

# Rubin & Hays

ATTORNEYS AT LAW

Kentucky Home Trust Building, 450 South Third Street, Louisville, Kentucky 40202-1410  
Telephone (502) 569-7525 Telefax (502) 569-7555 www.rubinhays.com

CHARLES S. MUSSON  
W. RANDALL JONES  
CHRISTIAN L. JUCKETT

May 11, 2011

**RECEIVED**

MAY 13 2011

**PUBLIC SERVICE  
COMMISSION**

Mr. Jeff Derouen  
Executive Director  
Public Service Commission  
P.O. Box 615  
Frankfort, Kentucky 40602

Re: North Mercer Water District - KRS 278.023 Application - **PHASE 2**

Dear Mr. Derouen:

Enclosed please find the original and ten (10) copies of the Application of the North Mercer Water District for an Order approving construction financing and Certificate of Public Convenience and Necessity pursuant to KRS 278.023.

Also enclosed are eleven (11) copies of the exhibits required pursuant to 807 KAR 5.069, **with the exception of the Preliminary and Final Engineering Reports, of which two copies are enclosed.**

If you need any additional information or documentation, please let us know.

Sincerely,

Rubin & Hays

By   
W. Randall Jones

WRJ:cr  
Enclosures  
cc: Distribution List

**DISTRIBUTION LIST**

Account No. 2059.0000

**Re: North Mercer Water District Waterworks Revenue Bonds, Series 2011A (Phase 2 Project), in the principal amount of \$1,547,000**

Mr. Thomas G. Fern,  
State Director  
USDA, Rural Development  
771 Corporate Drive, Suite 200  
Lexington, Kentucky 40503-5477

Telephone: (859) 224-7336  
Fax: (859) 224-7340

Mr. John Johnson  
USDA, Rural Development  
90 Howard Drive, Suite 3  
Shelbyville, Kentucky 40065

Telephone: (502) 633-3294  
Fax: (502) 633-0552

Mr. Gerald Sheperson, Chairman  
Ms. Mischell Lee, Manager  
North Mercer Water District  
P.O. Box 79  
Salvisa, Kentucky 40372

Telephone: (859) 865-2292

Mr. Ron Gastineau  
Gastineau & Associates  
3465 Rabbits Foot Trail  
Lexington, Kentucky 40503

Telephone: (859) 421-4641

Thomas M. Jones, Esq.  
Attorney at Law  
138 South Main Street  
Lawrenceburg, Kentucky 40342

Telephone: (502) 839-6020  
Fax: (502) 839-6029

W. Randall Jones, Esq.  
Rubin & Hays  
Kentucky Home Trust Building  
450 South Third Street  
Louisville, Kentucky 40202

Telephone: (502) 569-7534  
Fax: (502) 569-7555

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

**RECEIVED**

MAY 13 2011

PUBLIC SERVICE  
COMMISSION

In the Matter of:

THE APPLICATION OF NORTH MERCER WATER )  
DISTRICT OF FOR A CERTIFICATE OF PUBLIC ) Case No. 2011-\_\_\_\_\_  
CONVENIENCE AND NECESSITY TO CONSTRUCT )  
AND FINANCE PURSUANT TO THE PROVISIONS )  
OF KRS 278.023 )

**A P P L I C A T I O N**

This Application of the North Mercer Water District (the "Applicant") respectfully shows:

1. That Applicant is a water district of Mercer, Boyle, Anderson and Washington Counties, Kentucky, created and existing under and by virtue of Chapter 74 of the Kentucky Revised Statutes.

2. That the post office address of the Applicant is:

North Mercer Water District  
c/o Mr. Gerald Sheperson, Chairman  
P.O. Box 79  
Salvisa, Kentucky 40372

3. That the Applicant, pursuant to the provisions of 278.023, seeks (i) a Certificate of Public Convenience and Necessity, permitting the Applicant to construct a waterworks construction project, consisting of extensions, additions, and improvements (the "Phase 2 Project") to the existing waterworks system of the Applicant; and (ii) approval of the proposed plan of financing said Phase 2 Project.

4. That the Phase 2 Project consists of the construction and installation of (i) approximately 1,370 linear feet of 12 inch water line, 4,760 linear feet of 10 inch water line, 22,700 linear feet of 8 inch water line, 20,500 linear feet of 6 inch water line and 400 linear feet of 4 inch water line and appurtenances; (ii) a connection to the City of Danville's water system, including a booster pumping station; and (iii) installation of 2 additional pumping stations.

5. That the Applicant proposes to finance the construction of the Phase 2 Project through (i) issuance of \$1,547,000 of its Waterworks Revenue Bonds, Series 2011A (Phase 2 Project); and (ii) a grant from USDA, Rural Development ("RD") in the amount of \$750,000. Applicant has a commitment from RD to purchase said \$1,547,000 of bonds maturing over a 40-year period, at an interest rate of not exceeding 3.625% per annum, as set out in the RD Letter of Conditions, as amended, filed herewith as an Exhibit.

6. That the Applicant does not contemplate having the Phase 2 Project constructed with any deviation from minimum construction standards of this Public Service Commission.

7. That the Applicant files herewith the following Exhibits pursuant to 807 KAR 5:069 in support of this Application:

- A. Copy of RD Letter of Conditions, as amended.
- B. Copy of RD Letter of Concurrence in Contract Award.
- C. Copy of Preliminary and Final Engineering Reports.
- D. Certified statement from the Chairman of the Applicant, based upon statements of the Engineers for the Applicant, concerning the following:
  - (1) The proposed plans and specifications for the Phase 2 Project have been designed to meet the minimum construction and operating requirements set out in 807 KAR 5:066, Section 4 (3) and (4); Section 5 (1); Sections 6 and 7; Section 8 (1) through (3); Section 9 (1) and Section 10;
  - (2) All other state approvals or permits have already been obtained;
  - (3) The existing rates of the Applicant shall produce the total revenue requirements set out in the engineering reports; and
  - (4) Setting out the dates when it is anticipated that construction will begin and end.

8. That the foregoing constitutes the documents necessary to obtain the approval of the Kentucky Public Service Commission in accordance with Section 278.023 of the Kentucky Revised Statutes and in accordance with the Filing Requirements specified in 807 KAR 5:069, Section 1.

WHEREFORE, the Applicant, the North Mercer Water District, asks that the Public Service Commission of the Commonwealth of Kentucky grant to the Applicant the following:

- a. A Certificate of Public Convenience and Necessity permitting the Applicant to construct a waterworks project consisting of extensions, additions, and improvements to the existing waterworks system of the Applicant.
- b. An Order approving the financing arrangements made by the Applicant, viz., the issuance of \$1,547,000 of North Mercer Water District Waterworks Revenue Bonds, Series 2011A (Phase 2 Project) at an interest rate of not exceeding 3.625% per annum; and a grant from RD in the amount of \$750,000.

NORTH MERCER WATER DISTRICT

By: *Geracee Sheper*  
Chairman  
Board of Water Commissioners

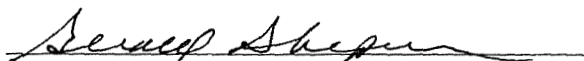
RUBIN & HAYS

By: *W. D. [Signature]*  
Counsel for Applicant  
Kentucky Home Trust Building  
450 South Third Street  
Louisville, Kentucky 40202  
(502) 569-7525

COMMONWEALTH OF KENTUCKY )  
 ) SS:  
COUNTY OF MERCER )

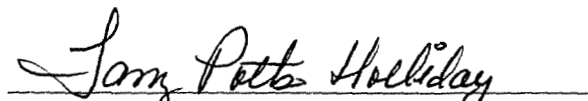
The undersigned, Gerald Sheperson, being duly sworn, deposes and states that he is the Chairman of the Board of Commissioners of the North Mercer Water District, the Applicant, in the above proceedings; that he has read the foregoing Application and has noted the contents thereof; that the same is true of his own knowledge, except as to matters which are therein stated on information or belief, and as to those matters, he believes same to be true.

IN TESTIMONY WHEREOF, witness the signature of the undersigned on this May 7, 2011.

  
Gerald Sheperson, Chairman  
North Mercer Water District

Subscribed, sworn and acknowledged to before me by Gerald Sheperson, Chairman of the Board of Commissioners of the North Mercer Water District on this May 7, 2011.

My Commission expires: May 22, 2012.

  
Notary Public  
In and for said County and State





United States Department of Agriculture  
Rural Development  
Kentucky State Office

July 21, 2008

Mr. Roy Short, Chairman  
North Mercer Water District  
P.O. Box 79  
Salvisa, Kentucky 40372

Dear Chairman Short:

This letter establishes conditions which must be understood and agreed to by you before further consideration may be given to the application. The loan and grant will be administered on behalf of the Rural Utilities Service (RUS) by the State and Area office staff of USDA Rural Development. Any changes in project cost, source of funds, scope of services or any other significant changes in the project or applicant must be reported to and approved by USDA Rural Development, by written amendment to this letter. Any changes not approved by Rural Development shall be cause for discontinuing processing of the application. It should also be understood that Rural Development is under no obligation to provide additional funds to meet an overrun in construction costs.

This letter is not to be considered as loan and grant approval or as a representation as to the availability of funds. The docket may be completed on the basis of a RUS loan not to exceed \$1,547,000, a RUS grant not to exceed \$750,000.

If Rural Development makes the loan, the interest rate will be the lower of the rate in effect at the time of loan approval or the rate in effect at the time of loan closing, unless the applicant otherwise chooses. The loan will be considered approved on the date a signed copy of Form RD 1940-1, "Request for Obligation of Funds," is mailed to you.

Please complete and return the attached Form RD 1942-46, "Letter of Intent to Meet Conditions," if you desire that further consideration be given to your application.

The "Letter of Intent to Meet Conditions" must be executed within three weeks from the date of this letter or it becomes invalid unless a time extension is granted by Rural Development.

If the conditions set forth in this letter are not met within 240 days from the date hereof, Rural Development reserves the right to discontinue the processing of the application.

In signing Form RD 1942-46, "Letter of Intent to Meet Conditions," you are agreeing to complete the following as expeditiously as possible:

771 Corporate Drive • Suite 200 • Lexington, KY 40503  
Phone: (859) 224-7336 • Fax: (859) 224-7444 • TDD: (859) 224-7422 • Web: <http://www.rurdev.usda.gov/ky>

Committed to the future of rural communities.

"USDA is an equal opportunity provider, employer and lender."  
To file a complaint of discrimination write USDA, Director, Office of Civil Rights,  
1400 Independence Avenue, SW, Washington, DC 20250-0410



1. Number of Users and Their Contribution:

There shall be 4,337 water users, of which all are existing users. The Area Director will review and authenticate the number of users prior to advertising for construction bids. No applicant cash contribution will be required.

2. Grant Agreement:

Attached is a copy of RUS Bulletin 1780-12, "Water and Waste System Grant Agreement," for your review. You will be required to execute a completed form at the time of grant closing.

3. Drug-Free Work Place:

Prior to grant closing, the District will be required to execute Form AD-1049, "Certification Regarding Drug-Free Workplace Requirements (Grants) Alternative I - For Grantees Other Than Individuals."

4. Repayment Period:

The loan will be scheduled for repayment over a period not to exceed 40 years from the date of the Bond. Principal payment will not be deferred for a period in excess of 2 years from the date of the Bond. Payments will be in accordance with applicable KRS, which requires interest to be paid semi-annually (January 1<sup>st</sup> and July 1<sup>st</sup>) and principal will be due on or before the first of January. Rural Development may require the District to adopt a supplemental payment agreement providing for monthly payments of principal and interest so long as the bond is held or insured by RUS. Monthly payments will be approximate amortized installments.

5. Recommended Repayment Method:

Payments on this loan shall be made using the Preauthorized Debit (PAD) payment method. This procedure eliminates the need for paper checks and ensures timely receipt of RD loan payments. To initiate PAD payments, Form SF 5510, "Authorization Agreement for Preauthorized Payments," should be signed by the District to authorize the electronic withdrawal of funds from your designated bank account on the exact installment payment due date. The Area Director will furnish the necessary forms and further guidance on the PAD procedure.

6. Reserve Accounts:

Reserves must be properly budgeted to maintain the financial viability of any operation. Reserves are important to fund unanticipated emergency maintenance, pay for repairs, and assist with debt service should the need arise.

The District will be required to deposit \$635 per month into a "Funded Depreciation Reserve Account" until the account reaches \$76,200. The deposits are to be resumed any time the account falls below the \$76,200.

The required monthly deposits to the Reserve Account and required Reserve Account levels are in addition to the requirements of the District's prior bond resolutions.

The monthly deposits to the Reserve Account are required to commence with the first month of the first full fiscal year after the facility becomes operational.

The District also needs to fund an account for short-lived assets by depositing a sum of \$5,000 monthly into the account. The funds in the short-lived asset account may be used by the District as needed to replace or add short-lived assets in the District's water system. This short-lived asset reserve amount replaces any previous short-lived assets requirements previously set with any prior RUS loan.

7. Security Requirements:

A pledge of gross water revenue will be provided in the Bond Resolution. Bonds shall rank on a parity with existing bonds, if possible.

If this is not possible, the bond will be subordinate and junior to the existing bonds, in which case the District will be required to abrogate its right to issue additional bonds ranking on a parity with the existing bonds, so long as any unpaid indebtedness remains on this bond issue.

8. Land Rights and Real Property:

The District will be required to furnish satisfactory title, easements, etc., necessary to install, maintain and operate the facility to serve the intended users. The pipelines will be on private rights-of-way where feasible. Easements and options are to be secured prior to advertising for construction bids.

9. Organization:

The District will be legally organized under applicable KRS which will permit them to perform this service, borrow and repay money.

10. Business Operations:

The District will be required to operate the system under a well-established set of resolutions, rules and regulations. A budget must be established annually and adopted by the District after review by Rural Development. At no later than loan pre-closing, the District will be required to furnish a prior approved management plan to include, as a minimum, provisions for management, maintenance, meter reading, miscellaneous services, billing, collecting, delayed payment penalties, disconnect/reconnect fees, bookkeeping, making and delivering required reports and audits.

11. Accounts, Records and Audits:

The District will be required to maintain adequate records and accounts and submit annual budgets and year-end reports (annual audits), in accordance with subsection 1780.47 of RUS Instruction 1780.

The enclosed audit booklet will be used as a guide for preparation of audits. The District shall be required to submit a copy of its audit agreement for review and concurrence by Rural Development prior to pre-closing the loan.

12. Accomplish Audits for Years in Which Federal Financial Assistance is Received:

The District will accomplish audits in accordance with OMB Circular A-133, during the years in which federal funds are received. The District will provide copies of the audits to the Area Office and the appropriate Federal cognizant agency as designated by OMB Circular A-133.

13. Insurance and Bonding:

The following insurance and bonding will be required:

- A. Adequate Liability and Property Damage Insurance including vehicular coverage, if applicable, must be obtained and maintained by the District. The District should obtain amounts of coverage as recommended by its attorney, consulting engineer and/or insurance provider.
- B. Worker's Compensation - The District will carry worker's compensation insurance for employees in accordance with applicable state laws.
- C. Fidelity Bond - The District will provide Fidelity Bond Coverage for all persons who have access to funds. Coverage may be provided either for all individual positions or persons, or through "blanket" coverage providing protection for all appropriate employees and/or officials. The amount of coverage required for all RUS loans is \$390,000.
- D. Real Property Insurance - The District will obtain and maintain adequate fire and extended coverage on all structures including major items of equipment or machinery located in the structures. The amounts of coverage should be based on recommendations obtained by the District from its attorney, consulting engineer and/or insurance provider. Subsurface lift stations do not have to be covered except for the value of electrical and pumping equipment therein.
- E. Flood Insurance - The District will obtain and maintain adequate coverage on any facilities located in a special flood and mudslide prone areas.

14. Planning and Performing Development:

- A. The engineer should not be authorized to commence work on final plans and specifications until a determination has been made that the project can be planned and constructed within the estimated cost shown in paragraph "24" of this letter. The engineer may then proceed to develop final plans and specifications to be completed no later than 210 days from this date, and prepare bid documents. The Area Director is prepared to furnish the necessary guide to follow so as to keep the project plans and documents within our guidelines and requirements. The project should not be advertised for construction bids until all easements and

enforceable options have been obtained, and total funds are committed or available for the project.

B. The following documents will be submitted to Rural Development for review and must be concurred in by Rural Development prior to advertisement for construction bids:

1. Final plans, specifications and bid documents.
2. Applicant's letter on efforts to encourage small business and minority-owned business participation.
3. Legal Service Agreements.
4. Engineering Agreements.

Revision in these documents will be subject to Rural Development concurrence. Any agreements, contracts, etc. not reviewed and approved by Rural Development will not be eligible for payment from project funds or revenues from facilities financed by this Agency.

Prior to receipt of an authorization to advertise for construction bids, the District will obtain advance clearance from Bond Counsel regarding compliance with KRS 424 pertaining to publishing of the advertisement for construction bids in local newspapers and the period of time the notice is required to be published.

15. Civil Rights & Equal Opportunity:

You should be aware of and will be required to comply with other federal statute requirements including but not limited to:

A. Section 504 of the Rehabilitation Act of 1973:

Under Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), no handicapped individual in the United States shall, solely by reason of their handicap, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Rural Development financial assistance.

B. Civil Rights Act of 1964:

All borrowers are subject to, and facilities must be operated in accordance with, Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d et seq.) and Subpart E of Part 1901 of this Title, particularly as it relates to conducting and reporting of compliance reviews. Instruments of conveyance for loans and/or grants subject to the Act must contain the covenant required by paragraph 1901.202(e) of this Title.

C. The Americans with Disabilities Act (ADA) of 1990:

This Act (42 U.S.C. 12101 et seq.) prohibits discrimination on the basis of disability in employment, state and local government services, public transportation, public accommodations, facilities, and telecommunications. Title

II of the Act applies to facilities operated by state and local public entities that provide services, programs, and activities. Title III of the Act applies to facilities owned, leased, or operated by private entities that accommodate the public.

D. Age Discrimination Act of 1975:

This Act (42 U.S.C. 6101 et seq.) provides that no person in the United States shall, on the basis of age, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.

Rural Development financial programs must be extended without regard to race, color, religion, sex, national origin, marital status, age, or physical or mental handicap.

16. Closing Instructions:

The Office of General Counsel, our Regional Attorney, will be required to write closing instructions in connection with this loan. Conditions listed therein must be met by the District.

17. Compliance with Special Laws and Regulations:

The District will be required to conform to any and all state and local laws and regulations affecting this type project.

18. System Operator:

The District is reminded that the system operator must have an Operator's Certificate issued by the State.

19. Prior to Pre-Closing the Loan, the District Will Be Required to Adopt:

- A. Form RUS Bulletin 1780-27, "Loan Resolution (Public Bodies)."
- B. Form RD 400-1, "Equal Opportunity Agreement."
- C. Form RD 400-4, "Assurance Agreement."
- D. Form AD-1047, "Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transaction."
- E. Form RD 1910-11, "Applicant Certification Federal Collection Policies for Consumer or Commercial Debts."
- F. RD Instruction 1940-Q, Exhibit A-1, "Certification for Contracts, Grants and Loans."
- G. RUS Bulletin 1780-22, "Eligibility Certification."

20. Refinancing and Graduation Requirements:

The District is reminded that if at any time it shall appear to the Government that the District is able to refinance the amount of the RUS indebtedness then outstanding, in whole or in part, by obtaining a loan from commercial sources at reasonable rates and terms, upon the request of the Government, the District will apply for and accept such loan in sufficient amount to repay the Government.

21. Commercial Interim Financing:

The District will be required to use commercial interim financing for the project during construction for the RUS loan portion of the financing, if available at reasonable rates and terms.

Before the loan is closed, the District will be required to provide Rural Development with statements from the contractor, engineer and attorneys that they have been paid to date in accordance with their contract or other agreements and, in the case of the contractor, that he has paid his suppliers and sub-contractors.

22. Disbursement of Project Funds:

A construction account for the purpose of disbursement of project funds (RUS) will be established by the District prior to start of construction. The position of officials entrusted with the receipt and disbursement of RUS project funds will be covered by a "Fidelity Bond," with USDA Rural Development as Co-Obligee, in the amount of construction funds on hand at any one time during the construction phase.

For each "construction account" as established, if the amount of RUS loan and grant funds plus any applicant contributions or funds from other sources to be deposited into the account are expected to exceed \$100,000 at any time, the financial institution will secure the amount in excess of \$100,000 by pledging collateral with the Federal Reserve Bank in an amount not less than the excess in accordance with 7 CFR, 1902.7(a).

During construction, the District shall disburse project funds in a manner consistent with subsection 1780.76 (e) of RUS Instruction 1780. Form RD 1924-18, "Partial Payment Estimate," or similar form approved by Rural Development, shall be used for the purpose of documenting periodic construction estimates, and shall be submitted to Rural Development for review and acceptance. Prior to disbursement of funds by the District, the Board of Directors shall review and approve each payment estimate. All bills and vouchers must be approved by Rural Development prior to payment by the District.

Form RD 440-11, "Estimate of Funds Needed for 30-Day Period Commencing \_\_\_\_\_," will be prepared by the District and submitted to Rural Development in order that a periodic advance of federal cash may be requested.

Borrowers receiving federal loan and/or grant funds by EFT will have funds directly deposited to a specified account at a financial institution with funds being available to the recipient on the date of payment. The borrower should complete Form SF-3881, "Electronic Funds Transfer Payment Enrollment Form," for each account where funds will be electronically received. The

completed form(s) must be received by Rural Development at least thirty (30) days prior to the first advance of funds.

Monthly audits of the District's construction account records shall be made by Rural Development.

23. Disbursement of Grant Funds:

The RUS funds will be advanced as they are needed in the amount(s) necessary to cover the RUS proportionate share of obligations due and payable by the District. Grant funds, upon receipt, must be deposited in an interest bearing account in accordance with 7 CFR part 3016 (as applicable). Interest earned on grant funds in excess of \$100 (as applicable) per year will be submitted to RUS at least quarterly.

24. Cost of Facility:

Breakdown of Costs:

Development	\$ 1,773,000
Land and Rights	7,500
Legal and Administrative	38,000
Engineering	237,700
Interest	69,000
Contingencies	<u>171,800</u>
TOTAL	\$ 2,297,000

Financing:

RUS Loan	\$ 1,547,000
RUS Grant	<u>750,000</u>
TOTAL	\$ 2,297,000

25. Use of Remaining Project Funds:

After providing for all authorized costs, any remaining project funds will be considered to be RUS/ grant funds and refunded in proportion to participation in the project. If the amount of unused project funds exceeds the grants, that part would be RUS loan funds.

26. Proposed Operating Budget:

You will be required to submit to Rural Development a copy of your proposed annual operating budget that supports the proposed loan repayment prior to this agency giving you written authorization to proceed with the bidding phase. The operating budget should be based on a typical year cash flow, subject to completion of this project in the first full year of operation. Form RD 442-7, "Operating Budget," or similar form may be utilized for this purpose.

27. Rates and Charges:

Rates and charges for facilities and services rendered by the District must be at least adequate to meet cost of maintaining, repairing and operating the water system and meeting required principal and interest payments and the required deposits to debt service and/or depreciation reserve.

Water rates will be at least:

First	1000	gallons @ \$	15.15. - Minimum Bill.
Next	2000	gallons @ \$	5.90. - per 1,000 gallons.
Next	2000	gallons @ \$	5.30. - per 1,000 gallons.
Next	5000	gallons @ \$	4.90. - per 1,000 gallons.
All Over	10,000	gallons @ \$	4.50. - per 1,000 gallons.

28. Water Purchase Contract:

The District will submit a Water Purchase Contract for approval by Rural Development before advertising for construction bids. If the contract is not on Form RD 442-30, "Water Purchase Contract," the contract will require approval by our Regional Attorney. The contract must meet the requirements of subsection 1780.62 of RUS Instruction 1780.

29. Compliance with the Bioterrorism Act:

Prior to pre-closing the loan, the District will provide a certification they have completed a Vulnerability Assessment (VA) and prepared an emergency response plan (ERP) as required by the Safe Drinking Water Act (SDWA).

30. Floodplain Construction:

The District will be required to pass and adopt a Resolution or amend its By-Laws whereby the District will deny any water service to any future customer wishing to build on or develop property located within a designated floodplain. If a customer or developer requests service for construction in a designated floodplain, the customer or developer must provide evidence and a justification for approval by the District and Rural Development officials that there are no other alternatives to construction or development within the designated floodplain. The community must be a participant in the National Flood Insurance Program (NFIP) and the customer or developer must obtain the required permits prior to the tap on restrictions being waived.

31. Mitigation Measures:

- A. The project shall be in compliance with all requirements noted in the Governor's Office for Local Development letter dated December 17, 2007, from Ms. Lee Nalley.
- B. The line design and construction shall be accomplished in a way that will leave flood plains and farmland without effect after construction is complete. The Army Corps of Engineers Nationwide Permit No. 12 applies to all floodplain and wetland utility line construction.




- C. Any excavation by Contractor that uncovers a historical or archaeological artifact shall be immediately reported to Owner and a representative of Agency. Construction shall be temporarily halted pending the notification process and further directions issued by Agency after consultation with the State Historic Preservation Officer (SHPO).
- D. The design and construction shall be in compliance with all local, state and federal environmental statutes, regulations and executive orders applicable to the project.
- E. Best Management Practices shall be incorporated into the project design, construction, and maintenance.

32. Final Approval Conditions:

Final approval of this assistance will depend on your willingness, with the assistance of all your co-workers, to meet the conditions of this letter in an orderly and systematic manner. Then too, final approval will depend on funds being available.

If you desire to proceed with your application, the Area Director will allot a reasonable portion of time to provide guidance in application processing.

Sincerely,

  
KENNETH SLONE  
State Director

Enclosures

cc: Area Director - Shelbyville, Kentucky  
Bluegrass ADD - Lexington, Kentucky  
Rubin & Hays - Louisville, Kentucky (Bond Counsel)  
Thomas Jones- Lawrenceburg, Kentucky (Local Counsel)  
Gastineau & Associates - Nicholasville, Kentucky (Consulting Engineer)  
PSC - ATTN: Dennis Smith - Frankfort, Kentucky



United States Department of Agriculture  
Rural Development  
Kentucky State Office

April 27, 2011

Gerald Sheperson, Chairman  
North Mercer Water District  
PO Box 79  
Salvisa, Kentucky 40372

Re: Letter of Conditions Dated July 21, 2008 Phase II

Dear Chairman Sheperson:

This letter shall serve as Amendment No. 1 to the Letter of Conditions dated July 21, 2008. The purpose of this amendment is to revise the following:

- 1) Total cost of proposed project
- 2) Number of users
- 3) Short lived asset reserve account
- 4) Rates and Charges

Paragraph numbered "1" is revised to read as follows:

" 1. Number of Users and Their Contribution:

There shall be 4,325 water users, of which all are existing users. The Area Director will review and authenticate the number of users prior to advertising for construction bids. No applicant cash contribution will be required. "

Paragraph numbered "6" is revised to read as follows:

" 6. Reserve Accounts:

Reserves must be properly budgeted to maintain the financial viability of any operation. Reserves are important to fund unanticipated emergency maintenance, pay for repairs, and assist with debt service should the need arise.

The District will be required to deposit \$635 per month into a "Funded Debt Reserve Account" until the account reaches \$76,200. The deposits are to be resumed any time the account falls below the \$76,200.

771 Corporate Drive • Suite 200 • Lexington, KY 40503  
Phone: (859) 224-7336 • Fax: (859) 224-7344 • TDD: (859) 224-7422 • Web: <http://www.rurdev.usda.gov/ky>

Committed to the future of rural communities.

"USDA is an equal opportunity provider, employer and lender."  
To file a complaint of discrimination write USDA, Director, Office of Civil Rights,  
1400 Independence Avenue, SW, Washington, DC 20250-9410  
or call (800) 795-3272 (voice) or (202) 720-6382 (TDD).

The required monthly deposits to the Reserve Account and required Reserve Account levels are in addition to the requirements of the District’s prior bond ordinances.

The monthly deposits to the Reserve Account are required to commence with the first month of the first full fiscal year after the facility becomes operational.

The District also needs to fund an account for short-lived assets by depositing a sum of \$5,897 monthly into the account. The funds in the short-lived asset account may be used by the District as needed to replace or add short-lived assets in the District’s water system. This short lived asset amount supersedes any prior short lived asset requirements.”

Paragraph numbered “24” is revised to read as follows:

“ 24. Cost of Facility:

Breakdown of Costs:

Development	\$ 1,687,000
Land and Rights	15,000
Legal and Administrative	42,000
Engineering	244,000
Interest	69,000
Contingencies	<u>240,000</u>
TOTAL	\$ 2,297,000

Financing:

RUS Loan	\$ 1,547,000
RUS Grant	<u>750,000</u>
TOTAL	\$ 2,297,000 ”

Paragraph numbered “27” is revised to read as follows:

“ 27. Rates and Charges:

Rates and charges for facilities and services rendered by the District must be at least adequate to meet cost of maintaining, repairing and operating the water system and meeting required principal and interest payments and the required deposits to debt service and/or depreciation reserve.

Water rates will be at least:

First	1,000	gallons @ \$	16.30. - Minimum Bill.
Next	2,000	gallons @ \$	6.70. - per 1,000 gallons.
Next	2,000	gallons @ \$	6.00. - per 1,000 gallons.
Next	5,000	gallons @ \$	5.80. - per 1,000 gallons.
All Over	10,000	gallons @ \$	5.50. - per 1,000 gallons.

All other provisions of the referenced Letter of Conditions remain in full force and unchanged.

Sincerely,



THOMAS G. FERN  
State Director

cc: Area Director - Shelbyville, Kentucky  
Bluegrass ADD - Lexington, Kentucky  
Rubin & Hays - Louisville, Kentucky  
Thomas Jones - Lawrenceburg, Kentucky  
Gastineau & Associates - Lexington, Kentucky  
PSC - ATTN: Dennis Jones - Frankfort, Kentucky





**United States Department of Agriculture  
Rural Development  
Kentucky State Office**

May 5, 2011

**SUBJECT:** North Mercer Water District  
2020 Master Plan Improvements, Phase II  
Contract Award Concurrence

**TO:** Area Office  
Shelbyville, Kentucky

Based on the bids received and the recommendation of the consulting engineer, Rural Development concurs in the award of subject contract to the low bidder on Contract 2-1, 2-3 and 2-4, Salmon Construction Co., Inc., in the amounts of \$236,794.50; \$392,032.98; and \$530,826.00; respectively, and the low bidder on Contract 2-2, Hubert Excavating Co., in the amount of \$446,850.00.

If you have any questions, please contact Julie Anderson, State Engineer, at (859) 224-7348.

  
THOMAS G. FERN  
State Director  
Rural Development

**cc:** Gastineau and Associates  
Lexington, Kentucky

Rubin and Hays  
Louisville, Kentucky

771 Corporate Drive • Suite 200 • Lexington, KY 40503  
Phone: (859) 224-7300 • Fax: (859) 224-7425 • TDD: (859) 224-7422 • Web: <http://www.rurdev.usda.gov/ky>

Committed to the future of rural communities.

"USDA is an equal opportunity provider, employer and lender."  
To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14<sup>th</sup> and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice or TDD).



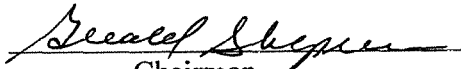
**CERTIFICATE OF CHAIRMAN OF NORTH MERCER WATER DISTRICT,  
AS TO STATEMENT REQUIRED BY SECTION 1(5) OF 807 KAR 5:069**

I, Gerald Sheperson, hereby certify that I am the duly qualified and acting Chairman of the North Mercer Water District, and that said District is in the process of arranging to finance the construction of extensions, additions and improvements to the existing waterworks system of the District (the "Phase 2 Project"), in cooperation with the Engineers for the District, Gastineau and Associates, Inc., Lexington, Kentucky.

Based on information furnished to me by said Engineers for the District, I hereby certify as follows:

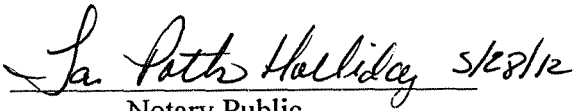
1. That the proposed plans and specifications for the Phase 2 Project have been designed to meet the minimum construction and operating requirements set out in 807 KAR 5:066 Section 4(3) and (4); Section 5(1); Sections 6 and 7; Section 8(1) through (3); Section 9(1) and Section 10.
2. That all other state approvals and/or permits have already been obtained.
3. That the existing rates of the District shall produce the total revenue requirements set out in the engineering reports.
4. That it is now contemplated that construction of the Phase 2 Project will begin on or about July 1, 2011, and will end on or about January 31, 2012.

IN TESTIMONY WHEREOF, witness my signature this May 4, 2011.

  
Chairman  
North Mercer Water District

STATE OF KENTUCKY    )  
                                  ) SS  
COUNTY OF MERCER    )

Subscribed and sworn to before me by Gerald Sheperson, Chairman of the Board of Commissioners of the North Mercer Water District, on this May 4, 2011.

  
Notary Public  
In and For Said State and County

(Seal of Notary)



**FINAL ENGINEERING REPORT  
FOR  
MASTER PLAN IMPROVEMENTS  
TO THE  
NORTH MERCER WATER DISTRICT  
  
PHASE 2**

**COMMISSIONERS**

Gerald Sheperson, Chairman  
Tony Best  
Roy Short

April 2011

Prepared By:

GASTINEAU AND ASSOCIATES, Inc.  
3465 Rabbits Foot Trail  
Lexington, KY 40503

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### EXHIBITS

MAPS OF PROPOSED IMPROVEMENTS

**PRELIMINARY ENGINEERING REPORT  
NORTH MERCER WATER DISTRICT  
MASTER PLAN IMPROVEMENTS  
PHASE 2**

I. AREA TO BE SERVED AND DESCRIPTION OF THE WATER DISTRICT

The North Mercer Water District was established in accordance with existing statutes of the Commonwealth of Kentucky and all business of the Water District is transacted and administered by the Board of Commissioners. The three Commissioners, whose names appear on the front of this report have been appointed to that office by the County Judge of Mercer County, Kentucky.

The water distribution system of this District is located within the boundaries of the original District which includes the unincorporated communities of Salvisa, Bondville, McAfee, and Rose Hill in Mercer County, plus eastern Washington County, bounded by KY #390, #53, #1586 (excluded from the District are the cities of Harrodsburg and Burgin).

The principal industry of the area is farming with emphasis on cattle and dairy farms. The land is productive and the soil fertile. The topography, which is rolling to hilly, provides excellent drainage.

North Mercer Water District has, during the past decade concentrated on getting a potable water supply to as many people as possible within their service area. They have been very successful in that endeavor. Currently, the District, along with the other water distributors of the county, provides nearly 100% of all of the households within their service area with a safe supply of water. However, as a result of the expansion of the system to this extent, the original facilities have

exceeded their capacity. Thus a major upgrade is required to insure that all water customers are provided with an adequate supply which meets the standards established by the Kentucky Division of Water and the Kentucky Public Service Commission.

The District has made minor changes to their original system only to the extent required to meet average demands placed on the system by the extension of their distribution lines. Most of the original system has now reached its capacity and must be enlarged to provide the level of service required by the regulatory agencies. This project has been proposed to correct the deficiencies in the systems ability to continue to deliver a safe and steady supply of potable water to all customers in its service area through the year 2020.

The project also provides for interconnection with the water system of the city of Danville, Kentucky.

## II. EXISTING FACILITIES

The original system was constructed in 1967 with a total of 210 water customers, and has grown to a total of 4,325 customers (as of February 2011). The District purchases treated water from the city of Harrodsburg, Kentucky at the contracted City rate. The water is delivered to the District through three master meters: one on KY 152 (Mackville Road); one on KY1989 (Cornishville Road; and one on US 127 (Louisville Road).

The existing system has five (5) storage tanks; a 318,000 gallon standpipe on the east side of US Highway 127, two miles south of Salvisa, a 282,000 gallon standpipe south of and adjacent to McCroskey Pike, a 92,000 gallon standpipe

near Mayo, and a 156,600 gallon standpipe at Dixville. The other tank is a 125,000 gallon elevated tank located on Kentucky 152 near Rose Hill.

The District has over 360 miles of water lines ranging in size from 2" to 12". Pipe material includes ductile, asbestos cement, and PVC. Most of the system consists of PVC pipe either class 160 or 200.

A 500 GPM pump station pumps into the northern area of the District and a 300 GPM pumps into the Rose Hill portion of the system.

### III. PROPOSED FACILITIES AND SERVICE

#### A. General Description of the Proposed Project:

The District has been struggling with meeting the water demands of many of its customers during high usage periods, particularly in the hot summer months and periods of drought. This project, designated as Master Plan Improvements, Phase II, will improve the District's ability to supply a constant, reliable, and safe water supply to all customers of the District during most delivery conditions.

Components of the proposed project include replacement of lines in an area where significant water pipe breakage occurs. That area is along Mundy's Landing Road and Warrick Pike.

New lines will be installed along various existing lines for the purpose of increasing the delivery capacity to the various service areas. These parallel lines will be installed at several locations on US 127 north of the city of Harrodsburg and extending to new lines at Jackson Pike and US 27: along KY 152 (Mackville Road) from a master meter at

Harrodsburg to the Rose Hill storage tank; along Dixville Road and Russell Branch Road.

A new line will be installed along KY 1941 from Cornishville and into Washington County to complete a loop in the water distribution mains in that area.

In addition, a connection will be made to the Danville water system at the Boyle/Mercer county line at the intersection of US 68 and KY 1941. This connection will require a booster pumping station.

Included in the project is a connection to Harrodsburg's 20" water transmission line that parallels the Harrodsburg bypass. The connection includes a new master meter and a booster pumping station.

In addition to the above facilities, numerous gate valves, check valves, pressure reducing valves and flow control valves will be installed in such a manner as to divide the North Mercer Water District's service area in distinct pressure zones. In so doing, the quality of water will be improved, isolation of areas will be accomplished easier and the location of leaks and breaks will be quicker.

B. Land, Water and Other Rights:

1. Land: Parcels of land for pump station site have been secured.
2. Water Rights: Stream crossing permits will be required from the Division of Water, Frankfort, Kentucky.
3. Other Rights:

- a. Easement and Permits: Construction of parallel lines will be on existing easements. The new line on KY 1941 out of Cornishville is planned to be on private property in as much as possible. Easements will be required for that line. There will be some locations that require a permit for the Kentucky Department of Transportation. Water lines are to be located on private property to the maximum extent with State Highway Department Encroachment Permits required only for short sections where this would not be feasible and where necessary to cross state highways with the various pipelines. All right of ways have been secured.
  - b. Minimum pressure requirements (30 PSI at the meter) of the Kentucky State Department for Natural Resources and Environmental Protection will be met.
4. Problems in Acquisition: All right of ways have been obtained.
  5. Water Supply: Currently, the North Mercer Water District purchases all of its water from the city of Harrodsburg, Kentucky. Included as a portion of this project is a proposed connection to the city of Danville water system. However, the majority of the District's water will be purchased from the city of Harrodsburg.
  6. Requirements: The estimated water usage for the District is 29,336,500 gallons per month which includes an allowance of for water losses. This amount does not allow for any growth in the water use for the District.

7. Requirements as to Quality: State Department for Natural Resources and Environmental Protection requirements as to quality will be met, as this agency has approved the present source of supply and existing distribution facilities.
8. Water Supply: As noted earlier in this report, the water supply for this District is the City of Harrodsburg. Since this project does not add any new customers the City should have sufficient treated water to supply the needs of the District. However, the project includes a connection to another source of supply.

#### IV. COST ESTIMATE

- A. Construction costs based on the bids received on April 13, 2011 are presented in Appendix A. Those bids total \$1,686,785 and have been used in the subsequent sections of this report to determine water service rates.
- B. Project costs are shown in Appendix "B" along with the proposed funding sources. It is estimated that total project costs will be \$2,247,000 and includes \$240,030 for contingencies.

#### V. ANNUAL OPERATING INCOME AND EXPENSES

- A. Income: Estimated income from water sales is shown in the tables of Appendix "D". These projections are based on an existing customer base of 4324 and their water use for the February 2011 billing cycle. There has not been any allowance for the anticipated new customers that are routinely added each year
- B. Operation and Maintenance Costs: The cost of operation and maintenance for these improvements to the District's system is derived from a



projection of figures contained in the Financial Reports of the District for the year ending December 31, 2010. These figures are projected to the end of 2011 when it is anticipated that the proposed system will be in full operation. Any increases in O & M cost after the project is completed will have to be offset by the normal process of a rate increase. This information is detailed in Appendix "C" of this report.

- C. Debt Service and Bond Coverage: As of the District's December 31, 2010 audit they have \$4,405,500 of outstanding long term bonded indebtedness with a payment requirement of \$331,294 in 2012.

The proposed funding is a loan of \$1,497,000 loan for a 40 year period at 3.625% from the Rural Utility Service (RUS), US Department of Agriculture and a grant of \$750,000 from the same agency. With the additional debt service and the projected operation and maintenance cost the Districts rates will need to be increased by approximately thirty two (32%) percent for a customer using 4,000 gallons per month. The proposed rates shown in Appendix "D" were used in estimating the annual income.

## VI. MAPS, DRAWINGS, AND SKETCHES

- A. Maps: These are included as part of the design plans.
- B. Drawings and Photographs:

Design plans have been produced from information from several sources and in such detail as necessary to insure that construction can proceed in an orderly manner. Successful construction bids were received for the proposed work.

VII. CONSTRUCTION PROBLELMS

Construction of the proposed project is considered to be relatively simple with no complex problems to be surmounted.

VIII. CONCLUSIONS AND RECOMMENDATIONS

- A. Future Growth: From 1967 to the present, the District has grown from 210 customers to over 4325 customers. Project financial feasibility has been determined based on 4325 existing customers without any allowance for future connections to the system.
- B. Recommendations: It is recommended that the District's officials award the contracts to the low bidders and proceed with the construction of the proposed project.

Respectfully submitted,

Gastineau and Associates, Inc. by

*Ronald E. Gastineau*  
Ronald E. Gastineau, P.E.  
STATE OF UTAH  
E  
GASTINEAU  
6249  
LICENSED  
PROFESSIONAL ENGINEER  
*April 2011*

# APPENDICES

APPENDIX A  
WATER SYSTEM IMPROVEMENT PROJECT  
NORTH MERCER WATER DISTRICT  
PHASE 2

CONSTRUCTION COST BASED ON LOW BIDS OF APRIL 13, 2011

CONTRACT NMWD MPI 2-1	\$236,795.50
CONTRACT NMWD MPI 2-2	\$446,850.00
CONTRACT NMWD MPI 2-3	\$392,032.98
CONTRACT NMWD MPI 2-4	\$530,826.00
TELEMETRY	<u>\$80,280.00</u>
TOTAL ESTIMATED CONSTRUCTION COST	\$1,686,784.48

**APPENDIX "B"**  
**FINAL ENGINEERING REPORT**  
**PROJECT COST AND FUNDING**  
**MASTER PLAN IMPROVEMENTS**  
**NORTH MERCER WATER DISTRICT**  
**PHASE 2**

**PROJECT COST**

Estimated Construction Cost	\$1,686,785
Land and Rights of Way	\$15,000
Engineering	\$108,360
Other Engineering	\$53,000
Construction Observation	\$82,825
Legal and Administrative	\$42,000
Interest During Construction	\$69,000
Contingencies	<u>\$240,030</u>
Total	\$2,297,000

**FUNDING**

RUS Loan	\$1,547,000
RUS Grant	\$750,000
Total	\$2,297,000

APPENDIX C  
REVENUE AND EXPENSES  
YEAR ENDING 2010 AND PROJECTED 2012

	ACTUAL 2010	PROJECTED 2012
<u>OPERATING REVENUES</u>		
Metered sales to customers	\$1,454,255	\$2,095,479
Metered sales-water station	\$1,767	\$1,400
Penalties	\$23,398	\$24,000
Tap on fees	\$16,301	\$15,000
Miscellaneous revenue	\$1,473	\$1,500
	<hr/>	<hr/>
TOTAL OPERATING REVENUE	\$1,497,194	\$2,137,379
<u>OPERATING EXPENSES</u>		
Salaries and wages, Employees	\$318,121	\$304,000
Salaries and wages, officers	\$14,400	\$14,400
Employee pension and benefits	\$119,772	\$136,500
Purchased water	\$576,112	\$730,500
Purchased power	\$27,359	\$35,000
Materials and supplies	\$51,529	\$87,000
Contractual services-engineering	\$2,745	\$1,500
Contractual services-legal	\$5,066	\$4,800
Contractual services-accounting	\$5,875	\$6,000
Contractual services-tank maintenance		\$24,876
Contractual services-water testing	\$2,868	\$10,000
Contractual services-other	\$57,088	\$49,700
Rental of building	\$520	\$520
Transportation expense	\$23,696	\$20,500
Regulatory commission expense-PSC	\$2,236	\$2,400
Insurance-Vehicle		\$3,000
Insurance expense, general liability	\$16,770	\$17,000
Insurance expense, workmen's compensation	\$5,874	\$6,800
Advertising expense	\$633	\$700
Bad debt Expense	\$10,103	\$4,500
Taxes	\$27,399	\$22,500
Depreciation	\$359,120	\$416,100
Capital improvements		\$70,773
Replacement reserves		\$18,070
Miscellaneous expense	\$16,736	
	<hr/>	<hr/>
TOTAL OPERATING EXPENSES	\$1,644,022	\$1,987,139
NET OPERATING INCOME (Revenue minus expenses)	-\$146,828	\$150,240

**APPENDIX C**  
FINAL ENGINEERING REPORT  
NORTH MERCER WATER DISTRICT  
REPLACEMENT RESERVES-SHORT LIVED ASSETS

TYPE OF RESERVE	USER DESCRIPTION	REPLACEMENT COST	RESERVE ON HAND	ANNUAL RESERVE
1-5 YEARS	Pickup Trucks	\$140,000	\$0	\$28,000
1-5 YEARS	Computer System Upgrade	\$12,000	\$0	\$2,400
1-5 YEARS	Printer/Document Storage System	\$8,700	\$0	\$1,740
SUBTOTAL 1-5 YEARS		\$160,700	\$0	\$32,140
5-10 YEARS	Telemetry System Upgrade	\$135,000	\$0	\$13,500
5-10 YEARS	Backhoe	\$82,000	\$0	\$8,200
5-10 YEARS	Dump Truck	\$58,000	\$0	\$5,800
SUBTOTAL 5-10 YEARS		\$275,000	\$0	\$27,500
10-15 YEARS	Tank Painting	\$167,000	\$0	\$11,133
SUBTOTAL 10-15 YEARS		\$167,000	\$0	\$11,133
TOTAL REPLACEMENT RESERVE-SHORT LIVED ASSETS				\$70,773

NORTH MERCER WATER DISTRICT  
EXISTING RATE-- EXISTING CUSTOMERS

WATER BILLING RATE STRUCTURE

<u>GALLON INCREMENT</u>		<u>COST PER 1000 GALLONS</u>
FIRST	1,000	\$11.36
NEXT	2,000	\$5.22
NEXT	2,000	\$5.16
NEXT	5,000	\$4.75
ALL OVER	10,000	\$4.59

<u>NUMBER OF CUSTOMERS</u>	<u>MONTHLY USAGE</u>		<u>COST PER CUSTOMER</u>	<u>NET MONTHLY BILLINGS</u>
	<u>PER CUSTOMER</u>	<u>TOTAL</u>		
573	500	286,500	\$11.36	\$6,509.28
533	1,500	799,500	\$13.97	\$7,446.01
634	2,500	1,585,000	\$19.19	\$12,166.46
660	3,500	2,310,000	\$24.38	\$16,090.80
571	4,500	2,569,500	\$29.54	\$16,867.34
390	5,500	2,145,000	\$34.50	\$13,455.00
271	6,500	1,761,500	\$39.25	\$10,636.75
171	7,500	1,282,500	\$44.00	\$7,524.00
137	8,500	1,164,500	\$48.75	\$6,678.75
81	9,500	769,500	\$53.50	\$4,333.50
56	11,000	616,000	\$60.46	\$3,385.76
65	13,000	845,000	\$69.64	\$4,526.60
45	15,000	675,000	\$78.82	\$3,546.90
33	17,000	561,000	\$88.00	\$2,904.00
27	19,000	513,000	\$97.18	\$2,623.86
24	22,500	540,000	\$113.25	\$2,718.00
21	27,500	577,500	\$136.20	\$2,860.20
3	32,500	97,500	\$159.15	\$477.45
10	37,500	375,000	\$182.10	\$1,821.00
3	42,500	127,500	\$205.05	\$615.15
3	47,500	142,500	\$228.00	\$684.00
3	52,500	157,500	\$250.95	\$752.85
1	57,500	57,500	\$273.90	\$273.90
1	67,500	67,500	\$319.80	\$319.80
1	72,500	72,500	\$342.75	\$342.75
3	87,500	262,500	\$411.60	\$1,234.80
4	122,500	490,000	\$572.25	\$2,289.00
1	186,700	186,700	\$866.92	\$866.92

TOTALS	4,325	21,037,700 Gal.		\$133,950.83
YEARLY TOTALS		252,452,400 Gal.		\$1,607,409.96



NORTH MERCER WATER DISTRICT  
PROPOSED RATE- EXISTING CUSTOMERS

WATER BILLING RATE STRUCTURE

<u>GALLON INCREMENT</u>		<u>COST PER 1000 GALLONS</u>
FIRST	1,000	\$16.30
NEXT	2,000	\$6.70
NEXT	2,000	\$6.00
NEXT	5,000	\$5.80
ALL OVER	10,000	\$5.50

<u>NUMBER OF CUSTOMERS</u>	<u>MONTHLY USAGE PER CUSTOMER</u>	<u>MONTHLY USAGE TOTAL</u>	<u>COST PER CUSTOMER</u>	<u>NET MONTHLY BILLINGS</u>
573	500	286,500	\$16.30	\$9,339.90
533	1,500	799,500	\$19.65	\$10,473.45
634	2,500	1,585,000	\$26.35	\$16,705.90
660	3,500	2,310,000	\$32.70	\$21,582.00
571	4,500	2,569,500	\$38.70	\$22,097.70
390	5,500	2,145,000	\$44.60	\$17,394.00
271	6,500	1,761,500	\$50.40	\$13,658.40
171	7,500	1,282,500	\$56.20	\$9,610.20
137	8,500	1,164,500	\$62.00	\$8,494.00
81	9,500	769,500	\$67.80	\$5,491.80
56	11,000	616,000	\$76.20	\$4,267.20
65	13,000	845,000	\$87.20	\$5,668.00
45	15,000	675,000	\$98.20	\$4,419.00
33	17,000	561,000	\$109.20	\$3,603.60
27	19,000	513,000	\$120.20	\$3,245.40
24	22,500	540,000	\$139.45	\$3,346.80
21	27,500	577,500	\$166.95	\$3,505.95
3	32,500	97,500	\$194.45	\$583.35
10	37,500	375,000	\$221.95	\$2,219.50
3	42,500	127,500	\$249.45	\$748.35
3	47,500	142,500	\$276.95	\$830.85
3	52,500	157,500	\$304.45	\$913.35
1	57,500	57,500	\$331.95	\$331.95
1	67,500	67,500	\$386.95	\$386.95
1	72,500	72,500	\$414.45	\$414.45
3	87,500	262,500	\$496.95	\$1,490.85
4	122,500	490,000	\$689.45	\$2,757.80
1	186,700	186,700	\$1,042.55	\$1,042.55

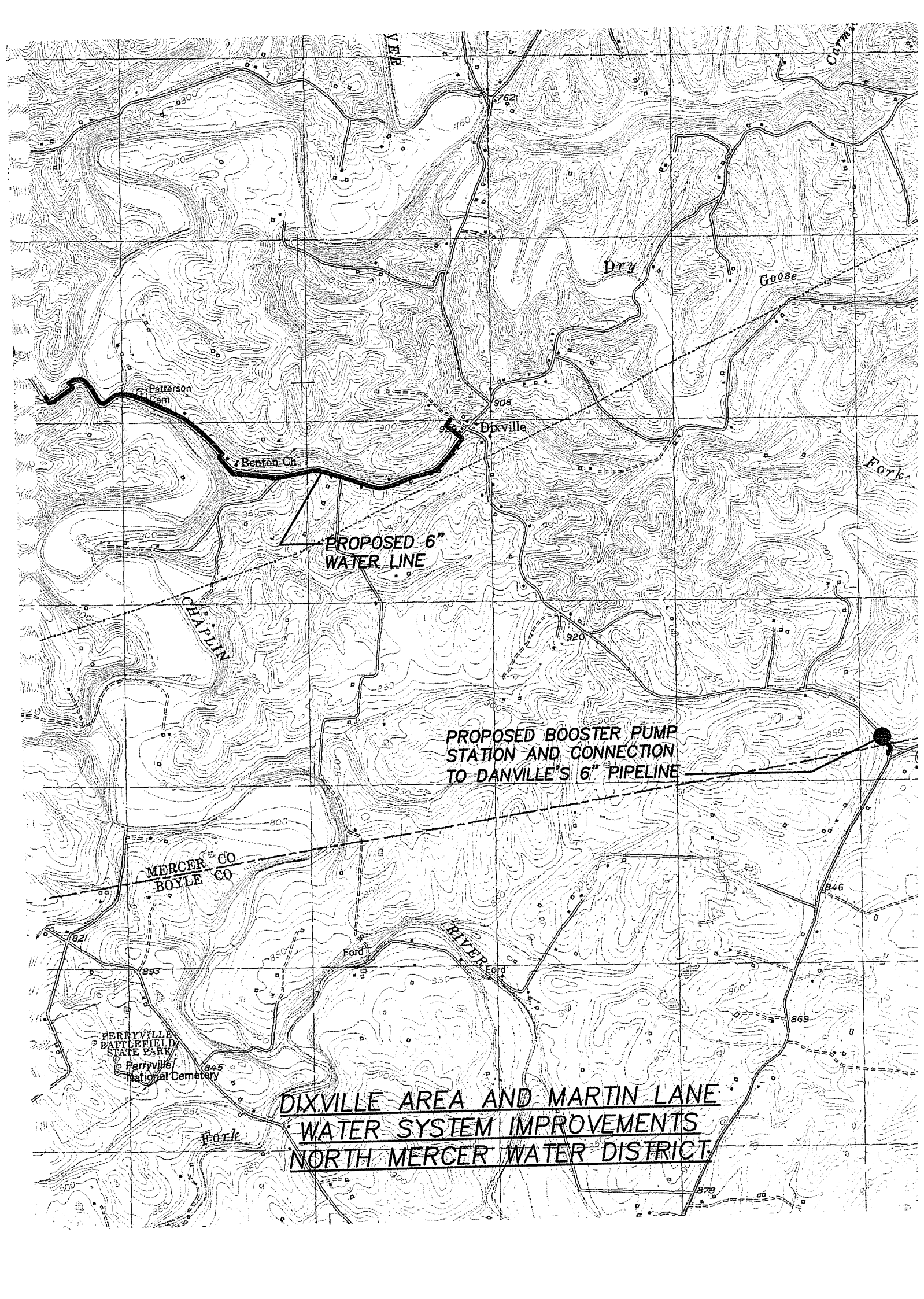
TOTALS	4,325	21,037,700 Gal.		\$174,623.25
YEARLY TOTALS		252,452,400 Gal.		\$2,095,479.00

APPENDIX "E"

NORTH MERCER WATER DISTRICT  
 MASTER PLAN IMPROVEMENTS  
 ESTIMATED INCOME, EXPENSE, DEBT SERVICE  
 AND BOND COVERAGE

ESTIMATED INCOME		\$2,137,379
ESTIMATED EXPENSE		\$1,987,139
NET OPERATING INCOME		\$150,240
PLUS INTEREST INCOME		\$6,000
PLUS DEPRECIATION		\$416,100
AVAILABLE FOR DEBT SERVICE		<u>\$572,340</u>
DEBT SERVICE (PRINCIPAL AND INTEREST ONLY)		
EXISTING		
RUS	\$128,785	
KIA	\$53,481	
REFUNDING BOND	\$149,028	
TOTAL EXISTING DEBT SERVICE (PRINCIPAL AND INTEREST ONLY)		\$331,294
PROPOSED RUS DEBT SERVICE		
PHASE 1 \$1,874,000 @ 4.5% = \$1,874,000 X 0.05540 =		\$103,820
PHASE 2 \$1,547,000 @ 3.625% = \$1,547,00 X 0.048883 =		<u>\$75,622</u>
TOTAL PROPOSED RUS DEBT SERVICE		\$179,442
TOTAL AVAILABLE FOR DEBT SERVICE		\$572,340
LESS DEBT SERVICE REQUIREMENTS (KIA)		\$53,481
LESS DEBT SERVICE REQUIREMENTS (REFUNDING BONDS)		<u>\$178,834</u>
TOTAL AVAILABLE FOR RUS DEBT SERVICE (EXISTING AND NEW)		\$340,025
BOND COVERAGE		
RUS	\$340,025 / \$308,227 =	1.10
KIA	\$53,481 / \$53,481 =	1.00
R B	\$178,834 / \$149,028 =	1.20

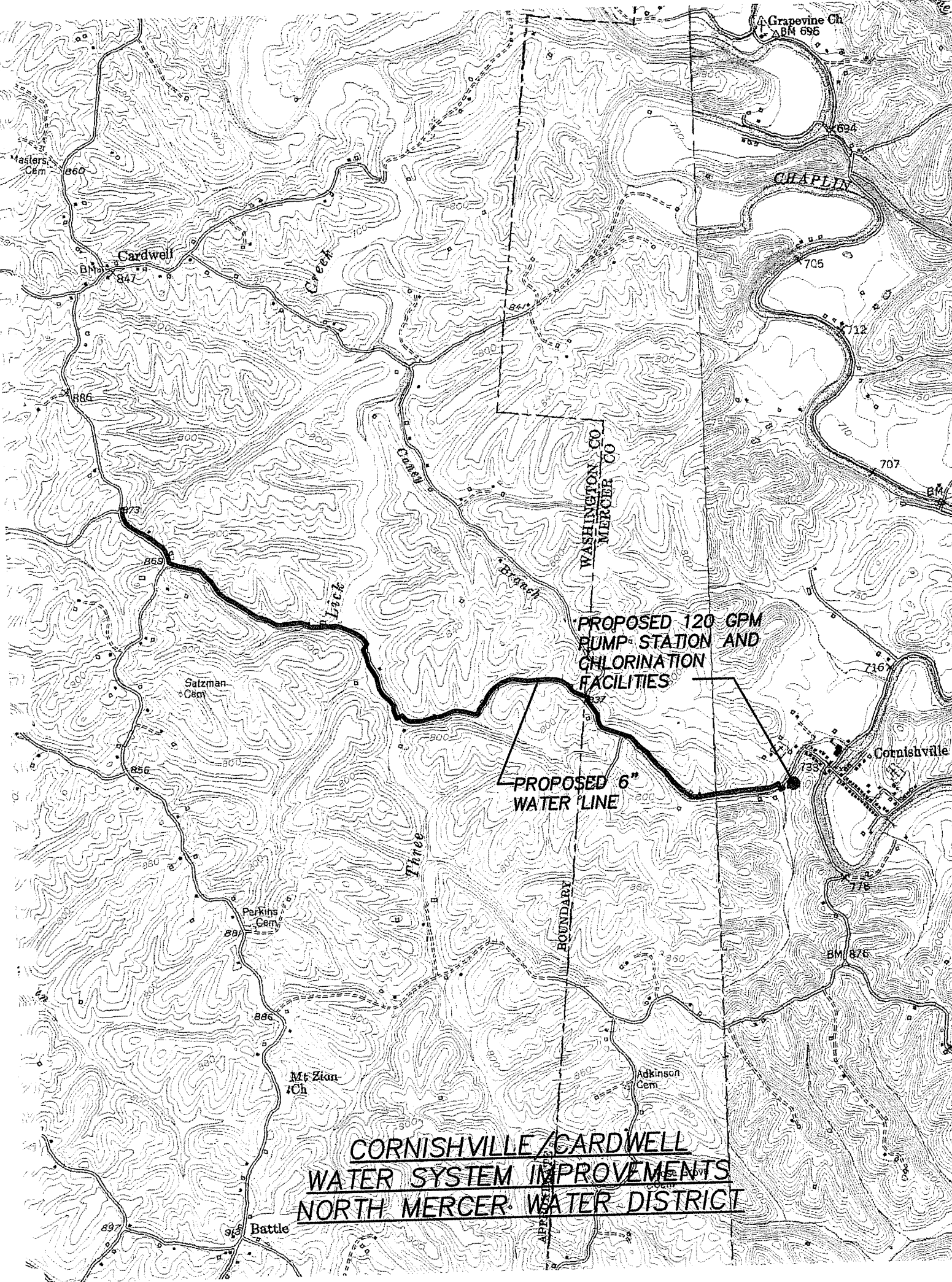
# EXHIBITS



PROPOSED 6" WATER LINE

PROPOSED BOOSTER PUMP STATION AND CONNECTION TO DANVILLE'S 6" PIPELINE

DIXVILLE AREA AND MARTIN LANE WATER SYSTEM IMPROVEMENTS  
NORTH MERCER WATER DISTRICT



PROPOSED 120 GPM  
PUMP STATION AND  
CHLORINATION  
FACILITIES

PROPOSED 6"  
WATER LINE

**CORNISHVILLE / CARDWELL  
WATER SYSTEM IMPROVEMENTS  
NORTH MERCER WATER DISTRICT**

WASHINGTON CO  
MERCER CO

BOUNDARY

CONNECTION TO AN  
EXISTING 8" LINE

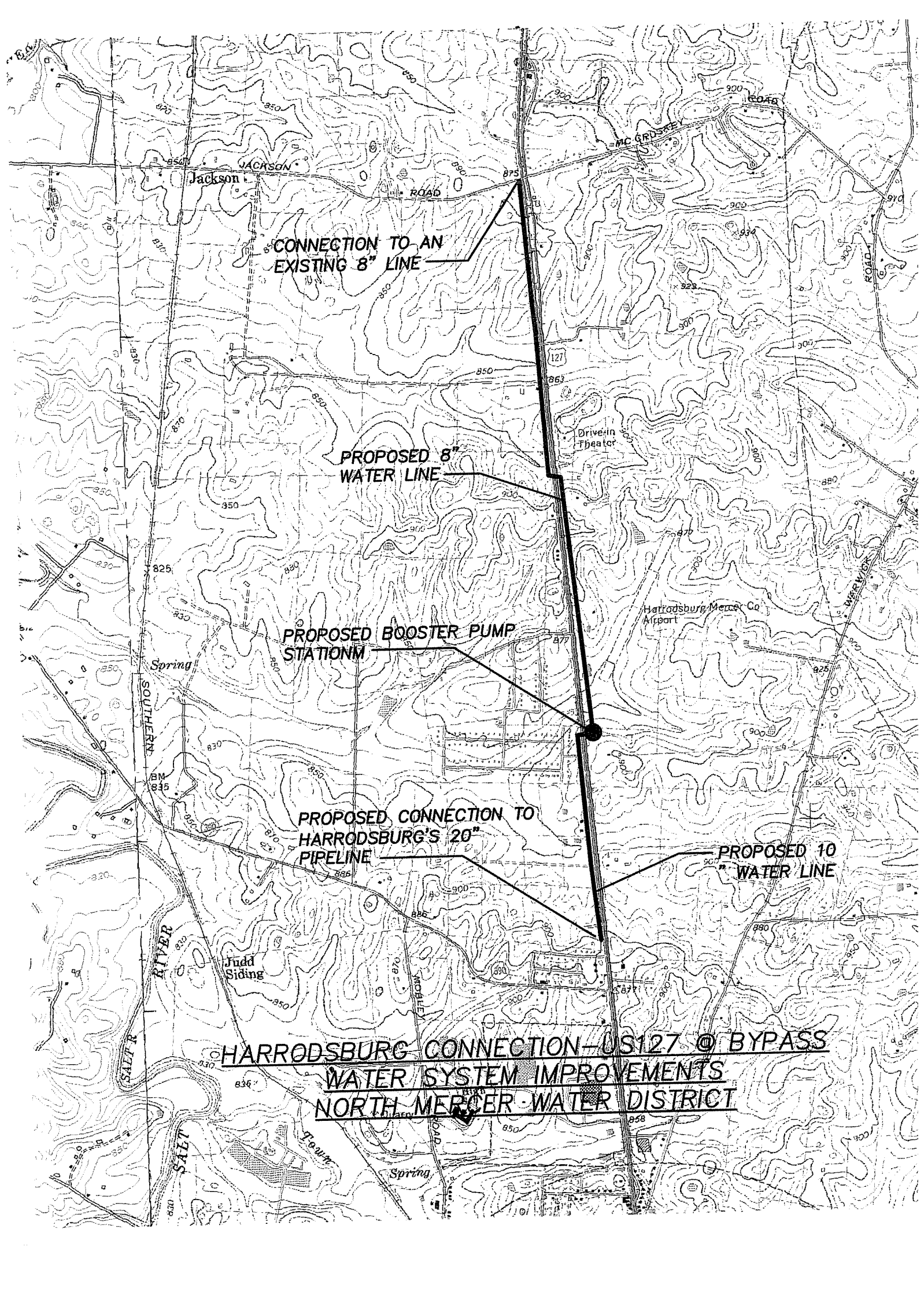
PROPOSED 8"  
WATER LINE

PROPOSED BOOSTER PUMP  
STATION

PROPOSED CONNECTION TO  
HARRODSBURG'S 20"  
PIPELINE

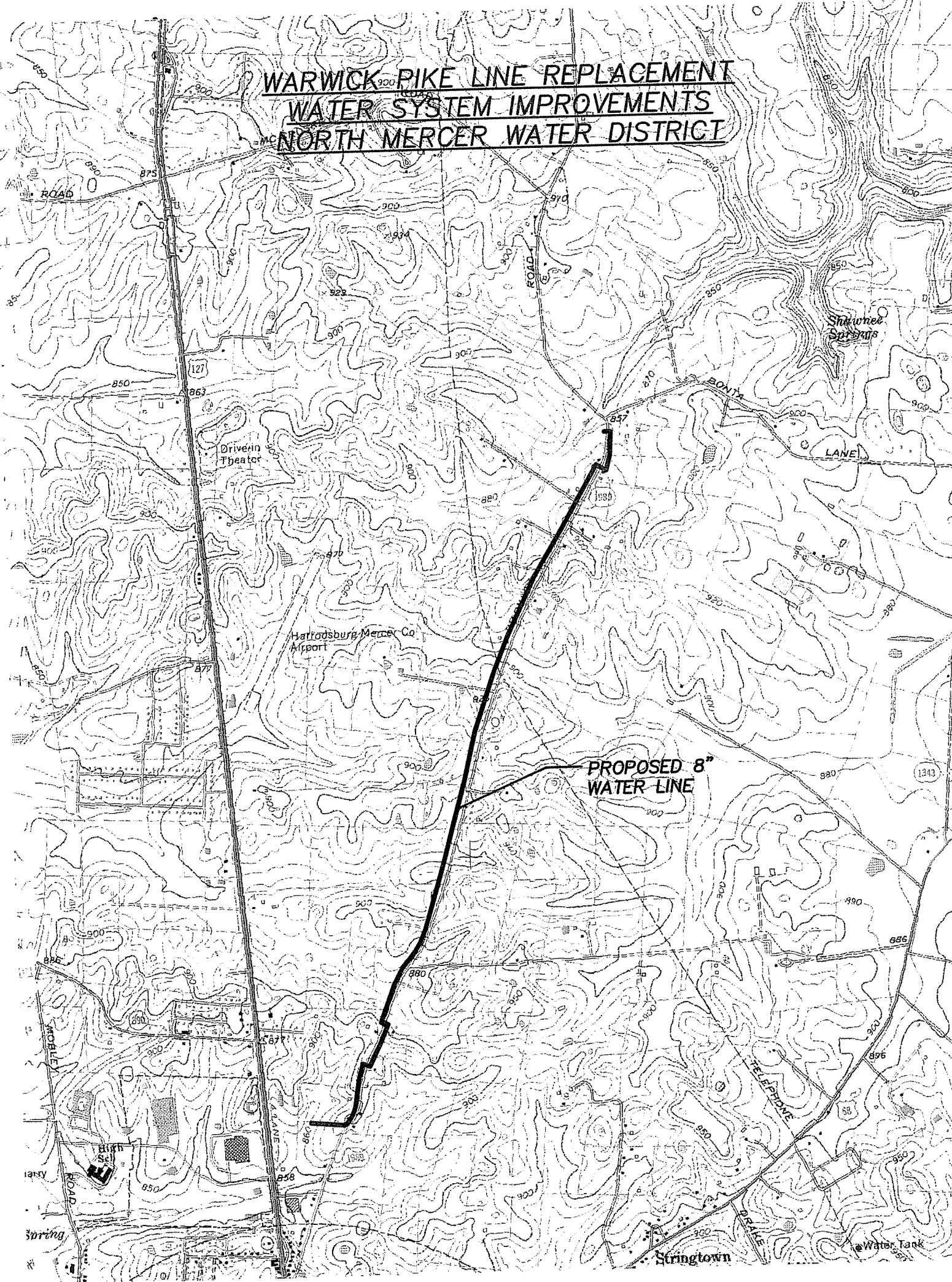
PROPOSED 10"  
WATER LINE

HARRODSBURG CONNECTION - US 127 @ BYPASS  
WATER SYSTEM IMPROVEMENTS  
NORTH MERCER WATER DISTRICT





**WARWICK PIKE LINE REPLACEMENT  
WATER SYSTEM IMPROVEMENTS  
NORTH MERCER WATER DISTRICT**



**PROPOSED 8"  
WATER LINE**

**PRELIMINARY ENGINEERING REPORT  
FOR  
MASTER PLAN IMPROVEMENTS  
TO THE  
NORTH MERCER WATER DISTRICT  
  
PHASE II**

**COMMISSIONERS**

Roy Short , Chairman  
Gerald Sheperson  
Tony Best

April 2008

Prepared By:

**GASTINEAU AND ASSOCIATES, Inc.  
104 Barkley Estates  
Nicholasville, KY 40356**



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### APPENDICES

ESTIMATED CONSTRUCTION COSTS	A
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DEBT SERVICE AND BOND COVERAGE	E

### EXHIBITS

MAPS OF PROPOSED IMPROVEMENTS
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**PRELIMINARY ENGINEERING REPORT  
NORTH MERCER WATER DISTRICT  
MASTER PLAN IMPROVEMENTS  
PHASE II**

I. AREA TO BE SERVED AND DESCRIPTION OF THE WATER DISTRICT

The North Mercer Water District was established in accordance with existing statutes of the Commonwealth of Kentucky and all business of the Water District is transacted and administered by the Board of Commissioners. The three Commissioners, whose names appear on the front of this report have been appointed to that office by the County Judge of Mercer County, Kentucky.

The water distribution system of this District is located within the boundaries of the original District which includes the unincorporated communities of Salvisa, Bondville, McAfee, and Rose Hill in Mercer County, plus eastern Washington County, bounded by KY #390, #53, #1586 (excluded from the District are the cities of Harrodsburg and Burgin).

The principal industry of the area is farming with emphasis on cattle and dairy farms. The land is productive and the soil fertile. The topography, which is rolling to hilly, provides excellent drainage.

North Mercer Water District has, during the past decade concentrated on getting a potable water supply to as many people as possible within their service area. They have been very successful in that endeavor. Currently, the District, along with the other water distributors of the county, provides nearly 100% of all of the households within their service area with a safe supply of water. However, as a result of the expansion of the system to this extent, the original facilities have exceeded their capacity. Thus a major upgrade is required to insure that all water

customers are provided with an adequate supply which meets the standards established by the Kentucky Division of Water and the Kentucky Public Service Commission.

The District has made minor changes to their original system only to the extent required to meet average demands placed on the system by the extension of their distribution lines. Most of the original system has now reached its capacity and must be enlarged to provide the level of service required by the regulatory agencies. This project has been proposed to correct the deficiencies in the systems ability to continue to deliver a safe and steady supply of potable water to all customers in its service area through the year 2020.

## II. EXISTING FACILITIES

The original system was constructed in 1967 with a total of 210 water customers, and has grown to a total of 4,337 customers (as of October 2007). The District purchases treated water from the city of Harrodsburg, Kentucky at the contracted City rate. The water is delivered to the District through three master meters: one on KY 152 (Mackville Road); one on KY1989 (Cornishville Road; and one on US 127 (Louisville Road).

The existing system has five (5) storage tanks; a 318,000 gallon standpipe on the east side of US Highway 127, two miles south of Salvisa, a 282,000 gallon standpipe south of and adjacent to McCroskey Pike, a 92,000 gallon standpipe near Mayo, and a 156,600 gallon standpipe at Dixville. The other tank is a 125,000 gallon elevated tank located on Kentucky 152 near Rose Hill.

The District has over 360 miles of water lines ranging in size from 2” to 12”. Pipe material includes ductile, asbestos cement, and PVC. Most of the system consists of PVC pipe either class 160 or 200.

A 500 GPM pump station pumps into the northern area of the District and a 125 GPM pumps into the Rose Hill portion of the system.

### III. PROPOSED FACILITIES AND SERVICE

#### A. General Description of the Proposed Project:

The District has been struggling with meeting the water demands of many of its customers during high usage periods, particularly in the hot summer months and periods of drought. This project, designated as Master Plan Improvements, Phase II, will improve the District’s ability to supply a constant, reliable, and safe water supply to all customers of the District during most delivery conditions.

Components of the proposed project include replacement of lines in two areas where significant water pipe breakage occurs. These areas are along Mundy’s Landing Road and Warrick Pike.

New lines will be installed along various existing lines for the purpose of increasing the delivery capacity to the various service areas. These parallel lines will be installed at several locations on US 127 north of the city of Harrodsburg and extending to new lines at Jackson Pike and US 27: along KY 152 (Mackville Road) from a master meter at Harrodsburg to the Rose Hill storage tank; along Dixville Road and Russell Branch Road.

A new line will be installed along KY 1941 from Cornishville and into Washington County to complete a loop in the water distribution mains in that area.

In addition, a connection will be made to the Danville water system at the Boyle/Mercer county line at the intersection of US 68 and KY 1941. This connection will require a booster pumping station.

Included in the project is a connection to Harrodsburg's 20" water transmission line that parallels the Harrodsburg bypass. The connection includes a new master meter and a booster pumping station.

In addition to the above facilities, numerous gate valves, check valves, pressure reducing valves and flow control valves will be installed in such a manner as to divide the North Mercer Water District's service area in distinct pressure zones. In so doing, the quality of water will be improved, isolation of areas will be accomplished easier and the location of leaks and breaks will be quicker.

B. Land, Water and Other Rights:

1. Land: A parcel of land for the tank site and one site for the pumping station will be required.
2. Water Rights: Stream crossing permits will be required from the Division of Water, Frankfort, Kentucky.
3. Other Rights:
  - a. Easement and Permits: Construction of parallel lines will be on existing easements. The new line on KY 1941 out of Cornishville is planned to be on private property in as

much as possible. Easements will be required for that line. There will be some locations that require a permit for the Kentucky Department of Transportation. Water lines are to be located on private property to the maximum extent with State Highway Department Encroachment Permits required only for short sections where this would not be feasible and where necessary to cross state highways with the various pipelines.

- b. Minimum pressure requirements (30 PSI at the meter) of the Kentucky State Department for Natural Resources and Environmental Protection will be met.
4. Problems in Acquisition: All right of ways are considered to be readily obtainable.
5. Water Supply: Currently, the North Mercer Water District purchases all of its water from the city of Harrodsburg, Kentucky. Included as a portion of this project is a proposed connection to the city of Danville water system. However, the majority of the District's water will be purchased from the city of Harrodsburg.
6. Requirements: The average water usage for the North Mercer Water District is 24,601,500 gallons per month (See Appendix "C") plus an allowance of 3,346,000 gallons per month or 13.6 percent for water losses. This amount does not include any allowance for water use for future customers.

7. Requirements as to Quality: State Department for Natural Resources and Environmental Protection requirements as to quality will be met, as this agency has approved the present source of supply and existing distribution facilities.
8. Water Supply: As noted earlier in this report, the water supply for this District is the City of Harrodsburg. The City should have sufficient treated water to supply the needs of the expanded District. However, the project includes connections to two other sources of supply.

#### IV. COST ESTIMATE

- A. Estimated construction costs are presented in Appendix A by project areas. These costs are based on the review of recent bids with appropriate adjustments where warranted. These estimates have been adjusted to reflect estimated costs in September 2008. The total estimated construction \$1,723,000 has been used in the subsequent sections of this report to determine water service rates.
- B. Project costs are shown in Appendix "B" along with the proposed funding sources. It is estimated that total project costs will be \$2,247,000 and includes \$171,800 for contingencies.

#### V. ANNUAL OPERATING FIGURES

- A. Income: Estimated income from water sales is shown in the tables of Appendix "D". These projections are based on an existing customer base of 4337 and their use for the November 2007 billing cycle. There has not

been any allowance for the anticipated new customers that are routinely added each year.

- B. Operation and Maintenance Costs: The cost of operation and maintenance for these improvements to the District's system is derived from a projection of figures contained in the Financial Reports of the District for the year ending December 31, 2007. These figures are projected to the end of 2009 when it is anticipated that the proposed system will be in full operation. Any increases in O & M cost after the project is completed will have to be offset by the normal process of a rate increase. This information is detailed in Appendix "C" of this report.
- C. Debt Service and Bond Coverage: As of the District's December 31, 2007 audit they have \$4,721,500 of outstanding long term indebtedness with an overall annual average payment requirement of \$343,596.

The proposed funding is a loan of \$1,497,000 loan for a 40 year period at 4.625% from the Rural Utility Service (RUS), US Department of Agriculture and a grant of \$750,000 from the same agency. With the additional debt service and the projected operation and maintenance cost the Districts rates will need to be increased by approximately fifty (50%) percent. The proposed rates shown in Appendix "D" were used in estimating the annual income.

## VI. MAPS, DRAWINGS, AND SKETCHES

- A. Maps: The proposed project segments have been plotted on portions of the USGS maps of the area. A copy of each of those maps are included in the Exhibit section of this report.



B. Drawings and Photographs:

Design plans will be produced from information from several sources. The plans will be of such detail as necessary to insure that competitive construction bids will be received for the proposed work.

VII. CONSTRUCTION PROBLEMS

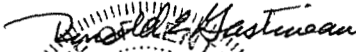

Construction of the proposed project is considered to be relatively simple with no complex problems to be surmounted.

VIII. CONCLUSIONS AND RECOMMENDATIONS

- A. Future Growth: From 1967 to the present, the District has grown from 210 customers to over 4337 customers. It is anticipated that the District's customer base will increase by at least 100 new customers annually for the foreseeable future. Financial feasibility has been determined based on 4337 existing customers.
- B. Recommendations: It is recommended the District's officials proceed with the application process for funding through the U.S. Department of Agriculture, RUS loan and grant program.

Respectfully submitted,

Gastineau and Associates, Inc. by

  
RONALD E. GASTINEAU, P.E.  
  
April 2008

# APPENDICES

APPENDIX A  
ESTIMATED CONSTRUCTION COST  
MASTER PLAN IMPROVEMENTS  
NORTH MERCER WATER DISTRICT  
PHASE II

KY 152 (MACKVILLE ROAD)	\$353,900
DIXVILLE AREA	\$162,400
CORNISHVILLE TO CARDWELL	\$470,000
HARRODSBURG CONNECTION @ BYPASS	\$338,700
WARWICK ROAD	\$267,600
CONTROL VALVES AND MISCELLANEOUS	<u>\$130,400</u>
TOTAL ESTIMATED CONSTRUCTION COST	\$1,723,000

APPENDIX A  
KY152 (MACKVILLE ROAD)  
WATER SYSTEM IMPROVEMENT PROJECT  
NORTH MERCER WATER DISTRICT  
PHASE II

ITEM	UNIT	QUANTITY	UNIT PRICE	COST OF ITEM
8" CL 200 PVC PIPE	LF	13150	\$11.10	\$145,965.00
8" RESILIENT WEDGE GATE VALVE	EA	4	\$1,017.00	\$4,068.00
6" RESILIENT WEDGE GATE VALVE	EA	1	\$748.00	\$748.00
6" TAPPING SLEEVE AND VALVE	EA	3	\$1,705.00	\$5,115.00
8" HIGHWAY CROSSING W/ 12" STEEL CASING, BORE & JACK	LF	135	\$150.00	\$20,250.00
8" DWY CROSSING W/ 12" SDR 35 PVC CASING, BORE & JACK	LF	110	\$115.00	\$12,650.00
8" CONNECTION TO EXISTING METER	EA	1	\$1,230.00	\$1,230.00
8" CONNECTION TO VALVE VAULT	EA	1	\$1,230.00	\$1,230.00
3/4" AIR RELEASE VALVE	EA	5	\$460.00	\$2,300.00
CRUSHED STONE	TONS	1200	\$16.00	\$19,200.00
ASPHALT REPLACEMENT	TONS	120	\$57.00	\$6,840.00
BOOSTER PUMP STATION	EA	1	\$93,000.00	\$93,000.00
TELEMETRY	EA	1	\$19,800.00	\$19,800.00
MISCELLANEOUS	LS	1	\$21,504.00	\$21,504.00

TOTAL ESTIMATED CONSTRUCTION COST

\$353,900.00

APPENDIX A  
DIXVILLE AREA  
WATER SYSTEM REPLACEMENT PROJECT  
NORTH MERCER WATER DISTRICT  
PHASE II

ITEM	UNIT	QUANTITY	UNIT PRICE	COST OF ITEM
4" CL 200 PVC PIPE	LF	3410	\$5.40	\$18,414.00
6" CL 200 PVC PIPE	LF	9600	\$7.40	\$71,040.00
4" RESILIENT WEDGE GATE VALVE	EA	1	\$570.00	\$570.00
6" RESILIENT WEDGE GATE VALVE	EA	2	\$750.00	\$1,500.00
4" TAPPING SLEEVE AND VALVE	EA	5	\$1,490.00	\$7,450.00
8" X 6" TAPPING SLEEVE AND VALVE	EA	1	\$1,680.00	\$1,680.00
6" HIGHWAY CROSSING W/ 12" STEEL CASING, BORE & JACK	LF	185	\$150.00	\$27,750.00
3/4" AIR RELEASE VALVE	EA	5	\$460.00	\$2,300.00
CRUSHED STONE	TONS	950	\$16.00	\$15,200.00
ASPHALT REPLACEMENT	TONS	48	\$57.00	\$2,736.00
#12 COPPER TRACER WIRE	LF	13010	\$0.20	\$2,602.00
MISCELLANEOUS	LS	1	\$11,158.00	\$11,158.00

TOTAL ESTIMATED CONSTRUCTION

\$162,400.00

APPENDIX A  
CORNISHVILLE TO CARDWELL EXTENSION  
WATER SYSTEM IMPROVEMENT PROJECT  
NORTH MERCER WATER DISTRICT  
PAHSE II

ITEM	UNIT	QUANTITY	UNIT PRICE	COST OF ITEM
6" CL 200 PVC PIPE	LF	14400	\$11.10	\$159,840.00
6" RESILIENT WEDGE GATE VALVE	EA	3	\$750.00	\$2,250.00
6" TAPPING SLEEVE AND VALVE	EA	2	\$1,705.00	\$3,410.00
6" HIGHWAY CROSSING W/ 12" STEEL CASING, BORE & JACK	LF	160	\$150.00	\$24,000.00
6" DWY CROSSING W/ 12" SDR 35 PVC CASING, BORE & JACK	LF	90	\$115.00	\$10,350.00
6" BLOW OFF	EA	2	\$970.00	\$1,940.00
6" CREEK CROSSING, TYPE II	LF	240	\$82.00	\$19,680.00
3/4" AIR RELEASE VALVE	EA	6	\$460.00	\$2,760.00
CRUSHED STONE	TONS	1280	\$16.00	\$20,480.00
ASPHALT REPLACEMENT	TONS	108	\$57.00	\$6,156.00
#12 COPPER TRACER WIRE	LF	1440	\$0.20	\$288.00
BOOSTER PUMP STATION/CHLORINATION	EA	1	\$137,500.00	\$137,500.00
TELEMETRY	EA	1	\$41,800.00	\$41,800.00
MISCELLANEOUS	LS	1	\$39,546.00	\$39,546.00

TOTAL ESTIMATED CONSTRUCTION COST

\$470,000.00

APPENDIX A  
HARRODSBURG CONNECTION-US127 @ BYPASS  
WATER SYSTEM IMPROVEMENT PROJECT  
NORTH MERCER WATER DISTRICT  
PHASE I

ITEM	UNIT	QUANTITY	UNIT PRICE	COST OF ITEM
8" CL 200 PVC PIPE	LF	9960	\$11.10	\$110,556.00
8" RESILIENT WEDGE GATE VALVE	EA	2	\$750.00	\$1,500.00
8" TAPPING SLEEVE AND VALVE	EA	2	\$2,340.00	\$4,680.00
8" HIGHWAY CROSSING W/ 12" STEEL CASING, BORE & JACK	LF	80	\$150.00	\$12,000.00
6" DWY CROSSING W/ 12" SDR 35 PVC CASING, BORE & JACK	LF	40	\$115.00	\$4,600.00
6" BLOW OFF	EA	2	\$970.00	\$1,940.00
8" CREEK CROSSING, TYPE II	LF	165	\$93.00	\$15,345.00
3/4" AIR RELEASE VALVE	EA	6	\$460.00	\$2,760.00
CRUSHED STONE	TONS	960	\$16.00	\$15,360.00
ASPHALT REPLACEMENT	TONS	48	\$57.00	\$2,736.00
#12 COPPER TRACER WIRE	LF	9960	\$0.20	\$1,992.00
BOOSTER PUMP STATION	EA	1	\$95,000.00	\$95,000.00
TELEMETRY	EA	1	\$41,800.00	\$41,800.00
MISCELLANEOUS	LS	1	\$28,431.00	\$28,431.00

TOTAL ESTIMATED CONSTRUCTION COST

\$338,700.00

APPENDIX A  
WARWICK ROAD  
WATER SYSTEM IMPROVEMENT PROJECT  
NORTH MERCER WATER DISTRICT  
PHASE II

ITEM	UNIT	QUANTITY	UNIT PRICE	COST OF ITEM
8" CL 200 PVC PIPE	LF	13530	\$11.10	\$150,183.00
8" RESILIENT WEDGE GATE VALVE	EA	4	\$1,017.00	\$4,068.00
6" RESILIENT WEDGE GATE VALVE	EA	1	\$748.00	\$748.00
8" TAPPING SLEEVE AND VALVE	EA	2	\$2,145.00	\$4,290.00
8" HIGHWAY CROSSING W/ 12" STEEL CASING, BORE & JACK	LF	135	\$150.00	\$20,250.00
8" DWY CROSSING W/ 12" SDR 35 PVC CASING, BORE & JACK	LF	250	\$115.00	\$28,750.00
RECONNECTION TO EXISTING METER	EA	30	\$165.00	\$4,950.00
3/4" PE SERVICE LINE TRENCHED	LF	550	\$3.90	\$2,145.00
3/4" PE SERVICE LINE JACKED	LF	120	\$11.55	\$1,386.00
3/4" AIR RELEASE VALVE	EA	5	\$460.00	\$2,300.00
CRUSHED STONE	TONS	1200	\$16.00	\$19,200.00
ASPHALT REPLACEMENT	TONS	120	\$57.00	\$6,840.00
MISCELLANEOUS	LS	1	\$22,490.00	\$22,490.00

TOTAL ESTIMATED CONSTRUCTION COST

\$267,600.00

**APPENDIX "B"**  
**PRELIMINARY ENGINEERING REPORT**  
**ESTIMATED PROJECT COST AND PROPOSED FUNDING**  
**MASTER PLAN IMPROVEMENTS**  
**NORTH MERCER WATER DISTRICT**  
**PHASE II**

**PROJECT COST**

Estimated Construction Cost	\$1,723,000
Land and Rights of Way	\$7,500
Engineering	\$137,600
Other Engineering	\$16,000
Construction Observation	\$84,100
Legal and Administrative	\$38,000
Interest During Construction	\$69,000
Contingencies	<u>\$171,800</u>
Total	\$2,247,000

**FUNDING**

RUS Loan	\$1,497,000
RUS Grant	\$750,000



APPENDIX C  
REVENUE AND EXPENSES-REGULATORY BASIS  
YEAR ENDING 2007 AND PROJECTED 2009

	ACTUAL 2007	PROJECTED 2008
<u>OPERATING REVENUES</u>		
Metered sales to customers	\$1,414,733.00	\$2,012,550
Other operating revenues	\$51,092.00	\$21,400
	<hr/>	<hr/>
TOTAL OPERATING REVENUE	\$1,465,825.00	\$2,033,950
<u>OPERATING EXPENSES</u>		
Salaries and wages, Employees	\$297,855.11	\$315,990
Salaries and wages, officers	\$14,400.00	\$14,400
Employee pension and benefits	\$124,471.47	\$132,050
Purchased water	\$487,251.48	\$525,520
Purchased power	\$20,450.86	\$22,300
Materials and supplies	\$37,947.11	\$37,900
Contractual services-engineering	\$15,894.51	\$5,000
Contractual services-legal	\$4,800.00	\$4,800
Contractual services-accounting	\$4,400.00	\$4,600
Contractual services-tank maintenance	\$62,538.66	\$62,540
Contractual services-water testing	\$4,158.00	\$12,000
Contractual services-other	\$3,235.00	\$14,190
Transportation expense	\$32,466.23	\$45,450
Office supplies and expense	\$35,909.55	\$39,210
Regulatory commission expense-PSC	\$2,260.07	\$2,300
Insurance expense, general liability	\$17,893.78	\$20,680
Insurance expense, workmen's compensation	\$6,939.57	\$7,300
Travel expense	\$7,498.27	\$9,600
Depreciation	\$309,795.00	\$340,000
Replacement reserves	\$0.00	\$88,024
Miscellaneous expense	\$15,789.33	\$17,370
	<hr/>	<hr/>
TOTAL OPERATING EXPENSES	\$1,505,954.00	\$1,721,224
NET OPERATING INCOME (Revenue minus expenses)	(\$40,129.00)	\$312,726

NORTH MERCER WATER DISTRICT  
EXISTING RATE-- EXISTING CUSTOMERS

WATER BILLING RATE STRUCTURE

<u>GALLON INCREMENT</u>		<u>COST PER 1000 GALLONS</u>
FIRST	1,000	\$10.56
NEXT	2,000	\$4.42
NEXT	2,000	\$4.16
NEXT	5,000	\$3.95
ALL OVER	10,000	\$3.79

<u>NUMBER OF CUSTOMERS</u>	<u>MONTHLY USAGE PER CUSTOMER</u>	<u>TOTAL</u>	<u>COST PER CUSTOMER</u>	<u>NET MONTHLY BILLINGS</u>
554	500	277,000	\$10.56	\$5,850.24
507	1,500	760,500	\$12.77	\$6,474.39
577	2,500	1,442,500	\$17.19	\$9,918.63
661	3,500	2,313,500	\$21.48	\$14,198.28
504	4,500	2,268,000	\$25.64	\$12,922.56
386	5,500	2,123,000	\$29.70	\$11,464.20
276	6,500	1,794,000	\$33.65	\$9,287.40
205	7,500	1,537,500	\$37.60	\$7,708.00
146	8,500	1,241,000	\$41.55	\$6,066.30
96	9,500	912,000	\$45.50	\$4,368.00
107	11,000	1,177,000	\$51.26	\$5,484.82
86	13,000	1,118,000	\$58.84	\$5,060.24
38	15,000	570,000	\$66.42	\$2,523.96
40	17,000	680,000	\$74.00	\$2,960.00
25	19,000	475,000	\$81.58	\$2,039.50
37	22,500	832,500	\$94.85	\$3,509.45
20	27,500	550,000	\$113.80	\$2,276.00
16	32,500	520,000	\$132.75	\$2,124.00
14	37,500	525,000	\$151.70	\$2,123.80
10	42,500	425,000	\$170.65	\$1,706.50
7	47,500	332,500	\$189.60	\$1,327.20
2	52,500	105,000	\$208.55	\$417.10
5	57,500	287,500	\$227.50	\$1,137.50
1	62,500	62,500	\$246.45	\$246.45
2	67,500	135,000	\$265.40	\$530.80
2	72,500	145,000	\$284.35	\$568.70
4	87,500	350,000	\$341.20	\$1,364.80
5	122,500	612,500	\$473.85	\$2,369.25
2	180,000	360,000	\$691.77	\$1,383.54
2	335,000	670,000	\$1,279.22	\$2,558.44

TOTALS	4,337	24,601,500 Gal.		\$123,658.82
YEARLY TOTALS		295,218,000 Gal.		\$1,483,905.84

NORTH MERCER WATER DISTRICT  
PROPOSED RATE-- EXISTING CUSTOMERS

WATER BILLING RATE STRUCTURE

<u>GALLON INCREMENT</u>		<u>COST PER 1000 GALLONS</u>
FIRST	1,000	\$15.90
NEXT	2,000	\$6.70
NEXT	2,000	\$6.30
NEXT	5,000	\$5.90
ALL OVER	10,000	\$5.50

<u>NUMBER OF CUSTOMERS</u>	<u>MONTHLY USAGE PER CUSTOMER</u>	<u>MONTHLY USAGE TOTAL</u>	<u>COST PER CUSTOMER</u>	<u>NET MONTHLY BILLINGS</u>
554	500	277,000	\$15.90	\$8,808.60
507	1,500	760,500	\$19.25	\$9,759.75
577	2,500	1,442,500	\$25.95	\$14,973.15
661	3,500	2,313,500	\$32.45	\$21,449.45
504	4,500	2,268,000	\$38.75	\$19,530.00
386	5,500	2,123,000	\$44.85	\$17,312.10
276	6,500	1,794,000	\$50.75	\$14,007.00
205	7,500	1,537,500	\$56.65	\$11,613.25
146	8,500	1,241,000	\$62.55	\$9,132.30
96	9,500	912,000	\$68.45	\$6,571.20
107	11,000	1,177,000	\$76.90	\$8,228.30
86	13,000	1,118,000	\$87.90	\$7,559.40
38	15,000	570,000	\$98.90	\$3,758.20
40	17,000	680,000	\$109.90	\$4,396.00
25	19,000	475,000	\$120.90	\$3,022.50
37	22,500	832,500	\$140.15	\$5,185.55
20	27,500	550,000	\$167.65	\$3,353.00
16	32,500	520,000	\$195.15	\$3,122.40
14	37,500	525,000	\$222.65	\$3,117.10
10	42,500	425,000	\$250.15	\$2,501.50
7	47,500	332,500	\$277.65	\$1,943.55
2	52,500	105,000	\$305.15	\$610.30
5	57,500	287,500	\$332.65	\$1,663.25
1	62,500	62,500	\$360.15	\$360.15
2	67,500	135,000	\$387.65	\$775.30
2	72,500	145,000	\$415.15	\$830.30
4	87,500	350,000	\$497.65	\$1,990.60
5	122,500	612,500	\$690.15	\$3,450.75
2	180,000	360,000	\$1,006.40	\$2,012.80
2	335,000	670,000	\$1,858.90	\$3,717.80
TOTALS		24,601,500 Gal.		\$185,574.20
YEARLY TOTALS		295,218,000 Gal.		\$2,226,890.40

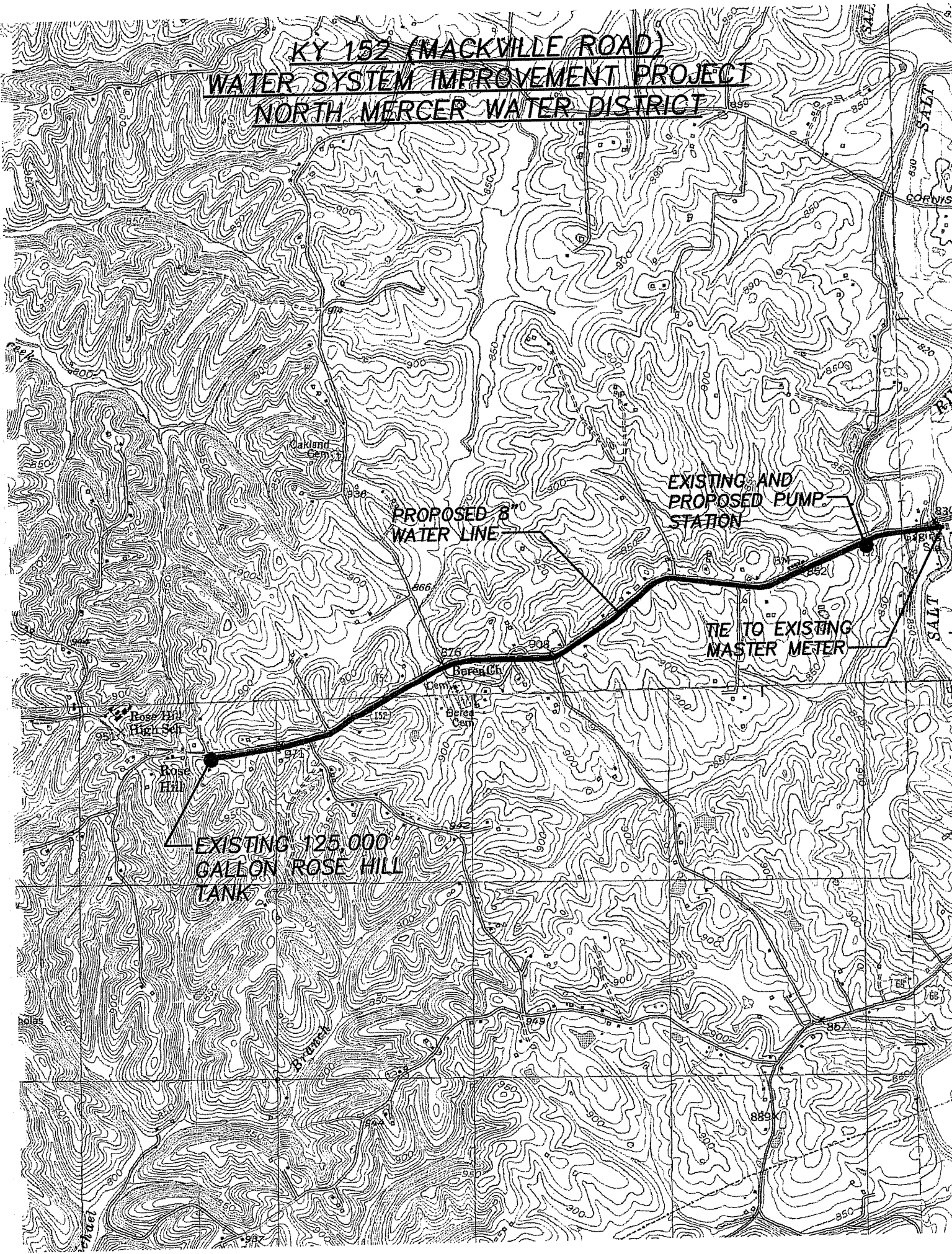
APPENDIX "E"

NORTH MERCER WATER DISTRICT  
 MASTER PLAN IMPROVEMENTS  
 ESTIMATED INCOME, EXPENSE, DEBT SERVICE  
 AND BOND COVERAGE

ESTIMATED INCOME		\$2,226,890
ESTIMATED EXPENSE		\$1,721,224
NET OPERATING INCOME		\$505,666
PLUS INTEREST INCOME		\$37,195
AVAILABLE FOR DEBT SERVICE		<u>\$542,861</u>
DEBT SERVICE		
EXISTING PAYMENT REQUIREMENTS 2009		
RUS	\$290,809	
KIA	\$53,781	
		\$343,600
PROPOSED		
\$1,874,000 @ 4.75 % =	\$1,874,000 X 0.057329 =	\$107,435
\$1,497,000 @ 4.625%	\$1,497,000 X 0.056362 =	<u>\$84,375</u>
TOTAL DEBT SERVICE		\$535,410
BOND COVERAGE		
	\$542,861 / \$535,410 =	1.01

# EXHIBITS

**KY 152 (MACKVILLE ROAD)  
WATER SYSTEM IMPROVEMENT PROJECT  
NORTH MERCER WATER DISTRICT**



**PROPOSED 8" WATER LINE**

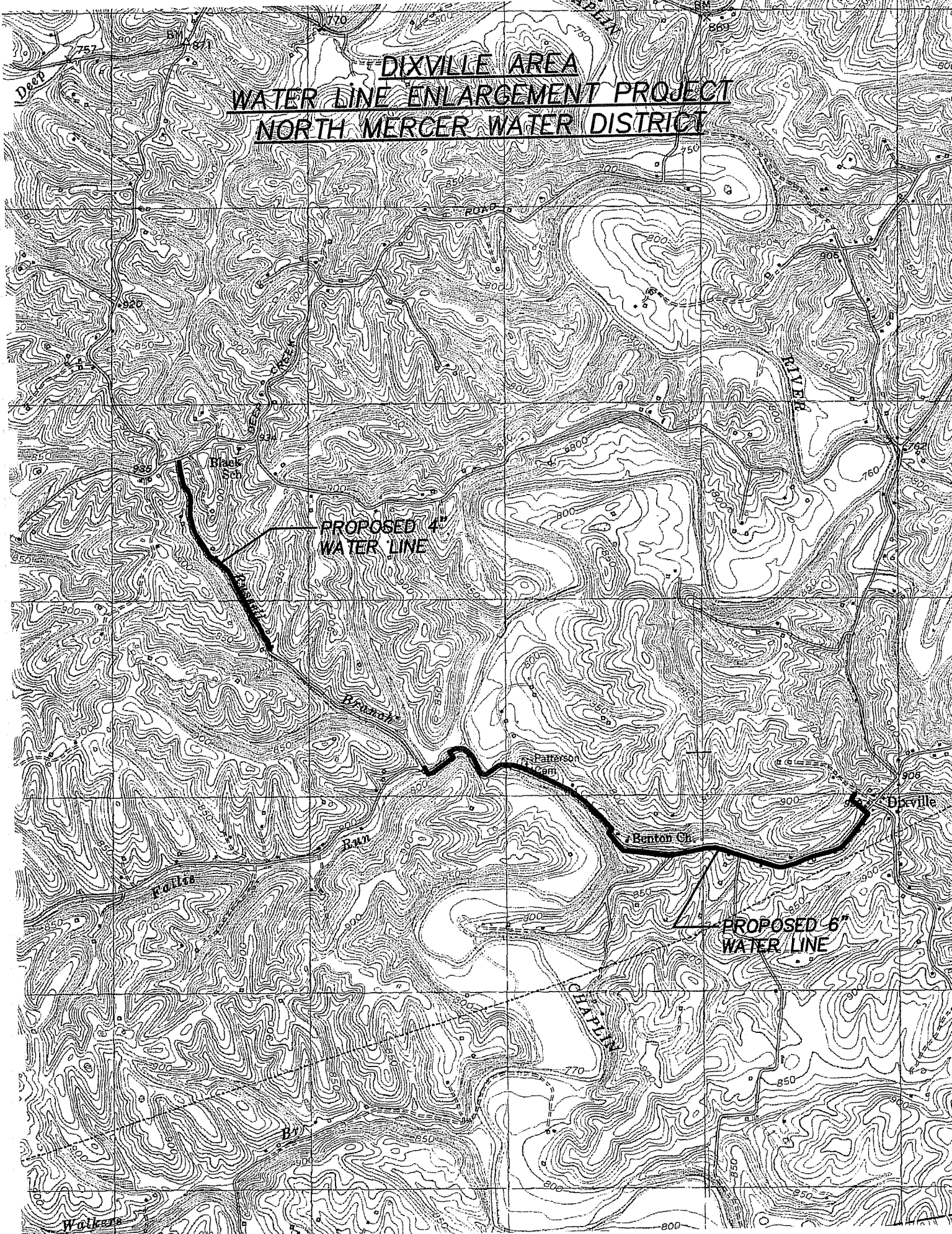
**EXISTING AND PROPOSED PUMP STATION**

**TIE TO EXISTING MASTER METER**

**EXISTING 125,000 GALLON ROSE HILL TANK**



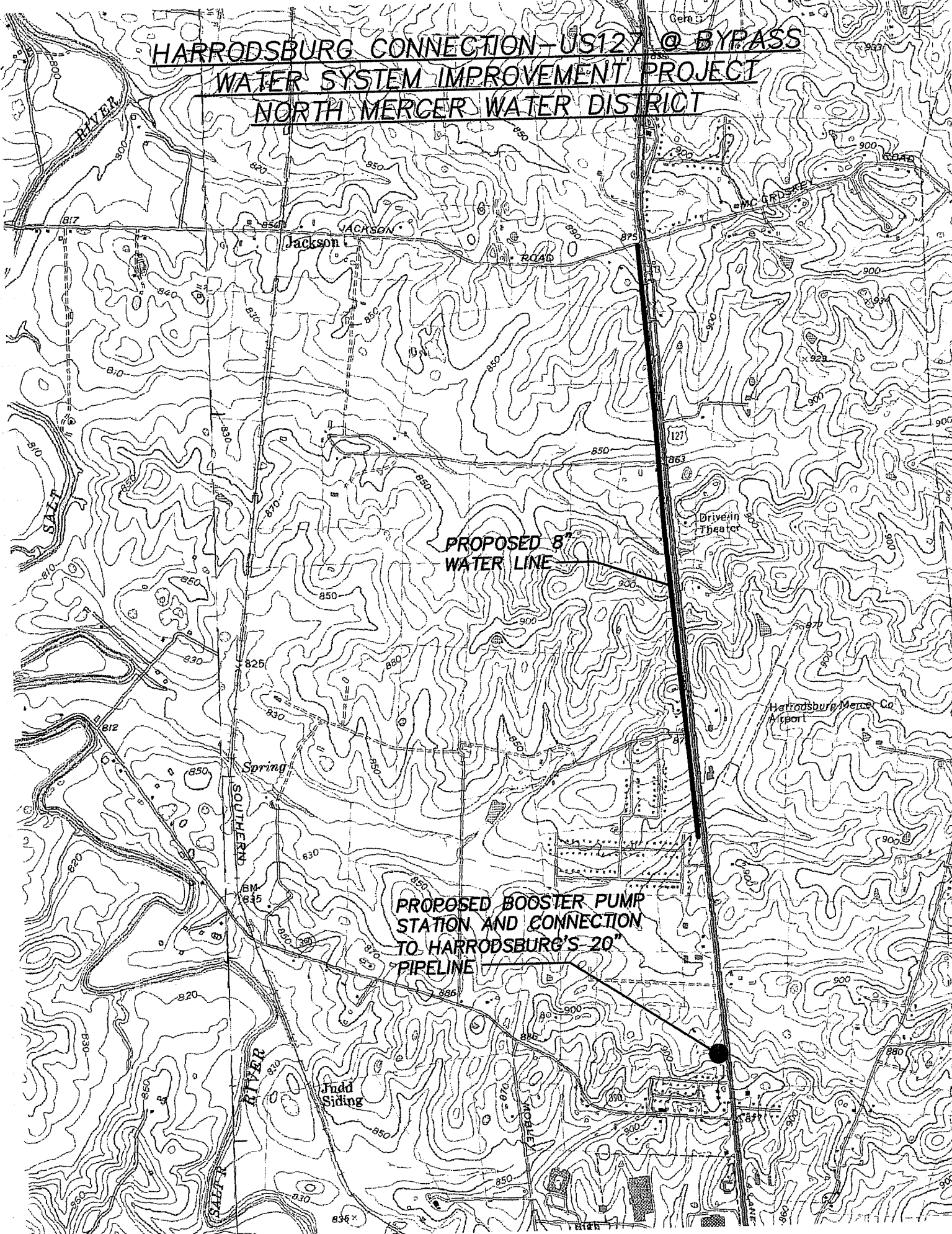
DIXVILLE AREA  
WATER LINE ENLARGEMENT PROJECT  
NORTH MERCER WATER DISTRICT



PROPOSED 4"  
WATER LINE

PROPOSED 6"  
WATER LINE

**HARRODSBURG CONNECTION-US127 @ BYPASS  
WATER SYSTEM IMPROVEMENT PROJECT  
NORTH MERCER WATER DISTRICT**



**PROPOSED 8" WATER LINE**

**PROPOSED BOOSTER PUMP STATION AND CONNECTION TO HARRODSBURG'S 20" PIPELINE**

Spring  
SOUTHERN

Judd Siding

Harrodsburg Merc Co Airport

Drive-in Theater

836 X

127

863

850

875

850

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**CORNISHVILLE/GARDWELL  
WATER SYSTEM IMPROVEMENT PROJECT  
NORTH MERCER WATER DISTRICT**

