Rubin & Hays

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

November 16, 2009

RECEIVED

NOV 1 7 2009

PUBLIC SERVICE COMMISSION

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

Re:

Carroll County Water District No. 1

Dear Mr. Derouen:

Enclosed please find the original and ten (10) copies of the Application of the Carroll County Water District No. 1 for a Certificate of Public Convenience and Necessity to construct, finance and increase rates 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

2009 - MY

W. Randall Jones

WRJ:jkm Enclosures

cc: Distribution List

DISTRIBUTION LIST

Re: Carroll County Water District No. 1 Waterworks Revenue Bonds, Series 2010, in the principal amount of \$1,246,000

Account No. 1670.0000

Mr. Vernon Brown Acting State Director

USDA, Rural Development

771 Corporate Drive, Suite 200 Telephone: (606) 224-7336

Lexington, Kentucky 40503-5477 Fax: (606) 224-7340

Mr. Ernest Scruggs

USDA, Rural Development

486 Helton Street Telephone: (859) 824-7171

Williamstown, Kentucky 41097 Fax: (859) 824-3172

Mr. James L. Smith, Manager

Carroll County Water District No. 1

P.O. Box 350 Telephone: (502) 347-9470

Ghent, Kentucky 41045 Fax: (502) 347-9333

Mr. James E. McNulty

Strand Associates, Inc.

629 Washington Street Telephone: (812) 372-9911

Columbus, Indiana 47201 Fax: (812) 372-7190

Ruth H. Baxter, Esq.

Crawford & Baxter, P.S.C.

523 Highland Avenue

P.O. Box 353 Telephone: (502) 732-6688

Carrollton, Kentucky 41008 Fax: (502) 732-6920

W. Randall Jones, Esq.

Rubin & Hays

Kentucky Home Trust Building

450 South Third Street Telephone: (502) 569-7534

Louisville, Kentucky 40202 Fax: (502) 569-7555

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF CARROLL COUNTY WATER DISTRICT NO. 1 FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO CONSTRUCT, FINANCE AND INCREASE RATES PURSUANT TO KRS 278.023.

)) Case No. <u>2009</u>-447)

APPLICATION

This Application of the Carroll County Water District No. 1 ("Applicant") of Carroll, Gallatin and Owen Counties, Kentucky, respectfully shows:

- 1. That Applicant is a water district of Carroll, Gallatin and Owen Counties, Kentucky, created and existing under and by virtue of Chapter 74 of the Kentucky Revised Statutes.
 - 2. That the post office address of Applicant is:

Carroll County Water District No. 1 c/o Mr. Jim Smith, Manager P.O. Box 350 Ghent, Kentucky 41045

- 3. That Applicant, pursuant to the provisions of KRS 278.020 and 278.023, seeks (i) a Certificate of Public Convenience and Necessity, permitting Applicant to construct a waterworks construction project, consisting of extensions, additions, and improvements (the "Project") to the existing waterworks system of Applicant; (ii) an Order approving increased rates; and (iii) approval of the proposed plan of financing said Project.
- 4. That the project consists of the construction and installation of (i) approximately 22,000 linear feet of 10 and 8 inch water main; (ii) approximately 6,000 linear feet of 6 inch water main; (iii) approximately 6,000 linear feet of 4 inch water main; (iv) a 300,000 gallon elevated water storage tank; and (v) a booster pump station and appurtenances.
- 5. That Applicant proposes to finance the construction of the Project through (i) the issuance of \$1,246,000 of its Waterworks Revenue Bonds; (ii) a USDA, Rural Development ("RD") grant in the amount of \$410,000; and (iii) an Applicant contribution in the amount of \$100,000. Applicant has a commitment from RD to purchase said \$1,246,000 of bonds maturing over a 40-year period, at an interest rate of not exceeding 4.625% per annum, as set out in the RD Letter of Conditions, as amended, filed herewith as an Exhibit.

- 6. That Applicant does not contemplate having the Project constructed with any deviation from minimum construction standards of this Public Service Commission.
- 7. That Applicant files herewith the following Exhibits pursuant to 807 KAR 5:069 in support of this Application:
 - **EXHIBIT A.** Copy of RD Letter of Conditions, as amended.
 - **EXHIBIT B.** Copy of RD Letter of Concurrence in Bid Award.
 - **EXHIBIT C.** Certified statement from the Chairman of Applicant, based upon statements of the Engineers for Applicant, concerning the following:
 - (1) The proposed plans and specifications for the 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 proposed rates of 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

Applicant also files herewith two (2) copies of Preliminary and Final Engineering Reports.

- 8. That Applicant has arranged for the publication, prior to or at the same time this Application is filed, of a Notice of Proposed Rate Change pursuant to Section 2 of 807 KAR 5:069, in the Carrollton News-Democrat, Gallatin County News and Owenton News Herald, which are the newspapers of general circulation in Applicant's service area and in Carroll, Gallatin and Owen Counties, Kentucky. Said Notice sets out the current rates and the proposed rates of Applicant and a short description of the Project. A copy of said Notice is filed herewith as **EXHIBIT D**.
- 9. 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, Applicant, the Carroll County Water District No. 1 asks that the Public Service Commission of the Commonwealth of Kentucky grant to Applicant the following:

- a. A Certificate of Public Convenience and Necessity permitting Applicant to construct a waterworks project consisting of extensions, additions, and improvements to the existing waterworks system of Applicant.
- b. An Order approving the financing arrangements made by Applicant, viz., the issuance of (i) \$1,246,000 of Carroll County Water District No. 1 Waterworks Revenue Bonds, at an interest rate of not exceeding 4.625% per annum, (ii) an RD Grant in the amount of \$410,000; and (iii) an Applicant contribution in the amount of \$100,000.
- c. An Order approving the proposed increased rates as set out in Section 27 of the RD Letter of Conditions, as amended, filed herewith as an Exhibit.

Carroll County Water District No. 1

Chairman

Board of Water Commissioners

W. Randall Jones, Esq.

Rubin & Hays

Counsel for Applicant

Kentucky Home Trust Building

450 South Third Street

Louisville, Kentucky 40202

(502) 569-7525

COMMONWEALTH OF KENTUCKY)
) SS:
COUNTY OF CARROLL)

The undersigned, Dennis Crawford, being duly sworn, deposes and states that he is the Chairman of the Board of Commissioners of the Carroll County Water District No. 1, 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 November 4, 2009.

Dennis Crawford, Chairman
Carroll County Water District No. 1

Subscribed and sworn to before me by Dennis Crawford, Chairman of the Board of Commissioners of the Carroll County Water District No. 1, on this November 4, 2009.

My Commission expires: <u>Aug 19, 2010</u>.

Sancua K Beall
Notary Public, Carroll County, Kentucky





United States Department of Agriculture Rural Development

Kentucky State Office

June 16, 2008

COPY FOR YOUR INFORMATION

Dennis Crawford, Chairman Carroll County Water District No. 1 P.O. Box 350 Ghent, Kentucky 41045

Dear Mr. Crawford:

This letter establishes conditions which must be understood and agreed to by you before further consideration may be given to the application. The loan/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/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 \$1,246,000; a RUS grant not to exceed \$410,000; and an applicant cash contribution in the amount of \$100,000.

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 210 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

1. Number of Users and Their Contribution:

There shall be 3,017 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.

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. <u>Drug-Free Work Place</u>:

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 two years from the date of the Bond. Payments will be in accordance with applicable KRS, which requires interest to be paid semi-annually (March 1st and September 1st) and principal will be due on or before the first of September. 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 \$510 per month into a "Funded Depreciation Reserve Account" until the account reaches \$61,200. The deposits are to be resumed any time the account falls below the \$61,200.

The above 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 \$1,250 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. <u>Security Requirements</u>:

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. <u>Organization</u>:

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. <u>Insurance and Bonding:</u>

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 \$355,000.
- 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 180 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. <u>Civil Rights & Equal Opportunity</u>:

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 <u>et seq.</u>) 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. Treatment Plant and System Operator:

The District is reminded that the treatment plant and 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 <u>each</u> payment estimate. <u>All bills and vouchers must be approved by Rural Development prior to payment by the District.</u>

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. <u>Cost of Facility:</u>

Breakdown of Costs:

Development		\$ 1,358,750
Land and Rights		5,000
Legal and Administrative		33,600
Engineering		148,000
Interest		24,000
Environmental/Archeological/Other Testin	g	50,750
Contingencies		135,900
	TOTAL	\$ 1,756,000

Financing:

RUS Loan		\$ 1,246,000
RUS Grant		410,000
Applicant Contribution/Connection Fees		100,000
	TOTAL	\$ 1.756 000

25. Use of Remaining Project Funds:

The applicant contribution shall be considered as the first funds expended. 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	1,000	gallons @ \$	13.00 Minimum Bill.
Next	1,000	gallons @ \$	6.80 per 1,000 gallons.
Next	3,000	gallons @ \$	7.50 per 1,000 gallons.
Next	5,000	gallons @ \$	8.00 per 1,000 gallons.
Next	10,000	gallons @ \$	5.50 per 1,000 gallons.
Next	20,000	gallons @\$	5.00 per 1,000 gallons.
All Over	40,000	gallons @\$	2.65 per 1,000 gallons.

28. <u>Compliance with the Bioterrorism Act</u>:

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).

29. <u>Floodplain Construction</u>:

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.

30. Water Withdrawal Permit:

The District will be required to obtain satisfactory evidence that a revised water withdrawal permit has been secured from the Division of Water. The permit must be obtained prior to the commencement of construction on the water project.

31. <u>Mitigation Measures</u>:

- 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. <u>Final Approval Conditions</u>:

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,

Enclosures

State Director

cc: Area Director - Shelbyville, Kentucky
Northern KY ADD - Florence, Kentucky
Rubin & Hays - Louisville, Kentucky
Ruth Baxter - Carrollton, Kentucky
Strand Associates - Columbia, Indiana
PSC - ATTN: Dennis Jones - Frankfort, Kentucky





United States Department of Agriculture Rural Development

Kentucky State Office

October 27, 2009

Mr. Dennis Crawford, Chairman Carroll County Water District #1 PO Box 350 Ghent, Kentucky 41045

Re:

Letter of Conditions Dated June 16, 2008

Dear Mr. Crawford:

This letter shall serve as Amendment No. 1 to the Letter of Conditions dated June 16, 2008. The purpose of this amendment is to revise the individual cost items of the proposed project and to revise rates and charges.

Paragraph numbered "24" is revised to read as follows:

" 24. Cost of Facility:

Breakdown of Costs:

Development		\$ 1,414,777
Land and Rights		5,000
Legal and Administrative		18,000
Engineering		222,750
Interest		24,000
Contingencies		71,473
-	TOTAL	\$ 1,756,000

Financing:

RUS Loan		\$ 1,246,000	
RUS Grant		410,000	
Applicant Contribution		100,000	
	TOTAL	\$ 1,756,000	יי

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 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 @ \$	13.50 Minimum Bill.
Next	4,000	gallons @ \$	7.50 per 1,000 gallons.
Next	5,000	gallons @ \$	8.00 per 1,000 gallons.
Next	30,000	gallons @\$	5.00 per 1,000 gallons.
All Over	40,000	gallons @ \$	2.80 per 1,000 gallons.

Bulk sales will be \$1.66 per 1,000 gallons.

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

Sincerely,

VERNON C. BROWN Acting State Director

cc: Area Director - Shelbyville, Kentucky Area Manager – Williamstown, Kentucky Northern KY ADD - Florence, Kentucky Rubin & Hays - Louisville, Kentucky Ruth Baxter - Carrollton, Kentucky

Strand Associates - Columbia, Indiana

PSC - ATTN: Dennis Jones - Frankfort, Kentucky





United States Department of Agriculture Rural Development

Kentucky State Office

November 16, 2009

SUBJECT: Carroll County Water District No. 1

Capacity Upgrade

Contract Award Concurrence

TO: Area Director

Williamstown, 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 the water main portion, C and H/M Excavating, Inc., in the amount of \$1,150,508.80, and the low bidder on the tank portion, Kentucky Glass Lined Tanks, in the amount of \$264,268.00.

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

VERNON BROWN Acting State Director

Rural Development

cc: Strand Engineers, Inc.

Columbus, Indiana

Rubin and Hays Eouisville, 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

CERTIFICATE OF CHAIRMAN OF CARROLL COUNTY WATER DISTRICT NO. 1, AS TO STATEMENT REQUIRED BY SECTION 1(5) OF 807 KAR 5:069

I, Dennis Crawford, hereby certify that I am the duly qualified and acting Chairman of the Carroll County Water District No. 1, 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 "Project"), in cooperation with Strand Associates, Inc., Columbus, Indiana, the Engineers for the District (the "Engineers").

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

- That the proposed plans and specifications for the Project have been designed to meet 1. 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 rates proposed by the District in its current Application filed with the Public Service Commission of Kentucky are contemplated to produce total revenue requirements set out in the Engineering Reports prepared by such Engineers and filed with the Public Service Commission.
- That it is now contemplated that construction of the Project will begin on or about December 15, 2009, and will end on or about June 1, 2010.

IN TESTIMONY WHEREOF, witness my signature this November $\frac{4}{3}$, 2009.

Carroll County Water District No. 1

STATE OF KENTUCKY) SS **COUNTY OF CARROLL**

Subscribed and sworn to before me by Dennis Crawford, Chairman of the Board of Commissioners of the Carroll County Water District No. 1, on this November 4, 2009.

In and For Said State and County

NOTICE OF PROPOSED RATE CHANGE

In accordance with the requirements of the Public Service Commission of the Commonwealth of Kentucky as set out in 807 KAR 5:069, Section 2, notice is hereby given to the customers of the Carroll County Water District No. 1 of Carroll, Gallatin and Owen Counties, Kentucky, of an change in the District's rate schedule as set forth herein.

The proposed rate change is required by the U.S. Department of Agriculture, acting through Rural Development ("RD") in connection with a loan by RD to the District to be evidenced by the issuance by the District of its Waterworks Revenue Bonds, which RD has agreed to purchase provided the District meets certain conditions of RD, including changing water rates as set forth below:

Current Monthly Rates

First 1,000 gallons	\$12.50 minimum bill
Next 1,000 gallons	5.90 per 1,000 gallons
Next 3,000 gallons	4.85 per 1,000 gallons
Next 35,000 gallons	4.50 per 1,000 gallons
All over 40,000 gallons	2.40 per 1,000 gallons

Bulk Rate \$1.66 per 1,000 gallons

Proposed Monthly Rates

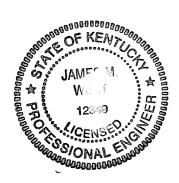
First 1,000 gallons	\$13.50 minimum bill
Next 4,000 gallons	7.50 per 1,000 gallons
Next 5,000 gallons	8.00 per 1,000 gallons
Next 30,000 gallons	5.00 per 1,000 gallons
All over 40,000 gallons	2.80 per 1,000 gallons

Bulk Rate \$1.66 per 1,000 gallons

The RD loan proceeds will be used in conjunction with an RD Grant in the amount of \$410,000 and a contribution from the District in the minimum amount of \$100,000, to finance the cost of extensions, additions and improvements to the existing waterworks system of the District, consisting of the installation of (i) approximately 22,000 linear feet of 10 and 8 inch water main; (ii) approximately 6,000 linear feet of 6 inch water main; (iii) approximately 6,000 linear feet of 4 inch water main; (iv) a 300,000 gallon elevated water storage tank; and (v) a booster pump station and appurtenances. Signed: Dennis Crawford, Chairman, Carroll County Water District No. 1, Carrollton, Kentucky 41008.

Report for Carroll County Water District No. 1 Carroll County, KY

Final Engineering Report – Capacity Upgrade 2007



Prepared by:

STRAND ASSOCIATES, INC.® 629 Washington Street Columbus, IN 47201 www.strand.com

October 2009

James M. West, P.E.

Kentucky Registration No. 12349

Oct. 9, 2009

Date



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SECTION 1
INTRODUCTION

1.01 INTRODUCTION

The Carroll County Water District No. 1 (CCWD) was created and established by order of the Carroll County Court, Carrollton, Kentucky on January 9, 1961, as set forth in KRS 74.010.

The District's service area is generally that portion of Carroll County east of the Kentucky River, excluding the area presently served by Carrollton Utilities (City of Carrollton, Kentucky), a portion of Gallatin County between I-71 and the Ohio River east of the Carroll-Gallatin line and a large portion of Owen County in the northwest quadrant along the Kentucky River between Worthville and the Town of Gratz east to Highway 22.

The service area is bounded on the north by the Ohio River, extends approximately 20 miles south into Owen County, and extends to the east to defined boundaries in Gallatin County.

This report describes and details the water system capacity upgrade of 2007 proposed by the CCWD.

1.02 DEFINITIONS

CCWD Carroll County Water District No. 1

CI cast iron CL Class

CA concrete-asbestos
DR dimension ratio
DI ductile iron

gpm gallons per minute GV&B gate valve and box

NPDES National Pollutant Discharge Elimination System

PVC polyvinyl chloride

PSC Public Service Commission

R/W Right-of-way

RD Rural Development
SDR standard dimension ratio

STA Station

TV&B tapping valve and box WTP Water Treatment Plant

SECTION 2
PRESENT FACILITIES AND CAPACITIES

2.01 PRESENT FACILITIES AND CAPACITIES

The CCWD presently serves 3,025 customers of which 152 are considered commercial or large users (over 20,000 gallons per month) and 32 industrial users.

The CCWD's 179 miles of water distribution mains include 12,250 feet of 10- to 12-inch ductile iron (DI) pipe, 116,424 feet of 8-inch polyvinyl chloride (PVC) pipe; 189,552 feet of 6-inch cast iron (CI), DI, and PVC pipe; 419,496 feet of 4-inch concrete-asbestos (CA) and PVC pipe; and 207,398 feet of 3-inch and smaller PVC pipe.

Water storage for the system is provided by the following:

- One 120.000-gallon standpipe on Jackson Ridge Road, near Worthville.
- One 170,000-gallon standpipe on KY Hwy. No. 355 in Owen County.
- Two 200,000-gallon standpipes located on Dividing Ridge Road near Interstate I-71 and between US 227 and Buck's Run Road in Owen County.
- One 150,000-gallon elevated tanks, located on Kentucky Utility off Black Rock Road in Carroll County.
- One 200,000-gallon elevated storage tank on Squiresville Road in Owen County.
- Four 50,000-gallon ground storage tanks, located at Ghent, Sanders, Worthville and M & T Road at US 42.
- One 500,000-gallon elevated tank on Buck's Run Road.

The CCWD owns and operates two water treatment plants (WTPs) and raw water supply sources consisting of the following:

A. Ghent WTP

- Well No. 1–250 gpm maximum yield, gravel pack design.
- Well No. 2–250 gpm maximum yield, gravel pack design.
- Well No. 3–450 gpm maximum yield, gravel pack design.
- Well No. 4–400 gpm maximum yield, gravel pack design.
- Well No. 5–500 gpm maximum yield, gravel pack design.
- Clearwell Storage–17,500-gallon capacity, concrete in-ground.
- Clearwell Storage—12,000-gallon capacity, steel in-ground.
- Raw Water Storage

 –80,000-gallon capacity, ground storage-steel.
- High Service Pump No. 1–500 gpm capacity, drawing from clearwell.
- High Service Pump No. 2–500 gpm capacity drawing from clearwell.
- High Service Pump No. 3–500 gpm capacity drawing from clearwell.
- High Service Pump No. 4–500 gpm capacity drawing from clearwell.
- Water Plant Building

 –Masonry structure over clearwell.
- Chlorination and Fluoridation Equipment, feeding to clearwell.

B. Gallatin County WTP

- Well No. 7–500 gpm maximum yield, gravel pack design.
- Well No. 8–500 gpm maximum yield, gravel pack design.
- Factory Built WTP building with chlorination and fluoridation equipment with 5,068 feet of 12-inch DI Clearwell Storage (29,000 gallons).

The potential growth for the District is primarily normal residential growth along existing mains at a rate of 3 percent per year. Some commercial growth can be expected in the Town of Ghent, along US 227 near the I-71 interchange, and the industrial area between Ghent and Carrollton on KY Hwy 42 along the Ohio River. No consumers will be added with the currently proposed water system improvements.

SECTION 3
OPERATIONAL STATUS OF SYSTEM

3.01 OPERATIONAL STATUS OF SYSTEM

The existing system has experienced major expansion and growth since 1993. The number of customers served increased approximately 112 percent from 1,452 in 1993 to the current 3,075.

The proposed project will provide a more reliable system by looping Buck's Run Road via South Fork Road to US 42, enabling the existing elevated tank on Buck's Run Road to maintain water pressure to the US 42 area. The 300,000-gallon tank and 6-inch water main proposed for SR 36 will add water storage and system reliability to an area southeast of Carrollton that will soon become underserved because of pipeline limitations on Hwy 36.

The 6-inch water main proposed for Hwy 227 south of Carrollton will improve system flow to a rapidly developing area. A 70 gpm booster station and 4-inch water main on Hwy 227 near Worthville will loop the existing water main on Hwy 227 with an existing water main on Jackson Ridge Road to provide a new source of water to fill the tank on Jackson Ridge Road. This relieves the demand on Hwy 467, which is served by a 4-inch main that is near its capacity. Metering and telemetry improvements for the Ghent, M & T, and Sanders tanks will provide better system monitoring and management. The proposed control valve on Buck's Run Road and Hwy 227 in Owen County will provide flow control and monitoring and a backup supply to all points south. This control valve will also provide a controlled source of water to Owen County if a critical bridge crossing fails.

The project is necessary to allow growth potential for Owen County residents and southernmost customers in Carroll County while maintaining the ability to adequately serve current customers in Carroll County. The project will eliminate pipeline inadequacies on Hwy 36, Hwy 227, and Hwy 467.

SECTION 4
EXISTING WATER SERVICE RATE SCHEDULE

4.01 EXISTING WATER SERVICE RATE SCHEDULE

The monthly rate for water sold by the CCWD as ordered by the Public Service Commission (PSC), effective September 1, 2005, is as follows:

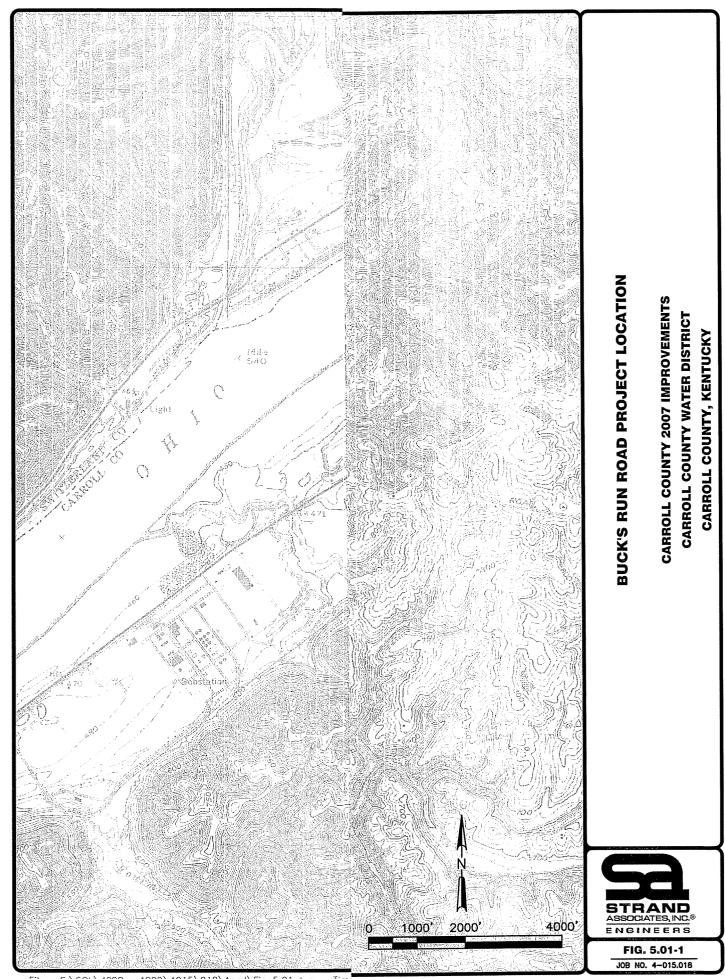
Billing Class	Current Rate
First 1,000 gallons	\$12.50 (minimum bill)
Next 1,000 gallons	\$5.90 per 1,000 gallons
Next 3,000 gallons	\$4.85 per 1,000 gallons
Next 35,000 gallons	\$4.50 per 1,000 gallons
Over 40,000 gallons	\$2.40 per 1,000 gallons
Bulk Sales	\$1.66 per 1,000 gallons

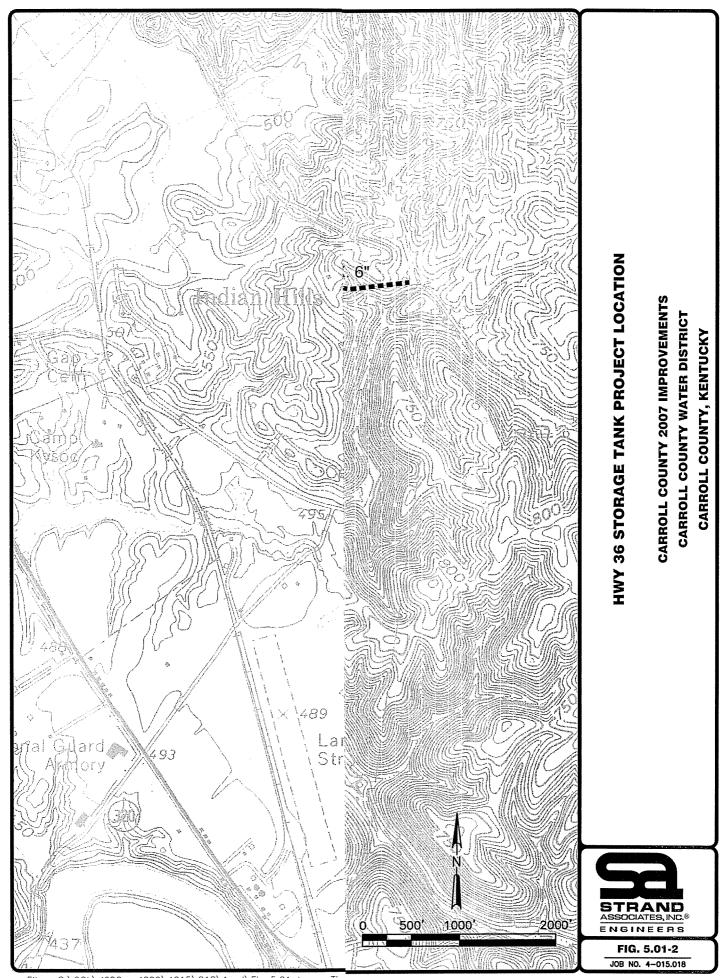
5.01 PROJECT DESCRIPTION

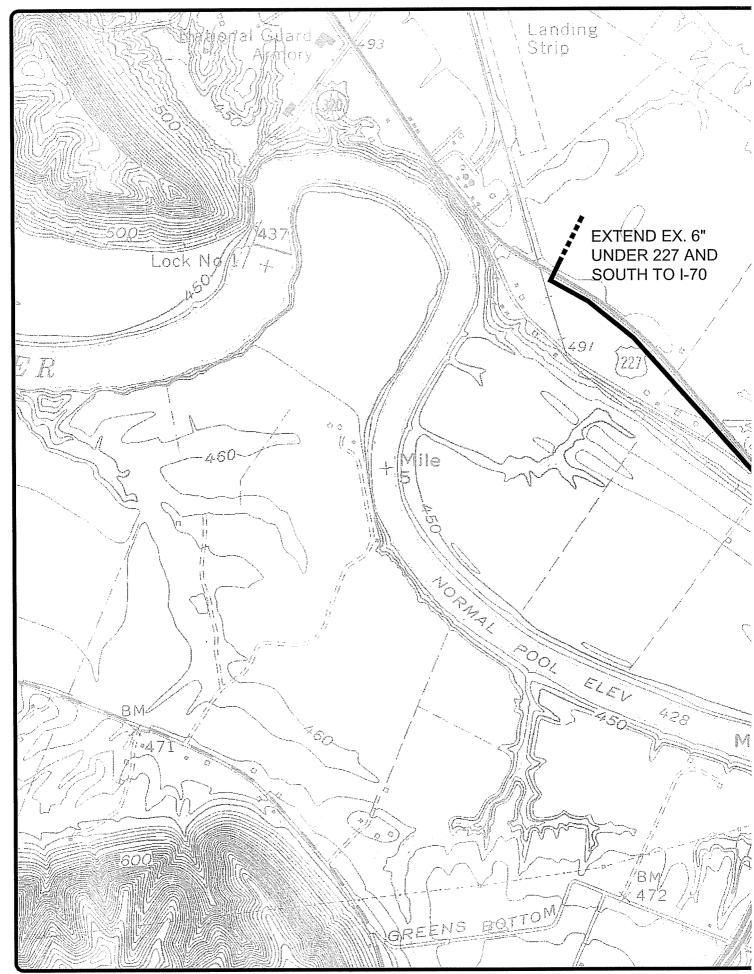
The following projects are included in the proposed 2007 improvements for the CCWD:

- A. Extend and parallel the existing 8-inch water main on Buck's Run Road with 6,400 feet of 8- and 10-inch water main to connect to the Buck's Run tank and connect the tank to South Fork Road and US 42 with approximately 15,500 feet of 8-inch PVC water main.
- B. Construct a 300,000-gallon ground storage tank on Hwy 36 to improve storage for the area southeast of Carrollton.
- C. Extend the 6-inch water main by boring under Hwy 227 and constructing in the right of way of Hwy 227; this includes approximately 6,000 feet to I-71 near Carrollton.
- D. Add a 70 gpm pumping station on Hwy 227 near Worthville with approximately 6,000 feet of 4-inch PVC water main to connect to the existing water main on Jackson Road.
- E. Install a control valve, meter, and telemetry at Buck's Run Road near Highway 227 in Owen County.
- F. Add metering and telemetry on the existing water main at the Sanders tank.
- G. Add a control valve, metering, and telemetry at the Ghent tank and M & T tanks.

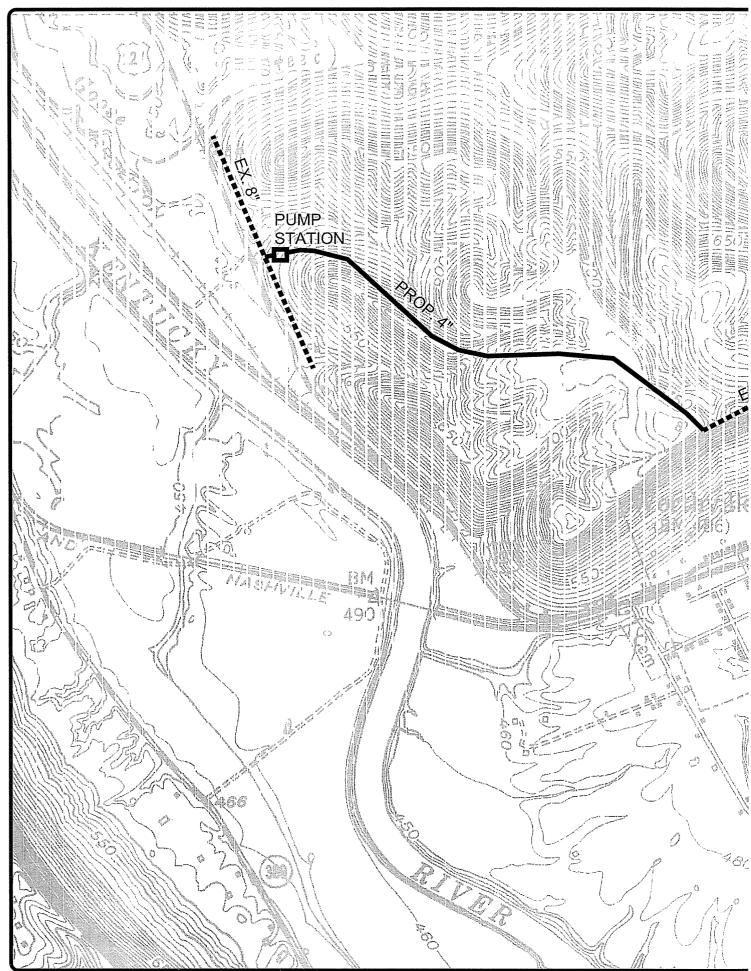
These projects are depicted on the following Figures 5.01-1 through 5.01-4.







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SECTION 6 CONSTRUCTION COSTS

6.01 CONSTRUCTION COSTS

C & H/M Excavating, Inc. was the low bid for the water main extension portion of the project. Table 6.01-1 presents a breakdown of their costs for the proposed 2007 water system improvements.

ltem	Description	Quantity	Unit	Unit Price	Extension
1.	Mobilization, Demobilization, Insurance, Bonds, and all items not associated with construction	1	LS	\$18,896.00	\$18,896.00
2.	Obtain NPDES Construction Stormwater Permit and Provide Erosion Control	1	LS	\$8,750.00	\$8,750.00
3.	Transport and Install 10-in D.I., CL 350 Water Main Furnished by Owner S.R. 1112, STA 0+00 to 46+44	4,644	LF	\$8.95	\$41,563.8
4.	Furnish and Install 8-in D.I., CL 350 or PVC, C-900, DR 14, CL 305, Water Main on S.R. 1112, STA 46+44 to 56+00	1,000	LF	\$15.75	\$15,750.0
5.	Furnish and Install 8-in D.I., CL 350 or PVC, C-900, DR 14, CL 305, South Fork Road	2,750	LF	\$17.00	\$46,750.0
6.	Furnish and Install 8-in PVC, SDR 21, CL 200 Water Main, S.R. 1112 and South Fork Road	16,500	LF	\$9.25	\$152,625.0
7.	Furnish and Install 8-in, D.I., CL 350, or PVC C-900, CL 305, DR 14, Restrained Joint Water Main, South Fork Road, STA 99+30 to 106+50	720	LF	\$20.15	\$14,508.0
8.	Furnish and Install 6-in PVC, SDR 21, CL 200 Water Main	3,500	LF	\$7.05	\$24,675.0
9.	Furnish and Install 6-in D.I., CL 350 Main, S.R. 227, STA 29+20 to 34+97	700	LF	\$17.72	\$12,404.0
10.	Furnish and Install 4-in PVC, C-900, DR 14, CL 305, Restrained Joint Water Main at Worthville STA 0+00 to 23+00	2,400	LF	\$9.50	\$22,800.0
11.	Furnish and Install 4-in PVC, SDR 21, CL 200, Water Main	3,600	LF	\$5.70	\$20,520.0
12.	Furnish and Install 6-in PVC, SDR 21, CL 200, Restrained Joint Water Main by Directional Boring. S.R. 227, STA 22+00 TO 22+50	50	LF	\$45.36	\$2,268.0
13.	Furnish and Install 6-in D.I., CL 350 Restrained Joint Water Main Installed by Directional Boring, S.R. 227, STA 26+75 to STA 29+20	260	LF	\$47.64	\$12,386.4
14.	Tracer Wire, Including Connections and Riser	35,000	LF	\$0.16	\$5,600.0
15.	Furnish and Install 8-in GV&B	9	EA	\$950.00	\$8,550.0
16.	Furnish and Install 6-in GV&B	12	EA	\$666.00	\$7,992.0
17.	Furnish and Install 4-in GV&B	8	EA	\$546.00	\$4,368.0
18.	Furnish and Install 6-in Flushing Hydrant with 6-in GV&B	10	EA	\$2,400.00	\$24,000.0
19.	Furnish and Install 2-1/2-in Flushing Hydrant with 3-in GV&B	2	EA	\$1,677.00	\$3,354.0
20.	Furnish and Install 2-1/2-in Flushing Hydrant with 3-in GV&B and 4-in x 3-in Cutting In Tee and Sleeve at Worthville	1	EA	\$2,177.00	\$2,177.0
21.	Furnish and Install 8-in x 8-in Pressure Tap, Including Tapping Sleeve and 8-in TV&B and 8-in x 10-in Increaser at STA 0+00 Bucks Run Road (S.R. 1112)	1	LS	\$2,160.00	\$2,160.0
22.	Furnish and Install 8-in x 8-in Pressure Tap, Including Tapping sleeve and 8-in TV&B at STA 84+00 Bucks Run Road. (S.R. 1112).	1	LS	\$2,160.00	\$2,160.
23.	Furnish and Install 6-in x 6-in Pressure Tap, Including Tapping Sleeve and 6-in TV&B and 6-in x 8-in Increaser at STA 0+00 South Fork Road	1	LS	\$1,804.00	\$1,804.

Table 6.01-1 Water Main Construction Cost (continued on next page)

ltem	Description	Quantity	Unit	Unit Price	Extension
24.	Furnish and Install 8-in x 8-in Pressure Tap, Including Tapping Sleeve and 8-in TV&B at STA 166+25 South Fork Road	1	LS	\$2,160.00	\$2,160.0
25.	Furnish and Install 6-in Connection to Existing 4-in Water Main at STA 0+00, S.R. 227, Excluding Valves	1	LS	\$1,865.00	\$1,865.0
26.	Furnish and Install 6-in x 4-in Connection at STA 34+97, S.R. 227, Excluding Valves	1	LS	\$1,416.00	\$1,416.0
27.	Furnish and Install 4-in x 4-in Connection at Proposed Worthville Pump Station near S.R. 227, Excluding Valves	. 1	LS	\$1,316.00	\$1,316.0
28.	Furnish and Install 4-in Connection to Existing 4-in Main on Lucas Lane, off Jackson Ridge, Station 51+100, Excluding Valve	1	LS	\$1,101.00	\$1,101.0
29.	Furnish and Install 6-in x 6-in Connections at Proposed Carrollton Tank Site, Excluding Valves	2	EA	\$1,861.00	\$3,722.0
30.	Furnish and Install 4-in Connection to end of Existing 4-in Main along U.S. Highway 47 at Existing Sanders Tank site.	1	LS	\$1,208.00	\$1,208.0
31.	Furnish and Install 6-in Connection to Existing 6-in AC Water Main at Existing M&T Tank, Excluding Valves	2	EA	\$2,187.00	\$4,374.0
32.	Furnish and Install 6-in Check Valves In Vaults at M & T Tank site	2	EA	\$2,209.00	\$4,418.0
33.	Furnish and Install 6-in Connection to Existing M & T Tank, Including Cutting Opening In Steel Tank, Including cutting opening In Steel Tank Wall, Welding 6-in Steel Pipe to Tank Wall, 6-in Steel Pipe 36-in below grade, Pipe Insulation and Coating Repair	1	LS	\$1,941.00	\$1,941.0
34.	Furnish and Install 4-in x 4-in Connection at Proposed Control Valve on Bucks Run Road, Excluding Valves	2	EA	\$985.00	\$1,970.0
35.	Furnish and Install 8-in x 8-in Connection at Proposed Control Valve on Lewis Road, Excluding Valves	2	EA	\$1,720.00	\$3,440.0
36.	Furnish and Install 6-in x 6-in Connection at Proposed New Carrollton Tank, Excluding Valves	2	EA	\$1,770.00	\$3,540.0
37.	Furnish and Install Air Release Valve for 10-in Water Main	1	EA	\$898.00	\$898.0
38.	Furnish and Install Air Release Valve for 8-in Water Main	3	EA	\$888.00	\$2,664.0
39.	Furnish and Install Air Release Valve for 4-in Water Main	2	EA	\$881.00	\$1,762.0
40.	Disconnect Existing Customer Service from Existing Main and Reconnect to Proposed 8-in Main	10	EA	\$410.00	\$4,100.0
41.	Furnish and Install 18-in Steel Casing, Mln. Wall Thickness 0.375-in, Including Installation of 10-in D.I. Water Main Furnished by Owner. S.R. 1112, STA 02+00	30	LF	\$163.00	\$4,890.0
42.	Furnish and Install 14-in Steel Casing, Min. Wall Thickness 0.375-in, under roads, Including 8-in, Restrained Joint, PVC, SDR 21, Class 200 Water Main, South Fork Road, STA 28+75	50	LF	\$144.00	\$7,200.0
43.	Furnish and Install 14-in Steel Casing, Min Wall Thickness 0.375-in, under Railroad, Including 8-in Restrained Joint D.I. Class 350 Main, South Fork Road, STA 20+00	100	LF	\$185.00	\$18,500.0
44.	Furnish and Install 12-in Steel Casing, Min. Wall Thickness 0.375-in, under Roads, Including 6-in, Restrained Joint PVC, SDR 21, Class 200 Main. S.R. 227, STA 0+00 and STA 22+00	110	LF	\$115.16	\$12,667.6
45.	Furnish and Install 14-in Steel Casing, Mln. Wall Thickness 0.375-in, under Railroad, IncludIng6-in, Restrained Joint, D.I. Class 350 Water Main, S.R. 227, STA 34+97	55	lf	\$189.00	\$10,395.0
46.	Cut and Repair of Gravel Roads and Drives for 10-in Main	280	LF	\$7.45	\$2,086.0
47.	Cut and Repair of Gravel Roads and Drives for 8-in Main	650	LF	\$7.45	\$4,842.5
48.	Cut and Repair of Gravel Roads and Drives for 6-in Main	250	LF	\$7.45	\$1,862.5
49.	Cut and Repair of Gravel Roads and Drives for 4-in Main	100	L.F	\$7.45	\$745.0
50.	Cut and Repair of Asphalt Drives for 8-in Main	75	LF	\$30.00	\$2,250.0

Table 6.01-1 Water Main Construction Cost (continued on next page)

tem	Description	Quantity	Unit	Unit Price	Extension
51.	Cut and Repair of Asphalt Drives for 6-in Main	30	LF	\$30.00	\$900.00
52.	Furnish and Install 10-in Class B Stream Crossing	80	LF	\$52.50	\$4,200.00
53.	Furnish and Install 8-in Class C Stream Crossing	270	LF	\$72.00	\$19,440.00
54.	Furnish and Install Worthville Packaged Booster Pumping Station, near U.S. 227, as manufactured by EFI, Including Site Work and Electrical	1	LS	\$75,757.00	\$75,757.00
55.	Furnish and Install, Complete, the South Fork Road Packaged Control Valve Station, as manufactured by EFI, Including Site Work and Electrical	1	LF	\$67,223.00	\$67,223.0
56.	Furnish and Install the proposed Carrollton Water Storage Tank Packaged Control Valve Station as manufactured by EFI, Including Site Work and Electrical	1	LS	\$67,223.00	\$67,223.0
57.	Furnish and Install the Bucks Run Packaged Control Valve Station, as manufactured by EFI, Including Site Work and Electrical	1	LS	\$64,824.00	\$64,824.0
58.	Rehabilitation and Installation of the Lewis Road Packaged Control Valve Station, as manufactured by EFI, Including Site Work and Electrical	1	LS	\$66,324.00	\$66,324.0
59.	Rehabilitation of Existing Control Valve Building at the M & T Storage Tank	1	LS	\$13,178.00	\$13,178.0
60.	Rehabilitation of Existing Control Valve Building at the Sanders Storage Tank	1	LS	\$37,809.00	\$37,809.0
61.	Furnish and Install SCADA System at the Proposed Worthville Booster Station	1	LS	\$17,554.00	\$17,554.0
62.	Furnish and Install SCADA System at the Existing Control Valve Building at the Existing M & T Water Storage Tank	1	LS	\$12,414.00	\$12,414.0
63.	Furnish and Install SCADA System at the Proposed Bucks Run Control Valve Station	1	LS	\$15,423.00	\$15,423.0
64.	Furnish and Install SCADA System at the Existing Ghent Water Storage Tank to Control the Lewis Road Control Valve	1	LS	\$12,914.00	\$12,914.0
65.	Furnish and Install SCADA System at the Lewis Road Control Valve Station	1	LS	\$15,423.00	\$15,423.0
66.	Furnish and Install SCADA System at the Proposed Control Valve Station at the Proposed Carrollton Water Storage Tank	1	LS	\$12,414.00	\$12,414.0
67.	Furnish and Install SCADA System at the South Fork Road Control Valve Station	1	LS	\$15,423.00	\$15,423.0
68.	Furnish and Install Modifications to the Existing SCADA System Control Unit at the Water Office In Ghent	1	LS	\$10,581.00	\$10,581.0
69.	Furnish and Install Granular Fill Parallel and within S.R. R/W	8,000	LF	\$7.00	\$56,000.0
70.	Furnish and Install Stone for Ditch Repair	100	Т	\$20.90	\$2,090.0

Table 6.01-1 Water Main Construction Cost

A. Water Storage Tank Construction

The low bidder for the water storage tank construction portion of the project was Kentucky Glass Lined Tank. The construction cost as submitted in the bid tabulation is provided in Table 6.01-2 on the following page.

ltem	Description	Quantity	Unit	Unit Price	Extension
1.	Foundation and Tank Design and Shop Drawings	1	LS	\$1,000.00	\$1,000.00
2.	Tank Foundation	1	LS	\$53,920.00	\$53,920.00
3.	Tank Fabrication	1	LS	\$105,176.00	\$105,176.00
4.	Tank Erection	1	LS	\$46,000.00	\$46,000.00
5.	Site Work, excluding Drive and Fence	1	LS	\$21,388.00	\$21,388.00
6.	Chain Link Fence and Gate	1	LS	\$8,285.00	\$8,285.00
7.	Access Drive	1	LS	\$19,722.00	\$19,722.00
8.	Tank Disinfection	1	LS	\$1,000.00	\$1,000.00
9.	Tank Hydrodynamic Mixing System	1	LS	\$7,777.00	\$7,777.00
terrerenation se	Water	Storage Tar	ık Cons	truction Cost	\$ 264,268.00

Table 6.01-2 Water Storage Tank Construction Cost

B. Total Construction Cost

The total cost of project construction for the proposed improvements is \$1,414,776.80.

SECTION 7
ESTIMATED PROJECT COST AND FUNDING

7.01 ESTIMATED PROJECT COST AND FUNDING

Table 7.01-1 presents a summary of the estimated total project cost for the proposed water system improvements.

Administrative and Legal Expenses Land, Structures, Rights-of-Way, and Appraisals Architectural and Engineering Fees	\$33,000.00 \$5,000.00
	\$5,000.00
Architectural and Engineering Fees	
	\$106,000.00
Other Architectural and Engineering Fees	\$42,000.00
Project Inspection Fees	\$74,750.00
Purchase of 10-in D.I. Pipe	\$46,080.00
Construction	\$1,414,776.80
Construction Contingency	\$34,393.00
Total	\$1,755,999.80

A line item for purchase of 10-inch D.I. pipe is included in the above table. The pipe was purchased by CCWD from a neighboring water corporation prior to bidding the project. The bid tabulation for water line construction (Table 6.01-1) indicates a cost for transporting the pipe to the site and for its installation, but it does not include the cost for purchasing the 10-inch D.I. pipe.

CCWD proposes to fund this project through a combination of federal grant, federal loan, and local contributions as follows:

Source	Amount
Federal Loan	\$1,246,000.00
Federal Grant	\$410,000.00
Local Contribution	\$100,000.00
Total	\$1,756,000.00

8.01 REVENUE REQUIRED FOR DEBT SERVICE

Table 8.01-1 below presents a summary of the estimated revenue required for the first full year of operation (2011).

ltem	Amount	Annual Percentage Requirement	Annual Debt Service
Revenue Bonds of 1994	\$540,000	4.500%	\$29,295.00
1984 Refinance through KRWA	\$829,000	4.030%	\$115,963.00
Revenue Bonds of 1997	\$1,072,000	4.875%	\$62,166.00
Revenue Bonds of 1997	\$1,194,000	4.875%	\$69,309.00
Revenue Bonds of 1999	\$700,000	4.500%	\$38,868.00
Revenue Bonds of 1999	\$810,000	4.500%	\$44,390.00
Revenue Bonds of 2003	\$1,908,662	3.000%	\$139,082.73
Revenue Bonds of 2005	\$592,000	4.375%	\$32,638.00
Revenue Bonds of 2005	\$319,000	4.125%	\$17,015.00
Revenue Bonds for New Project	\$1,241,600	4.500%	\$67,472.45
(40 years @ 4.5%)			
		Subtotal	\$616,199.18
Required Reserve of 10% Annual Debt Service	AND THE PROPERTY OF THE PROPER		\$13,047.2
(Current Reserves of \$525/Month Plus New Debt Se	rvice)		
	A TOTAL CONTRACTOR OF THE PROPERTY OF THE PROP	Total	\$629,246.43

Table 8.01-1 Estimated Annual Revenue Required To Meet Bond Principal, Interest, and Reserve Requirements

8.02 REVENUE REQUIREMENTS FOR OPERATION AND MAINTENANCE

Item	Cost
First Full Year of Operation - 2011	
Water Treatment Expense	\$15,565
Source of Supply and Pumping Expense	\$102,531
Transmission and Distribution Expense	\$661,930
Customer Accounts Expense	\$170,372
Administrative and General Expense	\$202,381
Total	\$1,152,779

Table 8.02-1 Estimated Annual Revenue Requirement For Operation and Maintenance

8.03 SUMMARY OF TOTAL ANNUAL REVENUE REQUIREMENTS

ltem		Cost
First Full Year of Operation - 2011	0000	
Bond Principal, Interest, and Reserve Requirements	Control of the Contro	\$629,246.43
Operation and Maintenance		\$1,152,779.00
	Total	\$1,782,025.43

Table 8.03-1 Total Average Annual Revenue Requirements

8.04 PROPOSED MONTHLY WATER SERVICE RATE SCHEDULE

Billing Class	Proposed Rate/1,000 gallons
First 1,000 gallons	\$13.50
Next 1,000 gallons	\$7.50
Next 3,000 gallons	\$7.50
Next 5,000 gallons	\$8.00
Next 10,000 gallons	\$5.00
Next 20,000 gallons	\$5.00
Over 40,000 gallons	\$2.80
Bulk Sales	\$1.66

Table 8.04-1 Proposed Monthly Water Service Rate Schedule

The CCWD also desires to increase connection fees for new customers, which is based on the size of the installed meter. The proposed rate for 5/8-inch meter is \$750, while a 1-inch meter is \$1,000. Meters of 2-inches or larger would be charged for the actual cost of installation of the meter.

8.05 PROJECTED WATER USAGE AND INCOME

Projected water usage and income are based on the usage study period from June 30, 2008, to July 1, 2009, as provided in the water usage, revenue charts, and rate calculation spreadsheet following this Section. Water usage is not expected to increase because of this proposed project.

Count	Type	Gallons	Income
36,201	Single Meters	1,447,269	\$1,747,436.12
3000	Multifamily Fees	included above	\$40,500.00
12	Bulk Sales	18,405,200	\$34,909.35
		Total	\$1,821,050.13

Table 8.05-1 Projected Operating Revenue at Proposed Rates

8.06 PROJECTED OPERATING AND NONOPERATING INCOME

Water Sales at Proposed Rates	\$1,821,050.13
New Customer Sales	\$0.00
Disconnect/Reconnect/Late Charges	\$35,000.00
Hydrant Rental/Other Miscellaneous	\$2,500.00
Total	\$1,858,550.13

Table 8.06-1 Projected Operating and Nonoperating Income

8.07 PROJECTED COVERAGE

By using the proposed rate schedule and applying the rates to the projected consumption data, total revenue of \$1,858,550.13 (Table 8.06-1) is anticipated, as shown above. This is an adequate amount to cover the expected annual debt service and operation and maintenance requirements of \$1,782,025.43 (Table 8.03-1). This produces the following coverage.

APPENDIX A
WATER USAGE, REVENUE, AND RATE CALCULATION TABLES

CARROLL COUNTY Rate Study Presuming Grant Funds in the A

	STUDY PERIOD WATER USAGE BY BILLING CLASS						S		
Billing Class		Bills	Avg. Bill	Gallons	1st 1000	next 1000	next 3000	next 5000	next 1000
First1000	23.63%	8652	308	2,665,000	2,665,000				
Next 1000	12.95%	4743	1,575	7,469,200	4,743,000				and the control of th
Next 3000	38.15%	13971	3,439	48,047,792	13,971,000		20,105,792		
Next 5000	18.06%	6612	6,749	44,625,450	6,612,000	·	19,836,000		
Next 10000	4.09%	1499	13,562	20,329,580	1,499,000	(4,497,000		
Next 20000	1.68%	615	27,534	16,933,180	615,000				
Over 40000	1.41%	517	277,617	143,528,136	517,000	517,000	1,551,000	2,585,000	5,170,00
Bulk	0.03%	12	1,662,350	19,948,200					
Total	100.00%	36621		303,546,538	30,622,000	25,940,200	47,834,792	24,720,450	16,659,58

							Existing	Proposed	
						Usage	Rate/1000	Rate/1000	
						Bracket	gallons	gallons*	
						First 1000	\$ 12.50	\$ 13.50	
				A STATE OF THE PARTY OF THE PAR		Next 1000	\$ 5.90	\$ 7.50	
					M. V. T.	Next 3000	\$ 4.85	\$ 7.50	
						Next 5000	\$ 4.50	\$ 8.00	
						Next 10000	\$ 4.50	\$ 5.00	MANAGEMENT Production of the Company
						Next 20000	\$ 4.50	\$ 5.00	
					···	Over 40000	\$ 2.40	\$ 2.80	
					and the same of th	Bulk	\$ 1.66	\$ 1.66	

For Study Period: Jun

CARROLL COUNTY WATER DISTRICT #1 Study Period Water Usage and Revenue Summary

STUDY PERIOD	RESIDENTIAL	US	SAGE AND F	REVENUE
	Usage		Amt.	Cnt.
1000	2,334,800	\$	95,825.00	7660
1000-2000	7,010,400	\$	70,692.24	4441
2000-5000	46,156,400	\$	340,876.64	13441
5000-10000	41,626,700	\$	252,083.45	6195
10000-20000	15,514,700	\$	82,018.70	1168
20000-40000	6,770,000	\$	33,202.90	262
40000+	3,992,400	\$	14,870.96	56
Subtotals	123,405,400	\$	889,569.89	33223

STUDY PERIOD	COMMERCIAL	U	SAGE AND	REVENUE
	Usage		Amt.	Cnt.
1000	210,400	\$	6,962.50	557
1000-2000	312,500	\$	3,304.27	208
2000-5000	887,392	\$	7,793.51	260
5000-10000	1,364,450	\$	10,139.11	189
10000-20000	2,995,380	\$	16,655.81	204
20000-40000	6,819,480	\$	35,430.05	234
40000+	37,893,236	\$	130,459.84	305
Subtotals	50,482,838	\$	210,745.09	1957

STUDY PERIOD	INDUSTRIAL	US	SAGE AND F	REVENUE
	Usage		Amt.	Cnt.
1000	8,700	\$	1,000.00	80
1000-2000	18,500	\$	175.15	10
2000-5000	137,100	\$	960.81	34
5000-10000	210,700	\$	1,251.20	29
10000-20000	413,600	\$	2,143.35	27
20000-40000	1,341,300	\$	6,516.55	46
40000+	100,974,900	\$	256,129.46	146
Subtotals	103,104,800	\$	268,176.52	372

STUDY PERIOD	MULTI-FAN	/ILY	WATER USAG
	REVE	NUE	:
	Usage		Amt.
1000	3,800	\$	162.50
1000-2000	46,700	\$	1,062.50
2000-5000	529,200	\$	5,437.32
5000-10000	1,139,200	\$	8,672.27
10000-20000	1,167,000	\$	7,678.56
20000-40000	1,658,700	\$	9,210.32
40000+	410,000	\$	2,054.00
Subtotals	4,954,600	\$	34,277.47

STUDY PERIOR	STUDY PERIOD PUBLIC GOVERNMENT USAG REVENUE							
	Usage		Amt.					
1000	107,300	\$	4,237.50					
1000-2000	81,100	\$	755.28					
2000-5000	337,700	\$	2,268.35					
5000-10000	284,400	\$	1,812.63					
10000-20000	238,900	\$	1,263.15					
20000-40000	343,700	\$	1,682.50					
40000+	257,600	\$	996.04					
Subtotals	1,650,700	\$	13,015.45					

	STUDY PERIOD BULK USAGI	AND REVEN
	Usage	Amt.
40000+	19,948,200 \$	33,114.01

Report for Carroll County Water District No. 1 Carroll County, KY

Preliminary Engineering Report – Capacity Upgrade 2007

Prepared by:

STRAND ASSOCIATES, INC.® 629 Washington Street Columbus, IN 47201 www.strand.com

January 2008

James M. West, P.E.

Kentucky Registration No. 12349

Oct, 9,2009 Date



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1.01 INTRODUCTION

The Carroll County Water District No. 1 (CCWD) was created and established by order of the Carroll County Court, Carrollton, Kentucky on January 9, 1961, as set forth in KRS 74.010.

The District's service area is generally that portion of Carroll County east of the Kentucky River, excluding the area presently served by Carrollton Utilities (City of Carrollton, Kentucky), a portion of Gallatin County between I-71 and the Ohio River east of the Carroll-Gallatin line and a large portion of Owen County in the northwest quadrant along the Kentucky River between Worthville and the Town of Gratz east to Highway 22.

The service area is bounded on the north by the Ohio River, extends approximately 20 miles south into Owen County, and extends to the east to defined boundaries in Gallatin County.

This report describes and details the water system capacity upgrade of 2007 proposed by the CCWD.

1.02 DEFINITIONS

CCWD	Carroll County Water District #1
E : [: WW L]	Larroll Lounty Water District # C

CI cast iron

CA concrete-asbestos

DI ductile iron

gpm gallons per minute
GV&B gate valve and box

NPDES National Pollutant Discharge Elimination System

PVC polyvinyl chloride

PSC Public Service Commission

RD Rural Development WTP Water Treatment Plant

SECTION 2
PRESENT FACILITIES AND CAPACITIES

2.01 PRESENT FACILITIES AND CAPACITIES

The CCWD presently serves 3,025 customers of which 152 are considered commercial or large users (over 20,000 gallons per month) and 32 industrial users.

The CCWD's 179 miles of water distribution mains include 12,250 feet of 10- to 12-inch ductile iron (DI) pipe, 116,424 feet of 8-inch polyvinyl chloride (PVC) pipe; 189,552 feet of 6-inch cast iron (CI), DI, and PVC pipe; 419,496 feet of 4-inch concrete-asbestos (CA) and PVC pipe; and 207,398 feet of 3- inch and smaller PVC pipe.

Water storage for the system is provided by the following:

- One 120,000-gallon standpipe on Jackson Ridge Road, near Worthville.
- One 170,000-gallon standpipe on KY Hwy. No. 355 in Owen County.
- Two 200,000-gallon standpipes located on Dividing Ridge Road near Interstate I-71 and between US 227 and Buck's Run Road in Owen County.
- One 150,000-gallon elevated tanks, located on Kentucky Utility off Black Rock Road in Carroll County.
- One 200,000-gall on elevated storage tank on Squiresville Road in Owen County.
- Four 50,000-gallon ground storage tanks, located at Ghent, Sanders, Worthville and M & T Road at US 42.
- One 500,000-gallon elevated tank on Buck's Run Road.

The CCWD owns and operates two water treatment plants (WTPs) and raw water supply sources consisting of the following:

A. Ghent WTP

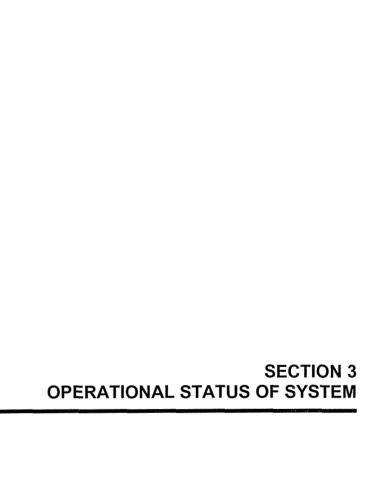
- Well No. 1–250 gpm maximum yield, gravel pack design.
- Well No. 2–250 gpm maximum yield, gravel pack design.
- Well No. 3–450 gpm maximum yield, gravel pack design.
- Well No. 4–400 gpm maximum yield, gravel pack design.
- Well No. 5–500 gpm maximum yield, gravel pack design.
- Clearwell Storage

 17,500-gallon capacity, concrete in-ground.
- Clearwell Storage—12,000-gallon capacity, steel in-ground.
- Raw Water Storage—80,000-gallon capacity, ground storage-steel.
- High Service Pump No. 1–500 gpm capacity, drawing from clearwell.
- High Service Pump No. 2–500 gpm capacity drawing from clearwell.
- High Service Pump No. 3–500 gpm capacity drawing from clearwell.
- High Service Pump No. 4–500 gpm capacity drawing from clearwell.
- Water Plant Building-Masonry structure over clearwell.
- Chlorination and Fluoridation Equipment, feeding to clearwell.

B. Gallatin County WTP

- Well No. 7-500 gpm maximum yield, gravel pack design.
- Well No. 8–500 gpm maximum yield, gravel pack design.
- Factory Built WTP building with chlorination and fluoridation equipment with 5,068 feet of 12-inch DI Clearwell Storage (29,000 gallons).

The potential growth for the District is primarily normal residential growth along existing mains at a rate of 3 percent per year. Some commercial growth can be expected in the Town of Ghent, along US 227 near the I-71 interchange and the industrial area between Ghent and Carrollton on KY Hwy. 42 along the Ohio River. No consumers will be added with the currently proposed water system improvements.



3.01 OPERATIONAL STATUS OF SYSTEM

The existing system has experienced major expansion and growth since 1993. The number of customers served increased from 1,452 in 1993 to the current 3,025, resulting in an increase of approximately 108 percent.

The proposed project will provide a more reliable system by looping Buck's Run Road via South Fork Road to US 42, enabling the existing elevated tank on Buck's Run Road to maintain water pressure to the US 42 area. The 300,000-gallon tank and 6-inch water main proposed for SR 36 will add water storage and system reliability to an area southeast of Carrollton that will soon become underserved because of pipeline limitations on Hwy 36.

The 6-inch water main proposed for Hwy 227 south of Carrollton will improve system flow to a rapidly developing area. A 70 gpm booster station and 4-inch water main on Hwy 227 near Worthville will loop the existing water main on Hwy 227 with an existing water main on Jackson Ridge Road to provide a new source of water to fill the tank on Jackson Ridge Road; this relieves the demand on Hwy 467, which is served by a 4-inch main that is near its capacity. Metering and telemetry improvements for the Ghent, M & T, and Sanders tanks will provide improved system monitoring and management. The proposed control valve on Buck's Run Road and Hwy 227 in Owen County will provide flow control and monitoring and a backup supply to all points south. This control valve will also provide a controlled source of water to Owen County in the event of failure of a critical bridge crossing.

The project is necessary to provide growth potential for Owen County residents and southernmost customers in Carroll County, while maintaining the ability to adequately serve other current customers in Carroll County. The project will eliminate pipeline inadequacies on Hwy 36, Hwy 227, and Hwy 467.



4.01 EXISTING WATER SERVICE RATE SCHEDULE

The monthly rate for water sold by the CCWD as ordered by the Public Service Commission (PSC), effective September 1, 2005, is as follows:

Billing Class	Current Rate
First 1,000 gallons	\$12.50 (minimum bill)
Next 1,000 gallons	\$5.90 per 1,000 gallons
Next 3,000 gallons	\$4.85 per 1,000 gallons
Next 35,000 gallons	\$4.50 per 1,000 gallons
Over 40,000 gallons	\$2.40 per 1,000 gallons
Bulk Sales	\$1.66 per 1,000 gallons

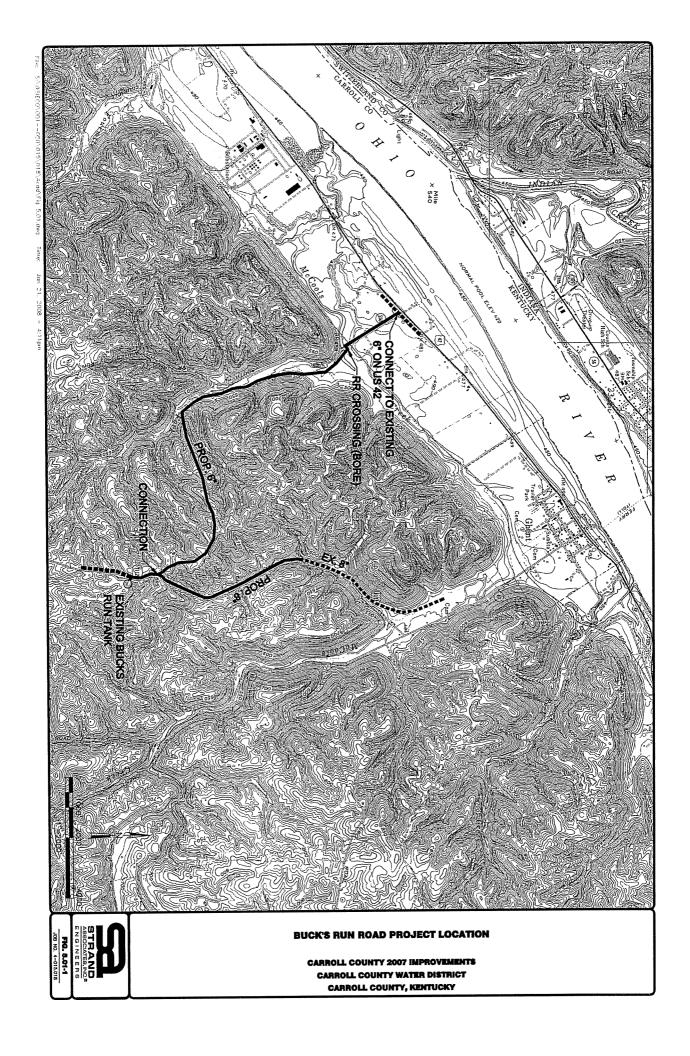


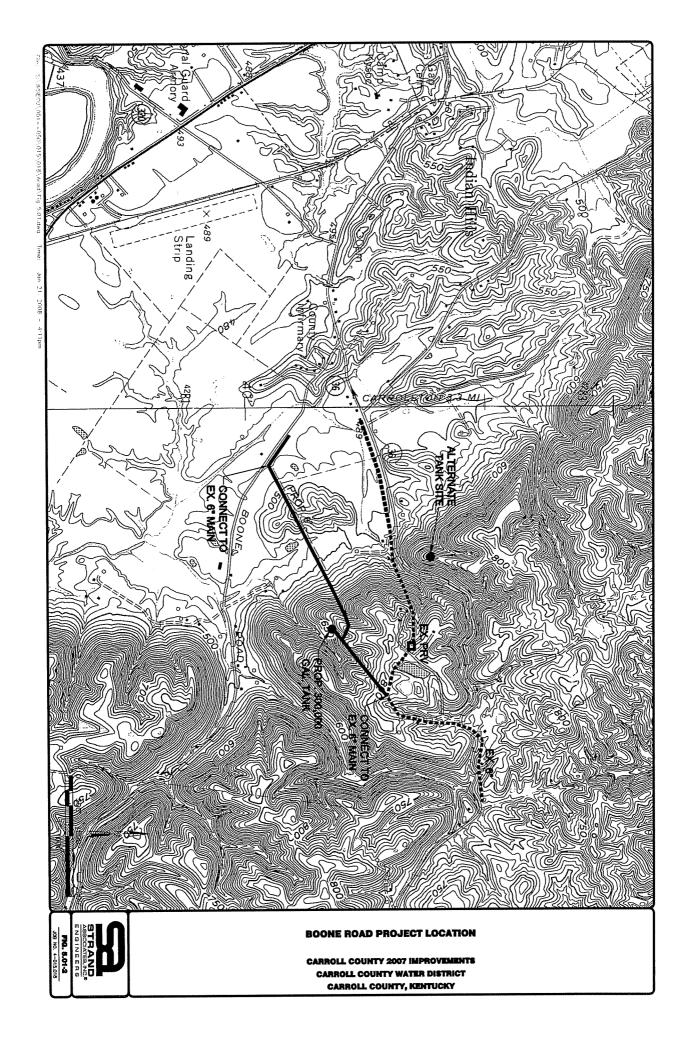
5.01 PROPOSED PROJECT DESCRIPTION

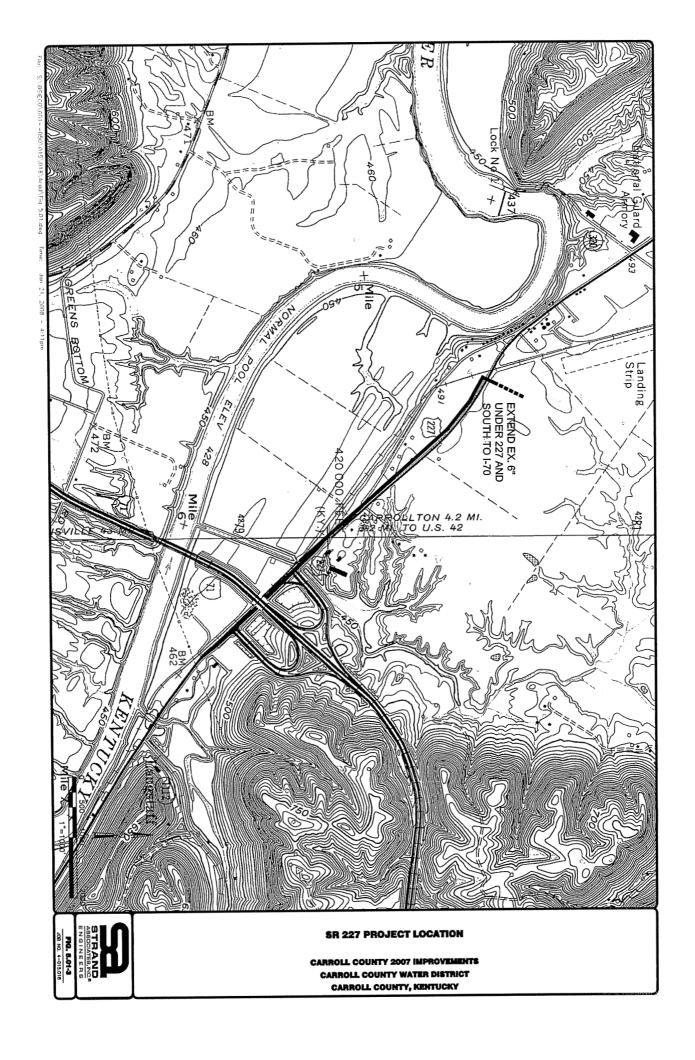
The following projects are included in the proposed 2007 improvements for the CCWD:

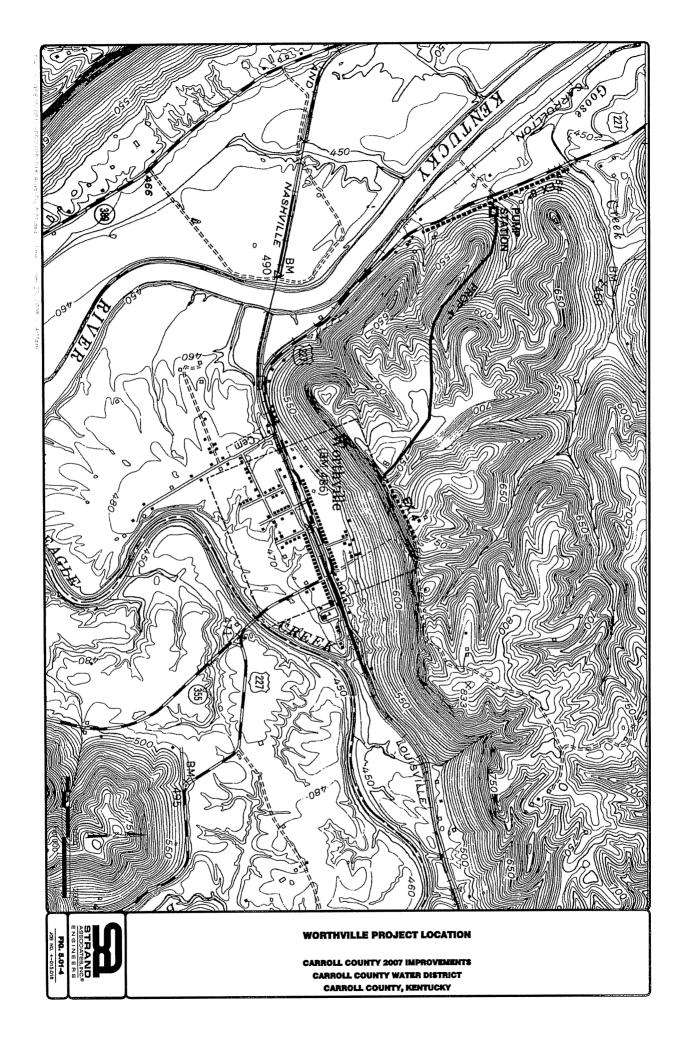
- A. Extend and parallel the existing 8-inch water main on Buck's Run Road with 6,400 feet of 8-inch water main to connect to the Buck's Run tank and connect the tank to South Fork Road and US 42 with approximately 15,500 feet of 6-inch PVC water main.
- B. Construct a 300,000-gallon ground storage tank on Hwy 36 and approximately 3,200 feet of 8-inch PVC water main to connect to the existing 6-inch water main near Boone Road.
- C. Extend the 6-inch water main by boring under Hwy 227 and constructing in the right of way of Hwy 227; this includes approximately 6,000 feet to I-71 near Carrollton.
- D. Add a 70 gpm pumping station on Hwy 227 near Worthville with approximately 6,000 feet of 4-inch PVC water main to connect to the existing water main on Jackson Road.
- E. Install a control valve, meter, and telemetry at Buck's Run Road near Highway 227 in Owen County.
- F. Add metering and telemetry on the existing water main at Sanders tank.
- G. Add a control valve, metering, and telemetry at the Ghent tank and M & T tanks.

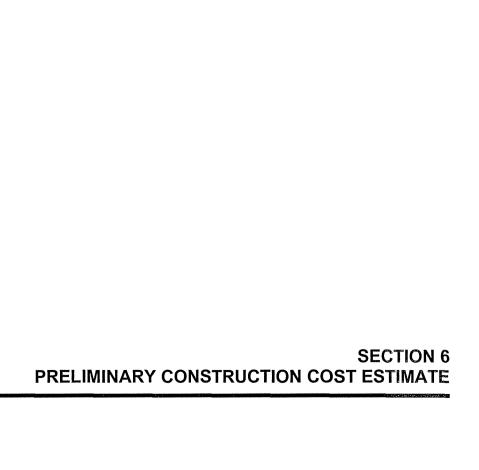
These projects are depicted on the following Figures 5.01-1 through 5.01-4.











6.01 PRELIMINARY CONSTRUCTION COST ESTIMATE

Table 6.01-1 below presents a summary of the preliminary construction cost estimate for proposed 2007 water system improvements.

No.	Description	Quantity	Unit	Unit Cost	Extended Cos
1	8-inch PVC, C-900 Water Main	9,600	LF	\$ 20.00	\$ 192,000.00
2	6-inch PVC, C-900 Water Main	23,500	LF	\$ 15.00	\$ 352,500.00
3	8-inch GV&B	4	EA	\$ 900.00	\$ 3,600.00
4	6-inch GV&B	2	EA	\$ 600.00	\$ 1,200.00
5	6-inch Hydrant with 6-inch GV&B	6	EA	\$ 2,600.00	\$ 15,600.00
6	4-inch PVC C-900	6,000	LF	\$ 12.00	\$ 72,000.00
7	4-inch GV&B	2	EA	\$ 500.00	\$ 1,000.00
8	Air Release Valve for 8-inch Main	4	EA	\$ 800.00	\$ 3,200.00
9	Leak Detector Meter	2	EA	\$ 900.00	\$ 1,800.00
10	Test Markers	10	EA	\$ 55.00	\$ 550.00
11	Detectable Wire	40,000	LF	\$ 0.25	\$ 10,000.00
12	Worthville Booster- 70 gpm	1	LS	\$ 80,000.00	\$ 80,000.00
13	Type "A" 6-inch Connection	2	LS	\$ 1,800.00	\$ 3,600.00
14	Type "A" 8-inch Connection	4	LS	\$ 2,800.00	\$ 11,200.00
15	Road Bore Casing for 6-inch Main	300	LF	\$ 115.00	\$ 34,500.00
16	Class "B" Encasement, 8-inch Main	100	LF	\$ 110.00	\$ 11,000.00
17	Class "B" Encasement, 6-inch Main	100	LF	\$ 100.00	\$ 10,000.00
18	NPDES Permit and Erosion Control	1	LS	\$ 5,000.00	\$ 5,000.00
19	300,000 Gallon Ground Storage Tank	1	LS	\$400,000.00	\$ 400,000.00
20	Hwy 227 Flow Control Valve, Meter and Telemetry Loop	1	LS	\$ 40,000.00	\$ 40,000.00
21	Sanders Tank Meter and Telemetry	1	LS	\$ 30,000.00	\$ 30,000.00
22	Ghent Tank Control Valve, Meter and Telemetry	1	LS	\$ 40,000.00	\$ 40,000.00
23	M&T Tank Control Valve, Meter and Telemetry	1	LS	\$ 40,000.00	\$ 40,000.00
Cotal	Preliminary Construction Cost Estimate				\$1,358,750.0

Table 6.01-1 Preliminary Construction Cost Estimate

SECTION 7
ESTIMATED PROJECT COST

7.01 ESTIMATED PROJECT COST AND FUNDING

Table 7.01-1 below presents a summary of the estimated total project cost for proposed 2007 water system improvements.

Item	Cost
Administrative and Legal Expenses	33,000.00
Land, Structures, Rights-of-Way, and Appraisals	5,000.00
Architectural and Engineering Fees	106,000.00
Other Architectural and Engineering Fees	42,000.00
Project Inspection Fees	74,750.00
Construction	1,358,750.00
Subtotal	1,619,500.00
Contingencies	135,900.00
Total Project Cost	1,755,400

CCWD proposes to fund this project through a combination of federal grant, federal loan and local contributions as follows:

Source	Amount		
Federal Loan	\$1,241,600.00		
Federal Grant	\$413,800.00		
Local Contribution	\$100,000.00		
Total Funds	\$1,755,400.00		

Table 7.01-2 Proposed Project Funding

Prepared by Strand Associates, Inc.® BAR:dh\R:\Documents\Reports\Active\Client\Carroll County\4-015-018.doc



8.01 REVENUE REQUIRED FOR DEBT SERVICE

Table 8.01-1 below presents a summary of the estimated revenue required for the first full year of operation (2009).

ltem	Amount	Annual Percentage Requirement	Annual Debt Service
Revenue Bonds of 1994	\$540,000	4.500%	\$29,295.00
1984 Refinance through KRWA	\$829,000	4.030%	\$115,963.00
Revenue Bonds of 1997	\$1,072,000	4.875%	\$62,166.00
Revenue Bonds of 1997	\$1,194,000	4.875%	\$69,309.00
Revenue Bonds of 1999	\$700,000	4.500%	\$38,868.00
Revenue Bonds of 1999	\$810,000	4.500%	\$44,390.00
Revenue Bonds of 2003	\$1,908,662	3.000%	\$139,082.73
Revenue Bonds of 2005	\$592,000	4.375%	\$32,638.00
Revenue Bonds of 2005	\$319,000	4.125%	\$17,015.00
Revenue Bonds for New Project	\$1,241,600	4.500%	\$67,472.45
(40 years @ 4.5%)			
ing the second s	A - Continue de activit de transport de la continue	Subtotal	\$616,199.18
Required Reserve of 10% Annual Debt Service			\$13,047.25
(Current Reserves of \$525/Month Plus New Debt S Total Revenue Required to Meet Bond Principal, In		erve	
Requirements			\$629,246.43

Table 8.01-1 Estimated Annual Revenue Required To Meet Bond Principal, Interest, and Reserve Requirements

8.02 REVENUE REQUIREMENTS FOR OPERATION AND MAINTENANCE

Item	Cost
First Full Year of Operation - 2009	
Water Treatment Expense	\$15,112.00
Source of Supply and Pumping Expense	\$99,545.00
Transmission and Distribution Expense	\$642,650.00
Customer Accounts Expense	\$165,410.00
Administrative and General Expense	\$196,486.00
Total Estimated Annual Revenue Required for Operation and Maintenance	\$1,119,203.00

Table 8.02-1 Estimated Annual Revenue Requirement For Operation and Maintenance

8.03 SUMMARY OF TOTAL ANNUAL REVENUE REQUIREMENTS

ltem	Cost
First Full Year of Operation - 2009	
Bond Principal, Interest, and Reserve Requirements	\$629,246.43
Operation and Maintenance	\$1,119,203.00
Total Average Annual Revenue Requirements	\$1,748,449.43

8.04 PROPOSED MONTHLY WATER SERVICE RATE SCHEDULE

Billing Class	Proposed Rate/1,000 gallons		
First 1,000 gallons	\$13.00		
Next 1,000 gallons	\$6.80		
Next 3,000 gallons	\$7.50		
Next 5,000 gallons	\$8.00		
Next 10,000 gallons	\$5.50		
Next 20,000 gallons	\$5.00		
Over 40,000 gallons	\$2.65		
Bulk Sales	\$1.75		

Table 8.04-1 Proposed Monthly Water Service Rate Schedule

8.05 PROJECTED WATER USAGE AND INCOME

Projected water usage and income is based on the usage study period 7/01/06 to 6/30/07, as provided in the water usage, revenue charts, and rate calculation spreadsheet following this Section. Water usage is not expected to increase due to this proposed project.

Count	Туре	Gallons	Income
35,450	Single Meters	1,447,269	\$1,725,541.18
2,592	Multi-Family Fees	included above	\$33,696.00
12	Bulk Sales	18,405,200	\$32,209.10
Projected O	perating Revenue Generate	ed at Proposed Rates	\$1,791,446.28

8.06 PROJECTED OPERATING AND NON-OPERATING INCOME

Total Projected Income	\$1,828,946.28
Hydrant Rental/Other Miscellaneous	\$2,500.00
Disconnect/Reconnect/Late Charges	\$35,000.00
New Customer Sales	\$0.00
AND THE RESERVE OF THE PARTY OF	

8.07 PROJECTED COVERAGE

By using the proposed rate schedule and applying the rates to the projected consumption data, total revenue of \$1,828,946.28 (Table 8.06-1) is anticipated, as shown above. This is an adequate amount to cover the expected annual debt service and operation and maintenance requirements of \$1,748,449.43 (Table 8.03-1). This produces the following coverage:

Billing Class		Bills	Avg. Bill	Gallor		Study Period Billing Printout (Actual Revenue)	Difference	Projected Billings at Proposed Rates
First1000	23.44%	8313	308	2,564	12.50	\$ 104,087.50	\$ 175.00	\$ 108,069.00
Next 1000	13.28%	4709	1,567	7,376	02.76	\$ 75,152.75	\$ 549.99	\$ 79,358.31
Next 3000	37.24%	13207	3,454	45,619	5/ 36	\$ 338,741.98	\$ 2,587.62	\$ 405,538.13
Next 5000	18.76%	6652	6,757	44,944	35.72	\$ 276,358.61	\$ 4,592.89	\$ 374,859.28
Next 10000	4.22%	1497	13,436	20,113	56.52	\$ 108,091.10	\$ 1,934.58	\$ 151,494.94
Next 20000	1.47%	521	28,214	14,699	93.24	\$ 74,392.44	\$ 2,799.21	\$ 92,931.95
Over 40000	1.55%	551	301,985	166,393	36.81	\$ 470,444.69	\$ 19,057.88	\$ 513,289.58
Bulk	0.03%	12		18,405	52.63	\$ 30,627.33	\$ 74.70	\$ 32,209.10
					00.00	included above	NA	\$ 33,696.00
Total	100.00%	35462		320,117	24.52	\$1,477,896.40	\$ (628.12)	\$1,791,446.28
						nue vs. Revenue leral Grant Fund		
					equirer Billings		\$ 1,748,449.43 \$ 1,791,446.28 \$ 42,996.86	
					erence	9	2.46% 1.13	
	1							

Study Feriod Wa	ter Osage and R	ev.	enue Summa	ıy		
STUDY PERIOD	RESIDENTIAL	US	SAGE AND R	EVENUUDY PEI	RIOD	
	Usage		Amt.	C Amt.	Cnt.	%
1000	2,248,900	\$	92,050.00	73)87.50	8313	23.44%
1000-2000	6,979,940	\$	70,606.70	44152.75	4709	13.28%
2000-5000	44,033,470	\$	324,717.52	127741.98	13207	37.24%
5000-10000	41,361,660	\$	250,498.89	61358.61	6652	18.76%
10000-20000	16,245,600	\$	85,843.75	12)91.10	1497	4.22%
20000-40000	5,993,600	\$	29,322.45	2392.44	521	1.47%
40000+	6,927,500	\$	24,142.24	444.69	551	1.55%
				627.33	12	0.03%
Subtotals	123,790,670	\$	877,181.55	322		
				396.40	35462	100.00%
STUDY PERIOD	COMMERCIAL	. U	SAGE AND F	REVENU		
	Usage		Amt.	С		
1000	211,000	\$	6,350.00	5		
1000-2000	285,400	\$	3,047.74	1 ;		
2000-5000	857,700	\$	7,472.57	2 2		
5000-10000	1,842,500		•	2		
10000-20000	2,002,270	\$		1		
20000-40000	5,571,830	\$	28,566.47	1		
40000+	35,838,990	\$	131,211.68	2!		
Subtotals	46,609,690	\$	201,377.79	18:		
STUDY PERIC	D INDUSTRIAL	U				
4000	Usage	Φ.	Amt.	Cı		
1000	13,500		•	11		
1000-2000	4,600		46.94	4		
2000-5000	118,500			;		
5000-10000	229,200		•	;		
10000-20000	229,800	\$	1,190.85	•		

1!

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1,305,700 \$ 6,335.45 121,407,900 \$ 306,018.71

123,309,200 \$ 317,168.22

20000-40000

40000+

Subtotals