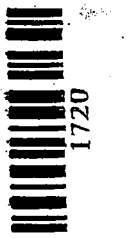


Bound Reports
1720

KINGS RIDGE NORTH
REVISED STORMWATER CALCULATIONS
FBA NO. 941216.077

FARNER, BARLEY & ASSOCIATES, INC.
350 NORTH SINCLAIR AVENUE
TAVARES, FLORIDA 32778

BY: _____
DUANE K. BOOTH, P.E.
FLORIDA REG. NO. 44631

DATE: JAN 2 1 2000

TABLE OF CONTENTS

KINGS RIDGE NORTH

STORMWATER DESIGN SUMMARY

Kings Ridge North is located in Section 4 of Township 23S, Range 26E on Hancock Road consisting of approximately 228.80 acres. The property as existing today is an abandoned orange grove.

The property has a positive outfall to Lake Felter bordering part of its boundary. The stormwater management system is designed to retain the total runoff from the 25 year-96 hour storm event.

The Stormwater Calculations meet or exceed the requirements of St. Johns River Water Management District, the City of Clermont, and Florida Department of Transportation.

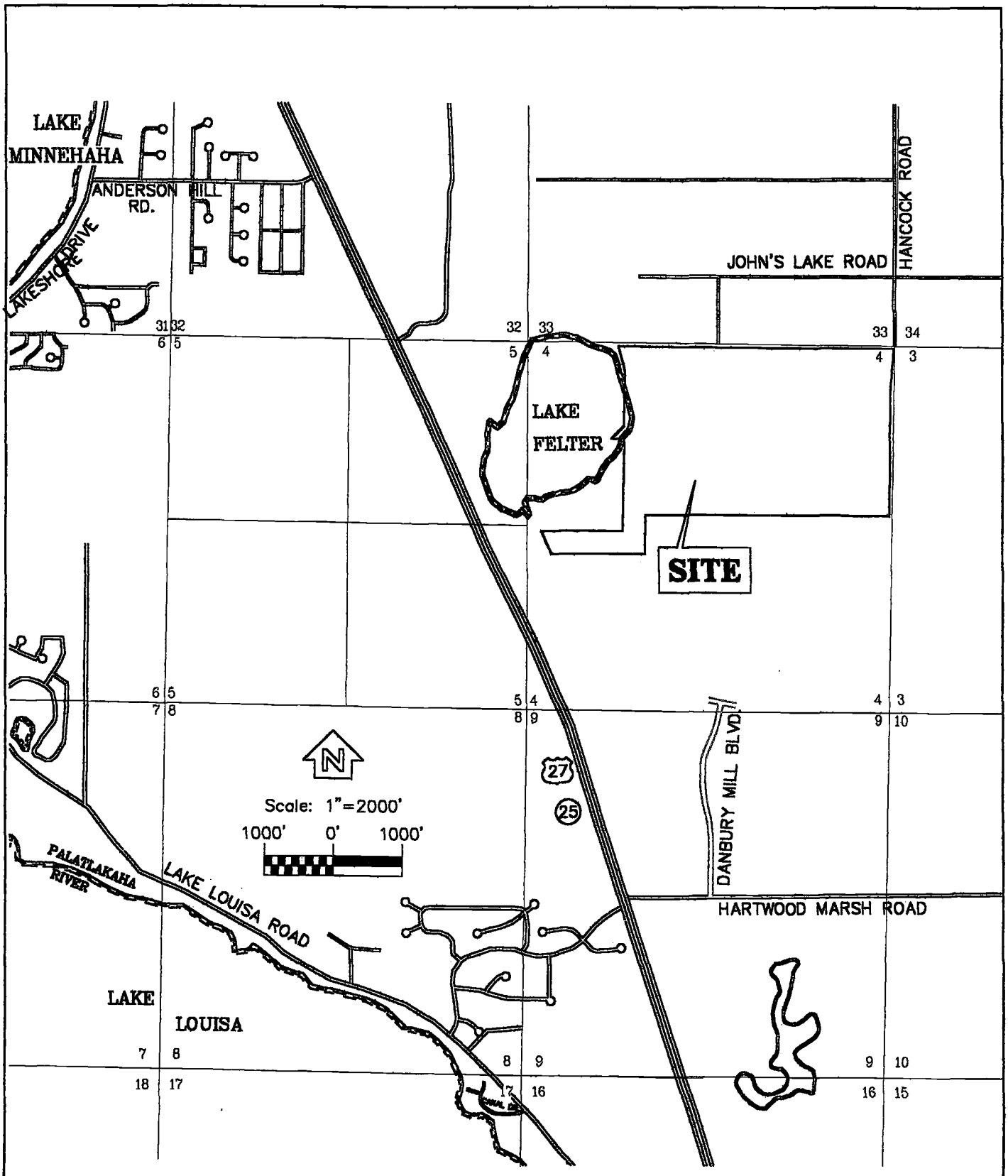
See ICPR Max Node conditions for comparison of peak stage versus pond max elevation and ponds Recovery analysis for stormwater treatment volume calculation and recovery analysis.

Pond 2 has been designed as a lined irrigation pond to serve the residential community and golf course. Pond 4 has been designed as a lined pond for asthetic proposes.

POND	*TOP OF POND ELEVATION*	*PEAK STAGE*	*TREATMENT VOLUME Cu.Ft.*	*TREATMENT RECOVERY TIME (Hrs.)*
2	250.0	248.83	34,667	0
3	243.0	240.18	48,497	1.65
4	233.0	232.28	89,843	40.33
5	135.0	134.65	204,986	3.19
6	239.0	234.79	57,681	1.16
7	212.0	208.09	20,800	1.39
10	146.0	144.11	105,560	3.20
11	171.0	167.66	37,389	1.64
13	162.0	161.73	13,685	3.26
14	149.0	145.95	19,602	1.25
16	90.0	88.60	139,029	2.81

POST DEVELOPMENT BASIN SUMMARY TABLE

BASIN	*AREA (AC.)*	*PERCENT IMPERVIOUS*	*PERCENT PERVIOUS*	*CN*
1	25.24	30	70	57
2	9.55	14	86	47
3	13.36	24	76	53
4	24.75	36	64	60
5	56.47	34	66	59
6	15.89	23	77	53
7	5.73	18	82	50
10	29.08	28	72	56
11	10.30	37	63	61
12	19.15	27	73	55
13	3.77	35	65	60
14	5.40	40	60	63
15	10.83	23	77	53
16	38.30	28	72	56



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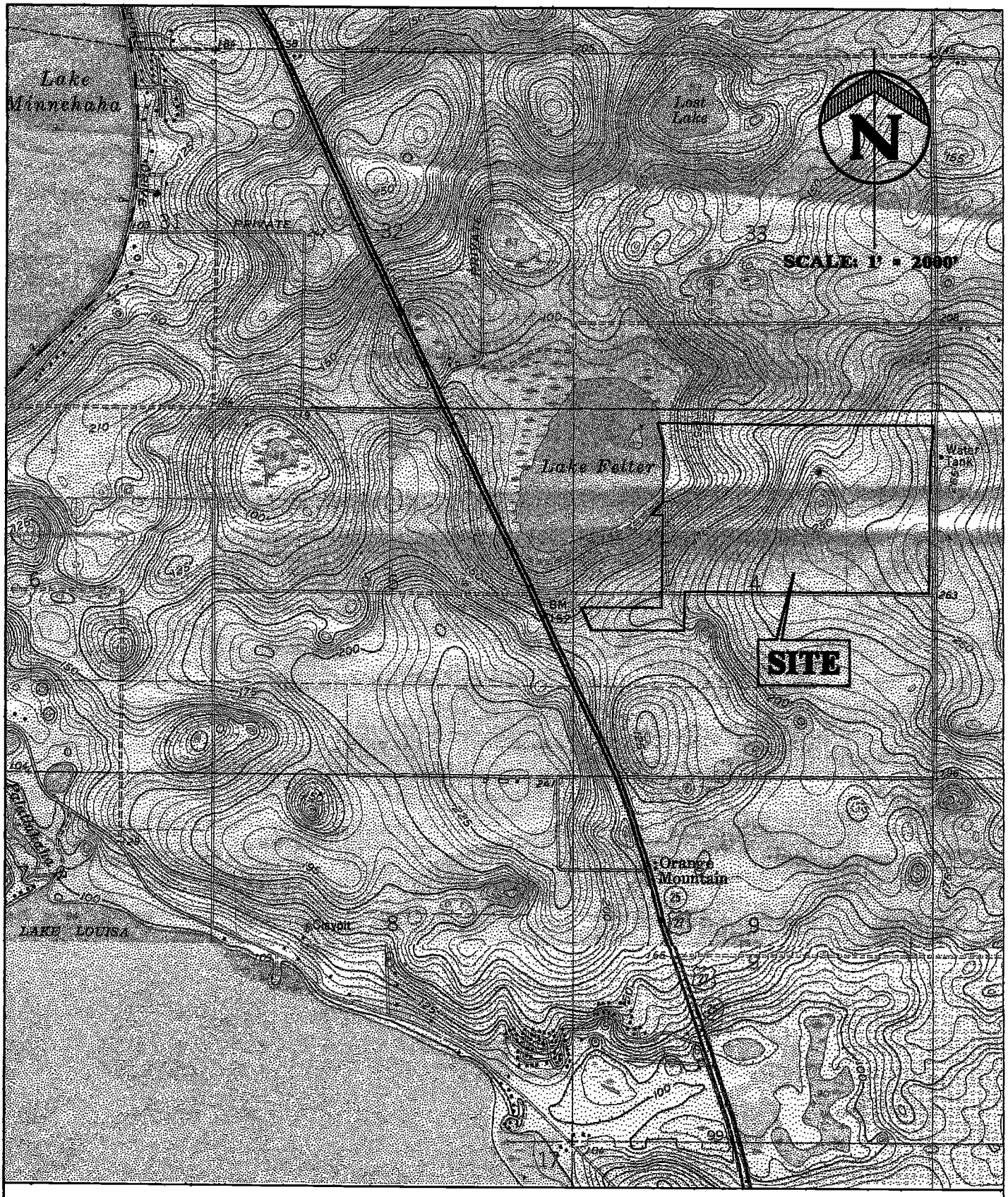
PARNER BARLEY AND ASSOCIATES, INC.
A ENGINEERS
A SURVEYORS
A PLANNERS

KINGS RIDGE NORTH

LOCATION MAP

DATE: MARCH 12, 1999

JOB NO. 941214.076



CLERMONT EAST QUADRANGLE FLORIDA
LAKE LOUISA EAST QUADRANGLE FLORIDA

FARNER BARLEY AND ASSOCIATES, INC.
ENGINEERS
SURVEYORS
PLANNERS

KINGS RIDGE NORTH

USGS MAP

DATE: MARCH 10, 1999

JOB NO. 94126.076

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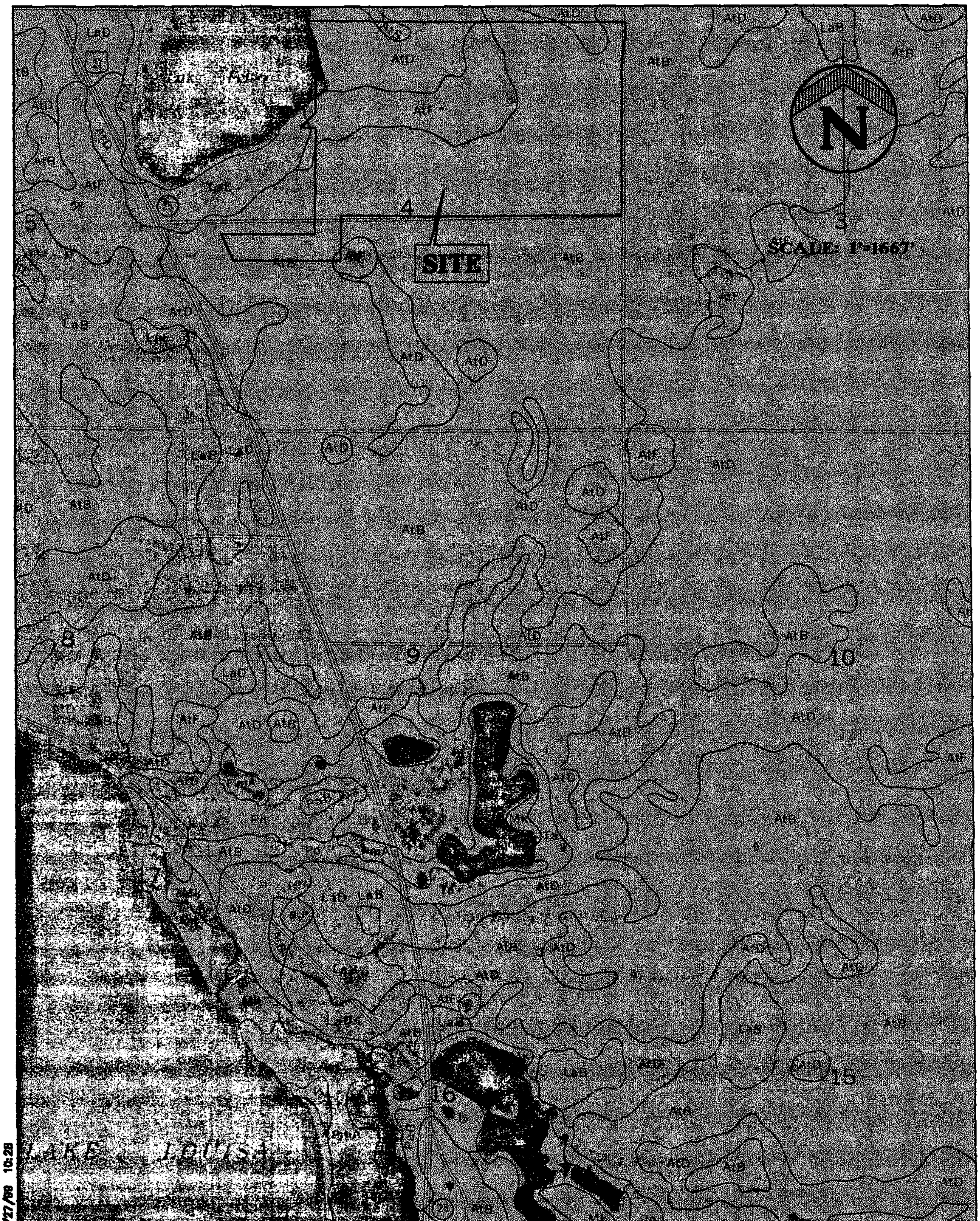


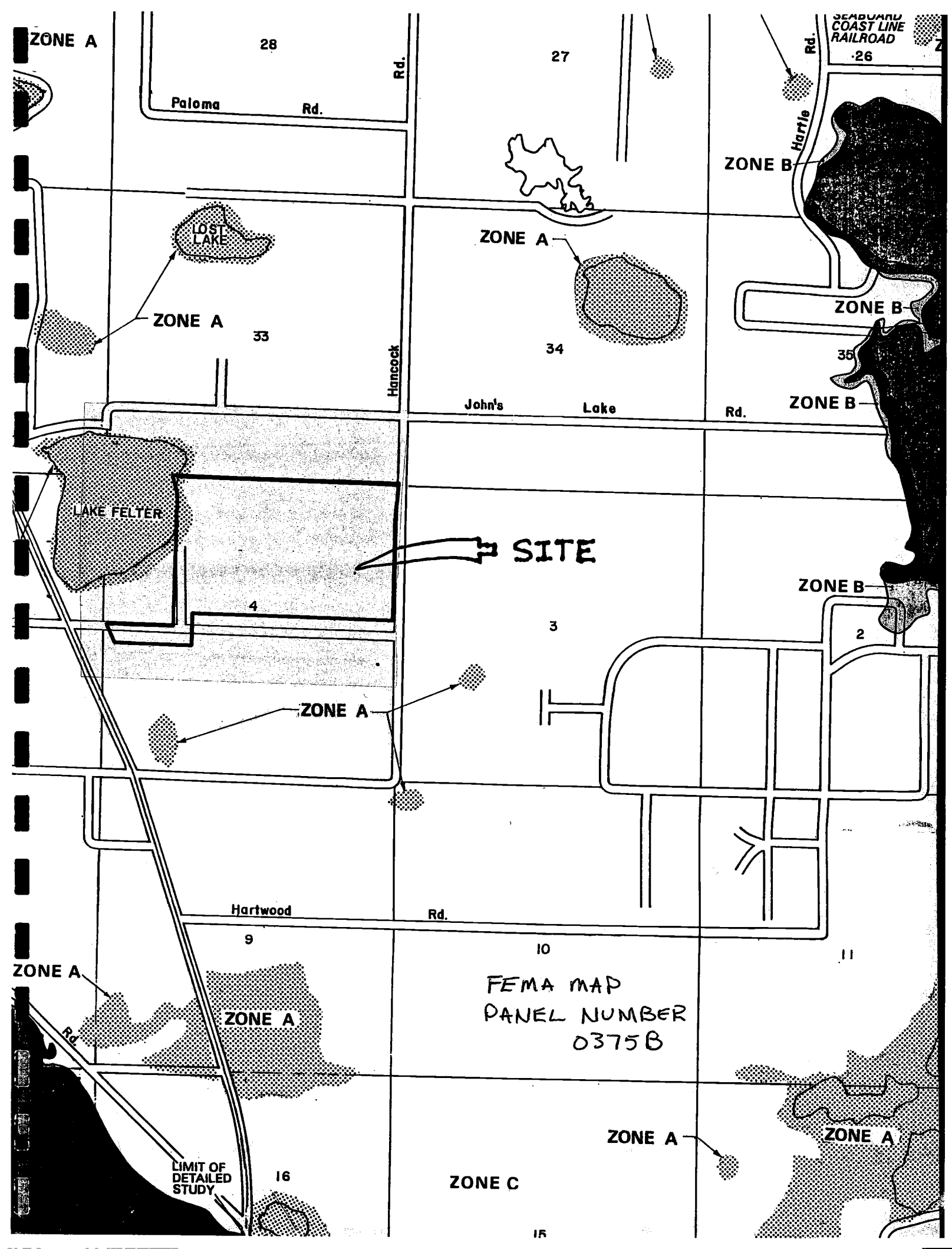
FARNER BARLEY AND ASSOCIATES, INC.
▲ENGINEERS
▲SURVEYORS
▲PLANNERS

KINGS RIDGE NORTH

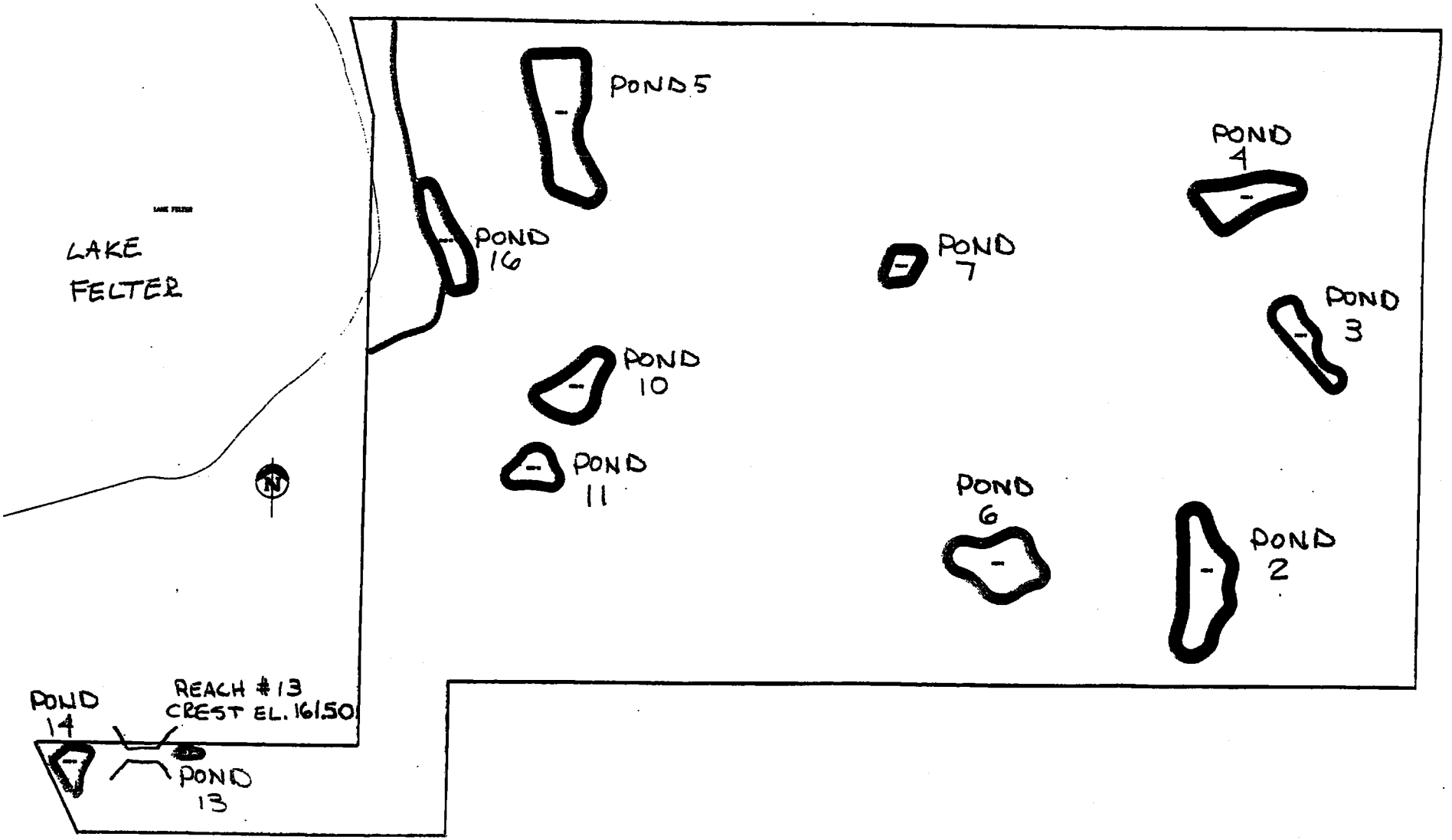
SOILS MAP

DATE: MARCH 10, 1999

JOB NO. 941216.076


ZONE A
28
Paloma Rd.
Rd.
27
SEABOARD COAST LINE RAILROAD
26
Rd.
Hartle
ZONE B
LOST LAKE
ZONE A
ZONE A
33
34
35
Hancock
ZONE B
John's Lake Rd.
ZONE B
LAKE FELTER
SITE
4
3
2
ZONE B
ZONE A
Hartwood Rd.
9
10
11
ZONE A
ZONE A
Rd.
FEMA MAP
PANEL NUMBER
0375B
ZONE A
ZONE A
LIMIT OF DETAILED STUDY
16
ZONE C
15

NODAL/REACH MAP - KINGS RIDGE NORTH



DEVELOPED BASIN SUMMARY
AND CURVE NUMBER CALCULATION

POND VOLUME

PROJECT: KINGS RIDGE NORTH PROJECT NO.: 941216.077

DESCRIPTION: POND 2 DATE: 7/23

ELEVATION	AREA (SQ. FT.)	AVERAGE AREA (SQ. FT.)	DELTA HEIGTH (FEET)	DELTA VOLUME (CU. FT.)	STORAGE (CU. FT.)	STORAGE (AC. FT.)
238	45954				0	0
		48214	1	48214		
239	50473				98219	1.11
		52783	1	52783		
240	55093				100997	2.32
		57454	1	57454		
241	59814				158451	3.64
		62225	1	62225		
242	64635				220676	5.07
		67096	1	67096		
243	69556				287772	6.61
		72068	1	72068		
244	74579				359840	8.26
		77140	1	77140		
245	79701				436980	10.03
		82313	1	82313		
246	84925				519293	11.92
		87587	1	87587		
247	90248				606880	13.93
		92961	1	92961		
248	95673				699841	16.07
		98436	1	98436		
249	101198				798277	18.33
		104011	1	104011		
250	106823				902288	20.71

****
********** POND VOLUME COMPUTATIONS **********
****

Description: POND 3
DATE: Dec 17 , 1999 TIME: 8:55:41 AM

BOTTOM AREA = 22059 SQ FT
BOTTOM ELEVATION = 237
BOTTOM PERIMETER = 852
SLOPE = 4 : 1
TOP OF BERM ELEVATION = 243

ELEV	AREA (SF)	AREA (AC)	AVERAGE AREA (SF)	DELTA H (SF)	DELTA VOL (CF)	STORAGE (CF)	STORAGE (AC FT)
237.00	22059	0.51					0.00
			23788	1.00	23788		
238.00	25517	0.59				23788	0.55
			27297	1.00	27297		
239.00	29076	0.67				51085	1.17
			30906	1.00	30906		
240.00	32735	0.75				81991	1.88
			34615	1.00	34615		
241.00	36495	0.84				116606	2.68
			38425	1.00	38425		
242.00	40356	0.93				155031	3.56
			42336	1.00	42336		
243.00	44317	1.02				197367	4.53

****
********** POND VOLUME COMPUTATIONS **********
****

Description: POND 4
DATE: Dec 16 , 1999 TIME: 10:00:22 AM

BOTTOM AREA = 23741 SQ FT
BOTTOM ELEVATION = 220
BOTTOM PERIMETER = 807
SLOPE = 4 : 1
TOP OF BERM ELEVATION = 233

ELEV	AREA (SF)	AREA (AC)	AVERAGE AREA (SF)	DELTA H (SF)	DELTA VOL (CF)	STORAGE (CF)	STORAGE (AC FT)
220.00	23741	0.55					0.00
			25380	1.00	25380		
221.00	27019	0.62				25380	0.58
			28709	1.00	28709		
222.00	30398	0.70				54089	1.24
			32138	1.00	32138		
223.00	33877	0.78				86227	1.98
			35667	1.00	35667		
224.00	37457	0.86				121894	2.80
			39297	1.00	39297		
225.00	41138	0.94				161191	3.70
			43028	1.00	43028		
226.00	44919	1.03				204219	4.69
			46859	1.00	46859		
227.00	48800	1.12				251079	5.76
			50791	1.00	50791		
228.00	52782	1.21				301870	6.93
			54823	1.00	54823		
229.00	56865	1.31				356693	8.19
			58956	1.00	58956		
230.00	61048	1.40				415649	9.54
			63189	1.00	63189		
231.00	65331	1.50				478838	10.99
			67523	1.00	67523		
232.00	69715	1.60				546361	12.54
			71958	1.00	71958		
233.00	74200	1.70				618319	14.19

****
********** POND VOLUME COMPUTATIONS **********
****

Description: POND 5
DATE: Dec 21 , 1999 TIME: 10:10:21 AM

BOTTOM AREA = 86462 SQ FT
BOTTOM ELEVATION = 129
BOTTOM PERIMETER = 1426
SLOPE = 4 : 1
TOP OF BERM ELEVATION = 135

ELEV	AREA (SF)	AREA (AC)	AVERAGE AREA (SF)	DELTA H (SF)	DELTA VOL (CF)	STORAGE (CF)	STORAGE (AC FT)
129.00	86462	1.98					0.00
			89339	1.00	89339		
130.00	92216	2.12				89339	2.05
			95144	1.00	95144		
131.00	98071	2.25				184483	4.24
			101049	1.00	101049		
132.00	104026	2.39				285532	6.55
			107054	1.00	107054		
133.00	110082	2.53				392586	9.01
			113160	1.00	113160		
134.00	116239	2.67				505746	11.61
			119367	1.00	119367		
135.00	122496	2.81				625113	14.35

****
********** POND VOLUME COMPUTATIONS **********
****

Description: POND 6
DATE: Dec 15 , 1999 TIME: 2:01:01 PM

BOTTOM AREA = 40661 SQ FT
BOTTOM ELEVATION = 233
BOTTOM PERIMETER = 842
SLOPE = 6 : 1
TOP OF BERM ELEVATION = 239

ELEV	AREA (SF)	AREA (AC)	AVERAGE AREA (SF)	DELTA H (SF)	DELTA VOL (CF)	STORAGE (CF)	STORAGE (AC FT)
233.00	40661	0.93					0.00
			43244	1.00	43244		
234.00	45826	1.05				43244	0.99
			48522	1.00	48522		
235.00	51217	1.18				91765	2.11
			54026	1.00	54026		
236.00	56835	1.30				145791	3.35
			59757	1.00	59757		
237.00	62679	1.44				205548	4.72
			65713	1.00	65713		
238.00	68748	1.58				271262	6.23
			71896	1.00	71896		
239.00	75045	1.72				343158	7.88

********** POND VOLUME COMPUTATIONS **********

Description: POND 7
DATE: Dec 21 , 1999 TIME: 11:28:27 AM

BOTTOM AREA = 10716 SQ FT
BOTTOM ELEVATION = 206
BOTTOM PERIMETER = 389
SLOPE = 4 : 1
TOP OF BERM ELEVATION = 212

ELEV	AREA (SF)	AREA (AC)	AVERAGE AREA (SF)	DELTA H (SF)	DELTA VOL (CF)	STORAGE (CF)	STORAGE (AC FT)
206.00	10716	0.25					0.00
			11519	1.00	11519		
207.00	12322	0.28				11519	0.26
			13176	1.00	13176		
208.00	14029	0.32				24695	0.57
			14933	1.00	14933		
209.00	15836	0.36				39628	0.91
			16790	1.00	16790		
210.00	17744	0.41				56418	1.30
			18748	1.00	18748		
211.00	19753	0.45				75166	1.73
			20807	1.00	20807		
212.00	21862	0.50				95973	2.20

********** POND VOLUME COMPUTATIONS **********

Description: POND 10
DATE: Dec 15 , 1999 TIME: 2:03:53 PM

BOTTOM AREA = 23130 SQ FT
BOTTOM ELEVATION = 136
BOTTOM PERIMETER = 681
SLOPE = 4 : 1
TOP OF BERM ELEVATION = 146

ELEV	AREA (SF)	AREA (AC)	AVERAGE AREA (SF)	DELTA H (SF)	DELTA VOL (CF)	STORAGE (CF)	STORAGE (AC FT)
136.00	23130	0.53					0.00
			24517	1.00	24517		
137.00	25904	0.59				24517	0.56
			27342	1.00	27342		
138.00	28779	0.66				51859	1.19
			30267	1.00	30267		
139.00	31754	0.73				82126	1.89
			33292	1.00	33292		
140.00	34830	0.80				115418	2.65
			36418	1.00	36418		
141.00	38007	0.87				151836	3.49
			39645	1.00	39645		
142.00	41284	0.95				191481	4.40
			42972	1.00	42972		
143.00	44661	1.03				234454	5.38
			46400	1.00	46400		
144.00	48139	1.11				280854	6.45
			49928	1.00	49928		
145.00	51718	1.19				330782	7.59
			53557	1.00	53557		
146.00	55397	1.27				384339	8.82

********** POND VOLUME COMPUTATIONS **********

Description: POND 11
DATE: Jan 3 , 2000 TIME: 11:24:08 AM

BOTTOM AREA = 12427 SQ FT
BOTTOM ELEVATION = 163
BOTTOM PERIMETER = 461
SLOPE = 4 : 1
TOP OF BERM ELEVATION = 171

ELEV	AREA (SF)	AREA (AC)	AVERAGE AREA (SF)	DELTA H (SF)	DELTA VOL (CF)	STORAGE (CF)	STORAGE (AC FT)
163.00	12427	0.29					0.00
			13374	1.00	13374		
164.00	14321	0.33				13374	0.31
			15319	1.00	15319		
165.00	16316	0.37				28693	0.66
			17364	1.00	17364		
166.00	18411	0.42				46057	1.06
			19509	1.00	19509		
167.00	20607	0.47				65566	1.51
			21755	1.00	21755		
168.00	22904	0.53				87321	2.00
			24102	1.00	24102		
169.00	25301	0.58				111423	2.56
			26549	1.00	26549		
170.00	27798	0.64				137973	3.17
			29097	1.00	29097		
171.00	30396	0.70				167070	3.84

********** POND VOLUME COMPUTATIONS **********

Description: POND 13
DATE: Dec 15 , 1999 TIME: 2:06:31 PM

BOTTOM AREA = 1148 SQ FT
BOTTOM ELEVATION = 157
BOTTOM PERIMETER = 185
SLOPE = 4 : 1
TOP OF BERM ELEVATION = 162

ELEV	AREA (SF)	AREA (AC)	AVERAGE AREA (SF)	DELTA H (SF)	DELTA VOL (CF)	STORAGE (CF)	STORAGE (AC FT)
157.00	1148	0.03					0.00
			1543	1.00	1543		
158.00	1938	0.04				1543	0.04
			2384	1.00	2384		
159.00	2829	0.06				3927	0.09
			3325	1.00	3325		
160.00	3820	0.09				7252	0.17
			4366	1.00	4366		
161.00	4912	0.11				11618	0.27
			5508	1.00	5508		
162.00	6105	0.14				17126	0.39

****
********** POND VOLUME COMPUTATIONS **********
****

Description: POND 14
DATE: Dec 15 , 1999 TIME: 2:07:47 PM

BOTTOM AREA = 7703 SQ FT
BOTTOM ELEVATION = 142
BOTTOM PERIMETER = 403
SLOPE = 4 : 1
TOP OF BERM ELEVATION = 149

ELEV	AREA (SF)	AREA (AC)	AVERAGE AREA (SF)	DELTA H (SF)	DELTA VOL (CF)	STORAGE (CF)	STORAGE (AC FT)
142.00	7703	0.18					0.00
			8534	1.00	8534		
143.00	9365	0.21				8534	0.20
			10247	1.00	10247		
144.00	11128	0.26				18781	0.43
			12060	1.00	12060		
145.00	12991	0.30				30841	0.71
			13973	1.00	13973		
146.00	14955	0.34				44814	1.03
			15987	1.00	15987		
147.00	17020	0.39				60801	1.40
			18102	1.00	18102		
148.00	19185	0.44				78903	1.81
			20317	1.00	20317		
149.00	21450	0.49				99221	2.28

POND VOLUME

PROJECT: KINGS RIDGE NORTH PROJECT NO.: 94/216,077

DESCRIPTION: POND 16 DATE: 12/7/99

ELEVATION	AREA (SQ. FT.)	AREA (ACRES)	AVERAGE AREA (SQ. FT.)	DELTA HEIGTH (FEET)	DELTA VOLUME (CU. FT.)	STORAGE (CU. FT.)	STORAGE (AC. FT.)
80	19680	0.452				0	0
			21355	1	21355		
81	23030	0.529				21355	0.49
			24756	1	24756		
82	26481	0.608				46111	1.06
			28257	1	28257		
83	30032	0.689				74368	1.71
			31858	1	31858		
84	33684	0.773				106226	2.44
			35560	1	35560		
85	37436	0.859				141786	3.25
			39362	1	39362		
86	41288	0.948				181148	4.16
			43265	1	43265		
87	45242	1.039				224413	5.15
			49838	1	49838		
88	54434	1.250				274251	6.30
			60560	1	60560		
89	66685	1.531				334811	7.69
			72845	1	72845		
90	79005	1.814				407656	9.36

STORM RUNOFF WORKSHEET

PROJECT #: 941216.077 PROJECT: KINGS RIDGE NORTH DATE: 11/17/94 ☐ PRE-DEVELOPMENT ☒ POST-DEVELOPMENT

BASIN NO. B1 | **TOTAL AREA 29.24 ac** | **STORM: 25 YEAR 96 HOUR**

SOIL	GROUP	LAND USE	AREA Pervious (acres)	AREA Imperv. (acres)	CN	AREA (%)	PRODUCT CN x AREA
	A	GREEN GRASS (GOOD)	20.36		39	70	2716
		34.5 X 4250 = 146,625 1227 X 25 = 30,675					
		+ ~~63,200~~ 177,300 ~~25 X 1830~~ + ~~209,550~~ ~~209,550~~ 386,850 TOTALS		8.88	98	30	2976
						100	5692

RAINFALL (P)= 11.2 in. RUNOFF R= _____ in. _____ ac.ft. _____ cu.ft. | PRODUCT / COVERAGE = $\overline{CN}$ = 57

BASIN NO. B2 | **TOTAL AREA 9.55 ac** | **STORM: 25 YEAR 96 HOUR**

SOIL	GROUP	LAND USE	AREA Pervious (acres)	AREA Imperv. (acres)	CN	AREA (%)	PRODUCT CN x AREA
	A	GREEN GRASS (GOOD)	8.25		39	86	3354
		11 X 4250 = 46,750 390 X 25 = 9,750					
		56,500		1.30	98	14	1372
		TOTALS				100	4726

RAINFALL (P)= 11.2 in. RUNOFF R= _____ in. _____ ac.ft. _____ cu.ft. | PRODUCT / COVERAGE = $\overline{CN}$ = 47

BASIN NO. B3 | **TOTAL AREA 13.36 ac** | **STORM: 25 YEAR 96 HOUR**

SOIL	GROUP	LAND USE	AREA Pervious (acres)	AREA Imperv. (acres)	CN	AREA (%)	PRODUCT CN x AREA
	A	GREEN GRASS (GOOD)	10.20		39	76	2964
		25.5 X 4250 = 108,375 PUMP = 29,406					
		137,781		3.16	98	24	2352
		TOTALS				100	5316

RAINFALL (P)= 11.2 in. RUNOFF R= _____ in. _____ ac.ft. _____ cu.ft. | PRODUCT / COVERAGE = $\overline{CN}$ = 53

$S = \frac{1000}{CN} - 10$ $R = \frac{(P - 0.2S)^2}{(P + 0.8S)}$ R= runoff (in.) P= rainfall (in.)

STORM RUNOFF WORKSHEET

PROJECT #: 941216.077 PROJECT: KINGS RIDGE NORTH DATE: 11/17/92

☐ PRE-DEVELOPMENT
☒ POST-DEVELOPMENT

BASIN NO. B4 | **TOTAL AREA 24.75 ac.** | **STORM: 25 YEAR 96 HOUR**

SOIL	GROUP	LAND USE	AREA Pervious (acres)	AREA Imperv. (acres)	CN	AREA (%)	PRODUCT CN x AREA
	A	GREEN GRASS (GOOD)	15.83		39	64	2496
		23 X 3500 = 80,500 49 X 4250 = 208,250 PVMT = 99,712 388,462		8.92	98	36	3528
		TOTALS				100	6024

RAINFALL (P)= 11.2 in. RUNOFF R= _____ in. _____ ac.ft. _____ cu.ft.

PRODUCT / COVERAGE = $\overline{CN}$ = 60

BASIN NO. B5 | **TOTAL AREA 56.47ac** | **STORM: 25 YEAR 96 HOUR**

SOIL	GROUP	LAND USE	AREA Pervious (acres)	AREA Imperv. (acres)	CN	AREA (%)	PRODUCT CN x AREA
	A	GREEN GRASS (GOOD)	37.54		39	66	2574
		92 X 3500 = 322,000 80.5 X 4250 = 342,125 PVMT = 160,550 824,675		18.93	98	34	3332
		TOTALS				100	5906

RAINFALL (P)= 11.2 in. RUNOFF R= _____ in. _____ ac.ft. _____ cu.ft.

PRODUCT / COVERAGE = $\overline{CN}$ = 59

BASIN NO. B6 | **TOTAL AREA 15.89ac** | **STORM: 25 YEAR 96 HOUR**

SOIL	GROUP	LAND USE	AREA Pervious (acres)	AREA Imperv. (acres)	CN	AREA (%)	PRODUCT CN x AREA
	A	GREEN GRASS (GOOD)	12.19		39	77	3003
		31 X 4250 = 131,750 1175 X 25 = 29,375 161,125		3.70	98	23	2254
		TOTALS				100	5275

RAINFALL (P)= 11.2 in. RUNOFF R= _____ in. _____ ac.ft. _____ cu.ft.

PRODUCT / COVERAGE = $\overline{CN}$ = 53

$S = \frac{1000}{CN} - 10$ $R = \frac{(P - 0.2S)^2}{(P + 0.8S)}$ R= runoff (in.) P= rainfall (in.)

STORM RUNOFF WORKSHEET

PROJECT #: 94216.077 PROJECT: KINGS RIDGE NORTH DATE: 11/17/99 ☐ PRE-DEVELOPMENT ☒ POST-DEVELOPMENT

BASIN NO. B7 | TOTAL AREA 5.73 ac | STORM: 25 YEAR 96 HOUR

SOIL	GROUP	LAND USE	AREA Pervious (acres)	AREA Imperv. (acres)	CN	AREA (%)	PRODUCT CN x AREA
	A	GREEN GRASS (GOOD)	4.68		39	82	3198
		8 X 4250 = 34,000 463 X 25 = 11,575 45,575		1.05	98	18	1764
		TOTALS				100	4962

RAINFALL (P)= 11.2 in. RUNOFF R= _____ in. _____ ac.ft. _____ cu.ft.

PRODUCT / COVERAGE = $\overline{CN}$ = 50

BASIN NO. _____ | TOTAL AREA _____ | STORM: _____ YEAR _____ HOUR

SOIL	GROUP	LAND USE	AREA Pervious (acres)	AREA Imperv. (acres)	CN	AREA (%)	PRODUCT CN x AREA
		TOTALS					

RAINFALL (P)= 11.2 in. RUNOFF R= _____ in. _____ ac.ft. _____ cu.ft.

PRODUCT / COVERAGE = $\overline{CN}$ =

BASIN NO. _____ | TOTAL AREA _____ | STORM: _____ YEAR _____ HOUR

SOIL	GROUP	LAND USE	AREA Pervious (acres)	AREA Imperv. (acres)	CN	AREA (%)	PRODUCT CN x AREA
		TOTALS					

RAINFALL (P)= _____ in. RUNOFF R= _____ in. _____ ac.ft. _____ cu.ft.

PRODUCT / COVERAGE = $\overline{CN}$ =

$S = \frac{1000}{CN} - 10$ $R = \frac{(P - 0.2S)^2}{(P + 0.8S)}$ R= runoff (in.) P= rainfall (in.)

STORM RUNOFF WORKSHEET

PROJECT #: 94216.077 PROJECT: KINGS RIDGE NORTH DATE: 11/17/94 ☐ PRE-DEVELOPMENT ☒ POST-DEVELOPMENT

BASIN NO. B10 | **TOTAL AREA 29.08ac** | **STORM: 25 YEAR 96 HOUR**

SOIL	GROUP	LAND USE	AREA Pervious (acres)	AREA Imperv. (acres)	CN	AREA (%)	PRODUCT CN x AREA
	A	GREEN GRASS (GOOD)	20.99		39	72	2808
		66 X 4250 = 280,500 PVMT = 71,795 352,295		8.09	98	28	2744
		TOTALS				100	5552

RAINFALL (P)= 11.2 in. RUNOFF R= _____ in. _____ ac.ft. _____ cu.ft.

PRODUCT / COVERAGE = $\overline{CN}$ = 56

BASIN NO. B11 | **TOTAL AREA 10.30ac** | **STORM: 25 YEAR 96 HOUR**

SOIL	GROUP	LAND USE	AREA Pervious (acres)	AREA Imperv. (acres)	CN	AREA (%)	PRODUCT CN x AREA
	A	GREEN GRASS (GOOD)	6.49		39	63	2457
		29 X 3500 = 101,500 9 X 4250 = 38,250 PVMT = 26,316 166,066		3.81	98	37	3624
		TOTALS				100	6083

RAINFALL (P)= 11.2 in. RUNOFF R= _____ in. _____ ac.ft. _____ cu.ft.

PRODUCT / COVERAGE = $\overline{CN}$ = 61

BASIN NO. B12 | **TOTAL AREA 19.15 ac.** | **STORM: 25 YEAR 96 HOUR**

SOIL	GROUP	LAND USE	AREA Pervious (acres)	AREA Imperv. (acres)	CN	AREA (%)	PRODUCT CN x AREA
	A	GREEN GRASS (GOOD)	13.93		39	73	2837
		3 X 4250 = 12,750 46x40x65 = 119,600 96x10x32 = 14,720 PVMT = 80,194 227,264		5.22	98	27	2670
		TOTALS				100	5507

RAINFALL (P)= 11.2 in. RUNOFF R= _____ in. _____ ac.ft. _____ cu.ft.

PRODUCT / COVERAGE = $\overline{CN}$ = 55

$S = \frac{1000}{CN} - 10$ $R = \frac{(P - 0.2S)^2}{(P + 0.8S)}$ R= runoff (in.) P= rainfall (in.)

STORM RUNOFF WORKSHEET

PROJECT #: 94216.077 PROJECT: KINGS RIDGE NORTH DATE: 11/17/99

☐ PRE-DEVELOPMENT
☒ POST-DEVELOPMENT

BASIN NO. B13 | **TOTAL AREA 3.77 ac.** | **STORM: 25 YEAR 96 HOUR**

SOIL	GROUP	LAND USE	AREA Pervious (acres)	AREA Imperv. (acres)	CN	AREA (%)	PRODUCT CN x AREA
	A	GREEN GRASS (GOOD)	2.44		39	65	2535
		16.5 X 3500 = 57,750					
		57,750		1.33	98	35	3430
		TOTALS				100	5965

RAINFALL (P)= 1.2 in. RUNOFF R= _____ in. _____ ac.ft. _____ cu.ft.

PRODUCT / COVERAGE = CN= 60

BASIN NO. B14 | **TOTAL AREA 5.40 ac** | **STORM: 25 YEAR 96 HOUR**

SOIL	GROUP	LAND USE	AREA Pervious (acres)	AREA Imperv. (acres)	CN	AREA (%)	PRODUCT CN x AREA
	A	GREEN GRASS (GOOD)	3.23		39	60	2340
		18 X 3500 = 63,000					
		1260 X 25 = 31,500					
		94,500		2.17	98	40	3920
		TOTALS				100	6260

RAINFALL (P)= 1.2 in. RUNOFF R= _____ in. _____ ac.ft. _____ cu.ft.

PRODUCT / COVERAGE = CN= 63

BASIN NO. B15 | **TOTAL AREA 10.83 ac.** | **STORM: 25 YEAR 96 HOUR**

SOIL	GROUP	LAND USE	AREA Pervious (acres)	AREA Imperv. (acres)	CN	AREA (%)	PRODUCT CN x AREA
	A	GREEN GRASS (GOOD)	8.35		39	77	3006
		8 X 3500 = 28,000					
		19 X 40 X 65					
		19 x 10 x 32					
		540 X 25 (108,284					
		3.14 x 60 x 60		2.48	98	23	2244
		TOTALS				100	5251

RAINFALL (P)= 1.2 in. RUNOFF R= _____ in. _____ ac.ft. _____ cu.ft.

PRODUCT / COVERAGE = CN= 53

$S = \frac{1000}{CN} - 10$ $R = \frac{(P - 0.2S)^2}{(P + 0.8S)}$ R= runoff (in.) P= rainfall (in.)

STORM RUNOFF WORKSHEET

PROJECT # 941216.077 PROJECT: KINGS RIDGE NORTH DATE: 11/17/99 ☐ PRE-DEVELOPMENT ☒ POST-DEVELOPMENT

BASIN NO. B16 TOTAL AREA 38.30 ac. STORM: 25 YEAR 96 HOUR

SOIL	GROUP	LAND USE	AREA Pervious (acres)	AREA Imperv. (acres)	CN	AREA (%)	PRODUCT CN x AREA
	A	GREEN GRASS (GOOD)	27.48		39	72	2808
		68 X 3500 = 238,000 22 X 4250 = 93,500 STREET / CLUB = 139,734 471,234		10.82	98	28	2744
		TOTALS				100	5552

RAINFALL (P)= 11.2 In. RUNOFF R= _____ In. _____ ac.ft. _____ cu.ft. PRODUCT COVERAGE = $\overline{CN}$ = 56

BASIN NO. _____ TOTAL AREA _____ STORM: _____ YEAR _____ HOUR

SOIL	GROUP	LAND USE	AREA Pervious (acres)	AREA Imperv. (acres)	CN	AREA (%)	PRODUCT CN x AREA
		TOTALS					

RAINFALL (P)= _____ In. RUNOFF R= _____ In. _____ ac.ft. _____ cu.ft. PRODUCT COVERAGE = $\overline{CN}$ =

BASIN NO. _____ TOTAL AREA _____ STORM: _____ YEAR _____ HOUR

SOIL	GROUP	LAND USE	AREA Pervious (acres)	AREA Imperv. (acres)	CN	AREA (%)	PRODUCT CN x AREA
		TOTALS					

RAINFALL (P)= _____ In. RUNOFF R= _____ In. _____ ac.ft. _____ cu.ft. PRODUCT COVERAGE = $\overline{CN}$ =

$S = \frac{1000}{CN} - 10$ $R = \frac{(P - 0.2S)^2}{(P + 0.8S)}$ R= runoff (in.) P= rainfall (in.)

Basins 1, 12, and 15 were previously calculated and approved under the original permit. These basins were called 1-G, 1-F, and 1-C respectively. The following 3 pages demonstrates that the new final buildout calculations do not exceed what was previously permitted.

POST DEVELOPMENT
WATERSHED DATA TABLE
BASIN NO. 1

BASIN NO.	DRAINAGE AREA (AC.)	LAND USES	WEIGHTED C.N.
1-A	74.16	COMMERCIAL, RECREATION/ OPEN SPACE, RETENTION	86
1-B	22.13	RESIDENTIAL, RECREATION/ OPEN SPACE	62
1-C	11.79	RESIDENTIAL, RECREATION/ OPEN SPACE, RETENTION	67
1-D	4.97	RESIDENTIAL, RECREATION/ OPEN SPACE, RETENTION	69
1-E	6.73	RESIDENTIAL, RETENTION	80
1-F	19.82	RESIDENTIAL, RECREATION/ OPEN SPACE	66
1-G	33.08	RESIDENTIAL, RECREATION/ OPEN SPACE, RETENTION	75
1-H	23.98	RESIDENTIAL, RECREATION/ OPEN SPACE	65
1-I	23.50	RESIDENTIAL, RECREATION/ OPEN SPACE	64
1-J	15.29	RESIDENTIAL, RETENTION	79
1-K	22.62	RESIDENTIAL, RETENTION, RECREATION/ OPEN SPACE	71

BASIN 15

BASIN 12

BASIN 1

PREVIOUSLY APPROVED

KINGS RIDGE BASIN NO. 1 POST-DEVELOPED

********** Basin Summary - KINGS **********

***					
Basin Name:	1-A	1-B	1-C	1-D	1-E
Group Name:	BASE	BASE	BASE	BASE	BASE
Node Name:	1-A	1-B	1-C	1-D	1-E
Hydrograph Type:	SB	SB	SB	SB	SB
Spec Time Inc (sec):	13.20	6.00	11.70	5.00	6.00
Comp Time Inc (sec):	13.20	6.00	11.70	5.00	6.00
Rainfall File:	SJRWMD96	SJRWMD96	SJRWMD96	SJRWMD96	SJRWMD96
Rainfall Amount (in):	11.40	11.40	11.40	11.40	11.40
Storm Duration (hr):	96.00	96.00	96.00	96.00	96.00
Status:	ONSITE	ONSITE	ONSITE	ONSITE	ONSITE
Time of Conc. (min):	26.40	12.00	23.40	10.00	12.00
Lag Time (hr):	0.00	0.00	0.00	0.00	0.00
Area (acres):	74.16	22.13	11.79	4.97	6.73
Curve Number:	86.00	62.00	67.00	69.00	80.00
DCIA (%):	0.00	0.00	0.00	0.00	0.00
Time Max (hrs):	59.84	59.90	59.86	59.92	59.90
Flow Max (cfs):	265.80	85.40	36.11	22.81	33.82
Runoff Volume (in):	9.65	6.35	7.07	7.35	8.87
Runoff Volume (cf):	2598125	510049	302507	132623	216604

BASIN 15

***					
Basin Name:	1-F	1-G	1-H	1-I	1-J
Group Name:	BASE	BASE	BASE	BASE	BASE
Node Name:	1-F	1-G	1-H	1-I	1-J
Hydrograph Type:	SB	SB	SB	SB	SB
Spec Time Inc (sec):	11.40	13.50	8.10	9.90	6.00
Comp Time Inc (sec):	11.40	13.50	8.10	9.90	6.00
Rainfall File:	SJRWMD96	SJRWMD96	SJRWMD96	SJRWMD96	SJRWMD96
Rainfall Amount (in):	11.40	11.40	11.40	11.40	11.40
Storm Duration (hr):	96.00	96.00	96.00	96.00	96.00
Status:	ONSITE	ONSITE	ONSITE	ONSITE	ONSITE
Time of Conc. (min):	22.80	27.00	16.20	19.80	12.00
Lag Time (hr):	0.00	0.00	0.00	0.00	0.00
Area (acres):	19.82	33.08	23.98	23.50	15.29
Curve Number:	66.00	75.00	65.00	64.00	79.00
DCIA (%):	0.00	0.00	0.00	0.00	0.00
Time Max (hrs):	59.85	59.85	59.94	59.89	59.90
Flow Max (cfs):	60.46	104.34	83.36	74.21	76.08
Runoff Volume (in):	6.93	8.18	6.78	6.63	8.73
Runoff Volume (cf):	498286	982600	590501	565926	484676

BASIN 12 BASIN 1

***					
Basin Name:	1-K	1-L	1-M	1-M2	1-M3

PREVIOUSLY PERMITTED

25YR96HR STORM EVENT

********** Basin Summary - KINGSNO **********

Group Name:	BASE	BASE	BASE	BASE	BASE
Node Name:	13	16	1	12	15
Hydrograph Type:	SB	SB	SB	SB	SB
Spec Time Inc (sec):	60.00	60.00	60.00	60.00	60.00
Comp Time Inc (sec):	60.00	60.00	60.00	60.00	60.00
Rainfall File:	SJRWMD96	SJRWMD96	SJRWMD96	SJRWMD96	SJRWMD96
Rainfall Amount (in):	11.20	11.20	11.20	11.20	11.20
Storm Duration (hr):	96.00	96.00	96.00	96.00	96.00
Status:	ONSITE	ONSITE	ONSITE	ONSITE	ONSITE
Time of Conc. (min):	15.00	15.00	15.00	15.00	15.00
Lag Time (hr):	0.00	0.00	0.00	0.00	0.00
Area (acres):	3.77	38.30	29.24	19.15	10.83
Curve Number:	60.00	56.00	57.00	55.00	53.00
DCIA (%):	0.00	0.00	0.00	0.00	0.00
Time Max (hrs):	59.00	59.00	59.00	59.00	59.00
Flow Max (cfs):	5.62	51.03	40.13	24.74	13.11
Runoff Volume (in):	5.89	5.30	5.45	5.16	4.86
Runoff Volume (cf):	80596	737283	578516	358364	190987

DOES NOT EXCEED PREVIOUSLY APPROVED PROJECTED RUNOFF CALCULATIONS

DESIGN OK

25YR96HR STORM EVENT

********** Basin Summary - KINGSNO **********

***					
Basin Name:	999	2	3	4	5
Group Name:	BASE	BASE	BASE	BASE	BASE
Node Name:	999	2	3	4	5
Hydrograph Type:	SB	SB	SB	SB	SB
Spec Time Inc (sec):	60.00	60.00	60.00	60.00	60.00
Comp Time Inc (sec):	60.00	60.00	60.00	60.00	60.00
Rainfall File:	SJRWMD96	SJRWMD96	SJRWMD96	SJRWMD96	SJRWMD96
Rainfall Amount (in):	11.20	11.20	11.20	11.20	11.20
Storm Duration (hr):	96.00	96.00	96.00	96.00	96.00
Status:	ONSITE	ONSITE	ONSITE	ONSITE	ONSITE
Time of Conc. (min):	15.00	15.00	15.00	15.00	15.00
Lag Time (hr):	0.00	0.00	0.00	0.00	0.00
Area (acres):	1.00	9.55	13.36	24.75	56.47
Curve Number:	1.00	47.00	53.00	60.00	59.00
DCIA (%):	0.00	0.00	0.00	0.00	0.00
Time Max (hrs):	0.00	59.00	59.00	59.00	59.00
Flow Max (cfs):	0.00	9.12	16.17	36.86	81.93
Runoff Volume (in):	0.00	3.96	4.86	5.89	5.74
Runoff Volume (cf):	0	137193	235603	529110	1177350

***					
Basin Name:	6	7	10	11	14
Group Name:	BASE	BASE	BASE	BASE	BASE
Node Name:	6	7	10	11	14
Hydrograph Type:	SB	SB	SB	SB	SB
Spec Time Inc (sec):	60.00	60.00	60.00	60.00	60.00
Comp Time Inc (sec):	60.00	60.00	60.00	60.00	60.00
Rainfall File:	SJRWMD96	SJRWMD96	SJRWMD96	SJRWMD96	SJRWMD96
Rainfall Amount (in):	11.20	11.20	11.20	11.20	11.20
Storm Duration (hr):	96.00	96.00	96.00	96.00	96.00
Status:	ONSITE	ONSITE	ONSITE	ONSITE	ONSITE
Time of Conc. (min):	15.00	15.00	15.00	15.00	15.00
Lag Time (hr):	0.00	0.00	0.00	0.00	0.00
Area (acres):	15.89	5.73	29.08	10.30	5.40
Curve Number:	53.00	50.00	56.00	61.00	63.00
DCIA (%):	0.00	0.00	0.00	0.00	0.00
Time Max (hrs):	59.00	59.00	59.00	59.00	59.00
Flow Max (cfs):	19.23	6.21	38.75	15.73	8.65
Runoff Volume (in):	4.86	4.41	5.30	6.03	6.32
Runoff Volume (cf):	280220	91713	559796	225623	123945

***

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.01) [1]

KINGS RIDGE NORTH

********** Input Report **********

--------Class: Node----------

Name: 10 Base Flow(cfs): 0 Init Stage(ft): 136
Group: BASE Length(ft): 0 Warn Stage(ft): 146
Comment:

Stage(ft)	Area(ac)
136	0.53
137	0.59
138	0.66
139	0.73
140	0.8
141	0.87
142	0.95
143	1.03
144	1.11
145	1.19
146	1.27

--------Class: Node----------

Name: 11 Base Flow(cfs): 0 Init Stage(ft): 163
Group: BASE Length(ft): 0 Warn Stage(ft): 171
Comment:

Stage(ft)	Area(ac)
163	0.29
164	0.33
165	0.37
166	0.42
167	0.47
168	0.53
169	0.58
170	0.64
171	0.7

--------Class: Node----------

Name: 13 Base Flow(cfs): 0 Init Stage(ft): 157
Group: BASE Length(ft): 0 Warn Stage(ft): 162
Comment:

Stage(ft)	Area(ac)
157	0.031
158	0.4
159	0.06
160	0.09
161	0.11
162	0.14

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.01) [2]

KINGS RIDGE NORTH

********** Input Report **********

--------Class: Node----------

Name: 14 Base Flow(cfs): 0 Init Stage(ft): 142
Group: BASE Length(ft): 0 Warn Stage(ft): 149
Comment:

Stage(ft)	Area(ac)
142	0.18
143	0.21
144	0.26
145	0.3
146	0.34
147	0.39
148	0.44
149	0.49

--------Class: Node----------

Name: 16 Base Flow(cfs): 0 Init Stage(ft): 80
Group: BASE Length(ft): 0 Warn Stage(ft): 90
Comment:

Stage(ft)	Area(ac)
80	0.45
81	0.53
82	0.61
83	0.69
84	0.77
85	0.86
86	0.95
87	1.04
88	1.25
89	1.53
90	1.81

--------Class: Node----------

Name: 2 Base Flow(cfs): 0 Init Stage(ft): 248
Group: BASE Length(ft): 0 Warn Stage(ft): 250
Comment:

Stage(ft)	Area(ac)
248	2.196
249	2.323
250	2.452

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.01) [3]

KINGS RIDGE NORTH

********** Input Report **********

--------Class: Node----------

Name: 3 Base Flow(cfs): 0 Init Stage(ft): 237
Group: BASE Length(ft): 0 Warn Stage(ft): 243
Comment:

Stage(ft)	Area(ac)
237	0.51
238	0.59
239	0.67
240	0.75
241	0.84
242	0.93
243	1.02

--------Class: Node----------

Name: 4 Base Flow(cfs): 0 Init Stage(ft): 227
Group: BASE Length(ft): 0 Warn Stage(ft): 233
Comment:

Stage(ft)	Area(ac)
227	1.12
228	1.21
229	1.31
230	1.4
231	1.5
232	1.6
233	1.7

--------Class: Node----------

Name: 5 Base Flow(cfs): 0 Init Stage(ft): 129
Group: BASE Length(ft): 0 Warn Stage(ft): 135
Comment:

Stage(ft)	Area(ac)
129	1.98
130	2.12
131	2.25
132	2.39
133	2.53
134	2.67
135	2.81

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.01) [4]
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KINGS RIDGE NORTH

********** Input Report **********

--------Class: Node----------

Name: 6 Base Flow(cfs): 0 Init Stage(ft): 233
Group: BASE Length(ft): 0 Warn Stage(ft): 239
Comment:

Stage(ft)	Area(ac)
233	0.933
234	1.052
235	1.176
236	1.305
237	1.439
238	1.578
239	1.723

--------Class: Node----------

Name: 7 Base Flow(cfs): 0 Init Stage(ft): 206
Group: BASE Length(ft): 0 Warn Stage(ft): 212
Comment:

Stage(ft)	Area(ac)
206	0.25
207	0.28
208	0.32
209	0.36
210	0.41
211	0.45
212	0.5

--------Class: Node----------

Name: 999 Base Flow(cfs): 0 Init Stage(ft): 87
Group: BASE Length(ft): 0 Warn Stage(ft): 89
Comment:

Time(hrs)	Stage(ft)
0	87
30	87.5
60	88
96	88.6

--------Class: Basin----------

Basin: 1 Node: 1 Status: On Site Type: Santa Barbara
Group: BASE
Rainfall File: SJRWMD96 Storm Duration(hrs): 96
Rainfall Amount(in): 11.2 Lag Time(hrs): 0
Time Increment(min): 60 Concentration Time(min): 15
Area(ac): 29.24 DCIA(%): 0
Curve #: 57

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.01) [5]

KINGS RIDGE NORTH

********** Input Report **********

--------Class: Basin--------
Basin: 10 Node: 10 Status: On Site Type: Santa Barbara
Group: BASE
Rainfall File: SJRWMD96 Storm Duration(hrs): 96
Rainfall Amount(in): 11.2 Lag Time(hrs): 0
Time Increment(min): 60 Concentration Time(min): 15
Area(ac): 29.08 DCIA(%): 0
Curve #: 56

--------Class: Basin--------
Basin: 11 Node: 11 Status: On Site Type: Santa Barbara
Group: BASE
Rainfall File: SJRWMD96 Storm Duration(hrs): 96
Rainfall Amount(in): 11.2 Lag Time(hrs): 0
Time Increment(min): 60 Concentration Time(min): 15
Area(ac): 10.3 DCIA(%): 0
Curve #: 61

--------Class: Basin--------
Basin: 12 Node: 12 Status: On Site Type: Santa Barbara
Group: BASE
Rainfall File: SJRWMD96 Storm Duration(hrs): 96
Rainfall Amount(in): 11.2 Lag Time(hrs): 0
Time Increment(min): 60 Concentration Time(min): 15
Area(ac): 19.15 DCIA(%): 0
Curve #: 55

--------Class: Basin--------
Basin: 13 Node: 13 Status: On Site Type: Santa Barbara
Group: BASE
Rainfall File: SJRWMD96 Storm Duration(hrs): 96
Rainfall Amount(in): 11.2 Lag Time(hrs): 0
Time Increment(min): 60 Concentration Time(min): 15
Area(ac): 3.77 DCIA(%): 0
Curve #: 60

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.01) [6]

KINGS RIDGE NORTH

********** Input Report **********

--------Class: Basin----------

Basin: 14 Node: 14 Status: On Site Type: Santa Barbara
Group: BASE
Rainfall File: SJRWMD96 Storm Duration(hrs): 96
Rainfall Amount(in): 11.2 Lag Time(hrs): 0
Time Increment(min): 60 Concentration Time(min): 15
Area(ac): 5.4 DCIA(%): 0
Curve #: 63

--------Class: Basin----------

Basin: 15 Node: 15 Status: On Site Type: Santa Barbara
Group: BASE
Rainfall File: SJRWMD96 Storm Duration(hrs): 96
Rainfall Amount(in): 11.2 Lag Time(hrs): 0
Time Increment(min): 60 Concentration Time(min): 15
Area(ac): 10.83 DCIA(%): 0
Curve #: 53

--------Class: Basin----------

Basin: 16 Node: 16 Status: On Site Type: Santa Barbara
Group: BASE
Rainfall File: SJRWMD96 Storm Duration(hrs): 96
Rainfall Amount(in): 11.2 Lag Time(hrs): 0
Time Increment(min): 60 Concentration Time(min): 15
Area(ac): 38.3 DCIA(%): 0
Curve #: 56

--------Class: Basin----------

Basin: 2 Node: 2 Status: On Site Type: Santa Barbara
Group: BASE
Rainfall File: SJRWMD96 Storm Duration(hrs): 96
Rainfall Amount(in): 11.2 Lag Time(hrs): 0
Time Increment(min): 60 Concentration Time(min): 15
Area(ac): 9.55 DCIA(%): 0
Curve #: 47

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.01) [7]

KINGS RIDGE NORTH

********** Input Report **********

--------Class: Basin--------

Basin: 3 Node: 3 Status: On Site Type: Santa Barbara
Group: BASE
Rainfall File: SJRWMD96 Storm Duration(hrs): 96
Rainfall Amount(in): 11.2 Lag Time(hrs): 0
Time Increment(min): 60 Concentration Time(min): 15
Area(ac): 13.36 DCIA(%): 0
Curve #: 53

--------Class: Basin--------

Basin: 4 Node: 4 Status: On Site Type: Santa Barbara
Group: BASE
Rainfall File: SJRWMD96 Storm Duration(hrs): 96
Rainfall Amount(in): 11.2 Lag Time(hrs): 0
Time Increment(min): 60 Concentration Time(min): 15
Area(ac): 24.75 DCIA(%): 0
Curve #: 60

--------Class: Basin--------

Basin: 5 Node: 5 Status: On Site Type: Santa Barbara
Group: BASE
Rainfall File: SJRWMD96 Storm Duration(hrs): 96
Rainfall Amount(in): 11.2 Lag Time(hrs): 0
Time Increment(min): 60 Concentration Time(min): 15
Area(ac): 56.47 DCIA(%): 0
Curve #: 59

--------Class: Basin--------

Basin: 6 Node: 6 Status: On Site Type: Santa Barbara
Group: BASE
Rainfall File: SJRWMD96 Storm Duration(hrs): 96
Rainfall Amount(in): 11.2 Lag Time(hrs): 0
Time Increment(min): 60 Concentration Time(min): 15
Area(ac): 15.89 DCIA(%): 0
Curve #: 53

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.01) [8]

KINGS RIDGE NORTH

********** Input Report **********

--------Class: Basin----------

Basin: 7 Node: 7 Status: On Site Type: Santa Barbara
Group: BASE
Rainfall File: SJRWMD96 Storm Duration(hrs): 96
Rainfall Amount(in): 11.2 Lag Time(hrs): 0
Time Increment(min): 60 Concentration Time(min): 15
Area(ac): 5.73 DCIA(%): 0
Curve #: 50

--------Class: Basin----------

Basin: 999 Node: 999 Status: On Site Type: Santa Barbara
Group: BASE
Rainfall File: SJRWMD96 Storm Duration(hrs): 96
Rainfall Amount(in): 11.2 Lag Time(hrs): 0
Time Increment(min): 60 Concentration Time(min): 15
Area(ac): 1 DCIA(%): 0
Curve #: 1

--------Class: Weir----------

Name: 13 From Node: 13
Group: BASE To Node: 14
Count: 1

Type: Horiz Flow: Both Geometry: Trapezoidal

Bottom Width(ft): 5
Left Side Slope(h/v): 4
Right Side Slope(h/v): 4
Invert(ft): 161.5
Control Elev(ft): 161.75
Structure Opening(ft): 5 TABLE
Bottom Clip(ft): 0
Top Clip(ft): 0
Weir Discharge Coef: 3.2
Orifice Discharge Coef: 0.062

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.01) [9]
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KINGS RIDGE NORTH

********** Input Report **********
--------Class: Weir----------
Name: 999 From Node: 16
Group: BASE To Node: 999
Count: 1

Type: Horiz Flow: Both Geometry: Trapezoidal

Bottom Width(ft): 10
Left Side Slope(h/v): 4
Right Side Slope(h/v): 4
Invert(ft): 89.25
Control Elev(ft): 89.75
Structure Opening(ft): 0 TABLE
Bottom Clip(ft): 0
Top Clip(ft): 0
Weir Discharge Coef: 3.2
Orifice Discharge Coef: 0.062

--------Class: Simulation----------
C:\ICPR2\DATA\KINGSNO
Execution: Hydraulics
Header: 25YR96HR STORM EVENT

---------HYDRAULICS----------HYDROLOGY----------
Max Delta Z (ft): 1
Delta Z Factor: 0.05 Override Defaults: No
Time Step Optimizer: 10
Drop Structure Optimizer: 10
Sim Start Time(hrs): 0
Sim End Time(hrs): 96
Min Calc Time(sec): 15
Max Calc Time(sec): 60

To Hour:	PInc(min):	To Hour:	PInc(min):
96	60	96	60

---------GROUP SELECTIONS----------
+ BASE [01/06/00]

ICPR NODE MAX CONDITIONS
(STORMWATER ROUTING SUMMARY)
25 YEAR-96 HOUR STORM

25YR96HR STORM EVENT

********** Node Maximum Conditions - KINGSNO **********

(Time units - hours)

Node Name	Group Name	Max Time Conditions	Max Stage (ft)	Warning Stage (ft)	Max Delta Stage (ft)	Max Surface Area (sf)	Max Time Inflow	Max Inflow (cfs)	Max Time Outflow	Max Outflow (cfs)
10	BASE	96.00	144.11	146.00	0.0375	48740.98	59.00	34.29	0.00	0.00
11	BASE	60.80	167.66	171.00	0.0264	22188.70	59.00	12.82	0.00	0.00
13	BASE	64.33	161.73	162.00	0.0438	5739.15	59.00	4.34	0.00	0.00
14	BASE	60.75	145.95	149.00	0.0237	14721.97	59.00	7.20	0.00	0.00
16	BASE	96.00	88.60	90.00	0.0498	61813.72	59.00	45.67	0.00	0.00
2	BASE	67.61	248.83	250.00	0.0044	100231.92	59.00	8.98	0.00	0.00
3	BASE	96.00	240.18	243.00	0.0145	33368.67	59.00	11.84	0.00	0.00
4	BASE	64.23	232.28	233.00	0.0196	70931.11	59.00	35.89	0.00	0.00
5	BASE	96.00	134.65	135.00	0.0181	120262.22	59.00	54.24	0.00	0.00
6	BASE	96.00	234.79	239.00	0.0089	50081.87	59.00	11.11	0.00	0.00
7	BASE	60.71	208.09	212.00	0.0113	14093.81	59.00	4.28	0.00	0.00
999	BASE	96.00	88.60	89.00	0.0003	0.00	0.00	0.00	0.00	0.00

ICPR ROUTED HYDROGRAPH
BY BASIN
WITH INFILTRATION INPUTED FROM "PONDS"

25YR96HR STORM EVENT

********** Node Time Series by Node - KINGSNO **********

			Inflow					Link
Time (hrs)	Stage (ft)	Surface Ar.(ac)	Base Q (cfs)	Onsite (cfs)	Offsite (cfs)	Bndry Q (cfs)	Link Q (cfs)	Outflow (cfs)
*** Group: BASE		Node: 10						
0.000	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
1.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
2.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
3.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
4.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
5.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
6.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
7.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
8.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
9.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
10.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
11.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
12.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
13.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
14.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
15.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
16.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
17.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
18.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
19.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
20.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
21.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
22.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
23.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
24.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
25.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
26.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
27.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
28.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
29.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
30.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
31.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
32.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
33.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
34.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
35.004	136.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
36.004	136.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00
37.004	136.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00
38.004	136.00	0.00	0.00	0.01	-0.01	0.00	0.00	0.00
39.004	136.00	0.00	0.00	0.03	-0.04	0.00	0.00	0.00
40.010	136.00	0.53	0.00	0.07	-0.07	0.00	0.00	0.00
41.001	136.00	0.53	0.00	0.10	-0.10	0.00	0.00	0.00
42.001	136.00	0.53	0.00	0.13	-0.13	0.00	0.00	0.00
43.001	136.00	0.53	0.00	0.16	-0.16	0.00	0.00	0.00
44.001	136.00	0.53	0.00	0.18	-0.18	0.00	0.00	0.00

45.001	136.00	0.53	0.00	0.21	-0.21	0.00	0.00	0.00

25YR96HR STORM EVENT

********** Node Time Series by Node - KINGSNO **********

Time (hrs)	Stage (ft)	Surface Ar.(ac)	Inflow Base Q (cfs)	Inflow Onsite (cfs)	Inflow Offsite (cfs)	Inflow Bndry Q (cfs)	Inflow Link Q (cfs)	Link Outflow (cfs)
46.001	136.00	0.53	0.00	0.23	-0.23	0.00	0.00	0.00
47.014	136.00	0.00	0.00	0.26	-0.28	0.00	0.00	0.00
48.008	136.00	0.53	0.00	0.35	-0.35	0.00	0.00	0.00
49.008	136.00	0.53	0.00	0.43	-0.44	0.00	0.00	0.00
50.008	136.00	0.53	0.00	0.52	-0.52	0.00	0.00	0.00
51.002	136.00	0.00	0.00	0.61	-0.63	0.00	0.00	0.00
52.009	136.00	0.53	0.00	0.76	-0.76	0.00	0.00	0.00
53.012	136.00	0.00	0.00	0.91	-0.93	0.00	0.00	0.00
54.012	136.00	0.53	0.00	1.14	-1.14	0.00	0.00	0.00
55.008	136.00	0.00	0.00	1.36	-1.46	0.00	0.00	0.00
56.008	136.00	0.53	0.00	1.97	-1.96	0.00	0.00	0.00
57.004	136.00	0.00	0.00	2.52	-2.77	0.00	0.00	0.00
58.004	136.03	0.53	0.00	4.22	-3.60	0.00	0.00	0.00
59.001	138.40	0.69	0.00	38.75	-4.45	0.00	0.00	0.00
60.008	141.70	0.93	0.00	35.17	-5.91	0.00	0.00	0.00
61.013	142.75	1.01	0.00	4.95	-9.24	0.00	0.00	0.00
62.013	142.57	1.00	0.00	6.89	-7.13	0.00	0.00	0.00
63.013	142.64	1.00	0.00	4.35	-2.31	0.00	0.00	0.00
64.013	142.81	1.01	0.00	3.93	-1.88	0.00	0.00	0.00
65.013	142.94	1.03	0.00	2.79	-1.65	0.00	0.00	0.00
66.013	143.05	1.03	0.00	3.19	-1.51	0.00	0.00	0.00
67.013	143.19	1.04	0.00	3.07	-1.41	0.00	0.00	0.00
68.013	143.29	1.05	0.00	2.43	-1.32	0.00	0.00	0.00
69.013	143.37	1.06	0.00	1.97	-1.25	0.00	0.00	0.00
70.013	143.43	1.06	0.00	2.14	-1.19	0.00	0.00	0.00
71.013	143.50	1.07	0.00	2.08	-1.14	0.00	0.00	0.00
72.013	143.55	1.07	0.00	1.43	-1.08	0.00	0.00	0.00
73.013	143.57	1.08	0.00	0.99	-1.03	0.00	0.00	0.00
74.013	143.57	1.08	0.00	1.14	-0.99	0.00	0.00	0.00
75.013	143.58	1.08	0.00	1.09	-0.95	0.00	0.00	0.00
76.013	143.59	1.08	0.00	1.11	-0.92	0.00	0.00	0.00
77.013	143.61	1.08	0.00	1.12	-0.90	0.00	0.00	0.00
78.013	143.63	1.08	0.00	1.12	-0.88	0.00	0.00	0.00
79.013	143.65	1.08	0.00	1.12	-0.86	0.00	0.00	0.00
80.013	143.67	1.08	0.00	1.12	-0.84	0.00	0.00	0.00
81.013	143.69	1.09	0.00	1.11	-0.82	0.00	0.00	0.00
82.013	143.71	1.09	0.00	1.12	-0.81	0.00	0.00	0.00
83.013	143.74	1.09	0.00	1.12	-0.80	0.00	0.00	0.00
84.013	143.76	1.09	0.00	1.12	-0.79	0.00	0.00	0.00
85.013	143.79	1.09	0.00	1.12	-0.78	0.00	0.00	0.00
86.013	143.81	1.09	0.00	1.12	-0.77	0.00	0.00	0.00
87.013	143.84	1.10	0.00	1.12	-0.76	0.00	0.00	0.00
88.013	143.87	1.10	0.00	1.13	-0.75	0.00	0.00	0.00
89.013	143.90	1.10	0.00	1.14	-0.74	0.00	0.00	0.00
90.013	143.93	1.10	0.00	1.14	-0.74	0.00	0.00	0.00

91.013	143.96	1.11	0.00	1.14	-0.73	0.00	0.00	0.00
92.013	143.99	1.11	0.00	1.14	-0.72	0.00	0.00	0.00

25YR96HR STORM EVENT

********** Node Time Series by Node - KINGSNO **********

Time (hrs)	Stage (ft)	Surface Ar.(ac)	Inflow: Base Q (cfs)	Inflow: Onsite (cfs)	Inflow: Offsite (cfs)	Inflow: Bndry Q (cfs)	Inflow: Link Q (cfs)	Link Outflow (cfs)
93.013	144.02	1.11	0.00	1.13	-0.72	0.00	0.00	0.00
94.013	144.05	1.11	0.00	1.14	-0.71	0.00	0.00	0.00
95.013	144.08	1.12	0.00	1.13	-0.69	0.00	0.00	0.00
96.005	144.11	1.12	0.00	0.38	-0.00	0.00	0.00	0.00
*** Group: BASE		Node: 11						
0.000	163.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
1.004	163.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
2.004	163.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
3.004	163.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
4.004	163.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
5.004	163.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
6.004	163.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
7.004	163.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
8.004	163.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
9.004	163.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
10.004	163.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
11.004	163.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
12.004	163.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
13.004	163.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
14.004	163.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
15.004	163.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
16.004	163.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
17.004	163.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
18.004	163.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
19.004	163.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
20.004	163.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
21.004	163.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
22.004	163.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
23.004	163.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
24.004	163.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
25.004	163.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
26.004	163.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
27.004	163.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
28.004	163.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
29.004	163.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
30.004	163.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
31.004	163.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00
32.004	163.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00
33.004	163.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00
34.004	163.00	0.00	0.00	0.01	-0.01	0.00	0.00	0.00
35.004	163.00	0.29	0.00	0.02	-0.02	0.00	0.00	0.00
36.004	163.00	0.29	0.00	0.03	-0.03	0.00	0.00	0.00
37.004	163.00	0.29	0.00	0.05	-0.05	0.00	0.00	0.00
38.004	163.00	0.29	0.00	0.06	-0.06	0.00	0.00	0.00

39.004	163.00	0.29	0.00	0.07	-0.07	0.00	0.00	0.00
40.010	163.00	0.29	0.00	0.08	-0.08	0.00	0.00	0.00

25YR96HR STORM EVENT

********** Node Time Series by Node - KINGSNO **********

Time (hrs)	Stage (ft)	Surface Ar.(ac)	Inflow Base Q (cfs)	Inflow Onsite (cfs)	Inflow Offsite (cfs)	Inflow Bndry Q (cfs)	Inflow Link Q (cfs)	Link Outflow (cfs)
41.001	163.00	0.29	0.00	0.10	-0.10	0.00	0.00	0.00
42.001	163.00	0.29	0.00	0.11	-0.11	0.00	0.00	0.00
43.001	163.00	0.29	0.00	0.12	-0.12	0.00	0.00	0.00
44.001	163.00	0.29	0.00	0.13	-0.13	0.00	0.00	0.00
45.001	163.00	0.29	0.00	0.13	-0.13	0.00	0.00	0.00
46.001	163.00	0.29	0.00	0.14	-0.14	0.00	0.00	0.00
47.014	163.00	0.00	0.00	0.15	-0.16	0.00	0.00	0.00
48.008	163.00	0.29	0.00	0.20	-0.20	0.00	0.00	0.00
49.008	163.00	0.29	0.00	0.24	-0.24	0.00	0.00	0.00
50.008	163.00	0.29	0.00	0.28	-0.28	0.00	0.00	0.00
51.002	163.00	0.00	0.00	0.32	-0.32	0.00	0.00	0.00
52.009	163.00	0.29	0.00	0.39	-0.38	0.00	0.00	0.00
53.012	163.00	0.00	0.00	0.45	-0.46	0.00	0.00	0.00
54.012	163.00	0.29	0.00	0.55	-0.55	0.00	0.00	0.00
55.008	163.00	0.00	0.00	0.64	-0.68	0.00	0.00	0.00
56.008	163.00	0.29	0.00	0.90	-0.90	0.00	0.00	0.00
57.004	163.00	0.00	0.00	1.13	-1.24	0.00	0.00	0.00
58.004	163.00	0.00	0.00	1.84	-2.03	0.00	0.00	0.00
59.001	164.62	0.35	0.00	15.73	-2.91	0.00	0.00	0.00
60.008	166.97	0.47	0.00	14.02	-3.75	0.00	0.00	0.00
61.013	167.61	0.51	0.00	1.78	-4.42	0.00	0.00	0.00
62.013	167.20	0.48	0.00	2.69	-4.97	0.00	0.00	0.00
63.013	166.83	0.46	0.00	1.65	-3.57	0.00	0.00	0.00
64.013	166.65	0.45	0.00	1.51	-1.56	0.00	0.00	0.00
65.013	166.63	0.45	0.00	1.06	-1.23	0.00	0.00	0.00
66.013	166.63	0.45	0.00	1.22	-1.07	0.00	0.00	0.00
67.013	166.66	0.45	0.00	1.17	-0.96	0.00	0.00	0.00
68.013	166.68	0.45	0.00	0.93	-0.88	0.00	0.00	0.00
69.013	166.68	0.45	0.00	0.75	-0.81	0.00	0.00	0.00
70.013	166.68	0.45	0.00	0.81	-0.77	0.00	0.00	0.00
71.013	166.69	0.45	0.00	0.79	-0.72	0.00	0.00	0.00
72.013	166.68	0.45	0.00	0.54	-0.68	0.00	0.00	0.00
73.013	166.65	0.45	0.00	0.37	-0.64	0.00	0.00	0.00
74.013	166.61	0.45	0.00	0.43	-0.60	0.00	0.00	0.00
75.013	166.58	0.45	0.00	0.41	-0.58	0.00	0.00	0.00
76.013	166.55	0.45	0.00	0.42	-0.56	0.00	0.00	0.00
77.013	166.53	0.45	0.00	0.42	-0.54	0.00	0.00	0.00
78.013	166.51	0.45	0.00	0.42	-0.52	0.00	0.00	0.00
79.013	166.49	0.44	0.00	0.42	-0.51	0.00	0.00	0.00
80.013	166.47	0.44	0.00	0.42	-0.49	0.00	0.00	0.00
81.013	166.46	0.44	0.00	0.42	-0.48	0.00	0.00	0.00
82.013	166.45	0.44	0.00	0.42	-0.47	0.00	0.00	0.00
83.013	166.44	0.44	0.00	0.42	-0.46	0.00	0.00	0.00
84.013	166.44	0.44	0.00	0.42	-0.45	0.00	0.00	0.00
85.013	166.43	0.44	0.00	0.42	-0.44	0.00	0.00	0.00

86.013	166.43	0.44	0.00	0.42	-0.44	0.00	0.00	0.00
87.013	166.43	0.44	0.00	0.42	-0.43	0.00	0.00	0.00

25YR96HR STORM EVENT

********** Node Time Series by Node - KINGSNO **********

Time (hrs)	Stage (ft)	Surface Ar.(ac)	Inflow: Base Q (cfs)	Onsite (cfs)	Offsite (cfs)	Bndry Q (cfs)	Link Q (cfs)	Link Outflow (cfs)
88.013	166.43	0.44	0.00	0.43	-0.42	0.00	0.00	0.00
89.013	166.43	0.44	0.00	0.43	-0.42	0.00	0.00	0.00
90.013	166.43	0.44	0.00	0.43	-0.41	0.00	0.00	0.00
91.013	166.43	0.44	0.00	0.43	-0.41	0.00	0.00	0.00
92.013	166.44	0.44	0.00	0.43	-0.40	0.00	0.00	0.00
93.013	166.44	0.44	0.00	0.43	-0.40	0.00	0.00	0.00
94.013	166.45	0.44	0.00	0.43	-0.40	0.00	0.00	0.00
95.013	166.46	0.44	0.00	0.42	-0.38	0.00	0.00	0.00
96.005	166.47	0.44	0.00	0.14	-0.00	0.00	0.00	0.00
*** Group: BASE		Node: 13						
0.000	157.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
1.004	157.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
2.004	157.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
3.004	157.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
4.004	157.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
5.004	157.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
6.004	157.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
7.004	157.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
8.004	157.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
9.004	157.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
10.004	157.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
11.004	157.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
12.004	157.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
13.004	157.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
14.004	157.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
15.004	157.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
16.004	157.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
17.004	157.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
18.004	157.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
19.004	157.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
20.004	157.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
21.004	157.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
22.004	157.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
23.004	157.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
24.004	157.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
25.004	157.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
26.004	157.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
27.004	157.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
28.004	157.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
29.004	157.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
30.004	157.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
31.004	157.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
32.004	157.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00
33.004	157.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00

34.004	157.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00
35.004	157.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00

25YR96HR STORM EVENT

********** Node Time Series by Node - KINGSNO **********

Time (hrs)	Stage (ft)	Surface Ar.(ac)	Inflow Base Q (cfs)	Inflow Onsite (cfs)	Inflow Offsite (cfs)	Inflow Bndry Q (cfs)	Inflow Link Q (cfs)	Link Outflow (cfs)
36.004	157.00	0.03	0.00	0.01	-0.01	0.00	0.00	0.00
37.004	157.00	0.03	0.00	0.01	-0.01	0.00	0.00	0.00
38.004	157.00	0.03	0.00	0.02	-0.02	0.00	0.00	0.00
39.004	157.00	0.03	0.00	0.02	-0.02	0.00	0.00	0.00
40.010	157.00	0.03	0.00	0.03	-0.03	0.00	0.00	0.00
41.001	157.00	0.03	0.00	0.03	-0.03	0.00	0.00	0.00
42.001	157.00	0.03	0.00	0.03	-0.03	0.00	0.00	0.00
43.001	157.00	0.03	0.00	0.04	-0.04	0.00	0.00	0.00
44.001	157.00	0.03	0.00	0.04	-0.04	0.00	0.00	0.00
45.001	157.00	0.03	0.00	0.04	-0.04	0.00	0.00	0.00
46.001	157.00	0.03	0.00	0.05	-0.05	0.00	0.00	0.00
47.014	157.00	0.00	0.00	0.05	-0.05	0.00	0.00	0.00
48.008	157.00	0.03	0.00	0.07	-0.07	0.00	0.00	0.00
49.008	157.00	0.03	0.00	0.08	-0.08	0.00	0.00	0.00
50.008	157.00	0.03	0.00	0.09	-0.09	0.00	0.00	0.00
51.002	157.00	0.00	0.00	0.11	-0.11	0.00	0.00	0.00
52.009	157.00	0.03	0.00	0.13	-0.13	0.00	0.00	0.00
53.012	157.00	0.00	0.00	0.16	-0.16	0.00	0.00	0.00
54.012	157.01	0.03	0.00	0.19	-0.18	0.00	0.00	0.00
55.008	157.05	0.05	0.00	0.22	-0.19	0.00	0.00	0.00
56.008	157.14	0.08	0.00	0.32	-0.21	0.00	0.00	0.00
57.004	157.25	0.12	0.00	0.40	-0.24	0.00	0.00	0.00
58.004	157.38	0.17	0.00	0.65	-0.30	0.00	0.00	0.00
59.001	158.04	0.38	0.00	5.61	-1.28	0.00	0.00	0.00
60.008	160.38	0.10	0.00	5.02	-1.60	0.00	0.00	0.00
61.013	161.56	0.13	0.00	0.65	-0.85	0.00	0.00	0.00
62.013	161.60	0.13	0.00	0.97	-0.66	0.00	0.00	0.00
63.013	161.70	0.13	0.00	0.60	-0.57	0.00	0.00	0.00
64.013	161.72	0.13	0.00	0.54	-0.51	0.00	0.00	0.00
65.013	161.71	0.13	0.00	0.38	-0.46	0.00	0.00	0.00
66.013	161.69	0.13	0.00	0.44	-0.43	0.00	0.00	0.00
67.013	161.70	0.13	0.00	0.42	-0.40	0.00	0.00	0.00
68.013	161.69	0.13	0.00	0.33	-0.38	0.00	0.00	0.00
69.013	161.65	0.13	0.00	0.27	-0.35	0.00	0.00	0.00
70.013	161.61	0.13	0.00	0.29	-0.34	0.00	0.00	0.00
71.013	161.59	0.13	0.00	0.29	-0.32	0.00	0.00	0.00
72.013	161.54	0.13	0.00	0.20	-0.30	0.00	0.00	0.00
73.013	161.46	0.12	0.00	0.14	-0.28	0.00	0.00	0.00
74.013	161.37	0.12	0.00	0.16	-0.27	0.00	0.00	0.00
75.013	161.30	0.12	0.00	0.15	-0.26	0.00	0.00	0.00
76.013	161.23	0.12	0.00	0.15	-0.25	0.00	0.00	0.00
77.013	161.16	0.11	0.00	0.15	-0.24	0.00	0.00	0.00
78.013	161.10	0.11	0.00	0.15	-0.23	0.00	0.00	0.00
79.013	161.05	0.11	0.00	0.15	-0.22	0.00	0.00	0.00
80.013	161.00	0.11	0.00	0.15	-0.22	0.00	0.00	0.00

81.013	160.95	0.11	0.00	0.15	-0.21	0.00	0.00	0.00
82.013	160.90	0.11	0.00	0.15	-0.21	0.00	0.00	0.00

25YR96HR STORM EVENT

********** Node Time Series by Node - KINGSNO **********

Time (hrs)	Stage (ft)	Surface Ar.(ac)	Inflow Base Q (cfs)	Inflow Onsite (cfs)	Inflow Offsite (cfs)	Inflow Bndry Q (cfs)	Inflow Link Q (cfs)	Link Outflow (cfs)
83.013	160.86	0.11	0.00	0.15	-0.20	0.00	0.00	0.00
84.013	160.82	0.11	0.00	0.15	-0.20	0.00	0.00	0.00
85.013	160.79	0.11	0.00	0.15	-0.20	0.00	0.00	0.00
86.013	160.76	0.11	0.00	0.15	-0.19	0.00	0.00	0.00
87.013	160.72	0.10	0.00	0.15	-0.19	0.00	0.00	0.00
88.013	160.70	0.10	0.00	0.15	-0.19	0.00	0.00	0.00
89.013	160.67	0.10	0.00	0.16	-0.18	0.00	0.00	0.00
90.013	160.65	0.10	0.00	0.16	-0.18	0.00	0.00	0.00
91.013	160.63	0.10	0.00	0.16	-0.18	0.00	0.00	0.00
92.013	160.61	0.10	0.00	0.15	-0.18	0.00	0.00	0.00
93.013	160.59	0.10	0.00	0.15	-0.18	0.00	0.00	0.00
94.013	160.57	0.10	0.00	0.15	-0.17	0.00	0.00	0.00
95.013	160.56	0.10	0.00	0.15	-0.17	0.00	0.00	0.00
96.005	160.58	0.10	0.00	0.05	-0.00	0.00	0.00	0.00
*** Group: BASE		Node: 14						
0.000	142.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
1.004	142.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
2.004	142.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
3.004	142.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
4.004	142.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
5.004	142.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
6.004	142.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
7.004	142.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
8.004	142.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
9.004	142.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
10.004	142.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
11.004	142.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
12.004	142.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
13.004	142.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
14.004	142.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
15.004	142.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
16.004	142.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
17.004	142.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
18.004	142.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
19.004	142.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
20.004	142.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
21.004	142.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
22.004	142.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
23.004	142.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
24.004	142.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
25.004	142.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
26.004	142.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
27.004	142.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
28.004	142.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00

29.004	142.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00
30.004	142.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00

25YR96HR STORM EVENT

********** Node Time Series by Node - KINGSNO **********

Time (hrs)	Stage (ft)	Surface Ar.(ac)	Inflow Base Q (cfs)	Inflow Onsite (cfs)	Inflow Offsite (cfs)	Inflow Bndry Q (cfs)	Inflow Link Q (cfs)	Link Outflow (cfs)
31.004	142.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00
32.004	142.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00
33.004	142.00	0.00	0.00	0.01	-0.01	0.00	0.00	0.00
34.004	142.00	0.18	0.00	0.02	-0.02	0.00	0.00	0.00
35.004	142.00	0.18	0.00	0.02	-0.02	0.00	0.00	0.00
36.004	142.00	0.18	0.00	0.03	-0.03	0.00	0.00	0.00
37.004	142.00	0.18	0.00	0.04	-0.04	0.00	0.00	0.00
38.004	142.00	0.18	0.00	0.04	-0.04	0.00	0.00	0.00
39.004	142.00	0.18	0.00	0.05	-0.05	0.00	0.00	0.00
40.010	142.00	0.18	0.00	0.06	-0.06	0.00	0.00	0.00
41.001	142.00	0.18	0.00	0.06	-0.06	0.00	0.00	0.00
42.001	142.00	0.18	0.00	0.07	-0.07	0.00	0.00	0.00
43.001	142.00	0.18	0.00	0.08	-0.08	0.00	0.00	0.00
44.001	142.00	0.18	0.00	0.08	-0.08	0.00	0.00	0.00
45.001	142.00	0.18	0.00	0.08	-0.08	0.00	0.00	0.00
46.001	142.00	0.18	0.00	0.09	-0.09	0.00	0.00	0.00
47.014	142.00	0.00	0.00	0.09	-0.10	0.00	0.00	0.00
48.008	142.00	0.18	0.00	0.12	-0.12	0.00	0.00	0.00
49.008	142.00	0.18	0.00	0.15	-0.14	0.00	0.00	0.00
50.008	142.00	0.18	0.00	0.17	-0.17	0.00	0.00	0.00
51.002	142.00	0.00	0.00	0.19	-0.19	0.00	0.00	0.00
52.009	142.00	0.18	0.00	0.23	-0.23	0.00	0.00	0.00
53.012	142.00	0.00	0.00	0.26	-0.27	0.00	0.00	0.00
54.012	142.00	0.18	0.00	0.32	-0.32	0.00	0.00	0.00
55.008	142.00	0.00	0.00	0.37	-0.39	0.00	0.00	0.00
56.008	142.00	0.18	0.00	0.52	-0.51	0.00	0.00	0.00
57.004	142.00	0.00	0.00	0.65	-0.71	0.00	0.00	0.00
58.004	142.00	0.00	0.00	1.04	-1.04	0.00	0.00	0.00
59.001	143.46	0.23	0.00	8.65	-1.45	0.00	0.00	0.00
60.008	145.41	0.32	0.00	7.66	-1.95	0.00	0.00	0.00
61.013	145.89	0.34	0.00	0.94	-2.82	0.00	0.00	0.00
62.013	145.56	0.32	0.00	1.46	-2.14	0.00	0.00	0.00
63.013	145.49	0.32	0.00	0.89	-0.79	0.00	0.00	0.00
64.013	145.53	0.32	0.00	0.81	-0.63	0.00	0.00	0.00
65.013	145.55	0.32	0.00	0.57	-0.54	0.00	0.00	0.00
66.013	145.58	0.32	0.00	0.65	-0.49	0.00	0.00	0.00
67.013	145.62	0.32	0.00	0.63	-0.45	0.00	0.00	0.00
68.013	145.65	0.33	0.00	0.50	-0.42	0.00	0.00	0.00
69.013	145.66	0.33	0.00	0.40	-0.39	0.00	0.00	0.00
70.013	145.67	0.33	0.00	0.44	-0.37	0.00	0.00	0.00
71.013	145.69	0.33	0.00	0.42	-0.36	0.00	0.00	0.00
72.013	145.69	0.33	0.00	0.29	-0.34	0.00	0.00	0.00
73.013	145.67	0.33	0.00	0.20	-0.32	0.00	0.00	0.00
74.013	145.65	0.33	0.00	0.23	-0.30	0.00	0.00	0.00
75.013	145.63	0.33	0.00	0.22	-0.29	0.00	0.00	0.00

76.013	145.61	0.32	0.00	0.23	-0.28	0.00	0.00	0.00
77.013	145.60	0.32	0.00	0.23	-0.27	0.00	0.00	0.00

25YR96HR STORM EVENT

********** Node Time Series by Node - KINGSNO **********

Time (hrs)	Stage (ft)	Surface Ar.(ac)	Inflow: Base Q (cfs)	Onsite (cfs)	Offsite (cfs)	Bndry Q (cfs)	Link Q (cfs)	Link Outflow (cfs)
78.013	145.59	0.32	0.00	0.23	-0.26	0.00	0.00	0.00
79.013	145.58	0.32	0.00	0.23	-0.25	0.00	0.00	0.00
80.013	145.58	0.32	0.00	0.23	-0.25	0.00	0.00	0.00
81.013	145.57	0.32	0.00	0.23	-0.24	0.00	0.00	0.00
82.013	145.57	0.32	0.00	0.23	-0.24	0.00	0.00	0.00
83.013	145.57	0.32	0.00	0.23	-0.23	0.00	0.00	0.00
84.013	145.57	0.32	0.00	0.23	-0.23	0.00	0.00	0.00
85.013	145.57	0.32	0.00	0.23	-0.22	0.00	0.00	0.00
86.013	145.57	0.32	0.00	0.23	-0.22	0.00	0.00	0.00
87.013	145.57	0.32	0.00	0.23	-0.22	0.00	0.00	0.00
88.013	145.57	0.32	0.00	0.23	-0.21	0.00	0.00	0.00
89.013	145.58	0.32	0.00	0.23	-0.21	0.00	0.00	0.00
90.013	145.58	0.32	0.00	0.23	-0.21	0.00	0.00	0.00
91.013	145.59	0.32	0.00	0.23	-0.21	0.00	0.00	0.00
92.013	145.59	0.32	0.00	0.23	-0.21	0.00	0.00	0.00
93.013	145.60	0.32	0.00	0.23	-0.20	0.00	0.00	0.00
94.013	145.61	0.32	0.00	0.23	-0.20	0.00	0.00	0.00
95.013	145.61	0.32	0.00	0.23	-0.19	0.00	0.00	0.00
96.005	145.63	0.33	0.00	0.08	-0.00	0.00	0.00	0.00
*** Group: BASE		Node: 16						
0.000	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
1.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
2.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
3.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
4.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
5.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
6.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
7.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
8.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
9.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
10.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
11.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
12.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
13.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
14.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
15.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
16.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
17.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
18.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
19.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
20.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
21.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
22.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
23.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00

24.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
25.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00

25YR96HR STORM EVENT

********** Node Time Series by Node - KINGSNO **********

			Inflow					
Time (hrs)	Stage (ft)	Surface Ar.(ac)	Base Q (cfs)	Onsite (cfs)	Offsite (cfs)	Bndry Q (cfs)	Link Q (cfs)	Link Outflow (cfs)
26.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
27.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
28.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
29.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
30.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
31.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
32.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
33.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
34.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
35.004	80.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
36.004	80.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00
37.004	80.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00
38.004	80.00	0.00	0.00	0.01	-0.02	0.00	0.00	0.00
39.004	80.00	0.00	0.00	0.05	-0.05	0.00	0.00	0.00
40.010	80.00	0.45	0.00	0.09	-0.09	0.00	0.00	0.00
41.001	80.00	0.45	0.00	0.13	-0.13	0.00	0.00	0.00
42.001	80.00	0.45	0.00	0.17	-0.17	0.00	0.00	0.00
43.001	80.00	0.45	0.00	0.21	-0.21	0.00	0.00	0.00
44.001	80.00	0.45	0.00	0.24	-0.24	0.00	0.00	0.00
45.001	80.00	0.45	0.00	0.27	-0.27	0.00	0.00	0.00
46.001	80.00	0.45	0.00	0.31	-0.31	0.00	0.00	0.00
47.014	80.00	0.00	0.00	0.34	-0.36	0.00	0.00	0.00
48.008	80.00	0.45	0.00	0.46	-0.46	0.00	0.00	0.00
49.008	80.00	0.45	0.00	0.57	-0.57	0.00	0.00	0.00
50.008	80.00	0.45	0.00	0.68	-0.69	0.00	0.00	0.00
51.002	80.00	0.00	0.00	0.81	-0.82	0.00	0.00	0.00
52.009	80.00	0.45	0.00	1.01	-1.01	0.00	0.00	0.00
53.012	80.00	0.00	0.00	1.20	-1.23	0.00	0.00	0.00
54.012	80.00	0.45	0.00	1.50	-1.50	0.00	0.00	0.00
55.008	80.00	0.00	0.00	1.80	-1.92	0.00	0.00	0.00
56.008	80.00	0.45	0.00	2.59	-2.57	0.00	0.00	0.00
57.004	80.00	0.00	0.00	3.32	-3.53	0.00	0.00	0.00
58.004	80.10	0.46	0.00	5.56	-4.12	0.00	0.00	0.00
59.001	83.40	0.72	0.00	51.03	-5.36	0.00	0.00	0.00
60.008	87.31	1.10	0.00	46.32	-8.34	0.00	0.00	0.00
61.013	88.42	1.37	0.00	6.52	-11.26	0.00	0.00	0.00
62.013	88.18	1.30	0.00	9.07	-12.06	0.00	0.00	0.00
63.013	87.94	1.24	0.00	5.73	-10.03	0.00	0.00	0.00
64.013	87.76	1.20	0.00	5.17	-6.15	0.00	0.00	0.00
65.013	87.74	1.19	0.00	3.67	-3.45	0.00	0.00	0.00
66.013	87.79	1.21	0.00	4.20	-2.78	0.00	0.00	0.00
67.013	87.90	1.23	0.00	4.04	-2.43	0.00	0.00	0.00
68.013	87.98	1.25	0.00	3.21	-2.20	0.00	0.00	0.00
69.013	88.04	1.26	0.00	2.60	-2.02	0.00	0.00	0.00
70.013	88.08	1.27	0.00	2.81	-1.89	0.00	0.00	0.00

71.013	88.15	1.29	0.00	2.74	-1.78	0.00	0.00	0.00
72.013	88.18	1.30	0.00	1.89	-1.67	0.00	0.00	0.00

25YR96HR STORM EVENT

********** Node Time Series by Node - KINGSNO **********

Time (hrs)	Stage (ft)	Surface Ar.(ac)	Inflow Base Q (cfs)	Inflow Onsite (cfs)	Inflow Offsite (cfs)	Inflow Bndry Q (cfs)	Inflow Link Q (cfs)	Link Outflow (cfs)
73.013	88.18	1.30	0.00	1.30	-1.57	0.00	0.00	0.00
74.013	88.17	1.30	0.00	1.50	-1.49	0.00	0.00	0.00
75.013	88.17	1.30	0.00	1.44	-1.43	0.00	0.00	0.00
76.013	88.18	1.30	0.00	1.47	-1.38	0.00	0.00	0.00
77.013	88.18	1.30	0.00	1.47	-1.33	0.00	0.00	0.00
78.013	88.19	1.30	0.00	1.47	-1.30	0.00	0.00	0.00
79.013	88.21	1.31	0.00	1.47	-1.26	0.00	0.00	0.00
80.013	88.22	1.31	0.00	1.47	-1.23	0.00	0.00	0.00
81.013	88.24	1.32	0.00	1.47	-1.21	0.00	0.00	0.00
82.013	88.25	1.32	0.00	1.47	-1.18	0.00	0.00	0.00
83.013	88.27	1.33	0.00	1.47	-1.16	0.00	0.00	0.00
84.013	88.29	1.33	0.00	1.47	-1.14	0.00	0.00	0.00
85.013	88.31	1.34	0.00	1.48	-1.12	0.00	0.00	0.00
86.013	88.33	1.34	0.00	1.48	-1.11	0.00	0.00	0.00
87.013	88.36	1.35	0.00	1.48	-1.09	0.00	0.00	0.00
88.013	88.38	1.36	0.00	1.49	-1.08	0.00	0.00	0.00
89.013	88.41	1.36	0.00	1.50	-1.07	0.00	0.00	0.00
90.013	88.44	1.37	0.00	1.50	-1.05	0.00	0.00	0.00
91.013	88.46	1.38	0.00	1.50	-1.04	0.00	0.00	0.00
92.013	88.49	1.39	0.00	1.50	-1.03	0.00	0.00	0.00
93.013	88.52	1.39	0.00	1.49	-1.02	0.00	0.00	0.00
94.013	88.55	1.40	0.00	1.50	-1.01	0.00	0.00	0.00
95.013	88.57	1.41	0.00	1.49	-0.98	0.00	0.00	0.00
96.005	88.60	1.42	0.00	0.50	-0.00	0.00	0.00	0.00
*** Group: BASE		Node: 2						
0.000	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
1.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
2.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
3.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
4.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
5.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
6.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
7.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
8.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
9.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
10.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
11.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
12.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
13.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
14.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
15.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
16.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
17.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
18.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00

19.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
20.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00

25YR96HR STORM EVENT

********** Node Time Series by Node - KINGSNO **********

Time (hrs)	Stage (ft)	Surface Ar.(ac)	Inflow Base Q (cfs)	Inflow Onsite (cfs)	Inflow Offsite (cfs)	Inflow Bndry Q (cfs)	Inflow Link Q (cfs)	Link Outflow (cfs)
21.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
22.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
23.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
24.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
25.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
26.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
27.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
28.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
29.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
30.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
31.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
32.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
33.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
34.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
35.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
36.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
37.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
38.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
39.004	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
40.010	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
41.001	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
42.001	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
43.001	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
44.001	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
45.001	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
46.001	248.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00
47.014	248.00	2.20	0.00	0.00	-0.00	0.00	0.00	0.00
48.008	248.00	2.20	0.00	0.00	-0.00	0.00	0.00	0.00
49.008	248.00	2.20	0.00	0.01	-0.00	0.00	0.00	0.00
50.008	248.00	2.20	0.00	0.03	-0.00	0.00	0.00	0.00
51.002	248.00	2.20	0.00	0.04	-0.00	0.00	0.00	0.00
52.009	248.00	2.20	0.00	0.07	-0.00	0.00	0.00	0.00
53.012	248.01	2.20	0.00	0.10	-0.01	0.00	0.00	0.00
54.012	248.01	2.20	0.00	0.15	-0.01	0.00	0.00	0.00
55.008	248.02	2.20	0.00	0.19	-0.01	0.00	0.00	0.00
56.008	248.03	2.20	0.00	0.31	-0.02	0.00	0.00	0.00
57.004	248.04	2.20	0.00	0.43	-0.03	0.00	0.00	0.00
58.004	248.06	2.20	0.00	0.80	-0.05	0.00	0.00	0.00
59.001	248.24	2.23	0.00	9.12	-0.14	0.00	0.00	0.00
60.008	248.56	2.27	0.00	8.67	-0.36	0.00	0.00	0.00
61.013	248.73	2.29	0.00	1.51	-0.58	0.00	0.00	0.00
62.013	248.77	2.29	0.00	1.79	-0.67	0.00	0.00	0.00
63.013	248.80	2.30	0.00	1.20	-0.70	0.00	0.00	0.00
64.013	248.81	2.30	0.00	1.06	-0.72	0.00	0.00	0.00
65.013	248.82	2.30	0.00	0.77	-0.73	0.00	0.00	0.00

66.013	248.82	2.30	0.00	0.87	-0.73	0.00	0.00	0.00
67.013	248.83	2.30	0.00	0.84	-0.74	0.00	0.00	0.00

25YR96HR STORM EVENT

********** Node Time Series by Node - KINGSNO **********

Time (hrs)	Stage (ft)	Surface Ar.(ac)	Inflow Base Q (cfs)	Inflow Onsite (cfs)	Inflow Offsite (cfs)	Inflow Bndry Q (cfs)	Inflow Link Q (cfs)	Link Outflow (cfs)
68.013	248.83	2.30	0.00	0.67	-0.74	0.00	0.00	0.00
69.013	248.82	2.30	0.00	0.55	-0.74	0.00	0.00	0.00
70.013	248.82	2.30	0.00	0.59	-0.73	0.00	0.00	0.00
71.013	248.81	2.30	0.00	0.58	-0.73	0.00	0.00	0.00
72.013	248.80	2.30	0.00	0.40	-0.72	0.00	0.00	0.00
73.013	248.79	2.30	0.00	0.27	-0.71	0.00	0.00	0.00
74.013	248.77	2.29	0.00	0.32	-0.70	0.00	0.00	0.00
75.013	248.76	2.29	0.00	0.30	-0.75	0.00	0.00	0.00
76.013	248.66	2.28	0.00	0.31	-5.53	0.00	0.00	0.00
77.013	248.43	2.25	0.00	0.31	-7.56	0.00	0.00	0.00
78.013	248.22	2.22	0.00	0.31	-4.20	0.00	0.00	0.00
79.013	248.10	2.21	0.00	0.31	-3.13	0.00	0.00	0.00
80.013	248.02	2.20	0.00	0.31	-1.51	0.00	0.00	0.00
81.013	248.00	2.20	0.00	0.31	-0.31	0.00	0.00	0.00
82.013	248.00	2.20	0.00	0.31	-0.31	0.00	0.00	0.00
83.013	248.00	2.20	0.00	0.31	-0.31	0.00	0.00	0.00
84.013	248.00	2.20	0.00	0.31	-0.31	0.00	0.00	0.00
85.013	248.00	2.20	0.00	0.32	-0.32	0.00	0.00	0.00
86.013	248.00	2.20	0.00	0.32	-0.32	0.00	0.00	0.00
87.013	248.00	2.20	0.00	0.32	-0.32	0.00	0.00	0.00
88.013	248.00	2.20	0.00	0.32	-0.32	0.00	0.00	0.00
89.013	248.00	2.20	0.00	0.32	-0.32	0.00	0.00	0.00
90.013	248.00	2.20	0.00	0.32	-0.32	0.00	0.00	0.00
91.013	248.00	2.20	0.00	0.32	-0.32	0.00	0.00	0.00
92.013	248.00	2.20	0.00	0.32	-0.32	0.00	0.00	0.00
93.013	248.00	2.20	0.00	0.32	-0.32	0.00	0.00	0.00
94.013	248.00	2.20	0.00	0.32	-0.32	0.00	0.00	0.00
95.013	248.00	2.20	0.00	0.32	-0.27	0.00	0.00	0.00
96.005	248.00	2.20	0.00	0.11	-0.00	0.00	0.00	0.00

*** Group: BASE Node: 3

0.000	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
1.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
2.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
3.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
4.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
5.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
6.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
7.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
8.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
9.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
10.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
11.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
12.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
13.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00

14.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
15.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00

25YR96HR STORM EVENT

********** Node Time Series by Node - KINGSNO **********

Time (hrs)	Stage (ft)	Surface Ar.(ac)	Inflow Base Q (cfs)	Inflow Onsite (cfs)	Inflow Offsite (cfs)	Inflow Bndry Q (cfs)	Inflow Link Q (cfs)	Link Outflow (cfs)
16.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
17.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
18.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
19.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
20.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
21.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
22.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
23.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
24.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
25.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
26.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
27.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
28.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
29.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
30.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
31.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
32.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
33.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
34.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
35.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
36.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
37.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
38.004	237.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00
39.004	237.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00
40.010	237.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00
41.001	237.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00
42.001	237.00	0.00	0.00	0.01	-0.01	0.00	0.00	0.00
43.001	237.00	0.51	0.00	0.03	-0.03	0.00	0.00	0.00
44.001	237.00	0.51	0.00	0.04	-0.04	0.00	0.00	0.00
45.001	237.00	0.51	0.00	0.05	-0.05	0.00	0.00	0.00
46.001	237.00	0.51	0.00	0.06	-0.06	0.00	0.00	0.00
47.014	237.00	0.00	0.00	0.07	-0.08	0.00	0.00	0.00
48.008	237.00	0.51	0.00	0.10	-0.10	0.00	0.00	0.00
49.008	237.00	0.00	0.00	0.14	-0.14	0.00	0.00	0.00
50.008	237.00	0.00	0.00	0.17	-0.17	0.00	0.00	0.00
51.002	237.00	0.00	0.00	0.21	-0.21	0.00	0.00	0.00
52.009	237.00	0.51	0.00	0.26	-0.26	0.00	0.00	0.00
53.012	237.00	0.00	0.00	0.32	-0.33	0.00	0.00	0.00
54.012	237.00	0.00	0.00	0.41	-0.41	0.00	0.00	0.00
55.008	237.00	0.00	0.00	0.51	-0.54	0.00	0.00	0.00
56.008	237.00	0.51	0.00	0.75	-0.74	0.00	0.00	0.00
57.004	237.00	0.00	0.00	0.97	-1.08	0.00	0.00	0.00
58.004	236.99	0.00	0.00	1.67	-2.69	0.00	0.00	0.00
59.001	237.83	0.58	0.00	16.17	-4.32	0.00	0.00	0.00
60.008	239.26	0.69	0.00	14.87	-5.04	0.00	0.00	0.00

61.013	239.64	0.72	0.00	2.24	-5.37	0.00	0.00	0.00
62.013	239.44	0.71	0.00	2.95	-3.28	0.00	0.00	0.00

25YR96HR STORM EVENT

********** Node Time Series by Node - KINGSNO **********

Time (hrs)	Stage (ft)	Surface Ar.(ac)	Inflow Base Q (cfs)	Inflow Onsite (cfs)	Inflow Offsite (cfs)	Inflow Bndry Q (cfs)	Inflow Link Q (cfs)	Link Outflow (cfs)
63.013	239.46	0.71	0.00	1.90	-1.19	0.00	0.00	0.00
64.013	239.55	0.71	0.00	1.71	-0.96	0.00	0.00	0.00
65.013	239.61	0.72	0.00	1.22	-0.84	0.00	0.00	0.00
66.013	239.67	0.72	0.00	1.39	-0.76	0.00	0.00	0.00
67.013	239.74	0.73	0.00	1.34	-0.71	0.00	0.00	0.00
68.013	239.80	0.73	0.00	1.06	-0.67	0.00	0.00	0.00
69.013	239.84	0.74	0.00	0.86	-0.63	0.00	0.00	0.00
70.013	239.87	0.74	0.00	0.93	-0.60	0.00	0.00	0.00
71.013	239.91	0.74	0.00	0.91	-0.57	0.00	0.00	0.00
72.013	239.93	0.74	0.00	0.63	-0.54	0.00	0.00	0.00
73.013	239.93	0.74	0.00	0.43	-0.51	0.00	0.00	0.00
74.013	239.93	0.74	0.00	0.50	-0.49	0.00	0.00	0.00
75.013	239.93	0.74	0.00	0.48	-0.47	0.00	0.00	0.00
76.013	239.93	0.74	0.00	0.49	-0.46	0.00	0.00	0.00
77.013	239.93	0.74	0.00	0.49	-0.44	0.00	0.00	0.00
78.013	239.94	0.75	0.00	0.49	-0.43	0.00	0.00	0.00
79.013	239.95	0.75	0.00	0.49	-0.42	0.00	0.00	0.00
80.013	239.95	0.75	0.00	0.49	-0.41	0.00	0.00	0.00
81.013	239.96	0.75	0.00	0.49	-0.40	0.00	0.00	0.00
82.013	239.97	0.75	0.00	0.49	-0.40	0.00	0.00	0.00
83.013	239.98	0.75	0.00	0.49	-0.39	0.00	0.00	0.00
84.013	240.00	0.75	0.00	0.49	-0.38	0.00	0.00	0.00
85.013	240.01	0.75	0.00	0.49	-0.38	0.00	0.00	0.00
86.013	240.02	0.75	0.00	0.49	-0.37	0.00	0.00	0.00
87.013	240.03	0.75	0.00	0.49	-0.37	0.00	0.00	0.00
88.013	240.05	0.75	0.00	0.50	-0.36	0.00	0.00	0.00
89.013	240.06	0.76	0.00	0.50	-0.36	0.00	0.00	0.00
90.013	240.08	0.76	0.00	0.50	-0.36	0.00	0.00	0.00
91.013	240.09	0.76	0.00	0.50	-0.35	0.00	0.00	0.00
92.013	240.11	0.76	0.00	0.50	-0.35	0.00	0.00	0.00
93.013	240.13	0.76	0.00	0.50	-0.35	0.00	0.00	0.00
94.013	240.14	0.76	0.00	0.50	-0.35	0.00	0.00	0.00
95.013	240.16	0.76	0.00	0.50	-0.33	0.00	0.00	0.00
96.005	240.18	0.77	0.00	0.17	-0.00	0.00	0.00	0.00
*** Group: BASE		Node: 4						
0.000	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00
1.004	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00
2.004	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00
3.004	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00
4.004	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00
5.004	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00
6.004	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00
7.004	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00
8.004	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00

9.004	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00
10.004	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00

25YR96HR STORM EVENT

********** Node Time Series by Node - KINGSNO **********

Time (hrs)	Stage (ft)	Surface Ar.(ac)	Inflow Base Q (cfs)	Inflow Onsite (cfs)	Inflow Offsite (cfs)	Inflow Bndry Q (cfs)	Inflow Link Q (cfs)	Link Outflow (cfs)
11.004	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00
12.004	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00
13.004	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00
14.004	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00
15.004	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00
16.004	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00
17.004	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00
18.004	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00
19.004	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00
20.004	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00
21.004	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00
22.004	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00
23.004	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00
24.004	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00
25.004	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00
26.004	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00
27.004	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00
28.004	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00
29.004	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00
30.004	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00
31.004	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00
32.004	227.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00
33.004	227.00	1.12	0.00	0.00	-0.00	0.00	0.00	0.00
34.004	227.00	1.12	0.00	0.00	-0.00	0.00	0.00	0.00
35.004	227.00	1.12	0.00	0.03	-0.00	0.00	0.00	0.00
36.004	227.00	1.12	0.00	0.06	-0.00	0.00	0.00	0.00
37.004	227.01	1.12	0.00	0.09	-0.00	0.00	0.00	0.00
38.004	227.02	1.12	0.00	0.11	-0.01	0.00	0.00	0.00
39.004	227.02	1.12	0.00	0.14	-0.01	0.00	0.00	0.00
40.010	227.04	1.12	0.00	0.17	-0.02	0.00	0.00	0.00
41.001	227.05	1.12	0.00	0.20	-0.02	0.00	0.00	0.00
42.001	227.06	1.13	0.00	0.23	-0.03	0.00	0.00	0.00
43.001	227.08	1.13	0.00	0.25	-0.04	0.00	0.00	0.00
44.001	227.09	1.13	0.00	0.27	-0.05	0.00	0.00	0.00
45.001	227.11	1.13	0.00	0.29	-0.06	0.00	0.00	0.00
46.001	227.13	1.13	0.00	0.32	-0.07	0.00	0.00	0.00
47.014	227.14	1.13	0.00	0.34	-0.08	0.00	0.00	0.00
48.008	227.17	1.13	0.00	0.45	-0.09	0.00	0.00	0.00
49.008	227.19	1.14	0.00	0.54	-0.11	0.00	0.00	0.00
50.008	227.23	1.14	0.00	0.62	-0.13	0.00	0.00	0.00
51.002	227.27	1.14	0.00	0.71	-0.15	0.00	0.00	0.00
52.009	227.31	1.15	0.00	0.87	-0.17	0.00	0.00	0.00
53.012	227.37	1.15	0.00	1.02	-0.20	0.00	0.00	0.00
54.012	227.43	1.16	0.00	1.24	-0.24	0.00	0.00	0.00
55.008	227.51	1.17	0.00	1.47	-0.28	0.00	0.00	0.00

56.008	227.61	1.18	0.00	2.07	-0.34	0.00	0.00	0.00
57.004	227.75	1.19	0.00	2.61	-0.41	0.00	0.00	0.00

25YR96HR STORM EVENT

********** Node Time Series by Node - KINGSNO **********

Time (hrs)	Stage (ft)	Surface Ar.(ac)	Inflow Base Q (cfs)	Inflow Onsite (cfs)	Inflow Offsite (cfs)	Inflow Bndry Q (cfs)	Inflow Link Q (cfs)	Link Outflow (cfs)
58.004	227.95	1.21	0.00	4.26	-0.51	0.00	0.00	0.00
59.001	229.24	1.33	0.00	36.86	-0.97	0.00	0.00	0.00
60.008	231.20	1.52	0.00	32.96	-2.00	0.00	0.00	0.00
61.013	232.05	1.60	0.00	4.28	-2.91	0.00	0.00	0.00
62.013	232.17	1.62	0.00	6.34	-3.22	0.00	0.00	0.00
63.013	232.26	1.63	0.00	3.92	-3.29	0.00	0.00	0.00
64.013	232.28	1.63	0.00	3.57	-3.33	0.00	0.00	0.00
65.013	232.27	1.63	0.00	2.52	-3.38	0.00	0.00	0.00
66.013	232.13	1.61	0.00	2.88	-7.21	0.00	0.00	0.00
67.013	231.89	1.59	0.00	2.77	-7.92	0.00	0.00	0.00
68.013	231.70	1.57	0.00	2.19	-4.23	0.00	0.00	0.00
69.013	231.61	1.56	0.00	1.78	-3.29	0.00	0.00	0.00
70.013	231.54	1.55	0.00	1.92	-2.80	0.00	0.00	0.00
71.013	231.50	1.55	0.00	1.87	-2.49	0.00	0.00	0.00
72.013	231.46	1.55	0.00	1.29	-2.25	0.00	0.00	0.00
73.013	231.41	1.54	0.00	0.89	-2.06	0.00	0.00	0.00
74.013	231.35	1.54	0.00	1.02	-1.91	0.00	0.00	0.00
75.013	231.30	1.53	0.00	0.98	-1.79	0.00	0.00	0.00
76.013	231.26	1.53	0.00	1.00	-1.70	0.00	0.00	0.00
77.013	231.23	1.52	0.00	1.00	-1.61	0.00	0.00	0.00
78.013	231.20	1.52	0.00	1.00	-1.54	0.00	0.00	0.00
79.013	231.17	1.52	0.00	1.00	-1.48	0.00	0.00	0.00
80.013	231.14	1.51	0.00	1.00	-1.43	0.00	0.00	0.00
81.013	231.12	1.51	0.00	1.00	-1.38	0.00	0.00	0.00
82.013	231.10	1.51	0.00	1.00	-1.34	0.00	0.00	0.00
83.013	231.09	1.51	0.00	1.00	-1.30	0.00	0.00	0.00
84.013	231.07	1.51	0.00	1.00	-1.26	0.00	0.00	0.00
85.013	231.06	1.51	0.00	1.00	-1.23	0.00	0.00	0.00
86.013	231.05	1.50	0.00	1.01	-1.20	0.00	0.00	0.00
87.013	231.04	1.50	0.00	1.01	-1.18	0.00	0.00	0.00
88.013	231.03	1.50	0.00	1.01	-1.15	0.00	0.00	0.00
89.013	231.02	1.50	0.00	1.02	-1.13	0.00	0.00	0.00
90.013	231.01	1.50	0.00	1.02	-1.11	0.00	0.00	0.00
91.013	231.01	1.50	0.00	1.02	-1.09	0.00	0.00	0.00
92.013	231.01	1.50	0.00	1.02	-1.07	0.00	0.00	0.00
93.013	231.00	1.50	0.00	1.01	-1.05	0.00	0.00	0.00
94.013	231.00	1.50	0.00	1.02	-1.04	0.00	0.00	0.00
95.013	231.00	1.50	0.00	1.01	-1.00	0.00	0.00	0.00
96.005	231.01	1.50	0.00	0.34	-0.00	0.00	0.00	0.00
*** Group: BASE		Node: 5						
0.000	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00
1.004	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00
2.004	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00
3.004	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00

4.004	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00
5.004	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00

25YR96HR STORM EVENT

********** Node Time Series by Node - KINGSNO **********

Time (hrs)	Stage (ft)	Surface Ar.(ac)	Inflow Base Q (cfs)	Inflow Onsite (cfs)	Inflow Offsite (cfs)	Inflow Bndry Q (cfs)	Inflow Link Q (cfs)	Link Outflow (cfs)
6.004	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00
7.004	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00
8.004	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00
9.004	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00
10.004	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00
11.004	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00
12.004	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00
13.004	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00
14.004	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00
15.004	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00
16.004	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00
17.004	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00
18.004	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00
19.004	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00
20.004	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00
21.004	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00
22.004	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00
23.004	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00
24.004	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00
25.004	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00
26.004	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00
27.004	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00
28.004	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00
29.004	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00
30.004	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00
31.004	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00
32.004	129.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00
33.004	129.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00
34.004	129.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00
35.004	129.00	0.00	0.00	0.01	-0.02	0.00	0.00	0.00
36.004	129.00	0.00	0.00	0.06	-0.07	0.00	0.00	0.00
37.004	129.00	1.98	0.00	0.13	-0.13	0.00	0.00	0.00
38.004	129.00	1.98	0.00	0.19	-0.19	0.00	0.00	0.00
39.004	129.00	1.98	0.00	0.26	-0.26	0.00	0.00	0.00
40.010	129.00	1.98	0.00	0.32	-0.32	0.00	0.00	0.00
41.001	129.00	1.98	0.00	0.39	-0.39	0.00	0.00	0.00
42.001	129.00	1.98	0.00	0.45	-0.45	0.00	0.00	0.00
43.001	129.00	1.98	0.00	0.51	-0.51	0.00	0.00	0.00
44.001	129.00	1.98	0.00	0.55	-0.55	0.00	0.00	0.00
45.001	129.00	1.98	0.00	0.60	-0.60	0.00	0.00	0.00
46.001	129.00	1.98	0.00	0.65	-0.65	0.00	0.00	0.00
47.014	129.00	0.00	0.00	0.70	-0.75	0.00	0.00	0.00
48.008	129.00	1.98	0.00	0.93	-0.92	0.00	0.00	0.00
49.008	129.00	1.98	0.00	1.13	-1.13	0.00	0.00	0.00
50.008	129.00	1.98	0.00	1.31	-1.32	0.00	0.00	0.00

51.002	129.00	0.00	0.00	1.52	-1.55	0.00	0.00	0.00
52.009	129.00	1.98	0.00	1.86	-1.86	0.00	0.00	0.00

25YR96HR STORM EVENT

********** Node Time Series by Node - KINGSNO **********

Time (hrs)	Stage (ft)	Surface Ar.(ac)	Inflow Base Q (cfs)	Inflow Onsite (cfs)	Inflow Offsite (cfs)	Inflow Bndry Q (cfs)	Inflow Link Q (cfs)	Link Outflow (cfs)
53.012	129.00	0.00	0.00	2.19	-2.23	0.00	0.00	0.00
54.012	129.00	1.98	0.00	2.68	-2.68	0.00	0.00	0.00
55.008	129.00	0.00	0.00	3.17	-3.38	0.00	0.00	0.00
56.008	129.00	1.98	0.00	4.50	-4.47	0.00	0.00	0.00
57.004	129.00	0.00	0.00	5.69	-6.27	0.00	0.00	0.00
58.004	128.99	0.00	0.00	9.35	-17.24	0.00	0.00	0.00
59.001	129.96	2.11	0.00	81.93	-27.69	0.00	0.00	0.00
60.008	131.90	2.38	0.00	73.51	-23.39	0.00	0.00	0.00
61.013	132.71	2.49	0.00	9.73	-11.47	0.00	0.00	0.00
62.013	132.85	2.51	0.00	14.21	-4.06	0.00	0.00	0.00
63.013	133.11	2.55	0.00	8.83	-3.34	0.00	0.00	0.00
64.013	133.28	2.57	0.00	8.02	-2.92	0.00	0.00	0.00
65.013	133.41	2.59	0.00	5.67	-2.65	0.00	0.00	0.00
66.013	133.52	2.60	0.00	6.49	-2.46	0.00	0.00	0.00
67.013	133.65	2.62	0.00	6.23	-2.33	0.00	0.00	0.00
68.013	133.75	2.64	0.00	4.94	-2.20	0.00	0.00	0.00
69.013	133.82	2.65	0.00	4.01	-2.08	0.00	0.00	0.00
70.013	133.89	2.65	0.00	4.33	-2.00	0.00	0.00	0.00
71.013	133.96	2.66	0.00	4.22	-1.92	0.00	0.00	0.00
72.013	134.02	2.67	0.00	2.90	-1.83	0.00	0.00	0.00
73.013	134.04	2.67	0.00	2.00	-1.75	0.00	0.00	0.00
74.013	134.05	2.68	0.00	2.30	-1.68	0.00	0.00	0.00
75.013	134.07	2.68	0.00	2.21	-1.63	0.00	0.00	0.00
76.013	134.09	2.68	0.00	2.26	-1.58	0.00	0.00	0.00
77.013	134.11	2.69	0.00	2.26	-1.54	0.00	0.00	0.00
78.013	134.13	2.69	0.00	2.26	-1.51	0.00	0.00	0.00
79.013	134.15	2.69	0.00	2.26	-1.47	0.00	0.00	0.00
80.013	134.18	2.70	0.00	2.25	-1.44	0.00	0.00	0.00
81.013	134.20	2.70	0.00	2.25	-1.42	0.00	0.00	0.00
82.013	134.23	2.70	0.00	2.26	-1.39	0.00	0.00	0.00
83.013	134.26	2.71	0.00	2.26	-1.37	0.00	0.00	0.00
84.013	134.28	2.71	0.00	2.26	-1.35	0.00	0.00	0.00
85.013	134.31	2.71	0.00	2.26	-1.33	0.00	0.00	0.00
86.013	134.34	2.72	0.00	2.27	-1.32	0.00	0.00	0.00
87.013	134.37	2.72	0.00	2.27	-1.30	0.00	0.00	0.00
88.013	134.40	2.73	0.00	2.29	-1.29	0.00	0.00	0.00
89.013	134.43	2.73	0.00	2.30	-1.27	0.00	0.00	0.00
90.013	134.46	2.73	0.00	2.30	-1.26	0.00	0.00	0.00
91.013	134.49	2.74	0.00	2.30	-1.25	0.00	0.00	0.00
92.013	134.53	2.74	0.00	2.29	-1.24	0.00	0.00	0.00
93.013	134.56	2.75	0.00	2.29	-1.23	0.00	0.00	0.00
94.013	134.59	2.75	0.00	2.29	-1.22	0.00	0.00	0.00
95.013	134.62	2.76	0.00	2.27	-1.18	0.00	0.00	0.00
96.005	134.65	2.76	0.00	0.77	-0.00	0.00	0.00	0.00

*** Group: BASE Node: 6

0.000	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00

25YR96HR STORM EVENT

********** Node Time Series by Node - KINGSNO **********

Time (hrs)	Stage (ft)	Surface Ar.(ac)	Inflow Base Q (cfs)	Inflow Onsite (cfs)	Inflow Offsite (cfs)	Inflow Bndry Q (cfs)	Inflow Link Q (cfs)	Link Outflow (cfs)
1.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
2.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
3.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
4.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
5.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
6.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
7.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
8.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
9.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
10.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
11.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
12.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
13.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
14.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
15.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
16.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
17.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
18.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
19.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
20.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
21.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
22.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
23.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
24.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
25.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
26.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
27.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
28.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
29.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
30.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
31.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
32.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
33.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
34.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
35.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
36.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
37.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
38.004	233.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
39.004	233.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00
40.010	233.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00
41.001	233.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00
42.001	233.00	0.00	0.00	0.02	-0.02	0.00	0.00	0.00
43.001	233.00	0.93	0.00	0.03	-0.03	0.00	0.00	0.00
44.001	233.00	0.93	0.00	0.05	-0.05	0.00	0.00	0.00
45.001	233.00	0.93	0.00	0.06	-0.06	0.00	0.00	0.00

46.001	233.00	0.93	0.00	0.07	-0.07	0.00	0.00	0.00
47.014	233.00	0.00	0.00	0.09	-0.09	0.00	0.00	0.00

25YR96HR STORM EVENT

********** Node Time Series by Node - KINGSNO **********

Time (hrs)	Stage (ft)	Surface Ar.(ac)	Inflow Base Q (cfs)	Inflow Onsite (cfs)	Inflow Offsite (cfs)	Inflow Bndry Q (cfs)	Inflow Link Q (cfs)	Link Outflow (cfs)
48.008	233.00	0.93	0.00	0.12	-0.12	0.00	0.00	0.00
49.008	233.00	0.00	0.00	0.16	-0.16	0.00	0.00	0.00
50.008	233.00	0.00	0.00	0.20	-0.20	0.00	0.00	0.00
51.002	233.00	0.00	0.00	0.24	-0.25	0.00	0.00	0.00
52.009	233.00	0.93	0.00	0.31	-0.31	0.00	0.00	0.00
53.012	233.00	0.00	0.00	0.39	-0.39	0.00	0.00	0.00
54.012	233.00	0.00	0.00	0.49	-0.49	0.00	0.00	0.00
55.008	233.00	0.00	0.00	0.60	-0.65	0.00	0.00	0.00
56.008	233.00	0.93	0.00	0.89	-0.88	0.00	0.00	0.00
57.004	233.00	0.00	0.00	1.15	-1.29	0.00	0.00	0.00
58.004	232.99	0.00	0.00	1.98	-4.78	0.00	0.00	0.00
59.001	233.38	0.98	0.00	19.23	-8.12	0.00	0.00	0.00
60.008	234.20	1.08	0.00	17.68	-8.67	0.00	0.00	0.00
61.013	234.27	1.09	0.00	2.66	-9.70	0.00	0.00	0.00
62.013	233.91	1.04	0.00	3.51	-5.72	0.00	0.00	0.00
63.013	233.87	1.04	0.00	2.26	-1.02	0.00	0.00	0.00
64.013	233.97	1.05	0.00	2.03	-0.83	0.00	0.00	0.00
65.013	234.04	1.06	0.00	1.45	-0.73	0.00	0.00	0.00
66.013	234.11	1.07	0.00	1.65	-0.67	0.00	0.00	0.00
67.013	234.19	1.08	0.00	1.59	-0.63	0.00	0.00	0.00
68.013	234.25	1.08	0.00	1.26	-0.59	0.00	0.00	0.00
69.013	234.29	1.09	0.00	1.03	-0.56	0.00	0.00	0.00
70.013	234.33	1.09	0.00	1.11	-0.53	0.00	0.00	0.00
71.013	234.38	1.10	0.00	1.08	-0.51	0.00	0.00	0.00
72.013	234.41	1.10	0.00	0.75	-0.49	0.00	0.00	0.00
73.013	234.42	1.10	0.00	0.51	-0.46	0.00	0.00	0.00
74.013	234.43	1.10	0.00	0.59	-0.44	0.00	0.00	0.00
75.013	234.44	1.11	0.00	0.57	-0.43	0.00	0.00	0.00
76.013	234.45	1.11	0.00	0.58	-0.42	0.00	0.00	0.00
77.013	234.46	1.11	0.00	0.58	-0.40	0.00	0.00	0.00
78.013	234.47	1.11	0.00	0.58	-0.40	0.00	0.00	0.00
79.013	234.49	1.11	0.00	0.58	-0.39	0.00	0.00	0.00
80.013	234.50	1.11	0.00	0.58	-0.38	0.00	0.00	0.00
81.013	234.52	1.12	0.00	0.58	-0.37	0.00	0.00	0.00
82.013	234.53	1.12	0.00	0.58	-0.37	0.00	0.00	0.00
83.013	234.55	1.12	0.00	0.58	-0.36	0.00	0.00	0.00
84.013	234.57	1.12	0.00	0.58	-0.36	0.00	0.00	0.00
85.013	234.58	1.12	0.00	0.59	-0.35	0.00	0.00	0.00
86.013	234.60	1.13	0.00	0.59	-0.35	0.00	0.00	0.00
87.013	234.62	1.13	0.00	0.59	-0.34	0.00	0.00	0.00
88.013	234.64	1.13	0.00	0.59	-0.34	0.00	0.00	0.00
89.013	234.66	1.13	0.00	0.60	-0.34	0.00	0.00	0.00
90.013	234.67	1.14	0.00	0.60	-0.33	0.00	0.00	0.00
91.013	234.69	1.14	0.00	0.60	-0.33	0.00	0.00	0.00
92.013	234.71	1.14	0.00	0.59	-0.33	0.00	0.00	0.00

93.013	234.73	1.14	0.00	0.59	-0.33	0.00	0.00	0.00
94.013	234.75	1.15	0.00	0.60	-0.32	0.00	0.00	0.00

25YR96HR STORM EVENT

********** Node Time Series by Node - KINGSNO **********

Time (hrs)	Stage (ft)	Surface Ar.(ac)	Inflow Base Q (cfs)	Inflow Onsite (cfs)	Inflow Offsite (cfs)	Inflow Bndry Q (cfs)	Inflow Link Q (cfs)	Link Outflow (cfs)
95.013	234.77	1.15	0.00	0.59	-0.32	0.00	0.00	0.00
96.005	234.79	1.15	0.00	0.20	-0.00	0.00	0.00	0.00
*** Group: BASE		Node: 7						
0.000	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
1.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
2.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
3.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
4.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
5.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
6.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
7.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
8.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
9.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
10.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
11.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
12.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
13.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
14.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
15.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
16.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
17.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
18.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
19.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
20.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
21.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
22.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
23.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
24.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
25.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
26.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
27.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
28.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
29.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
30.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
31.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
32.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
33.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
34.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
35.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
36.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
37.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
38.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
39.004	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
40.010	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00

41.001	206.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
42.001	206.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00

25YR96HR STORM EVENT

********** Node Time Series by Node - KINGSNO **********

Time (hrs)	Stage (ft)	Surface Ar.(ac)	Inflow Base Q (cfs)	Inflow Onsite (cfs)	Inflow Offsite (cfs)	Inflow Bndry Q (cfs)	Inflow Link Q (cfs)	Link Outflow (cfs)
43.001	206.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00
44.001	206.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00
45.001	206.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00
46.001	206.00	0.25	0.00	0.01	-0.01	0.00	0.00	0.00
47.014	206.00	0.00	0.00	0.01	-0.01	0.00	0.00	0.00
48.008	206.00	0.00	0.00	0.02	-0.02	0.00	0.00	0.00
49.008	206.00	0.00	0.00	0.03	-0.03	0.00	0.00	0.00
50.008	206.00	0.00	0.00	0.04	-0.04	0.00	0.00	0.00
51.002	206.00	0.00	0.00	0.06	-0.06	0.00	0.00	0.00
52.009	206.00	0.00	0.00	0.08	-0.08	0.00	0.00	0.00
53.012	206.00	0.00	0.00	0.10	-0.10	0.00	0.00	0.00
54.012	206.00	0.00	0.00	0.13	-0.13	0.00	0.00	0.00
55.008	206.00	0.00	0.00	0.17	-0.18	0.00	0.00	0.00
56.008	206.00	0.25	0.00	0.25	-0.25	0.00	0.00	0.00
57.004	206.00	0.00	0.00	0.34	-0.38	0.00	0.00	0.00
58.004	205.99	0.00	0.00	0.60	-1.16	0.00	0.00	0.00
59.001	206.60	0.27	0.00	6.21	-1.93	0.00	0.00	0.00
60.008	207.75	0.31	0.00	5.80	-2.17	0.00	0.00	0.00
61.013	208.03	0.32	0.00	0.94	-2.38	0.00	0.00	0.00
62.013	207.69	0.31	0.00	1.17	-2.36	0.00	0.00	0.00
63.013	207.32	0.29	0.00	0.77	-2.25	0.00	0.00	0.00
64.013	206.89	0.28	0.00	0.69	-2.13	0.00	0.00	0.00
65.013	206.48	0.26	0.00	0.49	-1.77	0.00	0.00	0.00
66.013	206.20	0.26	0.00	0.56	-1.01	0.00	0.00	0.00
67.013	206.13	0.25	0.00	0.54	-0.52	0.00	0.00	0.00
68.013	206.14	0.25	0.00	0.43	-0.44	0.00	0.00	0.00
69.013	206.13	0.25	0.00	0.35	-0.38	0.00	0.00	0.00
70.013	206.13	0.25	0.00	0.38	-0.37	0.00	0.00	0.00
71.013	206.13	0.25	0.00	0.37	-0.34	0.00	0.00	0.00
72.013	206.14	0.25	0.00	0.25	-0.26	0.00	0.00	0.00
73.013	206.13	0.25	0.00	0.18	-0.20	0.00	0.00	0.00
74.013	206.13	0.25	0.00	0.20	-0.19	0.00	0.00	0.00
75.013	206.13	0.25	0.00	0.19	-0.20	0.00	0.00	0.00
76.013	206.13	0.25	0.00	0.20	-0.20	0.00	0.00	0.00
77.013	206.13	0.25	0.00	0.20	-0.20	0.00	0.00	0.00
78.013	206.13	0.25	0.00	0.20	-0.20	0.00	0.00	0.00
79.013	206.13	0.25	0.00	0.20	-0.20	0.00	0.00	0.00
80.013	206.13	0.25	0.00	0.20	-0.20	0.00	0.00	0.00
81.013	206.13	0.25	0.00	0.20	-0.20	0.00	0.00	0.00
82.013	206.13	0.25	0.00	0.20	-0.20	0.00	0.00	0.00
83.013	206.13	0.25	0.00	0.20	-0.20	0.00	0.00	0.00
84.013	206.13	0.25	0.00	0.20	-0.20	0.00	0.00	0.00
85.013	206.13	0.25	0.00	0.20	-0.20	0.00	0.00	0.00
86.013	206.13	0.25	0.00	0.20	-0.20	0.00	0.00	0.00
87.013	206.13	0.25	0.00	0.20	-0.20	0.00	0.00	0.00

88.013	206.13	0.25	0.00	0.20	-0.20	0.00	0.00	0.00
89.013	206.13	0.25	0.00	0.20	-0.20	0.00	0.00	0.00

25YR96HR STORM EVENT

********** Node Time Series by Node - KINGSNO **********

Time (hrs)	Stage (ft)	Surface Ar.(ac)	Inflow Base Q (cfs)	Inflow Onsite (cfs)	Inflow Offsite (cfs)	Inflow Bndry Q (cfs)	Inflow Link Q (cfs)	Link Outflow (cfs)
90.013	206.13	0.25	0.00	0.20	-0.20	0.00	0.00	0.00
91.013	206.13	0.25	0.00	0.20	-0.20	0.00	0.00	0.00
92.013	206.13	0.25	0.00	0.20	-0.20	0.00	0.00	0.00
93.013	206.13	0.25	0.00	0.20	-0.20	0.00	0.00	0.00
94.013	206.13	0.25	0.00	0.20	-0.20	0.00	0.00	0.00
95.013	206.13	0.25	0.00	0.20	-0.17	0.00	0.00	0.00
96.005	206.15	0.25	0.00	0.07	-0.00	0.00	0.00	0.00
*** Group: BASE		Node: 999						
0.000	87.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.004	87.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.004	87.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.004	87.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.004	87.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.004	87.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.004	87.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7.004	87.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8.004	87.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.004	87.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.004	87.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.004	87.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.004	87.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13.004	87.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14.004	87.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.004	87.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16.004	87.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17.004	87.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18.004	87.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19.004	87.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20.004	87.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21.004	87.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22.004	87.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23.004	87.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24.004	87.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25.004	87.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26.004	87.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27.004	87.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28.004	87.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29.004	87.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30.004	87.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31.004	87.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32.004	87.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33.004	87.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
34.004	87.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35.004	87.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00

36.004	87.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
37.004	87.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00

25YR96HR STORM EVENT

********** Node Time Series by Node - KINGSNO **********

Time (hrs)	Stage (ft)	Surface Ar.(ac)	Inflow Base Q (cfs)	Inflow Onsite (cfs)	Inflow Offsite (cfs)	Inflow Bndry Q (cfs)	Inflow Link Q (cfs)	Link Outflow (cfs)
38.004	87.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39.004	87.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40.010	87.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00
41.001	87.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42.001	87.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
43.001	87.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44.001	87.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45.001	87.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46.001	87.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47.014	87.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48.008	87.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49.008	87.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50.008	87.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00
51.002	87.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00
52.009	87.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00
53.012	87.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00
54.012	87.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55.008	87.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00
56.008	87.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00
57.004	87.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00
58.004	87.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00
59.001	87.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60.008	88.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
61.013	88.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
62.013	88.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
63.013	88.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
64.013	88.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
65.013	88.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
66.013	88.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
67.013	88.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
68.013	88.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
69.013	88.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
70.013	88.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
71.013	88.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00
72.013	88.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
73.013	88.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74.013	88.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75.013	88.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00
76.013	88.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00
77.013	88.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
78.013	88.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
79.013	88.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80.013	88.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
81.013	88.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82.013	88.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00

83.013	88.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84.013	88.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00

25YR96HR STORM EVENT

********** Node Time Series by Node - KINGSNO **********

Time (hrs)	Stage (ft)	Surface Ar.(ac)	Inflow Base Q (cfs)	Inflow Onsite (cfs)	Inflow Offsite (cfs)	Inflow Bndry Q (cfs)	Inflow Link Q (cfs)	Link Outflow (cfs)
85.013	88.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00
86.013	88.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
87.013	88.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00
88.013	88.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
89.013	88.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90.013	88.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
91.013	88.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92.013	88.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
93.013	88.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
94.013	88.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95.013	88.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
96.005	88.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00

"PONDS" INFILTRATION ANALYSIS
25 YEAR-96 HOUR STORM

PONDS - Version 2.26
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Written By Devo Seereeram, Ph.D., P.E.
And Robert D. Casper

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Retention Pond Recovery Analysis - Inflow Hydrograph

I. Job Information

Job Name: north2
Engineer: kk
Date: 12/23/99

II. Input Data

Equivalent Pond Length, [L] (ft):	580.00
Equivalent Pond Width, [W] (ft):	200.00
Base Of Aquifer Elevation, [B] (ft above datum):	234.90
Water Table Elevation, [WT] (ft above datum):	235.00
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day)	28.00
Fillable Porosity of Aquifer, [n] (%):	30.00
Is there a ditch parallel to the pond length axis?:	No
Is there a ditch parallel to the pond width axis?:	No
Include unsaturated vertical infiltration?:	Yes
Unsaturated vertical infiltration rate, (ft/day):	14.00
Maximum area for unsaturated infiltration, (sq ft):	11150
Groundwater mound intersects pond bottom?:	Yes

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III. Input Data - Discharge Structures

Weir (or Orifice) #1 is Inactive

Weir (or Orifice) #2 is Inactive

Weir (or Orifice) #3 is Inactive

IV. Input Data - Stage vs Area Data

Stage (ft datum)	Area (ft^2)
248.000	95673.0
249.000	101198.0
250.000	106823.0

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V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
0.0000	0.00000	0.00000
1.0000	0.00000	0.00000
2.0000	0.00000	0.00000
3.0000	0.00000	0.00000
4.0000	0.00000	0.00000
5.0000	0.00000	0.00000
6.0000	0.00000	0.00000
7.0000	0.00000	0.00000
8.0000	0.00000	0.00000
9.0000	0.00000	0.00000
10.0000	0.00000	0.00000
11.0000	0.00000	0.00000
12.0000	0.00000	0.00000
13.0000	0.00000	0.00000
14.0000	0.00000	0.00000
15.0000	0.00000	0.00000
16.0000	0.00000	0.00000
17.0000	0.00000	0.00000
18.0000	0.00000	0.00000
19.0000	0.00000	0.00000
20.0000	0.00000	0.00000
21.0000	0.00000	0.00000
22.0000	0.00000	0.00000
23.0000	0.00000	0.00000
24.0000	0.00000	0.00000
25.0000	0.00000	0.00000
26.0000	0.00000	0.00000
27.0000	0.00000	0.00000
28.0000	0.00000	0.00000
29.0000	0.00000	0.00000
30.0000	0.00000	0.00000
31.0000	0.00000	0.00000
32.0000	0.00000	0.00000
33.0000	0.00000	0.00000
34.0000	0.00000	0.00000
35.0000	0.00000	0.00000
36.0000	0.00000	0.00000
37.0000	0.00000	0.00000
38.0000	0.00000	0.00000
39.0000	0.00000	0.00000

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V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
40.0000	0.00000	0.00000
41.0000	0.00000	0.00000
42.0000	0.00000	0.00000
43.0000	0.00000	0.00000
44.0000	0.00000	0.00000
45.0000	0.00000	0.00000
46.0000	0.00000	0.00000
47.0000	0.00000	0.00000
48.0000	0.00134	0.00000
49.0000	0.00982	0.00000
50.0000	0.02647	0.00000
51.0000	0.04375	0.00000
52.0000	0.07114	0.00000
53.0000	0.10006	0.00000
54.0000	0.14525	0.00000
55.0000	0.19246	0.00000
56.0000	0.31043	0.00000
57.0000	0.42981	0.00000
58.0000	0.77289	0.00000
59.0000	9.11694	0.00000
60.0000	8.72600	0.00000
61.0000	1.51119	0.00000
62.0000	1.79445	0.00000
63.0000	1.20564	0.00000
64.0000	1.06511	0.00000
65.0000	0.76376	0.00000
66.0000	0.87357	0.00000
67.0000	0.84663	0.00000
68.0000	0.67256	0.00000
69.0000	0.54523	0.00000
70.0000	0.59153	0.00000
71.0000	0.57988	0.00000
72.0000	0.39957	0.00000
73.0000	0.27394	0.00000
74.0000	0.31693	0.00000
75.0000	0.30369	0.00000
76.0000	0.31087	0.00000
77.0000	0.31125	0.00000
78.0000	0.31222	0.00000
79.0000	0.31298	0.00000

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V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
80.0000	0.31210	0.00000
81.0000	0.31175	0.00000
82.0000	0.31291	0.00000
83.0000	0.31356	0.00000
84.0000	0.31437	0.00000
85.0000	0.31512	0.00000
86.0000	0.31588	0.00000
87.0000	0.31663	0.00000
88.0000	0.31910	0.00000
89.0000	0.32100	0.00000
90.0000	0.32137	0.00000
91.0000	0.32224	0.00000
92.0000	0.32118	0.00000
93.0000	0.32076	0.00000
94.0000	0.32186	0.00000
95.0000	0.32244	0.00000
96.0000	0.10762	0.00000

VI. Input Data - Simulation Time After Storm Event

Time (days)
1.0000
2.0000
3.0000
14.0000

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
0.00	0.00000	235.00	0.000000	0.000000	N.A.
1.00	0.00000	248.00	0.000000	0.000000	U/P
2.00	0.00000	248.00	0.000000	0.000000	U/P
3.00	0.00000	248.00	0.000000	0.000000	U/P
4.00	0.00000	248.00	0.000000	0.000000	U/P
5.00	0.00000	248.00	0.000000	0.000000	U/P
6.00	0.00000	248.00	0.000000	0.000000	U/P
7.00	0.00000	248.00	0.000000	0.000000	U/P
8.00	0.00000	248.00	0.000000	0.000000	U/P
9.00	0.00000	248.00	0.000000	0.000000	U/P
10.00	0.00000	248.00	0.000000	0.000000	U/P
11.00	0.00000	248.00	0.000000	0.000000	U/P
12.00	0.00000	248.00	0.000000	0.000000	U/P
13.00	0.00000	248.00	0.000000	0.000000	U/P
14.00	0.00000	248.00	0.000000	0.000000	U/P
15.00	0.00000	248.00	0.000000	0.000000	U/P
16.00	0.00000	248.00	0.000000	0.000000	U/P
17.00	0.00000	248.00	0.000000	0.000000	U/P
18.00	0.00000	248.00	0.000000	0.000000	U/P
19.00	0.00000	248.00	0.000000	0.000000	U/P
20.00	0.00000	248.00	0.000000	0.000000	U/P
21.00	0.00000	248.00	0.000000	0.000000	U/P
22.00	0.00000	248.00	0.000000	0.000000	U/P
23.00	0.00000	248.00	0.000000	0.000000	U/P
24.00	0.00000	248.00	0.000000	0.000000	U/P
25.00	0.00000	248.00	0.000000	0.000000	U/P
26.00	0.00000	248.00	0.000000	0.000000	U/P
27.00	0.00000	248.00	0.000000	0.000000	U/P
28.00	0.00000	248.00	0.000000	0.000000	U/P
29.00	0.00000	248.00	0.000000	0.000000	U/P
30.00	0.00000	248.00	0.000000	0.000000	U/P
31.00	0.00000	248.00	0.000000	0.000000	U/P
32.00	0.00000	248.00	0.000000	0.000000	U/P

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
33.00	0.00000	248.00	0.000000	0.000000	U/P
34.00	0.00000	248.00	0.000000	0.000000	U/P
35.00	0.00000	248.00	0.000000	0.000000	U/P
36.00	0.00000	248.00	0.000000	0.000000	U/P
37.00	0.00000	248.00	0.000000	0.000000	U/P
38.00	0.00000	248.00	0.000000	0.000000	U/P
39.00	0.00000	248.00	0.000000	0.000000	U/P
40.00	0.00000	248.00	0.000000	0.000000	U/P
41.00	0.00000	248.00	0.000000	0.000000	U/P
42.00	0.00000	248.00	0.000000	0.000000	U/P
43.00	0.00000	248.00	0.000000	0.000000	U/P
44.00	0.00000	248.00	0.000000	0.000000	U/P
45.00	0.00000	248.00	0.000000	0.000000	U/P
46.00	0.00000	248.00	0.000000	0.000000	U/P
47.00	0.00000	248.00	0.000000	0.000000	U/P
48.00	0.00134	248.00	0.000014	0.000000	U/P
49.00	0.00982	248.00	0.000116	0.000000	U/P
50.00	0.02647	248.00	0.000512	0.000000	U/P
51.00	0.04375	248.00	0.001393	0.000000	U/P
52.00	0.07114	248.00	0.002903	0.000000	U/P
53.00	0.10006	248.01	0.005211	0.000000	U/P
54.00	0.14525	248.01	0.008544	0.000000	U/P
55.00	0.19246	248.02	0.013169	0.000000	U/P
56.00	0.31043	248.03	0.019794	0.000000	U/P
57.00	0.42981	248.04	0.029576	0.000000	U/P
58.00	0.77289	248.06	0.044903	0.000000	U/P
59.00	9.11694	248.24	0.136066	0.000000	U/P
60.00	8.72600	248.56	0.360986	0.000000	U/P
61.00	1.51119	248.73	0.579171	0.000000	U/P
62.00	1.79445	248.77	0.670218	0.000000	U/P
63.00	1.20564	248.80	0.699459	0.000000	U/P
64.00	1.06511	248.81	0.719382	0.000000	U/P
65.00	0.76376	248.82	0.729218	0.000000	U/P

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
66.00	0.87357	248.82	0.733630	0.000000	U/P
67.00	0.84663	248.83	0.737032	0.000000	U/P
68.00	0.67256	248.83	0.739375	0.000000	U/P
69.00	0.54523	248.82	0.737599	0.000000	U/P
70.00	0.59153	248.82	0.732811	0.000000	U/P
71.00	0.57988	248.81	0.727804	0.000000	U/P
72.00	0.39957	248.80	0.721684	0.000000	U/P
73.00	0.27394	248.79	0.711746	0.000000	U/P
74.00	0.31693	248.77	0.699001	0.000000	U/P
75.00	0.30369	248.76	0.686228	0.000000	U/P
76.00	0.31087	248.75	5.505080	0.000000	U/P
77.00	0.31125	248.38	7.604093	0.000000	U/S
78.00	0.31222	248.21	4.217492	0.000000	S
79.00	0.31298	248.09	3.148982	0.000000	S
80.00	0.31210	246.99	1.526495	0.000000	S
81.00	0.31175	246.93	0.312127	0.000000	S
82.00	0.31291	246.87	0.312782	0.000000	S
83.00	0.31356	246.82	0.313599	0.000000	S
84.00	0.31437	246.77	0.314355	0.000000	S
85.00	0.31512	246.72	0.315123	0.000000	S
86.00	0.31588	246.68	0.315878	0.000000	S
87.00	0.31663	246.64	0.317060	0.000000	S
88.00	0.31910	246.61	0.318956	0.000000	S
89.00	0.32100	246.57	0.320617	0.000000	S
90.00	0.32137	246.54	0.321495	0.000000	S
91.00	0.32224	246.51	0.321758	0.000000	S
92.00	0.32118	246.48	0.321341	0.000000	S
93.00	0.32076	246.45	0.321141	0.000000	S
94.00	0.32186	246.43	0.321730	0.000000	S
95.00	0.32244	246.40	0.268590	0.000000	S
96.00	0.10762	246.37	0.206429	0.000000	S
120.00	0.00000	245.79	0.000000	0.000000	S
144.00	0.00000	245.36	0.000000	0.000000	S

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
168.00	0.00000	245.01	0.000000	0.000000	S
432.00	0.00000	243.36	-----	-----	N.A.

VIII. Summary - Cumulative Volumes, Peaks Rates, and Peak Stage

Inflow

Peak Inflow Rate, (cfs):	9.12
Time, (hrs):	59.00
Cumulative Inflow Volume, (ft^3):	137064

Stage

Peak Stage, (ft datum):	248.83
Time, (hrs):	68.00

Overflow Discharge

Peak Discharge Rate, (cfs):	0.00
Time, (hrs):	0.00
Cumulative weir discharge volume, (ft^3):	0

Infiltration Rate

Peak Infiltration Rate, (cfs):	7.6041
Time, (hrs):	77.00
Cumulative Infiltration Volume, (ft^3):	137065

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Retention Pond Recovery Analysis - Inflow Hydrograph

I. Job Information

Job Name: north3
Engineer: kk
Date: 7/22/99

II. Input Data

Equivalent Pond Length, [L] (ft):	340.00
Equivalent Pond Width, [W] (ft):	130.00
Base Of Aquifer Elevation, [B] (ft above datum):	232.00
Water Table Elevation, [WT] (ft above datum):	232.10
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day)	32.00
Fillable Porosity of Aquifer, [n] (%):	30.00
Is there a ditch parallel to the pond length axis?:	No
Is there a ditch parallel to the pond width axis?:	No
Include unsaturated vertical infiltration?:	Yes
Unsaturated vertical infiltration rate, (ft/day):	16.00
Maximum area for unsaturated infiltration, (sq ft):	42192
Groundwater mound intersects pond bottom?:	Yes

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III. Input Data - Discharge Structures

Weir (or Orifice) #1 is Inactive

Weir (or Orifice) #2 is Inactive

Weir (or Orifice) #3 is Inactive

IV. Input Data - Stage vs Area Data

Stage (ft datum)	Area (ft^2)
237.000	22059.0
238.000	25517.0
239.000	29076.0
240.000	32735.0
241.000	36495.0
242.000	40356.0
243.000	44317.0

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V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
0.0000	0.00000	0.00000
1.0000	0.00000	0.00000
2.0000	0.00000	0.00000
3.0000	0.00000	0.00000
4.0000	0.00000	0.00000
5.0000	0.00000	0.00000
6.0000	0.00000	0.00000
7.0000	0.00000	0.00000
8.0000	0.00000	0.00000
9.0000	0.00000	0.00000
10.0000	0.00000	0.00000
11.0000	0.00000	0.00000
12.0000	0.00000	0.00000
13.0000	0.00000	0.00000
14.0000	0.00000	0.00000
15.0000	0.00000	0.00000
16.0000	0.00000	0.00000
17.0000	0.00000	0.00000
18.0000	0.00000	0.00000
19.0000	0.00000	0.00000
20.0000	0.00000	0.00000
21.0000	0.00000	0.00000
22.0000	0.00000	0.00000
23.0000	0.00000	0.00000
24.0000	0.00000	0.00000
25.0000	0.00000	0.00000
26.0000	0.00000	0.00000
27.0000	0.00000	0.00000
28.0000	0.00000	0.00000
29.0000	0.00000	0.00000
30.0000	0.00000	0.00000
31.0000	0.00000	0.00000
32.0000	0.00000	0.00000
33.0000	0.00000	0.00000
34.0000	0.00000	0.00000
35.0000	0.00000	0.00000
36.0000	0.00000	0.00000
37.0000	0.00000	0.00000
38.0000	0.00000	0.00000
39.0000	0.00000	0.00000

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V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
40.0000	0.00000	0.00000
41.0000	0.00290	0.00000
42.0000	0.01346	0.00000
43.0000	0.02716	0.00000
44.0000	0.03855	0.00000
45.0000	0.04984	0.00000
46.0000	0.06134	0.00000
47.0000	0.07246	0.00000
48.0000	0.10468	0.00000
49.0000	0.13522	0.00000
50.0000	0.16890	0.00000
51.0000	0.20516	0.00000
52.0000	0.26430	0.00000
53.0000	0.32295	0.00000
54.0000	0.41310	0.00000
55.0000	0.50347	0.00000
56.0000	0.74327	0.00000
57.0000	0.96829	0.00000
58.0000	1.61456	0.00000
59.0000	16.16687	0.00000
60.0000	14.96549	0.00000
61.0000	2.22724	0.00000
62.0000	2.96753	0.00000
63.0000	1.90630	0.00000
64.0000	1.71172	0.00000
65.0000	1.21388	0.00000
66.0000	1.39067	0.00000
67.0000	1.34314	0.00000
68.0000	1.06562	0.00000
69.0000	0.86222	0.00000
70.0000	0.93445	0.00000
71.0000	0.91472	0.00000
72.0000	0.62972	0.00000
73.0000	0.43129	0.00000
74.0000	0.49875	0.00000
75.0000	0.47756	0.00000
76.0000	0.48855	0.00000
77.0000	0.48882	0.00000
78.0000	0.49003	0.00000
79.0000	0.49091	0.00000

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V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
80.0000	0.48922	0.00000
81.0000	0.48838	0.00000
82.0000	0.48989	0.00000
83.0000	0.49061	0.00000
84.0000	0.49159	0.00000
85.0000	0.49246	0.00000
86.0000	0.49336	0.00000
87.0000	0.49424	0.00000
88.0000	0.49781	0.00000
89.0000	0.50049	0.00000
90.0000	0.50077	0.00000
91.0000	0.50184	0.00000
92.0000	0.49992	0.00000
93.0000	0.49898	0.00000
94.0000	0.50041	0.00000
95.0000	0.50104	0.00000
96.0000	0.16718	0.00000

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
0.00	0.00000	232.10	0.000000	0.000000	N.A.
1.00	0.00000	232.10	0.000000	0.000000	U
2.00	0.00000	232.10	0.000000	0.000000	U
3.00	0.00000	232.10	0.000000	0.000000	U
4.00	0.00000	232.10	0.000000	0.000000	U
5.00	0.00000	232.10	0.000000	0.000000	U
6.00	0.00000	232.10	0.000000	0.000000	U
7.00	0.00000	232.10	0.000000	0.000000	U
8.00	0.00000	232.10	0.000000	0.000000	U
9.00	0.00000	232.10	0.000000	0.000000	U
10.00	0.00000	232.10	0.000000	0.000000	U
11.00	0.00000	232.10	0.000000	0.000000	U
12.00	0.00000	232.10	0.000000	0.000000	U
13.00	0.00000	232.10	0.000000	0.000000	U
14.00	0.00000	232.10	0.000000	0.000000	U
15.00	0.00000	232.10	0.000000	0.000000	U
16.00	0.00000	232.10	0.000000	0.000000	U
17.00	0.00000	232.10	0.000000	0.000000	U
18.00	0.00000	232.10	0.000000	0.000000	U
19.00	0.00000	232.10	0.000000	0.000000	U
20.00	0.00000	232.10	0.000000	0.000000	U
21.00	0.00000	232.10	0.000000	0.000000	U
22.00	0.00000	232.10	0.000000	0.000000	U
23.00	0.00000	232.10	0.000000	0.000000	U
24.00	0.00000	232.10	0.000000	0.000000	U
25.00	0.00000	232.10	0.000000	0.000000	U
26.00	0.00000	232.10	0.000000	0.000000	U
27.00	0.00000	232.10	0.000000	0.000000	U
28.00	0.00000	232.10	0.000000	0.000000	U
29.00	0.00000	232.10	0.000000	0.000000	U
30.00	0.00000	232.10	0.000000	0.000000	U
31.00	0.00000	232.10	0.000000	0.000000	U
32.00	0.00000	232.10	0.000000	0.000000	U

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
33.00	0.00000	232.10	0.000000	0.000000	U
34.00	0.00000	232.10	0.000000	0.000000	U
35.00	0.00000	232.10	0.000000	0.000000	U
36.00	0.00000	232.10	0.000000	0.000000	U
37.00	0.00000	232.10	0.000000	0.000000	U
38.00	0.00000	232.10	0.000000	0.000000	U
39.00	0.00000	232.10	0.000000	0.000000	U
40.00	0.00000	232.10	0.000725	0.000000	U
41.00	0.00290	232.10	0.004815	0.000000	U
42.00	0.01346	232.10	0.014245	0.000000	U
43.00	0.02716	232.11	0.026582	0.000000	U
44.00	0.03855	232.12	0.038525	0.000000	U
45.00	0.04984	232.13	0.049893	0.000000	U
46.00	0.06134	232.15	0.061245	0.000000	U
47.00	0.07246	232.17	0.077735	0.000000	U
48.00	0.10468	232.19	0.104260	0.000000	U
49.00	0.13522	232.22	0.136005	0.000000	U
50.00	0.16890	232.27	0.169545	0.000000	U
51.00	0.20516	232.32	0.210880	0.000000	U
52.00	0.26430	232.39	0.264178	0.000000	U
53.00	0.32295	232.47	0.330825	0.000000	U
54.00	0.41310	232.58	0.413155	0.000000	U
55.00	0.50347	232.71	0.540828	0.000000	U
56.00	0.74327	232.88	0.739575	0.000000	U
57.00	0.96829	233.13	1.073602	0.000000	U
58.00	1.61456	233.49	2.688212	0.000000	U
59.00	16.16687	237.74	4.322330	0.000000	U/P
60.00	14.96549	239.20	5.039257	0.000000	U/P
61.00	2.22724	239.56	5.396297	0.000000	U/P
62.00	2.96753	239.25	3.311990	0.000000	U/S
63.00	1.90630	239.38	1.194715	0.000000	S
64.00	1.71172	239.47	0.962730	0.000000	S
65.00	1.21388	239.53	0.839563	0.000000	S

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
66.00	1.39067	239.59	0.764953	0.000000	S
67.00	1.34314	239.66	0.713219	0.000000	S
68.00	1.06562	239.72	0.666646	0.000000	S
69.00	0.86222	239.76	0.626578	0.000000	S
70.00	0.93445	239.79	0.596863	0.000000	S
71.00	0.91472	239.83	0.570664	0.000000	S
72.00	0.62972	239.85	0.540676	0.000000	S
73.00	0.43129	239.86	0.511411	0.000000	S
74.00	0.49875	239.85	0.488870	0.000000	S
75.00	0.47756	239.85	0.471137	0.000000	S
76.00	0.48855	239.85	0.455837	0.000000	S
77.00	0.48882	239.86	0.442757	0.000000	S
78.00	0.49003	239.87	0.431315	0.000000	S
79.00	0.49091	239.87	0.421125	0.000000	S
80.00	0.48922	239.88	0.412014	0.000000	S
81.00	0.48838	239.89	0.403794	0.000000	S
82.00	0.48989	239.90	0.396327	0.000000	S
83.00	0.49061	239.91	0.389642	0.000000	S
84.00	0.49159	239.92	0.383658	0.000000	S
85.00	0.49246	239.93	0.378214	0.000000	S
86.00	0.49336	239.95	0.373210	0.000000	S
87.00	0.49424	239.96	0.368574	0.000000	S
88.00	0.49781	239.98	0.364473	0.000000	S
89.00	0.50049	239.99	0.360801	0.000000	S
90.00	0.50077	240.01	0.357258	0.000000	S
91.00	0.50184	240.02	0.353989	0.000000	S
92.00	0.49992	240.04	0.350981	0.000000	S
93.00	0.49898	240.05	0.348085	0.000000	S
94.00	0.50041	240.07	0.345421	0.000000	S
95.00	0.50104	240.09	0.338935	0.000000	S
96.00	0.16718	240.09	-----	-----	N.A.

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VIII. Summary - Cumulative Volumes, Peaks Rates, and Peak Stage

Inflow

Peak Inflow Rate, (cfs):	16.17
Time, (hrs):	59.00
Cumulative Inflow Volume, (ft^3):	235403

Stage

Peak Stage, (ft datum):	240.09
Time, (hrs):	96.00

Overflow Discharge

Peak Discharge Rate, (cfs):	0.00
Time, (hrs):	0.00
Cumulative weir discharge volume, (ft^3):	0

Infiltration Rate

Peak Infiltration Rate, (cfs):	5.3963
Time, (hrs):	61.00
Cumulative Infiltration Volume, (ft^3):	150502

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Retention Pond Recovery Analysis - Inflow Hydrograph

I. Job Information

Job Name: north4
Engineer: kk
Date: 7/22/99

II. Input Data

Equivalent Pond Length, [L] (ft):	400.00
Equivalent Pond Width, [W] (ft):	180.00
Base Of Aquifer Elevation, [B] (ft above datum):	215.00
Water Table Elevation, [WT] (ft above datum):	215.10
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day)	25.00
Fillable Porosity of Aquifer, [n] (%):	30.00
Is there a ditch parallel to the pond length axis?:	No
Is there a ditch parallel to the pond width axis?:	No
Include unsaturated vertical infiltration?:	Yes
Unsaturated vertical infiltration rate, (ft/day):	13.00
Maximum area for unsaturated infiltration, (sq ft):	25400
Groundwater mound intersects pond bottom?:	Yes

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III. Input Data - Discharge Structures

Weir (or Orifice) #1 is Inactive

Weir (or Orifice) #2 is Inactive

Weir (or Orifice) #3 is Inactive

IV. Input Data - Stage vs Area Data

Stage (ft datum)	Area (ft^2)
227.000	48800.0
228.000	52782.0
229.000	56865.0
230.000	61048.0
231.000	65331.0
232.000	69715.0
233.000	74200.0

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V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
0.0000	0.00000	0.00000
1.0000	0.00000	0.00000
2.0000	0.00000	0.00000
3.0000	0.00000	0.00000
4.0000	0.00000	0.00000
5.0000	0.00000	0.00000
6.0000	0.00000	0.00000
7.0000	0.00000	0.00000
8.0000	0.00000	0.00000
9.0000	0.00000	0.00000
10.0000	0.00000	0.00000
11.0000	0.00000	0.00000
12.0000	0.00000	0.00000
13.0000	0.00000	0.00000
14.0000	0.00000	0.00000
15.0000	0.00000	0.00000
16.0000	0.00000	0.00000
17.0000	0.00000	0.00000
18.0000	0.00000	0.00000
19.0000	0.00000	0.00000
20.0000	0.00000	0.00000
21.0000	0.00000	0.00000
22.0000	0.00000	0.00000
23.0000	0.00000	0.00000
24.0000	0.00000	0.00000
25.0000	0.00000	0.00000
26.0000	0.00000	0.00000
27.0000	0.00000	0.00000
28.0000	0.00000	0.00000
29.0000	0.00000	0.00000
30.0000	0.00000	0.00000
31.0000	0.00000	0.00000
32.0000	0.00000	0.00000
33.0000	0.00000	0.00000
34.0000	0.00383	0.00000
35.0000	0.02511	0.00000
36.0000	0.05649	0.00000
37.0000	0.08495	0.00000
38.0000	0.11329	0.00000
39.0000	0.14063	0.00000

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V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
40.0000	0.17140	0.00000
41.0000	0.20120	0.00000
42.0000	0.22737	0.00000
43.0000	0.25373	0.00000
44.0000	0.27278	0.00000
45.0000	0.29234	0.00000
46.0000	0.31617	0.00000
47.0000	0.33780	0.00000
48.0000	0.44585	0.00000
49.0000	0.53546	0.00000
50.0000	0.62084	0.00000
51.0000	0.71418	0.00000
52.0000	0.86942	0.00000
53.0000	1.01723	0.00000
54.0000	1.24182	0.00000
55.0000	1.46038	0.00000
56.0000	2.06538	0.00000
57.0000	2.60321	0.00000
58.0000	4.14730	0.00000
59.0000	36.86299	0.00000
60.0000	33.18027	0.00000
61.0000	4.24929	0.00000
62.0000	6.37511	0.00000
63.0000	3.92497	0.00000
64.0000	3.58143	0.00000
65.0000	2.51312	0.00000
66.0000	2.88405	0.00000
67.0000	2.77656	0.00000
68.0000	2.20036	0.00000
69.0000	1.77723	0.00000
70.0000	1.92430	0.00000
71.0000	1.88117	0.00000
72.0000	1.29395	0.00000
73.0000	0.88540	0.00000
74.0000	1.02349	0.00000
75.0000	0.97933	0.00000
76.0000	1.00131	0.00000
77.0000	1.00127	0.00000
78.0000	1.00316	0.00000
79.0000	1.00438	0.00000

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V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
80.0000	1.00035	0.00000
81.0000	0.99806	0.00000
82.0000	1.00060	0.00000
83.0000	1.00151	0.00000
84.0000	1.00295	0.00000
85.0000	1.00419	0.00000
86.0000	1.00548	0.00000
87.0000	1.00673	0.00000
88.0000	1.01347	0.00000
89.0000	1.01839	0.00000
90.0000	1.01842	0.00000
91.0000	1.02007	0.00000
92.0000	1.01563	0.00000
93.0000	1.01322	0.00000
94.0000	1.01562	0.00000
95.0000	1.01639	0.00000
96.0000	0.33906	0.00000

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VI. Input Data - Simulation Time After Storm Event

Time (days)
1.0000
2.0000
3.0000
4.0000
5.0000
6.0000
7.0000
14.0000

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
0.00	0.00000	215.10	0.000000	0.000000	N.A.
1.00	0.00000	215.10	0.000000	0.000000	U
2.00	0.00000	215.10	0.000000	0.000000	U
3.00	0.00000	215.10	0.000000	0.000000	U
4.00	0.00000	215.10	0.000000	0.000000	U
5.00	0.00000	215.10	0.000000	0.000000	U
6.00	0.00000	215.10	0.000000	0.000000	U
7.00	0.00000	215.10	0.000000	0.000000	U
8.00	0.00000	215.10	0.000000	0.000000	U
9.00	0.00000	215.10	0.000000	0.000000	U
10.00	0.00000	215.10	0.000000	0.000000	U
11.00	0.00000	215.10	0.000000	0.000000	U
12.00	0.00000	215.10	0.000000	0.000000	U
13.00	0.00000	215.10	0.000000	0.000000	U
14.00	0.00000	215.10	0.000000	0.000000	U
15.00	0.00000	215.10	0.000000	0.000000	U
16.00	0.00000	215.10	0.000000	0.000000	U
17.00	0.00000	215.10	0.000000	0.000000	U
18.00	0.00000	215.10	0.000000	0.000000	U
19.00	0.00000	215.10	0.000000	0.000000	U
20.00	0.00000	215.10	0.000000	0.000000	U
21.00	0.00000	215.10	0.000000	0.000000	U
22.00	0.00000	215.10	0.000000	0.000000	U
23.00	0.00000	215.10	0.000000	0.000000	U
24.00	0.00000	215.10	0.000000	0.000000	U
25.00	0.00000	215.10	0.000000	0.000000	U
26.00	0.00000	215.10	0.000000	0.000000	U
27.00	0.00000	215.10	0.000000	0.000000	U
28.00	0.00000	215.10	0.000000	0.000000	U
29.00	0.00000	215.10	0.000000	0.000000	U
30.00	0.00000	215.10	0.000000	0.000000	U
31.00	0.00000	215.10	0.000000	0.000000	U
32.00	0.00000	215.10	0.000000	0.000000	U

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
33.00	0.00000	215.10	0.000000	0.000000	U
34.00	0.00383	227.00	0.000041	0.000000	U/P
35.00	0.02511	227.00	0.000402	0.000000	U/P
36.00	0.05649	227.00	0.001609	0.000000	U/P
37.00	0.08495	227.01	0.004000	0.000000	U/P
38.00	0.11329	227.02	0.007570	0.000000	U/P
39.00	0.14063	227.02	0.012228	0.000000	U/P
40.00	0.17140	227.04	0.017932	0.000000	U/P
41.00	0.20120	227.05	0.024684	0.000000	U/P
42.00	0.22737	227.06	0.032414	0.000000	U/P
43.00	0.25373	227.08	0.040989	0.000000	U/P
44.00	0.27278	227.09	0.050255	0.000000	U/P
45.00	0.29234	227.11	0.060023	0.000000	U/P
46.00	0.31617	227.13	0.070244	0.000000	U/P
47.00	0.33780	227.14	0.080977	0.000000	U/P
48.00	0.44585	227.17	0.093141	0.000000	U/P
49.00	0.53546	227.20	0.108317	0.000000	U/P
50.00	0.62084	227.23	0.126848	0.000000	U/P
51.00	0.71418	227.27	0.148364	0.000000	U/P
52.00	0.86942	227.31	0.173505	0.000000	U/P
53.00	1.01723	227.37	0.203409	0.000000	U/P
54.00	1.24182	227.43	0.239142	0.000000	U/P
55.00	1.46038	227.51	0.281868	0.000000	U/P
56.00	2.06538	227.61	0.335926	0.000000	U/P
57.00	2.60321	227.75	0.407925	0.000000	U/P
58.00	4.14730	227.95	0.509587	0.000000	U/P
59.00	36.86299	229.25	0.970648	0.000000	U/P
60.00	33.18027	231.20	1.996363	0.000000	U/P
61.00	4.24929	232.05	2.902536	0.000000	U/P
62.00	6.37511	232.16	3.220418	0.000000	U/P
63.00	3.92497	232.26	3.289783	0.000000	U/P
64.00	3.58143	232.28	3.329700	0.000000	U/P
65.00	2.51312	232.27	3.332115	0.000000	U/P

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
66.00	2.88405	232.24	7.195731	0.000000	U/P
67.00	2.77656	231.81	7.970003	0.000000	U/S
68.00	2.20036	231.69	4.239585	0.000000	S
69.00	1.77723	231.60	3.298084	0.000000	S
70.00	1.92430	231.54	2.807940	0.000000	S
71.00	1.88117	231.50	2.489395	0.000000	S
72.00	1.29395	231.46	2.248770	0.000000	S
73.00	0.88540	231.40	2.059212	0.000000	S
74.00	1.02349	231.35	1.912124	0.000000	S
75.00	0.97933	231.30	1.794461	0.000000	S
76.00	1.00131	231.26	1.696872	0.000000	S
77.00	1.00127	231.23	1.614557	0.000000	S
78.00	1.00316	231.20	1.543539	0.000000	S
79.00	1.00438	231.17	1.481844	0.000000	S
80.00	1.00035	231.14	1.427744	0.000000	S
81.00	0.99806	231.12	1.379533	0.000000	S
82.00	1.00060	231.10	1.336601	0.000000	S
83.00	1.00151	231.08	1.298252	0.000000	S
84.00	1.00295	231.07	1.263453	0.000000	S
85.00	1.00419	231.06	1.231722	0.000000	S
86.00	1.00548	231.04	1.202679	0.000000	S
87.00	1.00673	231.03	1.175896	0.000000	S
88.00	1.01347	231.03	1.151312	0.000000	S
89.00	1.01839	231.02	1.128912	0.000000	S
90.00	1.01842	231.01	1.108071	0.000000	S
91.00	1.02007	231.01	1.088517	0.000000	S
92.00	1.01563	231.01	1.070296	0.000000	S
93.00	1.01322	231.00	1.053336	0.000000	S
94.00	1.01562	231.00	1.037510	0.000000	S
95.00	1.01639	231.00	1.016255	0.000000	S
96.00	0.33906	230.98	0.989410	0.000000	S
120.00	0.00000	230.07	0.588498	0.000000	S
144.00	0.00000	229.34	0.453399	0.000000	S

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
168.00	0.00000	228.73	0.365806	0.000000	S
192.00	0.00000	228.21	0.304553	0.000000	S
216.00	0.00000	227.75	0.259452	0.000000	S
240.00	0.00000	227.34	0.218044	0.000000	S
264.00	0.00000	226.87	0.171532	0.000000	S
432.00	0.00000	225.35	-----	-----	N.A.

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VIII. Summary - Cumulative Volumes, Peaks Rates, and Peak Stage

Inflow

Peak Inflow Rate, (cfs):	36.86
Time, (hrs):	59.00
Cumulative Inflow Volume, (ft^3):	528703

Stage

Peak Stage, (ft datum):	232.28
Time, (hrs):	64.00

Overflow Discharge

Peak Discharge Rate, (cfs):	0.00
Time, (hrs):	0.00
Cumulative weir discharge volume, (ft^3):	0

Infiltration Rate

Peak Infiltration Rate, (cfs):	7.9700
Time, (hrs):	67.00
Cumulative Infiltration Volume, (ft^3):	528702

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Retention Pond Recovery Analysis - Inflow Hydrograph

I. Job Information

Job Name: north5
Engineer: kk
Date: 7/22/99

II. Input Data

Equivalent Pond Length, [L] (ft):	580.00
Equivalent Pond Width, [W] (ft):	190.00
Base Of Aquifer Elevation, [B] (ft above datum):	120.00
Water Table Elevation, [WT] (ft above datum):	120.10
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day)	27.00
Fillable Porosity of Aquifer, [n] (%):	30.00
Is there a ditch parallel to the pond length axis?:	No
Is there a ditch parallel to the pond width axis?:	No
Include unsaturated vertical infiltration?:	Yes
Unsaturated vertical infiltration rate, (ft/day):	27.00
Maximum area for unsaturated infiltration, (sq ft):	122480
Groundwater mound intersects pond bottom?:	Yes

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III. Input Data - Discharge Structures

Weir (or Orifice) #1 is Inactive

Weir (or Orifice) #2 is Inactive

Weir (or Orifice) #3 is Inactive

IV. Input Data - Stage vs Area Data

Stage (ft datum)	Area (ft^2)
129.000	86457.0
130.000	92210.0
131.000	98063.0
132.000	104016.0
133.000	110070.0
134.000	116225.0
135.000	122480.0

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V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
0.0000	0.00000	0.00000
1.0000	0.00000	0.00000
2.0000	0.00000	0.00000
3.0000	0.00000	0.00000
4.0000	0.00000	0.00000
5.0000	0.00000	0.00000
6.0000	0.00000	0.00000
7.0000	0.00000	0.00000
8.0000	0.00000	0.00000
9.0000	0.00000	0.00000
10.0000	0.00000	0.00000
11.0000	0.00000	0.00000
12.0000	0.00000	0.00000
13.0000	0.00000	0.00000
14.0000	0.00000	0.00000
15.0000	0.00000	0.00000
16.0000	0.00000	0.00000
17.0000	0.00000	0.00000
18.0000	0.00000	0.00000
19.0000	0.00000	0.00000
20.0000	0.00000	0.00000
21.0000	0.00000	0.00000
22.0000	0.00000	0.00000
23.0000	0.00000	0.00000
24.0000	0.00000	0.00000
25.0000	0.00000	0.00000
26.0000	0.00000	0.00000
27.0000	0.00000	0.00000
28.0000	0.00000	0.00000
29.0000	0.00000	0.00000
30.0000	0.00000	0.00000
31.0000	0.00000	0.00000
32.0000	0.00000	0.00000
33.0000	0.00000	0.00000
34.0000	0.00000	0.00000
35.0000	0.01205	0.00000
36.0000	0.06280	0.00000
37.0000	0.13172	0.00000
38.0000	0.19386	0.00000
39.0000	0.25598	0.00000

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V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
40.0000	0.32380	0.00000
41.0000	0.39019	0.00000
42.0000	0.44957	0.00000
43.0000	0.50905	0.00000
44.0000	0.55353	0.00000
45.0000	0.59873	0.00000
46.0000	0.65240	0.00000
47.0000	0.70154	0.00000
48.0000	0.93183	0.00000
49.0000	1.12534	0.00000
50.0000	1.31269	0.00000
51.0000	1.51715	0.00000
52.0000	1.85643	0.00000
53.0000	2.18102	0.00000
54.0000	2.67488	0.00000
55.0000	3.15720	0.00000
56.0000	4.48555	0.00000
57.0000	5.67413	0.00000
58.0000	9.08661	0.00000
59.0000	81.93154	0.00000
60.0000	74.00714	0.00000
61.0000	9.67171	0.00000
62.0000	14.27629	0.00000
63.0000	8.83878	0.00000
64.0000	8.04777	0.00000
65.0000	5.65505	0.00000
66.0000	6.48819	0.00000
67.0000	6.24897	0.00000
68.0000	4.95288	0.00000
69.0000	4.00135	0.00000
70.0000	4.33298	0.00000
71.0000	4.23660	0.00000
72.0000	2.91443	0.00000
73.0000	1.99447	0.00000
74.0000	2.30564	0.00000
75.0000	2.20636	0.00000
76.0000	2.25606	0.00000
77.0000	2.25612	0.00000
78.0000	2.26056	0.00000
79.0000	2.26346	0.00000

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V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
80.0000	2.25455	0.00000
81.0000	2.24957	0.00000
82.0000	2.25543	0.00000
83.0000	2.25764	0.00000
84.0000	2.26106	0.00000
85.0000	2.26401	0.00000
86.0000	2.26709	0.00000
87.0000	2.27006	0.00000
88.0000	2.28540	0.00000
89.0000	2.29664	0.00000
90.0000	2.29688	0.00000
91.0000	2.30074	0.00000
92.0000	2.29089	0.00000
93.0000	2.28559	0.00000
94.0000	2.29116	0.00000
95.0000	2.29304	0.00000
96.0000	0.76497	0.00000

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
0.00	0.00000	120.10	0.000000	0.000000	N.A.
1.00	0.00000	120.10	0.000000	0.000000	U
2.00	0.00000	120.10	0.000000	0.000000	U
3.00	0.00000	120.10	0.000000	0.000000	U
4.00	0.00000	120.10	0.000000	0.000000	U
5.00	0.00000	120.10	0.000000	0.000000	U
6.00	0.00000	120.10	0.000000	0.000000	U
7.00	0.00000	120.10	0.000000	0.000000	U
8.00	0.00000	120.10	0.000000	0.000000	U
9.00	0.00000	120.10	0.000000	0.000000	U
10.00	0.00000	120.10	0.000000	0.000000	U
11.00	0.00000	120.10	0.000000	0.000000	U
12.00	0.00000	120.10	0.000000	0.000000	U
13.00	0.00000	120.10	0.000000	0.000000	U
14.00	0.00000	120.10	0.000000	0.000000	U
15.00	0.00000	120.10	0.000000	0.000000	U
16.00	0.00000	120.10	0.000000	0.000000	U
17.00	0.00000	120.10	0.000000	0.000000	U
18.00	0.00000	120.10	0.000000	0.000000	U
19.00	0.00000	120.10	0.000000	0.000000	U
20.00	0.00000	120.10	0.000000	0.000000	U
21.00	0.00000	120.10	0.000000	0.000000	U
22.00	0.00000	120.10	0.000000	0.000000	U
23.00	0.00000	120.10	0.000000	0.000000	U
24.00	0.00000	120.10	0.000000	0.000000	U
25.00	0.00000	120.10	0.000000	0.000000	U
26.00	0.00000	120.10	0.000000	0.000000	U
27.00	0.00000	120.10	0.000000	0.000000	U
28.00	0.00000	120.10	0.000000	0.000000	U
29.00	0.00000	120.10	0.000000	0.000000	U
30.00	0.00000	120.10	0.000000	0.000000	U
31.00	0.00000	120.10	0.000000	0.000000	U
32.00	0.00000	120.10	0.000000	0.000000	U

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
33.00	0.00000	120.10	0.000000	0.000000	U
34.00	0.00000	120.10	0.003013	0.000000	U
35.00	0.01205	120.10	0.021725	0.000000	U
36.00	0.06280	120.10	0.067343	0.000000	U
37.00	0.13172	120.11	0.130025	0.000000	U
38.00	0.19386	120.13	0.193855	0.000000	U
39.00	0.25598	120.15	0.257405	0.000000	U
40.00	0.32380	120.18	0.323442	0.000000	U
41.00	0.39019	120.22	0.388438	0.000000	U
42.00	0.44957	120.26	0.449595	0.000000	U
43.00	0.50905	120.30	0.505300	0.000000	U
44.00	0.55353	120.36	0.553710	0.000000	U
45.00	0.59873	120.41	0.600848	0.000000	U
46.00	0.65240	120.47	0.651268	0.000000	U
47.00	0.70154	120.54	0.746827	0.000000	U
48.00	0.93183	120.62	0.922634	0.000000	U
49.00	1.12534	120.72	1.123800	0.000000	U
50.00	1.31269	120.84	1.316967	0.000000	U
51.00	1.51715	120.98	1.550855	0.000000	U
52.00	1.85643	121.14	1.852757	0.000000	U
53.00	2.18102	121.34	2.223337	0.000000	U
54.00	2.67488	121.58	2.671995	0.000000	U
55.00	3.15720	121.86	3.368707	0.000000	U
56.00	4.48555	122.24	4.450607	0.000000	U
57.00	5.67413	122.74	6.230105	0.000000	U
58.00	9.08661	123.46	17.199091	0.000000	U
59.00	81.93154	129.75	27.693062	0.000000	U/P
60.00	74.00714	131.61	23.478382	0.000000	U/P
61.00	9.67171	132.41	11.566137	0.000000	U/S
62.00	14.27629	132.66	4.067822	0.000000	S
63.00	8.83878	132.92	3.340597	0.000000	S
64.00	8.04777	133.10	2.927086	0.000000	S
65.00	5.65505	133.23	2.652299	0.000000	S

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
66.00	6.48819	133.35	2.466606	0.000000	S
67.00	6.24897	133.47	2.328040	0.000000	S
68.00	4.95288	133.58	2.199581	0.000000	S
69.00	4.00135	133.65	2.086055	0.000000	S
70.00	4.33298	133.72	1.998986	0.000000	S
71.00	4.23660	133.79	1.921682	0.000000	S
72.00	2.91443	133.85	1.834805	0.000000	S
73.00	1.99447	133.87	1.750362	0.000000	S
74.00	2.30564	133.88	1.683109	0.000000	S
75.00	2.20636	133.90	1.628903	0.000000	S
76.00	2.25606	133.92	1.582419	0.000000	S
77.00	2.25612	133.94	1.541712	0.000000	S
78.00	2.26056	133.96	1.505457	0.000000	S
79.00	2.26346	133.99	1.473317	0.000000	S
80.00	2.25455	134.01	1.443899	0.000000	S
81.00	2.24957	134.04	1.417072	0.000000	S
82.00	2.25543	134.06	1.392918	0.000000	S
83.00	2.25764	134.09	1.370843	0.000000	S
84.00	2.26106	134.12	1.350952	0.000000	S
85.00	2.26401	134.15	1.332579	0.000000	S
86.00	2.26709	134.18	1.315270	0.000000	S
87.00	2.27006	134.20	1.299685	0.000000	S
88.00	2.28540	134.24	1.285401	0.000000	S
89.00	2.29664	134.27	1.272041	0.000000	S
90.00	2.29688	134.30	1.259972	0.000000	S
91.00	2.30074	134.33	1.248473	0.000000	S
92.00	2.29089	134.36	1.237640	0.000000	S
93.00	2.28559	134.39	1.227602	0.000000	S
94.00	2.29116	134.43	1.217649	0.000000	S
95.00	2.29304	134.46	1.198213	0.000000	S
96.00	0.76497	134.47	-----	-----	N.A.

VIII. Summary - Cumulative Volumes, Peaks Rates, and Peak Stage

Inflow

Peak Inflow Rate, (cfs):	81.93
Time, (hrs):	59.00
Cumulative Inflow Volume, (ft^3):	1176432

Stage

Peak Stage, (ft datum):	134.47
Time, (hrs):	96.00

Overflow Discharge

Peak Discharge Rate, (cfs):	0.00
Time, (hrs):	0.00
Cumulative weir discharge volume, (ft^3):	0

Infiltration Rate

Peak Infiltration Rate, (cfs):	27.6931
Time, (hrs):	59.00
Cumulative Infiltration Volume, (ft^3):	615572

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Retention Pond Recovery Analysis - Inflow Hydrograph

I. Job Information

Job Name: north6
Engineer: kk
Date: 7/22/99

II. Input Data

Equivalent Pond Length, [L] (ft):	390.00
Equivalent Pond Width, [W] (ft):	180.00
Base Of Aquifer Elevation, [B] (ft above datum):	228.00
Water Table Elevation, [WT] (ft above datum):	228.10
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day)	34.00
Fillable Porosity of Aquifer, [n] (%):	30.00
Is there a ditch parallel to the pond length axis?:	No
Is there a ditch parallel to the pond width axis?:	No
Include unsaturated vertical infiltration?:	Yes
Unsaturated vertical infiltration rate, (ft/day):	17.00
Maximum area for unsaturated infiltration, (sq ft):	75045
Groundwater mound intersects pond bottom?:	Yes

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III. Input Data - Discharge Structures

Weir (or Orifice) #1 is Inactive

Weir (or Orifice) #2 is Inactive

Weir (or Orifice) #3 is Inactive

IV. Input Data - Stage vs Area Data

Stage (ft datum)	Area (ft^2)
233.000	40661.0
234.000	45826.0
235.000	51217.0
236.000	56835.0
237.000	62679.0
238.000	68748.0
239.000	75045.0

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V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
0.0000	0.00000	0.00000
1.0000	0.00000	0.00000
2.0000	0.00000	0.00000
3.0000	0.00000	0.00000
4.0000	0.00000	0.00000
5.0000	0.00000	0.00000
6.0000	0.00000	0.00000
7.0000	0.00000	0.00000
8.0000	0.00000	0.00000
9.0000	0.00000	0.00000
10.0000	0.00000	0.00000
11.0000	0.00000	0.00000
12.0000	0.00000	0.00000
13.0000	0.00000	0.00000
14.0000	0.00000	0.00000
15.0000	0.00000	0.00000
16.0000	0.00000	0.00000
17.0000	0.00000	0.00000
18.0000	0.00000	0.00000
19.0000	0.00000	0.00000
20.0000	0.00000	0.00000
21.0000	0.00000	0.00000
22.0000	0.00000	0.00000
23.0000	0.00000	0.00000
24.0000	0.00000	0.00000
25.0000	0.00000	0.00000
26.0000	0.00000	0.00000
27.0000	0.00000	0.00000
28.0000	0.00000	0.00000
29.0000	0.00000	0.00000
30.0000	0.00000	0.00000
31.0000	0.00000	0.00000
32.0000	0.00000	0.00000
33.0000	0.00000	0.00000
34.0000	0.00000	0.00000
35.0000	0.00000	0.00000
36.0000	0.00000	0.00000
37.0000	0.00000	0.00000
38.0000	0.00000	0.00000
39.0000	0.00000	0.00000

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V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
40.0000	0.00000	0.00000
41.0000	0.00345	0.00000
42.0000	0.01601	0.00000
43.0000	0.03230	0.00000
44.0000	0.04585	0.00000
45.0000	0.05928	0.00000
46.0000	0.07296	0.00000
47.0000	0.08618	0.00000
48.0000	0.12450	0.00000
49.0000	0.16083	0.00000
50.0000	0.20089	0.00000
51.0000	0.24401	0.00000
52.0000	0.31435	0.00000
53.0000	0.38411	0.00000
54.0000	0.49133	0.00000
55.0000	0.59882	0.00000
56.0000	0.88402	0.00000
57.0000	1.15166	0.00000
58.0000	1.92031	0.00000
59.0000	19.22841	0.00000
60.0000	17.79952	0.00000
61.0000	2.64901	0.00000
62.0000	3.52949	0.00000
63.0000	2.26729	0.00000
64.0000	2.03587	0.00000
65.0000	1.44375	0.00000
66.0000	1.65402	0.00000
67.0000	1.59749	0.00000
68.0000	1.26742	0.00000
69.0000	1.02550	0.00000
70.0000	1.11141	0.00000
71.0000	1.08795	0.00000
72.0000	0.74897	0.00000
73.0000	0.51296	0.00000
74.0000	0.59320	0.00000
75.0000	0.56800	0.00000
76.0000	0.58107	0.00000
77.0000	0.58139	0.00000
78.0000	0.58283	0.00000
79.0000	0.58388	0.00000

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V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
80.0000	0.58187	0.00000
81.0000	0.58087	0.00000
82.0000	0.58266	0.00000
83.0000	0.58352	0.00000
84.0000	0.58468	0.00000
85.0000	0.58572	0.00000
86.0000	0.58679	0.00000
87.0000	0.58783	0.00000
88.0000	0.59208	0.00000
89.0000	0.59527	0.00000
90.0000	0.59560	0.00000
91.0000	0.59687	0.00000
92.0000	0.59459	0.00000
93.0000	0.59347	0.00000
94.0000	0.59518	0.00000
95.0000	0.59592	0.00000
96.0000	0.19884	0.00000

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
0.00	0.00000	228.10	0.000000	0.000000	N.A.
1.00	0.00000	228.10	0.000000	0.000000	U
2.00	0.00000	228.10	0.000000	0.000000	U
3.00	0.00000	228.10	0.000000	0.000000	U
4.00	0.00000	228.10	0.000000	0.000000	U
5.00	0.00000	228.10	0.000000	0.000000	U
6.00	0.00000	228.10	0.000000	0.000000	U
7.00	0.00000	228.10	0.000000	0.000000	U
8.00	0.00000	228.10	0.000000	0.000000	U
9.00	0.00000	228.10	0.000000	0.000000	U
10.00	0.00000	228.10	0.000000	0.000000	U
11.00	0.00000	228.10	0.000000	0.000000	U
12.00	0.00000	228.10	0.000000	0.000000	U
13.00	0.00000	228.10	0.000000	0.000000	U
14.00	0.00000	228.10	0.000000	0.000000	U
15.00	0.00000	228.10	0.000000	0.000000	U
16.00	0.00000	228.10	0.000000	0.000000	U
17.00	0.00000	228.10	0.000000	0.000000	U
18.00	0.00000	228.10	0.000000	0.000000	U
19.00	0.00000	228.10	0.000000	0.000000	U
20.00	0.00000	228.10	0.000000	0.000000	U
21.00	0.00000	228.10	0.000000	0.000000	U
22.00	0.00000	228.10	0.000000	0.000000	U
23.00	0.00000	228.10	0.000000	0.000000	U
24.00	0.00000	228.10	0.000000	0.000000	U
25.00	0.00000	228.10	0.000000	0.000000	U
26.00	0.00000	228.10	0.000000	0.000000	U
27.00	0.00000	228.10	0.000000	0.000000	U
28.00	0.00000	228.10	0.000000	0.000000	U
29.00	0.00000	228.10	0.000000	0.000000	U
30.00	0.00000	228.10	0.000000	0.000000	U
31.00	0.00000	228.10	0.000000	0.000000	U
32.00	0.00000	228.10	0.000000	0.000000	U

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
33.00	0.00000	228.10	0.000000	0.000000	U
34.00	0.00000	228.10	0.000000	0.000000	U
35.00	0.00000	228.10	0.000000	0.000000	U
36.00	0.00000	228.10	0.000000	0.000000	U
37.00	0.00000	228.10	0.000000	0.000000	U
38.00	0.00000	228.10	0.000000	0.000000	U
39.00	0.00000	228.10	0.000000	0.000000	U
40.00	0.00000	228.10	0.000862	0.000000	U
41.00	0.00345	228.10	0.005728	0.000000	U
42.00	0.01601	228.10	0.016943	0.000000	U
43.00	0.03230	228.11	0.031615	0.000000	U
44.00	0.04585	228.11	0.045820	0.000000	U
45.00	0.05928	228.12	0.059342	0.000000	U
46.00	0.07296	228.13	0.072845	0.000000	U
47.00	0.08618	228.14	0.092455	0.000000	U
48.00	0.12450	228.16	0.124002	0.000000	U
49.00	0.16083	228.18	0.161763	0.000000	U
50.00	0.20089	228.21	0.201655	0.000000	U
51.00	0.24401	228.25	0.250815	0.000000	U
52.00	0.31435	228.29	0.314205	0.000000	U
53.00	0.38411	228.35	0.393475	0.000000	U
54.00	0.49133	228.42	0.491398	0.000000	U
55.00	0.59882	228.51	0.643247	0.000000	U
56.00	0.88402	228.62	0.879630	0.000000	U
57.00	1.15166	228.79	1.276912	0.000000	U
58.00	1.92031	229.03	4.768207	0.000000	U
59.00	19.22841	233.22	8.114597	0.000000	U/P
60.00	17.79952	234.07	8.657884	0.000000	U/P
61.00	2.64901	234.15	9.754370	0.000000	U/P
62.00	3.52949	233.57	5.785210	0.000000	U/S
63.00	2.26729	233.71	1.021706	0.000000	S
64.00	2.03587	233.81	0.832572	0.000000	S
65.00	1.44375	233.89	0.732264	0.000000	S

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
66.00	1.65402	233.96	0.671642	0.000000	S
67.00	1.59749	234.04	0.629942	0.000000	S
68.00	1.26742	234.10	0.591913	0.000000	S
69.00	1.02550	234.14	0.558929	0.000000	S
70.00	1.11141	234.18	0.534714	0.000000	S
71.00	1.08795	234.23	0.513245	0.000000	S
72.00	0.74897	234.26	0.488061	0.000000	S
73.00	0.51296	234.27	0.463156	0.000000	S
74.00	0.59320	234.28	0.443822	0.000000	S
75.00	0.56800	234.29	0.428597	0.000000	S
76.00	0.58107	234.30	0.415836	0.000000	S
77.00	0.58139	234.32	0.404985	0.000000	S
78.00	0.58283	234.33	0.395379	0.000000	S
79.00	0.58388	234.34	0.386867	0.000000	S
80.00	0.58187	234.36	0.379165	0.000000	S
81.00	0.58087	234.37	0.372475	0.000000	S
82.00	0.58266	234.39	0.366352	0.000000	S
83.00	0.58352	234.41	0.360810	0.000000	S
84.00	0.58468	234.42	0.356041	0.000000	S
85.00	0.58572	234.44	0.351463	0.000000	S
86.00	0.58679	234.46	0.347244	0.000000	S
87.00	0.58783	234.48	0.343582	0.000000	S
88.00	0.59208	234.50	0.340300	0.000000	S
89.00	0.59527	234.51	0.337160	0.000000	S
90.00	0.59560	234.53	0.334381	0.000000	S
91.00	0.59687	234.55	0.331901	0.000000	S
92.00	0.59459	234.57	0.329506	0.000000	S
93.00	0.59347	234.59	0.327085	0.000000	S
94.00	0.59518	234.61	0.324976	0.000000	S
95.00	0.59592	234.63	0.319536	0.000000	S
96.00	0.19884	234.64	-----	-----	N.A.

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VIII. Summary - Cumulative Volumes, Peaks Rates, and Peak Stage

Inflow

Peak Inflow Rate, (cfs):	19.23
Time, (hrs):	59.00
Cumulative Inflow Volume, (ft^3):	279981

Stage

Peak Stage, (ft datum):	234.64
Time, (hrs):	96.00

Overflow Discharge

Peak Discharge Rate, (cfs):	0.00
Time, (hrs):	0.00
Cumulative weir discharge volume, (ft^3):	0

Infiltration Rate

Peak Infiltration Rate, (cfs):	9.7544
Time, (hrs):	61.00
Cumulative Infiltration Volume, (ft^3):	206410

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Retention Pond Recovery Analysis - Inflow Hydrograph

I. Job Information

Job Name: north7
Engineer: kk
Date: 7/22/99

II. Input Data

Equivalent Pond Length, [L] (ft):	160.00
Equivalent Pond Width, [W] (ft):	150.00
Base Of Aquifer Elevation, [B] (ft above datum):	197.00
Water Table Elevation, [WT] (ft above datum):	197.10
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day)	30.00
Fillable Porosity of Aquifer, [n] (%):	30.00
Is there a ditch parallel to the pond length axis?:	No
Is there a ditch parallel to the pond width axis?:	No
Include unsaturated vertical infiltration?:	Yes
Unsaturated vertical infiltration rate, (ft/day):	15.00
Maximum area for unsaturated infiltration, (sq ft):	21866
Groundwater mound intersects pond bottom?:	Yes

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III. Input Data - Discharge Structures

Weir (or Orifice) #1 is Inactive

Weir (or Orifice) #2 is Inactive

Weir (or Orifice) #3 is Inactive

IV. Input Data - Stage vs Area Data

Stage (ft datum)	Area (ft^2)
206.000	10717.0
207.000	12324.0
208.000	14031.0
209.000	15839.0
210.000	17748.0
211.000	19757.0
212.000	21866.0

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V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
0.0000	0.00000	0.00000
1.0000	0.00000	0.00000
2.0000	0.00000	0.00000
3.0000	0.00000	0.00000
4.0000	0.00000	0.00000
5.0000	0.00000	0.00000
6.0000	0.00000	0.00000
7.0000	0.00000	0.00000
8.0000	0.00000	0.00000
9.0000	0.00000	0.00000
10.0000	0.00000	0.00000
11.0000	0.00000	0.00000
12.0000	0.00000	0.00000
13.0000	0.00000	0.00000
14.0000	0.00000	0.00000
15.0000	0.00000	0.00000
16.0000	0.00000	0.00000
17.0000	0.00000	0.00000
18.0000	0.00000	0.00000
19.0000	0.00000	0.00000
20.0000	0.00000	0.00000
21.0000	0.00000	0.00000
22.0000	0.00000	0.00000
23.0000	0.00000	0.00000
24.0000	0.00000	0.00000
25.0000	0.00000	0.00000
26.0000	0.00000	0.00000
27.0000	0.00000	0.00000
28.0000	0.00000	0.00000
29.0000	0.00000	0.00000
30.0000	0.00000	0.00000
31.0000	0.00000	0.00000
32.0000	0.00000	0.00000
33.0000	0.00000	0.00000
34.0000	0.00000	0.00000
35.0000	0.00000	0.00000
36.0000	0.00000	0.00000
37.0000	0.00000	0.00000
38.0000	0.00000	0.00000
39.0000	0.00000	0.00000

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V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
40.0000	0.00000	0.00000
41.0000	0.00000	0.00000
42.0000	0.00000	0.00000
43.0000	0.00000	0.00000
44.0000	0.00023	0.00000
45.0000	0.00294	0.00000
46.0000	0.00770	0.00000
47.0000	0.01227	0.00000
48.0000	0.02154	0.00000
49.0000	0.03147	0.00000
50.0000	0.04364	0.00000
51.0000	0.05660	0.00000
52.0000	0.07747	0.00000
53.0000	0.09872	0.00000
54.0000	0.13161	0.00000
55.0000	0.16518	0.00000
56.0000	0.25198	0.00000
57.0000	0.33613	0.00000
58.0000	0.57786	0.00000
59.0000	6.21165	0.00000
60.0000	5.83808	0.00000
61.0000	0.93395	0.00000
62.0000	1.17722	0.00000
63.0000	0.77241	0.00000
64.0000	0.68821	0.00000
65.0000	0.49062	0.00000
66.0000	0.56163	0.00000
67.0000	0.54332	0.00000
68.0000	0.43131	0.00000
69.0000	0.34930	0.00000
70.0000	0.37875	0.00000
71.0000	0.37101	0.00000
72.0000	0.25552	0.00000
73.0000	0.17509	0.00000
74.0000	0.20251	0.00000
75.0000	0.19398	0.00000
76.0000	0.19850	0.00000
77.0000	0.19867	0.00000
78.0000	0.19922	0.00000
79.0000	0.19964	0.00000

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V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
80.0000	0.19901	0.00000
81.0000	0.19873	0.00000
82.0000	0.19940	0.00000
83.0000	0.19975	0.00000
84.0000	0.20020	0.00000
85.0000	0.20062	0.00000
86.0000	0.20104	0.00000
87.0000	0.20145	0.00000
88.0000	0.20296	0.00000
89.0000	0.20411	0.00000
90.0000	0.20428	0.00000
91.0000	0.20477	0.00000
92.0000	0.20404	0.00000
93.0000	0.20371	0.00000
94.0000	0.20435	0.00000
95.0000	0.20466	0.00000
96.0000	0.06830	0.00000

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
0.00	0.00000	197.10	0.000000	0.000000	N.A.
1.00	0.00000	197.10	0.000000	0.000000	U
2.00	0.00000	197.10	0.000000	0.000000	U
3.00	0.00000	197.10	0.000000	0.000000	U
4.00	0.00000	197.10	0.000000	0.000000	U
5.00	0.00000	197.10	0.000000	0.000000	U
6.00	0.00000	197.10	0.000000	0.000000	U
7.00	0.00000	197.10	0.000000	0.000000	U
8.00	0.00000	197.10	0.000000	0.000000	U
9.00	0.00000	197.10	0.000000	0.000000	U
10.00	0.00000	197.10	0.000000	0.000000	U
11.00	0.00000	197.10	0.000000	0.000000	U
12.00	0.00000	197.10	0.000000	0.000000	U
13.00	0.00000	197.10	0.000000	0.000000	U
14.00	0.00000	197.10	0.000000	0.000000	U
15.00	0.00000	197.10	0.000000	0.000000	U
16.00	0.00000	197.10	0.000000	0.000000	U
17.00	0.00000	197.10	0.000000	0.000000	U
18.00	0.00000	197.10	0.000000	0.000000	U
19.00	0.00000	197.10	0.000000	0.000000	U
20.00	0.00000	197.10	0.000000	0.000000	U
21.00	0.00000	197.10	0.000000	0.000000	U
22.00	0.00000	197.10	0.000000	0.000000	U
23.00	0.00000	197.10	0.000000	0.000000	U
24.00	0.00000	197.10	0.000000	0.000000	U
25.00	0.00000	197.10	0.000000	0.000000	U
26.00	0.00000	197.10	0.000000	0.000000	U
27.00	0.00000	197.10	0.000000	0.000000	U
28.00	0.00000	197.10	0.000000	0.000000	U
29.00	0.00000	197.10	0.000000	0.000000	U
30.00	0.00000	197.10	0.000000	0.000000	U
31.00	0.00000	197.10	0.000000	0.000000	U
32.00	0.00000	197.10	0.000000	0.000000	U

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
33.00	0.00000	197.10	0.000000	0.000000	U
34.00	0.00000	197.10	0.000000	0.000000	U
35.00	0.00000	197.10	0.000000	0.000000	U
36.00	0.00000	197.10	0.000000	0.000000	U
37.00	0.00000	197.10	0.000000	0.000000	U
38.00	0.00000	197.10	0.000000	0.000000	U
39.00	0.00000	197.10	0.000000	0.000000	U
40.00	0.00000	197.10	0.000000	0.000000	U
41.00	0.00000	197.10	0.000000	0.000000	U
42.00	0.00000	197.10	0.000000	0.000000	U
43.00	0.00000	197.10	0.000058	0.000000	U
44.00	0.00023	197.10	0.000850	0.000000	U
45.00	0.00294	197.10	0.003452	0.000000	U
46.00	0.00770	197.10	0.007653	0.000000	U
47.00	0.01227	197.11	0.013445	0.000000	U
48.00	0.02154	197.12	0.021705	0.000000	U
49.00	0.03147	197.13	0.032030	0.000000	U
50.00	0.04364	197.15	0.043838	0.000000	U
51.00	0.05660	197.18	0.058578	0.000000	U
52.00	0.07747	197.22	0.077565	0.000000	U
53.00	0.09872	197.27	0.101630	0.000000	U
54.00	0.13161	197.33	0.131780	0.000000	U
55.00	0.16518	197.41	0.178488	0.000000	U
56.00	0.25198	197.53	0.251318	0.000000	U
57.00	0.33613	197.69	0.375525	0.000000	U
58.00	0.57786	197.94	1.158792	0.000000	U
59.00	6.21165	206.50	1.929898	0.000000	U/P
60.00	5.83808	207.66	2.167073	0.000000	U/P
61.00	0.93395	207.94	2.375911	0.000000	U/P
62.00	1.17722	207.58	2.363543	0.000000	U/P
63.00	0.77241	207.21	2.255367	0.000000	U/P
64.00	0.68821	206.78	2.138788	0.000000	U/P
65.00	0.49062	206.31	1.779770	0.000000	U/P

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
66.00	0.56163	206.00	1.017485	0.000000	U/P
67.00	0.54332	206.00	0.519895	0.000000	U/P
68.00	0.43131	205.37	0.438810	0.000000	U/S
69.00	0.34930	205.18	0.377165	0.000000	S
70.00	0.37875	205.06	0.369452	0.000000	S
71.00	0.37101	205.00	0.344073	0.000000	S
72.00	0.25552	204.93	0.264286	0.000000	S
73.00	0.17509	204.86	0.202053	0.000000	S
74.00	0.20251	204.79	0.193522	0.000000	S
75.00	0.19398	204.73	0.197242	0.000000	S
76.00	0.19850	204.68	0.197413	0.000000	S
77.00	0.19867	204.64	0.198765	0.000000	S
78.00	0.19922	204.61	0.199188	0.000000	S
79.00	0.19964	204.58	0.199378	0.000000	S
80.00	0.19901	204.55	0.199097	0.000000	S
81.00	0.19873	204.53	0.198967	0.000000	S
82.00	0.19940	204.51	0.199320	0.000000	S
83.00	0.19975	204.49	0.199776	0.000000	S
84.00	0.20020	204.48	0.200193	0.000000	S
85.00	0.20062	204.46	0.200620	0.000000	S
86.00	0.20104	204.45	0.201038	0.000000	S
87.00	0.20145	204.45	0.201725	0.000000	S
88.00	0.20296	204.44	0.202870	0.000000	S
89.00	0.20411	204.44	0.203865	0.000000	S
90.00	0.20428	204.43	0.204359	0.000000	S
91.00	0.20477	204.43	0.204464	0.000000	S
92.00	0.20404	204.43	0.204140	0.000000	S
93.00	0.20371	204.43	0.203953	0.000000	S
94.00	0.20435	204.43	0.204268	0.000000	S
95.00	0.20466	204.43	0.170493	0.000000	S
96.00	0.06830	204.41	-----	-----	N.A.

VIII. Summary - Cumulative Volumes, Peaks Rates, and Peak Stage

Inflow

Peak Inflow Rate, (cfs):	6.21
Time, (hrs):	59.00
Cumulative Inflow Volume, (ft^3):	91631

Stage

Peak Stage, (ft datum):	207.94
Time, (hrs):	61.00

Overflow Discharge

Peak Discharge Rate, (cfs):	0.00
Time, (hrs):	0.00
Cumulative weir discharge volume, (ft^3):	0

Infiltration Rate

Peak Infiltration Rate, (cfs):	2.3759
Time, (hrs):	61.00
Cumulative Infiltration Volume, (ft^3):	91631

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Retention Pond Recovery Analysis - Inflow Hydrograph

I. Job Information

Job Name: north10
Engineer: kk
Date: 12/10/99

II. Input Data

Equivalent Pond Length, [L] (ft):	310.00
Equivalent Pond Width, [W] (ft):	170.00
Base Of Aquifer Elevation, [B] (ft above datum):	131.00
Water Table Elevation, [WT] (ft above datum):	131.10
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day)	29.00
Fillable Porosity of Aquifer, [n] (%):	30.00
Is there a ditch parallel to the pond length axis?:	No
Is there a ditch parallel to the pond width axis?:	No
Include unsaturated vertical infiltration?:	Yes
Unsaturated vertical infiltration rate, (ft/day):	14.50
Maximum area for unsaturated infiltration, (sq ft):	55397
Groundwater mound intersects pond bottom?:	Yes

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II. Input Data - Discharge Structures

Weir (or Orifice) #1 is Inactive

Weir (or Orifice) #2 is Inactive

Weir (or Orifice) #3 is Inactive

V. Input Data - Stage vs Area Data

Stage (ft datum)	Area (ft^2)
136.000	23130.0
137.000	25904.0
138.000	28779.0
139.000	31754.0
140.000	34830.0
141.000	38007.0
142.000	41284.0
143.000	44661.0
144.000	48139.0
145.000	51718.0
146.000	55397.0

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V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
0.0000	0.00000	0.00000
1.0000	0.00000	0.00000
2.0000	0.00000	0.00000
3.0000	0.00000	0.00000
4.0000	0.00000	0.00000
5.0000	0.00000	0.00000
6.0000	0.00000	0.00000
7.0000	0.00000	0.00000
8.0000	0.00000	0.00000
9.0000	0.00000	0.00000
10.0000	0.00000	0.00000
11.0000	0.00000	0.00000
12.0000	0.00000	0.00000
13.0000	0.00000	0.00000
14.0000	0.00000	0.00000
15.0000	0.00000	0.00000
16.0000	0.00000	0.00000
17.0000	0.00000	0.00000
18.0000	0.00000	0.00000
19.0000	0.00000	0.00000
20.0000	0.00000	0.00000
21.0000	0.00000	0.00000
22.0000	0.00000	0.00000
23.0000	0.00000	0.00000
24.0000	0.00000	0.00000
25.0000	0.00000	0.00000
26.0000	0.00000	0.00000
27.0000	0.00000	0.00000
28.0000	0.00000	0.00000
29.0000	0.00000	0.00000
30.0000	0.00000	0.00000
31.0000	0.00000	0.00000
32.0000	0.00000	0.00000
33.0000	0.00000	0.00000
34.0000	0.00000	0.00000
35.0000	0.00000	0.00000
36.0000	0.00000	0.00000
37.0000	0.00000	0.00000
38.0000	0.00847	0.00000
39.0000	0.03419	0.00000

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V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
40.0000	0.06726	0.00000
41.0000	0.09829	0.00000
42.0000	0.12839	0.00000
43.0000	0.15780	0.00000
44.0000	0.18210	0.00000
45.0000	0.20604	0.00000
46.0000	0.23249	0.00000
47.0000	0.25732	0.00000
48.0000	0.35132	0.00000
49.0000	0.43422	0.00000
50.0000	0.51914	0.00000
51.0000	0.61124	0.00000
52.0000	0.76293	0.00000
53.0000	0.91039	0.00000
54.0000	1.13578	0.00000
55.0000	1.35855	0.00000
56.0000	1.96176	0.00000
57.0000	2.51333	0.00000
58.0000	4.09709	0.00000
59.0000	38.74843	0.00000
60.0000	35.40392	0.00000
61.0000	4.92753	0.00000
62.0000	6.91844	0.00000
63.0000	4.35970	0.00000
64.0000	3.94292	0.00000
65.0000	2.78283	0.00000
66.0000	3.19051	0.00000
67.0000	3.07697	0.00000
68.0000	2.43992	0.00000
69.0000	1.97260	0.00000
70.0000	2.13693	0.00000
71.0000	2.09054	0.00000
72.0000	1.43861	0.00000
73.0000	0.98488	0.00000
74.0000	1.13873	0.00000
75.0000	1.09001	0.00000
76.0000	1.11481	0.00000
77.0000	1.11511	0.00000
78.0000	1.11757	0.00000
79.0000	1.11928	0.00000

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V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
80.0000	1.11514	0.00000
81.0000	1.11293	0.00000
82.0000	1.11609	0.00000
83.0000	1.11744	0.00000
84.0000	1.11939	0.00000
85.0000	1.12110	0.00000
86.0000	1.12287	0.00000
87.0000	1.12458	0.00000
88.0000	1.13244	0.00000
89.0000	1.13827	0.00000
90.0000	1.13862	0.00000
91.0000	1.14077	0.00000
92.0000	1.13613	0.00000
93.0000	1.13374	0.00000
94.0000	1.13674	0.00000
95.0000	1.13791	0.00000
96.0000	0.37965	0.00000

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
0.00	0.00000	131.10	0.000000	0.000000	N.A.
1.00	0.00000	131.10	0.000000	0.000000	U
2.00	0.00000	131.10	0.000000	0.000000	U
3.00	0.00000	131.10	0.000000	0.000000	U
4.00	0.00000	131.10	0.000000	0.000000	U
5.00	0.00000	131.10	0.000000	0.000000	U
6.00	0.00000	131.10	0.000000	0.000000	U
7.00	0.00000	131.10	0.000000	0.000000	U
8.00	0.00000	131.10	0.000000	0.000000	U
9.00	0.00000	131.10	0.000000	0.000000	U
10.00	0.00000	131.10	0.000000	0.000000	U
11.00	0.00000	131.10	0.000000	0.000000	U
12.00	0.00000	131.10	0.000000	0.000000	U
13.00	0.00000	131.10	0.000000	0.000000	U
14.00	0.00000	131.10	0.000000	0.000000	U
15.00	0.00000	131.10	0.000000	0.000000	U
16.00	0.00000	131.10	0.000000	0.000000	U
17.00	0.00000	131.10	0.000000	0.000000	U
18.00	0.00000	131.10	0.000000	0.000000	U
19.00	0.00000	131.10	0.000000	0.000000	U
20.00	0.00000	131.10	0.000000	0.000000	U
21.00	0.00000	131.10	0.000000	0.000000	U
22.00	0.00000	131.10	0.000000	0.000000	U
23.00	0.00000	131.10	0.000000	0.000000	U
24.00	0.00000	131.10	0.000000	0.000000	U
25.00	0.00000	131.10	0.000000	0.000000	U
26.00	0.00000	131.10	0.000000	0.000000	U
27.00	0.00000	131.10	0.000000	0.000000	U
28.00	0.00000	131.10	0.000000	0.000000	U
29.00	0.00000	131.10	0.000000	0.000000	U
30.00	0.00000	131.10	0.000000	0.000000	U
31.00	0.00000	131.10	0.000000	0.000000	U
32.00	0.00000	131.10	0.000000	0.000000	U

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
33.00	0.00000	131.10	0.000000	0.000000	U
34.00	0.00000	131.10	0.000000	0.000000	U
35.00	0.00000	131.10	0.000000	0.000000	U
36.00	0.00000	131.10	0.000000	0.000000	U
37.00	0.00000	131.10	0.002117	0.000000	U
38.00	0.00847	131.10	0.012783	0.000000	U
39.00	0.03419	131.11	0.036028	0.000000	U
40.00	0.06726	131.12	0.066750	0.000000	U
41.00	0.09829	131.13	0.098057	0.000000	U
42.00	0.12839	131.16	0.128218	0.000000	U
43.00	0.15780	131.19	0.156522	0.000000	U
44.00	0.18210	131.23	0.182010	0.000000	U
45.00	0.20604	131.27	0.206667	0.000000	U
46.00	0.23249	131.32	0.232085	0.000000	U
47.00	0.25732	131.37	0.274612	0.000000	U
48.00	0.35132	131.44	0.348545	0.000000	U
49.00	0.43422	131.52	0.434725	0.000000	U
50.00	0.51914	131.62	0.520935	0.000000	U
51.00	0.61124	131.75	0.626137	0.000000	U
52.00	0.76293	131.89	0.761873	0.000000	U
53.00	0.91039	132.08	0.929873	0.000000	U
54.00	1.13578	132.30	1.135125	0.000000	U
55.00	1.35855	132.57	1.453660	0.000000	U
56.00	1.96176	132.93	1.948850	0.000000	U
57.00	2.51333	133.41	2.771378	0.000000	U
58.00	4.09709	134.13	3.593491	0.000000	U
59.00	38.74843	138.38	4.451804	0.000000	U/P
60.00	35.40392	141.68	5.887869	0.000000	U/P
61.00	4.92753	142.83	9.265193	0.000000	U/P
62.00	6.91844	142.34	7.191691	0.000000	U/S
63.00	4.35970	142.60	2.316519	0.000000	S
64.00	3.94292	142.77	1.882868	0.000000	S
65.00	2.78283	142.90	1.651482	0.000000	S

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/II. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
66.00	3.19051	143.02	1.510943	0.000000	S
67.00	3.07697	143.15	1.413376	0.000000	S
68.00	2.43992	143.26	1.324954	0.000000	S
69.00	1.97260	143.34	1.248565	0.000000	S
70.00	2.13693	143.40	1.192121	0.000000	S
71.00	2.09054	143.48	1.142555	0.000000	S
72.00	1.43861	143.53	1.085378	0.000000	S
73.00	0.98488	143.54	1.029217	0.000000	S
74.00	1.13873	143.54	0.985765	0.000000	S
75.00	1.09001	143.55	0.951797	0.000000	S
76.00	1.11481	143.57	0.922874	0.000000	S
77.00	1.11511	143.58	0.897965	0.000000	S
78.00	1.11757	143.60	0.876131	0.000000	S
79.00	1.11928	143.62	0.856774	0.000000	S
80.00	1.11514	143.64	0.839471	0.000000	S
81.00	1.11293	143.66	0.823939	0.000000	S
82.00	1.11609	143.68	0.809857	0.000000	S
83.00	1.11744	143.71	0.797288	0.000000	S
84.00	1.11939	143.73	0.785832	0.000000	S
85.00	1.12110	143.76	0.775248	0.000000	S
86.00	1.12287	143.79	0.765760	0.000000	S
87.00	1.12458	143.81	0.757130	0.000000	S
88.00	1.13244	143.84	0.749267	0.000000	S
89.00	1.13827	143.87	0.742201	0.000000	S
90.00	1.13862	143.90	0.735506	0.000000	S
91.00	1.14077	143.93	0.729324	0.000000	S
92.00	1.13613	143.96	0.723477	0.000000	S
93.00	1.13374	143.99	0.718085	0.000000	S
94.00	1.13674	144.03	0.713108	0.000000	S
95.00	1.13791	144.06	0.700461	0.000000	S
96.00	0.37965	144.06	-----	-----	N.A.

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VIII. Summary - Cumulative Volumes, Peaks Rates, and Peak Stage

Inflow

Peak Inflow Rate, (cfs):	38.75
Time, (hrs):	59.00
Cumulative Inflow Volume, (ft^3):	559340

Stage

Peak Stage, (ft datum):	144.06
Time, (hrs):	96.00

Overflow Discharge

Peak Discharge Rate, (cfs):	0.00
Time, (hrs):	0.00
Cumulative weir discharge volume, (ft^3):	0

Infiltration Rate

Peak Infiltration Rate, (cfs):	9.2652
Time, (hrs):	61.00
Cumulative Infiltration Volume, (ft^3):	275463

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Retention Pond Recovery Analysis - Inflow Hydrograph

I. Job Information

Job Name: north11
Engineer: kk
Date: 7/22/99

II. Input Data

Equivalent Pond Length, [L] (ft):	180.00
Equivalent Pond Width, [W] (ft):	160.00
Base Of Aquifer Elevation, [B] (ft above datum):	156.00
Water Table Elevation, [WT] (ft above datum):	156.10
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day)	37.00
Fillable Porosity of Aquifer, [n] (%):	30.00
Is there a ditch parallel to the pond length axis?:	No
Is there a ditch parallel to the pond width axis?:	No
Include unsaturated vertical infiltration?:	Yes
Unsaturated vertical infiltration rate, (ft/day):	18.00
Maximum area for unsaturated infiltration, (sq ft):	30372
Groundwater mound intersects pond bottom?:	Yes

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III. Input Data - Discharge Structures

Weir (or Orifice) #1 is Inactive

Weir (or Orifice) #2 is Inactive

Weir (or Orifice) #3 is Inactive

IV. Input Data - Stage vs Area Data

Stage (ft datum)	Area (ft^2)
163.000	12426.0
164.000	14317.0
165.000	16309.0
166.000	18402.0
167.000	20595.0
168.000	22888.0
169.000	25282.0
170.000	27777.0
171.000	30372.0

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V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
0.0000	0.00000	0.00000
1.0000	0.00000	0.00000
2.0000	0.00000	0.00000
3.0000	0.00000	0.00000
4.0000	0.00000	0.00000
5.0000	0.00000	0.00000
6.0000	0.00000	0.00000
7.0000	0.00000	0.00000
8.0000	0.00000	0.00000
9.0000	0.00000	0.00000
10.0000	0.00000	0.00000
11.0000	0.00000	0.00000
12.0000	0.00000	0.00000
13.0000	0.00000	0.00000
14.0000	0.00000	0.00000
15.0000	0.00000	0.00000
16.0000	0.00000	0.00000
17.0000	0.00000	0.00000
18.0000	0.00000	0.00000
19.0000	0.00000	0.00000
20.0000	0.00000	0.00000
21.0000	0.00000	0.00000
22.0000	0.00000	0.00000
23.0000	0.00000	0.00000
24.0000	0.00000	0.00000
25.0000	0.00000	0.00000
26.0000	0.00000	0.00000
27.0000	0.00000	0.00000
28.0000	0.00000	0.00000
29.0000	0.00000	0.00000
30.0000	0.00000	0.00000
31.0000	0.00000	0.00000
32.0000	0.00000	0.00000
33.0000	0.00094	0.00000
34.0000	0.00910	0.00000
35.0000	0.02250	0.00000
36.0000	0.03495	0.00000
37.0000	0.04723	0.00000
38.0000	0.05909	0.00000
39.0000	0.07064	0.00000

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V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
40.0000	0.08383	0.00000
41.0000	0.09653	0.00000
42.0000	0.10747	0.00000
43.0000	0.11856	0.00000
44.0000	0.12628	0.00000
45.0000	0.13431	0.00000
46.0000	0.14435	0.00000
47.0000	0.15338	0.00000
48.0000	0.20133	0.00000
49.0000	0.24063	0.00000
50.0000	0.27752	0.00000
51.0000	0.31791	0.00000
52.0000	0.38523	0.00000
53.0000	0.44905	0.00000
54.0000	0.54588	0.00000
55.0000	0.63979	0.00000
56.0000	0.90103	0.00000
57.0000	1.13181	0.00000
58.0000	1.79439	0.00000
59.0000	15.73272	0.00000
60.0000	14.11285	0.00000
61.0000	1.77174	0.00000
62.0000	2.70115	0.00000
63.0000	1.65398	0.00000
64.0000	1.51241	0.00000
65.0000	1.05983	0.00000
66.0000	1.21654	0.00000
67.0000	1.17073	0.00000
68.0000	0.92765	0.00000
69.0000	0.74909	0.00000
70.0000	0.81099	0.00000
71.0000	0.79268	0.00000
72.0000	0.54518	0.00000
73.0000	0.37301	0.00000
74.0000	0.43116	0.00000
75.0000	0.41252	0.00000
76.0000	0.42175	0.00000
77.0000	0.42170	0.00000
78.0000	0.42247	0.00000
79.0000	0.42295	0.00000

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V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
80.0000	0.42123	0.00000
81.0000	0.42024	0.00000
82.0000	0.42127	0.00000
83.0000	0.42162	0.00000
84.0000	0.42221	0.00000
85.0000	0.42270	0.00000
86.0000	0.42321	0.00000
87.0000	0.42371	0.00000
88.0000	0.42652	0.00000
89.0000	0.42856	0.00000
90.0000	0.42854	0.00000
91.0000	0.42921	0.00000
92.0000	0.42732	0.00000
93.0000	0.42627	0.00000
94.0000	0.42726	0.00000
95.0000	0.42756	0.00000
96.0000	0.14263	0.00000

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
0.00	0.00000	156.10	0.000000	0.000000	N.A.
1.00	0.00000	156.10	0.000000	0.000000	U
2.00	0.00000	156.10	0.000000	0.000000	U
3.00	0.00000	156.10	0.000000	0.000000	U
4.00	0.00000	156.10	0.000000	0.000000	U
5.00	0.00000	156.10	0.000000	0.000000	U
6.00	0.00000	156.10	0.000000	0.000000	U
7.00	0.00000	156.10	0.000000	0.000000	U
8.00	0.00000	156.10	0.000000	0.000000	U
9.00	0.00000	156.10	0.000000	0.000000	U
10.00	0.00000	156.10	0.000000	0.000000	U
11.00	0.00000	156.10	0.000000	0.000000	U
12.00	0.00000	156.10	0.000000	0.000000	U
13.00	0.00000	156.10	0.000000	0.000000	U
14.00	0.00000	156.10	0.000000	0.000000	U
15.00	0.00000	156.10	0.000000	0.000000	U
16.00	0.00000	156.10	0.000000	0.000000	U
17.00	0.00000	156.10	0.000000	0.000000	U
18.00	0.00000	156.10	0.000000	0.000000	U
19.00	0.00000	156.10	0.000000	0.000000	U
20.00	0.00000	156.10	0.000000	0.000000	U
21.00	0.00000	156.10	0.000000	0.000000	U
22.00	0.00000	156.10	0.000000	0.000000	U
23.00	0.00000	156.10	0.000000	0.000000	U
24.00	0.00000	156.10	0.000000	0.000000	U
25.00	0.00000	156.10	0.000000	0.000000	U
26.00	0.00000	156.10	0.000000	0.000000	U
27.00	0.00000	156.10	0.000000	0.000000	U
28.00	0.00000	156.10	0.000000	0.000000	U
29.00	0.00000	156.10	0.000000	0.000000	U
30.00	0.00000	156.10	0.000000	0.000000	U
31.00	0.00000	156.10	0.000000	0.000000	U
32.00	0.00000	156.10	0.000235	0.000000	U

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
33.00	0.00094	156.10	0.002745	0.000000	U
34.00	0.00910	156.10	0.010410	0.000000	U
35.00	0.02250	156.11	0.022262	0.000000	U
36.00	0.03495	156.12	0.034908	0.000000	U
37.00	0.04723	156.14	0.047125	0.000000	U
38.00	0.05909	156.16	0.059013	0.000000	U
39.00	0.07064	156.18	0.071050	0.000000	U
40.00	0.08383	156.21	0.083708	0.000000	U
41.00	0.09653	156.25	0.096090	0.000000	U
42.00	0.10747	156.29	0.107507	0.000000	U
43.00	0.11856	156.33	0.117718	0.000000	U
44.00	0.12628	156.38	0.126357	0.000000	U
45.00	0.13431	156.43	0.134813	0.000000	U
46.00	0.14435	156.49	0.144098	0.000000	U
47.00	0.15338	156.55	0.163110	0.000000	U
48.00	0.20133	156.62	0.199167	0.000000	U
49.00	0.24063	156.70	0.240027	0.000000	U
50.00	0.27752	156.81	0.278395	0.000000	U
51.00	0.31791	156.92	0.324643	0.000000	U
52.00	0.38523	157.06	0.384355	0.000000	U
53.00	0.44905	157.23	0.457303	0.000000	U
54.00	0.54588	157.43	0.545150	0.000000	U
55.00	0.63979	157.66	0.681622	0.000000	U
56.00	0.90103	157.96	0.893415	0.000000	U
57.00	1.13181	158.37	1.239760	0.000000	U
58.00	1.79439	158.94	2.025925	0.000000	U
59.00	15.73272	164.59	2.909011	0.000000	U/P
60.00	14.11285	166.94	3.746456	0.000000	U/P
61.00	1.77174	167.57	4.412395	0.000000	U/P
62.00	2.70115	167.18	4.984300	0.000000	U/P
63.00	1.65398	166.60	3.594920	0.000000	U/S
64.00	1.51241	166.57	1.561060	0.000000	S
65.00	1.05983	166.56	1.234047	0.000000	S

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
66.00	1.21654	166.56	1.069258	0.000000	S
67.00	1.17073	166.59	0.965526	0.000000	S
68.00	0.92765	166.62	0.882567	0.000000	S
69.00	0.74909	166.62	0.815528	0.000000	S
70.00	0.81099	166.62	0.766268	0.000000	S
71.00	0.79268	166.63	0.724413	0.000000	S
72.00	0.54518	166.62	0.679611	0.000000	S
73.00	0.37301	166.58	0.637260	0.000000	S
74.00	0.43116	166.54	0.604399	0.000000	S
75.00	0.41252	166.51	0.578339	0.000000	S
76.00	0.42175	166.48	0.556135	0.000000	S
77.00	0.42170	166.46	0.537095	0.000000	S
78.00	0.42247	166.44	0.520453	0.000000	S
79.00	0.42295	166.43	0.505719	0.000000	S
80.00	0.42123	166.41	0.492483	0.000000	S
81.00	0.42024	166.40	0.480602	0.000000	S
82.00	0.42127	166.39	0.469953	0.000000	S
83.00	0.42162	166.38	0.460332	0.000000	S
84.00	0.42221	166.37	0.451518	0.000000	S
85.00	0.42270	166.37	0.443555	0.000000	S
86.00	0.42321	166.37	0.436313	0.000000	S
87.00	0.42371	166.36	0.429658	0.000000	S
88.00	0.42652	166.36	0.423644	0.000000	S
89.00	0.42856	166.37	0.418154	0.000000	S
90.00	0.42854	166.37	0.413037	0.000000	S
91.00	0.42921	166.37	0.408247	0.000000	S
92.00	0.42732	166.38	0.403694	0.000000	S
93.00	0.42627	166.38	0.399424	0.000000	S
94.00	0.42726	166.39	0.395510	0.000000	S
95.00	0.42756	166.39	0.386665	0.000000	S
96.00	0.14263	166.37	-----	-----	N.A.

VIII. Summary - Cumulative Volumes, Peaks Rates, and Peak Stage

Inflow

Peak Inflow Rate, (cfs):	15.73
Time, (hrs):	59.00
Cumulative Inflow Volume, (ft^3):	225452

Stage

Peak Stage, (ft datum):	167.57
Time, (hrs):	61.00

Overflow Discharge

Peak Discharge Rate, (cfs):	0.00
Time, (hrs):	0.00
Cumulative weir discharge volume, (ft^3):	0

Infiltration Rate

Peak Infiltration Rate, (cfs):	4.9843
Time, (hrs):	62.00
Cumulative Infiltration Volume, (ft^3):	172362

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Retention Pond Recovery Analysis - Inflow Hydrograph

I. Job Information

Job Name: north13
Engineer: kk
Date: 7/22/99

II. Input Data

Equivalent Pond Length, [L] (ft):	120.00
Equivalent Pond Width, [W] (ft):	60.00
Base Of Aquifer Elevation, [B] (ft above datum):	153.00
Water Table Elevation, [WT] (ft above datum):	153.10
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day)	27.00
Fillable Porosity of Aquifer, [n] (%):	30.00
Is there a ditch parallel to the pond length axis?:	No
Is there a ditch parallel to the pond width axis?:	No
Include unsaturated vertical infiltration?:	Yes
Unsaturated vertical infiltration rate, (ft/day):	14.00
Maximum area for unsaturated infiltration, (sq ft):	6105
Groundwater mound intersects pond bottom?:	Yes

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III. Input Data - Discharge Structures

Weir (or Orifice) #1 is Inactive

Weir (or Orifice) #2 is Inactive

Weir (or Orifice) #3 is Inactive

IV. Input Data - Stage vs Area Data

Stage (ft datum)	Area (ft^2)
157.000	1148.0
158.000	1938.0
159.000	2829.0
160.000	3820.0
161.000	4912.0
162.000	6105.0

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V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
0.0000	0.00000	0.00000
1.0000	0.00000	0.00000
2.0000	0.00000	0.00000
3.0000	0.00000	0.00000
4.0000	0.00000	0.00000
5.0000	0.00000	0.00000
6.0000	0.00000	0.00000
7.0000	0.00000	0.00000
8.0000	0.00000	0.00000
9.0000	0.00000	0.00000
10.0000	0.00000	0.00000
11.0000	0.00000	0.00000
12.0000	0.00000	0.00000
13.0000	0.00000	0.00000
14.0000	0.00000	0.00000
15.0000	0.00000	0.00000
16.0000	0.00000	0.00000
17.0000	0.00000	0.00000
18.0000	0.00000	0.00000
19.0000	0.00000	0.00000
20.0000	0.00000	0.00000
21.0000	0.00000	0.00000
22.0000	0.00000	0.00000
23.0000	0.00000	0.00000
24.0000	0.00000	0.00000
25.0000	0.00000	0.00000
26.0000	0.00000	0.00000
27.0000	0.00000	0.00000
28.0000	0.00000	0.00000
29.0000	0.00000	0.00000
30.0000	0.00000	0.00000
31.0000	0.00000	0.00000
32.0000	0.00000	0.00000
33.0000	0.00000	0.00000
34.0000	0.00058	0.00000
35.0000	0.00383	0.00000
36.0000	0.00860	0.00000
37.0000	0.01294	0.00000
38.0000	0.01726	0.00000
39.0000	0.02142	0.00000

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V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
40.0000	0.02611	0.00000
41.0000	0.03065	0.00000
42.0000	0.03463	0.00000
43.0000	0.03865	0.00000
44.0000	0.04155	0.00000
45.0000	0.04453	0.00000
46.0000	0.04816	0.00000
47.0000	0.05146	0.00000
48.0000	0.06791	0.00000
49.0000	0.08156	0.00000
50.0000	0.09457	0.00000
51.0000	0.10879	0.00000
52.0000	0.13243	0.00000
53.0000	0.15495	0.00000
54.0000	0.18916	0.00000
55.0000	0.22245	0.00000
56.0000	0.31461	0.00000
57.0000	0.39653	0.00000
58.0000	0.63173	0.00000
59.0000	5.61509	0.00000
60.0000	5.05413	0.00000
61.0000	0.64727	0.00000
62.0000	0.97108	0.00000
63.0000	0.59786	0.00000
64.0000	0.54553	0.00000
65.0000	0.38281	0.00000
66.0000	0.43931	0.00000
67.0000	0.42293	0.00000
68.0000	0.33517	0.00000
69.0000	0.27071	0.00000
70.0000	0.29312	0.00000
71.0000	0.28655	0.00000
72.0000	0.19710	0.00000
73.0000	0.13487	0.00000
74.0000	0.15590	0.00000
75.0000	0.14917	0.00000
76.0000	0.15252	0.00000
77.0000	0.15252	0.00000
78.0000	0.15281	0.00000
79.0000	0.15299	0.00000

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V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
80.0000	0.15238	0.00000
81.0000	0.15203	0.00000
82.0000	0.15241	0.00000
83.0000	0.15255	0.00000
84.0000	0.15277	0.00000
85.0000	0.15296	0.00000
86.0000	0.15316	0.00000
87.0000	0.15335	0.00000
88.0000	0.15438	0.00000
89.0000	0.15513	0.00000
90.0000	0.15513	0.00000
91.0000	0.15538	0.00000
92.0000	0.15470	0.00000
93.0000	0.15434	0.00000
94.0000	0.15470	0.00000
95.0000	0.15482	0.00000
96.0000	0.05165	0.00000

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
0.00	0.00000	153.10	0.000000	0.000000	N.A.
1.00	0.00000	153.10	0.000000	0.000000	U
2.00	0.00000	153.10	0.000000	0.000000	U
3.00	0.00000	153.10	0.000000	0.000000	U
4.00	0.00000	153.10	0.000000	0.000000	U
5.00	0.00000	153.10	0.000000	0.000000	U
6.00	0.00000	153.10	0.000000	0.000000	U
7.00	0.00000	153.10	0.000000	0.000000	U
8.00	0.00000	153.10	0.000000	0.000000	U
9.00	0.00000	153.10	0.000000	0.000000	U
10.00	0.00000	153.10	0.000000	0.000000	U
11.00	0.00000	153.10	0.000000	0.000000	U
12.00	0.00000	153.10	0.000000	0.000000	U
13.00	0.00000	153.10	0.000000	0.000000	U
14.00	0.00000	153.10	0.000000	0.000000	U
15.00	0.00000	153.10	0.000000	0.000000	U
16.00	0.00000	153.10	0.000000	0.000000	U
17.00	0.00000	153.10	0.000000	0.000000	U
18.00	0.00000	153.10	0.000000	0.000000	U
19.00	0.00000	153.10	0.000000	0.000000	U
20.00	0.00000	153.10	0.000000	0.000000	U
21.00	0.00000	153.10	0.000000	0.000000	U
22.00	0.00000	153.10	0.000000	0.000000	U
23.00	0.00000	153.10	0.000000	0.000000	U
24.00	0.00000	153.10	0.000000	0.000000	U
25.00	0.00000	153.10	0.000000	0.000000	U
26.00	0.00000	153.10	0.000000	0.000000	U
27.00	0.00000	153.10	0.000000	0.000000	U
28.00	0.00000	153.10	0.000000	0.000000	U
29.00	0.00000	153.10	0.000000	0.000000	U
30.00	0.00000	153.10	0.000000	0.000000	U
31.00	0.00000	153.10	0.000000	0.000000	U
32.00	0.00000	153.10	0.000000	0.000000	U

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
33.00	0.00000	153.10	0.000145	0.000000	U
34.00	0.00058	153.10	0.001248	0.000000	U
35.00	0.00383	153.10	0.004210	0.000000	U
36.00	0.00860	153.12	0.008492	0.000000	U
37.00	0.01294	153.14	0.012935	0.000000	U
38.00	0.01726	153.17	0.017220	0.000000	U
39.00	0.02142	153.21	0.021552	0.000000	U
40.00	0.02611	153.25	0.026072	0.000000	U
41.00	0.03065	153.31	0.030510	0.000000	U
42.00	0.03463	153.37	0.034640	0.000000	U
43.00	0.03865	153.44	0.038370	0.000000	U
44.00	0.04155	153.52	0.041570	0.000000	U
45.00	0.04453	153.61	0.044693	0.000000	U
46.00	0.04816	153.70	0.048078	0.000000	U
47.00	0.05146	153.80	0.054747	0.000000	U
48.00	0.06791	153.91	0.067210	0.000000	U
49.00	0.08156	154.06	0.081400	0.000000	U
50.00	0.09457	154.23	0.094873	0.000000	U
51.00	0.10879	154.43	0.111145	0.000000	U
52.00	0.13243	154.67	0.132150	0.000000	U
53.00	0.15495	154.95	0.157872	0.000000	U
54.00	0.18916	155.29	0.179037	0.000000	U
55.00	0.22245	157.06	0.189908	0.000000	U/P
56.00	0.31461	157.27	0.207260	0.000000	U/P
57.00	0.39653	157.60	0.241565	0.000000	U/P
58.00	0.63173	158.10	0.295104	0.000000	U/P
59.00	5.61509	161.04	1.275248	0.000000	U/P
60.00	5.05413	162.96	1.608682	0.000000	U/S
61.00	0.64727	164.06	0.855383	0.000000	S
62.00	0.97108	164.11	0.664426	0.000000	S
63.00	0.59786	164.21	0.574344	0.000000	S
64.00	0.54553	164.23	0.508229	0.000000	S
65.00	0.38281	164.22	0.460192	0.000000	S

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
66.00	0.43931	164.21	0.427132	0.000000	S
67.00	0.42293	164.22	0.401825	0.000000	S
68.00	0.33517	164.21	0.376135	0.000000	S
69.00	0.27071	164.18	0.352836	0.000000	S
70.00	0.29312	164.14	0.335415	0.000000	S
71.00	0.28655	164.12	0.319600	0.000000	S
72.00	0.19710	164.08	0.300669	0.000000	S
73.00	0.13487	164.00	0.282052	0.000000	S
74.00	0.15590	163.93	0.267810	0.000000	S
75.00	0.14917	163.86	0.256618	0.000000	S
76.00	0.15252	163.80	0.246999	0.000000	S
77.00	0.15252	163.75	0.238709	0.000000	S
78.00	0.15281	163.70	0.231381	0.000000	S
79.00	0.15299	163.66	0.224832	0.000000	S
80.00	0.15238	163.62	0.218921	0.000000	S
81.00	0.15203	163.58	0.213578	0.000000	S
82.00	0.15241	163.54	0.208748	0.000000	S
83.00	0.15255	163.51	0.204375	0.000000	S
84.00	0.15277	163.48	0.200375	0.000000	S
85.00	0.15296	163.46	0.196693	0.000000	S
86.00	0.15316	163.43	0.193317	0.000000	S
87.00	0.15335	163.41	0.190227	0.000000	S
88.00	0.15438	163.39	0.187406	0.000000	S
89.00	0.15513	163.37	0.184817	0.000000	S
90.00	0.15513	163.35	0.182388	0.000000	S
91.00	0.15538	163.34	0.180105	0.000000	S
92.00	0.15470	163.32	0.177927	0.000000	S
93.00	0.15434	163.31	0.175855	0.000000	S
94.00	0.15470	163.30	0.173944	0.000000	S
95.00	0.15482	163.29	0.169533	0.000000	S
96.00	0.05165	163.25	-----	-----	N.A.

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VIII. Summary - Cumulative Volumes, Peaks Rates, and Peak Stage

Inflow

Peak Inflow Rate, (cfs):	5.62
Time, (hrs):	59.00
Cumulative Inflow Volume, (ft^3):	80534

Stage

Peak Stage, (ft datum):	164.23
Time, (hrs):	64.00

Overflow Discharge

Peak Discharge Rate, (cfs):	0.00
Time, (hrs):	0.00
Cumulative weir discharge volume, (ft^3):	0

Infiltration Rate

Peak Infiltration Rate, (cfs):	1.6087
Time, (hrs):	60.00
Cumulative Infiltration Volume, (ft^3):	55770

POND5 - Version 2.26

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Retention Pond Recovery Analysis - Inflow Hydrograph

I. Job Information

Job Name: north14
Engineer: kk
Date: 7/22/99

II. Input Data

Equivalent Pond Length, [L] (ft):	185.00
Equivalent Pond Width, [W] (ft):	145.00
Base Of Aquifer Elevation, [B] (ft above datum):	138.00
Water Table Elevation, [WT] (ft above datum):	138.10
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day)	28.00
Fillable Porosity of Aquifer, [n] (%):	30.00
Is there a ditch parallel to the pond length axis?:	No
Is there a ditch parallel to the pond width axis?:	No
Include unsaturated vertical infiltration?:	Yes
Unsaturated vertical infiltration rate, (ft/day):	14.00
Maximum area for unsaturated infiltration, (sq ft):	21450
Groundwater mound intersects pond bottom?:	Yes

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III. Input Data - Discharge Structures

Weir (or Orifice) #1 is Inactive

Weir (or Orifice) #2 is Inactive

Weir (or Orifice) #3 is Inactive

IV. Input Data - Stage vs Area Data

Stage (ft datum)	Area (ft^2)
142.000	7703.0
143.000	9365.0
144.000	11128.0
145.000	12991.0
146.000	14955.0
147.000	17020.0
148.000	19185.0
149.000	21450.0

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V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
0.0000	0.00000	0.00000
1.0000	0.00000	0.00000
2.0000	0.00000	0.00000
3.0000	0.00000	0.00000
4.0000	0.00000	0.00000
5.0000	0.00000	0.00000
6.0000	0.00000	0.00000
7.0000	0.00000	0.00000
8.0000	0.00000	0.00000
9.0000	0.00000	0.00000
10.0000	0.00000	0.00000
11.0000	0.00000	0.00000
12.0000	0.00000	0.00000
13.0000	0.00000	0.00000
14.0000	0.00000	0.00000
15.0000	0.00000	0.00000
16.0000	0.00000	0.00000
17.0000	0.00000	0.00000
18.0000	0.00000	0.00000
19.0000	0.00000	0.00000
20.0000	0.00000	0.00000
21.0000	0.00000	0.00000
22.0000	0.00000	0.00000
23.0000	0.00000	0.00000
24.0000	0.00000	0.00000
25.0000	0.00000	0.00000
26.0000	0.00000	0.00000
27.0000	0.00000	0.00000
28.0000	0.00000	0.00000
29.0000	0.00000	0.00000
30.0000	0.00000	0.00000
31.0000	0.00002	0.00000
32.0000	0.00293	0.00000
33.0000	0.00980	0.00000
34.0000	0.01724	0.00000
35.0000	0.02418	0.00000
36.0000	0.03099	0.00000
37.0000	0.03756	0.00000
38.0000	0.04394	0.00000
39.0000	0.05013	0.00000

V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
40.0000	0.05745	0.00000
41.0000	0.06442	0.00000
42.0000	0.07019	0.00000
43.0000	0.07610	0.00000
44.0000	0.07992	0.00000
45.0000	0.08399	0.00000
46.0000	0.08936	0.00000
47.0000	0.09411	0.00000
48.0000	0.12242	0.00000
49.0000	0.14515	0.00000
50.0000	0.16590	0.00000
51.0000	0.18869	0.00000
52.0000	0.22683	0.00000
53.0000	0.26268	0.00000
54.0000	0.31695	0.00000
55.0000	0.36923	0.00000
56.0000	0.51604	0.00000
57.0000	0.64422	0.00000
58.0000	1.01224	0.00000
59.0000	8.65069	0.00000
60.0000	7.71000	0.00000
61.0000	0.93097	0.00000
62.0000	1.46492	0.00000
63.0000	0.88761	0.00000
64.0000	0.81499	0.00000
65.0000	0.56962	0.00000
66.0000	0.65414	0.00000
67.0000	0.62902	0.00000
68.0000	0.49828	0.00000
69.0000	0.40221	0.00000
70.0000	0.43534	0.00000
71.0000	0.42538	0.00000
72.0000	0.29251	0.00000
73.0000	0.20009	0.00000
74.0000	0.23126	0.00000
75.0000	0.22123	0.00000
76.0000	0.22615	0.00000
77.0000	0.22609	0.00000
78.0000	0.22647	0.00000
79.0000	0.22670	0.00000

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V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
80.0000	0.22574	0.00000
81.0000	0.22518	0.00000
82.0000	0.22571	0.00000
83.0000	0.22587	0.00000
84.0000	0.22615	0.00000
85.0000	0.22638	0.00000
86.0000	0.22663	0.00000
87.0000	0.22687	0.00000
88.0000	0.22834	0.00000
89.0000	0.22941	0.00000
90.0000	0.22937	0.00000
91.0000	0.22970	0.00000
92.0000	0.22866	0.00000
93.0000	0.22807	0.00000
94.0000	0.22857	0.00000
95.0000	0.22871	0.00000
96.0000	0.07629	0.00000

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
0.00	0.00000	138.10	0.000000	0.000000	N.A.
1.00	0.00000	138.10	0.000000	0.000000	U
2.00	0.00000	138.10	0.000000	0.000000	U
3.00	0.00000	138.10	0.000000	0.000000	U
4.00	0.00000	138.10	0.000000	0.000000	U
5.00	0.00000	138.10	0.000000	0.000000	U
6.00	0.00000	138.10	0.000000	0.000000	U
7.00	0.00000	138.10	0.000000	0.000000	U
8.00	0.00000	138.10	0.000000	0.000000	U
9.00	0.00000	138.10	0.000000	0.000000	U
10.00	0.00000	138.10	0.000000	0.000000	U
11.00	0.00000	138.10	0.000000	0.000000	U
12.00	0.00000	138.10	0.000000	0.000000	U
13.00	0.00000	138.10	0.000000	0.000000	U
14.00	0.00000	138.10	0.000000	0.000000	U
15.00	0.00000	138.10	0.000000	0.000000	U
16.00	0.00000	138.10	0.000000	0.000000	U
17.00	0.00000	138.10	0.000000	0.000000	U
18.00	0.00000	138.10	0.000000	0.000000	U
19.00	0.00000	138.10	0.000000	0.000000	U
20.00	0.00000	138.10	0.000000	0.000000	U
21.00	0.00000	138.10	0.000000	0.000000	U
22.00	0.00000	138.10	0.000000	0.000000	U
23.00	0.00000	138.10	0.000000	0.000000	U
24.00	0.00000	138.10	0.000000	0.000000	U
25.00	0.00000	138.10	0.000000	0.000000	U
26.00	0.00000	138.10	0.000000	0.000000	U
27.00	0.00000	138.10	0.000000	0.000000	U
28.00	0.00000	138.10	0.000000	0.000000	U
29.00	0.00000	138.10	0.000000	0.000000	U
30.00	0.00000	138.10	0.000005	0.000000	U
31.00	0.00002	138.10	0.000743	0.000000	U
32.00	0.00293	138.10	0.003920	0.000000	U

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
33.00	0.00980	138.10	0.009942	0.000000	U
34.00	0.01724	138.11	0.017115	0.000000	U
35.00	0.02418	138.12	0.024147	0.000000	U
36.00	0.03099	138.14	0.030930	0.000000	U
37.00	0.03756	138.16	0.037512	0.000000	U
38.00	0.04394	138.18	0.043893	0.000000	U
39.00	0.05013	138.21	0.050412	0.000000	U
40.00	0.05745	138.24	0.057363	0.000000	U
41.00	0.06442	138.27	0.064120	0.000000	U
42.00	0.07019	138.31	0.070225	0.000000	U
43.00	0.07610	138.35	0.075577	0.000000	U
44.00	0.07992	138.39	0.079983	0.000000	U
45.00	0.08399	138.44	0.084315	0.000000	U
46.00	0.08936	138.49	0.089205	0.000000	U
47.00	0.09411	138.54	0.100000	0.000000	U
48.00	0.12242	138.60	0.121025	0.000000	U
49.00	0.14515	138.67	0.144655	0.000000	U
50.00	0.16590	138.76	0.166410	0.000000	U
51.00	0.18869	138.86	0.192528	0.000000	U
52.00	0.22683	138.98	0.226258	0.000000	U
53.00	0.26268	139.11	0.267285	0.000000	U
54.00	0.31695	139.28	0.316453	0.000000	U
55.00	0.36923	139.47	0.392862	0.000000	U
56.00	0.51604	139.72	0.511382	0.000000	U
57.00	0.64422	140.04	0.704180	0.000000	U
58.00	1.01224	140.50	1.038200	0.000000	U
59.00	8.65069	143.45	1.446720	0.000000	U/P
60.00	7.71000	145.42	1.941479	0.000000	U/P
61.00	0.93097	145.94	2.827754	0.000000	U/P
62.00	1.46492	145.38	2.160225	0.000000	U/S
63.00	0.88761	145.45	0.793084	0.000000	S
64.00	0.81499	145.50	0.630090	0.000000	S
65.00	0.56962	145.53	0.543917	0.000000	S

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
66.00	0.65414	145.55	0.491574	0.000000	S
67.00	0.62902	145.59	0.455223	0.000000	S
68.00	0.49828	145.63	0.422802	0.000000	S
69.00	0.40221	145.64	0.395035	0.000000	S
70.00	0.43534	145.65	0.374375	0.000000	S
71.00	0.42538	145.66	0.356189	0.000000	S
72.00	0.29251	145.67	0.335538	0.000000	S
73.00	0.20009	145.65	0.315554	0.000000	S
74.00	0.23126	145.62	0.300070	0.000000	S
75.00	0.22123	145.61	0.287910	0.000000	S
76.00	0.22615	145.59	0.277522	0.000000	S
77.00	0.22609	145.58	0.268605	0.000000	S
78.00	0.22647	145.57	0.260735	0.000000	S
79.00	0.22670	145.56	0.253765	0.000000	S
80.00	0.22574	145.56	0.247537	0.000000	S
81.00	0.22518	145.55	0.241857	0.000000	S
82.00	0.22571	145.55	0.236797	0.000000	S
83.00	0.22587	145.54	0.232218	0.000000	S
84.00	0.22615	145.54	0.228016	0.000000	S
85.00	0.22638	145.54	0.224210	0.000000	S
86.00	0.22663	145.54	0.220727	0.000000	S
87.00	0.22687	145.55	0.217550	0.000000	S
88.00	0.22834	145.55	0.214670	0.000000	S
89.00	0.22941	145.55	0.212064	0.000000	S
90.00	0.22937	145.56	0.209637	0.000000	S
91.00	0.22970	145.56	0.207337	0.000000	S
92.00	0.22866	145.57	0.205178	0.000000	S
93.00	0.22807	145.58	0.203142	0.000000	S
94.00	0.22857	145.58	0.201249	0.000000	S
95.00	0.22871	145.59	0.196799	0.000000	S
96.00	0.07629	145.58	-----	-----	N.A.

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VIII. Summary - Cumulative Volumes, Peaks Rates, and Peak Stage

Inflow

Peak Inflow Rate, (cfs):	8.65
Time, (hrs):	59.00
Cumulative Inflow Volume, (ft^3):	123854

Stage

Peak Stage, (ft datum):	145.94
Time, (hrs):	61.00

Overflow Discharge

Peak Discharge Rate, (cfs):	0.00
Time, (hrs):	0.00
Cumulative weir discharge volume, (ft^3):	0

Infiltration Rate

Peak Infiltration Rate, (cfs):	2.8278
Time, (hrs):	61.00
Cumulative Infiltration Volume, (ft^3):	85156

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Retention Pond Recovery Analysis - Inflow Hydrograph

I. Job Information

Job Name: north16
Engineer: kk
Date: 7/22/99

II. Input Data

Equivalent Pond Length, [L] (ft):	440.00
Equivalent Pond Width, [W] (ft):	150.00
Base Of Aquifer Elevation, [B] (ft above datum):	75.00
Water Table Elevation, [WT] (ft above datum):	75.10
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day)	35.00
Fillable Porosity of Aquifer, [n] (%):	30.00
Is there a ditch parallel to the pond length axis?:	No
Is there a ditch parallel to the pond width axis?:	No
Include unsaturated vertical infiltration?:	Yes
Unsaturated vertical infiltration rate, (ft/day):	18.00
Maximum area for unsaturated infiltration, (sq ft):	79005
Groundwater mound intersects pond bottom?:	Yes

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III. Input Data - Discharge Structures

Weir (or Orifice) #1 is Inactive

Weir (or Orifice) #2 is Inactive

Weir (or Orifice) #3 is Inactive

IV. Input Data - Stage vs Area Data

Stage (ft datum)	Area (ft^2)
80.000	19680.0
81.000	23030.0
82.000	26481.0
83.000	30032.0
84.000	33684.0
85.000	37436.0
86.000	41288.0
87.000	45242.0
88.000	54434.0
89.000	66685.0
90.000	79005.0

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V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
0.0000	0.00000	0.00000
1.0000	0.00000	0.00000
2.0000	0.00000	0.00000
3.0000	0.00000	0.00000
4.0000	0.00000	0.00000
5.0000	0.00000	0.00000
6.0000	0.00000	0.00000
7.0000	0.00000	0.00000
8.0000	0.00000	0.00000
9.0000	0.00000	0.00000
10.0000	0.00000	0.00000
11.0000	0.00000	0.00000
12.0000	0.00000	0.00000
13.0000	0.00000	0.00000
14.0000	0.00000	0.00000
15.0000	0.00000	0.00000
16.0000	0.00000	0.00000
17.0000	0.00000	0.00000
18.0000	0.00000	0.00000
19.0000	0.00000	0.00000
20.0000	0.00000	0.00000
21.0000	0.00000	0.00000
22.0000	0.00000	0.00000
23.0000	0.00000	0.00000
24.0000	0.00000	0.00000
25.0000	0.00000	0.00000
26.0000	0.00000	0.00000
27.0000	0.00000	0.00000
28.0000	0.00000	0.00000
29.0000	0.00000	0.00000
30.0000	0.00000	0.00000
31.0000	0.00000	0.00000
32.0000	0.00000	0.00000
33.0000	0.00000	0.00000
34.0000	0.00000	0.00000
35.0000	0.00000	0.00000
36.0000	0.00000	0.00000
37.0000	0.00000	0.00000
38.0000	0.01116	0.00000
39.0000	0.04503	0.00000

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V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
40.0000	0.08859	0.00000
41.0000	0.12945	0.00000
42.0000	0.16909	0.00000
43.0000	0.20783	0.00000
44.0000	0.23983	0.00000
45.0000	0.27137	0.00000
46.0000	0.30620	0.00000
47.0000	0.33890	0.00000
48.0000	0.46271	0.00000
49.0000	0.57189	0.00000
50.0000	0.68373	0.00000
51.0000	0.80504	0.00000
52.0000	1.00482	0.00000
53.0000	1.19903	0.00000
54.0000	1.49589	0.00000
55.0000	1.78928	0.00000
56.0000	2.58375	0.00000
57.0000	3.31019	0.00000
58.0000	5.39610	0.00000
59.0000	51.03387	0.00000
60.0000	46.62896	0.00000
61.0000	6.48983	0.00000
62.0000	9.11198	0.00000
63.0000	5.74197	0.00000
64.0000	5.19304	0.00000
65.0000	3.66514	0.00000
66.0000	4.20208	0.00000
67.0000	4.05255	0.00000
68.0000	3.21352	0.00000
69.0000	2.59803	0.00000
70.0000	2.81446	0.00000
71.0000	2.75335	0.00000
72.0000	1.89474	0.00000
73.0000	1.29714	0.00000
74.0000	1.49977	0.00000
75.0000	1.43560	0.00000
76.0000	1.46827	0.00000
77.0000	1.46867	0.00000
78.0000	1.47190	0.00000
79.0000	1.47416	0.00000

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V. Input Data - Inflow Hydrograph

Time (hrs)	Inflow Rate (cfs)	Outside Recharge (ft/day)
80.0000	1.46871	0.00000
81.0000	1.46579	0.00000
82.0000	1.46995	0.00000
83.0000	1.47173	0.00000
84.0000	1.47429	0.00000
85.0000	1.47655	0.00000
86.0000	1.47888	0.00000
87.0000	1.48114	0.00000
88.0000	1.49149	0.00000
89.0000	1.49916	0.00000
90.0000	1.49963	0.00000
91.0000	1.50246	0.00000
92.0000	1.49635	0.00000
93.0000	1.49320	0.00000
94.0000	1.49715	0.00000
95.0000	1.49870	0.00000
96.0000	0.50002	0.00000

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
0.00	0.00000	75.10	0.000000	0.000000	N.A.
1.00	0.00000	75.10	0.000000	0.000000	U
2.00	0.00000	75.10	0.000000	0.000000	U
3.00	0.00000	75.10	0.000000	0.000000	U
4.00	0.00000	75.10	0.000000	0.000000	U
5.00	0.00000	75.10	0.000000	0.000000	U
6.00	0.00000	75.10	0.000000	0.000000	U
7.00	0.00000	75.10	0.000000	0.000000	U
8.00	0.00000	75.10	0.000000	0.000000	U
9.00	0.00000	75.10	0.000000	0.000000	U
10.00	0.00000	75.10	0.000000	0.000000	U
11.00	0.00000	75.10	0.000000	0.000000	U
12.00	0.00000	75.10	0.000000	0.000000	U
13.00	0.00000	75.10	0.000000	0.000000	U
14.00	0.00000	75.10	0.000000	0.000000	U
15.00	0.00000	75.10	0.000000	0.000000	U
16.00	0.00000	75.10	0.000000	0.000000	U
17.00	0.00000	75.10	0.000000	0.000000	U
18.00	0.00000	75.10	0.000000	0.000000	U
19.00	0.00000	75.10	0.000000	0.000000	U
20.00	0.00000	75.10	0.000000	0.000000	U
21.00	0.00000	75.10	0.000000	0.000000	U
22.00	0.00000	75.10	0.000000	0.000000	U
23.00	0.00000	75.10	0.000000	0.000000	U
24.00	0.00000	75.10	0.000000	0.000000	U
25.00	0.00000	75.10	0.000000	0.000000	U
26.00	0.00000	75.10	0.000000	0.000000	U
27.00	0.00000	75.10	0.000000	0.000000	U
28.00	0.00000	75.10	0.000000	0.000000	U
29.00	0.00000	75.10	0.000000	0.000000	U
30.00	0.00000	75.10	0.000000	0.000000	U
31.00	0.00000	75.10	0.000000	0.000000	U
32.00	0.00000	75.10	0.000000	0.000000	U

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
33.00	0.00000	75.10	0.000000	0.000000	U
34.00	0.00000	75.10	0.000000	0.000000	U
35.00	0.00000	75.10	0.000000	0.000000	U
36.00	0.00000	75.10	0.000000	0.000000	U
37.00	0.00000	75.10	0.002790	0.000000	U
38.00	0.01116	75.10	0.016838	0.000000	U
39.00	0.04503	75.11	0.047452	0.000000	U
40.00	0.08859	75.12	0.087915	0.000000	U
41.00	0.12945	75.13	0.129145	0.000000	U
42.00	0.16909	75.15	0.168865	0.000000	U
43.00	0.20783	75.18	0.206145	0.000000	U
44.00	0.23983	75.22	0.239715	0.000000	U
45.00	0.27137	75.26	0.272193	0.000000	U
46.00	0.30620	75.30	0.305668	0.000000	U
47.00	0.33890	75.35	0.361677	0.000000	U
48.00	0.46271	75.41	0.459052	0.000000	U
49.00	0.57189	75.49	0.572555	0.000000	U
50.00	0.68373	75.58	0.686097	0.000000	U
51.00	0.80504	75.70	0.824657	0.000000	U
52.00	1.00482	75.83	1.003428	0.000000	U
53.00	1.19903	76.00	1.224693	0.000000	U
54.00	1.49589	76.21	1.495023	0.000000	U
55.00	1.78928	76.46	1.914550	0.000000	U
56.00	2.58375	76.79	2.566742	0.000000	U
57.00	3.31019	77.24	3.523485	0.000000	U
58.00	5.39610	80.05	4.116096	0.000000	U/P
59.00	51.03387	83.43	5.357896	0.000000	U/P
60.00	46.62896	87.33	8.317684	0.000000	U/P
61.00	6.48983	88.44	11.252090	0.000000	U/P
62.00	9.11198	88.15	12.083990	0.000000	U/P
63.00	5.74197	87.86	10.076109	0.000000	U/P
64.00	5.19304	87.66	6.182117	0.000000	U/S
65.00	3.66514	87.69	3.458748	0.000000	S

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VII. Results - Summary

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
66.00	4.20208	87.76	2.781141	0.000000	S
67.00	4.05255	87.87	2.437875	0.000000	S
68.00	3.21352	87.96	2.198535	0.000000	S
69.00	2.59803	88.01	2.017540	0.000000	S
70.00	2.81446	88.06	1.887862	0.000000	S
71.00	2.75335	88.12	1.781981	0.000000	S
72.00	1.89474	88.16	1.673651	0.000000	S
73.00	1.29714	88.16	1.572640	0.000000	S
74.00	1.49977	88.15	1.494129	0.000000	S
75.00	1.43560	88.15	1.432202	0.000000	S
76.00	1.46827	88.15	1.379919	0.000000	S
77.00	1.46867	88.16	1.335474	0.000000	S
78.00	1.47190	88.17	1.296916	0.000000	S
79.00	1.47416	88.18	1.262974	0.000000	S
80.00	1.46871	88.20	1.232636	0.000000	S
81.00	1.46579	88.21	1.205440	0.000000	S
82.00	1.46995	88.23	1.181199	0.000000	S
83.00	1.47173	88.25	1.159472	0.000000	S
84.00	1.47429	88.27	1.139737	0.000000	S
85.00	1.47655	88.29	1.121885	0.000000	S
86.00	1.47888	88.31	1.105578	0.000000	S
87.00	1.48114	88.34	1.090770	0.000000	S
88.00	1.49149	88.36	1.077492	0.000000	S
89.00	1.49916	88.39	1.065261	0.000000	S
90.00	1.49963	88.41	1.053891	0.000000	S
91.00	1.50246	88.44	1.043221	0.000000	S
92.00	1.49635	88.47	1.033104	0.000000	S
93.00	1.49320	88.50	1.023475	0.000000	S
94.00	1.49715	88.53	1.014480	0.000000	S
95.00	1.49870	88.55	0.995248	0.000000	S
96.00	0.50002	88.55	-----	-----	N.A.

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VIII. Summary - Cumulative Volumes, Peaks Rates, and Peak Stage

Inflow

Peak Inflow Rate, (cfs):	51.03
Time, (hrs):	59.00
Cumulative Inflow Volume, (ft^3):	736683

Stage

Peak Stage, (ft datum):	88.55
Time, (hrs):	96.00

Overflow Discharge

Peak Discharge Rate, (cfs):	0.00
Time, (hrs):	0.00
Cumulative weir discharge volume, (ft^3):	0

Infiltration Rate

Peak Infiltration Rate, (cfs):	12.0840
Time, (hrs):	62.00
Cumulative Infiltration Volume, (ft^3):	430341

"PONDS" RECOVERY ANALYSIS
TREATMENT VOLUME

Since every basin consists of less than 40 percent impervious, the following calculations for all basins are based on formula:

Per 40C-42 FAC

V_T = 1/2" (area) + ½ (area - for volume treatment) = 1" (area)

V_T Pond 2 = 1" x (415,998 Sq. Ft.) = 34,667 Cu. Ft

V_T Pond 3 = 1" x (581,962 Sq. Ft.) = 48,497 Cu. Ft

V_T Pond 4 = 1" x (1,078,110 Sq. Ft.) = 89,843 Cu. Ft

V_T Pond 5 = 1" x (2,459,833 Sq. Ft.) = 204,986 Cu. Ft

V_T Pond 6 = 1" x (692,168 Sq. Ft.) = 57,681 Cu. Ft

V_T Pond 7 = 1" x (249,599 Sq. Ft.) = 20,800 Cu. Ft

V_T Pond 10 = 1" x (1,266,725 Sq. Ft.) = 105,560 Cu. Ft

V_T Pond 11 = 1" x (448,668 Sq. Ft.) = 37,389 Cu. Ft

V_T Pond 13 = 1" x (164,221 Sq. Ft.) = 13,685 Cu. Ft

V_T Pond 14 = 1" x (235,224 Sq. Ft.) = 19,602 Cu. Ft

V_T Pond 16 = 1" x (1,668,348 Sq. Ft.) = 139,029 Cu. Ft

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VII. Results - Summary POND 2 - SEE COMPLETE CALCS IN "PONDS" RECOVERY ANALYSIS

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
66.00	0.87357	248.82	0.733630	0.000000	U/P
67.00	0.84663	248.83	0.737032	0.000000	U/P
68.00	0.67256	248.83	0.739375	0.000000	U/P
69.00	0.54523	248.82	0.737599	0.000000	U/P
70.00	0.59153	248.82	0.732811	0.000000	U/P
71.00	0.57988	248.81	0.727804	0.000000	U/P
72.00	0.39957	248.80	0.721684	0.000000	U/P
73.00	0.27394	248.79	0.711746	0.000000	U/P
74.00	0.31693	248.77	0.699001	0.000000	U/P
75.00	0.30369	248.76	0.686228	0.000000	U/P
76.00	0.31087	248.75	5.505080	0.000000	U/P
77.00	0.31125	248.38	7.604093	0.000000	U/S
78.00	0.31222	248.21	4.217492	0.000000	S
79.00	0.31298	248.09	3.148982	0.000000	S
80.00	0.31210	246.99	1.526495	0.000000	S
81.00	0.31175	246.93	0.312127	0.000000	S
82.00	0.31291	246.87	0.312782	0.000000	S
83.00	0.31356	246.82	0.313599	0.000000	S
84.00	0.31437	246.77	0.314355	0.000000	S
85.00	0.31512	246.72	0.315123	0.000000	S
86.00	0.31588	246.68	0.315878	0.000000	S
87.00	0.31663	246.64	0.317060	0.000000	S
88.00	0.31910	246.61	0.318956	0.000000	S
89.00	0.32100	246.57	0.320617	0.000000	S
90.00	0.32137	246.54	0.321495	0.000000	S
91.00	0.32224	246.51	0.321758	0.000000	S
92.00	0.32118	246.48	0.321341	0.000000	S
93.00	0.32076	246.45	0.321141	0.000000	S
94.00	0.32186	246.43	0.321730	0.000000	S
95.00	0.32244	246.40	0.268590	0.000000	S
96.00	0.10762	246.37	0.206429	0.000000	S
120.00	0.00000	245.79	0.000000	0.000000	S
144.00	0.00000	245.36	0.000000	0.000000	S

BECAUSE THERE IS VERY LITTLE IMPERVIOUS AREA DRAINING TO THE POND AND THE SIZE OF THE POND IN RELATION TO THE DRAINAGE BASIN AREA, POND 2 IS ABLE TO RECOVER BOTH WATER QUALITY AND TOTAL TREATMENT VOLUME PRIOR TO THE 25 YR 96 HR STORM ENDING. TOP OF LINER IS 248.0.

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Retention Pond Recovery Analysis

I. Job Information

Job Name: north3
Engineer: kk
Date: 12/22/99

II. Input Data

Equivalent Pond Length, [L] (ft):	340.00
Equivalent Pond Width, [W] (ft):	130.00
Pond Bottom Elevation, [PB] (ft above datum):	237.00
Porosity Of Material Within Pond, [p] (%):	100.00
Base Of Aquifer Elevation, [B] (ft above datum):	227.00
Water Table Elevation, [WT] (ft above datum):	227.10
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day)	32.00
Fillable Porosity of Aquifer, [n] (%):	30.00
Vertical Unsaturated Infiltration, [Iv] (ft/day):	16.00
Runoff Volume, [V] (cubic feet)	48497.00
Percent Recovery Of Runoff Volume, [PV] (%)	100.00

I. Results

UNSATURATED FLOW

Recovery Time From Unsaturated Flow, [T1] (days):	0.0686
Recovered Volume From Unsaturated Flow, [V1] (ft^3):	48497.00

SATURATED FLOW

Recovery Time From Saturated Flow, [T2] (days):	0.0000
Recovered Volume From Saturated Flow, [V2] (ft^3):	0.00
Maximum Radius Of Influence, [R] (ft):	0.00
Maximum Driving Head, [Hmax] (ft):	0.000
Minimum Driving Head, [Hmin] (ft):	0.000

TOTAL

Total Recovery Time, [T] (days):	0.0686
Total Recovered Volume, [V] (ft^3):	48497.00

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VII. Results - Summary POND 4 - SEE COMPLETE CALCS IN "POND" RECOVERY ANALYSIS

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
66.00	2.88405	232.24	7.195731	0.000000	U/P
67.00	2.77656	231.81	7.970003	0.000000	U/S
68.00	2.20036	231.69	4.239585	0.000000	S
69.00	1.77723	231.60	3.298084	0.000000	S
70.00	1.92430	231.54	2.807940	0.000000	S
71.00	1.88117	231.50	2.489395	0.000000	S
72.00	1.29395	231.46	2.248770	0.000000	S
73.00	0.88540	231.40	2.059212	0.000000	S
74.00	1.02349	231.35	1.912124	0.000000	S
75.00	0.97933	231.30	1.794461	0.000000	S
76.00	1.00131	231.26	1.696872	0.000000	S
77.00	1.00127	231.23	1.614557	0.000000	S
78.00	1.00316	231.20	1.543539	0.000000	S
79.00	1.00438	231.17	1.481844	0.000000	S
80.00	1.00035	231.14	1.427744	0.000000	S
81.00	0.99806	231.12	1.379533	0.000000	S
82.00	1.00060	231.10	1.336601	0.000000	S
83.00	1.00151	231.08	1.298252	0.000000	S
84.00	1.00295	231.07	1.263453	0.000000	S
85.00	1.00419	231.06	1.231722	0.000000	S
86.00	1.00548	231.04	1.202679	0.000000	S
87.00	1.00673	231.03	1.175896	0.000000	S
88.00	1.01347	231.03	1.151312	0.000000	S
89.00	1.01839	231.02	1.128912	0.000000	S
90.00	1.01842	231.01	1.108071	0.000000	S
91.00	1.02007	231.01	1.088517	0.000000	S
92.00	1.01563	231.01	1.070296	0.000000	S
93.00	1.01322	231.00	1.053336	0.000000	S
94.00	1.01562	231.00	1.037510	0.000000	S
95.00	1.01639	231.00	1.016255	0.000000	S
96.00	0.33906	230.98	0.989410	0.000000	S
120.00	0.00000	230.07	0.588498	0.000000	S
144.00	0.00000	229.34	0.453399	0.000000	S

REQUIRED WATER QUALITY TREATMENT VOLUME - 89,843 CU. FT.

(SQ. FT.) AREA	(CU. FT.) VOLUME	STAGE
65,245	0	230.98
61,348	59,373	230.07
58,287	44,784	229.34
	104,157	

TOTAL VOLUME AFTER DAY 2

$$\frac{89,843 - 59,373}{104,157 - 59,373} \times (24\ HR) = 16.33\ HR. + 24\ HR.\ (FOR\ DAY\ 2)$$

$$= 40.33\ HR.\ RECOVERY\ TIME$$

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Retention Pond Recovery Analysis

I. Job Information

Job Name: north5
Engineer: kk
Date: 12/22/99

II. Input Data

Equivalent Pond Length, [L] (ft):	580.00
Equivalent Pond Width, [W] (ft):	190.00
Pond Bottom Elevation, [PB] (ft above datum):	129.00
Porosity Of Material Within Pond, [p] (%):	100.00
Base Of Aquifer Elevation, [B] (ft above datum):	115.00
Water Table Elevation, [WT] (ft above datum):	115.10
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day)	27.00
Fillable Porosity of Aquifer, [n] (%):	30.00
Vertical Unsaturated Infiltration, [Iv] (ft/day):	14.00
Runoff Volume, [V] (cubic feet)	204986.00
Percent Recovery Of Runoff Volume, [PV] (%)	100.00

I. Results

UNSATURATED FLOW

Recovery Time From Unsaturated Flow, [T1] (days):	0.1329
Recovered Volume From Unsaturated Flow, [V1] (ft^3):	204986.00

SATURATED FLOW

Recovery Time From Saturated Flow, [T2] (days):	0.0000
Recovered Volume From Saturated Flow, [V2] (ft^3):	0.00
Maximum Radius Of Influence, [R] (ft):	0.00
Maximum Driving Head, [Hmax] (ft):	0.000
Minimum Driving Head, [Hmin] (ft):	0.000

TOTAL

Total Recovery Time, [T] (days):	0.1329
Total Recovered Volume, [V] (ft^3):	204986.00

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Retention Pond Recovery Analysis

I. Job Information

Job Name: north6
Engineer: kk
Date: 12/22/99

II. Input Data

Equivalent Pond Length, [L] (ft):	390.00
Equivalent Pond Width, [W] (ft):	180.00
Pond Bottom Elevation, [PB] (ft above datum):	233.00
Porosity Of Material Within Pond, [p] (%):	100.00
Base Of Aquifer Elevation, [B] (ft above datum):	223.00
Water Table Elevation, [WT] (ft above datum):	223.10
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day)	34.00
Fillable Porosity of Aquifer, [n] (%):	30.00
Vertical Unsaturated Infiltration, [Iv] (ft/day):	17.00
Runoff Volume, [V] (cubic feet)	57681.00
Percent Recovery Of Runoff Volume, [PV] (%)	100.00

III. Results

UNSATURATED FLOW

Recovery Time From Unsaturated Flow, [T1] (days):	0.0483
Recovered Volume From Unsaturated Flow, [V1] (ft^3):	57681.00

SATURATED FLOW

Recovery Time From Saturated Flow, [T2] (days):	0.0000
Recovered Volume From Saturated Flow, [V2] (ft^3):	0.00
Maximum Radius Of Influence, [R] (ft):	0.00
Maximum Driving Head, [Hmax] (ft):	0.000
Minimum Driving Head, [Hmin] (ft):	0.000

TOTAL

Total Recovery Time, [T] (days):	0.0483
Total Recovered Volume, [V] (ft^3):	57681.00

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Retention Pond Recovery Analysis

I. Job Information

Job Name: north7
Engineer: kk
Date: 12/22/99

II. Input Data

Equivalent Pond Length, [L] (ft):	160.00
Equivalent Pond Width, [W] (ft):	150.00
Pond Bottom Elevation, [PB] (ft above datum):	206.00
Porosity Of Material Within Pond, [p] (%):	100.00
Base Of Aquifer Elevation, [B] (ft above datum):	197.00
Water Table Elevation, [WT] (ft above datum):	197.10
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day)	30.00
Fillable Porosity of Aquifer, [n] (%):	30.00
Vertical Unsaturated Infiltration, [Iv] (ft/day):	15.00
Runoff Volume, [V] (cubic feet)	20800.00
Percent Recovery Of Runoff Volume, [PV] (%)	100.00

III. Results

UNSATURATED FLOW

Recovery Time From Unsaturated Flow, [T1] (days):	0.0578
Recovered Volume From Unsaturated Flow, [V1] (ft^3):	20800.00

SATURATED FLOW

Recovery Time From Saturated Flow, [T2] (days):	0.0000
Recovered Volume From Saturated Flow, [V2] (ft^3):	0.00
Maximum Radius Of Influence, [R] (ft):	0.00
Maximum Driving Head, [Hmax] (ft):	0.000
Minimum Driving Head, [Hmin] (ft):	0.000

TOTAL

Total Recovery Time, [T] (days):	0.0578
Total Recovered Volume, [V] (ft^3):	20800.00

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Retention Pond Recovery Analysis

I. Job Information

Job Name: north10
Engineer: kk
Date: 12/22/99

II. Input Data

Equivalent Pond Length, [L] (ft):	310.00
Equivalent Pond Width, [W] (ft):	170.00
Pond Bottom Elevation, [PB] (ft above datum):	136.00
Porosity Of Material Within Pond, [p] (%):	100.00
Base Of Aquifer Elevation, [B] (ft above datum):	126.00
Water Table Elevation, [WT] (ft above datum):	126.10
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day)	29.00
Fillable Porosity of Aquifer, [n] (%):	30.00
Vertical Unsaturated Infiltration, [Iv] (ft/day):	15.00
Runoff Volume, [V] (cubic feet)	105560.00
Percent Recovery Of Runoff Volume, [PV] (%)	100.00

I. Results

UNSATURATED FLOW

Recovery Time From Unsaturated Flow, [T1] (days):	0.1335
Recovered Volume From Unsaturated Flow, [V1] (ft^3):	105560.00

SATURATED FLOW

Recovery Time From Saturated Flow, [T2] (days):	0.0000
Recovered Volume From Saturated Flow, [V2] (ft^3):	0.00
Maximum Radius Of Influence, [R] (ft):	0.00
Maximum Driving Head, [Hmax] (ft):	0.000
Minimum Driving Head, [Hmin] (ft):	0.000

TOTAL

Total Recovery Time, [T] (days):	0.1335
Total Recovered Volume, [V] (ft^3):	105560.00

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Retention Pond Recovery Analysis

I. Job Information

Job Name: north11
Engineer: kk
Date: 12/22/99

II. Input Data

Equivalent Pond Length, [L] (ft):	180.00
Equivalent Pond Width, [W] (ft):	160.00
Pond Bottom Elevation, [PB] (ft above datum):	163.00
Porosity Of Material Within Pond, [p] (%):	100.00
Base Of Aquifer Elevation, [B] (ft above datum):	151.00
Water Table Elevation, [WT] (ft above datum):	151.10
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day)	37.00
Fillable Porosity of Aquifer, [n] (%):	30.00
Vertical Unsaturated Infiltration, [Iv] (ft/day):	19.00
Runoff Volume, [V] (cubic feet)	37389.00
Percent Recovery Of Runoff Volume, [PV] (%)	100.00

III. Results

UNSATURATED FLOW

Recovery Time From Unsaturated Flow, [T1] (days):	0.0683
Recovered Volume From Unsaturated Flow, [V1] (ft^3):	37389.00

SATURATED FLOW

Recovery Time From Saturated Flow, [T2] (days):	0.0000
Recovered Volume From Saturated Flow, [V2] (ft^3):	0.00
Maximum Radius Of Influence, [R] (ft):	0.00
Maximum Driving Head, [Hmax] (ft):	0.000
Minimum Driving Head, [Hmin] (ft):	0.000

TOTAL

Total Recovery Time, [T] (days):	0.0683
Total Recovered Volume, [V] (ft^3):	37389.00

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Retention Pond Recovery Analysis

I. Job Information

Job Name: north13
Engineer: kk
Date: 12/22/99

II. Input Data

Equivalent Pond Length, [L] (ft):	120.00
Equivalent Pond Width, [W] (ft):	60.00
Pond Bottom Elevation, [PB] (ft above datum):	157.00
Porosity Of Material Within Pond, [p] (%):	100.00
Base Of Aquifer Elevation, [B] (ft above datum):	148.00
Water Table Elevation, [WT] (ft above datum):	148.10
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day)	27.00
Fillable Porosity of Aquifer, [n] (%):	30.00
Vertical Unsaturated Infiltration, [Iv] (ft/day):	14.00
Runoff Volume, [V] (cubic feet)	13685.00
Percent Recovery Of Runoff Volume, [PV] (%)	100.00

III. Results

UNSATURATED FLOW

Recovery Time From Unsaturated Flow, [T1] (days):	0.1358
Recovered Volume From Unsaturated Flow, [V1] (ft^3):	13685.00

SATURATED FLOW

Recovery Time From Saturated Flow, [T2] (days):	0.0000
Recovered Volume From Saturated Flow, [V2] (ft^3):	0.00
Maximum Radius Of Influence, [R] (ft):	0.00
Maximum Driving Head, [Hmax] (ft):	0.000
Minimum Driving Head, [Hmin] (ft):	0.000

TOTAL

Total Recovery Time, [T] (days):	0.1358
Total Recovered Volume, [V] (ft^3):	13685.00

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Retention Pond Recovery Analysis

I. Job Information

Job Name: north14
Engineer: kk
Date: 12/22/99

II. Input Data

Equivalent Pond Length, [L] (ft):	185.00
Equivalent Pond Width, [W] (ft):	145.00
Pond Bottom Elevation, [PB] (ft above datum):	142.00
Porosity Of Material Within Pond, [p] (%):	100.00
Base Of Aquifer Elevation, [B] (ft above datum):	133.00
Water Table Elevation, [WT] (ft above datum):	133.10
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day)	28.00
Fillable Porosity of Aquifer, [n] (%):	30.00
Vertical Unsaturated Infiltration, [Iv] (ft/day):	14.00
Runoff Volume, [V] (cubic feet)	19602.00
Percent Recovery Of Runoff Volume, [PV] (%)	100.00

I. Results

UNSATURATED FLOW

Recovery Time From Unsaturated Flow, [T1] (days):	0.0522
Recovered Volume From Unsaturated Flow, [V1] (ft^3):	19602.00

SATURATED FLOW

Recovery Time From Saturated Flow, [T2] (days):	0.0000
Recovered Volume From Saturated Flow, [V2] (ft^3):	0.00
Maximum Radius Of Influence, [R] (ft):	0.00
Maximum Driving Head, [Hmax] (ft):	0.000
Minimum Driving Head, [Hmin] (ft):	0.000

TOTAL

Total Recovery Time, [T] (days):	0.0522
Total Recovered Volume, [V] (ft^3):	19602.00

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Retention Pond Recovery Analysis

I. Job Information

Job Name: north16
Engineer: kk
Date: 12/22/99

II. Input Data

Equivalent Pond Length, [L] (ft):	440.00
Equivalent Pond Width, [W] (ft):	150.00
Pond Bottom Elevation, [PB] (ft above datum):	80.00
Porosity Of Material Within Pond, [p] (%):	100.00
Base Of Aquifer Elevation, [B] (ft above datum):	70.00
Water Table Elevation, [WT] (ft above datum):	70.10
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day)	35.00
Fillable Porosity of Aquifer, [n] (%):	30.00
Vertical Unsaturated Infiltration, [Iv] (ft/day):	18.00
Runoff Volume, [V] (cubic feet)	139029.00
Percent Recovery Of Runoff Volume, [PV] (%)	100.00

II. Results

UNSATURATED FLOW

Recovery Time From Unsaturated Flow, [T1] (days):	0.1170
Recovered Volume From Unsaturated Flow, [V1] (ft^3):	139029.00

SATURATED FLOW

Recovery Time From Saturated Flow, [T2] (days):	0.0000
Recovered Volume From Saturated Flow, [V2] (ft^3):	0.00
Maximum Radius Of Influence, [R] (ft):	0.00
Maximum Driving Head, [Hmax] (ft):	0.000
Minimum Driving Head, [Hmin] (ft):	0.000

TOTAL

Total Recovery Time, [T] (days):	0.1170
Total Recovered Volume, [V] (ft^3):	139029.00

"PONDS" RECOVERY ANALYSIS
TOTAL RUNOFF VOLUME

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1. Results - Summary POND 2 - SEE COMPLETE CALCS IN "PONDS" RECOVERY ANALYSIS

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
66.00	0.87357	248.82	0.733630	0.000000	U/P
67.00	0.84663	248.83	0.737032	0.000000	U/P
68.00	0.67256	248.83	0.739375	0.000000	U/P
69.00	0.54523	248.82	0.737599	0.000000	U/P
70.00	0.59153	248.82	0.732811	0.000000	U/P
71.00	0.57988	248.81	0.727804	0.000000	U/P
72.00	0.39957	248.80	0.721684	0.000000	U/P
73.00	0.27394	248.79	0.711746	0.000000	U/P
74.00	0.31693	248.77	0.699001	0.000000	U/P
75.00	0.30369	248.76	0.686228	0.000000	U/P
76.00	0.31087	248.75	5.505080	0.000000	U/P
77.00	0.31125	248.38	7.604093	0.000000	U/S
78.00	0.31222	248.21	4.217492	0.000000	S
79.00	0.31298	248.09	3.148982	0.000000	S
80.00	0.31210	246.99	1.526495	0.000000	S
81.00	0.31175	246.93	0.312127	0.000000	S
82.00	0.31291	246.87	0.312782	0.000000	S
83.00	0.31356	246.82	0.313599	0.000000	S
84.00	0.31437	246.77	0.314355	0.000000	S
85.00	0.31512	246.72	0.315123	0.000000	S
86.00	0.31588	246.68	0.315878	0.000000	S
87.00	0.31663	246.64	0.317060	0.000000	S
88.00	0.31910	246.61	0.318956	0.000000	S
89.00	0.32100	246.57	0.320617	0.000000	S
90.00	0.32137	246.54	0.321495	0.000000	S
91.00	0.32224	246.51	0.321758	0.000000	S
92.00	0.32118	246.48	0.321341	0.000000	S
93.00	0.32076	246.45	0.321141	0.000000	S
94.00	0.32186	246.43	0.321730	0.000000	S
95.00	0.32244	246.40	0.268590	0.000000	S
96.00	0.10762	246.37	0.206429	0.000000	S
120.00	0.00000	245.79	0.000000	0.000000	S
144.00	0.00000	245.36	0.000000	0.000000	S

BECAUSE THERE IS VERY LITTLE IMPERVIOUS AREA DRAINING TO THE POND AND THE SIZE OF THE POND IN RELATION TO THE DRAINAGE BASIN AREA, POND 2 IS ABLE TO RECOVER BOTH WATER QUALITY AND TOTAL TREATMENT VOLUME PRIOR TO THE 25YR 96HR STORM ENDING. TOP OF LINER IS 248.0.

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Retention Pond Recovery Analysis

I. Job Information

Job Name: north3
Engineer: kk
Date: 12/22/99

II. Input Data

Equivalent Pond Length, [L] (ft):	340.00
Equivalent Pond Width, [W] (ft):	130.00
Pond Bottom Elevation, [PB] (ft above datum):	237.00
Porosity Of Material Within Pond, [p] (%):	100.00
Base Of Aquifer Elevation, [B] (ft above datum):	227.00
Water Table Elevation, [WT] (ft above datum):	227.10
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day)	32.00
Fillable Porosity of Aquifer, [n] (%):	30.00
Vertical Unsaturated Infiltration, [Iv] (ft/day):	16.00
Runoff Volume, [V] (cubic feet)	235603.00
Percent Recovery Of Runoff Volume, [PV] (%)	100.00

I. Results

UNSATURATED FLOW

Recovery Time From Unsaturated Flow, [T1] (days):	0.1856
Recovered Volume From Unsaturated Flow, [V1] (ft^3):	131273.92

SATURATED FLOW

Recovery Time From Saturated Flow, [T2] (days):	0.9627
Recovered Volume From Saturated Flow, [V2] (ft^3):	104329.08
Maximum Radius Of Influence, [R] (ft):	65.25
Maximum Driving Head, [Hmax] (ft):	12.260
Minimum Driving Head, [Hmin] (ft):	9.900

TOTAL

Total Recovery Time, [T] (days):	1.1483
Total Recovered Volume, [V] (ft^3):	235603.00

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VII. Results - Summary POND 4 - SEE COMPLETE CALCS IN "POND" RECOVERY ANALYSIS

Elapsed Time (hrs)	Inflow Rate (cfs)	Stage Elevation (ft datum)	Infiltration Rate (cfs)	Overflow Discharge Rate (cfs)	Flow Type
168.00	0.00000	228.73	0.365806	0.000000	S
192.00	0.00000	228.21	0.304553	0.000000	S
216.00	0.00000	227.75	0.259452	0.000000	S
240.00	0.00000	227.34	0.218044	0.000000	S - DAY 6
264.00	0.00000	226.87	0.171532	0.000000	S - DAY 7
432.00	0.00000	225.35	-----	-----	N.A.

TOP OF LINER AT 227.0

FULL RECOVERY BETWEEN DAY 6 AND DAY 7 AFTER STORM EVENT.

$$\frac{(227.0-226.87)}{227.34-226.87} \times (24\ \text{HR.}) = 6.64\ \text{HR.}$$

$$6\ \text{DAYS} + \frac{6.64\ \text{HR.}}{24\ \text{HR/DAY}} = 6.28\ \text{DAYS}$$

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Retention Pond Recovery Analysis

I. Job Information

Job Name: north5
Engineer: kk
Date: 12/22/99

II. Input Data

Equivalent Pond Length, [L] (ft):	580.00
Equivalent Pond Width, [W] (ft):	190.00
Pond Bottom Elevation, [PB] (ft above datum):	129.00
Porosity Of Material Within Pond, [p] (%):	100.00
Base Of Aquifer Elevation, [B] (ft above datum):	115.00
Water Table Elevation, [WT] (ft above datum):	115.10
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day)	27.00
Fillable Porosity of Aquifer, [n] (%):	30.00
Vertical Unsaturated Infiltration, [Iv] (ft/day):	14.00
Runoff Volume, [V] (cubic feet)	1177350.00
Percent Recovery Of Runoff Volume, [PV] (%)	100.00

III. Results

UNSATURATED FLOW

Recovery Time From Unsaturated Flow, [T1] (days):	0.2979
Recovered Volume From Unsaturated Flow, [V1] (ft^3):	459534.06

SATURATED FLOW

Recovery Time From Saturated Flow, [T2] (days):	5.7859
Recovered Volume From Saturated Flow, [V2] (ft^3):	717815.94
Maximum Radius Of Influence, [R] (ft):	179.66
Maximum Driving Head, [Hmax] (ft):	20.414
Minimum Driving Head, [Hmin] (ft):	13.900

TOTAL

Total Recovery Time, [T] (days):	6.0838
Total Recovered Volume, [V] (ft^3):	1177350.00

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Retention Pond Recovery Analysis

I. Job Information

Job Name: north6
Engineer: kk
Date: 12/22/99

II. Input Data

Equivalent Pond Length, [L] (ft):	390.00
Equivalent Pond Width, [W] (ft):	180.00
Pond Bottom Elevation, [PB] (ft above datum):	233.00
Porosity Of Material Within Pond, [p] (%):	100.00
Base Of Aquifer Elevation, [B] (ft above datum):	223.00
Water Table Elevation, [WT] (ft above datum):	223.10
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day)	34.00
Fillable Porosity of Aquifer, [n] (%):	30.00
Vertical Unsaturated Infiltration, [Iv] (ft/day):	17.00
Runoff Volume, [V] (cubic feet)	280220.00
Percent Recovery Of Runoff Volume, [PV] (%)	100.00

III. Results

UNSATURATED FLOW

Recovery Time From Unsaturated Flow, [T1] (days):	0.1747
Recovered Volume From Unsaturated Flow, [V1] (ft^3):	208493.88

SATURATED FLOW

Recovery Time From Saturated Flow, [T2] (days):	0.3423
Recovered Volume From Saturated Flow, [V2] (ft^3):	71726.13
Maximum Radius Of Influence, [R] (ft):	39.50
Maximum Driving Head, [Hmax] (ft):	10.922
Minimum Driving Head, [Hmin] (ft):	9.900

TOTAL

Total Recovery Time, [T] (days):	0.5170
Total Recovered Volume, [V] (ft^3):	280220.00

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Retention Pond Recovery Analysis

I. Job Information

Job Name: north7
Engineer: kk
Date: 12/22/99

II. Input Data

Equivalent Pond Length, [L] (ft):	160.00
Equivalent Pond Width, [W] (ft):	150.00
Pond Bottom Elevation, [PB] (ft above datum):	206.00
Porosity Of Material Within Pond, [p] (%):	100.00
Base Of Aquifer Elevation, [B] (ft above datum):	197.00
Water Table Elevation, [WT] (ft above datum):	197.10
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day)	30.00
Fillable Porosity of Aquifer, [n] (%):	30.00
Vertical Unsaturated Infiltration, [Iv] (ft/day):	15.00
Runoff Volume, [V] (cubic feet)	91713.00
Percent Recovery Of Runoff Volume, [PV] (%)	100.00

II. Results

UNSATURATED FLOW

Recovery Time From Unsaturated Flow, [T1] (days):	0.1780
Recovered Volume From Unsaturated Flow, [V1] (ft^3):	64079.96

SATURATED FLOW

Recovery Time From Saturated Flow, [T2] (days):	0.2565
Recovered Volume From Saturated Flow, [V2] (ft^3):	27633.04
Maximum Radius Of Influence, [R] (ft):	30.29
Maximum Driving Head, [Hmax] (ft):	10.051
Minimum Driving Head, [Hmin] (ft):	8.900

TOTAL

Total Recovery Time, [T] (days):	0.4345
Total Recovered Volume, [V] (ft^3):	91713.00

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Retention Pond Recovery Analysis

I. Job Information

Job Name: north10
Engineer: kk
Date: 12/22/99

II. Input Data

Equivalent Pond Length, [L] (ft):	310.00
Equivalent Pond Width, [W] (ft):	170.00
Pond Bottom Elevation, [PB] (ft above datum):	136.00
Porosity Of Material Within Pond, [p] (%):	100.00
Base Of Aquifer Elevation, [B] (ft above datum):	126.00
Water Table Elevation, [WT] (ft above datum):	126.10
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day)	29.00
Fillable Porosity of Aquifer, [n] (%):	30.00
Vertical Unsaturated Infiltration, [Iv] (ft/day):	15.00
Runoff Volume, [V] (cubic feet)	559796.00
Percent Recovery Of Runoff Volume, [PV] (%)	100.00

II. Results

UNSATURATED FLOW

Recovery Time From Unsaturated Flow, [T1] (days):	0.1980
Recovered Volume From Unsaturated Flow, [V1] (ft^3):	156519.03

SATURATED FLOW

Recovery Time From Saturated Flow, [T2] (days):	8.9888
Recovered Volume From Saturated Flow, [V2] (ft^3):	403276.97
Maximum Radius Of Influence, [R] (ft):	197.65
Maximum Driving Head, [Hmax] (ft):	17.552
Minimum Driving Head, [Hmin] (ft):	9.900

TOTAL

Total Recovery Time, [T] (days):	9.1868
Total Recovered Volume, [V] (ft^3):	559796.00

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Retention Pond Recovery Analysis

I. Job Information

Job Name: north11
Engineer: kk
Date: 12/22/99

II. Input Data

Equivalent Pond Length, [L] (ft):	180.00
Equivalent Pond Width, [W] (ft):	160.00
Pond Bottom Elevation, [PB] (ft above datum):	163.00
Porosity Of Material Within Pond, [p] (%):	100.00
Base Of Aquifer Elevation, [B] (ft above datum):	151.00
Water Table Elevation, [WT] (ft above datum):	151.10
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day)	37.00
Fillable Porosity of Aquifer, [n] (%):	30.00
Vertical Unsaturated Infiltration, [Iv] (ft/day):	19.00
Runoff Volume, [V] (cubic feet)	225623.00
Percent Recovery Of Runoff Volume, [PV] (%)	100.00

I. Results

UNSATURATED FLOW

Recovery Time From Unsaturated Flow, [T1] (days):	0.1879
Recovered Volume From Unsaturated Flow, [V1] (ft^3):	102815.95

SATURATED FLOW

Recovery Time From Saturated Flow, [T2] (days):	1.0875
Recovered Volume From Saturated Flow, [V2] (ft^3):	122807.05
Maximum Radius Of Influence, [R] (ft):	80.98
Maximum Driving Head, [Hmax] (ft):	16.164
Minimum Driving Head, [Hmin] (ft):	11.900

TOTAL

Total Recovery Time, [T] (days):	1.2754
Total Recovered Volume, [V] (ft^3):	225623.00

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etention Pond Recovery Analysis

I. Job Information

Job Name: north13
Engineer: kk
Date: 12/22/99

II. Input Data

Equivalent Pond Length, [L] (ft):	120.00
Equivalent Pond Width, [W] (ft):	60.00
Pond Bottom Elevation, [PB] (ft above datum):	157.00
Porosity Of Material Within Pond, [p] (%):	100.00
Base Of Aquifer Elevation, [B] (ft above datum):	148.00
Water Table Elevation, [WT] (ft above datum):	148.10
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day)	27.00
Fillable Porosity of Aquifer, [n] (%):	30.00
Vertical Unsaturated Infiltration, [Iv] (ft/day):	14.00
Runoff Volume, [V] (cubic feet)	80596.00
Percent Recovery Of Runoff Volume, [PV] (%)	100.00

III. Results

UNSATURATED FLOW

Recovery Time From Unsaturated Flow, [T1] (days):	0.1907
Recovered Volume From Unsaturated Flow, [V1] (ft^3):	19223.99

SATURATED FLOW

Recovery Time From Saturated Flow, [T2] (days):	1.9116
Recovered Volume From Saturated Flow, [V2] (ft^3):	61372.01
Maximum Radius Of Influence, [R] (ft):	85.33
Maximum Driving Head, [Hmax] (ft):	17.424
Minimum Driving Head, [Hmin] (ft):	8.900

TOTAL

Total Recovery Time, [T] (days):	2.1023
Total Recovered Volume, [V] (ft^3):	80596.00

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Retention Pond Recovery Analysis

I. Job Information

Job Name: north14
Engineer: kk
Date: 12/22/99

II. Input Data

Equivalent Pond Length, [L] (ft):	185.00
Equivalent Pond Width, [W] (ft):	145.00
Pond Bottom Elevation, [PB] (ft above datum):	142.00
Porosity Of Material Within Pond, [p] (%):	100.00
Base Of Aquifer Elevation, [B] (ft above datum):	133.00
Water Table Elevation, [WT] (ft above datum):	133.10
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day)	28.00
Fillable Porosity of Aquifer, [n] (%):	30.00
Vertical Unsaturated Infiltration, [Iv] (ft/day):	14.00
Runoff Volume, [V] (cubic feet)	123945.00
Percent Recovery Of Runoff Volume, [PV] (%)	100.00

II. Results

UNSATURATED FLOW

Recovery Time From Unsaturated Flow, [T1] (days):	0.1907
Recovered Volume From Unsaturated Flow, [V1] (ft^3):	71622.70

SATURATED FLOW

Recovery Time From Saturated Flow, [T2] (days):	0.7757
Recovered Volume From Saturated Flow, [V2] (ft^3):	52322.30
Maximum Radius Of Influence, [R] (ft):	51.10
Maximum Driving Head, [Hmax] (ft):	10.850
Minimum Driving Head, [Hmin] (ft):	8.900

TOTAL

Total Recovery Time, [T] (days):	0.9664
Total Recovered Volume, [V] (ft^3):	123945.00

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Retention Pond Recovery Analysis

I. Job Information

Job Name: north16
Engineer: kk
Date: 12/22/99

II. Input Data

Equivalent Pond Length, [L] (ft):	440.00
Equivalent Pond Width, [W] (ft):	150.00
Pond Bottom Elevation, [PB] (ft above datum):	80.00
Porosity Of Material Within Pond, [p] (%):	100.00
Base Of Aquifer Elevation, [B] (ft above datum):	70.00
Water Table Elevation, [WT] (ft above datum):	70.10
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day)	35.00
Fillable Porosity of Aquifer, [n] (%):	30.00
Vertical Unsaturated Infiltration, [Iv] (ft/day):	18.00
Runoff Volume, [V] (cubic feet)	737283.00
Percent Recovery Of Runoff Volume, [PV] (%)	100.00

II. Results

UNSATURATED FLOW

Recovery Time From Unsaturated Flow, [T1] (days):	0.1650
Recovered Volume From Unsaturated Flow, [V1] (ft^3):	196020.03

SATURATED FLOW

Recovery Time From Saturated Flow, [T2] (days):	8.7941
Recovered Volume From Saturated Flow, [V2] (ft^3):	541263.00
Maximum Radius Of Influence, [R] (ft):	221.67
Maximum Driving Head, [Hmax] (ft):	18.101
Minimum Driving Head, [Hmin] (ft):	9.900

TOTAL

Total Recovery Time, [T] (days):	8.9591
Total Recovered Volume, [V] (ft^3):	737283.00

GEOTECHNICAL INVESTIGATION
OF KINGS RIDGE NORTH
SUBDIVISION
Clermont
Lake County, Florida

KINGSRIDGE NORTH
STORMWATER RETENTION SYSTEMS AND PAVEMENT SECTIONS
CLERMONT
LAKE COUNTY FLORIDA

Andreyev Engineering, Inc.

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352-742-9622
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▼ Groundwater ▼ Environmental ▼ Geotechnical ▼ Construction Materials Testing

April 29, 1999
Project No: TPGT 99-043

TO: **Lennar Homes**
c/o Farner Barley & Associates, Inc.
350 North Sinclair
Tavares, Florida 32778

Attention: Duane Booth, P.E.

SUBJECT: **Geotechnical Investigation of KingsRidge North, Stormwater Retention Systems and Pavement Sections, Clermont, Lake County, Florida**

Dear Mr. Booth,

As requested, Andreyev Engineering, Inc. (AEI) has completed a geotechnical investigation for the subject site. The following report presents the results of our field and laboratory investigation along with evaluation and recommendations for the proposed site.

SITE LOCATION AND DESCRIPTION

The subject site property is located between Hancock Road and Lake Felter in Clermont adjacent to KingsRidge Subdivision. We understand that the property will be used for residential development. Approximately seventeen (17) stormwater retention areas and swales are associated with the proposed development. The attached site plan labeled **Figure 2** shows the site layout with the proposed lots, stormwater retention areas, and paved areas. In addition, a vicinity map is attached as **Figure 1**, showing the site on a regional scale as well as topographic features of the site.

PURPOSE AND SCOPE OF SERVICES

The purpose of this study was to explore shallow subsurface conditions at the proposed retention ponds, swales, and roadway areas to determine the suitability for stormwater retention and pavement design. The field exploration consisted of drilling twenty (20) auger borings to 10 feet in

pavement areas, and thirty-one (31) auger borings to 15 feet within the proposed retention areas. In addition, seventeen (17) field permeability tests were conducted at selected borings in order to measure the hydraulic conductivity of the soils.

Field permeability tests were conducted at selected borings within the proposed retention pond areas to measure the horizontal hydraulic conductivity of the soils. These tests were conducted by installing a screened PVC piezometer in the ground to varying depths between 10 and 15 feet below the ground surface, and conducting a constant head field permeability test, per designation E-19, Earth Manual, 1974.

Samples were recovered from the borings and returned to AEI 's laboratory for visual classification and stratification. Soil strata were classified according to the Unified Soil Classification System. Approximate boring locations are shown on **Figure 2** and results of the borings in profile form are presented on **Figures 3,4, & 5**. Also shown on **Figures 3 & 4** next to the tested depth intervals are the results of the permeability test. On the profiles, horizontal lines designating the interface between differing materials represent approximate boundaries. The actual transition between layers is typically gradual.

SUBSURFACE CONDITIONS

Three (3) soil strata were identified in the borings. Strata 1and 2 were the predominant surficial soils extending from the ground surface to the boring termination depths. Stratum 3, slightly clayey to clayey fine sand, was found at varying depths between 6 and 15 foot below ground surface. Field permeability tests measured the shallow soil hydraulic conductivity at the proposed retention areas. In general soil conductivity measured between 14 and 37 feet per day in the Strata 1 and 2 sandy soils. Results of these tests are shown next to the tested depth intervals and borings on **Figures 3 & 4**.

The groundwater table was not encountered in any of the borings to the boring termination depths. The groundwater table at this site is estimated to be well below the termination depths of the borings.

For purposes of design and evaluation of retention area recovery, it can be assumed that the seasonal high groundwater table exists at more than 15 feet below the ground surface. However, at the locations where clayey soils of Stratum 3 are present (borings A-25 and A-26), the groundwater table should be assumed to occur at about 0.5 feet above the top of Stratum 3 soil due to expected temporary perching of groundwater above these soils.

EVALUATION AND RECOMMENDATIONS

Based on the results of borings, field permeability tests, and laboratory tests, we conclude that the site is suitable for construction and long-term performance of dry stormwater retention systems. Adequate separation between the bottom of the proposed ponds and the groundwater table should not be a problem. The well-drained and, highly permeable nature of the surficial soils, and deep groundwater table is well suited for dry stormwater retention areas. However, temporary perching is expected to occur above the Stratum 3 clayey soils in areas where these are present.

Paved Areas

In general, the compacted subsurface soils will be suitable for support of a flexible (limerock) or semi-flexible (soil-cement) type pavement base after subgrade preparation. A limerock base is generally used for these soil and groundwater conditions since it is the more economical alternative. Typical flexible and semi-flexible pavement sections are as follows:

Limerock Base

1-1/2" asphaltic concrete wearing surface

6" limerock base course, quality of limerock to be in accordance with current Florida Department of Transportation specifications and compacted to a minimum density equivalent to 95 percent of the Modified Proctor (AASHTO T-180).

6" stabilized subbase with minimum Florida Bearing Value (FBV) of 50 psi or Limerock Bearing Ratio (LBR) of 30 percent. The subbase should be compacted to a minimum density equivalent to 95 percent of the Modified Proctor Maximum Density (AASHTO T-180).

The subgrade material, below the subbase, shall be compacted to minimum density of 95% of the Modified Proctor Maximum Density of the soil, or measured to a depth of 1 foot below the subbase level.

Soil-Cement Base

1-1/2" asphaltic concrete wearing surface

6" soil-cement base designed and constructed in accordance with current Portland Cement Association recommended methods.

12" subgrade consisting of free draining natural fine sand or fine sand fill. Subgrade to be compacted to a minimum density of 95 percent of the Modified Proctor Maximum Density (AASHTO T-180).

Asphaltic wearing surface normally consists of Type S-1 or S-3, meeting current Florida Department of Transportation specifications. The wearing surface should be compacted to a minimum density of 95 percent of the Laboratory Density as determined by the Marshall Stability Test method for the approved job mix formula.

The recommendations presented above are minimum assuming normal light passenger car and pick-up truck traffic with an occasional garbage or delivery truck. Traffic should not be allowed on the subgrade prior to placement of the base to avoid rutting. The final pavement thickness design should be checked by the project civil engineer using data contained in this report and anticipated traffic conditions.

Retention Ponds

For analysis and design purposes the following aquifer characteristics should be used. These aquifer characteristics were determined from the results of the field and laboratory investigations:

Boring	Bottom of Aquifer (ft)	Seasonal High GWT (ft)	Kh avg.(ft/day)
1	15	15	25
2	15	15	-
3	15	15	-
4	15	15	28
5	15	15	29
6	15	15	-
7	15	15	14
8	15	15	-
9	15	15	27
10	15	15	-
11	15	15	29
12	15	15	22
13	15	15	-
14	15	15	30
15	15	15	32
16	15	15	-
17	15	15	28
18	15	15	-
19	15	15	-
20	15	15	37
21	15	15	-
22	15	15	35
23	15	15	-
24	15	15	28
25	9	8.5	27
26	12	11.5	-
27	15	15	31
28	15	15	28
29	15	15	-
30	15	15	34
31	15	15	-

Stormwater Swales

Placements of the stormwater swales are proposed along the eastern property boundaries nearest to Lake Felter. The soil in these areas is considered satisfactory for construction of a stormwater swales. The horizontal hydraulic conductivity at the swale locations was measured between 27 and 35 feet per day.

The highly permeable soils in the area of the proposed stormwater swales should provide adequate infiltration of stormwater. The clayey soils encountered in the areas of borings A-25 and A-26 can

be left in place so long as adequate separation exists between the swale bottom and the top of the clayey soils.

CLOSURE

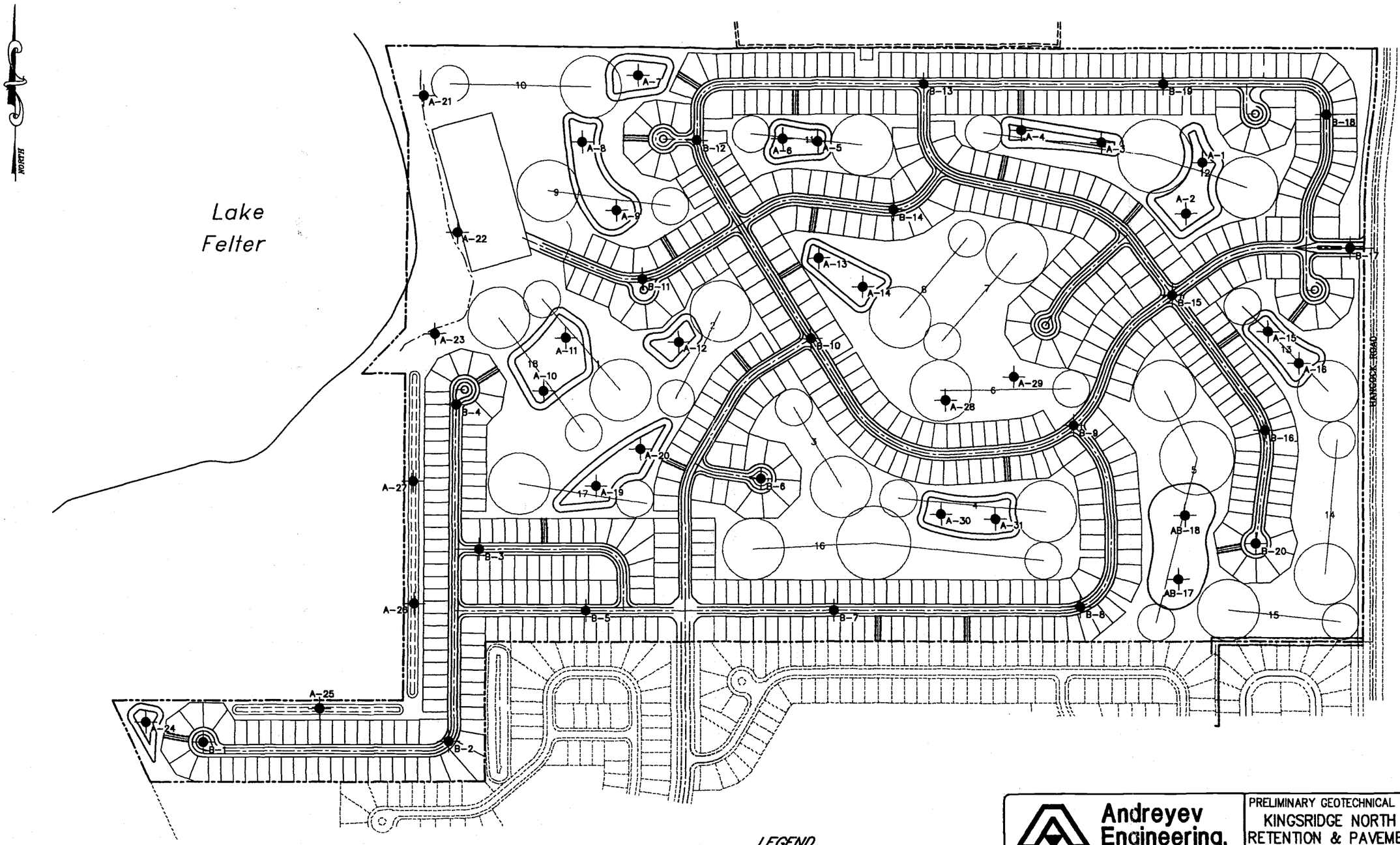
AEI appreciates the opportunity to participate in this project, and we trust that the information herein is sufficient for your immediate needs. If you have any questions or comments concerning the contents of this report, please do not hesitate to contact the undersigned.

Sincerely,

ANDREYEV ENGINEERING, INC.

Ray Jones, E.I.
Project Engineer
Tavares Office

Nicolas E. Andreyev
President
Florida Registration No. 35459



LEGEND
AUGER BORING LOCATION

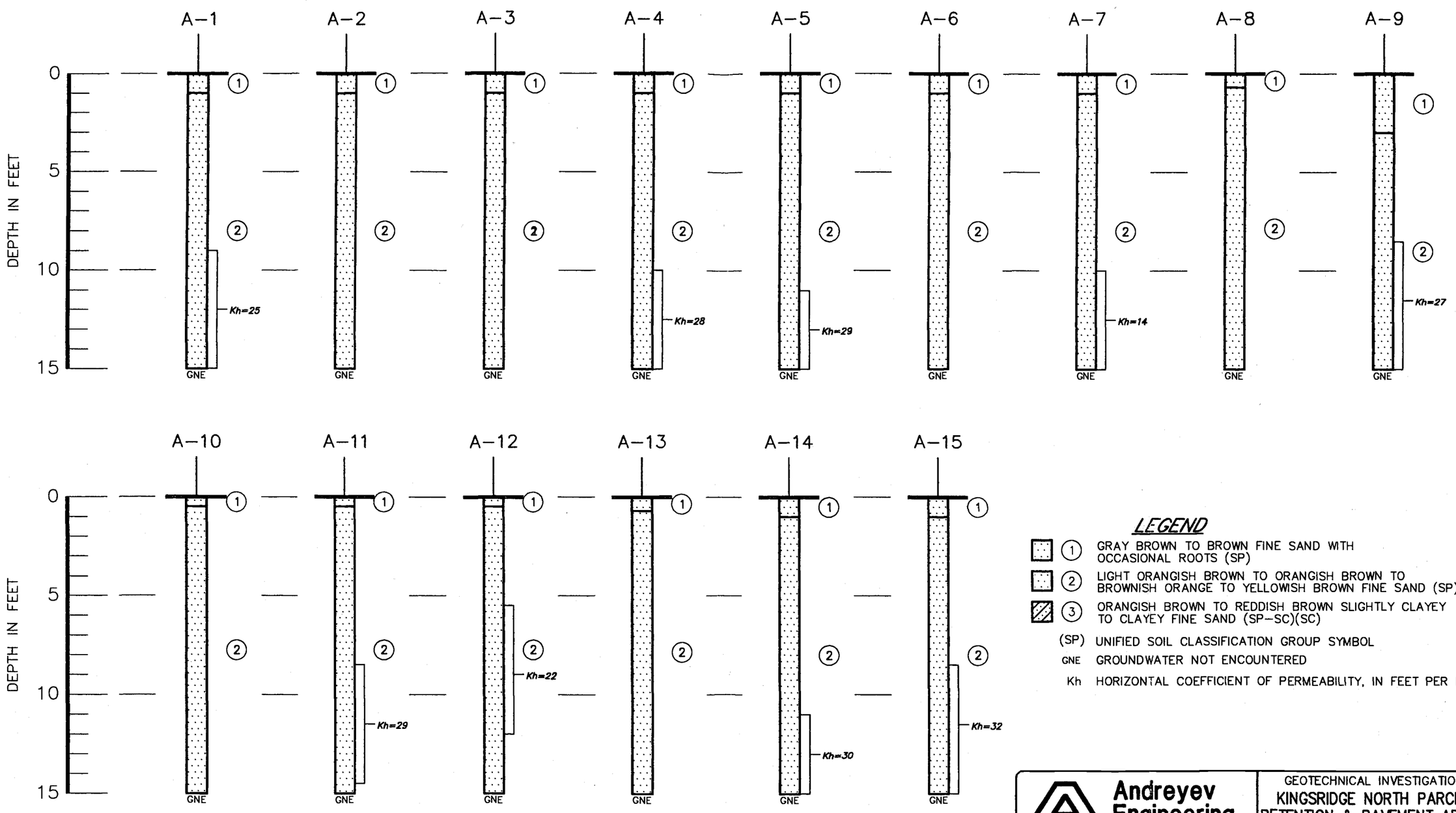
Andreyev Engineering, Inc.

PRELIMINARY GEOTECHNICAL INVESTIGATION
KINGSRIDGE NORTH PARCEL
RETENTION & PAVEMENT AREAS
CLERMONT, LAKE COUNTY, FLORIDA

SITE PLAN

FIGURE 2

SCALE:	DATE: 4/21/99	ENGINEER: RJ
1"=400'	PN: TPGT-99-043	DRAWN BY: MK



LEGEND

- (1) GRAY BROWN TO BROWN FINE SAND WITH OCCASIONAL ROOTS (SP)
- (2) LIGHT ORANGISH BROWN TO ORANGISH BROWN TO BROWNISH ORANGE TO YELLOWISH BROWN FINE SAND (SP)
- (3) ORANGISH BROWN TO REDDISH BROWN SLIGHTLY CLAYEY TO CLAYEY FINE SAND (SP-SC)(SC)
- (SP) UNIFIED SOIL CLASSIFICATION GROUP SYMBOL
- GNE GROUNDWATER NOT ENCOUNTERED
- Kh HORIZONTAL COEFFICIENT OF PERMEABILITY, IN FEET PER DAY

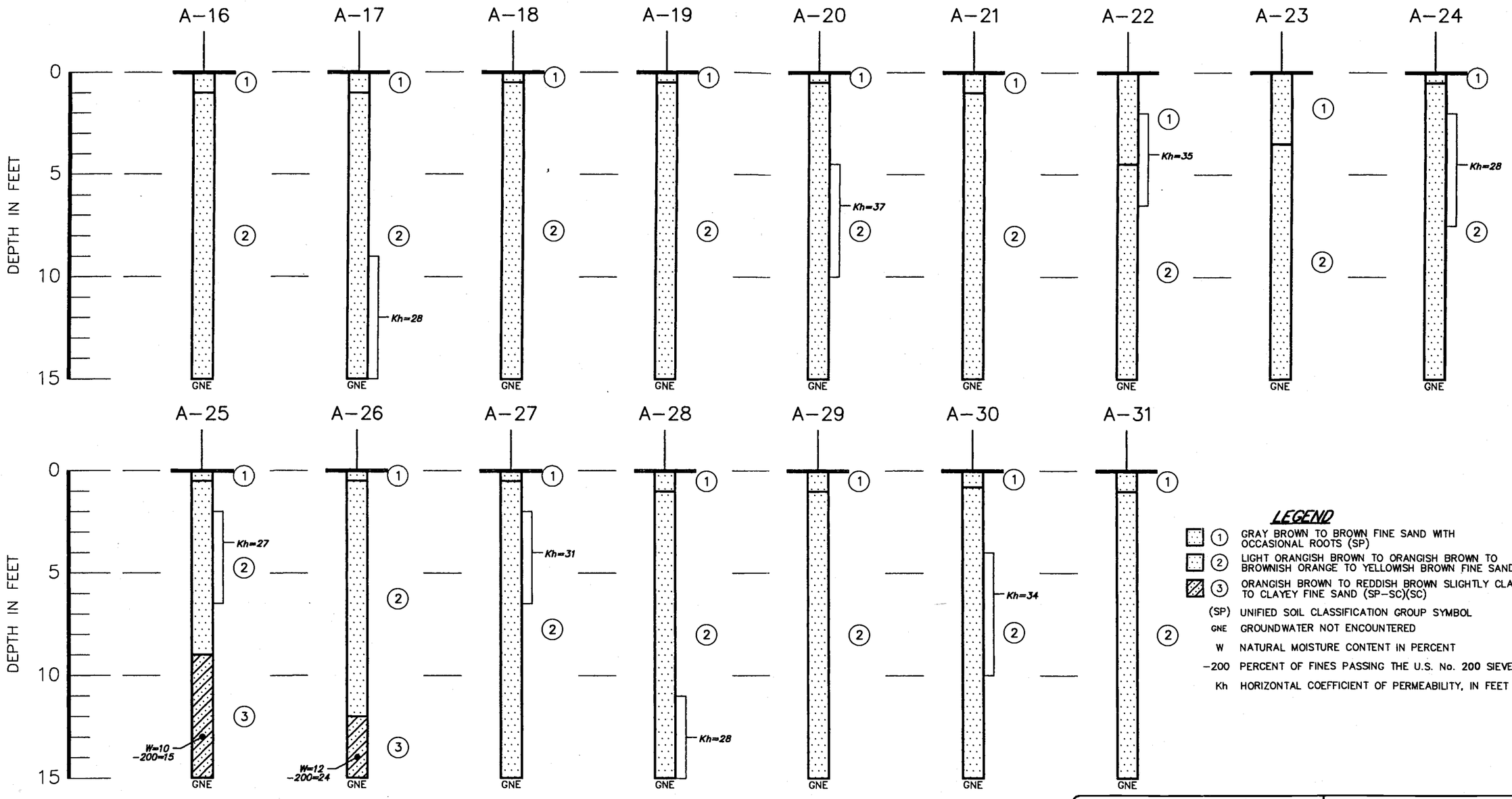
Andreyev Engineering, Inc.

GEOTECHNICAL INVESTIGATION
KINGSRIDGE NORTH PARCEL
RETENTION & PAVEMENT AREAS
CLERMONT, LAKE COUNTY, FLORIDA

SOIL PROFILES

SCALE:	DATE: 4/12/99	ENGINEER: RJ
1"=5'	PN: TPGT-99-043	DRAWN BY: MK

FIGURE 3



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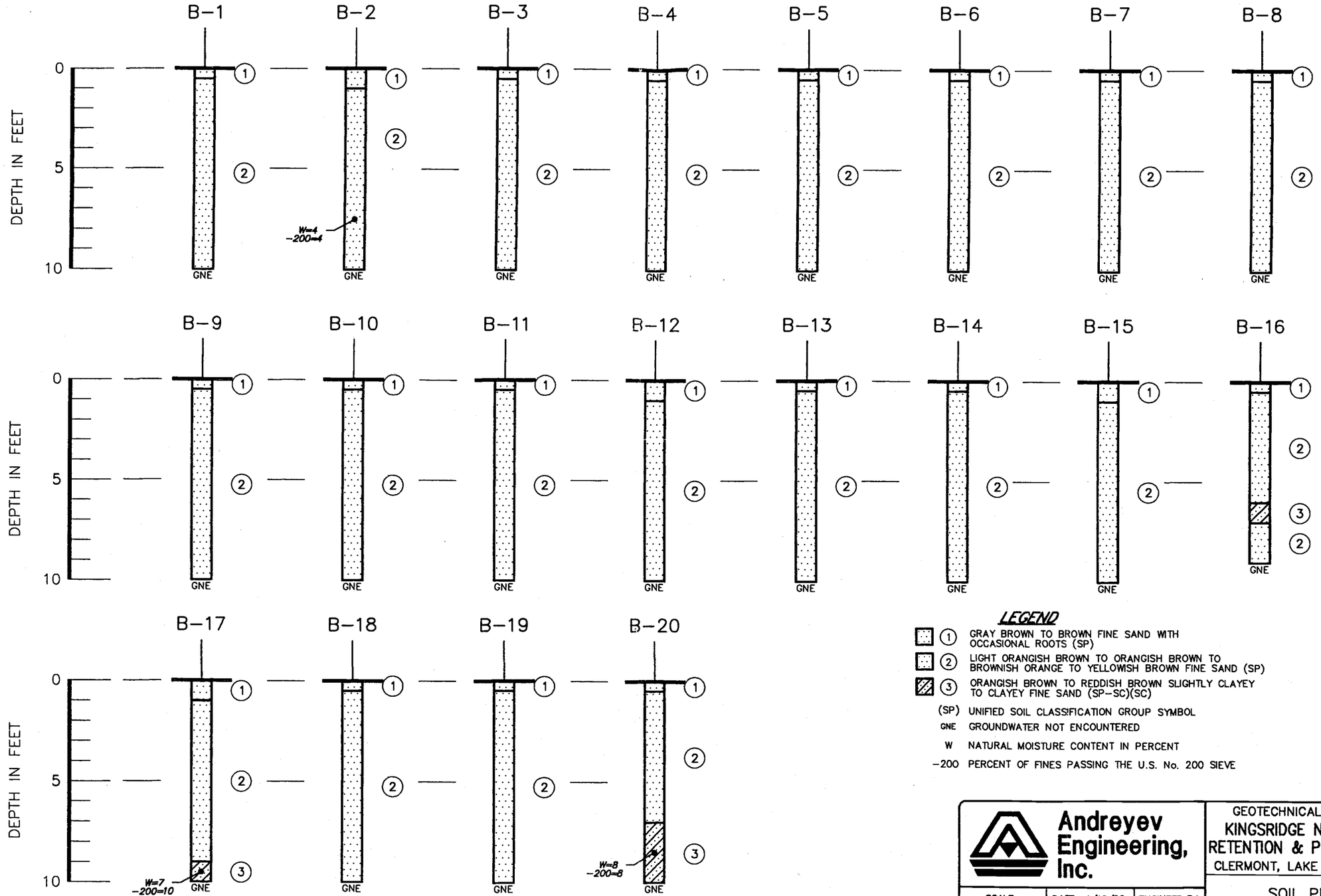
CLERMONT, LAKE COUNTY, FLORIDA

SOIL PROFILES

SCALE:	DATE: 4/12/99	ENGINEER: RJ
1"=5'	PN: TPGT-99-043	DRAWN BY: MK

FIGURE 4



LEGEND

- (1) GRAY BROWN TO BROWN FINE SAND WITH OCCASIONAL ROOTS (SP)
- (2) LIGHT ORANGISH BROWN TO ORANGISH BROWN TO BROWNISH ORANGE TO YELLOWISH BROWN FINE SAND (SP)
- (3) ORANGISH BROWN TO REDDISH BROWN SLIGHTLY CLAYEY TO CLAYEY FINE SAND (SP-SC)(SC)
- (SP) UNIFIED SOIL CLASSIFICATION GROUP SYMBOL
- GNE GROUNDWATER NOT ENCOUNTERED
- W NATURAL MOISTURE CONTENT IN PERCENT
- -200 PERCENT OF FINES PASSING THE U.S. No. 200 SIEVE

Andreyev Engineering, Inc.

GEOTECHNICAL INVESTIGATION
KINGSRIDGE NORTH PARCEL
RETENTION & PAVEMENT AREAS
CLERMONT, LAKE COUNTY, FLORIDA

SCALE:	DATE: 4/12/99	ENGINEER: RJ
1"=5'	PN: TPGT-99-043	DRAWN BY: MK

SOIL PROFILES

FIGURE 5