

- 6. Replace Roof on RRS Garage..... \$15,000
This building houses offices for maintenance personnel and much of the maintenance equipment for use at the treatment plant. The current roof is over 20 years old and needs to be replaced. (August)
- 7. Replace Heating and Air Conditioning – RRS Operators' Room \$18,000
The existing system frequently malfunctions and needs repair. This room is utilized daily for associate meetings and breaks for the operators. The system will be upgraded to tie in with the lab system. (May)
- 8. Remodel Restroom at KRS..... \$12,000
The existing fixtures are 30 years old and have deteriorated. (January)
- 9. Replace Cox Street Altitude Valve\$35,000
The existing valve has deteriorated due to cavitation and age. It recently malfunctioned and caused significant damage to the tank. Although the valve was repaired to maintain operations, it will be replaced to prevent further malfunctions. The new valves will include anti-cavitation features. (April)
- 10. Replace Mercer Road Altitude Valve..... \$22,000
The existing valve recently malfunctioned, causing traffic problems as water overflowed on to the nearby roadway. The valve was repaired to maintain operations, but will be replaced to prevent further malfunctions. The new valve will include anti-cavitation features. (May)

WATER QUALITY

- 1. Distribution Sampling Stations \$10,000
As KAWC expands into more rural areas, adequate bacteriological sample points are difficult to locate. Sampling stations provide a clean, easily accessible means of collecting compliance samples. (April-May)

Approved at
Board of Directors Meeting
October 11, 2000



Kentucky-American Water Company

2300 Richmond Road • Lexington, Kentucky 40502 • (859) 269-2386 • Fax (859) 268-6327
September 6, 2000
IP 01 - 01
Project No. 11105

KENTUCKY-AMERICAN WATER COMPANY PROPOSED INVESTMENT PROJECT 01 - SECURITY SYSTEM IMPROVEMENTS

Reference: Strategic Business Plans for 2000 and 1999, 1998 Facility Security Vulnerability Report (Mason and Hanger Group)

SUBJECT

Security deficiencies at the main office, plants and facilities within the distribution system.

RECOMMENDATION

Security improvements should be implemented at the two plants, the office, and at the Jacobson Reservoir intake facility to protect employees and critical equipment.

ESTIMATED COST

Total Estimated Cost \$350,000
Proposed 2001 Expenditure \$350,000

ADEQUACY

The proposed investment project will be adequate for construction of security improvements.

INVESTMENT PROJECT REVIEW		
DEPARTMENT	BY	DATE
ENGINEERING	<i>N/A</i>	
WATER QUALITY	<i>Carroll Dumas</i>	<i>9/15/00</i>
INFO. SYSTEMS		
OTHERS		

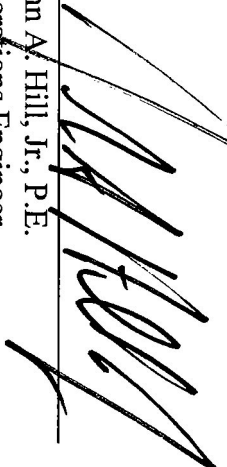
RECOMMENDED FOR APPROVAL: *[Signature]* 9/25/00
PRESIDENT

Kentucky-American Water Company
Proposed 2001 IP 01-
Security System Improvements
Project No. 11105
September 6, 2000
Page 2

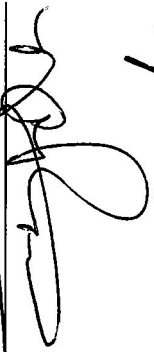
DISCUSSION

Kentucky-American Water Company owns and operates a water system serving Lexington-Fayette County and parts of five surrounding counties consisting of two water treatment plants and 22 distribution facilities. In 1998, KAWC contracted with The Mason & Hanger Group to perform a facility security and vulnerability report. The report was completed in 1998 and outlined areas where security measures should be improved to reduce the vulnerability of these facilities. These areas of vulnerability included potential threats to the safety of employees, potential tampering with critical water processes, or potential vandalism at critical structures in the urban area.

During 1999, selected projects from the report that were associated with Y2K concerns were completed with reoccurring funds. This IP will allow for the completion of the remaining priority projects outlined in the report. These projects include new card readers at both treatment plants, fencing at the Richmond Road Station, the Kentucky River Station and main office complex, additional security cameras at both treatment plants and the main office facility, and increased security at the pump building at Jacobson Reservoir. The accuracy of the estimate is within plus/minus 15 percent.



John A. Hill, Jr., P.E.
Operations Engineer



Nick O. Kowe
Vice-President Operations

KENTUCKY-AMERICAN WATER COMPANY
PROPOSED 2000 CAPITAL INVESTMENT PLAN PROJECT 01 -
SECURITY SYSTEM IMPROVEMENTS

ITEM	RESPONSIBLE ENTITY	TOTAL ESTIMATED COST
Construction	Contractor	\$ 312,500
Supervision	KAWC	\$ 11,500
	Sub-Total	\$ 324,000
O&C (3%)		\$ 9,720
Engineering Overhead (2%)		\$ 6,674
	Sub-Total	\$ 340,394
AFUDC		\$ 9,596
	Total	\$ 349,991

Estimate \$ **350,000**

**KENTUCKY-AMERICAN WATER COMPANY
ECONOMIC ANALYSIS OF THE IMPACT OF CAPITAL
SPENDING PROPOSAL
Replace KRS Sluice nates**

<u>Determination of Revenue Requirement</u>	
Authorized Rate of Return on Common Equity	11.00%
Federal Income Tax Rate	35.00%
Return on Common Equity before FIT	16.92%
State Income Tax Rate	8.25%
Required Rate of Return on CE for Project	18.44%
Common Equity Ratio for Project	40.00%
Weighted Cost of Common Equity before Tax	<u>7.38%</u>

Long Term Debt Ratio for Project	60.00%
Estimated Cost Rate for New Debt	8.00%
Weighted Cost of Debt	<u>4.80%</u>

Total Pre-Tax Cost of Capital 12.18%

Total Estimated Cost of Project	\$ 349,991
Investment by Others	0
Net Investment Financed by Company	<u>\$ 349,991</u>
New Common Equity	\$ 139,996
New Long Term Debt	209,994

<u>Total Revenue Requirement</u>	<u>Amount</u>	<u>Rate</u>
Required Pre-Tax Operating Income	\$ 42,629	12.18%
Depreciation Rate	16,485	4.71%
Property Tax Rate	2,463	0.70%
Change in Operation & Maint. Expense	0	0.00%
Revenue from New Customers	0	0.00%
Total Net Revenue Requirement	\$ 61,577	17.59%
Revenue Tax Rate	90	0.03%
Total Revenue Requirement	<u>\$ 61,667</u>	<u>17.62%</u>

Latest 12 Months Revenue - 06/30/2000 \$ 39,128,658
 Required Price Increase 0.16%



Kentucky-American Water Company

1025 Laurel Oak Road • P.O. Box 1770 • Voorhees, New Jersey 08043
Telephone: 609-345-9200

Proposed IP 01-02
Project No. 11106

KENTUCKY-AMERICAN WATER COMPANY PROPOSED DESIGN INVESTMENT PROJECT 01- THREE MILLION GALLON GROUND STORAGE TANK

Reference: 1992 Least/Comprehensive Planning Study, Project B-13; 1993 and 2000 Storage Capacity Analyses, Strategic Business Plans for 1999 and 2000

SUBJECT OF STUDY

The need to equalize pressures and provide fire flows and system reliability through finished water storage located in the distribution system.

RECOMMENDATION

A 3.0 million gallon ground storage tank should be designed and constructed in the distribution system to provide fire flows and system reliability and to equalize demands within the system. This facility should be located on the site of existing storage to reduce costs.

ESTIMATED COST

Total Estimated Cost \$ 100,000
Proposed 2001 Expenditure \$ 100,000

ADEQUACY

The proposed investment project is adequate for engineering design, survey, and bidding services to properly locate the new tank. A revision to the current project will be made after construction bids are received.

INVESTMENT PROJECT REVIEW

DEPARTMENT	BY	DATE
ENGINEERING	<i>W. V. Long</i>	9-21-00
WATER QUALITY	<i>N/A</i>	<i>None</i>
INFO. SYSTEMS		
OTHERS		

RECOMMENDED FOR APPROVAL: *9/25/00*

Andy ...
PRESIDENT

Kentucky-American Water Company
Proposed 2001 IP 01 -
Three MG Ground Storage Tank
Project No. 11106
September 5, 2000
Page 2


DISCUSSION


This capital investment will initiate design services for the new three (3) MG tank. Using current and projected system demands, the IRP to be completed in late 2000 will determine which existing site (Hume Road, Clays Mill or Parkers Mill) will be most effective in having additional storage added to the site. The tank will be a ground storage facility, and will share the pump station with the existing tank on the site. Based on recent system operations, including the new record maximum day pumpage, it is obvious that this tank is necessary. Peak system demands in the northwestern and western sections of the distribution system caused low pressure for numerous residential and commercial customers. The continued residential growth in this area will only increase system demands during hot and dry weather. This additional tank is critical to meeting system reliability and is the most efficient way to meet peak period demands while providing fire protection. Design will also include dechlorination facilities on site to allow for dechlorination while the tank is drained for maintenance.

The Kentucky Public Service Commission Title 807, Chapter 5 - Utilities, Section 4 - Continuity of Service, paragraph (4) states "the minimum storage capacity for systems shall be equal to the average daily consumption." KAWC does not currently meet this requirement. The 1992 Least/Comprehensive Planning Study and the 1993 Storage Capacity Analysis outlined the need for three additional three (3) MG tanks in the main service area and two additional tanks in the north high service area. The 1993 Storage Capacity Analysis proposed the use of a 50-50 split between storage capacity and back-up power facilities. Kentucky-American would be able to provide one-half average daily consumption in storage and be able to produce and pump one-half average daily consumption using backup or auxiliary power at the treatment facilities. In 1993 the Public Service Commission approved the Storage Capacity Analysis and granted a variance to KAWC until 2005. Two of the five necessary tanks have already been constructed with the completion of the three (3) MG Clays Mill ground storage tank and the 750,000 gallon elevated Briar Hill Road tank. In 2000, KAWC initiated discussions with the PSC to explore a further variance of storage needs, however, it is clear from system operations that this tank is necessary. Those discussions are still ongoing for future storage needs.

Kentucky-American Water Company
Proposed 2001 IP 01 -
Three MG Ground Storage Tank
Project No. 11106
September 5, 2000
Page 3

Design is scheduled for 2001, with construction to begin in 2002 and completion in 2003. A revision to the current proposed investment project will be presented once design is complete and construction costs can be accurately projected. It is estimated that construction will cost \$1,400,000. The proposed design cost is within an accuracy of plus or minus 10 percent.


Richard C. Svindland
Operations Engineer


Nick O. Rowe
Vice President – Operations

NOR/rcs

KENTUCKY-AMERICAN WATER COMPANY
PROPOSED 2001 CAPITAL INVESTMENT PLAN PROJECT 01-
THREE (3) MG GROUND STORAGE TANK

ITEM	RESPONSIBLE ENTITY	TOTAL ESTIMATED COST
Preliminary Design	KAWC / Consultant	\$ 15,000
Final Design	Consultant	\$ 75,000
Company Labor	KAWC	\$ 4,529
	Sub-Total	\$ 94,529
O&C (3%)		\$ 2,836
Engineering Overhead (2%)		\$ 1,891
	Sub-Total	\$ 99,255
AFUDC		\$ 744
	Total	\$ 100,000

KENTUCKY-AMERICAN WATER COMPANY
 ECONOMIC ANALYSIS OF THE IMPACT OF CAPITAL
 SPENDING PROPOSAL
THREE (3) MG GROUND STORAGE TANK

<u>Determination of Revenue Requirement</u>	
Authorized Rate of Return on Common Equity	11.00%
Federal Income Tax Rate	35.00%
Return on Common Equity before FIT	16.92%
State Income Tax Rate	8.25%
Required Rate of Return on CE for Project	18.44%
Common Equity Ratio for Project	40.00%
Weighted Cost of Common Equity before Tax	<u>7.38%</u>

Long Term Debt Ratio for Project	60.00%
Estimated Cost Rate for New Debt	7.00%
Weighted Cost of Debt	<u>4.20%</u>

Total Pre-Tax Cost of Capital	<u>11.58%</u>
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Total Estimated Cost of Project	\$ 1,500,000
Investment by Others	0
Net Investment Financed by Company	<u>\$ 1,500,000</u>
New Common Equity	\$ 600,000
New Long Term Debt	900,000

<u>Total Revenue Requirement</u>		<u>Amount</u>	<u>Rate</u>
Required Pre-Tax Operating Income		\$ 173,700	11.58%
Depreciation Rate	2.200%	33,000	2.20%
Property Tax Rate	0.7037%	10,556	0.70%
Change in Operation & Maint. Expense		0	0.00%
Revenue from New Customers		0	0.00%
Total Net Revenue Requirement		\$ 217,256	14.48%
Revenue Tax Rate		316	0.02%
Total Revenue Requirement	0.14537%	<u>\$ 217,572</u>	<u>14.50%</u>

Latest 12 Months Revenue - 06/30/2000	<u>\$ 39,128,658</u>
Required Price Increase	<u>0.56%</u>



American Water Works Service Company, Inc.

1025 Laurel Oak Road • P. O. Box 1770 • Voorhees, New Jersey 08043 • (856) 346-8201 • Fax (856) 346-8360

September 13, 2000
File No. 380-8362
IP 01-03
Project ID - 11167

KENTUCKY-AMERICAN WATER COMPANY PROPOSED INVESTMENT PROJECT DISTRIBUTED CONTROL SYSTEM IMPROVEMENTS

Reference: 2000 Strategic Business Plan

SUBJECT

Deficiencies and obsolescence of the existing distributed control system (DCS) for the production facilities and distribution system.

RECOMMENDATION

A comprehensive upgrade of the DCS is recommended to modernize and integrate the present monitoring and control functions.

ESTIMATED COST

Total Estimated Cost \$94,000
Proposed 2001 Expenditure \$94,000

INVESTMENT PROJECT REVIEW		
DEPARTMENT	BY	DATE
ENGINEERING	<i>John V. Young</i>	9-16-00
WATER QUALITY	<i>Charles Moore</i>	9/16/00
INFO. SYSTEMS		
OTHERS		
RECOMMENDED FOR APPROVAL:		
<i>Ray W. Wundt</i>		9/25/00
PRESIDENT		

Kentucky-American Water Company
Proposed 2001 IP
Distributed Control System Improvements
September 11, 2000

ADEQUACY

The recommended funding is adequate for design and bidding of the DCS improvements.

Kentucky-American Water Company
Proposed 2001 Investment Project
Distributed Control System Improvements
September 13, 2000


DISCUSSION

Kentucky-American Water Company (KAWC) owns and operates an intake at the Kentucky River, two water treatment plants, and numerous distribution system facilities. Computer based distributed control system (DCS) technology was installed at these facilities in a step-wise manner over the past ten years. The equipment in the earliest DCS that was installed at the Richmond Road Station is obsolete and unreliable resulting in the occasional loss of data. The Kentucky River Station DCS cannot communicate with the Richmond Road Station DCS. More recently installed DCS hardware and software at the Richmond Road Station is not compatible with the original DCS at Richmond Road. Furthermore, the existing DCS has minimal reserve capacity for additional functions and very limited capabilities to export data for operational reports and other functions.

This Investment Project is recommended to: replace the existing data concentrators and operator interfaces (i.e., work stations); upgrade 40 of the existing remote telemetry units; upgrade the software, programs, displays and reports; provide a frame relay for communication and data access from anywhere in the system; provide a structured query logic server and firewall to permit the sharing of data with other Water Company functions, but without affecting the integrity of the data. The recommended improvements will create an integrated DCS to handle all current monitoring, control and reporting functions and to accommodate additional functions in the future.

The total project cost for the recommended improvements is estimated at \$650,000 within -20 to +10 percent.


Norman R. Ansell, P.E.


Richard E. Hubel, P.E.
Director - Design

**KENTUCKY-AMERICAN WATER COMPANY
DISTRIBUTED CONTROL SYSTEM IMPROVEMENTS**

Detailed Cost Estimate

Item	Category	Estimate
Design	Company	\$70,000
Bidding	Company	10,000
KAWC Engineering	Company	<u>10,000</u>
		\$90,000
AFUDC		<u>4,000</u>
		\$94,000

REH/bem
9/13/00
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**KENTUCKY-AMERICAN WATER COMPANY
ECONOMIC ANALYSIS OF THE IMPACT OF CAPITAL
SPENDING PROPOSAL
DESIGN SCADA IMPROVEMENTS**

Determination of Revenue Requirement

Authorized Rate of Return on Common Equity	11.00%
Federal Income Tax Rate	35.00%
Return on Common Equity before FIT	16.92%
State Income Tax Rate	8.25%
Required Rate of Return on CE for Project	18.44%
Common Equity Ratio for Project	40.00%
Weighted Cost of Common Equity before Tax	7.38%

Long Term Debt Ratio for Project	60.00%
Estimated Cost Rate for New Debt	7.00%
Weighted Cost of Debt	4.20%

Total Pre-Tax Cost of Capital	11.58%
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Total Estimated Cost of Project	\$ 650,000
Investment by Others	0
Net Investment Financed by Company	\$ 650,000
New Common Equity	\$ 260,000
New Long Term Debt	390,000

<u>Total Revenue Requirement</u>	<u>Amount</u>	<u>Rate</u>
Required Pre-Tax Operating Income	\$ 75,270	11.58%
Depreciation Rate 4.790%	31,135	4.79%
Property Tax Rate 0.7037%	4,574	0.70%
Change in Operation & Maint. Expense	0	0.00%
Revenue from New Customers	0	0.00%
Total Net Revenue Requirement	\$ 110,979	17.07%
Revenue Tax Rate 0.14537%	162	0.02%
Total Revenue Requirement	\$ 111,141	17.09%

Latest 12 Months Revenue - 06/30/2000	\$ 39,128,658
Required Price Increase	0.28%



Kentucky-American Water Company

2300 Richmond Road • Lexington, Kentucky 40502 • (859) 269-2386 • Fax (859) 268-6327

September 7, 2000
IP 01- 04
Project No. 10511

KENTUCKY-AMERICAN WATER COMPANY PROPOSED INVESTMENT PROJECT 01 - SCOTT COUNTY MAINS

Reference: Investment Project Memoranda 99-03 dated 10/12/98, 97-05 dated 11/6/97, 95-12 dated 6/21/96; Strategic Business Plans for 1996, 1997, 1998, 1999 and 2000

SUBJECT
The extension of water service in rural Scott County.

RECOMMENDATION
It is recommended that 45,900 feet of 8-inch mains be installed in Scott County.

ESTIMATED COST	
Total Estimated Cost	\$1,500,000
Proposed 2001 Expenditure	\$750,000
Proposed 2002 Expenditure	\$750,000
Total Reimbursements	\$(960,000)
Proposed 2001 Reimbursements	\$(396,600)
Proposed 2002 Reimbursements	\$(563,400)

ADEQUACY
The proposed investment project funds are adequate to design and construct the mains. This is a continuation of a program that was originally initiated under budget project 95-12 and continued under BP 97-05 and IP 99-03. An estimated \$959,714 will be reimbursed by the Scott Fiscal Court.

INVESTMENT PROJECT REVIEW		
DEPARTMENT	BY	DATE
ENGINEERING	<i>Don V. Perry</i>	9-18-00
WATER QUALITY	N/A	9/24
INFO. SYSTEMS		
OTHERS		
RECOMMENDED OR APPROVAL		
<i>Don V. Perry</i>		9/25/00
PRESIDENT		


Kentucky-American Water Company
Proposed 2001 IP 01-
Scott County Mains
Project No. 10511
September 6, 2000
Page Two

DISCUSSION

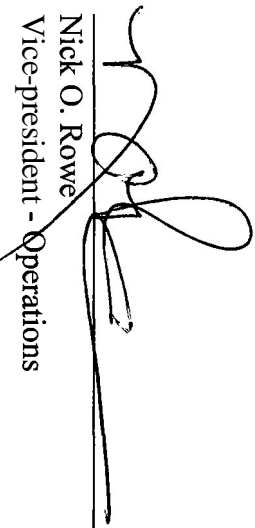
The Scott County Judge Executive has indicated that the Fiscal Court would like to continue the program of extending water supply mains into rural Scott County. The program was initiated under budget project 95-12 in 1995 and 1996. The County has agreed to provide 80 percent of the capital expenditures for rural water service and waive refunds if Kentucky-American Water Company will provide 20 percent of the capital expenditures, based on the use of PVC pipe. The Public Service Commission has approved the special agreement.

The Fiscal Court has agreed with the proposed extension of 19,200 feet on Burgess-Smith Road from KY 32 to Davis-Turkeyfoot, and 26,700 feet on US 25 from KY 356 to Field's Lane, thence to the city of Hinton and back to KY 356. An estimated 72 homes will be provided water service.

As with the previous extensions, Kentucky-American Water Company will provide the investment to upgrade the installation of these extensions in order to meet Company standards and provide for anticipated growth. The proposed 8-inch mains will provide a minimum hydrant fire flow of 500 gpm to these residential areas. The accuracy of the estimate is within plus/minus 10 percent.



J, Scott Thomson, P.E.
Operation Engineer



Nick O. Rowe
Vice-president - Operations

NOR/jst

KENTUCKY-AMERICAN WATER COMPANY
PROPOSED INVESTMENT PLAN PROJECT 01-
SCOTT COUNTY MAINS

ITEM	RESPONSIBLE ENTITY	TOTAL ESTIMATED COST
2001		
Design	KAWC	\$ 9,575
Easement Acquisition	KAWC	\$ 25,000
Construction	Contractor	\$ 651,850
	Sub-Total	\$ 686,425
O&C (5%)		\$ 34,321
Engineering Overhead (2%)		\$ 13,729
	Sub-Total	\$ 734,475
AFUDC		\$ 15,507
	Total	\$ 749,982
2002		
Design	KAWC	\$ 8,000
Easement Acquisition	KAWC	\$ 20,000
Construction	(Contractor	\$ 658,700
	Sub-Total	\$ 686,700
O&C (5%)		\$ 34,335
Engineering Overhead (2%)		\$ 13,734
	Sub-Total	\$ 734,769
AFUDC		\$ 15,231
	Total	\$ 750,000

KENTUCKY-AMERICAN WATER COMPANY

Proposed 2001 Capital Investment Plan Project 01-

SCOTT COUNTY MAINS

DESCRIPTION OF ACTIVITY	ENTITY RESPONSIBLE	2001												TOTAL 2001
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	
Design	Consultant	\$ 1,925	\$ 2,875	\$ 4,775	\$ -	\$ -	\$ -	\$ -						\$ 9,575
Easement Acquisition	KAWC			\$ 5,000	\$ 10,000	\$ 10,000	\$ -	\$ -						\$ 25,000
Construction	Consultant			\$ -			\$ 19,925	\$ 54,800	\$ 74,350	\$ 115,500	\$ 169,000	\$ 120,775	\$ 97,500	\$ 651,850
SUB-TOTAL		\$ 1,925	\$ 2,875	\$ 9,775	\$ 10,000	\$ 10,000	\$ 19,925	\$ 54,800	\$ 74,350	\$ 115,500	\$ 169,000	\$ 120,775	\$ 97,500	\$ 686,425
O&C (5%)		\$ 96	\$ 144	\$ 489	\$ 500	\$ 500	\$ 996	\$ 2,740	\$ 3,718	\$ 5,775	\$ 8,450	\$ 6,039	\$ 4,875	\$ 34,321
Overhead (2%)		\$ 39	\$ 58	\$ 196	\$ 200	\$ 200	\$ 399	\$ 1,096	\$ 1,487	\$ 2,310	\$ 3,380	\$ 2,416	\$ 1,950	\$ 13,729
AFUDC		\$ 7	\$ 11	\$ 37	110.81	185.81	298.03	578.25	1,062.56	1,774.50	2,841.38	3,928.03	4,673.25	\$ 15,507
CASH FORECAST		\$ 2,067	\$ 3,087	\$ 10,496	\$ 10,811	\$ 10,886	\$ 21,618	\$ 59,214	\$ 80,617	\$ 125,360	\$ 183,671	\$ 133,157	\$ 108,998	\$ 749,982

KENTUCKY-AMERICAN WATER COMPANY
Proposed 2001 Capital Investment Plan Project 01-
SCOTT COUNTY MAINS

DESCRIPTION OF ACTIVITY	ENTITY RESPONSIBLE	2002												TOTAL 2002	Project Total	
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC			
Design	Consultant	\$ 1,925	\$ 2,875	\$ 3,200	\$ -	\$ -	\$ -	\$ -							\$ 8,000	\$ 17,575
Easement Acquisition	KAWC			\$ 5,000	\$ 10,000	\$ 5,000	\$ -	\$ -							\$ 20,000	\$ 45,000
Construction	Consultant			\$ -			\$ 19,925	\$ 54,800	\$ 77,000	\$ 115,500	\$ 169,000	\$ 120,775	\$ 101,700	\$ 658,700	\$ 1,310,550	
SUB-TOTAL		\$ 1,925	\$ 2,875	\$ 8,200	\$ 10,000	\$ 5,000	\$ 19,925	\$ 54,800	\$ 77,000	\$ 115,500	\$ 169,000	\$ 120,775	\$ 101,700	\$ 686,700	\$ 1,373,125	
O&C (5%)		\$ 96	\$ 144	\$ 410	\$ 500	\$ 250	\$ 996	\$ 2,740	\$ 3,850	\$ 5,775	\$ 8,450	\$ 6,039	\$ 5,085	\$ 34,335	\$ 68,656	
Overhead (2%)		\$ 39	\$ 58	\$ 164	\$ 200	\$ 100	\$ 399	\$ 1,096	\$ 1,540	\$ 2,310	\$ 3,380	\$ 2,416	\$ 2,034	\$ 13,734	\$ 27,463	
AFUDC		\$ 7	\$ 11	\$ 31	99.00	155.25	248.72	528.94	1,023.19	1,745.06	2,811.94	3,898.59	4,671.38	\$ 15,231	\$ 30,738	
CASH FORECAST		\$ 2,067	\$ 3,087	\$ 8,805	\$ 10,799	\$ 5,505	\$ 21,568	\$ 59,165	\$ 83,413	\$ 125,330	\$ 183,642	\$ 133,128	\$ 113,490	\$ 750,000	\$ 1,499,982	

AFUDC Interest Rate 0.0075

**KENTUCKY-AMERICAN WATER COMPANY
ECONOMIC ANALYSIS OF THE IMPACT OF CAPITAL
SPENDING PROPOSAL
SCOTT COUNTY MAINS**

<u>Determination of Revenue Requirement</u>	
Authorized Rate of Return on Common Equity	11.00%
Federal Income Tax Rate	35.00%
Return on Common Equity before FIT	16.92%
State Income Tax Rate	8.25%
Required Rate of Return on CE for Project	18.44%
Common Equity Ratio for Project	40.00%
Weighted Cost of Common Equity before Tax	<u>7.38%</u>

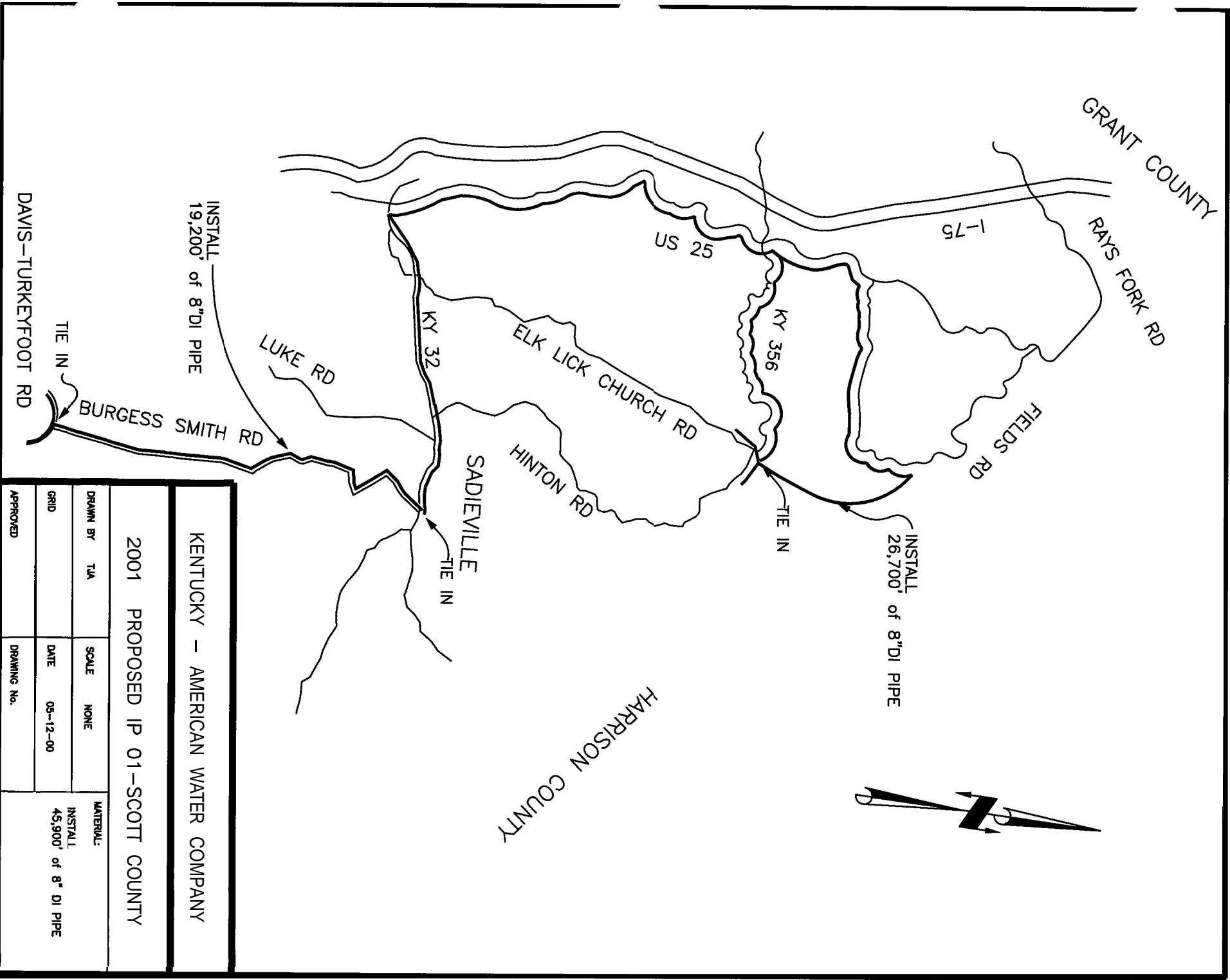
Long Term Debt Ratio for Project	60.00%
Estimated Cost Rate for New Debt	7.00%
Weighted Cost of Debt	<u>4.20%</u>

Total Pre-Tax Cost of Capital	<u>11.58%</u>
Total Estimated Cost of Project	\$ 1,500,000
Investment by Others	959,700
Net Investment Financed by Company	<u>\$ 540,300</u>

New Common Equity	\$ 216,120
New Long Term Debt	324,180

<u>Total Revenue Requirement</u>		<u>Amount</u>	<u>Rate</u>
Required Pre-Tax Operating Income		\$ 62,567	11.58%
Depreciation Rate	1.180%	6,376	1.18%
Property Tax Rate	0.7037%	3,802	0.70%
Change in Operation & Maint. Expense	0.00%	0	0.00%
Revenue from New Customers	4.00%	21,600	4.00%
Total Net Revenue Requirement		\$ 94,345	17.46%
Revenue Tax Rate		137	0.03%
Total Revenue Requirement	0.14537%	<u>\$ 94,482</u>	<u>17.49%</u>

Latest 12 Months Revenue - 05/30/1999	<u>\$ 42,000,000</u>
Required Price Increase	<u>0.22%</u>



KENTUCKY - AMERICAN WATER COMPANY

2001 PROPOSED IP 01-SCOTT COUNTY

DRAWN BY	TJA	SCALE	NONE	MATERIAL:
GRID		DATE	05-12-00	INSTALL 45,900' of 8" DI PIPE
APPROVED		DRAWING No.		



Kentucky-American Water Company

1025 Laurel Oak Road • P.O. Box 1770 • Voorhees, New Jersey 08043 • (609) 346-8200

September 5, 2000
Proposed IP 01-05
Project No. 11201

KENTUCKY-AMERICAN WATER COMPANY PROPOSED DESIGN INVESTMENT PROJECT 01- ONE MILLION GALLON PUMPED STORAGE FACILITY

Reference: 1992 Least/Comprehensive Planning Study, Project B-8; 1993 and 2000 Storage Capacity Analyses, Strategic Business Plans 1997, 1998, 1999, 2000

SUBJECT

The need to equalize pressures, provide fire flows, and improve system reliability through finished water storage located in the north section of the distribution system.

RECOMMENDATION

A one (1) million gallon pumped storage tank should be designed and constructed in the northern Fayette County section of the distribution system to provide fire flows and system reliability, and to equalize demands within the system.

ESTIMATED COST

Total Estimated Cost \$ 200,000
Proposed 2001 Expenditure \$ 150,000
Proposed 2002 Expenditure \$ 50,000

ADEQUACY

The proposed investment project funds are adequate for engineering design, survey, and land acquisition and bidding services to properly locate the new tank.

INVESTMENT PROJECT REVIEW

DEPARTMENT	BY	DATE
ENGINEERING	<i>John V. Perry</i>	9-21-00
WATER QUALITY	<i>n/a</i>	<i>gscg</i>
INFO. SYSTEMS		
OTHERS		

RECOMMENDED FOR APPROVAL: *Joseph W. Dwyer* 9/15/00
PRESIDENT

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DISCUSSION

This capital investment will initiate design services for the new one (1) MG tank to be located on a new site in the northern section of the distribution system as recommended in the 1992 Least Cost/Comprehensive Planning Study. Part of that task will be to negotiate land acquisition. This tank is critical to the continued operations and reliability in the rapidly growing Scott County area. On peak demand days, many high elevation areas in Scott County experience low pressure. It is anticipated that this tank will provide better reliability for Toyota Motor Manufacturing and will reinforce the area where new bulk sales will be provided to the Harrison County Water Association. The tank will also allow for the Muddy Ford tank to be taken out of service for maintenance. The Muddy Ford tank, which was built in 1989, is currently so critical to Scott County and Toyota operations that it could not be painted without shutting down Toyota. A recent inspection projected the life of the paint on the tank to be an additional five years. In that time frame, additional storage for the area must be available. Design will also include dechlorination facilities on site to allow for disinfection and adequate treatment during tank draining.

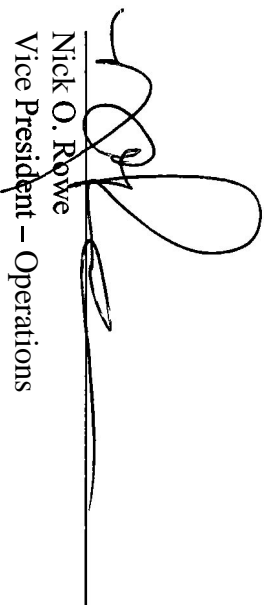
The Kentucky Public Service Commission Title 807, Chapter 5 - Utilities, Section 4 - Continuity of Service, paragraph (4) states "the minimum storage capacity for systems shall be equal to the average daily consumption." KAWC does not currently meet this requirement. The 1992 Least/Comprehensive Planning Study and the 1993 Storage Capacity Analysis outlined the need for an additional three (3) MG tank in the main service area and two additional tanks in the north high service area. The 1993 Storage Capacity Analysis proposed the use of a 50-50 split between storage capacity and back-up power facilities. In 1993 the Public Service Commission approved the Storage Capacity Analysis and granted a variance to KAWC until 2005. Two of the five necessary tanks have already been constructed with the completion of the three (3) million gallon Clays Mill ground storage tank and the 750,000 gallon elevated Briar Hill Road tank. In 2000, KAWC initiated discussion with the PSC to explore the possibility of a further variance, however, it is clear from operational history that this proposed tank is absolutely necessary. The discussions with the PSC are ongoing with regard to future storage needs.

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Design will be complete in 2002, and construction will begin in 2003 with completion in 2004. It is estimated that construction will cost \$1,300,000 including pumping facilities. The accuracy of this estimate is plus/minus 15 percent.



Kevin W. Kennoy
Operations Engineer



Nick O. Rowe
Vice President – Operations

NOR/kwk