SUNSET RIDGE ESTATES

DETENTION BASIN REPORT

PROJECT NUMBER: 95-541

October 24, 1996

Prepared By:

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TRACT SIZE - 127.30 Acres

TRACT ZONING - R1 - (10,000 S.F. Minimum Lot Size)

RUNOFF FACTORS

	Developed P.I.	Undeveloped P.I.
15 yr - 20 min	2.64 cfs/ac	1.87 cfs/ac
25 yr - 20 min	3.26 cfs/ac	2.31 cfs/ac
100 yr - 20min	4.17 cfs/ac	2.95 cfs.ac

TOTAL REQUIRED STORMWATER DETENTION VOLUME

127.30 ac x (3.26 cfs/ac - 2.31 cfs/ac) = 120.94 cfs

DETENTION BASIN "A"

AREA TRIBUTARY TO DETENTION BASIN - "A" - 36.63 Acres

REQUIRED STORAGE & ALLOWABLE DISCHARGES

15yr - 20 min Storm

Flow to Basin: 36.63 ac x 2.64 cfs/ac = 96.70 cfs = Total Q

ALLOWABLE DISCHARGE

96.70 cfs - (36.63 ac x (2.64 cfs/ac - 1.87 cfs/ac) = 68.49 cfs = Total Q

REQUIRED STORAGE VOLUME

Site Acreage x (P.I. Developed - P.I. Undeveloped) x 1800 sec = cu. ft.

36.63 x (2.64 - 1.87) x 1800 = 50,769 cu. ft.

DETENTION BASIN "A"

REQUIRED STORAGE & ALLOWABLE DISCHARGES FOR ALTERNATE STORMS

25 yr - 20 min Storm

Flow to Basin: 36.63 x 3.26 cfs/ac = 119.41 cfs = Total Q
Allowable Discharge: 119.41 cfs - (36.63 x (3.26 - 2.31) = 84.61 cfs
Required Storage: 36.63 x (3.26 - 2.31) x 1800 = 62,637 cu. ft.

100 yr - 20 min Storm

Flow to Basin: 36.63 x 4.17 cfs/ac = 152.75 cfs = Total Q
Allowable Discharge: 152.75 cfs - (36.63 x (4.17 - 2.95) = 108.06 cfs
Required Storage: 36.63 x (4.17 - 2.95) x 1800 = 80,439 cu.ft.

SUMMARY CHART - BASIN "A"

STORM	Q	REQUIRED VOLUME	ALLOWABLE DISCHARGE	
yr - 20 min	*cfs*	*cu.ft.*	*cfs*	Routing
15	96.70	50,769	68.49	66.57
25	119.41	62,637	84.61	73.02
100	152.75	80,439	108.06	102.66

DETENTION BASIN "B"

Area Tributary to Detention Basin "B" = 22.31 ac

REQUIRED STORAGE & ALLOWABLE DISCHARGES

15yr - 20 min Storm

Flow to Basin: 22.31 ac x 2.64 cfs/ac = 58.91 cfs = Total Q

ALLOWABLE DISCHARGE

58.91 cfs - (22.31 ac x (2.64 cfs/ac - 1.87 cfs/ac) = 41.73 cfs = Total Q

REQUIRED STORAGE VOLUME

Site Acreage x (P.I. Developed - P.I. Undeveloped) x 1800 sec = cu. ft.
22.31 x (2.64 - 1.87) x 1800 = 30,922 cu. ft.

DETENTION BASIN "B"

REQUIRED STORAGE & ALLOWABLE DISCHARGES FOR ALTERNATE STORMS

25 yr - 20 min Storm

Flow to Basin: 22.31 x 3.26 cfs/ac = 72.73 cfs = Total Q
Allowable Discharge: 72.73 cfs - (22.31 x (3.26 - 2.31) = 51.54 cfs
Required Storage: 22.31 x (3.26 - 2.31) x 1800 = 38,150 cu. ft.

100 yr - 20 min Storm

Flow to Basin: 22.31 x 4.17 cfs/ac = 93.03 cfs = Total Q
Allowable Discharge: 93.03 cfs - (22.31 x (4.17 - 2.95) = 65.81 cfs
Required Storage: 22.31 x (4.17 - 2.95) x 1800 = 48,993 cu.ft.

SUMMARY CHART - BASIN "B"

STORM	Q	REQUIRED VOLUME	ALLOWABLE DISCHARGE	
yr - 20 min	*cfs*	*cu.ft.*	*cfs*	Routing
15	58.91	30,922	41.73	34.61
25	72.73	38,150	51.54	38.95
100	93.03	48,993	65.81	57.45

DETENTION BASIN "C"

EXISTING OFF-SITE DETENTION

Existing Area Tributary to Detention Basin - "C" - 369.80 ac
(From Approved Plans)
Osage Meadows - 97.8 ac
Flow from north of property line - 272 ac
(Osage Meadows)

32.38 AC

Existing Total Flow through Structure = 712 cfs
Total Detention Provided = 139.9 cfs
Total Detention Required for Osage Meadows = 68.46 cfs
Excess Detention = 139.9 - 68.46 = 71.44 cfs

PROPOSED AREA TRIBUTARY TO BASIN - "C"

Sunset Ridge Discharge: 34.28 ac @ 2.64 = 90.50 cfs
Sunset Ridge Overland Flow: 1.70 ac @ 2.64 = 4.49 cfs
Great Warrior/ Osage Meadows: 36" RCP: 28.26 @ 2.64 = 74.61 cfs
Osage Meadows: 90" Radial Pipe: 194.39 ac @ 2.64 = 513.19 cfs
Osage Meadows Overland Flow: 4.17 ac @ 2.64 = 11.01 cfs
Total Area: 262.80 @ 2.64 = 693.80 cfs

TOTAL ALLOWABLE DETENTION

Existing Detention - Proposed Detention = Reduction of Flow
712.00 cfs - 693.50 cfs = 18.20 cfs (less flow to basin)

Capacity for Basin: 851.90 cfs > 693.80 cfs (Exceeds requirement)

SUMMARY CHART - BASIN "C"

"Excess" Detention Provided in Off Site Basin "C"
15 yr. - 20 min. = 71.44 cfs
25 yr. - 20 min. = 92.91 cfs
100 yr. - 20 min. = 119.32 cfs

DETERMINE ELEVATION OF OUTFALL STRUCTURE BASIN "A"

Structure: 4' x 8' Concrete Overflow Structure
OPEN ALL (6) SIDES
L= 17.52' C = 3.0

25 yr - Storm

SET WEIR AT ELEVATION = 599.35
Q 15 - HIGH WATER ELEVTION = 597.69
Q 25 - HIGH WATER ELEVATION = 598.65

601.00 Top of Berm
598.65 25 yr High Water Elevation
2.35 Feet of Freeboard

DETERMINE ELEVATION OF OUTFALL STRUCTURE BASIN "B"

Structure: 4' x 4' Concrete Overflow Structure
OPEN ALL (6) SIDES
L= 11.68' C = 3.0

25 yr - Storm

SET WEIR AT ELEVATION = 585.00
Q 15 - HIGH WATER ELEVATION = 584.19
Q 25 - HIGH WATER ELEVATION = 584.77

587.00 Top of Berm
584.77 25 yr High Water Elevation
2.23 Feet of Freeboard

TOTAL DETENTION PROVIDED:

TRACT SIZE - 127.30 ACRES

DETENTION REQUIRED(25 yr.) -
127.30 acre x (3.26 cfs/ac-2.31 cfs/ac) =120.94 cfs

DETENTION PROVIDED:
(25 yr - 20 min.)

DETENTION BASIN "A"

Peak In Flow = 119.41 cfs
Peak Outflow = 73.02 cfs

Detention = 46.39 cfs

DETENTION BASIN "B"

Peak In Flow = 72.73 cfs
Peak Outflow = 38.95 cfs

Detention = 33.78 cfs

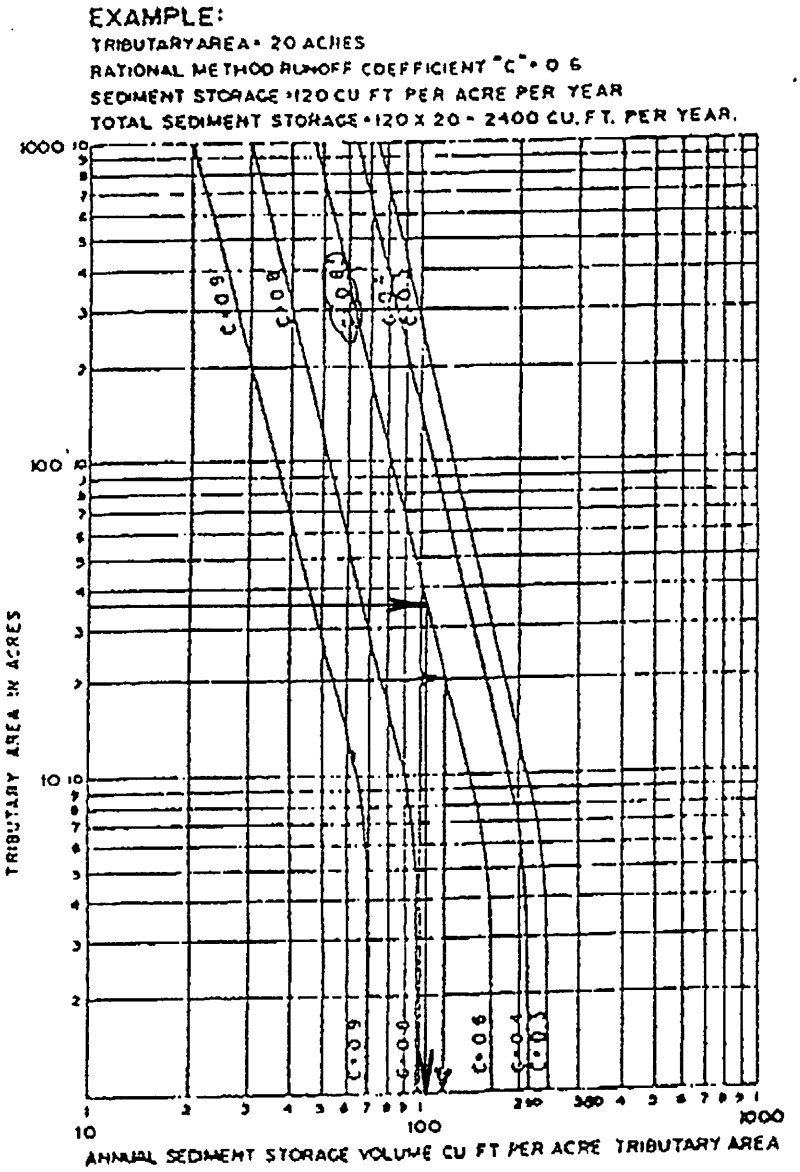
EX. DETENTION BASIN "C" (15 yr)

Peak In Flow = 712.00 cfs
Peak Outflow = 572.10 cfs

Detention = 139.90 cfs
Excess Detention (15 yr.) = 71.44 cfs
Excess Detention (25 yr.) = 92.91 cfs

DETENTION "A" + DETENTION "B" + DETENTION "C" = TOTAL DETENTION

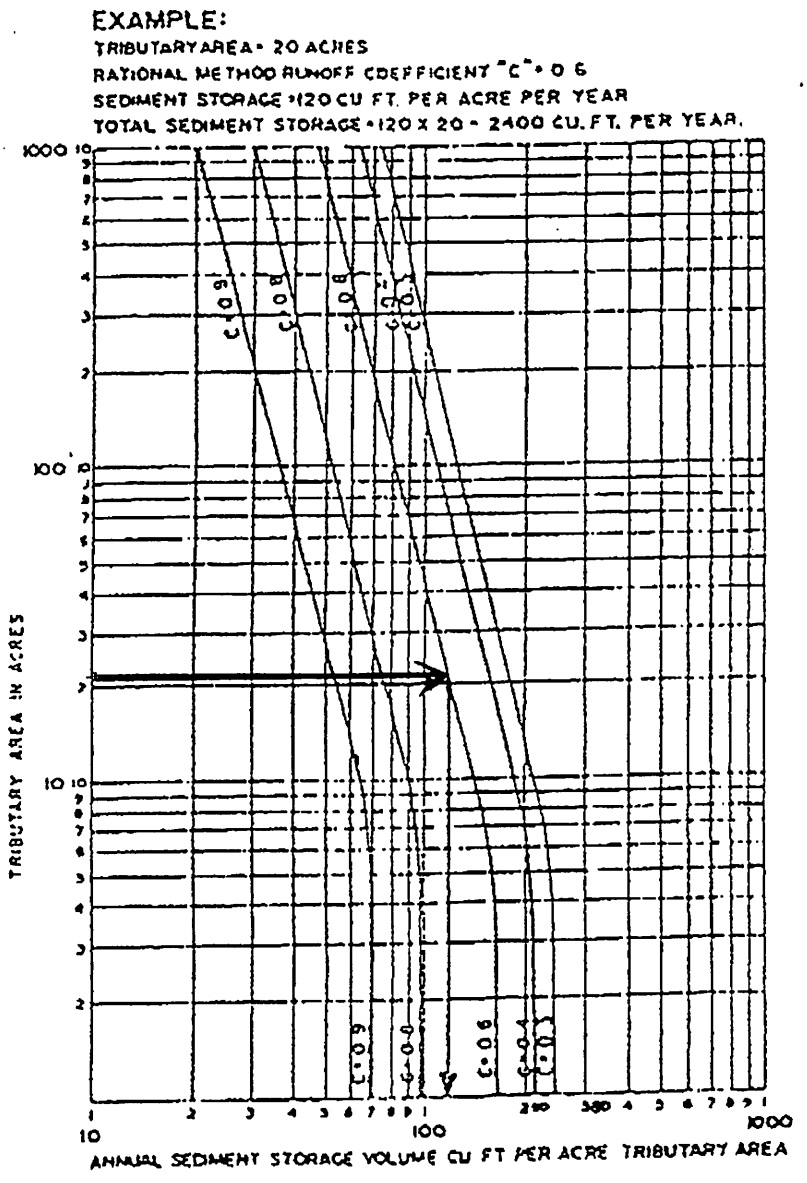
46.39 cfs + 33.78 cfs + 92.91 cfs = 173.08 cfs



ANNUAL SEDIMENT STORAGE

FIG. 1

BASIN "A" = 36.63 Acres
Rational Method Runoff coeff. "c" = 0.6
Annual Sediment Storage = 105 C.F. per acre per year
Volume Sediment Storage = 105 C.F. x 36.63 = 3,846 C.F./Yr
Total 5 Yr. Sediment Storage = 3,846 C.F. x 5 = 19,230 C.F



ANNUAL SEDIMENT STORAGE

FIG. 1

Basin "B" = 22.31 Acres
Rational Method Runoff Coeff. "C" = 0.60
Annual Sediment Storage = 125 CF. per acre per year
Volume Sediment Storage = 125 CF. x 22.31 = 2789 CF/yr
Total 5yr. Sediment Storage = 2,789 CF x5 = 13,994 CF

POND-2 Version: 5.17 S/N:

>>>>> HYDROGRAPH PRINTOUT <<<<<

04-08-1996 13:56:33

Hydrograph file: projects\95-541\541A-15 .HYD

HYDROGRAPH ORDINATES (cfs)
Time increment = 1.00 Minutes
Time on left represents time for first Q in each row.

Time Minutes							
0.00	96.70	96.70	96.70	96.70	96.70	96.70	96.70
7.00	96.70	96.70	96.70	96.70	96.70	96.70	96.70
14.00	96.70	96.70	96.70	96.70	96.70	96.70	96.70

POND-2 Version: 5.17 S/N:

>>>>> HYDROGRAPH PRINTOUT <<<<<

04-08-1996 13:56:58

Hydrograph file: projects\95-541\541A-25 .HYD

HYDROGRAPH ORDINATES (cfs)
Time increment = 1.00 Minutes
Time on left represents time for first Q in each row.

Time Minutes							
0.00	119.41	119.41	119.41	119.41	119.41	119.41	119.41
7.00	119.41	119.41	119.41	119.41	119.41	119.41	119.41
14.00	119.41	119.41	119.41	119.41	119.41	119.41	119.41

POND-2 Version: 5.17 S/N:

>>>>> HYDROGRAPH PRINTOUT <<<<<

04-08-1996 13:57:22

Hydrograph file: projects\95-541\541A-100.HYD

HYDROGRAPH ORDINATES (cfs)
Time increment = 1.00 Minutes
Time on left represents time for first Q in each row.

Time Minutes							
0.00	152.75	152.75	152.75	152.75	152.75	152.75	152.75
7.00	152.75	152.75	152.75	152.75	152.75	152.75	152.75
14.00	152.75	152.75	152.75	152.75	152.75	152.75	152.75

POND-2 Version: 5.17 S/N:

>>>>> HYDROGRAPH PRINTOUT <<<<<

10-23-1996 14:29:11

Hydrograph file: projects\95-541\541B-15 .HYD

HYDROGRAPH ORDINATES (cfs)
Time increment = 1.00 Minutes
Time on left represents time for first Q in each row.

Time Minutes							
0.00	58.91	58.91	58.91	58.91	58.91	58.91	58.91
7.00	58.91	58.91	58.91	58.91	58.91	58.91	58.91
14.00	58.91	58.91	58.91	58.91	58.91	58.91	58.91

POND-2 Version: 5.17 S/N:

>>>>> HYDROGRAPH PRINTOUT <<<<<

10-23-1996 14:30:03

Hydrograph file: projects\95-541\541B-25 .HYD

HYDROGRAPH ORDINATES (cfs)
Time increment = 1.00 Minutes
Time on left represents time for first Q in each row.

Time Minutes							
0.00	72.73	72.73	72.73	72.73	72.73	72.73	72.73
7.00	72.73	72.73	72.73	72.73	72.73	72.73	72.73
14.00	72.73	72.73	72.73	72.73	72.73	72.73	72.73

POND-2 Version: 5.17 S/N:

>>>>> HYDROGRAPH PRINTOUT <<<<<

10-23-1996 14:31:15

Hydrograph file: projects\95-541\541B-100.HYD

HYDROGRAPH ORDINATES (cfs)
Time increment = 1.00 Minutes
Time on left represents time for first Q in each row.

Time Minutes							
0.00	93.03	93.03	93.03	93.03	93.03	93.03	93.03
7.00	93.03	93.03	93.03	93.03	93.03	93.03	93.03
14.00	93.03	93.03	93.03	93.03	93.03	93.03	93.03

POND-2 Version: 5.17
S/N:

SUNSET RIDGE ESTATES
DETENTION BASIN "A"
5/24/96
J.O.Y.

CALCULATED 10-23-1996 14:32:21
DISK FILE: projects\95-541\541A .VOL

Planimeter scale: 1 inch = 1 ft.

Elevation (ft)	Planimeter (sq.in.)	Area (sq.ft)	A1+A2+sqr(A1*A2) (sq.ft)	* Volume (cubic-ft)	Volume Sum (cubic-ft)
593.00	0.00	0	0	0	0
594.00	8,712.00	8,712	8,712	2,904	2,904
595.00	15,188.00	15,188	35,403	11,801	14,705
596.00	16,988.00	16,988	48,239	16,080	30,785
598.00	20,473.20	20,473	56,111	37,407	68,192
600.00	25,264.80	25,265	68,481	45,654	113,846
601.00	27,442.80	27,443	79,039	26,346	140,192
					− 19,230 Req.

2

IA = (sq.rt(Area1) + ((Ei-E1)/(E2-E1))*(sq.rt(Area2)-sq.rt(Area1)))

where: E1, E2 = Closest two elevations with planimeter data
Ei = Elevation at which to interpolate area
Area1,Area2 = Areas computed for E1, E2, respectively
IA = Interpolated area for Ei

* Incremental volume computed by the Conic Method for Reservoir Volumes.

Volume = (1/3) * (EL2-EL1) * (Area1 + Area2 + sq.rt.(Area1*Area2))

where: EL1, EL2 = Lower and upper elevations of the increment
Area1,Area2 = Areas computed for EL1, EL2, respectively
Volume = Incremental volume between EL1 and EL2

POND-2 Version: 5.17
S/N:

SUNSET RIDGE ESTATES
DETENTION BASIN "B"
3/20/96
J.O.Y.

CALCULATED 10-23-1996 14:33:11
DISK FILE: projects\95-541\541B .VOL

Planimeter scale: 1 inch = 1 ft.

Elevation (ft)	Planimeter (sq.in.)	Area (sq.ft)	A1+A2+sqr(A1*A2) (sq.ft)	Volume* (cubic-ft)	Volume Sum (cubic-ft)
580.25	0.00	0	0	0	0
581.00	5,934.07	5,934	5,934	1,484	1,484
582.00	17,951.73	17,952	34,207	11,402	12,886
584.00	21,268.54	21,269	58,760	39,173	52,059
586.00	24,816.56	24,817	69,059	46,040	98,099
587.00	26,677.32	26,677	77,224	25,741	123,840

- 13,940 seal

$$IA = (sq.rt(Area1) + ((Ei-E1)/(E2-E1))*(sq.rt(Area2)-sq.rt(Area1)))^2$$

where: E1, E2 = Closest two elevations with planimeter data
Ei = Elevation at which to interpolate area
Area1,Area2 = Areas computed for E1, E2, respectively
IA = Interpolated area for Ei

* Incremental volume computed by the Conic Method for Reservoir Volumes.

Volume = (1/3) * (EL2-EL1) * (Area1 + Area2 + sq.rt.(Area1*Area2))

where: EL1, EL2 = Lower and upper elevations of the increment
Area1,Area2 = Areas computed for EL1, EL2, respectively
Volume = Incremental volume between EL1 and EL2

Outlet Structure File: 541A .STR

POND-2 Version: 5.17 S/N:
Date Executed: Time Executed:

****
SUNSET RIDGE ESTATES
DETENTION BASIN "A"
OVERFLOW STRUCTURE
3/20/96
****

***** COMPOSITE OUTFLOW SUMMARY ****

Elevation (ft)	Q (cfs)	Contributing Structures
593.00	0.0	
593.25	0.0	
593.50	0.0	
593.75	0.0	
594.00	0.0	
594.25	0.0	
594.50	0.0	
594.75	0.0	
595.00	0.0	
595.25	0.0	
595.50	0.0	
595.75	0.0	
596.00	53.2	1
596.25	55.4	1
596.50	57.5	1
596.75	59.5	1
597.00	61.4	1
597.25	63.3	1
597.50	65.2	1
597.75	67.0	1
598.00	68.7	1
598.25	70.4	1
598.50	72.0	1
598.75	73.7	1
599.00	75.2	1
599.25	76.8	1
599.50	81.4	1 +2
599.75	93.1	1 +2
600.00	108.8	1 +2
600.25	127.6	1 +2
600.50	148.9	1 +2
600.75	172.6	1 +2
601.00	0.0	

Outlet Structure File: 541A .STR

POND-2 Version: 5.17 S/N:
Date Executed: Time Executed:

****
SUNSET RIDGE ESTATES
DETENTION BASIN "A"
OVERFLOW STRUCTURE
3/20/96
****

Outlet Structure File: projects\95-541\541A .STR
Planimeter Input File: projects\95-541\541A .VOL
Rating Table Output File: projects\95-541\541A .PND

Min. Elev.(ft) = 593 Max. Elev.(ft) = 601 Incr.(ft) = .25

Additional elevations (ft) to be included in table:
* *

****
SYSTEM CONNECTIVITY
****

Structure	No.	Q Table		Q Table
ORIFICE	1		->	1
INLET BOX	2		->	2

Outflow rating table summary was stored in file:
projects\95-541\541A .PND

Outlet Structure File: 541A .STR

POND-2 Version: 5.17 S/N:
Date Executed: Time Executed:

****
SUNSET RIDGE ESTATES
DETENTION BASIN "A"
OVERFLOW STRUCTURE
3/20/96
****

>>>>>> Structure No. 1 <<<<<<
(Input Data)

ORIFICE
Orifice - Based on Area and Datum Elevation

E1 elev.(ft)?	596
E2 elev.(ft)?	601
Orifice coeff.?	.6
Invert elev.(ft)?	593.00
Datum elev.(ft) ?	593.00
Orifice area (sq ft)?	6.38

Outlet Structure File: 541A .STR

POND-2 Version: 5.17 S/N:
Date Executed: Time Executed:

****
SUNSET RIDGE ESTATES
DETENTION BASIN "A"
OVERFLOW STRUCTURE
3/20/96
****

>>>>>> Structure No. 2 <<<<<<
(Input Data)

INLET BOX
Weir & Orifice defined by length and area

E1 elev.(ft)?	596.00
E2 elev.(ft)?	601
Crest elev.(ft)?	599.35
Weir length (ft)?	17.52
Weir coefficient?	3
Orifice area (sq.ft)?	32
Orifice coefficient?	.6
Start transition elev.(ft) @ ?	
Transition height (ft)?	

Outlet Structure File: 541B .STR

POND-2 Version: 5.17 S/N:
Date Executed: Time Executed:

****
SUNSET RIDGE ESTEATES
DETENTION BASIN "B"
3/20/96
J.O.Y.
****

***** COMPOSITE OUTFLOW SUMMARY ****

Elevation (ft)	Q (cfs)	Contributing Structures
582.05	0.0	
582.30	0.0	
582.55	0.0	
582.80	20.5	1
583.05	23.6	1
583.30	26.4	1
583.55	28.9	1
583.80	31.3	1
584.05	33.4	1
584.30	35.5	1
584.55	37.4	1
584.80	39.2	1
585.05	41.3	1 +2
585.30	48.4	1 +2
585.55	58.5	1 +2
585.80	70.8	1 +2
586.05	85.0	1 +2
586.30	100.7	1 +2
586.55	117.8	1 +2
586.80	136.1	1 +2
587.00	0.0	

Outlet Structure File: 541B .STR

POND-2 Version: 5.17 S/N:
Date Executed: Time Executed:

****
SUNSET RIDGE ESTEATES
DETENTION BASIN "B"
3/20/96
J.O.Y.
****

Outlet Structure File: projects\95-541\541B .STR
Planimeter Input File: projects\95-541\541B .VOL
Rating Table Output File: projects\95-541\541B .PND

Min. Elev.(ft) = 582.05 Max. Elev.(ft) = 587 Incr.(ft) = .25

Additional elevations (ft) to be included in table:
* *

****
SYSTEM CONNECTIVITY
****

Structure	No.	Q Table		Q Table
ORIFICE-VC	1		->	1
INLET BOX	2		->	2

Outflow rating table summary was stored in file:
projects\95-541\541B .PND

Outlet Structure File: 541B .STR

POND-2 Version: 5.17 S/N:
Date Executed: Time Executed:

****
SUNSET RIDGE ESTEATES
DETENTION BASIN "B"
3/20/96
J.O.Y.
****

>>>>>> Structure No. 1 <<<<<<
(Input Data)

ORIFICE-VC
Orifice - Vertical Circular

E1 elev.(ft)?	582.75
E2 elev.(ft)?	587
Orifice coeff.?	.6
Invert elev.(ft)?	580.25
Datum elev.(ft)?	582.05
Diameter (ft)?	2.50

Outlet Structure File: 541B .STR

POND-2 Version: 5.17 S/N:
Date Executed: Time Executed:

****
SUNSET RIDGE ESTEATES
DETENTION BASIN "B"
3/20/96
J.O.Y.
****

>>>>>> Structure No. 2 <<<<<<
(Input Data)

INLET BOX
Weir & Orifice defined by length and area

E1 elev.(ft)?	582.25
E2 elev.(ft)?	587
Crest elev.(ft)?	585.00
Weir length (ft)?	11.68
Weir coefficient?	3
Orifice area (sq.ft)?	16
Orifice coefficient?	.6

Start transition elev.(ft) @ ?
Transition height (ft)?

POND-2 Version: 5.17 S/N:
EXECUTED: 10-23-1996 14:40:52

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**************************
*                        *
*  SUNSET RIDGE ESTATES  *
*  DETENTION BASIN "A"   *
*   OVERFLOW STRUCTURE   *
*        10/23/96        *
*                        *
**************************
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Inflow Hydrograph: projects\95-541\541A-15 .HYD
Rating Table file: projects\95-541\541A .PND

----INITIAL CONDITIONS----
Elevation = 593.00 ft
Outflow = 0.00 cfs
Storage = 0 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
593.00	0.0	0
593.25	0.0	45
593.50	0.0	363
593.75	0.0	1,225
594.00	0.0	2,904
594.25	0.0	5,261
594.50	0.0	7,995
594.75	0.0	11,134
595.00	0.0	14,705
595.25	0.0	18,557
595.50	0.0	22,520
595.75	0.0	26,595
596.00	53.2	30,785
596.25	55.4	35,084
596.50	57.5	39,488
596.75	59.5	43,999
597.00	61.4	48,617
597.25	63.3	53,344
597.50	65.2	58,181
597.75	67.0	63,130
598.00	68.7	68,191
598.25	70.4	73,381
598.50	72.0	78,715
598.75	73.7	84,194
599.00	75.2	89,821
599.25	76.8	95,598
599.50	81.4	101,526
599.75	93.1	107,608
600.00	108.8	113,846
600.25	127.6	120,229
600.50	148.9	126,747

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
0.0	0.0
1.5	1.5
12.1	12.1
40.8	40.8
96.8	96.8
175.4	175.4
266.5	266.5
371.1	371.1
490.2	490.2
618.6	618.6
750.7	750.7
886.5	886.5
1026.2	1079.4
1169.5	1224.9
1316.3	1373.8
1466.6	1526.1
1620.6	1682.0
1778.1	1841.4
1939.4	2004.6
2104.3	2171.3
2273.0	2341.7
2446.0	2516.4
2623.8	2695.8
2806.4	2880.1
2994.0	3069.2
3186.6	3263.4
3384.2	3465.6
3586.9	3680.0
3794.9	3903.7
4007.6	4135.2
4224.9	4373.8

EXECUTED 10-23-1996 14:40:52
DISK FILES: 541A-15 .HYD ; 541A .PND

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
600.75	172.6	133,401

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
4446.7	4619.3

Time increment (t) = 1.0 min.

POND-2 Version: 5.17 S/N:
EXECUTED: 10-23-1996 14:40:52

Pond File: projects\95-541\541A .PND
Inflow Hydrograph: projects\95-541\541A-15 .HYD
Outflow Hydrograph: projects\95-541\OUT .HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
0.0	96.70
1.0	96.70
2.0	96.70
3.0	96.70
4.0	96.70
5.0	96.70
6.0	96.70
7.0	96.70
8.0	96.70
9.0	96.70
10.0	96.70
11.0	96.70
12.0	96.70
13.0	96.70
14.0	96.70
15.0	96.70
16.0	96.70
17.0	96.70
18.0	96.70
19.0	96.70
20.0	96.70

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
-----	0.0	0.0	0.00	593.00
193.4	193.4	193.4	0.00	594.30
193.4	386.8	386.8	0.00	594.78
193.4	580.2	580.2	0.00	595.18
193.4	773.6	773.6	0.00	595.54
193.4	922.6	967.0	22.21	595.85
193.4	1008.5	1116.0	53.75	596.06
193.4	1091.8	1201.9	55.05	596.21
193.4	1172.7	1285.2	56.25	596.35
193.4	1251.3	1366.1	57.39	596.49
193.4	1327.8	1444.7	58.43	596.62
193.4	1402.4	1521.2	59.44	596.74
193.4	1475.1	1595.8	60.35	596.86
193.4	1546.0	1668.5	61.24	596.98
193.4	1615.2	1739.4	62.08	597.09
193.4	1682.8	1808.6	62.91	597.20
193.4	1748.8	1876.2	63.70	597.30
193.4	1813.2	1942.2	64.47	597.40
193.4	1876.2	2006.6	65.22	597.50
193.4	1937.8	2069.6	65.90	597.60
193.4	1998.1	2131.2	66.57	597.69

POND-2 Version: 5.17 S/N:
EXECUTED: 10-23-1996 14:40:52

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: projects\95-541\541A .PND
Inflow Hydrograph: projects\95-541\541A-15 .HYD
Outflow Hydrograph: projects\95-541\OUT .HYD

Starting Pond W.S. Elevation = 593.00 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow	=	96.70 cfs
Peak Outflow	=	66.57 cfs
Peak Elevation	=	597.69 ft

***** Summary of Approximate Peak Storage *****

Initial Storage	=	0 cu-ft
Peak Storage From Storm	=	61,939 cu-ft
Total Storage in Pond	=	61,939 cu-ft

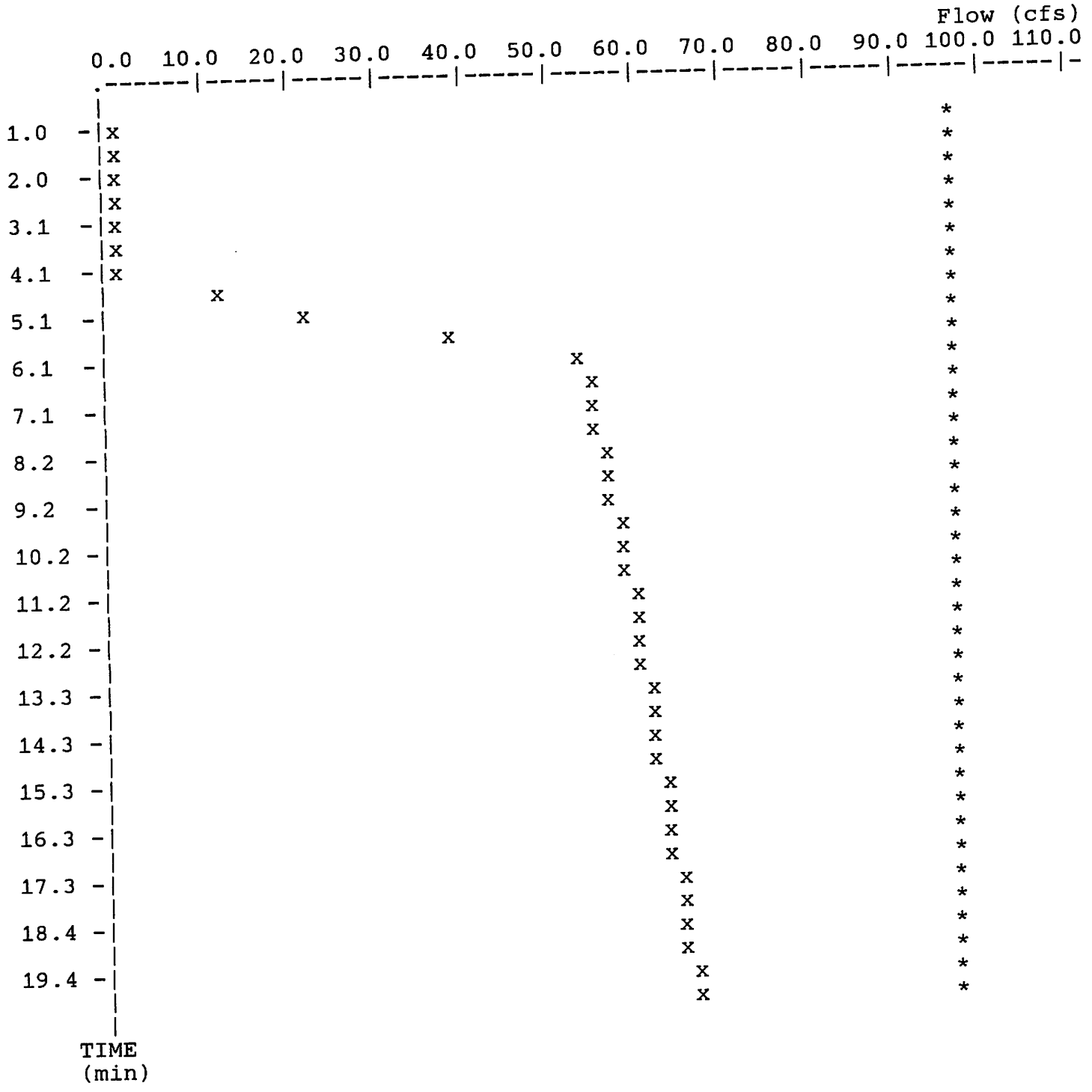
Warning: Inflow hydrograph truncated on left side.
Warning: Inflow hydrograph truncated on right side.

POND-2 Version: 5.17 S/N:

Pond File: projects\95-541\541A .PND
Inflow Hydrograph: projects\95-541\541A-15 .HYD
Outflow Hydrograph: projects\95-541\OUT .HYD

EXECUTED: 10-23-1996
14:40:52

Peak Inflow = 96.70 cfs
Peak Outflow = 66.57 cfs
Peak Elevation = 597.69 ft



x File: projects\95-541\541A-15 .HYD Qmax = 66.6 cfs
* File: projects\95-541\OUT .HYD Qmax = 96.7 cfs

POND-2 Version: 5.17 S/N:
EXECUTED: 10-23-1996 14:41:33

****
* *
* SUNSET RIDGE ESTATES *
* DETENTION BASIN "A" *
* OVERFLOW STRUCTURE *
* 10/23/96 *
* *
****

Inflow Hydrograph: projects\95-541\541A-25 .HYD
Rating Table file: projects\95-541\541A .PND

----INITIAL CONDITIONS----
Elevation = 593.00 ft
Outflow = 0.00 cfs
Storage = 0 cu-ft

GIVEN POND DATA

INTERMEDIATE ROUTING COMPUTATIONS

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)	2S/t (cfs)	2S/t + O (cfs)
593.00	0.0	0	0.0	0.0
593.25	0.0	45	1.5	1.5
593.50	0.0	363	12.1	12.1
593.75	0.0	1,225	40.8	40.8
594.00	0.0	2,904	96.8	96.8
594.25	0.0	5,261	175.4	175.4
594.50	0.0	7,995	266.5	266.5
594.75	0.0	11,134	371.1	371.1
595.00	0.0	14,705	490.2	490.2
595.25	0.0	18,557	618.6	618.6
595.50	0.0	22,520	750.7	750.7
595.75	0.0	26,595	886.5	886.5
596.00	53.2	30,785	1026.2	1079.4
596.25	55.4	35,084	1169.5	1224.9
596.50	57.5	39,488	1316.3	1373.8
596.75	59.5	43,999	1466.6	1526.1
597.00	61.4	48,617	1620.6	1682.0
597.25	63.3	53,344	1778.1	1841.4
597.50	65.2	58,181	1939.4	2004.6
597.75	67.0	63,130	2104.3	2171.3
598.00	68.7	68,191	2273.0	2341.7
598.25	70.4	73,381	2446.0	2516.4
598.50	72.0	78,715	2623.8	2695.8
598.75	73.7	84,194	2806.4	2880.1
599.00	75.2	89,821	2994.0	3069.2
599.25	76.8	95,598	3186.6	3263.4
599.50	81.4	101,526	3384.2	3465.6
599.75	93.1	107,608	3586.9	3680.0
600.00	108.8	113,846	3794.9	3903.7
600.25	127.6	120,229	4007.6	4135.2
600.50	148.9	126,747	4224.9	4373.8

EXECUTED 10-23-1996 14:41:33
DISK FILES: 541A-25 .HYD ; 541A .PND

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
600.75	172.6	133,401

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
4446.7	4619.3

Time increment (t) = 1.0 min.

POND-2 Version: 5.17 S/N:
EXECUTED: 10-23-1996 14:41:33

Pond File: projects\95-541\541A .PND
Inflow Hydrograph: projects\95-541\541A-25 .HYD
Outflow Hydrograph: projects\95-541\OUT .HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
0.0	119.41
1.0	119.41
2.0	119.41
3.0	119.41
4.0	119.41
5.0	119.41
6.0	119.41
7.0	119.41
8.0	119.41
9.0	119.41
10.0	119.41
11.0	119.41
12.0	119.41
13.0	119.41
14.0	119.41
15.0	119.41
16.0	119.41
17.0	119.41
18.0	119.41
19.0	119.41
20.0	119.41

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
-----	0.0	0.0	0.00	593.00
238.8	238.8	238.8	0.00	594.42
238.8	477.6	477.6	0.00	594.97
238.8	716.5	716.5	0.00	595.44
238.8	917.3	955.3	18.97	595.84
238.8	1047.4	1156.2	54.36	596.13
238.8	1173.7	1286.3	56.27	596.35
238.8	1296.5	1412.5	58.01	596.56
238.8	1416.1	1535.3	59.61	596.76
238.8	1532.8	1654.9	61.07	596.96
238.8	1646.7	1771.6	62.47	597.14
238.8	1757.9	1885.5	63.81	597.32
238.8	1866.5	1996.7	65.11	597.49
238.8	1972.7	2105.3	66.29	597.65
238.8	2076.7	2211.5	67.40	597.81
238.8	2178.7	2315.6	68.44	597.96
238.8	2278.6	2417.5	69.44	598.11
238.8	2376.6	2517.4	70.41	598.25
238.8	2472.9	2615.5	71.28	598.39
238.8	2567.4	2711.7	72.15	598.52
238.8	2660.2	2806.2	73.02	598.65

POND-2 Version: 5.17 S/N:
EXECUTED: 10-23-1996 14:41:33

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: projects\95-541\541A .PND
Inflow Hydrograph: projects\95-541\541A-25 .HYD
Outflow Hydrograph: projects\95-541\OUT .HYD

Starting Pond W.S. Elevation = 593.00 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow	=	119.41 cfs
Peak Outflow	=	73.02 cfs
Peak Elevation	=	598.65 ft

***** Summary of Approximate Peak Storage *****

Initial Storage	=	0 cu-ft
Peak Storage From Storm	=	81,996 cu-ft
Total Storage in Pond	=	81,996 cu-ft

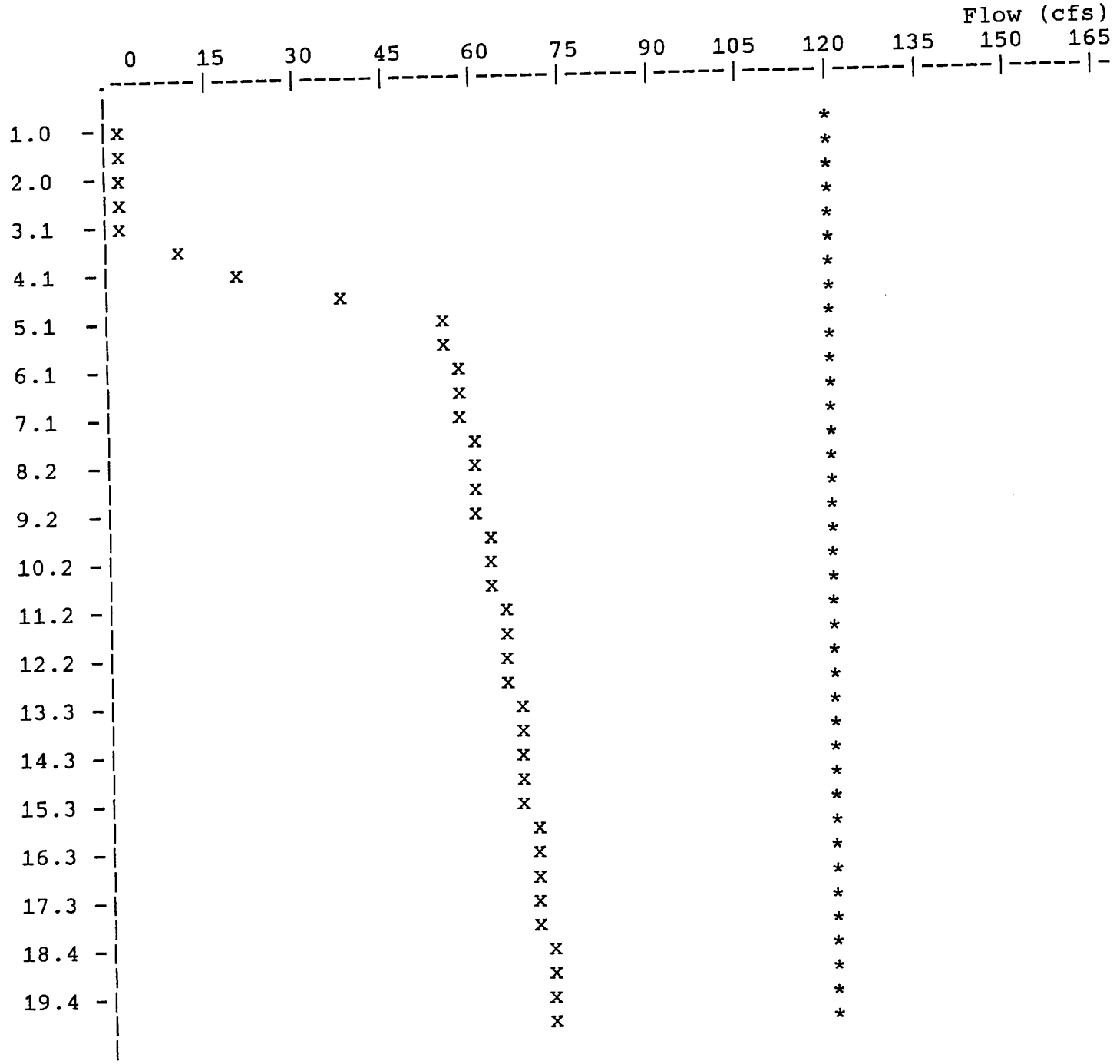
Warning: Inflow hydrograph truncated on left side.
Warning: Inflow hydrograph truncated on right side.

POND-2 Version: 5.17 S/N:

Pond File: projects\95-541\541A .PND
Inflow Hydrograph: projects\95-541\541A-25 .HYD
Outflow Hydrograph: projects\95-541\OUT .HYD

EXECUTED: 10-23-1996
14:41:33

Peak Inflow = 119.41 cfs
Peak Outflow = 73.02 cfs
Peak Elevation = 598.65 ft



x File: projects\95-541\541A-25 .HYD Qmax = 73.0 cfs
* File: projects\95-541\OUT .HYD Qmax = 119.4 cfs

POND-2 Version: 5.17 S/N:
EXECUTED: 10-23-1996 14:42:04

```
**************************
*                        *
*  SUNSET RIDGE ESTATES  *
*  DETENTION BASIN "A"   *
*   OVERFLOW STRUCTURE   *
*        10/23/96        *
*                        *
**************************
```

Inflow Hydrograph: projects\95-541\541A-100.HYD
Rating Table file: projects\95-541\541A .PND

----INITIAL CONDITIONS----
Elevation = 593.00 ft
Outflow = 0.00 cfs
Storage = 0 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
593.00	0.0	0
593.25	0.0	45
593.50	0.0	363
593.75	0.0	1,225
594.00	0.0	2,904
594.25	0.0	5,261
594.50	0.0	7,995
594.75	0.0	11,134
595.00	0.0	14,705
595.25	0.0	18,557
595.50	0.0	22,520
595.75	0.0	26,595
596.00	53.2	30,785
596.25	55.4	35,084
596.50	57.5	39,488
596.75	59.5	43,999
597.00	61.4	48,617
597.25	63.3	53,344
597.50	65.2	58,181
597.75	67.0	63,130
598.00	68.7	68,191
598.25	70.4	73,381
598.50	72.0	78,715
598.75	73.7	84,194
599.00	75.2	89,821
599.25	76.8	95,598
599.50	81.4	101,526
599.75	93.1	107,608
600.00	108.8	113,846
600.25	127.6	120,229
600.50	148.9	126,747

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
0.0	0.0
1.5	1.5
12.1	12.1
40.8	40.8
96.8	96.8
175.4	175.4
266.5	266.5
371.1	371.1
490.2	490.2
618.6	618.6
750.7	750.7
886.5	886.5
1026.2	1079.4
1169.5	1224.9
1316.3	1373.8
1466.6	1526.1
1620.6	1682.0
1778.1	1841.4
1939.4	2004.6
2104.3	2171.3
2273.0	2341.7
2446.0	2516.4
2623.8	2695.8
2806.4	2880.1
2994.0	3069.2
3186.6	3263.4
3384.2	3465.6
3586.9	3680.0
3794.9	3903.7
4007.6	4135.2
4224.9	4373.8

EXECUTED 10-23-1996 14:42:04
DISK FILES: 541A-100.HYD ; 541A .PND

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
600.75	172.6	133,401

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
4446.7	4619.3

Time increment (t) = 1.0 min.

POND-2 Version: 5.17 S/N:
EXECUTED: 10-23-1996 14:42:04

Pond File: projects\95-541\541A .PND
Inflow Hydrograph: projects\95-541\541A-100.HYD
Outflow Hydrograph: projects\95-541\OUT .HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
0.0	152.75
1.0	152.75
2.0	152.75
3.0	152.75
4.0	152.75
5.0	152.75
6.0	152.75
7.0	152.75
8.0	152.75
9.0	152.75
10.0	152.75
11.0	152.75
12.0	152.75
13.0	152.75
14.0	152.75
15.0	152.75
16.0	152.75
17.0	152.75
18.0	152.75
19.0	152.75
20.0	152.75

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
-----	0.0	0.0	0.00	593.00
305.5	305.5	305.5	0.00	594.59
305.5	611.0	611.0	0.00	595.24
305.5	899.9	916.5	8.28	595.79
305.5	1095.2	1205.4	55.11	596.22
305.5	1285.0	1400.7	57.85	596.54
305.5	1470.0	1590.5	60.29	596.85
305.5	1650.4	1775.5	62.51	597.15
305.5	1826.7	1955.9	64.63	597.43
305.5	1999.0	2132.2	66.58	597.69
305.5	2167.9	2304.5	68.33	597.95
305.5	2333.4	2473.4	69.98	598.19
305.5	2495.9	2638.9	71.49	598.42
305.5	2655.5	2801.4	72.97	598.64
305.5	2812.3	2961.0	74.34	598.86
305.5	2966.6	3117.8	75.60	599.06
305.5	3118.1	3272.1	77.00	599.26
305.5	3262.7	3423.6	80.44	599.45
305.5	3394.2	3568.2	87.00	599.62
305.5	3510.7	3699.7	94.48	599.77
305.5	3610.9	3816.2	102.66	599.90

POND-2 Version: 5.17 S/N:
EXECUTED: 10-23-1996 14:42:04

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: projects\95-541\541A .PND
Inflow Hydrograph: projects\95-541\541A-100.HYD
Outflow Hydrograph: projects\95-541\OUT .HYD

Starting Pond W.S. Elevation = 593.00 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow	=	152.75 cfs
Peak Outflow	=	102.66 cfs
Peak Elevation	=	599.90 ft

***** Summary of Approximate Peak Storage *****

Initial Storage	=	0 cu-ft
Peak Storage From Storm	=	111,408 cu-ft
Total Storage in Pond	=	111,408 cu-ft

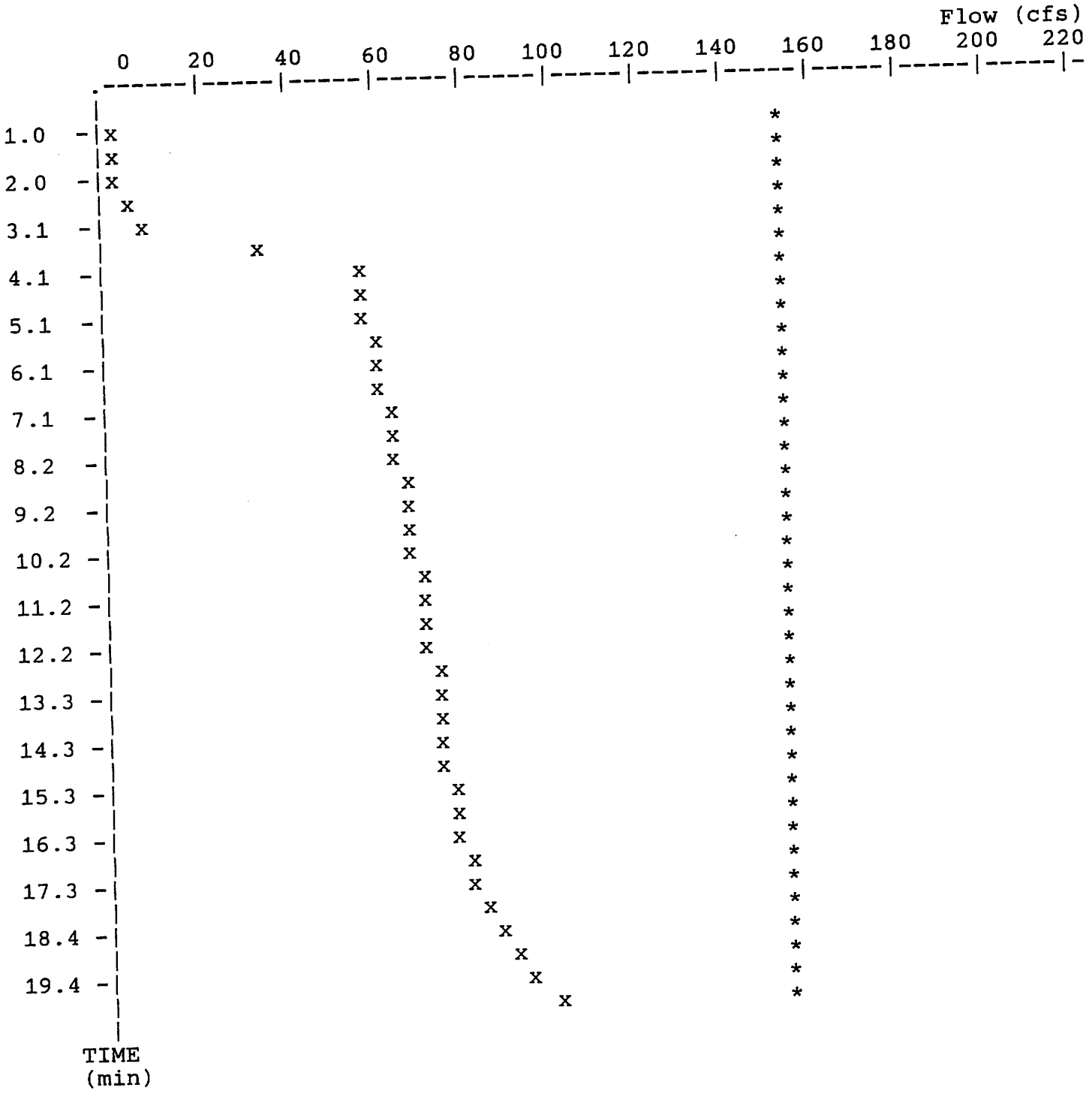
Warning: Inflow hydrograph truncated on left side.
Warning: Inflow hydrograph truncated on right side.

POND-2 Version: 5.17 S/N:

Pond File: projects\95-541\541A .PND
Inflow Hydrograph: projects\95-541\541A-100.HYD
Outflow Hydrograph: projects\95-541\OUT .HYD

EXECUTED: 10-23-1996
14:42:04

Peak Inflow = 152.75 cfs
Peak Outflow = 102.66 cfs
Peak Elevation = 599.90 ft



x File: projects\95-541\541A-100.HYD Qmax = 102.7 cfs
* File: projects\95-541\OUT .HYD Qmax = 152.8 cfs

POND-2 Version: 5.17 S/N:
EXECUTED: 10-23-1996 14:46:19

```
**************************
*                        *
*  SUNSET RIDGE ESTEATES *
*  DETENTION BASIN "B"   *
*        10/23/96        *
*         J.O.Y.         *
*                        *
**************************
```

Inflow Hydrograph: projects\95-541\541B-15 .HYD
Rating Table file: projects\95-541\541B .PND

----INITIAL CONDITIONS----
Elevation = 582.05 ft
Outflow = 0.00 cfs
Storage = 13,785 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
582.05	0.0	13,785
582.30	0.0	18,343
582.55	0.0	23,001
582.80	20.5	27,761
583.05	23.6	32,624
583.30	26.4	37,591
583.55	28.9	42,662
583.80	31.3	47,840
584.05	33.4	53,124
584.30	35.5	58,517
584.55	37.4	64,017
584.80	39.2	69,625
585.05	41.3	75,344
585.30	48.4	81,174
585.55	58.5	87,117
585.80	70.8	93,172
586.05	85.0	99,342
586.30	100.7	105,626
586.55	117.8	112,026
586.80	136.1	118,542

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
459.5	459.5
611.4	611.4
766.7	766.7
925.4	945.9
1087.5	1111.1
1253.0	1279.4
1422.1	1451.0
1594.7	1626.0
1770.8	1804.2
1950.6	1986.1
2133.9	2171.3
2320.8	2360.0
2511.5	2552.8
2705.8	2754.2
2903.9	2962.4
3105.7	3176.5
3311.4	3396.4
3520.9	3621.6
3734.2	3852.0
3951.4	4087.5

Time increment (t) = 1.0 min.

POND-2 Version: 5.17 S/N:
EXECUTED: 10-23-1996 14:46:19

Pond File: projects\95-541\541B .PND
Inflow Hydrograph: projects\95-541\541B-15 .HYD
Outflow Hydrograph: projects\95-541\OUT .HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
0.0	58.91
1.0	58.91
2.0	58.91
3.0	58.91
4.0	58.91
5.0	58.91
6.0	58.91
7.0	58.91
8.0	58.91
9.0	58.91
10.0	58.91
11.0	58.91
12.0	58.91
13.0	58.91
14.0	58.91
15.0	58.91
16.0	58.91
17.0	58.91
18.0	58.91
19.0	58.91
20.0	58.91

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
-----	459.5	459.5	0.00	582.05
117.8	577.3	577.3	0.00	582.24
117.8	695.1	695.1	0.00	582.43
117.8	802.4	813.0	5.29	582.61
117.8	885.1	920.2	17.56	582.76
117.8	959.8	1002.9	21.57	582.89
117.8	1031.6	1077.6	22.97	583.00
117.8	1101.0	1149.4	24.24	583.11
117.8	1168.0	1218.8	25.39	583.21
117.8	1232.8	1285.8	26.49	583.31
117.8	1295.8	1350.7	27.44	583.40
117.8	1356.9	1413.6	28.36	583.50
117.8	1416.3	1474.7	29.23	583.58
117.8	1474.0	1534.1	30.04	583.67
117.8	1530.2	1591.8	30.83	583.75
117.8	1584.9	1648.0	31.56	583.83
117.8	1638.3	1702.7	32.20	583.91
117.8	1690.4	1756.1	32.83	583.98
117.8	1741.4	1808.2	33.45	584.06
117.8	1791.1	1859.2	34.03	584.13
117.8	1839.7	1908.9	34.61	584.19

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: projects\95-541\541B .PND
Inflow Hydrograph: projects\95-541\541B-15 .HYD
Outflow Hydrograph: projects\95-541\OUT .HYD

Starting Pond W.S. Elevation = 582.05 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow	=	58.91 cfs
Peak Outflow	=	34.61 cfs
Peak Elevation	=	584.19 ft

***** Summary of Approximate Peak Storage *****

Initial Storage	=	13,785 cu-ft
Peak Storage From Storm	=	42,445 cu-ft
Total Storage in Pond	=	56,230 cu-ft

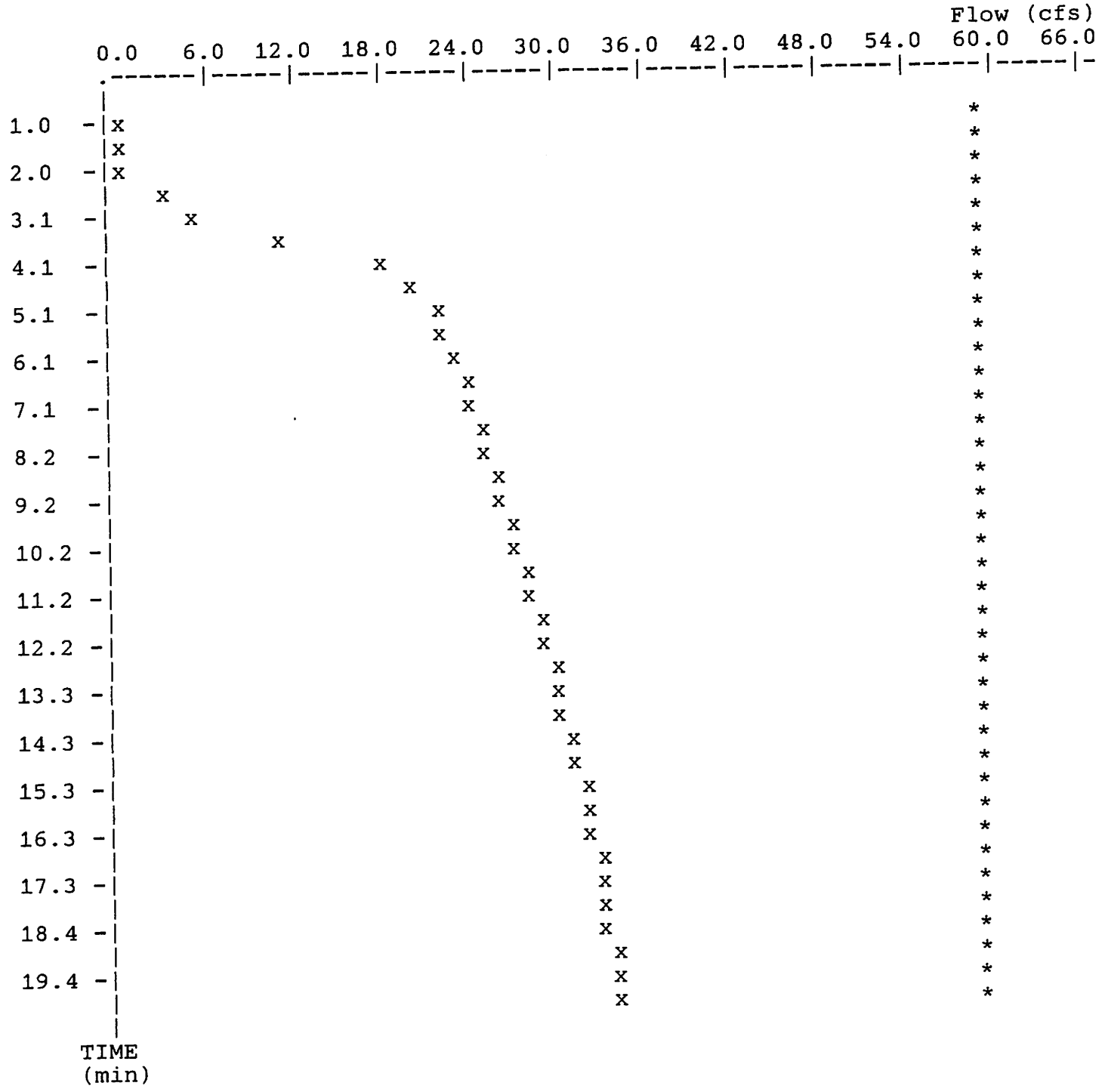
Warning: Inflow hydrograph truncated on left side.
Warning: Inflow hydrograph truncated on right side.

POND-2 Version: 5.17 S/N:

Pond File: projects\95-541\541B .PND
Inflow Hydrograph: projects\95-541\541B-15 .HYD
Outflow Hydrograph: projects\95-541\OUT .HYD

EXECUTED: 10-23-1996
14:46:19

Peak Inflow = 58.91 cfs
Peak Outflow = 34.61 cfs
Peak Elevation = 584.19 ft



x File: projects\95-541\541B-15 .HYD Qmax = 34.6 cfs
* File: projects\95-541\OUT .HYD Qmax = 58.9 cfs

POND-2 Version: 5.17 S/N:
EXECUTED: 10-23-1996 14:50:05

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**************************
*                        *
*   SUNSET RIDGE ESTEATES *
*   DETENTION BASIN "B"   *
*         10/23/96        *
*          J.O.Y.         *
*                        *
**************************
```

Inflow Hydrograph: projects\95-541\541B-25 .HYD
Rating Table file: projects\95-541\541B .PND

----INITIAL CONDITIONS----
Elevation = 582.05 ft
Outflow = 0.00 cfs
Storage = 13,785 cu-ft

GIVEN POND DATA			INTERMEDIATE ROUTING COMPUTATIONS	
ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)	2S/t (cfs)	2S/t + O (cfs)
582.05	0.0	13,785	459.5	459.5
582.30	0.0	18,343	611.4	611.4
582.55	0.0	23,001	766.7	766.7
582.80	20.5	27,761	925.4	945.9
583.05	23.6	32,624	1087.5	1111.1
583.30	26.4	37,591	1253.0	1279.4
583.55	28.9	42,662	1422.1	1451.0
583.80	31.3	47,840	1594.7	1626.0
584.05	33.4	53,124	1770.8	1804.2
584.30	35.5	58,517	1950.6	1986.1
584.55	37.4	64,017	2133.9	2171.3
584.80	39.2	69,625	2320.8	2360.0
585.05	41.3	75,344	2511.5	2552.8
585.30	48.4	81,174	2705.8	2754.2
585.55	58.5	87,117	2903.9	2962.4
585.80	70.8	93,172	3105.7	3176.5
586.05	85.0	99,342	3311.4	3396.4
586.30	100.7	105,626	3520.9	3621.6
586.55	117.8	112,026	3734.2	3852.0
586.80	136.1	118,542	3951.4	4087.5

Time increment (t) = 1.0 min.

POND-2 Version: 5.17 S/N:
EXECUTED: 10-23-1996 14:50:05

Pond File: projects\95-541\541B .PND
Inflow Hydrograph: projects\95-541\541B-25 .HYD
Outflow Hydrograph: projects\95-541\OUT .HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
0.0	72.73
1.0	72.73
2.0	72.73
3.0	72.73
4.0	72.73
5.0	72.73
6.0	72.73
7.0	72.73
8.0	72.73
9.0	72.73
10.0	72.73
11.0	72.73
12.0	72.73
13.0	72.73
14.0	72.73
15.0	72.73
16.0	72.73
17.0	72.73
18.0	72.73
19.0	72.73
20.0	72.73

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
-----	459.5	459.5	0.00	582.05
145.5	605.0	605.0	0.00	582.29
145.5	750.4	750.4	0.00	582.52
145.5	866.3	895.9	14.78	582.73
145.5	968.3	1011.8	21.74	582.90
145.5	1066.5	1113.8	23.65	583.05
145.5	1161.4	1211.9	25.28	583.20
145.5	1253.2	1306.8	26.80	583.34
145.5	1342.4	1398.7	28.14	583.47
145.5	1429.1	1487.9	29.41	583.60
145.5	1513.3	1574.5	30.59	583.73
145.5	1595.4	1658.8	31.69	583.85
145.5	1675.6	1740.9	32.65	583.96
145.5	1753.9	1821.0	33.59	584.07
145.5	1830.3	1899.3	34.50	584.18
145.5	1905.0	1975.8	35.38	584.29
145.5	1978.2	2050.5	36.16	584.39
145.5	2049.8	2123.6	36.91	584.49
145.5	2120.0	2195.2	37.63	584.58
145.5	2188.9	2265.5	38.30	584.67
145.5	2256.4	2334.3	38.95	584.77

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: projects\95-541\541B .PND
Inflow Hydrograph: projects\95-541\541B-25 .HYD
Outflow Hydrograph: projects\95-541\OUT .HYD

Starting Pond W.S. Elevation = 582.05 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow	=	72.73 cfs
Peak Outflow	=	38.95 cfs
Peak Elevation	=	584.77 ft

***** Summary of Approximate Peak Storage *****

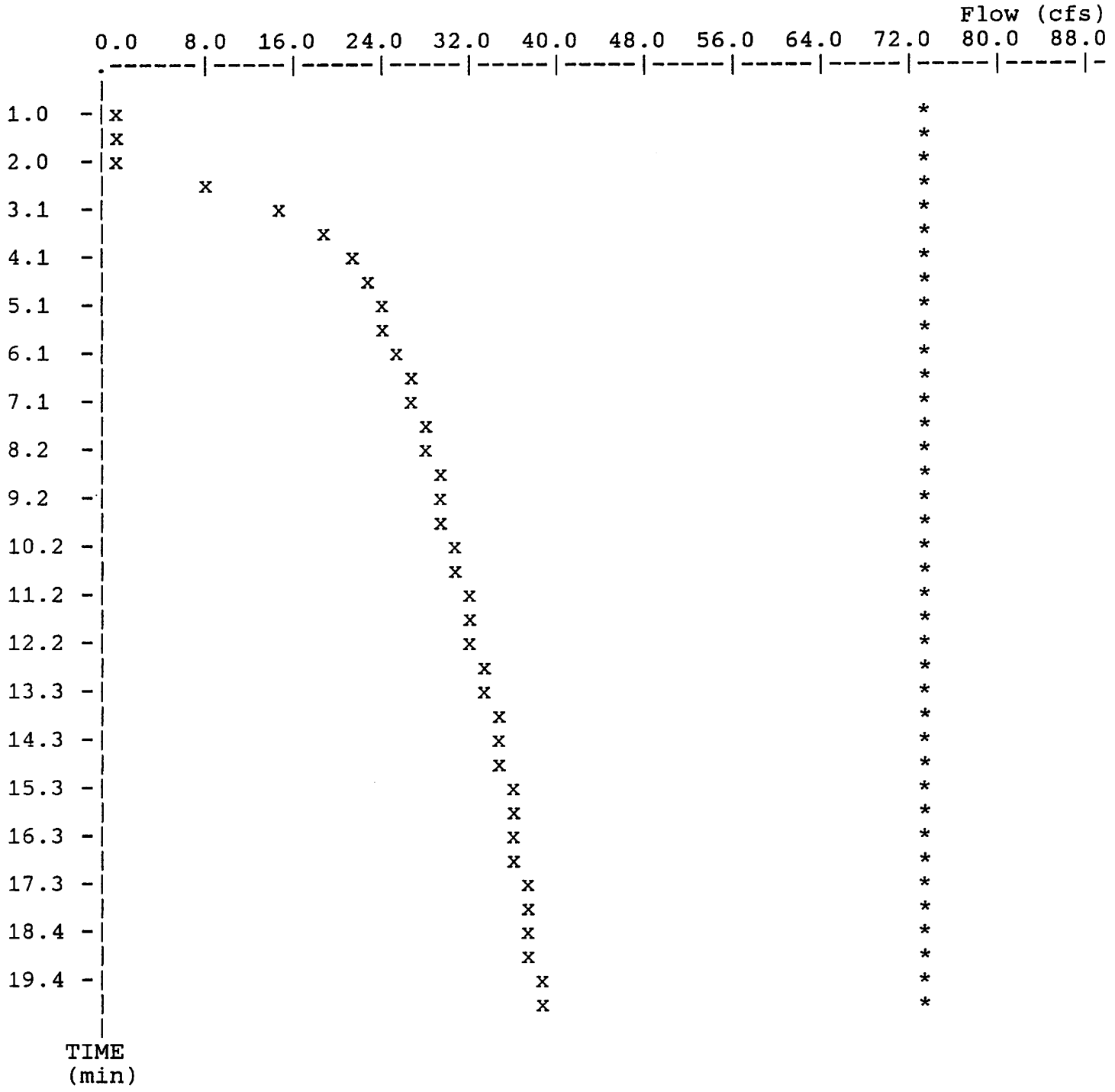
Initial Storage	=	13,785 cu-ft
Peak Storage From Storm	=	55,076 cu-ft
Total Storage in Pond	=	68,861 cu-ft

Warning: Inflow hydrograph truncated on left side.
Warning: Inflow hydrograph truncated on right side.

Pond File: projects\95-541\541B .PND
Inflow Hydrograph: projects\95-541\541B-25 .HYD
Outflow Hydrograph: projects\95-541\OUT .HYD

EXECUTED: 10-23-1996
14:50:05

Peak Inflow = 72.73 cfs
Peak Outflow = 38.95 cfs
Peak Elevation = 584.77 ft



x File: projects\95-541\541B-25 .HYD Qmax = 39.0 cfs
* File: projects\95-541\OUT .HYD Qmax = 72.7 cfs

```
**************************
*                        *
*   SUNSET RIDGE ESTEATES *
*   DETENTION BASIN "B"   *
*         10/23/96        *
*          J.O.Y.         *
*                        *
**************************
```

Inflow Hydrograph: projects\95-541\541B-100.HYD
Rating Table file: projects\95-541\541B .PND

----INITIAL CONDITIONS----
Elevation = 582.05 ft
Outflow = 0.00 cfs
Storage = 13,785 cu-ft

GIVEN POND DATA			INTERMEDIATE ROUTING COMPUTATIONS	
ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)	2S/t (cfs)	2S/t + O (cfs)
582.05	0.0	13,785	459.5	459.5
582.30	0.0	18,343	611.4	611.4
582.55	0.0	23,001	766.7	766.7
582.80	20.5	27,761	925.4	945.9
583.05	23.6	32,624	1087.5	1111.1
583.30	26.4	37,591	1253.0	1279.4
583.55	28.9	42,662	1422.1	1451.0
583.80	31.3	47,840	1594.7	1626.0
584.05	33.4	53,124	1770.8	1804.2
584.30	35.5	58,517	1950.6	1986.1
584.55	37.4	64,017	2133.9	2171.3
584.80	39.2	69,625	2320.8	2360.0
585.05	41.3	75,344	2511.5	2552.8
585.30	48.4	81,174	2705.8	2754.2
585.55	58.5	87,117	2903.9	2962.4
585.80	70.8	93,172	3105.7	3176.5
586.05	85.0	99,342	3311.4	3396.4
586.30	100.7	105,626	3520.9	3621.6
586.55	117.8	112,026	3734.2	3852.0
586.80	136.1	118,542	3951.4	4087.5

Time increment (t) = 1.0 min.

Pond File: projects\95-541\541B .PND
Inflow Hydrograph: projects\95-541\541B-100.HYD
Outflow Hydrograph: projects\95-541\OUT .HYD

INFLOW HYDROGRAPH		ROUTING COMPUTATIONS				
TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	93.03	-----	459.5	459.5	0.00	582.05
1.0	93.03	186.1	645.6	645.6	0.00	582.35
2.0	93.03	186.1	816.8	831.6	7.43	582.64
3.0	93.03	186.1	959.7	1002.8	21.57	582.89
4.0	93.03	186.1	1097.4	1145.7	24.18	583.10
5.0	93.03	186.1	1230.5	1283.5	26.46	583.31
6.0	93.03	186.1	1359.8	1416.6	28.40	583.50
7.0	93.03	186.1	1485.5	1545.9	30.20	583.69
8.0	93.03	186.1	1607.8	1671.5	31.84	583.86
9.0	93.03	186.1	1727.3	1793.9	33.28	584.04
10.0	93.03	186.1	1844.1	1913.4	34.66	584.20
11.0	93.03	186.1	1958.2	2030.1	35.95	584.36
12.0	93.03	186.1	2070.1	2144.3	37.12	584.51
13.0	93.03	186.1	2179.7	2256.1	38.21	584.66
14.0	93.03	186.1	2287.2	2365.8	39.26	584.81
15.0	93.03	186.1	2392.4	2473.3	40.43	584.95
16.0	93.03	186.1	2494.1	2578.5	42.21	585.08
17.0	93.03	186.1	2588.6	2680.1	45.79	585.21
18.0	93.03	186.1	2675.8	2774.6	49.39	585.32
19.0	93.03	186.1	2754.6	2861.9	53.62	585.43
20.0	93.03	186.1	2825.8	2940.7	57.45	585.52

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: projects\95-541\541B .PND
Inflow Hydrograph: projects\95-541\541B-100.HYD
Outflow Hydrograph: projects\95-541\OUT .HYD

Starting Pond W.S. Elevation = 582.05 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow	=	93.03 cfs
Peak Outflow	=	57.45 cfs
Peak Elevation	=	585.52 ft

***** Summary of Approximate Peak Storage *****

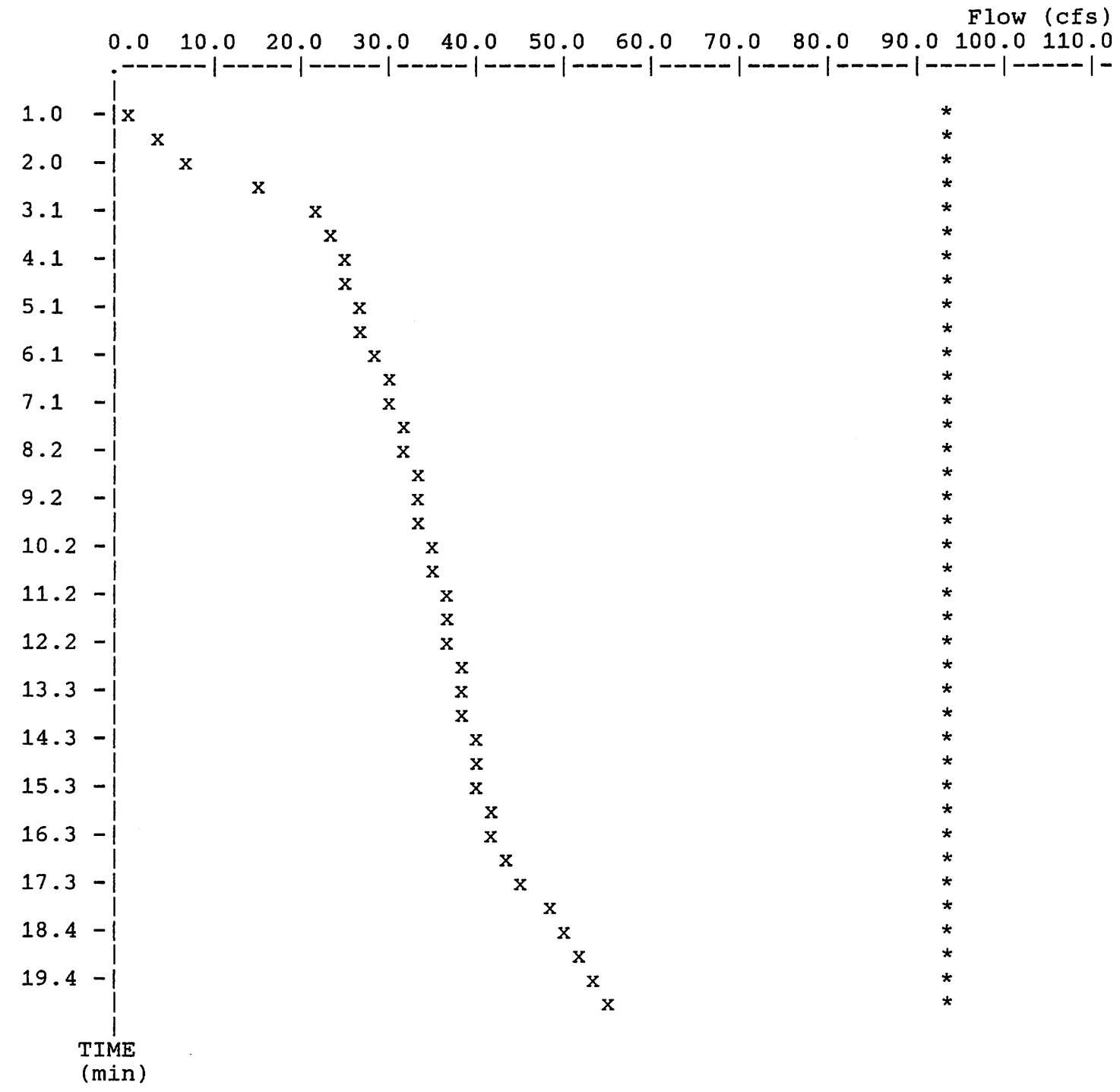
Initial Storage	=	13,785 cu-ft
Peak Storage From Storm	=	72,713 cu-ft
Total Storage in Pond	=	86,498 cu-ft

Warning: Inflow hydrograph truncated on left side.
Warning: Inflow hydrograph truncated on right side.

Pond File: projects\95-541\541B .PND
Inflow Hydrograph: projects\95-541\541B-100.HYD
Outflow Hydrograph: projects\95-541\OUT .HYD

EXECUTED: 10-23-1996
14:47:33

Peak Inflow = 93.03 cfs
Peak Outflow = 57.45 cfs
Peak Elevation = 585.52 ft



x File: projects\95-541\541B-100.HYD Qmax = 57.5 cfs
* File: projects\95-541\OUT .HYD Qmax = 93.0 cfs