

**PIDGEON PARK WEST PLAT 3
LOT 3 (A AND B)
DETENTION CALCULATIONS**

Highway K & Mexico Rd. City of O'Fallon, Missouri

Kuhlmann Design Group
Project No. 980324-0011
Calculation date 2/27/07

Calculated by: Dennis Niehaus

Checked by: Jay Lapin



Detention structure: Underground
60" dia. CMP, 4 barrels @ 70' with 30' x 60" CMP connecting manifolds at each end

Flow Control: 1-7" diameter opening at elev 506.80 (invert)
1-10" diameter opening at elev 510.25 (invert)
Overflow elevation at 511.22 (high water for 100yr storm)

<i>Storm runoff:</i>	Existing (allowable):	Developed (detention outfall):
	2 yr storm 1.80cfs	2 yr storm 1.48cfs
	15 yr storm 2.93cfs	15 yr storm 2.22cfs
	25 yr storm 3.62cfs	25 yr storm 2.76cfs
	50 yr storm 4.09cfs	50 yr storm 2.82cfs
	100 yr storm 4.62cfs	100 yr storm 4.58cfs

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VOL.PIPE 60		Vol: Pipe	77

S/N: HOM0L0436313 JRK, JR

Pond Pack Ver: 10-9-97 :055 Compute Time: 10:33:30 Date: 02-27-2007

le.... J:\1998\980324~1\0011\HYDR\PONDPA~1\9811L3R2.ppk

LEVEL POOL ROUTING DATA

HYG Dir = J:\1998\980324~1\0011\HYDR\PONDPA~1\
 Inflow HYG file = 9811L3R2.HYG - LOT 3 A-B Of 100
 Outflow HYG file = NONE STORED - 2-27-07 RT OUT Of 100

Pond Node Data = P 20
 Pond Volume Data = Vol.Pipe 60
 Pond Outlet Data = Lot3 DetCntrl R1

No Infiltration

INITIAL CONDITIONS

 Starting WS Elev = 506.80 ft
 Starting Volume = 0 cu.ft
 Starting Outflow = .00 cfs
 Starting Infiltr. = .00 cfs
 Starting Total Qout = .00 cfs
 Time Increment = .0250 hrs

Elevation ft	Outflow cfs	Storage cu.ft	Infiltr. cfs	Q Total cfs	2S/t + O cfs
506.80	.00	0	.00	.00	.00
506.92	.04	6	.00	.04	.17
507.04	.14	31	.00	.14	.82
507.16	.29	82	.00	.29	2.11
507.28	.49	161	.00	.49	4.06
507.40	.71	260	.00	.71	6.50
507.52	.84	377	.00	.84	9.23
507.64	.95	507	.00	.95	12.21
507.76	1.05	647	.00	1.05	15.42
507.88	1.14	796	.00	1.14	18.82
508.00	1.23	953	.00	1.23	22.40
508.12	1.30	1118	.00	1.30	26.15
508.24	1.38	1289	.00	1.38	30.03
508.36	1.45	1466	.00	1.45	34.03
508.48	1.52	1648	.00	1.52	38.13
508.60	1.58	1834	.00	1.58	42.33
508.72	1.64	2024	.00	1.64	46.61
508.84	1.70	2217	.00	1.70	50.96
508.96	1.76	2412	.00	1.76	55.37
509.08	1.81	2610	.00	1.81	59.81
509.20	1.87	2809	.00	1.87	64.30
509.32	1.92	3010	.00	1.92	68.81
509.44	1.97	3211	.00	1.97	73.33

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LEVEL POOL ROUTING DATA

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No Infiltration

INITIAL CONDITIONS

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 Starting Volume = 0 cu.ft
 Starting Outflow = .00 cfs
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 Starting Total Qout= .00 cfs
 Time Increment = .0250 hrs

Elevation ft	Outflow cfs	Storage cu.ft	Infiltr. cfs	Q Total cfs	2S/t + O cfs
509.56	2.02	3412	.00	2.02	77.85
509.68	2.07	3614	.00	2.07	82.37
509.80	2.12	3814	.00	2.12	86.87
509.92	2.16	4013	.00	2.16	91.34
510.04	2.21	4210	.00	2.21	95.77
510.16	2.25	4406	.00	2.25	100.16
510.25	2.29	4550	.00	2.29	103.41
510.28	2.30	4598	.00	2.30	104.49
510.40	2.41	4788	.00	2.41	108.81
510.52	2.60	4973	.00	2.60	113.12
510.64	2.85	5154	.00	2.85	117.40
510.76	3.16	5331	.00	3.16	121.62
510.88	3.53	5501	.00	3.53	125.78
511.00	3.92	5666	.00	3.92	129.82
511.12	4.35	5822	.00	4.35	133.72
511.22	4.56	5946	.00	4.56	136.69
511.24	4.66	5969	.00	4.66	137.31
511.36	5.80	6108	.00	5.80	141.53
511.48	7.49	6236	.00	7.49	146.06
511.60	9.55	6351	.00	9.55	150.69
511.72	11.93	6448	.00	11.93	155.23
511.84	14.79	6536	.00	14.79	160.04
511.96	18.07	6618	.00	18.07	165.13

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Type.... Pond E-V-Q Table
Name.... 2-27-07 RT

le.... J:\1998\980324~1\0011\HYDR\PONDPA~1\9811L3R2.ppk

LEVEL POOL ROUTING DATA

HYG Dir = J:\1998\980324~1\0011\HYDR\PONDPA~1\
Inflow HYG file = 9811L3R2.HYG - LOT 3 A-B Of 100
Outflow HYG file = NONE STORED - 2-27-07 RT OUT OF 100

Pond Node Data = P 20
Pond Volume Data = Vol.Pipe 60
Pond Outlet Data = Lot3 DetCntrl R1

No Infiltration

INITIAL CONDITIONS

Starting WS Elev = 506.80 ft
Starting Volume = 0 cu.ft
Starting Outflow = .00 cfs
Starting Infiltr. = .00 cfs
Starting Total Qout= .00 cfs
Time Increment = .0250 hrs

Elevation ft	Outflow cfs	Storage cu.ft	Infiltr. cfs	Q Total cfs	2S/t + O cfs
512.08	21.68	6656	.00	21.68	169.60
512.18	24.91	6676	.00	24.91	173.26

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Outflow HYG file = NONE STORED - 2-27-07 RT OUT Of 100

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Pond Volume Data = Vol.Pipe 60
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No Infiltration

INITIAL CONDITIONS

Starting WS Elev = 506.80 ft
Starting Volume = 0 cu.ft
Starting Outflow = .00 cfs
Starting Infiltr. = .00 cfs
Starting Total Qout = .00 cfs
Time Increment = .0250 hrs

INFLOW/OUTFLOW HYDROGRAPH SUMMARY

=====
Peak Inflow = 9.11 cfs at 11.9250 hrs
Peak Outflow = 4.58 cfs at 12.0750 hrs

Peak Elevation = 511.22 ft
Peak Storage = 5948 cu.ft
=====

MASS BALANCE (cu.ft)

+ Initial Vol = 0
+ HYG Vol IN = 21962
- Infiltration = 0
- HYG Vol OUT = 21961
- Retained Vol = 0

Unrouted Vol == cu.ft (.001% of Inflow Volume)

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POND ROUTED TOTAL OUTFLOW HYG...

HYG file =
 HYG ID = 2-27-07 RT OUT
 HYG Tag = Of 100

 Peak Discharge = 4.58 cfs
 Time to Peak = 12.0750 hrs
 HYG Volume = 21961 cu.ft

HYDROGRAPH ORDINATES (cfs)

Output Time increment = .0250 hrs
 Time on left represents time for first value in each row.

Time hrs					
6.2500	.00	.00	.00	.00	.00
6.3750	.00	.00	.00	.00	.00
6.5000	.00	.00	.00	.01	.01
6.6250	.01	.01	.01	.01	.01
6.7500	.01	.01	.01	.01	.01
6.8750	.01	.01	.01	.01	.01
7.0000	.01	.01	.01	.01	.01
7.1250	.01	.02	.02	.02	.02
7.2500	.02	.02	.02	.02	.02
7.3750	.02	.02	.02	.02	.02
7.5000	.02	.02	.02	.02	.02
7.6250	.02	.02	.03	.03	.03
7.7500	.03	.03	.03	.03	.03
7.8750	.03	.03	.03	.03	.03
8.0000	.03	.03	.03	.03	.03
8.1250	.03	.04	.04	.04	.04
8.2500	.04	.04	.04	.04	.04
8.3750	.04	.04	.04	.05	.05
8.5000	.05	.05	.05	.05	.05
8.6250	.05	.05	.05	.06	.06
8.7500	.06	.06	.06	.06	.06
8.8750	.06	.07	.07	.07	.07
9.0000	.07	.07	.07	.07	.08
9.1250	.08	.08	.08	.08	.08
9.2500	.08	.08	.08	.08	.08
9.3750	.08	.09	.09	.09	.09
9.5000	.09	.09	.09	.09	.09
9.6250	.09	.09	.10	.10	.10
9.7500	.10	.10	.10	.11	.11
9.8750	.11	.11	.12	.12	.12
10.0000	.12	.12	.13	.13	.13
10.1250	.13	.14	.14	.14	.14
10.2500	.15	.15	.15	.15	.16

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File.... J:\1998\980324~1\0011\HYDR\PONDPA~1\9811L3R2.ppk

HYDROGRAPH ORDINATES (cfs)						
Time	Output Time increment = .0250 hrs					
hrs	Time on left represents time for first value in each row.					
10.3750	.16	.16	.17	.17	.17	.17
10.5000	.18	.18	.19	.19	.19	.19
10.6250	.20	.20	.21	.21	.22	.22
10.7500	.22	.23	.23	.24	.24	.24
10.8750	.25	.26	.26	.27	.27	.27
11.0000	.28	.29	.29	.30	.31	.31
11.1250	.31	.32	.33	.34	.35	.35
11.2500	.37	.38	.39	.40	.42	.42
11.3750	.43	.45	.46	.48	.49	.49
11.5000	.51	.53	.56	.62	.70	.70
11.6250	.75	.82	.90	.99	1.08	1.08
11.7500	1.18	1.28	1.39	1.50	1.62	1.62
11.8750	1.76	1.91	2.06	2.21	2.40	2.40
12.0000	3.07	3.89	4.46	4.58	4.45	4.45
12.1250	4.11	3.71	3.35	3.06	2.83	2.83
12.2500	2.66	2.52	2.41	2.35	2.29	2.29
12.3750	2.27	2.24	2.22	2.19	2.17	2.17
12.5000	2.14	2.11	2.09	2.06	2.03	2.03
12.6250	2.00	1.97	1.94	1.91	1.89	1.89
12.7500	1.86	1.83	1.80	1.77	1.74	1.74
12.8750	1.71	1.68	1.65	1.62	1.59	1.59
13.0000	1.56	1.52	1.49	1.46	1.43	1.43
13.1250	1.40	1.36	1.33	1.30	1.26	1.26
13.2500	1.23	1.19	1.16	1.12	1.09	1.09
13.3750	1.05	1.01	.98	.94	.90	.90
13.5000	.87	.83	.79	.75	.72	.72
13.6250	.66	.61	.57	.53	.50	.50
13.7500	.48	.45	.43	.42	.41	.41
13.8750	.39	.38	.37	.37	.36	.36
14.0000	.35	.35	.34	.34	.33	.33
14.1250	.33	.32	.32	.32	.31	.31
14.2500	.31	.31	.31	.31	.30	.30
14.3750	.30	.30	.30	.30	.30	.30
14.5000	.29	.29	.29	.29	.29	.29
14.6250	.29	.28	.28	.28	.28	.28
14.7500	.28	.28	.28	.27	.27	.27
14.8750	.27	.27	.27	.27	.27	.27
15.0000	.26	.26	.26	.26	.26	.26
15.1250	.26	.26	.25	.25	.25	.25
15.2500	.25	.25	.25	.25	.24	.24
15.3750	.24	.24	.24	.24	.24	.24
15.5000	.23	.23	.23	.23	.23	.23
15.6250	.23	.23	.22	.22	.22	.22
15.7500	.22	.22	.22	.22	.21	.21
15.8750	.21	.21	.21	.21	.21	.21
16.0000	.21	.20	.20	.20	.20	.20
16.1250	.20	.20	.20	.20	.20	.20

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HYDROGRAPH ORDINATES (cfs)						
Time	Output Time increment = .0250 hrs					
hrs	Time on left represents time for first value in each row.					
16.2500	.19	.19	.19	.19	.19	.19
16.3750	.19	.19	.19	.19	.19	.19
16.5000	.19	.19	.19	.19	.19	.19
16.6250	.19	.19	.19	.18	.18	.18
16.7500	.18	.18	.18	.18	.18	.18
16.8750	.18	.18	.18	.18	.18	.18
17.0000	.18	.18	.18	.18	.18	.18
17.1250	.18	.18	.18	.17	.17	.17
17.2500	.17	.17	.17	.17	.17	.17
17.3750	.17	.17	.17	.17	.17	.17
17.5000	.17	.17	.17	.17	.17	.17
17.6250	.17	.17	.16	.16	.16	.16
17.7500	.16	.16	.16	.16	.16	.16
17.8750	.16	.16	.16	.16	.16	.16
18.0000	.16	.16	.16	.16	.16	.16
18.1250	.16	.15	.15	.15	.15	.15
18.2500	.15	.15	.15	.15	.15	.15
18.3750	.15	.15	.15	.15	.15	.15
18.5000	.15	.15	.15	.15	.15	.15
18.6250	.14	.14	.14	.14	.14	.14
18.7500	.14	.14	.14	.14	.14	.14
18.8750	.14	.14	.14	.14	.14	.14
19.0000	.14	.14	.14	.14	.14	.13
19.1250	.13	.13	.13	.13	.13	.13
19.2500	.13	.13	.13	.13	.13	.13
19.3750	.13	.13	.13	.13	.13	.13
19.5000	.13	.13	.13	.12	.12	.12
19.6250	.12	.12	.12	.12	.12	.12
19.7500	.12	.12	.12	.12	.12	.12
19.8750	.12	.12	.12	.12	.12	.12
20.0000	.12	.11	.11	.11	.11	.11
20.1250	.11	.11	.11	.11	.11	.11
20.2500	.11	.11	.11	.11	.11	.11
20.3750	.11	.11	.11	.11	.11	.11
20.5000	.11	.11	.11	.11	.11	.11
20.6250	.11	.11	.11	.11	.11	.11
20.7500	.11	.11	.11	.11	.11	.11
20.8750	.11	.11	.11	.11	.11	.11
21.0000	.11	.11	.11	.11	.11	.11
21.1250	.11	.11	.11	.11	.11	.11
21.2500	.11	.11	.11	.11	.11	.11
21.3750	.11	.11	.11	.11	.11	.11
21.5000	.11	.11	.11	.11	.11	.11
21.6250	.11	.11	.11	.11	.11	.11
21.7500	.11	.11	.11	.11	.11	.11
21.8750	.11	.11	.10	.10	.10	.10
22.0000	.10	.10	.10	.10	.10	.10

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HYDROGRAPH ORDINATES (cfs)						
Time	Output Time increment = .0250 hrs					
hrs	Time on left represents time for first value in each row.					
22.1250	.10	.10	.10	.10	.10	.10
22.2500	.10	.10	.10	.10	.10	.10
22.3750	.10	.10	.10	.10	.10	.10
22.5000	.10	.10	.10	.10	.10	.10
22.6250	.10	.10	.10	.10	.10	.10
22.7500	.10	.10	.10	.10	.10	.10
22.8750	.10	.10	.10	.10	.10	.10
23.0000	.10	.10	.10	.10	.10	.10
23.1250	.10	.10	.10	.10	.10	.10
23.2500	.10	.10	.10	.10	.10	.10
23.3750	.10	.10	.10	.10	.10	.10
23.5000	.10	.10	.10	.10	.10	.10
23.6250	.10	.10	.10	.10	.10	.10
23.7500	.10	.10	.10	.10	.10	.10
23.8750	.10	.10	.10	.10	.10	.10
24.0000	.10	.10	.09	.08	.07	.07
24.1250	.05	.04	.02	.02	.01	.01
24.2500	.01	.00	.00	.00	.00	.00

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LEVEL POOL ROUTING SUMMARY

HYG Dir = J:\1998\980324~1\0011\HYDR\PONDPA~1\
Inflow HYG file = 9811L3R2.HYG - LOT 3 A-B Of 15
Outflow HYG file = NONE STORED - 2-27-07 RT OUT Of 15

Pond Node Data = P 20
Pond Volume Data = Vol.Pipe 60
Pond Outlet Data = Lot3 DetCntrl R1

No Infiltration

INITIAL CONDITIONS

Starting WS Elev = 506.80 ft
Starting Volume = 0 cu.ft
Starting Outflow = .00 cfs
Starting Infiltr. = .00 cfs
Starting Total Qout = .00 cfs
Time Increment = .0250 hrs

INFLOW/OUTFLOW HYDROGRAPH SUMMARY

=====
Peak Inflow = 6.56 cfs at 11.9250 hrs
Peak Outflow = 2.22 cfs at 12.1000 hrs
=====

Peak Elevation = 510.07 ft
Peak Storage = 4264 cu.ft
=====

MASS BALANCE (cu.ft)

+ Initial Vol = 0
+ HYG Vol IN = 15743
- Infiltration = 0
- HYG Vol OUT = 15743
- Retained Vol = 0

Unrouted Vol ==- cu.ft (.001% of Inflow Volume)

File.... J:\1998\980324~1\0011\HYDR\PONDPA~1\9811L3R2.ppk

POND ROUTED TOTAL OUTFLOW HYG...

HYG file =
 HYG ID = 2-27-07 RT OUT
 HYG Tag = Of 15

 Peak Discharge = 2.22 cfs
 Time to Peak = 12.1000 hrs
 HYG Volume = 15743 cu.ft

HYDROGRAPH ORDINATES (cfs)

Output Time increment = .0250 hrs
 Time on left represents time for first value in each row.

Time hrs	1	2	3	4	5	6
7.3500	.00	.00	.00	.00	.00	.00
7.4750	.00	.00	.00	.00	.00	.00
7.6000	.00	.00	.00	.00	.00	.00
7.7250	.01	.01	.01	.01	.01	.01
7.8500	.01	.01	.01	.01	.01	.01
7.9750	.01	.01	.01	.01	.01	.01
8.1000	.01	.01	.01	.01	.01	.01
8.2250	.01	.01	.01	.01	.01	.01
8.3500	.02	.02	.02	.02	.02	.02
8.4750	.02	.02	.02	.02	.02	.02
8.6000	.02	.02	.02	.02	.02	.02
8.7250	.02	.03	.03	.03	.03	.03
8.8500	.03	.03	.03	.03	.03	.03
8.9750	.03	.03	.03	.03	.03	.04
9.1000	.04	.04	.04	.04	.04	.04
9.2250	.04	.04	.04	.04	.04	.04
9.3500	.04	.04	.04	.04	.04	.04
9.4750	.04	.05	.05	.05	.05	.05
9.6000	.05	.05	.05	.05	.05	.05
9.7250	.05	.05	.05	.05	.06	.06
9.8500	.06	.06	.06	.06	.06	.06
9.9750	.07	.07	.07	.07	.07	.07
10.1000	.07	.07	.08	.08	.08	.08
10.2250	.08	.08	.09	.09	.09	.09
10.3500	.09	.09	.10	.10	.10	.10
10.4750	.10	.11	.11	.11	.11	.11
10.6000	.12	.12	.12	.13	.13	.13
10.7250	.13	.14	.14	.14	.14	.15
10.8500	.15	.15	.16	.16	.16	.16
10.9750	.17	.17	.18	.18	.18	.19
11.1000	.19	.20	.20	.21	.21	.22
11.2250	.23	.23	.24	.25	.25	.26
11.3500	.27	.28	.29	.30	.30	.31

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HYDROGRAPH ORDINATES (cfs)						
Output Time increment = .0250 hrs						
Time hrs	Time on left represents time for first value in each row.					
11.4750	.32	.33	.34	.37	.41	
11.6000	.46	.52	.61	.72	.79	
11.7250	.87	.96	1.05	1.14	1.24	
11.8500	1.34	1.47	1.60	1.73	1.85	
11.9750	1.95	2.04	2.12	2.18	2.21	
12.1000	2.22	2.22	2.20	2.19	2.16	
12.2250	2.14	2.12	2.10	2.07	2.05	
12.3500	2.02	1.99	1.97	1.94	1.91	
12.4750	1.88	1.85	1.83	1.80	1.76	
12.6000	1.73	1.70	1.67	1.64	1.61	
12.7250	1.57	1.54	1.51	1.47	1.44	
12.8500	1.41	1.37	1.34	1.30	1.26	
12.9750	1.23	1.19	1.15	1.11	1.08	
13.1000	1.04	1.00	.96	.91	.87	
13.2250	.83	.79	.75	.71	.64	
13.3500	.58	.53	.50	.46	.43	
13.4750	.41	.39	.37	.36	.35	
13.6000	.34	.33	.32	.31	.31	
13.7250	.30	.30	.29	.29	.28	
13.8500	.28	.27	.27	.27	.26	
13.9750	.26	.26	.25	.25	.25	
14.1000	.24	.24	.24	.24	.24	
14.2250	.23	.23	.23	.23	.23	
14.3500	.23	.23	.23	.22	.22	
14.4750	.22	.22	.22	.22	.22	
14.6000	.22	.22	.21	.21	.21	
14.7250	.21	.21	.21	.21	.21	
14.8500	.21	.20	.20	.20	.20	
14.9750	.20	.20	.20	.20	.20	
15.1000	.20	.19	.19	.19	.19	
15.2250	.19	.19	.19	.19	.19	
15.3500	.18	.18	.18	.18	.18	
15.4750	.18	.18	.18	.18	.17	
15.6000	.17	.17	.17	.17	.17	
15.7250	.17	.17	.17	.16	.16	
15.8500	.16	.16	.16	.16	.16	
15.9750	.16	.16	.15	.15	.15	
16.1000	.15	.15	.15	.15	.15	
16.2250	.15	.15	.15	.15	.15	
16.3500	.15	.15	.15	.14	.14	
16.4750	.14	.14	.14	.14	.14	
16.6000	.14	.14	.14	.14	.14	
16.7250	.14	.14	.14	.14	.14	
16.8500	.14	.14	.14	.14	.14	
16.9750	.14	.14	.14	.13	.13	
17.1000	.13	.13	.13	.13	.13	
17.2250	.13	.13	.13	.13	.13	

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HYDROGRAPH ORDINATES (cfs)						
Time	Output Time increment = .0250 hrs					
hrs	Time on left represents time for first value in each row.					
17.3500	.13	.13	.13	.13	.13	.13
17.4750	.13	.13	.13	.13	.13	.13
17.6000	.13	.13	.13	.12	.12	.12
17.7250	.12	.12	.12	.12	.12	.12
17.8500	.12	.12	.12	.12	.12	.12
17.9750	.12	.12	.12	.12	.12	.12
18.1000	.12	.12	.12	.12	.12	.12
18.2250	.12	.12	.12	.12	.12	.11
18.3500	.11	.11	.11	.11	.11	.11
18.4750	.11	.11	.11	.11	.11	.11
18.6000	.11	.11	.11	.11	.11	.11
18.7250	.11	.11	.11	.11	.11	.11
18.8500	.11	.11	.11	.11	.11	.10
18.9750	.10	.10	.10	.10	.10	.10
19.1000	.10	.10	.10	.10	.10	.10
19.2250	.10	.10	.10	.10	.10	.10
19.3500	.10	.10	.10	.10	.10	.10
19.4750	.10	.10	.10	.10	.10	.09
19.6000	.09	.09	.09	.09	.09	.09
19.7250	.09	.09	.09	.09	.09	.09
19.8500	.09	.09	.09	.09	.09	.09
19.9750	.09	.09	.09	.09	.09	.09
20.1000	.09	.09	.09	.09	.09	.09
20.2250	.09	.09	.09	.09	.09	.09
20.3500	.09	.08	.08	.08	.08	.08
20.4750	.08	.08	.08	.08	.08	.08
20.6000	.08	.08	.08	.08	.08	.08
20.7250	.08	.08	.08	.08	.08	.08
20.8500	.08	.08	.08	.08	.08	.08
20.9750	.08	.08	.08	.08	.08	.08
21.1000	.08	.08	.08	.08	.08	.08
21.2250	.08	.08	.08	.08	.08	.08
21.3500	.08	.08	.08	.08	.08	.08
21.4750	.08	.08	.08	.08	.08	.08
21.6000	.08	.08	.08	.08	.08	.08
21.7250	.08	.08	.08	.08	.08	.08
21.8500	.08	.08	.08	.08	.08	.08
21.9750	.08	.08	.08	.08	.08	.08
22.1000	.08	.08	.08	.08	.08	.08
22.2250	.08	.08	.08	.08	.08	.08
22.3500	.08	.08	.08	.08	.08	.08
22.4750	.08	.08	.08	.08	.08	.08
22.6000	.08	.08	.08	.08	.08	.08
22.7250	.08	.08	.08	.08	.08	.08
22.8500	.08	.08	.08	.08	.08	.08
22.9750	.08	.08	.08	.08	.08	.08
23.1000	.08	.08	.08	.08	.08	.08

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HYDROGRAPH ORDINATES (cfs)						
Time	Output Time increment = .0250 hrs					
hrs	Time on left represents time for first value in each row.					
23.2250	.08	.08	.08	.08	.08	.08
23.3500	.08	.08	.08	.08	.08	.08
23.4750	.08	.08	.08	.08	.08	.08
23.6000	.07	.07	.07	.07	.07	.07
23.7250	.07	.07	.07	.07	.07	.07
23.8500	.07	.07	.07	.07	.07	.07
23.9750	.07	.07	.07	.07	.07	.06
24.1000	.05	.04	.03	.02		.01
24.2250	.01	.00	.00			

S/N: HOMOL0436313 JRK, JR

Pond Pack Ver: 10-9-97 :055 Compute Time: 10:33:30 Date: 02-27-2007

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LEVEL POOL ROUTING SUMMARY

HYG Dir = J:\1998\980324~1\0011\HYDR\PONDPA~1\
Inflow HYG file = 9811L3R2.HYG - LOT 3 A-B Of 2
Outflow HYG file = NONE STORED - 2-27-07 RT OUT Of 2

Pond Node Data = P 20
Pond Volume Data = Vol.Pipe 60
Pond Outlet Data = Lot3 DetCntrl R1

No Infiltration

INITIAL CONDITIONS

Starting WS Elev = 506.80 ft
Starting Volume = 0 cu.ft
Starting Outflow = .00 cfs
Starting Infiltr. = .00 cfs
Starting Total Qout = .00 cfs
Time Increment = .0250 hrs

INFLOW/OUTFLOW HYDROGRAPH SUMMARY

=====
Peak Inflow = 3.12 cfs at 11.9500 hrs
Peak Outflow = 1.48 cfs at 12.0750 hrs

Peak Elevation = 508.42 ft
Peak Storage = 1553 cu.ft
=====

MASS BALANCE (cu.ft)

+ Initial Vol = 0
+ HYG Vol IN = 7554
- Infiltration = 0
- HYG Vol OUT = 7554
- Retained Vol = 0

Unrouted Vol == cu.ft (.002% of Inflow Volume)

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POND ROUTED TOTAL OUTFLOW HYG...

HYG file =
 HYG ID = 2-27-07 RT OUT
 HYG Tag = Of 2

 Peak Discharge = 1.48 cfs
 Time to Peak = 12.0750 hrs
 HYG Volume = 7554 cu.ft

HYDROGRAPH ORDINATES (cfs)

Output Time increment = .0250 hrs
 Time on left represents time for first value in each row.

Time hrs	1	2	3	4	5
9.6000	.00	.00	.00	.00	.00
9.7250	.00	.00	.00	.00	.00
9.8500	.00	.00	.00	.01	.01
9.9750	.01	.01	.01	.01	.01
10.1000	.01	.01	.01	.01	.01
10.2250	.01	.01	.01	.01	.01
10.3500	.02	.02	.02	.02	.02
10.4750	.02	.02	.02	.02	.02
10.6000	.02	.03	.03	.03	.03
10.7250	.03	.03	.03	.03	.04
10.8500	.04	.04	.04	.04	.04
10.9750	.04	.05	.05	.05	.05
11.1000	.05	.06	.06	.06	.06
11.2250	.07	.07	.08	.08	.08
11.3500	.09	.09	.10	.10	.10
11.4750	.11	.11	.12	.13	.15
11.6000	.17	.20	.24	.29	.34
11.7250	.41	.49	.58	.69	.77
11.8500	.85	.95	1.05	1.15	1.24
11.9750	1.32	1.38	1.43	1.47	1.48
12.1000	1.48	1.46	1.44	1.41	1.39
12.2250	1.36	1.32	1.29	1.26	1.23
12.3500	1.19	1.15	1.12	1.08	1.04
12.4750	1.00	.96	.91	.87	.82
12.6000	.77	.73	.65	.58	.52
12.7250	.47	.43	.40	.37	.34
12.8500	.32	.31	.29	.28	.26
12.9750	.25	.24	.24	.23	.23
13.1000	.22	.22	.21	.21	.20
13.2250	.20	.20	.20	.19	.19
13.3500	.19	.19	.18	.18	.18
13.4750	.18	.17	.17	.17	.17
13.6000	.17	.16	.16	.16	.16

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HYDROGRAPH ORDINATES (cfs)						
Time	Output Time increment = .0250 hrs					
hrs	Time on left represents time for first value in each row.					
13.7250	.16	.15	.15	.15	.15	.15
13.8500	.15	.15	.14	.14	.14	.14
13.9750	.14	.14	.14	.13	.13	.13
14.1000	.13	.13	.13	.13	.13	.13
14.2250	.13	.12	.12	.12	.12	.12
14.3500	.12	.12	.12	.12	.12	.12
14.4750	.12	.12	.12	.12	.12	.12
14.6000	.12	.12	.12	.12	.12	.11
14.7250	.11	.11	.11	.11	.11	.11
14.8500	.11	.11	.11	.11	.11	.11
14.9750	.11	.11	.11	.11	.11	.11
15.1000	.11	.11	.10	.10	.10	.10
15.2250	.10	.10	.10	.10	.10	.10
15.3500	.10	.10	.10	.10	.10	.10
15.4750	.10	.10	.10	.10	.10	.09
15.6000	.09	.09	.09	.09	.09	.09
15.7250	.09	.09	.09	.09	.09	.09
15.8500	.09	.09	.09	.09	.09	.09
15.9750	.09	.08	.08	.08	.08	.08
16.1000	.08	.08	.08	.08	.08	.08
16.2250	.08	.08	.08	.08	.08	.08
16.3500	.08	.08	.08	.08	.08	.08
16.4750	.08	.08	.08	.08	.08	.08
16.6000	.08	.08	.08	.08	.08	.08
16.7250	.08	.08	.08	.08	.08	.08
16.8500	.08	.08	.08	.08	.08	.07
16.9750	.07	.07	.07	.07	.07	.07
17.1000	.07	.07	.07	.07	.07	.07
17.2250	.07	.07	.07	.07	.07	.07
17.3500	.07	.07	.07	.07	.07	.07
17.4750	.07	.07	.07	.07	.07	.07
17.6000	.07	.07	.07	.07	.07	.07
17.7250	.07	.07	.07	.07	.07	.07
17.8500	.07	.07	.07	.07	.07	.07
17.9750	.07	.07	.07	.07	.07	.07
18.1000	.07	.07	.06	.06	.06	.06
18.2250	.06	.06	.06	.06	.06	.06
18.3500	.06	.06	.06	.06	.06	.06
18.4750	.06	.06	.06	.06	.06	.06
18.6000	.06	.06	.06	.06	.06	.06
18.7250	.06	.06	.06	.06	.06	.06
18.8500	.06	.06	.06	.06	.06	.06
18.9750	.06	.06	.06	.06	.06	.06
19.1000	.06	.06	.06	.06	.06	.06
19.2250	.06	.06	.06	.05	.05	.05
19.3500	.05	.05	.05	.05	.05	.05
19.4750	.05	.05	.05	.05	.05	.05

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HYDROGRAPH ORDINATES (cfs)						
Output Time increment = .0250 hrs						
Time hrs	Time on left represents time for first value in each row.					
19.6000	.05	.05	.05	.05	.05	.05
19.7250	.05	.05	.05	.05	.05	.05
19.8500	.05	.05	.05	.05	.05	.05
19.9750	.05	.05	.05	.05	.05	.05
20.1000	.05	.05	.05	.05	.05	.05
20.2250	.05	.05	.05	.05	.05	.05
20.3500	.05	.05	.05	.05	.05	.05
20.4750	.05	.05	.05	.05	.05	.05
20.6000	.05	.05	.05	.05	.05	.05
20.7250	.05	.05	.05	.05	.05	.05
20.8500	.05	.05	.05	.05	.05	.05
20.9750	.05	.05	.05	.05	.05	.05
21.1000	.05	.05	.05	.05	.05	.05
21.2250	.05	.05	.05	.05	.05	.05
21.3500	.05	.05	.05	.05	.05	.05
21.4750	.05	.05	.05	.05	.05	.05
21.6000	.05	.05	.05	.05	.05	.05
21.7250	.05	.05	.04	.04	.04	.04
21.8500	.04	.04	.04	.04	.04	.04
21.9750	.04	.04	.04	.04	.04	.04
22.1000	.04	.04	.04	.04	.04	.04
22.2250	.04	.04	.04	.04	.04	.04
22.3500	.04	.04	.04	.04	.04	.04
22.4750	.04	.04	.04	.04	.04	.04
22.6000	.04	.04	.04	.04	.04	.04
22.7250	.04	.04	.04	.04	.04	.04
22.8500	.04	.04	.04	.04	.04	.04
22.9750	.04	.04	.04	.04	.04	.04
23.1000	.04	.04	.04	.04	.04	.04
23.2250	.04	.04	.04	.04	.04	.04
23.3500	.04	.04	.04	.04	.04	.04
23.4750	.04	.04	.04	.04	.04	.04
23.6000	.04	.04	.04	.04	.04	.04
23.7250	.04	.04	.04	.04	.04	.04
23.8500	.04	.04	.04	.04	.04	.04
23.9750	.04	.04	.04	.04	.04	.03
24.1000	.03	.02	.01	.01	.01	.00
24.2250	.00					

S/N: HOM0L0436313 JRK, JR

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LEVEL POOL ROUTING SUMMARY

HYG Dir = J:\1998\980324~1\0011\HYDR\PONDPA~1\
Inflow HYG file = 9811L3R2.HYG - LOT 3 A-B Of 25
Outflow HYG file = NONE STORED - 2-27-07 RT OUT Of 25

Pond Node Data = P 20
Pond Volume Data = Vol.Pipe 60
Pond Outlet Data = Lot3 DetCntrl R1

No Infiltration

INITIAL CONDITIONS

Starting WS Elev = 506.80 ft
Starting Volume = 0 cu.ft
Starting Outflow = .00 cfs
Starting Infiltr. = .00 cfs
Starting Total Qout = .00 cfs
Time Increment = .0250 hrs

INFLOW/OUTFLOW HYDROGRAPH SUMMARY

=====
Peak Inflow = 7.59 cfs at 11.9250 hrs
Peak Outflow = 2.76 cfs at 12.1000 hrs

Peak Elevation = 510.60 ft
Peak Storage = 5088 cu.ft
=====

MASS BALANCE (cu.ft)

+ Initial Vol = 0
+ HYG Vol IN = 18239
- Infiltration = 0
- HYG Vol OUT = 18239
- Retained Vol = 0

Unrouted Vol =- cu.ft (.001% of Inflow Volume)

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POND ROUTED TOTAL OUTFLOW HYG...

HYG file =
 HYG ID = 2-27-07 RT OUT
 HYG Tag = Of 25

 Peak Discharge = 2.76 cfs
 Time to Peak = 12.1000 hrs
 HYG Volume = 18239 cu.ft

HYDROGRAPH ORDINATES (cfs)

Time hrs	Output Time increment = .0250 hrs				
	Time on left represents time for first value in each row.				
6.8500	.00	.00	.00	.00	.00
6.9750	.00	.00	.00	.00	.00
7.1000	.00	.00	.00	.00	.01
7.2250	.01	.01	.01	.01	.01
7.3500	.01	.01	.01	.01	.01
7.4750	.01	.01	.01	.01	.01
7.6000	.01	.01	.01	.01	.01
7.7250	.01	.01	.01	.01	.01
7.8500	.02	.02	.02	.02	.02
7.9750	.02	.02	.02	.02	.02
8.1000	.02	.02	.02	.02	.02
8.2250	.02	.02	.02	.02	.02
8.3500	.03	.03	.03	.03	.03
8.4750	.03	.03	.03	.03	.03
8.6000	.03	.03	.03	.04	.04
8.7250	.04	.04	.04	.04	.04
8.8500	.04	.04	.04	.04	.04
8.9750	.05	.05	.05	.05	.05
9.1000	.05	.05	.05	.05	.05
9.2250	.05	.06	.06	.06	.06
9.3500	.06	.06	.06	.06	.06
9.4750	.06	.06	.06	.06	.06
9.6000	.07	.07	.07	.07	.07
9.7250	.07	.07	.07	.08	.08
9.8500	.08	.08	.08	.08	.08
9.9750	.09	.09	.09	.09	.09
10.1000	.10	.10	.10	.10	.10
10.2250	.11	.11	.11	.11	.12
10.3500	.12	.12	.12	.13	.13
10.4750	.13	.14	.14	.14	.14
10.6000	.15	.15	.15	.16	.16
10.7250	.16	.17	.17	.18	.18
10.8500	.19	.19	.19	.20	.20

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HYDROGRAPH ORDINATES (cfs)						
Output Time increment = .0250 hrs						
Time hrs	Time on left represents time for first value in each row.					
10.9750	.21	.21	.22	.23	.23	
11.1000	.24	.25	.25	.26	.27	
11.2250	.28	.29	.30	.31	.32	
11.3500	.33	.34	.35	.36	.37	
11.4750	.39	.40	.42	.44	.49	
11.6000	.55	.63	.72	.79	.88	
11.7250	.96	1.05	1.15	1.25	1.35	
11.8500	1.46	1.59	1.73	1.87	2.00	
11.9750	2.11	2.21	2.30	2.51	2.70	
12.1000	2.76	2.70	2.59	2.50	2.40	
12.2250	2.34	2.29	2.27	2.24	2.22	
12.3500	2.19	2.17	2.14	2.11	2.09	
12.4750	2.06	2.03	2.00	1.97	1.94	
12.6000	1.91	1.88	1.85	1.82	1.79	
12.7250	1.76	1.73	1.70	1.67	1.64	
12.8500	1.60	1.57	1.54	1.51	1.47	
12.9750	1.44	1.40	1.37	1.34	1.30	
13.1000	1.26	1.23	1.19	1.16	1.12	
13.2250	1.08	1.04	1.00	.96	.92	
13.3500	.88	.85	.80	.76	.73	
13.4750	.67	.61	.56	.52	.49	
13.6000	.46	.43	.41	.39	.38	
13.7250	.37	.36	.35	.34	.33	
13.8500	.33	.32	.31	.31	.30	
13.9750	.30	.30	.29	.29	.28	
14.1000	.28	.28	.27	.27	.27	
14.2250	.27	.26	.26	.26	.26	
14.3500	.26	.26	.25	.25	.25	
14.4750	.25	.25	.25	.25	.25	
14.6000	.24	.24	.24	.24	.24	
14.7250	.24	.24	.24	.24	.23	
14.8500	.23	.23	.23	.23	.23	
14.9750	.23	.23	.22	.22	.22	
15.1000	.22	.22	.22	.22	.22	
15.2250	.21	.21	.21	.21	.21	
15.3500	.21	.21	.21	.20	.20	
15.4750	.20	.20	.20	.20	.20	
15.6000	.20	.19	.19	.19	.19	
15.7250	.19	.19	.19	.19	.18	
15.8500	.18	.18	.18	.18	.18	
15.9750	.18	.18	.18	.17	.17	
16.1000	.17	.17	.17	.17	.17	
16.2250	.17	.17	.17	.17	.17	
16.3500	.16	.16	.16	.16	.16	
16.4750	.16	.16	.16	.16	.16	
16.6000	.16	.16	.16	.16	.16	
16.7250	.16	.16	.16	.16	.16	

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HYDROGRAPH ORDINATES (cfs)						
Time	Output Time increment = .0250 hrs					
hrs	Time on left represents time for first value in each row.					
16.8500	.16	.16	.16	.15	.15	.15
16.9750	.15	.15	.15	.15	.15	.15
17.1000	.15	.15	.15	.15	.15	.15
17.2250	.15	.15	.15	.15	.15	.15
17.3500	.15	.15	.15	.15	.15	.15
17.4750	.14	.14	.14	.14	.14	.14
17.6000	.14	.14	.14	.14	.14	.14
17.7250	.14	.14	.14	.14	.14	.14
17.8500	.14	.14	.14	.14	.14	.14
17.9750	.14	.14	.13	.13	.13	.13
18.1000	.13	.13	.13	.13	.13	.13
18.2250	.13	.13	.13	.13	.13	.13
18.3500	.13	.13	.13	.13	.13	.13
18.4750	.13	.13	.13	.13	.13	.12
18.6000	.12	.12	.12	.12	.12	.12
18.7250	.12	.12	.12	.12	.12	.12
18.8500	.12	.12	.12	.12	.12	.12
18.9750	.12	.12	.12	.12	.12	.12
19.1000	.12	.12	.11	.11	.11	.11
19.2250	.11	.11	.11	.11	.11	.11
19.3500	.11	.11	.11	.11	.11	.11
19.4750	.11	.11	.11	.11	.11	.11
19.6000	.11	.11	.11	.11	.11	.10
19.7250	.10	.10	.10	.10	.10	.10
19.8500	.10	.10	.10	.10	.10	.10
19.9750	.10	.10	.10	.10	.10	.10
20.1000	.10	.10	.10	.10	.10	.10
20.2250	.10	.10	.10	.10	.10	.10
20.3500	.10	.10	.10	.10	.10	.10
20.4750	.10	.10	.10	.10	.10	.09
20.6000	.09	.09	.09	.09	.09	.09
20.7250	.09	.09	.09	.09	.09	.09
20.8500	.09	.09	.09	.09	.09	.09
20.9750	.09	.09	.09	.09	.09	.09
21.1000	.09	.09	.09	.09	.09	.09
21.2250	.09	.09	.09	.09	.09	.09
21.3500	.09	.09	.09	.09	.09	.09
21.4750	.09	.09	.09	.09	.09	.09
21.6000	.09	.09	.09	.09	.09	.09
21.7250	.09	.09	.09	.09	.09	.09
21.8500	.09	.09	.09	.09	.09	.09
21.9750	.09	.09	.09	.09	.09	.09
22.1000	.09	.09	.09	.09	.09	.09
22.2250	.09	.09	.09	.09	.09	.09
22.3500	.09	.09	.09	.09	.09	.09
22.4750	.09	.09	.09	.09	.09	.09
22.6000	.09	.09	.09	.09	.09	.09

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HYDROGRAPH ORDINATES (cfs)						
Time	Output Time increment = .0250 hrs					
hrs	Time on left represents time for first value in each row.					
22.7250	.09	.09	.09	.09	.09	.09
22.8500	.09	.09	.09	.09	.09	.09
22.9750	.09	.09	.09	.09	.09	.09
23.1000	.09	.09	.09	.09	.09	.09
23.2250	.09	.09	.09	.09	.09	.09
23.3500	.09	.09	.09	.08	.08	.08
23.4750	.08	.08	.08	.08	.08	.08
23.6000	.08	.08	.08	.08	.08	.08
23.7250	.08	.08	.08	.08	.08	.08
23.8500	.08	.08	.08	.08	.08	.08
23.9750	.08	.08	.08	.08	.08	.07
24.1000	.06	.04	.03	.02	.02	.01
24.2250	.01	.00	.00	.00	.00	.00

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LEVEL POOL ROUTING SUMMARY

HYG Dir = J:\1998\980324~1\0011\HYDR\PONDPA~1\
Inflow HYG file = 9811L3R2.HYG - LOT 3 A-B Of 50
Outflow HYG file = NONE STORED - 2-27-07 RT OUT Of 50

Pond Node Data = P 20
Pond Volume Data = Vol.Pipe 60
Pond Outlet Data = Lot3 DetCntrl R1

No Infiltration

INITIAL CONDITIONS

Starting WS Elev = 506.80 ft
Starting Volume = 0 cu.ft
Starting Outflow = .00 cfs
Starting Infiltr. = .00 cfs
Starting Total Qout= .00 cfs
Time Increment = .0250 hrs

INFLOW/OUTFLOW HYDROGRAPH SUMMARY

=====
Peak Inflow = 7.65 cfs at 11.9250 hrs
Peak Outflow = 2.82 cfs at 12.1000 hrs
=====

Peak Elevation = 510.62 ft
Peak Storage = 5129 cu.ft
=====

MASS BALANCE (cu.ft)

+ Initial Vol = 0
+ HYG Vol IN = 18390
- Infiltration = 0
- HYG Vol OUT = 18390
- Retained Vol = 0

Unrouted Vol ==- cu.ft (.001% of Inflow Volume)

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POND ROUTED TOTAL OUTFLOW HYG...

HYG file =
 HYG ID = 2-27-07 RT OUT
 HYG Tag = Of 50

 Peak Discharge = 2.82 cfs
 Time to Peak = 12.1000 hrs
 HYG Volume = 18390 cu.ft

HYDROGRAPH ORDINATES (cfs)

Output Time increment = .0250 hrs
 Time on left represents time for first value in each row.

Time hrs						
6.8250	.00	.00	.00	.00	.00	.00
6.9500	.00	.00	.00	.00	.00	.00
7.0750	.00	.00	.00	.00	.00	.01
7.2000	.01	.01	.01	.01	.01	.01
7.3250	.01	.01	.01	.01	.01	.01
7.4500	.01	.01	.01	.01	.01	.01
7.5750	.01	.01	.01	.01	.01	.01
7.7000	.01	.01	.01	.01	.01	.01
7.8250	.02	.02	.02	.02	.02	.02
7.9500	.02	.02	.02	.02	.02	.02
8.0750	.02	.02	.02	.02	.02	.02
8.2000	.02	.02	.02	.02	.02	.02
8.3250	.03	.03	.03	.03	.03	.03
8.4500	.03	.03	.03	.03	.03	.03
8.5750	.03	.03	.03	.03	.04	.04
8.7000	.04	.04	.04	.04	.04	.04
8.8250	.04	.04	.04	.04	.04	.04
8.9500	.05	.05	.05	.05	.05	.05
9.0750	.05	.05	.05	.05	.05	.05
9.2000	.05	.06	.06	.06	.06	.06
9.3250	.06	.06	.06	.06	.06	.06
9.4500	.06	.06	.06	.06	.06	.06
9.5750	.07	.07	.07	.07	.07	.07
9.7000	.07	.07	.07	.07	.07	.08
9.8250	.08	.08	.08	.08	.08	.08
9.9500	.09	.09	.09	.09	.09	.09
10.0750	.09	.10	.10	.10	.10	.10
10.2000	.11	.11	.11	.11	.11	.12
10.3250	.12	.12	.12	.12	.13	.13
10.4500	.13	.13	.14	.14	.14	.14
10.5750	.14	.15	.15	.15	.15	.16
10.7000	.16	.17	.17	.17	.17	.18
10.8250	.18	.19	.19	.19	.20	.20

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HYDROGRAPH ORDINATES (cfs)						
Output Time increment = .0250 hrs						
Time hrs	Time on left represents time for first value in each row.					
10.9500	.21	.21	.22	.22	.23	
11.0750	.23	.24	.25	.26	.26	
11.2000	.27	.28	.29	.30	.31	
11.3250	.32	.33	.34	.35	.37	
11.4500	.38	.39	.40	.42	.45	
11.5750	.50	.56	.64	.72	.80	
11.7000	.88	.97	1.06	1.15	1.25	
11.8250	1.36	1.47	1.60	1.74	1.88	
11.9500	2.01	2.12	2.22	2.32	2.56	
12.0750	2.77	2.82	2.76	2.64	2.53	
12.2000	2.43	2.36	2.30	2.27	2.25	
12.3250	2.22	2.20	2.17	2.15	2.12	
12.4500	2.09	2.07	2.04	2.01	1.98	
12.5750	1.95	1.92	1.89	1.86	1.83	
12.7000	1.80	1.77	1.74	1.71	1.67	
12.8250	1.64	1.61	1.58	1.55	1.51	
12.9500	1.48	1.45	1.41	1.38	1.34	
13.0750	1.31	1.27	1.24	1.20	1.17	
13.2000	1.13	1.09	1.05	1.01	.98	
13.3250	.94	.90	.86	.82	.77	
13.4500	.74	.69	.63	.57	.53	
13.5750	.50	.47	.44	.42	.40	
13.7000	.38	.37	.36	.35	.34	
13.8250	.33	.33	.32	.32	.31	
13.9500	.31	.30	.30	.29	.29	
14.0750	.28	.28	.28	.27	.27	
14.2000	.27	.27	.27	.26	.26	
14.3250	.26	.26	.26	.26	.26	
14.4500	.25	.25	.25	.25	.25	
14.5750	.25	.25	.25	.24	.24	
14.7000	.24	.24	.24	.24	.24	
14.8250	.24	.23	.23	.23	.23	
14.9500	.23	.23	.23	.23	.22	
15.0750	.22	.22	.22	.22	.22	
15.2000	.22	.22	.21	.21	.21	
15.3250	.21	.21	.21	.21	.21	
15.4500	.20	.20	.20	.20	.20	
15.5750	.20	.20	.20	.19	.19	
15.7000	.19	.19	.19	.19	.19	
15.8250	.19	.18	.18	.18	.18	
15.9500	.18	.18	.18	.18	.18	
16.0750	.17	.17	.17	.17	.17	
16.2000	.17	.17	.17	.17	.17	
16.3250	.17	.17	.17	.17	.16	
16.4500	.16	.16	.16	.16	.16	
16.5750	.16	.16	.16	.16	.16	
16.7000	.16	.16	.16	.16	.16	

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HYDROGRAPH ORDINATES (cfs)						
Time	Output Time increment = .0250 hrs					
hrs	Time on left represents time for first value in each row.					
16.8250	.16	.16	.16	.16	.16	.16
16.9500	.16	.15	.15	.15	.15	.15
17.0750	.15	.15	.15	.15	.15	.15
17.2000	.15	.15	.15	.15	.15	.15
17.3250	.15	.15	.15	.15	.15	.15
17.4500	.15	.15	.15	.15	.15	.14
17.5750	.14	.14	.14	.14	.14	.14
17.7000	.14	.14	.14	.14	.14	.14
17.8250	.14	.14	.14	.14	.14	.14
17.9500	.14	.14	.14	.14	.14	.14
18.0750	.13	.13	.13	.13	.13	.13
18.2000	.13	.13	.13	.13	.13	.13
18.3250	.13	.13	.13	.13	.13	.13
18.4500	.13	.13	.13	.13	.13	.13
18.5750	.13	.13	.12	.12	.12	.12
18.7000	.12	.12	.12	.12	.12	.12
18.8250	.12	.12	.12	.12	.12	.12
18.9500	.12	.12	.12	.12	.12	.12
19.0750	.12	.12	.12	.12	.12	.11
19.2000	.11	.11	.11	.11	.11	.11
19.3250	.11	.11	.11	.11	.11	.11
19.4500	.11	.11	.11	.11	.11	.11
19.5750	.11	.11	.11	.11	.11	.11
19.7000	.11	.10	.10	.10	.10	.10
19.8250	.10	.10	.10	.10	.10	.10
19.9500	.10	.10	.10	.10	.10	.10
20.0750	.10	.10	.10	.10	.10	.10
20.2000	.10	.10	.10	.10	.10	.10
20.3250	.10	.10	.10	.10	.10	.10
20.4500	.10	.10	.10	.10	.10	.10
20.5750	.10	.10	.10	.10	.10	.10
20.7000	.10	.10	.10	.09	.09	.09
20.8250	.09	.09	.09	.09	.09	.09
20.9500	.09	.09	.09	.09	.09	.09
21.0750	.09	.09	.09	.09	.09	.09
21.2000	.09	.09	.09	.09	.09	.09
21.3250	.09	.09	.09	.09	.09	.09
21.4500	.09	.09	.09	.09	.09	.09
21.5750	.09	.09	.09	.09	.09	.09
21.7000	.09	.09	.09	.09	.09	.09
21.8250	.09	.09	.09	.09	.09	.09
21.9500	.09	.09	.09	.09	.09	.09
22.0750	.09	.09	.09	.09	.09	.09
22.2000	.09	.09	.09	.09	.09	.09
22.3250	.09	.09	.09	.09	.09	.09
22.4500	.09	.09	.09	.09	.09	.09
22.5750	.09	.09	.09	.09	.09	.09

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HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0250 hrs
Time on left represents time for first value in each row.

Time hrs					
22.7000	.09	.09	.09	.09	.09
22.8250	.09	.09	.09	.09	.09
22.9500	.09	.09	.09	.09	.09
23.0750	.09	.09	.09	.09	.09
23.2000	.09	.09	.09	.09	.09
23.3250	.09	.09	.09	.09	.09
23.4500	.09	.09	.09	.09	.09
23.5750	.09	.08	.08	.08	.08
23.7000	.08	.08	.08	.08	.08
23.8250	.08	.08	.08	.08	.08
23.9500	.08	.08	.08	.08	.08
24.0750	.07	.06	.04	.03	.02
24.2000	.01	.01	.00	.00	

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TIME vs. ELEVATION (ft)

Time hrs	Output Time increment = .0250 hrs				
	Time on left represents time for first value in each row.				
6.2500	506.80	506.80	506.80	506.80	506.81
6.3750	506.81	506.81	506.81	506.81	506.81
6.5000	506.81	506.81	506.82	506.82	506.82
6.6250	506.82	506.82	506.82	506.82	506.83
6.7500	506.83	506.83	506.83	506.83	506.83
6.8750	506.83	506.84	506.84	506.84	506.84
7.0000	506.84	506.84	506.84	506.85	506.85
7.1250	506.85	506.85	506.85	506.85	506.85
7.2500	506.86	506.86	506.86	506.86	506.86
7.3750	506.86	506.87	506.87	506.87	506.87
7.5000	506.87	506.87	506.87	506.88	506.88
7.6250	506.88	506.88	506.88	506.88	506.89
7.7500	506.89	506.89	506.89	506.89	506.89
7.8750	506.90	506.90	506.90	506.90	506.90
8.0000	506.90	506.91	506.91	506.91	506.91
8.1250	506.91	506.92	506.92	506.92	506.92
8.2500	506.92	506.92	506.92	506.92	506.93
8.3750	506.93	506.93	506.93	506.93	506.93
8.5000	506.93	506.93	506.93	506.94	506.94
8.6250	506.94	506.94	506.94	506.94	506.94
8.7500	506.95	506.95	506.95	506.95	506.95
8.8750	506.95	506.95	506.96	506.96	506.96
9.0000	506.96	506.96	506.96	506.96	506.97
9.1250	506.97	506.97	506.97	506.97	506.97
9.2500	506.97	506.97	506.97	506.98	506.98
9.3750	506.98	506.98	506.98	506.98	506.98
9.5000	506.98	506.98	506.98	506.98	506.99
9.6250	506.99	506.99	506.99	506.99	506.99
9.7500	507.00	507.00	507.00	507.00	507.01
9.8750	507.01	507.01	507.01	507.02	507.02
10.0000	507.02	507.02	507.03	507.03	507.03
10.1250	507.03	507.04	507.04	507.04	507.04
10.2500	507.05	507.05	507.05	507.05	507.06
10.3750	507.06	507.06	507.06	507.07	507.07
10.5000	507.07	507.07	507.08	507.08	507.08
10.6250	507.09	507.09	507.09	507.10	507.10
10.7500	507.10	507.11	507.11	507.12	507.12
10.8750	507.13	507.13	507.14	507.14	507.15
11.0000	507.15	507.15	507.16	507.16	507.17
11.1250	507.17	507.18	507.18	507.19	507.20
11.2500	507.20	507.21	507.22	507.23	507.24
11.3750	507.25	507.26	507.26	507.27	507.28
11.5000	507.29	507.30	507.32	507.35	507.39
11.6250	507.44	507.50	507.58	507.68	507.80
11.7500	507.93	508.09	508.26	508.45	508.68

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TIME vs. ELEVATION (ft)

Output Time increment = .0250 hrs
 Time on left represents time for first value in each row.

Time hrs					
11.8750	508.96	509.30	509.66	510.04	510.40
12.0000	510.72	510.99	511.17	511.22	511.17
12.1250	511.05	510.93	510.82	510.72	510.63
12.2500	510.55	510.47	510.40	510.34	510.27
12.3750	510.20	510.14	510.07	510.00	509.93
12.5000	509.86	509.79	509.72	509.65	509.58
12.6250	509.51	509.44	509.38	509.31	509.24
12.7500	509.18	509.11	509.05	508.98	508.92
12.8750	508.86	508.80	508.73	508.67	508.61
13.0000	508.55	508.50	508.44	508.38	508.32
13.1250	508.27	508.21	508.16	508.11	508.05
13.2500	508.00	507.95	507.90	507.86	507.81
13.3750	507.76	507.72	507.67	507.63	507.59
13.5000	507.55	507.51	507.47	507.44	507.41
13.6250	507.37	507.35	507.32	507.30	507.29
13.7500	507.27	507.26	507.25	507.24	507.23
13.8750	507.22	507.22	507.21	507.21	507.20
14.0000	507.20	507.19	507.19	507.19	507.18
14.1250	507.18	507.18	507.18	507.17	507.17
14.2500	507.17	507.17	507.17	507.17	507.17
14.3750	507.17	507.16	507.16	507.16	507.16
14.5000	507.16	507.16	507.16	507.16	507.16
14.6250	507.15	507.15	507.15	507.15	507.15
14.7500	507.15	507.15	507.15	507.14	507.14
14.8750	507.14	507.14	507.14	507.14	507.14
15.0000	507.14	507.14	507.13	507.13	507.13
15.1250	507.13	507.13	507.13	507.13	507.13
15.2500	507.13	507.12	507.12	507.12	507.12
15.3750	507.12	507.12	507.12	507.12	507.12
15.5000	507.11	507.11	507.11	507.11	507.11
15.6250	507.11	507.11	507.11	507.11	507.10
15.7500	507.10	507.10	507.10	507.10	507.10
15.8750	507.10	507.10	507.10	507.09	507.09
16.0000	507.09	507.09	507.09	507.09	507.09
16.1250	507.09	507.09	507.09	507.08	507.08
16.2500	507.08	507.08	507.08	507.08	507.08
16.3750	507.08	507.08	507.08	507.08	507.08
16.5000	507.08	507.08	507.08	507.08	507.08
16.6250	507.08	507.08	507.08	507.08	507.08
16.7500	507.08	507.07	507.07	507.07	507.07
16.8750	507.07	507.07	507.07	507.07	507.07
17.0000	507.07	507.07	507.07	507.07	507.07
17.1250	507.07	507.07	507.07	507.07	507.07
17.2500	507.07	507.07	507.07	507.07	507.07
17.3750	507.07	507.06	507.06	507.06	507.06
17.5000	507.06	507.06	507.06	507.06	507.06

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TIME vs. ELEVATION (ft)

Output Time increment = .0250 hrs
 Time on left represents time for first value in each row.

Time hrs					
17.6250	507.06	507.06	507.06	507.06	507.06
17.7500	507.06	507.06	507.06	507.06	507.06
17.8750	507.06	507.06	507.06	507.06	507.06
18.0000	507.06	507.05	507.05	507.05	507.05
18.1250	507.05	507.05	507.05	507.05	507.05
18.2500	507.05	507.05	507.05	507.05	507.05
18.3750	507.05	507.05	507.05	507.05	507.05
18.5000	507.05	507.05	507.05	507.05	507.05
18.6250	507.05	507.04	507.04	507.04	507.04
18.7500	507.04	507.04	507.04	507.04	507.04
18.8750	507.04	507.04	507.04	507.04	507.04
19.0000	507.04	507.04	507.04	507.04	507.04
19.1250	507.03	507.03	507.03	507.03	507.03
19.2500	507.03	507.03	507.03	507.03	507.03
19.3750	507.03	507.03	507.03	507.03	507.03
19.5000	507.03	507.02	507.02	507.02	507.02
19.6250	507.02	507.02	507.02	507.02	507.02
19.7500	507.02	507.02	507.02	507.02	507.02
19.8750	507.02	507.02	507.01	507.01	507.01
20.0000	507.01	507.01	507.01	507.01	507.01
20.1250	507.01	507.01	507.01	507.01	507.01
20.2500	507.01	507.01	507.01	507.01	507.01
20.3750	507.01	507.01	507.01	507.01	507.01
20.5000	507.01	507.01	507.01	507.01	507.01
20.6250	507.01	507.01	507.01	507.01	507.01
20.7500	507.01	507.01	507.01	507.01	507.01
20.8750	507.01	507.01	507.01	507.01	507.01
21.0000	507.01	507.00	507.00	507.00	507.00
21.1250	507.00	507.00	507.00	507.00	507.00
21.2500	507.00	507.00	507.00	507.00	507.00
21.3750	507.00	507.00	507.00	507.00	507.00
21.5000	507.00	507.00	507.00	507.00	507.00
21.6250	507.00	507.00	507.00	507.00	507.00
21.7500	507.00	507.00	507.00	507.00	507.00
21.8750	507.00	507.00	507.00	507.00	507.00
22.0000	507.00	507.00	507.00	507.00	507.00
22.1250	507.00	507.00	507.00	507.00	507.00
22.2500	507.00	507.00	507.00	507.00	507.00
22.3750	507.00	507.00	507.00	507.00	507.00
22.5000	507.00	507.00	507.00	507.00	507.00
22.6250	507.00	507.00	507.00	507.00	507.00
22.7500	507.00	507.00	507.00	507.00	507.00
22.8750	507.00	507.00	507.00	507.00	507.00
23.0000	507.00	507.00	507.00	506.99	506.99
23.1250	506.99	506.99	506.99	506.99	506.99
23.2500	506.99	506.99	506.99	506.99	506.99

Type.... Time-Elev
Name.... 2-27-07 RT OUT Tag: Of 100

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TIME vs. ELEVATION (ft)

Output Time increment = .0250 hrs
Time on left represents time for first value in each row.

Time hrs					
23.3750	506.99	506.99	506.99	506.99	506.99
23.5000	506.99	506.99	506.99	506.99	506.99
23.6250	506.99	506.99	506.99	506.99	506.99
23.7500	506.99	506.99	506.99	506.99	506.99
23.8750	506.99	506.99	506.99	506.99	506.99
24.0000	506.99	506.99	506.98	506.97	506.95
24.1250	506.94	506.92	506.88	506.85	506.83
24.2500	506.82	506.81	506.81		

S/N: HOM0L0436313 JRK, JR

Pond Pack Ver: 10-9-97 :055 Compute Time: 10:33:30 Date: 02-27-2007

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TIME vs. VOLUME (cu.ft)

Output Time increment = .0250 hrs
 Time on left represents time for first value in each row.

Time hrs					
6.2500	0	0	0	0	0
6.3750	0	0	0	0	0
6.5000	0	0	0	1	1
6.6250	1	1	1	1	1
6.7500	1	1	1	1	1
6.8750	1	1	1	1	1
7.0000	1	1	1	1	1
7.1250	1	1	2	2	2
7.2500	2	2	2	2	2
7.3750	2	2	2	2	2
7.5000	2	2	2	2	2
7.6250	2	2	2	3	3
7.7500	3	3	3	3	3
7.8750	3	3	3	3	3
8.0000	4	4	4	4	5
8.1250	5	5	6	6	6
8.2500	6	6	7	7	7
8.3750	7	7	7	7	8
8.5000	8	8	8	8	9
8.6250	9	9	9	9	10
8.7500	10	10	10	10	11
8.8750	11	11	11	11	12
9.0000	12	12	12	13	13
9.1250	13	13	13	13	14
9.2500	14	14	14	14	14
9.3750	14	15	15	15	15
9.5000	15	15	15	16	16
9.6250	16	16	16	17	17
9.7500	17	18	18	19	20
9.8750	20	21	22	23	24
10.0000	24	25	26	27	28
10.1250	29	30	31	31	32
10.2500	33	33	34	35	36
10.3750	36	37	38	39	40
10.5000	41	41	42	43	44
10.6250	45	46	48	49	50
10.7500	52	55	57	59	62
10.8750	64	66	69	71	74
11.0000	77	79	82	84	86
11.1250	89	92	95	98	102
11.2500	107	112	118	124	130
11.3750	136	143	150	156	163
11.5000	169	176	191	217	252
11.6250	295	354	442	557	694
11.7500	861	1070	1319	1607	1961

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TIME vs. VOLUME (cu.ft)

Output Time increment = .0250 hrs
 Time on left represents time for first value in each row.

Time hrs					
11.8750	2417	2972	3588	4209	4784
12.0000	5276	5655	5886	5948	5878
12.1250	5737	5577	5420	5274	5141
12.2500	5018	4902	4792	4686	4581
12.3750	4475	4367	4258	4148	4034
12.5000	3919	3803	3687	3570	3452
12.6250	3335	3219	3104	2991	2879
12.7500	2769	2661	2554	2449	2346
12.8750	2244	2144	2047	1950	1856
13.0000	1764	1673	1584	1498	1413
13.1250	1332	1252	1175	1100	1028
13.2500	958	891	826	764	704
13.3750	649	593	543	495	449
13.5000	407	367	330	297	266
13.6250	238	215	195	179	167
13.7500	157	146	138	131	125
13.8750	119	115	111	107	104
14.0000	102	100	98	96	95
14.1250	93	92	91	90	89
14.2500	88	87	87	86	85
14.3750	85	84	84	83	83
14.5000	82	81	81	80	79
14.6250	79	78	77	77	76
14.7500	76	75	74	74	73
14.8750	73	72	72	71	70
15.0000	70	69	69	68	67
15.1250	67	66	66	65	64
15.2500	64	63	63	62	62
15.3750	61	60	60	59	58
15.5000	58	57	57	56	56
15.6250	55	54	54	53	53
15.7500	52	51	51	50	50
15.8750	49	49	49	48	48
16.0000	48	47	47	46	46
16.1250	46	46	45	45	45
16.2500	45	45	44	44	44
16.3750	44	44	44	44	44
16.5000	43	43	43	43	43
16.6250	43	43	42	42	42
16.7500	42	42	42	42	42
16.8750	41	41	41	41	41
17.0000	41	41	41	40	40
17.1250	40	40	40	40	40
17.2500	40	39	39	39	39
17.3750	39	39	39	38	38
17.5000	38	38	38	38	38

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TIME vs. VOLUME (cu.ft)

Output Time increment = .0250 hrs
 Time on left represents time for first value in each row.

Time hrs					
17.6250	38	37	37	37	37
17.7500	37	37	37	37	36
17.8750	36	36	36	36	36
18.0000	36	36	35	35	35
18.1250	35	35	35	35	34
18.2500	34	34	34	34	34
18.3750	34	34	33	33	33
18.5000	33	33	33	33	33
18.6250	32	32	32	32	32
18.7500	32	32	31	31	31
18.8750	31	31	31	31	30
19.0000	30	30	30	29	29
19.1250	29	29	29	28	28
19.2500	28	28	28	27	27
19.3750	27	27	27	26	26
19.5000	26	26	26	25	25
19.6250	25	25	25	24	24
19.7500	24	24	24	23	23
19.8750	23	23	23	22	22
20.0000	22	22	22	21	21
20.1250	21	21	21	21	21
20.2500	21	21	21	21	21
20.3750	21	20	20	20	20
20.5000	20	20	20	20	20
20.6250	20	20	20	20	20
20.7500	20	20	20	20	20
20.8750	20	20	20	20	20
21.0000	20	19	19	19	19
21.1250	19	19	19	19	19
21.2500	19	19	19	19	19
21.3750	19	19	19	19	19
21.5000	19	19	19	19	19
21.6250	19	18	18	18	18
21.7500	18	18	18	18	18
21.8750	18	18	18	18	18
22.0000	18	18	18	18	18
22.1250	18	18	18	18	18
22.2500	18	18	18	18	18
22.3750	18	18	18	18	18
22.5000	18	18	18	18	17
22.6250	17	17	17	17	17
22.7500	17	17	17	17	17
22.8750	17	17	17	17	17
23.0000	17	17	17	17	17
23.1250	17	17	17	17	17
23.2500	17	17	17	17	17

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TIME vs. VOLUME (cu.ft)

Output Time increment = .0250 hrs
Time on left represents time for first value in each row.

Time hrs						
23.3750	17	17	17	17	17	17
23.5000	17	17	17	17	17	17
23.6250	17	17	17	17	17	17
23.7500	17	17	17	17	17	17
23.8750	17	17	17	17	17	16
24.0000	16	16	15	14	14	11
24.1250	9	6	2	2	2	1
24.2500	1	0	0	0	0	0

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Pond Pack Ver: 10-9-97 :055 Compute Time: 10:33:30 Date: 02-27-2007

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TIME vs. ELEVATION (ft)

Time hrs	Output Time increment = .0250 hrs Time on left represents time for first value in each row.				
7.3500	506.80	506.80	506.80	506.80	506.80
7.4750	506.81	506.81	506.81	506.81	506.81
7.6000	506.81	506.81	506.81	506.81	506.82
7.7250	506.82	506.82	506.82	506.82	506.82
7.8500	506.82	506.82	506.82	506.83	506.83
7.9750	506.83	506.83	506.83	506.83	506.83
8.1000	506.83	506.84	506.84	506.84	506.84
8.2250	506.84	506.84	506.84	506.85	506.85
8.3500	506.85	506.85	506.85	506.85	506.86
8.4750	506.86	506.86	506.86	506.86	506.87
8.6000	506.87	506.87	506.87	506.88	506.88
8.7250	506.88	506.88	506.88	506.89	506.89
8.8500	506.89	506.89	506.90	506.90	506.90
8.9750	506.90	506.91	506.91	506.91	506.92
9.1000	506.92	506.92	506.92	506.92	506.92
9.2250	506.92	506.92	506.92	506.92	506.93
9.3500	506.93	506.93	506.93	506.93	506.93
9.4750	506.93	506.93	506.93	506.93	506.93
9.6000	506.93	506.93	506.94	506.94	506.94
9.7250	506.94	506.94	506.94	506.94	506.94
9.8500	506.95	506.95	506.95	506.95	506.95
9.9750	506.95	506.96	506.96	506.96	506.96
10.1000	506.96	506.96	506.97	506.97	506.97
10.2250	506.97	506.98	506.98	506.98	506.98
10.3500	506.99	506.99	506.99	506.99	507.00
10.4750	507.00	507.00	507.00	507.01	507.01
10.6000	507.01	507.02	507.02	507.02	507.03
10.7250	507.03	507.04	507.04	507.04	507.05
10.8500	507.05	507.05	507.05	507.06	507.06
10.9750	507.06	507.07	507.07	507.07	507.08
11.1000	507.08	507.09	507.09	507.10	507.10
11.2250	507.11	507.11	507.12	507.13	507.14
11.3500	507.14	507.15	507.16	507.16	507.17
11.4750	507.18	507.18	507.19	507.21	507.23
11.6000	507.26	507.30	507.34	507.40	507.47
11.7250	507.55	507.64	507.75	507.88	508.02
11.8500	508.19	508.39	508.64	508.90	509.16
11.9750	509.39	509.61	509.80	509.95	510.04
12.1000	510.07	510.06	510.03	509.98	509.92
12.2250	509.87	509.81	509.75	509.68	509.62
12.3500	509.56	509.49	509.43	509.37	509.30
12.4750	509.24	509.17	509.11	509.04	508.97
12.6000	508.91	508.84	508.78	508.71	508.65
12.7250	508.59	508.53	508.47	508.40	508.34
12.8500	508.29	508.23	508.17	508.11	508.06

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TIME vs. ELEVATION (ft)

Time hrs	Output Time increment = .0250 hrs Time on left represents time for first value in each row.				
12.9750	508.00	507.95	507.90	507.84	507.79
13.1000	507.74	507.69	507.65	507.60	507.55
13.2250	507.51	507.47	507.43	507.40	507.36
13.3500	507.33	507.31	507.29	507.27	507.25
13.4750	507.23	507.22	507.21	507.20	507.19
13.6000	507.19	507.18	507.18	507.17	507.17
13.7250	507.17	507.16	507.16	507.16	507.15
13.8500	507.15	507.15	507.14	507.14	507.14
13.9750	507.13	507.13	507.13	507.13	507.12
14.1000	507.12	507.12	507.12	507.12	507.12
14.2250	507.11	507.11	507.11	507.11	507.11
14.3500	507.11	507.11	507.11	507.11	507.11
14.4750	507.10	507.10	507.10	507.10	507.10
14.6000	507.10	507.10	507.10	507.10	507.10
14.7250	507.10	507.10	507.09	507.09	507.09
14.8500	507.09	507.09	507.09	507.09	507.09
14.9750	507.09	507.09	507.09	507.09	507.08
15.1000	507.08	507.08	507.08	507.08	507.08
15.2250	507.08	507.08	507.08	507.08	507.08
15.3500	507.08	507.07	507.07	507.07	507.07
15.4750	507.07	507.07	507.07	507.07	507.07
15.6000	507.07	507.07	507.07	507.06	507.06
15.7250	507.06	507.06	507.06	507.06	507.06
15.8500	507.06	507.06	507.06	507.06	507.06
15.9750	507.05	507.05	507.05	507.05	507.05
16.1000	507.05	507.05	507.05	507.05	507.05
16.2250	507.05	507.05	507.05	507.05	507.05
16.3500	507.05	507.05	507.05	507.04	507.04
16.4750	507.04	507.04	507.04	507.04	507.04
16.6000	507.04	507.04	507.04	507.04	507.04
16.7250	507.04	507.04	507.04	507.04	507.04
16.8500	507.04	507.04	507.04	507.04	507.04
16.9750	507.04	507.04	507.04	507.04	507.04
17.1000	507.03	507.03	507.03	507.03	507.03
17.2250	507.03	507.03	507.03	507.03	507.03
17.3500	507.03	507.03	507.03	507.03	507.03
17.4750	507.03	507.03	507.03	507.03	507.03
17.6000	507.03	507.03	507.02	507.02	507.02
17.7250	507.02	507.02	507.02	507.02	507.02
17.8500	507.02	507.02	507.02	507.02	507.02
17.9750	507.02	507.02	507.02	507.02	507.02
18.1000	507.02	507.02	507.02	507.01	507.01
18.2250	507.01	507.01	507.01	507.01	507.01
18.3500	507.01	507.01	507.01	507.01	507.01
18.4750	507.01	507.01	507.01	507.01	507.01
18.6000	507.01	507.01	507.01	507.01	507.01

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TIME vs. ELEVATION (ft)

Time hrs	Output Time increment = .0250 hrs				
	Time on left represents time for first value in each row.				
18.7250	507.00	507.00	507.00	507.00	507.00
18.8500	507.00	507.00	507.00	507.00	507.00
18.9750	507.00	507.00	507.00	507.00	507.00
19.1000	507.00	507.00	507.00	507.00	507.00
19.2250	507.00	506.99	506.99	506.99	506.99
19.3500	506.99	506.99	506.99	506.99	506.99
19.4750	506.99	506.99	506.99	506.99	506.99
19.6000	506.99	506.99	506.99	506.99	506.99
19.7250	506.99	506.99	506.98	506.98	506.98
19.8500	506.98	506.98	506.98	506.98	506.98
19.9750	506.98	506.98	506.98	506.98	506.98
20.1000	506.98	506.98	506.98	506.98	506.98
20.2250	506.98	506.98	506.98	506.98	506.98
20.3500	506.98	506.98	506.98	506.98	506.98
20.4750	506.98	506.98	506.98	506.98	506.98
20.6000	506.98	506.98	506.98	506.98	506.98
20.7250	506.98	506.98	506.98	506.98	506.98
20.8500	506.98	506.98	506.98	506.97	506.97
20.9750	506.97	506.97	506.97	506.97	506.97
21.1000	506.97	506.97	506.97	506.97	506.97
21.2250	506.97	506.97	506.97	506.97	506.97
21.3500	506.97	506.97	506.97	506.97	506.97
21.4750	506.97	506.97	506.97	506.97	506.97
21.6000	506.97	506.97	506.97	506.97	506.97
21.7250	506.97	506.97	506.97	506.97	506.97
21.8500	506.97	506.97	506.97	506.97	506.97
21.9750	506.97	506.97	506.97	506.97	506.97
22.1000	506.97	506.97	506.97	506.97	506.97
22.2250	506.97	506.97	506.97	506.97	506.97
22.3500	506.97	506.97	506.97	506.97	506.97
22.4750	506.97	506.97	506.97	506.97	506.97
22.6000	506.97	506.97	506.97	506.97	506.97
22.7250	506.97	506.97	506.97	506.97	506.97
22.8500	506.97	506.97	506.97	506.97	506.97
22.9750	506.97	506.97	506.97	506.97	506.97
23.1000	506.97	506.97	506.97	506.97	506.97
23.2250	506.97	506.97	506.97	506.97	506.97
23.3500	506.97	506.97	506.97	506.97	506.97
23.4750	506.97	506.97	506.97	506.97	506.97
23.6000	506.97	506.97	506.96	506.96	506.96
23.7250	506.96	506.96	506.96	506.96	506.96
23.8500	506.96	506.96	506.96	506.96	506.96
23.9750	506.96	506.96	506.96	506.96	506.95
24.1000	506.94	506.92	506.89	506.86	506.83
24.2250	506.82	506.81	506.81		

S/N: HOM0L0436313 JRK, JR

nd Pack Ver: 10-9-97 :055 Compute Time: 10:33:30 Date: 02-27-2007

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TIME vs. VOLUME (cu.ft)

Time hrs	Output Time increment = .0250 hrs				
	Time on left represents time for first value in each row.				
7.3500	0	0	0	0	0
7.4750	0	0	0	0	0
7.6000	0	0	0	0	0
7.7250	1	1	1	1	1
7.8500	1	1	1	1	1
7.9750	1	1	1	1	1
8.1000	1	1	1	1	1
8.2250	1	1	1	1	1
8.3500	1	2	2	2	2
8.4750	2	2	2	2	2
8.6000	2	2	2	2	2
8.7250	2	2	3	3	3
8.8500	3	3	3	3	3
8.9750	4	4	5	5	5
9.1000	6	6	6	6	6
9.2250	6	6	7	7	7
9.3500	7	7	7	7	7
9.4750	7	7	8	8	8
9.6000	8	8	8	8	9
9.7250	9	9	9	9	10
9.8500	10	10	10	11	11
9.9750	11	11	12	12	12
10.1000	12	13	13	13	14
10.2250	14	14	15	15	15
10.3500	16	16	16	17	17
10.4750	18	18	19	20	21
10.6000	22	23	24	26	27
10.7250	28	30	31	32	32
10.8500	33	34	35	36	37
10.9750	38	39	40	41	43
11.1000	44	45	47	49	51
11.2250	54	58	61	65	69
11.3500	73	77	82	84	87
11.4750	91	94	98	107	125
11.6000	150	176	212	264	330
11.7250	411	512	640	797	980
11.8500	1210	1513	1889	2310	2736
11.9750	3134	3493	3813	4067	4215
12.1000	4264	4244	4187	4110	4020
12.2250	3924	3825	3723	3619	3514
12.3500	3409	3303	3196	3088	2981
12.4750	2872	2763	2653	2545	2436
12.6000	2329	2222	2117	2015	1914
12.7250	1816	1719	1625	1532	1444
12.8500	1356	1272	1189	1110	1033

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nd Pack Ver: 10-9-97 :055 Compute Time: 10:33:30 Date: 02-27-2007

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TIME vs. VOLUME (cu.ft)

Time hrs	Output Time increment = .0250 hrs				
	Time on left represents time for first value in each row.				
12.9750	958	886	816	749	685
13.1000	625	566	513	460	414
13.2250	369	328	291	257	226
13.3500	201	180	165	150	138
13.4750	127	118	111	105	100
13.6000	97	94	91	89	87
13.7250	85	83	82	79	77
13.8500	76	74	72	71	70
13.9750	68	67	65	64	63
14.1000	62	61	60	59	58
14.2250	58	57	56	56	55
14.3500	55	54	54	53	53
14.4750	53	52	52	51	51
14.6000	50	50	50	49	49
14.7250	49	49	48	48	48
14.8500	48	47	47	47	47
14.9750	46	46	46	45	45
15.1000	45	45	44	44	44
15.2250	44	43	43	43	42
15.3500	42	42	42	41	41
15.4750	41	41	40	40	40
15.6000	40	39	39	39	38
15.7250	38	38	38	37	37
15.8500	37	36	36	36	36
15.9750	35	35	35	35	34
16.1000	34	34	34	34	33
16.2250	33	33	33	33	33
16.3500	33	33	32	32	32
16.4750	32	32	32	32	32
16.6000	32	32	31	31	31
16.7250	31	31	31	31	31
16.8500	31	30	30	30	30
16.9750	30	30	29	29	29
17.1000	29	29	29	29	28
17.2250	28	28	28	28	28
17.3500	28	27	27	27	27
17.4750	27	27	27	26	26
17.6000	26	26	26	26	25
17.7250	25	25	25	25	25
17.8500	25	24	24	24	24
17.9750	24	24	24	23	23
18.1000	23	23	23	23	23
18.2250	22	22	22	22	22
18.3500	22	21	21	21	21
18.4750	21	21	21	20	20
18.6000	20	20	20	20	20

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TIME vs. VOLUME (cu.ft)

Time hrs	Output Time increment = .0250 hrs				
	Time on left represents time for first value in each row.				
18.7250	19	19	19	19	19
18.8500	19	18	18	18	18
18.9750	18	18	18	18	18
19.1000	18	17	17	17	17
19.2250	17	17	17	17	17
19.3500	17	17	17	17	17
19.4750	16	16	16	16	16
19.6000	16	16	16	16	16
19.7250	16	16	16	16	15
19.8500	15	15	15	15	15
19.9750	15	15	15	15	15
20.1000	15	15	15	15	15
20.2250	15	15	15	14	14
20.3500	14	14	14	14	14
20.4750	14	14	14	14	14
20.6000	14	14	14	14	14
20.7250	14	14	14	14	14
20.8500	14	14	14	14	14
20.9750	14	14	14	14	14
21.1000	14	14	14	14	14
21.2250	14	14	14	14	14
21.3500	14	14	14	14	14
21.4750	14	14	14	14	14
21.6000	14	14	14	14	14
21.7250	14	14	14	14	14
21.8500	14	14	14	14	14
21.9750	14	14	14	14	14
22.1000	14	14	13	13	13
22.2250	13	13	13	13	13
22.3500	13	13	13	13	13
22.4750	13	13	13	13	13
22.6000	13	13	13	13	13
22.7250	13	13	13	13	13
22.8500	13	13	13	13	13
22.9750	13	13	13	13	13
23.1000	13	13	13	13	13
23.2250	13	13	13	13	13
23.3500	13	13	13	13	13
23.4750	13	13	13	13	13
23.6000	13	13	13	13	13
23.7250	13	13	13	13	13
23.8500	13	13	13	13	13
23.9750	12	12	12	12	10
24.1000	8	6	3	2	1
24.2250	1	0	0		

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TIME vs. ELEVATION (ft)

Time hrs	Output Time increment = .0250 hrs Time on left represents time for first value in each row.				
9.6000	506.80	506.80	506.80	506.80	506.81
9.7250	506.81	506.81	506.81	506.81	506.81
9.8500	506.81	506.81	506.82	506.82	506.82
9.9750	506.82	506.82	506.82	506.83	506.83
10.1000	506.83	506.83	506.83	506.83	506.84
10.2250	506.84	506.84	506.84	506.85	506.85
10.3500	506.85	506.85	506.86	506.86	506.86
10.4750	506.86	506.87	506.87	506.87	506.88
10.6000	506.88	506.88	506.89	506.89	506.89
10.7250	506.90	506.90	506.91	506.91	506.92
10.8500	506.92	506.92	506.92	506.93	506.93
10.9750	506.93	506.93	506.93	506.94	506.94
11.1000	506.94	506.94	506.95	506.95	506.95
11.2250	506.96	506.96	506.97	506.97	506.97
11.3500	506.98	506.98	506.99	506.99	507.00
11.4750	507.01	507.01	507.02	507.03	507.05
11.6000	507.07	507.09	507.12	507.16	507.19
11.7250	507.23	507.28	507.33	507.39	507.45
11.8500	507.53	507.63	507.76	507.89	508.02
11.9750	508.14	508.24	508.33	508.39	508.42
12.1000	508.41	508.39	508.35	508.30	508.25
12.2250	508.20	508.15	508.10	508.05	508.00
12.3500	507.95	507.90	507.84	507.79	507.74
12.4750	507.69	507.65	507.60	507.55	507.50
12.6000	507.45	507.41	507.37	507.33	507.30
12.7250	507.27	507.25	507.22	507.21	507.19
12.8500	507.18	507.17	507.16	507.15	507.14
12.9750	507.13	507.12	507.12	507.11	507.11
13.1000	507.10	507.10	507.10	507.09	507.09
13.2250	507.09	507.09	507.08	507.08	507.08
13.3500	507.08	507.08	507.07	507.07	507.07
13.4750	507.07	507.07	507.07	507.06	507.06
13.6000	507.06	507.06	507.06	507.06	507.05
13.7250	507.05	507.05	507.05	507.05	507.05
13.8500	507.05	507.05	507.04	507.04	507.04
13.9750	507.04	507.04	507.04	507.03	507.03
14.1000	507.03	507.03	507.03	507.03	507.03
14.2250	507.02	507.02	507.02	507.02	507.02
14.3500	507.02	507.02	507.02	507.02	507.02
14.4750	507.02	507.02	507.02	507.02	507.02
14.6000	507.01	507.01	507.01	507.01	507.01
14.7250	507.01	507.01	507.01	507.01	507.01
14.8500	507.01	507.01	507.01	507.01	507.01
14.9750	507.00	507.00	507.00	507.00	507.00
15.1000	507.00	507.00	507.00	507.00	507.00

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TIME vs. ELEVATION (ft)

Output Time increment = .0250 hrs
 Time on left represents time for first value in each row.

Time hrs					
15.2250	507.00	507.00	507.00	507.00	507.00
15.3500	506.99	506.99	506.99	506.99	506.99
15.4750	506.99	506.99	506.99	506.99	506.99
15.6000	506.99	506.99	506.99	506.99	506.99
15.7250	506.98	506.98	506.98	506.98	506.98
15.8500	506.98	506.98	506.98	506.98	506.98
15.9750	506.98	506.98	506.98	506.98	506.97
16.1000	506.97	506.97	506.97	506.97	506.97
16.2250	506.97	506.97	506.97	506.97	506.97
16.3500	506.97	506.97	506.97	506.97	506.97
16.4750	506.97	506.97	506.97	506.97	506.97
16.6000	506.97	506.97	506.97	506.97	506.97
16.7250	506.97	506.97	506.97	506.97	506.97
16.8500	506.97	506.97	506.97	506.97	506.97
16.9750	506.96	506.96	506.96	506.96	506.96
17.1000	506.96	506.96	506.96	506.96	506.96
17.2250	506.96	506.96	506.96	506.96	506.96
17.3500	506.96	506.96	506.96	506.96	506.96
17.4750	506.96	506.96	506.96	506.96	506.96
17.6000	506.96	506.96	506.96	506.96	506.96
17.7250	506.96	506.96	506.96	506.96	506.96
17.8500	506.96	506.96	506.96	506.96	506.96
17.9750	506.96	506.95	506.95	506.95	506.95
18.1000	506.95	506.95	506.95	506.95	506.95
18.2250	506.95	506.95	506.95	506.95	506.95
18.3500	506.95	506.95	506.95	506.95	506.95
18.4750	506.95	506.95	506.95	506.95	506.95
18.6000	506.95	506.95	506.95	506.95	506.95
18.7250	506.95	506.95	506.95	506.95	506.95
18.8500	506.95	506.95	506.95	506.95	506.95
18.9750	506.95	506.94	506.94	506.94	506.94
19.1000	506.94	506.94	506.94	506.94	506.94
19.2250	506.94	506.94	506.94	506.94	506.94
19.3500	506.94	506.94	506.94	506.94	506.94
19.4750	506.94	506.94	506.94	506.94	506.94
19.6000	506.94	506.94	506.94	506.94	506.94
19.7250	506.94	506.94	506.94	506.94	506.94
19.8500	506.94	506.94	506.94	506.94	506.93
19.9750	506.93	506.93	506.93	506.93	506.93
20.1000	506.93	506.93	506.93	506.93	506.93
20.2250	506.93	506.93	506.93	506.93	506.93
20.3500	506.93	506.93	506.93	506.93	506.93
20.4750	506.93	506.93	506.93	506.93	506.93
20.6000	506.93	506.93	506.93	506.93	506.93
20.7250	506.93	506.93	506.93	506.93	506.93
20.8500	506.93	506.93	506.93	506.93	506.93

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TIME vs. ELEVATION (ft)

Output Time increment = .0250 hrs
Time on left represents time for first value in each row.

Time hrs					
20.9750	506.93	506.93	506.93	506.93	506.93
21.1000	506.93	506.93	506.93	506.93	506.93
21.2250	506.93	506.93	506.93	506.93	506.93
21.3500	506.93	506.93	506.93	506.93	506.93
21.4750	506.93	506.93	506.93	506.93	506.93
21.6000	506.93	506.93	506.93	506.93	506.93
21.7250	506.93	506.93	506.93	506.93	506.93
21.8500	506.93	506.93	506.93	506.93	506.93
21.9750	506.93	506.93	506.93	506.93	506.93
22.1000	506.93	506.93	506.93	506.93	506.93
22.2250	506.93	506.93	506.93	506.93	506.93
22.3500	506.93	506.93	506.93	506.93	506.93
22.4750	506.93	506.93	506.93	506.93	506.93
22.6000	506.93	506.93	506.93	506.93	506.93
22.7250	506.93	506.93	506.93	506.93	506.93
22.8500	506.93	506.93	506.93	506.93	506.93
22.9750	506.93	506.93	506.93	506.93	506.93
23.1000	506.93	506.93	506.93	506.93	506.93
23.2250	506.93	506.93	506.93	506.93	506.93
23.3500	506.93	506.93	506.93	506.93	506.93
23.4750	506.93	506.93	506.93	506.93	506.93
23.6000	506.93	506.93	506.93	506.93	506.93
23.7250	506.93	506.93	506.93	506.93	506.93
23.8500	506.93	506.93	506.93	506.93	506.93
23.9750	506.93	506.93	506.92	506.92	506.91
24.1000	506.88	506.86	506.84	506.83	506.82
24.2250	506.81				

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TIME vs. VOLUME (cu.ft)

Output Time increment = .0250 hrs
 Time on left represents time for first value in each row.

Time hrs					
9.6000	0	0	0	0	0
9.7250	0	0	0	0	0
9.8500	0	0	0	1	1
9.9750	1	1	1	1	1
10.1000	1	1	1	1	1
10.2250	1	1	1	1	1
10.3500	2	2	2	2	2
10.4750	2	2	2	2	2
10.6000	2	2	3	3	3
10.7250	3	4	4	5	6
10.8500	6	6	7	7	7
10.9750	7	8	8	8	9
11.1000	9	9	10	10	11
11.2250	12	12	13	13	14
11.3500	15	15	16	17	18
11.4750	20	21	24	28	34
11.6000	39	46	58	80	99
11.7250	127	162	201	251	309
11.8500	388	500	646	814	986
11.9750	1146	1290	1416	1510	1553
12.1000	1545	1505	1448	1380	1309
12.2250	1236	1164	1092	1021	951
12.3500	883	816	751	688	628
12.4750	568	512	456	406	357
12.6000	312	271	233	201	175
12.7250	155	136	120	107	98
12.8500	92	86	81	75	70
12.9750	66	62	59	56	54
13.1000	52	50	49	48	47
13.2250	46	46	45	44	44
13.3500	43	42	42	41	41
13.4750	40	40	39	39	38
13.6000	37	37	36	36	36
13.7250	35	35	34	34	33
13.8500	33	33	32	32	31
13.9750	31	30	30	29	28
14.1000	28	27	27	26	26
14.2250	26	26	25	25	25
14.3500	25	24	24	24	24
14.4750	24	23	23	23	23
14.6000	23	22	22	22	22
14.7250	22	21	21	21	21
14.8500	20	20	20	20	20
14.9750	19	19	19	19	19
15.1000	18	18	18	18	18

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TIME vs. VOLUME (cu.ft)

Output Time increment = .0250 hrs
 Time on left represents time for first value in each row.

Time hrs					
15.2250	18	17	17	17	17
15.3500	17	17	17	17	17
15.4750	17	16	16	16	16
15.6000	16	16	16	16	16
15.7250	16	15	15	15	15
15.8500	15	15	15	15	15
15.9750	15	14	14	14	14
16.1000	14	14	14	14	14
16.2250	14	14	14	14	14
16.3500	14	14	13	13	13
16.4750	13	13	13	13	13
16.6000	13	13	13	13	13
16.7250	13	13	13	13	13
16.8500	13	13	13	13	13
16.9750	13	13	13	13	13
17.1000	12	12	12	12	12
17.2250	12	12	12	12	12
17.3500	12	12	12	12	12
17.4750	12	12	12	12	12
17.6000	12	12	12	12	12
17.7250	12	12	11	11	11
17.8500	11	11	11	11	11
17.9750	11	11	11	11	11
18.1000	11	11	11	11	11
18.2250	11	11	11	11	11
18.3500	11	11	11	11	10
18.4750	10	10	10	10	10
18.6000	10	10	10	10	10
18.7250	10	10	10	10	10
18.8500	10	10	10	10	10
18.9750	10	10	10	10	10
19.1000	10	9	9	9	9
19.2250	9	9	9	9	9
19.3500	9	9	9	9	9
19.4750	9	9	9	9	9
19.6000	9	9	9	9	9
19.7250	9	9	8	8	8
19.8500	8	8	8	8	8
19.9750	8	8	8	8	8
20.1000	8	8	8	8	8
20.2250	8	8	8	8	8
20.3500	8	8	8	8	8
20.4750	8	8	8	8	8
20.6000	8	8	8	8	8
20.7250	8	8	8	8	8
20.8500	8	8	8	8	8

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TIME vs. VOLUME (cu.ft)

Output Time increment = .0250 hrs
 Time on left represents time for first value in each row.

Time hrs						
20.9750	8	8	8	8	8	8
21.1000	8	8	8	8	8	8
21.2250	8	8	8	8	8	8
21.3500	8	8	8	8	8	8
21.4750	8	8	8	8	8	7
21.6000	7	7	7	7	7	7
21.7250	7	7	7	7	7	7
21.8500	7	7	7	7	7	7
21.9750	7	7	7	7	7	7
22.1000	7	7	7	7	7	7
22.2250	7	7	7	7	7	7
22.3500	7	7	7	7	7	7
22.4750	7	7	7	7	7	7
22.6000	7	7	7	7	7	7
22.7250	7	7	7	7	7	7
22.8500	7	7	7	7	7	7
22.9750	7	7	7	7	7	7
23.1000	7	7	7	7	7	7
23.2250	7	7	7	7	7	7
23.3500	7	7	7	7	7	7
23.4750	7	7	7	7	7	7
23.6000	7	7	7	7	7	7
23.7250	7	7	7	7	7	7
23.8500	7	7	7	7	7	7
23.9750	7	7	7	6	6	5
24.1000	2	2	1	1	1	0
24.2250	0					

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TIME vs. ELEVATION (ft)

Time hrs	Output Time increment = .0250 hrs				
	Time on left represents time for first value in each row.				
6.8500	506.80	506.80	506.80	506.80	506.80
6.9750	506.81	506.81	506.81	506.81	506.81
7.1000	506.81	506.81	506.81	506.82	506.82
7.2250	506.82	506.82	506.82	506.82	506.82
7.3500	506.82	506.82	506.83	506.83	506.83
7.4750	506.83	506.83	506.83	506.83	506.83
7.6000	506.84	506.84	506.84	506.84	506.84
7.7250	506.84	506.84	506.85	506.85	506.85
7.8500	506.85	506.85	506.85	506.85	506.85
7.9750	506.86	506.86	506.86	506.86	506.86
8.1000	506.86	506.86	506.87	506.87	506.87
8.2250	506.87	506.87	506.88	506.88	506.88
8.3500	506.88	506.89	506.89	506.89	506.89
8.4750	506.89	506.90	506.90	506.90	506.91
8.6000	506.91	506.91	506.91	506.92	506.92
8.7250	506.92	506.92	506.92	506.92	506.92
8.8500	506.93	506.93	506.93	506.93	506.93
8.9750	506.93	506.93	506.93	506.93	506.94
9.1000	506.94	506.94	506.94	506.94	506.94
9.2250	506.94	506.94	506.94	506.94	506.94
9.3500	506.95	506.95	506.95	506.95	506.95
9.4750	506.95	506.95	506.95	506.95	506.95
9.6000	506.95	506.95	506.96	506.96	506.96
9.7250	506.96	506.96	506.96	506.97	506.97
9.8500	506.97	506.97	506.97	506.97	506.98
9.9750	506.98	506.98	506.98	506.98	506.99
10.1000	506.99	506.99	506.99	507.00	507.00
10.2250	507.00	507.01	507.01	507.01	507.01
10.3500	507.02	507.02	507.02	507.03	507.03
10.4750	507.03	507.04	507.04	507.04	507.04
10.6000	507.05	507.05	507.05	507.05	507.06
10.7250	507.06	507.06	507.07	507.07	507.07
10.8500	507.08	507.08	507.08	507.09	507.09
10.9750	507.10	507.10	507.10	507.11	507.11
11.1000	507.12	507.12	507.13	507.14	507.14
11.2250	507.15	507.16	507.16	507.17	507.18
11.3500	507.18	507.19	507.20	507.20	507.21
11.4750	507.22	507.23	507.24	507.25	507.28
11.6000	507.32	507.36	507.41	507.47	507.56
11.7250	507.65	507.76	507.89	508.03	508.19
11.8500	508.38	508.62	508.90	509.20	509.50
11.9750	509.78	510.04	510.28	510.46	510.57
12.1000	510.60	510.57	510.52	510.46	510.39
12.2250	510.33	510.26	510.20	510.13	510.07
12.3500	510.00	509.93	509.86	509.79	509.73

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TIME vs. ELEVATION (ft)

Output Time increment = .0250 hrs
 Time on left represents time for first value in each row.

Time hrs					
12.4750	509.66	509.59	509.52	509.45	509.38
12.6000	509.31	509.24	509.17	509.10	509.03
12.7250	508.97	508.90	508.84	508.77	508.71
12.8500	508.65	508.58	508.52	508.46	508.40
12.9750	508.34	508.29	508.23	508.17	508.12
13.1000	508.06	508.01	507.95	507.90	507.85
13.2250	507.80	507.75	507.70	507.66	507.61
13.3500	507.57	507.53	507.48	507.45	507.41
13.4750	507.38	507.34	507.32	507.30	507.28
13.6000	507.26	507.25	507.23	507.22	507.21
13.7250	507.21	507.20	507.19	507.19	507.18
13.8500	507.18	507.18	507.17	507.17	507.17
13.9750	507.16	507.16	507.16	507.16	507.15
14.1000	507.15	507.15	507.14	507.14	507.14
14.2250	507.14	507.14	507.14	507.13	507.13
14.3500	507.13	507.13	507.13	507.13	507.13
14.4750	507.13	507.13	507.13	507.12	507.12
14.6000	507.12	507.12	507.12	507.12	507.12
14.7250	507.12	507.12	507.12	507.12	507.11
14.8500	507.11	507.11	507.11	507.11	507.11
14.9750	507.11	507.11	507.11	507.11	507.10
15.1000	507.10	507.10	507.10	507.10	507.10
15.2250	507.10	507.10	507.10	507.10	507.10
15.3500	507.09	507.09	507.09	507.09	507.09
15.4750	507.09	507.09	507.09	507.09	507.09
15.6000	507.08	507.08	507.08	507.08	507.08
15.7250	507.08	507.08	507.08	507.08	507.08
15.8500	507.08	507.07	507.07	507.07	507.07
15.9750	507.07	507.07	507.07	507.07	507.07
16.1000	507.07	507.07	507.06	507.06	507.06
16.2250	507.06	507.06	507.06	507.06	507.06
16.3500	507.06	507.06	507.06	507.06	507.06
16.4750	507.06	507.06	507.06	507.06	507.06
16.6000	507.06	507.06	507.06	507.06	507.06
16.7250	507.06	507.06	507.05	507.05	507.05
16.8500	507.05	507.05	507.05	507.05	507.05
16.9750	507.05	507.05	507.05	507.05	507.05
17.1000	507.05	507.05	507.05	507.05	507.05
17.2250	507.05	507.05	507.05	507.05	507.05
17.3500	507.05	507.05	507.05	507.05	507.05
17.4750	507.05	507.04	507.04	507.04	507.04
17.6000	507.04	507.04	507.04	507.04	507.04
17.7250	507.04	507.04	507.04	507.04	507.04
17.8500	507.04	507.04	507.04	507.04	507.04
17.9750	507.04	507.04	507.04	507.04	507.03
18.1000	507.03	507.03	507.03	507.03	507.03

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TIME vs. ELEVATION (ft)

Output Time increment = .0250 hrs
 Time on left represents time for first value in each row.

Time hrs					
18.2250	507.03	507.03	507.03	507.03	507.03
18.3500	507.03	507.03	507.03	507.03	507.03
18.4750	507.03	507.03	507.03	507.02	507.02
18.6000	507.02	507.02	507.02	507.02	507.02
18.7250	507.02	507.02	507.02	507.02	507.02
18.8500	507.02	507.02	507.02	507.02	507.02
18.9750	507.02	507.02	507.01	507.01	507.01
19.1000	507.01	507.01	507.01	507.01	507.01
19.2250	507.01	507.01	507.01	507.01	507.01
19.3500	507.01	507.01	507.01	507.01	507.01
19.4750	507.00	507.00	507.00	507.00	507.00
19.6000	507.00	507.00	507.00	507.00	507.00
19.7250	507.00	507.00	507.00	507.00	507.00
19.8500	507.00	507.00	507.00	507.00	506.99
19.9750	506.99	506.99	506.99	506.99	506.99
20.1000	506.99	506.99	506.99	506.99	506.99
20.2250	506.99	506.99	506.99	506.99	506.99
20.3500	506.99	506.99	506.99	506.99	506.99
20.4750	506.99	506.99	506.99	506.99	506.99
20.6000	506.99	506.99	506.99	506.99	506.99
20.7250	506.99	506.99	506.99	506.99	506.99
20.8500	506.99	506.99	506.99	506.99	506.99
20.9750	506.99	506.99	506.99	506.99	506.99
21.1000	506.99	506.99	506.99	506.99	506.99
21.2250	506.99	506.99	506.99	506.99	506.99
21.3500	506.99	506.99	506.99	506.99	506.99
21.4750	506.99	506.98	506.98	506.98	506.98
21.6000	506.98	506.98	506.98	506.98	506.98
21.7250	506.98	506.98	506.98	506.98	506.98
21.8500	506.98	506.98	506.98	506.98	506.98
21.9750	506.98	506.98	506.98	506.98	506.98
22.1000	506.98	506.98	506.98	506.98	506.98
22.2250	506.98	506.98	506.98	506.98	506.98
22.3500	506.98	506.98	506.98	506.98	506.98
22.4750	506.98	506.98	506.98	506.98	506.98
22.6000	506.98	506.98	506.98	506.98	506.98
22.7250	506.98	506.98	506.98	506.98	506.98
22.8500	506.98	506.98	506.98	506.98	506.98
22.9750	506.98	506.98	506.98	506.98	506.98
23.1000	506.98	506.98	506.98	506.98	506.98
23.2250	506.98	506.98	506.98	506.98	506.98
23.3500	506.98	506.98	506.98	506.98	506.98
23.4750	506.98	506.98	506.98	506.98	506.98
23.6000	506.98	506.98	506.98	506.98	506.98
23.7250	506.98	506.98	506.98	506.98	506.98
23.8500	506.98	506.98	506.97	506.97	506.97

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TIME vs. ELEVATION (ft)

Output Time increment = .0250 hrs
Time on left represents time for first value in each row.

Time hrs	-----				
23.9750	506.97	506.97	506.97	506.97	506.96
24.1000	506.94	506.93	506.90	506.87	506.84
24.2250	506.82	506.81	506.81		

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TIME vs. VOLUME (cu.ft)

Output Time increment = .0250 hrs
 Time on left represents time for first value in each row.

Time hrs					
6.8500	0	0	0	0	0
6.9750	0	0	0	0	0
7.1000	0	0	0	0	0
7.2250	1	1	1	1	1
7.3500	1	1	1	1	1
7.4750	1	1	1	1	1
7.6000	1	1	1	1	1
7.7250	1	1	1	1	1
7.8500	1	2	2	2	2
7.9750	2	2	2	2	2
8.1000	2	2	2	2	2
8.2250	2	2	2	2	2
8.3500	2	3	3	3	3
8.4750	3	3	3	3	4
8.6000	4	5	5	5	6
8.7250	6	6	6	6	7
8.8500	7	7	7	7	7
8.9750	8	8	8	8	8
9.1000	8	9	9	9	9
9.2250	9	9	9	10	10
9.3500	10	10	10	10	10
9.4750	10	10	11	11	11
9.6000	11	11	11	12	12
9.7250	12	12	12	13	13
9.8500	13	14	14	14	14
9.9750	15	15	15	16	16
10.1000	16	17	17	17	18
10.2250	19	19	20	21	22
10.3500	23	24	25	26	27
10.4750	28	30	31	31	32
10.6000	33	33	34	35	36
10.7250	37	38	39	40	41
10.8500	42	44	45	46	47
10.9750	48	50	52	54	56
11.1000	59	62	65	69	72
11.2250	76	80	84	87	90
11.3500	93	97	101	105	110
11.4750	116	122	129	142	163
11.6000	189	222	267	330	416
11.7250	519	646	805	999	1223
11.8500	1503	1867	2314	2814	3318
11.9750	3788	4213	4593	4888	5050
12.1000	5088	5048	4971	4879	4779
12.2250	4678	4574	4469	4361	4252
12.3500	4142	4030	3917	3804	3689

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TIME vs. VOLUME (cu.ft)

Output Time increment = .0250 hrs
 Time on left represents time for first value in each row.

Time hrs					
12.4750	3574	3456	3339	3222	3105
12.6000	2987	2871	2757	2643	2532
12.7250	2423	2315	2210	2106	2005
12.8500	1906	1809	1714	1621	1530
12.9750	1442	1355	1271	1190	1111
13.1000	1034	961	889	821	755
13.2250	692	634	576	524	473
13.3500	426	383	341	304	271
13.4750	240	213	191	174	161
13.6000	147	136	127	119	113
13.7250	107	103	100	97	95
13.8500	93	91	89	87	86
13.9750	84	83	81	79	78
14.1000	76	75	73	72	71
14.2250	71	70	69	68	68
14.3500	67	67	66	66	65
14.4750	65	64	64	63	63
14.6000	62	62	61	61	60
14.7250	60	59	59	58	58
14.8500	57	57	56	56	55
14.9750	55	54	54	53	53
15.1000	52	52	51	51	50
15.2250	50	49	49	49	49
15.3500	48	48	48	47	47
15.4750	47	46	46	46	45
15.6000	45	45	45	44	44
15.7250	44	43	43	43	42
15.8500	42	42	41	41	41
15.9750	41	40	40	40	39
16.1000	39	39	39	38	38
16.2250	38	38	38	38	37
16.3500	37	37	37	37	37
16.4750	37	37	37	36	36
16.6000	36	36	36	36	36
16.7250	36	36	35	35	35
16.8500	35	35	35	35	35
16.9750	35	34	34	34	34
17.1000	34	34	34	34	34
17.2250	33	33	33	33	33
17.3500	33	33	33	33	32
17.4750	32	32	32	32	32
17.6000	32	32	32	31	31
17.7250	31	31	31	31	31
17.8500	31	30	30	30	30
17.9750	30	30	29	29	29
18.1000	29	29	29	28	28

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TIME vs. VOLUME (cu.ft)

Output Time increment = .0250 hrs
 Time on left represents time for first value in each row.

Time hrs					
18.2250	28	28	28	27	27
18.3500	27	27	27	27	26
18.4750	26	26	26	26	26
18.6000	25	25	25	25	25
18.7250	25	24	24	24	24
18.8500	24	24	23	23	23
18.9750	23	23	23	22	22
19.1000	22	22	22	22	21
19.2250	21	21	21	21	21
19.3500	20	20	20	20	20
19.4750	19	19	19	19	19
19.6000	19	18	18	18	18
19.7250	18	18	18	18	18
19.8500	17	17	17	17	17
19.9750	17	17	17	17	17
20.1000	17	17	17	17	16
20.2250	16	16	16	16	16
20.3500	16	16	16	16	16
20.4750	16	16	16	16	16
20.6000	16	16	16	16	16
20.7250	16	16	16	16	16
20.8500	16	16	16	16	16
20.9750	16	16	16	16	16
21.1000	16	16	16	16	16
21.2250	16	16	16	16	16
21.3500	16	16	16	16	16
21.4750	16	16	16	16	16
21.6000	16	16	16	16	16
21.7250	16	16	15	15	15
21.8500	15	15	15	15	15
21.9750	15	15	15	15	15
22.1000	15	15	15	15	15
22.2250	15	15	15	15	15
22.3500	15	15	15	15	15
22.4750	15	15	15	15	15
22.6000	15	15	15	15	15
22.7250	15	15	15	15	15
22.8500	15	15	15	15	15
22.9750	15	15	15	15	15
23.1000	15	15	15	15	15
23.2250	15	15	15	15	15
23.3500	15	14	14	14	14
23.4750	14	14	14	14	14
23.6000	14	14	14	14	14
23.7250	14	14	14	14	14
23.8500	14	14	14	14	14

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TIME vs. VOLUME (cu.ft)

Output Time increment = .0250 hrs
Time on left represents time for first value in each row.

Time hrs					
23.9750	14	14	14	13	12
24.1000	10	7	4	2	1
24.2250	1	0	0		

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TIME vs. ELEVATION (ft)

Time hrs	Output Time increment = .0250 hrs				
	Time on left represents time for first value in each row.				
6.8250	506.80	506.80	506.80	506.80	506.80
6.9500	506.81	506.81	506.81	506.81	506.81
7.0750	506.81	506.81	506.81	506.82	506.82
7.2000	506.82	506.82	506.82	506.82	506.82
7.3250	506.82	506.83	506.83	506.83	506.83
7.4500	506.83	506.83	506.83	506.83	506.84
7.5750	506.84	506.84	506.84	506.84	506.84
7.7000	506.84	506.84	506.85	506.85	506.85
7.8250	506.85	506.85	506.85	506.85	506.85
7.9500	506.86	506.86	506.86	506.86	506.86
8.0750	506.86	506.86	506.87	506.87	506.87
8.2000	506.87	506.87	506.88	506.88	506.88
8.3250	506.88	506.89	506.89	506.89	506.89
8.4500	506.89	506.90	506.90	506.90	506.90
8.5750	506.91	506.91	506.91	506.92	506.92
8.7000	506.92	506.92	506.92	506.92	506.92
8.8250	506.93	506.93	506.93	506.93	506.93
8.9500	506.93	506.93	506.93	506.93	506.94
9.0750	506.94	506.94	506.94	506.94	506.94
9.2000	506.94	506.94	506.94	506.94	506.95
9.3250	506.95	506.95	506.95	506.95	506.95
9.4500	506.95	506.95	506.95	506.95	506.95
9.5750	506.95	506.95	506.96	506.96	506.96
9.7000	506.96	506.96	506.96	506.96	506.97
9.8250	506.97	506.97	506.97	506.97	506.98
9.9500	506.98	506.98	506.98	506.98	506.99
10.0750	506.99	506.99	506.99	507.00	507.00
10.2000	507.00	507.00	507.01	507.01	507.01
10.3250	507.02	507.02	507.02	507.03	507.03
10.4500	507.03	507.04	507.04	507.04	507.04
10.5750	507.04	507.05	507.05	507.05	507.06
10.7000	507.06	507.06	507.06	507.07	507.07
10.8250	507.07	507.08	507.08	507.09	507.09
10.9500	507.09	507.10	507.10	507.11	507.11
11.0750	507.11	507.12	507.13	507.13	507.14
11.2000	507.14	507.15	507.16	507.17	507.17
11.3250	507.18	507.18	507.19	507.20	507.21
11.4500	507.21	507.22	507.23	507.24	507.26
11.5750	507.29	507.32	507.36	507.41	507.48
11.7000	507.56	507.66	507.77	507.90	508.04
11.8250	508.20	508.40	508.63	508.92	509.22
11.9500	509.53	509.81	510.07	510.31	510.50
12.0750	510.60	510.62	510.59	510.54	510.48
12.2000	510.41	510.35	510.28	510.22	510.15
12.3250	510.08	510.02	509.95	509.88	509.81

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TIME vs. ELEVATION (ft)

Output Time increment = .0250 hrs
 Time on left represents time for first value in each row.

Time hrs					
12.4500	509.74	509.67	509.60	509.53	509.46
12.5750	509.39	509.32	509.25	509.18	509.12
12.7000	509.05	508.98	508.92	508.85	508.79
12.8250	508.72	508.66	508.60	508.54	508.48
12.9500	508.42	508.36	508.30	508.24	508.19
13.0750	508.13	508.07	508.02	507.97	507.91
13.2000	507.86	507.81	507.76	507.71	507.67
13.3250	507.62	507.58	507.54	507.50	507.46
13.4500	507.42	507.39	507.35	507.33	507.30
13.5750	507.29	507.27	507.25	507.24	507.23
13.7000	507.22	507.21	507.20	507.20	507.19
13.8250	507.19	507.18	507.18	507.17	507.17
13.9500	507.17	507.17	507.16	507.16	507.16
14.0750	507.15	507.15	507.15	507.15	507.14
14.2000	507.14	507.14	507.14	507.14	507.14
14.3250	507.14	507.13	507.13	507.13	507.13
14.4500	507.13	507.13	507.13	507.13	507.13
14.5750	507.13	507.12	507.12	507.12	507.12
14.7000	507.12	507.12	507.12	507.12	507.12
14.8250	507.12	507.11	507.11	507.11	507.11
14.9500	507.11	507.11	507.11	507.11	507.11
15.0750	507.11	507.11	507.10	507.10	507.10
15.2000	507.10	507.10	507.10	507.10	507.10
15.3250	507.10	507.10	507.09	507.09	507.09
15.4500	507.09	507.09	507.09	507.09	507.09
15.5750	507.09	507.09	507.08	507.08	507.08
15.7000	507.08	507.08	507.08	507.08	507.08
15.8250	507.08	507.08	507.08	507.07	507.07
15.9500	507.07	507.07	507.07	507.07	507.07
16.0750	507.07	507.07	507.07	507.07	507.06
16.2000	507.06	507.06	507.06	507.06	507.06
16.3250	507.06	507.06	507.06	507.06	507.06
16.4500	507.06	507.06	507.06	507.06	507.06
16.5750	507.06	507.06	507.06	507.06	507.06
16.7000	507.06	507.06	507.06	507.06	507.06
16.8250	507.05	507.05	507.05	507.05	507.05
16.9500	507.05	507.05	507.05	507.05	507.05
17.0750	507.05	507.05	507.05	507.05	507.05
17.2000	507.05	507.05	507.05	507.05	507.05
17.3250	507.05	507.05	507.05	507.05	507.05
17.4500	507.05	507.05	507.05	507.05	507.04
17.5750	507.04	507.04	507.04	507.04	507.04
17.7000	507.04	507.04	507.04	507.04	507.04
17.8250	507.04	507.04	507.04	507.04	507.04
17.9500	507.04	507.04	507.04	507.04	507.04
18.0750	507.04	507.04	507.03	507.03	507.03

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TIME vs. ELEVATION (ft)

Output Time increment = .0250 hrs
 Time on left represents time for first value in each row.

Time hrs					
18.2000	507.03	507.03	507.03	507.03	507.03
18.3250	507.03	507.03	507.03	507.03	507.03
18.4500	507.03	507.03	507.03	507.03	507.03
18.5750	507.03	507.02	507.02	507.02	507.02
18.7000	507.02	507.02	507.02	507.02	507.02
18.8250	507.02	507.02	507.02	507.02	507.02
18.9500	507.02	507.02	507.02	507.02	507.01
19.0750	507.01	507.01	507.01	507.01	507.01
19.2000	507.01	507.01	507.01	507.01	507.01
19.3250	507.01	507.01	507.01	507.01	507.01
19.4500	507.01	507.01	507.01	507.00	507.00
19.5750	507.00	507.00	507.00	507.00	507.00
19.7000	507.00	507.00	507.00	507.00	507.00
19.8250	507.00	507.00	507.00	507.00	507.00
19.9500	507.00	507.00	506.99	506.99	506.99
20.0750	506.99	506.99	506.99	506.99	506.99
20.2000	506.99	506.99	506.99	506.99	506.99
20.3250	506.99	506.99	506.99	506.99	506.99
20.4500	506.99	506.99	506.99	506.99	506.99
20.5750	506.99	506.99	506.99	506.99	506.99
20.7000	506.99	506.99	506.99	506.99	506.99
20.8250	506.99	506.99	506.99	506.99	506.99
20.9500	506.99	506.99	506.99	506.99	506.99
21.0750	506.99	506.99	506.99	506.99	506.99
21.2000	506.99	506.99	506.99	506.99	506.99
21.3250	506.99	506.99	506.99	506.99	506.99
21.4500	506.99	506.99	506.99	506.99	506.99
21.5750	506.99	506.99	506.99	506.99	506.98
21.7000	506.98	506.98	506.98	506.98	506.98
21.8250	506.98	506.98	506.98	506.98	506.98
21.9500	506.98	506.98	506.98	506.98	506.98
22.0750	506.98	506.98	506.98	506.98	506.98
22.2000	506.98	506.98	506.98	506.98	506.98
22.3250	506.98	506.98	506.98	506.98	506.98
22.4500	506.98	506.98	506.98	506.98	506.98
22.5750	506.98	506.98	506.98	506.98	506.98
22.7000	506.98	506.98	506.98	506.98	506.98
22.8250	506.98	506.98	506.98	506.98	506.98
22.9500	506.98	506.98	506.98	506.98	506.98
23.0750	506.98	506.98	506.98	506.98	506.98
23.2000	506.98	506.98	506.98	506.98	506.98
23.3250	506.98	506.98	506.98	506.98	506.98
23.4500	506.98	506.98	506.98	506.98	506.98
23.5750	506.98	506.98	506.98	506.98	506.98
23.7000	506.98	506.98	506.98	506.98	506.98
23.8250	506.98	506.98	506.98	506.98	506.98

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TIME vs. ELEVATION (ft)

Output Time increment = .0250 hrs
Time on left represents time for first value in each row.

Time hrs					
23.9500	506.98	506.98	506.98	506.97	506.97
24.0750	506.96	506.94	506.93	506.90	506.87
24.2000	506.84	506.83	506.81	506.81	

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TIME vs. VOLUME (cu.ft)

Output Time increment = .0250 hrs
 Time on left represents time for first value in each row.

Time hrs					
6.8250	0	0	0	0	0
6.9500	0	0	0	0	0
7.0750	0	0	0	0	1
7.2000	1	1	1	1	1
7.3250	1	1	1	1	1
7.4500	1	1	1	1	1
7.5750	1	1	1	1	1
7.7000	1	1	1	1	1
7.8250	1	2	2	2	2
7.9500	2	2	2	2	2
8.0750	2	2	2	2	2
8.2000	2	2	2	2	2
8.3250	2	3	3	3	3
8.4500	3	3	3	3	4
8.5750	4	5	5	5	6
8.7000	6	6	6	6	7
8.8250	7	7	7	7	7
8.9500	8	8	8	8	8
9.0750	8	9	9	9	9
9.2000	9	9	9	10	10
9.3250	10	10	10	10	10
9.4500	10	11	11	11	11
9.5750	11	11	11	11	12
9.7000	12	12	12	13	13
9.8250	13	13	14	14	14
9.9500	15	15	15	16	16
10.0750	16	17	17	17	18
10.2000	18	19	20	21	22
10.3250	23	24	25	26	27
10.4500	28	29	30	31	32
10.5750	32	33	34	35	36
10.7000	37	38	39	40	41
10.8250	42	43	44	45	47
10.9500	48	49	51	53	55
11.0750	58	60	63	66	70
11.2000	74	78	82	85	88
11.3250	91	95	98	102	107
11.4500	112	118	124	131	144
11.5750	165	191	225	270	334
11.7000	421	526	654	815	1011
11.8250	1238	1521	1889	2340	2845
11.9500	3354	3828	4257	4640	4936
12.0750	5096	5129	5087	5007	4911
12.2000	4810	4707	4603	4498	4390
12.3250	4281	4171	4060	3947	3833

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TIME vs. VOLUME (cu.ft)

Output Time increment = .0250 hrs
 Time on left represents time for first value in each row.

Time hrs					
12.4500	3719	3603	3485	3368	3250
12.5750	3133	3016	2899	2784	2671
12.7000	2559	2449	2341	2236	2132
12.8250	2031	1931	1833	1738	1645
12.9500	1553	1465	1377	1293	1210
13.0750	1132	1054	980	908	839
13.2000	773	709	650	592	538
13.3250	487	439	395	352	315
13.4500	280	249	221	198	179
13.5750	165	152	140	130	122
13.7000	115	109	104	101	98
13.8250	96	94	91	90	88
13.9500	86	85	83	82	80
14.0750	79	77	76	74	73
14.2000	72	71	71	70	69
14.3250	69	68	67	67	66
14.4500	66	65	65	64	64
14.5750	63	63	62	62	61
14.7000	61	60	60	59	59
14.8250	58	58	57	57	56
14.9500	56	55	55	54	54
15.0750	53	53	52	52	51
15.2000	51	50	50	49	49
15.3250	49	49	48	48	48
15.4500	47	47	47	46	46
15.5750	46	45	45	45	45
15.7000	44	44	44	43	43
15.8250	43	42	42	42	41
15.9500	41	41	40	40	40
16.0750	40	39	39	39	39
16.2000	38	38	38	38	38
16.3250	38	38	37	37	37
16.4500	37	37	37	37	37
16.5750	37	36	36	36	36
16.7000	36	36	36	36	36
16.8250	35	35	35	35	35
16.9500	35	35	35	35	34
17.0750	34	34	34	34	34
17.2000	34	34	34	34	33
17.3250	33	33	33	33	33
17.4500	33	33	33	32	32
17.5750	32	32	32	32	32
17.7000	32	32	31	31	31
17.8250	31	31	31	31	31
17.9500	30	30	30	30	30
18.0750	29	29	29	29	29

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TIME vs. VOLUME (cu.ft)

Output Time increment = .0250 hrs
 Time on left represents time for first value in each row.

Time hrs					
18.2000	29	28	28	28	28
18.3250	28	28	27	27	27
18.4500	27	27	26	26	26
18.5750	26	26	26	25	25
18.7000	25	25	25	25	24
18.8250	24	24	24	24	24
18.9500	23	23	23	23	23
19.0750	23	22	22	22	22
19.2000	22	21	21	21	21
19.3250	21	21	20	20	20
19.4500	20	20	20	19	19
19.5750	19	19	19	19	18
19.7000	18	18	18	18	18
19.8250	18	18	17	17	17
19.9500	17	17	17	17	17
20.0750	17	17	17	17	17
20.2000	17	17	17	17	17
20.3250	16	16	16	16	16
20.4500	16	16	16	16	16
20.5750	16	16	16	16	16
20.7000	16	16	16	16	16
20.8250	16	16	16	16	16
20.9500	16	16	16	16	16
21.0750	16	16	16	16	16
21.2000	16	16	16	16	16
21.3250	16	16	16	16	16
21.4500	16	16	16	16	16
21.5750	16	16	16	16	16
21.7000	16	16	16	16	16
21.8250	16	16	16	16	16
21.9500	15	15	15	15	15
22.0750	15	15	15	15	15
22.2000	15	15	15	15	15
22.3250	15	15	15	15	15
22.4500	15	15	15	15	15
22.5750	15	15	15	15	15
22.7000	15	15	15	15	15
22.8250	15	15	15	15	15
22.9500	15	15	15	15	15
23.0750	15	15	15	15	15
23.2000	15	15	15	15	15
23.3250	15	15	15	15	15
23.4500	15	15	15	15	14
23.5750	14	14	14	14	14
23.7000	14	14	14	14	14
23.8250	14	14	14	14	14

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TIME vs. VOLUME (cu.ft)

Output Time increment = .0250 hrs
Time on left represents time for first value in each row.

Time hrs					
23.9500	14	14	14	14	13
24.0750	12	10	7	4	2
24.2000	1	1	0	0	

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REQUESTED POND WS ELEVATIONS:

Min. Elev.= 506.80 ft
Increment = .12 ft
Max. Elev.= 512.18 ft

Spot Elevations, ft
511.22

OUTLET CONNECTIVITY

---> Forward Flow Only (UpStream to DnStream)
<--- Reverse Flow Only (DnStream to UpStream)
<---> Forward and Reverse Both Allowed

Structure	No.	Outfall	E1, ft	E2, ft
Weir-Rectangular	d	---> TW	511.720	512.180
Weir-Rectangular	c	---> TW	511.220	512.180
Orifice-Circular	b	---> TW	510.250	512.180
Orifice-Circular	a	---> TW	506.800	512.180
TWSETUP,DS Channel				

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OUTLET STRUCTURE INPUT DATA

Structure ID = d
Structure Type = Weir-Rectangular

of Openings = 1
Crest Elev. = 511.72 ft
Weir Length = 1.50 ft
Weir Coeff. = 3.330000

Weir TW effects (Use adjustment equation)

Structure ID = c
Structure Type = Weir-Rectangular

of Openings = 1
Crest Elev. = 511.22 ft
Weir Length = 5.50 ft
Weir Coeff. = 3.330000

Weir TW effects (Use adjustment equation)

Structure ID = b
Structure Type = Orifice-Circular

of Openings = 1
Invert Elev. = 510.25 ft
Diameter = .8330 ft
Orifice Coeff. = .600

Structure ID = a
Structure Type = Orifice-Circular

of Openings = 1
Invert Elev. = 506.80 ft
Diameter = .5833 ft
Orifice Coeff. = .600

Type.... OutletInput Data
Name.... LOT3 DETCNTRL R1

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OUTLET STRUCTURE INPUT DATA

Structure ID = TW
Structure Type = TWSETUP,DS Channel

FREE OUTFALL CONDITIONS SPECIFIED

CONVERGENCE TOLERANCES...

Maximum Iterations= 30
Min. TW tolerance = .01 ft
Max. TW tolerance = .01 ft
Min. HW tolerance = .01 ft
Max. HW tolerance = .01 ft
Min. Q tolerance = .10 cfs
Max. Q tolerance = .10 cfs

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RATING TABLE FOR ONE OUTLET TYPE

Structure ID = d (Weir-Rectangular)

 Upstream ID = (Pond Water Surface)
 DNstream ID = TW (Pond Outfall)

WS Elev, Device Q		Tail Water		Notes
WS Elev.	Q	TW Elev	Converge	Computation Messages
ft	cfs	ft	+/-ft	
506.80	.00	Free Outfall		HW & TW below Inv.El.=511.720
506.92	.00	Free Outfall		HW & TW below Inv.El.=511.720
507.04	.00	Free Outfall		HW & TW below Inv.El.=511.720
507.16	.00	Free Outfall		HW & TW below Inv.El.=511.720
507.28	.00	Free Outfall		HW & TW below Inv.El.=511.720
507.40	.00	Free Outfall		HW & TW below Inv.El.=511.720
507.52	.00	Free Outfall		HW & TW below Inv.El.=511.720
507.64	.00	Free Outfall		HW & TW below Inv.El.=511.720
507.76	.00	Free Outfall		HW & TW below Inv.El.=511.720
507.88	.00	Free Outfall		HW & TW below Inv.El.=511.720
508.00	.00	Free Outfall		HW & TW below Inv.El.=511.720
508.12	.00	Free Outfall		HW & TW below Inv.El.=511.720
508.24	.00	Free Outfall		HW & TW below Inv.El.=511.720
508.36	.00	Free Outfall		HW & TW below Inv.El.=511.720
508.48	.00	Free Outfall		HW & TW below Inv.El.=511.720
508.60	.00	Free Outfall		HW & TW below Inv.El.=511.720
508.72	.00	Free Outfall		HW & TW below Inv.El.=511.720
508.84	.00	Free Outfall		HW & TW below Inv.El.=511.720
508.96	.00	Free Outfall		HW & TW below Inv.El.=511.720
509.08	.00	Free Outfall		HW & TW below Inv.El.=511.720
509.20	.00	Free Outfall		HW & TW below Inv.El.=511.720
509.32	.00	Free Outfall		HW & TW below Inv.El.=511.720
509.44	.00	Free Outfall		HW & TW below Inv.El.=511.720
509.56	.00	Free Outfall		HW & TW below Inv.El.=511.720
509.68	.00	Free Outfall		HW & TW below Inv.El.=511.720
509.80	.00	Free Outfall		HW & TW below Inv.El.=511.720
509.92	.00	Free Outfall		HW & TW below Inv.El.=511.720
510.04	.00	Free Outfall		HW & TW below Inv.El.=511.720
510.16	.00	Free Outfall		HW & TW below Inv.El.=511.720
510.25	.00	Free Outfall		HW & TW below Inv.El.=511.720
510.28	.00	Free Outfall		HW & TW below Inv.El.=511.720
510.40	.00	Free Outfall		HW & TW below Inv.El.=511.720
510.52	.00	Free Outfall		HW & TW below Inv.El.=511.720
510.64	.00	Free Outfall		HW & TW below Inv.El.=511.720

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RATING TABLE FOR ONE OUTLET TYPE

Structure ID = d (Weir-Rectangular)

Upstream ID = (Pond Water Surface)

DNstream ID = TW (Pond Outfall)

WS Elev, Device Q		Tail Water		Notes
WS Elev.	Q	TW Elev	Converge	Computation Messages
ft	cfs	ft	+/-ft	
510.76	.00	Free Outfall		HW & TW below Inv.El.=511.720
510.88	.00	Free Outfall		HW & TW below Inv.El.=511.720
511.00	.00	Free Outfall		HW & TW below Inv.El.=511.720
511.12	.00	Free Outfall		HW & TW below Inv.El.=511.720
511.22	.00	Free Outfall		HW & TW below Inv.El.=511.720
511.24	.00	Free Outfall		HW & TW below Inv.El.=511.720
511.36	.00	Free Outfall		HW & TW below Inv.El.=511.720
511.48	.00	Free Outfall		HW & TW below Inv.El.=511.720
511.60	.00	Free Outfall		HW & TW below Inv.El.=511.720
511.72	.00	Free Outfall		H=.00; Htw=.00; Qfree=.00;
511.84	.21	Free Outfall		H=.12; Htw=.00; Qfree=.21;
511.96	.59	Free Outfall		H=.24; Htw=.00; Qfree=.59;
512.08	1.08	Free Outfall		H=.36; Htw=.00; Qfree=1.08;
512.18	1.56	Free Outfall		H=.46; Htw=.00; Qfree=1.56;

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RATING TABLE FOR ONE OUTLET TYPE

Structure ID = c (Weir-Rectangular)

Upstream ID = (Pond Water Surface)

DNstream ID = TW (Pond Outfall)

WS Elev, Device Q		Tail Water		Notes
WS Elev. ft	Q cfs	TW Elev ft	Converge +/-ft	Computation Messages
506.80	.00	Free Outfall		HW & TW below Inv.El.=511.220
506.92	.00	Free Outfall		HW & TW below Inv.El.=511.220
507.04	.00	Free Outfall		HW & TW below Inv.El.=511.220
507.16	.00	Free Outfall		HW & TW below Inv.El.=511.220
507.28	.00	Free Outfall		HW & TW below Inv.El.=511.220
507.40	.00	Free Outfall		HW & TW below Inv.El.=511.220
507.52	.00	Free Outfall		HW & TW below Inv.El.=511.220
507.64	.00	Free Outfall		HW & TW below Inv.El.=511.220
507.76	.00	Free Outfall		HW & TW below Inv.El.=511.220
507.88	.00	Free Outfall		HW & TW below Inv.El.=511.220
508.00	.00	Free Outfall		HW & TW below Inv.El.=511.220
508.12	.00	Free Outfall		HW & TW below Inv.El.=511.220
508.24	.00	Free Outfall		HW & TW below Inv.El.=511.220
508.36	.00	Free Outfall		HW & TW below Inv.El.=511.220
508.48	.00	Free Outfall		HW & TW below Inv.El.=511.220
508.60	.00	Free Outfall		HW & TW below Inv.El.=511.220
508.72	.00	Free Outfall		HW & TW below Inv.El.=511.220
508.84	.00	Free Outfall		HW & TW below Inv.El.=511.220
508.96	.00	Free Outfall		HW & TW below Inv.El.=511.220
509.08	.00	Free Outfall		HW & TW below Inv.El.=511.220
509.20	.00	Free Outfall		HW & TW below Inv.El.=511.220
509.32	.00	Free Outfall		HW & TW below Inv.El.=511.220
509.44	.00	Free Outfall		HW & TW below Inv.El.=511.220
509.56	.00	Free Outfall		HW & TW below Inv.El.=511.220
509.68	.00	Free Outfall		HW & TW below Inv.El.=511.220
509.80	.00	Free Outfall		HW & TW below Inv.El.=511.220
509.92	.00	Free Outfall		HW & TW below Inv.El.=511.220
510.04	.00	Free Outfall		HW & TW below Inv.El.=511.220
510.16	.00	Free Outfall		HW & TW below Inv.El.=511.220
510.25	.00	Free Outfall		HW & TW below Inv.El.=511.220
510.28	.00	Free Outfall		HW & TW below Inv.El.=511.220
510.40	.00	Free Outfall		HW & TW below Inv.El.=511.220
510.52	.00	Free Outfall		HW & TW below Inv.El.=511.220
510.64	.00	Free Outfall		HW & TW below Inv.El.=511.220

S/N: HOMOLO436313 JRK, JR

Pond Pack Ver: 10-9-97 :055 Compute Time: 10:33:30 Date: 02-27-2007

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RATING TABLE FOR ONE OUTLET TYPE

Structure ID = c (Weir-Rectangular)

Upstream ID = (Pond Water Surface)

DNstream ID = TW (Pond Outfall)

WS Elev, Device Q		Tail Water		Notes
WS Elev. ft	Q cfs	TW Elev ft	Converge +/-ft	Computation Messages
510.76	.00	Free	Outfall	HW & TW below Inv.El.=511.220
510.88	.00	Free	Outfall	HW & TW below Inv.El.=511.220
511.00	.00	Free	Outfall	HW & TW below Inv.El.=511.220
511.12	.00	Free	Outfall	HW & TW below Inv.El.=511.220
511.22	.00	Free	Outfall	H=.00; Htw=.00; Qfree=.00;
511.24	.05	Free	Outfall	H=.02; Htw=.00; Qfree=.05;
511.36	.96	Free	Outfall	H=.14; Htw=.00; Qfree=.96;
511.48	2.43	Free	Outfall	H=.26; Htw=.00; Qfree=2.43;
511.60	4.29	Free	Outfall	H=.38; Htw=.00; Qfree=4.29;
511.72	6.48	Free	Outfall	H=.50; Htw=.00; Qfree=6.48;
511.84	8.94	Free	Outfall	H=.62; Htw=.00; Qfree=8.94;
511.96	11.66	Free	Outfall	H=.74; Htw=.00; Qfree=11.66;
512.08	14.61	Free	Outfall	H=.86; Htw=.00; Qfree=14.61;
512.18	17.23	Free	Outfall	H=.96; Htw=.00; Qfree=17.23;

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RATING TABLE FOR ONE OUTLET TYPE

Structure ID = b (Orifice-Circular)

Upstream ID = (Pond Water Surface)

DNstream ID = TW (Pond Outfall)

WS Elev, Device Q		Tail Water		Notes
WS Elev. ft	Q cfs	TW Elev ft	Converge +/-ft	Computation Messages
506.80	.00	Free Outfall		HW & TW below invert
506.92	.00	Free Outfall		HW & TW below invert
507.04	.00	Free Outfall		HW & TW below invert
507.16	.00	Free Outfall		HW & TW below invert
507.28	.00	Free Outfall		HW & TW below invert
507.40	.00	Free Outfall		HW & TW below invert
507.52	.00	Free Outfall		HW & TW below invert
507.64	.00	Free Outfall		HW & TW below invert
507.76	.00	Free Outfall		HW & TW below invert
507.88	.00	Free Outfall		HW & TW below invert
508.00	.00	Free Outfall		HW & TW below invert
508.12	.00	Free Outfall		HW & TW below invert
508.24	.00	Free Outfall		HW & TW below invert
508.36	.00	Free Outfall		HW & TW below invert
508.48	.00	Free Outfall		HW & TW below invert
508.60	.00	Free Outfall		HW & TW below invert
508.72	.00	Free Outfall		HW & TW below invert
508.84	.00	Free Outfall		HW & TW below invert
508.96	.00	Free Outfall		HW & TW below invert
509.08	.00	Free Outfall		HW & TW below invert
509.20	.00	Free Outfall		HW & TW below invert
509.32	.00	Free Outfall		HW & TW below invert
509.44	.00	Free Outfall		HW & TW below invert
509.56	.00	Free Outfall		HW & TW below invert
509.68	.00	Free Outfall		HW & TW below invert
509.80	.00	Free Outfall		HW & TW below invert
509.92	.00	Free Outfall		HW & TW below invert
510.04	.00	Free Outfall		HW & TW below invert
510.16	.00	Free Outfall		HW & TW below invert
510.25	.00	Free Outfall		Upstream HW & DNstream TW < Inv.El
510.28	.00	Free Outfall		CRIT. DEPTH CNTRL Vh= .004ft Dcr= .026ft CRIT.DEPTH
510.40	.07	Free Outfall		CRIT. DEPTH CNTRL Vh= .039ft Dcr= .111ft CRIT.DEPTH
510.52	.21	Free Outfall		CRIT. DEPTH CNTRL Vh= .071ft Dcr= .200ft CRIT.DEPTH
510.64	.43	Free Outfall		CRIT. DEPTH CNTRL Vh= .105ft Dcr= .286ft CRIT.DEPTH

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RATING TABLE FOR ONE OUTLET TYPE

Structure ID = b (Orifice-Circular)

Upstream ID = (Pond Water Surface)

DNstream ID = TW (Pond Outfall)

WS Elev, Device Q		Tail Water		Notes			
WS Elev.	Q	TW Elev	Converge	Computation Messages			
ft	cfs	ft	+/-ft				
510.76	.70	Free Outfall		CRIT. DEPTH CNTRL	Vh= .140ft	Dcr= .369ft	CRIT.DEPTH
510.88	1.02	Free Outfall		CRIT. DEPTH CNTRL	Vh= .181ft	Dcr= .450ft	CRIT.DEPTH
511.00	1.38	Free Outfall		CRIT. DEPTH CNTRL	Vh= .224ft	Dcr= .525ft	CRIT.DEPTH
511.12	1.77	Free Outfall		H =.45			
511.22	1.95	Free Outfall		H =.55			
511.24	1.99	Free Outfall		H =.57			
511.36	2.18	Free Outfall		H =.69			
511.48	2.37	Free Outfall		H =.81			
511.60	2.53	Free Outfall		H =.93			
511.72	2.69	Free Outfall		H =1.05			
511.84	2.84	Free Outfall		H =1.17			
511.96	2.98	Free Outfall		H =1.29			
512.08	3.12	Free Outfall		H =1.41			
512.18	3.23	Free Outfall		H =1.51			

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RATING TABLE FOR ONE OUTLET TYPE

Structure ID = a (Orifice-Circular)

Upstream ID = (Pond Water Surface)

DNstream ID = TW (Pond Outfall)

WS Elev, Device Q		Tail Water		Notes	
WS Elev. ft	Q cfs	TW Elev ft	Converge +/-ft	Computation Messages	
506.80	.00	Free Outfall		Upstream HW & DNstream TW < Inv.El	
506.92	.04	Free Outfall		CRIT. DEPTH CNTRL	Vh= .029ft Dcr= .091ft CRIT.DEPTH
507.04	.14	Free Outfall		CRIT. DEPTH CNTRL	Vh= .063ft Dcr= .178ft CRIT.DEPTH
507.16	.29	Free Outfall		CRIT. DEPTH CNTRL	Vh= .101ft Dcr= .260ft CRIT.DEPTH
507.28	.49	Free Outfall		CRIT. DEPTH CNTRL	Vh= .141ft Dcr= .339ft CRIT.DEPTH
507.40	.71	Free Outfall		H =.31	
507.52	.84	Free Outfall		H =.43	
507.64	.95	Free Outfall		H =.55	
507.76	1.05	Free Outfall		H =.67	
507.88	1.14	Free Outfall		H =.79	
508.00	1.23	Free Outfall		H =.91	
508.12	1.30	Free Outfall		H =1.03	
508.24	1.38	Free Outfall		H =1.15	
508.36	1.45	Free Outfall		H =1.27	
508.48	1.52	Free Outfall		H =1.39	
508.60	1.58	Free Outfall		H =1.51	
508.72	1.64	Free Outfall		H =1.63	
508.84	1.70	Free Outfall		H =1.75	
508.96	1.76	Free Outfall		H =1.87	
509.08	1.81	Free Outfall		H =1.99	
509.20	1.87	Free Outfall		H =2.11	
509.32	1.92	Free Outfall		H =2.23	
509.44	1.97	Free Outfall		H =2.35	
509.56	2.02	Free Outfall		H =2.47	
509.68	2.07	Free Outfall		H =2.59	
509.80	2.12	Free Outfall		H =2.71	
509.92	2.16	Free Outfall		H =2.83	
510.04	2.21	Free Outfall		H =2.95	
510.16	2.25	Free Outfall		H =3.07	
510.25	2.29	Free Outfall		H =3.16	
510.28	2.30	Free Outfall		H =3.19	
510.40	2.34	Free Outfall		H =3.31	
510.52	2.38	Free Outfall		H =3.43	
510.64	2.42	Free Outfall		H =3.55	

S/N: HOMOLO436313 JRK, JR

Pond Pack Ver: 10-9-97 :055 Compute Time: 10:33:30 Date: 02-27-2007

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RATING TABLE FOR ONE OUTLET TYPE

Structure ID = a (Orifice-Circular)

 Upstream ID = (Pond Water Surface)
 DNstream ID = TW (Pond Outfall)

WS Elev, Device Q		Tail Water		Notes
WS Elev.	Q	TW Elev Converge		Computation Messages
ft	cfs	ft	+/-ft	
510.76	2.46	Free Outfall		H =3.67
510.88	2.50	Free Outfall		H =3.79
511.00	2.54	Free Outfall		H =3.91
511.12	2.58	Free Outfall		H =4.03
511.22	2.61	Free Outfall		H =4.13
511.24	2.62	Free Outfall		H =4.15
511.36	2.66	Free Outfall		H =4.27
511.48	2.69	Free Outfall		H =4.39
511.60	2.73	Free Outfall		H =4.51
511.72	2.77	Free Outfall		H =4.63
511.84	2.80	Free Outfall		H =4.75
511.96	2.84	Free Outfall		H =4.87
512.08	2.87	Free Outfall		H =4.99
512.18	2.90	Free Outfall		H =5.09

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

WS Elev, Total Q		Converge		Notes
Elev. ft	Q cfs	TW Elev ft	Error +/-ft	Contributing Structures
506.80	.00	Free	Outfall	None contributing
506.92	.04	Free	Outfall	a
507.04	.14	Free	Outfall	a
507.16	.29	Free	Outfall	a
507.28	.49	Free	Outfall	a
507.40	.71	Free	Outfall	a
507.52	.84	Free	Outfall	a
507.64	.95	Free	Outfall	a
507.76	1.05	Free	Outfall	a
507.88	1.14	Free	Outfall	a
508.00	1.23	Free	Outfall	a
508.12	1.30	Free	Outfall	a
508.24	1.38	Free	Outfall	a
508.36	1.45	Free	Outfall	a
508.48	1.52	Free	Outfall	a
508.60	1.58	Free	Outfall	a
508.72	1.64	Free	Outfall	a
508.84	1.70	Free	Outfall	a
508.96	1.76	Free	Outfall	a
509.08	1.81	Free	Outfall	a
509.20	1.87	Free	Outfall	a
509.32	1.92	Free	Outfall	a
509.44	1.97	Free	Outfall	a
509.56	2.02	Free	Outfall	a
509.68	2.07	Free	Outfall	a
509.80	2.12	Free	Outfall	a
509.92	2.16	Free	Outfall	a
510.04	2.21	Free	Outfall	a
510.16	2.25	Free	Outfall	a
510.25	2.29	Free	Outfall	a
510.28	2.30	Free	Outfall	b +a
510.40	2.41	Free	Outfall	b +a
510.52	2.60	Free	Outfall	b +a
510.64	2.85	Free	Outfall	b +a
510.76	3.16	Free	Outfall	b +a
510.88	3.53	Free	Outfall	b +a
511.00	3.92	Free	Outfall	b +a
511.12	4.35	Free	Outfall	b +a
511.22	4.56	Free	Outfall	c +b +a
511.24	4.66	Free	Outfall	c +b +a

S/N: HOMOL0436313 JRK, JR

Pond Pack Ver: 10-9-97 :055 Compute Time: 10:33:30 Date: 02-27-2007

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

WS Elev, Total Q		Converge		Notes
Elev.	Q	TW Elev	Error	Contributing Structures
ft	cfs	ft	+/-ft	
511.36	5.80	Free Outfall		c +b +a
511.48	7.49	Free Outfall		c +b +a
511.60	9.55	Free Outfall		c +b +a
511.72	11.93	Free Outfall		d +c +b +a
511.84	14.79	Free Outfall		d +c +b +a
511.96	18.07	Free Outfall		d +c +b +a
512.08	21.68	Free Outfall		d +c +b +a
512.18	24.91	Free Outfall		d +c +b +a

S/N: HOM0L0436313 JRK, JR

Pond Pack Ver: 10-9-97 :055 Compute Time: 10:33:30 Date: 02-27-2007

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 Title... Lot 3 Underground 60" Pipes

COMPUTED VOLUMES FOR A PIPE

US Invert Elev.= 507.18 ft
 DS Invert Elev.= 506.80 ft
 Barrel Length = 85.00 ft
 Computed Slope = .004471 ft/ft
 Diameter = 5.0000 ft
 # of Barrels = 4.00

 Slice Width = 1.00 ft
 Vertical Incr. = .10 ft

Elevation (ft)	Perpendicular DS Depth (ft)	Perpendicular DS Area (sq.ft)	Wetted Length (ft)	Filled Length (ft)	Perpendicular US Depth (ft)	Perpendicular US Area (sq.ft)	Total Volume (cu.ft)
506.80	.00	.0000	.00	.00	.00	.0000	0
506.90	.10	.0876	22.37	.00	.00	.0000	3
507.00	.20	.2548	44.74	.00	.00	.0000	18
507.10	.30	.4704	67.10	.00	.00	.0000	50
507.20	.40	.7238	85.00	.00	.02	.0084	103
507.30	.50	1.0086	85.00	.00	.12	.1230	175
507.40	.60	1.3202	85.00	.00	.22	.3036	260
507.50	.70	1.6555	85.00	.00	.32	.5292	356
507.60	.80	2.0115	85.00	.00	.42	.7907	462
507.70	.90	2.3863	85.00	.00	.52	1.0824	575
507.80	1.00	2.7778	85.00	.00	.62	1.4001	695
507.90	1.10	3.1845	85.00	.00	.72	1.7407	821
508.00	1.20	3.6047	85.00	.00	.82	2.1016	953
508.10	1.30	4.0371	85.00	.00	.92	2.4805	1090
508.20	1.40	4.4805	85.00	.00	1.02	2.8759	1231
508.30	1.50	4.9339	85.00	.00	1.12	3.2860	1377
508.40	1.60	5.3960	85.00	.00	1.22	3.7093	1526
508.50	1.70	5.8659	85.00	.00	1.32	4.1446	1678
508.60	1.80	6.3424	85.00	.00	1.42	4.5905	1834
508.70	1.90	6.8250	85.00	.00	1.52	5.0461	1992
508.80	2.00	7.3125	85.00	.00	1.62	5.5102	2152
508.90	2.10	7.8042	85.00	.00	1.72	5.9818	2314
509.00	2.20	8.2991	85.00	.00	1.82	6.4600	2478
509.10	2.30	8.7964	85.00	.00	1.92	6.9437	2643
509.20	2.40	9.2954	85.00	.00	2.02	7.4324	2809
509.30	2.50	9.7953	85.00	.00	2.12	7.9249	2976
509.40	2.60	10.2952	85.00	.00	2.22	8.4205	3144
509.50	2.70	10.7944	85.00	.00	2.32	8.9184	3312
509.60	2.80	11.2918	85.00	.00	2.42	9.4176	3480
509.70	2.90	11.7870	85.00	.00	2.52	9.9175	3647
509.80	3.00	12.2790	85.00	.00	2.62	10.4174	3814
509.90	3.10	12.7670	85.00	.00	2.72	10.9162	3980
510.00	3.20	13.2500	85.00	.00	2.82	11.4133	4145
510.10	3.30	13.7271	85.00	.00	2.92	11.9076	4309
510.20	3.40	14.1976	85.00	.00	3.02	12.3987	4471

Type.... Vol: Pipe
Name.... VOL.PIPE 60

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Title... Lot 3 Underground 60" Pipes

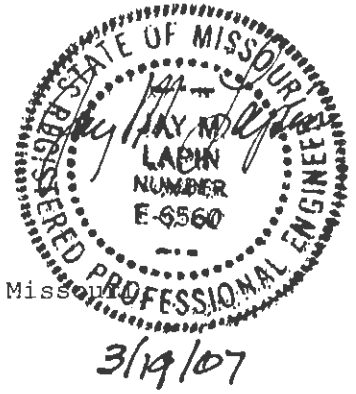
Elevation (ft)	Perpendicular DS Depth (ft)	Perpendicular DS Area (sq.ft)	Wetted Length (ft)	Filled Length (ft)	Perpendicular US Depth (ft)	Perpendicular US Area (sq.ft)	Total Volume (cu.ft)
510.30	3.50	14.6605	85.00	.00	3.12	12.8855	4630
510.40	3.60	15.1146	85.00	.00	3.22	13.3672	4788
510.50	3.70	15.5590	85.00	.00	3.32	13.8429	4943
510.60	3.80	15.9924	85.00	.00	3.42	14.3115	5095
510.70	3.90	16.4138	85.00	.00	3.52	14.7723	5244
510.80	4.00	16.8217	85.00	.00	3.62	15.2242	5389
510.90	4.10	17.2146	85.00	.00	3.72	15.6660	5529
511.00	4.20	17.5910	85.00	.00	3.82	16.0967	5666
511.10	4.30	17.9488	85.00	.00	3.92	16.5148	5797
511.20	4.40	18.2859	85.00	.00	4.02	16.9192	5922
511.30	4.50	18.5998	85.00	.00	4.12	17.3082	6041
511.40	4.60	18.8871	85.00	.00	4.22	17.6803	6153
511.50	4.70	19.1435	85.00	.00	4.32	18.0333	6256
511.60	4.80	19.3628	85.00	.00	4.42	18.3649	6351
511.70	4.90	19.5350	85.00	.00	4.52	18.6726	6434
511.80	5.00	19.6350	85.00	.01	4.62	18.9528	6505
511.90	5.00	19.6350	85.00	22.38	4.72	19.2008	6583
512.00	5.00	19.6350	85.00	44.75	4.82	19.4098	6641
512.18	5.00	19.6350	85.00	85.00	5.00	19.6350	6676

S/N: HOM0L0436313 JRK, JR

nd Pack Ver: 10-9-97 :055 Compute Time: 10:33:30 Date: 02-27-2007

PIDGEON PARK WEST PLAT 3
LOT 3 (A AND B)
OVERFLOW WEIR CALCULATIONS

Highway K & Mexico Loop Road East, City of O'Fallon, Missouri



Kuhlmann Design Group
Project No. 980324-0011
Calculation date 1/10/07

Calculated by: Dennis Niehaus

Checked by: Jay Lapin

OVERFLOW WEIR DATA

Weir Width = 5.5' @ elevation 511.22 and 7.0' @ elevation 511.72 (overflow data in report shown in bold and italics)

Table of Contents

LOT3 DETCNTRL R1	OutletInput Data	1
LOT3 DETCNTRL R1	Individual Outlet Curves	4
LOT3 DETCNTRL R1	Composite Rating Curve	12

Type.... OutletInput Data
Name.... LOT3 DETCNTRL R1

File.... J:\1998\980324~1\0011\HYDR\PONDPA~1\9811L3R.PPK

REQUESTED POND WS ELEVATIONS:

Min. Elev.= 506.80 ft
Increment = .12 ft
Max. Elev.= 512.18 ft

Spot Elevations, ft
511.22

OUTLET CONNECTIVITY

---> Forward Flow Only (UpStream to DnStream)
<--- Reverse Flow Only (DnStream to UpStream)
<---> Forward and Reverse Both Allowed

Structure	No.		Outfall	E1, ft	E2, ft
<i>Weir-Rectangular</i>	<i>d</i>	--->	<i>TW</i>	<i>511.720</i>	<i>512.180</i>
<i>Weir-Rectangular</i>	<i>c</i>	--->	<i>TW</i>	<i>511.220</i>	<i>512.180</i>
Orifice-Circular	b	--->	TW	510.250	511.220
Orifice-Circular	a	--->	TW	506.800	511.220
TWSETUP,DS Channel					

Type.... OutletInput Data
Name.... LOT3 DETCNTRL R1

File.... J:\1998\980324~1\0011\HYDR\PONDPA~1\9811L3R.PPK

OUTLET STRUCTURE INPUT DATA

Structure ID = d
Structure Type = Weir-Rectangular

of Openings = 1
Crest Elev. = 511.72 ft
Weir Length = 1.50 ft
Weir Coeff. = 3.330000

Weir TW effects (Use adjustment equation)

Structure ID = c
Structure Type = Weir-Rectangular

of Openings = 1
Crest Elev. = 511.22 ft
Weir Length = 5.50 ft
Weir Coeff. = 3.330000

Weir TW effects (Use adjustment equation)

Structure ID = b
Structure Type = Orifice-Circular

of Openings = 1
Invert Elev. = 510.25 ft
Diameter = .8330 ft
Orifice Coeff. = .600

Structure ID = a
Structure Type = Orifice-Circular

of Openings = 1
Invert Elev. = 506.80 ft
Diameter = .5833 ft
Orifice Coeff. = .600

Type.... OutletInput Data
Name.... LOT3 DETCNTRL R1

Page 3

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OUTLET STRUCTURE INPUT DATA

Structure ID = TW
Structure Type = TWSETUP,DS Channel

FREE OUTFALL CONDITIONS SPECIFIED

CONVERGENCE TOLERANCES...

Maximum Iterations= 30
Min. TW tolerance = .01 ft
Max. TW tolerance = .01 ft
Min. HW tolerance = .01 ft
Max. HW tolerance = .01 ft
Min. Q tolerance = .10 cfs
Max. Q tolerance = .10 cfs

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RATING TABLE FOR ONE OUTLET TYPE

Structure ID = d (Weir-Rectangular)

 Upstream ID = (Pond Water Surface)
 DNstream ID = TW (Pond Outfall)

WS Elev, Device Q		Tail Water		Notes
WS Elev.	Q	TW Elev Converge		Computation Messages
ft	cfs	ft	+/-ft	
506.80	.00	Free Outfall		HW & TW below Inv.El.=511.720
506.92	.00	Free Outfall		HW & TW below Inv.El.=511.720
507.04	.00	Free Outfall		HW & TW below Inv.El.=511.720
507.16	.00	Free Outfall		HW & TW below Inv.El.=511.720
507.28	.00	Free Outfall		HW & TW below Inv.El.=511.720
507.40	.00	Free Outfall		HW & TW below Inv.El.=511.720
507.52	.00	Free Outfall		HW & TW below Inv.El.=511.720
507.64	.00	Free Outfall		HW & TW below Inv.El.=511.720
507.76	.00	Free Outfall		HW & TW below Inv.El.=511.720
507.88	.00	Free Outfall		HW & TW below Inv.El.=511.720
508.00	.00	Free Outfall		HW & TW below Inv.El.=511.720
508.12	.00	Free Outfall		HW & TW below Inv.El.=511.720
508.24	.00	Free Outfall		HW & TW below Inv.El.=511.720
508.36	.00	Free Outfall		HW & TW below Inv.El.=511.720
508.48	.00	Free Outfall		HW & TW below Inv.El.=511.720
508.60	.00	Free Outfall		HW & TW below Inv.El.=511.720
508.72	.00	Free Outfall		HW & TW below Inv.El.=511.720
508.84	.00	Free Outfall		HW & TW below Inv.El.=511.720
508.96	.00	Free Outfall		HW & TW below Inv.El.=511.720
509.08	.00	Free Outfall		HW & TW below Inv.El.=511.720
509.20	.00	Free Outfall		HW & TW below Inv.El.=511.720
509.32	.00	Free Outfall		HW & TW below Inv.El.=511.720
509.44	.00	Free Outfall		HW & TW below Inv.El.=511.720
509.56	.00	Free Outfall		HW & TW below Inv.El.=511.720
509.68	.00	Free Outfall		HW & TW below Inv.El.=511.720
509.80	.00	Free Outfall		HW & TW below Inv.El.=511.720
509.92	.00	Free Outfall		HW & TW below Inv.El.=511.720
510.04	.00	Free Outfall		HW & TW below Inv.El.=511.720
510.16	.00	Free Outfall		HW & TW below Inv.El.=511.720
510.25	.00	Free Outfall		HW & TW below Inv.El.=511.720
510.28	.00	Free Outfall		HW & TW below Inv.El.=511.720
510.40	.00	Free Outfall		HW & TW below Inv.El.=511.720
510.52	.00	Free Outfall		HW & TW below Inv.El.=511.720
510.64	.00	Free Outfall		HW & TW below Inv.El.=511.720

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RATING TABLE FOR ONE OUTLET TYPE

Structure ID = d (Weir-Rectangular)

 Upstream ID = (Pond Water Surface)
 DNstream ID = TW (Pond Outfall)

WS Elev, Device Q		Tail Water		Notes
WS Elev.	Q	TW Elev	Converge	Computation Messages
ft	cfs	ft	+/-ft	
510.76	.00	Free Outfall		HW & TW below Inv.El.=511.720
510.88	.00	Free Outfall		HW & TW below Inv.El.=511.720
511.00	.00	Free Outfall		HW & TW below Inv.El.=511.720
511.12	.00	Free Outfall		HW & TW below Inv.El.=511.720
511.22	.00	Free Outfall		HW & TW below Inv.El.=511.720
511.24	.00	Free Outfall		HW & TW below Inv.El.=511.720
511.36	.00	Free Outfall		HW & TW below Inv.El.=511.720
511.48	.00	Free Outfall		HW & TW below Inv.El.=511.720
511.60	.00	Free Outfall		HW & TW below Inv.El.=511.720
511.72	.00	Free Outfall		H=.00; Htw=.00; Qfree=.00;
511.84	.21	Free Outfall		H=.12; Htw=.00; Qfree=.21;
511.96	.59	Free Outfall		H=.24; Htw=.00; Qfree=.59;
512.08	1.08	Free Outfall		H=.36; Htw=.00; Qfree=1.08;
512.18	1.56	Free Outfall		H=.46; Htw=.00; Qfree=1.56;

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RATING TABLE FOR ONE OUTLET TYPE

Structure ID = c (Weir-Rectangular)

 Upstream ID = (Pond Water Surface)
 DNstream ID = TW (Pond Outfall)

WS Elev,Device Q		Tail Water		Notes
WS Elev.	Q	TW Elev	Converge	Computation Messages
ft	cfs	ft	+/-ft	
506.80	.00	Free Outfall		HW & TW below Inv.El.=511.220
506.92	.00	Free Outfall		HW & TW below Inv.El.=511.220
507.04	.00	Free Outfall		HW & TW below Inv.El.=511.220
507.16	.00	Free Outfall		HW & TW below Inv.El.=511.220
507.28	.00	Free Outfall		HW & TW below Inv.El.=511.220
507.40	.00	Free Outfall		HW & TW below Inv.El.=511.220
507.52	.00	Free Outfall		HW & TW below Inv.El.=511.220
507.64	.00	Free Outfall		HW & TW below Inv.El.=511.220
507.76	.00	Free Outfall		HW & TW below Inv.El.=511.220
507.88	.00	Free Outfall		HW & TW below Inv.El.=511.220
508.00	.00	Free Outfall		HW & TW below Inv.El.=511.220
508.12	.00	Free Outfall		HW & TW below Inv.El.=511.220
508.24	.00	Free Outfall		HW & TW below Inv.El.=511.220
508.36	.00	Free Outfall		HW & TW below Inv.El.=511.220
508.48	.00	Free Outfall		HW & TW below Inv.El.=511.220
508.60	.00	Free Outfall		HW & TW below Inv.El.=511.220
508.72	.00	Free Outfall		HW & TW below Inv.El.=511.220
508.84	.00	Free Outfall		HW & TW below Inv.El.=511.220
508.96	.00	Free Outfall		HW & TW below Inv.El.=511.220
509.08	.00	Free Outfall		HW & TW below Inv.El.=511.220
509.20	.00	Free Outfall		HW & TW below Inv.El.=511.220
509.32	.00	Free Outfall		HW & TW below Inv.El.=511.220
509.44	.00	Free Outfall		HW & TW below Inv.El.=511.220
509.56	.00	Free Outfall		HW & TW below Inv.El.=511.220
509.68	.00	Free Outfall		HW & TW below Inv.El.=511.220
509.80	.00	Free Outfall		HW & TW below Inv.El.=511.220
509.92	.00	Free Outfall		HW & TW below Inv.El.=511.220
510.04	.00	Free Outfall		HW & TW below Inv.El.=511.220
510.16	.00	Free Outfall		HW & TW below Inv.El.=511.220
510.25	.00	Free Outfall		HW & TW below Inv.El.=511.220
510.28	.00	Free Outfall		HW & TW below Inv.El.=511.220
510.40	.00	Free Outfall		HW & TW below Inv.El.=511.220
510.52	.00	Free Outfall		HW & TW below Inv.El.=511.220
510.64	.00	Free Outfall		HW & TW below Inv.El.=511.220

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RATING TABLE FOR ONE OUTLET TYPE

Structure ID = c (Weir-Rectangular)

 Upstream ID = (Pond Water Surface)
 DNstream ID = TW (Pond Outfall)

WS Elev, Device Q		Tail Water		Notes
WS Elev.	Q	TW Elev Converge		Computation Messages
ft	cfs	ft	+/-ft	
510.76	.00	Free Outfall		HW & TW below Inv.El.=511.220
510.88	.00	Free Outfall		HW & TW below Inv.El.=511.220
511.00	.00	Free Outfall		HW & TW below Inv.El.=511.220
511.12	.00	Free Outfall		HW & TW below Inv.El.=511.220
511.22	.00	Free Outfall		H=.00; Htw=.00; Qfree=.00;
511.24	.05	Free Outfall		H=.02; Htw=.00; Qfree=.05;
511.36	.96	Free Outfall		H=.14; Htw=.00; Qfree=.96;
511.48	2.43	Free Outfall		H=.26; Htw=.00; Qfree=2.43;
511.60	4.29	Free Outfall		H=.38; Htw=.00; Qfree=4.29;
511.72	6.48	Free Outfall		H=.50; Htw=.00; Qfree=6.48;
511.84	8.94	Free Outfall		H=.62; Htw=.00; Qfree=8.94;
511.96	11.66	Free Outfall		H=.74; Htw=.00; Qfree=11.66;
512.08	14.61	Free Outfall		H=.86; Htw=.00; Qfree=14.61;
512.18	17.23	Free Outfall		H=.96; Htw=.00; Qfree=17.23;

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RATING TABLE FOR ONE OUTLET TYPE

Structure ID = b (Orifice-Circular)

 Upstream ID = (Pond Water Surface)
 DNstream ID = TW (Pond Outfall)

WS Elev, Device Q		Tail Water		Notes
WS Elev.	Q	TW Elev	Converge	Computation Messages
ft	cfs	ft	+/-ft	
506.80	.00	Free Outfall		HW & TW below invert
506.92	.00	Free Outfall		HW & TW below invert
507.04	.00	Free Outfall		HW & TW below invert
507.16	.00	Free Outfall		HW & TW below invert
507.28	.00	Free Outfall		HW & TW below invert
507.40	.00	Free Outfall		HW & TW below invert
507.52	.00	Free Outfall		HW & TW below invert
507.64	.00	Free Outfall		HW & TW below invert
507.76	.00	Free Outfall		HW & TW below invert
507.88	.00	Free Outfall		HW & TW below invert
508.00	.00	Free Outfall		HW & TW below invert
508.12	.00	Free Outfall		HW & TW below invert
508.24	.00	Free Outfall		HW & TW below invert
508.36	.00	Free Outfall		HW & TW below invert
508.48	.00	Free Outfall		HW & TW below invert
508.60	.00	Free Outfall		HW & TW below invert
508.72	.00	Free Outfall		HW & TW below invert
508.84	.00	Free Outfall		HW & TW below invert
508.96	.00	Free Outfall		HW & TW below invert
509.08	.00	Free Outfall		HW & TW below invert
509.20	.00	Free Outfall		HW & TW below invert
509.32	.00	Free Outfall		HW & TW below invert
509.44	.00	Free Outfall		HW & TW below invert
509.56	.00	Free Outfall		HW & TW below invert
509.68	.00	Free Outfall		HW & TW below invert
509.80	.00	Free Outfall		HW & TW below invert
509.92	.00	Free Outfall		HW & TW below invert
510.04	.00	Free Outfall		HW & TW below invert
510.16	.00	Free Outfall		HW & TW below invert
510.25	.00	Free Outfall		Upstream HW & DNstream TW < Inv.El
510.28	.00	Free Outfall		CRIT.DEPTH CONTROL Vh= .004ft Dcr= .026ft CRIT.DEPTH
510.40	.07	Free Outfall		CRIT.DEPTH CONTROL Vh= .039ft Dcr= .111ft CRIT.DEPTH
510.52	.21	Free Outfall		CRIT.DEPTH CONTROL Vh= .071ft Dcr= .200ft CRIT.DEPTH
510.64	.43	Free Outfall		CRIT.DEPTH CONTROL Vh= .105ft Dcr= .286ft CRIT.DEPTH

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RATING TABLE FOR ONE OUTLET TYPE

Structure ID = b (Orifice-Circular)

 Upstream ID = (Pond Water Surface)
 DNstream ID = TW (Pond Outfall)

WS Elev, Device Q		Tail Water		Notes
WS Elev.	Q	TW Elev	Converge	Computation Messages
ft	cfs	ft	+/-ft	
510.76	.70	Free Outfall		CRIT.DEPTH CONTROL Vh= .140ft Dcr= .369ft CRIT.DEPTH
510.88	1.02	Free Outfall		CRIT.DEPTH CONTROL Vh= .181ft Dcr= .450ft CRIT.DEPTH
511.00	1.38	Free Outfall		CRIT.DEPTH CONTROL Vh= .224ft Dcr= .525ft CRIT.DEPTH
511.12	1.77	Free Outfall		H =.45
511.22	.00	Free Outfall		E = or > E2= 511.220
511.24	.00	Free Outfall		E = or > E2= 511.220
511.36	.00	Free Outfall		E = or > E2= 511.220
511.48	.00	Free Outfall		E = or > E2= 511.220
511.60	.00	Free Outfall		E = or > E2= 511.220
511.72	.00	Free Outfall		E = or > E2= 511.220
511.84	.00	Free Outfall		E = or > E2= 511.220
511.96	.00	Free Outfall		E = or > E2= 511.220
512.08	.00	Free Outfall		E = or > E2= 511.220
512.18	.00	Free Outfall		E = or > E2= 511.220

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = a (Orifice-Circular)

 Upstream ID = (Pond Water Surface)
 DNstream ID = TW (Pond Outfall)

WS Elev, Device Q		Tail Water		Notes
WS Elev.	Q	TW Elev	Converge	Computation Messages
ft	cfs	ft	+/-ft	
506.80	.00	Free Outfall		Upstream HW & DNstream TW < Inv.El
506.92	.04	Free Outfall		CRIT.DEPTH CONTROL Vh= .029ft Dcr= .091ft CRIT.DEPTH
507.04	.14	Free Outfall		CRIT.DEPTH CONTROL Vh= .063ft Dcr= .178ft CRIT.DEPTH
507.16	.29	Free Outfall		CRIT.DEPTH CONTROL Vh= .101ft Dcr= .260ft CRIT.DEPTH
507.28	.49	Free Outfall		CRIT.DEPTH CONTROL Vh= .141ft Dcr= .339ft CRIT.DEPTH
507.40	.71	Free Outfall		H =.31
507.52	.84	Free Outfall		H =.43
507.64	.95	Free Outfall		H =.55
507.76	1.05	Free Outfall		H =.67
507.88	1.14	Free Outfall		H =.79
508.00	1.23	Free Outfall		H =.91
508.12	1.30	Free Outfall		H =1.03
508.24	1.38	Free Outfall		H =1.15
508.36	1.45	Free Outfall		H =1.27
508.48	1.52	Free Outfall		H =1.39
508.60	1.58	Free Outfall		H =1.51
508.72	1.64	Free Outfall		H =1.63
508.84	1.70	Free Outfall		H =1.75
508.96	1.76	Free Outfall		H =1.87
509.08	1.81	Free Outfall		H =1.99
509.20	1.87	Free Outfall		H =2.11
509.32	1.92	Free Outfall		H =2.23
509.44	1.97	Free Outfall		H =2.35
509.56	2.02	Free Outfall		H =2.47
509.68	2.07	Free Outfall		H =2.59
509.80	2.12	Free Outfall		H =2.71
509.92	2.16	Free Outfall		H =2.83
510.04	2.21	Free Outfall		H =2.95
510.16	2.25	Free Outfall		H =3.07
510.25	2.29	Free Outfall		H =3.16
510.28	2.30	Free Outfall		H =3.19
510.40	2.34	Free Outfall		H =3.31
510.52	2.38	Free Outfall		H =3.43
510.64	2.42	Free Outfall		H =3.55

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = a (Orifice-Circular)

 Upstream ID = (Pond Water Surface)
 DNstream ID = TW (Pond Outfall)

WS Elev, Device Q		Tail Water		Notes
WS Elev.	Q	TW Elev	Converge	Computation Messages
ft	cfs	ft	+/-ft	
510.76	2.46	Free Outfall	H =3.67	
510.88	2.50	Free Outfall	H =3.79	
511.00	2.54	Free Outfall	H =3.91	
511.12	2.58	Free Outfall	H =4.03	
511.22	.00	Free Outfall	E = or > E2=	511.220
511.24	.00	Free Outfall	E = or > E2=	511.220
511.36	.00	Free Outfall	E = or > E2=	511.220
511.48	.00	Free Outfall	E = or > E2=	511.220
511.60	.00	Free Outfall	E = or > E2=	511.220
511.72	.00	Free Outfall	E = or > E2=	511.220
511.84	.00	Free Outfall	E = or > E2=	511.220
511.96	.00	Free Outfall	E = or > E2=	511.220
512.08	.00	Free Outfall	E = or > E2=	511.220
512.18	.00	Free Outfall	E = or > E2=	511.220

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

WS Elev, Total Q		Converge		Notes
Elev. ft	Q cfs	TW Elev ft	Error +/-ft	Contributing Structures
506.80	.00	Free Outfall		None contributing
506.92	.04	Free Outfall		a
507.04	.14	Free Outfall		a
507.16	.29	Free Outfall		a
507.28	.49	Free Outfall		a
507.40	.71	Free Outfall		a
507.52	.84	Free Outfall		a
507.64	.95	Free Outfall		a
507.76	1.05	Free Outfall		a
507.88	1.14	Free Outfall		a
508.00	1.23	Free Outfall		a
508.12	1.30	Free Outfall		a
508.24	1.38	Free Outfall		a
508.36	1.45	Free Outfall		a
508.48	1.52	Free Outfall		a
508.60	1.58	Free Outfall		a
508.72	1.64	Free Outfall		a
508.84	1.70	Free Outfall		a
508.96	1.76	Free Outfall		a
509.08	1.81	Free Outfall		a
509.20	1.87	Free Outfall		a
509.32	1.92	Free Outfall		a
509.44	1.97	Free Outfall		a
509.56	2.02	Free Outfall		a
509.68	2.07	Free Outfall		a
509.80	2.12	Free Outfall		a
509.92	2.16	Free Outfall		a
510.04	2.21	Free Outfall		a
510.16	2.25	Free Outfall		a
510.25	2.29	Free Outfall		a
510.28	2.30	Free Outfall		b +a
510.40	2.41	Free Outfall		b +a
510.52	2.60	Free Outfall		b +a
510.64	2.85	Free Outfall		b +a
510.76	3.16	Free Outfall		b +a
510.88	3.53	Free Outfall		b +a
511.00	3.92	Free Outfall		b +a
511.12	4.35	Free Outfall		b +a
511.22	.00	Free Outfall		c
511.24	.05	Free Outfall		c

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

WS Elev, Total Q		Converge		Notes
Elev.	Q	TW Elev	Error	Contributing Structures
ft	cfs	ft	+/-ft	
511.36	.96	Free Outfall	c	
511.48	2.43	Free Outfall	c	
511.60	4.29	Free Outfall	c	
511.72	6.48	Free Outfall	d +c	
511.84	9.15	Free Outfall	d +c	
511.96	12.25	Free Outfall	d +c	
512.08	15.69	Free Outfall	d +c	
512.18	18.79	Free Outfall	d +c	

Retention Outlet Structure

Project Name: Lots 3A & 3B, Pigeon Park West 3

Project Number: 980324-0011

Computed By: JML

Date: 1/2/07

Checked By:

Date:

Sheet No.: ①

Of ②

kdg $f'_c = 4000 \text{ psi}$
 $f_y = 60,000 \text{ psi}$

Top Slab - Loads		Actual	Ultimate
DL - 9" slab		113 psf $\times 1.5 =$	170 psf
LL - Truck		250 $\times 1.8 =$	450
Soil		120 $\times 1.8 =$	216
		<u>483</u>	<u>836 psf</u>

Conservative design - Simple span 7'-8" - Use same reinf. each way.

$$\text{loading: } M_u = \frac{1}{8} (0.836 \text{ ksf}) (7.67 \text{ ft})^2 = 6.15 \text{ k'}$$

$$\text{Min reinf: } \frac{3 \sqrt{4000}}{f_y} (b_w d)^{1.29-2.31} = 0.25 \text{ \#'/ft.}$$

Use 9" deep slab, #5 @ 12" (0.31 \#'/ft.)

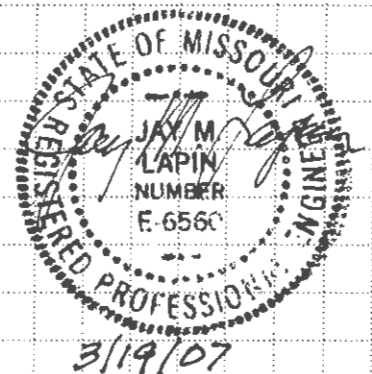
$$T = 0.31 (60) = 18.6 \text{ k'/ft.}$$

$$C = T = 18.6 \text{ k'/ft.} = 0.85 (4 \text{ ksi}) (12") a"$$

$$a = 0.456"$$

$$\text{capacity } M_u = \left(6.69" - \frac{0.456"}{2}\right) \frac{1}{12} \times 18.6 = 10.0 \text{ k'/ft.}$$

Section OK



Detention Outlet Structure

KdG

Project Name: Lots 3A & 3B, Pidgeon Park West :

Project Number: 980324-0011

Computed By: JML

Date: 1/4/07

Checked By:

Date:

Sheet No.: ②

Of ⑦

Wall Design: Design 1) structure full of water with no soil resistance on exterior 2) structure empty with backfill saturated.

Wall "A" - Design wall for loading 1' above bottom.

$$1) (514.33 - 508) 62.4 = 395 \text{ psf Actual}$$

$$395 \times 1.5 = 593 \text{ psf Ultimate}$$

$$\text{Outside face - Span 7'-8"} \quad M_u = \frac{1}{8} (0.593) 7.67^2 \\ = 4.36 \text{ k'/1}$$

$$2) (514.33 - 508) 100 = 633 \text{ psf Actual}$$

$$633 \times 1.5 = 950 \text{ psf Ultimate}$$

$$\text{Inside face - Span 7'-8"} \quad M_u = \frac{1}{8} (0.950) 7.67^2 \\ = 6.99 \text{ k'/1}$$

$$\text{Use 9" wall } d = 9 - 2.31 = 6.69"$$

$$\text{Min. reinf. } \frac{3\sqrt{4000}}{60,000} (12 \times 6.69) = 0.25 \text{ \#'/1}$$

$$\text{Use \#5 @ 12" horiz bars, } 0.31 \text{ \#'/1}$$

$$T = 0.31 (60) = 18.6 \text{ k'/1}$$

$$C = T = 18.6 \text{ k'/1} = 0.35 (4) 12 (a)$$

$$a = 0.456$$

$$M_u \text{ capacity} = \left(6.69 - \frac{0.456}{2} \right) \frac{1}{12} \times 18.6 \\ = 10.0 \text{ k'/1}$$

This loading is most severe for all the walls. Use 9" walls, #5 @ 12" horiz for all walls.

Section OK

Detention Outlet Structure

kdG

Project Name: Lots 3A & 3B, Pidgeon Park West 3

Project Number: 980324-0011

Computed By: JML

Date: 1/4/07

Checked By:

Date:

Sheet No.: (3)

Of (7)

Bott Slab - Loading empty:

$$\begin{array}{rcl}
 \text{Top Slab} & & = 483 \\
 \text{Walls A, B} & \frac{8.0(113)23.5}{70.1} & = 303 \\
 \text{C} & \frac{7.0(113)5}{70.1} & = 56 \\
 \text{D} & \frac{8.0(113)7 - \pi(2.5)^2}{70.1} & = 90 \\
 & & \hline
 & & 932 \#/\text{ft}
 \end{array}$$

$$\begin{array}{rcl}
 \text{Bott. Slab } 10'' & & 125 \\
 & & \hline
 & & 1057 \#/\text{ft}
 \end{array}$$

Loading full of water:

$$\begin{array}{rcl}
 \frac{[7(6)7.33 + 0.75(2.73)]62.4}{70.1} & = & 276 \#/\text{ft} \\
 & & \hline
 & & 1333 \#/\text{ft}
 \end{array}$$

Max. Brg. Pressure 1.33 ksf O.K.

$$\text{Max } M_u \text{ (top steel)} \quad \frac{1}{8}(1.057)1.5(3)^2 = 1.78 \text{ k'}$$

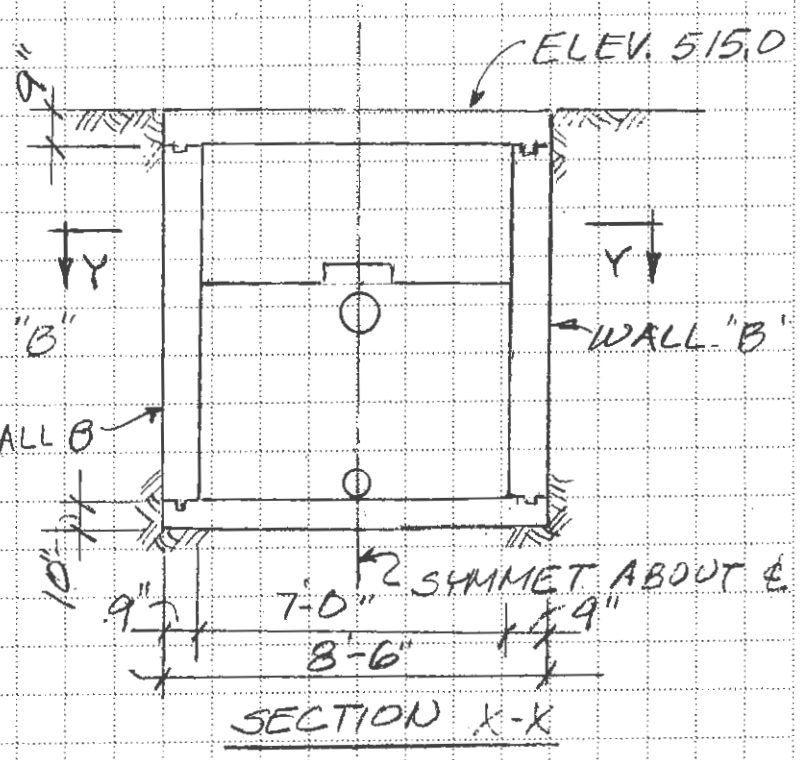
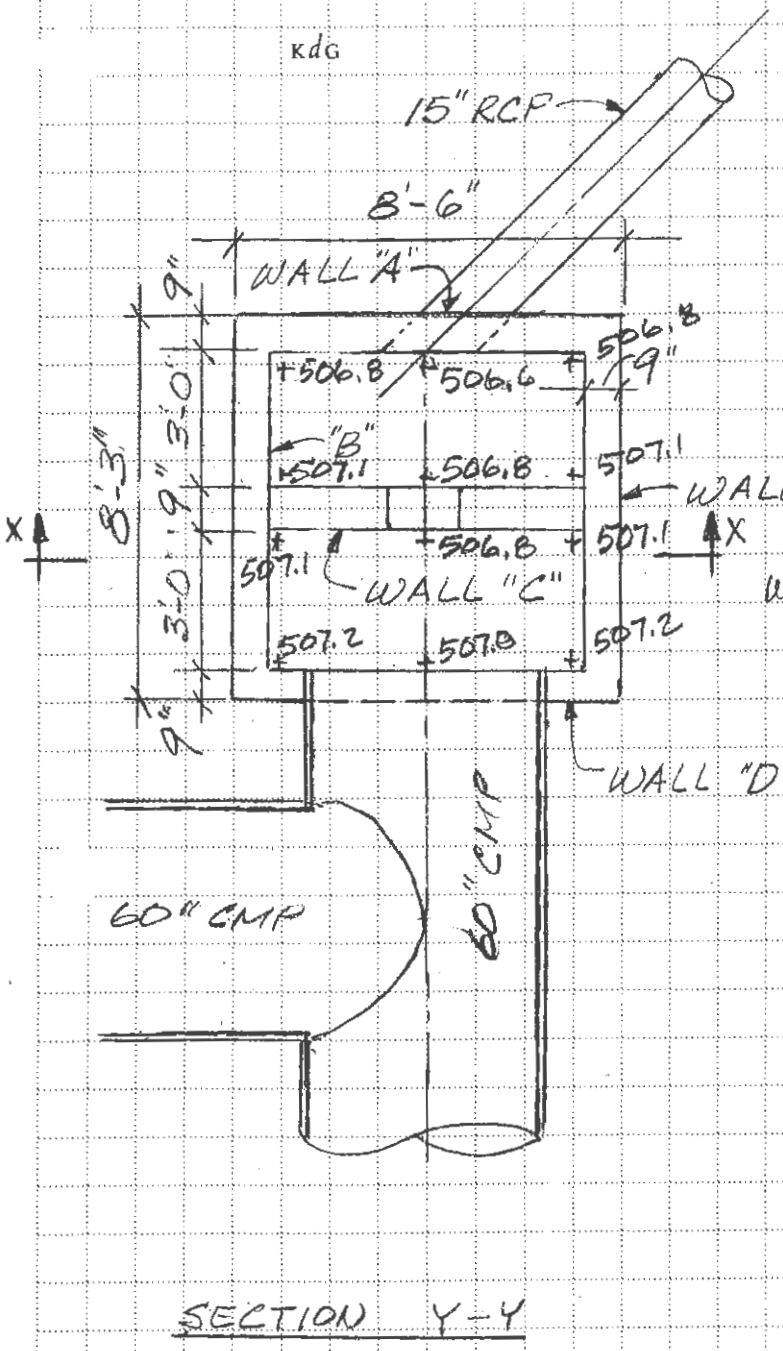
Max M_u (bott. steel) - over subgrade void

$$\frac{1}{8}(0.125 + 0.276)1.5(3)^2 = 5.41 \text{ k'}$$

$$\text{Min reinf} \quad \frac{3\sqrt{4000}}{60000}(12)(10 - 2.31) = 0.29 \text{ \#}/\text{ft}$$

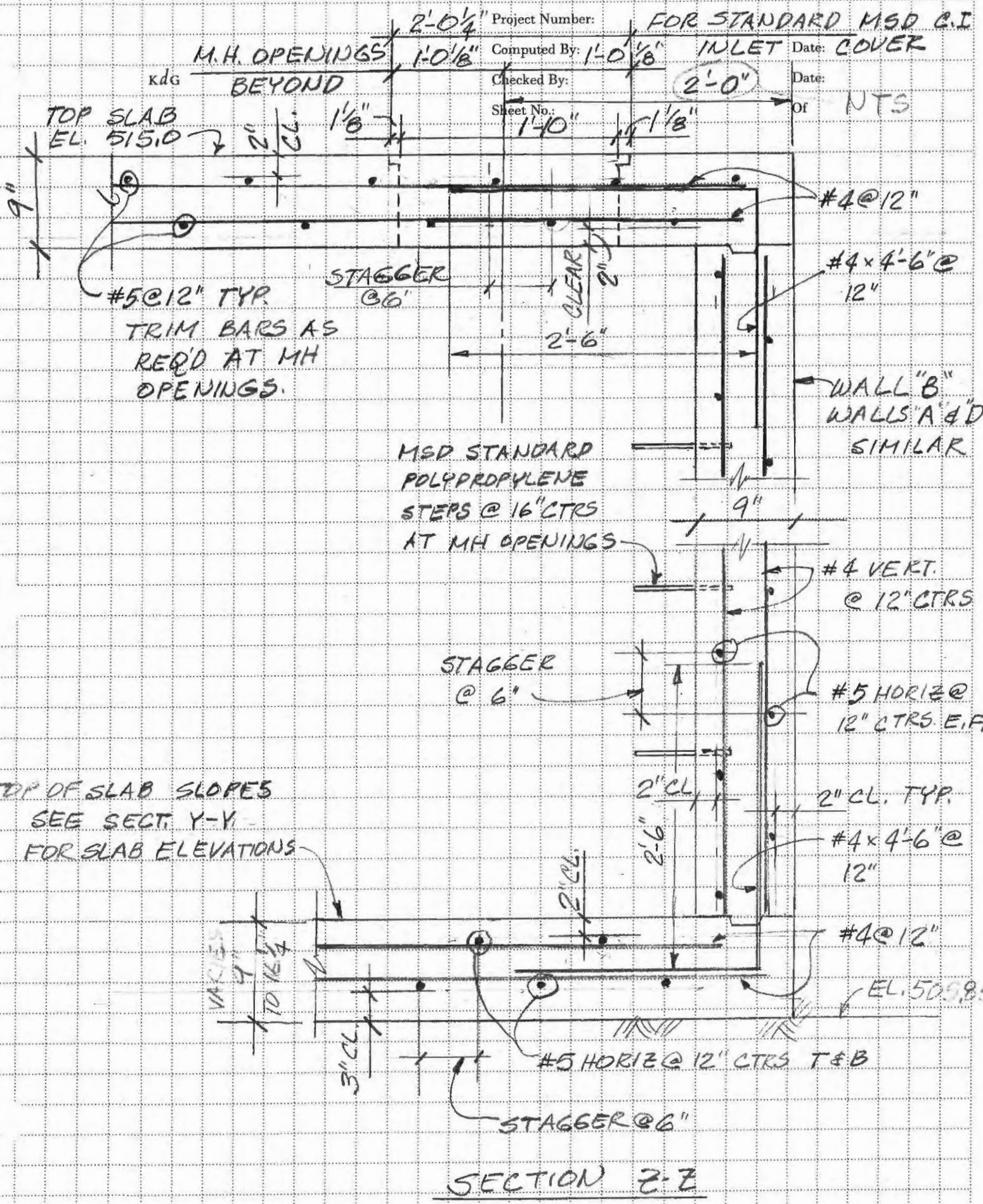
Use 10" slab, #5@12" N-S. Section OK

Project Name: Lot 3B/3A Detention
 Project Number: 980324-0011 Rev 1/4/07
 Computed By: JML Date: 12/27/06
 Checked By: _____ Date: _____
 Sheet No.: ④ Of ⑦



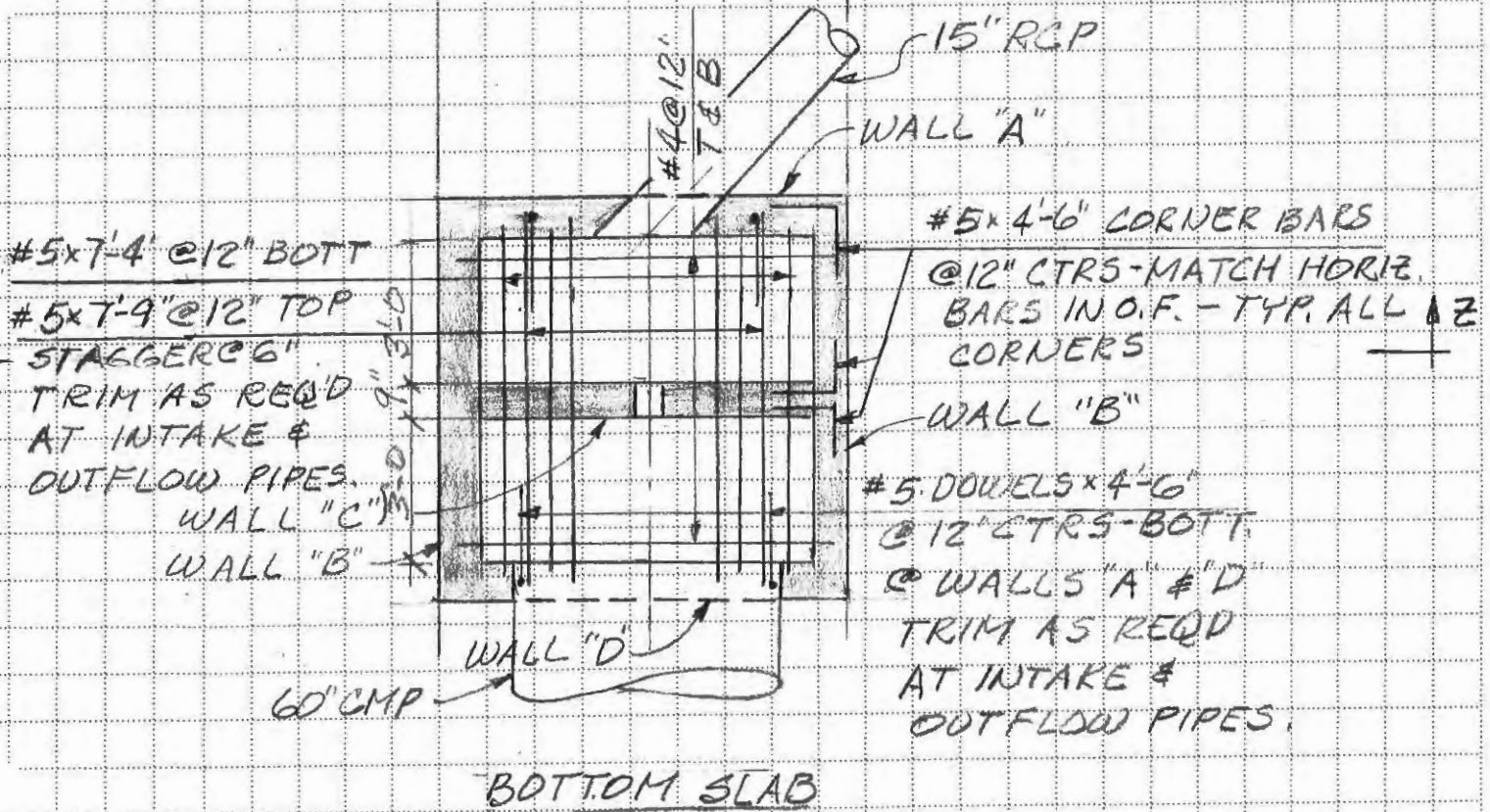
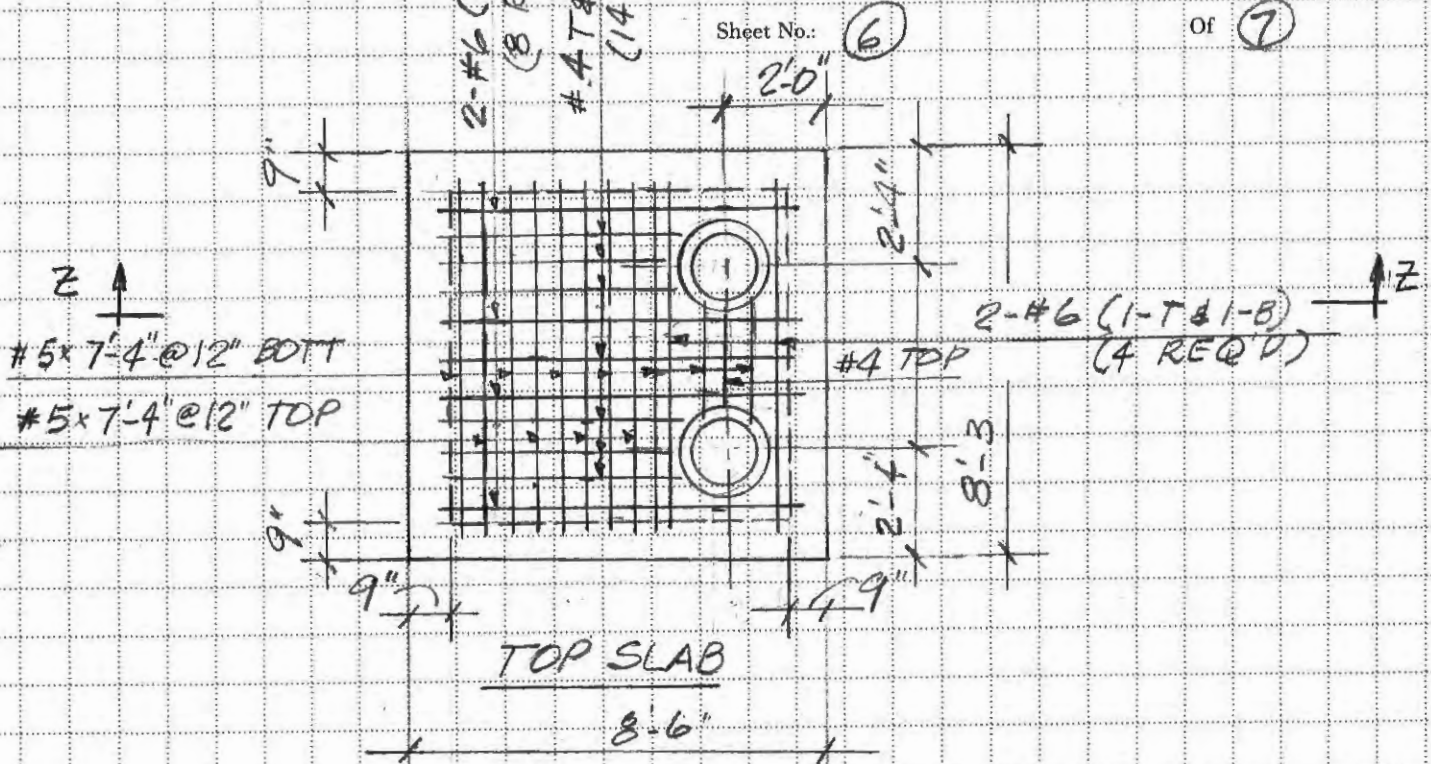
Outlet structure

Project Number: FOR STANDARD MSD C.I. INLET COVER
Computed By: 1'-0 1/8" Date:
Checked By: 2'-0" Date:
Sheet No.: 140 1 1/8" Of NTS



Project Name: Lot 3A/3B Detention
 Project Number: 980324-0011 Rev. 1/4/07
 Computed By: JML Date: 12/27/06
 Checked By: Date:
 Sheet No.: 6 Of 7

kdg



Project Name: Lot 3A/3B Pidgeonpark West 3

Project Number: 980324-0011

Computed By: JML

Date: 1/4/07

Checked By:

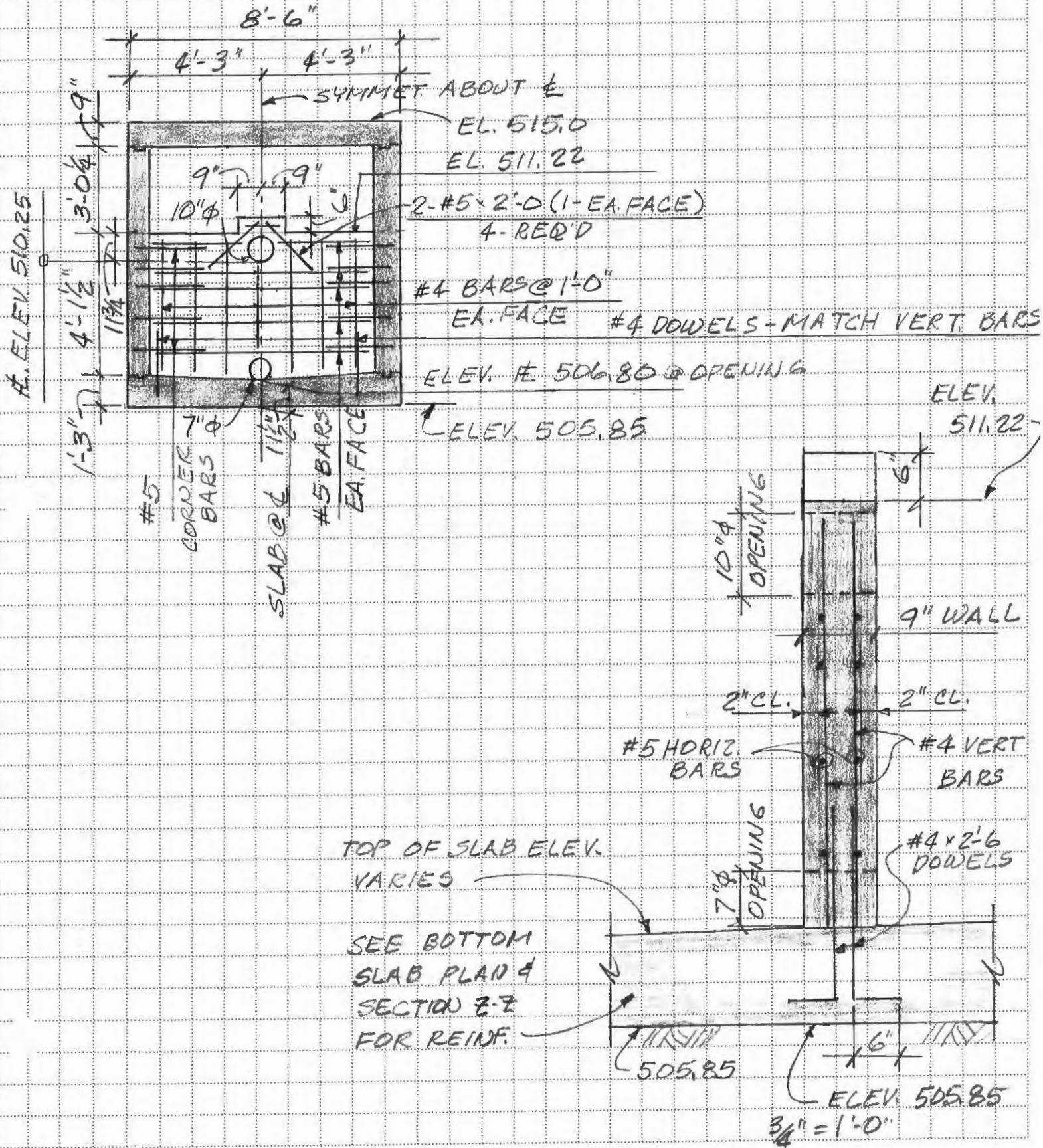
Date:

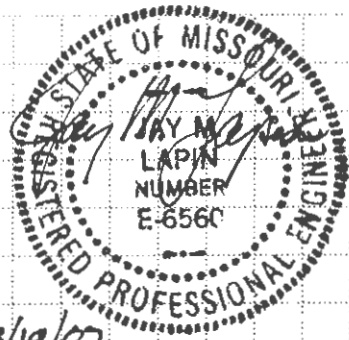
Sheet No.: ⑦

Of ⑦

Retention

KdG





kdg

CALCULATION SHEET

Project Name: Pidgeon Park West Plat 3, Lot 3

Project Number: 980324-0011

Computed By: JML

Date: 11/6/06

Checked By:

Date:

Sheet No.: 1

Of 5

3/19/07

Storm Water Detention - Lots 3A & 3B

Lot 3A - Estimate based on fast food restaurant use (Wendy's)

Total Lot Area 1.030 Acres
 Bldg & Paving 0.807 Acres - Impervious
 Lawn 0.223 Acres

Lot 3B - National City Bank

Total Lot Area 1.350 Acres
 Bldg & Paving 0.646 Acres - Impervious
 Lawn 0.604 Acres

P.I. including saturation cfs/acre

	15yr	25yr	50yr	100yr
Lawn Areas	1.87	2.31	2.61	2.95
Bldg & Paving	3.85	4.75	5.38	6.08

Detention Basin - Flows

Into Basin: Lot 3A 0.807 Ac Imp. (0.223 Ac not to basin)
 Lot 3B 0.646 Ac Imp.
 0.114 Ac Lawn (0.490 Ac not to basin)

15 Year - $0.807(3.85) + 0.646(3.85) + 0.114(1.87) = 5.81$ cfs
 * 25 ✓ - $(4.75) + (4.75) + (2.31) = 7.17$ cfs
 50 ✓ - $(5.38) + (5.38) + (2.61) = 8.11$ cfs
 100 ✓ - $(6.08) + (6.08) + (2.95) = 9.17$ cfs

Project Name: Pidgeon Park West Plat 3, Lot 3

Project Number: 980324-0011

Computed By: JML

Date: 11/6/06

Checked By:

Date:

Sheet No.: 2

Of 5

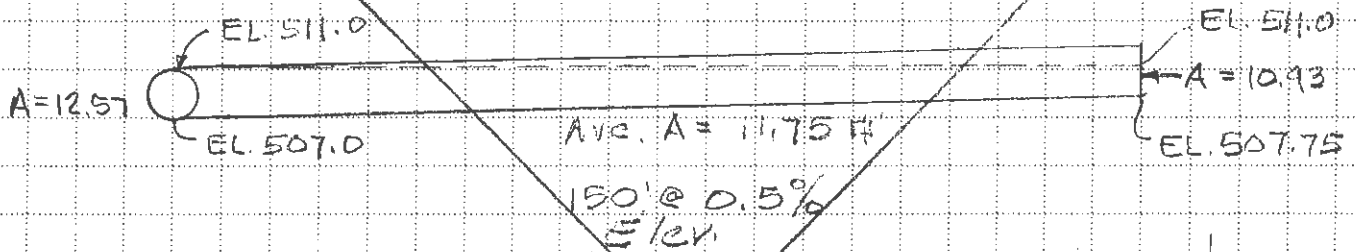
KDG

Discharge from Basin

*	15 Year	-	(0.807 + 0.646 + 0.114)	(1.87)	=	2.93 cfs
	25 ✓	-	(✓ ✓ ✓)	(2.31)	=	3.62
	50 ✓	-	(✓ ✓ ✓)	(2.61)	=	4.09
	100 ✓	-	(✓ ✓ ✓)	(2.95)	=	4.62

Estimate - Vol. req'd - 25 yr - (7.17 - 3.62 cfs) 60' x 30' = 6390 cu. ft.

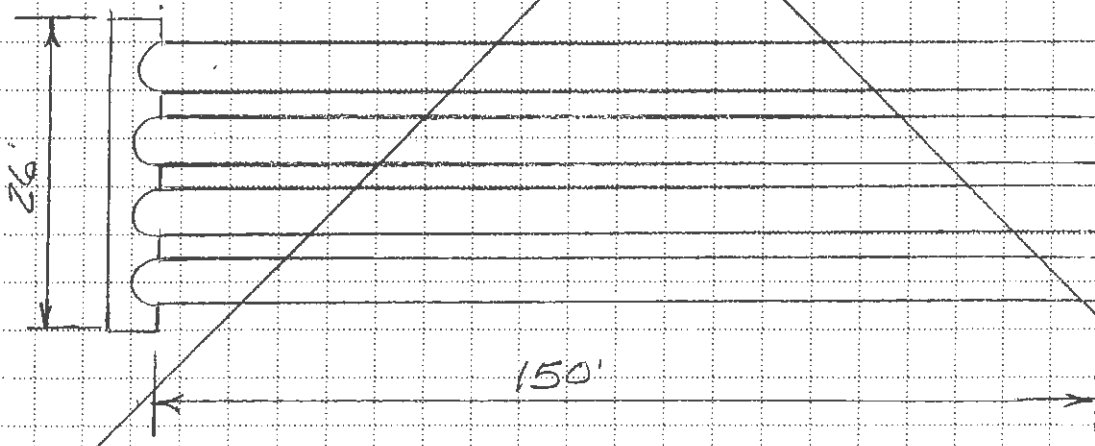
Sediment Storage 471
Trq 48' CMP 6861 cu. ft.



Water Vol. (full @ bottom) = 1762.5 cf

$$4(1762.5) = 7050 \text{ ft}^3$$

$$26(\pi)2^2 = 327 \text{ ft}^3$$



Plan
N.S.

Project Name: Pidgeon Park West Plat 3, Lot 3

Project Number: 980324-0011

Computed By: JML

Date: 11/07/06

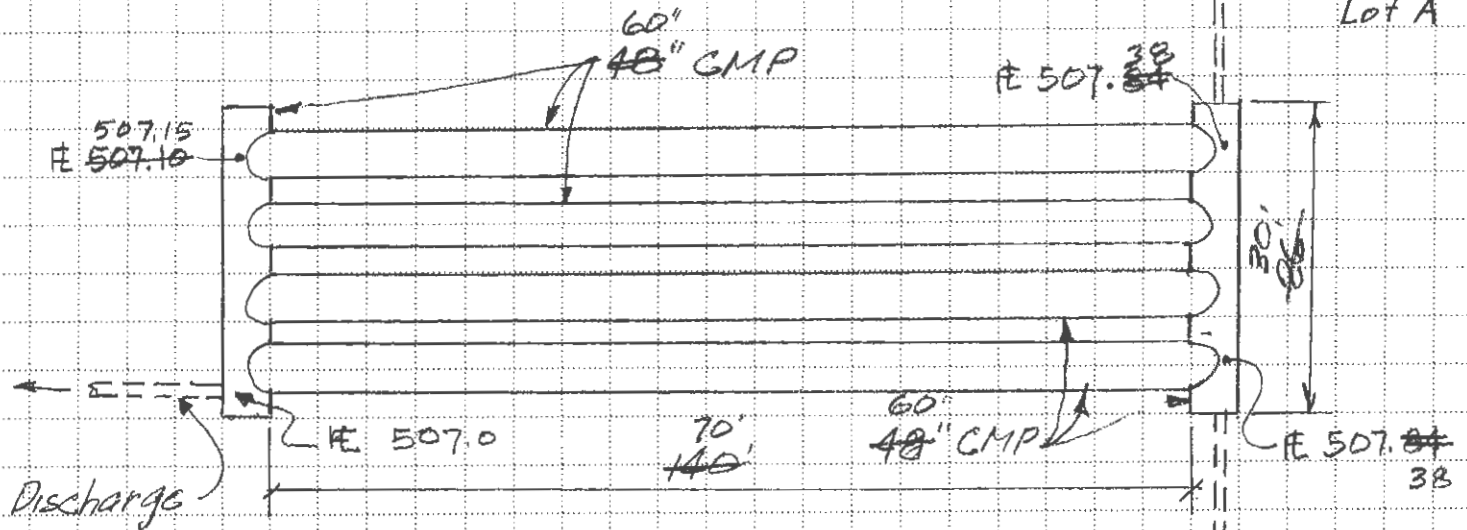
Checked By:

Date: Rev. 11/14/06

Sheet No.: 3

kdg

Storm Water Detention



Cover on 48" CMP ~ 3'

Detention Basin Plan

- Lot B - Flow into Basin 0.65 Ac. Impervious - Bldg & Parking
0.11 Ac. Lawn
- Lot A - Flow into Basin 0.81 Ac. Impervious - (Estimate no current user)

Flows - Lot A	Inflow		Max. Discharge	
	Year	Flow (cfs)	Year	Flow (cfs)
Lot A	15yr	3.11 cfs	15yr	2.93 cfs
	25yr	3.83 cfs	25yr	3.62 cfs
	50yr	4.34 cfs	50yr	4.09 cfs
	100yr	4.91 cfs	100yr	4.62 cfs
Lot B	15yr	2.70 cfs		
	25yr	3.34 cfs		
	50yr	3.77 cfs		
	100yr	4.26 cfs		

Project Name: *Pidgson Park West Plat 3, Lot*Project Number: *980324-0011*Computed By: *JML*Date: *12/15/06*

Checked By:

Date:

Sheet No.: *4*Of *5*

kdG

Sediment storage =

From chart, 2 yr. storage = 471 ft^3 Peak water storage (100 yr) = 5949 ft^3 6420 ft^3 Total volume of 60" pipe
 $(340)\pi(2.5)^2$ = 6676 ft^3

} OK

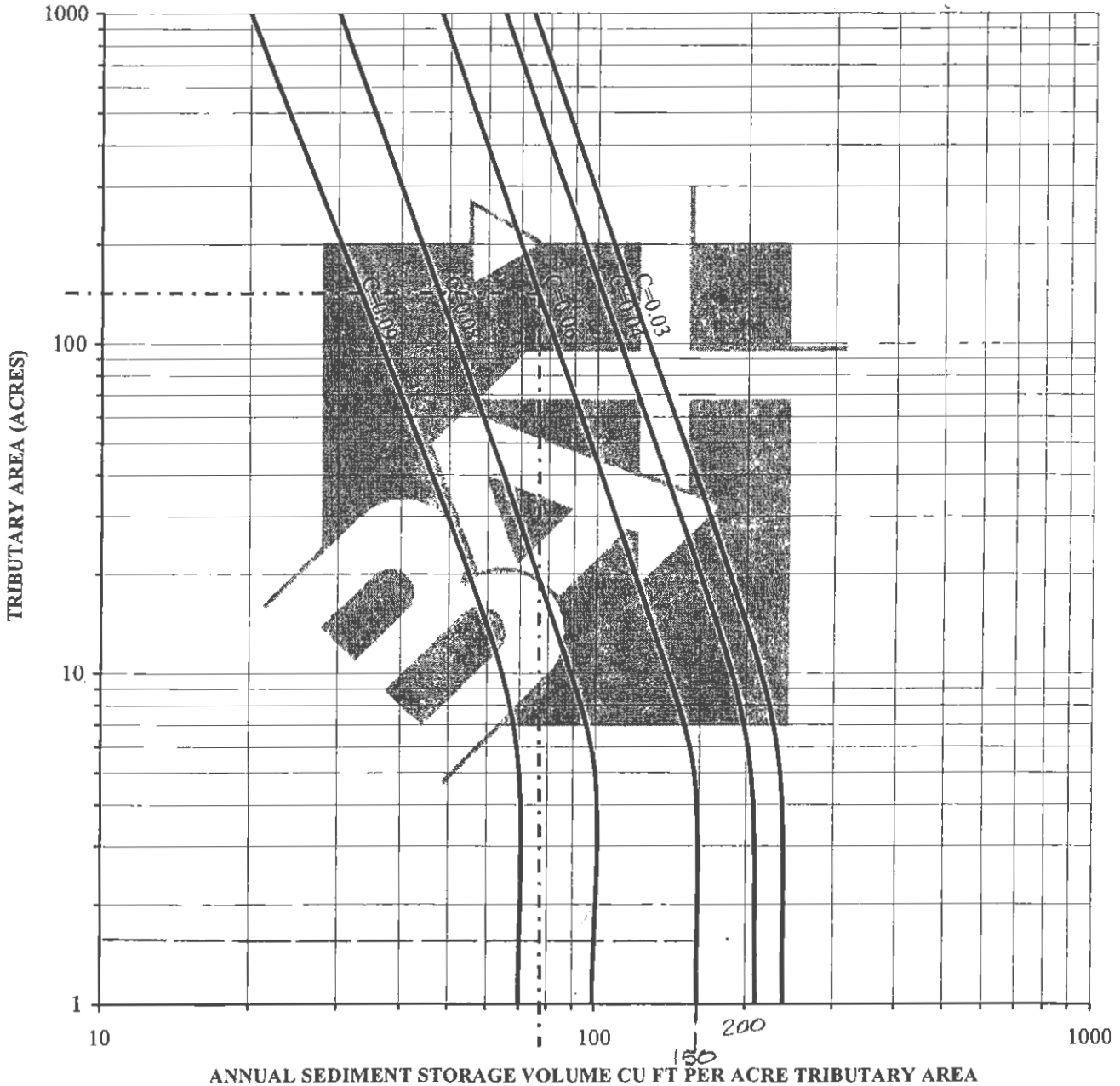


BAX ENGINEERING
 Engineering - Planning - Surveying
 221 Point West Blvd.
 St. Charles, MO 63301
 636 928-5552 FAX 636 928-1718

Project: Lot 3 Pidgeon Park West Plat 2
 Date: 11/06/06 Project: 980324-0011
 Designer: JML Checked: _____

⑤

ANNUAL SEDIMENT STORAGE



Storage Required = Years of Storage * Annual Sediment * Drainage Area

RUNOFF C VALUE = 0.06 YEARS OF STORAGE = 2
 DRAINAGE AREA = 1.57 acres
 ANNUAL SEDIMENT = 150 ft³/acre STORAGE REQUIRED = 2(150)1.57 = 471 ft³



File

100 NORTH MAIN STREET
O'FALLON, MISSOURI 63366
636.240.2000
FACSIMILE 636.978-4144
www.ofallon.mo.us

Kuhlmann Design Group
Jay Lapin
66 Progress Parkway
St. Louis, Mo 63043

May 8, 2007

RE: Detention for Lot 3 of Pidgeon Park West Plat 3

Dear Mr. Lapin:

The construction plans for the Detention for Lot 3 of Pidgeon Park West Plat 3 have been reviewed and are accepted for construction. In lieu of the construction of the asphalt multi use trail, the City has agreed to accept a contribution of \$25,000.00 toward the construction of the trail at a later date. This will have to be paid to the City of O'Fallon prior to the approval of the plat for this area.

Make sure all City specifications are followed. Additional temporary swales, berms and/or silting basins may be required as construction proceeds and planned siltation control is evaluated for effectiveness. Siltation control is to be erected before construction begins in any area. Copies of any off site easements and pertinent permits or approvals should be on file before any construction off site. Care should be taken to ensure no soil or mud is tracked onto any pavement from the site. Please schedule a pre-construction meeting with Senior Construction Inspector, Jay Herigodt at (636) 379-5416. Please notify the Construction Inspection Division at 636-379-5416 at least 48 hours before construction begins and 24 hours in advance of any required inspections. Please notify Gary Johnson of Alliance Water at (636) 281-2858 one- (1) week prior to the start of construction. Upon completion of the improvements and necessary tests, an engineer shall certify that construction took place according to plan with all changes noted. Please insure that the as-builts accurately show the locations and elevations of the water, sanitary sewer, storm sewer, and swales. One set of reproducible as-builts should then be submitted along with three copies. **An e-mail version of the site plan and as-builts must also be supplied.** With this information the City of O'Fallon can proceed to accept the public improvements under its maintenance responsibility.

It is the responsibility of the owner/developer to obtain approval from all other departments and outside organizations as required. All City ordinances and standards shall be followed during the construction of the proposed improvements. This approval is for compliance with city standards and ordinance requirements. The City's approval is not a certification of the calculations or plans. The design engineer is responsible for the technical accuracy, project decisions, engineering judgment, and quality of the plans, calculations, and/or report.

If you have any further questions please call me at (636) 240-2000.

Sincerely,

Jeannie Greenlee
Engineer III

cc via email

Al Kilpatrick – Engineering Manager
David Woods – Director of Planning
Shannon Gerard – Assistant Director of Planning
Nathan Lacey – Director of Building Safety / Building Official
Jay Herigodt – Construction Inspection Manager
File through KL

KdG

March 19, 2007

Mrs. Jeannie Greenlee
Engineer III
City of O'Fallon
100 N. Main St.
O'Fallon, Missouri 63366

Re: Lots 3A and 3B
Pidgeon Park West Plat 3
O'Fallon, Missouri
KdG Project No: 980324-0011

Dear Mrs. Greenlee,

I am attaching two sets of revised improvement plans for the subject proposed subdivision. These plans are submitted for your review and approval and in response to your comments in your letter of February 5, 2007.

Please note that the only improvements to be installed for the subdivision are the storm water detention system and the storm water treatment unit, both of which are detailed on the plans. Notes and information have been added as requested in your letter.

It is our understanding that the requirement for the eight (8) foot multi purpose trail along Highway K has been deleted after discussions and agreements between the City and the Developer. Please contact Mr. David Woods for verification.

The issue of the availability of sanitary sewage treatment and use of temporary storage and hauling is to be a function of the building plans and construction permits for the proposed National City Bank on Lot 3B. The treatment program is to be addressed by the Bank and their consultants.

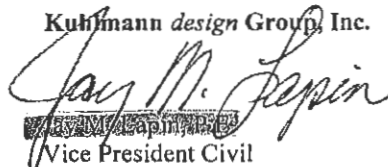
The cost estimate for the remaining improvements is:

- 1) The underground storm water detention system with outlet structure, discharge lines to existing storm sewers, available connections to future storm sewers serving Lots3A and 3B, and the storm water treatment unit.....\$75,000.00.
- 2) Site grading, excavation, fill, erosion control and finish grading and seeding and layout in the detention and treatment unit area.....\$22,000.00.

The developer is under contract to have the subdivision improvements installed by June 1, 2007. The Contractor is prepared to start on the work, but needs a minimum of two months to obtain delivery of materials and perform all necessary work. Your assistance in expediting review and approval and permitting this project to proceed will be greatly appreciated

Yours very truly,

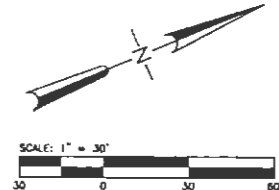
Kuhlmann design Group, Inc.


Vice President Civil

JML/lmc

Enclosures

3 11 1 8 1 3 1 3 8 | S I D O T . D O C



(PROP) LINES INDICATING PROPOSED DRAINAGE AREAS
(EX) LINES INDICATING EXISTING DRAINAGE AREAS



PIDGEEON PARK WEST PLAT 3

DEVELOPER:
 PACE PROPERTIES, INC.
 1401 S. BREWWOOD BLVD., SUITE 900
 ST. LOUIS, MISSOURI 63144
 (314) 968-9898 PHONE
 (314) 968-5050 FAX

Kuhlmann
 Design
 Group, Inc.
 66 Progress Parkway
 St. Louis, Missouri 63043-3706
 Tel: (314) 434-8998
 St. Louis, Missouri
 St. Charles, Missouri

KdG

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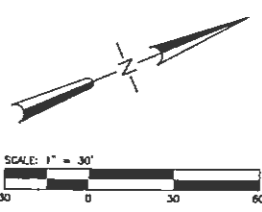
APRIL 26, 2007

EXPIRES DEC. 31, 2007	
NO.	DATE
1	3/19/07 CITY RESUBMITAL
2	4/26/07 CITY RESUBMITAL
PROJECT NO. 980324 CONTRACT NO. 0011	
DRAWN DON	CHECKED JML
DATE 1/16/07	

DRAINAGE PLAN

SHEET 5 OF 5

DM1



(PROP) LINES INDICATING PROPOSED DRAINAGE AREAS
(EX) LINES INDICATING EXISTING DRAINAGE AREAS

LOT 3B PROPOSED:
 TOTAL LOT AREA: 1.35 ACRES
 BLDG & PAVING: 0.64 ACRES IMPERVIOUS
 LAWN/LANDSCAPE: 0.174 ACRES TO DETENTION
 0.498 ACRES DRAINS DIRECTLY TO CREEK

LOT 3A PROPOSED:
 TOTAL LOT AREA: 1.93 ACRES
 BLDG & PAVING: 0.807 ACRES IMPERVIOUS
 LAWN/LANDSCAPE: 0.223 ACRES BYPASSING DETENTION



PIDGEEON PARK WEST PLAT 3

DEVELOPER:
 PACE PROPERTIES, INC.
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APRIL 26, 2007

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2	4/26/07 CITY RESUBMITAL
PROJECT NO.	CONTRACT NO.
080324	0011
DRAWN	CHECKED
DMJ	JML
DATE	1/18/07

DRAINAGE
 PLAN
 SHEET 5 OF 5
DMI
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LOT 2B

LOT 2A

LOT 3B PROPOSED:
TOTAL LOT AREA: 1.35 ACRES
BLDG & PAVING: 0.64 ACRES IMPERVIOUS
LAWN/LANDSCAPE: 0.14 ACRES TO DETENTION
0.49 ACRES DRAINS DIRECTLY TO CREEK

LOT 3A PROPOSED:
TOTAL LOT AREA: 1.04 ACRES
BLDG & PAVING: 0.807 ACRES IMPERVIOUS
LAWN/LANDSCAPE: 0.223 ACRES BYPASSING DETENTION

(PROP) LINES INDICATING PROPOSED DRAINAGE AREAS
(EX) LINES INDICATING EXISTING DRAINAGE AREAS



PIDGEON PARK WEST PLAT 3
DEVELOPER:
PACE PROPERTIES, INC.
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66 Progress Parkway
St. Louis, Missouri 63043-3705
Tel: (314) 434-8898
St. Louis, Missouri
St. Charles, Missouri

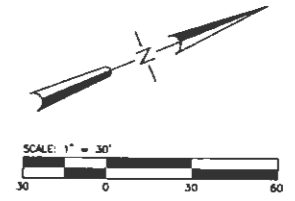
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2	4/26/07 CITY RESUBMITAL
PROJECT NO. 080324 CONTRACT NO. 0011	
DRAWN	CHECKED
DM	JML
DATE	1/16/07

DRAINAGE PLAN
SHEET 5 OF 5
DM1



(PROP) LINES INDICATING PROPOSED DRAINAGE AREAS
(EX) LINES INDICATING EXISTING DRAINAGE AREAS



PIDGEEON PARK WEST PLAT 3

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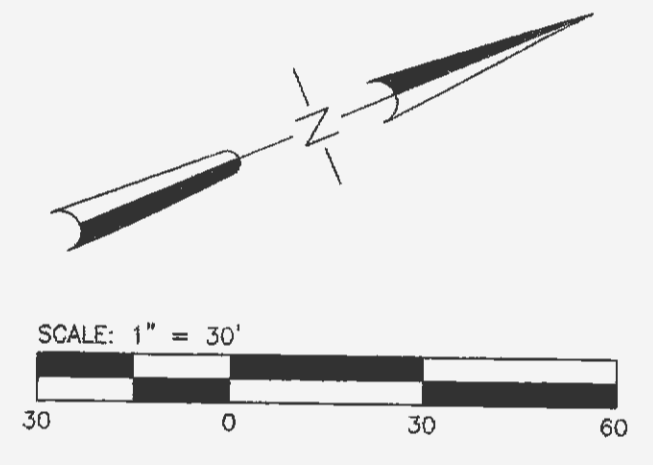
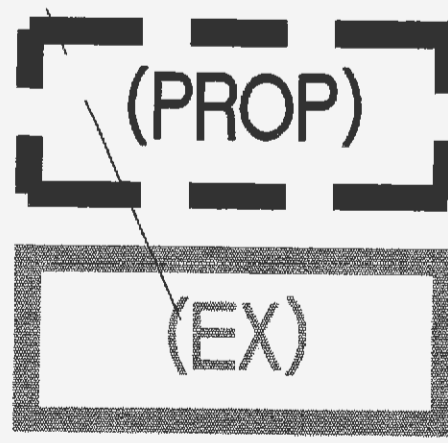
EXPIRES DEC. 31, 2007	
NO.	DATE
1	3/16/07 CITY SUBMITTAL
2	4/28/07 CITY SUBMITTAL
PROJECT NO. 080324 CONTRACT NO. 0011	
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DATE 1/16/07	

DRAINAGE
 PLAN
 SHEET 5 OF 5
DM1



LOT 3B PROPOSED
 TOTAL LOT AREA: 1.35 ACRES
 BLDG & PAVING: 0.646 ACRES IMPERVIOUS
 LAWN/LANDSCAPE: 0.114 ACRES TO DETENTION
 0.490 ACRES DRAINS DIRECTLY TO CREEK

LOT 3A PROPOSED
 TOTAL LOT AREA: 1.03 ACRES
 BLDG & PAVING: 0.807 ACRES IMPERVIOUS
 LAWN/LANDSCAPE: 0.223 ACRES BYPASSING DETENTION

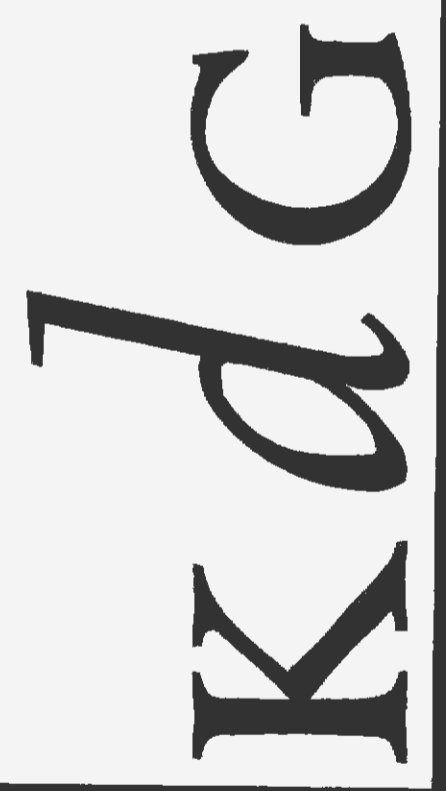


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MARCH 19, 2007

EXPIRES DEC. 31, 2007

NO.	DATE	CITY
1	3/19/07	CITY RESUBMITAL

PROJECT NO.	CONTRACT NO.
980324	0011
DRAWN	CHECKED
DGN	JML

DATE 1/16/07

DRAINAGE PLAN

SHEET 5 OF 5

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