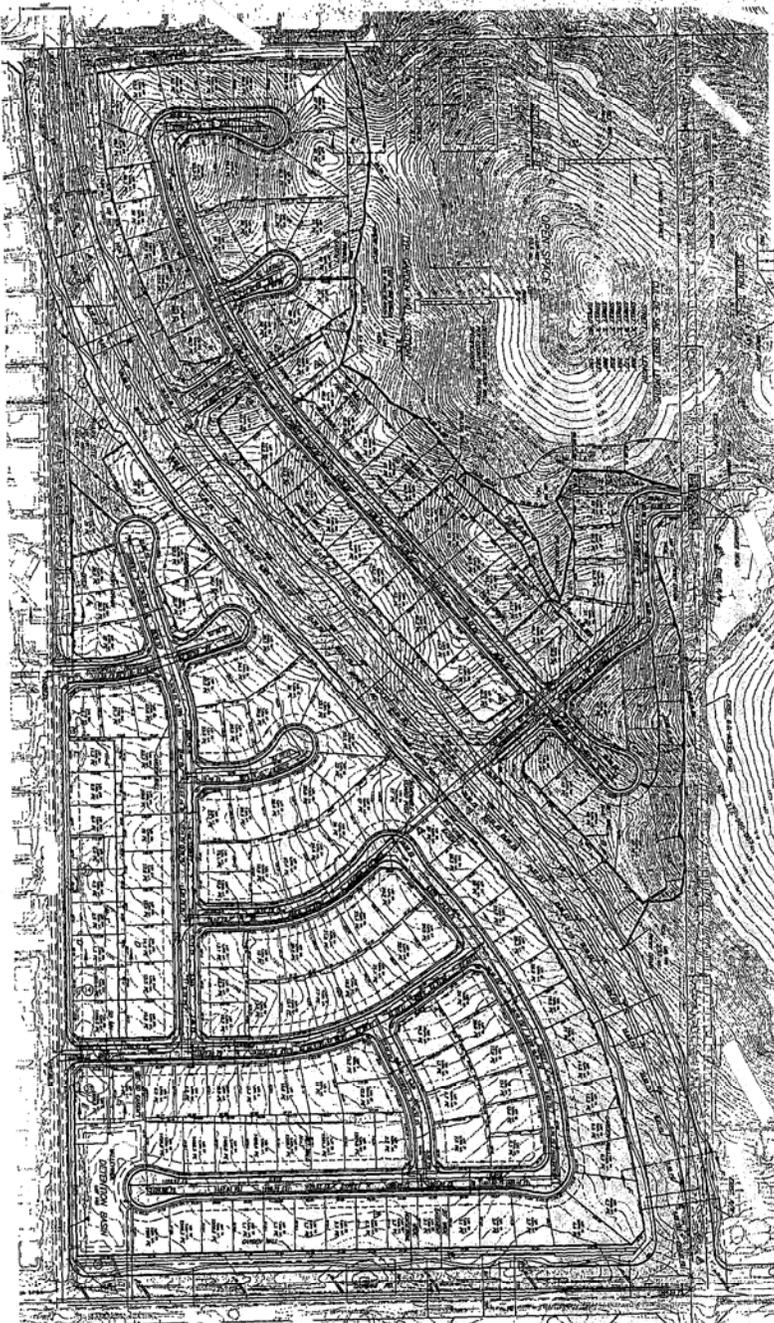


**Appendix B**  
**Stormwater Quality Best Management Practice**  
**Design Handbook**

**Extended Detention Basin Example**



**GENERAL NOTES:**

**PROPERTY:** THE SOUTHWEST QUARTER OF SECTION 11, TOWNSHIP 6 SOUTH, RANGE 3 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF RIVERSIDE.

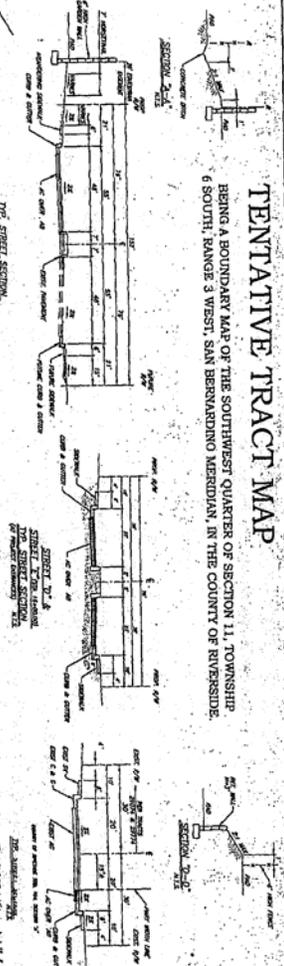
**ASSESSOR'S OFFICE:** RIVERSIDE COUNTY, CALIFORNIA.

**DATE:** 1954.

**SCALE:** 1" = 100'

**COMPILED BY:** [Name]

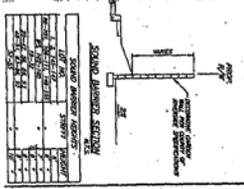
**APPROVED BY:** [Name]

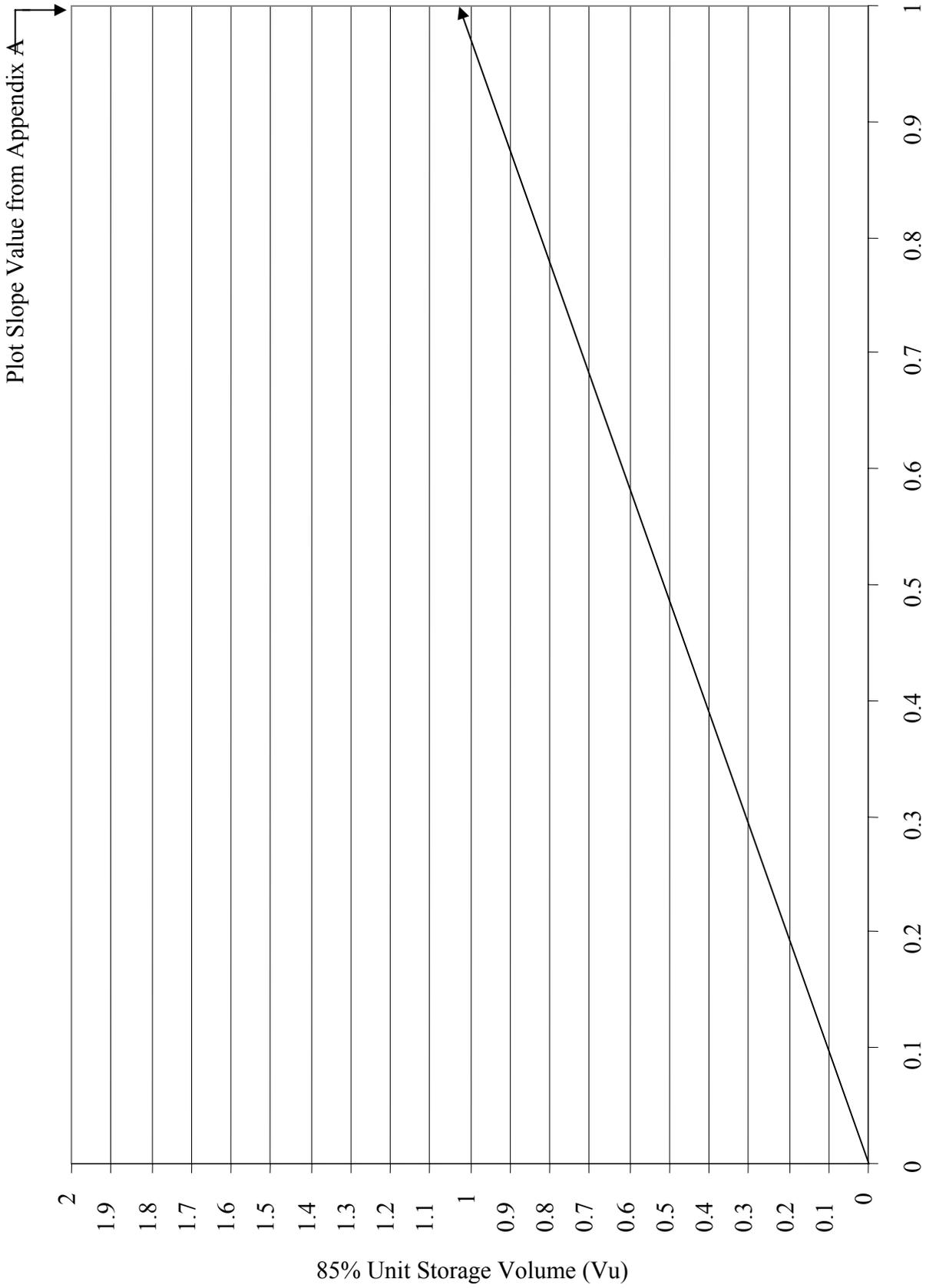


# TENTATIVE TRACT MAP

BRING A BOUNDARY MAP OF THE SOUTHWEST QUARTER OF SECTION 11, TOWNSHIP 6 SOUTH, RANGE 3 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF RIVERSIDE.

LOT NO.	ACRES	OWNER
1	0.125	...
2	0.125	...
3	0.125	...
4	0.125	...
5	0.125	...
6	0.125	...
7	0.125	...
8	0.125	...
9	0.125	...
10	0.125	...
11	0.125	...
12	0.125	...
13	0.125	...
14	0.125	...
15	0.125	...
16	0.125	...
17	0.125	...
18	0.125	...
19	0.125	...
20	0.125	...
21	0.125	...
22	0.125	...
23	0.125	...
24	0.125	...
25	0.125	...
26	0.125	...
27	0.125	...
28	0.125	...
29	0.125	...
30	0.125	...
31	0.125	...
32	0.125	...
33	0.125	...
34	0.125	...
35	0.125	...
36	0.125	...
37	0.125	...
38	0.125	...
39	0.125	...
40	0.125	...
41	0.125	...
42	0.125	...
43	0.125	...
44	0.125	...
45	0.125	...
46	0.125	...
47	0.125	...
48	0.125	...
49	0.125	...
50	0.125	...





**Figure 2** Unit Storage Volume Graph

## Datasheet

### Site Conditions:

$A_{\text{total}} = 40$ acres	(from worksheet 1)
$V_{\text{BMP}} = 50820$ ft <sup>3</sup>	(from worksheet 1)
L:W Ratio = 2:1	(min 2:1, consider site constraints)
Basin depth = 4'	(min 3.5', consider site constraints)

### Design Assumptions:

In this example a rectangular basin shape was assumed for simplification. Actual volumes and dimensions will differ based on the configuration of the basin.

Two Stage Design (see Figure 3):

Based on the total depth (outlet to spillway) of 4', set depth of each stage:

Upper Stage Depth = 2' (2' min)

Bottom Stage Depth = 2' (1.5' min)

#### **Upper Stage:**

The total basin volume must be greater than or equal to the design volume. The bottom stage will hold between 10 and 25 percent of the design volume. The top stage must therefore hold between 75 and 90 percent of the design volume. In this example, the top stage is designed to hold 90 percent of the design volume.

$$\begin{aligned}L &= 2 * W \\0.9V_{\text{BMP}} &= \text{Depth} * (2W^2) \\45738 &= 4 * W^2\end{aligned}$$

$$W = 106.9' \rightarrow \text{round to } 110'$$

$$L = 220'$$

$$\text{Volume}_{\text{US}} = 48400 \text{ ft}^2$$

#### **Bottom Stage:**

The bottom stage must hold between 10 and 25 percent of the design volume.

$$\begin{aligned}\text{At } 10\% \rightarrow 0.1V_{\text{BMP}} &= D_{\text{Bottom}} * W * L_{\text{Bottom}} \\0.1(50820) &= (2') * (110') * L_{\text{Bottom}} \\L_{\text{Bottom}} &= 23.1'\end{aligned}$$

$$\begin{aligned}\text{At } 25\% \rightarrow 0.25V_{\text{BMP}} &= D_{\text{Bottom}} * W * L_{\text{Bottom}} \\0.25(50820) &= (2') * (110') * L_{\text{Bottom}} \\L_{\text{Bottom}} &= 57.8'\end{aligned}$$

$$\text{Set } L_{\text{Bottom}} = 30'$$
$$\text{Volume}_{\text{BS}} = 6600 \text{ ft}^3 \text{ (13\% of } V_{\text{BMP}})$$

Total Basin Volume check:

$$\text{Volume}_{\text{Basin}} = V_{\text{BS}} + V_{\text{US}} = 55000 \text{ ft}^3 \text{ (108\% } V_{\text{BMP}}) \geq V_{\text{BMP}} \quad \text{ok}$$

### Forebay Design:

In this example a cylindrical forebay shape was assumed for simplification.

Set forebay volume between 5 and 10 percent of the design volume:

$$V_{\text{F}} = 0.1V_{\text{BMP}} = 5082 \text{ ft}^3$$

Forebay should drain into low-flow channel in approximately 45 minutes or less. Standing water is not allowable.

$$\text{Depth}_{\text{F}} = 0.8 \text{ ft (assumed)}$$

$$\text{Area}_{\text{F}} = (5082) / \text{depth} = 6352.5 \text{ ft}^2$$

$$\text{Diameter}_{\text{F}} = \text{SQRT}((4 * \text{Area}_{\text{F}}) / \pi) = 89.9 \rightarrow \text{use } 90'$$

For a 45 minute drain time:

$$\text{Forebay } Q_{\text{out}} = (5082 \text{ ft}^3) / (45 \text{ min} * 60 \text{ sec/min}) = 1.9 \text{ ft}^3/\text{s}$$

Size outlet accordingly

### Low-flow Channel:

This example assumes a low flow channel depth. The capacity is based on a v-ditch channel at a 2% slope, with side slopes of 2:1. The capacity should be at least twice the forebay outlet rate.

$$\text{Depth} = 0.9 \text{ ft (min. } 0.75 \text{ ft)}$$

$$\text{Flow capacity} = 4.5 \text{ ft/s} > (2 * \text{Forebay } Q_{\text{OUT}}) \rightarrow \text{ok}$$

### Basin Outlet:

The stage versus storage graph shows the volume of the proposed basin at various depths:

stage (ft)	storage (ft <sup>3</sup> )	storage (acre-ft)
0	0	0.0000
0.5	1650	0.0379
1	3300	0.0758
1.5	4950	0.1136
2	6600	0.1515
2.5	18700	0.4293
3	30800	0.7071
3.5	42900	0.9848
4	55000	1.2626

In this example CivilD was used to route the design volume through the basin for various orifice sizes. After several iterations an appropriate orifice size was chosen of a 2.1-inch diameter. The CivilD program determined the outflow rate at each depth. Please see the attached printout for the routing.

stage (ft)	storage (ft <sup>3</sup> )	storage (acre-ft)	Q <sub>OUT</sub> (cfs)
0	0	0.0000	0.00
0.5	1650	0.0379	0.11
1	3300	0.0758	0.15
1.5	4950	0.1136	0.18
2	6600	0.1515	0.21
2.5	18700	0.4293	0.23
3	30800	0.7071	0.25
3.5	42900	0.9848	0.27
4	55000	1.2626	0.29

For this size orifice:

50% of the  $V_{BMP}$  has drained from the basin in 27 hours  $\geq$  24 hours  $\rightarrow$  ok

After 27 hours  
Volume Remaining = 0.581 acre-ft  
WS Elevation = 2.77 ft

100% of the  $V_{BMP}$  has drained from the basin in 60 hours  $\geq$  48 hours  
 $<$  72 hours  $\rightarrow$  ok

After 60 hours  
Volume Remaining = 0.03 acre-ft  
WS Elevation = 0.45 ft

**Vegetation:**

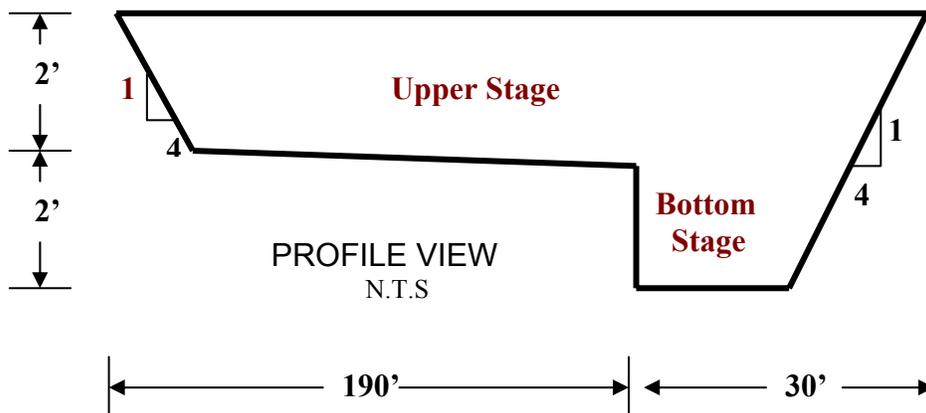
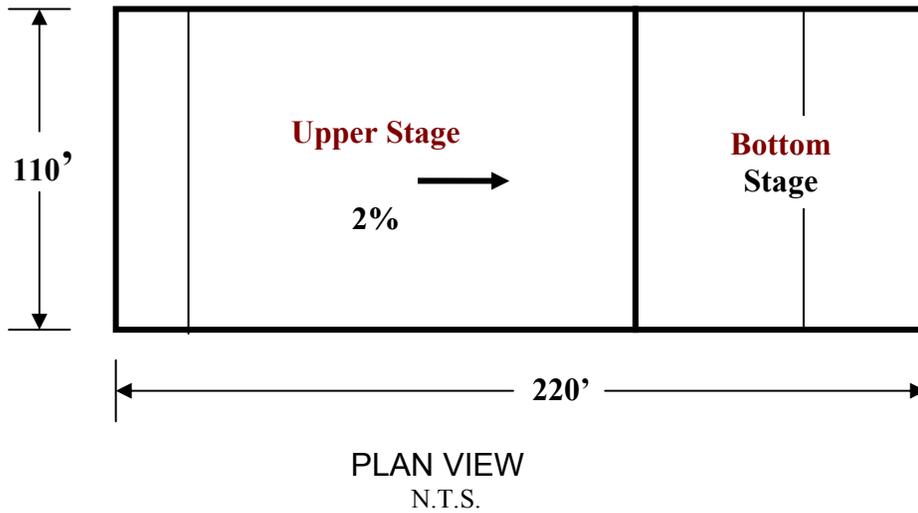
Native grass chosen as appropriate for the site.

**Embankment:**

Maximum interior slope of 4:1 and maximum exterior slope of 3:1 chosen.

**Access:**

Maximum 10% slope and minimum 16' access roads chosen.



**Design Procedure for BMP Design Volume**

85<sup>th</sup> percentile runoff event

Designer: **Benjie Cho**

Company: **Riverside County Flood Control and Water Conservation District**

Date: **3/1/04**

Project: **BMP Example**

Location: \_\_\_\_\_

<p>1. Create Unit Storage Volume Graph</p> <p>a. Site location (Township, Range and Section)</p> <p>b. Slope value from the Design Volume Curve in <b>Appendix A</b>.</p> <p>c. Plot this value on the Unit Storage Volume Graph shown on <b>Figure 2</b>.</p> <p>d. Draw a straight line form this point to the origin, to create the graph</p>	<p style="text-align: center;">T <b>6</b> &amp;R <b>3</b>  <hr/> Section <b>11</b> (1)</p> <p>Slope = <u>          <b>1.03</b>          </u> (2)</p> <p>Is this graph attached? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p>2. Determine Runoff Coefficient</p> <p>a. Determine total impervious area</p> <p>b. Determine total tributary area</p> <p>c. Determine Impervious fraction i = (5) / (6)</p> <p>d. Use (7) in <b>Figure 1</b> to find Runoff OR <math>C = .858i^3 - .78i^2 + .774i + .04</math></p>	<p><math>A_{\text{impervious}} =</math> <u>          <b>20</b>          </u> acres (5)</p> <p><math>A_{\text{total}} =</math> <u>          <b>40</b>          </u> acres (6)</p> <p>i = <u>          <b>.50</b>          </u> (7)</p> <p>C = <u>          <b>.34</b>          </u> (8)</p>
<p>3. Determine 85% Unit Storage Volume</p> <p>a. Use (8) in <b>Figure 1</b> Draw a Vertical line from (8) to the graph, then a Horizontal line to the desired <math>V_u</math> value.</p>	<p><math>V_u =</math> <u>          <b>.35</b>          </u> <math>\frac{\text{in-acre}}{\text{acre}}</math> (9)</p>
<p>4. Determine Design Storage Volume</p> <p>a. <math>V_{\text{BMP}} = (9) \times (6)</math> [in- acres]</p> <p>b. <math>V_{\text{BMP}} = (10) / 12</math> [ft- acres]</p> <p>c. <math>V_{\text{BMP}} = (11) \times 43560</math> [ft<sup>3</sup>]</p>	<p><math>V_{\text{BMP}} =</math> <u>          <b>14</b>          </u> in-acre (10)</p> <p><math>V_{\text{BMP}} =</math> <u>          <b>1.17</b>          </u> ft-acre (11)</p> <p><math>V_{\text{BMP}} =</math> <u>          <b>50820</b>          </u> ft<sup>3</sup> (12)</p>

Notes: \_\_\_\_\_

## Design Procedure Form for Extended Detention Basin

Designer: Jennifer Otterson  
 Company: Riverside County Flood Control and Water Conservation District  
 Date: 3/2/04  
 Project: BMP Example  
 Location: Winchester/Antelope Valley Area

1. Determine Design Volume (Use <a href="#">Worksheet 1</a> ) a. Total Tributary Area (minimum 5 ac.) b. Design Volume, $V_{BMP}$	$A_{total} = \frac{40}{50820}$ acres $V_{BMP} =$ <u>50820</u> $ft^3$
2. Basin Length to Width Ratio (2:1 min.)	Ratio = <u>2:1</u> L:W
3. Two-Stage Design a. Overall Design 1) Depth (3.5' min.) 2) Width (30' min.) 3) Length (60' min.) 4) Volume (must be $\geq V_{BMP}$ ) b. Upper Stage 1) Depth (2' min.) 2) Bottom Slope (2% to low flow channel recommended) c. Bottom Stage 1) Depth (1.5' to 3') 2) Length 3) Volume (10 to 25% of $V_{BMP}$ )	$Depth = \frac{4}{110}$ ft $Width = \frac{110}{220}$ ft $Length = \frac{220}{55000}$ ft $Volume =$ <u>55000</u> $ft^3$  $Depth = \frac{2}{2}$ ft $Slope =$ <u>2</u> %  $Depth = \frac{2}{30}$ ft $Length = \frac{30}{6600}$ ft $Volume =$ <u>6600 (13%)</u> $ft^3$
4. Forebay Design a. Forebay Volume (5 to 10% of $V_{BMP}$ ) b. Outlet pipe drainage time ( $\cong$ 45 min)	$Volume = \frac{5082}{45}$ $ft^3$ $Drain\ time =$ <u>45</u> minutes
5. Low-flow Channel a. Depth (9" minimum) b. Flow Capacity ( $2 * \text{Forebay } Q_{OUT}$ )	$Depth = \frac{0.9}{4.5}$ ft $Q_{Low\ Flow} =$ <u>4.5</u> cfs
6. Trash Rack or Gravel Pack (check one)	Trash Rack <input checked="" type="checkbox"/> Gravel Pack <input type="checkbox"/>

<p>7. Basin Outlet</p> <p>a. Outlet type (check one)</p> <p>b. Orifice Area</p> <p>c. Orifice Type</p> <p>d. Maximum Depth of water above bottom orifice</p> <p>e. Length of time for 50% <math>V_{BMP}</math> drainage (24 hour minimum)</p> <p>f. Length of time for 100% <math>V_{BMP}</math> drainage (between 48 and 72 hours)</p> <p>g. Attached Documents (all required)</p> <ol style="list-style-type: none"> <li>1) Stage vs. Discharge</li> <li>2) Stage vs. Volume</li> <li>3) Inflow Hydrograph</li> <li>4) Basin Routing</li> </ol>	<p>Single orifice <u>  X  </u></p> <p>Multi-orifice plate <u>      </u></p> <p>Perforated Pipe <u>      </u></p> <p>Other <u>                          </u></p> <p>Area = <u> 0.024 (2.1" Diameter) </u> ft<sup>2</sup></p> <p>Type <u>  Pipe  </u></p> <p>Depth = <u>  3.8  </u> ft</p> <p>Time 50% = <u>  27  </u> hrs</p> <p>Time 100% = <u>  60  </u> hrs</p> <p>Attached Documents (check)</p> <ol style="list-style-type: none"> <li>1) <u>  X  </u></li> <li>2) <u>  X  </u></li> <li>3) <u>  X  </u></li> <li>4) <u>  X  </u></li> </ol>
<p>8. Increased Runoff (optional)</p> <p>Is this basin also mitigating increased runoff?</p> <p>Attached Documents (all required) for 2, 5, &amp; 10-year storms:</p> <ol style="list-style-type: none"> <li>1) Stage vs. Discharge</li> <li>2) Stage vs. Volume/Storage</li> <li>3) Inflow Hydrograph</li> <li>4) Basin Routing</li> </ol>	<p>Yes <u>      </u> No <u>  X  </u> (if No, skip to #9)</p> <p>Attached Documents (check)</p> <ol style="list-style-type: none"> <li>1) <u>      </u></li> <li>2) <u>      </u></li> <li>3) <u>      </u></li> <li>4) <u>      </u></li> </ol>
<p>9. Vegetation (check type)</p>	<p><u>  X  </u> Native Grasses</p> <p><u>      </u> Irrigated Turf</p> <p><u>      </u> Other</p> <p><u>                          </u></p>
<p>10. Embankment</p> <ol style="list-style-type: none"> <li>a. Interior slope (4:1 max.)</li> <li>b. Exterior slope (3:1 max.)</li> </ol>	<p>Interior Slope = <u>  4:1  </u></p> <p>Exterior Slope = <u>  3:1  </u></p>
<p>11. Maintenance Access</p> <ol style="list-style-type: none"> <li>a. Slope (10% max.)</li> <li>b. Width (16 feet min.)</li> </ol>	<p>Slope = <u>  10  </u> %</p> <p>Width = <u>  16  </u> ft</p>

FLOOD HYDROGRAPH ROUTING PROGRAM  
Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2001  
Study date: 04/15/04

-----  
FOR OFFICIAL USE ONLY - Riverside County Offices - S/N 433  
-----

\*\*\*\*\* HYDROGRAPH INFORMATION \*\*\*\*\*

From study/file name: BMPexampl.rte  
\*\*\*\*\* Hydrograph Information \*\*\*\*\*  
From manual input hydrograph

\*\*\*\*\*HYDROGRAPH DATA\*\*\*\*\*

Number of intervals = 2  
Time interval = 5.0 (Min.)  
Maximum/Peak flow rate = 84.700 (CFS)  
Total volume = 1.167 (Ac.Ft)  
Status of hydrographs being held in storage  
Stream 1 Stream 2 Stream 3 Stream 4 Stream 5  
Peak (CFS) 0.000 0.000 0.000 0.000 0.000  
Vol (Ac.Ft) 0.000 0.000 0.000 0.000 0.000

\*\*\*\*\*

+++++  
Process from Point/Station 1.000 to Point/Station 2.000  
\*\*\*\* RETARDING BASIN ROUTING \*\*\*\*

-----  
Program computation of outflow v. depth

CALCULATED OUTFLOW DATA AT DEPTH = 0.50(Ft.)  
Pipe length = 1.00(Ft.) Elevation difference = 0.10(Ft.)  
Manning's N = 0.013 No. of pipes = 1  
Given pipe size = 2.10(In.)  
NOTE: Assuming free outlet flow.  
NOTE: Normal flow is pressure flow.  
The total friction loss through the pipe is 0.600(Ft.)  
Pipe friction loss = 0.105(Ft.)  
Minor friction loss = 0.495(Ft.) K-factor = 1.50  
Calculated flow rate through pipe(s) = 0.111(CFS)

Total outflow at this depth = 0.11(CFS)

CALCULATED OUTFLOW DATA AT DEPTH = 1.00(Ft.)  
Pipe length = 1.00(Ft.) Elevation difference = 0.10(Ft.)

Manning's N = 0.013 No. of pipes = 1  
Given pipe size = 2.10(In.)  
NOTE: Assuming free outlet flow.  
NOTE: Normal flow is pressure flow.  
The total friction loss through the pipe is 1.100(Ft.)  
Pipe friction loss = 0.193(Ft.)  
Minor friction loss = 0.907(Ft.) K-factor = 1.50  
Calculated flow rate through pipe(s) = 0.150(CFS)

Total outflow at this depth = 0.15(CFS)

CALCULATED OUTFLOW DATA AT DEPTH = 1.50(Ft.)  
Pipe length = 1.00(Ft.) Elevation difference = 0.10(Ft.)  
Manning's N = 0.013 No. of pipes = 1  
Given pipe size = 2.10(In.)  
NOTE: Assuming free outlet flow.  
NOTE: Normal flow is pressure flow.  
The total friction loss through the pipe is 1.600(Ft.)  
Pipe friction loss = 0.281(Ft.)  
Minor friction loss = 1.320(Ft.) K-factor = 1.50  
Calculated flow rate through pipe(s) = 0.181(CFS)

Total outflow at this depth = 0.18(CFS)

CALCULATED OUTFLOW DATA AT DEPTH = 2.00(Ft.)  
Pipe length = 1.00(Ft.) Elevation difference = 0.10(Ft.)  
Manning's N = 0.013 No. of pipes = 1  
Given pipe size = 2.10(In.)  
NOTE: Assuming free outlet flow.  
NOTE: Normal flow is pressure flow.  
The total friction loss through the pipe is 2.100(Ft.)  
Pipe friction loss = 0.369(Ft.)  
Minor friction loss = 1.732(Ft.) K-factor = 1.50  
Calculated flow rate through pipe(s) = 0.207(CFS)

Total outflow at this depth = 0.21(CFS)

CALCULATED OUTFLOW DATA AT DEPTH = 2.50(Ft.)  
Pipe length = 1.00(Ft.) Elevation difference = 0.10(Ft.)  
Manning's N = 0.013 No. of pipes = 1  
Given pipe size = 2.10(In.)  
NOTE: Assuming free outlet flow.  
NOTE: Normal flow is pressure flow.  
The total friction loss through the pipe is 2.600(Ft.)  
Pipe friction loss = 0.457(Ft.)  
Minor friction loss = 2.144(Ft.) K-factor = 1.50  
Calculated flow rate through pipe(s) = 0.231(CFS)

Total outflow at this depth = 0.23(CFS)

CALCULATED OUTFLOW DATA AT DEPTH = 3.00(Ft.)  
Pipe length = 1.00(Ft.) Elevation difference = 0.10(Ft.)

Manning's N = 0.013 No. of pipes = 1  
 Given pipe size = 2.10(In.)  
 NOTE: Assuming free outlet flow.  
 NOTE: Normal flow is pressure flow.  
 The total friction loss through the pipe is 3.100(Ft.)  
 Pipe friction loss = 0.545(Ft.)  
 Minor friction loss = 2.557(Ft.) K-factor = 1.50  
 Calculated flow rate through pipe(s) = 0.252(CFS)

Total outflow at this depth = 0.25(CFS)

CALCULATED OUTFLOW DATA AT DEPTH = 3.50(Ft.)  
 Pipe length = 1.00(Ft.) Elevation difference = 0.10(Ft.)  
 Manning's N = 0.013 No. of pipes = 1  
 Given pipe size = 2.10(In.)  
 NOTE: Assuming free outlet flow.  
 NOTE: Normal flow is pressure flow.  
 The total friction loss through the pipe is 3.600(Ft.)  
 Pipe friction loss = 0.633(Ft.)  
 Minor friction loss = 2.969(Ft.) K-factor = 1.50  
 Calculated flow rate through pipe(s) = 0.272(CFS)

Total outflow at this depth = 0.27(CFS)

CALCULATED OUTFLOW DATA AT DEPTH = 4.00(Ft.)  
 Pipe length = 1.00(Ft.) Elevation difference = 0.10(Ft.)  
 Manning's N = 0.013 No. of pipes = 1  
 Given pipe size = 2.10(In.)  
 NOTE: Assuming free outlet flow.  
 NOTE: Normal flow is pressure flow.  
 The total friction loss through the pipe is 4.100(Ft.)  
 Pipe friction loss = 0.721(Ft.)  
 Minor friction loss = 3.381(Ft.) K-factor = 1.50  
 Calculated flow rate through pipe(s) = 0.290(CFS)

Total outflow at this depth = 0.29(CFS)

-----  
 Total number of inflow hydrograph intervals = 2  
 Hydrograph time unit = 5.000 (Min.)  
 Initial depth in storage basin = 0.00(Ft.)  
 -----

-----  
 Initial basin depth = 0.00 (Ft.)  
 Initial basin storage = 0.00 (Ac.Ft)  
 Initial basin outflow = 0.00 (CFS)  
 -----

-----  
 Depth vs. Storage and Depth vs. Discharge data:  
 Basin Depth Storage Outflow (S-O\*dt/2) (S+O\*dt/2)  
 (Ft.) (Ac.Ft) (CFS) (Ac.Ft) (Ac.Ft)

Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
0.500	0.038	0.111	0.038	0.038

1.000	0.076	0.150	0.075	0.077
1.500	0.114	0.181	0.113	0.115
2.000	0.152	0.207	0.151	0.153
2.500	0.429	0.231	0.428	0.430
3.000	0.707	0.252	0.706	0.708
3.500	0.985	0.272	0.984	0.986
4.000	1.263	0.290	1.262	1.264

-----  
Hydrograph Detention Basin Routing  
-----

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)	.0	21.2	42.35	63.53	84.70 (Ft.)	Depth
0.083	84.70	0.22	0.291	O					2.25
0.167	84.70	0.26	0.873	O					3.30
0.250	0.00	0.28	1.162	O					3.82
0.333	0.00	0.28	1.160	O					3.82
0.417	0.00	0.28	1.158	O					3.81
0.500	0.00	0.28	1.157	O					3.81
0.583	0.00	0.28	1.155	O					3.80
0.667	0.00	0.28	1.153	O					3.80
0.750	0.00	0.28	1.151	O					3.80
0.833	0.00	0.28	1.149	O					3.79
0.917	0.00	0.28	1.147	O					3.79
1.000	0.00	0.28	1.145	O					3.79
1.083	0.00	0.28	1.143	O					3.78
1.167	0.00	0.28	1.141	O					3.78
1.250	0.00	0.28	1.139	O					3.78
1.333	0.00	0.28	1.137	O					3.77
1.417	0.00	0.28	1.135	O					3.77
1.500	0.00	0.28	1.133	O					3.77
1.583	0.00	0.28	1.131	O					3.76
1.667	0.00	0.28	1.129	O					3.76
1.750	0.00	0.28	1.127	O					3.76
1.833	0.00	0.28	1.125	O					3.75
1.917	0.00	0.28	1.124	O					3.75
2.000	0.00	0.28	1.122	O					3.75
2.083	0.00	0.28	1.120	O					3.74
2.167	0.00	0.28	1.118	O					3.74
2.250	0.00	0.28	1.116	O					3.74
2.333	0.00	0.28	1.114	O					3.73
2.417	0.00	0.28	1.112	O					3.73
2.500	0.00	0.28	1.110	O					3.72
2.583	0.00	0.28	1.108	O					3.72
2.667	0.00	0.28	1.106	O					3.72
2.750	0.00	0.28	1.104	O					3.71
2.833	0.00	0.28	1.102	O					3.71
2.917	0.00	0.28	1.100	O					3.71
3.000	0.00	0.28	1.098	O					3.70
3.083	0.00	0.28	1.097	O					3.70
3.167	0.00	0.28	1.095	O					3.70
3.250	0.00	0.28	1.093	O					3.69
3.333	0.00	0.28	1.091	O					3.69
3.417	0.00	0.28	1.089	O					3.69

3.500	0.00	0.28	1.087	O	3.68
3.583	0.00	0.28	1.085	O	3.68
3.667	0.00	0.28	1.083	O	3.68
3.750	0.00	0.28	1.081	O	3.67
3.833	0.00	0.28	1.079	O	3.67
3.917	0.00	0.28	1.077	O	3.67
4.000	0.00	0.28	1.075	O	3.66
4.083	0.00	0.28	1.074	O	3.66
4.167	0.00	0.28	1.072	O	3.66
4.250	0.00	0.28	1.070	O	3.65
4.333	0.00	0.28	1.068	O	3.65
4.417	0.00	0.28	1.066	O	3.65
4.500	0.00	0.28	1.064	O	3.64
4.583	0.00	0.28	1.062	O	3.64
4.667	0.00	0.28	1.060	O	3.64
4.750	0.00	0.28	1.058	O	3.63
4.833	0.00	0.28	1.056	O	3.63
4.917	0.00	0.28	1.055	O	3.63
5.000	0.00	0.28	1.053	O	3.62
5.083	0.00	0.28	1.051	O	3.62
5.167	0.00	0.28	1.049	O	3.61
5.250	0.00	0.28	1.047	O	3.61
5.333	0.00	0.28	1.045	O	3.61
5.417	0.00	0.28	1.043	O	3.60
5.500	0.00	0.28	1.041	O	3.60
5.583	0.00	0.28	1.039	O	3.60
5.667	0.00	0.28	1.037	O	3.59
5.750	0.00	0.27	1.036	O	3.59
5.833	0.00	0.27	1.034	O	3.59
5.917	0.00	0.27	1.032	O	3.58
6.000	0.00	0.27	1.030	O	3.58
6.083	0.00	0.27	1.028	O	3.58
6.167	0.00	0.27	1.026	O	3.57
6.250	0.00	0.27	1.024	O	3.57
6.333	0.00	0.27	1.022	O	3.57
6.417	0.00	0.27	1.020	O	3.56
6.500	0.00	0.27	1.019	O	3.56
6.583	0.00	0.27	1.017	O	3.56
6.667	0.00	0.27	1.015	O	3.55
6.750	0.00	0.27	1.013	O	3.55
6.833	0.00	0.27	1.011	O	3.55
6.917	0.00	0.27	1.009	O	3.54
7.000	0.00	0.27	1.007	O	3.54
7.083	0.00	0.27	1.005	O	3.54
7.167	0.00	0.27	1.003	O	3.53
7.250	0.00	0.27	1.002	O	3.53
7.333	0.00	0.27	1.000	O	3.53
7.417	0.00	0.27	0.998	O	3.52
7.500	0.00	0.27	0.996	O	3.52
7.583	0.00	0.27	0.994	O	3.52
7.667	0.00	0.27	0.992	O	3.51
7.750	0.00	0.27	0.990	O	3.51
7.833	0.00	0.27	0.988	O	3.51
7.917	0.00	0.27	0.987	O	3.50
8.000	0.00	0.27	0.985	O	3.50
8.083	0.00	0.27	0.983	O	3.50

8.167	0.00	0.27	0.981	O	3.49
8.250	0.00	0.27	0.979	O	3.49
8.333	0.00	0.27	0.977	O	3.49
8.417	0.00	0.27	0.975	O	3.48
8.500	0.00	0.27	0.974	O	3.48
8.583	0.00	0.27	0.972	O	3.48
8.667	0.00	0.27	0.970	O	3.47
8.750	0.00	0.27	0.968	O	3.47
8.833	0.00	0.27	0.966	O	3.47
8.917	0.00	0.27	0.964	O	3.46
9.000	0.00	0.27	0.962	O	3.46
9.083	0.00	0.27	0.961	O	3.46
9.167	0.00	0.27	0.959	O	3.45
9.250	0.00	0.27	0.957	O	3.45
9.333	0.00	0.27	0.955	O	3.45
9.417	0.00	0.27	0.953	O	3.44
9.500	0.00	0.27	0.951	O	3.44
9.583	0.00	0.27	0.949	O	3.44
9.667	0.00	0.27	0.948	O	3.43
9.750	0.00	0.27	0.946	O	3.43
9.833	0.00	0.27	0.944	O	3.43
9.917	0.00	0.27	0.942	O	3.42
10.000	0.00	0.27	0.940	O	3.42
10.083	0.00	0.27	0.938	O	3.42
10.167	0.00	0.27	0.936	O	3.41
10.250	0.00	0.27	0.935	O	3.41
10.333	0.00	0.27	0.933	O	3.41
10.417	0.00	0.27	0.931	O	3.40
10.500	0.00	0.27	0.929	O	3.40
10.583	0.00	0.27	0.927	O	3.40
10.667	0.00	0.27	0.925	O	3.39
10.750	0.00	0.27	0.924	O	3.39
10.833	0.00	0.27	0.922	O	3.39
10.917	0.00	0.27	0.920	O	3.38
11.000	0.00	0.27	0.918	O	3.38
11.083	0.00	0.27	0.916	O	3.38
11.167	0.00	0.27	0.914	O	3.37
11.250	0.00	0.27	0.912	O	3.37
11.333	0.00	0.27	0.911	O	3.37
11.417	0.00	0.27	0.909	O	3.36
11.500	0.00	0.27	0.907	O	3.36
11.583	0.00	0.27	0.905	O	3.36
11.667	0.00	0.27	0.903	O	3.35
11.750	0.00	0.27	0.901	O	3.35
11.833	0.00	0.27	0.900	O	3.35
11.917	0.00	0.27	0.898	O	3.34
12.000	0.00	0.27	0.896	O	3.34
12.083	0.00	0.27	0.894	O	3.34
12.167	0.00	0.27	0.892	O	3.33
12.250	0.00	0.26	0.891	O	3.33
12.333	0.00	0.26	0.889	O	3.33
12.417	0.00	0.26	0.887	O	3.32
12.500	0.00	0.26	0.885	O	3.32
12.583	0.00	0.26	0.883	O	3.32
12.667	0.00	0.26	0.881	O	3.31
12.750	0.00	0.26	0.880	O	3.31

12.833	0.00	0.26	0.878	O					3.31
12.917	0.00	0.26	0.876	O					3.30
13.000	0.00	0.26	0.874	O					3.30
13.083	0.00	0.26	0.872	O					3.30
13.167	0.00	0.26	0.871	O					3.29
13.250	0.00	0.26	0.869	O					3.29
13.333	0.00	0.26	0.867	O					3.29
13.417	0.00	0.26	0.865	O					3.28
13.500	0.00	0.26	0.863	O					3.28
13.583	0.00	0.26	0.861	O					3.28
13.667	0.00	0.26	0.860	O					3.27
13.750	0.00	0.26	0.858	O					3.27
13.833	0.00	0.26	0.856	O					3.27
13.917	0.00	0.26	0.854	O					3.26
14.000	0.00	0.26	0.852	O					3.26
14.083	0.00	0.26	0.851	O					3.26
14.167	0.00	0.26	0.849	O					3.26
14.250	0.00	0.26	0.847	O					3.25
14.333	0.00	0.26	0.845	O					3.25
14.417	0.00	0.26	0.843	O					3.25
14.500	0.00	0.26	0.842	O					3.24
14.583	0.00	0.26	0.840	O					3.24
14.667	0.00	0.26	0.838	O					3.24
14.750	0.00	0.26	0.836	O					3.23
14.833	0.00	0.26	0.834	O					3.23
14.917	0.00	0.26	0.833	O					3.23
15.000	0.00	0.26	0.831	O					3.22
15.083	0.00	0.26	0.829	O					3.22
15.167	0.00	0.26	0.827	O					3.22
15.250	0.00	0.26	0.825	O					3.21
15.333	0.00	0.26	0.824	O					3.21
15.417	0.00	0.26	0.822	O					3.21
15.500	0.00	0.26	0.820	O					3.20
15.583	0.00	0.26	0.818	O					3.20
15.667	0.00	0.26	0.816	O					3.20
15.750	0.00	0.26	0.815	O					3.19
15.833	0.00	0.26	0.813	O					3.19
15.917	0.00	0.26	0.811	O					3.19
16.000	0.00	0.26	0.809	O					3.18
16.083	0.00	0.26	0.808	O					3.18
16.167	0.00	0.26	0.806	O					3.18
16.250	0.00	0.26	0.804	O					3.17
16.333	0.00	0.26	0.802	O					3.17
16.417	0.00	0.26	0.800	O					3.17
16.500	0.00	0.26	0.799	O					3.16
16.583	0.00	0.26	0.797	O					3.16
16.667	0.00	0.26	0.795	O					3.16
16.750	0.00	0.26	0.793	O					3.16
16.833	0.00	0.26	0.792	O					3.15
16.917	0.00	0.26	0.790	O					3.15
17.000	0.00	0.26	0.788	O					3.15
17.083	0.00	0.26	0.786	O					3.14
17.167	0.00	0.26	0.784	O					3.14
17.250	0.00	0.26	0.783	O					3.14
17.333	0.00	0.26	0.781	O					3.13
17.417	0.00	0.26	0.779	O					3.13

17.500	0.00	0.26	0.777	O					3.13
17.583	0.00	0.26	0.776	O					3.12
17.667	0.00	0.26	0.774	O					3.12
17.750	0.00	0.26	0.772	O					3.12
17.833	0.00	0.26	0.770	O					3.11
17.917	0.00	0.26	0.768	O					3.11
18.000	0.00	0.26	0.767	O					3.11
18.083	0.00	0.26	0.765	O					3.10
18.167	0.00	0.26	0.763	O					3.10
18.250	0.00	0.26	0.761	O					3.10
18.333	0.00	0.26	0.760	O					3.09
18.417	0.00	0.26	0.758	O					3.09
18.500	0.00	0.26	0.756	O					3.09
18.583	0.00	0.26	0.754	O					3.09
18.667	0.00	0.26	0.753	O					3.08
18.750	0.00	0.26	0.751	O					3.08
18.833	0.00	0.25	0.749	O					3.08
18.917	0.00	0.25	0.747	O					3.07
19.000	0.00	0.25	0.746	O					3.07
19.083	0.00	0.25	0.744	O					3.07
19.167	0.00	0.25	0.742	O					3.06
19.250	0.00	0.25	0.740	O					3.06
19.333	0.00	0.25	0.739	O					3.06
19.417	0.00	0.25	0.737	O					3.05
19.500	0.00	0.25	0.735	O					3.05
19.583	0.00	0.25	0.733	O					3.05
19.667	0.00	0.25	0.732	O					3.04
19.750	0.00	0.25	0.730	O					3.04
19.833	0.00	0.25	0.728	O					3.04
19.917	0.00	0.25	0.726	O					3.03
20.000	0.00	0.25	0.725	O					3.03
20.083	0.00	0.25	0.723	O					3.03
20.167	0.00	0.25	0.721	O					3.03
20.250	0.00	0.25	0.719	O					3.02
20.333	0.00	0.25	0.718	O					3.02
20.417	0.00	0.25	0.716	O					3.02
20.500	0.00	0.25	0.714	O					3.01
20.583	0.00	0.25	0.712	O					3.01
20.667	0.00	0.25	0.711	O					3.01
20.750	0.00	0.25	0.709	O					3.00
20.833	0.00	0.25	0.707	O					3.00
20.917	0.00	0.25	0.705	O					3.00
21.000	0.00	0.25	0.704	O					2.99
21.083	0.00	0.25	0.702	O					2.99
21.167	0.00	0.25	0.700	O					2.99
21.250	0.00	0.25	0.699	O					2.98
21.333	0.00	0.25	0.697	O					2.98
21.417	0.00	0.25	0.695	O					2.98
21.500	0.00	0.25	0.693	O					2.98
21.583	0.00	0.25	0.692	O					2.97
21.667	0.00	0.25	0.690	O					2.97
21.750	0.00	0.25	0.688	O					2.97
21.833	0.00	0.25	0.686	O					2.96
21.917	0.00	0.25	0.685	O					2.96
22.000	0.00	0.25	0.683	O					2.96
22.083	0.00	0.25	0.681	O					2.95

22.167	0.00	0.25	0.680	O	2.95
22.250	0.00	0.25	0.678	O	2.95
22.333	0.00	0.25	0.676	O	2.94
22.417	0.00	0.25	0.674	O	2.94
22.500	0.00	0.25	0.673	O	2.94
22.583	0.00	0.25	0.671	O	2.94
22.667	0.00	0.25	0.669	O	2.93
22.750	0.00	0.25	0.668	O	2.93
22.833	0.00	0.25	0.666	O	2.93
22.917	0.00	0.25	0.664	O	2.92
23.000	0.00	0.25	0.662	O	2.92
23.083	0.00	0.25	0.661	O	2.92
23.167	0.00	0.25	0.659	O	2.91
23.250	0.00	0.25	0.657	O	2.91
23.333	0.00	0.25	0.656	O	2.91
23.417	0.00	0.25	0.654	O	2.90
23.500	0.00	0.25	0.652	O	2.90
23.583	0.00	0.25	0.650	O	2.90
23.667	0.00	0.25	0.649	O	2.90
23.750	0.00	0.25	0.647	O	2.89
23.833	0.00	0.25	0.645	O	2.89
23.917	0.00	0.25	0.644	O	2.89
24.000	0.00	0.25	0.642	O	2.88
24.083	0.00	0.25	0.640	O	2.88
24.167	0.00	0.25	0.639	O	2.88
24.250	0.00	0.25	0.637	O	2.87
24.333	0.00	0.25	0.635	O	2.87
24.417	0.00	0.25	0.633	O	2.87
24.500	0.00	0.25	0.632	O	2.86
24.583	0.00	0.25	0.630	O	2.86
24.667	0.00	0.25	0.628	O	2.86
24.750	0.00	0.25	0.627	O	2.86
24.833	0.00	0.25	0.625	O	2.85
24.917	0.00	0.25	0.623	O	2.85
25.000	0.00	0.25	0.622	O	2.85
25.083	0.00	0.25	0.620	O	2.84
25.167	0.00	0.25	0.618	O	2.84
25.250	0.00	0.25	0.617	O	2.84
25.333	0.00	0.24	0.615	O	2.83
25.417	0.00	0.24	0.613	O	2.83
25.500	0.00	0.24	0.611	O	2.83
25.583	0.00	0.24	0.610	O	2.83
25.667	0.00	0.24	0.608	O	2.82
25.750	0.00	0.24	0.606	O	2.82
25.833	0.00	0.24	0.605	O	2.82
25.917	0.00	0.24	0.603	O	2.81
26.000	0.00	0.24	0.601	O	2.81
26.083	0.00	0.24	0.600	O	2.81
26.167	0.00	0.24	0.598	O	2.80
26.250	0.00	0.24	0.596	O	2.80
26.333	0.00	0.24	0.595	O	2.80
26.417	0.00	0.24	0.593	O	2.79
26.500	0.00	0.24	0.591	O	2.79
26.583	0.00	0.24	0.590	O	2.79
26.667	0.00	0.24	0.588	O	2.79
26.750	0.00	0.24	0.586	O	2.78

26.833	0.00	0.24	0.585	O	2.78
26.917	0.00	0.24	0.583	O	2.78
27.000	0.00	0.24	0.581	O	2.77
27.083	0.00	0.24	0.580	O	2.77
27.167	0.00	0.24	0.578	O	2.77
27.250	0.00	0.24	0.576	O	2.76
27.333	0.00	0.24	0.575	O	2.76
27.417	0.00	0.24	0.573	O	2.76
27.500	0.00	0.24	0.571	O	2.76
27.583	0.00	0.24	0.570	O	2.75
27.667	0.00	0.24	0.568	O	2.75
27.750	0.00	0.24	0.566	O	2.75
27.833	0.00	0.24	0.565	O	2.74
27.917	0.00	0.24	0.563	O	2.74
28.000	0.00	0.24	0.561	O	2.74
28.083	0.00	0.24	0.560	O	2.73
28.167	0.00	0.24	0.558	O	2.73
28.250	0.00	0.24	0.556	O	2.73
28.333	0.00	0.24	0.555	O	2.73
28.417	0.00	0.24	0.553	O	2.72
28.500	0.00	0.24	0.551	O	2.72
28.583	0.00	0.24	0.550	O	2.72
28.667	0.00	0.24	0.548	O	2.71
28.750	0.00	0.24	0.546	O	2.71
28.833	0.00	0.24	0.545	O	2.71
28.917	0.00	0.24	0.543	O	2.71
29.000	0.00	0.24	0.541	O	2.70
29.083	0.00	0.24	0.540	O	2.70
29.167	0.00	0.24	0.538	O	2.70
29.250	0.00	0.24	0.536	O	2.69
29.333	0.00	0.24	0.535	O	2.69
29.417	0.00	0.24	0.533	O	2.69
29.500	0.00	0.24	0.532	O	2.68
29.583	0.00	0.24	0.530	O	2.68
29.667	0.00	0.24	0.528	O	2.68
29.750	0.00	0.24	0.527	O	2.68
29.833	0.00	0.24	0.525	O	2.67
29.917	0.00	0.24	0.523	O	2.67
30.000	0.00	0.24	0.522	O	2.67
30.083	0.00	0.24	0.520	O	2.66
30.167	0.00	0.24	0.518	O	2.66
30.250	0.00	0.24	0.517	O	2.66
30.333	0.00	0.24	0.515	O	2.65
30.417	0.00	0.24	0.514	O	2.65
30.500	0.00	0.24	0.512	O	2.65
30.583	0.00	0.24	0.510	O	2.65
30.667	0.00	0.24	0.509	O	2.64
30.750	0.00	0.24	0.507	O	2.64
30.833	0.00	0.24	0.505	O	2.64
30.917	0.00	0.24	0.504	O	2.63
31.000	0.00	0.24	0.502	O	2.63
31.083	0.00	0.24	0.500	O	2.63
31.167	0.00	0.24	0.499	O	2.63
31.250	0.00	0.24	0.497	O	2.62
31.333	0.00	0.24	0.496	O	2.62
31.417	0.00	0.24	0.494	O	2.62

31.500	0.00	0.24	0.492	O	2.61
31.583	0.00	0.24	0.491	O	2.61
31.667	0.00	0.24	0.489	O	2.61
31.750	0.00	0.24	0.488	O	2.61
31.833	0.00	0.24	0.486	O	2.60
31.917	0.00	0.23	0.484	O	2.60
32.000	0.00	0.23	0.483	O	2.60
32.083	0.00	0.23	0.481	O	2.59
32.167	0.00	0.23	0.479	O	2.59
32.250	0.00	0.23	0.478	O	2.59
32.333	0.00	0.23	0.476	O	2.58
32.417	0.00	0.23	0.475	O	2.58
32.500	0.00	0.23	0.473	O	2.58
32.583	0.00	0.23	0.471	O	2.58
32.667	0.00	0.23	0.470	O	2.57
32.750	0.00	0.23	0.468	O	2.57
32.833	0.00	0.23	0.467	O	2.57
32.917	0.00	0.23	0.465	O	2.56
33.000	0.00	0.23	0.463	O	2.56
33.083	0.00	0.23	0.462	O	2.56
33.167	0.00	0.23	0.460	O	2.56
33.250	0.00	0.23	0.458	O	2.55
33.333	0.00	0.23	0.457	O	2.55
33.417	0.00	0.23	0.455	O	2.55
33.500	0.00	0.23	0.454	O	2.54
33.583	0.00	0.23	0.452	O	2.54
33.667	0.00	0.23	0.450	O	2.54
33.750	0.00	0.23	0.449	O	2.54
33.833	0.00	0.23	0.447	O	2.53
33.917	0.00	0.23	0.446	O	2.53
34.000	0.00	0.23	0.444	O	2.53
34.083	0.00	0.23	0.442	O	2.52
34.167	0.00	0.23	0.441	O	2.52
34.250	0.00	0.23	0.439	O	2.52
34.333	0.00	0.23	0.438	O	2.52
34.417	0.00	0.23	0.436	O	2.51
34.500	0.00	0.23	0.435	O	2.51
34.583	0.00	0.23	0.433	O	2.51
34.667	0.00	0.23	0.431	O	2.50
34.750	0.00	0.23	0.430	O	2.50
34.833	0.00	0.23	0.428	O	2.50
34.917	0.00	0.23	0.427	O	2.50
35.000	0.00	0.23	0.425	O	2.49
35.083	0.00	0.23	0.423	O	2.49
35.167	0.00	0.23	0.422	O	2.49
35.250	0.00	0.23	0.420	O	2.48
35.333	0.00	0.23	0.419	O	2.48
35.417	0.00	0.23	0.417	O	2.48
35.500	0.00	0.23	0.415	O	2.48
35.583	0.00	0.23	0.414	O	2.47
35.667	0.00	0.23	0.412	O	2.47
35.750	0.00	0.23	0.411	O	2.47
35.833	0.00	0.23	0.409	O	2.46
35.917	0.00	0.23	0.408	O	2.46
36.000	0.00	0.23	0.406	O	2.46
36.083	0.00	0.23	0.404	O	2.46

36.167	0.00	0.23	0.403	O	2.45
36.250	0.00	0.23	0.401	O	2.45
36.333	0.00	0.23	0.400	O	2.45
36.417	0.00	0.23	0.398	O	2.44
36.500	0.00	0.23	0.397	O	2.44
36.583	0.00	0.23	0.395	O	2.44
36.667	0.00	0.23	0.393	O	2.44
36.750	0.00	0.23	0.392	O	2.43
36.833	0.00	0.23	0.390	O	2.43
36.917	0.00	0.23	0.389	O	2.43
37.000	0.00	0.23	0.387	O	2.42
37.083	0.00	0.23	0.386	O	2.42
37.167	0.00	0.23	0.384	O	2.42
37.250	0.00	0.23	0.382	O	2.42
37.333	0.00	0.23	0.381	O	2.41
37.417	0.00	0.23	0.379	O	2.41
37.500	0.00	0.23	0.378	O	2.41
37.583	0.00	0.23	0.376	O	2.40
37.667	0.00	0.23	0.375	O	2.40
37.750	0.00	0.23	0.373	O	2.40
37.833	0.00	0.23	0.372	O	2.40
37.917	0.00	0.23	0.370	O	2.39
38.000	0.00	0.23	0.368	O	2.39
38.083	0.00	0.23	0.367	O	2.39
38.167	0.00	0.23	0.365	O	2.39
38.250	0.00	0.23	0.364	O	2.38
38.333	0.00	0.23	0.362	O	2.38
38.417	0.00	0.23	0.361	O	2.38
38.500	0.00	0.22	0.359	O	2.37
38.583	0.00	0.22	0.358	O	2.37
38.667	0.00	0.22	0.356	O	2.37
38.750	0.00	0.22	0.354	O	2.37
38.833	0.00	0.22	0.353	O	2.36
38.917	0.00	0.22	0.351	O	2.36
39.000	0.00	0.22	0.350	O	2.36
39.083	0.00	0.22	0.348	O	2.35
39.167	0.00	0.22	0.347	O	2.35
39.250	0.00	0.22	0.345	O	2.35
39.333	0.00	0.22	0.344	O	2.35
39.417	0.00	0.22	0.342	O	2.34
39.500	0.00	0.22	0.341	O	2.34
39.583	0.00	0.22	0.339	O	2.34
39.667	0.00	0.22	0.338	O	2.33
39.750	0.00	0.22	0.336	O	2.33
39.833	0.00	0.22	0.334	O	2.33
39.917	0.00	0.22	0.333	O	2.33
40.000	0.00	0.22	0.331	O	2.32
40.083	0.00	0.22	0.330	O	2.32
40.167	0.00	0.22	0.328	O	2.32
40.250	0.00	0.22	0.327	O	2.32
40.333	0.00	0.22	0.325	O	2.31
40.417	0.00	0.22	0.324	O	2.31
40.500	0.00	0.22	0.322	O	2.31
40.583	0.00	0.22	0.321	O	2.30
40.667	0.00	0.22	0.319	O	2.30
40.750	0.00	0.22	0.318	O	2.30

40.833	0.00	0.22	0.316	O	2.30
40.917	0.00	0.22	0.315	O	2.29
41.000	0.00	0.22	0.313	O	2.29
41.083	0.00	0.22	0.312	O	2.29
41.167	0.00	0.22	0.310	O	2.29
41.250	0.00	0.22	0.308	O	2.28
41.333	0.00	0.22	0.307	O	2.28
41.417	0.00	0.22	0.305	O	2.28
41.500	0.00	0.22	0.304	O	2.27
41.583	0.00	0.22	0.302	O	2.27
41.667	0.00	0.22	0.301	O	2.27
41.750	0.00	0.22	0.299	O	2.27
41.833	0.00	0.22	0.298	O	2.26
41.917	0.00	0.22	0.296	O	2.26
42.000	0.00	0.22	0.295	O	2.26
42.083	0.00	0.22	0.293	O	2.26
42.167	0.00	0.22	0.292	O	2.25
42.250	0.00	0.22	0.290	O	2.25
42.333	0.00	0.22	0.289	O	2.25
42.417	0.00	0.22	0.287	O	2.24
42.500	0.00	0.22	0.286	O	2.24
42.583	0.00	0.22	0.284	O	2.24
42.667	0.00	0.22	0.283	O	2.24
42.750	0.00	0.22	0.281	O	2.23
42.833	0.00	0.22	0.280	O	2.23
42.917	0.00	0.22	0.278	O	2.23
43.000	0.00	0.22	0.277	O	2.23
43.083	0.00	0.22	0.275	O	2.22
43.167	0.00	0.22	0.274	O	2.22
43.250	0.00	0.22	0.272	O	2.22
43.333	0.00	0.22	0.271	O	2.21
43.417	0.00	0.22	0.269	O	2.21
43.500	0.00	0.22	0.268	O	2.21
43.583	0.00	0.22	0.266	O	2.21
43.667	0.00	0.22	0.265	O	2.20
43.750	0.00	0.22	0.263	O	2.20
43.833	0.00	0.22	0.262	O	2.20
43.917	0.00	0.22	0.260	O	2.20
44.000	0.00	0.22	0.259	O	2.19
44.083	0.00	0.22	0.257	O	2.19
44.167	0.00	0.22	0.256	O	2.19
44.250	0.00	0.22	0.254	O	2.18
44.333	0.00	0.22	0.253	O	2.18
44.417	0.00	0.22	0.251	O	2.18
44.500	0.00	0.22	0.250	O	2.18
44.583	0.00	0.22	0.248	O	2.17
44.667	0.00	0.22	0.247	O	2.17
44.750	0.00	0.22	0.245	O	2.17
44.833	0.00	0.22	0.244	O	2.17
44.917	0.00	0.22	0.242	O	2.16
45.000	0.00	0.21	0.241	O	2.16
45.083	0.00	0.21	0.240	O	2.16
45.167	0.00	0.21	0.238	O	2.16
45.250	0.00	0.21	0.237	O	2.15
45.333	0.00	0.21	0.235	O	2.15
45.417	0.00	0.21	0.234	O	2.15

45.500	0.00	0.21	0.232	O	2.14
45.583	0.00	0.21	0.231	O	2.14
45.667	0.00	0.21	0.229	O	2.14
45.750	0.00	0.21	0.228	O	2.14
45.833	0.00	0.21	0.226	O	2.13
45.917	0.00	0.21	0.225	O	2.13
46.000	0.00	0.21	0.223	O	2.13
46.083	0.00	0.21	0.222	O	2.13
46.167	0.00	0.21	0.220	O	2.12
46.250	0.00	0.21	0.219	O	2.12
46.333	0.00	0.21	0.217	O	2.12
46.417	0.00	0.21	0.216	O	2.12
46.500	0.00	0.21	0.215	O	2.11
46.583	0.00	0.21	0.213	O	2.11
46.667	0.00	0.21	0.212	O	2.11
46.750	0.00	0.21	0.210	O	2.10
46.833	0.00	0.21	0.209	O	2.10
46.917	0.00	0.21	0.207	O	2.10
47.000	0.00	0.21	0.206	O	2.10
47.083	0.00	0.21	0.204	O	2.09
47.167	0.00	0.21	0.203	O	2.09
47.250	0.00	0.21	0.201	O	2.09
47.333	0.00	0.21	0.200	O	2.09
47.417	0.00	0.21	0.198	O	2.08
47.500	0.00	0.21	0.197	O	2.08
47.583	0.00	0.21	0.196	O	2.08
47.667	0.00	0.21	0.194	O	2.08
47.750	0.00	0.21	0.193	O	2.07
47.833	0.00	0.21	0.191	O	2.07
47.917	0.00	0.21	0.190	O	2.07
48.000	0.00	0.21	0.188	O	2.07
48.083	0.00	0.21	0.187	O	2.06
48.167	0.00	0.21	0.185	O	2.06
48.250	0.00	0.21	0.184	O	2.06
48.333	0.00	0.21	0.182	O	2.06
48.417	0.00	0.21	0.181	O	2.05
48.500	0.00	0.21	0.180	O	2.05
48.583	0.00	0.21	0.178	O	2.05
48.667	0.00	0.21	0.177	O	2.04
48.750	0.00	0.21	0.175	O	2.04
48.833	0.00	0.21	0.174	O	2.04
48.917	0.00	0.21	0.172	O	2.04
49.000	0.00	0.21	0.171	O	2.03
49.083	0.00	0.21	0.170	O	2.03
49.167	0.00	0.21	0.168	O	2.03
49.250	0.00	0.21	0.167	O	2.03
49.333	0.00	0.21	0.165	O	2.02
49.417	0.00	0.21	0.164	O	2.02
49.500	0.00	0.21	0.162	O	2.02
49.583	0.00	0.21	0.161	O	2.02
49.667	0.00	0.21	0.159	O	2.01
49.750	0.00	0.21	0.158	O	2.01
49.833	0.00	0.21	0.157	O	2.01
49.917	0.00	0.21	0.155	O	2.01
50.000	0.00	0.21	0.154	O	2.00
50.083	0.00	0.21	0.152	O	2.00

50.167	0.00	0.21	0.151	O					1.99
50.250	0.00	0.21	0.149	O					1.97
50.333	0.00	0.20	0.148	O					1.95
50.417	0.00	0.20	0.147	O					1.93
50.500	0.00	0.20	0.145	O					1.91
50.583	0.00	0.20	0.144	O					1.89
50.667	0.00	0.20	0.142	O					1.87
50.750	0.00	0.20	0.141	O					1.86
50.833	0.00	0.20	0.140	O					1.84
50.917	0.00	0.20	0.138	O					1.82
51.000	0.00	0.20	0.137	O					1.80
51.083	0.00	0.20	0.136	O					1.78
51.167	0.00	0.20	0.134	O					1.77
51.250	0.00	0.19	0.133	O					1.75
51.333	0.00	0.19	0.132	O					1.73
51.417	0.00	0.19	0.130	O					1.71
51.500	0.00	0.19	0.129	O					1.70
51.583	0.00	0.19	0.128	O					1.68
51.667	0.00	0.19	0.126	O					1.66
51.750	0.00	0.19	0.125	O					1.65
51.833	0.00	0.19	0.124	O					1.63
51.917	0.00	0.19	0.122	O					1.61
52.000	0.00	0.19	0.121	O					1.59
52.083	0.00	0.19	0.120	O					1.58
52.167	0.00	0.18	0.119	O					1.56
52.250	0.00	0.18	0.117	O					1.54
52.333	0.00	0.18	0.116	O					1.53
52.417	0.00	0.18	0.115	O					1.51
52.500	0.00	0.18	0.114	O					1.49
52.583	0.00	0.18	0.112	O					1.48
52.667	0.00	0.18	0.111	O					1.46
52.750	0.00	0.18	0.110	O					1.45
52.833	0.00	0.18	0.109	O					1.43
52.917	0.00	0.18	0.107	O					1.41
53.000	0.00	0.17	0.106	O					1.40
53.083	0.00	0.17	0.105	O					1.38
53.167	0.00	0.17	0.104	O					1.37
53.250	0.00	0.17	0.103	O					1.35
53.333	0.00	0.17	0.101	O					1.34
53.417	0.00	0.17	0.100	O					1.32
53.500	0.00	0.17	0.099	O					1.30
53.583	0.00	0.17	0.098	O					1.29
53.667	0.00	0.17	0.097	O					1.27
53.750	0.00	0.17	0.096	O					1.26
53.833	0.00	0.17	0.095	O					1.24
53.917	0.00	0.16	0.093	O					1.23
54.000	0.00	0.16	0.092	O					1.21
54.083	0.00	0.16	0.091	O					1.20
54.167	0.00	0.16	0.090	O					1.18
54.250	0.00	0.16	0.089	O					1.17
54.333	0.00	0.16	0.088	O					1.16
54.417	0.00	0.16	0.087	O					1.14
54.500	0.00	0.16	0.086	O					1.13
54.583	0.00	0.16	0.085	O					1.11
54.667	0.00	0.16	0.083	O					1.10
54.750	0.00	0.16	0.082	O					1.08

54.833	0.00	0.15	0.081	O					1.07
54.917	0.00	0.15	0.080	O					1.06
55.000	0.00	0.15	0.079	O					1.04
55.083	0.00	0.15	0.078	O					1.03
55.167	0.00	0.15	0.077	O					1.01
55.250	0.00	0.15	0.076	O					1.00
55.333	0.00	0.15	0.075	O					0.99
55.417	0.00	0.15	0.074	O					0.97
55.500	0.00	0.15	0.073	O					0.96
55.583	0.00	0.15	0.072	O					0.95
55.667	0.00	0.14	0.071	O					0.93
55.750	0.00	0.14	0.070	O					0.92
55.833	0.00	0.14	0.069	O					0.91
55.917	0.00	0.14	0.068	O					0.90
56.000	0.00	0.14	0.067	O					0.88
56.083	0.00	0.14	0.066	O					0.87
56.167	0.00	0.14	0.065	O					0.86
56.250	0.00	0.14	0.064	O					0.84
56.333	0.00	0.14	0.063	O					0.83
56.417	0.00	0.14	0.062	O					0.82
56.500	0.00	0.14	0.061	O					0.81
56.583	0.00	0.13	0.060	O					0.80
56.667	0.00	0.13	0.060	O					0.78
56.750	0.00	0.13	0.059	O					0.77
56.833	0.00	0.13	0.058	O					0.76
56.917	0.00	0.13	0.057	O					0.75
57.000	0.00	0.13	0.056	O					0.74
57.083	0.00	0.13	0.055	O					0.72
57.167	0.00	0.13	0.054	O					0.71
57.250	0.00	0.13	0.053	O					0.70
57.333	0.00	0.13	0.052	O					0.69
57.417	0.00	0.12	0.052	O					0.68
57.500	0.00	0.12	0.051	O					0.67
57.583	0.00	0.12	0.050	O					0.66
57.667	0.00	0.12	0.049	O					0.64
57.750	0.00	0.12	0.048	O					0.63
57.833	0.00	0.12	0.047	O					0.62
57.917	0.00	0.12	0.046	O					0.61
58.000	0.00	0.12	0.046	O					0.60
58.083	0.00	0.12	0.045	O					0.59
58.167	0.00	0.12	0.044	O					0.58
58.250	0.00	0.12	0.043	O					0.57
58.333	0.00	0.12	0.042	O					0.56
58.417	0.00	0.11	0.042	O					0.55
58.500	0.00	0.11	0.041	O					0.54
58.583	0.00	0.11	0.040	O					0.53
58.667	0.00	0.11	0.039	O					0.52
58.750	0.00	0.11	0.039	O					0.51
58.833	0.00	0.11	0.038	O					0.50
58.917	0.00	0.11	0.037	O					0.49
59.000	0.00	0.11	0.036	O					0.48
59.083	0.00	0.10	0.036	O					0.47
59.167	0.00	0.10	0.035	O					0.46
59.250	0.00	0.10	0.034	O					0.45

Remaining water in basin = 0.03 (Ac.Ft)

\*\*\*\*\*HYDROGRAPH DATA\*\*\*\*\*

Number of intervals = 711  
Time interval = 5.0 (Min.)  
Maximum/Peak flow rate = 0.283 (CFS)  
Total volume = 1.133 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

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