

From: Karen Willis / THRD
To: Jim Brammell / THRD
Subject: fwd: Bill Rhodes

====NOTE=====4/07/98==3:05pm=====

I just checking to see if you had heard anything from Bill lately. Has he run into any barriers, problems, etc.? Does he have everything he needs?

Fwd=by:=Jim=Brammell==4/07/98==4:11pm=====

Fwd to: Karen Willis / THRD
CC: Greg Heitzman / THRD4

.....

I spoke to Bill a couple of days ago. All work is progressing well; he has spent considerable time driving the areas and he is getting info (LOJIC, etc.) from Jason.

The only question at this point is when we want to meet with him again. My notes from the previous meeting indicated that Bill has a deliverable due on 20 April. My thought is that we could ask Bill to come in and give us an update prior to our IBSO mtg...say from 1:00 to 2:00. Thoughts.

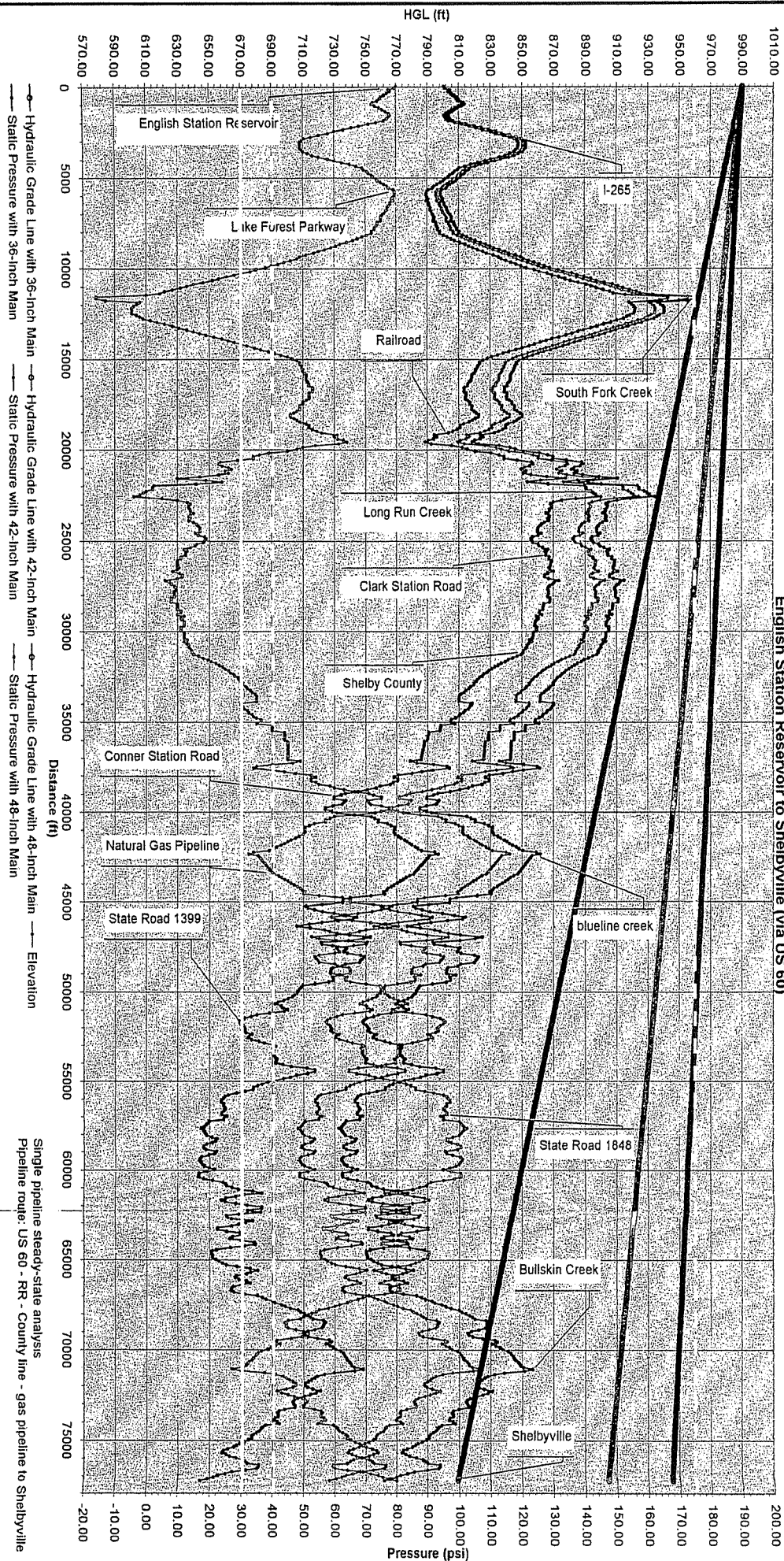
Fwd=by:=Greg=Heitzman=4/07/98==4:50pm=====

Fwd to: Jim Brammell / THRD
CC: Karen Willis / THRD

.....

sounds good, let's arrange a mtg on the 20th, confirm time with gale. Also, Karn and I met with West Shelby Water Disytrict today, and Karen has some added input for Bill to consider, regarding tank site, I-64 crossing, etc.

Figure 2: Bluegrass Transmission Main HGL and Ps Profile
 23.0 MGD Flowrate, English Station Pumping Facility (+150 feet head)
 English Station Reservoir to Shelbyville (via US 60)





American Water Works Service Company, Inc.

1025 Laurel Oak Road • P.O. Box 1770 • Voorhees, New Jersey 08043 • (609) 346-8201 • Fax (609) 346-8360

April 1, 1998
BP 92-12

(A copy of this has been sent to the attached list of consultants)

Re: Kentucky-American Water Company
Bluegrass Water Project

Dear Colleague:

Thank you for your recent proposal for the referenced project. Although our evaluation of consultant proposals is not yet complete, the proposal submitted by the Gannett Fleming/PDR team appears, at this time, to be the most favorable. Based on this preliminary evaluation, we have authorized Gannett Fleming/PDR to proceed only with an additional aerial survey and appropriate ground control along the proposed pipeline route. These activities were initiated at this time such that adequate horizontal and vertical control based on the current topography along the pipeline route could be established while the limited opportunity to do so still exists.

We expect that our final evaluation will be complete no later than April 13 at which time you will be informed if there has been any change from our preliminary evaluation. Should the Gannett Fleming/PDR team not be chosen to complete the remainder of the engineering activities on this project, the new survey data will be provided to the selected consultant. Thank you again for your efforts to date on this project.

Sincerely,

David M. Reves

DMR/f

xc: L.C. Bridwell - KAWC
T.A. Friley - KAWC
N.O. Rowc - KAWC
K.A. Willis - Louisville Water Company

KENTUCKY-AMERICAN WATER COMPANY
BLUEGRASS WATER PROJECT

List of Consultants

Team 1

GRW Engineers, Inc.
801 Corporate Drive
Lexington, KY 40503
Attn: Ron D. Gilkerson
(606) 223-3999

Copied

Quest Engineers, Inc.
881 Corporate Drive
Lexington, KY 40503
Attn: Mr. Charles R. Scroggin

Copied

Montgomery Watson
2000 Bond Court Building
1300 East 9th Street
Cleveland, OH 44114
Attn: Mr. Richard G. Atoulikian

Team 2

Killam Associates
27 Bleeker Street
Milburn, NJ 07041-1008
Attn: Nicholas M. DeNichilo
(973) 379-3400

Copied

CDP Engineers, Inc.
616 Wellington Way, Suite C
Lexington, KY 40503
Attn: Mr. John B. Steinmetz

Team 3

Gannett Fleming, Inc.
207 Senate Avenue
Camp Hill, PA 17011
Attn: W. Kirk Corliss, Jr.
(717) 763-7211

Copied

PDR Engineers, Inc.
462 South 4th Avenue, Suite 400
Meidinger Tower
Louisville, KY 40202
Attn: Mr. Raymond W. Ihlenburg

Team 4

PEH Engineers
620 Euclid Avenue
P.O. Box 22738
Lexington, KY 40522
Attn: Michael A. Woolum
(606) 266-2144

Copied


Hazen and Sawyer, P.C.
4011 WestChase Blvd.
Raleigh, NC 27607
Attn: Anthony P. Izzo

Team 5

Camp Dresser & McKee Inc.
Two Paragon Centre
Suite 300
6040 Dutchmans Lane
Louisville, KY 40205
Attn: Bernard F. Maloy
(502) 452-1700

Copied

Photo Science, Inc.
2670 Wilhite Drive
Lexington, KY 40503
Attn: Mr. Mark Meade



Kentucky-American Water Company

2300 Richmond Road • Lexington, Kentucky 40502 • (606) 269-2386 • Fax (606) 268-6327

Linda C. Bridwell, P.E.
Director of Engineering

5/1/98

David M. Reves, P.E.
American Water Works Service Company
1025 Laurel Oak Road
P.O. Box 1770
Voorhees, NJ 08043

RE: Bluegrass Water Project, Louisville Water Company Issues

Dear Dave:

This afternoon Nick Rowe and I had the opportunity to talk with Greg Heitzman and Karen Willis. On Friday April 24, Karen and I had discussed the issues that still needed to be resolved. I want to summarize our conversation:

-The proposed 36" pipeline from the English Station tank along US 60 will not be able to provide 23 MGD with a minimum of 30 psi at the delivery point and at all locations along the line in Jefferson County. In fact, the 36" line can only provide 10 mgd without an additional booster to maintain adequate pressures. The 30 psi requirement is a Division of Water regulation which is for all water lines. If the critical points were at locations where there would be no other tie-ins for 2-3 miles on either side and were just an issue of elevation, we could approach the Division of Water about a waiver. Unfortunately, these points are at highly populated areas and Louisville is concerned about a depression of pressures based on the flowrate from the surrounding distribution system. Although Greg did distinguish their analysis as a fixed grade review, these critical points cannot be corrected without additional energy.

-If the pipeline from the English Station tank along US 60 is increased to a 48" main, the critical points are within margins that Louisville would be willing to consider. An upsizing to 42" main will not achieve the reduced friction losses to eliminate the critical points.

-An increase of approximately 100 feet of hydraulic head would also correct the critical points on a 36" main. Karen will forward us copies of the additional hydraulic modelling.

-I expressed to them my concerns with water quality issues by increasing the pipe size.

-If a booster is needed in Jefferson County, I expressed a preference from a constructability standpoint on the I-64 corridor. We discussed that this will also provide greater flexibility in our booster station locations for electrical and chemical delivery considerations.

Louisville is completing a determination to upsize the pipeline to the point of delivery to 42". This will be based on projected growth to their existing wholesale customers in Shelby County. This will be complete next week.

Louisville has also undertaken a review of the constructability of the two routes, to be complete next week. The initial draft information had recommended the I-64 route based on construction feasibility issues.

Greg indicated that they did not feel that there was any other route from the English Station tank that would enable them to provide the 23 mgd at 30 psi with a 36" pipe, without a booster. It is not merely an issue of trying to avoid a couple of high elevation points. Greg welcomed any additional review from our consultant on their hydraulic determinations.

Additionally, there is still some negotiation on the point of delivery. They have agreed to complete work by next week regarding the economic considerations of a point east of the Jefferson County line. This point would be no further east than KY highway 55.

Obviously, this will alter our design scope, although not significantly at this point. I have indicated to Greg that we gave Gannett-Fleming the official notice to proceed on April 20 and that we need to determine the exact level of changes by next week.

Please call me when you have had a chance to review this information.

Sincerely,

Linda Bridwell, P.E.
Director of Engineering

C: N.O. Rowe
G.C. Heitzman, PE
K.A. Willis, PE

Figure 3: Bluegrass Transmission Main HGL and Ps Profile

23.0 MGD Flowrate, No Pumping Facility
English Station Reservoir to Shelbyville (via I-64)

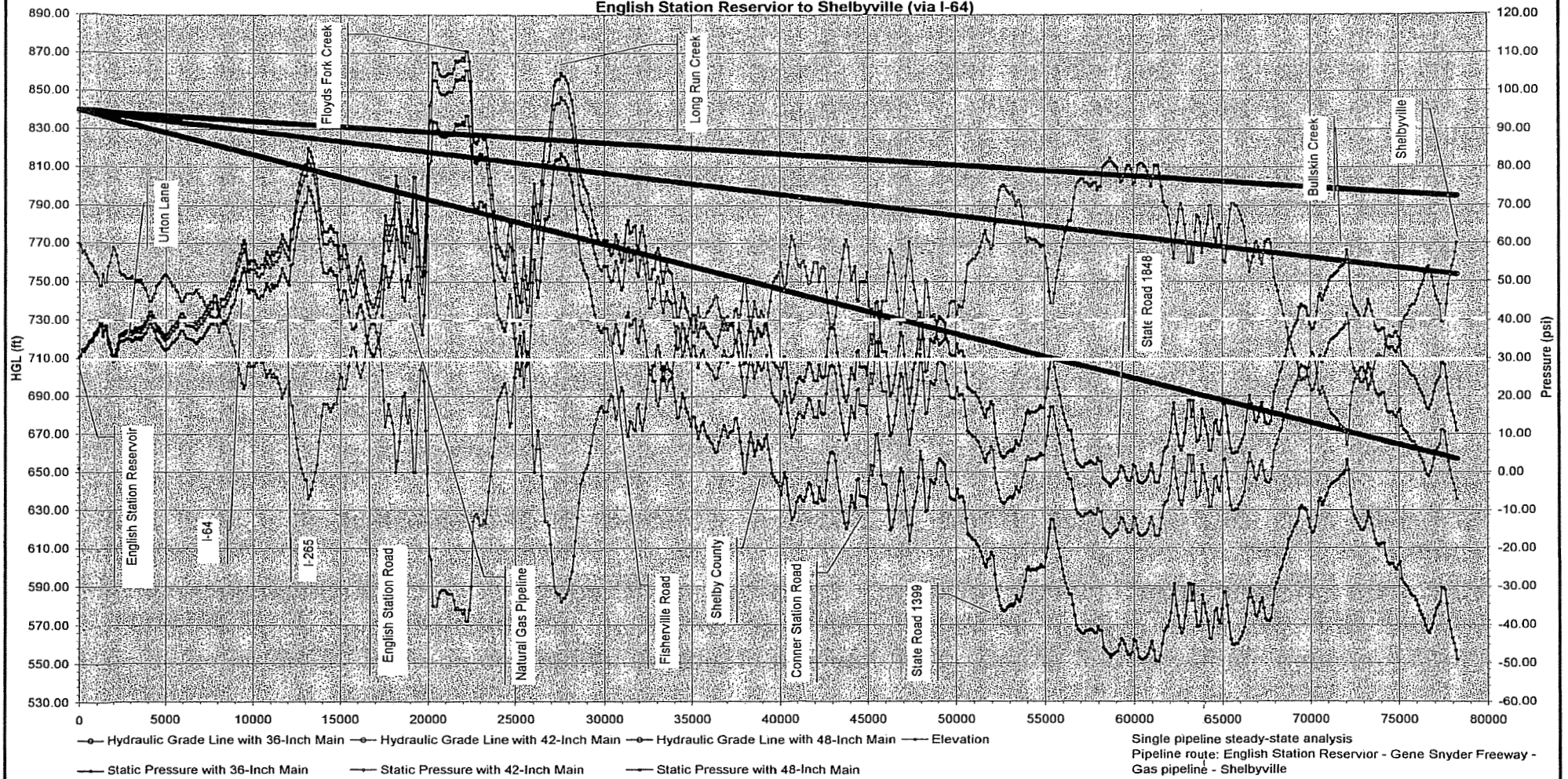


Figure 4: Bluegrass Transmission Main HGL and Ps Profile
 23.0 MGD Flowrate, Pumping Facility at English Station Reservoir (150 feet of head)
 English Station Reservoir to Shelbyville (via I-64)

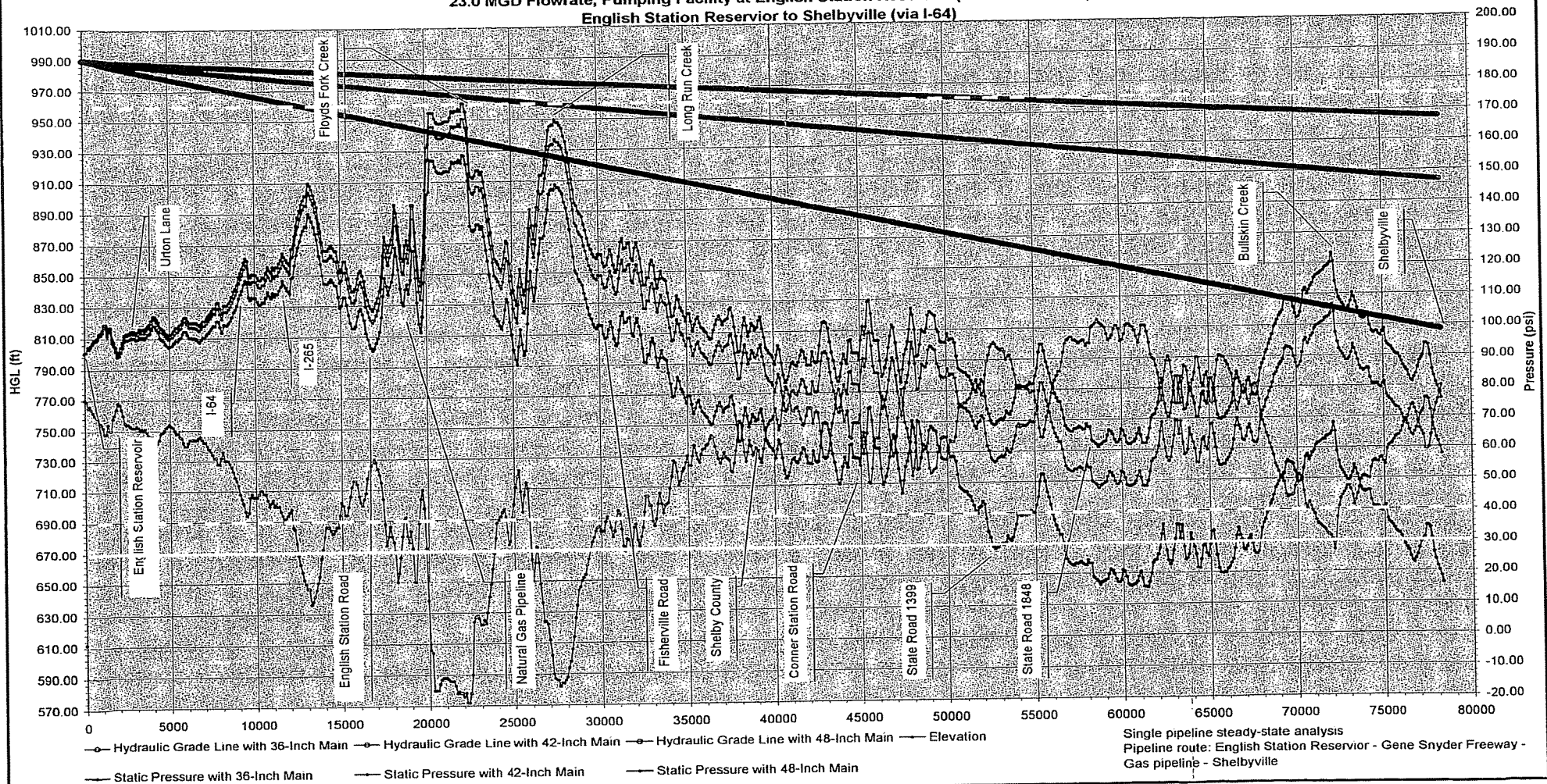
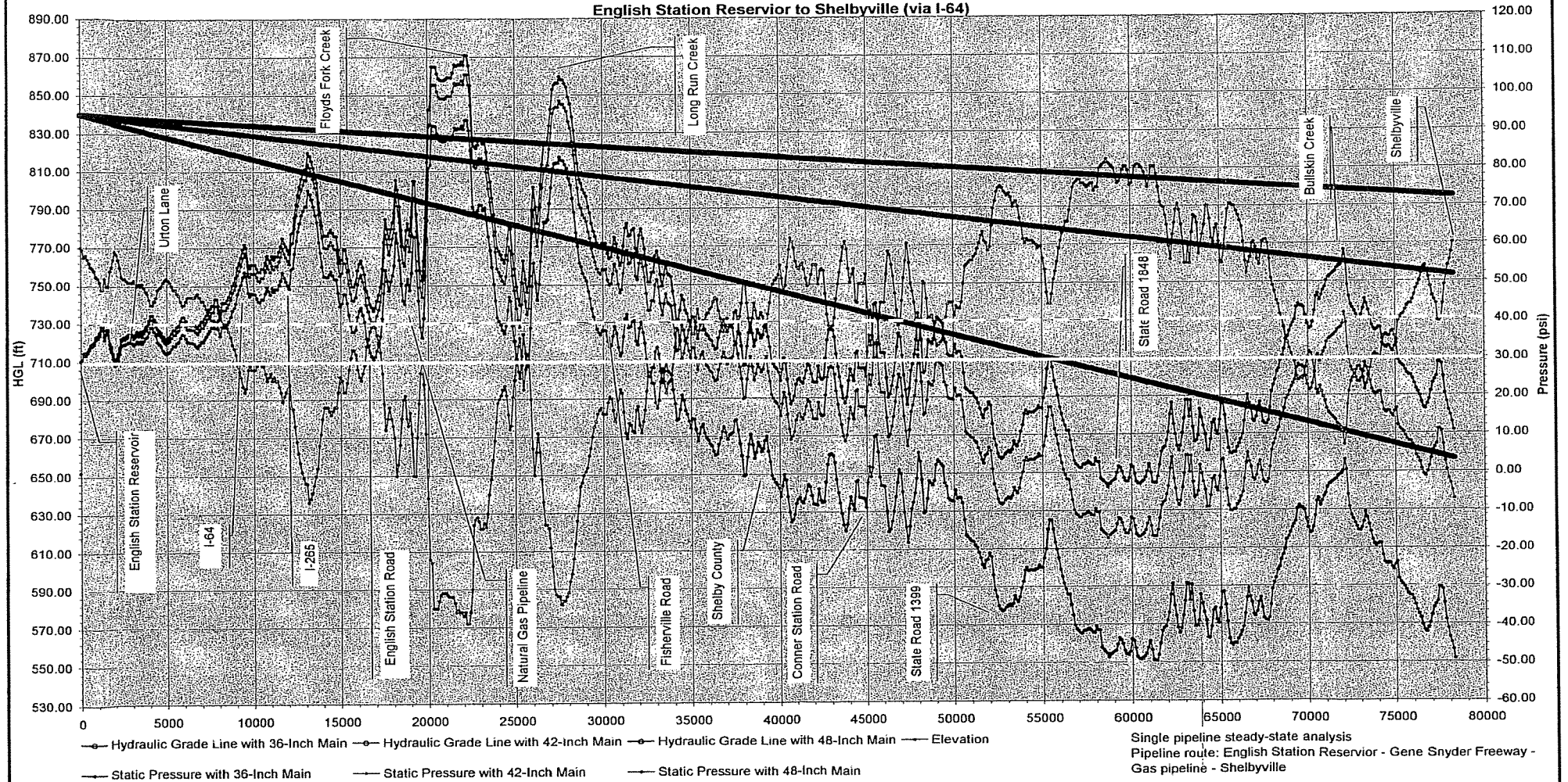


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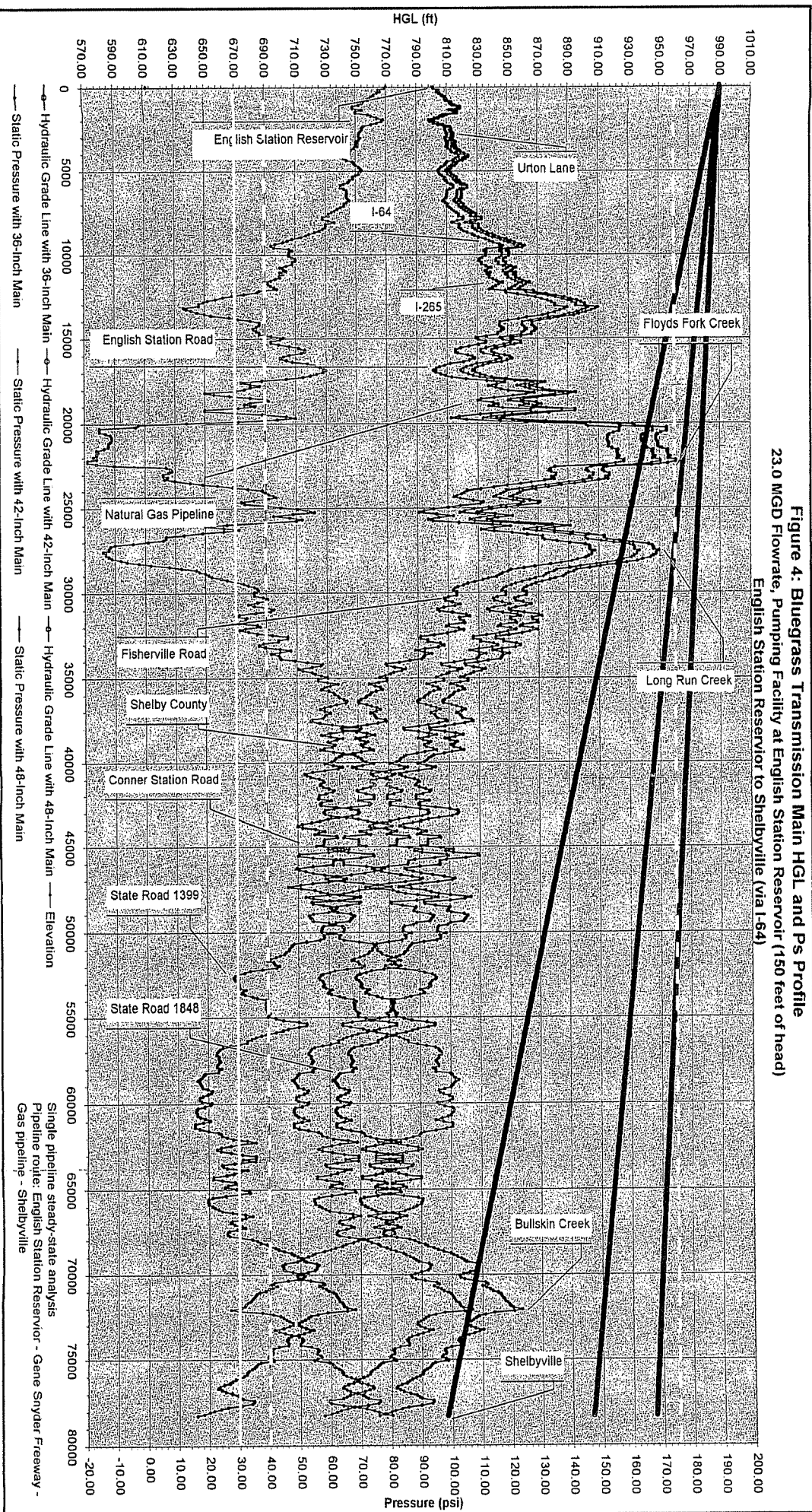


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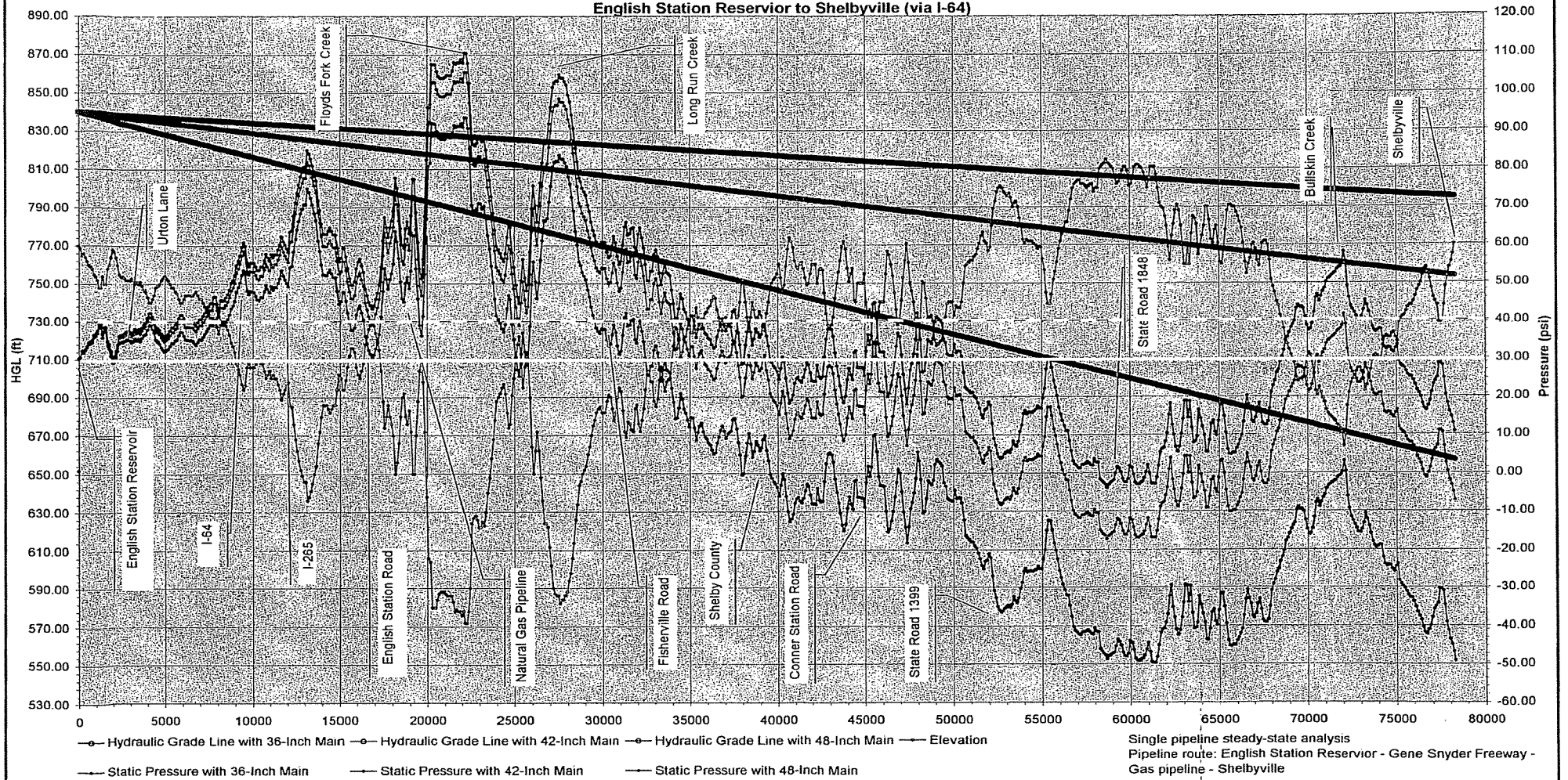
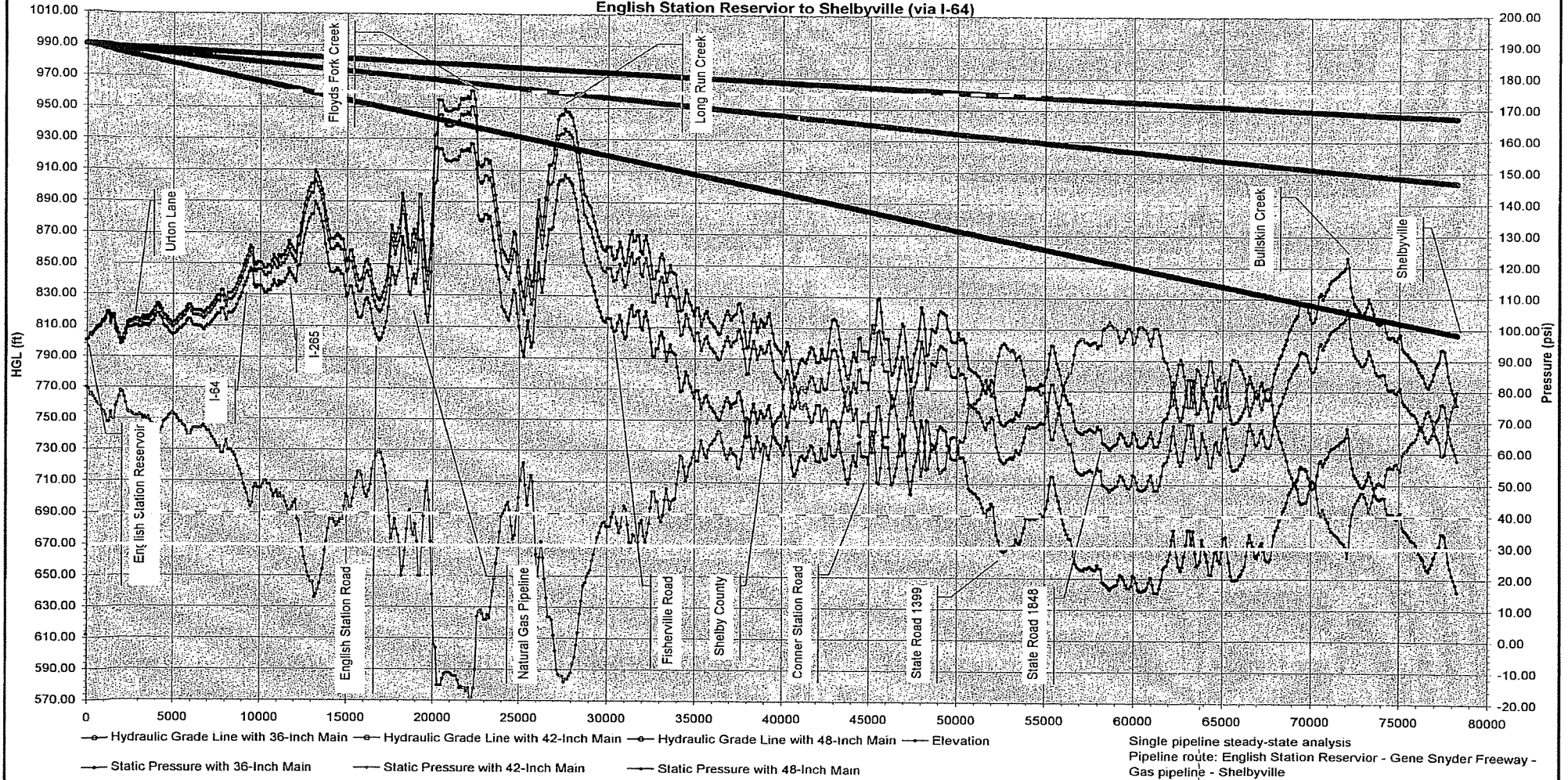


Figure 4: Bluegrass Transmission Main HGL and Ps Profile
 23.0 MGD Flowrate, Pumping Facility at English Station Reservoir (150 feet of head)
 English Station Reservoir to Shelbyville (via I-64)



05/19/98

Karen,

attached are 4 copies each of the
overhead electric route to the county line,
please call w/ g's.

Alan

KY-AM

SENT BY:

5- 4-98 : 3:35PM : AWWWS SYSTEM ENG.-

916062686327:# 2/ 3

Louisville Pipeline								
May 4, 1998								
Flow from the English Station Tank to the Jefferson/Shelby County line along Shakes Run						C=	130	
						Flow =	23.0	MGD
Location	Station	Elevation (feet)	Distance (feet)	Diameter (inches)	Head Loss (feet)	HGL (feet)	Pressure (feet)	Pressure (psi)
English Station tank	0.0	784	0			840.0	78.0	32.9
	0.1	750	1,000	36	2.1	837.9	87.9	38.1
	0.2	760	1,000	36	2.1	835.9	75.9	32.9
	0.3	750	1,000	36	2.1	833.8	83.8	36.3
	0.4	750	1,000	36	2.1	831.8	81.8	35.4
	0.5	750	1,000	36	2.1	829.7	79.7	34.5
	0.6	750	1,000	36	2.1	827.7	77.7	33.6
	0.7	740	1,000	36	2.1	825.6	85.6	37.1
	0.8	735	1,000	36	2.1	823.6	88.6	38.4
	0.9	710	1,000	36	2.1	821.5	111.5	48.3
	1.0	670	1,000	36	2.1	819.5	149.5	64.7
	1.1	700	1,000	36	2.1	817.4	117.4	50.9
	1.2	730	1,000	36	2.1	815.4	85.4	37.0
	1.3	720	1,000	36	2.1	813.3	93.3	40.4
	1.4	700	1,000	36	2.1	811.3	111.3	48.2
	1.5	700	1,000	36	2.1	809.2	109.2	47.3
	1.6	700	1,000	36	2.1	807.2	107.2	46.4
	1.7	600	1,000	36	2.1	805.1	205.1	88.8
	1.8	580	1,000	36	2.1	803.1	223.1	96.6
	1.9	590	1,000	36	2.1	801.0	211.0	91.4
	2.0	680	1,000	36	2.1	799.0	139.0	60.2
	2.1	700	1,000	36	2.1	798.9	96.9	42.0
	2.2	720	1,000	36	2.1	794.9	74.9	32.4
	2.3	610	1,000	36	2.1	792.8	182.8	79.2
	2.4	590	1,000	36	2.1	790.8	200.8	86.9
	2.5	630	1,000	36	2.1	788.7	158.7	68.7
	2.6	810	1,000	36	2.1	786.7	176.7	76.5
	2.7	810	1,000	36	2.1	784.6	174.6	75.6
	2.8	820	1,000	36	2.1	782.8	162.8	70.4
	2.9	640	1,000	36	2.1	780.5	140.5	60.9
	3.0	880	1,000	36	2.1	778.5	118.5	51.3
	3.1	880	1,000	36	2.1	778.4	118.4	50.4
	3.2	660	1,000	36	2.1	774.4	114.4	49.5
	3.3	880	1,000	36	2.1	772.3	92.3	40.0
	3.4	680	1,000	36	2.1	770.3	90.3	39.1
	3.5	680	1,000	36	2.1	768.2	78.2	33.9
Jefferson/Shelby County Line	3.6	890	1,000	36	2.1	766.2	76.2	33.0

SENT BY:

5-4-98 : 3:36PM : AWW'S SYSTEM ENG. -

916062686327:# 3/ 3

Start @ 100

STATE OF KENTUCKY
KENTUCKY GEOLOGICAL SURVEY
UNIVERSITY OF KENTUCKY

EFFERTS TOWN QUADRANGLE
KENTUCKY-JEFFERSON CO.
7.5 MINUTE SERIES (TOPOGRAPHIC) DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



Figure 5: Bluegrass Transmission Main HGL and Ps Profile
23.0 MGD Flowrate, No Pumping Facility
English Station Reservoir to Shelby County Boundary (via Overhead Electric)

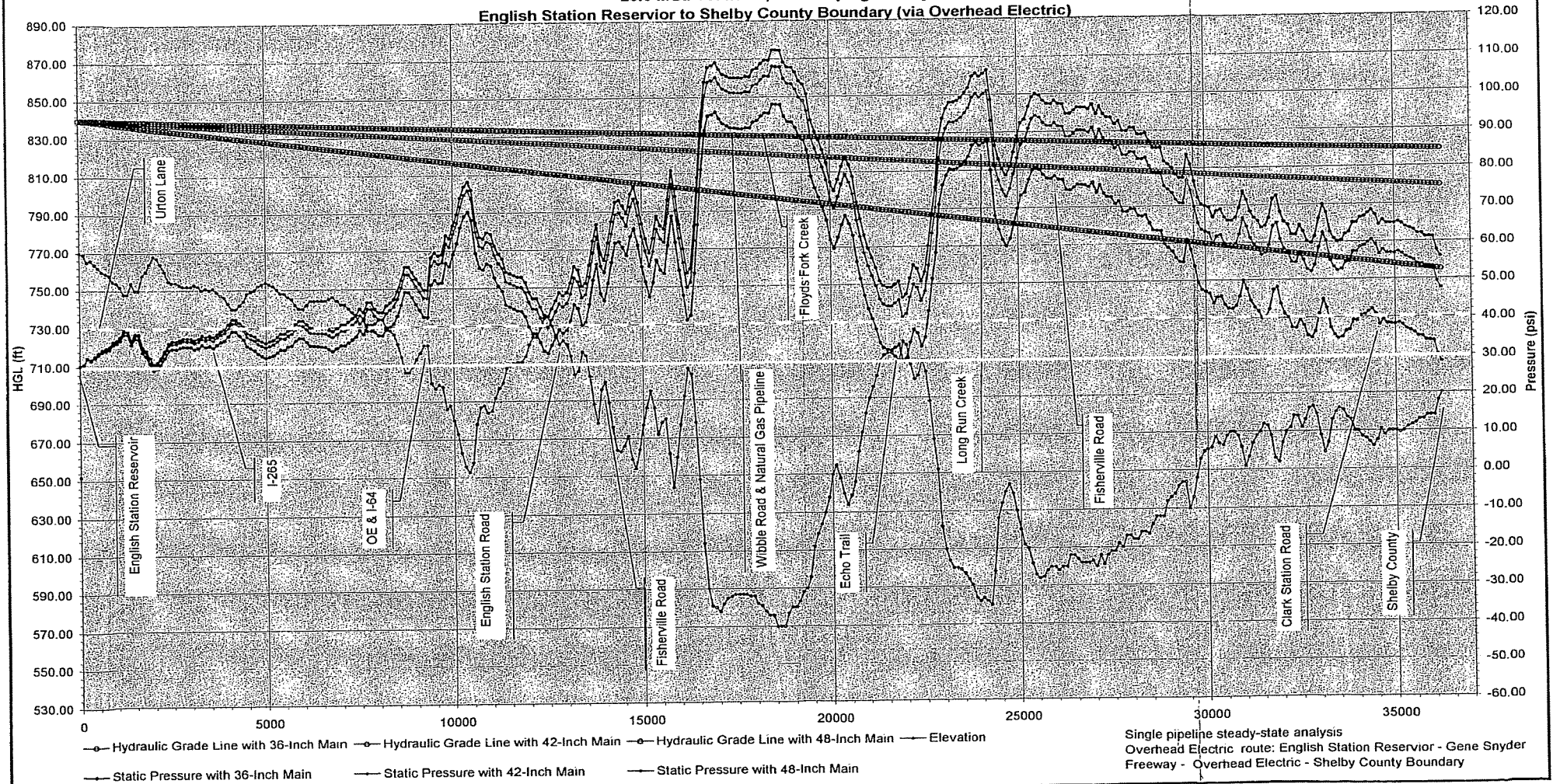


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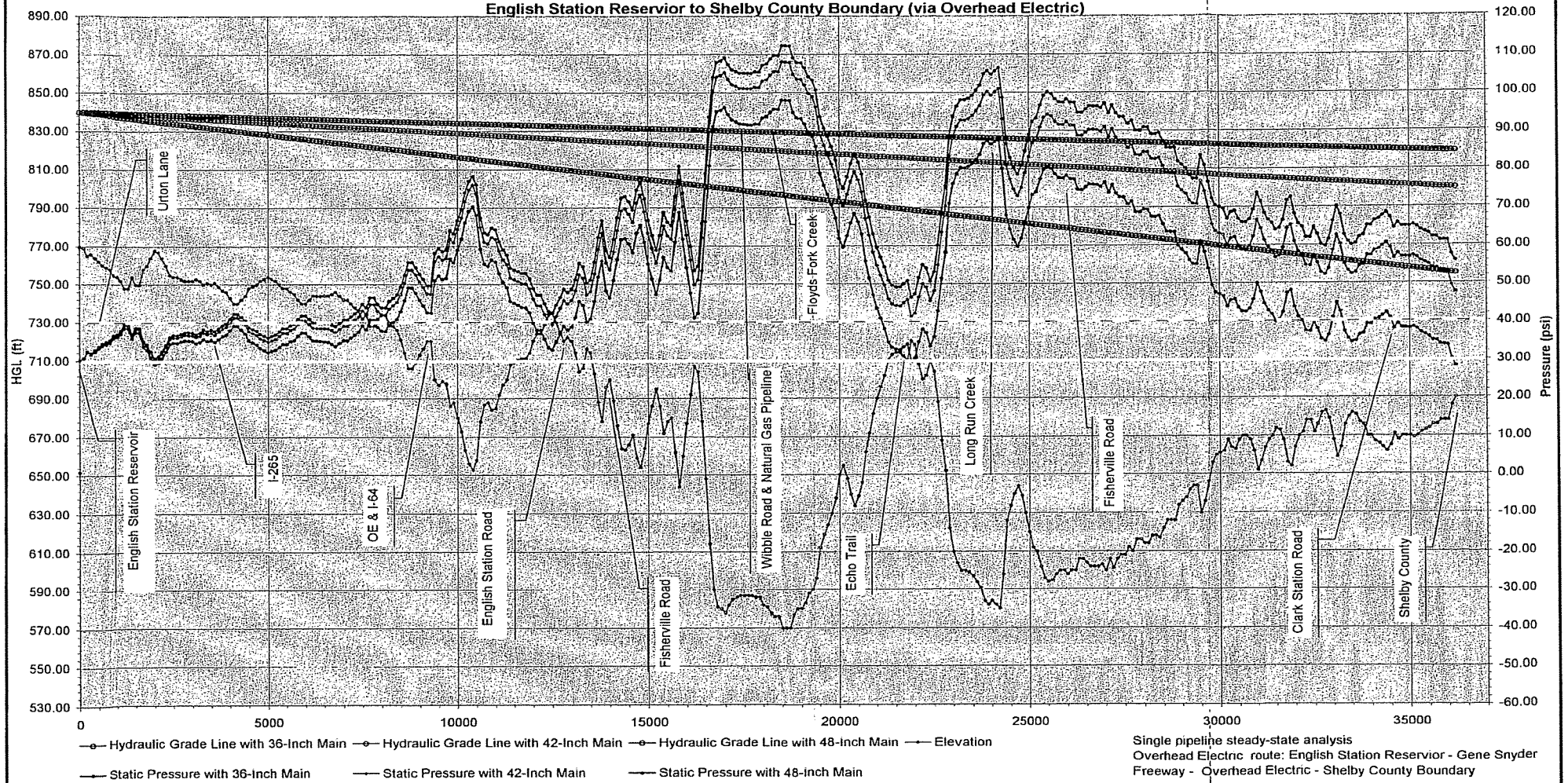
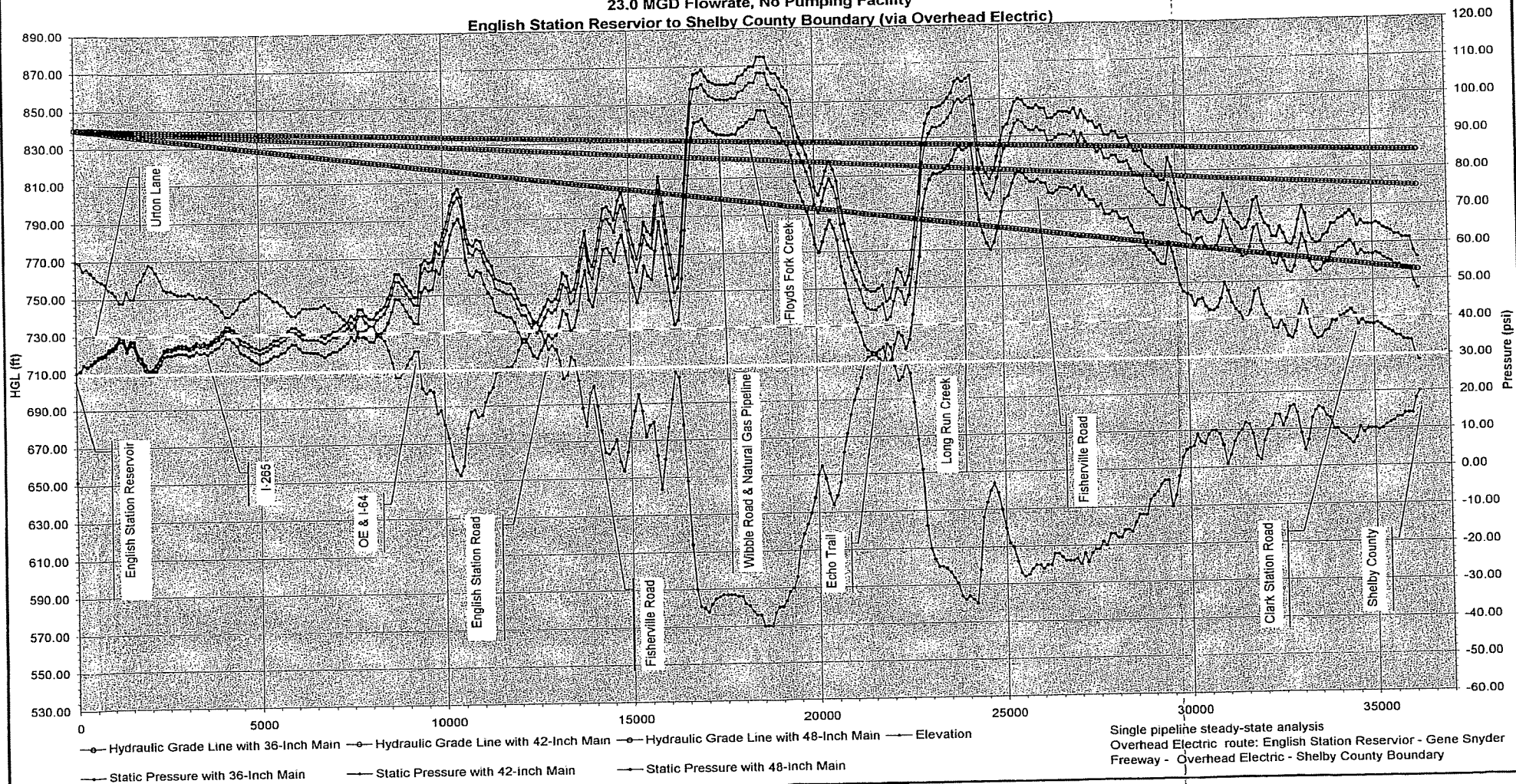


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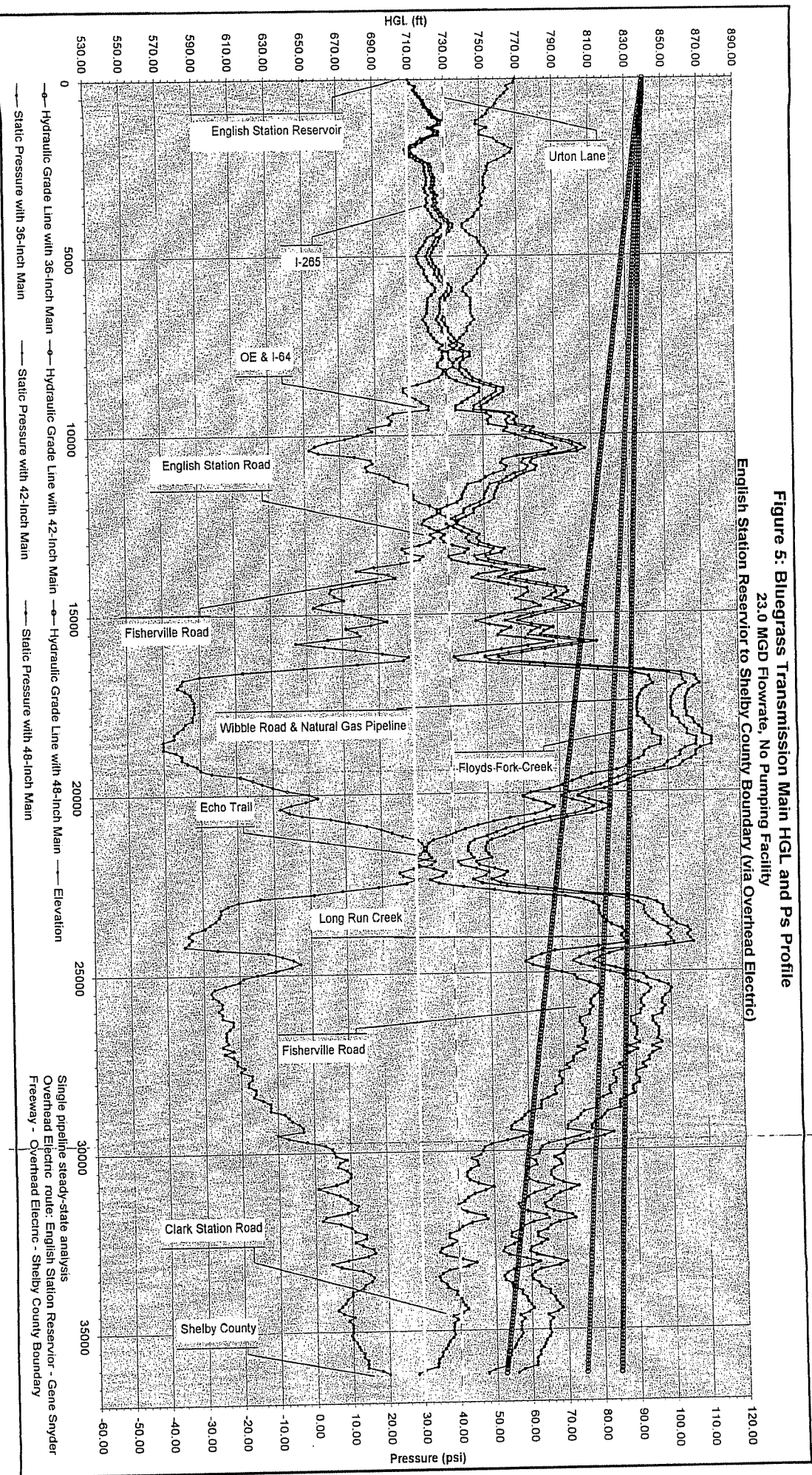


Figure 6: Bluegrass Transmission Main HGL and Ps Profile
 23.0 MGD Flowrate, Pumping Facility at English Station Reservoir (150 feet of head)
 English Station Reservoir to Shelby County Boundary (via Overhead Electric)

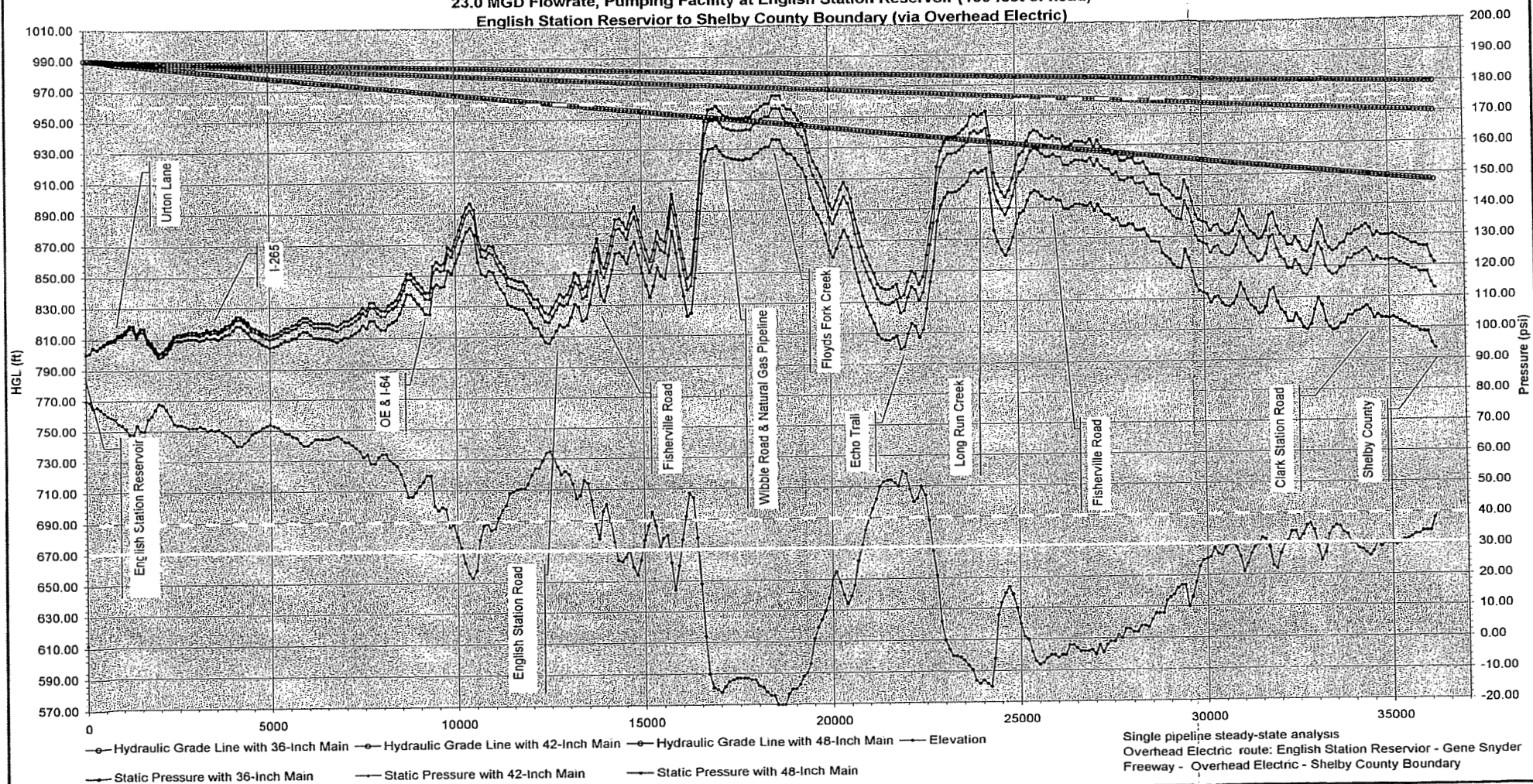


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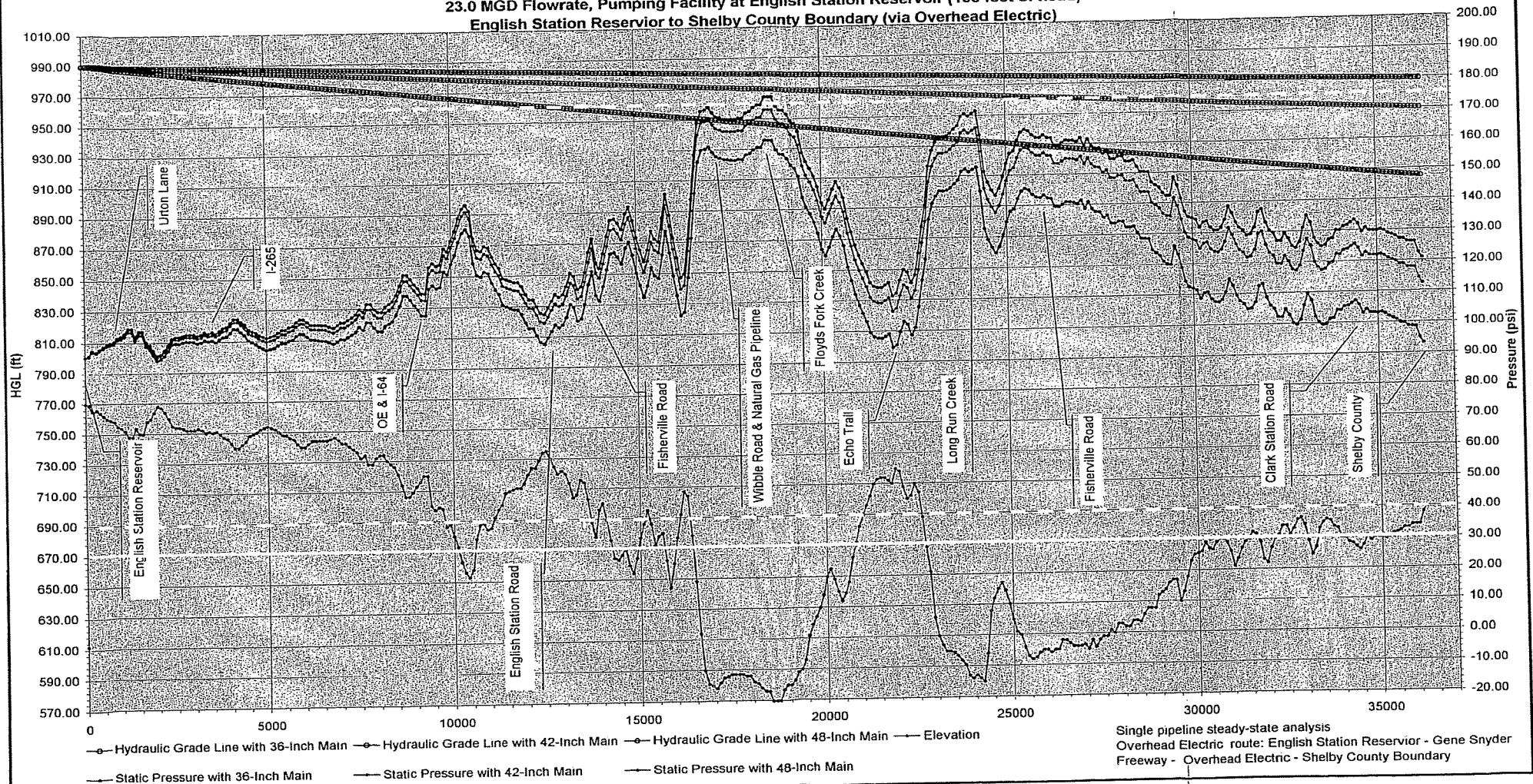
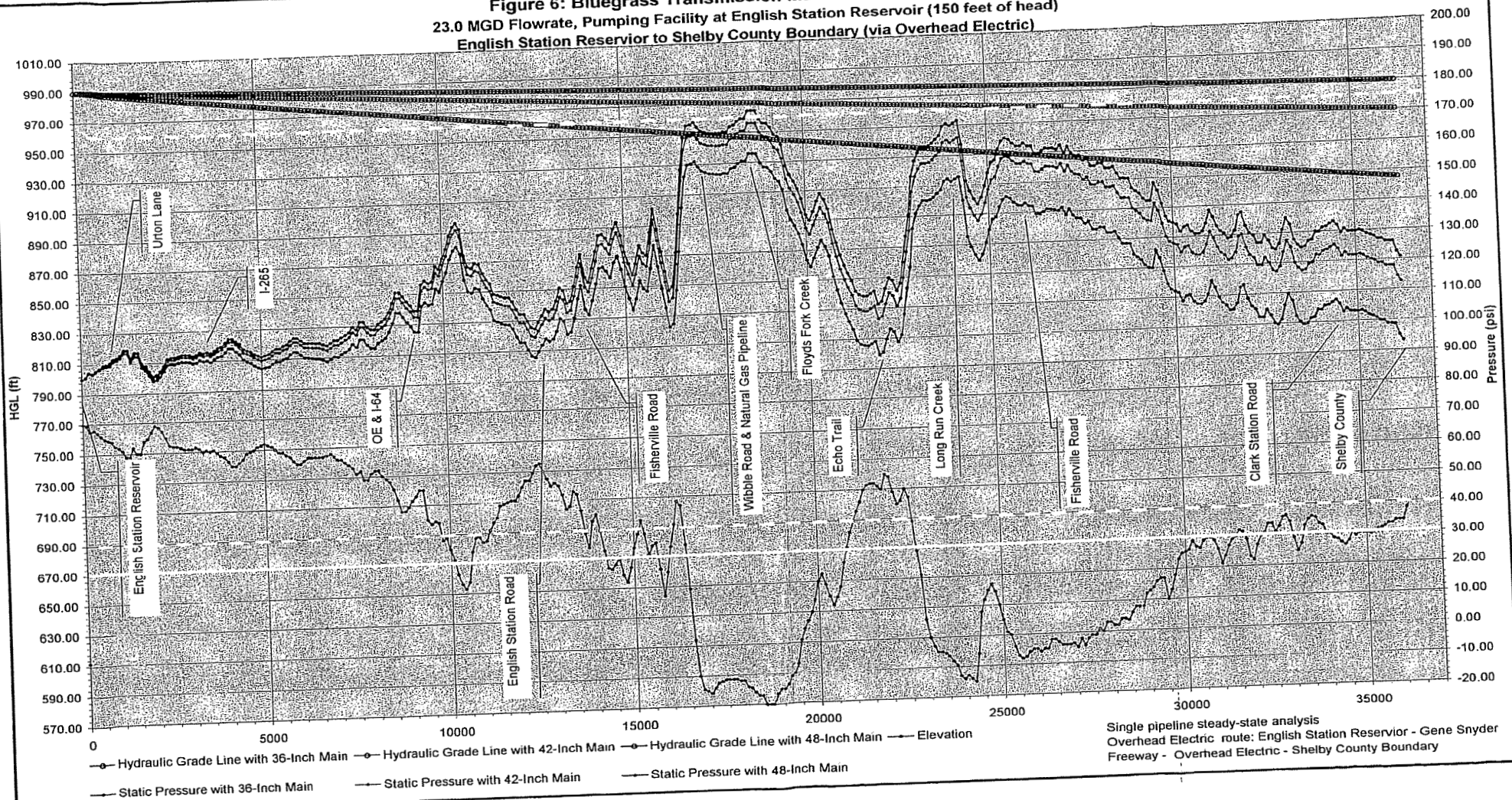
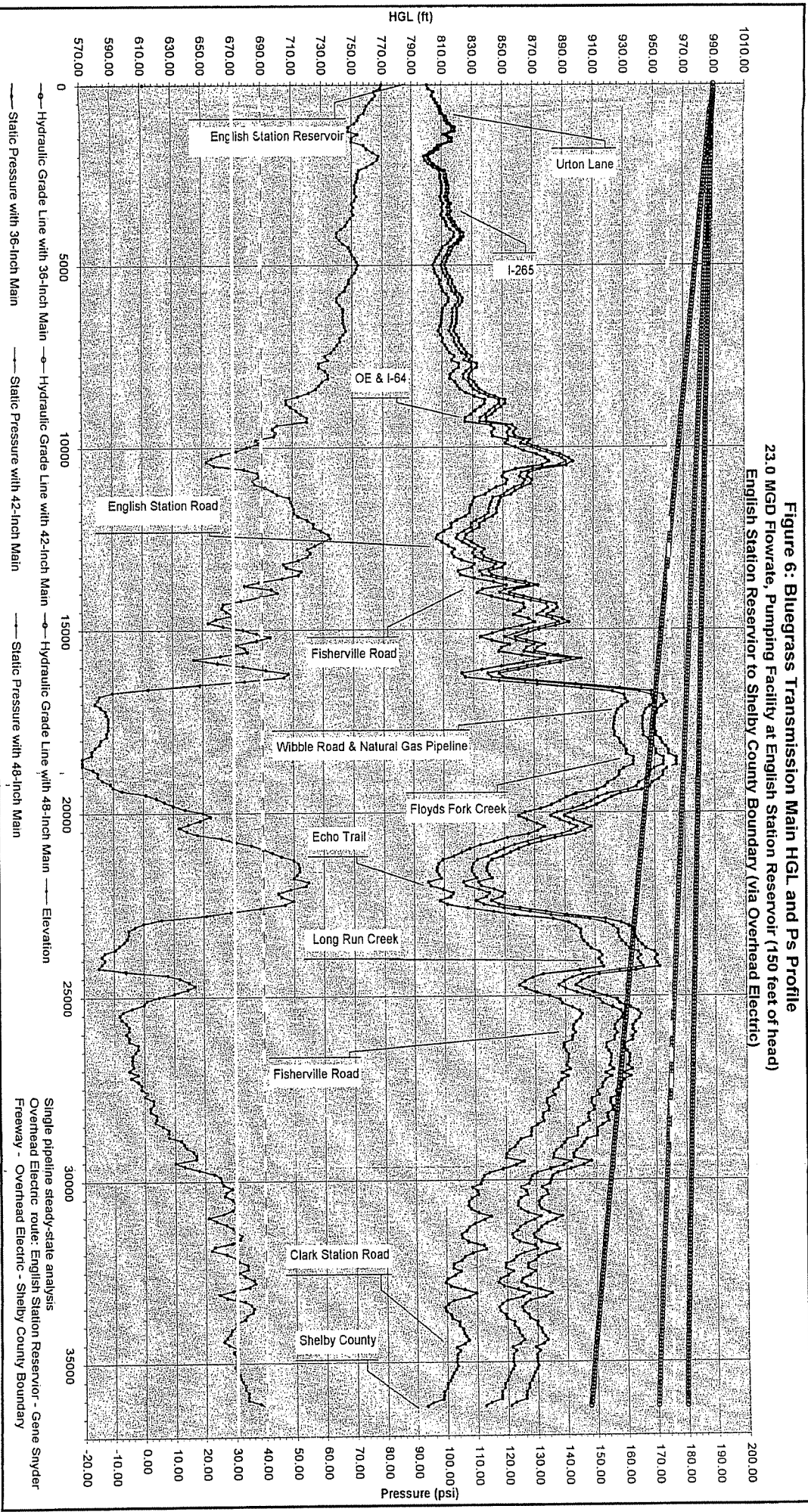


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 23.0 MGD Flowrate, Pumping Facility at English Station Reservoir (150 feet of head)
 English Station Reservoir to Shelby County Boundary (via Overhead Electric)





also Figure 5 & 6

Figure 5: Overhead to Co. line - No pump.
 6 " " " " - 150' pump

later
in the
week

Fig 1 & 3, stop graph @ County line.

	@ 5 FPS	#2	#3	@ 5 FPS
	Co line	1848	Hwy 55	Nom. Capacity
36"	X	X K	X	23 MGD
42"	X	23/30 Pro rated share	23/30	30
48"	X	23/40	23/40	40
60/36-42-48				
PS (2.5 MGD)	<u>NO</u>	23/30 23/40		
Storage (2.5 MGD) elv.	<u>NO</u>	23/30 23/40		

P.S. / storage 36" — for #2 & #3

~~Pro rated share~~
~~with route~~

Pro & cons for each scenario

Sales scenarios 30 yr } No rate increase
30 yr } start @ 2007

#1 } NSWOD up to IMG } adjust
NSWOD. up to IMG } growth
key-ann. \$1.10 / 3% based on Paul's numbers

#2. same as #1
@ 2010
NSWOD supply from Shelbyville -
NSWOD. ck. Fac Plan
include growth from now - 2010

~~after freeze pt. incr. 3%~~

RR
How long will
we freeze wholesale
rate. app. rate
for key-ann

#3 same as #2

+ Shelbyville back out
4.5 MGD (198) NSWD
NSWD, US-60. ✓

start @ 2003.

~~total sale rate~~ ✓

use Ky-Ann rate-

+ U.S. 60 / 1-mile @ 2010

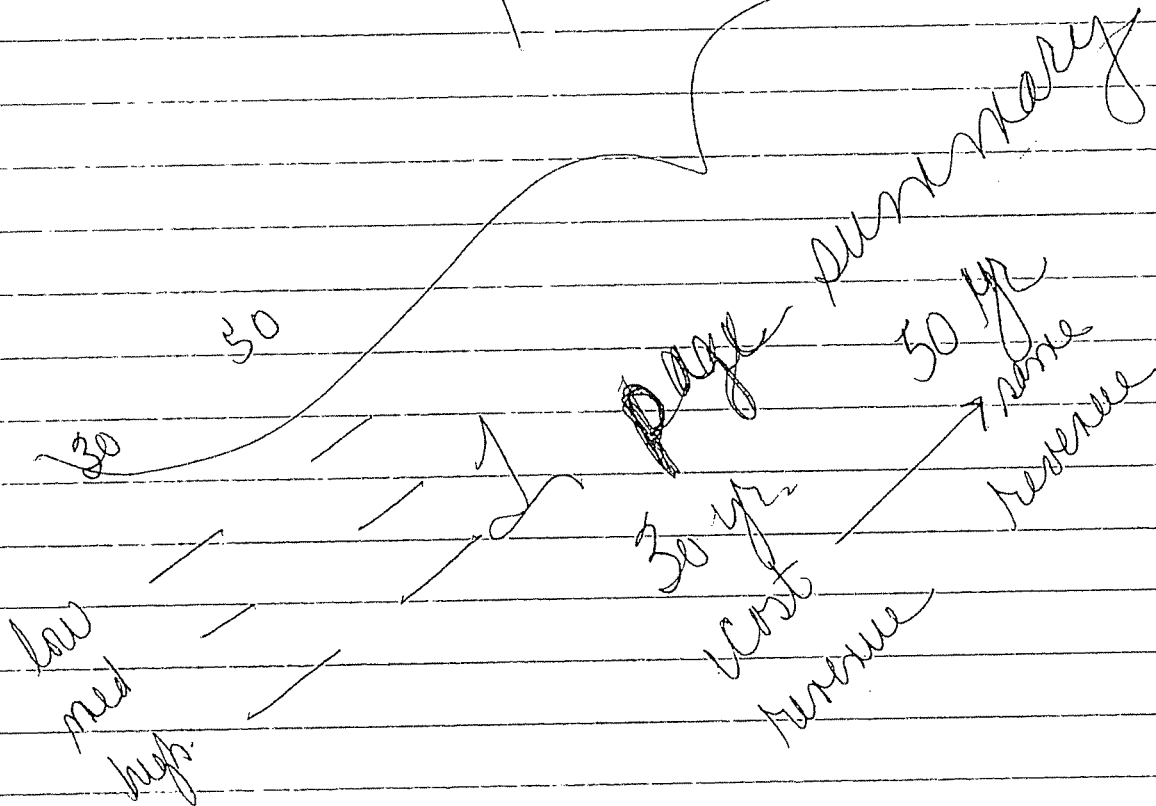
Ky-Ann rate - include
growth
along till
2010

~~total sale rate~~
~~total sale rate~~
~~total sale rate~~

map

How much
to spend

How much
return



Co line

1848

55

60-10,200 60-36' LWC
36-25,200

60-10,200 60-36' LWC
36-44,600

low

Cost/revenue
~~30~~

P.S. LWC 1.9m
tank LWC 2.1m

med

60 60-36' LWC
42 42-36' LWC

60- 60-36' LWC
42 42-36' LWC

P.S. } LWC
tank }

aggr

60 60-36' LWC
48 48-36' LWC

Bullets

10,200

25,200

35,400

**Ky-American
Forecast/Revenue Projection**

Year 36 2036	Year 37 2037	Year 38 2038	Year 39 2039	Year 40 2040	Year 41 2042	Year 42 2043	Year 43 2044	Year 44 2045	Year 45 2046	Year 46 2047	Year 47 2048	Year 48 2049	Year 49 2050	Year 50 2051
3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
6,472	6,666	6,866	7,072	7,284	7,503	7,728	7,960	8,198	8,444	8,698	8,959	9,227	9,504	9,789
\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10
\$7,119	\$7,333	\$7,553	\$7,779	\$8,013	\$8,253	\$8,501	\$8,756	\$9,018	\$9,289	\$9,567	\$9,854	\$10,150	\$10,455	\$10,768
\$213,572	\$219,979	\$226,579	\$233,376	\$240,377	\$247,589	\$255,016	\$262,667	\$270,547	\$278,663	\$287,023	\$295,634	\$304,503	\$313,638	\$323,047
\$2,562,866	\$2,639,752	\$2,718,944	\$2,800,513	\$2,884,528	\$2,971,064	\$3,060,196	\$3,152,002	\$3,246,562	\$3,343,959	\$3,444,277	\$3,547,606	\$3,654,034	\$3,763,655	\$3,876,565
1348	1388	1430	1473	1517	1563	1609	1658	1707	1759	1811	1866	1922	1979	2039
348	388	430	473	517	563	609	658	707	759	811	866	922	979	1039
\$1.35	\$1.35	\$1.35	\$1.35	\$1.35	\$1.35	\$1.35	\$1.35	\$1.35	\$1.35	\$1.35	\$1.35	\$1.35	\$1.35	\$1.35
\$470	\$524	\$580	\$638	\$698	\$759	\$823	\$888	\$955	\$1,024	\$1,096	\$1,169	\$1,244	\$1,322	\$1,402
\$14,089	\$15,726	\$17,413	\$19,151	\$20,940	\$22,783	\$24,682	\$26,637	\$28,651	\$30,726	\$32,863	\$35,064	\$37,330	\$39,665	\$42,070
\$169,065	\$188,717	\$208,958	\$229,807	\$251,281	\$273,399	\$296,181	\$319,647	\$343,816	\$368,711	\$394,352	\$420,763	\$447,965	\$475,984	\$504,844
1510	1555	1602	1650	1699	1750	1803	1857	1912	1970	2029	2090	2152	2217	2283
510	555	602	650	699	750	803	857	912	970	1029	1090	1152	1217	1283
\$1.35	\$1.35	\$1.35	\$1.35	\$1.35	\$1.35	\$1.35	\$1.35	\$1.35	\$1.35	\$1.35	\$1.35	\$1.35	\$1.35	\$1.35
\$688	\$749	\$812	\$877	\$944	\$1,013	\$1,083	\$1,156	\$1,232	\$1,309	\$1,389	\$1,471	\$1,556	\$1,643	\$1,733
\$20,639	\$22,474	\$24,363	\$26,309	\$28,313	\$30,377	\$32,504	\$34,694	\$36,950	\$39,273	\$41,666	\$44,131	\$46,670	\$49,285	\$51,979
\$247,672	\$269,683	\$292,353	\$315,704	\$339,755	\$364,527	\$390,043	\$416,324	\$443,394	\$471,276	\$499,994	\$529,574	\$560,041	\$591,423	\$623,745
10609	10928	11255	11593	11941	12299	12668	13048	13440	13843	14258	14686	15126	15580	16048
\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10
\$11,670	\$12,020	\$12,381	\$12,752	\$13,135	\$13,529	\$13,935	\$14,353	\$14,784	\$15,227	\$15,684	\$16,154	\$16,639	\$17,138	\$17,652
\$350,108	\$360,611	\$371,430	\$382,573	\$394,050	\$405,871	\$418,048	\$430,589	\$443,507	\$456,812	\$470,516	\$484,632	\$499,171	\$514,146	\$529,570
\$4,201,299	\$4,327,338	\$4,457,158	\$4,590,873	\$4,728,599	\$4,870,457	\$5,016,571	\$5,167,068	\$5,322,080	\$5,481,742	\$5,646,195	\$5,815,580	\$5,990,048	\$6,169,749	\$6,354,842
844	869	896	922	950	979	1008	1038	1069	1101	1134	1169	1204	1240	1277
\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10
\$929	\$956	\$985	\$1,015	\$1,045	\$1,076	\$1,109	\$1,142	\$1,176	\$1,212	\$1,248	\$1,285	\$1,324	\$1,364	\$1,405
\$27,857	\$28,693	\$29,554	\$30,440	\$31,354	\$32,294	\$33,263	\$34,261	\$35,289	\$36,347	\$37,438	\$38,561	\$39,718	\$40,909	\$42,137
\$334,287	\$344,315	\$354,645	\$365,284	\$376,243	\$387,530	\$399,156	\$411,131	\$423,465	\$436,169	\$449,254	\$462,731	\$476,613	\$490,912	\$505,639

Type of Risk	Scenario KY Highway 55		Nominal Capacity of Pipeline
Conservative (1) 40 Year Projection K-A, WSWD, NSWD	Total Cost	\$22,900,000	35 MGD
	LWC Cost (12/35) •	\$11,465,714	
	K-A Cost (23/35)	\$11,434,286	
	Potential LWC Revenue	\$73,400,000	
Medium (2) 40 Year Projection K-A, WSWD, NSWD US60/T-ville	Total Cost	\$22,900,000	35 MGD
	LWC Cost (12/35) *	\$11,465,714	
	K-A Cost (23/35)	\$11,434,286	
	Potential LWC Revenue	\$81,200,000	
Aggressive (3) 40 Year Projection K-A, WSWD, NSWD US60/T-ville Shelbyville	Total Cost	\$22,900,000	35 MGD
	LWC Cost (12/35) •	\$11,465,714	
	K-A Cost (23/35)	\$11,434,286	
	Potential LWC Revenue	\$190,700,000	

• - 60-inch ESR to I-64; 36-inch out I-64 to Point of Delivery - LWC pays upsize to 60-inch, PS and Tank plus share of 36-inch as indicated

SERVICE TO KENTUCKY-AMERICAN ROUTE SCENARIOS

ROUTE	DESCRIPTION	MAIN SIZE	LENGTH L.F.	UNIT COST	TOTAL COST	SUMMARY
1a	English Station Road, US 60	60-inch	900	\$375/l.f.	\$337,500	
	US 60, Veechdale, I-64	48-inch	54,500	\$300/l.f.	\$16,350,000	
	2M Elevated Tank @ Simpsonville (800' OF Elev.)	N/A	N/A	\$0.83/gallon	\$1,660,000	
	23 MGD Pump Station @ English Station Resv.	N/A	N/A	\$75,000/MGD	\$1,725,000	\$20,072,500 Total Project
	US 60, Veechdale, I-64	36-inch	54,500	\$225/l.f.	\$12,262,500	\$14,325,000 Ky-Am Portion \$5,747,500 LWC Portion
1b	English Station Road, Urton Lane, I-265, I-64	60-inch	10,200	\$375/l.f.	\$3,825,000	
	I-64, Veechdale (Simpsonville) exit	48-inch	44,500	\$300/l.f.	\$13,350,000	
	2M Elevated Tank @ Simpsonville (800' OF Elev.)	N/A	N/A	\$0.83/gallon	\$1,660,000	
	23 MGD Pump Station (I-265 @ I-64)	N/A	N/A	\$75,000/MGD	\$1,725,000	\$20,560,000 Total Project
	I-64, Veechdale (Simpsonville) exit	36-inch	44,500	\$225/l.f.	\$10,013,000	\$15,563,000 Ky-Am Portion \$4,997,000 LWC Portion
1c	Simpsonville, I-64 to Shelbyville	48-inch	22,500	\$300/l.f.	\$6,750,000	
	2M Elevated Tank (Hwy 155 @ I-64)	N/A	N/A	\$0.83/gallon	\$1,660,000	
	23 MGD Pump Station @ English Station Resv.	N/A	N/A	\$75,000/MGD	\$1,725,000	\$10,135,000 Total Project
	Simpsonville, I-64 to Shelbyville	36-inch	22,500	\$225/l.f.	\$5,062,500	\$6,787,500 Ky-Am Portion \$3,347,500 LWC Portion
2a	English Station Road, US 60	60-inch	900	\$375/l.f.	\$337,500	
	US 60, RR, Clark Station Road, Jefferson County line	42-inch	29,700	\$250/l.f.	\$7,425,000	
	2M Elevated Tank (Suction Side of Pump Station)	N/A	N/A	\$0.83/gallon	\$1,660,000	
	23 MGD Pump Station (Spotswood EL 740)	N/A	N/A	\$75,000/MGD	\$1,725,000	\$11,147,500 Total Project
	US 60, RR, Clark Station Road, Jefferson County line	36-inch	29,700	\$225/l.f.	\$6,682,500	\$8,745,000 Ky-Am Portion \$2,402,500 LWC Portion
2b	English Station Road, Urton Lane, I-265, I-64	60-inch	10,200	\$375/l.f.	\$3,825,000	
	I-64, Jefferson County line	42-inch	25,200	\$250/l.f.	\$6,300,000	
	2M Elevated Tank (Suction Side of Pump Station)	N/A	N/A	\$0.83/gallon	\$1,660,000	
	23 MGD Pump Station (Spotswood EL 740)	N/A	N/A	\$75,000/MGD	\$1,725,000	\$13,510,000 Total Project
	I-64, Jefferson County line	36-inch	25,200	\$225/l.f.	\$5,670,000	\$11,220,000 Ky-Am Portion \$2,290,000 LWC Portion

Note: Ky-American portion does not include cost of tank construction

* Build map ref. from dason to match scenarios *

Hydraulic

Scenario I

- Demand 23 MG/D, minimum 30 psi.
- English Station Reservoir 840' H.G.
- Velocity ≤ 5 fps

A

repetitive sheet

Scenario II

- Demand 23 MG/D - K.A. } minimum 30 psi
- English Station Reservoir 840' H.G.
- Velocity 8 fps, Flow = 35 MG/D availability

Scenario III

Same

Scope

- 60" along I-265 (10,200')
- 36" out I-64 to Jefferson/Shelby line
- LWC owns 60"/36"
- BPS at Jeff/Shelby line
- No options

Cost

4.000000 40" BPS
Total Cost
K.A. pays
LWC pays upsizing
Cost to 60"

1.5m upfront

Shelby }
only { • LWC 12/35 + upsizing + BPS.
K.A. 23/35

2,3

- LWC 25 MG/D BPS - (150) Discharge pressure
- K.A BPS at Ky 55 by K.A.
- Option
- 1.5 + P.S. pipe later

Same

Option

1.5 + P.S. now
pipe later

From: Jim Brammell / THRD4
To: Greg Heitzman / THRD4
Subject: fwd: KY-AMERICAN

====NOTE=====5/20/98=12:02pm=====

CC: Karen Willis / THRD4

.....

I phoned Bill Rhodes this morning to inquire about status of his work. He is essentially complete (90%) with the boilerplate, but is stopped at this point as he awaits further guidance on the alignment(s) to be considered. Pls advise of any decisions that have been reached subsequent to our last conversation. THanks.

Fwd-by:=Greg=Heitzman=5/20/98==1:27pm=====

Fwd to: Jim Brammell / THRD4

CC: Karen Willis / THRD4

.....

From everything I can see, we will decide Friday to contact PDR/Gannett Fleming and ask if they are interested in negotiating with LWC to design the Louisville piece of the pipeline. If they answer yes, we would send them Bill's RFP next week, ask them for a proposal back (qualifications/scope/cost) within 2 weeks, and have contract in hand by June 8, to submit to June BOWW for award.

Since I feel 99% sure this is the route we will take, pls have Bill build the RFP using a negotiated Prof Serv contract format, omitting any requirements for interviews, 2 envelopes, etc, and focus soley on an RFP that has 3 parts:

I. PDR/GF Project Team and qualifications (describe the resources they propose to use)

II. The scope of services (route analysis, hyd analysis, design, plans/specs, final cost estimate) for a scope from English Station to Jeferson County line, 60"/36" scenario with a 25 MGD pump station at I-265 at I-64 (using 60" as suction, 36" as discharge). Assume the I-265/LG&E gas esmt as general route description.) By Tuesday, Karen can provide a scope map for Bill to use in RFP.

III. Cost of services section, including a NTE price, and table of hourly rates for people on project team, how they will mark up direct costs, subs, etc. Also have them build costs in phases, as follows:

- A. Prel engr, hyd analysis, design, easement plats, est for esmt, plans, specs, final cost etimate
- B. cost to procure easements (negotiation up to decision to condemn, where we will take over) and
- C. cost for contract administration/inspection/as-builts (assume 100% inspection of line and pump station).

If he builds this RFP scenario, the actual scenario should be very close to this. So have him proceed using this scenario asap, and we will finalize details Friday. I want to be in a position to call PDR/GF on Tuesday 5/26 and hand them an RFP.

Memo

To: Greg Heitzman, Karen Willis
From: Jim Brammell
Date: 05/04/98
CC: Steve Tucker
Re: KY-American/Bluegrass Water Project – Preliminary Route Alignment

Please find attached for your information and use a copy of Bill Rhodes' Preliminary Route Alignment analysis for the subject project.

Also, FYI, I met with Bill this afternoon and provided some of the information necessary for him to begin preparing a Request for Proposal. The direction to him was to begin work as soon as possible on the RFP for our component of the project. My intent is to give him a day or two to review the document and to begin work, and then to request a completion date from him. Of course, in order for him to complete the document it will be necessary for LWC to convey additional information concerning the technical components of the project, e.g. point of delivery, route decisions, etc.

Please review the attached and forward any comments you have to me. Also, I will need additional input ASAP regarding the technical features of the project so that these can be conveyed.

**PRELIMINARY ROUTE ANALYSIS
FOR
BLUEGRASS WATER PROJECT**

PRELIMINARY ROUTE ANALYSIS
FOR
BLUEGRASS WATER PROJECT

LOUISVILLE WATER COMPANY

WILLIAM J. RHODES

MAY 1, 1998

Forward

Three scenarios, with two alternatives each, have been proposed for providing water to the Kentucky-American Water Company (KAWC). This report evaluates constructibility issues for the six alternatives, with comments on each, and a tabulation of significant elements for the routes in a matrix format.

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SCENARIO DESCRIPTIONS

Scenario 1 would provide delivery point at the Jefferson-Shelby County line.

Route 1a would start at English Station Road and run along US 60 to Eastwood, then parallel to railroad tracks to the Jefferson-Shelby County line near Clarks Station Road at Spotswood. Total length of this path has been estimated to be 30,600 feet. There would be a 23 MGD Pumping Station located around elevation 740 near Clarks Station Road at the Jefferson-Shelby County Line. A 2 million gallon elevated tank would be located on the suction side of the pumping station.

Route 1b would begin at English Station Road and go along Urton Lane parallel to I-265 to I-64, then parallel to I-64 to Clarks Station Road near the Jefferson County line at Spotswood. Total length of this route has been estimated to be 35,400 feet. There would be a 23 MGD Pumping Station located around elevation 740 near Clarks Station Road at the Jefferson-Shelby County Line. A 2 million gallon elevated tank would be located on the suction side of the pumping station.

Scenario 2 calls for delivery at Hwy 1848, near Simpsonville.

Route 2a starts at English Station Road and follows US 60 to Simpsonville, then on Old Veechdale Rd and across I-64 to Highway 1848, just south of its interchange with I-64. Total length of this route has been estimated to be 55,400 feet. There would be a 23 MGD pumping station located at the LWC English Station Road property. The existing 10 million gallon English Station Reservoir would serve as suction for the pumping station. A 2 million gallon elevated distribution storage tank would be constructed near the flea market site at Simpsonville, located at I-64 and Hwy 1848.

Route 2b begins at English Station Road, then follows Urton Lane and I-265 to I-64, then generally parallels I-64 to Hwy 1848 near Simpsonville. Total length of this route has been estimated to be 54,700 feet. There would be a 23 MGD pumping station located at Pope Lick Road, near the I-64 and I-265 interchange. The existing 10 million gallon English Station Reservoir would serve as suction for the pumping station. A 2 million gallon elevated distribution storage tank would be constructed near the flea market site at Simpsonville, located at I-64 and Hwy 1848.

Scenario 3 would provide delivery at Hwy 55, near Shelbyville.

Route 3a goes from English Station Road to US 60 and follows it to Simpsonville, then on Old Veechdale Rd, across I-64 to Highway 1848, just south of its interchange with I-64, then parallel to I-64 with delivery point at Hwy 155 at Shelbyville. Total length of this route has been estimated to be 77,900 feet. There would be a 23 MGD pumping station located at the LWC English Station Road property. The existing 10 million gallon English Station Reservoir would serve as suction for the pumping station. A 2 million gallon elevated distribution storage tank would be constructed near Shelbyville, at a site located close to the Hwy 155 interchange with I-64.

Route 3b begins at English Station Road and follows Urton Lane and I-265 to I-64, then generally parallel to I-64 to the delivery point at Hwy 55 near Shelbyville. Total length of this route has been estimated to be 77,200 feet. There would be a 23 MGD pumping station located at Pope Lick Road, near the I-64 and I-265 interchange. The existing 10 million gallon English Station Reservoir would serve as suction for the pumping station. A 2 million gallon elevated distribution storage tank would be constructed near Shelbyville, at a site located close to the Hwy 155 interchange with I-64.

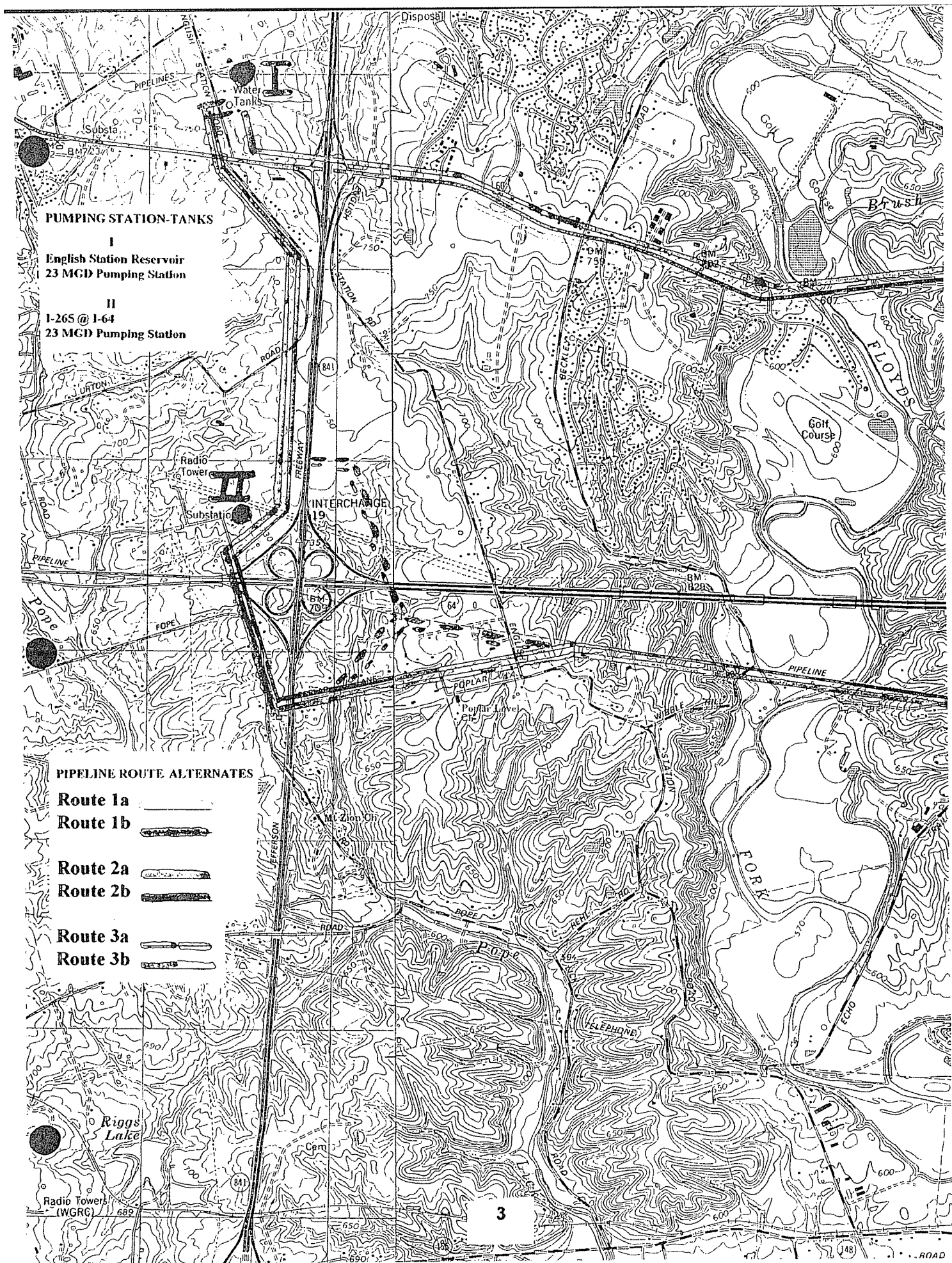
LWC BLUEGRASS PROJECT PIPE ROUTES MATRIX

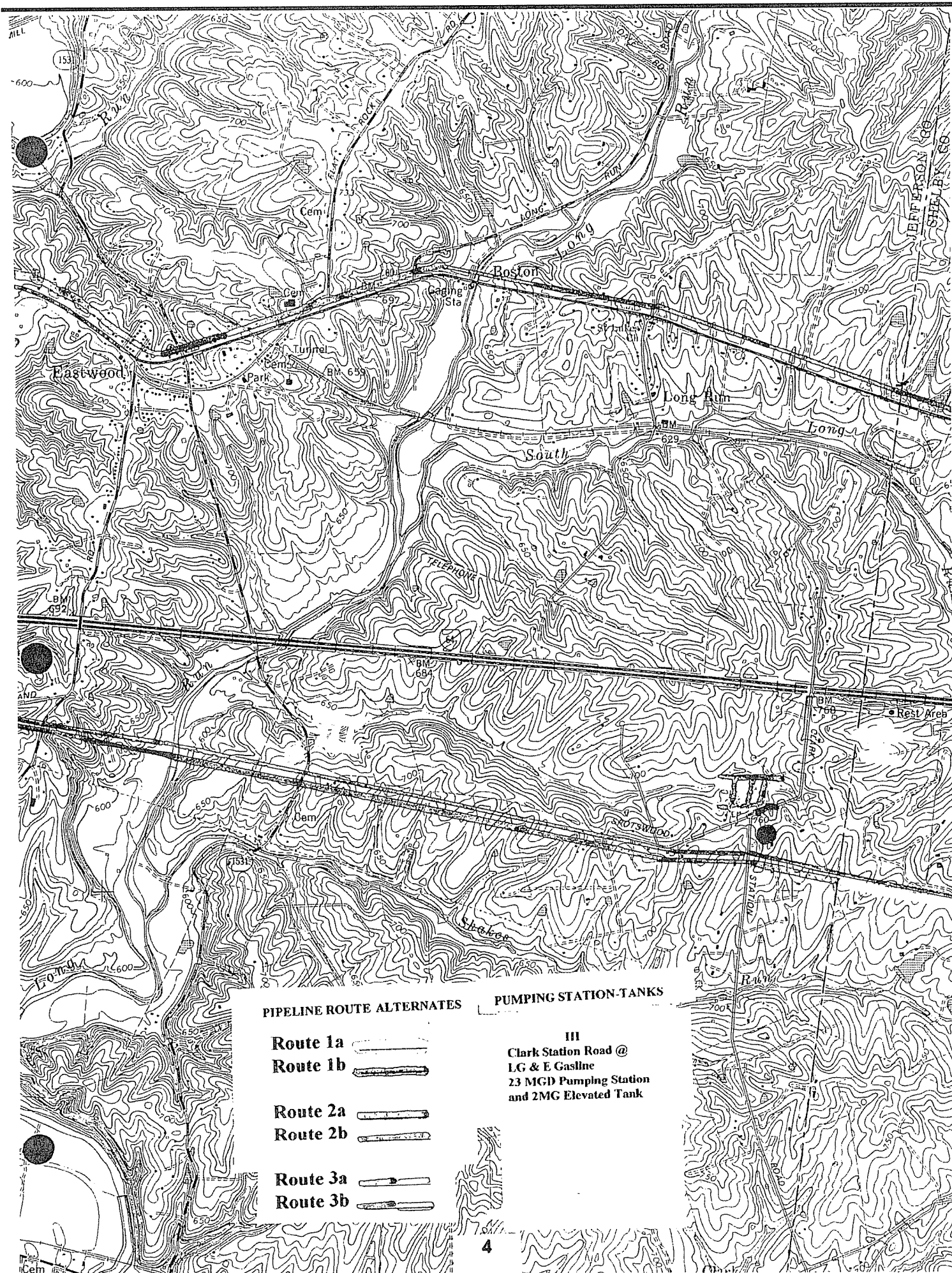
ROUTE CHARACTERISTICS

SCENARIO	1a (Yellow)	1b (Blue)	2a (Green)	2b (Red)	3a (Green + Orange)	3b (Red + Orange)
DESCRIPTION	English Sta. Rd. to US 60 800 ft of 60", then 23,700 ft 42" along US 60 to Eastwood area RR tracks to Spotswood area 23 MGD Pumping Station and 2 MG elevated Tank at Spotswood	English Sta. Rd. to Union Ln., parallel to I-265, 10,200 ft 60", then parallel to I-64, 25,200 ft 42" to Clarks Sta. Rd. 23 MGD Pumping Station and 2 MG elevated Tank at Spotswood	English Sta. Rd. to US 60 800 ft of 60", then 54,500 ft 48" to Old Veatchdale, across I-64 to 2MG elevated tank near Simpsonville (800msl) 23 MGD Pumping Station at English Station Reservoir	English Sta. Rd. to Union Ln., parallel to I-265, 10,200 ft 60", 44,500 ft of 48" to Hwy 1848 to 2MG elevated tank near Simpsonville (800msl) 23 MGD Pumping Station near I-64 and I-265 interchange	Follow Route 2a, then proceed parallel to I-64, 22,500 ft 48" to I-64 Exit 55 at Shelbyville 2MG elevated tank near Hwy 55 at Shelbyville 23 MGD Pumping Station near I-64 and I-265 interchange	Follow Route 2b, then proceed parallel to I-64, 22,500 ft 48" to I-64 Exit 55 at Shelbyville 2MG elevated tank near Hwy 55 at Shelbyville 23 MGD Pumping Station near I-64 and I-265 interchange
FOOTAGES	ESTIMATED 30,600 ft ESTIMATED 110 AVERAGE 280 ft.	ESTIMATED 35,400 ft ESTIMATED 57 AVERAGE 620 ft	ESTIMATED 55,400 ft ESTIMATED 165 AVERAGE 340 ft	ESTIMATED 54,700 ft ESTIMATED 75 AVERAGE 730 ft	ESTIMATED 77,900 ft ESTIMATED 165 AVERAGE 420 ft	ESTIMATED 77,200 ft ESTIMATED 85 AVERAGE 810 ft
MAJOR FEATURES CROSSINGS	US-60 I-265 I-64 Floyds Fork Long Run S Long Run Parallel to L & N	US-60 I-64 I-265 Floyds Fork Long Run	I-265 US-60 I-64 Floyds Fork Long Run Ponds "Southern"	US-60 I-64 I-265 Floyds Fork Long Run Ponds "Southern"	I-265 US-60 I-64 Floyds Fork Long Run Ponds "Southern"	US-60 I-64 I-265 Floyds Fork Long Run Buckskin "Southern"

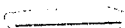

OBSERVATIONS MATRIX

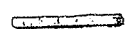
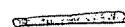
	POSITIVE	NEUTRAL	NEGATIVE	POSITIVE	NEUTRAL	NEGATIVE	POSITIVE	NEUTRAL	NEGATIVE	POSITIVE	NEUTRAL	NEGATIVE	POSITIVE	NEUTRAL	NEGATIVE
ROCK		3			3										
TREES		3			3										
LANDSCAPING			1			1									
DRIVEWAYS			1			1									
SIGNATURE ENTRY			1			1									
WETLANDS			1			1									
ARCHAEOLOGICAL		3			3										
UST POTENTIAL			1			1									
RAILROADS			1			1									
CREEKS- DRAINAGE			1			1									
OVERHEAD ELECTRIC		3			3										
PIPELINES		3			3										
COMMUNICATIONS TOWERS		3			3										
STRAY CURRENT		3			3										
ANODE BEDS		3			3										
TRAFFIC CONTROL			1			1									
ACCESS			1			1									
CONSTRUCTION	5			5						5			5		
MAINTENANCE	5			5						5			5		
SERVICE EXTENSION	5			5						5			5		
TERRAIN	5			5						5			5		
KDOH PROPERTY AVAILABLE			1			1									
JEFFERSON CO. EASEMENTS			1			1									
SHELBY CO. EASEMENTS			1			1									
480 V, 3 PHASE POWER (Pump Sta.)			1			1									
COLUMN TOTAL	20	21	14	50	30	5	61	89	81	20	30	11	55	30	4
ROUTE RATING TOTAL	55														







PIPELINE ROUTE ALTERNATES

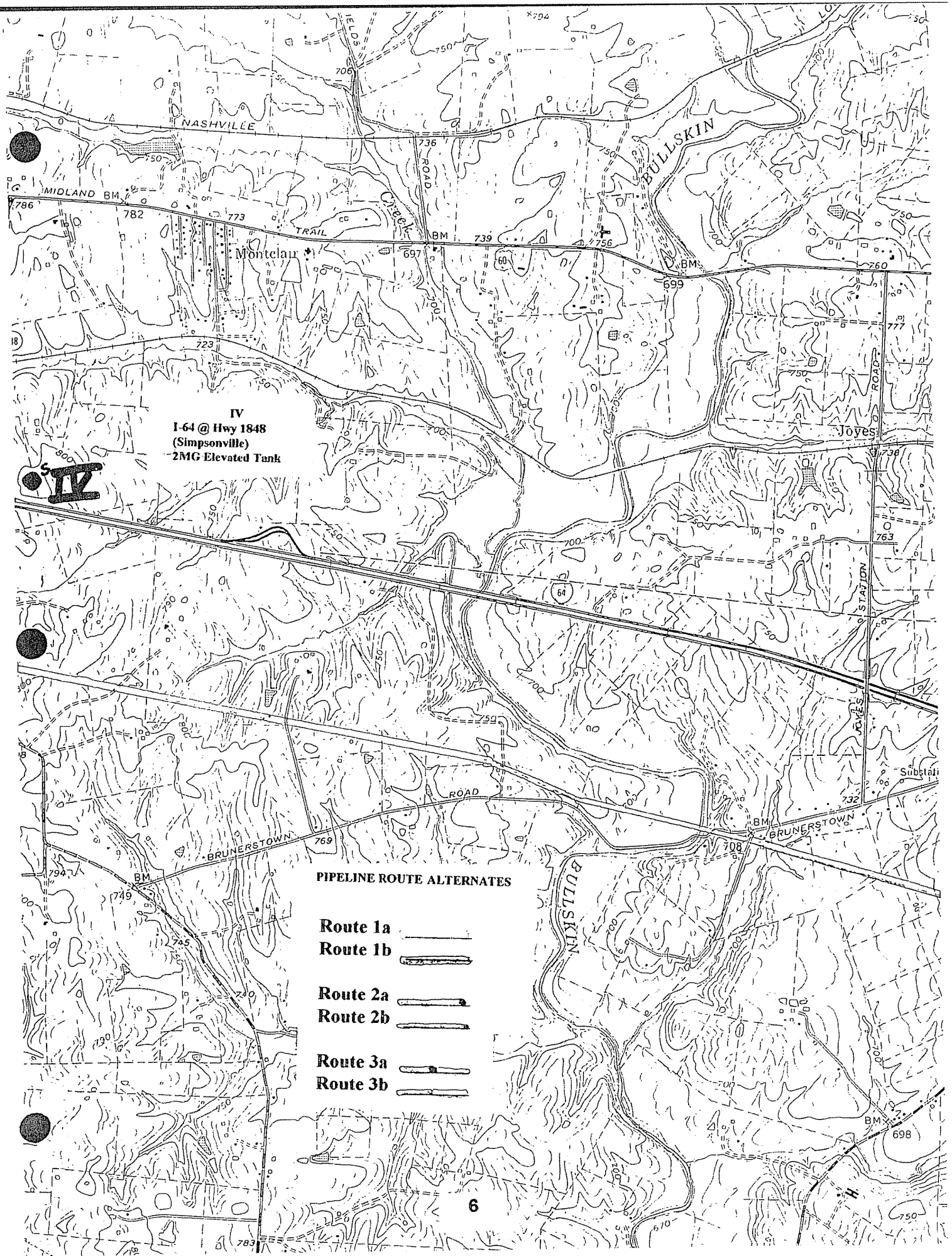
Route 1a 
Route 1b 

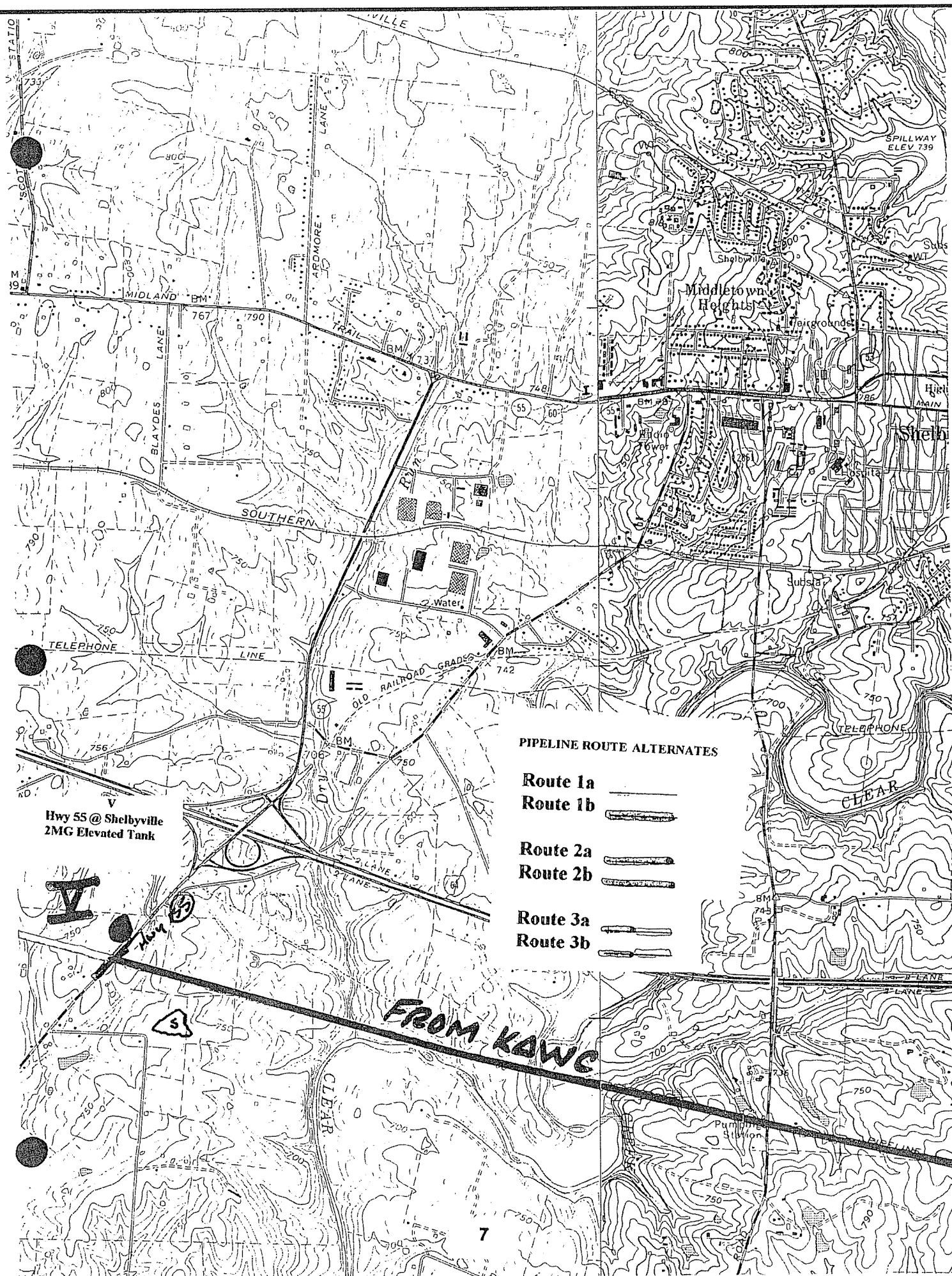
Route 2a 
Route 2b 

Route 3a 
Route 3b 

PUMPING STATION-TANKS

III
Clark Station Road @
LG & E Gasline
23 MGD Pumping Station
and 2MG Elevated Tank





SCENARIO 1

DELIVERY at JEFFERSON-SHELBY COUNTY LINE

OBSERVATIONS

Route 1a

English Station Road to US 60, 900 lf of 60-inch, then 29,700 lf of 42-inch along US 60 to Eastwood and then parallel to railroad tracks to the Jefferson-Shelby County line near Clarks Station Road at Spotswood. Total length of this path has been estimated to be 30,600 feet. There would be a 23 MGD Pumping Station located around elevation 740 near Clarks Station Road at the Jefferson-Shelby County Line. A 2 million gallon elevated tank would be located on the suction side of the pumping station.

US 60 at I-265 Interchange

Consideration of alternate path to avoid current interchange traffic and utility congestion, and potential future re-construction is recommended. Perhaps a path exiting the rear of LWC English Station Reservoir property, tunneling I-265 there and merging into US 60 east of interchange.

US 60 at Floyds Fork Crossing

The existing utilities, homes on south side, old bridge next to current in-use structure contribute to tight spot issues. Valhala golf course is on north side. This area is pretty tight.

Railroad Tracks from Eastwood to Clarks Station Road

The tracks at Eastwood are in a tunnel which penetrates the hill on which Eastwood sits. It exits near Long Run at the edge of Ashmoor Woods subdivision. The tracks at the location at rear of subdivision are on an berm, which is elevated 20 feet or so. The access to tunnel opening was shown on USGS map, but is on private property. Attempts to gain permission to drive through the property could not be obtained, as there was no one home when the attempt was made.

Corrosion issues near railroad bed may need to be checked out, if pipeline is installed near tracks.

Some of the desired advantages of the route next to an adjacent railroad are lost here because the water line would have to go "cross country, perhaps diagonally through a farm/nursery to reach the east tunnel exit and then run parallel to tracks. Once at the bottom, there is a pretty large bottomland area to be crossed at Long Run. There are elevated railroad tracks near Long Run, that are discussed later in this list of comments.

Route 1b

English Station Road to Urton Lane, parallel to I-265, 10,200 lf of 60-inch, then 25,200 lf of 42-inch parallel to I-64 to Clarks Station Road near the Jefferson County line, near Spotswood. Total length of this route has been estimated to be 35,400 feet. There would be a 23 MGD Pumping Station located around elevation 740 near Clarks Station Road at the Jefferson-Shelby County Line. A 2 million gallon elevated tank would be located on the suction side of the pumping station.

English Station Rd to I-64

Tunnel at US 60, Urton Lane Route ok to I-64. The strip between US 60 and the new fire station is tight for the first 700 feet or so, due to a currently out for bid 16-inch water main, storm drains, and other underground facilities.

Truck turn around needed at I-64, because of dead end Pope Lick Road. There is an existing easement along part of Pope Lick for newly installed CWEP main.

I-64 to I-265

Tunnel at I-64, old roadway on south side of I-64 accessible for tunnel shaft and transition to pipe route

I-265 to English Station Road

Tunnel I-265 at Old Poplar Lane, along that road to area near New Poplar Lane transition with old (built to re-route for I-265).

Route along Poplar Lane to English Station Road at Poplar Level Church appears quite difficult.

There are several large signature entryways, a couple of ponds that are near the road right of way, and an old, 2 acre or so water filled rock quarry on this pathway.

If this overall path is used, it is recommended that it diverge north near the Old Poplar-New Poplar intersection to follow a path to the LG & E gas route through the currently being developed subdivision at English Station Road and I-64 (opposite I-64 from Christian Academy site).

Alternate I-64 to I-265, & I-265 to English Station Road

Because of the Poplar Lane issues, it is recommended that consideration be given to crossing I-265 near Urton, or Pope Lick to Christian Academy site, cross I-64 to the subdivision at English Station Road and I-64.

English Station Road to Floyds Fork

The route appears OK. Significant terrain change when heading down to the Floyds Fork flood plain.

There is an active sod farm being operated on the "Osterriter" property at Beckley Station Road and Wibble Hill Road adjacent to Floyds Fork. Basically all of the creek bottom land at this location. It is believed that there was some controversy in the area when MSD was choosing a location for their treatment plant, now under construction directly across I-64.

SCENARIO 2

DELIVERY at HIGHWAY 1848 NEAR SIMPSONVILLE

OBSERVATIONS

Route 2a

English Station Road to US 60, 900 lf of 60-inch, then 54,500 lf of 48-inch to Old Veechdale Rd, across I-64 to Highway 1848, just south of its interchange with I-64. Total length of this route has been estimated to be 55,400 feet. There would be a 23 MGD pumping station located at the LWC English Station Road property. The existing 10 million gallon English Station Reservoir would serve as suction for the pumping station. A 2 million gallon elevated distribution storage tank would be constructed near the flea market site at Simpsonville, located at I-64 and Hwy 1848.

US 60 at I-265 Interchange

Consideration of alternate path to avoid current interchange traffic and utility congestion, and potential future re-construction is recommended. Perhaps a path exiting the rear of LWC English Station Reservoir property, tunneling I-265 there and merging into US 60 east of interchange.

US 60 at Floyds Fork Crossing

The existing utilities, homes on south side, old bridge next to current in-use structure contribute to tight spot issues. Valhala golf course is on north side. This area is pretty tight.

US 60 at Long Run Creek Crossing

The path at Floyds Fork bridge is bottlenecked by structures and converging utilities at this location. Location is in a curve of US 60 at the bottom of hill from Eastwood. This looks like a very difficult spot to work through.

US 60 at Railroad tracks just west of Simpsonville

Significant difficulty is apparent at the US 60 overpass at "L & N" railroad tracks. There are gas, water lines parallel to US 60. Homes are tight to right of way on north side of US 60, on both sides of tracks. At this site, on south side there is a lumber yard. The paths that look like a good place to install facilities, appear to be "taken" by other utilities.

US 60 at, and along Old Veechdale Road to I-64

Old Veechdale Rd from US 60 to I-64 looks tough. Narrow partially dead end road, tight ROW, tight utilities, and trees. An alternate appears 1/4 mile west. Fairview to Lake Shore to the rear property line of Old Veechdale Road, thence to I-64. There used to be a lake along this path. There were cat tails observed in parts of old lake bed. There was an elevated water tank on Fairview. Existing utilities could be conflicting (sewer, water, etc).

Alternate Route 2a, US 60 to US Job Corps Center, south to I-64

Because of the Simpsonville congestion at railroad and Old Veechdale Road, it is recommended that consideration be given to diverting Route 2a south from US 60 through the Job Corp Center. Preliminary investigation revealed open pathway that could intersect with the Route 2b, near where it intersects with KY Hwy 1399 (Clark Station-Veechdale Road). If this alternate is pursued, Mr Underhill, of the Job Corp Center management, recommended contacting Dr. Sam Robinson of the Lincoln Institute, in Louisville. LI leases property to the Job Corp Center.

English Station Road 23 MGD Pumping Station

LWC property has several facilities cited there. Care in adding the pumping station would be necessary. There are several vacant tracts of land adjacent to LWC property, so there is likelihood of finding a plot of land for the station. LG & E advises that power is readily available to the site.

Simpsonville 2MG Elevated Distribution Tank

There appear to be sufficient vacant tracts of land in the area near the I-64 and Hwy 1848 interchange to find a plot of land for the elevated tank.

General Notes:

US 60 traffic volume is fairly high, and moves at posted limits, or higher (55 mph). This is particularly significant in the two lane sections, from Eastwood in Jefferson County all the way to Simpsonville in Shelby County. The traffic control elements along this path will require careful planning, and execution so as to ensure safe delivery of pipe materials and equipment.

The estimated number of easements for the route through Veechdale, is 165.

Route 2b

English Station Road to Urton Lane, parallel to I-265, 10,200 lf of 60-inch, then 44,500 lf of 48-inch parallel to I-64 to Hwy 1848 near Simpsonville. Total length of this route has been estimated to be 54,700 feet. There would be a 23 MGD pumping station located at South Pope Lick Road, near the I-64 and I-265 interchange (southwest quadrant). The existing 10 million gallon English Station Reservoir would serve as suction for the pumping station. A 2 million gallon elevated distribution storage tank would be constructed near the flea market site at Simpsonville, located at I-64 and Hwy 1848.

English Station Rd to I-64

Tunnel at US 60, Urton Lane route ok to I-64. The strip between US 60 and the new fire station is tight for the first 700 feet or so, due to a currently out for bid 16-inch water main, storm drains, and other underground facilities.

Truck turn around needed at I-64, because of dead end Pope Lick Road. There is an existing easement along part of Pope Lick for newly installed CWEP main. Truck turn around needed at I-64, because of dead end Pope Lick Road. Existing easement along part of Pope Lick for newly installed CWEP main.

I-64 to I-265

Tunnel at I-64, old roadway on south side of I-64 accessible for tunnel shaft and transition to pipe route

I-265 to English Station Road

Tunnel I-265 at Old Poplar Lane, along that road to area near New Poplar Lane transition with old (built to re-route for I-265). Route along Poplar Lane to English Station Road at Poplar Level Church appears quite difficult. There are several large signature entryways, a couple of ponds that are near the road right of way, and an old, 2 acre or so water filled rock quarry on this pathway.

If this overall path is used, it is recommended that it diverge north near the Old Poplar-New Poplar intersection to follow a path to the LG & E gas route through the currently being developed subdivision at English Station Road and I-64 (opposite I-64 from Christian Academy site).

Alternate I-64 to I-265, & I-265 to English Station Road

Because of the Poplar Lane issues, it is recommended that consideration be given to crossing I-265 near Urton, or Pope Lick to Christian Academy site, cross I-64 to the subdivision at English Station Road and I-64.

English Station Road to Floyds Fork

The route appears OK. Significant terrain change when heading down to the Floyds Fork flood plain. There is an active sod farm being operated on the "Osterriter" property at Beckley Station Road and Wibble Hill Road adjacent to Floyds Fork. Basically all of the creek bottom land at this location. It is believed that there was some controversy in the area when MSD was choosing a location for their treatment plant, now under construction directly across I-64.

Floyds Fork to Echo Trail

The gas line is a little difficult to find in this vicinity. It crosses Gilliland Rd. between 1201 and 1211. It appears that the gas line is near 1201. Installing the water line here would have some solvable design issues. Terrain change coming out of Floyds Fork bottom land. There is a creek crossing to make between Wibble Hill Road and Gilliland Rd.

Echo Trail to Fischerville Road

Pipe route as observed from paved roadway at gas route crossing appeared OK. USGS maps show significant grade changes between Echo Trail and Fischerville Rd when entering the Long Run valley. There is a creek crossing at Long Run.

Fischerville Road to Spotswood - Clark Station Road

The route from Spotswood Road to Clark Station Road has a few tight spots for additional facility placement, due to existing home sites and landscaping elements.. ponds, gardens etc. Route near Spotswood Road, between Clark Ridge Rd. appears to thread between homes and outbuildings. Five to six houses affected. Routing appears possible, but some challenges exist here. Not out of the ordinary though. There is a long, connected series of dead end roadways that must handle resident access during construction.

Spotswood - Clark Station Road to Conner Station Road, Conner Station Road to KY Hwy 1399, and KY Hwy 1399 to KY Hwy 1848

Routes as observed from paved surfaces look fine.

Pope Lick Road 23 MGD Pumping Station

There appear to be sufficient vacant tracts of land in the area near the I-64 and I-265 interchange to find a plot of land for the station. LG & E advises that power is readily available to the site.

Simpsonville 2MG Elevated Distribution Tank

There appear to be sufficient vacant tracts of land in the area near the I-64 and Hwy 1848 interchange to find a plot of land for the elevated tank.

General Notes:

The route was observed from the paved roadways near the LG & E gas line route, which is generally parallel to I-64.

Access to route 2b adjacent to the gas line, if not within the confines of the easement, will be on narrow roads, with soft shoulders. They appear to be quite well maintained and are currently in good condition.

Roadways that cross under I-64 through "culvert type access tunnels" may have vertical clearance problems for pipe delivery. The roads are: Beckley Station Rd and Fischerville Rd. in Jefferson County, and Conner Station Rd. in Shelby County.

Easement requirements for the route is estimated to be 75.

Production is expected to be higher here than along US 60, due to open country nature of pathway. Large stretches of favorable terrain were observed.

Stray current and gas line cathodic protection issues may exist along path parallel to gas easement. Blasting control for rock removal near gas routes will require close and careful monitoring to ensure safe construction.

SCENARIO 3

DELIVERY at HIGHWAY 55 NEAR SHELBYVILLE

Route 3a

English Station Road to US 60, 900 lf of 60-inch, then 54,500 lf of 48-inch to Old Veechdale Rd, across I-64 to Highway 1848, just south of its interchange with I-64, then 22,500 lf of 48-inch parallel to I-64 with delivery point at Hwy 55 at Shelbyville. Total length of this route has been estimated to be 77,900 feet. There would be a 23 MGD pumping station located at the LWC English Station Road property. The existing 10 million gallon English Station Reservoir would serve as suction for the pumping station. A 2 million gallon elevated distribution storage tank would be constructed near Shelbyville, at a site located close to the Hwy 55 interchange with I-64.

US 60 at I-265 Interchange

Consideration of alternate path to avoid current interchange traffic and utility congestion, and potential future re-construction is recommended. Perhaps a path exiting the rear of LWC English Station Reservoir property, tunneling I-265 there and merging into US 60 east of interchange.

US 60 at Floyds Fork Crossing

The existing utilities, homes on south side, old bridge next to current in-use structure contribute to tight spot issues. Valhala golf course is on north side. This area is pretty tight.

US 60 at Long Run Creek Crossing

The path at Floyds Fork bridge is bottlenecked by structures and converging utilities at this location. Location is in a curve of US 60 at the bottom of hill from Eastwood. This looks like a very difficult spot to work through.

US 60 at Railroad tracks just west of Simpsonville

Significant difficulty is apparent at the US 60 overpass at "L & N" railroad tracks. There are gas, water lines parallel to US 60. Homes are tight to right of way on north side of US 60, on both sides of tracks. At this site, on south side there is a lumber yard. The paths that look like a good place to install facilities, appear to be "taken" by other utilities.

US 60 at, and along Old Veechdale Road to I-64 and Hwy 1848

Old Veechdale Rd from US 60 to I-64 looks tough. Narrow partially dead end road, tight ROW, tight utilities, and trees. An alternate appears 1/4 mile west. Fairview to Lake Shore to the rear property line of Old Veechdale Road, thence to I-64. There used to be a lake along this path. There were cat tails observed in parts of old lake bed. There was an elevated water tank on Fairview. Existing utilities could be conflicting (sewer, water, etc).

KY Hwy 1848 to KY Hwy 55

Route as observed from paved surfaces looks fine.

Alternate Route 3a, US 60 to US Job Corps Center, south to I-64

Because of the Simpsonville congestion at railroad and Old Veechdale Road, it is recommended that consideration be given to diverting Route 2a south from US 60 through the Job Corp Center. Preliminary investigation revealed open pathway that could intersect with the Route 2b, near where it intersects with KY Hwy 1399 (Clark Station-Veechdale Road). If this alternate is pursued, Mr Underhill, of the Job Corp Center management, recommended contacting Dr. Sam Robinson of the Lincoln Institute, in Louisville. LI leases property to the Job Corp Center.

English Station Road 23 MGD Pumping Station

LWC property has several facilities cited there. Care in adding the pumping station would be necessary. There are several vacant tracts of land adjacent to LWC property, so there is likelihood of finding a plot of land for the station. LG & E advises that power is readily available to the site.

Shelbyville 2MG Elevated Distribution Tank

There appear to be sufficient vacant tracts of land in the area near the I-64 and Hwy 55 interchange to find a plot of land for the elevated tank.

General Notes:

US 60 traffic volume is fairly high, and moves at posted limits, or higher (55 mph). This is particularly significant in the two lane sections, from Eastwood in Jefferson County all the way to Simpsonville in Shelby County. The traffic control elements along this path will require careful planning, and execution so as to ensure safe delivery of pipe materials and equipment.

This route, where not adjacent to US 60 was observed from paved roadway surfaces.

The estimated number of easements for the route through Veechdale, is 185.

Stray current and gas line cathodic protection issues may exist along the portion of path parallel to gas easement. Blasting control for rock removal near gas line will require close and careful monitoring to ensure safe construction.

ROUTE 3b

English Station Road to Urton Lane, parallel to I-265, 10,200 lf of 60-inch, then 44,500 lf of 48-inch parallel to I-64 to Hwy 1848 near Simpsonville, then 22,500 lf of 48-inch parallel to I-64 with delivery point at Hwy 155 at Shelbyville. Total length of this route has been estimated to be 77,200 feet. There would be a 23 MGD pumping station located at Pope Lick Road, near the I-64 and I-265 interchange. The existing 10 million gallon English Station Reservoir would serve as suction for the pumping station. A 2 million gallon elevated distribution storage tank would be constructed near Shelbyville, at a site located close to the Hwy 55 interchange with I-64.

English Station Rd to I-64

Tunnel at US 60, Urton Lane route ok to I-64. The strip between US 60 and the new fire station is tight for the first 700 feet or so, due to a currently out for bid 16-inch water main, storm drains, and other underground facilities.

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If this overall path is used, it is recommended that it diverge north near the Old Poplar-New Poplar intersection to follow a path to the LG & E gas route through the currently being developed subdivision at English Station Road and I-64 (opposite I-64 from Christian Academy site).

Alternate I-64 to I-265, & I-265 to English Station Road

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The route appears OK. Significant terrain change when heading down to the Floyds Fork flood plain. There is an active sod farm being operated on the "Osterriter" property at Beckley Station Road and Wibble Hill Road adjacent to Floyds Fork. Basically all of the creek bottom land at this location. It is believed that there was some controversy in the area when MSD was choosing a location for their treatment plant, now under construction directly across I-64.

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Spotswood - Clark Station Road to Conner Station Road, Conner Station Road to KY Hwy 1399, KY Hwy 1399 to KY Hwy 1848, and KY Hwy 1848 to KY Hwy 55

Routes as observed from paved surfaces look fine.

Pope Lick Road 23 MGD Pumping Station

There appear to be sufficient vacant tracts of land in the area near the I-64 and I-265 interchange to find a plot of land for the station. LG & E advises that power is readily available to the site.

Shelbyville 2MG Elevated Distribution Tank

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Roadways that cross under I-64 through "culvert type access tunnels" may have vertical clearance problems for pipe delivery. The roads are: Beckley Station Rd and Fischerville Rd. in Jefferson County, and Conner Station Rd. in Shelby County.

Easement requirements for the route is estimated to be 95.

Production is expected to be higher here than along US 60, due to open country nature of pathway. Large stretches of favorable terrain were observed.

Stray current and gas line cathodic protection issues may exist along path parallel to gas easement. Blasting control for rock removal near gas routes will require close and careful monitoring to ensure safe construction.

PUMPING STATION and ELEVATED TANK DISCUSSION

Clarks Station Road 23 MGD Pumping Station , and 2MG Elevated Tank (Tank on suction side of pumping station)

There appears to be sufficient acreage in the vicinity to installing a pumping station and elevated suction reservoir. However, LG & E advises that power availability to the Clark Station Road at Spotswood Road location is poor. They would have to come from US 60 to bring in a feed. Indications are that this would be an expensive installation.

English Station Road 23 MGD Pumping Station

LWC property has several facilities cited there. Care in adding the pumping station would be necessary. There are several vacant tracts of land adjacent to LWC property, so there is likelihood of finding a plot of land for the station. LG & E advises that power is readily available to the site.

Pope Lick Road 23 MGD Pumping Station

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Shelbyville 2MG Elevated Distribution Tank

There appears to be sufficient vacant tracts of land in the area near the I-64 and Hwy 55 interchange to find a plot of land for the elevated tank.

EASEMENT DISCUSSION

Jefferson County

LOJIC data was utilized to estimate the number of Jefferson County easements required for all pipeline routes. A meeting attended by Bill Rhodes, Jason Jones and James Bates was held 3/25/98 in James' office. Techniques for extracting information about the potentially affected properties were explored. It was determined that LOJIC "layers" of aerial photo data, contours and roadways could be used to define points on the routes, which could then be connected to show the "route lines". The LOJIC database then would be queried for information about properties intersected by the lines. Information retrieved, and loaded into an Excel file would include lot & block number, owner name & address, property address, PVA assessed values of property (including improvements).

The routes were visually approximated on the monitor, with point and click techniques used to input these points into the computer. The roadways and LG&E gas lines route were fairly distinct on the photo data. They agreed with representations on the USGS Jeffersontown, and Fischerville quads. These points therefore are approximate, but deemed reasonably accurate for estimating orders of magnitude for easement quantities, and their values.

A copy of the Excel spreadsheet showing Jefferson County PVA information , and a diagram depicting the properties is included on the following pages.

Shelby County

Records in the Shelby County Property Valuation Office were used to estimate the number of Shelby County easements for the routes. They are in the form of an aerial photo grid on which the properties are shown. A visual approximation of the routes was made, and the easements were counted. The count is not precise, but is felt to be reasonably accurate for estimating orders of magnitude for easement quantities.

No additional research for Shelby County property or owner data was made. No attachments are included for the Shelby County portions of the routes.

Easement Summary

Estimated easement quantities and average lengths are tabulated in the Route Characteristics section of the "LWC Bluegrass Project Pipe Routes Matrix".

BLUEGRASS WATER PROJECT

ROUTE 1

3/21/95

AREA	BLOCK	LOT	SUBLOT	LOT SIZE	PROPERTY ADDRESS	DEED BOOK	DEED PAGE	OWNER LAST NAME	OWNER FIRST NAME	OWNER SECOND NAME	OWNER ADDRESS	CITY	ST	ZIP	VALUE
200503.48633	0041	0166	0000	0.05000	1300 S BECKLEY STATION RD	5685	693	OESTERRITTER	ROBERT J &	MADALYN M	1300 S BECKLEY STATION R	LOUISVILLE	KY	40245	57240
349286.11914	0042	0143	0000	0.08598	2027 CLARK STATION RD	5428	568	GOING	IM LEE & SARAH D		2027 CLARK STATION RD	FISHERVILLE	KY	40023	209720
129899.63770	0042	0110	0000	0.03000	2048 CLARK STATION RD	6159	190	OTTING	PATRICIA A		2059 CLARK STATION RD	FISHERVILLE	KY	40023	21505
128677.50732	0042	0111	0000	0.03000	2050 CLARK STATION RD	6159	90	OTTING	PATRICIA A		2059 CLARK STATION RD	FISHERVILLE	KY	40023	255470
546292.31250	0042	0104	0000	0.04620	CLARK STATION RD	6833	200	SHEETS	MICHAEL C &	PATRICIA L	2769 COSTIGAN WAY	LOUISVILLE	KY	40220	34700
107132.03369	0042	0093	0000	0.04000	1401 EASTWOOD FISHERVILLE RD	4300	429	AARON	LARRY T & AUDREY K		1401 EASTWOOD FISHERVILL	FISHERVILLE	KY	40023	134360
208089.80688	0042	0147	0000	0.05000	1410 EASTWOOD FISHERVILLE RD	6247	803	BODE	THOMAS C & RUTH ANN		1410 FISHERVILLE RD	FISHERVILLE	KY	40023	175000
9790417.33163	0042	0023	0000	2.25000	1515 EASTWOOD FISHERVILLE RD	6873	844	HOLLOWAY	BILLY S		PO BOX 43277	LOUISVILLE	KY	40253	987200
3082684.65924	0042	0184	0000	179.00000	EASTWOOD FISHERVILLE RD	5470	178	MARKS	JAMES P JR &	PATRICIA P	#2 EASTWOOD RD	FISHERVILLE	KY	40023	0
219895.08545	1990	0003	0000	0.05172	1404 ECHO TRL	5595	873	BROWN	H L & VICKI T		1404 ECHO TRL	JEFFERSONTOWN	KY	40299	230000
288923.50439	1977	0008	0000	0.06715	1405 ECHO TRL	5363	18	YOUNG	JOHN M		1405 ECHO TRL	LOUISVILLE	KY	40245	195000
523346.81689	1977	0007	0000	0.12416	1425 ECHO TRL	5209	247	DITSCH	CARL C		1425 ECHO TRAIL	LOUISVILLE	KY	40223	167510
533109.05568	1977	0006	0000	0.11970	1475 ECHO TRL	5579	376	COOK	GARY L & DONNA W		1475 ECHO TRL	LOUISVILLE	KY	40245	140330
270895.75000	0040	0008	0000	0.06210	1108 S ENGLISH STATION RD	5900	728	RUCCELLA	RODNEY & PEGGY P		1108 S ENGLISH STATION	JEFFERSONTOWN	KY	40299	215120
187505.37744	0041	0075	0000	0.04480	1409 S ENGLISH STATION RD	3669	255	THOMPSON	LUCY LEE		1409 S ENGLISH STATION	JEFFERSONTOWN	KY	40299	27200
310900.14746	0041	0094	0000	0.06800	1605 S ENGLISH STATION RD	4468	161	COY	EDWARDS J & LOIS J		1605 S ENGLISH STA RD	JEFFERSONTOWN	KY	40299	326570
2960121.29004	0032	0058	0000	0.84036	906 ENGLISH STATION RD	6839	752	HEBEL	CHARLES W JR &	CAROL W	5806 ORION RD	LOUISVILLE	KY	40222	110050
3213172.14209	0041	0016	0000	0.74250	FISHERVILLE RD	6897	117	D	W HALLENBERG FAMILY		12300 HOLLY LN	LOUISVILLE	KY	40223	84300
1024371.34009	0041	0012	0000	0.23000	1107 GILLILAND RD	5875	648	THOMPSON	ROGER L &	CAROLYN W	1107 GILLILAND RD	LOUISVILLE	KY	40245	263230
221409.18018	1990	0002	0000	0.05098	1201 GILLILAND RD	5319	804	LANGFORD	ROBERT L		1201 GILLILAND RD	LOUISVILLE	KY	40245	298000
211429.76025	1990	0001	0000	0.05098	1211 GILLILAND RD	5919	852	TAYLOR	MARY A &	HELM WILLIAM B	1211 GILLILAND RD	LOUISVILLE	KY	40245	229725
458679.76580	0041	0149	0000	0.17130	1304 GILLILAND RD	6408	124	GATTI	FRANCESCA E		1304 GILLILAND RD	LOUISVILLE	KY	40245	316580
253328.09375	0041	0185	0000	0.05580	1308 GILLILAND RD	5863	585	TIDWELL	VANCE & NOBUKO O		1308 GILLILAND RD	LOUISVILLE	KY	40223	220000
494867.55225	0041	0180	0000	0.09580	1308 GILLILAND RD	5826	118	LUBA	NORMAN K & LORRAINE		1308 GILLILAND RD	LOUISVILLE	KY	40223	245000
684865.68213	0041	0144	0000	0.17050	GILLILAND RD	6123	484	MARTIN	EDWARD A		1907 CLAREMOOR DR	LOUISVILLE	KY	40223	75000
72898.41357	0437	0047	0000	1.71800	13117 MARCUS AVE	6516	52	SPORTS	& RECREATION INC		4701 WHILLSBOROUGH AVE	TAMPA	FL	33614	2066460
371408.94118	0040	0375	0000	0.08860	14315 OXFORD STATION LN	6931	135	BRAY	DENNIS L &	JENNIFER S	6807 MANSICK RD	LOUISVILLE	KY	40214	43370
253872.17272	0040	0374	0000	0.05360	14331 OXFORD STATION LN	6920	687	ROGERS	MARK & HOLLY		10831 HOBBS STATION RD	LOUISVILLE	KY	40223	30100
233752.78693	0040	0373	0000	0.05410	14401 OXFORD STATION LN	6891	272	READ	THOMAS M & PATTIE B		3206 SENECA PARK RD	LOUISVILLE	KY	40207	30200
238753.81166	0040	0372	0000	0.05490	14415 OXFORD STATION LN	6891	271	GREGORY	STEVE W & TINA M		4905 HUNTERS POINT CIR	LOUISVILLE	KY	40216	30400
790410.09326	0040	0209	0000	0.17130	1301 POPE LICK RD	6194	340	HOLLOWAY	DAVID P &	HENRIDA T	1301 N POPE LICK RD	JEFFERSONTOWN	KY	40289	188480
71643.16455	0437	0028	0000	0.01670	13210 SHELBYVILLE RD	6589	185	PETERSON	HAROLD E		PO BOX 344	COLUMBUS	IN	47202	11320
510063.54839	0023	0674	0000	9.21200	SHELBYVILLE RD	6684	125	MIDDLETOWN	PROPERTY	TRUST	PO BOX 802206	DALLAS	TX	75380	1783630
1076147.66326	0042	0142	0000	0.24756	2508 SPOTSWOOD LN	5501	498	WETHERBY	ALFRED D & NANCY		223 N MADISON AVE	LOUISVILLE	KY	40243	73190
108140.17798	0042	0106	0000	0.02480	1909 SPOTSWOOD RD	6139	109	SCOFIELD	DANIEL S &	JEANNE P	1809 SPOTSWOOD RD	LOUISVILLE	KY	40205	188780
107889.95410	0042	0105	0000	0.02241	1911 SPOTSWOOD LN	5598	908	SETTLE	JAMES E &	PATRICIA A	1911 SPOTSWOOD LN	FISHERVILLE	KY	40023	17900
200732.66802	0042	0090	0000	0.05000	1915 SPOTSWOOD RD	4512	363	SETTLE	JAS E & PATRICIA		1915 SPOTSWOOD RD	FISHERVILLE	KY	40023	188910
202942.35010	0042	0098	0000	0.05000	2001 SPOTSWOOD RD	6371	247	NEICHTER	ANDREW J		2001 SPOTSWOOD RD	FISHERVILLE	KY	40023	183160
197674.98486	0042	0102	0000	0.05000	2125 SPOTSWOOD	4572	202	PEARL	RICHARD A &	PATRICIA D	2125 SPOTSWOOD LN	FISHERVILLE	KY	40023	96360
205995.74316	0042	0109	0000	0.05000	2405 SPOTSWOOD RD	4780	518	CLARK	WAYNE & MARILYN		2405 SPOTSWOOD RD	FISHERVILLE	KY	40023	140560
067046.82031	0042	0103	0000	0.22520	2500 SPOTSWOOD LN	4095	321	COAPLEN	ARTHUR C & ELSIE		2500 SPOTSWOOD LN	FISHERVILLE	KY	40023	130140
192734.23462	0042	0019	0000	0.05160	SPOTSWOOD LN	5369	902	COAPLEN	ARTHUR C & ELSIE		2500 SPOTSWOOD LN	FISHERVILLE	KY	40023	14450
230878.72040	0042	0100	0000	0.05040	1913 SPOTWOOD RD	6916	827	CARLSON	KENNETH M &	CARLSON JANICE LITMAN	1913 SPOTSWOOD RD	FISHERVILLE	KY	40023	162700
392584.48272	0437	0008	0000	0.08632	1108 URTON LN	6581	612	MIDDLETOWN	FIRE		11704 US HWY 60	LOUISVILLE	KY	40243	425000
209465.90186	0437	0007	0000	0.05000	114 URTON LN	0	0	DUFF	HARRY L & DAISY		114 URTON LANE	LOUISVILLE	KY	40223	117360
208802.07227	0437	0034	0000	0.05000	118 URTON LN	4201	594	KUTE	WM E & ANNA D		118 URTON RD	LOUISVILLE	KY	40223	113920
408494.78172	0437	0005	0000	< 1/4 ACRE	300 URTON LN	0	0	NALLY	AMELIA	OCHSNER ET AL	300 URTON LN	LOUISVILLE	KY	40223	0
2514566.98877	0032	0187	0000	< 1/4 ACRE	URTUN LN	6098	362	FREEMAN	CORPORATE GROUP	LTD	1113 SPRINGSIDE CT	LOUISVILLE	KY	40223	400000
474944.03418	0041	0178	0000	0.48108	14801 WBBLE HILL RD	5974	567	THOMAS	JAMES K & KATHY G		14801 WBBLE HILL RD	LOUISVILLE	KY	40245	158000
1909559.28996	0041	0179	0000	0.07718	14811 WBBLE HILL ROAD	6376	734	KEY	DANIEL & SUSAN A		PO BOX 52	PEWEE VALLEY	KY	40056	35800
110853.89258	0041	0067	0000	0.03330	15911 WBBLE HILL RD	6544	757	HERTELENDY	CHRIS & JOAN		15911 WBBLE HILL RD	LOUISVILLE	KY	40245	87000
47803.87969	0041	0123	0000	< 1 ACRE	15913 WBBLE HILL RD	5011	111	HARNED	VIRGIL B &	EMILY	15913 WBBLE HILL RD	LOUISVILLE	KY	40245	72000
396540.80078	0437	0003	0000	0.00000		0	0	NALLY	AMELIA	OCHSNER ET AL	300 URTON LN	LOUISVILLE	KY	40223	0
736784.94141	0040	0324	0000	0.17290		5217	560	DOWDELL	RICHARD & JANICE		13988 POPLAR LN	JEFFERSONTOWN	KY	40299	86450
230872.28709	0041	0178	0000	0.05003		5978	681	WIGGINTON	STEPHEN L &	MARY LOU HOLT	14787 WBBLE HILL RD	JEFFERSONTOWN	KY	40299	29300
31789.33789	0041	0122	0000	< 1 ACRE		5011	115	HARNED	VIRGIL B &	EMILY	15913 WBBLE HILL RD	LOUISVILLE	KY	40245	5000
778925.95776	0042	0134	0000	0.14370		5876	327	GRANT	RICHARD W		2081 CLARK STATION RD	FISHERVILLE	KY	40023	35900

Jefferson County Easements - Route 1b

and

Jefferson County Easements - Route 2b

and

Jefferson County Easements - Route 3b

BLUEGRASS WATER PROJECT

ROUTE 2

3/21/88

AREA	BLOCK	LOT	SUBLOT	LOT SIZE	PROPERTY ADDRESS	DEED BOOK	DEED PAGE	OWNER LAST NAME	OWNER FIRST NAME	OWNER SECOND NAME	OWNER ADDRESS	CITY	ST	ZIP	VALUE
67426.81885	2194	.0045	.0000	0.01515	16900 ASH HILL DR	6770	746	MASON	JOYCE		16900 ASH HILL DR	LOUISVILLE	KY	40245	456690
130523.22354	2194	.0046	.0000	0.03274	16901 ASH HILL DR	5897	1647	ASHMOOR	WOODS DEV CO INC		6500 GLENRIDGE PARK PL	LOUISVILLE	KY	40222	185000
136100.89770	2194	.0063	.0000	0.03101	400 ASH RUN RD	6527	966	STREIBLE	LLOYD W		211 N ENGLISH STATION RD	LOUISVILLE	KY	40223	300000
98278.51172	2194	.0031	.0000	0.02298	401 ASH RUN RD	5897	647	ASHMOOR	WOODS DEV CO INC		6500 GLENRIDGE PARK PL	LOUISVILLE	KY	40222	14920
37040.72232	2788	.0018	.0000	< 1 ACRE	16700 CEDAR MIST CT	5897	588	DESCHAMP	MARK H &	CYNTHIA G	16700 CEDAR MIST CT	LOUISVILLE	KY	40245	335000
34289.63625	2788	.0019	.0000	< 1 ACRE	16701 CEDAR MIST CT	5897	51	EASTWOOD	CONST & DEV LLC		PO BOX 8	EASTWOOD	KY	40018	75000
36382.43802	2788	.0017	.0000	< 1 ACRE	16702 CEDAR MIST CT	5897	110	ARLING	JAMES P & WINNIE		505 WATTERSON TRL	LOUISVILLE	KY	40243	67400
48923.89072	2788	.0013	.0000	0.01120	116 CHESTNUT GLEN DR	6760	511	KLAPHEKE	CHRISTOPHER E		12402 BRIERLY HILL PL	JEFFERSONTOWN	KY	40299	70400
52204.51082	2788	.0012	.0000	0.01200	118 CHESTNUT GLEN DR	6555	756	JOHNSON	WILLIAM T TR	FOR THE WM T & EMMA M	118 CHESTNUT GLEN DR	LOUISVILLE	KY	40245	429900
36472.78089	2788	.0011	.0000	< 1 ACRE	120 CHESTNUT GLEN DR	6555	756	JOHNSON	WILLIAM T TR	FOR THE WM T & EMMA M	120 CHESTNUT GLEN DR	LOUISVILLE	KY	40245	77000
233213.64063	0034	.0063	.0000	0.05311	311 CLARK STATION RD	5666	602	MCCLURE	JAMES T & WANDA		114 S WHIPPS MILL RD	LOUISVILLE	KY	40222	311530
218892.07813	0034	.0024	.0000	0.06200	312 CLARK STATION RD	6449	642	WELLENDOFF	CARL E &	MARILYN J	312 CLARK STATION RD	FISHERVILLE	KY	40023	100000
240830.80684	0034	.0008	.0000	0.58000	318 CLARK STATION RD	5739	253	THOMPSON	CHARLES W &	THOMPSON WAYNE L & ETAL	318 CLARK STATION RD	FISHERVILLE	KY	40023	142600
77119.99353	0034	.0076	.0000	0.01820	16418 EASTWOOD CUT OFF RD	6587	48	KESSLER	EDWARD J &	DIANE L	16418 EASTWOOD CUT OFF	LOUISVILLE	KY	40245	113000
1256867.54932	0024	.0063	.0000	0.31740	1211 N ENGLISH STATION RD	5873	142	LUTKUS	ANNE L &	DAUGHERTY KYRAN L	13609 SHELBYVILLE RD	LOUISVILLE	KY	40245	203340
14026.87524	3045	.0001	.0000	< 1/2 ACRE	100 FOREST PLACE CT	6656	129	GLEN	MAR DEVELOPMENT INC		206 OLD HARRODS CREEK RD	LOUISVILLE	KY	40223	0
13641.05006	3045	.0020	.0000	< 1/2 ACRE	101 FOREST PLACE CT	6656	129	GLEN	MAR DEVELOPMENT INC		206 OLD HARRODS CREEK RD	LOUISVILLE	KY	40223	0
26414.44189	0025	.0030	.0000	< 1 ACRE	105 JOHNSON RD	6447	908	EASTWOOD	STATION INC		14051 SHELBYVILLE RD	LOUISVILLE	KY	40245	110000
28864.85840	0025	.0078	.0000	< 1 ACRE	108 JOHNSON RD	5023	46	PATTERSON	WILLIAM M		108 JOHNSON RD	LOUISVILLE	KY	40245	45530
189357.46924	0034	.0053	.0000	0.04250	309 JOHNSON RD (REAR)	6051	407	LEFFLER	THOMAS E SR &	MARILYN C	316 CLARK STATION RD	FISHERVILLE	KY	40023	92700
134229.38379	0024	.0186	.0000	0.03091	13725 SHELBYVILLE RD	6223	479	LUTHERAN	ASCENSION	CHURCH INC	103 BECKLEY WOODS DR	LOUISVILLE	KY	40245	250010
830330.24951	0024	.0040	.0000	19.18000	13803 SHELBYVILLE RD	6808	433	LAKEWOOD	BAPTIST CH INC		13803 SHELBYVILLE RD	LOUISVILLE	KY	40222	615230
66681.42826	0024	.0041	.0000	0.02131	13905 SHELBYVILLE RD	6422	425	COX	BARBARA A		1227 CONSTITUTION DR	LOUISVILLE	KY	40214	600000
16389.85180	0024	.0075	.0000	< 1/2 ACRE	13913 SHELBYVILLE RD	6885	539	GABELE	LEO & SARAH		12342 SHELBYVILLE RD	LOUISVILLE	KY	40243	55730
193802.44863	0024	.0044	.0000	0.04500	13915 SHELBYVILLE RD	5410	811	INDIANA-KENTUC	CONF %	UNITED CHURCH OF CHRIST	1100 W 42ND ST	INDIANAPOLIS	IN	46208	70000
33687.95264	0024	.0184	.0000	0.01029	14005 SHELBYVILLE RD	5676	823	LORENZ	DONALD A & NANCY		14005 SHELBYVILLE RD	LOUISVILLE	KY	40245	165680
13464.58594	0024	.0088	.0000	< 1/4 ACRE	14011 SHELBYVILLE RD	5741	74	LORENZ	DONALD A &	ROEDERER WILLIAM L	641 NORMANDY RD	TAYLORSVILLE	KY	40071	40030
48702.81055	0024	.0091	.0000	1.11000	14043 SHELBYVILLE RD	5304	589	GREENE	ORBIN N JR & JUDY		PO BOX 23175	LOUISVILLE	KY	40223	760470
33159.05713	0024	.0177	.0000	< 1/4 ACRE	14101 SHELBYVILLE RD	5510	216	GOODALL	REGINALD BARRY	D & DIANE K	218 TUCKER STATION RD	LOUISVILLE	KY	40243	357200
218366.89707	0024	.0062	.0000	5.00000	14103 SHELBYVILLE RD	5046	582	KLEIER	EUGENE J		PO BOX 43623	LOUISVILLE	KY	40253	123200
199177.83867	0024	.0066	.0000	0.05000	14113 SHELBYVILLE RD	4582	150	JACKSON	H J & MAGDALEN M		14113 W S 60	LOUISVILLE	KY	40245	114090
207661.65508	0024	.0050	.0000	0.05450	14119 SHELBYVILLE RD	3885	15	FLENER	THOS G & T A		PO BOX 159	EASTWOOD	KY	40018	134840
46583.24414	0024	.0077	.0000	0.01120	14121 SHELBYVILLE RD	6884	822	HARBIN	STANLEY A &	CARRIE R	14121 SHELBYVILLE RD	LOUISVILLE	KY	40245	88000
637490.80615	0024	.0138	.0000	14.60000	15201 SHELBYVILLE RD	6772	940	BRYANT	GARY L		15201 SHELBYVILLE RD	LOUISVILLE	KY	40245	279020
19811.38916	0024	.0082	.0000	< 1/2 ACRE	15205 SHELBYVILLE RD	6597	994	WILLIAMS	ERIC B &	SMITH COURTNEY M	15205 SHELBYVILLE RD	LOUISVILLE	KY	40223	77000
13496.34375	0024	.0061	.0000	< 1 ACRE	15207 SHELBYVILLE RD	6358	633	MOUSER	MICHAEL R		15207 SHELBYVILLE RD	LOUISVILLE	KY	40245	87250
17849.34277	0024	.0071	.0000	< 1 ACRE	15209 SHELBYVILLE RD	5625	261	FOUSHEE	LAWRENCE D &	ROSALIE S	15209 SHELBYVILLE RD	LOUISVILLE	KY	40245	29900
106432.77881	0024	.0182	.0000	0.01986	15211 SHELBYVILLE RD	6358	633	MOUSE	MICHAEL R		15207 SHELBYVILLE RD	LOUISVILLE	KY	40245	87300
123335.03076	0024	.0035	.0000	0.03000	15215 SHELBYVILLE RD	4936	865	PARRENT	HOMER BROWN		15217 SHELBYVILLE RD	LOUISVILLE	KY	40223	192110
137789.30762	0024	.0056	.0000	0.02840	15217 SHELBYVILLE RD	3644	62	PARRENT	HOMER B & C R		15217 SHELBYVILLE RD	LOUISVILLE	KY	40243	208850
208256.85742	0024	.0175	.0000	0.05010	15333 SHELBYVILLE RD	5908	173	STEEL	TECHNOLOGIES INC		PO BOX 869	JEFFERSONVILLE	IN	47131	2710773
7251988.63037	0024	.0027	.0000	178.00000	15400 SHELBYVILLE RD	4223	174	BIG	TEN REALTY CO		PO BOX 43339	LOUISVILLE	KY	40203	2854980
817550.56055	0024	.0180	.0000	118.62000	15415 SHELBYVILLE RD	5559	783	STEEL	TECHNOLOGIES INC		PO BOX 888	JEFFERSONVILLE	IN	47131	2355822
6601467.04492	0024	.0047	.0000	157.00000	15709 SHELBYVILLE RD	4275	285	BIG	TEN REALTY CORP		15811 SHELBYVILLE RD	LOUISVILLE	KY	40223	315200
252867.72803	0025	.0070	.0000	6.00000	15811 SHELBYVILLE RD	5195	292	THOMPSON	CHAS E & JOYCE		PO BOX 888	JEFFERSONVILLE	IN	47131	231270
597290.68846	0025	.0125	.0000	0.12609	15813 SHELBYVILLE RD	5711	226	THREE	GEES REALTY		15817 SHELBYVILLE RD	LOUISVILLE	KY	40223	117110
54381.80826	0025	.0028	.0000	0.01318	15817 SHELBYVILLE RD	5635	591	COMBEST	CLAUDE W &	PATRICIA G	15819 SHELBYVILLE RD	LOUISVILLE	KY	40245	130000
47444.88036	0025	.0141	.0000	0.01444	15819 SHELBYVILLE RD	6399	634	YOUNG	JAMES B &	AUTUMN YOUNG KIMETHA	1619 IDLEWOOD DR	CLARKSVILLE	IN	47129	165570
136683.43408	0025	.0112	.0000	0.02789	15823 SHELBYVILLE RD	5860	889	LEE	HYUN T & CHUN		15903 SHELBYVILLE RD	LOUISVILLE	KY	40245	235000
152446.30811	0025	.0097	.0000	0.03290	15903 SHELBYVILLE RD	6687	592	FAY	FREDERICK M JR &	JENNEFER J	PO BOX 21	EASTWOOD	KY	40018	53710
9508.76172	0299	.0021	.0000	< 1/4 ACRE	15911 SHELBYVILLE RD	5899	922	BURNETT	SUSAN C		PO BOX 21	EASTWOOD	KY	40018	15000
8015.15283	0299	.0020	.0000	< 1/4 ACRE	15913 SHELBYVILLE RD	5899	922	BURNETT	SUSAN C		PO BOX 139	EASTWOOD	KY	40018	62770
15810.65479	0299	.0019	.0004	< 1/2 ACRE	15917 SHELBYVILLE RD	5541	940	PATTERSON	TERRY L		PO BOX 139	EASTWOOD	KY	40202	138050
17317.28418	0299	.0010	.0000	< 1/4 ACRE	16009 SHELBYVILLE RD	6885	931	WMT	DEVELOPMENT		PO BOX 139	EASTWOOD	KY	40202	138050
10876.20947	0299	.0030	.0000	< 1/2 ACRE	16011 SHELBYVILLE RD	6048	515	BARBARI	JOE JR &	ACKMAN DAVID R	15216 SHELBYVILLE RD	LOUISVILLE	KY	40245	87750
111397.34082	0025	.0085	.0000	2.15000	16121 SHELBYVILLE RD	6967	438	MCHOLAN	CHARLES KEITH		1837 N HOPE LICK RD	LOUISVILLE	KY	40243	137280
23593.92773	0025	.0056	.0000	< 1 ACRE	16201 SHELBYVILLE RD	5203	417	BELL	THOMAS & CHRISTINE		9805 WIND FALL TRACE	LOUISVILLE	KY	40223	110000
25845.91357	0025	.0261	.0000	0.52000	16211 SHELBYVILLE RD	6367	234	WANG	JYH CHUANG & MARIA		9808 ATERBURN WOODS DR	LOUISVILLE	KY	40223	150000
11335.13770	0025	.0114	.0000	< 1/2 ACRE	16229 SHELBYVILLE RD	6945	134	ID	& R INVESTMENTS LLC		11210 BLUEGRASS PKWY	JEFFERSONTOWN	KY	40223	144690
102300.10742	0025	.0048	.0000	0.03320	16313 SHELBYVILLE RD	4116	221	BROWN	BURL A & JEAN C		16313 SHELBYVILLE RD	LOUISVILLE	KY	40245	148250
12286.88665	0025	.0077	.0000	< 1/2 ACRE	16317 SHELBYVILLE RD	2483	14	BRYANT	WM R JR &	LILLIAN M	16401 US HWY 60	LOUISVILLE	KY	40014	36080
123739.21436	0025	.0121	.0000	0.03000	16829 SHELBYVILLE RD	6290	924	BAJA	INC		4108 S HWY 393	CRESTWOOD	KY	40014	192750
491392.70752	0034	.0051	.0000	0.13160	17016 SHELBYVILLE RD	3892	31	BRADLEY	OCIE L		17016 SHELBYVILLE RD	FISHERVILLE	KY	40023	192750

BLUEGRASS WATER PROJECT
ROUTE 2

1528708.3549010034	0010	0000	0.05100	18014 SHELBYVILLE RD	5632	1706	REICHERT	WALTER S & MARY	18014 SHELBYVILLE RD	FISHERVILLE	KY	40023	144330	
53009.7871110034	0117	0000	0.01354	18218 SHELBYVILLE RD	6763	270	GILEZAN	WAYNE L & SYLVIA	2001 S POPE LICK RD	JEFFERSONTOWN	KY	40299	35150	
473746.5505910034	0065	0000	0.10220	18302 SHELBYVILLE RD	5761	188	DAVENPORT	BRENT & PHYLLIS	18302 SHELBYVILLE RD	FISHERVILLE	KY	40023	147150	
673755.0019510034	0119	0000	0.13800	18406 SHELBYVILLE RD	5798	89	WISER	JAMES W & PEGGY H	307 N JEFFERSON #3	BEEVILLE	TX	78102	144020	
489727.1992210034	0071	0000	0.11610	18502 SHELBYVILLE RD	5153	238	KINNEY	THOMAS IRVIN & JEAN KAY	2740 CLEVELAND BLVD	LOUISVILLE	KY	40206	76100	
232144.7597710034	0154	0000	0.06110	18504 SHELBYVILLE RD	6644	886	HURT	LENVIL & ANNA LAURA	18504 SHELBYVILLE RD	FISHERVILLE	KY	40023	317730	
261423.7636710034	0176	0000	0.07500	18700 SHELBYVILLE RD	5986	227	SNYDER	RONALD R & SARAH	PO BOX 13	EASTWOOD	KY	40018	325000	
459980.9804710034	0069	0000	0.10820	18702 SHELBYVILLE RD	2459	15	WERST	JOHN J & BESSIE M	PO BOX 6138	LOUISVILLE	KY	40206	73700	
240642.3203110034	0177	0000	0.07500	18702 SHELBYVILLE RD	6019	970	FIERRO	RAYMOND & CYNTHIA	18702 SHELBYVILLE RD	LOUISVILLE	KY	40243	305000	
167946.6640610034	0181	0000	0.09022	18704 SHELBYVILLE RD	6303	912	DARLAK	KRZYSZTOF & MIROSLAWA	18704 SHELBYVILLE RD	FISHERVILLE	KY	40023	253660	
211570.5214810034	0182	0000	0.09011	18708 SHELBYVILLE RD	6023	919	BURRIS	CALVIN E & BETTY	18708 SHELBYVILLE RD	FISHERVILLE	KY	40023	323940	
203126.4707010034	0183	0000	0.06180	18708 SHELBYVILLE RD	6431	520	OLLER	ALLAN & ELAINE	18708 SHELBYVILLE RD	FISHERVILLE	KY	40023	335670	
1236627.3422910024	0067	0000	27.89000	SHELBYVILLE RD	4169	137	DAUGHERTY	ANNE LYNN & DAUGHERTY KYRAN LEE	2145 LARKSBURG DR	LEXINGTON	KY	40504	105970	
90010.6845710025	0126	0000	11.51400	16217 U S HWY 60	5879	207	THOMAS	FRANK	16217 SHELBYVILLE RD	LOUISVILLE	KY	40223	141300	
165664.0585910299	0022	0012	0.02070	16001 US HWY 60	5041	161	BLAIR	JAMES W & BESSIE L	16001 US HWY 60	LOUISVILLE	KY	40223	87060	
276369.3916010025	0067	0000	0.05990	16223 US HWY 60	4484	303	HALL	G KEITH & IDA C	16223 SHELBYVILLE RD	LOUISVILLE	KY	40245	198200	
89775.4433610025	0100	0000	0.01754	16301 US HWY 60	5773	880	LEE	KWANG S & JYUNG W	8904 PINE LAKE DR	LOUISVILLE	KY	40220	90000	
69188.5810510025	0073	0000	0.01340	16305 US HWY 60	5900	468	LEE	KWANG S & JYUNG W	8904 PINE LAKE DR	LOUISVILLE	KY	40220	74380	
999690.7550410025	0036	0000	10.23180	16401 US HWY 60	3744	209	BRYANT	WM R JR & LILLIAN	16401 US HWY 60	LOUISVILLE	KY	40245	142550	
76073.7578110024	0046	0000	11.70000	100 VALHALLA VIEW DR	6772	940	BRYAN	GARRY L	15201 SHELBYVILLE RD	LOUISVILLE	KY	40245	0	
183650.4033210024	0188	0000	10.05000	110 VALHALLA VIEW DR	5806	199	ROLEY	RICHARD D & RAE A	7409 SUNSET LN	CRESTWOOD	KY	40014	50000	
212288.5678710024	0190	0000	10.05000	111 VALHALLA VIEW DR	6835	665	POTTER	KAREN K	110 VALHALLA DR	LOUISVILLE	KY	40245	566810	
455088.3891610024	0195	0000	0.11220	121 VALHALLA VIEW DR	5908	173	STEEL	TECHNOLOGIES INC	PO BOX 43339	LOUISVILLE	KY	40243	141490	
255631.3247110024	0189	0000	0.05750	121 VALHALLA VIEW DR	6255	453	HILLERICH	RONALD P	500 KY HOME LIFE BLDG	LOUISVILLE	KY	40202	580000	
688713.6667410023	0106	0000	16.00000		0	0	CITY	OF LOUISVILLE					96850	
73041.7382610023	6021	0000			0	0	COMMONWEALTH	OF KY					143500	
416007.7402310023	0107	0000			0	0	CITY	OF LOUISVILLE					96850	
111897.0078110023	0378	0000	2.59000		5258	363	IN	T S BECKLEY WOODS	SUITE 200	10172 LNN STATION RD	LOUISVILLE	KY	40223	30010
154752.0232512433	6001	0000			5258	363	IN	T S BECKLEY WOODS	SUITE 200	10172 LNN STATION RD	LOUISVILLE	KY	40223	24540
437965.7991812433	0002	0000	10.10006		0	0	COMMONWEALTH	OF KY					262500	
356024.4655412433	0001	0000	10.08180		0	0	COMMONWEALTH	OF KY					60000	
61463.2348610023	0396	0000	0.84000		0	0	COMMONWEALTH	OF KY					262500	
46604.6406310023	0390	0000			0	0	COMMONWEALTH	OF KY					60000	
33965.4286910023	0390	0000			0	0	COMMONWEALTH	OF KY					262500	
70098.5117210023	0360	0000			0	0	COMMONWEALTH	OF KY					117000	
56622.6119510023	0383	0001			0	0	COMMONWEALTH	OF KY					33000	
72536.6359410023	0374	0000			0	0	COMMONWEALTH	OF KY					0	
36263.8843810023	0371	0000			0	0	COMM	OF KY	DEPT OF TRANSPORTATION				100800	
84045.7343810023	0387	0000			0	0	COMM	OF KY					0	
61387.7304710023	0373	0000	1.14300		0	0	COMM	OF KY					0	
30486.0516213045	6001	0000	< 1 ACRE		6858	129	DEDICATED	TO PUBLIC USE					15000	
102185.5141610025	0037	0000	1.50000		0	0	EASTWOOD	CHRISTIAN CH	CHURCH INC	PO BOX 124	EASTWOOD	KY	40018	37500
48568.4345710034	0075	0000	0.01000		5988	641	EASTWOOD	CHRISTIAN CH					32500	
18921.0795910034	0073	0000			0	0	EASTWOOD	CHRISTIAN CH					5750	
20165.1987310034	0041	0000			0	0	EASTWOOD	CHURCH OF	EASTWOOD				5860	
65586.5932610034	0038	0000			2162	343	IRVIN	METHODIST CH					22800	
48935.9648410034	0164	0000	10.01282		5679	781		LOWELL R & JUDITH	18310 SHELBYVILLE RD	FISHERVILLE	KY	40023	22800	

BLUEGRASS WATER PROJECT

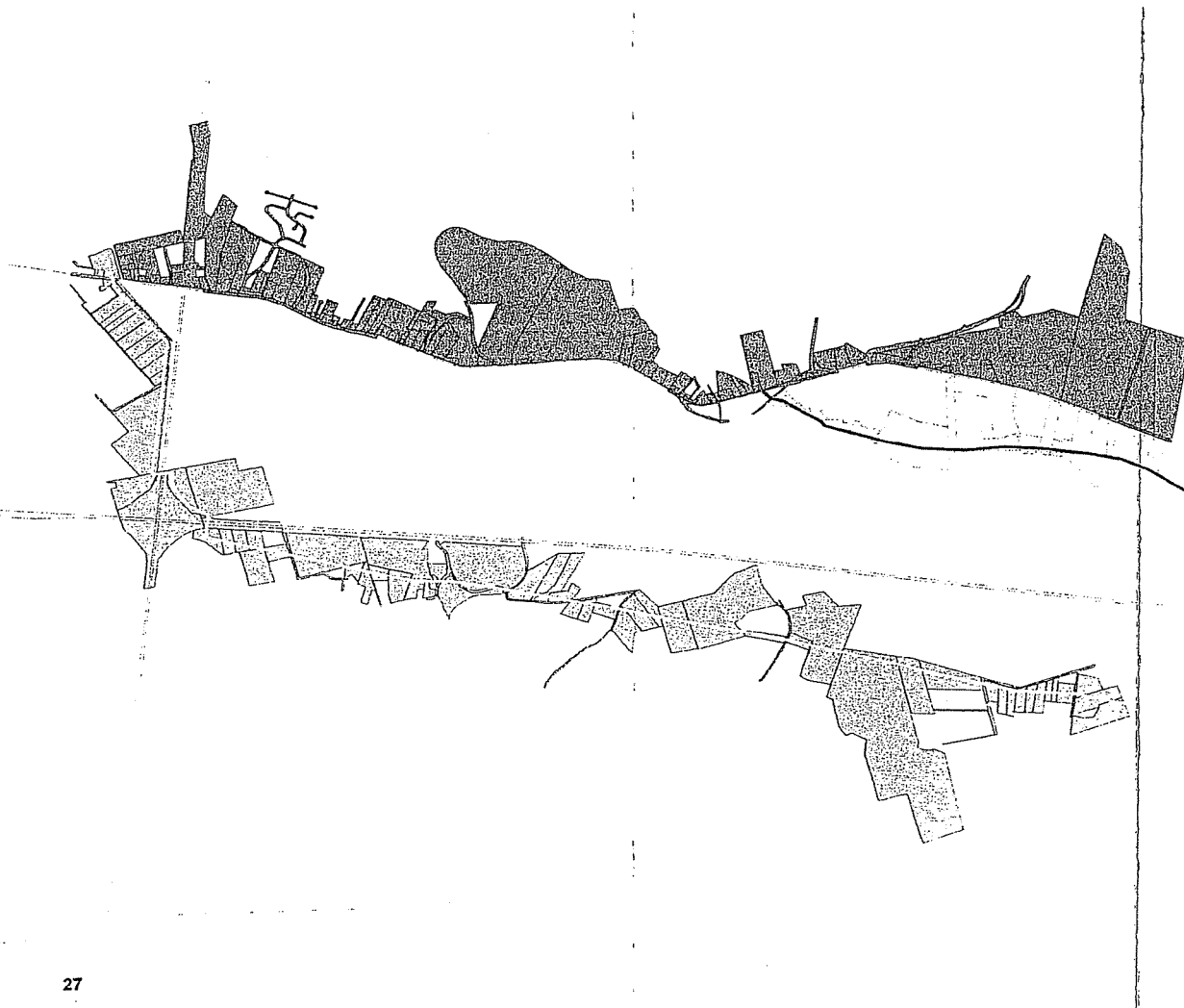
ROUTE 3

4/24/98

AREA	BLOCK	LOT	SUBLOT	LOT SIZE	PROPERTY ADDRESS	DEED BOOK	DEED PAGE	OWNER LAST NAME	OWNER FIRST NAME	OWNER SECOND NAME	OWNER ADDRESS	CITY	ST	ZIP	VALUE
688713.65674	0023	0105	0000	16.00000		0	0	CITY	OF LOUISVILLE	WATER CO					96850
416007.74023	0023	0107	0000			0	0	COMMONWEALTH	OF KY						143500
70095.51172	0023	0360	0000			0	0	COMMONWEALTH	OF KY						262500
84045.73438	0023	0367	0000			0	0	COMM	OF KY						0
36263.98438	0023	0371	0000			0	0	COMM	OF KY						33000
61387.73047	0023	0373	0000	1.14300		0	0	COMMONWEALTH	OF KY						100800
72536.83594	0023	0374	0000			0	0	COMMONWEALTH	OF KY						117000
111897.00781	0023	0378	0000	2.59000		0	0	CITY	OF LOUISVILLE	DEPT OF TRANSPORTATION					96850
61463.23488	0023	0386	0000			0	0	COMMONWEALTH	OF KY						262500
46604.64063	0023	0396	0000	0.84000		0	0	COMMONWEALTH	OF KY						60000
7251988.63037	0024	0027	0000	178.00000	15400 SHELBYVILLE RD	4223	174	BIG	TEN REALTY CO		PO BOX 868	JEFFERSONVILLE	IN	47131	2710773
123335.03076	0024	0035	0000	0.03000	15215 SHELBYVILLE RD	4936	865	PARRENT	HOMER BROWN		15217 SHELBYVILLE RD	LOUISVILLE	KY	40245	87300
246999.24561	0024	0037	0000	0.04958	13613 SHELBYVILLE RD	5115	887	POLLITT	SAMUEL III	& GREGORY D DYCHE	12700 SHELBYVILLE RD	LOUISVILLE	KY	40243	51000
830330.24951	0024	0040	0000	19.18000	13803 SHELBYVILLE RD	5808	433	LAKEWOOD	BAPTIST CH INC		13803 SHELBYVILLE RD	LOUISVILLE	KY	40222	615230
96661.42826	0024	0041	0000	0.02131	13905 SHELBYVILLE RD	6422	425	COX	BARBARA A		1227 CONSTITUTION DR	LOUISVILLE	KY	40214	600000
193802.44863	0024	0044	0000	0.04500	13915 SHELBYVILLE RD	5410	611	INDIANA-KENTUC	CONF %	UNITED CHURCH OF CHRIST	1100 W 42ND ST	INDIANAPOLIS	IN	46208	70000
76073.75781	0024	0046	0000	1.70000	US HWY 60	6772	940	BRYAN	GARRY L		15201 SHELBYVILLE RD	LOUISVILLE	KY	40245	18200
6601467.04492	0024	0047	0000	157.00000	15709 SHELBYVILLE RD	4275	285	BIG	TEN REALTY CORP		PO BOX 868	JEFFERSONVILLE	IN	47131	2355822
207861.68508	0024	0050	0000	0.05450	14119 SHELBYVILLE RD	3865	15	FLENER	THOS G & T A		PO BOX 159	EASTWOOD	KY	40018	134840
137799.30762	0024	0056	0000	0.02940	15217 SHELBYVILLE RD	3944	62	PARRENT	HOMER B & C R		15217 SHELBYVILLE RD	LOUISVILLE	KY	40223	202110
13496.34375	0024	0061	0000	< 1 ACRE	15207 SHELBYVILLE RD	6358	633	MOUSER	MICHAEL R		15207 SHELBYVILLE RD	LOUISVILLE	KY	40245	87250
219366.99707	0024	0062	0000	5.00000	14103 SHELBYVILLE RD	5046	582	KLEIER	EUGENE J		PO BOX 43623	LOUISVILLE	KY	40253	123200
1256867.54932	0024	0063	0000	0.31740	211 N ENGLISH STATION RD	5873	142	LUTKUS	ANNE L &	DAUGHERTY KYRAN L	13609 SHELBYVILLE RD	LOUISVILLE	KY	40245	203340
199177.83887	0024	0066	0000	0.05000	14113 SHELBYVILLE RD	4582	150	JACKSON	H J & MAGDALEN M		14113 U S 60	LOUISVILLE	KY	40245	114090
1238627.34229	0024	0067	0000	27.89000	SHELBYVILLE RD	4169	137	DAUGHERTY	ANNE LYNN &	DAUGHERTY KYRAN LEE	2145 LARKSBURG DR	LEXINGTON	KY	40504	105970
17849.34277	0024	0071	0000	< 1 ACRE	15209 SHELBYVILLE RD	5625	261	FOUSHEE	LAWRENCE D &	ROSALIE S	15209 SHELBYVILLE RD	LOUISVILLE	KY	40223	58270
16369.65180	0024	0075	0000	< 1/2 ACRE	13913 SHELBYVILLE RD	8885	539	GABELE	LEO & SARAH		12342 SHELBYVILLE RD	LOUISVILLE	KY	40243	61600
46583.24414	0024	0077	0000	0.01120	14121 SHELBYVILLE RD	6684	822	HARBIN	STANLEY A &	CARRIE R	14121 SHELBYVILLE RD	LOUISVILLE	KY	40245	122000
19811.38918	0024	0082	0000	< 1/2 ACRE	15205 SHELBYVILLE RD	6597	994	WILLIAMS	ERIC B &	SMITH COURTNEY M	15205 SHELBYVILLE RD	LOUISVILLE	KY	40223	77000
48702.81055	0024	0091	0000	1.11000	14043 SHELBYVILLE RD	5394	388	GREENE	ORBIN N JR & JUDY		PO BOX 23175	LOUISVILLE	KY	40223	760470
637490.80615	0024	0138	0000	14.60000	15201 SHELBYVILLE RD	6772	940	BRYANT	GARY L		15201 SHELBYVILLE RD	LOUISVILLE	KY	40245	778000
106432.77881	0024	0162	0000	0.01986	15211 SHELBYVILLE RD	6358	633	MOUSE	MICHAEL R		15207 SHELBYVILLE RD	LOUISVILLE	KY	40245	29900
209256.85742	0024	0175	0000	0.05010	15333 SHELBYVILLE RD	5908	173	STEEL	TECHNOLOGIES INC		PO BOX 43339	LOUISVILLE	KY	40243	268850
33159.05713	0024	0177	0000	< 1/4 ACRE	14101 SHELBYVILLE RD	5510	218	GOODALL	REGINALD BARRY	D & DIANE K	218 TUCKER STATION RD	LOUISVILLE	KY	40243	357200
817550.56055	0024	0180	0000	18.62000	15415 SHELBYVILLE RD	5559	783	STEEL	TECHNOLOGIES INC		PO BOX 43339	LOUISVILLE	KY	40203	2854980
33687.95264	0024	0184	0000	0.01029	14005 SHELBYVILLE RD	5676	823	LORENZ	DONALD A & NANCY		14005 SHELBYVILLE RD	LOUISVILLE	KY	40245	165880
134229.38379	0024	0186	0000	0.03091	13725 SHELBYVILLE RD	6223	479	ASCENSION	LUTHERAN	CHURCH INC	103 BECKLEY WOODS DR	LOUISVILLE	KY	40245	250010
183650.40332	0024	0188	0000	0.05000	100 VALHALLA VIEW DR	5806	199	ROLEY	RICHARD D & RAE A		7409 SUNSET LN	CRESTWOOD	KY	40014	50000
256531.32471	0024	0189	0000	0.05750	121 VALHALLA VIEW DR	6255	453	HILLERICH	RONALD P		500 KY HOME LIFE BLDG	LOUISVILLE	KY	40202	580000
212288.56787	0024	0190	0000	0.05000	110 VALHALLA VIEW DR	6835	665	POTTER	KAREN K		110 VALHALLA DR	LOUISVILLE	KY	40245	566810
455088.38916	0024	0195	0000	0.11220	111 VALHALLA VIEW DR	5908	173	STEEL	TECHNOLOGIES INC		PO BOX 43339	LOUISVILLE	KY	40243	141490
54351.90625	0025	0028	0000	0.01318	15817 SHELBYVILLE RD	5635	591	COMBEST	CLAUDE W &	PATRICIA G	15817 SHELBYVILLE RD	LOUISVILLE	KY	40223	117110
26414.44189	0025	0030	0000	< 1 ACRE	105 JOHNSON RD	6447	908	EASTWOOD	STATION INC		14051 SHELBYVILLE RD	LOUISVILLE	KY	40245	110000
999690.75504	0025	0036	0000	0.23180	16401 US HWY 60	3744	209	BRYANT	WM R JR &	LILLIAN	16401 US HWY 60	LOUISVILLE	KY	40245	142550
102300.10742	0025	0048	0000	0.03320	16313 SHELBYVILLE RD	4116	221	BROWN	BURL A & JEAN C		16313 SHELBYVILLE RD	LOUISVILLE	KY	40223	144690
23593.92775	0025	0056	0000	< 1 ACRE	16201 SHELBYVILLE RD	5203	417	BELL	THOMAS & CHRISTINE		9905 WIND FALL TRACE	LOUISVILLE	KY	40223	143800
49604.47021	0025	0057	0000	< 1/2 ACRE	110 FLAT ROCK RD	6923	32	GINKGO	BILOBA RES	DEVELOPERS LTD CO	110 FLAT ROCK RD	LOUISVILLE	KY	40245	190720
43649.11885	0025	0059	0000	0.01280	17003 SHELBYVILLE RD	4199	274	HALL	ALICE M		17003 SHELBYVILLE ROAD	FISHERVILLE	KY	40023	115860

**BLUEGRASS WATER PROJECT
ROUTE 3
4/24/98**

AREA	BLOCK	LOT	SUBLOT	LOT SIZE	PROPERTY ADDRESS	DEED BOOK	DEED PAGE	OWNER LAST NAME	OWNER FIRST NAME	OWNER SECOND NAME	OWNER ADDRESS	CITY	ST	ZIP	VALUE
89005.70166	0025	0060	0000	0.02167	16911 SHELBYVILLE RD	5919	307	JENKENS	GARY W & SUSANNE		17008 SHELBYVILLE RD	FISHERVILLE	KY	40023	9000
276369.39160	0025	0067	0000	0.05990	16223 US HWY 60	4484	303	HALL	G KEITH & IDA C		16223 SHELBYVILLE RD	LOUISVILLE	KY	40245	198200
252867.72803	0025	0070	0000	6.00000	15811 SHELBYVILLE RD	5195	292	THOMPSON	CHAS E & JOYCE		15811 SHELBYVILLE RD	LOUISVILLE	KY	40223	315200
69188.58105	0025	0073	0000	0.01340	16305 US HWY 60	5880	468	LEE	KWANG S & JYUNG W		8904 PINE LAKE DR	LOUISVILLE	KY	40220	74380
12286.86865	0025	0077	0000	< 1/2 ACRE	16317 SHELBYVILLE RD	2483	14	BRYANT	WM R JR &	LILLIAN M	16401 US HWY 60	LOUISVILLE	KY	40245	48250
28864.85840	0025	0078	0000	< 1 ACRE	108 JOHNSON RD	5023	46	PATTERSON	WILLIAM M		108 JOHNSON RD	LOUISVILLE	KY	40223	45530
111397.34082	0025	0085	0000	2.15000	16121 SHELBYVILLE RD	6967	438	MCHOLAN	CHARLES KEITH		837 N POPE LICK RD	LOUISVILLE	KY	40243	137260
152446.30811	0025	0097	0000	0.03290	15903 SHELBYVILLE RD	6667	592	FAY	FREDERICK M JR &	JENNEFER J	15903 SHELBYVILLE RD	LOUISVILLE	KY	40245	235000
89775.44336	0025	0100	0000	0.01754	16301 US HWY 60	5773	880	LEE	KWANG S & JYUNG W		8904 PINE LAKE DR	LOUISVILLE	KY	40220	900000
136683.43408	0025	0112	0000	0.02789	15823 SHELBYVILLE RD	5960	889	LEE	HYUN T & CHUN		1619 IDLEWOOD DR	CLARKSVILLE	IN	47129	165570
11335.13770	0025	0114	0000	< 1/2 ACRE	16229 SHELBYVILLE RD	6945	134	D	& R INVESTMENTS LLC		11210 BLUEGRASS PKWY	JEFFERSONTOWN	KY	40299	15000
37498.81836	0025	0116	0000	< 1/2 ACRE	FLAT ROCK RD	6923	32	GINKGO	BILOBA RES	DEVELOPERS LTD CO	110 FLAT ROCK RD	LOUISVILLE	KY	40245	1940
123739.21436	0025	0121	0000	0.03000	16829 SHELBYVILLE RD	6290	924	BAJA	INC		4108 S HWY 393	CRESTWOOD	KY	40014	36080
597290.66846	0025	0125	0000	0.12609	15813 SHELBYVILLE RD	5711	226	THREE	GEES REALTY		PO BOX 868	JEFFERSONVILLE	IN	47131	231270
90010.68457	0025	0126	0000	1.51400	16217 U S HWY 60	5879	207	THOMAS	FRANK		16217 SHELBYVILLE RD	LOUISVILLE	KY	40223	141300
55351.94141	0025	0130	0000	0.01750	16901 SHELBYVILLE RD	6046	981	EISENBACK	STUART &	CONNIE	1701 ECHO TRL	LOUISVILLE	KY	40245	51530
14240.97070	0025	0131	0000	< 1/4 ACRE	16305 SHELBYVILLE RD	5880	468	LEE	KWANG S & JYUNG W		8904 PINE LAKE DR	LOUISVILLE	KY	40220	15000
8166.49170	0025	0134	0000	< 1/2 ACRE	16921 SHELBYVILLE RD	6668	648	PALMER	ADAM & SHELLEY		16921 SHELBYVILLE RD	LOUISVILLE	KY	40245	40000
47444.58936	0025	0141	0000	0.01441	15819 SHELBYVILLE RD	6390	634	YOUNG	JAMES B &	AUTUMN YOUNG KIMETHA	15819 SHELBYVILLE RD	LOUISVILLE	KY	40245	130000
201985.94141	0025	0256	0000	0.05307		5859	274	BOBERG	WILLIAM H & SUSAN		PO BOX 43107	LOUISVILLE	KY	40243	52500
25845.91357	0025	0261	0000	0.52000	16211 SHELBYVILLE RD	6367	234	WANG	JYH CHUANG & MARIA		9909 ATERBURN WOODS DR	LOUISVILLE	KY	40223	150000
286213.53414	0025	0288	0000	6.65000	FLAT ROCK RD	6923	30	GINKGO	BILOBA LTD CO		110 FLAT ROCK RD	LOUISVILLE	KY	40245	0
294956.17026	0025	0289	0000	6.73000	FLAT ROCK RD	6977	621	GARDINER	PARK DEV LLC		16411 SHELBYVILLE RD	LOUISVILLE	KY	40245	0
57680.17745	0025	0290	0000	1.39000	FLAT ROCK RD	6977	621	GARDINER	PARK DEV LLC		16411 SHELBYVILLE RD	LOUISVILLE	KY	40245	0
3973717.70508	0026	0013	0000	1.00000	18701 SHELBYVILLE RD	5697	460	GREENBERG	PHILIP M		P O BOX 363	SIMPSONVILLE	KY	40067	471230
225632.58691	0026	0022	0000	0.05000	18105 SHELBYVILLE RD	6963	528	WILSON	ANTHONY FINIS &	WILSON DELLA R	18105 SHELBYVILLE RD	FISHERVILLE	KY	40023	190440
56709.40527	0026	0075	0000	0.01380	17015 SHELBYVILLE RD	6098	801	SKILES	DAVID L & ESTHER		17105 SHELBYVILLE RD	FISHERVILLE	KY	40023	126930
73170.14258	0026	0114	0000	0.01870		5859	274	BOBERG	WILLIAM H & SUSAN		PO BOX 43107	LOUISVILLE	KY	40243	21900
6754162.12846	0026	0123	0000	1.62320	18123 SHELBYVILLE RD	5116	482	JONES	SUSAN M	SWEENEY MAURICE & DERYL	18123 U S 60 STAR ROUTE	FISHERVILLE	KY	40023	0
7089406.86534	0026	0124	0000	150.92000	SHELBYVILLE RD	5116	482	JONES	SUSAN M	SWEENEY MAURICE & DERYL	18123 U S 60 STAR ROUTE	FISHERVILLE	KY	40023	0
10363.45361	0299	0009	0025	< 1/4 ACRE	105 HIGHLAND AVE	6849	330	LIKES	LARRY L &	JENNIFER A	105 HIGHLAND AVE	LOUISVILLE	KY	40245	79900
17317.28418	0299	0010	0000	< 1/4 ACRE	16009 SHELBYVILLE RD	6885	931	WMT	DEVELOPMENT		% WILLIAM F MULLOY SR	LOUISVILLE	KY	40202	202200
15810.65479	0299	0019	0004	< 1/2 ACRE	15917 SHELBYVILLE RD	5541	940	PATTESON	TERRY L		PO BOX 139	EASTWOOD	KY	40018	62770
8015.15283	0299	0020	0000	< 1/4 ACRE	15913 SHELBYVILLE RD	5899	922	BURNETT	SUSAN C		PO BOX 21	EASTWOOD	KY	40018	15000
9598.76172	0299	0021	0000	< 1/4 ACRE	15911 SHELBYVILLE RD	5899	922	BURNETT	SUSAN C		P.O. BOX 21	EASTWOOD	KY	40018	53710
165684.05859	0299	0022	0012	0.02070	16001 US HWY 60	5041	161	BLAIR	JAMES W & BESSIE L		16001 US HWY 60	LOUISVILLE	KY	40223	87060
10976.20947	0299	0030	0000	< 1/2 ACRE	16011 SHELBYVILLE RD	6048	515	BARBATI	JOE JR &	ACKMAN DAVID R	15218 SHELBYVILLE RD	LOUISVILLE	KY	40245	87750
77517.33447	1671	0136	0000	5.40000	211 BECKLEY WOODS DR	5394	62	ROSEWOOD	APTS OF JEFF CO		% CARDINAL REALTY	REYNOLDSBURG	OH	43068	2209500
20363.77637	1671	0148	0000	< 1/2 ACRE	101 BECKLEY WOODS DR	6210	376	SPURGEON	DARRELL E &	BONNIE GAIL	101 BECKLEY WOODS DR	LOUISVILLE	KY	40245	104090
218343.79855	1701	0049	0000	0.05031	17700 LON RUN PL	6399	551	SHEA	JOHN & DEBORAH		120 LONG RUN RD	LOUISVILLE	KY	40245	56400
232647.48973	1701	0050	0000	0.05450	17750 LONG RUN PL	6399	556	SHEA	MICHAEL & TONI		P.O. BOX 15	EASTWOOD	KY	40018	390350
356024.45654	2433	0001	0000	0.08180		5258	263	N	T S BECKLEY WOODS	SUITE 200	10172 LINN STATION RD	LOUISVILLE	KY	40223	24540
437965.79918	2433	0002	0000	0.10006		5258	263	N	T S BECKLEY WOODS	SUITE 200	10172 LINN STATION RD	LOUISVILLE	KY	40223	30010
14026.87524	3045	0001	0000	< 1/2 ACRE	100 FOREST PLACE CT	6658	129	GLEN	MAR DEVELOPMENT INC		206 OLD HARRODS CREEK RD	LOUISVILLE	KY	40223	172680
13541.05006	3045	0020	0000	< 1/2 ACRE	101 FOREST PLACE CT	6658	129	GLEN	MAR DEVELOPMENT INC		206 OLD HARRODS CREEK RD	LOUISVILLE	KY	40223	11790
30486.05162	3045	6001	0000	< 1 ACRE		6658	129	DEDICATED	TO PUBLIC USE						8440



From: Jim Brammell / THRD4
To: Greg Heitzman / THRD4
Subject: fwd: Bluegrass Transmission - PDR Proposal

====NOTE=====6/15/98==9:30am=====

PDR provided their latest revised proposal last Friday a.m. We reviewed over the week-end. High level, the break-down is as follows:

	LWC	PDR	Delta
Base Pipe	\$500k	\$510k	<\$10k>
Pump Station	240k	290k	< 50k>
Tank	150k	148k	2k
Opt. Pipe	420k	391k	29k
Total	\$1,310k	\$1,340k	<\$29k>

In summary I think we could accept the proposed fees for base pipeline, the tank and the optional pipeline.

The pump station remains a point of contention. The PDR fees proposed above include the assumption that all three pump stations will be bid as one package. If we bid separately then their design fees are even higher. On the other hand I think Gannett Fleming has whittled out just about all they intend to.

Recall that the original PDR proposal was for about \$1,950k. We've negotiated them down by ~\$610k.

It may be time to pull KY-American in and tell them that we recommend award of the contract at the proposed fees.

Fwd=by:=Greg=Heitzman=6/15/98==5:27pm=====

Fwd to: Jim Brammell / THRD4

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I believe we have enough data to now contact KAWC. Pls get with Karen to make contact with Linda Bridwell/Tom Friley, to review the proposals with KAWC. Ultimately we want a letter from KAWC that these prices are approved and LWC can proceed to award contract with PDR and that design costs will be reimbursed by KAWC in accordance with LWC/KAWC agreement (which we are still negotiating). Then we'll proceed with rec to our Board at special mtg in early July or regular July Board mtg.

Fwd=by:=Jim=Brammell==6/17/98==6:54am=====

Fwd to: Karen Willis / THRD4

CC: Greg Heitzman / THRD4

.....

Karen, FYI. Also, have you made attempt to set up the mtg?

Draft 6/8/98

**SCHEDULE B
BLUEGRASS WATER PROJECT AGREEMENT**

1. Seller System Capacity/ Buyer Reserve Capacity Request

The Seller shall establish in writing every five years, the Seller System Production Capacity as determined by a consulting engineer of national reknown.

Buyer shall notify Seller, in writing, the Buyer Reserve Capacity request for each calendar year by July 1st of the previous year. Annually, the Seller may reserve a minimum of _____ million gallons per day (MGD) *{LWC will consider a ramping approach}*, and up to a maximum of 23 MGD capacity to the Buyer. The Seller has up to 6 months to make the necessary improvements to provide the new Buyer Reserve Capacity request *{K-A needs to have this capacity on a moments notice}*.

2. Water Rate for Agreement

The invoice for all water purchased by the Buyer until the end of the agreement shall be comprised of the following components: 1) Operating Cost, 2) Depreciation Cost, 3) Return on Plant Investment, and 4) Customer costs. These components are defined as follows:

- Operating Cost Component
(Buyer Consumption / Seller Total System Sales) * (Seller operating expenses - common to only retail costs - customer costs)
- Depreciation Cost Component
(Buyer Reserved Capacity / Seller System Capacity) * (Seller depreciation expenses - common to only retail costs - customer costs)
- Return on Plant Investment Component
(Buyer Reserved Capacity / Seller System Capacity) * (Seller return on plant investment - common to only retail costs - customer costs)
- Customer Costs
Actual expenses assignable to the Buyer including, but not limited to, metering, billing, collection, and operation and maintenance on Buyer specific assets.

3. Minimum Consumption and Peaking Factor

{Both parties to look at and determine a minimum consumption}

Buyer consumption for each day shall be determined by the metered usage from midnight until midnight. Minimum Buyer consumption will be _____ MGD. If Buyer consumption is unusually high due to unforeseeable and uncontrollable circumstances, then the Seller will consider, at its own discretion without setting precedent, waiving the additional charges as described below for the affected period. If Buyer consumption is low due to unforeseeable and uncontrollable circumstances, then the Seller will consider, at its own discretion without setting precedent, waiving the daily minimum required as described above for the affected period.

Should the Buyer consumption remain below the Buyer Reserve Capacity for each day, the rate per 1,000 gallons shall be according to paragraph 2 above. Should the Buyer consumption exceed the Buyer Reserve Capacity for any given day, the rate shall be as identified in paragraph 2 up to the Buyer Reserve Capacity, and any additional consumption shall be at the then current LWC wholesale rate plus elevated service charge (presently \$1.35/thousand gallons).

Draft 6/8/98

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Draft 6/8/98

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The invoice for all water purchased by the Buyer until the end of the agreement shall be comprised of the following components: 1) Operating Cost, 2) Depreciation Cost, 3) Return on Plant Investment, and 4) Customer costs. These components are defined as follows:

- Operating Cost Component
(Buyer Consumption / Seller Total System Sales) * (Seller operating expenses - common to only retail costs – customer costs)
- Depreciation Cost Component
(Buyer Reserved Capacity / Seller System Capacity) * (Seller depreciation expenses - common to only retail costs – customer costs)
- Return on Plant Investment Component
(Buyer Reserved Capacity / Seller System Capacity) * (Seller return on plant investment – common to only retail costs – customer costs)
- Customer Costs
Actual expenses assignable to the Buyer including, but not limited to, metering, billing, collection, and operation and maintenance on Buyer specific assets.

3. Minimum Consumption and Peaking Factor

{Both parties to look at and determine a minimum consumption}

Buyer consumption for each day shall be determined by the metered usage from midnight until midnight. Minimum Buyer consumption will be _____ MGD. If Buyer consumption is unusually high due to unforeseeable and uncontrollable circumstances, then the Seller will consider, at its own discretion without setting precedent, waiving the additional charges as described below for the affected period. If Buyer consumption is low due to unforeseeable and uncontrollable circumstances, then the Seller will consider, at its own discretion without setting precedent, waiving the daily minimum required as described above for the affected period.

Should the Buyer consumption remain below the Buyer Reserve Capacity for each day, the rate per 1,000 gallons shall be according to paragraph 2 above. Should the Buyer consumption exceed the Buyer Reserve Capacity for any given day, the rate shall be as identified in paragraph 2 up to the Buyer Reserve Capacity, and any additional consumption shall be at the then current LWC wholesale rate plus elevated service charge (presently \$1.35/thousand gallons).

	Off-farm Cost	Derivation	Return on Plant	Return on Plant
Bluegrass Water Project - Sample Monthly Bill Calculation				

[illegible]

Assumptions:

Reserve Capacity Request
Minimum Usage per Day
LWC System Consumption
LWC Operating Cost
LWC Depreciation Cost
LWC Return on Plant
LWC System Capacity

thousand gallons per day	per day	thousand gallons per day
6000	14,950	240000
2000	44,631	56,072
1013	69,863	

Bluegrass Water Project - Sample Monthly Bill Calculation

Bluegrass Water Project - Sample Monthly Bill Calculation												
Day	Consumption		Operating Cost		Depreciation	Return on Plant	Customer Cost	Excess Rate Cost		Effective	Rate per	1,000 gallons
	Consumption	Below Amount	Standard	Rate per				Excess	Rate			
1	1,500	2,000	\$0.44	\$880.56	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$2,684.86	
2	1,500	2,000	\$0.44	\$880.56	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$2,684.86	1.79
3	2,000	2,000	\$0.44	\$880.56	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$2,684.86	1.79
4	2,000	2,000	\$0.44	\$880.56	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$2,684.86	1.34
5	3,000	3,000	\$0.44	\$1,320.83	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$3,125.14	1.04
6	3,000	3,000	\$0.44	\$1,320.83	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$3,125.14	1.04
7	4,000	4,000	\$0.44	\$1,761.11	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$3,565.41	0.89
8	4,000	4,000	\$0.44	\$1,761.11	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$3,565.41	0.89
9	5,000	5,000	\$0.44	\$2,201.39	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$4,005.69	0.80
10	5,000	5,000	\$0.44	\$2,201.39	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$4,005.69	0.80
11	6,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$4,445.97	0.74
12	6,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$4,445.97	0.74
13	7,000	7,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	1,000	\$1.35	\$1,350.00	\$5,795.97	0.83
14	7,000	7,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	1,000	\$1.35	\$1,350.00	\$5,795.97	0.83
15	8,000	8,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	2,000	\$1.35	\$2,700.00	\$7,145.97	0.89
16	8,000	8,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	2,000	\$1.35	\$2,700.00	\$7,145.97	0.89
17	9,000	9,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	3,000	\$1.35	\$4,050.00	\$8,495.97	0.94
18	9,000	9,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	3,000	\$1.35	\$4,050.00	\$8,495.97	0.94
19	10,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	4,000	\$1.35	\$5,400.00	\$9,845.97	0.98
20	10,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	4,000	\$1.35	\$5,400.00	\$9,845.97	0.98
21	9,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	3,000	\$1.35	\$4,050.00	\$8,495.97	0.94
22	9,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	3,000	\$1.35	\$4,050.00	\$8,495.97	0.94
23	8,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	2,000	\$1.35	\$2,700.00	\$7,145.97	0.89
24	8,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	2,000	\$1.35	\$2,700.00	\$7,145.97	0.89
25	7,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	1,000	\$1.35	\$1,350.00	\$5,795.97	0.83
26	7,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	1,000	\$1.35	\$1,350.00	\$5,795.97	0.83
27	6,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$4,445.97	0.74
28	6,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$4,445.97	0.74
29	5,000	5,000	\$0.44	\$2,201.39	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$4,005.69	0.80
30	5,000	5,000	\$0.44	\$2,201.39	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$4,005.69	0.80
	Actual Usage 181,000 1,000 gallons							Excess Usage 32,000 1,000 gallons				
										\$43,200	\$163,370.78	0.90

Bluegrass Water Project - Sample Monthly Bill Calculation												
Day	Consumption 1,000 gallons	Operating Cost			Depreciation	Return on Plant	Customer Cost	Excess Rate Cost			Total	Effective Rate per 1,000 gallons
		Consumption Below Amount	Standard Rate per 1,000 gallons	Operating Cost				Consumption Above Amount	Excess Rate per 1,000 gallons	Excess Cost		
1	1,500	2,000	\$0.44	\$880.56	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$2,684.86	1.79
2	1,500	2,000	\$0.44	\$880.56	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$2,684.86	1.79
3	2,000	2,000	\$0.44	\$880.56	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$2,684.86	1.79
4	2,000	2,000	\$0.44	\$880.56	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$2,684.86	1.34
5	3,000	3,000	\$0.44	\$1,320.83	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$3,125.14	1.04
6	3,000	3,000	\$0.44	\$1,320.83	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$3,125.14	1.04
7	4,000	4,000	\$0.44	\$1,761.11	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$3,565.41	0.89
8	4,000	4,000	\$0.44	\$1,761.11	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$3,565.41	0.89
9	5,000	5,000	\$0.44	\$2,201.39	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$4,005.69	0.80
10	5,000	5,000	\$0.44	\$2,201.39	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$4,005.69	0.80
11	6,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$4,445.97	0.74
12	6,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$4,445.97	0.74
13	7,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$4,445.97	0.74
14	7,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	1,000	\$1.35	\$1,350.00	\$5,795.97	0.83
15	8,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	2,000	\$1.35	\$2,700.00	\$7,145.97	0.89
16	8,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	2,000	\$1.35	\$2,700.00	\$7,145.97	0.89
17	9,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	3,000	\$1.35	\$4,050.00	\$8,495.97	0.94
18	9,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	3,000	\$1.35	\$4,050.00	\$8,495.97	0.94
19	10,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	4,000	\$1.35	\$5,400.00	\$9,845.97	0.98
20	10,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	4,000	\$1.35	\$5,400.00	\$9,845.97	0.98
21	9,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	3,000	\$1.35	\$4,050.00	\$8,495.97	0.94
22	9,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	3,000	\$1.35	\$4,050.00	\$8,495.97	0.94
23	8,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	3,000	\$1.35	\$4,050.00	\$8,495.97	0.94
24	8,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	2,000	\$1.35	\$2,700.00	\$7,145.97	0.89
25	7,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	1,000	\$1.35	\$1,350.00	\$5,795.97	0.83
26	7,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$4,445.97	0.74
27	6,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$4,445.97	0.74
28	6,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$4,445.97	0.74
29	5,000	5,000	\$0.44	\$2,201.39	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$4,005.69	0.80
30	5,000	5,000	\$0.44	\$2,201.39	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$4,005.69	0.80
	181,000	150,000		66,041.64	11,212.38	42,053.75	863.01	32,000	43,200	\$163,370.78		0.90
	Actual Usage 1,000 gallons	Billed Usage 1,000 gallons						Excess Usage 1,000 gallons				

Assumptions:

Reserve Capacity Request
 Minimum Usage per Day
 LWC System Consumption
 LWC Operating Cost
 LWC Depreciation Cost
 LWC Return on Plant
 LWC System Capacity
 6000 thousand gallons per day
 2000 thousand gallons per day
 101369.863 thousand gallons per day
 44.631 per day
 14.950 per day
 56.072 per day
 240000 thousand gallons per day

Bluegrass Water Project - Sample Monthly Bill Calculation

[illegible]

Assumptions:

Parameter	Value
Reserve Capacity Request	6000 thousand gallons per day
WVC System Minimum Usage per Day	2000 thousand gallons per day
WVC System Consumption	101369.863 thousand gallons per day
WVC Operating Cost	44.631 per day
WVC Depreciation Cost	14,950 per day
WVC Return on Plant	56.072 per day
WVC System Capacity	240000 thousand gallons per day

Bluegrass Water Project - Sample Monthly Bill Calculation												
	Operating Cost			Depreciation	Return on Plant	Customer Cost	Excess Rate Cost					
Day	Consumption	Below Amount	Reserved	Operating Cost	Depreciation	Return on Plant	Estimated	Consumption	Excess	Rate	Total	Effective
	1,000 gallons		1,000 gallons	Cost	Cost	Plant Invest	Customer	1,000 gallons	Excess	Rate per	1,000 gallons	Rate per
1	1,500	2,000	\$0.44	\$880.56	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$2,684.86	1.79
2	1,500	2,000	\$0.44	\$880.56	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$2,684.86	1.79
3	2,000	2,000	\$0.44	\$880.56	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$2,684.86	1.34
4	2,000	2,000	\$0.44	\$880.56	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$2,684.86	1.34
5	3,000	3,000	\$0.44	\$1,320.83	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$3,125.14	1.04
6	3,000	3,000	\$0.44	\$1,320.83	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$3,125.14	1.04
7	4,000	4,000	\$0.44	\$1,761.11	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$3,565.41	0.89
8	4,000	4,000	\$0.44	\$1,761.11	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$3,565.41	0.89
9	5,000	5,000	\$0.44	\$2,201.39	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$4,005.69	0.80
10	5,000	5,000	\$0.44	\$2,201.39	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$4,005.69	0.80
11	6,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$4,445.97	0.74
12	6,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$4,445.97	0.74
13	7,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	1,000	\$1.35	\$1,350.00	\$5,795.97	0.83
14	7,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	1,000	\$1.35	\$1,350.00	\$5,795.97	0.83
15	8,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	2,000	\$1.35	\$2,700.00	\$7,145.97	0.89
16	8,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	2,000	\$1.35	\$2,700.00	\$7,145.97	0.89
17	9,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	3,000	\$1.35	\$4,050.00	\$8,495.97	0.94
18	9,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	3,000	\$1.35	\$4,050.00	\$8,495.97	0.94
19	10,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	4,000	\$1.35	\$5,400.00	\$9,845.97	0.98
20	10,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	4,000	\$1.35	\$5,400.00	\$9,845.97	0.98
21	9,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	3,000	\$1.35	\$4,050.00	\$8,495.97	0.94
22	9,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	3,000	\$1.35	\$4,050.00	\$8,495.97	0.94
23	8,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	3,000	\$1.35	\$4,050.00	\$8,495.97	0.94
24	8,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	2,000	\$1.35	\$2,700.00	\$7,145.97	0.89
25	7,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	1,000	\$1.35	\$1,350.00	\$5,795.97	0.83
26	7,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	1,000	\$1.35	\$1,350.00	\$5,795.97	0.83
27	6,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$4,445.97	0.74
28	6,000	6,000	\$0.44	\$2,641.67	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$4,445.97	0.74
29	5,000	5,000	\$0.44	\$2,201.39	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$4,005.69	0.80
30	5,000	5,000	\$0.44	\$2,201.39	\$373.75	\$1,401.79	\$28.77	-	\$1.35	\$0.00	\$4,005.69	0.80
	181,000	150,000				11,212.38	42,053.75	863.01	32,000	Excess Usage	1,000 gallons	1,000 gallons

Operating Cost	Depreciation	Return on Plant	Customer Cost	Expense Ratio Cost

[illegible]

Assumptions:

Reserve Capacity Request
 Minimum Usage per Day
 LWC System Consumption
 LWC Operating Cost
 LWC Depreciation Cost
 LWC Return on Plant
 LWC System Capacity

thousand gallons per day	thousand gallons per day	thousand gallons per day	thousand gallons per day	thousand gallons per day	thousand gallons per day
6000	2000	101369.863	44,631	14,950	56,072
			per day	per day	per day
			thousand gallons per day	thousand gallons per day	thousand gallons per day

FAX**KENTUCKY-AMERICAN
WATER COMPANY****Date** 5-11-98 *KAWC***Number of pages including cover sheet** 3**TO:** John Huber
Louisville Water Co**Phone****Fax Phone** 502-569-3691**FROM:** Roy W. Mundy II
KENTUCKY-AMERICAN
WATER COMPANY
2300 Richmond Road
Lexington, KY 40502**Phone** 606-268-6320**Fax Phone** 606-268-6327Any problems with receiving this fax -
please contact Pat Ballard at 268-6326**CC:****REMARKS:** ☐ Urgent ☐ For your review ☐ Reply ASAP ☐ Please Comment

Please distribute copies to Bob Miller and Greg Heitzman.

Thank you.

Pat Ballard



Kentucky-American Water Company

2300 Richmond Road • Lexington, Kentucky 40502
(606) 268-6320 • Fax (606) 268-6327

Roy W. Mundy II
President

May 11, 1998

Mr. John Huber, President
Louisville Water Company
435 South Third Street
Louisville, Kentucky 40202

Dear John:

I would like to express my appreciation for the time and dedication that you and your staff have put into developing our contract to this point and for your continued willingness to discuss the various issues.

Coleman, Linda and Mark contacted Greg on Thursday, May 7, 1998 to clarify some of the issues that we discussed on Tuesday. We want to make sure that we clearly understand your position on some matters and that you also understand our needs as you approach your board tomorrow. Our needs are, in essence, the needs of our customers. Our customers require an additional source of quality water at a fair cost. As you know, before our contract is finalized, the Public Service Commission must approve it. Our diligence would not vary regardless, but we have approached the negotiations with the regulatory process, and its attendant scrutiny, in mind.

At our meeting on Tuesday, we talked at length about the issue of developing a defensible reserve capacity number. Greg suggested that we approach this issue by measuring various scenarios regarding the frequency, severity and time of a drought event. This information is to be supplied to Bob so that he can run the various reserve capacity and peak event scenarios through his rate model. Through our discussion with Greg, Linda gained a firm understanding of what he is proposing and will supply those numbers to Bob next week.

In talking to Greg, we were also seeking clarification on the issues of upsizing and point of delivery. There have been numerous scenarios presented, and I will attempt in this letter to state what I believe to be your position and also to confirm our position on these matters.

The first scenario: **Point of delivery at the Jefferson/Shelby County line with upsizing.** We understand that your position on upsizing under this scenario would be to do so on an incremental basis, basically paying the increased cost of larger pipe and any increase in installation costs within Jefferson County. Our position on upsizing this main is that the costs should be shared on a carrying capacity basis. In discussing the scenario on Tuesday relating to facilities beyond the Jefferson County line, you offered, as an example, an upsizing scenario that

Mr. John Huber
May 11, 1998
Page 2

would increase the capacity of the line from 23 to 40 MGD. On this basis, I believe your comment was that the sharing could be 23/40 KAWC and 17/40 LWC. I am certainly not trying to imply that this was an offer on your behalf, but am using this to illustrate that we feel this is the fair way to share the costs on any upsizing as LWC will obviously have that capacity for its future needs.

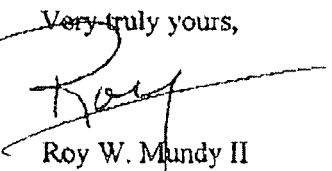
The second scenario: **Point of delivery in Shelby County at Highway 55 with upsizing.** As I mentioned on Tuesday, for us to consider moving the point of delivery, KAWC expects that a substantial investment be made by LWC. Offering this proposal means that the line has value to LWC, the total cost of which should not be borne by KAWC's customers. We discussed this proposal at length on Tuesday, but I want to make sure that we both have the same understanding. One possible scenario I presented was for LWC to pick up the entire cost of the line from the Shelby County line to Highway 55. Sharing the upsizing of the line from English Station to Highway 55 on the carrying capacity basis mentioned above is also worthy of consideration.

During the discussion between Linda, Coleman, Mark and Greg on Thursday, Greg mentioned that he would like to consider a third pump station. Under a scenario where LWC would see the need for a third pump station, but KAWC did not have an immediate need for it, Greg asked that KAWC consider participating in this third pump station on a carrying capacity basis. We would be willing to listen to a proposal on how a third pump station could benefit us.

One last issue that hasn't been discussed by us, but one Coleman has suggested to Bob is the consideration LWC will give KAWC as a result of KAWC becoming a guaranteed customer providing several hundred thousand dollars a year in revenues. When such opportunities are available to us, we are willing to invest certain capital to obtain such a user based upon revenue projections (not necessarily guarantees). It is possible that some of the issues we are now discussing will open that opportunity for such consideration.

Again, thank you and your team for the sincere efforts you've shown in our negotiations. If you should have any questions or comments regarding this matter, please let me know.

Very truly yours,



Roy W. Mundy II
President

RWM/pb

c: Bob Miller
Coleman Bush
Herb Miller

Greg Heitzman
Mark Frost
Nick Rowe

Linda Bridwell
L.W. Ingram, Esq.



Kentucky-American Water Company

2300 Richmond Road • Lexington, Kentucky 40502
(606) 268-6320 • Fax (606) 268-6327

Roy W. Mundy II
President

June 19, 1998

Mr. John Huber, President
Louisville Water Company
435 South Third Street
Louisville, Kentucky 40202

Dear John:

Thank you again for the hard work you and your staff have put into our negotiations toward the water purchase agreement between the Louisville Water Company and Kentucky-American Water Company. My purpose in writing is to state the current position of KAWC regarding what I consider to be our only significant remaining issue, and to make a suggestion as to how we might bring these issues to a close.

POINT OF DELIVERY:

We are in agreement with your request to move the point of delivery to the intersection of Interstate Highway 64 and Kentucky Highway 55. Our understanding is that this request includes a 25-MGD pump station and water storage tank designed and installed entirely at the expense of LWC (tank capacity to be determined).

ADDITIONAL 12 MGD OF CAPACITY CREATED BY PUMP STATION AND TANK REFERENCED ABOVE:

We understand that you have offered KAWC the right of first refusal for any increment of this additional capacity. Our request that one-half of this additional capacity be reserved for us at no additional cost was denied. I assume that if we agree to the first refusal concept of the 12 MGD in lieu of an absolute reserve, our cost to accept a portion of the 12 MGD would be in accord with current contract terms.

UPSIZING PROJECT FACILITIES:

We continue to disagree on LWC's share of the cost when the line is upsized, but to complete the contract, we will accept your representation that the incremental cost approach has been universally applied by LWC in situations where upsizing has been done.

Copies to RKM L. Hollis
GCH S. Huber
6-22-98 K. Wallis K. Deasley

John Huber
June 22, 1998
Page 2

DEPRECIATION ON CLAC:

The Public Service Commission does not allow KAWC to recover depreciation on contributed property and it is likely that they would look with disfavor on a rate that included such a cost. We suggest that depreciation on contributed property, if any, be removed from our rate calculation.

MINIMUM LEVEL OF SALES:

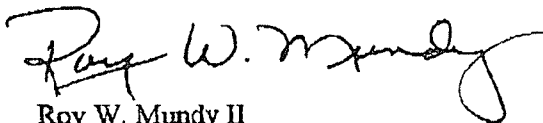
You have indicated that your board is interested in a guaranteed stream of revenue. We suggest that a minimum level of sales is unnecessary because the reserved capacity rate requires a minimum, and guaranteed, level of revenue, as it may increase from time to time, over the life of the contract.

RESERVED CAPACITY:

Our decision in these negotiations must be made among the various alternatives to the source of supply deficit. We must minimize our annual operating costs. It is obvious that the closer our reserved capacity is to our actual average use, the lower our per-unit rate will be. We propose that our initial reserved capacity be 2.5 MGD. We also propose that this reserve increase .5 MGD in the succeeding three years until it reaches 4 MGD. A reserved capacity of 6 MGD, while our average use remains at around 2 MGD, produces a rate that creates little, if any, benefit for KAWC. In fact, at an actual use of 1.5 MGD, the rate, using a 6-MGD reserved capacity, is \$1.79 per thousand gallons.

I am hopeful that prior to our next meeting as a group, I could discuss these issues with you privately. We may be able to bring closure to some of them.

Sincerely,



Roy W. Mundy II
President



LOUISVILLE WATER COMPANY

550 SOUTH THIRD STREET • LOUISVILLE, KENTUCKY 40202

TEL 502-569-3600 FAX 502-569-0815

JOHN L. HUBER
PRESIDENT

November 16, 1998

Mr. Herbert A. Miller, Jr.
Corporate Counsel
Kentucky-American Water Company
2300 Richmond Road
Lexington, KY 40502

Dear Herb:

Enclosed are four fully executed copies of the Water Supply Agreement.

Design of the water main from English Station Road and U. S. Highway 60 to Kentucky Highway 55 at Interstate 64 is being initiated in accordance with Mr. Mundy's recent letter.

Please extend our appreciation to the Kentucky-American staff for the professionalism and courtesy exhibited throughout these negotiations.

Sincerely,

A handwritten signature in cursive script, appearing to read "John L. Huber".

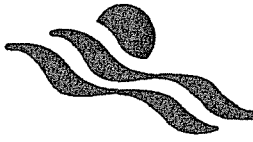
John L. Huber
President

jcm
enclosures

cc: Mr. Joseph B. Helm
Mr. Lindsey W. Ingram, Jr.

bcc: Greg Heitzman, with copy of agreement
Steve Hubbs, with copy of agreement
Bob Miller, with copy of agreement
Karla Teasley, with copy of agreement

*4 copies to KAWC
2 ✓ M. Dee for
LWC contract file*



Kentucky-American Water Company

2300 Richmond Road • Lexington, Kentucky 40502 • (606) 269-2386 • Fax (606) 268-6327

Herbert A. Miller, Jr.
Corporate Counsel
(606) 268-6339

November 9, 1998

John L. Huber
President
Louisville Water Company
550 South Third Street
Louisville, KY 40202

Dear John:

Enclosed for your signature are seven (7) sets of the Water Supply Agreement. I would appreciate the return of four (4) fully signed originals.

Kentucky-American has appreciated the cooperation and professionalism displayed by you and your staff in these negotiations. The resulting Agreement will benefit the customers of both Louisville Water Company and Kentucky-American Water Company.

Yours very truly,

Herbert A. Miller, Jr.

HAM/jd

Enclosures

c: Hon. Joseph B. Helm
Lindsey W. Ingram, Jr.

WATER SUPPLY AGREEMENT

THIS WATER SUPPLY AGREEMENT, dated as of this 7th day of NOVEMBER, 1998, between

LOUISVILLE WATER COMPANY,
550 South Third Street
Louisville, Kentucky 40202 ("Seller").

and

KENTUCKY-AMERICAN WATER COMPANY,
2300 Richmond Road
Lexington, Kentucky 40502 ("Buyer")

RECITALS

A. Seller, a Kentucky corporation all of the stock of which is owned by the City of Louisville, is governed by the Board of Water Works pursuant to Sections 96.230 through 96.310 of the Kentucky Revised Statutes and is statutorily permitted to sell water to customers taking service in Jefferson, Oldham, Shelby, Spencer, Bullitt and Hardin Counties, Kentucky.

B. Seller owns and operates water treatment and distribution facilities and utilizes its facilities to provide water service on a retail and wholesale basis throughout Jefferson County, Kentucky and in large areas of Oldham, Shelby, Spencer, and Bullitt Counties, including, among others, wholesale service to West Shelby Water District, North Shelby Water District and the City of Taylorsville;

C. Seller has available treatment and storage capacity sufficient to meet Buyer's needs set forth in this Agreement;

D. Buyer, a Kentucky corporation, engages in the manufacture of water for sale and service to customers in the counties of Fayette, Bourbon, Clark, Harrison, Jessamine, Scott, and Woodford; and

E. Buyer is desirous of securing a continuing, dependable source of water to meet the present and future needs of Buyer's customers and plans construction of extended transmission facilities to the Point of Delivery, defined below, to connect its existing system with Seller's.

WITNESSETH:

NOW, THEREFORE, in consideration of the mutual covenants and conditions herein contained, the parties agree as follows:

1. DEFINITIONS. In this Agreement, these terms have the meanings indicated below:

(a) Project Facilities: Fixtures, equipment, water transmission mains, metering equipment, vaults, storage facility, pipes, pump station, and other improvements and facilities designed and to be constructed to Seller's specifications and approved by Buyer to be used for delivery of Service under this Agreement together with easements and other real property rights acquired with respect thereto. Such facilities shall be owned by the Seller.

(b) Point of Delivery: The connection of the Project Facilities to Buyer's facilities. The connection will be at a point in Shelby County, Kentucky at or near the intersection of Interstate Highway 64 and Kentucky Highway 55.

(c) Service: The delivery of treated, potable water by Seller to the Point of Delivery under this Agreement pursuant to the standards set forth in Section 9, subsections (a) and (b) and as may be changed by operation of Section 13.

2. DESIGN OF PROJECT FACILITIES:

(a) The Project Facilities will be designed by Seller, Buyer retaining the right to approve the selection by Seller of outside professional engineering assistance in creating such design, such approval not to be unreasonably withheld, and to approve the scope of the design within the framework set forth immediately below. To the extent this Agreement is not executed by August 1, 1998, then the design completion date shall be extended by the time subsequent to August 1, 1998, until execution of this Agreement.

(b) The design of the Project Facilities shall include, among other things, a 60-inch transmission main from Seller's English Station Road Reservoir to the intersection of Interstate Highway 265 and Interstate Highway 64 in Jefferson County, a 36-inch transmission main from such intersection eastwardly to the intersection of Interstate Highway 64 and Kentucky Highway 55 in Shelby County (the location of the Point of Delivery), a 23 million gallon per day pump station situated in the Interstate 265-Interstate 64 intersection area, and a water storage facility with a minimum capacity of 1.0 million gallons situated along the 36-inch transmission main in Shelby County west of the Point of Delivery. Attached, designated EXHIBIT A, is a plat indicating the general location and route of the Project Facilities. Any subsequent change in the design/route which, individually or in the aggregate, increases the costs of the construction or operation of the Project Facilities to be paid by Buyer shall be subject to Buyer's prior written approval, which approval shall not be unreasonably withheld.

(c) Seller understands that the design of the Project Facilities must be fully completed in a form and substance satisfactory to Buyer prior to Buyer's application to the Kentucky Public Service Commission (the "PSC") for a Certificate of Convenience and Necessity. Consequently, the date of completion for such design shall not be later than December 1, 1998, time being of the essence.

(d) Also, on or before December 1, 1998 Seller will provide Buyer with its estimated cost of the portion of the Project Facilities for which Buyer is agreeing to pay as hereinafter provided and an estimate of the cost of the remaining (Seller's) portion.

3 PROPERTY ACQUISITION. Upon receipt by the Seller of Buyer's written instructions and within the limitations of such, Seller will initiate an effort to acquire easements and other property rights needed in the construction and installation of the Project Facilities, keeping Buyer advised from time to time as to its progress and as to any obstacles encountered in such procurement. Seller's efforts to acquire easements and other property rights shall be made expeditiously and in good faith. With respect to property rights being acquired at Buyer's cost, Seller will not purchase any of them without the costs thereof being approved by the Buyer and will not file condemnation actions without Buyer's direction to do so.

4. BIDDING ON CONSTRUCTION OF PROJECT FACILITIES: Upon receipt of written instructions from Buyer, and within the limitations contained therein which shall not be contrary to law or Seller's written contract bidding procedures, Seller will initiate its construction contract bidding process for the Project Facilities, including the advertising for and the taking of bids in accordance with its invitation to bid.

5. CONSTRUCTION OF PROJECT FACILITIES:

(a) Upon receipt of written instructions from Buyer, Seller will proceed with the awarding (preceded by rebidding if previously submitted bids have expired) of the Project Facilities construction contract(s) to the qualified bidder(s) submitting the lowest and best bid(s).

(b) Seller, using a professional engineering firm, registered in Kentucky, will supervise the construction of the Project Facilities and will complete same to the Point of Delivery no later than eighteen months from the date Seller receives the initial written instructions, set forth in Section 5(a), immediately above, time being of the essence. The completion of construction of the Project Facilities with water service being available at the Point of Delivery is referred to as the "Construction Completion Date".

(c) Delays in construction may cause reasonable extension of the Construction Completion Date provided such delays are the result of unanticipated adverse weather conditions, labor unrest, natural disasters, legal obstacles encountered in easement acquisition or other circumstances beyond Seller's control. Also, if Seller deems it necessary to rebid the construction contract(s) because of the expiration of the previous bids, the Construction Completion Date will be extended to accommodate the delay caused by such rebidding.

6. PROJECT FACILITIES' COSTS ALLOCATION:

(a) Except as otherwise provided in Section 6(c) Buyer agrees to pay the reasonable and necessary costs of design, site acquisition and construction of the Project Facilities, which costs include, but are not limited, to the following:

Consulting Engineering Services
Easement and other Property Rights
Easement Acquisition Agent
Recording of Real Estate Documents
Real Property Appraisals
Miscellaneous Out-of-Pocket Expenses

Bid Publication
Construction Contract(s) Obligations
Materials
Reproduction and Printing
Measurable In-house Engineering Planning,
Design and Construction Administration

(b) In addition, Buyer agrees to pay Seller's costs incurred with respect to the financing of Buyer's share of the Project Facilities, which costs include but are not limited to, financial advisor charges, bond counsel and other legal expenses, printing and other reproduction costs and marketing and travel expenses and pre-issuance financing costs, referenced in Section 7(a), below.

(c) Seller will be responsible for the costs of the design, site location and construction of the pump station and the Shelby County water storage facility. In addition, Seller shall be responsible for the incremental costs of material and installation of any portion of the transmission main, the diameter of which is greater than 36 inches so long as such increase in diameter is not the requirement of Buyer. Provided, however, in the event the Project Facilities are not built, Buyer will reimburse Seller for the design cost of the pump station and the storage facility in return for which Seller will assign all of its right, title and interest in and to such design to Buyer.

7. INVOICING AND PAYMENT OF BUYER'S COSTS:

(a) Inasmuch as most, if not all, of the costs incurred by Seller on Buyer's behalf in the design, property acquisition, bidding, and construction of the Project Facilities can be paid from the proceeds of issuance of tax-free or taxable revenue bonds, contemplated under Sections 8(a) or (b), below, Seller is agreeable to financing all pre-issuance costs with the understanding that it will be reimbursed in full from the bond proceeds for such costs, including its financing costs, to the extent permitted under the terms of the bond issue; otherwise such reimbursement is to be made by Buyer in accordance with Section 8(c), below.

(b) Seller will advise Buyer of its pre-bond issue design, property acquisition and bidding costs. Seller, within 30 days of such advice, will finance the amount thereof anticipating reimbursement from bond proceeds pursuant to Subsection (a), above.

(c) Construction costs, unless paid directly from bond financing proceeds, will be invoiced by Seller to Buyer as incurred with Buyer to be responsible for providing funds to Seller in advance of any construction contract payment deadline relating to progress and final payments.

(d) Seller's cost incurred on Buyer's behalf not reimbursable, or not to be reimbursed, from bond proceeds will be paid by Buyer in full within 30 days of receipt of Seller's invoice.

(e) Buyer reserves the right to dispute costs it deems to be unreasonable but agrees that it will indemnify Seller and hold it harmless for any judgments, settlements, legal fees

and other costs incurred by Seller as a result of Buyer's refusal to pay Seller with respect to a third party claim.

8. FINANCING OF BUYER'S SHARE OF COSTS OF PROJECT FACILITIES:

Buyer agrees to reimburse Seller for all Project Facilities' costs, the cost of which Buyer has assumed hereinabove. Such reimbursement will take one or more of the following forms:

(a) By reimbursing Seller for its costs, including, but not limited to, debt service and issuance costs, through the issuance of tax-free, municipal revenue bonds by the Seller, the proceeds of which are to be used to pay or to reimburse Seller for the Project Facilities' costs, to the extent such costs are eligible for reimbursement from bond proceeds, it being understood that the contemplated bonds will be sold on a competitive bid basis and the bid award will be made by Seller only after consultation with Buyer. Attached hereto and designated Schedule A is a Projected Debt Amortization Schedule which assumes a \$1,000,000 issue, bearing interest at 6% per annum and maturing over a 20 year period, said Schedule being attached for illustrative purposes only; or

(b) Failing the availability of above described tax-free financing, by reimbursing Seller for its costs, including, but not limited to, debt service and cost of issuance, through the issuance of corporate revenue bonds by Seller or Buyer, at Buyer's option, the proceeds of which are to be used to pay or to reimburse Seller for the cost of the Project Facilities, it being understood that the contemplated bonds, if issued by Seller, will be sold on a competitive bid basis with the winning bid to be awarded by Seller only after consultation with Buyer; or

(c) By progress payments from Buyer to Seller to be made within 30 days of invoice, the first such payment to be made within thirty days of Buyer's written advice that no bond issue financing is to be pursued and to be in an amount equal to the sum of all amounts previously incurred by Seller including those financed pursuant to Section 7(a), above, plus the financing cost thereof. The provisions of this subsection also shall be applicable to invoices from Seller that are later determined to be ineligible for reimbursement from bond proceeds.

(d) If Seller's bond instruments permit prepayment of part or all of the debt obligation, and if Buyer is not in default of any of its payments to Seller under this Section and Section 11 of this Agreement, then Buyer has the right to instruct Seller on a timely basis to exercise the prepayment privilege and shall simultaneously pay to Seller the amount of the prepayment needed, including premium, if any, to remit to the holders of the debt instruments being redeemed and any redemption expenses.

(e) Failure of Buyer to provide Seller with readily available funds in time to meet any debt payment requirements or construction contract obligation will result in a 5% penalty on the delinquent amount to be added to such delinquent payment for each month or partial month such payment and penalties thereon are delinquent.

(f) The parties understand and agree that the pledge securing the proposed revenue bonds will be Buyer's promise to pay the debt service thereon. Buyer agrees to cooperate

with Seller in good faith in preparing for and marketing the bond issue, including, but not limited to, the meeting of all disclosure requirements.

9. SERVICE AT THE POINT OF DELIVERY:

(a) Condition. Seller will provide Buyer Service at the Point of Delivery, which meets or exceeds all applicable drinking water standards in effect at the time of delivery.

(b) Flow Rate and Pressure. Seller shall design and construct the Project Facilities to make them capable of delivering water to Buyer at the Point of Delivery having a flow rate of up to 23 million gallons per day and water pressure of not less than thirty pounds per square inch (30 psi).

(c) Rate of Flow Demand. While Buyer is reserving up to 23 million gallons per day of Seller's production capacity, its requirements will be, as presently contemplated, substantially less than that during much of the duration of this Agreement. Such is recognized in Exhibit B, referenced in Section 11, setting forth the parties' rate arrangements. Nevertheless, Buyer may at any time and from time to time be in need of 23 million gallons per day, or significant portions thereof. At the same time, Seller desires as much advance notice as it can get with respect to any significant demand increase by Buyer in order that Seller's operations will not be adversely affected by a sudden, out of the ordinary demand on its production and transmission facilities. With such in mind, the parties pledge to each other open communications, from the Buyer to the Seller of any operational situations that may cause it to significantly increase its water needs in the near future, i.e. plant/equipment outage, drought predictions, etc., and from Seller to Buyer of Seller's operational situations that might adversely affect Seller's ability to immediately respond to any sudden need of Buyer for a significant increase in volume of water at the Point of Delivery, i.e. plant/equipment outages, planned and unplanned, and other factors that might affect its ability to deliver water. Regardless, Seller agrees to supply Buyer's demands, as same may be altered from time to time, and with reference to any sudden significant demand increase, as soon as possible after notification by Buyer, barring problems beyond Seller's control.

(d) Service to Others. Seller warrants and represents that any water service to others prior to the Point of Delivery provided through or from the Project Facilities shall not interfere with its service or diminish its obligations to the Buyer under this Agreement.

(e) Failures. Buyer acknowledges that unexpected supply or treatment problems may occur which are beyond Seller's control. In the event Seller, when called upon, is unable to provide Buyer with Service under the terms of this Agreement for reasons beyond Seller's control, Seller shall use its best efforts to restore the Service to the quality, rate of flow and pressure required. Time is of the essence in all situations where such failure and duty of restoration exists. In the event delivery problems limit or prevent the delivery of water to any of Seller's other customers, then Seller agrees that any restrictions, placed by it or upon it by others as to water delivery, shall apply to the Buyer in the same manner as applied by Seller to other customers.

10. METERING ARRANGEMENTS: Seller agrees to furnish, install, maintain, repair and replace at the Point of Delivery a service meter or battery of meters, including meter house or vault, for properly measuring the quantity of water being delivered to Buyer and to test such metering equipment whenever requested by Buyer but no more frequently than once every six months with the results of such tests provided to Buyer. Buyer may require Seller to conduct tests more often than every six months, but at its own expense. A meter registering between 98.5% and 101.5% of the actual flow shall be deemed to be accurate. Previous readings of any meter disclosed by test to be inaccurate shall be corrected for three months previous to such test in accordance with the percentage of inaccuracy found by such test. If any meter fails to register for any period, the amount of water furnished during such period shall be deemed to be the amount of water delivered in the corresponding period immediately prior to the failure, unless Seller and Buyer shall agree otherwise. An appropriate official of the Buyer shall have access to the meter at reasonable times for the purpose of inspecting and reading such metering facilities.

11. RATES AND PAYMENT:

(a) Buyer shall pay Seller for the Service as determined by the methodology set forth in Exhibit B, attached hereto and incorporated herein, Buyer agreeing that the rate-making methodology contained therein is reasonable for the anticipated annual rate adjustment filings by the Seller with the Kentucky Public Service Commission relating to the provision of Service under this Agreement.

(b) Buyer's meter will be read at the end of each month of Service and shall be invoiced by Seller in accordance with the provisions of Exhibit B, provided, however, the rate paid by Buyer for Service shall never exceed Seller's Wholesale Rate plus its Elevated Service Area Surcharge, if applicable, as adjusted from time to time.

(c) Buyer shall remit payment to Seller for each invoice no later than the 30 calendar days following the mailing or facsimile transmission of such invoice. Failure to make timely payments will cause a penalty of five percent (5%) per month or partial month on each invoice remaining unpaid. Buyer shall have the option of paying such monthly invoices by automatic bank drafts.

12. RESERVATION OF CAPACITY: Seller reserves production capacity to Buyer of 23 million gallons per day (flow rate) for the term of this Agreement.

13. RIGHT TO INCREASE DELIVERY CAPACITY OF PROJECT FACILITIES:

(a) Recognizing that the Project Facilities being financed by Buyer will have a delivery capacity of 23 million gallons of water per day and further recognizing that the Seller financed additions thereto of a pumping station, a Shelby County storage facility and main upsizing will make the Project Facilities expandable to 35 million gallons per day, Seller hereby agrees to give Buyer the right, and the right of first refusal, to acquire up to all of the additional 12 million gallons per day capacity on the following terms and conditions:

(i) When Seller receives a bona fide, acceptable proposal to sell water service from or through the Project Facilities, it will notify Buyer in writing who will have 60 days to exercise its right of first refusal for the acquisition of the capacity contemplated in such proposal. If Buyer chooses to acquire the additional capacity offered, or on its own volition to acquire additional available capacity, it will be obligated as follows.

(ii) To pay Seller a percentage of the then book value of the Seller-financed part of the Project Facilities and any improvements made thereto that is represented by the capacity being acquired as same relates to the total 12 million gallons per day available.

(iii) Pay to Seller all costs incurred by it in any upgrading of the Project Facilities needed to provide the increase in rate of flow to the Point of Delivery.

(iv) To an increase in its Exhibit B capacity Request in an amount equal to the increased daily capacity being acquired, effective at the time that the Seller has made the increase available at the Point of Delivery, it being understood that Seller will make such increased capacity available no later than 12 months from the date of exercise of the right.

(v) To an increase in its Exhibit B minimum monthly usage by an amount equal to 50% of the increased monthly capacity being acquired, effective at the same time the Request increase takes effect.

(b) Upon Buyer's exercise of its rights set forth above in this Section 13, Seller will consider, at Buyer's request, issuance of Seller's debt instrument(s) to finance Buyer's obligations under subsection (a)(ii) and (iii), above, an issuance similar to that contemplated in Section 8(a)

14. ADDITIONAL EXPANSION BY SELLER: Seller agrees that before undertaking any expansion or enlargement of any of the Project Facilities or the Payne plant treatment capacity, it will notify Buyer of its intention to do so and will afford Buyer with a reasonable opportunity to participate in the expansion or enlargement upon terms and conditions mutually agreeable.

15. NOTICE: In addition to the communications called for in subsection 9(c), Buyer will timely notify Seller of any condition or situation, which would adversely affect the quality, quantity or pressure of the water in Seller's system and, likewise, Seller will timely notify Buyer of any condition or situation, which would adversely affect the quality, quantity or pressure of the water at the Point of Delivery.

16. TERM AND EXTENSIONS: The term of this Agreement shall begin on the date it is executed by both parties hereto and shall terminate 50 years after the date Service is initiated. The parties shall execute an addendum showing the date Service is initiated and the termination date 50 years later. One year prior to the termination date the parties hereto shall begin to negotiate in good faith an extension of this Agreement with due and proper consideration for the principles and concepts contained herein, being mindful that the parties are hopeful that their relationship, created herein, will be one of mutual benefit and respect that will last longer than the initial 50 year term.

17. BUYER'S REPRESENTATION AND WARRANTY:

Buyer is a Kentucky corporation with the authority to enter into this Agreement, subject to regulatory approval, and has the authority to perform under the terms of this Agreement.

18. SELLER'S REPRESENTATION AND WARRANTY:

Seller is a Kentucky corporation with the statutory authority through the Board of Water Works to enter into this Agreement and to perform under the terms of this Agreement.

19. TERMINATION:

(a) Buyer may terminate this Agreement upon six (6) months written notice in the event of:

(1) Repeated failure of Seller to provide the Service set forth in this Agreement.

(2) Revocation of Seller's authority to do business.

(b) Seller may terminate this Agreement upon six (6) months written notice in the event of:

(1) Failure of Buyer to deliver to Seller written instructions to proceed with the construction of the Project Facilities within six months of receipt by Buyer of a final, non-appealable Order from the PSC in the form of a Certificate that public convenience and necessity requires the construction.

(2) Buyer's failure to receive after five or more years from the date of this Agreement a final, nonappealable Order, referenced in subsection (1), immediately above, unless at the time of such termination election by Seller, Buyer is pursuing, and continues to pursue, in good faith and with reasonable diligence the desired PSC Order.

(3) Repeated failure of Buyer to pay its invoices for water service on a timely basis.

(4) Repeated failure of Buyer to pay on a timely basis its debt service obligations to Seller, time being of the essence in that regard.

(5) Revocation of Buyer's authority to do business.

20. MISCELLANEOUS PROVISIONS:

(a) This Agreement is subject to the approval of the PSC and receipt by Buyer of a final, non-appealable Order, in a form and written content acceptable to Buyer, from the PSC

in the form of a Certificate of Convenience and Necessity for the facilities to be constructed pursuant to this Agreement. Provided, however, failure to obtain such an Order shall not relieve Buyer of its duties hereunder to reimburse Seller for costs incurred pursuant to the provisions of Sections 2, 3 and 4, above. In the event such Order alters, directly or indirectly, one or more provisions of this Agreement (including the one or more provisions of Exhibit B) and such modification(s) is not acceptable to either party, then this Agreement terminates so long as the terminating party communicates such action to the other party within 60 days of receipt of such Order.

(b) This Agreement does not constitute a partnership, joint venture, agency or other relationship between Buyer and Seller, and Buyer and Seller expressly state that they owe no fiduciary duties to one another and that the relationship is based upon Contract.

(c) This Agreement is binding on the successors and assigns of the parties hereto.

(d) The parties agree that each will have access upon reasonable notice to the books and records of the other relating to the subject matter of this Agreement, such access to exclude records that are subject to a recognized privilege or to protection under the Kentucky Open Records Law. Without limitation, the information subject to access shall include all costs of design, construction, financing, and costs of operation and maintenance of the facilities contemplated by this Agreement.

(e) Buyer reserves the right to develop and use other water supply sources and may obtain water from sources other than the Seller.

(f) The parties agree to operate and maintain their respective facilities in an efficient and economical manner and in accordance with all applicable local, state and federal laws, regulations and performance standards.

(g) This Agreement may be amended at any time by mutual agreement, in writing, of the parties.

(h) Both parties agree to use their best efforts to obtain all regulatory and legal approvals required for the accomplishment of the terms of this Agreement.

(i) The parties acknowledge that the water to be purchased hereunder will be resold in the regular course of business of Buyer and is therefore exempt from Kentucky sales and use tax. To evidence this exemption, Buyer will furnish Seller with a duly executed "Resale Certificate" or such other documentation as the parties deem appropriate.

(j) Seller agrees, subject to its right hereby reserved to self-insure itself up to the first Two Million Dollars in liability, to carry public liability insurance in the minimum amount of Ten Million Dollars per occurrence during the term of this Agreement.

IN WITNESS WHEREOF, the parties have set forth their hand the day and year first above written.

BUYER:

SELLER:

Kentucky-American Water Company

Louisville Water Company

By: Roy W Mundy, II

By: John L Huber

Roy W Mundy, II

John L. Huber

President

President

Date: November 7, 1998

Date: November 12, 1998

Attest: Herbert A. Miller, Jr.

Attest: Robert K. Miller

Name: Herbert A. Miller, Jr.
Secretary

Name: Robert K. Miller

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FAUSERS\015\LWC\KYAMEWAT.A13

Schedule A

Bluegrass Water Project Agreement

Projected Debt Amortization Schedule
per \$1,000,000 of debt with level debt service payments
at 6% interest for 20 years

Year	Beginning Balance	Interest	Principal	Ending Balance
1	\$ 1,000,000	\$ 60,000	\$ 27,185	\$ 972,815
2	\$ 972,815	\$ 58,369	\$ 28,816	\$ 944,000
3	\$ 944,000	\$ 56,640	\$ 30,545	\$ 913,455
4	\$ 913,455	\$ 54,807	\$ 32,377	\$ 881,078
5	\$ 881,078	\$ 52,865	\$ 34,320	\$ 846,758
6	\$ 846,758	\$ 50,805	\$ 36,379	\$ 810,379
7	\$ 810,379	\$ 48,623	\$ 38,562	\$ 771,817
8	\$ 771,817	\$ 46,309	\$ 40,876	\$ 730,942
9	\$ 730,942	\$ 43,857	\$ 43,328	\$ 687,614
10	\$ 687,614	\$ 41,257	\$ 45,928	\$ 641,686
11	\$ 641,686	\$ 38,501	\$ 48,683	\$ 593,002
12	\$ 593,002	\$ 35,580	\$ 51,604	\$ 541,398
13	\$ 541,398	\$ 32,484	\$ 54,701	\$ 486,697
14	\$ 486,697	\$ 29,202	\$ 57,983	\$ 428,715
15	\$ 428,715	\$ 25,723	\$ 61,462	\$ 367,253
16	\$ 367,253	\$ 22,035	\$ 65,149	\$ 302,104
17	\$ 302,104	\$ 18,126	\$ 69,058	\$ 233,045
18	\$ 233,045	\$ 13,983	\$ 73,202	\$ 159,843
19	\$ 159,843	\$ 9,591	\$ 77,594	\$ 82,249
20	\$ 82,249	\$ 4,935	\$ 82,250	\$ (0)

WATER SUPPLY AGREEMENT

EXHIBIT B

Rate Arrangements

Because of the unusual situation impacting upon the relationship, i.e. Buyer owning and operating production facilities sufficient, much of the time, to meet its present needs but desiring a second reliable source of water, and Seller presently having production capacity available and being asked to commit to Buyer more capacity than Buyer plans to use for a number of years, the parties have developed the rate arrangements set forth below.

1. Buyer's Capacity Request. On or before July 1 of each calendar year, beginning with the year preceding the first full calendar year of Service, Buyer will notify Seller in writing of its capacity request (the "Request") for the succeeding calendar year, which Request may be any number between 2.5 million gallons per day and 23 million gallons per day, provided, however, Buyer's Request, beginning in the sixth full calendar year of service must be at least 5 million gallons per day. Buyer's Request for the first partial calendar year of service delivered under this Agreement, assuming the initial Service commences after January 1 of any calendar year and the first full calendar year is set at 2.5 million gallons per day unless such amount is raised on a timely basis by Buyer. Subsequent Requests for the next four full calendar years will not be less than 3 million gallons per day for the second full calendar year, 3.5 million gallons per day for the third, 4 million gallons per day for the fourth and 4.5 million gallons per day for the fifth full calendar year.

2. Water Service Rate. The rate for the Service for the term of the Agreement shall be determined by totaling the following components:

(a) The Operating Expense Component, determined for the billing period by dividing the Buyer's usage by the Seller's total sales and multiplying the quotient by Seller's Operating Expenses, less expenses common only to retail customer expenses and to customers generally.

(b) The Depreciation Expense Component, determined for the billing period by dividing the Buyer's Request by the Seller's production capacity and multiplying the quotient by the Seller's Depreciation Expense, less depreciation on contributed capital and depreciation common only to retail customers and to customers generally.

(c) The Return on Plant Investment Component, determined for the billing period by dividing the Buyer's Request by the Seller's production capacity and multiplying the quotient by Seller's Return on Plant Investment, excluding return on plant investment common only to retail customers and to customers generally.

(d) Customer Cost Component, determined for the billing period by the Service Charge, as it may change from time to time, currently contained in Section 6.02.1 of Seller's rate schedule, applied to the number and size of meters installed at Buyer's request.

3. Minimum Usage. Minimum usage of water during the first full calendar year of Service, and for any months of Service prior thereto, shall be, for the months of January, February, March, April, November and December (the "Nonirrigation Months") 36 million gallons per month and for the months of May through October (the "Irrigation Months") 54 million gallons per month. Buyer will be billed for such minimum usage if same is not consumed by it. During the second full calendar year, the minimum usage for the Nonirrigation Months shall be 38.4 million gallons per month and for the Irrigation Months, shall be 57.6 million gallons per month. For the third full calendar year, the minimum usage of water during the Nonirrigation Months shall be 40.8 million gallons per month and 61.2 million gallons per month for the Irrigation Months. For the fourth full calendar year, the minimum usage for water during the Nonirrigation Months shall be 43.2 million gallons per month and for the Irrigation months, 64.8 million gallons per month. During the fifth full calendar year of Service, the minimum usage of water during the Nonirrigation Months shall be 45.6 million gallons per month and during the Irrigation Months, 68.4 million gallons per month. Thereafter, for the remaining months of the Agreement the minimum usage shall be 54.0 million gallons per month for the Nonirrigation months and 66 million per month for the Irrigation months. However, in determining whether Buyer has met its minimum usage for any month, only daily usage by Buyer up to its capacity Request, then in effect, will be considered, usage exceeding such Request not to be included in such computation.

4. Usage Exceeding Request. Usage of water during any 24 hour period in excess of Buyer's Request will result in a charge to Buyer, with respect to the excess consumption, of Seller's Wholesale Rate, as set by the Board of Water Works from time to time, including its Elevated Service Area Surcharge (which Rate, including the surcharge, is presently \$1.35 per 1000 gallons).

5. Emergency Excess or Minimum Usage. In the event Buyer's usage is enhanced or diminished for a brief period of time due to unforeseeable or uncontrollable circumstances, for example emergency flushing, Seller agrees to equitably adjust Buyer's Service billing with respect to such emergency.

6. Supporting and Explanatory Schedules. Attached to this Exhibit B are the following described supporting and explanatory schedules:

- (a) Schedule 1, entitled Calculation of Rate Components where a Request of 2.5 million gallons per day is in effect and making references to schedules found in "Seller's 1997 Rate Study for 1998."
- (b) Schedule 2, relating to the Operating Expense Component.
- (c) Schedule 3, relating to the Depreciation Expense Component.
- (d) Schedule 4, relating to the Return on Plant Investment Component.
- (e) Schedule 5, entitled Calculation of Monthly Water Bill Example.

7. Seller's Production Capacity. As shown in Schedule 1, attached, Seller's present daily production capacity has been determined to be 240,000,000 gallons, based upon data contained in Seller's 1995-2015 Facilities Plan, prepared by CH2M Hill a nationally recognized independent consulting engineering firm. Seller agrees to have its production capacity reviewed and redetermined at least every five years during the term of this Agreement by a nationally recognized independent consulting engineering firm and the redetermination used in Exhibit B computations [Sections 2(b) and 2(c)]. Production capacity, for the purposes of this Agreement, shall mean Seller's combined source pumping, treatment, and treated water pumping capability as determined from its facilities existing at the time of such determination. Provided, however, such capacity, for the purposes of the annual computations to be made pursuant to Section 2 of this Exhibit B, shall never be lower than 240,000,000 gallons.

8. Computations. The computations contained in the attached Schedules are based upon Seller's 1997 Rate Study For FY 1998, using Seller's historical and current financial and operational records, such financial records being prepared in accordance with generally accepted accounting principles, audited annually by a reputable certificated public accounting firm and constitute the same figures used by Seller in preparing its 1998 budget, approved by the Board of Water Works and submitted to Seller's bondholder trustee, an annual exercise. Annual rate revisions will be performed using Seller's budget figures.

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EXHIBIT B

10/8/98

Schedule 1

LWC - KAWC WATER SUPPLY AGREEMENT
Calculation of Rate Components

Request (1,000 Gal.)	2,500
Divided by: LWC Production Capacity (1,000 Gal.)	240,000
Request / Production Capacity Quotient	1.042%

CALCULATION OF OPERATING EXPENSE COMPONENT

Net Operating Expenses	Utility Rate Schedule 2; Column 1; Line 50.	\$ 31,220,800
Less: Common to Retail Customer Costs	Utility Rate Schedule 2; Column 7; Line 50.	(5,127,330)
Customer Costs	Utility Rate Schedule 2; Column 8; Line 50.	(9,803,200)
Operating Cost		\$ 16,290,270
Divided by: LWC's Annual System Sales (1,000 Gal.)	Utility Rate Schedule 1; Column 3; Line 4.	37,000,000
Operating Expense Component Quotient (per 1,000 Gal.)		\$ 0.44028

CALCULATION OF DEPRECIATION EXPENSE COMPONENT

Depreciation Expense	Utility Rate Schedule 3; Column 1; Line 19.	\$ 11,010,480
Less: Common to Retail Customer Costs	Utility Rate Schedule 3; Column 7; Line 19.	(2,940,510)
Customer Costs	Utility Rate Schedule 3; Column 8; Line 19.	(2,663,010)
Depreciation - Plant Funded by CIAC	Utility Rate Schedule 3.	(632,290)
Depreciation Cost		\$ 4,774,670
Multiplied by: Request / Production Capacity Quotient		1.042%
Annual Depreciation Expense Component		\$ 49,752.06
Divided by: 12-Months		12
Monthly Depreciation Expense Component		\$ 4,146.01

CALCULATION OF RETURN ON PLANT INVESTMENT COMPONENT

LWC's Return on Plant Investment	Utility Rate Schedule 4; Column 1; Line 24.	\$ 28,585,310
Less: Common to Retail Customer Costs	Utility Rate Schedule 4; Column 7; Line 24.	(7,164,740)
Customer Costs	Utility Rate Schedule 4; Column 8; Line 24.	(1,488,140)
Net Return on Plant Investment		\$ 19,932,430
Multiplied by: Request / Production Capacity Quotient		1.042%
Annual Return on Plant Investment Component		\$ 207,695.92
Divided by: 12-Months		12
Monthly Return on Plant Investment Component		\$ 17,307.99

CUSTOMER COST COMPONENT

Example based on one 6" meter	\$ 259.00
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USAGE EXCEEDING REQUEST COMPONENT

Usage of water during any 24 hour period in excess of KAWC's Request will result in a charge to KAWC, with respect to excess consumption, of LWC's Wholesale Rate Including Its Elevated Service Area Surcharge.	\$ 1.35
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COMPUTATION OF TOTAL WATER BILL

The monthly water bill will be the sum of the following charges: operating expense component; depreciation expense component; return on plant investment component; customer cost component; and the usage exceeding request component.

EXHIBIT B

Schedule 2

UTILITY RATE

ALLOCATION OF LOUISVILLE WATER COMPANY ESTIMATED NET OPERATING EXPENSE TO FUNCTIONAL COST COMPONENTS
YEAR ENDED DECEMBER 31, 1998 (IN THOUSAND DOLLARS)

LINE NO.	ITEM	NET OPERATING EXPENSE	ELEVATED SERVICE AREA	BASE	COMMON TO ALL CUSTOMERS			COMMON TO ONLY RETAIL CUSTOMERS
					EXTRA CAPACITY MAXIMUM DAY	MAXIMUM HOUR	CUSTOMER	
1)	SOURCE OF SUPPLY	52.44		36.31	16.13			
2)	POWER AND PUMPING							
3)	Zorn Station, Power	866.07		866.07				
4)	Zorn Station, Other	427.14		295.76	131.38			
5)	Crescent Hill Station, Power	743.19		743.19				
6)	Crescent Hill Station, Other	434.68		269.42		165.26		
7)	B.E. Payne Station, Raw Water, Power	113.98		113.98				
8)	B.E. Payne Station, Raw Water, Other	178.51		123.61	54.91			
9)	B.E. Payne Sta., Finished Water, Power	645.90	322.95	322.95				
10)	B.E. Payne Sta., Finished Water, Other	207.41	103.70	64.28		39.43		
11)	Boosting Pumping, Power	180.86	171.82	9.04				
12)	Boosting Pumping, Other	496.64	397.31	61.56		37.76		
13)	Total Power and Pumping	4,294.38	995.78	2,869.87	186.28	242.45	0.00	
14)	PURIFICATION							
15)	Chemicals, B.E. Payne	977.05		977.05				
16)	Chemicals, Crescent Hill	308.54		308.54				
17)	Purification, Other	3,707.65		2,567.27	1,140.38			
18)	Total Purification	4,993.24	0.00	3,852.86	1,140.38	0.00	0.00	
19)	TRANSMISSION AND DISTRIBUTION							
20)	Transmission Mains	712.95		493.66	219.28			
21)	Distribution Mains	1,789.04						1,789.04
22)	Distribution Storage, Res. & Tanks	23.09	20.78	1.43		0.88		
23)	Services	1,126.75					1,126.75	
24)	Meters	485.12					485.12	
25)	Hydrants	290.26						290.26
26)	Transmission & Distribution Subtotal	4,427.20	20.78	495.09	219.28	0.88	1,611.87	2,079.30
27)	Percent	100.00%	0.47%	11.16%	4.95%	0.02%	36.41%	46.97%
28)	General Transmission and Distribution	5,052.32	23.71	565.00	250.25	1.00	1,839.47	2,372.89
29)	Total Transmission and Distribution	9,479.52	44.48	1,060.09	469.53	1.88	3,451.34	4,452.19
30)	CUSTOMER ACCOUNTS AND SERVICE							
31)	Supervision	201.12						
32)	Meter Reading	1,025.39						
33)	Customer Records	3,983.47						
34)	Uncollected Accounts	275.00						
35)	Miscellaneous Customer Accounts	96.82						
36)	Total Customer Accounts & Service	5,581.80					5,581.80	
37)	Subtotal	24,401.37	1,040.27	7,819.13	1,812.32	244.33	9,033.14	4,452.19
38)	Percent	100.00%	4.26%	32.04%	7.43%	1.00%	37.02%	18.25%
39)	ADMINISTRATIVE AND GENERAL							
40)	Administrative and General	12,610.53						
41)	Labor Related Overhead	8,853.50						
42)	Less: Operating Expenses Applied	(12,262.30)						
43)	Total Administrative and General	9,201.73	392.28	2,948.59	683.42	92.14	3,406.39	1,678.91
44)	Total	33,603.10	1,432.55	10,767.72	2,495.74	336.46	12,439.52	6,131.10
45)	Free Water in Lieu of Taxes	963.70		963.70				
46)	Amortization	(80.90)		(80.90)				
47)	Retirement of Assets	750.00		232.43		142.57	375.00	
48)	Total Operating Expenses	35,235.90	1,432.55	11,882.95	2,495.74	479.03	12,814.52	6,131.10
49)	Other Operating Income	(4,015.10)					(3,011.33)	(1,003.78)
50)	Net Operating Expense	31,220.80	1,432.55	11,882.95	2,495.74	479.03	9,803.20	5,127.33

EXHIBIT B

Schedule 3

UTILITY RATE

ALLOCATION OF LOUISVILLE WATER COMPANY ESTIMATED DEPRECIATION EXPENSE TO FUNCTIONAL COST COMPONENTS
YEAR ENDED DECEMBER 31, 1998 (IN THOUSAND DOLLARS)

LINE NO.	ITEM	TOTAL DEPRECIATIO EXPENSE	ELEVATED SERVICE AREA	BASE	COMMON TO ALL CUSTOMERS			COMMON TO ONLY RETAIL CUSTOMERS
					EXTRA CAPACITY MAXIMUM DAY	MAXIMUM HOUR	CUSTOMER	
1)	Land							
2)	Land Improvements and Buildings	895.57	17.31	614.97	200.07	13.48	49.73	
3)	Basins and Ground Storage	359.24		248.75	110.49			
4)	Standpipes and Elevated Storage	162.42	43.90	73.46		45.06		
5)	High Service Pumps and Equipment	204.84	19.21	128.54	57.09			
6)	Booster Pump Equipment	34.93	24.17	6.67		4.09		
7)	Miscellaneous Pump Equipment	48.65		33.69	14.96			
8)	Sludge Disposal Equipment	64.48		64.48				
9)	Purification Equipment	536.44		371.44	165.00			
10)	Transmission Mains	2,122.63		1,469.76	652.87			
11)	Distribution Mains	1,971.82						1,971.82
12)	Meters	357.76					357.76	
13)	Services	1,302.41					1,302.41	
14)	Meter Installations	447.05					447.05	
15)	Fire Hydrants	409.90						409.90
16)	Sub-total	8,918.14	104.59	3,011.76	1,200.49	62.63	2,156.95	2,381.72
17)	Percent	100.00%	1.17%	33.77%	13.46%	0.70%	24.19%	26.71%
18)	General and Other Equipment	2,092.34	24.54	706.61	281.65	14.69	506.06	558.79
19)	TOTAL	11,010.48	129.13	3,718.37	1,482.14	77.33	2,663.01	2,940.51

Schedule 3

EXHIBIT B

Schedule 4

UTILITY RATE

ALLOCATION OF ESTIMATED LOUISVILLE WATER COMPANY NET INVESTMENT (1998)
INCLUDING WORK-IN-PROGRESS
(THOUSAND DOLLARS)

LINE NO.	ITEM	NET PLANT INVESTMENT	ELEVATED SERVICE AREA	COMMON TO ALL CUSTOMERS				COMMON TO ONLY RETAIL CUSTOMERS
				BASE	EXTRA CAPACITY MAXIMUM DAY	MAXIMUM HOUR	CUSTOMER	
1)	Land	4,827.66	133.83	2,817.58	889.91	107.15	879.19	
2)	Land Improvements and Buildings	34,449.56	448.15	20,410.16	6,446.36	776.15	6,368.74	
3)	Basins and Ground Storage	9,866.34		6,831.71	3,034.63			
4)	Standpipes and Elevated Storage	5,457.51	1,711.29	2,321.96		1,424.26		
5)	High Service Pumps and Equipment	6,127.01	543.55	3,866.13	1,717.33			
6)	Booster Pump Equipment	1,025.46	733.14	181.18		111.14		
7)	Miscellaneous Pump Equipment	3,510.21		2,430.56	1,079.65			
8)	Sludge Disposal Equipment	1,704.07		1,704.07				
9)	Purification Equipment	18,576.16		12,862.62	5,713.54			
10)	Transmission Mains	148,269.67		102,665.77	45,603.90			
11)	Distribution Mains	102,856.67						102,856.67
12)	Meters	2,887.58					2,887.58	
13)	Services	40,176.18					40,176.18	
14)	Meter Installations	13,588.90					13,588.90	
15)	Fire Hydrants	16,854.21						16,854.21
16)	Sub-total	410,177.19	3,569.96	156,091.75	64,485.33	2,418.69	63,900.59	119,710.88
17)	Percent	100.00%	0.87%	38.05%	15.72%	0.59%	15.58%	29.19%
18)	Gen. Plant & Unamortized Capital Charges	10,906.02	94.92	4,150.25	1,714.57	64.31	1,699.02	3,182.94
19)	Total Plant	421,083.21	3,664.88	160,242.00	66,199.90	2,483.00	65,599.61	122,893.82
20)	Other Rate Base Items (1)	9,451.20	82.26	3,596.63	1,485.85	55.73	1,472.38	2,758.35
21)	Sub-total	430,534.41	3,747.14	163,838.63	67,685.75	2,538.73	67,071.99	125,652.17
22)	Contributions and Grants (2)	(132,149.10)		(24,183.29)			(51,538.15)	(56,427.67)
23)	Total Net Plant Investment	298,385.31	3,747.14	139,655.35	67,685.75	2,538.73	15,533.84	69,224.50
24)	Annual Return @ 9.58%	28,585.31	358.98	13,378.98	6,484.30	243.21	1,488.14	7,164.74

1. Line 20, "Other Rate Base Items", includes: Materials - \$3,500,000, Prepayments - \$250,000, and Working Capital - \$5,701,200 for a total of \$9,451,200.

2. Line 22, "Contributions and Grants", excludes federal government grants of \$3,550,900.

Schedule 4
11/25/97

EXHIBIT B

10/8/98

Schedule 5

LWC - KAWC Water Supply Agreement
Calculation of Monthly Water Bill Example

Monthly Minimum Usage (1,000 Gal.)

45,000

Buyer's Daily Request (1,000 Gal.)

2,500

Day	Daily Usage (1,000 Gal.)	Usage Exceeding Request (1,000 Gal.)
1	1,500	0
2	1,500	0
3	2,000	0
4	2,000	0
5	3,000	500
6	3,000	500
7	4,000	1,500
8	4,000	1,500
9	5,000	2,500
10	5,000	2,500
11	6,000	3,500
12	6,000	3,500
13	7,000	4,500
14	7,000	4,500
15	8,000	5,500
16	8,000	5,500
17	9,000	6,500
18	9,000	6,500
19	10,000	7,500
20	10,000	7,500
21	9,000	6,500
22	9,000	6,500
23	8,000	5,500
24	8,000	5,500
25	7,000	4,500
26	7,000	4,500
27	6,000	3,500
28	6,000	3,500
29	5,000	2,500
30	5,000	2,500
Totals	181,000	109,000
Usage Within the Request (1,000 Gal.)		72,000
Multiplied by: Operating Expense Component Quotient (per 1,000 Gal.)		\$ 0.44028
Operating Expense Component		\$ 31,700.16
Usage Exceeding Request (1,000 Gal.)		109,000
Multiplied by: Seller's Wholesale Rate (per 1,000 Gal.)		\$ 1.35
Usage Exceeding Request Component		\$ 147,150.00
Operating Expense Component		\$ 31,700.16
Depreciation Expense Component		4,146.01
Return on Plant Investment Component		17,307.99
Usage Exceeding Request Component		147,150.00
Customer Cost Component		259.00
Monthly Water Bill		\$ 200,563.16
Monthly Water Bill / Buyer's Usage for Month (1,000 Gal.)		\$ 1.10808
Monthly Debt Service Cost		\$ XXX,XXX.XX
Total		\$ XXX,XXX.XX

**LOUISVILLE WATER COMPANY
MEMORANDUM**

To: Greg Heitzman

From: Karen Willis *Karen*

May 28, 1998

RE: Ky-American - Schedule B

Attached please find a revised copy of Schedule B as I have interpreted Bob's original. In addition, I have attached a sample bill calculation showing how the daily rate can change based on various daily consumption scenarios (ie. under the minimum 2.0, at the Buyer Request Capacity, above the Buyer Request Capacity by less than 20% and above the Buyer Request Capacity by more than the 20%). I revamped the "after five year" rate calculation description on Schedule B in an attempt to make it clearer, and then attached the sample calculation that Bob had developed previously. The sample calculation definitely needs a title on it, but you may think it needs more than that.

I have not forwarded this information to Joe yet. I would like to have you review first and provide comments, then we can send Joe the revised copy.

I am attempting to set up the June 5th meeting. I have been unable to get a hold of Nick Rowe as of this afternoon. I will try either him or Linda on Friday.

Schedule A

Bluegrass Water Project Agreement

Projected Debt Amortization Schedule
per \$1,000,000 of debt with level debt service payments
at 6% interest for 20 years

Year	Beginning Balance	Interest	Principal	Ending Balance
1	\$ 1,000,000	\$ 60,000	\$ 27,185	\$ 972,815
2	\$ 972,815	\$ 58,369	\$ 28,816	\$ 944,000
3	\$ 944,000	\$ 56,640	\$ 30,545	\$ 913,455
4	\$ 913,455	\$ 54,807	\$ 32,377	\$ 881,078
5	\$ 881,078	\$ 52,865	\$ 34,320	\$ 846,758
6	\$ 846,758	\$ 50,805	\$ 36,379	\$ 810,379
7	\$ 810,379	\$ 48,623	\$ 38,562	\$ 771,817
8	\$ 771,817	\$ 46,309	\$ 40,876	\$ 730,942
9	\$ 730,942	\$ 43,857	\$ 43,328	\$ 687,614
10	\$ 687,614	\$ 41,257	\$ 45,928	\$ 641,686
11	\$ 641,686	\$ 38,501	\$ 48,683	\$ 593,002
12	\$ 593,002	\$ 35,580	\$ 51,604	\$ 541,398
13	\$ 541,398	\$ 32,484	\$ 54,701	\$ 486,697
14	\$ 486,697	\$ 29,202	\$ 57,983	\$ 428,715
15	\$ 428,715	\$ 25,723	\$ 61,462	\$ 367,253
16	\$ 367,253	\$ 22,035	\$ 65,149	\$ 302,104
17	\$ 302,104	\$ 18,126	\$ 69,058	\$ 233,045
18	\$ 233,045	\$ 13,983	\$ 73,202	\$ 159,843
19	\$ 159,843	\$ 9,591	\$ 77,594	\$ 82,249
20	\$ 82,249	\$ 4,935	\$ 82,250	\$ (0)

**SCHEDULE B
BLUEGRASS WATER PROJECT AGREEMENT**

1. Seller shall establish, in writing, the Seller ^{is} ~~System~~ ^{Production and Treatment} Capacity, every five years as determined by a consulting engineer of national reknown. ~~of the Elevated Service Area - USA~~

Buyer shall notify Seller, in writing, the Buyer Reserve Capacity request for the coming year. ~~Should the Buyer Reserve Capacity request be within the 23 million gallon per day (MGD) limit, yet exceed the current Seller System Capacity, the Seller has up to 12 months to make the necessary improvements to provide the new Buyer Reserve Capacity request.~~ ^{by December 1 of each year. The seller will reserve a capacity in the amount requested up to a maximum of 23 million gallons per day.} Should the Seller be approached to sell any elevated system capacity to anyone other than the Buyer, the Buyer has ^{90 days} two months from the time of notification from the Seller to respond to the Seller with a new Buyer Reserve Capacity.

^{that would limit the sellers ability to provide the reserve capacity request}

2. Rate for First Five Years of Agreement

^{through January 1, 2004. December 31, 2003}

The invoice for all water purchased by the Buyer during the first five years of this agreement shall be comprised of the following:

- ^{average month 45}
- Minimum consumption per day will be 2.0 million gallons,
 - Actual consumption will be multiplied by the ^{lowest} ~~rate block~~ ^{available to Seller's customers} (\$1.03/1,000 gallons - 1998) plus the elevated service charge (\$0.19/1,000 gallons - 1998). ^{1.16}

- The water rates will be established by the Board of water works of the ^{whole sale}

3. Rate for Remaining Years of Agreement

^{beginning January 1, 2004}

^{seller, and in no case exceed the increase in the CPI from the base year 1998.}

A. The invoice for all water purchased by the Buyer after the first five years until the end of the agreement shall be comprised of the following three components: 1) Operating Cost, 2) Depreciation Cost, and 3) Return on Plant Investment. These components are defined as follows:

- Operating Cost Component
(Buyer Consumption / Seller Total System Sales) * (Seller operating expenses - common to retail only costs - customer costs)

- Depreciation Cost Component
(Buyer Reserved Capacity / Seller System Capacity) * (Seller depreciation expenses - common to retail only costs - customer costs)

- Return on Plant Investment Component
(Buyer Reserved Capacity / Seller System Capacity) * (Seller return on plant investment - common to retail only costs - customer costs)

^{retail ? ask BOB}
^{depr ?}
^{return on plant investment ?}
^{KAWI}

4. Peaking Factor for First Five Years of Agreement

Buyer consumption for each day shall be determined by the metered usage from midnight until midnight. If Buyer consumption is unusually high due to unforeseeable and uncontrollable circumstance, then the Seller will consider, at its own discretion without setting precedent, waiving the additional charges as described below.

Should the Buyer consumption remain below the Buyer Reserve Capacity for each day, the rate per 1,000 gallons shall be according to paragraph 2 above.

Should the buyer consumption exceed the Buyer Reserve Capacity by less than 20 percent for any given day, the rate shall be as identified in paragraph 2 up to the Buyer Reserve Capacity, and any additional consumption shall be at the rate identified in paragraph 2 times a multiplier of 1.5.

Should the buyer consumption exceed the Buyer Reserve Capacity by more than 20 percent for any given day, the rate shall be as identified in paragraph 2 up to the Buyer Reserve Capacity, and any additional consumption shall be at the rate identified in paragraph 2 times a multiplier of 2.0.

does not
apply
1st 5
years
unless go to
ind. rate.

~~January 1, December 31, 2003~~
C. Peaking Factor After the First Five Years of the Agreement

Should the Buyer consumption remain below the Buyer Reserve Capacity for each day, the rate per 1,000 gallons shall be according to paragraph 3 above.

Should the buyer consumption exceed the Buyer Reserve Capacity by less than 20 percent for any given day, the rate shall be as identified in paragraph 3 up to the Buyer Reserve Capacity, and any additional consumption shall be at the rate identified in paragraph 2 times a multiplier of 1.5.

Should the buyer consumption exceed the Buyer Reserve Capacity by more than 20 percent for any given day, the rate shall be as identified in paragraph 3 up to the Buyer Reserve Capacity, and any additional consumption shall be at the rate identified in paragraph 2 times a multiplier of 2.0.

B. Minimum Water Purchase

Buyer will purchase a minimum of 60 million gallons per month at the rate identified in paragraph 3 A, regardless of the actual consumption for the month.

Bluegrass Water Project - Sample Monthly Bill Calculation
Rate for First Five Years of Agreement

Day	Consumption	Min. Consumption	Rate per	Buyer Reserve Capacity	Multiplie	Rate * Multiplier	Total
	1,000 gallons	1,000 gallons	1,000 gallons	1,000 gallons	per 1,000 gallons		
1	2000	2000	\$1.22	0	1	\$1.22	\$2,440.00
2	1800	2000	\$1.22	0	1	\$1.22	\$2,440.00
3	2300	2000	\$1.22	0	1	\$1.22	\$2,806.00
4	2500	2000	\$1.22	0	1	\$1.22	\$3,050.00
5	2900	2000	\$1.22	0	1	\$1.22	\$3,538.00
6	3500	2000	\$1.22	0	1	\$1.22	\$4,270.00
7	4500	2000	\$1.22	0	1	\$1.22	\$5,490.00
8	5000	2000	\$1.22	0	1	\$1.22	\$6,100.00
9	6200	2000	\$1.22	1300	2	\$2.44	\$10,492.00
10	6100	2000	\$1.22	1250	2	\$2.44	\$10,370.00
11	4500	2000	\$1.22	500	1.5	\$1.83	\$8,235.00
12	2300	2000	\$1.22	0	1	\$1.22	\$2,806.00
13	1800	2000	\$1.22	0	1	\$1.22	\$2,440.00
14	1800	2000	\$1.22	0	1	\$1.22	\$2,440.00
15	1900	2000	\$1.22	0	1	\$1.22	\$2,440.00
16	2000	2000	\$1.22	0	1	\$1.22	\$2,440.00
17	2100	2000	\$1.22	0	1	\$1.22	\$2,562.00
18	2200	2000	\$1.22	0	1	\$1.22	\$2,684.00
19	2100	2000	\$1.22	0	1	\$1.22	\$2,562.00
20	2000	2000	\$1.22	0	1	\$1.22	\$2,440.00
21	2300	2000	\$1.22	0	1	\$1.22	\$2,806.00
22	2200	2000	\$1.22	0	1	\$1.22	\$2,684.00
23	2100	2000	\$1.22	0	1	\$1.22	\$2,562.00
24	2000	2000	\$1.22	0	1	\$1.22	\$2,440.00
25	1900	2000	\$1.22	0	1	\$1.22	\$2,440.00
26	6500	2000	\$1.22	500	1.5	\$1.83	\$8,235.00
27	5500	2000	\$1.22	0	1	\$1.22	\$6,710.00
28	4500	2000	\$1.22	0	1	\$1.22	\$5,490.00
29	4300	2000	\$1.22	0	1	\$1.22	\$5,246.00
30	4000	2000	\$1.22	0	1	\$1.22	\$4,880.00
	94,800 Actual Usage /1,000 gallons	99,850 Billed Usage /1,000 gallons					\$125,538.00

do sample for 12 months.
 some below
 some million
 some of 95

* Examples: $(6000 \times \$2.44/1,000) + (1300 \times \$1.83/1,000) = \$10,492$
 $(6000 \times \$1.22/1,000) + (500 \times \$1.83/1,000) = \$8,235$

INPUTS FOR RATE CALCULATIONS

Kentucky American Water Use (mgd):

Average Day by Month:

Jan.	3.00
Feb.	3.00
March	3.00
April	3.00
May	3.00
June	3.00
July	3.00
Aug.	3.00
Sept.	3.00
Oct.	3.00
Nov.	3.00
Dec.	3.00

Reserved Amount by Month:

6.00
6.00
6.00
6.00
6.00
6.00
6.00
6.00
6.00
6.00
6.00
6.00

Avg Day for Year (mg) 3.00

Maximum Day Demand (mgd): 6.00 Planned or Reserved

Kentucky American Meter Equivalents: 1,150

Louisville Water Company Sales:

Annual Sales (mgd): 101.37
Maximum Day Capacity (mgd): 240.00

Annual Sales + KAWC Sales 104.37 102.96%

LWC Standard Wholesale Rate:

Wholesale Commodity Rate: \$1.16 per 1,000 gals.
Elevated Service Area Rate: \$0.19 per 1,000 gals.
Customer Charge: \$3.50 per month

Current KAWC Wholesale Commodity Rate \$1.16 per 1,000 gals.
Current Elevated Service Area Rate: \$0.19 per 1,000 gals.
Current Year Customer Charge: \$3.50 per month

LWC System Development Charge \$700 per Meter Equivalent

LWC Return on Investment: 9.580%

Kentucky American Water Company Investment:

Cost of Transmission Line: \$11,000,000

Annual Interest Rate: 6.000%

Number of Annual Payments: 20

Costs

199X

LWC Operating Costs

Total: \$31,220,800

Customer & Retail Only: \$14,930,530

16,290,270

199X

LWC Depreciation

Total: \$11,010,480

Customer & Retail Only: \$5,553,790

5456690

199X

LWC Rate Base

Total: \$298,385,310

Customer & Retail Only: \$84,751,092

213,634,218

199X

Customer Costs Allocated to KAWC: \$48,300

$$\begin{aligned}
 & - \frac{3.0}{101.37} \frac{101.37}{240} (16,290,270) = \cancel{66,470} \quad 482,103 \\
 & - \frac{6}{240} (\$5456690) = 136,417 \checkmark \\
 & - \frac{6}{240} (\$213,634,218) = 534,086 \pm \text{but Bob shows } 511,634?
 \end{aligned}$$

$$\frac{\$1,152,606}{40} \div (365 \times 3,000) = \frac{\$1.05}{1000} \text{ gallon}$$

then use \$1.05

KAWC RATE OPTIONS

Annual Water Bill: Regular Wholesale Rates: Option 1

Commodity Rate	\$1,270,200 @ \$1.16/1,000 gals.
Elevated Service Area Surcharge	208,050 @ \$0.19/1,000 gals.
Total Annual Commodity Charge	<u>\$1,478,250</u>
Customer Charge	<u>\$48,300 @ \$3.5/Meter Equivalent per month</u>
Total Annual Water Bill	<u>\$1,526,550</u> or \$ 1.39 per 1,000

Initial Capital Outlay

Extension of System Capital Contribution	\$11,000,000
System Development Charge	<u>\$805,000</u>
Total Initial Capital Outlay	<u>\$11,805,000</u>

Assumptions:

Wholesale rate = \$1.16/1,000 gals.
 KAWC Usage 3 MGD (annual average)
 KAWC has 1150 Equivalent Meter Units

Annual Water Bill: Proposed Approach (Option 2)

Operating Cost Component	\$482,103
Depreciation Cost Component	136,417
Return on Plant Investment Component	<u>511,654</u>
Total Annual Commodity Charge	\$1,130,174
Customer Charge	<u>\$48,300</u>
Total Annual Water Bill	<u>\$1,178,474</u> or \$1.08 /1,000 gals.

Assumptions:

KAWC Usage 3 MGD (annual average)
 LWC System Capacity 240 MGD
 KAWC Reserved Capacity Request 6 MGD

Annual Debt Service

Principal Amount \$11000000 \$959,030 Assumes 0.06% for 20 years

just show this

for 3 MGD avg.

Bills and Bill Impacts

Item	Current Rates	New Rates	Change	Percent Change
Total Allocated Costs	\$ 1,526,550	\$ 1,178,474	\$(348,076)	-22.80%
Estimated Monthly Bills				
Jan.	\$ 129,575	\$ 100,090	\$ (29,485)	-22.76%
Feb.	\$ 117,425	\$ 90,404	\$ (27,021)	-23.01%
March	\$ 129,575	\$ 100,090	\$ (29,485)	-22.76%
April	\$ 125,525	\$ 96,861	\$ (28,664)	-22.84%
May	\$ 129,575	\$ 100,090	\$ (29,485)	-22.76%
June	\$ 125,525	\$ 96,861	\$ (28,664)	-22.84%
July	\$ 129,575	\$ 100,090	\$ (29,485)	-22.76%
Aug.	\$ 129,575	\$ 100,090	\$ (29,485)	-22.76%
Sept.	\$ 125,525	\$ 96,861	\$ (28,664)	-22.84%
Oct.	\$ 129,575	\$ 100,090	\$ (29,485)	-22.76%
Nov.	\$ 125,525	\$ 96,861	\$ (28,664)	-22.84%
Dec.	\$ 129,575	\$ 100,090	\$ (29,485)	-22.76%
Total	\$ 1,526,550	\$ 1,178,474	\$(348,076)	-22.80%

Bob Miller

From: cbush@kawc.com
Sent: Wednesday, August 19, 1998 2:15 PM
To: bmiller@lwcky.com
Subject: Agreement

Bob, we are down to the short rows of cane now!

Reference page 9, Section 19(b)(1). This should read: "Failure of Buyer to deliver to Seller written instructions to proceed with the construction of the Project Facilities within six months of receipt by Buyer of a final, non-appealable Order from the PSC in the form of a Certificate that public convenience and necessity requires the construction."
OK

Reference page 10, Section 20(d). Put a comma after privilege on the third line.

Reference Schedule B, paragraph 3. Add at end of sentence: "Purchases which exceed the daily reserve capacity request are not includable in the calculation of minimum usage for the purposes of Schedule B, paragraph 3."

Reference Schedule B, paragraph 6(a). The new language should read: "Exhibit I entitled LWC-KAWC Water Supply Agreement Calculation of Rate Components where a Request of 2.5 million gallons per day is in effect and making references to schedules found in 'Seller's 1997 Rate Study for 1998.'"

Reference Schedule B, paragraph 6(c). This should be changed to read: "Exhibit III entitled LWC-KAWC Water Supply Agreement - Calculation of Monthly Water Bill giving an example of a theoretical bill for a 30 day month where a Capacity Request of 2.5 million gallons per day is in effect."

Eliminate Schedule B, paragraph 6(d).

Reference Schedule B, paragraph 8. Lindsey and Joe discussed substitute language for the last sentence and came to agreement. Please ask Joe.

Mark has faxed Exhibits I and III.



Kentucky-American Water Company

2300 Richmond Road • Lexington, Kentucky 40502

606-269-2386

TELECOPY TRANSMITTAL SHEET

FAX No. (606) 268-6327

We have a Sharp Model FO-800 Facsimile

DATE: August 19, 1998
COMPANY: Louisville Water Company
HAND TO: Bob Miller
FROM: Coleman Bush / Mark Frost

Number of pages, including cover: 3

If you have any problems with receiving, please call:

Phone: ⁽⁶⁰⁶⁾ 335-3425 Ask for: Mark Frost

Hard copy mailed: yes no ☒

PLEASE DELIVER TO THE ABOVE NAMED PERSON IMMEDIATELY.

The information contained in this transmission is privileged, confidential and intended only for the use of the individual or entity named above. If you have received this communication in error, please notify Kentucky-American Water Company immediately by telephone, collect and return the original message to us at the address shown via the U.S. Postal Service. You will be reimbursed for the required postage. Thank you.

MESSAGE: 1 Page missing from last fax.

EXHIBIT I
LWC - KAWC WATER SUPPLY AGREEMENT
Calculation of Rate Components

8/19/98

Reserve Capacity (1,000 Gal.)	2,500
Divided by: LWC System Capacity (1,000 Gal.)	240,000
Reserve Capacity Ratio	<u>1.04167%</u>

CALCULATION OF OPERATING COST RATE

Net Operating Expenses	Utility Rate Schedule 2; Column 1; Line 50.	\$ 31,220,800
Less: Common to Retail Customer Costs	Utility Rate Schedule 2; Column 7; Line 50.	(5,127,330)
Customer Costs	Utility Rate Schedule 2; Column 6; Line 50.	<u>(9,803,200)</u>
Operating Cost		<u>\$ 16,290,270</u>
Divided by: LWC's Annual System Sales (1,000 Gal.)	Utility Rate Schedule 1; Column 3; Line 4.	37,000,000
Operating Cost Rate per 1,000 Gal		<u>\$ 0.44027757</u>

CALCULATION OF MONTHLY DEPRECIATION CHARGE

Depreciation Expense	Utility Rate Schedule 3; Column 1; Line 19.	\$ 11,010,480
Less: Common to Retail Customer Costs	Utility Rate Schedule 3; Column 7; Line 19.	(2,940,510)
Customer Costs	Utility Rate Schedule 3; Column 6; Line 19.	(2,683,010)
Depreciation - Plant Funded by CIAC	Analysis of Depreciation Component of Water Rates	<u>(632,290)</u>
Depreciation Cost		<u>\$ 4,774,670</u>
Multiplied by: Reserve Capacity Ratio		1.04167%
Annual Depreciation Cost Charge		<u>\$ 49,736.30</u>
Divided by: 12-Months		12
Monthly Depreciation Charge		<u>\$ 4,144.69</u>

CALCULATION OF MONTHLY RETURN ON PLANT INVESTMENT CHARGE

LWC Return on Plant Investment	Utility Rate Schedule 4; Column 1; Line 24.	\$ 28,585,310
Less: Common to Retail Customer Costs	Utility Rate Schedule 4; Column 7; Line 24.	(7,164,740)
Customer Costs	Utility Rate Schedule 4; Column 6; Line 24.	(1,488,140)
Net Return on Plant Investment		<u>\$ 19,932,430</u>
Multiplied by: Reserve Capacity Ratio		1.04167%
Annual Return on Plant Investment Charge		<u>\$ 207,630.14</u>
Divided by: 12-Months		12
Monthly Return on Plant Investment Charge		<u>\$ 17,302.51</u>

CUSTOMER CHARGE

Example of Actual Operating Expenses assignable to KAWC including, but not limited to, Metering, Billing, Collection, and Maintenance on KAWC specific assets.

\$ 875.00

USAGE EXCEEDING RESERVE REQUEST

Usage of water during any 24 hour period in excess of KAWC's request will result in a charge to KAWC, with respect to excess consumption, of LWC's regular Utility (Wholesale) rate.

\$ 1.35

COMPUTATION OF TOTAL WATER BILL

The monthly water bill will be the sum of the following charges: operating cost; depreciation; return on plant investment; direct customer costs; and the purchases above reserve costs.

EXHIBIT III
LWC - KAWC Water Supply Agreement
Calculation of Monthly Water Bill

8/19/98

Monthly Minimum Purchases (1,000 Gal.)	45,000
Daily Reserve Capacity (1,000 Gal.)	2,500

Day	Daily Purchases 1,000 Gal.	Purchases Above Reserve Capacity 1,000 Gal
1	1,500	0
2	1,500	0
3	2,000	0
4	2,000	0
5	3,000	500
6	3,000	500
7	4,000	1,500
8	4,000	1,500
9	5,000	2,500
10	5,000	2,500
11	6,000	3,500
12	6,000	3,500
13	7,000	4,500
14	7,000	4,500
15	8,000	5,500
16	8,000	5,500
17	9,000	6,500
18	9,000	6,500
19	10,000	7,500
20	10,000	7,500
21	9,000	6,500
22	9,000	6,500
23	8,000	5,500
24	8,000	5,500
25	7,000	4,500
26	7,000	4,500
27	6,000	3,500
28	6,000	3,500
29	5,000	2,500
30	5,000	2,500
Totals	181,000	109,000

Purchases Within the Reserve Request (1,000 Gal.)	72,000
Multiplied by: Operating Cost Rate per 1,000 Gal.	\$ 0.440278
Operating Cost	\$ 31,700.02

Purchases Exceeding the Reserve Request (1,000 Gal.)	109,000
Multiplied by: Wholesale Rate per 1,000 Gal.	\$ 1.35
Purchases Above Reserve	\$ 147,150.00

Operating Cost	\$ 31,700.02
Depreciation Charge	4,144.69
Return on Plant Investment Charge	17,302.51
Purchases Above Reserve Charge	147,150.00
Customer Charge	875.00
Total Purchased Water Cost	\$ 201,172.22

Rate per 1,000 Gallons	\$ 1.111449
------------------------	-------------

* Purchases above the daily Reserve Capacity do not contribute to the determination of the Min.

7/14/98 Draft

WATER SUPPLY AGREEMENT

THIS WATER SUPPLY AGREEMENT, dated as of this _____ day of _____, 1998, between

LOUISVILLE WATER COMPANY,
435 South Third Street
(soon to be 550 South Third Street)
Louisville, Kentucky 40202 ("Seller").

and

KENTUCKY-AMERICAN WATER COMPANY,
2300 Richmond Road
Lexington, Kentucky 40502 ("Buyer")

RECITALS

A. Seller, a Kentucky corporation all of the stock of which is owned by the City of Louisville, is governed by the Board of Water Works pursuant to Sections 96.230 through 96.310 of the Kentucky Revised Statutes and is statutorily permitted to sell water to customers taking service in Jefferson, Oldham, Shelby, Spencer, Bullitt and Hardin Counties, Kentucky. ✓

B. Seller owns and operates water treatment and distribution facilities and utilizes its facilities to provide water service on a retail and wholesale basis throughout Jefferson County, Kentucky and in large areas of Oldham, Shelby, Spencer, and Bullitt Counties, including, among others, wholesale service to West Shelby Water District, North Shelby Water District and the City of Taylorsville; ✓

C. Seller has available treatment and storage capacity sufficient to meet Buyer's needs set forth in this Agreement; ✓

D. Buyer, a Kentucky corporation, engages in the manufacture of water for sale and service to customers in the counties of Fayette, Bourbon, Clark, Harrison, Jessamine, Scott, and Woodford; and ✓

E. Buyer is desirous of securing a continuing, dependable source of water to meet the present and future needs of Buyer's customers and plans construction of extended transmission facilities to the Point of Delivery, defined below, to connect its existing system with Seller's. ✓

WITNESSETH:

NOW, THEREFORE, in consideration of the mutual covenants and conditions herein contained, the parties agree as follows:

1. DEFINITIONS. In this Agreement, these terms have the meanings indicated below:

(a) Project Facilities: Fixtures, equipment, water transmission mains, metering equipment, vaults, storage facility, pipes, pump station, and other improvements and facilities designed and to be constructed to Seller's specifications and approved by Buyer to be used for delivery of Service under this Agreement together with easements and other real property rights acquired with respect thereto. Such facilities shall be owned by the Seller. ✓

(b) Point of Delivery: The connection of the Project Facilities to Buyer's facilities. The connection will be at a point in Shelby County, Kentucky at or near the intersection of Interstate Highway 64 and Kentucky Highway 55. ✓

(c) Service: The delivery of treated, potable water by Seller to the Point of Delivery under this Agreement pursuant to the standards set forth in Section 9, subsections (a) and (b). ✓

2. DESIGN OF PROJECT FACILITIES:
(d) *Reserve Capacity* (e) *Design Capacity of Proj. Fac.*
(f) *System Capacity*

(a) The Project Facilities will be designed by Seller, Buyer retaining the right to approve the selection by Seller of outside professional engineering assistance in creating such design, such approval not to be unreasonably withheld, and to approve the scope of the design within the framework set forth immediately below. ✓

(b) The design of the Project Facilities shall include, among other things, a 60-inch transmission main from Seller's English Station Road Reservoir to the intersection of Interstate Highway 265 and Interstate Highway 64 in Jefferson County, a 36-inch transmission main from such intersection eastwardly to the intersection of Interstate Highway 64 and Kentucky Highway 55 in Shelby County (the location of the Point of Delivery), a 25 million gallon per day pump station situated in the Interstate 265-Interstate 64 intersection area, and a water storage facility with a minimum capacity of 10 million gallons situated along the 36-inch transmission main in Shelby County west of the Point of Delivery. Attached, designated EXHIBIT I, is a plat indicating the general location and route of the Project Facilities. Any subsequent change in the design/route which, individually or in the aggregate, increases the costs of the construction or operation of the Project Facilities to be paid by Buyer shall be subject to Buyer's prior written approval, which approval shall not be unreasonably withheld. ✓

(c) Seller understands that the design of the Project Facilities must be fully completed in a form and substance satisfactory to Buyer prior to Buyer's application to the Kentucky Public Service Commission (the "PSC") for a Certificate of Convenience and Necessity. Consequently, the date of completion for such design shall not be later than December 1, 1998, time being of the essence. ✓

(d) Also, on or before December 1, 1998 Seller will provide Buyer with its estimated cost of the portion of the Project Facilities for which Buyer is agreeing to pay as hereinafter provided and an estimate of the cost of the remaining (Seller's) portion. ✓

3. PROPERTY ACQUISITION: Upon receipt by the Seller of Buyer's written instructions and within the limitations of such, Seller will initiate an effort to acquire easements and other property rights needed in the construction and installation of the Project Facilities, keeping Buyer advised from time to time as to its progress and as to any obstacles encountered in such procurement. Seller's efforts to acquire easements and other property rights shall be made expeditiously and in good faith. Seller will not purchase any property rights without the costs thereof being approved by the Buyer and will not file condemnation actions without Buyer's direction to do so.

4. BIDDING ON CONSTRUCTION OF PROJECT FACILITIES: Upon receipt of written instructions from Buyer, and within the limitations contained therein which shall not be contrary to law or Seller's written contract bidding procedures, Seller will initiate its construction contract bidding process for the Project Facilities, including the advertising for and the taking of bids in accordance with its invitation to bid.

5. CONSTRUCTION OF PROJECT FACILITIES:

(a) Upon receipt of written instructions from Buyer, Seller will proceed with the awarding (preceded by rebidding if previously submitted bids have expired) of the construction contract(s) to the qualified bidder(s) submitting the lowest and best bid(s). ✓

(b) Seller, using a professional engineering firm, registered in Kentucky, will supervise the construction of the Project Facilities and will complete same to the Point of Delivery no later than eighteen months from the date Seller receives the initial written instructions, set forth in Section 5(a), immediately above, time being of the essence. The completion of construction of the Project Facilities with water service being available at the Point of Delivery is referred to as the "Construction Completion Date". ✓

(c) Delays in construction may cause reasonable extension of the Construction Completion Date provided such delays are the result of unanticipated adverse weather conditions, labor unrest, natural disasters, legal obstacles encountered in easement acquisition or other circumstances beyond Seller's control. Also, if Seller deems it necessary to rebid the construction contract(s) because of the expiration of the previous bids, the Construction Completion Date will be extended to accommodate the delay caused by such rebidding. ✓

what about
BPS / Tech
Property
↓
include
thrs
prop.

6. PROJECT FACILITIES' COSTS ALLOCATION:

(a) Except as otherwise provided in Section 6(c) Buyer agrees to pay the reasonable and necessary costs of design, site acquisition and construction of the Project Facilities, which costs include, but are not limited, to the following: ✓

Consulting Engineering Services
Easement and other Property Rights
Easement Acquisition Agent
Recording of Real Estate Documents
Real Property Appraisals
Miscellaneous Out-of-Pocket Expenses

Bid Publication
Construction Contract(s) Obligations
Materials
Reproduction and Printing
Measurable In-house Engineering Planning,
Design and Construction Administration

(b) In addition, Buyer agrees to pay Seller's costs incurred with respect to the financing of Buyer's share of the Project Facilities, which costs include but are not limited to, financial advisor charges, bond counsel and other legal expenses, printing and other reproduction costs and marketing and travel expenses. ✓

(c) Seller will be responsible for the costs of the design, site location and construction of the 25 million gallon per day pump station and the Shelby County water storage facility. In addition, Seller shall be responsible for the incremental costs of material and installation of any portion of the transmission main, the diameter of which is greater than 36 inches so long as such increase in diameter is not the requirement of Buyer. ✓

add provision to reimburse seller for design costs if never built

7. INVOICING AND PAYMENT OF BUYER'S COSTS:

(a) It appearing that most, if not all, of the costs incurred by Seller in the design, property acquisition, and construction of the Project Facilities can be paid from the proceeds of issuance of tax-free or taxable revenue bonds, contemplated under Sections 8(a) or (b), below, Seller is agreeable to financing all pre-issuance costs with the understanding that it will be reimbursed in full from the bond proceeds for such costs, including its financing costs, to the extent permitted under the terms of the bond issue; otherwise such reimbursement is to be made by Buyer in accordance with Section 8(c), below. → ~~what about reimb of design, prop. acq. costs~~

(b) Seller will invoice Buyer for its pre-bond issue design and property acquisition costs so that Buyer will be kept advised of same. Seller, within 30 days of such invoicing, will finance the amount of the invoice anticipating reimbursement from bond proceeds pursuant to Subsection (a), above. } *review with Joe*

(c) Construction costs, unless paid directly from bond financing proceeds, will be billed by Seller to Buyer as incurred with Buyer to be responsible for providing funds to Seller in advance of any construction contract payment deadline relating to progress and final payments. } *Should we set up escrow account?*

d
(e) Seller's cost not reimbursable ~~from~~ or not to be reimbursed, from bond proceeds will be paid by Buyer in full within 30 days of receipt of Seller's invoice. ✓

(e) Buyer reserves the right to dispute costs it deems to be unreasonable but agrees that it will indemnify Seller and hold it harmless for any judgments, settlements, legal fees and other costs incurred by Seller as a result of Buyer's refusal to pay Seller with respect to a third party claim. ✓

8. FINANCING OF BUYER'S SHARE OF COSTS OF PROJECT FACILITIES:

Buyer agrees to reimburse Seller for all Project Facilities' costs, the responsibility for which Buyer has assumed hereinabove. Such reimbursement will take one or more of the following forms: *less BPS / Tank?*

(a) By reimbursing Seller for its costs, including, but not limited to, debt service and issuance costs, through the issuance of tax-free, municipal revenue bonds by the Seller, the proceeds of which are to be used to pay or to reimburse Seller for the Project Facilities' costs, to the extent such costs are eligible for reimbursement from bond proceeds, it being understood that the contemplated bonds will be sold on a competitive bid basis and the bid award will be made by Seller only after consultation with Buyer. Attached hereto and designated Schedule A is a Projected Debt Amortization Schedule which assumes a \$1,000,000 issue, bearing interest at 6% per annum and maturing over a 20 year period, said Schedule being attached for illustrative purposes only; or ✓

(b) Failing the availability of above described tax-free financing, by reimbursing Seller for its costs, including, but not limited to, debt service and cost of issuance, through the issuance of corporate revenue bonds by Seller or Buyer, at Buyer's option, the proceeds of which are to be used to pay or to reimburse Seller for the cost of the Project Facilities, it being understood that the contemplated bonds, if issued by Seller, will be sold on a competitive bid basis with the winning bid to be awarded by Seller only after consultation with Buyer; or ✓

(c) By progress payments from Buyer to Seller to be made within 30 days of invoice, the first such payment to be made within thirty days of Buyer's written advice that no bond issue financing is to be pursued and to be in an amount equal to the sum of all amounts previously incurred by Seller including those financed pursuant to Section 7(f), above, plus the financing cost thereof. The provisions of this subsection also shall be applicable to invoices from Seller that are later determined to be ineligible for reimbursement from bond proceeds. ✓ *70*

(d) If Seller's bond instruments permit prepayment of part or all of the debt obligation, and if Buyer is not in default of any of its payments to Seller under this Section and Section 11 of this Agreement, then Buyer has the right to instruct Seller on a timely basis to exercise the prepayment privilege and shall simultaneously pay to Seller the amount of the prepayment needed, including premium, if any, to remit to the holders of the debt instruments being redeemed and any redemption expenses. ✓

(e) Failure of Buyer to provide Seller with readily available funds in time to meet any debt payment requirements or construction contract obligation will result in a 5% penalty on the delinquent amount to be added to such delinquent payment for each month or partial month such payment and penalties thereon are delinquent. ✓

(f) ~~Buyer understands and agrees that Seller most likely will assign its rights under this Agreement as security on Seller's bonded indebtedness, incurred by it with respect to the Project Facilities and further agrees to cooperate with Seller in preparing for and marketing the bond issue.~~ The parties understand and agree that the pledges securing the proposed revenue bonds will be Buyer's promise to pay the debt service, and Buyer's and Seller's rights and interest in the Project Facilities paid for by Buyer. ✓

~~g) Bond insurance requirement.~~

Buyer agrees to cooperate in good faith in preparing etc.

9. SERVICE AT THE POINT OF DELIVERY:

(a) Condition. Seller will provide Buyer Service at the Point of Delivery, which meets or exceeds all applicable drinking water standards in effect at the time of delivery. ✓

(b) Capacity and Pressure. Seller shall design and construct the Project Facilities to make them capable of delivering water to Buyer at the Point of Delivery having a flow rate of up to 16,000 gallons per minute and water pressure of not less than thirty pounds per square inch (30 psi). ✓

(c) Rate of Flow Demand. The parties understand that although the Project Facilities will be designed and constructed to deliver Service of 16,000 gallons per minute, ~~the capacity reserved to Buyer herein~~, Buyer's requirements will be, as presently contemplated, substantially less than that during much of the duration of this Agreement. Such is recognized in Schedule B, referenced in Section 11, setting forth the parties' rate arrangements. Nevertheless, Buyer may at any time and from time to time be in need of the full capacity it is reserving herein, i.e. 16,000 gallons per minute, or significant portions thereof. At the same time, Seller desires as much advance notice as it can get with respect to any significant demand increase by Buyer in order that Seller's operations will not be adversely affected by a sudden, out of the ordinary demand on its treatment and transmission facilities. With such in mind, the parties pledge to each other open communications, from the Buyer to the Seller of any operational situations that may cause it to significantly increase its water needs in the near future, i.e. plant/equipment outage, drought predictions, etc., and from Seller to Buyer of Seller's operational situations that might adversely affect Seller's ability to immediately respond to any sudden need of Buyer for a significant increase in volume of water at the Point of Delivery, i.e. plant/equipment outages, planned and unplanned, and other factors that might affect its ability to deliver water. Regardless, Seller agrees to supply Buyer's demands, as same may be altered from time to time, as soon as possible and with reference to any sudden significant demand increase, within 1 hours of notification by Buyer, barring problems beyond Seller's control.

K/Aue did not reserve 16,000 gpm.

design capacity

maintenance

make sure we do not need approval to make connections.

(d) Service to Others. Seller warrants and represents that any water service to others prior to the Point of Delivery provided through or from the Project Facilities shall not interfere with its service or diminish its obligations to the Buyer under this Agreement. ✓

(e) Failures. Buyer acknowledges that unexpected supply or treatment problems may occur which are beyond Seller's control. In the event Seller, when called upon, is unable to provide Buyer with Service under the terms of this Agreement for reasons beyond Seller's control, Seller shall use its best efforts to restore the Service to the quality rate of flow and pressure required. ✓
Time is of the essence in all situations where such failure and duty of restoration exists. In the event delivery problems limit or prevent the delivery of water to any of Seller's other customers, then Seller agrees that any restrictions, placed by it or upon it by others as to water delivery, shall apply to the Buyer in the same manner as applied by Seller to other customers.

at Buyer's expense

10. METERING ARRANGEMENTS. Seller agrees to furnish, install, maintain, repair and replace at the Point of Delivery a service meter or battery of meters, including meter house or vault, for properly measuring the quantity of water being delivered to Buyer and to test such metering equipment whenever requested by Buyer but no more frequently than once every six months with the results of such tests provided to Buyer. Buyer may require Seller to conduct tests more often than every six months, but at its own expense. A meter registering within the warranty limits specified by the manufacturer thereof shall be deemed to be accurate. Previous readings of any meter disclosed by test to be inaccurate shall be corrected for three months previous to such test in accordance with the percentage of inaccuracy found by such test. If any meter fails to register for any period the amount of water furnished during such period shall be deemed to be the amount of water delivered in the corresponding period immediately prior to the failure, unless Seller and Buyer shall agree otherwise. An appropriate official of the Buyer shall have access to the meter at reasonable times for the purpose of inspecting and reading such metering facilities. ✓

11. RATES AND PAYMENT:

(a) Buyer shall pay Seller for the Service as determined by the rate methodology set forth in Schedule B, attached hereto and incorporated herein, Buyer agreeing that the rate-making methodology contained therein is reasonable for the anticipated annual rate adjustment filings by the Seller with the Kentucky Public Service Commission relating to the provision of Service under this Agreement. ✓

(b) Buyer's meter will be read at the end of each month of Service and shall be invoiced by Seller in accordance with the provisions of Schedule B, provided, however, the rate paid by Buyer for Service shall never exceed Seller's Utility (wholesale) Rate plus its Elevated Service add-on charge, as adjusted from time to time. ✓

(c) Buyer shall remit payment to Seller for each invoice no later than the 30 calendar days following the mailing or facsimile transmission of such invoice. Failure to make timely payments will cause a penalty of five percent (5%) per month or partial month on each

invoice remaining unpaid. Buyer shall have the option of paying such monthly invoices by automatic bank drafts. ✓

12. RESERVATION OF CAPACITY: Seller reserves treatment and delivery capacity to Buyer of ~~sixteen thousand~~ ^{16,000} gallons per minute (flow rate) for the term of this Agreement.

13. OPTION TO INCREASE RESERVE CAPACITY: Recognizing that Seller by designing and construction a portion of the Project Facilities and upsizing mains, as discussed subsection 6(c), has increased at its own expense the delivery capacity of the Project Facilities from 23 million gallons per day, the capacity required by and reserved to Seller in this Agreement, to 35 million gallons per day, Seller hereby agrees to give Buyer the right of first refusal to acquire up to all of the additional 12 million gallons per day capacity on the following terms and conditions:

(a) When Seller receives a bona fide, acceptable proposal to sell water service from or through the Project Facilities, it will notify Buyer who will have ~~40~~ ³⁰ days to exercise its right of first refusal for the acquisition of the capacity contemplated in such proposal. If Buyer chooses to acquire the ~~reserve~~ ^{additional} capacity offered, it will be obligated as follows:

(b) To pay Seller a percentage of the undepreciated portion of the Seller-finance part of the Project Facilities that is represented by the capacity being acquired as same relates to the total 12 million gallons per day available. *i.e. a 4 mgd request will require a 33.3% of the depreciated book value*

(c) Pay to Seller all costs incurred by it in any upgrading of the Project Facilities needed to provide the capacity increase to the Point of Delivery. *same % as (b)*

(d) Increase its Schedule B Request in an amount equal to the increased capacity being acquired, effective at the time that the Seller has made the increase available at the Point of Delivery, it being understood that Seller will make such increased capacity available no later than ¹² ~~4~~ months from the date of exercise of the right of first refusal. *i.e. a 4 mgd request would increase the Reserve Capacity from 5 to 9 mgd.*

(e) Increase of its Schedule B minimum usage by an amount equal to 50% of the capacity increase being acquired, effective at the same time the Request increase takes effect. *i.e. a 4 mgd request would increase the min from 2 to 4 mgd.*

✓ 14. ADDITIONAL EXPANSION BY SELLER: Seller agrees that before undertaking any expansion or enlargement of any of the Project Facilities or the Payne plant treatment capacity, it will notify Buyer of its intention to do so and will afford Buyer with a reasonable opportunity to participate in the expansion or enlargement upon terms and conditions mutually agreeable.

15. NOTICE: In addition to the communications called for in subsection 9(c), Buyer will timely notify Seller of any condition or situation, which would adversely affect the quality, quantity or pressure of the water in Seller's system and, likewise, Seller will timely notify Buyer of any condition or situation, which would adversely affect the quality, quantity or pressure of the water at the Point of Delivery. ✓

16. TERM AND EXTENSIONS: The term of this Agreement shall begin on the date it is executed by both parties hereto and shall terminate 40 years after the date Service is initiated. The parties shall execute an addendum showing the date Service is initiated and the termination date on December 31, 20__. One year prior to the termination date the parties hereto shall begin to negotiate in good faith an extension of this Agreement with due and proper consideration for the principles and concepts contained herein, being mindful that the parties are hopeful that their relationship, created herein, will be one of mutual benefit and respect that will last longer than the initial 40 year term.

17. BUYER'S REPRESENTATION AND WARRANTY.

Buyer is a Kentucky corporation with the authority to enter into this Agreement, subject to regulatory approval, and has the authority to perform under the terms of this Agreement.

18. SELLER'S REPRESENTATION AND WARRANTY:

Seller is a Kentucky corporation with the statutory authority through the Board of Water Works to enter into this Agreement and to perform under the terms of this Agreement.

19. TERMINATION:

(a) Buyer may terminate this Agreement upon six (6) months written notice in the event of:

(1) Repeated failure of Seller to provide the Service set forth in this Agreement.

(2) Revocation of Seller's authority to do business.

(b) Seller may terminate this Agreement upon six (6) months written notice in the event of:

(1) Failure of Buyer to deliver to Seller written instructions to proceed with the construction of the Project Facilities within six months of receipt by Buyer of a final, non-appealable Order from the PSC in the form of a Certificate of Convenience and Necessity permitting Buyer, among other things, to finance the Project Facilities to the extent provided herein.

(2) Repeated failure of Buyer to pay its invoices for water service on a timely basis.

(3) Repeated failure of Buyer to pay on a timely basis its debt service obligations to Seller, time being of the essence in that regard.

5 years
termination
clause.

(4) Revocation of Buyer's authority to do business.

20. MISCELLANEOUS PROVISIONS:

(a) This Agreement is subject to the approval of the PSC and receipt by Buyer of a final, non-appealable Order, in a form and written content acceptable to Buyer, from the PSC in the form of a Certificate of Convenience and Necessity for the facilities to be constructed pursuant to this Agreement. Provided, however, failure to obtain such an Order shall not relieve Buyer of its duties hereunder to reimburse Seller for costs incurred pursuant to the provisions of Sections 2 and 3, above. In the event such Order alters, directly or indirectly, one or more provisions of this Agreement (including the one or more provisions of Exhibit B) and such modification(s) is not acceptable to either party, then this Agreement terminates so long as the terminating party communicates such action to the other party within 60 days of receipt of such Order.

(b) This Agreement does not constitute a partnership, joint venture, agency or other relationship between Buyer and Seller, and Buyer and Seller expressly state that they owe no fiduciary duties to one another and that the relationship is based upon Contract.

(c) This Agreement is binding on the successors and assigns of the parties hereto.

(d) Buyer and Seller agree that each of them shall have access to the books and records of the other, which are related to matters which are the subject of this Agreement, at such reasonable notice, except as those records may be subject to a recognized privilege that are confidential or may be protected by the Kentucky Open Records Law. Without limitation, the information subject to access shall include all costs of design, construction, financing, and costs of operation and maintenance of the facilities contemplated by this Agreement.

(e) Buyer reserves the right to develop and use other water supply sources and may obtain water from sources other than the Seller.

(f) The parties agree to operate and maintain their respective facilities in an efficient and economical manner and in accordance with all applicable local, state and federal laws, regulations and performance standards.

(g) This Agreement may be amended at any time by mutual agreement, in writing, of the parties.

(h) Both parties agree to use their best efforts to obtain all regulatory and legal approvals required for the accomplishment of the terms of this Agreement.

(i) The parties acknowledge that the water to be purchased hereunder will be resold in the regular course of business of Buyer and is therefore exempt from Kentucky sales and

overall
time limit
(5 years)

Schedule ✓

and
(4)
Bidders

use tax. To evidence this exemption, Buyer will furnish Seller with a duly executed "Resale Certificate" or such other documentation as the parties deem appropriate. ✓

(j) Seller agrees, subject to its right hereby reserved to self-insure itself up to the first Two Million Dollars in liability, to carry public liability insurance in the minimum amount of Ten Million Dollars per occurrence during the term of this Agreement. ✓

IN WITNESS WHEREOF, the parties have set forth their hand the day and year first above written.

BUYER:

SELLER:

Kentucky-American Water Company

Louisville Water Company

By: _____
Name: _____

By: _____
Name: _____

Title: _____

Title: _____

Date: _____

Date: _____

Attest: _____
Name: _____

Attest: _____
Name: _____

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How long can this contract stay in effect? → suggest expires automatically July 1, 2003.

WATER SUPPLY AGREEMENT

SCHEDULE B

Rate Arrangements

Because of the unusual situation impacting upon the relationship, i.e. Buyer owning and operating treatment facilities sufficient, much of the time, to meet its present needs but desiring a second reliable source of water, and Seller presently having reserve treatment capacity available and being asked to commit to Buyer more capacity than Buyer plans to use for a number of years, the parties have developed the rate arrangements set forth below.

1. Buyer's Reserve Capacity Request. On or before July 1 of each calendar year, beginning with the year preceding the first full calendar year of Service, Buyer will notify Seller in writing of its reserve capacity request (the "Request") for the succeeding calendar year, which Request may be any number between 2.5 million gallons per day and 23 million gallons per day; provided, however, Buyer's Request, beginning in the sixth full calendar year of service must be at least 5 million gallons per day. Buyer's Request for the first partial calendar year of service delivered under this Agreement, assuming the initial Service commences after January 1 of any calendar year and the first full calendar year is set at 2.5 million gallons per day unless such amount is raised on a timely basis by Buyer. Subsequent Requests for the next four full calendar years will not be less than 3 million gallons per day for the second full calendar year, 3.5 million gallons per day for the third, 4 million gallons per day for the fourth and 4.5 million gallons per day for the fifth full calendar year. ✓

2. Water Service Rate. The rate for the Service for the term of the Agreement shall be determined by totaling the following components:

(a) The Operating Expense Component, determined for the billing period by dividing the Buyer's usage by the Seller's total sales and multiplying the quotient by Seller's Operating Expenses, less expenses common only to retail customer expenses and to customers generally. } for prev. yr. or estimated.

(b) The Depreciation Expense Component, ^(presently at 24% msl) determined for the billing period by dividing the Buyer's Request by the Seller's system capacity and multiplying the quotient by the Seller's Depreciation Expense, less depreciation on contributed capital and depreciation common only to retail customers and to customers generally.

(c) The Return on Plant Investment Component, determined for the billing period by dividing the Buyer's Request by the Seller's system capacity and multiplying the quotient by Seller's Return on Plant Investment, excluding return on contributed capital and return on plant investment common only to retail customers and to customers generally.

(d) Customer Cost Component, determined by ascertaining the actual expenses assignable to the Service including, but not limited to, metering, billing, collections, operations and maintenance of the Project Facilities.

3. Minimum Usage. Minimum usage of water during the first twelve months of Service shall be, for the months of January, February, March, April, November and December (the "Nonirrigation Months") shall be 36 million gallons per month and for the months of May through October (the "Irrigation Months") shall be 54 million gallons per month. Buyer will be billed for such minimum usage if same is not consumed by it. During the second twelve months, the minimum usage for the Nonirrigation Months shall be 38.4 million gallons per month and for the Irrigation Months, shall be 57.6 million gallons per month. For the third twelve months period, the minimum usage of water during the Nonirrigation Months shall be 40.8 million gallons per month and 61.2 million gallons per month for the Irrigation Months. For the fourth twelve month period, the minimum usage for water during the Nonirrigation Months shall be 43.2 million gallons per month and for the Irrigation months, 64.8 million gallons per month. During the fifth twelve month period of Service, the minimum usage of water during the Nonirrigation Months shall be 45.6 million gallons per month and during the Irrigation Months, 68.4 million gallons per month. Thereafter, for the remaining months of the Agreement the minimum usage shall be 60.0 million gallons per month (Nonirrigation Months and Irrigation Months) 48.72 ✓

check that all B's.

4. Usage Exceeding Reserve Request. Usage of water during any 24 hour period in excess of Buyer's Request will result in a charge to Buyer, with respect to the excess consumption, of Seller's regular Utility (wholesale) Rate, as set by the Board of Water Works from time to time, including its elevated service charge add-on (which rate, including the add-on is presently \$1.35 per 1000 gallons). ✓

5. Emergency Excess or Minimum Usage. In the event Buyer's usage is enhanced or diminished for a brief period of time due to unforeseeable or uncontrollable circumstances, Seller agrees to equitably adjust Buyer's Service billing with respect to such emergency. ✓

KAWC
flushing

6. Supporting and Explanatory Exhibits. Attached to this Schedule B are the following described supporting and explanatory exhibits: ✓

(a) Exhibit I entitled Bluegrass Water Project-Sample Monthly Bill Calculations, giving an example of a theoretical billing for a 30-day month where a reserve capacity Request of 2.5 million gallons per day is in effect and making references to schedules found in "Seller's 1997 Rate Study for 1998." ✓

(b) Exhibit II are Schedules Two, Three and Four of the Rate Study, referenced in Exhibit I. ✓

(c) Exhibit III, entitled Bluegrass Water Project-Computed Rate Per Thousand Gallons, showing thereon the applicable rate based upon indicated usage and varying reserve capacity Requests. ✓

(d) Exhibit IV entitled Bluegrass Water Project, Sample Monthly Bill Calculation, intended to show what Buyer's monthly service charges, broken down on a daily basis, would be today for service in place, assuming Buyer's Request was for 5 million gallons per day and Buyer's consumption was 181 thousand gallons for the 30-day month in question. ✓

The computations contained in the attached Exhibits are derived from Seller's current financial records, prepared in accordance with generally accepted accounting principles, which records are audited annually by a reputable certificated public accounting firm. The figures used by Seller in preparing the attached Exhibits, per understanding with Buyer, are those used by it in estimating its operating revenues and operating expenses for 1998 (as opposed to Seller's actual experience for 1997). The parties agree that Seller's budget estimates will be used annually in determining the rate components for the term of the Agreement. ✓

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FAUSERS\015\LWC\WATSUPP1.SCB

6c. reimburse design costs of BPS/SJ. (or prel. design concept)

8. Concern over the pledge of revenues.

- \$20 million cost

- ~~2nd~~ bond insurance

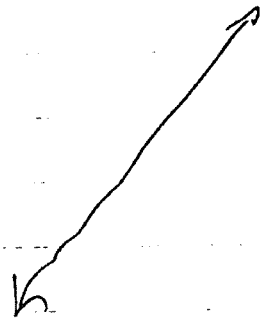
- pledge property.

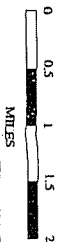
- pledge rights.

- distinguish. how

- estimate

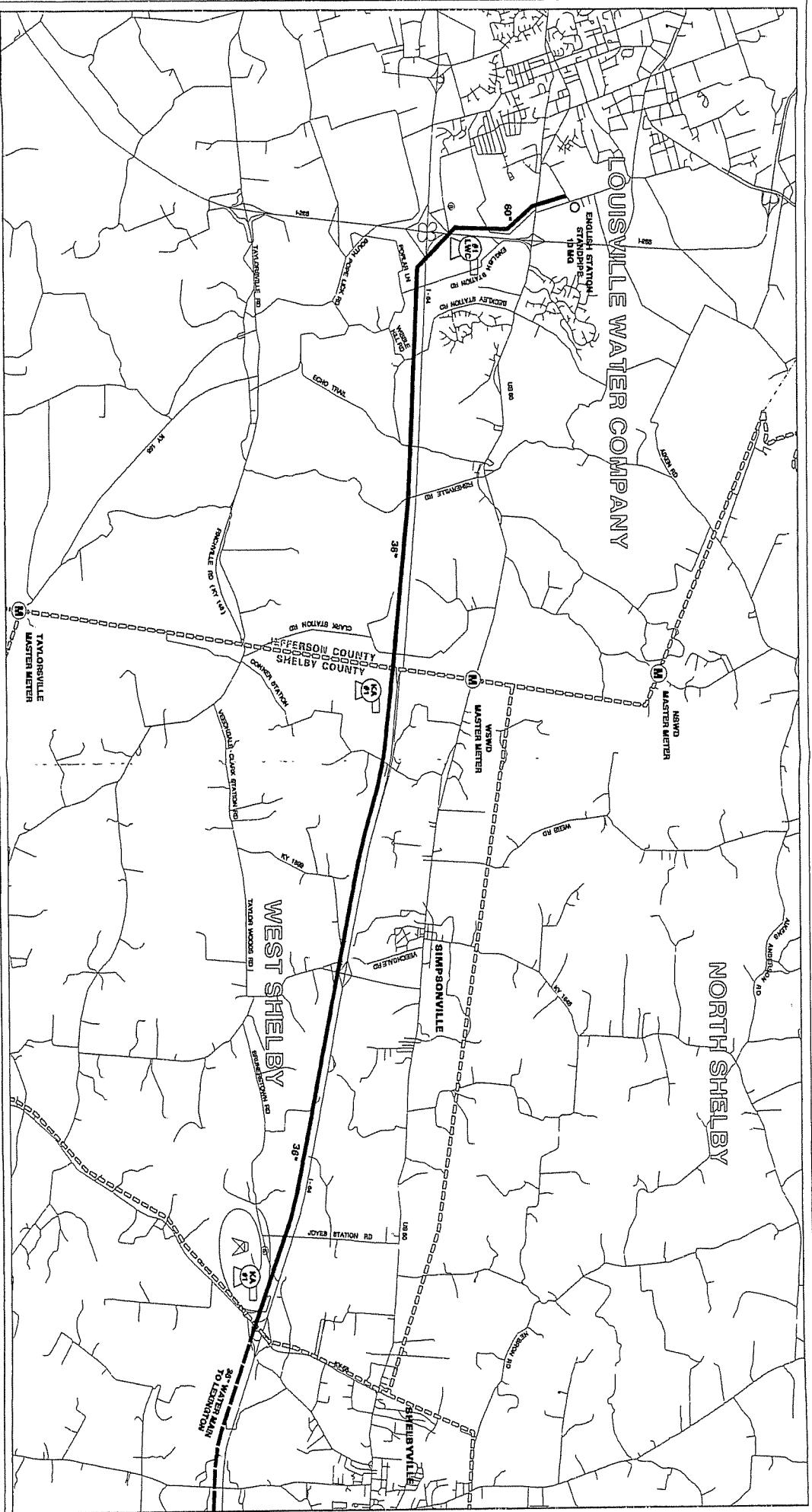
- flushing system.





BLUEGRASS WATER PROJECT

- PROPOSED ELEVATED STORAGE
- PROPOSED PUMPING STATION
- PROPOSED RESERVOIR
- PROPOSED 36" WATER MAIN (LWC)
- PROPOSED 36" WATER MAIN (LWC OPTION)
- WATER DISTRICT BOUNDARIES (APPROX.)
- 36" WATER MAIN TO LEXINGTON
- MASTER METER
- ELECTRIC SUBSTATIONS

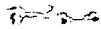


Schedule A

Bluegrass Water Project Agreement

Projected Debt Amortization Schedule
per \$1,000,000 of debt with level debt service payments
at 6% interest for 20 years

Year	Beginning Balance	Interest	Principal	Ending Balance
1	\$ 1,000,000	\$ 60,000	\$ 27,185	\$ 972,815
2	\$ 972,815	\$ 58,369	\$ 28,816	\$ 944,000
3	\$ 944,000	\$ 56,640	\$ 30,545	\$ 913,455
4	\$ 913,455	\$ 54,807	\$ 32,377	\$ 881,078
5	\$ 881,078	\$ 52,865	\$ 34,320	\$ 846,758
6	\$ 846,758	\$ 50,805	\$ 36,379	\$ 810,379
7	\$ 810,379	\$ 48,623	\$ 38,562	\$ 771,817
8	\$ 771,817	\$ 46,309	\$ 40,876	\$ 730,942
9	\$ 730,942	\$ 43,857	\$ 43,328	\$ 687,614
10	\$ 687,614	\$ 41,257	\$ 45,928	\$ 641,686
11	\$ 641,686	\$ 38,501	\$ 48,683	\$ 593,002
12	\$ 593,002	\$ 35,580	\$ 51,604	\$ 541,398
13	\$ 541,398	\$ 32,484	\$ 54,701	\$ 486,697
14	\$ 486,697	\$ 29,202	\$ 57,983	\$ 428,715
15	\$ 428,715	\$ 25,723	\$ 61,462	\$ 367,253
16	\$ 367,253	\$ 22,035	\$ 65,149	\$ 302,104
17	\$ 302,104	\$ 18,126	\$ 69,058	\$ 233,045
18	\$ 233,045	\$ 13,983	\$ 73,202	\$ 159,843
19	\$ 159,843	\$ 9,591	\$ 77,594	\$ 82,249
20	\$ 82,249	\$ 4,935	\$ 82,250	\$ (0)



INPUTS FOR RATE CALCULATIONS

Kentucky American Water Use (mgd):

Usage per Day by Month:

Jan.	2.50
Feb.	2.50
March	2.50
April	2.50
May	2.50
June	2.50
July	2.50
Aug.	2.50
Sept.	2.50
Oct.	2.50
Nov.	2.50
Dec.	2.50

Avg Day for Year: 2.50

Reserved Amount by Month:

6.00
6.00
6.00
6.00
6.00
6.00
6.00
6.00
6.00
6.00
6.00
6.00

Maximum Day Demand (mgd):

6.00

Kentucky American Meter Equivalents:

250

Louisville Water Company Sales:

Annual Sales (mgd):

101.37

Maximum Day Capacity (mgd):

240.00

Annual Sales + KAWC Sales

103.87

102.47%

LWC Standard Wholesale Rate:

Wholesale Commodity Rate:

\$1.16 per 1,000 gals.

Elevated Service Area Rate:

\$0.19 per 1,000 gals.

Customer Charge:

\$3.50 per meter equivalent

Current KAWC Wholesale Commodity Rate

\$1.16 per 1,000 gals.

Current Elevated Service Area Rate:

\$0.19 per 1,000 gals.

Current Year Customer Charge:

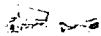
\$3.50 per meter equivalent

LWC System Development Charge

\$700 per meter equivalent unit

LWC Return on Investment:

9.580%



Kentucky American Water Company Investment:

Cost of Transmission Line:	\$11,000,000
Annual Interest Rate:	6.000%
Number of Annual Payments:	20

Costs

LWC Operating Costs

Total:	\$31,220,800
Customer & Retail Only:	\$14,930,530

LWC Depreciation

Total:	\$11,010,480
Customer & Retail Only:	\$5,553,790

LWC Return on Plant Investment

Total:	\$298,385,310
Customer & Retail Only:	\$84,751,092

Customer Costs Allocated to KAWC: \$10,500 estimated

INPUTS FOR RATE CALCULATIONS

Kentucky American Water Use (mgd):

Average Day by Month:

Jan.	2.50
Feb.	2.50
March	2.50
April	2.50
May	2.50
June	2.50
July	2.50
Aug.	2.50
Sept.	2.50
Oct.	2.50
Nov.	2.50
Dec.	2.50

Reserved Amount by Month:

3.00
3.00
3.00
3.00
3.00
3.00
3.00
3.00
3.00
3.00
3.00
3.00

Avg Day for Year (mg) 2.50

Maximum Day Demand (mgd): 3.00 Planned or Reserved

Kentucky American Meter Equivalents: 1,150

Louisville Water Company Sales:

Annual Sales (mgd): 101.37

Maximum Day Capacity (mgd): 240.00

Annual Sales + KAWC Sales 103.87 102.47%

LWC Standard Wholesale Rate:

Wholesale Commodity Rate: \$1.16 per 1,000 gals.

Elevated Service Area Rate: \$0.19 per 1,000 gals.

Customer Charge: \$3.50 per month

Current KAWC Wholesale Commodity Rate \$1.16 per 1,000 gals.

Current Elevated Service Area Rate: \$0.19 per 1,000 gals.

Current Year Customer Charge: \$3.50 per month

LWC System Development Charge \$700 per Meter Equivalent

LWC Return on Investment: 9.580%



Kentucky American Water Company Investment:

Cost of Transmission Line:	\$11,000,000
Annual Interest Rate:	6.000%
Number of Annual Payments:	20

Costs

LWC Operating Costs

Total:	\$31,220,800
Customer & Retail Only:	\$14,930,530

LWC Depreciation

Total:	\$11,010,480
Customer & Retail Only:	\$5,553,790

LWC Rate Base

Total:	\$298,385,310
Customer & Retail Only:	\$84,751,092

Customer Costs Allocated to KAWC:	\$48,300
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INPUTS FOR RATE CALCULATIONS

Kentucky American Water Use (mgd):

Average Day by Month:

Jan.	3.00
Feb.	3.00
March	3.00
April	3.00
May	3.00
June	3.00
July	3.00
Aug.	3.00
Sept.	3.00
Oct.	3.00
Nov.	3.00
Dec.	3.00

Reserved Amount by Month:

6.00
6.00
6.00
6.00
6.00
6.00
6.00
6.00
6.00
6.00
6.00
6.00

Avg Day for Year (mg) 3.00

Maximum Day Demand (mgd): 6.00 Planned or Reserved

Kentucky American Meter Equivalents: 1,150

Louisville Water Company Sales:

Annual Sales (mgd): 101.37
Maximum Day Capacity (mgd): 240.00

Annual Sales + KAWC Sales 104.37 102.96%

LWC Standard Wholesale Rate:

Wholesale Commodity Rate: \$1.16 per 1,000 gals.
Elevated Service Area Rate: \$0.19 per 1,000 gals.
Customer Charge: \$3.50 per month

Current KAWC Wholesale Commodity Rate \$1.16 per 1,000 gals.
Current Elevated Service Area Rate: \$0.19 per 1,000 gals.
Current Year Customer Charge: \$3.50 per month

LWC System Development Charge \$700 per Meter Equivalent

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KAWC RATE OPTIONS

Annual Water Bill: Regular Wholesale Rates: Option 1

Commodity Rate	\$1,270,200 @ \$1.16/1,000 gals.
Elevated Service Area Surcharge	208,050 @ \$0.19/1,000 gals.
Total Annual Commodity Charge	<u>\$1,478,250</u>
Customer Charge	<u>\$48,300 @ \$3.5/Meter Equivalent per month</u>
Total Annual Water Bill	<u>\$1,526,550</u> or \$ 1.39 per 1,000

Initial Capital Outlay

Extension of System Capital Contribution	\$11,000,000
System Development Charge	<u>\$805,000</u>
Total Initial Capital Outlay	<u>\$11,805,000</u>

Assumptions:

Wholesale rate = \$1.16/1,000 gals.

KAWC Usage 3 MGD (annual average)

KAWC has 1150 Equivalent Meter Units

Annual Water Bill: Proposed Approach (Option 2)

Operating Cost Component	\$482,103
Depreciation Cost Component	136,417
Return on Plant Investment Component	<u>511,654</u>
Total Annual Commodity Charge	\$1,130,174
Customer Charge	<u>\$48,300</u>
Total Annual Water Bill	<u>\$1,178,474</u> or \$1.08 /1,000 gals.

Assumptions:

KAWC Usage 3 MGD (annual average)

LWC System Capacity 240 MGD

KAWC Reserved Capacity Request 6 MGD

Annual Debt Service

Principal Amount \$11000000	\$959,030 Assumes 0.06% for 20 years
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Bills and Bill Impacts

Item	Current Rates	New Rates	Change	Percent Change
Total Allocated Costs	\$ 1,526,550	\$ 1,178,474	\$(348,076)	-22.80%
Estimated Monthly Bills				
Jan.	\$ 129,575	\$ 100,090	\$ (29,485)	-22.76%
Feb.	\$ 117,425	\$ 90,404	\$ (27,021)	-23.01%
March	\$ 129,575	\$ 100,090	\$ (29,485)	-22.76%
April	\$ 125,525	\$ 96,861	\$ (28,664)	-22.84%
May	\$ 129,575	\$ 100,090	\$ (29,485)	-22.76%
June	\$ 125,525	\$ 96,861	\$ (28,664)	-22.84%
July	\$ 129,575	\$ 100,090	\$ (29,485)	-22.76%
Aug.	\$ 129,575	\$ 100,090	\$ (29,485)	-22.76%
Sept.	\$ 125,525	\$ 96,861	\$ (28,664)	-22.84%
Oct.	\$ 129,575	\$ 100,090	\$ (29,485)	-22.76%
Nov.	\$ 125,525	\$ 96,861	\$ (28,664)	-22.84%
Dec.	\$ 129,575	\$ 100,090	\$ (29,485)	-22.76%
Total	\$ 1,526,550	\$ 1,178,474	\$(348,076)	-22.80%