



CERTIFICATE OF AUTHENTICITY

THIS IS TO CERTIFY THAT THE FOLLOWING ELECTRONIC RECORDS ARE TRUE AND ACCURATE REPRODUCTIONS OF THE ORIGINAL RECORDS OF JAMES CITY COUNTY GENERAL SERVICES DEPARTMENT- STORMWATER DIVISION; WERE SCANNED IN THE REGULAR COURSE OF BUSINESS PURSUANT TO GUIDELINES ESTABLISHED BY THE LIBRARY OF VIRGINIA AND ARCHIVES; AND HAVE BEEN VERIFIED IN THE CUSTODY OF THE INDIVIDUAL LISTED BELOW.

BMP NUMBER: CC-004

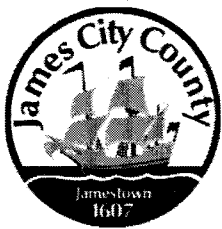
DATE VERIFIED: March 22, 2012

QUALITY ASSURANCE TECHNICIAN:

Leah Hardenbergh

Leah Hardenbergh

LOCATION: WILLIAMSBURG, VIRGINIA



Stormwater Division

MEMORANDUM

DATE: March 10, 2010
TO: Michael J. Gillis, Virginia Correctional Enterprises Document Management Services
FROM: Jo Anna Ripley, Stormwater
PO: 270712
RE: Files Approved for Scanning

General File ID or BMP ID: CC004

PIN: 4820100005C

Subdivision, Tract, Business or Owner

Name (if known):

Waltrip, Larry T

Property Description:

Waltrip Recycling

Site Address:

164 Waltrip Lane

(For internal use only)

Box 10

Drawer: 6

Agreements: (in file as of scan date)

N

Book or Doc#:

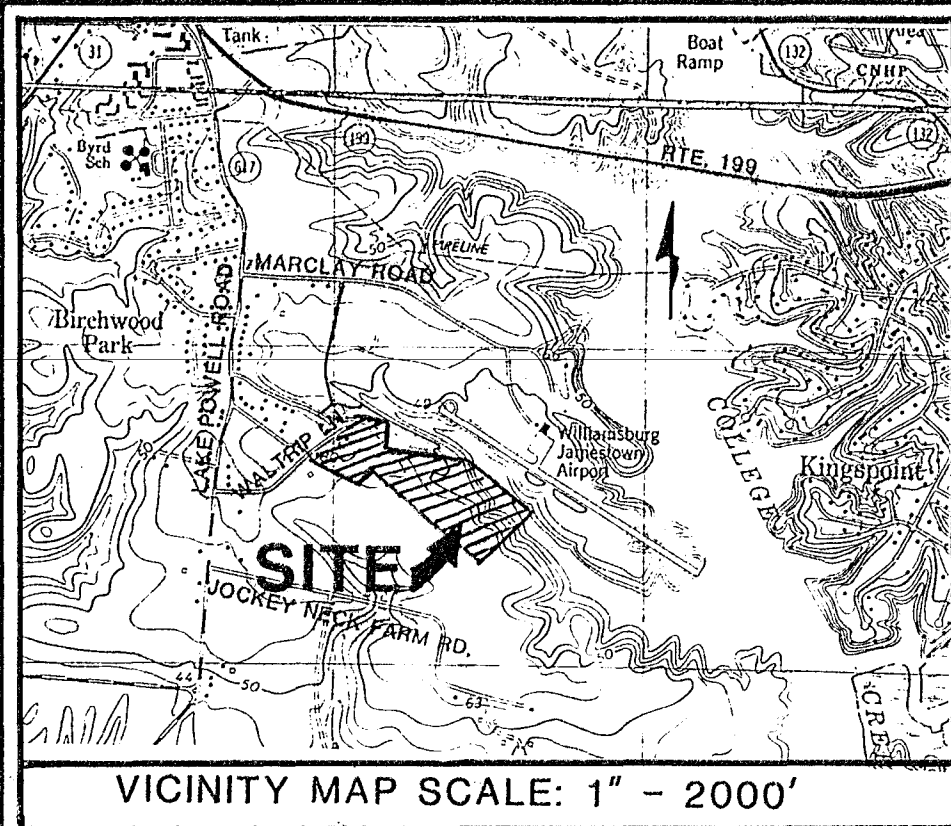
Page:

Comments

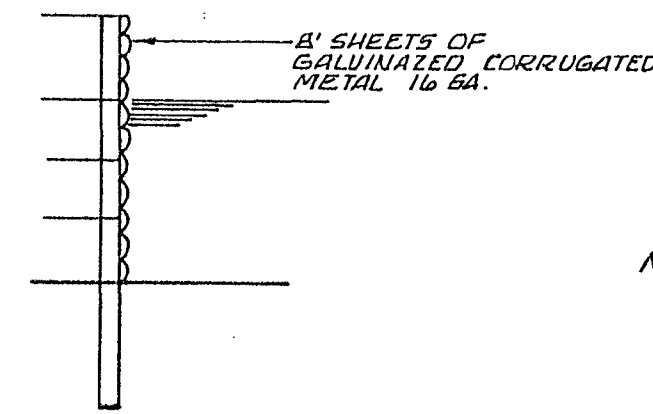
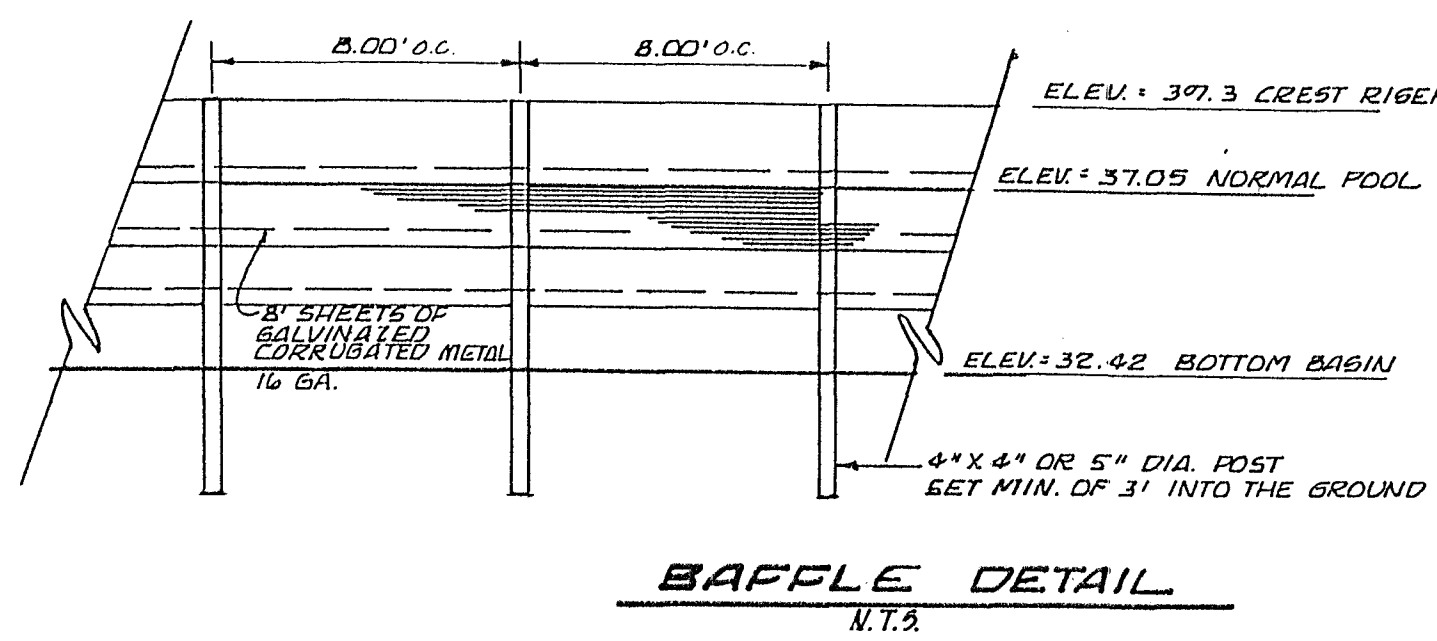
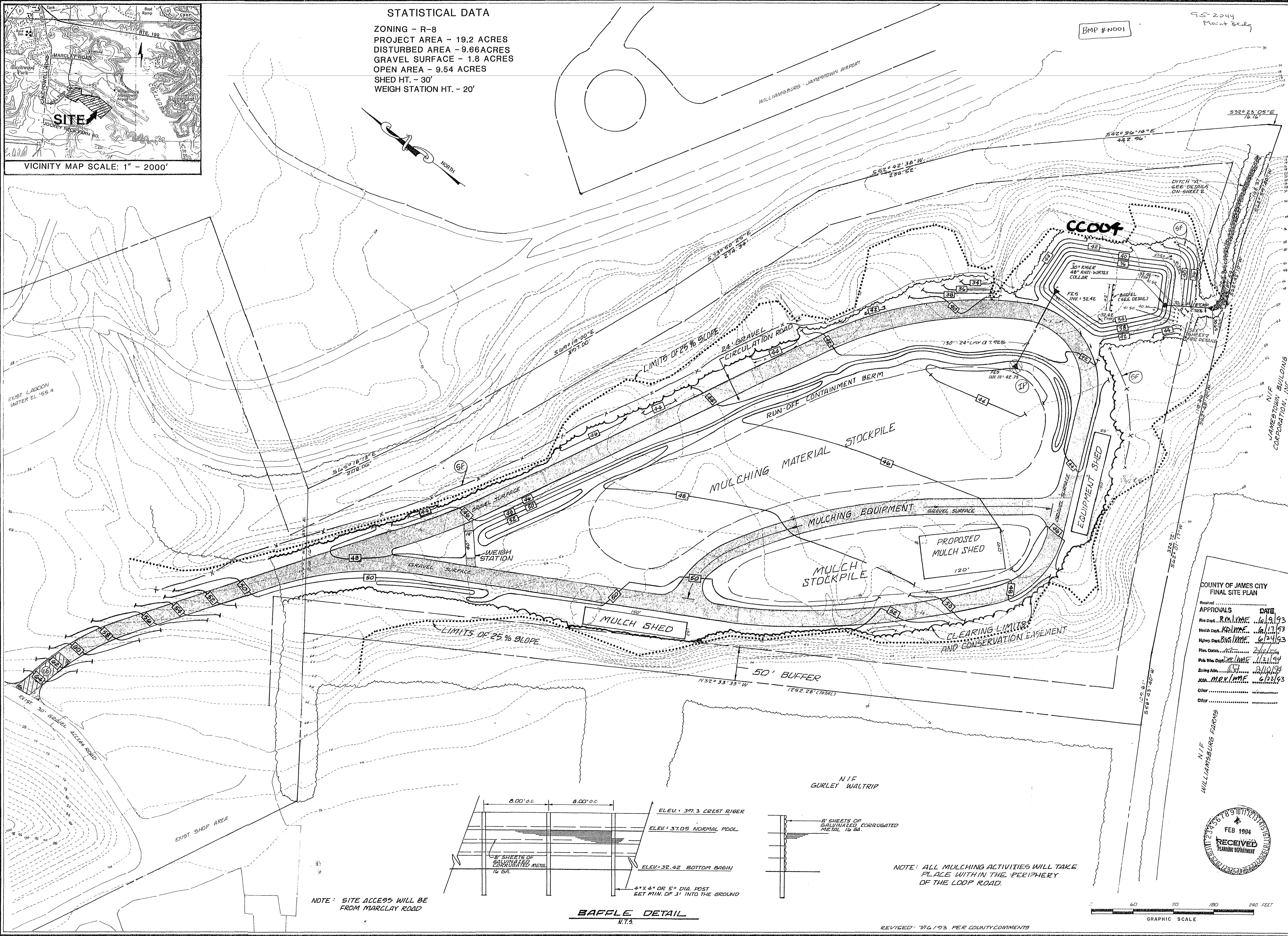
Contents for Stormwater Management Facilities As-built Files

Each file is to contain:

- ① As-built plan
2. Completed construction certification
3. Construction Plan
- ④ Design Calculations
5. Watershed Map
6. Maintenance Agreement
7. Correspondence with owners
8. Inspection Records
9. Enforcement Actions



STATISTICAL DATA
 ZONING - R-8
 PROJECT AREA - 19.2 ACRES
 DISTURBED AREA - 9.66 ACRES
 GRAVEL SURFACE - 1.8 ACRES
 OPEN AREA - 9.54 ACRES
 SHED HT. - 30'
 WEIGH STATION HT. - 20'

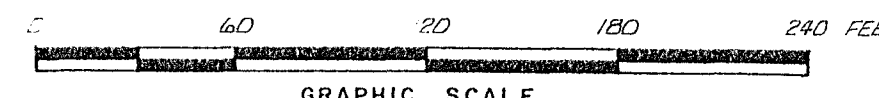
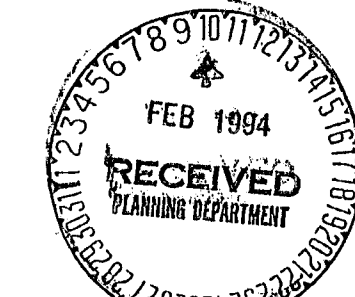


NOTE: ALL MULCHING ACTIVITIES WILL TAKE PLACE WITHIN THE PERIPHERY OF THE LOOP ROAD.

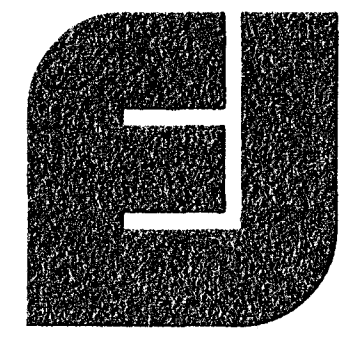
COUNTY OF JAMES CITY
FINAL SITE PLAN

APPROVALS	DATE
Plan Dept. <i>R.M. LIME</i>	6/9/93
Health Dept. <i>R.M. LIME</i>	6/13/93
Highway Dept. <i>R.M. LIME</i>	6/24/93
Plan Comm. <i>R.M. LIME</i>	6/24/93
Public Works Dept. <i>R.M. LIME</i>	1/31/94
Zoning Admin. <i>R.M. LIME</i>	2/10/94
JCS. <i>R.M. LIME</i>	6/22/93
Other	

N.I.F. WILLIAMSBURG FARMS



Langley and McDonald
 A PROFESSIONAL CORPORATION
 ENGINEERS • PLANNERS • SURVEYORS
 VIRGINIA BEACH - WILLIAMSBURG, VIRGINIA

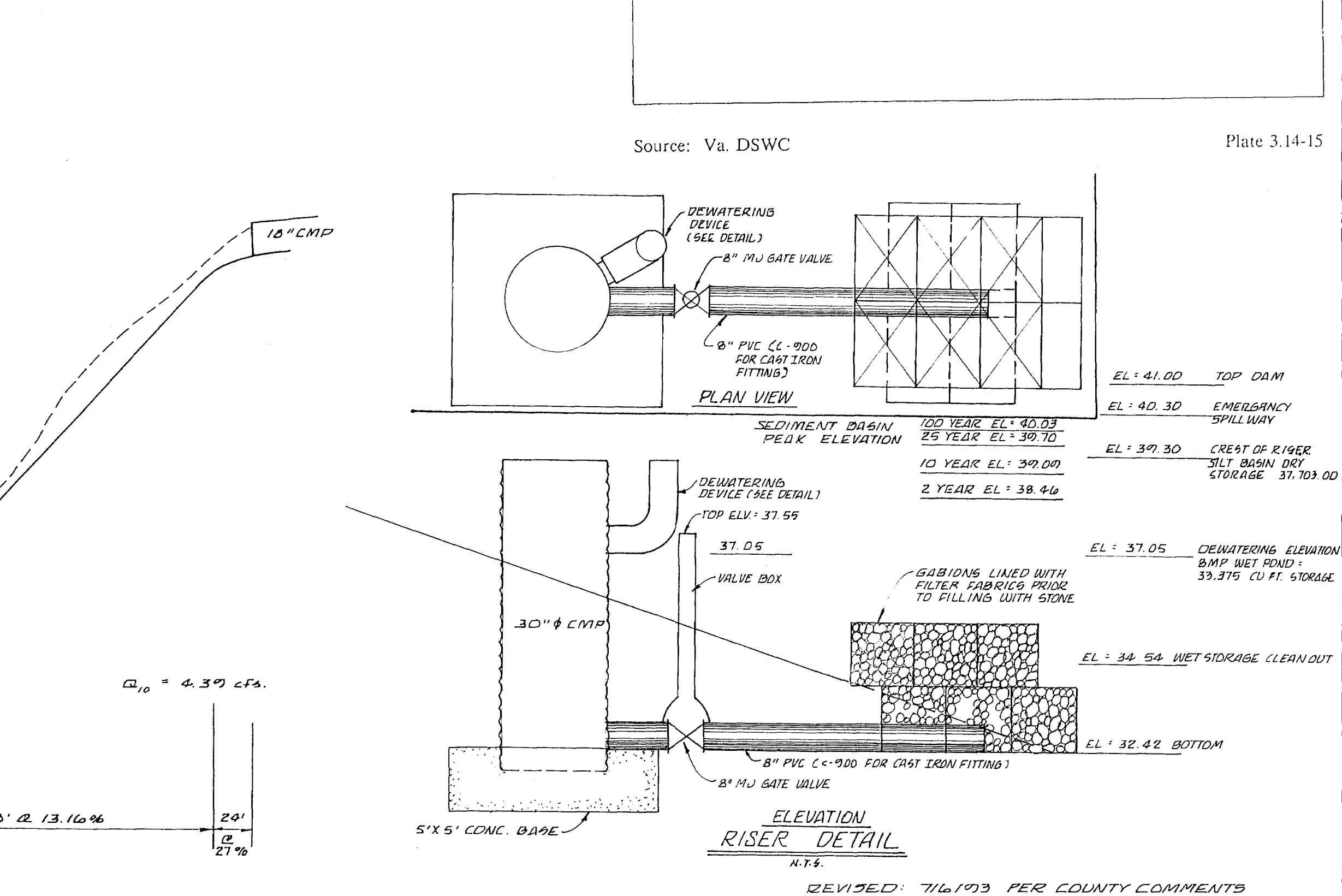
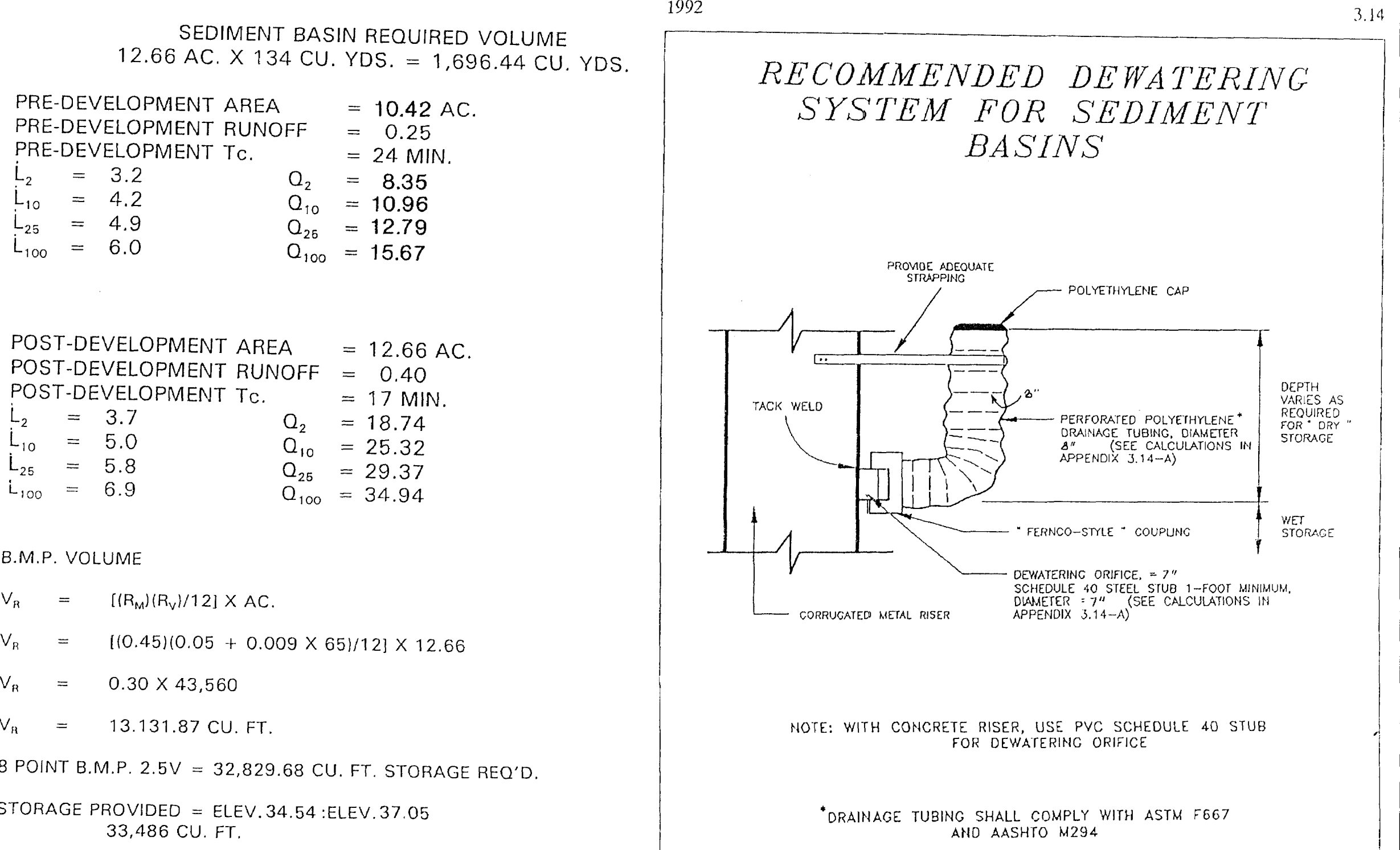
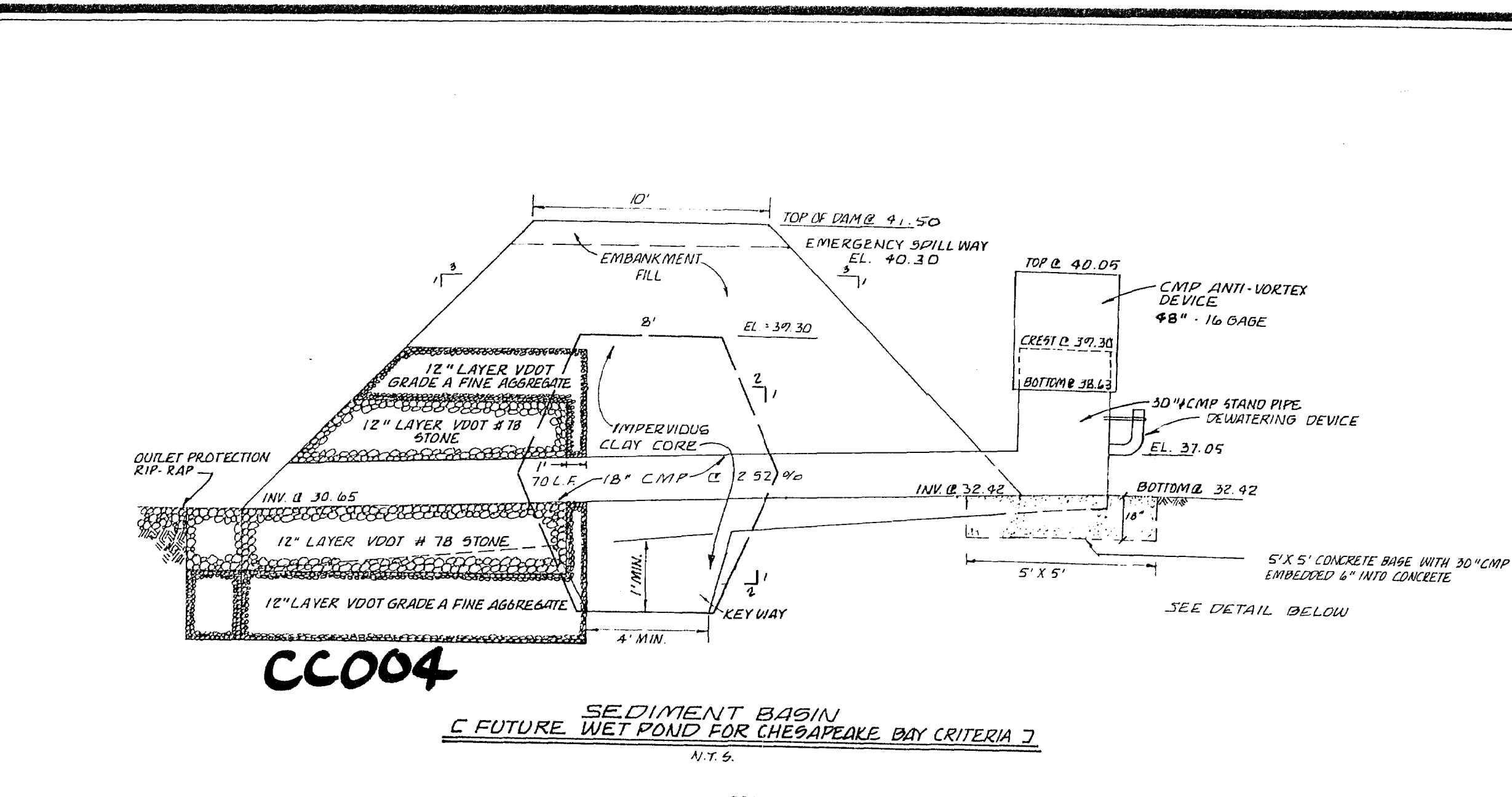
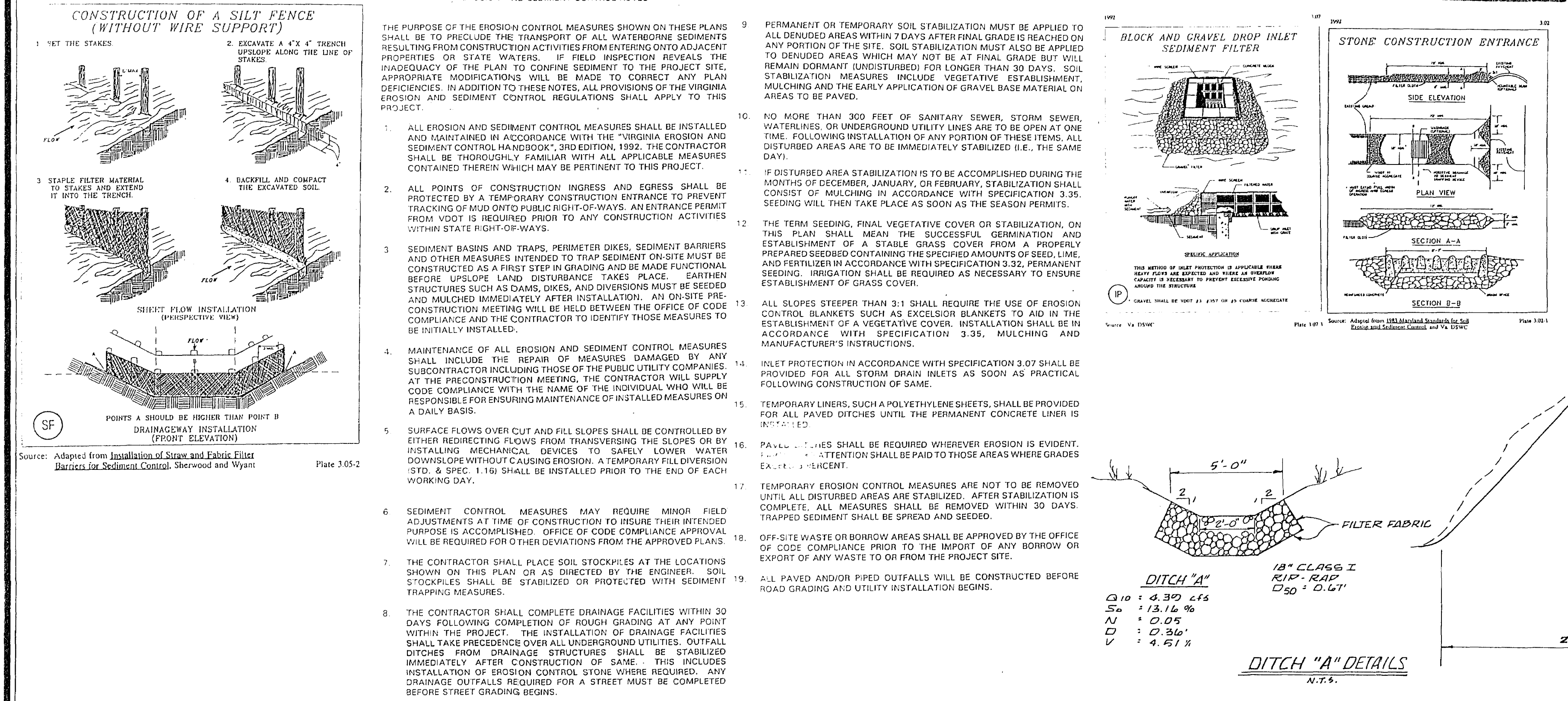
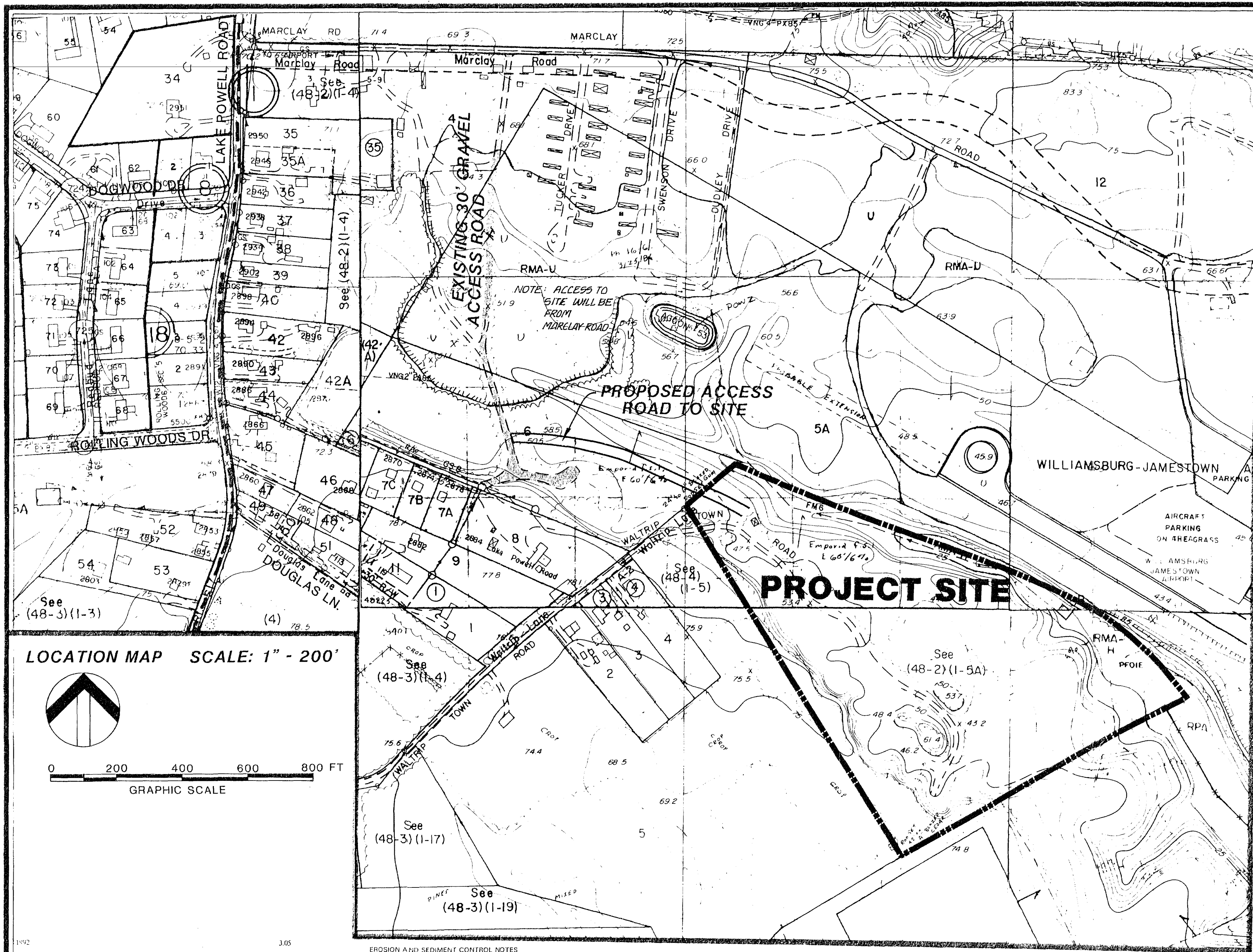


DES. CRO/WFB	HTB	CRO	DATE 5/28/93
DWN	HTB	CRO	
CHK.	HTB	CRO	

WALTRIP RECYCLING
 SITE PLAN
 JAMES CITY COUNTY, VIRGINIA

PROJ. NO.	93057
SCALE	1" = 60'
SHEET	1 OF 2
DWG.	4906W

SP-68-93



Langley and McDonald
A PROFESSIONAL CORPORATION
ENGINEERS • PLANNERS • SURVEYORS
VIRGINIA BEACH - WILLIAMSBURG, VIRGINIA

DES.	CRO/WFB
DWN.	HTB
CHK.	CRO
DATE	5/28/93

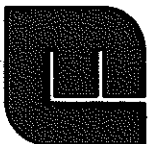
WALTRIP RECYCLING
NOTES, DETAILS & LOCATION MAP
JAMES CITY COUNTY, VIRGINIA

PROJ. NO. 93057
SCALE 1" = 60'
SHEET 2 OF 2
DWG. 4906AW

ok -
final calc's
7/30/93

WALTRIP RECYCLING
STORMWATER MANAGEMENT
SEDIMENT BASIN
BMP CALCULATIONS

JULY 29, 1993



Langley and McDonald

ENGINEERS • PLANNERS • SURVEYORS

5544 Greenwich Road, Virginia Beach, VA 23462 (804) 473-2000

201 Packets Court, Williamsburg, VA 23185 (804) 253-2975



 *
 *
 *
 *
 *
 *
 *
 *

MODIFIED RATIONAL METHOD
 ---- Grand Summary For All Storm Frequencies ----

First peak outflow point assumed to occur at inflow recession leg.

Waltrip Recycling
 Sediment Basin

Area = 12.66 acres

Tc = 17.00 minutes

						VOLUMES	
Frequency (years)	Adjusted 'C'	Duration minutes	Intens. in/hr	Qpeak cfs	Allowable cfs	Inflow (cu.ft.)	Storage (cu.ft.)
2	0.400	27	2.975	15.07	10.13	24,406	11,034
10	0.400	35	3.450	17.47	13.29	36,689	15,956
25	0.440	50	3.250	18.10	15.51	54,311	23,136
100	0.500	41	4.430	28.04	18.99	68,983	35,940

	Storm	Qpre	Qpost	Qout	Elev	Vs	
37.05	2-24	7.7	10.9	2.1	39.1	0.8	
39.3	10-24	16.1	20.3	8.4	40.2	1.3	
40.3	100-24	30.4	35.4	26.4	41.3	1.8	raise top of dam
w/	10-24	16.1	20.3	9.1	40.1	1.2	
C=1.0	"	"	"	10.2	40.0	1.2	
for 39.3	10-24	16.1	20.3	4.8	40.7	1.5	
37.05	10-24			13.0	39.8	1.1	
40.3	100-24			30.7	40.5	1.4	
41.3							

Outlet Structure File: WALTRIP2.BTR

POND-2 Version: 5.17

S/N: 1295130250

Date Executed:

Time Executed:

Waltrip Recycling

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

Elevation (ft)	Q (cfs)	Contributing Structures
37.05	0.0	3
37.25	0.1	3
37.45	0.3	3
37.65	0.4	3
37.85	0.9	2
38.05	1.1	2
38.25	1.2	2
38.45	1.3	2
38.65	1.5	2
38.85	1.6	2
39.05	1.7	2
39.25	1.8	2
39.45	3.3	2 +1
39.65	7.0	2 +1
39.85	11.9	2 +1
40.05	17.9	2 +1
40.25	24.7	2 +1
40.45	28.5	4 +2 +1
40.65	33.3	4 +2 +1
40.85	39.0	4 +2 +1
41.05	45.7	4 +2 +1
41.25	53.4	4 +2 +1
41.45	62.0	4 +2 +1
41.65	71.7	4 +2 +1
41.85	82.3	4 +2 +1
42.00	91.0	4 +2 +1

Outlet Structure File: WALTRIP2.STR

POND-2 Version: 5.17

S/N: 1295130250

Date Executed:

Time Executed:

Waltrip Recycling

Outlet Structure File: b:WALTRIP2.STR

Planimeter Input File: b:WALTRIP2.VOL

Rating Table Output File: b:WALTRIP2.PND

Min. Elev.(ft) = 37.05 Max. Elev.(ft) = 42 Incr.(ft) = .2

Additional elevations (ft) to be included in table:

* * * * *

SYSTEM CONNECTIVITY

Structure	No.	Q Table	Q Table
-----	---	-----	-----
WEIR-XY	4	->	4
TABLE	3	->	3
ORIFICE-VC	2	->	2
STAND PIPE	1	->	1

Outflow rating table summary was stored in file:
b:WALTRIP2.PND

Outlet Structure File: WALTRIP2.STR

POND-2 Version: 5.17
Date Executed:

S/N: 1295130250
Time Executed:

Waltrip Recycling

>>>>> Structure No. 4 <<<<<
(Input Data)

WEIR-XY

Weir - Defined by X, Y Coordinates

E1 (ft) = 40.3 E2 (ft) = 42.001

X dist.(ft)	Y elev.(ft)
0	42
4.1	40.3
9.1	40.3
11.2	42

Outlet Structure File: WALTRIP2.STR

POND-2 Version: 5.17

S/N: 1295130250

Date Executed:

Time Executed:

Waltrip Recycling

>>>>> Structure No. 3 <<<<<
(Input Data)

TABLE

Input your own rating table.

E1 (ft) =37.05 E2 (ft) =37.85

Constant (ft) added to each elevation was:

Elev. (ft)	Q (cfs)
-----	-----
37.05	0
37.25	.1
37.45	.3
37.65	.4
37.85	.6

Outlet Structure File: WALTRIP2.STR

POND-2 Version: 5.17
Date Executed:

S/N: 1295130250
Time Executed:

Waltrip Recycling

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

ORIFICE-VC
Orifice - Vertical Circular

E1 elev.(ft)?	37.85
E2 elev.(ft)?	42.001
Orifice coeff.?	.6
Invert elev.(ft)?	37.05
Datum elev.(ft)?	37.34
Diameter (ft)?	.58

Outlet Structure File: WALTRIP2.STR

POND-2 Version: 5.17

S/N: 1295130250

Date Executed:

Time Executed:

Waltrip Recycling

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

STAND PIPE

Stand Pipe with weir or orifice flow

E1 elev.(ft)?	39.3
E2 elev.(ft)?	42.001
Crest elev.(ft)?	39.30
Diameter (ft)?	2.5
Weir coefficient?	3.1
Orifice coefficient?	.6
Start transition elev.(ft) @ ?	
Transition height (ft)?	

MODIFIED RATIONAL METHOD

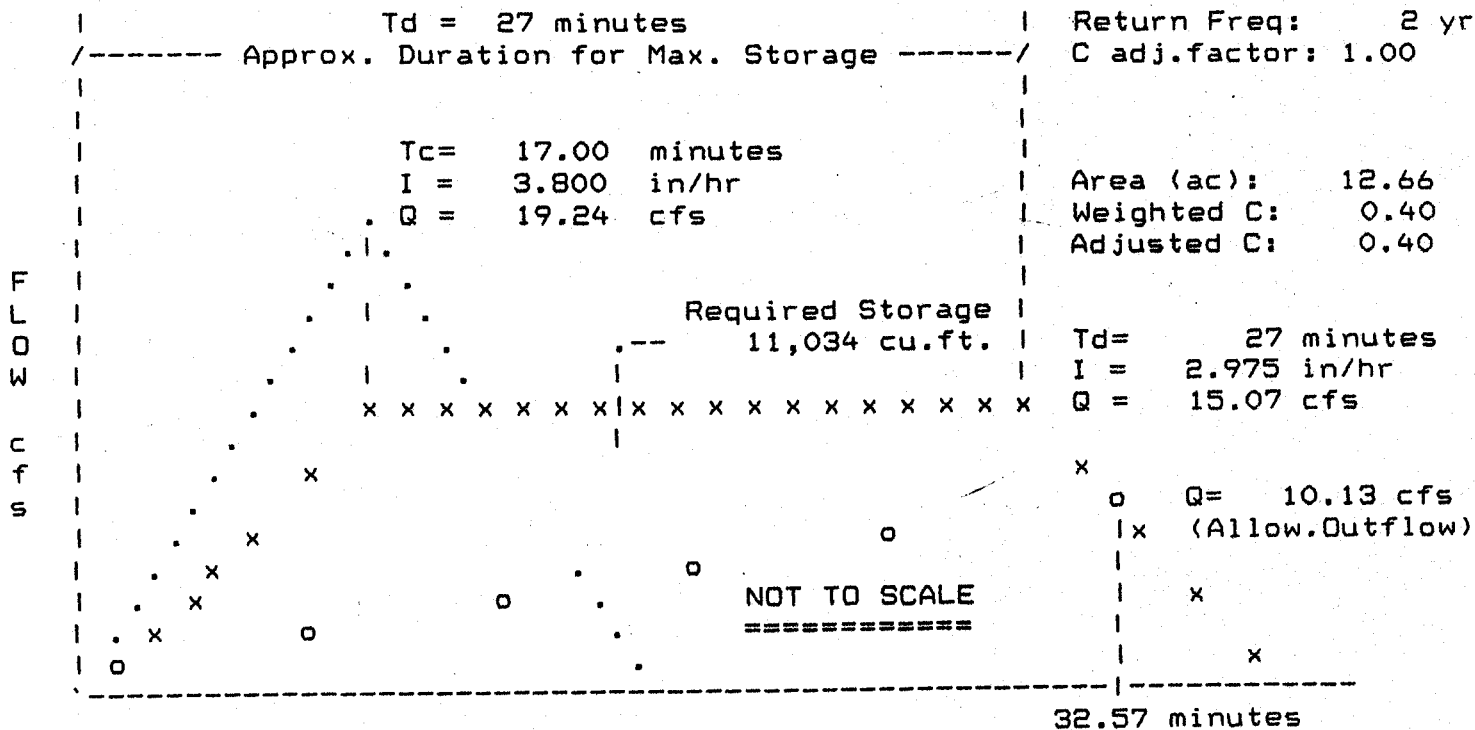
---- Graphical Summary for Maximum Required Storage ----

First peak outflow point assumed to occur at inflow recession leg.

Waltrip Recycling
Sediment Basin

* RETURN FREQUENCY: 2 yr | Allowable Outflow: 10.13 cfs *
* 'C' Adjustment: 1.000 | Required Storage: 11,034 cu.ft. *

* Peak Inflow: 15.07 cfs | Inflow .HYD stored: 2 IN W .HYD *



Quick TR-55 Ver.5.46 S/N:1315430271
Executed: 13:31:52 07-15-1993

Waltrip Recycling
Sediment Basin

**** Modified Rational Hydrograph ****

Weighted C = 0.400 Area= 12.660 acres Tc = 17.00 minutes

Adjusted C = 0.400 Td= 27.00 min. I= 2.97 in/hr Qp= 15.07 cfs

RETURN FREQUENCY: 2 year storm Adj.factor = 1.00

Output file: 2 IN W .HYD

HYDROGRAPH FOR MAXIMUM STORAGE
For the 2 Year Storm

Time	Time increment = 1.00 Minutes						
Minutes	Time on left represents time for first Q in each row.						
0.00	0.00	0.89	1.77	2.66	3.54	4.43	5.32
7.00	6.20	7.09	7.98	8.86	9.75	10.63	11.52
14.00	12.41	13.29	14.18	15.07	15.07	15.07	15.07
21.00	15.07	15.07	15.07	15.07	15.07	15.07	15.07
28.00	14.18	13.29	12.41	11.52	10.63	9.75	8.86
35.00	7.98	7.09	6.20	5.32	4.43	3.54	2.66
42.00	1.77	0.89	0.00				

Waltrip Recycling
Sediment Basin

* * * * * SUMMARY OF RATIONAL METHOD PEAK DISCHARGES * * * * *

$$Q = \text{adj} * C * I * A$$

Where: Q=cfs, C=Weighted Runoff Coefficient, I=in/hour, A=acres
adj = 'C' adjustment factor for each return frequency

RETURN FREQUENCY = 2 years
'C' adjustment, k = 1
Adj. 'C' = Wtd. 'C' x 1

Subarea Descr.	Runoff 'C'	Area acres	Tc (min)	Wtd. 'C'	Adj. 'C'	I in/hr	Total acres	Peak Q (cfs)
	0.400	12.66						
			17.00	0.400	0.400	3.800	12.66	19.24

Quick TR-55 Ver.5.46 S/N:1315430271
Executed: 13:31:52 07-15-1993

MODIFIED RATIONAL METHOD
----- Summary for Single Storm Frequency -----

First peak outflow point assumed to occur at inflow recession leg.

Waltrip Recycling
Sediment Basin

RETURN FREQUENCY: 2 yr 'C' Adjustment = 1.000 Allowable Q = 10.13 cfs

Hydrograph file duration= 27.00 minutes

Hydrograph file: 2 IN W .HYD

Tc = 17.00 minutes

.....

VOLUMES

Weighted 'C'	Adjusted 'C'	Duration minutes	Intens. in/hr	Areas acres	Qpeak cfs	Inflow (cu.ft.)	Storage (cu.ft.)
0.400	0.400	17	3.800	12.66	19.24	19,628	9,295
0.400	0.400	20	3.500	12.66	17.72	21,269	10,025

***** Storage Maximum

0.400	0.400	27	2.975	12.66	15.07	24,406	11,034
-------	-------	----	-------	-------	-------	--------	--------

0.400	0.400	30	2.750	12.66	13.93	25,067	10,784
0.400	0.400	40	2.250	12.66	11.39	27,346	10,023
0.400	0.400	50	2.000	12.66	10.13	Qpeak < Qallow	

 *
 * Waltrip Recycling *
 *
 *
 *
 *

Inflow Hydrograph: b:2 IN W .HYD
 Rating Table file: b:WALTRIP2.PND

----INITIAL CONDITIONS----
 Elevation = 37.05 ft
 Outflow = 0.00 cfs
 Storage = 0 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
37.05	0.0	0
37.25	0.1	3,084
37.45	0.3	6,216
37.65	0.4	9,396
37.85	0.9	12,625
38.05	1.1	15,903
38.25	1.2	19,241
38.45	1.3	22,642
38.65	1.5	26,106
38.85	1.6	29,636
39.05	1.7	33,230
39.25	1.8	36,890
39.45	3.3	40,616
39.65	7.0	44,409
39.85	11.9	48,269
40.05	17.9	52,198
40.25	24.7	56,188
40.45	28.5	60,238
40.65	33.3	64,349
40.85	39.0	68,520
41.05	45.7	72,752
41.25	53.4	77,032
41.45	62.0	81,355
41.65	71.7	85,721
41.85	82.3	90,131
42.00	91.0	93,467

INTERMEDIATE ROUTING
 COMPUTATIONS

2S/t (cfs)	2S/t + 0 (cfs)
0.0	0.0
102.8	102.9
207.1	207.4
313.1	313.5
420.7	421.6
530.0	531.1
641.2	642.4
754.6	755.9
870.0	871.5
987.7	989.3
1107.4	1109.1
1229.4	1231.2
1353.6	1356.9
1480.0	1487.0
1608.7	1620.6
1739.6	1757.5
1872.6	1897.3
2007.5	2036.0
2144.5	2177.8
2283.5	2322.5
2424.6	2470.3
2567.2	2620.6
2711.3	2773.3
2856.8	2928.5
3003.8	3086.1
3114.9	3205.9

Time increment (t) = 1.0 min.

Pond File: b:WALTRIP2.PND
 Inflow Hydrograph: b:2 IN W .HYD
 Outflow Hydrograph: b:2 OUT .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	0.00	----	0.0	0.0	0.00	37.05
1.0	0.89	0.9	0.9	0.9	0.00	37.05
2.0	1.77	2.7	3.5	3.5	0.00	37.06
3.0	2.66	4.4	8.0	8.0	0.01	37.07
4.0	3.54	6.2	14.1	14.2	0.01	37.08
5.0	4.43	8.0	22.1	22.1	0.02	37.09
6.0	5.32	9.8	31.7	31.8	0.03	37.11
7.0	6.20	11.5	43.2	43.3	0.04	37.13
8.0	7.09	13.3	56.4	56.5	0.05	37.16
9.0	7.98	15.1	71.3	71.4	0.07	37.19
10.0	8.86	16.8	88.0	88.1	0.09	37.22
11.0	9.75	18.6	106.4	106.6	0.11	37.26
12.0	10.63	20.4	126.4	126.7	0.15	37.30
13.0	11.52	22.2	148.2	148.6	0.19	37.34
14.0	12.41	23.9	171.7	172.1	0.23	37.38
15.0	13.29	25.7	196.8	197.4	0.28	37.43
16.0	14.18	27.5	223.7	224.3	0.32	37.48
17.0	15.07	29.3	252.2	252.9	0.34	37.54
18.0	15.07	30.1	281.6	282.4	0.37	37.59
19.0	15.07	30.1	311.0	311.8	0.40	37.65
20.0	15.07	30.1	340.1	341.1	0.53	37.70
21.0	15.07	30.1	368.9	370.2	0.66	37.75
22.0	15.07	30.1	397.4	399.0	0.80	37.81
23.0	15.07	30.1	425.7	427.6	0.91	37.86
24.0	15.07	30.1	454.0	455.9	0.96	37.91
25.0	15.07	30.1	482.1	484.1	1.01	37.96
26.0	15.07	30.1	510.1	512.2	1.07	38.02
27.0	15.07	30.1	538.0	540.2	1.11	38.07
28.0	14.18	29.3	565.0	567.2	1.13	38.11
29.0	13.29	27.5	590.1	592.5	1.16	38.16
30.0	12.41	25.7	613.5	615.8	1.18	38.20
31.0	11.52	23.9	635.0	637.4	1.20	38.24
32.0	10.63	22.2	654.8	657.2	1.21	38.28
33.0	9.75	20.4	672.7	675.1	1.23	38.31
34.0	8.86	18.6	688.8	691.3	1.24	38.34
35.0	7.98	16.8	703.1	705.6	1.26	38.36
36.0	7.09	15.1	715.7	718.2	1.27	38.38
37.0	6.20	13.3	726.4	729.0	1.28	38.40
38.0	5.32	11.5	735.4	737.9	1.28	38.42
39.0	4.43	9.8	742.5	745.1	1.29	38.43
40.0	3.54	8.0	747.9	750.5	1.30	38.44
41.0	2.66	6.2	751.5	754.1	1.30	38.45
42.0	1.77	4.4	753.3	755.9	1.30	38.45
43.0	0.89	2.7	753.4	756.0	1.30	38.45
44.0	0.00	0.9	751.7	754.3	1.30	38.45

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

Pond File: b:WALTRIP2.PND
Inflow Hydrograph: b:2 IN W .HYD
Outflow Hydrograph: b:2 OUT .HYD

Starting Pond W.S. Elevation = 37.05 ft

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

Peak Inflow	=	15.07 cfs
Peak Outflow	=	1.30 cfs
Peak Elevation	=	38.45 ft

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

Initial Storage	=	0 cu-ft
Peak Storage From Storm	=	22,645 cu-ft

Total Storage in Pond	=	22,645 cu-ft

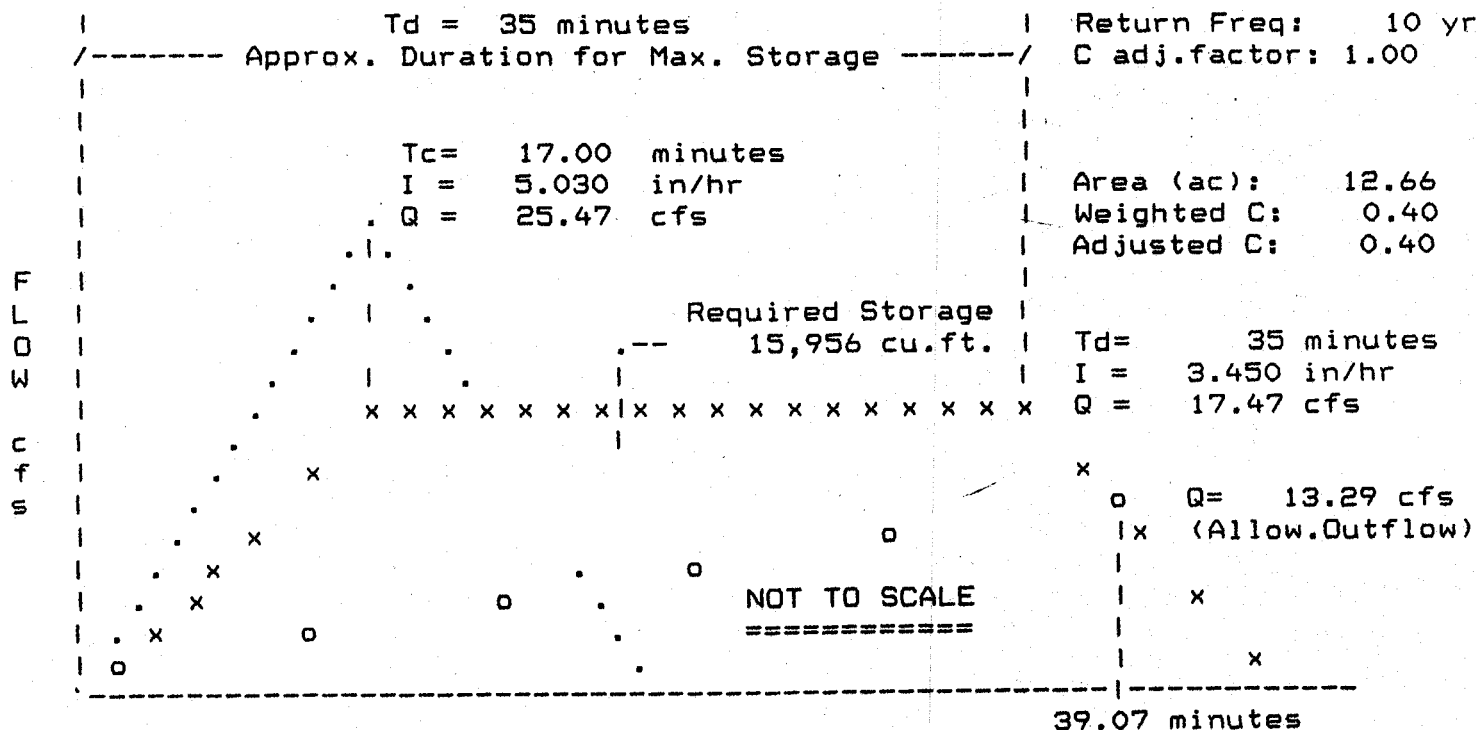
MODIFIED RATIONAL METHOD

---- Graphical Summary for Maximum Required Storage ----

First peak outflow point assumed to occur at inflow recession leg.

Waltrip Recycling
Sediment Basin

```
*****
* RETURN FREQUENCY: 10 yr | Allowable Outflow: 13.29 cfs *
* 'C' Adjustment: 1.000 | Required Storage: 15,956 cu.ft. *
*-----*
* Peak Inflow: 17.47 cfs | Inflow .HYD stored: 10 IN W .HYD *
*****
```



Quick TR-55 Ver.5.46 S/N:1315430271
Executed: 13:31:52 07-15-1993

Waltrip Recycling
Sediment Basin

**** Modified Rational Hydrograph ****

Weighted C = 0.400 Area= 12.660 acres Tc = 17.00 minutes

Adjusted C = 0.400 Td= 35.00 min. I= 3.45 in/hr Qp= 17.47 cfs

RETURN FREQUENCY: 10 year storm Adj.factor = 1.00

Output file: 10 IN W .HYD

HYDROGRAPH FOR MAXIMUM STORAGE
For the 10 Year Storm

Time	Time increment = 1.00 Minutes						
Minutes	Time on left represents time for first Q in each row.						
0.00	0.00	1.03	2.06	3.08	4.11	5.14	6.17
7.00	7.19	8.22	9.25	10.28	11.30	12.33	13.36
14.00	14.39	15.42	16.44	17.47	17.47	17.47	17.47
21.00	17.47	17.47	17.47	17.47	17.47	17.47	17.47
28.00	17.47	17.47	17.47	17.47	17.47	17.47	17.47
35.00	17.47	16.44	15.42	14.39	13.36	12.33	11.30
42.00	10.28	9.25	8.22	7.19	6.17	5.14	4.11
49.00	3.08	2.06	1.03	0.00			

Quick TR-55 Ver.5.46 S/N:1315430271
Executed: 13:31:52 07-15-1993

Waltrip Recycling
Sediment Basin

* * * * * SUMMARY OF RATIONAL METHOD PEAK DISCHARGES * * * * *

$$Q = \text{adj} * C * I * A$$

Where: Q=cfs, C=Weighted Runoff Coefficient, I=in/hour, A=acres
adj = 'C' adjustment factor for each return frequency

RETURN FREQUENCY = 10 years
'C' adjustment, k = 1
Adj. 'C' = Wtd.'C' x 1

Subarea Descr.	Runoff 'C'	Area acres	Tc (min)	Wtd. 'C'	Adj. 'C'	I in/hr	Total acres	Peak Q (cfs)
	0.400	12.66						
			17.00	0.400	0.400	5.030	12.66	25.47

Quick TR-55 Ver.5.46 S/N:1315430271
Executed: 13:31:52 07-15-1993

MODIFIED RATIONAL METHOD
---- Summary for Single Storm Frequency ----

First peak outflow point assumed to occur at inflow recession leg.

Waltrip Recycling
Sediment Basin

RETURN FREQUENCY: 10 yr 'C' Adjustment = 1.000 Allowable Q = 13.29 cfs

Hydrograph file duration= 35.00 minutes

Hydrograph file: 10 IN W .HYD

Tc = 17.00 minutes

.....
VOLUMES

Weighted 'C'	Adjusted 'C'	Duration minutes	Intens. in/hr	Areas acres	Qpeak cfs	Inflow (cu.ft.)	Storage (cu.ft.)
0.400	0.400	17	5.030	12.66	25.47	25,981	12,426
0.400	0.400	20	4.700	12.66	23.80	28,561	13,809
0.400	0.400	30	3.750	12.66	18.99	34,182	15,443
***** Storage Maximum							
0.400	0.400	35	3.450	12.66	17.47	36,689	15,956

0.400	0.400	40	3.150	12.66	15.95	38,284	15,558
0.400	0.400	50	2.750	12.66	13.93	41,778	15,065
0.400	0.400	60	2.450	12.66	12.41	Qpeak < Qallow	

```
*****
*
*   Waltrip Recycling
*
*
*
*
*
*****
```

Inflow Hydrograph: b:10 IN W .HYD
 Rating Table file: b:WALTRIP2.PND

-----INITIAL CONDITIONS-----

Elevation = 37.05 ft
 Outflow = 0.00 cfs
 Storage = 0 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
37.05	0.0	0
37.25	0.1	3,084
37.45	0.3	6,216
37.65	0.4	9,396
37.85	0.9	12,625
38.05	1.1	15,903
38.25	1.2	19,241
38.45	1.3	22,642
38.65	1.5	26,106
38.85	1.6	29,636
39.05	1.7	33,230
39.25	1.8	36,890
39.45	3.3	40,616
39.65	7.0	44,409
39.85	11.9	48,269
40.05	17.9	52,198
40.25	24.7	56,188
40.45	28.5	60,238
40.65	33.3	64,349
40.85	39.0	68,520
41.05	45.7	72,752
41.25	53.4	77,032
41.45	62.0	81,355
41.65	71.7	85,721
41.85	82.3	90,131
42.00	91.0	93,467

INTERMEDIATE ROUTING
 COMPUTATIONS

2S/t (cfs)	2S/t + 0 (cfs)
0.0	0.0
102.8	102.9
207.1	207.4
313.1	313.5
420.7	421.6
530.0	531.1
641.2	642.4
754.6	755.9
870.0	871.5
987.7	989.3
1107.4	1109.1
1229.4	1231.2
1353.6	1356.9
1480.0	1487.0
1608.7	1620.6
1739.6	1757.5
1872.6	1897.3
2007.5	2036.0
2144.5	2177.8
2283.5	2322.5
2424.6	2470.3
2567.2	2620.6
2711.3	2773.3
2856.8	2928.5
3003.8	3086.1
3114.9	3205.9

Time increment (t) = 1.0 min.

Pond File: b:WALTRIP2.PND
 Inflow Hydrograph: b:10 IN W .HYD
 Outflow Hydrograph: b:10 OUT .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	0.00	----	0.0	0.0	0.00	37.05
1.0	1.03	1.0	1.0	1.0	0.00	37.05
2.0	2.06	3.1	4.1	4.1	0.00	37.06
3.0	3.08	5.1	9.2	9.2	0.01	37.07
4.0	4.11	7.2	16.4	16.4	0.02	37.08
5.0	5.14	9.3	25.6	25.6	0.02	37.10
6.0	6.17	11.3	36.8	36.9	0.04	37.12
7.0	7.19	13.4	50.1	50.2	0.05	37.15
8.0	8.22	15.4	65.4	65.5	0.06	37.18
9.0	9.25	17.5	82.7	82.8	0.08	37.21
10.0	10.28	19.5	102.0	102.2	0.10	37.25
11.0	11.30	21.6	123.3	123.6	0.14	37.29
12.0	12.33	23.6	146.6	146.9	0.18	37.33
13.0	13.36	25.7	171.8	172.3	0.23	37.38
14.0	14.39	27.8	199.0	199.6	0.28	37.43
15.0	15.42	29.8	228.2	228.8	0.32	37.49
16.0	16.44	31.9	259.3	260.0	0.35	37.55
17.0	17.47	33.9	292.5	293.2	0.38	37.61
18.0	17.47	34.9	326.5	327.4	0.46	37.68
19.0	17.47	34.9	360.2	361.4	0.62	37.74
20.0	17.47	34.9	393.6	395.1	0.78	37.80
21.0	17.47	34.9	426.7	428.5	0.91	37.86
22.0	17.47	34.9	459.7	461.6	0.97	37.92
23.0	17.47	34.9	492.5	494.6	1.03	37.98
24.0	17.47	34.9	525.3	527.5	1.09	38.04
25.0	17.47	34.9	558.0	560.2	1.13	38.10
26.0	17.47	34.9	590.6	592.9	1.16	38.16
27.0	17.47	34.9	623.2	625.5	1.18	38.22
28.0	17.47	34.9	655.7	658.1	1.21	38.28
29.0	17.47	34.9	688.1	690.6	1.24	38.33
30.0	17.47	34.9	720.5	723.1	1.27	38.39
31.0	17.47	34.9	752.9	755.5	1.30	38.45
32.0	17.47	34.9	785.1	787.8	1.36	38.51
33.0	17.47	34.9	817.2	820.1	1.41	38.56
34.0	17.47	34.9	849.2	852.2	1.47	38.62
35.0	17.47	34.9	881.2	884.2	1.51	38.67
36.0	16.44	33.9	912.0	915.1	1.54	38.72
37.0	15.42	31.9	940.7	943.9	1.56	38.77
38.0	14.39	29.8	967.4	970.5	1.58	38.82
39.0	13.36	27.8	991.9	995.1	1.60	38.86
40.0	12.33	25.7	1014.4	1017.6	1.62	38.90
41.0	11.30	23.6	1034.7	1038.0	1.64	38.93
42.0	10.28	21.6	1053.0	1056.3	1.66	38.96
43.0	9.25	19.5	1069.2	1072.5	1.67	38.99
44.0	8.22	17.5	1083.3	1086.6	1.68	39.01

POND-2 Version: 5.17 S/N: 1295130250
EXECUTED: 07-15-1993 13:09:06

Page 3
Return Freq: 10 years

Pond File: b:WALTRIP2.PND
Inflow Hydrograph: b:10 IN W .HYD
Outflow Hydrograph: b:10 OUT .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
45.0	7.19	15.4	1095.3	1098.7	1.69	39.03
46.0	6.17	13.4	1105.3	1108.7	1.70	39.05
47.0	5.14	11.3	1113.2	1116.6	1.71	39.06
48.0	4.11	9.3	1119.0	1122.4	1.71	39.07
49.0	3.08	7.2	1122.7	1126.2	1.71	39.08
50.0	2.06	5.1	1124.5	1127.9	1.72	39.08
51.0	1.03	3.1	1124.1	1127.5	1.72	39.08
52.0	0.00	1.0	1121.7	1125.1	1.71	39.08

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

Pond File: b:WALTRIP2.PND
Inflow Hydrograph: b:10 IN W .HYD
Outflow Hydrograph: b:10 OUT .HYD

Starting Pond W.S. Elevation = 37.05 ft

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

Peak Inflow	=	17.47 cfs
Peak Outflow	=	1.72 cfs
Peak Elevation	=	39.08 ft

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

Initial Storage	=	0 cu-ft
Peak Storage From Storm	=	33,792 cu-ft

Total Storage in Pond	=	33,792 cu-ft

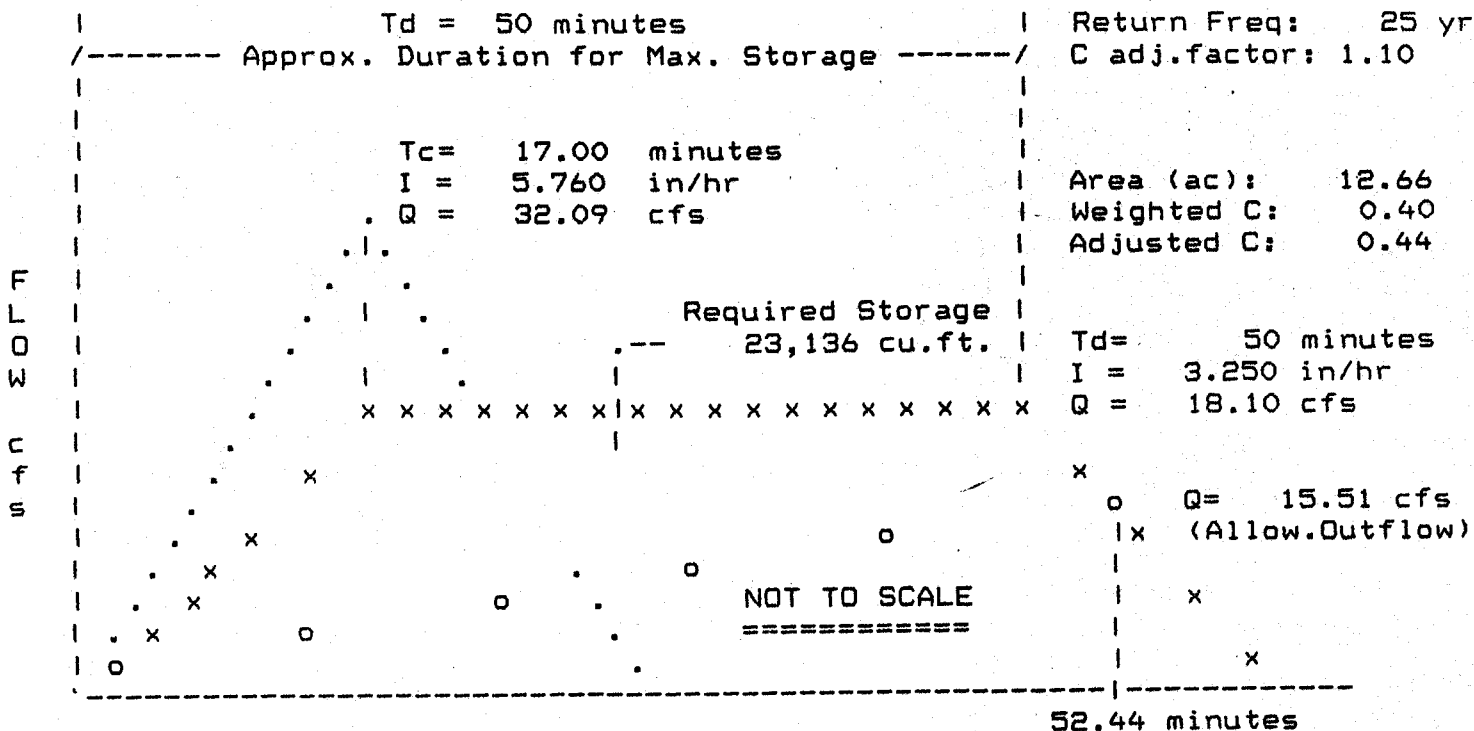
MODIFIED RATIONAL METHOD
 ---- Graphical Summary for Maximum Required Storage ----

First peak outflow point assumed to occur at inflow recession leg.

Waltrip Recycling
 Sediment Basin

 * RETURN FREQUENCY: 25 yr | Allowable Outflow: 15.51 cfs *
 * 'C' Adjustment: 1.100 | Required Storage: 23,136 cu.ft. *

 * Peak Inflow: 18.10 cfs | Inflow .HYD stored: 25 IN W .HYD *



Quick TR-55 Ver.5.46 S/N:1315430271
Executed: 13:31:52 07-15-1993

Waltrip Recycling
Sediment Basin

**** Modified Rational Hydrograph ****

Weighted C = 0.400 Area= 12.660 acres Tc = 17.00 minutes

Adjusted C = 0.440 Td= 50.00 min. I= 3.25 in/hr Qp= 18.10 cfs

RETURN FREQUENCY: 25 year storm Adj.factor = 1.10
Output file: 25 IN W .HYD

HYDROGRAPH FOR MAXIMUM STORAGE
For the 25 Year Storm

Time	Time increment = 1.00 Minutes						
Minutes	Time on left represents time for first Q in each row.						
0.00	0.00	1.06	2.13	3.19	4.26	5.32	6.39
7.00	7.45	8.52	9.58	10.65	11.71	12.78	13.84
14.00	14.91	15.97	17.04	18.10	18.10	18.10	18.10
21.00	18.10	18.10	18.10	18.10	18.10	18.10	18.10
28.00	18.10	18.10	18.10	18.10	18.10	18.10	18.10
35.00	18.10	18.10	18.10	18.10	18.10	18.10	18.10
42.00	18.10	18.10	18.10	18.10	18.10	18.10	18.10
49.00	18.10	18.10	17.04	15.97	14.91	13.84	12.78
56.00	11.71	10.65	9.58	8.52	7.45	6.39	5.32
63.00	4.26	3.19	2.13	1.06	0.00		

Quick TR-55 Ver.5.46 S/N:1315430271
Executed: 13:31:52 07-15-1993

Waltrip Recycling
Sediment Basin

* * * * * SUMMARY OF RATIONAL METHOD PEAK DISCHARGES * * * * *

$$Q = \text{adj} * C * I * A$$

Where: Q=cfs, C=Weighted Runoff Coefficient, I=in/hour, A=acres
adj = 'C' adjustment factor for each return frequency

RETURN FREQUENCY = 25 years

'C' adjustment, k = 1.1

Adj. 'C' = Wtd.'C' x 1.1

=====										=====	
Subarea Descr.	Runoff 'C'	Area acres	Tc (min)	Wtd. 'C'	Adj. 'C'	I in/hr	Total acres	Peak Q (cfs)			
	0.400	12.66									
			17.00	0.400	0.440	5.760	12.66	32.09			

Quick TR-55 Ver.5.46 S/N:1315430271
Executed: 13:31:52 07-15-1993

MODIFIED RATIONAL METHOD
----- Summary for Single Storm Frequency -----

First peak outflow point assumed to occur at inflow recession leg.

Waltrip Recycling
Sediment Basin

RETURN FREQUENCY: 25 yr 'C' Adjustment = 1.100 Allowable Q = 15.51 cfs

Hydrograph file duration= 50.00 minutes

Hydrograph file: 25 IN W .HYD

Tc = 17.00 minutes

.....
VOLUMES

Weighted 'C'	Adjusted 'C'	Duration minutes	Intens. in/hr	Areas acres	Qpeak cfs	Inflow (cu.ft.)	Storage (cu.ft.)
0.400	0.440	17	5.760	12.66	32.09	32,727	16,907
0.400	0.440	20	5.400	12.66	30.08	36,096	18,880
0.400	0.440	30	4.400	12.66	24.51	44,118	22,248
0.400	0.440	40	3.600	12.66	20.05	48,128	21,606
***** Storage Maximum							
0.400	0.440	50	3.250	12.66	18.10	54,311	23,136

0.400	0.440	60	2.800	12.66	15.60	56,150	20,322
0.400	0.440	120	1.750	12.66	9.75	Qpeak < Qallow	

```

*****
*                               *
*   Waltrip Recycling   *
*                               *
*                               *
*                               *
*                               *
*                               *
*****
  
```

Inflow Hydrograph: b:25 IN W .HYD
 Rating Table file: b:WALTRIP2.PND

----INITIAL CONDITIONS----

Elevation = 37.05 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 + 0 (cfs)
37.05	0.0	0	0.0	0.0
37.25	0.1	3,084	102.8	102.9
37.45	0.3	6,216	207.1	207.4
37.65	0.4	9,396	313.1	313.5
37.85	0.9	12,625	420.7	421.6
38.05	1.1	15,903	530.0	531.1
38.25	1.2	19,241	641.2	642.4
38.45	1.3	22,642	754.6	755.9
38.65	1.5	26,106	870.0	871.5
38.85	1.6	29,636	987.7	989.3
39.05	1.7	33,230	1107.4	1109.1
39.25	1.8	36,890	1229.4	1231.2
39.45	3.3	40,616	1353.6	1356.9
39.65	7.0	44,409	1480.0	1487.0
39.85	11.9	48,269	1608.7	1620.6
40.05	17.9	52,198	1739.6	1757.5
40.25	24.7	56,188	1872.6	1897.3
40.45	28.5	60,238	2007.5	2036.0
40.65	33.3	64,349	2144.5	2177.8
40.85	39.0	68,520	2283.5	2322.5
41.05	45.7	72,752	2424.6	2470.3
41.25	53.4	77,032	2567.2	2620.6
41.45	62.0	81,355	2711.3	2773.3
41.65	71.7	85,721	2856.8	2928.5
41.85	82.3	90,131	3003.8	3086.1
42.00	91.0	93,467	3114.9	3205.9

Time increment (t) = 1.0 min.

Pond File: b:WALTRIP2.PND
 Inflow Hydrograph: b:25 IN W .HYD
 Outflow Hydrograph: b:25 OUT .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	0.00	----	0.0	0.0	0.00	37.05
1.0	1.06	1.1	1.1	1.1	0.00	37.05
2.0	2.13	3.2	4.2	4.2	0.00	37.06
3.0	3.19	5.3	9.5	9.6	0.01	37.07
4.0	4.26	7.4	17.0	17.0	0.02	37.08
5.0	5.32	9.6	26.5	26.5	0.03	37.10
6.0	6.39	11.7	38.1	38.2	0.04	37.12
7.0	7.45	13.8	51.9	52.0	0.05	37.15
8.0	8.52	16.0	67.7	67.8	0.07	37.18
9.0	9.58	18.1	85.6	85.8	0.08	37.22
10.0	10.65	20.2	105.7	105.9	0.11	37.26
11.0	11.71	22.4	127.7	128.0	0.15	37.30
12.0	12.78	24.5	151.8	152.2	0.19	37.34
13.0	13.84	26.6	177.9	178.4	0.24	37.39
14.0	14.91	28.8	206.1	206.7	0.30	37.45
15.0	15.97	30.9	236.3	237.0	0.33	37.51
16.0	17.04	33.0	268.6	269.3	0.36	37.57
17.0	18.10	35.1	303.0	303.8	0.39	37.63
18.0	18.10	36.2	338.1	339.2	0.52	37.70
19.0	18.10	36.2	373.0	374.3	0.68	37.76
20.0	18.10	36.2	407.5	409.2	0.84	37.83
21.0	18.10	36.2	441.8	443.7	0.94	37.89
22.0	18.10	36.2	476.0	478.0	1.00	37.95
23.0	18.10	36.2	510.1	512.2	1.07	38.02
24.0	18.10	36.2	544.0	546.3	1.11	38.08
25.0	18.10	36.2	578.0	580.2	1.14	38.14
26.0	18.10	36.2	611.8	614.2	1.17	38.20
27.0	18.10	36.2	645.6	648.0	1.20	38.26
28.0	18.10	36.2	679.3	681.8	1.23	38.32
29.0	18.10	36.2	713.0	715.5	1.26	38.38
30.0	18.10	36.2	746.6	749.2	1.29	38.44
31.0	18.10	36.2	780.1	782.8	1.35	38.50
32.0	18.10	36.2	813.5	816.3	1.40	38.55
33.0	18.10	36.2	846.8	849.7	1.46	38.61
34.0	18.10	36.2	880.0	883.0	1.51	38.67
35.0	18.10	36.2	913.1	916.2	1.54	38.73
36.0	18.10	36.2	946.2	949.3	1.57	38.78
37.0	18.10	36.2	979.2	982.4	1.59	38.84
38.0	18.10	36.2	1012.1	1015.4	1.62	38.89
39.0	18.10	36.2	1045.0	1048.3	1.65	38.95
40.0	18.10	36.2	1077.9	1081.2	1.68	39.00
41.0	18.10	36.2	1110.7	1114.1	1.70	39.06
42.0	18.10	36.2	1143.4	1146.9	1.73	39.11
43.0	18.10	36.2	1176.1	1179.6	1.76	39.17
44.0	18.10	36.2	1208.7	1212.3	1.78	39.22

POND-2 Version: 5.17 S/N: 1295130250
EXECUTED: 07-15-1993 13:14:21

Page 3
Return Freq: 25 years

Pond File: b:WALTRIP2.PND
Inflow Hydrograph: b:25 IN W .HYD
Outflow Hydrograph: b:25 OUT .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
45.0	18.10	36.2	1241.0	1244.9	1.96	39.27
46.0	18.10	36.2	1272.5	1277.2	2.35	39.32
47.0	18.10	36.2	1303.2	1308.7	2.72	39.37
48.0	18.10	36.2	1333.3	1339.4	3.09	39.42
49.0	18.10	36.2	1362.1	1369.5	3.66	39.47
50.0	18.10	36.2	1389.4	1398.3	4.48	39.51
51.0	17.04	35.1	1414.1	1424.5	5.22	39.55
52.0	15.97	33.0	1435.4	1447.1	5.87	39.59
53.0	14.91	30.9	1453.4	1466.2	6.41	39.62
54.0	13.84	28.8	1468.4	1482.2	6.86	39.64
55.0	12.78	26.6	1480.5	1495.1	7.30	39.66
56.0	11.71	24.5	1489.6	1505.0	7.66	39.68
57.0	10.65	22.4	1496.2	1512.0	7.92	39.69
58.0	9.58	20.2	1500.2	1516.4	8.08	39.69
59.0	8.52	18.1	1502.0	1518.3	8.15	39.70
60.0	7.45	16.0	1501.7	1518.0	8.14	39.70
61.0	6.39	13.8	1499.5	1515.6	8.05	39.69
62.0	5.32	11.7	1495.4	1511.2	7.89	39.69
63.0	4.26	9.6	1489.7	1505.0	7.66	39.68
64.0	3.19	7.4	1482.4	1497.1	7.37	39.67
65.0	2.13	5.3	1473.7	1487.7	7.03	39.65
66.0	1.06	3.2	1463.4	1476.8	6.71	39.63
67.0	0.00	1.1	1451.8	1464.5	6.36	39.62

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

Pond File: b:WALTRIP2.PND
Inflow Hydrograph: b:25 IN W .HYD
Outflow Hydrograph: b:25 OUT .HYD

Starting Pond W.S. Elevation = 37.05 ft

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

Peak Inflow	=	18.10 cfs
Peak Outflow	=	8.15 cfs
Peak Elevation	=	39.70 ft

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

Initial Storage	=	0 cu-ft
Peak Storage From Storm	=	45,315 cu-ft

Total Storage in Pond	=	45,315 cu-ft

MODIFIED RATIONAL METHOD

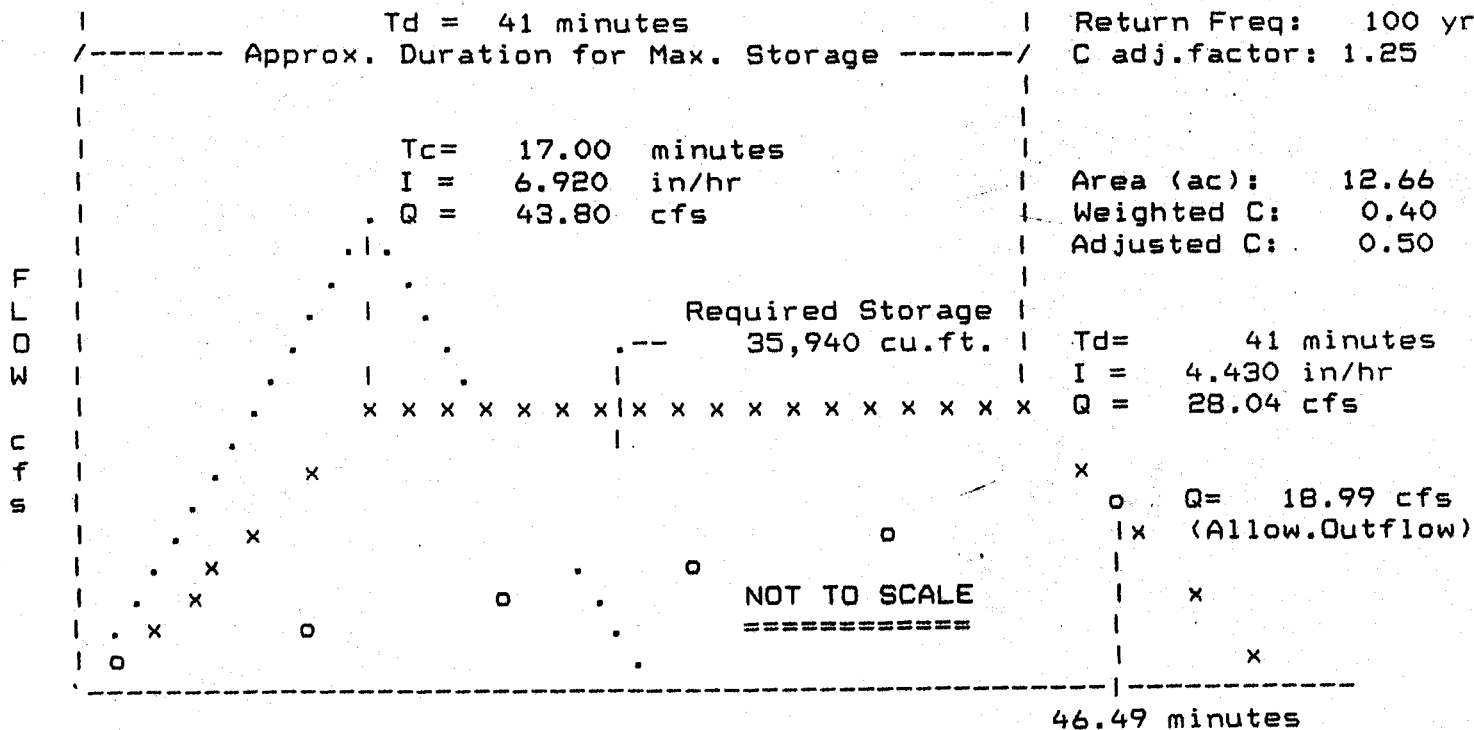
---- Graphical Summary for Maximum Required Storage ----

First peak outflow point assumed to occur at inflow recession leg.

Waltrip Recycling
 Sediment Basin

 * RETURN FREQUENCY: 100 yr | Allowable Outflow: 18.99 cfs *
 * 'C' Adjustment: 1.250 | Required Storage: 35,940 cu.ft. *

 * Peak Inflow: 28.04 cfs | Inflow .HYD stored: 100 IN W.HYD *



Quick TR-55 Ver.5.46 S/N:1315430271
Executed: 13:31:52 07-15-1993

Waltrip Recycling
Sediment Basin

**** Modified Rational Hydrograph ****

Weighted C = 0.400 Area= 12.660 acres Tc = 17.00 minutes

Adjusted C = 0.500 Td= 41.00 min. I= 4.43 in/hr Qp= 28.04 cfs

RETURN FREQUENCY: 100 year storm Adj.factor = 1.25

Output file: 100 IN W.HYD

HYDROGRAPH FOR MAXIMUM STORAGE
For the 100 Year Storm

Time	Time increment = 1.00 Minutes						
Minutes	Time on left represents time for first Q in each row.						
0.00	0.00	1.65	3.30	4.95	6.60	8.25	9.90
7.00	11.55	13.20	14.85	16.50	18.14	19.79	21.44
14.00	23.09	24.74	26.39	28.04	28.04	28.04	28.04
21.00	28.04	28.04	28.04	28.04	28.04	28.04	28.04
28.00	28.04	28.04	28.04	28.04	28.04	28.04	28.04
35.00	28.04	28.04	28.04	28.04	28.04	28.04	28.04
42.00	26.39	24.74	23.09	21.44	19.79	18.14	16.50
49.00	14.85	13.20	11.55	9.90	8.25	6.60	4.95
56.00	3.30	1.65	0.00				

Waltrip Recycling
 Sediment Basin

* * * * * SUMMARY OF RATIONAL METHOD PEAK DISCHARGES * * * * *

$$Q = \text{adj} * C * I * A$$

Where: Q=cfs, C=Weighted Runoff Coefficient, I=in/hour, A=acres
 adj = 'C' adjustment factor for each return frequency

RETURN FREQUENCY = 100 years
 'C' adjustment, k = 1.25
 Adj. 'C' = Wtd. 'C' x 1.25

Subarea Descr.	Runoff 'C'	Area acres	Tc (min)	Wtd. 'C'	Adj. 'C'	I in/hr	Total acres	Peak Q (cfs)
	0.400	12.66						
			17.00	0.400	0.500	6.920	12.66	43.80

Quick TR-55 Ver.5.46 S/N:1315430271
 Executed: 13:31:52 07-15-1993

MODIFIED RATIONAL METHOD
 ---- Summary for Single Storm Frequency ----

First peak outflow point assumed to occur at inflow recession leg.

Waltrip Recycling
 Sediment Basin

RETURN FREQUENCY: 100 yr 'C' Adjustment = 1.250 Allowable Q = 18.99 cfs

Hydrograph file duration= 41.00 minutes

Hydrograph file: 100 IN W.HYD

Tc = 17.00 minutes

VOLUMES								
Weighted 'C'	Adjusted 'C'	Duration minutes	Intens. in/hr	Areas acres	Qpeak cfs	Inflow (cu.ft.)	Storage (cu.ft.)	
0.400	0.500	17	6.920	12.66	43.80	44,680	25,310	
0.400	0.500	20	6.500	12.66	41.15	49,374	28,295	
0.400	0.500	30	5.250	12.66	33.23	59,818	33,043	
0.400	0.500	40	4.500	12.66	28.49	68,364	35,891	
***** Storage Maximum								
0.400	0.500	41	4.430	12.66	28.04	68,983	35,940	

0.400	0.500	50	3.800	12.66	24.05	72,162	33,992	
0.400	0.500	60	3.400	12.66	21.52	77,479	33,612	
0.400	0.500	120	2.250	12.66	14.24	Qpeak < Qallow		

```
*****
*
*   Waltrip Recycling *
*
*
*
*
*
*****
```

Inflow Hydrograph: b:100 IN W.HYD
 Rating Table file: b:WALTRIP2.PND

----INITIAL CONDITIONS----

Elevation = 37.05 ft
 Outflow = 0.00 cfs
 Storage = 0 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
37.05	0.0	0
37.25	0.1	3,084
37.45	0.3	6,216
37.65	0.4	9,396
37.85	0.9	12,625
38.05	1.1	15,903
38.25	1.2	19,241
38.45	1.3	22,642
38.65	1.5	26,106
38.85	1.6	29,636
39.05	1.7	33,230
39.25	1.8	36,890
39.45	3.3	40,616
39.65	7.0	44,409
39.85	11.9	48,269
40.05	17.9	52,198
40.25	24.7	56,188
40.45	28.5	60,238
40.65	33.3	64,349
40.85	39.0	68,520
41.05	45.7	72,752
41.25	53.4	77,032
41.45	62.0	81,355
41.65	71.7	85,721
41.85	82.3	90,131
42.00	91.0	93,467

INTERMEDIATE ROUTING
 COMPUTATIONS

2S/t (cfs)	2S/t + 0 (cfs)
0.0	0.0
102.8	102.9
207.1	207.4
313.1	313.5
420.7	421.6
530.0	531.1
641.2	642.4
754.6	755.9
870.0	871.5
987.7	989.3
1107.4	1109.1
1229.4	1231.2
1353.6	1356.9
1480.0	1487.0
1608.7	1620.6
1739.6	1757.5
1872.6	1897.3
2007.5	2036.0
2144.5	2177.8
2283.5	2322.5
2424.6	2470.3
2567.2	2620.6
2711.3	2773.3
2856.8	2928.5
3003.8	3086.1
3114.9	3205.9

Time increment (t) = 1.0 min.

Pond File: b:WALTRIP2.PND
 Inflow Hydrograph: b:100 IN W.HYD
 Outflow Hydrograph: b:100 OUT .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	0.00	----	0.0	0.0	0.00	37.05
1.0	1.65	1.7	1.6	1.7	0.00	37.05
2.0	3.30	4.9	6.6	6.6	0.01	37.06
3.0	4.95	8.3	14.8	14.8	0.01	37.08
4.0	6.60	11.6	26.3	26.4	0.03	37.10
5.0	8.25	14.9	41.1	41.2	0.04	37.13
6.0	9.90	18.2	59.1	59.2	0.06	37.17
7.0	11.55	21.5	80.4	80.6	0.08	37.21
8.0	13.20	24.8	104.9	105.2	0.10	37.25
9.0	14.85	28.1	132.7	133.0	0.16	37.31
10.0	16.50	31.4	163.6	164.0	0.22	37.37
11.0	18.14	34.6	197.7	198.2	0.28	37.43
12.0	19.79	37.9	234.9	235.6	0.33	37.50
13.0	21.44	41.2	275.4	276.2	0.36	37.58
14.0	23.09	44.5	319.1	320.0	0.43	37.66
15.0	24.74	47.8	365.7	366.9	0.65	37.75
16.0	26.39	51.1	415.0	416.8	0.88	37.84
17.0	28.04	54.4	467.5	469.5	0.99	37.94
18.0	28.04	56.1	521.4	523.6	1.09	38.04
19.0	28.04	56.1	575.2	577.5	1.14	38.13
20.0	28.04	56.1	628.9	631.3	1.19	38.23
21.0	28.04	56.1	682.5	685.0	1.24	38.32
22.0	28.04	56.1	736.0	738.6	1.28	38.42
23.0	28.04	56.1	789.4	792.1	1.36	38.51
24.0	28.04	56.1	842.5	845.4	1.45	38.60
25.0	28.04	56.1	895.6	898.6	1.52	38.70
26.0	28.04	56.1	948.5	951.6	1.57	38.79
27.0	28.04	56.1	1001.4	1004.6	1.61	38.88
28.0	28.04	56.1	1054.1	1057.4	1.66	38.96
29.0	28.04	56.1	1106.8	1110.2	1.70	39.05
30.0	28.04	56.1	1159.4	1162.9	1.74	39.14
31.0	28.04	56.1	1211.9	1215.5	1.79	39.22
32.0	28.04	56.1	1263.5	1268.0	2.24	39.31
33.0	28.04	56.1	1313.9	1319.6	2.85	39.39
34.0	28.04	56.1	1362.6	1370.0	3.67	39.47
35.0	28.04	56.1	1408.6	1418.7	5.06	39.54
36.0	28.04	56.1	1451.9	1464.7	6.36	39.62
37.0	28.04	56.1	1492.5	1508.0	7.77	39.68
38.0	28.04	56.1	1530.0	1548.5	9.26	39.74
39.0	28.04	56.1	1564.8	1586.1	10.64	39.80
40.0	28.04	56.1	1597.1	1620.9	11.92	39.85
41.0	28.04	56.1	1626.5	1653.2	13.33	39.90
42.0	26.39	54.4	1651.8	1680.9	14.55	39.94
43.0	24.74	51.1	1672.0	1703.0	15.51	39.97
44.0	23.09	47.8	1687.3	1719.8	16.25	39.99

POND-2 Version: 5.17 S/N: 1295130250
EXECUTED: 07-15-1993 13:20:19

Page 3
Return Freq: 100 years

Pond File: b:WALTRIP2.PND
Inflow Hydrograph: b:100 IN W.HYD
Outflow Hydrograph: b:100 OUT .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
45.0	21.44	44.5	1698.3	1731.8	16.78	40.01
46.0	19.79	41.2	1705.3	1739.5	17.11	40.02
47.0	18.14	37.9	1708.6	1743.2	17.27	40.03
48.0	16.50	34.6	1708.7	1743.3	17.28	40.03
49.0	14.85	31.4	1705.8	1740.1	17.14	40.02
50.0	13.20	28.1	1700.1	1733.9	16.87	40.02
51.0	11.55	24.8	1691.9	1724.9	16.47	40.00
52.0	9.90	21.5	1681.4	1713.4	15.97	39.99
53.0	8.25	18.2	1668.9	1699.6	15.36	39.97
54.0	6.60	14.9	1654.4	1683.7	14.67	39.94
55.0	4.95	11.6	1638.2	1665.9	13.89	39.92
56.0	3.30	8.3	1620.3	1646.4	13.03	39.89
57.0	1.65	4.9	1601.1	1625.3	12.11	39.86
58.0	0.00	1.7	1580.2	1602.7	11.25	39.82

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

Pond File: b:WALTRIP2.PND
Inflow Hydrograph: b:100 IN W.HYD
Outflow Hydrograph: b:100 OUT .HYD

Starting Pond W.S. Elevation = 37.05 ft

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

Peak Inflow	=	28.04 cfs
Peak Outflow	=	17.28 cfs
Peak Elevation	=	40.03 ft

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

Initial Storage	=	0 cu-ft
Peak Storage From Storm	=	51,791 cu-ft

Total Storage in Pond	=	51,791 cu-ft

Date Record Created:

WS_BMPNO:

CC004

Print Record

Created By:

PRINTED ON

Wednesday, March 10, 201

3:29:13 PM

WATERSHED

CC

BMP ID NO

004

PLAN NO

SP-68-93

TAX PARCEL

(48-2)(1-5C)

PIN NO

4820100005C

CONSTRUCTION DATE

2/10/1994

PROJECT NAME

Waltrip Recycling

FACILITY LOCATION

164 Waltrip Lane

CITY-STATE

Williamsburg, VA

CURRENT OWNER

Larry Waltrip

OWNER ADDRESS

100 Lands End Drive

OWNER ADDRESS 2

CITY-STATE-ZIP CODE

Williamsburg, VA 23185

OWNER PHONE

MAINT AGREEMENT

No

EMERG ACTION PLAN

No

Get Last BMP No

Return to Menu

MAINTENANCE PLAN

No

SITE AREA acre

12.7

LAND USE

COMM

old BMP TYP

Wet Pond

JCC BMP CODE

A2 Wet Pond

POINT VALUE

8

SVC DRAIN AREA acres

12.7

SERVICE AREA DESCR

NONE

IMPERV AREA acres

RECV STREAM

COLLEGE CREEK

EXT DET-WQ-CTRL

No

WTR QUAL VOL acre-ft

2

CHAN PROT CTRL

No

CHAN PROT VOL acre-ft

0.8

SW/FLOOD CONTROL

No

GEOTECH REPORT

No

CTRL STRUC DESC

CMP Riser

CTRL STRUC SIZE inches

30

OTLT BARRL DESC

CMP

OTLT BARRL SIZE inch

18

EMERG SPILLWAY

Yes

DESIGN HW ELEV

40.3

PERM POOL ELEV

37.05

2-YR OUTFLOW cfs

10.13

10-YR OUTFLOW cfs

13.29

REC DRAWING

No

CONSTR CERTIF

No

LAST INSP DATE

2/2/2001

Inspected by:

INTERNAL RATING

3

MISC/COMMENTS

Additional Comments:

CC004_WALTRIP_RECYCLING - 045