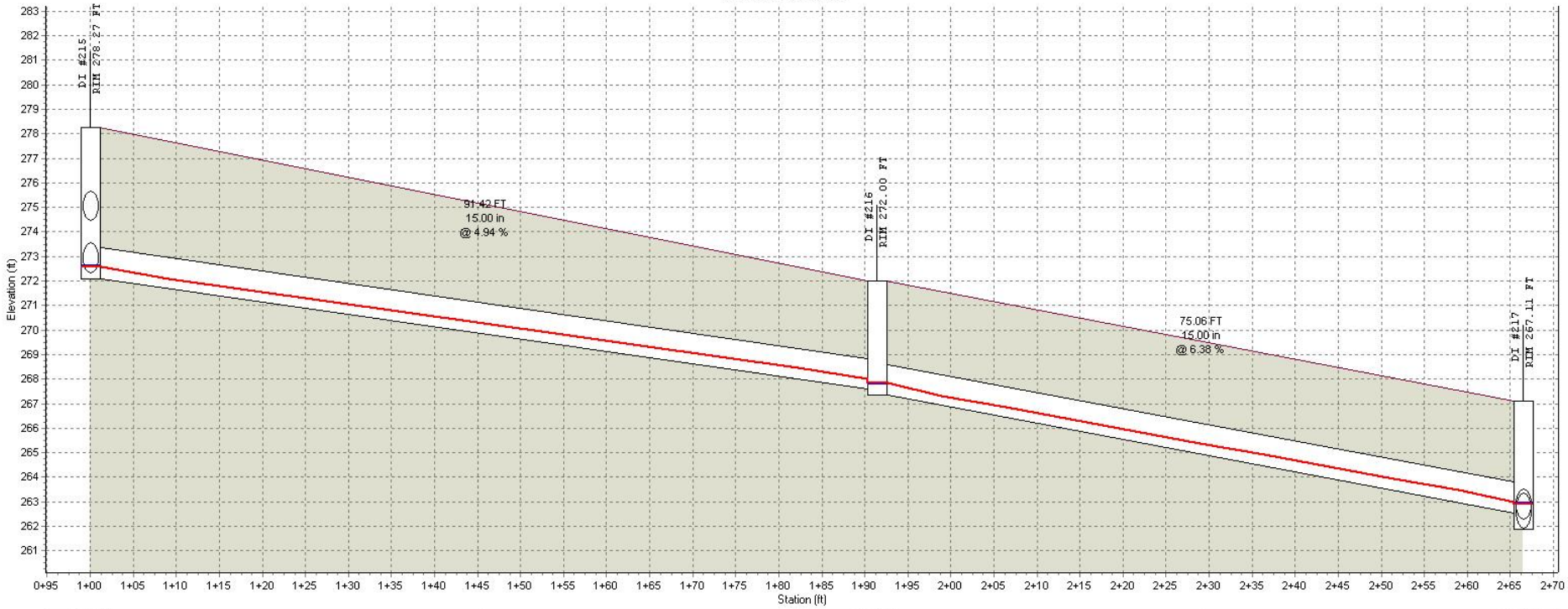
	CB #87	CB #88	DI #218
RIM (FT):	265.02	264.47	263.22
Invert (ft):	260.31	259.25	258.06
Min Pipe Cover (ft):			
Max HGL (ft):	260.50	259.74	259.15

Link ID:	P #131	P #132
(FT):	28.76	56.37
(in):	18.00	18.00
@ (%):	3.00	1.29
Up Invert (ft):	260.31	259.25
Dn Invert (ft):	259.45	258.52
Max Q (cfs):	0.59	2.14
Max Vel (ft/s):	3.50	4.36
Max Depth (ft):	0.24	0.55

HGL

Profile Plot

Main Street Storm Sewer



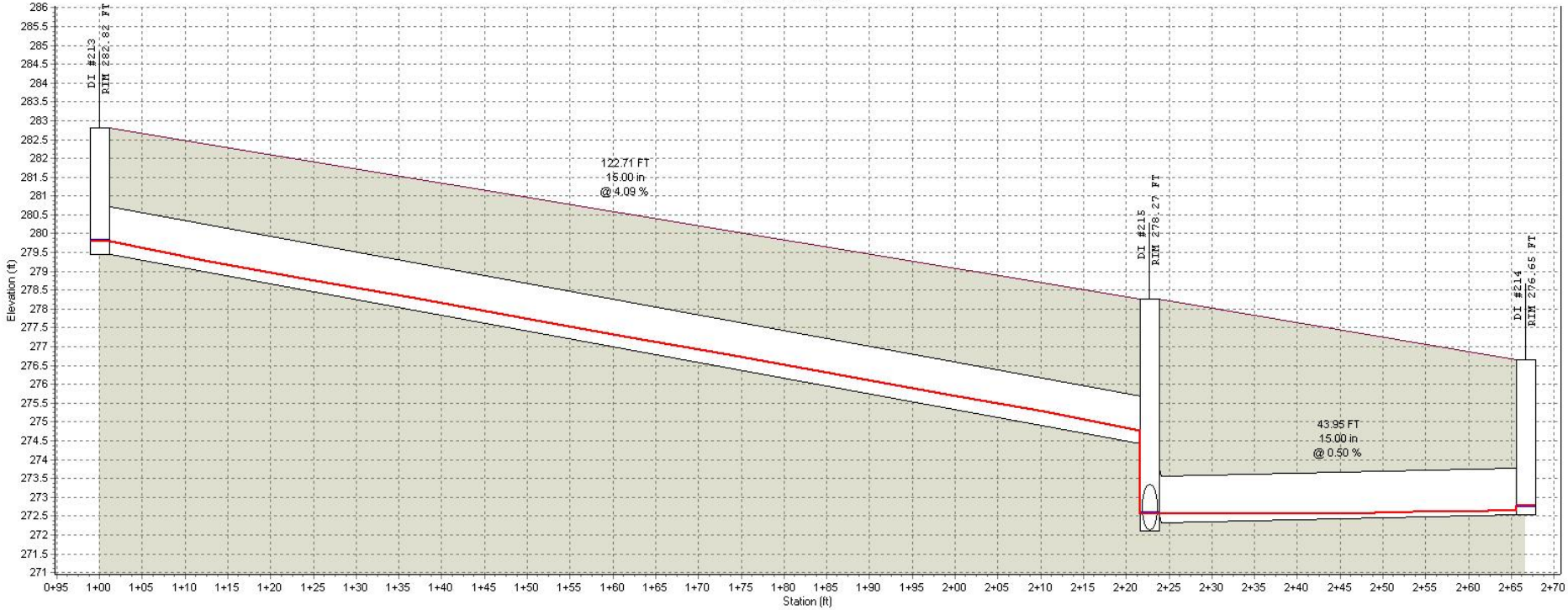
	DI #215	DI #216	DI #217
RIM (FT):	278.27	272.00	267.11
Invert (ft):	272.10	267.33	261.87
Min Pipe Cover (ft):			
Max HGL (ft):	272.57	267.83	262.92

Link ID:	P #128	P #129
(FT):	91.42	75.06
(in):	15.00	15.00
@ (%):	4.94	6.38
Up Invert (ft):	272.10	267.33
Dn Invert (ft):	267.59	262.54
Max Q (cfs):	3.53	4.35
Max Vel (ft/s):	9.05	10.34
Max Depth (ft):	0.44	0.47

HGL

Profile Plot

Main Street Storm Sewer

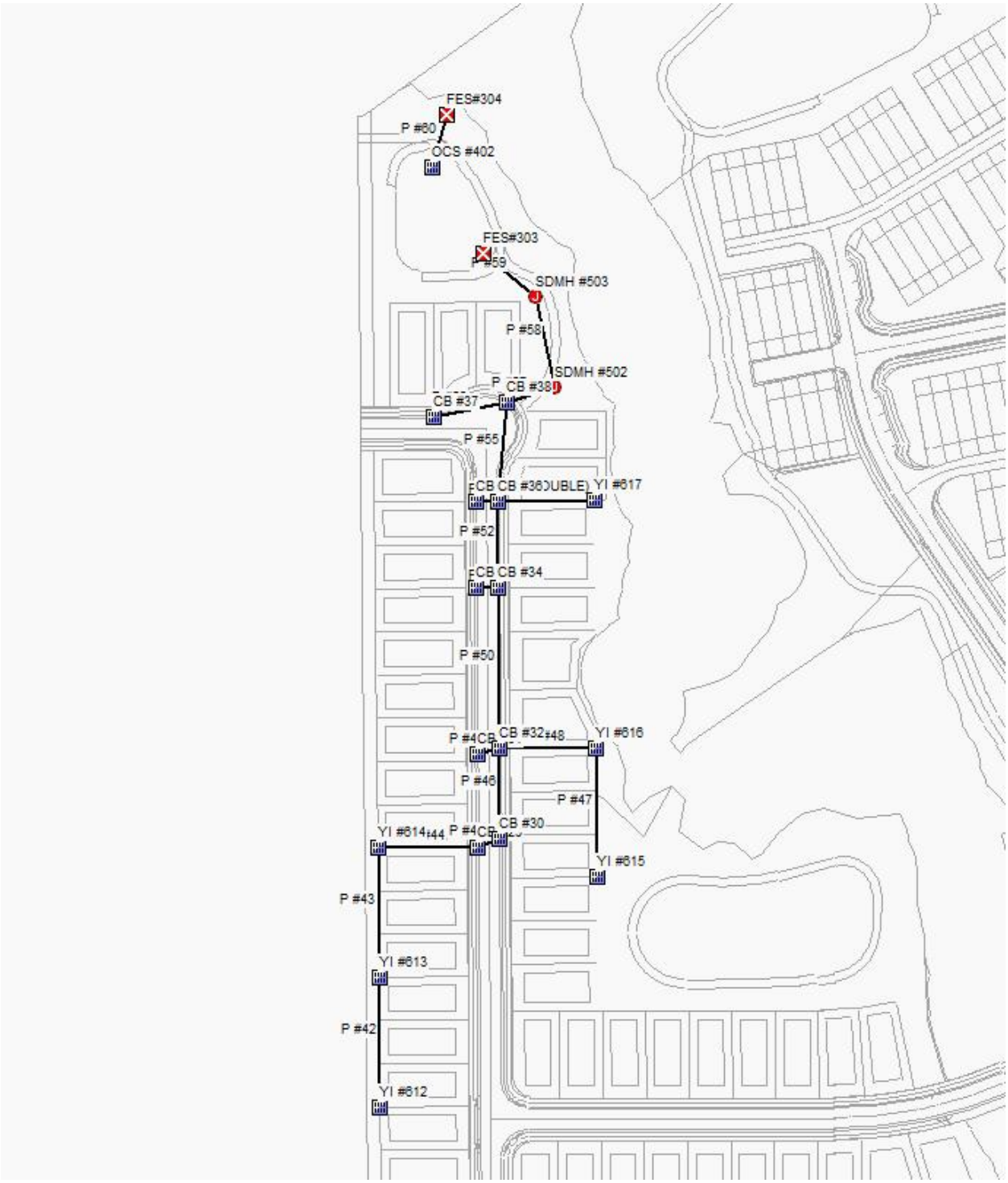


:	DI #213		DI #215		DI #214
RIM (FT):	282.82		278.27		276.65
Invert (ft):	279.45		272.10		272.53
Min Pipe Cover (ft):					
Max HGL (ft):	279.81		272.57		272.77
Link ID:		P #127		P #126	
(FT):		122.71		43.95	
(in):		15.00		15.00	
@ (%):		4.09		0.50	
Up Invert (ft):		279.45		272.53	
Dn Invert (ft):		274.43		272.31	
Max Q (cfs):		2.07		0.32	
Max Vel (ft/s):		7.48		1.94	
Max Depth (ft):		0.35		0.25	

HGL

S T O R M W A T E R AREA " H "

STORMWATER PIPING AND HYDRAULIC GRADE LINE FOR 25-YR STORM



PLAN VIEW

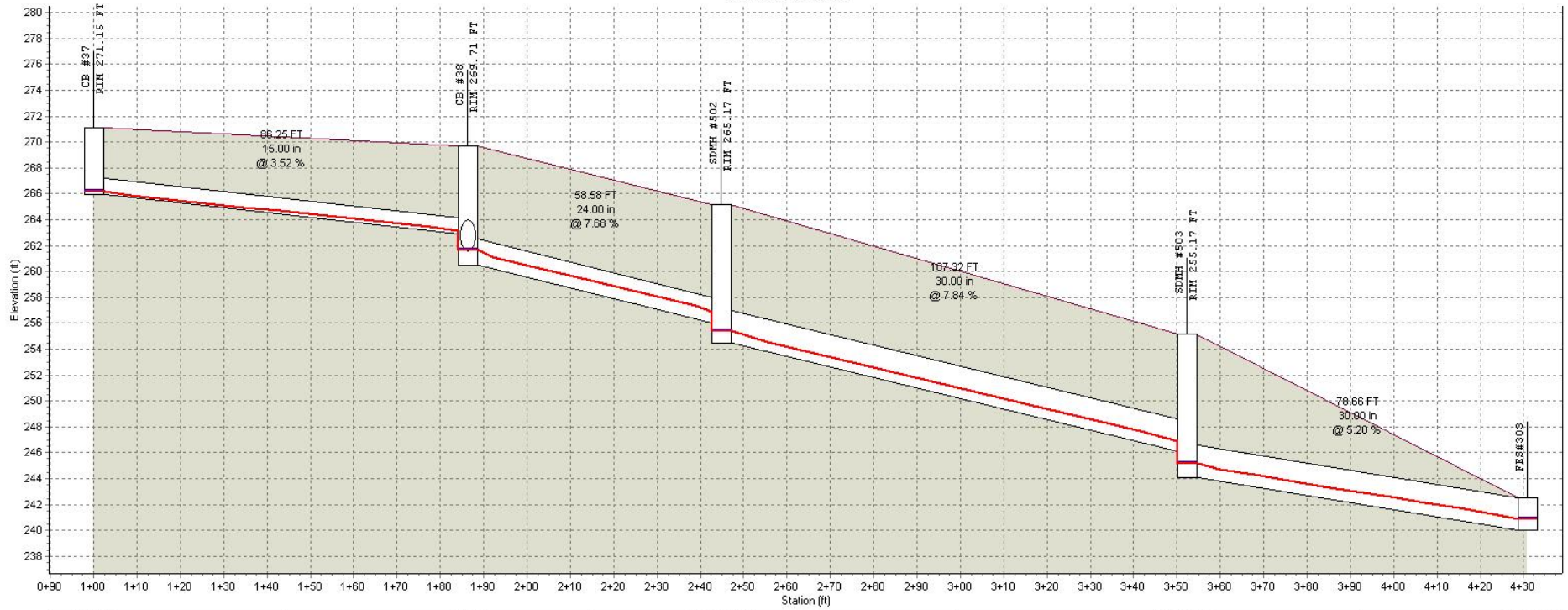
DRAINAGE AREA

SN	Element ID	Area (acres)	Drainage Node ID	Weighted Runoff Coefficient	Accumulated Precipitation (inches)	Total Runoff (inches)	Peak Runoff (cfs)	Rainfall Intensity (inches/hr)	Time of Concentration (days hh:mm:ss)
1	Sub-CB#29	0.64	CB #29	0.5400	0.67	0.36	2.76	7.990	0 00:05:00
2	Sub-CB#30	0.57	CB #30	0.5900	0.67	0.39	2.69	7.990	0 00:05:00
3	Sub-CB#31	0.37	CB #31	0.6400	0.67	0.43	1.89	7.990	0 00:05:00
4	Sub-CB#32	0.18	CB #32	0.5400	0.67	0.36	0.78	7.990	0 00:05:00
5	Sub-CB#33	0.46	CB #33	0.6900	0.67	0.46	2.54	7.990	0 00:05:00
6	Sub-CB#34	0.34	CB #34	0.5400	0.67	0.36	1.47	7.990	0 00:05:00
7	Sub-CB#35(DOUBLE)	0.63	CB #35 (DOUBLE)	0.6900	0.67	0.46	3.47	7.990	0 00:05:00
8	Sub-CB#36	0.39	CB #36	0.5900	0.67	0.39	1.84	7.990	0 00:05:00
9	Sub-CB#37	0.20	CB #37	0.7900	0.67	0.53	1.26	7.990	0 00:05:00
10	Sub-CB#38	0.33	CB #38	0.7900	0.67	0.53	2.08	7.990	0 00:05:00
11	Sub-YI#612	0.18	YI #612	0.5400	0.67	0.36	0.78	7.990	0 00:05:00
12	Sub-YI#613	0.22	YI #613	0.5900	0.67	0.39	1.04	7.990	0 00:05:00
13	Sub-YI#614	0.25	YI #614	0.5400	0.67	0.36	1.08	7.990	0 00:05:00
14	Sub-YI#615	0.09	YI #615	0.5400	0.67	0.36	0.39	7.990	0 00:05:00
15	Sub-YI#616	0.27	YI #616	0.5900	0.67	0.39	1.27	7.990	0 00:05:00
16	Sub-YI#617	0.40	YI #617	0.5900	0.67	0.39	1.89	7.990	0 00:05:00

MODEL INPUT										MODEL OUTPUT									
SN	Element ID	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Pipe Diameter or Height (inches)	Manning's Roughness	Peak Flow (cfs)	Time of Peak Flow Occurrence (days hh:mm)	Max Flow Velocity (ft/sec)	Travel Time (min)	Design Flow Capacity (cfs)	Max Flow / Design Flow Ratio	Max Flow Depth / Total Depth Ratio	Total Time Surcharged (min)	Max Flow Depth (ft)	Reported Condition
1	P #42	YI #612	YI #613	150.00	275.39	273.75	1.1000	15.000	0.0130	0.72	0 00:05	3.51	0.71	6.76	0.11	0.22	0.00	0.28	Calculated
2	P #43	YI #613	YI #614	150.00	273.55	269.38	2.7800	15.000	0.0130	1.69	0 00:05	4.79	0.52	10.77	0.16	0.36	0.00	0.44	Calculated
3	P #44	YI #614	CB #29	115.75	269.18	268.60	0.5000	15.000	0.0130	2.61	0 00:05	3.13	0.62	4.57	0.57	0.65	0.00	0.81	Calculated
4	P #45	CB #29	CB #30	27.68	268.40	268.26	0.5000	18.000	0.0130	4.56	0 00:05	3.92	0.12	7.43	0.61	0.63	0.00	0.94	Calculated
5	P #46	CB #30	CB #32	104.02	268.06	265.55	2.4100	18.000	0.0130	6.53	0 00:05	7.96	0.22	16.32	0.40	0.47	0.00	0.71	Calculated
6	P #47	YI #615	YI #616	150.00	271.06	265.90	3.4400	15.000	0.0130	0.37	0 00:05	3.01	0.83	11.99	0.03	0.18	0.00	0.23	Calculated
7	P #48	YI #616	CB #32	112.15	265.70	265.14	0.5000	15.000	0.0130	1.54	0 00:05	2.23	0.84	4.57	0.34	0.55	0.00	0.69	Calculated
8	P #49	CB #31	CB #32	26.71	266.15	265.55	2.2400	15.000	0.0130	2.24	0 00:05	5.27	0.08	9.67	0.23	0.38	0.00	0.48	Calculated
9	P #50	CB #32	CB #34	186.49	264.94	262.96	1.0600	24.000	0.0130	11.20	0 00:05	5.42	0.57	23.31	0.48	0.63	0.00	1.26	Calculated
10	P #51	CB #33	CB #34	25.78	264.25	264.12	0.5100	15.000	0.0130	2.27	0 00:05	3.33	0.13	4.61	0.49	0.54	0.00	0.68	Calculated
11	P #52	CB #34	CB #36	99.32	262.76	262.26	0.5000	30.000	0.0130	14.06	0 00:06	4.16	0.40	28.96	0.49	0.68	0.00	1.69	Calculated
12	P #53	YI #617	CB #36	112.15	263.77	263.21	0.5000	15.000	0.0130	1.88	0 00:05	3.18	0.59	4.57	0.41	0.53	0.00	0.66	Calculated
13	P #54	CB #35 (DOUBLE)	CB #36	25.71	263.68	263.55	0.5000	15.000	0.0130	3.97	0 00:05	3.95	0.11	4.57	0.87	0.76	0.00	0.95	Calculated
14	P #55	CB #36	CB #38	114.92	262.06	261.49	0.5000	30.000	0.0130	20.80	0 00:06	5.70	0.34	29.00	0.72	0.70	0.00	1.74	Calculated
15	P #56	CB #37	CB #38	86.25	265.92	262.89	3.5200	15.000	0.0130	1.14	0 00:05	5.97	0.24	12.12	0.09	0.21	0.00	0.27	Calculated
16	P #57	CB #38	SDMH #502	58.58	260.50	256.00	7.6800	24.000	0.0130	23.27	0 00:06	14.83	0.07	62.70	0.37	0.50	0.00	1.00	Calculated
17	P #58	SDMH #502	SDMH #503	107.32	254.50	246.09	7.8400	30.000	0.0130	23.28	0 00:06	16.19	0.11	114.82	0.20	0.33	0.00	0.84	Calculated
18	P #59	SDMH #503	FES#303	78.66	244.09	240.00	5.2000	30.000	0.0130	23.29	0 00:06	13.26	0.10	93.55	0.25	0.39	0.00	0.97	Calculated

Profile Plot

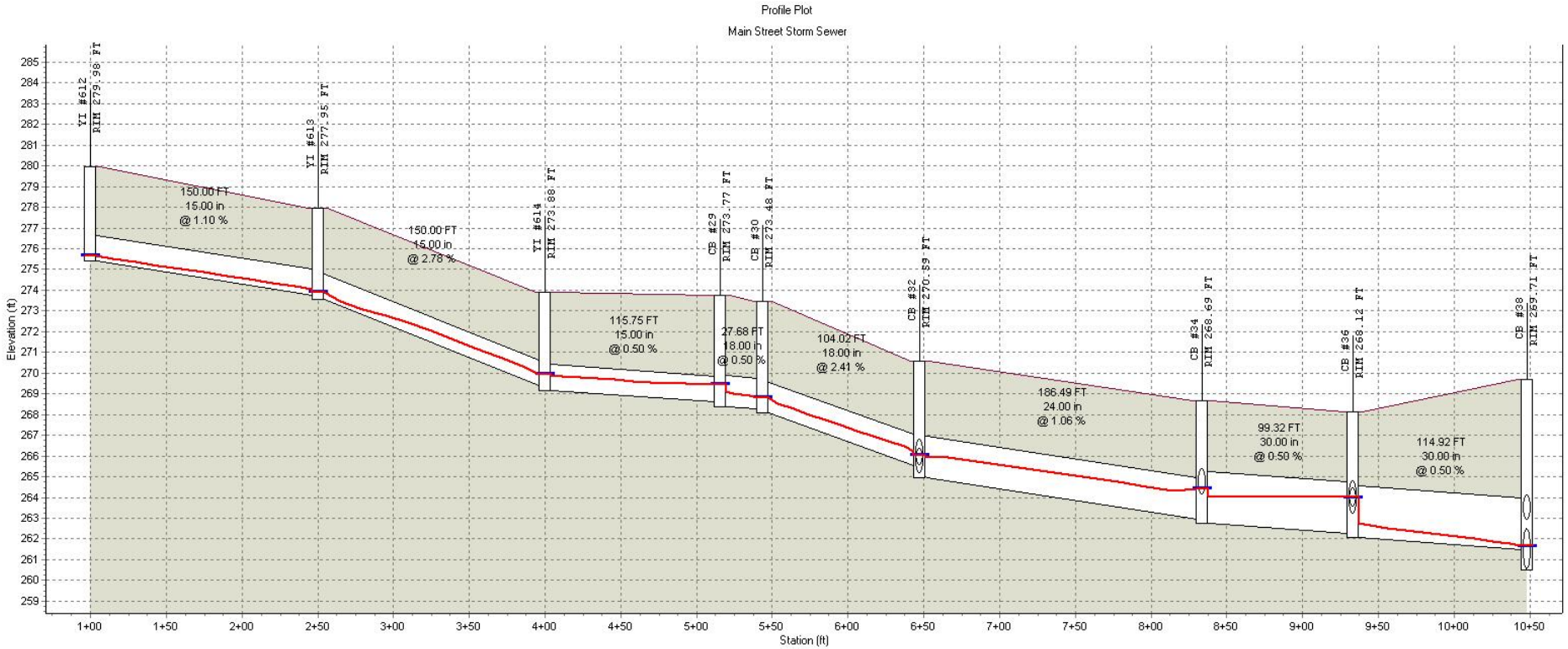
Main Street Storm Sewer



:	CB #37	CB #38	SDMH #502	SDMH #503	FES#303
RIM (FT):	271.15	269.71	265.17	255.17	
Invert (ft):	265.92	260.50	254.50	244.09	240.00
Min Pipe Cover (ft):			7.17	6.58	
Max HGL (ft):	266.20	261.66	255.41	245.18	240.85

Link ID:	P #56	P #57	P #58	P #59
(FT):	86.25	58.58	107.32	78.66
(in):	15.00	24.00	30.00	30.00
@ (%):	3.52	7.68	7.84	5.20
Up Invert (ft):	265.92	260.50	254.50	244.09
Dn Invert (ft):	262.89	256.00	246.09	240.00
Max Q (cfs):	1.14	23.27	23.28	23.29
Max Vel (ft/s):	5.97	14.83	16.19	13.26
Max Depth (ft):	0.27	1.00	0.84	0.97

HGL

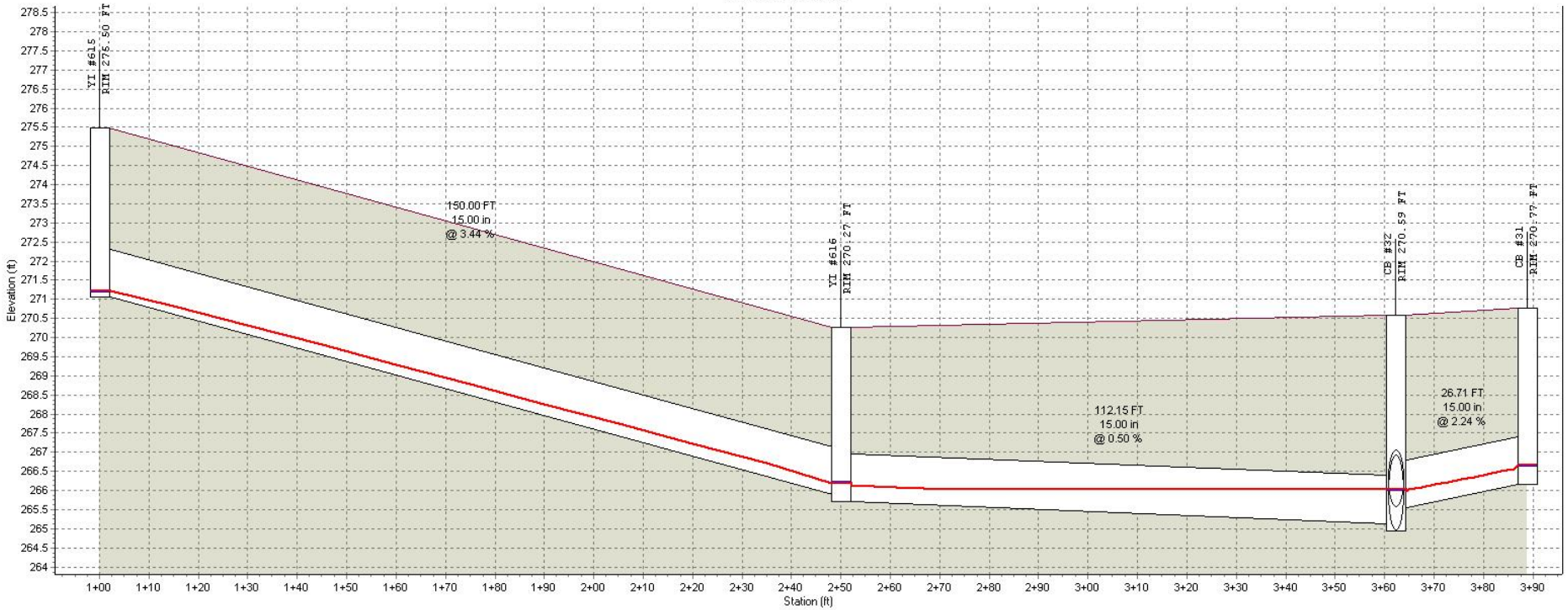


:	YI #612	YI #613	YI #614	CB #29	CB #30	CB #32	CB #34	CB #36	CB #38
RIM (FT):	279.98	277.95	273.88	273.77	273.48	270.59	268.69	268.12	269.71
Invert (ft):	275.39	273.55	269.18	268.40	268.06	264.94	262.76	262.06	260.50
Min Pipe Cover (ft):									
Max HGL (ft):	275.68	273.89	269.93	269.46	268.82	266.02	264.41	264.00	261.66

Link ID:	P #42	P #43	P #44	P #45	P #46	P #50	P #52	P #55
(FT):	150.00	150.00	115.75	27.68	104.02	186.49	99.32	114.92
(in):	15.00	15.00	15.00	18.00	18.00	24.00	30.00	30.00
@ (%):	1.10	2.78	0.50	0.50	2.41	1.06	0.50	0.50
Up Invert (ft):	275.39	273.55	269.18	268.40	268.06	264.94	262.76	262.06
Dn Invert (ft):	273.75	269.38	268.60	268.26	265.55	262.96	262.26	261.49
Max Q (cfs):	0.72	1.69	2.61	4.56	6.53	11.20	14.06	20.80
Max Vel (ft/s):	3.51	4.79	3.13	3.92	7.96	5.42	4.16	5.70
Max Depth (ft):	0.28	0.44	0.81	0.94	0.71	1.26	1.69	1.74

Profile Plot

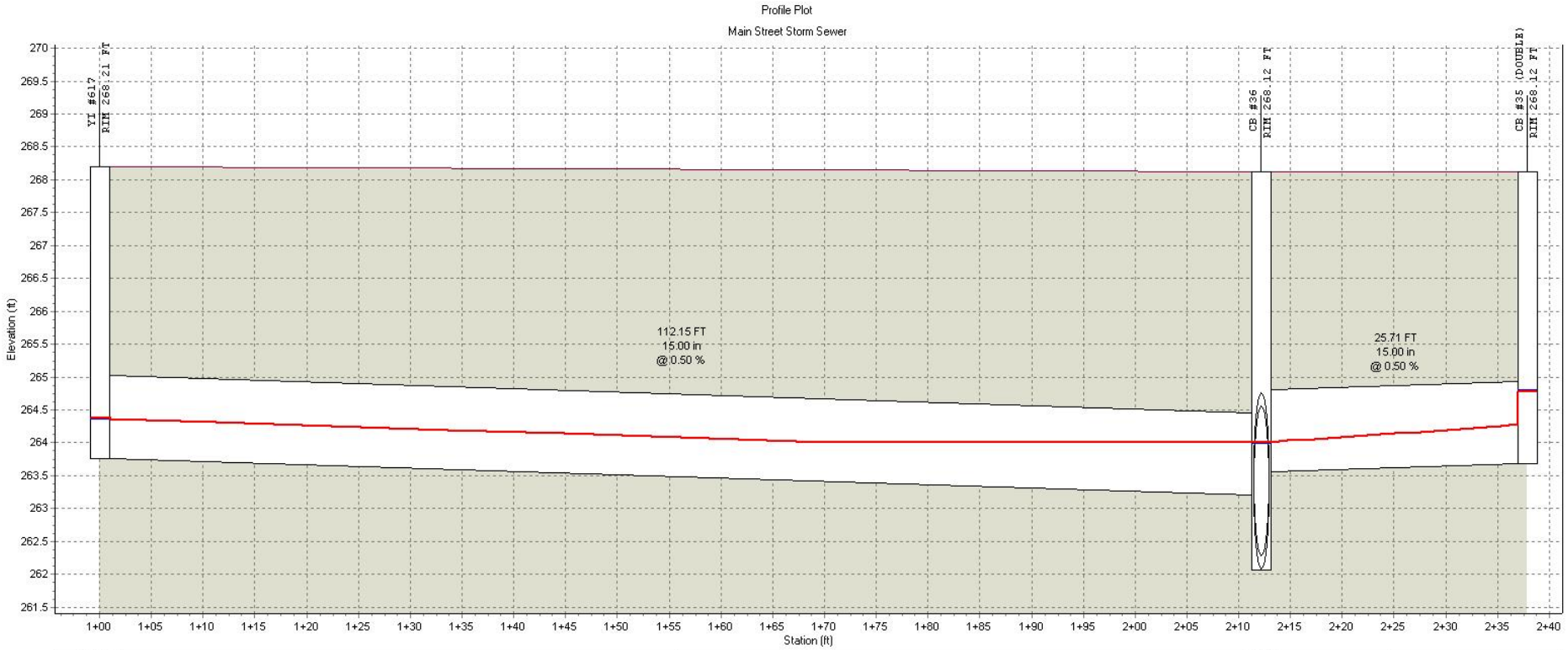
Main Street Storm Sewer



:	YI #615	YI #616	CB #32	CB #31
RIM (FT):	275.50	270.27	270.59	270.77
Invert (ft):	271.06	265.70	264.94	266.15
Min Pipe Cover (ft):				
Max HGL (ft):	271.21	266.20	266.02	266.66

Link ID:	P #47	P #48	P #49
(FT):	150.00	112.15	26.71
(in):	15.00	15.00	15.00
@ (%):	3.44	0.50	2.24
Up Invert (ft):	271.06	265.70	266.15
Dn Invert (ft):	265.90	265.14	265.55
Max Q (cfs):	0.37	1.54	2.24
Max Vel (ft/s):	3.01	2.23	5.27
Max Depth (ft):	0.23	0.69	0.48

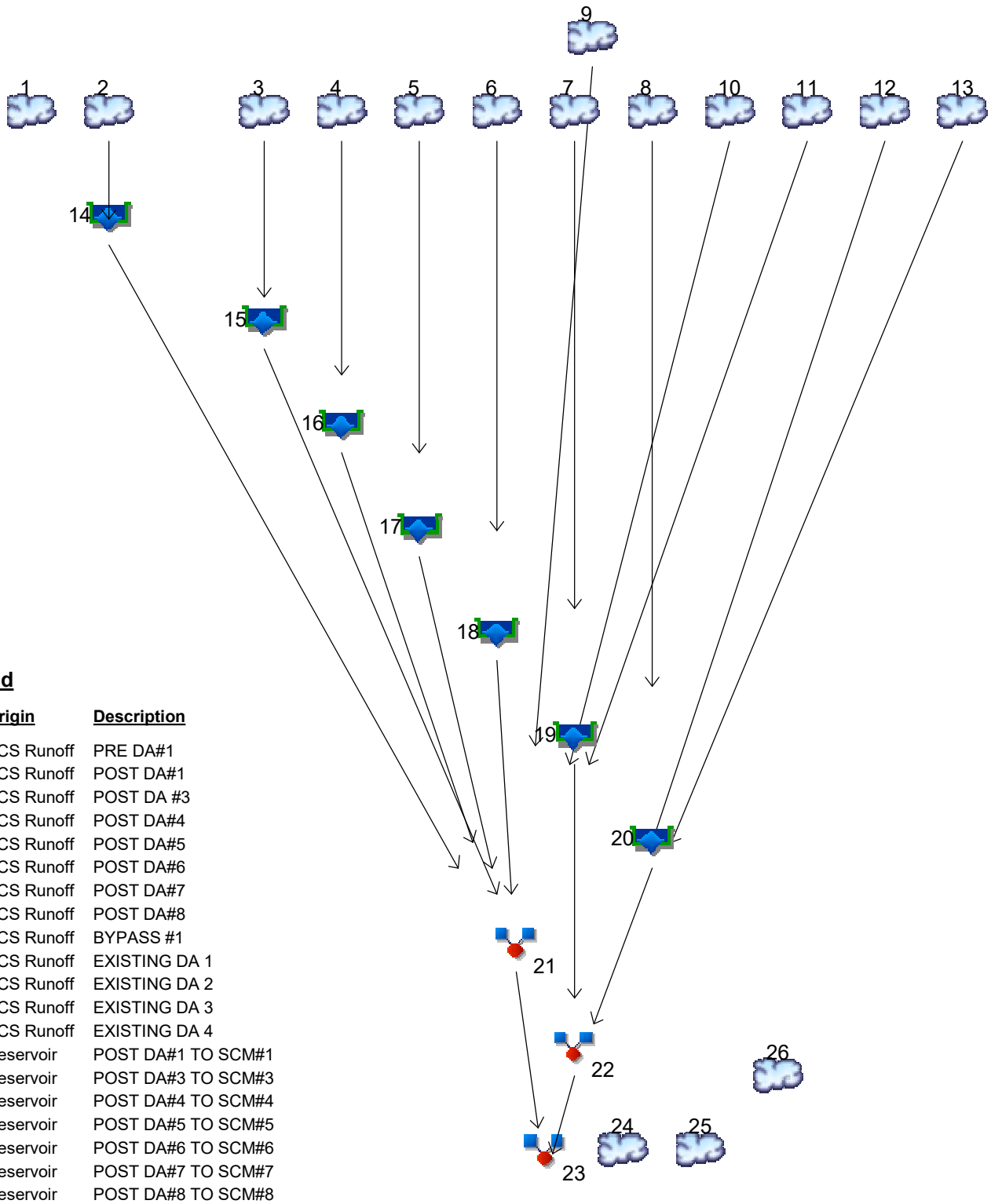
HGL



	YI #617		CB #36	
RIM (FT):	268.21		268.12	268.12
Invert (ft):	263.77		262.06	263.68
Min Pipe Cover (ft):				
Max HGL (ft):	264.37		264.00	264.79
Link ID:		P #53	P #54	
(FT):		112.15	25.71	
(in):		15.00	15.00	
@ (%):		0.50	0.50	
Up Invert (ft):		263.77	263.68	
Dn Invert (ft):		263.21	263.55	
Max Q (cfs):		1.88	3.97	
Max Vel (ft/s):		3.18	3.95	
Max Depth (ft):		0.66	0.95	

5. APPENDIX A: Hydrograph Report

Watershed Model Schematic



Legend

Hyd.	Origin	Description
1	SCS Runoff	PRE DA#1
2	SCS Runoff	POST DA#1
3	SCS Runoff	POST DA #3
4	SCS Runoff	POST DA#4
5	SCS Runoff	POST DA#5
6	SCS Runoff	POST DA#6
7	SCS Runoff	POST DA#7
8	SCS Runoff	POST DA#8
9	SCS Runoff	BYPASS #1
10	SCS Runoff	EXISTING DA 1
11	SCS Runoff	EXISTING DA 2
12	SCS Runoff	EXISTING DA 3
13	SCS Runoff	EXISTING DA 4
14	Reservoir	POST DA#1 TO SCM#1
15	Reservoir	POST DA#3 TO SCM#3
16	Reservoir	POST DA#4 TO SCM#4
17	Reservoir	POST DA#5 TO SCM#5
18	Reservoir	POST DA#6 TO SCM#6
19	Reservoir	POST DA#7 TO SCM#7
20	Reservoir	POST DA#8 TO SCM#8
21	Combine	UPSTREAM AOI#1
22	Combine	DOWNSTREAM AOI#2
23	Combine	POI
24	SCS Runoff	CULVERT DA#1
25	SCS Runoff	CULVERT DA #2
26	SCS Runoff	CULVERT DA#3

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	------	312.38	483.47	-------	-------	1017.83	1371.63	-------	1972.73	PRE DA#1
2	SCS Runoff	------	26.28	34.74	-------	-------	58.44	72.97	-------	96.59	POST DA#1
3	SCS Runoff	------	52.59	67.91	-------	-------	110.16	135.87	-------	177.57	POST DA #3
4	SCS Runoff	------	26.20	33.50	-------	-------	53.52	65.68	-------	85.37	POST DA#4
5	SCS Runoff	------	10.41	13.64	-------	-------	22.64	28.14	-------	37.07	POST DA#5
6	SCS Runoff	------	30.18	39.74	-------	-------	66.45	82.82	-------	109.42	POST DA#6
7	SCS Runoff	------	44.23	56.55	-------	-------	90.35	110.86	-------	144.11	POST DA#7
8	SCS Runoff	------	17.19	22.38	-------	-------	36.78	45.57	-------	59.82	POST DA#8
9	SCS Runoff	------	7.210	9.220	-------	-------	14.73	18.07	-------	23.49	BYPASS #1
10	SCS Runoff	------	19.65	29.71	-------	-------	61.50	82.46	-------	117.82	EXISTING DA 1
11	SCS Runoff	------	240.44	371.41	-------	-------	779.97	1050.21	-------	1510.69	EXISTING DA 2
12	SCS Runoff	------	22.57	34.34	-------	-------	71.27	95.77	-------	137.16	EXISTING DA 3
13	SCS Runoff	------	1.438	2.203	-------	-------	4.592	6.183	-------	8.874	EXISTING DA 4
14	Reservoir	2	1.216	2.061	-------	-------	3.574	14.48	-------	36.12	POST DA#1 TO SCM#1
15	Reservoir	3	5.665	11.92	-------	-------	45.35	64.20	-------	146.94	POST DA#3 TO SCM#3
16	Reservoir	4	1.163	2.564	-------	-------	5.124	15.72	-------	52.19	POST DA#4 TO SCM#4
17	Reservoir	5	1.962	4.732	-------	-------	10.13	16.41	-------	24.41	POST DA#5 TO SCM#5
18	Reservoir	6	3.916	8.062	-------	-------	12.72	16.11	-------	57.31	POST DA#6 TO SCM#6
19	Reservoir	7	4.464	8.642	-------	-------	18.29	30.19	-------	63.71	POST DA#7 TO SCM#7
20	Reservoir	8	3.532	10.86	-------	-------	31.67	34.49	-------	50.78	POST DA#8 TO SCM#8
21	Combine	9, 10, 11, 16, 17, 18,	253.29	394.52	-------	-------	825.06	1115.92	-------	1626.22	UPSTREAM AOI#1
22	Combine	12, 13, 14, 15, 19, 20,	36.04	68.78	-------	-------	170.06	243.99	-------	437.61	DOWNSTREAM AOI#2
23	Combine	21, 22	280.46	442.83	-------	-------	925.47	1275.76	-------	1850.31	POI
24	SCS Runoff	------	214.51	330.70	-------	-------	692.74	932.87	-------	1341.90	CULVERT DA#1
25	SCS Runoff	------	7.507	11.23	-------	-------	22.66	30.30	-------	43.15	CULVERT DA #2
26	SCS Runoff	------	2.252	3.336	-------	-------	6.637	8.850	-------	12.57	CULVERT DA#3

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

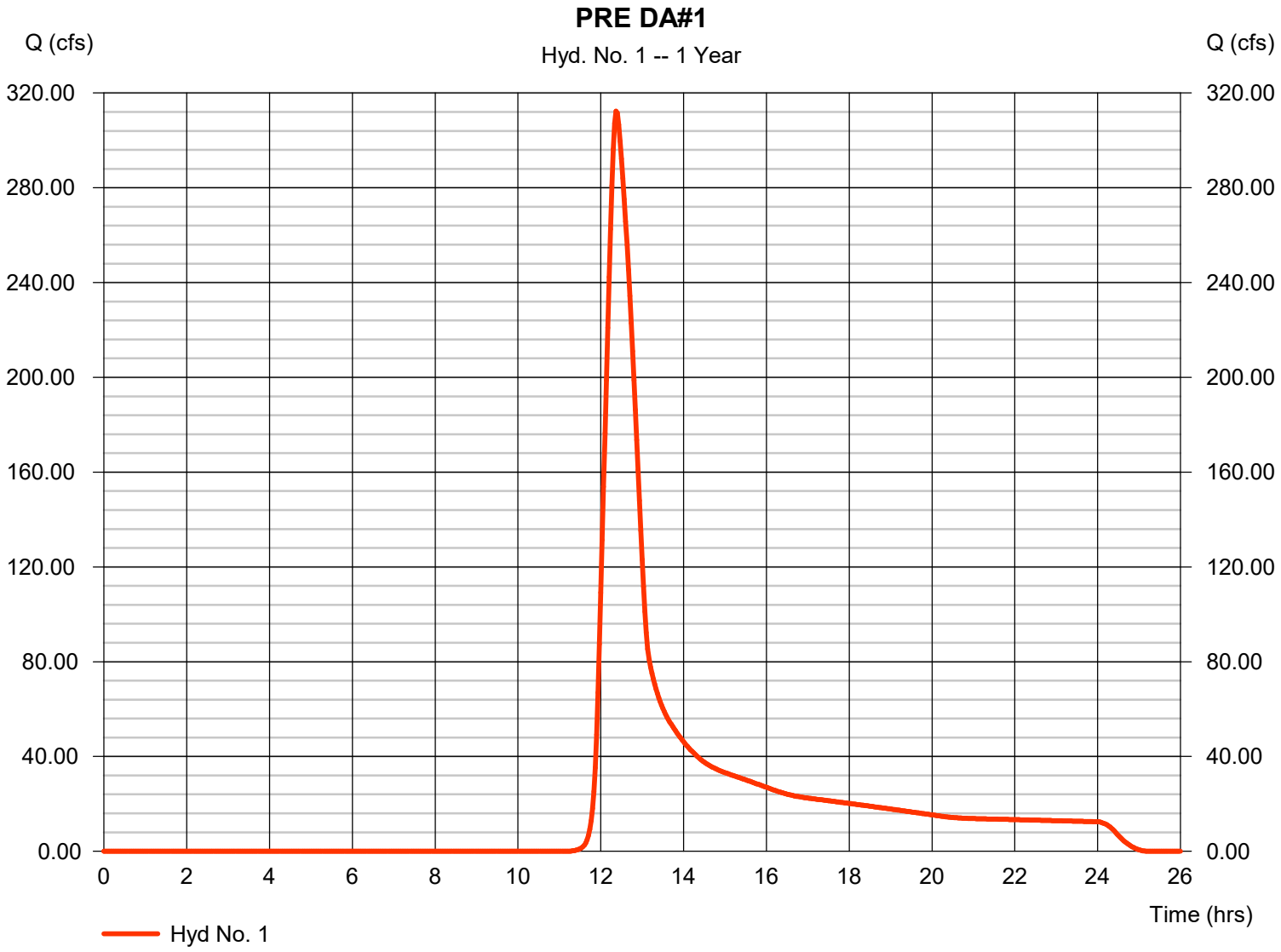
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	312.38	2	742	1,868,306	------	------	------	PRE DA#1
2	SCS Runoff	26.28	2	716	53,223	------	------	------	POST DA#1
3	SCS Runoff	52.59	2	718	121,448	------	------	------	POST DA #3
4	SCS Runoff	26.20	2	716	54,031	------	------	------	POST DA#4
5	SCS Runoff	10.41	2	716	21,141	------	------	------	POST DA#5
6	SCS Runoff	30.18	2	722	84,630	------	------	------	POST DA#6
7	SCS Runoff	44.23	2	716	91,205	------	------	------	POST DA#7
8	SCS Runoff	17.19	2	718	39,539	------	------	------	POST DA#8
9	SCS Runoff	7.210	2	716	14,870	------	------	------	BYPASS #1
10	SCS Runoff	19.65	2	724	58,573	------	------	------	EXISTING DA 1
11	SCS Runoff	240.44	2	738	1,294,015	------	------	------	EXISTING DA 2
12	SCS Runoff	22.57	2	726	75,916	------	------	------	EXISTING DA 3
13	SCS Runoff	1.438	2	730	5,758	------	------	------	EXISTING DA 4
14	Reservoir	1.216	2	794	49,607	2	263.68	30,975	POST DA#1 TO SCM#1
15	Reservoir	5.665	2	746	115,126	3	242.73	65,281	POST DA#3 TO SCM#3
16	Reservoir	1.163	2	790	50,705	4	242.20	33,183	POST DA#4 TO SCM#4
17	Reservoir	1.962	2	726	20,763	5	250.72	10,149	POST DA#5 TO SCM#5
18	Reservoir	3.916	2	752	82,662	6	239.31	44,326	POST DA#6 TO SCM#6
19	Reservoir	4.464	2	742	88,550	7	241.41	49,162	POST DA#7 TO SCM#7
20	Reservoir	3.532	2	730	38,442	8	242.33	19,336	POST DA#8 TO SCM#8
21	Combine	253.29	2	738	1,521,586	9, 10, 11, 16, 17, 18,	------	------	UPSTREAM AOI#1
22	Combine	36.04	2	728	373,400	12, 13, 14, 15, 19, 20,	------	------	DOWNSTREAM AOI#2
23	Combine	280.46	2	738	1,894,987	21, 22	------	------	POI
24	SCS Runoff	214.51	2	736	1,074,329	------	------	------	CULVERT DA#1
25	SCS Runoff	7.507	2	720	17,578	------	------	------	CULVERT DA #2
26	SCS Runoff	2.252	2	718	4,541	------	------	------	CULVERT DA#3

Hydrograph Report

Hyd. No. 1

PRE DA#1

Hydrograph type	=	SCS Runoff	Peak discharge	=	312.38 cfs
Storm frequency	=	1 yrs	Time to peak	=	12.37 hrs
Time interval	=	2 min	Hyd. volume	=	1,868,306 cuft
Drainage area	=	618.810 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	47.00 min
Total precip.	=	2.89 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

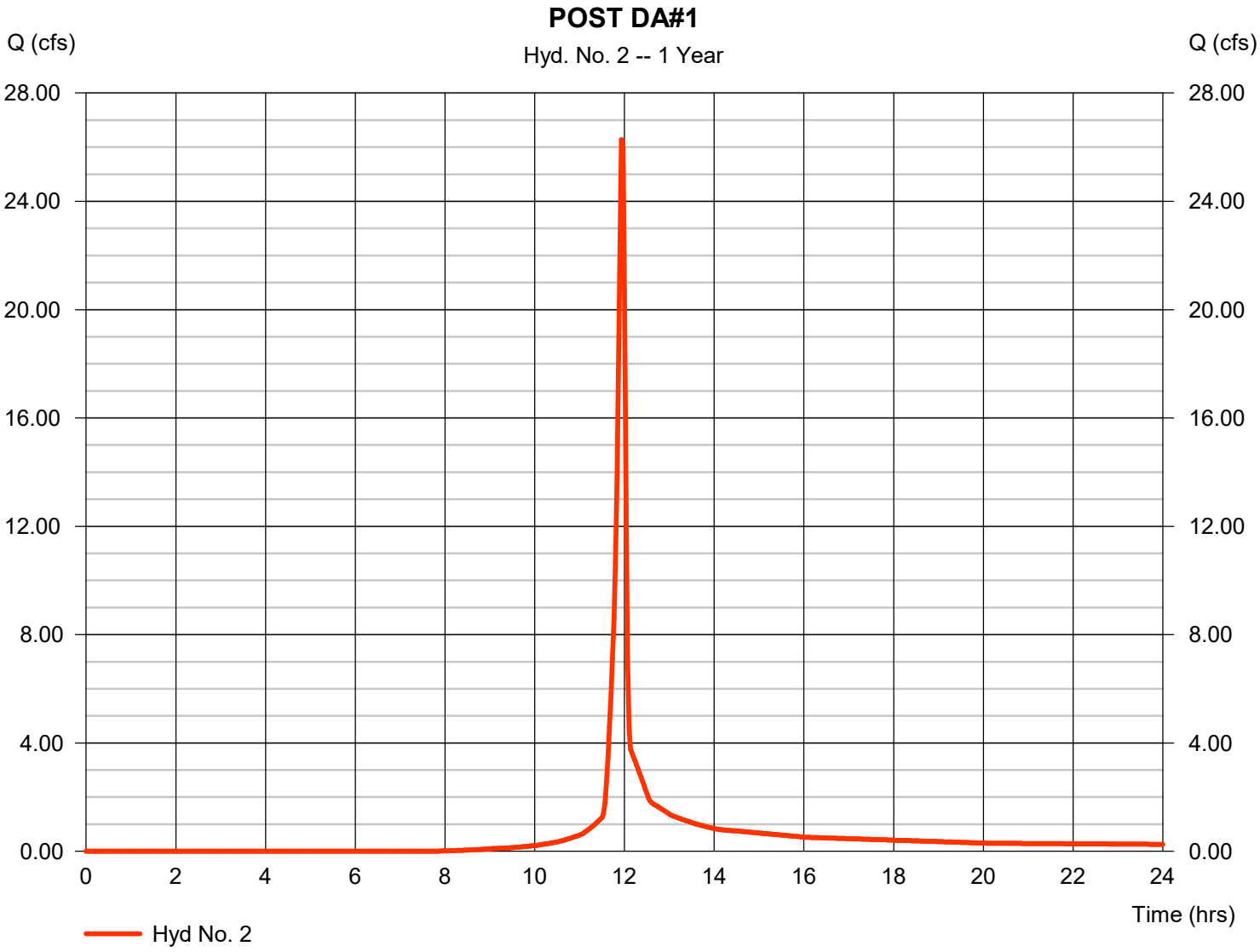


Hydrograph Report

Hyd. No. 2

POST DA#1

Hydrograph type	=	SCS Runoff	Peak discharge	=	26.28 cfs
Storm frequency	=	1 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	53,223 cuft
Drainage area	=	9.970 ac	Curve number	=	86
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.50 min
Total precip.	=	2.89 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

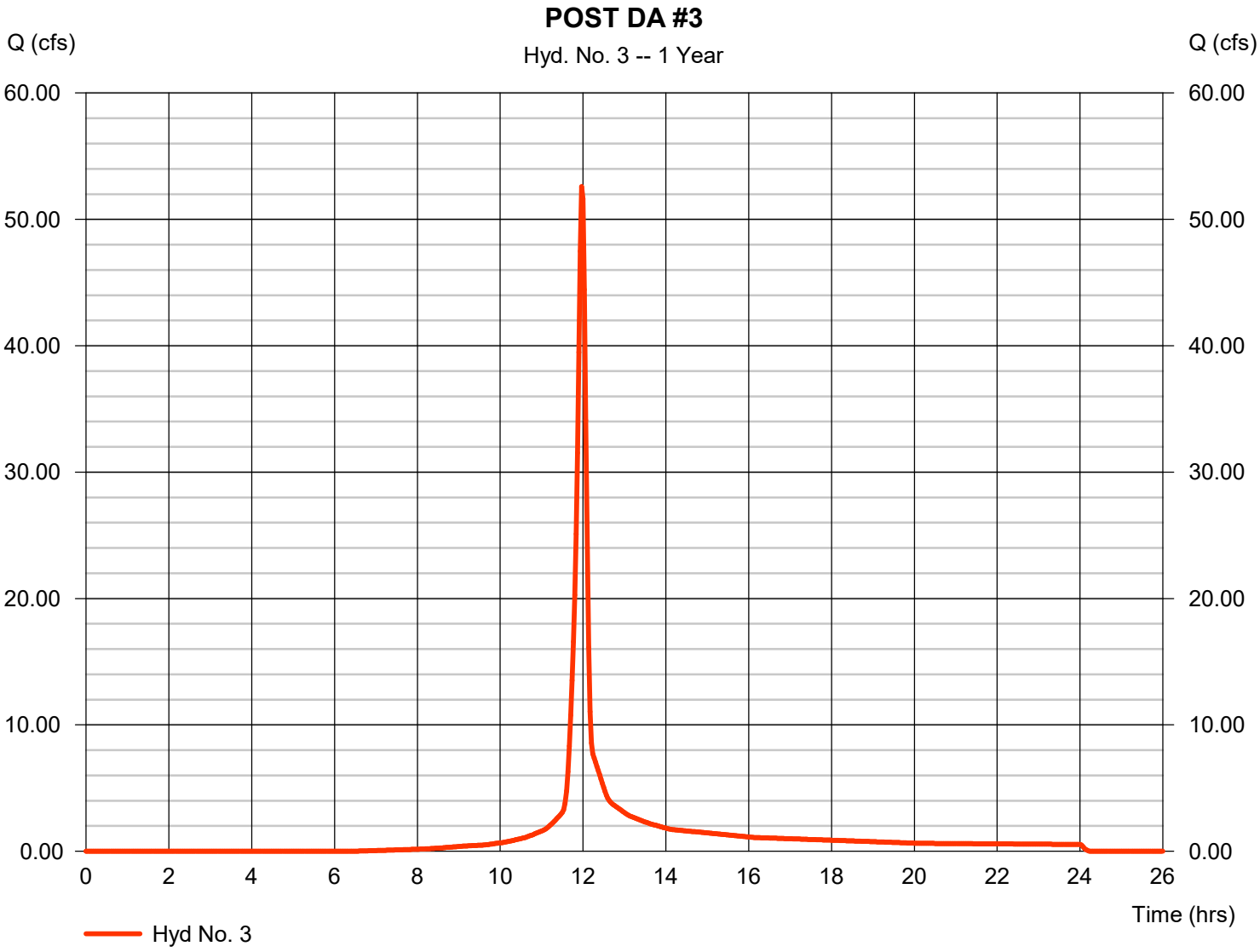


Hydrograph Report

Hyd. No. 3

POST DA #3

Hydrograph type	=	SCS Runoff	Peak discharge	=	52.59 cfs
Storm frequency	=	1 yrs	Time to peak	=	11.97 hrs
Time interval	=	2 min	Hyd. volume	=	121,448 cuft
Drainage area	=	18.580 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	7.40 min
Total precip.	=	2.89 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

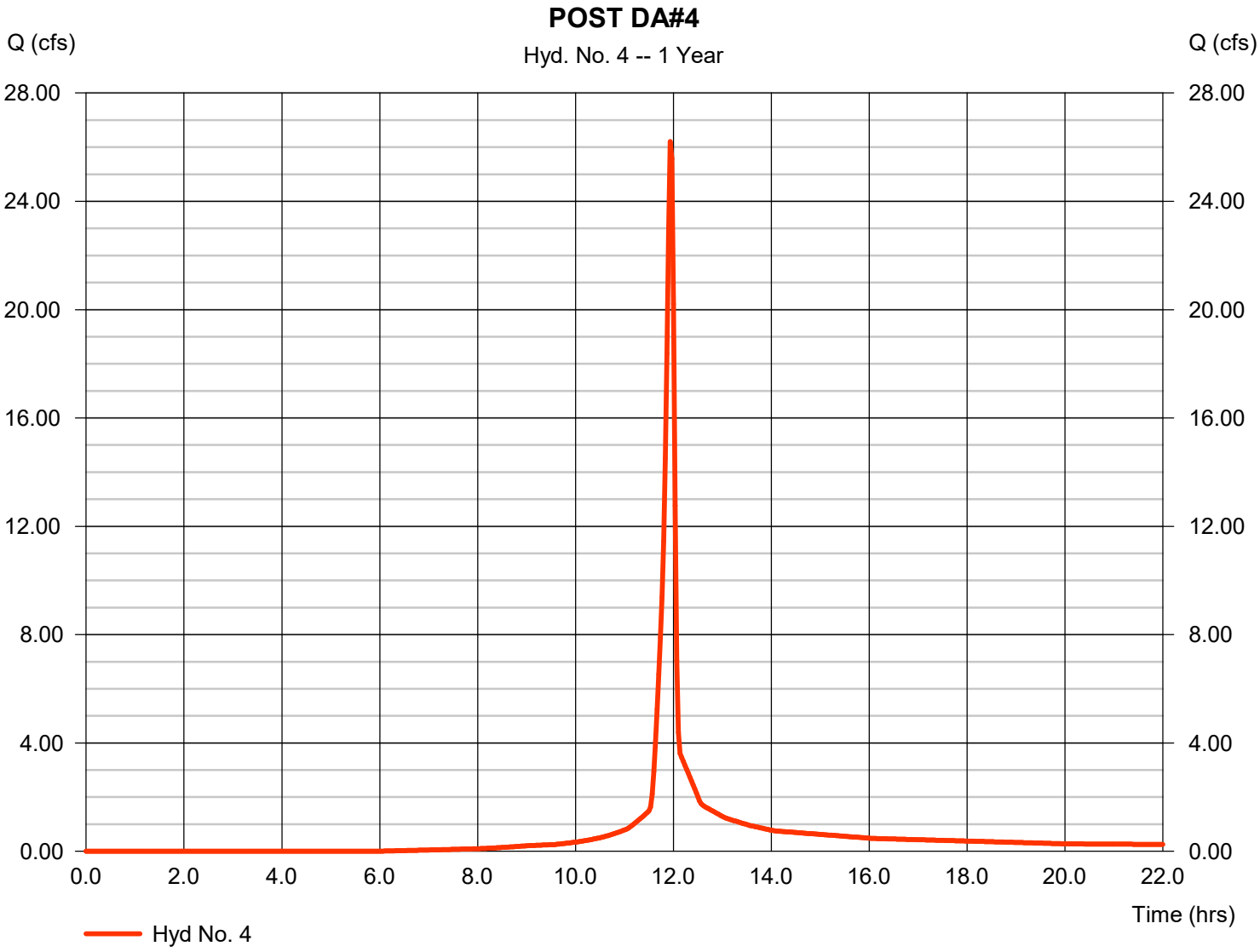


Hydrograph Report

Hyd. No. 4

POST DA#4

Hydrograph type	=	SCS Runoff	Peak discharge	=	26.20 cfs
Storm frequency	=	1 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	54,031 cuft
Drainage area	=	8.430 ac	Curve number	=	90
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.30 min
Total precip.	=	2.89 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

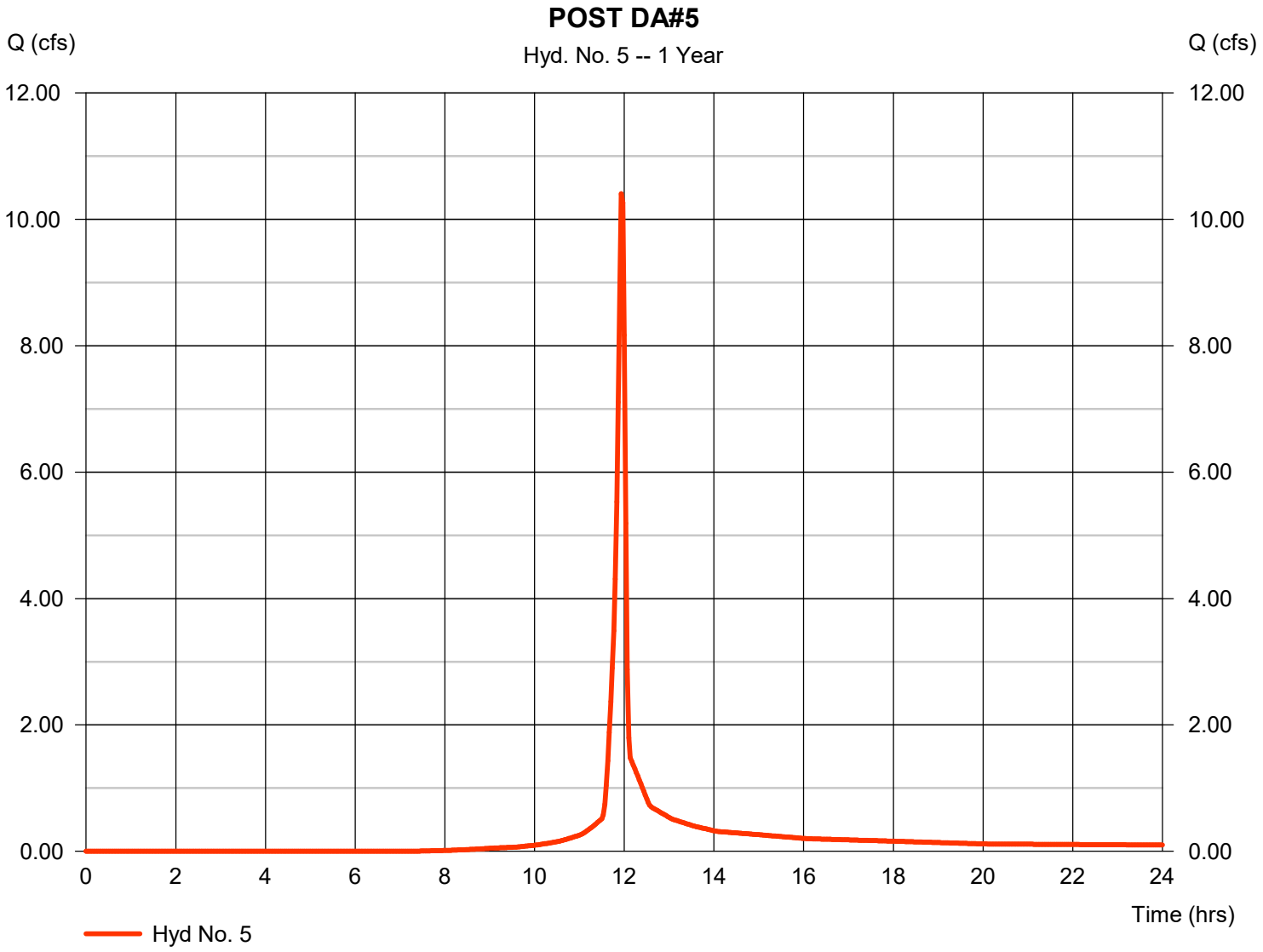


Hydrograph Report

Hyd. No. 5

POST DA#5

Hydrograph type	=	SCS Runoff	Peak discharge	=	10.41 cfs
Storm frequency	=	1 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	21,141 cuft
Drainage area	=	3.780 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	2.89 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

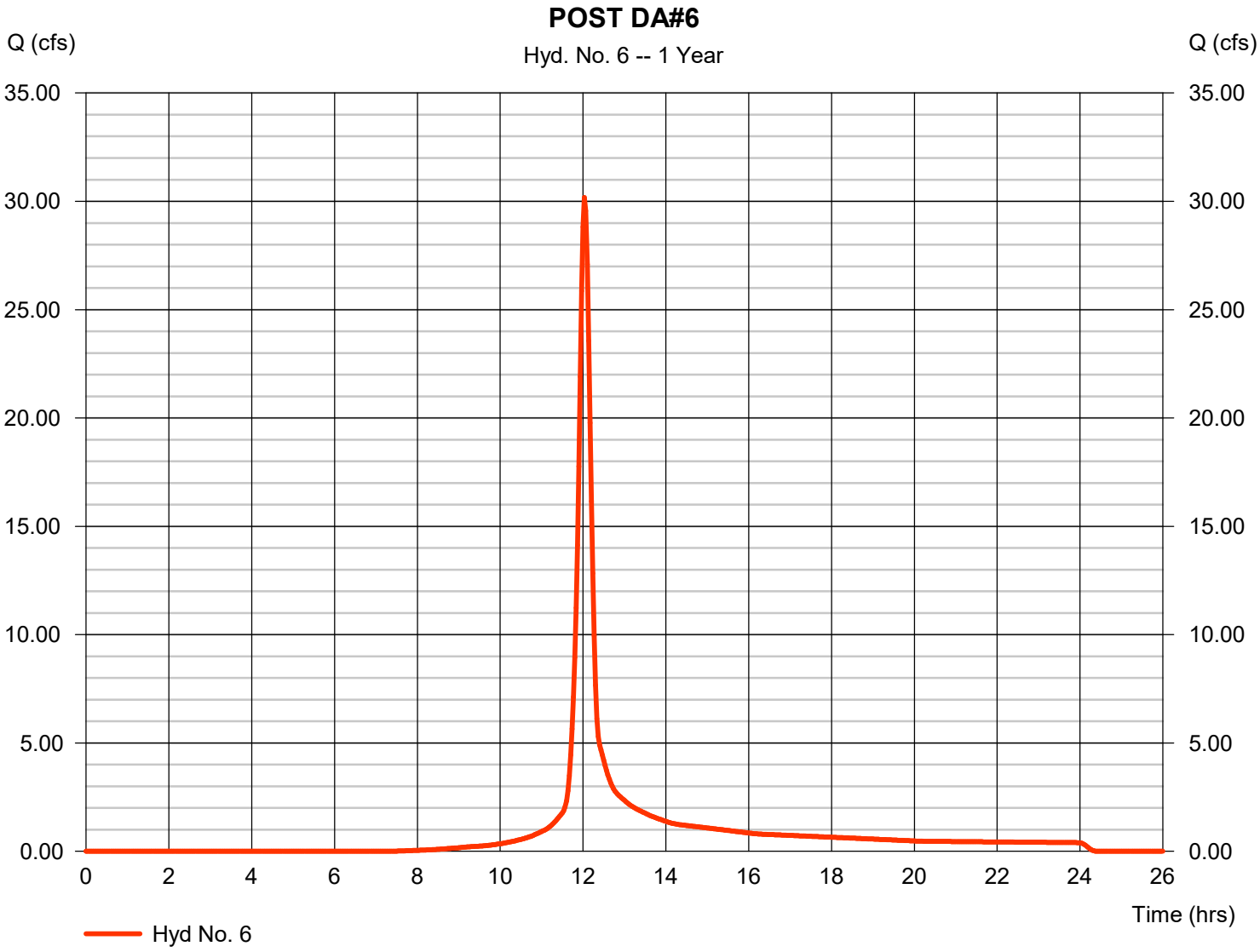


Hydrograph Report

Hyd. No. 6

POST DA#6

Hydrograph type	= SCS Runoff	Peak discharge	= 30.18 cfs
Storm frequency	= 1 yrs	Time to peak	= 12.03 hrs
Time interval	= 2 min	Hyd. volume	= 84,630 cuft
Drainage area	= 14.550 ac	Curve number	= 87
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 14.80 min
Total precip.	= 2.89 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

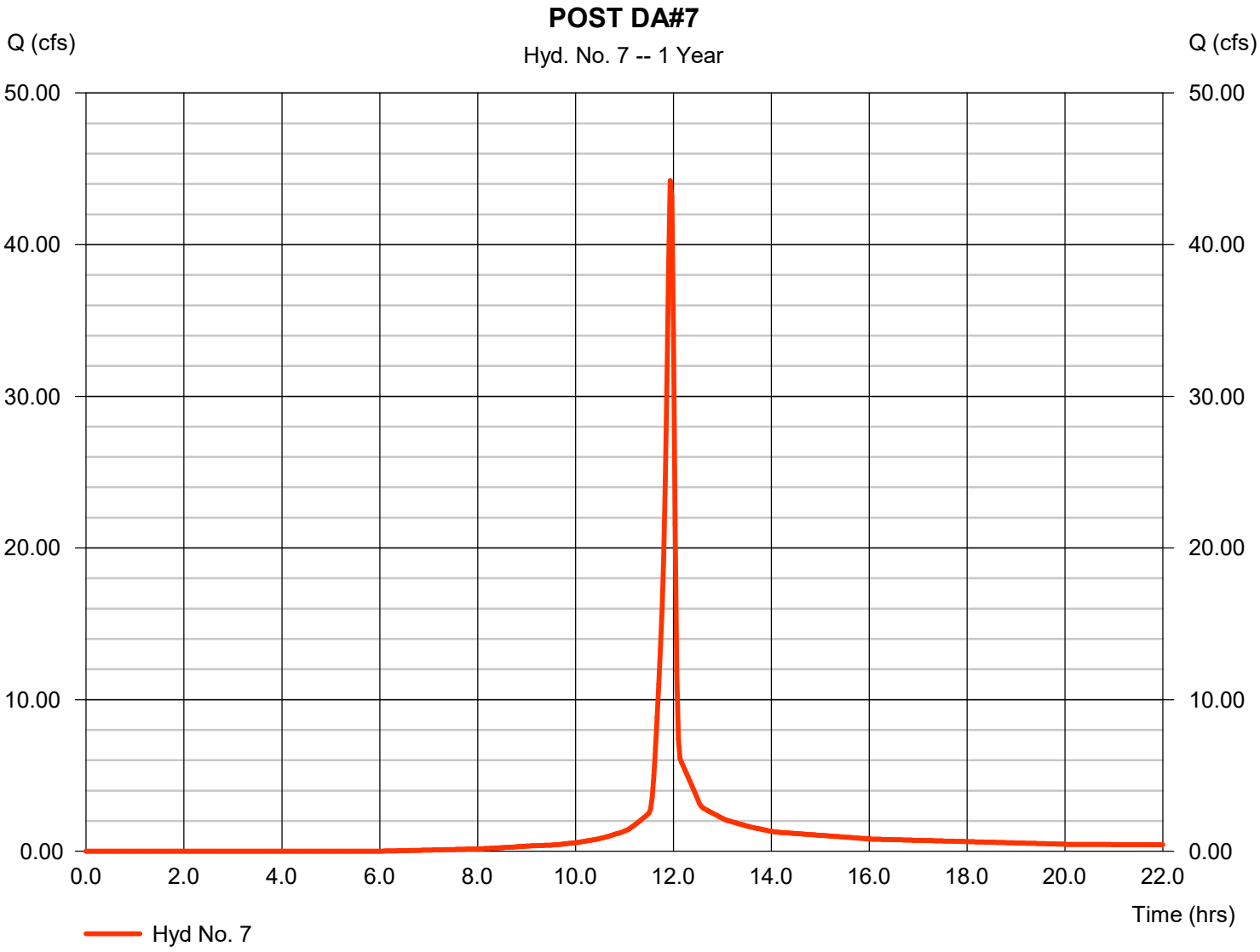


Hydrograph Report

Hyd. No. 7

POST DA#7

Hydrograph type	=	SCS Runoff	Peak discharge	=	44.23 cfs
Storm frequency	=	1 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	91,205 cuft
Drainage area	=	14.230 ac	Curve number	=	90
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.20 min
Total precip.	=	2.89 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

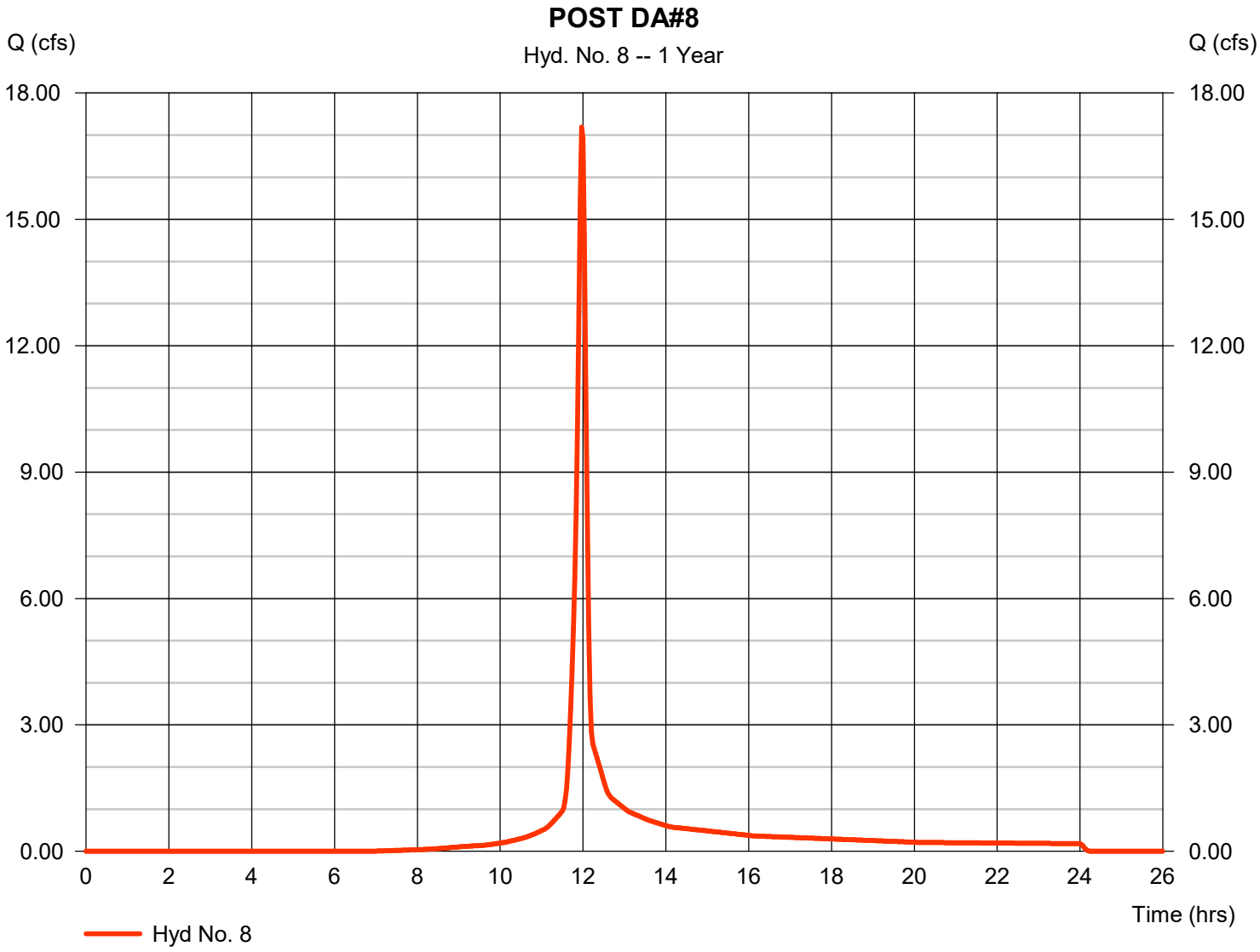


Hydrograph Report

Hyd. No. 8

POST DA#8

Hydrograph type	=	SCS Runoff	Peak discharge	=	17.19 cfs
Storm frequency	=	1 yrs	Time to peak	=	11.97 hrs
Time interval	=	2 min	Hyd. volume	=	39,539 cuft
Drainage area	=	6.330 ac	Curve number	=	88
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.80 min
Total precip.	=	2.89 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

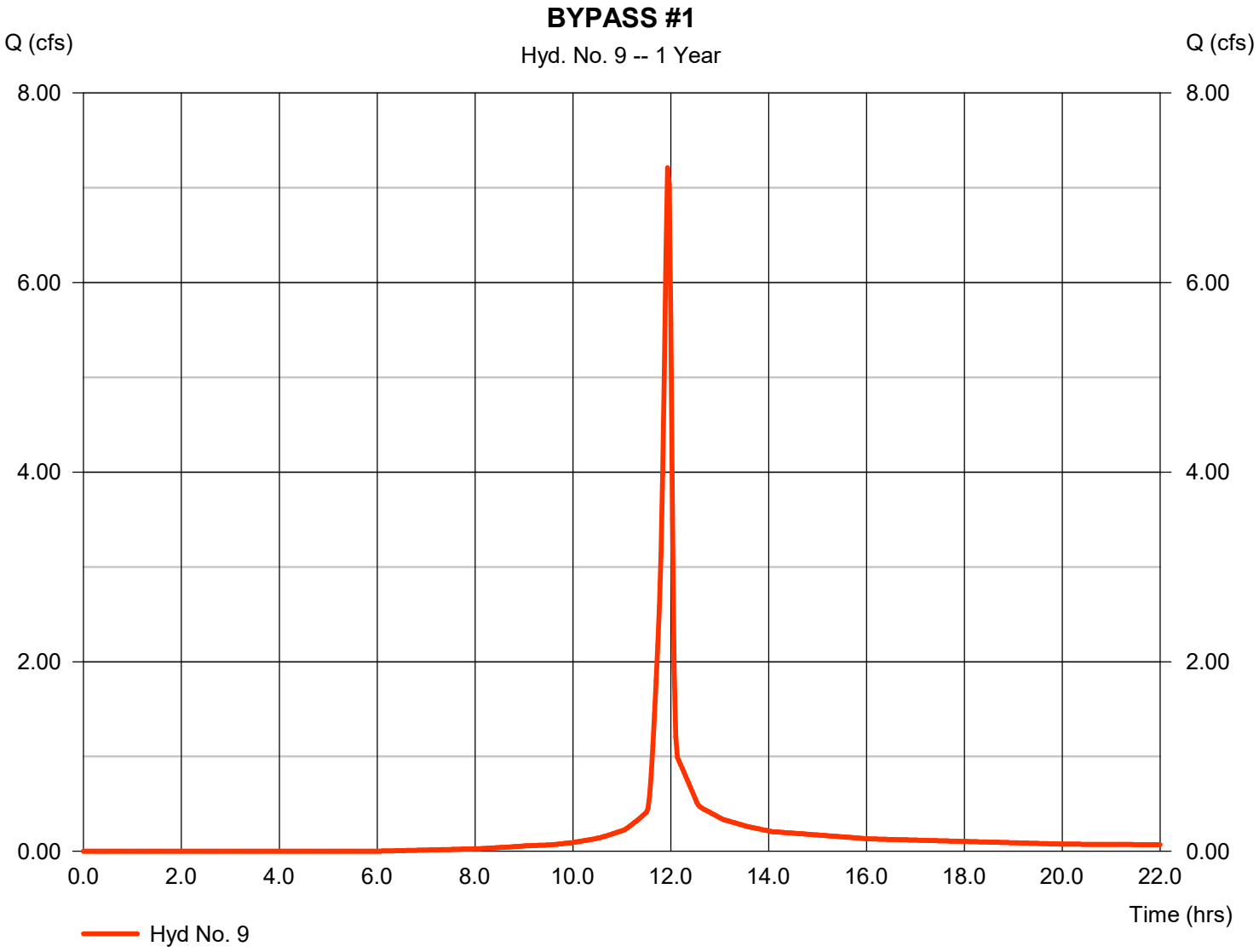


Hydrograph Report

Hyd. No. 9

BYPASS #1

Hydrograph type	=	SCS Runoff	Peak discharge	=	7.210 cfs
Storm frequency	=	1 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	14,870 cuft
Drainage area	=	2.320 ac	Curve number	=	90
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	2.89 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

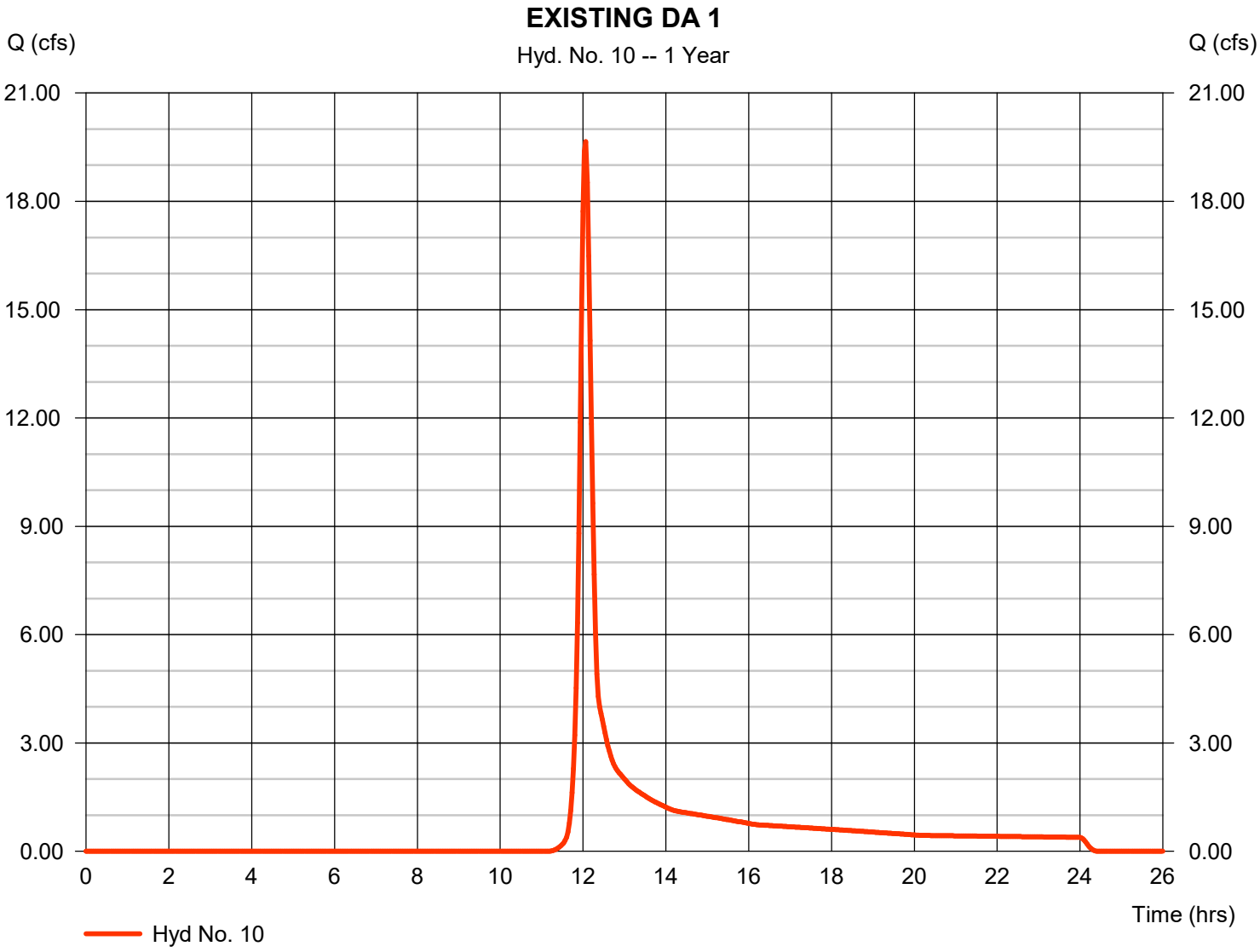


Hydrograph Report

Hyd. No. 10

EXISTING DA 1

Hydrograph type	=	SCS Runoff	Peak discharge	=	19.65 cfs
Storm frequency	=	1 yrs	Time to peak	=	12.07 hrs
Time interval	=	2 min	Hyd. volume	=	58,573 cuft
Drainage area	=	19.720 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	14.00 min
Total precip.	=	2.89 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

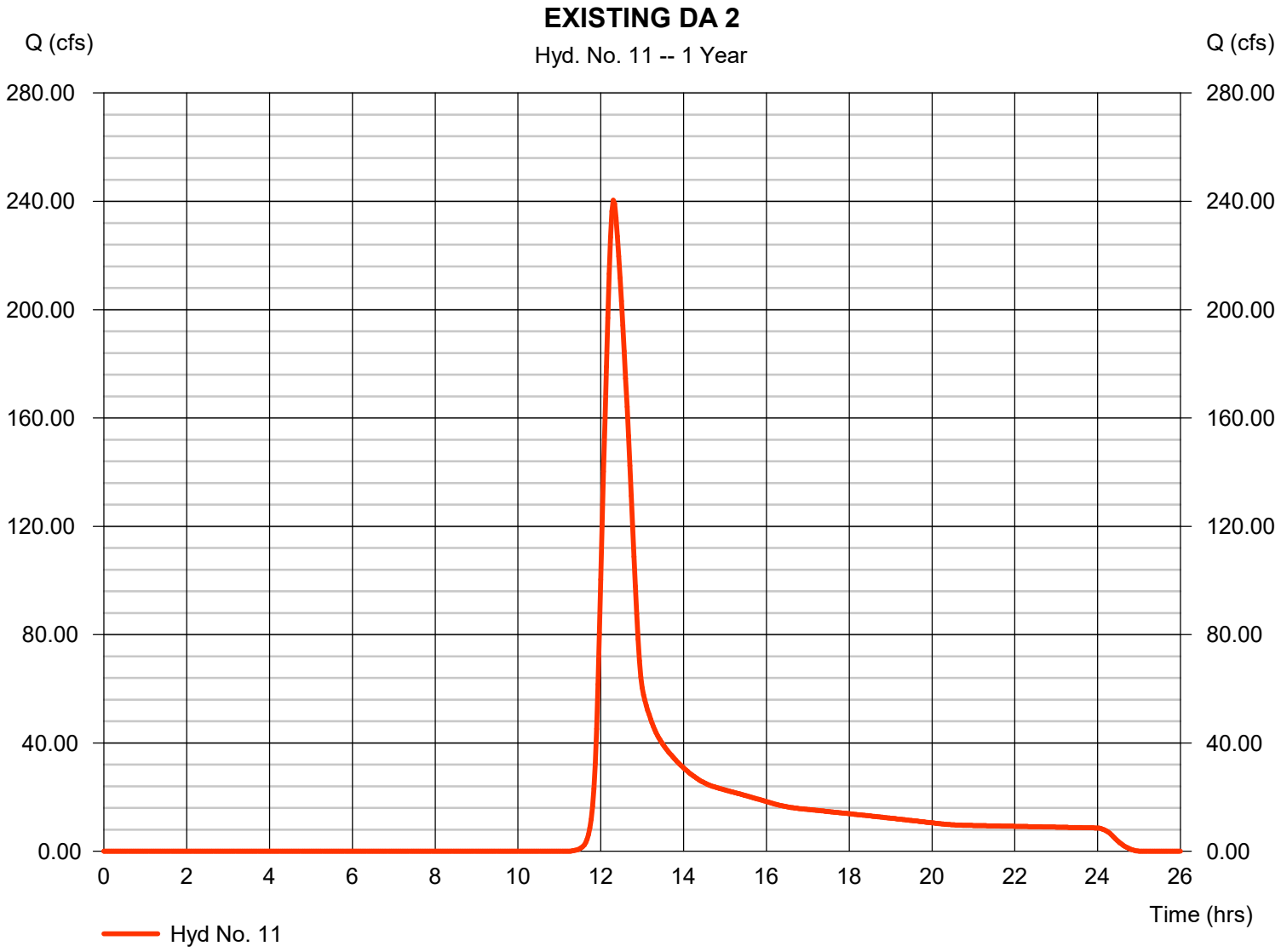


Hydrograph Report

Hyd. No. 11

EXISTING DA 2

Hydrograph type	=	SCS Runoff	Peak discharge	=	240.44 cfs
Storm frequency	=	1 yrs	Time to peak	=	12.30 hrs
Time interval	=	2 min	Hyd. volume	=	1,294,015 cuft
Drainage area	=	424.770 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	38.10 min
Total precip.	=	2.89 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

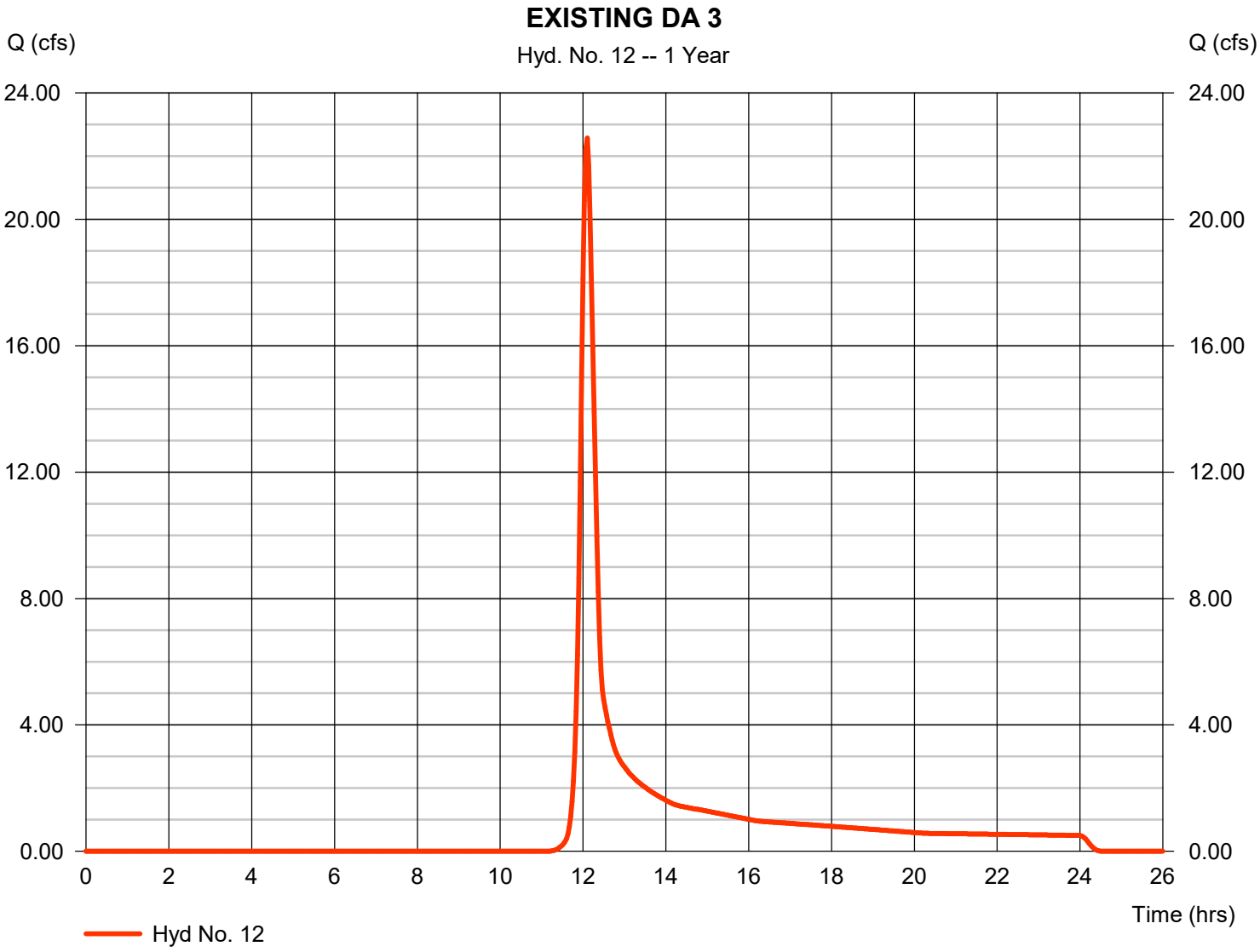


Hydrograph Report

Hyd. No. 12

EXISTING DA 3

Hydrograph type	=	SCS Runoff	Peak discharge	=	22.57 cfs
Storm frequency	=	1 yrs	Time to peak	=	12.10 hrs
Time interval	=	2 min	Hyd. volume	=	75,916 cuft
Drainage area	=	24.920 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	19.60 min
Total precip.	=	2.89 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

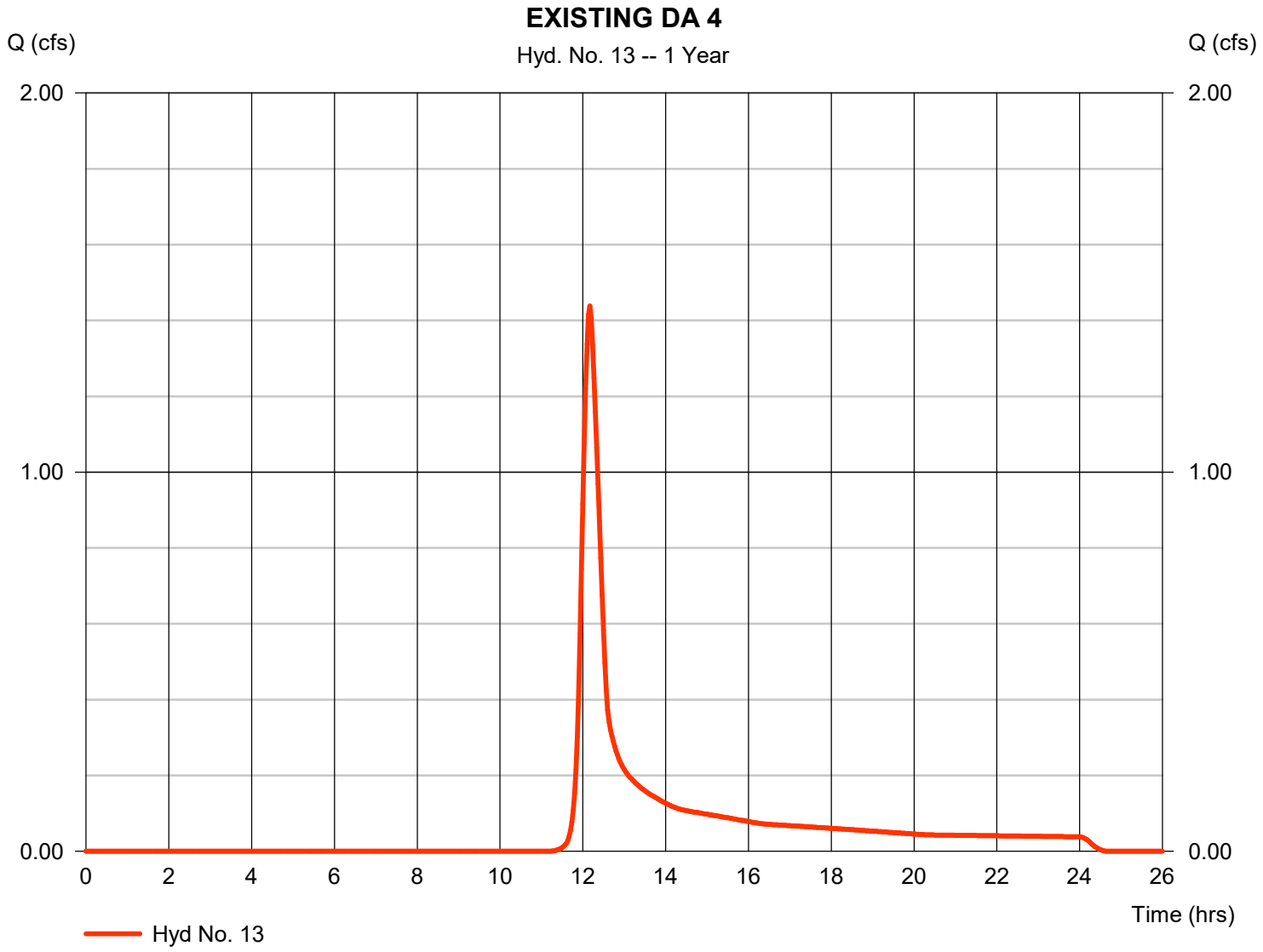


Hydrograph Report

Hyd. No. 13

EXISTING DA 4

Hydrograph type	= SCS Runoff	Peak discharge	= 1.438 cfs
Storm frequency	= 1 yrs	Time to peak	= 12.17 hrs
Time interval	= 2 min	Hyd. volume	= 5,758 cuft
Drainage area	= 1.920 ac	Curve number	= 74
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 26.20 min
Total precip.	= 2.89 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



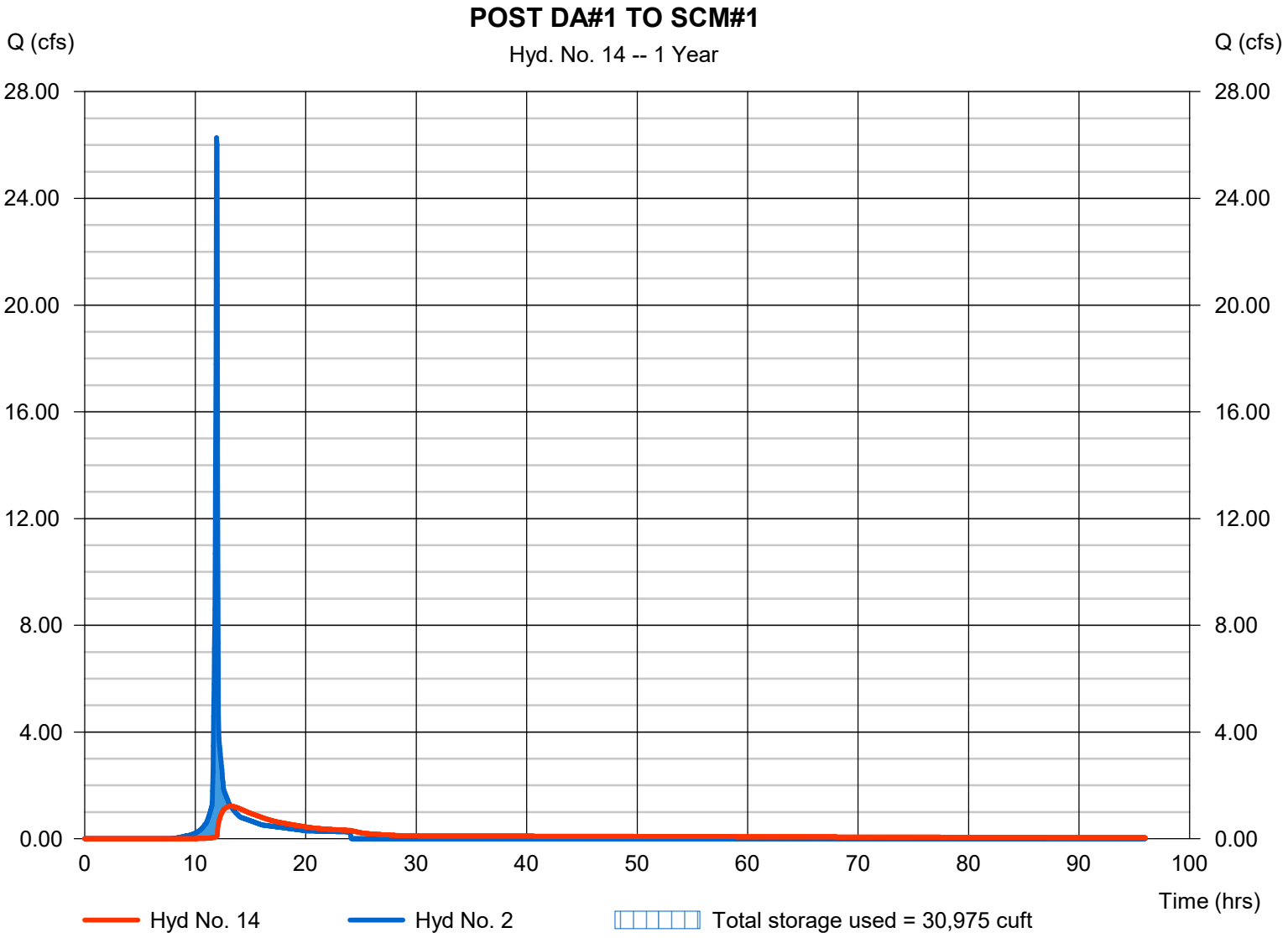
Hydrograph Report

Hyd. No. 14

POST DA#1 TO SCM#1

Hydrograph type	= Reservoir	Peak discharge	= 1.216 cfs
Storm frequency	= 1 yrs	Time to peak	= 13.23 hrs
Time interval	= 2 min	Hyd. volume	= 49,607 cuft
Inflow hyd. No.	= 2 - POST DA#1	Max. Elevation	= 263.68 ft
Reservoir name	= SCM#1	Max. Storage	= 30,975 cuft

Storage Indication method used.



Pond No. 1 - SCM#1

Pond Data

Contours -User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 262.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	262.00	15,452	0	0
1.00	263.00	19,207	17,294	17,294
2.00	264.00	21,061	20,125	37,419
3.00	265.00	22,971	22,007	59,426
4.00	266.00	24,938	23,945	83,371
5.00	267.00	26,962	25,941	109,312
6.00	268.00	29,042	27,993	137,305

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 24.00	2.00	6.00	0.00
Span (in)	= 24.00	2.00	12.00	0.00
No. Barrels	= 1	1	1	0
Invert El. (ft)	= 262.00	262.00	263.21	0.00
Length (ft)	= 45.00	0.00	0.00	0.00
Slope (%)	= 0.96	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	Yes	Yes	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 16.00	30.00	0.00	0.00
Crest El. (ft)	= 265.60	266.50	0.00	0.00
Weir Coeff.	= 3.33	2.60	3.33	3.33
Weir Type	= 1	Broad	---	---
Multi-Stage	= Yes	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).

Stage / Storage / Discharge Table

Stage ft	Storage cuft	Elevation ft	Clv A cfs	Clv B cfs	Clv C cfs	PrfRsr cfs	Wr A cfs	Wr B cfs	Wr C cfs	Wr D cfs	Exfil cfs	User cfs	Total cfs
0.00	0	262.00	0.00	0.00	0.00	---	0.00	0.00	---	---	---	---	0.000
1.00	17,294	263.00	0.11 ic	0.10 ic	0.00	---	0.00	0.00	---	---	---	---	0.098
2.00	37,419	264.00	1.90 ic	0.13 ic	1.77 ic	---	0.00	0.00	---	---	---	---	1.895
3.00	59,426	265.00	3.15 ic	0.16 ic	2.99 ic	---	0.00	0.00	---	---	---	---	3.146
4.00	83,371	266.00	16.60 oc	0.13 ic	2.99 ic	---	13.48	0.00	---	---	---	---	16.60
5.00	109,312	267.00	30.04 ic	0.02 ic	0.56 ic	---	29.44 s	27.58	---	---	---	---	57.60
6.00	137,305	268.00	33.77 ic	0.01 ic	0.30 ic	---	33.41 s	143.30	---	---	---	---	177.02

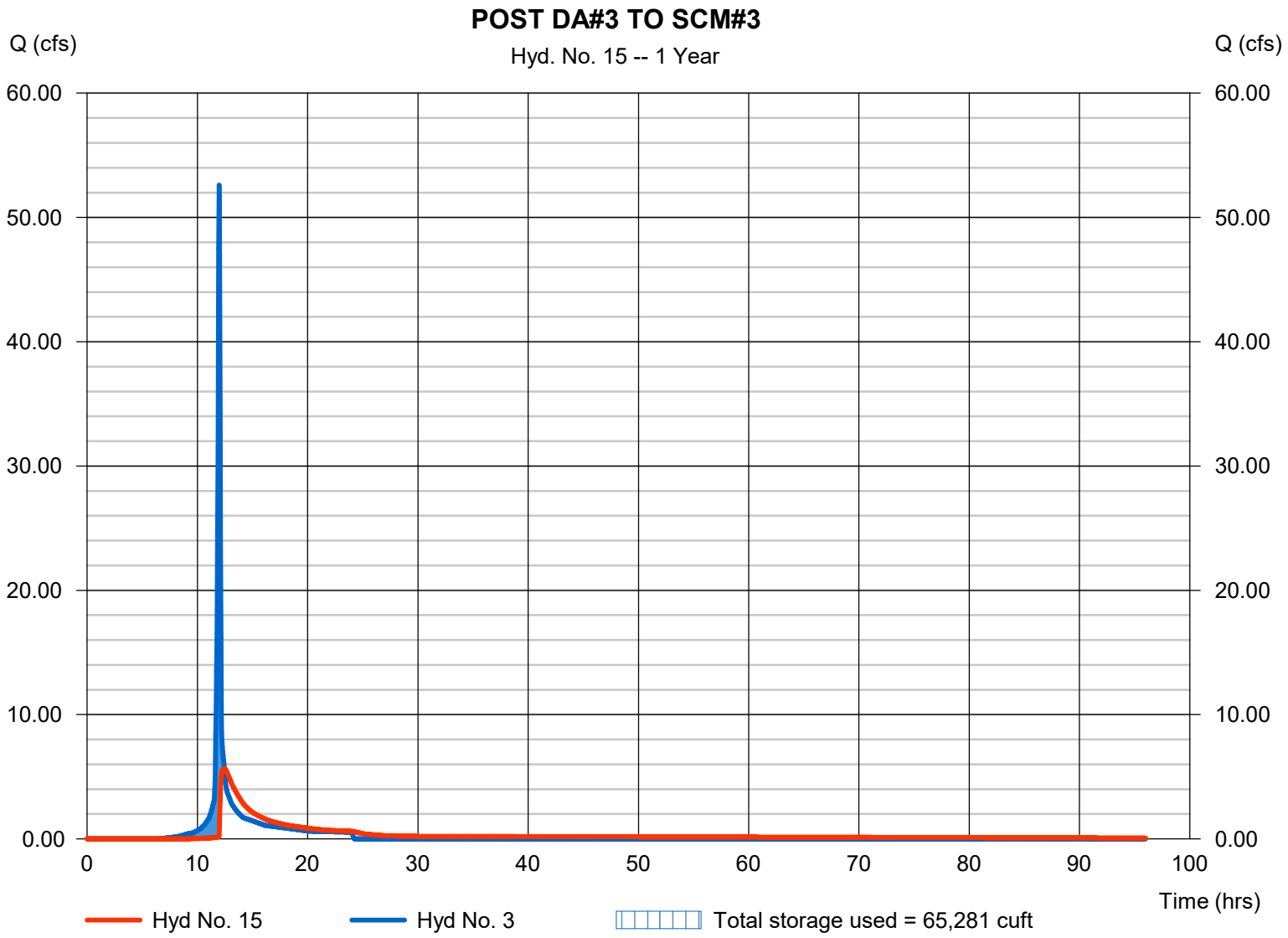
Hydrograph Report

Hyd. No. 15

POST DA#3 TO SCM#3

Hydrograph type	=	Reservoir	Peak discharge	=	5.665 cfs
Storm frequency	=	1 yrs	Time to peak	=	12.43 hrs
Time interval	=	2 min	Hyd. volume	=	115,126 cuft
Inflow hyd. No.	=	3 - POST DA #3	Max. Elevation	=	242.73 ft
Reservoir name	=	SCM#3	Max. Storage	=	65,281 cuft

Storage Indication method used.



Pond No. 3 - SCM#3

Pond Data

Contours -User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 240.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	240.00	20,733	0	0
1.00	241.00	23,355	22,029	22,029
2.00	242.00	25,130	24,235	46,263
3.00	243.00	26,962	26,038	72,301
4.00	244.00	28,851	27,898	100,200
5.00	245.00	30,796	29,815	130,015
6.00	246.00	32,798	31,789	161,804
7.00	247.00	36,725	34,740	196,543

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 36.00	2.50	24.00	0.00
Span (in)	= 36.00	2.50	24.00	0.00
No. Barrels	= 1	1	1	0
Invert El. (ft)	= 240.00	240.00	241.73	0.00
Length (ft)	= 122.00	0.00	0.00	0.00
Slope (%)	= 1.64	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	Yes	Yes	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 16.00	100.00	Inactive	0.00
Crest El. (ft)	= 244.20	245.50	244.20	0.00
Weir Coeff.	= 3.33	2.60	3.33	3.33
Weir Type	= 1	Broad	Rect	---
Multi-Stage	= Yes	No	Yes	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).

Stage / Storage / Discharge Table

Stage ft	Storage cuft	Elevation ft	Clv A cfs	Clv B cfs	Clv C cfs	PrfRsr cfs	Wr A cfs	Wr B cfs	Wr C cfs	Wr D cfs	Exfil cfs	User cfs	Total cfs
0.00	0	240.00	0.00	0.00	0.00	---	0.00	0.00	0.00	---	---	---	0.000
1.00	22,029	241.00	0.15 ic	0.15 ic	0.00	---	0.00	0.00	0.00	---	---	---	0.153
2.00	46,263	242.00	0.67 ic	0.21 ic	0.45 ic	---	0.00	0.00	0.00	---	---	---	0.666
3.00	72,301	243.00	8.37 ic	0.23 ic	8.14 ic	---	0.00	0.00	0.00	---	---	---	8.367
4.00	100,200	244.00	17.57 ic	0.25 ic	17.04 ic	---	0.00	0.00	0.00	---	---	---	17.30
5.00	130,015	245.00	53.58 ic	0.17 ic	15.29 ic	---	38.12	0.00	0.00	---	---	---	53.58
6.00	161,804	246.00	70.57 ic	0.07 ic	6.75 ic	---	63.74 s	91.92	0.00	---	---	---	162.49
7.00	196,543	247.00	79.21 ic	0.05 ic	4.34 ic	---	74.79 s	477.65	0.00	---	---	---	556.83

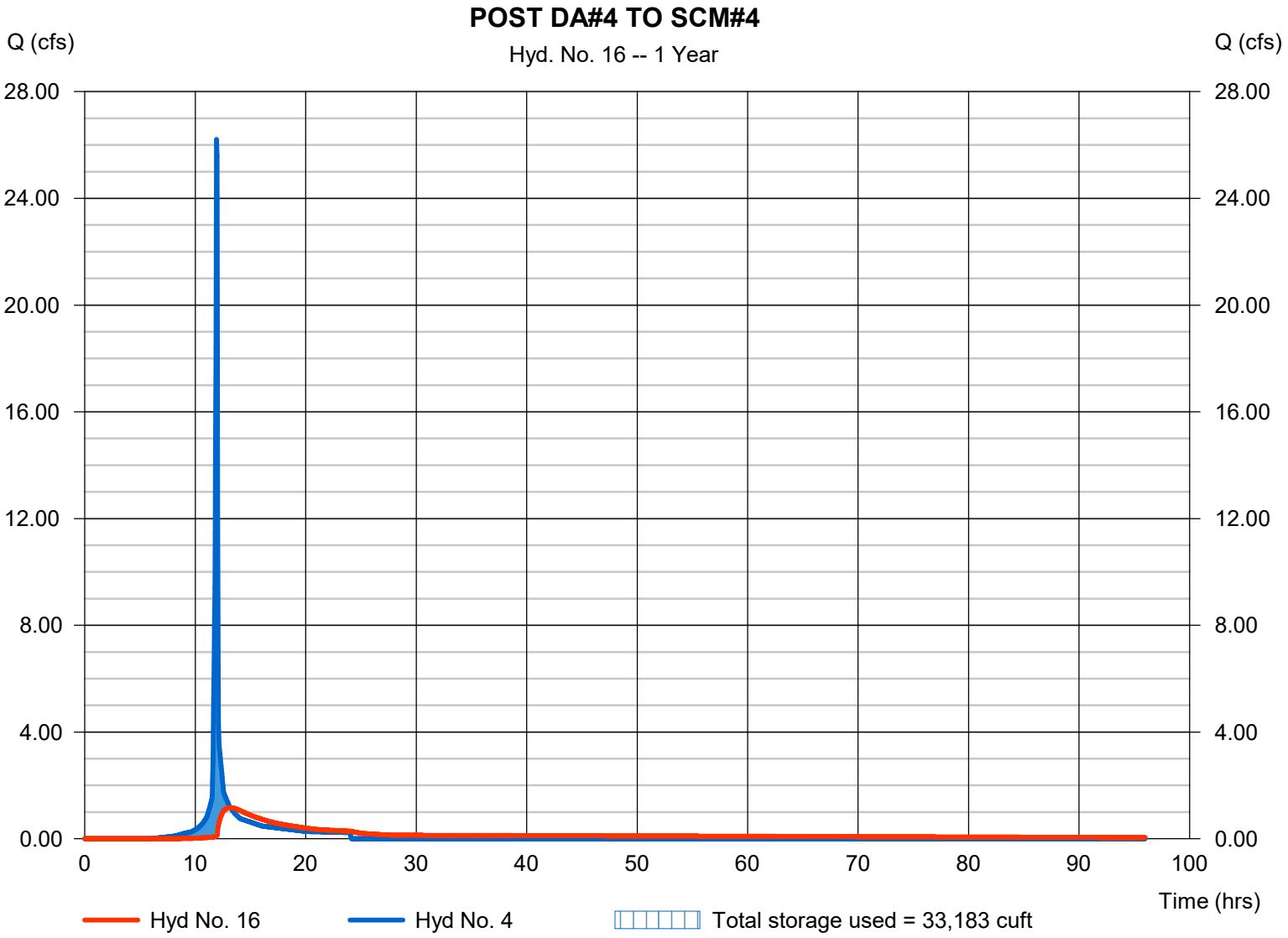
Hydrograph Report

Hyd. No. 16

POST DA#4 TO SCM#4

Hydrograph type	= Reservoir	Peak discharge	= 1.163 cfs
Storm frequency	= 1 yrs	Time to peak	= 13.17 hrs
Time interval	= 2 min	Hyd. volume	= 50,705 cuft
Inflow hyd. No.	= 4 - POST DA#4	Max. Elevation	= 242.20 ft
Reservoir name	= SCM#4	Max. Storage	= 33,183 cuft

Storage Indication method used.



Pond No. 4 - SCM#4

Pond Data

Contours -User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 240.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	240.00	11,960	0	0
1.00	241.00	15,188	13,541	13,541
2.00	242.00	16,949	16,059	29,599
3.00	243.00	18,766	17,848	47,447
4.00	244.00	20,641	19,694	67,141
5.00	245.00	22,572	21,597	88,739
6.00	246.00	24,560	23,557	112,295

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 18.00	2.00	12.00	0.00
Span (in)	= 18.00	2.00	12.00	0.00
No. Barrels	= 1	1	1	0
Invert El. (ft)	= 240.00	240.00	241.68	0.00
Length (ft)	= 70.50	0.00	0.00	0.00
Slope (%)	= 2.13	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	Yes	Yes	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 16.00	30.00	0.00	0.00
Crest El. (ft)	= 244.00	244.50	0.00	0.00
Weir Coeff.	= 3.33	3.33	3.33	3.33
Weir Type	= 1	Rect	---	---
Multi-Stage	= Yes	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).

Stage / Storage / Discharge Table

Stage ft	Storage cuft	Elevation ft	Clv A cfs	Clv B cfs	Clv C cfs	PrfRsr cfs	Wr A cfs	Wr B cfs	Wr C cfs	Wr D cfs	Exfil cfs	User cfs	Total cfs
0.00	0	240.00	0.00	0.00	0.00	---	0.00	0.00	---	---	---	---	0.000
1.00	13,541	241.00	0.10 ic	0.10 ic	0.00	---	0.00	0.00	---	---	---	---	0.098
2.00	29,599	242.00	0.58 ic	0.14 ic	0.42 ic	---	0.00	0.00	---	---	---	---	0.559
3.00	47,447	243.00	3.58 ic	0.15 ic	3.42 ic	---	0.00	0.00	---	---	---	---	3.576
4.00	67,141	244.00	5.30 ic	0.18 ic	5.10 ic	---	0.00	0.00	---	---	---	---	5.279
5.00	88,739	245.00	17.47 ic	0.02 ic	0.69 ic	---	16.75 s	35.32	---	---	---	---	52.78
6.00	112,295	246.00	19.48 ic	0.01 ic	0.30 ic	---	19.06 s	183.53	---	---	---	---	202.89

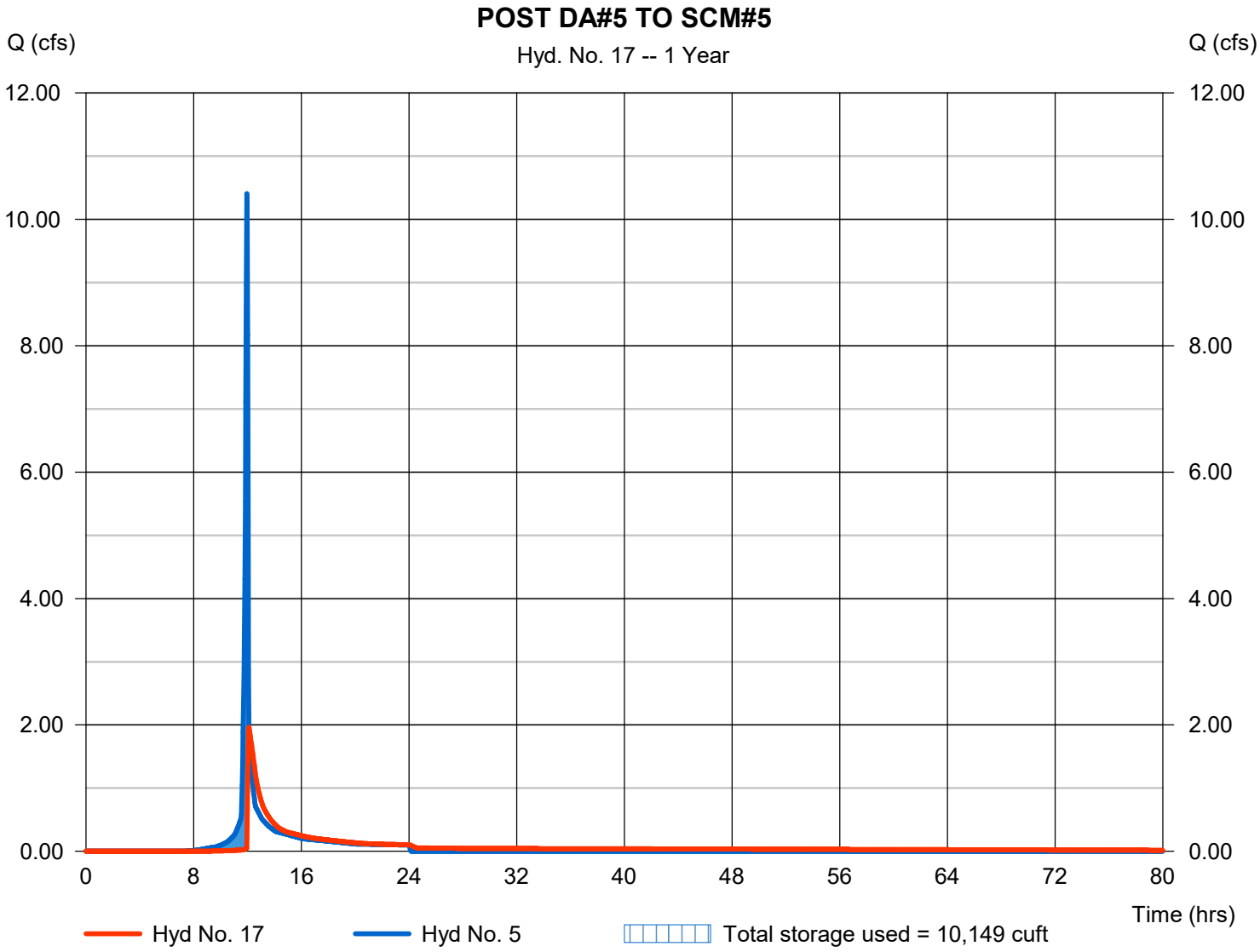
Hydrograph Report

Hyd. No. 17

POST DA#5 TO SCM#5

Hydrograph type	= Reservoir	Peak discharge	= 1.962 cfs
Storm frequency	= 1 yrs	Time to peak	= 12.10 hrs
Time interval	= 2 min	Hyd. volume	= 20,763 cuft
Inflow hyd. No.	= 5 - POST DA#5	Max. Elevation	= 250.72 ft
Reservoir name	= SCM#5	Max. Storage	= 10,149 cuft

Storage Indication method used.



Pond Report

Pond No. 5 - SCM#5

Pond Data

Contours -User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 249.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	249.00	4,080	0	0
1.00	250.00	6,359	5,177	5,177
2.00	251.00	7,516	6,929	12,106
3.00	252.00	8,729	8,114	20,220
4.00	253.00	9,999	9,356	29,576
5.00	254.00	11,326	10,655	40,230

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 18.00	1.25	12.00	0.00
Span (in)	= 18.00	1.25	24.00	0.00
No. Barrels	= 1	1	1	0
Invert El. (ft)	= 246.50	249.00	250.29	0.00
Length (ft)	= 106.00	0.00	0.00	0.00
Slope (%)	= 6.93	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	Yes	Yes	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 16.00	30.00	0.00	0.00
Crest El. (ft)	= 252.00	252.50	0.00	0.00
Weir Coeff.	= 3.33	2.60	3.33	3.33
Weir Type	= 1	Broad	---	---
Multi-Stage	= Yes	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).

Stage / Storage / Discharge Table

Stage ft	Storage cuft	Elevation ft	Clv A cfs	Clv B cfs	Clv C cfs	PrfRsr cfs	Wr A cfs	Wr B cfs	Wr C cfs	Wr D cfs	Exfil cfs	User cfs	Total cfs
0.00	0	249.00	0.00	0.00	0.00	---	0.00	0.00	---	---	---	---	0.000
1.00	5,177	250.00	11.25 ic	0.04 ic	0.00	---	0.00	0.00	---	---	---	---	0.040
2.00	12,106	251.00	11.25 ic	0.06 ic	4.07 ic	---	0.00	0.00	---	---	---	---	4.131
3.00	20,220	252.00	11.25 ic	0.07 ic	10.59 ic	---	0.00	0.00	---	---	---	---	10.66
4.00	29,576	253.00	20.33 ic	0.01 ic	1.98 ic	---	18.33 s	27.58	---	---	---	---	47.89
5.00	40,230	254.00	22.09 ic	0.00 ic	0.87 ic	---	21.20 s	143.30	---	---	---	---	165.37

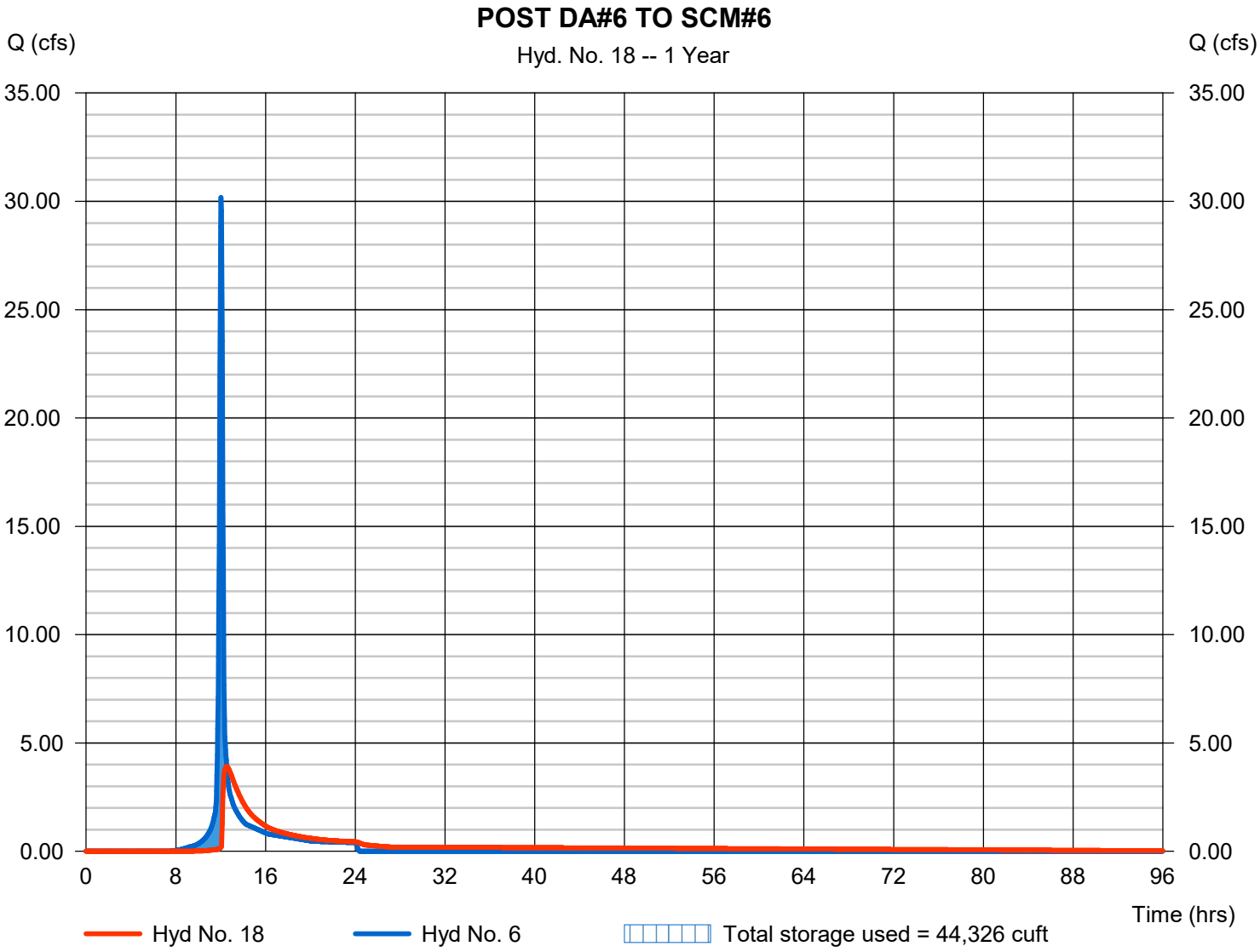
Hydrograph Report

Hyd. No. 18

POST DA#6 TO SCM#6

Hydrograph type	=	Reservoir	Peak discharge	=	3.916 cfs
Storm frequency	=	1 yrs	Time to peak	=	12.53 hrs
Time interval	=	2 min	Hyd. volume	=	82,662 cuft
Inflow hyd. No.	=	6 - POST DA#6	Max. Elevation	=	239.31 ft
Reservoir name	=	SCM#6	Max. Storage	=	44,326 cuft

Storage Indication method used.



Pond No. 6 - SCM#6

Pond Data

Contours -User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 237.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	237.00	14,903	0	0
1.00	238.00	19,186	16,998	16,998
2.00	239.00	21,501	20,330	37,328
3.00	240.00	23,872	22,674	60,002
4.00	241.00	26,299	25,073	85,075
5.00	242.00	28,783	27,529	112,604
6.00	243.00	31,324	30,042	142,646
7.00	244.00	33,921	32,611	175,256

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 18.00	2.50	12.00	0.00
Span (in)	= 18.00	2.50	24.00	0.00
No. Barrels	= 1	1	1	0
Invert El. (ft)	= 237.00	237.00	238.64	0.00
Length (ft)	= 100.00	0.00	0.00	0.00
Slope (%)	= 0.50	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	Yes	Yes	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 16.00	40.00	0.00	0.00
Crest El. (ft)	= 241.25	242.50	0.00	0.00
Weir Coeff.	= 3.33	2.60	3.33	3.33
Weir Type	= 1	Broad	---	---
Multi-Stage	= Yes	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).

Stage / Storage / Discharge Table

Stage ft	Storage cuft	Elevation ft	Clv A cfs	Clv B cfs	Clv C cfs	PrfRsr cfs	Wr A cfs	Wr B cfs	Wr C cfs	Wr D cfs	Exfil cfs	User cfs	Total cfs
0.00	0	237.00	0.00	0.00	0.00	---	0.00	0.00	---	---	---	---	0.000
1.00	16,998	238.00	0.16 ic	0.15 ic	0.00	---	0.00	0.00	---	---	---	---	0.150
2.00	37,328	239.00	1.67 ic	0.20 ic	1.47 ic	---	0.00	0.00	---	---	---	---	1.666
3.00	60,002	240.00	8.63 oc	0.14 ic	8.48 ic	---	0.00	0.00	---	---	---	---	8.627
4.00	85,075	241.00	10.57 oc	0.18 ic	10.39 ic	---	0.00	0.00	---	---	---	---	10.57
5.00	112,604	242.00	15.51 oc	0.03 ic	2.01 ic	---	13.46 s	0.00	---	---	---	---	15.51
6.00	142,646	243.00	17.42 oc	0.01 ic	0.77 ic	---	16.60 s	36.77	---	---	---	---	54.15
7.00	175,256	244.00	19.10 oc	0.01 ic	0.46 ic	---	18.53 s	191.06	---	---	---	---	210.06

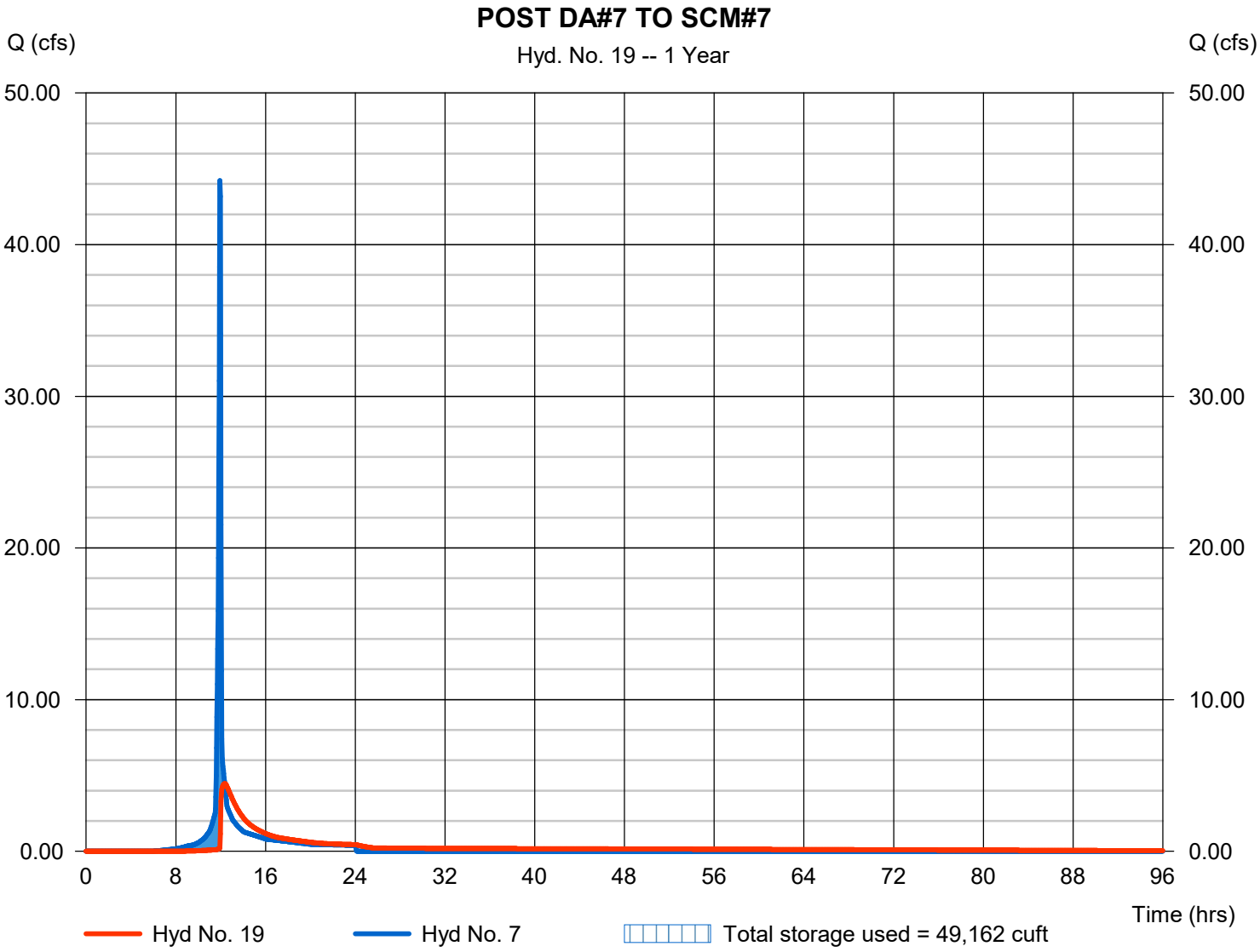
Hydrograph Report

Hyd. No. 19

POST DA#7 TO SCM#7

Hydrograph type	= Reservoir	Peak discharge	= 4.464 cfs
Storm frequency	= 1 yrs	Time to peak	= 12.37 hrs
Time interval	= 2 min	Hyd. volume	= 88,550 cuft
Inflow hyd. No.	= 7 - POST DA#7	Max. Elevation	= 241.41 ft
Reservoir name	= SCM#7	Max. Storage	= 49,162 cuft

Storage Indication method used.



Pond Report

Pond No. 7 - SCM#7

Pond Data

Contours -User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 239.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	239.00	16,414	0	0
1.00	240.00	20,314	18,328	18,328
2.00	241.00	22,252	21,274	39,601
3.00	242.00	24,248	23,241	62,842
4.00	243.00	26,300	25,265	88,106
5.00	244.00	28,408	27,344	115,451
6.00	245.00	30,573	29,481	144,932
7.00	246.00	32,794	31,674	176,605

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 24.00	2.50	12.00	0.00
Span (in)	= 24.00	2.50	24.00	0.00
No. Barrels	= 1	1	1	0
Invert El. (ft)	= 239.00	239.00	240.68	0.00
Length (ft)	= 108.00	0.00	0.00	0.00
Slope (%)	= 3.29	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	Yes	Yes	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 16.00	30.00	0.00	0.00
Crest El. (ft)	= 243.25	244.50	0.00	0.00
Weir Coeff.	= 3.33	2.60	3.33	3.33
Weir Type	= 1	Broad	---	---
Multi-Stage	= Yes	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).

Stage / Storage / Discharge Table

Stage ft	Storage cuft	Elevation ft	Clv A cfs	Clv B cfs	Clv C cfs	PrfRsr cfs	Wr A cfs	Wr B cfs	Wr C cfs	Wr D cfs	Exfil cfs	User cfs	Total cfs
0.00	0	239.00	0.00	0.00	0.00	---	0.00	0.00	---	---	---	---	0.000
1.00	18,328	240.00	0.15 ic	0.15 ic	0.00	---	0.00	0.00	---	---	---	---	0.151
2.00	39,601	241.00	1.48 ic	0.20 ic	1.23 ic	---	0.00	0.00	---	---	---	---	1.434
3.00	62,842	242.00	8.93 ic	0.21 ic	8.72 ic	---	0.00	0.00	---	---	---	---	8.932
4.00	88,106	243.00	13.29 ic	0.25 ic	12.99 ic	---	0.00	0.00	---	---	---	---	13.24
5.00	115,451	244.00	29.38 ic	0.08 ic	4.58 ic	---	24.72 s	0.00	---	---	---	---	29.38
6.00	144,932	245.00	33.70 ic	0.03 ic	1.80 ic	---	31.86 s	27.58	---	---	---	---	61.27
7.00	176,605	246.00	37.01 ic	0.02 ic	1.09 ic	---	35.87 s	143.30	---	---	---	---	180.27

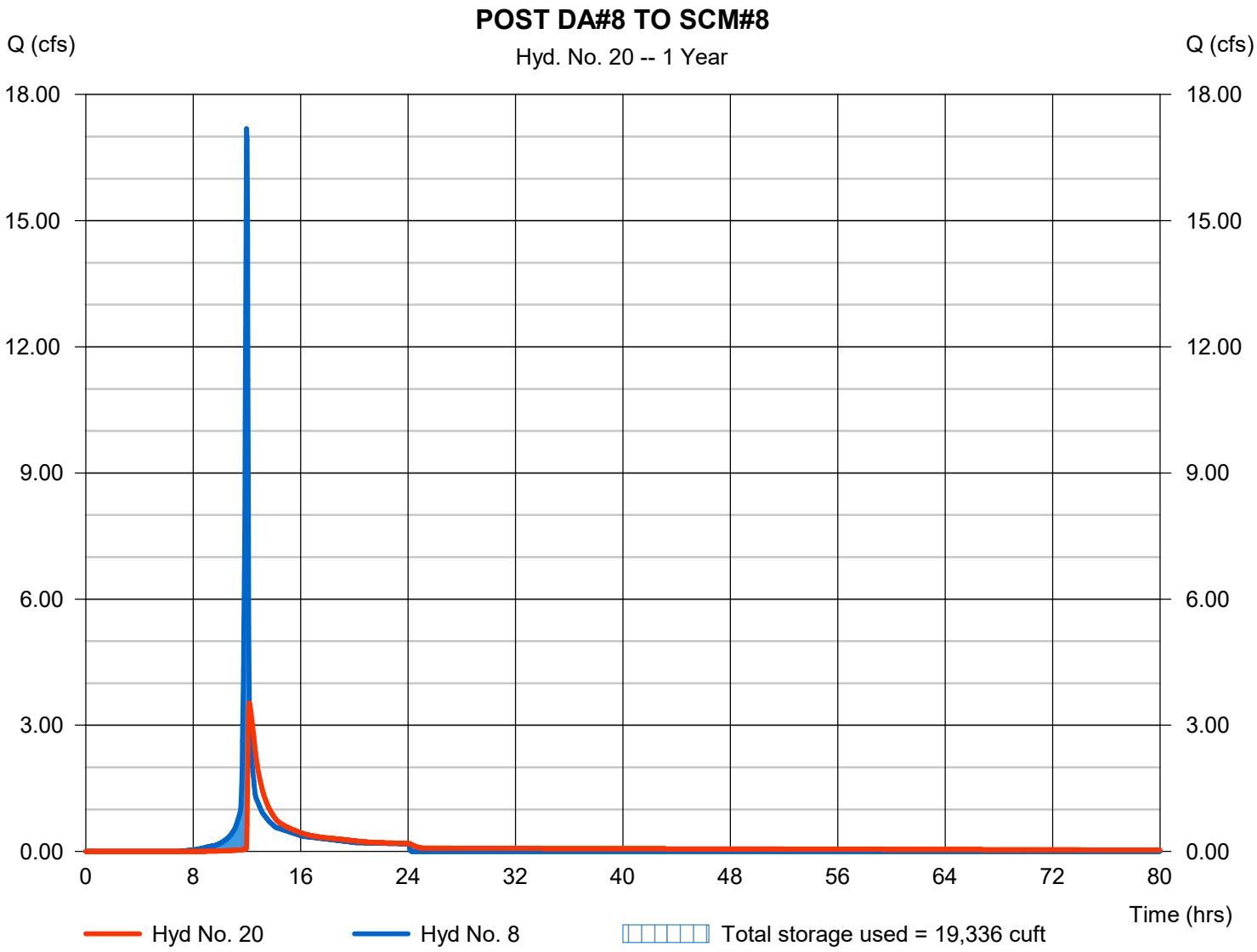
Hydrograph Report

Hyd. No. 20

POST DA#8 TO SCM#8

Hydrograph type	=	Reservoir	Peak discharge	=	3.532 cfs
Storm frequency	=	1 yrs	Time to peak	=	12.17 hrs
Time interval	=	2 min	Hyd. volume	=	38,442 cuft
Inflow hyd. No.	=	8 - POST DA#8	Max. Elevation	=	242.33 ft
Reservoir name	=	SCM#8	Max. Storage	=	19,336 cuft

Storage Indication method used.



Pond Report

Pond No. 8 - SCM#8

Pond Data

Contours -User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 240.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	240.00	6,058	0	0
1.00	241.00	8,343	7,169	7,169
2.00	242.00	9,432	8,881	16,050
3.00	243.00	10,578	9,999	26,049
4.00	244.00	11,780	11,173	37,221
5.00	245.00	13,039	12,403	49,624

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 24.00	1.50	8.00	0.00
Span (in)	= 24.00	1.50	24.00	0.00
No. Barrels	= 1	1	1	0
Invert El. (ft)	= 237.00	240.00	241.69	0.00
Length (ft)	= 58.00	0.00	0.00	0.00
Slope (%)	= 5.17	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	Yes	Yes	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 16.00	30.00	0.00	0.00
Crest El. (ft)	= 242.50	243.50	0.00	0.00
Weir Coeff.	= 3.33	2.60	3.33	3.33
Weir Type	= 1	Broad	---	---
Multi-Stage	= Yes	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).

Stage / Storage / Discharge Table

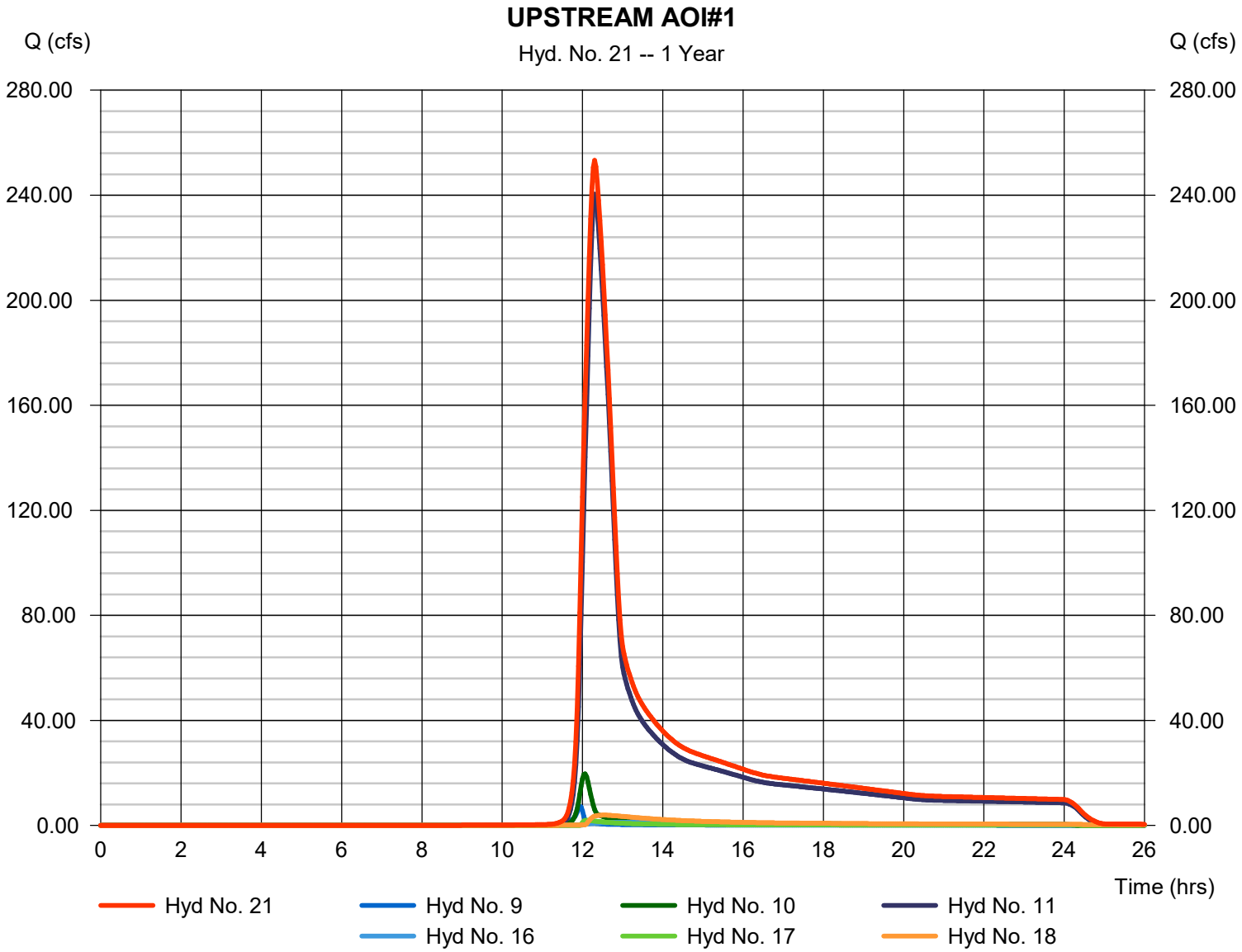
Stage ft	Storage cuft	Elevation ft	Clv A cfs	Clv B cfs	Clv C cfs	PrfRsr cfs	Wr A cfs	Wr B cfs	Wr C cfs	Wr D cfs	Exfil cfs	User cfs	Total cfs
0.00	0	240.00	0.00	0.00	0.00	---	0.00	0.00	---	---	---	---	0.000
1.00	7,169	241.00	21.39 ic	0.06 ic	0.00	---	0.00	0.00	---	---	---	---	0.057
2.00	16,050	242.00	21.39 ic	0.08 ic	1.18 ic	---	0.00	0.00	---	---	---	---	1.258
3.00	26,049	243.00	25.27 ic	0.09 ic	6.34 ic	---	18.84	0.00	---	---	---	---	25.27
4.00	37,221	244.00	36.83 ic	0.02 ic	1.70 ic	---	35.10 s	27.58	---	---	---	---	64.40
5.00	49,624	245.00	39.96 ic	0.01 ic	0.93 ic	---	39.01 s	143.30	---	---	---	---	183.24

Hydrograph Report

Hyd. No. 21

UPSTREAM AOI#1

Hydrograph type	= Combine	Peak discharge	= 253.29 cfs
Storm frequency	= 1 yrs	Time to peak	= 12.30 hrs
Time interval	= 2 min	Hyd. volume	= 1,521,586 cuft
Inflow hyds.	= 9, 10, 11, 16, 17, 18	Contrib. drain. area	= 446.810 ac

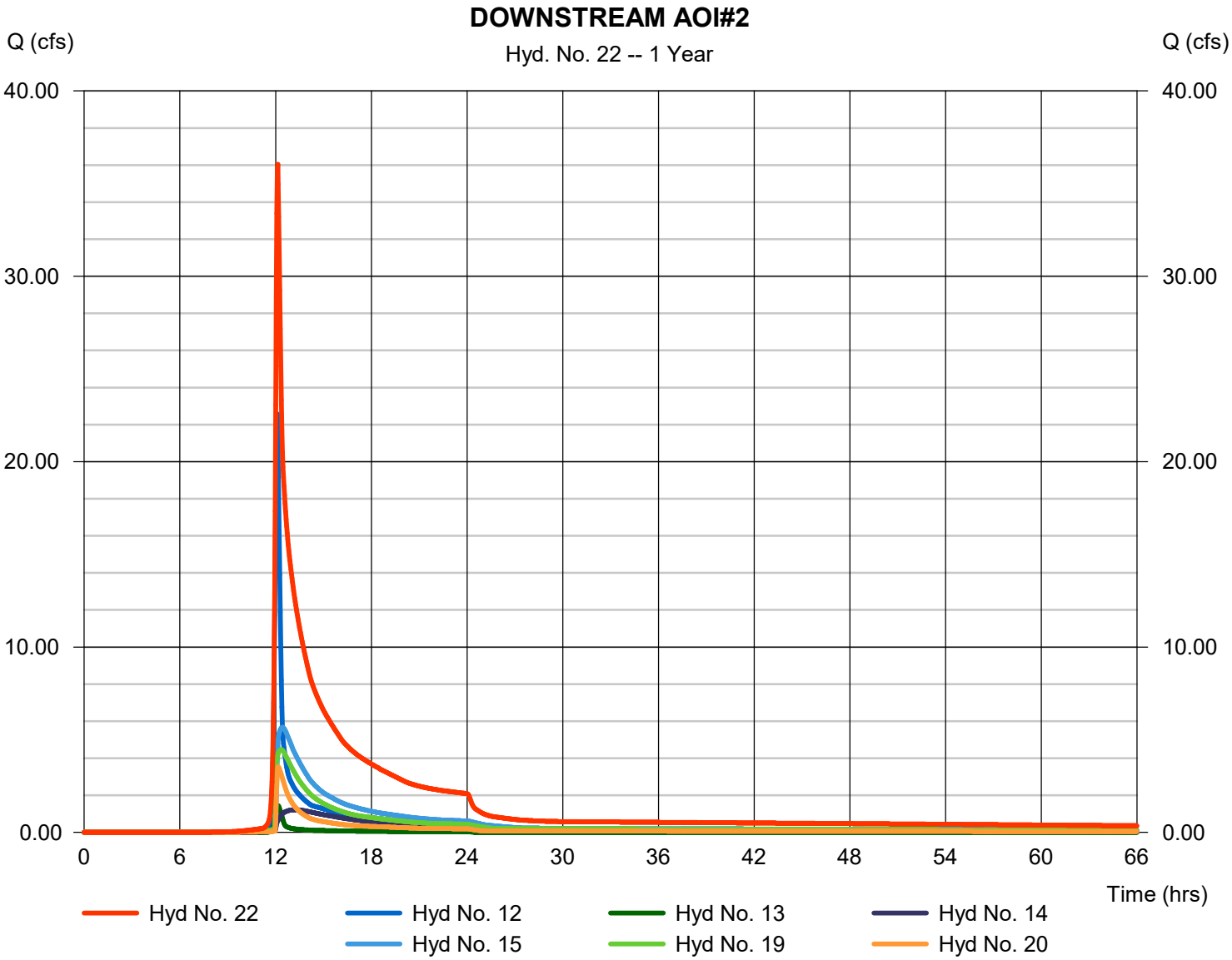


Hydrograph Report

Hyd. No. 22

DOWNSTREAM AOI#2

Hydrograph type	= Combine	Peak discharge	= 36.04 cfs
Storm frequency	= 1 yrs	Time to peak	= 12.13 hrs
Time interval	= 2 min	Hyd. volume	= 373,400 cuft
Inflow hyds.	= 12, 13, 14, 15, 19, 20	Contrib. drain. area	= 26.840 ac

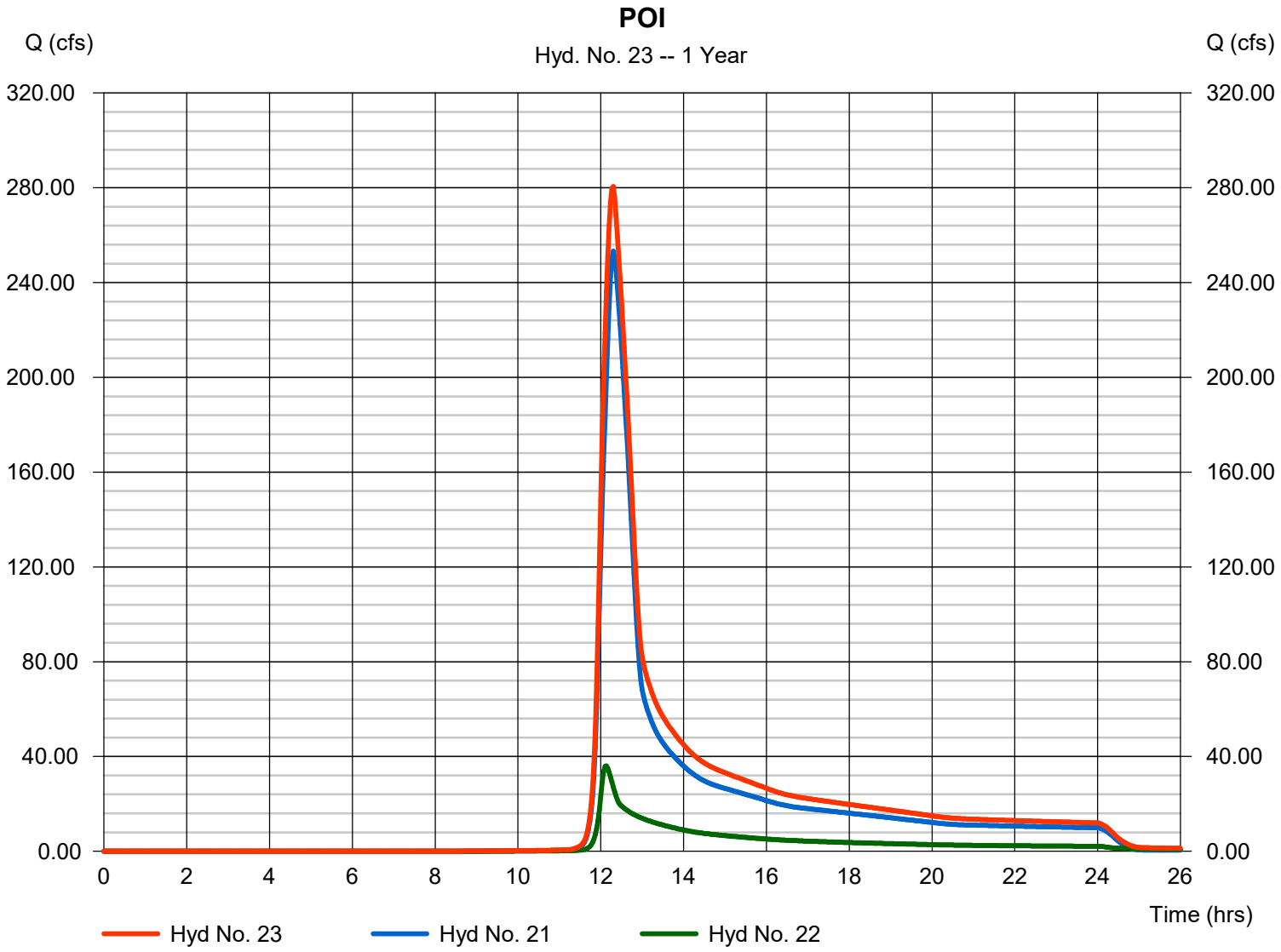


Hydrograph Report

Hyd. No. 23

POI

Hydrograph type	=	Combine	Peak discharge	=	280.46 cfs
Storm frequency	=	1 yrs	Time to peak	=	12.30 hrs
Time interval	=	2 min	Hyd. volume	=	1,894,987 cuft
Inflow hyds.	=	21, 22	Contrib. drain. area	=	0.000 ac

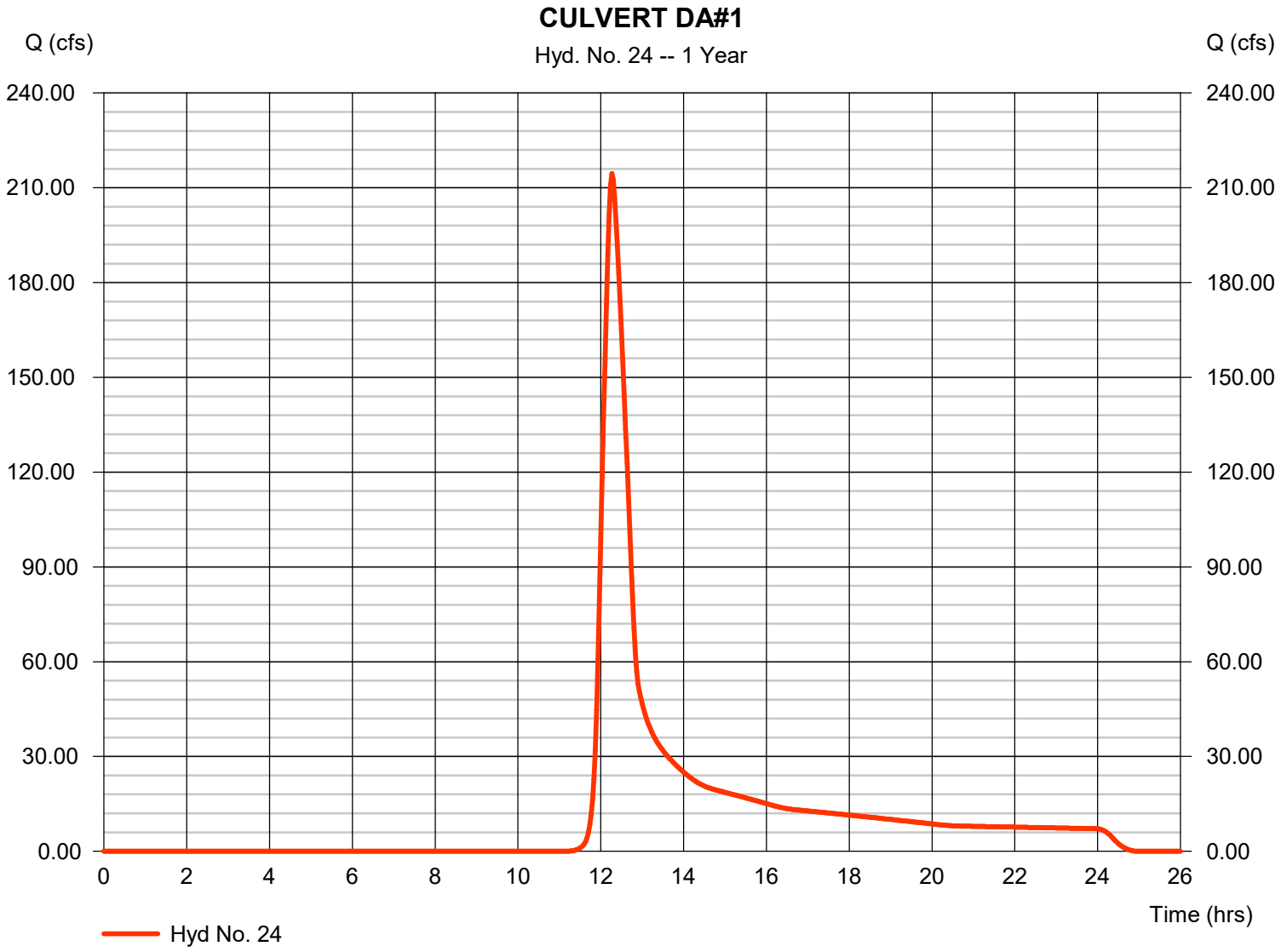


Hydrograph Report

Hyd. No. 24

CULVERT DA#1

Hydrograph type	=	SCS Runoff	Peak discharge	=	214.51 cfs
Storm frequency	=	1 yrs	Time to peak	=	12.27 hrs
Time interval	=	2 min	Hyd. volume	=	1,074,329 cuft
Drainage area	=	356.710 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	34.90 min
Total precip.	=	2.89 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

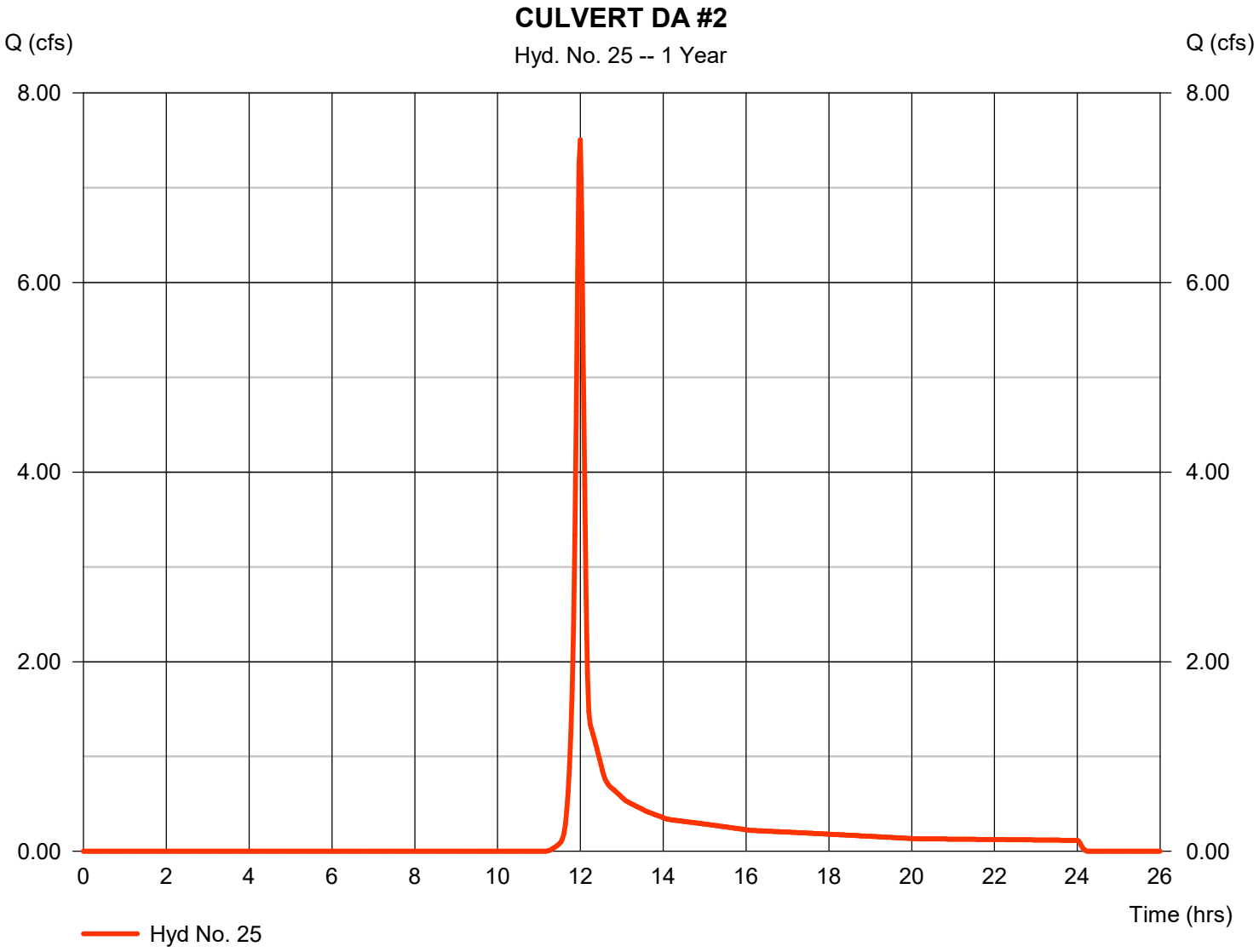


Hydrograph Report

Hyd. No. 25

CULVERT DA #2

Hydrograph type	=	SCS Runoff	Peak discharge	=	7.507 cfs
Storm frequency	=	1 yrs	Time to peak	=	12.00 hrs
Time interval	=	2 min	Hyd. volume	=	17,578 cuft
Drainage area	=	5.770 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	8.80 min
Total precip.	=	2.89 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

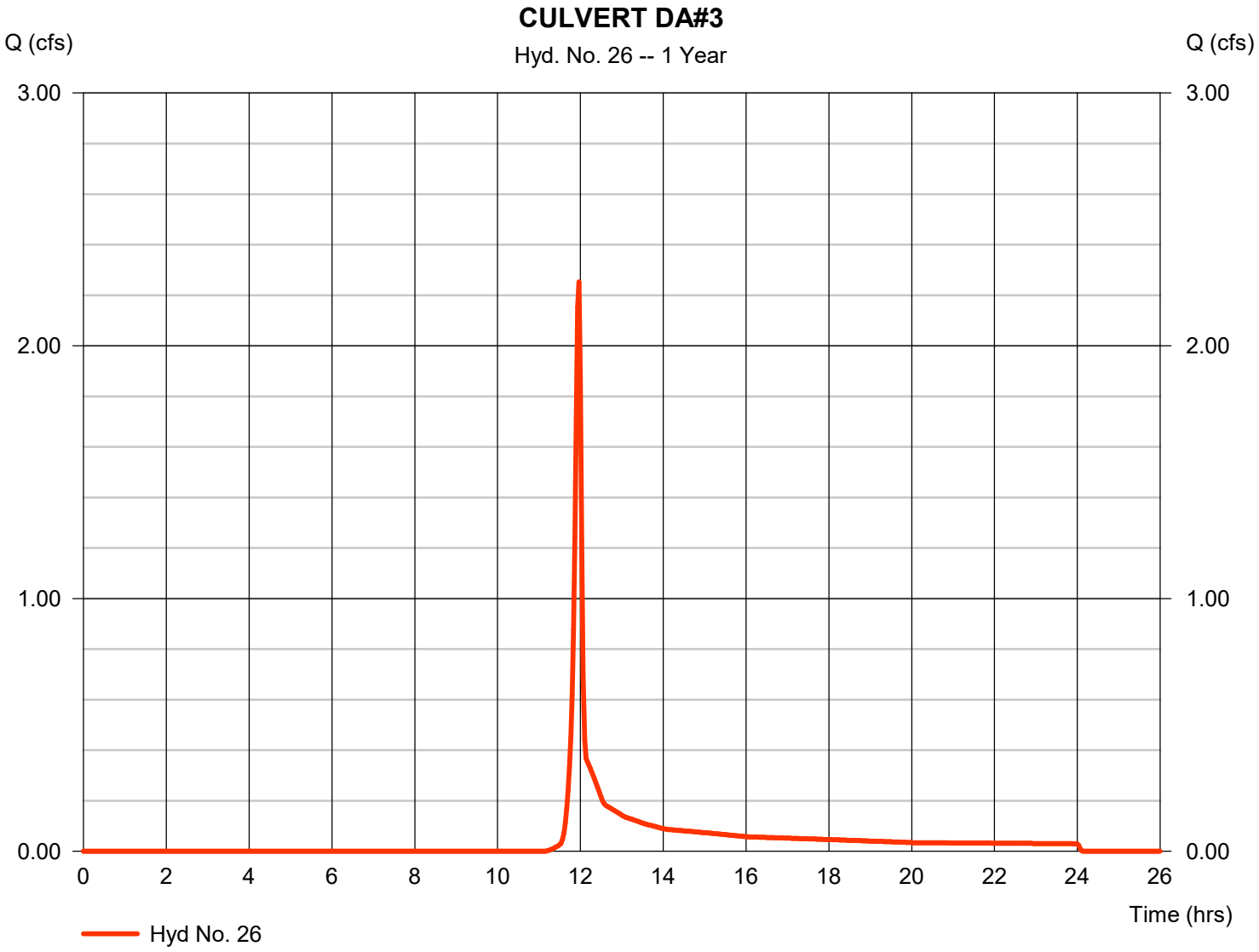


Hydrograph Report

Hyd. No. 26

CULVERT DA#3

Hydrograph type	=	SCS Runoff	Peak discharge	=	2.252 cfs
Storm frequency	=	1 yrs	Time to peak	=	11.97 hrs
Time interval	=	2 min	Hyd. volume	=	4,541 cuft
Drainage area	=	1.590 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	2.89 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

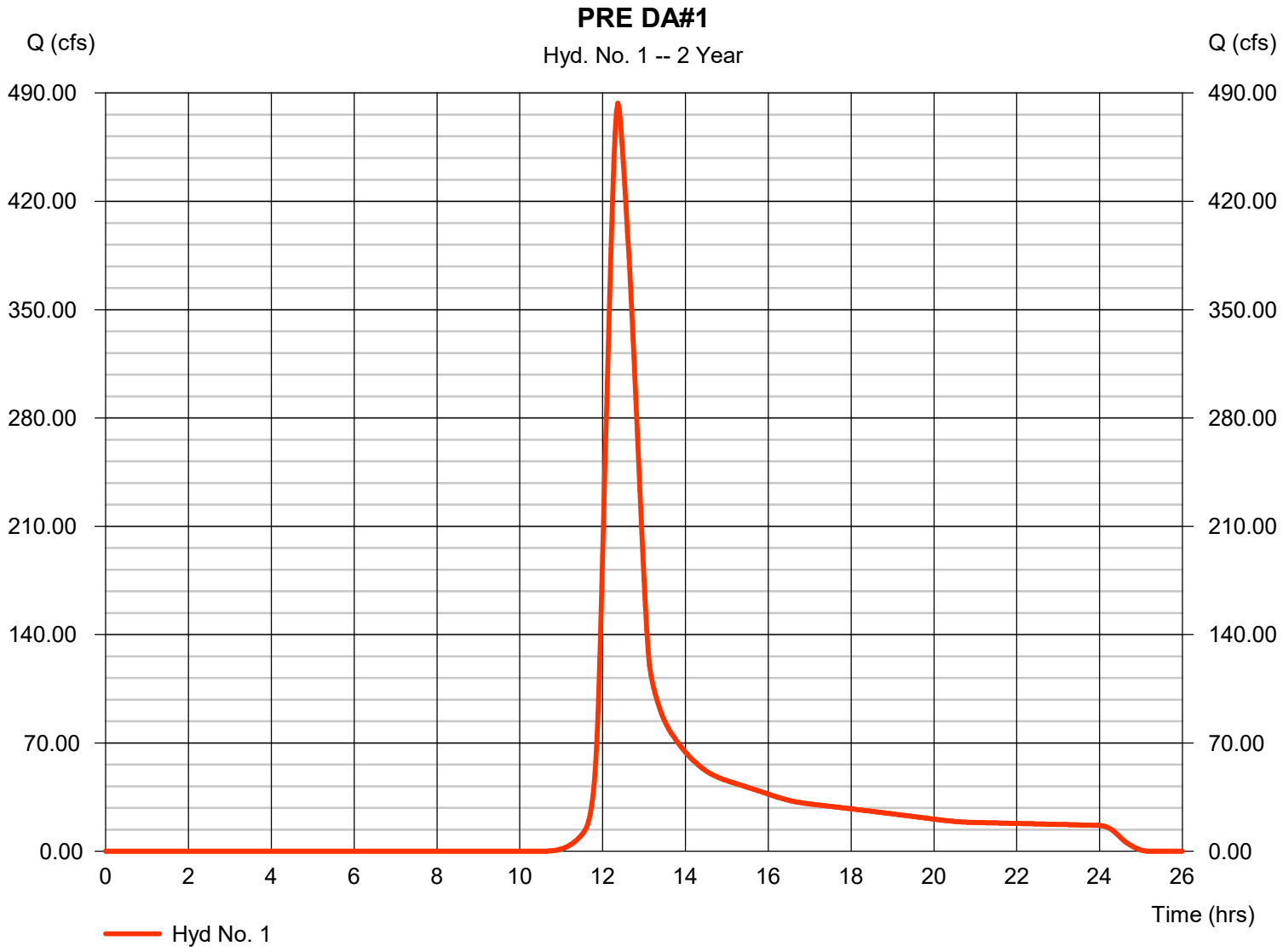
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	483.47	2	742	2,744,974	------	------	------	PRE DA#1
2	SCS Runoff	34.74	2	716	70,895	------	------	------	POST DA#1
3	SCS Runoff	67.91	2	718	158,357	------	------	------	POST DA #3
4	SCS Runoff	33.50	2	716	69,959	------	------	------	POST DA#4
5	SCS Runoff	13.64	2	716	27,959	------	------	------	POST DA#5
6	SCS Runoff	39.74	2	722	111,924	------	------	------	POST DA#6
7	SCS Runoff	56.55	2	716	118,093	------	------	------	POST DA#7
8	SCS Runoff	22.38	2	718	51,920	------	------	------	POST DA#8
9	SCS Runoff	9.220	2	716	19,253	------	------	------	BYPASS #1
10	SCS Runoff	29.71	2	724	86,057	------	------	------	EXISTING DA 1
11	SCS Runoff	371.41	2	738	1,901,209	------	------	------	EXISTING DA 2
12	SCS Runoff	34.34	2	726	111,538	------	------	------	EXISTING DA 3
13	SCS Runoff	2.203	2	730	8,459	------	------	------	EXISTING DA 4
14	Reservoir	2.061	2	766	67,198	2	264.10	39,709	POST DA#1 TO SCM#1
15	Reservoir	11.92	2	732	151,932	3	243.34	81,652	POST DA#3 TO SCM#3
16	Reservoir	2.564	2	750	66,555	4	242.58	40,035	POST DA#4 TO SCM#4
17	Reservoir	4.732	2	724	27,577	5	251.07	12,653	POST DA#5 TO SCM#5
18	Reservoir	8.062	2	740	109,926	6	239.82	55,956	POST DA#6 TO SCM#6
19	Reservoir	8.642	2	726	115,398	7	241.95	61,624	POST DA#7 TO SCM#7
20	Reservoir	10.86	2	726	50,810	8	242.72	23,213	POST DA#8 TO SCM#8
21	Combine	394.52	2	738	2,210,579	9, 10, 11, 16, 17, 18,	------	------	UPSTREAM AOI#1
22	Combine	68.78	2	726	505,336	12, 13, 14, 15, 19, 20,	------	------	DOWNSTREAM AOI#2
23	Combine	442.83	2	736	2,715,912	21, 22	------	------	POI
24	SCS Runoff	330.70	2	736	1,578,438	------	------	------	CULVERT DA#1
25	SCS Runoff	11.23	2	720	25,826	------	------	------	CULVERT DA #2
26	SCS Runoff	3.336	2	718	6,672	------	------	------	CULVERT DA#3

Hydrograph Report

Hyd. No. 1

PRE DA#1

Hydrograph type	=	SCS Runoff	Peak discharge	=	483.47 cfs
Storm frequency	=	2 yrs	Time to peak	=	12.37 hrs
Time interval	=	2 min	Hyd. volume	=	2,744,974 cuft
Drainage area	=	618.810 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	47.00 min
Total precip.	=	3.49 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

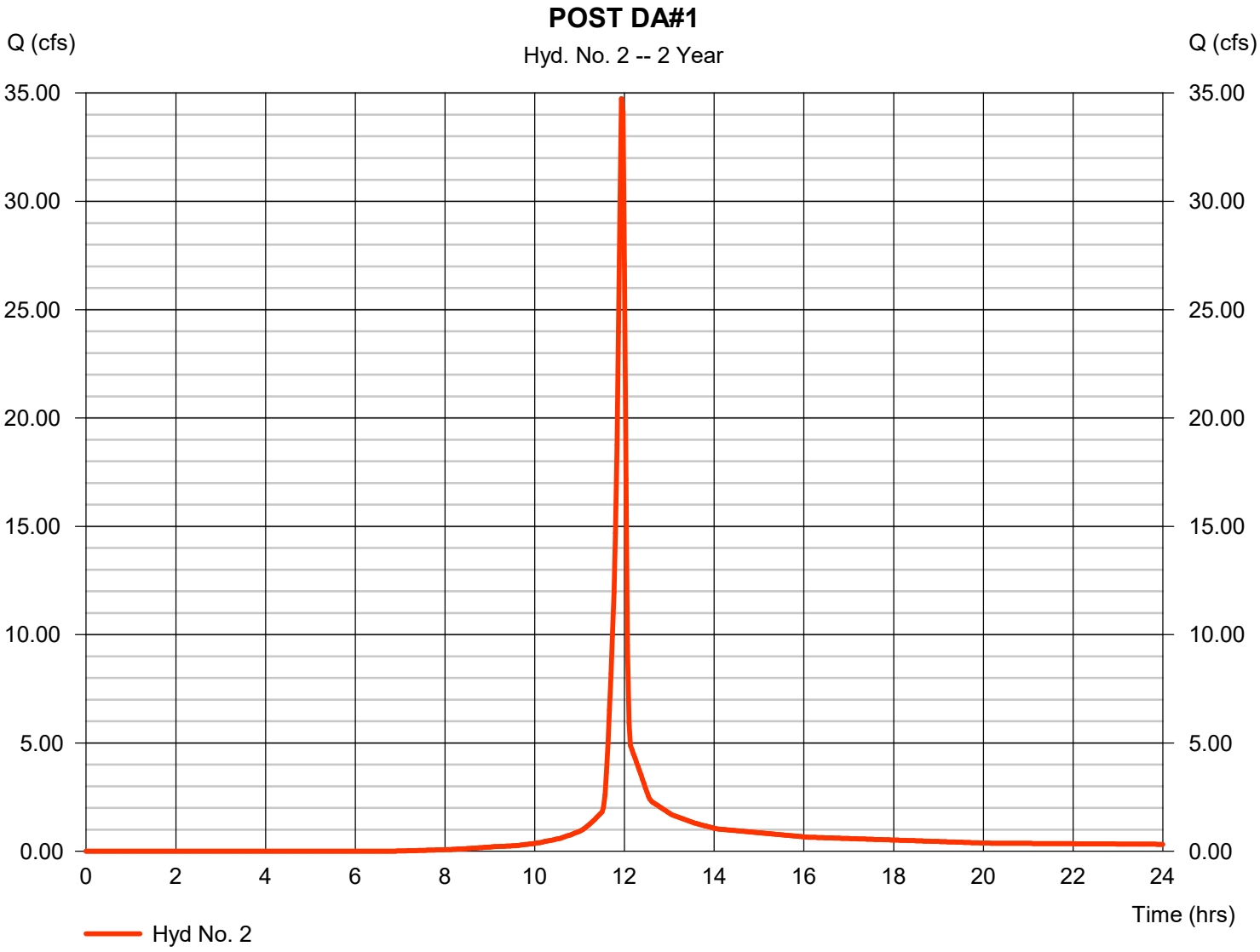


Hydrograph Report

Hyd. No. 2

POST DA#1

Hydrograph type	=	SCS Runoff	Peak discharge	=	34.74 cfs
Storm frequency	=	2 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	70,895 cuft
Drainage area	=	9.970 ac	Curve number	=	86
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.50 min
Total precip.	=	3.49 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

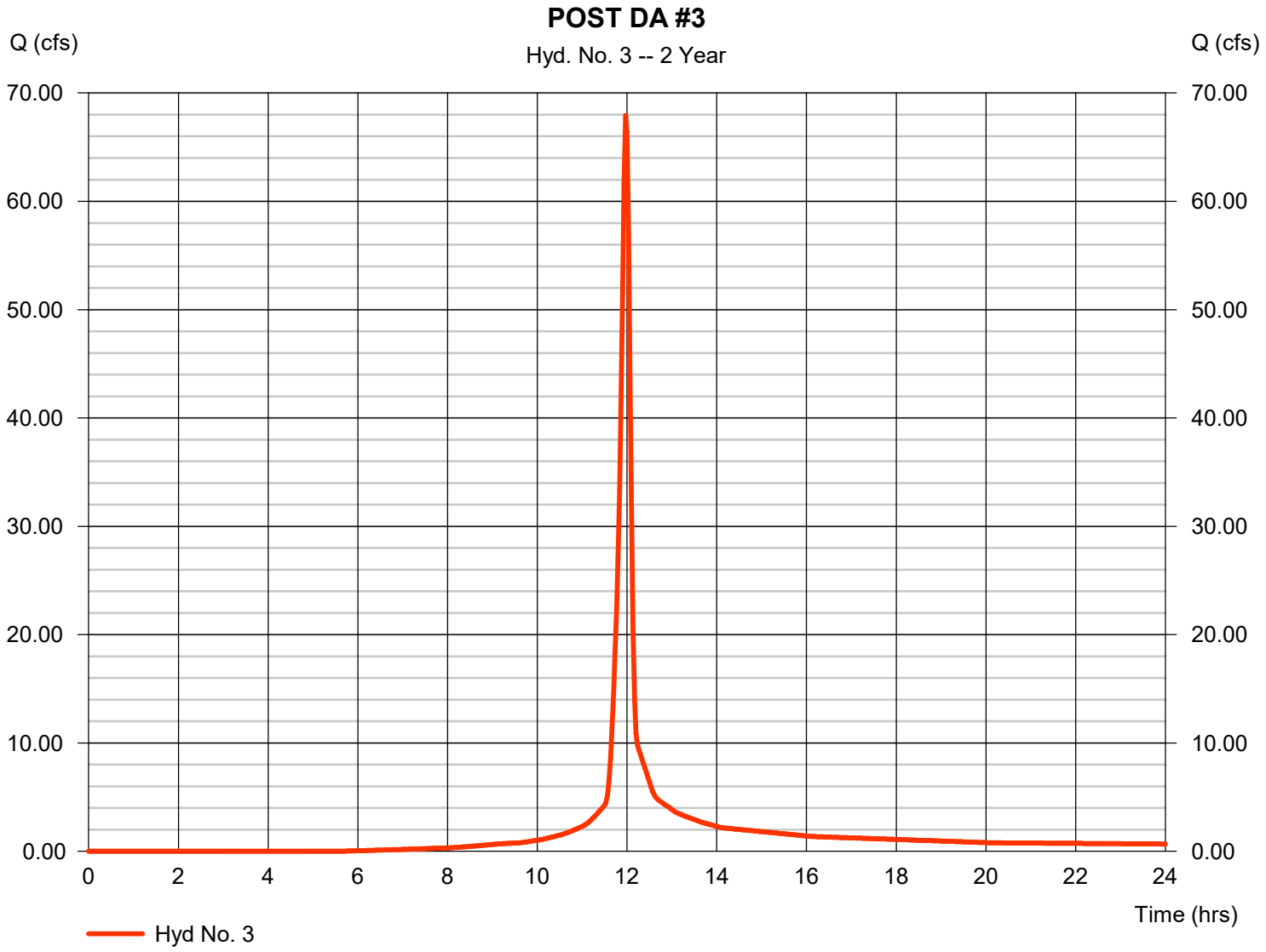


Hydrograph Report

Hyd. No. 3

POST DA #3

Hydrograph type	=	SCS Runoff	Peak discharge	=	67.91 cfs
Storm frequency	=	2 yrs	Time to peak	=	11.97 hrs
Time interval	=	2 min	Hyd. volume	=	158,357 cuft
Drainage area	=	18.580 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	7.40 min
Total precip.	=	3.49 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

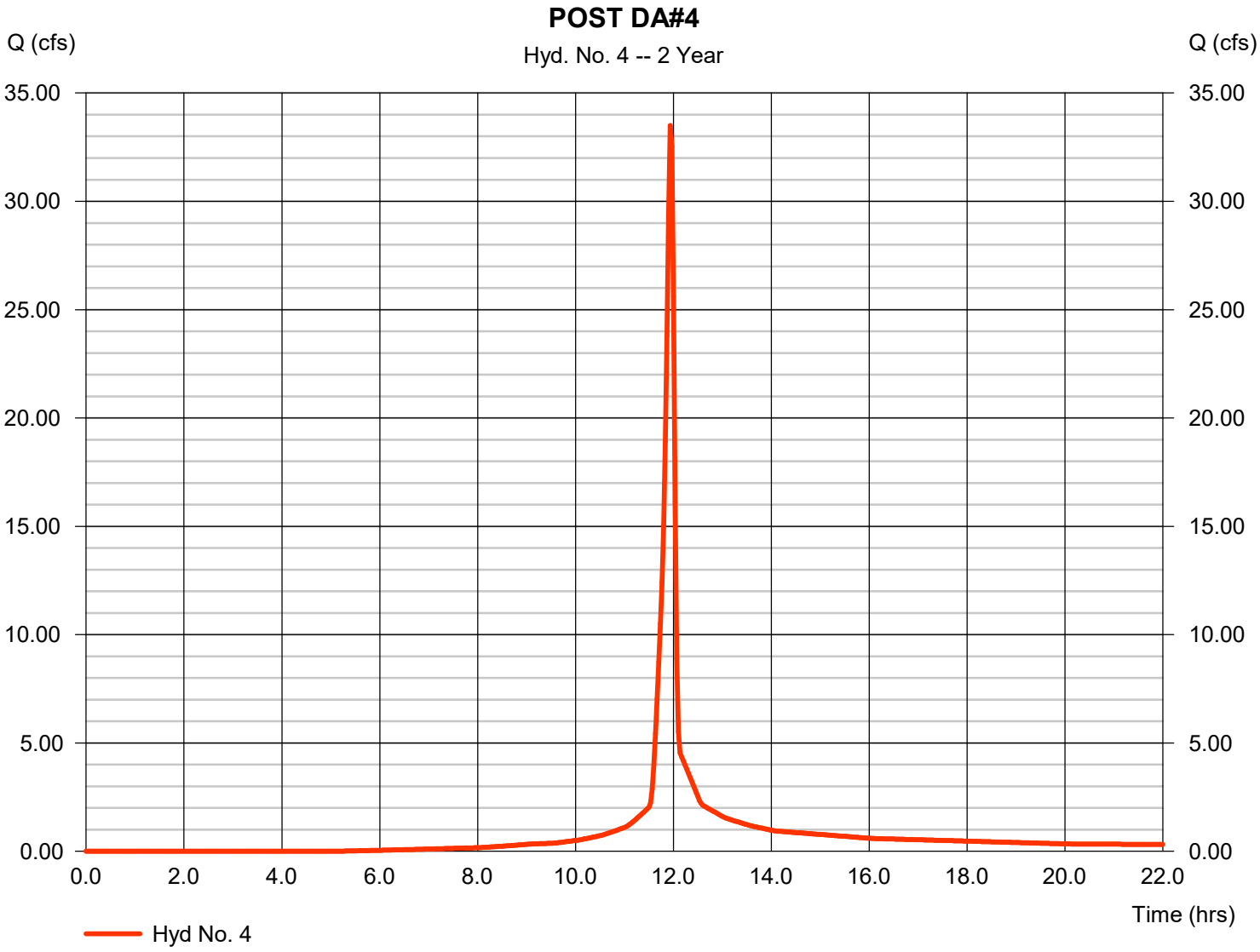


Hydrograph Report

Hyd. No. 4

POST DA#4

Hydrograph type	=	SCS Runoff	Peak discharge	=	33.50 cfs
Storm frequency	=	2 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	69,959 cuft
Drainage area	=	8.430 ac	Curve number	=	90
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.30 min
Total precip.	=	3.49 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

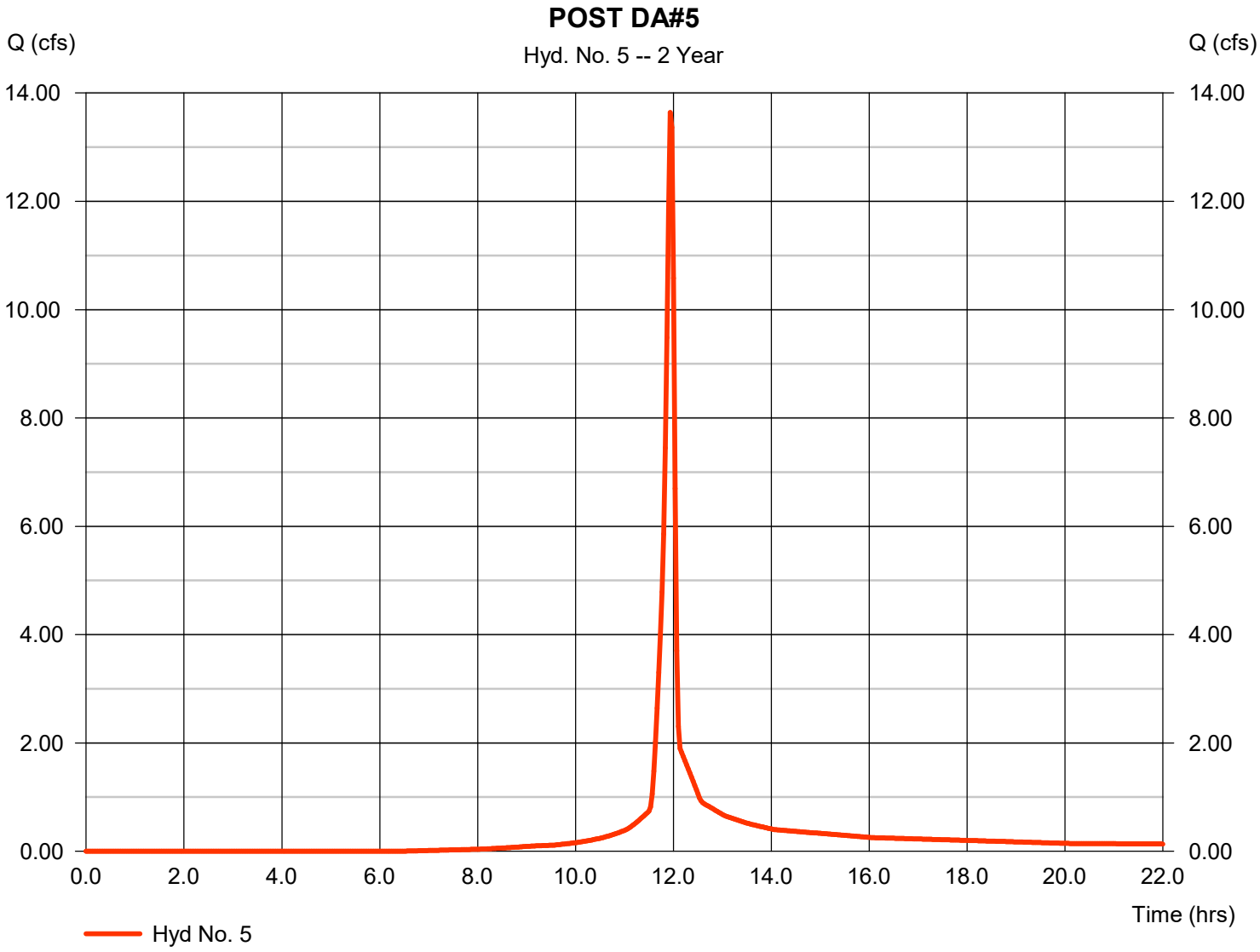


Hydrograph Report

Hyd. No. 5

POST DA#5

Hydrograph type	=	SCS Runoff	Peak discharge	=	13.64 cfs
Storm frequency	=	2 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	27,959 cuft
Drainage area	=	3.780 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	3.49 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

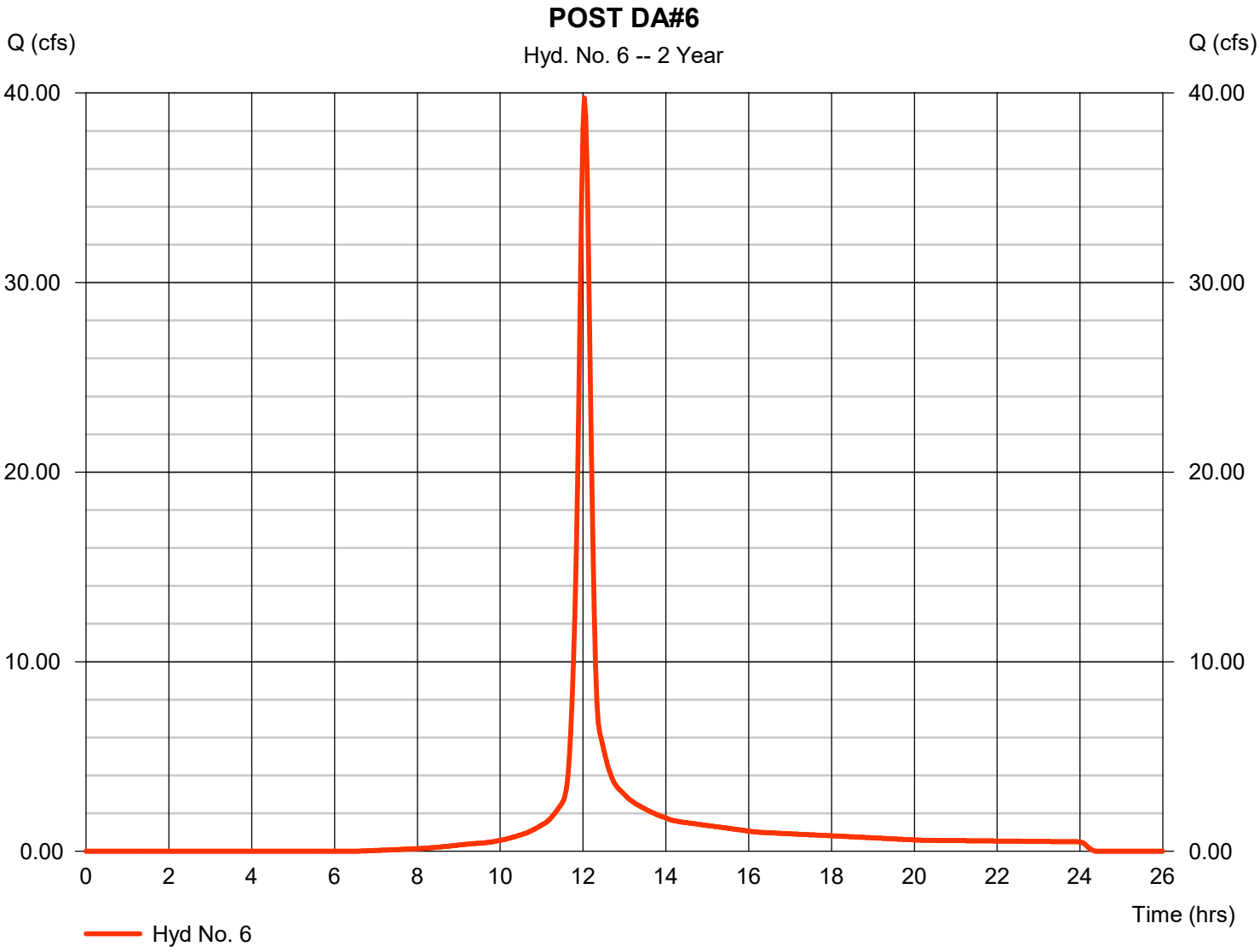


Hydrograph Report

Hyd. No. 6

POST DA#6

Hydrograph type	=	SCS Runoff	Peak discharge	=	39.74 cfs
Storm frequency	=	2 yrs	Time to peak	=	12.03 hrs
Time interval	=	2 min	Hyd. volume	=	111,924 cuft
Drainage area	=	14.550 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	14.80 min
Total precip.	=	3.49 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

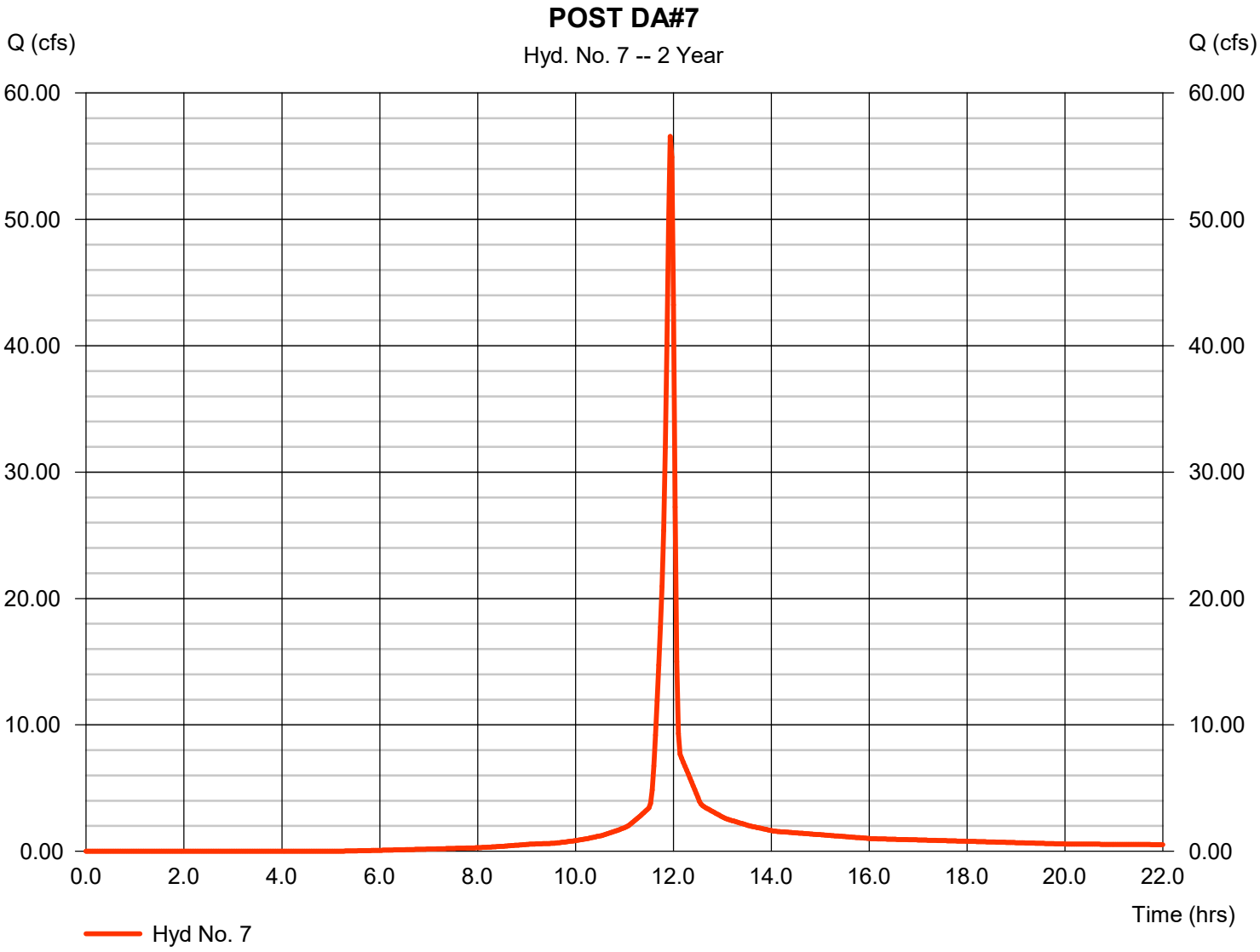


Hydrograph Report

Hyd. No. 7

POST DA#7

Hydrograph type	=	SCS Runoff	Peak discharge	=	56.55 cfs
Storm frequency	=	2 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	118,093 cuft
Drainage area	=	14.230 ac	Curve number	=	90
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.20 min
Total precip.	=	3.49 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

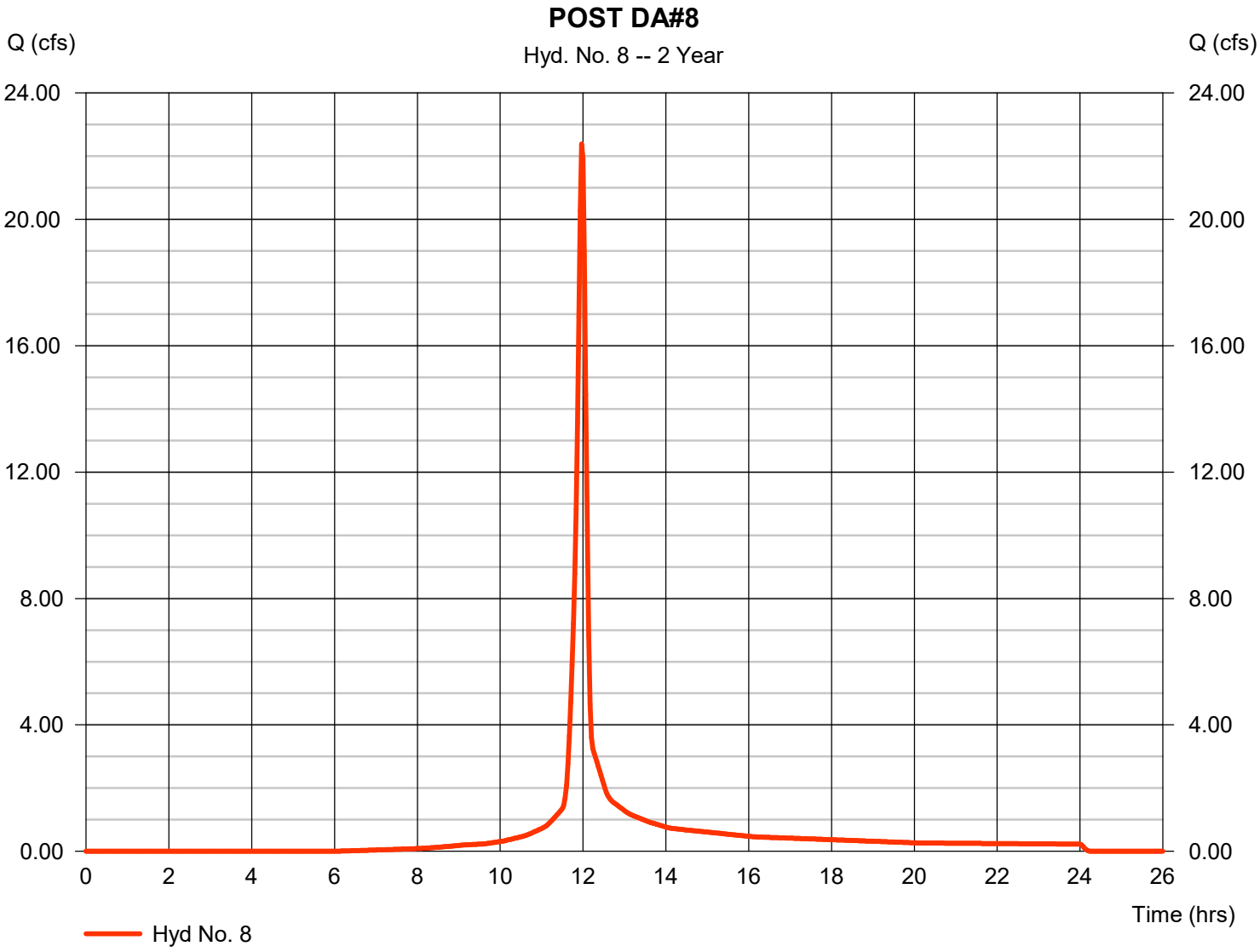


Hydrograph Report

Hyd. No. 8

POST DA#8

Hydrograph type	=	SCS Runoff	Peak discharge	=	22.38 cfs
Storm frequency	=	2 yrs	Time to peak	=	11.97 hrs
Time interval	=	2 min	Hyd. volume	=	51,920 cuft
Drainage area	=	6.330 ac	Curve number	=	88
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.80 min
Total precip.	=	3.49 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

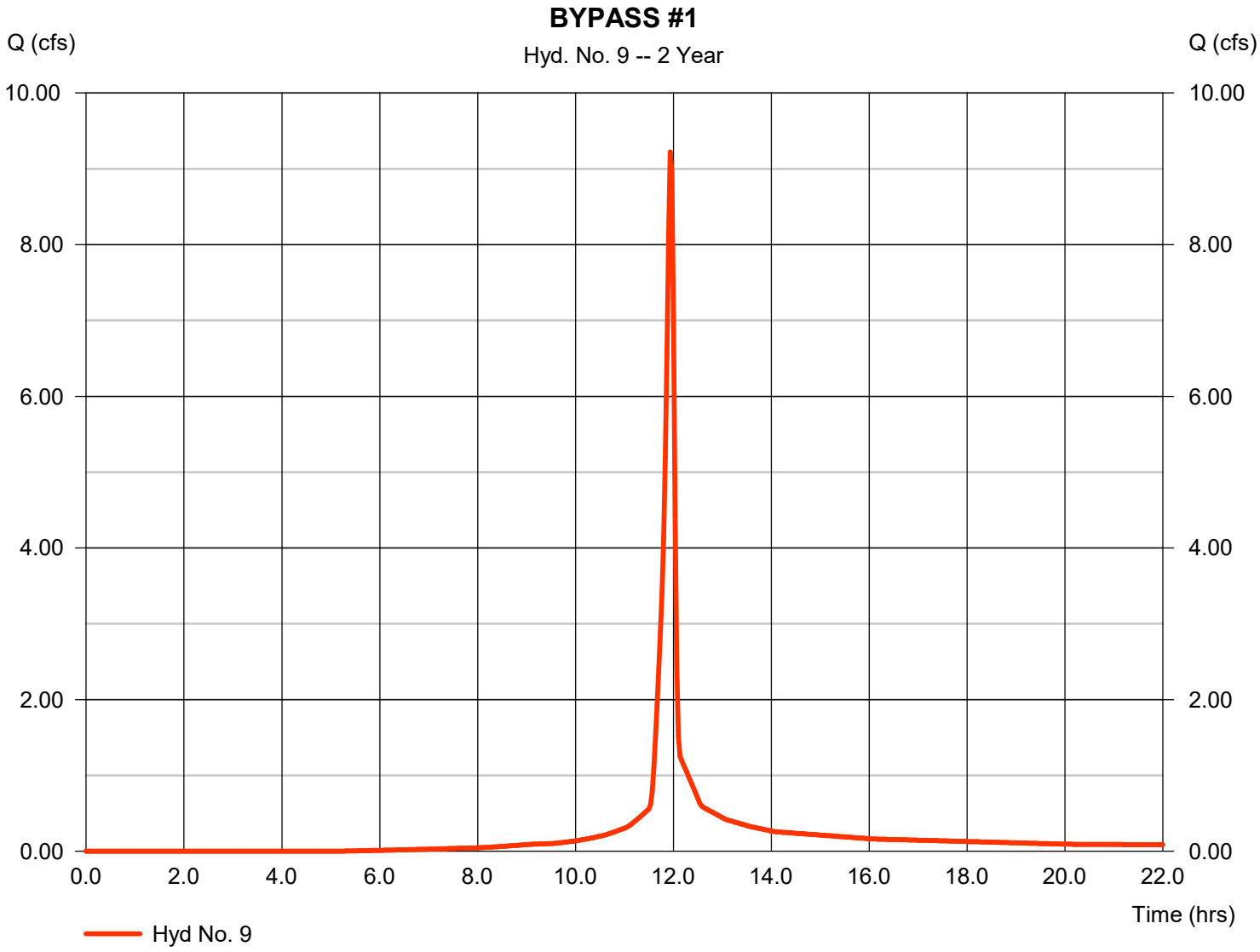


Hydrograph Report

Hyd. No. 9

BYPASS #1

Hydrograph type	=	SCS Runoff	Peak discharge	=	9.220 cfs
Storm frequency	=	2 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	19,253 cuft
Drainage area	=	2.320 ac	Curve number	=	90
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	3.49 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

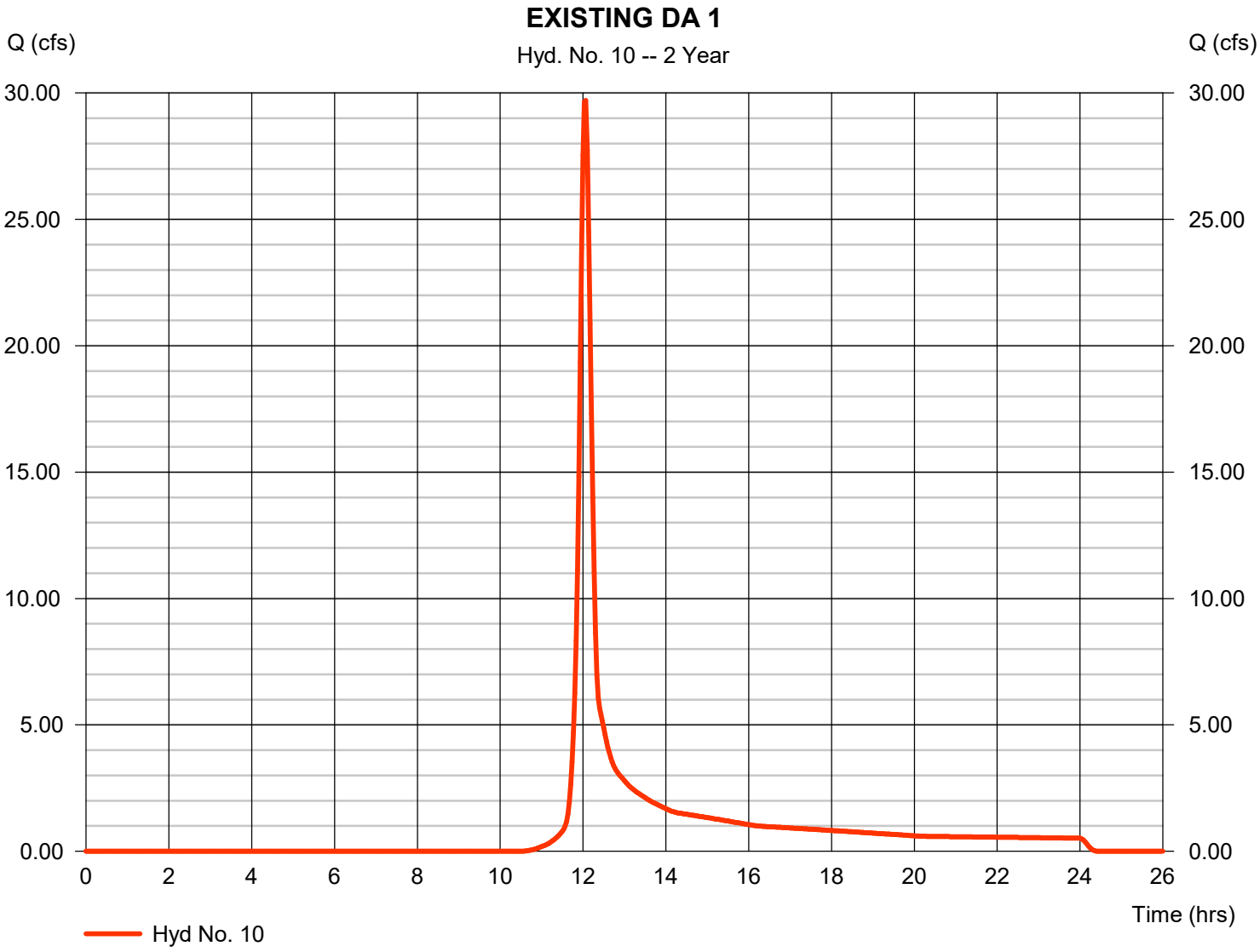


Hydrograph Report

Hyd. No. 10

EXISTING DA 1

Hydrograph type	=	SCS Runoff	Peak discharge	=	29.71 cfs
Storm frequency	=	2 yrs	Time to peak	=	12.07 hrs
Time interval	=	2 min	Hyd. volume	=	86,057 cuft
Drainage area	=	19.720 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	14.00 min
Total precip.	=	3.49 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

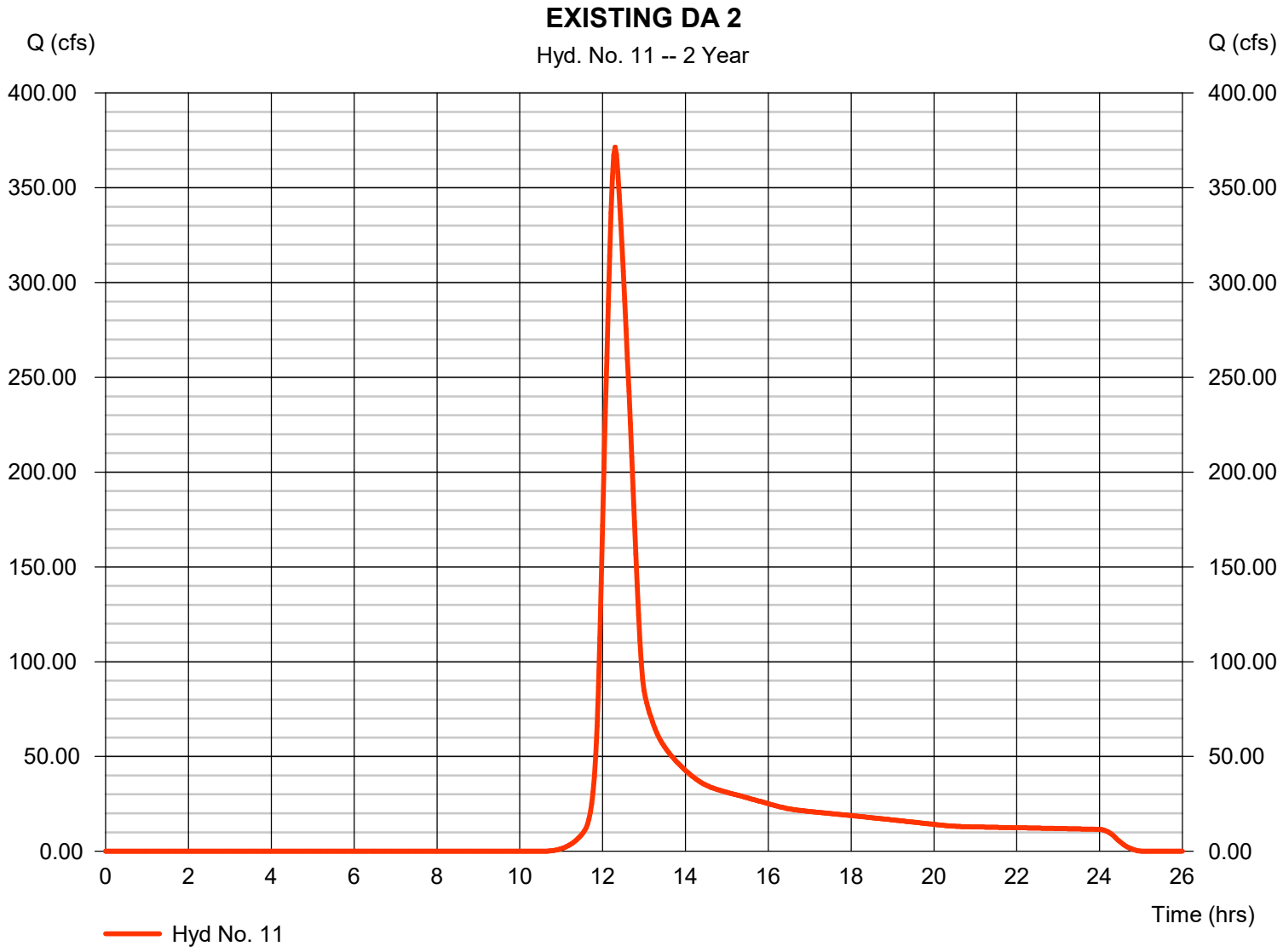


Hydrograph Report

Hyd. No. 11

EXISTING DA 2

Hydrograph type	=	SCS Runoff	Peak discharge	=	371.41 cfs
Storm frequency	=	2 yrs	Time to peak	=	12.30 hrs
Time interval	=	2 min	Hyd. volume	=	1,901,209 cuft
Drainage area	=	424.770 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	38.10 min
Total precip.	=	3.49 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

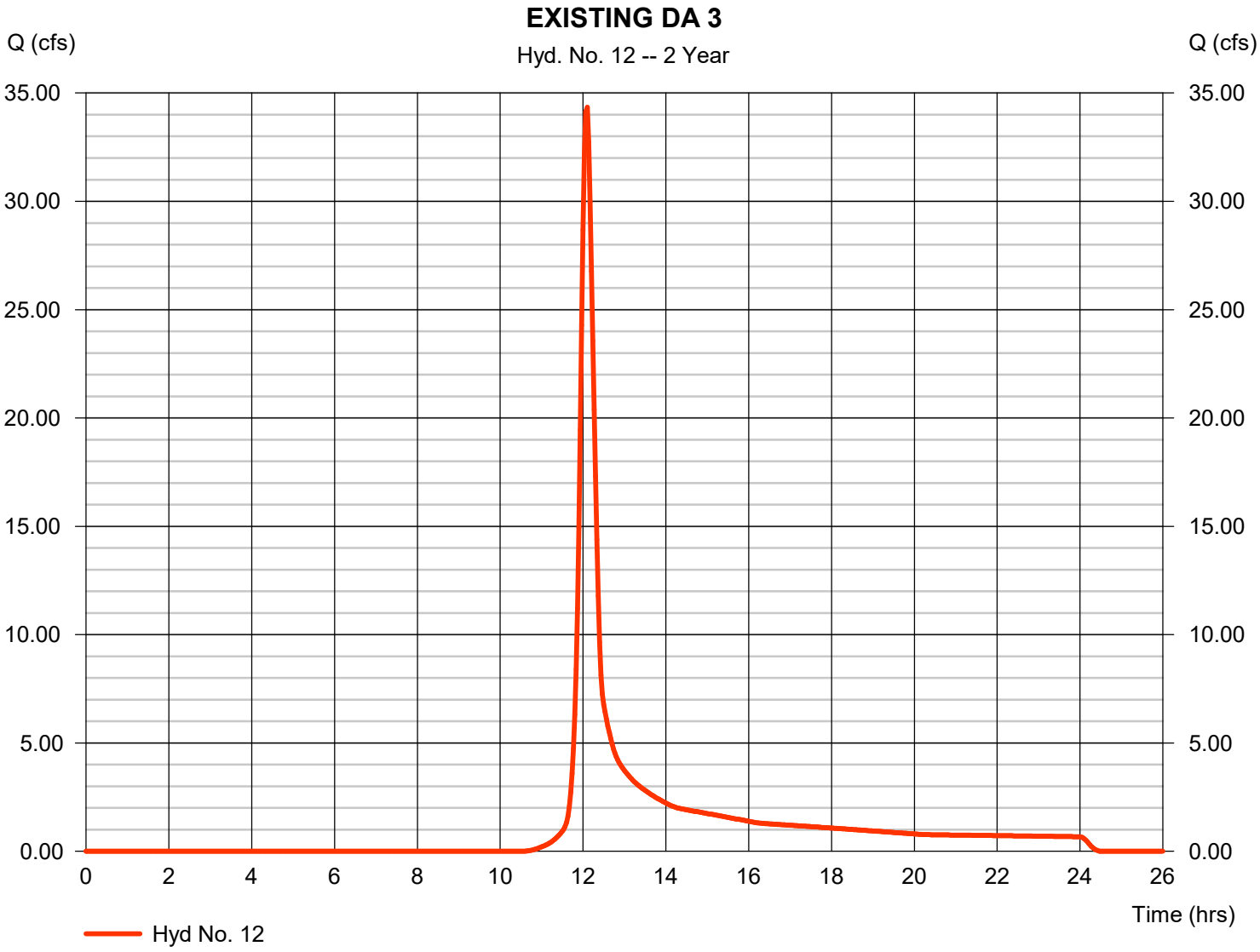


Hydrograph Report

Hyd. No. 12

EXISTING DA 3

Hydrograph type	=	SCS Runoff	Peak discharge	=	34.34 cfs
Storm frequency	=	2 yrs	Time to peak	=	12.10 hrs
Time interval	=	2 min	Hyd. volume	=	111,538 cuft
Drainage area	=	24.920 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	19.60 min
Total precip.	=	3.49 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

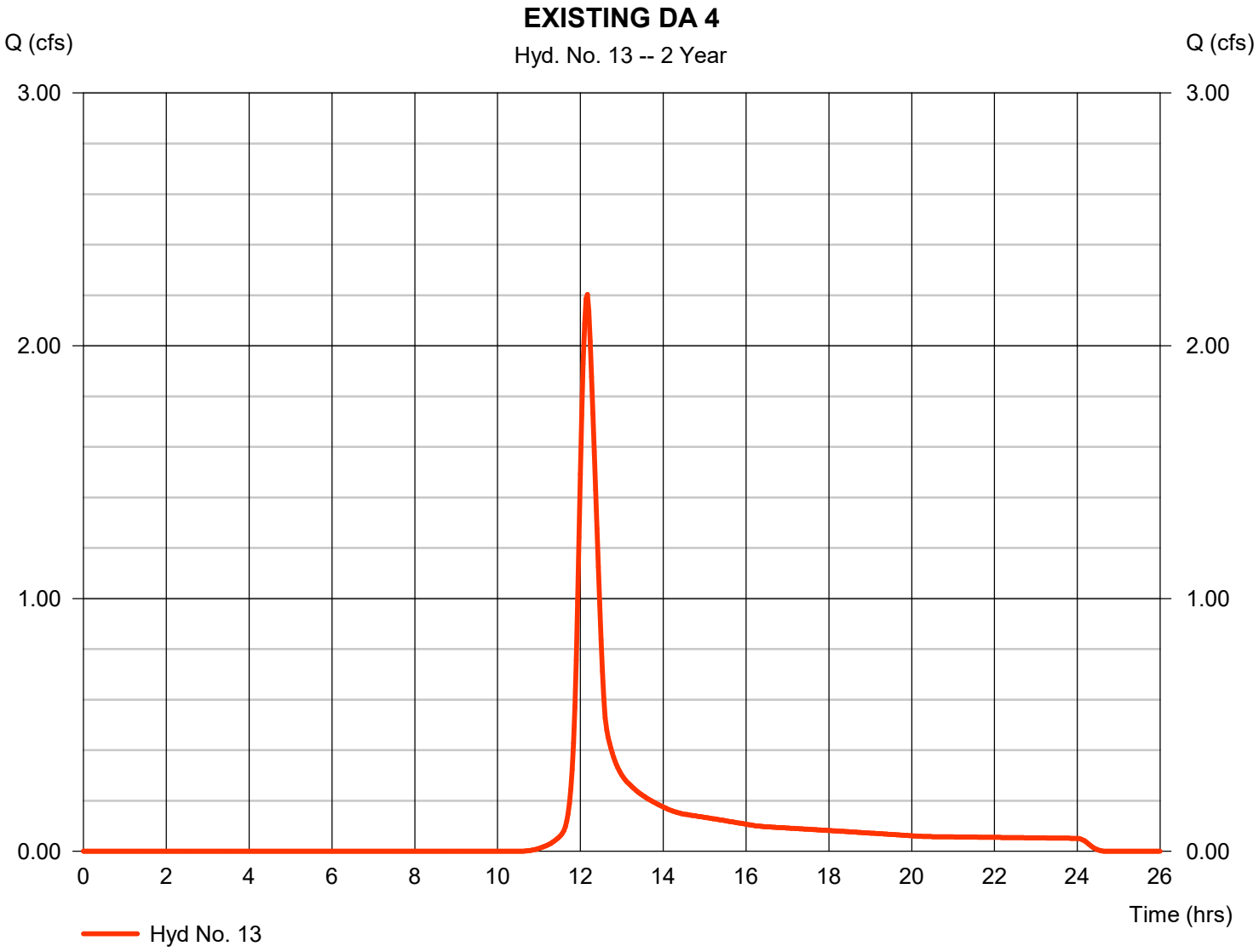


Hydrograph Report

Hyd. No. 13

EXISTING DA 4

Hydrograph type	=	SCS Runoff	Peak discharge	=	2.203 cfs
Storm frequency	=	2 yrs	Time to peak	=	12.17 hrs
Time interval	=	2 min	Hyd. volume	=	8,459 cuft
Drainage area	=	1.920 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	26.20 min
Total precip.	=	3.49 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



Hydrograph Report

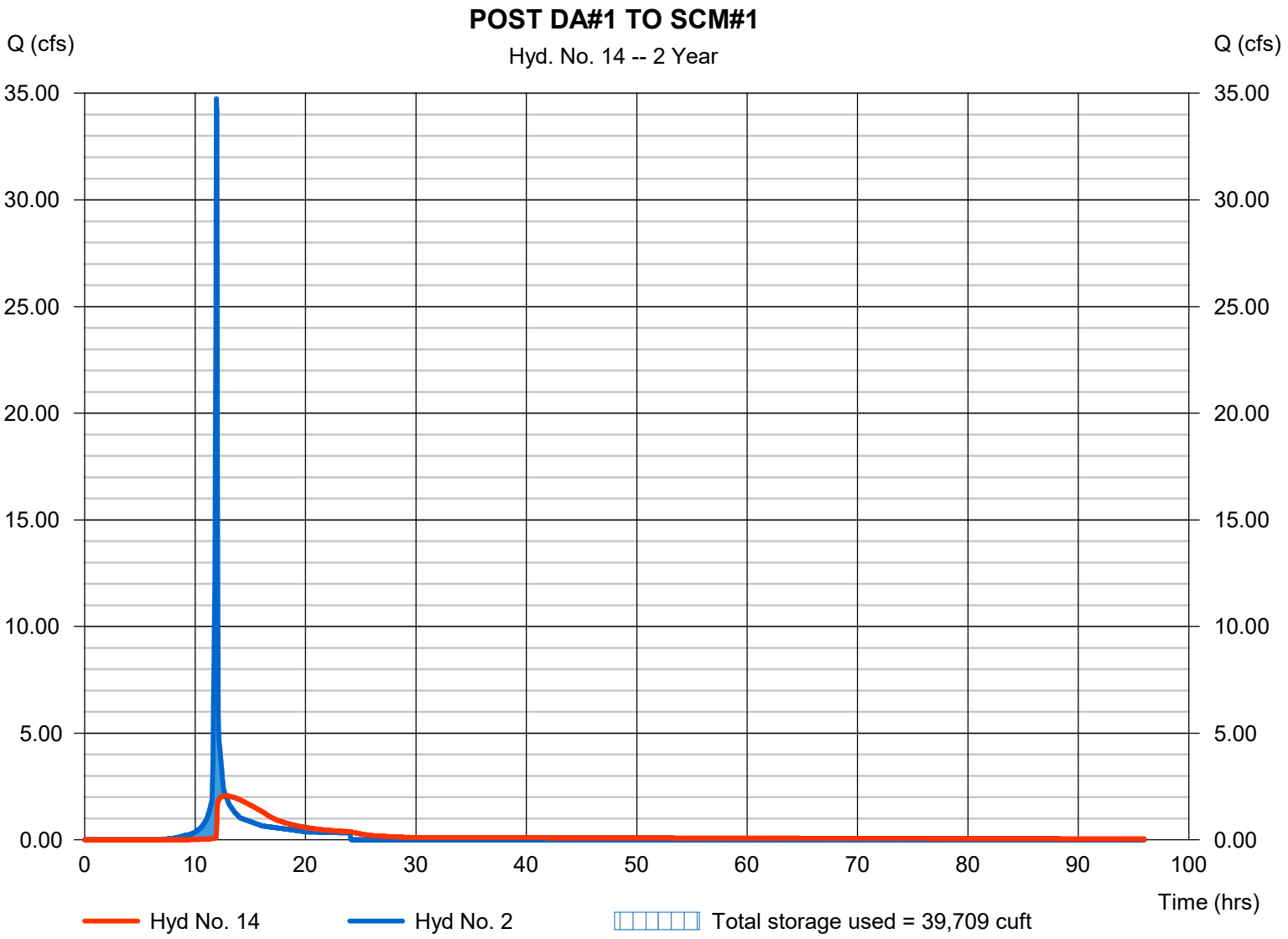
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Thursday, 10 / 31 / 2024

Hyd. No. 14

POST DA#1 TO SCM#1

Hydrograph type	= Reservoir	Peak discharge	= 2.061 cfs
Storm frequency	= 2 yrs	Time to peak	= 12.77 hrs
Time interval	= 2 min	Hyd. volume	= 67,198 cuft
Inflow hyd. No.	= 2 - POST DA#1	Max. Elevation	= 264.10 ft
Reservoir name	= SCM#1	Max. Storage	= 39,709 cuft

Storage Indication method used.



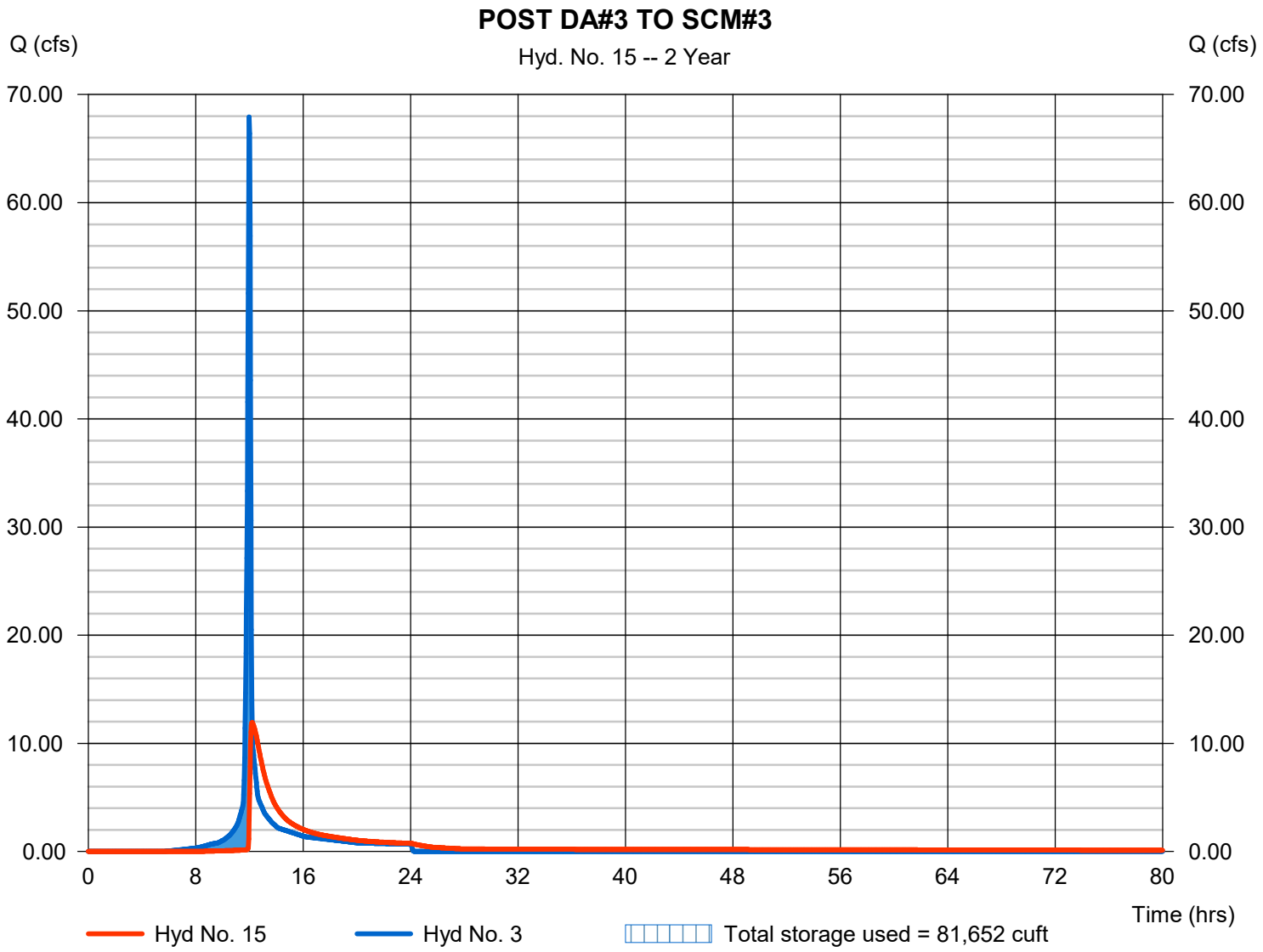
Hydrograph Report

Hyd. No. 15

POST DA#3 TO SCM#3

Hydrograph type	=	Reservoir	Peak discharge	=	11.92 cfs
Storm frequency	=	2 yrs	Time to peak	=	12.20 hrs
Time interval	=	2 min	Hyd. volume	=	151,932 cuft
Inflow hyd. No.	=	3 - POST DA #3	Max. Elevation	=	243.34 ft
Reservoir name	=	SCM#3	Max. Storage	=	81,652 cuft

Storage Indication method used.



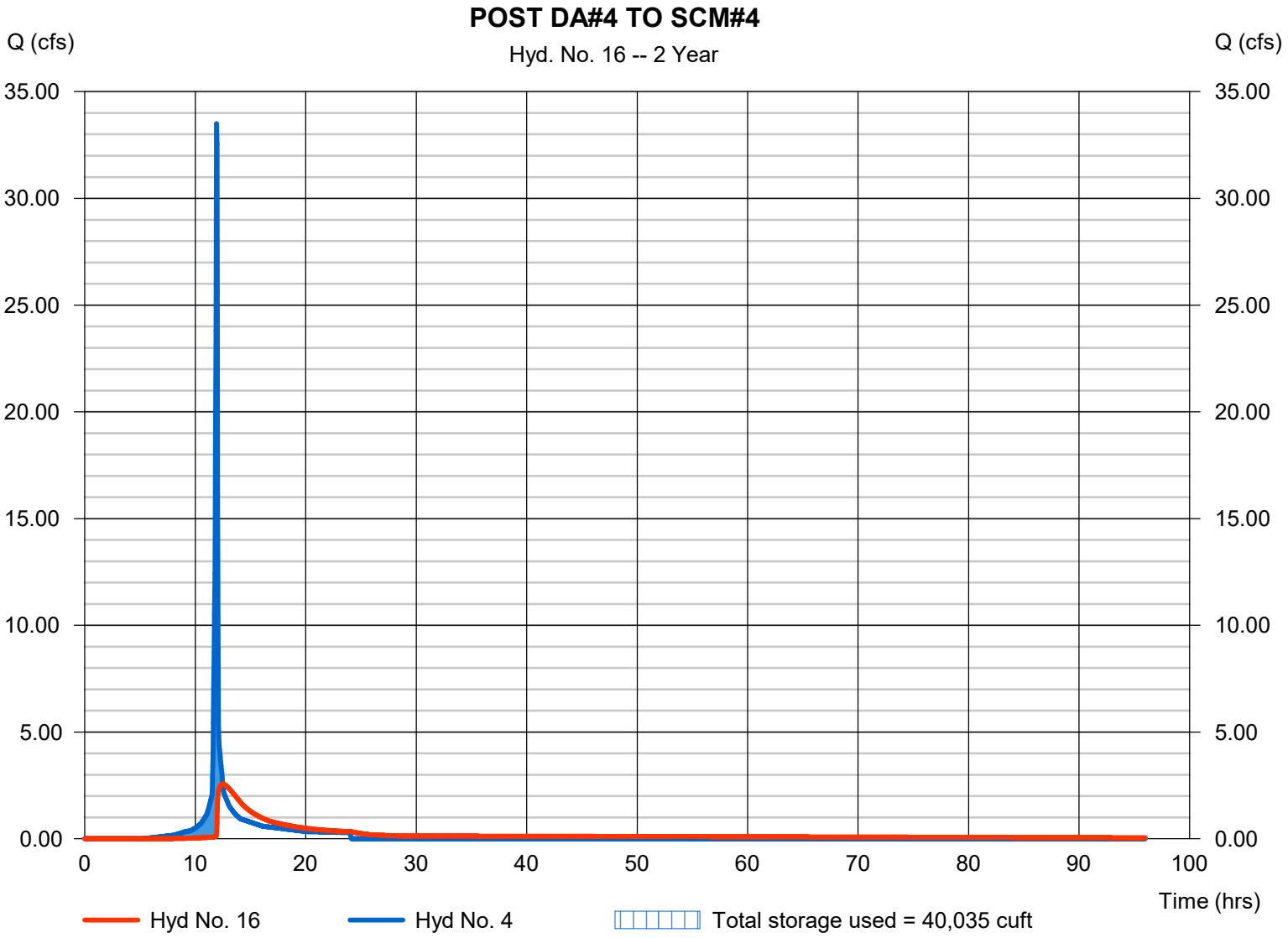
Hydrograph Report

Hyd. No. 16

POST DA#4 TO SCM#4

Hydrograph type	= Reservoir	Peak discharge	= 2.564 cfs
Storm frequency	= 2 yrs	Time to peak	= 12.50 hrs
Time interval	= 2 min	Hyd. volume	= 66,555 cuft
Inflow hyd. No.	= 4 - POST DA#4	Max. Elevation	= 242.58 ft
Reservoir name	= SCM#4	Max. Storage	= 40,035 cuft

Storage Indication method used.



Hydrograph Report

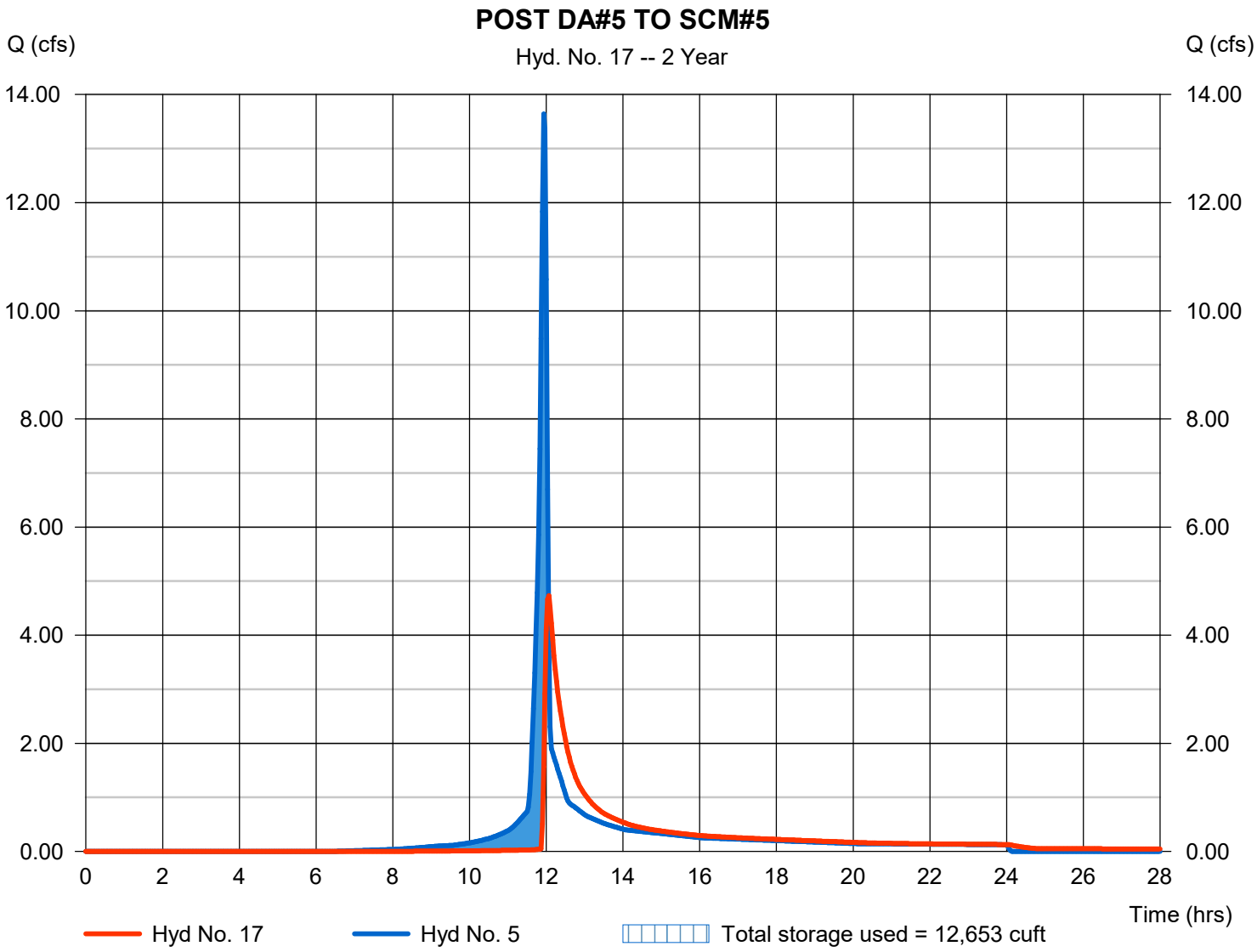
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Thursday, 10 / 31 / 2024

Hyd. No. 17

POST DA#5 TO SCM#5

Hydrograph type	=	Reservoir	Peak discharge	=	4.732 cfs
Storm frequency	=	2 yrs	Time to peak	=	12.07 hrs
Time interval	=	2 min	Hyd. volume	=	27,577 cuft
Inflow hyd. No.	=	5 - POST DA#5	Max. Elevation	=	251.07 ft
Reservoir name	=	SCM#5	Max. Storage	=	12,653 cuft

Storage Indication method used.



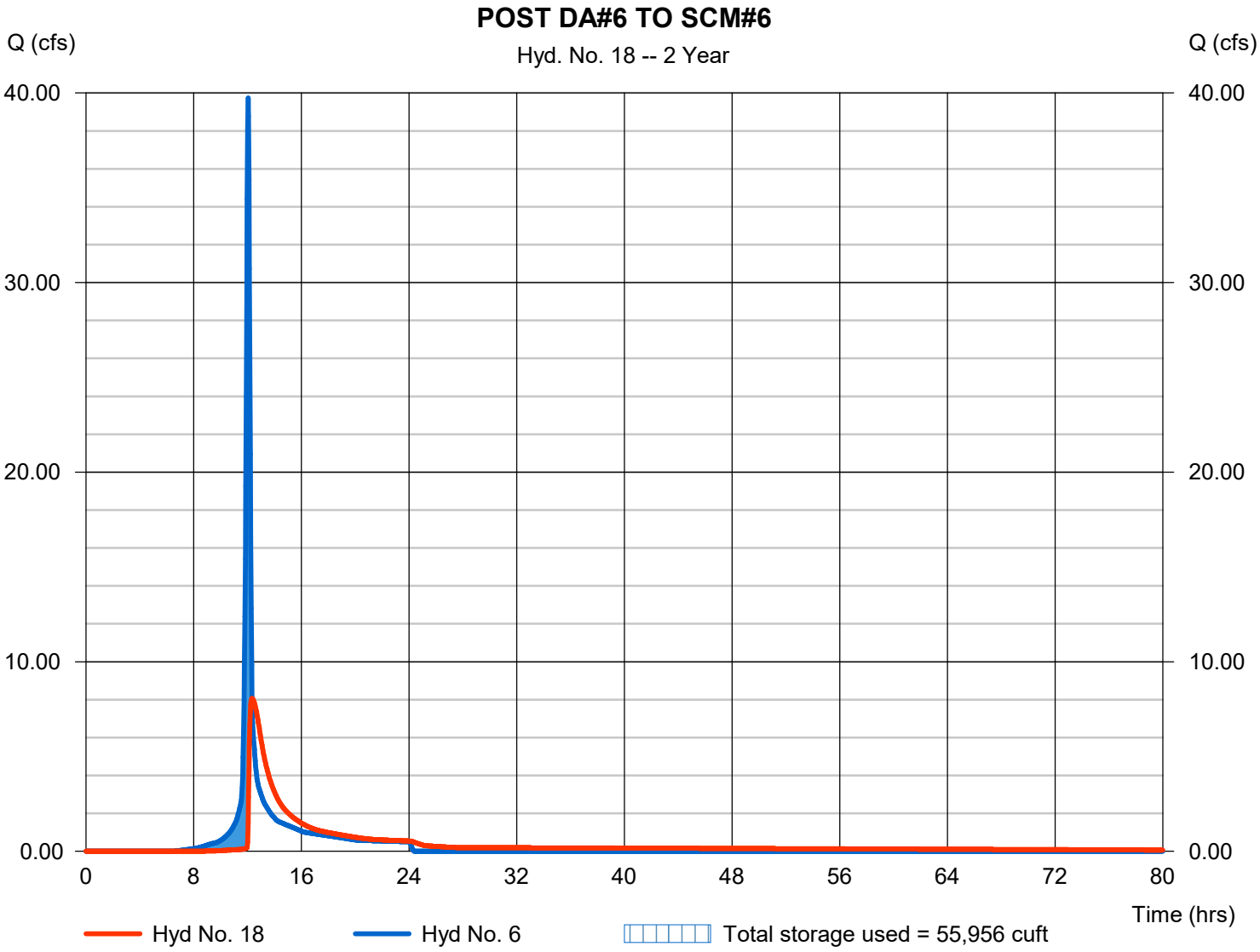
Hydrograph Report

Hyd. No. 18

POST DA#6 TO SCM#6

Hydrograph type	= Reservoir	Peak discharge	= 8.062 cfs
Storm frequency	= 2 yrs	Time to peak	= 12.33 hrs
Time interval	= 2 min	Hyd. volume	= 109,926 cuft
Inflow hyd. No.	= 6 - POST DA#6	Max. Elevation	= 239.82 ft
Reservoir name	= SCM#6	Max. Storage	= 55,956 cuft

Storage Indication method used.



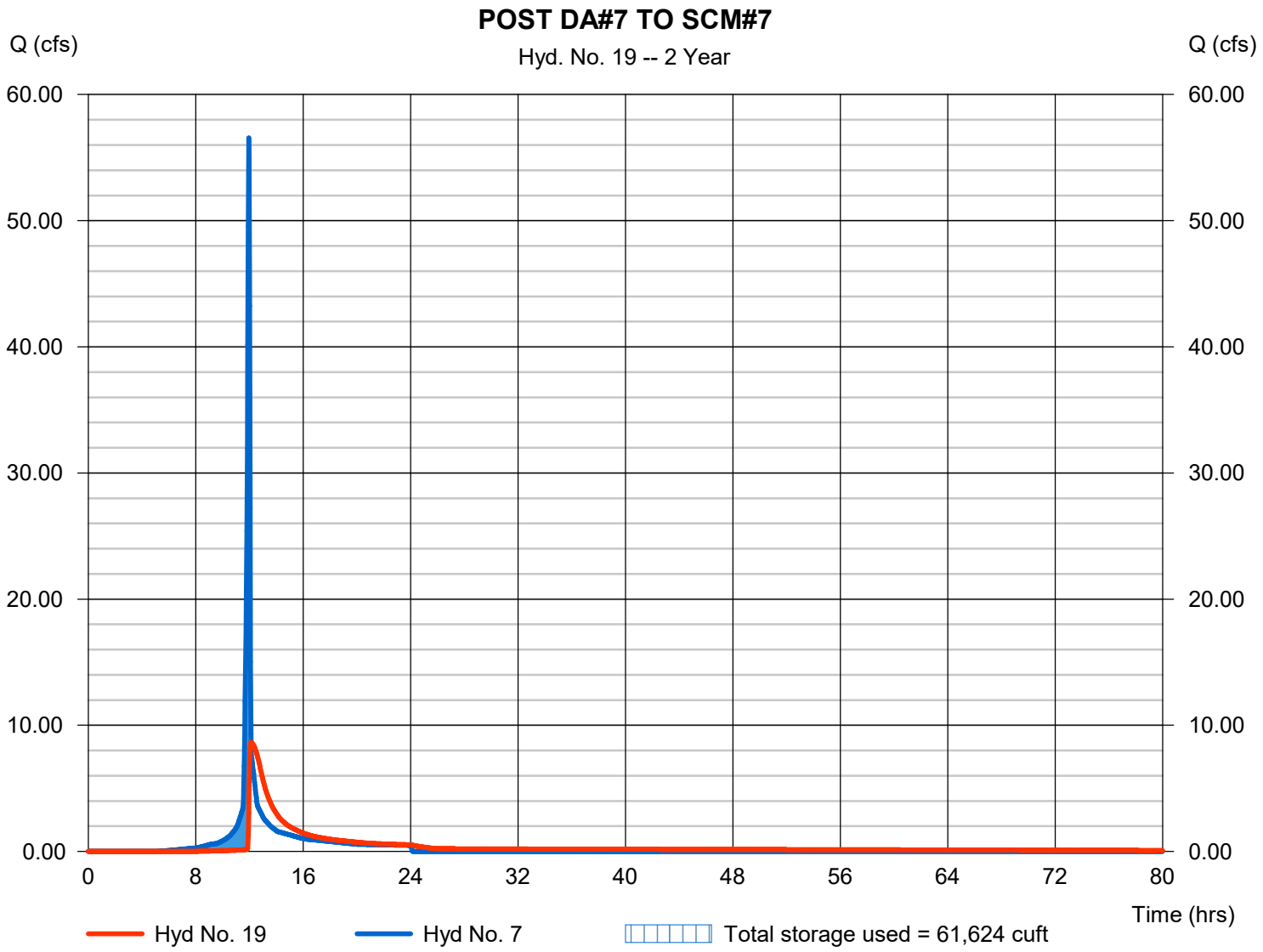
Hydrograph Report

Hyd. No. 19

POST DA#7 TO SCM#7

Hydrograph type	=	Reservoir	Peak discharge	=	8.642 cfs
Storm frequency	=	2 yrs	Time to peak	=	12.10 hrs
Time interval	=	2 min	Hyd. volume	=	115,398 cuft
Inflow hyd. No.	=	7 - POST DA#7	Max. Elevation	=	241.95 ft
Reservoir name	=	SCM#7	Max. Storage	=	61,624 cuft

Storage Indication method used.



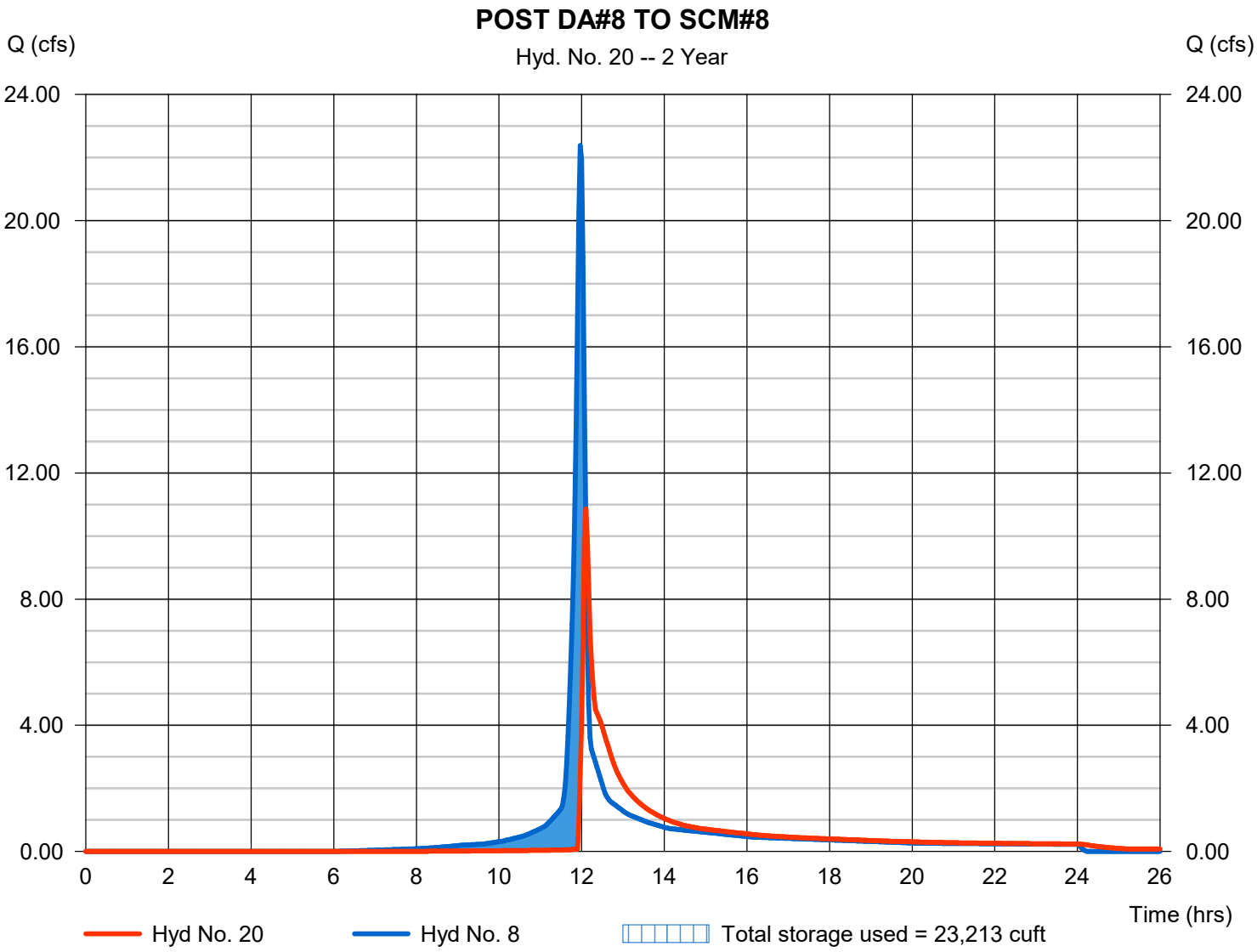
Hydrograph Report

Hyd. No. 20

POST DA#8 TO SCM#8

Hydrograph type	=	Reservoir	Peak discharge	=	10.86 cfs
Storm frequency	=	2 yrs	Time to peak	=	12.10 hrs
Time interval	=	2 min	Hyd. volume	=	50,810 cuft
Inflow hyd. No.	=	8 - POST DA#8	Max. Elevation	=	242.72 ft
Reservoir name	=	SCM#8	Max. Storage	=	23,213 cuft

Storage Indication method used.

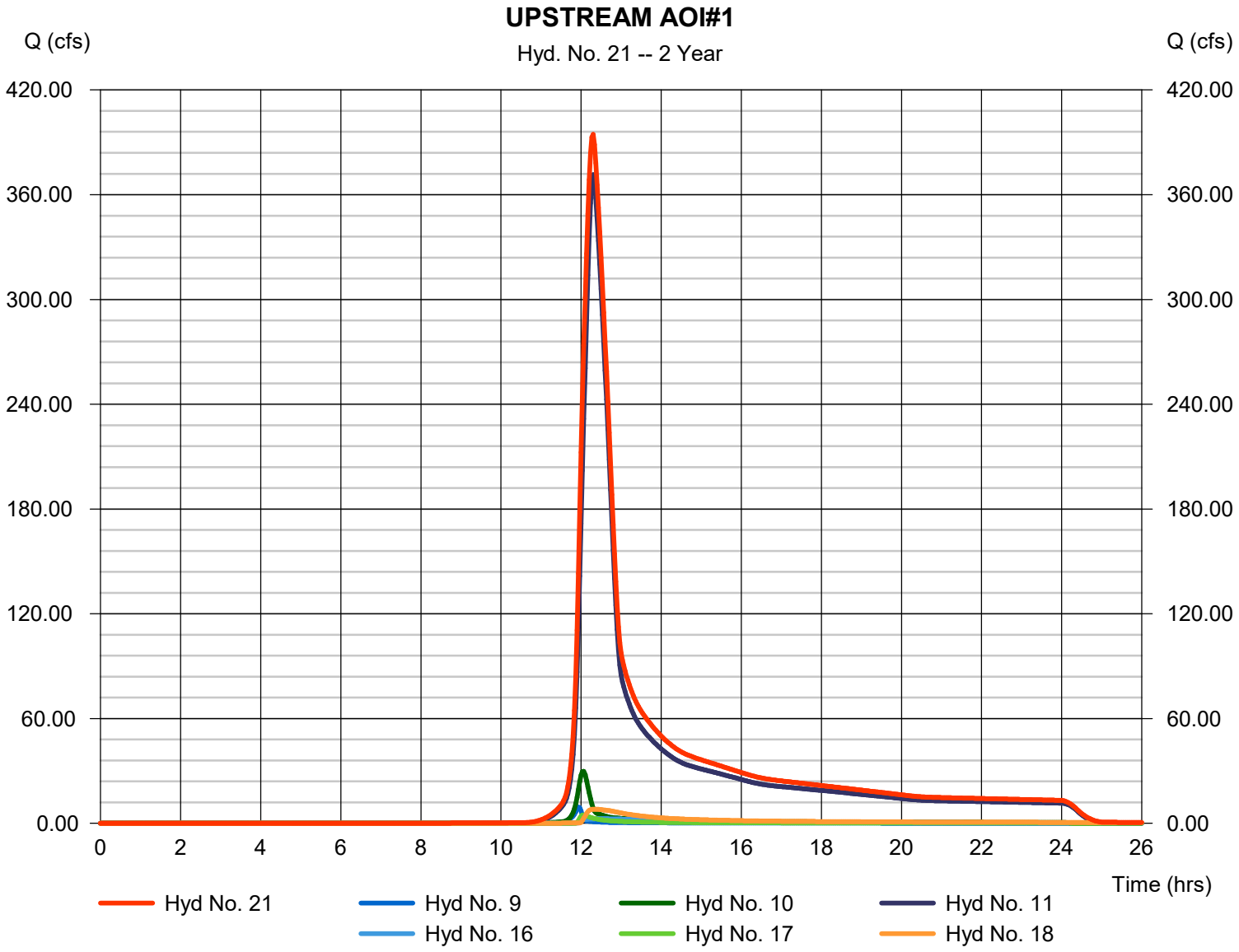


Hydrograph Report

Hyd. No. 21

UPSTREAM AOI#1

Hydrograph type	= Combine	Peak discharge	= 394.52 cfs
Storm frequency	= 2 yrs	Time to peak	= 12.30 hrs
Time interval	= 2 min	Hyd. volume	= 2,210,579 cuft
Inflow hyds.	= 9, 10, 11, 16, 17, 18	Contrib. drain. area	= 446.810 ac

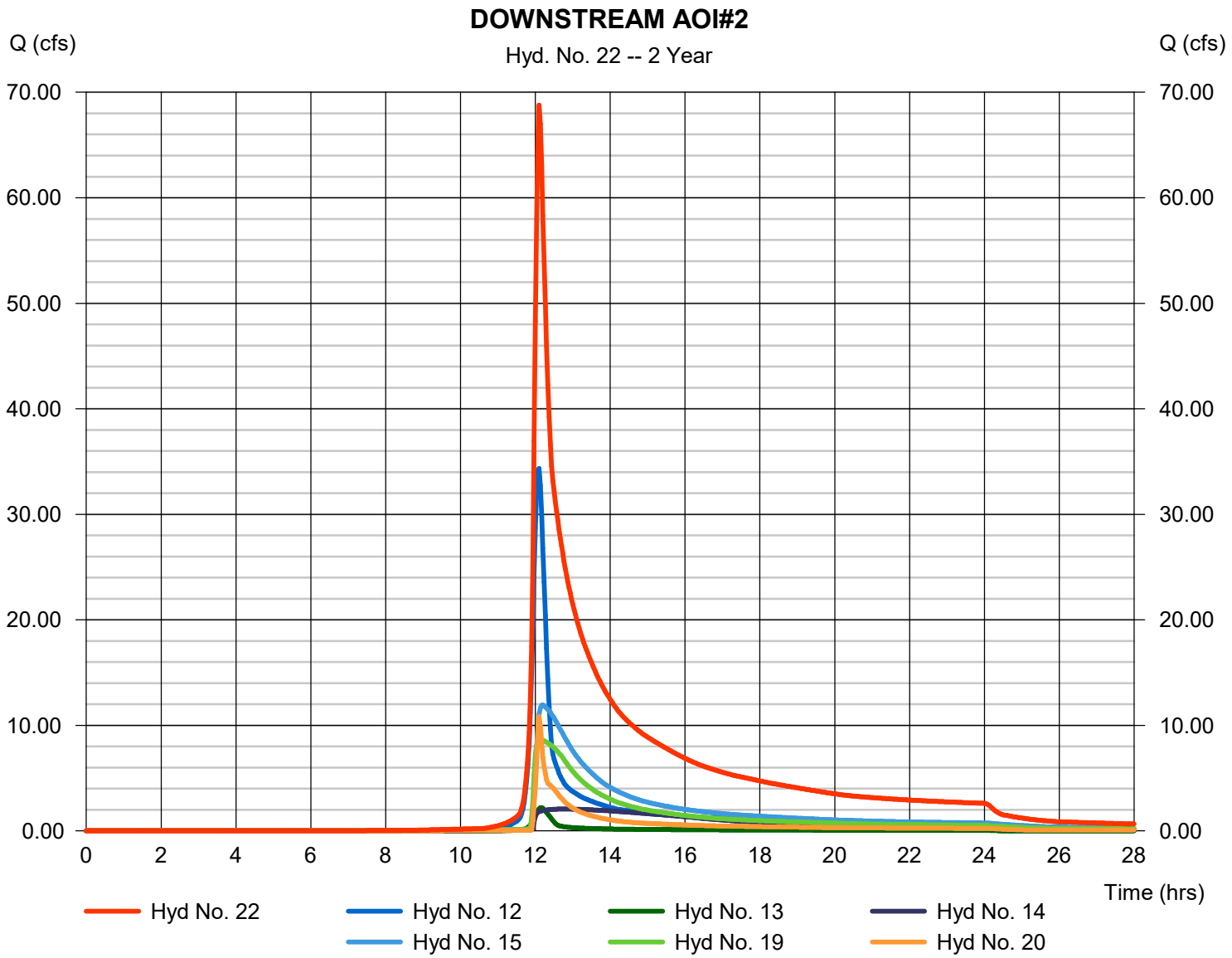


Hydrograph Report

Hyd. No. 22

DOWNSTREAM AOI#2

Hydrograph type	=	Combine	Peak discharge	=	68.78 cfs
Storm frequency	=	2 yrs	Time to peak	=	12.10 hrs
Time interval	=	2 min	Hyd. volume	=	505,336 cuft
Inflow hyds.	=	12, 13, 14, 15, 19, 20	Contrib. drain. area	=	26.840 ac

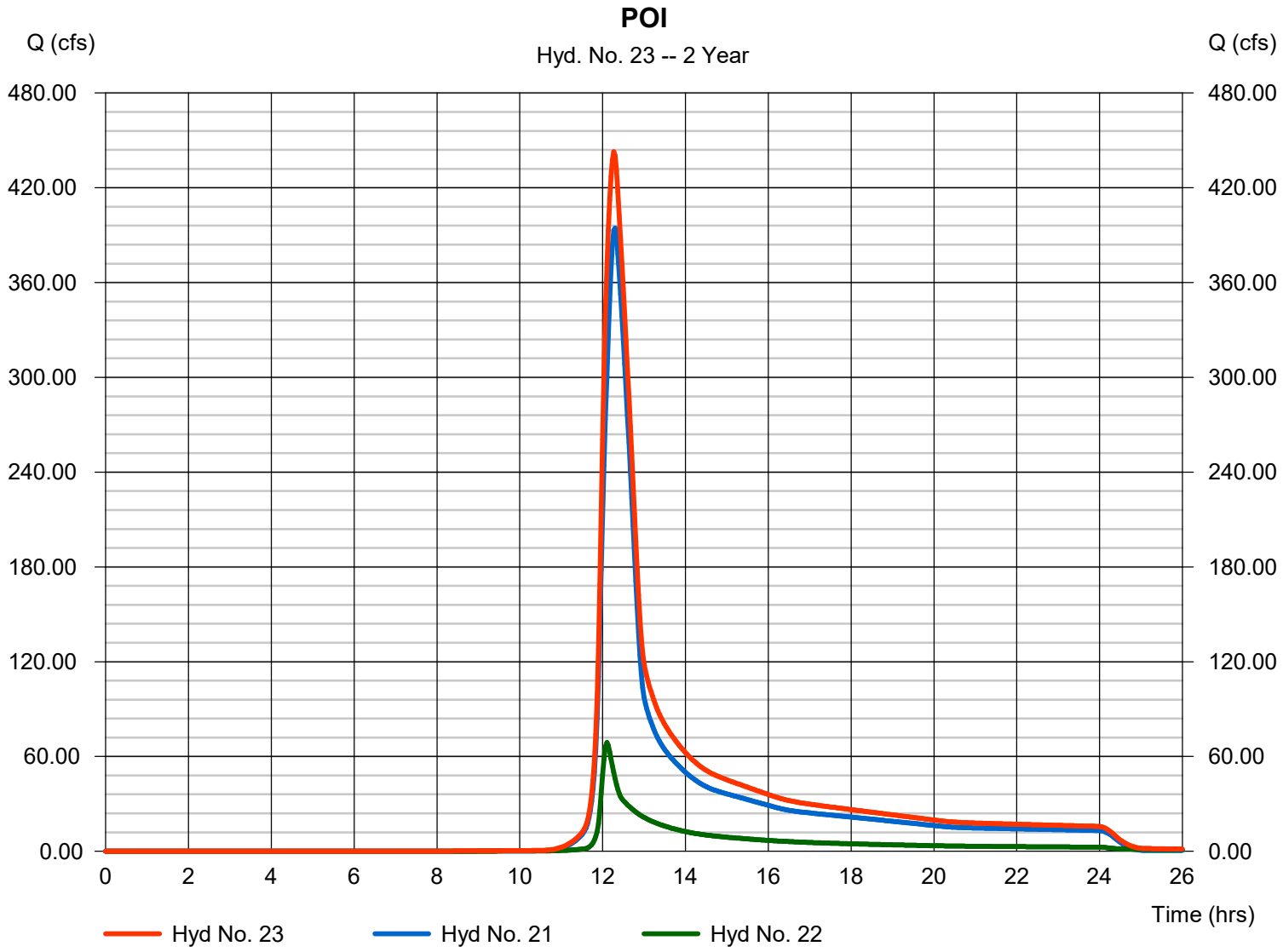


Hydrograph Report

Hyd. No. 23

POI

Hydrograph type	=	Combine	Peak discharge	=	442.83 cfs
Storm frequency	=	2 yrs	Time to peak	=	12.27 hrs
Time interval	=	2 min	Hyd. volume	=	2,715,912 cuft
Inflow hyds.	=	21, 22	Contrib. drain. area	=	0.000 ac

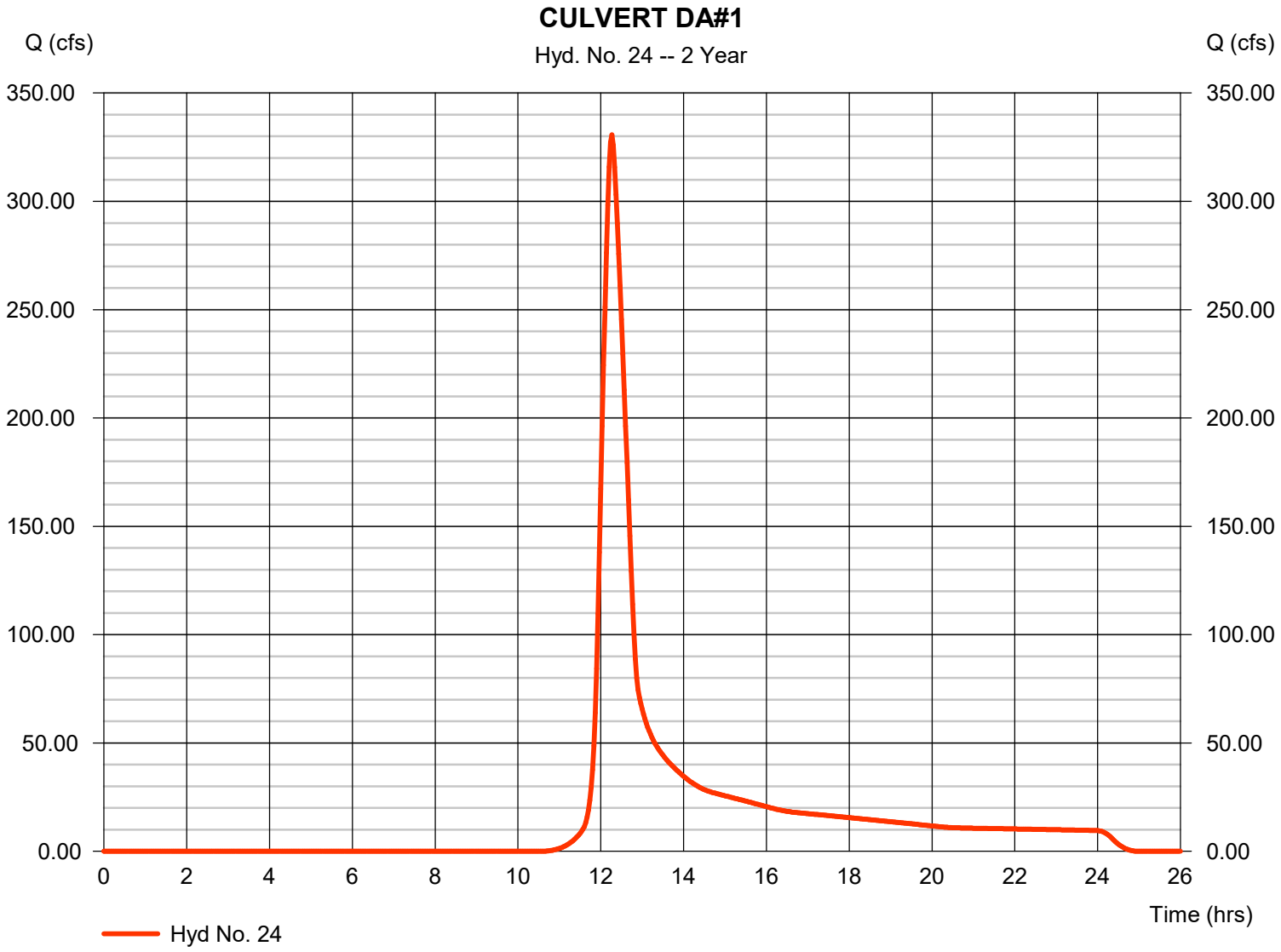


Hydrograph Report

Hyd. No. 24

CULVERT DA#1

Hydrograph type	=	SCS Runoff	Peak discharge	=	330.70 cfs
Storm frequency	=	2 yrs	Time to peak	=	12.27 hrs
Time interval	=	2 min	Hyd. volume	=	1,578,438 cuft
Drainage area	=	356.710 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	34.90 min
Total precip.	=	3.49 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

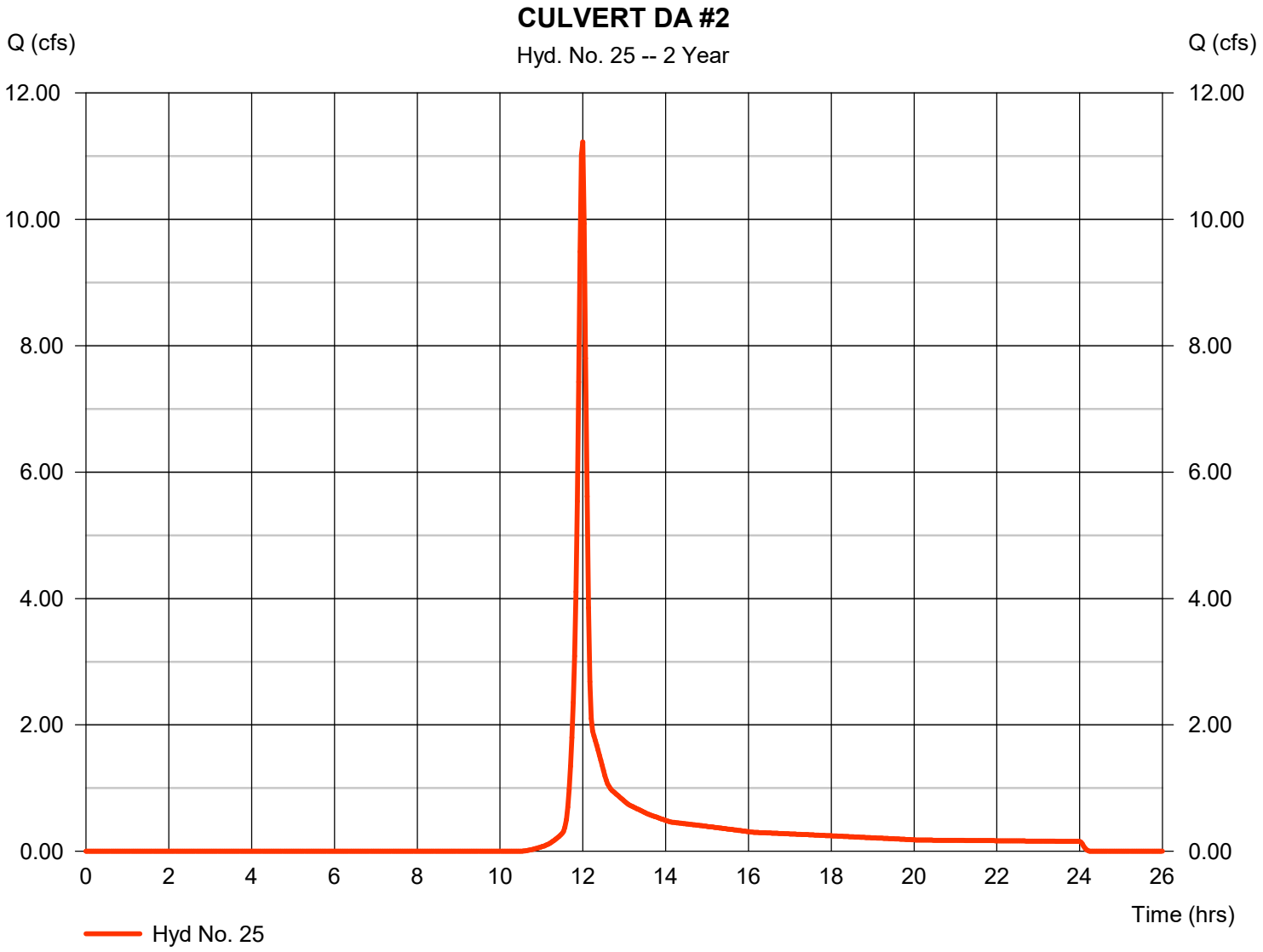


Hydrograph Report

Hyd. No. 25

CULVERT DA #2

Hydrograph type	=	SCS Runoff	Peak discharge	=	11.23 cfs
Storm frequency	=	2 yrs	Time to peak	=	12.00 hrs
Time interval	=	2 min	Hyd. volume	=	25,826 cuft
Drainage area	=	5.770 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	8.80 min
Total precip.	=	3.49 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

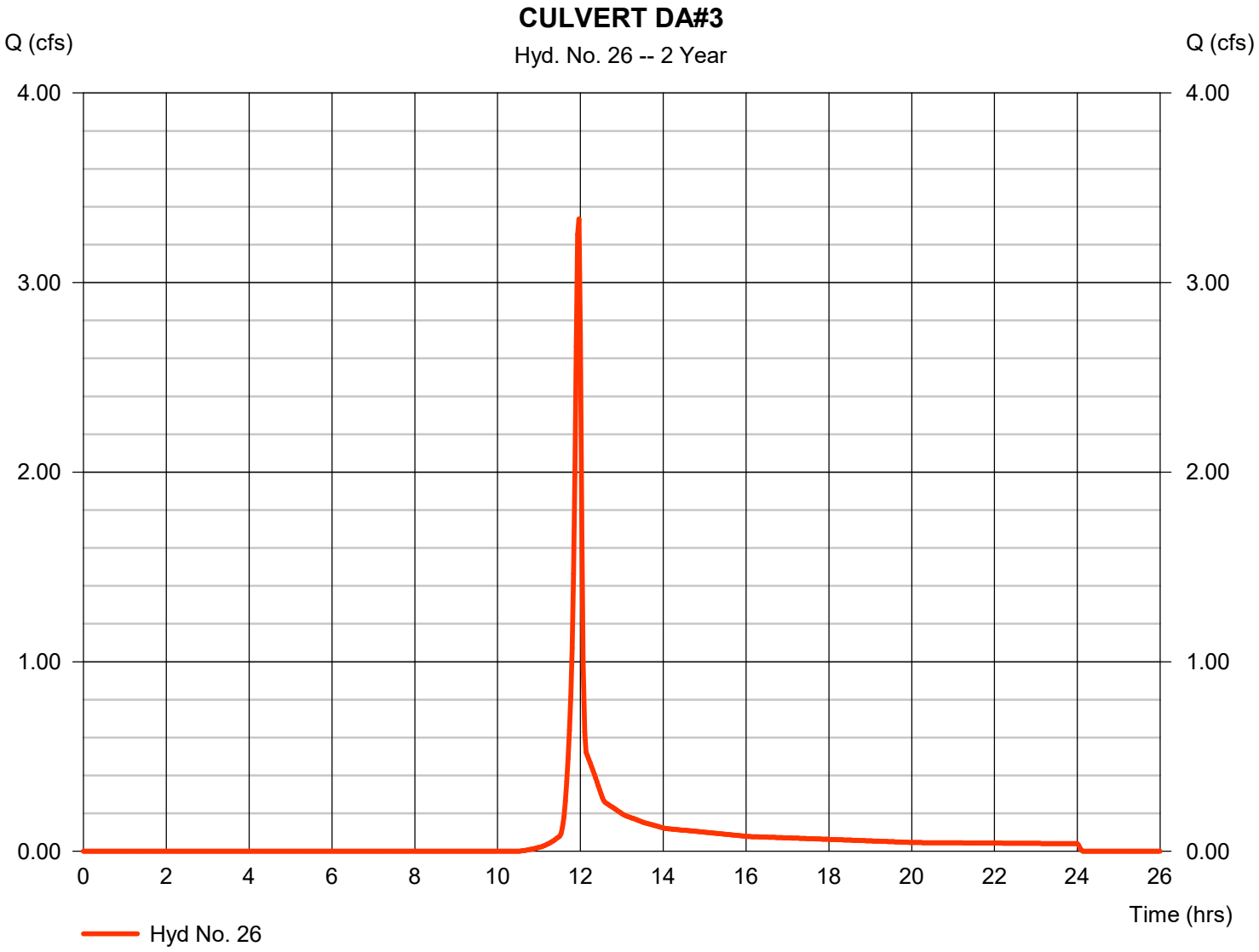


Hydrograph Report

Hyd. No. 26

CULVERT DA#3

Hydrograph type	=	SCS Runoff	Peak discharge	=	3.336 cfs
Storm frequency	=	2 yrs	Time to peak	=	11.97 hrs
Time interval	=	2 min	Hyd. volume	=	6,672 cuft
Drainage area	=	1.590 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	3.49 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

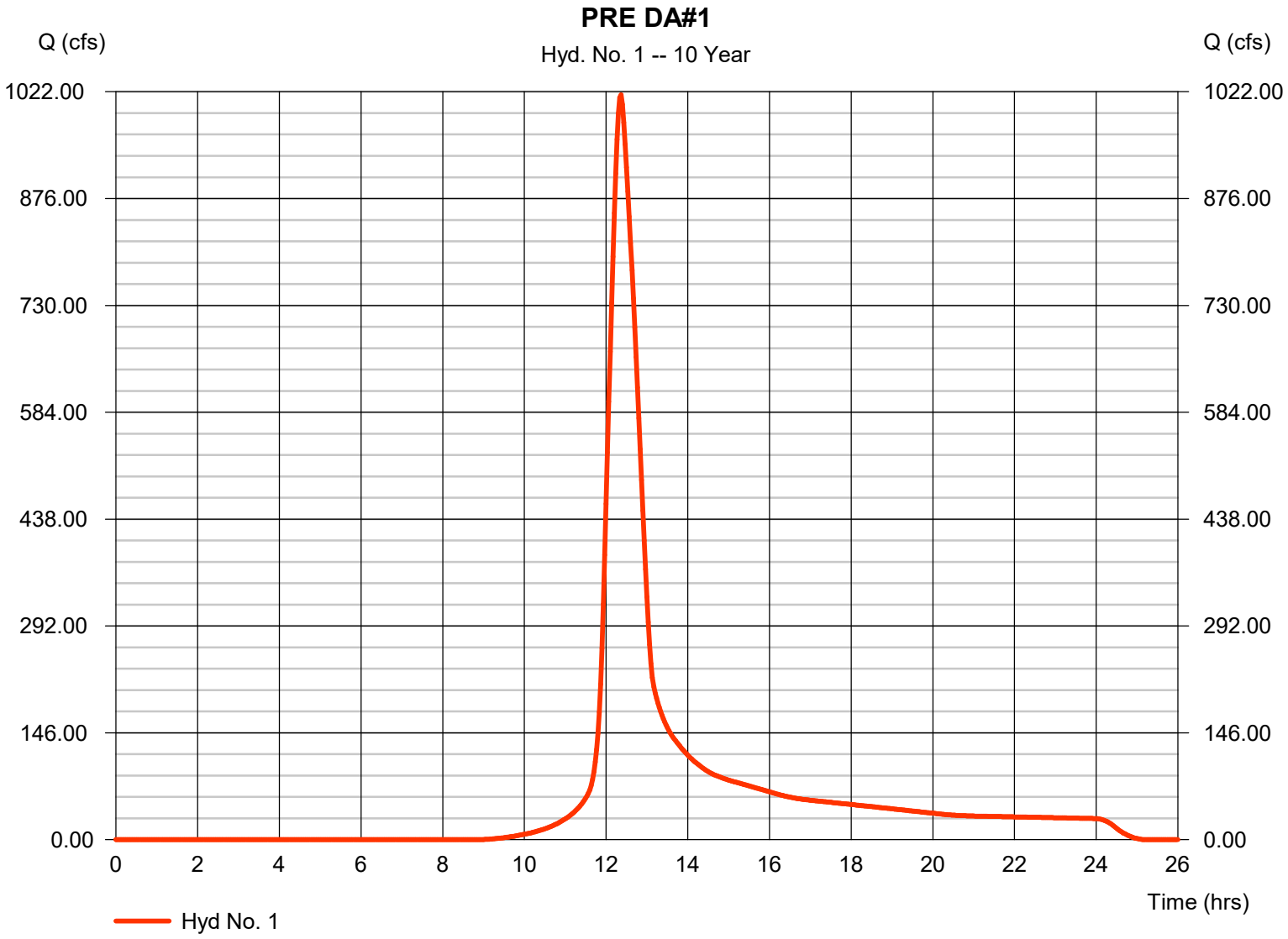
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	1017.83	2	742	5,513,080	------	------	------	PRE DA#1
2	SCS Runoff	58.44	2	716	122,073	------	------	------	POST DA#1
3	SCS Runoff	110.16	2	718	263,449	------	------	------	POST DA #3
4	SCS Runoff	53.52	2	716	115,082	------	------	------	POST DA#4
5	SCS Runoff	22.64	2	716	47,587	------	------	------	POST DA#5
6	SCS Runoff	66.45	2	722	190,501	------	------	------	POST DA#6
7	SCS Runoff	90.35	2	716	194,260	------	------	------	POST DA#7
8	SCS Runoff	36.78	2	718	87,364	------	------	------	POST DA#8
9	SCS Runoff	14.73	2	716	31,671	------	------	------	BYPASS #1
10	SCS Runoff	61.50	2	722	172,840	------	------	------	EXISTING DA 1
11	SCS Runoff	779.97	2	738	3,818,441	------	------	------	EXISTING DA 2
12	SCS Runoff	71.27	2	724	224,017	------	------	------	EXISTING DA 3
13	SCS Runoff	4.592	2	728	16,990	------	------	------	EXISTING DA 4
14	Reservoir	3.574	2	760	118,216	2	265.46	70,389	POST DA#1 TO SCM#1
15	Reservoir	45.35	2	726	256,840	3	244.82	124,790	POST DA#3 TO SCM#3
16	Reservoir	5.124	2	742	111,546	4	243.89	65,038	POST DA#4 TO SCM#4
17	Reservoir	10.13	2	722	47,198	5	251.88	19,260	POST DA#5 TO SCM#5
18	Reservoir	12.72	2	740	188,454	6	241.43	96,966	POST DA#6 TO SCM#6
19	Reservoir	18.29	2	726	191,493	7	243.44	100,162	POST DA#7 TO SCM#7
20	Reservoir	31.67	2	722	86,229	8	243.14	27,570	POST DA#8 TO SCM#8
21	Combine	825.06	2	736	4,370,148	9, 10, 11, 16, 17, 18,	------	------	UPSTREAM AOI#1
22	Combine	170.06	2	724	893,786	12, 13, 14, 15, 19, 20,	------	------	DOWNSTREAM AOI#2
23	Combine	925.47	2	736	5,263,934	21, 22	------	------	POI
24	SCS Runoff	692.74	2	736	3,170,181	------	------	------	CULVERT DA#1
25	SCS Runoff	22.66	2	718	51,869	------	------	------	CULVERT DA #2
26	SCS Runoff	6.637	2	716	13,400	------	------	------	CULVERT DA#3

Hydrograph Report

Hyd. No. 1

PRE DA#1

Hydrograph type	=	SCS Runoff	Peak discharge	=	1017.83 cfs
Storm frequency	=	10 yrs	Time to peak	=	12.37 hrs
Time interval	=	2 min	Hyd. volume	=	5,513,080 cuft
Drainage area	=	618.810 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	47.00 min
Total precip.	=	5.14 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

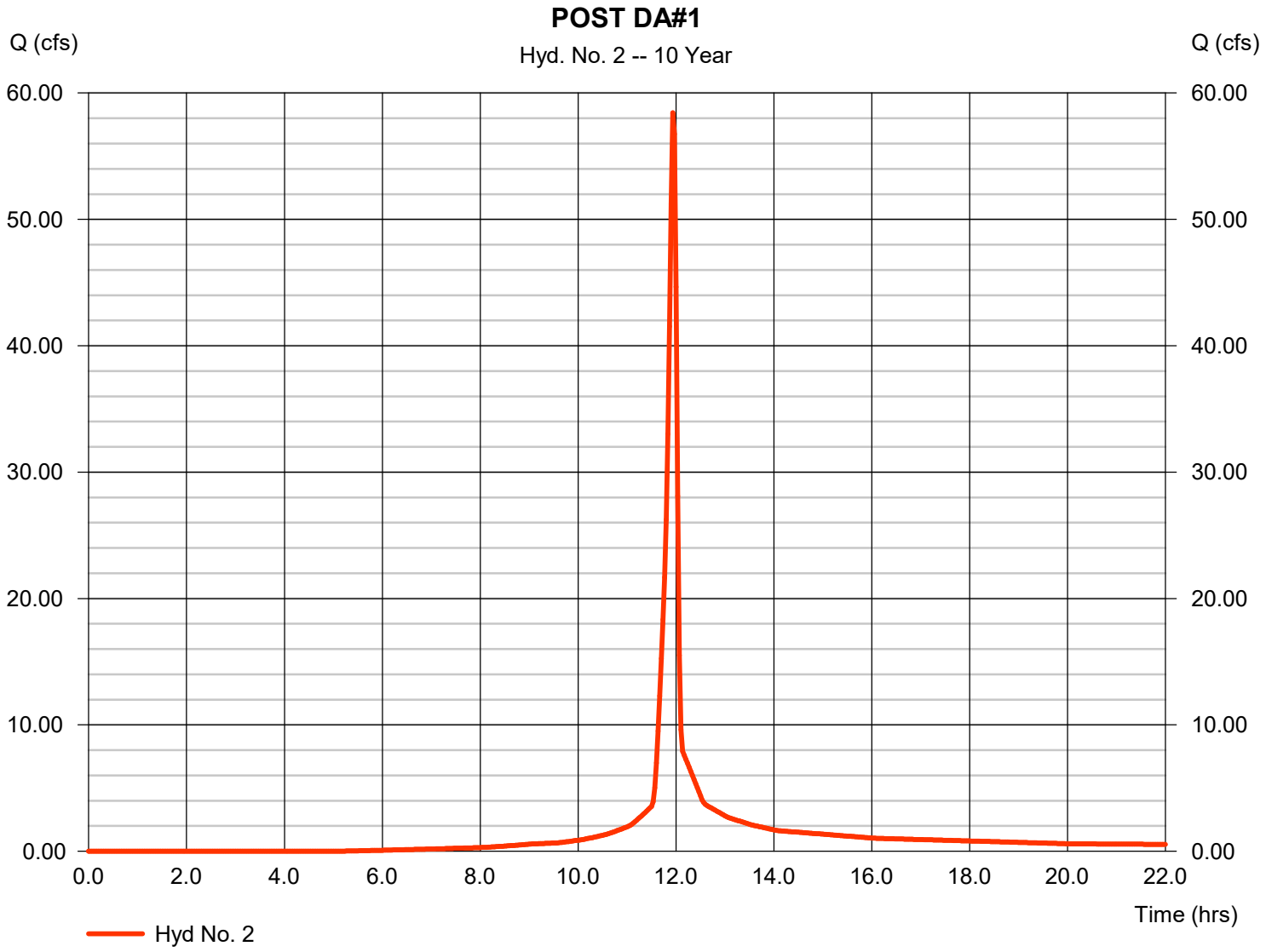


Hydrograph Report

Hyd. No. 2

POST DA#1

Hydrograph type	=	SCS Runoff	Peak discharge	=	58.44 cfs
Storm frequency	=	10 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	122,073 cuft
Drainage area	=	9.970 ac	Curve number	=	86
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.50 min
Total precip.	=	5.14 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

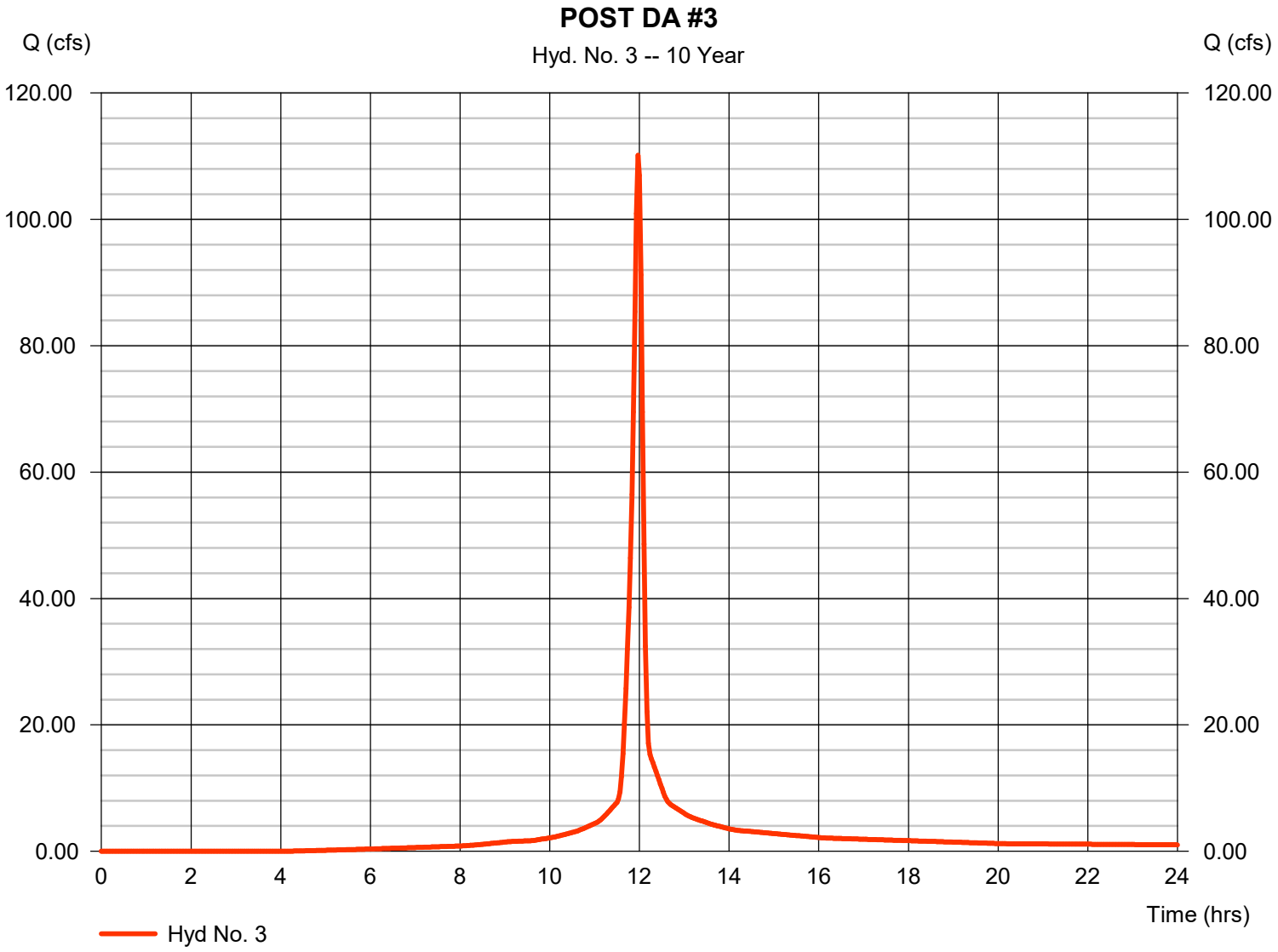


Hydrograph Report

Hyd. No. 3

POST DA #3

Hydrograph type	=	SCS Runoff	Peak discharge	=	110.16 cfs
Storm frequency	=	10 yrs	Time to peak	=	11.97 hrs
Time interval	=	2 min	Hyd. volume	=	263,449 cuft
Drainage area	=	18.580 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	7.40 min
Total precip.	=	5.14 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

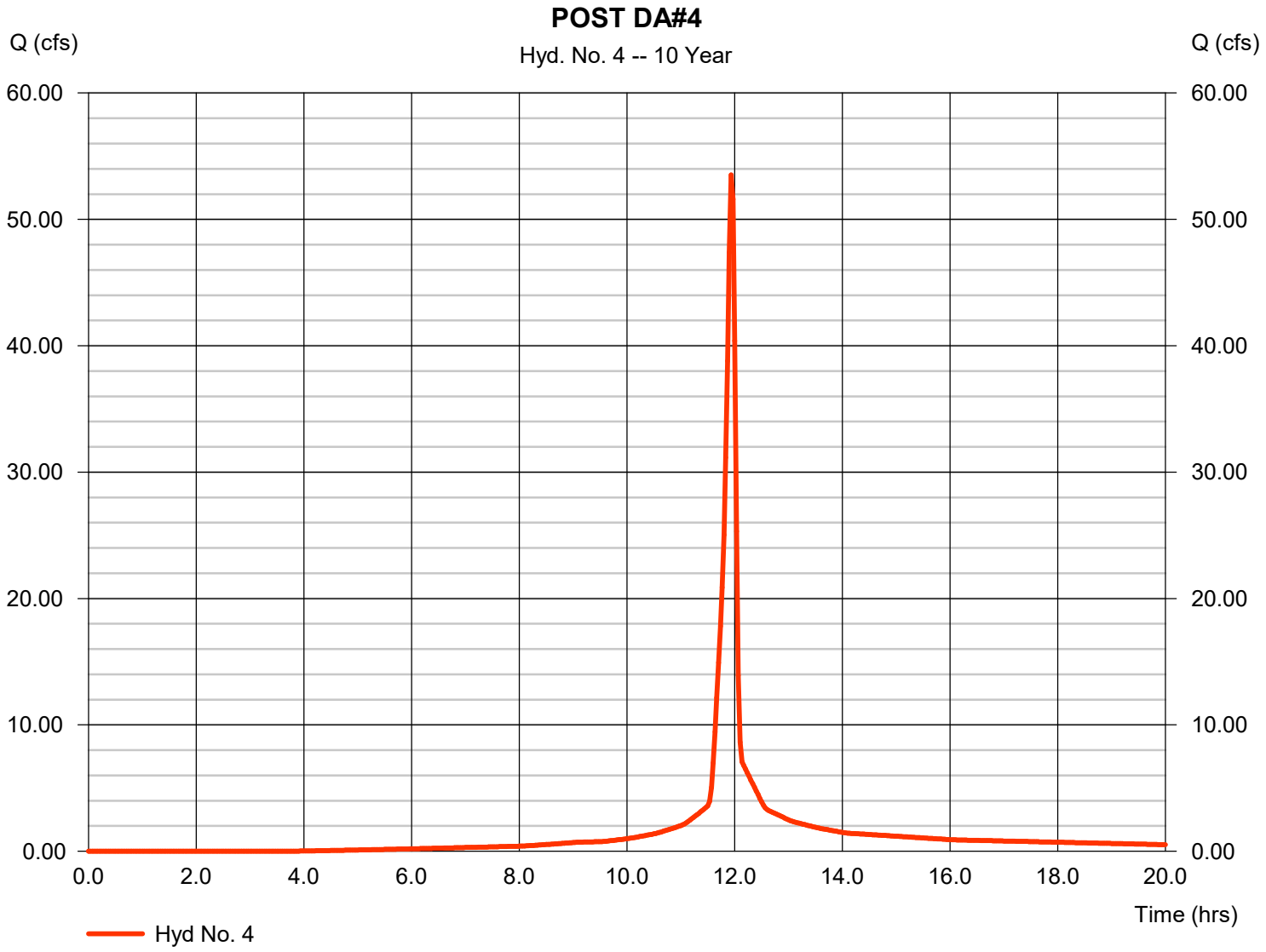


Hydrograph Report

Hyd. No. 4

POST DA#4

Hydrograph type	=	SCS Runoff	Peak discharge	=	53.52 cfs
Storm frequency	=	10 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	115,082 cuft
Drainage area	=	8.430 ac	Curve number	=	90
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.30 min
Total precip.	=	5.14 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

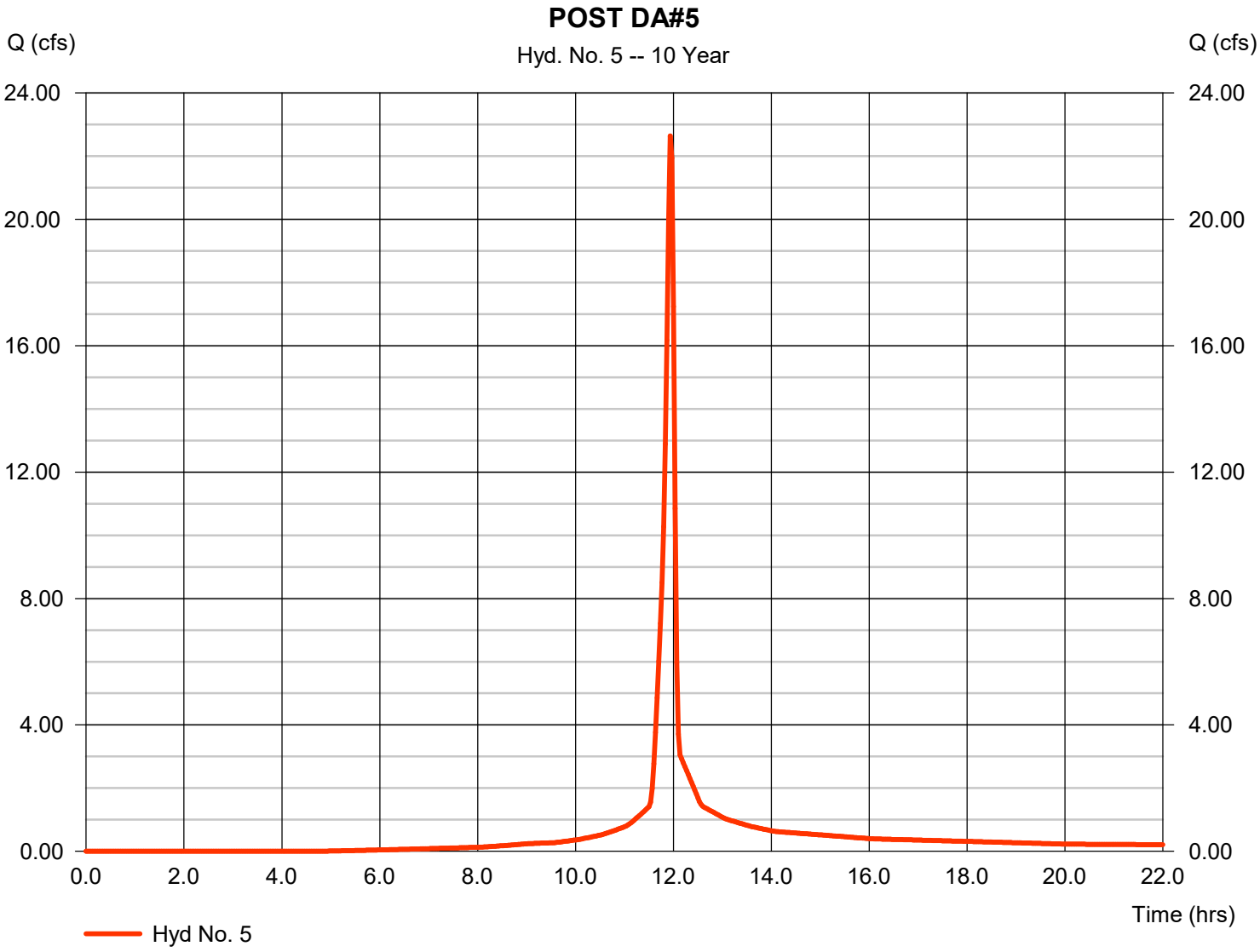


Hydrograph Report

Hyd. No. 5

POST DA#5

Hydrograph type	=	SCS Runoff	Peak discharge	=	22.64 cfs
Storm frequency	=	10 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	47,587 cuft
Drainage area	=	3.780 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	5.14 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

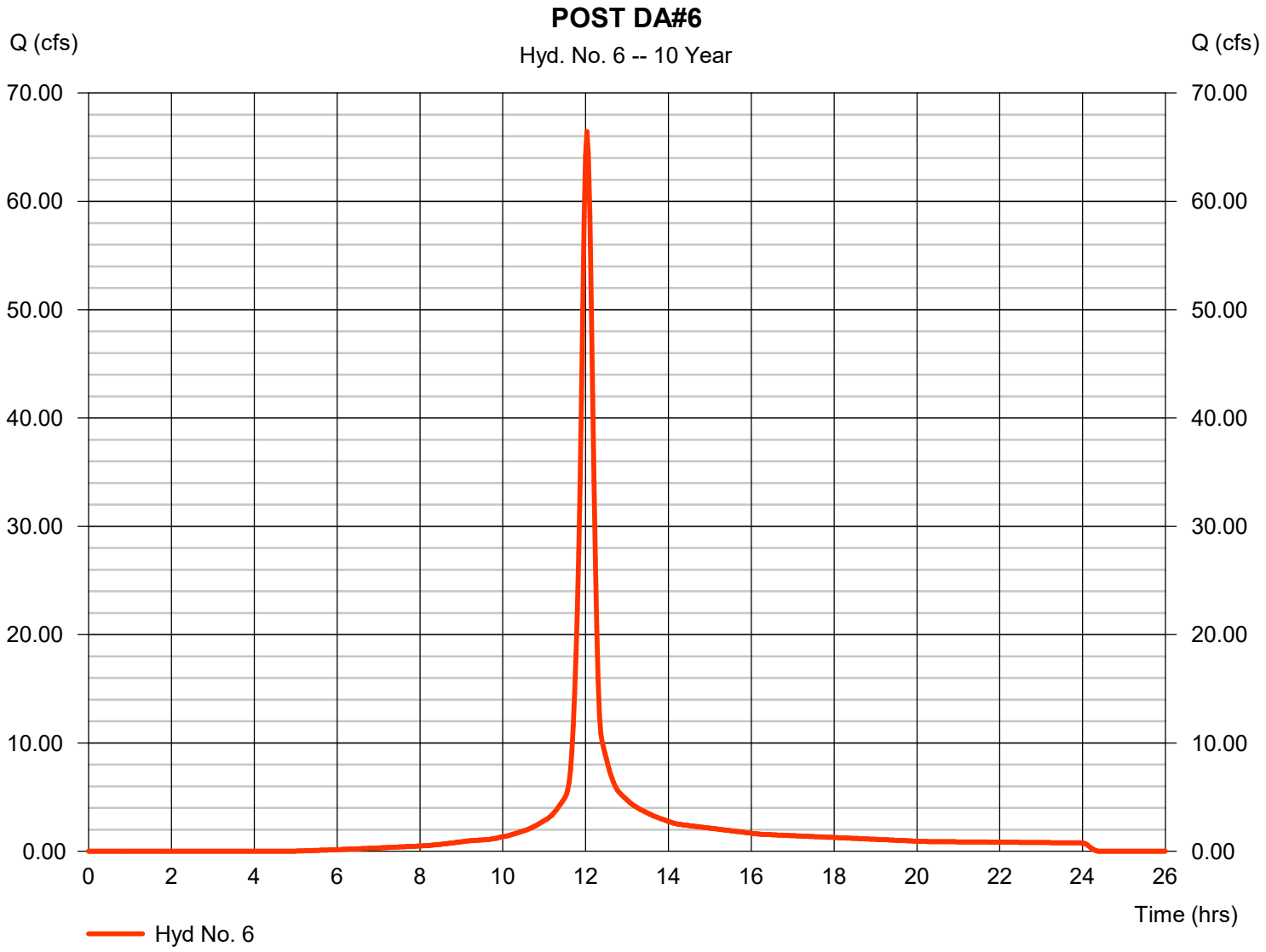


Hydrograph Report

Hyd. No. 6

POST DA#6

Hydrograph type	=	SCS Runoff	Peak discharge	=	66.45 cfs
Storm frequency	=	10 yrs	Time to peak	=	12.03 hrs
Time interval	=	2 min	Hyd. volume	=	190,501 cuft
Drainage area	=	14.550 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	14.80 min
Total precip.	=	5.14 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

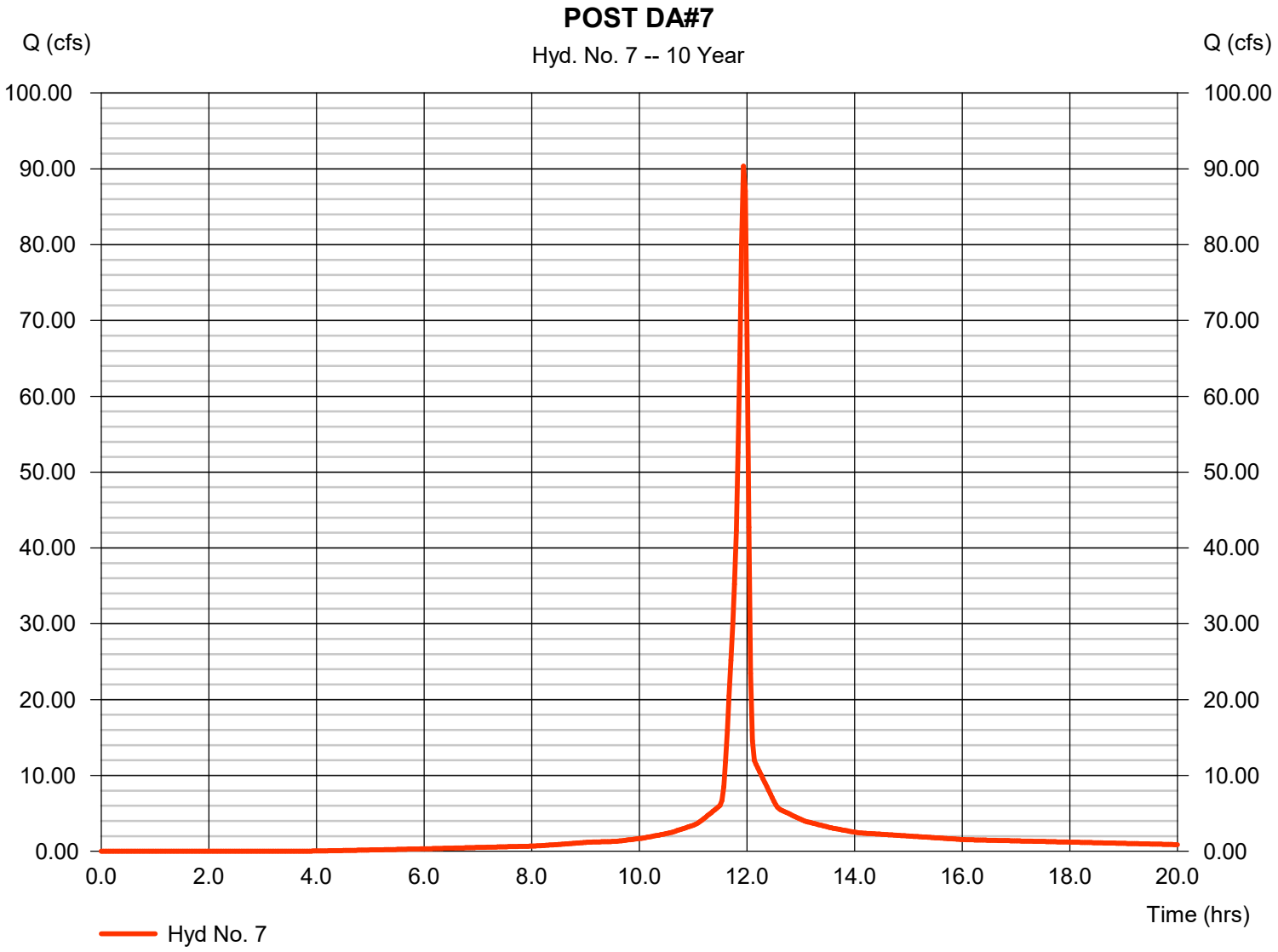


Hydrograph Report

Hyd. No. 7

POST DA#7

Hydrograph type	=	SCS Runoff	Peak discharge	=	90.35 cfs
Storm frequency	=	10 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	194,260 cuft
Drainage area	=	14.230 ac	Curve number	=	90
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.20 min
Total precip.	=	5.14 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

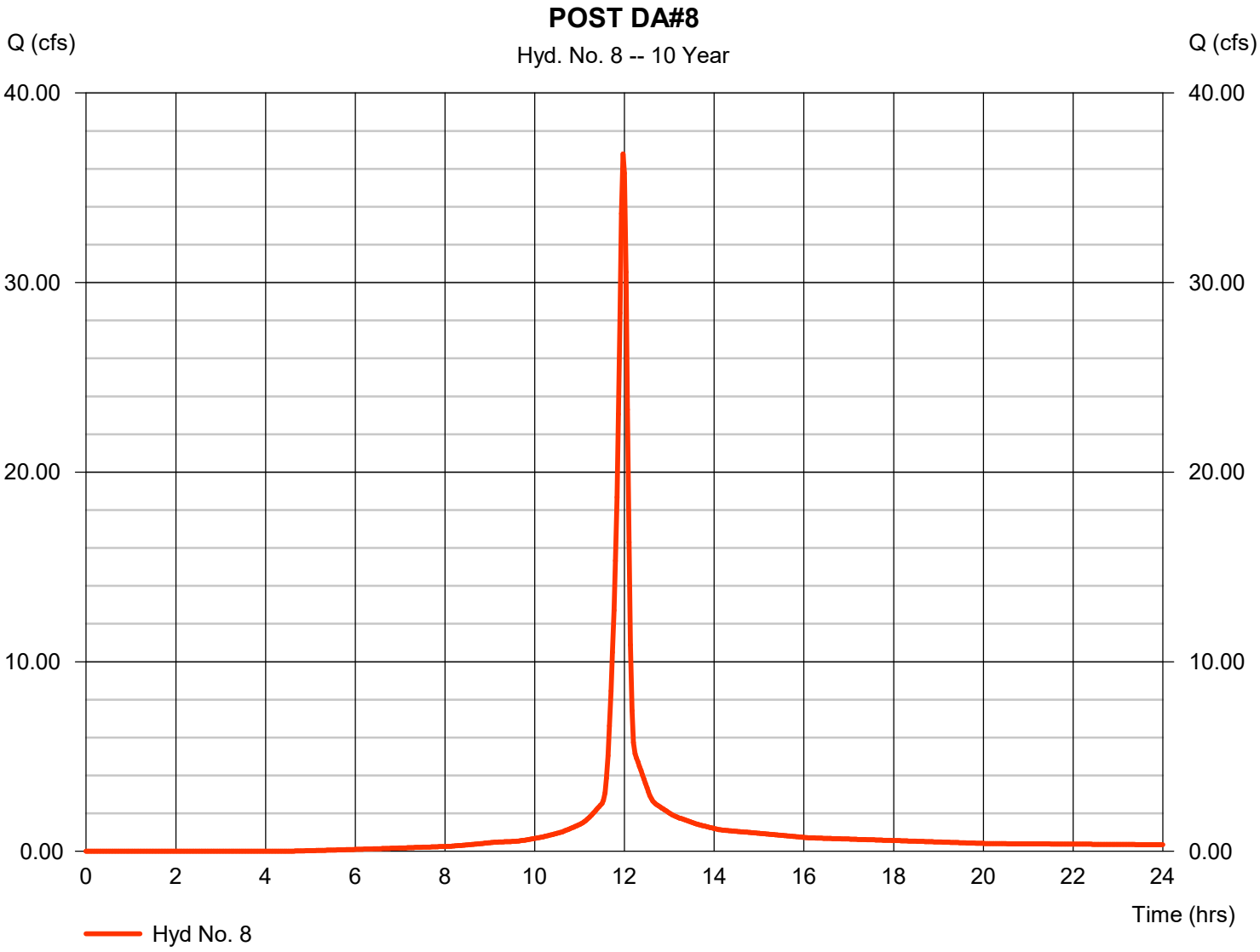


Hydrograph Report

Hyd. No. 8

POST DA#8

Hydrograph type	=	SCS Runoff	Peak discharge	=	36.78 cfs
Storm frequency	=	10 yrs	Time to peak	=	11.97 hrs
Time interval	=	2 min	Hyd. volume	=	87,364 cuft
Drainage area	=	6.330 ac	Curve number	=	88
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.80 min
Total precip.	=	5.14 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

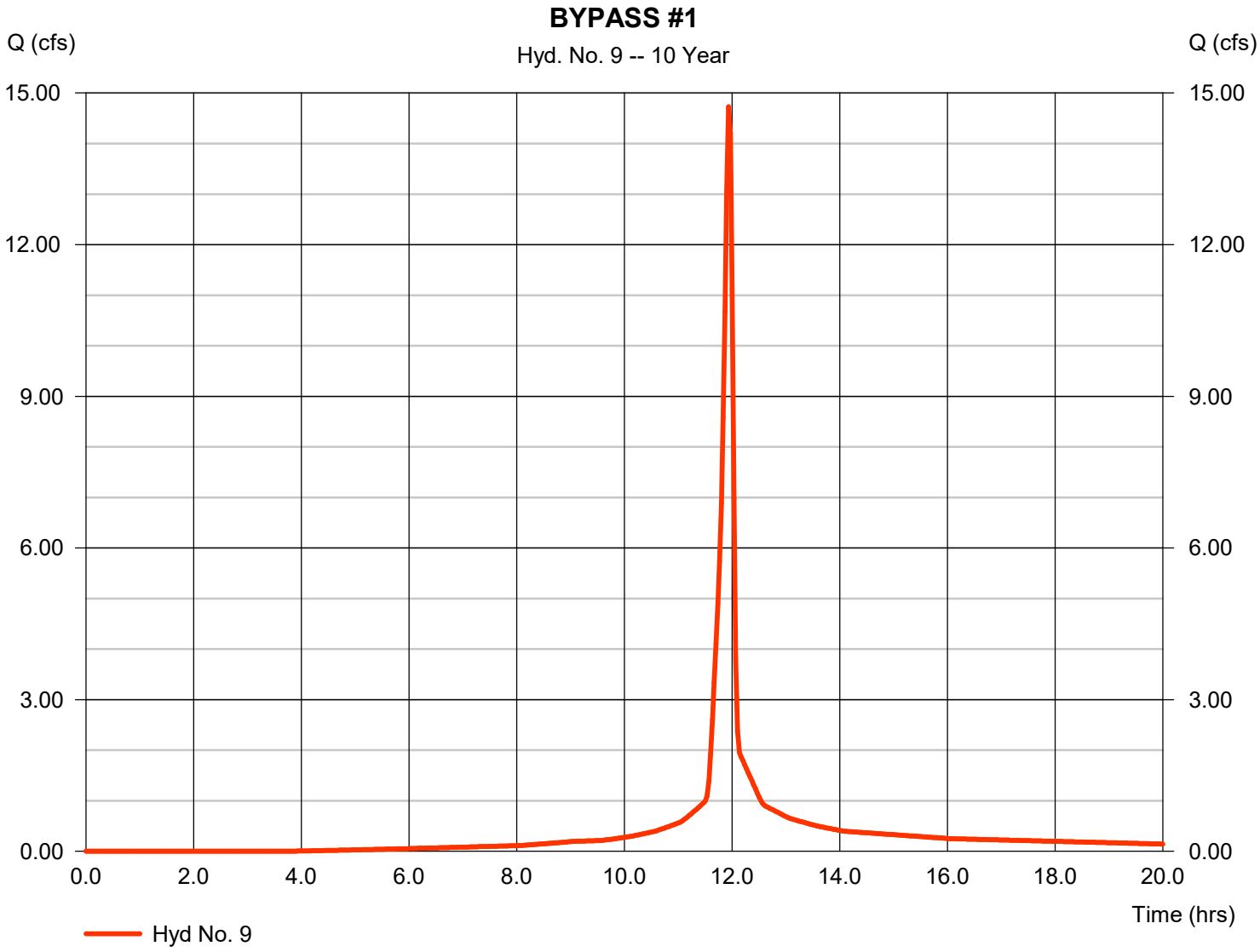


Hydrograph Report

Hyd. No. 9

BYPASS #1

Hydrograph type	=	SCS Runoff	Peak discharge	=	14.73 cfs
Storm frequency	=	10 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	31,671 cuft
Drainage area	=	2.320 ac	Curve number	=	90
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	5.14 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

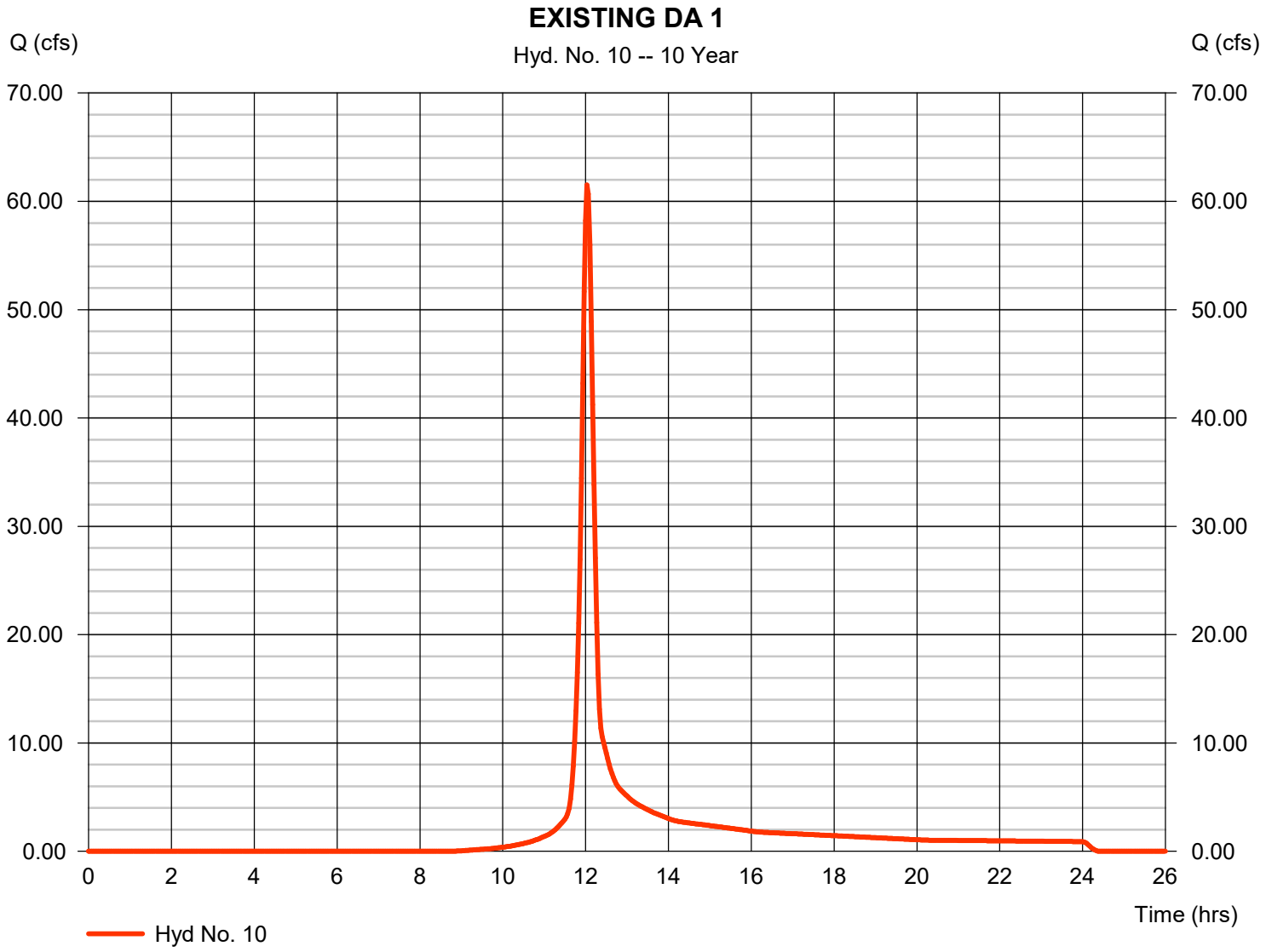


Hydrograph Report

Hyd. No. 10

EXISTING DA 1

Hydrograph type	= SCS Runoff	Peak discharge	= 61.50 cfs
Storm frequency	= 10 yrs	Time to peak	= 12.03 hrs
Time interval	= 2 min	Hyd. volume	= 172,840 cuft
Drainage area	= 19.720 ac	Curve number	= 74
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 14.00 min
Total precip.	= 5.14 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

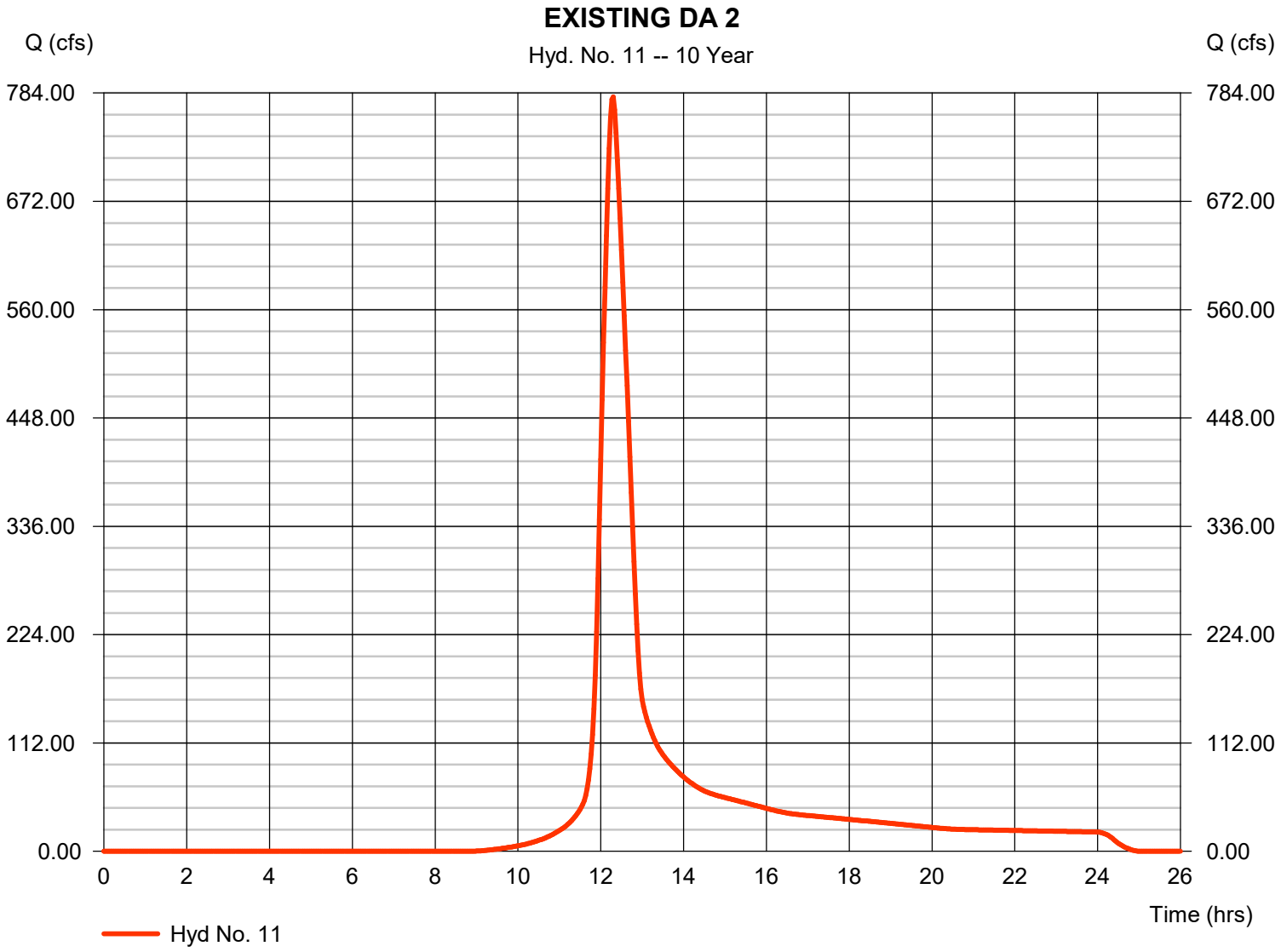


Hydrograph Report

Hyd. No. 11

EXISTING DA 2

Hydrograph type	=	SCS Runoff	Peak discharge	=	779.97 cfs
Storm frequency	=	10 yrs	Time to peak	=	12.30 hrs
Time interval	=	2 min	Hyd. volume	=	3,818,441 cuft
Drainage area	=	424.770 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	38.10 min
Total precip.	=	5.14 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

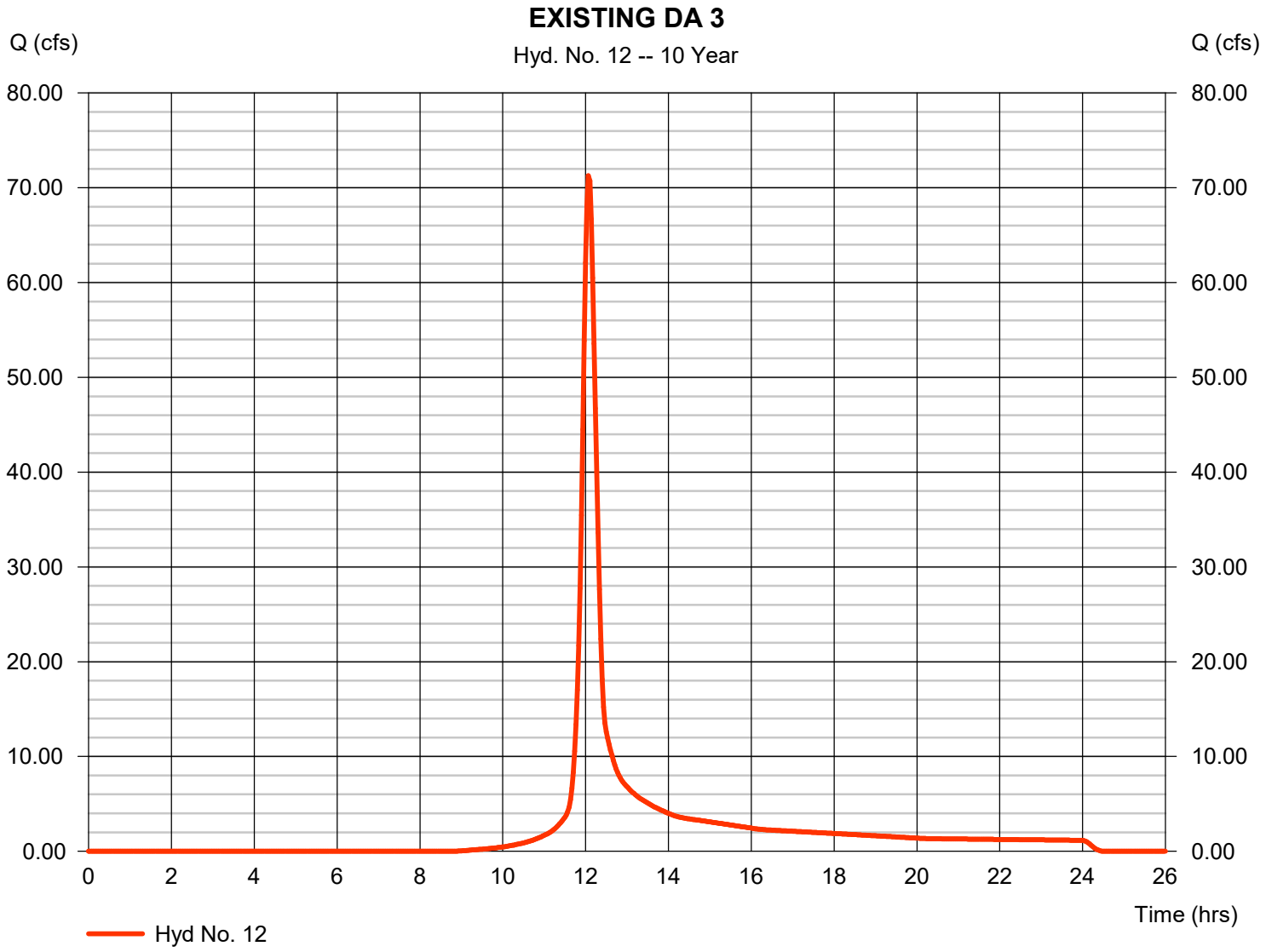


Hydrograph Report

Hyd. No. 12

EXISTING DA 3

Hydrograph type	= SCS Runoff	Peak discharge	= 71.27 cfs
Storm frequency	= 10 yrs	Time to peak	= 12.07 hrs
Time interval	= 2 min	Hyd. volume	= 224,017 cuft
Drainage area	= 24.920 ac	Curve number	= 74
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 19.60 min
Total precip.	= 5.14 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

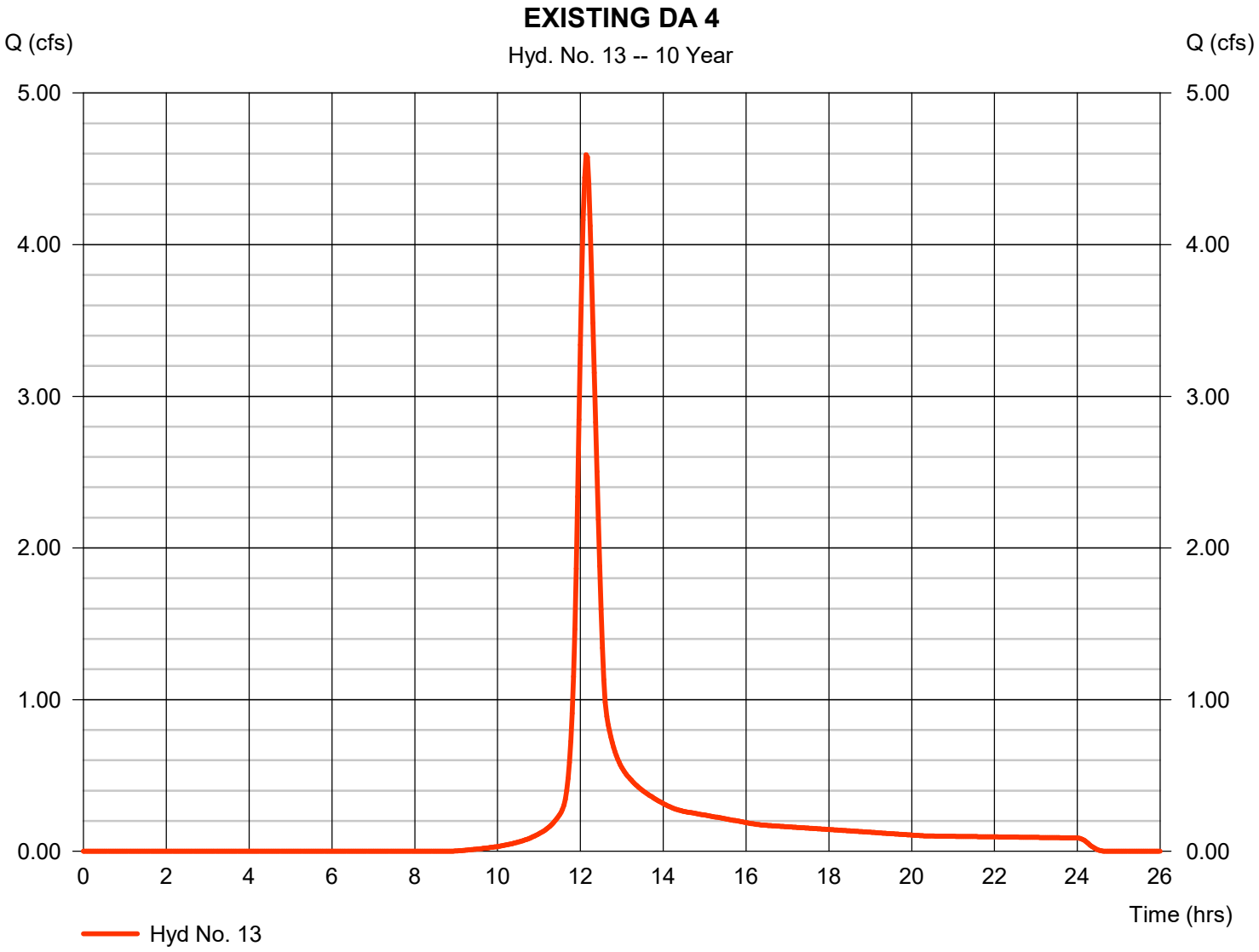


Hydrograph Report

Hyd. No. 13

EXISTING DA 4

Hydrograph type	= SCS Runoff	Peak discharge	= 4.592 cfs
Storm frequency	= 10 yrs	Time to peak	= 12.13 hrs
Time interval	= 2 min	Hyd. volume	= 16,990 cuft
Drainage area	= 1.920 ac	Curve number	= 74
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 26.20 min
Total precip.	= 5.14 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



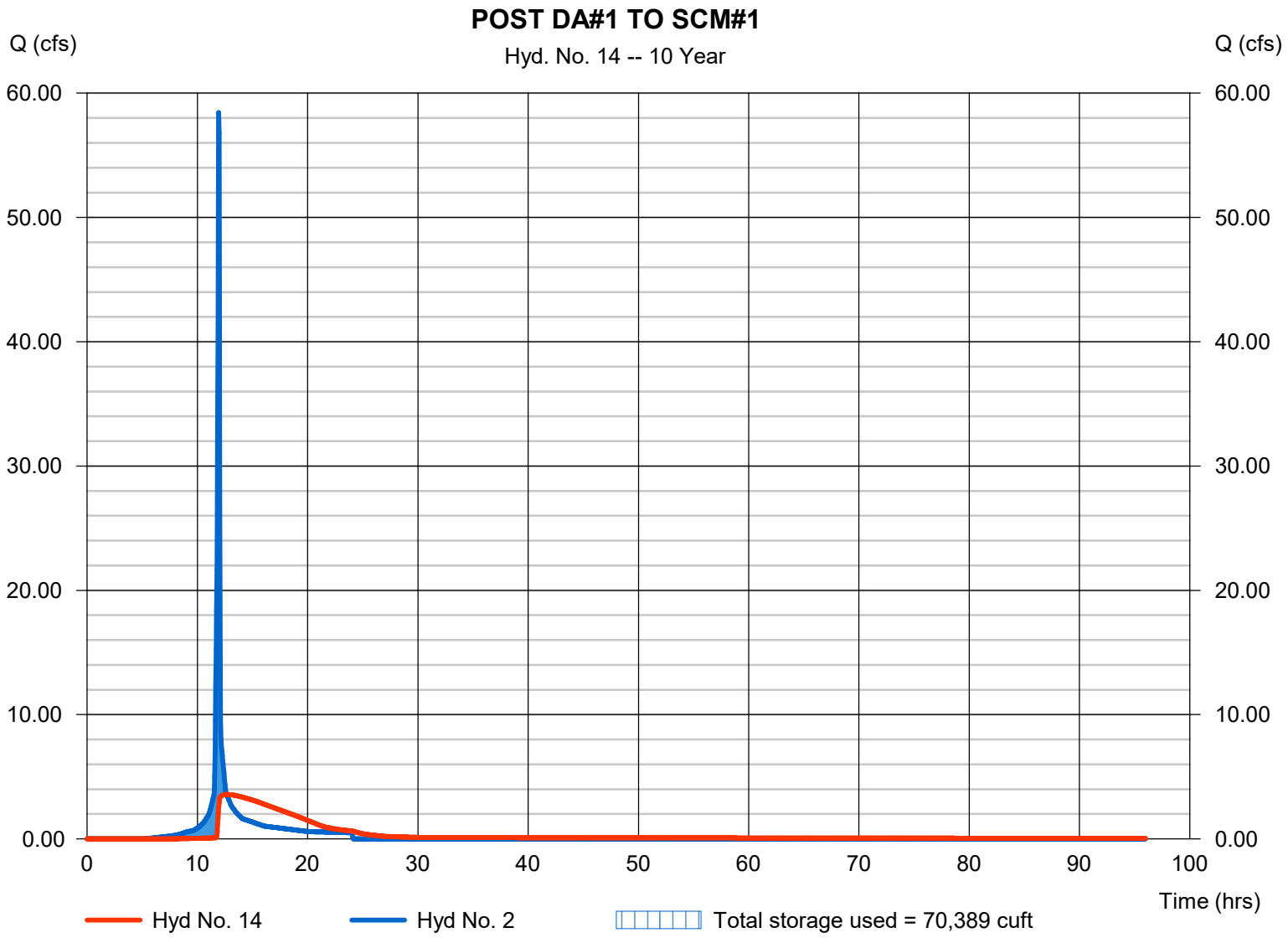
Hydrograph Report

Hyd. No. 14

POST DA#1 TO SCM#1

Hydrograph type	= Reservoir	Peak discharge	= 3.574 cfs
Storm frequency	= 10 yrs	Time to peak	= 12.67 hrs
Time interval	= 2 min	Hyd. volume	= 118,216 cuft
Inflow hyd. No.	= 2 - POST DA#1	Max. Elevation	= 265.46 ft
Reservoir name	= SCM#1	Max. Storage	= 70,389 cuft

Storage Indication method used.



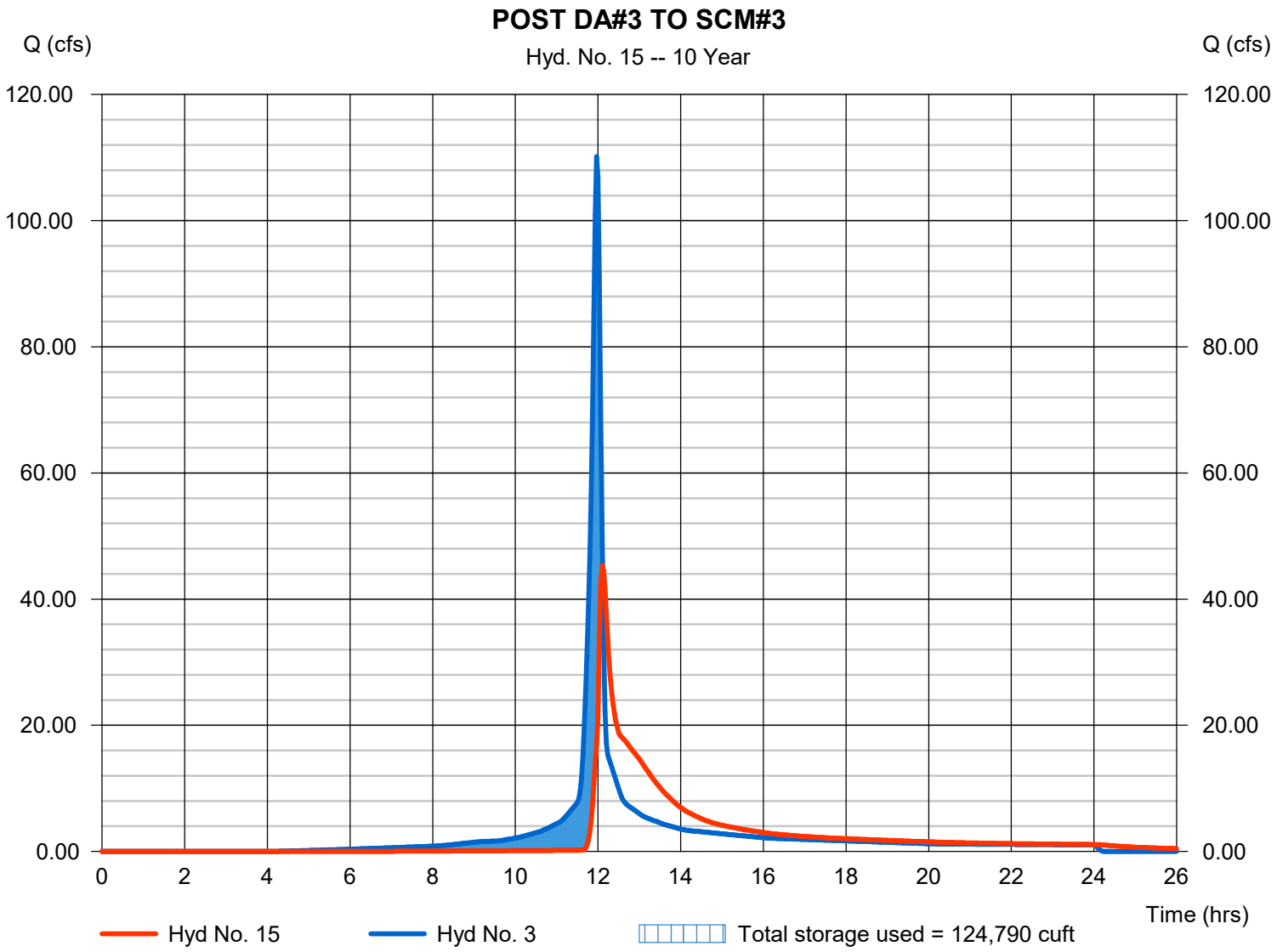
Hydrograph Report

Hyd. No. 15

POST DA#3 TO SCM#3

Hydrograph type	= Reservoir	Peak discharge	= 45.35 cfs
Storm frequency	= 10 yrs	Time to peak	= 12.10 hrs
Time interval	= 2 min	Hyd. volume	= 256,840 cuft
Inflow hyd. No.	= 3 - POST DA #3	Max. Elevation	= 244.82 ft
Reservoir name	= SCM#3	Max. Storage	= 124,790 cuft

Storage Indication method used.



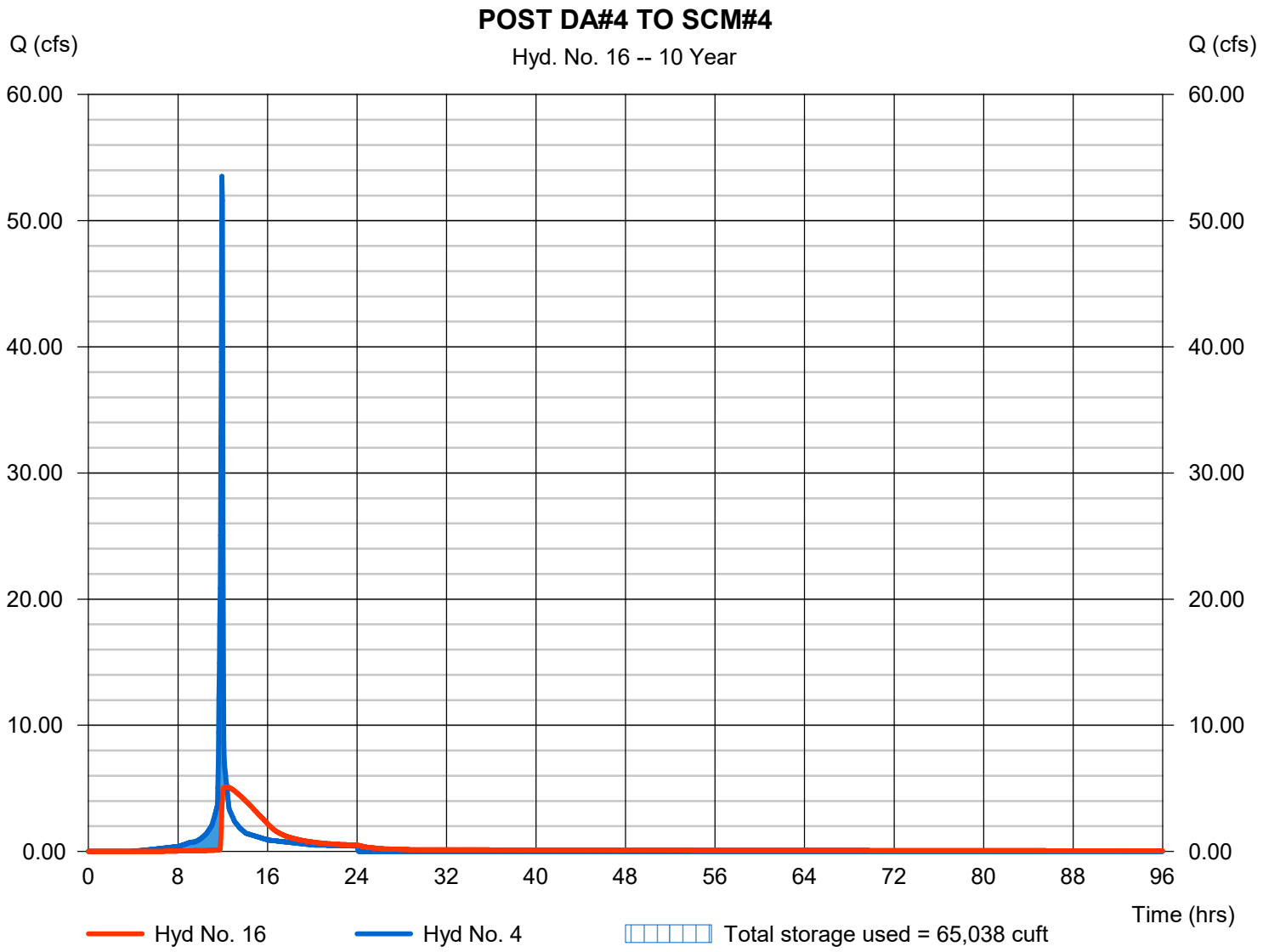
Hydrograph Report

Hyd. No. 16

POST DA#4 TO SCM#4

Hydrograph type	= Reservoir	Peak discharge	= 5.124 cfs
Storm frequency	= 10 yrs	Time to peak	= 12.37 hrs
Time interval	= 2 min	Hyd. volume	= 111,546 cuft
Inflow hyd. No.	= 4 - POST DA#4	Max. Elevation	= 243.89 ft
Reservoir name	= SCM#4	Max. Storage	= 65,038 cuft

Storage Indication method used.



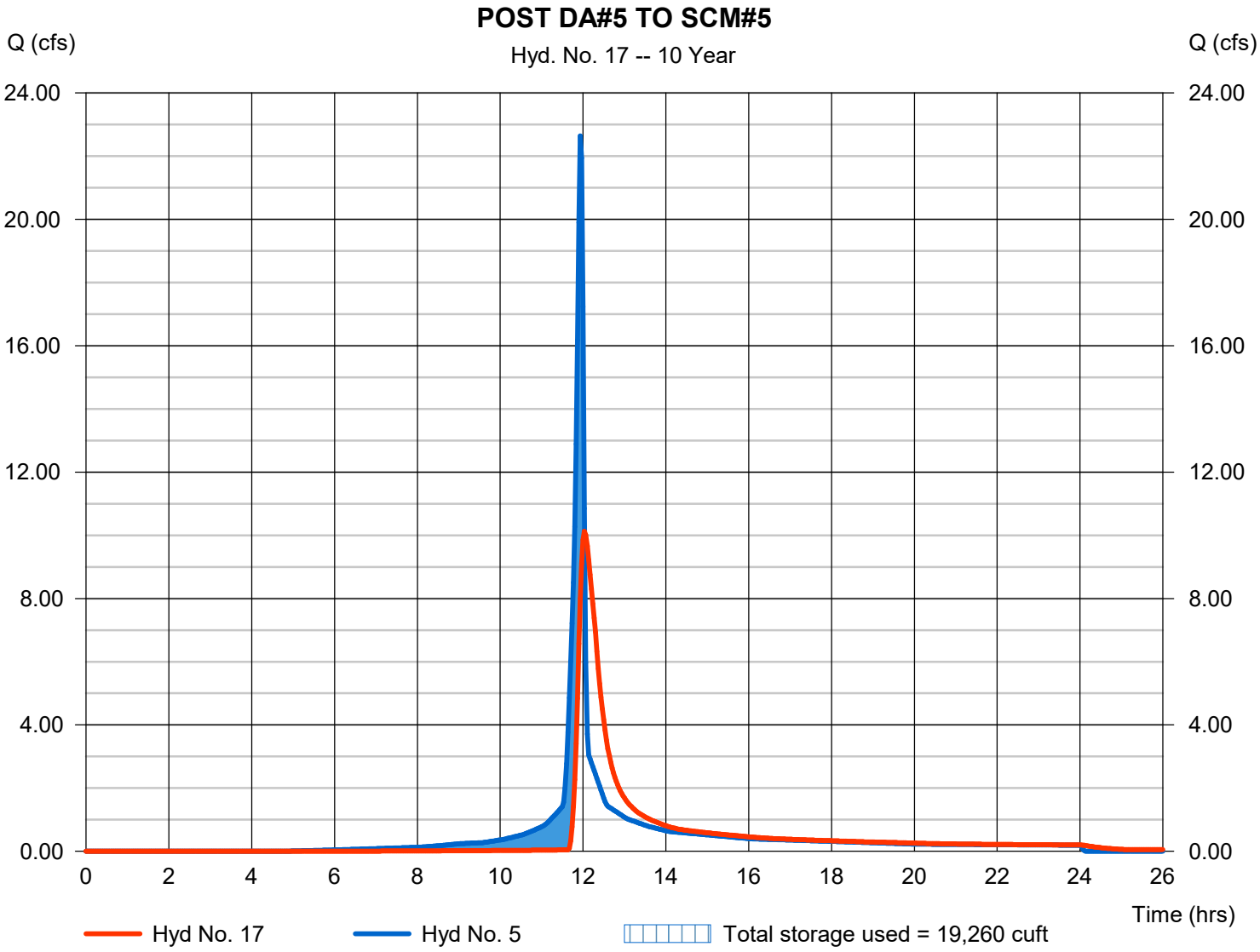
Hydrograph Report

Hyd. No. 17

POST DA#5 TO SCM#5

Hydrograph type	=	Reservoir	Peak discharge	=	10.13 cfs
Storm frequency	=	10 yrs	Time to peak	=	12.03 hrs
Time interval	=	2 min	Hyd. volume	=	47,198 cuft
Inflow hyd. No.	=	5 - POST DA#5	Max. Elevation	=	251.88 ft
Reservoir name	=	SCM#5	Max. Storage	=	19,260 cuft

Storage Indication method used.



Hydrograph Report

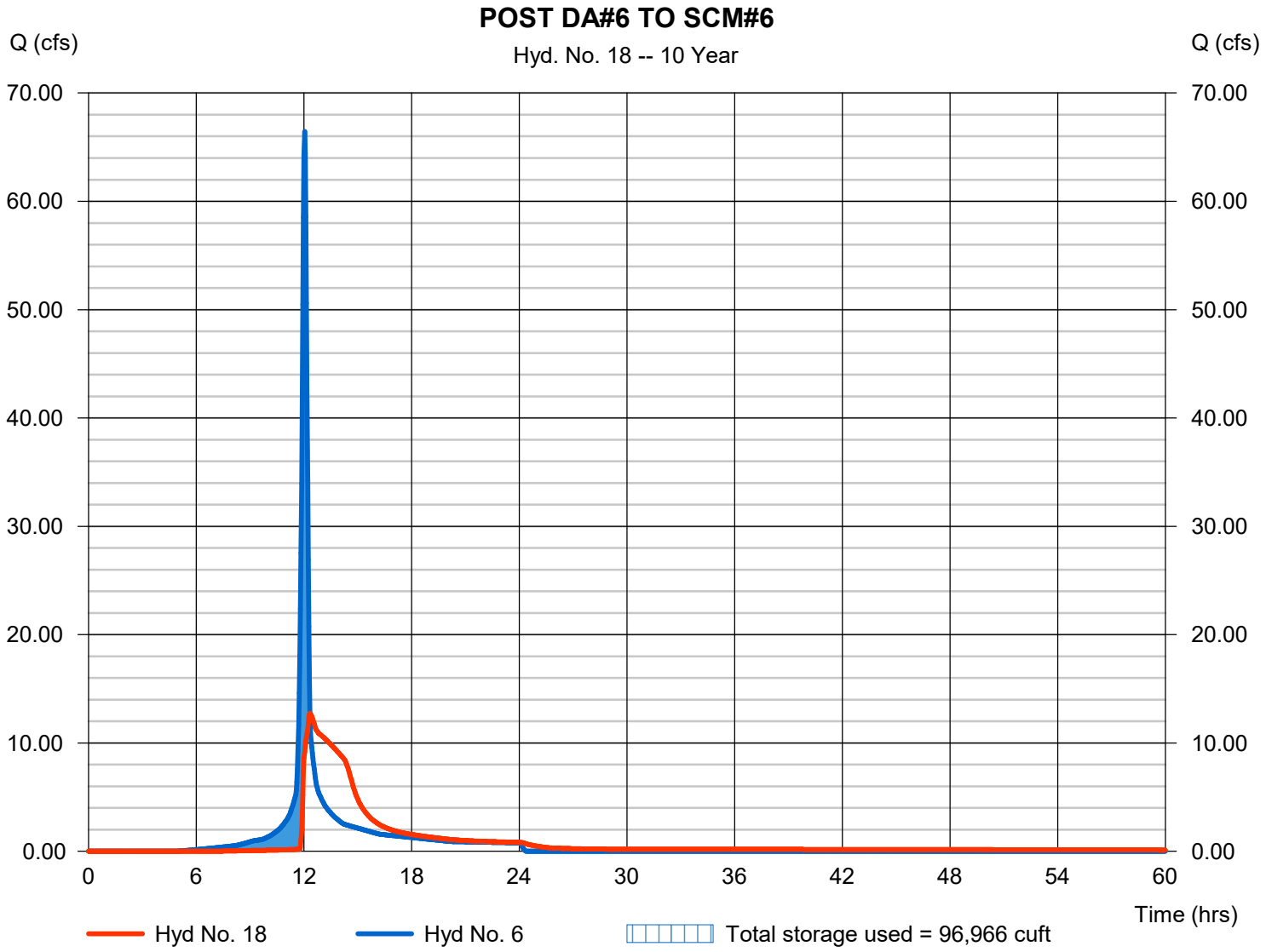
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Thursday, 10 / 31 / 2024

Hyd. No. 18

POST DA#6 TO SCM#6

Hydrograph type	=	Reservoir	Peak discharge	=	12.72 cfs
Storm frequency	=	10 yrs	Time to peak	=	12.33 hrs
Time interval	=	2 min	Hyd. volume	=	188,454 cuft
Inflow hyd. No.	=	6 - POST DA#6	Max. Elevation	=	241.43 ft
Reservoir name	=	SCM#6	Max. Storage	=	96,966 cuft

Storage Indication method used.



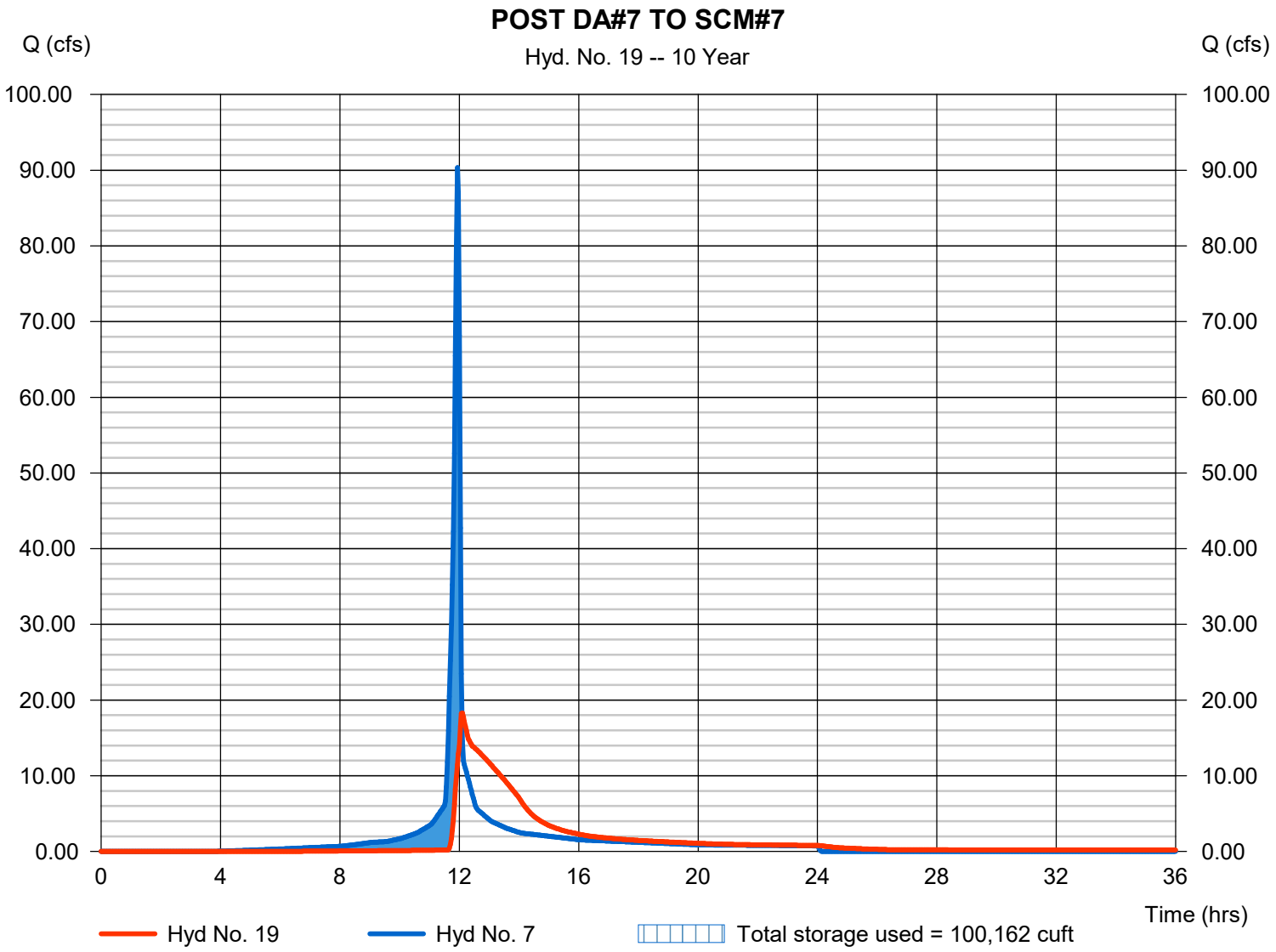
Hydrograph Report

Hyd. No. 19

POST DA#7 TO SCM#7

Hydrograph type	=	Reservoir	Peak discharge	=	18.29 cfs
Storm frequency	=	10 yrs	Time to peak	=	12.10 hrs
Time interval	=	2 min	Hyd. volume	=	191,493 cuft
Inflow hyd. No.	=	7 - POST DA#7	Max. Elevation	=	243.44 ft
Reservoir name	=	SCM#7	Max. Storage	=	100,162 cuft

Storage Indication method used.



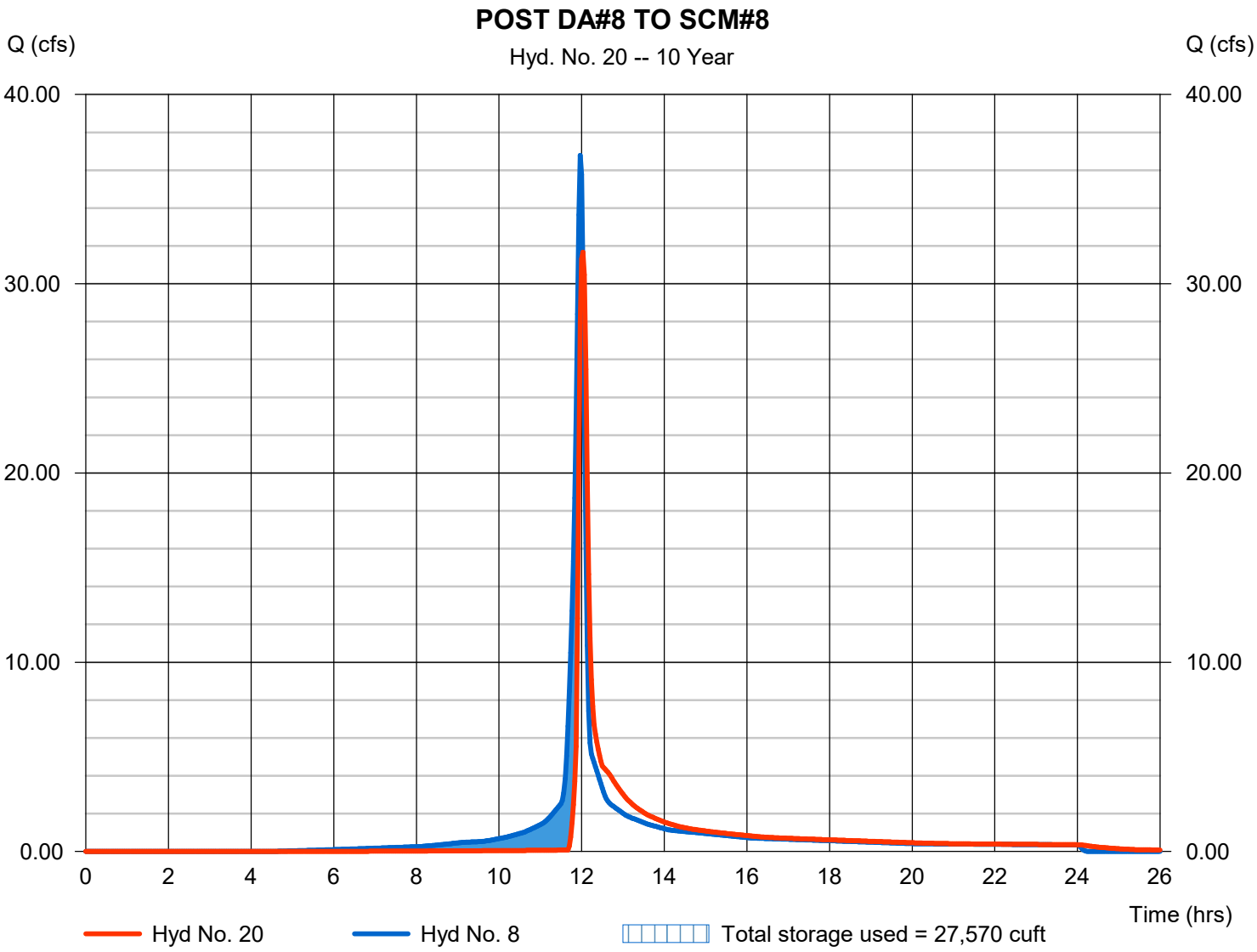
Hydrograph Report

Hyd. No. 20

POST DA#8 TO SCM#8

Hydrograph type	=	Reservoir	Peak discharge	=	31.67 cfs
Storm frequency	=	10 yrs	Time to peak	=	12.03 hrs
Time interval	=	2 min	Hyd. volume	=	86,229 cuft
Inflow hyd. No.	=	8 - POST DA#8	Max. Elevation	=	243.14 ft
Reservoir name	=	SCM#8	Max. Storage	=	27,570 cuft

Storage Indication method used.

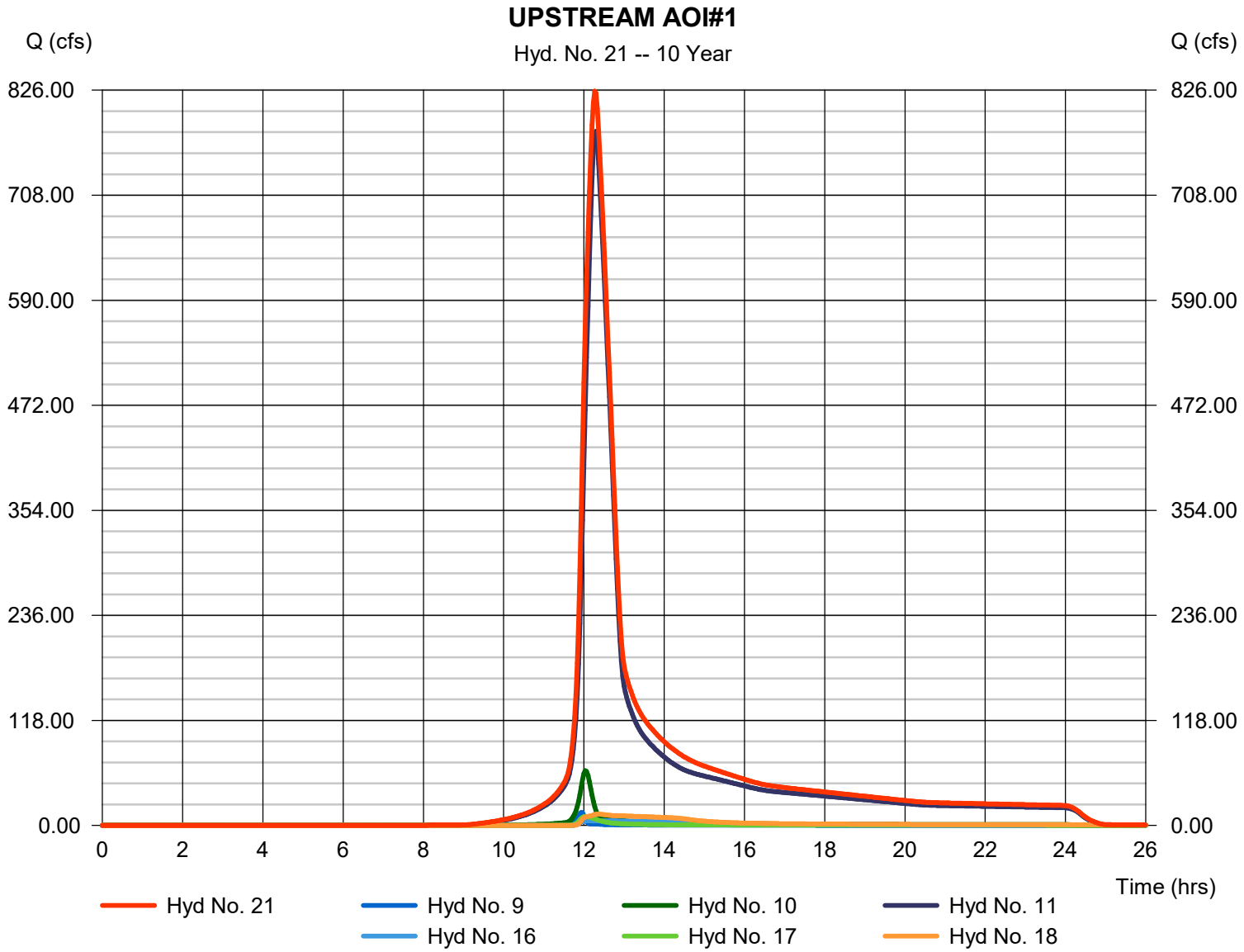


Hydrograph Report

Hyd. No. 21

UPSTREAM AOI#1

Hydrograph type	= Combine	Peak discharge	= 825.06 cfs
Storm frequency	= 10 yrs	Time to peak	= 12.27 hrs
Time interval	= 2 min	Hyd. volume	= 4,370,148 cuft
Inflow hyds.	= 9, 10, 11, 16, 17, 18	Contrib. drain. area	= 446.810 ac

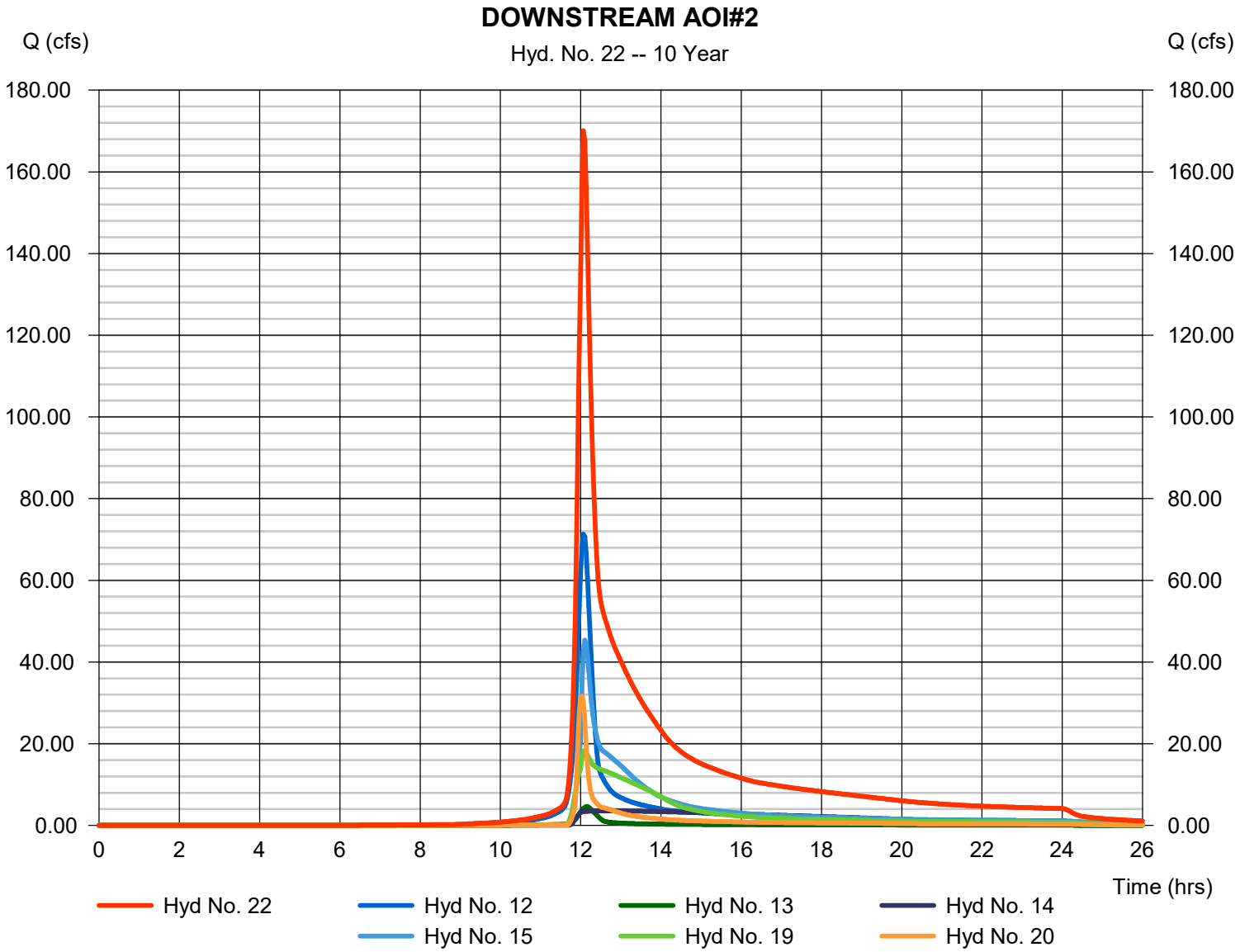


Hydrograph Report

Hyd. No. 22

DOWNSTREAM AOI#2

Hydrograph type	=	Combine	Peak discharge	=	170.06 cfs
Storm frequency	=	10 yrs	Time to peak	=	12.07 hrs
Time interval	=	2 min	Hyd. volume	=	893,786 cuft
Inflow hyds.	=	12, 13, 14, 15, 19, 20	Contrib. drain. area	=	26.840 ac

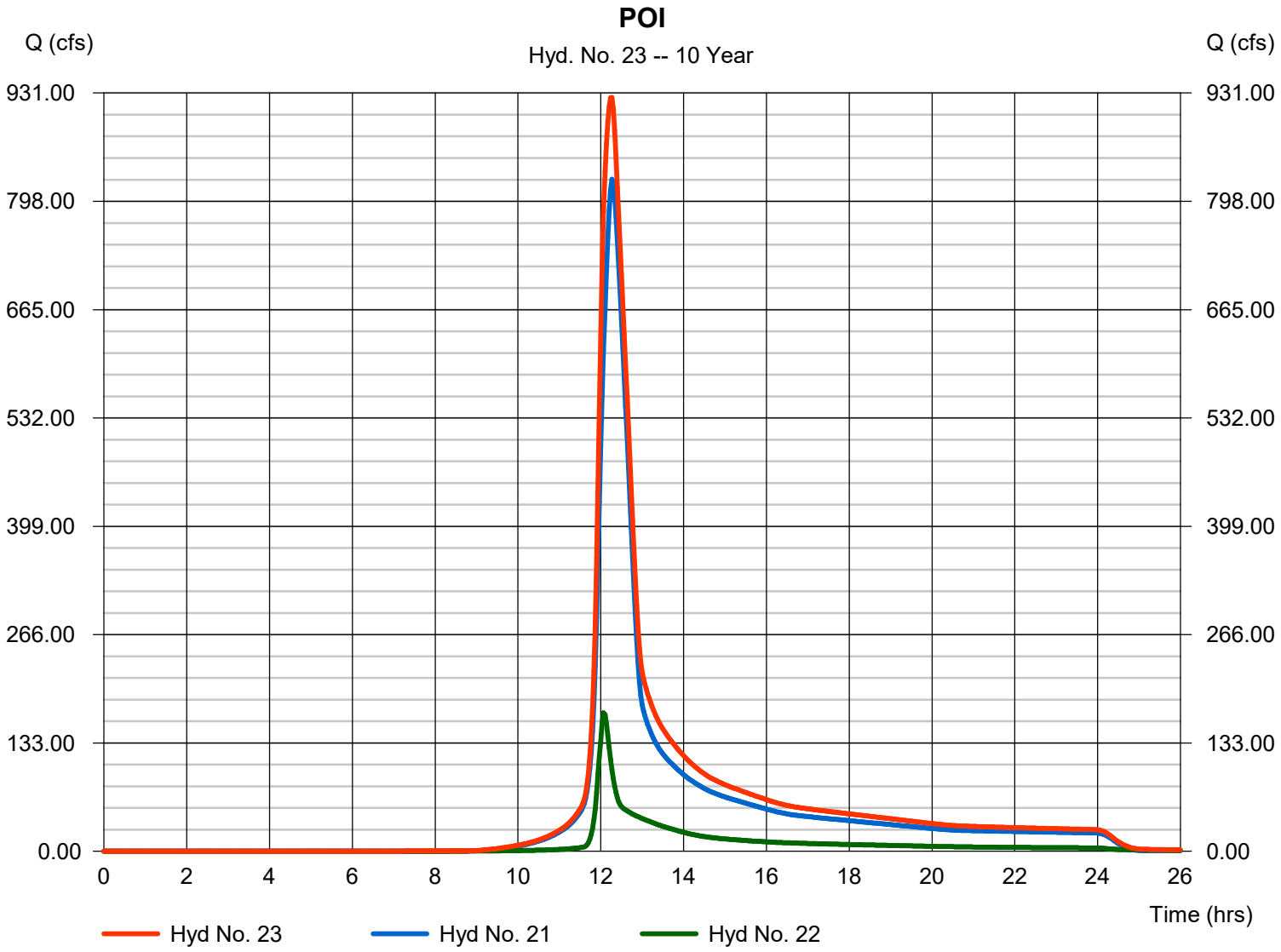


Hydrograph Report

Hyd. No. 23

POI

Hydrograph type	=	Combine	Peak discharge	=	925.47 cfs
Storm frequency	=	10 yrs	Time to peak	=	12.27 hrs
Time interval	=	2 min	Hyd. volume	=	5,263,934 cuft
Inflow hyds.	=	21, 22	Contrib. drain. area	=	0.000 ac

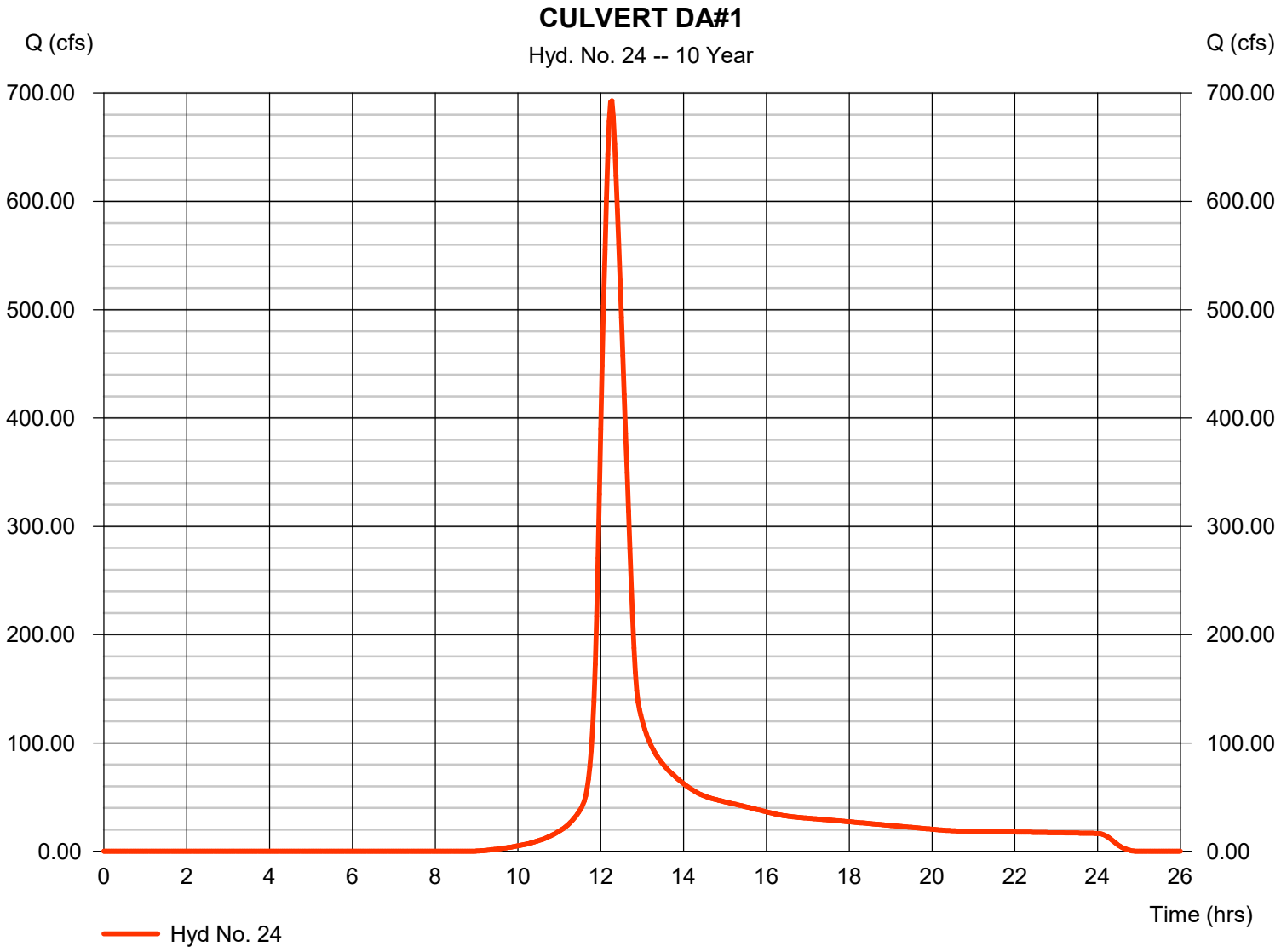


Hydrograph Report

Hyd. No. 24

CULVERT DA#1

Hydrograph type	=	SCS Runoff	Peak discharge	=	692.74 cfs
Storm frequency	=	10 yrs	Time to peak	=	12.27 hrs
Time interval	=	2 min	Hyd. volume	=	3,170,181 cuft
Drainage area	=	356.710 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	34.90 min
Total precip.	=	5.14 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

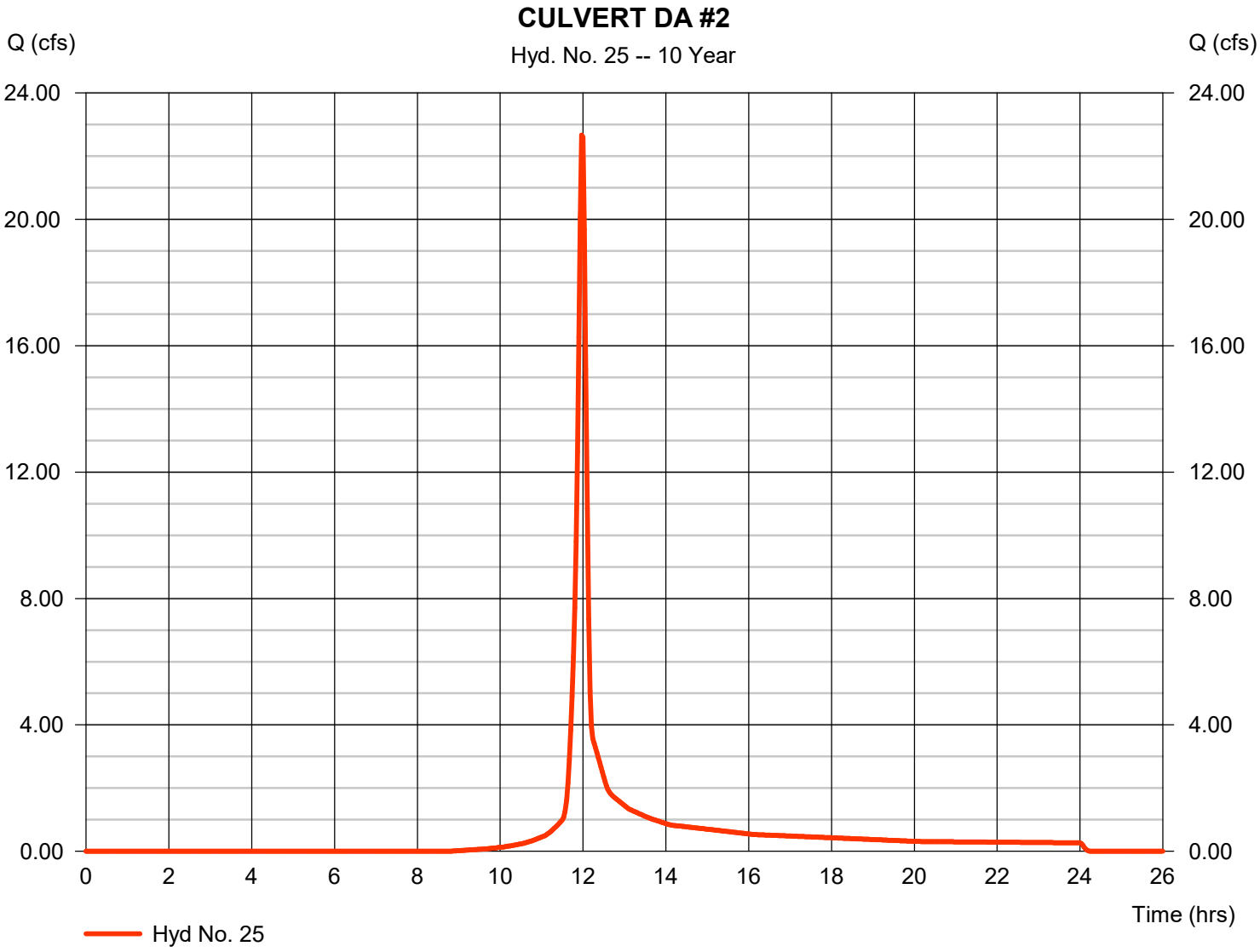


Hydrograph Report

Hyd. No. 25

CULVERT DA #2

Hydrograph type	=	SCS Runoff	Peak discharge	=	22.66 cfs
Storm frequency	=	10 yrs	Time to peak	=	11.97 hrs
Time interval	=	2 min	Hyd. volume	=	51,869 cuft
Drainage area	=	5.770 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	8.80 min
Total precip.	=	5.14 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

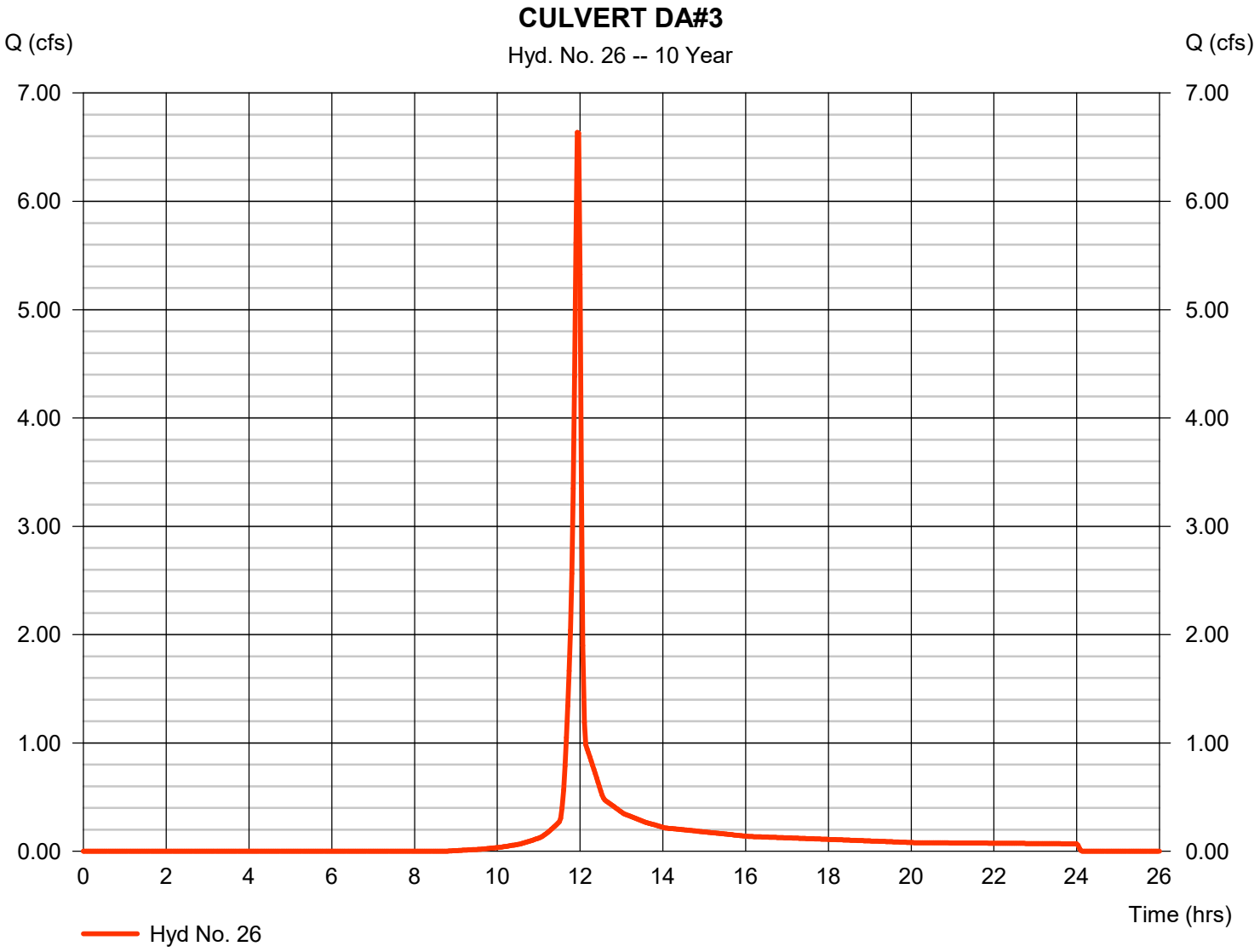


Hydrograph Report

Hyd. No. 26

CULVERT DA#3

Hydrograph type	=	SCS Runoff	Peak discharge	=	6.637 cfs
Storm frequency	=	10 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	13,400 cuft
Drainage area	=	1.590 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	5.14 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

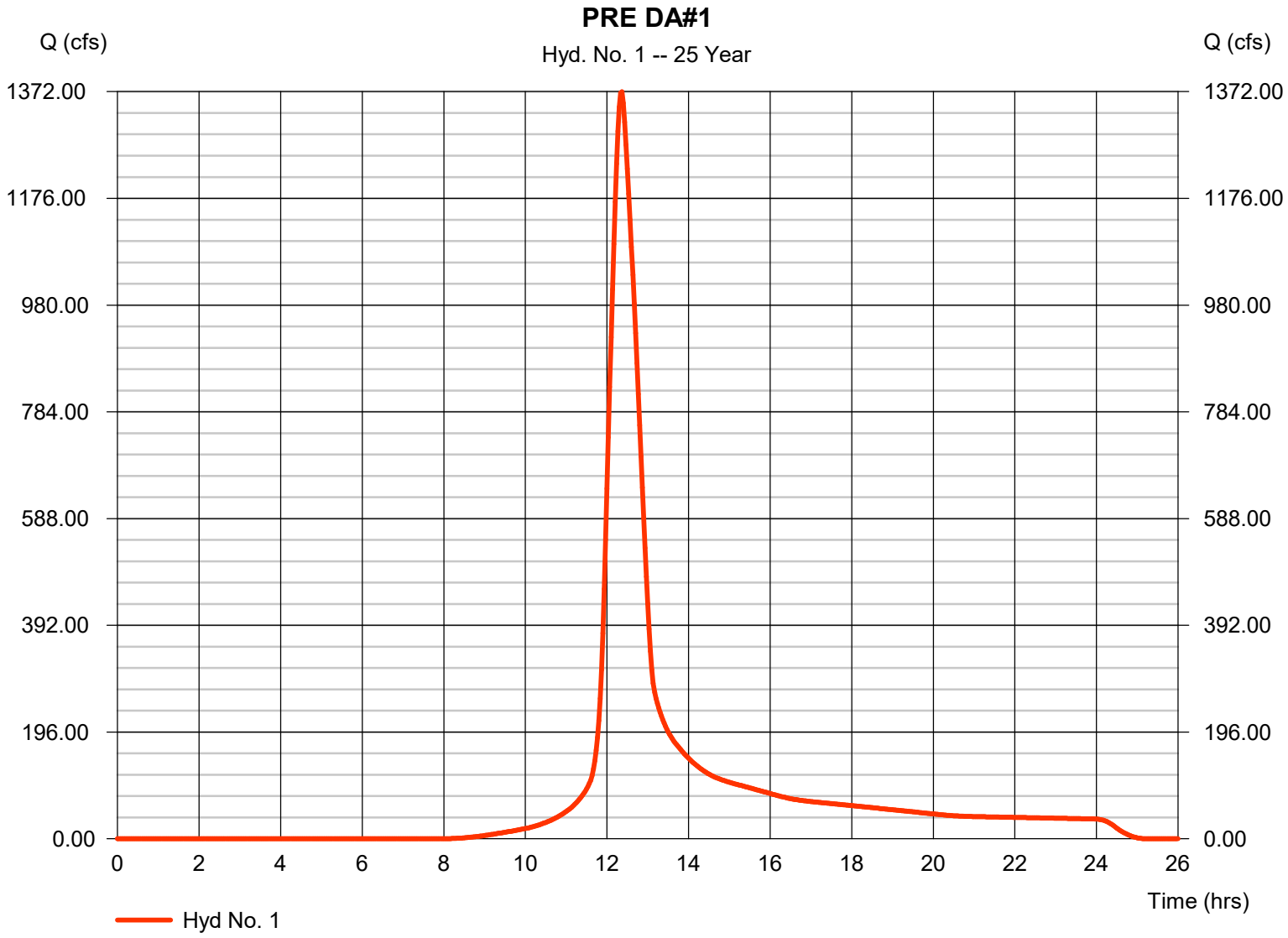
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	1371.63	2	742	7,371,980	------	------	------	PRE DA#1
2	SCS Runoff	72.97	2	716	154,449	------	------	------	POST DA#1
3	SCS Runoff	135.87	2	718	329,190	------	------	------	POST DA #3
4	SCS Runoff	65.68	2	716	143,214	------	------	------	POST DA#4
5	SCS Runoff	28.14	2	716	59,957	------	------	------	POST DA#5
6	SCS Runoff	82.82	2	722	240,016	------	------	------	POST DA#6
7	SCS Runoff	110.86	2	716	241,748	------	------	------	POST DA#7
8	SCS Runoff	45.57	2	718	109,615	------	------	------	POST DA#8
9	SCS Runoff	18.07	2	716	39,414	------	------	------	BYPASS #1
10	SCS Runoff	82.46	2	722	231,118	------	------	------	EXISTING DA 1
11	SCS Runoff	1050.21	2	738	5,105,935	------	------	------	EXISTING DA 2
12	SCS Runoff	95.77	2	724	299,550	------	------	------	EXISTING DA 3
13	SCS Runoff	6.183	2	728	22,719	------	------	------	EXISTING DA 4
14	Reservoir	14.48	2	726	150,529	2	265.95	82,224	POST DA#1 TO SCM#1
15	Reservoir	64.20	2	726	322,510	3	245.46	144,591	POST DA#3 TO SCM#3
16	Reservoir	15.72	2	724	139,624	4	244.44	76,687	POST DA#4 TO SCM#4
17	Reservoir	16.41	2	722	59,563	5	252.22	22,303	POST DA#5 TO SCM#5
18	Reservoir	16.11	2	740	237,949	6	242.30	121,550	POST DA#6 TO SCM#6
19	Reservoir	30.19	2	724	238,951	7	244.14	119,674	POST DA#7 TO SCM#7
20	Reservoir	34.49	2	722	108,473	8	243.43	30,824	POST DA#8 TO SCM#8
21	Combine	1115.92	2	736	5,813,602	9, 10, 11, 16, 17, 18,	------	------	UPSTREAM AOI#1
22	Combine	243.99	2	724	1,142,733	12, 13, 14, 15, 19, 20,	------	------	DOWNSTREAM AOI#2
23	Combine	1275.76	2	734	6,956,328	21, 22	------	------	POI
24	SCS Runoff	932.87	2	734	4,239,097	------	------	------	CULVERT DA#1
25	SCS Runoff	30.30	2	718	69,358	------	------	------	CULVERT DA #2
26	SCS Runoff	8.850	2	716	17,918	------	------	------	CULVERT DA#3

Hydrograph Report

Hyd. No. 1

PRE DA#1

Hydrograph type	=	SCS Runoff	Peak discharge	=	1371.63 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.37 hrs
Time interval	=	2 min	Hyd. volume	=	7,371,980 cuft
Drainage area	=	618.810 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	47.00 min
Total precip.	=	6.15 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

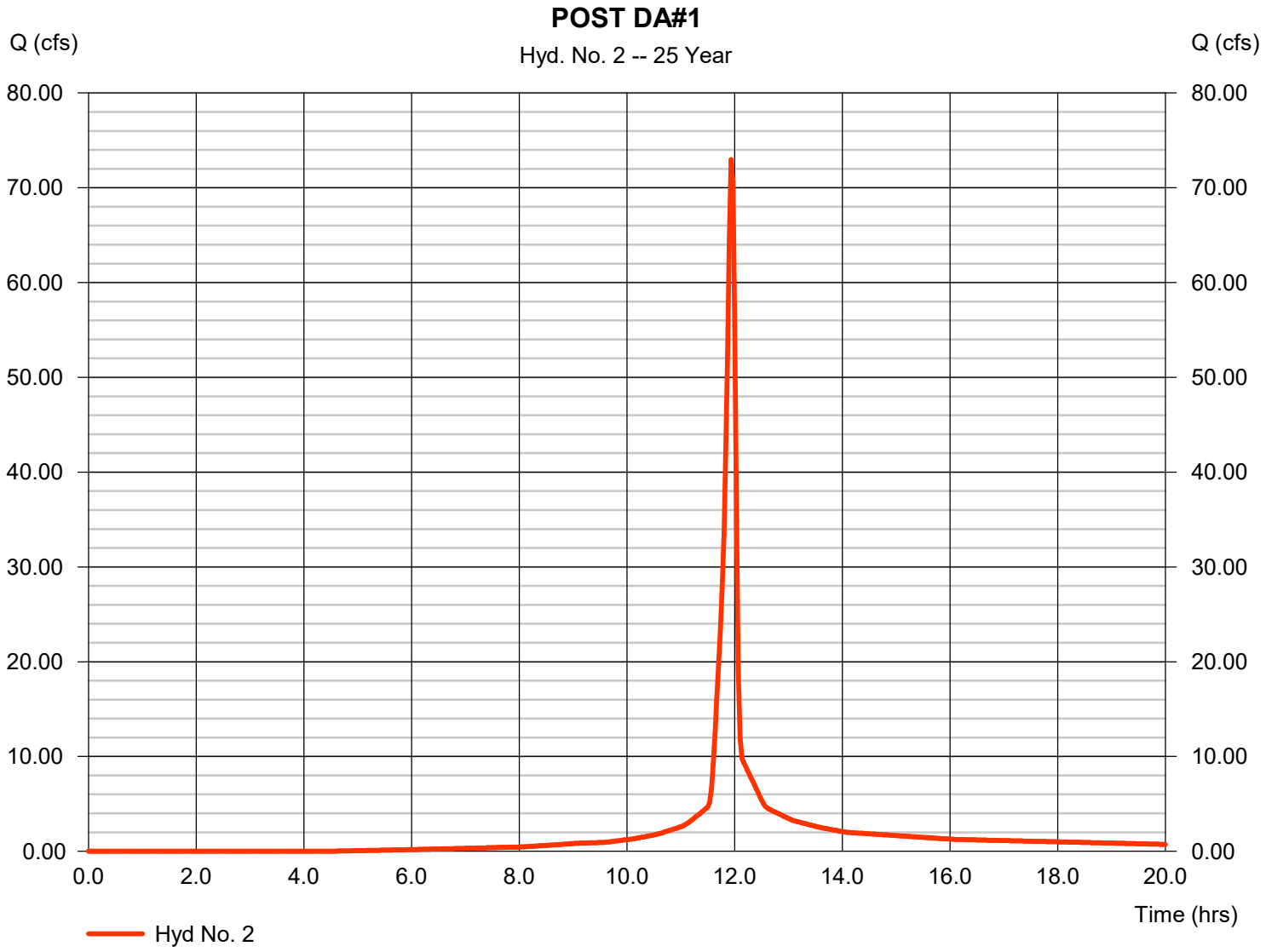


Hydrograph Report

Hyd. No. 2

POST DA#1

Hydrograph type	=	SCS Runoff	Peak discharge	=	72.97 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	154,449 cuft
Drainage area	=	9.970 ac	Curve number	=	86
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.50 min
Total precip.	=	6.15 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

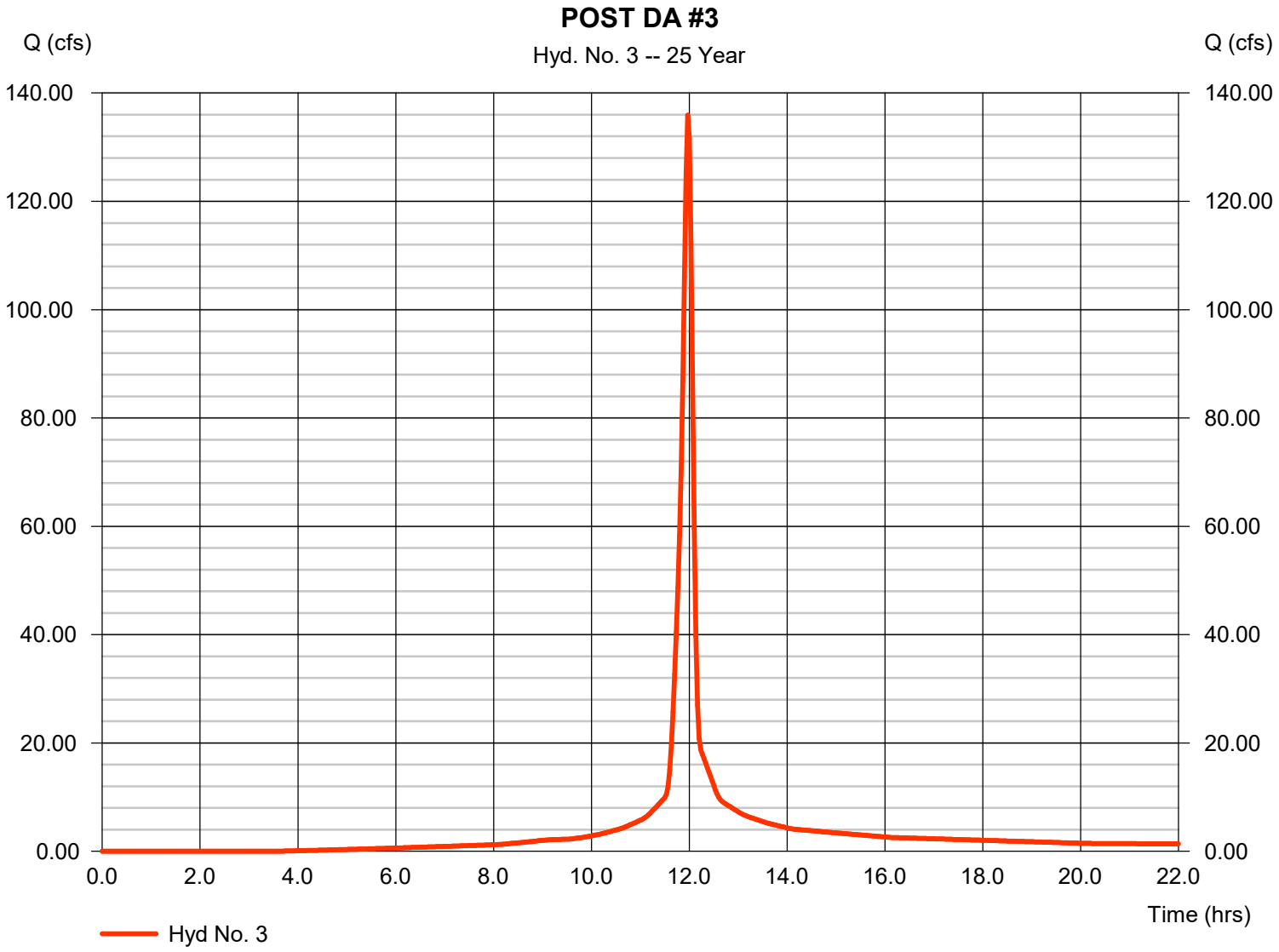


Hydrograph Report

Hyd. No. 3

POST DA #3

Hydrograph type	=	SCS Runoff	Peak discharge	=	135.87 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.97 hrs
Time interval	=	2 min	Hyd. volume	=	329,190 cuft
Drainage area	=	18.580 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	7.40 min
Total precip.	=	6.15 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

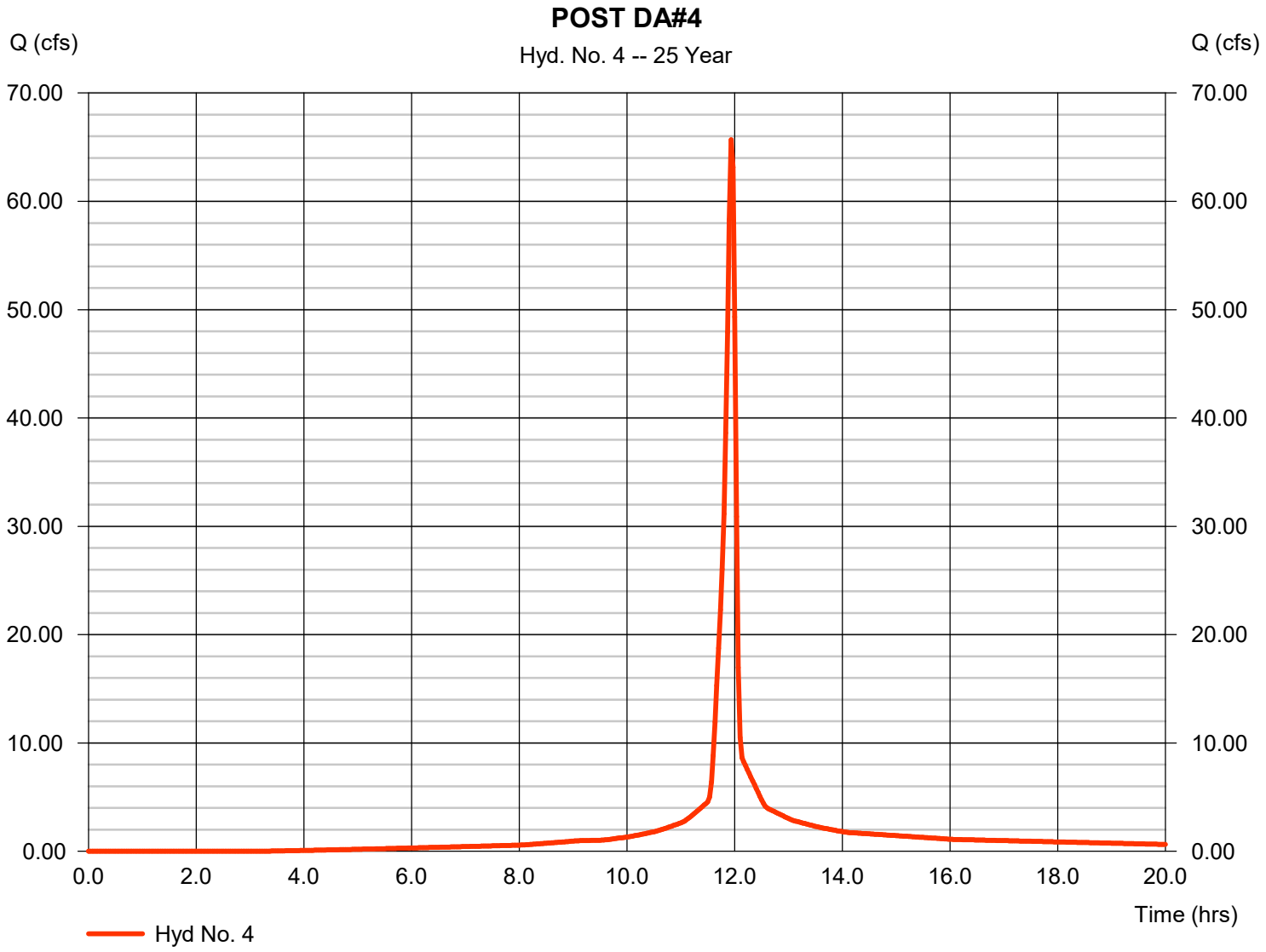


Hydrograph Report

Hyd. No. 4

POST DA#4

Hydrograph type	=	SCS Runoff	Peak discharge	=	65.68 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	143,214 cuft
Drainage area	=	8.430 ac	Curve number	=	90
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.30 min
Total precip.	=	6.15 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

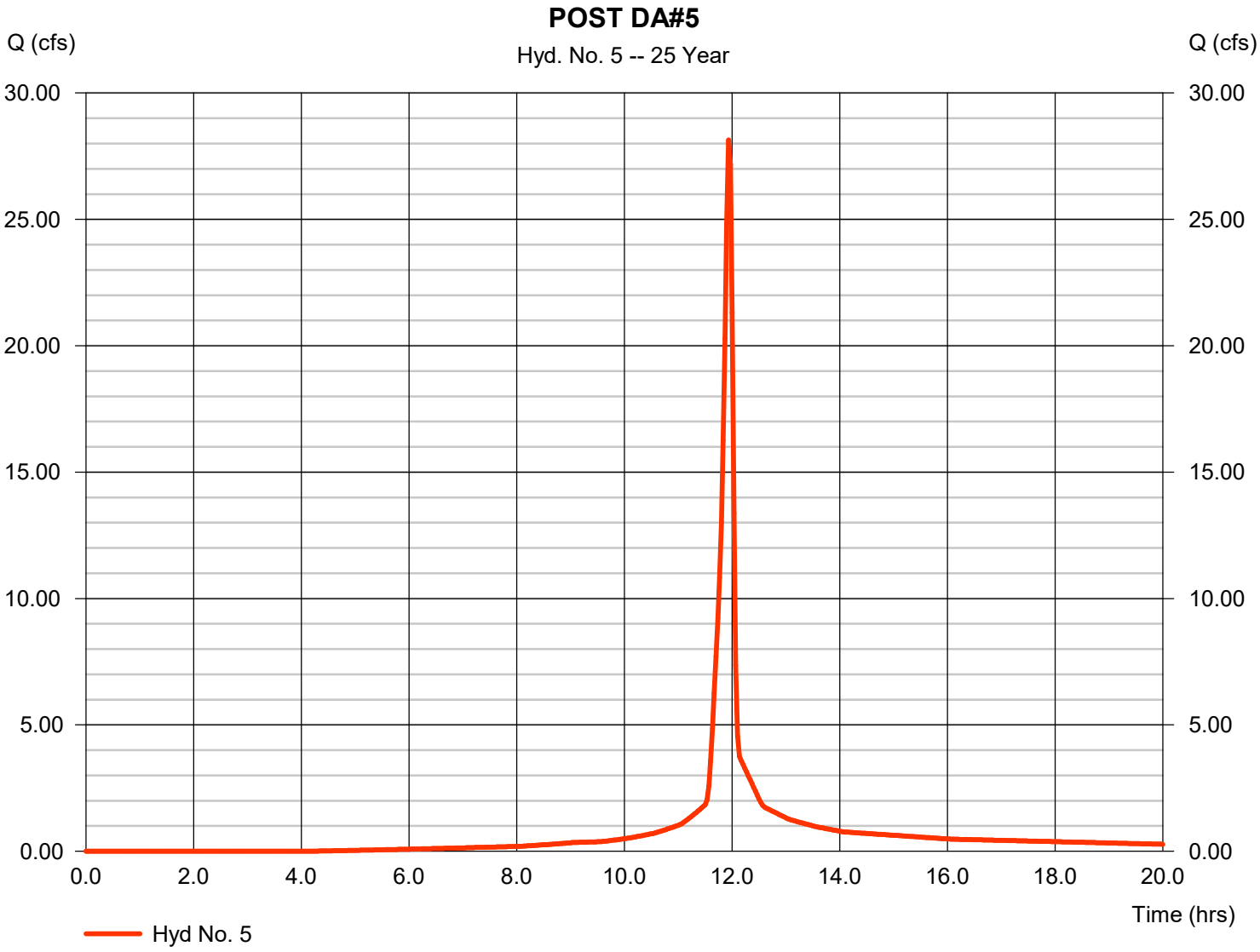


Hydrograph Report

Hyd. No. 5

POST DA#5

Hydrograph type	=	SCS Runoff	Peak discharge	=	28.14 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	59,957 cuft
Drainage area	=	3.780 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	6.15 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

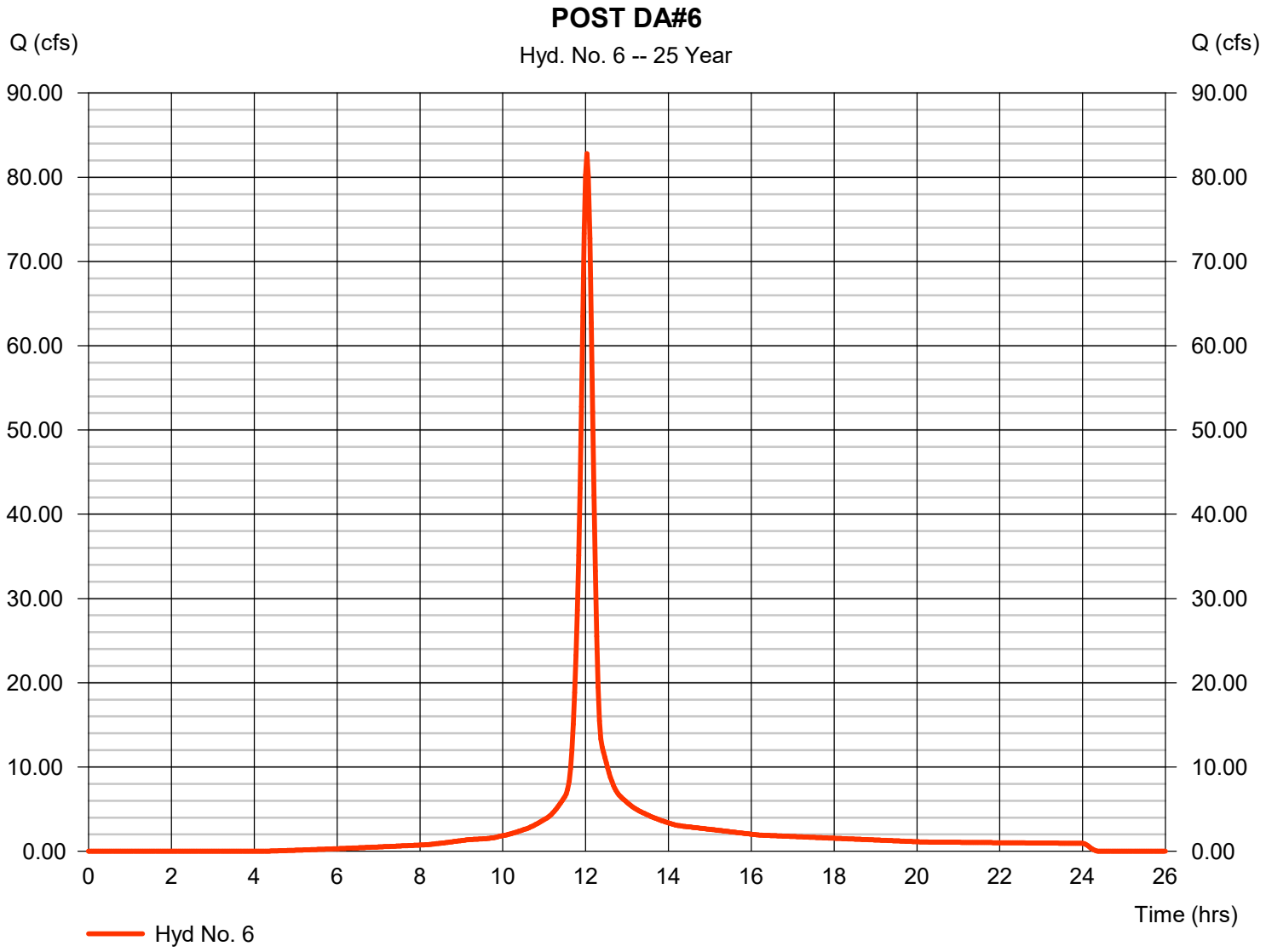


Hydrograph Report

Hyd. No. 6

POST DA#6

Hydrograph type	=	SCS Runoff	Peak discharge	=	82.82 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.03 hrs
Time interval	=	2 min	Hyd. volume	=	240,016 cuft
Drainage area	=	14.550 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	14.80 min
Total precip.	=	6.15 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

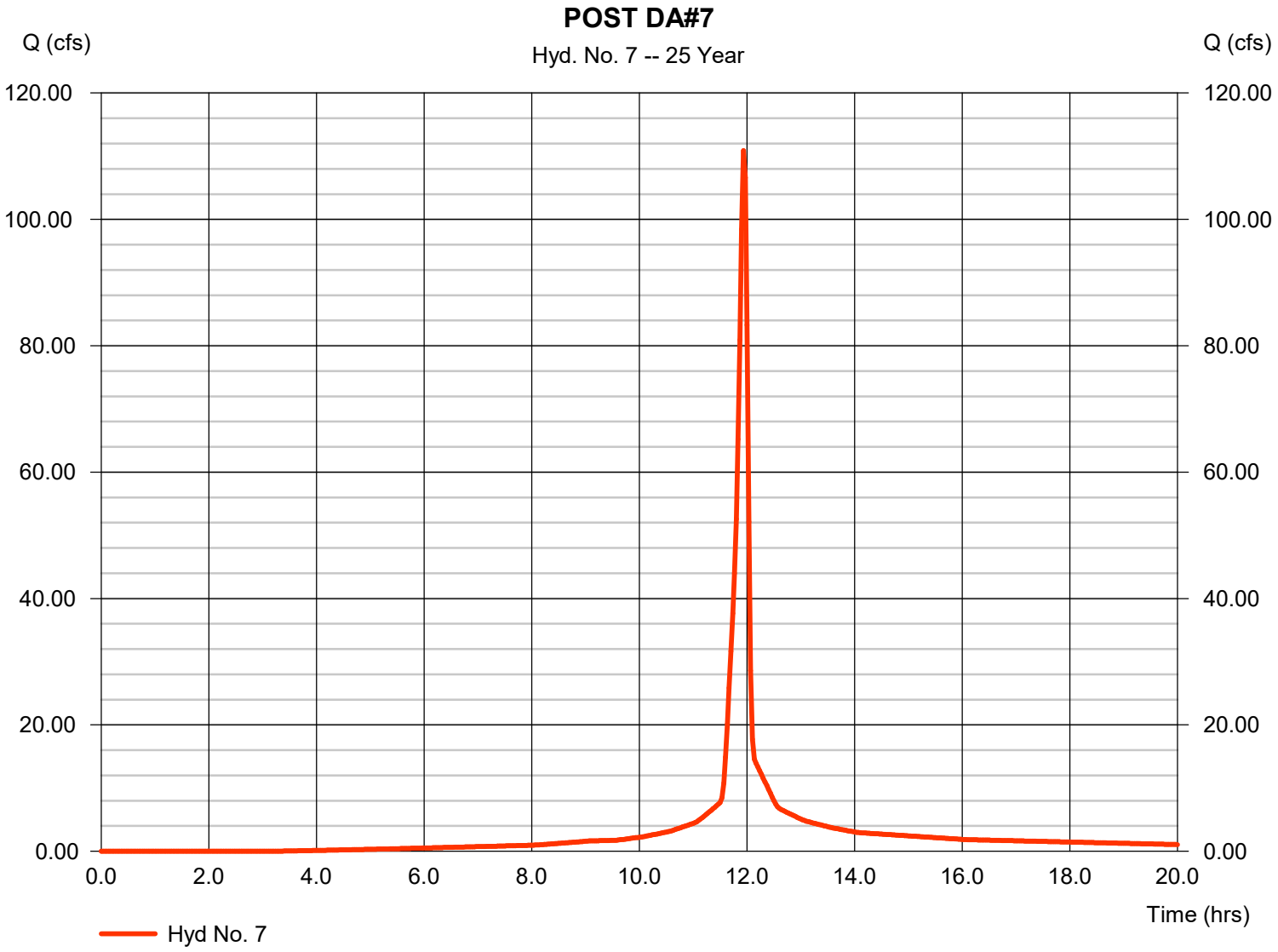


Hydrograph Report

Hyd. No. 7

POST DA#7

Hydrograph type	=	SCS Runoff	Peak discharge	=	110.86 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	241,748 cuft
Drainage area	=	14.230 ac	Curve number	=	90
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.20 min
Total precip.	=	6.15 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

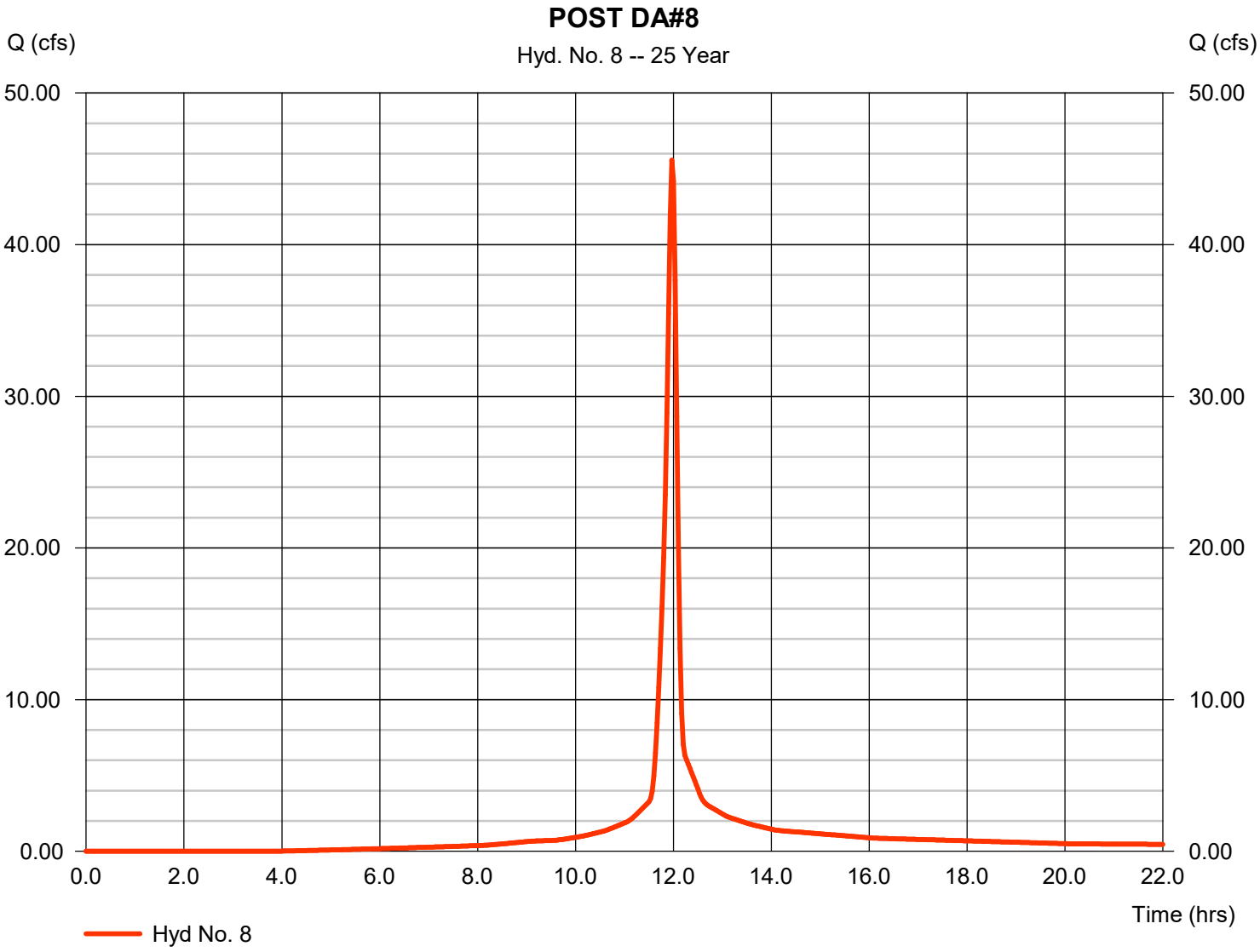


Hydrograph Report

Hyd. No. 8

POST DA#8

Hydrograph type	=	SCS Runoff	Peak discharge	=	45.57 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.97 hrs
Time interval	=	2 min	Hyd. volume	=	109,615 cuft
Drainage area	=	6.330 ac	Curve number	=	88
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.80 min
Total precip.	=	6.15 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

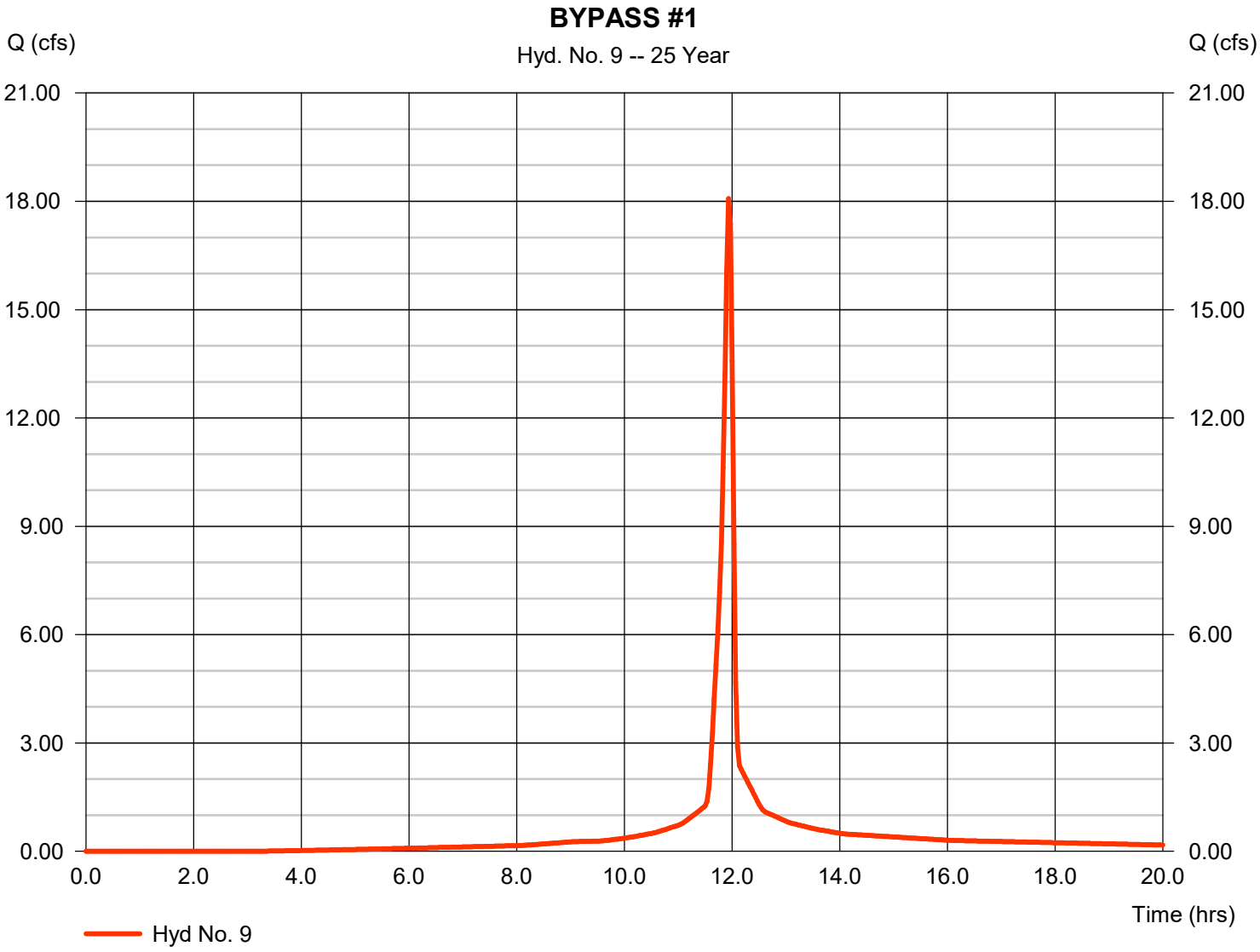


Hydrograph Report

Hyd. No. 9

BYPASS #1

Hydrograph type	=	SCS Runoff	Peak discharge	=	18.07 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	39,414 cuft
Drainage area	=	2.320 ac	Curve number	=	90
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	6.15 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

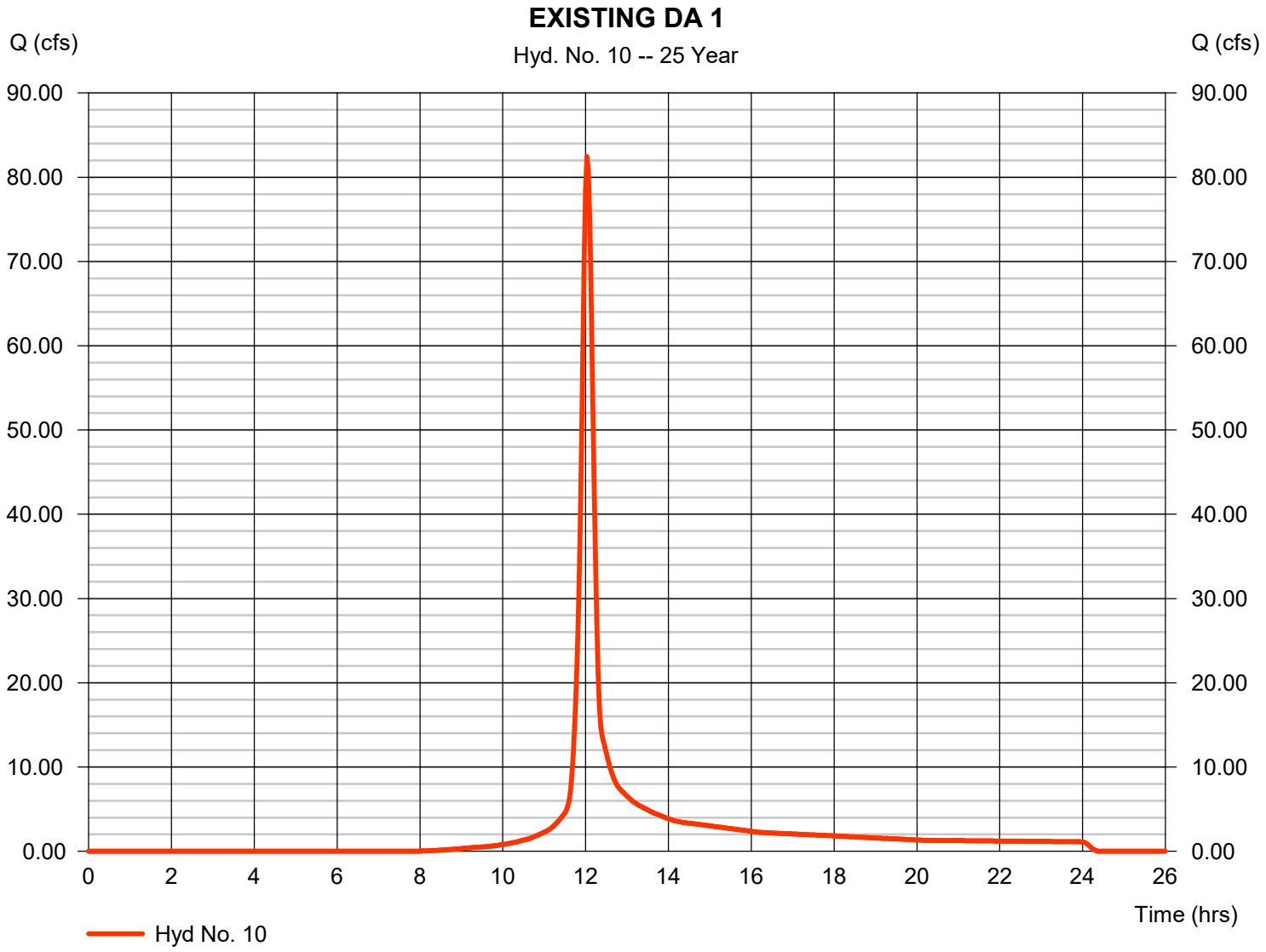


Hydrograph Report

Hyd. No. 10

EXISTING DA 1

Hydrograph type	=	SCS Runoff	Peak discharge	=	82.46 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.03 hrs
Time interval	=	2 min	Hyd. volume	=	231,118 cuft
Drainage area	=	19.720 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	14.00 min
Total precip.	=	6.15 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

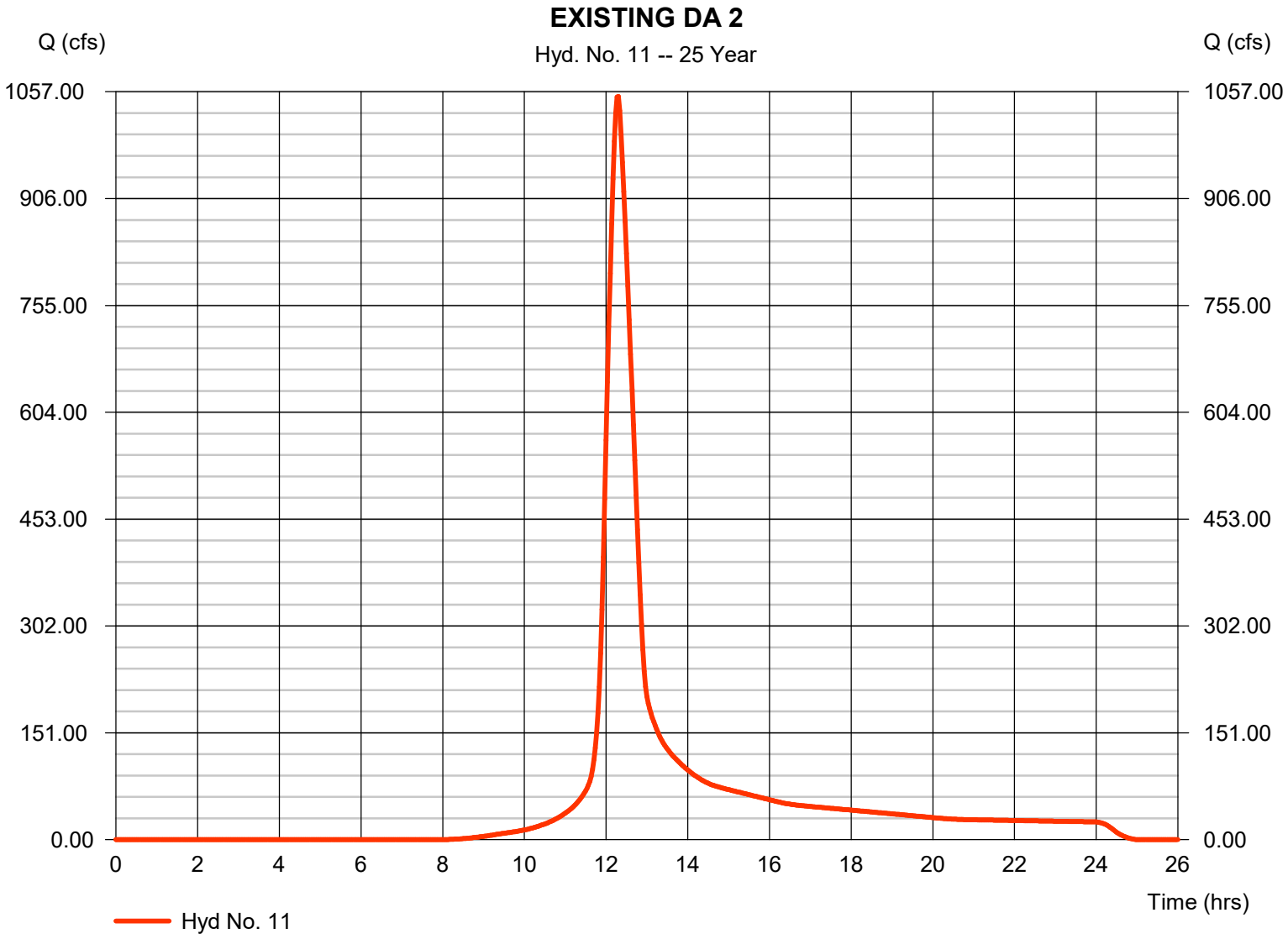


Hydrograph Report

Hyd. No. 11

EXISTING DA 2

Hydrograph type	=	SCS Runoff	Peak discharge	=	1050.21 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.30 hrs
Time interval	=	2 min	Hyd. volume	=	5,105,935 cuft
Drainage area	=	424.770 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	38.10 min
Total precip.	=	6.15 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

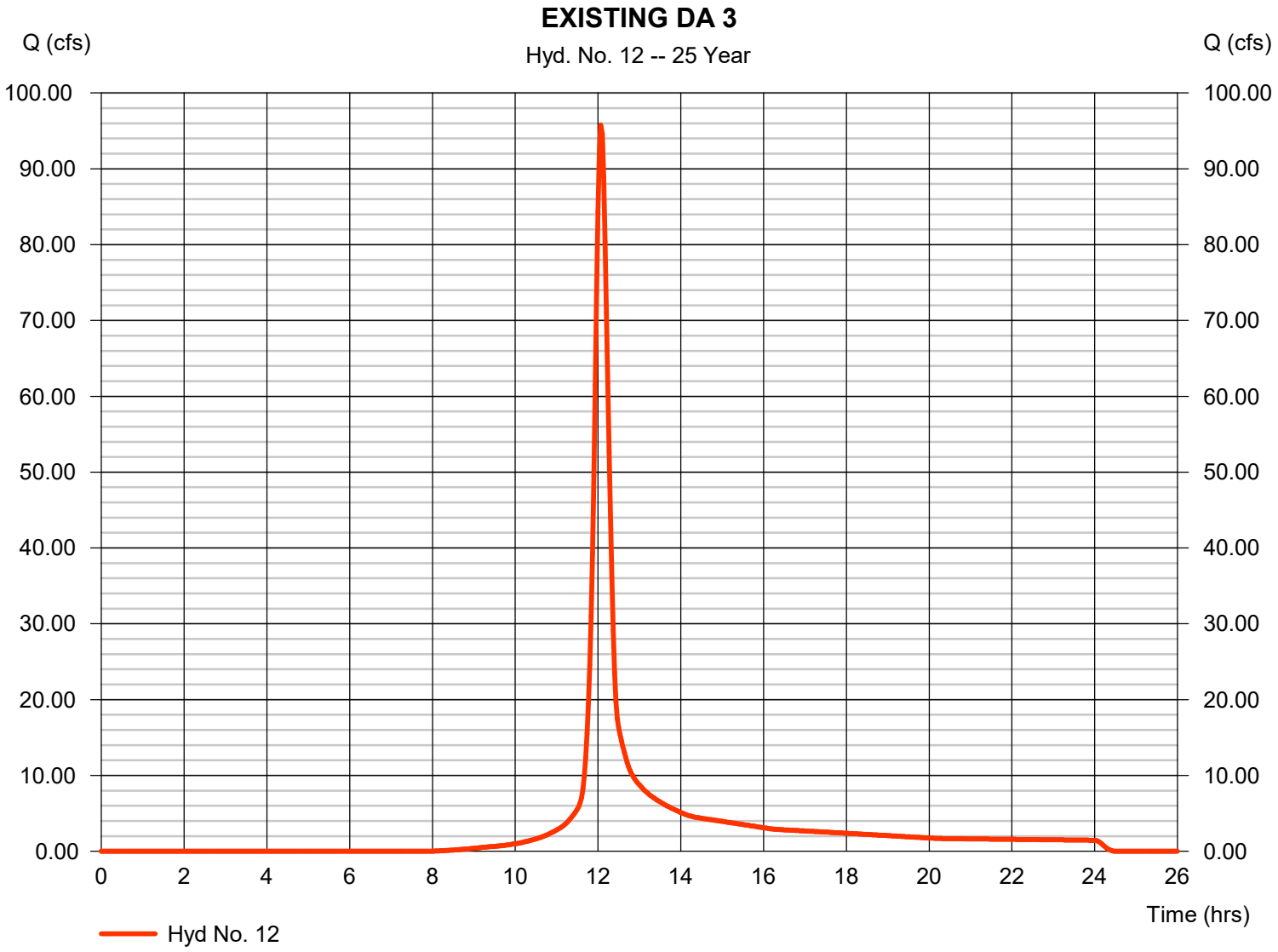


Hydrograph Report

Hyd. No. 12

EXISTING DA 3

Hydrograph type	=	SCS Runoff	Peak discharge	=	95.77 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.07 hrs
Time interval	=	2 min	Hyd. volume	=	299,550 cuft
Drainage area	=	24.920 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	19.60 min
Total precip.	=	6.15 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

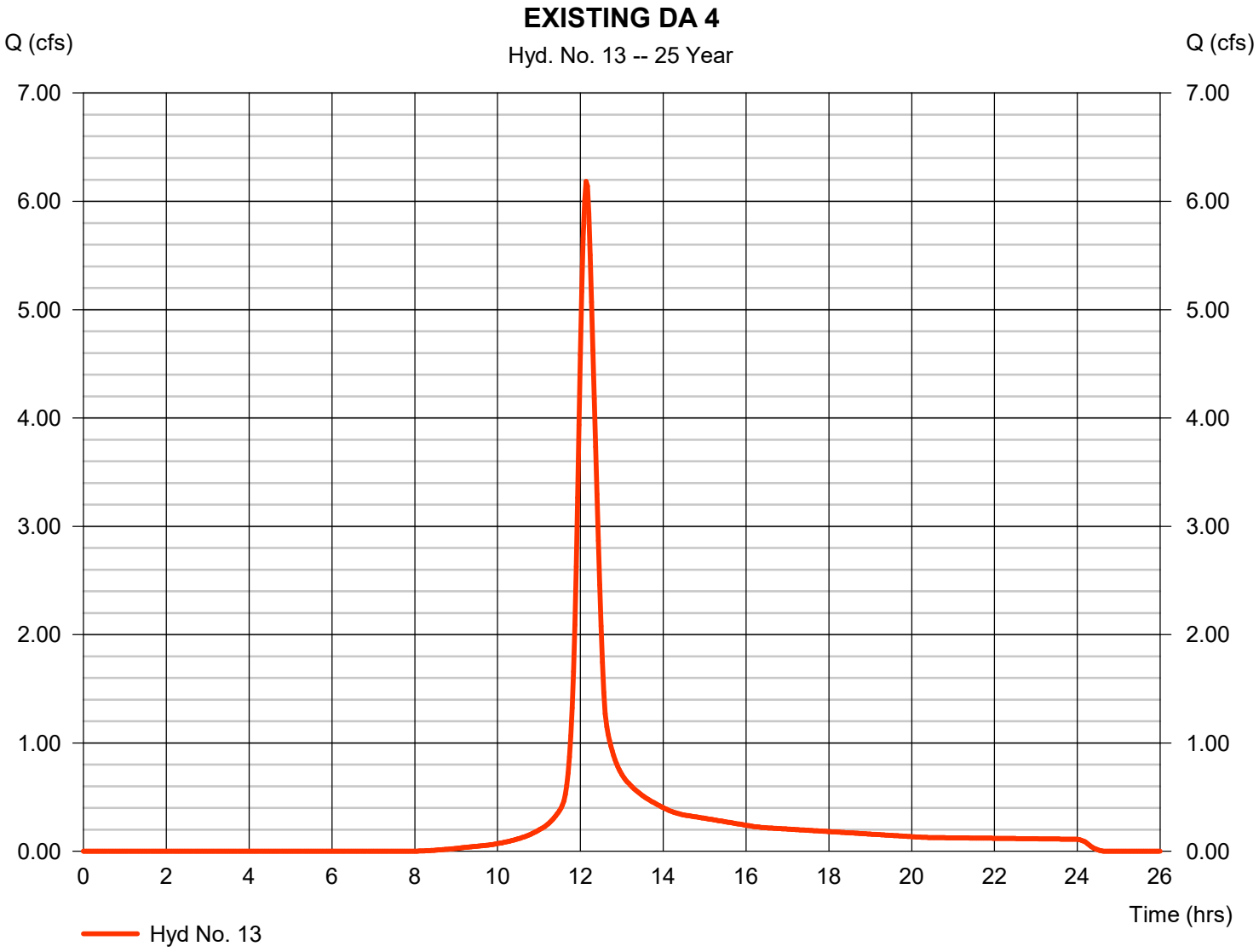


Hydrograph Report

Hyd. No. 13

EXISTING DA 4

Hydrograph type	=	SCS Runoff	Peak discharge	=	6.183 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.13 hrs
Time interval	=	2 min	Hyd. volume	=	22,719 cuft
Drainage area	=	1.920 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	26.20 min
Total precip.	=	6.15 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



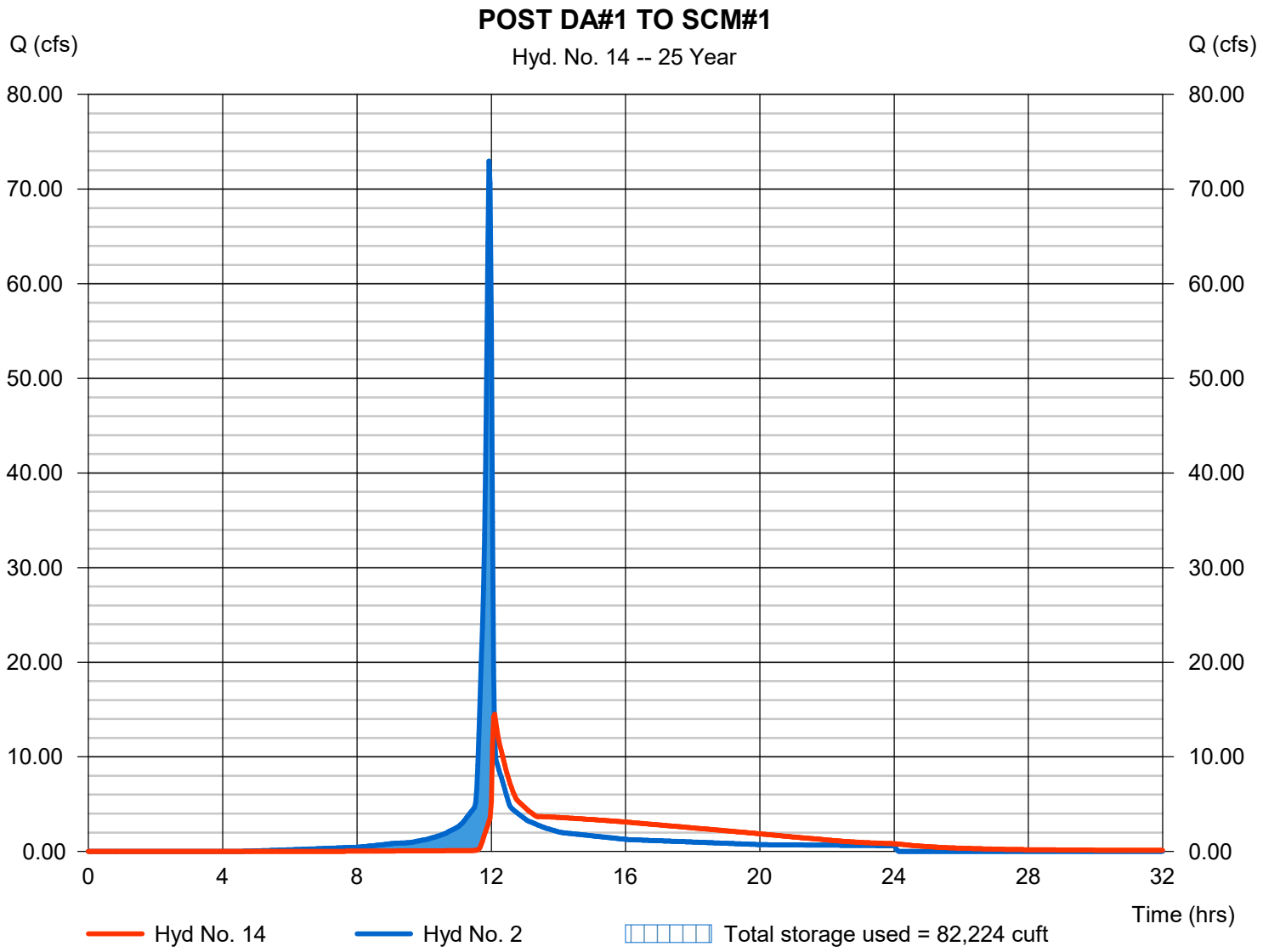
Hydrograph Report

Hyd. No. 14

POST DA#1 TO SCM#1

Hydrograph type	=	Reservoir	Peak discharge	=	14.48 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.10 hrs
Time interval	=	2 min	Hyd. volume	=	150,529 cuft
Inflow hyd. No.	=	2 - POST DA#1	Max. Elevation	=	265.95 ft
Reservoir name	=	SCM#1	Max. Storage	=	82,224 cuft

Storage Indication method used.



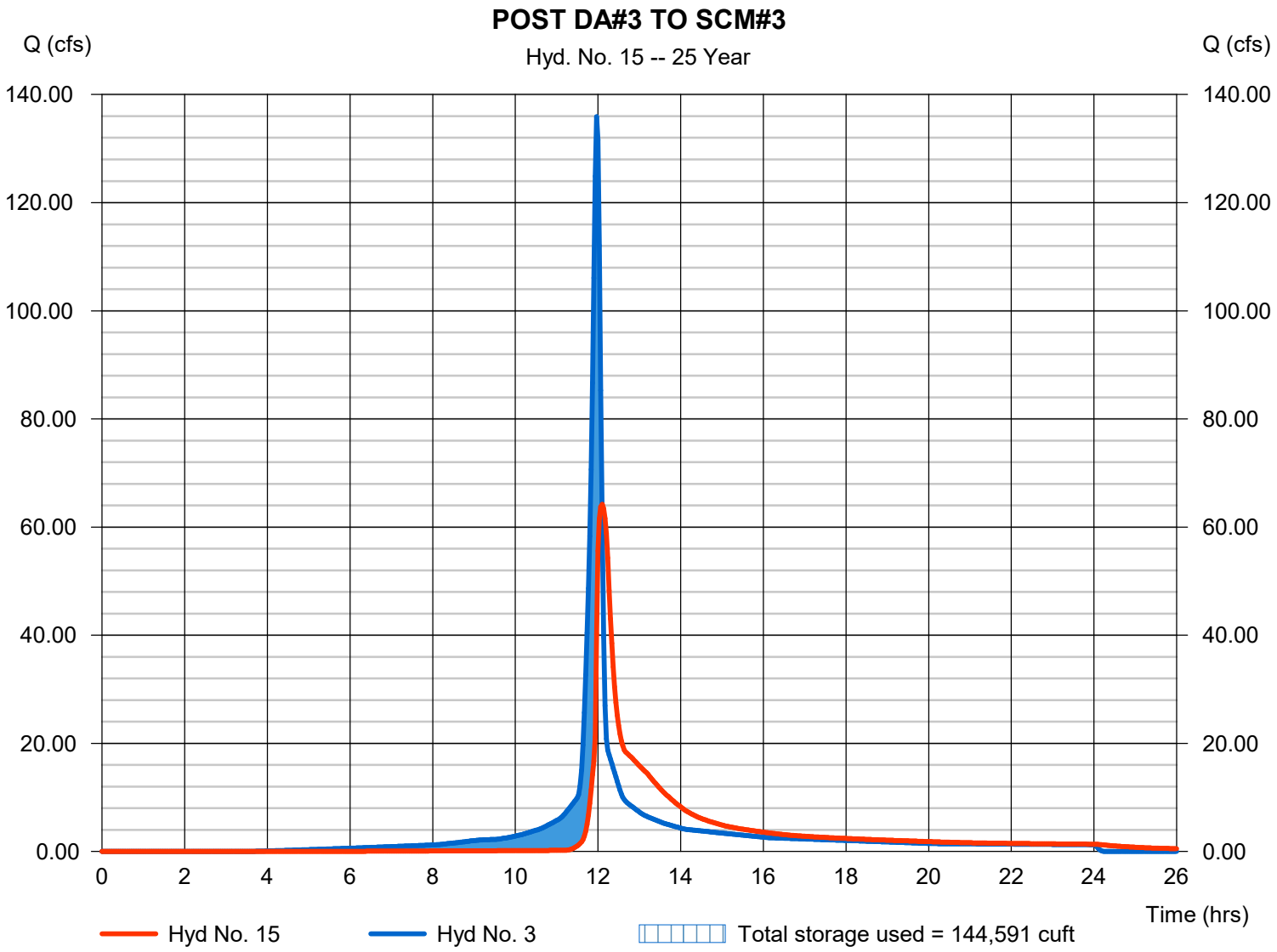
Hydrograph Report

Hyd. No. 15

POST DA#3 TO SCM#3

Hydrograph type	=	Reservoir	Peak discharge	=	64.20 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.10 hrs
Time interval	=	2 min	Hyd. volume	=	322,510 cuft
Inflow hyd. No.	=	3 - POST DA #3	Max. Elevation	=	245.46 ft
Reservoir name	=	SCM#3	Max. Storage	=	144,591 cuft

Storage Indication method used.



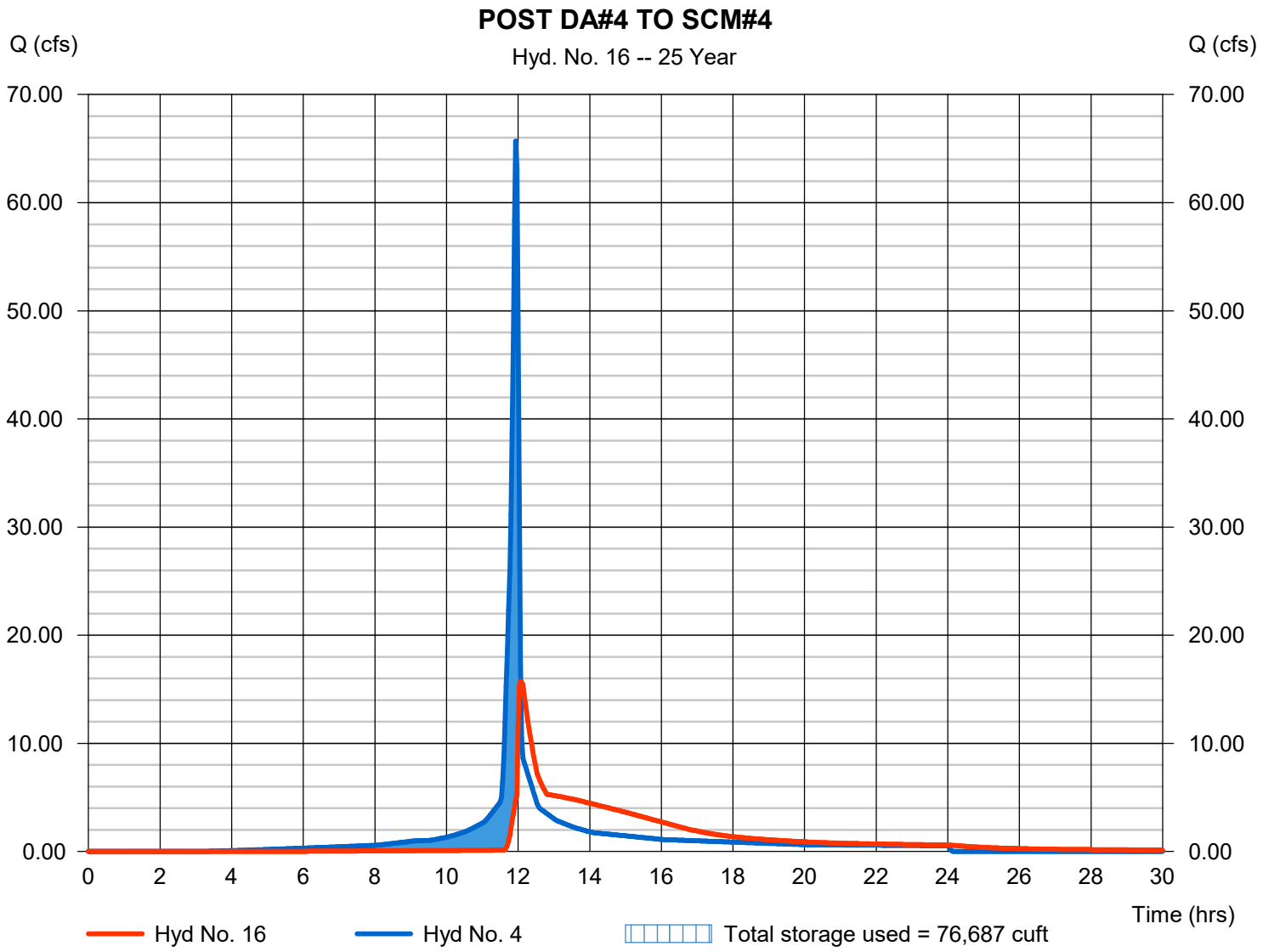
Hydrograph Report

Hyd. No. 16

POST DA#4 TO SCM#4

Hydrograph type	=	Reservoir	Peak discharge	=	15.72 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.07 hrs
Time interval	=	2 min	Hyd. volume	=	139,624 cuft
Inflow hyd. No.	=	4 - POST DA#4	Max. Elevation	=	244.44 ft
Reservoir name	=	SCM#4	Max. Storage	=	76,687 cuft

Storage Indication method used.



Hydrograph Report

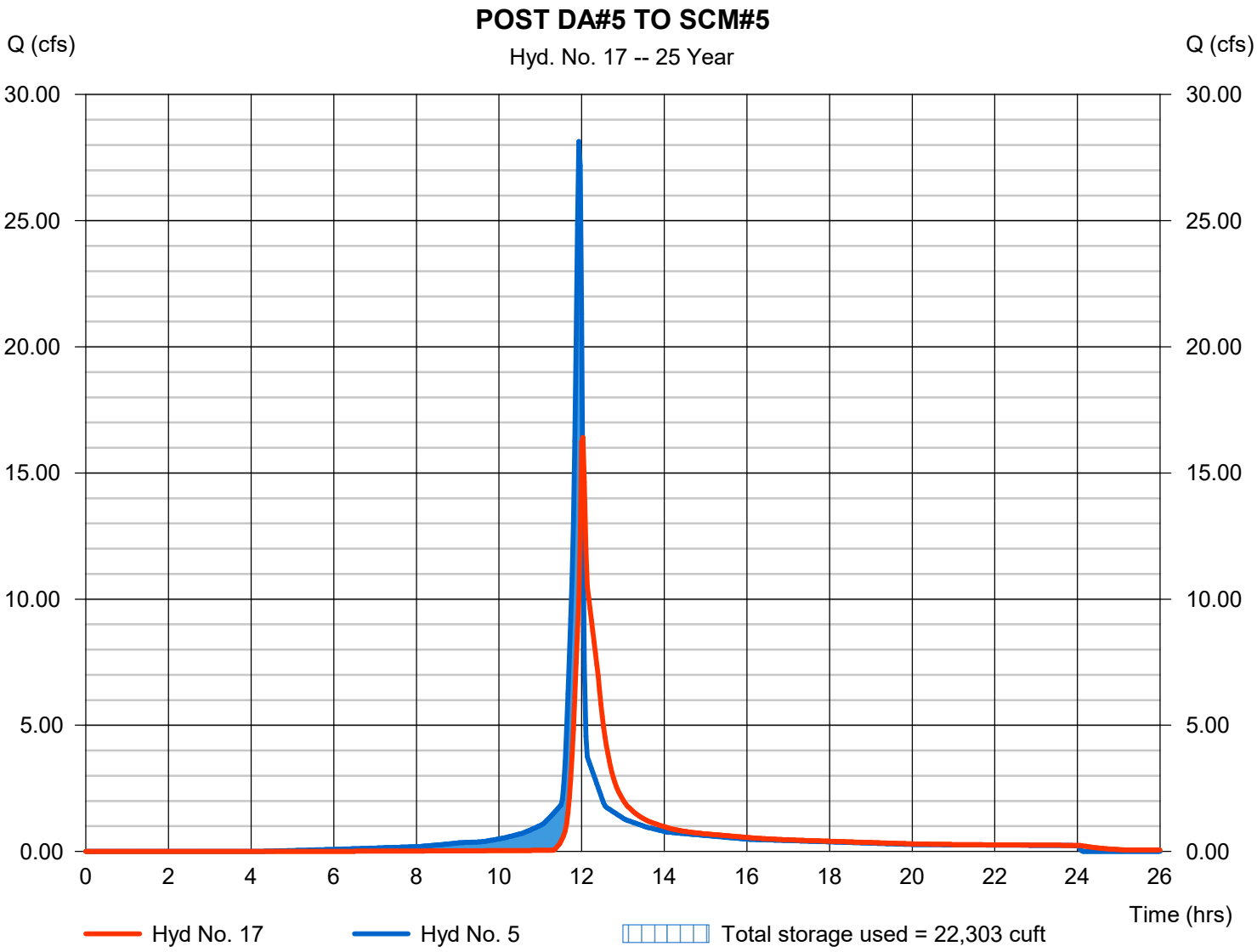
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Thursday, 10 / 31 / 2024

Hyd. No. 17

POST DA#5 TO SCM#5

Hydrograph type	=	Reservoir	Peak discharge	=	16.41 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.03 hrs
Time interval	=	2 min	Hyd. volume	=	59,563 cuft
Inflow hyd. No.	=	5 - POST DA#5	Max. Elevation	=	252.22 ft
Reservoir name	=	SCM#5	Max. Storage	=	22,303 cuft

Storage Indication method used.



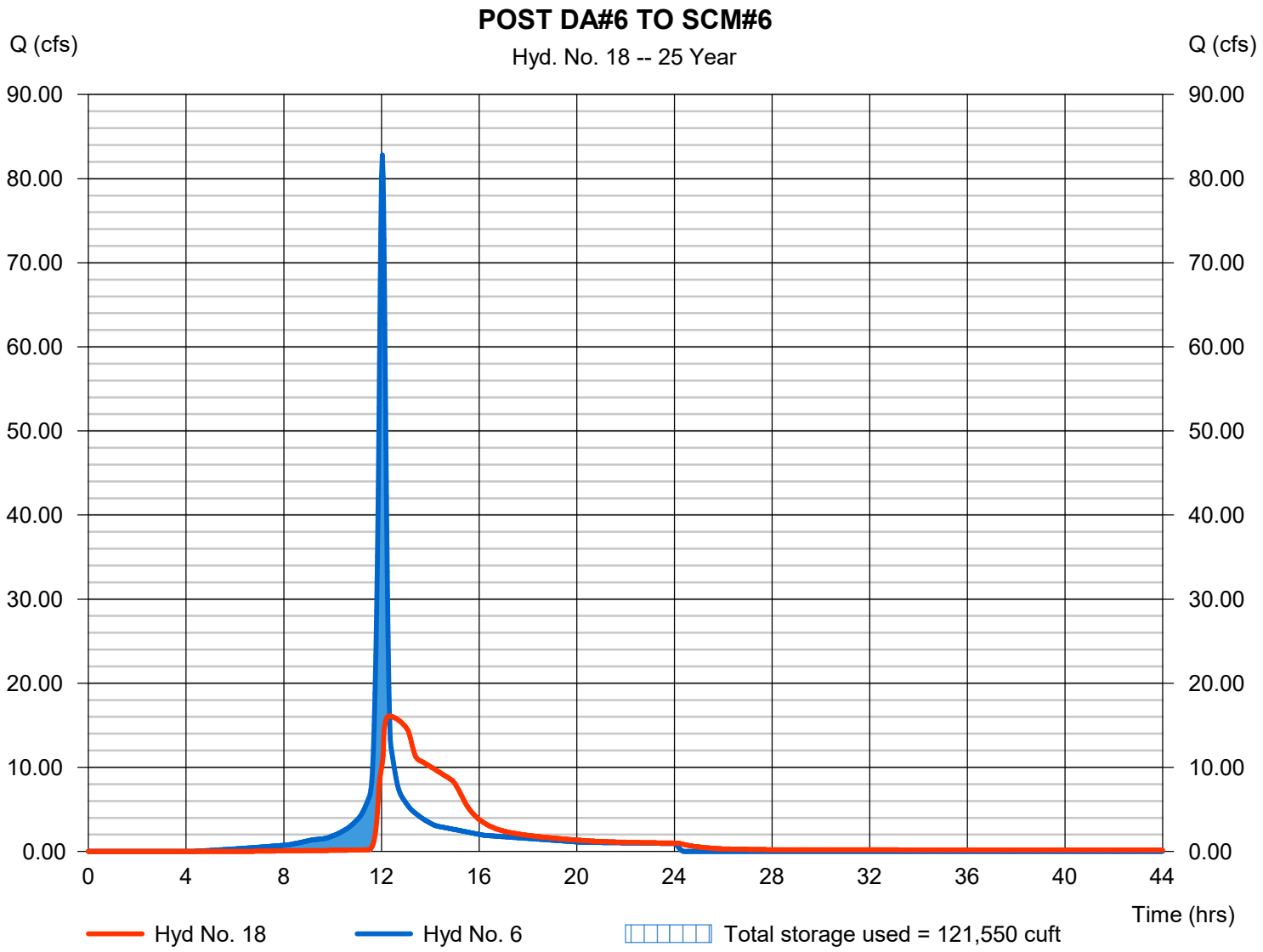
Hydrograph Report

Hyd. No. 18

POST DA#6 TO SCM#6

Hydrograph type	=	Reservoir	Peak discharge	=	16.11 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.33 hrs
Time interval	=	2 min	Hyd. volume	=	237,949 cuft
Inflow hyd. No.	=	6 - POST DA#6	Max. Elevation	=	242.30 ft
Reservoir name	=	SCM#6	Max. Storage	=	121,550 cuft

Storage Indication method used.



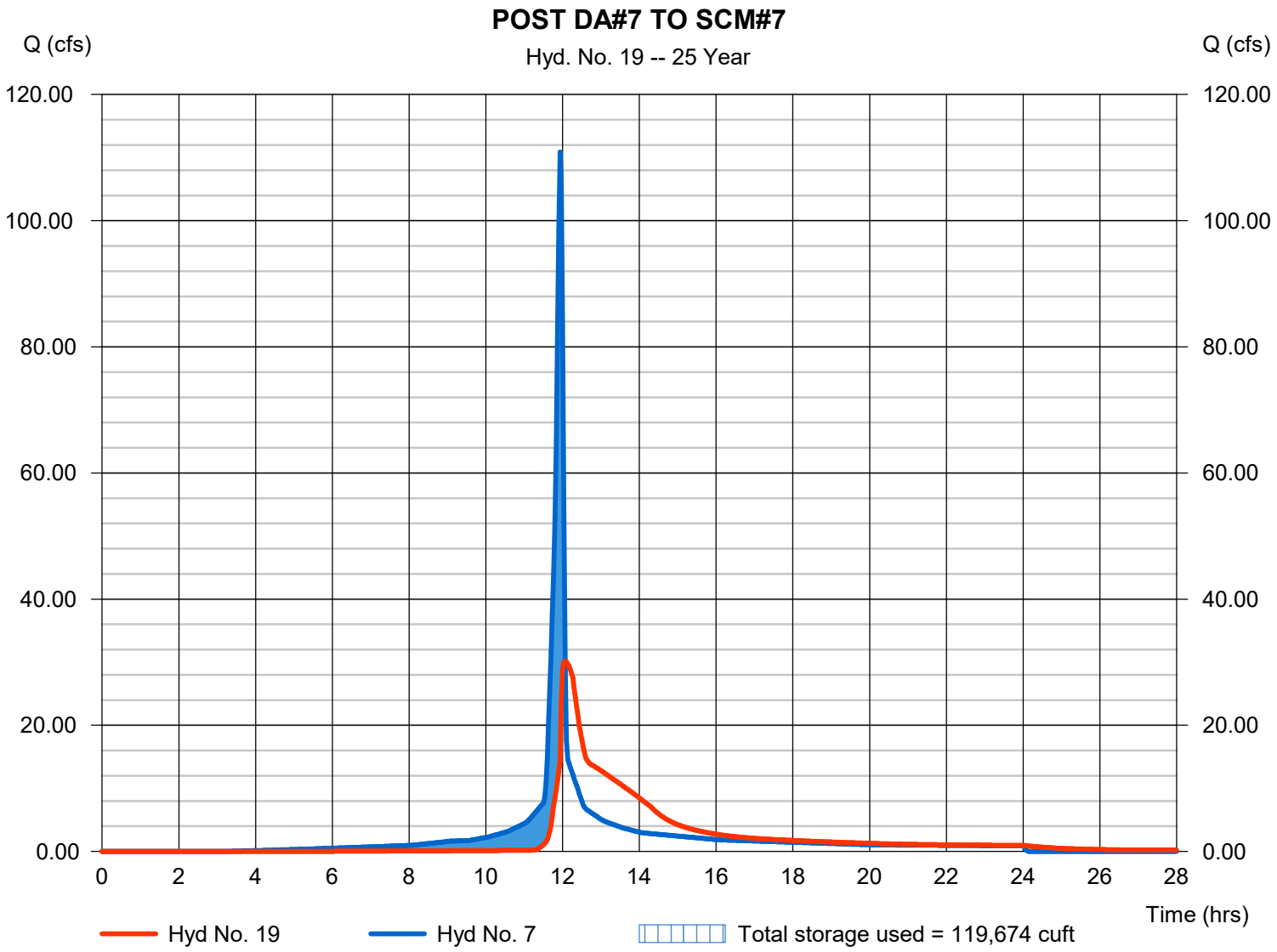
Hydrograph Report

Hyd. No. 19

POST DA#7 TO SCM#7

Hydrograph type	=	Reservoir	Peak discharge	=	30.19 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.07 hrs
Time interval	=	2 min	Hyd. volume	=	238,951 cuft
Inflow hyd. No.	=	7 - POST DA#7	Max. Elevation	=	244.14 ft
Reservoir name	=	SCM#7	Max. Storage	=	119,674 cuft

Storage Indication method used.



Hydrograph Report

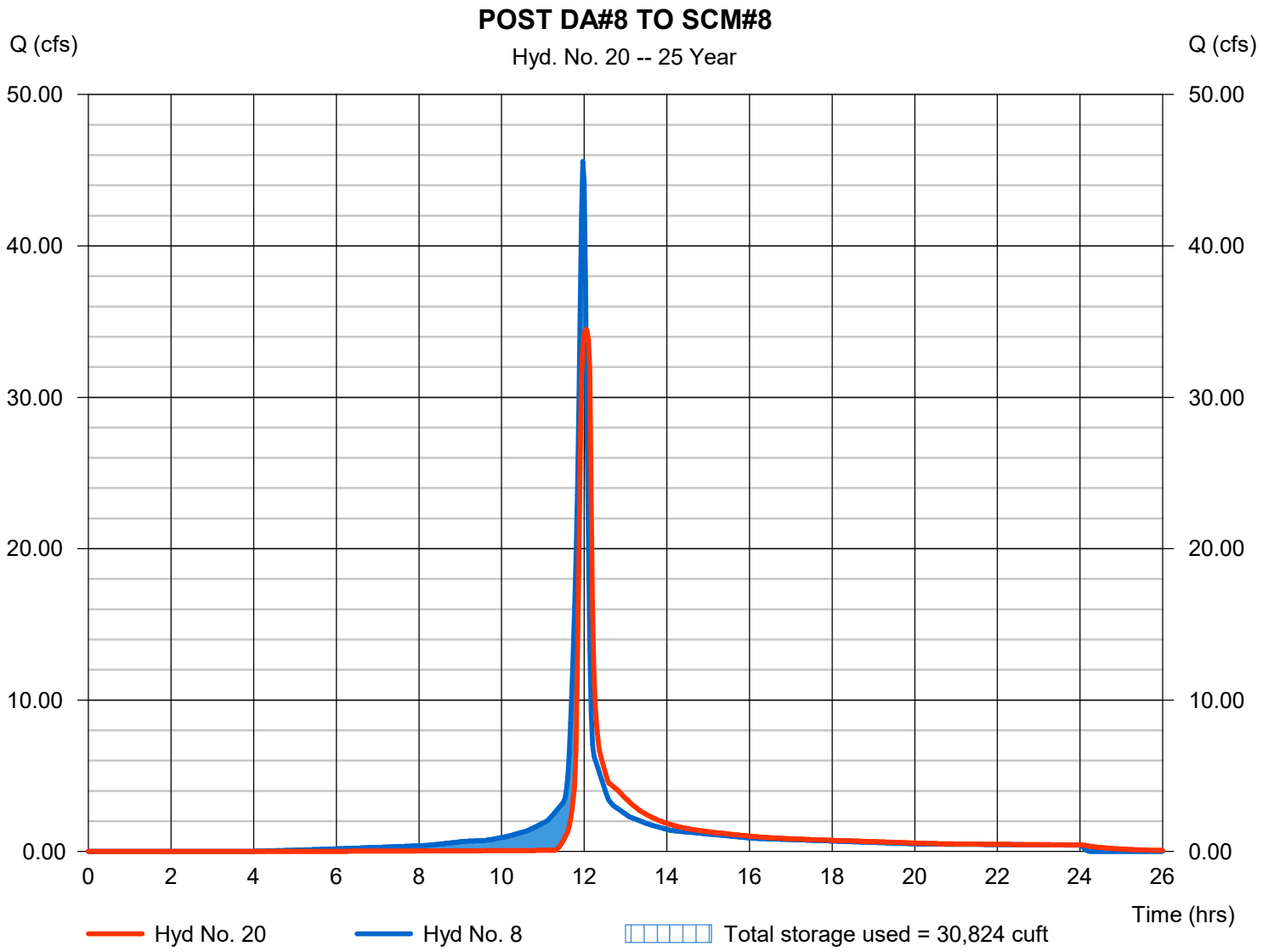
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Thursday, 10 / 31 / 2024

Hyd. No. 20

POST DA#8 TO SCM#8

Hydrograph type	= Reservoir	Peak discharge	= 34.49 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.03 hrs
Time interval	= 2 min	Hyd. volume	= 108,473 cuft
Inflow hyd. No.	= 8 - POST DA#8	Max. Elevation	= 243.43 ft
Reservoir name	= SCM#8	Max. Storage	= 30,824 cuft

Storage Indication method used.

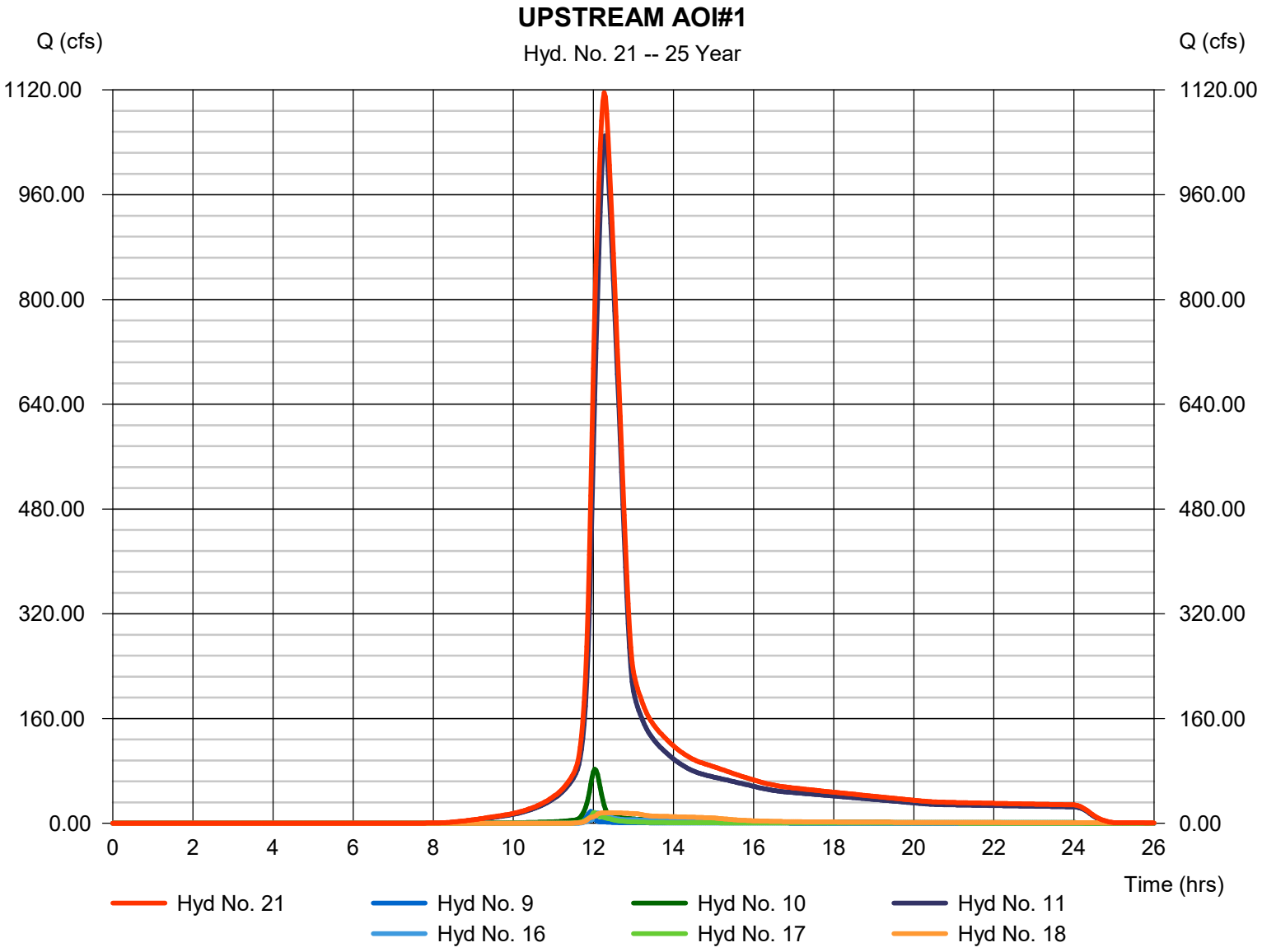


Hydrograph Report

Hyd. No. 21

UPSTREAM AOI#1

Hydrograph type	= Combine	Peak discharge	= 1115.92 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.27 hrs
Time interval	= 2 min	Hyd. volume	= 5,813,602 cuft
Inflow hyds.	= 9, 10, 11, 16, 17, 18	Contrib. drain. area	= 446.810 ac

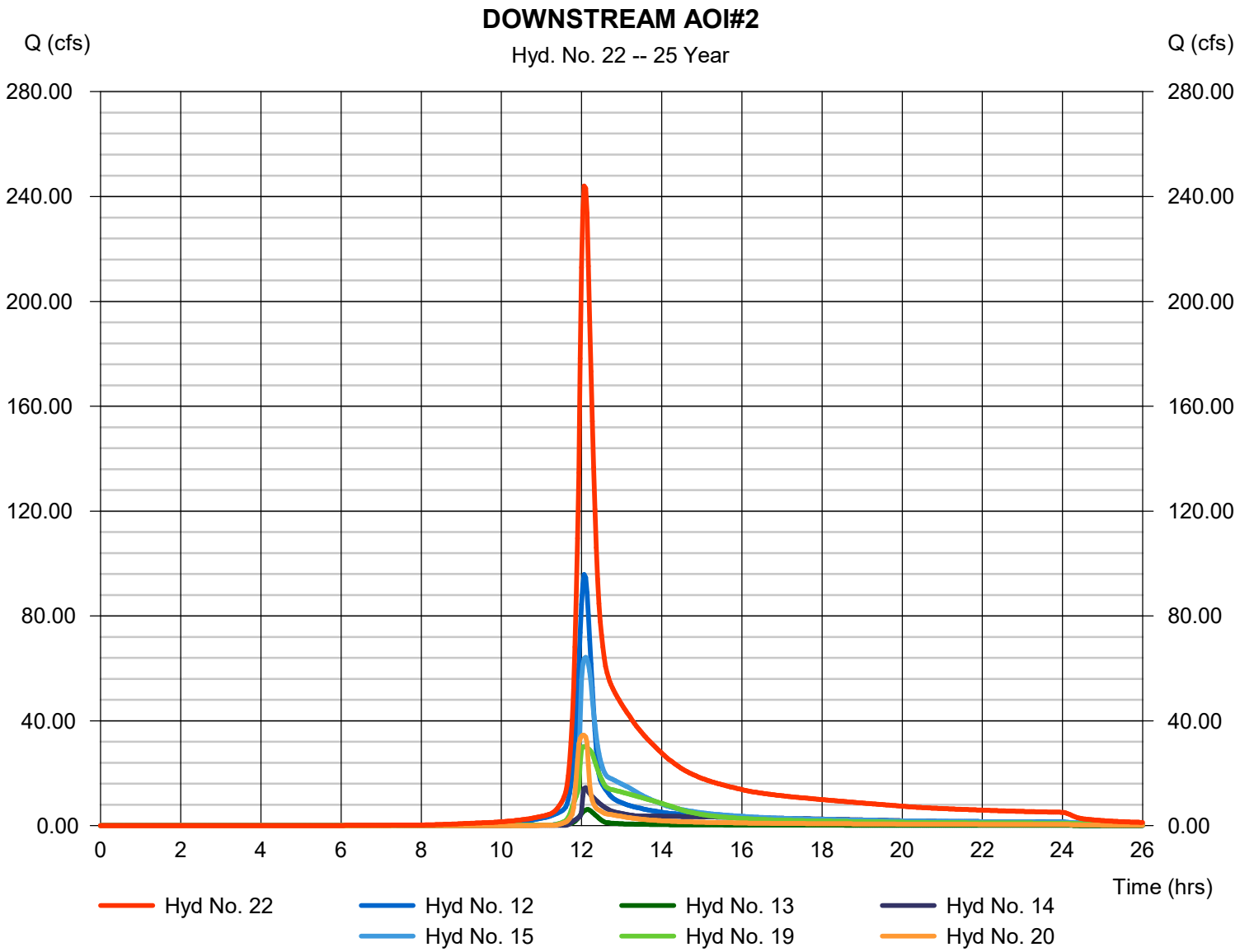


Hydrograph Report

Hyd. No. 22

DOWNSTREAM AOI#2

Hydrograph type	= Combine	Peak discharge	= 243.99 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.07 hrs
Time interval	= 2 min	Hyd. volume	= 1,142,733 cuft
Inflow hyds.	= 12, 13, 14, 15, 19, 20	Contrib. drain. area	= 26.840 ac

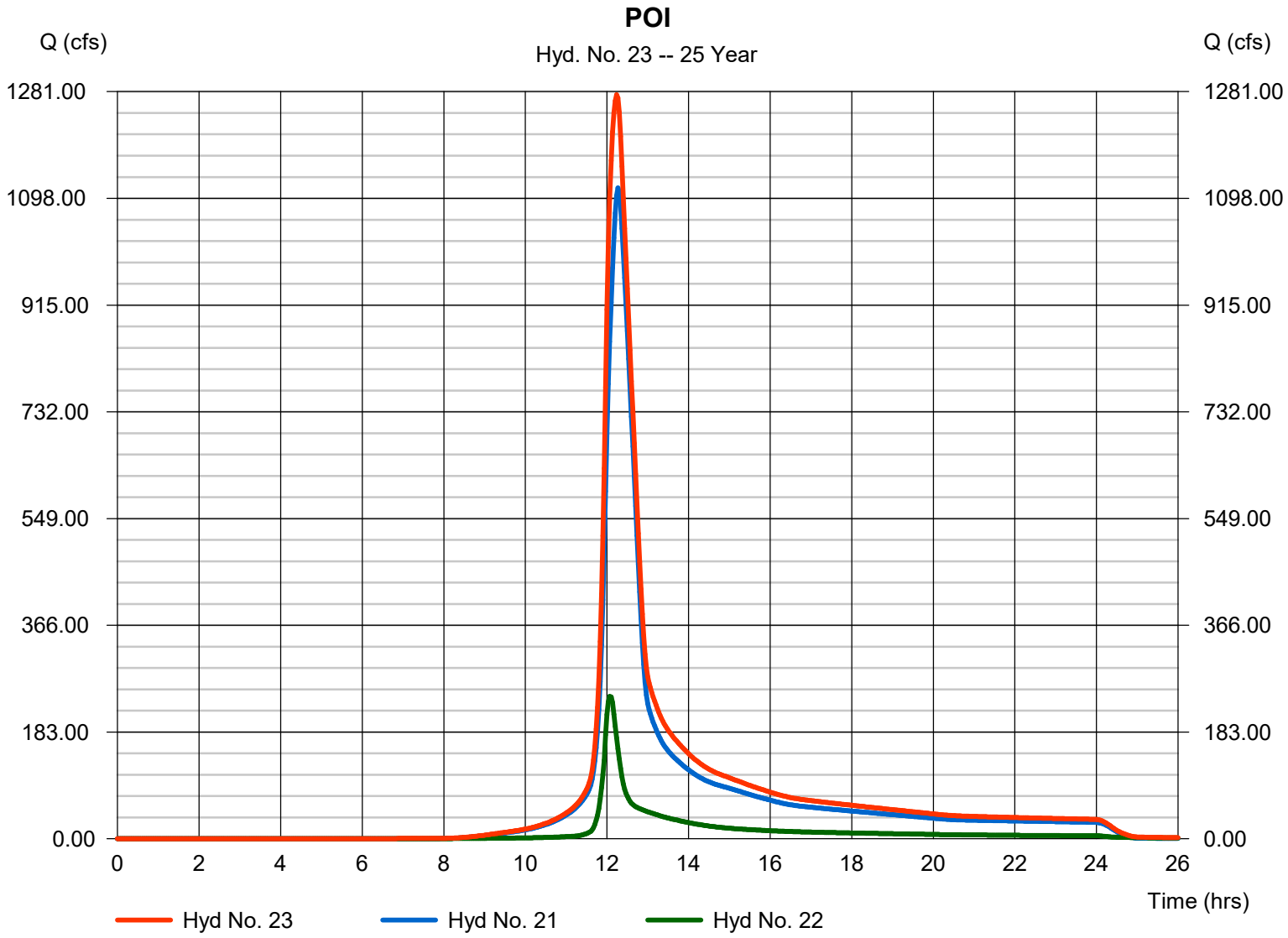


Hydrograph Report

Hyd. No. 23

POI

Hydrograph type	=	Combine	Peak discharge	=	1275.76 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.23 hrs
Time interval	=	2 min	Hyd. volume	=	6,956,328 cuft
Inflow hyds.	=	21, 22	Contrib. drain. area	=	0.000 ac

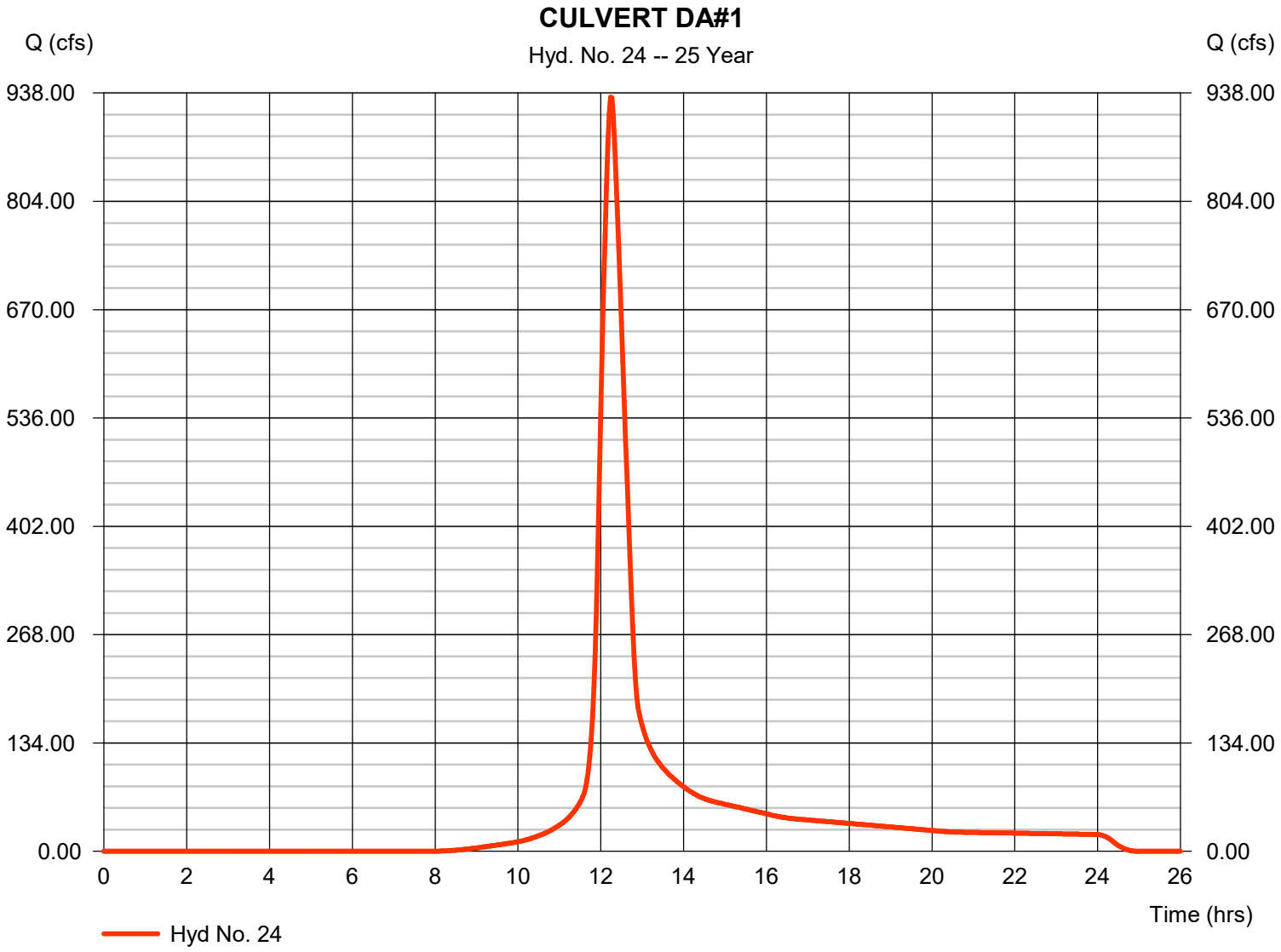


Hydrograph Report

Hyd. No. 24

CULVERT DA#1

Hydrograph type	=	SCS Runoff	Peak discharge	=	932.87 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.23 hrs
Time interval	=	2 min	Hyd. volume	=	4,239,097 cuft
Drainage area	=	356.710 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	34.90 min
Total precip.	=	6.15 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

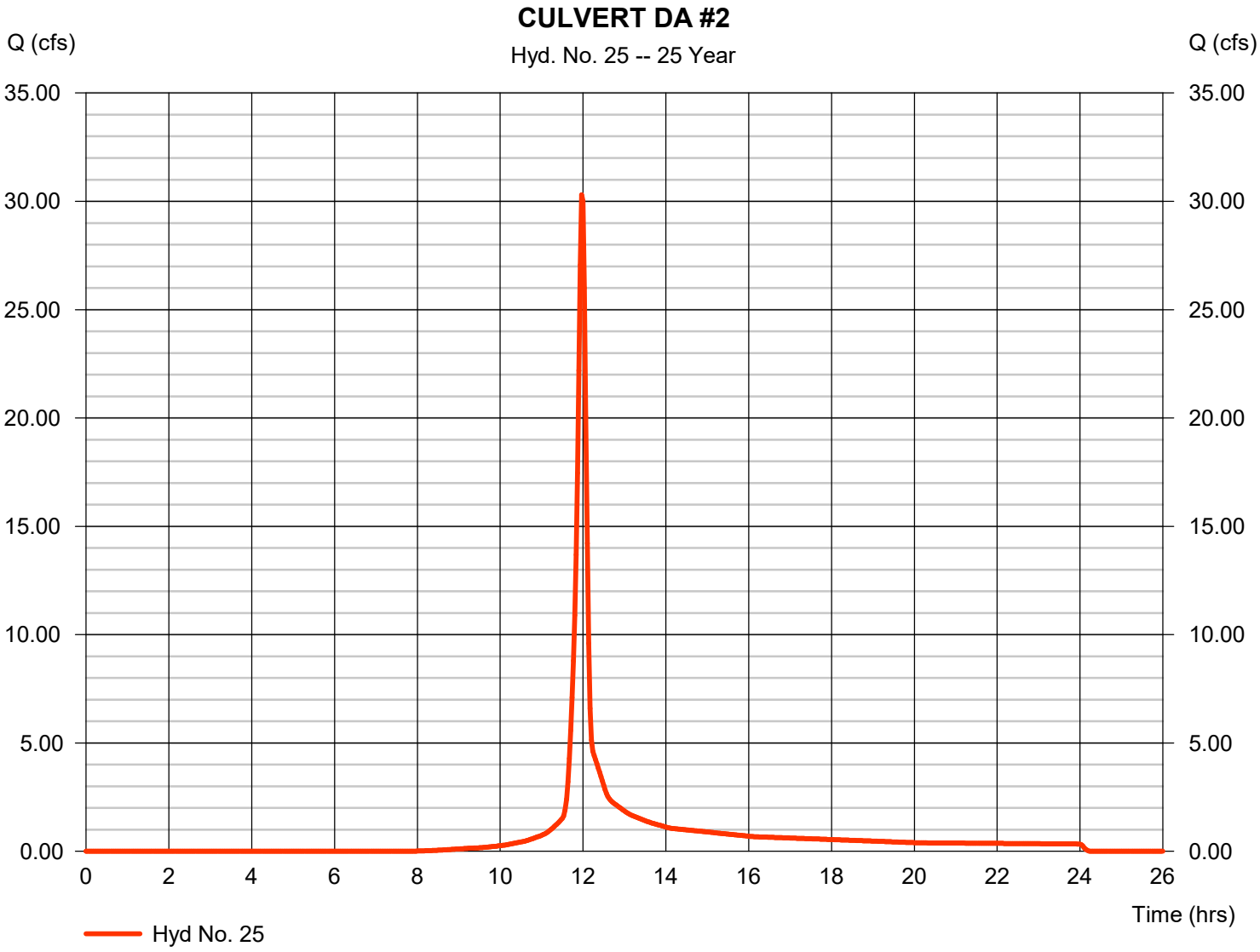


Hydrograph Report

Hyd. No. 25

CULVERT DA #2

Hydrograph type	=	SCS Runoff	Peak discharge	=	30.30 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.97 hrs
Time interval	=	2 min	Hyd. volume	=	69,358 cuft
Drainage area	=	5.770 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	8.80 min
Total precip.	=	6.15 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

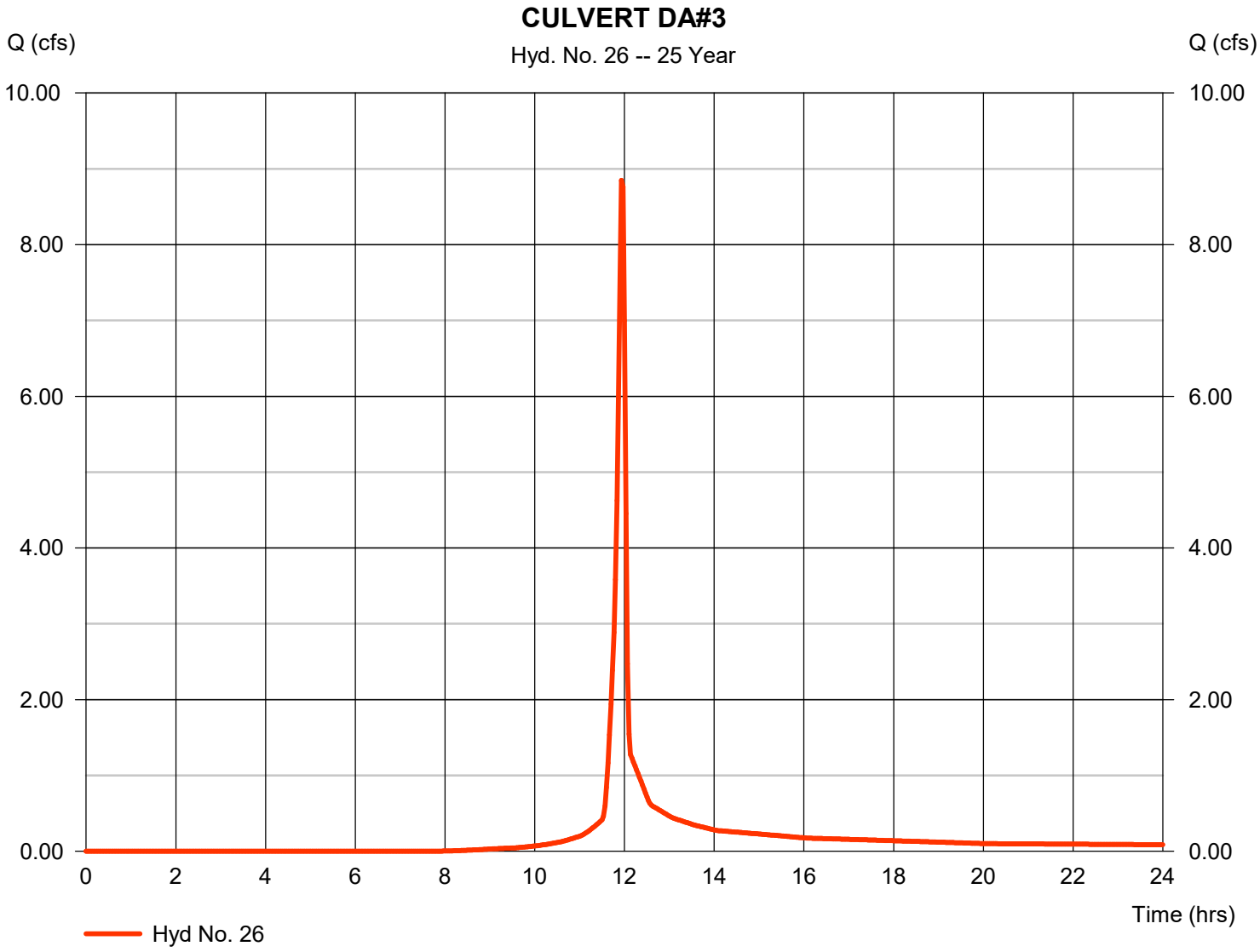


Hydrograph Report

Hyd. No. 26

CULVERT DA#3

Hydrograph type	=	SCS Runoff	Peak discharge	=	8.850 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	17,918 cuft
Drainage area	=	1.590 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	6.15 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

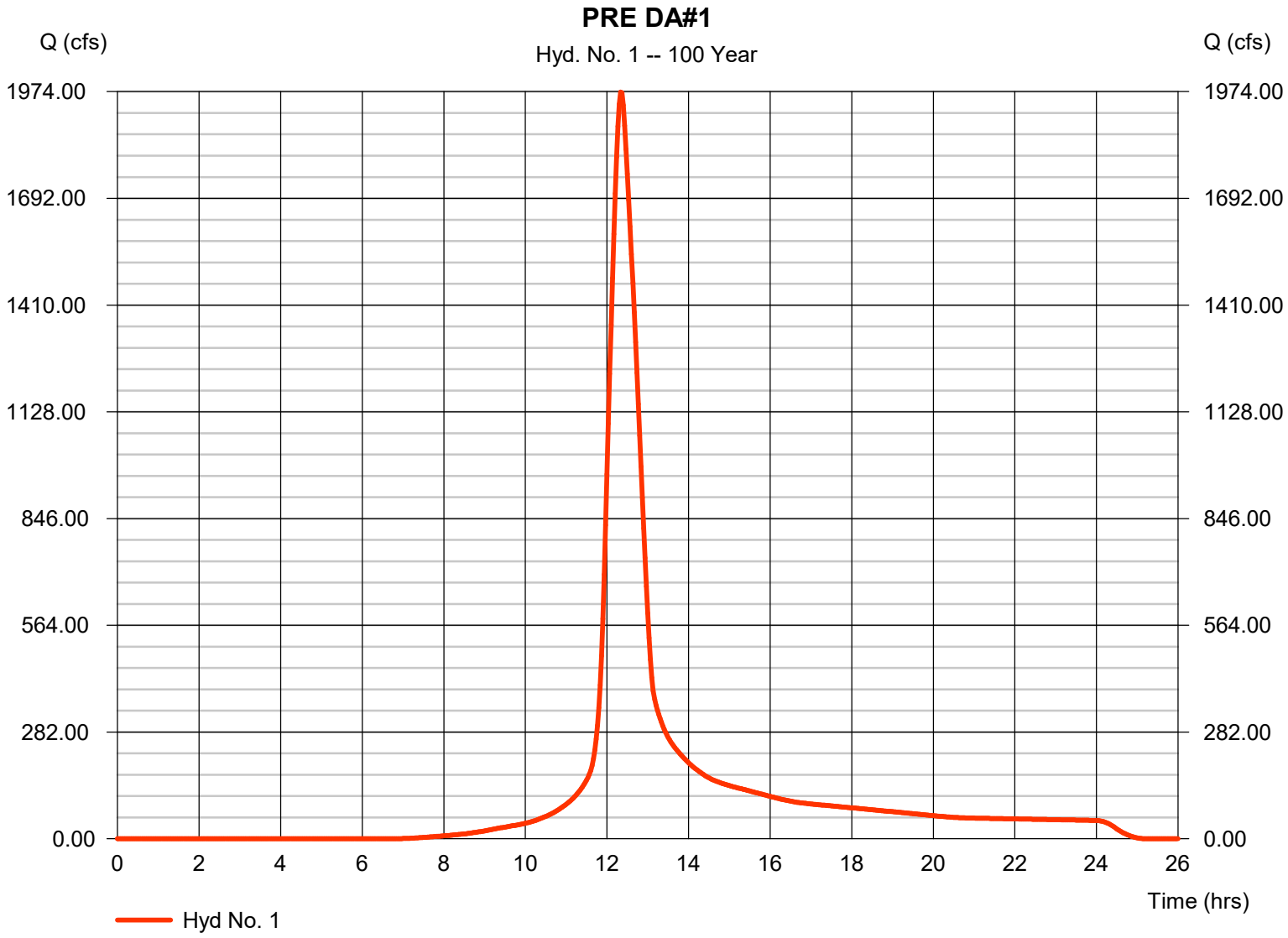
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	1972.73	2	740	10,568,323	------	------	------	PRE DA#1
2	SCS Runoff	96.59	2	716	208,245	------	------	------	POST DA#1
3	SCS Runoff	177.57	2	718	437,766	------	------	------	POST DA #3
4	SCS Runoff	85.37	2	716	189,594	------	------	------	POST DA#4
5	SCS Runoff	37.07	2	716	80,465	------	------	------	POST DA#5
6	SCS Runoff	109.42	2	722	322,114	------	------	------	POST DA#6
7	SCS Runoff	144.11	2	716	320,039	------	------	------	POST DA#7
8	SCS Runoff	59.82	2	718	146,433	------	------	------	POST DA#8
9	SCS Runoff	23.49	2	716	52,178	------	------	------	BYPASS #1
10	SCS Runoff	117.82	2	722	331,326	------	------	------	EXISTING DA 1
11	SCS Runoff	1510.69	2	736	7,319,775	------	------	------	EXISTING DA 2
12	SCS Runoff	137.16	2	724	429,430	------	------	------	EXISTING DA 3
13	SCS Runoff	8.874	2	728	32,569	------	------	------	EXISTING DA 4
14	Reservoir	36.12	2	722	204,244	2	266.71	101,710	POST DA#1 TO SCM#1
15	Reservoir	146.94	2	722	430,999	3	245.94	159,982	POST DA#3 TO SCM#3
16	Reservoir	52.19	2	720	185,937	4	244.99	88,613	POST DA#4 TO SCM#4
17	Reservoir	24.41	2	720	80,066	5	252.65	26,328	POST DA#5 TO SCM#5
18	Reservoir	57.31	2	732	320,023	6	243.03	143,527	POST DA#6 TO SCM#6
19	Reservoir	63.71	2	722	317,207	7	245.03	145,791	POST DA#7 TO SCM#7
20	Reservoir	50.78	2	722	145,282	8	243.83	35,271	POST DA#8 TO SCM#8
21	Combine	1626.22	2	736	8,289,309	9, 10, 11, 16, 17, 18,	------	------	UPSTREAM AOI#1
22	Combine	437.61	2	722	1,559,729	12, 13, 14, 15, 19, 20,	------	------	DOWNSTREAM AOI#2
23	Combine	1850.31	2	734	9,849,030	21, 22	------	------	POI
24	SCS Runoff	1341.90	2	734	6,077,089	------	------	------	CULVERT DA#1
25	SCS Runoff	43.15	2	718	99,431	------	------	------	CULVERT DA #2
26	SCS Runoff	12.57	2	716	25,687	------	------	------	CULVERT DA#3

Hydrograph Report

Hyd. No. 1

PRE DA#1

Hydrograph type	=	SCS Runoff	Peak discharge	=	1972.73 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.33 hrs
Time interval	=	2 min	Hyd. volume	=	10,568,323 cuft
Drainage area	=	618.810 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	47.00 min
Total precip.	=	7.80 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

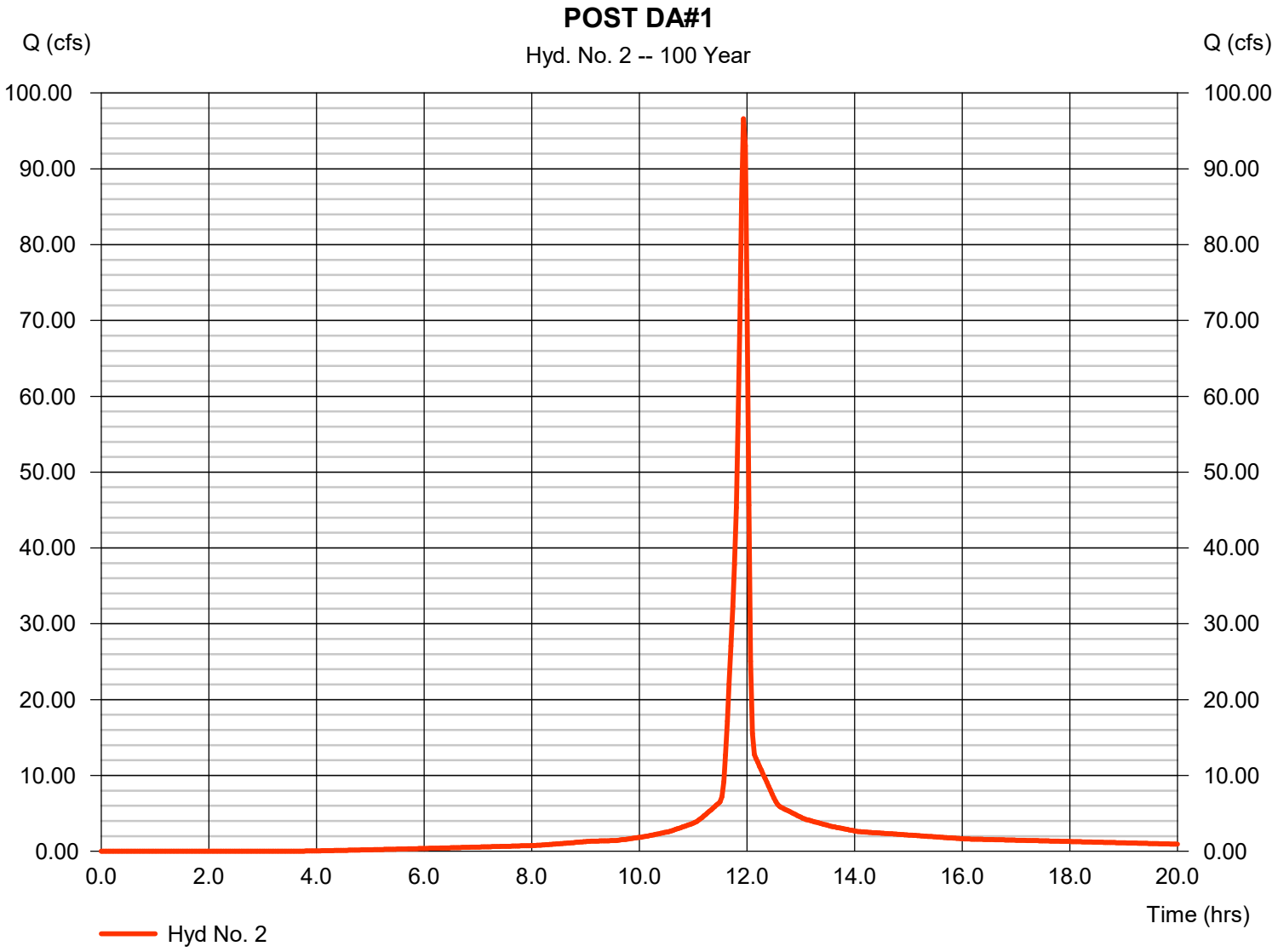


Hydrograph Report

Hyd. No. 2

POST DA#1

Hydrograph type	=	SCS Runoff	Peak discharge	=	96.59 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	208,245 cuft
Drainage area	=	9.970 ac	Curve number	=	86
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.50 min
Total precip.	=	7.80 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

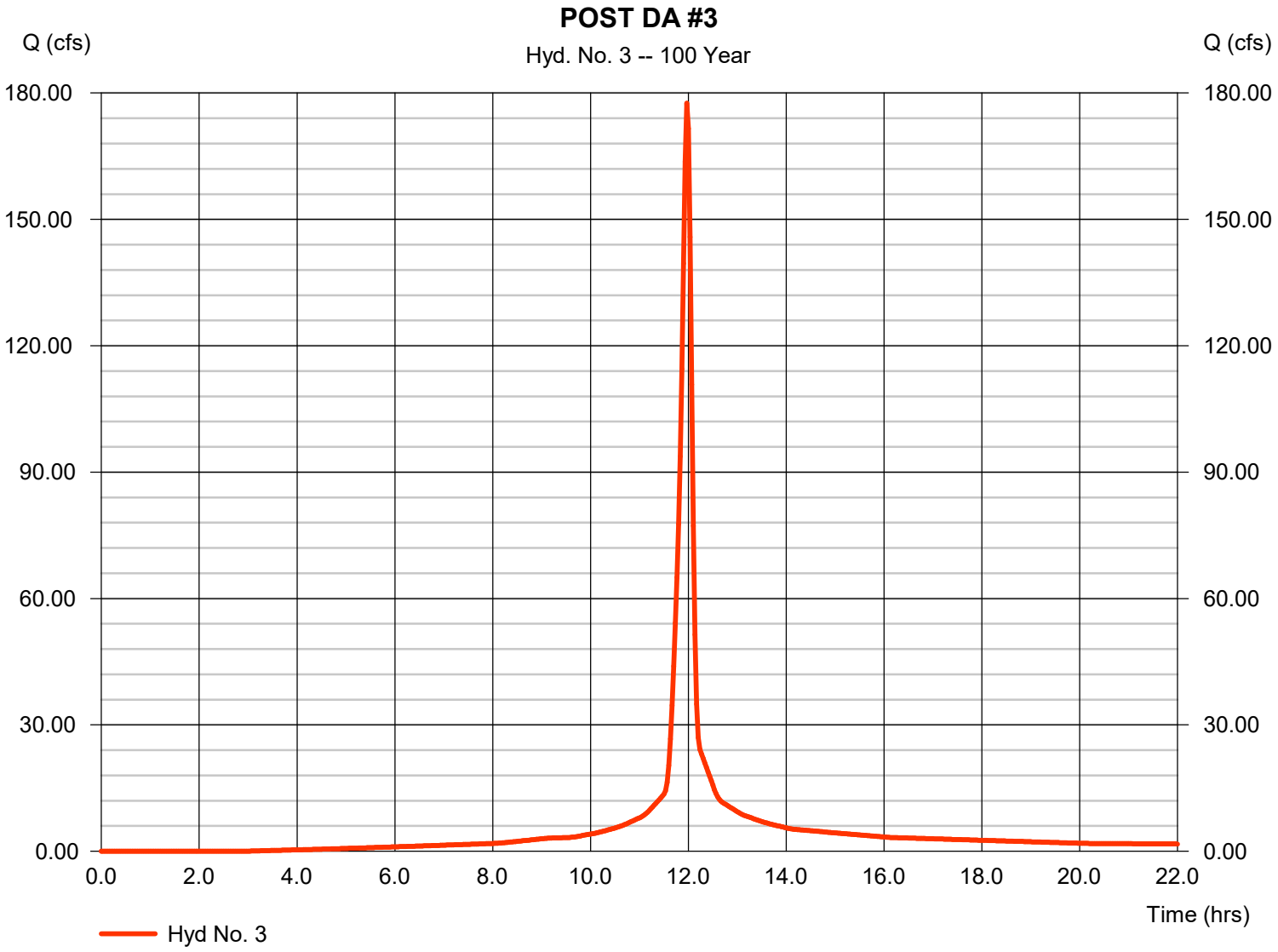


Hydrograph Report

Hyd. No. 3

POST DA #3

Hydrograph type	=	SCS Runoff	Peak discharge	=	177.57 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.97 hrs
Time interval	=	2 min	Hyd. volume	=	437,766 cuft
Drainage area	=	18.580 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	7.40 min
Total precip.	=	7.80 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

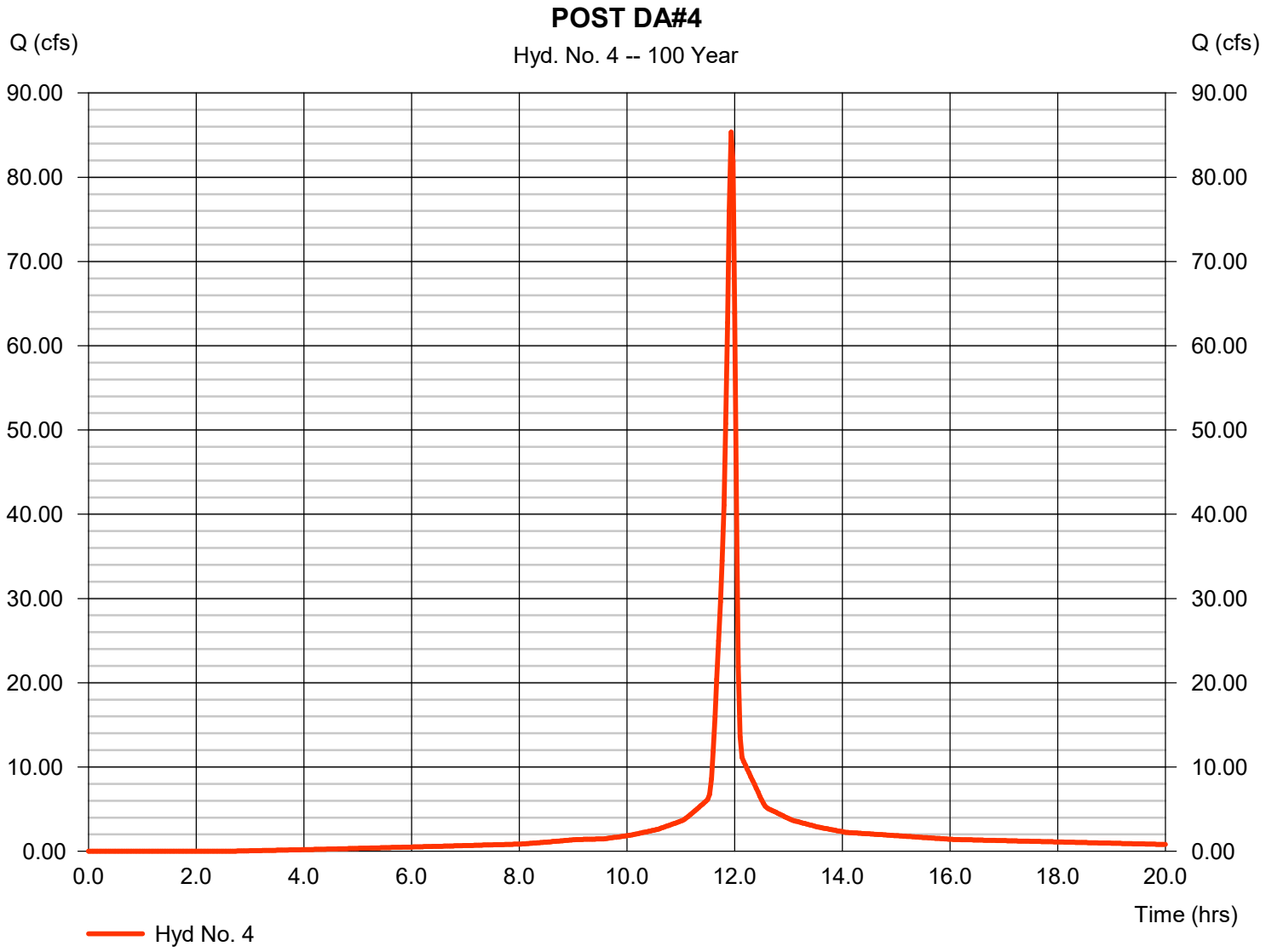


Hydrograph Report

Hyd. No. 4

POST DA#4

Hydrograph type	=	SCS Runoff	Peak discharge	=	85.37 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	189,594 cuft
Drainage area	=	8.430 ac	Curve number	=	90
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.30 min
Total precip.	=	7.80 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

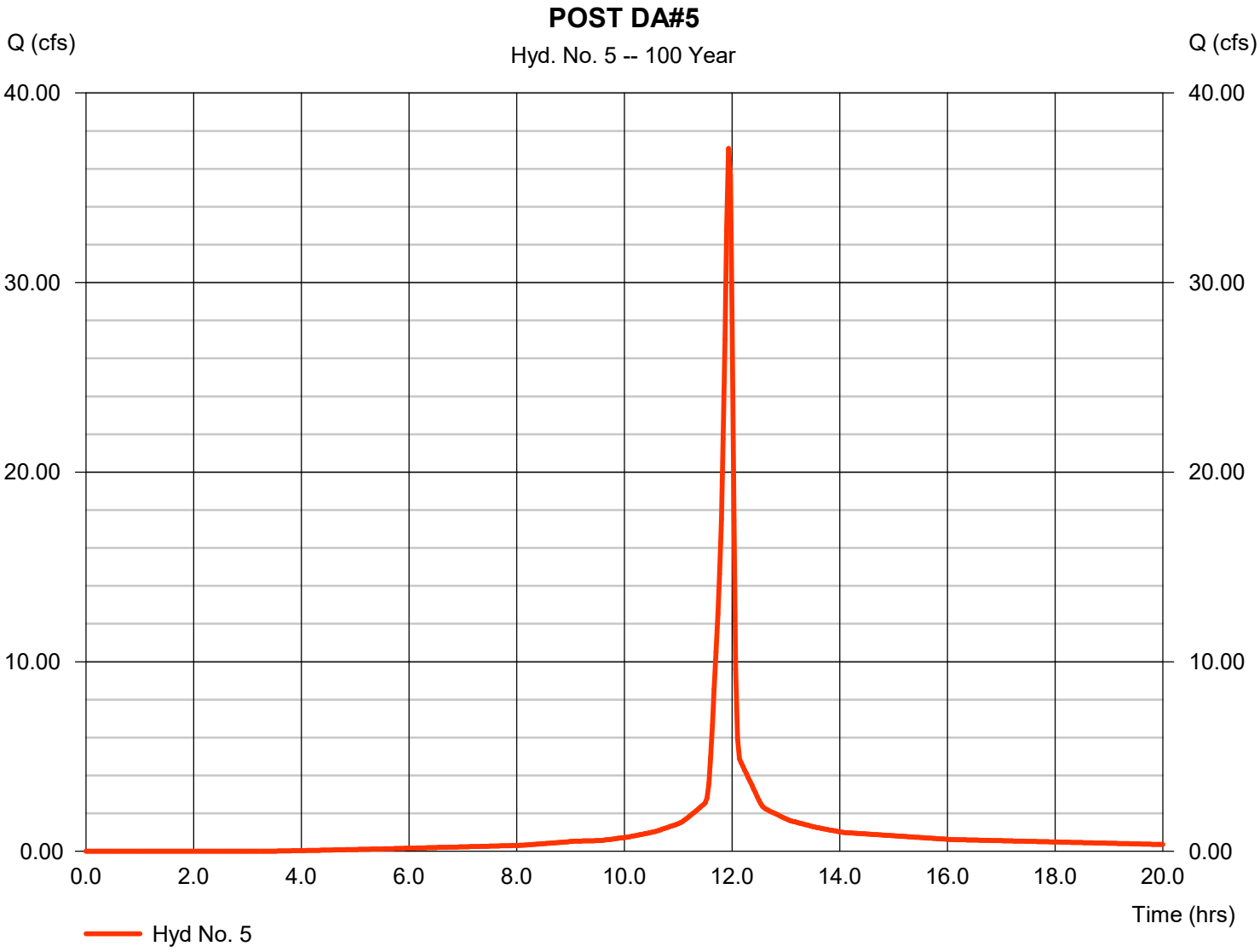


Hydrograph Report

Hyd. No. 5

POST DA#5

Hydrograph type	=	SCS Runoff	Peak discharge	=	37.07 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	80,465 cuft
Drainage area	=	3.780 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	7.80 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

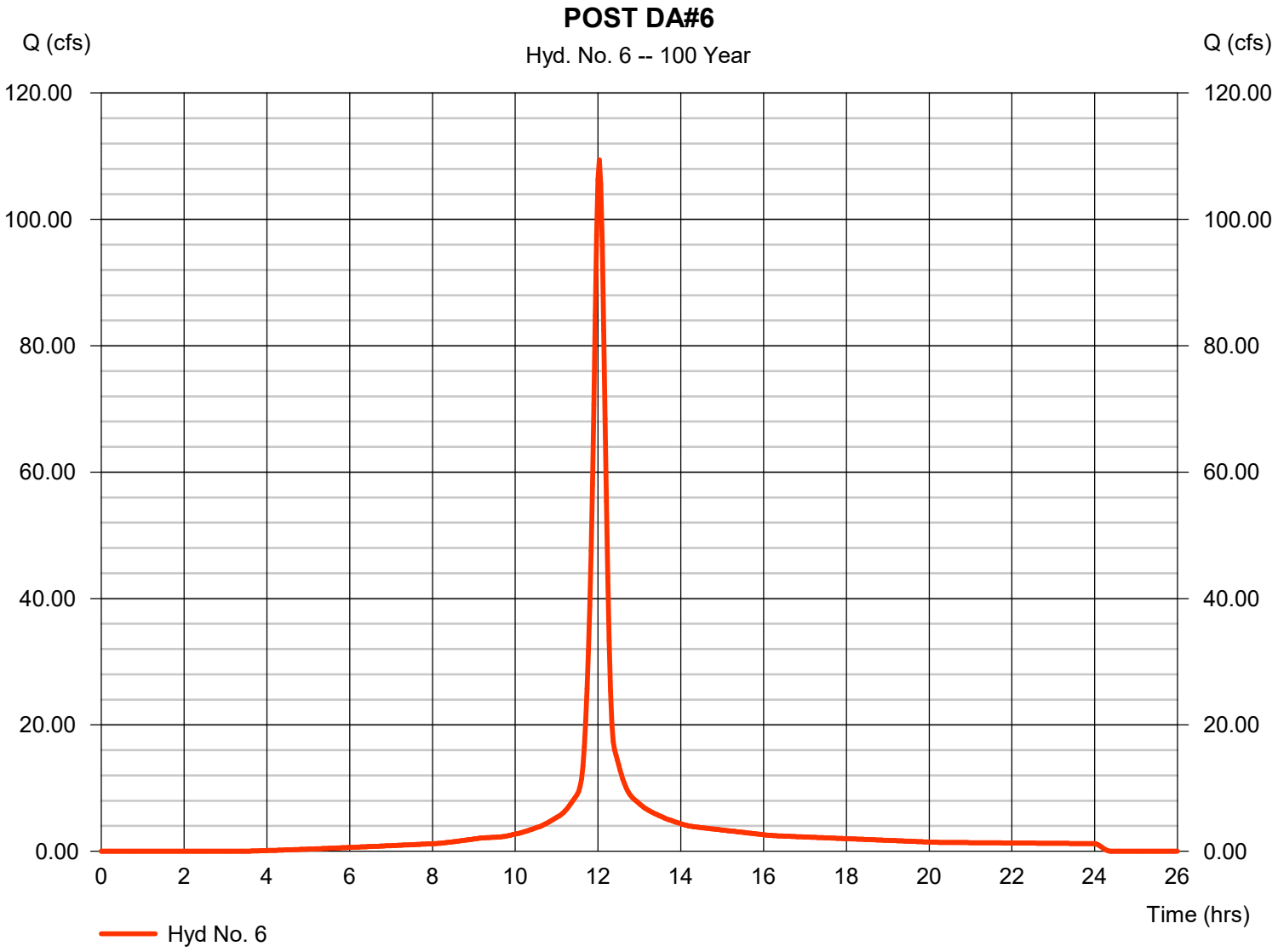


Hydrograph Report

Hyd. No. 6

POST DA#6

Hydrograph type	=	SCS Runoff	Peak discharge	=	109.42 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.03 hrs
Time interval	=	2 min	Hyd. volume	=	322,114 cuft
Drainage area	=	14.550 ac	Curve number	=	87
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	14.80 min
Total precip.	=	7.80 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

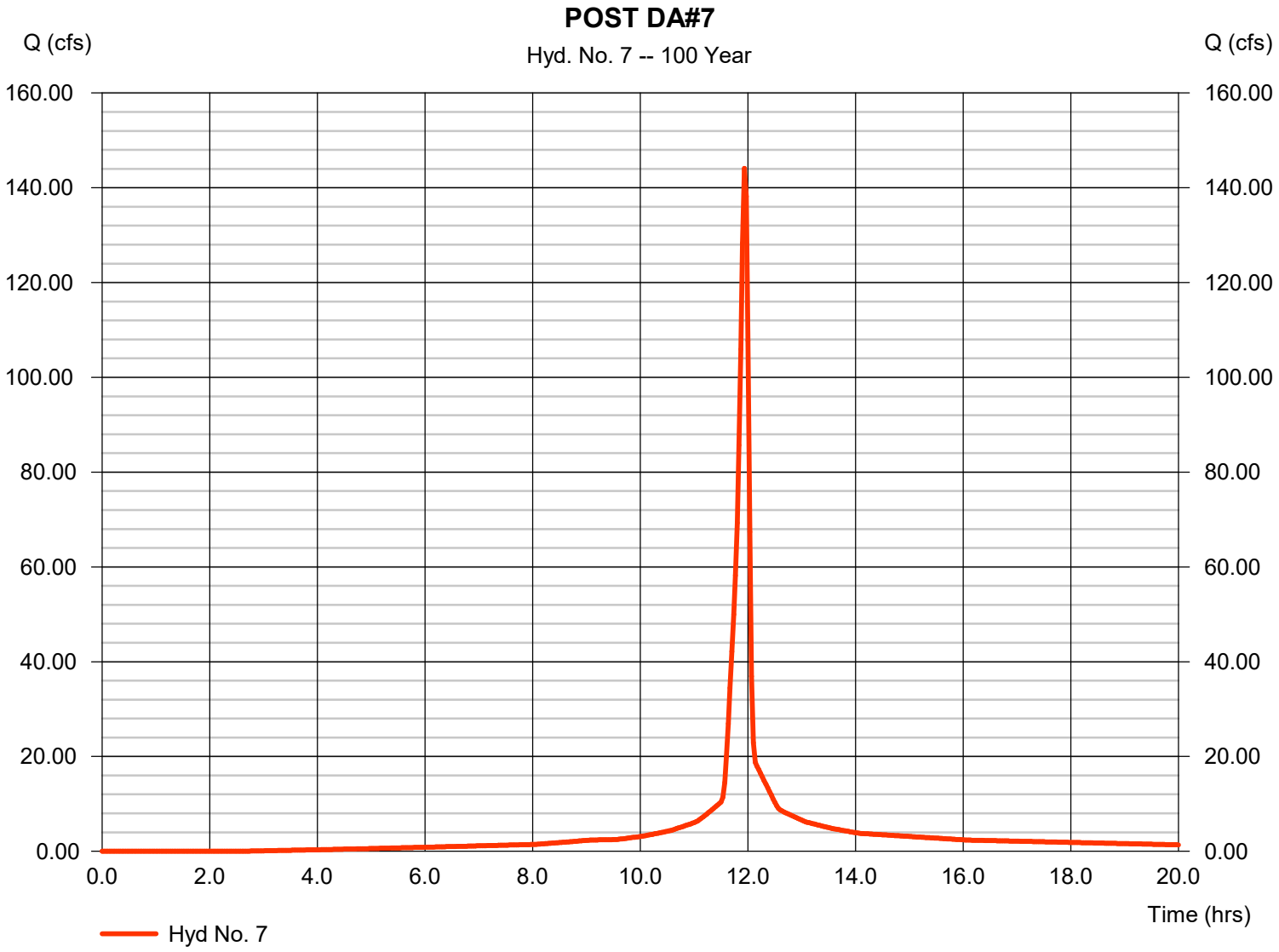


Hydrograph Report

Hyd. No. 7

POST DA#7

Hydrograph type	=	SCS Runoff	Peak discharge	=	144.11 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	320,039 cuft
Drainage area	=	14.230 ac	Curve number	=	90
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.20 min
Total precip.	=	7.80 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

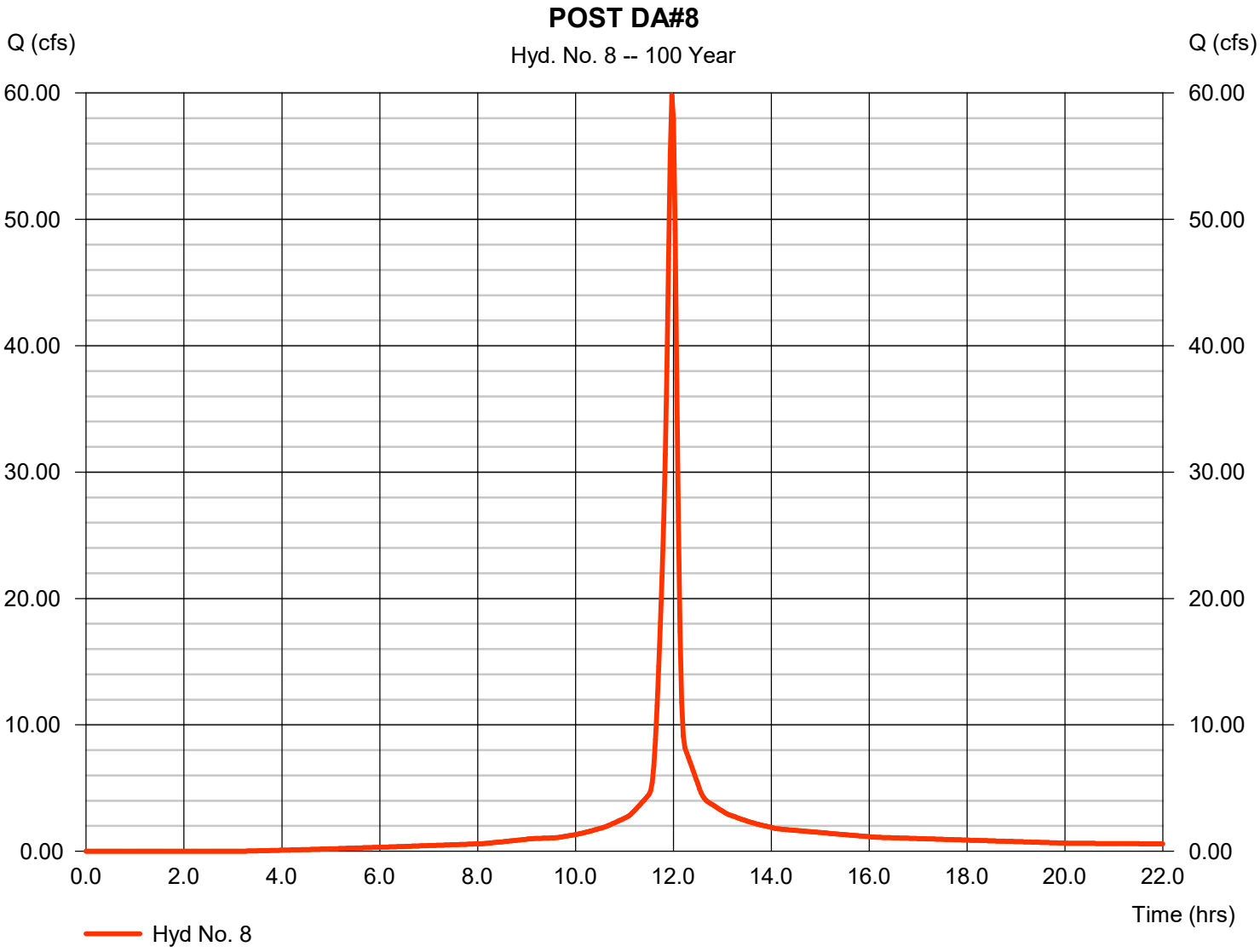


Hydrograph Report

Hyd. No. 8

POST DA#8

Hydrograph type	=	SCS Runoff	Peak discharge	=	59.82 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.97 hrs
Time interval	=	2 min	Hyd. volume	=	146,433 cuft
Drainage area	=	6.330 ac	Curve number	=	88
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	6.80 min
Total precip.	=	7.80 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

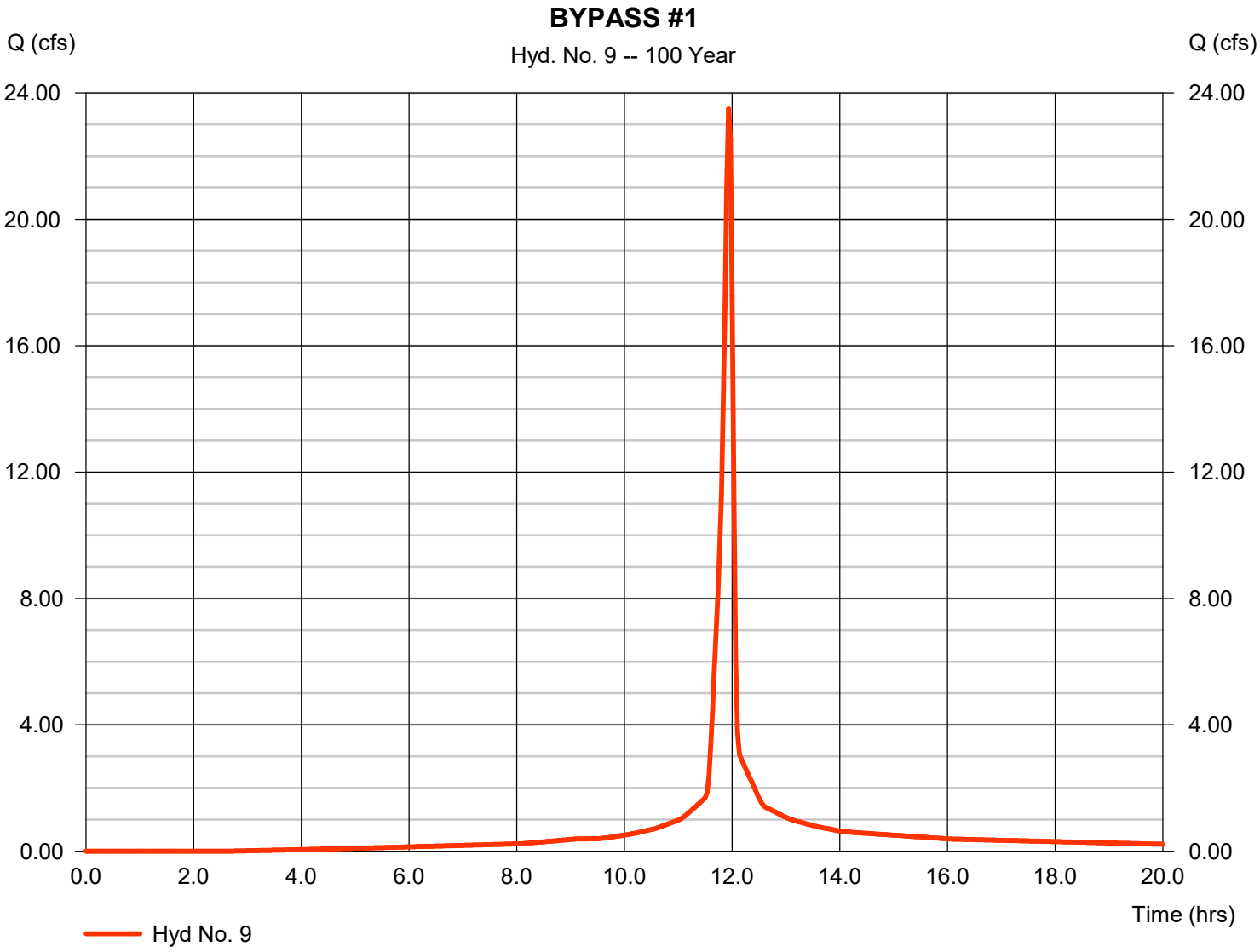


Hydrograph Report

Hyd. No. 9

BYPASS #1

Hydrograph type	=	SCS Runoff	Peak discharge	=	23.49 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	52,178 cuft
Drainage area	=	2.320 ac	Curve number	=	90
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	7.80 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

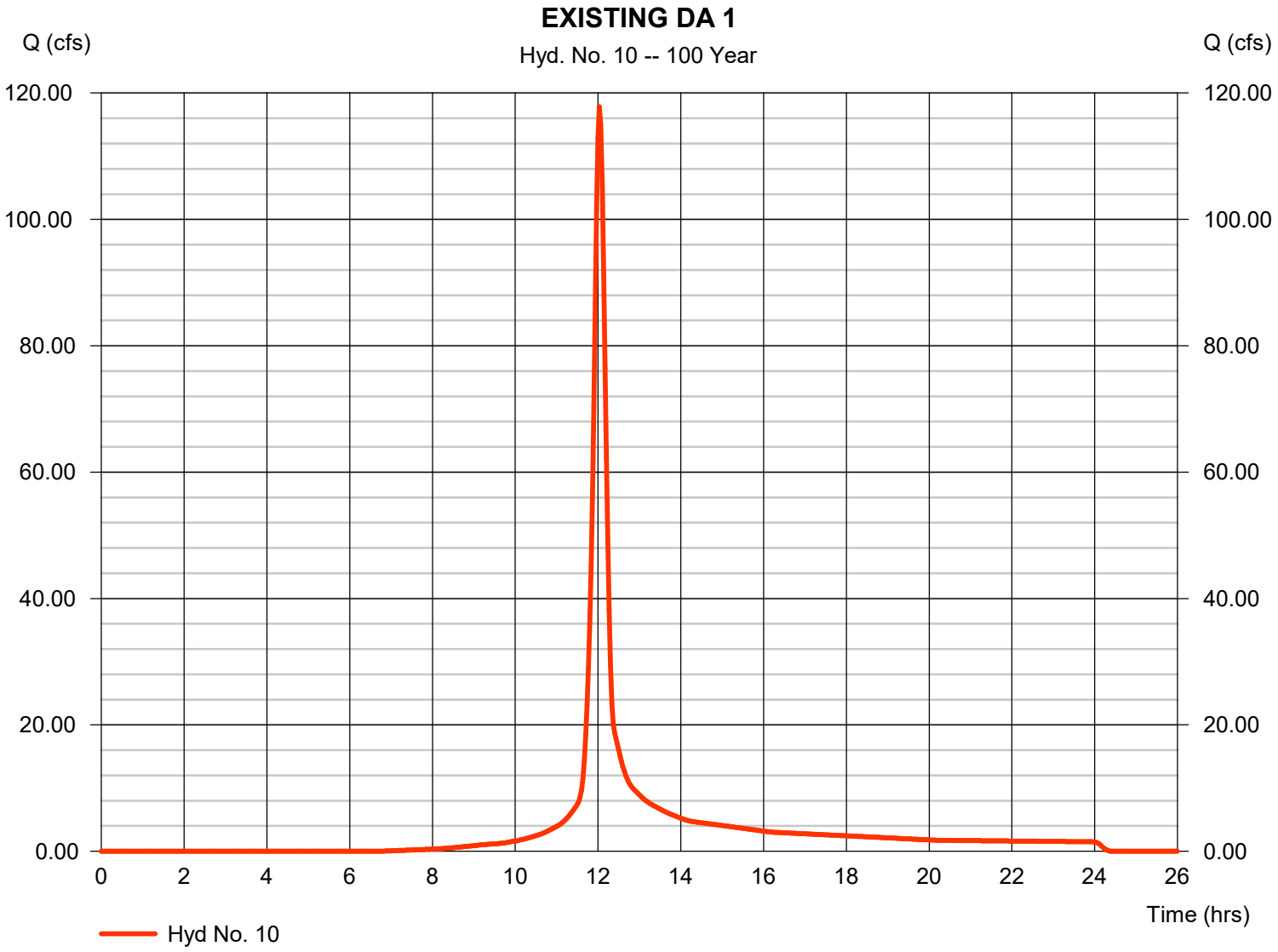


Hydrograph Report

Hyd. No. 10

EXISTING DA 1

Hydrograph type	=	SCS Runoff	Peak discharge	=	117.82 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.03 hrs
Time interval	=	2 min	Hyd. volume	=	331,326 cuft
Drainage area	=	19.720 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	14.00 min
Total precip.	=	7.80 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

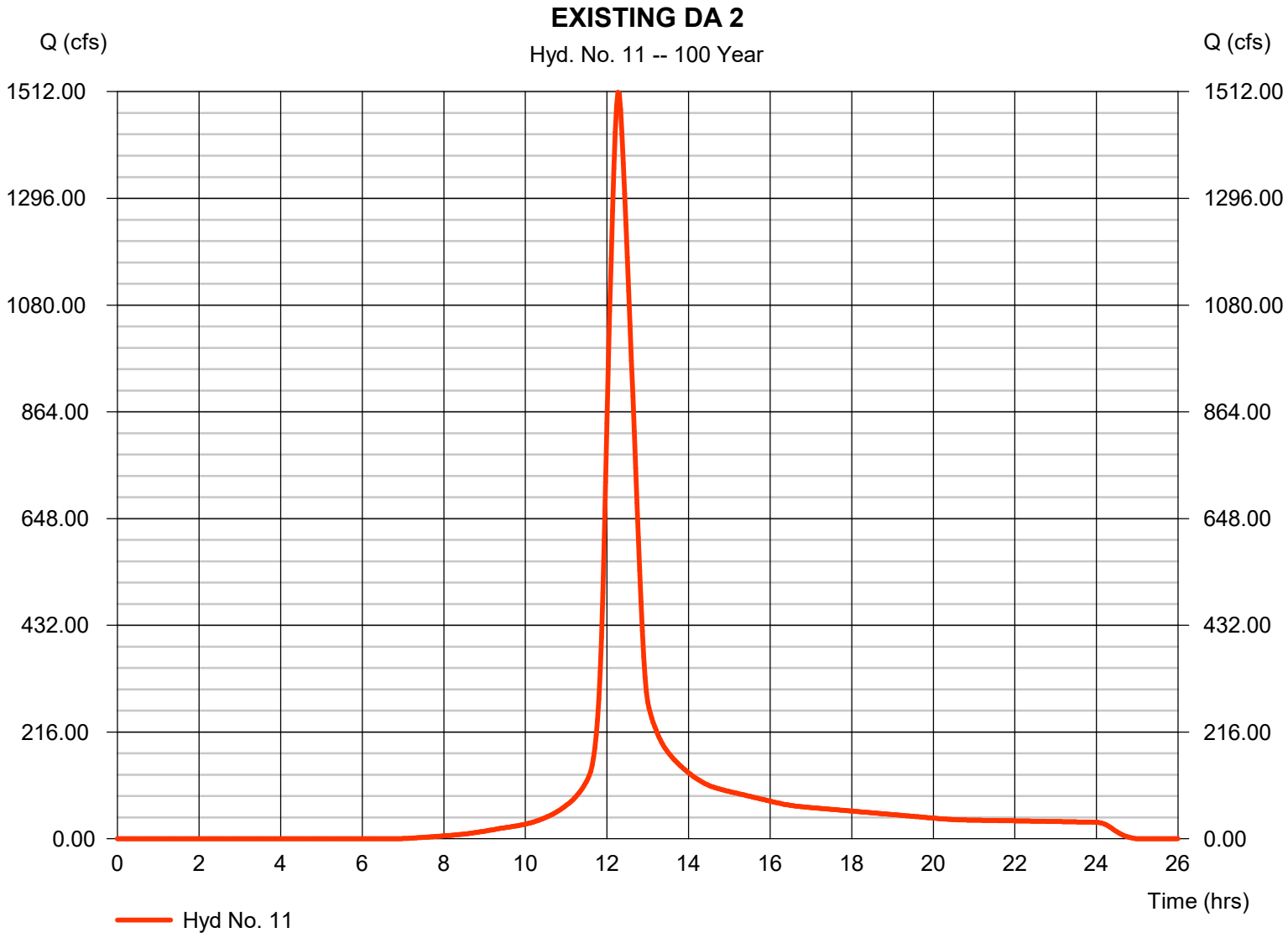


Hydrograph Report

Hyd. No. 11

EXISTING DA 2

Hydrograph type	=	SCS Runoff	Peak discharge	=	1510.69 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.27 hrs
Time interval	=	2 min	Hyd. volume	=	7,319,775 cuft
Drainage area	=	424.770 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	38.10 min
Total precip.	=	7.80 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

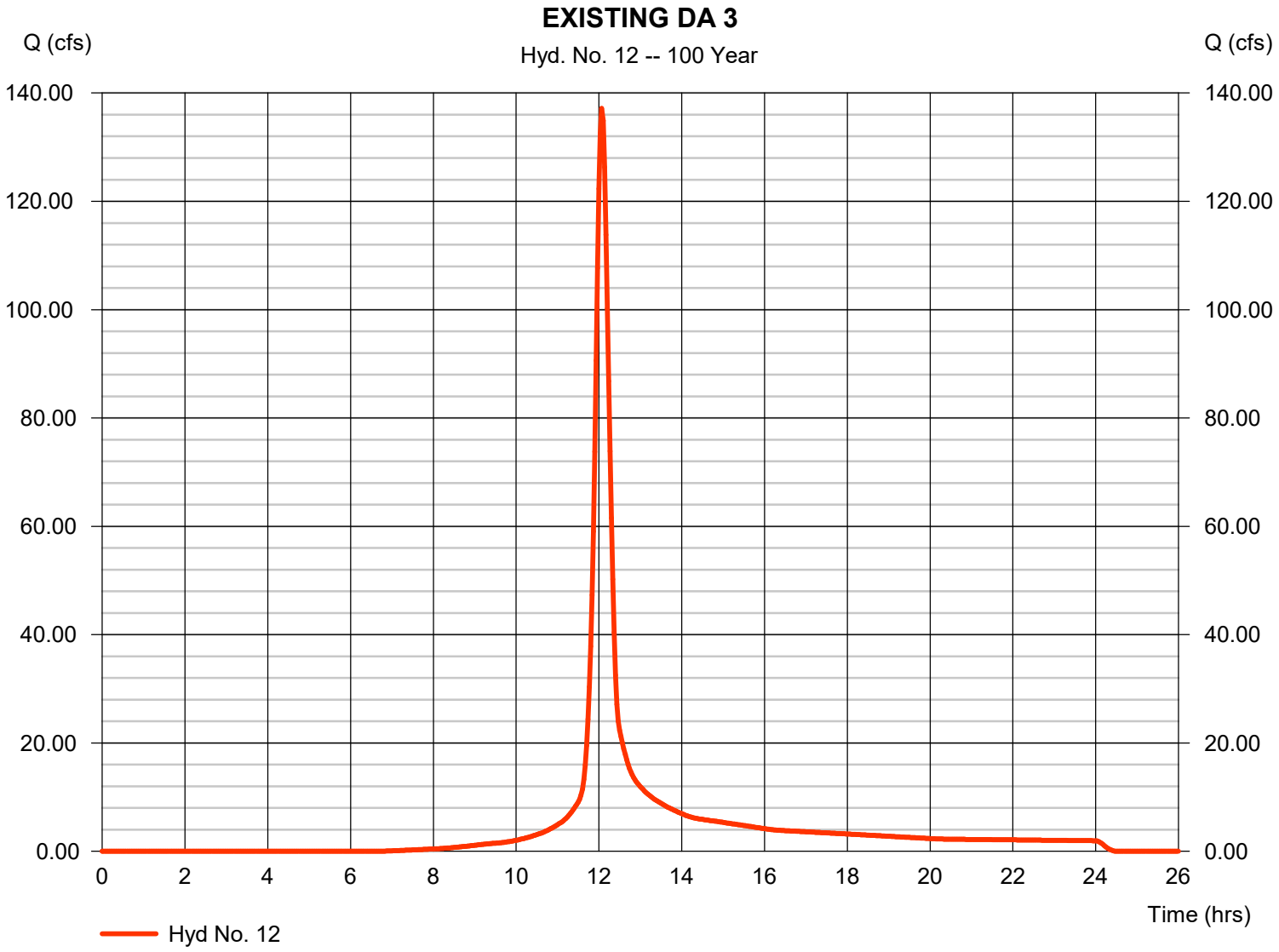


Hydrograph Report

Hyd. No. 12

EXISTING DA 3

Hydrograph type	=	SCS Runoff	Peak discharge	=	137.16 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.07 hrs
Time interval	=	2 min	Hyd. volume	=	429,430 cuft
Drainage area	=	24.920 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	19.60 min
Total precip.	=	7.80 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

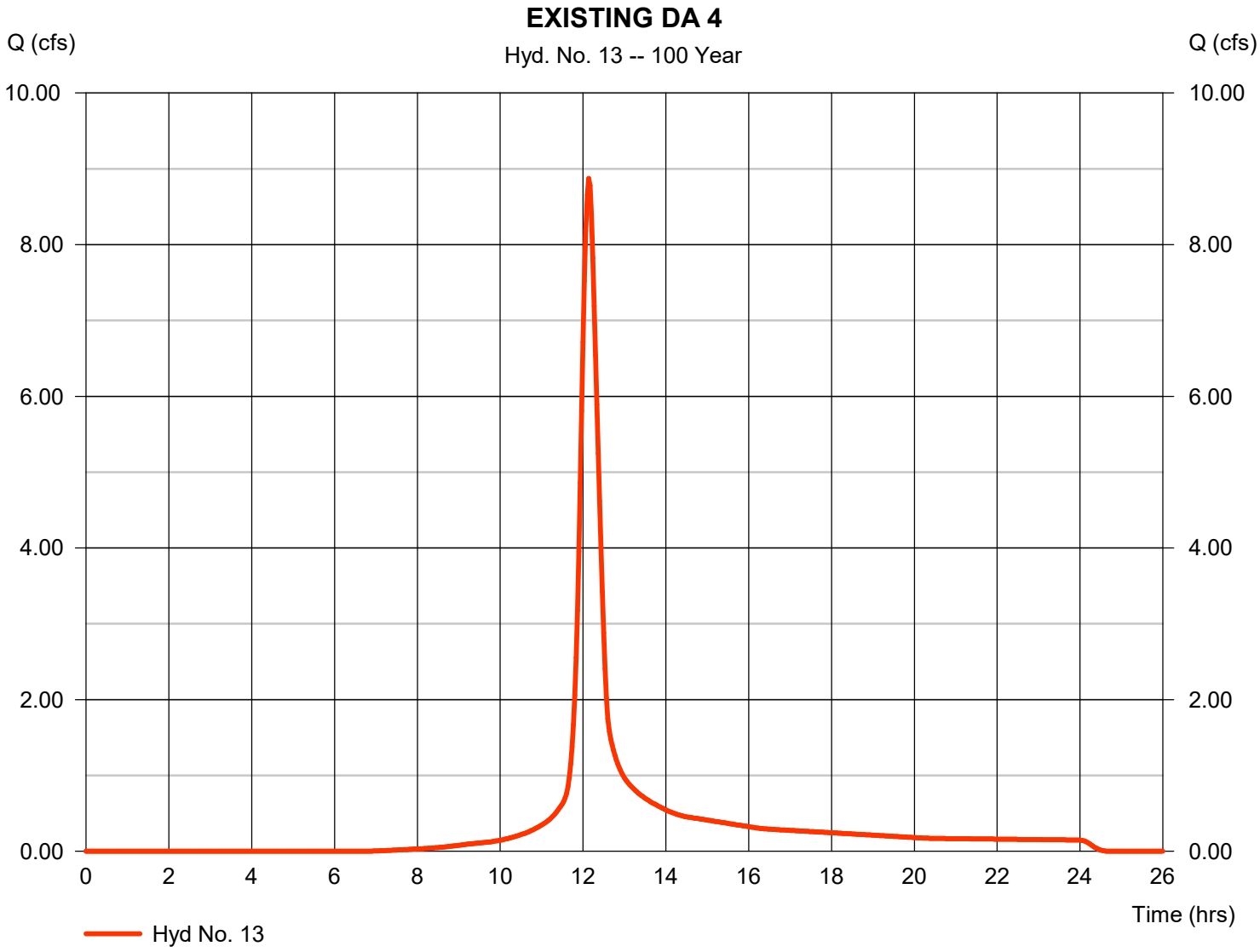


Hydrograph Report

Hyd. No. 13

EXISTING DA 4

Hydrograph type	=	SCS Runoff	Peak discharge	=	8.874 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.13 hrs
Time interval	=	2 min	Hyd. volume	=	32,569 cuft
Drainage area	=	1.920 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	26.20 min
Total precip.	=	7.80 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



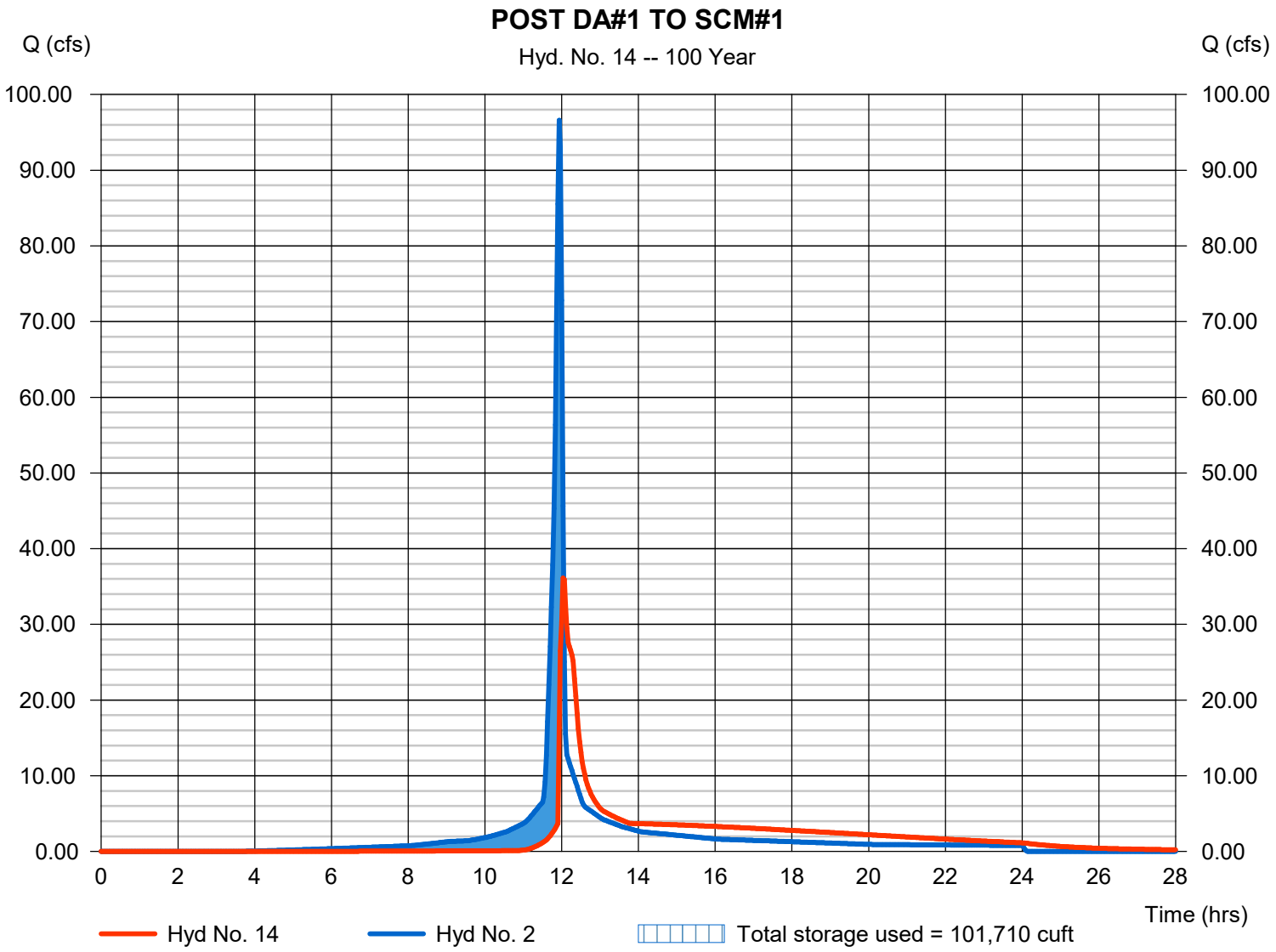
Hydrograph Report

Hyd. No. 14

POST DA#1 TO SCM#1

Hydrograph type	=	Reservoir	Peak discharge	=	36.12 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.03 hrs
Time interval	=	2 min	Hyd. volume	=	204,244 cuft
Inflow hyd. No.	=	2 - POST DA#1	Max. Elevation	=	266.71 ft
Reservoir name	=	SCM#1	Max. Storage	=	101,710 cuft

Storage Indication method used.



Hydrograph Report

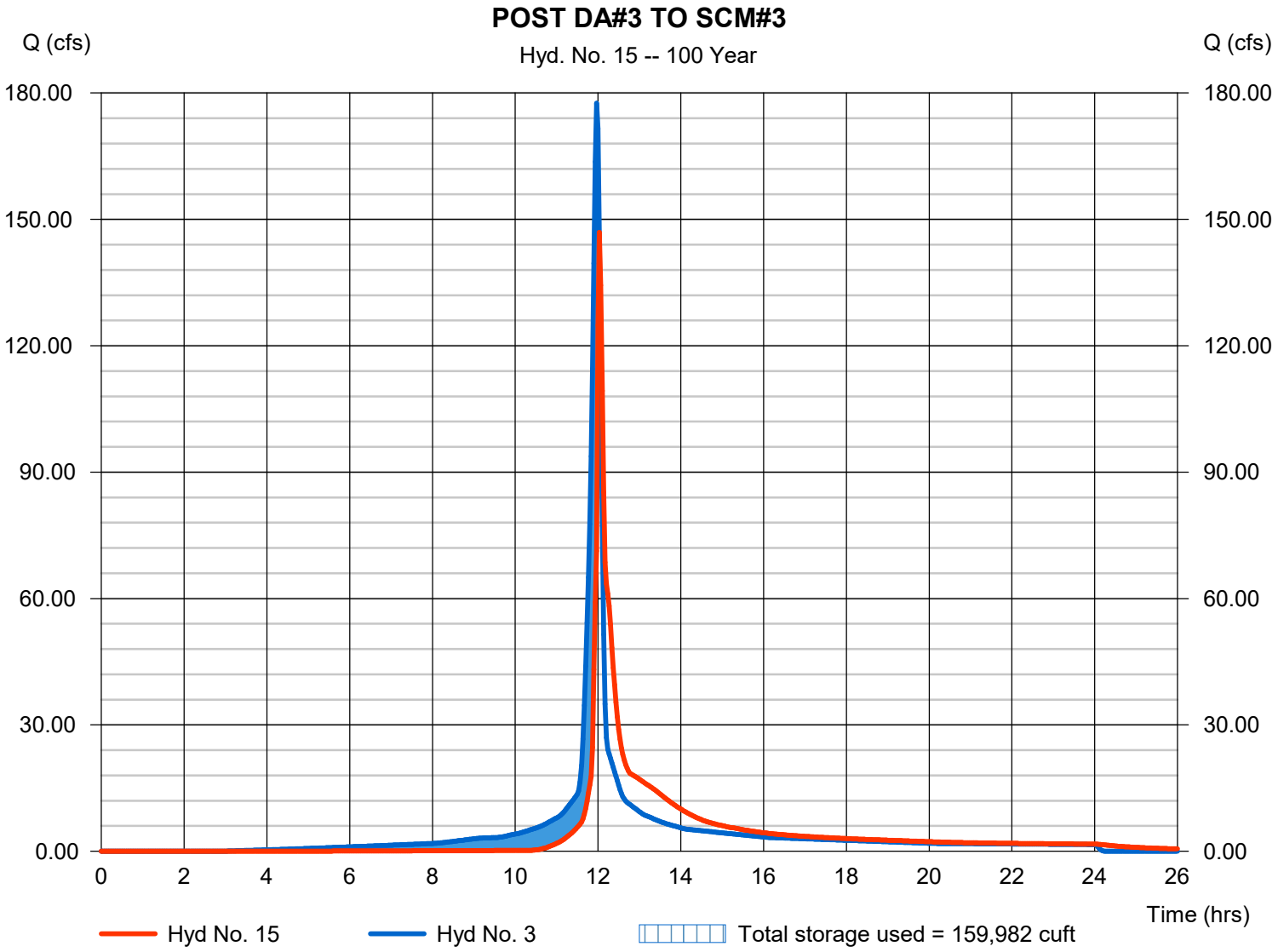
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Thursday, 10 / 31 / 2024

Hyd. No. 15

POST DA#3 TO SCM#3

Hydrograph type	= Reservoir	Peak discharge	= 146.94 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.03 hrs
Time interval	= 2 min	Hyd. volume	= 430,999 cuft
Inflow hyd. No.	= 3 - POST DA #3	Max. Elevation	= 245.94 ft
Reservoir name	= SCM#3	Max. Storage	= 159,982 cuft

Storage Indication method used.



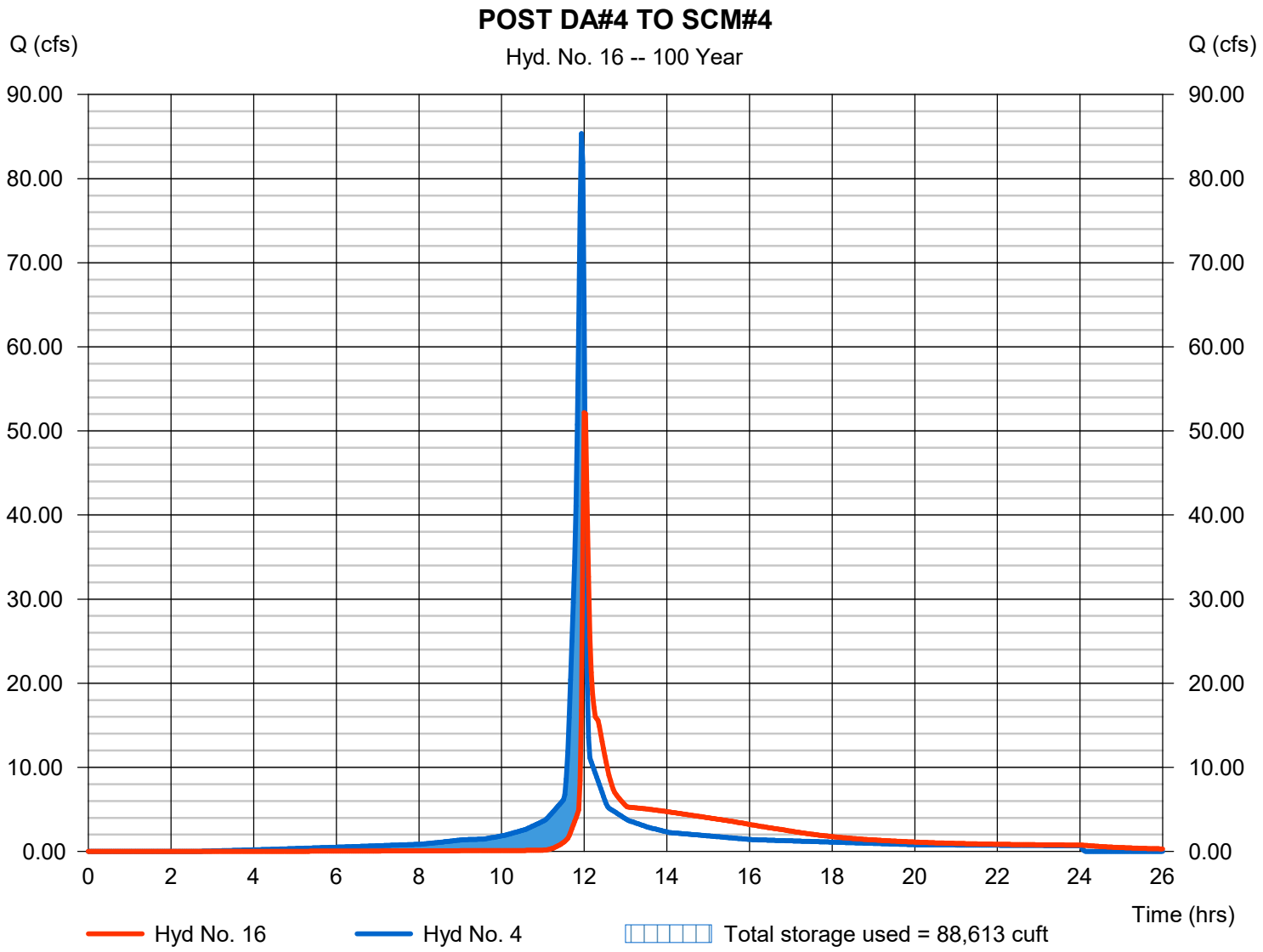
Hydrograph Report

Hyd. No. 16

POST DA#4 TO SCM#4

Hydrograph type	= Reservoir	Peak discharge	= 52.19 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.00 hrs
Time interval	= 2 min	Hyd. volume	= 185,937 cuft
Inflow hyd. No.	= 4 - POST DA#4	Max. Elevation	= 244.99 ft
Reservoir name	= SCM#4	Max. Storage	= 88,613 cuft

Storage Indication method used.



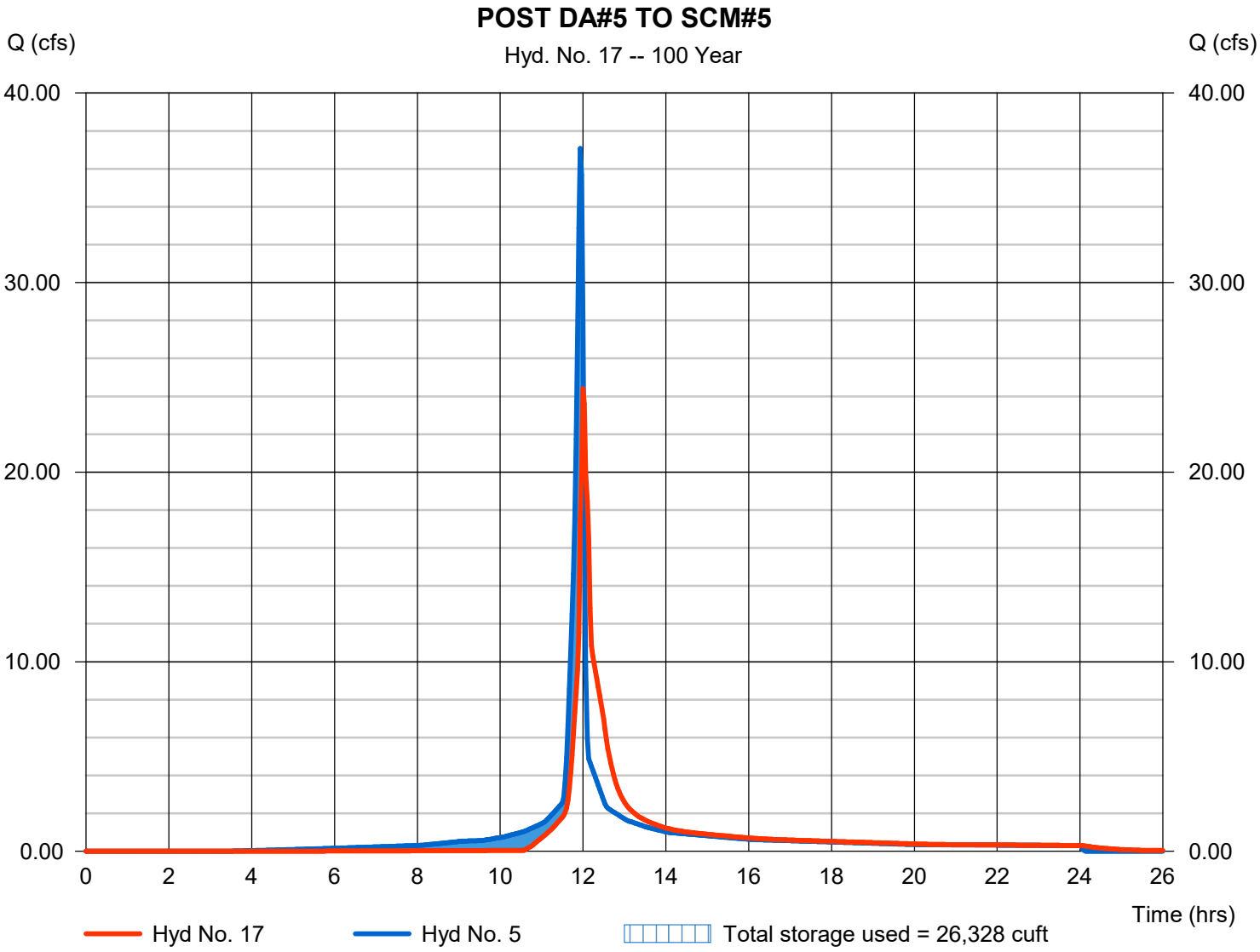
Hydrograph Report

Hyd. No. 17

POST DA#5 TO SCM#5

Hydrograph type	=	Reservoir	Peak discharge	=	24.41 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.00 hrs
Time interval	=	2 min	Hyd. volume	=	80,066 cuft
Inflow hyd. No.	=	5 - POST DA#5	Max. Elevation	=	252.65 ft
Reservoir name	=	SCM#5	Max. Storage	=	26,328 cuft

Storage Indication method used.



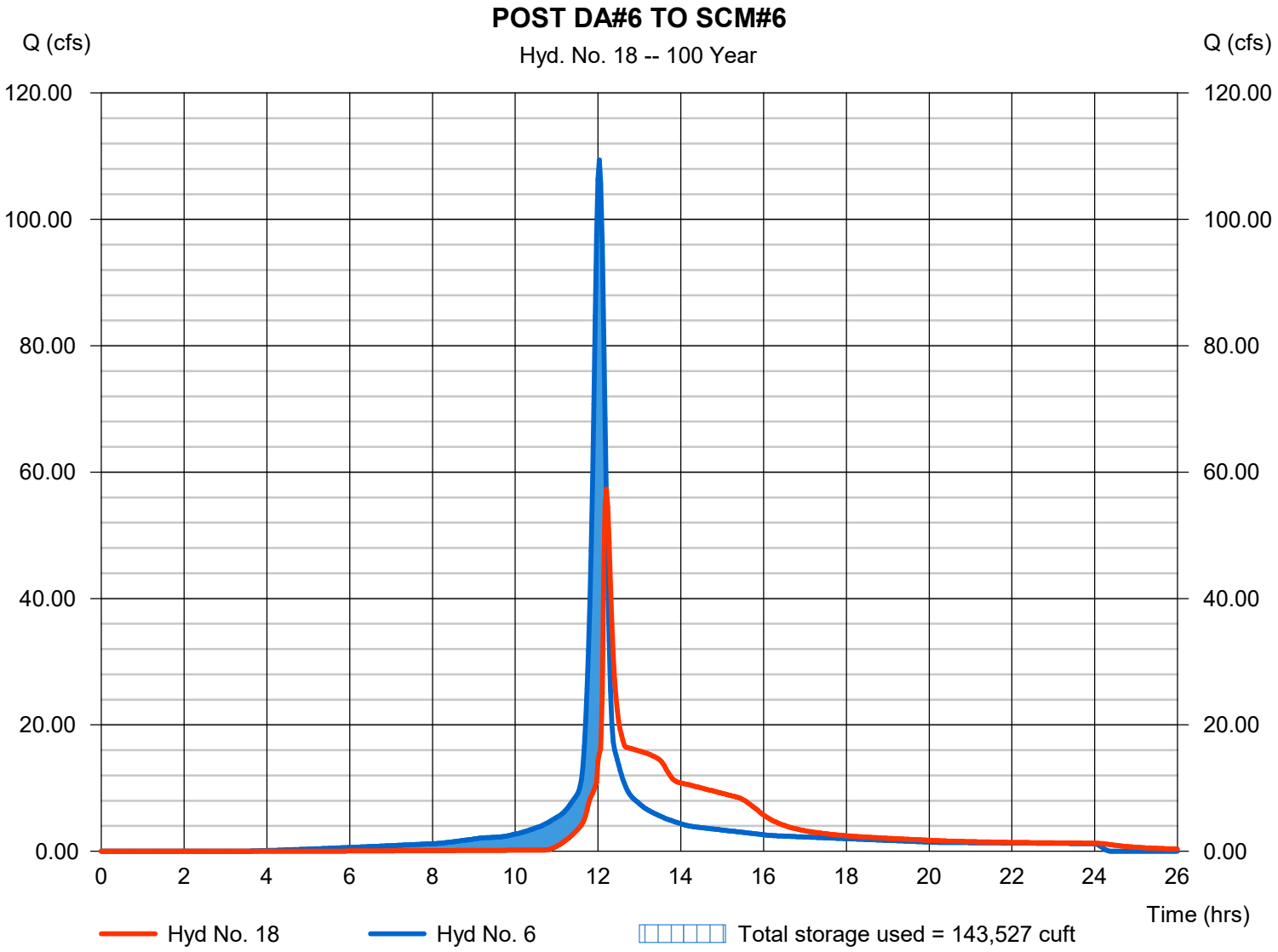
Hydrograph Report

Hyd. No. 18

POST DA#6 TO SCM#6

Hydrograph type	= Reservoir	Peak discharge	= 57.31 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.20 hrs
Time interval	= 2 min	Hyd. volume	= 320,023 cuft
Inflow hyd. No.	= 6 - POST DA#6	Max. Elevation	= 243.03 ft
Reservoir name	= SCM#6	Max. Storage	= 143,527 cuft

Storage Indication method used.



Hydrograph Report

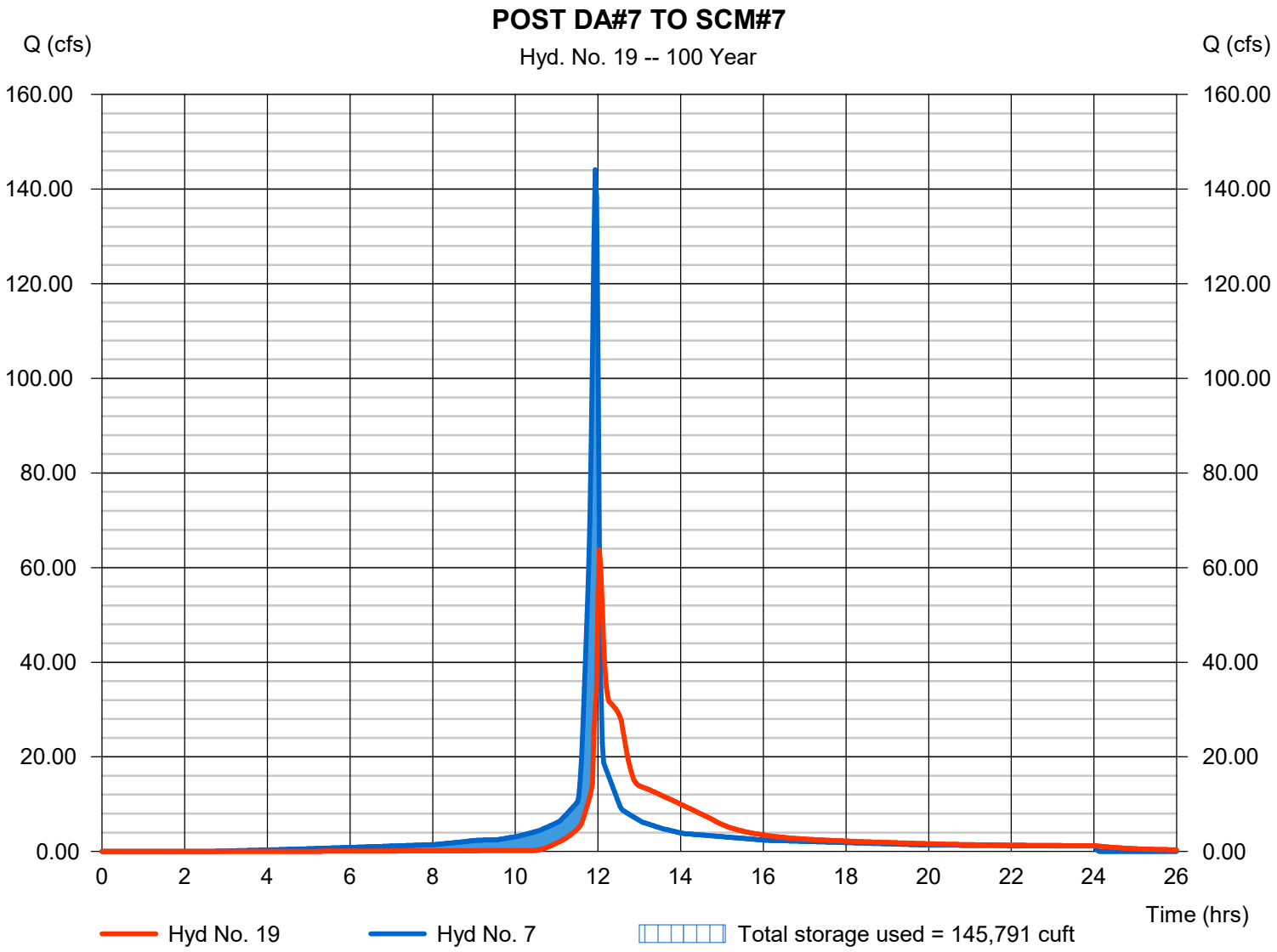
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Thursday, 10 / 31 / 2024

Hyd. No. 19

POST DA#7 TO SCM#7

Hydrograph type	= Reservoir	Peak discharge	= 63.71 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.03 hrs
Time interval	= 2 min	Hyd. volume	= 317,207 cuft
Inflow hyd. No.	= 7 - POST DA#7	Max. Elevation	= 245.03 ft
Reservoir name	= SCM#7	Max. Storage	= 145,791 cuft

Storage Indication method used.



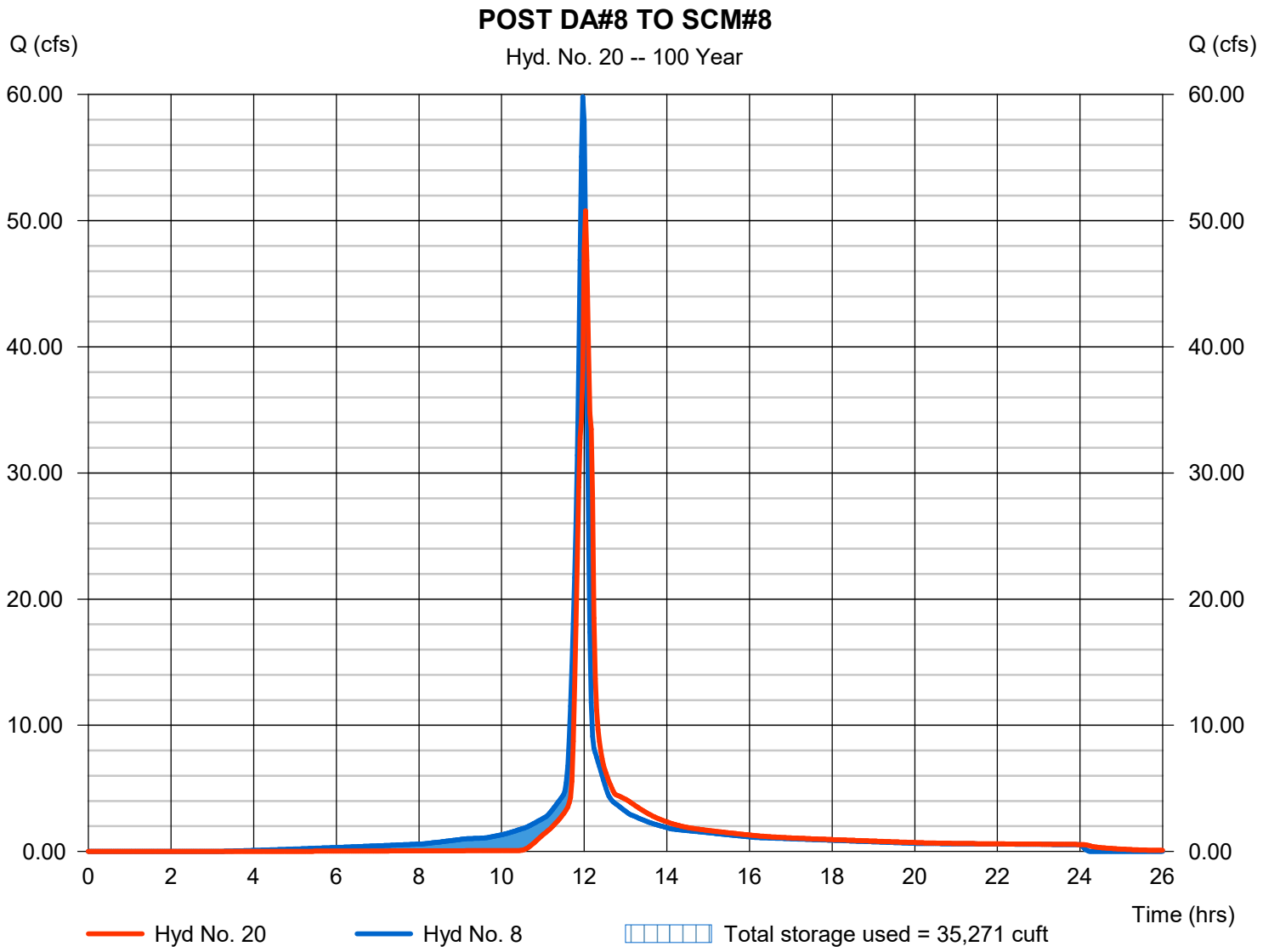
Hydrograph Report

Hyd. No. 20

POST DA#8 TO SCM#8

Hydrograph type	= Reservoir	Peak discharge	= 50.78 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.03 hrs
Time interval	= 2 min	Hyd. volume	= 145,282 cuft
Inflow hyd. No.	= 8 - POST DA#8	Max. Elevation	= 243.83 ft
Reservoir name	= SCM#8	Max. Storage	= 35,271 cuft

Storage Indication method used.

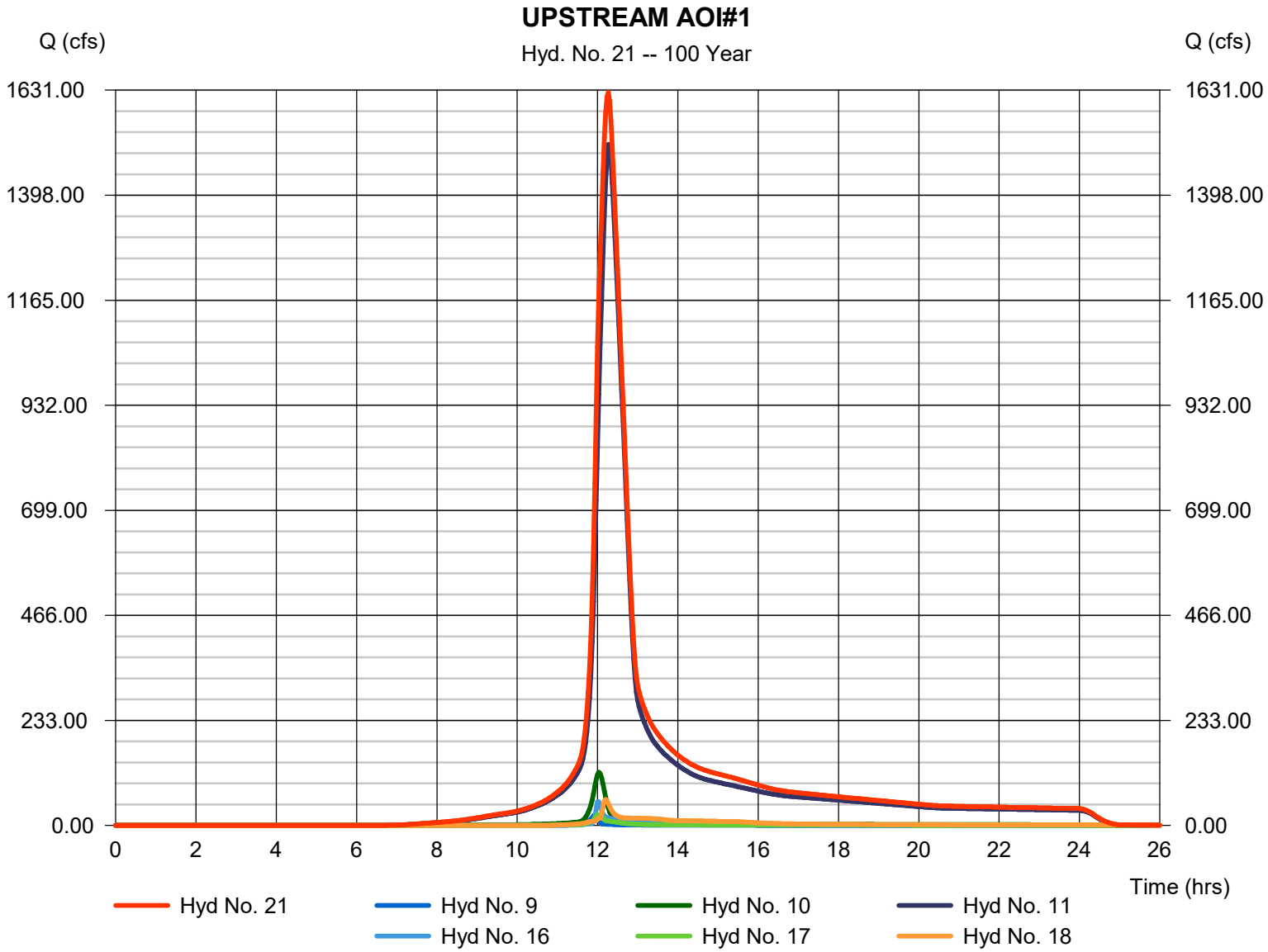


Hydrograph Report

Hyd. No. 21

UPSTREAM AOI#1

Hydrograph type	= Combine	Peak discharge	= 1626.22 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.27 hrs
Time interval	= 2 min	Hyd. volume	= 8,289,309 cuft
Inflow hyds.	= 9, 10, 11, 16, 17, 18	Contrib. drain. area	= 446.810 ac

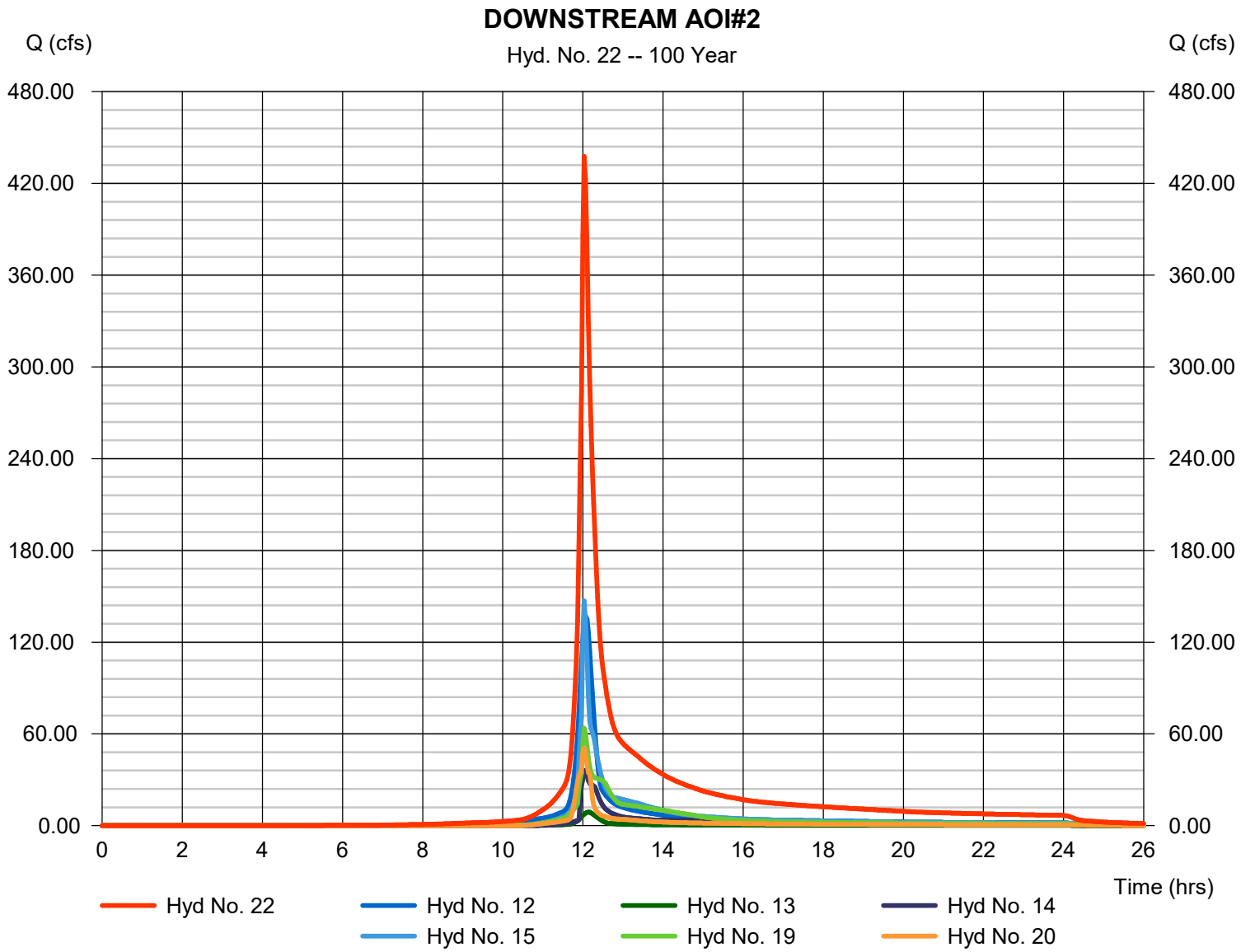


Hydrograph Report

Hyd. No. 22

DOWNSTREAM AOI#2

Hydrograph type	= Combine	Peak discharge	= 437.61 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.03 hrs
Time interval	= 2 min	Hyd. volume	= 1,559,729 cuft
Inflow hyds.	= 12, 13, 14, 15, 19, 20	Contrib. drain. area	= 26.840 ac

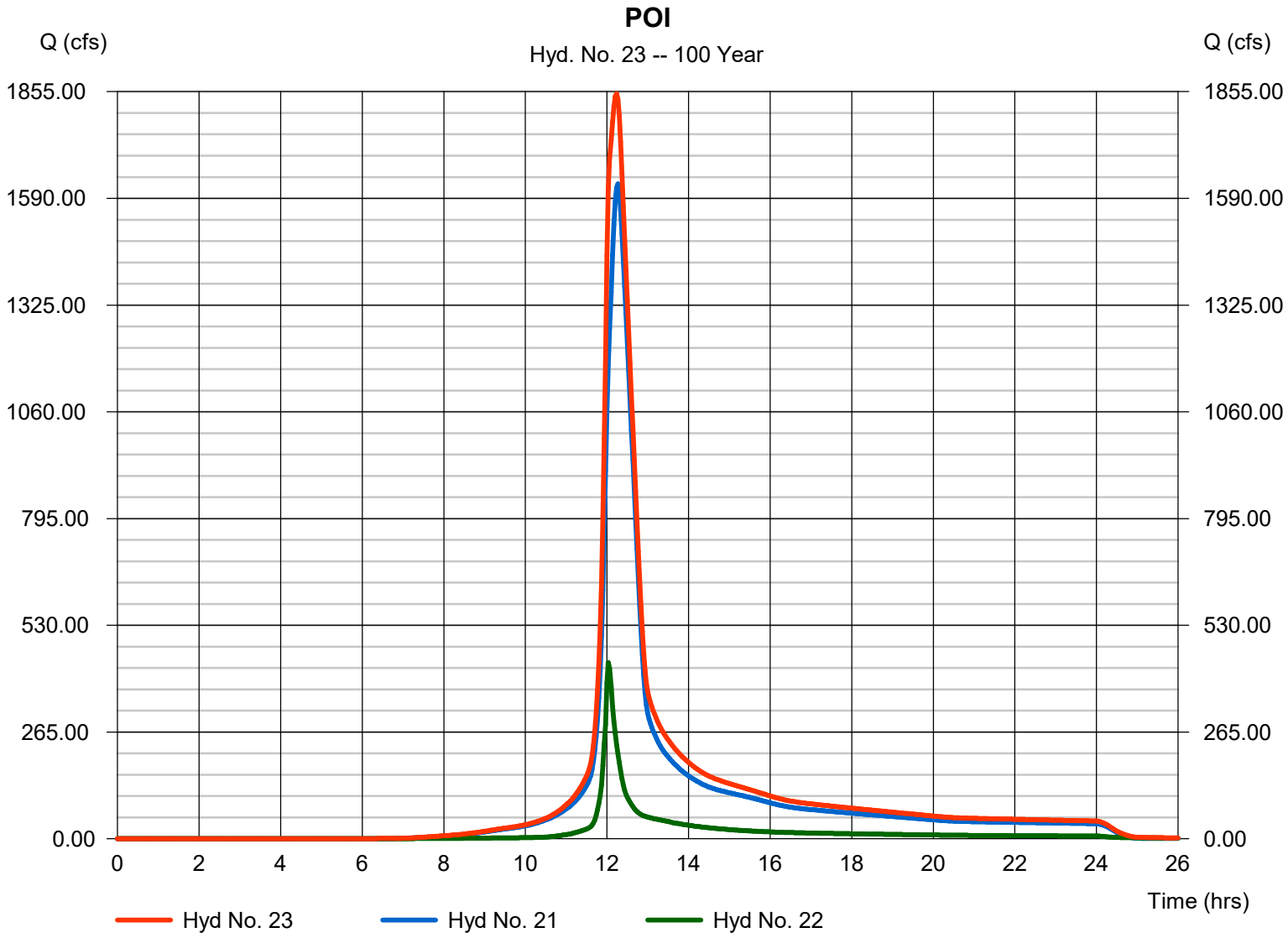


Hydrograph Report

Hyd. No. 23

POI

Hydrograph type	= Combine	Peak discharge	= 1850.31 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.23 hrs
Time interval	= 2 min	Hyd. volume	= 9,849,030 cuft
Inflow hyds.	= 21, 22	Contrib. drain. area	= 0.000 ac

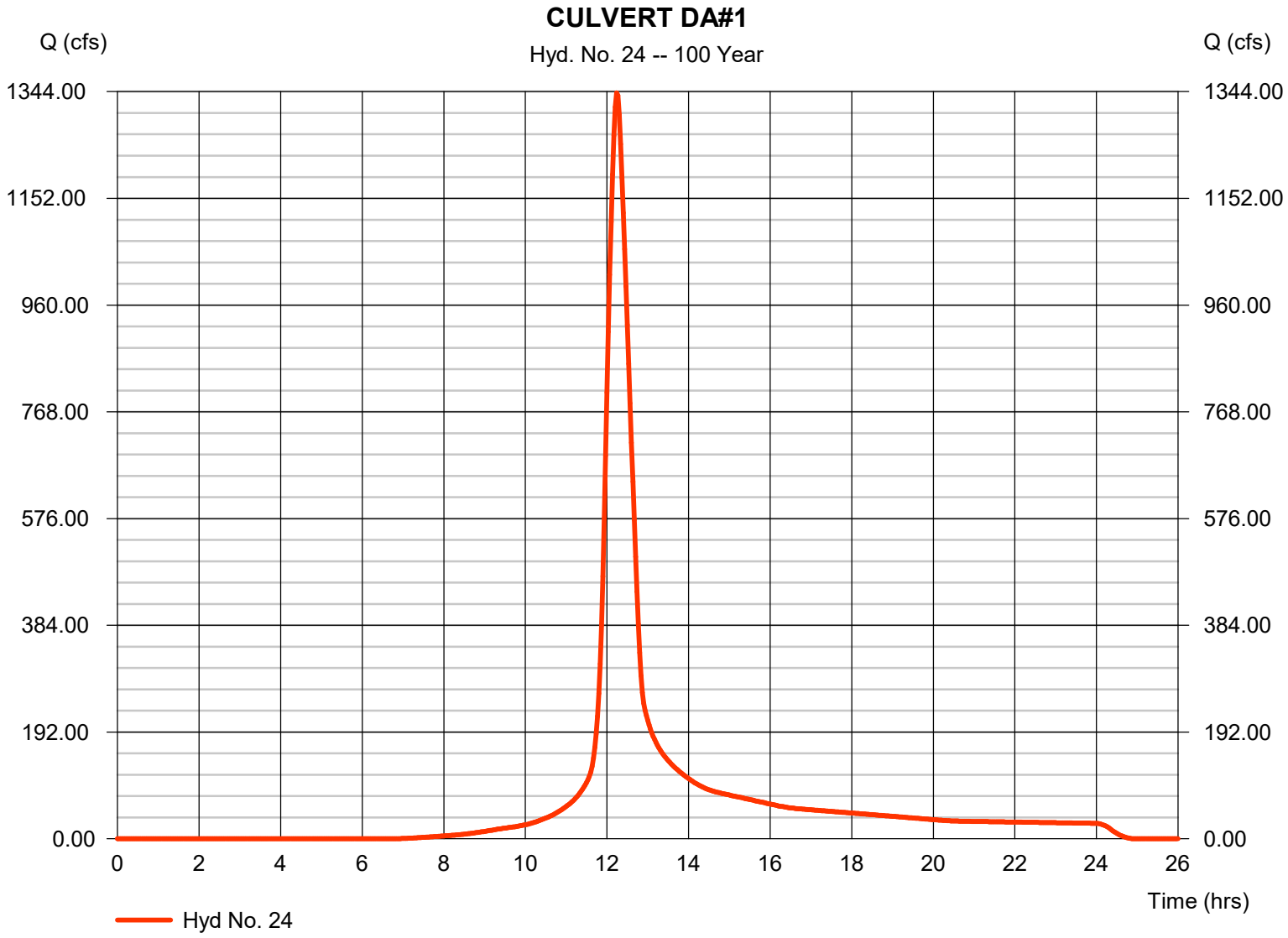


Hydrograph Report

Hyd. No. 24

CULVERT DA#1

Hydrograph type	=	SCS Runoff	Peak discharge	=	1341.90 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.23 hrs
Time interval	=	2 min	Hyd. volume	=	6,077,089 cuft
Drainage area	=	356.710 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	34.90 min
Total precip.	=	7.80 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

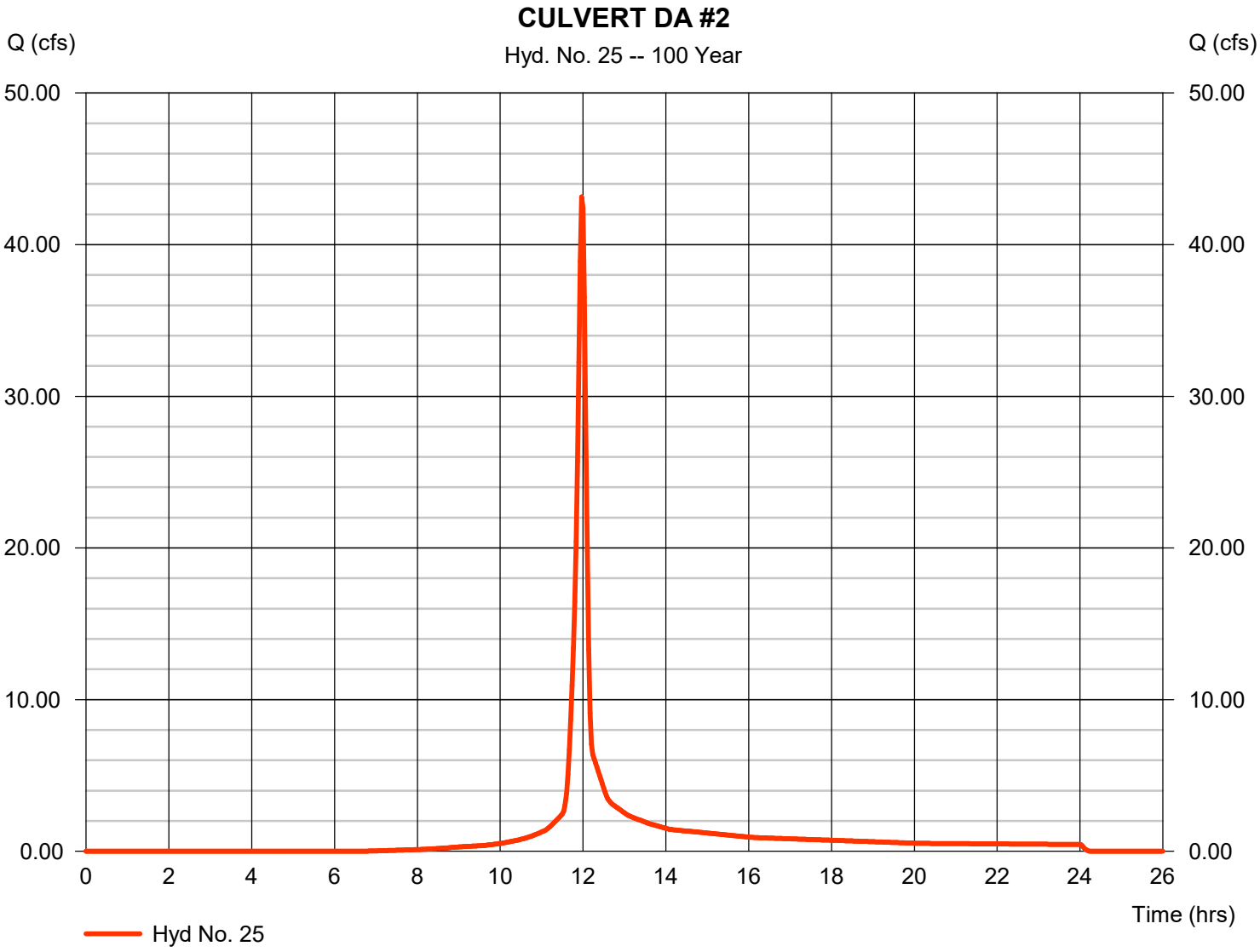


Hydrograph Report

Hyd. No. 25

CULVERT DA #2

Hydrograph type	=	SCS Runoff	Peak discharge	=	43.15 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.97 hrs
Time interval	=	2 min	Hyd. volume	=	99,431 cuft
Drainage area	=	5.770 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	8.80 min
Total precip.	=	7.80 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

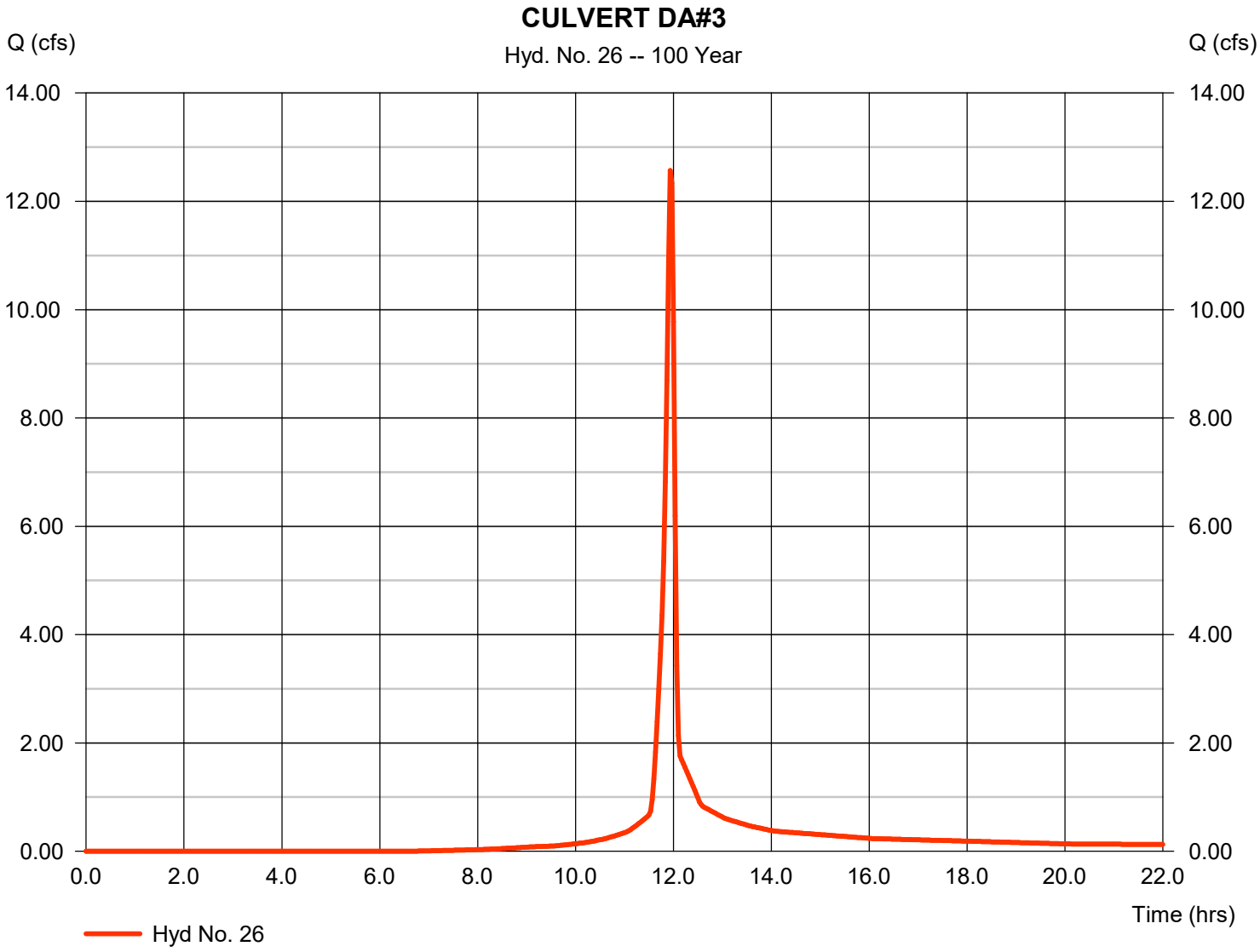


Hydrograph Report

Hyd. No. 26

CULVERT DA#3

Hydrograph type	=	SCS Runoff	Peak discharge	=	12.57 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	25,687 cuft
Drainage area	=	1.590 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	7.80 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



Hydraflow Rainfall Report

Return Period (Yrs)	Intensity-Duration-Frequency Equation Coefficients (FHA)			
	B	D	E	(N/A)
1	62.6038	12.7000	0.8883	--------
2	71.6708	12.9000	0.8793	--------
3	0.0000	0.0000	0.0000	--------
5	74.8360	13.1000	0.8451	--------
10	71.4402	12.3000	0.8016	--------
25	62.3903	11.0000	0.7384	--------
50	57.7988	10.1000	0.6977	--------
100	52.8915	9.2000	0.6569	--------

File name: Reserve at Mitchell Mill.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	4.88	3.91	3.28	2.83	2.49	2.23	2.02	1.85	1.71	1.59	1.48	1.39
2	5.67	4.57	3.84	3.32	2.93	2.63	2.39	2.19	2.02	1.88	1.76	1.65
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	6.47	5.27	4.46	3.89	3.45	3.11	2.83	2.61	2.42	2.25	2.11	1.99
10	7.27	5.93	5.04	4.41	3.93	3.55	3.25	2.99	2.78	2.60	2.45	2.31
25	8.05	6.59	5.63	4.94	4.43	4.02	3.69	3.42	3.19	3.00	2.83	2.68
50	8.70	7.12	6.10	5.37	4.83	4.40	4.05	3.77	3.53	3.32	3.14	2.98
100	9.26	7.59	6.52	5.76	5.20	4.75	4.39	4.09	3.84	3.62	3.44	3.27

Tc = time in minutes. Values may exceed 60.

Active Projects\Hopper-Rolesville-Reserve at Mitchell Mill\3. Engineering\Design\HGH\SIA\Reserve at Mitchell Mill.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	2.89	3.49	0.00	0.00	5.14	6.15	6.96	7.80
SCS 6-Hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-1st	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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