

CASE

NUMBER:

99.388



Ernie Fletcher
Governor

LaJuana S. Wilcher
Secretary

Commonwealth of Kentucky
Environmental and Public Protection Cabinet
Public Service Commission
211 Sower Blvd.
P.O. Box 615
Frankfort, Kentucky 40602-0615
Telephone: (502) 564-3940
Fax: (502) 564-3460

January 27, 2004

Mr. David C. House
Chairman
Henderson County Water District
P. O. Box 655
Henderson, Kentucky 42419-0655

RE: Case No. 1999-00388
First Reminder Letter

Dear Mr. House:

The Commission entered the enclosed Final Order in this case on November 1, 2000. It was ordered that "Three years from the date of this Order Henderson District shall file an income statement, along with any pro forma adjustments, in sufficient detail to demonstrate that the rates approved herein are sufficient to meet its operating expenses and annual debt service requirements." To date, this information has not been received. Please make the filing, referencing the case number 1999-00388, not later than 15 days from the date of this letter.

If you have questions concerning this letter, please contact Brenda Talley of the Filings Division at (502) 564-3940, extension 435. Otherwise, please mail the required filing to Thomas M. Dorman, Executive Director, **ATTN: Brenda Talley**, Public Service Commission, Post Office Box 615, Frankfort, Kentucky 40602.

Sincerely,

DAVID BROWN

David Brown
Director Division of Filings

Enclosure

/bt

C

CAMPBELL, ROYSTER, CARVER, McBRIDE & CO., LLP
CERTIFIED PUBLIC ACCOUNTANTS
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Henderson, Kentucky 42419-0676

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Members of the Kentucky Society of CPAs
PUBLIC SERVICE COMMISSION

February 7, 2004

Thomas M. Doorman
Executive Director
Public Service Commission
Post Office Box 615
Frankfort, KY 40602

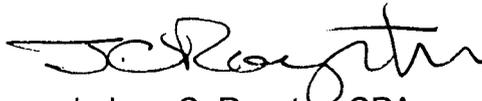
RE: Case No. 1999-00388
Henderson County Water District

Dear Mr. Doorman:

As per your request in your letter dated January 27, 2004, I have enclosed my computation of the Henderson County Water District's debt service coverage. The computations are based on the audited financial statements for the year ended August 31, 2003, a copy of which is enclosed. The computation reflects a debt service coverage of 1.3311, which exceeds the required coverage of 1.3 required in the bond resolutions.

I apologize for the tardiness of this information, but it was simply overlooked by the superintendent of the District and me. If you have any questions or find you need additional information, please contact me at (207) 826-4474.

Sincerely,



Judson C. Royster, CPA

Enclosures (2)

cc: Alan VanMeter

**HENDERSON COUNTY WATER DISTRICT
COMPUTATION OF DEBT SERVICE COVERAGE
AS OF AUGUST 31, 2003
BASED ON AUDIT FINANCIAL STATEMENTS**

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PUBLIC SERVICE
COMMISSION

Operating revenues:	
Water	\$ 1,850,676
Penalties and sundry	63,501
Total operating revenues	1,914,177
Operating expenses:	
Purchased water	686,055
Pumping utilities	24,877
Maintenance of system(schedule)	139,616
Vehicle and equipment(schedule)	23,618
Customer accounts (schedule)	89,346
Administration (schedule)	329,404
Depreciation and amortization	383,080
Total operating expenses	1,675,996
Operating income	238,181
Nonoperating revenues (expenses):	
Interest income	35,878
Gain (loss) on sale of equipment	409
Interest expense-refundable deposits, building loan and other	(3,160)
Interest expense - bonds	(311,158)
Interest expense-KIA debt	(28,758)
Loan service fees	(1,250)
Amortization of bond issue costs	(27,113)
Total nonoperating revenues (expenses)	(335,152)
Net income (loss)	\$ (96,971)
Debt service requirement-Bonds Only:	
Add back:	
Depreciation	\$ 383,080
Interest expense	311,158
Net revenues available	597,267
Maximum debt service	\$ 448,698
Coverage	1.3311

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PUBLIC SERVICE
COMMISSION

HENDERSON COUNTY WATER DISTRICT

FINANCIAL STATEMENTS

Years Ended August 31, 2003 and 2002

HENDERSON COUNTY WATER DISTRICT
FINANCIAL STATEMENTS
Years Ended August 31, 2003 and 2002

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INDEPENDENT AUDITOR'S REPORT

To the Board of Commissioners
Henderson County Water District
Henderson, Kentucky 42420

We have audited the accompanying financial statements of Henderson County Water District, as of and for the years ended August 31, 2003 and 2002, as listed in the table of contents. These financial statements are the responsibility of Henderson County Water District, management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Henderson County Water District, as of August 31, 2003 and 2002, and the results of its operations and cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

In accordance with *Government Auditing Standards*, we have also issued our report dated October 27, 2003, on our consideration of Henderson County Water District's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and grants. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be read in conjunction with this report in considering the results of our audits.

Our audits were conducted for the purpose of forming an opinion on the financial statements taken as a whole. The supplementary financial information listed in the table of contents is presented for purposes of additional analysis and is not a required part of the financial statements of Henderson County Water District. Such information has been subjected to the auditing procedures applied in the audit of the financial statements and, in our opinion, is fairly presented in all material respects in relation to the financial statements taken as a whole.

Campbell Royster Carver McBride & Co., LLP
Campbell, Royster, Carver, McBride & Co., LLP

October 27, 2003

HENDERSON COUNTY WATER DISTRICT

Balance Sheets

August 31, 2003 and 2002

	2003	2002
<u>ASSETS</u>		
Current assets:		
Cash and cash equivalents	\$ 498,159	\$ 595,222
Investments, at cost	196,967	187,097
Accounts receivable (net of allowances for uncollectibles):		
Water	236,847	273,984
Other	828	802
Accrued interest receivable	4,669	10,205
Inventories	34,553	44,187
Prepaid expenses	28,268	19,212
	<u>1,000,291</u>	<u>1,130,709</u>
Restricted assets:		
Cash and cash equivalents	601,550	929,650
Investments, at cost	489,847	669,844
	<u>1,091,397</u>	<u>1,599,494</u>
Property, plant and equipment:		
Land	162,208	162,208
Buildings and improvements	611,034	611,034
Improvements other than buildings	12,837,753	12,540,566
Machinery and equipment	298,077	285,776
Office equipment	61,112	53,036
Construction in progress	670,917	34,467
	<u>14,641,101</u>	<u>13,687,087</u>
Less: accumulated depreciation	4,101,728	3,790,565
	<u>10,539,373</u>	<u>9,896,522</u>
Other assets:		
Other receivable	149,790	147,848
Unamortized bond discount and fees	176,429	160,704
Deferred charges, net	7,208	10,555
	<u>333,427</u>	<u>319,107</u>
	<u>10,872,800</u>	<u>10,211,631</u>
	<u>12,964,488</u>	<u>12,945,832</u>
	<u>\$ 12,964,488</u>	<u>\$ 12,945,832</u>

	2003	2002
<u>LIABILITIES AND EQUITY</u>		
Liabilities:		
Current liabilities (payable from current assets):		
Current portion of notes payable	\$ 30,794	\$ 20,734
Accounts payable	81,779	88,241
Accrued liabilities	25,588	25,711
Customer deposits	41,815	40,820
Total current liabilities (payable from current assets)	<u>179,976</u>	<u>175,506</u>
Current liabilities (payable from restricted assets):		
Retainage payable	46,294	11,264
Contracts payable	139,887	---
Accrued interest	129,858	167,083
Current portion of notes payable	61,173	55,859
Current portion of revenue bonds payable	75,000	160,000
Total current liabilities (payable from restricted assets)	<u>452,212</u>	<u>394,206</u>
Long-term debt:		
Notes payable - net of current portion	533,041	591,162
Revenue bonds payable - net of current portion	5,154,185	5,557,158
Total long-term debt	<u>5,687,226</u>	<u>6,148,320</u>
Total liabilities	<u>6,319,414</u>	<u>6,718,032</u>
Equity:		
Contributed capital:		
Tap fees	1,481,888	1,411,763
Contributions in aid of construction	3,340,956	2,896,836
Total contributed capital	<u>4,822,844</u>	<u>4,308,599</u>
Retained earnings:		
Reserved for debt retirement	596,141	823,200
Unreserved	1,226,089	1,096,001
Total retained earnings	<u>1,822,230</u>	<u>1,919,201</u>
Total equity	<u>6,645,074</u>	<u>6,227,800</u>
Total liabilities and equity	<u>\$ 12,964,488</u>	<u>\$ 12,945,832</u>

HENDERSON COUNTY WATER DISTRICT
 Statements of Revenues, Expenses and Retained Earnings
 Years Ended August 31, 2003 and 2002

	2003	2002
Operating revenues:		
Water	\$ 1,850,676	\$ 1,845,635
Penalties and sundry	<u>63,501</u>	<u>61,191</u>
Total operating revenues	<u>1,914,177</u>	<u>1,906,826</u>
Operating expenses:		
Purchased water	686,055	627,124
Pumping utilities	24,877	20,694
Maintenance of system	139,616	160,934
Vehicle and equipment	23,618	26,944
Customer accounts	89,346	78,353
Administration	329,404	293,521
Depreciation	<u>383,080</u>	<u>373,123</u>
Total operating expenses	<u>1,675,996</u>	<u>1,580,693</u>
Operating income	<u>238,181</u>	<u>326,133</u>
Nonoperating revenues (expenses):		
Interest income	35,878	83,567
Gain on sale of assets	409	----
Interest expense - notes	(36,008)	(40,024)
Interest expense - bonds	(322,923)	(331,415)
Amortization of debt issue costs	<u>(12,508)</u>	<u>(12,621)</u>
Total nonoperating revenues (expenses)	<u>(335,152)</u>	<u>(300,493)</u>
Net income (loss)	(96,971)	25,640
Retained earnings, beginning of year	<u>1,919,201</u>	<u>1,893,561</u>
Retained earnings, end of year	<u>\$ 1,822,230</u>	<u>\$ 1,919,201</u>

HENDERSON COUNTY WATER DISTRICT
 Statements of Cash Flows
 Years Ended August 31, 2003 and 2002

	2003	2002
Cash flows from operating activities:		
Cash received from customers	\$ 1,887,813	\$ 1,809,146
Cash payments to suppliers for goods and services	(914,524)	(812,076)
Cash payments to employees for services	(394,182)	(381,360)
Other operating revenues	<u>63,501</u>	<u>61,191</u>
Net cash provided (used) by operating activities	<u>642,608</u>	<u>676,901</u>
Cash flows from noncapital financing activities:		
(Increase) decrease in deferred charges	(5,700)	9,047
Increase (decrease) in customer deposits	<u>995</u>	<u>(4,574)</u>
Net cash provided (used) by noncapital financing activities	<u>(4,705)</u>	<u>4,473</u>
Cash flows from capital and related financing activities:		
Acquisition and construction of capital assets	(860,541)	(332,585)
Proceeds from sale of assets	5,901	----
Tap fees	70,125	45,150
Contributed capital in aid of construction	444,120	333,450
Proceeds from issuance of revenue bonds and other capital notes	985,217	----
Bond discount and issuance costs	(34,622)	----
Principal paid on revenue bond maturities and other capital notes	(1,502,053)	(227,159)
Interest paid on revenue bonds and other capital notes	<u>(380,786)</u>	<u>(359,835)</u>
Net cash provided (used) by capital and related financing activities	<u>(1,272,639)</u>	<u>(540,979)</u>
Cash flows from investing activities:		
(Increase) decrease in other receivables	(1,968)	(3,161)
(Increase) decrease in investment securities	170,127	(74,954)
Interest income	<u>41,414</u>	<u>86,885</u>
Net cash provided (used) by investing activities	<u>209,573</u>	<u>8,770</u>
Net increase (decrease) in cash and cash equivalents	(425,163)	149,165
Cash and cash equivalents, beginning of year	<u>1,524,872</u>	<u>1,375,707</u>
Cash and cash equivalents, end of year	<u>\$ 1,099,709</u>	<u>\$ 1,524,872</u>

	2003	2002
Reconciliation of operating income to net cash provided (used) by operating activities:		
Operating income	\$ 238,181	\$ 326,133
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation	383,080	373,123
(Increase) decrease in accounts receivable	37,137	(36,489)
(Increase) decrease in inventories	(149)	3,292
(Increase) decrease in prepaid expenses	(9,056)	(3,035)
Increase (decrease) in accounts payable	(6,462)	12,303
Increase (decrease) in accrued liabilities	<u>(123)</u>	<u>1,574</u>
Net cash provided (used) by operating activities	<u>\$ 642,608</u>	<u>\$ 676,901</u>

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The Henderson County Water District ("Water District") was created by the fiscal court of Henderson County under the provisions authorized by Chapter 74 of the Kentucky Revised Statutes.

The accounting and reporting policies of the Water District conform to generally accepted accounting principles applicable to governmental units. Generally accepted accounting principles for governmental units include those principles prescribed by the Governmental Accounting Standards Board (GASB), the American Institute of Certified Public Accountants in the publication entitled Audits of State and Local Governmental Units and by the Financial Accounting Standards Board (FASB). As allowed in GASB's Codification of Governmental Accounting and Financial Reporting Standards, the Water District has elected not to apply to its proprietary activities Financial Accounting Standards Board Statements and Interpretations, Accounting Principles Board Opinions, and Accounting Research Bulletins issued after November 30, 1989. The more significant accounting policies of the Water District are described below.

Reporting Entity

The financial statements of the Henderson County Water District include the funds comprising the primary government. In evaluating how to define the Water District for financial reporting purposes, management has considered any potential component units, based upon the Water District's ability to exercise significant oversight responsibility. Oversight responsibility was determined on the basis of the Water District's ability to significantly influence operations, select the governing body, participate in fiscal management and the scope of public service. Based upon the application of these criteria, no potential component units were noted.

Fund Types

A fund or account group is an accounting entity with a self-balancing set of accounts established to record the financial position and results of operations of a specific governmental activity. The Water District maintains the following fund type:

Proprietary Fund Type:

Proprietary Funds are accounted for on a flow of economic resources measurement focus. The accounting objectives are a determination of net income, financial position and changes in cash flow. All assets and liabilities associated with a proprietary fund's activities are included on its balance sheet. Proprietary fund equity is segregated into contributed capital and retained earnings.

Measurement Focus/Basis of Accounting

Measurement focus refers to what is being measured; basis of accounting refers to when revenues and expenditures are recognized in the accounts and reported in the financial statements. Basis of accounting relates to the timing of the measurement made, regardless of the measurement focus applied.

Proprietary fund types are accounted for on an economic resources measurement focus using the accrual basis of accounting. Revenues are recorded when they are earned, including unbilled water services which are accrued. Expenses are recorded at the time liabilities are incurred.

Inventories

Inventories are carried at the lower of cost (primarily first-in, first-out) or market.

Investments

Investments are carried at cost. Gains or losses are recognized when investments are sold or redeemed.

Donated Lines

From time to time prospective users have constructed and paid for line extensions and donated these additions to the Water District. These additions are recorded at cost invoiced to the user and are depreciated at rates based on their estimated useful life. Such additions are recorded as contributed capital.

Property, Plant and Equipment

Property, plant and equipment owned by proprietary funds are recorded at cost or, if contributed property, at their fair market value at the time of contribution. Repairs and maintenance are recorded as expenses; renewals and betterments are capitalized. Construction period interest is capitalized to property, plant and equipment.

Depreciation of all exhaustible fixed assets used by proprietary funds is charged as an expense against their operations. Accumulated depreciation is reported on proprietary fund balance sheets. Depreciation has been provided over the estimated useful lives using the straight-line method. The estimated useful lives are as follows:

Building and improvements	10-50
Improvements other than building	15-50
Machinery and equipment	5-10
Office equipment and fixtures	5-10

Tap Fees

Tap fees collected from new customers are recorded as contributed capital. The cost of installing the service lines and setting the water meters are capitalized and depreciated over their estimated useful lives.

Other Assets

Other assets subject to amortization include unamortized bond discount and fees, and deferred Public Service Commission ("PSC") rate case expenses. Unamortized bond discount and fees are being amortized on a straight-line basis over the life of the related debt. Deferred PSC rate case expenses are being amortized on a straight-line basis over a three year period, beginning with the date of the PSC rate order.

Accumulated Compensated Absences

Accumulated unpaid vacation amounts are accrued when incurred. The accrued compensated balance at August 31, 2003 and 2002 was \$11,432 and \$9,620, respectively.

Statement of Cash Flows

For the purposes of the Statement of Cash Flows, all highly liquid investments with a maturity of three months or less are considered to be cash equivalents.

Reclassifications

Certain accounts in the prior-year totals have been reclassified for comparative purposes to conform with the presentation in the current-year financial statements.

NOTE 2 - ALLOWANCE FOR UNCOLLECTIBLE ACCOUNTS

The allowance for uncollectible accounts receivable at August 31, 2003 and 2002 was \$24,596 and \$19,577, respectively.

NOTE 3 - CASH AND CASH EQUIVALENTS

Kentucky Revised Statutes authorize governmental units to invest in obligations of the United States and its agencies, obligations of the Commonwealth of Kentucky and its agencies, shares in savings and loan associates insured by federal agencies and deposits in national or state chartered banks insured by federal agencies and larger amounts in such institutions providing such banks pledge as security obligations of the United States government or its agencies.

At August 31, 2003, the Water District's demand and time deposits with the local custodial banks were fully covered by federal depository insurance or by pledged collateral held by the custodial banks in the Water District's name.

NOTE 4 - INVESTMENTS

Investments stated at cost consisted of the following at August 31, 2003 and 2002:

	<u>2003</u>	<u>2002</u>
Unrestricted:		
Certificates of deposit	\$ 196,967	\$ 187,097
Restricted:		
Certificates of deposit	<u>489,847</u>	<u>669,844</u>
	<u>\$ 686,814</u>	<u>\$ 856,941</u>

NOTE 5 - RISK MANAGEMENT

The Water District is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. Significant

losses are covered by commercial insurance for all major programs. There have been no significant reductions in insurance coverage and settlement amounts have not exceeded insurance coverage for the current year or the three prior years.

NOTE 6 - CHANGES IN PROPERTY, PLANT AND EQUIPMENT

A summary of changes in property, plant and equipment follows:

	Balance 8/31/2002	Additions	Disposals/ Transfers	Balance 8/31/2003
Land	\$ 162,208	\$ ----	\$ ----	\$ 162,208
Building and improvements	611,034	----	----	611,034
Improvements other than buildings	12,540,566	297,187	----	12,837,753
Machinery and equipment	285,776	89,710	77,409	298,077
Office equipment and fixtures	53,036	8,076	----	61,112
Construction in progress	34,467	636,450	----	670,917
	<u>\$ 13,687,087</u>	<u>\$ 1,031,423</u>	<u>\$ 77,409</u>	<u>\$ 14,641,101</u>

Construction commitments included in construction in progress are as follows:

	Project Auth.	Expended 8/31/2003	Committed
Water line extension project	\$ <u>1,117,803</u>	\$ <u>670,917</u>	\$ <u>446,886</u>

NOTE 7 - CHANGES IN LONG-TERM DEBT

The following is a summary of revenue bond and note transactions of the Water District for the year ended August 31, 2003:

	Notes Payable	Revenue Bonds	Totals
Bonds/notes payable-August 31, 2002	\$ 667,755	\$ 5,717,158	\$ 6,384,913
Bonds/notes issued	30,217	955,000	985,217
Bonds/notes retired	(77,053)	(1,425,000)	(1,502,053)
Increase in deferred valuation amount on debt refunding/restructuring	----	(29,739)	(29,739)
Amortization of deferred valuation amount on debt refunding/restructuring	4,089	11,766	15,855
Bonds/notes payable-August 31, 2003	<u>\$ 625,008</u>	<u>\$ 5,229,185</u>	<u>\$ 5,854,193</u>

On August 28, 2003, the Henderson County Water District issued \$955,000 Kentucky Rural Water Finance Corporation Public Projects Refunding Revenue Bonds Series 2003 B, interest ranging from 2.0% to 4.5%.

to advance refund outstanding 1993 Water Refunding Revenue Bonds and 1994 Water Refunding Revenue Bonds with outstanding balances of \$450,000 and \$815,000, respectively. \$401,333 of current debt service reserve and bond sinking funds were used toward the payoff of the 1993 and 1994 refunding revenue bonds. The advance refunding resulted in a difference between the reacquisition price and the net carrying amount of the 1993 and 1994 series bonds of \$110,815. This difference, reported in the accompanying financial statements as a deduction from bonds payable, will be charged to operations through the year 2014 using the effective-interest method.

On April 1, 1998, the Henderson County Water District executed a supplemental assistance agreement with the Kentucky Infrastructure Authority to restructure its existing loans to take advantage of lower market interest rates. The loan restructuring increased the outstanding principal balance by \$53,846. The loan restructuring costs are reported in the accompanying financial statements as a deduction from notes payable, and are being charged to operations (included in "interest expense") through the year 2011.

Bonds/notes payable at August 31, 2003 and 2002 are comprised of the following:

<u>Notes Payable:</u>	<u>2003</u>	<u>2002</u>
Note payable to Henderson County Fiscal Court, payable in annual installments of \$2,016 for 25 years, beginning in 1989; non-interest bearing	\$ 22,176	\$ 24,192
Note payable to Old National Bank, dated August 16, 2001, payable in monthly installments of \$1,131 including interest at 5.0%, through August 16, 2006, secured by real estate	37,655	48,995
Notes payable to Kentucky Infrastructure Authority, dated April 1, 1998, due in annual installments of \$46,825 to \$82,450 through June 1, 2011, interest payable semiannually on December 1 and June 1 at 4.75%	569,174	625,033
Note payable to Case Credit, dated May 28, 2000, payable in monthly installments of \$607 including interest at 6.5%, through May 28, 2003, secured by equipment	----	5,319
Note payable to Edgar County Bank & Trust dated July 30, 2003, payable in monthly installments of \$1,320 including interest at 4.96%, through June 30, 2005, secured by equipment	27,697	----
Deferred valuation amount on debt restructuring	(31,694)	(35,784)
	<u>625,008</u>	<u>667,755</u>
Less: current portion	<u>91,967</u>	<u>76,593</u>
	<u>\$ 533,041</u>	<u>\$ 591,162</u>
 <u>Revenue Bonds:</u>		
\$1,250,000 Water Refunding Revenue Bonds of 1993 dated March 1, 1993 due in annual installments of \$65,000 to \$120,000 through September 1, 2006, interest payable semiannually on March 1 and September 1, escalating from 3% to 5.75%	\$ ----	\$ 550,000

\$1,220,000 Water Refunding and Improvement Revenue Bonds dated January 1, 1994 due in annual installments of \$35,000 to \$90,000 through September 1, 2014, interest payable semiannually on March 1 and September 1, escalating from 4.5% to 5.2%	----	865,000
\$1,800,000 Water Revenue Bonds dated July 1, 1997 due in annual installments of \$5,000 to \$200,000 through September 1, 2022, interest payable semiannually on March 1 and September 1, escalating from 4.5% to 5.6%	1,770,000	1,775,000
\$2,625,000 Water Revenue Bonds dated June 1, 2000 due in annual installments of \$5,000 to \$330,000 through September 1, 2025, interest payable semiannually on March 1 and September 1, escalating from 5.1% to 5.75%	2,615,000	2,620,000
\$955,000 Public Projects Water Refunding Revenue Bonds dated August 15, 2003 due in annual installments of \$65,000 to \$100,000 through February 1, 2015, interest payable semiannually on February 1 and August 1, escalating from 2.0% to 4.5%	955,000	----
Deferred valuation amount on debt refunding	(110,815)	(92,842)
	<u>5,229,185</u>	<u>5,717,158</u>
Less: current portion	75,000	160,000
	<u>\$ 5,154,185</u>	<u>\$ 5,557,158</u>

The annual requirements to amortize all bonds/notes outstanding as of August 31, 2003, including interest payments of \$4,260,728 are as follows:

<u>Year ending August 31</u>	<u>Notes Payable</u>	<u>Revenue Bonds</u>	<u>Total</u>
2004	\$ 118,570	\$ 348,957	\$ 467,527
2005	115,959	363,302	479,261
2006	102,494	361,168	463,662
2007	88,788	358,745	447,533
2008	88,336	448,697	537,033
Thereafter	<u>271,512</u>	<u>7,448,393</u>	<u>7,719,905</u>
	<u>\$ 785,659</u>	<u>\$ 9,329,262</u>	<u>\$ 10,114,921</u>

There are a number of limitations and restrictions contained in the various bond indentures. The Water District is in compliance with all significant limitations and restrictions.

NOTE 8 - PENSION PLAN

A. Plan Description

The Henderson County Water District contributes to the County Employees Retirement System (CERS), a cost-sharing multiple-employer defined benefit pension plan administered by the

Kentucky Retirement System (KRS). CERS provides for retirement, disability and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living (COLA) adjustments are provided at the discretion of the State Legislature. Section 61.645 of the Kentucky Revised Statutes assigns the authority to administer the CERS to the KRS Board of Trustees. The KRS issues a publicly available financial report that includes financial statements and required supplementary information for CERS. That report may be obtained by writing to Kentucky Retirement Systems, Perimeter Park West, 1260 Louisville Road, Frankfort, Kentucky 40601.

B. Funding Policy

Plan members are required to contribute 5.0% of their annual creditable compensation and the Water District is required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. The current rate is 6.34% of annual creditable compensation. The Water District's contributions to CERS for the years ending August 31, 2003, 2002, and 2001 were \$18,315, \$18,142, and \$18,758, respectively, equal to the required contributions for each year.

NOTE 9 - OTHER EMPLOYEE BENEFITS

Compensated Absences

All employees of the Water District earn and accrue vacation and sick time. The maximum number of vacation days that can be earned is twenty. Sick leave may be accumulated with a maximum of sixty-five days. An employee leaving for any reason, including retirement, will be paid their accumulated vacation. This liability is recorded in the financial statements.

Post Employment Benefits

In addition to the pension benefits described in Note 8, the Water District participates in the Kentucky Retirement Systems Insurance Fund (Fund). The Fund was created by the Kentucky General Assembly pursuant to the provisions of KRS 61.701 to provide hospital and medical insurance for members receiving benefits from the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System (Systems). The Fund and members receiving benefits pay prescribed portions of the aggregate premiums paid by the Fund. For the year, insurance premiums withheld from benefit payments to members of the Systems approximated \$16,462,261 and \$355,816 for KERS and KERS hazardous, respectively, \$15,190,421 and \$1,299,220 for CERS and CERS hazardous, respectively, and \$285,755 for SPRS. The Fund pays the same proportion of hospital and medical insurance premiums for the spouse and dependents of retired hazardous members killed in the line of duty. As of June 30, 2002, the Fund had 58,020 retirees for whom benefits were available. The Fund's financial report is included in the KRS report whose address is listed in Note 8.

The amount of contribution paid by the Fund is based on years of service with the Systems. Years of service and respective percentages of the maximum contribution are as follows:

Years of Service	Paid by Insurance Fund	Paid by Member
20 or more	100%	0%
15-19	75%	25%
10-14	50%	50%
4-9	25%	75%
Less than 4	0%	100%

In prior years, the required medical insurance contribution rate was being increased annually by a percentage that would result in advance-funding the medical liability on an actuarially determined basis using the entry age normal cost method within a 20-year period measured from 1987. In November 1992, the Board of Trustees adopted a fixed percentage contribution rate and suspended future increases under the current medical premium funding policy until the next experience study could be performed.

In May 1996, the Board of Trustees adopted a policy to increase the insurance contribution rate by the amount needed to achieve the target rate for full entry age normal funding within twenty years. The increases commenced with the 1997 valuation and adjustments will be made every other valuation year to coincide with the valuation used by the General Assembly to establish employer contribution rates for the biennium.

NOTE 10 - KENTUCKY INFRASTRUCTURE AUTHORITY DEBT SERVICE RESERVE

The Debt Service Reserve (DSR) is a component of the Kentucky Infrastructure Authority (KIA) Fund C program. These are funds that are part of the Fund C borrowers' principal loan that is held by the KIA trustee bank when KIA bonds are issued. Each borrower in a bond issue is allocated their portion of DSR. The purpose of the DSR is to make debt service payments on the bonds if any of the borrowers in the entire Fund C pool default. Therefore, DSR funds are not guaranteed to be returned to the borrower in full. Interest is accrued to the borrower each June 30 and December 31 equal to the average rate of return on the three month treasury bill for the six months prior to calculation.

All debt service reserves are assets of the KIA and pledged to borrowers. It is the KIA board's policy to use DSR balances to make final payments on loans in the Fund C program, assuming no defaults by pool participants. The Water District's portion of the Fund C program DSR is recorded as an "Other receivable" classified under "Other assets" on the balance sheets as of August 31, 2003 and 2002.

CAMPBELL, ROYSTER, CARVER, McBRIDE & CO., LLP

CERTIFIED PUBLIC ACCOUNTANTS

941 North Green Street • P. O. Box 676
Henderson, Kentucky 42419-0676

Members of the American Institute of CPAs
Members of the Kentucky Society of CPAs

Benson W. Campbell III CPA
Judson C. Royster CPA
Terry L. Carver CPA
David L. McBride CPA

Jacqueline F. Wilson CPA
Anne H. Rakestraw CPA
Kristopher Kemp CPA

**REPORT ON COMPLIANCE AND ON INTERNAL CONTROL OVER FINANCIAL
REPORTING BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED
IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS**

To the Board of Commissioners
Henderson County Water District
Henderson, Kentucky 42420

We have audited the financial statements of Henderson County Water District, as of and for the year ended August 31, 2003, and have issued our report thereon dated October 27, 2003. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States.

Compliance

As part of obtaining reasonable assurance about whether Henderson County Water District's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grants, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance that are required to be reported under *Government Auditing Standards*.

Internal Control Over Financial Reporting

In planning and performing our audit, we considered Henderson County Water District's internal control over financial reporting in order to determine our auditing procedures for the purpose of expressing our opinion on the financial statements and not to provide assurance on the internal control over financial reporting. However, we noted certain matters involving the internal control over financial reporting and its operation that we consider to be reportable conditions. Reportable conditions involve matters coming to our attention relating to significant deficiencies in the design or operation of the internal control over financial reporting that, in our judgement, could adversely affect Henderson County Water District's ability to record, process, summarize and report financial data consistent with the assertions of management in the financial statements.

Due to the relative small staff size, an overall lack of segregation of duties exist.

A material weakness is a condition in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that misstatements in amounts that would be material in relation to the financial statements being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. Our consideration of the internal control over financial reporting would not necessarily disclose all matters in the internal control over financial reporting that might be reportable conditions and, accordingly, would not necessarily disclose all reportable conditions that are also considered to be material weaknesses. However, we believe none of the reportable conditions described above is a material weakness.

This report is intended solely for the information and use of management and Board of Commissioners, and is not intended to be and should not be used by anyone other than these specified parties.

Campbell Royster Carver McBride & Co. LLP
Campbell, Royster, Carver, McBride & Co., LLP

October 27, 2003

HENDERSON COUNTY WATER DISTRICT
 Schedule of System Maintenance, Customer Accounts
 and Administrative Expenses
 Years Ended August 31, 2003 and 2002

	2003	2002
<u>Maintenance of System:</u>		
Maintenance of mains	\$ 105,114	\$ 121,003
Materials & supplies - transmission	33,654	32,815
Materials & supplies - pumping	311	6,725
Rental - equipment	537	391
	<u>\$ 139,616</u>	<u>\$ 160,934</u>
<u>Customer accounts:</u>		
Salaries - meter reading	\$ 24,159	\$ 21,152
Billing and collections - labor and materials	60,144	55,862
Bad debts	5,018	1,339
Collection fees	25	----
	<u>\$ 89,346</u>	<u>\$ 78,353</u>
<u>Administration:</u>		
Salaries	\$ 64,787	\$ 62,037
Vacation and unassigned salaries	36,804	28,856
Commissioner's fees	8,400	9,520
Payroll taxes	21,790	21,508
Employee benefits	99,458	84,120
Office and computer expense	8,440	12,195
Telephone and utilities	10,049	8,760
Advertising	693	1,598
Professional fees	24,968	17,342
Insurance	28,965	24,534
Regulatory commission	12,607	13,131
Maintenance - office	5,798	5,955
Miscellaneous and general	6,645	3,965
	<u>\$ 329,404</u>	<u>\$ 293,521</u>

HENDERSON COUNTY WATER DISTRICT
Schedule of Insurance Coverage
Year Ended August 31, 2003

Fire and Extended Coverage

Water tank and pump house
Office building and contents

\$1,770,000 - 90% Co-insurance

Comprehensive General Liability

Bodily injury

\$3,000,000 each occurrence

Property damage

\$3,000,000 each occurrence

Automobile Liability

Bodily injury

\$3,000,000 each occurrence

Property damage

\$3,000,000 each occurrence

Uninsured motorist

\$300,000 each occurrence

Flood

\$1,000,000

Earthquake

\$1,000,000

Workmen's Compensation

Statutory

Money and Securities

Employee dishonesty

\$10,000

Robbery inside/outside premises

\$2,500

Director and Officer Umbrella Liability

\$3,000,000

Commissioners and Employees are Bonded.

INDEX FOR CASE: 1999-388
HENDERSON COUNTY WATER DISTRICT
Construct, Rates, Financing

IN THE MATTER OF THE APPLICATION OF HENDERSON COUNTY WATER DISTRICT FOR (1) ISSUANCE OF A CERTIFICATE OF CONVENIENCE AND NECESSITY AND (2) AUTHORIZATION TO BORROW FUNDS AND TO ISSUE ITS EVIDENCE OF INDEBTEDNESS THEREFOR AND (3) AUTHORITY TO ADJUST RATES

SEQ NBR	ENTRY DATE	REMARKS
0001	09/17/1999	Notice of Intent to file Application.
0002	09/21/1999	Notice of Intent Acknowledgement Letter.
M0001	02/08/2000	AG DAVID SPENARD-MOTION TO INTERVENE
0003	04/19/2000	Application.
0004	04/20/2000	Acknowledgement letter.
M0002	04/27/2000	FRANK N. KING/HENDERSON CO. WD-MOTION TO EXPEDITE
M0003	04/27/2000	FRANK N. KING/HENDERSON CO. WD-RESPONSE TO FILING DEFICIENCY NOTICE
0005	05/02/2000	Order granting Attorney General intervention
0006	05/08/2000	Order granting permission to deviate; application is accepted for filing.
M0004	05/19/2000	DAVID SPENARD/AG-RESPONSE TO MOTION TO EXPEDITE
M0005	05/23/2000	FRANK KING HENDERSON CO WD-AFFIDAVIT OF PUBLICATION
0007	05/26/2000	Order suspending proposed rates from 7/1/2000 up to & including 11/30/2000.
0008	05/31/2000	Interim Order approving construction and financing.
0009	09/19/2000	Order with attached Staff Report; comments or request for hearing or IC due 9/29
M0006	10/02/2000	FRANK KING/HENDERSON CO WD.-LETTER ACCEPTING COMMISSION'S RECOMMENDATIONS
0010	11/01/2000	Final Order denying proposed rates & adopting findings in Staff Report.
0011	11/21/2000	Order entered nunc pro tunc setting forth rates in Appendix A.
M0007	11/29/2000	FRANK KING HENDERSON CO WD-REQUEST FOR 15 DAY EXTENSION OF TIME FILE REVISED TARIFF
M0008	04/25/2001	FRANK KING-REQ FOR APPROVAL FROM PSC FOR ADDITIONAL WORK
M0009	05/03/2001	FRANK KING/HENDERSON DISTRICT-FOLLOW UP LETTER
M0010	07/03/2001	HENDERSON CO WD-ADDITIONAL INFO FOR INFO SENT ON APRIL 20,01
0012	08/20/2001	FINAL ORDER; GRANTS CONSTRUCTION; AUTHORIZES USE OF REMAINING BOND ISSUE FUNDS

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF HENDERSON COUNTY)	
WATER DISTRICT FOR (1) ISSUANCE OF)	
CERTIFICATE OF CONVENIENCE AND	)	CASE NO.
NECESSITY; (2) AUTHORIZATION TO BORROW	)	99-388
FUNDS AND TO ISSUE ITS EVIDENCE OF)	
INDEBTEDNESS THEREFOR; AND (3))	
AUTHORITY TO ADJUST RATES)	

O R D E R

On May 31, 2000, the Commission granted Henderson County Water District ("Henderson District") a Certificate of Public Convenience and Necessity ("CPCN") to construct a waterworks improvement project. Henderson District was authorized to issue bonds in the amount of \$2,625,000 to provide funding for the project. The Commission ordered Henderson District to obtain approval prior to performing any construction not expressly authorized and restricted the use of the bond issue funds to the approved improvement project.

On April 25, 2001, Henderson District notified the Commission that it estimated that after the completion of the previously authorized project it would have \$100,000 remaining from the bond issue. It requested Commission approval to install an additional 10,000 linear feet of new 4-inch water mains at a cost of \$45,000 to \$50,000. In a letter dated May 2, 2001, it stated that other than the 10,000 feet of mains it did not plan any additional construction and that the remaining funds would be used to reimburse Henderson District for expenses. On June 29, 2001, Henderson District revised its request of April 25, 2001 and the information submitted therein. Henderson

District now states that the unused bond funds total \$176,517.79. It requests Commission approval to construct the 10,000 feet of 4-inch main previously described and an additional 10,100 feet of 8-inch main for a total cost of \$108,527. Henderson District requests that the Commission approve the use of the balance of unused funds to pay engineering expenses in the amount of \$13,634.87 and to refund the water district for certain expenses outlined in its application in the amount of \$54,355.92.

The Commission, having considered the request of Henderson District and being otherwise sufficiently advised, finds that Henderson District's request is reasonable and should be granted.

IT IS THEREFORE ORDERED that:

1. Henderson District is granted a CPCN to construct the additional water mains described in this proceeding.
2. Henderson District is authorized to use the remaining, previously approved bond issue funds as requested in its June 29, 2001 filing.
3. Any deviation from the construction approved herein shall be undertaken only with the prior approval of the Commission.
4. Henderson District shall furnish documentation of the total costs of this project including the cost of construction and all other capitalized costs (engineering, legal, administrative, etc.) within 60 days of the date that construction is substantially completed. Construction costs should be classified into appropriate plant accounts in accordance with the Uniform System of Accounts for Water Utilities prescribed by the Commission.

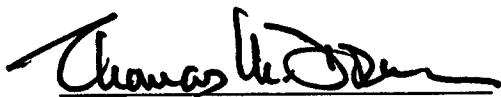
5. Henderson District shall require construction to be inspected under the general supervision of a professional engineer licensed in Kentucky with competency in civil or mechanical engineering to ensure that the construction work is done in accordance with the drawings and specifications and in conformance with the best practices of the construction trades involved in the project.

6. Henderson District shall file a copy of the "as-built" drawings and a certified statement that the construction has been satisfactorily completed in accordance with the contract plans and specifications within 60 days of the substantial completion of the construction certificated herein.

Done at Frankfort, Kentucky, this 20th day of August, 2001.

By the Commission

ATTEST:


Executive Director

DORSEY, KING, GRAY & NORMENT

ATTORNEYS-AT-LAW

318 SECOND STREET

HENDERSON, KENTUCKY 42420

JOHN DORSEY (1920-1986)
FRANK N. KING, JR.
STEPHEN D. GRAY
WILLIAM B. NORMENT, JR.
J. CHRISTOPHER HOPGOOD
S. MADISON GRAY

June 29, 2001

RECEIVED
JUL 03 2001

PUBLIC SERVICE
COMMISSION
TELEPHONE (270) 826-3965
TELEFAX (270) 826-6672

Mr. Thomas M. Dorman
Executive Director
Public Service Commission of Kentucky
Post Office Box 615
Frankfort, Kentucky 40602

Re: Henderson County Water District
Case No. 99-388

Dear Mr. Dorman:

On April 20, 2001, we sent a letter to the Commission on behalf of Henderson County Water District ("Henderson District") requesting approval of additional work (approximately 10,000 LF of four (4) inch water main). By letter to the Commission dated May 2, 2001, we forwarded a copy of the approval letter from the DOW/Drinking Water Branch, Department for Environmental Protection, and we explained that surplus funds from the bond issue would be used to reimburse Henderson District for expenses and that no other water main extensions would be constructed.

The Henderson District has now decided that it desires to construct an additional approximately 10,100 LF of eight (8) inch water main at a cost of \$108,527.00. Total additional funds available prior to paying for this additional work amounts to \$176,517.79. Therefore, after payment for the above mentioned eight (8) inch water line, \$54,355.92 remains. Henderson District desires to reimburse itself \$29,350.62 for specified administrative, legal, misc. expenses and \$25,005.30 for project related personnel field time, which will deplete the funds.

In support of the foregoing we attach the following:

- (1) June 20, 2001, letter from project engineer Hunter Martin & Associates, Inc. to the undersigned explaining about the proposed additional work (8 inch main) with map (Sheet 3) showing the locations
- (2) June 20, 2001, approval letter from DOW/Drinking Water Branch for the proposed additional work (8 inch main)
- (3) Spread sheet titled, in part, "Summary of Project Costs to Date" (please note the second entry on page 2 showing additional funds available to date in the amount of \$176,517.79

Page 2
June 29, 2001

RECEIVED
JUL 03 2001
PUBLIC SERVICE
COMMISSION

- (4) Spread sheet titled, in part, "Summary of Use of Additional Funds Available to Date" showing how the Water District proposes to spend the remaining \$176,517.79

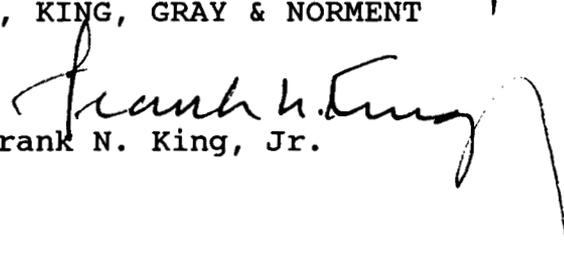
Henderson District respectfully requests the Commission's approval of this additional work (8 inch main) along with the previously mentioned additional work (4 inch main). Henderson District also requests Commission approval of the manner in which the remaining funds are proposed to be spent. Expedited treatment of this request is requested in order to avoid delays in construction.

Your assistance in this matter is appreciated.

Very truly yours,

DORSEY, KING, GRAY & NORMENT

By


Frank N. King, Jr.

FNKJr/cds
Encls.

COPY: Mr. Allan VanMeter, Superintendent

Mr. Jerry R. Jones
Hunter Martin & Associates



"Established 1952"

HUNTER MARTIN & ASSOCIATES, INC.

ENGINEERS & SURVEYORS

3220 LONE OAK ROAD * PADUCAH, KENTUCKY 42003
(270) 554-2737 * FAX (270) 554-2738
<http://www.huntermartin.com>

HUNTER H. MARTIN (1924 - 1997)
Founder

ROD H. MARTIN, P.E./L.S.
President

MICHAEL GARDNER
Vice President

BETTY J. GARDNER
Secretary/Treasurer

June 20, 2001

Mr. Frank King
Attorney at Law
318 Second Street
Henderson, KY 42420

Dear Mr. King:

RE: HENDERSON COUNTY WATER DISTRICT (1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS) -
PSC CASE NO. 99-388

After further review of the above project, as it continues to approach completion, it was noted that there are sufficient funds to replace the existing 4 inch water main along Kentucky Highway 145 from Overfield Road to Melton Road with 8 inch main. This work is in line with the District's planned improvements.

At the District's regular monthly meeting, held on May 23, 2001, we were authorized to include this work in Change Order No. A-3. Plans Sheet No. 3, showing this additional work, is enclosed. The total construction cost for Change Order No. A-3, including the work described in our letter dated April 12, 2001, is \$108,527.00.

Also enclosed is a copy of the approval letter from Kentucky Division of Water for this Highway 145 work and a Summary of Project Cost to Date, as well as a Summary of Use of Additional Funds Available to Date.

The District would like for you to proceed with PSC approval as soon as possible to minimize delays in construction.

If you have any questions, please do not hesitate to contact me.

Yours very truly,

HUNTER MARTIN & ASSOCIATES, INC.



Jerry R. Jones, P.E.

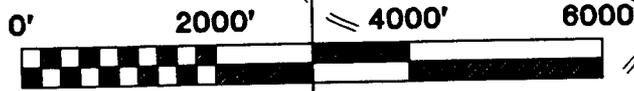
JRJ:dc

Enclosures

c: Mr. Allan Van Meter, Manager, Henderson County Water District, w/o encls.

TUNNEL HI

SCALE 1" = 2000'



**APPROX.
7,000 LF OF 8"**
SDR 21, CLASS 200 PVC WATER
MAIN INSTALLED IN R.O.W.

PARALLEL OCCUPANCY
FROM MILEPOINT: 2.115
TO MILEPOINT: 3.441

2 - TIE IN (8")

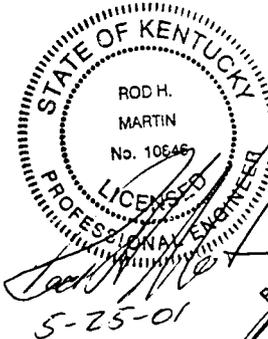
1 - 8"x 8" TAPPING SLEEVE
W/8" GATE VALVE AND BOX

EXISTING 4" MAIN TO BE ABANDONED
AFTER RECONNECTS ARE MADE

1 - TIE IN (4")
1 - TIE IN (2")
1 - 8"x 8" TEE
1 - 8"x 4" REDUCER
1 - 8"x 2" REDUCER

**APPROX.
3,100 LF OF 8"**
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN EASEMENTS

1 - 8" G.V. W/BOX
1 - 2" G.V. W/BOX



HENDERSON CO.
WEBSTER CO.



HUNTER MARTIN & ASSOCIATES, INC.
ENGINEERS & SURVEYORS
3220 LONE OAK ROAD • PAROULAN, KENTUCKY 42003
(270) 244-2787 • FAX (270) 244-2788

Drawn by: JJ
Checked by: JJ
File: C.O.A-3
Date: 05/25/01
Revised:

1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS
KY HWY 145
CHANGE ORDER NO. A-9

HENDERSON COUNTY WATER DISTRICT

Sheet

3

JAMES E. BICKFORD
SECRETARY



PAUL E. PATTON
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
14 REILLY RD
FRANKFORT KY 40601

June 20, 2001

Henderson County Water District
655 South Main
Henderson, Kentucky 42419

RE: DW #0510189-01-003C
Water Line Replacement
Change Order No. A-3
Henderson County, Kentucky

Dear Sirs:

We have reviewed the plans and specifications for the above referenced project. The plans include approximately 10,100 feet of 8-inch PVC water line. This is to advise that the May 29, 2001 changes submitted for the above referenced project are APPROVED with respect to sanitary features of design. All stipulations contained in the original letter dated February 3, 2000 (DW #0510189-99-006) remain in effect with the following additional stipulations:

1. Based on the hydraulic analysis/data submitted, the areas served by the following extension(s) are considered to be underserved: KY 145 from Overfield Road to Dixon Road. This designation indicates that without improvements to the existing infrastructure, future extensions may not be able to provide the required minimum pressure of 30 psi on the discharge side of customers' meters. Without improvements to the infrastructure, future extensions may be denied. The underserved designation may be used to help prioritize areas under the Governor's 2020 plan for funding future infrastructure improvements.
2. All dead end lines must be provided with a properly sized blow-off assembly, flush hydrant or fire hydrant for flushing purposes. Flushing devices should be sized to provide flows which will give a velocity of at least 2.5 feet per second in the water main being flushed. No flushing device shall be directly connected to any sewer.



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Change Order No. 3-A
June 20, 2001
Page two

3. A minimum pressure of 30 psi must be available on the discharge side of all meters. All water mains, including those not designed to provide fire protection, shall be sized after a hydraulic analysis based on flow demands and pressure requirements. The system shall be designed to maintain a minimum pressure of 20 psi (140 kPa) at ground level at all points in the distribution system.

If you have any questions concerning this project please contact Bob Arnett, PE at 502/564-2225, extension 578.

Sincerely,



Vicki L. Ray, Manager
Drinking Water Branch
Division of Water

VLR:RNA:lm

Enclosures

C: Hunter Martin & Associates, Inc.
Henderson County Health Department
Public Service Commission
Madisonville Regional Office
Drinking Water Files

HENDERSON COUNTY WATER DISTRICT
 SUMMARY OF PROJECT COSTS TO DATE
 1999/2000 WATER SYSTEM IMPROVEMENTS

						Subtotal	ESTIMATED FINAL
FINANCIAL, BOND, ETC.							\$100,688.25
	1	LS					\$176,517.79
ADDITIONAL FUNDS AVAILABLE TO DATE	1	LS					\$ 2,693,774.93
TOTAL PROJECT COSTS							
FUNDS:							\$2,625,000.00
Par Amount of Bond							68,774.93
Accrued Interest Through Construction							\$2,693,774.93
TOTAL FUNDS							
Bond Discount	\$	52,313.25					
Fiscal and Legal	\$	39,375.00					
Bank Fee	\$	4,500.00					
Rating Fee	\$	4,500.00					
Subtotal - Financial Bond Expenses	\$	100,688.25					
Deposit To Construction	\$	2,524,311.75					
Par Amount Of Bond	\$	2,625,000.00					
Amount Wired By Morgan Kegan	\$	2,536,194.35					
Accrued Interest To Bond Int & Redemption Acct.	\$	(16,007.60)					
Good Faith Money	\$	52,500.00					
Total Amount Paid For Bonds	\$	2,572,686.75					
Par Amount Of Bonds	\$	2,625,000.00					
Less Bond Discount	\$	(52,313.25)					
Total Cost Of Bonds	\$	2,572,686.75					
Balance As Of 5/21/01	\$	565,313.56					
Bond Proceeds Deposited In Construction Account	\$	2,524,311.75					
Total Draws As Of 5/21/01	\$	2,027,773.12					
Balance After Draws	\$	496,538.63					
Interest Earned	\$	68,774.93					

**HENDERSON COUNTY WATER DISTRICT
SUMMARY OF USE OF ADDITIONAL FUNDS AVAILABLE TO DATE
1999/2000 WATER SYSTEM IMPROVEMENTS**

	Original Contract				Subtotal	ESTIMATED FINAL
CONSTRUCTION COSTS:						
Change Order A-3	\$ 108,527.00				\$ 108,527.00	\$ 108,527.00
TOTAL CONSTRUCTION	\$ 108,527.00					\$ 108,527.00
TECHNICAL						
Basic Engineering Fee						
(1) Preliminary Basic (10%)		Percent Of Construction				
Contract A		Fixed				
Subtotal - Preliminary Basic		6.880%				
(2) Design Basic (60%)		Fixed				
Contract A		6.880%				
Subtotal Design Basic						
(3) Bidding/Award (10%)		Fixed				
Contract A		6.880%				
Subtotal Bidding/Award						
(4) Construction Basic (20%)		Fixed				
Contract A		6.880%				
Subtotal Construction Basic						
Inspection		Percentage Of Construction				
Contract A		3.380%				
Subtotal Inspection						
Extra				Actual		
Preliminary		Hourly		\$ -		
Surveys		Hourly		\$ 1,500.00		
Easements/Permits/Right-Of-Way		Hourly		\$ -		
Additional Inspectors		Hourly		\$ -		
Shop Drawings Manual		Hourly		\$ -		
Financing Assistance				\$ 1,000.00		
PSC Rate & Construction Case				\$ -		
Hydraulic Analysis				\$ 2,500.00		
Subtotal Extra						
TOTAL TECHNICAL						
					\$ 1,493.33	\$ 1,493.33
					\$ 3,668.21	\$ 3,668.21
					\$ -	\$ -
					\$ 1,500.00	\$ 1,500.00
					\$ -	\$ -
					\$ -	\$ -
					\$ 1,000.00	\$ 1,000.00
					\$ -	\$ -
					\$ 2,500.00	\$ 2,500.00
					\$ -	\$ -
					\$ 13,634.87	\$ 13,634.87



COMMONWEALTH OF KENTUCKY
PUBLIC SERVICE COMMISSION
211 SOWER BOULEVARD
POST OFFICE BOX 615
FRANKFORT, KENTUCKY 40602
www.psc.state.ky.us

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MAY 03 2001
PUBLIC SERVICE
COMMISSION

Telephone
502/564-3940

Telefax
502/564-7279

FAX TRANSMITTAL

Date: May 3, 2001

To: David Spenard

Company: Office of the Attorney General

FAX Number: 573-8315

From: Anita Mitchell

Re: Henderson County Water District, Case No. 99-388

Comment: As we discussed this date, Henderson County has requested

authority for additional construction in this matter. Since

the AG was a party to Case No. 99-388, I am sending you the documents

filed by Henderson County on April 25, 2001 and May 3, 2001.

Counsel for Henderson County has been notified that all future

documents are to be sent to you.

YOU SHOULD RECEIVE 9 PAGES (INCLUDING THIS ONE).
IF YOU DO NOT RECEIVE ALL THE PAGES, PLEASE CALL
502/564-3940, EXTENSION 264

TRANSMISSION VERIFICATION REPORT

TIME : 05/03/2001 15:01

DATE, TIME	05/03 14:58
FAX NO./NAME	95738315
DURATION	00:02:38
PAGE(S)	09
RESULT	OK
MODE	STANDARD ECM

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APR 26 2001

DORSEY, KING, GRAY & NORMENT
ATTORNEYS-AT-LAW

318 SECOND STREET

HENDERSON, KENTUCKY 42420

GENERAL COUNSEL

JOHN DORSEY (1920-1986)
FRANK N. KING, JR.
STEPHEN D. GRAY
WILLIAM B. NORMENT, JR.
J. CHRISTOPHER HOPGOOD
S. MADISON GRAY

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APR 25 2001

PUBLIC SERVICE
COMMISSION

TELEPHONE
(270) 826-3965
TELEFAX
(270) 826-6672

April 20, 2001

VIA FAX NO. 502-564-7279
AND CONVENTIONAL MAIL

Mr. Thomas M. Dorman
Executive Director
Public Service Commission of Kentucky
Post Office Box 615
Frankfort, Kentucky 40602

RECEIVED

MAY 03 2001

PUBLIC SERVICE
COMMISSION

Re: Henderson County Water District
Case No. 99-388

Dear Mr. Dorman:

Henderson County Water District (Henderson District) was granted a Certificate of Public Convenience and Necessity in the Interim Order dated May 31, 2000. In ordering paragraph 2 Henderson District was directed to obtain approval from the Commission prior to performing any additional construction not expressly authorized by the order.

Henderson District is nearing completion of the approved project. It has approximately \$100,000.00 in unused funds and desires to install approximately 10,000 linear feet of new mains at a cost of approximately \$45,000.00 to \$50,000.00. Enclosed please find project engineers April 12, 2001, letter to the undersigned outlining the additional work.

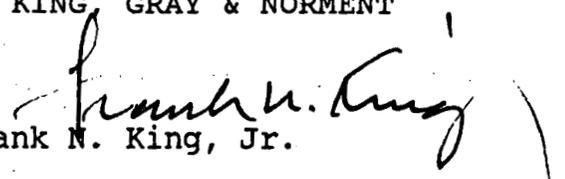
Henderson District respectfully requests the Commission's approval of this additional work. Expedited treatment of this request is requested in order to avoid delays in construction.

Your assistance in this matter is appreciated.

Very truly yours,

DORSEY, KING, GRAY & NORMENT

By


Frank N. King, Jr.

FNKJr/cds
Encls.

COPY: Mr. Allan VanMeter, Superintendent

Mr. Jerry R. Jones



"Established 1952"
HUNTER MARTIN & ASSOCIATES, INC.

ENGINEERS & SURVEYORS

3220 LONE OAK ROAD * PADUCAH, KENTUCKY 42003

(270) 554-2737 * FAX (270) 554-2738

<http://www.huntermartin.com>

HUNTER H. MARTIN (1924 - 1997)
Founder

ROD H. MARTIN, P.E./L.S.
President

MICHAEL GARDNER
Vice President

BETTY J. GARDNER
Secretary/Treasurer

April 12, 2001

Mr. Frank King
Attorney at Law
318 Second Street
Henderson, KY 42420

Dear Mr. King:

RE: HENDERSON COUNTY WATER DISTRICT (1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS)
- PSC CASE NO. 199-388

As you know, we are nearing completion of the above project. It appears, at this point, that the District will have approximately \$100,000 of unused funds. The PSC Order requires the District to seek PSC approval prior to expenditures of any additional money or any change in the scope of the work. At the District's regular meeting on March 28, 2001, we were authorized to issue a Change Order for approximately 10,000 LF of new mains in the Dixie-Pool area. Sheets 1 and 2 of the Plans, showing the additional work, are enclosed. It is estimated (based on unit prices bid) that this will increase the cost of construction approximately \$45,000 to \$50,000. We are in the process of obtaining Division of Water approval and the District would like for you to proceed with PSC approval.

We need to proceed with this as soon as possible to avoid delays in construction.

If you have any questions, please feel free to contact us.

Yours very truly,

HUNTER MARTIN & ASSOCIATES, INC.



Jerry R. Jones, P.E.

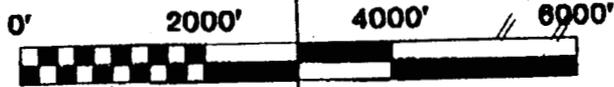
JRJ:dc

Enclosures

c: Mr. Allan Van Meter, Manager, Henderson County Water District, w/o encls.



SCALE 1" = 2000'



- 1 - TIE IN (6")
- 1 - 6" X 4" REDUCER
- 1 - 6" x 6" TEE
- 1 - 4" G.V. W/BOX
- 1 - 6." G.V. W/BOX

APPROX.
6,300 LF OF 4"
SDR 21, CLASS 200 PVC WATER
MAIN INSTALLED IN R.O.W.

40 LF BORE W/O CASING
4" CARRIER

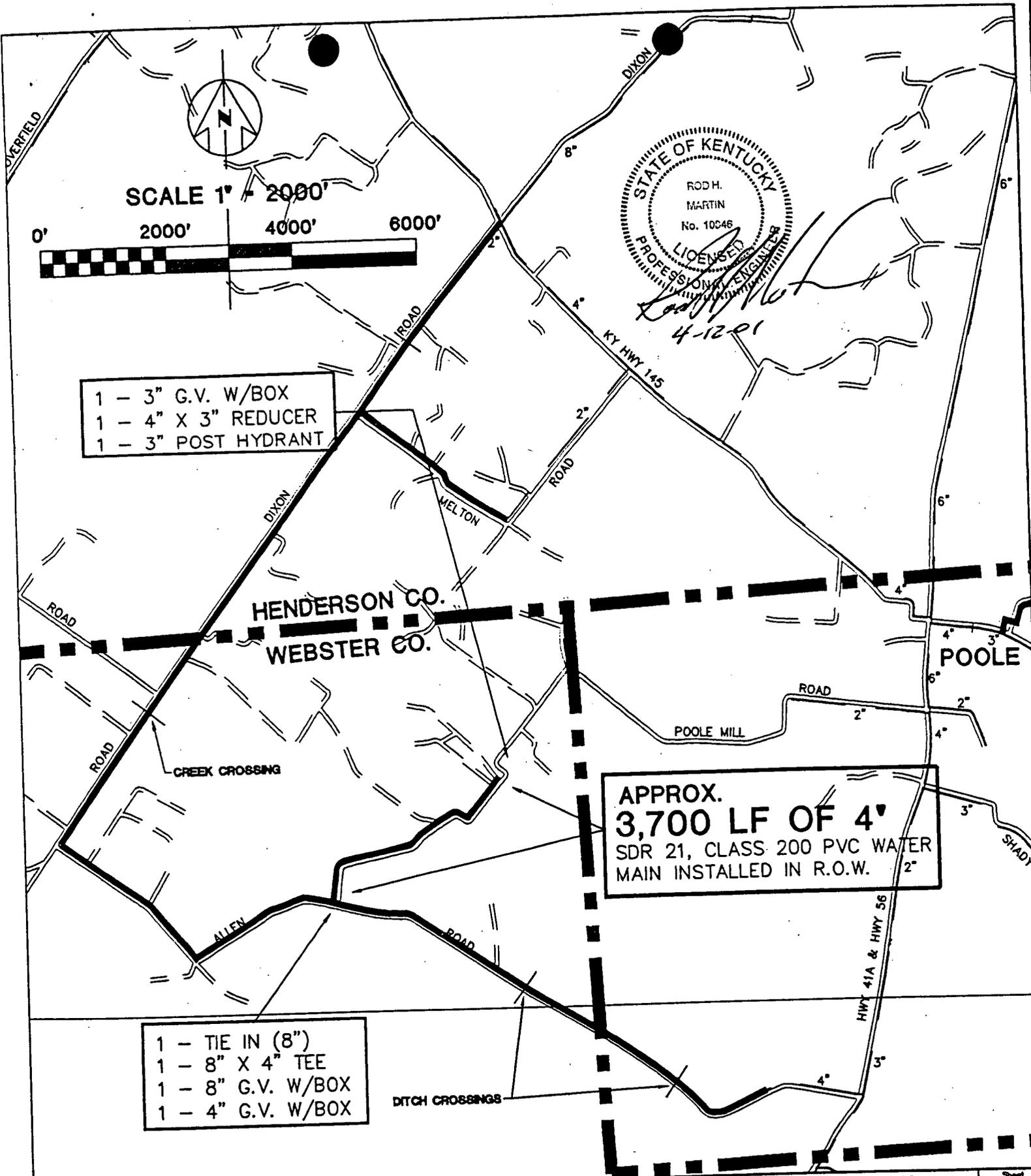
4" BENDS AS REQ.

40 LF BORE W/O CASING
4" CARRIER

- 1 - TIE IN (4")
- 1 - 4" G.V. W/BOX

DIXIE

HUNTER MARTIN & ASSOCIATES, INC. ENGINEERS & SURVEYORS <small>1100 LOTS ONE ROAD - FARMING BROOKS 40000 (878) 644-2707 • FAX (878) 644-0738</small>	Drawn by K.K.	Checked by J.	Title C.O.A.-3	Date 04/09/01	1808/2000 DISTRIBUTION SYSTEM IMPROVEMENTS WHEELER RD. CHANGE ORDER NO. A-3	1
	HENDERSON COUNTY WATER DISTRICT					



- 1 - 3" G.V. W/BOX
- 1 - 4" X 3" REDUCER
- 1 - 3" POST HYDRANT

APPROX.
3,700 LF OF 4"
 SDR 21, CLASS 200 PVC WATER
 MAIN INSTALLED IN R.O.W.

- 1 - TIE IN (8")
- 1 - 8" X 4" TEE
- 1 - 8" G.V. W/BOX
- 1 - 4" G.V. W/BOX

HUNTER MARTIN & ASSOCIATES, INC. <small>ENGINEERS & SURVEYORS 2220 LONG OAK ROAD • PADUCAH, KENTUCKY 40360 (270) 544-2777 • FAX (270) 544-2778</small>	<small>Drawn by</small> K.K.	<small>Checked by</small> JJ	<small>File</small> C.O.A-3	<small>Date</small> 04/08/01	<small>Revised</small>	1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS POOLE MILL RD. CHANGE ORDER NO. A-3	<small>Sheet</small> 2
	HENDERSON COUNTY WATER DISTRICT						

DORSEY, KING, GRAY & NORMENT

Attorneys at Law
318 Second Street
Henderson, Kentucky 42420

John Dorsey (1920-1986)
Frank N. King, Jr.
Stephen D. Gray
William B. Norment, Jr.
J. Christopher Hopgood
S. Madison Gray

Telephone
(270) 826-3965
Telefax
(270) 826-6672
E-Mail
dkgn@hotmail.com

FAX MESSAGE

TO: ANITA MITCHELL
FAX NO. 502-564-7279

FROM: FRANK N. KING, JR.
FAX NO. 270-826-6672

DATE: 5-3-01

NO. OF PAGES 4 (including this page)

M E S S A G E

Re: 99-388

following is a copy of
what was mailed
yesterday. Fu

If you are experiencing any difficulty or not receiving all material being transmitted, please call (270) 826-3965 and ask for **Charla**.

NO ORIGINAL DOCUMENTS WILL FOLLOW UNLESS REQUESTED.

ORIGINAL DOCUMENTS WILL FOLLOW BY COURIER OR MAIL.

DORSEY, KING, GRAY & NORMENT

ATTORNEYS-AT-LAW

318 SECOND STREET

HENDERSON, KENTUCKY 42420

JOHN DORSEY (1920-1988)
FRANK N. KING, JR.
STEPHEN D. GRAY
WILLIAM B. NORMENT, JR.
J. CHRISTOPHER HOPGOOD
B. MADISON GRAY

TELEPHONE
(270) 826-3985
TELEFAX
(270) 826-6672

May 2, 2001

Mr. Thomas M. Dorman
Executive Director
Public Service Commission of Kentucky
Post Office Box 615
Frankfort, Kentucky 40602

Re: Henderson County Water District
Case No. 99-388

Dear Mr. Dorman:

This is a follow-up to my April 20, 2001, letter regarding additional work that Henderson District planned to undertake.

As requested by Anita Mitchell of your office, we enclose a copy of the approval letter from the DOW/Drinking Water Branch, Department for Environmental Protection.

In response to Ms. Mitchell's inquiry about how the remaining surplus funds will be handled, please be advised that at the regular monthly meeting of Henderson District's board of commissioners on April 25, 2001, it was decided that the surplus funds from the bond issue will be used to reimburse the District for expenses and that no other water main extensions would be constructed (except for the previously announced 10,000 feet of new mains) during this project.

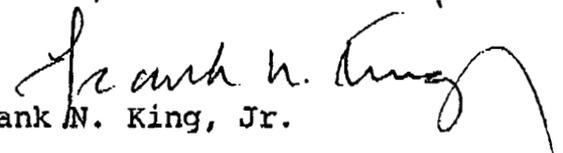
If additional information is needed, please advise. Once again we request expedited treatment of the pending request for approval of the additional work in order avoid delays in construction.

Your assistance in this matter is appreciated.

Very truly yours,

DORSEY, KING, GRAY & NORMENT

BY


Frank N. King, Jr.

FNKJr/cds

Encls.

COPY/w/o/encls.: Mr. Allan VanMeter, Superintendent

Mr. Jerry R. Jones
Hunter Martin & Associates

JAMES E. BICKFORD
SECRETARY



PAUL E. PATTON
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
14 REILLY RD
FRANKFORT KY 40601

April 30, 2001

Henderson County Water District
655 South Main
Henderson, Kentucky 42419

RE: DW #0510189-01-002C
Water Line Extension
1999/2000 System Improvements
Contract A, Change Order A3
Henderson County, Kentucky

Dear Sirs:

We have reviewed the plans and specifications for the above-referenced project. The plans include approximately 10,000 feet of 4-inch PVC water line. This is to advise that the April 19, 2001 changes submitted for the above referenced project are APPROVED with respect to sanitary features of design. All stipulations contained in the original letter dated February 3, 2000 (DW #0510189-99-006) remain in effect with the following additional stipulations:

1. All dead end lines must be provided with a properly sized blow-off assembly, flush hydrant or fire hydrant for flushing purposes. Flushing devices should be sized to provide flows which will give a velocity of at least 2.5 feet per second in the water main being flushed. No flushing device shall be directly connected to any sewer.
2. A minimum pressure of 30 psi must be available on the discharge side of all meters. All water mains, including those not designed to provide fire protection, shall be sized after a hydraulic analysis based on flow demands and pressure requirements. The system shall be designed to maintain a minimum pressure of 20 psi (140 kPa) at ground level at all points in the distribution system.

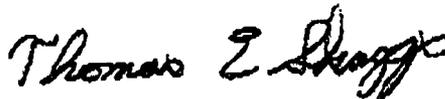


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1999/2000 System Improvements CO #3
April 30, 2001
Page two

If you have any questions concerning this project please contact Bob Arnett, PE at 502/564-2225, extension 578.

Sincerely,



for John S. Thomson, PE
Supervisor, Plan Review Section
DOW/Drinking Water Branch

JST:RNA:lm

C: Hunter Martin & Associates, Inc.
Webster County Water District *H.D.*
Henderson County Health Department
Public Service Commission
Division of Plumbing
Madisonville Regional Office
Drinking Water Files

DORSEY, KING, GRAY & NORMENT

ATTORNEYS-AT-LAW

318 SECOND STREET

HENDERSON, KENTUCKY 42420

JOHN DORSEY (1920-1986)
FRANK N. KING, JR.
STEPHEN D. GRAY
WILLIAM B. NORMENT, JR.
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S. MADISON GRAY

TELEPHONE
(270) 826-3965
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(270) 826-6672

May 2, 2001

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MAY 03 2001

PUBLIC SERVICE
COMMISSION

Mr. Thomas M. Dorman
Executive Director
Public Service Commission of Kentucky
Post Office Box 615
Frankfort, Kentucky 40602

Re: Henderson County Water District
Case No. 99-388

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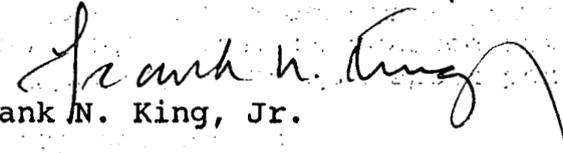
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Your assistance in this matter is appreciated.

Very truly yours,

DORSEY, KING, GRAY & NORMENT

By:


Frank N. King, Jr.

FNKJr/cds
Encls.

COPY/w/o/encls.: Mr. Allan VanMeter, Superintendent

Mr. Jerry R. Jones
Hunter Martin & Associates

JAMES E. BICKFORD
SECRETARY



PAUL E. PATTON
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
14 REILLY RD
FRANKFORT KY 40601

April 30, 2001

Henderson County Water District
655 South Main
Henderson, Kentucky 42419

RE: DW #0510189-01-002C
Water Line Extension
1999/2000 System Improvements
Contract A, Change Order A3
Henderson County, Kentucky

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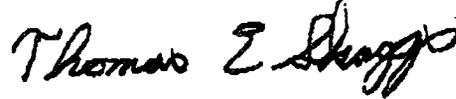
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1999/2000 System Improvements CO #3
April 30, 2001
Page two

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Sincerely,



for John S. Thomson, PE
Supervisor, Plan Review Section
DOW/Drinking Water Branch

JST:RNA:lm

C: Hunter Martin & Associates, Inc.
Webster County Water District *H, D.*
Henderson County Health Department
Public Service Commission
Division of Plumbing
Madisonville Regional Office
Drinking Water Files

DORSEY, KING, GRAY & NORMENT
ATTORNEYS-AT-LAW

318 SECOND STREET
HENDERSON, KENTUCKY 42420

JOHN DORSEY (1920-1986)
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PUBLIC SERVICE
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TELEPHONE
(270) 826-3965
TELEFAX
(270) 826-6672

April 20, 2001

VIA FAX NO. 502-564-7279
AND CONVENTIONAL MAIL

Mr. Thomas M. Dorman
Executive Director
Public Service Commission of Kentucky
Post Office Box 615
Frankfort, Kentucky 40602

Re: Henderson County Water District
Case No. 99-388

Dear Mr. Dorman:

Henderson County Water District (Henderson District) was granted a Certificate of Public Convenience and Necessity in the Interim Order dated May 31, 2000. In ordering paragraph 2 Henderson District was directed to obtain approval from the Commission prior to performing any additional construction not expressly authorized by the order.

Henderson District is nearing completion of the approved project. It has approximately \$100,000.00 in unused funds and desires to install approximately 10,000 linear feet of new mains at a cost of approximately \$45,000.00 to \$50,000.00. Enclosed please find project engineers April 12, 2001, letter to the undersigned outlining the additional work.

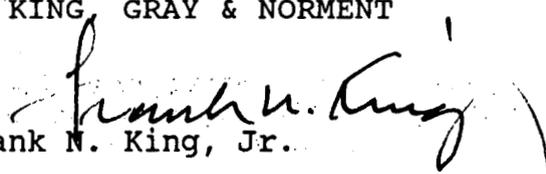
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Your assistance in this matter is appreciated.

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DORSEY, KING, GRAY & NORMENT

By


Frank N. King, Jr.

FNKJr/cds
Encls.

COPY: Mr. Allan VanMeter, Superintendent

Mr. Jerry R. Jones



"Established 1952"

HUNTER MARTIN & ASSOCIATES, INC.

ENGINEERS & SURVEYORS

3220 LONE OAK ROAD * PADUCAH, KENTUCKY 42003

(270) 554-2737 * FAX (270) 554-2738

<http://www.huntermartin.com>

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Founder

ROD H. MARTIN, P.E./L.S.
President

MICHAEL GARDNER
Vice President

BETTY J. GARDNER
Secretary/Treasurer

April 12, 2001

Mr. Frank King
Attorney at Law
318 Second Street
Henderson, KY 42420

Dear Mr. King:

RE: HENDERSON COUNTY WATER DISTRICT (1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS)
- PSC CASE NO. 199-388

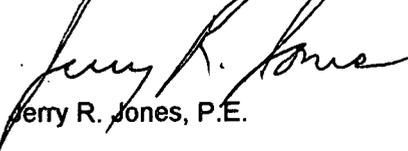
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We need to proceed with this as soon as possible to avoid delays in construction.

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Yours very truly,

HUNTER MARTIN & ASSOCIATES, INC.

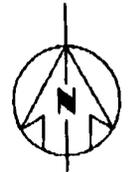


Jerry R. Jones, P.E.

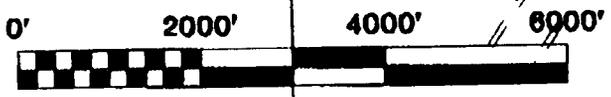
JRJ:dc

Enclosures

c: Mr. Allan Van Meter, Manager, Henderson County Water District, w/o encls.



SCALE 1" = 2000'



- 1 - TIE IN (6")
- 1 - 6" X 4" REDUCER
- 1 - 6" x 6" TEE
- 1 - 4" G.V. W/BOX
- 1 - 6." G.V. W/BOX

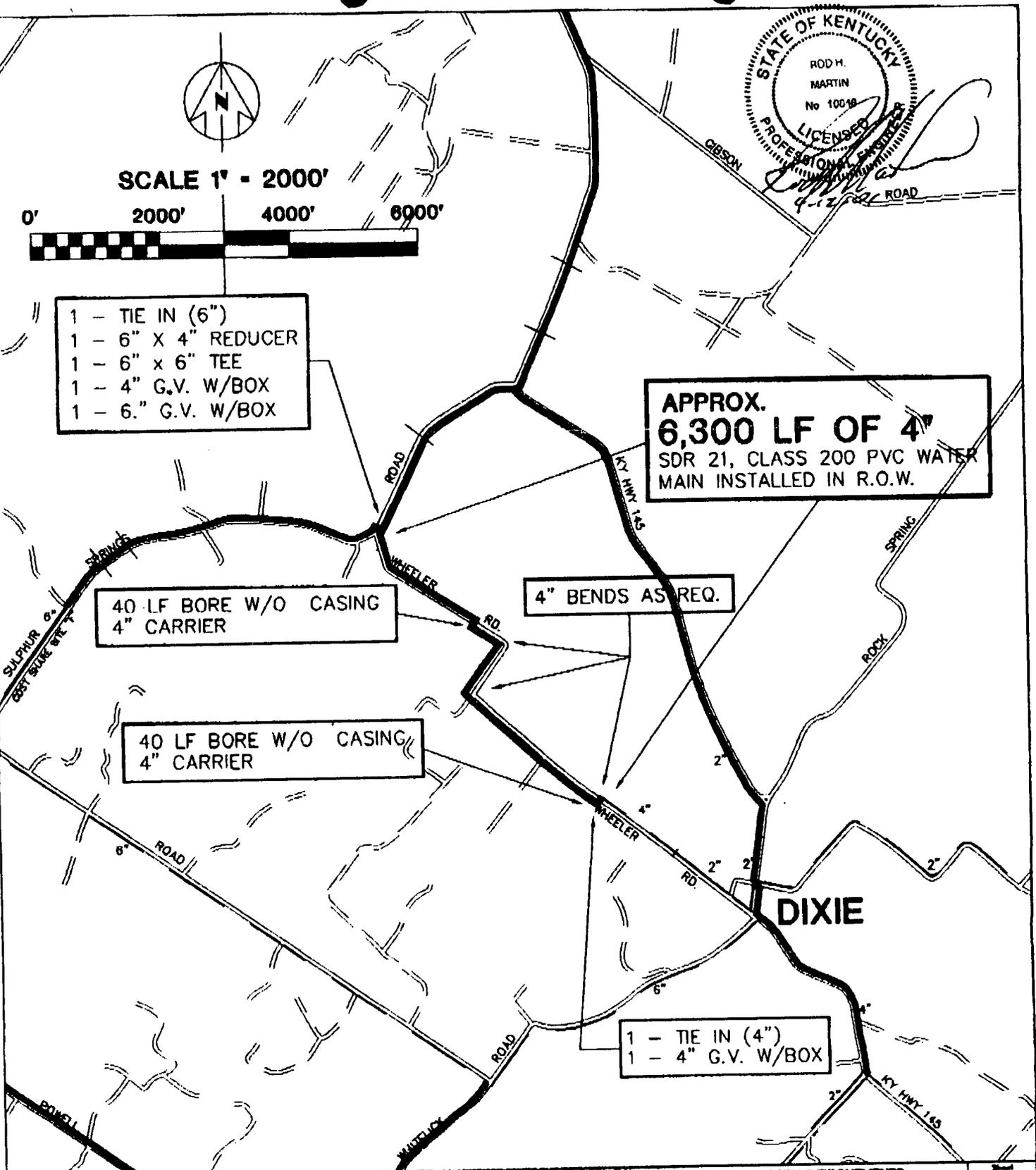
APPROX.
6,300 LF OF 4"
 SDR 21, CLASS 200 PVC WATER
 MAIN INSTALLED IN R.O.W.

40 LF BORE W/O CASING
 4" CARRIER

4" BENDS AS REQ.

40 LF BORE W/O CASING
 4" CARRIER

- 1 - TIE IN (4")
- 1 - 4" G.V. W/BOX

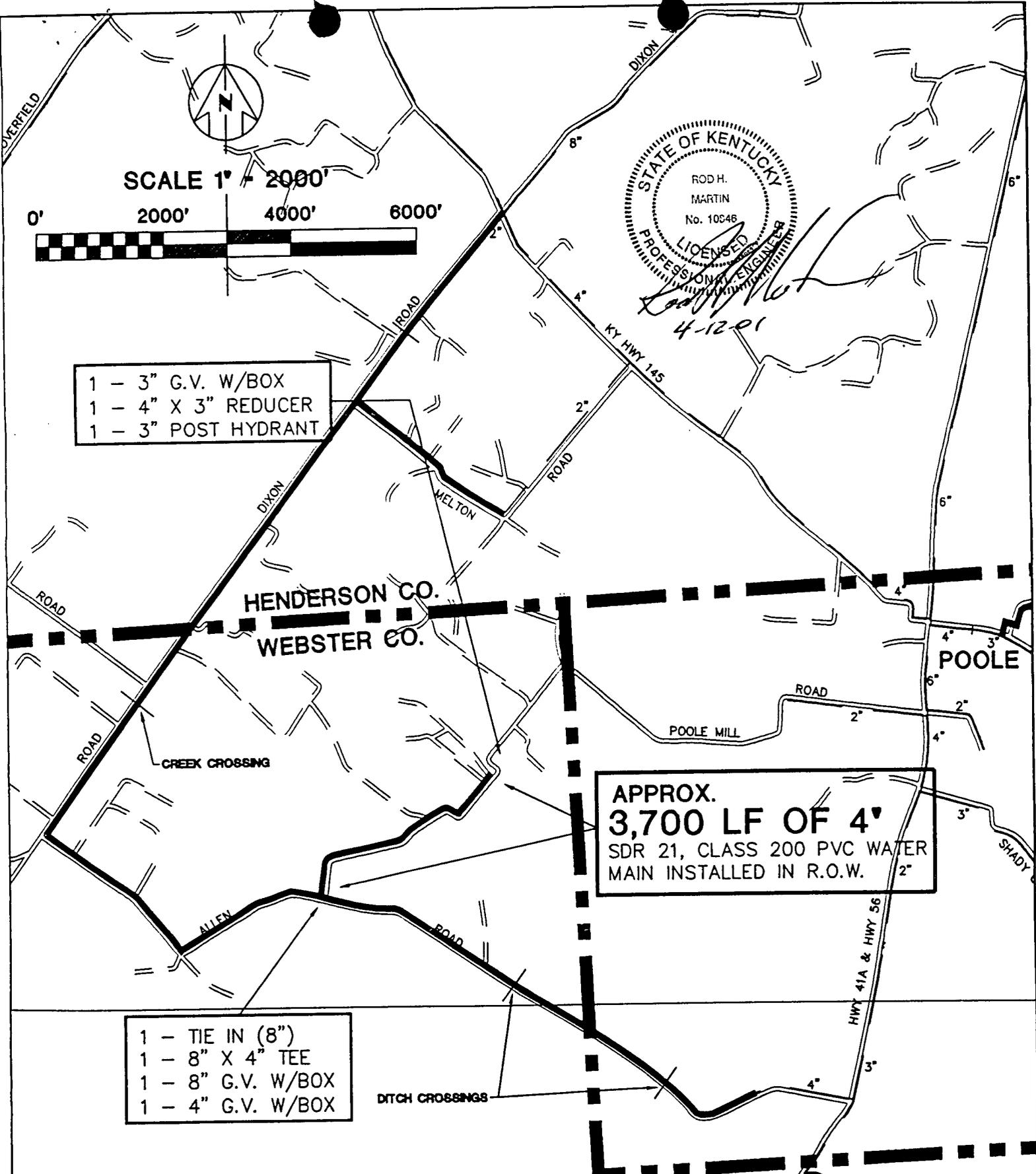


HUNTER MARTIN & ASSOCIATES, INC.
 ENGINEERS & SURVEYORS
 1100 LOTS ONE ROAD • FAYETTE COUNTY 40400
 (770) 564-8707 • FAX (770) 564-8726

Drawn by: K.K.
 Checked by: J.J.
 Title: C.O.A.-3
 Date: 04/09/01

1998/2000 DISTRIBUTION SYSTEM IMPROVEMENTS
 WHEELER RD.
 CHANGE ORDER NO. A-3
HENDERSON COUNTY WATER DISTRICT

Sheet
1



STATE OF KENTUCKY
 ROD H. MARTIN
 No. 10846
 LICENSED PROFESSIONAL ENGINEER
[Signature]
 4-12-01

- 1 - 3" G.V. W/BOX
- 1 - 4" X 3" REDUCER
- 1 - 3" POST HYDRANT

APPROX.
3,700 LF OF 4"
 SDR 21, CLASS 200 PVC WATER
 MAIN INSTALLED IN R.O.W.

- 1 - TIE IN (8")
- 1 - 8" X 4" TEE
- 1 - 8" G.V. W/BOX
- 1 - 4" G.V. W/BOX



HUNTER MARTIN & ASSOCIATES, INC.
 ENGINEERS & SURVEYORS
 3220 LOWE OAK ROAD • PADUCAH, KENTUCKY 40306
 (270) 564-8787 • FAX (270) 564-8788

Drawn by: K.K.
 Checked by: J.J.
 File: C.O.A-3
 Date: 04/09/01
 Review:

1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS
 POOLE MILL RD.
 CHANGE ORDER NO. A-3

HENDERSON COUNTY WATER DISTRICT

Sheet
2

DORSEY, KING, GRAY & NORMENT

ATTORNEYS-AT-LAW

318 SECOND STREET

HENDERSON, KENTUCKY 42420

JOHN DORSEY (1920-1986)
FRANK N. KING, JR.
STEPHEN D. GRAY
WILLIAM B. NORMENT, JR.
J. CHRISTOPHER HOPGOOD
STEPHEN M. GRAY

TELEPHONE
(270) 826-3965
TELEFAX
(270) 826-6672

November 28, 2000

VIA FAX NO. 502-564-7279
AND CONVENTIONAL MAIL

Mr. Thomas M. Dorman
Executive Director
Public Service Commission of Kentucky
Post Office Box 615
Frankfort, Kentucky 40602

RECEIVED
NOV 29 2000
PUBLIC SERVICE
COMMISSION

Re: Henderson County Water District
Case No. 99-388

Dear Mr. Dorman:

This letter is sent on behalf of applicant Henderson County Water District and requests a 15 day extension of time in which to file its revised tariff. On November 1, 2000, the Commission ordered that the revised tariff be filed within 30 days of the date of the order, but on November 21, 2000, a nunc pro tunc order was entered correcting clerical errors in the rates set forth in the earlier order.

Additional time is needed in order to prepare and file the revised tariff and the Henderson County Water District respectfully requests that it be allowed to and including Friday, December 15, 2000, in order to make this filing.

Your assistance in this matter is appreciated.

Very truly yours,

DORSEY, KING, GRAY & NORMENT

By

Frank N. King, Jr.

FNKJr/cds

Encls.

Copy: Mr. A. B. Chandler, III, Attorney General
Attention: David Edward Spenard

Henderson County Water District



COMMONWEALTH OF KENTUCKY
PUBLIC SERVICE COMMISSION
211 SOWER BOULEVARD
POST OFFICE BOX 615
FRANKFORT, KY. 40602
(502) 564-3940

CERTIFICATE OF SERVICE

RE: Case No. 1999-388
HENDERSON COUNTY WATER DISTRICT

I, Stephanie Bell, Secretary of the Public Service Commission, hereby certify that the enclosed attested copy of the Commission's Order in the above case was served upon the following by U.S. Mail on November 21, 2000.

Parties of Record:

Allan R. VanMeter
Manager
Henderson County Water District
655 South Main Street
P. O. Box 655
Henderson, KY. 42419 0655

Honorable Frank N. King,
Attorney for Henderson County Water
Dorsey, King, Gray & Norment
318 Second Street
Henderson, KY. 42420

Hon. A.B. Chandler
Attorney General
David Edward Spenard
Assistant Attorney General
1024 Capital Center Drive
Frankfort, KY. 40601 8204

Stephanie J. Bell

Secretary of the Commission

SB/hv
Enclosure

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF HENDERSON COUNTY)	
WATER DISTRICT FOR (1) ISSUANCE OF)	
CERTIFICATE OF CONVENIENCE AND	)	CASE NO.
NECESSITY; (2) AUTHORIZATION TO BORROW	)	99-388
FUNDS AND TO ISSUE ITS EVIDENCE OF)	
INDEBTEDNESS THEREFORE; AND (3))	
AUTHORITY TO ADJUST RATES)	

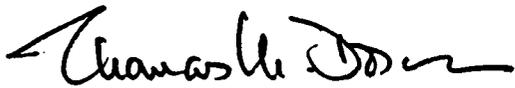
O R D E R

On November 1, 2000, the Commission entered an Order in this case in which it established rates for Henderson County Water District. Due to clerical error, certain rates in that Order were incorrectly stated.

IT IS THEREFORE ORDERED, to be entered nunc pro tunc, that the rates set forth in the Appendix to the Order of November 1, 2000 are stricken and replaced with the rates contained in Appendix A to this Order.

Done at Frankfort, Kentucky, this 21st day of November, 2000.
By the Commission

ATTEST:



Executive Director

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 99-388 DATED NOVEMBER 21, 2000

The following rates and charges are prescribed for the customers in the area served by Henderson County Water District. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under authority of the Commission prior to the effective date of this Order.

Monthly Water Rates

5/8 Inch x 3/4 Inch Meter

First	2,000 gallons	\$ 10.90	Minimum bill
Next	8,000 gallons	3.90	per 1,000 gallons
Next	20,000 gallons	3.48	per 1,000 gallons
Over	30,000 gallons	2.98	per 1,000 gallons

1 Inch Meter

First	5,000 gallons	\$ 22.60	Minimum bill
Next	5,000 gallons	3.90	per 1,000 gallons
Next	20,000 gallons	3.48	per 1,000 gallons
Over	30,000 gallons	2.98	per 1,000 gallons

1 1/2 Inch Meter

First	10,000 gallons	\$42.10	Minimum bill
Next	20,000 gallons	3.48	per 1,000 gallons
Over	30,000 gallons	2.98	per 1,000 gallons

2 Inch Meter

First	16,000 gallons	\$ 62.98	Minimum bill
Next	14,000 gallons	3.48	per 1,000 gallons
Over	30,000 gallons	2.98	per 1,000 gallons

3 Inch Meter

First	30,000 gallons	\$ 111.70	Minimum bill
Over	30,000 gallons	2.98	per 1,000 gallons

4 Inch Meter

First	50,000 gallons	\$ 171.30	Minimum bill
Over	50,000 gallons	2.98	per 1,000 gallons

6 Inch Meter

First 100,000 gallons	\$ 320.30	Minimum bill
Over 100,000 gallons	2.98	per 1,000 gallons

Fire Department	\$10.90	Per month
-----------------	---------	-----------

Non-Recurring Charges

Meter Connection/Tap-on Charge	
5/8 Inch x 3/4 Inch	\$475.00
All Larger Meters	Actual Cost
Connection/Turn-on Charge	25.00
Connection/Turn-on Charge-After Hours	40.00
Field Collection Charge	25.00
Late Payment Penalty	10%
Meter Relocation Charge	Actual Cost
Meter Re-read Charge	25.00
Meter Test Charge	50.00
Re-connection Charge	50.00
Re-connection Charge-After Hours	65.00
Returned Check Charge	20.00
Service Call/Investigation	25.00
Service Call/Investigation-After Hours	40.00
Service Line Inspection	40.00



COMMONWEALTH OF KENTUCKY
PUBLIC SERVICE COMMISSION
211 SOWER BOULEVARD
POST OFFICE BOX 615
FRANKFORT, KY. 40602
(502) 564-3940

CERTIFICATE OF SERVICE

RE: Case No. 1999-388
HENDERSON COUNTY WATER DISTRICT

I, Stephanie Bell, Secretary of the Public Service Commission, hereby certify that the enclosed attested copy of the Commission's Order in the above case was served upon the following by U.S. Mail on November 1, 2000.

Parties of Record:

Allan R. VanMeter
Manager
Henderson County Water District
655 South Main Street
P. O. Box 655
Henderson, KY. 42419 0655

Honorable Frank N. King,
Attorney for Henderson County Water
Dorsey, King, Gray & Norment
318 Second Street
Henderson, KY. 42420

Hon. A.B. Chandler
Attorney General
David Edward Spenard
Assistant Attorney General
1024 Capital Center Drive
Frankfort, KY. 40601 8204

Stephanie D. Bell

Secretary of the Commission

SB/hv
Enclosure

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF HENDERSON COUNTY)	
WATER DISTRICT FOR (1) ISSUANCE OF)	
CERTIFICATE OF CONVENIENCE AND	)	CASE NO.
NECESSITY; (2) AUTHORIZATION TO BORROW	)	99-388
FUNDS AND TO ISSUE ITS EVIDENCE OF)	
INDEBTEDNESS THEREFOR; AND (3))	
AUTHORITY TO ADJUST RATES)	

ORDER

On May 8, 2000, Henderson County Water District ("Henderson District") filed an application for Commission approval of proposed rates. The proposed rates for water service would generate additional annual revenues of \$97,547, an increase of 5.87 percent above normalized operating revenues. The proposed rates would increase the average residential bill by \$1.45 or 6.87 percent. Henderson District also proposed several new non-recurring charges and increased certain existing non-recurring charges.

By Order dated September 19, 2000, the Commission issued a Staff Report that was prepared upon review of Henderson District's test-year operations. Staff's report recommended that the proposed revenue increase be granted, that the proposed non-recurring charges be approved with certain modifications, and that rates be granted as shown in the cost-of-service study as attached thereto. The Order granted 10 days to file written comments regarding the Staff Report or requests for a hearing or informal conference. By letter dated September 28, 2000, Henderson District accepted the

recommendations of the Staff Report. No comments were received from the Office of Attorney General.

The Commission, having considered the evidence of record and being otherwise sufficiently advised, finds that:

1. The recommendations and findings contained in the Staff Report are supported by the evidence of record, are reasonable, and should be adopted as the findings of the Commission.

2. The rates in Appendix A will produce annual revenue from water sales of \$1,804,538.

IT IS THEREFORE ORDERED that:

1. The rates proposed by Henderson District are denied.

2. The findings contained in the Staff Report are adopted and incorporated by reference into this Order as if fully set out herein.

3. The rates in Appendix A are approved for service rendered by Henderson District on and after the date of this Order.

4. Within 30 days of the date of this Order, Henderson District shall file with the Commission its revised tariff setting out the rates approved herein.

5. Three years from the date of this Order Henderson District shall file an income statement, along with any pro forma adjustments, in sufficient detail to demonstrate that the rates approved herein are sufficient to meet its operating expenses and annual debt service requirements.

Done at Frankfort, Kentucky, this 1st day of November, 2000.

By the Commission

ATTEST:

A handwritten signature in black ink, appearing to read "Charles W. Owsen", written over a horizontal line.

Executive Director

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 99-388 DATED NOVEMBER 1, 2000

The following rates and charges are prescribed for the customers in the area served by Henderson County Water District. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under authority of the Commission prior to the effective date of this Order.

Monthly Water Rates5/8 Inch x 3/4 Inch Meter

First	2,000 gallons	\$ 10.90	Minimum bill
Next	8,000 gallons	3.90	per 1,000 gallons
Next	20,000 gallons	3.48	per 1,000 gallons
Over	30,000 gallons	2.98	per 1,000 gallons

1 Inch Meter

First	5,000 gallons	\$ 22.60	Minimum bill
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First	50,000 gallons	\$ 171.16	Minimum bill
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6 Inch Meter

First 100,000 gallons	\$ 320.07	Minimum bill
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Fire Department	\$10.90	Per month

Non-Recurring Charges

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Late Payment Penalty	10%
Meter Relocation Charge	Actual Cost
Meter Re-read Charge	25.00
Meter Test Charge	50.00
Re-connection Charge	50.00
Re-connection Charge-After Hours	65.00
Returned Check Charge	20.00
Service Call/Investigation	25.00
Service Call/Investigation-After Hours	40.00
Service Line Inspection	40.00

DORSEY, KING, GRAY & NORMENT

ATTORNEYS-AT-LAW

318 SECOND STREET

HENDERSON, KENTUCKY 42420

JOHN DORSEY (1920-1986)
FRANK N. KING, JR.
STEPHEN D. GRAY
WILLIAM B. NORMENT, JR.
J. CHRISTOPHER HOPGOOD

TELEPHONE
(270) 826-3965
TELEFAX
(270) 826-6672

September 28, 2000

VIA FAX NO. 502-564-7279
AND CONVENTIONAL MAIL

RECEIVED

OCT 02 2000

PUBLIC SERVICE
COMMISSION

Mr. Thomas M. Dorman
Executive Director
Public Service Commission of Kentucky
211 Sower Boulevard
Frankfort, Kentucky 40601

Re: Henderson County Water District
Case No. 99-388

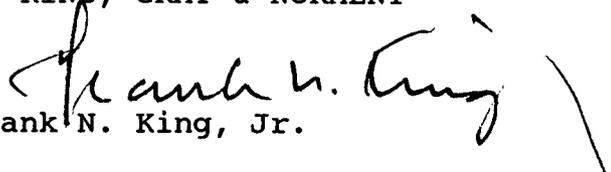
Dear Mr. Dorman:

This letter is to inform the Commission that applicant Henderson County Water District has reviewed the staff report attached to the Commission's September 19, 2000, order in the above case and accepts the staff's recommendations.

Very truly yours,

DORSEY, KING, GRAY & NORMENT

By


Frank N. King, Jr.

FNKJr/cds

Copy: Mr. A. B. Chandler, III,
Attorney General
Attention: David Edward Spenard
Henderson County Water District



COMMONWEALTH OF KENTUCKY
PUBLIC SERVICE COMMISSION
211 SOWER BOULEVARD
POST OFFICE BOX 615
FRANKFORT, KY. 40602
(502) 564-3940

September 19, 2000

Allan R. VanMeter
Manager
Henderson County Water District
655 South Main Street
P. O. Box 655
Henderson, KY. 42419 0655

Honorable Frank N. King
Attorney at Law
Dorsey, King, Gray & Norment
318 Second Street
Henderson, KY. 42420

Hon. A.B. Chandler
Attorney General
David Edward Spenard
Assistant Attorney General
1024 Capital Center Drive
Frankfort, KY. 40601 8204

RE: Case No. 1999-388

We enclose one attested copy of the Commission's Order in
the above case.

Sincerely,

Stephanie Bell

Stephanie Bell
Secretary of the Commission

SB/hv
Enclosure

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF HENDERSON COUNTY)
WATER DISTRICT FOR (1) ISSUANCE OF)
CERTIFICATE OF CONVENIENCE AND)
NECESSITY; (2) AUTHORIZATION TO BORROW)
FUNDS AND TO ISSUE ITS EVIDENCE OF)
INDEBTEDNESS THEREFOR; AND (3))
AUTHORITY TO ADJUST RATES)

CASE NO.
99-388

ORDER

On May 8, 2000, Henderson County Water District ("Henderson District") filed its application for Commission approval of proposed water rates. Commission Staff, having performed a limited financial review of Henderson District's operations, has prepared the attached Staff Report containing Staff's findings and recommendations regarding the proposed rates. All parties should review the report carefully and provide any written comments or requests for a hearing or informal conference no later than 10 days from the date of this Order.

IT IS THEREFORE ORDERED that:

1. All parties shall, no later than 10 days from the date of this Order, submit their written comments on the attached Staff Report or request for a hearing or informal conference. If Henderson District wishes to amend its application to reflect the additional rates found justified by Commission Staff, it shall submit such amendment when filing its comments.

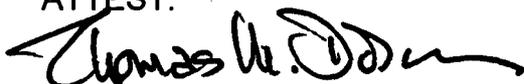
2. If Henderson District should choose to amend its application to reflect rates that differ from those in its application, it shall notify its customers of the amended rate proposal in accordance with 807 KAR 5:001, Section 10.

3. If no comment, request for hearing, or request for an informal conference is received within 10 days from the date of this Order, the parties shall be deemed to have accepted Staff's recommendations and this case shall stand submitted to the Commission for decision.

Done at Frankfort, Kentucky, this 19th day of September, 2000.

By the Commission

ATTEST:



Executive Director

STAFF REPORT
ON
HENDERSON COUNTY WATER DISTRICT

CASE NO. 1999-388

On April 19, 2000, the Public Service Commission ("Commission") received an application from Henderson County Water District ("Henderson District") requesting Commission authorization to construct certain system improvements, issue long-term debt, adjust rates for water service, and adjust certain nonrecurring charges. The application was considered filed on May 8, 2000, when all deficiencies were cured. On May 31, 2000, the Commission issued an interim order granting approval of the construction and financing; however, the request for rate adjustment was continued until further review could be performed.

In order to review the requested rates Commission Staff ("Staff") performed a limited financial review of Henderson District's test year operations. The scope of Staff's review was limited to obtaining information as to whether the test period operating revenues and expenses were representative of normal operation. Insignificant or immaterial discrepancies were not pursued and are not addressed herein. Henderson District used the twelve months ending August 31, 1999, as the test year in its application.

Henderson District's pro forma operating income statement is included in this report as Attachment A. It shows normalized operating revenues from rates to be \$1,662,332. Henderson District's proposed rates would increase normalized operating revenues by \$97,547 to \$1,759,879.

Staff's pro forma operating income statement and explanation of adjustments thereto are shown in Attachment B of this report. Based on Staff's revenue requirement calculation, Henderson District could have justified operating revenues from rates of \$2,061,263 or additional revenue of \$354,272. However, Staff recommends that Henderson District's requested revenue increase of \$97,547 be granted since it will produce revenues sufficient to pay the immediate annual debt payments and pro forma cash expenses as delineated in Attachment B. If Henderson District decides to amend its application to request additional revenue of \$354,272, it should do so when responding to this report. In that event, notice to its customers would be required.

A comparison of Henderson District's and Staff's revenue requirement calculations is shown in Attachment C. The rates listed in Sheet 8 of Attachment E will produce additional annual revenue of \$97,547 and should be approved by this Commission. The recommended rates were determined using the cost of service study shown in Attachment E as discussed in Attachment D.

Henderson District filed a new tariff and proposed to establish certain non-recurring charges and increase several existing charges. Henderson District provided cost justification to support the proposed non-recurring charges and Staff recommends that the proposed non-recurring charges be accepted upon completion of this case. The nonrecurring charges are shown on Sheet 9 of Attachment E. Staff also recommends that Henderson District's revised tariff be approved at the conclusion of this case with the following revisions: 1) Henderson District should file a new rate schedule setting out the rates approved by the Commission; 2) Henderson District should amend Section O (3) as follows: Late Payment Penalty: Shall be assessed on the delinquent amount of

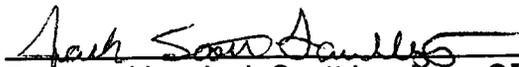
the bill, less taxes, in accordance with 807 KAR 5:006, Section 8(3)(h); and 3) Henderson District should amend Section S (1) as follows: The utility may refuse to perform the test if said meter was tested within the prior twelve (12) months at the request of the customer.

Renee Curry is responsible for all revenue adjustments, the calculation of the recommended rates, and the cost of service study. Scott Lawless is responsible for the determination of the revenue requirement.

Staff anticipates that the recommended rates will generate sufficient revenues to allow the utility to meet all its cash operating expenses and annual debt service requirements for the next three years. At the end of this three-year period, staff will perform a limited review of the utility's operations and notify the utility and Commission of any adjustments deemed necessary to ensure that the utility's rates remain adequate. As part of that review, the utility may be required to file additional information.

The utility should notify the Commission in writing if during this three-year period, and prior to the limited review, the revenues generated by the recommended rates become inadequate to meet its cash operating expenses and annual debt service requirements.

Signatures


Prepared by: Jack Scott Lawless, CPA
Financial Analyst, Water and Sewer
Revenue Requirements Branch
Division of Financial Analysis


Prepared by: Renee Curry
Rate Analyst, Communications, Water,
and Sewer Rate Design Branch
Division of Financial Analysis

ATTACHMENT A
 STAFF REPORT CASE NO. 1999-388
 HENDERSON DISTRICT'S REQUESTED OPERATIONS

	Test Year	Adjustments	Pro forma
Operating Revenues			
Sales of Water	1,601,325	61,007	1,662,332
Other Operating Revenue	52,700	1,972	54,672
Total Operating Revenues	1,654,025	62,979	1,717,004
Operating Expenses			
Operation and Maintenance Expenses			
Salaries and Wages Employees	236,228	15,313	251,541
Salaries and Wages Officers	5,750		5,750
Employee Pensions and Benefits	60,795	10,024	70,819
Purchased Water	564,275	21,611	585,886
Fuel for Power Production	26,883		26,883
Materials and Supplies	70,406		70,406
Contractual Services - Legal	1,436		1,436
Contractual Services - Other	16,848		16,848
Transportation Expenses	19,479		19,479
Insurance - Worker's Compensation	5,823		5,823
Insurance - Other	22,728		22,728
Bad Debt Expense	12,845		12,845
Amortization of Rate Case Expenses		15,000	15,000
Miscellaneous Expense	15,971		15,971
Total Operation and Maintenance Expenses	1,059,467	61,948	1,121,415
Depreciation Expense	277,914	66,838	344,752
Loan Servicing Fees	1,636	(88)	1,548
Amortization of Bond Issuance Costs	24,164	4,491	28,655
Taxes Other Than Income Taxes	21,129	803	21,932
Total Operating Expenses	1,384,310	133,992	1,518,302
Net Operating Income	269,715	(71,013)	198,702
Plus: Interest Income	75,908		75,908
Income Available to Service Debt	345,623	(71,013)	274,610

ATTACHMENT B
STAFF REPORT CASE NO. 1999-388
STAFF'S RECOMMENDED OPERATIONS

	Test Year	Adjustments	Ref.	Pro forma
Operating Revenues				
Sales of Water	1,601,325	105,666	A	1,706,991
Other Operating Revenue	52,700			52,700
Total Operating Revenues	1,654,025	105,666		1,759,691
Operating Expenses				
Operation and Maintenance Expenses				
Salaries and Wages Employees	236,228	15,313	B	251,541
Salaries and Wages Officers	5,750			5,750
Employee Pensions and Benefits	60,795	(13,683)	C	47,112
Purchased Water	564,275	21,611	D	585,886
Fuel for Power Production	26,883			26,883
Materials and Supplies	70,406			70,406
Contractual Services - Legal	1,436			1,436
Contractual Services - Other	16,848			16,848
Transportation Expenses	19,479			19,479
Insurance - Worker's Compensation	5,823			5,823
Insurance - Other	22,728			22,728
Bad Debt Expense	12,845			12,845
Amortization of Rate Case Expenses			E	-
Miscellaneous Expense	15,971	(1,176)	F	14,795
Total Operation and Maintenance Expenses	1,059,467	22,065		1,081,532
Depreciation Expense	277,914	66,838	G	344,752
Loan Servicing Fees	1,636			1,636
Amortization of Bond Issuance Costs	24,164	(24,164)	H	-
Taxes Other Than Income Taxes	21,129	803	B	21,932
Total Operating Expenses	1,384,310	65,542		1,449,852
Net Operating Income	269,715	40,124		309,839
Plus: Interest Income	75,908			75,908
Income Available to Service Debt	345,623	40,124		385,747

ATTACHMENT B
STAFF REPORT CASE NO. 1999-388
STAFF'S RECOMMENDED OPERATIONS

A) Water Sales. Henderson District's application showed test year revenue from water sales in the amount of \$1,601,325 and total operating revenue of \$1,654,025. Staff's billing analysis showed total revenue from water sales for the test year ending August 31, 1999 as \$1,641,106. Staff normalized gallons sold to reflect Henderson District's increase of 218 customers (93 additional and 125 projected). For the purposes of this report, Henderson District's normalized revenue from water sales is \$1,706,991¹ and its total normalized operating revenue is \$1,759,691.

B) Salaries and Wages – Employees and Taxes Other Than Income Taxes. Henderson District proposed to increase test year expenses by \$15,313 to reflect current employee and salary levels. Staff agrees with the adjustment and recommends that it be accepted. Staff also agrees with the corresponding payroll tax adjustment of \$803.

C) Employee Pensions and Benefits. Henderson District proposed to increase test year expenses by \$10,024 to account for changes in health insurance premiums and pension contributions. Staff agrees in theory with the adjustment but has calculated an adjustment decrease of \$13,683. The difference in the two adjustments results from Staff recommending that the District recover an amount equal to the premium for a single health insurance plan for each eligible employee. Henderson District's adjustment includes many family plan premiums. Henderson District informed Staff that the family

¹ Test year revenue from sales per billing analysis = \$1,641,106.

207 new 5/8 x 3/4 inch connections x \$23.514 (average bill) x 12 months = \$58,408.

9 new 1 inch connections x \$60.96 (average bill) x 12 months = \$6,584.

1 new 2 inch connection x \$74.40 (average bill) x 12 months = \$893.

Normalized revenue from water sales = \$1,641,106 + \$58,408 + \$6,584 + \$893=\$1,706,991.

ATTACHMENT B
STAFF REPORT CASE NO. 1999-388
STAFF'S RECOMMENDED OPERATIONS

health insurance premiums were not paid in lieu of additional salaries and wages. Based on this, Commission Staff recommends that Henderson District's adjustment be denied and test year expenses be decreased by \$13,683.

D) Purchased Water. Henderson District proposed to increase test year expenses by \$21,611 to account for additional purchases required by the customers to be added from the proposed construction. Staff agrees with the adjustment and recommends that it be accepted.

E) Amortization of Rate Case Expenses. Henderson District proposed to include rate case amortization expense in pro forma operations. The rate case expenses referred to were incurred as a result of this case, Case No. 99-388. These costs will be funded through the issuance of long-term debt. It is Staff's opinion that these costs should not then be funded directly through rates as to do so would create a double recovery. Staff recommends that the proposed adjustment be denied.

F) Miscellaneous Expenses. Included in test year operating expenses was \$1,176 that should have been recorded in account 426-Miscellaneous Nonutility Expenses. This amount was expended for Thanksgiving turkeys, Christmas hams, and employee dinners. Staff has eliminated these expenses from test year operating expenses.

G) Depreciation. Henderson District proposed to increase test year depreciation by \$66,838. Its adjustment consisted of a full year depreciation taken on plant additions placed into service during the test year and the capital expenditures proposed in this case. Staff agrees with the proposed adjustment and recommends that it be accepted.

ATTACHMENT B
STAFF REPORT CASE NO. 1999-388
STAFF'S RECOMMENDED OPERATIONS

H) Bond Issuance Costs. Henderson District included bond issuance costs as a revenue requirement. These costs are financed through long-term debt and should therefore not be financed directly through rates. Staff recommends that the amortization of bond issuance costs be disallowed in this case.

ATTACHMENT C
 STAFF REPORT CASE NO. 1999-388
 COMPARISON OF HENDERSON DISTRICT'S AND STAFF'S REVENUE
 REQUIREMENT CALCULATIONS

Pro forma Operating Expenses	1,518,302	1,449,852	(68,450)
Less: Depreciation	(344,752)	-	344,752
Customer Deposit Interest	625	625	-
Bank Loan ¹	5,689	14,470	8,781
KIA Loans ¹	38,755	84,733	45,978
Debt Service Requirement for Bonds	640,192	640,192	-
Margin in Excess of Debt Coverage	34,872	-	(34,872)
<hr/>			
Total Revenue Requirement	1,893,683	2,189,872	296,189
Less: Other Operating Revenue	(57,896)	(52,700)	5,196
Interest Income	(75,908)	(75,908)	-
<hr/>			
Revenue Required from Rates	1,759,879	2,061,264	301,386
Less: Pro forma present rate revenue	(1,662,332)	(1,706,991)	(44,659)
<hr/>			
Required Revenue Increase	97,547	354,273	256,727
<hr/> <hr/>			

1 Henderson District's requirement includes interest only while Staff includes principal and interest.

ATTACHMENT D
STAFF REPORT CASE NO. 1999-388
STAFF'S DISCUSSIONS ON THE
COST OF SERVICE STUDY

Current Rate Design. Henderson District's current rate design is a 4-step declining block schedule with usage increments of 2,000 gallons, 8,000 gallons, 20,000 gallons, and over 30,000 gallons. Henderson District also has a flat minimum charge for the fire department. Henderson District proposed to increase the minimum bill for the 5/8 inch by 3 /4 inch connection 12.02% and the remaining rate steps an average of 2.62%.

Henderson District filed a cost of service study with its application but did not base its proposed rates on the results of the study. Commission Staff prepared a cost of service study for Henderson District and has attached this study as Attachment E.

Staff has used the commodity demand methodology as set out in the American Water Works Association's ("AWWA") Manual M-1 in preparing the cost of service for Henderson District's retail customers. This study recognizes that a utility must be prepared for meeting peak demand requirements as well as average water use needs. In other words, a system must be sized to meet the demand of the residential customers who tend to place a larger peak demand on the system than very large customers. The large consumers use water throughout the day and night and generally place a smaller peak demand on the system than residential customers who use water for a few hours each day.

The commodity demand method allocates costs into either commodity, demand or customer functions. Commodity costs are those costs that vary directly with the quantity of water produced such as chemical, purchased water, and purchased power. Demand costs are associated with providing facilities to meet the peak demands placed

ATTACHMENT D
STAFF REPORT CASE NO. 1999-388
STAFF'S DISCUSSIONS ON THE
COST OF SERVICE STUDY

on the system. These costs include transmission and distribution costs. Customer costs are those costs associated with serving the customers regardless of the amount of water used. These costs include meter reading and billing and collecting.

Allocation of plant value, shown at Sheet 1, allocates plant value into demand or customer components. No plant value is allocated to commodity since the value does not change with the amount of produced water. Sheet 2 shows allocation of depreciation. Sheet 3 shows the allocation of expenses to the functional cost components. Administrative and general expenses are allocated to the cost components based on the subtotal of all other expenses, excluding commodity costs. Depreciation expense is based on the percentages shown in Sheet 2 and has been reduced \$256,726 from \$344,752 to \$88,026 to achieve the utility requested increase. Debt Service is based on the allocation of plant value as shown on Sheet 1.

Once operating and maintenance expense has been allocated, all other expenses and income must be allocated to the functional categories. Sheet 4 is the allocation of expenses and other revenue. Sheet 4 shows that \$612,769 should be collected from the commodity category, \$1,003,673 from the demand category, and \$188,096 from the customer category.

Based upon the aforementioned allocation of expenses, the rates produced (Sheet 5) are \$10.93 for the first 2,000 gallons; \$3.94 per 1,000 gallons for the next 8,000 gallons; \$3.48 per 1,000 gallons for the next 20,000 gallons; and \$2.98 per 1,000 gallons for all usage in excess of 30,000 gallons. Sheet 6 is a verification schedule showing that the rates produced by the cost of service study will in fact produce the

ATTACHMENT D
STAFF REPORT CASE NO. 1999-388
STAFF'S DISCUSSIONS ON THE
COST OF SERVICE STUDY

correct amount of revenue. Sheet 7 is the comparison of Henderson District's current rates and the cost of service rates. Sheets 8 and 9 show Staff's recommended rates.

ATTACHMENT E
STAFF REPORT CASE NO. 1999-388

Henderson County Water District

Cost of Service

Allocation of Plant Value	Sheet 1
Allocation of Depreciation	Sheet 2
Allocation of O/M Expenses	Sheet 3
Allocation of Cost of Service	Sheet 4
Calculation of Water Rates	Sheet 5
Verification of Rates	Sheet 6
Comparison of Rates	Sheet 7
Recommended Rates	Sheet 8 - 9

ATTACHMENT E
STAFF REPORT CASE NO. 1999-388

ALLOCATION OF PLANT VALUE

Henderson County Water District

	Total	Commodity	Demand	Customer
Pumping Plant	\$214,540		\$214,540	
Transmission & Distribution				
Mains	8,385,339		8,385,339	
Services	315,138			315,138
Meters	711,505			711,505
Hydrants	96,468			96,468
Subtotal	\$9,722,990		\$8,599,879	\$1,123,111
Allocation Percentages	100%		88.45%	11.55%
General Plant	\$566,140		\$500,751	\$65,389
Total	\$10,289,130		\$9,100,630	\$1,188,500
Percentages	100%		88.45%	11.55%

ATTACHMENT E
STAFF REPORT CASE NO. 1999-388

ALLOCATION OF DEPRECIATION

Henderson County Water District

	Total	Commodity	Demand	Customer
Structures & Improvements	\$6,958		\$6,958	
Pumping Equipment	7,785		7,785	
Trans/Dist. Mains	204,493		204,493	
Services	12,013			12,013
Meters	69,508			69,508
Hydrants	3,076			3,076
Subtotal	\$303,833		\$219,236	\$84,597
Allocation Percentages	100%		72.16%	27.84%
Office Furniture & Equipment	\$7,315		\$5,279	\$2,036
Other Plant & Misc. Equipment	34,803		25,114	9,689
Total	\$345,951		\$249,629	\$96,322
Percentages	100%		72.16%	27.84%

ATTACHMENT E
STAFF REPORT CASE NO. 1999-388

ALLOCATION OF OPERATION AND MAINTENANCE EXPENSES

Henderson County Water District

	Total	Commodity	Demand	Customer
Salaries and Wages				
Transmission & Distribution	113,020		113,020	
Customer Accounts	55,171			55,171
Employee Pensions and Benefits				
Transmission & Distribution	23,650		23,650	
Customer Accounts	11,542			11,542
Purchased Water	585,886	585,886		
Fuel for Power Production	26,883	26,883		
Bad Debt Expense	12,845			12,845
Subtotal	\$828,997	\$612,769	\$136,670	\$79,558
Less Commodity	(612,769)			
Total	\$216,228		\$136,670	\$79,558
Allocation Percentages	100.00%		63.21%	36.79%
Administrative & General				
Salaries & Wages-Employees	83,350		52,686	30,664
Salaries & Wages-Officers	5,750		3,635	2,115
Employee Pensions & Benefits	11,920		7,535	4,385
Materials & Supplies	70,406		44,504	25,902
Contractual Services-Legal	1,436		908	528
Contractual Services-Other	16,848		10,650	6,198
Transportation Expenses	19,479		12,313	7,166
Insurance - Worker's Comp	5,823		3,681	2,142
Insurance - Other	22,728		14,366	8,362
Miscellaneous Expense	14,795		9,352	5,443
Subtotal Operation & Maintenance	\$1,081,532	\$612,769	\$296,300	\$172,463
Taxes other than income	\$21,932		\$13,863	\$8,069
Loan Servicing Fees	\$1,636		\$1,034	\$602
Customer Deposit Interest*	\$625			\$625
Bank Loan	\$14,470		\$9,146	\$5,324
KIA Loans	\$84,733		\$53,560	\$31,173
Total Operating & Maintenance	\$1,204,928	\$612,769	\$373,903	\$218,256
Depreciation**(1)	\$88,026		\$63,520	\$24,506
Debt Service Coverage(2)	\$640,192		\$566,250	\$73,942
Total Revenue Required	\$1,933,146	\$612,769	\$1,003,673	\$316,704

*Allocated all to customer.

**Depreciation reduced \$256,726 to achieve utility requested increase.

(1) Depreciation based on percentages at sheet 2.

(2) Debt Service based on plant value percentages.

ATTACHMENT E
STAFF REPORT CASE NO. 1999-388

Allocation of Cost of Service

Henderson County Water District

	Total	Commodity	Demand	Customer
Operation and Maintenance	\$1,204,928	\$612,769	\$373,903	\$218,256
Depreciation	88,026		63,520	24,506
Debt Service	640,192		566,250	73,942
General Water Service Cost	\$1,933,146	\$612,769	\$1,003,673	\$316,704
Less: Other Operating Revenue	(52,700)			(52,700)
Less: Interest Income	(75,908)			(75,908)
Revenue Required from Rates	\$1,804,538	\$612,769	\$1,003,673	\$188,096

ATTACHMENT E
STAFF REPORT CASE NO. 1999-388

CALCULATION OF WATER RATES

Henderson County Water District

	Total	First 2,000	Next 8,000	Next 20,000	Over 30,000
Actual Water Sales:					
Thousand Gallons	405,108,294	125,426,525	215,044,073	38,267,684	26,370,012
	100.00%	30.96%	53.08%	9.45%	6.51%
Weighted Sales for Demand:					
Thousand Gallons	685,474,920	250,853,050	356,973,161	51,278,697	26,370,012
Percent	100.01%	36.60%	52.08%	7.48%	3.85%
Allocation of Volumetric Costs:					
Commodity	\$612,769	\$189,713	\$325,258	\$57,907	\$39,891
Demand	1,003,673	367,344	522,713	75,075	38,641
Customer	188,096	188,096			
Total	\$1,804,538	\$745,153	\$847,971	\$132,982	\$78,532
Number of Bills		68,177			
Proposed Rates		\$10.93	\$3.94	\$3.48	\$2.98

ATTACHMENT E
STAFF REPORT CASE NO. 1999-388

VERIFICATION OF RATES

Henderson County Water District

	Bills	Gallons	Rate	Revenue
5/8 Inch x 3/4 Inch Meter				
First 2,000 gallons	66,667	122,426,525	\$10.90	\$726,670
Next 8,000 gallons		207,331,218	3.90	808,592
Next 20,000 gallons		31,791,154	3.48	110,633
Over 30,000 gallons		14,644,391	2.98	43,640
1 Inch Meter				
First 5,000 gallons	1,189	5,224,323	\$22.60	26,871
Next 5,000 gallons		3,282,863	3.90	12,803
Next 20,000 gallons		3,675,465	3.48	12,791
Over 30,000 gallons		6,861,986	2.98	20,449
2 Inch Meter				
First 16,000 gallons	251	2,397,669	\$62.98	15,808
Next 14,000 gallons		852,980	3.48	2,968
Over 30,000 gallons		1,733,523	2.98	5,166
3 Inch Meter				
First 30,000 gallons	12	316,085	\$111.70	1,340
Over 30,000 gallons		172,600	2.98	514
4 Inch Meter				
First 50,000 gallons	36	1,561,971	\$171.30	6,167
Over 50,000 gallons		2,298,541	2.98	6,850
6 Inch Meter				
First 100,000 gallons	12	537,000	\$320.30	3,844
Over 100,000 gallons		0	2.98	0
Fire Department	12	283,697	\$10.90	\$130.80
Subtotal				\$1,805,237
Other Income				52,700
Interest Income				75,908
Total Revenue				\$1,933,845

Note: First 2,000 gallons reduced \$0.03 and Next 8,000 gallons reduced \$0.04 to obtain revenue requirement.

ATTACHMENT E
STAFF REPORT CASE NO. 1999-388

COMPARISON OF RATES				
Henderson County Water District				

Gallon Usage	Current Rates	Cost of Service Rates	Increase	Percentage
1000	\$9.82	\$10.90	\$1.08	11.00%
2000	9.82	10.90	\$1.08	11.00%
3000	13.58	14.80	\$1.22	8.98%
4000	17.34	18.70	\$1.36	7.84%
5000	21.10	22.60	\$1.50	7.11%
6000	24.86	26.50	\$1.64	6.60%
7000	28.62	30.40	\$1.78	6.22%
8000	32.38	34.30	\$1.92	5.93%
9000	36.14	38.20	\$2.06	5.70%
10000	39.90	42.10	\$2.20	5.51%
15000	57.40	59.50	\$2.10	3.66%
20000	74.90	76.90	\$2.00	2.67%
25000	92.40	94.30	\$1.90	2.06%
30000	109.90	111.70	\$1.80	1.64%
35000	125.45	126.60	\$1.15	0.92%
50000	172.10	171.30	-\$0.80	-0.46%
75000	249.85	245.80	-\$4.05	-1.62%
100000	327.60	320.30	-\$7.30	-2.23%
200000	638.60	618.30	-\$20.30	-3.18%

ATTACHMENT E
STAFF REPORT CASE NO. 1999-388

Henderson County Water District
Staff Recommended Rates

Monthly Water Rates

5/8 Inch x 3/4 Inch Meter

First	2,000 gallons	\$10.90	Minimum bill
Next	8,000 gallons	3.90	per 1,000 gallons
Next	20,000 gallons	3.4750304	per 1,000 gallons
Over	30,000 gallons	2.98	per 1,000 gallons

1 Inch Meter

First	5,000 gallons	\$22.60	Minimum bill
Next	5,000 gallons	3.90	per 1,000 gallons
Next	20,000 gallons	3.48	per 1,000 gallons
Over	30,000 gallons	2.98	per 1,000 gallons

2 Inch Meter

First	16,000 gallons	\$62.95	Minimum bill
Next	14,000 gallons	3.48	per 1,000 gallons
Over	30,000 gallons	2.98	per 1,000 gallons

3 Inch Meter

First	30,000 gallons	\$111.60	Minimum bill
Over	30,000 gallons	2.98	per 1,000 gallons

4 Inch Meter

First	50,000 gallons	\$171.16	Minimum bill
Over	50,000 gallons	2.98	per 1,000 gallons

6 Inch Meter

First	100,000 gallons	\$320.07	Minimum bill
Over	100,000 gallons	2.98	per 1,000 gallons

Fire Department	\$10.90	Per Month
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ATTACHMENT E
STAFF REPORT CASE NO. 1999-388

Henderson County Water District
Staff Recommended Rates

Non-Recurring Charges

Meter Connection/Tap-on Charges	
5/8 Inch x 3/4 Inch	\$475.00
All Larger Meters	Actual Cost
Connection/Turn-on Charge	25.00
Connection/Turn-on Charge-after hours	40.00
Field Collection Charge	25.00
Late Payment Penalty	10%
Meter Relocation Charge	Actual Cost
Meter Re-read Charge	25.00
Meter Test Charge	50.00
Re-connection Charge	50.00
Re-connection Charge-after hours	65.00
Returned Check Charge	20.00
Service Call/Investigation	25.00
Service Call/Investigation-after hours	40.00
Service Line Inspection	40.00



COMMONWEALTH OF KENTUCKY
PUBLIC SERVICE COMMISSION
211 SOWER BOULEVARD
POST OFFICE BOX 615
FRANKFORT, KY. 40602
(502) 564-3940

May 31, 2000

Allan R. VanMeter
Manager
Henderson County Water District
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Henderson, KY. 42419 0655

Honorable Frank N. King
Attorney at Law
Dorsey, King, Gray & Norment
318 Second Street
Henderson, KY. 42420

Hon. A.B. Chandler
Attorney General
David Edward Spenard
Assistant Attorney General
1024 Capital Center Drive
Frankfort, KY. 40601 8204

RE: Case No. 1999-388

We enclose one attested copy of the Commission's Order in
the above case.

Sincerely,

A handwritten signature in cursive script that reads "Stephanie Bell".

Stephanie Bell
Secretary of the Commission

SB/hv
Enclosure

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF HENDERSON COUNTY)
WATER DISTRICT FOR (1) ISSUANCE OF A)
CERTIFICATE OF CONVENIENCE AND)
NECESSITY; (2) AUTHORIZATION TO BORROW) CASE NO. 99-388
FUNDS AND TO ISSUE ITS EVIDENCE OF)
INDEBTEDNESS THEREFOR AND (3) AUTHORITY)
TO ADJUST RATES)

INTERIM ORDER

On May 8, 2000, Henderson County Water District ("Henderson District") submitted an application for a Certificate of Public Convenience and Necessity to construct a \$2,625,000 waterworks improvement project, for approval of its plan of financing for this project, and for adjustments to its water service rates.

The project consists of the construction of approximately 55 miles of 12-inch through 4-inch water transmission mains. This project will provide service to approximately 170 new customers and will create loops in the existing distribution system to enhance quality and reliability of service. Funding for the proposed project consists of \$2,625,000 in Water Revenue Bonds, Series 2000 at an average interest rate of 6.32 percent.

Henderson District has requested that Commission approval of the proposed construction and financing be granted as expeditiously as possible so that construction may begin in a timely manner. By subsequent Order in this case, the Commission will

address the rates necessary to provide the utility with an opportunity to recover its reasonable operating costs and service its debt.

After review of the evidence of the record and being otherwise sufficiently advised, the Commission finds that:

1. Henderson District proposes to construct approximately 55 miles of 12-inch through 4-inch water transmission mains to provide service to approximately 170 new customers and to enhance the quality of service to existing customers.

2. Plans and specifications for the proposed improvements prepared by Hunter, Martin & Associates, Inc. of Paducah, Kentucky, have been approved by the Division of Water of the Natural Resources and Environmental Protection Cabinet.

3. Public convenience and necessity require that the construction identified in Henderson District's application be performed and that a Certificate of Public Convenience and Necessity be granted.

4. The financing plan proposed by Henderson District is for lawful objects within the corporate purpose of its utility operation, is necessary and appropriate for and consistent with the proper performance of the utility's service to the public and will not impair its ability to perform that service, is reasonably necessary and appropriate for such purpose, and should be approved.

IT IS THEREFORE ORDERED that:

1. Henderson District is granted a Certificate of Public Convenience and Necessity to proceed with the proposed construction project as set forth in the plans and specifications of record herein.

2. Henderson District shall obtain approval from the Commission prior to performing any additional construction not expressly authorized by this Order.

3. Any deviation from the construction approved shall be undertaken only with the prior approval of the Commission.

4. Henderson District shall furnish documentation of the total costs of this project including the cost of construction and all other capitalized costs (engineering, legal, administrative, etc.) within 60 days of the date that construction is substantially completed. Construction costs should be classified into appropriate plant accounts in accordance with the Uniform System of Accounts for Water Utilities prescribed by the Commission.

5. Henderson District shall require construction to be inspected under the general supervision of a professional engineer licensed in Kentucky with competency in civil or mechanical engineering to ensure that the construction work is done in accordance with the drawings and specifications and in conformance with the best practices of the construction trades involved in the project.

6. Henderson District shall file a copy of the "as-built" drawings and a certified statement that the construction has been satisfactorily completed in accordance with the contract plans and specifications within 60 days of the substantial completion of the construction certificated herein.

7. The financing plan proposed by Henderson District is approved.

8. The proceeds from the \$2,625,000 bond issue shall be used only for the lawful purposes specified in Henderson District's application.



COMMONWEALTH OF KENTUCKY
PUBLIC SERVICE COMMISSION
211 SOWER BOULEVARD
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May 26, 2000

Allan R. VanMeter
Manager
Henderson County Water District
655 South Main Street
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Henderson, KY. 42419 0655

Honorable Frank N. King
Attorney at Law
Dorsey, King, Gray & Norment
318 Second Street
Henderson, KY. 42420

Hon. A.B. Chandler
Attorney General
David Edward Spenard
Assistant Attorney General
1024 Capital Center Drive
Frankfort, KY. 40601 8204

RE: Case No. 1999-388

We enclose one attested copy of the Commission's Order in
the above case.

Sincerely,

A handwritten signature in cursive script that reads "Stephanie J. Bell".

Stephanie Bell
Secretary of the Commission

SB/hv
Enclosure

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF HENDERSON)
COUNTY WATER DISTRICT FOR (1))
THE ISSUANCE OF A CERTIFICATE)
OF CONVENIENCE AND NECESSITY;) CASE NO. 99-388
(2) AUTHORIZATION TO BORROW)
FUNDS AND TO ISSUE EVIDENCE OF)
INDEBTEDNESS THEREFOR; AND (3))
AUTHORITY TO ADJUST RATES)

O R D E R

On May 8, 2000, Henderson County Water District ("Henderson District") filed an application with the Commission wherein it proposed to adjust its rates for water services rendered on and after July 1, 2000.

The Commission finds that, pursuant to KRS 278.190, further proceedings are necessary in order to determine the reasonableness of the proposed rates and that such proceedings cannot be completed prior to the proposed effective date.

IT IS THEREFORE ORDERED that:

1. The proposed rates are suspended for five months from July 1, 2000 up to and including November 30, 2000.
2. Nothing contained herein shall prevent the Commission from entering a final decision in this case prior to the termination of the suspension period.

Done at Frankfort, Kentucky, this 26th day of May, 2000.

ATTEST:

By the Commission


Executive Director

DORSEY, KING, GRAY & NORMENT

ATTORNEYS-AT-LAW

318 SECOND STREET

HENDERSON, KENTUCKY 42420

JOHN DORSEY (1920-1986)
FRANK N. KING, JR.
STEPHEN D. GRAY
WILLIAM B. NORMENT, JR.
J. CHRISTOPHER HOPGOOD

May 22, 2000

RECEIVED
MAY 23 2000
PUBLIC SERVICE
COMMISSION

TELEPHONE
(270) 826-3965
TELEFAX
(270) 826-6672

PRIORITY MAIL

Ms. Martin J. Huelsmann, Executive Director
Public Service Commission of Kentucky
211 Sower Boulevard
Frankfort, Kentucky 40601

Re: Henderson County Water District
Application
Case No. 99-388

Dear Mr. Huelsmann:

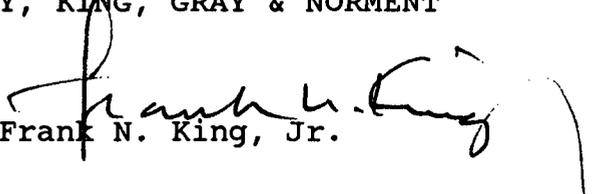
We enclose herewith for filing in the above case
affidavit of publication with an attached copy of the published
notice.

Your cooperation is appreciated.

Very truly yours,

DORSEY, KING, GRAY & NORMENT

By


Frank N. King, Jr.

FNKJr/cds
Encls.

AFFIDAVIT OF PUBLICATION

RECEIVED
MAY 23 2000
PUBLIC SERVICE
COMMISSION

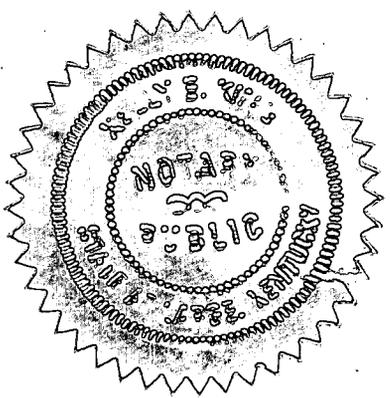
I, Becky Yates, hereby certify that
(Name of Officer)
Classified Sales Rep of THE GLEANER, a newspaper
(Title or Position)

printed, published and having a general circulation in the city of Henderson,
County of Henderson, Kentucky; and that advertisement has been published
in said newspaper on the following dates:

<u>Hend Co. Water Dist.</u> (Advertiser)	<u>Notice of Application</u>
<u>4/18/00</u> (Dates Published)	<u>for Issuance of a</u>
	<u>Certificate of Public...</u>

Becky Yates
(Signature of Officer)

Subscribed & sworn to before me this 22 day of May,
192000. My Commission expires: 5/26/2004



Kelly D. King
Notary Public
Henderson County, Kentucky

RECEIVED

MAY 19 2000

PUBLIC SERVICE
COMMISSION

Commonwealth of Kentucky
Before the Public Service Commission

In the Matter of:)
THE APPLICATION FOR GENERAL) Case No. 99-388
ADJUSTMENT IN EXISTING RATES OF)
HENDERSON COUNTY WATER DISTRICT)

RESPONSE TO MOTION TO EXPEDITE

Comes now the Attorney General and in response to the applicant's Motion to Expedite notes the following:

1. The Attorney General has no objection to the motion.
2. The Attorney General has no plans to submit any requests for information nor any plans to request a hearing in this matter.
3. The Attorney General has no objection to the Commission's consideration of the application for a certificate of convenience and necessity and the application for authority for financing by review of the record the Commission is developing.
4. The Attorney General does not request leave to file a brief with respect to the application to adjust rates.

Wherefore, the Attorney General has no objection to the Motion to Expedite.

Respectfully submitted,

A. B. CHANDLER III
ATTORNEY GENERAL

David Edward Spenard
David Edward Spenard
Assistant Attorney General
1024 Capital Center Drive
Frankfort, KY 40601-8204
502.696.5457

Certificate of Service and Filing

Counsel certifies that an original and ten photocopies of this Response to Motion to Expedite were served and filed by hand delivery to Martin Huelsmann, Executive Director, Public Service Commission, 211 Sower Boulevard, Frankfort, Kentucky 40601; furthermore, it was served by mailing a true and correct copy of the same, first class postage prepaid, to, Allan R. VanMeter, P.O. Box 655, Henderson, Kentucky 42419-0655 and Frank N. King, King, Gray & Norment, 318 Second Street, Henderson, Kentucky 42420 all on this 19th day of May, 2000.

David Edward Spenard
Assistant Attorney General



COMMONWEALTH OF KENTUCKY
PUBLIC SERVICE COMMISSION
211 SOWER BOULEVARD
POST OFFICE BOX 615
FRANKFORT, KY. 40602
(502) 564-3940

May 2, 2000

Allan R. VanMeter
Manager
Henderson County Water District
655 South Main Street
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Honorable Frank N. King
Attorney at Law
Dorsey, King, Gray & Norment
318 Second Street
Henderson, KY. 42420

Hon. A.B. Chandler
Attorney General
David Edward Spenard
Assistant Attorney General
1024 Capital Center Drive
Frankfort, KY. 40601 8204

RE: Case No. 1999-388

We enclose one attested copy of the Commission's Order in
the above case.

Sincerely,

A handwritten signature in cursive script that reads "Stephanie Bell".

Stephanie Bell
Secretary of the Commission

SB/sa
Enclosure

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF HENDERSON COUNTY)	
WATER DISTRICT FOR (1) ISSUANCE OF A)	
CERTIFICATE OF CONVENIENCE AND NECESSITY	)	CASE NO.
AND (2) AUTHORIZATION TO BORROW FUNDS AND	)	99-388
TO ISSUE ITS EVIDENCE OF INDEBTEDNESS)	
THEREFOR AND (3) AUTHORITY TO ADJUST RATES)	

O R D E R

This matter arising upon the motion of the Attorney General of the Commonwealth of Kentucky, by and through his Office of Rate Intervention ("Attorney General"), filed February 8, 2000, pursuant to KRS 367.150(8), for full intervention, such intervention being authorized by statute, and this Commission being otherwise sufficiently advised,

IT IS HEREBY ORDERED that the motion is granted, and the Attorney General is hereby made a party to these proceedings.

Done at Frankfort, Kentucky, this 2nd day of May, 2000.

By the Commission

ATTEST:


Executive Director



COMMONWEALTH OF KENTUCKY
PUBLIC SERVICE COMMISSION
211 SOWER BOULEVARD
POST OFFICE BOX 615
FRANKFORT, KY. 40602
(502) 564-3940

May 8, 2000

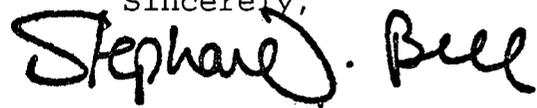
Allan R. VanMeter
Manager
Henderson County Water District
655 South Main Street
P. O. Box 655
Henderson, KY. 42419 0655

Honorable Frank N. King
Attorney at Law
Dorsey, King, Gray & Norment
318 Second Street
Henderson, KY. 42420

Hon. A.B. Chandler
Attorney General
David Edward Spenard
Assistant Attorney General
1024 Capital Center Drive
Frankfort, KY. 40601 8204

RE: Case No. 1999-388

We enclose one attested copy of the Commission's Order in
the above case.

Sincerely,

Stephanie Bell
Secretary of the Commission

SB/hv
Enclosure

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF HENDERSON COUNTY)	
WATER DISTRICT FOR (1) ISSUANCE OF)	
CERTIFICATE OF CONVENIENCE AND	)	CASE NO.
NECESSITY; (2) AUTHORIZATION TO BORROW	)	99-388
FUNDS AND TO ISSUE ITS EVIDENCE OF)	
INDEBTEDNESS THEREFOR; AND (3))	
AUTHORITY TO ADJUST RATES)	

O R D E R

On April 19, 2000, Henderson County Water District ("Henderson District") applied to the Commission for a certificate of convenience and necessity to construct water system improvements, for approval of its proposed plan of financing said construction project, and for approval to increase its water rates. On April 26, 2000, Henderson District filed a letter, which the Commission will treat as a motion, requesting permission to deviate from the requirements of Administrative Regulation 807 KAR 5:001, Section 6.

Administrative Regulation 807 KAR 5:001, Section 6, requires the submission of a detailed financial exhibit for a period ending not more than 90 days prior to the date of the application. The financial exhibit filed with the application is for a 12-month period ending August 31, 1999, the end of Henderson District's fiscal year. Henderson District states in support of its motion that the records covering operations for a 12-month period ending not more than 90 days prior to the date of the filing of the application have

not been prepared and that preparation of such an exhibit would require additional time and expense.

The Commission, having reviewed the record and being otherwise sufficiently advised, finds that good cause has been shown by Henderson District for its request to deviate from the 90-day requirement of 807 KAR 5:001, Section 6, and that its motion should be granted.

IT IS THEREFORE ORDERED that Henderson District is granted permission to deviate from the 90-day requirement of 807 KAR 5:001, Section 6, and that its application is accepted for filing as of the date of this Order.

Done at Frankfort, Kentucky, this 8th day of May, 2000.

By the Commission

ATTEST:


Executive Director

Before the Public Service Commission

RECEIVED
APR 27 2000
PUBLIC SERVICE
COMMISSION

IN THE MATTER OF THE APPLICATION OF)
HENDERSON COUNTY WATER DISTRICT FOR)
(1) ISSUANCE OF CERTIFICATE OF)
CONVENIENCE AND NECESSITY)
AND)
(2) AUTHORIZATION TO BORROW FUNDS)
AND TO ISSUE ITS EVIDENCE OF)
INDEBTEDNESS THEREFOR)
AND)
(3) AUTHORITY TO ADJUST RATES)

No. 99-388

MOTION TO EXPEDITE

HENDERSON COUNTY WATER DISTRICT ("HCWD") moves the Commission to expedite the handling of this application and in support thereof states:

1. On March 23, 2000, HCWD received bids from the low bidder, Craftsman Construction, Inc. for construction of the 1999/00 Project. These bids are "firm" for 90 days which means that they remain firm until June 21, 2000. After that date the bidder will have no obligation to contract with HCWD.

2. HCWD desires to sell the Water Revenue Bonds, Series 2000, in the amount of \$2,625,000.00 prior to the execution of the construction contracts. Financial advisor Johnston, Brown, Burnett and Knight needs to sell the bonds by June 8, 2000, in order to complete its work with respect to the bond sale by June 21, 2000. The bond sale must be advertised at least seven (7) days

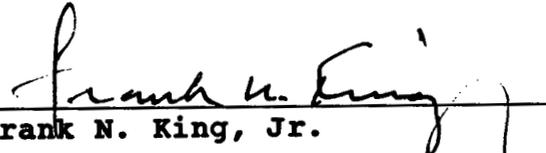
prior to the sale of the bonds, and the advertising cannot occur until after Commission approval of the bonds.

3. Applicant is requesting that the proposed rate adjustment go into effect on July 1, 2000.

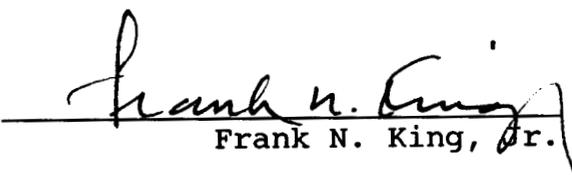
WHEREFORE, HCWD respectfully requests that the handling of this application be expedited so that the Commission may enter orders (interim or final) by May 26, 2000, approving the bond sale and the proposed construction, and may also enter order (interim or final) prior to July 1, 2000, allowing the proposed adjustment in rates to become effective on that date. HCWD further requests all proper relief.

**DORSEY, KING, GRAY & NORMENT
318 Second Street
Henderson, Kentucky 42420
Telephone 270 - 826-3965
Telefax 270 - 826-6672
Attorneys for Henderson County
Water District**

By


Frank N. King, Jr.

I hereby certify that the foregoing was served on the Attorney General of the Commonwealth of Kentucky by mailing a true and correct copy of same to A. B. Chandler, III, Attorney General, ATTENTION: David Edward Spenard, Assistant Attorney General, 1024 Capital Center Drive, Frankfort, Kentucky 40601-8204, this 26th day of April, 2000.


Frank N. King, Jr.

DORSEY, KING, GRAY & NORMENT

ATTORNEYS-AT-LAW

318 SECOND STREET

HENDERSON, KENTUCKY 42420

JOHN DORSEY (1920-1986)
FRANK N. KING, JR.
STEPHEN D. GRAY
WILLIAM B. NORMENT, JR.
J. CHRISTOPHER HOPGOOD

RECEIVED

APR 27 2000

PUBLIC SERVICE
COMMISSION

TELEPHONE
(270) 826-3965
TELEFAX
(270) 826-6672

April 26, 2000

FEDERAL EXPRESS

Ms. Martin J. Huelsmann, Executive Director
Public Service Commission of Kentucky
211 Sower Boulevard
Frankfort, Kentucky 40602

Re: Henderson County Water District
Application
Case No. 99-388

Dear Mr. Huelsmann:

I acknowledge receipt of a telephone call today from Staff Counsel Anita Mitchell advising that a deficiency notice was being issued because the 12 month period of operations covered in the financial exhibit ended more than 90 days prior to the date the application was submitted. I explained that in paragraph (pp) of the application request had been made for grant of a deviation for any noncompliance, but Ms. Mitchell informed me that a specific request was necessary.

Please be advised that the 12 month period of operations covered in the financial exhibit ended August 31, 1999, which was the end of the applicant's last fiscal year. Records covering operations for a 12 month period ending less than 90 days prior to the date the application was submitted have not been prepared and are not available at this time. Because of the extra time and expense and the hardship involved in compiling said records, the applicant respectfully requests that a deviation be permitted and that the 12 month period ending August 31, 1999, be deemed acceptable by the Commission.

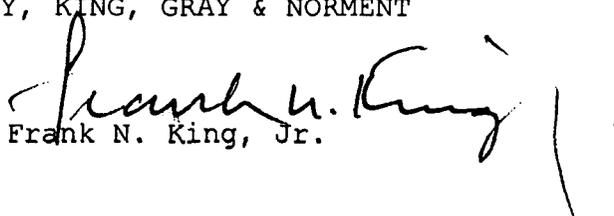
The applicant is moving the Commission to expedite the handling of this application and applicant's motion to expedite is enclosed herewith for filing.

Thank you for your consideration.

Very truly yours,

DORSEY, KING, GRAY & NORMENT

By


Frank N. King, Jr.

FNKJr/cds

Encls.

Copy: Mr. A. B. Chandler, III,
Attorney General
Attention: David Edward Spenard
Ms. Anita Mitchell



COMMONWEALTH OF KENTUCKY
PUBLIC SERVICE COMMISSION
211 SOWER BOULEVARD
POST OFFICE BOX 615
FRANKFORT, KY. 40602
(502) 564-3940

April 20, 2000

Allan R. VanMeter
Manager
Henderson County Water District
655 South Main Street
P. O. Box 655
Henderson, KY. 42419 0655

Honorable Frank N. King
Attorney at Law
Dorsey, King, Gray & Norment
318 Second Street
Henderson, KY. 42420

RE: Case No. 1999-388
HENDERSON COUNTY WATER DISTRICT
(Construct, Rates, Financing)

This letter is to acknowledge receipt of initial application in the above case. The application was date-stamped received April 19, 2000 and has been assigned Case No. 1999-388. In all future correspondence or filings in connection with this case, please reference the above case number.

If you need further assistance, please contact my staff at 502/564-3940.

Sincerely,

A handwritten signature in cursive script that reads "Stephanie Bell".

Stephanie Bell
Secretary of the Commission

SB/jc

DORSEY, KING, GRAY & NORMENT

ATTORNEYS-AT-LAW

318 SECOND STREET

HENDERSON, KENTUCKY 42420

JOHN DORSEY (1920-1986)
FRANK N. KING, JR.
STEPHEN D. GRAY
WILLIAM B. NORMENT, JR.
J. CHRISTOPHER HOPGOOD

TELEPHONE
(270) 826-3965
TELEFAX
(270) 826-6672

April 18, 2000

RECEIVED

APR 19 2000

PUBLIC SERVICE
COMMISSION

FEDERAL EXPRESS

Ms. Martin J. Huelsmann, Executive Director
Public Service Commission of Kentucky
211 Sower Boulevard
Post Office Box 615
Frankfort, Kentucky 40602

Re: Henderson County Water District
Application
Case No. 99-388

Dear Mr. Huelsmann:

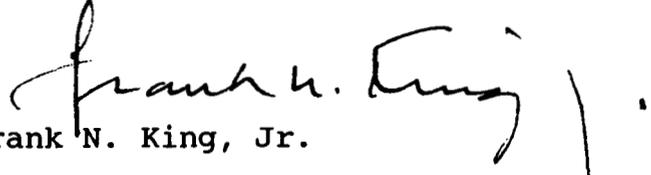
We enclose herewith for filing the original and 10
copies of the application in the above case.

Thank you for your assistance.

Very truly yours,

DORSEY, KING, GRAY & NORMENT

By


Frank N. King, Jr.

FNKJr/cds

Encls.

Copy: Mr. A. B. Chandler, III,
Attorney General
Attention: David Edward Spenard

4 Packages

RECEIVED

Before the Public Service Commission

APR 19 2000

PUBLIC SERVICE
COMMISSION

IN THE MATTER OF THE APPLICATION OF)
HENDERSON COUNTY WATER DISTRICT FOR)

(1) ISSUANCE OF CERTIFICATE OF)
CONVENIENCE AND NECESSITY)

AND)

(2) AUTHORIZATION TO BORROW FUNDS)
AND TO ISSUE ITS EVIDENCE OF)
INDEBTEDNESS THEREFOR)

AND)

(3) AUTHORITY TO ADJUST RATES)

No. 99-388

A P P L I C A T I O N

The application of HENDERSON COUNTY WATER DISTRICT respectfully shows:

(a) Applicant is a water district of Henderson and Webster Counties, Kentucky, created and existing under and by virtue of Chapter 74 of the Kentucky Revised Statutes, pursuant to a judgment of the County Court of Henderson County, Kentucky, duly entered on February 19, 1965. The borders of said Water District have been extended to include additional territories in Henderson County by order of Henderson County Court entered February 8, 1966, and in Webster County by order of the Webster County Court entered on February 14, 1966. Such judgment and order were previously filed with the Commission in Case No. 4696. Said water district includes the incorporated city of Corydon, Kentucky.

(b) The post office address of the applicant is Henderson County Water District, c/o Mr. David C. House, Chairman, Post Office Box 655, Henderson, Kentucky 42419-0655.

(c) The applicant seeks (1) a certificate of convenience and necessity permitting it to construct water system improvements consisting of additions and improvements to its water works system (the "1999/00 Project"), (2) approval of the proposed plan of financing said project, and (3) approval of increased water rates proposed to be charged by the water district to its customers, effective July 1, 2000, to enable the 1999/00 Project to be financed and to compensate the water district for increased operating costs.

(d) The 1999/00 Project will cover approximately 55 miles with new or improved water lines and will provide water service to approximately 170 additional customers. New or improved water lines will be constructed along 36 different roads or highways in both Henderson County and Webster County. The homes and businesses in the new areas to be served are presently served only by private wells, cisterns and tank water with no treatment facilities. There is no public water supply available for domestic consumption or fire protection in said new areas, and existing water services are completely inadequate to serve present needs. The 1999/00 Project is needed to enable the applicant to maintain adequate pressure and reinforce the basic system. The proposed construction of new and improved water lines is in the best

interest of the applicant, its present customers and potentially new customers.

CONSTRUCTION

(e) The facts relied upon to show that the proposed new construction is or will be required by public convenience or necessity are set forth above in paragraph (d) and also set forth in the entirety of this application, including exhibits. 807 KAR 5:001, Section 9(2)(a).

(f) Applicant has entered into an agreement with Hunter Martin & Associates, Inc. of Paducah, Kentucky, to provide engineering services for the 1999/00 Project. The construction work has been divided into two parts, "Contract A" and "Contract B." Advertisements for sealed bids were duly published and upon bids being received, applicant has approved the award of contracts to Craftsman Construction, Inc. for both contracts. However, these contracts are subject to the Commission's approval herein and final approval of the engineer after due investigation. Contract A will be in the amount of \$1,078,325.00 and Contract B will be in the amount of \$958,125.00. "Exhibit 1" includes copies of the advertisements for bids with affidavit of publication and the bids on the respective contracts received by applicant from Craftsman Construction, Inc. Unexecuted copies of the respective contracts are included in "Exhibit 2" and "Exhibit 3." Hunter Martin & Associates, Inc. estimates that the total project cost will amount

to \$2,625,000.00. See "Exhibit 4." The Engineering Report is attached as "Exhibit 5."

(g) Franchises are not required for the proposed new construction or extension. A copy of the approval letter from the Kentucky Department for Environmental Protection, Division of Water, is "Exhibit 6." Application has been made for encroachment permits from the Kentucky Department of Transportation, but such permits have not yet been received by applicant. Applicant has been assured that such permits will be duly issued, and same will be forwarded to the Commission for filing herein upon receipt by applicant. 807 KAR 5:001, Section 9(2)(b).

(h) A full description of the proposed location, route or routes of the new construction or extension including a description of the manner in which same will be constructed is set forth on the three (3) maps of suitable scale submitted herewith as "Exhibit 2" ("Contract A") and "Exhibit 3" ("Contract B"). See, also, "Exhibit 5." There are no public utilities, corporations or persons with whom the proposed new construction or extension is likely to compete, nor are there like facilities owned by others located anywhere within the map area. 807 KAR 5:001, Section 9(2)(c) and (d).

(i) The new construction or extension will be financed with the issuance of \$2,625,000.00 in Water Revenue Bonds, Series 2000. See paragraphs k through q, infra. 807 KAR 5:001, Section 9(2)(e).

(j) The estimated cost of operation after the proposed facilities are completed is shown in Part 1 of "Exhibit 7." 807 KAR 5:001, Section 9(2)(f).

FINANCING

(k) A general description of applicant's property and the field of its operation is set forth in annual reports which have been previously filed by the applicant with the Commission. 807 KAR 5:001, Section 11(1)(a).

(l) The applicant desires to issue \$2,625,000.00 in Water Revenue Bonds, Series 2000. The proceeds from these bonds will be used to construct the 1999/00 Project. Applicant has contracted with Johnston, Brown, Burnett and Knight Division of Ross, Sinclaire & Associates, Inc., Investment Bankers, Louisville, Kentucky, to provide financial advisory services with respect to the bond issue. The estimated average interest rate (6.32%), average debt service, maximum average debt service and net revenues required are set forth on "Exhibit 8." The official terms and conditions of the sale of the bonds are set forth in attached "Exhibit 9." The date of sale will be set upon Commission approval of the issuance of the bonds. 807 KAR 5:001, Section 11(1)(b) and (c).

(m) The property in detail which is to be constructed or extended with its cost as aforesaid and a detailed description of the contemplated construction or extension are set forth in "Exhibit 2," "Exhibit 3," and "Exhibit 5." The contracts

which will be entered into for construction or extension of facilities are included with "Exhibit 2 and "Exhibit 3." The contract which has been made for disposition of the evidence of indebtedness which applicant proposes to issue or the proceeds thereof is "Exhibit 10." 807 KAR 5:001, Section 11(1)(d).

(n) Applicant does not propose to discharge or refund obligations with any of the proceeds from the issuance of bonds. 807 KAR 5:001, Section 11(1)(e).

(o) A financial exhibit is included in "Exhibit 7." See pages 1 and 2 of said exhibit. 807 KAR 5:001, Section 11(2)(a).

(p) There are no mortgage liens against the applicant's property. 807 KAR 5:001, Section 11(2)(b).

(q) Maps and plans of the proposed constructions together with detailed estimates are filed herewith as aforesaid. 807 KAR 5:001, Section 11(2)(c).

RATE ADJUSTMENT

(r) This request for a general adjustment in existing rates is supported by a 12 month historical test period which includes adjustments for known and measurable changes. The 12 month period runs from September 1, 1998, through August 31, 1999, which is applicant's most recent fiscal year. See Part 1 of "Exhibit 7." 807 KAR 5:001, Section 10(1)(a).

(s) The adjustment in rates is needed to finance the construction which is detailed above. 807 KAR 5:001, Section 10(1)(b)1.

(t) The applicant's annual reports are on file with the Commission in accordance with 807 KAR 5:006, Section 3(1). 807 KAR 5:001, Section 10(1)(b)2.

(u) The proposed tariff with an effective date of July 1, 2000, is "Exhibit 11." 807 KAR 5:001, Section 10(1)(b)7.

(v) Applicant's proposed tariff changes, identified in compliance with 807 KAR 5:011, are shown in "Exhibit 12." 807 KAR 5:001, Section 10(1)(b)8.

(w) Customer notice has been given (or will be given) as required by law and a copy of said notice is "Exhibit 13." 807 KAR 5:001, Section 10(1)(b)9.

(x) A complete description and quantified explanation for all proposed adjustments as required under 807 KAR 5:001, Section 10(6)(a) are stated in "Exhibit 7." See Part 1 of said exhibit.

(y) The prepared testimony of Judson C. Royster, applicant's accountant in support of this application is "Exhibit 14." 807 KAR 5:001, Section 10(6)(b).

(z) A statement estimating the effect that the new rates will have upon the revenues of the utility is included in "Exhibit 7." See Part 3 of said exhibit. 807 KAR 5:001, Section 10(6)(d).

(aa) The effect upon the average bill of each customer classification to which the proposed rate change will apply is shown in Part 3 of "Exhibit 7." 807 KAR 5:001, Section 10(6)(e).

(bb) An analysis of customers' bills as required under 807 KAR 5:001, Section 10(6)(g).

(cc) A summary of the applicant's determination of its revenue requirements with supporting schedules appears in Part 3 of "Exhibit 7." 807 KAR 5:001, Section 10(6)(h).

(dd) A reconciliation of the rate base and capital used to determine applicant's revenue requirements appears in Part 3 of "Exhibit 7." 807 KAR 5:001, Section 10(6)(i).

(ee) A current chart of accounts required under 807 KAR 5:001, Section 10(6)(j) appears in Part 3 of "Exhibit 7."

(ff) The independent auditor's annual opinion report is set forth as Part 4 of "Exhibit 7." 807 KAR 5:001, Section 10(6)(k).

(gg) A summary of the applicant's latest depreciation study with schedules by major plant accounts is set forth in Part 1, Schedule H, of "Exhibit 7." 807 KAR 5:001, Section 10(6)(n).

(hh) A list of all commercially available for in-house developed computer software, programs, and models used in the development of the schedules and work papers associated with the

filing of this application is set forth on page 4 of "Exhibit 7."
807 KAR 5:001, Section 10(6)(o).

(ii) Monthly managerial reports providing financial results of operations for the 12 months in the test period are set forth in Part 5 of "Exhibit 7." 807 KAR 5:001, Section 10(6)(r).

(jj) A cost of service study is set forth as Part 6 of "Exhibit 7." 807 KAR 5:001, Section 10(6)(u).

(kk) A detailed income statement and balance sheet reflecting the impact of all proposed adjustments is set forth on page 4 of "Exhibit 7." 807 KAR 5:001, Section 10(7)(a).

(ll) The applicant is undertaking a \$2,625,000.00 capital project as detailed in the engineer's exhibits. 807 KAR 5:001, Section 10(7)(b).

(mm) The proposed pro forma adjustments required under 807 KAR 5:001, Section 10(7)(c) are set forth on page 5 of "Exhibit 7."

(nn) The operating budget for each month of the period encompassing the pro forma adjustments is set forth as Page 7 of "Exhibit 7." 807 KAR 5:001, Section 10(7)(d).

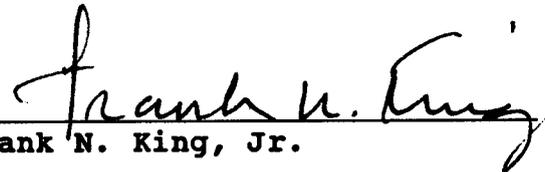
(oo) The project is expected to initially generate 125 new residential 3/4" meter customers. All supporting workpapers are set forth on page 5 of "Exhibit 7." 807 KAR 5:001, Section 10(7)(e).

(pp) To the extent the foregoing does not fully comply with applicable rules, regulations and other law, deviations therefrom are requested.

WHEREFORE the applicant, **HENDERSON COUNTY WATER DISTRICT**, respectfully requests (1) issuance of a certificate of convenience and necessity for construction of the 1999/00 Project, (2) authorization to issue \$2,625,000.00 Water Revenue Bonds, Series 2000, and (3) order of the Commission approving the proposed increased water rates and charges being sought herein.

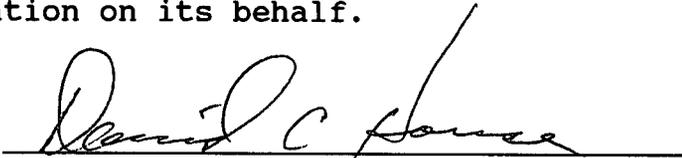
**DORSEY, KING, GRAY & NORMENT
318 Second Street
Henderson, Kentucky 42420
Telephone 270 - 826-3965
Telefax 270 - 826-6672
Attorneys for Henderson County
Water District**

By


Frank N. King, Jr.

VERIFICATION

The undersigned, DAVID C. HOUSE, Chairman of the HENDERSON COUNTY WATER DISTRICT, hereby verifies that he has personal knowledge of the matters set forth in the above stated application, that the information set forth therein is true and correct and that he is duly designated by Henderson County Water District to sign this application on its behalf.



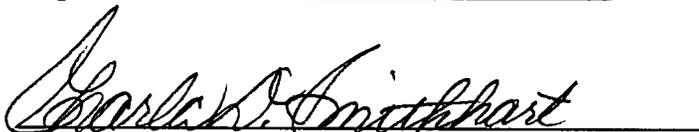
David C. House

STATE OF KENTUCKY

COUNTY OF HENDERSON

Subscribed and sworn to before me by DAVID C. HOUSE,
CHAIRMAN OF HENDERSON COUNTY WATER DISTRICT this 14th day of
April, 2000.

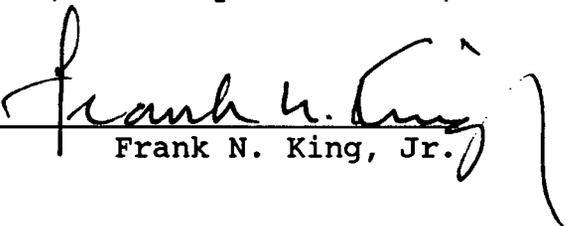
My commission expires September 29, 2001



Notary Public, State of Kentucky at Large

(seal)

I hereby certify that the foregoing was served on the Attorney General of the Commonwealth of Kentucky by mailing a true and correct copy of same to A. B. Chandler, III, Attorney General, ATTENTION: David Edward Spenard, Assistant Attorney General, 1024 Capital Center Drive, Frankfort, Kentucky 40601-8204, this 13 day of April, 2000.



Frank N. King, Jr.

AFFIDAVIT OF PUBLICATION

RECEIVED MAR 16 2000

I, Becky Yates, hereby certify that I am
(Name of Officer)

Circulation Sales Rep. of THE GLEANER, a newspaper
(Title or Position)

printed, published and having a general circulation in the city of Henderson,
County of Henderson, Kentucky; and that advertisement has been published
in said newspaper on the following dates:

Henderson Co. Water District
(Advertiser)

March 3, 4, & 5th 2000

(Dates Published)

Becky Yates

(Signature of Officer)

Subscribed & sworn to before me this 14 day of March,
19 2000. My Commission expires: May 26, 2000

Karen D. Bryant
Notary Public

Henderson County, Kentucky

EXHIBIT
1

ADVERTISEMENT FOR BIDS CONTRACT "A"
Henderson County
Water District
655 South Main Street
P.O. Box 655
Henderson, KY 42420

Separate sealed BIDS for the construction of 1999/2000 Water Distribution System Improvements Contract "A" (Including 90,500 LF of 8" water mains; 67,600 LF of 6" water mains; 7,600 LF of 4" water mains; 750 LF of 3" water mains; and appurtenances will be received by Henderson County Water District at the office of Henderson County Water District, 655 South Main Street, Henderson, Kentucky 42420 until 11:00 A.M., CST, Thursday, March 23, 2000, and then at said office publicly opened and read aloud.

The CONTRACT DOCUMENTS may be examined at the following locations:

- Hunter Martin & Associates, Inc., Paducah, Kentucky
- Henderson County Water District, Henderson, Kentucky
- Associated General Contractors, Paducah, Kentucky
- F. W. Dodge-Cig, Evansville, Indiana
- Builders Exchange of Louisville, Louisville, Kentucky

Copies of the CONTRACT DOCUMENTS may be obtained at the office of HUNTER MARTIN & ASSOCIATES, INC., 3220 Lone Oak Road, Paducah, KY 42003, upon payment of \$100.00 for each set.

Any BIDDER, upon returning the CONTRACT DOCUMENTS promptly and in good condition, will be refunded the payment, and any non-bidder or subbidder upon so returning the CONTRACT DOCUMENTS will be refunded \$50.00.

The OWNER reserves the right to waive any informalities or to reject any or all bids.

Each BIDDER must deposit with his BID security in the amount, form and subject to the conditions provided in the Information for Bidders.

No BIDDER may withdraw his BID within 90 DAYS after the actual date of the opening thereof.

FEBRUARY 23, 2000
H. D.C. HOUSE,
CHAIRMAN

ADVERTISEMENT FOR BIDS CONTRACT "B"
Henderson County
Water District
655 South Main Street
P.O. Box 655
Henderson, KY 42420

Separate sealed BIDS for the construction of 1999/2000 Water Distribution System Improvements Contract "B" (Including 16,700 LF of 12" water mains; 24,900 LF of 8" water mains; 65,700 LF of 6" water mains; 11,300 LF of 4" water mains; and appurtenances will be received by Henderson County Water District at the office of Henderson County Water District, 655 South Main Street, Henderson, Kentucky 42420 until 1:00 P.M., CST, Thursday, March 23, 2000, and then at said office publicly opened and read aloud.

The CONTRACT DOCUMENTS may be examined at the following locations:

- Hunter Martin & Associates, Inc., Paducah, Kentucky
- Henderson County Water District, Henderson, Kentucky
- Associated General Contractors, Paducah, Kentucky
- F. W. Dodge-Cig, Evansville, Indiana
- Builders Exchange of Louisville, Louisville, Kentucky

Copies of the CONTRACT DOCUMENTS may be obtained at the office of HUNTER MARTIN & ASSOCIATES, INC., 3220 Lone Oak Road, Paducah, KY 42003, upon payment of \$100.00 for each set.

Any BIDDER, upon returning the CONTRACT DOCUMENTS promptly and in good condition, will be refunded the payment, and any non-bidder or subbidder upon so returning the CONTRACT DOCUMENTS will be refunded \$50.00.

The OWNER reserves the right to waive any informalities or to reject any or all bids.

Each BIDDER must deposit with his BID security in the amount, form and subject to the conditions provided in the Information for Bidders.

No BIDDER may withdraw his BID within 90 DAYS after the actual date of the opening thereof.

FEBRUARY 23, 2000
H. D.C. HOUSE,
CHAIRMAN

BID - CONTRACT "A"

Proposal of Craftsman Construction, Inc. (hereinafter called "BIDDER"), organized and existing under the laws of the State of Indiana doing business as Corporation
(Insert "a corporation", "a partnership", or "an individual" as applicable.)

To HENDERSON COUNTY WATER DISTRICT, 655 SOUTH MAIN STREET, HENDERSON, KENTUCKY 42420 (hereinafter called OWNER).

The BIDDER hereby proposes to perform all WORK for the installation of 1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS - CONTRACT "A" in strict accordance with the CONTRACT DOCUMENTS, within the time set forth herein, and at the prices stated below.

By submission of this BID, each BIDDER certifies, and in the case of a joint BID each party thereto certifies as to its own organization, that this BID has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this BID with any other BIDDER or with any competitor.

BIDDER hereby agrees to commence WORK under this contract on or before a date to be specified in the NOTICE TO PROCEED and to fully complete the PROJECT within 180 consecutive calendar days thereafter. BIDDER further agrees to pay as liquidated damages, the sum of \$ 500.00 for each consecutive calendar day thereafter.

BIDDER acknowledges receipt of the following ADDENDUM:

Addendum # 1 Dated March 17, 2000

BIDDER, having examined the plans and specifications and being acquainted with and fully understanding (a) the extent and character of the work, (b) the location, arrangement and specified requirements, (c) existing and probable construction difficulties and hazards, (d) local conditions relative to labor, transportation, hauling and delivery, and (e) all other conditions affecting or which may be affected by the PROJECT hereby agrees to perform all the WORK described in the CONTRACT DOCUMENTS for the following unit prices and/or lump sums:

BID SCHEDULE

NOTE: BIDS SHALL INCLUDE SALES TAX AND ALL APPLICABLE TAXES AND FEES. SEE SPECIAL CONDITIONS FOR EXPLANATION OF BID ITEMS.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE BID	AMOUNT
1.	MOBILIZATION/ DEMOLITION	1	LS	42,000. ⁰⁰	42,000. ⁰⁰
2.	WATER MAINS, PVC				
2.1	8" SDR 21 or 8" Class 250 DIP	93,000	LF	5.85	544,050. ⁰⁰
2.2	6" SDR 21 or 6" Class 250 DIP	39,600	LF	3.75	223,500. ⁰⁰
2.3	4" SDR 21 or 4" Class 250 DIP	7,200	LF	2.15	15,480. ⁰⁰
2.4	3" SDR 21	750	LF	1.60	1,200. ⁰⁰
2.5	2" SDR 21	100	LF	1.40	140. ⁰⁰
2.6	8" Class 250 DIP	400	LF	10.00	4,000. ⁰⁰
2.7	6" Class 250 DIP	400	LF	8.20	3,280. ⁰⁰
2.8	4" Class 250 DIP	400	LF	7.95	3,180. ⁰⁰
3.	FITTINGS				
3.1	Ductile Iron, 8" Size	3,000	LBS.	4.00	12,000. ⁰⁰
3.2	Ductile Iron, 6" Size	1,500	LBS.	3.90	5,850. ⁰⁰
3.3	Ductile Iron, 4" Size	200	LBS.	4.75	950. ⁰⁰
3.4	PVC, 3" and Smaller	6	EA	75. ⁰⁰	450. ⁰⁰
4.	VALVES, W/IRON BOX				
4.1	8" Gate	23	EA	680. ⁰⁰	15,640. ⁰⁰
4.2	6" Gate	8	EA	525. ⁰⁰	4,200. ⁰⁰
4.3	4" Gate	4	EA	425. ⁰⁰	1,700. ⁰⁰
4.4	3" Gate	8	EA	375. ⁰⁰	3,000. ⁰⁰
4.5	2" Gate	4	EA	325. ⁰⁰	1,300. ⁰⁰
5.	SPECIAL FITTINGS, SERVICE SADDLES - TAPPING SLEEVE				
5.1	8" x 8" Tapping Sleeve W/8" Gate Valve & Box	1	EA	1,500. ⁰⁰	1,500. ⁰⁰
5.2	6" x 6" Tapping Sleeve W/6" Gate Valve & Box	1	EA	1,200. ⁰⁰	1,200. ⁰⁰

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE BID	AMOUNT
6.	CLAMPS AND COUPLINGS				
6.1	8"	1	EA.	230.00	230.00
6.2	6"	1	EA.	220.00	220.00
6.3	4"	1	EA.	165.00	165.00
6.4	3" and Smaller	1	EA.	135.00	135.00
7.	TIE-INS				
7.1	8"	5	EA.	325.00	1,625.00
7.2	6"	6	EA.	250.00	1,500.00
7.3	4"	3	EA.	160.00	480.00
7.4	3" and Smaller	13	EA.	130.00	1,690.00
8.	HYDRANTS				
8.1	Standard Hydrant	2	EA.	1,175.00	2,350.00
8.2	3" Post Hydrant	5	EA.	650.00	3,250.00
9.	AIR RELEASE VALVES W/BOX	2	EA.	650.00	1,300.00
10.	METER SETTINGS				
10.1	5/8" x 3/4" New	96	EA.	325.00	31,200.00
10.2	5/8" x 3/4" Reconnection	107	EA.	295.00	31,565.00
11.	SERVICE LINES				
11.1	1/4" Copper, Open Cut	4,600	LF	3.00	13,800.00
11.2	1/4" Copper, Bore	4,200	LF	4.70	19,740.00
12.	BORE W/CASING				
12.1	14" Casing	750	LF	46.50	34,875.00
12.2	12" Casing	250	LF	44.70	11,175.00
13.	BORE W/O CASING				
13.1	8" Carrier	40	LF	21.50	860.00
13.2	6" Carrier	150	LF	21.00	3,150.00
14.	OPEN CUT CASING				
14.1	14" Casing	80	LF	24.00	1,920.00
14.2	12" Casing	40	LF	22.00	880.00
15.	ADDITIONAL DEPTH (Greater than 7')	500	LF	5.00	2,500.00
16.	CRUSHED STONE	900	CY	21.00	18,900.00
17.	RIPRAP	300	CY	25.00	7,500.00

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE BID	AMOUNT
18.	CONCRETE ENCASEMENT	20	LF	28.50	570.00
19.	ASPHALT PAVEMENT REPLACEMENT	20	SY	75.00	1,500.00
20.	CONCRETE PAVEMENT REPLACEMENT	5	CY	125.00	625.00
TOTAL BID - CONTRACT "A"				\$ 1,078,325.00	

NOTE: THE CONTRACT SHALL BE AWARDED BASED ON THE TOTAL BID. HOWEVER, IT IS AGREED THAT THE OWNER MAY ADJUST THE QUANTITIES TO MATCH AVAILABLE FUNDS.

RESPECTFULLY SUBMITTED THIS 23rd DAY OF March, 2000

IS BIDDER AN INDIVIDUAL, A PARTNERSHIP, OR A CORPORATION? Corporation

Craftsman Construction, Inc.

FIRM NAME

502 West 12th Street

FIRM ADDRESS

Huntingburg, IN 47542

(812) 683-5705

PHONE NUMBER



SIGNATURE

General Manager

TITLE

LIST OF PARTNERS, OR CORPORATE OFFICERS WITH
TITLES IF APPLICABLE:

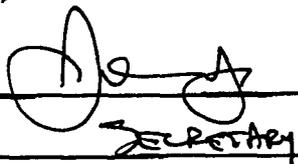
Robert H. Menke Jr. Pres.

Jim F. Harris Jr. Sec./Tres.

Lary Wehr, General Manager

SEAL (IF APPLICABLE)

ATTEST:



TITLE

BID - CONTRACT "B"

Proposal of Craftsman Construction, Inc. (hereinafter called "BIDDER"), organized and existing under the laws of the State of Indiana

doing business as Corporation

(Insert "a corporation", "a partnership", or "an individual" as applicable.)

To **HENDERSON COUNTY WATER DISTRICT, 655 SOUTH MAIN STREET, HENDERSON, KENTUCKY 42420** (hereinafter called OWNER).

The BIDDER hereby proposes to perform all WORK for the installation of 1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS - CONTRACT "B" in strict accordance with the CONTRACT DOCUMENTS, within the time set forth herein, and at the prices stated below.

By submission of this BID, each BIDDER certifies, and in the case of a joint BID each party thereto certifies as to its own organization, that this BID has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this BID with any other BIDDER or with any competitor.

BIDDER hereby agrees to commence WORK under this contract on or before a date to be specified in the NOTICE TO PROCEED and to fully complete the PROJECT within 180 consecutive calendar days thereafter. BIDDER further agrees to pay as liquidated damages, the sum of \$ 500.00 for each consecutive calendar day thereafter.

BIDDER acknowledges receipt of the following ADDENDUM:

Addendum # 1 Dated March 17, 2000

Addendum # 2 Dated March 20, 2000

Addendum # 3 Dated March 22, 2000

BIDDER, having examined the plans and specifications and being acquainted with and fully understanding (a) the extent and character of the work, (b) the location, arrangement and specified requirements, (c) existing and probable construction difficulties and hazards, (d) local conditions relative to labor, transportation, hauling and delivery, and (e) all other conditions affecting or which may be affected by the PROJECT hereby agrees to perform all the WORK described in the CONTRACT DOCUMENTS for the following unit prices and/or lump sums:

BID SCHEDULE

NOTE: BIDS SHALL INCLUDE SALES TAX AND ALL APPLICABLE TAXES AND FEES. SEE SPECIAL CONDITIONS FOR EXPLANATION OF BID ITEMS.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE BID	AMOUNT
1.	MOBILIZATION/ DEMobilIZATION	1	LS	38,000.00	38,000.00
2.	WATER MAINS, PVC				
2.1	12" SDR 21 or 12" Class 250 DIP	16,300	LF	12.75	199,675.00
2.2	8" SDR 21 or 8" Class 250 DIP	24,500	LF	6.50	159,250.00
2.3	6" SDR 21 or 6" Class 250 DIP	65,800	LF	4.00	263,200.00
2.4	4" SDR 21 or 4" Class 250 DIP	10,700	LF	2.35	25,145.00
2.5	3" SDR 21	100	LF	1.70	170.00
2.6	2" SDR 21	100	LF	1.50	150.00
2.7	12" Class 250 DIP	400	LF	15.95	6,380.00
2.8	8" Class 250 DIP	400	LF	10.75	4,300.00
2.9	6" Class 250 DIP	400	LF	8.70	3,480.00
2.10	4" Class 250 DIP	400	LF	8.50	3,400.00
3.	FITTINGS				
3.1	Ductile Iron, 12" Size	1,300	LBS.	4.30	5,590.00
3.2	Ductile Iron, 10" Size	300	LBS.	4.25	1,275.00
3.3	Ductile Iron, 8" Size	1,500	LBS.	4.20	6,300.00
3.4	Ductile Iron, 6" Size	1,800	LBS.	4.10	7,380.00
3.5	Ductile Iron, 4" Size	400	LBS.	4.90	1,960.00
3.6	PVC, 3" and Smaller	2	EA.	75.00	150.00
4.	VALVES, W/IRON BOX				
4.1	12" Gate	3	EA.	1,290.00	3,870.00
4.2	10" Gate	1		1,000.00	1,000.00
4.3	8" Gate	11	EA.	750.00	8,250.00
4.4	6" Gate	14	EA.	570.00	7,980.00
4.5	4" Gate	3	EA.	470.00	1,410.00
4.6	3" Gate	8	EA.	410.00	3,280.00
5.	SPECIAL FITTINGS, TAPPING TEE				
5.1	8" x 3" Scrv Saddle W/3" Gate Valve & Box	1	EA.	1,000.00	1,000.00
5.2	10" x 10" Tapping Sleeve W/10" Gate Valve & Box	1	EA.	2,000.00	2,000.00
5.3	8" x 6" Tapping sleeve W/6" Gate Valve & Box	1	EA.	1,100.00	1,100.00
5.4	6" x 6" Tapping Sleeve W/6" Gate Valve & Box	2	EA.	1,050.00	2,100.00
5.4	4" x 4" Tapping Sleeve W/4" Gate Valve & Box	1	EA.	950.00	950.00

Add. #3

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE BID	AMOUNT
6.	CLAMPS AND COUPLINGS				
6.1	12"	1	EA.	300. ⁰⁰	300. ⁰⁰
6.2	10"	1	EA.	250. ⁰⁰	250. ⁰⁰
6.3	8"	1	EA.	200. ⁰⁰	200. ⁰⁰
6.4	6"	1	EA.	175. ⁰⁰	175. ⁰⁰
6.5	4"	1	EA.	150. ⁰⁰	150. ⁰⁰
6.6	3" and Smaller	1	EA.	120. ⁰⁰	120. ⁰⁰
7.	TIE-INS				
7.1	10"	1	EA.	400. ⁰⁰	400. ⁰⁰
7.2	8"	6	EA.	380. ⁰⁰	2,280. ⁰⁰
7.3	6"	11	EA.	300. ⁰⁰	3,300. ⁰⁰
7.4	4"	2	EA.	200. ⁰⁰	400. ⁰⁰
7.5	3" and Smaller	11	EA.	150. ⁰⁰	1,650. ⁰⁰
8.	HYDRANTS				
8.1	Standard Hydrant	2	EA.	1,200. ⁰⁰	2,400. ⁰⁰
8.2	3" Post Hydrant	8	EA.	730. ⁰⁰	5,840. ⁰⁰
9.	AIR RELEASE VALVES W/BOX	2	EA.	675. ⁰⁰	1,350. ⁰⁰
10.	METER SETTINGS				
10.1	5/8" x 1/4" Reconnection	72	EA.	320. ⁰⁰	23,040. ⁰⁰
10.2	5/8" x 1/4" New	75	EA.	350. ⁰⁰	26,250. ⁰⁰
11.	SERVICE LINES				
11.1	3/4" Copper, Open Cut	3,400	LF	3. ⁰⁰	10,200. ⁰⁰
11.2	3/4" Copper, Bore	3,000	LF	4.50	13,500. ⁰⁰
12.	BORE W/CASING				
12.1	18" Casing	380	LF	54.70	20,786. ⁰⁰
12.2	14" Casing	300	LF	51.75	15,525. ⁰⁰
12.3	12" Casing	480	LF	48.30	23,184. ⁰⁰
12.4	10" Casing	120	LF	45.75	5,490. ⁰⁰
13.	BORE W/O CASING				
13.1	12" Carrier	70	LF	25. ⁰⁰	1,750. ⁰⁰
13.2	8" Carrier	30	LF	24. ⁰⁰	720. ⁰⁰
13.3	6" Carrier	40	LF	23. ⁰⁰	920. ⁰⁰
14.	OPEN CUT CASING				
14.1	14" Casing	40	LF	25. ⁰⁰	1,000. ⁰⁰
15.	ADDITIONAL DEPTH (Greater than 7')	500	LF	6. ⁰⁰	3,000. ⁰⁰
16.	CRUSHED STONE	900	CY	25. ⁰⁰	22,500. ⁰⁰

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE BID	AMOUNT
17.	RIPRAP	300	CY	28. ⁰⁰	8,400. ⁰⁰
18.	CONCRETE ENCASEMENT	20	LF	32. ⁰⁰	640. ⁰⁰
19.	ASPHALT PAVEMENT REPLACEMENT	20	SY	83. ⁰⁰	1,660. ⁰⁰
20.	CONCRETE PAVEMENT REPLACEMENT	20	CY	100. ⁰⁰	2,000. ⁰⁰
TOTAL BID - CONTRACT "B"				958,125. ⁰⁰	

NOTE: THE CONTRACT SHALL BE AWARDED BASED ON THE TOTAL BID. HOWEVER, IT IS AGREED THAT THE OWNER MAY ADJUST THE QUANTITIES TO MATCH AVAILABLE FUNDS.

RESPECTFULLY SUBMITTED THIS 23rd DAY OF March, 2000

IS BIDDER AN INDIVIDUAL, A PARTNERSHIP, OR A CORPORATION? Corporation

Craftsman Construction
FIRM NAME
502 W. 12th Street
FIRM ADDRESS
Huntingburg, In 47542
(812) 683-5705
PHONE NUMBER

Lary Wehr
SIGNATURE
General Manager
TITLE
LIST OF PARTNERS, OR CORPORATE OFFICERS WITH TITLES IF APPLICABLE:
Robert H. Menke Jr. -Pres.
Jim F. Harris Jr. Sec./Tres.
Lary Wehr, General Manager

SEAL (IF APPLICABLE)

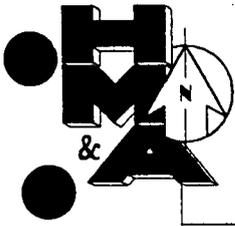
ATTEST: *[Signature]*
Secretary
TITLE

**EXHIBIT 2 CONTAINS 3 COPIES OF SYSTEM
IMPROVEMENTS MAPS AND PROPOSED CONTRACTS
FOR CONTRACT A. BECAUSE OF SIZE EXHIBIT 2
IS FILED HERewith UNDER SEPARATE COVER.**

TERRILL	EXHIBIT
	<u>2</u>

**EXHIBIT 3 CONTAINS 3 COPIES OF SYSTEM
IMPROVEMENTS MAPS AND PROPOSED CONTRACTS
FOR CONTRACT B. BECAUSE OF SIZE EXHIBIT 3
IS FILED HEREWITH UNDER SEPARATE COVER.**

TABLETS	EXHIBIT
	3



"Established 1952"

HUNTER MARTIN & ASSOCIATES, INC.

ENGINEERS & SURVEYORS

3220 LONE OAK ROAD • PADUCAH, KENTUCKY 42003
(502) 554-2737 * FAX (502) 554-2738

HUNTER H. MARTIN (1924 - 1997)

Founder

ROD H. MARTIN, P.E./L.S.

President

MICHAEL GARDNER

Vice President

BETTY J. GARDNER

Secretary/Treasurer

PrjCst6AB; PC Total
04/13/2000

**HENDERSON COUNTY WATER DISTRICT
1999/2000 WATER SYSTEM IMPROVEMENTS
PRELIMINARY PROJECT COSTS
(AFTER BIDDING)**

CONSTRUCTION COSTS:

CONTRACT A	Craftsman	\$ 1,078,325.00
CONTRACT B	Craftsman	\$958,125.00
SUBTOTAL - CONSTRUCTION		\$2,036,450.00

TECHNICAL

	Percentage	Discount	Subtotal
Basic	7.1300%	6.8800%	\$140,107.76
Through Contract Award	80.00%		\$112,086.21
During Construction	20.00%		\$28,021.55
Inspection	3.3800%		\$68,832.01
Extra (As Requested)			
Preliminary		\$5,000.00	
Surveys		\$3,000.00	
Easements/Permits/Right-Of-Way		\$7,000.00	
Additional Inspectors		\$6,000.00	
Shop Drawings Manual		\$1,000.00	
Financing Assistance		\$10,000.00	
PSC Rate & Construction Case		\$20,000.00	
Hydraulic Analysis		\$8,000.00	
			\$60,000.00
SUBTOTAL - TECHNICAL			\$268,940.00

ADMINISTRATIVE & LEGAL	1	LS	\$10,000.00
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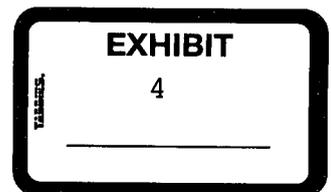
LAND, EASEMENTS & R.O.W.	1	LS	\$5,000.00
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FINANCIAL, BOND, ETC.	1	LS	\$100,375.00
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CONTINGENCIES	10.03%	Of Construction	\$204,235.00
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TOTAL PROJECT COSTS			\$2,625,000.00
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BOND PROCEEDS:			\$2,625,000.00
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**HENDERSON COUNTY
WATER DISTRICT
OHIO COUNTY, KENTUCKY**

**1999/2000 DISTRIBUTION
SYSTEM IMPROVEMENTS**

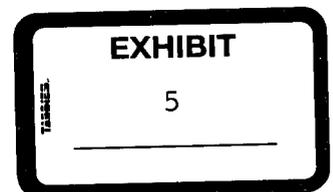
**ENGINEERING
REPORT**



4-13-00



APRIL, 2000



SET NO. _____

HENDERSON COUNTY WATER DISTRICT

ENGINEERING REPORT

1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS

IN

HENDERSON COUNTY, KENTUCKY

GENERAL INFORMATION:

The Henderson County Water District, created under KRS Chapter 74 on October 24, 1964, comprises all of Henderson County and serves a small area in the Northern portion of Webster County.

Henderson County lies in the Northwest part of the State of Kentucky (See Figure 1, Page 2) with the Ohio River forming the Northern border of the County, Union County on the West, Webster and McLean Counties on the South and Daviess County on the East. Henderson County comprises 433 square miles and the City of Henderson is the County Seat. Henderson is only 10 miles South of Evansville, Indiana; 140 miles West of Louisville, Kentucky; 150 miles North of Nashville, Tennessee; and 175 miles East of St. Louis, Missouri.

Highway transportation in Henderson County consists of the Pennyrile Parkway (North/South) and the Audubon Parkway (East/West) of the Kentucky Turnpike System; U. S. Highways 41, 41A, 60 and 641; and is crisscrossed with many State and County highways. Three railroads traverse the County and water transportation is prevalent on the Ohio and Green Rivers with a river terminal available at Evansville. Henderson County has a local airport and there is a commercial airport only 15 miles North at Evansville, Indiana.

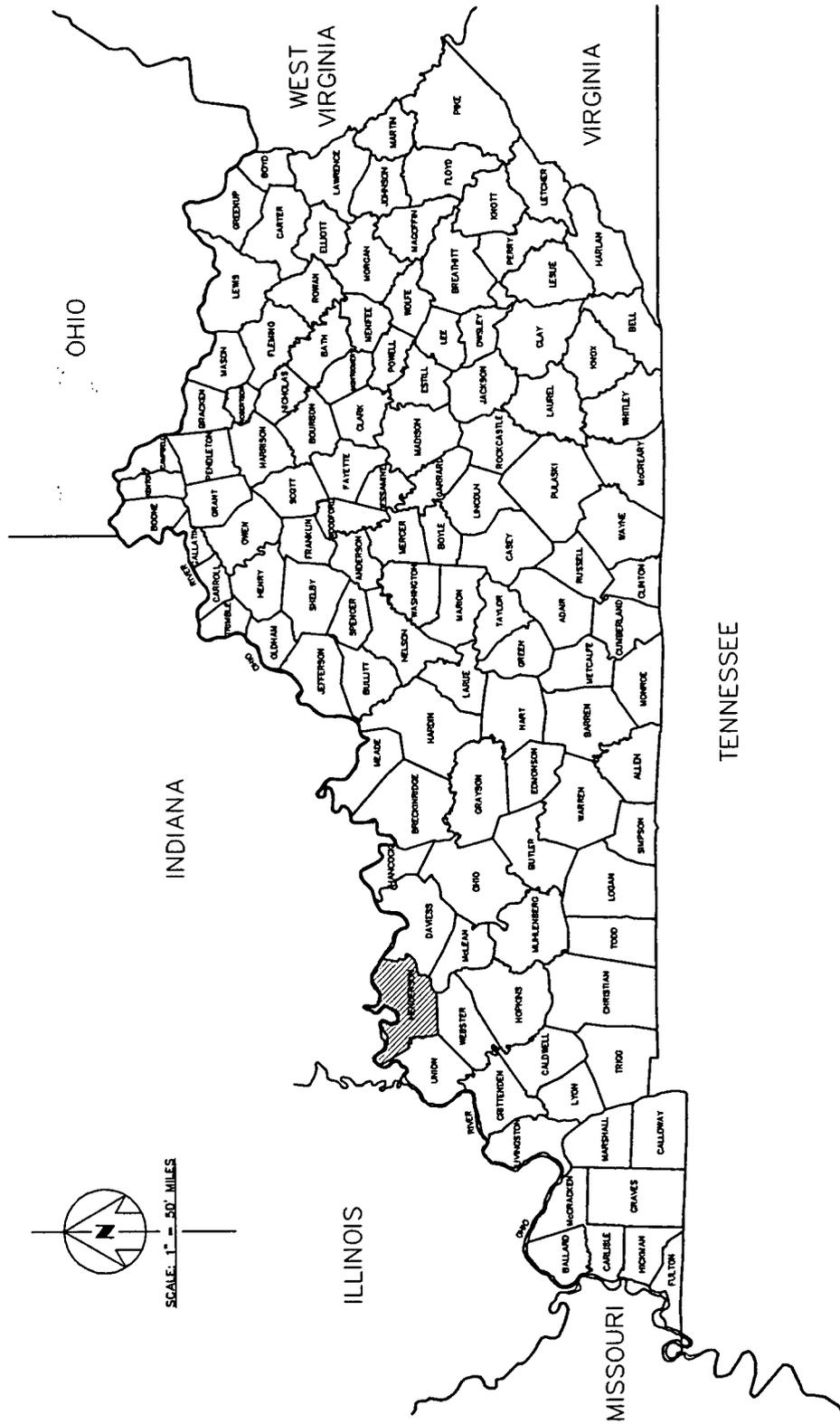
Manufacturing provides the major source of employment in Henderson County followed by agriculture, mineral extraction, trade and services. There are approximately 50 manufacturing companies in the County with the largest being Anaconda Aluminum Company and Firestone.

The County ranks second in the State for corn production, third for swine production, fourth for soybean production and sixth for dark fired tobacco production. Petroleum and coal are the principal mineral resources and others include sand, gravel and clay.

OTHER UTILITIES:

Other utilities in Henderson County include the following:

1. The only sanitary sewage facilities within the Water District are provided by the City of Henderson. The City treats wastewater from the City of Corydon and the Henderson South Sewage Plant serves Hudson Foods, Inc. and the City of Sebree in Webster County.
2. Electrical Service in the County is by Henderson Union Rural Electric, Henderson, Kentucky.
3. Telephone service in the County is by Henderson Union Rural Electric, Henderson, Kentucky.



HUNTER MARTIN & ASSOCIATES, INC.

ENGINEERS & SURVEYORS
 3220 LOWE OAK ROAD • PADUCAH, KENTUCKY 42003
 (502) 554-2797 • FAX (502) 554-2738

Drawn by:	SDC
Checked by:	RHM
FR:	
REPORT/FIG:	
Date:	
Revised:	

FIGURE 1
KENTUCKY COUNTIES
HENDERSON COUNTY WATER DISTRICT

4. Natural gas service is by Western Kentucky Gas to most communities East of U. S. Highway 60/641 and by Henderson City Gas Company along U. S. Highway 60 to Corydon. Texas Gas has several large trunk lines through the County.

EXISTING WATER SYSTEM:

The Water District Board of Commissioners, with three appointed by the Henderson County Judge and two appointed by the Webster County Judge, are:

David C. House, Chairman
 Robert McIndoo, Secretary
 David Spainhoward, Treasurer
 Jimmie L. Russell
 James Tomlingson

Construction of water facilities for the Henderson County Water District was completed in 1967 with initial service to the major populated communities in Henderson County and a portion of Webster County, Kentucky. The initial system was to serve 1,842 customers including the City of Corydon with 200 existing users on an existing water system. A growth rate of 75 new customers per year was projected from the 3rd through the 20th year. Current users and future projections are shown under the article on "Population".

The existing water facilities include the following:

1. SUPPLY:

The District's supply is from the City of Henderson Municipal Water Works, which is operated by the Henderson Water and Sewer Commission. The source of supply is from the Ohio River and the plant has a capacity of 12 million gallons per day. The current average use is 7.5 MGD including the demand to the Henderson County Water District. Treated water storage in the City is 7.6 MG plus a 1.2 MG clearwell. The plant and pumping facilities are served by a dual power feed.

The City of Henderson Water Treatment Plant is in the central part of the City near the Ohio River and the Water District surrounds the City on the West, South and East sides. Water supply to the District is from seven master metering points around the City and fanning out to serve the entire District.

The City of Henderson operates a 4 MGD treatment plant with an 800,000 gallon clearwell and a 1.0 MG elevated tank in the Southeastern part of Henderson County (South Plant) and sells water from this plant to the Henderson County Water District. The District receives a maximum average daily supply of 500,000 GPD and the 24 hour peak supply does not exceed 625,000 GPD (125%). The maximum pumping rate does not exceed 500 gpm

A "Water Purchase Agreement" between the City of Henderson and the Henderson County Water District to run for 40 years was executed June 1, 1989.

2. PRESSURE SYSTEM:

Figure 2 on Page 5 shows the pressure systems within the District. These are described as follows:

No. 1 - Main Pressure System: This pressure system constitutes the largest area and has about 71 percent of the District's customers.

There are three 200,000 gallon elevated storage tanks, one 500,000 gallon elevated storage tank and one 100,000 gallon standpipe, all having the same overflow elevation. The total supply to this pressure system of 1,358 gpm is from the following locations.

- a. Rock Springs Pump Station (178 gpm) from a reservoir supplied through System 4 by the Highway 1A Pump Station (244 gpm).
- b. Anthoston Pump Station (164 gpm) supplied by Henderson Utilities through System 5.
- c. Graham Hill Pump Station (285 gpm) supplied directly by Henderson Utilities.
- d. Spottsville Pump Station (231 gpm) supplied directly by Henderson Utilities with the Highway 60 East (345gpm) low pressure booster pumps.
- e. Robards Pump Station (500 gpm) supplied directly by Henderson Utilities.

No. 2 - Reed Pressure System: This Pressure System is supplied from the Main Pressure System (No. 1) through the Spottsville 200,000 Gallon Elevated Tank. A pressure reducing valve is employed to lower the pressure in this low, flat area on the East side of the Green River.

No. 3 - West Pressure System: This Pressure System is the second largest with approximately 22 percent of the District's customers. It has a 200,000 gallon and a 150,000 gallon elevated tank at the same overflow elevation.

This pressure system is supplied by the Highway 60 West Pump Station (303 gpm) directly from Henderson Utilities.

No. 4 - Central Pressure System: This small pressure system is supplied by the Highway 41A Pump Station (244 gpm) directly from Henderson Utilities. It serves a corridor along U. S. Highway 41A to the 100,000 gallon reservoir at Rock Springs where the Rock Springs Pump Station pumps to the Main Pressure System (No. 1). The Rock Springs reservoir maintains the pressure in this system.

No. 5 and No. 6: These two small pressure systems operate directly on pressure from the Henderson Utilities System.

3. DISTRIBUTION SYSTEM:

The District's distribution system consists of main lines radiating out from the City of Henderson's supply sources. The original system was constructed with asbestos cement pipe. Over the years, most of these mains have been looped and are served from two or more directions. Many of the original small mains have been replaced and/or have been reinforced by loops from other mains.

Figure 3 on Page 6 shows the Overall Distribution System. The present system serves approximately 287 miles with the following pipe sizes:

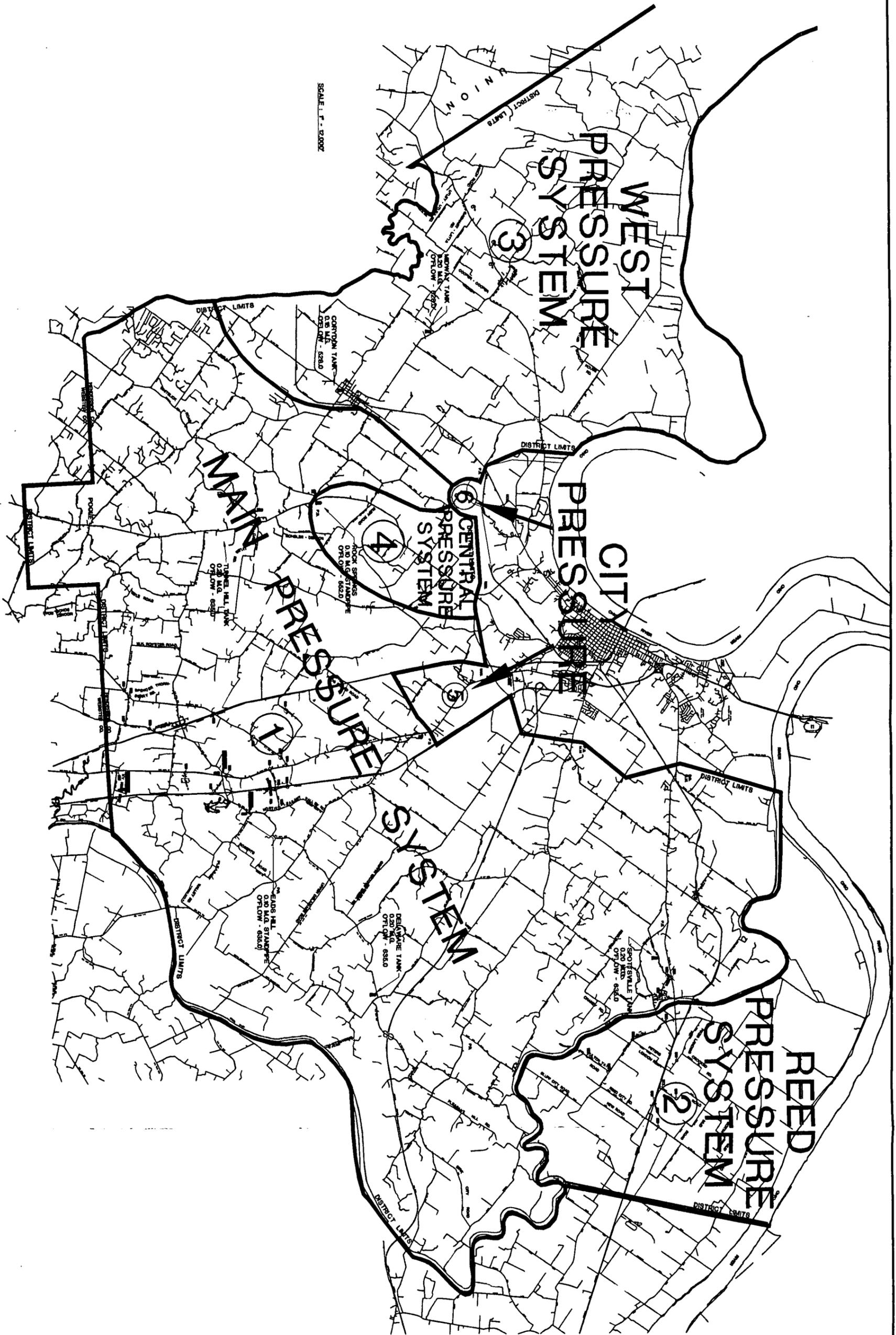


FIGURE 2
DISTRICT PRESSURE SYSTEMS

HENDERSON COUNTY WATER DISTRICT



HUNTER MARTIN & ASSOCIATES, INC.
ENGINEERS & SURVEYORS
2820 LOVE OAK ROAD • PADUCAH, KENTUCKY 40003
(870) 654-2787 • FAX (870) 654-2788

Drawn By: JRM
Checked By: RHM
THE REPORT-FIGURE NO.: 11-00
Date: 11-00

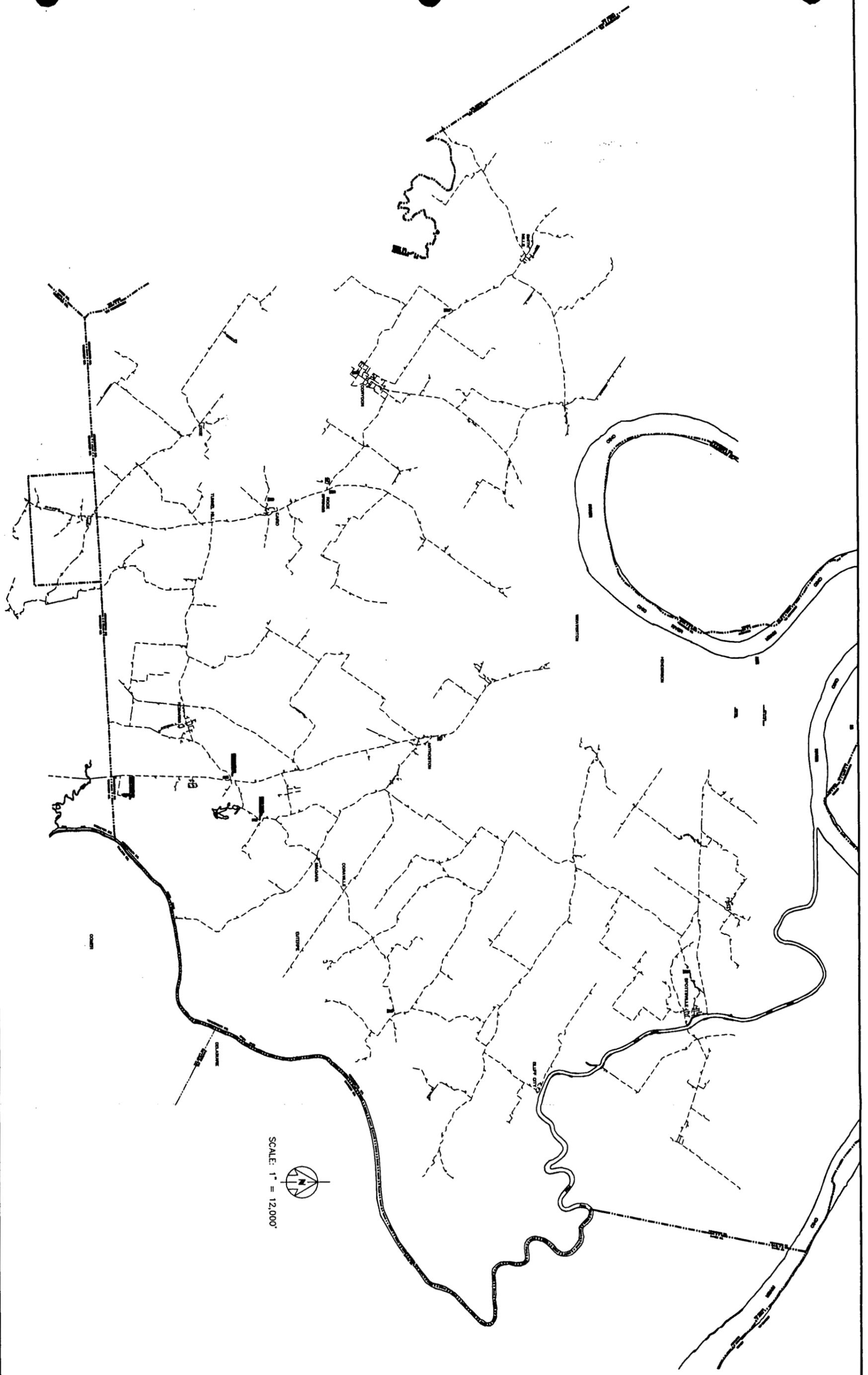


FIGURE 3
 OVERALL DISTRIBUTION SYSTEM
 HENDERSON COUNTY WATER DISTRICT

SCALE: 1" = 12,000'

HUNTER MARTIN & ASSOCIATES, INC.
 ENGINEERS & SURVEYORS
 3220 LONG OAK ROAD • PADUCAH, KENTUCKY 40003
 (270) 554-5757 • FAX (270) 554-5758

Drawn by
 SDC
 Checked by
 RHM
 Title
 REPORTS
 Date
 4-11-00
 Project
 00

MAIN SIZE	AC PIPE (MILES)	PVC PIPE (MILES)	TOTAL PIPE (MILES)
12"	0.0	4.6	4.6
10"	5.4	7.2	12.6
8"	28.9	46.9	75.8
6"	25.0	60.8	85.8
4"	1.2	34.6	35.8
3"	0.0	28.6	28.6
2"	0.0	44.0	44.0
	60.5	226.7	287.2

All of the 5,571 users are metered.

The major problems associated with the distribution system are:

- a. Small mains (2" and 3") of such length that the pressures and flows are not adequate.
- b. More loops are needed for better circulation and alternative directions of feed.
- c. More valves are needed for isolation of areas for maintenance and repairs.
- d. More fire hydrants and flush hydrants are needed for adequate flushing.

4. STORAGE FACILITIES:

The District's storage facilities are:

STORAGE FACILITY	CAPACITY	WITH OVERFLOW AT
MIDWAY ELEVATED TANK	0.20 MG	528.0 MSL
CORYDON ELEVATED TANK	0.15 MG	528.0 MSL
ROCK SPRINGS STANDPIPE	0.10 MG	552.0 MSL
TUNNEL HILL ELEVATED TANK	0.20 MG	635.0 MSL
EADS HILL STANDPIPE	0.10 MG	635.0 MSL
DELAWARE ELEVATED TANK	0.20 MG	635.0 MSL
SPOTTSVILLE ELEVATED TANK	0.20 MG	635.0 MSL
ROBARDS ELEVATED TANK	0.50 MG	635.0 MSL
TOTAL STORAGE	1.65 MG	

WATER DEMAND ANALYSIS:

1. **DESIGN PERIOD:**

A facility, which is oversized, creates an excessive burden on current users who must pay for something they do not need. Also, designing for too short a period is poor economics because replacement may be needed before the end of a facility's useful life.

Water mains and structures should be treated as permanent and should be planned for 40 to 50 years. Pumping and other mechanical facilities have a life expectancy of only 10 to 20 years and maintenance and replacement costs for these items must be budgeted annually. On the other hand, growth of the District's water demand and service areas can only be estimated from historical data and judgment of future conditions.

2. **POPULATION PROJECTION:**

The most recent Population Forecast (1990-2020) by the Kentucky State Data Center, University of Louisville, for Henderson County is:

YEAR	1990*	2000	2010	2020
PREDICTION	43,101	44,851	45,882	45,991
PERCENT INCREASE	---	4.06	2.30	0.24

*Census

This is an average annual increase of 0.216 percent.

Historically, the actual average annual increases have been:

1960 to 1970 (Census)	-	0.726 Percent
1970 to 1990 (Census)	-	0.900 Percent

Following is a summary of the population growth for 30 years by different methods:

U of L Projection for 30 Years	-	45,991
Actual Census (60-70 Average) for 30 Years	-	53,547
Actual Census (70 - 90 Average) for 30 Years	-	56,392
Projected 1.00 Percent Annual Increase for 30 Years	-	58,094

The projection is based on an annual increase of 1.00 percent.

The above analysis is based on Henderson County as a whole (including the City of Henderson). The rural portion of Henderson County is calculated as follows:

1990 Census	Henderson County	-	43,101
1990 Census	Henderson City	-	(25,945)
1990 Census	Henderson County Rural	-	17,156

Therefore, it has been established the Henderson County Rural projection at 1.00 percent annual increase as follows:

YEAR	1990	2000	2010	2020	2030
POPULATION	17,156	18,951	20,943	23,124	25,543
HOUSES @3.0 PERSONS/HOUSE	5,719	6,317	6,981	7,708	8,514

By using 1.00 percent annual increase, which is slightly higher than the previous census results, we are adding a safety factor for:

- a. The trend in the past several years of a residential move from urban areas to rural areas.
- b. Some industries using additional water.

WATER DEMAND:

The best measure of water demand is the actual historical record of the District's demand based on the water purchased.

The following data is from the annual reports filed with the Public Service Commission and reflects the water purchased from the City of Henderson:

YEAR	1995	1996	1997	1998	1999
CUSTOMERS:					
Average Number	4,913	5,044	5,159	5,350	5,571
Annual Increase	132	131	115	191	221
WATER PURCHASED:					
Annual (MG)	483.195	489.824	487.272	498.406	513.643
Average Monthly (MG)	40.266	40.819	40.606	41.534	42.803
Average Daily (MG)	1.324	1.342	1.335	1.365	1.407
Average GPD/Customer	269	266	259	255	253
Maximum Monthly (MG)	45.655	46.686	47.445	48.324	52.585
Maximum Greater Than Average (%)	15.87%	14.37%	16.84%	16.34%	22.85%
Maximum Daily (MG)	1.710	1.952	1.702	1.825	1.696

Design of a new water system is usually based on an average use of 100 gpd per person. Based on three persons per user (house), 300 gpd/customer is a good average demand and correlates with the actual records. The actual water sold is approximately 65 gpd per person or 200 gpd per customer.

In accordance with Ten States Standards, water supplies shall be designed to furnish the Maximum Daily Demand, which is defined as 150 percent of the Average Daily Demand.

Based on the population of 1.00 percent annual growth and an average daily demand of 100 gpdc, the demand would be as follows:

YEAR	1990	2000	2010	2020	2030
POPULATION	17,156	18,951	20,934	23,124	25,543
AVERAGE DAILY DEMAND (MGD)	1.716	1.895	2.093	2.312	2.554
MAXIMUM DAILY DEMAND (MGD)	2.574	2.843	3.140	3.468	3.831

The estimated and projected customers in each of the pressure systems are:

YEAR	1995	2000	2010	2020	2030
ENTIRE DISTRICT	4,913	5,671	6,264	6,920	8,050
MAIN SYSTEM (1)	3,495	4,034	4,456	4,923	5,727
REED SYSTEM (2)	92	106	117	130	151
WEST SYSTEM (3)	1,069	1,234	1,363	1,506	1,752
CENTRAL SYSTEM (4)	62	72	79	87	102
CITY PRESSURE (5 & 6)	195	225	249	275	320

Systems 4, 5 and 6 are independent of the Main/Reed Systems (1 and 2) and the West System (3) and are not affected by the supply to these systems.

Following is a summary of the demand, supply and storage for the Main/Reed System and the West System.

	1995	2000	2010	2020	2030
MAIN/REED SYSTEM (1 & 2):					
CUSTOMERS	3,587	4,140	4,573	5,053	5,878
AVERAGE DAILY DEMAND (MGD)	1.076	1.242	1.372	1.516	1.763
MAXIMUM DAILY DEMAND (MGD)	1.614	1.863	2.058	2.274	2.645
EXISTING SUPPLY (MGD)	1.236	1.956			
REQUIRED SUPPLY (MGD)	1.614	1.863	2.058	2.274	2.645
EXISTING STORAGE (MG)	0.700	1.20			
REQUIRED STORAGE (MG)	1.076	1.242	1.372	1.516	1.763
WEST SYSTEM (3):					
CUSTOMERS	1,069	1,234	1,363	1,506	1,752
AVERAGE DAILY DEMAND (MGD)	0.321	0.3702	0.409	0.452	0.526
MAXIMUM DAILY DEMAND (MGD)	0.481	0.555	0.613	0.678	0.788
EXISTING SUPPLY (MGD)	0.436	0.436			
REQUIRED SUPPLY (MGD)	0.481	0.555	0.613	0.678	0.788
EXISTING STORAGE (MG)	0.350	0.350			
REQUIRED STORAGE (MG)	0.321	0.3702	0.409	0.452	0.526

PROPOSED IMPROVEMENTS:

Plans and Specifications for the 1999/ 2000 Distribution System Improvements were prepared and submitted to Kentucky Division Of Water for review, and approval was received in February, 2000. The work was advertised for bidding in March, 2000. The proposed improvements are shown in Figures 4 & 5 on Pages 12 & 13 and a brief description of the work is as follows:

1999/ 2000 DISTRIBUTION SYSTEM IMPROVEMENTS.

This project consists of two contracts containing several miles of water line. The objective of this project is to install new water lines throughout the County. The project is part of Henderson County's Long-Range Plan of (1) supplying water to all residents within the County; (2) increasing storage, as needed, to meet average daily flows for the design period; (3) eliminating future low pressure problems within the system, as calculated at the design maximum and peak flows; (4) creating loops to enhance quality and reliability of service.

Contract A consists of approximately 93,000 lineal feet of 8" water main; approximately 59,600 lineal feet of 6" water main; and approximately 7,200 lineal feet of 4" water main. The water main shall be installed in various parts of the County in order to create loops that will reinforce flow, distribute flow, increase the quality of service and help establish a hydraulically sound system.

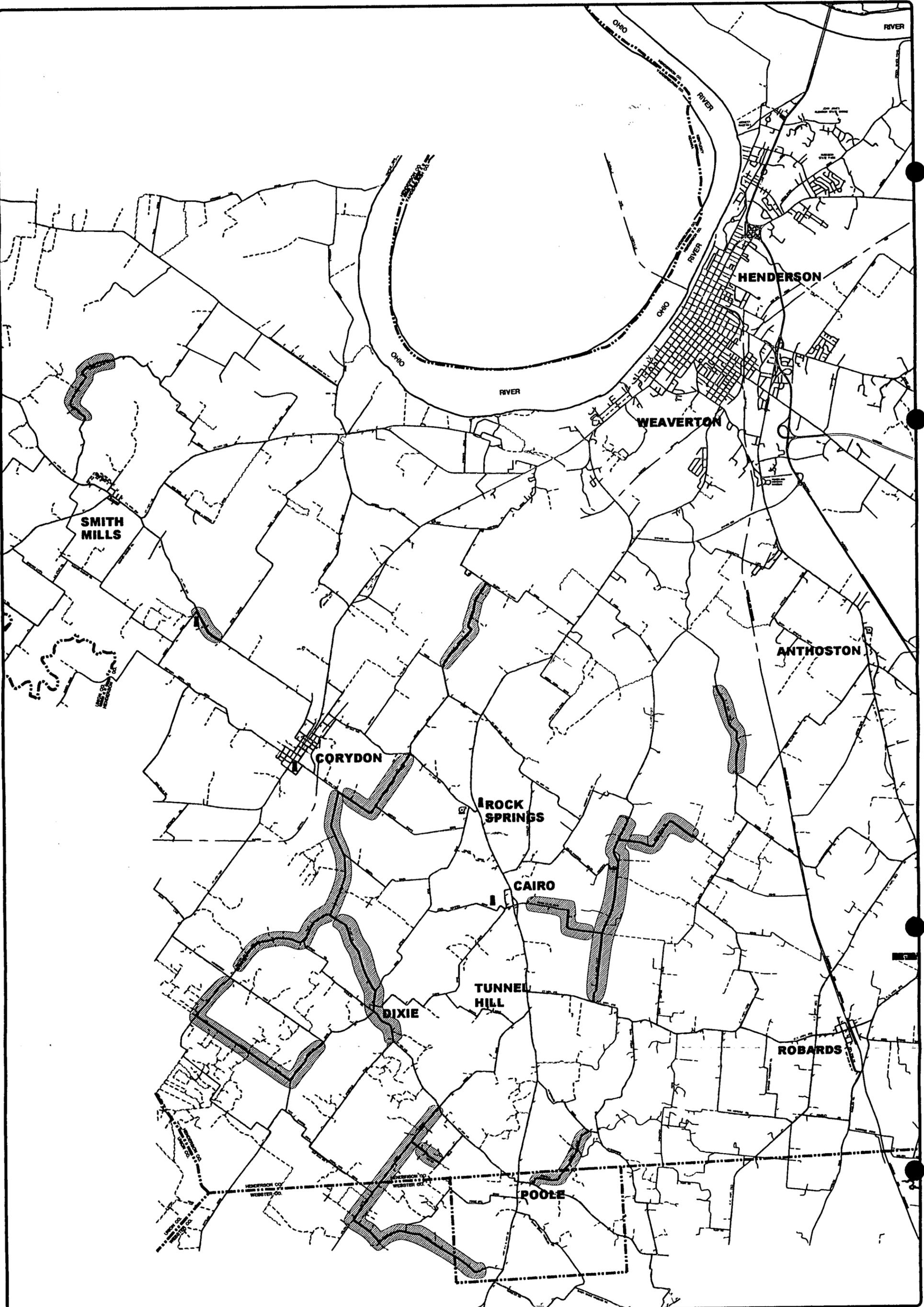


FIGURE 4
CONTRACT "A"
PROPOSED IMPROVEMENTS
HENDERSON COUNTY WATER DISTRICT

Drawn by:
 SOC
 Checked by:
 RHM
 File:
 REPORT-1104
 Date:
 1-5-00
 Revised:

HUNTER MARTIN & ASSOCIATES, INC.
 ENGINEERS & SURVEYORS
 3200 LONG OAK ROAD • FAUCETT ESTATES 43003
 (770) 264-2727 • FAX (770) 264-2738

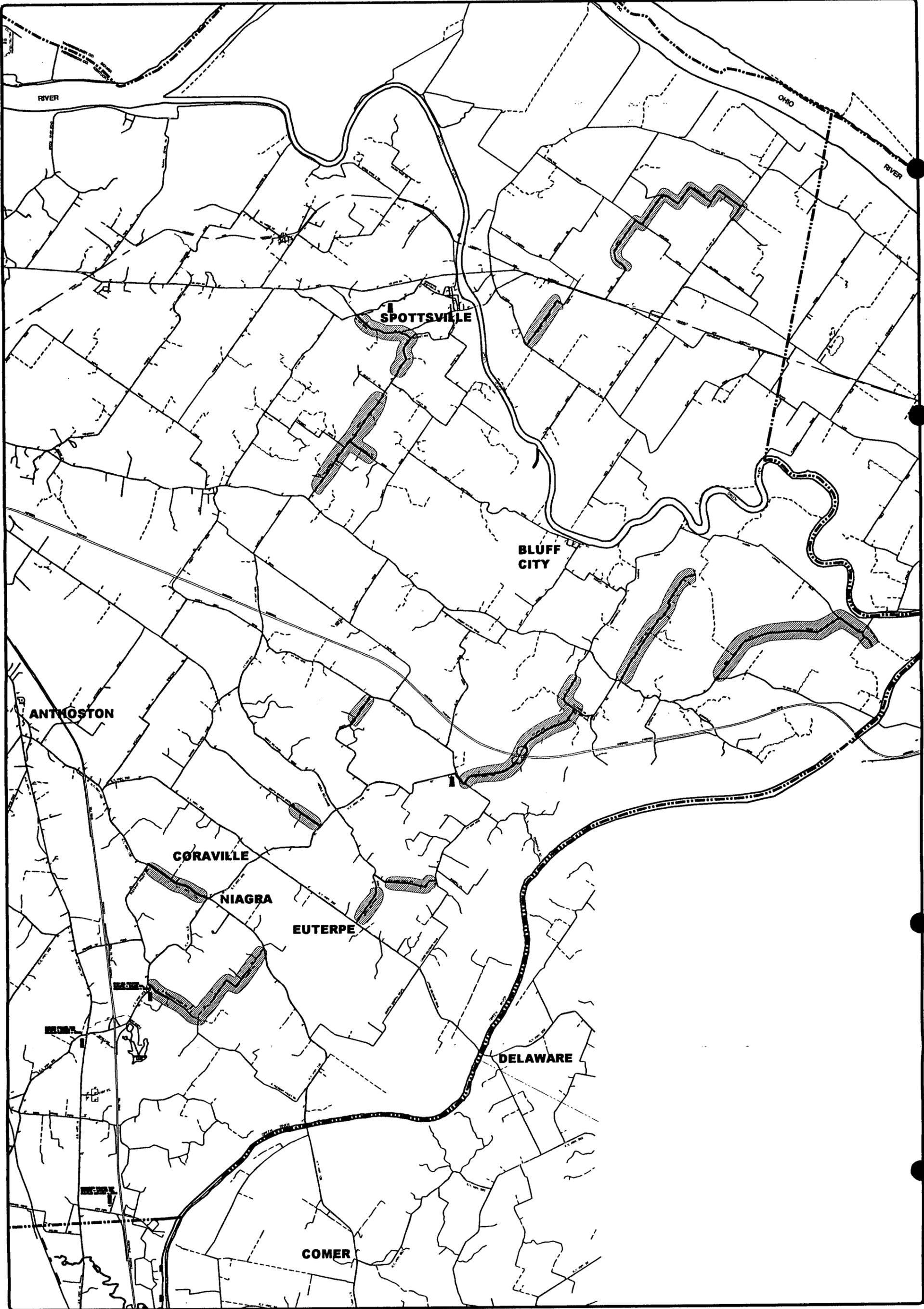


FIGURE 5
CONTRACT "B"
PROPOSED IMPROVEMENTS
HENDERSON COUNTY WATER DISTRICT

Drawn by:
 SDC
 Checked by:
 RHM
 File:
 REPORT-FIG 4
 Date: 5-00
 Revised:



HUNTER MARTIN & ASSOCIATES, INC.
 ENGINEERS & SURVEYORS
 3220 LONE OAK ROAD • PADUCAH KENTUCKY 42003
 (270) 554-2737 • FAX (270) 554-2738

Contract B consists of approximately 16,300 lineal feet of 12" water main; approximately 24,500 lineal feet of 8" water main; approximately 65,800 lineal feet of 6" water main; and approximately 10,700 lineal feet of 4" water main. The water main shall be installed in various parts of the County in order to create loops that will reinforce flow, distribute flow, increase the quality of service and help establish a hydraulically sound system.

PROJECT COST:

On March 23, 2000, Henderson County Water District received and opened Bids for Contracts A & B for the 1999/2000 Distribution System Improvements. These Bids for each Contract are outlined as follows:

CONTRACT A:

Fourteen Bids were received on Contract A with the Low Bidder being Craftsman Construction, Inc., 409 West 12th Street, Huntingburg, IN 47542, with a Low Bid in the amount of \$1,078,325.00.

All Bids were checked to determine if they were responsive and responsible and a Bid Tabulation was completed and distributed to all Bidders, the District and the Public Service Commission.

The Contractor has sufficient equipment to do the work; has the expertise for this type work; and has worked on another project with the Engineer.

The Contractor is satisfied with his Bid in relation to other Bids and there should be no problem with bonding.

The District shall issue the Notice of Award (Subject to Public Service Commission Approval) to Craftsman Construction Inc. in the amount of \$1,078,325.00.

CONTRACT B:

Seventeen Bids were received on Contract B with the Low Bidder being Craftsman Construction, Inc., 409 West 12th Street, Huntingburg, IN 47542, with a Low Bid in the amount of \$958,125.00.

All Bids were checked to determine if they were responsive and responsible and a Bid Tabulation was completed and distributed to all Bidders, the District and the Public Service Commission.

The Contractor has sufficient equipment to do the work; has the expertise for this type work; and has worked on another project with the Engineer.

The Contractor is satisfied with his Bid in relation to other Bids and there should be no problem with bonding.

The District shall issue the Notice of Award (Subject to Public Service Commission Approval) to Craftsman Construction Inc. in the amount of \$958,125.00.

FINANCIAL:

CONSTRUCTION COSTS:				
CONTRACT A (Craftsman)				\$ 1,078,325.00
CONTRACT B (Craftsman)				\$958,125.00
SUBTOTAL				\$2,036,450.00
TECHNICAL				
		Percentage	Discount	Subtotal
Basic		7.1300%	6.8800%	\$140,107.76
Through Contract Award	80.00%			\$112,086.21
During Construction	20.00%			\$28,021.55
Inspection		3.3800%		\$68,832.01
Extra (As Requested)				\$68,832.01
Preliminary			\$5,000.00	
Surveys			\$3,000.00	
Easements/Permits/Right-Of-Way			\$7,000.00	
Additional Inspectors			\$6,000.00	
Shop Drawings Manual			\$1,000.00	
Financing Assistance			\$10,000.00	
PSC Rate & Construction Case			\$20,000.00	
Hydraulic Analysis			\$8,000.00	
				\$60,000.00
SUBTOTAL - TECHNICAL				\$268,940.00
ADMINISTRATIVE & LEGAL	1	LS		\$10,000.00
LAND, EASEMENTS & R.O.W.	1	LS		\$5,000.00
FINANCIAL, BOND, ETC.	1	LS		\$100,375.00
CONTINGENCIES	10.03%	Of		\$204,235.00
		Construction		
TOTAL PROJECT COSTS				\$2,625,000.00
BOND PROCEEDS:				\$2,625,000.00

The District proposes to finance this project (as shown above) with a bond issue of \$2,625,000. The District has hired the firm of Johnson, Brown, Burnett & Knight, Inc. as its Fiscal Agent.

The District has filed an Application with the Public Service Commission (CASE NO. 99-388) for issuance of a Certificate of Public Convenience and Necessity; authorization to issue Revenue Bonds in the amount of \$2,625,000 and authorization to adjust rates to pay for the additional indebtedness.

The new rates are necessary to cover the increased indebtedness. A comparison of the existing and proposed rates, as well as the amount of change requested in the rates for each bracket of use, is as follows:

5/8' x 3/4" Meter			Basis Of Charge	Present Charge	Proposed Charge	Amount Of Increase	Percent Of Increase
First	2,000	Gallons	Minimum	\$9.82	\$11.00	\$1.18	12.02%
Next	8,000	Gallons	Per 1,000 Gallons	\$3.76	\$3.85	\$0.09	2.39%
Next	20,000	Gallons	Per 1,000 Gallons	\$3.50	\$3.59	\$0.09	2.57%
Over	30,000	Gallons	Per 1,000 Gallons	\$3.11	\$3.20	\$0.09	2.89%
1" Meter							
First	5,000	Gallons	Minimum	\$21.10	\$22.55	\$1.45	6.87%
Next	5,000	Gallons	Per 1,000 Gallons	\$3.76	\$3.85	\$0.09	2.39%
Next	20,000	Gallons	Per 1,000 Gallons	\$3.50	\$3.59	\$0.09	2.57%
Over	30,000	Gallons	Per 1,000 Gallons	\$3.11	\$3.20	\$0.09	2.89%
1-1/2" Meter							
First	10,000	Gallons	Minimum	\$37.82	\$39.72	\$1.90	5.02%
Next	20,000	Gallons	Per 1,000 Gallons	\$3.50	\$3.59	\$0.09	2.57%
Over	30,000	Gallons	Per 1,000 Gallons	\$3.11	\$3.20	\$0.09	2.89%
2" Meter							
First	16,000	Gallons	Minimum	\$60.90	\$63.34	\$2.44	4.01%
Next	14,000	Gallons	Per 1,000 Gallons	\$3.50	\$3.59	\$0.09	2.57%
Over	30,000	Gallons	Per 1,000 Gallons	\$3.11	\$3.20	\$0.09	2.89%
3" Meter							
First	30,000	Gallons	Minimum	\$109.90	\$113.60	\$3.70	3.37%
Over	30,000	Gallons	Per 1,000 Gallons	\$3.11	\$3.20	\$0.09	2.89%
4" Meter							
First	50,000	Gallons	Minimum	\$172.10	\$177.60	\$5.50	3.20%
Over	50,000	Gallons	Per 1,000 Gallons	\$3.11	\$3.20	\$0.09	2.89%
6" Meter							
First	100,000	Gallons	Minimum	\$327.60	\$337.60	\$10.00	3.05%

CONSTRUCTION PROBLEMS:

No major construction problems are anticipated. The project will not be affected by a high water table and there are no known extensive rock formations in the area. The major difficulties, which will be encountered, are those associated with built-up areas, paved streets and existing underground utilities.

ENVIRONMENTAL EFFECTS:

Land for the proposed facilities does not have a higher priority use and there will be no displacement of households, businesses or any buildings. The quality of both ground water and surface water will not be diminished in any way by the proposed facility and there will be no adverse effects on the topography, climate or soil.

No marketable timber will be affected by the project and there are no known unique or endangered plant or animal species in the area. Minor local noises and air pollution will result from construction, but shall be minimized by construction methods and will not be objectionable. There will be no reduction in the value of adjacent property and no adverse effects on the recreational potential of the area.

CONCLUSIONS AND RECOMMENDATIONS:

The foregoing report has been prepared for use by the Commissioners of the Henderson County Water District and the Public Service Commission for their review, comments and approval of the proposed improvements.

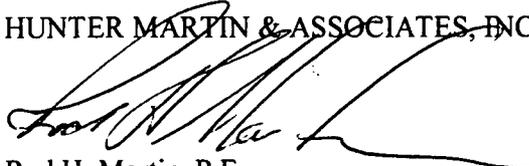
This is a very worthwhile and urgently needed project for the health and welfare of the entire Water District.

It is recommended that the District proceed as rapidly as possible to complete its financial arrangements, obtain PSC approval and award the contracts so construction can commence.

We trust that you will find this report complete in every respect and that it meets the planning and financial needs of the District. Please do not hesitate to request additional information or assistance on any decisions.

Respectfully submitted,

HUNTER MARTIN & ASSOCIATES, INC.



Rod H. Martin, P.E.

RHM:dc

Hunter Martin + Assoc.

JAMES E. BICKFORD
SECRETARY



PAUL E. PATTON
GOVERNOR

RECEIVED FEB - 8 2000

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
14 REILLY RD
FRANKFORT KY 40601

February 3, 2000

Henderson County Water District
655 South Main
Henderson, Kentucky 42420

RE: DW #0510189-99-006
1999/2000 System Improvements
Contract A and B
Henderson County, Kentucky

Dear Sirs:

We have reviewed the plans and specifications for the above referenced project. The plans include approximately 284,300 feet of 12-inch, 10-inch, 8-inch, 6-inch, 4-inch, 3-inch, and 2-inch PVC water line. This is to advise that plans and specifications covering the above referenced subject are APPROVED with respect to sanitary features of design as of this date with the following stipulations:

1. If PVC piping is used, it must be NSF approved and manufactured in accordance with ASTM standards.
2. Upon completion of construction, disinfection shall be strictly in accordance with the procedure designated in the State Regulations, which reads as follows:

"A water distribution system, including storage distribution tanks, repaired portions of existing systems, or all extensions to existing systems, shall be thoroughly disinfected before being placed into service. A water distribution system shall disinfect with chlorine or chlorine compounds, in amounts as to produce a concentration of at least fifty (50) ppm and a residual of at least twenty-five (25) ppm at the end of 24-hours (24) and the disinfection shall be followed by a thorough flushing."

EXHIBIT
6



New or repaired water distribution lines shall not be placed into service until bacteriological samples taken at the points specified in 401 KAR 8:150 Section 4 (2) are examined and are shown to be negative following disinfection.

3. A minimum pressure of 30 psi must be available on the discharge side of all meters.
4. Water mains shall be laid at least 10 feet horizontally from any existing or proposed sewer. A sewer is defined as any conduit conveying fluids other than potable water. The distance shall be measured edge to edge. In cases where it is not practical to maintain a 10 foot separation, this office may allow deviation on a case-by-case basis, if supported by data from the design engineer. Such deviation may allow installation of the water main closer to a sewer, provided that the water main is laid in a separate trench or on an undisturbed shelf located on one side of the sewer at such an elevation that the bottom of the water main is at least 18 inches above the top of the sewer. This deviation will not be allowed for force mains.

Water mains crossing sewers shall be laid to provide a minimum vertical distance of 18 inches between the outside of the water main and the outside of the sewer. This shall be the case where the water main is either above or below the sewer. At crossings, one full length of the water pipe shall be located so both joints will be as far from the sewer as possible. Special structural support for the water and sewer pipes may be required.

5. At high points in water mains where air can accumulate provisions shall be made to remove the air by means of hydrants or air relief valves. Automatic air relief valves shall not be used in situations where flooding of the manhole or chamber may occur.

6. If the existing water main material being tapped is asbestos concrete, then during the process of tapping the asbestos concrete water main, the contractor shall conform to OSHA regulations governing the handling of hazardous waste. Pieces of asbestos concrete resulting from the tap shall be double bagged, placed in a rigid container and disposed of in an approved landfill.
7. For underwater crossing greater than 15 feet in width the following shall be provided:
 - a. The pipe shall be of special construction, having flexible water tight joints, except if concrete encased;
 - b. valves shall be provided at both ends of water crossings so that the section can be isolated for testing or repair; the valves shall be easily accessible, and not subject to flooding; and the valve closest to the supply source shall be in a manhole; and,
 - c. permanent taps shall be made on each side of the valve within the manhole to allow insertion of a small meter to determine leakage and for sampling purposes.
8. The minimum size of water main for providing fire protection and serving fire hydrants shall be six inch diameter. Larger size mains will be required, if necessary, to allow the withdrawal of the required fire flow while maintaining the minimum residual pressure. Hydrants on lines either less than six inches in diameter or served by other lines less than six inches in diameter shall be for flushing purposes only.

9. When this project is completed, the owner shall submit a written certification to the Division of Water that the above referenced water supply facilities have been constructed and tested in accordance with the approved plans and specifications and the above stipulations. Such certification shall be signed by a licensed professional engineer.

If this water line project will cross a stream or wetland, the attached Water Quality Certification will apply. Please read this certification and make this a part of any contract to install the water lines. If you have any questions please contact John Dovak of the Water Quality Branch at 502/564-2225, extension 485.

Since the requirements of Administrative Regulations 401 KAR 4:050, Section 2 are met with regard to subfluvial pipe crossings, a floodplain construction permit will not be required pursuant to KRS 151.250 for this aspect of the project. Please note the reference to subfluvial pipe line crossings in the enclosed copy of the regulations.

This approval has been issued under the provisions of KRS Chapter 224 and regulations promulgated pursuant thereto. Issuance of this approval does not relieve the applicant from the responsibility of obtaining any other approvals, permits or licenses required by this Cabinet and other state, federal and local agencies.

Unless construction of this project is begun within one year from the date of approval, the approval shall expire. If you have any questions concerning this project, please contact Bob Arnett, PE at 502/564-2225, extension 578.

Sincerely,



Vicki L. Ray, Manager
Drinking Water Branch
Division of Water

VLR:RNA:lm

Enclosures

1999/2000 Water System
February 3, 2000
Page five

C: Hunter Martin & Associates
Henderson County Health Department
Webster County Health Department
Public Service Commission
Division of Plumbing
Madisonville Regional Office
Water Quality Branch
Water Resources Branch
Drinking Water Files

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Water

401 KAR 4:050. Construction exemptions.

RELATES TO: KRS 151.110, 151.250, 151.310

STATUTORY AUTHORITY: KRS 151.230, 151.250

NECESSITY AND FUNCTION: In the course of regulating construction in or along streams pursuant to KRS 151.250, the Natural Resources and Environmental Protection Cabinet frequently encounters actions or proposed actions which are of such nature or location as to have little potential for damage or such that any damage which would occur is limited in extent to the immediate vicinity of the action. This regulation exempts construction of this type from the provisions of KRS 151.250.

Section 1. A construction permit pursuant to KRS 151.250 shall not be required for construction in or along a stream whose watershed is less than one (1) square mile, except for the construction of dams as defined by KRS 151.100 or other water impounding structures or for any construction that does or may endanger life or cause severe damage to residential or commercial property.

Section 2. A construction permit pursuant to KRS 151.250 shall not be required for a subfluvial utility or pipeline crossing provided that the construction of the crossing meets the following criteria:

(1) During the construction of the crossing, no material may be placed in the stream or in the flood plain of the stream to form construction pads, coffer dams, access roads, etc., unless prior approval has been obtained from the cabinet.

(2) The trench shall be backfilled as closely as possible to the original contour. All excess material from construction of the trench shall be disposed of outside of the flood plain unless the applicant has received prior approval from the cabinet to fill within the flood plain.

(3) For subfluvial crossings of erodible channels, there shall be at least thirty (30) inches clear to the top of the pipe or conduit at all points.

(4) For subfluvial crossings of nonerodible channels, there shall be at least six (6) inches of clear cover above the top of the pipe or conduit at all points, and the pipe or conduit shall be encased on all sides by at least six (6) inches of concrete.

(5) The weight of a pipe and its contents during normal operating conditions at all points must exceed that of an equal volume of water, or the applicant must provide the division with sufficient information to show that the pipe and joints have sufficient strength. (7 Ky.R. 365; eff. 11-6-80.)



COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
14 REILLY RD
FRANKFORT KY 40601

General Certification--Nationwide Permit #12--Utility Line Backfill and Bedding

This General Certification is issued in conformity with the requirements of Section 401 of the Clean Water Act of 1977, as amended (33USC 1314), as well as Kentucky Statute KRS 224.16-070.

The Commonwealth of Kentucky hereby certifies under Section 401 of the Clean Water Act (CWA) that it has reasonable assurances that applicable water quality standards under Kentucky Administrative Regulations Title 401, Chapter 5, established pursuant to Sections 301, 302, 304, 306 and 307 of the CWA, will not be violated for the activity covered under 33 CFR Part 330 Appendix A(B) (12), namely utility line backfill and bedding provided that the following conditions are met:

- 1) Utility line construction projects through jurisdictional wetlands shall not result in conversion of the area to non-wetland status.
- 2) For the purpose of this General Certification, streams are defined as a solid or dashed blue line on the most recent version of USGS 1:24,000 topographic map. For impacts to streams from utility line construction the following conditions must be met:
 - A) Utility line installation in waters of the Commonwealth shall be minimized to the greatest possible extent.
 - B) All excavations within a stream, necessary to complete a utility line construction project, shall be done in such a manner as to prevent degradation of Waters of the Commonwealth. Spoil material from utility line excavations shall not be allowed to enter the flowing portion of the stream.
 - C) Removal of riparian vegetation in the utility line right-of-way shall be limited to that necessary for equipment access.
 - D) Effective erosion and sedimentation control measures must be employed at all times during the project to prevent degradation of waters of the Commonwealth.
 - E) Site regrading and reseeded will be accomplished within 14 days after disturbance.



3) This General Certification shall not apply to those waters of the Commonwealth identified as national or state outstanding resource waters or those waterbodies whose quality exceeds that necessary to support propagation of fish, shellfish, wildlife and recreation in and on the water. An individual Water Quality Certification will be required for projects in these waters.

Non-compliance with the conditions of this general certification or violation of Kentucky state water quality standards may result in civil penalties.

This general certification will expire on February 10, 2002, or sooner if the COE makes significant changes to this nationwide permit.

RECEIVED FEB - 8 2000

HENDERSON COUNTY WATER DISTRICT

HENDERSON COUNTY, KENTUCKY

1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS

CONTRACT "A"

GENERAL CONTRACT DOCUMENTS AND SPECIFICATIONS

NOVEMBER, 1999



[Handwritten Signature]
12-3-99

HUNTER MARTIN & ASSOCIATES, INC.
ENGINEERS & SURVEYORS

3220 LONE OAK ROAD ♦ PADUCAH, KY, 42003 ♦ (502) 554-2737

SET NO. 3

INDOO, SECRETARY
HOWARD, TREASURER
E. L. RUSSELL
TOMLINGSO

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MANAGER
N VAN METER

APPROVED
IN ACCORDANCE WITH LETTER OF APPROVAL

Vicki Ray
DIVISION OF WATER
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

RNA
REVIEWED

CHECKED

2/3/2000
APPROVAL DATE
2/3/2001
EXPIRATION DATE

SANITARY FEATURES OF DESIGN - WATER SUPPLY FACILITIES ONLY

BER, 1999

TIN & ASSOCIATES, INC.
ENGINEERS & SURVEYORS
ROAD * PADUCAH KENTUCKY 42003
-2787 * FAX (502) 554-2738

RECEIVED FEB - 8 2000

HENDERSON COUNTY WATER DISTRICT

HENDERSON COUNTY, KENTUCKY

1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS

CONTRACT "B"

GENERAL CONTRACT DOCUMENTS AND SPECIFICATIONS

NOVEMBER, 1999



[Handwritten Signature]
12-3-99

HUNTER MARTIN & ASSOCIATES, INC.
ENGINEERS & SURVEYORS
3220 LONE OAK ROAD ♦ PADUCAH, KY. 42003 ♦ (502) 554-2737

SET NO. 

INDEX

TITLE

B

COVER

OVERALL PLAN

**KY HWY 136, MIDDLE DELAWARE RD., CASH CREEK RD.,
PLEASANT VALLEY RD. AND ROBARDS RD.**

JONES BROS RD. AND KY HWY 416

PLEASANT HILL RD. AND BIRK CITY RD.

HATCHET MILL RD. AND CONOWAY RD.

PETERS LONDON RD. AND CHASE RD.

WATER SYSTEM STANDARDS

RECEIVED FEB - 8 2000

APPROVED

CONFORMANCE WITH LETTER OF APPROVAL

Vicki Ray

DIVISION OF WATER
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

2/3/2000

APPROVAL DATE

2/3/2007

EXPIRATION DATE

DESIGN CRITERIA - WATER SUPPLY FACILITIES ONLY



[Signature]
12-399

SET NO.

4



CAMPBELL, ROYSTER, CARVER, McBRIDE & CO., LLP
CERTIFIED PUBLIC ACCOUNTANTS
941 N. Green St.
Henderson, Kentucky 42420

EXHIBIT
7

TABLETS

HENDERSON COUNTY WATER DISTRICT
FILING REQUIREMENTS
FINANCIAL

HENDERSON COUNTY WATER DISTRICT

Case No. 99-388

Filing Requirements-Financial

	Accountants' Compilation Report
Pages 1 and 2	Financial Exhibit, 807 KAR 5:001, Section 6
Pages 3, 4 and 5	Responses to relevant subsections of 807 KAR 5:001, Section 10
Part 1	Pro Forma Financial Statements & Supporting Schedules
Part 2	Billing Analysis
Part 3	Chart of Accounts
Part 4	Audited Financial Statements for the Year Ended August 31, 1999
Part 5	Monthly Statement of Income for the Year Ended August 31, 1999
Part 6	Cost of Service Study
Part 7	Monthly Operating Budget With Pro Forma Adjustments

Prepared by
Judson C. Royster
Campbell, Royster, Carver, McBride & Co., LLP
Certified Public Accountants

CAMPBELL, ROYSTER, CARVER, McBRIDE & CO., LLP

CERTIFIED PUBLIC ACCOUNTANTS

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Members of the Kentucky Society of CPAs

Jacqueline F. Wilson CPA
Vernon E. Wathen CPA
Darin L. Thompson CPA

To the Board of Commissioners
Henderson County Water District
Henderson, KY 42420

We have compiled the special-purpose financial statements of the Henderson County Water District and the accompanying supplementary information contained in the financial exhibits and schedules, which were presented only for supplementary analysis purposes, included in Parts 1, 5 and 7 in accordance with Statement of Standards for Accounting and Review Services issued by the American Institute of Certified Public Accountants. We audited the financial statements of the Henderson County Water District for the years ended August 31, 1999 and 1998 included in Part 4, and issued our report thereon dated November 11, 1999.

A compilation is limited to presenting in the form of financial statements and supplementary financial exhibits and schedules information that is the representation of management. We have not audited or reviewed the accompanying special-purpose financial statements and supplementary financial exhibits and schedules and, accordingly, do not express an opinion or any other form of assurance on them.

The accompanying special-purpose financial statements and the supplementary financial exhibits and schedules were prepared for the purpose of fulfilling certain requirements in filing a rate case before the Public Service Commission of the Commonwealth of Kentucky.

This report is intended solely for the information and use of the board of commissioners and management of the Henderson County Water District and the Public Service Commission, and should not be used for any other purpose.

Campbell Royster Carver McBride & Co. LLP
Campbell, Royster, Carver, McBride & Co., LLP

April 10, 2000

**HENDERSON COUNTY WATER DISTRICT
FILING REQUIREMENTS
FINANCIAL EXHIBITS**

807 KAR 5:001

**SECTION 6
FINANCIAL EXHIBIT**

- Section 6 (1) The Water District is a special district of the Commonwealth of Kentucky. There is no stock authorized.
- Section 6 (2) There is no stock issued or outstanding.
- Section 6 (3) There is no preferred stock.
- Section 6 (4) There are no mortgages on any property of the Water District.
- Section 6 (5) There are three outstanding bond issues, as described in note 7 of the audited financial statements in Part 4.

Water Refunding Revenue Bonds of 1993. \$1,250,000 authorized and issued, dated March 1, 1993, due in annual installments of \$65,000 to \$120,000 through September 1, 2006; interest escalating from 3% to 5.75%, secured by revenues of the system. There were \$820,000 face amount of bonds outstanding as of August 31, 1999. Interest in the amount of \$46,901.25 was paid during the year ended August 31, 1999.

Water Refunding and Improvement Revenue Bonds of 1994. \$1,220,000 authorized and issued, dated January 1, 1994, due in annual installments of \$35,000 to \$90,000 through September 1, 2014; interest escalating from 4.25% to 5.2%, secured by revenues of the system. There were \$1,005,000 face amount of bonds outstanding as of August 31, 1999. Interest in the amount of \$51,090.00 was paid during the year ended August 31, 1999.

Water Revenue Bonds of 1997. \$1,800,000 authorized and issued, dated July 1, 1997, due in annual installments of \$5,000 to \$200,000 through September 1, 2022; interest escalating from 4.5% to 5.6%, secured by revenues of the system. There were \$1,795,000 face amount of bonds outstanding as of August 31, 1999. Interest in the amount of

\$97,682.50 was paid during the year ended August 31, 1999.

All bonds were issued in the name of the Henderson County Water District.

Section 6 (6)

The Water District had four notes outstanding as of August 31, 1999, as described in note 7 of the audited financial statements in Part 4.

Note payable to Henderson County Fiscal Court, issued in 1989, payable in annual installments of \$2,016 for 25 years; non-interest bearing. There was principal in the amount of \$32,256 outstanding as of August 31, 1999.

Note payable to Old National Bank, dated August 16, 1996, payable in monthly installments of \$1,205.80, including interest at 7.9%, through August 16, 2001, secured by real estate. There was principal in the amount of \$77,369 outstanding as of August 31, 1999. Interest in the amount of \$6,337.31 was paid during the year ended August 31, 1999.

Two notes payable to Kentucky Infrastructure Authority, dated April 1, 1998, payable in annual installments of \$46,825 to \$82,450, through June 1, 2011. There was principal in the amount of \$773,842 outstanding as of August 31, 1999. Interest in the amount of \$42,409.18 was paid during the year ended August 31, 1999.

Section 6 (7)

The Water District has no "other indebtedness" at August 31, 1999.

Section 6 (8)

The Water District does not pay dividends.

Section 6 (9)

The detailed income statement and balance sheet are contained in Part 4, Audited Financial Statements for the Year Ended August 31, 1999.

807 KAR 5:001

**SECTION 10
APPLICATIONS FOR GENERAL ADJUSTMENTS IN EXISTING RATES**

- Section 10 (6) (a) A complete description and quantified explanation and supporting schedules are presented after the proforma statement of operations in Part 1.
- Section 10 (6) (d) The new rate being requested would generate an additional \$98,000 annually in water revenue. This represents an 5.9% increase in total annual water revenue.
- Section 10 (6) (e) The effect upon the average bill of each customer class based on consumption, exclusive of school or sales tax, is as follows:

	<u>Present bill</u>	<u>Proposed bill</u>
3/4" meter	\$ 23.51	\$ 25.02
1" meter	\$ 60.96	\$ 63.40
2" meter	\$ 74.40	\$ 77.19
3" meter	\$ 143.25	\$ 147.92
4" meter	\$ 350.11	\$ 360.76
6" meter	\$ 327.60	\$ 337.60

- Section 10 (6) (g) A customer billing analysis is presented under a separate Part 2.
- Section 10 (6) (h) The Water Districts revenue requirements are based on debt service coverage of net revenues available equal or exceed 1.3 times the maximum debt service requirement for any one year as specified in the bond resolutions of all previous and current bond issues. Net revenues available are defined to be net income before depreciation and interest expense. See computation of debt service coverage at the bottom of the proforma statement of operations.
- Section 10 (6) (i) See information in response to section 10 (6) (h).
- Section 10 (6) (j) A chart of accounts is presented in Part 3.
- Section 10 (6) (k) A copy of the independent auditor's annual opinion report is included in Part 4. There were no material weaknesses in the utility's internal controls.

- Section 10 (6) (n) A detailed depreciation schedule is presented in Part 1, schedule H.
- Section 10 (6) (o) The following software were used in preparation of this material:
- Utility billing – Utility Management System II, version 5.2, by United Systems and Software, Inc. (DOS)
- Accounting applications – MAS90, version 3.4, by Sage Software, Inc. (Windows)
- Spreadsheet application - Excel 2000, by Microsoft Corporation
- Word processing application – Word 2000. By Microsoft Corporation
- All the above applications are windows based with the exception of the billing application, which is dos based.
- Section 10 (6) (r) Monthly operating statements for the test year are presented in Part 5.
- Section 10 (6) (u) Although this section doesn't apply to the Water District because of annual gross revenues less than \$5,000,000, there is presented a simplified cost of service study under Part 6.
- Section 10 (7) (a) A detailed income statement and balance sheet reflecting the impact of all proposed adjustments is presented in Part 1. There are 3 columns on the statement of income that reflect known and measurable adjustments. Column two headed proforma adjustments represent known and measurable adjustments to the present system. The column headed project proforma adjustments represent adjustments for the impact of the \$2,625,000 construction project and bond issue. The column headed rate increase represents the amount of additional revenue that would be generated under the proposed rate schedule.
- Section 10 (7) (b) The Water District is undertaking a \$2,625,000 capital project as detailed in the engineer's exhibits.

Section 10 (7) (c)

1. The project's projected construction starting date is June 29, 2000 as outlined in the 1999/00 water system improvements project schedule in the engineer's exhibits.
2. The proposed in-service date of the project is projected to be December 29, 2000, 180 days after construction begins.
3. The total estimated cost of the construction at completion is outlined in schedule K-1, Analysis of construction and rate case costs in Part 1.
4. There is no construction in progress as of the end of the test period, August 31, 1999.
5. There are no anticipated plant retirements.
6. Not applicable.
7. There are no differences in the capital construction budget and the costs contained in the proforma adjustment period.
8. The depreciation expense adjustment in the amount of \$170, 597 based on the analysis of construction costs is detailed in the depreciation schedule.

Section 10 (7) (d)

The operating budget for each month of the period encompassing the proforma adjustments is contained in Part 7.

Section 10 (7) (e)

The project is expected to initially generate 125 new residential $\frac{3}{4}$ " meter customers. All supporting workpapers are contained in Part 1.

PART 1
PROFORMA FINANCIAL STATEMENTS
& SUPPORTING SCHEDULES

**HENDERSON COUNTY WATER DISTRICT
PROFORMA STATEMENT OF OPERATIONS
BASED ON THE YEAR ENDED AUGUST 31, 1999**

	Year Ended		Proforma	
	August 31, 1999 Actual		Adjustments	Proforma
Operating revenues:				
Water	\$1,601,325	A	\$26,154	\$1,627,479
Penalties and sundry	52,700	M	843	53,543
Total operating revenues	<u>1,654,025</u>		<u>26,997</u>	<u>1,681,022</u>
Operating expenses:				
Purchased water	564,275	B	10,152	574,427
Pumping utilities	26,883			26,883
Maintenance of system(schedule)	146,237		2,906	149,143
Vehicle and equipment(schedule)	19,479			19,479
Customer accounts (schedule)	84,681		2,681	87,362
Administration (schedule)	239,041		20,553	259,594
Depreciation and amortization	277,914	H	6,259	284,173
Total operating expenses	<u>1,358,510</u>		<u>42,551</u>	<u>1,401,061</u>
Operating income	<u>295,515</u>		<u>(15,554)</u>	<u>279,961</u>
Nonoperating revenues (expenses):				
Interest income	75,908			75,908
Gain on sale of securities	0			0
Gain (loss) on sale of property, plant and equipment	0			0
Interest expense-refundable deposits	(625)			(625)
Interest expense-building loan	(6,303)	C	614	(5,689)
Interest expense - bonds	(192,730)	D	6,500	(186,230)
Interest expense-KIA debt	(41,688)	D	2,933	(38,755)
Loan service fees	(1,636)	D	88	(1,548)
Amortization of rate case expense	0			0
Amortization of bond issue costs	(24,164)	D	309	(23,855)
Total nonoperating revenues (expenses)	<u>(191,238)</u>		<u>10,444</u>	<u>(180,794)</u>
Net income (loss)	<u>\$104,277</u>		<u>(\$5,110)</u>	<u>\$99,167</u>
Debt service requirement-Bonds Only:				
Add back:				
Depreciation	277,914		6,259	284,173
Interest expense	192,730		(6,500)	186,230
Net revenues available	<u>\$574,921</u>		<u>(\$5,351)</u>	<u>\$569,570</u>
Maximum debt service	<u>\$327,675</u>			<u>\$327,675</u>
Coverage	<u>1.7545</u>			<u>1.7382</u>

	Project Proforma Adjustments	Project Proforma		Rate Increase	Final Proforma
I	\$34,853	\$1,662,332	N	\$97,547	\$1,759,879
M	1,129	54,672	M	3,224	57,896
	<u>35,982</u>	<u>1,717,004</u>		<u>100,771</u>	<u>1,817,775</u>
J	11,459	585,886			585,886
		26,883			26,883
		149,143			149,143
		19,479			19,479
		87,362			87,362
		259,594			259,594
K	60,579	344,752			344,752
	<u>72,038</u>	<u>1,473,099</u>		<u>0</u>	<u>1,473,099</u>
	<u>(36,056)</u>	<u>243,905</u>		<u>100,771</u>	<u>344,676</u>
		75,908			75,908
		0			0
		0			0
		(625)			(625)
		(5,689)			(5,689)
L	(159,780)	(346,010)			(346,010)
		(38,755)			(38,755)
		(1,548)			(1,548)
K	(15,000)	(15,000)			(15,000)
K	(4,800)	(28,655)			(28,655)
	<u>(179,580)</u>	<u>(360,374)</u>		<u>0</u>	<u>(360,374)</u>
	<u>(\$215,636)</u>	<u>(\$116,469)</u>		<u>\$100,771</u>	<u>(\$15,698)</u>
	60,579	344,752		0	344,752
	159,780	346,010		0	346,010
	<u>\$4,723</u>	<u>\$574,293</u>		<u>\$100,771</u>	<u>\$675,064</u>
L	<u>\$164,490</u>	<u>\$492,165</u>			<u>\$492,165</u>
	<u>1.1669</u>			<u>1.3716</u>	

**HENDERSON COUNTY WATER DISTRICT
PROFORMA STATEMENT OF OPERATIONS
BASED ON THE YEAR ENDED AUGUST 31, 1999
DETAILED EXPENDITURES**

	Year Ended August 31, 1999 Actual		Proforma Adjustments	Proforma
Maintenance of system:				
Mains	\$110,114	E	2,906	113,020
Materials /supplies- pumping	1,514			1,514
Materials /supplies-transmission	34,315			34,315
Maintenance of tanks	0			0
Equipment rental	294			294
	<u>\$146,237</u>		<u>\$2,906</u>	<u>\$149,143</u>
Vehicles and equipment:				
Repairs and maintenance	6,700			6,700
Gas and oil	12,779			12,779
	<u>\$19,479</u>		<u>\$0</u>	<u>\$19,479</u>
Customer accounts:				
Salaries - meter reading	\$18,703	E	1,698	20,401
Billing and collections labor	33,787	E	983	34,770
Billing and collections expense	18,974			18,974
Bad debts	12,845			12,845
Collector's commissions	159			159
Acct rec. over/short	213			213
	<u>\$84,681</u>		<u>\$2,681</u>	<u>\$87,362</u>
Administration:				
Salaries	\$53,042	E	3,989	57,031
Vacation and unassigned salaries	20,582	E	5,737	26,319
Commissioner's fees	5,750			5,750
Kentucky retirement	19,916	F	(1,397)	18,519
Medical insurance	40,879	G	11,421	52,300
Unemployment	481			481
Social security and medicare	17,977	F	803	18,780
Telephone/utilities	5,571			5,571
Office supplies and expense	7,724			7,724
Computer supplies/expense	7,585			7,585
Office repair and maintenance	5,329			5,329
Professional services	9,850			9,850
Legal services	1,436			1,436
Other consulting fees	5,839			5,839
Contractual services-other	1,000			1,000
Insurance-general liability & vehicle	21,832			21,832
Insurance-workman's comp.	5,823			5,823
Insurance-other	896			896
Regulatory expense-other	2,671			2,671
Miscellaneous	4,858			4,858
	<u>\$239,041</u>		<u>\$20,553</u>	<u>\$259,594</u>

Project Proforma Adjustments	Project Proforma	Rate Increase	Final Proforma
	113,020		113,020
	1,514		1,514
	34,315		34,315
	0		0
	294		294
	<u>\$149,143</u>		<u>\$149,143</u>
	6,700		6,700
	12,779		12,779
	<u>\$19,479</u>		<u>\$19,479</u>
	20,401		20,401
	34,770		34,770
	18,974		18,974
	12,845		12,845
	159		159
	213		213
	<u>\$87,362</u>		<u>\$87,362</u>
	57,031		57,031
	26,319		26,319
	5,750		5,750
	18,519		18,519
	52,300		52,300
	481		481
	18,780		18,780
	5,571		5,571
	7,724		7,724
	7,585		7,585
	5,329		5,329
	9,850		9,850
	1,436		1,436
	5,839		5,839
	1,000		1,000
	21,832		21,832
	5,823		5,823
	896		896
	2,671		2,671
	4,858		4,858
	<u>\$259,594</u>		<u>\$259,594</u>

**HENDERSON COUNTY WATER DISTRICT
PROFORMA STATEMENT OF OPERATIONS
BASED ON THE YEAR ENDED AUGUST 31, 1999**

Explanation of Adjustments

		Schedule
A	Water revenue Adjustment for increased number of customers. Used average billing for base year adjusted for number of customers on December 1999 billing register.	A-1 & A-2
B	Water purchased Adjusted for increase in rates charged District for water by the City of Henderson. Used same gallons as purchased in base year at a blended rate charged by the City according to usage over the past 12 months ending December, 1999.	B-1 & B-2
C	Interest expense- building loan Adjusted to amortization schedule based on the outstanding principal as of August 31, 1999.	C
D	Interest expense-bonds Interest expense-KEA debt Loan service fees Amortization of bond issue costs Adjusted per bonds and KEA debt amortization schedules.	D
E	Mains Salaries-meter reading Billing & collections labor Administration salaries Vacations and unassigned salaries Salary accounts adjusted based on same hours and allocation of time as in base year adjusted for raises given all employees effective September 1, 1999.	E-1 & E-2
F	Kentucky retirement Social security and medicare Payroll related expenses adjusted per salary adjustments in E above. Also retirement was adjusted for decrease in employer contribution rate.	F
G	Health insurance Adjusted for change in employees and health insurance premiums increase effective in April, 1999.	G
H	Depreciation Adjusted for new additions during base year.	H

**HENDERSON COUNTY WATER DISTRICT
 PROFORMA STATEMENT OF OPERATIONS
 BASED ON THE YEAR ENDED AUGUST 31, 1999**

Explanation of Adjustments

I	Water revenue	Revenue adjusted fro expected 125 new customers based on water usage in test period.	I
J	Purchased water	Purchased water adjusted for additional consumption of 125 new customers based on average consumption in test year.	J
K	Depreciation and Amortization	Depreciation and amortization adjusted per analysis of engineer's estimate of project costs.	K
L	Interest expense- bonds	Interest expense adjusted to first full year of interest incurred on new \$2,625,000 bond issue.	L
M	Penalties and sundry	Penalties adjust as a percentage of revenue.	None
N	Water revenue	Adjustment for new proposed rates	N

**Henderson County Water District
Balance Sheets
Proforma Balance Sheet**

	August 31, 1999	Proforma Adjustments	As Adjusted
<u>ASSETS</u>			
Current assets:			
Cash and cash equivalents	\$ 363,598	\$ -	\$ 363,598
Accounts receivable, net	228,487	-	228,487
Accrued interest receivable	15,900	-	15,900
Inventories	43,945	-	43,945
Prepaid expenses	15,236	-	15,236
Total current assets	<u>667,166</u>	-	<u>667,166</u>
Restricted assets:			
Cash and cash equivalents	1,248,870	-	1,248,870
Investments	150,000	-	150,000
Total restricted assets	<u>1,398,870</u>	-	<u>1,398,870</u>
Property, plant and equipment:			
Land	162,208	15,000	177,208
Buildings and improvements	578,753	-	578,753
Improvements other than buildings	9,572,441	2,445,000	12,017,441
Machinery and equipment	260,478	-	260,478
Office equipment	61,113	-	61,113
	<u>10,634,993</u>	<u>2,460,000</u>	<u>13,094,993</u>
Less: accumulated depreciation	2,829,419	-	2,829,419
Net property, plant and equipment	<u>7,805,574</u>	<u>2,460,000</u>	<u>10,265,574</u>
Other assets:			
Rate case expense	-	45,000	45,000
Unamortized bond discount and fees	90,364	120,000	210,364
Total other assets	<u>90,364</u>	<u>165,000</u>	<u>255,364</u>
Total assets	<u>\$9,961,974</u>	<u>\$2,625,000</u>	<u>\$12,586,974</u>

**Henderson County Water District
Balance Sheets
Proforma Balance Sheet**

	August 31, 1999	Proforma Adjustments	As Adjusted
<u>LIABILITIES AND EQUITY</u>			
Liabilities:			
Current liabilities (payable from current assets):			
Current portion of notes payable	\$ 12,703	\$ -	\$ 12,703
Accounts payable and accrued liabilities	86,008	-	86,008
Customer deposits	36,819	-	36,819
Total current liabilities (payable from current assets)	135,530	-	135,530
Current liabilities (payable from restricted assets):			
Accounts payable	4,183	-	4,183
Accrued interest	106,488	-	106,488
Current portion of notes payable	46,679	-	46,679
Current portion of revenue bonds payable	135,000	-	135,000
Total current liabilities (payable from restricted asse	292,350	-	292,350
Long-term debt:			
Notes payable - net of current portion	776,032		776,032
Revenue bonds payable - net of current portion	3,353,947	2,625,000	5,978,947
Total long-term debt	4,129,979	2,625,000	6,754,979
Total liabilities	4,557,859	2,625,000	7,182,859
Equity:			
Tap fees	1,219,788		1,219,788
Contributions in aid of construction	2,439,503		2,439,503
Retained earnings:			
Reserved for debt retirement	587,621		587,621
Unreserved	1,157,203		1,157,203
Total equity	5,404,115	-	5,404,115
Total liabilities and equity	\$9,961,974	\$2,625,000	\$12,586,974

Henderson County Water District
 Projected Water Revenue-Existing Customers

Rate Code Old (New)	Type	Test Year 1998/99					# of Customers 12/31/99	Projected Annual Consumption	Projected Annual Billing
		# of Bills	Consumption	Charges	Average Consumption	Average Bill*			
WC-00, WC-20, WC-30, WC-40, WC-60, WC-90, WC-91, WR-00, WR-80 (01,10,20,30,40,60,80,90,91)	5/8" X 3/4"	64,193	362,178,560.16	1,532,738.05	5,642.03	23.88	367,770,083.52	\$ 1,556,593.92	
WC-01, WC-99, WR-01 (02,11,92)	1"	1,081	17,314,801.02	65,052.75	16,017.39	60.18	19,028,659.32	71,493.84	
WC-02, WR-02 (03,12)	2"	239	4,745,887.50	22,769.80	19,857.27	95.27	5,004,032.04	24,008.04	
WR-03 (03)	3"	12	488,685.34	1,855.59	40,723.78	154.63	488,685.36	1,855.56	
WC-04, WR-04 (05,14)	4"	36	3,860,512.23	13,344.06	107,236.45	370.67	3,860,512.20	13,344.12	
WR-06 (16)	6"	12	537,000.00	3,931.20	44,750.00	327.60	537,000.00	3,931.20	
WR-75, WR-76 (75,76)	Fire Dept.	144	283,697.18	1,414.08	1,970.12	9.82	283,697.28	1,414.08	
WR-77 (77)	Fire n/c	24	260,827.00	-	10,867.79	-	260,826.96	-	
Totals		65,741	389,669,970.43	1,641,105.53	5,927.35	24.96	397,233,496.68	1,672,640.76	

Percentage of gross billing realized as revenue in base year per schedule A-2

Adjusted proforma revenue

*-Average bill based on average charge

97.30%
\$ 1,627,479.46

Henderson County Water District
 Water Revenue and Purchased Water
 For The Year Ended August 31, 1999

Month	Total Billing Per Billing Analysis	Leak Adjustments	Read-Outs	Adjusted Revenue	Water Purchased	Rate	Cost of Water Purchased
September	152,033.73	(4,699.06)	104.02	147,438.69	45,652,100.00	0.0010773	49,180.96
October	145,433.54	(2,021.47)	31.57	143,443.64	40,198,800.00	0.0010773	43,306.13
November	123,647.69	(2,112.85)	24.53	121,559.37	39,332,600.00	0.0010773	42,372.97
December	122,867.91	(992.39)	36.46	121,911.98	42,260,800.00	0.0010773	45,527.52
January	146,488.49	(539.09)	41.41	145,990.81	43,173,500.00	0.0010773	46,510.77
February	126,258.23	(3,632.31)	-	122,625.92	34,982,700.00	0.0010773	37,686.83
March	120,686.71	(1,243.49)	-	119,443.22	38,247,800.00	0.0010773	41,204.32
April	112,091.35	(943.64)	30.61	111,178.32	37,323,800.00	0.0010773	40,208.89
May	123,271.08	(611.41)	45.22	122,704.89	45,528,100.00	0.0010773	49,047.38
June	147,504.95	(270.35)	9.82	147,244.42	44,712,198.00	0.0011506	51,445.13
July	160,057.56	(1,009.74)	12.53	159,060.35	49,645,400.00	0.0011515	57,167.79
August	160,764.29	(7,786.81)	14.49	152,991.97	52,585,000.00	0.0011527	60,615.84
Total	1,641,105.53	(25,862.61)	350.66	1,615,593.58	513,642,798.00		564,274.53
Unexplained difference				221.89			
Adjustment to receivable for billing errors				(19,006.71)			
Adjusted water revenue				1,596,808.76			
Adjustment for unbilled water, per audit				4,516.66			
Final water revenue per financial statement				1,601,325.42			
Percentage adjusted water revenue to water revenue per billing analysis				97.30%			

Henderson County Water District
 Water Consumption (Purchased) History
 Previous Twelve Months

	North			South			Total Consumption	Total Amount	Blended Rate	Blended Use North %
	Consumption	Rate	Amount	Consumption	Rate	Amount				
January, 1999	40,533,600	0.0010773	43,666.85	2,639,900	0.0010773	2,843.96	43,173,500	46,510.81	0.0010773	93.885%
February, 1999	33,384,100	0.0010773	35,964.69	1,598,600	0.0010773	1,722.17	34,982,700	37,686.86	0.0010773	95.430%
March, 1999	36,985,800	0.0010773	39,844.80	1,262,000	0.0010773	1,359.55	38,247,800	41,204.35	0.0010773	96.700%
April, 1999	34,939,700	0.0010773	37,640.54	2,384,100	0.0010773	2,568.39	37,323,800	40,208.93	0.0010773	93.612%
May, 1999	40,997,400	0.0010773	44,166.50	4,530,700	0.0010773	4,880.92	45,528,100	49,047.42	0.0010773	90.049%
June, 1999	41,149,800	0.0011486	47,264.66	3,562,400	0.0011735	4,180.48	44,712,200	51,445.14	0.0011506	92.033%
July, 1999	43,818,900	0.0011486	50,330.39	5,826,500	0.0011735	6,837.40	49,645,400	57,167.79	0.0011515	88.264%
August, 1999	43,882,100	0.0011486	50,402.98	8,702,900	0.0011735	10,212.85	52,585,000	60,615.83	0.0011527	83.450%
September, 1999	41,629,300	0.0011486	47,815.41	8,132,700	0.0011735	9,543.72	49,762,000	57,359.13	0.0011527	83.657%
October, 1999	41,113,300	0.0011486	47,222.74	3,271,900	0.0011735	3,839.57	44,385,200	51,062.31	0.0011504	92.628%
November, 1999	38,288,400	0.0011486	43,978.06	3,917,400	0.0011735	4,597.07	42,205,800	48,575.13	0.0011509	90.718%
December, 1999	38,729,000	0.0011486	44,484.13	3,254,600	0.0011735	3,819.27	41,983,600	48,303.40	0.0011505	92.248%
Totals-last 12 months	475,451,400		532,781.75	49,083,700		56,405.35	524,535,100	589,187.10		90.642%
Proforma usage							<u>513,642,798</u>			
Proforma usage	<u>465,576,105</u>	<u>0.0011486</u>	<u>534,760.71</u>	<u>48,066,693</u>	<u>0.0011735</u>	<u>56406.26</u>	<u>513,642,798</u>	<u>591,166.97</u>		

Henderson County Water District purchases water from the City of Henderson. Under contract with the City, they purchase from both the North plant and South plant at different stated rates. The above amounts represent purchases for both plants over the most recent 12 month period, in order to compute a blended rate for the test period. The Water District received a rate increase for the City in June of 1999.

Old National Bank-#239572

Compound Period: Monthly

Nominal Annual Rate ... : 7.750 %
 Effective Annual Rate .. : 8.031 %
 Periodic Rate : 0.6458 %
 Daily Rate : 0.02123 %

CASH FLOW DATA

Event	Start Date	Amount	Number	Period	End Date
1 Loan	08/16/1999	77,369.08	1		
2 Payment	09/16/1999	1,205.80	82	Monthly	06/16/2006
3 Payment	07/16/2006	1,352.98	1		

AMORTIZATION SCHEDULE - Normal Amortization

Date	Payment	Interest	Principal	Balance
Loan 08/16/1999				77,369.08
1999 Totals	0.00	0.00	0.00	
1 09/16/1999	1,205.80	499.68	706.12	76,662.96
2 10/16/1999	1,205.80	495.11	710.69	75,952.27
3 11/16/1999	1,205.80	490.53	715.27	75,237.00
4 12/16/1999	1,205.80	485.91	719.89	74,517.11
5 01/16/2000	1,205.80	481.26	724.54	73,792.57
6 02/16/2000	1,205.80	476.58	729.22	73,063.35
7 03/16/2000	1,205.80	471.87	733.93	72,329.42
8 04/16/2000	1,205.80	467.13	738.67	71,590.75
9 05/16/2000	1,205.80	462.36	743.44	70,847.31
10 06/16/2000	1,205.80	457.56	748.24	70,099.07
11 07/16/2000	1,205.80	452.72	753.08	69,345.99
12 08/16/2000	1,205.80	447.86	757.94	68,588.05
2000 Totals	14,469.60	5,688.57	8,781.03	
Grand Totals	14,469.60	5,688.57	8,781.03	

**HENDERSON COUNTY WATER DISTRICT
PROFORMA STATEMENT OF OPERATIONS
BASED ON THE YEAR ENDED AUGUST 31, 1999**

	Base Year	Proforma Year
Interest expense-bonds:		
1993 issue	45,082.46	40,832.50
1994 issue	50,077.46	48,052.50
1997 issue	97,570.00	97,345.00
Total bonded interest expense	192,729.92	186,230.00
Interest expense-KIA debt:		
KIA #1	26,203.68	24,360.60
KIA #2	15,483.99	14,394.90
Total KIA interest expense	41,687.67	38,755.50
Loan service fees-KIA debt:		
KIA #1	1,028.16	972.82
KIA #2	607.54	574.86
Total loan service fees	1,635.70	1,547.68
Amortization of bond issue costs:		
Bond amortization-1993 bond issue	2,546.28	2,546.28
Amortization-KIA financing costs	1,071.24	1,071.24
Amortization-89 debt refunding costs on 1994 bond issuance	13,425.72	13,120.66
Amortization of 1997 bond discount	1,818.16	1,813.97
Amortization of 1997 bond issue costs	1,212.91	1,212.91
Amortization of 1998 KIA loan restructuring costs	4,089.61	4,089.61
Total amortization of bond issue costs	24,163.92	23,854.67

Henderson County Water District
 Proforma Salary Expense
 Fiscal Year

Employee Name	Title	Principal Account Classification	Base Salary	Hours Worked	Total Salaries	Maintenance of System	Customer Accounts			Office	Vacation & Unassigned	Meter Setting
							Billing & Collections	Meter Reading	Meter Setting			
VanMeter, Allan	General Manager	Office	\$35,588	Salary	36,680.91	-	-	-	35,588.80	1,092.11	-	
Wilkerson, Sandra	Bookkeeper	Office	\$11.65 hr.	2,142.75	25,625.59	-	269.41	-	21,441.83	3,914.36	-	
Croft, Beverly	Billing Clerk	Customer Accounts	\$8.92 hr.	2,224.25	20,844.55	-	18,643.92	-	-	2,200.63	-	
Robards, Ruth A.	Data Processing	Customer Accounts	\$8.84 hr.	2,009.25	18,414.23	-	15,856.75	-	-	2,557.48	-	
Crowley, Clarence	Field Foreman	Maint. Of system	\$14.77 hr.	2,854.75	46,595.35	34,203.63	-	2,053.03	-	5,281.81	5,056.88	
Burke, James	Meter Reader	Maint. Of system	\$10.96 hr.	3,038.75	37,579.92	25,377.88	-	8,230.96	-	3,424.45	546.63	
Gibson, Doris	Equipment Operator	Maint. Of system	\$10.40 hr.	2,790.25	31,811.81	21,717.80	-	-	-	3,517.31	6,576.70	
Graves, James	Laborer	Maint. Of system	\$8.32 hr.	2,291.75	20,164.87	11,330.80	-	1,934.40	-	2,816.63	4,083.04	
*Burke, David	Meter Reader	Maint. Of system	\$7.64 hr.	2,218.50	17,631.76	9,239.63	-	6,978.19	-	1,203.34	200.55	
**Corbett, Adam	Laborer	Maint. Of system	\$6.50 hr.	2,080.00	13,520.00	11,149.94	-	1,204.80	-	310.47	854.79	
Total salaries and wages					268,868.98	113,019.67	34,770.07	20,401.38	57,030.63	26,318.59	17,318.59	
Temporary staffing					-	-	-	-	-	-	-	
Total labor					268,868.98	113,019.67	34,770.07	20,401.38	57,030.63	26,318.59	17,318.59	
Prior year wages					2,947.66	2,050.78	-	-	-	50.00	846.88	
Prior year temporary staff expense					10,189.60	8,995.95	-	1,193.65	-	-	-	
Total expense in base year for Adam Corbet					13,137.26	11,046.73	-	1,193.65	-	50.00	846.88	
Percentage allocation of expense					100.00%	84.09%	0.00%	9.09%	0.00%	0.38%	6.45%	
Base salary with no overtime					13,520.00	-	-	-	-	260.00	-	
Known vacation pay					(260.00)	-	-	-	-	50.47	-	
Remaining amount to allocate by percentage					13,260.00	11,149.94	-	1,204.80	-	310.47	854.79	
Total expense allocation					13,520.00	11,149.94	-	1,204.80	-	310.47	854.79	

**Employed as temporary staff until last 12 weeks of base year. Now a full-time employee.
 Salaries departmentalized according to allocation of his prior year wages and temporary staff expense

Henderson County Water District
 Breakdown of Salary Expense
 Year Ended August 31, 1999

Employee Name	Title	Principal Account Classification	Base Salary	Hours Worked	Total Salaries	Maintenance of System	Customer Accounts			Vacation & Unassigned	Meter Setting	
							Billing & Collections	Meter Reading	Office			
VanMeter, Allan	General Manager	Office	\$34,216	Salary	35,281.71			34,216.00	1,065.71			
Wilkerson, Sandra	Bookkeeper	Office	11.20 hr.	2,142.75	24,651.51		259.00	20,613.60	3,778.91			
Croft, Beverly	Billing Clerk	Customer Accounts	\$8.50 hr.	2,224.25	19,882.27		17,766.06		2,116.21			
Dishman, Ruth	Data Processing	Customer Accounts	\$8.50 hr.	2,009.25	17,713.24		15,246.88		2,466.36			
Crowley, Clarence	Field Foreman	Maint. Of system	\$14.20 hr.	2,854.75	44,812.89	32,883.65		1,973.80	5,093.71	4,861.73		
Burke, James	Meter Reader	Maint. Of system	\$10.25 hr.	3,038.75	35,171.87	23,733.88		7,697.75	3,229.02	511.22		
Gibson, Doris	Equipment Operator	Maint. Of system	\$10.00 hr.	2,790.25	30,603.96	20,882.50		-	3,397.71	6,323.75		
Graves, James	Laborer	Maint. Of system	\$7.50 hr.	2,291.75	18,681.52	10,505.75		1,743.75	2,622.15	3,809.88		
Burke, David	Meter Reader	Maint. Of system	\$6.50/7.00 hr.	2,218.50	15,399.97	8,056.81		6,108.56	1,053.34	181.25		
Corbet, Adam	Meter Reader	Maint. Of system	\$6.25 hr	460.75	2,947.66	2,050.78		-	50.00	846.88		
Total salaries and wages					245,146.58	98,113.37	33,271.94	17,523.86	54,829.60	24,873.12	16,534.69	
Temporary staffing					10,189.60	8,995.95	-	1,193.65				
Accrual 8/31/99					4,397.58	2,689.40	515.38	-	920.32	166.40	106.08	
Accrual 8/31/98					(2,752.69)				(2,752.69)			
Unexplained difference					154.33	315.27	0.14	(14.44)	44.80	(177.89)	(13.55)	
Total labor per general ledger postings					257,135.40	110,113.99	33,787.46	18,703.07	53,042.03	24,861.63	16,627.22	

**Henderson County Water District
Payroll taxes and Retirement Expense
For the Year Ended August 31, 1999
and Proforma Year**

	Base Year	Base Year	Base Year	Proforma Year	Proforma Year
	09/01/1998	07/01/1999	08/31/1999	09/01/1999	07/01/2000
				06/30/2000	08/31/2000
					Total

Computation of KRS retirement expense for base year and proforma year:

Wages	200,564.45	44,582.13	245,146.58	211,688.78	46,715.71	258,404.49
Non-cash fringe benefits	1,683.00	369.00	2,052.00	1,683.00	369.00	2,052.00
Total wages subject to retirement	202,247.45	44,951.13	247,198.58	213,371.78	47,084.71	260,456.49
Employer match rate	8.22%	7.28%		7.28%	6.34%	
Employer expense	16,624.74	3,272.44	19,897.18	15,533.47	2,985.17	18,518.64
Unexplained difference			19.16			
Total expense per financial statement			19,916.34			18,518.64

Computation of social security & medicare expense for base year and proforma year:

Gross wages	247,198.58			258,404.49		
Less KRS retirement @ 5% of gross wages	12,359.93			12,920.22		
Wages subject to social security and medicare	234,838.65			245,484.27		
Combined social security/medicare rate	7.65%			7.65%		
Employer expense	17,965.16			18,779.55		
Unexplained difference	12.65					
Total expense per financial statement	17,977.81			18,779.55		

Henderson County Water District
Health insurance expense
For the Year Ended August 31, 1999

	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	98/99 Totals	Current Premiums	Annual Current Premiums
Employee Premiums															
VanMeter, Allan	565.75	565.75	565.75	565.75	565.75	565.75	565.75	634.70	634.70	634.70	634.70	634.70	7,133.75	635.00	7,620.00
Wilkinson, Sandra	387.00	387.00	387.00	387.00	387.00	387.00	387.00	489.23	489.23	489.23	469.23	469.23	5,055.15	470.51	5,646.12
Croft, Beverly	192.13	192.13	192.13	192.13	192.13	192.13	192.13	217.46	217.46	217.46	217.46	217.46	2,432.21	218.03	2,616.36
Robards, Ruth A.	192.13	192.13	192.13	192.13	192.13	192.13	192.13	217.46	217.46	217.46	217.46	217.46	2,432.21	466.66	5,599.92
Crowley, Clarence	391.77	391.77	391.77	391.77	391.77	391.77	391.77	474.00	474.00	474.00	474.00	474.00	5,112.39	474.77	5,697.24
Burke, James	557.27	557.27	557.27	557.27	557.27	557.27	557.27	621.09	621.09	621.09	621.09	621.09	7,006.34	627.19	7,526.28
Gibson, Doris	194.18	194.18	194.18	194.18	194.18	194.18	194.18	219.51	219.51	219.51	219.51	219.51	2,456.81	220.06	2,640.72
Graves, James	553.51	553.51	553.51	553.51	553.51	553.51	553.51	622.46	622.46	622.46	622.46	622.46	6,986.87	623.58	7,482.96
Burke, David	557.63	552.14	552.14	552.14	552.14	552.14	552.14	626.22	626.22	626.22	626.22	626.22	7,001.57	622.65	7,471.80
Crowley, Tamra															
Corbett, Adam	3,591.37	3,585.88	3,585.88	3,585.88	3,585.88	3,585.88	3,585.88	4,102.13	4,102.13	4,316.51	4,316.51	4,316.51	46,260.44	4,572.83	54,873.96
Employee Withholding															
VanMeter, Allan	9.57	9.57	9.57	9.57	9.57	9.57	9.57	9.57	31.38	31.38	31.38	31.38	202.08	31.38	376.56
Wilkinson, Sandra	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	29.65	29.65	29.65	29.65	128.20	29.65	355.80
Croft, Beverly															
Robards, Ruth A.	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	29.65	29.65	29.65	29.65	128.20	29.65	355.80
Crowley, Clarence	9.57	9.57	9.57	9.57	9.57	9.57	9.57	9.57	31.38	31.38	31.38	31.38	202.08	31.38	376.56
Burke, James															
Gibson, Doris															
Graves, James	9.57	9.57	9.57	9.57	9.57	9.57	9.57	9.57	31.38	31.38	31.38	31.38	202.08	31.38	376.56
Burke, David	9.57	9.57	9.57	9.57	9.57	9.57	9.57	9.57	31.38	31.38	31.38	31.38	202.08	31.38	376.56
Crowley, Tamra															
Corbett, Adam	40.68	40.68	40.68	40.68	40.68	40.68	40.68	40.68	184.82	184.82	184.82	184.82	1,064.72	214.47	2,573.64
Net Expense															
VanMeter, Allan	556.18	556.18	556.18	556.18	556.18	556.18	556.18	625.13	603.32	603.32	603.32	603.32	6,931.67	603.62	7,243.44
Wilkinson, Sandra	385.80	385.80	385.80	385.80	385.80	385.80	385.80	468.03	439.58	439.58	439.58	439.58	4,926.95	440.86	5,290.32
Croft, Beverly	192.13	192.13	192.13	192.13	192.13	192.13	192.13	217.46	217.46	217.46	217.46	217.46	2,432.21	218.03	2,616.36
Robards, Ruth A.	192.13	192.13	192.13	192.13	192.13	192.13	192.13	217.46	217.46	217.46	217.46	217.46	2,432.21	437.01	5,244.12
Crowley, Clarence	390.57	390.57	390.57	390.57	390.57	390.57	390.57	472.80	444.35	444.35	444.35	444.35	4,984.19	445.12	5,341.44
Burke, James	547.70	547.70	547.70	547.70	547.70	547.70	547.70	611.52	589.71	589.71	589.71	589.71	6,804.26	595.81	7,149.72
Gibson, Doris	194.18	194.18	194.18	194.18	194.18	194.18	194.18	219.51	219.51	219.51	219.51	219.51	2,456.81	220.06	2,640.72
Graves, James	543.94	543.94	543.94	543.94	543.94	543.94	543.94	612.89	591.08	591.08	591.08	591.08	6,784.79	592.20	7,106.40
Burke, David	548.06	542.57	542.57	542.57	542.57	542.57	542.57	616.65	594.84	594.84	594.84	594.84	6,799.49	591.27	7,095.24
Crowley, Tamra															
Corbett, Adam	3,550.69	3,545.20	3,545.20	3,545.20	3,545.20	3,545.20	3,545.20	4,061.45	3,917.31	4,131.69	4,131.69	4,131.69	45,195.72	4,358.36	52,300.32

4/09/00

Company: H4030

Henderson County Water District
 DEPRECIATION SCHEDULE BY CLASS
 For the Fiscal Year through 08/31/00
 Book Schedule

8 Electric Pumping Equipment

Num	Description	Date	Svc	Method	Lf	Sec179		Prior Yr	Current	Annual	Depr	Through
						Cost	Bonus	Accum Dep	Year Dep	Net Book	Cur Per	08/31/00
0168	Water System Additions	01/08/88		S/L	20	148,775	0	86,788	7,439	54,548	619	7,439
00188	Pump Station Equipment	10/10/88		S/L	20	6,157	0	3,362	308	2,487	22	308
00189	Additions 89-90	03/01/90		S/L	20	766	0	361	38	367	5	38
Division 00 Total						155,698	0	90,511	7,785	57,402	646	7,785
CLASS 80 TOTAL						155,698	0	90,511	7,785	57,402	646	7,785

Company: H4030

DEPRECIATION SCHEDULE BY CLASS

For the Fiscal Year through 08/31/00

Book Schedule

Structures & Improvements

Num	Description	Date	Svc	Method	Lf	Sec179		Prior Yr	Current	Annual	Depr	Through
						Cost	Bonus	Accum Dep	Year Dep	Net Book	Cur Per	08/31/00
00029	Pumping station	09/01/67	S/L	40	100,500	0	80,416	2,513	17,571	214	2,513	
00030	Graham Hill pump station	12/01/75	S/L	25	2,304	0	2,185	92	27	4	92	
00032	Rock Springs pump statio	12/01/75	S/L	25	2,296	0	2,185	92	19	4	92	
00033	Rock Springs equipment	11/30/75	S/L	10	3,916	0	3,916	0	0	0	0	
00034	Equipment	02/28/77	S/L	10	1,895	0	1,895	0	0	0	0	
00035	Equipment	02/28/78	S/L	10	686	0	686	0	0	0	0	
00036	Pumphouse-33M tank	02/28/67	S/L	20	1,000	0	1,000	0	0	0	0	
00037	Equipment	02/28/80	S/L	10	931	0	931	0	0	0	0	
00166	Spottsville Pump Station	01/08/88	S/L	40	41,191	0	12,017	1,030	28,144	84	1,030	
00167	Anthoston Pump Station	01/08/88	S/L	40	38,023	0	11,095	951	25,977	82	951	
00168	Delaware tank fence	08/01/94	S/L	10	4,777	0	2,430	478	1,869	38	478	
00169	Robards Pump Station	10/29/98	S/L	40	72,092	0	1,502	1,802	68,788	152	1,802	
Division 00 Total						269,611	0	120,258	6,958	142,395	578	6,958
CLASS 82 TOTAL						269,611	0	120,258	6,958	142,395	578	6,958

Henderson County Water District
 DEPRECIATION SCHEDULE BY CLASS
 For the Fiscal Year through 08/31/00
 Book Schedule

Distribution

Num	Description	Date	Svc	Method	Lf	Sec179		Prior Yr	Current	Annual	Depr	Through
						Cost	Bonus	Accum Dep	Year Dep	Net Book	Cur Per	08/31/00
00022	(2)100M tanks	09/01/67		S/L	50	34,044	0	21,793	681	11,570	54	681
00028	Improvements-Niagara	11/18/83		S/L	15	1,500	0	1,500	0	0	0	0
00169	Midway Road Tank-Elevate	01/08/88		S/L	50	187,324	0	43,704	3,746	139,874	314	3,746
00170	Tunnel Hill Tank-Elevate	01/08/88		S/L	50	230,006	0	53,667	4,600	171,739	387	4,600
00171	Delaware Tank-Elevated	01/08/88		S/L	50	165,193	0	38,547	3,304	123,342	279	3,304
00172	Spottsville Tank-Elevate	01/08/88		S/L	50	181,792	0	42,420	3,636	135,736	303	3,636
00173	Eades Hill-Alt. Valve	01/08/88		S/L	50	14,227	0	3,325	285	10,617	21	285
00174	Corydon Tank-Alt. valve	01/08/88		S/L	50	11,856	0	2,765	237	8,854	17	237
00195	Renov-Edds Hill & Rk Spr	08/31/89		S/L	10	64,277	0	64,277	0	0	0	0
00196	Elevated tank-Corydon	01/20/93		S/L	40	206,255	0	33,944	5,156	167,155	426	5,156
00197	Robards Elevated Tank	09/10/98		S/L	40	514,630	0	12,866	12,866	488,898	1,074	12,866
Division 00 Total						1,611,104	0	318,808	34,511	1,257,785	2,875	34,511
CLASS 83 TOTAL						1,611,104	0	318,808	34,511	1,257,785	2,875	34,511

Company: H4030

DEPRECIATION SCHEDULE BY CLASS

For the Fiscal Year through 08/31/00

Book Schedule

Transmission

Num	Description	Date Svc	Method	Lf	Sec179		Prior Yr Accum Dep	Current Year Dep	Annual Net Book	Depr Cur Per	Through 08/31/00
					Cost	Bonus					
00068	8" main	08/31/67	S/L	50	29,997	0	15,596	600	13,801	50	600
00069	Valves, casing, misc	08/31/67	S/L	50	1,057,274	0	544,754	21,145	491,375	1,763	21,145
00070	Engineering fee	08/31/67	S/L	50	90,850	0	46,810	1,817	42,223	156	1,817
00071	Gravel & resurfacing	08/31/67	S/L	50	35,613	0	18,346	712	16,555	63	712
00072	Work on orig constructio	03/01/69	S/L	50	16,607	0	10,126	332	6,149	24	332
00073	Additions	03/01/68	S/L	50	7,300	0	4,599	146	2,555	14	146
00074	Additions	03/01/69	S/L	50	7,288	0	4,453	146	2,689	14	146
00075	Additions	03/01/70	S/L	50	6,960	0	4,101	139	2,720	7	139
00076	Additions	08/31/71	S/L	50	979	0	560	20	399	2	20
00077	Additions	03/01/72	S/L	50	1,089	0	605	22	462	0	22
00078	Additions	03/01/72	S/L	50	7,375	0	4,070	148	3,157	16	148
00079	Additions	03/01/73	S/L	50	14,601	0	7,738	292	6,571	28	292
00080	Additions	03/01/73	S/L	50	8,175	0	4,346	164	3,665	10	164
00081	Additions	03/01/74	S/L	50	17,332	0	8,848	347	8,137	28	347
00082	Additions	03/01/75	S/L	50	8,640	0	4,238	173	4,229	19	173
00083	Additions	03/01/76	S/L	50	39,566	0	18,589	791	20,186	65	791
00084	Additions	03/01/77	S/L	50	32,531	0	14,647	651	17,233	57	651
00085	Additions	03/01/77	S/L	50	26,915	0	12,105	538	14,272	43	538
00086	Additions	03/01/78	S/L	50	44,857	0	19,286	897	24,674	72	897
00088	(6) mains-Corydon	03/01/67	S/L	50	27,000	0	17,550	540	8,910	45	540
00089	(2) mains-Corydon	03/01/67	S/L	50	23,000	0	14,950	460	7,590	42	460
00090	Additions	03/01/79	S/L	50	38,452	0	15,765	769	21,918	65	769
00091	Additions	03/01/80	S/L	50	19,626	0	7,663	393	11,570	30	393
00093	Additions	03/01/81	S/L	50	22,952	0	8,492	459	14,001	41	459
00095	Additions	03/01/82	S/L	50	14,779	0	5,180	296	9,303	21	296
00097	Additions	05/01/82	S/L	50	31,687	0	10,989	634	20,064	51	634
00100	Additions	03/01/83	S/L	50	29,314	0	9,669	586	19,059	47	586
00103	Additions	03/01/84	S/L	50	11,534	0	3,580	231	7,723	22	231
00104	Pumps from inventory	09/01/74	S/L	10	3,665	0	3,665	0	0	0	0
00105	Additions	03/01/85	S/L	50	61,482	0	17,835	1,230	42,417	97	1,230
00159	Additions	02/01/87	S/L	50	6,281	0	1,585	126	4,570	5	126
00160	Additions	03/01/86	S/L	50	17,426	0	4,711	349	12,366	30	349
00161	Additions	03/01/88	S/L	50	19,932	0	4,588	399	14,945	36	399
00175	Water System Additions	01/08/88	S/L	50	1,543,647	0	360,185	30,873	1,152,589	2,570	30,873
00189	Reed-Beals additions	02/14/89	S/L	50	322,690	0	68,305	6,454	247,931	536	6,454
00207	Additions 89-90	03/01/90	S/L	50	3,329	0	636	67	2,626	1	67
00208	Additions 90-91	03/01/91	S/L	50	13,565	0	2,304	271	10,990	18	271
00209	Additions 91-92	03/01/92	S/L	50	2,255	0	338	45	1,872	1	45
00210	91 Line Extension	05/18/92	S/L	50	568,694	0	82,461	11,374	474,859	946	11,374
00211	Additions 92-93	03/01/93	S/L	50	8,578	0	1,118	172	7,288	18	172
00212	Line replacement-Corydon	01/20/93	S/L	50	425,182	0	55,984	8,504	360,694	705	8,504
00213	KDOT Hwy 60E Util Reloca	11/01/93	S/L	50	25,773	0	3,005	515	22,253	42	515
00214	93-94 Additions	03/01/94	S/L	50	6,151	0	677	123	5,351	13	123
00215	94-95 Additions	03/01/95	S/L	50	79,678	0	7,173	1,594	70,911	131	1,594
00216	95-96 Additions	03/01/96	S/L	50	98,851	0	6,920	1,977	89,954	162	1,977
00218	96-97 Additions	03/01/97	S/L	50	146,331	0	7,317	2,927	136,087	243	2,927
00219	Reed-Beals Extension	08/26/98	S/L	50	164,684	0	3,294	3,294	158,096	269	3,294
00219	97-98 Additions	03/01/98	S/L	50	64,620	0	1,938	1,292	61,390	104	1,292
00220	98-99 Additions	03/01/99	S/L	50	82,911	0	829	1,658	80,424	140	1,658
00221	1997 System Improvements	10/29/98	S/L	50	921,324	0	15,355	18,426	887,543	1,530	18,426
00222	Additions	11/01/99	S/L	50	1,758	0	0	29	1,729	2	29

Company: H4030

DEPRECIATION SCHEDULE BY CLASS
For the Fiscal Year through 08/31/00
Book Schedule

Transmission

Num	Description	Date	Svc	Method	Lf	Sec179		Prior Yr	Current	Annual	Depr		Through
						Cost	Bonus	Accum	Year	Net	Book	Cur	Per	08/31/00
Division 00 Total						6,261,100	0	1,487,878	125,147	4,648,075	10,390	125,147	
CLASS 84 TOTAL						6,261,100	0	1,487,878	125,147	4,648,075	10,390	125,147	

DEPRECIATION SCHEDULE BY CLASS

For the Fiscal Year through 08/31/00

Book Schedule

Meters

Num	Description	Date	Svc	Method	Lf	Sec179		Prior Yr	Current	Annual	Depr	Through
						Cost	Bonus	Accum Dep	Year Dep	Net Book	Cur Per	08/31/00
00001	03/01/63 additions	09/01/87	S/L	16		83,670	40,989	32,016	2,668	7,997	226	2,668
00002	3-1-72 additions	09/01/87	S/L	25		656	202	216	18	220	4-	18
00003	3-1-72 additions	09/01/87	S/L	25		2,427	759	804	67	797	1	67
00004	3-1-72 additions	09/01/87	S/L	25		1,319	403	444	37	435	4	37
00005	3-1-73 additions	09/01/87	S/L	26		1,935	565	636	53	681	9	53
00006	3-1-74 additions	09/01/87	S/L	27		3,856	1,040	1,248	104	1,464	5	104
00007	3-1-75 additions	09/01/87	S/L	28		1,246	312	396	33	505	0	33
00008	3-1-76 additions	09/01/87	S/L	29		5,427	1,253	1,728	144	2,302	12	144
00009	3-1-77 additions	09/01/87	S/L	30		3,549	745	1,116	93	1,595	5	93
00010	3-1-78 additions	09/01/87	S/L	31		9,303	1,767	2,916	243	4,377	23	243
00011	3-1-79 additions	09/01/87	S/L	32		6,656	1,131	2,076	173	3,276	19	173
00012	3-1-80 additions	09/01/87	S/L	33		12,893	1,935	3,984	332	6,642	24	332
00013	3-1-81 additions	09/01/87	S/L	34		16,426	2,138	5,040	420	8,828	35	420
00014	11-1-81 additions	09/01/87	S/L	34		1,478	175	456	38	809	5	38
00015	5-1-82 additions	09/01/87	S/L	35		9,091	971	2,784	232	5,104	23	232
00016	3-1-83 additions	09/01/87	S/L	36		18,442	1,660	5,592	466	10,724	37	466
00017	3-1-84 additions	09/01/87	S/L	37		14,529	1,018	4,380	365	8,766	35	365
00018	3-1-85 additions	09/01/87	S/L	38		20,113	1,005	6,036	503	12,569	41	503
00160	1-1-87 additions	09/01/87	S/L	40		16,651	222	4,932	411	11,086	37	411
00161	3-1-86 additions	09/01/87	S/L	39		18,181	546	5,424	452	11,759	34	452
	Water System Additions	01/08/88	S/L	15		105,624	0	82,156	7,042	16,426	585	7,042
00177	Additions	03/01/88	S/L	15		23,010	0	17,641	1,534	3,835	126	1,534
00191	Additions 88-89	03/01/89	S/L	15		25,947	0	18,165	1,730	6,052	146	1,730
00197	Reed-Beals additions	02/14/89	S/L	15		6,045	0	4,265	403	1,377	29	403
00208	Additions 89-90	03/01/90	S/L	15		36,175	0	22,914	2,412	10,849	201	2,412
00209	Additions 90-91	03/01/91	S/L	15		18,244	0	10,336	1,216	6,692	105	1,216
00210	Additions 91-92	03/01/92	S/L	15		23,468	0	11,737	1,565	10,166	135	1,565
00211	Additions 92-93	03/01/93	S/L	15		23,435	0	10,153	1,562	11,720	132	1,562
00212	Additions 93-94	03/01/94	S/L	15		11,107	0	4,070	740	6,297	58	740
00213	94-95 Additions	03/01/95	S/L	15		15,078	0	4,523	1,005	9,550	81	1,005
00214	95-96 Additions	03/01/96	S/L	15		15,614	0	3,643	1,041	10,930	84	1,041
00215	96-97 Additions	03/01/97	S/L	15		14,090	0	2,348	939	10,803	81	939
00216	Additions 97-98	03/01/98	S/L	15		18,988	0	1,899	1,266	15,823	100	1,266
00217	Reed-Beals Extension	08/26/98	S/L	15		18,820	0	1,255	1,255	16,310	100	1,255
00218	98-99 Additions	03/01/99	S/L	10		25,546	0	1,277	2,555	21,714	212	2,555
00219	1997 System Improvements	10/29/98	S/L	10		34,479	0	2,873	3,448	28,158	291	3,448
00220	Additions	11/01/99	S/L	10		10,251	0	0	854	9,397	89	854
Division 00 Total						673,769	58,836	281,479	37,419	296,035	3,126	37,419
CLASS 85 TOTAL						673,769	58,836	281,479	37,419	296,035	3,126	37,419

Company: H4030

DEPRECIATION SCHEDULE BY CLASS
For the Fiscal Year through 08/31/00
Book Schedule

86 - Meter Installation

Num	Description	Date	Svc	Method	Lf	Sec179		Prior Yr	Current	Annual	Depr		Through
						Cost	Bonus	Accum Dep	Year Dep	Net Book	Cur Per	08/31/00	
00047	8-31-67 additions	09/01/87	S/L	20		47,923	19,160	17,256	1,438	10,069	118		1,438
00048	3-1-68 additions	09/01/87	S/L	21		9,921	3,861	3,468	289	2,303	25		289
00049	3-1-69 additions	09/01/87	S/L	22		5,525	2,053	1,896	158	1,418	15		158
00050	3-1-70 additions	09/01/87	S/L	23		8,715	3,045	2,964	247	2,459	16		247
00051	3-1-71 additions	09/01/87	S/L	24		15,747	5,197	5,280	440	4,830	33		440
00052	3-1-72 additions	09/01/87	S/L	25		12,028	3,735	3,984	332	3,977	24		332
00054	3-1-73 additions	09/01/87	S/L	26		12,386	3,596	4,056	338	4,396	30		338
00055	3-1-74 additions	09/01/87	S/L	27		14,740	3,982	4,776	398	5,584	35		398
00056	3-1-75 additions	09/01/87	S/L	28		14,199	3,550	4,560	380	5,709	28		380
00057	3-1-76 additions	09/01/87	S/L	29		18,640	4,289	5,940	495	7,916	44		495
00058	3-1-77 additions	09/01/87	S/L	30		24,680	5,187	7,800	650	11,043	56		650
00059	3-1-78 additions	09/01/87	S/L	31		32,466	6,166	10,176	848	15,276	67		848
00060	3-1-79 additions	09/01/87	S/L	32		35,493	6,035	11,052	921	17,485	74		921
00061	3-1-80 additions	09/01/87	S/L	33		25,766	3,863	7,968	664	13,271	59		664
00062	3-1-81 additions	09/01/87	S/L	34		13,779	1,794	4,236	353	7,396	34		353
00063	3-1-82 additions	09/01/87	S/L	35		3,528	390	1,080	90	1,968	2		90
00064	5-1-82 additions	09/01/87	S/L	35		3,266	347	996	83	1,840	6		83
00065	3-1-83 additions	09/01/87	S/L	36		6,962	626	2,112	176	4,048	11		176
00066	3-1-84 additions	09/01/87	S/L	37		8,540	598	2,580	215	5,147	17		215
00067	3-1-85 additions	09/01/87	S/L	38		8,607	430	2,580	215	5,382	17		215
00068	2-1-87 additions	09/01/87	S/L	40		8,325	97	2,472	206	5,550	19		206
00162	3-1-86 additions	09/01/87	S/L	39		8,155	245	2,436	203	5,271	16		203
00163	Additions	03/01/88	S/L	15		11,855	0	9,085	790	1,980	64		790
00164	Additions 90-91	03/01/91	S/L	15		4,878	0	2,763	325	1,790	28		325
00165	Additions 91-92	03/01/92	S/L	15		13,285	0	6,645	886	5,754	72		886
00166	Additions 92-93	03/01/93	S/L	15		8,306	0	3,601	554	4,151	48		554
00202	Additions 93-94	03/01/94	S/L	15		18,656	0	6,842	1,244	10,570	100		1,244
00203	94-95 Additions	03/01/95	S/L	15		16,845	0	5,054	1,123	10,668	89		1,123
00204	95-96 Additions	03/01/96	S/L	15		15,848	0	3,699	1,057	11,092	89		1,057
00205	96-97 Additions	03/01/97	S/L	15		12,438	0	2,073	829	9,536	70		829
00206	Additions 97-98	03/01/98	S/L	15		15,551	0	1,555	1,037	12,959	91		1,037
00207	98-99 Additions	03/01/99	S/L	10		16,521	0	826	1,652	14,043	134		1,652
Division 00 Total						473,574	78,246	151,811	18,636	224,881	1,531		18,636
CLASS 86 TOTAL						473,574	78,246	151,811	18,636	224,881	1,531		18,636

Company: H4030

DEPRECIATION SCHEDULE BY CLASS

For the Fiscal Year through 08/31/00

Book Schedule

Hydrants

Num	Description	Date	Svc	Method	Lf	Sec179		Prior Yr	Current	Annual	Depr	Through
						Cost	Bonus	Accum Dep	Year Dep	Net Book	Cur Per	08/31/00
0019	Additions	09/01/67	S/L	50	16,560	0	10,592	331	5,637	23	331	
0020	Additions	05/01/82	S/L	50	396	0	139	8	249	3-	8	
0021	4 hydrants	03/01/85	S/L	50	2,095	0	609	42	1,444	2-	42	
0163	Additions	03/01/86	S/L	50	1,345	0	364	27	954	5	27	
00178	Water System Additions	01/08/88	S/L	40	22,232	0	6,487	556	15,189	50	556	
00179	Additions	03/01/88	S/L	40	1,407	0	403	35	969	2	35	
0193	Additions 88-89	11/01/88	S/L	40	1,696	0	455	42	1,199	2-	42	
0198	Reed-Beals additions	02/14/89	S/L	40	9,080	0	2,402	227	6,451	18	227	
00199	Additions 91-92	03/01/92	S/L	40	525	0	98	13	414	2	13	
0200	91 Line Extensions	05/18/92	S/L	40	14,549	0	2,639	364	11,546	34	364	
0201	Additions-Corydon projec	01/20/93	S/L	40	32,518	0	5,352	813	26,353	65	813	
00202	Fire Hydrant	12/01/93	S/L	40	1,859	0	265	46	1,548	2	46	
00203	95-96 Additions	03/01/96	S/L	40	2,507	0	220	63	2,224	8	63	
0204	96-97 Additions	03/01/97	S/L	40	7,571	0	473	189	6,909	13	189	
00205	Reed-Beals Extension	08/26/98	S/L	40	5,822	0	146	146	5,530	14	146	
00206	1997 System Improvements	10/29/98	S/L	40	6,401	0	133	160	6,108	17	160	
0207	Additions	11/01/99	S/L	40	682	0	0	14	668	5	14	
Division 00 Total						127,245	0	30,777	3,076	93,392	251	3,076
CLASS 87 TOTAL						127,245	0	30,777	3,076	93,392	251	3,076

Henderson County Water District
 DEPRECIATION SCHEDULE BY CLASS
 For the Fiscal Year through 08/31/00
 Book Schedule

Services

Num	Description	Date	Svc	Method	Lf	Sec179		Prior Yr	Current	Annual	Depr	Through
						Cost	Bonus	Accum Dep	Year Dep	Net Book	Cur Per	08/31/00
00176	Additions 87-88	01/08/88	S/L	30	45,229	0	17,593	1,508	26,128	122	1,508	
00190	Additions 88-89	03/01/89	S/L	30	608	0	210	20	378	2-	20	
00196	Reed-Beals additions	02/14/89	S/L	30	994	0	349	33	612	0	33	
00197	Additions 89-90	03/01/90	S/L	30	5,681	0	1,796	189	3,696	13	189	
00198	Additions 90-91	03/01/91	S/L	30	7,961	0	2,253	265	5,443	23	265	
00199	Additions 91-92	03/01/92	S/L	30	10,619	0	2,655	354	7,610	24	354	
00200	Additions 92-93	03/01/93	S/L	30	32,700	0	7,085	1,090	24,525	89	1,090	
00201	Additions 93-94	03/01/94	S/L	30	16,927	0	3,102	564	13,261	47	564	
00202	94-95 Additions	03/01/95	S/L	30	25,733	0	3,861	858	21,014	66	858	
00203	95-96 Additions	03/01/96	S/L	30	31,570	0	3,682	1,052	26,836	84	1,052	
00204	96-97 Additions	03/01/97	S/L	30	23,976	0	1,998	799	21,179	62	799	
00205	97-98 Additions	03/01/98	S/L	30	22,946	0	1,147	765	21,034	61	765	
00206	Reed-Beals Extension	08/26/98	S/L	30	10,954	0	365	365	10,224	35	365	
00207	98-99 Additions	03/01/99	S/L	30	27,083	0	451	903	25,729	78	903	
00208	1997 System Improvements	10/29/98	S/L	30	19,661	0	546	655	18,460	50	655	
00209	Additions	11/01/99	S/L	30	10,865	0	0	302	10,563	32	302	
Division 00 Total						293,507	0	47,093	9,722	236,692	784	9,722
CLASS 88 TOTAL						293,507	0	47,093	9,722	236,692	784	9,722

Henderson County Water District
 DEPRECIATION SCHEDULE BY CLASS
 For the Fiscal Year through 08/31/00
 Book Schedule

Buildings & Improvements

Num	Description	Date	Svc	Method	Lf	Sec179		Prior Yr	Current	Annual	Depr	Through
						Cost	Bonus	Accum Dep	Year Dep	Net Book	Cur Per	08/31/00
00001	Office building	01/04/97		S/L	30	307,612	0	27,344	10,254	270,014	849	10,254
00002	Whse-concrete pad	07/22/98		S/L	15	1,530	0	111	102	1,317	3	102
00003	Shelving	12/31/96		S/L	10	1,160	0	309	116	735	6	116
Division 00 Total						310,302	0	27,764	10,472	272,066	858	10,472
CLASS 89 TOTAL						310,302	0	27,764	10,472	272,066	858	10,472

Company: H4030

DEPRECIATION SCHEDULE BY CLASS
For the Fiscal Year through 08/31/00
Book Schedule

9 Office furniture & equip.

Num	Description	Date	Svc	Method	Lf	Sec179		Prior Yr	Current	Annual	Depr	Through
						Cost	Bonus	Accum Dep	Year Dep	Net Book	Cur Per	08/31/00
00107	Fire proof file & ref.	03/01/77		S/L	10	530	0	530	0	0	0	0
00116	Table	01/15/84		S/L	8	89	0	89	0	0	0	0
00117	(2) computer desks/chair	02/15/84		S/L	8	364	0	364	0	0	0	0
00194	Time clock	10/19/88		S/L	10	309	0	309	0	0	0	0
00199	Printer table	03/01/89		S/L	10	105	0	105	0	0	0	0
00202	Equipment	03/01/90		S/L	10	115	0	114	1	0	0	1
00203	Office chair	12/15/90		S/L	10	171	0	149	17	5	6	17
00204	Filing cabinets (3)	12/01/93		S/L	10	1,505	0	868	151	486	8	151
00205	Power supply	02/01/94		S/L	5	227	0	227	0	0	0	0
00206	(2) Chairs	05/31/95		S/L	10	305	0	132	31	142	2-	31
00207	Stool	01/08/97		S/L	10	127	0	34	13	80	2	13
00208	10 Board room chairs	01/15/97		S/L	10	2,590	0	691	259	1,640	17	259
00209	7 chairs	01/15/97		S/L	10	1,158	0	309	116	733	6	116
00210	2 tables	01/29/97		S/L	10	181	0	47	18	116	4-	18
00211	Conference table	01/31/97		S/L	10	1,578	0	408	158	1,012	15	158
00212	Blinds and cornice	01/28/97		S/L	7	1,364	0	504	195	665	19	195
00213	Executive chair	02/25/97		S/L	10	370	0	93	37	240	4	37
00214	Breakroom table & chairs	02/25/97		S/L	10	602	0	150	60	392	5	60
00215	Office Security System	01/04/97		S/L	10	1,598	0	427	160	1,011	17	160
00216	Phone System	01/04/97		S/L	10	3,457	0	922	346	2,189	27	346
	Fax Machine	01/31/97		S/L	5	499	0	258	100	141	12	100
00218	(3) Chairs	04/30/97		S/L	10	777	0	182	78	517	1	78
00219	Backup power supply	06/30/97		S/L	5	200	0	87	40	73	7	40
00220	Cannon copier	07/15/98		S/L	8	1,491	0	217	186	1,088	10	186
Division 00 Total						19,712	0	7,216	1,966	10,530	150	1,966
CLASS 90 TOTAL						19,712	0	7,216	1,966	10,530	150	1,966

Company: H4030

DEPRECIATION SCHEDULE BY CLASS

For the Fiscal Year through 08/31/00

Book Schedule

9 Computer

Num	Description	Date Svc	Method	Lf	Sec179		Prior Yr Accum Dep	Current Year Dep	Annual Net Book	Depr Cur Per	Through 08/31/00
					Cost	Bonus					
00182	Mentor-Sys & Applic Soft	03/04/88	S/L	5	7,044	0	7,044	0	0	0	0
00186	Utility Supt. Upgrade	09/30/94	S/L	3	3,000	0	3,000	0	0	0	0
00187	(2) Computers;(1) Printe	01/01/95	S/L	5	7,509	0	7,009	500	0	0	500
00188	MAS90 Level 2.0 upgrade	01/31/96	S/L	3	734	0	734	0	0	0	0
00189	Gateway P300 Computer	04/29/98	S/L	5	2,403	0	641	481	1,281	41	481
00190	MAS90 Level 3.2 software	10/31/98	S/L	3	1,694	0	471	565	658	48	565
00191	United Systems Hdw & Sof	01/11/99	S/L	5	19,017	0	2,536	3,803	12,678	316	3,803
Division 00 Total					41,401	0	21,435	5,349	14,617	405	5,349
CLASS 91 TOTAL					41,401	0	21,435	5,349	14,617	405	5,349

Company: H4030

DEPRECIATION SCHEDULE BY CLASS
For the Fiscal Year through 08/31/00
Book Schedule

92 Transportation & other eq

Num	Description	Date Svc	Method	Lf	Sec179		Prior Yr	Current	Annual	Depr	Through
					Cost	Bonus	Accum Dep	Year Dep	Net Book	Cur Per	08/31/00
00131	Dump truck(1980chevy-grn	03/01/80	S/L	8	13,785	0	10,000	0	3,785	0	0
00153	Test bench	10/10/83	S/L	10	3,162	0	3,162	0	0	0	0
00156	Radios for car & truck	01/10/85	S/L	10	1,780	0	1,780	0	0	0	0
00157	Homelite trash pump	11/07/84	S/L	5	1,155	0	1,155	0	0	0	0
00158	(3) mini recorders	11/07/84	S/L	8	570	0	570	0	0	0	0
00185	Communications Equipment	05/16/88	S/L	10	683	0	683	0	0	0	0
00201	Boring Drill	01/09/89	S/L	8	3,714	0	3,714	0	0	0	0
00204	Lawn mower	04/30/89	S/L	8	230	0	230	0	0	0	0
00205	Tool boxes for 89 trucks	05/31/89	S/L	8	242	0	242	0	0	0	0
00206	1990 Ford F700	04/02/90	S/L	5	20,258	0	20,258	0	0	0	0
00207	Truckbed	06/28/90	S/L	5	3,385	0	3,385	0	0	0	0
00210	Generator	01/15/90	S/L	10	450	0	435	15	0	0	15
00213	Water Pump	08/01/91	S/L	8	175	0	175	0	0	0	0
00219	1994 GMC P/U	01/19/94	S/L	5	9,330	0	9,330	0	0	0	0
00220	1994 F350 1 Ton W/bed	06/30/94	S/L	5	16,735	0	16,735	0	0	0	0
00221	Leak Detector	07/13/94	S/L	8	1,840	0	1,188	230	422	21	230
00223	1995 GMC Sierra P/U	05/26/95	S/L	5	12,217	0	10,383	1,834	0	0	1,834
00225	3/4" Vega drill	01/31/95	S/L	8	184	0	105	23	56	1	23
00226	1996 Ford Ranger	10/05/95	S/L	5	11,888	0	9,313	2,378	197	200	2,378
00227	(2) Chart Recorders	10/24/96	S/L	5	1,080	0	612	216	252	18	216
00228	1998 Malibu	03/11/98	S/L	5	13,220	0	3,966	2,644	6,610	224	2,644
00230	Radio for truck	03/20/98	S/L	8	470	0	83	59	328	4	59
00231	Cross box for truck	06/09/98	S/L	5	389	0	97	78	214	1	78
00232	1997 Case 580L Backhoe	01/16/98	S/L	10	35,955	0	5,693	3,596	26,666	296	3,596
00233	Radio Equipment-97 Contr	05/26/99	S/L	10	77,893	0	1,947	7,789	68,157	650	7,789
00234	1999 Chev P/U	01/27/99	S/L	5	12,835	0	1,497	2,567	8,771	213	2,567
00235	1999 Ford Ranger	07/07/99	S/L	5	12,484	0	416	2,497	9,571	209	2,497
00236	Line Tracer equipment	02/10/99	S/L	10	2,375	0	139	238	1,998	18	238
00237	Equip.-Ranger P/U	07/27/99	S/L	5	834	0	14	167	653	13	167
Division 00 Total					259,318	0	107,307	24,331	127,680	1,868	24,331
CLASS 92 TOTAL					259,318	0	107,307	24,331	127,680	1,868	24,331

Company: H4030

DEPRECIATION SCHEDULE BY CLASS

For the Fiscal Year through 08/31/00

Book Schedule

Report Totals By Class

Class	Description	Sec179		Prior Yr	Current	Annual	Depr	Through
		Cost	Bonus	Accum Dep	Year Dep	Net Book	Cur Per	08/31/00
80	- Electric Pumping Equipment	155,698	0	90,511	7,785	57,402	646	7,785
82	- Structures & Improvements	269,611	0	120,258	6,958	142,395	578	6,958
83	- Distribution	1,611,104	0	318,808	34,511	1,257,785	2,875	34,511
84	- Transmission	6,261,100	0	1,487,878	125,147	4,648,075	10,390	125,147
85	- Meters	673,769	58,836	281,479	37,419	296,035	3,126	37,419
86	- Meter Installation	473,574	78,246	151,811	18,636	224,881	1,531	18,636
87	- Hydrants	127,245	0	30,777	3,076	93,392	251	3,076
88	- Services	293,507	0	47,093	9,722	236,692	784	9,722
89	- Buildings & Improvements	310,302	0	27,764	10,472	272,066	858	10,472
90	- Office furniture & equip.	19,712	0	7,216	1,966	10,530	150	1,966
	Computer	41,401	0	21,435	5,349	14,617	405	5,349
92	- Transportation & other eq	259,318	0	107,307	24,331	127,680	1,868	24,331
*** Report Totals ***		10,496,341	137,082	2,692,337	285,372	7,381,550	23,462	285,372

Henderson County Water District
 Projected Water Revenue-After New Project

Rate Code Old (New)	Type	Test Year Average Bill	# of Customers 12/31/99	# of Customers New project	# of Customers After Project	Projected Annual Consumption	Projected Annual Billing
WC-00, WC-20, WC-30, WC-40, WC-60, WC-90, WC-91, WR-00, WR-80 (01,10,20,30,40,60,80,90,91)	5/8" X 3/4"	23.88	5,432	125	5,557	376,233,128.52	\$ 1,592,413.92
WC-01, WC-99, WR-01 (02,11,92)	1"	60.18	99	-	99	19,028,659.32	71,493.84
WC-02, WR-02 (03,12)	2"	95.27	21	-	21	5,004,032.04	24,008.04
WR-03 (03)	3"	154.63	1	-	1	488,685.36	1,855.56
WC-04, WR-04 (05,14)	4"	370.67	3	-	3	3,860,512.20	13,344.12
WR-06 (16)	6"	327.60	1	-	1	537,000.00	3,931.20
WR-75, WR-76 (75,76)	Fire Dept.	9.82	12	-	12	283,697.28	1,414.08
WR-77 (77)	Fire n/c	-	2	-	2	260,826.96	-
Totals		24.96	5,571	125	5,696	405,696,541.68	1,708,460.76

Percentage of gross billing realized as revenue in base year

97.30%

Adjusted proforma revenue

\$ 1,662,332.32

**HENDERSON COUNTY WATER DISTRICT
COMPUTATION OF PURCHASED WATER
FOR PROJECT ADJUSTMENT**

Schedule J

	Proforma Year W/O Project		Proforma Year With Project	
Projected annual consumption per A-1 and I-1	397,233,497	79.590%	405,696,542	79.696%
Free water provided for fire protection	10,800,000	2.164%	10,800,000	2.122%
Internal use water	16,200,000	3.246%	16,200,000	3.182%
Total accounted for water consumption	<u>424,233,497</u>	<u>85.000%</u>	<u>432,696,542</u>	<u>85.000%</u>
Allowed unaccounted line loss	74,864,735	15.000%	76,358,213	15.000%
Total allowed water purchases	<u>499,098,232</u>	<u>100.000%</u>	<u>509,054,755</u>	<u>100.000%</u>
Cost of Water purchased:				
Percent of water purchases from North plant per B-1	90.642%		90.642%	
North plant purchases	<u>452,392,619</u>		<u>461,417,411</u>	
North plant rate	0.0011486		0.0011486	
Cost of North plant purchases	<u>\$ 519,618.16</u>		<u>\$ 529,984.04</u>	
Percent of water purchases from South plant per B-1	9.358%		9.358%	
South plant purchases	<u>46,705,613</u>		<u>47,637,344</u>	
South plant rate	0.0011735		0.0011735	
Cost of South plant purchases	<u>\$ 54,809.04</u>		<u>\$ 55,902.42</u>	
Total cost of water purchased	<u>\$ 574,427.20</u>		<u>\$ 585,886.46</u>	
Increase cost of water purchased for 125 new customers			<u>\$ 11,459.26</u>	

HendersonCounty Water District
 Analysis of Construction and Rate Case Costs

	Transmission	Meters & Installation	Land & Easements	Services	Rate Case	Bond Costs	Totals
Construction costs:							
Contract A	\$ 982,020	\$ 62,765	\$ -	\$ 33,540	-	-	\$ 1,078,325
Contract B	885,135	49,290	-	23,700	-	-	958,125
Total construction	1,867,155	112,055	-	57,240	-	-	2,036,450
Technical							
Basic	128,461	7,709	-	3,938	-	-	140,108
Inspection	63,110	3,787	-	1,935	-	-	68,832
Extras							
Preliminary	4,584	275	-	141	-	-	5,000
Surveys	-	-	3,000	-	-	-	3,000
Easements/permits/row	-	-	7,000	-	-	-	7,000
Add'l inspectors	5,501	330	-	169	-	-	6,000
Shop drawing manual	917	55	-	28	-	-	1,000
Financing assistance	-	-	-	-	-	10,000	10,000
PSC Rate & construction case	-	-	-	-	20,000	-	20,000
Hydraulics analysis	7,335	440	-	225	-	-	8,000
Subtotal-technical	209,908	12,596	10,000	6,436	20,000	10,000	268,940
Administrative & legal	1,834	110	-	56	-	-	2,000
PSC rate case (CPA & attorney)	-	-	-	-	25,000	-	25,000
Land, easements and row	-	-	5,000	-	-	-	5,000
Financial, bond, etc	-	-	-	-	-	110,000	110,000
Contingencies	162,845	9,773	-	4,992	-	-	177,610
	\$ 2,241,742	\$ 134,534	\$ 15,000	\$ 68,724	\$ 45,000	\$ 120,000	\$ 2,625,000
Estimated useful life	50	10	-	30	3	25	
Annual depreciation	\$ 44,835	\$ 13,453	None	\$ 2,291			\$ 60,579
Annual amortization					\$ 15,000	\$ 4,800	\$ 19,800

Henderson County Water District
 \$2,625,000
 Water Revenue Bonds, Series 2000
 Dated May 1, 2000
 Due September 1, 2001 Through September 1, 2025

Year End 8/31	Principal September 1	Rate	Interest September 1	Interest March 1	Total Interest	Total Debt Service	Prior Debt Service	Debt Service All Issues
2000	0		-	53,300.83	53,300.83	53,300.83	324,480.00	377,780.83
2001	5,000	4.900%	79,951.25	79,828.75	159,780.00	164,780.00	327,675.00	492,455.00
2002	5,000	5.000%	79,828.75	79,703.75	159,532.50	164,532.50	325,365.00	489,897.50
2003	5,000	5.100%	79,703.75	79,576.25	159,280.00	164,280.00	322,622.50	486,902.50
2004	5,000	5.200%	79,576.25	79,446.25	159,022.50	164,022.50	324,310.00	488,332.50
2005	5,000	5.300%	79,446.25	79,321.25	158,767.50	163,767.50	320,410.00	484,177.50
2006	5,000	5.400%	79,321.25	79,186.25	158,507.50	163,507.50	325,770.00	489,277.50
2007	5,000	5.500%	79,186.25	79,048.75	158,235.00	163,235.00	315,658.75	478,893.75
2008	65,000	5.550%	79,048.75	77,245.00	156,293.75	221,293.75	223,122.50	444,416.25
2009	65,000	5.600%	77,245.00	75,425.00	152,670.00	217,670.00	227,833.75	445,503.75
2010	65,000	5.650%	75,425.00	73,588.75	149,013.75	214,013.75	227,067.50	441,081.25
2011	70,000	5.700%	73,588.75	71,593.75	145,182.50	215,182.50	225,980.00	441,162.50
2012	70,000	5.750%	71,593.75	69,581.25	141,175.00	211,175.00	229,466.25	440,641.25
2013	80,000	5.800%	69,581.25	67,261.25	136,842.50	216,842.50	227,548.75	444,391.25
2014	80,000	5.850%	67,261.25	64,921.25	132,182.50	212,182.50	230,195.00	442,377.50
2015	85,000	5.900%	64,921.25	62,413.75	127,335.00	212,335.00	227,405.00	439,740.00
2016	115,000	5.950%	62,413.75	58,992.50	121,406.25	236,406.25	204,732.50	441,138.75
2017	125,000	6.000%	58,992.50	55,242.50	114,235.00	239,235.00	202,170.00	441,405.00
2018	130,000	6.050%	55,242.50	51,310.00	106,552.50	236,552.50	204,195.00	440,747.50
2019	140,000	6.100%	51,310.00	46,760.00	98,070.00	238,070.00	205,670.00	443,740.00
2020	150,000	6.150%	46,760.00	42,147.50	88,907.50	238,907.50	206,595.00	445,502.50
2021	160,000	6.200%	42,147.50	37,187.50	79,335.00	239,335.00	206,880.00	446,215.00
2022	170,000	6.250%	37,187.50	31,875.00	69,062.50	239,062.50	206,520.00	445,582.50
2023	185,000	6.250%	31,875.00	26,093.75	57,968.75	242,968.75	205,600.00	448,568.75
2024	400,000	6.250%	26,093.75	13,593.75	39,687.50	439,687.50		439,687.50
2025	435,000	6.250%	13,593.75	-	13,593.75	448,593.75		448,593.75
	2,625,000		1,561,295.00	1,534,644.58	3,095,939.58	5,720,939.58	6,047,272.50	11,768,212.08

Average interest rate-this issue	6.32%
Average annual debt service-this issue	\$ 228,838.00
Maximum annual debt service-all issues	\$ 492,455.00
Net revenues required (1.3X)	\$ 640,191.50

Does not include two loans from the Kentucky Infrastructure Authority (KIA) dated August 29, 1991, which are subordinate to the parity bond issues of 1993, 1994 and 1997. The principal balance was \$773,842 as of August 31, 1999 and the average annual debt service is approximately \$93,207.

Henderson County Water District
Water Rate Determination Worksheet

PRESENT RATES

PROPOSED RATES

5/8" X 3/4" meter

Rate schedule

<2,000	9.82	minimum	11.00	minimum
>2,000<10,000	0.00376	per gal.	0.00385	per gal.
>10,000<30,000	0.00350	per gal.	0.00359	per gal.
>30,000	0.00311	per gal.	0.00320	per gal.

	Test Year			Proforma Year		
	# of bills	Consumption	Revenue	# of bills	Consumption	Revenue
<2,000	64,193	117,458,525	630,375.26	66,684	122,440,525	733,524.00
>2,000<10,000	53,863	198,284,490	745,549.68	56,354	207,356,787	798,323.63
>10,000<30,000	6,996	31,791,154	111,269.04	6,996	31,791,154	114,130.24
>30,000	432	14,644,391	45,544.06	432	14,644,391	46,862.05
		<u>362,178,560</u>	<u>1,532,738.04</u>		<u>376,232,857</u>	<u>1,692,839.92</u>

1" meter

Rate schedule

<5,000	21.10	minimum	22.55	minimum
>5,000<10,000	0.00376	per gal.	0.00385	per gal.
>10,000<30,000	0.00350	per gal.	0.00359	per gal.
>30,000	0.00311	per gal.	0.00320	per gal.

	Test Year			Proforma Year		
	# of bills	Consumption	Revenue	# of bills	Consumption	Revenue
<5,000	1,081	4,684,323	22,809.10	1,188	4,684,323	26,789.40
>5,000<10,000	753	2,742,863	10,313.16	860	2,742,863	10,560.02
>10,000<30,000	369	3,025,629	10,589.70	476	3,025,629	10,862.01
>30,000	78	6,861,986	21,340.78	78	6,861,986	21,958.36
		<u>17,314,801</u>	<u>65,052.74</u>		<u>17,314,801</u>	<u>70,169.79</u>

2" meter

Rate schedule

<16,000	60.90	minimum	63.34	minimum
>16,000<30,000	0.00350	per gal.	0.00359	per gal.
>30,000	0.00311	per gal.	0.00320	per gal.

	Test Year			Proforma Year		
	# of bills	Consumption	Revenue	# of bills	Consumption	Revenue
<16,000	239	2,205,669	14,555.10	252	2,205,669	15,961.68
>16,000<30,000	77	806,696	2,823.44	90	806,696	2,896.04
>30,000	43	1,733,523	5,391.26	43	1,733,523	5,547.27
		<u>4,745,888</u>	<u>22,769.80</u>		<u>4,745,888</u>	<u>24,404.99</u>

**Henderson County Water District
Water Rate Determination Worksheet**

	PRESENT RATES			PROPOSED RATES		
3" meter						
Rate schedule						
<30,000		109.90	minimum		113.60	minimum
>30,000		0.00311	per gal.		0.00320	per gal.
	Test Year			Proforma Year		
	# of bills	Consumption	Revenue	# of bills	Consumption	Revenue
<30,000	12	316,085	1,318.80	12	316,085	1,363.20
>30,000	8	172,600	536.79	8	172,600	552.32
		<u>488,685</u>	<u>1,855.59</u>		<u>488,685</u>	<u>1,915.52</u>
4" meter						
Rate schedule						
<50,000		172.10	minimum		177.60	minimum
>50,000		0.00311	per gal.		0.00320	per gal.
	Test Year			Proforma Year		
	# of bills	Consumption	Revenue	# of bills	Consumption	Revenue
<50,000	36	1,561,971	6,195.60	36	1,561,971	6,393.60
>50,000	22	2,298,541	7,148.46	22	2,298,541	7,355.33
		<u>3,860,512</u>	<u>13,344.06</u>		<u>3,860,512</u>	<u>13,748.93</u>
6" meter						
Rate schedule						
<100,000		327.60	minimum		337.60	minimum
>100,000		0.00311	per gal.		0.00320	per gal.
	Test Year			Proforma Year		
	# of bills	Consumption	Revenue	# of bills	Consumption	Revenue
<100,000	12	537,000	3,931.20	12	537,000	4,051.20
>100,000	-	-	-	-	-	-
		<u>537,000</u>	<u>3,931.20</u>		<u>537,000</u>	<u>4,051.20</u>
Fire Departments with minimum bill						
Rate schedule						
Minimum bill only		9.82	minimum		11.00	minimum
	Test Year			Proforma Year		
	# of bills	Consumption	Revenue	# of bills	Consumption	Revenue
Minimum bill only	144	283,697	1,414.08	144	283,697	1,584.00
		<u>283,697</u>	<u>1,414.08</u>		<u>283,697</u>	<u>1,584.00</u>

Henderson County Water District
Water Rate Determination Worksheet

PRESENT RATES

PROPOSED RATES

Fire Departments with no charge

Rate schedule

No charge meters

- minimum

- minimum

	Test Year			Proforma Year		
	# of bills	Consumption	Revenue	# of bills	Consumption	Revenue
Minimum bill only	24	260,827	-	24	260,827	-
		<u>260,827</u>	<u>-</u>		<u>260,827</u>	<u>-</u>

Totals	65,741	389,669,970	\$ 1,641,105.51	68,352	403,724,267	\$ 1,808,714.35
Allowance for billing adjustments			<u>97.30%</u>			<u>97.30%</u>
Final revenue			\$ 1,596,796.00			\$ 1,759,879.00

PART 2
BILLING ANALYSIS

**Henderson County Water District
Billing Analysis
For the Year Ended August 31, 1999**

Rate
WC-00,WC-20, WC-30,WC-40,WC-60,WC-90, WC-91,WR-00 & WR-80
5/8 X 3/4" meter

Rate schedule
 <2,000 9.82 minimum
 >2,000<10,000 0.00376 per gal.
 >10,000<30,000 0.00350 per gal.
 >30,000 0.00311 per gal.

	Minimum < 2,000 gal			>2,000<10,000		
	# of Charges	Consumption	Charges	# of Charges	Consumption	Charges
September	5,261	9,823,802.14	51,663.02	4541	18,784,841.57	70,631.00
October	5,286	9,850,563.00	51,908.52	4528	17,664,741.00	66,419.43
November	5,311	9,726,426.00	52,154.02	4389	14,875,651.00	55,932.45
December	5,316	9,753,099.00	52,203.12	4392	14,701,623.00	55,278.10
January	5,320	9,318,339.78	52,242.40	4565	18,597,012.52	69,924.77
February	5,309	9,570,011.00	52,134.38	4329	15,104,588.00	56,793.25
March	5,351	9,648,850.00	52,546.82	4313	13,585,401.00	51,081.11
April	5,387	9,708,084.00	52,900.34	4319	12,672,737.00	47,649.49
May	5,395	9,812,269.00	52,978.90	4439	14,557,556.00	54,736.41
June	5,414	9,998,589.00	53,165.48	4593	18,075,371.00	67,963.39
July	5,417	10,115,764.00	53,194.94	4720	19,471,031.00	73,211.08
August	5,426	10,132,728.00	53,283.32	4735	20,193,937.00	75,929.20
Totals	64,193	117,458,525	630,375	53,863	198,284,490	745,550

# of Charges	>10,000<30,000		# of Charges	>30,000		Total Consumption	Total Charges
	Consumption	Charges		Consumption	Charges		
727	4,150,284.86	14,526.00	53	1,642,012.16	5,106.66	34,400,940.73	141,926.68
637	3,604,954.00	12,617.34	57	1,628,116.00	5,063.44	32,748,374.00	136,008.73
372	1,986,759.00	6,953.66	25	478,993.00	1,489.67	27,067,829.00	116,529.80
321	1,412,842.00	4,944.95	21	1,064,080.00	3,309.29	26,931,644.00	115,735.46
617	2,836,026.29	9,926.09	40	1,497,331.84	4,656.70	32,248,710.43	136,749.96
1187	1,921,500.00	6,725.25	22	719,730.00	2,238.36	27,315,829.00	117,891.24
270	1,121,670.00	3,925.85	17	1,854,500.00	5,767.50	26,210,421.00	113,321.28
211	876,320.00	3,067.12	11	408,000.00	1,268.88	23,665,141.00	104,885.83
341	1,473,687.00	5,157.90	14	361,210.00	1,123.36	26,204,722.00	113,996.57
675	3,531,881.00	12,361.58	51	811,110.00	2,522.55	32,416,951.00	136,013.00
752	4,066,548.00	14,232.92	58	2,876,694.00	8,946.52	36,530,037.00	149,585.46
886	4,808,682.00	16,830.39	63	1,302,614.00	4,051.13	36,437,961.00	150,094.04
6,996	31,791,154	111,269	432	14,644,391	45,544	362,178,560	1,532,738

**Henderson County Water District
Billing Analysis
For the Year Ended August 31, 1999**

Rate
WC-01, WC-99 & WR-01
1" meter

Rate schedule
 <5,000 21.10 minimum
 >5,000<10,000 0.00376 per gal.
 >10,000<30,000 0.00350 per gal.
 >30,000 0.00311 per gal.

	Minimum < 5,000 gal			>5,000<10,000		
	# of Charges	Consumption	Charges	# of Charges	Consumption	Charges
September	90	405,637.00	1,899.00	68	261,575.00	983.52
October	90	383,429.00	1,899.00	62	240,230.00	903.26
November	87	396,526.00	1,835.70	61	210,980.00	793.28
December	88	385,069.00	1,856.80	56	187,320.00	704.32
January	90	392,792.16	1,899.00	67	239,479.77	900.44
February	87	363,780.00	1,835.70	54	183,990.00	691.80
March	88	352,390.00	1,856.80	52	183,480.00	689.88
April	88	365,820.00	1,856.80	54	179,220.00	673.87
May	88	377,440.00	1,856.80	61	212,730.00	799.86
June	93	416,390.00	1,962.30	71	270,600.00	1,017.46
July	95	421,126.00	2,004.50	74	291,916.00	1,097.60
August	97	423,924.00	2,046.70	73	281,342.00	1,057.85
Totals	1,081	4,684,323	22,809	753	2,742,863	10,313

# of Charges	>10,000<30,000		# of Charges	>30,000		Total Consumption	Total Charges
	Consumption	Charges		Consumption	Charges		
38	367,038.88	1,284.64	10	620,750.00	1,930.53	1,655,000.88	6,097.69
38	362,895.00	1,270.13	11	733,680.00	2,281.74	1,720,234.00	6,354.13
28	228,950.00	801.33	6	340,475.00	1,058.88	1,176,931.00	4,489.19
23	159,170.00	557.10	3	321,760.00	1,000.67	1,053,319.00	4,118.89
36	260,965.24	913.38	7	762,840.97	2,372.44	1,656,078.14	6,085.26
23	164,640.00	576.24	5	786,410.00	2,445.74	1,498,820.00	5,549.48
21	154,090.00	539.32	4	572,690.00	1,781.07	1,262,650.00	4,867.07
19	148,400.00	519.40	5	461,340.00	1,434.77	1,154,780.00	4,484.84
25	220,780.00	772.73	5	498,800.00	1,551.27	1,309,750.00	4,980.66
38	340,650.00	1,192.28	7	575,640.00	1,790.24	1,603,280.00	5,962.28
39	198,310.00	694.09	3	499,840.00	1,554.50	1,411,192.00	5,350.69
41	419,740.00	1,469.09	12	687,760.00	2,138.93	1,812,766.00	6,712.57
369	3,025,629	10,590	78	6,861,986	21,341	17,314,801	65,053

**Henderson County Water District
Billing Analysis
For the Year Ended August 31, 1999**

Rate
WC-02 & WR-02
2" meter

Rate schedule
 <16,000 60.90 minimum
 >16,000<30,000 0.00350 per gal.
 >30,000 0.00311 per gal.

	Minimum < 16,000 gal			>16,000<30,000		
	# of Charges	Consumption	Charges	# of Charges	Consumption	Charges
September	20	206,169.46	1,218.00	8	67,500.00	236.25
October	20	177,497.00	1,218.00	6	62,500.00	218.75
November	20	181,439.00	1,218.00	6	56,000.00	196.00
December	20	161,965.00	1,218.00	5	54,000.00	189.00
January	20	163,238.40	1,218.00	5	45,995.67	160.98
February	20	136,290.00	1,218.00	3	34,800.00	121.80
March	19	160,260.00	1,157.10	4	43,800.00	153.30
April	19	185,270.00	1,157.10	7	48,000.00	168.00
May	20	182,640.00	1,218.00	7	82,300.00	288.05
June	21	224,200.00	1,278.90	9	105,000.00	367.50
July	20	221,500.00	1,218.00	9	111,300.00	389.55
August	20	205,200.00	1,218.00	8	95,500.00	334.25
Totals	239	2,205,669	14,555	77	806,696	2,823

# of Charges	>30,000 Consumption	Charges	Total Consumption	Total Charges
4	152,800.00	475.21	426,469.46	1,929.46
3	83,200.00	258.75	323,197.00	1,695.50
2	29,100.00	90.50	266,539.00	1,504.50
3	39,800.00	123.78	255,765.00	1,530.78
2	320,162.97	995.71	529,397.04	2,374.69
2	95,470.00	296.91	266,560.00	1,636.71
2	10,500.00	32.66	214,560.00	1,343.06
2	33,160.00	103.13	266,430.00	1,428.23
5	225,120.00	700.12	490,060.00	2,206.17
7	351,060.00	1,091.80	680,260.00	2,738.20
6	310,280.00	964.97	643,080.00	2,572.52
5	82,870.00	257.73	383,570.00	1,809.98
43	1,733,523	5,391	4,745,888	22,770

**Henderson County Water District
Billing Analysis
For the Year Ended August 31, 1999**

Rate
WR-03
3" meter

Rate schedule

<30,000 109.90 minimum
>30,000 0.00311 per gal.

	Minimum < 30,000 gal			>30,000		
	# of Charges	Consumption	Charges	# of Charges	Consumption	Charges
September	1	30,000.00	109.90	1	20,200.00	62.82
October	1	30,000.00	109.90	1	17,600.00	54.74
November	1	30,000.00	109.90	1	14,900.00	46.34
December	1	30,000.00	109.90	1	20,200.00	62.82
January	1	27,585.34	109.90			-
February	1	30,000.00	109.90	1	25,100.00	78.06
March	1	30,000.00	109.90	1	19,900.00	61.89
April	1	19,900.00	109.90			-
May	1	30,000.00	109.90	1	26,700.00	83.04
June	1	30,000.00	109.90	1	28,000.00	87.08
July	1	27,600.00	109.90			-
August	1	1,000.00	109.90			-
Totals	12	316,085	1,319	8	172,600	537

Total Consumption	Total Charges
----------------------	------------------

50,200.00	172.72
47,600.00	164.64
44,900.00	156.24
50,200.00	172.72
27,585.34	109.90
55,100.00	187.96
49,900.00	171.79
19,900.00	109.90
56,700.00	192.94
58,000.00	196.98
27,600.00	109.90
1,000.00	109.90
488,685	1,856

**Henderson County Water District
Billing Analysis
For the Year Ended August 31, 1999**

Rate
WC-04 & WR-04
4" meter

Rate schedule
<50,000 172.10 minimum
>50,000 0.00311 per gal.

	Minimum < 50,000 gal			>50,000		
	# of Charges	Consumption	Charges	# of Charges	Consumption	Charges
September	3	150,000.00	516.30	3	304,000.00	945.44
October	3	150,000.00	516.30	3	80,000.00	248.80
November	3	133,000.00	516.30	1	2,000.00	6.22
December	3	150,000.00	516.30	2	112,000.00	348.32
January	3	125,971.19	516.30	1	66,541.04	206.94
February	3	114,000.00	516.30	1	10,000.00	31.10
March	3	122,000.00	516.30	2	7,000.00	21.77
April	3	113,000.00	516.30	2	71,000.00	220.81
May	3	149,000.00	516.30	2	300,000.00	933.00
June	3	150,000.00	516.30	3	525,000.00	1,632.75
July	3	108,000.00	516.30	1	475,000.00	1,477.25
August	3	97,000.00	516.30	1	346,000.00	1,076.06
Totals	36	1,561,971	6,196	22	2,298,541	7,148

**Henderson County Water District
Billing Analysis
For the Year Ended August 31, 1999**

Rate
WR-06
6" meter

Rate schedule
<100,000
>100,000

327.60 minimum
0.00311 per gal.

	# of Charges	Minimum < 100,000 gal		# of Charges	>100,000	
		Consumption	Charges		Consumption	Charges
September	1	61,000.00	327.60	0	-	-
October	1	58,000.00	327.60	0	-	-
November	1	37,000.00	327.60	0	-	-
December	1	51,000.00	327.60	0	-	-
January	1	38,000.00	327.60			
February	1	58,000.00	327.60			
March	1	52,000.00	327.60			
April	1	35,000.00	327.60			
May	1	56,000.00	327.60			
June	1	52,000.00	327.60			
July	1	22,000.00	327.60			
August	1	17,000.00	327.60			
Totals	12	537,000.00	3,931.20	0	-	-

Total
Consumption

Total
Charges

61,000.00	327.60
58,000.00	327.60
37,000.00	327.60
51,000.00	327.60
38,000.00	327.60
58,000.00	327.60
52,000.00	327.60
35,000.00	327.60
56,000.00	327.60
52,000.00	327.60
22,000.00	327.60
17,000.00	327.60
<hr/> 537,000.00	<hr/> 3,931.20

Total
Consumption

Total
Charges

114,133.00	117.84
13,568.00	117.84
32,041.00	117.84
14,009.00	117.84
16,289.18	117.84
17,447.00	117.84
7,770.00	117.84
11,010.00	117.84
30,423.00	117.84
7,507.00	117.84
6,150.00	117.84
13,350.00	117.84
<hr/> 283,697.18	<hr/> 1,414.08

Henderson County Water District
 Billing Analysis
 For the Year Ended August 31, 1999

Rate
 WC-77
 Minimum bills

Rate schedule
 on only a minimum bill No charge

	# of Charges	Consumption	Minimum < 999,999gal Charges
September	2	4,235.00	-
October	2	112.00	-
November	2	500.00	-
December	2	1,900.00	-
January	2	2,000.00	-
February	2	243,280.00	-
March	2	100.00	-
April	2	2,400.00	-
May	2	1,800.00	-
June	2	1,400.00	-
July	2	1,700.00	-
August	2	1,400.00	-
Totals	24	260,827	-

Total Consumption	Total Charges
----------------------	------------------

4,235.00	-
----------	---

112.00	-
--------	---

500.00	-
--------	---

1,900.00	-
----------	---

2,000.00	-
----------	---

243,280.00	-
------------	---

100.00	-
--------	---

2,400.00	-
----------	---

1,800.00	-
----------	---

1,400.00	-
----------	---

1,700.00	-
----------	---

1,400.00	-
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260,827.00	-
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Henderson County Water District
Billing Analysis
For the Year Ended August 31, 1999

TOTALS

September	5,390
October	5,415
November	5,437
December	5,443
January	5,449
February	5,435
March	5,477
April	5,513
May	5,522
June	5,547
July	5,551
August	5,562
Totals	<hr/> 65,741 <hr/>

	Total	Total
	Consumption	Charges
	37,165,979.07	152,033.73
	35,141,085.00	145,433.54
	28,760,740.00	123,647.69
	28,619,837.00	122,867.91
	34,710,572.36	146,488.49
	29,579,036.00	126,258.23
	27,926,401.00	120,686.71
	25,338,661.00	112,091.35
	28,598,455.00	123,271.08
	35,494,398.00	147,504.95
	39,224,759.00	160,057.56
	39,110,047.00	160,764.29
	389,669,970.43	1,641,105.53

PART 3
CHART OF ACCOUNTS

CHART OF ACCOUNTS

ALL ACCOUNTS

ACCOUNT NUMBER	DESCRIPTION
CONSTRUCTION IN PROGRESS	
105-0	Construction in progress
RESERVE FOR DEPRECIATION	
108-1	Reserve for depreciation
CURRENT ASSETS	
126-1	Cash in Bank-1994 B&I Redempt.
126-2	Cash in bank-1993 b&i redempt.
126-3	Cash in bank-KIA debt reserve
126-4	Cash in bank-KIA b&i redempt.
126-5	Cash in Bank 97 B&I Redemption
127-1	Cash-Debt reserve-93,94 & 97
127-2	Cash in Bank-Unreserved C/D
127-3	Investments-C/D's
127-4	Investments-Bonds
127-5	Depreciation Reserve-CD
131-1	Petty Cash
131-2	Cash in bank-Revenue
131-3	Cash in bank - O&M
131-4	Cash in bank - General
131-5	Cash in Bank-Expansion
131-6	HCWD/Fiscal Court Acct.
131-7	KIA Construction Escrow
131-8	94 Const. escrow fd-Citizens
131-9	Cash/1997 Const.Escrow
139-1	Cash transfers
141-0	Accounts rec'v - water
141-1	Unbilled rec'v - water
142-1	Accounts rec'v - employees
142-2	Accounts rec'v - other
142-3	Note receivable-Crowley
143-0	Reserve for bad debts
143-3	Rec'v from Fed. Gov't
151-0	Inventory
162-1	Prepaid Insurance
162-2	Prepaid Debt Service
162-3	Prepaid rent
171-0	Accrued Interest Rec'v
OTHER ASSETS	
181-1	Unamort. Bond Exp.-(78)
181-3	98 KIA Restructuring Costs

CHART OF ACCOUNTS

ALL ACCOUNTS

ACCOUNT
NUMBER

DESCRIPTION

OTHER ASSETS

181-4	KIA Financing costs
181-5	Unamortized bond exp.-(93)
181-6	Unamort. bond costs-(94)
181-7	Deferred loss-89 debt refund.
181-8	Bond Issuance Exp./97 Bonds
181-9	Unamort. bond costs-1997
186-1	Rate Case Expense
186-2	Other Deferred Debits
186-4	Software Costs

SURPLUS

215-0	RETAINED EARNINGS - PRIOR
-------	---------------------------

LIABILITIES

221-4	Bonds payable-KIA
221-5	Bonds payable-1993 series
221-6	Bonds payable-1994 series
221-7	Bonds Payable/1997 Series
231-0	Accounts Payable
231-1	Accounts payable - General
231-2	Accounts payable - O&M
231-3	Contracts payable
231-4	Retainage payable
232-0	N/P - Farmers Bank & Tr.
232-1	N/P - A T & T
232-2	N/P - Hend. Fiscal Ct.
232-3	Ohio Valley Bank
232-4	Const. Customer Deposits
235-0	Refundable Deposits
235-1	Medicare withholding
235-2	Employee FICA withholding
236-0	Employers FICA payable
236-1	Federal withholding
236-2	Kentucky withholding
236-3	Sales Tax Payable
236-4	Webster Co. School Tax
236-5	H'son Co.School Tax
236-6	Accrued unemployment
236-7	KY retirement withholding
236-8	Insurance withholding
237-4	Interest payable-note
237-5	Interest payable-KIA debt
237-6	Interest payable-(93 bonds)
237-7	Interest payable-(94 bonds)

CHART OF ACCOUNTS

ALL ACCOUNTS

ACCOUNT
NUMBER

DESCRIPTION

LIABILITIES

237-8	Interest payable-(97 bonds)
239-0	Bonds Payable-Current
239-1	Current portion-KIA debt
252-0	Rebates Due Customer
253-0	Returnable \$10 tap fees
253-1	Returnable tap fees expan
263-1	Accrued Compensated Absen
263-2	Accrued payroll

CONTRIBUTED CAPITAL

271-1	Tap Fees
271-2	Contributed Capitol
275-0	P/L Summary

FIXED ASSETS

303-4	Land
303-5	Land
304-2	Struct. & Improv-Pump Stations
304-4	Structures & Improvements
304-5	Building & Improvements
311-2	Electric Pumping Equipment
330-4	Distrib-Reserv.& Standpipe
331-4	Transmission & distrib. mains
333-4	Services
334-4	Meters & meter installation
335-4	Hydrants
340-5	Office Furniture & Equipment
341-5	Trans & Other Field Equip.
343-5	Shop Equipment
347-5	Computer

DEPRECIATION

403-0	Depreciation
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NONOPERATING REVENUES/EXPENSES

407-3	Amort. of Software Costs
414-0	Gain(loss) Sale of Property
419-0	Interest Income
421-0	Gain(loss) Investments
421-1	Gain on Bond Defeasance

CHART OF ACCOUNTS

ALL ACCOUNTS

ACCOUNT NUMBER	DESCRIPTION
NONOPERATING REVENUES/EXPENSES	
427-3	Interest Expense-Bonds
427-4	Interest expense-KIA debt
427-5	Other Interest Expense
427-6	Interest Expense-Building
428-0	Bond Amortization
428-1	Amortization-KIA financing
428-2	Loan servicing fees-KIA
428-3	Amort.-debt refunding costs
428-4	Amortization-1997 bonds
428-5	Amort.-98KIA Restruct. Cost

OPERATING REVENUES

461-0	Water Revenue
470-0	Penalties & Cut-Offs
473-0	Discounts earned
474-0	Miscellaneous
474-1	Misc Income/Billing Services

OPERATING EXPENSES

601-6	Maintenance of mains
601-7	Meter reading salaries
601-8	Salaries - office
602-8	Vacation / unassigned
603-8	Commissioners Fees
604-8	Kentucky retirement
605-8	Medical insurance
606-8	Unemployment
607-8	Employer Medicare expense
608-8	Employer FICA expense
610-0	
610-1	Water Purchased
615-1	Utilities-Field
615-8	Telephone/Office Utilities
620-2	Materials & Suppl-Pumping
620-6	Materials-Supply-Transm
620-7	Billing expense-Labor & supply
620-8	Office Supplies/Expenses
621-6	Maintenace of tanks
621-8	Computer Expense
622-8	Maintenance of Gen. Plant
632-8	Accounting Services
633-8	Legal Services
634-8	Other Consulting Services
635-2	Contractual Service-Other

CHART OF ACCOUNTS

ALL ACCOUNTS

ACCOUNT NUMBER	DESCRIPTION
OPERATING EXPENSES	
635-8	Contractual Services/Other
641-6	Storage Rental
641-8	Building Rental
642-6	Equipment Rental
650-8	Repairs & Maintenance-Equip.
651-8	Gas & Oil-Equipment
656-8	Insurance-Vehicles
657-8	Insurance-General Liability
658-8	Insurance-Workman's Comp.
659-8	Insurance - Other
665-8	Regulatory Exp.-Rate Case
667-8	Regulatory Exp.-Other
670-7	Bad Debt Expense
671-7	Bad Debts Collected
672-7	Collector's Commission
673-7	Acc/Rec. Over/Short
675-8	Miscellaneous

Non-financial information

900-0	Gallons purchased
910-0	Gallons sold
920-0	Number of customers
930-0	Debt service requirement

PART 4
AUDITED FINANCIAL STATEMENTS
FOR THE YEAR ENDED AUGUST 31, 1999

HENDERSON COUNTY WATER DISTRICT

FINANCIAL STATEMENTS

Years Ended August 31, 1999 and 1998

HENDERSON COUNTY WATER DISTRICT
FINANCIAL STATEMENTS
Years Ended August 31, 1999 and 1998

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INDEPENDENT AUDITOR'S REPORT

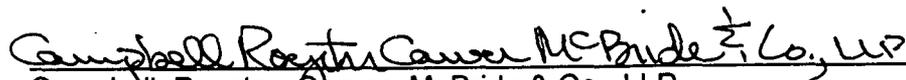
To the Board of Commissioners
Henderson County Water District
Henderson, Kentucky 42420

We have audited the accompanying financial statements of Henderson County Water District, as of and for the years ended August 31, 1999 and 1998, as listed in the table of contents. These financial statements are the responsibility of Henderson County Water District, management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards and *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Henderson County Water District, as of August 31, 1999 and 1998, and the results of its operations and cash flows for the years then ended in conformity with generally accepted accounting principles.

Our audit was conducted for the purpose of forming an opinion on the financial statements taken as a whole. The supplementary financial information listed in the table of contents is presented for purposes of additional analysis and is not a required part of the financial statements of Henderson County Water District. Such information has been subjected to the auditing procedures applied in the audit of the financial statements and, in our opinion, is fairly presented in all material respects in relation to the financial statements taken as a whole.


Campbell, Royster, Carver, McBride & Co., LLP

November 11, 1999

HENDERSON COUNTY WATER DISTRICT

Balance Sheets

August 31, 1999 and 1998

	1999	1998
<u>ASSETS</u>		
Current assets:		
Cash and cash equivalents (note 3)	\$ 363,598	\$ 218,880
Investments, at cost (note 4)	----	147,309
Accounts receivable (net of allowances for uncollectibles) (note 2):		
Water	226,365	195,903
Other	2,122	4,202
Accrued interest receivable	15,900	18,326
Inventories	43,945	38,273
Prepaid expenses	15,236	18,562
Total current assets	<u>667,166</u>	<u>641,455</u>
Restricted assets:		
Cash and cash equivalents (note 3)	1,248,870	863,574
Investments, at cost (note 4)	<u>150,000</u>	<u>477,675</u>
Total restricted assets	<u>1,398,870</u>	<u>1,341,249</u>
Property, plant and equipment (note 5):		
Land	162,208	162,208
Buildings and improvements	578,753	506,660
Improvements other than buildings	9,572,441	7,923,885
Machinery and equipment	260,478	168,962
Office equipment	61,113	40,402
Construction in progress	----	1,622,687
	<u>10,634,993</u>	<u>10,424,804</u>
Less: accumulated depreciation	<u>2,829,419</u>	<u>2,566,410</u>
Net property, plant and equipment	<u>7,805,574</u>	<u>7,858,394</u>
Other assets:		
Unamortized bond discount and fees	<u>90,364</u>	<u>97,013</u>
 Total assets	 <u>\$ 9,961,974</u>	 <u>\$ 9,938,111</u>

	1999	1998
<u>LIABILITIES AND EQUITY</u>		
Liabilities:		
Current liabilities (payable from current assets):		
Current portion of notes payable (note 7)	\$ 12,703	\$ 12,049
Accounts payable	69,549	69,586
Accrued liabilities	16,459	18,360
Customer deposits	<u>36,819</u>	<u>36,879</u>
Total current liabilities (payable from current assets)	<u>135,530</u>	<u>136,874</u>
Current liabilities (payable from restricted assets):		
Accounts payable	4,183	44,692
Accrued interest	106,488	110,187
Current portion of notes payable (note 7)	46,679	44,006
Current portion of revenue bonds payable (note 7)	<u>135,000</u>	<u>125,000</u>
Total current liabilities (payable from restricted assets)	<u>292,350</u>	<u>323,885</u>
Long-term debt:		
Notes payable - net of current portion (note 7)	776,032	829,423
Revenue bonds payable - net of current portion (note 7)	<u>3,353,947</u>	<u>3,475,522</u>
Total long-term debt	<u>4,129,979</u>	<u>4,304,945</u>
Total liabilities	<u>4,557,859</u>	<u>4,765,704</u>
Equity:		
Contributed capital:		
Tap fees	1,219,788	1,154,276
Contributions in aid of construction	<u>2,439,503</u>	<u>2,377,584</u>
Total contributed capital	<u>3,659,291</u>	<u>3,531,860</u>
Retained earnings:		
Reserved for debt retirement	587,621	578,634
Unreserved	<u>1,157,203</u>	<u>1,061,913</u>
Total retained earnings	<u>1,744,824</u>	<u>1,640,547</u>
Total equity	<u>5,404,115</u>	<u>5,172,407</u>
Total liabilities and equity	<u>\$ 9,961,974</u>	<u>\$ 9,938,111</u>

HENDERSON COUNTY WATER DISTRICT

Statements of Revenues, Expenses and Retained Earnings
 Years Ended August 31, 1999 and 1998

	1999	1998
Operating revenues:		
Water	\$ 1,601,325	\$ 1,521,231
Penalties and sundry	<u>52,700</u>	<u>46,628</u>
Total operating revenues	<u>1,654,025</u>	<u>1,567,859</u>
Operating expenses:		
Purchased water	564,275	525,052
Pumping utilities	26,883	27,246
Maintenance of system	146,237	132,610
Vehicle and equipment	19,479	23,827
Customer accounts	84,681	69,319
Administration	239,041	234,487
Depreciation	<u>277,914</u>	<u>226,740</u>
Total operating expenses	<u>1,358,510</u>	<u>1,239,281</u>
Operating income	<u>295,515</u>	<u>328,578</u>
Nonoperating revenues (expenses):		
Interest income	75,908	66,032
Gain (loss) on sale of assets	----	200
Interest expense - notes	(52,706)	(51,911)
Interest expense - bonds	(206,156)	(116,355)
Amortization of debt issue costs	<u>(8,284)</u>	<u>(6,505)</u>
Total nonoperating revenues (expenses)	<u>(191,238)</u>	<u>(108,539)</u>
Net income	104,277	220,039
Retained earnings - beginning of year	<u>1,640,547</u>	<u>1,420,508</u>
Retained earnings - end of year	<u>\$ 1,744,824</u>	<u>\$ 1,640,547</u>

HENDERSON COUNTY WATER DISTRICT

Statements of Cash Flows

Years Ended August 31, 1999 and 1998

	1999	1998
Cash flows from operating activities:		
Cash received from customers	\$ 1,570,863	\$ 1,525,534
Cash payments to suppliers for goods and services	(764,701)	(702,317)
Cash payments to employees for services	(320,742)	(312,223)
Other operating revenues	52,700	46,628
Net cash provided (used) by operating activities	<u>538,120</u>	<u>557,622</u>
Cash flows from noncapital financing activities:		
Increase (decrease) in customer deposits	<u>(60)</u>	<u>6,884</u>
Net cash provided (used) by noncapital financing activities	<u>(60)</u>	<u>6,884</u>
Cash flows from capital and related financing activities:		
Acquisition and construction of capital assets	(266,675)	(1,733,060)
Proceeds from sale of assets	----	200
Tap fees	65,512	75,920
Contributed capital in aid of construction	61,919	71,135
Principal paid on revenue bond maturities and other capital notes	(161,639)	(176,372)
Interest paid on revenue bonds and other capital notes	(262,561)	(222,480)
Net cash provided (used) by capital and related financing activities	<u>(563,444)</u>	<u>(1,984,657)</u>
Cash flows from investing activities:		
(Increase) decrease in other receivables	2,080	2,106
Purchase of investment securities	----	(474,984)
Interest income	78,334	65,530
Proceeds from sale of investment securities	474,984	----
Net cash provided (used) by investing activities	<u>555,398</u>	<u>(407,348)</u>
Net increase (decrease) in cash and cash equivalents	530,014	(1,827,499)
Cash and cash equivalents, beginning of year	<u>1,082,454</u>	<u>2,909,953</u>
Cash and cash equivalents, end of year	<u>\$ 1,612,468</u>	<u>\$ 1,082,454</u>

	1999	1998
Reconciliation of operating income to net cash provided (used) by operating activities:		
Operating income	\$ 295,515	\$ 328,578
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation	277,914	226,740
(Increase) decrease in accounts receivable	(30,462)	4,303
(Increase) decrease in inventories	(5,672)	(2,607)
(Increase) decrease in prepaid expenses	3,326	3,668
Increase (decrease) in accounts payable	(600)	(3,800)
Increase (decrease) in accrued liabilities	(1,901)	740
Net cash provided (used) by operating activities	<u>\$ 538,120</u>	<u>\$ 557,622</u>

HENDERSON COUNTY WATER DISTRICT

Notes to Financial Statements

August 31, 1999 and 1998

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The Henderson County Water District ("Water District") was created by the fiscal court of Henderson County under the provisions authorized by Chapter 74 of the Kentucky Revised Statutes.

The Water District accounts for its financial position and results of operations in accordance with generally accepted accounting principles applicable to governmental units. The following is a summary of the more significant accounting policies.

Reporting Entity

The financial statements of the Henderson County Water District include the funds comprising the primary government. In evaluating how to define the Water District for financial reporting purposes, management has considered any potential component units, based upon the Water District's ability to exercise significant oversight responsibility. Oversight responsibility was determined on the basis of the Water District's ability to significantly influence operations, select the governing body, participate in fiscal management and the scope of public service. Based upon the application of these criteria, no potential component units were noted.

Fund Types

A fund or account group is an accounting entity with a self-balancing set of accounts established to record the financial position and results of operations of a specific governmental activity. The Water District maintains the following fund type:

Proprietary Fund Type:

Proprietary Funds are accounted for on a flow of economic resources measurement focus. The accounting objectives are a determination of net income, financial position and changes in cash flow. All assets and liabilities associated with a Proprietary Fund's activities are included on its balance sheet. Proprietary Fund equity is segregated into contributed capital and retained earnings.

Measurement Focus/Basis of Accounting

Measurement focus refers to what is being measured; basis of accounting refers to when revenues and expenditures are recognized in the accounts and reported in the financial statements. Basis of accounting relates to the timing of the measurement made, regardless of the measurement focus applied.

Proprietary Fund Types are accounted for on an economic resources measurement focus using the accrual basis of accounting. Revenues are recorded when they are earned. Expenses are recorded at the time liabilities are incurred. Proprietary Fund Types apply all FASB Statements and Interpretations issued after November 30, 1989, except for those that conflict with or contradict GASB pronouncements.

Inventories

Inventories are carried at the lower of cost (primarily first-in, first-out) or market.

Investments

Investments are carried at cost. Gains or losses are recognized when investments are sold or redeemed.

Donated Lines

From time to time prospective users have constructed and paid for line extensions and donated these additions to the Water District. These additions are recorded at cost invoiced to the user and are depreciated at rates based on their estimated useful life. Such additions are recorded as contributed capital.

Property, Plant and Equipment

Property, plant and equipment owned by Proprietary Funds are recorded at cost or, if contributed property, at their fair market value at the time of contribution. Repairs and maintenance are recorded as expenses; renewals and betterments are capitalized. Construction period interest is capitalized to property, plant and equipment.

Depreciation of all exhaustible fixed assets used by proprietary funds is charged as an expense against their operations. Accumulated depreciation is reported on proprietary fund balance sheets. Depreciation has been provided over the estimated useful lives using the straight-line method. The estimated useful lives are as follows:

Building and improvements	10-50
Improvements other than building	15-50
Machinery and equipment	5-10
Office equipment and fixtures	5-10

Tap Fees

Tap fees collected from new customers are recorded as contributed capital. The cost of installing the service lines and setting the water meters are capitalized and depreciated over their estimated useful lives.

Other Assets

Other assets subject to amortization include unamortized bond discount and fees, being amortized on a straight-line basis over the life of the related debt.

Accumulated Compensated Absences

Accumulated unpaid vacation amounts are accrued when incurred. The accrued compensated balance at August 31, 1999 and 1998 was \$2,867 and \$7,146, respectively.

Statement of Cash Flows

For the purposes of the Statement of Cash Flows, all highly liquid investments with a maturity of three months or less are considered to be cash equivalents.

Reclassifications

Certain accounts in the prior-year totals have been reclassified for comparative purposes to conform with the presentation in the current-year financial statements.

NOTE 2 - ALLOWANCE FOR UNCOLLECTIBLE ACCOUNTS

The allowance for uncollectible accounts receivable at August 31, 1999 and 1998 was \$1,445 and \$1,538, respectively.

NOTE 3 - CASH AND CASH EQUIVALENTS

The Water District's deposits at August 31, 1999 were fully covered by federal depository insurance or by collateral held by the Water District's custodial bank in the Water District's name.

NOTE 4 - INVESTMENTS

Investments stated at cost consisted of the following at August 31, 1999 and 1998:

	<u>1999</u>	<u>1998</u>
Unrestricted:		
Certificates of deposit	\$ ----	\$ 147,309
Restricted:		
Certificates of deposit	<u>150,000</u>	<u>477,675</u>
	<u>\$ 150,000</u>	<u>\$ 624,984</u>

NOTE 5 - CHANGES IN PROPERTY, PLANT AND EQUIPMENT

A summary of changes in property, plant and equipment follows:

	<u>Balance 8/31/98</u>	<u>Additions</u>	<u>Disposals/ Transfers</u>	<u>Balance 8/31/99</u>
Land	\$ 162,208	\$ ----	\$ ----	\$ 162,208
Building and improvements	506,660	72,093	----	578,753
Improvements other than buildings	7,923,885	1,648,556	----	9,572,441
Machinery and equipment	168,962	106,421	14,905	260,478
Office equipment and fixtures	40,402	20,711	----	61,113
Construction in progress	<u>1,622,687</u>	<u>23,793</u>	<u>1,646,480</u>	<u>----</u>
	<u>\$ 10,424,804</u>	<u>\$ 1,871,574</u>	<u>\$ 1,661,385</u>	<u>\$ 10,634,993</u>

NOTE 6 - RISK MANAGEMENT

The Water District is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. Significant losses are covered by commercial insurance for all major programs. There have been no significant reductions in insurance coverage and settlement amounts have not exceeded insurance coverage for the current year or the three prior years.

NOTE 7 - CHANGES IN LONG-TERM DEBT

The following is a summary of revenue bond and note transactions of the Water District for the year ended August 31, 1999:

	<u>Notes Payable</u>	<u>Revenue Bonds</u>	<u>Totals</u>
Bonds/notes payable-August 31, 1998	\$ 885,478	\$ 3,600,522	\$ 4,486,000
Bonds/notes retired	(54,154)	(125,000)	(179,154)
Amortization of deferred valuation amount on debt refunding/restructuring	<u>4,090</u>	<u>13,425</u>	<u>17,515</u>
Bonds/notes payable-August 31, 1999	<u>\$ 835,414</u>	<u>\$ 3,488,947</u>	<u>\$ 4,324,361</u>

On January 1, 1994, the Henderson County Water District issued \$1,220,000 1994 Water Refunding and Improvement Revenue Bonds with an average interest rate of 5.0% to advance refund \$970,000 of outstanding 1989 Water Refunding Revenue Bonds with an average interest rate of 7.3%. The advance refunding resulted in a difference between the reacquisition price and the net carrying amount of the 1989 Series bonds of \$161,076. This difference, reported in the accompanying financial statements as a deduction from bonds payable, is being charged to operations through the year 2014 using the effective-interest method.

On April 1, 1998, the Henderson County Water District executed a supplemental assistance agreement with the Kentucky Infrastructure Authority to restructure its existing loans to take advantage of lower market interest rates. The loan restructuring increased the outstanding principal balance by \$53,846. The loan restructuring costs are reported in the accompanying financial statements as a deduction from notes payable, and are being charged to operations (included in "interest expense") through the year 2011.

Bonds/notes payable at August 31, 1999 and 1998 are comprised of the following:

<u>Notes Payable:</u>	<u>1999</u>	<u>1998</u>
Note payable to Henderson County Fiscal Court, payable in annual installments of \$2,016 for 25 years, beginning in 1989; non-interest bearing	\$ 32,256	\$ 34,272
Note payable to Old National Bank, dated August 16, 1996, payable in monthly installments of \$1,205.80 including interest at 7.9%, through August 16, 2001, secured by real estate	77,369	85,501
Notes payable to Kentucky Infrastructure Authority, dated April 1, 1998, due in annual installments of \$46,825 to \$82,450 through June 1, 2011, interest payable semiannually on December 1 and June 1 at 4.75%	773,842	817,848
Deferred valuation amount on debt restructuring	<u>(48,053)</u>	<u>(52,143)</u>
	835,414	885,478
Less: current portion	<u>59,382</u>	<u>56,055</u>
	<u>\$ 776,032</u>	<u>\$ 829,423</u>

Revenue Bonds:

\$1,250,000 Water Refunding Revenue Bonds of 1993 dated March 1, 1993 due in annual installments of \$65,000 to \$120,000 through September 1, 2006; interest escalating from 3% to 5.75%.	\$ 820,000	\$ 895,000
\$1,220,000 Water Refunding and Improvement Revenue Bonds dated January 1, 1994 due in annual installments of \$35,000 to \$90,000 through September 1, 2014, interest payable semiannually on March 1 and September 1, escalating from 4.5% to 5.2%.	1,005,000	1,050,000
\$1,800,000 Water Revenue Bonds dated July 1, 1997 due in annual installments of \$5,000 to \$200,000 through September 1, 2022, interest payable semiannually on March 1 and September 1, escalating from 4.5% to 5.6%.	1,795,000	1,800,000
Deferred valuation amount on debt refunding	<u>(131,053)</u>	<u>(144,478)</u>
	3,488,947	3,600,522
Less: current portion	<u>135,000</u>	<u>125,000</u>
	<u>\$ 3,353,947</u>	<u>\$ 3,475,522</u>

Construction period interest capitalized for the years ended August 31, 1999 and 1998, included in property, plant and equipment was \$-0- and \$97,975, respectively.

The annual requirements to amortize all bonds/notes outstanding as of August 31, 1999, including interest payments of \$2,702,033 are as follows:

<u>Year ending August 31</u>	<u>Notes Payable</u>	<u>Revenue Bonds</u>	<u>Total</u>
2000	\$ 104,704	\$ 324,480	\$ 429,184
2001	162,142	327,675	489,817
2002	87,786	325,365	413,151
2003	87,562	322,623	410,185
2004	89,158	324,310	413,468
Thereafter	<u>626,877</u>	<u>4,422,818</u>	<u>5,049,695</u>
	<u>\$ 1,158,229</u>	<u>\$ 6,047,271</u>	<u>\$ 7,205,500</u>

There are a number of limitations and restrictions contained in the various bond indentures. The Water District is in compliance with all significant limitations and restrictions.

NOTE 8 - PENSION PLAN

A. Plan Description

The Henderson County Water District contributes to the County Employees Retirement System (CERS), a cost-sharing multiple-employer defined benefit pension plan administered by the Kentucky Retirement System (KRS). CERS provides for retirement, disability and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Cost-of-living (COLA) adjustments are provided at the

discretion of the State Legislature. Section 61.645 of the Kentucky Revised Statutes assigns the authority to administer the CERS to the KRS Board of Trustees. The KRS issues a publicly available financial report that includes financial statements and required supplementary information for CERS. That report may be obtained by writing to Kentucky Retirement Systems, Perimeter Park West, 1260 Louisville Road, Frankfort, Kentucky 40601.

B. Funding Policy

Plan members are required to contribute 5.0% of their annual creditable compensation and the Water District is required to contribute at an actuarially determined rate. The current rate is 8.22% of annual creditable compensation. The contribution requirements of plan members and the Water District are established and may be amended by the KRS Board of Trustees. The Water District's contributions to CERS for the years ending August 31, 1999, 1998, and 1997 were \$19,916, \$20,071, and \$20,588, respectively, equal to the required contributions for each year.

NOTE 9 - OTHER EMPLOYEE BENEFITS

Compensated Absences

All employees of the Water District earn and accrue vacation and sick time. The maximum number of vacation days that can be earned is twenty. Sick leave may be accumulated with a maximum of 65 days. An employee leaving for any reason, including retirement, will be paid their accumulated vacation. This liability is recorded in the financial statements.

Post Employment Benefits

In addition to the pension benefits described in Note 8, the Water District participates in the Kentucky Retirement Systems Insurance Fund (Fund). The Fund was created by the Kentucky General Assembly pursuant to the provisions of KRS 61.701 to provide hospital and medical insurance for members receiving benefits from the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System (Systems). The Fund and members receiving benefits pay prescribed portions of the aggregate premiums paid by the Fund. For the year, insurance premiums withheld from benefit payments to members of the Systems approximated \$12,841,073 and \$170,403 for KERS and KERS hazardous, respectively, \$11,408,057 and \$777,937 for CERS and CERS hazardous, respectively, and \$197,458 for SPRS. The Fund pays the same proportion of hospital and medical insurance premiums for the spouse and dependents of retired hazardous members killed in the line of duty. As of June 30, 1998, the Fund had 35,308 retirees for whom benefits were available. The Fund's financial report is included in the KRS report whose address is listed in note 8. The allocation of the insurance premiums paid by the Fund and amounts withheld from members' benefits is based on the years of service with the System, as follows:

<u>Years of Service</u>	<u>Paid by Insurance Fund</u>	<u>Paid by Member</u>
20 or more	100%	0%
15-19	75%	25%
10-14	50%	50%
4-9	25%	75%
Less than 4	0%	100%

In prior years, the required medical insurance contribution rate was being increased annually by a percentage that would result in advance-funding the medical liability on an actuarially determined basis using the entry age normal cost method within a 20-year period measured from 1987. In November 1992, the Board of Trustees adopted a fixed percentage contribution rate and suspended future increases under the current medical premium funding policy until the next experience study could be performed.

In May 1996, the Board of Trustees adopted a policy to increase the insurance contribution rate by the amount needed to achieve the target rate for full entry age normal funding within twenty years. The increases commenced with the 1997 valuation and adjustments will be made every other valuation year to coincide with the valuation used by the General Assembly to establish employer contribution rates for the biennium.

NOTE 10 - LITIGATION

The Water District has been named as a defendant in a lawsuit filed by a customer. Management has reviewed the pending litigation with legal counsel and believes it to be without merit or that the ultimate liability, if any, would be covered by the Water District's insurance.

NOTE 11 - YEAR 2000 ISSUE

The Year 2000 issue is the result of shortcomings in many electronic data processing systems and other electronic equipment that may adversely affect the entity's operations as early as fiscal year 1999.

The Water District has completed an inventory of computer systems and other electronic equipment that may be affected by the Year 2000 Issue and that are necessary to conducting the Water District's operations. Based on this inventory, the Water District is in the validation/testing stage in that hardware and software believed to be year 2000 compliant has been purchased from outside vendors for the financial reporting systems. As of August 31, 1999, the Water District has not been required to spend additional funds to become year 2000 compliant.

Because of the unprecedented nature of the Year 2000 Issue, its effects and the success of related remediation efforts will not be fully determinable until the year 2000 and thereafter. Management cannot assure that the Water District is or will be year 2000 ready, that the Water District's remediation efforts will be successful in whole or in part, or that parties with whom the Water District does business will be year 2000 ready.

CAMPBELL, ROYSTER, CARVER, McBRIDE & CO., LLP

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**REPORT ON COMPLIANCE AND ON INTERNAL CONTROL OVER FINANCIAL
REPORTING BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED
IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS**

To the Board of Commissioners
Henderson County Water District
Henderson, Kentucky 42420

We have audited the financial statements of Henderson County Water District, as of and for the year ended August 31, 1999, and have issued our report thereon dated November 11, 1999. We conducted our audit in accordance with generally accepted auditing standards and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States.

Compliance

As part of obtaining reasonable assurance about whether Henderson County Water District's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grants, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance that are required to be reported under *Government Auditing Standards*.

Internal Control Over Financial Reporting

In planning and performing our audit, we considered Henderson County Water District's internal control over financial reporting in order to determine our auditing procedures for the purpose of expressing our opinion on the financial statements and not to provide assurance on the internal control over financial reporting. However, we noted certain matters involving the internal control over financial reporting and its operation that we consider to be reportable conditions. Reportable conditions involve matters coming to our attention relating to significant deficiencies in the design or operation of the internal control over financial reporting that, in our judgement, could adversely affect Henderson County Water District's ability to record, process, summarize and report financial data consistent with the assertions of management in the financial statements.

Due to the relative small staff size, an overall lack of segregation of duties exist.

A material weakness is a condition in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that misstatements in amounts that would be material in relation to the financial statements being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. Our consideration of the internal control over financial reporting would not necessarily disclose all matters in the internal control over financial reporting that might be reportable conditions and, accordingly, would not necessarily disclose all reportable conditions that are also considered to be material weaknesses. However, we believe none of the reportable conditions described above is a material weakness.

This report is intended solely for the information and use of management and Board of Commissioners, and is not intended to be and should not be used by anyone other than these specified parties.

Campbell, Royster, Carver, McBride & Co., LLP
Campbell, Royster, Carver, McBride & Co., LLP

November 11, 1999

HENDERSON COUNTY WATER DISTRICT
 Schedule of System Maintenance, Customer Accounts
 and Administrative Expenses
 Years Ended August 31, 1999 and 1998

	1999	1998
<u>Maintenance of System:</u>		
Maintenance of mains	\$ 110,114	\$ 94,961
Materials & supplies - transmission	34,315	35,510
Materials & supplies - pumping	1,514	1,967
Rental-equipment	294	172
	<u>\$ 146,237</u>	<u>\$ 132,610</u>
<u>Customer accounts:</u>		
Salaries - meter reading	\$ 18,703	\$ 18,023
Billing and collections-labor and materials	52,761	47,878
Bad debts	12,845	3,126
Collection fees	372	292
	<u>\$ 84,681</u>	<u>\$ 69,319</u>
<u>Administration:</u>		
Salaries	\$ 53,042	\$ 54,419
Vacation and unassigned salaries	20,582	25,029
Commissioner's fees	5,750	4,890
Payroll taxes	18,458	17,639
Employee benefits	60,795	57,696
Office and computer expense	15,309	7,635
Telephone and utilities	5,571	5,920
Professional fees	18,125	11,192
Insurance	28,551	34,488
Regulatory commission	2,671	2,850
Maintenance - office	5,329	8,926
Miscellaneous and general	4,858	3,803
	<u>\$ 239,041</u>	<u>\$ 234,487</u>

PART 5

MONTHLY STATEMENT OF INCOME

FOR THE YEAR ENDED AUGUST 31, 1999

**HENDERSON COUNTY WATER DISTRICT
MONTHLY STATEMENTS OF INCOME
YEAR ENDED AUGUST 31, 1999**

	September	October	November	December	January	February	March	April	May	June	July	August	Totals
Operating revenues:													
Water	\$147,713	\$143,443	\$121,234	\$121,912	\$146,953	\$122,667	\$119,263	\$110,599	\$122,424	\$146,976	\$159,748	\$138,393	\$1,601,325
Penalties and sundry	4,296	4,356	3,713	4,382	6,495	3,695	4,493	3,831	3,665	3,833	4,715	5,226	52,700
Total operating revenues	152,009	147,799	124,947	126,294	153,448	126,362	123,756	114,430	126,089	150,809	164,463	143,619	1,654,025
Operating expenses:													
Purchased water	49,181	43,306	42,373	45,528	46,511	37,687	41,204	40,209	49,047	51,445	57,168	60,616	564,275
Pumping utilities	2,800	2,210	2,436	358	2,728	2,436	2,510	2,137	2,175	2,461	2,397	2,235	26,883
Maintenance of system(schedule)	13,345	14,106	9,615	9,440	10,517	11,580	12,565	12,269	20,078	10,692	13,398	8,632	146,237
Vehicle and equipment(schedule)	1,885	1,455	2,795	1,955	1,203	1,450	192	1,192	1,337	1,817	1,727	2,471	19,479
Customer accounts (schedule)	7,456	7,070	4,868	7,070	7,331	8,114	9,934	7,806	5,345	5,021	9,488	5,178	84,681
Administration (schedule)	16,246	17,627	18,478	24,999	28,151	24,302	19,273	18,617	16,853	21,031	19,625	13,839	239,041
Depreciation and amortization	19,760	19,760	19,760	19,760	24,859	24,859	24,859	24,859	24,859	24,859	24,859	24,861	277,914
Total operating expenses	110,673	105,534	100,325	109,110	121,300	110,428	110,537	107,089	119,694	117,326	128,662	117,832	1,358,510
Operating income	41,336	42,265	24,622	17,184	32,148	15,934	13,219	7,341	6,395	33,483	35,801	25,787	295,515
Nonoperating revenues (expenses):													
Interest income	4,435	6,069	6,307	707	7,003	2,202	4,681	9,026	7,197	9,127	9,488	9,666	75,908
Gain on sale of securities	0	0	0	0	0	0	0	0	0	0	0	0	0
Gain (loss) on sale of property, plant and equipment	0	0	0	0	0	0	(21)	0	0	0	0	0	0
Interest expense-refundable deposits	(301)	(39)	(41)	(58)	(48)	(48)	(21)	(17)	(24)	(30)	(24)	(22)	(625)
Interest expense-building loan	(551)	(547)	(543)	(539)	(534)	(531)	(526)	(522)	(518)	(513)	(509)	(470)	(6,303)
Interest expense - bonds	(16,061)	(16,061)	(16,061)	(16,061)	(16,061)	(16,061)	(16,061)	(16,061)	(16,061)	(16,061)	(16,061)	(16,059)	(192,730)
Interest expense-KIA debt	(3,534)	(3,534)	(3,534)	(3,534)	(3,534)	(3,534)	(3,534)	(3,534)	(3,534)	(3,294)	(3,294)	(3,294)	(41,688)
Loan service fees	0	0	(818)	0	0	0	0	0	(818)	0	0	0	(1,636)
Amortization of bond issue costs	(2,014)	(2,014)	(2,014)	(2,014)	(2,014)	(2,014)	(2,014)	(2,014)	(2,014)	(2,014)	(2,014)	(2,010)	(24,164)
Total nonoperating revenues (expenses)	(18,026)	(16,126)	(16,704)	(21,499)	(15,140)	(19,986)	(17,475)	(13,122)	(15,772)	(12,785)	(12,414)	(12,189)	(191,238)
Net income (loss)	\$23,310	\$26,139	\$7,918	(\$4,315)	\$17,008	(\$4,052)	(\$4,256)	(\$5,781)	(\$9,377)	\$20,698	\$23,387	\$13,598	\$104,277

HENDERSON COUNTY WATER DISTRICT
MONTHLY STATEMENTS OF INCOME
YEAR ENDED AUGUST 31, 1999
DETAILED EXPENDITURES

	September	October	November	December	January	February	March	April	May	June	July	August	Totals
Maintenance of system:													
Mains	\$8,310	\$9,856	\$7,744	\$9,197	\$7,443	\$8,835	\$8,762	\$10,238	\$9,394	\$8,227	\$10,379	\$11,729	\$110,114
Materials /supplies- pumping	0	0	782	(943)	0	1,642	33	0	0	0	0	0	1,514
Materials /supplies-transmission	5,035	4,110	1,089	1,135	3,074	1,103	3,770	2,031	10,613	2,433	3,019	(3,097)	34,315
Maintenance of tanks	0	0	0	0	0	0	0	0	0	0	0	0	0
Equipment rental	0	140	0	51	0	0	0	0	71	32	0	0	294
	\$13,345	\$14,106	\$9,615	\$9,440	\$10,517	\$11,580	\$12,565	\$12,269	\$20,078	\$10,692	\$13,398	\$8,632	\$146,237
Vehicles and equipment:													
Repairs and maintenance	825	351	1,847	1,070	357	609	(866)	232	194	680	419	983	6,701
Gas and oil	1,060	1,104	948	885	846	841	1,058	960	1,143	1,137	1,308	1,488	12,778
	\$1,885	\$1,455	\$2,795	\$1,955	\$1,203	\$1,450	\$192	\$1,192	\$1,337	\$1,817	\$1,727	\$2,471	\$19,479
Customer accounts:													
Salaries - meter reading	\$1,940	\$1,734	\$1,394	\$1,469	\$1,927	\$1,573	\$1,887	\$1,468	\$1,627	\$1,221	\$1,225	\$1,238	\$18,703
Billing and collections labor	2,637	3,233	2,492	2,829	2,700	3,224	3,101	3,139	2,085	2,301	3,051	2,480	33,272
Billing and collections expense	2,395	1,374	289	2,442	877	3,317	1,318	2,467	286	1,385	2,503	836	19,489
Bad debts	389	624	663	330	1,827	0	3,628	740	1,304	103	2,613	624	12,845
Collector's commissions	10	105	30	0	0	0	0	0	3	11	0	0	159
Acct rec. over/short	85	0	0	0	0	0	0	(8)	40	0	96	0	213
	\$7,456	\$7,070	\$4,868	\$7,070	\$7,331	\$8,114	\$9,934	\$7,806	\$5,345	\$5,021	\$9,488	\$5,178	\$84,681
Administration:													
Salaries	\$4,113	\$5,492	\$4,486	\$4,907	\$4,255	\$4,428	\$4,406	\$4,997	\$4,137	\$4,187	\$5,383	\$2,251	\$53,042
Vacation and unassigned salaries	1,682	1,524	1,663	8,131	1,874	752	278	1,932	1,463	2,128	2,332	(3,177)	20,582
Commissioner's fees	375	500	500	0	875	500	500	500	500	500	500	500	5,750
Kentucky retirement	1,555	1,879	1,524	2,222	1,425	1,500	1,524	1,898	1,545	1,583	1,796	1,465	19,916
Medical insurance	3,551	3,545	3,545	3,545	3,545	3,545	3,545	4,061	3,917	3,917	4,346	(183)	40,879
Unemployment	6	6	5	31	87	91	85	53	27	18	9	63	481
Social security and medicare	1,375	1,662	1,347	1,964	1,260	1,326	1,347	1,678	1,366	1,399	1,790	1,464	17,978
Telephone/utilities	428	358	438	376	800	513	528	370	393	449	457	461	5,571
Office supplies and expense	451	126	269	277	1,757	1,053	1,115	340	701	253	81	1,301	7,724
Computer supplies/expense	0	0	0	0	515	7,070	0	0	0	0	0	0	7,585
Office repair and maintenance	535	280	630	637	357	454	730	288	254	500	280	384	5,329
Professional services	0	0	0	0	7,705	0	1,595	0	0	550	0	0	9,850
Legal services	0	0	446	0	990	0	0	0	0	0	0	0	1,436
Other consulting fees	0	0	0	0	0	0	0	0	0	0	0	0	5,839
Contractual services-other	0	0	0	0	0	0	1,000	0	0	0	0	0	1,000
Insurance-general liability & vehicle	1,428	1,428	1,428	1,428	2,015	2,015	2,015	2,015	2,015	2,015	2,015	2,015	21,832
Insurance-workman's comp.	485	485	485	485	485	485	485	485	485	485	485	488	5,823
Insurance-other	102	0	0	0	102	0	0	0	0	0	0	692	896
Regulatory expense-other	0	0	0	0	0	0	0	0	0	2,671	0	0	2,671
Miscellaneous	160	342	1,712	996	104	570	120	0	50	376	151	276	4,857
	\$16,246	\$17,627	\$18,478	\$24,999	\$28,151	\$24,392	\$18,273	\$18,617	\$16,853	\$21,031	\$19,625	\$13,839	\$339,240

PART 6
COST OF SERVICE STUDY

**HENDERSON COUNTY WATER DISTRICT
 COST OF SERVICE STUDY
 \$ 2,625,000 Bond Issue**

Allocation of Plant Value

	Total	Commodity	Demand	Customer
Source of supply	-		-	
Pumping plant	\$ 214,540		\$ 214,540	
Treatment plant	-		-	
Trans./dist. mains	8,385,339		8,385,339	
Services	315,138			\$ 315,138
Meters	711,505			711,505
Hydrants	96,468			96,468
Subtotal	9,722,990	-	8,599,879	1,123,111
Percentage		0.00%	88.45%	11.55%
General plant	566,140	-	500,751	65,389
Total value	<u>\$ 10,289,130</u>	<u>\$ -</u>	<u>\$ 9,100,630</u>	<u>\$ 1,188,500</u>

**HENDERSON COUNTY WATER DISTRICT
 COST OF SERVICE STUDY
 \$ 2,625,000 Bond Issue**

Allocation of Depreciation

	Total	Commodity	Demand	Customer
Structures/improvements	\$ 6,958		\$ 6,958	
Pumping equipment	7,785		7,785	
Treatment equipment	-		-	
Trans./dist. Mains	204,493		204,493	
Services	12,013			\$ 12,013
Meters	69,508			69,508
Hydrants	3,076			3,076
Subtotal	303,833	-	219,236	84,597
Percentage		0.00%	72.16%	27.84%
Other plant & misc.	34,803	-	25,114	9,689
Office equipment	7,315	-	5,279	2,036
Total depreciation	\$ 345,951	\$ -	\$ 249,629	\$ 96,322

HENDERSON COUNTY WATER DISTRICT
COST OF SERVICE STUDY
\$ 2,625,000 Bond Issue

Allocation of Operation and Maintenance Expense

	Total	Commodity	Demand	Customer
Purchased water	\$ 585,886	\$ 585,886		
Pumping utilities	26,883	26,883		
Maintenance of system	149,143		\$ 111,857	\$ 37,286
Vehicle and equipment	19,479		9,740	9,739
Customer accounts (below)	29,466			29,466
Subtotal	810,857	612,769	121,597	76,491
Less commodity	(612,769)			
Subtotal	198,088			
Percentage			61.39%	38.61%
Administration and general (below)	204,000	-	125,236	78,764
Total O&M expense	\$ 1,014,857	\$ 612,769	\$ 246,833	\$ 155,255

Customer accounts (billing and collections):	
Per proforma financial statements	\$ 87,362
Less customer penalties and sundry income	(57,896)
Net customer accounts	<u>\$ 29,466</u>

Administration and general:	
Per proforma financial statements	\$ 259,594
Add amortization of rate case expenses	14,000
Add interest expense-building loan	5,689
Add interest expense-refundable deposits	625
Less interest income	(75,908)
Net administration and general	<u>\$ 204,000</u>

**HENDERSON COUNTY WATER DISTRICT
COST OF SERVICE STUDY
\$ 2,625,000 Bond Issue**

**Allocation of Cost of Service
With Full Depreciation**

	Total	Commodity	Demand	Customer
Operations and maintenance	\$ 1,014,857	\$ 612,769	\$ 246,833	\$ 155,255
Depreciation	345,951	-	249,629	96,322
Debt service	492,455	-	435,576	56,879
 Water cost	 \$ 1,853,263	 \$ 612,769	 \$ 932,038	 \$ 308,456

**Allocation of Cost of Service
Without Depreciation**

	Total	Commodity	Demand	Customer
Operations and maintenance	\$ 1,014,857	\$ 612,769	\$ 246,833	\$ 155,255
Depreciation	-	-	-	-
Debt service	492,455	-	435,576	56,879
 Water cost	 \$ 1,507,312	 \$ 612,769	 \$ 682,409	 \$ 212,134

HENDERSON COUNTY WATER DISTRICT
COST OF SERVICE STUDY
\$ 2,625,000 Bond Issue

Calculation of Water Rates
With Full Depreciation

	Total	First 2,000	Next 8,000	Over 10,000
Actual sales, gallons	376,232,857	122,440,525	207,356,787	46,435,545
Percentage	100.00%	32.54%	55.12%	12.34%
Weighted sales for demand:				
Factor		2.00	1.50	1.00
Amount	602,351,776	244,881,050	311,035,181	46,435,545
Percentage	100.00%	40.65%	51.64%	7.71%
Allocation of costs:				
Commodity	612,769	199,395	337,758	75,616
Demand	932,038	378,873	481,305	71,860
Customer	308,456	308,456		
Total	<u>\$ 1,853,263</u>	<u>\$ 886,724</u>	<u>\$ 819,063</u>	<u>\$ 147,476</u>
Number of bills		<u>68,184</u>		
Rates		<u>\$ 13.00</u>	<u>\$ 3.95</u>	<u>\$ 3.18</u>

Calculation of Water Rates
Without Depreciation

	Total	First 2,000	Next 8,000	Over 10,000
Actual sales	376,232,857	122,440,525	207,356,787	46,435,545
Percentage	100.00%	32.54%	55.12%	12.34%
Weighted sales for demand:				
Factor		2.00	1.50	1.00
Amount	602,351,776	244,881,050	311,035,181	46,435,545
Percentage	100.00%	40.65%	51.64%	7.71%
Allocation of costs:				
Commodity	612,769	199,395	337,758	75,616
Demand	682,410	277,399	352,397	52,614
Customer	212,134	212,134		
Total	<u>\$ 1,507,313</u>	<u>\$ 688,928</u>	<u>\$ 690,155</u>	<u>\$ 128,230</u>
Number of bills		<u>68,184</u>		
Rates		<u>\$ 10.10</u>	<u>\$ 3.33</u>	<u>\$ 2.76</u>

**HENDERSON COUNTY WATER DISTRICT
 COST OF SERVICE STUDY
 \$ 2,625,000 Bond Issue**

**Calculation of Water Rates
 With Full Depreciation**

	Bills	Gallons	Rate	Revenue
First 2,000 gallons	68,184	122,440,525	13.00	\$ 886,392
Next 8,000 gallons		207,356,787	3.95	818,931
Over 10,000 gallons		46,435,545	3.18	<u>147,456</u>
Revenue from rates				<u><u>\$ 1,852,779</u></u>

**Calculation of Water Rates
 Without Depreciation**

	Bills	Gallons	Rate	Revenue
First 2,000 gallons	68,184	122,440,525	10.10	\$ 688,658
Next 8,000 gallons		207,356,787	3.33	690,023
Over 10,000 gallons		46,435,545	2.76	<u>128,210</u>
Revenue from rates				<u><u>\$ 1,506,891</u></u>

Due to the classification of meter sizes and minimum rate for each class, application of these rates to the entire population of bills results in too much revenue. As shown in the following two worksheets, by lowering the minimums to \$12.32 and \$9.49 respectively for the models with depreciation and without, sufficient revenue is generated to cover the cost of operations.

**HENDERSON COUNTY WATER DISTRICT
COST OF SERVICE STUDY
\$ 2,625,000 Bond Issue
Water Rate Determination Worksheet**

WITH DEPRECIATION

RATES AS CALCULATED

RATES AS ADJUSTED

5/8" X 3/4" meter

Rate schedule

<2,000	13.00	minimum	12.32	minimum
>2,000<10,000	0.00395	per gal.	0.00395	per gal.
>10,000<30,000	0.00318	per gal.	0.00318	per gal.
>30,000	0.00318	per gal.	0.00318	per gal.

	Proforma Year			Proforma Year		
	# of bills	Consumption	Revenue	# of bills	Consumption	Revenue
<2,000	66,684	122,440,525	866,892.00	66,684	122,440,525	821,546.88
>2,000<10,000	56,354	207,356,787	819,059.31	56,354	207,356,787	819,059.31
>10,000<30,000	6,996	31,791,154	101,095.87	6,996	31,791,154	101,095.87
>30,000	432	14,644,391	46,569.16	432	14,644,391	46,569.16
		376,232,857	1,833,616.34		376,232,857	1,788,271.22

1" meter

Rate schedule

<5,000	24.85	minimum	24.17	minimum
>5,000<10,000	0.00395	per gal.	0.00395	per gal.
>10,000<30,000	0.00318	per gal.	0.00318	per gal.
>30,000	0.00318	per gal.	0.00318	per gal.

	Proforma Year			Proforma Year		
	# of bills	Consumption	Revenue	# of bills	Consumption	Revenue
<5,000	1,188	4,684,323	29,521.80	1,188	4,684,323	28,713.96
>5,000<10,000	860	2,742,863	10,834.31	860	2,742,863	10,834.31
>10,000<30,000	476	3,025,629	9,621.50	476	3,025,629	9,621.50
>30,000	78	6,861,986	21,821.12	78	6,861,986	21,821.12
		17,314,801	71,798.73		17,314,801	70,990.89

2" meter

Rate schedule

<16,000	63.68	minimum	63.00	minimum
>16,000<30,000	0.00318	per gal.	0.00318	per gal.
>30,000	0.00318	per gal.	0.00318	per gal.

	Proforma Year			Proforma Year		
	# of bills	Consumption	Revenue	# of bills	Consumption	Revenue
<16,000	252	2,205,669	16,047.36	252	2,205,669	15,876.00
>16,000<30,000	90	806,696	2,565.29	90	806,696	2,565.29
>30,000	43	1,733,523	5,512.60	43	1,733,523	5,512.60
		4,745,888	24,125.25		4,745,888	23,953.89

**HENDERSON COUNTY WATER DISTRICT
 COST OF SERVICE STUDY
 \$ 2,625,000 Bond Issue
 Water Rate Determination Worksheet**

WITH DEPRECIATION

RATES AS CALCULATED

RATES AS ADJUSTED

Fire Departments with no charge

Rate schedule

No charge meters

- minimum

- minimum

	RATES AS CALCULATED			RATES AS ADJUSTED		
	# of bills	Proforma Year Consumption	Revenue	# of bills	Proforma Year Consumption	Revenue
Minimum bill only	24	260,827	-	24	260,827	-
		260,827	-		260,827	-
Totals	68,352	403,724,267	\$ 1,950,723.35	68,352	403,724,267	\$ 1,904,260.31
Allowance for billing adjustments			97.30%			97.30%
Final revenue			\$ 1,898,054.00			\$ 1,852,845.00

**HENDERSON COUNTY WATER DISTRICT
COST OF SERVICE STUDY
\$ 2,625,000 Bond Issue
Water Rate Determination Worksheet**

WITHOUT DEPRECIATION

RATES AS CALCULATED

RATES AS ADJUSTED

5/8" X 3/4" meter

Rate schedule

<2,000	10.10	minimum	9.49	minimum
>2,000<10,000	0.00333	per gal.	0.00333	per gal.
>10,000<30,000	0.00276	per gal.	0.00276	per gal.
>30,000	0.00276	per gal.	0.00276	per gal.

	Proforma Year			Proforma Year		
	# of bills	Consumption	Revenue	# of bills	Consumption	Revenue
<2,000	66,684	122,440,525	673,508.40	66,684	122,440,525	632,831.16
>2,000<10,000	56,354	207,356,787	690,498.10	56,354	207,356,787	690,498.10
>10,000<30,000	6,996	31,791,154	87,743.59	6,996	31,791,154	87,743.59
>30,000	432	14,644,391	40,418.52	432	14,644,391	40,418.52
		<u>376,232,857</u>	<u>1,492,168.61</u>		<u>376,232,857</u>	<u>1,451,491.37</u>

1" meter

Rate schedule

<5,000	20.09	minimum	19.48	minimum
>5,000<10,000	0.00333	per gal.	0.00333	per gal.
>10,000<30,000	0.00276	per gal.	0.00276	per gal.
>30,000	0.00276	per gal.	0.00276	per gal.

	Proforma Year			Proforma Year		
	# of bills	Consumption	Revenue	# of bills	Consumption	Revenue
<5,000	1,188	4,684,323	23,866.92	1,188	4,684,323	23,142.24
>5,000<10,000	860	2,742,863	9,133.73	860	2,742,863	9,133.73
>10,000<30,000	476	3,025,629	8,350.74	476	3,025,629	8,350.74
>30,000	78	6,861,986	18,939.08	78	6,861,986	18,939.08
		<u>17,314,801</u>	<u>60,290.47</u>		<u>17,314,801</u>	<u>59,565.79</u>

2" meter

Rate schedule

<16,000	53.30	minimum	52.69	minimum
>16,000<30,000	0.00276	per gal.	0.00276	per gal.
>30,000	0.00276	per gal.	0.00276	per gal.

	Proforma Year			Proforma Year		
	# of bills	Consumption	Revenue	# of bills	Consumption	Revenue
<16,000	252	2,205,669	13,431.60	252	2,205,669	13,277.88
>16,000<30,000	90	806,696	2,226.48	90	806,696	2,226.48
>30,000	43	1,733,523	4,784.52	43	1,733,523	4,784.52
		<u>4,745,888</u>	<u>20,442.60</u>		<u>4,745,888</u>	<u>20,288.88</u>

**HENDERSON COUNTY WATER DISTRICT
 COST OF SERVICE STUDY
 \$ 2,625,000 Bond Issue
 Water Rate Determination Worksheet**

WITHOUT DEPRECIATION

RATES AS CALCULATED	RATES AS ADJUSTED
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3" meter

Rate schedule
 <30,000
 >30,000

91.94 minimum
 0.00276 per gal.

91.33 minimum
 0.00276 per gal.

	Proforma Year			Proforma Year		
	# of bills	Consumption	Revenue	# of bills	Consumption	Revenue
<30,000	12	316,085	1,103.28	12	316,085	1,095.96
>30,000	8	172,600	476.38	8	172,600	476.38
		488,685	1,579.66		488,685	1,572.34

4" meter

Rate schedule
 <50,000
 >50,000

147.14 minimum
 0.00276 per gal.

146.53 minimum
 0.00276 per gal.

	Proforma Year			Proforma Year		
	# of bills	Consumption	Revenue	# of bills	Consumption	Revenue
<50,000	36	1,561,971	5,297.04	36	1,561,971	5,275.08
>50,000	22	2,298,541	6,343.97	22	2,298,541	6,343.97
		3,860,512	11,641.01		3,860,512	11,619.05

6" meter

Rate schedule
 <100,000
 >100,000

285.14 minimum
 0.00276 per gal.

284.53 minimum
 0.00276 per gal.

	Proforma Year			Proforma Year		
	# of bills	Consumption	Revenue	# of bills	Consumption	Revenue
<100,000	12	537,000	3,421.68	12	537,000	3,414.36
>100,000	-	-	-	-	-	-
		537,000	3,421.68		537,000	3,414.36

Fire Departments with minimum bill

Rate schedule
 Minimum bill only

10.10 minimum

9.49 minimum

	Proforma Year			Proforma Year		
	# of bills	Consumption	Revenue	# of bills	Consumption	Revenue
Minimum bill only	144	283,697	1,454.40	144	283,697	1,366.56
		283,697	1,454.40		283,697	1,366.56

HENDERSON COUNTY WATER DISTRICT
COST OF SERVICE STUDY
\$ 2,625,000 Bond Issue
Water Rate Determination Worksheet

WITHOUT DEPRECIATION

RATES AS CALCULATED

RATES AS ADJUSTED

Fire Departments with no charge

Rate schedule

No charge meters

- minimum

- minimum

	RATES AS CALCULATED			RATES AS ADJUSTED		
	# of bills	Proforma Year Consumption	Revenue	# of bills	Proforma Year Consumption	Revenue
Minimum bill only	24	260,827	-	24	260,827	-
		260,827	-		260,827	-
Totals	68,352	403,724,267	\$ 1,590,998.43	68,352	403,724,267	\$ 1,549,318.35
Allowance for billing adjustments			97.30%			97.30%
Final revenue			\$ 1,548,041.00			\$ 1,507,487.00

PART 7
MONTHLY OPERATING BUDGET
WITH PROFORMA ADJUSTMENTS

HENDERSON COUNTY WATER DISTRICT
MONTHLY OPERATING BUDGET
WITH PROFORMA ADJUSTMENTS

	September	October	November	December	January	February	March	April	May	June	July	August	Totals
Operating revenues:													
Water	\$162,222	\$156,814	\$135,185	\$135,185	\$162,222	\$135,185	\$129,777	\$124,370	\$135,185	\$151,407	\$167,629	\$162,219	\$1,757,400
Penalties and sundry	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	48,000
Total operating revenues	166,222	160,814	139,185	139,185	166,222	139,185	133,777	128,370	139,185	155,407	171,629	166,219	1,805,400
Operating expenses:													
Purchased water	55,035	48,920	48,920	50,958	51,977	43,824	46,882	45,862	51,977	51,977	56,054	59,114	611,500
Pumping utilities	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	30,000
Maintenance of system(schedule)	15,058	12,866	12,866	15,058	12,866	12,866	15,058	12,866	12,866	15,058	12,866	12,866	163,160
Vehicle and equipment(schedule)	1,983	1,983	1,983	1,983	1,983	1,983	1,983	1,983	1,983	1,983	1,983	1,983	23,800
Customer accounts (schedule)	7,570	7,570	7,570	7,570	7,570	7,570	7,570	7,570	7,570	7,570	7,570	7,570	90,840
Administration (schedule)	22,184	19,506	19,506	21,364	27,426	19,506	23,164	19,506	19,506	24,864	19,506	19,502	255,540
Depreciation and amortization	29,583	29,583	29,583	29,583	29,583	29,583	29,583	29,583	29,583	29,583	29,583	29,587	355,000
Total operating expenses	133,913	122,928	122,928	129,016	133,905	117,832	126,740	119,870	125,985	133,535	130,062	133,126	1,529,840
Operating income	32,309	37,886	16,257	10,169	32,317	21,353	7,037	8,500	13,200	21,872	41,567	33,093	275,560
Nonoperating revenues (expenses):													
Interest income	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	54,000
Gain on sale of securities	0	0	0	0	0	0	0	0	0	0	0	0	0
Gain (loss) on sale of property, plant and equipment	0	0	0	0	0	0	0	0	0	0	0	0	0
Interest expense-refundable deposits	(60)	(60)	(60)	(60)	(60)	(60)	(60)	(60)	(60)	(60)	(60)	(60)	(720)
Interest expense-building loan	(500)	(495)	(490)	(485)	(480)	(474)	(468)	(462)	(457)	(451)	(445)	(439)	(5,646)
Interest expense - bonds	(28,810)	(28,810)	(28,810)	(28,810)	(28,810)	(28,810)	(28,810)	(28,810)	(28,810)	(28,810)	(28,810)	(28,810)	(345,720)
Interest expense-KIA debt	(3,294)	(3,294)	(3,294)	(3,294)	(3,294)	(3,294)	(3,294)	(3,294)	(3,294)	(3,037)	(3,037)	(3,035)	(38,755)
Loan service fees	0	0	(774)	0	0	0	0	0	(774)	0	0	0	(1,548)
Amortization-rate case expense	(1,250)	(1,250)	(1,250)	(1,250)	(1,250)	(1,250)	(1,250)	(1,250)	(1,250)	(1,250)	(1,250)	(1,250)	(15,000)
Amortization of bond issue costs	(2,388)	(2,388)	(2,388)	(2,388)	(2,388)	(2,388)	(2,388)	(2,388)	(2,388)	(2,388)	(2,388)	(2,387)	(28,655)
Total nonoperating revenues (expenses)	(31,802)	(31,797)	(32,566)	(31,787)	(31,782)	(31,776)	(31,770)	(31,764)	(32,533)	(31,496)	(31,490)	(31,481)	(382,044)
Net income (loss)	\$507	\$6,089	(\$16,309)	(\$21,618)	\$535	(\$10,423)	(\$24,733)	(\$23,264)	(\$19,333)	(\$9,624)	\$10,077	\$1,612	(\$106,484)

**HENDERSON COUNTY WATER DISTRICT
MONTHLY OPERATING BUDGET
WITH PROFORMA ADJUSTMENTS
DETAILED EXPENDITURES**

	September	October	November	December	January	February	March	April	May	June	July	August	Totals
Maintenance of system:													
Mains	\$10,962	\$8,769	\$8,769	\$10,962	\$8,769	\$8,769	\$10,962	\$8,769	\$8,769	\$10,962	\$8,769	\$8,769	\$114,000
Materials /supplies- pumping	166	167	167	166	167	167	166	167	167	166	167	167	2,000
Materials /supplies-transmission	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	42,000
Maintenance of tanks	400	400	400	400	400	400	400	400	400	400	400	400	4,800
Equipment rental	30	30	30	30	30	30	30	30	30	30	30	30	360
	<u>\$15,058</u>	<u>\$12,866</u>	<u>\$12,866</u>	$15,058	$12,866	$12,866	$15,058	$12,866	$12,866	$15,058	$12,866	$12,866	<u>\$163,160</u>
Vehicles and equipment:													
Repairs and maintenance	800	800	800	800	800	800	800	800	800	800	800	800	9,600
Gas and oil	1,183	1,183	1,183	1,183	1,183	1,183	1,183	1,183	1,183	1,183	1,183	1,183	14,200
	<u>\$1,983</u>	$1,983	$1,983	$1,983	$1,983	$1,983	$1,983	$1,983	$1,983	$1,983	$1,983	$1,983	<u>\$23,800</u>
Customer accounts:													
Salaries - meter reading	\$1,650	\$1,650	\$1,650	\$1,650	\$1,650	\$1,650	\$1,650	\$1,650	\$1,650	\$1,650	\$1,650	\$1,650	\$19,800
Billing and collections labor/expense	4,800	4,800	4,800	4,800	4,800	4,800	4,800	4,800	4,800	4,800	4,800	4,800	57,600
Bad debts	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	13,200
Collector's commissions	20	20	20	20	20	20	20	20	20	20	20	20	240
Acct rec. over/short	0	0	0	0	0	0	0	0	0	0	0	0	0
	<u>\$7,570</u>	$7,570	$7,570	$7,570	$7,570	$7,570	$7,570	$7,570	$7,570	$7,570	$7,570	$7,570	<u>\$90,840</u>
Administration:													
Salaries	\$5,433	\$4,346	\$4,346	\$5,433	\$4,346	\$4,346	\$5,433	\$4,346	\$4,346	\$5,433	\$4,346	\$4,346	\$56,500
Vacation and unassigned salaries	2,292	2,292	2,292	2,292	2,292	2,292	2,292	2,292	2,292	2,292	2,292	2,288	27,500
Commissioner's fees	625	625	625	625	625	625	625	625	625	625	625	625	7,500
Kentucky retirement	2,076	1,662	1,662	2,076	1,662	1,662	2,076	1,662	1,662	2,076	1,662	1,662	21,600
Medical insurance	4,350	4,350	4,350	4,350	4,350	4,350	4,350	4,350	4,350	4,350	4,350	4,350	52,200
Unemployment	50	50	50	50	50	50	50	50	50	50	50	50	600
Social security and medicare	1,788	1,431	1,431	1,788	1,431	1,431	1,788	1,431	1,431	1,788	1,431	1,431	18,600
Telephone/utilities	500	500	500	500	500	500	500	500	500	500	500	500	6,000
Office supplies and expense	550	550	550	550	550	550	550	550	550	550	550	550	6,600
Computer supplies/expense	300	300	300	300	300	300	300	300	300	300	300	300	3,600
Office repair and maintenance	400	400	400	400	400	400	400	400	400	400	400	400	4,800
Professional services	800	100	100	1,900	100	100	1,900	100	100	100	100	100	12,000
Legal services	300	300	300	300	300	300	300	300	300	300	300	300	3,600
Other consulting fees	100	100	100	100	100	100	100	100	100	100	100	100	1,200
Contractual services-other	100	100	100	100	100	100	100	100	100	100	100	100	1,200
Insurance-general liability & vehicle	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	20,000
Insurance-workman's comp.	333	333	333	333	333	333	333	333	333	333	333	333	4,000
Insurance-other	120	0	0	0	0	0	0	0	0	0	0	0	240
Regulatory expense-other	0	0	0	0	0	0	0	0	0	0	0	0	3,000
Miscellaneous	400	400	400	400	400	400	400	400	400	400	400	400	4,800
	<u>\$22,184</u>	<u>\$19,506</u>	<u>\$19,506</u>	<u>\$21,364</u>	<u>\$27,426</u>	<u>\$19,506</u>	<u>\$23,164</u>	<u>\$19,506</u>	<u>\$19,506</u>	<u>\$24,864</u>	<u>\$19,506</u>	<u>\$19,502</u>	<u>\$255,540</u>

Proforma income statement-fiscal year 98-99/Operating budget

04/09/2000

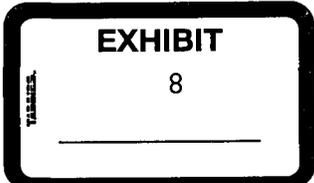
ESTIMATED

HENDERSON COUNTY (KENTUCKY) WATER DISTRICT
\$2,625,000
WATER REVENUE BONDS, SERIES 2000
 DATED May 1, 2000
 DUE SEPTEMBER 1, 2001 THROUGH SEPTEMBER 1, 2025

YEAR END 8/31	PRINCIPAL		INTEREST	INTEREST	TOTAL	TOTAL	PRIOR DEBT	DEBT
	September 1	RATE	September 1	March 1	INTEREST	DEBT SERVICE	SERVICE	SERVICE ALL ISSUES
2000	0	0.000	0.00	53,300.83	53,300.83	53,300.83	324,480.00	377,780.83
2001	5,000	4.900	79,951.25	79,828.75	159,780.00	164,780.00	327,675.00	492,455.00
2002	5,000	5.000	79,828.75	79,703.75	159,532.50	164,532.50	325,365.00	489,897.50
2003	5,000	5.100	79,703.75	79,576.25	159,280.00	164,280.00	322,622.50	486,902.50
2004	5,000	5.200	79,576.25	79,446.25	159,022.50	164,022.50	324,310.00	488,332.50
2005	5,000	5.000	79,446.25	79,321.25	158,767.50	163,767.50	320,410.00	484,177.50
2006	5,000	5.400	79,321.25	79,186.25	158,507.50	163,507.50	325,770.00	489,277.50
2007	5,000	5.500	79,186.25	79,048.75	158,235.00	163,235.00	315,658.75	478,893.75
2008	65,000	5.550	79,048.75	77,243.00	156,293.75	221,293.75	223,122.50	444,416.25
2009	65,000	5.600	77,243.00	75,423.00	152,670.00	217,670.00	227,833.75	445,503.75
2010	65,000	5.650	75,423.00	73,588.75	149,013.75	214,013.75	227,067.50	441,081.25
2011	70,000	5.700	73,588.75	71,593.75	145,182.50	215,182.50	225,980.00	441,162.50
2012	70,000	5.750	71,593.75	69,581.25	141,175.00	211,175.00	229,466.25	440,641.25
2013	80,000	5.800	69,581.25	67,261.25	136,842.50	216,842.50	227,548.75	444,391.25
2014	80,000	5.850	67,261.25	64,921.25	132,182.50	212,182.50	230,195.00	442,377.50
2015	85,000	5.900	64,921.25	62,413.75	127,335.00	212,335.00	227,405.00	439,740.00
2016	115,000	5.950	62,413.75	58,992.50	121,406.25	236,406.25	204,732.50	441,138.75
2017	125,000	6.000	58,992.50	55,242.50	114,235.00	239,235.00	202,170.00	441,405.00
2018	130,000	6.050	55,242.50	51,310.00	106,552.50	236,552.50	204,195.00	440,747.50
2019	140,000	6.500	51,310.00	46,760.00	98,070.00	238,070.00	203,670.00	443,740.00
2020	150,000	6.150	46,760.00	42,147.50	88,907.50	238,907.50	206,595.00	445,502.50
2021	160,000	6.200	42,147.50	37,187.50	79,335.00	239,335.00	206,880.00	446,215.00
2022	170,000	6.250	37,187.50	31,875.00	69,062.50	239,062.50	206,520.00	445,582.50
2023	185,000	6.250	31,875.00	26,093.75	57,968.75	242,968.75	205,600.00	448,568.75
2024	400,000	6.250	26,093.75	13,593.75	39,687.50	439,687.50		439,687.50
2025	435,000	6.250	13,593.75	0.00	13,593.75	448,593.75		448,593.75
	2,625,000		1,561,295.00	1,534,644.58	3,095,939.58	5,720,939.58	6,047,272.50	11,768,212.08

AVERAGE INTEREST RATE - THIS ISSUE	6.32%
AVERAGE ANNUAL DEBT SERVICE - THIS ISSUE	228,838
MAXIMUM ANNUAL DEBT SERVICE - ALL ISSUES	492,455.00
NET REVENUES REQUIRED (1.30X)	640,191.50

Prepared by: Johnston, Brown, Burnett & Knight
 A Division of Ross, Sinclair & Associates
 Date: 4/3/00 Time: 4:41 PM
 File: HENDWTR as bid.XLS Sheet: Series 99



OFFICIAL TERMS AND CONDITIONS OF SALE OF BONDS

**Henderson County (Kentucky) Water District
\$2,625,000*
Water Revenue Bonds
Series of 2000
dated May 1, 2000**

The Secretary of the Henderson County Water District, Henderson and Webster Counties, Kentucky (the "District" or "Issuer"), will until 1:00 P.M., C.D.S.T., on May 19, 2000, at the office of the District, 655 South Main Street, Henderson, Kentucky 42420, receive competitive, sealed bids for the purchase of \$2,625,000 (plus or minus up to \$260,000) principal amount of Henderson County Water District Water Revenue Bonds, Series 2000, dated May 1, 2000 (the "Bonds" or "Bonds of 2000"). The Board of Commissioners of the District will meet at 7:00 P.M., C.D.S.T., on the same date to act formally upon the bids received.

STATUTORY AUTHORITY, PURPOSE OF ISSUE AND SECURITY.

The Bonds are being issued under and in full compliance with the Bond Resolution of 1993 (as hereinafter defined), the Bond Resolution of 1994, the Bond Resolution of 1997 and the Bond Resolution of 2000 and the Constitution and Statutes of the Commonwealth of Kentucky, including Chapter 74 and Sections 58.010 through 58.140 of the Kentucky Revised Statutes, for the purpose of financing the installation of extensions of water lines for the District's System.

The Bonds do not constitute an indebtedness of the Henderson County Water District, Henderson County or Webster County, Kentucky, within the meaning of any constitutional or statutory provisions or limitations, but are secured by a first pledge of, and are payable as to both principal and interest solely out of, the gross revenues of the District's waterworks system (the "System") and rank on the basis of parity with the outstanding Henderson County Water District Water Refunding Revenue Bonds, Series 1993, dated March 1, 1993 (the "Bonds of 1993") authorized pursuant to a Resolution adopted by the District on July 11, 1993 (the "Bond Resolution of 1993"), the outstanding Henderson County Water District Water Refunding and Improvement Revenue Bonds, Series 1994, dated January 1, 1994 (the "Bonds of 1994"), authorized pursuant to a Resolution adopted by the District on November 17, 1993 (the "Bond Resolution of 1994") and Henderson County Water District Water Revenue Bonds, Series 1997, dated July 1, 1997 (the "Bonds of 1997") authorized pursuant to a Resolution adopted by the District on June 11, 1997 (the "Bond Resolution of 1997"), a portion of which gross revenues sufficient to pay the principal of and interest on the Bonds of 1993, the Bonds of 1994, the Bonds of 1997, and the Bonds of 2000 as and when the same become due and payable, shall be set aside and deposited in the "Henderson County Water District Revenue Bond and Interest Redemption Fund" (the "Sinking Fund").

ADDITIONAL PARITY BONDS.

The District has reserved the right to issue additional bonds ranking on a parity with the Bonds of 1993, the Bonds of 1994, the Bonds of 1997 and the Bonds of 2000 for the purpose of (a) financing extensions, additions and/or improvements to the System, upon establishing compliance (net annual revenues as adjusted, of the System, equal to at least 1.30 times the maximum annual principal and interest requirements) with the terms and conditions of the Bond Resolution of 1993, the Bond Resolution of 1994, the Bond Resolution of 1997 and the Bond Resolution of 2000 and/or (b) refunding or refinancing the Bonds of 1993, the Bonds of 1994, the Bonds of 1997 and/or the Bonds of 2000 upon compliance with the applicable terms and conditions of the Bond Resolution of 1993, the Bond Resolution of 1994, the Bond Resolution of 1997 and the Bond Resolution of 2000.

EXHIBIT

9

BOND MATURITIES, PROVISIONS FOR PRIOR REDEMPTION AND PAYING AGENT

The Bonds will bear interest from May 1, 2000, payable semiannually on September 1 and March 1 of each year beginning September 1, 2000, and will mature on September 1 in each of the years as follows:

<u>Maturity</u> <u>September 1</u>	<u>Principal</u> <u>Amount*</u>	<u>Maturity</u> <u>September 1</u>	<u>Principal</u> <u>Amount*</u>
2001	\$ 5,000	2014	\$ 80,000
2002	5,000	2015	85,000
2003	5,000	2016	115,000
2004	5,000	2017	125,000
2005	5,000	2018	130,000
2006	5,000	2019	140,000
2007	5,000	2020	150,000
2008	65,000	2021	160,000
2009	65,000	2022	170,000
2010	70,000	2023	185,000
2011	70,000	2024	400,000
2012	70,000	2025	435,000
2013	80,000		

Subject to a Permitted Adjustment of \$260,000*

The successful bidder may elect to notify the Financial Advisor within twenty-four (24) hours of the award of the Bonds that certain serial maturities as awarded may be combined with immediately succeeding serial maturities as one or more Term Bonds; provided, however, (a) bids must be submitted to permit only a single interest rate for each Term Bond specified, and (b) Term Bonds will be subject to mandatory redemption by lot on September 1 in accordance with the maturity schedule setting the actual size of the issue.

The Bonds are payable at maturity at the main office of Citizens Bank of Kentucky, National Association, Henderson, Kentucky the Bond Registrar and Paying Agent.

The Bonds maturing on or after September 1, 2011, are subject to redemption at the option of the Corporation prior to their stated maturities on any date falling on or after September 1, 2010, in any order of maturities (less than all of a single maturity to be selected by lot), in whole or in part, upon notice of such prior redemption being given by the Paying Agent by regular United States Mail to the Registered Owners of the Bonds so selected not less than thirty (30) days prior to the date of redemption, upon terms of the face amount, plus accrued interest, plus a redemption premium equal to 1% of the face amount so redeemed if the date of redemption is on or before August 31, 2011, and on the same terms if redeemed thereafter and on or before August 31, 2012, except that the redemption premium shall then be 1/2 of 1%, and without redemption premium if redeemed thereafter and prior to maturity.

Notice of redemption shall be given not less than thirty (30) nor more than sixty (60) days prior to the date of redemption by first class mail, postage prepaid, to the registered owners of the Bonds at the addresses shown in the Bond registration book kept by the Registrar.

BIDDING CONDITIONS AND RESTRICTIONS

The Bonds are offered for sale upon the following terms and conditions:

- A. A minimum price is required for the entire issue of not less than \$2,572,500 (98% of par), plus accrued interest from the date of the Bonds (May 1, 2000) to the date of delivery.

B. The successful bidder will be required to deposit with _____ for the account of the Henderson County Water District, immediately available funds in the amount of \$52,500 representing the good faith deposit, by the close of business on _____ 2000. The amount of said good faith deposit will be deducted from the purchase price at the time of delivery of the Bonds.

C. The determination of the best bid will be made on the basis of all bids submitted for exactly \$2,625,000 of Bonds as offered for sale under the terms and conditions herein specified. Upon determination of the lowest net interest cost according to the schedule of principal amounts listed in the Official Bid Form, the District shall immediately proceed to adjust such principal amounts of the Bonds to determine the maturities of its final bond issue. The successful bidder will be required to accept the final bond issue as so computed, whether the principal amount has been increased or decreased by up to \$260,000, and to pay the percentage purchase price based upon the aggregate amount of the final bond issue.

D. Bidders must state an interest rate or rates in a multiple of 1/8 or 1/20 of 1%, or both.

E. There is no limit on the number of different rates which may be specified by any bidder.

F. Interest rates must be on an ascending scale, in that the interest rate for Bonds of any maturity may not be less than the interest rate stipulated for any preceding maturity.

G. All Bonds of the same maturity shall bear the same and a single interest rate from the date thereof to maturity, even though some such Bonds may be subject to mandatory redemption prior to their maturity date.

H. Bidders may require that a portion of the Bonds be term bonds maturing on one or more dates (the "Term Bonds"); provided, however, that the District shall require such Term Bonds to be paid by mandatory redemption by lot at a redemption price of the principal amount thereof plus accrued interest to the redemption on September 1 of the years and in the principal set forth in the final adjusted maturity schedule.

I. The right to reject bids for any reason deemed advisable by the District, and the right to waive any possible informalities, irregularities or defect in any bid which, in the judgment of the District, shall be minor or immaterial, is expressly reserved.

J. Bids must be made on forms which, together with an Official Statement, may be obtained at the office of the Fiscal Agent, Johnston, Brown, Burnett & Knight, a Division of Ross, Sinclair & Associates, Inc., Louisville, Kentucky. Bids must be enclosed in sealed envelopes marked "Bid for Henderson County Water District Water Revenue Bonds, Series 2000 and bids must be received at the office of the Secretary of the District, 655 South Main Street, Henderson, Kentucky 42420, prior to the date and hour stated above.

K. It shall be the responsibility of the purchasers of the Bonds to furnish or cause to be furnished to the Payee Bank/Registrar at least five (5) days prior to the date of delivery of the Bonds, a list of the names, addresses and social security numbers or employer identification numbers of each of the parties to whom the Bonds are to be registered, and the principal amounts and maturities thereof. In the event of the failure to so deliver such list, the Bonds delivered to the purchasers shall be registered in the name or names of such purchasers or their designated representatives appearing as the first name on the successful bid form, or otherwise appropriately designated, and shall be issued in denominations corresponding to the principal amount of each respective maturity, or in the denomination of \$5,000, as shall be determined by the Payee Bank/Registrar.

L. Delivery will be made in Louisville, Kentucky, at no additional expense other than the charge, if any, of a delivery bank. The purchasers may elect to require delivery at any bank or trust company

elsewhere in the Continental United States, or delivery through a depository trust corporation, provided the purchasers agree to pay any additional expense in connection therewith, such expense to include shipping expense, insurance in transit and the fee of the depository trust corporation. In connection with the issuance of the Bonds, the District will pay for the printing of the Bonds, which will contain the opinion of Bond Counsel.

M. Upon wrongful refusal of the successful bidder to take delivery of and pay for the Bonds when tendered for delivery, the amount of the good faith deposit shall be forfeited by such bidder, and such amount shall be deemed liquidated damages for such default; provided, however, if said Bonds are not ready for delivery and subject 100% of date of amounts on payment within sixty (60) days from the date of sale, said bidder shall be relieved of any liability to accept the Bonds hereunder.

N. The purchasers of the Bonds will pay the CUSIP Service Bureau charge for the assignment of CUSIP numbers, which numbers will be printed on the Bonds at no expense or cost to the purchasers. Neither the failure to print a CUSIP number on any Bond, nor any error with respect thereto, shall constitute cause for a failure or refusal by the purchasers thereof to accept delivery of and payment for the Bonds in accordance with the terms of the purchase agreement.

The District will furnish to the purchaser the customary no-litigation certificate, and the final, approving Legal Opinion of Henry M. Reed III, Bond Counsel, Louisville, Kentucky, approving the legality and tax-exemption of the Bonds.

The District shall provide to the successful purchaser a final Official Statement in accordance with the Rule 15c2-12 of the Securities and Exchange Commission. Arrangements have been made with the printer of the preliminary official statement, upon submission of completion text, to print a reasonable quantity of final Official Statements in sufficient time to meet the delivery requirements of the successful bidder under SEC or Municipal Securities Rulemaking Board Delivery Requirements. The successful bidder shall be required to pay for the printing of the final Official Statement.

If, prior to the delivery of the Bonds, any event should occur which alters the tax-exempt status of the Bonds, or of the interest thereon, the purchaser shall have the privilege of voiding the purchase contract by giving immediate written notice to the Secretary of the District, whereupon the good faith deposit of the purchaser will be returned to the purchaser, and all respective obligations of the parties will be terminated.

Johnston, Brown, Burnett & Knight, a Division of Ross, Sinclaire & Associates, Inc., Louisville, Kentucky, has been employed as Fiscal Agent to the Henderson County Water District in connection with the issuance of the Bonds. The Fiscal Agent's fee for services rendered with respect to the sale of the Bonds is contingent upon the issuance and delivery of the Bonds. The Fiscal agent may submit a bid for the purchase of the Bonds at the time of the advertised public sale of the Bonds, either independently or as a member of a syndicate organized to submit a bid for the purchase of the Bonds.

CONTINUING DISCLOSURE

As a result of the District, at the time the Bonds referred to herein are offered for public sale having outstanding municipal securities in excess of \$10,000,000, the District will enter into a written agreement with the Paying Agent for the benefit of all parties who may become Owners of the Bonds whereunder said District shall be obligated to (i) supply to the repositories designated under said Rule by the Municipal Securities Rule Making Board notice of any of the "material events" outlined in said Rule should same occur and (ii) supply financial information on a current basis.

Financial information regarding the District may be obtained from the Manager, 655 South Main Street, Henderson, Kentucky 42420 (270-826-9802).

TAX EXEMPTION

Bond Counsel is of the opinion that the Bonds are "qualified tax-exempt obligations" within the meaning of the Internal Revenue Code of 1986, as amended, and therefore advises as follows:

(A) The Bonds and the interest thereon are exempt from income and ad valorem taxation by the Commonwealth of Kentucky and all of its political subdivisions.

(B) The interest income from the Bonds is excludable from the gross income of the recipient thereof for Federal income tax purposes under existing law; provided, that the corporate entities noted below are advised of certain tax consequences as follows:

(1) In the computation of the corporate minimum tax, earnings and profits may include otherwise tax-exempt interest on the Bonds; this provision applies to corporations only.

(2) Property and casualty insurance companies may be denied certain loss reserve deductions to the extent of otherwise tax-exempt interest on the Bonds.

(C) As a result of designations and certifications by the District, indicating the issuance of less than \$10,000,000 of qualified tax-exempt obligations during the calendar year ending December 31, 2000, the Bonds may be treated by financial institutions as if they were acquired before August 8, 1986.

(D) The interest income from the Bonds is excludable from the gross income of the recipient thereof for Federal income tax purposes under existing law for individuals; however, said income must be included in the calculation of "modified adjusted gross income" in the determination of whether and to what extent Social security benefits are subject to Federal income taxation.

HENDERSON COUNTY WATER DISTRICT

By / Robert L. McIndoo
Secretary

JOHNSTON, BROWN,
BURNETT & KNIGHT
Division

**AGREEMENT FOR FINANCIAL ADVISORY SERVICES
COMBINED UTILITIES REVENUE BONDS**

Navoy Circle
Suite 1920
Louisville, KY
40299
502/491-3939
fax: 502/491-9979

THIS AGREEMENT FOR FINANCIAL ADVISORY SERVICES ("Agreement") made and entered into as of the 28th day of July, 1999 by and between the Henderson County Water District ("District") and Johnston, Brown, Burnett and Knight Division of Ross, Sinclair & Associates, Inc., Investment Bankers, Louisville, Kentucky, who will act as Fiscal Agent and Financial Advisor to the District.

INVESTMENT
BANKING
FINANCIAL
ADVISORY
PUBLIC
FINANCE
BROKERAGE
SERVICES

WHEREAS, the District is considering an expansion of the existing water system and possibly additional projects. Such project(s) would require a revenue bond issue of approximately \$1.8 million to \$2.5 million.

WHEREAS, the Fiscal Agent is a nationally recognized investment banking firm with years of experience in advising Kentucky municipalities and served as Fiscal Agent and Financial Advisor for your 1978, 1989, 1993, 1994 and 1997 Bond Issues. We feel our years of experience will enable us to be of assistance to you in formulating the soundest and most economical financing plan in connection with the issuance of the Bonds, and

WHEREAS, the District has considered the proposal of the Fiscal Agent and has adopted a resolution authorizing the execution of this Agreement by its Chairman and Secretary,

16 E. 7th St.
Suite 1550
Cincinnati, OH
45202
513/381-3939
fax: 513/381-0124

NOW, THEREFORE, IN CONSIDERATION OF THE MUTUAL COVENANTS BETWEEN THE PARTIES HERETO HEREIN CONTAINED, IT IS AGREED BETWEEN THE PARTIES AS FOLLOWS:

I. SERVICES TO BE PROVIDED

In consideration of the fees hereinafter set forth, the Fiscal Agent shall work with the District and assist in the following services:

(A) EMPLOYMENT OF BOND COUNSEL

The Fiscal Agent shall select and employ nationally recognized municipal Bond Counsel and Bond Counsel will prepare and furnish all minutes, resolutions, leases, legal notices, and other necessary documents in order to legally authorize, sell, issue, and deliver the Bonds. Said Bond Counsel will render a Final Approving Legal Opinion simultaneously with the delivery of the Bonds stating that the Bonds have been legally authorized and issued in all respects and comply fully with the provisions of the Internal Revenue Code of 1986, as amended, ("Code") in order to permit the interest thereon to be excluded from the gross income of the recipients thereof for the purposes of federal income taxation as well as excludable from the gross income of the recipients for Kentucky income taxation purposes.

315 N. Broadway
Lexington, KY
40508
606/233-3939
fax: 606/225-5536

315 N. 9th St.
Mayfield, KY
42066
502/247-4012
fax: 502/247-0700

SIPC

NASD

EXHIBIT
10

(B) ADVICE TO DISTRICT

The Fiscal Agent will be available for consultation, planning, and advice at all stages of the financing program and will meet with officials of the District whenever necessary.

R 5 The Fiscal Agent will advise as to the details of the Bond issue, including the maturity schedule, redemption provisions, terms and conditions of the bond sale, as well as the actual timing for the public sale and all other details of the financing which require the expertise of the Fiscal Agent and its special knowledge of the municipal bond market.

(C) PUBLICATION OF REQUIRED LEGAL NOTICES

The Bond Counsel will prepare and publish at the District's expense all required legal notices in connection with the issuance of the Bonds, including, but not being limited to a Notice of Bond Sale in The Daily Bond Buyer, published in New York, New York (if required), The Courier-Journal, published in Louisville, Kentucky, and The Gleaner, published in Henderson, Kentucky, serving the publication area in which the District is located.

(D) PREPARATION OF OFFICIAL STATEMENT

The Fiscal Agent at its expense will prepare and distribute a Preliminary Official Statement and will distribute same to all interested bidders and potential buyers in advance of the sale of the Bonds in order to attract the largest possible interest in the sale of the Bonds by the investment community. Said Preliminary Official Statement, and the Final Official Statement which will be distributed at the expense of the successful purchaser of the Bonds, will conform in all respects to the rules and regulations of the Securities Exchange Commission, including SEC Rule 15(c) 2-12. The Fiscal Agent shall coordinate with officials of the District in obtaining and assimilating all necessary financial data and other information required for the Official Statements in order to present the Bonds and the District to the investment community in the best possible manner in light of all pertinent facts. It is understood and agreed that the District will furnish the Fiscal Agent, without expense, all such data and information as is normally found in official statements for this type of municipal financing.

(E) PRINTING OF BOND CERTIFICATES

The District, at its expense, will arrange to have a sufficient initial supply of engraved, registered bond certificates printed by a nationally recognized bank note company and to have same delivered to the Bank acting as Bond Registrar and Paying Agent for the Bonds for execution and delivery to the successful purchaser. The initial fee of the Bond Registrar/Paying Agent and any future annual charges or expenses for delivering the Bonds and paying the principal and interest requirements of the Bonds as same become due shall be the expense of the District and shall not be borne by the Fiscal Agent. In the event additional future bond certificates are required to be printed the cost of such additional bond certificates shall be borne by the District at the time incurred.

(F) DELIVERY OF BONDS AND INVESTMENT OF PROCEEDS

The Fiscal Agent will arrange for the execution and delivery of the bond certificates in Louisville or Lexington, Kentucky or, in accordance with the request of the successful purchaser of the Bonds, at another location at the expense of the successful purchaser and shall advise the District regarding the investment of the proceeds thereof until required for construction purposes

in order that the District may realize the greatest investment yield permissible under the Code until the project is completed.

(G) BOND RATING AGENCIES

R 5

If the Fiscal Agent recommends, subject to the concurrence of the District, the advisability of submitting the Bond Issue to a nationally recognized bond rating service for an investment rating, it will assist the District in preparing the information necessary in obtaining the best possible rating for the Bonds. The fees and charges of the bond rating agency for the assignment of a rating will be paid by the District. Such fee may be paid from bond proceeds.

(H) TITLE FEES

The District shall be responsible for furnishing the Bond Counsel such abstracts and title opinions certified by a licensed attorney as they may require indicating that title to the real estate upon which the project is to be constructed is owned in fee simple by the District free and clear of all liens and encumbrances, or, in the alternative, if such liens and encumbrances exist, a clear definition of same. The District shall be responsible for the purpose of providing the Fiscal Agent and Bond Counsel with necessary title information to include a title insurance policy if deemed necessary, and certification and said fees and expenses shall be borne by the District.

(I) FEES and CHARGES of BOND REGISTRAR / PAYING AGENT

The District shall be responsible for the fees and charges of the Bank serving as Bond Registrar and Paying Agent for the Bonds, including any initial fee and all annual fees for the administration of the Bond Issue.

(J) SCHEDULE OF FEES

For our services and expenses, acting as your Financial Advisor and Fiscal Agent, and also to cover the fees of our attorneys, we are to be paid a fee equal to 1 1/2%, based on the face amount of Bonds actually issued and sold, and shall be due and payable to us upon delivery of the Bonds and payment received by you.

The fee set forth above shall include the services provided under this Agreement and all expenses except those specifically excepted hereunder in connection with the issuance of the Bonds and the services of the Fiscal Agent will be continually available to the District for whatever consultation the District may require. This Agreement is entered upon the assumption that the financing program contemplated will proceed to fruition with the delivery of the Bonds, but nevertheless, in the event that the District should, for any reason, determine that the financing should be abandoned or postponed the District shall owe the Fiscal Agent nothing and the Fiscal Agent will absorb any expenses which may have been incurred up to the time that the financing program is abandoned. Notwithstanding the foregoing, the Fiscal Agent has entered this Agreement with understanding that the financing program contemplated will proceed and should the program be abandoned and subsequently revived, or a similar program instituted, it is agreed between the parties that the Fiscal Agent shall have the opportunity to serve the District under the terms of this Agreement, should the Fiscal Agent elect to continue its services, in order that the Fiscal Agent may have the opportunity to recoup otherwise unrecoverable expenses.

II. CONTINUING MUNICIPAL SECURITIES DISCLOSURE

The District agrees to comply with all the requirements of Securities and Exchange Commission Rule 15(c)2-12, effective July 3, 1995, relating to financial statement disclosures and certain event disclosures relating to the Bonds on an ongoing basis until the Bonds are paid in full.

This will require the District providing, at least annually, current financial information and timely notice of material events to a nationally recognized municipal securities information repository. Johnston, Brown, Burnett & Knight Division of Ross, Sinclair & Associates, Inc., will assist the District in the preparation and filing of this information.

III. RIGHT TO BID ON BONDS RESERVED

Nothing contained in this Agreement shall prohibit the Fiscal Agent from bidding at the public sale of the Bonds as an underwriter and the District hereby expressly grants its permission for said Fiscal Agent to submit a bid for the purchase of said Bonds, should it elect to do so.

IV. TERM OF AGREEMENT

This Agreement is intended to cover the financing for the aforementioned Project and shall be in effect for a period of one year from the date hereof. Notwithstanding the foregoing, this Agreement shall automatically be renewed from year-to-year unless terminated by either party at any time, for any reason, upon sixty days written notice.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

Johnston, Brown, Burnett & Knight
A Division of Ross, Sinclair & Associates, Inc.
1900 Envoy Circle, Suite 1920
Louisville, KY 40299-1848

By 
Prentice E. Brown, Jr.

By 
Glenn E. Brashear

HENDERSON COUNTY WATER DISTRICT

By 
Chairman

Attest:

By 

Upon a vote being taken on a motion to adopt said Resolution, the motion and Resolution were passed and adopted with the vote being as follows:

Yeas

Nays

The Chairman thereupon declared the Resolution carried.


Chairman

CERTIFICATE OF SECRETARY

I, _____, certify that I am the Secretary of the Henderson County Water District, Henderson, Kentucky, and that a regular meeting of the Board of Commissioners was held on the 28th day of July, 1999, and I hereby certify that the foregoing is a true copy of a portion of the Minutes of said meeting.


Secretary

P.S.C. KY. NO. _____ 4

CANCELLING P.S.C. KY. NO. TAR-3

HENDERSON COUNTY WATER DISTRICT

**P. O. BOX 655
655 SOUTH MAIN STREET
HENDERSON, KENTUCKY, 42420**

**RATES, RULES, AND REGULATIONS FOR FURNISHING
WATER SERVICE**

AT

HENDERSON & WEBSTER COUNTIES, KENTUCKY

**FILED WITH THE
PUBLIC SERVICE COMMISSION
OF
KENTUCKY**

ISSUED April 18, 2000

EFFECTIVE July 1, 2000

ISSUED BY: HENDERSON COUNTY WATER DISTRICT

BY:



ALLAN R. VAN METER, SUPERINTENDENT

EXHIBIT

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FOR: Henderson & Webster Counties, Kentucky

P.S.C. KY. NO. 4

ORIGINAL SHEET NO. 2

CANCELLING P.S.C. KY. NO. _____

_____ SHEET NO. _____

Henderson County Water District

CLASSIFICATION OF SERVICE

5/8" X 3/4" Meter

First 2,000 Gallons	\$11.00	Minimum Bill
Next 8,000 Gallons	3.85	Per 1,000 Gallons
Next 20,000 Gallons	3.59	Per 1,000 Gallons
Over 30,000 Gallons	3.20	Per 1,000 Gallons

1 Inch Meter

First 5,000 Gallons	\$22.55	Minimum Bill
Next 5,000 Gallons	3.85	Per 1,000 Gallons
Next 20,000 Gallons	3.59	Per 1,000 Gallons
Over 30,000 Gallons	3.20	Per 1,000 Gallons

1 1/2 Inch Meter

First 10,000 Gallons	\$41.80	Minimum Bill
Next 20,000 Gallons	3.59	Per 1,000 Gallons
Over 30,000 Gallons	3.20	Per 1,000 Gallons

2 Inch Meter

First 16,000 Gallons	\$63.34	Minimum Bill
Next 14,000 Gallons	3.59	Per 1,000 Gallons
Over 30,000 Gallons	3.20	Per 1,000 Gallons

3 Inch Meter

First 30,000 Gallons	\$113.60	Minimum Bill
Over 30,000 Gallons	3.20	Per 1,000 Gallons

DATE OF ISSUE: April 18, 2000
Month Day Year

DATE EFFECTIVE: July 1, 2000
Month Day Year

ISSUED BY: 

Allan R. Van Meter

SUPERINTENDENT

Title

P. O. BOX 655, HENDERSON, KY 42420

Address

FOR: Henderson & Webster Counties, Kentucky

P.S.C. KY. NO. _____ 4 _____

ORIGINAL SHEET NO. _____ 4 _____

CANCELLING P.S.C. KY. NO. _____

_____ SHEET NO. _____

Henderson County Water District

CLASSIFICATION OF SERVICE

THE BASE RATE FOR PURCHASED WATER SHALL BE:

<u>Supplier</u>	<u>Rate</u>
Henderson Water Utilities (North) PWSID # 0510188	\$1.1486 Per 1,000 Gallons
Henderson Water Utilities (South) PWSID # 0510510	\$1.1735 Per 1,000 Gallons

DATE OF ISSUE: _____ April 18, 2000 _____
Month Day Year

DATE EFFECTIVE: _____ July 1, 2000 _____
Month Day Year

ISSUED BY: Allan R. Van Meter SUPERINTENDENT P. O. BOX 655, HENDERSON, KY 42420
Allan R. Van Meter Title Address

FOR: Henderson & Webster Counties, Kentucky

P.S.C. KY. NO. _____ 4 _____

ORIGINAL SHEET NO. _____ 5 _____

CANCELLING P.S.C. KY. NO. _____

_____ SHEET NO. _____

Henderson County Water District

CLASSIFICATION OF SERVICE

METER CONNECTION/TAP-ON CHARGES:

5/8 Inch X 3/4 Inch
All Larger Meters

\$475.00
Actual Cost

DATE OF ISSUE: April 18, 2000
Month Day Year

DATE EFFECTIVE: July 1, 2000
Month Day Year

ISSUED BY: Allan R. Van Meter SUPERINTENDENT P. O. BOX 655, HENDERSON, KY 42420
Allan R. Van Meter Title Address

FOR: Henderson & Webster Counties, Kentucky

P.S.C. KY. NO. 4

ORIGINAL SHEET NO. 6

CANCELLING P.S.C. KY. NO. _____

_____ SHEET NO. _____

Henderson County Water District

CLASSIFICATION OF SERVICE

NON-RECURRING CHARGES:

Connection/Turn-on Charge	25.00
Connection/Turn-on Charge (After Hours)	40.00*
Field Collection Charge	25.00
Late Payment Penalty	10%
Meter Relocation Charge	Actual Cost
Meter Re-read Charge	25.00
Meter Test Charge	50.00
Re-connection Charge	50.00
Re-connection Charge (After Hours)	65.00*
Returned Check Charge	20.00
Service Call/Investigation	25.00
Service Call/Investigation (After Hours)	40.00*
Service Line Inspection	40.00

*NOTE—Regular working hours for the utility's Maintenance Staff is 7:00 a.m. to 3:30 p.m. Monday through Friday, excluding holidays. Services performed at any time other than during regular working hours will be subject to the after hours rate.

DATE OF ISSUE: April 18, 2000

DATE EFFECTIVE: July 1, 2000

ISSUED BY: _____

Allan R. Van Meter

SUPERINTENDENT

P. O. BOX 655, HENDERSON, KY 42420

Allan R. Van Meter

Title

Address

FOR: Henderson & Webster Counties, Kentucky

P.S.C. KY. NO. 4

ORIGINAL SHEET NO. 7

CANCELLING P.S.C. KY. NO. _____

_____ SHEET NO. _____

Henderson County Water District

RULES & REGULATIONS

The following are the rules and regulations of the Henderson County Water District. These rules and regulations are subject to change by the Water District Commissioners at any time subject to the approval of the Public Service Commission.

- A. The schedule of rates prescribed herein shall be uniformly charged to all customers of the utility. No one shall receive or be entitled to free service by the utility.
- B. Complaints may be made to the superintendent of the utility, which shall have 30 days to issue a decision. Customers have the right to appeal that decision to the Public Service Commission in accordance with its rules and regulations.
- C. No customer shall resell water except under the terms of a special contract executed by the utility.
- D. All taps and connections to the mains of the utility shall be made by and/or under the direction and supervision of utility personnel and shall incur a meter connection/tap-on charge. Payment of said fee is for the privilege of connecting to the water system of the utility and the payment of such fee does not constitute the purchase of a water meter.
- E. After the mains have been installed, tested, and chlorinated to the satisfaction of the Kentucky Department of Health, the utility shall then be responsible for furnishing potable water to the extension and for maintenance of the lines including meters, meter boxes, and service lines from the main to the meter.
- F. The customer shall be financially responsible for the installation and maintenance of his/her service line plumbing, including a shut-off valve, installed on his/her property beginning at the outlet side of the water meter. The installation and maintenance of the water service line shall be in accordance with the rules and regulations of the Kentucky Department of Health. The customer may, at his/her own expense, install a back-flow preventer and/or pressure regulator.
- G. Under no circumstances shall a single meter serve multiple residential dwellings located on divided property.
- H. A permanent single-family residential dwelling, including any agricultural/barn usage, along with additional single-family residential dwelling(s) may be supplied from the same water meter under the following circumstances:

DATE OF ISSUE: April 18, 2000
Month Day Year

DATE EFFECTIVE: July 1, 2000
Month Day Year

ISSUED BY:


Allan R. Van Meter
Title

SUPERINTENDENT P. O. BOX 655, HENDERSON, KY 42420
Address

FOR: Henderson & Webster Counties, Kentucky

P.S.C. KY. NO. 4

ORIGINAL SHEET NO. 8

CANCELLING P.S.C. KY. NO. _____

_____ SHEET NO. _____

Henderson County Water District

RULES & REGULATIONS

1. Written notification is given to the utility upon connection of the additional residential dwelling.
2. The customer agrees to a method of billing whereby one bill is sent to the main residence consisting of a charge for minimum bills for each dwelling, with the remaining water consumption divided equally and charged in accordance with the approved rate schedule.
3. The customer is responsible for payment of all water passing through his/her meter, regardless of which residential dwelling is responsible for the water consumption.

I. A multi-family dwelling shall be defined as a permanent-structure housing two or more units that produce rental revenue. This includes duplexes, triplexes, and apartment buildings.

Where multiple apartment buildings under separate roofs are built on the same lot, each building must have a minimum of one water meter. At the discretion of the property owner, subject to proper payment of meter connection/tap-on charges, each individual apartment unit within a building may have separate meters.

J. Where a commercial, industrial, or any other business entity involves more than one structure on a single lot, and all structures are operated as one entity under one entity name, a request can be made by the property owner that a single meter be used to serve the entire entity. Otherwise, each commercial, industrial, or any other business entity excluding residential and apartment complexes must have a separate meter. Should such property cease to be operated as one entity under one name, it will be required that separate water meters and service lines be installed and paid for by the respective property owner.

K. A commercial trailer (or mobile home) park shall be defined as two (2) or more revenue producing units occupying a common parcel of land and so designated a trailer park by the Kentucky Department of Health for reasons of health and public welfare.

Trailer and/or mobile home parks located on a single parcel of land are considered one business and may be served by one meter. The utility shall determine the size of meter necessary to provide adequate services. The customer shall pay for the meter installation at the prescribed meter connection/tap-on rate. The following schedule of meter sizes and maximum number of trailer spaces shall be adopted as the basis for selection by the utility under normal conditions:

Meter Size

Maximum Number of Trailer Spaces

DATE OF ISSUE: April 18, 2000
Month Day Year

DATE EFFECTIVE: July 1, 2000
Month Day Year

ISSUED BY:


Allan R. Van Meter
Title

SUPERINTENDENT P. O. BOX 655, HENDERSON, KY 42420
Address

FOR: Henderson & Webster Counties, Kentucky

P.S.C. KY. NO. 4

ORIGINAL SHEET NO. 10

CANCELLING P.S.C. KY. NO. _____

_____ SHEET NO. _____

Henderson County Water District

RULES & REGULATIONS

shall refund any overpayment by check or credit to the customer's bill. No refund will be made if the customer's bill is delinquent at the time of the recalculation.

- M. Bills and notices relating to the conduct of the business of the utility will be mailed to the customer at the address listed on the user's agreement unless a change of address has been filed with the utility in writing. The utility shall not otherwise be responsible for delivery of any bill or notice nor will the customer be excused from the payment of any bill or any performance required in said notice.
- N. The utility shall abide by the following Billing, Collection, and Penalty policies:
1. Water service will be billed monthly on or about the first of each month.
 2. Bills are due and payable at the office of the utility, or to any designated agent of the utility, on the date of issuance.
 3. Payment must be received, not postmarked, before the close of business on the tenth day following issuance of the bill; otherwise, the delinquent bill will be assessed the late payment penalty approved and on-file with the Public Service Commission.
 4. The late payment penalty will be assessed on the delinquent amount of the bill, less any taxes.
- O. The utility shall assess a charge for the following non-recurring services:
1. Connection/Turn-on Charge: Shall be assessed for new service turn-ons, seasonal turn-ons, or temporary service. The charge will not be made for initial installation of service where a meter connection/tap-on charge is applicable provided service is established at the time of connection.
 2. Field Collection Charge: Shall be assessed when a utility representative visits the premises of the service connection to terminate service, and the customer is on-site and pays the bill to avoid termination of service.
 3. Late Payment Penalty: Shall be assessed on the delinquent amount of the bill, less taxes.
 4. Meter Relocation Charge: Shall be assessed when a customer or other authorized person requests that a meter be relocated, changed, or modified. Those requesting said change shall reimburse the

DATE OF ISSUE: April 18, 2000 DATE EFFECTIVE: July 1, 2000
Month Day Year Month Day Year

ISSUED BY: Allan R. Van Meter SUPERINTENDENT P. O. BOX 655, HENDERSON, KY 42420
Allan R. Van Meter Title Address

FOR: Henderson & Webster Counties, Kentucky

P.S.C. KY. NO. 4

ORIGINAL SHEET NO. 11

CANCELLING P.S.C. KY. NO. _____

_____ SHEET NO. _____

Henderson County Water District

RULES & REGULATIONS

utility at actual costs, including but not limited to appropriate legal, administrative, engineering, overhead, or other related costs.

5. Meter Re-read Charge: Shall be assessed when a customer requests the utility to re-read the customer's meter and the re-read proves that the original meter reading was correct.
6. Meter Test Charge: Shall be assessed when a customer requests the utility perform a test on the customer's meter to check for accuracy, and the test shows the customer's meter is not more than two percent (2%) fast.
7. Reconnection Charge: Shall be assessed to reconnect service that has been terminated for non-payment of service or for violation of Utility or Public Service Commission rules and regulations, and shall include the cost of the service trip for both the disconnection and the reconnection.
8. Returned Check Charge: Shall be assessed when a customer's check is returned, either due to insufficient funds or other reason due to customer fault.
9. Service Call/Investigation Charge: Shall be assessed when a customer requests the onsite presence of utility personnel to investigate a service problem and the problem is a result of the customer's own plumbing facilities, beyond the utility's delivery point, or not caused by failure of utility facilities. Any maintenance and repair of facilities beyond the utility's delivery point is the responsibility of the customer.
10. Service Line Inspection Charge: Shall be assessed to inspect a customer's service line from the point of delivery at the meter service to the point of use. The service line inspection charge may be waived if confirmation is received from the Kentucky State Plumbing Inspector that a state plumbing permit has been obtained and the State Plumbing Inspector will inspect the service line.

P. In accordance with 807 KAR 5:006 Section 14, water service may be discontinued by the Utility for the violation of any rule, regulation, or condition of service, including, but not limited to the following prohibited acts:

1. Misrepresentation in the application or contract as to the property or fixtures to be supplied or additional use to be made of water.

DATE OF ISSUE: April 18, 2000 DATE EFFECTIVE: July 1, 2000
Month Day Year Month Day Year

ISSUED BY: Allan R. Van Meter SUPERINTENDENT P. O. BOX 655, HENDERSON, KY 42420
Allan R. Van Meter Title Address

FOR: Henderson & Webster Counties, Kentucky

P.S.C. KY. NO. 4

ORIGINAL SHEET NO. 12

CANCELLING P.S.C. KY. NO. _____

_____ SHEET NO. _____

Henderson County Water District

RULES & REGULATIONS

2. Failure to report to the Utility additions to the property or fixtures to be supplied or additional use to be made of water.
3. Resale of water.
4. Waste or misuse of water due to improper or imperfect service pipes and/or failure to keep said pipes in suitable state of repair.
5. Tampering with meter, meter seal, service, or valves, or permitting such tampering by others.
6. Connections, cross-connections, or permitting the same, of any separate water supply to premises which receive water from the Utility.
7. Non-payment of bills.

Q. Any customer desiring to discontinue water service to the premises for any reason must give notice of discontinuance in person or in writing at the business office of the utility at least three (3) business days prior to the date on which the customer desires to discontinue service. If such proper notice is given to the utility, the customer shall not be liable for any water consumed beyond the date of discontinuance stated in said notification. Failure to provide a proper notification will result in the customer or property owner being liable for all water used and service rendered by the utility until such proper notice is received by the utility.

R. All final bills not paid within thirty (30) days following the date of billing shall have the payment deducted from the customer's deposit with the balance, if any, mailed to the last known address. If there is a balance of less than \$1.00, no refund shall be made.

S. Upon written request of any customer, the meter serving said customer will be tested by the utility.

1. The utility may refuse to perform the test if said meter was tested within the prior twelve (12) months.
2. If the test results show that the meter is registering less than two percent (2%) fast, then the customer will be assessed the meter test charge approved and on-file with the Public Service Commission.

DATE OF ISSUE: April 18, 2000 DATE EFFECTIVE: July 1, 2000
Month Day Year Month Day Year

ISSUED BY: Allan R. Van Meter SUPERINTENDENT P. O. BOX 655, HENDERSON, KY 42420
Allan R. Van Meter Title Address

FOR: Henderson & Webster Counties, Kentucky

P.S.C. KY. NO. 4

ORIGINAL SHEET NO. 13

CANCELLING P.S.C. KY. NO. _____

_____ SHEET NO. _____

Henderson County Water District

RULES & REGULATIONS

3. If the test results show that the meter is registering more than two percent (2%) fast, then adjustments to the customer's account shall be made in accordance with the regulations of the Public Service Commission pursuant to 807 KAR 5:066 Section 9(c).
- T. When a meter has ceased to register, or a meter reading can not be obtained, the quantity of water to be billed will be based upon an average of twelve-months' consumption. If said meter readings are not available for an entire twelve-month period, the water bill will be estimated by the utility, subject to an upward or downward adjustment once a twelve-month average of actual meter readings can be calculated.
- U. A customer may make a request for a bill adjustment in the event of a hidden underground leak as follows:
1. The request for adjustment and the proof of repair shall be in writing and submitted to the office of the utility. Both documents shall be signed and dated and the proof of repair shall include the plumber's comments.
 2. The adjustment will be calculated by first determining the customer's twelve-month average usage. Water in excess of the average shall be billed at an adjusted rate per thousand gallons. The adjusted rate shall be two times the average of the wholesale rates rounded to the nearest \$0.10.
 3. If said meter readings are not available for an entire twelve-month period, a six month average may be used. In the case of a service history of less than 6 months, an average consumption shall be used based on the system average.
 4. Only two leak adjustments will be permitted during the lifetime of a customer's water service line. Each of those adjustments may cover a maximum of two billing periods. Before a third adjustment can be considered, the entire water service line from the meter box to the house or structure must be replaced. The customer shall notify the utility so that an inspection of the replacement service line can be made. If plastic pipe is used for any repair of underground water service lines, it must be no less than class 160 PSI, either CTS or IPS pipe. The use of radiator clamps, king nipples, or the equivalent cannot be accepted.
- V. Any customer having boilers and/or pressure vessels that receive water from the utility must have a check valve on the water supply line and a vacuum valve on the steam line in order to prevent a collapse were the water supply from the utility be discontinued or interrupted.

DATE OF ISSUE: April 18, 2000
Month Day Year

DATE EFFECTIVE: July 1, 2000
Month Day Year

ISSUED BY: _____

Allan R. Van Meter
Allan R. Van Meter

SUPERINTENDENT P. O. BOX 655, HENDERSON, KY 42420
Title Address

FOR: Henderson & Webster Counties, Kentucky

P.S.C. KY. NO. 4

ORIGINAL SHEET NO. 14

CANCELLING P.S.C. KY. NO. _____

_____ SHEET NO. _____

Henderson County Water District

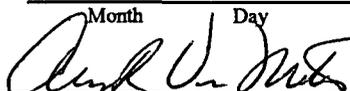
RULES & REGULATIONS

- W. The service lines, meters, and fixtures located on a customer's premises shall at all reasonable hours be subject to inspection by the utility should the utility have reason to believe that unauthorized use of water is occurring.
- X. Piping on the premises of a customer must be so installed that connections are conveniently located with respect to the utility's lines and mains. The customer shall provide a place for metering which is unobstructed and accessible at all times.
- Y. A customer who requests service whose property line is over one hundred (100) feet from the water main must sign an agreement between the utility and the property owner (customer) that specifically define the responsibilities of each party with regards to the service extension.
- Z. All customers shall grant or convey or shall cause to be granted or conveyed to the utility a perpetual easement and rights of way across any property owned or controlled by the customer wherever said easement or right of way is necessary for the utility's water facilities and lines so as to be able to furnish service to the customer.
- AA. If any loss or damage to the property of the utility or any accident or other injury to persons or property is caused by or results from the negligence or wrongful action of a customer, members of his/her household, his/her agent or employee, the cost of necessary repairs or replacements shall be paid by the customer to the utility and any liability otherwise resulting shall be that of the customer.
- BB. The utility shall in no event be held responsible for any claims made against it for reasons of system failure or interruption of service. No persons shall be entitled to damages nor for any portion of a payment refunded for any system failure or interruption of service which in the opinion of the utility is deemed necessary.
- CC. For the purpose of off-setting fifty percent or more of its operation expenses, any fire department not receiving public funds from the Commonwealth of Kentucky, or any political subdivision thereof, may withdraw water from the utility's facilities at no charge, for the extinguishing of fires or the training of firemen. A fire department making such withdrawals shall provide an estimate of its withdrawals to the utility at the end of each month.
- DD. For the purposes of fire protection, including any customer's fire protection system, the utility cannot guarantee a water supply at any particular flow rate or pressure. The fire flow may vary depending upon other water demands on the system, various water facility limitations, or other circumstances. The

DATE OF ISSUE: April 18, 2000
Month Day Year

DATE EFFECTIVE: July 1, 2000
Month Day Year

ISSUED BY:


Allan R. Van Meter
Title

SUPERINTENDENT P. O. BOX 655, HENDERSON, KY 42420
Address

FOR: Henderson & Webster Counties, Kentucky

P.S.C. KY. NO. 4

ORIGINAL SHEET NO. 15

CANCELLING P.S.C. KY. NO. _____

_____ SHEET NO. _____

Henderson County Water District

RULES & REGULATIONS

customer will indemnify and hold harmless the utility and its employees from and against all claims, damages, losses, and expenses incurred as a result of insufficient water supply or deficient system facilities.

EE. In accordance with 807 KAR 5:066 Section 10 (2) (b), a new fire hydrant will not be installed by the utility unless:

1. A professional engineer with a Kentucky registration has certified that the system can provide a minimum fire flow of 250 gallons per minute, and
2. The system supporting this flow has the capability of providing this flow for a period of not less than two (2) hours plus consumption at the maximum daily rate.

FF. Unless specifically exempted within the utility's approved tariff, all connections to the utility's system must be metered; one exception being fire sprinkler systems, subject to utility inspection and approval. Approved fire sprinkler systems shall be charged based on the size of tap made to the system and shall be charged in the following manner:

3 inch and smaller tap	\$15.00 per month
4 inch tap	\$20.00 per month
6 inch tap	\$30.00 per month
8 inch line	\$40.00 per month

DATE OF ISSUE: April 18, 2000
Month Day Year

DATE EFFECTIVE: July 1, 2000
Month Day Year

ISSUED BY: Allan R. Van Meter SUPERINTENDENT P. O. BOX 655, HENDERSON, KY 42420
Allan R. Van Meter Title Address

RECEIVED APR 25 1997

For Issuing Rate Schedules

For Henderson and Webster Counties
Community, Town or City

P.S.C. NO. 212 - 3

SIXTH REVISED SHEET NO. 4

CANCELLING P.S.C. NO. 212 - 3

FIFTH REVISED SHEET NO. 4

Henderson County Water District
and its Issuing Corporation

CLASSIFICATION OF SERVICE

CLASSIFICATION OF SERVICE	RATE PER UNIT
7/8 - Inch Connections First 2,000 Gallons Next 8,000 Gallons Next 20,000 Gallons Over 30,000 Gallons	\$ 9.82 Minimum 3.76/1000 3.50/1000 3.11/1000
1/4 - Inch Connections First 2,000 Gallons Next 7,000 Gallons Next 20,000 Gallons Over 30,000 Gallons	\$ 13.58 Minimum 3.76/1000 3.50/1000 3.11/1000
1/2 - Inch Connections First 2,000 Gallons Next 7,000 Gallons Next 20,000 Gallons Over 30,000 Gallons	\$ 21.10 Minimum 3.76/1000 3.50/1000 3.11/1000
3/2 - Inch Connections First 10,000 Gallons Next 20,000 Gallons Over 30,000 Gallons	\$ 25.90 Minimum 3.50/1000 3.11/1000
1 - Inch Connections First 16,000 Gallons Next 20,000 Gallons Over 30,000 Gallons	\$ 60.90 Minimum 3.50/1000 3.11/1000
1 1/2 - Inch Connections First 30,000 Gallons Over 30,000 Gallons	\$ 109.90 Minimum 3.11/1000

PUBLIC SERVICE COMMISSION
OF KENTUCKY
EFFECTIVE

APR 21 1996

PURSUANT TO KRS 401.5011,
SECTION 9(1)

BY: *[Signature]*
FOR THE PUBLIC SERVICE COMMISSION

FOR: Henderson & Webster Counties, Kentucky

P.S.C. NO. 4

ORIGINAL SHEET NO. 2

CANCELLING P.S.C. KY. NO.

SHEET NO.

Henderson County Water District

CLASSIFICATION OF SERVICE

5/8" X 3/4" Meter First 2,000 Gallons Next 8,000 Gallons Next 20,000 Gallons Over 30,000 Gallons	\$11 00 3 85 3 59 3 20	Minimum Bill Per 1,000 Gallons Per 1,000 Gallons Per 1,000 Gallons
1 Inch Meter First 5,000 Gallons Next 5,000 Gallons Next 20,000 Gallons Over 30,000 Gallons	\$22 55 3 85 3 59 3 20	Minimum Bill Per 1,000 Gallons Per 1,000 Gallons Per 1,000 Gallons
1 1/2 Inch Meter First 10,000 Gallons Next 20,000 Gallons Over 30,000 Gallons	\$41 80 3 59 3 20	Minimum Bill Per 1,000 Gallons Per 1,000 Gallons
2 Inch Meter First 16,000 Gallons Next 14,000 Gallons Over 30,000 Gallons	\$63 34 3 59 3 20	Minimum Bill Per 1,000 Gallons Per 1,000 Gallons
3 Inch Meter First 30,000 Gallons Over 30,000 Gallons	\$113 60 3 20	Minimum Bill Per 1,000 Gallons

THAMES

EXHIBIT

12

DATE OF ISSUE: _____ DATE EFFECTIVE: _____
ISSUED BY: _____ SUPERINTENDENT P. O. BOX 666, HENDERSON, KY 42420

DATE OF ISSUE: _____ DATE EFFECTIVE: _____
ISSUED BY: _____ SUPERINTENDENT P. O. BOX 666, HENDERSON, KY 42420

Form for filing Rate Schedules

For HENDERSON AND WEBSTER COUNTIES
Community, Town or City

P.S.C. NO. TAR-3

SECOND SHEET NO. 4.1

CANCELLING P.S.C. NO. TAR-3

FIRST REVISED SHEET NO. 4.1

FOR: Henderson & Webster Counties, Kentucky

P.S.C. KY. NO. 4

ORIGINAL SHEET NO. 3

CANCELLING P.S.C. KY. NO. _____

SHEET NO. _____

Henderson County Water District

HENDERSON COUNTY WATER DISTRICT
Name of Issuing Corporation

CLASSIFICATION OF SERVICE

CLASSIFICATION OF SERVICE	RATE PER UNIT
4 - Inch Connections First 50,000 Gallons Over 50,000 Gallons	\$149.10 Minimum 2.65/1,000
6 - Inch Connections First 100,000 Gallons Over 100,000 Gallons	\$281.60 Minimum 2.65/1,000

The monthly charge for water usage in excess of the respective minimum water rates set out above shall be computed in increments of 10 gallons. Accordingly, a customer having a 5/8 inch meter who consumes at least 2,001 gallons of water and not more than 2,010 gallons of water in any month shall pay the amount of \$8.93 for the month (\$8.90 plus 3¢). A customer having a 5/8 inch meter who consumes at least 2,011 and not more than 2,020 gallons of water in any month shall pay the amount of \$8.97 for that month (\$8.90 plus 7¢).

The foregoing rates are rates to be charged by the District and any applicable State Sales Tax and School Tax shall be added to each bill.

PUBLIC SERVICE COMMISSION
OF KENTUCKY
EFFECTIVE

AUG 5 1991

PURSUANT TO 807 KAR 5.011
SECTION 8 (1)

DATE OF ISSUE 9/04/91

ISSUED BY Allan R. Van Meter

BY: Allan R. Van Meter
DATE PUBLIC SERVICE COMMISSION MANIFEST 5, 1991

TITLE MANAGER

Issued by authority of an Order of the Public Service Commission of Kentucky
in Case No. 91-083 dated 8/05/91

CLASSIFICATION OF SERVICE

4 Inch Meter First 50,000 Gallons Over 30,000 Gallons	\$177.60 3.20	Minimum Bill Per 1,000 Gallons
6 Inch Meter First 100,000 Gallons Over 100,000 Gallons	\$337.60 3.20	Minimum Bill Per 1,000 Gallons

Volunteer Fire Departments (Metered Services)

Flat Rate

\$11.00 Maximum Bill

The monthly charge for water usage in excess of the respective minimum water rates set out above shall be computed in increments of 10 gallons. Accordingly, a customer having a 5/8 inch meter who consumes at least 2,010 gallons of water and not more than 2,019 gallons of water in any month shall pay the amount of \$11.04 for the month (\$11.00 plus \$0.04). A customer having a 5/8 inch meter who consumes at least 2,020 and not more than 2,029 gallons of water in any month shall pay the amount of \$11.08 for that month (\$11.00 plus \$0.08).

The foregoing rates are rates to be charged by the District and any applicable State Sales Tax and School Tax shall be added to each bill.

DATE OF ISSUE: _____

DATE EFFECTIVE: _____

Month _____ Day _____ Year _____

ISSUED BY: _____

TITLE SUPERINTENDENT

Address P. O. BOX 655, HENDERSON, KY 42420

Allan R. Van Meter

NOTICE OF APPLICATION FOR ISSUANCE OF A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY; AUTHORIZATION TO ISSUE REVENUE BONDS IN THE AMOUNT OF \$2,625,000 AND AUTHORIZATION TO ADJUST RATES TO PAY FOR THE ADDITIONAL INDEBTEDNESS

In accordance with the requirements of the Public Service Commission of Kentucky as set out in 807 KAR 5:001, Section 10, notice is hereby given that the Henderson County Water District of Henderson County, Kentucky will be filing with the Kentucky Public Service Commission at their offices in Frankfort, Kentucky, an Application for Issuance of a Certificate of Public Convenience and Necessity; Authorization to Issue Revenue Bonds in the Amount of \$2,625,000; and Authorization to Adjust Rates to Pay for the Additional Indebtedness.

The new rates are necessary to cover the increased indebtedness. A comparison of the existing and proposed rates as well as the amount of change requested in the rates for each bracket of use is as follows:

5/8' x 3/4" Meter			Basis Of Charge	Present Charge	Proposed Charge	Amount Of Increase	Percent Of Increase
First	2,000	Gallons	Minimum	\$9.82	\$11.00	\$1.18	12.02%
Next	8,000	Gallons	Per 1,000 Gallons	\$3.76	\$3.85	\$0.09	2.39%
Next	20,000	Gallons	Per 1,000 Gallons	\$3.50	\$3.59	\$0.09	2.57%
Over	30,000	Gallons	Per 1,000 Gallons	\$3.11	\$3.20	\$0.09	2.89%
1" Meter							
First	5,000	Gallons	Minimum	\$21.10	\$22.55	\$1.45	6.87%
Next	5,000	Gallons	Per 1,000 Gallons	\$3.76	\$3.85	\$0.09	2.39%
Next	20,000	Gallons	Per 1,000 Gallons	\$3.50	\$3.59	\$0.09	2.57%
Over	30,000	Gallons	Per 1,000 Gallons	\$3.11	\$3.20	\$0.09	2.89%
1-1/2" Meter							
First	10,000	Gallons	Minimum	\$37.82	\$39.72	\$1.90	5.02%
Next	20,000	Gallons	Per 1,000 Gallons	\$3.50	\$3.59	\$0.09	2.57%
Over	30,000	Gallons	Per 1,000 Gallons	\$3.11	\$3.20	\$0.09	2.89%
2" Meter							
First	16,000	Gallons	Minimum	\$60.90	\$63.34	\$2.44	4.01%
Next	14,000	Gallons	Per 1,000 Gallons	\$3.50	\$3.59	\$0.09	2.57%
Over	30,000	Gallons	Per 1,000 Gallons	\$3.11	\$3.20	\$0.09	2.89%
3" Meter							
First	30,000	Gallons	Minimum	\$109.90	\$113.60	\$3.70	3.37%
Over	30,000	Gallons	Per 1,000 Gallons	\$3.11	\$3.20	\$0.09	2.89%
4" Meter							
First	50,000	Gallons	Minimum	\$172.10	\$177.60	\$5.50	3.20%
Over	50,000	Gallons	Per 1,000 Gallons	\$3.11	\$3.20	\$0.09	2.89%
6" Meter							
First	100,000	Gallons	Minimum	\$327.60	\$337.60	\$10.00	3.05%
Over	100,000	Gallons	Per 1,000 Gallons	\$3.11	\$3.20	\$0.09	2.89%

The new rates will impact the revenue as follows:

	Test Year Ending 8/31/99	Pro Forma Period - Proposed Rates	Increase	Percent Increase
Annual Water Sales	\$1,641,106.00	\$1,808,714.00	\$167,608.00	10.21%
Average Monthly Usage	5,927	5,927		
Average Retail Monthly Charge	\$24.59	\$26.12	\$1.53	6.24%

The District proposes to establish new water connection charges and a comparison of the existing and proposed charges is as follows:

	Present Charge	Proposed Charge	Increase	Percent Increase
5/8" x 3/4"	\$400.00	\$475.00	\$75.00	18.75%
1" and Larger	AT COST	AT COST	N/A	N/A

The District shall establish the following Non-Recurring Charges:

NON-RECURRING CHARGES	
Connection/Turn-on Charge	\$25.00
Connection/Turn-on Charge (After Hours)	\$40.00*
Field Collection Charge	\$25.00
Late Payment Penalty	10%
Meter Relocation Charge	Actual Cost
Meter Re-read Charge	\$25.00
Meter Test Charge	\$50.00
Reconnection Charge	\$50.00
Reconnection Charge (After Hours)	\$65.00*
Return Check Charge	\$20.00
Service Call/Investigation	\$25.00
Service Call/Investigation (After Hours)	\$40.00*
Service Line Inspection	\$40.00
<p>* NOTE: Regular working hours for the District's maintenance staff is 7:00 a.m. to 3:30 p.m., Monday through Friday, excluding holidays. Services performed any other time other than during regular working hours will be subject to the after hours rate.</p>	

Pursuant to the rules governing tariffs, Henderson County Water District will be filing new "RATES, RULES, AND REGULATIONS" (P.S.C. KY. NO. 4) which cancels P.S.C. Ky. No. TAR-3.

The rates and fees contained in this notice are the rates and fees proposed by Henderson County Water District. However, the Public Service Commission may order rates and fees to be charged that differ from these proposed rates and fees. Such action may result in rates and fees for customers other than the rates and fees included in this notice.

Any corporation, association, body politic or person may request leave to intervene by motion within 30 days after notice of the proposed changes in rates and fees is given. The motion shall be submitted to the Public Service Commission, 211 Sower Boulevard, P. O. Box 615, Frankfort, Kentucky 40602-0615, and shall set forth the grounds for the request including the status and interest of the party. Interveners may obtain copies of the application and testimony by contacting the Henderson County Water District's office the P. O. Box 655, 655 South Main Street, Henderson, Kentucky 42419-0655, during regular office hours. A copy of the application and testimony shall be available for public inspection at the Water District's office.

D.C. House, Chairman
Henderson County Water District
April 14, 2000

DIRECT TESTIMONY OF JUDSON C. ROYSTER, CPA

PSC CASE NO. 99-388

1. Please state your name and business address.

ANSWER: Judson C. Royster, partner
Campbell, Royster, Carver, McBride & Co., LLP
941 North Green Street
Post Office Box 676
Henderson, KY 42419-0676

2. What is your business or profession?

ANSWER: I am a certified public accountant.

3. Please describe your educational background and work experience.

ANSWER: I received a Bachelor of Science degree in accounting from the University of Kentucky in May 1972. I became a certified public accountant in September 1974.

I have 28 years of public accounting experience, working in tax, accounting, auditing and consulting.

4. What is your relationship with applicant Henderson County Water District?

ANSWER: Our firm and I provide various accounting, consulting and auditing services on a contract basis for the District.

5. What is the purpose of your testimony?

ANSWER: The purpose of my testimony is to present financial information, exhibits and schedules as required under sections 6 and 10 of 807 KAR

EXHIBIT

14

5:001 to support a water rate increase.

6. Please explain the rate adjustment that is being sought.

ANSWER: The District is seeking an increase in water rates sufficient to operate the District on a sound basis.

7. Please explain how the various customer classes will be impacted by the rate increase.

ANSWER: The rate adjustment requested would result in average 5.9% increase in water revenue to the District. The percentage increase by meter size (class) is as follows:

3/4"	6.42%
1"	4.00%
2"	3.75%
3"	3.04%
6"	3.05%

8. Why is the current rate adjustment being sought?

ANSWER: The District is seeking a water rate adjustment to provide adequate revenue to support a new \$2,625,000 bond issue and construction project.

9. When was the last time Henderson County Water District had a general adjustment in rates?

ANSWER: The District last received a general rate adjustment in 1989 in PSC Case No. 89-200.

10. Has Henderson County Water District had any intervening increases in its wholesale rates that were not passed on to customers?

ANSWER: Yes. The District received a rate increase for its purchased water from the City of Henderson in July 1998, which was not passed through to its customers.

11. In your opinion will the proposed rates be fair, just and reasonable, and nondiscriminatory?

ANSWER: Yes, I believe the proposed rate will be fair, just, reasonable and nondiscriminatory.

12. Does that conclude your testimony?

ANSWER: Yes, this concludes my testimony.

**AVERAGE METER CONNECTION EXPENSE
COST JUSTIFICATION**

Name of Utility Henderson County Water District

The following is an itemization of expenses for providing a metered service connection.

A. Meter Size

5/8-Inch 3/4-Inch 1-Inch 1 1/2-Inch 2-Inch

Other (specify) _____

B. Materials Expense

	<u>Quantity</u>	<u>Unit Cost</u>	<u>Total Cost</u>
1. Water Meter	1	\$ 36.00	\$ 36.00
2. Meter Yoke	1	31 or B (any)	22.00
3. Corporation Stop	1	8.00	8.00
4. Meter Box and Top	1	25.00	25.00
5. Miscellaneous Fittings (3)	1) curb stop adapter	8.00	} → 39.00
	2) meter coupling	3.00	
	3) saddle (any)	28.00	
6. Other (Itemize)			
Total Materials Expense (add total cost)			<u>\$ 130.00</u>

C. Service Pipe Expense

Type of Service Pipe K Copper Size of Service Pipe 3/4"

	<u>Quantity</u>	<u>Unit Cost</u>	<u>Total Cost</u>
1. Short Side Service	<u>25'</u>	<u>\$ 1.25/ft</u>	<u>\$ 31.25</u>
2. Long Side Service	<u>75'</u>	<u>1.25/ft</u>	<u>93.75</u>
Average Cost (Add total cost and divide by 2)			<u>\$ 62.50</u>

D. Installation Expense

Labor (crew of 3)

	<u>Total Hours</u>	<u>Hourly Rate</u>	<u>Total Cost</u>
1. Short Side Service	<u>2</u>	<u>\$ 45.00</u>	<u>\$ 90.00</u>
2. Long Side Service	<u>4</u>	<u>45.00</u>	<u>180.00</u>
Average Cost (Add total cost and divide by 2)			<u>\$ 135.00</u>

Equipment

	<u>Total Hours</u>	<u>Hourly Rate</u>	<u>Total Cost</u>
1. Short Side Service	<u>1</u>	<u>\$ 30.00</u>	<u>\$ 30.00</u>
2. Long Side Service	<u>2</u>	<u>50.00</u>	<u>100.00</u>
Average Cost (Add total cost and divide by 2)			<u>\$ 65.00</u>

Installation Expense continued

	<u>Total Hours</u>	<u>Hourly Rate</u>	<u>Total Cost</u>
1. Inspection	<u>0.5</u>	<u>\$ 15.00</u>	<u>\$ 7.50</u>
2. Site Clean-up	<u>1.0</u>	<u>30.00</u>	<u>30.00</u>
3. Other (Itemize)	<u> </u>	<u> </u>	<u> </u>
Total Miscellaneous (add total cost)			<u>\$ 37.50</u>

E. Overhead Expense

1. Installation expense (\$ _____) times
overhead rate (_____ %) \$ 25.00

F. Administrative Expense

1. Office expense for establishing a new account
and billing record. \$ 20.00

G. Total Expense

1. Total of all items:

Materials Expense	<u>\$ 130.00</u>
Service Pipe Expense	<u>62.50</u>
Installation Labor Expense	<u>135.00</u>
Installation Equipment Expense	<u>65.00</u>
Equipment Expense	<u>—</u>
Miscellaneous Expense	<u>37.50</u>
Overhead Expense	<u>25.00</u>
Administrative Expense	<u>20.00</u>
Total Connection Expense	<u>\$ 475.00</u>

NONRECURRING CHARGE COST JUSTIFICATION

Type of Charge: Reconnection : during normal working hrs.
for maintenance staff (7: A - 3: 30p)
M-F
except holidays

1. Field Expense:

A. Materials (Itemize)

	\$

B. Labor (Time and Wage)

<u>1 hr</u>	<u>15.00</u>
-------------	--------------

Total Field Expense	\$ <u>15.00</u>
----------------------------	------------------------

2. Clerical and Office Expense

A. Supplies	\$ _____
-------------	----------

B. Labor	_____
----------	-------

Total Clerical and Office Expense	\$ _____
--	-----------------

3. Miscellaneous Expense

A. Transportation	\$ <u>10.00</u>
-------------------	-----------------

B. Other (Itemize)	_____
--------------------	-------

Total Miscellaneous Expense	\$ _____
------------------------------------	-----------------

Total Nonrecurring Charge Expense	\$ <u>25.00</u>
--	------------------------

X 2.00 trips

Total \$ 50.00

NONRECURRING CHARGE COST JUSTIFICATION

Type of Charge: Service Line Inspection

1. Field Expense:

A. Materials (Itemize)

_____	\$ _____
_____	_____
_____	_____

B. Labor (Time and Wage)

<u>1 1/2 hr @ \$20/hr</u>	<u>30.00</u>
<u>(licensed plumber)</u>	

Total Field Expense \$ 30.00

2. Clerical and Office Expense

A. Supplies \$ _____

B. Labor _____

Total Clerical and Office Expense \$ _____

3. Miscellaneous Expense

A. Transportation \$ 10.00

B. Other (Itemize)

_____	_____
_____	_____
_____	_____

Total Miscellaneous Expense \$ _____

Total Nonrecurring Charge Expense \$ 40.00

NONRECURRING CHARGE COST JUSTIFICATION

Type of Charge: Connection Charge

during business hours

1. Field Expense:

A. Materials (Itemize)

_____ \$ _____

B. Labor (Time and Wage)

1 hr _____ 15.00

Total Field Expense \$ _____

2. Clerical and Office Expense

A. Supplies

\$ _____

B. Labor

Total Clerical and Office Expense \$ _____

3. Miscellaneous Expense

A. Transportation

\$ 10.00

B. Other (Itemize)

Total Miscellaneous Expense \$ _____

Total Nonrecurring Charge Expense \$ 25.00

NONRECURRING CHARGE COST JUSTIFICATION

Type of Charge: Connection Charge (after hrs)

1. Field Expense:

A. Materials (Itemize)

_____ \$ _____

B. Labor (Time and Wage)

1 hr

Total Field Expense \$ 22.50

2. Clerical and Office Expense

A. Supplies \$ _____

B. Labor _____

Total Clerical and Office Expense \$ _____

3. Miscellaneous Expense

A. Transportation \$ 10.00

B. Other (Itemize)

Answering service dispatch 7.50

Total Miscellaneous Expense \$ _____

Total Nonrecurring Charge Expense \$ 40.00

NONRECURRING CHARGE COST JUSTIFICATION

Type of Charge: Field Collection Charge

1. Field Expense:

A. Materials (Itemize)

_____	\$ _____
_____	_____
_____	_____

B. Labor (Time and Wage)

<u>1 hr</u>	_____
-------------	-------

Total Field Expense \$ 15.00

2. Clerical and Office Expense

A. Supplies \$ _____

B. Labor _____

Total Clerical and Office Expense \$ _____

3. Miscellaneous Expense

A. Transportation \$ 10.00

B. Other (Itemize)

_____	_____
_____	_____
_____	_____

Total Miscellaneous Expense \$ _____

Total Nonrecurring Charge Expense \$ 25.00

NONRECURRING CHARGE COST JUSTIFICATION

Type of Charge: Meter Reread

1. Field Expense:

A. Materials (Itemize)

_____	\$ _____
_____	_____
_____	_____

B. Labor (Time and Wage)

<u>1 hr</u>	<u>15.00</u>
-------------	--------------

Total Field Expense \$ _____

2. Clerical and Office Expense

A. Supplies \$ _____

B. Labor _____

Total Clerical and Office Expense \$ _____

3. Miscellaneous Expense

A. Transportation \$ 10.00

B. Other (Itemize)

_____	_____
_____	_____
_____	_____

Total Miscellaneous Expense \$ _____

Total Nonrecurring Charge Expense \$ 25.00

NONRECURRING CHARGE COST JUSTIFICATION

Type of Charge: Meter Testing

1. Field Expense:

A. Materials (Itemize)

_____	\$ _____
_____	_____
_____	_____

B. Labor (Time and Wage)

<u>2.5 hrs @ \$15.</u>	<u>37.50</u>
------------------------	--------------

Total Field Expense \$ _____

2. Clerical and Office Expense

A. Supplies \$ _____

B. Labor _____

Total Clerical and Office Expense \$ _____

3. Miscellaneous Expense

A. Transportation \$ 10.00

B. Other (Itemize)

<u>facility charge : test bench</u>	<u>2.50</u>
_____	_____
_____	_____

Total Miscellaneous Expense \$ 12.50

Total Nonrecurring Charge Expense \$ 50.00

NONRECURRING CHARGE COST JUSTIFICATION

Type of Charge: Reconnection: after hrs (anytime other than 7A-3:30p M-F)

1. Field Expense:

A. Materials (Itemize)

	\$ <u> </u>
	<u> </u>
	<u> </u>

B. Labor (Time and Wage)

1 hr	22.50
------	-------

Total Field Expense \$ 22.50

2. Clerical and Office Expense

A. Supplies \$

B. Labor

Total Clerical and Office Expense \$

3. Miscellaneous Expense

A. Transportation \$ 10.00

B. Other (Itemize)

Answering service dispatch	7.50
	<u> </u>
	<u> </u>

Total Miscellaneous Expense \$

Total Nonrecurring Charge Expense

\$ 40.00
+ 25.00 (1st trip)

Total - \$ 65.00

NONRECURRING CHARGE COST JUSTIFICATION

Type of Charge: Return Check Charge

1. Field Expense:

A. Materials (Itemize)

_____	\$ _____
_____	_____
_____	_____

B. Labor (Time and Wage)

_____	_____
-------	-------

Total Field Expense \$ _____

2. Clerical and Office Expense

A. Supplies \$ 5.00

B. Labor 10.00

Total Clerical and Office Expense \$ 15.00

3. Miscellaneous Expense

A. Transportation \$ 5.00

B. Other (Itemize)

_____	_____
_____	_____
_____	_____

Total Miscellaneous Expense \$ _____

Total Nonrecurring Charge Expense \$ 20.00

NONRECURRING CHARGE COST JUSTIFICATION

Type of Charge: Service Investigation / Service Call

*during
business
hours*

1. Field Expense:

A. Materials (Itemize)

_____ \$ _____

B. Labor (Time and Wage)

1 hr _____ 15.00

Total Field Expense \$ 15.00

2. Clerical and Office Expense

A. Supplies \$ _____

B. Labor _____

Total Clerical and Office Expense \$ _____

3. Miscellaneous Expense

A. Transportation \$ 10.00

B. Other (Itemize)

Total Miscellaneous Expense \$ 10.00

Total Nonrecurring Charge Expense \$ 25.00

NONRECURRING CHARGE COST JUSTIFICATION

Type of Charge: Service Investigation/Service Call (after hrs)

1. Field Expense:

A. Materials (Itemize)

_____	\$ _____
_____	_____
_____	_____

B. Labor (Time and Wage)

<u>1 hr @ 22.50 (time 1/2)</u>	<u>22.50</u>
--------------------------------	--------------

Total Field Expense \$ 22.50

2. Clerical and Office Expense

A. Supplies \$ _____

B. Labor _____

Total Clerical and Office Expense \$ _____

3. Miscellaneous Expense

A. Transportation \$ 10.00

B. Other (Itemize)

<u>Answering service dispatch</u>	<u>7.50</u>
_____	_____
_____	_____

Total Miscellaneous Expense \$ 17.50

Total Nonrecurring Charge Expense \$ 40.00

Commonwealth of Kentucky
Before the Public Service Commission

RECEIVED

FEB 08 2000

PUBLIC SERVICE
COMMISSION

In the Matter of:)
THE APPLICATION FOR GENERAL)
ADJUSTMENT IN EXISTING RATES OF) Case No. 99-388
HENDERSON COUNTY WATER DISTRICT)

MOTION TO INTERVENE

Comes now the Attorney General of the Commonwealth of Kentucky, by and through his Office of Rate Intervention, pursuant to KRS 367.150(8), and moves to intervene in the above-styled proceeding. The Attorney General requests that he be permitted to intervene as a party to the fullest extent permitted by law in order to execute his statutory duties pursuant to KRS 367.150(8).

Respectfully submitted,

A. B. CHANDLER III
ATTORNEY GENERAL

David Edward Spenard
David Edward Spenard
Assistant Attorney General
1024 Capital Center Drive
Frankfort, KY 40601-8204
502.696.5457

Certificate of Service and Filing

Counsel certifies that an original and ten photocopies of this Motion to Intervene were served and filed by hand delivery to Martin Huelsmann, Executive Director, Public Service Commission, 211 Sower Boulevard, Frankfort, Kentucky 40601; furthermore, it was served by mailing a true and correct copy of the same, first class postage prepaid, to, Allan R. VanMeter, P.O. Box 655, Henderson, Kentucky 42419-0655 and Frank N. King, King, Gray & Norment, 318 Second Street, Henderson, Kentucky 42420 all on this 8th day of February, 2000.

Dave E. H. Spence
Assistant Attorney General



COMMONWEALTH OF KENTUCKY
PUBLIC SERVICE COMMISSION
730 SCHENKEL LANE
POST OFFICE BOX 615
FRANKFORT, KY. 40602
(502) 564-3940

September 21, 1999

Allan R. VanMeter
Manager
Henderson County Water District
655 South Main Street
P. O. Box 655
Henderson, KY. 42419 0655

Honorable Frank N. King
Attorney at Law
Dorsey, King, Gray & Norment
318 Second Street
Henderson, KY. 42420

RE: Case No. 99-388
HENDERSON COUNTY WATER DISTRICT
(Rates - General)

This letter is to acknowledge receipt of initial application in the above case. The application was date-stamped received September 17, 1999 and has been assigned Case No. 99-388. In all future correspondence or filings in connection with this case, please reference the above case number.

If you need further assistance, please contact my staff at 502/564-3940.

Sincerely,

A handwritten signature in cursive script that reads "Stephanie Bell".

Stephanie Bell
Secretary of the Commission

SB/jc

DORSEY, KING, GRAY & NORMENT

ATTORNEYS-AT-LAW

318 SECOND STREET

HENDERSON, KENTUCKY 42420

JOHN DORSEY (1920-1986)
FRANK N. KING, JR.
STEPHEN D. GRAY
WILLIAM B. NORMENT, JR.
J. CHRISTOPHER HOPGOOD

TELEPHONE
(270) 826-3965
TELEFAX
(270) 826-6672

September 14, 1999

RECEIVED
SEP 17 1999
PUBLIC SERVICE
COMMISSION

Ms. Helen Helton, Executive Director
Public Service Commission of Kentucky
730 Schenkel Lane
Post Office Box 615
Frankfort, Kentucky 40602

CASE 99-388

Re: Henderson County Water District
Notice of Intent to File Rate
Application

Dear Ms. Helton:

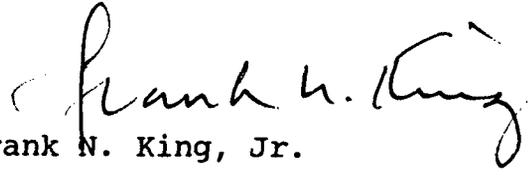
Enclosed for filing please find notice of intent to
file a rate application on behalf of Henderson County Water
District.

Thank you for your assistance.

Very truly yours,

DORSEY, KING, GRAY & NORMENT

BY


Frank N. King, Jr.

FNKJr/cds
Encls.

Copy: Henderson County Water District

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

RECEIVED
SEP 17 1999
PUBLIC SERVICE
COMMISSION

In the Matter of:

APPLICATION FOR GENERAL ADJUSTMENTS)
IN EXISTING RATES OF HENDERSON)
COUNTY WATER DISTRICT) CASE NO. 99-388

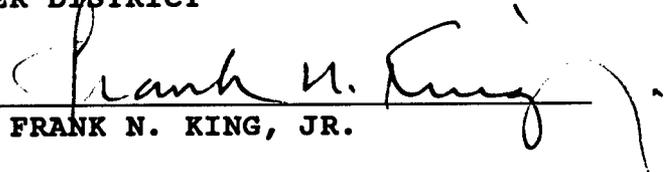
NOTICE OF INTENT

Henderson County Water District, a water district created under KRS Chapter 74, hereby gives written notice of its intent to file an application for general adjustments in existing rates. The rate application will be supported by an historical test period. This notice of intent is filed pursuant to 807 KAR 5:001, Section 10(2).

It is hereby certified that a copy of this notice has been served upon the Attorney General of Kentucky, Office of Rate Intervention, 1024 Capital Center Drive, Frankfort, Kentucky 40601, by mailing a true and correct copy of same on this the 14th day of September, 1999.

DORSEY, KING, GRAY & NORMENT
318 Second Street
Henderson, Kentucky 42420
(502) 826-3965 Telephone
(502) 826-6672 Telefax
Attorneys for HENDERSON COUNTY
WATER DISTRICT

By


FRANK N. KING, JR.

HENDERSON COUNTY WATER DISTRICT

HENDERSON COUNTY, KENTUCKY

RECEIVED

APR 19 2000

PUBLIC SERVICE
COMMISSION

04-388

1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS

CONTRACT "A"

GENERAL CONTRACT DOCUMENTS AND SPECIFICATIONS



[Handwritten Signature]
2/28/00

NOVEMBER, 1999
(BID: MARCH, 2000)

HUNTER MARTIN & ASSOCIATES, INC.
ENGINEERS & SURVEYORS
3220 LONE OAK ROAD ♦ PADUCAH, KY. 42003 ♦ (270) 554-2737

9
T NO. 9

HENDERSON COUNTY WATER DISTRICT

HENDERSON COUNTY, KENTUCKY

1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS CONTRACT "A"

* * * * *

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TITLE	PAGE NUMBERS
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Bid - Contract "A"	B-1 - B-4
Bid Bond - Contract "A"	BB-1 - BB-2
Agreement - Contract "A"	A-1 - A-4
Performance Bond - Contract "A"	PE-1 - PE-3
Payment Bond - Contract "A"	PA-1 - PA-3
Notice of Award - Contract "A"	NA-1
Notice to Proceed - Contract "A"	NP-1
Change Order - Contract "A"	CO-1
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"Established 1952"

HUNTER MARTIN & ASSOCIATES, INC.

ENGINEERS & SURVEYORS

3220 LONE OAK ROAD • PADUCAH, KENTUCKY 42003

(270) 554-2737 • FAX (270) 554-2738

http://www.huntermartin.com • hma@huntermartin.com

HUNTER H. MARTIN (1924 - 1997)
Founder

ROD H. MARTIN, P.E., S.
President

MICHAEL GARDNER
Vice President

BETTY J. GARDNER
Secretary/Treasurer

FAX TRANSMITTAL

DATE: **MARCH 20, 2000** TIME: **3:50 P.M.**

TO: **TRI-STATE CONSTRUCTION NEWS**

ATTENTION:

FAX NO: **(812) 464-5197**

RE: **HENDERSON COUNTY WATER DISTRICT (1999/2000 WATER DISTRIBUTION SYSTEM IMPROVEMENTS) – CONTRACT B ADDENDUM NO. 2**

NO. OF PAGES: **6** (INCLUDING COVER SHEET)

REMARKS:

A HARD COPY WILL BE MAILED TO YOU TODAY.

SENDER: **ROD H. MARTIN, P.E.**

IF YOU DO NOT RECEIVE THE NUMBER OF PAGES SPECIFIED OR RECEIVE A POOR COPY, PLEASE NOTIFY US AT:

(502) 554-2737
(502) 554-2738 (FAX)

38

HENDERSON COUNTY WATER DISTRICT

HENDERSON COUNTY, KENTUCKY

1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS

CONTRACT B

March 20, 2000

ADDENDUM NO. 2

TO

GENERAL CONTRACT DOCUMENTS AND SPECIFICATIONS AND PLANS

NOVEMBER, 1999
(BID MARCH, 2000)

GENERAL CONTRACT DOCUMENTS:

BID:

Delete the "BID - CONTRACT B", Pages B-1 (ADDENDUM NO. 1) thru B-4 (ADDENDUM NO. 1) in its entirety.
Replace with the attached "BID - CONTRACT B", Pages B-1 (ADDENDUM NO. 2) thru B-4 (ADDENDUM NO. 2)

HUNTER MARTIN & ASSOCIATES, INC.



Rod H. Martin, P.E.

ACKNOWLEDGMENT: This Addendum No. 2 is to be acknowledged on the BID, Page B-1 (ADDENDUM NO. 2) thru B-4 (ADDENDUM NO. 2).

BID - CONTRACT "B"

Proposal of _____ (hereinafter called "BIDDER"), organized and existing under the laws of the State of _____

doing business as _____
(Insert "a corporation", "a partnership", or "an individual" as applicable.)

To **HENDERSON COUNTY WATER DISTRICT, 655 SOUTH MAIN STREET, HENDERSON, KENTUCKY 42420** (hereinafter called OWNER).

The BIDDER hereby proposes to perform all WORK for the installation of **1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS - CONTRACT "B"** in strict accordance with the CONTRACT DOCUMENTS, within the time set forth herein, and at the prices stated below.

By submission of this BID, each BIDDER certifies, and in the case of a joint BID each party thereto certifies as to its own organization, that this BID has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this BID with any other BIDDER or with any competitor.

BIDDER hereby agrees to commence WORK under this contract on or before a date to be specified in the NOTICE TO PROCEED and to fully complete the PROJECT within 180 consecutive calendar days thereafter. BIDDER further agrees to pay as liquidated damages, the sum of \$ 500.00 for each consecutive calendar day thereafter.

BIDDER acknowledges receipt of the following ADDENDUM:

BIDDER, having examined the plans and specifications and being acquainted with and fully understanding (a) the extent and character of the work, (b) the location, arrangement and specified requirements, (c) existing and probable construction difficulties and hazards, (d) local conditions relative to labor, transportation, hauling and delivery, and (e) all other conditions affecting or which may be affected by the PROJECT hereby agrees to perform all the WORK described in the CONTRACT DOCUMENTS for the following unit prices and/or lump sums:

BID SCHEDULE

NOTE: BIDS SHALL INCLUDE SALES TAX AND ALL APPLICABLE TAXES AND FEES. SEE SPECIAL CONDITIONS FOR EXPLANATION OF BID ITEMS.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE BID	AMOUNT
1.	MOBILIZATION/ DEMOBILIZATION	1	LS		
2.	WATER MAINS, PVC				
2.1	12" SDR 21 or 12" Class 250 DIP	16,300	LF		
2.2	8" SDR 21 or 8" Class 250 DIP	24,500	LF		
2.3	6" SDR 21 or 6" Class 250 DIP	65,800	LF		
2.4	4" SDR 21 or 4" Class 250 DIP	10,700	LF		
2.5	3" SDR 21	100	LF		
2.6	2" SDR 21	100	LF		
2.7	12" Class 250 DIP	400	LF		
2.8	8" Class 250 DIP	400	LF		
2.9	6" Class 250 DIP	400	LF		
2.10	4" Class 250 DIP	400	LF		
3.	FITTINGS				
3.1	Ductile Iron, 12" Size	1,300	LBS.		
3.2	Ductile Iron, 10" Size	300	LBS.		
3.3	Ductile Iron, 8" Size	1,500	LBS.		
3.4	Ductile Iron, 6" Size	1,800	LBS.		
3.5	Ductile Iron, 4" Size	400	LBS.		
3.6	PVC, 3" and Smaller	2	EA.		
4.	VALVES, W/IRON BOX				
4.1	12" Gate	3	EA.		
4.2	10" Gate	1			
4.3	8" Gate	11	EA.		
4.4	6" Gate	14	EA.		
4.5	4" Gate	3	EA.		
4.6	3" Gate	8	EA.		
5.	SPECIAL FITTINGS, TAPPING TEE				
5.1	8" x 3" Serive Saddle W/3" Gate Valve & Box	1	EA.		
5.2	10" x 10" Tapping Slecvc W/10" Gate Valve & Box	1	EA.		
5.3	8" x 6" Tapping sleeve W/6" Gate Valvc & Box	1	EA.		
5.4	6" x 6" Tapping Sleeve W/6" Gate Valve & Box	2	EA.		
5.4	4" x 4" Tapping Slecvc W/6" Gate Valve & Box	1	EA.		

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE BID	AMOUNT
6.	CLAMPS AND COUPLINGS				
6.1	12"	1	EA.		
6.2	10"	1	EA.		
6.3	8"	1	EA.		
6.4	6"	1	EA.		
6.5	4"	1	EA.		
6.6	3" and Smaller	1	EA.		
7.	TIE-INS				
7.1	10"	1	EA.		
7.2	8"	6	EA.		
7.3	6"	11	EA.		
7.4	4"	2	EA.		
7.5	3" and Smaller	11	EA.		
8.	HYDRANTS				
8.1	Standard Hydrant	2	EA.		
8.2	3" Post Hydrant	8	EA.		
9	AIR RELEASE VALVES W/BOX	2	EA.		
10.	METER SETTINGS				
10.1	5/8" x 3/4" Reconnection	72	EA.		
10.2	5/8" x 3/4" New	75	EA.		
11.	SERVICE LINES				
11.1	3/4" Copper, Open Cut	3,400	LF		
11.2	3/4" Copper, Bore	3,000	LF		
12.	BORE W/CASING				
12.1	18" Casing	380	LF		
12.2	14" Casing	300	LF		
12.3	12" Casing	480	LF		
12.4	10" Casing	120	LF		
13.	BORE W/O CASING				
13.1	12" Carrier	70	LF		
13.2	8" Carrier	30	LF		
13.3	6" Carrier	40	LF		
14.	OPEN CUT CASING				
14.1	14" Casing	40	LF		
15.	ADDITIONAL DEPTH (Greater than 7')	500	LF		
16.	CRUSHED STONE	900	CY		

ADVERTISEMENT FOR BIDS – CONTRACT “A”

HENDERSON COUNTY WATER DISTRICT

655 SOUTH MAIN STREET

P. O. BOX 655

HENDERSON, KY 42420

Separate sealed BIDS for the construction of 1999/2000 WATER DISTRIBUTION SYSTEM IMPROVE-
MENTS - CONTRACT “A” (INCLUDING 93,400 LF OF 8” WATER MAINS; 60,000 LF OF 6” WATER
MAINS; 7,600 LF OF 4” WATER MAINS; 750 LF OF 3” WATER MAINS; AND APPURTENANCES

will be received by HENDERSON COUNTY WATER DISTRICT

at the office of HENDERSON COUNTY WATER DISTRICT, 655 SOUTH MAIN STREET,

HENDERSON, KENTUCKY 42420 until 11:00 A.M., CST , THURSDAY ,

MARCH 23 , 20 00 , and then at said office publicly opened and read aloud.

The CONTRACT DOCUMENTS may be examined at the following locations:

HUNTER MARTIN & ASSOCIATES, INC., PADUCAH, KENTUCKY

HENDERSON COUNTY WATER DISTRICT, HENDERSON, KENTUCKY

ASSOCIATED GENERAL CONTRACTORS, PADUCAH, KENTUCKY

F. W. DODGE-CIG, EVANSVILLE, INDIANA

BUILDERS EXCHANGE OF LOUISVILLE, LOUISVILLE, KENTUCKY

Copies of the CONTRACT DOCUMENTS may be obtained at the office of HUNTER MARTIN & ASSOCIATES, INC., 3220 Lone Oak Road, Paducah, KY 42003, upon payment of \$ 100.00 for each set.

Any BIDDER, upon returning the CONTRACT DOCUMENTS promptly and in good condition, will be refunded the payment, and any non-bidder or subbidder upon so returning the CONTRACT DOCUMENTS will be refunded \$ 50.00 .

The OWNER reserves the right to waive any informalities or to reject any or all bids.

Each BIDDER must deposit with his BID, security in the amount, form and subject to the conditions provided in the Information for Bidders.

No BIDDER may withdraw his BID within 90 DAYS after the actual date of the opening thereof.

FEBRUARY 23, 2000

DATE

D. C. HOUSE, CHAIRMAN

TITLE

INFORMATION FOR BIDDERS – CONTRACT “A”

BIDS will be received by HENDERSON COUNTY WATER DISTRICT
(herein called the "OWNER"), at 655 SOUTH MAIN STREET, HENDERSON, KY 42420 until 11:00 A.M., CST,
MARCH 23, 20 00, and then BIDS shall be opened publicly and read aloud.

Each BID must be submitted in a sealed envelope, addressed to the HENDERSON COUNTY WATER DISTRICT,
655 SOUTH MAIN STREET, P. O. BOX 655, HENDERSON, KY 42420.

Each sealed envelope containing a BID must be plainly marked on the outside as BID FOR " 1999/2000
DISTRIBUTION SYSTEM IMPROVEMENTS - CONTRACT "A"

and the envelope shall bear on the outside the BIDDER'S name, address, and license number if applicable, and the name of the project for which the BID is submitted. If forwarded by mail, the sealed envelope containing the BID must be enclosed in another envelope addressed to the HENDERSON COUNTY WATER DISTRICT, 655 SOUTH MAIN STREET, P. O. BOX 655, HENDERSON, KENTUCKY 42420.

All BIDS must be made on the required BID form. All blank spaces for BID prices must be filled in, in ink or typewritten, and the BID form must be fully completed and executed when submitted. Only one copy of the BID form is required.

The OWNER may waive any informalities or minor defects or reject any and all BIDS. Any BID may be withdrawn prior to the above scheduled time for the opening of BIDS or authorized postponement thereof. Any BID received after the time and date specified shall not be considered. No BIDDER may withdraw a BID within 90 calendar days after the actual date of the opening thereof. Should there be reasons why the contract cannot be awarded within the specified period, the time may be extended by mutual agreement between the OWNER and the BIDDER.

BIDDERS must satisfy themselves of the accuracy of the estimated quantities in the BID Schedule by examination of the site and a review of the drawings and specifications including ADDENDA. After BIDS have been submitted, the BIDDER shall not assert that there was a misunderstanding concerning the quantities of WORK or of the nature of the WORK to be done.

If requested, the OWNER shall provide to BIDDERS prior to BIDDING, all information which is pertinent to, and delineates and describes, the land owned and rights-of-way acquired or to be acquired.

The CONTRACT DOCUMENTS contain the provisions required for the construction of the PROJECT. Information obtained from an officer, agent, or employee of the OWNER or any other person shall not affect the risks or obligations assumed by the CONTRACTOR or relieve the CONTRACTOR from fulfilling any of the conditions of the contract.

Each BID shall be accompanied by a Bid Bond, payable to the OWNER, for 5 percent of the total amount of the BID. As soon as the BID prices have been compared, the OWNER will return the BONDS of all except the three lowest responsible BIDDERS. When the Agreement is executed, the bonds of the two remaining unsuccessful BIDDERS will be returned. The BID BOND of the successful BIDDER will be retained until the payment BOND and performance BOND have been executed and approved, after which it will be returned. A certified check may be used in lieu of a Bid Bond.

A PERFORMANCE BOND and a PAYMENT BOND, each in the amount of 100 percent of the CONTRACT PRICE with a corporate surety approved by the OWNER, shall be required for the faithful performance of the CONTRACT.

Attorneys-in-fact who sign BID BONDS, PAYMENT BONDS and PERFORMANCE BONDS must file with each BOND a certified and effective dated copy of their power of attorney.

The party to whom the contract is awarded will be required to execute the Agreement and obtain the performance BOND and payment BOND within 10 calendar days from the date when NOTICE OF AWARD is delivered to the BIDDER. The NOTICE OF AWARD shall be accompanied by the necessary Agreement and BOND forms. In case of failure of the BIDDER to execute the Agreement, the OWNER may consider the BIDDER in default, in which case the BID BOND accompanying the proposal shall become the property of the OWNER.

The OWNER within 10 calendar days of receipt of acceptable performance BOND, payment BOND and Agreement signed by the party to whom the Agreement was awarded shall sign the Agreement and return to such party an executed duplicate of the Agreement. Should the OWNER not execute the Agreement within such period, the BIDDER may by WRITTEN NOTICE withdraw the signed Agreement. Such notice of withdrawal shall be effective upon receipt of the notice by the OWNER.

The NOTICE TO PROCEED shall be issued within 10 calendar days of the execution of the Agreement by the OWNER. Should there be reasons why the NOTICE TO PROCEED cannot be issued within such period, the time may be extended by mutual agreement between the OWNER AND CONTRACTOR. If the NOTICE TO PROCEED has not been issued within the specified period or within the period mutually agreed upon, the CONTRACTOR may terminate the Agreement without further liability on the part of either party. The CONTRACTOR shall commence work within 10 calendar days of receipt of the NOTICE TO PROCEED.

The OWNER may make such investigations as deemed necessary to determine the ability of the BIDDER to perform the WORK, and the BIDDER shall furnish to the OWNER all such information and data for this purpose as the OWNER may request. The OWNER reserves the right to reject any BID if the evidence submitted by, or investigation of, such BIDDER fails to satisfy the OWNER that such BIDDER is properly qualified to carry out the obligations of the Agreement and to complete the WORK contemplated therein.

A conditional or qualified BID will not be accepted.

Award will be made to the lowest responsible, responsive BIDDER.

All applicable laws, ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the PROJECT shall apply to the contract throughout.

Each BIDDER is responsible for inspecting the site and for reading and being thoroughly familiar with the CONTRACT DOCUMENTS. The failure or omission of any BIDDER to do any of the foregoing shall in no way relieve any BIDDER from any obligation in respect to its BID.

The low bidder shall supply the names and addresses of major material SUPPLIERS and SUBCONTRACTORS when required to do so by the OWNER.

The ENGINEER is HUNTER MARTIN & ASSOCIATES, INC., 3220 LONE OAK ROAD, PADUCAH, KENTUCKY 42003, (PHONE 270, 554-2737; FAX 270, 554-2738).

An inspection for prospective BIDDERS will leave from the office of HENDERSON COUNTY WATER DISTRICT
655 SOUTH MAIN STREET, HENDERSON, KENTUCKY 42420 at 8:00 A.M., CST,
THURSDAY, MARCH 16, 20 00.

BID – CONTRACT "A"

Proposal of _____ (hereinafter called "BIDDER"), organized and existing under the laws of the State of _____

doing business as _____
(Insert "a corporation", "a partnership", or "an individual" as applicable.)

To HENDERSON COUNTY WATER DISTRICT, 655 SOUTH MAIN STREET, HENDERSON, KENTUCKY 42420 (hereinafter called OWNER).

The BIDDER hereby proposes to perform all WORK for the installation of 1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS - CONTRACT "A" in strict accordance with the CONTRACT DOCUMENTS, within the time set forth herein, and at the prices stated below.

By submission of this BID, each BIDDER certifies, and in the case of a joint BID each party thereto certifies as to its own organization, that this BID has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this BID with any other BIDDER or with any competitor.

BIDDER hereby agrees to commence WORK under this contract on or before a date to be specified in the NOTICE TO PROCEED and to fully complete the PROJECT within 150 consecutive calendar days thereafter. BIDDER further agrees to pay as liquidated damages, the sum of \$ 500.00 for each consecutive calendar day thereafter.

BIDDER acknowledges receipt of the following ADDENDUM:

BIDDER, having examined the plans and specifications and being acquainted with and fully understanding (a) the extent and character of the work, (b) the location, arrangement and specified requirements, (c) existing and probable construction difficulties and hazards, (d) local conditions relative to labor, transportation, hauling and delivery, and (e) all other conditions affecting or which may be affected by the PROJECT hereby agrees to perform all the WORK described in the CONTRACT DOCUMENTS for the following unit prices and/or lump sums:

BID SCHEDULE

NOTE: BIDS SHALL INCLUDE SALES TAX AND ALL APPLICABLE TAXES AND FEES. SEE SPECIAL CONDITIONS FOR EXPLANATION OF BID ITEMS.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE BID	AMOUNT
1.	MOBILIZATION/ DEMOBILIZATION	1	LS		
2.	WATER MAINS, PVC				
2.1	8" SDR 21 or 8" Class 250 DIP	93,000	LF		
2.2	6" SDR 21 or 6" Class 250 DIP	59,600	LF		
2.3	4" SDR 21 or 4" Class 250 DIP	7,200	LF		
2.4	3" SDR 21	750	LF		
2.5	2" SDR 21	100	LF		
2.6	8" Class 250 DIP	400	LF		
2.7	6" Class 250 DIP	400	LF		
2.8	4" Class 250 DIP	400	LF		
3.	FITTINGS				
3.1	Ductile Iron, 8" Size	3,000	LBS.		
3.2	Ductile Iron, 6" Size	1,500	LBS.		
3.3	Ductile Iron, 4" Size	200	LBS.		
3.4	PVC, 3" and Smaller	6	EA.		
4.	VALVES, W/IRON BOX				
4.1	8" Gate	23	EA.		
4.2	6" Gate	8	EA.		
4.3	4" Gate	4	EA.		
4.4	3" Gate	8	EA.		
4.5	2" Gate	4	EA.		
5.	SPECIAL FITTINGS, SERVICE SADDLES - TAPPING SLEEVE				
5.1	8" x 8" Tapping Sleeve W/8" Gate Valve & Box	1	EA		
5.2	6" x 6" Tapping Sleeve W/6" Gate Valve & Box	1	EA		

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE BID	AMOUNT
6.	CLAMPS AND COUPLINGS				
6.1	8"	1	EA.		
6.2	6"	1	EA.		
6.3	4"	1	EA.		
6.4	3" and Smaller	1	EA.		
7.	TIE-INS				
7.1	8"	5	EA.		
7.2	6"	6	EA.		
7.3	4"	3	EA.		
7.4	3" and Smaller	13	EA.		
8.	HYDRANTS				
8.1	Standard Hydrant	2	EA.		
8.2	3" Post Hydrant	5	EA.		
9.	AIR RELEASE VALVES W/BOX	2	EA.		
10.	METER SETTINGS				
10.1	5/8" x 3/4" New	96	EA.		
10.2	5/8" x 3/4" Reconnection	107	EA.		
11.	SERVICE LINES				
11.1	3/4" Copper, Open Cut	4,600	LF		
11.2	3/4" Copper, Bore	4,200	LF		
12.	BORE W/CASING				
12.1	14" Casing	750	LF		
12.2	12" Casing	250	LF		
13.	BORE W/O CASING				
13.1	8" Carrier	40	LF		
13.2	6" Carrier	150	LF		
14.	OPEN CUT CASING				
14.1	14" Casing	80	LF		
14.2	12" Casing	40	LF		
15.	ADDITIONAL DEPTH (Greater than 7')	500	LF		
16.	CRUSHED STONE	900	CY		
17.	RIPRAP	300	CY		

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE BID	AMOUNT
18.	CONCRETE ENCASEMENT	20	LF		
19.	ASPHALT PAVEMENT REPLACEMENT	20	SY		
20.	CONCRETE PAVEMENT REPLACEMENT	5	CY		
TOTAL BID - CONTRACT "A"					

NOTE: THE CONTRACT SHALL BE AWARDED BASED ON THE TOTAL BID. HOWEVER, IT IS AGREED THAT THE OWNER MAY ADJUST THE QUANTITIES TO MATCH AVAILABLE FUNDS.

RESPECTFULLY SUBMITTED THIS _____ DAY OF _____, 20 _____

IS BIDDER AN INDIVIDUAL, A PARTNERSHIP, OR A CORPORATION? _____

FIRM NAME

SIGNATURE

FIRM ADDRESS

TITLE

LIST OF PARTNERS, OR CORPORATE OFFICERS WITH
TITLES IF APPLICABLE:

PHONE NUMBER

SEAL (IF APPLICABLE)

ATTEST: _____

TITLE

BID BOND – CONTRACT “A”

KNOW ALL PERSONS BY THESE PRESENTS, that we, the undersigned, _____ as Principal, and _____ as Surety, are hereby held and firmly bound unto HENDERSON COUNTY WATER DISTRICT as Owner in the penal sum of _____ for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

Signed, this _____ day of _____, 20____.

The Condition of the above obligation is such that whereas the Principal has submitted to HENDERSON COUNTY WATER DISTRICT a certain Bid, attached hereto and hereby made a part hereof to enter into a contract in writing, for the

1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS – CONTRACT “A”

NOW, THEREFORE,

- (a) If said Bid shall be rejected, or
- (b) If said Bid shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said Bid) and shall furnish a Bond for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said Bid,

then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its Bond shall be in no way impaired or affected by any extension of the time within which the Owner may accept such Bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

Principal (L.S.)

By: _____

Surety

By: _____

IMPORTANT - Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the project is located, and hold certificates of authority as acceptable sureties (31 CFR 223).

AGREEMENT – CONTRACT “A”

THIS AGREEMENT, made this _____ day of _____, 20_____, by and between

HENDERSON COUNTY WATER DISTRICT, hereinafter called "OWNER" and

_____ doing business as

_____ hereinafter called "CONTRACTOR".

(an individual,) or (a partnership,) or (a corporation)

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned:

1. The CONTRACTOR will commence and complete the PROJECT described as 1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS - CONTRACT “A”.
2. The CONTRACTOR will furnish all of the materials, supplies, tools, equipment, labor, and other services necessary for the construction and completion of the PROJECT described herein.
3. The CONTRACTOR will commence the work required by the CONTRACT DOCUMENTS within 10 calendar days after the date of the NOTICE TO PROCEED and will complete the same within 150 calendar days unless the period for completion is extended otherwise by the CONTRACT DOCUMENTS.
4. The CONTRACTOR agrees to perform all of the WORK described in the CONTRACT DOCUMENTS and comply with the terms therein for the sum of \$ _____, or as shown in the BID schedule.

5. The term "CONTRACT DOCUMENTS" means and includes the following:

(A) GENERAL CONTRACT DOCUMENTS

- (1) ADVERTISEMENT FOR BIDS
- (2) INFORMATION FOR BIDDERS
- (3) BID
- (4) BID BOND
- (5) AGREEMENT
- (6) PERFORMANCE BOND
- (7) PAYMENT BOND
- (8) NOTICE OF AWARD
- (9) NOTICE TO PROCEED
- (10) CHANGE ORDER
- (11) GENERAL CONDITIONS
- (12) SPECIAL CONDITIONS

(B) SPECIFICATIONS prepared by HUNTER MARTIN & ASSOCIATES, INC.
dated NOVEMBER, 1999 (BID: MARCH, 2000).

(C) DRAWINGS prepared or issued by HUNTER MARTIN & ASSOCIATES,
INC. dated NOVEMBER, 1999 (BID: MARCH, 2000).

(D) ADDENDA:

No. _____ dated _____, 20 _____

No. _____ dated _____, 20 _____

No. _____ dated _____, 20 _____

6. The OWNER will pay to the CONTRACTOR in the manner and at such times as set forth in the General Conditions such amounts as required by the CONTRACT DOCUMENTS.

7. This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

IN WITNESS WHEREOF, the parties hereto have executed or caused to be executed by their duly authorized officials, this Agreement in THREE copies each of which shall be deemed an original on the date first above written.

OWNER: HENDERSON COUNTY WATER DISTRICT

BY: _____

NAME: D. C. HOUSE
(Please Type)

TITLE: CHAIRMAN

(Seal)

ATTEST:

BY: _____

NAME: _____
(Please Type)

TITLE: _____

CONTRACTOR:

BY:

NAME:

(Please Type)

TITLE:

(Seal)

ATTEST:

BY:

NAME:

(Please Type)

TITLE:

PERFORMANCE BOND – CONTRACT “A”

KNOW ALL PERSONS BY THESE PRESENTS: that

(Name Of Contractor)

(Address Of Contractor)

a _____ hereinafter called PRINCIPAL and
(Corporation, Partnership or Individual)

(Name Of Surety)

hereinafter called SURETY, are held and firmly bound unto

HENDERSON COUNTY WATER DISTRICT
(Name of Owner)

655 SOUTH MAIN STREET, HENDERSON, KENTUCKY 42420
(Address of Owner)

hereinafter called OWNER in the total aggregate penal sum of _____
_____ Dollars (\$ _____) in lawful money

of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors,
administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the PRINCIPAL entered into a certain contract with the
OWNER, dated the _____ day of _____, 20_____

a copy of which is hereto attached and made a part hereof for the construction of:

1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS – CONTRACT “A”

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the OWNER, with or without notice to the SURETY and during the one year guaranty period and if the PRINCIPAL shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the OWNER from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the OWNER may incur in making good any default, then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said SURETY, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to WORK to be performed thereunder or the SPECIFICATIONS accompanying same shall in any way affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that it is expressly agreed that the BOND shall be deemed amended automatically and immediately, without formal and separate amendments hereto, upon amendment to the CONTRACT not increasing the contract price more than 20 per cent, so as to bind the PRINCIPAL and the SURETY to the full and faithful performance of the CONTRACT as so amended. The term "Amendment", wherever used in this BOND, and whether referring to this BOND, or the CONTRACT, shall include any alteration, addition, extension, or modification of any character whatsoever.

PAYMENT BOND – CONTRACT “A”

KNOW ALL PERSONS BY THESE PRESENTS: that

(Name Of Contractor)

(Address Of Contractor)

a _____ hereinafter called PRINCIPAL and
(Corporation, Partnership or Individual)

(Name Of Surety)

hereinafter called SURETY, are held and firmly bound unto

HENDERSON COUNTY WATER DISTRICT
(Name of Owner)

655 SOUTH MAIN STREET, HENDERSON, KENTUCKY 42420
(Address of Owner)

hereinafter called OWNER and unto all persons, firms, and corporations who or which may furnish labor, or who furnish materials to perform as described under the contract and to their successors and assigns in the total aggregate penal sum of _____ Dollars (\$ _____) in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the PRINCIPAL entered into a certain contract with the OWNER, dated the _____ day of _____, 20____, a copy of which is hereto attached and made a part hereof for the construction of:

1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS – CONTRACT “A”

NOW, THEREFORE, if the PRINCIPAL shall promptly make payment to all persons, firms, and corporations furnishing materials for or performing labor in the prosecution of the WORK provided for in such contract, and any authorized extensions or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such WORK, and for all labor cost incurred in such WORK including that by a SUBCONTRACTOR, and to any mechanic or materialman lien holder whether it acquires its lien by operation of State or Federal law, then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, that beneficiaries or claimants hereunder shall be limited to the SUBCONTRACTORS, and persons, firms, and corporations having a direct contract with the PRINCIPAL or its SUBCONTRACTORS.

PROVIDED, FURTHER, that the said SURETY for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any way affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of this contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no suit or action shall be commenced hereunder by any claimant: (a) unless claimant, other than one having a direct contract with the PRINCIPAL, shall have given written notice to any two of the following: the PRINCIPAL, the OWNER, or the SURETY above named within ninety (90) days after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the PRINCIPAL, OWNER, or SURETY, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the aforesaid project is located, save that such service need not be made by a public officer; (b) after the expiration of one (1) year following the date of which PRINCIPAL ceased work on said CONTRACT, is being understood, however, that if any limitation embodied in the BOND is prohibited by any law controlling the construction hereof, such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.

PROVIDED, FURTHER, that it is expressly agreed that this BOND shall be deemed amended automatically and immediately, without formal and separate amendments hereto, upon amendment to the Contract not increasing the contract price more than 20 per cent, so as to bind the PRINCIPAL and the SURETY to the full and faithful performance of the CONTRACT as so amended. The term "Amendment", wherever used in this BOND and whether referring to this BOND, or the CONTRACT, shall include any alteration, addition, extension or modification of any character whatsoever.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in FOUR counterparts, each of which shall
Number

be deemed an original, this _____ day of _____, 20 ____.

ATTEST:

Principal

By: _____ (s)

(SEAL)

(Address)

Witness to Principal

Address

ATTEST:

Surety

By: _____

Witness to Surety

Attorney-In-Fact

(Address)

(Address)

NOTE: Date of BOND must not be prior to date of CONTRACT.
If CONTRACT is partnership, all partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the Project is located.

NOTICE OF AWARD – CONTRACT “A”

TO: _____

PROJECT DESCRIPTION: 1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS -
CONTRACT “A”

The OWNER has considered the BID submitted by your for the above described WORK in response to its Advertisement for Bids dated FEBRUARY 23, 20 00, and Information for Bidders.

You are hereby notified that your BID has been accepted for items in the amount of \$ _____.

You are required by the Information for Bidders to execute the Agreement and furnish the required CONTRACTOR'S Performance BOND, Payment BOND and Certificates of Insurance within 10 calendar days from the date of this Notice to you.

If you fail to execute said Agreement and to furnish said BONDS within 10 days from the date of this Notice, said OWNER will be entitled to consider all your rights arising out of the OWNER'S acceptance of your BID as abandoned and as a forfeiture of your BID BOND. The OWNER will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this NOTICE OF AWARD to the OWNER.

Dated this _____ day of _____, 20 _____.

HENDERSON COUNTY WATER DISTRICT
OWNER

BY: _____

TITLE: D. C. HOUSE, CHAIRMAN

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE OF AWARD is hereby acknowledged by _____

this the _____ day of _____, 20 _____.

BY: _____

TITLE: _____

NOTICE TO PROCEED – CONTRACT “A”

TO: _____

DATE: _____

PROJECT: 1999/2000 DISTRIBUTION
SYSTEM IMPROVEMENTS -
CONTRACT “A”

You are hereby notified to commence WORK in accordance with the Agreement dated _____, 20 ____, on or before _____, 20 ____, and you are to complete the WORK within 150 consecutive calendar days thereafter. The date of completion of all WORK is therefore _____, 20 ____.

HENDERSON COUNTY WATER DISTRICT
OWNER

BY: _____

TITLE: D. C. HOUSE, CHAIRMAN

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE TO PROCEED is hereby acknowledged by _____

this the _____ day of _____, 20 ____.

BY: _____

TITLE: _____

CHANGE ORDER - CONTRACT "A"

ORDER NO.: _____

DATE: _____

AGREEMENT DATE: _____

NAME OF PROJECT: 1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS -
CONTRACT "A"

OWNER: HENDERSON COUNTY WATER DISTRICT

CONTRACTOR: _____

The following changes are hereby made to the CONTRACT DOCUMENTS:

Justification:

Change to CONTRACT PRICE:

Original CONTRACT PRICE: \$ _____

Current CONTRACT PRICE adjusted by previous CHANGE ORDER \$ _____

The CONTRACT PRICE due to this CHANGE ORDER will be **DECREASED** by

(\$ _____) and **INCREASED** by \$ _____ for a NET

change of \$ _____.

The new CONTRACT PRICE including this CHANGE ORDER will be \$ _____.

Change to CONTRACT TIME:

The CONTRACT TIME will be _____ by _____ calendar days.

(Increased / Decreased)

The date for completion of all work will be _____.

(Date)

Requested by: _____ OWNER

Recommended by: _____ ENGINEER

Accepted by: _____ CONTRACTOR

GENERAL CONDITIONS

- | | |
|--|--|
| 1. Definitions | 17. Subsurface Conditions |
| 2. Additional Instructions and Detail Drawings | 18. Suspension of Work, Termination, and Delay |
| 3. Schedules, Reports, and Records | 19. Payments to Contractor |
| 4. Drawings and Specifications | 20. Acceptance of Final Payment as Release |
| 5. Shop Drawings | 21. Insurance |
| 6. Materials, Services, and Facilities | 22. Contract Security |
| 7. Inspection and Testing | 23. Assignments |
| 8. Substitutions | 24. Indemnification |
| 9. Patents | 25. Separate Contracts |
| 10. Surveys, Permits, Regulations | 26. Subcontracting |
| 11. Protection of Work, Property, Persons | 27. Engineer's Authority |
| 12. Supervision by Contractor | 28. Land and Rights-of-Way |
| 13. Changes in the Work | 29. Guaranty |
| 14. Changes in Contract Price | 30. Arbitration |
| 15. Time for Completion and Liquidated Damages | 31. Taxes |
| 16. Correction of Work | |

1. DEFINITIONS.

- 1.1. Wherever used in the CONTRACT DOCUMENTS, the following terms shall have the meanings indicated and shall be applicable to both the singular and plural thereof:
- 1.2. ADDENDA - Written or graphic instruments issued prior to the execution of the Agreement which modify or interpret the CONTRACT DOCUMENTS, DRAWINGS and SPECIFICATIONS, by additions, deletions, clarifications, or corrections.
- 1.3. BID - The offer or proposal of the BIDDER submitted on the prescribed form setting forth the prices for the WORK to be performed.
- 1.4. BIDDER - Any person, firm, or corporation submitting a BID for the WORK.
- 1.5. BONDS - Bid, Performance, and Payment Bonds and other instruments of surety, furnished by the CONTRACTOR and the CONTRACTOR'S surety in accordance with the CONTRACT DOCUMENTS.
- 1.6. CHANGE ORDER - A written order to the CONTRACTOR authorizing an addition, deletion, or revision in the WORK within the general scope of the CONTRACT DOCUMENTS, or authorizing an adjustment in the CONTRACT PRICE or CONTRACT TIME.
- 1.7. CONTRACT DOCUMENTS - The CONTRACT, including Advertisement For BIDS, Information for BIDDERS, BID, BID BOND, AGREEMENT, PAYMENT BOND, PERFORMANCE BOND, NOTICE OF AWARD, NOTICE TO PROCEED, CHANGE ORDER, DRAWINGS, SPECIFICATIONS, and ADDENDA.
- 1.8. CONTRACT PRICE - The total monies payable to the CONTRACTOR under the terms and conditions of the CONTRACT DOCUMENTS.
- 1.9. CONTRACT TIME - The number of calendar days stated in the CONTRACT DOCUMENTS for the completion of the WORK.

- 1.10. DEVELOPER - A corporation, association, partnership, or an individual for whom the WORK is to be performed.
- 1.11. CONTRACTOR - The person, firm, or corporation with whom the OWNER has executed the Agreement.
- 1.12. DRAWINGS - The parts of the CONTRACT DOCUMENTS which show the characteristics and scope of the WORK to be performed and which have been prepared or approved by the ENGINEER.
- 1.13. ENGINEER - The person, firm, or corporation named as such in the CONTRACT DOCUMENTS.
- 1.14. FIELD ORDER - A written order affecting a change in the WORK not involving an adjustment in the CONTRACT PRICE or an extension of the CONTRACT TIME, issued by the ENGINEER to the CONTRACTOR during construction.
- 1.15. NOTICE OF AWARD - The written notice of the acceptance of the BID from the OWNER to the successful BIDDER.
- 1.16. NOTICE TO PROCEED - Written communication issued by the OWNER to the CONTRACTOR authorizing him/her to proceed with the WORK and establishing the date for commencement of the WORK.
- 1.17. OWNER - A public or quasi-public body or authority, corporation, association, partnership, or an individual for whom the WORK is to be performed.
- 1.18. PROJECT - The undertaking to be performed as provided in the CONTRACT DOCUMENTS.
- 1.19. RESIDENT PROJECT REPRESENTATIVE - The authorized representative of the OWNER who is assigned to the PROJECT site or any part thereof.
- 1.20. SHOP DRAWINGS - All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the CONTRACTOR, a SUBCONTRACTOR, manufacturer, SUPPLIER or distributor, which illustrate how specific portions of the WORK shall be fabricated or installed.
- 1.21. SPECIFICATIONS - A part of the CONTRACT DOCUMENTS consisting of written descriptions of a technical nature of materials, equipment, construction systems, standards and workmanship.
- 1.22. SUBCONTRACTOR - An individual, firm, or corporation having a direct contract with the CONTRACTOR or with any other SUBCONTRACTOR for the performance of a part of the WORK at the site.
- 1.23. SUBSTANTIAL COMPLETION - That date certified by the ENGINEER when the construction of the PROJECT or a specified part thereof is sufficiently completed, in accordance with the CONTRACT DOCUMENTS, so that the PROJECT or specified part can be utilized for the purposes for which it is intended.
- 1.24. SUPPLEMENTAL GENERAL CONDITIONS - Modifications to General Conditions required by a Federal agency for participation in the PROJECT and approved by the agency in writing prior to inclusion in the CONTRACT DOCUMENTS, or such requirements that may be imposed by applicable state laws.
- 1.25. SUPPLIER - Any person or organization who supplies materials or equipment for the WORK, including that fabricated to a special design, but who does not perform labor at the site.

- 1.26. WORK - All labor necessary to produce the construction required by the CONTRACT DOCUMENTS, and all materials and equipment incorporated or to be incorporated in the PROJECT.
- 1.27. WRITTEN NOTICE - Any notice to any party of the AGREEMENT relative to any part of this AGREEMENT in writing and considered delivered and the service thereof completed, when posted by certified or registered mail to the said party at their last given address, or delivered in person to said party or their authorized representative on the WORK.

2. ADDITIONAL INSTRUCTIONS AND DETAIL DRAWINGS.

- 2.1. The CONTRACTOR may be furnished additional instructions and detail drawings, by the ENGINEER, as necessary to carry out the WORK required by the CONTRACT DOCUMENTS.
- 2.2. The additional drawings and instructions thus supplied will become a part of the CONTRACT DOCUMENTS. The CONTRACTOR shall carry out the WORK in accordance with the additional detail drawings and instructions.

3. SCHEDULES, REPORTS AND RECORDS.

- 3.1. The CONTRACTOR shall submit to the OWNER such schedule of quantities and costs, progress schedules, payrolls, reports, estimates, records and other data where applicable as are required by the CONTRACT DOCUMENTS for the WORK to be performed.

With each succeeding progress payment request, the progress schedule shall be reviewed and revised (if necessary) and shall show the per cent complete of each major feature of the work.

- 3.2. Prior to the first partial payment estimate, the CONTRACTOR shall submit construction progress schedules showing the order in which the CONTRACTOR proposes to carry on the WORK, including dates at which the various parts of the WORK will be started, estimated date of completion of each part and, as applicable:

- 3.2.1. The dates at which special detail drawings will be required; and

- 3.2.2. Respective dates for submission of SHOP DRAWINGS, the beginning of manufacture, the testing and the installation of materials, supplies and equipment.

- 3.3. The CONTRACTOR shall also submit a schedule of payments that the CONTRACTOR anticipates will be earned during the course of the WORK.

4. DRAWINGS AND SPECIFICATIONS.

- 4.1. The intent of the DRAWINGS and SPECIFICATIONS is that the CONTRACTOR shall furnish all labor, materials, tools, equipment, and transportation necessary for the proper execution of the WORK in accordance with the CONTRACT DOCUMENTS and all incidental work necessary to complete the PROJECT in an acceptable manner, ready for use, occupancy or operation by the OWNER.
- 4.2. In case of conflict between the DRAWINGS and SPECIFICATIONS, the SPECIFICATIONS shall govern. Figure dimensions on DRAWINGS shall govern over general DRAWINGS.
- 4.3. Any discrepancies found between the DRAWINGS and SPECIFICATIONS and site conditions or any inconsistencies or ambiguities in the DRAWINGS or SPECIFICATIONS shall be immediately reported to the ENGINEER, in writing, who shall promptly correct such inconsistencies or ambiguities in writing. WORK done by the CONTRACTOR after discovery of such discrepancies, inconsistencies or ambiguities shall be done at the CONTRACTOR'S risk.

5. SHOP DRAWINGS.

- 5.1. The CONTRACTOR shall provide SHOP DRAWINGS of all mechanical and electrical equipment and all appearance items. The ENGINEER shall promptly review all SHOP DRAWINGS. The ENGINEER'S approval of any SHOP DRAWING shall not release the CONTRACTOR from responsibility for deviations from the CONTRACT DOCUMENTS. The approval of any SHOP DRAWING which substantially deviates from the requirement of the CONTRACT DOCUMENTS shall be evidenced by a CHANGE ORDER.
- 5.2. When submitted for the ENGINEER'S review, SHOP DRAWINGS shall bear the CONTRACTOR'S certification that he has reviewed, checked and approved the SHOP DRAWINGS and that they are in conformance with the requirements of the CONTRACT DOCUMENTS.
- 5.3. Portions of the WORK requiring a SHOP DRAWING or sample submission shall not begin until the SHOP DRAWING or submission has been approved by the ENGINEER. A copy of each approved SHOP DRAWING and each approved sample shall be kept in good order by the CONTRACTOR at the site and shall be available to the ENGINEER.

6. MATERIALS, SERVICES AND FACILITIES.

- 6.1. It is understood that, except as otherwise specifically stated in the CONTRACT DOCUMENTS, the CONTRACTOR shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, supervision, temporary construction of any nature, and all other services and facilities of any nature whatsoever necessary to execute, complete, and deliver the WORK within the specified time.
- 6.2. Materials and equipment shall be so stored as to insure the preservation of their quality and fitness for the WORK. Stored materials and equipment to be incorporated in the WORK shall be located so as to facilitate prompt inspection.
- 6.3. Manufactured articles, materials, and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturer.
- 6.4. Materials, supplies, and equipment shall be in accordance with samples submitted by the CONTRACTOR and approved by the ENGINEER.
- 6.5. Materials, supplies, or equipment to be incorporated into the WORK shall not be purchased by the CONTRACTOR or the SUBCONTRACTOR subject to a chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller.

7. INSPECTION AND TESTING.

- 7.1. All materials and equipment used in the construction of the PROJECT shall be subject to adequate inspection and testing in accordance with generally accepted standards, as required and defined in the CONTRACT DOCUMENTS.
- 7.2. The OWNER shall provide all inspection and testing services not required by the CONTRACT DOCUMENTS.
- 7.3. The CONTRACTOR shall provide at the CONTRACTOR'S expense the testing and inspection services required by the CONTRACT DOCUMENTS.
- 7.4. If the CONTRACT DOCUMENTS, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any WORK to specifically be inspected, tested, or approved by someone other than the CONTRACTOR, the CONTRACTOR will give the ENGINEER timely

notice of readiness. The CONTRACTOR will then furnish the ENGINEER the required certificates of inspection, testing or approval.

- 7.5. Inspections, tests, or approvals by the ENGINEER or others shall not relieve the CONTRACTOR from the obligation to perform the WORK in accordance with the requirements of the CONTRACT DOCUMENTS.
- 7.6. The ENGINEER and the ENGINEER'S representatives will at all times have access to the WORK. In addition, authorized representatives and agents of any participating Federal or State agency shall be permitted to inspect all work, materials, payrolls, records or personnel, invoices of materials, and other relevant data and records. The CONTRACTOR will provide proper facilities for such access and observation of the WORK and also for any inspection or testing thereof.
- 7.7. If any WORK is covered contrary to the written instructions of the ENGINEER, it must, if requested by the ENGINEER, be uncovered for the ENGINEER'S observation and replaced at the CONTRACTOR'S expense.
- 7.8. If the ENGINEER considers it necessary or advisable that covered WORK be inspected or tested by others, the CONTRACTOR, at the ENGINEER'S request, will uncover, expose or otherwise make available for observation, inspection or testing as the ENGINEER may require, that portion of the WORK in question, furnishing all necessary labor, materials, tools and equipment. If it is found that such WORK is defective, the CONTRACTOR will bear all the expense of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction, if, however, such WORK is not found to be defective, the CONTRACTOR will be allowed an increase in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction and an appropriate CHANGE ORDER shall be issued.

8. SUBSTITUTIONS.

- 8.1. Whenever a material, article, or piece of equipment is identified on the DRAWINGS or SPECIFICATIONS by reference to brand name or catalogue numbers, it shall be understood that this is referenced for the purpose of defining the performance or other salient requirements and that other products of equal capacities, quality and function shall be considered. The CONTRACTOR may recommend the substitution of a material, article, or piece of equipment of equal substance and function for those referred to in the CONTRACT DOCUMENTS by reference to brand name or catalogue number, and if, in the opinion of the ENGINEER, such material, article, or piece of equipment is of equal substance and function to that specified, the ENGINEER may approve its substitution and use by the CONTRACTOR. Any cost differential shall be deductible from the CONTRACT PRICE and the CONTRACT DOCUMENTS shall be appropriately modified by CHANGE ORDER. The CONTRACTOR warrants that if substitutes are approved, no major changes in the function or general design of the PROJECT will result. Incidental changes or extra component parts required to accommodate the substitute will be made by the CONTRACTOR without a change in the CONTRACT PRICE or CONTRACT TIME.

9. PATENTS.

- 9.1. The CONTRACTOR shall pay all applicable royalties and license fees, and shall defend all suits or claims for infringement of any patent rights and save the OWNER harmless from loss on account thereof, except that the OWNER shall be responsible for any such loss when a particular process, design, or product of a particular manufacturer or manufacturers is specified; however, if the CONTRACTOR has reason to believe that the design, process or product specified is an infringement of a patent, the CONTRACTOR shall be responsible for such loss unless the CONTRACTOR promptly gives such information to the ENGINEER.

10. SURVEYS, PERMITS, REGULATIONS.

- 10.1. The OWNER shall furnish all boundary surveys and establish all base lines for locating the principal component parts of the WORK together with a suitable number of bench marks adjacent to the WORK as shown in the CONTRACT DOCUMENTS. From the information provided by the OWNER , unless otherwise specified in the CONTRACT DOCUMENTS, the CONTRACTOR shall develop and make all detail surveys needed for construction such as slope stakes, batter boards, stakes for pipe locations and other working points, lines, elevations and cut sheets.
- 10.2. The CONTRACTOR shall carefully preserve bench marks, reference points and stakes and, in case of willful or careless destruction, shall be charged with the resulting expense and shall be responsible for any mistake that may be caused by their unnecessary loss or disturbance.
- 10.3. Permits and licenses of a temporary nature necessary for the prosecution of the WORK shall be secured and paid for by the CONTRACTOR unless otherwise stated in the SUPPLEMENTAL GENERAL CONDITIONS. Permits, licenses and easements for permanent structures or permanent changes in existing facilities shall be secured and paid for by the OWNER, unless otherwise specified. The CONTRACTOR shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the WORK as drawn and specified. If the CONTRACTOR observes that the CONTRACT DOCUMENTS are at variance therewith, the CONTRACTOR shall promptly notify the ENGINEER in writing, and any necessary changes shall be adjusted as provided in Section 13, CHANGES IN THE WORK.

11. PROTECTION OF WORK, PROPERTY, AND PERSONS.

- 11.1. The CONTRACTOR will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the WORK. The CONTRACTOR will take all necessary precautions for the safety of, will provide the necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury or loss to all employees on the WORK and other persons who may be affected thereby, all the WORK and all materials or equipment to be incorporated therein, whether in storage on or off the site, and other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.
- 11.2. The CONTRACTOR will comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction. The CONTRACTOR will erect and maintain, as required by the conditions and progress of the WORK, all necessary safeguards for safety and protection. The CONTRACTOR will notify owners of adjacent utilities when prosecution of the WORK may affect them. The CONTRACTOR will remedy all damage, injury or loss to any property caused, directly or indirectly, in whole or part, by the CONTRACTOR, any SUBCONTRACTOR or anyone directly or indirectly employed by any of them or anyone directly or indirectly employed by any of them or anyone of whose acts any of them may be liable, except damage or loss attributable to the fault of the CONTRACT DOCUMENTS or to the acts or omissions of the OWNER , of the ENGINEER or anyone employed by either of them or anyone for whose acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of the CONTRACTOR.
- 11.3. In emergencies affecting the safety of persons or the WORK or property at the site or adjacent thereto, the CONTRACTOR, without special instructions or authorization from the ENGINEER or OWNER, shall act to prevent threatened damage, injury or loss. The CONTRACTOR will give the ENGINEER prompt WRITTEN NOTICE of any significant changes in the WORK or deviations from the CONTRACT DOCUMENTS caused thereby, and a CHANGE ORDER shall thereupon be issued covering the changes and deviations involved.

12. SUPERVISION BY CONTRACTOR.

- 12.1. The CONTRACTOR will supervise and direct the WORK. He will be solely responsible for the means, methods, techniques, sequences and procedures of construction. The CONTRACTOR will employ and maintain on the WORK a qualified supervisor or superintendent who shall have been designated in writing by the CONTRACTOR as the CONTRACTOR'S representative at the site. The supervisor shall have full authority to act on behalf of the CONTRACTOR and all communications given the supervisor shall be as binding as if given to the CONTRACTOR. The supervisor shall be present on the site at all times as required to perform adequate supervision and coordination of the WORK.

13. CHANGES IN THE WORK.

- 13.1. The OWNER may at any time, as the need arises, order changes within the scope of the WORK without invalidating the AGREEMENT. If such changes increase or decrease the amount due under the CONTRACT DOCUMENTS, or in the time required for performance of the WORK, an equitable adjustment shall be authorized by CHANGE ORDER.
- 13.2. The ENGINEER also may, at any time, by issuing a FIELD ORDER, make changes in the details of the WORK. The CONTRACTOR shall proceed with the performance of any changes in the WORK so ordered by the ENGINEER unless the CONTRACTOR believes that such FIELD ORDER entitles the CONTRACTOR to a change in CONTRACT PRICE or TIME, or both, in which event the CONTRACTOR shall give the ENGINEER WRITTEN NOTICE thereof within 7 days after the receipt of the ordered change. Thereafter, the CONTRACTOR shall document the basis for the change in CONTRACT PRICE or TIME within 30 days. The CONTRACTOR shall not execute such changes pending the receipt of an executed CHANGE ORDER or further instruction from the OWNER.

14. CHANGES IN CONTRACT PRICE.

- 14.1. The CONTRACT PRICE may be changed only by a CHANGE ORDER. The value of any WORK covered by a CHANGE ORDER or of any claim for increase or decrease in the CONTRACT PRICE shall be determined by one or more of the following methods in the order of precedence listed below:
- a. Unit prices previously approved.
 - b. An agreed lump sum.

15. TIME FOR COMPLETION AND LIQUIDATED DAMAGES.

- 15.1. The date of beginning and the time for completion of the WORK are essential conditions of the CONTRACT DOCUMENTS and the WORK embraced shall be commenced on a date specified in the NOTICE TO PROCEED.
- 15.2. The CONTRACTOR will proceed with the WORK at such rate of progress to insure full completion within the CONTRACT TIME. It is expressly understood and agreed, by and between the CONTRACTOR and the OWNER, that the CONTRACT TIME for the completion of the WORK described herein is a reasonable time, taking into consideration the average climatic and economic conditions and other factors prevailing in the locality of the WORK.
- 15.3. If the CONTRACTOR shall fail to complete the WORK within the CONTRACT TIME, or extension of time granted by the OWNER, then the CONTRACTOR will pay to the OWNER the amount for liquidated damages as specified in the BID for each calendar day that the CONTRACTOR shall be in default after the time stipulated in the CONTRACT DOCUMENTS.

15.4. The CONTRACTOR shall not be charged with liquidated damages or any excess cost when the delay in completion of the WORK is due to the following and the CONTRACTOR has promptly given WRITTEN NOTICE of such delay to the OWNER or ENGINEER.

15.4.1. To any preference, priority or allocation order duly issued by the OWNER .

15.4.2. To unforeseeable causes beyond the control and without the fault or negligence of the CONTRACTOR, including but not restricted to, acts of God, or of the public enemy, acts of the OWNER, acts of another CONTRACTOR in the performance of a contract with the OWNER, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and abnormal and unforeseeable weather, and

15.4.3. To any delays of SUBCONTRACTORS occasioned by any of the causes specified in paragraphs 15.4.1 and 15.4.2 of this article.

16. CORRECTION OF WORK.

16.1. The CONTRACTOR shall promptly remove from the premises all WORK rejected by the ENGINEER for failure to comply with the CONTRACT DOCUMENTS, whether incorporated in the construction or not, and the CONTRACTOR shall promptly replace and re-execute the WORK in accordance with the CONTRACT DOCUMENTS and without expense to the OWNER and shall bear the expense of making good all WORK of other CONTRACTORS destroyed or damaged by such removal or replacement.

16.2. All removal and replacement WORK shall be done at the CONTRACTOR'S expense. If the CONTRACTOR does not take action to remove such rejected WORK within 10 days after receipt of WRITTEN NOTICE, the OWNER may remove such WORK and store the materials at the expense of the CONTRACTOR.

17. SUBSURFACE CONDITIONS.

17.1. The CONTRACTOR shall promptly, and before such conditions are disturbed, except in the event of an emergency, notify the OWNER by WRITTEN NOTICE of:

17.1.1. Subsurface or latent physical conditions at the site differing materially from those indicated in the CONTRACT DOCUMENTS; or

17.1.2. Unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in WORK of the character provided for in the CONTRACT DOCUMENTS.

17.2. The OWNER shall promptly investigate the conditions, and if it is found that such conditions do so materially differ and cause an increase or decrease in the cost of, or in the time required for, performance of the WORK, an equitable adjustment shall be made and the CONTRACT DOCUMENTS shall be modified by a CHANGE ORDER. Any claim of the CONTRACTOR for adjustment hereunder shall not be allowed unless the required WRITTEN NOTICE has been given; provided that the OWNER may, if the OWNER determines the facts so justify, consider and adjust any such claims asserted before the date of final payment.

18. SUSPENSION OF WORK, TERMINATION, AND DELAY.

18.1. The OWNER may suspend the WORK or any portion thereof for a period of not more than 90 days or such further time as agreed upon by the CONTRACTOR, by WRITTEN NOTICE to the CONTRACTOR and the ENGINEER which shall fix the date on which WORK shall be resumed. The CONTRACTOR will resume that WORK on the date so fixed. The CONTRACTOR will be

- allowed an increase in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, directly attributable to any suspension.
- 18.2. If the CONTRACTOR is adjudged bankrupt or insolvent, or makes a general assignment for the benefit of its creditors, or if a trustee or receiver is appointed for the CONTRACTOR or for any of its property, or if CONTRACTOR files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or applicable laws, or repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment, or repeatedly fails to make prompt payments to SUBCONTRACTORS or for labor, materials or equipment or disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction of the WORK or disregards the authority of the ENGINEER or otherwise violates any provision of the CONTRACT DOCUMENTS, then the OWNER may, without prejudice to any other right or remedy and after giving the CONTRACTOR and its surety a minimum of 10 days from delivery of a WRITTEN NOTICE, terminate the services of the CONTRACTOR and take possession of the PROJECT and of all materials, equipment, tools, construction equipment and machinery thereon owned by the CONTRACTOR, and finish the WORK by whatever method the OWNER may deem expedient. In such case, the CONTRACTOR shall not be entitled to receive any further payment until the WORK is finished. If the unpaid balance of the CONTRACT PRICE exceeds the direct and indirect costs of completing the PROJECT, including compensation for additional professional services, such excess SHALL BE PAID TO THE CONTRACTOR. If such costs exceed such unpaid balance, the CONTRACTOR will pay the difference to the OWNER. Such costs incurred by the OWNER will be determined by the ENGINEER and incorporated in a CHANGE ORDER.
- 18.3. Where the CONTRACTOR'S services have been so terminated by the OWNER, said termination shall not affect any right of the OWNER against the CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of monies by the OWNER due the CONTRACTOR will not release the CONTRACTOR from compliance with the CONTRACT DOCUMENTS.
- 18.4. After 10 days from delivery of WRITTEN NOTICE to the CONTRACTOR and the ENGINEER, the OWNER may, without cause and without prejudice to any other right or remedy, elect to abandon the PROJECT and terminate the CONTRACT. In such case, the CONTRACTOR shall be paid for all WORK executed and any expense sustained plus reasonable profit.
- 18.5. If, through no act or fault of the CONTRACTOR, the WORK is suspended for a period of more than 90 days by the OWNER or under an order of court or other public authority, or the ENGINEER fails to act on any request for payment within 30 days after it is submitted, or the OWNER fails to pay the CONTRACTOR substantially the sum approved by the ENGINEER or awarded by arbitrators within 30 days of its approval and presentation, then the CONTRACTOR may, after 10 days from delivery of a WRITTEN NOTICE to the OWNER and the ENGINEER terminate the CONTRACT and recover from the OWNER payment for all WORK executed and all expenses sustained. In addition and in lieu of terminating the CONTRACT if the ENGINEER has failed to act on a request for payment or if the OWNER has failed to make any payment as aforesaid, the CONTRACTOR may upon 10 days written notice to the OWNER and the ENGINEER stop the WORK until paid all amounts then due, in which event and upon resumption of the WORK, CHANGE ORDERS shall be issued for adjusting the CONTRACT PRICE or extending the CONTRACT TIME or both to compensate for the costs and delays attributable to the stoppage of the WORK.
- 18.6. If the performance of all or any portion of the WORK is suspended, delayed, or interrupted as a result of a failure of the OWNER or ENGINEER to act within the time specified in the CONTRACT DOCUMENTS, or if no time is specified, within a reasonable time, an adjustment in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, shall be made by CHANGE ORDER to compensate the CONTRACTOR for the costs and delays necessarily caused by the failure of the OWNER or ENGINEER.

19. PAYMENT TO CONTRACTOR.

- 19.1. At least 10 days before each progress payment falls due (but not more often than once a month), the CONTRACTOR will submit to the ENGINEER a partial payment estimate filled out and signed by the CONTRACTOR covering the WORK performed during the period covered by the partial payment estimate and supported by such data as the ENGINEER may reasonably require. If payment is requested on the basis of materials and equipment not incorporated in the WORK but delivered and suitably stored at or near the site, the partial payment estimate shall also be accompanied by such supporting data, satisfactory to the OWNER as will establish the OWNER'S title to the material and equipment and protect the OWNER'S interest therein, including applicable insurance. The ENGINEER will, within 10 days after receipt of each partial payment estimate, either indicate in writing approval of payment, and present the partial payment estimate to the OWNER, or return the partial payment estimate to the CONTRACTOR indicating in writing the reasons for refusing to approve payment. In the latter case, the CONTRACTOR may make the necessary corrections and resubmit the partial payment estimate. The OWNER will, within 10 days of presentation of an approved partial payment estimate, pay the CONTRACTOR a progress payment on the basis of the approved partial payment estimate less the retainage. The retainage shall be an amount equal to 10 percent of said estimate until 50 percent of the work has been completed. At 50 percent completion, further partial payments shall be made in full to the CONTRACTOR and no additional amounts may be retained unless the ENGINEER certifies that the job is not proceeding satisfactorily, but amounts previously retained shall not be paid to the CONTRACTOR. At 50 percent completion or any time thereafter when the progress of the WORK is not satisfactory, additional amounts may be retained but in no event shall the total retainage be more than 10 percent of the value of the work completed. Upon substantial completion of the work, any amount retained may be paid to the CONTRACTOR. When the WORK has been substantially completed except for WORK which cannot be completed because of weather conditions, lack of materials or other reasons which, in the judgment of the OWNER, are valid reasons for noncompletion, the OWNER may make additional payments, retaining at all times an amount sufficient to cover the estimated cost of the WORK still to be completed.
- 19.2. The request for payment may also include an allowance for the cost of such major materials and equipment which are suitably stored either at or near the site.
- 19.3. Prior to SUBSTANTIAL COMPLETION, the OWNER, with the approval of the ENGINEER and with the concurrence of the CONTRACTOR, may use any completed or substantially completed portions of the WORK. Such use shall not constitute an acceptance of such portions of the WORK.
- 19.4. The OWNER shall have the right to enter the premises for the purpose of doing work not covered by the CONTRACT DOCUMENTS. This provision shall not be construed as relieving the CONTRACTOR of the sole responsibility for the care and protection of the WORK, or the restoration of any damaged WORK except such as may be caused by agents or employees of the OWNER.
- 19.5. Upon completion and acceptance of the WORK, the ENGINEER shall issue a certificate attached to the final payment request that the WORK has been accepted under the conditions of the CONTRACT DOCUMENTS. The entire balance found to be due the CONTRACTOR, including the retained percentages, but except such sums as may be lawfully retained by the OWNER, shall be paid to the CONTRACTOR within 30 days of completion and acceptance of the WORK.
- 19.6. The CONTRACTOR will indemnify and save the OWNER or the OWNER'S agents harmless from all claims growing out of the lawful demand of SUBCONTRACTORS, laborers, workmen, mechanics, materialmen, and furnishers of machinery and parts thereof, equipment, tools, and all supplies, incurred in the furtherance of the performance of the WORK. The CONTRACTOR shall, at the OWNER'S request, furnish satisfactory evidence that all obligations of the nature designated above have been paid, discharged, or waived. If the CONTRACTOR fails to do so, the OWNER may, after having notified the CONTRACTOR, either pay unpaid bills or withhold from

the CONTRACTOR'S unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to the CONTRACTOR shall be resumed in accordance with the terms of the CONTRACT DOCUMENTS, but in no event shall the provisions of this sentence be construed to impose any obligations upon the OWNER to either the CONTRACTOR, the CONTRACTOR'S Surety, or any third party. In paying any unpaid bills of the CONTRACTOR, any payment so made by the OWNER shall be considered as a payment made under the CONTRACT DOCUMENTS by the OWNER to the CONTRACTOR and the OWNER shall not be liable to the CONTRACTOR for any such payments made in good faith.

- 19.7. If the OWNER fails to make payment 30 days after approval by the ENGINEER, in addition to other remedies available to the CONTRACTOR, there shall be added to each such payment interest at the maximum legal rate commencing on the first day after said payment is due and continuing until the payment is received by the CONTRACTOR.

20. **ACCEPTANCE OF FINAL PAYMENT AS RELEASE.**

- 20.1. The acceptance by the CONTRACTOR of final payment shall be and shall operate as a release to the OWNER of all claims and all liability to the CONTRACTOR other than claims in stated amounts as may be specifically excepted by the CONTRACTOR for all things done or furnished in connection with this WORK and for every act and neglect of the OWNER and others relating to or arising out of this WORK. Any payment, however, final or otherwise, shall not release the CONTRACTOR or its sureties from any obligations under the CONTRACT DOCUMENTS or the PERFORMANCE and PAYMENT BONDS.

21. **INSURANCE.**

- 21.1. The CONTRACTOR shall purchase and maintain such insurance as will protect it from claims set forth below which may arise out of, or result from the CONTRACTOR'S execution of the WORK, whether such execution be by the CONTRACTOR, any SUBCONTRACTOR, or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:
- 21.1.1. Claims under workmen's compensation, disability benefit and other similar employee benefit acts;
 - 21.1.2. Claims for damages because of bodily injury, occupational sickness or disease, or death of employees;
 - 21.1.3. Claims for damages because of bodily injury, sickness or disease, or death of any person other than employees;
 - 21.1.4. Claims for damages insured by usual personal injury liability coverage which are sustained (1) by any person as a result of an offense directly or indirectly related to the employment of such person by the CONTRACTOR, or (2) by any other person; and
 - 21.1.5. Claims for damages because of injury to or destruction of tangible property, including loss of use resulting therefrom.
- 21.2. Certificates of Insurance acceptable to the OWNER shall be filed with the OWNER prior to commencement of the WORK. These Certificates shall contain a provision that coverages afforded under the policies will not be canceled unless at least 15 days prior WRITTEN NOTICE has been given to the OWNER.
- 21.3. The CONTRACTOR shall procure and maintain, at the CONTRACTOR'S own expense, during the CONTRACT TIME, liability insurance as hereinafter specified:

21.3.1. CONTRACTOR'S General Public Liability and Property Damage Insurance including vehicle coverage issued to the CONTRACTOR and protecting the CONTRACTOR from all claims for personal injury, including death, and all claims for destruction of or damage to property, arising out of or in connection with any operations under the CONTRACT DOCUMENTS, whether such operations be by the CONTRACTOR or by any SUBCONTRACTOR employed by the CONTRACTOR or anyone directly or indirectly employed by the CONTRACTOR or by a SUBCONTRACTOR employed by the CONTRACTOR. Insurance shall be written with a limit of liability of not less than \$500,000 for all damages arising out of bodily injury, including death, at any time resulting therefrom, sustained by any one person in any one accident; and a limit of liability of not less than \$500,000 aggregate for any such damages sustained by two or more persons in any one accident. Insurance shall be written with a limit of liability of not less than \$200,000 for all property damage sustained by any one person in any one accident; and a limit of liability of not less than \$200,000 aggregate for any such damage sustained by two or more persons in any one accident.

21.3.2. The CONTRACTOR shall acquire and maintain, if applicable, Fire and Extended Coverage Insurance upon the PROJECT to the full insurable value thereof for the benefit of the OWNER, the CONTRACTOR, and SUBCONTRACTORS as their interest may appear. This provision shall in no way release the CONTRACTOR or CONTRACTOR'S surety from obligations under the CONTRACT DOCUMENTS to fully complete the PROJECT.

21.4. The CONTRACTOR shall procure and maintain, at the CONTRACTOR'S own expense, during the CONTRACT TIME, in accordance with the provisions of the laws of the state in which the WORK is performed, Workmen's Compensation Insurance, including occupational disease provisions, for all of the CONTRACTOR'S employees at the site of the PROJECT and in case any WORK is sublet, the CONTRACTOR shall require such SUBCONTRACTOR similarly to provide Workmen's Compensation Insurance, including occupational disease provisions for all of the latter's employees unless such employees are covered by the protection afforded by the CONTRACTOR. In case any class of employees engaged in hazardous work under this contract at the site of the PROJECT is not protected under Workmen's Compensation statute, the CONTRACTOR shall provide, and shall cause each SUBCONTRACTOR to provide adequate and suitable insurance for the protection of its employees not otherwise protected.

21.5. The CONTRACTOR shall secure, if applicable, "All Risk" type Builder's Risk Insurance for WORK to be performed. Unless specifically authorized by the OWNER, the amount of such insurance shall not be less than the CONTRACT PRICE totaled in the BID. The policy shall cover not less than the losses due to fire, explosion, hail, lightning, vandalism, malicious mischief, wind, collapse, riot, aircraft, and smoke during the CONTRACT TIME and until the WORK is accepted by the OWNER. The policy shall name as the insured the CONTRACTOR, and the OWNER.

22. CONTRACT SECURITY.

22.1. The CONTRACTOR shall within 10 days after the receipt of the NOTICE OF AWARD furnish the OWNER with a PERFORMANCE BOND and a PAYMENT BOND in penal sums equal to the amount of the CONTRACT PRICE, conditioned upon the performance by the CONTRACTOR of all undertakings, covenants, terms, conditions and agreements of the CONTRACT DOCUMENTS, and upon the prompt payment by the CONTRACTOR to all persons supplying labor and materials in the prosecution of the WORK provided by the CONTRACT DOCUMENTS. Such BONDS shall be executed by the CONTRACTOR and a corporate bonding company licensed to transact such business in the state in which the WORK is to be performed and named on the current list of "Surety Companies Acceptable on Federal Bonds" as published in the Treasury Department Circular Number 570. The expense of these BONDS shall be borne by the CONTRACTOR. If at any time a surety on any such BOND is declared bankrupt or loses its right to do business in the state in which the WORK is to be performed or is removed from the list of Surety Companies

accepted on Federal Bonds, CONTRACTOR shall within 10 days after notice from the OWNER to do so, substitute an acceptable BOND (or BONDS) in such form and sum and signed by such other surety or sureties as may be satisfactory to the OWNER. The premium on such BOND shall be paid by the CONTRACTOR. No further payment shall be deemed due nor shall be made until the new surety or sureties have furnished an acceptable BOND to the OWNER.

23. ASSIGNMENTS.

23.1. Neither the CONTRACTOR nor the OWNER shall sell, transfer, assign, or otherwise dispose of the Contract or any portion thereof, or of any right, title or interest therein, or any obligations thereunder, without written consent of the other party.

24. INDEMNIFICATION.

24.1. The CONTRACTOR will indemnify and hold harmless the OWNER and the ENGINEER and their agents and employees from and against all claims, damages, losses and expenses including attorney's fees arising out of or resulting from the performance of the WORK, provided that any such claims, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property including the loss of use resulting therefrom; and is caused in whole or in part by any negligent or willful act or omission of the CONTRACTOR, and SUBCONTRACTOR, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.

24.2. In any and all claims against the OWNER or the ENGINEER, or any of their agents or employees, by any employee of the CONTRACTOR, any SUBCONTRACTOR, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the CONTRACTOR or any SUBCONTRACTOR under workmen's compensation acts, disability benefit acts or other employee benefits acts.

24.3. The obligation of the CONTRACTOR under this paragraph shall not extend to the liability of the ENGINEER, its agents or employees arising out of the preparation or approval of maps, DRAWINGS, opinions, reports, surveys, CHANGE ORDERS, designs or SPECIFICATIONS.

25. SEPARATE CONTRACTS.

25.1. The OWNER reserves the right to let other contracts in connection with this PROJECT. The CONTRACTOR shall afford other CONTRACTORS reasonable opportunity for the introduction and storage of their materials and the execution of their WORK, and shall properly connect and coordinate the WORK with theirs. If the proper execution or results of any part of the CONTRACTOR'S WORK depends upon the WORK of any other CONTRACTOR, the CONTRACTOR shall inspect and promptly report to the ENGINEER any defects in such WORK that render it unsuitable for such proper execution and results.

25.2. The OWNER may perform additional WORK related to the PROJECT or the OWNER may let other contracts containing provisions similar to these. The CONTRACTOR will afford the other CONTRACTORS who are parties to such Contracts (or the OWNER, if the OWNER is performing the additional WORK) reasonable opportunity for the introduction and storage of materials and equipment and the execution of WORK, and shall properly connect and coordinate the WORK with theirs.

25.3. If the performance of additional WORK by other CONTRACTORS or the OWNER is not noted in the CONTRACT DOCUMENTS prior to the execution of the CONTRACT, written notice thereof shall be given to the CONTRACTOR prior to starting any such additional WORK. If the CONTRACTOR believes that the performance of such additional WORK by the OWNER or others

involves it in additional expense or entitles it to an extension of the CONTRACT TIME, the CONTRACTOR may make a claim thereof as provided in Sections 14 and 15.

26. SUBCONTRACTING.

- 26.1. The CONTRACTOR may utilize the services of specialty SUBCONTRACTS on those parts of the WORK which, under normal contracting practices, are performed by specialty SUBCONTRACTORS.
- 26.2. The CONTRACTOR shall not award WORK to SUBCONTRACTOR(S), in excess of 50 percent of the CONTRACT PRICE, without prior written approval of the OWNER.
- 26.3. The CONTRACTOR shall be fully responsible to the OWNER for the acts and omissions of its SUBCONTRACTORS, and of persons either directly or indirectly employed by them, as the CONTRACTOR is for the acts and omissions of persons directly employed by the CONTRACTOR.
- 26.4. The CONTRACTOR shall cause appropriate provisions to be inserted in all subcontracts relative to the WORK to bind SUBCONTRACTORS to the CONTRACTOR by the terms of the CONTRACT DOCUMENTS insofar as applicable to the WORK of SUBCONTRACTORS and to give the CONTRACTOR the same power as regards terminating any subcontract that the OWNER may exercise over the CONTRACTOR under any provision of the CONTRACT DOCUMENTS.
- 26.5. Nothing contained in this CONTRACT shall create any contractual relationship between any SUBCONTRACTOR and the OWNER.

27. ENGINEER'S AUTHORITY.

- 27.1. The ENGINEER shall act as the OWNER'S representative during the construction period, shall decide questions which may arise as to quality and acceptability of materials furnished and WORK performed, and shall interpret the intent of the CONTRACT DOCUMENTS in a fair and unbiased manner. The ENGINEER will make visits to the site and determine if the WORK is proceeding in accordance with the CONTRACT DOCUMENTS.
- 27.2. The CONTRACTOR will be held strictly to the intent of the CONTRACT DOCUMENTS in regard to the quality of materials, workmanship, and execution of the WORK. Inspections may be made at the factory or fabrication plant of the source of material supply.
- 27.3. The ENGINEER will not be responsible for the construction means, controls, techniques, sequences, procedures, or construction safety.
- 27.4. The ENGINEER shall promptly make decisions relative to interpretation of the CONTRACT DOCUMENTS.

28. LAND AND RIGHTS-OF-WAY.

- 28.1. Prior to issuance of the NOTICE TO PROCEED, the OWNER shall obtain all land and rights-of-way necessary for carrying out and for the completion of the WORK to be performed pursuant to the CONTRACT DOCUMENTS, unless otherwise mutually agreed.
- 28.2. The OWNER shall provide to the CONTRACTOR information which delineates and describes the lands owned and rights-of-way acquired.
- 28.3. The CONTRACTOR shall provide at its own expense and without liability to the OWNER any additional land and access thereto that the CONTRACTOR may desire for temporary construction facilities, or for storage of materials.

29. GUARANTEE.

29.1. The CONTRACTOR shall guarantee all materials and equipment furnished and WORK performed for a period of 1 year from the date of SUBSTANTIAL COMPLETION. The CONTRACTOR warrants and guarantees for a period of 1 year from the date of SUBSTANTIAL COMPLETION of the system that the completed system is free from all defects due to faulty materials or workmanship and the CONTRACTOR shall promptly make such corrections as may be necessary by reason of such defects including the repairs of any damage to other parts of the system resulting from such defects. The OWNER will give notice of observed defects with reasonable promptness. In the event that the CONTRACTOR should fail to make such repairs, adjustments, or other WORK that may be made necessary by such defects, the OWNER may do so and charge the CONTRACTOR the cost thereby incurred. The PERFORMANCE BOND shall remain in full force and effect through the guarantee period.

30. ARBITRATION BY MUTUAL AGREEMENT.

30.1. All claims, disputes, and other matters in question arising out of, or relating to, the CONTRACT DOCUMENTS or the breach thereof, except for claims which have been waived by making an acceptance of final payment as provided by Section 20, may be decided by arbitration if the parties mutually agree. Any agreement to arbitrate shall be specifically enforceable under the prevailing arbitration law. The award rendered by the arbitrators shall be final, and judgment may be entered upon it in any court having jurisdiction thereof.

30.2. Notice of the request for arbitration shall be filed in writing with the other party to the CONTRACT DOCUMENTS and a copy shall be filed with the ENGINEER. Request for arbitration shall in no event be made on any claim, dispute, or other matter in question which would be barred by the applicable statute of limitations.

30.3. The CONTRACTOR will carry on the WORK and maintain the progress schedule during any arbitration proceedings, unless otherwise mutually agreed in writing.

31. TAXES.

31.1. The CONTRACTOR will pay all sales, consumer, use, and other similar taxes required by the laws of the place where the WORK is performed.

SPECIAL CONDITIONS

SC-1. GENERAL.

The following Special Conditions, particular to this project, are intended to complement or supplement the preceding General Conditions and shall be of like import.

SC-2. OWNERSHIP.

The completed facilities shall be owned, operated and maintained by HENDERSON COUNTY WATER DISTRICT, hereinafter referred to as the OWNER. All workmanship and materials shall be in conformance with the OWNER'S requirements. Acceptance of this project and final payment therefor shall be contingent thereon. The OWNER'S representatives shall have the right of access to the WORK in progress and the right to inspect said WORK.

SC-3. CONTRACT DOCUMENTS.

The following CONTRACT DOCUMENTS shall govern the materials furnished and the WORK to be performed on this contract:

GENERAL CONTRACT DOCUMENTS AND SPECIFICATIONS ENTITLED "HENDERSON COUNTY WATER DISTRICT, HENDERSON COUNTY, KENTUCKY, 1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS - CONTRACT "A", NOVEMBER, 1999 (BID: MARCH, 2000)".

CONTRACT DRAWINGS BEING PLANS SHEETS COVER THROUGH 10 ENTITLED "HENDERSON COUNTY WATER DISTRICT, HENDERSON COUNTY, KENTUCKY, 1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS - CONTRACT "A", NOVEMBER, 1999 (BID: MARCH, 2000)".

ADDENDA (IF APPLICABLE) TO BE ACKNOWLEDGED IN THE BID.

The CONTRACTOR shall be furnished, without cost, THREE COPIES of all CONTRACT DOCUMENTS with any addenda thereto. Additional copies, if required, may be obtained from the ENGINEER at cost.

SC-4. CLAIMS BY THE CONTRACTOR.

If the CONTRACTOR believes he is entitled to a change in the contract price or time, or both, he shall give the ENGINEER written notice and documentation of the basis for the claim within 7 days of the cause of such claim. The ENGINEER will, within 7 days of such claim notice, either prepare a change order for processing or notify the CONTRACTOR in writing of the reason for rejection. Also see GC-13 and GC-14.

If the ENGINEER'S decision is not acceptable, the CONTRACTOR, within 7 days after the ENGINEER'S response, shall notify the OWNER of his intention to pursue the claim.

As the OWNER has limited funds for this project and must operate within its established budget, no claim shall be recognized or admissible for legal process unless presented as described.

SC-5. PROJECT INSPECTION.

The OWNER may employ supervisors or inspectors to inspect materials furnished and the WORK performed to see that they are in accordance with the Plans, Specifications, and the OWNER'S standards.

Suggestions by or approval of any plan or method of WORK by the OWNER'S representative shall imply consent, but adoption of any such plan or method shall be at the CONTRACTOR'S own risk and responsibility.

PROJECT INSPECTION, TESTS OR APPROVALS BY THE OWNER'S REPRESENTATIVE OR OTHERS SHALL NOT RELIEVE THE CONTRACTOR FROM HIS OBLIGATIONS TO PERFORM THE WORK IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH HEREIN.

Inspectors, and other properly authorized representatives of the OWNER, shall be free always to perform their duties. Intimidation or attempted intimidation of any one of them by the CONTRACTOR or by any of his employees shall be sufficient reason for dismissal of said employee or annulment of the contract.

SC-6. ENVIRONMENTAL PROTECTION.

The CONTRACTOR shall minimize siltation and bank erosion during construction and shall restore disturbed areas to present or better conditions. All chemicals used during project construction or furnished for project operation, whether herbicide, pesticide, disinfectant, polymer, reactant, or of other classification, must show approval by either EPA or USDA. Use of all such chemicals and disposal of residue shall be in strict conformance with the instructions.

SC-7. MATERIALS, EQUIPMENT AND WORKMANSHIP.

Unless otherwise specified, all materials and equipment shall be new and shall be of standard quality for the use intended. Reference to a proprietary product of a particular manufacturer or vendor is to establish a standard of quality. The CONTRACTOR may furnish with his bid the name and identifying information of each item upon which his bid is based and if this information is not submitted, he shall be obligated to furnish the product specified.

Approval of samples, shop drawings, etc. shall not mean final acceptance and they shall be subject to inspection and test on delivery and installation. The CONTRACTOR shall repair, replace, and/or adjust any materials or equipment found defective or not operating properly for 1 year after completion and acceptance of his WORK.

The CONTRACTOR shall always require strict discipline and good order among his employees and shall not employ on the WORK any unfit person or anyone not skilled in the WORK assigned to him. Any careless, untrustworthy, or incompetent workers shall be removed upon the request of the ENGINEER or his representative.

SC-8. MATERIALS COMPATIBILITY.

All materials must be compatible with the OWNER'S existing materials concerning interchangeability and appearance unless otherwise specifically approved.

SC-9. SAMPLES.

It shall be the CONTRACTOR'S responsibility to obtain and submit samples of painting, brick and similar "appearance" materials to the ENGINEER for approval as to color, texture, etc.

SC-10. CONSTRUCTION PROCEDURE.

A complete organization, equipment and ample materials shall be on hand before WORK commences. They shall be satisfactory for securing the quality of WORK specified and for continuous progress for the earliest possible completion of the project.

The CONTRACTOR shall provide and maintain a local project or field office and field telephone throughout the term of the project. A representative of the CONTRACTOR should be available to receive notices and messages during working hours and a local telephone shall be maintained for 24 hour emergency calls.

The Resident Inspector shall be permitted access to and use of the CONTRACTOR'S field office to maintain his records and his communications.

Prior to commencement of WORK, the CONTRACTOR shall:

- a. Notify the ENGINEER of the project superintendent's name and telephone number.
- b. Contact utility companies for location and protection of their facilities.
- c. Notify the ENGINEER, 3 days in advance, of when construction will commence.

No underground WORK shall be covered until it has been inspected by the OWNER'S representative.

SC-11. PROGRESS SCHEDULE.

Prior to commencement of WORK, the CONTRACTOR shall submit a Progress Schedule for the ENGINEER'S approval. The schedule shall show the sequence of the WORK for continuous progress. It shall be used for coordination of the OWNER'S operations, for the Inspector's scheduling, and as a basis for justifying a time extension, if required.

The Progress Schedule shall be revised (as required) and updated at the time each payment request is submitted as outlined in the General Conditions.

SC-12. SALVAGED MATERIALS.

Salvaged materials shall remain the property of the OWNER, unless otherwise shown, and shall be removed from the site to the OWNER'S storage yard, or as otherwise directed.

SC-13. RIGHTS-OF-WAY.

The OWNER shall furnish all land and rights-of-way required on this project. He shall obtain all permits and easements for crossings or occupancy of highways, railroads and other public and private property. No WORK shall be begun until the CONTRACTOR has a copy of said permit or easement and can comply with all requirements thereof.

SC-14. PERMITS.

Unless otherwise noted, the CONTRACTOR shall be responsible for the cost of all electric service hookups, Building Permits, Electrical Inspection Permits, Plumbing Permits, etc. and shall arrange for such permits to prevent delay in his WORK.

The CONTRACTOR shall also be responsible for the cost of running new electrical service, if required.

SC-15. WORKING HOURS.

WORK shall not exceed 40 hours per week and no WORK will be done between the hours of 6:00 P.M. and 7:00 A.M. nor on Saturdays, Sundays or legal holidays, without the written approval or permission of the ENGINEER in each case.

SC-16. CLEANUP AND RESTORATION.

The CONTRACTOR shall continuously maintain cleanup operations along the line of WORK and near any structures. Cleanup shall include the removal of all refuse, rubbish, scrap materials and debris and the finish dressing (hand raking, if necessary) of all areas to the satisfaction of the ENGINEER. Restoration shall include maintenance of any settled trenches and landscaping, if required. No item of WORK shall be

considered complete until cleanup and restoration are accomplished and, if not satisfactory in the opinion of the ENGINEER, payment may be withheld until such cleanup and restoration are accomplished.

The Contractor shall protect all shrubbery and shall be responsible for replacing any damaged shrubbery to the property owner's satisfactions. Restoration shall be in accordance with Specification 14.

SC-17. MAINTENANCE OF TRAFFIC AND SAFETY.

The CONTRACTOR shall, at his own expense, provide and maintain suitable accommodations for public and private travel near his WORK. Adequate warning signs, lights, barricades and other safety devices shall be maintained and shall comply with the requirements of any governing agency.

The local fire department, school district, etc. shall be notified of all detours and route changes.

SC-18. EXISTING UTILITIES.

It shall be the CONTRACTOR'S sole responsibility to learn the exact location of all utilities; to notify the utility OWNER; to protect all utilities through his operations; and to pay for any damage that may occur.

The exact location of existing utilities, either aboveground or underground, shall be determined by the CONTRACTOR far enough in advance of the WORK to permit adjustments in alignment or protection of the utility. Existing utilities, if shown on the Plans, are only approximate to alert the CONTRACTOR of their existence.

If the CONTRACTOR fails to locate existing utilities far enough in advance to permit realignment of the WORK, relocation of the existing utility or of the WORK shall be at his expense.

SC-19. MAINTAINING WATER SERVICE.

The CONTRACTOR shall maintain water service to all customers throughout construction and shall organize his WORK for the least inconvenience to all customers and residents. All customers whose water service will be interrupted shall be notified by the CONTRACTOR, in advance, and service shall be restored as soon as possible.

SC-20. PROGRESS PAYMENTS.

The 13th day of the month shall be used as a cut-off date for figuring monthly partial payments. Requests for partial payments shall be submitted for the ENGINEER'S approval not later than the 18th day of the month. Payment of said estimate shall be made by the 29th day of the following month.

Payrolls, with the necessary certification, shall be submitted to the proper authorities in accordance with the applicable regulations and a copy of the transmittal letter and one copy of the payroll shall be submitted to the OWNER. One copy of the transmittal letter shall be submitted to the ENGINEER.

SC-21. QUANTITIES OF ESTIMATE.

The quantities of WORK covered by unit prices in the bid are the ENGINEER'S estimates of the WORK to be done and may increase or decrease to complete the WORK contemplated by this project. The CONTRACTOR agrees that payment for any increases or decreases in the quantities shall be based on the unit price bid and that payment shall be made only for the actual WORK performed.

The CONTRACTOR shall verify all quantities before preparing his bid or placing his order.

SC-22. AFFIDAVIT OF PAYMENT.

Upon completion of the WORK, but before the acceptance thereof by the OWNER, the CONTRACTOR shall furnish proof in documentary form that all claims, liens, or other obligations incurred by him and all of his contractors in connection with the performance of the WORK have been properly paid and settled. This information shall be in affidavit form and shall bear the authorization of the surety company, if applicable.

SC-23. FINAL ADJUSTING CHANGE ORDER.

At the end of this project, a final adjusting change order shall be prepared to show over-runs and under-runs to balance all of the quantities.

SC-24. RECORDS.

The CONTRACTOR shall be responsible for maintaining a set of Record Plans showing the size, type of material and location of all new construction and of any existing facilities located during the WORK.

An extra set of Plans shall be furnished for records and shall be submitted to the ENGINEER at the end of the project for the OWNER'S permanent record.

SC-25. "OR EQUAL" CLAUSE.

It shall be the CONTRACTOR'S responsibility to furnish substantiating data that any product is equal to or better than the proprietary product specified.

SC-26. PROTECTION OF PROPERTY AND PUBLIC LIABILITY.

The CONTRACTOR shall assume full responsibility for the protection of all public and private property both above and below ground where WORK under this project is being performed.

The CONTRACTOR shall indemnify and save harmless the OWNER, the OWNER'S Representatives and the ENGINEER from and against all losses and all claims, demands, payments, suits, actions, recoveries, and judgments of every nature and description brought against him due to any act or omission of the said CONTRACTOR, his agents, or employees in the execution of the WORK or in its protection.

Said responsibilities shall apply despite the location of the damage and it shall be the CONTRACTOR'S sole responsibility to make such corrections and adjustments to the satisfaction of those whose property or premises have been damaged by his operation.

SC-27. LIABILITY.

The OWNER or ENGINEER shall not be liable for the safety of persons or property on or about a construction project site, or for the construction techniques, procedures, sequences and schedules, or for the conduct, action, errors, or omissions of the CONTRACTOR, his subcontractors, or his material suppliers, their agents or employees.

Further, it is the CONTRACTOR'S responsibility to protect and save harmless the OWNER and ENGINEER from any suits arising out of claims including the hiring, at his own expense, of the necessary professional help to defend the OWNER and ENGINEER.

The CONTRACTOR is also referred to the General Conditions regarding liability, protection of property, etc.

SC-28. EMERGENCIES.

In an emergency that threatens loss or injury to persons or property, the CONTRACTOR will be allowed to act diligently without previous instructions from the ENGINEER.

Wherever, in the opinion of the ENGINEER, an emergency exists and immediate action is considered necessary, the performance of emergency WORK under the direction of the ENGINEER, with or without notice to the CONTRACTOR, shall in no way relieve the CONTRACTOR of responsibility for damage that may occur.

SC-29. SAFETY AND SANITARY REGULATIONS.

The CONTRACTOR shall comply with all local, State and Federal safety and sanitary regulations that may apply on this project.

SAFETY ON AND AROUND THE JOB SITE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

SC-30. SHOP DRAWINGS.

In accordance with the General Conditions, the CONTRACTOR shall submit EIGHT copies of Shop Drawings for all materials furnished and certify to their compliance with the Specifications. The CONTRACTOR'S certification shall be as follows:

PROJECT TITLE	_____
CONTRACT:	_____
BID ITEM NO.:	_____
WE CERTIFY THAT THIS SHOP DRAWING SUBMITTAL IS IN COMPLIANCE WITH THE PLANS AND SPECIFICATIONS FOR THE ABOVE PROJECT.	
NO EXCEPTION:	_____
EXCEPTION:	_____
APPROVED BY:	_____
DATE:	_____

TWO COPIES of the approved shop drawings shall be returned to the CONTRACTOR.

SC-31. WAGE DETERMINATION.

WORK on this project shall be subject to prevailing wage rates for public works that are current at the time of bidding and are included herein.

The CONTRACTOR, in preparing his bid, agrees to the terms of the prevailing wage rates as part of this project without additional compensation.

SC-32. WEATHER CONDITIONS.

No portion of the WORK shall be constructed under conditions that would adversely affect the quality or efficiency thereof. The CONTRACTOR shall be responsible for protecting his WORK and materials against damage or injury from the weather.

SC-33. TIME EXTENSIONS FOR ABNORMAL WEATHER.

This section specifies the procedure for the determination of time extensions due to abnormal and unforeseeable weather as outlined in the General Conditions, Section 15.4.2. Reference is also made to Section 15.4 regarding prompt written notice.

For the purposes of this section the term "adverse weather day" shall mean a day when construction cannot proceed due to precipitation (not wet conditions caused by precipitation), provided the CONTRACTOR is prevented from working for 50 percent or more of his normal WORK day.

The listing below defines the monthly anticipated adverse weather days (including weekends and holidays) and shall form the "base line" for monthly (or portion thereof) weather time evaluation.

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
12	12	10	10	10	8	8	8	7	10	11	11

Upon acknowledgment of the Notice To Proceed, the CONTRACTOR shall keep an accurate and detailed record of actual adverse weather days monthly (including weekends and holidays) and this shall be compared to the anticipated adverse weather days listed above.

Time extensions shall be granted only where adverse weather affects WORK shown on the Progress Schedule.

At the end of each month, the CONTRACTOR shall request from the ENGINEER, in writing, a time extension based on the number of actual adverse days that exceeded the anticipated adverse days. Supporting documentation shall be furnished.

The ENGINEER shall review the information and notify the CONTRACTOR whether the request is justified. If the request is justified, a change order will be processed later.

SC-34. PRECONSTRUCTION CONFERENCE.

The CONTRACTOR shall attend a preconstruction conference with the OWNER, ENGINEER, and any other interested parties prior to commencement of WORK. Construction procedures and requirements shall be outlined and discussed in detail.

SC-35. TRENCH SETTLEMENT.

The CONTRACTOR shall be responsible for all trench settlement for 1 year after final acceptance by the OWNER.

SC-36. CORRECTION OF WORK.

The ENGINEER shall be the final judge of the quality and suitability of the WORK, materials, processes of manufacture, and methods of construction for the purpose for which they are used. Should they fail to meet the ENGINEER'S approval, they shall be corrected prior to acceptance of the extension.

SC-37. PATENTS, LICENSE AND ROYALTY FEES.

It shall be the CONTRACTOR'S responsibility to satisfy all of the demands and conditions pertaining to any patents used in this project.

SC-38. INSURANCE.

The CONTRACTOR shall have and maintain, during the life of this project, workmen's compensation insurance, public liability insurance, property damage insurance and automobile liability insurance in legal and/or reasonable limits of liability.

SC-39. LAWS AND ORDINANCES.

The CONTRACTOR shall always observe and comply with all ordinances, laws and regulations and shall protect and indemnify the OWNER and the OWNER'S agents against any claims or liability arising from or based on any violation of same.

SC-40. GUARANTEE.

The CONTRACTOR shall guarantee all materials and equipment furnished and Work performed for a period of 1 year from the date of Substantial Completion. The CONTRACTOR warrants and guarantees for a period of 1 year from the date of Substantial Completion of the system that the completed system is free from all defects due to faulty materials or workmanship and the CONTRACTOR shall promptly make such corrections as may be necessary by reason of such defects including the repairs of any damage to other parts of the system resulting from such defects. The OWNER will give notice of observed defects with reasonable promptness. In the event that the CONTRACTOR should fail to make such repairs, adjustments, or other Work that may be made necessary by such defects, the OWNER may do so and charge the CONTRACTOR the cost thereby incurred. The Performance Bond shall remain in full force and effect through the guarantee period.

SC-41. BASIS OF BID.

The bid, and all the items and sub-items thereof, shall be made on the attached form that shall be filled out completely. All the costs of the WORK and payment therefor shall be included in the lump-sum and unit prices set forth in the proposal form. No item of WORK that is required by the CONTRACT DOCUMENTS shall be paid for outside of, or in addition to, the prices submitted on the proposal form unless specifically authorized by a proper change order and unit prices shall control.

The following is to clarify the basis of bidding:

CONTRACT "A":

1. Mobilization/Demobilization.

Mobilization/Demobilization cost on this project shall be shown as one lump sum and may include the cost of insurance, bonds, site office, moving equipment, etc. Mobilization/demobilization shall not exceed 4 per cent of the total construction cost. Payment of mobilization/demobilization shall be as follows:

70% with the first monthly estimate.

30% when the project is 95 per cent complete.

2. Water Mains.

Payment for water mains (including jointing materials) shall be at the unit price bid per lineal foot, for each size and type of pipe, and shall include excavation, furnishing, laying, connections, embedment, testing, disinfecting and backfilling. Measurement for payment will be straight through with no deduction for the length of fittings.

3. Fittings.

Payment for iron fittings shall be at the unit price bid per pound based on published weights for compact (AWWA C153) M.J. fittings not including accessories and cement linings. Unit prices shall be the one average price bid per pound for the fitting size shown (largest pipe size of fitting).

Payment for PVC fittings (3 inches and smaller) shall be at the average unit price bid.

Payment shall include installation and blocking/anchorage/restraint.

4. Valves W/Cast Iron Box.

Payment for valves with the valve box shall be at the unit price bid for each size and shall include furnishing and installation complete.

5. Special Fittings.

Payment for special fittings, service saddles, tapping sleeves, inserting valves, etc. shall be made at the unit price bid for each size and/or type and shall include furnishing and installation complete.

6. Clamps and Couplings.

Payment for clamps and couplings, for joining and repairing all types and sizes of pipes, shall be at the average unit price bid for each size pipe. Payment shall include installation complete. No payment shall be allowed where the Contractor skips for road crossings, bores, etc. instead of pipe laying straight through or continuous.

7. Tie-ins.

Payment for a tie-in, where shown on the Plans, shall be for labor and equipment only where tie-in is made to an existing line with standard fittings. Payment for all materials required shall be made under a separate bid item. A wet tie-in made with special fittings (tapping sleeves, inserting valves, saddles, etc.) shall be included in the cost of the special.

8. Hydrants.

Payment for hydrants shall be at the unit price bid per size and type of hydrant shown and shall include the hydrant, thrust blocking, gravel or stone drain and extensions (if required) installed complete. Payment for valves (if required), connecting pieces, couplings, and all fittings shall be made under a separate bid item.

9. Air Release Valves W/Box.

Payment for air release valves shall be at the unit price bid for each valve and shall include the box and cover, all accessories and installation complete.

10. Meter Settings.

Payment for a meter setting shall be at the unit price bid for each size meter and shall include the meter, meter box and lid, service clamp, corporation stop and meter valve installed complete. The meter and meter box shall be furnished by the OWNER. Payment for the service line shall be made under a separate bid item.

Payment for meter reconnections shall be made at the unit price bid and shall include the service clamp, corporation stop, meter valve and connection to the existing meter setting complete. Payment shall also include relocation of existing meters if required. New meters and meter boxes shall be supplied by the OWNER. Payment for the new service line shall be made under a separate bid item.

11. Service Lines.

Payment for service lines shall be at the unit price bid for the size and type material used and for the type of installation (bore or open cut). Measurement, where a bore is required, will be for the length of the bore required plus any additional service line in open cut.

12. Bore With Casing.

Payment for a bore with casing shall be made at the unit price bid per lineal foot for the size casing required and shall include the bore, casing and installation complete. Payment for the carrier pipe (same material as other mains) shall be made under a separate bid item. Measurement will be made by the minimum length of casing required by the permit or specified by the Engineer.

13. Bore Without Casing.

Payment for a bore without casing shall be made at the unit price bid per lineal foot for the size of the carrier pipe and shall include the bore and installation complete. Payment for the carrier pipe (same material as other mains) shall be made under a separate bid item. Measurement for payment shall be the length of the area being bored plus 10 feet, unless otherwise directed by the Engineer.

14. Open Cut Casing.

Payment for open-cut casing shall be made at the unit price bid per lineal foot for the size of casing shown and shall include the cost of the casing installation complete. Payment for the carrier pipe (same material as other mains) and crushed stone backfill shall be made under separate bid items. Measurement for payment shall be the length of the casing installed unless otherwise directed by the Engineer.

15. Additional Depth.

Payment for additional depth required to install the water mains between 7'-1" and 15' deep shall be paid for at the unit price bid per lineal foot of main installed at the extra depth. Payment shall include additional excavation, shoring, etc., but shall not include pipe which shall be paid under a separate bid item. Additional depth shall be paid for at authorized locations only.

16. Crushed Stone.

Payment for all grades of crushed stone in place, at authorized locations, shall be at the unit price bid per cubic yard. Authorized locations include resurfacing, special foundations and backfill under permanent surface. Measurement for payment for resurfacing shall be based on the normal trench width plus one foot times the length of the surface crossed times a compacted thickness of 6 inches. Measurement for payment for special foundations and backfill under a permanent surface shall be based on the normal trench width times the length required times the depth as directed by the Engineer. Payment shall not be made for replacement due to settlement or for pipe embedment.

17. Rip Rap.

Payment for 150# grade of rip rap stone in place, at authorized locations, shall be at the unit price bid per cubic yard. Authorized locations include ditch and creek crossing as directed by the engineer.

18. Concrete Encasement.

Payment for concrete pipe encasement shall be made at the unit price bid per lineal foot in place, at authorized locations.

19. Asphalt Pavement Replacement.

Payment for asphalt pavement replacement shall be at the unit price bid per square yard for 2 inch compacted thickness. Measurement of the area for payment shall be based on the normal trench width plus two feet times the length of the surface crossed. Payment for other depths, approved by the Engineer, shall be proportioned. Payment shall not include replacement due to settlement.

20. Concrete Pavement Replacement.

Payment for concrete pavement replacement, at authorized locations, shall be at the unit price bid per cubic yard of concrete in place and shall include all materials and finishing to match the existing surfaces. Measurement for payment shall be based on the normal trench width plus one foot times the length of the surface crossed times the depth required to match the existing surface or as directed by the Engineer. Replacement due to settlement shall be at the Contractor's expense.

PAUL E. PATTON
GOVERNOR



DIVISION OF EMPLOYMENT STANDARDS,
APPRENTICESHIP AND TRAINING

JOE NORSWORTHY
SECRETARY

Larry L. Roberts
~~XXXXXXXXXXXX~~
DIRECTOR

LABOR CABINET
1047 US HWY 127 S STE 4
FRANKFORT KY 40601-4381

February 18, 2000

Mr. Rod H. Martin
Hunter Martin & Associates
3220 Lone Oak Road
Paducah, Kentucky 42003

Re: Henderson County Water District
1999/2000 Water Distribution System Improvements

Advertising Date as Shown on Notification: February 23, 2000

Dear Mr. Martin:

This office is in receipt of your written notification on the above project as required by KRS 337.510(1).

I am enclosing a copy of the current prevailing wage determination number CR-7-101, dated February 14, 2000, for Henderson County. This schedule of wages shall be attached to and made a part of the specifications for the work, printed on the bidding blanks, and made a part of the contract for the construction of the public works between the public authority and the successful bidder or bidders.

The determination number assigned to this project is based on the date contained in your notification as the date the project is advertised for bids. The commissioner has chosen to adopt the prevailing wages as determined by the United States Department of Labor for the aforementioned county. There may be modifications to this rate determination prior to your advertising date. It is the responsibility of the public authority to contact this office a few days before advertising to be certain the correct schedule of the prevailing rates of wages are included in the project.

Your project number is as follows: 101-2-0061-00-7

Sincerely,

Larry L. Roberts
Director

rprh

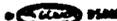
Enclosure



INTERNET ADDRESS
<http://www.state.ky.us/agencies/labor>

PHONE (502) 564-3070
FAX (502) 564-2248

An Equal Opportunity Employer M/F/D



SC-12

COMMISSIONER'S CURRENT REVISION
KENTUCKY PREVAILING WAGE DETERMINATION
HENDERSON COUNTY

NOTICE

Determination No. CR-7-101

THIS DETERMINATION APPLIES TO

Date of Determination: February 14, 2000 PROJECT NO. 101-2-0061-00-7

This schedule of the prevailing rate of wages for Henderson County has been determined in accordance with the provisions of KRS 337.505 to 337.550. The commissioner has chosen to adopt the prevailing wages as determined by the United States Department of Labor for this county. This determination shall be referred to as Prevailing Wage Determination No. CR-7-101, which includes General Decision Nos. KY000029 for Building Construction and KY000025 for Heavy/Highway Construction. This will also include any modifications since the original publication date of this determination.

Apprentices or trainees shall be permitted to work as such subject to Administrative Regulations adopted by the Commissioner of Workplace Standards. Copies of these regulations will be furnished upon request to any interested person.

Overtime is to be computed at not less than one and one-half (1 1/2) times the indicated BASE RATE for all hours worked in excess of eight (8) per day, or in excess of forty (40) per week. However, KRS 337.540 permits an employee and employer to agree, in writing, that the employee will be compensated at a straight time base rate for hours worked in excess of eight (8) hours in any one workday, but not more than ten (10) hours worked in any one workday, if such written agreement is prior to the over eight (8) hours in a workday actually being worked, or where provided for in a collective bargaining agreement. The fringe benefit rate is to be paid for each hour worked at a straight time rate for all hours worked.

No laborer, workman or mechanic shall be paid at a rate less than that of the General Laborer except those classified as bona fide apprentices registered with the Kentucky State Apprenticeship Supervisor unless otherwise specified in this schedule of wage rates.

Fringe benefit amounts are applicable for all hours worked except when otherwise noted.

NOTE: The type of construction shall be determined by applying the following definitions.

BUILDING CONSTRUCTION

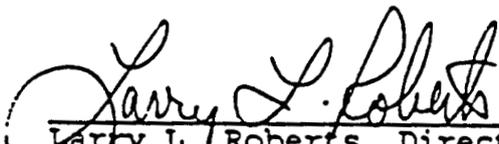
Building construction is the construction of sheltered enclosures with walk-in access for the purpose of housing persons, machinery, equipment, or supplies. It includes all construction of such structures, the installation of utilities and the installation of equipment, both above and below grade level, as well as incidental grading, utilities and paving.

HIGHWAY CONSTRUCTION

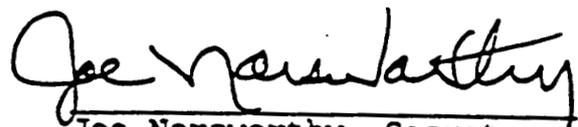
Highway construction includes the construction, alteration or repair of roads, streets, highways, runways, taxiways, alleys, trails, paths, parking areas, and other similar projects not incidental to building or heavy construction. It includes all incidental construction in conjunction with the highway construction project.

HEAVY CONSTRUCTION

Heavy projects are those projects that are not properly classified as either "building" or "highway". For example, dredging projects, water and sewer line projects, dams, flood control projects, sewage treatment plants and facilities, and water treatment plants and facilities are considered heavy.


Larry L. Roberts, Director
Employment Standards,
Apprenticeship & Training
Kentucky Labor Cabinet

&


Joe Norsworthy, Secretary
Kentucky Labor Cabinet
Frankfort, Kentucky 40601

This 14th day of February, 2000.

GENERAL DECISION KY000025 02/18/00 KY25
General Decision Number KY000025

Superseded General Decision No. KY990025

State: Kentucky

Construction Type:
HEAVY
HIGHWAY

County(ies):

ALLEN	FULTON	MCCRACKEN
BALLARD	GRAVES	MCLEAN
BUTLER	HANCOCK	MUHLENBERG
CALDWELL	HENDERSON	OHIO
CALLOWAY	HICKMAN	SIMPSON
CARLISLE	HOPKINS	TODD
CHRISTIAN	LIVINGSTON	TRIGG
CRITTENDEN	LOGAN	UNION
DAVISS	LYON	WARREN
EDMONSON	MARSHALL	WEBSTER

Heavy and Highway Construction Projects

Modification Number	Publication Date
0	02/11/2000
1	02/18/2000

COUNTY(ies):

ALLEN	FULTON	MCCRACKEN
BALLARD	GRAVES	MCLEAN
BUTLER	HANCOCK	MUHLENBERG
CALDWELL	HENDERSON	OHIO
CALLOWAY	HICKMAN	SIMPSON
CARLISLE	HOPKINS	TODD
CHRISTIAN	LIVINGSTON	TRIGG
CRITTENDEN	LOGAN	UNION
DAVISS	LYON	WARREN
EDMONSON	MARSHALL	WEBSTER

BRIN0004C 04/01/1999

	Rates	Fringes
CRITTENDEN, DAVIESS, HANCOCK, HENDERSON, LIVINGSTON, MCLEAN, OHIO, UNION & WEBSTER COUNTIES:		

BRICKLAYERS	22.41	5.15
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BRTN0004E 05/01/1999

	Rates	Fringes
ALLEN, BALLARD, BUTLER, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, EDMONSON, FULTON, GRAVES, HICKMAN, HOPKINS, LOGAN, LYON, MARSHALL, MCCRACKEN, MUHLENBERG, SIMPSON, TODD, TRIGG & WARREN		

COUNTIES:

BRICKLAYERS	20.16	1.60
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CARP0357C 07/01/1999

	Rates	Fringes
CARPENTERS	19.20	5.18
FILEDRIVERMEN	19.45	5.18
DIVERS	29.175	5.18

CARP1031M 06/01/1999

	Rates	Fringes
ALLEN, BUTLER, EDMONSON, LOGAN, SIMPSON & WARREN COUNTIES:		

MILLRIGHTS	20.41	8.74
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CARP1080E 06/16/1997

	Rates	Fringes
BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON, GRAVES, HICKMAN, HOPKINS, LIVINGSTON, LYON, MARSHALL, MCCRACKEN, TODD & TRIGG COUNTIES:		

MILLRIGHTS	19.05	5.37
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CARP1080G 06/01/1997

	Rates	Fringes
DAVISS, HANCOCK, HENDERSON, MCLEAN, MUHLENBERG, OHIO, UNION & WEBSTER COUNTIES:		

MILLRIGHTS	19.40	6.67
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ELEC0369I 08/01/1999

	Rates	Fringes
BUTLER, EDMONSON, LOGAN, TODD & WARREN COUNTIES:		

ELECTRICIANS	22.60	6.91
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ELEC0429B 01/01/1998

	Rates	Fringes
ALLEN & SIMPSON COUNTIES:		

ELECTRICIANS	15.85	4.115
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ELEC0816E 06/01/1999

	Rates	Fringes
BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON (Except a 5 mile radius of City Hall in Fulton), GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN & TRIGG COUNTIES:		

ELECTRICIANS:

Electricians	22.00	7.42
Cable Splicers	22.25	7.47

ELEC1701C 06/01/1999

	Rates	Fringes
DAVISS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, MUHLENBERG, OHIO, UNION & WEBSTER COUNTIES:		

ELECTRICIANS:

Electricians	22.04	7.015
Heilarc Welding; & Cable Splicing	22.29	7.06

ELEC1925B 07/01/1999

	Rates	Fringes
FULTON COUNTY (Up to a 5 mile radius of City Hall in Fulton):		

ELECTRICIANS	14.90	6.75
CABLE SPLICERS	15.40	6.76

ENGI0181X 01/01/2000

	Rates	Fringes
POWER EQUIPMENT OPERATORS:		
GROUP 1	20.35	6.90
GROUP 2	17.93	6.90
GROUP 3	18.31	6.90
GROUP 4	17.67	6.90

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1 - A-Frame Winch Truck; Auto Patrol; Backfiller; Batcher Plant; Bituminous Paver; Bituminous Transfer Machine; Boom Cat; Bulldozer; Mechanic; Cableway; Carry-All Scoop; Carry Deck Crane; Central Compressor Plant; Clamshell; Concrete Mixer (21 cu. ft. or Over); Concrete Paver; Truck-Mounted Concrete Pump; Core Drill; Crane; Crusher Plant; Derrick; Derrick Boat; Ditching & Trenching Machine; Dragline; Dredge Operator; Dredge Engineer; Elevating Grader & Loaders; Grade-All; Gurries; Heavy Equipment Robotics Operator/Mechanic; High Lift; Hoe-Type Machine; Hoist (Two or More Drums); Hoisting Engine (Two or More Drums); Horizontal Directional Drill Operator; Hydrocrane; Hyster; KeCal Loader; LeTourneau; Locomotive; Mechanic; Mechanically Operated Laser Screed; Mechanic Welder; Mucking Machine; Motor Scraper; Orangepeel Bucket; Piledriver; Power Blade; Pumpcrete; Push Dozer; Rock Spreader, attached to equipment; Rotary Drill; Roller (Bituminous); Scarifier; Scoopmobile; Shovel; Side Boom; Subgrader; Tailboom; Telescoping Type Forklift; Tow or Push Boat; Tower Crane (French, German & other types); Tractor Shovel; Truck Crane; Tunnel Mining Machines, including Moles, Shields or similar types of Tunnel Mining Equipment

GROUP 2 - Air Compressor (Over 900 cu. ft. per min.); Bituminous Mixer; Boom Type Tamping Machine; Bull Float; Concrete Mixer

(Under 21 cu. ft.); Dredge Engineer; Electric Vibrator; Compactor/Self-Propelled Compactor; Elevator (One Drum or Buck Hoist); Elevator (When used to Hoist Building Material); Finish Machine; Firemen & Hoist (One Drum); Flexplane; Forklift (Regardless of Lift Height); Form Grader; Joint Sealing Machine; Outboard Motor Boat; Power Sweeper (Riding Type); Roller (Rock); Ross Carrier; Skid Mounted or Trailer Mounted Concrete Pump; Switchman or Brakeman; Throttle Valve Person; Tractair & Road Widening Trencher; Tractor (50 H.P. or Over); Truck Crane Oiler; Tugger; Welding Machine; Well Points; & Whirley Oiler

GROUP 3 - Greaser on Grease Facilities servicing Heavy Equipment

GROUP 4 - Bituminous Distributor; Burlap & Curing Machine; Cement Gun; Concrete Saw; Conveyor; Deckhand Oiler; Grout Pump; Hydraulic Post Driver; Hydro Seeder; Mud Jack; Oiler; Paving Joint Machine; Power Form Handling Equipment; Pump; Roller (Earth); Steerman; Tamping Machine; Tractor (Under 50 H.P.); & Vibrator

CRANES WITH BOOMS 150 ft. & Over (Including JIB) \$.50 Premium

EMPLOYEES ASSIGNED TO WORK BELOW GROUND LEVEL ARE TO BE PAID 10% ABOVE BASIC WAGE RATE. THIS DOES NOT APPLY TO OPEN CUT WORK.

IRON0070G 06/01/1999

	Rates	Fringes
BUTLER COUNTY (Eastern eighth, including the Townships of Decker, Lee & Tilford);		

EDMONSON COUNTY (Northern three-fourths, including the Townships of Asphalt, Bee Spring, Brownsville, Grassland, Huff, Kyrock, Lindseyville, Mammoth Cave, Ollie, Prosperity, Rhoda, Sunfish & Sweden):

IRONWORKERS:

Structural; Ornamental;		
Reinforcing; Precast Concrete Erectors	20.96	9.67

IRON0103E 04/01/1999

	Rates	Fringes
BUTLER COUNTY (Townships of Aberdeen, Bancock, Casey, Dexterville, Dunbar, Elfie, Gilstrap, Huntsville, Logansport, Monford, Morgantown, Provo, Rochester, South Hill & Welchs Creek);		

CALDWELL COUNTY (Northeastern third, including the Township of Creswell);

CHRISTIAN COUNTY (Northern third, including the Townships of Apex, Crofton, Kelly, Mannington & Wynns);

CRITTENDEN COUNTY (Northeastern half, including the Townships of Grove, Mattoon, Repton, Shady Grove & Tribune);

MUHLENBERG COUNTY (Townships of Bavier, Beech Creek Junction, Benton, Brennen, Browder, Central City, Cleaton, Depoy, Drakesboro, Eunis, Graham, Hillside, Luzerne, Lynn City, Martwick, McNary, Millport, Moorman, Nelson, Paradise, Powderly, South Carrollton, Tarina & Weir);

DAVISS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, OHIO, UNION & WEBSTER COUNTIES:

IRONWORKERS	20.90	9.05
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IRON0492C 05/01/1999

Rates Fringes

BUTLER COUNTY (Southern third, including the Townships of Boston, Berrys Lick, Dimple, Jetson, Quality, Sharer, Sugar Grove & Woodbury);

CHRISTIAN COUNTY (Eastern two-thirds, including the Townships of Bennettstown, Casky, Herndon, Hopkinsville, Howell, Masonville, Pembroke & Thompsonville);

EDMONSON COUNTY (Southern fourth, including the Townships of Chalybeate & Rocky Hill);

MUHLENBERG COUNTY (Southern eighth, including the Townships of Dunnior, Penrod & Rosewood);

ALLEN, LOGAN, SIMPSON, TODD & WARREN COUNTIES:

IRONWORKERS	17.16	5.39
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IRON0782H 08/01/1999

Rates Fringes

CALDWELL COUNTY (Southwestern two-thirds, including the Townships of Cedar Bluff, Cider, Claxton, Cobb, Crowtown, Dulaney, Farmersville, Fredonia, McGowan, Otter Pond & Princeton);

CHRISTIAN COUNTY (Western third, Excluding the Townships of Apex, Crofton, Kelly, Mannington, Wynns, Bennettstown, Casky, Herndon, Hopkinsville, Howell, Masonville, Pembroke & Thompsonville);

CRITTENDEN COUNTY (Southwestern half, including the Townships of Crayne, Dycusburg, Frances, Marion, Mexico, Midway, Sheridan & Told);

BALLARD, CALLOWAY, CARLISLE, FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCrackEN & TRIGG COUNTIES:

IRONWORKERS:

Projects with a total contract cost of \$20,000,000.00 or above	20.15	9.36
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All Other Work 18.85 8.40

LABO0189E 07/01/1999

	Rates	Fringes
LABORERS:		
GROUP 1	15.35	5.13
GROUP 2	15.60	5.13
GROUP 3	15.65	5.13
GROUP 4	16.25	5.13

LABORER CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; & Wrecking of Concrete Form

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer); Brickmason

Tender; Mortar Mixer Operator; Burner & Welder; Bushammer; Chain Saw Operator; Concrete Saw Operator; Deckhand Scow Man; Dry Cement Handler; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level C; Forklift Operator for Masonary; Form Setter; Green Concrete Cutting; Hand Operated Grouter & Grinder Machine Operator; Jackhammer; Pavement Breaker; Paving Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven Georgia Buggy & Wheel Barrow; Power Post Hole Digger; Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind Trencher; Sand Blaster; Concrete Chipper; Surface Grinder; Vibrator Operator; & Wagon Driller

GROUP 3 - Air Track Driller; Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Powderman & Blaster; Side Rail Setter; Rail Paved Ditch; Screw Operator; Tunnel (Free Air); & Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air)

PAIN0032E 05/01/1999

	Rates	Fringes
BALLARD COUNTY:		
PAINTERS:		
Bridges & Dams	23.07	6.03
All Other Work	18.77	6.03

Spray, Blast, Steam, High & Hazardous (Including Lead Abatement)
and All Epoxy - \$1.00 Premium

PAIN0118C 05/01/1999

	Rates	Fringes
EDMONSON COUNTY:		
PAINTERS:		
Brush	16.17	4.15
Abrasive Blaster; Fireproofing; Lead Abatement; Spray; & Waterblasting 4000 PSI and Above		
	16.67	4.15

PAIN0156G 04/01/1999

	Rates	Fringes
DAVISS, HANCOCK, HENDERSON, MCLEAN, OHIO, UNION & WEBSTER COUNTIES:		
PAINTERS:		
BRIDGES, LOCKS & DAMS:		
GROUP 1	20.65	5.88
GROUP 2	20.90	5.88
GROUP 3	21.65	5.88
GROUP 4	22.65	5.88
ALL OTHER WORK:		
GROUP 1	19.50	5.88
GROUP 2	19.75	5.88
GROUP 3	20.50	5.88
GROUP 4	21.50	5.88

PAINTER CLASSIFICATIONS

GROUP 1 - Brush & Roller

GROUP 2 - Plasterers

GROUP 3 - Spray; Sandblast; Power Tools; Waterblast;
Steamcleaning; Brush & Roller of Mastics, Creosotes, Kwinch
Koate & Coal Tar Epoxy

GROUP 4 - Spray of Mastics, Creosotes, Kwinch Koate & Coal Tar
Epoxy

PAIN0456D 05/01/1999

	Rates	Fringes
ALLEN, BUTLER, LOGAN, MUHLENBERG, SIMPSON, TODD & WARREN COUNTIES:		
PAINTERS:		
Brush	15.43	4.30
Spray; Sandblast; Boswain Chair		

or Heights over 50 feet 15.93 4.30

PAIN0500C 05/01/1999

	Rates	Fringes
CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON, GRAVES, HICKMAN, HOPKINS, LIVINGSTON, LYON, MARSHALL, MCCRACKEN & TRIGG COUNTIES:		

PAINTERS:

Bridges & Dams	20.00	4.52
All Other Work	15.00	4.52

Spray, Sandblasting & Waterblasting - units with 3500 PSI and
above - \$.50 premium

Work 40 ft. and above ground level - \$1.00 premium

PLUM0107E 08/01/1999

	Rates	Fringes
ALLEN, BUTLER, EDMONSON, SIMPSON & WARREN COUNTIES:		

PLUMBERS; GAS FITTERS:

Plumbing contracts less than

\$150,000.00	17.84	5.32
All Other Plumbing contracts	22.76	5.32

PLUM0184C 05/01/1999

	Rates	Fringes
BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN (Excluding Ft. Campbell), CRITTENDEN, FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN & TRIGG COUNTIES:		

PLUMBERS & STEAMFITTERS	22.33	7.26
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* PLUM0522C 08/01/1999

	Rates	Fringes
ALLEN, BUTLER, EDMONSON, SIMPSON & WARREN COUNTIES:		

PIPEFITTERS & STEAMFITTERS	23.40	7.73
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PLUM0572F 05/01/1999

	Rates	Fringes
CHRISTIAN COUNTY (Ft. Campbell Only):		

PIPEFITTER; PLUMBER	20.04	4.85
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PLUM0633B 01/01/1999

	Rates	Fringes
DAVISS, HANCOCK, HENDERSON, HOPKINS, LOGAN, MCLEAN, MUHLENBERG, OHIO, TODD, UNION & WEBSTER COUNTIES:		

PLUMBERS & PIPEFITTERS

22.435

5.58

TEAM0089C 03/31/1999

Rates

Fringes

TRUCK DRIVERS:

ALLEN, BUTLER, EDMONSON, LOGAN, SIMPSON & WARREN COUNTIES:

GROUP 1	15.94	7.275
GROUP 2	16.17	7.275
GROUP 3	16.24	7.275
GROUP 4	16.25	7.275

BALLARD, CALLOWAY, CALDWELL, CARLISLE, CHRISTIAN, CRITTENDEN,
 FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN,
 TODD & TRIGG COUNTIES:

GROUP 1	20.34	2.95
GROUP 2	20.57	2.95
GROUP 3	20.64	2.95
GROUP 4	20.65	2.95

DAVISS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, MUHLENBERG, OHIO,
 UNION & WEBSTER COUNTIES:

GROUP 1	17.58	6.30
GROUP 2	17.81	6.30
GROUP 3	17.88	6.30
GROUP 4	17.89	6.30

TRUCK DRIVER CLASSIFICATIONS

GROUP 1 - Greaser, Tire Changer

GROUP 2 - Truck Mechanic

GROUP 3 - Single Axle Dump & Flatbed; Terrain Vehicle when used
 to haul materials; Semi-Trailer or Pole Trailer when used to
 pull building materials & equipment; Tandem Axle Dump;
 Distributor; & Mixer

GROUP 4 - Euclid, Other Heavy Earthmoving Equipment & Lowboy;
 Articulator Cat Truck & 5 Axle Vehicle; Winch & A-Frame when
 used in transporting materials; Ross Carrier; Fork Lift Truck
 when used to transport building materials; & Drivers on
 Pavement Breaker

WELDERS - Receive rate prescribed for craft performing operation
 to which welding is incidental.

Unlisted classifications needed for work not included within
 the scope of the classifications listed may be added after
 award only as provided in the labor standards contract clauses
 (29 CFR 5.5(a)(1)(v)).

In the listing above, the "SU" designation means that rates listed under that identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final.
END OF GENERAL DECISION

SUPPLEMENT
TO
SPECIFICATION 1, DISTRIBUTION AND PIPING
FOR
HENDERSON COUNTY WATER DISTRICT
WATER MAIN EXTENSION ON KENTUCKY HIGHWAY 283

OCTOBER, 1998

1-2. MATERIALS.

DELETE THE FOLLOWING:

- 1-2.7. SERVICE LINES.
- 1-2.8. SERVICE METERS.
- 1-2.10. WATER MAIN LOCATORS.

ADD THE FOLLOWING:

1-2.7. SERVICE LINES AND ACCESSORIES.

a. Pipe.

All service lines shall be Type K copper conforming with ASTM B88.

b. Saddles.

Saddles shall be Ford S70 Series for 6 inch main size and smaller. For pipe larger 6 inch, they shall be Smith-Blair double strap, No. 317.

c. Corporation Stops.

Corporation stops shall be Ford F600.

d. Eighth Bends.

Eighth bends shall be Ford LA 04-33 SG.

1-2.8. SERVICE METERS AND ACCESSORIES.

a. Meter Boxes.

Meter boxes shall be Goddard Concrete Products No. 36 series with two 12 inch sections (24").

b. Ball Valves.

Ball valves shall be Ford B 43-232 WG (with winglock grip).

c. Meters.

Service meters shall be Rockwell Sensus II, sealed register, oscillating piston type with magnetic drive and shall be straight reading in U. S. gallons. The shall have a plastic break.

d. Meter Couplings (House Side).

Meter couplings shall be Ford C38-23-2.5.

1-2.10 IDENTIFYING/DETECTABLE WIRE.

Identifying/detectable wire for laying in the trench above the water line shall be 12 gauge copper wire.

1-3. CONSTRUCTION.

1-3.13. BACKFILLING.

DELETE:

Delete the last paragraph in its entirety.

ADD:

Identifying/detectable 12 gauge copper wire shall be laid continuously and directly above the pipe approximately 12" to 18" below the ground surface.

SPECIFICATION 1

DISTRIBUTION SYSTEM AND PIPING

1-1. GENERAL.

This Specification pertains to furnishing all materials and construction of the complete distribution system. The intent herein is to be in accordance with the AWWA and the National Sanitation Foundation Standards that shall complement these Specifications.

In an existing system all materials must be compatible with the existing materials with regard to wrench sizes, operation, interchangeability and appearance (fire hydrants) unless otherwise specifically shown or approved.

1-2. MATERIALS.

1-2.1. DISTRIBUTION MAINS.

Distribution mains and fittings of a particular material shall be the product of one manufacturer. Jointing materials, including rubber gaskets, packing glands, flanges, bolts, lubricants, solvents, etc., shall be as recommended by the pipe manufacturer, shall comply with AWWA Standards and shall withstand a safe working pressure of not less than 150 psi, unless otherwise shown.

a. Iron Pipe.

Ductile iron pipe shall be AWWA C151 (ANSI A21.51). All iron pipe shall have cement-mortar lining conforming with AWWA C104 (ANSI A21.4). Jointing shall be with push-on or mechanical joints for Class 50 (150 psi working pressure) pipe.

b. Plastic Pipe.

Plastic pipe shall conform with ASTM D 2241 polyvinyl chloride (PVC) pressure pipe, 1-1/2 inches through 12 inches and shall bear the National Sanitation Foundation seal. Unless otherwise shown the pipe shall be SDR26, pressure rated at 160 psi. Jointing shall be with rubber ring gaskets.

PVC pipe, 14 inches through 30 inches, shall have an integral bell and spigot joints and shall be in accordance with AWWA C905. Pipe shall be DR18 unless otherwise shown.

1-2.2. FITTINGS.

All fittings larger than 3 inches shall be gray iron or ductile iron. All fittings, 3 inches and smaller, shall be PVC.

Iron fittings shall comply with AWWA C110 (ANSI A21.10) or AWWA C153 (ANSI A21.53) and the inside of the fittings shall be cement-mortar lined in accordance with AWWA C104. The outside coating shall be bituminous material approximately one mil thick. Rubber gaskets shall conform with AWWA C111 (ANSI A21.11).

1-2.3.

VALVES.

a. Gate Valves.

Gate valves larger than 2 inches shall be iron body, bronze mounted, with a nonrising stem and shall comply with AWWA C500 (double-disc) or AWWA C509 (resilient-seated). Valves below ground shall be wrench operated; valves above grade shall be wheel or lever operated; and all valves shall operate clockwise to close. All valves, 2 inches and smaller, shall be bronze body.

b. Butterfly Valves.

Butterfly valves, 2 inches through 20 inches, shall conform with AWWA C504 and shall have a minimum working pressure or rating of 150 psi. They shall have semi-steel or cast iron bodies with lug end connections for use with flanged CIP. The shaft seal shall be hycar and the seat shall be neoprene. They shall have bronze discs, 416 stainless steel shafts and bronze bearings. Valves below ground shall operate with a square nut through a worm gear and 3 operating wrenches shall be furnished for each size operating nut. For valves above grade, the actuator shall be of the lever type with 10 position or adjustable memory stops as shown on the Plans. All valves shall close clockwise and open counterclockwise.

Butterfly valves shall be installed in the distribution system with flanged to mechanical joint connecting pieces.

c. Valve Boxes.

Valve boxes shall be cast iron if located where subject to traffic. PVC boxes may be used at other locations. All valve boxes shall be adjustable with a minimum adjustment of 3 inches either higher or lower. Boxes for 2 inch through 14 inch valves shall have a 5-1/4 inch shaft diameter and the covers shall be cast iron with the word "WATER" cast in the top surface.

d. Valve Wrenches.

Three valve wrenches, approximately 6 feet in length, shall be furnished for each different type and/or size required.

e. Air Valves:

Air valves, either air release or combination air release and air vacuum, shall have a cast iron body, stainless steel trim and floats and a working pressure of 300 psi. They shall be direct acting or simple lever-type with full ported valves; parts shall be interchangeable; and they shall not require special tools for maintenance. The size and type air valve shall be as shown on the Plans.

All air valves shall be mounted upright on the main with a service clamp and shall have a shutoff valve between the air valve and the main. They shall be installed in a 30 inch I.D. by 30 inch deep valve box (CMP, PVC, clay or concrete) having a cast iron frame and locking, solid lid, Neenah Foundry R-5900 series, or equal.

The box shall be centered on the valve, shall be set plumb with the top slightly above grade and shall be filled from the bottom of the main to 4 inches below the shutoff valve with No. 57 crushed stone.

1-2.4. FIRE HYDRANTS.

Fire hydrants shall be three-way with two 2-1/2 inch hose nozzles and one 4-1/2 inch pumper nozzle and shall comply with AWWA C502. Hose connections and operating nuts shall be National Standard. The minimum valve opening shall be 5-1/4 inches, shall close with the pressure and shall remain closed if the hydrant barrel is broken or damaged. The hydrant shall have a replaceable, breakable flange or section. The operating nut shall be a pentagon shape, shall operate counterclockwise to open, and an "open" direction arrow shall be cast in the bonnet. The normal depth of bury shall be 42 inches. Three hydrant wrenches and one replaceable, breakable flange shall be furnished.

All hydrants shall be painted with a primer coat equal to Rustoleum No. 960 primer and a finish coat of "Fire Hydrant Red" equal to Rustoleum No. 1210.

1-2.5. FLUSH HYDRANTS.

Flush hydrants shall be of the post type having 150 psi working pressure, 2-1/8 inch valve opening and a single 2-1/2 inch hose nozzle. In all other respects, the flush hydrant shall be the same as the standard fire hydrant

1-2.6. TAPPING, CUT-IN AND REPAIR MATERIALS.

a. Tapping Sleeves.

Tapping sleeves shall be Class 125 (ASA B16.1) similar to Mueller H-615. Stainless steel tapping sleeves may be used in lieu of ductile iron.

b. Tapping Crosses.

The tapping crosses shall be Class 125 (ASA B16.1) similar to Mueller H-715.

c. Tapping Valves.

Tapping valves shall be Class 125 (ASA B16.1) similar to Mueller H-667 for mechanical joint pipe or H-642 for asbestos cement pipe.

d. Split Repair Sleeves.

Split repair sleeves shall have 150 psi working pressure similar to Mueller H-777 for asbestos cement pipe and 200 psi working pressure similar to Mueller H-785 for mechanical joint pipe.

e. Cut-In Sleeves and Valves.

Cut-in sleeves shall be similar to Mueller H-840, or equal, and cut-in valves shall be similar to Mueller H-862, or equal.

f. Inserting Valves.

Inserting valves shall be similar to Mueller H-800.

g. Repair Clamps.

Repair clamps shall be stainless steel, fully gasketed and pressure rated to match or exceed the pipe on which it is to be installed. Unless otherwise directed, repair clamps shall be used only on PVC pipe and shall be similar to Mueller 500 Series.

1-2.7. SERVICE LINES.

a. Plastic Pipe.

Plastic pipe and fittings for service lines shall conform with AWWA C901 for polyethylene pipe and AWWA C902 for polybutylene pipe, shall have a pressure rating of 200 psi and shall bear the National Sanitation Foundation seal.

b. Copper Pipe.

Copper pipe for service lines shall conform with ASTM B-88, "Type K".

c. Service Line Accessories.

Corporation stops, curb stops, service fittings, etc., shall be of the finest quality bronze or brass as manufactured by Hays, Mueller, Ford or equal.

1-2.8. SERVICE METERS.

All service meters shall be of the nutating disc type or oscillating piston type and shall be straight reading in U. S. gallons. They shall have a magnetic coupled drive and shall comply with AWWA C700.

Residential meters, unless otherwise noted, shall be 5/8 inch x 3/4 inch size. All meters 5/8 inch through 1 inch shall be installed in a meter yoke. One and one-half inch and 2 inch meters shall have flanged ends with suitable adaptors and shall have an accuracy of 100 plus or minus 1.5 percent of actual thruput.

a. Meter Yokes.

Meter yokes shall have a horizontal inlet and outlet and shall have multipurpose end connections with a 1/4 turn stop and a lock wing stop on the inlet side. The height of the yoke shall be approximately 7 inches and it shall securely support the meter in a horizontal position. Meter yokes shall be Ford, Mueller, or equal.

b. Meter Boxes.

Meter boxes may be plastic, clay or concrete with an inside area equivalent to an 18 inch diameter. They shall be 24 inches deep with cut-outs for the service lines.

Covers shall be cast iron, painted with a coal tar enamel and shall have an 11 inch minimum diameter (or equivalent) opening. The lid shall be equipped with a lock and lifting device and a total of three keys shall be furnished.

Standard covers (not subject to traffic) shall weigh 30 to 40 pounds and shall be Mueller H-10810, Ford No. A 32, Neenah R-1914-B, or equal.

Extra heavy covers (subject to light traffic) shall be Ford No. A 32H, Neenah R-1914-B, or equal.

Boxes, for meters 1-1/2 inches and larger, shall be brick masonry or concrete approximately 30 inches deep and large enough to permit convenient service or removal of the meter. Frames and lids shall be cast iron, shall have a locking device and shall have the word "WATER" cast in the top. They shall be Ford Monitor covers or Ford rectangular meter pit covers, or equal.

1-2.9. CASING PIPE.

Casing pipe shall be seamless or continuous welded steel pipe having a minimum wall thickness of 0.25 inches and a minimum yield strength of 35,000 psi.

1-2.10. WATER MAIN LOCATORS.

a. Identifying/Detectable Tape.

Identifying/detectable tape shall be a minimum of 3 inches wide, shall be inert plastic film, highly resistant to acids and alkalis and a bright color. It shall be imprinted with "WATER LINE BELOW" and shall be "Terratape Detectable" or equal.

b. Tracer Wire.

Tracer wire shall be 12 gauge insulated copper wire and shall be suitable for underground installation. The tracer wire shall be securely attached to all valves, fire hydrants, flush hydrants, etc. Splices shall be made in a manner to insure conductivity.

1-2.11. RIVER CROSSING PIPE.

River crossing pipe shall be Class 5 ductile iron, 0.42 metal thickness and shall be boltless, similar to "Usiflex" as manufactured by U. S. Pipe, or equal.

1-3. CONSTRUCTION.

1-3.1. RESPONSIBILITY FOR MATERIALS.

The Contractor shall be responsible for all materials furnished by him and shall replace at his own expense all materials found defective or not complying with these Specifications. His responsibility shall be in effect for 1 year after acceptance by the Owner.

1-3.2. ALIGNMENT AND GRADE.

The water line shall be located as shown on the Plans and shall be parallel with streets and property lines where possible. It shall have a minimum cover of 42 inches. Through areas where an adjacent roadbed is in a cut section, the main shall be laid to a minimum depth of 36 inches below the centerline crown elevation of the adjacent road or street but shall not exceed a depth of 7 feet. Exceptions to this requirement (deeper or more shallow) shall be authorized, in specific cases, by the Engineer. There shall be no additional compensation for laying depths up to 7 feet. Bends shall be used at any abrupt changes in direction and lines shall be a minimum distance of 5 feet from any pavement.

1-3.3. TRENCH PREPARATION.

The trench shall be dug to the alignment and grade required and shall be braced and drained for safe, efficient working conditions. Excavation shall not exceed pipe laying at the end of the working period. All pipe line trench excavation shall be considered unclassified and the cost for excavation of any material (earth, sand, gravel, rock, concrete, etc.) shall be borne by the Contractor.

a. Width.

The trench width shall be the nominal diameter of the pipe being laid plus an additional 16 inches. Open cuts across paved surfaces shall be cut in straight, neat lines approximately 12 inches wider than the trench being dug.

b. Bell Holes.

Bell holes shall be provided for properly jointing the pipe and to maintain a 2 inch clearance around the pipe joint.

c. Excavation to Grade.

The trench shall be excavated to provide a uniform and continuous bearing and support for the pipe on solid ground at every point between bell holes. Any excavation below the specified grade shall be corrected with approved material, thoroughly compacted as directed by the Engineer. The finished subgrade shall be prepared accurately by means of hand tools.

d. Unsuitable Foundation.

Where the bottom of the trench at subgrade is found unstable or to include ashes, cinders, refuse, vegetable or other organic materials, or large pieces or fragments of inorganic material that in the judgment of the Engineer should be removed, the Contractor shall excavate and remove such unsuitable material to the width and depth ordered by the Engineer. The subgrade shall then be constructed by backfilling with an approved material, thoroughly compacted in 4 inch layers to provide a uniform and continuous support for the pipe at the specified grade.

e. Clearance in Rock.

Ledge rock, boulders and large stones shall be removed to provide a clearance of at least 6 inches below and on each side of all pipe valves and fittings for pipes 24 inches in diameter or less and 9 inches for pipes larger than 24 inches in diameter. The subgrade shall then be constructed in accordance with Item d above.

1-3.4.

CROSSINGS AND OCCUPANCY.

The Contractor shall comply with all provisions of the permits for any crossings or parallel occupancy.

For a crossing requiring boring and jacking, the Contractor shall be responsible for maintaining line and grade. Where casing is required, a continuous steel casing, with continuous welds, shall be installed by advancing the casing as the hole is being bored. The carrier pipe shall be supported inside of the casing with 18 inch long pressure treated wooden skids which shall be double strapped with No. 10 gauge stainless steel wire or stainless steel straps. The carrier pipe shall not rest on the bells or hubs. Carrier pipe 12 inches and smaller shall be encircled with 4 skids at 90° and carrier pipe from 14 inches to 24 inches shall have 6 skids at 60°. Skid support spacing shall not exceed 4.7 feet for 4 inch pipe; 6.3 feet for 6 inch pipe; 7.4 feet for 8 inch pipe; 8.5 feet for 10 inch pipe; 9.6 feet for 12 inch pipe and 12 feet for 18 inch through 27 inch pipe.

Manufactured plastic skids may be permitted.

Casing end seals shall be installed on all casings and shall be secured to the casing and carrier pipe with stainless steel bands in such a manner as to prevent damage to the seal if

there is any pipe movement. The seals shall be made of oil and water resistant rubber and shall be similar to those manufactured by Maloney Pipeline Products, or equal.

For crossings not requiring casing, the bore shall be made with one continuous section of pipe having no joints under the pavement.

Open cuts shall not be closer than 5 feet from the edge of the pavement on either side or in accordance with the permit.

1-3.5. EXISTING MAINS.

Where there are existing mains along the route of a new main, the existing main and services shall be protected and maintained at the Contractor's expense. If an existing main is to remain in service, it shall not have a "dead end" but shall be connected to form a grid or loop or as directed by the Engineer.

All materials for connections of existing service lines to the new main, after testing and disinfection, must be kept clean and free from all contamination during the changeover. All customers whose water service will be interrupted shall be notified and service shall be restored when possible.

Any main or service line to be abandoned shall be disconnected and capped or plugged at its connections to the live mains. Existing valves, in the abandoned main at its connection to the live main, shall be removed.

1-3.6. TIE-INS TO EXISTING MAINS.

All tie-ins to existing mains must be kept clean and free from all contamination while the cutting-in and connecting are being done. The Contractor shall determine the type of existing pipe at each tie-in location to verify the materials required for the most economical method (for the Owner) of making the tie-in. The method of making the tie-in shall be subject to the Engineer's approval.

The following conditions shall apply to all tie-ins.

- a. If necessary to cut the line out of service, the water operator and all affected customers shall be notified and service shall be restored when possible.
- b. The trench or excavation shall be kept completely dry by providing a sump and by pumping, if necessary.
- c. Excavation around the existing main shall be sufficient to allow thorough cleaning with a wire brush and disinfection with a strong chlorine solution to a point 12 inches either side of the fitting(s) being installed.
- d. The inside of all valves and fittings shall be clean and shall be thoroughly swabbed with a strong chlorine solution before being placed in the existing line.
- e. All connections shall be valved for the new main being installed. This valve shall remain tightly closed until disinfection of the new main has been completed.

1-3.7. PIPE LAYING.

Pipe shall be laid continuously with the bell ends facing in the direction of laying. The trench shall be dewatered and every precaution shall be taken to prevent foreign material from

entering the pipe during installation. All pipe must be perfectly clean before placing in the line.

All phases of installation, including handling, cutting, laying, aligning, and jointing, shall be in strict compliance with the manufacturer's recommendations and with the AWWA Standards.

At times when pipe laying is not in progress, the open ends of pipe shall be sealed by a water-tight plug. If water is in the trench, the seal shall remain in place until the trench is pumped completely dry.

Anchorage and blocking shall be as shown on the Plans.

1-3.8. VALVES AND FITTINGS.

All valves and fittings, not otherwise shown on the Plans, shall be of the slip-joint or mechanical-joint type. Valves shall be set level and the valve box shall be centered over the operating nut and thoroughly tamped in a plumb position. The top surface of the valve box shall be level with the street or slightly above grade when installed in fields or yards.

Existing valves or appurtenances to be abandoned shall be removed from the line.

1-3.9. FIRE HYDRANTS.

All hydrants shall be set plumb and truly vertical with the pumper connection on the street side. Cast-in-place concrete thrust blocks bearing squarely against undisturbed soil shall be placed, using care not to obstruct the hydrant barrel drains. Not less than 7 cubic feet of coarse gravel or crushed stone shall be placed from the bottom of the trench to at least 6 inches above the waste opening and 1 foot around the elbow to facilitate drainage. The hydrant nozzles shall be at least 12 inches above the established grade or ground line.

1-3.10. METER SETTINGS.

All meters shall be set level and the meter box shall be centered over the meter and thoroughly tamped in a plumb position. Five feet of service line, with a cap on the end, shall be stubbed out on the customer side of the meter. The top of the meter box cover shall be slightly above grade to prevent the entrance of surface water. The OWNER shall be notified of the date a meter is installed, the serial number of the meter and the initial meter reading.

1-3.11. HYDROSTATIC TEST.

All distribution and piping systems shall be hydrostatically tested in accordance with Specification 12.

1-3.12. DISINFECTION.

All existing facilities exposed to contamination and all new piping, materials and equipment shall be disinfected in strict conformance with Specification 12 before placing or replacing in service. The Engineer shall be furnished with a copy of the State approved bacteriological test report before the facilities are put into service.

1-3.13. BACKFILLING.

Pipe embedment from the bottom of the trench to the centerline of the pipe shall be with fine earth or sand. It shall be placed by hand on both sides of the pipe simultaneously.

Pipe embedment from the centerline of the pipe to a point 18 inches above the top of the pipe shall consist of finely divided earth or sand free from rocks, boulders or wet or sticky masses. This embedment shall be evenly spread and carefully compacted.

Backfilling to grade under a roadway or other permanent structure shall be with a compacted granular material (sand or DGA) and to the satisfaction of the Engineer. Other backfilling to grade, not shown on the Plans, may be altered to fit the particular situation and tamping may not be required, but the Contractor shall be responsible for all settlement for 1 year.

Identifying/detectable tape shall be laid continuously and directly above the pipe with the printed side up. The tape shall be installed approximately 12 to 18 inches below the ground surface. Tracer wire shall be placed directly above the pipe.

1-3.14. SERVICE LINES.

Service lines shall be connected after the main has been tested, approved, and disinfected. The minimum size service line shall be 3/4 inch and shall be connected to the main with a corporation stop. For PVC and AC main sizes 6 inches and smaller and for cast iron pipe 4 inches and smaller, connections shall be made with a strap service clamp or saddle. For larger size mains, the connection shall be made with a corporation stop having a tapered thread similar to the Mueller H-15000 series or having a rubber sealing sleeve similar to the "Hays-Seal", or equal. For 1 inch and 2 inch service lines, connection to the main shall be made with a double-strap service clamp. Larger service lines or mains shall be connected with a tapping sleeve or by installation of fittings in the main.

The service lines shall be run perpendicular to the main in a straight line to the meter box.

1-3.15. CREEK CROSSINGS.

Creek crossings, where possible, shall be made by gradually increasing the depth of the pipe to provide the specified cover at the lowest point. Crossings requiring the use of bends shall be approved by the Engineer. Payment for crossings shall be at the unit prices bid for the various items used including encasement, as directed.

1-3.16. SPOT EXCAVATION.

Spot excavation shall be a pay item for mobilization, all work and equipment to cover the cost for location of water mains and appurtenances and for excavation to install a valve or other appurtenance at the isolated location (where other work is not being done) as shown on the Plans and as directed by the Engineer.

Spot excavation shall include backfilling in accordance with Article 1-3.13 of this Specification.

The Contractor shall use extreme care to prevent damage to existing mains and appurtenances and the final 6 inches above the main shall be hand excavated. Valve boxes accidentally damaged during spot excavation shall be replaced at the expense of the Owner, but other damage to existing facilities shall be the responsibility of the Contractor.

If a working valve or other item is located, the Contractor shall adjust the valve box height but shall only be paid for spot excavation plus the unit price bid for any new materials used.

Payment for this item shall be at the lump sum bid and excavation at a noncontiguous location shall constitute a separate pay item.

1-3.17.

RECORDS.

The Contractor shall be responsible for maintaining a set of Record Plans showing the size, type of material and location of all new construction and of any existing water facilities located during the work. These Record Plans must always be available to the Engineer and shall be furnished to the Engineer at the end of construction for the Owner's permanent record.

SPECIFICATION 3

CONCRETE WORK

3-1. GENERAL.

This Specification shall include all labor, equipment and materials to complete the concrete work on this project. The Contractor shall supply the Engineer with a certificate for each design mix from the ready mix supplier for approval before ordering.

3-2. MATERIALS.

3-2.1. CONCRETE.

a. General.

Cement for all concrete shall conform with standard specifications for "portland cement", ASTM Designation C-150, Type I.

Fine aggregate shall consist of sand having clean, sound, hard, durable particles and shall be free from clay and organic impurities. The gradation shall be as follows: 100% passing a 3/8 inch sieve; 85-100% passing a No. 4 sieve; 40-80% passing a No. 16 sieve; 5-25% passing a No. 50 sieve; 0-5% passing a No. 100 sieve.

Coarse aggregate shall be crushed stone or washed gravel having hard, strong, durable qualities and shall be free from adherent coatings and laminated, soft or disintegrated pieces. Coarse aggregate for concrete shall be as follows: 100% passing a 1-1/2 inch sieve; 95-100% passing a 1 inch sieve; 25-60% passing a 1/2 inch sieve; 0-10% passing a No. 4 sieve; 0-5% passing a No. 8 sieve.

Water shall be clear, clean and free from injurious substances.

The concrete shall have 6% air plus or minus 1-1/2%. Admixtures containing more than 0.1% shall not be used.

b. Classification.

(1) Structural Concrete.

Structural concrete shall be Class A and is defined as floors, walls, roofs, foundations, footings, etc., having reinforcing steel and requiring form work.

(2) Plain Concrete.

Plain concrete shall be Class B and shall be used only if specified with or without WWF and minor forms.

(3) Encasement Concrete.

Concrete for encasement may be Class C.

c. Strength.

Concrete mixes shall be as follows:

- Class A - 3,500 psi in 28 days with 6 bags of cement (minimum).
- Class B - 2,500 psi in 28 days with 5 bags of cement (minimum).
- Class C - 4 bag mix for encasement only (no test required).

d. Consistency.

Concrete shall be proportioned to give a plastic, workable mix meeting the strength requirements by the absolute volume method. Slump tests shall be made in accordance with ASTM Designation C-143. The slump shall not exceed 4 inches for concrete vibrated in place or 5 inches (authorized by Engineer only) for hand consolidation in very thin walls.

3-2.2. REINFORCEMENT.

Bars for concrete reinforcement shall conform with ASTM Designation A-615, Grade 60 (yield strength 60,000 psi) for deformed bars and ASTM Designation A-185 for welded wire fabric (WWF). All reinforcement shall be free from rust, scale, grease or other coatings that might destroy or reduce its bond with the concrete.

3-2.3. JOINT FILLERS.

Preformed fillers shall be furnished in a single piece for the full depth and width required for the joint unless otherwise authorized. When use of more than one piece is authorized for a joint, the abutting ends shall be fastened securely and held accurately to shape.

All joint fillers shall conform with AASHTO Standards and be as approved by the ENGINEER.

3-2.4. JOINT SEALERS.

a. Hot-poured elastic.

Hot-poured elastic joint sealers shall conform with ASTM D 3405 and all applicable Kentucky Transportation Cabinet, Department of Highways Standard Specifications and/or Illinois Department of Transportation Standard Specifications.

b. Preformed Compression Joint Sealers with Lubricant Adhesive.

Preformed compression joint sealers shall be of approved shapes and sizes for the joints to be sealed. The sealers shall conform with ASTM D 2628. The lubricant adhesive shall be compatible with the sealer, concrete, and steel. The sealer manufacturer shall recommend a lubricant adhesive which will be compatible with and which will meet the requirements of ASTM D 2835.

3-3. CONSTRUCTION.

3-3.1. REINFORCEMENT.

The clear distance between parallel bars shall not be less than 1-1/2 times the diameter of the bars. Bars shall have a minimum of 3 inches of concrete covering where concrete is cast directly against the ground; 2 inches of covering where concrete is exposed to earth, water or weathering conditions; and for concrete not exposed to ground or the weather, the reinforcement steel covering shall be not less than 1-1/2 inches for beams, girders, and columns and not less than 3/4 inch for slabs and walls.

Welded wire fabric in slabs shall be placed 1-1/2 inches from the bottom of 4 inch slabs and 2 inches from the bottom of 6 inch slabs.

Splices, where required in the reinforcement steel, shall be Class C in accordance with ACI-318. Chairs, ties, spacers, etc., shall be used to secure reinforcement in place throughout the concreting operation.

3-3.2. EMBEDDED ITEMS.

Sleeves, conduit, bolts, anchors, waterstops, etc., shall be securely anchored in place and thoroughly cleaned before placing the concrete.

3-3.3. FORMS.

Forms shall be secured in place to withstand the placing and the weight of the concrete without bulging, sagging, or deflecting from the line and grade. Forms shall be tight enough to prevent the leakage of mortar, shall be clean from all dirt, debris, etc., and shall be properly coated with a nonstaining mineral form oil for easy removal. Forms shall not be removed until the concrete has sufficient strength, and during removal, care shall be taken so as not to chip corners or damage the concrete.

3-3.4. PLACING CONCRETE.

Concrete may not be placed when the air temperature is 40 degrees F and falling. Concrete placed during hot weather shall be cooled by frequent spraying and protected from curing too rapidly.

Concrete shall be placed within 45 minutes after water has been added. The maximum free-fall in placing concrete shall be 5 feet. A mechanical vibrator shall be used to cause the concrete to flow or settle but care shall be taken to prevent overvibrating and segregation of the aggregate.

Vibrators shall not be used to transport concrete within form work.

3-3.5. JOINTS.

All joints, longitudinal and transverse, shall conform with all details shown on the Plans, and shall be installed at the locations so indicated, or as directed.

Saw-cut joints shall be cut to the depth and width indicated on the Plans and shall be of uniform width throughout. The sawing equipment shall be capable of cutting the joint in strict conformity with the required alignment and depth, and shall be so operated. Transverse saw cuts for joints to be sealed with preformed compression joint seals shall be one continuous cut across the pavement being sawed. Water may be sprayed on the saw blades during the cutting. The joints shall not be sawed until the concrete has hardened to the extent that tearing and raveling will not occur, but as soon thereafter as deemed necessary to preclude random cracking.

All sawed joints shall be thoroughly flushed with clean water or cleaned with compressed air immediately after sawing so the vertical surfaces of the joint will be clean and allow proper adherence of the joint sealer to the surfaces.

All joints shall be protected from intrusion of injurious foreign material until sealed. Temporary seals, when used, shall consist of an acceptable material designed for this use firmly embedded in the joint. The material shall be placed 1/4 inch below the pavement

surface and shall be sufficiently strong and durable to resist intrusion of incompressible materials, and to permit complete removal after its usefulness has ended.

3-3.6. FINISHING.

All exposed concrete surfaces, not otherwise specified, shall have a wood float finish to the lines and grades shown.

Walls, after removal of the forms, shall be rubbed to a reasonable smoothness, eliminating fins, cavities, honeycomb, and other defects on the exposed surfaces. Pointing and rubbing shall be with a mortar of sand and cement and shall be kept moist for 24 hours.

Floors shall have a monolithic, smooth, dense trowel finish.

3-3.7. CURING.

All fresh concrete shall be adequately protected from injurious weather conditions until properly cured. It shall be protected from the sun, heavy rain, flowing water, freezing, or mechanical injury. It shall be kept wet for not less than 7 days and during cold weather shall be maintained at temperatures between 50 degrees F and 70 degrees F for at least 5 days.

3-3.8. TESTING.

Excessive honeycomb, poor alignment, excessive roughness or unevenness, leaking where watertightness is required, or deficient test results may be causes for rejection. The Contractor shall be responsible for collecting, curing and testing of 4 cylinders per 100 cubic yards or part thereof and/or for each separate day's pour all in accordance with generally accepted standards. The Engineer shall be furnished 3 certified copies of all test results.

SPECIFICATION 8

GENERAL EQUIPMENT STIPULATIONS

8-1. SCOPE.

This Specification covers the obligations and responsibilities of the Contractor, his suppliers or vendors and the manufacturers for mechanical and electrical equipment, instruments and devices about this Contract.

8-2. MATERIALS AND WORKMANSHIP.

The materials and equipment furnished under this contract shall be constructed and finished in a workmanlike manner. Materials shall be suitable for the service intended and selected and fabricated following the best engineering practice. All materials and equipment shall be new.

All exposed surfaces of machines shall be finished smooth and shall be painted with a sufficient number of undercoats to provide a smooth, uniform surface. They shall then be finished with a high grade lacquer or spar enamel in an approved and efficient manner. Polished and machined metal surfaces and electrical equipment, not subject to painting, shall be protected from corrosion, moisture, or damage during shipment and erection.

8-3. SOURCE OF EQUIPMENT AND MATERIALS.

Wherever equipment or materials are specified or shown on the Plans by using the proprietary product of a particular manufacturer or vendor, it is to establish a standard of quality, operation and appearance. Acceptance or approval of a substitute is only for conformance with the design concept of the project for compliance with the information given in the Contract Documents and does not relieve the Contractor of his responsibility for the satisfactory configuration, operation, use or appearance intended.

8-4. EQUIPMENT TO OPERATE IN STRUCTURES AS DESIGNED.

It is the intent of the Plans, Specifications, and Contract that equipment shall be furnished which can be installed and operated properly in the structures as designed and shown on the Plans. The Owner will assume no responsibility for any alteration in, addition to, enlargement of, or any other change from the shape, size, arrangement and dimensions of any structure as designed and detailed, where such alteration, etc., is required for the installation and proper operation of any alternate equipment. Acceptance of alternate equipment will be contingent on any such alterations, additions, enlargements or other changes being made at the sole cost and expense of the Contractor, which shall be included in his base bid.

8-5. PATENTS AND PATENT ROYALTIES.

All royalties and fees for and in connection with patented articles, devices, apparatus, machines, and other equipment (but not including royalties, fees, or other costs in connection with any patented process required by the Owner in the design of the work or operation thereof) shall be included in the price or prices quoted by the equipment supplier to, and paid by, the Contractor.

8-6. EQUIPMENT GUARANTEE.

Each item of mechanical and electrical equipment, instrument, and device, furnished for and in connection with the contract, shall be guaranteed against (a) faulty or inadequate design by the manufacturer or supplier of such item, (b) improper assembly, (c) defective materials or workmanship, or both, and (d) leakage, breakage, or other failure that might occur, under normal and proper operation of the equipment under specified

conditions, for one year from and after the date of acceptance of the work by the Owner, and each item of equipment or part thereof thus proving defective within the 1 year guarantee period shall be replaced, without cost to the Owner.

8-7. LUBRICATION.

All bearings and other points of contact of all equipment shall be provided with adequate lubrication and complete lubrication instructions shall be supplied for each piece of equipment. Sufficient lubricants of the proper grade and quality shall be furnished and installed to fill all oil or grease cups, containers, and reservoirs and properly lubricate all equipment for initial startup and operation and until acceptance by the Owner.

8-8. ELECTRICAL EQUIPMENT.

All electrical equipment furnished under these Specifications shall be constructed and rated in accordance with the "Standards of AIEE" and shall pass temperature and insulation tests as recommended therein for the operating conditions required. All other electrical work shall conform with Specification 9, "Electrical and Control Work".

8-9. SPECIAL TOOLS AND ACCESSORIES.

With each piece of equipment or machine having parts and requiring periodic repairs and adjustment, there shall be furnished all special tools, wrenches and accessories required for removing worn parts and for making such adjustments. There shall also be furnished all gauges, indicators, lubricating devices, etc., necessary for proper operation of machines whether or not such accessories are specified.

8-10. SATISFACTORY OPERATION.

All mechanical equipment furnished by the Contractor shall operate satisfactorily without excessive wear, excessive lubrication, or undue attention required from its operator. All rotating parts shall be in true rotational balance and operate without vibration caused by mechanical defects or misalignment of parts.

8-11. INSTALLATION AND OPERATION INSTRUCTIONS.

The Contractor shall obtain from the equipment manufacturer, and deliver to the Engineer, not less than 9 copies of all necessary shop drawings, instructions and specifications relative to foundation requirements or piping connections, assembly, installation alignment, checking and placing in operation of each item of mechanical and electrical equipment furnished by him. Also, 9 copies of all instructions relative to maintenance and operation and drawings and descriptive data necessary for identification of parts for ordering replacements shall be furnished.

8-12. PLACING EQUIPMENT IN SERVICE.

The Contractor shall be responsible for the proper installation, alignment, and operating condition of all equipment and processes furnished. He shall furnish a written statement to the Engineer certifying that the equipment or process furnished (1) has been properly installed, packed and lubricated; (2) is in accurate alignment, secure and free from any undue stress; and (3) has been operated under normal conditions and that its operation is satisfactory and proper.

He shall provide the services of a manufacturer's or supplier's representative who is completely familiar with the operation of the equipment, who shall check over and verify the complete installation, start the equipment in operation, adjust and test all units and instruct the Owner's regular operator in the proper care and operation of said equipment.

SPECIFICATION 12

TESTING AND DISINFECTING

12-1. SCOPE.

The work under this Specification consists of testing and disinfecting of all water mains and appurtenances, plant equipment, pumping facilities, and storage facilities. Testing and disinfection shall be done by the CONTRACTOR in the presence of the ENGINEER. The cost of testing and disinfecting (including water, chemicals, equipment, etc.) shall be included in the unit and/or lump-sum prices bid. No additional payment shall be made for performance of these items.

12-2. TESTING.

All testing shall be done at the CONTRACTOR'S expense and in accordance with AWWA Standards and manufacturers' recommendations, unless otherwise specified. Any defects in materials or workmanship shall be corrected and retesting shall be at the CONTRACTOR'S expense.

12-2.1. DISTRIBUTION SYSTEM AND APPURTENANCES.

Hydrostatic tests shall be performed on all newly laid pipe and shall consist of a pressure and leakage test. The test shall be run before disinfection and before making service connections. The CONTRACTOR shall furnish the water, pump, piping, meters, connections, and all the necessary apparatus and labor to conduct the test. All pipe shall be tested in accordance with AWWA C600 unless otherwise specified.

Hydrostatic tests shall be performed between all valved and end sections; on shorter sections where practical; and as required to meet the test restrictions contained herein. The test shall be run only after concrete blocking has properly cured (5 days for regular cement and 2 days for high-early strength cement). All fittings, hydrants, plugs, etc., shall be properly blocked and protected.

The testing method described in this section is specific for water pressure testing and is not to be applied for air pressure testing due to the serious safety hazards involved.

a. Test Restrictions.

1. The test pressure, as measured at the point where the highest pressure occurs during normal operation, shall be at least equal to the maximum pressure rating of the pipe.

For systems using different classes of pipe, a separate test shall be run on each section at the respective pressure rating of the pipe being tested. The CONTRACTOR may, at his option and risk, test different sections of pipe simultaneously provided the higher test pressure is used and all other conditions are met.

2. The duration of the test shall be at least 2 hours.
3. The test pressure shall not vary more than 5 psi for the duration of the test.
4. The test pressure shall not exceed the pipe or thrust-restraint design pressures nor be more than twice the rated pressure of the valves or hydrants.

b. **Pressurization.**

Initial filling of the main to be tested shall be at a rate such that the velocity in the main does not exceed 1 fps. The CONTRACTOR shall take great care to assure that all air is expelled from the main. Where air vents are not located at high points, corporation stops shall be installed as required to expel the air during the filling process. After completion of the test, the corporation stops shall be removed at the discretion of the ENGINEER or used for service line connections, if practical.

Pressurization of the main shall begin only after the main is completely filled with water and all air is removed. Pressure shall be applied through a corporation stop set by the CONTRACTOR. Testing shall not begin until the test pressure has stabilized.

c. **Examination.**

All exposed pipe, fittings, valves, hydrants, joints, etc., shall be examined during the test. Any visible leaks or defects shall be corrected despite the results of the leakage test and the test shall be repeated until it is satisfactory to the ENGINEER.

d. **Leakage.**

Leakage is defined as the amount of water that must be added to the test section to maintain the test pressure. The duration of the test shall be 2 hours. At the end of the test, the Contractor shall meter and record accurately the amount of water required to restore the test pressure in the section being tested. The allowable leakage shall be determined by the following formula:

$$L = S \cdot D \cdot [P^{0.5}] / 133,200$$

Where,

L	=	Allowable leakage, in gallons per hour
S	=	Length of the test section, in feet
D	=	Diameter of the pipe being tested, in inches
$P^{0.5}$	=	Square root of the average test pressure

If the test shows any section with leakage greater than the allowable, the leak shall be located and repaired and the section retested.

12-2.2. **OTHER TESTS.**

Other tests, as required for equipment, storage facilities, etc., shall be conducted in accordance with the applicable specifications.

12-3. **DISINFECTION.**

All existing facilities exposed to possible contamination and all new facilities shall be thoroughly disinfected and tested for the absence of coliform organisms before placing or replacing into service. All disinfection shall be with chlorine or chlorine compounds in such amounts as to produce a concentration of at least 50 mg/l and a residual of at least 25 mg/l at the end of 24 hours.

Disinfection shall be in accordance with State Regulations.

12-3.1. GENERAL.

The general procedure for disinfection is outlined as follows:

- a. The CONTRACTOR shall prevent any contaminating materials from coming into contact with the facilities by utilizing good construction procedure.
- b. The CONTRACTOR shall remove all possible contaminating materials by flushing or other means.
- c. The CONTRACTOR shall chlorinate any residual contamination that may remain and dispose of the chlorinated water.
- d. The CONTRACTOR shall determine the bacteriological quality of the water through certified laboratory testing.

12-3.2. FORMS OF CHLORINE.

The forms of chlorine that may be used in the disinfection process are liquid chlorine, sodium hypochlorite solution, and calcium hypochlorite granules or tablets. The procedure for use and handling of the chlorine shall be in strict compliance with all AWWA and applicable safety standards.

Liquid chlorine contains 100 per cent available chlorine and is produced by mixing chlorine gas with water and injecting the solution into the facilities being disinfected. Direct feed of chlorine gas into the main shall not be permitted.

Sodium hypochlorite is in liquid form and contains approximately 5 to 15 per cent available chlorine. It is fed into the facilities by hand-pouring and mixing with the incoming water or by pumping a solution of known strength into the facilities.

Calcium hypochlorite is in either granular or tablet form and contains approximately 65 per cent available chlorine by weight. It is fed into the facilities by hand-pouring or pumping as described above. One pound of calcium hypochlorite added to 8.5 gallons of water produces a 1 per cent solution.

12-3.3. PREVENTIVE AND CORRECTIVE MEASURES DURING CONSTRUCTION.

It is essential that the facilities are thoroughly clean prior to disinfection and good construction procedures shall be used.

If, in the opinion of the ENGINEER, it appears that all dirt and debris cannot be removed hydraulically, the facilities shall be mechanically cleaned and swabbed with a 1 per cent hypochlorite disinfecting solution.

In cases of pipe contamination by flooding during installation, the main shall be flushed until clean and disinfected so that a 25 mg/l solution is maintained at the end of a 24 hour period. After cleaning and disinfecting, construction may resume.

12-3.4. DISINFECTION OF NEW MAINS.

Two methods of disinfecting mains are offered and the CONTRACTOR shall be responsible for selecting the method best suited for the conditions encountered.

a. Preliminary Flushing.

Preliminary flushing to remove visible evidence of contamination shall be at a rate to produce a velocity of 2.5 fps within the main unless it is determined by the ENGINEER that conditions do not permit the flow. As a guide, Table 12-1 shows the required flow and number of openings to produce a flushing velocity of 2.5 fps in various size mains at 40 psi residual pressure. It shall be the CONTRACTOR'S responsibility to verify the rate required for the actual field conditions.

TABLE 12-1 REQUIRED FLOW AND OPENINGS TO FLUSH PIPELINES* (40 PSI Residual Pressure In Water Main)				
Pipe Diameter Inches	Flow Required To Produce 2.5 fps Velocity in Main GPM	TYPE OF DISCHARGE OUTLET		
		Size of Main,** Tap On Inches	Hydrant Outlets	
			Number	Size, Inches
4	100	0-15/16	1	2-1/2
6	220	1-3/8	1	2-1/2
8	390	1-7/8	1	2-1/2
10	610	2-5/16	1	2-1/2
12	880	2-13/16	1	2-1/2
16	1,565	2-5/8	2	2-1/2

* With a 40 psi pressure in the main with the hydrant flowing to atmosphere, a 2-1/2 inch hydrant outlet will discharge approximately 1,000 GPM. A 4-1/2 inch hydrant outlet will discharge approximately 2,500 GPM.

** Size of tap on main, with no significant length of discharge piping.

b. Methods of Application.

All sections being disinfected shall be properly valved or otherwise disconnected to prevent the strong chlorine solution from entering the mains in active service. All valves and hydrants within the section shall be operated to assure contact with the disinfectant.

Two acceptable methods of application are as follows:

1. Tablet Method.

This method may be used only when the pipes and appurtenances are kept clean and dry during construction and for mains smaller than 24 inches in diameter. It shall not be used on solvent welded plastic or screwed joint steel pipe.

Under this method, hydrostatic tests will be run while disinfection is taking place. If any leaks are detected and the main is either partially or completely drained to make the necessary repairs, the CONTRACTOR shall start the disinfection over using the continuous feed method.

During construction, 5-g calcium hypochlorite tablets shall be placed in each section of pipe and one tablet in each hydrant, hydrant branch and other appurtenances. The number of tablets to place in each pipe section shall be sufficient to produce a concentration of 50 mg/l. As a guide, Table 12-2 is presented. The tablets shall be attached to the inside top of the pipe with an adhesive such as Permatex No. 1 or equal.

TABLE 12-2 NUMBER OF 5g HYPOCHLORITE TABLETS REQUIRED FOR DOSE OF 50 mg/l					
Pipe Diameter, Inches	Length Of Pipe Section				
	13 Feet or Less	18 Feet	20 Feet	30 Feet	40 Feet
4	1	1	1	2	2
6	2	2	2	3	4
8	2	3	3	5	6
10	3	5	5	7	9
12	5	6	7	10	14
16	8	12	14	20	26

Preliminary flushing of the main is eliminated for this method. The mains shall be filled as specified herein and chlorinated water shall remain in the main for 24 hours unless the water temperature is less than 41 degrees Fahrenheit, in which case the contact time shall be extended to 48 hours. After the required contact time, and verification of the 25 mg/l residual, final flushing of the main shall take place as specified.

2. Continuous Feed Method.

This method is suitable for general applications. Initial filling, testing and preliminary flushing shall be in accordance with the procedures previously set forth.

The main shall be refilled at a constant measured rate while injecting chlorinated solution into the main at a point no further than 10 feet downstream from the beginning. The chlorine shall be continuously fed into the main at a constant rate such that the water in the main has a concentration of at least 50 mg/l free chlorine. Measurements shall be taken at regular intervals along the new main to assure that this concentration is maintained. The contact time shall be 24 hours and the free chlorine residual at the end of the contact period shall not be less than 25 mg/l as specified. After verification of the residual, final flushing may take place.

Table 12-3 gives the amount of chlorine required to produce 50 mg/l in 100 feet of pipe for the diameters shown.

TABLE 12-3
CHLORINE REQUIRED TO PRODUCE 50 mg/l
CONCENTRATION IN 100 FEET OF PIPE BY DIAMETER

Pipe Diameter Inches	100 Per Cent Chlorine Pounds	1 Per Cent Chlorine Solution Gallons
4	.027	0.33
6	.061	0.73
8	.108	1.30
10	.170	2.04
12	.240	2.88
16	.435	5.20

12-3.5. MISCELLANEOUS DISINFECTION.

All cutting into or repairing of existing mains and all pumps, valves and appurtenances in a treatment plant, coming into contact with a potable water, shall be thoroughly cleaned and then shall be swabbed or sprayed with a 1 per cent hypochlorite solution before installation. Flushing, the most practical means of removing contamination introduced during repairs, shall be started when the repairs are completed and shall be continued until discolored water is eliminated.

12-3.6. DISINFECTION OF STORAGE FACILITIES.

Two methods of disinfecting storage facilities are offered and it shall be the CONTRACTOR'S responsibility to select the method best suited for the conditions.

a. Method 1.

For this method, the storage facility shall be slowly filled to the overflow with potable water to which enough chlorine has been added to provide a concentration of at least 50 mg/l and a residual of 25 mg/l at the end of the 24 hour contact period. The chlorine shall be introduced into the water as early during the filling operation as possible. Approximately 60 pounds of high test hypochlorite will produce 50 mg/l in 100,000 gallons of water.

After verification of the residual, the facility may be flushed as specified herein.

b. Method 2.

For this method, a solution of 250 mg/l available chlorine shall be applied directly to all surfaces of the storage facility that come in contact with the potable water including inlet piping. The solution shall be applied with suitable brushes or spray equipment and the necessary safety precautions shall be taken.

The spraying procedure shall be repeated within 1 hour of completion of the initial spraying. After completion of the second spraying and within 30 minutes of completion, the tank shall be drained and the filling procedure started.

12-3.7. FINAL FLUSHING.

After the specified contact time and after verification of the chlorine residuals, the heavily chlorinated water shall be flushed from the system. Flushing shall be done in a manner to protect the environment and the chlorinated water shall be neutralized with a reducing agent, if necessary. Water remaining in the main or storage facilities shall have a chlorine concentration no higher than that generally prevailing in the system but no less than 1 mg/l.

12-3.8. BACTERIOLOGICAL TESTS.

After final flushing, and before the new main is placed in service, a sample or samples shall be collected from the ends of the lines and tested by an approved laboratory to show the absence of coliform organisms. The results shall conform with the applicable State Standards. State Regulations regarding the method of collecting samples, the number of samples required and any other conditions, more stringent than those specified, shall prevail.

The ENGINEER shall be furnished with a copy of the State approved bacteriological test report before the facilities are put into service.

12-3.9. REDISINFECTION.

If the initial disinfection fails to produce satisfactory results, the facility shall be reflashed and resampled. If the additional samples reveal contamination, the facility shall be drained and rechlorinated. At the CONTRACTOR'S discretion, samples of the water entering the facility may be tested as well.

SPECIFICATION 14

ASSOCIATED MISCELLANEOUS WORK

14-1. GENERAL.

This Specification covers the furnishing of all labor, materials and equipment for associated miscellaneous work to be incorporated in the project. All materials and equipment shall be new and unused and workmanship shall be of the highest quality and in accordance with the best standard practice to result in a finished product ready for the use intended.

Payment for associated miscellaneous work, unless itemized in the proposal, shall be included in the lump sum or unit price of the particular work item and there shall be no additional payment.

14-2. LANDSCAPING.

This work shall include final grading, seedbed preparation and seeding and/or planting for replacement of areas disturbed during the work and for other sites or areas designated for landscaping. No item of work shall be considered complete until completion of landscaping.

Seeding and planting shall be done during the proper season and moisture conditions established by good horticultural practices to insure the best results. The CONTRACTOR shall be responsible for a good stand of grass and healthy plants for one year.

14-2.1. FINAL GRADING AND SEEDBED PREPARATION.

Final grading shall be to the lines, grades and elevations shown on the Plans. Surface drainage shall be away from any structures and no low spots shall exist.

Six inches of topsoil, free from roots, stones and other objectionable material, suitable for top dressing of a seedbed shall be used in all areas designated for landscaping where gravel, stones, clay and other unsuitable materials exist as determined by the ENGINEER.

After final grading and application of topsoil, if required, the CONTRACTOR shall take soil samples (by the approved method) from all areas of differing soil conditions as directed by the ENGINEER. These samples shall be taken to the local farm bureau for a soil analysis that shall form the basis for lime, nitrogen, phosphoric acid and potash to be used for the particular seeds and/or plantings.

The agricultural lime and fertilizer shall be applied uniformly over the area and the seedbed shall be prepared to a minimum depth of three inches. All clods, rocks, roots and other undesirable material shall be removed. Gentle berms shall be constructed around the various units and all areas shall be dressed by hand to form a satisfactory seedbed as approved by the ENGINEER.

14-2.2. SEEDING AND PLANTING.

Seeding and planting shall be performed immediately after the seedbed has been prepared and seed shall be uniformly distributed over the area to be seeded.

All plants and trees shall be delivered to the site balled or potted, shall have a healthy appearance and shall be guaranteed by the nursery. All seed shall be delivered to the site in sealed bags certified to show the percentage of purity and germination. Lawn replacement of

areas disturbed during the work shall be of the same grass variety as the original lawn. If this cannot be determined, a certified lawn mixture shall be furnished and the application rate of any grass variety shall be as recommended on the container or tag. Any other areas where the seed variety is not specified shall be seeded with Kentucky 31 fescue at the rate of 35 pounds per acre. No seed shall have a test date of more than 120 days before the date of the seeding.

Mulch consisting of wheat or rye straw, or threshed fescue straw, shall be applied uniformly over all seeded areas at the rate of 2 tons per acre. The mulch shall be stabilized (especially on slopes) by stakes and twine; a weighted disk set straight; or any method approved by the ENGINEER.

14-3. ROADWAYS AND BLACKTOPPING.

This work applies to repairing an existing bituminous concrete road or drive or construction of a new bituminous concrete road or drive. This consists of the base course, prime or tack coat and surface course.

14-3.1. SEASONAL AND WEATHER LIMITATIONS.

No bituminous concrete shall be laid between November 15 and April 1, nor when the temperature is below 40 degrees F except by written permission of the ENGINEER, nor when the underlying course is wet, nor when other weather conditions are unsuitable.

14-3.2. BASE COURSE.

The base course shall be 8 inches of compacted bank gravel or 6 inches of compacted dense grade crushed stone. Either base course used shall be approved for highway use. The base course shall be accurately graded to provide adequate drainage both off of and away from the roadbed. New surfaces shall be uniformly crowned at 1/2 inch per foot unless otherwise shown on the Plans. The base course shall be compacted by a roller weighing not less than 3 tons.

14-3.3. REPAIRS TO EXISTING SURFACES.

Where an existing surface is destroyed and repairs are specified, the entire area so disturbed shall be thoroughly cleaned and the base course (specified above) shall be compacted in 4 inch layers to the required depth for making the new surface level with the existing surface.

14-3.4. PRIME COAT.

A prime coat to seal and stabilize the surface of the base shall be liquid asphalt MC-1, liquid asphalt RC-2, or CBAE primer L and shall be applied, as specified, at the rate of 0.3 gallons per square yard.

14-3.5. TACK COAT.

A tack coat, to insure adhesion with an existing surface, shall be RS-2 emulsion and shall be applied at the rate of 0.1 gallon per square yard.

14-3.6. SURFACE COURSE.

The surface course to be used shall be 2 inches of hot-mixed, hot-laid, bituminous concrete with the following composition limits by weight:

Passing 1/2 inch, retained on No. 4 sieve	40 - 55 %
Passing No. 4, retained on No. 10 sieve	15 - 30 %
Passing No. 10 sieve	15 - 30 %
Hydrated lime	0.5 - 1.0%
Asphalt cement (other than liquefier)	5.0 - 7.5%
Liquefier	0.4 - 1.2%

14-4. GENERAL CLEANUP.

Cleanup, as directed by the ENGINEER, shall be maintained throughout the time of construction. Trench settlement and additional earth fill, if required, shall be included in cleanup and shall be the responsibility of the CONTRACTOR for one year after substantial completion.

All areas and locations of the work under this contract shall be left in a neat and clean condition. All debris, scrap, waste and other undesirable and objectionable material shall be completely removed from the site. All areas shall be restored and/or replaced to a condition equal to or better than conditions before construction and to the satisfaction of the property owner.

14-5. CHAIN LINK FENCE.

This article shall govern all material, equipment, labor and construction complete for a chain link fence and gates as shown on the Plans.

14-5.1. POSTS, RAILS AND BRACES.

All structural and roll-formed shapes shall conform with provisions of ASTM A123 for galvanized coating and all tubular members shall comply with provisions for ASTM A120, Schedule 40 steel pipe.

- a. End, corner, pull and gate posts shall be 3 inch O.D. set 3 feet deep in concrete footings with 3 inches of concrete below.
- b. Line posts (10'-0" maximum spacing) shall be 2 inch O.D. and shall be set 3 feet deep in concrete footings with 3 inches of concrete below.
- c. Top rails and gate posts shall be 1-5/8 inch O.D.

14-5.2. CHAIN LINK FABRIC.

The fabric shall be 2 inch mesh, No. 9 gauge, heavy galvanized with 2.0 ounces zinc per square foot complying with ASTM A392, Class 2, or aluminum coated complying with ASTM A491, Class 2. The chain link fabric shall be 6'-0" in height.

14-5.3. ACCESSORIES.

All accessories, except tie wires and barbed wire, shall be galvanized to comply with ASTM A153.

- a. Barbed wire supporting arms shall be integral with post top weather cap, shall have hole for passage of top rail and shall support 3 strands of barbed wire at an angle of 45 degrees.

- b. Barbed wire shall have 2 strand, 12-1/2 gauge wire with No. 14 gauge, 4 point round barbs and shall be galvanized per ASTM A121, Class 3.
- c. Fabric ties shall be No. 9 gauge aluminum wire and shall be spaced at 14 inches o/c on the posts and 24 inches o/c on the rails.

14-5.4. GATES.

Fabricated gates, as shown on the Plans, shall be adequately braced for proper operation and to prevent sagging. Gate hardware shall be heavy galvanized and shall include:

- a. Hinges of pressed steel or malleable iron of the non-lift-off type, offset to permit 180 degrees gate opening.
- b. Latch of the forked type or plunger-bar type with a padlock eye to permit operation from either side of gate.
- c. Keeper for all vehicle gates to engage automatically and hold the gate in the open position until manually released.
- d. Double gates provided with a mushroom-type or flush plate with anchors set in concrete to engage the center drop rod.

14-6. FARM-TYPE FENCE.

The farm-type fence and gate(s) shall be woven wire with barbed wire above and below as shown on the detailed Plans.

14-6.1. FENCE MATERIALS.

- a. Barbed Wire.

Barbed wire shall be 12-1/2 gauge steel and shall comply with ASTM A121 and shall have Class 2 zinc coating.

- b. Woven Wire.

Woven wire shall be general-purpose field wire, closely spaced at the bottom with 10 gauge top and bottom wires and 12-1/2 gauge line and stay wires. It shall be 32 inches in height, have 6 inch spacing between stays and shall contain 8 line wires. It shall have an ASTM A116, Class 1 zinc coating.

- c. Brace & Tension Wire.

Brace and tension wire shall be 9 gauge steel, shall comply with ASTM A121 and shall have a Class 2 zinc coating.

- d. Staples.

Staples shall be 9 gauge, 1-1/2 inches long and shall be zinc coated.

- e. Posts.

Wooden posts shall be new, straight and sound and shall be pressure treated in accordance with Federal Specification TT-W-571c.

Steel posts shall be the studded tee type, galvanized with minimum dimensions of 1-1/2 inches x 1-1/2 inches x 1/8 inch.

All end, corner, brace and gate posts shall be wood, having a minimum diameter of 6 inches and shall be set 3-1/2 feet deep.

Line posts, set 2-1/2 feet deep, shall be either wood with a minimum diameter of 4 inches or steel tee type posts that may be substituted between each fifth wooden post.

f. Wooden Braces.

Wooden braces shall be installed between brace posts and end posts or gate posts and shall be 4 inch x 4 inch pressure treated lumber.

14-6.2.

CONSTRUCTION.

Construction of the farm-type fence shall be in accordance with the detailed Plans and wood posts shall be set at all corners, angles, ends and gates with wooden brace posts set as shown on the Plans. All posts shall be set to the required depth in holes large enough to allow room for alignment and tamping on all sides. They shall be set vertically, shall be firmly tamped and the tops shall be beveled at 45 degrees.

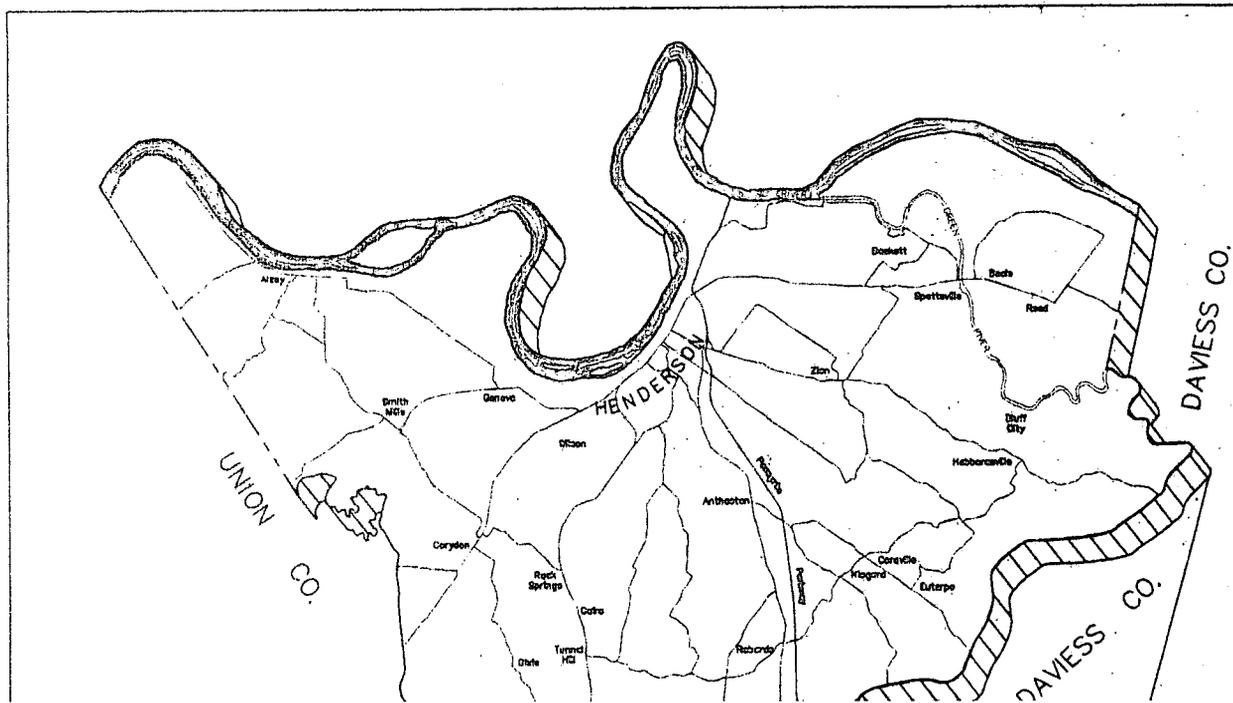
Wire shall be fastened to the post outside of the area being enclosed, except in corners or curves, where the wire shall be placed on the outer side of the corner or curve. The wire shall be placed as shown on the Plans with a single strand of barbed wire near the bottom, the 32 inch woven wire in the center and two strands of barbed wire above the woven wire.

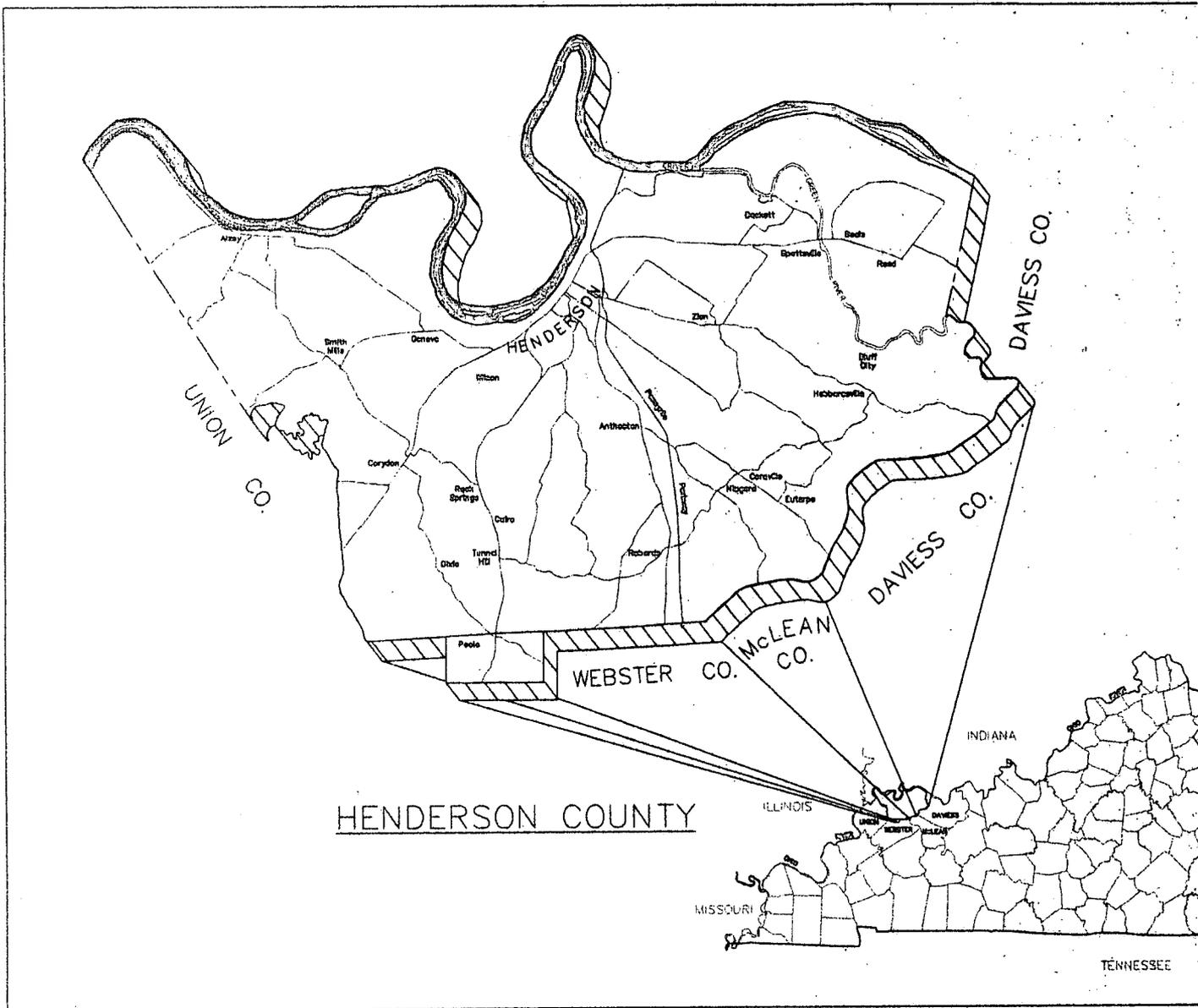
The wire shall be attached to the wood posts with staples and to the steel posts with approved fastener clips. Staples and/or fasteners shall allow horizontal movement of the line wire and shall securely support the fence. At end and gate posts, the wire shall be wrapped once around the post and secured by splicing each line wire to itself with no less than six complete turns.

Gates shall be installed at locations shown on the Plans and shall be considered a part of the complete fence.

HENDERSO

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LOCATION MAP

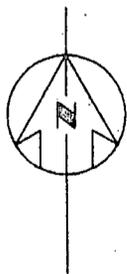
SON COUNTY V

ANDERSON COUNTY

**1999 / 2000 DISTRICT
SYSTEM IMPROVEMENT
CONTRACT**

COMMISSIONERS

D. C. HOUSE, CHAIRMAN
ROBERT L. McINDOO, SECRETARY
DAVID SPAINHOWARD, TREASURER
JIMMIE L. RUSSELL
JAMES TOMLINGSON



MANAGER

1999 / 2000 DISTRICT SYSTEM IMPROVEMENT CONTRACT

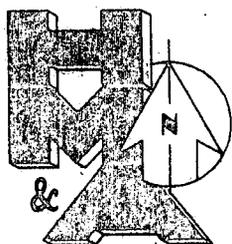
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JIMMIE L. RUSSELL
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MANAGER

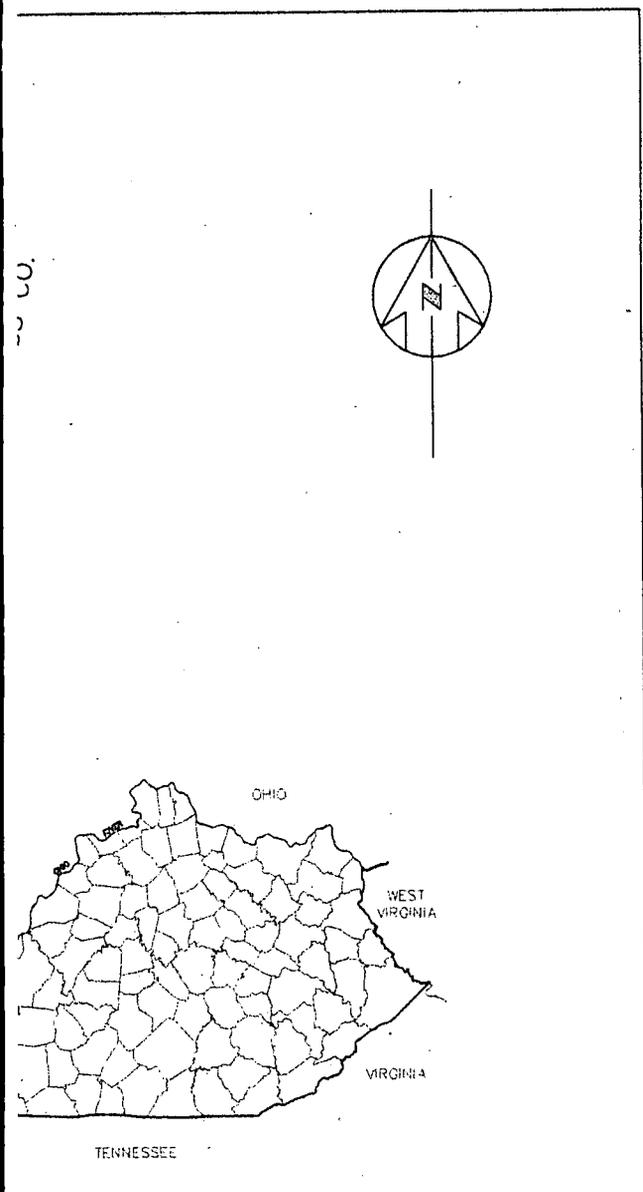
ALLAN VAN METER

NOVEMBER, 1999
(BID: MARCH, 2000)



HUNTER MARTIN & ASSOC

ENGINEERS & SURVEYORS
3220 LONE OAK ROAD * PADUCAH KENT
(502) 554-2737 * FAX (502) 554-



WATER DISTRICT COUNTY, KENTUCKY

DISTRIBUTION MOVEMENTS DISTRICT "A"

PERSONS

MANAGER
SECRETARY
TREASURER
CLERK
CONTRACTOR

INDEX

SHEET	TITLE
1	COVER
2	OVERALL PLAN
3	KY HWY 359 AND KY HWY 20
4	MARTIN - MARTIN RD.
5	JANE POSEY RD. AND KY HWY 20
6	CAIRO LYLES RD, MEAHL CA KY HWY 1217
7	SULPHUR SPRINGS RD., KY DR. FLOYD RD.

DISTRIBUTION MOVEMENTS ACT "A"

ERS

IRMAN
SECRETARY
TREASURER
ELL
SON

ER

1999

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ASSOCIATES, INC.

SURVEYORS

ADUCAH KENTUCKY 42003
AX (502) 554-2738

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7	SULPHUR SPRINGS RD., KY DR. FLOYD RD.
8	SULPHUR SPRINGS RD., LO WHITELICK RD.
9	KY HWY 145, DIXON RD., A BRIDWELL BRADLEY RD.
10	WATER SYSTEM STANDARI

GENERAL NOTES:

1. RIP RAP SHALL BE 150# GRADE. CONTRACTOR SHAI (SEE DETAIL SHEET "A-10") AS REQUIRED BY R.O.W BY ENGINEER.
2. ALL WATER MAIN SHALL BE INSTALLED W/ A MINIMU CROWN OF ADJACENT ROAD OR AT A DEPTH REQUIRE DETERMINED BY ENGINEER. PAYMENT FOR ADDITIONA SHALL BE AS STATED IN THE BASIS OF BID.
3. IN LIEU OF PVC PIPE, AS SPECIFIED ON THE PLANS A MINIMUM WATER WORKING PRESSURE OF 200 PSI M



Rich Martin
2-28-02

SE

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AN

AND KY HWY 266

MARTIN RD.

RD. AND KY HWY 1299

S RD, MEAHL CATES RD. AND

7

RINGS RD., KY HWY 145 AND

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RINGS RD., LOD POWELL RD. AND

RD.

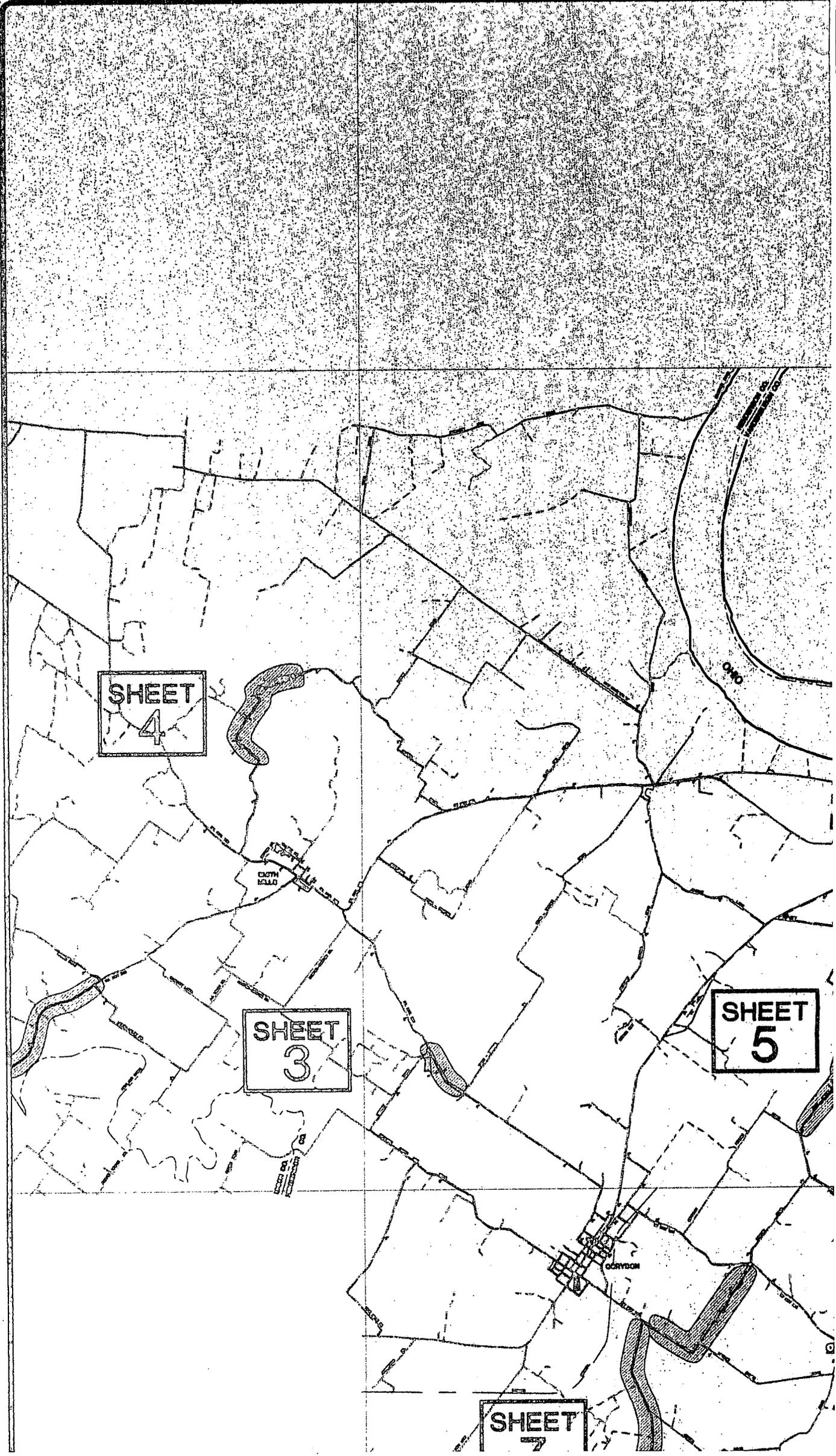
, DIXON RD., ALLEN RD. AND

RADLEY RD.

ITEM STANDARDS

GRADE. CONTRACTOR SHALL INSTALL RIP RAP DITCH
AS REQUIRED BY R.O.W. PERMIT OR AS DETERMINED

INSTALLED W/ A MINIMUM DEPTH OF 36" BELOW
OR AT A DEPTH REQUIRED BY R.O.W. PERMIT OR AS
PAYMENT FOR ADDITIONAL DEPTH (GREATER THAN 7')



SHEET
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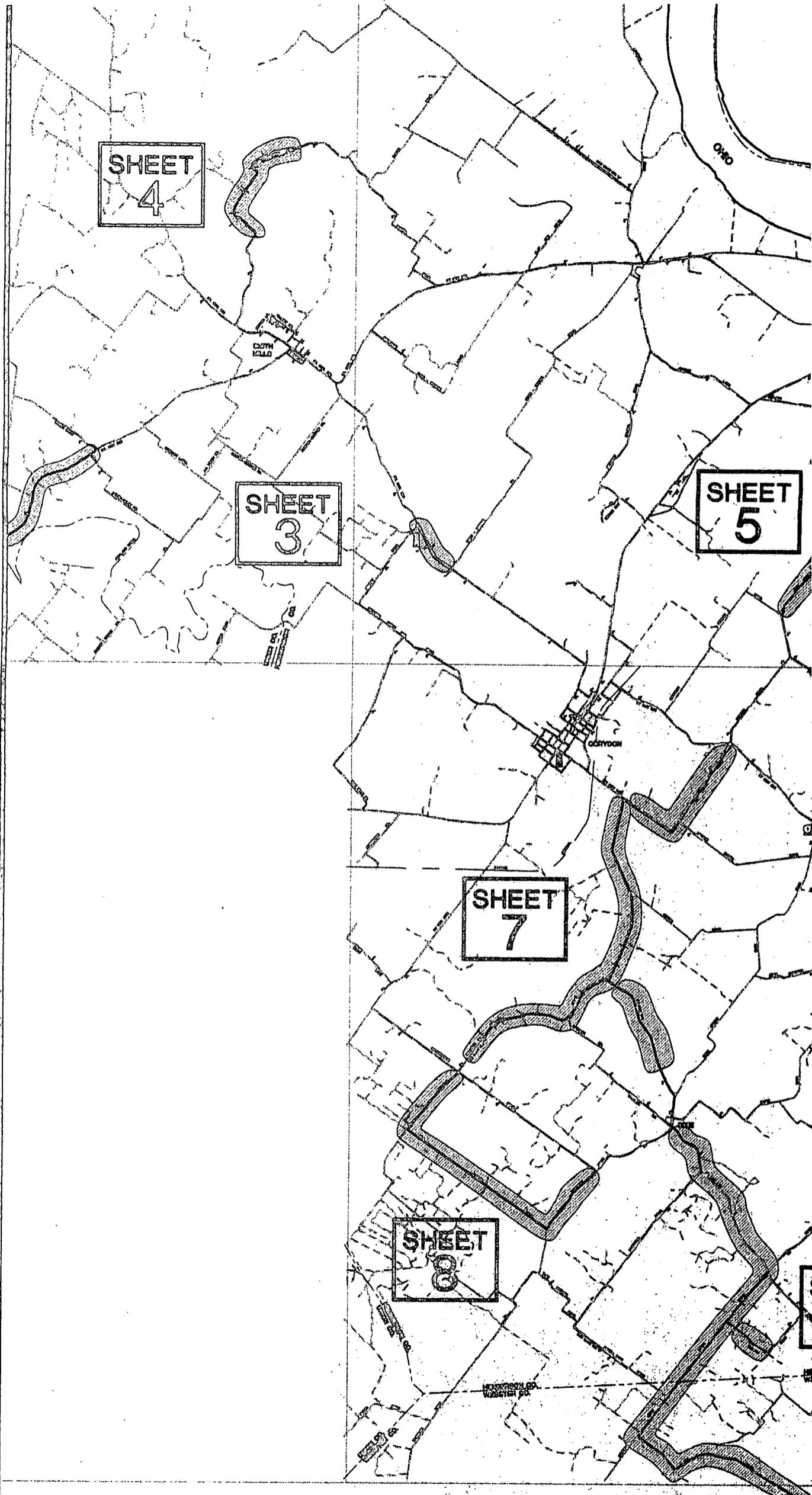
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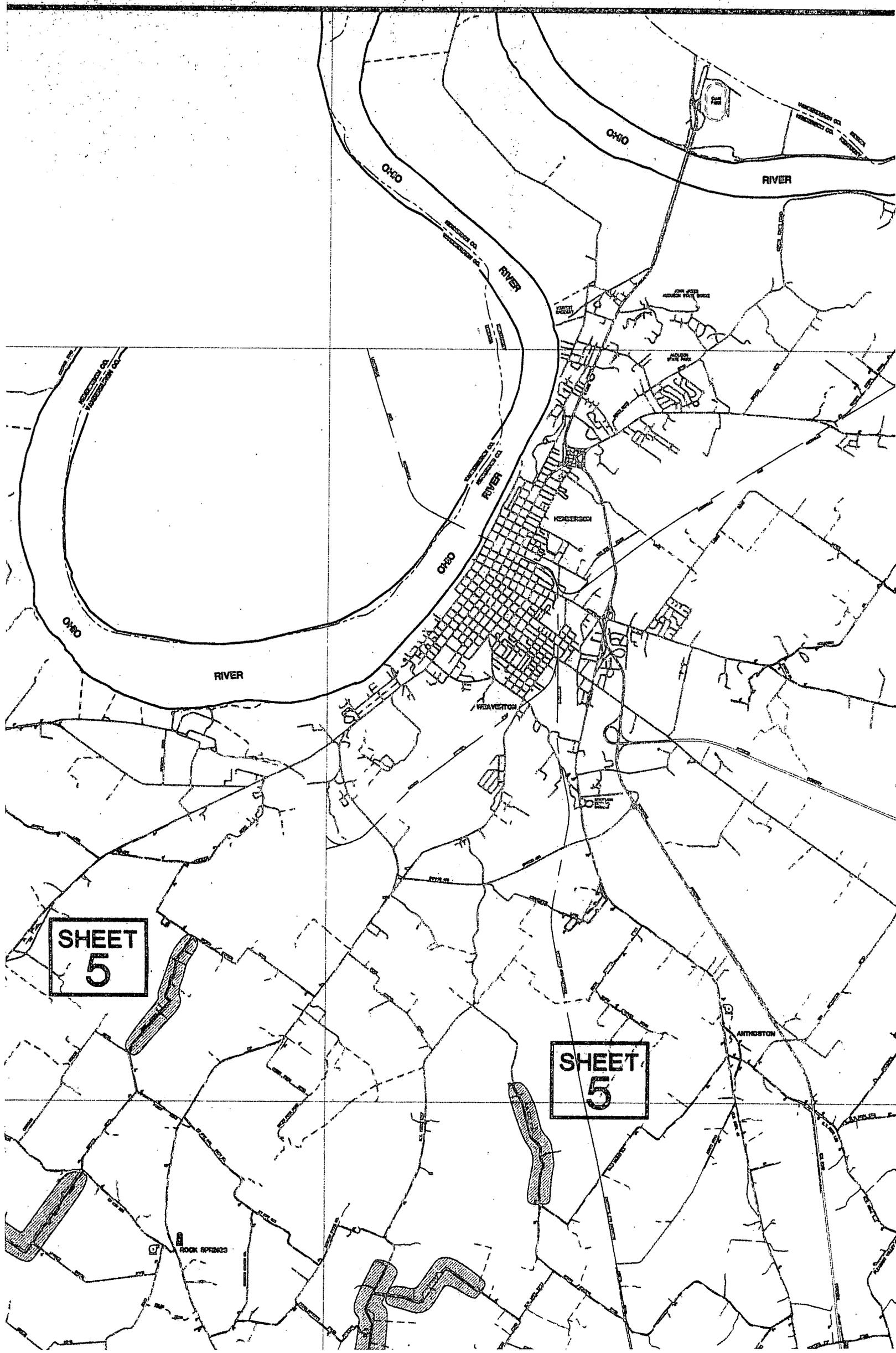
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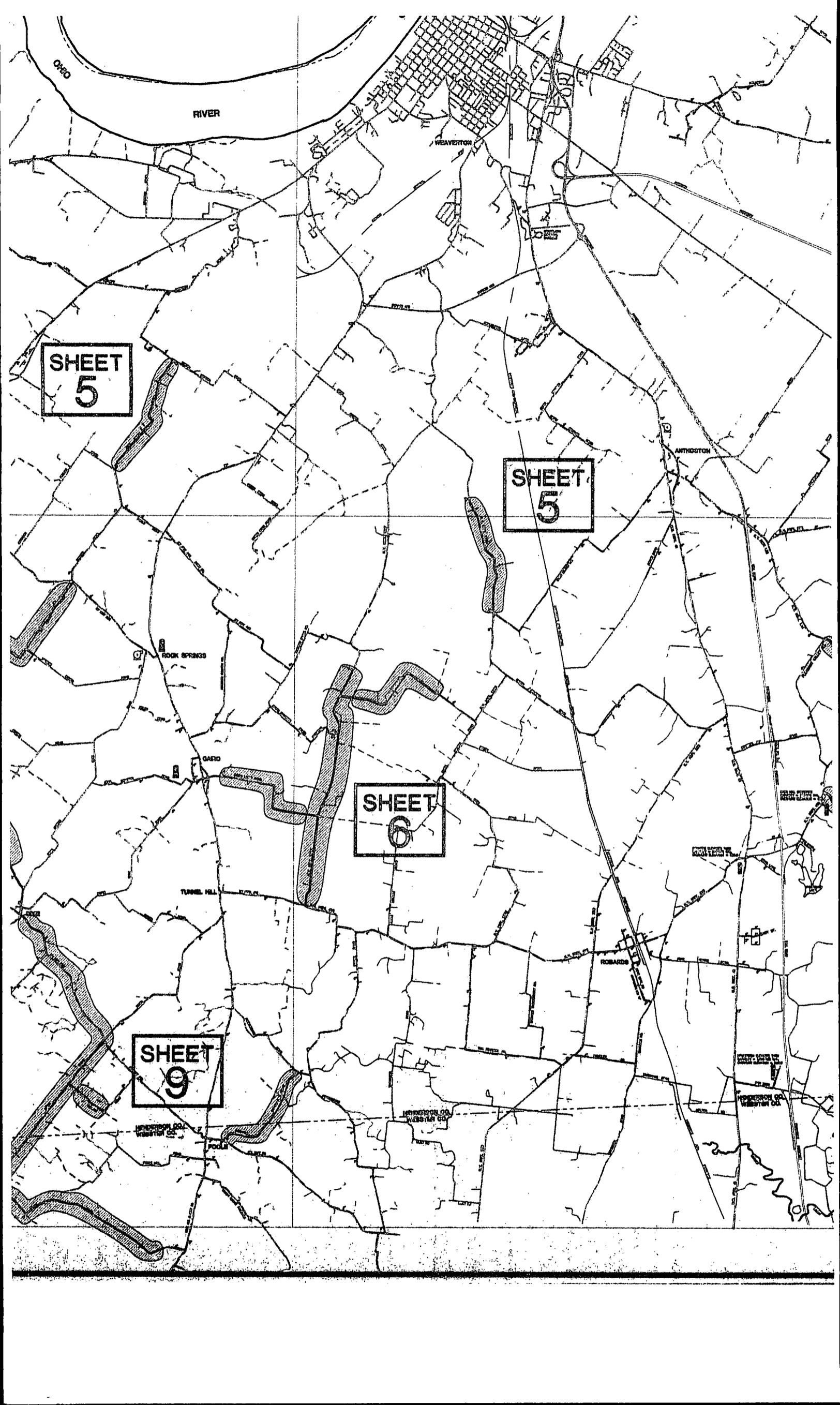
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SHEET
9

RIVER

REAVERTON

ANTHROTON

ROCK SPRINGS

GARD

TUNNEL HILL

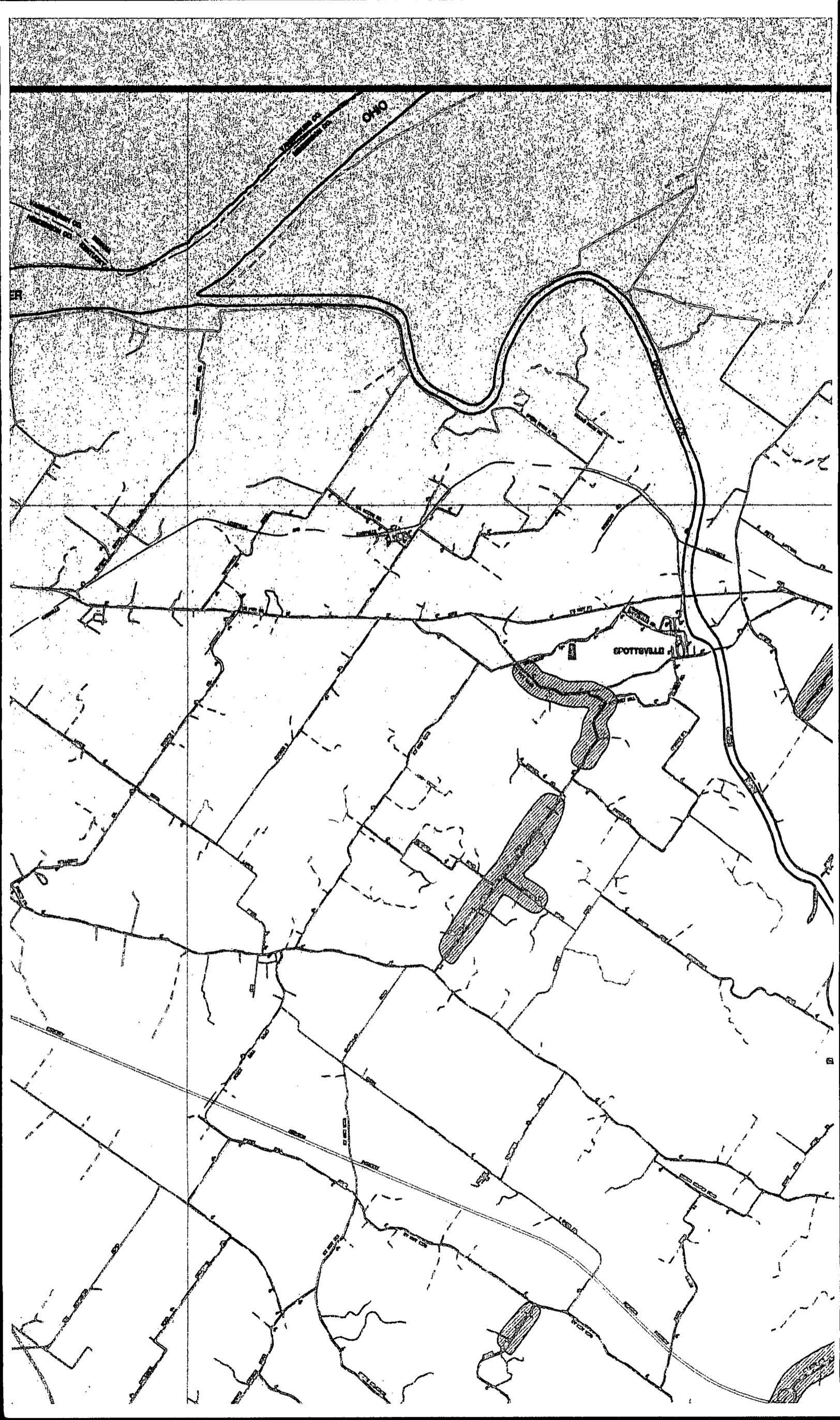
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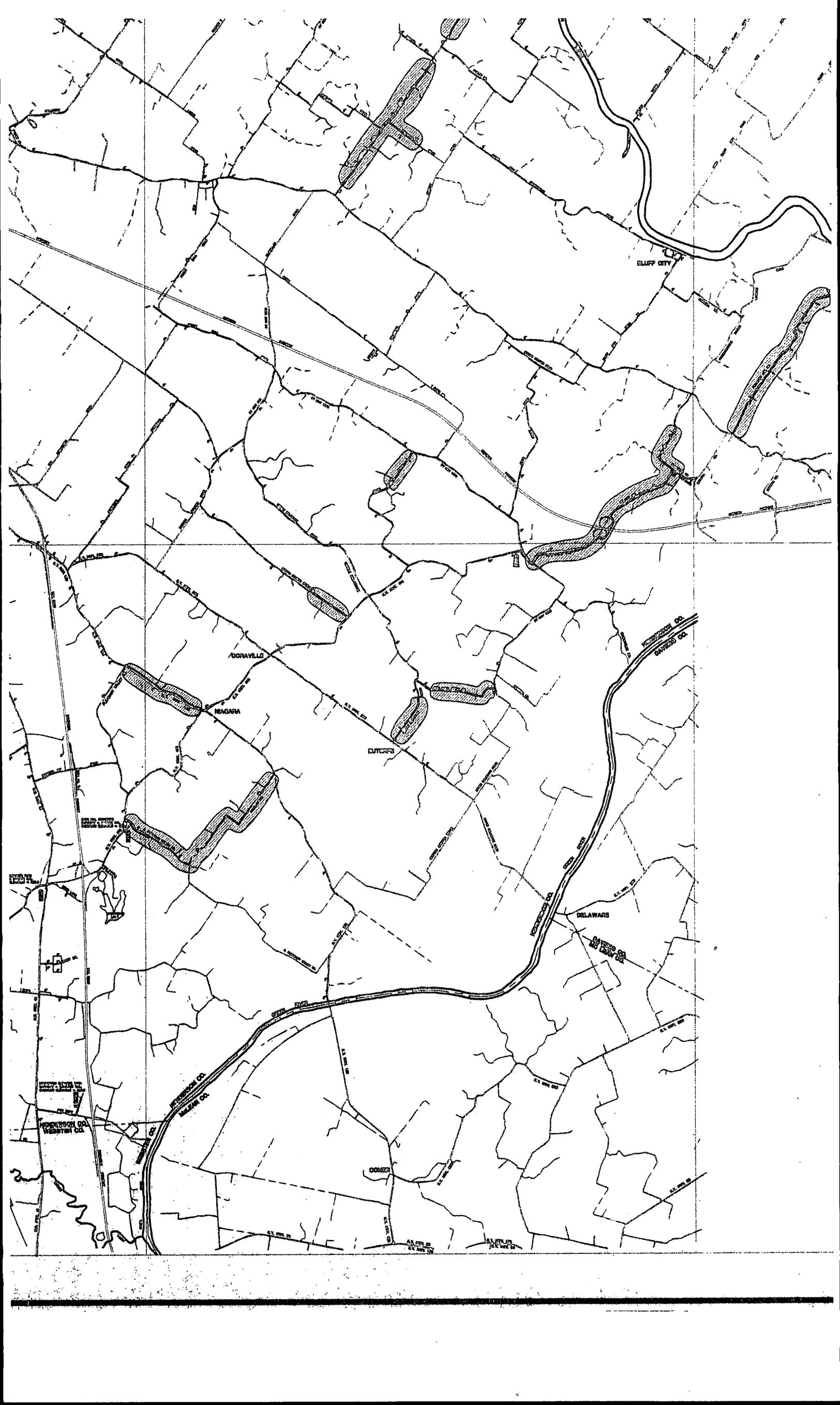
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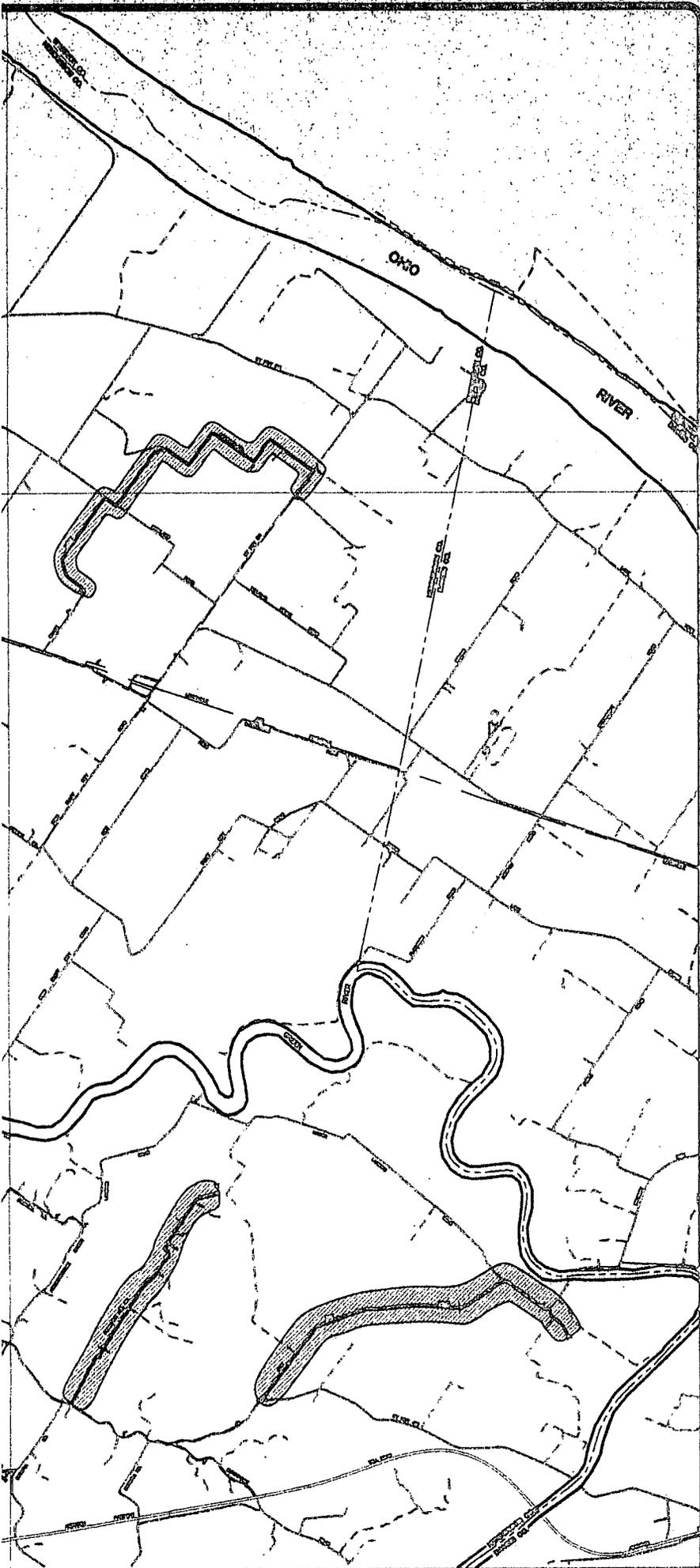
HENDERSON CO.

WEBSTER CO.

WEBSTER CO.

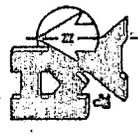






HUNTER MARTIN & ASSOCIATES, INC.

ENGINEERS & SURVEYORS
 3220 LONE OAK ROAD • PADUCAH KENTUCKY 42003
 (502) 554-2737 • FAX (502) 554-2738



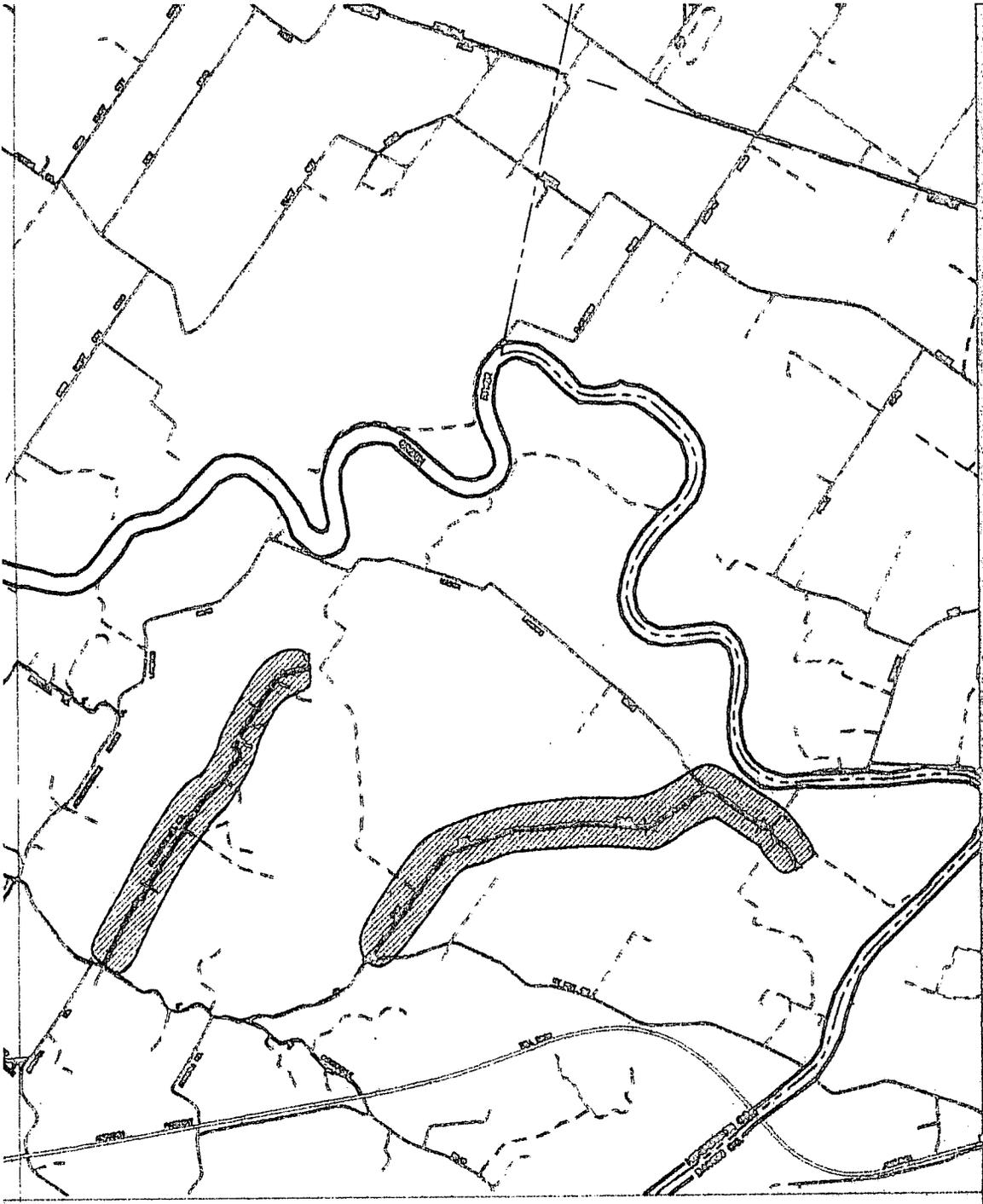
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Checked by: JRJ
File: 2000IMP2
Date: 11-28-99
Revised:

M IMPROVEMENTS

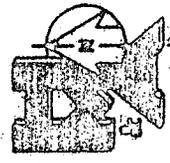
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11/17/99

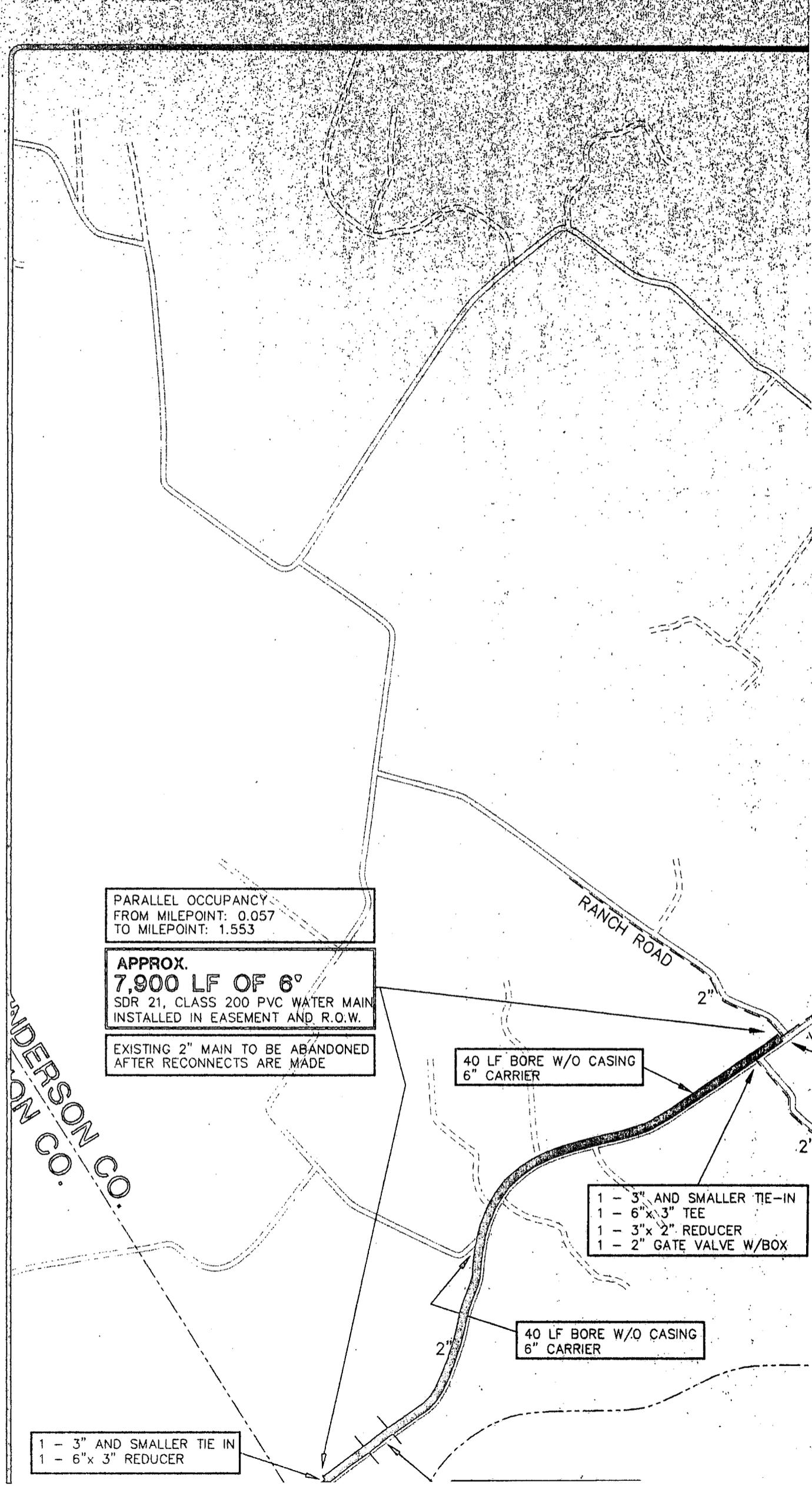


HUNTER M
I
3220 LONE
(502)



Drawn by:	SDC
Checked by:	JRJ
File:	2000IMP2
Date:	11-28-99
Revised:	

3/2000 DISTRIBUTION SYSTEM IMPROVEMENTS
 CONTRACT "A"
 OVERALL PLAN
 HENDERSON COUNTY WATER DISTRICT



PARALLEL OCCUPANCY
 FROM MILEPOINT: 0.057
 TO MILEPOINT: 1.553

APPROX.
7,900 LF OF 6"
 SDR 21, CLASS 200 PVC WATER MAIN
 INSTALLED IN EASEMENT AND R.O.W.

EXISTING 2" MAIN TO BE ABANDONED
 AFTER RECONNECTS ARE MADE

ANDERSON CO.
 ANDERSON CO.

RANCH ROAD

40 LF BORE W/O CASING
 6" CARRIER

- 1 - 3" AND SMALLER TIE-IN
- 1 - 6" x 3" TEE
- 1 - 3" x 2" REDUCER
- 1 - 2" GATE VALVE W/BOX

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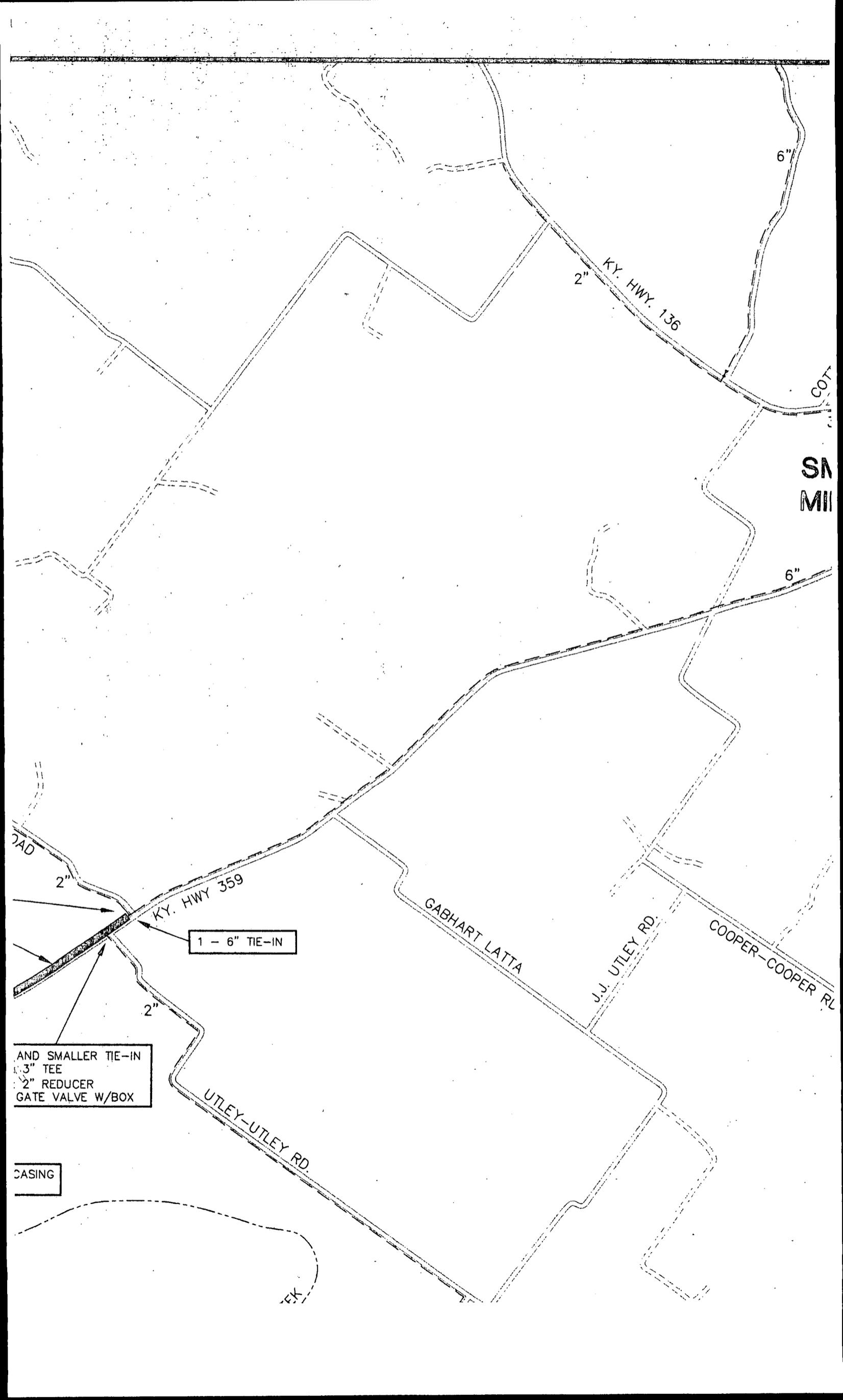
40 LF BORE W/O CASING
6" CARRIER

- 1 - 3" AND SMALLER TIE IN
- 1 - 6"x 3" REDUCER

INSTALL IN EASEMENT
THROUGH HORSE LOT

3"

CULVER



6"

2" KY. HWY. 136

COT

SM
MI

6"

ROAD

2"

KY. HWY 359

1 - 6" TIE-IN

2"

GABHART LATTA

J.J. UTLEY RD.

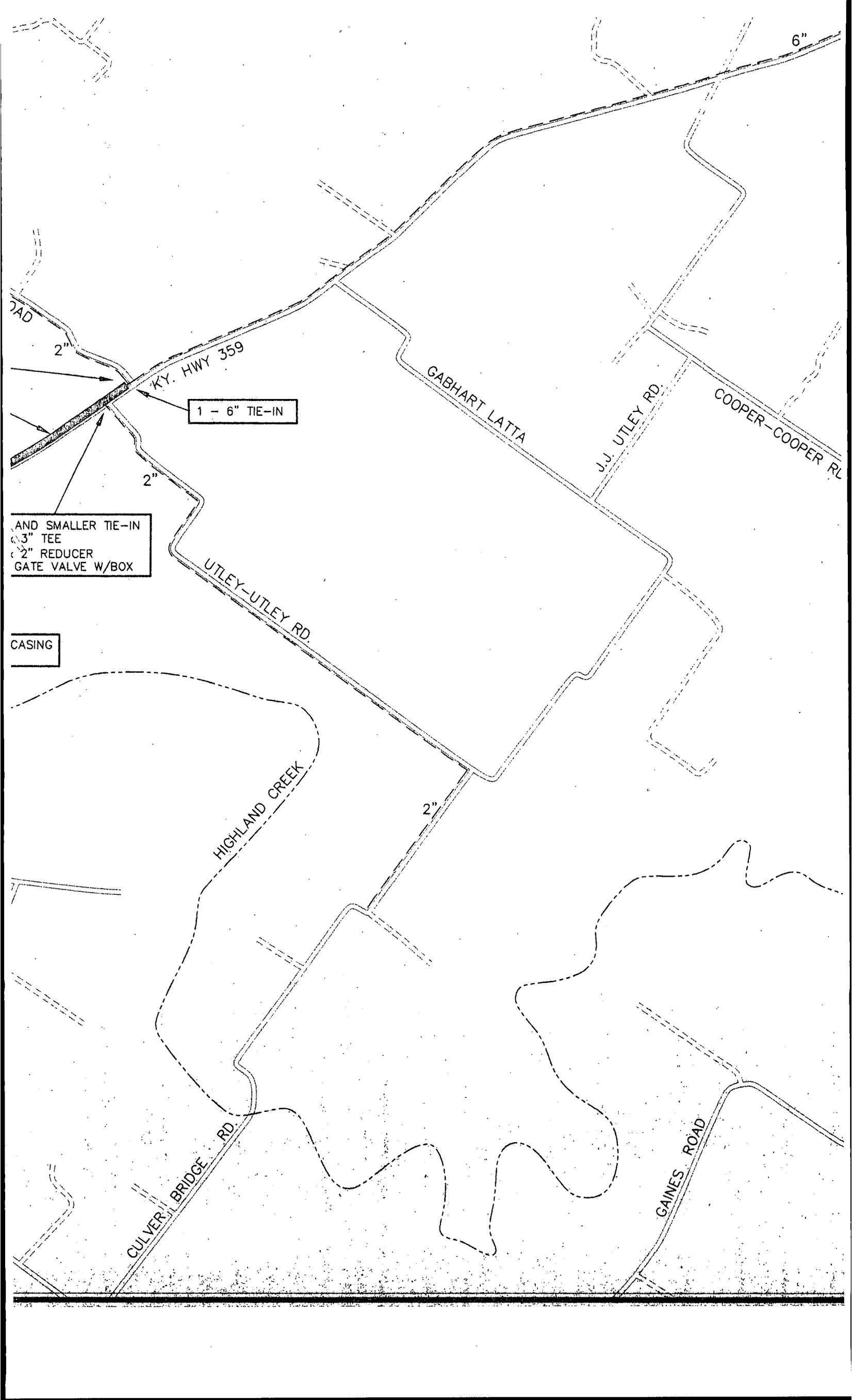
COOPER-COOPER RD.

AND SMALLER TIE-IN
3" TEE
2" REDUCER
GATE VALVE W/BOX

UTLEY-UTLEY RD.

CASING

EX



6"

ROAD

2"

KY. HWY 359

1 - 6" TIE-IN

GABHART LATTA

J.J. UTLEY RD.

COOPER-COOPER RD.

2"

AND SMALLER TIE-IN
3" TEE
2" REDUCER
GATE VALVE W/BOX

UTLEY-UTLEY RD.

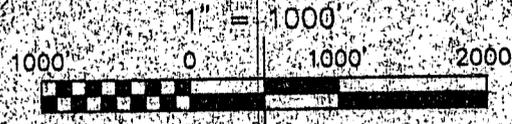
CASING

HIGHLAND CREEK

2"

CULVER BRIDGE RD.

GAINES ROAD



**SMITH
MILLS**

COTTON LN
HILL TOP DR
COST SHARE 2
SITE "G"

NEWMAN

KY HWY 266

KY HWY 136

COST SHARE 3

TRIGG

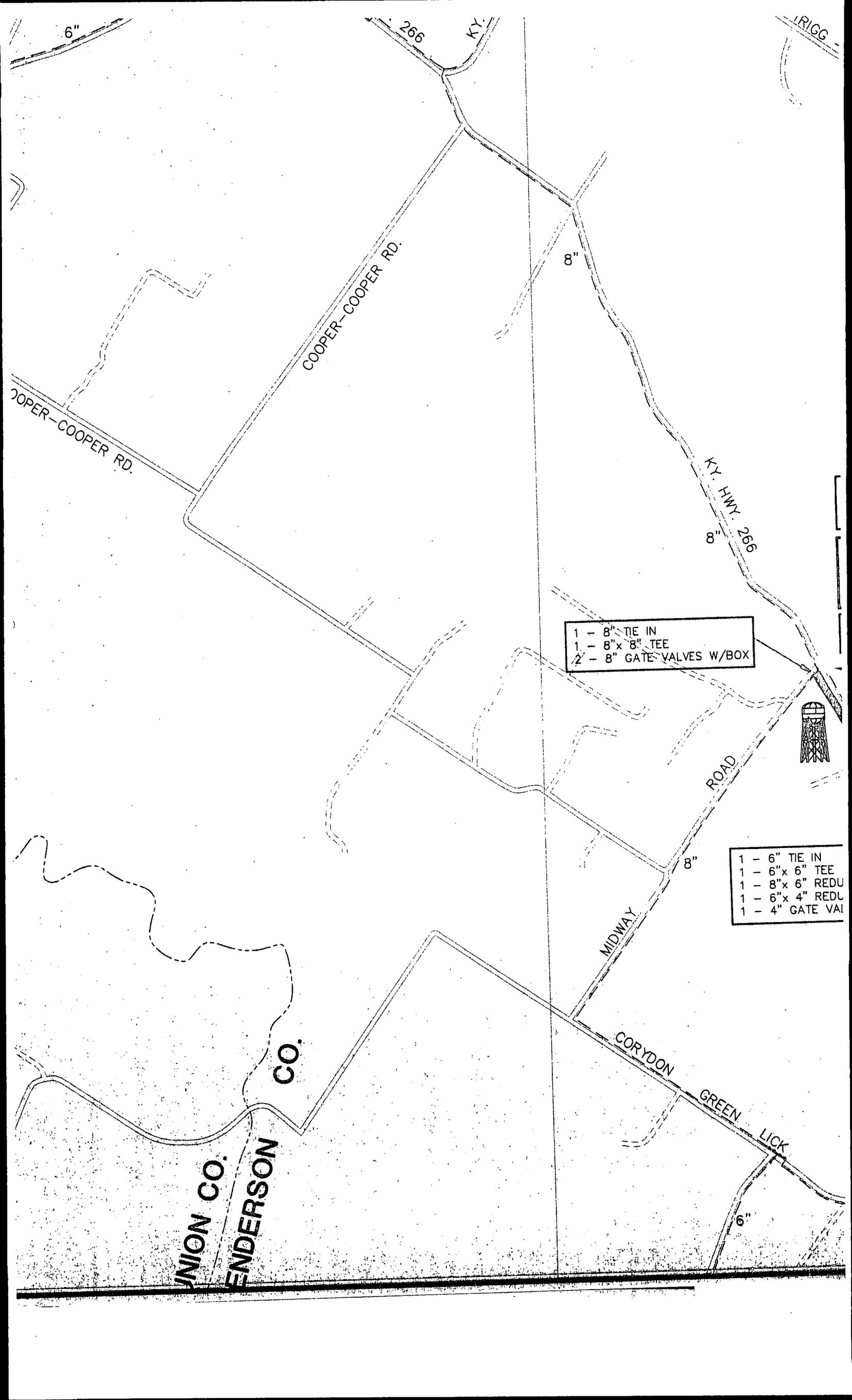
COOPER-COOPER RD.

COOPER-COOPER RD.

KY HWY 266

- 1 - 8" TIE IN
- 1 - 8" x 8" TEE
- 2 - 8" GATE VALVES W/BOX





1 - 8" TIE IN
 1 - 8" x 8" TEE
 2 - 8" GATE VALVES W/BOX

1 - 6" TIE IN
 1 - 6" x 6" TEE
 1 - 8" x 6" REDU
 1 - 6" x 4" REDU
 1 - 4" GATE VAL



6"

266

KY.

RIGG

COOPER-COOPER RD.

8"

COOPER-COOPER RD.

KY. HWY. 266

8"

ROAD

8"

MIDWAY

CORYDON

GREEN

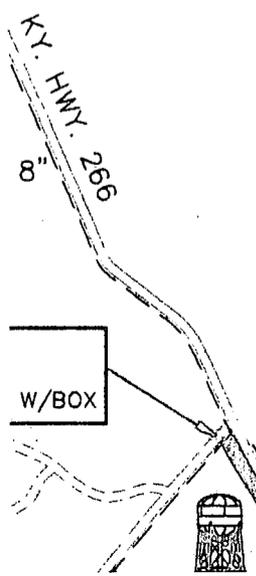
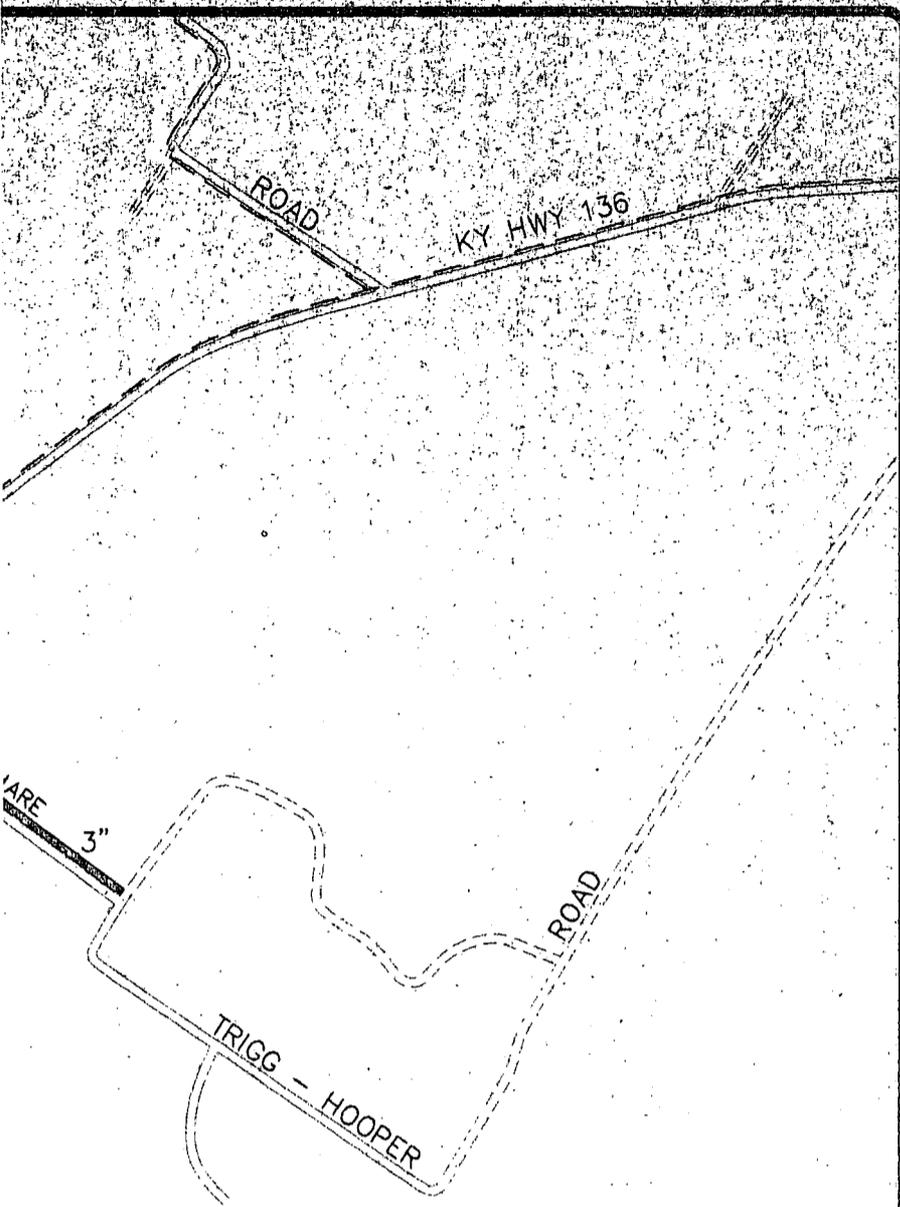
LICK

UNION CO.

ENDERSON

CO.

6"



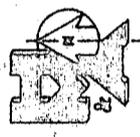
PARALLEL OCCUPANCY
FROM MILEPOINT: 1.814
TO MILEPOINT: 2.426

APPROX.
3,200 LF OF 8"
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN R.O.W.

EXISTING 4" MAIN TO BE ABANDONED
AFTER RECONNECTS ARE MADE

HUNTER MARTIN & ASSOCIATES, INC.

ENGINEERS & SURVEYORS
3220 LONE OAK ROAD • PADUCAH KENTUCKY 42003
(502) 554-2737 • FAX (502) 554-2738



Drawn by:	SDC
Checked by:	JRJ
File:	2000IMPA3
Date:	11-28-99
Revised:	

WEMENTS CONTRACT "A"

HWY 266

R DISTRICT

TRIGG - HOOPER

HUNTER

3/230 J



Drawn by:
SDC

Checked by:
JRJ

File:
2000IMPA3

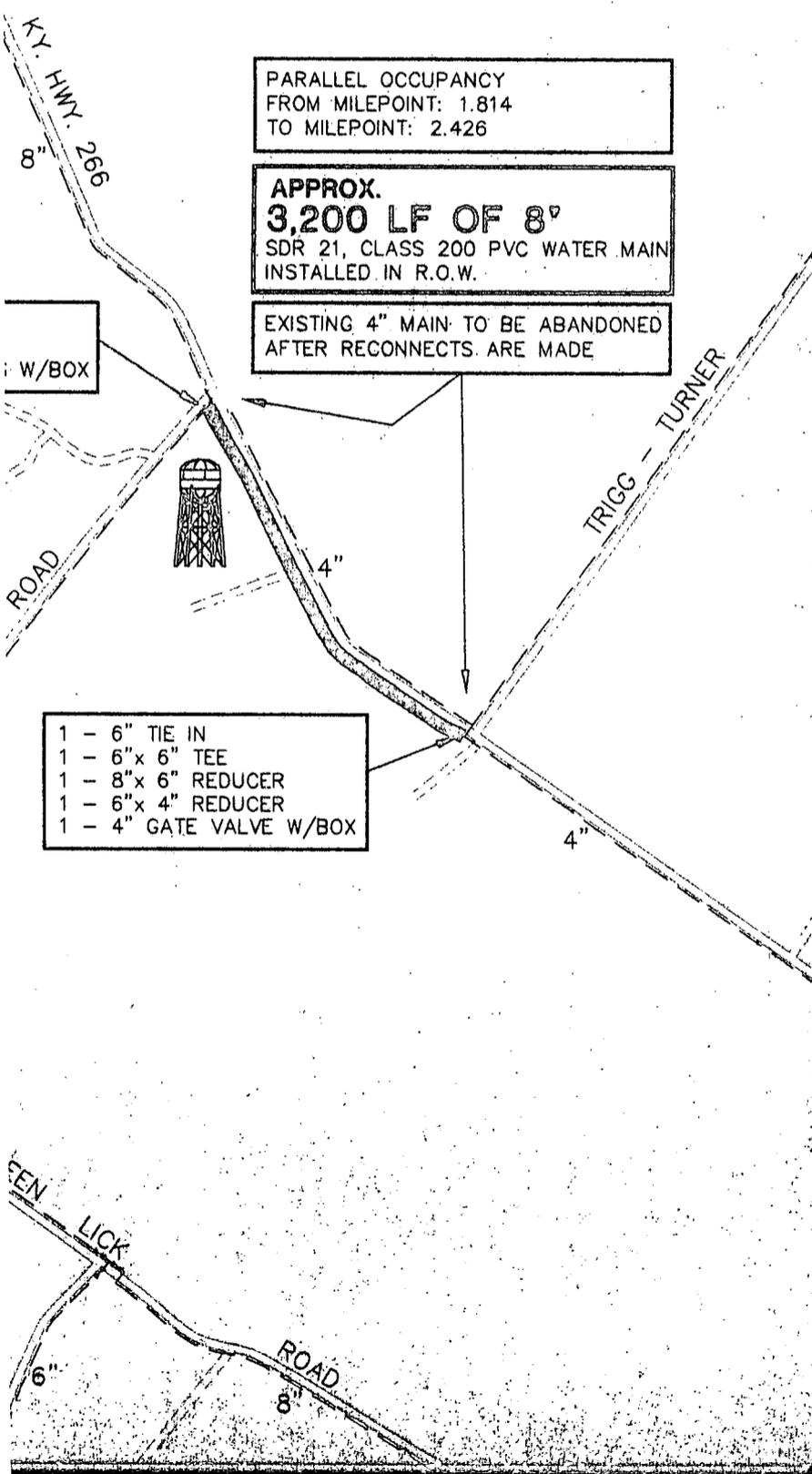
Date:
11-28-99

Revised:

PARALLEL OCCUPANCY
FROM MILEPOINT: 1.814
TO MILEPOINT: 2.426

APPROX.
3,200 LF OF 8"
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN R.O.W.

EXISTING 4" MAIN TO BE ABANDONED
AFTER RECONNECTS ARE MADE



- 1 - 6" TIE IN
- 1 - 6" x 6" TEE
- 1 - 8" x 6" REDUCER
- 1 - 6" x 4" REDUCER
- 1 - 4" GATE VALVE W/BOX

1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS CONTRACT "A"

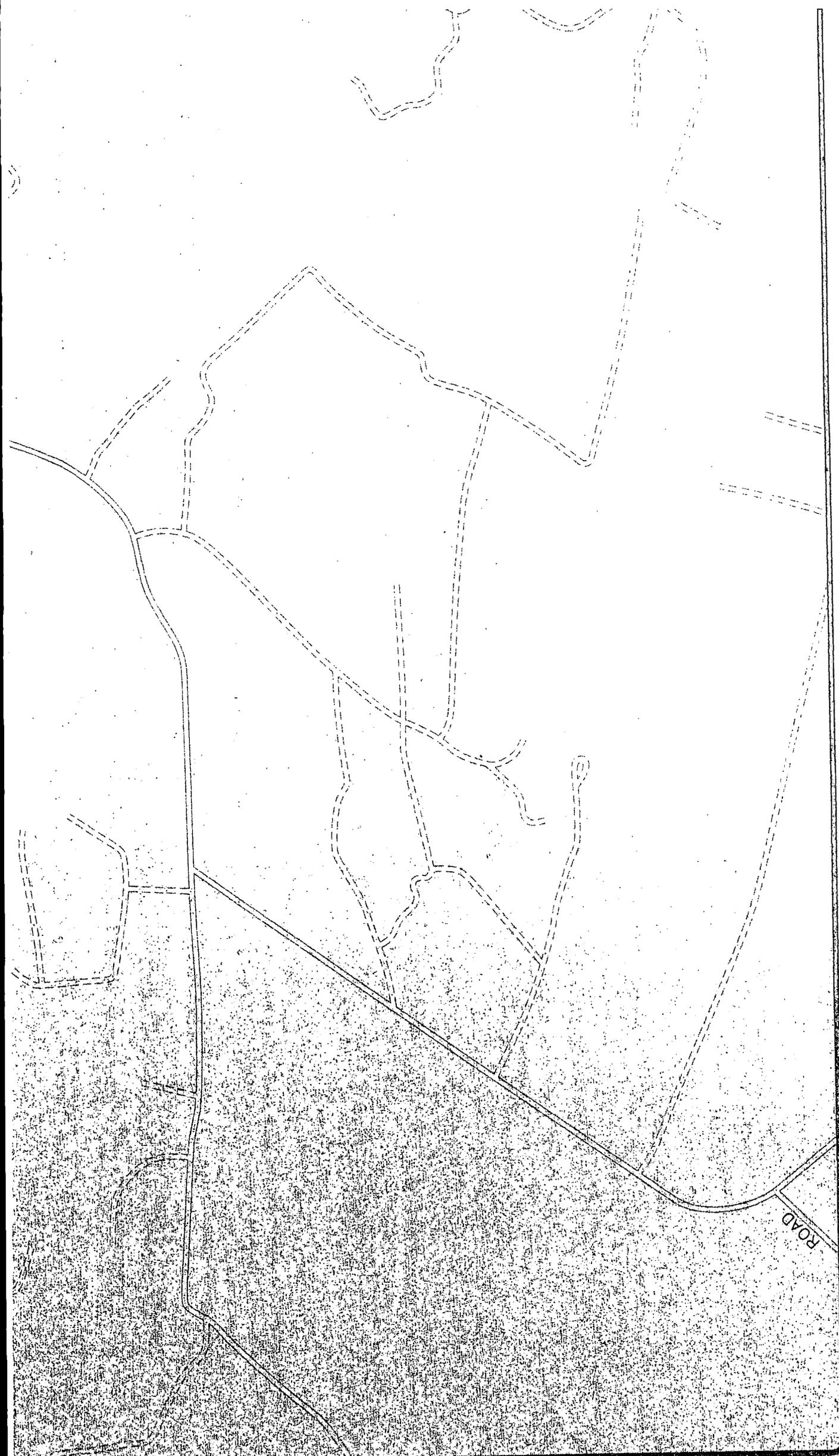
KY HWY 359 AND KY HWY 266

HENDERSON COUNTY WATER DISTRICT

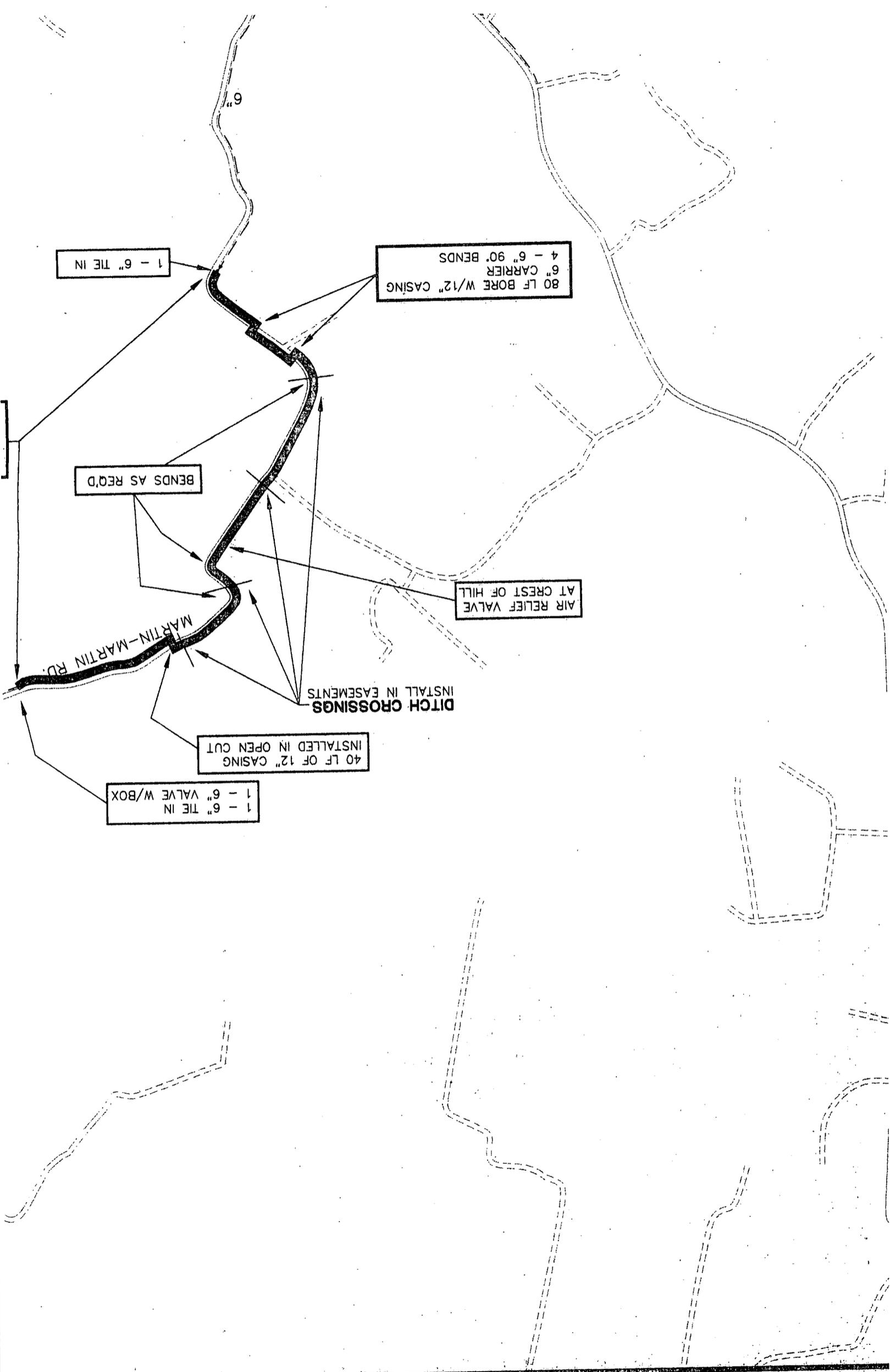
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A3

GAINES







1 - 6" TIE IN

80 LF BORE W/12" CASING
6" CARRIER
4 - 6" 90° BENDS

BENDS AS REQ'D

AIR RELIEF VALVE
AT CREST OF HILL

DITCH CROSSINGS
INSTALL IN EASEMENTS

40 LF OF 12" CASING
INSTALLED IN OPEN CUT

1 - 6" TIE IN
1 - 6" VALVE W/BOX

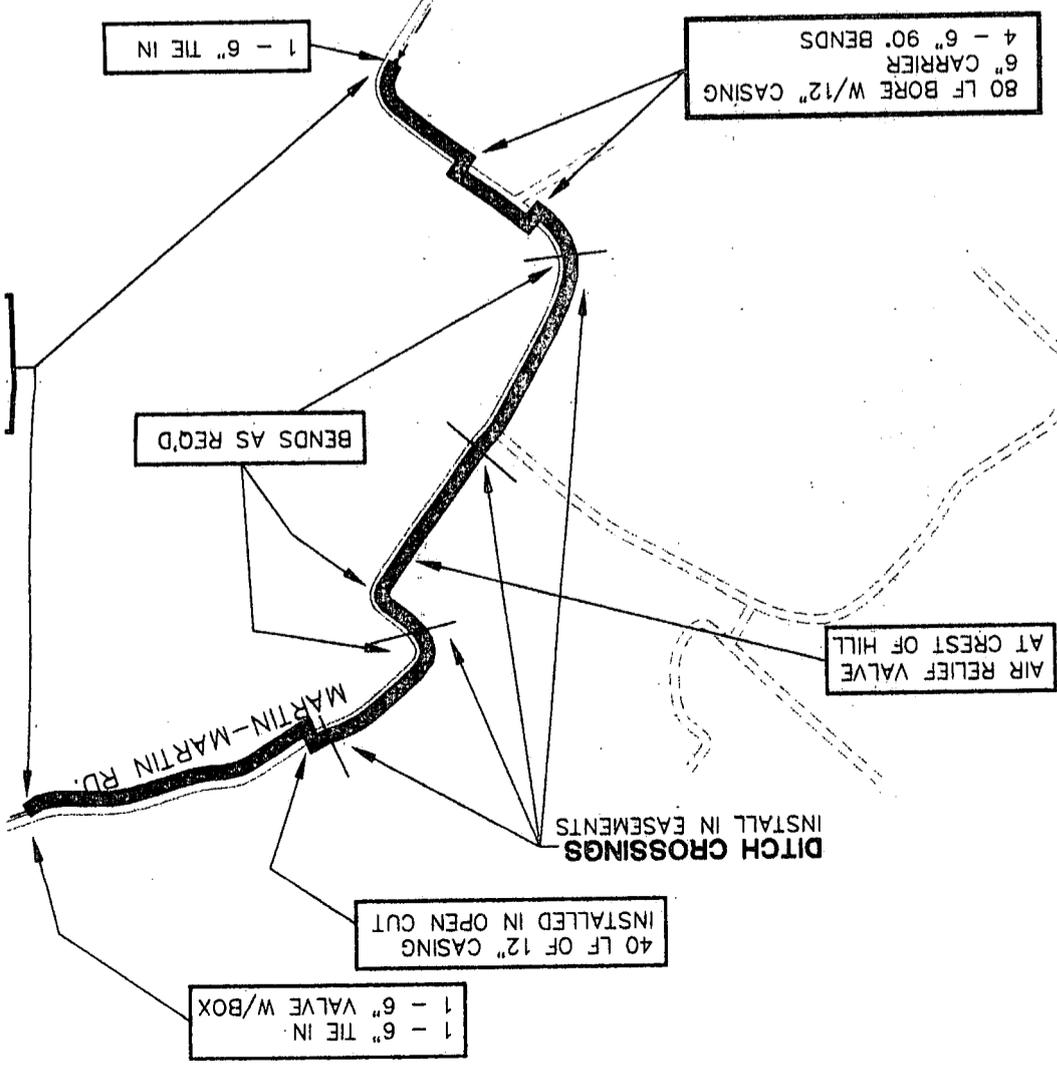
6"

MARTIN-MARTIN RD.

SMITH
MILLS

NEWMAN
HILLTOP DR.
COST SHARE 2"
SITE "G"
COTTON LN.

KY. HWY. 136



1 - 6" TIE IN

80 LF BORE W/12" CASING
6" CARRIER
4 - 6" 90° BENDS

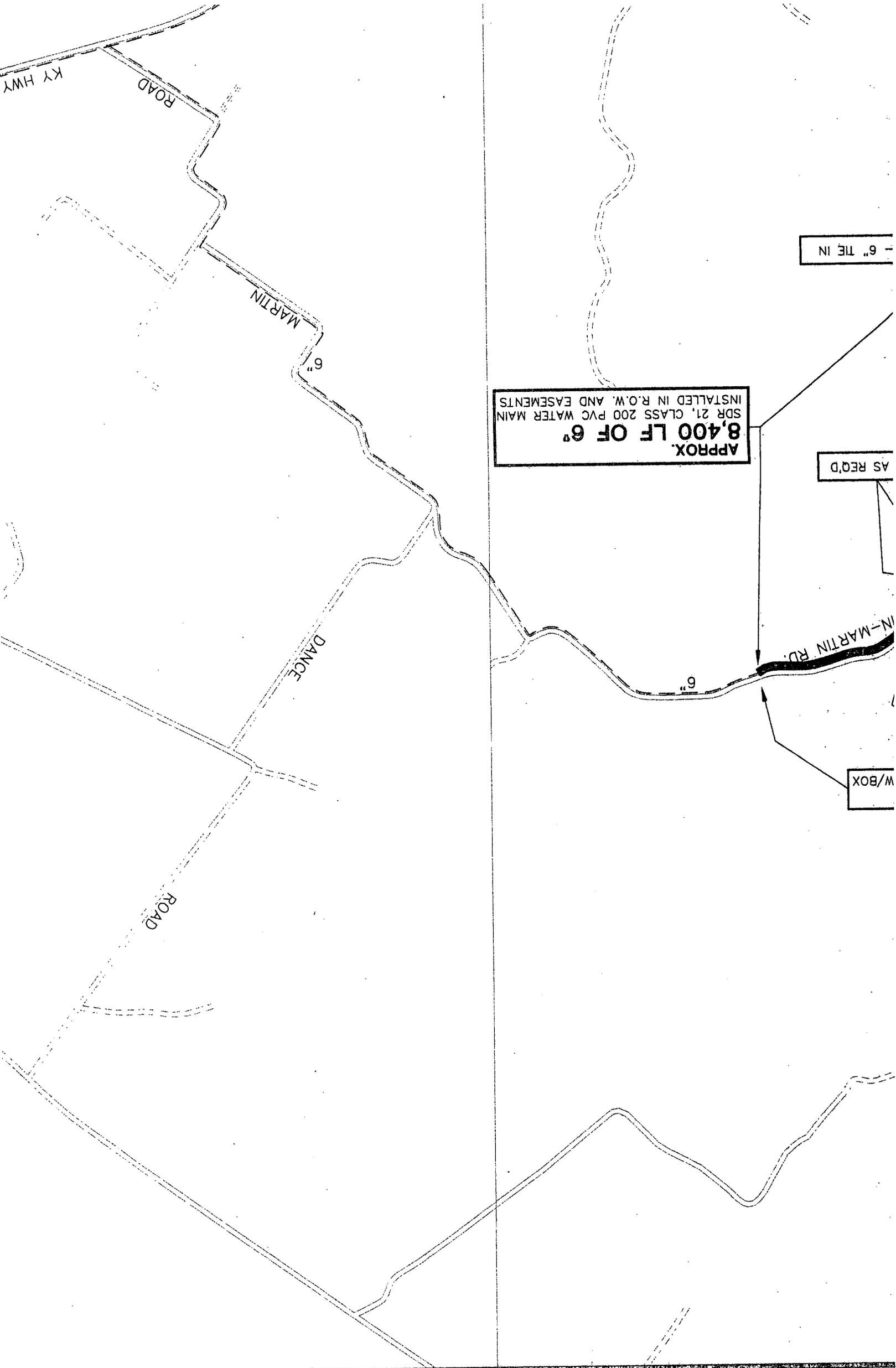
BENDS AS REQ'D

AIR RELIEF VALVE
AT CREST OF HILL

DITCH CROSSINGS
INSTALL IN EASEMENTS

40 LF OF 12" CASING
INSTALLED IN OPEN CUT

1 - 6" TIE IN
1 - 6" VALVE W/BOX



APPROX.
8,400 LF OF 6"
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN R.O.W. AND EASEMENTS

- 6" TIE IN

AS REQ'D

W/BOX

KY HWY

ROAD

MARTIN

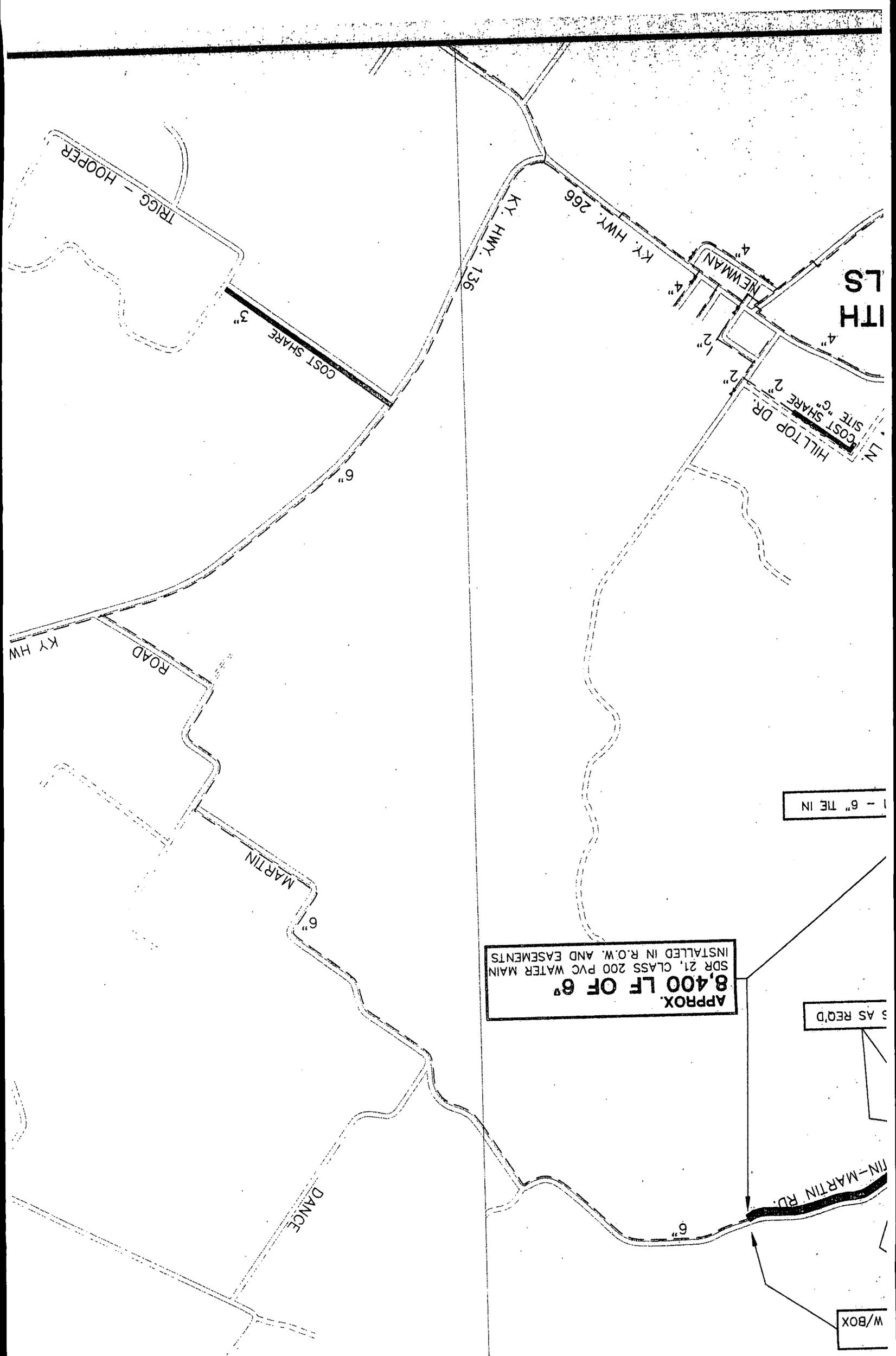
6"

DANCE

ROAD

IN-MARTIN RD.

6"



LS
TH

1 - 6" TIE IN

3 AS REQ'D

W/BOX

APPROX.
8,400 LF OF 6"
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN R.O.W. AND EASEMENTS

TRIGG - HOOPER

COST SHARE 3"

NEWMAN

HILLTOP DR.
COST SHARE 2"
SITE 6"

KY. HWY. 136

KY. HWY. 266

ROAD
KY HW

MARTIN

DANCE

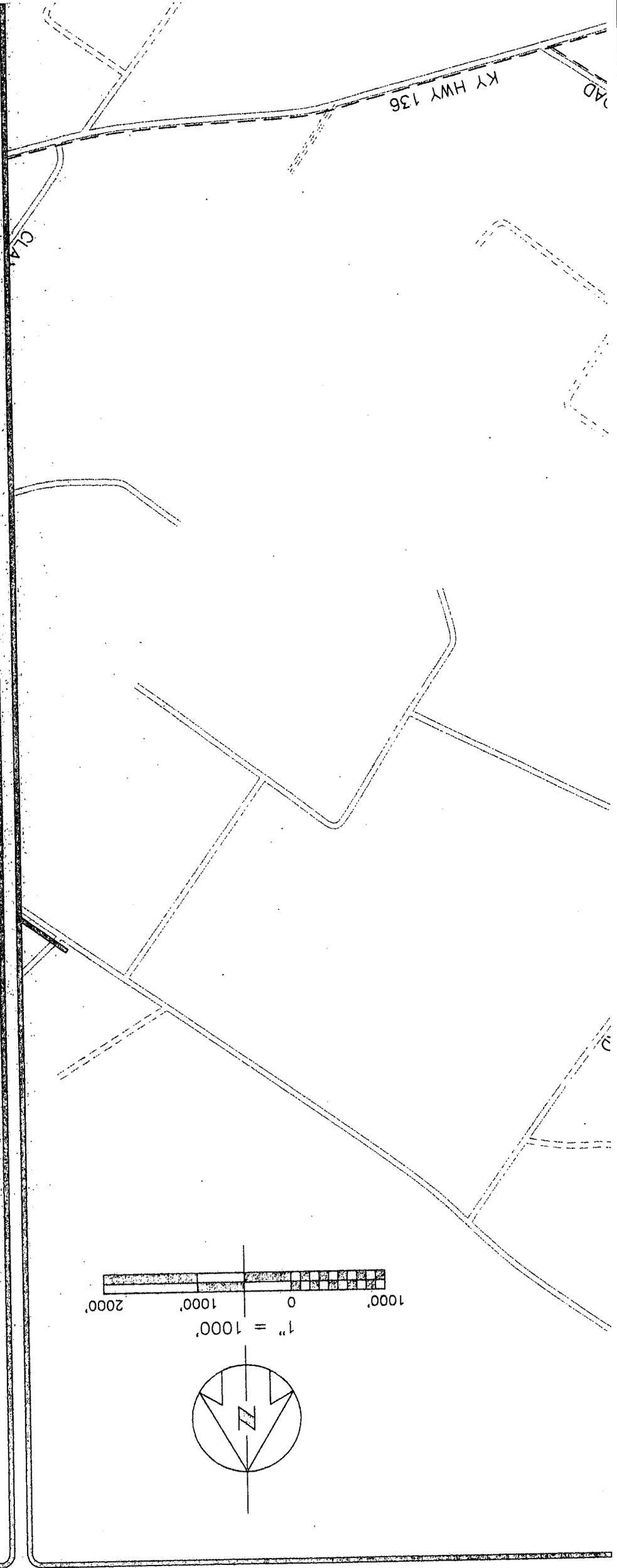
TIN-MARTIN RD.

IMPROVEMENTS CONTRACT "A"
RTIN RD.
WATER DISTRICT

Drawn by:	SDC
Checked by:	JRJ
File:	2000IMPA4
Date:	11-28-99
Revised:	



HUNTER MARTIN & ASSOCIATES, INC.
ENGINEERS & SURVEYORS
3220 LONE OAK ROAD • PADUCAH KENTUCKY 42003
(502) 554-2737 • FAX (502) 554-2738





Sheet

1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS CONTRACT "A"

MARTIN - MARTIN RD.

HENDERSON COUNTY WATER DISTRICT

Revised:

Date: 11-28-99

File:

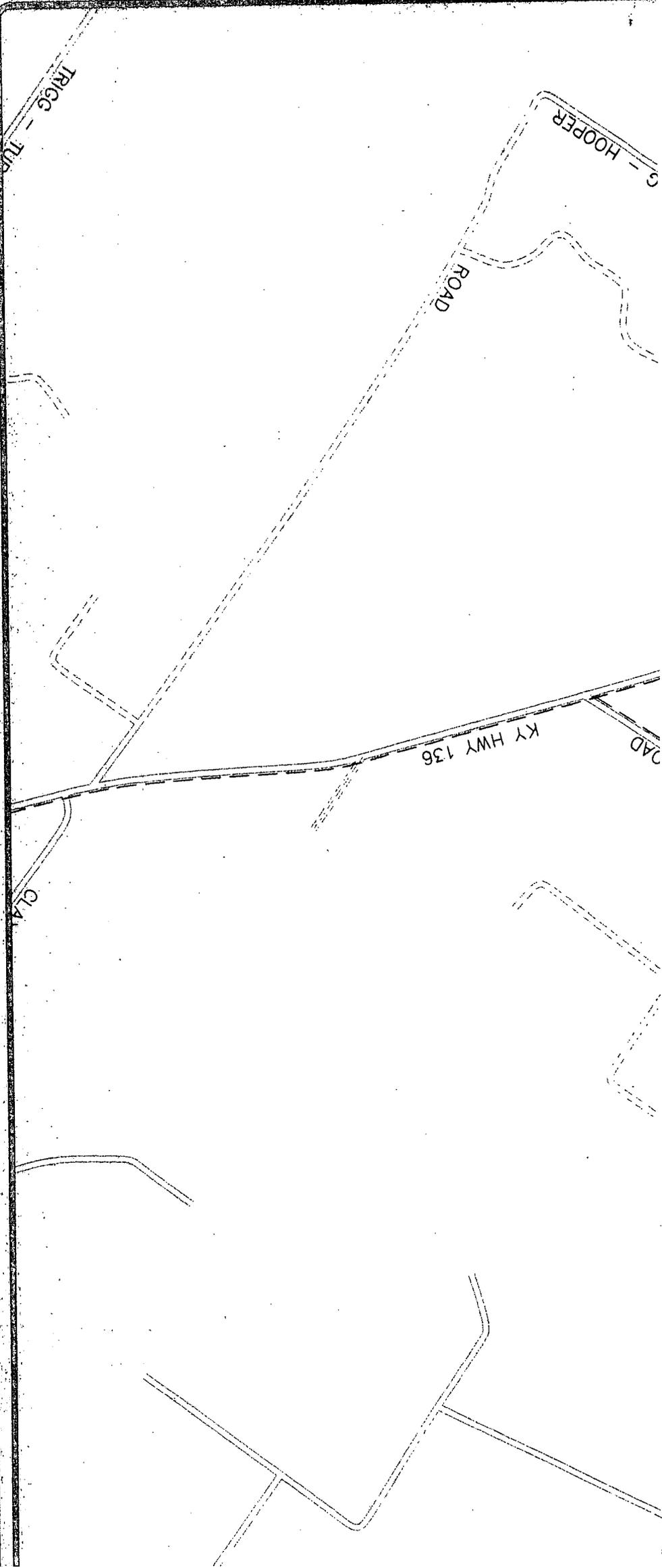
2000IMPA4

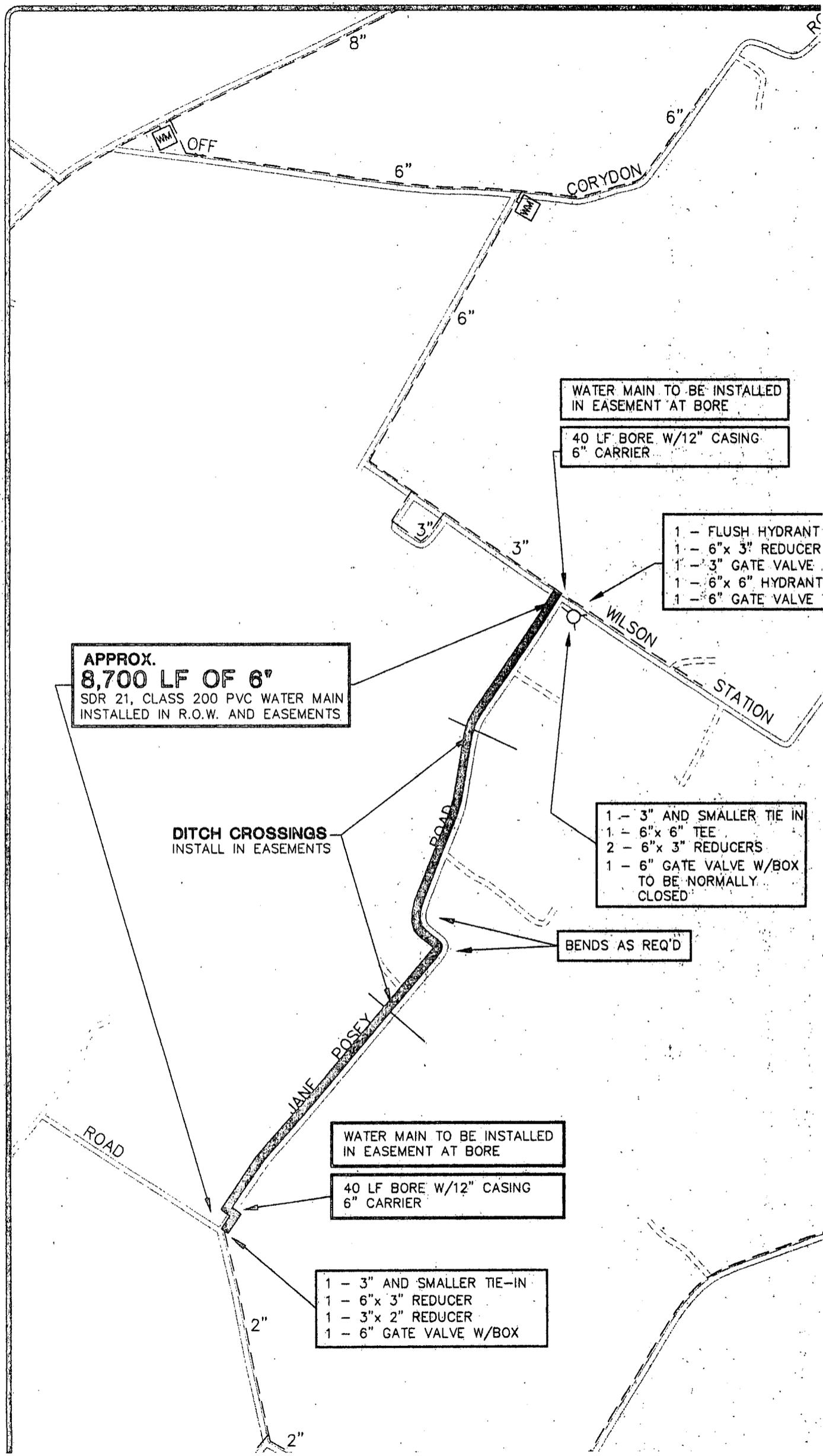
Checked by:

JRJ

Drawn by:

SDC





**APPROX.
8,700 LF OF 6"**
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN R.O.W. AND EASEMENTS

WATER MAIN TO BE INSTALLED
IN EASEMENT AT BORE

40 LF BORE W/12" CASING
6" CARRIER

- 1 - FLUSH HYDRANT
- 1 - 6"x 3" REDUCER
- 1 - 3" GATE VALVE
- 1 - 6"x 6" HYDRANT
- 1 - 6" GATE VALVE

DITCH CROSSINGS
INSTALL IN EASEMENTS

- 1 - 3" AND SMALLER TIE IN
- 1 - 6"x 6" TEE
- 2 - 6"x 3" REDUCERS
- 1 - 6" GATE VALVE W/BOX
TO BE NORMALLY
CLOSED

BENDS AS REQ'D

WATER MAIN TO BE INSTALLED
IN EASEMENT AT BORE

40 LF BORE W/12" CASING
6" CARRIER

- 1 - 3" AND SMALLER TIE-IN
- 1 - 6"x 3" REDUCER
- 1 - 3"x 2" REDUCER
- 1 - 6" GATE VALVE W/BOX

- 1 - 6" x 3" REDUCER
- 1 - 3" GATE VALVE
- 1 - 6" x 6" HYDRANT
- 1 - 6" GATE VALVE

**APPROX.
8,700 LF OF 6"**
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN R.O.W. AND EASEMENTS

DITCH CROSSINGS
INSTALL IN EASEMENTS

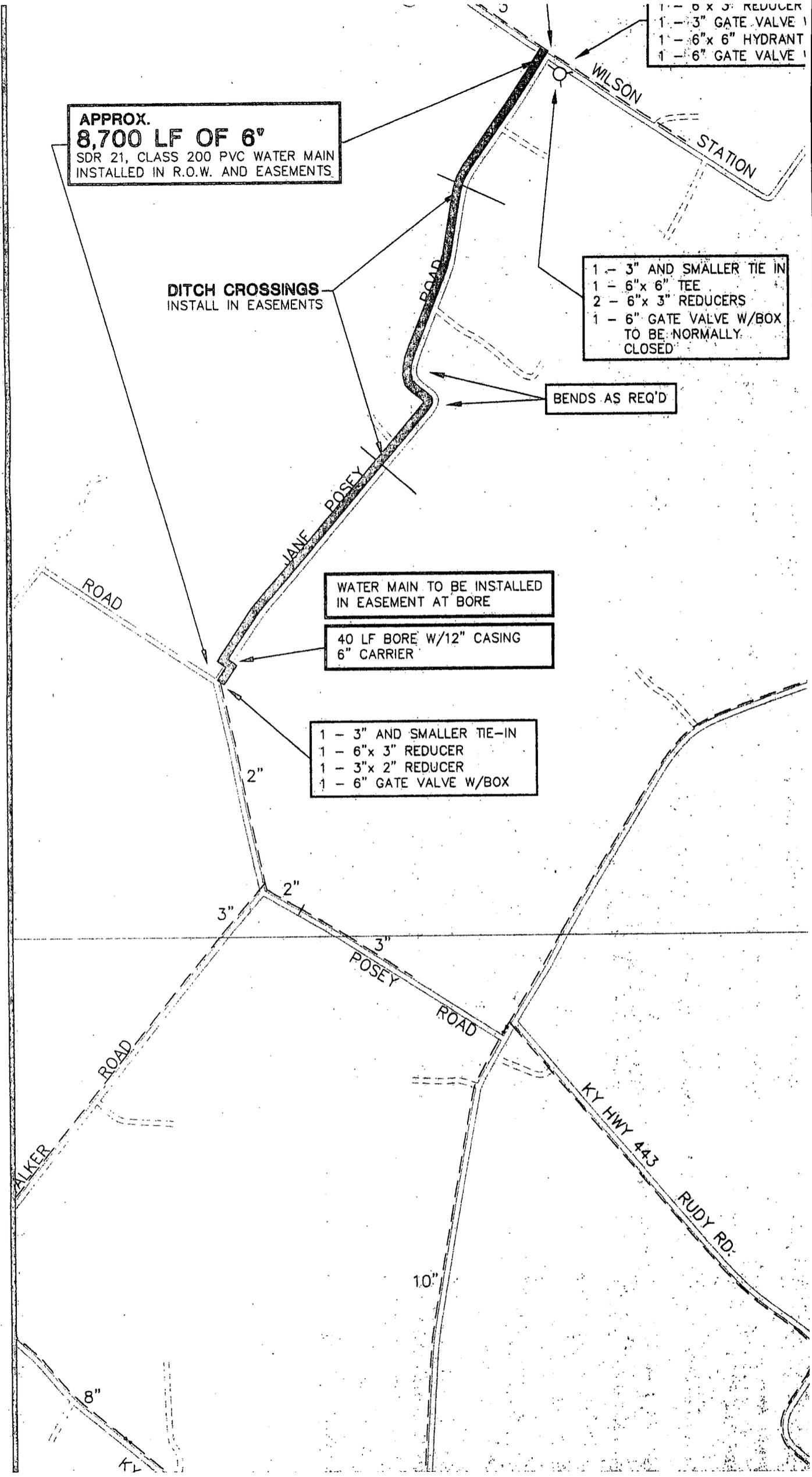
- 1 - 3" AND SMALLER TIE IN
- 1 - 6" x 6" TEE
- 2 - 6" x 3" REDUCERS
- 1 - 6" GATE VALVE W/BOX
TO BE NORMALLY
CLOSED

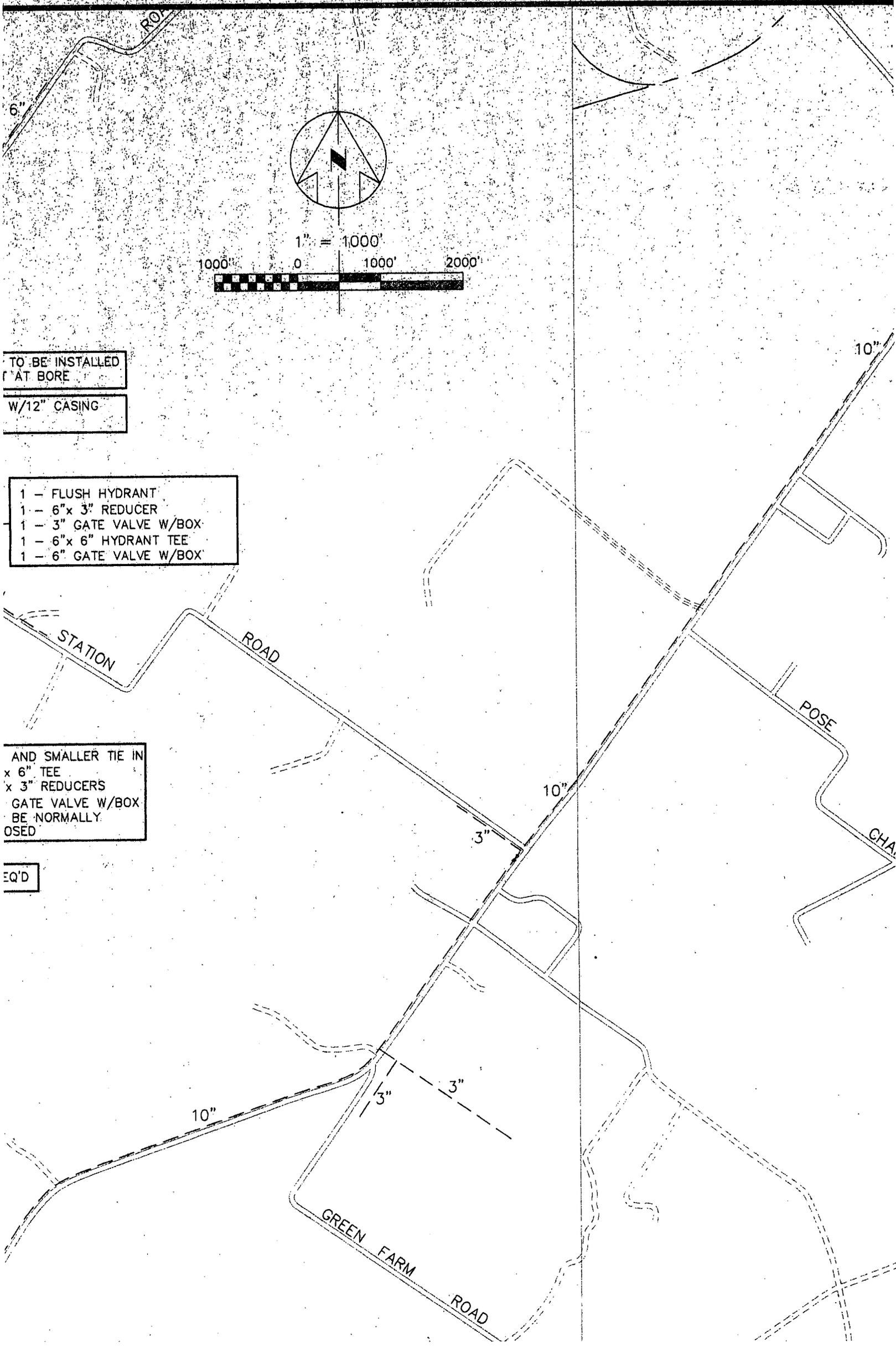
BENDS AS REQ'D

WATER MAIN TO BE INSTALLED
IN EASEMENT AT BORE

40 LF BORE W/12" CASING
6" CARRIER

- 1 - 3" AND SMALLER TIE-IN
- 1 - 6" x 3" REDUCER
- 1 - 3" x 2" REDUCER
- 1 - 6" GATE VALVE W/BOX





TO BE INSTALLED
AT BORE

W/12" CASING

- 1 - FLUSH HYDRANT
- 1 - 6" x 3" REDUCER
- 1 - 3" GATE VALVE W/BOX
- 1 - 6" x 6" HYDRANT TEE
- 1 - 6" GATE VALVE W/BOX

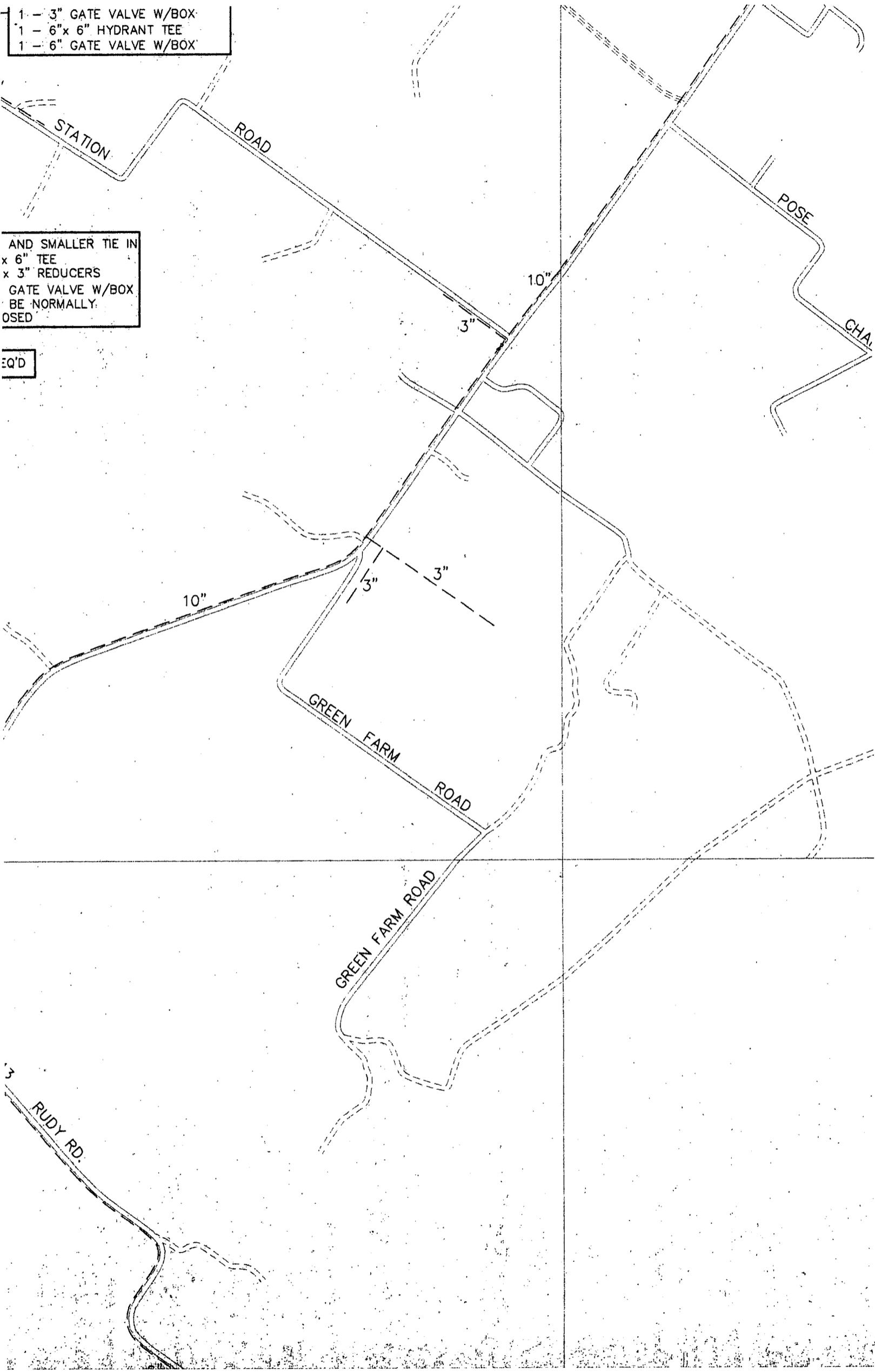
AND SMALLER TIE IN
x 6" TEE
x 3" REDUCERS
GATE VALVE W/BOX
BE NORMALLY
USED

EQ'D

- 1 - 3" GATE VALVE W/BOX
- 1 - 6" x 6" HYDRANT TEE
- 1 - 6" GATE VALVE W/BOX

AND SMALLER TIE IN
 x 6" TEE
 x 3" REDUCERS
 GATE VALVE W/BOX
 BE NORMALLY
 USED

EQ'D



STATION ROAD

ROAD

POSE

CHA

10"

3"

10"

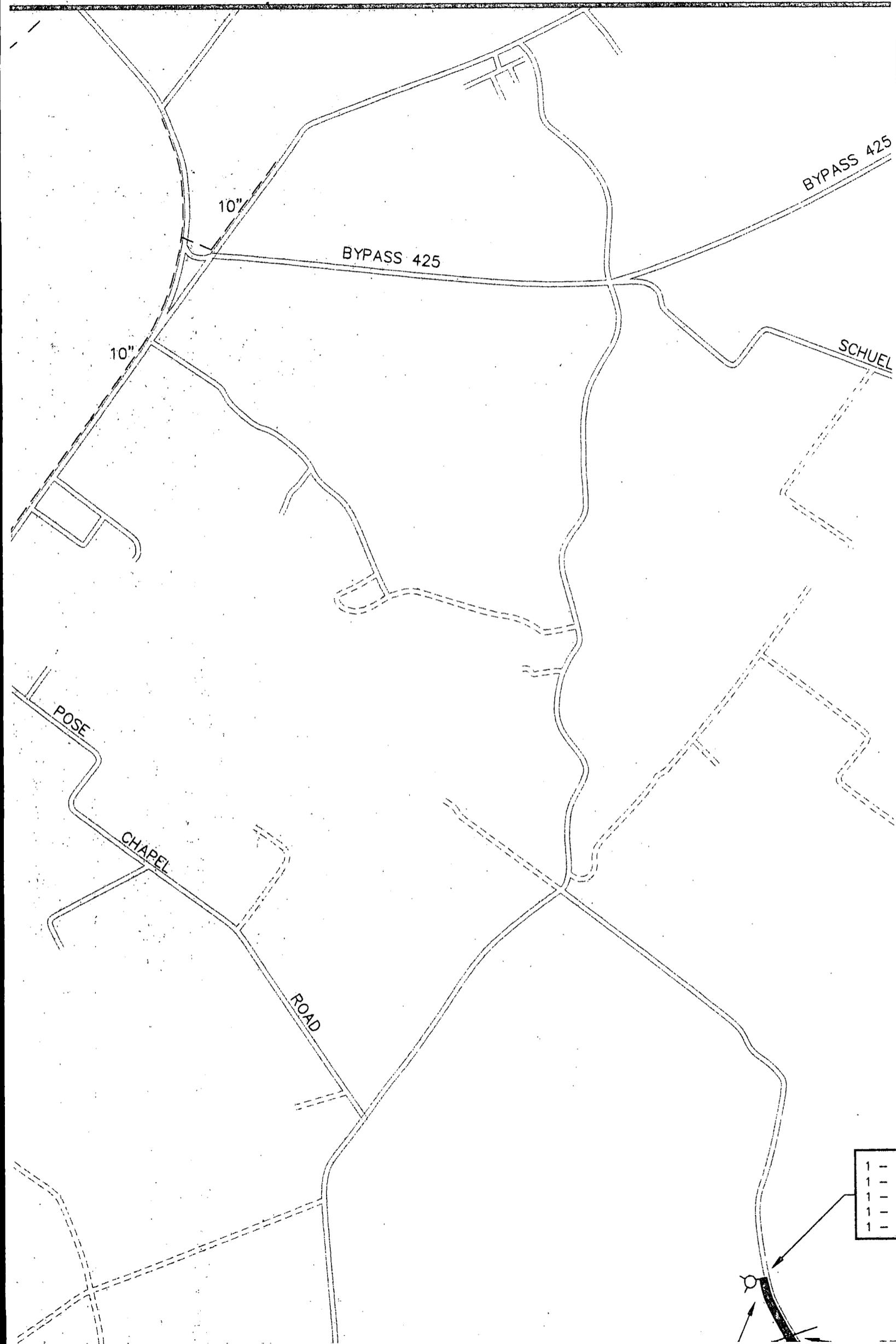
3"

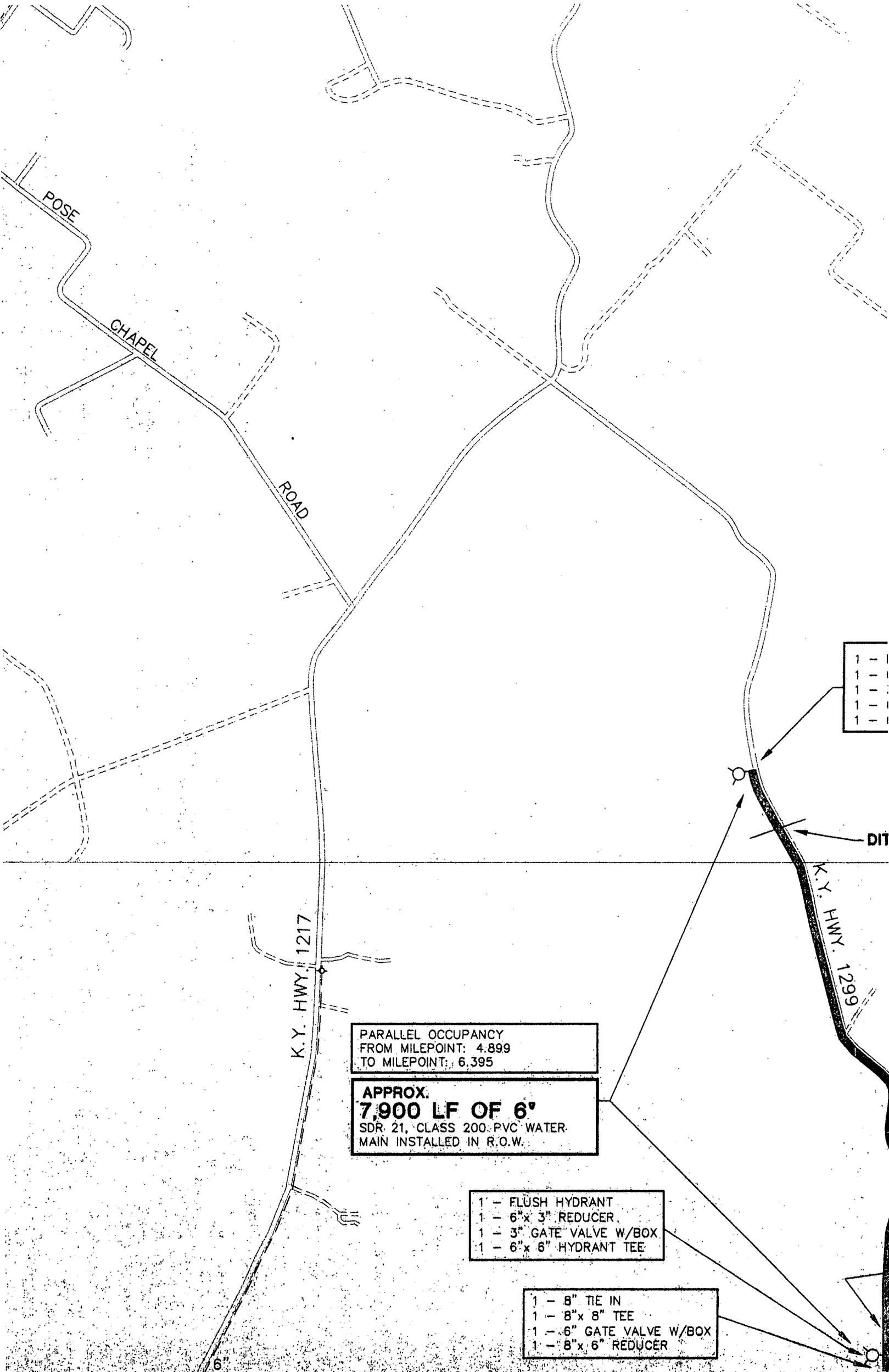
3"

GREEN FARM ROAD

GREEN FARM ROAD

RUDY RD.





K.Y. HWY. 1217

K.Y. HWY. 1299

DIT

PARALLEL OCCUPANCY
FROM MILEPOINT: 4.899
TO MILEPOINT: 6.395

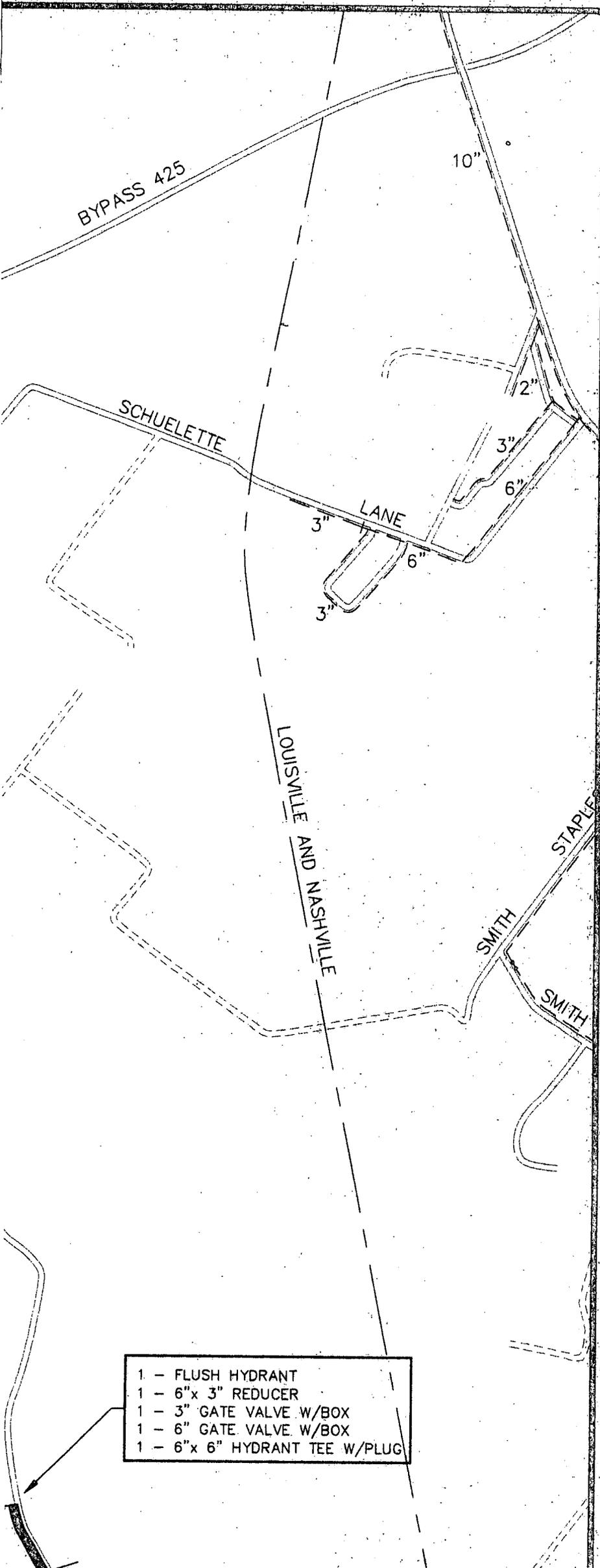
**APPROX.
7,900 LF OF 6"**
SDR 21, CLASS 200 PVC WATER
MAIN INSTALLED IN R.O.W.

- 1 - FLUSH HYDRANT
- 1 - 6" x 3" REDUCER
- 1 - 3" GATE VALVE W/BOX
- 1 - 6" x 6" HYDRANT TEE

- 1 - 8" TIE IN
- 1 - 8" x 8" TEE
- 1 - 6" GATE VALVE W/BOX
- 1 - 8" x 6" REDUCER

6"

- 1 -
- 1 -
- 1 -
- 1 -



- 1 - FLUSH HYDRANT
- 1 - 6" x 3" REDUCER
- 1 - 3" GATE VALVE W/BOX
- 1 - 6" GATE VALVE W/BOX
- 1 - 6" x 6" HYDRANT TEE W/PLUG

HUNTER MARTIN & ASSOCIATES, INC.

ENGINEERS & SURVEYORS
 3220 LONE OAK ROAD • PADUCAH KENTUCKY 42003
 (502) 554-2737 • FAX (502) 554-2738



Drawn by:	SDC
Checked by:	JRJ
File:	2000IMPA5
Date:	11-28-99
Revised:	

MOVEMENTS CONTRACT "A"
HWY 1298
R DISTRICT

3"

LOUISVILLE AND NASHVILLE

SMITH STAPLE
SMITH

HUNTER M
3220 LONI
(50)



Drawn by:
SDC

Checked by:
JRJ

File:
2000IMPA5

Date:
11-28-99

Revised:

- 1 - FLUSH HYDRANT
- 1 - 6" x 3" REDUCER
- 1 - 3" GATE VALVE W/BOX
- 1 - 6" GATE VALVE W/BOX
- 1 - 6" x 6" HYDRANT TEE W/PLUG

DITCH CROSSINGS

K.Y. HWY. 1299

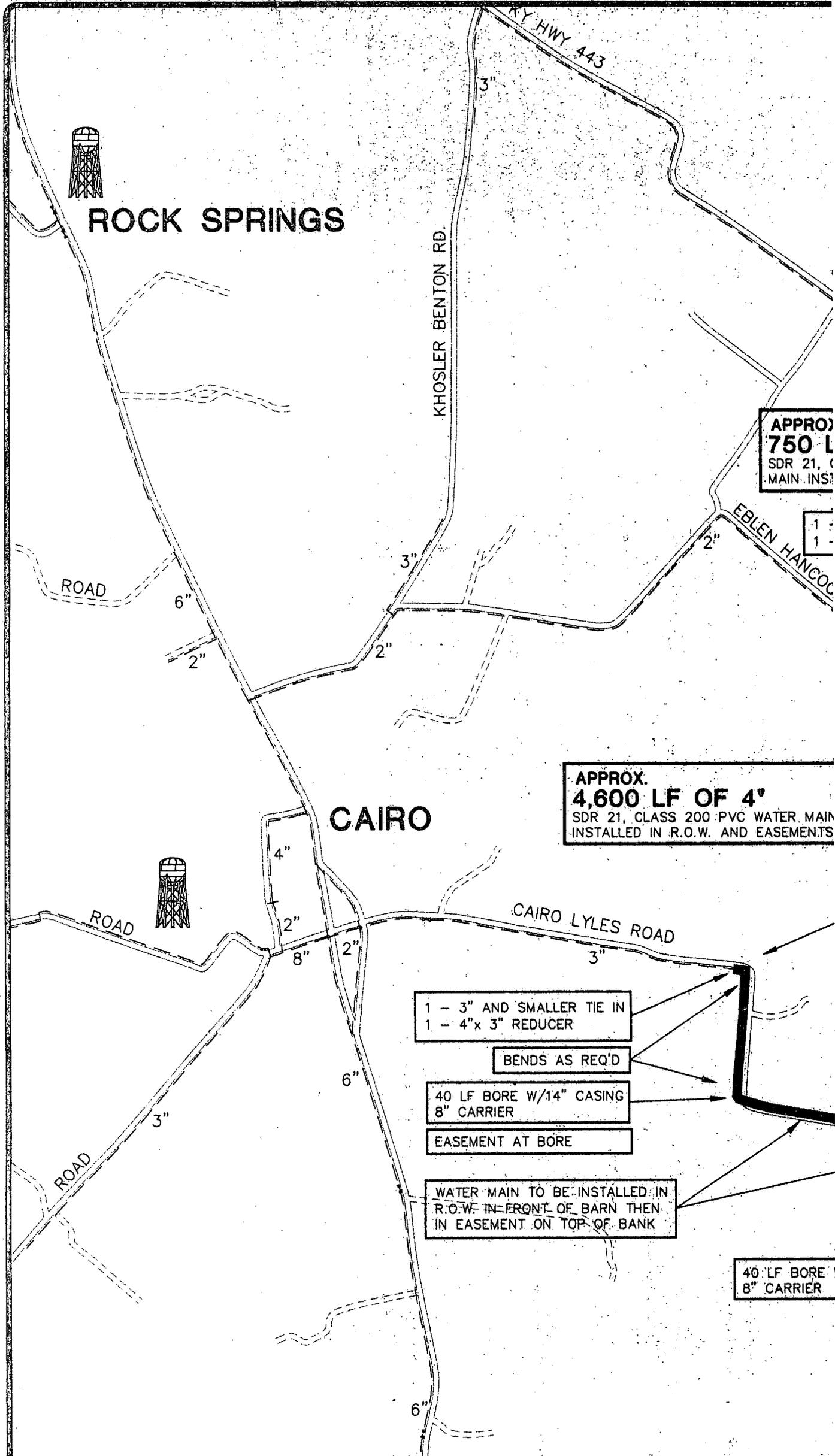
50 LF. BORE W/12" CASING
6" CARRIER

1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS CONTRACT "A"
JANE POSEY RD. AND KY HWY 1299

HENDERSON COUNTY WATER DISTRICT

Shoot

A5



ROCK SPRINGS

CAIRO

**APPROX.
750 LF**
SDR 21, ()
MAIN INS.

**APPROX.
4,600 LF OF 4"**
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN R.O.W. AND EASEMENTS

1 - 3" AND SMALLER TIE IN
1 - 4" x 3" REDUCER

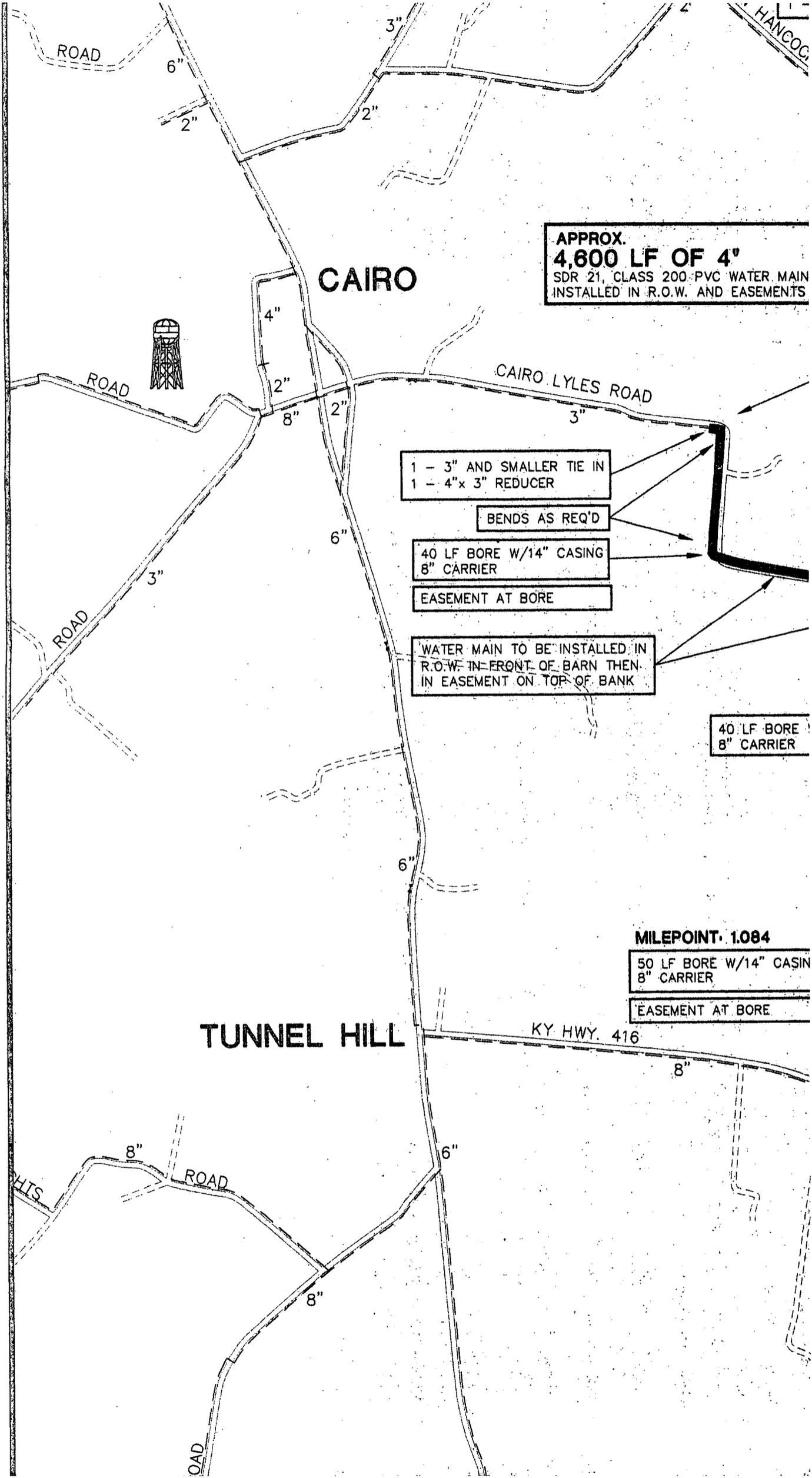
BENDS AS REQ'D

40 LF BORE W/14" CASING
8" CARRIER

EASEMENT AT BORE

WATER MAIN TO BE INSTALLED IN
R.O.W. IN FRONT OF BARN THEN
IN EASEMENT ON TOP OF BANK

40 LF BORE
8" CARRIER



APPROX.
4,600 LF OF 4"
 SDR 21, CLASS 200 PVC WATER MAIN
 INSTALLED IN R.O.W. AND EASEMENTS

1 - 3" AND SMALLER TIE IN
 1 - 4" x 3" REDUCER

BENDS AS REQ'D

40 LF BORE W/14" CASING
 8" CARRIER

EASEMENT AT BORE

WATER MAIN TO BE INSTALLED IN
 R.O.W. IN FRONT OF BARN THEN
 IN EASEMENT ON TOP OF BANK

40 LF BORE
 8" CARRIER

MILEPOINT 1.084
 50 LF BORE W/14" CASING
 8" CARRIER

EASEMENT AT BORE

TUNNEL HILL

KY HWY. 416

APPROX. 8,200 LF OF 8"
SDR 21, CLASS 200 PVC WATER
INSTALLED IN R.O.W. AND EASEMENT

- 1 - FLUSH HYDRANT
- 1 - 3" GATE VALVE W/BOX
- 1 - 8" GATE VALVE W/BOX
- 1 - 8"x 3" TEE W/PLUG

EASEMENT TOP OF BANK

- 1 - 8"x 8" TEE
- 2 - 8" GATE VALVES W/BOX

CREEK CROSSING
INSTALL IN EASEMENTS

MEHL/CATES RD.

APPROX. 750 LF OF 3"
SDR 21, CLASS 200 PVC WATER
MAIN INSTALLED IN R.O.W.

BENDS AS REQ'D

- 1 - 3" AND SMALLER TIE IN
- 1 - 3"x 2" REDUCER

40 LF OF 14" CASING
IN OPEN CUT

EASEMENT TOP OF B.

MILEPOINT 2.885

50 LF BORE W/14" CASING
8" CARRIER

40 LF BORE W/14" CASING
8" CARRIER

- 1 - FLUSH HYDRANT
- 1 - 8"x 3" TEE
- 1 - 3"x 3" TEE
- 2 - 3" GATE VALVES W/BOX
- 1 - 8" GATE VALVE W/BOX

4" OF 4"
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN R.O.W. AND EASEMENTS

- 1 - 4" GATE VALVE W/BOX
- 1 - 8" GATE VALVE W/BOX
- 1 - 8"x 4" TEE

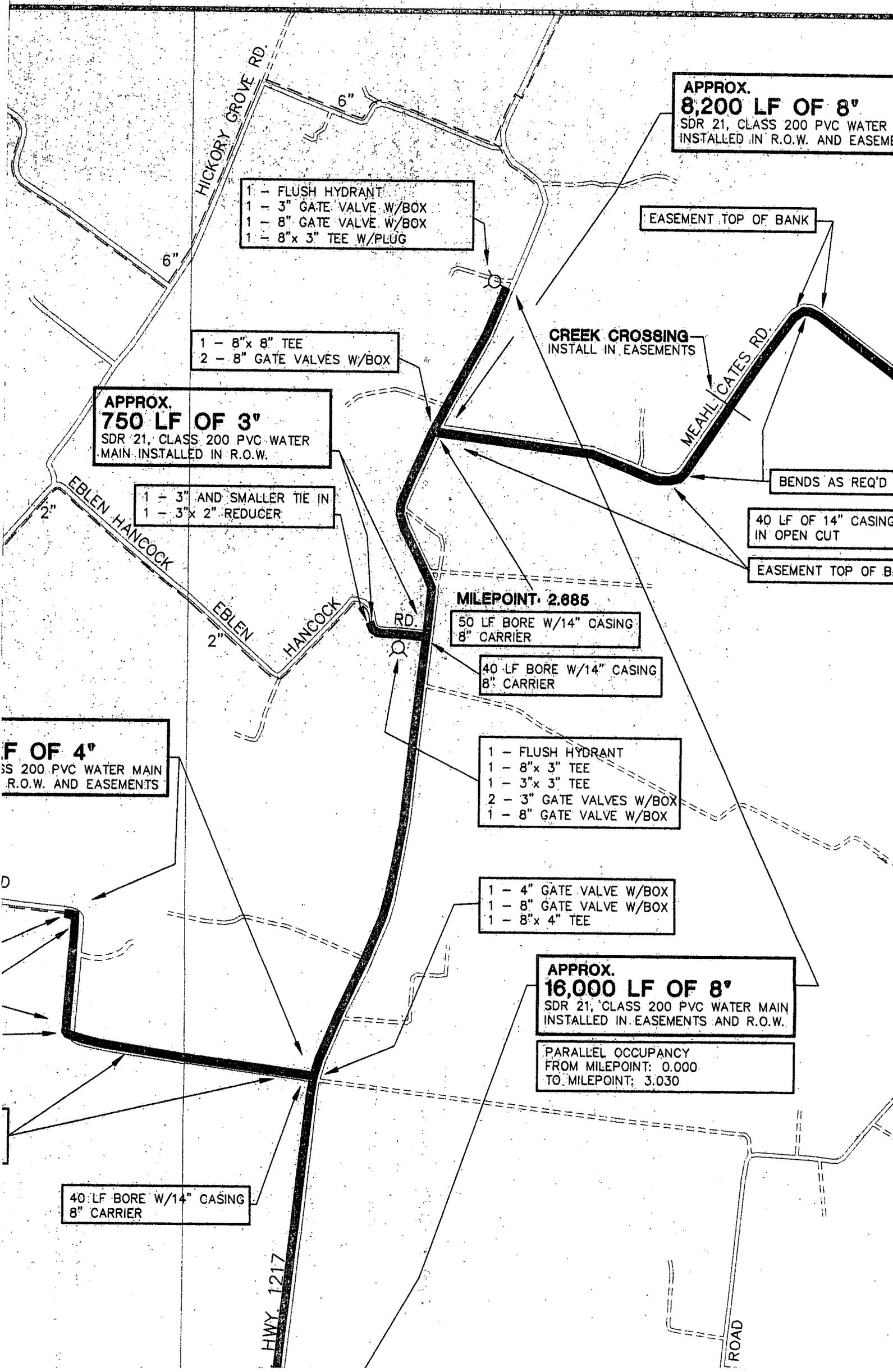
APPROX. 16,000 LF OF 8"
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN EASEMENTS AND R.O.W.

PARALLEL OCCUPANCY
FROM MILEPOINT: 0.000
TO MILEPOINT: 3.030

40 LF BORE W/14" CASING
8" CARRIER

HWY 1217

ROAD



EASEMENT TOP OF BA

MILEPOINT 2.685

50 LF BORE W/14" CASING
8" CARRIER

40 LF BORE W/14" CASING
8" CARRIER

1 - FLUSH HYDRANT
1 - 8"x 3" TEE
1 - 3"x 3" TEE
2 - 3" GATE VALVES W/BOX
1 - 8" GATE VALVE W/BOX

1 - 4" GATE VALVE W/BOX
1 - 8" GATE VALVE W/BOX
1 - 8"x 4" TEE

APPROX.
16,000 LF OF 8"
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN EASEMENTS AND R.O.W.

PARALLEL OCCUPANCY
FROM MILEPOINT: 0.000
TO MILEPOINT: 3.030

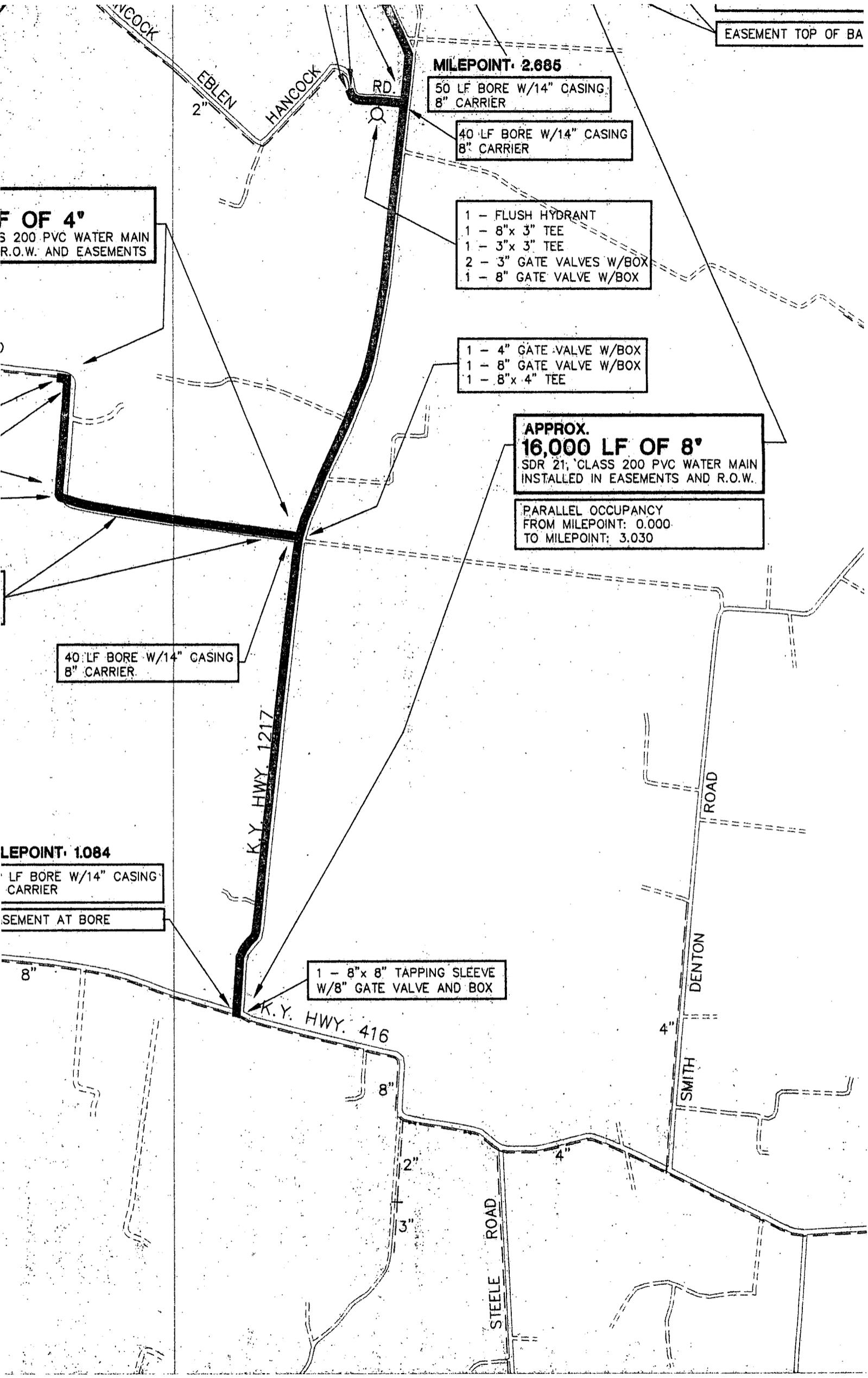
OF 4"
3 200 PVC WATER MAIN
R.O.W. AND EASEMENTS

40 LF BORE W/14" CASING
8" CARRIER

LEPOINT 1.084
LF BORE W/14" CASING
CARRIER

EMENT AT BORE

1 - 8"x 8" TAPPING SLEEVE
W/8" GATE VALVE AND BOX



E AND NASHVILLE

F OF 8"
S 200 PVC WATER MAIN
R.O.W. AND EASEMENTS

BANK

1 - 8" TIE IN
2 - 8" 90° BENDS
1 - 8" GATE VALVE W/BOX

BENDS AS REQ'D

0' LF OF 14" CASING INSTALLED
OPEN CUT

EASEMENT TOP OF BANK

K.Y. HWY. 1299

BUSBY STATION

ROAD

ROAD

DENTON

BUSBY

ROAD

SMITH

4"

8"

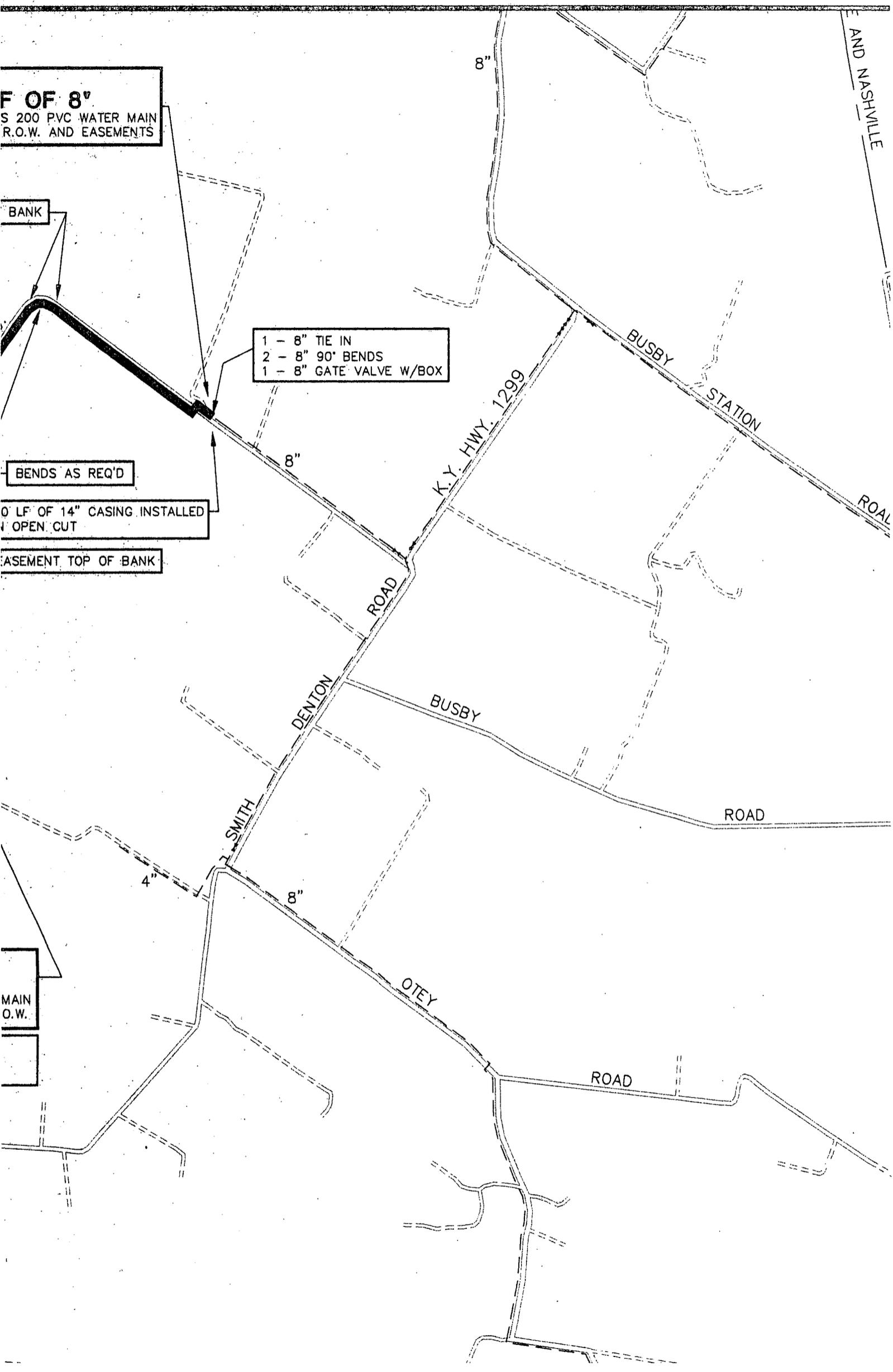
OTEY

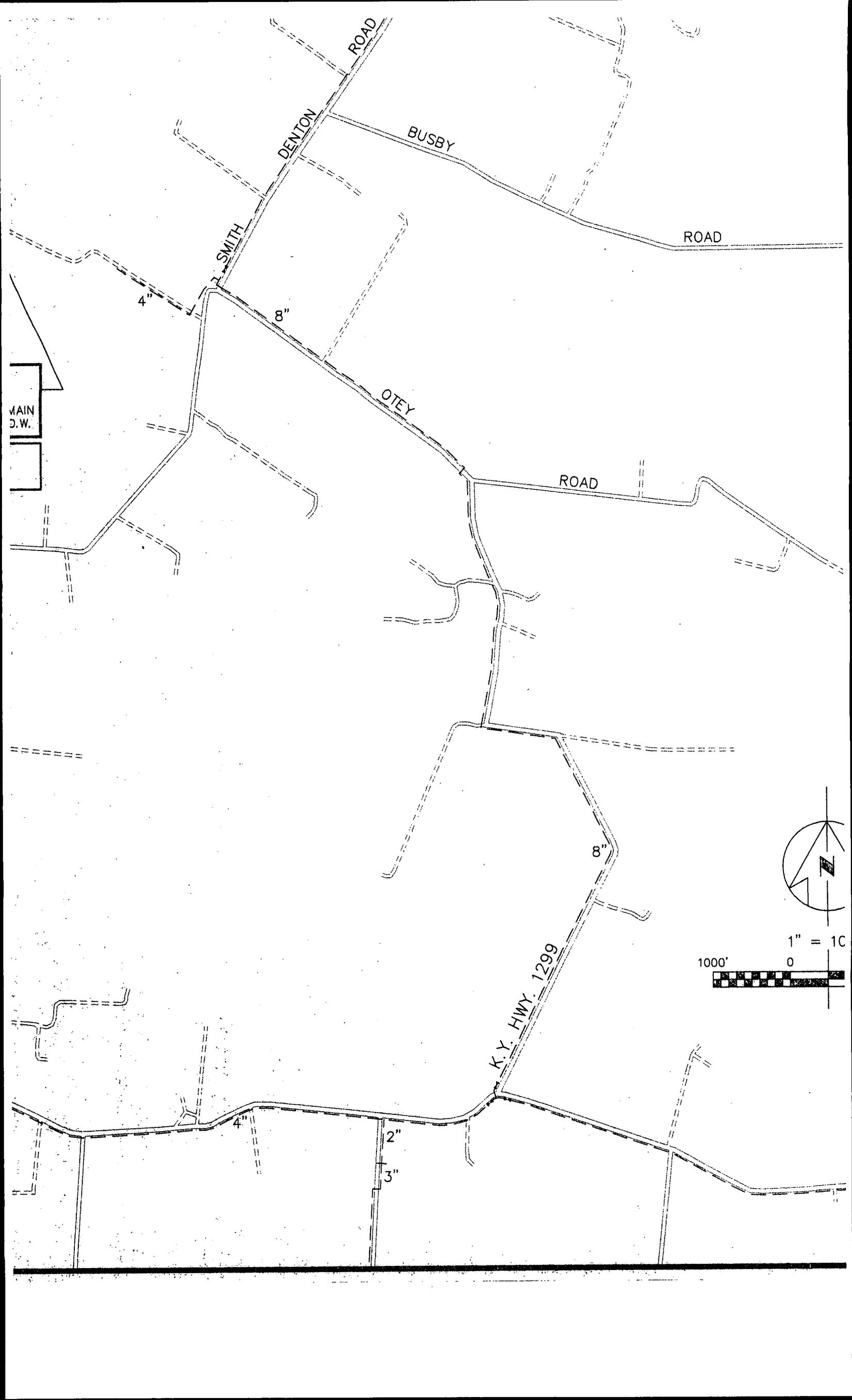
ROAD

MAIN
O.W.

8"

8"





MAIN
D.W.

DENTON
ROAD

BUSBY
ROAD

L. SMITH

ROAD

4"

8"

OTey
ROAD

ROAD

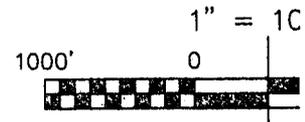
8"

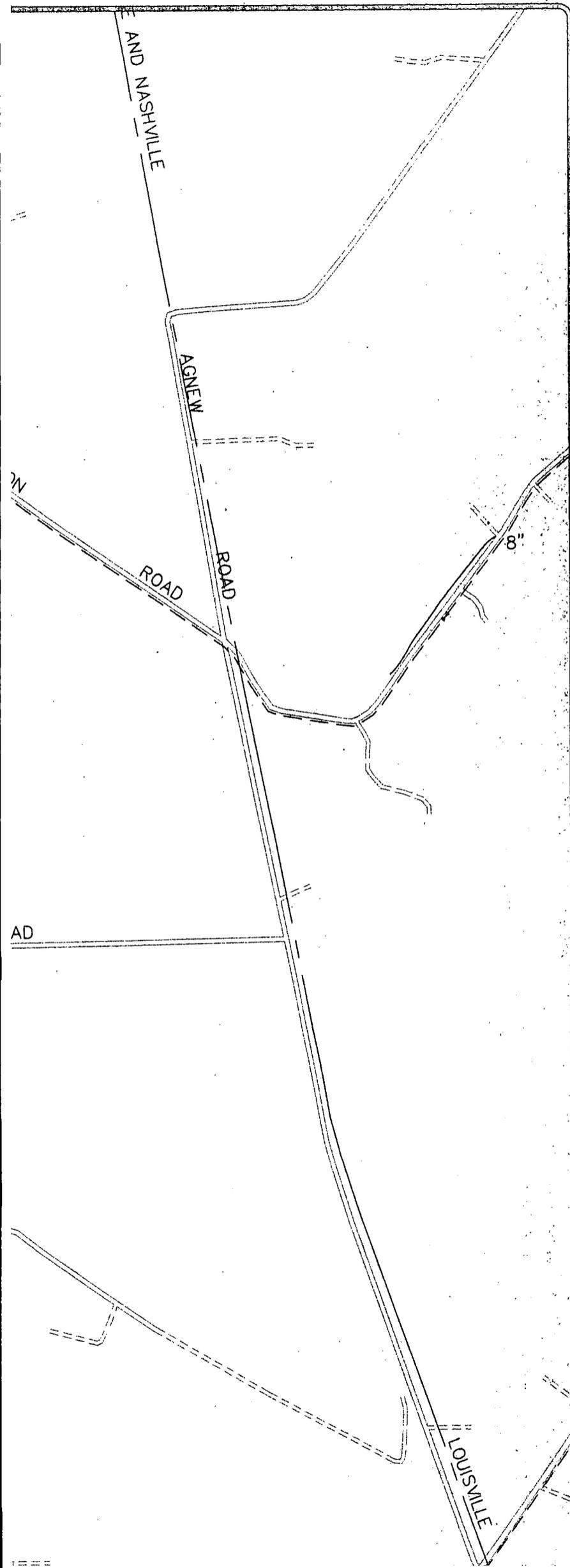
K.Y. HWY. 1299

4"

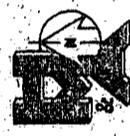
2"

3"





HUNTER MARTIN & ASSOCIATES, INC.



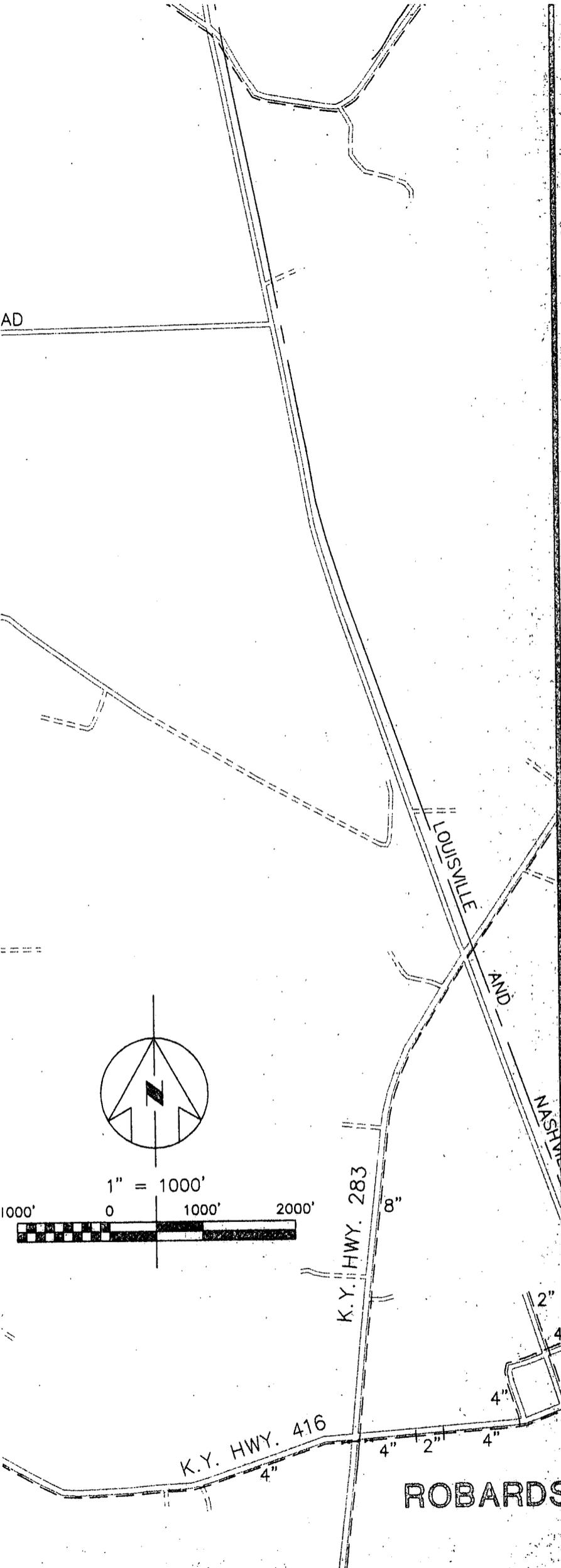
ENGINEERS & SURVEYORS
 3220 LONE OAK ROAD • PADUCAH, KENTUCKY 42003
 (502) 554-2737 • FAX (502) 554-2738

Drawn by: SDC
Checked by: JRJ
File: 2000IMPA6
Date: 11-28-99
Revised:

MOVEMENTS CONTRACT "A"
IL. CATES RD.
217
ER DISTRICT



PL
 D
 CL
 X



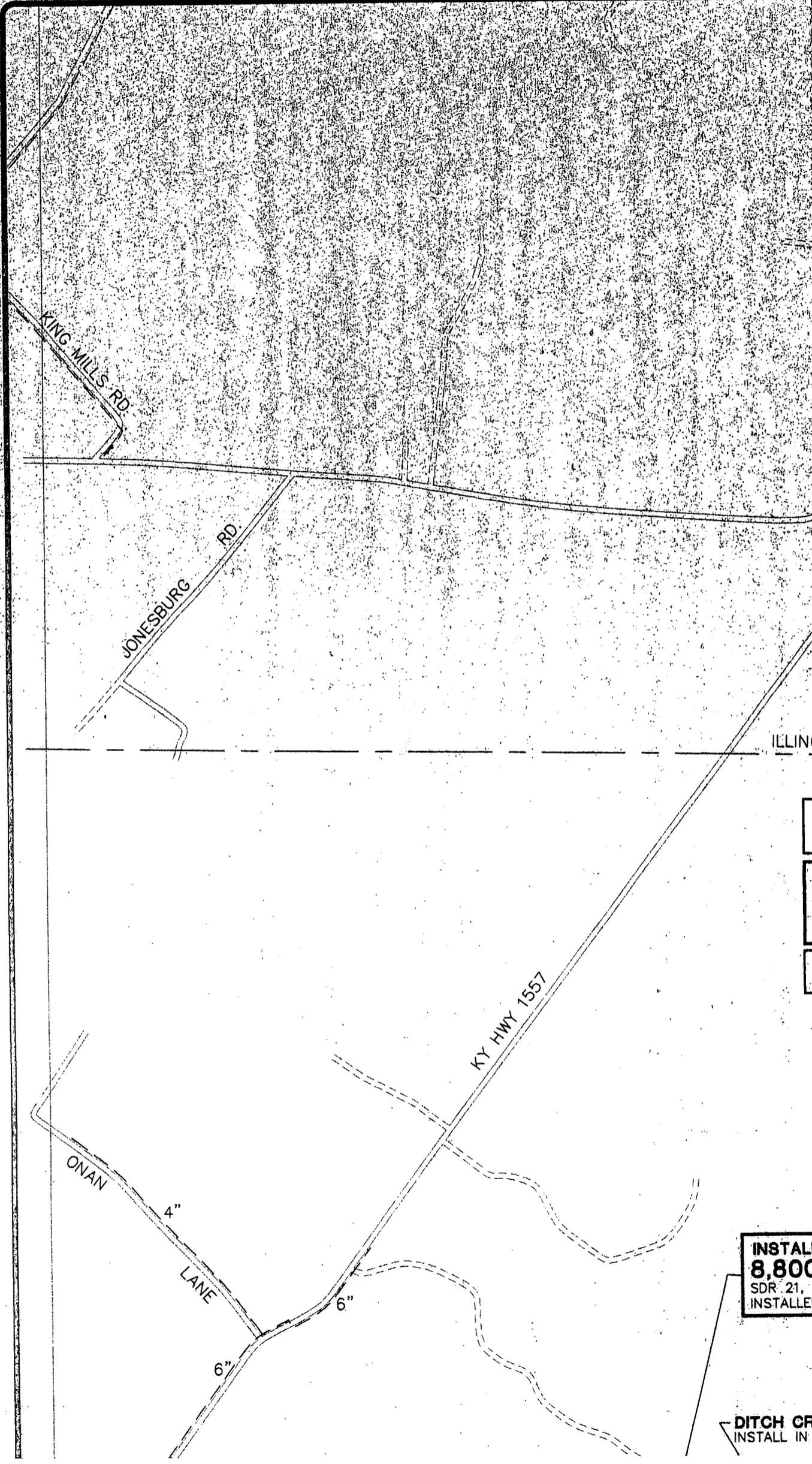
HUNTER
3220



Drawn by:	SDC
Checked by:	JRJ
File:	2000IMPA6
Date:	11-28-99
Revised:	

1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS CONTRACT "A"
CAIRO LYLES RD., MEAHL CATES RD.
AND KY. HWY. 1217
HENDERSON COUNTY WATER DISTRICT

Sheet
A6



INSTALL
8,800
SDR 21, C
INSTALLED

DITCH CRG
INSTALL IN E

JONESBURG

ILLINOIS

PAR
FRO
TO

AP
10
SDR
INST

EXIS
AFTI

KY HWY 1557

ONAN
LANE
4"
6"

INSTALL
8,800 L
SDR 21, CLAS
INSTALLED IN

DITCH CROSS
INSTALL IN EAS

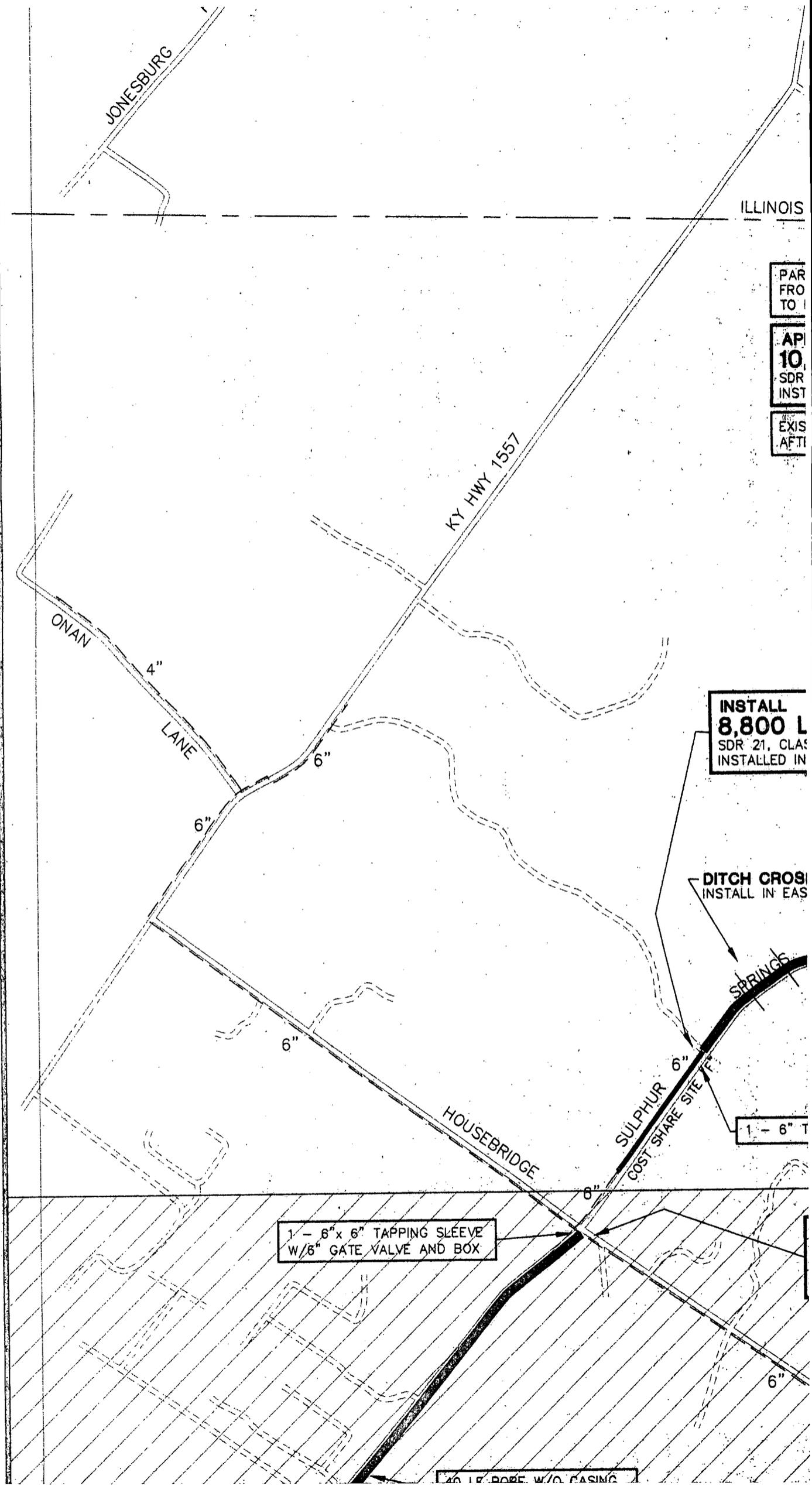
1 - 6" T

HOUSEBRIDGE

SULPHUR 6"
COST SHARE SITE 1'

1 - 6"x 6" TAPPING SLEEVE
W/6" GATE VALVE AND BOX

40 LF PIPE W/O CASING



CORYDON

WA
IN

APPROX.
9,400 LF
SDR 21, CLASS
INSTALLED IN R

EXISTING 2" MA
AFTER RECONN

BENDS

1 - 8" x 8" TEE W/
2 - 8" GATE VALVE

EASEMENT OF
AROUND BEND

- 1 - 3
- 1 - 8
- 1 - 8
- 1 - 4
- 1 - 3

ILLINOIS

CENTRAL

KY HWY 145

PARALLEL OCCUPANCY
FROM MILEPOINT: 5.240
TO MILEPOINT: 7.279

APPROX.
10,800 LF OF 8"
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN EASEMENT AND R.O.W.

EXISTING 2" MAIN TO BE ABANDONED
AFTER RECONNECTS ARE MADE

20 LF BORE W/O CASING
8" CARRIER

DITCH CROSSINGS

INSTALL
8,800 LF OF 6"
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN R.O.W. AND EASEMENT

MILEPOINT 5.240

50 LF BORE W/14"
8" CARRIER

EASEMENT AT BORE

40 LF BORE W/12" CASING
6" CARRIER

EASEMENT AT BORE

DITCH CROSSINGS
INSTALL IN EASEMENTS

ROAD

1 - 8" x 8" TEE
2 - 8" GATE VALVES W/BOX
1 - 8" x 6" REDUCER

KY HWY

- 1 - 8" x 8" TEE W/
 - 2 - 8" GATE VALVE
- EASEMENT OF
AROUND BEN

- 1 - 3
- 1 - 8
- 1 - 8
- 1 - 4
- 1 - 3

ILLINOIS

CENTRAL

PARALLEL OCCUPANCY
FROM MILEPOINT: 5.240
TO MILEPOINT: 7.279

20' LE BORE W/O CASING
8" CARRIER

APPROX.
10,800 LF OF 8"
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN EASEMENT AND R.O.W.

EXISTING 2" MAIN TO BE ABANDONED
AFTER RECONNECTS ARE MADE

DITCH CROSSINGS

INSTALL
8,800 LF OF 6"
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN R.O.W. AND EASEMENT

MILEPOINT 5.240
50 LF BORE W/14"
8" CARRIER
EASEMENT AT BORE

40 LF BORE W/12" CASING
6" CARRIER
EASEMENT AT BORE

DITCH CROSSINGS
INSTALL IN EASEMENTS

- 1 - 8" x 8" TEE
- 2 - 8" GATE VALVES W/BOX
- 1 - 8" x 6" REDUCER
- 1 - 6" GATE VALVE W/BOX

SULPHUR 6"
COST SHARE SITE

SPRINGS

1 - 6" TIE IN

ROAD
WHEELER

KY HWY 145

SEE SHEET A-9

APPROX.
18,300 LF OF 6"
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN R.O.W. AND EASEMENTS

6" ROAD

4"

WHEELER 2"
RD.

- 1 - 8" x 8" TEE W/PLUG
- 2 - 8" GATE VALVE W/BOX

EASEMENT ON TOP OF BANK AROUND BEND

- 1 - 3" AND SMALLER TIE-IN
- 1 - 8" x 8" TEE
- 1 - 8" x 4" REDUCER
- 1 - 4" x 3" REDUCER
- 1 - 3" GATE VALVE W/BOX

60 LF BORE W/14" CASING
8" CARRIER

MILEPOINT 5.240

50 LF BORE W/14" CASING
8" CARRIER

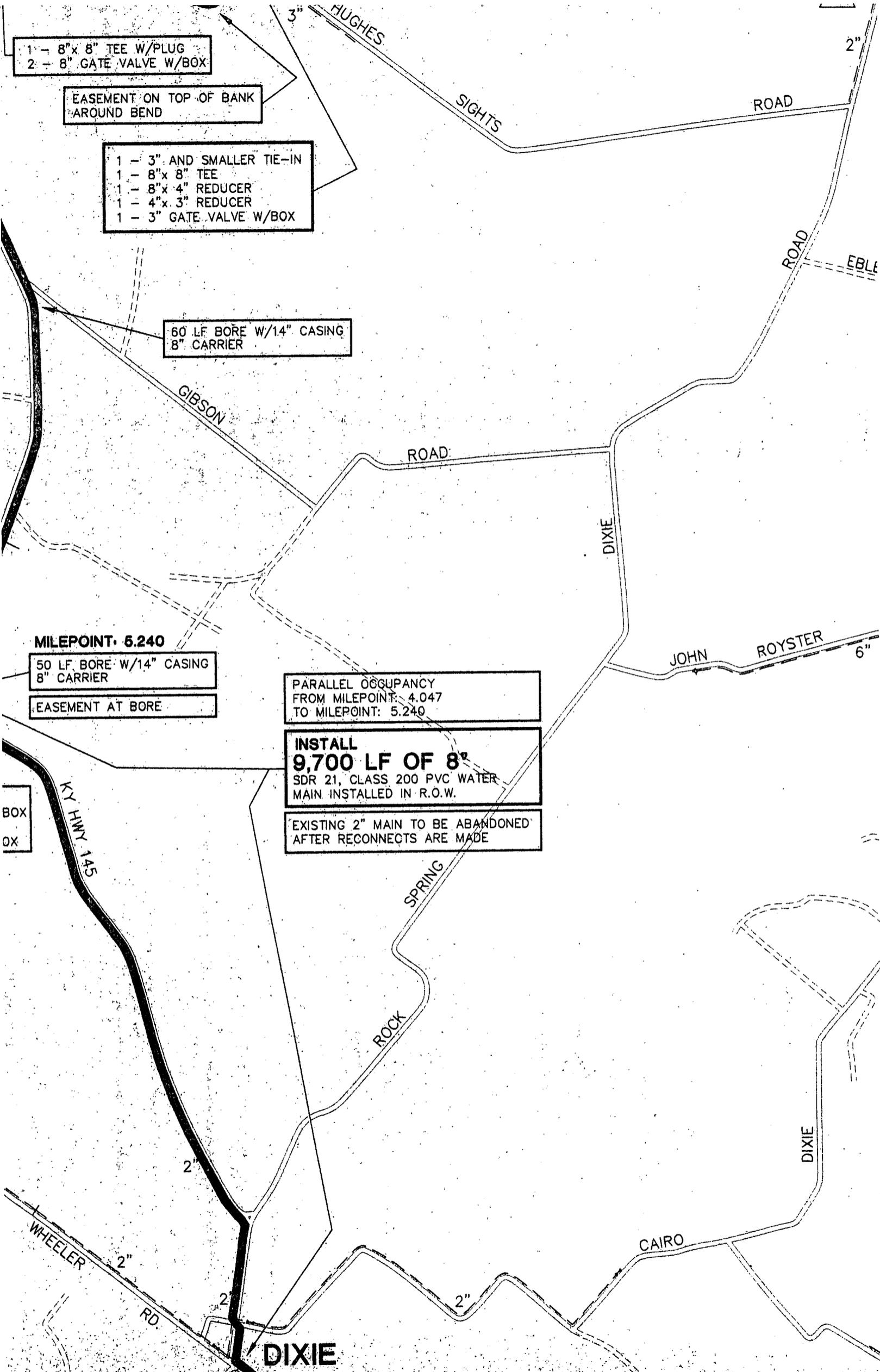
EASEMENT AT BORE

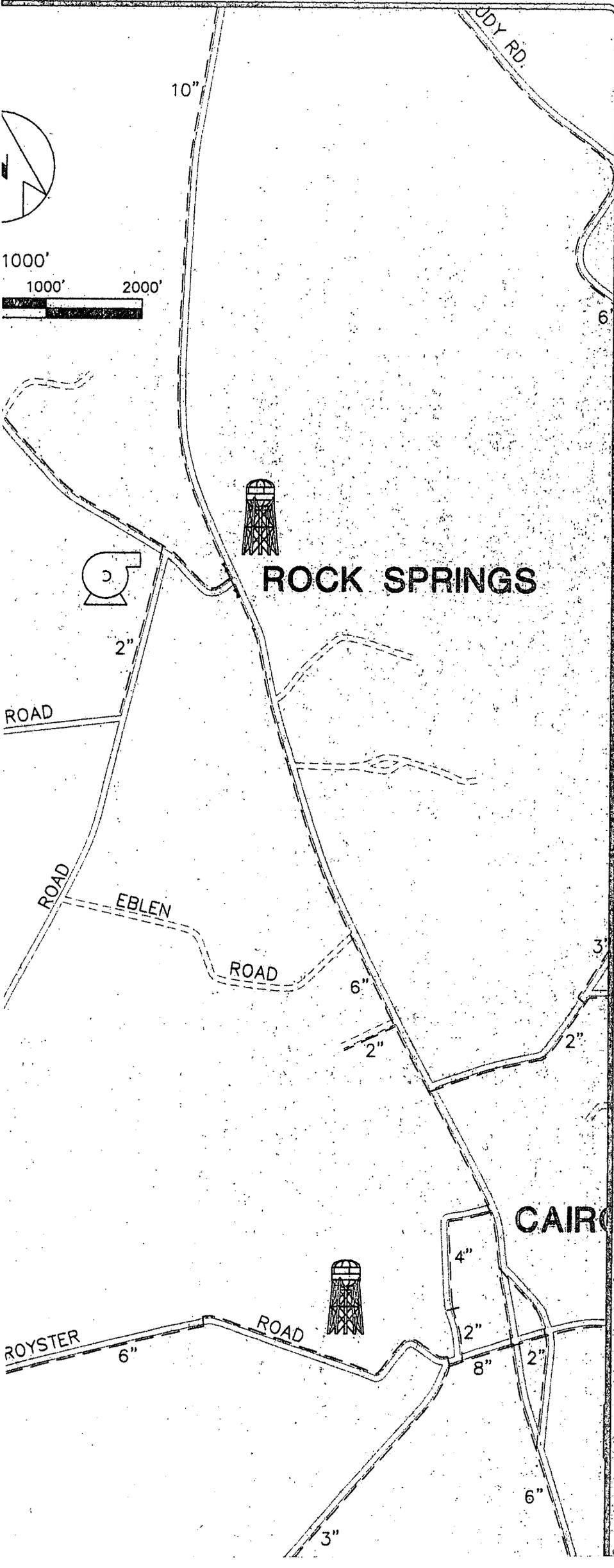
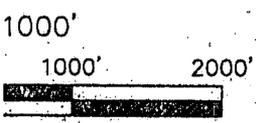
PARALLEL OCCUPANCY
FROM MILEPOINT: 4.047
TO MILEPOINT: 5.240

**INSTALL
9,700 LF OF 8"**
SDR 21, CLASS 200 PVC WATER
MAIN INSTALLED IN R.O.W.

EXISTING 2" MAIN TO BE ABANDONED
AFTER RECONNECTS ARE MADE

BOX
OX





ROCK SPRINGS

CAIRO

HUNTER MARTIN & ASSOCIATES, INC.



ENGINEERS & SURVEYORS
3220 LONE OAK ROAD
PADUCAH, KENTUCKY 42003
(502) 554-2737 FAX (502) 554-2738

Drawn by:	SDC
Checked by:	JRJ
File:	2000IMPA7
Date:	11-28-99
Revised:	

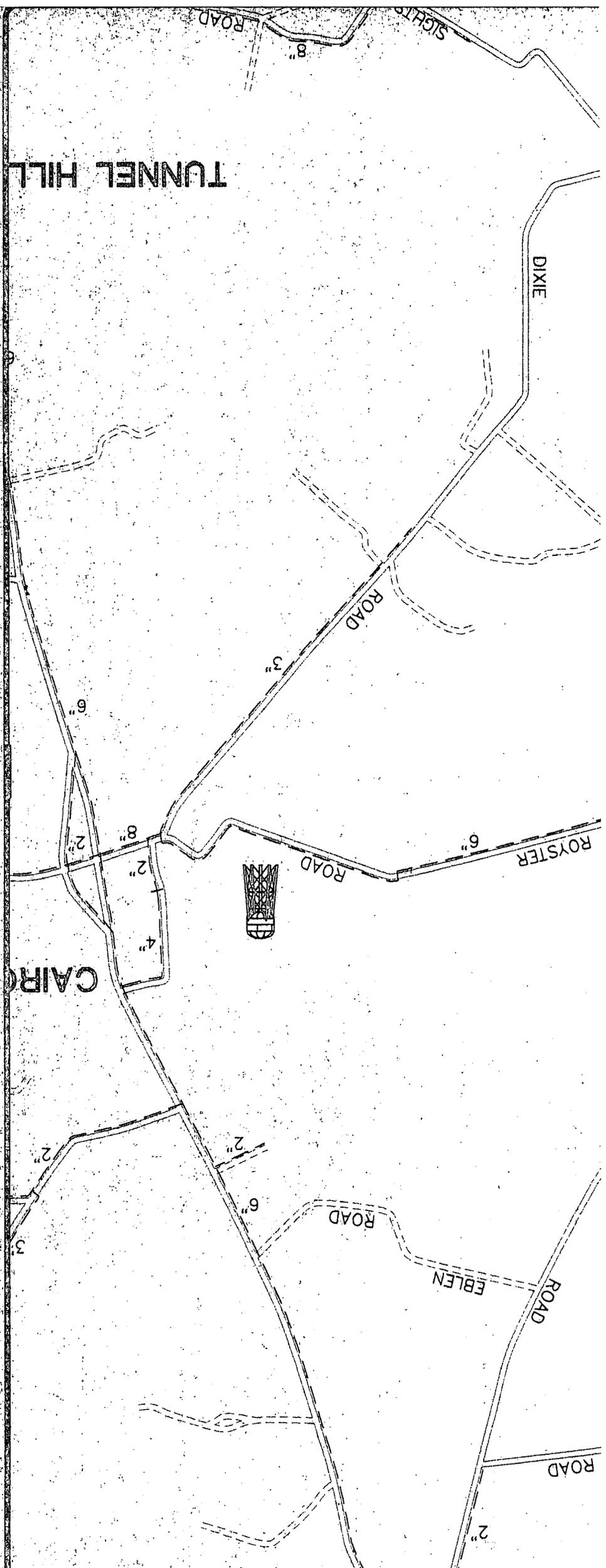
MOVEMENTS CONTRACT "A"
BY HWY 145
RD.
ER DISTRICT

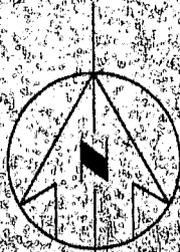
A7
Shoot

1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS CONTRACT "A"
SULPHUR SPRINGS RD., KY HWY 145
AND DR. FLOYD RD.
HENDERSON COUNTY WATER DISTRICT

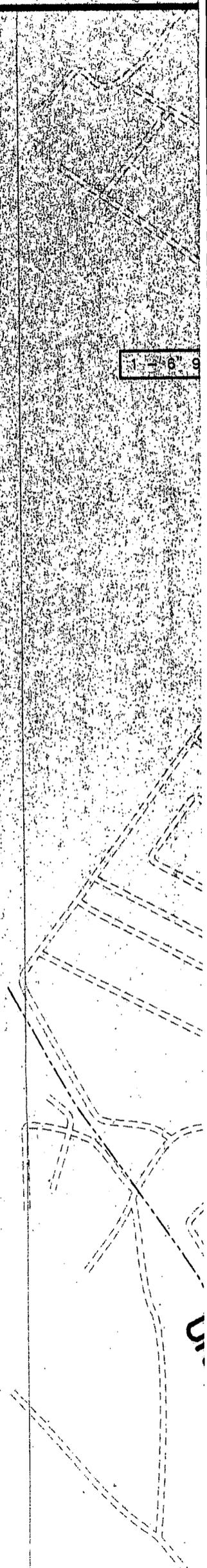
Revised
Date: 11-28-99
File: 2000IMPAZ
Checked by: JRU
Drawn by: SDC

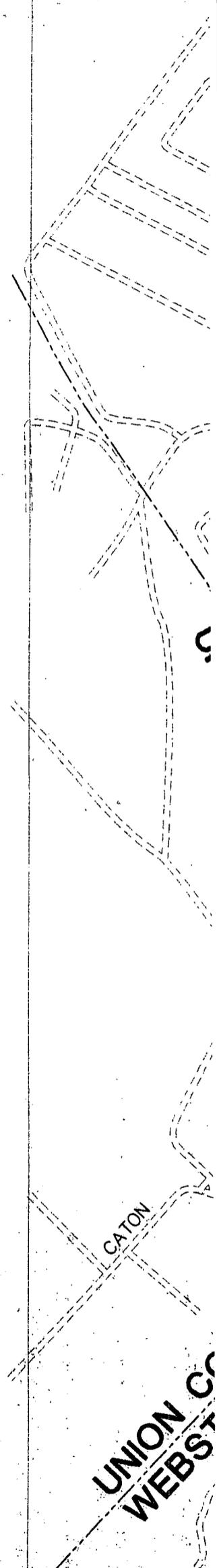
HUNTER
3220 1



1-6-9





CATON

UNION CO
WEBST

1 - 6"x 6" TAPPING SLEEVE
W/6" GATE VALVE AND BOX

APPROX.
18,300 LF OF
SDR 21, CLASS 200 PVC
INSTALLED IN R.O.W. AND

6" ROAD

40 LF BORE W/O. CASING
6" CARRIER

1 - 6" 90° BEND

INSTALL IN EASEMENT ON TOP
OF BANK TO GET PAST CLAY
PIPE IN R.O.W.

LOD

POWELL

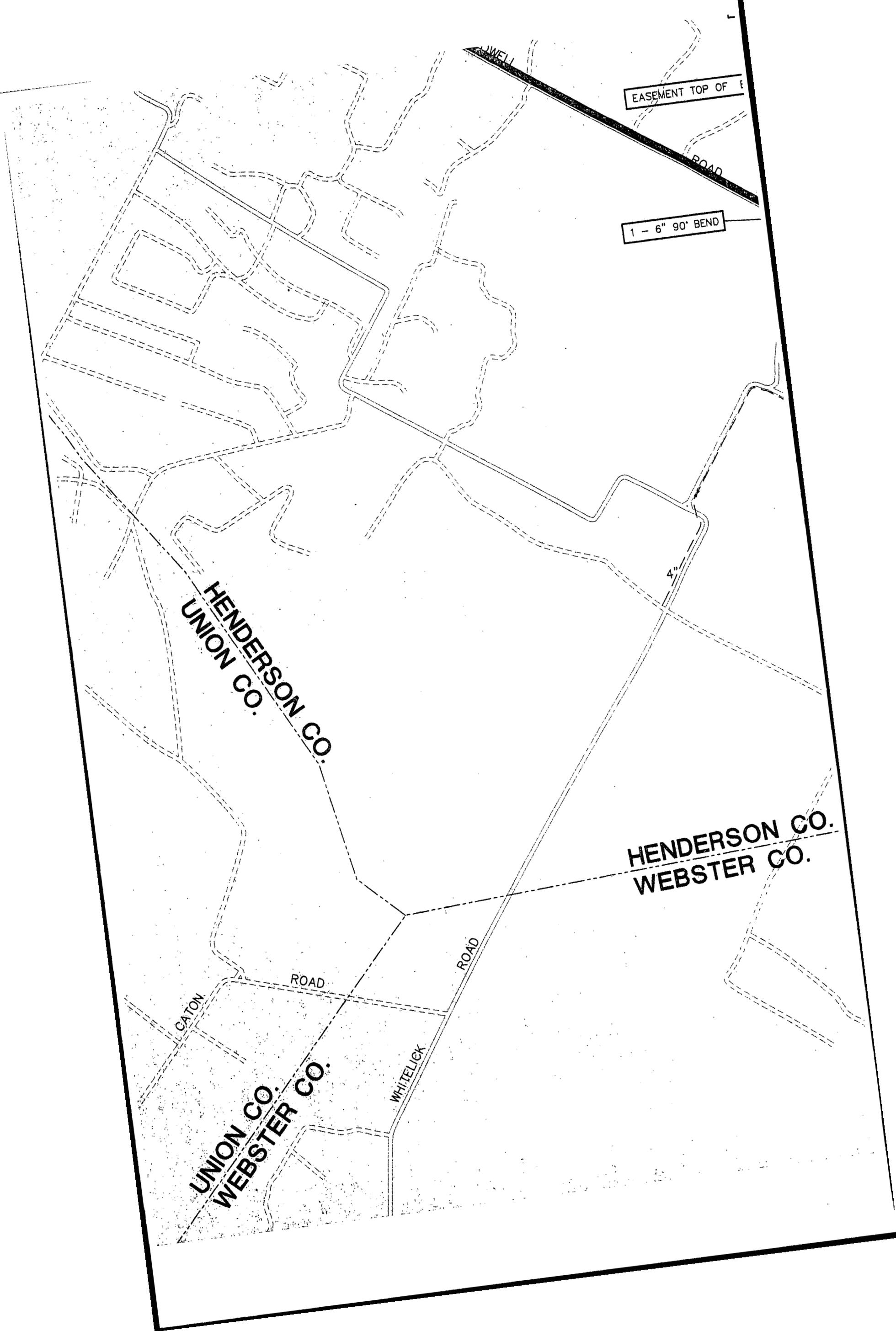
EASEMENT TOP OF

ROAD

1 - 6" 90° BEND

HENDERSON CO.
UNION CO.

4"



EASEMENT TOP OF E

ROAD

1 - 6" 90' BEND

HENDERSON CO.
UNION CO.

HENDERSON CO.
WEBSTER CO.

CATON

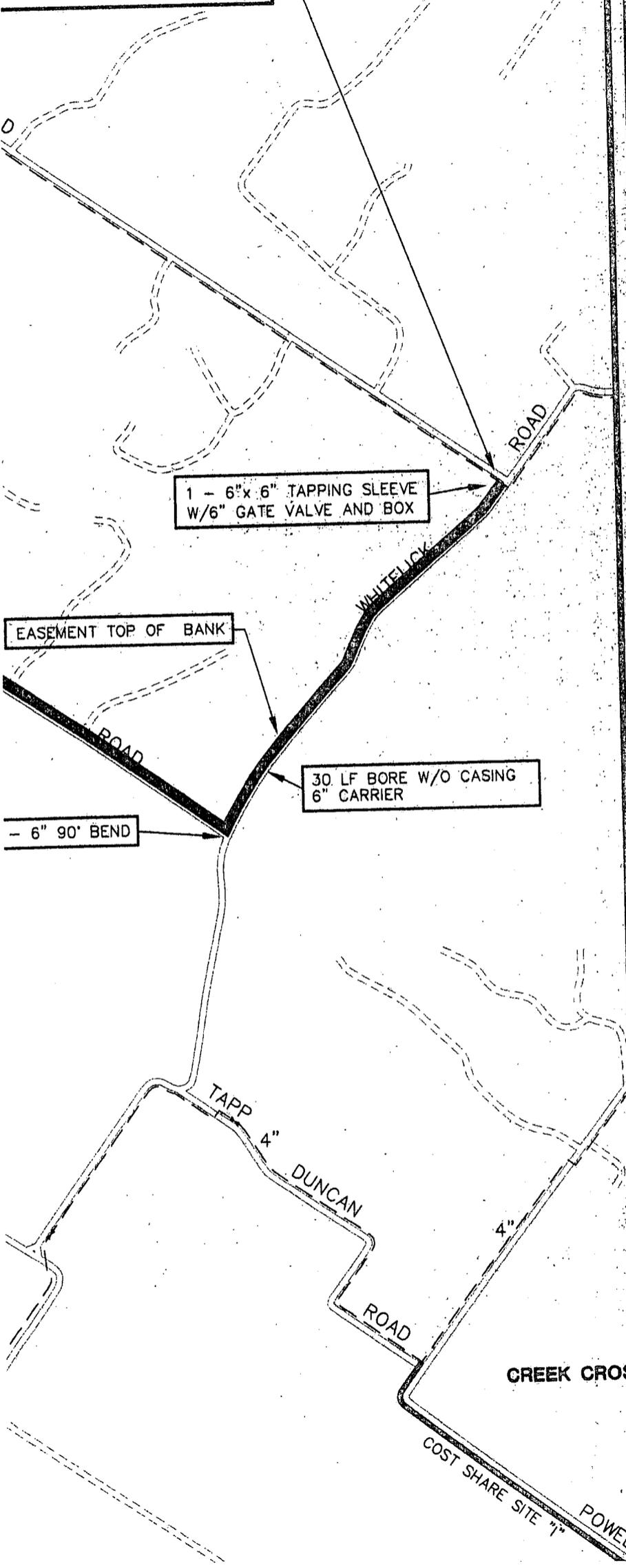
ROAD

ROAD

UNION CO.
WEBSTER CO.

WHITE LICK

BOX.
300 LF OF 6"
 21, CLASS 200 PVC WATER MAIN
 LLED IN R.O.W. AND EASEMENTS



1 - 6"x 6" TAPPING SLEEVE
 W/6" GATE VALVE AND BOX

EASEMENT TOP OF BANK

30 LF BORE W/O CASING
 6" CARRIER

- 6" 90° BEND

HUNTER MARTIN & ASSOCIATES, INC.



ENGINEERS & SURVEYORS
 3220 LONE OAK ROAD • PADUCAH KENTUCKY 42003
 (502) 564-2237 • FAX (502) 564-2738

Drawn by:	SDC
Checked by:	JRJ
File:	2000IMPAB
Date:	11-28-99
Revised:	

MOVEMENTS CONTRACT "A"
RD POWELL RD.
RD.
TER DISTRICT

CREEK CROS

COST SHARE SITE "1" POWELL

EASEMENT TOP OF BANK

- 6" 90° BEND

30 LF BORE W/O CASING
6" CARRIER

TAPP 4"

DUNCAN

ROAD

4"

CREEK CROSS

COST SHARE SITE "1"

POWELL

4"

HENDERSON CO.
WATER CO.

HUNTER



Drawn by:	SDC
Checked by:	JRJ
File:	2000IMPAB
Date:	11-28-99
Revised:	

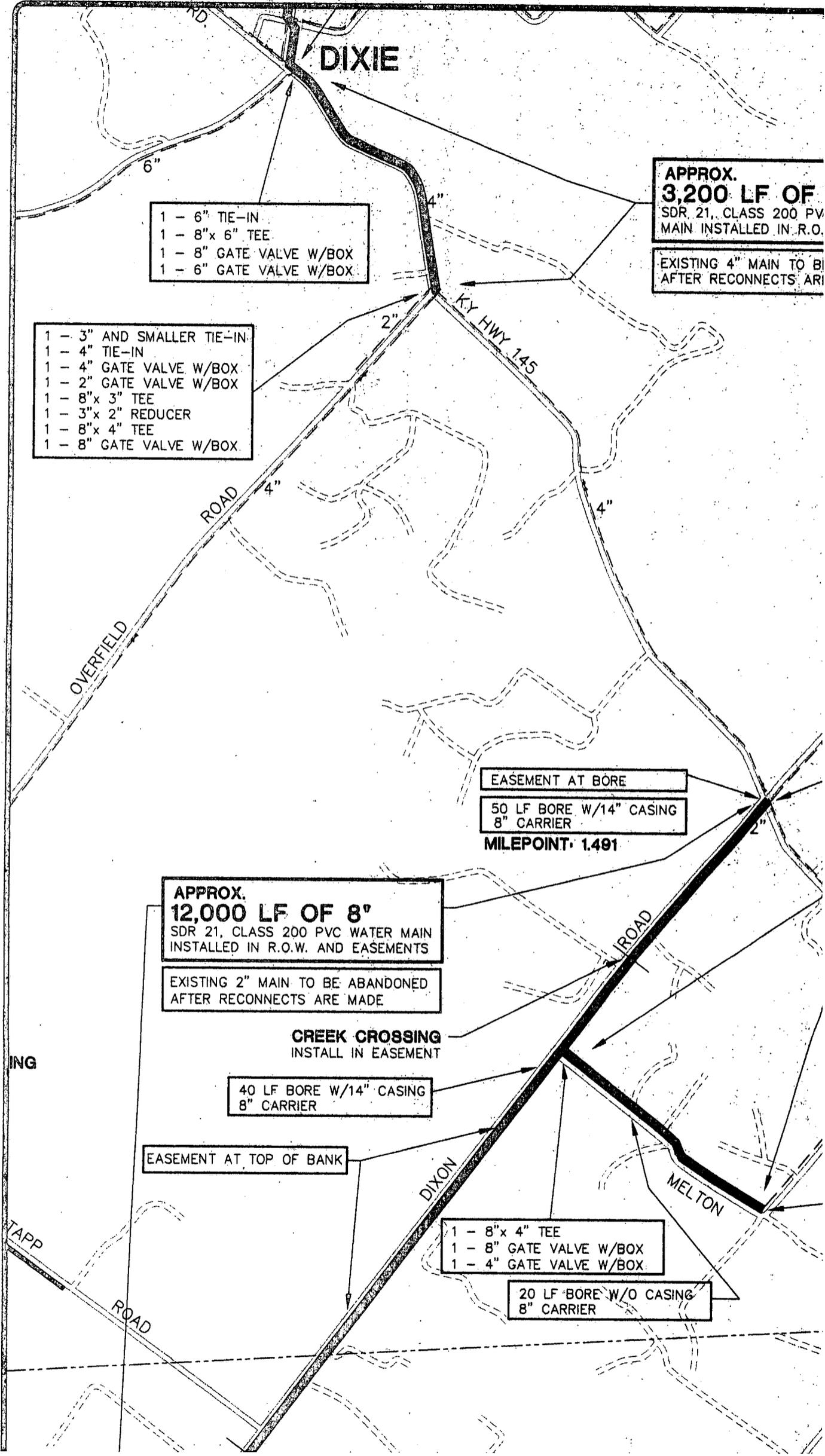
1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS CONTRACT "A"

SULPHUR SPRINGS RD., LOD POWELL RD.
AND WHITE LICK RD.

HENDERSON COUNTY WATER DISTRICT

Sheet

A8



DIXIE

APPROX.
3,200 LF OF
 SDR 21, CLASS 200 PV
 MAIN INSTALLED IN R.O.
 EXISTING 4" MAIN TO BE
 ABANDONED AFTER RECONNECTS ARE

- 1 - 6" TIE-IN
- 1 - 8"x 6" TEE
- 1 - 8" GATE VALVE W/BOX
- 1 - 6" GATE VALVE W/BOX

- 1 - 3" AND SMALLER TIE-IN
- 1 - 4" TIE-IN
- 1 - 4" GATE VALVE W/BOX
- 1 - 2" GATE VALVE W/BOX
- 1 - 8"x 3" TEE
- 1 - 3"x 2" REDUCER
- 1 - 8"x 4" TEE
- 1 - 8" GATE VALVE W/BOX

EASEMENT AT BORE
 50 LF BORE W/14" CASING
 8" CARRIER
 MILEPOINT 1.491

APPROX.
12,000 LF OF 8"
 SDR 21, CLASS 200 PVC WATER MAIN
 INSTALLED IN R.O.W. AND EASEMENTS
 EXISTING 2" MAIN TO BE ABANDONED
 AFTER RECONNECTS ARE MADE

CREEK CROSSING
 INSTALL IN EASEMENT

40 LF BORE W/14" CASING
 8" CARRIER

EASEMENT AT TOP OF BANK

- 1 - 8"x 4" TEE
- 1 - 8" GATE VALVE W/BOX
- 1 - 4" GATE VALVE W/BOX

20 LF BORE W/O CASING
 8" CARRIER

OVERFIELD ROAD

KY HWY 145

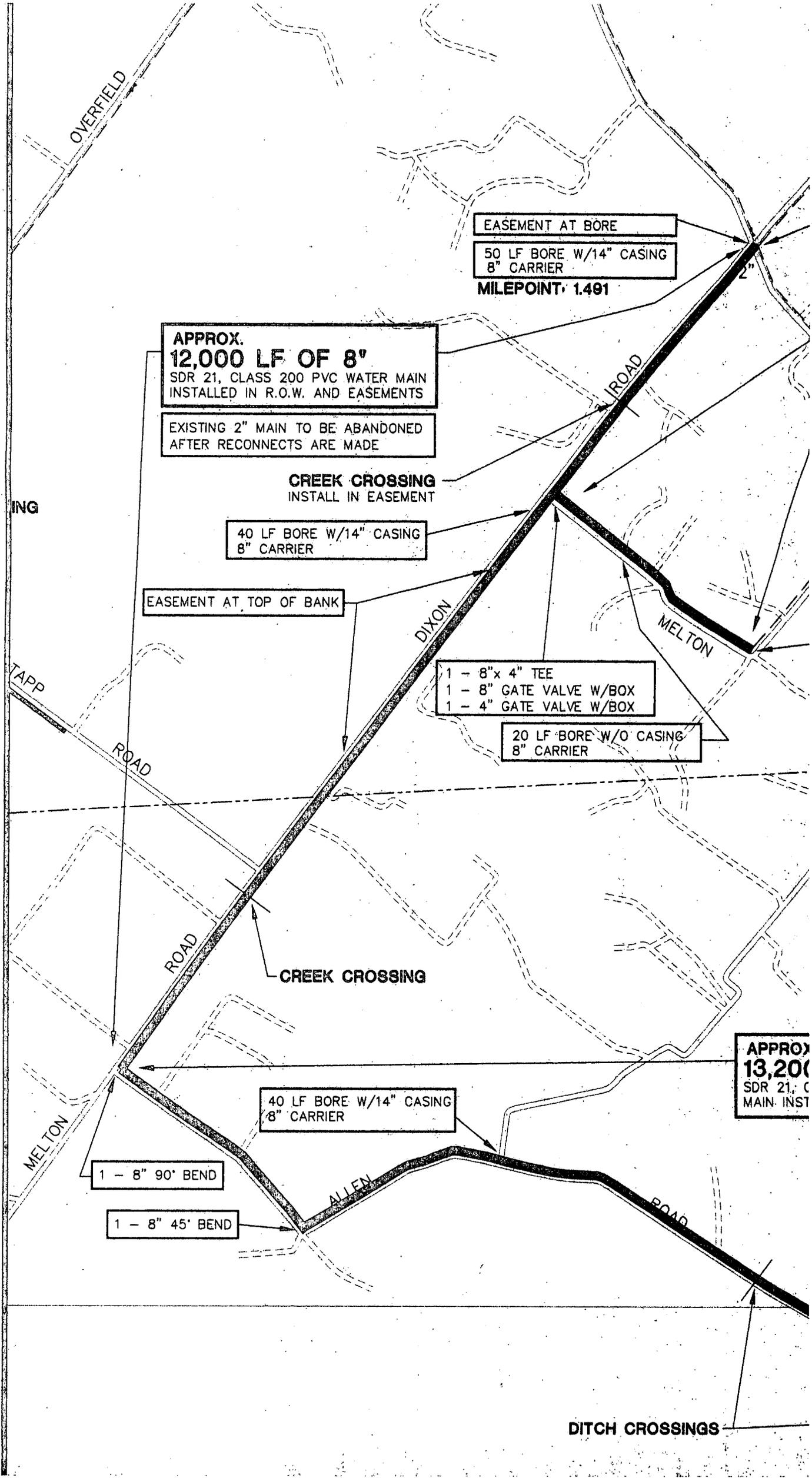
ROAD

DIXON

MELTON

TAPP ROAD

ING



EASEMENT AT BORE
 50 LF BORE W/14" CASING
 8" CARRIER
 MILEPOINT 1.491

APPROX.
12,000 LF OF 8"
 SDR 21, CLASS 200 PVC WATER MAIN
 INSTALLED IN R.O.W. AND EASEMENTS

EXISTING 2" MAIN TO BE ABANDONED
 AFTER RECONNECTS ARE MADE

CREEK CROSSING
 INSTALL IN EASEMENT

40 LF BORE W/14" CASING
 8" CARRIER

EASEMENT AT TOP OF BANK

- 1 - 8" x 4" TEE
- 1 - 8" GATE VALVE W/BOX
- 1 - 4" GATE VALVE W/BOX

20 LF BORE W/O CASING
 8" CARRIER

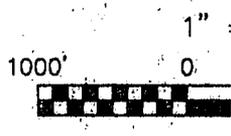
APPROX
13,200
 SDR 21, C
 MAIN INST

40 LF BORE W/14" CASING
 8" CARRIER

1 - 8" 90° BEND

1 - 8" 45° BEND

DITCH CROSSINGS



**APPROX.
3,200 LF OF 8"**
SDR 21, CLASS 200 PVC WATER
MAIN INSTALLED IN R.O.W.

EXISTING 4" MAIN TO BE ABANDONED
AFTER RECONNECTS ARE MADE

- 1 - 8" TIE IN
- 1 - 4" TIE-IN
- 2 - 8" x 8" TEES
- 3 - 8" GATE VALVES W/BOX
- 1 - 8" x 4" REDUCER
- 1 - 4" GATE VALVE W/BOX

**APPROX.
3,000 LF OF 4"**
SDR 21, CLASS 200 PVC WATER
MAIN INSTALLED IN EASEMENT

- 1 - 3" AND SMALLER TIE-IN
- 1 - 4" x 3" REDUCER
- 1 - 3" x 2" REDUCER
- 1 - 2" GATE VALVE W/BOX

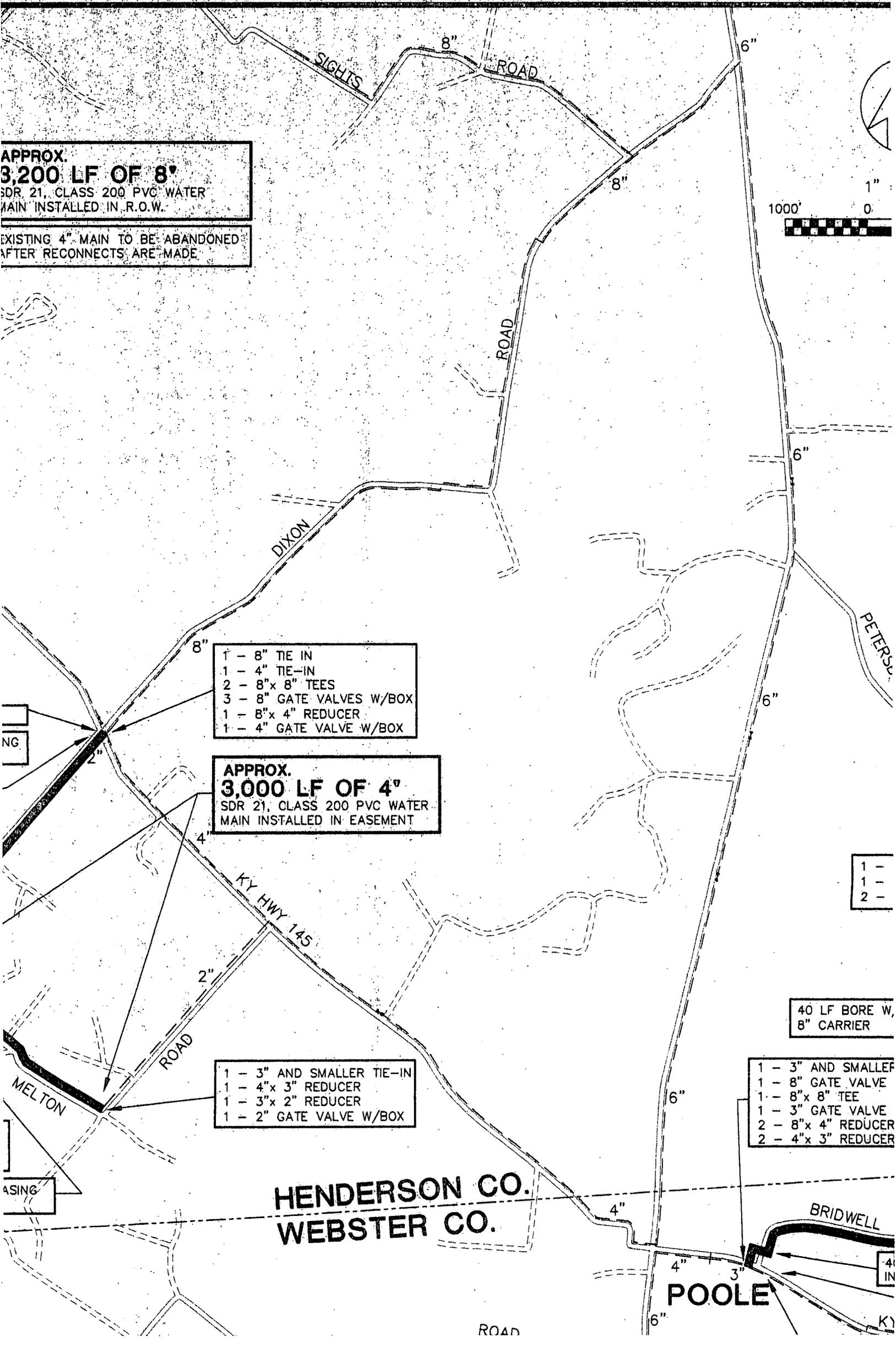
40 LF BORE W,
8" CARRIER

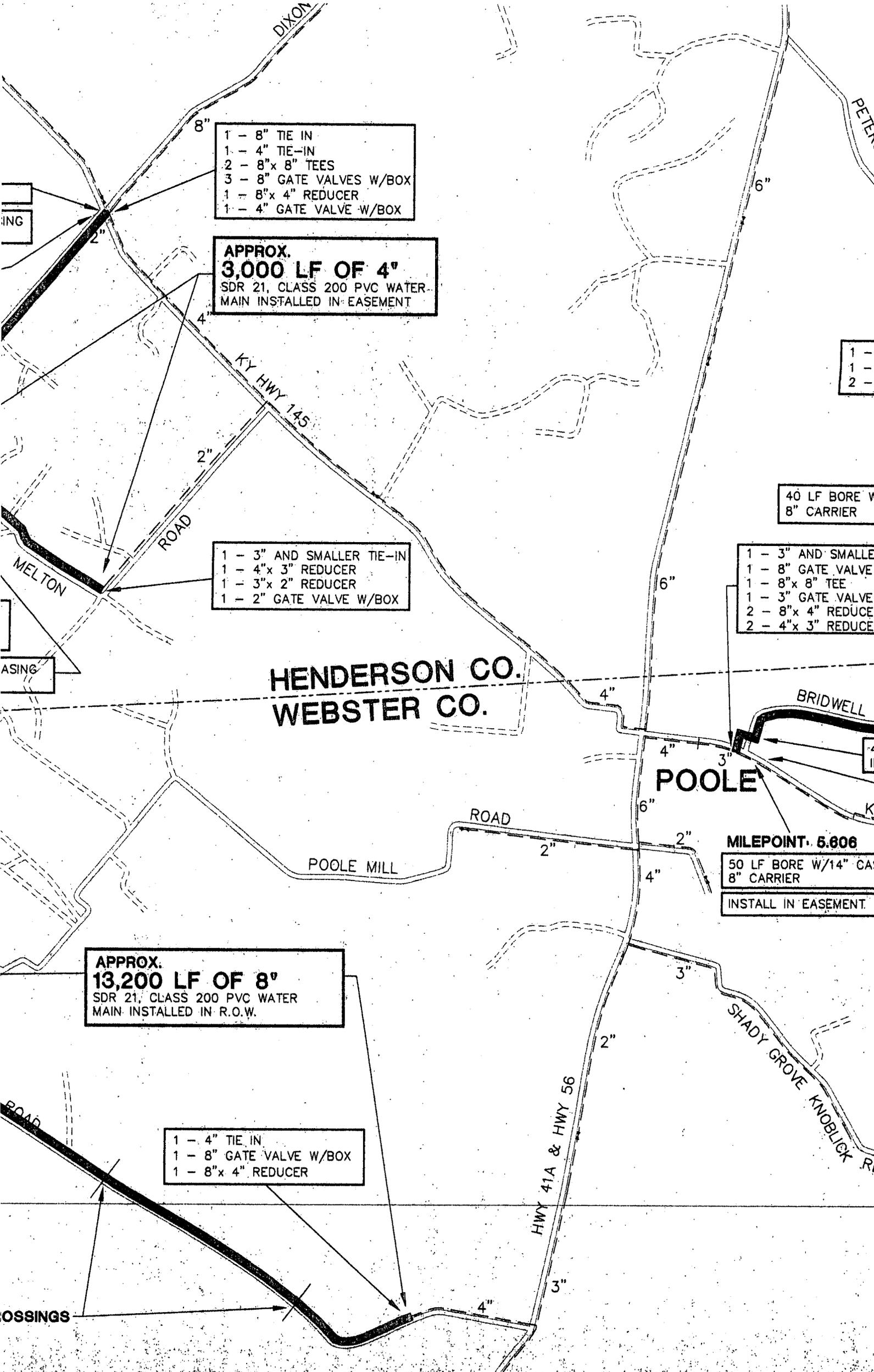
- 1 - 3" AND SMALLER
- 1 - 8" GATE VALVE
- 1 - 8" x 8" TEE
- 1 - 3" GATE VALVE
- 2 - 8" x 4" REDUCER
- 2 - 4" x 3" REDUCER

- 1 -
- 1 -
- 2 -

**HENDERSON CO.
WEBSTER CO.**

POOLE
BRIDWELL





- 1 - 8" TIE IN
- 1 - 4" TIE-IN
- 2 - 8"x 8" TEES
- 3 - 8" GATE VALVES W/BOX
- 1 - 8"x 4" REDUCER
- 1 - 4" GATE VALVE W/BOX

**APPROX.
3,000 LF OF 4"**
SDR 21, CLASS 200 PVC WATER MAIN INSTALLED IN EASEMENT

- 1 - 3" AND SMALLER TIE-IN
- 1 - 4"x 3" REDUCER
- 1 - 3"x 2" REDUCER
- 1 - 2" GATE VALVE W/BOX

- 1 - 3" AND SMALLER TIE-IN
- 1 - 8" GATE VALVE
- 1 - 8"x 8" TEE
- 1 - 3" GATE VALVE
- 2 - 8"x 4" REDUCER
- 2 - 4"x 3" REDUCER

40 LF BORE W/ 8" CARRIER

MILEPOINT 5.806
50 LF BORE W/14" CAS 8" CARRIER
INSTALL IN EASEMENT.

**APPROX.
13,200 LF OF 8"**
SDR 21, CLASS 200 PVC WATER MAIN INSTALLED IN R.O.W.

- 1 - 4" TIE IN
- 1 - 8" GATE VALVE W/BOX
- 1 - 8"x 4" REDUCER

- 1 -
- 1 -
- 2 -

**HENDERSON CO.
WEBSTER CO.**

POOLE

BRIDWELL

POOLE MILL

SHADY GROVE KNOBLICK RD

HWY 41A & HWY 56

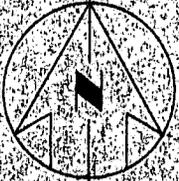
ING

ASING

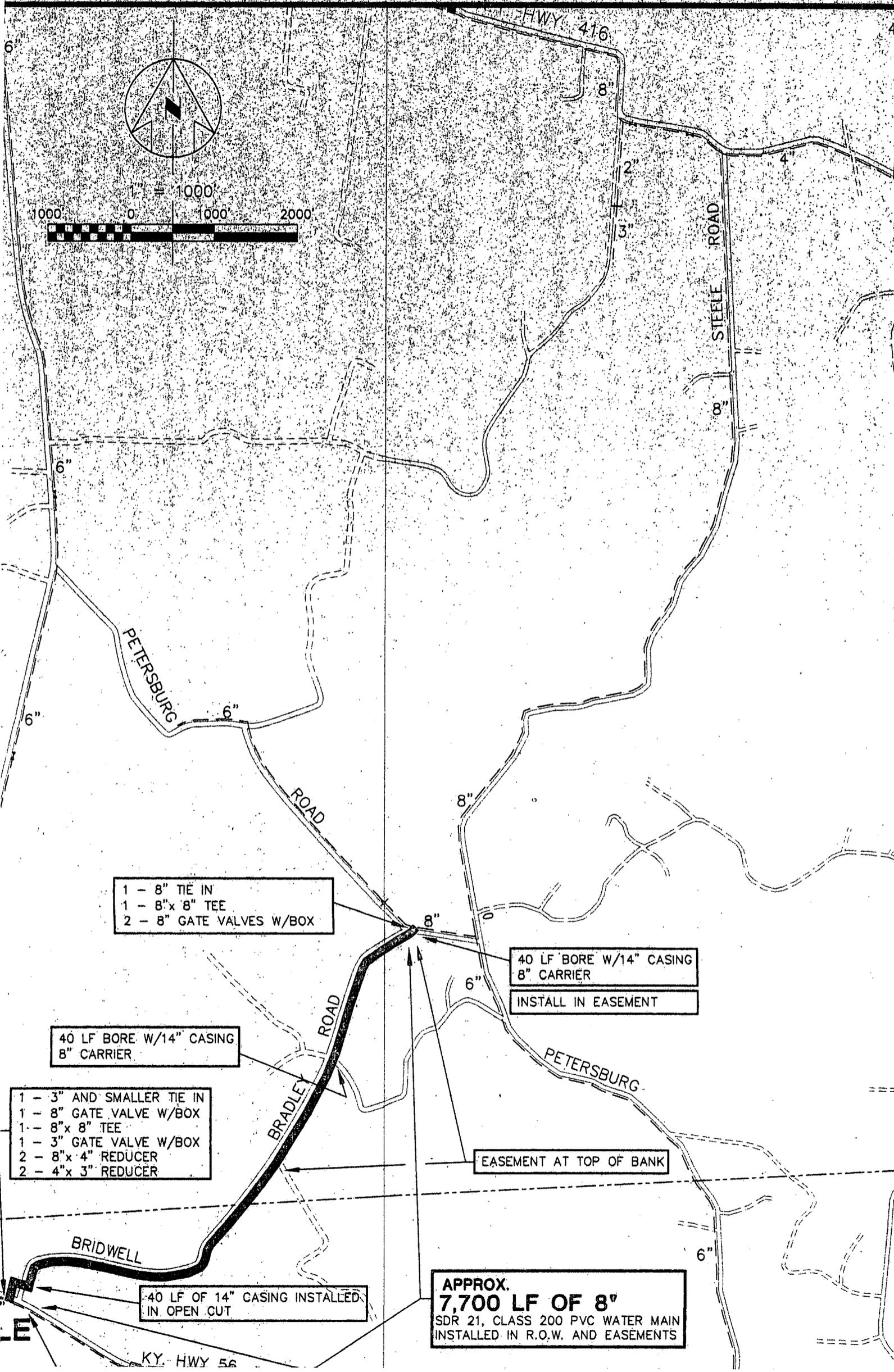
ROSSINGS

MELTON

PETER



1" = 1000'



1 - 8" TIE IN
1 - 8" x 8" TEE
2 - 8" GATE VALVES W/BOX

40 LF BORE W/14" CASING
8" CARRIER

1 - 3" AND SMALLER TIE IN
1 - 8" GATE VALVE W/BOX
1 - 8" x 8" TEE
1 - 3" GATE VALVE W/BOX
2 - 8" x 4" REDUCER
2 - 4" x 3" REDUCER

40 LF BORE W/14" CASING
8" CARRIER
INSTALL IN EASEMENT

EASEMENT AT TOP OF BANK

40 LF OF 14" CASING INSTALLED
IN OPEN CUT

APPROX.
7,700 LF OF 8"
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN R.O.W. AND EASEMENTS

KY. HWY 56

1 - 8" TIE IN
1 - 8"x 8" TEE
2 - 8" GATE VALVES W/BOX

40 LF BORE W/14" CASING
8" CARRIER

1 - 3" AND SMALLER TIE IN
1 - 8" GATE VALVE W/BOX
1 - 8"x 8" TEE
1 - 3" GATE VALVE W/BOX
2 - 8"x 4" REDUCER
2 - 4"x 3" REDUCER

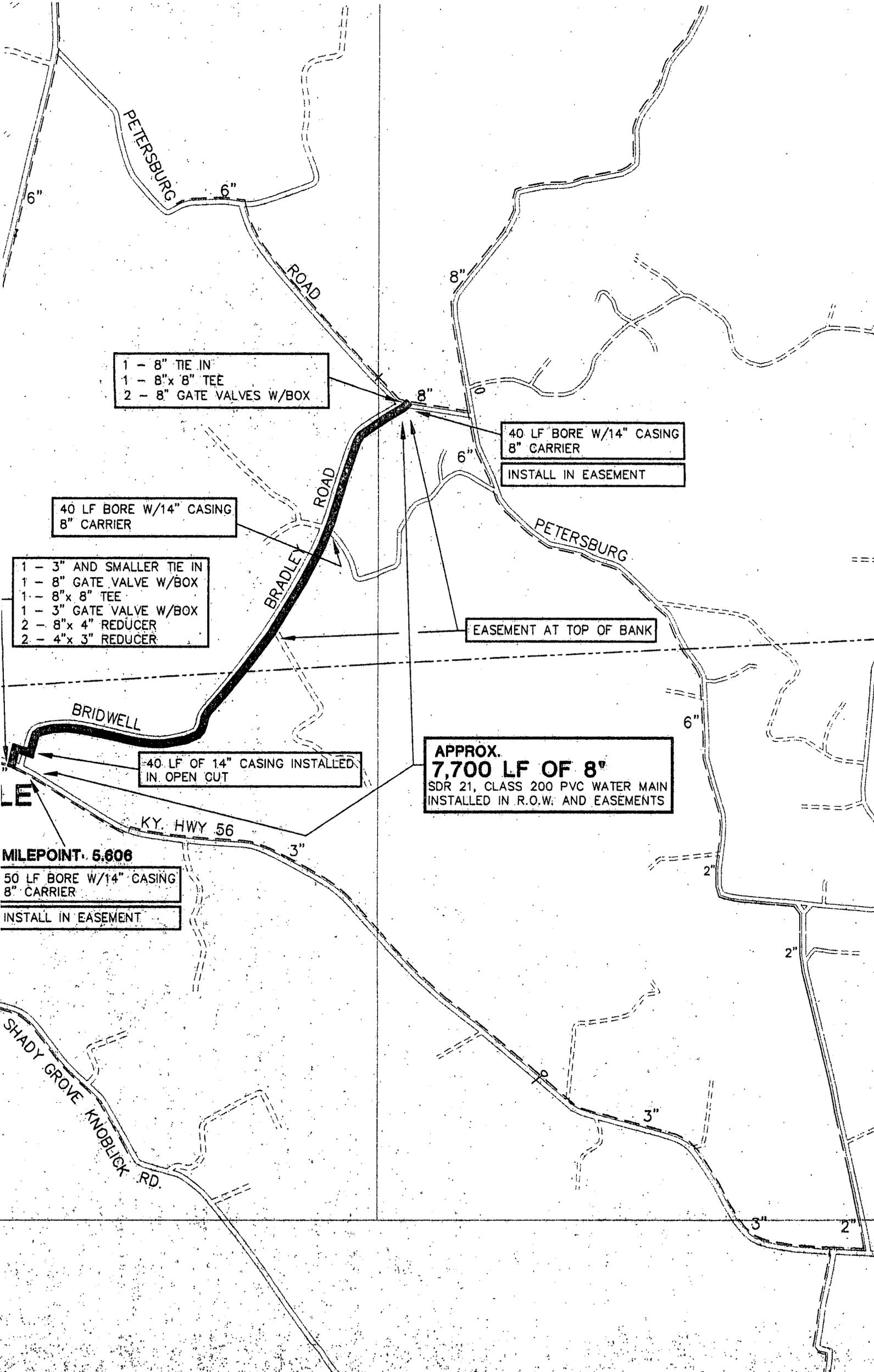
40 LF BORE W/14" CASING
8" CARRIER
INSTALL IN EASEMENT

EASEMENT AT TOP OF BANK

40 LF OF 14" CASING INSTALLED
IN OPEN CUT

APPROX.
7,700 LF OF 8"
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN R.O.W. AND EASEMENTS

MILEPOINT 5.606
50 LF BORE W/14" CASING
8" CARRIER
INSTALL IN EASEMENT



ADVERTISEMENT FOR BIDS - CONTRACT "B"

HENDERSON COUNTY WATER DISTRICT
655 SOUTH MAIN STREET
P. O. BOX 655
HENDERSON, KY 42420

Separate sealed BIDS for the construction of 1999/2000 WATER DISTRIBUTION SYSTEM IMPROVE-
MENTS - CONTRACT "B" (INCLUDING 16,700 LF OF 12" WATER MAINS; 24,900 LF OF 8" WATER
MAINS; 65,700 LF OF 6" WATER MAINS; 11,300 LF OF 4" WATER MAINS; AND APPURTENANCES
 will be received by HENDERSON COUNTY WATER DISTRICT at the office of
HENDERSON COUNTY WATER DISTRICT, 655 SOUTH MAIN STREET, HENDERSON, KY 42420
 until 1:00 P.M., CST , THURSDAY ,
MARCH 23 , 20 00 , and then at said office publicly opened and read aloud.

The CONTRACT DOCUMENTS may be examined at the following locations:
HUNTER MARTIN & ASSOCIATES, INC., PADUCAH, KENTUCKY
HENDERSON COUNTY WATER DISTRICT, HENDERSON, KENTUCKY
ASSOCIATED GENERAL CONTRACTORS, PADUCAH, KENTUCKY
F. W. DODGE-CIG, EVANSVILLE, INDIANA
BUILDERS EXCHANGE OF LOUISVILLE, LOUISVILLE, KENTUCKY

Copies of the CONTRACT DOCUMENTS may be obtained at the office of HUNTER MARTIN & ASSOCIATES, INC., 3220 Lone Oak Road, Paducah, KY 42003, upon payment of \$ 100.00 for each set.

Any BIDDER, upon returning the CONTRACT DOCUMENTS promptly and in good condition, will be refunded the payment, and any non-bidder or subbidder upon so returning the CONTRACT DOCUMENTS will be refunded \$ 50.00 .

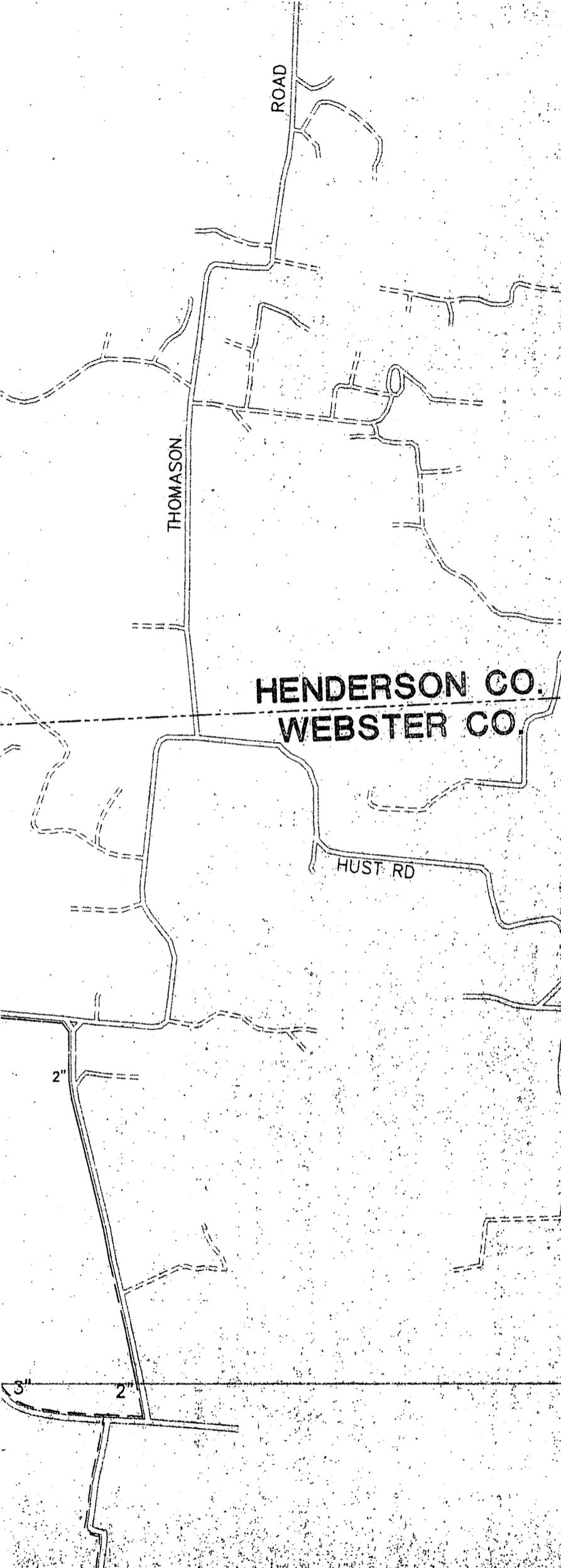
The OWNER reserves the right to waive any informalities or to reject any or all bids.

Each BIDDER must deposit with his BID, security in the amount, form and subject to the conditions provided in the Information for Bidders.

No BIDDER may withdraw his BID within 90 DAYS after the actual date of the opening thereof.

FEBRUARY 23, 2000
 DATE

D. C. HOUSE, CHAIRMAN
 TITLE



HUNTER

3220 LC
(C)

Drawn by:
SDC
Checked by:
JRJ
File:
2000IMPA9
Date:
11-28-99
Revised:

HENDERSON CO.
WEBSTER CO.

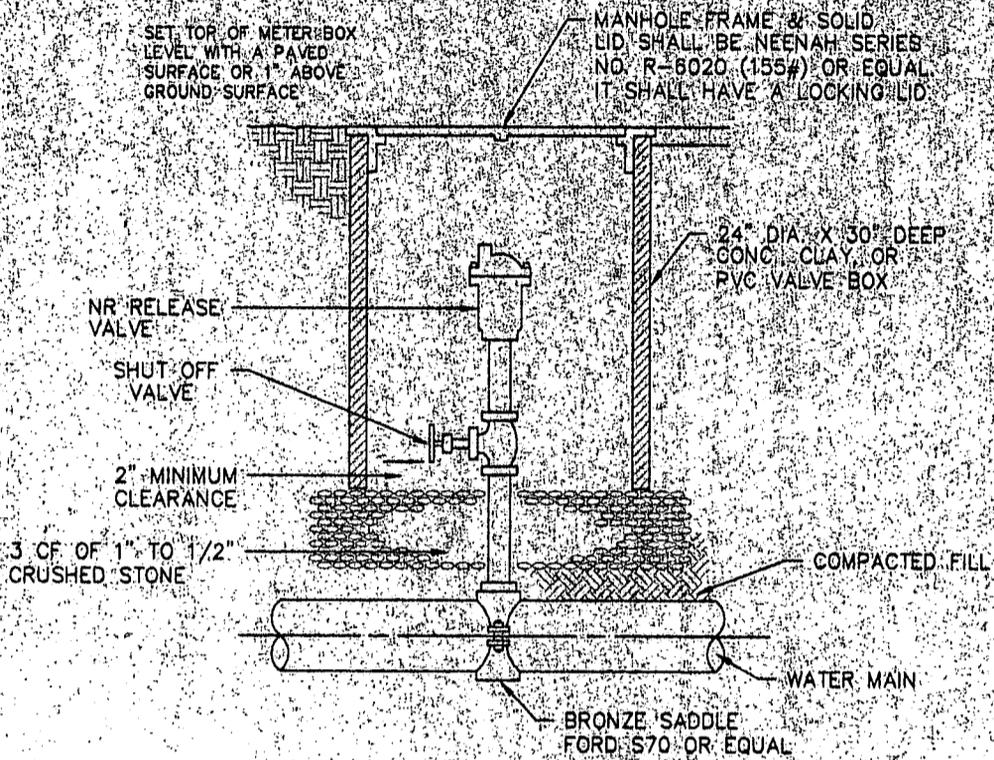
1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS CONTRACT "A"

KY HWY 145, DIXON RD., ALLEN RD.
AND BRIDWELL BRADLEY RD.

HENDERSON COUNTY WATER DISTRICT

Sheet

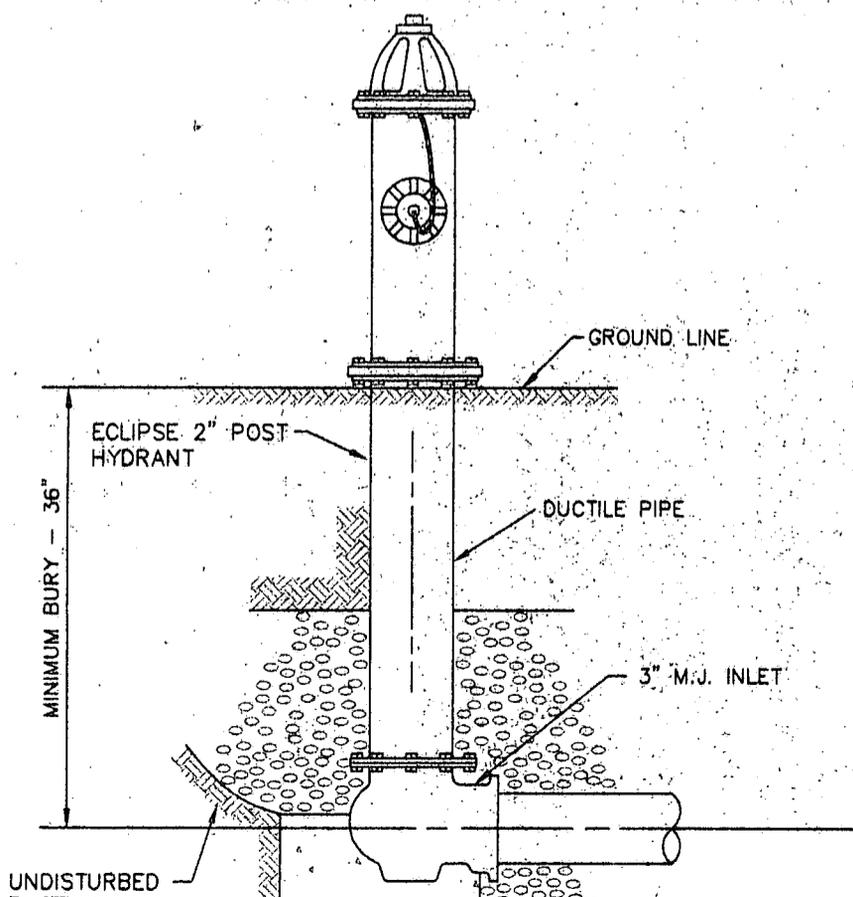
A9



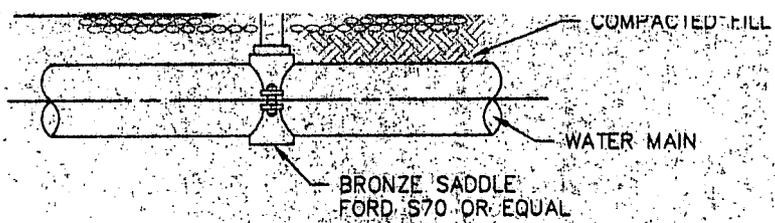
AIR RELEASE VALVE INSTALLATION

(VALVE SIZE PER PLANS)

NOT TO SCALE



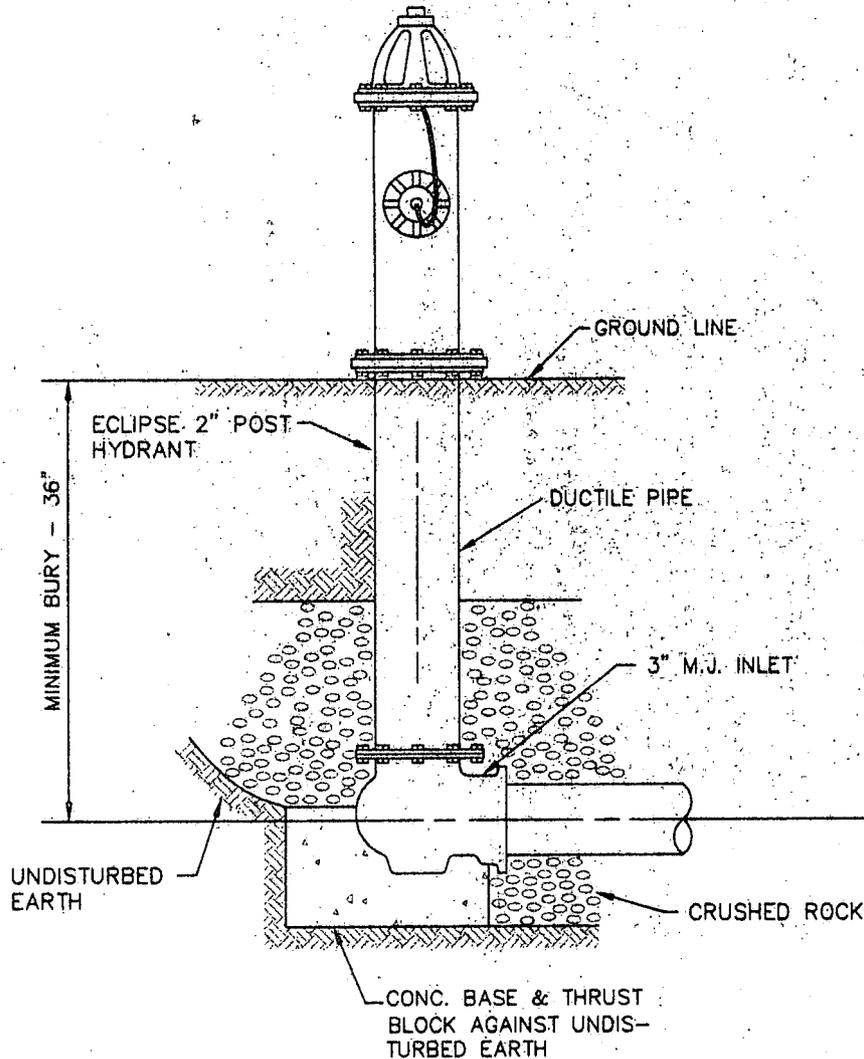
3 CF OF 1" TO 1/2"
CRUSHED STONE



AIR RELEASE VALVE INSTALLATION

(VALVE SIZE PER PLANS)

NOT TO SCALE



FLUSH HYDRANTS SHALL BE ECLIPSE NO.2 POST HYDRANTS OR APPROVED EQUAL.

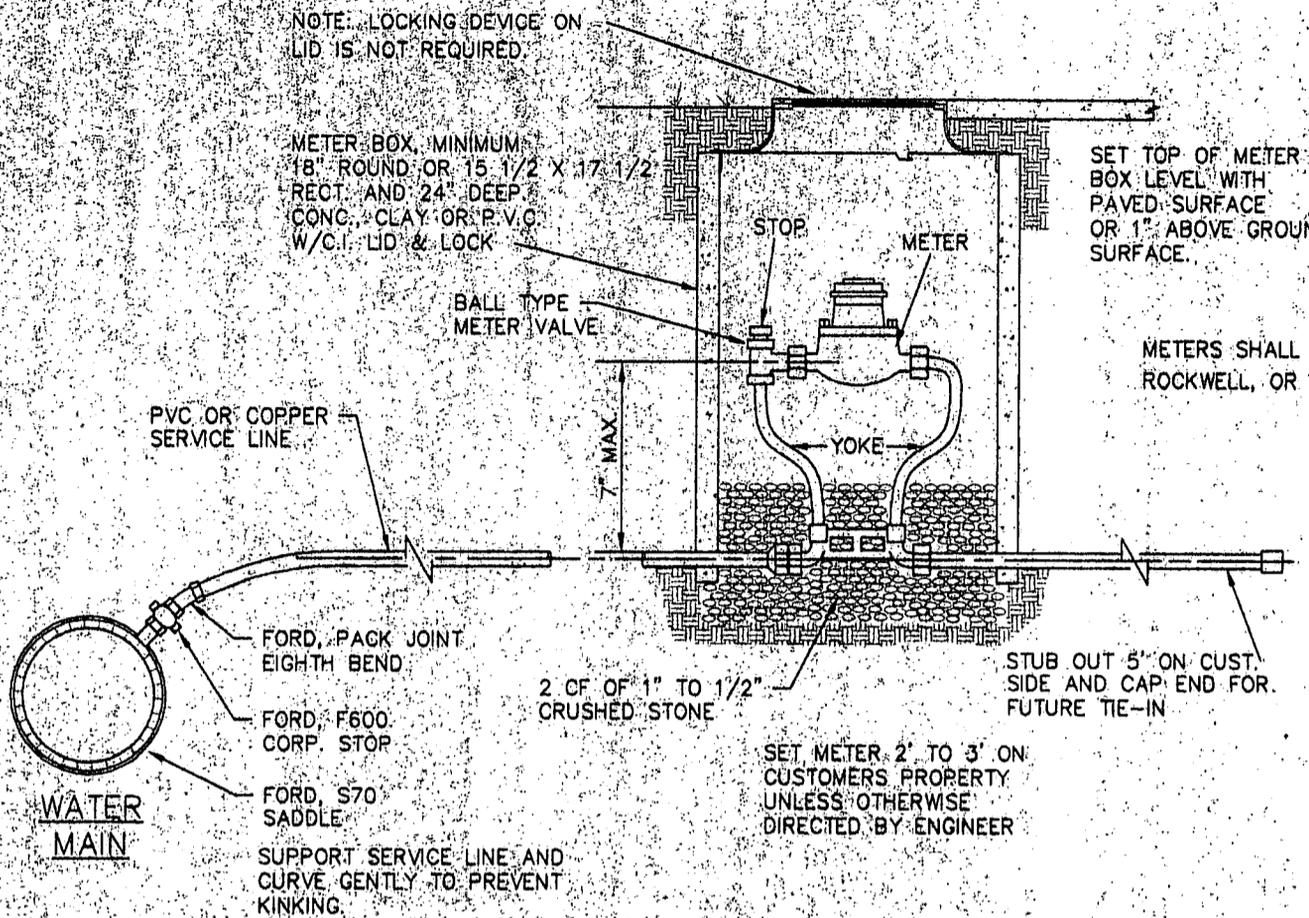
HYDRANTS SHALL BE SELF DRAINING, NON-FREEZING, COMPRESSION TYPE WITH 2-3/16" MAIN VALVE OPENING. INLET CONNECTION SHALL BE 3" M.J. OUTLET SHALL BE 2-1/2" NST.

HYDRANTS SHALL HAVE A 3" DUCTILE IRON PIPE RISER WITH A CAST IRON STOCK TOP, AND NON-TURNING OPERATING ROD. PRINCIPAL INTERIOR OPERATING PARTS SHALL BE BRASS AND REMOVABLE FROM THE HYDRANT FOR SERVICING WITHOUT EXCAVATING THE HYDRANT.

HYDRANTS SHALL BE SET IN 4 CUBIC FEET OF CRUSHED STONE TO ALLOW FOR PROPER DRAINAGE. RECOMMENDATIONS OF THE AWWA SHOULD BE FOLLOWED WHEN INSTALLING THE HYDRANTS.

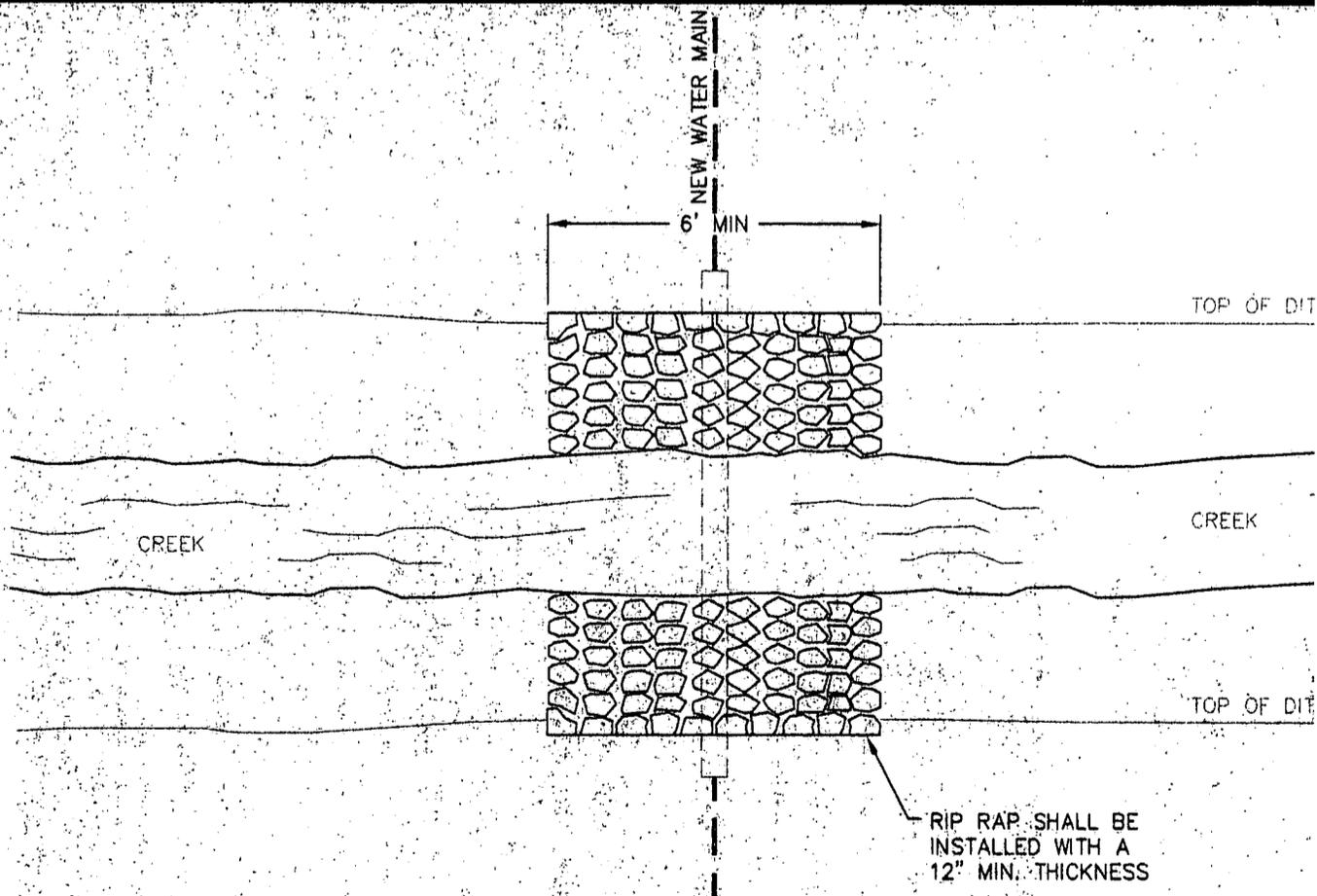
FLUSH HYDRANT

NOT TO SCALE



SERVICE CONNECTION DETAILS AND METER SETTING

NOT TO SCALE



RIP-RAP DETAIL

NOT TO SCALE

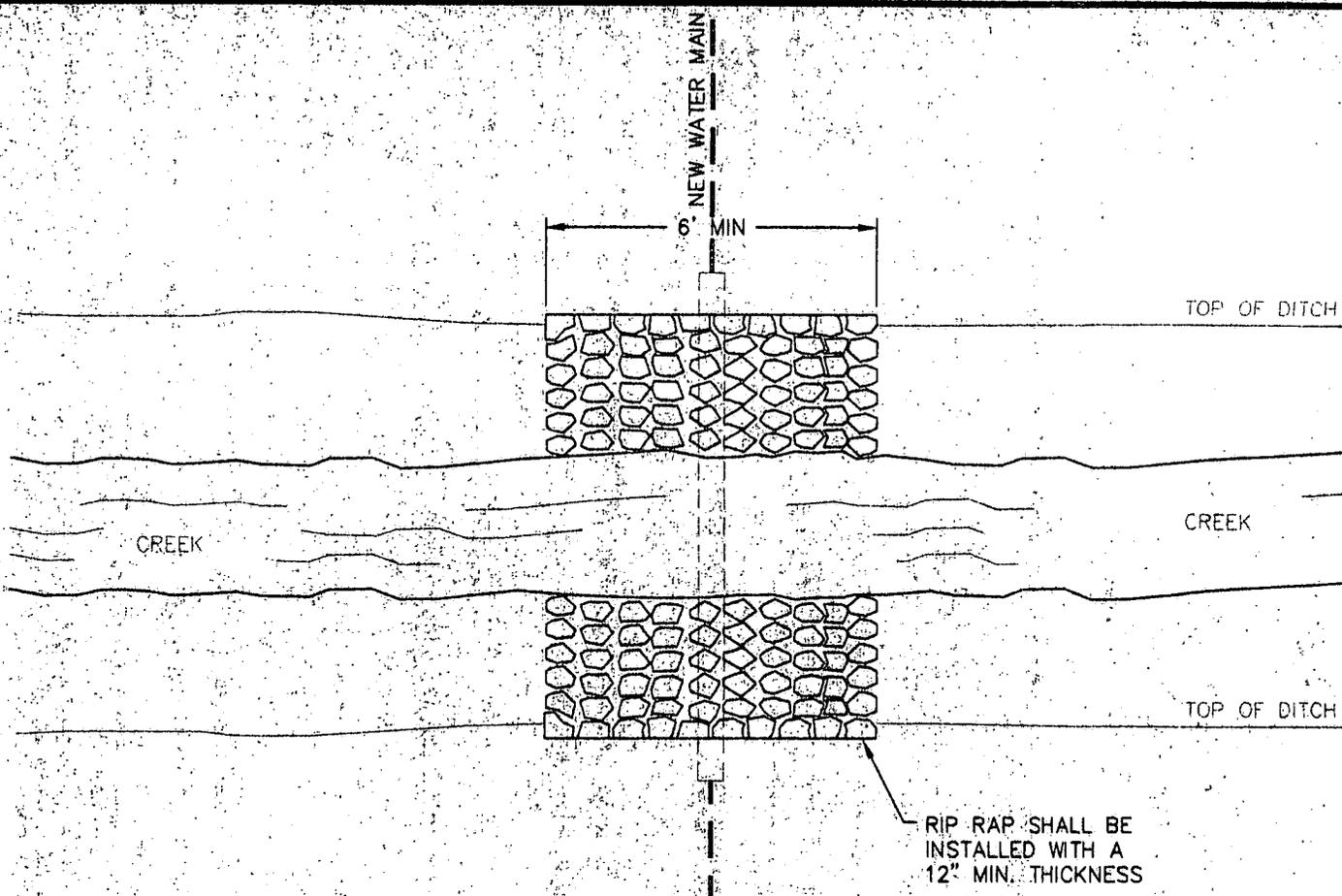
WATER
MAIN

SADDLE
SUPPORT SERVICE LINE AND
CURVE GENTLY TO PREVENT
KINKING.

DESIGNED BY ENGINEER
DIRECTED BY ENGINEER

SERVICE CONNECTION DETAILS AND METER SETTING

NOT TO SCALE



RIP-RAP DETAIL

NOT TO SCALE

RURAL SECTION

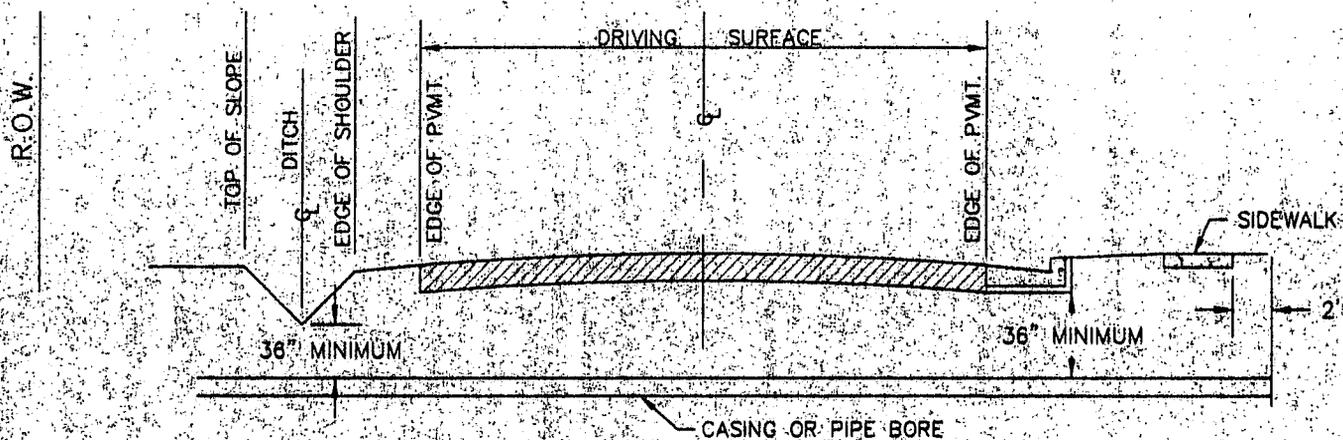
1. LIMIT OF OPEN CUT IS 5' FROM PVMT.

GENERAL

1. ALL WORK WITHIN ROW SHALL BE IN ACCORDANCE WITH THE PERMIT.
2. CASING IS REQ'D. ON ALL MAINS OVER 2".
3. BORE PITS SHALL BE BACKFILLED & COMPACTED.
4. SEED & STRAW ALL AREAS DISTURBED BY WORK.
5. ALL DRAINAGE DITCHES SHALL BE LEFT OPEN.
6. CARRIER PIPE SHALL BE INSTALLED WITH SKIDS PER THE SPECIFICATIONS.
7. SEAL THE ENDS OF CASING PER THE SPECS.
8. NO JOINTS UNDER PAVEMENT WITHOUT CASING.

IMPROVED SECTION

1. LIMIT OF OPEN CUT IS 5' FROM PVMT. OR CURB AND 2' FROM SIDEWALK.

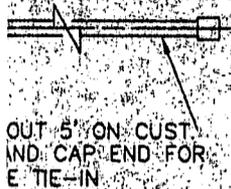


HIGHWAY OR ROAD CROSSING

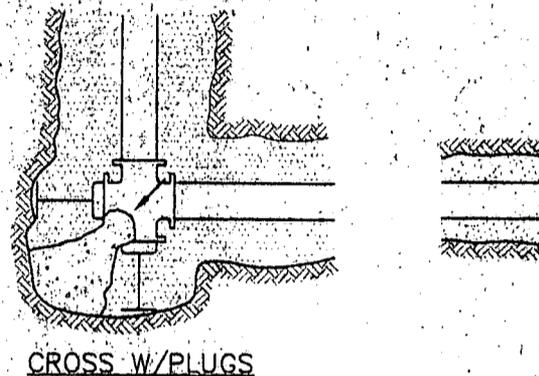
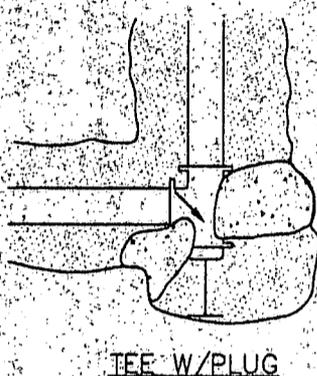
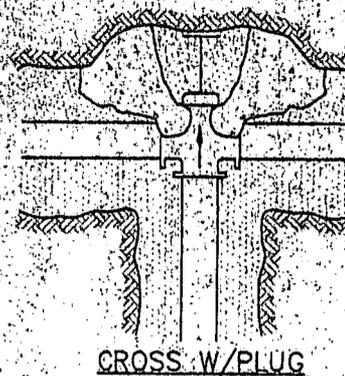
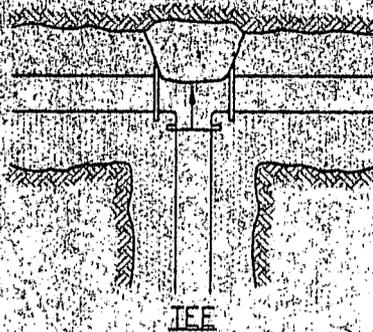
NOT TO SCALE

SET TOP OF METER BOX LEVEL WITH PAVED SURFACE OR 1" ABOVE GROUND SURFACE

METERS SHALL BE NEPTUNE, ROCKWELL, OR BADGER



ILS



NOTES:

1. ARROWS SHOW DIRECTION OF THRUST.
2. BLOCKING SHALL BEAR AGAINST UNDISTURBED EARTH.
3. BRACE PLUGS AGAINST UNDISTURBED EARTH.
4. THRUST BLOCKS SHALL BE 2500 P.S.I. (5 BAG MIX) CONCRETE.
5. CONCRETE SHALL NOT OBSTRUCT FITTING CONNECTIONS.

BEARING STRENGTH OF SOILS

Soils and Safe Bearing Loads	Lbs. Sq. Ft.
Sound Shale	10,000
Cemented Gravel and Sand difficult to pick	4,000
Coarse and fine compact Sand	3,000
Medium Clay - Can be spaded	2,000
Soft Clay	1,000
Mud	0

**THRUST BLOCKING DE
NOT TO SCALE**

TOP OF DITCH

CREEK

TOP OF DITCH

FIRE HYDRANTS SHALL BE MUELLER, WHICH IS THE OWNER'S STANDARD.

NOTE: AUXILIARY VALVES ARE REQUIRED FOR ALL FIRE HYDRANTS

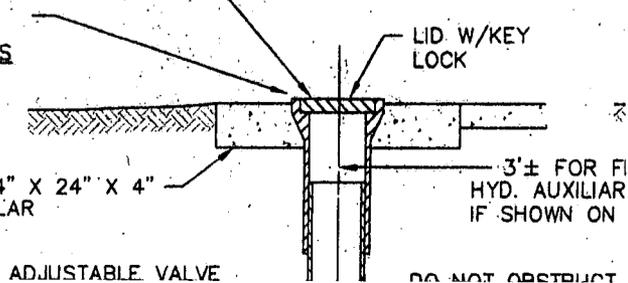
PUMPER NOZZLE SHALL FACE STREET SIDE

CAST IRON LID W/"WATER" TOP SET LEVEL W/PAVED SURFACE OR 1" ABOVE GROUND

LID W/KEY LOCK

PROVIDE 24" X 24" X 4" CONC. COLLAR

3'± FOR HYD. AUXILIAR IF SHOWN ON



NOTE: WHERE POSSIBLE THE AUXILIARY VALVE SHALL BE ATTACHED DIRECTLY TO A F.H.

ADJUSTABLE VALVE

DO NOT OBSTRUCT

L BE
H A
KNES

TEE W/PLUG

CROSS W/PLUGS

ILS

NOTES:

1. ARROWS SHOW DIRECTION OF THRUST.
2. BLOCKING SHALL BEAR AGAINST UNDISTURBED EARTH.
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Coarse and fine compact Sand	3,000
Medium Clay - Can be spaded	2,000
Soft Clay	1,000
Muck	0

THRUST BLOCKING DE
NOT TO SCALE

TOP OF DITCH

CREEK

TOP OF DITCH

L BE
H A
KNES

FIRE HYDRANTS SHALL BE MUELLER, WHICH IS THE OWNER'S STANDARD.

PUMPER NOZZLE - SHALL FACE STREET SIDE

NOTE: AUXILIARY VALVES ARE REQUIRED FOR ALL FIRE HYDRANTS

CAST IRON LID W/"WATER" TOP SET LEVEL W/PAVED SURFACE OR 1" ABOVE GROUND.

LID W/KEY LOCK

PROVIDE 24" X 24" X 4" CONC. COLLAR

3'± FOR FI
HYD. AUXILIAR
IF SHOWN ON

NOTE: WHERE POSSIBLE THE AUXILIARY VALVE SHALL BE ATTACHED DIRECTLY TO A F.H. ANCHORING TEE W/D.I. ROTATING GLAND. OTHERWISE, A STD. TEE AND A CONNECTING PIECE W/D.I. INTEGRAL GLAND & ROTATING GLAND SHALL BE PROVIDED TO SECURELY FASTEN THE VALVE TO THE MAIN.

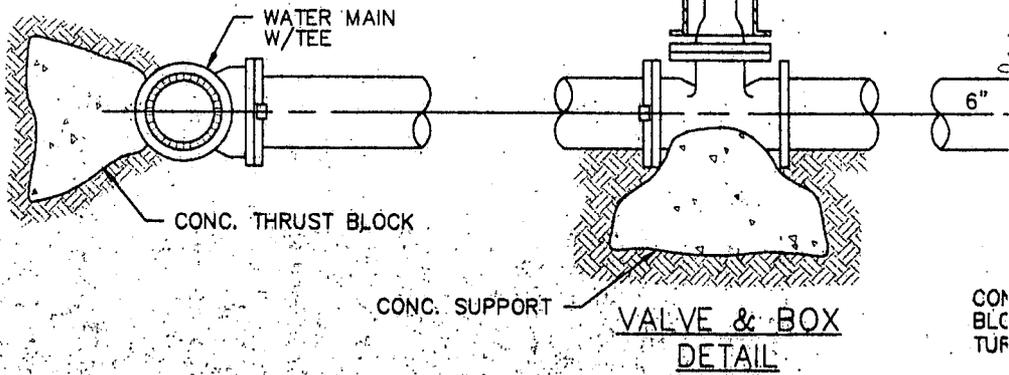
ADJUSTABLE VALVE BOX CENTERED OVER OPER. NUT, PLUMB AND HAND TAMPED

DO NOT OBSTRUCT HYDRANT DRAINS

7 C.F. OF 1" TO 1/2" CRUSHED STONE FOR DRAIN

IMPROVED SECTION

1. LIMIT OF OPEN CUT IS 5' FROM PAVT. OR CURB AND 2' FROM SIDEWALK.



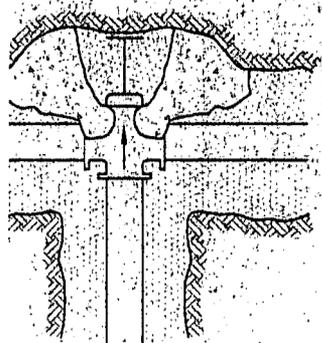
FIRE HYDRANT AND VALVE INST
NOT TO SCALE

R.O.W.

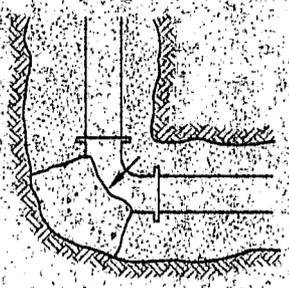
SIDEWALK

MINUM

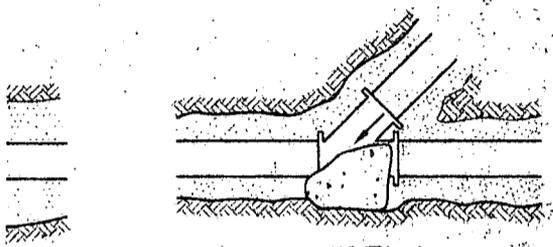
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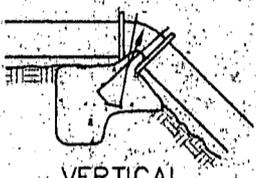
CROSS W/PLUG



ELBOW-BEND



WYE



VERTICAL BEND-ANCHOR

STRENGTH OF SOILS

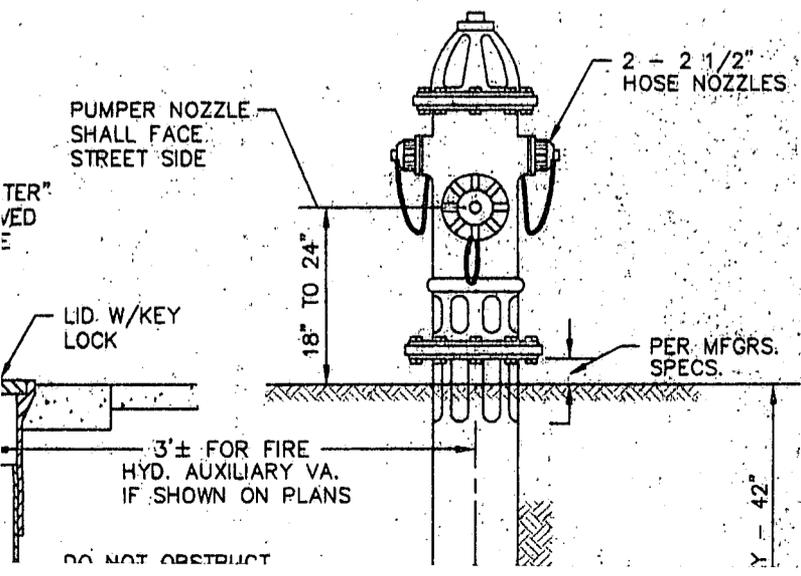
Safe Bearing Loads	Lbs. Sq. Ft.
Level and Sand	10,000
Clay	4,000
Loose compact Sand	3,000
Can be spaded	2,000
	1,000
	0

THRUST PER POUND OF WATER PRESSURE

Pipe Size	Dead End or Tee	90° Elbow	45° Elbow	22 1/2° Elbow
4	20	40	27	20
6	39	60	34	19
8	68	100	56	31
10	110	160	89	48
12	156	220	120	62
14	210	300	168	87
16	270	400	228	121
18	380	500	280	145
20	480	670	370	190
24	690	870	530	270

BLOCKING DETAILS

NOT TO SCALE



HUNTER MARTIN & ASSOCIATES, INC.

ENGINEERS & SURVEYORS
 3220 LONE OAK ROAD • PADUCAH, KENTUCKY 42003
 (502) 554-2737 • FAX (502) 554-2738



Drawn by:
SDC
 Checked by:
RHM
 File:
2000IMPST
 Date:
10-28-99
 Revised:

MENTS
 IDARDS
 R DISTRICT

STRENGTH OF SOILS

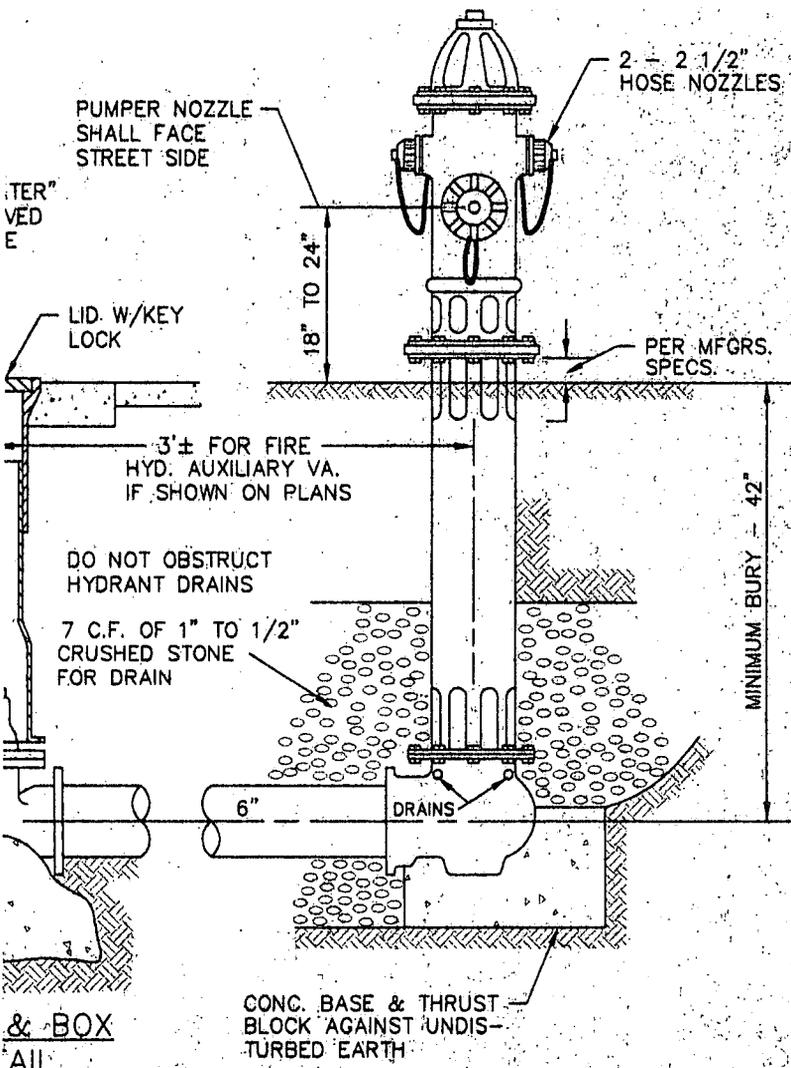
Safe Bearing Loads	Lbs. Sq. Ft.
Level and Sand	10,000
Clay and Sand	4,000
Very compact Sand	3,000
Can be spaded	2,000
	1,000
	0

THRUST PER POUND OF WATER PRESSURE

Pipe Size	Dead End or Tee	90° Elbow	45° Elbow	22 1/2° Elbow
4	20	40	27	20
6	39	60	34	19
8	68	100	66	31
10	110	160	89	48
12	155	220	120	62
14	210	300	168	87
16	270	400	225	121
18	380	500	280	145
20	480	670	370	180
24	890	970	530	270

BLOCKING DETAILS

NOT TO SCALE



D VALVE INSTALLATION

NOT TO SCALE

HUNTER A



3220 JUN 1994

Drawn by:
SDC

Checked by:
RHM

File:
2000IMPST

Date:
10-28-99

Revised:

**1999 / 2000 IMPROVEMENTS
WATER SYSTEMS STANDARDS**

HENDERSON COUNTY WATER DISTRICT

Sheet

A10

HENDERSON COUNTY WATER DISTRICT

HENDERSON COUNTY, KENTUCKY

RECEIVED

APR 19 2000

PUBLIC SERVICE
COMMISSION
910-3538

1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS

CONTRACT "B"

GENERAL CONTRACT DOCUMENTS AND SPECIFICATIONS



2-28-00

NOVEMBER, 1999
(BID: MARCH, 2000)

HUNTER MARTIN & ASSOCIATES, INC.
ENGINEERS & SURVEYORS
3220 LONE OAK ROAD ♦ PADUCAH, KY. 42003 ♦ (270) 554-2737

SET NO. 11

HENDERSON COUNTY WATER DISTRICT

HENDERSON COUNTY, KENTUCKY

**1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS
CONTRACT "B"**

* * * * *

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ADVERTISEMENT FOR BIDS - CONTRACT "B"

HENDERSON COUNTY WATER DISTRICT

655 SOUTH MAIN STREET

P. O. BOX 655

HENDERSON, KY 42420

Separate sealed BIDS for the construction of 1999/2000 WATER DISTRIBUTION SYSTEM IMPROVE-
MENTS - CONTRACT "B" (INCLUDING 16,700 LF OF 12" WATER MAINS; 24,900 LF OF 8" WATER
MAINS; 65,700 LF OF 6" WATER MAINS; 11,300 LF OF 4" WATER MAINS; AND APPURTENANCES

will be received by HENDERSON COUNTY WATER DISTRICT at the office of
HENDERSON COUNTY WATER DISTRICT, 655 SOUTH MAIN STREET, HENDERSON, KY 42420

until 1:00 P.M., CST, THURSDAY,
MARCH 23, 20 00, and then at said office publicly opened and read aloud.

The CONTRACT DOCUMENTS may be examined at the following locations:

HUNTER MARTIN & ASSOCIATES, INC., PADUCAH, KENTUCKY

HENDERSON COUNTY WATER DISTRICT, HENDERSON, KENTUCKY

ASSOCIATED GENERAL CONTRACTORS, PADUCAH, KENTUCKY

F. W. DODGE-CIG, EVANSVILLE, INDIANA

BUILDERS EXCHANGE OF LOUISVILLE, LOUISVILLE, KENTUCKY

Copies of the CONTRACT DOCUMENTS may be obtained at the office of HUNTER MARTIN & ASSOCIATES, INC., 3220 Lone Oak Road, Paducah, KY 42003, upon payment of \$ 100.00 for each set.

Any BIDDER, upon returning the CONTRACT DOCUMENTS promptly and in good condition, will be refunded the payment, and any non-bidder or subbidder upon so returning the CONTRACT DOCUMENTS will be refunded \$ 50.00.

The OWNER reserves the right to waive any informalities or to reject any or all bids.

Each BIDDER must deposit with his BID, security in the amount, form and subject to the conditions provided in the Information for Bidders.

No BIDDER may withdraw his BID within 90 DAYS after the actual date of the opening thereof.

FEBRUARY 23, 2000

DATE

D. C. HOUSE, CHAIRMAN

TITLE

INFORMATION FOR BIDDERS – CONTRACT "B"

BIDS will be received by HENDERSON COUNTY WATER DISTRICT
(herein called the "OWNER"), at 655 SOUTH MAIN STREET, HENDERSON, KY 42420 until 1:00 P.M., CST,
MARCH 23, 20 00, and then BIDS shall be opened publicly and read aloud.

Each BID must be submitted in a sealed envelope, addressed to the HENDERSON COUNTY WATER DISTRICT,
655 SOUTH MAIN STREET, P. O. BOX 655, HENDERSON, KY 42420.

Each sealed envelope containing a BID must be plainly marked on the outside as BID FOR " 1999/2000
DISTRIBUTION SYSTEM IMPROVEMENTS - CONTRACT "B"

and the envelope shall bear on the outside the BIDDER'S name, address, and license number if applicable, and the name of the project for which the BID is submitted. If forwarded by mail, the sealed envelope containing the BID must be enclosed in another envelope addressed to the HENDERSON COUNTY WATER DISTRICT, 655 SOUTH MAIN STREET, P. O. BOX 655, HENDERSON, KENTUCKY 42420.

All BIDS must be made on the required BID form. All blank spaces for BID prices must be filled in, in ink or typewritten, and the BID form must be fully completed and executed when submitted. Only one copy of the BID form is required.

The OWNER may waive any informalities or minor defects or reject any and all BIDS. Any BID may be withdrawn prior to the above scheduled time for the opening of BIDS or authorized postponement thereof. Any BID received after the time and date specified shall not be considered. No BIDDER may withdraw a BID within 90 calendar days after the actual date of the opening thereof. Should there be reasons why the contract cannot be awarded within the specified period, the time may be extended by mutual agreement between the OWNER and the BIDDER.

BIDDERS must satisfy themselves of the accuracy of the estimated quantities in the BID Schedule by examination of the site and a review of the drawings and specifications including ADDENDA. After BIDS have been submitted, the BIDDER shall not assert that there was a misunderstanding concerning the quantities of WORK or of the nature of the WORK to be done.

If requested, the OWNER shall provide to BIDDERS prior to BIDDING, all information which is pertinent to, and delineates and describes, the land owned and rights-of-way acquired or to be acquired.

The CONTRACT DOCUMENTS contain the provisions required for the construction of the PROJECT. Information obtained from an officer, agent, or employee of the OWNER or any other person shall not affect the risks or obligations assumed by the CONTRACTOR or relieve the CONTRACTOR from fulfilling any of the conditions of the contract.

Each BID shall be accompanied by a Bid Bond, payable to the OWNER, for 5 percent of the total amount of the BID. As soon as the BID prices have been compared, the OWNER will return the BONDS of all except the three lowest responsible BIDDERS. When the Agreement is executed, the bonds of the two remaining unsuccessful BIDDERS will be returned. The BID BOND of the successful BIDDER will be retained until the payment BOND and performance BOND have been executed and approved, after which it will be returned. A certified check may be used in lieu of a Bid Bond.

A PERFORMANCE BOND and a PAYMENT BOND, each in the amount of 100 percent of the CONTRACT PRICE with a corporate surety approved by the OWNER, shall be required for the faithful performance of the CONTRACT.

Attorneys-in-fact who sign BID BONDS, PAYMENT BONDS and PERFORMANCE BONDS must file with each BOND a certified and effective dated copy of their power of attorney.

The party to whom the contract is awarded will be required to execute the Agreement and obtain the performance BOND and payment BOND within 10 calendar days from the date when NOTICE OF AWARD is delivered to the BIDDER. The NOTICE OF AWARD shall be accompanied by the necessary Agreement and BOND forms. In case of failure of the BIDDER to execute the Agreement, the OWNER may consider the BIDDER in default, in which case the BID BOND accompanying the proposal shall become the property of the OWNER.

The OWNER within 10 calendar days of receipt of acceptable performance BOND, payment BOND and Agreement signed by the party to whom the Agreement was awarded shall sign the Agreement and return to such party an executed duplicate of the Agreement. Should the OWNER not execute the Agreement within such period, the BIDDER may by WRITTEN NOTICE withdraw the signed Agreement. Such notice of withdrawal shall be effective upon receipt of the notice by the OWNER.

The NOTICE TO PROCEED shall be issued within 10 calendar days of the execution of the Agreement by the OWNER. Should there be reasons why the NOTICE TO PROCEED cannot be issued within such period, the time may be extended by mutual agreement between the OWNER AND CONTRACTOR. If the NOTICE TO PROCEED has not been issued within the specified period or within the period mutually agreed upon, the CONTRACTOR may terminate the Agreement without further liability on the part of either party. The CONTRACTOR shall commence work within 10 calendar days of receipt of the NOTICE TO PROCEED.

The OWNER may make such investigations as deemed necessary to determine the ability of the BIDDER to perform the WORK, and the BIDDER shall furnish to the OWNER all such information and data for this purpose as the OWNER may request. The OWNER reserves the right to reject any BID if the evidence submitted by, or investigation of, such BIDDER fails to satisfy the OWNER that such BIDDER is properly qualified to carry out the obligations of the Agreement and to complete the WORK contemplated therein.

A conditional or qualified BID will not be accepted.

Award will be made to the lowest responsible, responsive BIDDER.

All applicable laws, ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the PROJECT shall apply to the contract throughout.

Each BIDDER is responsible for inspecting the site and for reading and being thoroughly familiar with the CONTRACT DOCUMENTS. The failure or omission of any BIDDER to do any of the foregoing shall in no way relieve any BIDDER from any obligation in respect to its BID.

The low bidder shall supply the names and addresses of major material SUPPLIERS and SUBCONTRACTORS when required to do so by the OWNER.

The ENGINEER is HUNTER MARTIN & ASSOCIATES, INC., 3220 LONE OAK ROAD, PADUCAH, KENTUCKY 42003, (PHONE 270, 554-2737; FAX 270, 554-2738).

An inspection for prospective BIDDERS will leave from the office of HENDERSON COUNTY WATER DISTRICT
655 SOUTH MAIN STREET, HENDERSON, KENTUCKY 42420 at 8:00 A.M., CST,
THURSDAY, MARCH 16, 20 00.

BID – CONTRACT "B"

Proposal of _____ (hereinafter called "BIDDER"), organized and existing under the laws of the State of _____

doing business as _____
(Insert "a corporation", "a partnership", or "an individual" as applicable.)

To HENDERSON COUNTY WATER DISTRICT, 655 SOUTH MAIN STREET, HENDERSON, KENTUCKY 42420 (hereinafter called OWNER).

The BIDDER hereby proposes to perform all WORK for the installation of 1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS - CONTRACT "B" in strict accordance with the CONTRACT DOCUMENTS, within the time set forth herein, and at the prices stated below.

By submission of this BID, each BIDDER certifies, and in the case of a joint BID each party thereto certifies as to its own organization, that this BID has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this BID with any other BIDDER or with any competitor.

BIDDER hereby agrees to commence WORK under this contract on or before a date to be specified in the NOTICE TO PROCEED and to fully complete the PROJECT within 150 consecutive calendar days thereafter. BIDDER further agrees to pay as liquidated damages, the sum of \$ 500.00 for each consecutive calendar day thereafter.

BIDDER acknowledges receipt of the following ADDENDUM:

BIDDER, having examined the plans and specifications and being acquainted with and fully understanding (a) the extent and character of the work, (b) the location, arrangement and specified requirements, (c) existing and probable construction difficulties and hazards, (d) local conditions relative to labor, transportation, hauling and delivery, and (e) all other conditions affecting or which may be affected by the PROJECT hereby agrees to perform all the WORK described in the CONTRACT DOCUMENTS for the following unit prices and/or lump sums:

BID SCHEDULE B

NOTE: BIDS SHALL INCLUDE SALES TAX AND ALL APPLICABLE TAXES AND FEES. SEE SPECIAL CONDITIONS FOR EXPLANATION OF BID ITEMS.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE BID	AMOUNT
1.	MOBILIZATION/ DEMOBILIZATION	1	LS		
2.	WATER MAINS, PVC				
2.1	12" SDR 21 or 12" Class 250 DIP	16,300	LF		
2.2	8" SDR 21 or 8" Class 250 DIP	24,500	LF		
2.3	6" SDR 21 or 6" Class 250 DIP	65,800	LF		
2.4	4" SDR 21 or 4" Class 250 DIP	10,700	LF		
2.5	3" SDR 21	100	LF		
2.6	2" SDR 21	100	LF		
2.7	12" Class 250 DIP	400	LF		
2.8	8" Class 250 DIP	400	LF		
2.9	6" Class 250 DIP	400	LF		
2.10	4" Class 250 DIP	400	LF		
3.	FITTINGS				
3.1	Ductile Iron, 12" Size	1,300	LBS.		
3.2	Ductile Iron, 10" Size	300	LBS.		
3.3	Ductile Iron, 8" Size	1,500	LBS.		
3.4	Ductile Iron, 6" Size	1,800	LBS.		
3.5	Ductile Iron, 4" Size	400	LBS.		
3.6	PVC, 3" and Smaller	2	EA.		
4.	VALVES, W/IRON BOX				
4.1	12" Gate	3	EA.		
4.2	10" Gate	1			
4.3	6" Gate	14	EA.		
4.4	4" Gate	3	EA.		
4.5	3" Gate	8	EA.		
5.	SPECIAL FITTINGS, TAPPING TEE				
5.1	8" x 3" Serive Saddle W/3" Gate Valve & Box	1	EA.		
5.2	10" x 10" Tapping Sleeve W/10" Gate Valve & Box	1	EA.		
5.3	8" x 6" Tapping sleeve W/6" Gate Valve & Box	1	EA.		
5.4	6" x 6" Tapping Sleeve W/6" Gate Valve & Box	2	EA.		
5.4	4" x 4" Tapping Sleeve W/6" Gate Valve & Box	1	EA.		

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE BID	AMOUNT
6.	CLAMPS AND COUPLINGS				
6.1	12"	1	EA.		
6.2	10"	1	EA.		
6.3	8"	1	EA.		
6.4	6"	1	EA.		
6.5	4"	1	EA.		
6.6	3" and Smaller	1	EA.		
7.	TIE-INS				
7.1	10"	1	EA.		
7.2	8"	6	EA.		
7.3	6"	11	EA.		
7.4	4"	2	EA.		
7.5	3" and Smaller	11	EA.		
8.	HYDRANTS				
8.1	Standard Hydrant	2	EA.		
8.2	3" Post Hydrant	8	EA.		
9	AIR RELEASE VALVES W/BOX	2	EA.		
10.	METER SETTINGS				
10.1	5/8" x 3/4" Reconnection	72	EA.		
10.2	5/8" x 3/4" New	75	EA.		
11.	SERVICE LINES				
11.1	3/4" Copper, Open Cut	3,400	LF		
11.2	3/4" Copper, Bore	3,000	LF		
12.	BORE W/CASING				
12.1	18" Casing	380	LF		
12.2	14" Casing	300	LF		
12.3	12" Casing	480	LF		
12.4	10" Casing	120	LF		
13.	BORE W/O CASING				
13.1	12" Carrier	70	LF		
13.2	8" Carrier	30	LF		
13.3	6" Carrier	40	LF		
14.	OPEN CUT CASING				
14.1	14" Casing	40	LF		
15.	ADDITIONAL DEPTH (Greater than 7')	500	LF		
16.	CRUSHED STONE	900	CY		
17.	RIPRAP	300	CY		

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE BID	AMOUNT
18.	CONCRETE ENCASEMENT	20	LF		
19.	ASPHALT PAVEMENT REPLACEMENT	20	SY		
20.	CONCRETE PAVEMENT REPLACEMENT	20	CY		
TOTAL BID - CONTRACT "B"					

NOTE: THE CONTRACT SHALL BE AWARDED BASED ON THE TOTAL BID. HOWEVER, IT IS AGREED THAT THE OWNER MAY ADJUST THE QUANTITIES TO MATCH AVAILABLE FUNDS.

RESPECTFULLY SUBMITTED THIS _____ DAY OF _____, 20 _____

IS BIDDER AN INDIVIDUAL, A PARTNERSHIP, OR A CORPORATION? _____

FIRM NAME

SIGNATURE

FIRM ADDRESS

TITLE

LIST OF PARTNERS, OR CORPORATE OFFICERS WITH
TITLES IF APPLICABLE:

PHONE NUMBER

SEAL (IF APPLICABLE)

ATTEST: _____

TITLE

BID BOND – CONTRACT “B”

KNOW ALL PERSONS BY THESE PRESENTS, that we, the undersigned, _____

_____ as Principal,

and _____ as Surety, are hereby held and firmly

bound unto HENDERSON COUNTY WATER DISTRICT

_____ as Owner in the penal sum of _____

_____ for

the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

Signed, this _____ day of _____, 20____.

The Condition of the above obligation is such that whereas the Principal has submitted to HENDERSON

COUNTY WATER DISTRICT a certain Bid, attached hereto and hereby

made a part hereof to enter into a contract in writing, for the

1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS – CONTRACT “B”

NOW, THEREFORE,

- (a) If said Bid shall be rejected, or
- (b) If said Bid shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said Bid) and shall furnish a Bond for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said Bid,

then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its Bond shall be in no way impaired or affected by any extension of the time within which the Owner may accept such Bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

Principal (L.S.)

By: _____

Surety

By: _____

IMPORTANT - Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the project is located, and hold certificates of authority as acceptable sureties (31 CFR 223).

AGREEMENT – CONTRACT "B"

THIS AGREEMENT, made this _____ day of _____, 20_____, by and between

HENDERSON COUNTY WATER DISTRICT, hereinafter called "OWNER" and

_____ doing business as

_____ hereinafter called "CONTRACTOR".

(an individual,) or (a partnership,) or (a corporation)

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned:

1. The CONTRACTOR will commence and complete the PROJECT described as 1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS – CONTRACT "B"
2. The CONTRACTOR will furnish all of the materials, supplies, tools, equipment, labor, and other services necessary for the construction and completion of the PROJECT described herein.
3. The CONTRACTOR will commence the work required by the CONTRACT DOCUMENTS within 10 calendar days after the date of the NOTICE TO PROCEED and will complete the same within 150 calendar days unless the period for completion is extended otherwise by the CONTRACT DOCUMENTS.
4. The CONTRACTOR agrees to perform all of the WORK described in the CONTRACT DOCUMENTS and comply with the terms therein for the sum of \$ _____, or as shown in the BID schedule.

5. The term "CONTRACT DOCUMENTS" means and includes the following:

(A) GENERAL CONTRACT DOCUMENTS

- (1) ADVERTISEMENT FOR BIDS
- (2) INFORMATION FOR BIDDERS
- (3) BID
- (4) BID BOND
- (5) AGREEMENT
- (6) PERFORMANCE BOND
- (7) PAYMENT BOND
- (8) NOTICE OF AWARD
- (9) NOTICE TO PROCEED
- (10) CHANGE ORDER
- (11) GENERAL CONDITIONS
- (12) SPECIAL CONDITIONS

(B) SPECIFICATIONS prepared by HUNTER MARTIN & ASSOCIATES, INC.
dated NOVEMBER, 1999 (BID: MARCH, 2000).

(C) DRAWINGS prepared or issued by HUNTER MARTIN & ASSOCIATES,
INC. dated NOVEMBER, 1999 (BID: MARCH, 2000).

(D) ADDENDA:

No. _____ dated _____, 20 _____

No. _____ dated _____, 20 _____

No. _____ dated _____, 20 _____

6. The OWNER will pay to the CONTRACTOR in the manner and at such times as set forth in the General Conditions such amounts as required by the CONTRACT DOCUMENTS.

7. This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

IN WITNESS WHEREOF, the parties hereto have executed or caused to be executed by their duly authorized officials, this Agreement in THREE copies each of which shall be deemed an original on the date first above written.

OWNER: HENDERSON COUNTY WATER DISTRICT

BY: _____

NAME: D. C. HOUSE
(Please Type)

TITLE: CHAIRMAN

(Seal)

ATTEST:

BY: _____

NAME: _____
(Please Type)

TITLE: _____

CONTRACTOR:

BY:

NAME:

(Please Type)

TITLE:

(Seal)

ATTEST:

BY:

NAME:

(Please Type)

TITLE:

PERFORMANCE BOND – CONTRACT “B”

KNOW ALL PERSONS BY THESE PRESENTS: that

(Name Of Contractor)

(Address Of Contractor)

a _____ hereinafter called PRINCIPAL and
(Corporation, Partnership or Individual)

(Name Of Surety)

hereinafter called SURETY, are held and firmly bound unto

HENDERSON COUNTY WATER DISTRICT
(Name of Owner)

655 SOUTH MAIN STREET, HENDERSON, KENTUCKY 42420
(Address of Owner)

hereinafter called OWNER in the total aggregate penal sum of _____
_____ Dollars (\$ _____) in lawful money
of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors,
administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the PRINCIPAL entered into a certain contract with the
OWNER, dated the _____ day of _____, 20_____,
a copy of which is hereto attached and made a part hereof for the construction of:

1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS – CONTRACT “B”

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the OWNER, with or without notice to the SURETY and during the one year guaranty period and if the PRINCIPAL shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the OWNER from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the OWNER may incur in making good any default, then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said SURETY, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to WORK to be performed thereunder or the SPECIFICATIONS accompanying same shall in any way affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that it is expressly agreed that the BOND shall be deemed amended automatically and immediately, without formal and separate amendments hereto, upon amendment to the CONTRACT not increasing the contract price more than 20 per cent, so as to bind the PRINCIPAL and the SURETY to the full and faithful performance of the CONTRACT as so amended. The term "Amendment", wherever used in this BOND, and whether referring to this BOND, or the CONTRACT, shall include any alteration, addition, extension, or modification of any character whatsoever.

PAYMENT BOND - CONTRACT "B"

KNOW ALL PERSONS BY THESE PRESENTS: that

(Name Of Contractor)

(Address Of Contractor)

a _____ hereinafter called PRINCIPAL and
(Corporation, Partnership or Individual)

(Name Of Surety)

hereinafter called SURETY, are held and firmly bound unto

HENDERSON COUNTY WATER DISTRICT
(Name of Owner)

655 SOUTH MAIN STREET, HENDERSON, KENTUCKY 42420
(Address of Owner)

hereinafter called OWNER and unto all persons, firms, and corporations who or which may furnish labor, or who furnish materials to perform as described under the contract and to their successors and assigns in the total aggregate penal sum of _____ Dollars (\$ _____) in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the PRINCIPAL entered into a certain contract with the OWNER, dated the _____ day of _____, 20_____, a copy of which is hereto attached and made a part hereof for the construction of:

1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS - CONTRACT "B"

NOW, THEREFORE, if the PRINCIPAL shall promptly make payment to all persons, firms, and corporations furnishing materials for or performing labor in the prosecution of the WORK provided for in such contract, and any authorized extensions or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such WORK, and for all labor cost incurred in such WORK including that by a SUBCONTRACTOR, and to any mechanic or materialman lien holder whether it acquires its lien by operation of State or Federal law, then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, that beneficiaries or claimants hereunder shall be limited to the SUBCONTRACTORS, and persons, firms, and corporations having a direct contract with the PRINCIPAL or its SUBCONTRACTORS.

PROVIDED, FURTHER, that the said SURETY for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any way affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of this contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no suit or action shall be commenced hereunder by any claimant: (a) unless claimant, other than one having a direct contract with the PRINCIPAL, shall have given written notice to any two of the following: the PRINCIPAL, the OWNER, or the SURETY above named within ninety (90) days after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the PRINCIPAL, OWNER, or SURETY, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the aforesaid project is located, save that such service need not be made by a public officer; (b) after the expiration of one (1) year following the date of which PRINCIPAL ceased work on said CONTRACT, is being understood, however, that if any limitation embodied in the BOND is prohibited by any law controlling the construction hereof, such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.

PROVIDED, FURTHER, that it is expressly agreed that this BOND shall be deemed amended automatically and immediately, without formal and separate amendments hereto, upon amendment to the Contract not increasing the contract price more than 20 per cent, so as to bind the PRINCIPAL and the SURETY to the full and faithful performance of the CONTRACT as so amended. The term "Amendment", wherever used in this BOND and whether referring to this BOND, or the CONTRACT, shall include any alteration, addition, extension or modification of any character whatsoever.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in FOUR counterparts, each of which shall
Number

be deemed an original, this _____ day of _____, 20 ____.

ATTEST:

Principal

By: _____ (s)

(SEAL)

(Address)

Witness to Principal

Address

ATTEST:

Surety

By: _____

Witness to Surety

Attorney-In-Fact

(Address)

(Address)

NOTE: Date of BOND must not be prior to date of CONTRACT.
If CONTRACT is partnership, all partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the Project is located.

NOTICE OF AWARD – CONTRACT "B"

TO: _____

PROJECT DESCRIPTION: 1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS -
CONTRACT "B"

The OWNER has considered the BID submitted by your for the above described WORK in response to its Advertisement for Bids dated FEBRUARY 23, 20 00, and Information for Bidders.

You are hereby notified that your BID has been accepted for items in the amount of \$ _____.

You are required by the Information for Bidders to execute the Agreement and furnish the required CONTRACTOR'S Performance BOND, Payment BOND and Certificates of Insurance within 10 calendar days from the date of this Notice to you.

If you fail to execute said Agreement and to furnish said BONDS within 10 days from the date of this Notice, said OWNER will be entitled to consider all your rights arising out of the OWNER'S acceptance of your BID as abandoned and as a forfeiture of your BID BOND. The OWNER will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this NOTICE OF AWARD to the OWNER.

Dated this _____ day of _____, 20 _____.

HENDERSON COUNTY WATER DISTRICT
OWNER

BY: _____

TITLE: D. C. HOUSE, CHAIRMAN

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE OF AWARD is hereby acknowledged by _____

this the _____ day of _____, 20 _____.

BY: _____

TITLE: _____

NOTICE TO PROCEED – CONTRACT “B”

TO: _____

DATE: _____

PROJECT: 1999/2000 DISTRIBUTION
SYSTEM IMPROVEMENTS -
CONTRACT “B”

You are hereby notified to commence WORK in accordance with the Agreement dated _____, 20____, on or before _____, 20____, and you are to complete the WORK within 150 consecutive calendar days thereafter. The date of completion of all WORK is therefore _____, 20____.

HENDERSON COUNTY WATER DISTRICT
OWNER

BY: _____

TITLE: D. C. HOUSE, CHAIRMAN

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE TO PROCEED is hereby acknowledged by _____

this the _____ day of _____, 20____.

BY: _____

TITLE: _____

CHANGE ORDER - CONTRACT "B"

ORDER NO.: _____

DATE: _____

AGREEMENT DATE: _____

NAME OF PROJECT: 1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS -
CONTRACT "B"

OWNER: HENDERSON COUNTY WATER DISTRICT

CONTRACTOR: _____

The following changes are hereby made to the CONTRACT DOCUMENTS:

Justification:

Change to CONTRACT PRICE:

Original CONTRACT PRICE: \$ _____

Current CONTRACT PRICE adjusted by previous CHANGE ORDER \$ _____

The CONTRACT PRICE due to this CHANGE ORDER will be **DECREASED** by

(\$ _____) and **INCREASED** by \$ _____ for a NET

change of \$ _____.

The new CONTRACT PRICE including this CHANGE ORDER will be \$ _____.

Change to CONTRACT TIME:

The CONTRACT TIME will be _____ by _____ calendar days.

(Increased / Decreased)

The date for completion of all work will be _____.

(Date)

Requested by: _____ OWNER

Recommended by: _____ ENGINEER

Accepted by: _____ CONTRACTOR

GENERAL CONDITIONS

- | | |
|--|--|
| 1. Definitions | 17. Subsurface Conditions |
| 2. Additional Instructions and Detail Drawings | 18. Suspension of Work, Termination, and Delay |
| 3. Schedules, Reports, and Records | 19. Payments to Contractor |
| 4. Drawings and Specifications | 20. Acceptance of Final Payment as Release |
| 5. Shop Drawings | 21. Insurance |
| 6. Materials, Services, and Facilities | 22. Contract Security |
| 7. Inspection and Testing | 23. Assignments |
| 8. Substitutions | 24. Indemnification |
| 9. Patents | 25. Separate Contracts |
| 10. Surveys, Permits, Regulations | 26. Subcontracting |
| 11. Protection of Work, Property, Persons | 27. Engineer's Authority |
| 12. Supervision by Contractor | 28. Land and Rights-of-Way |
| 13. Changes in the Work | 29. Guaranty |
| 14. Changes in Contract Price | 30. Arbitration |
| 15. Time for Completion and Liquidated Damages | 31. Taxes |
| 16. Correction of Work | |

1. DEFINITIONS.

- 1.1. Wherever used in the CONTRACT DOCUMENTS, the following terms shall have the meanings indicated and shall be applicable to both the singular and plural thereof:
- 1.2. ADDENDA - Written or graphic instruments issued prior to the execution of the Agreement which modify or interpret the CONTRACT DOCUMENTS, DRAWINGS and SPECIFICATIONS, by additions, deletions, clarifications, or corrections.
- 1.3. BID - The offer or proposal of the BIDDER submitted on the prescribed form setting forth the prices for the WORK to be performed.
- 1.4. BIDDER - Any person, firm, or corporation submitting a BID for the WORK.
- 1.5. BONDS - Bid, Performance, and Payment Bonds and other instruments of surety, furnished by the CONTRACTOR and the CONTRACTOR'S surety in accordance with the CONTRACT DOCUMENTS.
- 1.6. CHANGE ORDER - A written order to the CONTRACTOR authorizing an addition, deletion, or revision in the WORK within the general scope of the CONTRACT DOCUMENTS, or authorizing an adjustment in the CONTRACT PRICE or CONTRACT TIME.
- 1.7. CONTRACT DOCUMENTS - The CONTRACT, including Advertisement For BIDS, Information for BIDDERS, BID, BID BOND, AGREEMENT, PAYMENT BOND, PERFORMANCE BOND, NOTICE OF AWARD, NOTICE TO PROCEED, CHANGE ORDER, DRAWINGS, SPECIFICATIONS, and ADDENDA.
- 1.8. CONTRACT PRICE - The total monies payable to the CONTRACTOR under the terms and conditions of the CONTRACT DOCUMENTS.
- 1.9. CONTRACT TIME - The number of calendar days stated in the CONTRACT DOCUMENTS for the completion of the WORK.

- 1.10. DEVELOPER - A corporation, association, partnership, or an individual for whom the WORK is to be performed.
- 1.11. CONTRACTOR - The person, firm, or corporation with whom the OWNER has executed the Agreement.
- 1.12. DRAWINGS - The parts of the CONTRACT DOCUMENTS which show the characteristics and scope of the WORK to be performed and which have been prepared or approved by the ENGINEER.
- 1.13. ENGINEER - The person, firm, or corporation named as such in the CONTRACT DOCUMENTS.
- 1.14. FIELD ORDER - A written order affecting a change in the WORK not involving an adjustment in the CONTRACT PRICE or an extension of the CONTRACT TIME, issued by the ENGINEER to the CONTRACTOR during construction.
- 1.15. NOTICE OF AWARD - The written notice of the acceptance of the BID from the OWNER to the successful BIDDER.
- 1.16. NOTICE TO PROCEED - Written communication issued by the OWNER to the CONTRACTOR authorizing him/her to proceed with the WORK and establishing the date for commencement of the WORK.
- 1.17. OWNER - A public or quasi-public body or authority, corporation, association, partnership, or an individual for whom the WORK is to be performed.
- 1.18. PROJECT - The undertaking to be performed as provided in the CONTRACT DOCUMENTS.
- 1.19. RESIDENT PROJECT REPRESENTATIVE - The authorized representative of the OWNER who is assigned to the PROJECT site or any part thereof.
- 1.20. SHOP DRAWINGS - All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the CONTRACTOR, a SUBCONTRACTOR, manufacturer, SUPPLIER or distributor, which illustrate how specific portions of the WORK shall be fabricated or installed.
- 1.21. SPECIFICATIONS - A part of the CONTRACT DOCUMENTS consisting of written descriptions of a technical nature of materials, equipment, construction systems, standards and workmanship.
- 1.22. SUBCONTRACTOR - An individual, firm, or corporation having a direct contract with the CONTRACTOR or with any other SUBCONTRACTOR for the performance of a part of the WORK at the site.
- 1.23. SUBSTANTIAL COMPLETION - That date certified by the ENGINEER when the construction of the PROJECT or a specified part thereof is sufficiently completed, in accordance with the CONTRACT DOCUMENTS, so that the PROJECT or specified part can be utilized for the purposes for which it is intended.
- 1.24. SUPPLEMENTAL GENERAL CONDITIONS - Modifications to General Conditions required by a Federal agency for participation in the PROJECT and approved by the agency in writing prior to inclusion in the CONTRACT DOCUMENTS, or such requirements that may be imposed by applicable state laws.
- 1.25. SUPPLIER - Any person or organization who supplies materials or equipment for the WORK, including that fabricated to a special design, but who does not perform labor at the site.

- 1.26. WORK - All labor necessary to produce the construction required by the CONTRACT DOCUMENTS, and all materials and equipment incorporated or to be incorporated in the PROJECT.
- 1.27. WRITTEN NOTICE - Any notice to any party of the AGREEMENT relative to any part of this AGREEMENT in writing and considered delivered and the service thereof completed, when posted by certified or registered mail to the said party at their last given address, or delivered in person to said party or their authorized representative on the WORK.

2. ADDITIONAL INSTRUCTIONS AND DETAIL DRAWINGS.

- 2.1. The CONTRACTOR may be furnished additional instructions and detail drawings, by the ENGINEER, as necessary to carry out the WORK required by the CONTRACT DOCUMENTS.
- 2.2. The additional drawings and instructions thus supplied will become a part of the CONTRACT DOCUMENTS. The CONTRACTOR shall carry out the WORK in accordance with the additional detail drawings and instructions.

3. SCHEDULES, REPORTS AND RECORDS.

- 3.1. The CONTRACTOR shall submit to the OWNER such schedule of quantities and costs, progress schedules, payrolls, reports, estimates, records and other data where applicable as are required by the CONTRACT DOCUMENTS for the WORK to be performed.

With each succeeding progress payment request, the progress schedule shall be reviewed and revised (if necessary) and shall show the per cent complete of each major feature of the work.

- 3.2. Prior to the first partial payment estimate, the CONTRACTOR shall submit construction progress schedules showing the order in which the CONTRACTOR proposes to carry on the WORK, including dates at which the various parts of the WORK will be started, estimated date of completion of each part and, as applicable:

3.2.1. The dates at which special detail drawings will be required; and

3.2.2. Respective dates for submission of SHOP DRAWINGS, the beginning of manufacture, the testing and the installation of materials, supplies and equipment.

- 3.3. The CONTRACTOR shall also submit a schedule of payments that the CONTRACTOR anticipates will be earned during the course of the WORK.

4. DRAWINGS AND SPECIFICATIONS.

- 4.1. The intent of the DRAWINGS and SPECIFICATIONS is that the CONTRACTOR shall furnish all labor, materials, tools, equipment, and transportation necessary for the proper execution of the WORK in accordance with the CONTRACT DOCUMENTS and all incidental work necessary to complete the PROJECT in an acceptable manner, ready for use, occupancy or operation by the OWNER.
- 4.2. In case of conflict between the DRAWINGS and SPECIFICATIONS, the SPECIFICATIONS shall govern. Figure dimensions on DRAWINGS shall govern over general DRAWINGS.
- 4.3. Any discrepancies found between the DRAWINGS and SPECIFICATIONS and site conditions or any inconsistencies or ambiguities in the DRAWINGS or SPECIFICATIONS shall be immediately reported to the ENGINEER, in writing, who shall promptly correct such inconsistencies or ambiguities in writing. WORK done by the CONTRACTOR after discovery of such discrepancies, inconsistencies or ambiguities shall be done at the CONTRACTOR'S risk.

5. SHOP DRAWINGS.

- 5.1. The CONTRACTOR shall provide SHOP DRAWINGS of all mechanical and electrical equipment and all appearance items. The ENGINEER shall promptly review all SHOP DRAWINGS. The ENGINEER'S approval of any SHOP DRAWING shall not release the CONTRACTOR from responsibility for deviations from the CONTRACT DOCUMENTS. The approval of any SHOP DRAWING which substantially deviates from the requirement of the CONTRACT DOCUMENTS shall be evidenced by a CHANGE ORDER.
- 5.2. When submitted for the ENGINEER'S review, SHOP DRAWINGS shall bear the CONTRACTOR'S certification that he has reviewed, checked and approved the SHOP DRAWINGS and that they are in conformance with the requirements of the CONTRACT DOCUMENTS.
- 5.3. Portions of the WORK requiring a SHOP DRAWING or sample submission shall not begin until the SHOP DRAWING or submission has been approved by the ENGINEER. A copy of each approved SHOP DRAWING and each approved sample shall be kept in good order by the CONTRACTOR at the site and shall be available to the ENGINEER.

6. MATERIALS, SERVICES AND FACILITIES.

- 6.1. It is understood that, except as otherwise specifically stated in the CONTRACT DOCUMENTS, the CONTRACTOR shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, supervision, temporary construction of any nature, and all other services and facilities of any nature whatsoever necessary to execute, complete, and deliver the WORK within the specified time.
- 6.2. Materials and equipment shall be so stored as to insure the preservation of their quality and fitness for the WORK. Stored materials and equipment to be incorporated in the WORK shall be located so as to facilitate prompt inspection.
- 6.3. Manufactured articles, materials, and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturer.
- 6.4. Materials, supplies, and equipment shall be in accordance with samples submitted by the CONTRACTOR and approved by the ENGINEER.
- 6.5. Materials, supplies, or equipment to be incorporated into the WORK shall not be purchased by the CONTRACTOR or the SUBCONTRACTOR subject to a chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller.

7. INSPECTION AND TESTING.

- 7.1. All materials and equipment used in the construction of the PROJECT shall be subject to adequate inspection and testing in accordance with generally accepted standards, as required and defined in the CONTRACT DOCUMENTS.
- 7.2. The OWNER shall provide all inspection and testing services not required by the CONTRACT DOCUMENTS.
- 7.3. The CONTRACTOR shall provide at the CONTRACTOR'S expense the testing and inspection services required by the CONTRACT DOCUMENTS.
- 7.4. If the CONTRACT DOCUMENTS, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any WORK to specifically be inspected, tested, or approved by someone other than the CONTRACTOR, the CONTRACTOR will give the ENGINEER timely

notice of readiness. The CONTRACTOR will then furnish the ENGINEER the required certificates of inspection, testing or approval.

- 7.5. Inspections, tests, or approvals by the ENGINEER or others shall not relieve the CONTRACTOR from the obligation to perform the WORK in accordance with the requirements of the CONTRACT DOCUMENTS.
- 7.6. The ENGINEER and the ENGINEER'S representatives will at all times have access to the WORK. In addition, authorized representatives and agents of any participating Federal or State agency shall be permitted to inspect all work, materials, payrolls, records or personnel, invoices of materials, and other relevant data and records. The CONTRACTOR will provide proper facilities for such access and observation of the WORK and also for any inspection or testing thereof.
- 7.7. If any WORK is covered contrary to the written instructions of the ENGINEER, it must, if requested by the ENGINEER, be uncovered for the ENGINEER'S observation and replaced at the CONTRACTOR'S expense.
- 7.8. If the ENGINEER considers it necessary or advisable that covered WORK be inspected or tested by others, the CONTRACTOR, at the ENGINEER'S request, will uncover, expose or otherwise make available for observation, inspection or testing as the ENGINEER may require, that portion of the WORK in question, furnishing all necessary labor, materials, tools and equipment. If it is found that such WORK is defective, the CONTRACTOR will bear all the expense of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction, if, however, such WORK is not found to be defective, the CONTRACTOR will be allowed an increase in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction and an appropriate CHANGE ORDER shall be issued.

8. SUBSTITUTIONS.

- 8.1. Whenever a material, article, or piece of equipment is identified on the DRAWINGS or SPECIFICATIONS by reference to brand name or catalogue numbers, it shall be understood that this is referenced for the purpose of defining the performance or other salient requirements and that other products of equal capacities, quality and function shall be considered. The CONTRACTOR may recommend the substitution of a material, article, or piece of equipment of equal substance and function for those referred to in the CONTRACT DOCUMENTS by reference to brand name or catalogue number, and if, in the opinion of the ENGINEER, such material, article, or piece of equipment is of equal substance and function to that specified, the ENGINEER may approve its substitution and use by the CONTRACTOR. Any cost differential shall be deductible from the CONTRACT PRICE and the CONTRACT DOCUMENTS shall be appropriately modified by CHANGE ORDER. The CONTRACTOR warrants that if substitutes are approved, no major changes in the function or general design of the PROJECT will result. Incidental changes or extra component parts required to accommodate the substitute will be made by the CONTRACTOR without a change in the CONTRACT PRICE or CONTRACT TIME.

9. PATENTS.

- 9.1. The CONTRACTOR shall pay all applicable royalties and license fees, and shall defend all suits or claims for infringement of any patent rights and save the OWNER harmless from loss on account thereof, except that the OWNER shall be responsible for any such loss when a particular process, design, or product of a particular manufacturer or manufacturers is specified; however, if the CONTRACTOR has reason to believe that the design, process or product specified is an infringement of a patent, the CONTRACTOR shall be responsible for such loss unless the CONTRACTOR promptly gives such information to the ENGINEER.

10. SURVEYS, PERMITS, REGULATIONS.

- 10.1. The OWNER shall furnish all boundary surveys and establish all base lines for locating the principal component parts of the WORK together with a suitable number of bench marks adjacent to the WORK as shown in the CONTRACT DOCUMENTS. From the information provided by the OWNER, unless otherwise specified in the CONTRACT DOCUMENTS, the CONTRACTOR shall develop and make all detail surveys needed for construction such as slope stakes, batter boards, stakes for pipe locations and other working points, lines, elevations and cut sheets.
- 10.2. The CONTRACTOR shall carefully preserve bench marks, reference points and stakes and, in case of willful or careless destruction, shall be charged with the resulting expense and shall be responsible for any mistake that may be caused by their unnecessary loss or disturbance.
- 10.3. Permits and licenses of a temporary nature necessary for the prosecution of the WORK shall be secured and paid for by the CONTRACTOR unless otherwise stated in the SUPPLEMENTAL GENERAL CONDITIONS. Permits, licenses and easements for permanent structures or permanent changes in existing facilities shall be secured and paid for by the OWNER, unless otherwise specified. The CONTRACTOR shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the WORK as drawn and specified. If the CONTRACTOR observes that the CONTRACT DOCUMENTS are at variance therewith, the CONTRACTOR shall promptly notify the ENGINEER in writing, and any necessary changes shall be adjusted as provided in Section 13, CHANGES IN THE WORK.

11. PROTECTION OF WORK, PROPERTY, AND PERSONS.

- 11.1. The CONTRACTOR will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the WORK. The CONTRACTOR will take all necessary precautions for the safety of, will provide the necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury or loss to all employees on the WORK and other persons who may be affected thereby, all the WORK and all materials or equipment to be incorporated therein, whether in storage on or off the site, and other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.
- 11.2. The CONTRACTOR will comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction. The CONTRACTOR will erect and maintain, as required by the conditions and progress of the WORK, all necessary safeguards for safety and protection. The CONTRACTOR will notify owners of adjacent utilities when prosecution of the WORK may affect them. The CONTRACTOR will remedy all damage, injury or loss to any property caused, directly or indirectly, in whole or part, by the CONTRACTOR, any SUBCONTRACTOR or anyone directly or indirectly employed by any of them or anyone directly or indirectly employed by any of them or anyone of whose acts any of them may be liable, except damage or loss attributable to the fault of the CONTRACT DOCUMENTS or to the acts or omissions of the OWNER, of the ENGINEER or anyone employed by either of them or anyone for whose acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of the CONTRACTOR.
- 11.3. In emergencies affecting the safety of persons or the WORK or property at the site or adjacent thereto, the CONTRACTOR, without special instructions or authorization from the ENGINEER or OWNER, shall act to prevent threatened damage, injury or loss. The CONTRACTOR will give the ENGINEER prompt WRITTEN NOTICE of any significant changes in the WORK or deviations from the CONTRACT DOCUMENTS caused thereby, and a CHANGE ORDER shall thereupon be issued covering the changes and deviations involved.

12. SUPERVISION BY CONTRACTOR.

12.1. The CONTRACTOR will supervise and direct the WORK. He will be solely responsible for the means, methods, techniques, sequences and procedures of construction. The CONTRACTOR will employ and maintain on the WORK a qualified supervisor or superintendent who shall have been designated in writing by the CONTRACTOR as the CONTRACTOR'S representative at the site. The supervisor shall have full authority to act on behalf of the CONTRACTOR and all communications given the supervisor shall be as binding as if given to the CONTRACTOR. The supervisor shall be present on the site at all times as required to perform adequate supervision and coordination of the WORK.

13. CHANGES IN THE WORK.

13.1. The OWNER may at any time, as the need arises, order changes within the scope of the WORK without invalidating the AGREEMENT. If such changes increase or decrease the amount due under the CONTRACT DOCUMENTS, or in the time required for performance of the WORK, an equitable adjustment shall be authorized by CHANGE ORDER.

13.2. The ENGINEER also may, at any time, by issuing a FIELD ORDER, make changes in the details of the WORK. The CONTRACTOR shall proceed with the performance of any changes in the WORK so ordered by the ENGINEER unless the CONTRACTOR believes that such FIELD ORDER entitles the CONTRACTOR to a change in CONTRACT PRICE or TIME, or both, in which event the CONTRACTOR shall give the ENGINEER WRITTEN NOTICE thereof within 7 days after the receipt of the ordered change. Thereafter, the CONTRACTOR shall document the basis for the change in CONTRACT PRICE or TIME within 30 days. The CONTRACTOR shall not execute such changes pending the receipt of an executed CHANGE ORDER or further instruction from the OWNER.

14. CHANGES IN CONTRACT PRICE.

14.1. The CONTRACT PRICE may be changed only by a CHANGE ORDER. The value of any WORK covered by a CHANGE ORDER or of any claim for increase or decrease in the CONTRACT PRICE shall be determined by one or more of the following methods in the order of precedence listed below:

- a. Unit prices previously approved.
- b. An agreed lump sum.

15. TIME FOR COMPLETION AND LIQUIDATED DAMAGES.

15.1. The date of beginning and the time for completion of the WORK are essential conditions of the CONTRACT DOCUMENTS and the WORK embraced shall be commenced on a date specified in the NOTICE TO PROCEED.

15.2. The CONTRACTOR will proceed with the WORK at such rate of progress to insure full completion within the CONTRACT TIME. It is expressly understood and agreed, by and between the CONTRACTOR and the OWNER, that the CONTRACT TIME for the completion of the WORK described herein is a reasonable time, taking into consideration the average climatic and economic conditions and other factors prevailing in the locality of the WORK.

15.3. If the CONTRACTOR shall fail to complete the WORK within the CONTRACT TIME, or extension of time granted by the OWNER, then the CONTRACTOR will pay to the OWNER the amount for liquidated damages as specified in the BID for each calendar day that the CONTRACTOR shall be in default after the time stipulated in the CONTRACT DOCUMENTS.

15.4. The CONTRACTOR shall not be charged with liquidated damages or any excess cost when the delay in completion of the WORK is due to the following and the CONTRACTOR has promptly given WRITTEN NOTICE of such delay to the OWNER or ENGINEER.

15.4.1. To any preference, priority or allocation order duly issued by the OWNER .

15.4.2. To unforeseeable causes beyond the control and without the fault or negligence of the CONTRACTOR, including but not restricted to, acts of God, or of the public enemy, acts of the OWNER, acts of another CONTRACTOR in the performance of a contract with the OWNER, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and abnormal and unforeseeable weather, and

15.4.3. To any delays of SUBCONTRACTORS occasioned by any of the causes specified in paragraphs 15.4.1 and 15.4.2 of this article.

16. CORRECTION OF WORK.

16.1. The CONTRACTOR shall promptly remove from the premises all WORK rejected by the ENGINEER for failure to comply with the CONTRACT DOCUMENTS, whether incorporated in the construction or not, and the CONTRACTOR shall promptly replace and re-execute the WORK in accordance with the CONTRACT DOCUMENTS and without expense to the OWNER and shall bear the expense of making good all WORK of other CONTRACTORS destroyed or damaged by such removal or replacement.

16.2. All removal and replacement WORK shall be done at the CONTRACTOR'S expense. If the CONTRACTOR does not take action to remove such rejected WORK within 10 days after receipt of WRITTEN NOTICE, the OWNER may remove such WORK and store the materials at the expense of the CONTRACTOR.

17. SUBSURFACE CONDITIONS.

17.1. The CONTRACTOR shall promptly, and before such conditions are disturbed, except in the event of an emergency, notify the OWNER by WRITTEN NOTICE of:

17.1.1. Subsurface or latent physical conditions at the site differing materially from those indicated in the CONTRACT DOCUMENTS; or

17.1.2. Unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in WORK of the character provided for in the CONTRACT DOCUMENTS.

17.2. The OWNER shall promptly investigate the conditions, and if it is found that such conditions do so materially differ and cause an increase or decrease in the cost of, or in the time required for, performance of the WORK, an equitable adjustment shall be made and the CONTRACT DOCUMENTS shall be modified by a CHANGE ORDER. Any claim of the CONTRACTOR for adjustment hereunder shall not be allowed unless the required WRITTEN NOTICE has been given; provided that the OWNER may, if the OWNER determines the facts so justify, consider and adjust any such claims asserted before the date of final payment.

18. SUSPENSION OF WORK, TERMINATION, AND DELAY.

18.1. The OWNER may suspend the WORK or any portion thereof for a period of not more than 90 days or such further time as agreed upon by the CONTRACTOR, by WRITTEN NOTICE to the CONTRACTOR and the ENGINEER which shall fix the date on which WORK shall be resumed. The CONTRACTOR will resume that WORK on the date so fixed. The CONTRACTOR will be

allowed an increase in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, directly attributable to any suspension.

- 18.2. If the CONTRACTOR is adjudged bankrupt or insolvent, or makes a general assignment for the benefit of its creditors, or if a trustee or receiver is appointed for the CONTRACTOR or for any of its property, or if CONTRACTOR files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or applicable laws, or repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment, or repeatedly fails to make prompt payments to SUBCONTRACTORS or for labor, materials or equipment or disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction of the WORK or disregards the authority of the ENGINEER or otherwise violates any provision of the CONTRACT DOCUMENTS, then the OWNER may, without prejudice to any other right or remedy and after giving the CONTRACTOR and its surety a minimum of 10 days from delivery of a WRITTEN NOTICE, terminate the services of the CONTRACTOR and take possession of the PROJECT and of all materials, equipment, tools, construction equipment and machinery thereon owned by the CONTRACTOR, and finish the WORK by whatever method the OWNER may deem expedient. In such case, the CONTRACTOR shall not be entitled to receive any further payment until the WORK is finished. If the unpaid balance of the CONTRACT PRICE exceeds the direct and indirect costs of completing the PROJECT, including compensation for additional professional services, such excess SHALL BE PAID TO THE CONTRACTOR. If such costs exceed such unpaid balance, the CONTRACTOR will pay the difference to the OWNER. Such costs incurred by the OWNER will be determined by the ENGINEER and incorporated in a CHANGE ORDER.
- 18.3. Where the CONTRACTOR'S services have been so terminated by the OWNER, said termination shall not affect any right of the OWNER against the CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of monies by the OWNER due the CONTRACTOR will not release the CONTRACTOR from compliance with the CONTRACT DOCUMENTS.
- 18.4. After 10 days from delivery of WRITTEN NOTICE to the CONTRACTOR and the ENGINEER, the OWNER may, without cause and without prejudice to any other right or remedy, elect to abandon the PROJECT and terminate the CONTRACT. In such case, the CONTRACTOR shall be paid for all WORK executed and any expense sustained plus reasonable profit.
- 18.5. If, through no act or fault of the CONTRACTOR, the WORK is suspended for a period of more than 90 days by the OWNER or under an order of court or other public authority, or the ENGINEER fails to act on any request for payment within 30 days after it is submitted, or the OWNER fails to pay the CONTRACTOR substantially the sum approved by the ENGINEER or awarded by arbitrators within 30 days of its approval and presentation, then the CONTRACTOR may, after 10 days from delivery of a WRITTEN NOTICE to the OWNER and the ENGINEER terminate the CONTRACT and recover from the OWNER payment for all WORK executed and all expenses sustained. In addition and in lieu of terminating the CONTRACT if the ENGINEER has failed to act on a request for payment or if the OWNER has failed to make any payment as aforesaid, the CONTRACTOR may upon 10 days written notice to the OWNER and the ENGINEER stop the WORK until paid all amounts then due, in which event and upon resumption of the WORK, CHANGE ORDERS shall be issued for adjusting the CONTRACT PRICE or extending the CONTRACT TIME or both to compensate for the costs and delays attributable to the stoppage of the WORK.
- 18.6. If the performance of all or any portion of the WORK is suspended, delayed, or interrupted as a result of a failure of the OWNER or ENGINEER to act within the time specified in the CONTRACT DOCUMENTS, or if no time is specified, within a reasonable time, an adjustment in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, shall be made by CHANGE ORDER to compensate the CONTRACTOR for the costs and delays necessarily caused by the failure of the OWNER or ENGINEER.

19. PAYMENT TO CONTRACTOR.

- 19.1. At least 10 days before each progress payment falls due (but not more often than once a month), the CONTRACTOR will submit to the ENGINEER a partial payment estimate filled out and signed by the CONTRACTOR covering the WORK performed during the period covered by the partial payment estimate and supported by such data as the ENGINEER may reasonably require. If payment is requested on the basis of materials and equipment not incorporated in the WORK but delivered and suitably stored at or near the site, the partial payment estimate shall also be accompanied by such supporting data, satisfactory to the OWNER as will establish the OWNER'S title to the material and equipment and protect the OWNER'S interest therein, including applicable insurance. The ENGINEER will, within 10 days after receipt of each partial payment estimate, either indicate in writing approval of payment, and present the partial payment estimate to the OWNER, or return the partial payment estimate to the CONTRACTOR indicating in writing the reasons for refusing to approve payment. In the latter case, the CONTRACTOR may make the necessary corrections and resubmit the partial payment estimate. The OWNER will, within 10 days of presentation of an approved partial payment estimate, pay the CONTRACTOR a progress payment on the basis of the approved partial payment estimate less the retainage. The retainage shall be an amount equal to 10 percent of said estimate until 50 percent of the work has been completed. At 50 percent completion, further partial payments shall be made in full to the CONTRACTOR and no additional amounts may be retained unless the ENGINEER certifies that the job is not proceeding satisfactorily, but amounts previously retained shall not be paid to the CONTRACTOR. At 50 percent completion or any time thereafter when the progress of the WORK is not satisfactory, additional amounts may be retained but in no event shall the total retainage be more than 10 percent of the value of the work completed. Upon substantial completion of the work, any amount retained may be paid to the CONTRACTOR. When the WORK has been substantially completed except for WORK which cannot be completed because of weather conditions, lack of materials or other reasons which, in the judgment of the OWNER, are valid reasons for noncompletion, the OWNER may make additional payments, retaining at all times an amount sufficient to cover the estimated cost of the WORK still to be completed.
- 19.2. The request for payment may also include an allowance for the cost of such major materials and equipment which are suitably stored either at or near the site.
- 19.3. Prior to SUBSTANTIAL COMPLETION, the OWNER, with the approval of the ENGINEER and with the concurrence of the CONTRACTOR, may use any completed or substantially completed portions of the WORK. Such use shall not constitute an acceptance of such portions of the WORK.
- 19.4. The OWNER shall have the right to enter the premises for the purpose of doing work not covered by the CONTRACT DOCUMENTS. This provision shall not be construed as relieving the CONTRACTOR of the sole responsibility for the care and protection of the WORK, or the restoration of any damaged WORK except such as may be caused by agents or employees of the OWNER.
- 19.5. Upon completion and acceptance of the WORK, the ENGINEER shall issue a certificate attached to the final payment request that the WORK has been accepted under the conditions of the CONTRACT DOCUMENTS. The entire balance found to be due the CONTRACTOR, including the retained percentages, but except such sums as may be lawfully retained by the OWNER, shall be paid to the CONTRACTOR within 30 days of completion and acceptance of the WORK.
- 19.6. The CONTRACTOR will indemnify and save the OWNER or the OWNER'S agents harmless from all claims growing out of the lawful demand of SUBCONTRACTORS, laborers, workmen, mechanics, materialmen, and furnishers of machinery and parts thereof, equipment, tools, and all supplies, incurred in the furtherance of the performance of the WORK. The CONTRACTOR shall, at the OWNER'S request, furnish satisfactory evidence that all obligations of the nature designated above have been paid, discharged, or waived. If the CONTRACTOR fails to do so, the OWNER may, after having notified the CONTRACTOR, either pay unpaid bills or withhold from

the CONTRACTOR'S unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to the CONTRACTOR shall be resumed in accordance with the terms of the CONTRACT DOCUMENTS, but in no event shall the provisions of this sentence be construed to impose any obligations upon the OWNER to either the CONTRACTOR, the CONTRACTOR'S Surety, or any third party. In paying any unpaid bills of the CONTRACTOR, any payment so made by the OWNER shall be considered as a payment made under the CONTRACT DOCUMENTS by the OWNER to the CONTRACTOR and the OWNER shall not be liable to the CONTRACTOR for any such payments made in good faith.

19.7. If the OWNER fails to make payment 30 days after approval by the ENGINEER, in addition to other remedies available to the CONTRACTOR, there shall be added to each such payment interest at the maximum legal rate commencing on the first day after said payment is due and continuing until the payment is received by the CONTRACTOR.

20. ACCEPTANCE OF FINAL PAYMENT AS RELEASE.

20.1. The acceptance by the CONTRACTOR of final payment shall be and shall operate as a release to the OWNER of all claims and all liability to the CONTRACTOR other than claims in stated amounts as may be specifically excepted by the CONTRACTOR for all things done or furnished in connection with this WORK and for every act and neglect of the OWNER and others relating to or arising out of this WORK. Any payment, however, final or otherwise, shall not release the CONTRACTOR or its sureties from any obligations under the CONTRACT DOCUMENTS or the PERFORMANCE and PAYMENT BONDS.

21. INSURANCE.

21.1. The CONTRACTOR shall purchase and maintain such insurance as will protect it from claims set forth below which may arise out of, or result from the CONTRACTOR'S execution of the WORK, whether such execution be by the CONTRACTOR, any SUBCONTRACTOR, or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

- 21.1.1. Claims under workmen's compensation, disability benefit and other similar employee benefit acts;
- 21.1.2. Claims for damages because of bodily injury, occupational sickness or disease, or death of employees;
- 21.1.3. Claims for damages because of bodily injury, sickness or disease, or death of any person other than employees;
- 21.1.4. Claims for damages insured by usual personal injury liability coverage which are sustained (1) by any person as a result of an offense directly or indirectly related to the employment of such person by the CONTRACTOR, or (2) by any other person; and
- 21.1.5. Claims for damages because of injury to or destruction of tangible property, including loss of use resulting therefrom.

21.2. Certificates of Insurance acceptable to the OWNER shall be filed with the OWNER prior to commencement of the WORK. These Certificates shall contain a provision that coverages afforded under the policies will not be canceled unless at least 15 days prior WRITTEN NOTICE has been given to the OWNER.

21.3. The CONTRACTOR shall procure and maintain, at the CONTRACTOR'S own expense, during the CONTRACT TIME, liability insurance as hereinafter specified:

21.3.1. CONTRACTOR'S General Public Liability and Property Damage Insurance including vehicle coverage issued to the CONTRACTOR and protecting the CONTRACTOR from all claims for personal injury, including death, and all claims for destruction of or damage to property, arising out of or in connection with any operations under the CONTRACT DOCUMENTS, whether such operations be by the CONTRACTOR or by any SUBCONTRACTOR employed by the CONTRACTOR or anyone directly or indirectly employed by the CONTRACTOR or by a SUBCONTRACTOR employed by the CONTRACTOR. Insurance shall be written with a limit of liability of not less than \$500,000 for all damages arising out of bodily injury, including death, at any time resulting therefrom, sustained by any one person in any one accident; and a limit of liability of not less than \$500,000 aggregate for any such damages sustained by two or more persons in any one accident. Insurance shall be written with a limit of liability of not less than \$200,000 for all property damage sustained by any one person in any one accident; and a limit of liability of not less than \$200,000 aggregate for any such damage sustained by two or more persons in any one accident.

21.3.2. The CONTRACTOR shall acquire and maintain, if applicable, Fire and Extended Coverage Insurance upon the PROJECT to the full insurable value thereof for the benefit of the OWNER, the CONTRACTOR, and SUBCONTRACTORS as their interest may appear. This provision shall in no way release the CONTRACTOR or CONTRACTOR'S surety from obligations under the CONTRACT DOCUMENTS to fully complete the PROJECT.

21.4. The CONTRACTOR shall procure and maintain, at the CONTRACTOR'S own expense, during the CONTRACT TIME, in accordance with the provisions of the laws of the state in which the WORK is performed, Workmen's Compensation Insurance, including occupational disease provisions, for all of the CONTRACTOR'S employees at the site of the PROJECT and in case any WORK is sublet, the CONTRACTOR shall require such SUBCONTRACTOR similarly to provide Workmen's Compensation Insurance, including occupational disease provisions for all of the latter's employees unless such employees are covered by the protection afforded by the CONTRACTOR. In case any class of employees engaged in hazardous work under this contract at the site of the PROJECT is not protected under Workmen's Compensation statute, the CONTRACTOR shall provide, and shall cause each SUBCONTRACTOR to provide adequate and suitable insurance for the protection of its employees not otherwise protected.

21.5. The CONTRACTOR shall secure, if applicable, "All Risk" type Builder's Risk Insurance for WORK to be performed. Unless specifically authorized by the OWNER, the amount of such insurance shall not be less than the CONTRACT PRICE totaled in the BID. The policy shall cover not less than the losses due to fire, explosion, hail, lightning, vandalism, malicious mischief, wind, collapse, riot, aircraft, and smoke during the CONTRACT TIME and until the WORK is accepted by the OWNER. The policy shall name as the insured the CONTRACTOR, and the OWNER.

22. CONTRACT SECURITY.

22.1. The CONTRACTOR shall within 10 days after the receipt of the NOTICE OF AWARD furnish the OWNER with a PERFORMANCE BOND and a PAYMENT BOND in penal sums equal to the amount of the CONTRACT PRICE, conditioned upon the performance by the CONTRACTOR of all undertakings, covenants, terms, conditions and agreements of the CONTRACT DOCUMENTS, and upon the prompt payment by the CONTRACTOR to all persons supplying labor and materials in the prosecution of the WORK provided by the CONTRACT DOCUMENTS. Such BONDS shall be executed by the CONTRACTOR and a corporate bonding company licensed to transact such business in the state in which the WORK is to be performed and named on the current list of "Surety Companies Acceptable on Federal Bonds" as published in the Treasury Department Circular Number 570. The expense of these BONDS shall be borne by the CONTRACTOR. If at any time a surety on any such BOND is declared bankrupt or loses its right to do business in the state in which the WORK is to be performed or is removed from the list of Surety Companies

accepted on Federal Bonds, CONTRACTOR shall within 10 days after notice from the OWNER to do so, substitute an acceptable BOND (or BONDS) in such form and sum and signed by such other surety or sureties as may be satisfactory to the OWNER. The premium on such BOND shall be paid by the CONTRACTOR. No further payment shall be deemed due nor shall be made until the new surety or sureties have furnished an acceptable BOND to the OWNER.

23. ASSIGNMENTS.

23.1. Neither the CONTRACTOR nor the OWNER shall sell, transfer, assign, or otherwise dispose of the Contract or any portion thereof, or of any right, title or interest therein, or any obligations thereunder, without written consent of the other party.

24. INDEMNIFICATION.

24.1. The CONTRACTOR will indemnify and hold harmless the OWNER and the ENGINEER and their agents and employees from and against all claims, damages, losses and expenses including attorney's fees arising out of or resulting from the performance of the WORK, provided that any such claims, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property including the loss of use resulting therefrom; and is caused in whole or in part by any negligent or willful act or omission of the CONTRACTOR, and SUBCONTRACTOR, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.

24.2. In any and all claims against the OWNER or the ENGINEER, or any of their agents or employees, by any employee of the CONTRACTOR, any SUBCONTRACTOR, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the CONTRACTOR or any SUBCONTRACTOR under workmen's compensation acts, disability benefit acts or other employee benefits acts.

24.3. The obligation of the CONTRACTOR under this paragraph shall not extend to the liability of the ENGINEER, its agents or employees arising out of the preparation or approval of maps, DRAWINGS, opinions, reports, surveys, CHANGE ORDERS, designs or SPECIFICATIONS.

25. SEPARATE CONTRACTS.

25.1. The OWNER reserves the right to let other contracts in connection with this PROJECT. The CONTRACTOR shall afford other CONTRACTORS reasonable opportunity for the introduction and storage of their materials and the execution of their WORK, and shall properly connect and coordinate the WORK with theirs. If the proper execution or results of any part of the CONTRACTOR'S WORK depends upon the WORK of any other CONTRACTOR, the CONTRACTOR shall inspect and promptly report to the ENGINEER any defects in such WORK that render it unsuitable for such proper execution and results.

25.2. The OWNER may perform additional WORK related to the PROJECT or the OWNER may let other contracts containing provisions similar to these. The CONTRACTOR will afford the other CONTRACTORS who are parties to such Contracts (or the OWNER, if the OWNER is performing the additional WORK) reasonable opportunity for the introduction and storage of materials and equipment and the execution of WORK, and shall properly connect and coordinate the WORK with theirs.

25.3. If the performance of additional WORK by other CONTRACTORS or the OWNER is not noted in the CONTRACT DOCUMENTS prior to the execution of the CONTRACT, written notice thereof shall be given to the CONTRACTOR prior to starting any such additional WORK. If the CONTRACTOR believes that the performance of such additional WORK by the OWNER or others

involves it in additional expense or entitles it to an extension of the CONTRACT TIME, the CONTRACTOR may make a claim thereof as provided in Sections 14 and 15.

26. SUBCONTRACTING.

- 26.1. The CONTRACTOR may utilize the services of specialty SUBCONTRACTS on those parts of the WORK which, under normal contracting practices, are performed by specialty SUBCONTRACTORS.
- 26.2. The CONTRACTOR shall not award WORK to SUBCONTRACTOR(S), in excess of 50 percent of the CONTRACT PRICE, without prior written approval of the OWNER.
- 26.3. The CONTRACTOR shall be fully responsible to the OWNER for the acts and omissions of its SUBCONTRACTORS, and of persons either directly or indirectly employed by them, as the CONTRACTOR is for the acts and omissions of persons directly employed by the CONTRACTOR.
- 26.4. The CONTRACTOR shall cause appropriate provisions to be inserted in all subcontracts relative to the WORK to bind SUBCONTRACTORS to the CONTRACTOR by the terms of the CONTRACT DOCUMENTS insofar as applicable to the WORK of SUBCONTRACTORS and to give the CONTRACTOR the same power as regards terminating any subcontract that the OWNER may exercise over the CONTRACTOR under any provision of the CONTRACT DOCUMENTS.
- 26.5. Nothing contained in this CONTRACT shall create any contractual relationship between any SUBCONTRACTOR and the OWNER.

27. ENGINEER'S AUTHORITY.

- 27.1. The ENGINEER shall act as the OWNER'S representative during the construction period, shall decide questions which may arise as to quality and acceptability of materials furnished and WORK performed, and shall interpret the intent of the CONTRACT DOCUMENTS in a fair and unbiased manner. The ENGINEER will make visits to the site and determine if the WORK is proceeding in accordance with the CONTRACT DOCUMENTS.
- 27.2. The CONTRACTOR will be held strictly to the intent of the CONTRACT DOCUMENTS in regard to the quality of materials, workmanship, and execution of the WORK. Inspections may be made at the factory or fabrication plant of the source of material supply.
- 27.3. The ENGINEER will not be responsible for the construction means, controls, techniques, sequences, procedures, or construction safety.
- 27.4. The ENGINEER shall promptly make decisions relative to interpretation of the CONTRACT DOCUMENTS.

28. LAND AND RIGHTS-OF-WAY.

- 28.1. Prior to issuance of the NOTICE TO PROCEED, the OWNER shall obtain all land and rights-of-way necessary for carrying out and for the completion of the WORK to be performed pursuant to the CONTRACT DOCUMENTS, unless otherwise mutually agreed.
- 28.2. The OWNER shall provide to the CONTRACTOR information which delineates and describes the lands owned and rights-of-way acquired.
- 28.3. The CONTRACTOR shall provide at its own expense and without liability to the OWNER any additional land and access thereto that the CONTRACTOR may desire for temporary construction facilities, or for storage of materials.

29. GUARANTEE.

29.1. The CONTRACTOR shall guarantee all materials and equipment furnished and WORK performed for a period of 1 year from the date of SUBSTANTIAL COMPLETION. The CONTRACTOR warrants and guarantees for a period of 1 year from the date of SUBSTANTIAL COMPLETION of the system that the completed system is free from all defects due to faulty materials or workmanship and the CONTRACTOR shall promptly make such corrections as may be necessary by reason of such defects including the repairs of any damage to other parts of the system resulting from such defects. The OWNER will give notice of observed defects with reasonable promptness. In the event that the CONTRACTOR should fail to make such repairs, adjustments, or other WORK that may be made necessary by such defects, the OWNER may do so and charge the CONTRACTOR the cost thereby incurred. The PERFORMANCE BOND shall remain in full force and effect through the guarantee period.

30. ARBITRATION BY MUTUAL AGREEMENT.

30.1. All claims, disputes, and other matters in question arising out of, or relating to, the CONTRACT DOCUMENTS or the breach thereof, except for claims which have been waived by making an acceptance of final payment as provided by Section 20, may be decided by arbitration if the parties mutually agree. Any agreement to arbitrate shall be specifically enforceable under the prevailing arbitration law. The award rendered by the arbitrators shall be final, and judgment may be entered upon it in any court having jurisdiction thereof.

30.2. Notice of the request for arbitration shall be filed in writing with the other party to the CONTRACT DOCUMENTS and a copy shall be filed with the ENGINEER. Request for arbitration shall in no event be made on any claim, dispute, or other matter in question which would be barred by the applicable statute of limitations.

30.3. The CONTRACTOR will carry on the WORK and maintain the progress schedule during any arbitration proceedings, unless otherwise mutually agreed in writing.

31. TAXES.

31.1. The CONTRACTOR will pay all sales, consumer, use, and other similar taxes required by the laws of the place where the WORK is performed.

SPECIAL CONDITIONS

SC-1. GENERAL.

The following Special Conditions, particular to this project, are intended to complement or supplement the preceding General Conditions and shall be of like import.

SC-2. OWNERSHIP.

The completed facilities shall be owned, operated and maintained by HENDERSON COUNTY WATER DISTRICT, hereinafter referred to as the OWNER. All workmanship and materials shall be in conformance with the OWNER'S requirements. Acceptance of this project and final payment therefor shall be contingent thereon. The OWNER'S representatives shall have the right of access to the WORK in progress and the right to inspect said WORK.

SC-3. CONTRACT DOCUMENTS.

The following CONTRACT DOCUMENTS shall govern the materials furnished and the WORK to be performed on this contract:

GENERAL CONTRACT DOCUMENTS AND SPECIFICATIONS ENTITLED "HENDERSON COUNTY WATER DISTRICT, HENDERSON COUNTY, KENTUCKY, 1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS - CONTRACT "B", NOVEMBER, 1999 (BID: MARCH, 2000)".

CONTRACT DRAWINGS BEING PLANS SHEETS COVER THROUGH 10 ENTITLED "HENDERSON COUNTY WATER DISTRICT, HENDERSON COUNTY, KENTUCKY, 1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS - CONTRACT "B", NOVEMBER, 1999 (BID: MARCH, 2000)".

ADDENDA (IF APPLICABLE) TO BE ACKNOWLEDGED IN THE BID.

The CONTRACTOR shall be furnished, without cost, THREE COPIES of all CONTRACT DOCUMENTS with any addenda thereto. Additional copies, if required, may be obtained from the ENGINEER at cost.

SC-4. CLAIMS BY THE CONTRACTOR.

If the CONTRACTOR believes he is entitled to a change in the contract price or time, or both, he shall give the ENGINEER written notice and documentation of the basis for the claim within 7 days of the cause of such claim. The ENGINEER will, within 7 days of such claim notice, either prepare a change order for processing or notify the CONTRACTOR in writing of the reason for rejection. Also see GC-13 and GC-14.

If the ENGINEER'S decision is not acceptable, the CONTRACTOR, within 7 days after the ENGINEER'S response, shall notify the OWNER of his intention to pursue the claim.

As the OWNER has limited funds for this project and must operate within its established budget, no claim shall be recognized or admissible for legal process unless presented as described.

SC-5. PROJECT INSPECTION.

The OWNER may employ supervisors or inspectors to inspect materials furnished and the WORK performed to see that they are in accordance with the Plans, Specifications, and the OWNER'S standards.

Suggestions by or approval of any plan or method of WORK by the OWNER'S representative shall imply consent, but adoption of any such plan or method shall be at the CONTRACTOR'S own risk and responsibility.

PROJECT INSPECTION, TESTS OR APPROVALS BY THE OWNER'S REPRESENTATIVE OR OTHERS SHALL NOT RELIEVE THE CONTRACTOR FROM HIS OBLIGATIONS TO PERFORM THE WORK IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH HEREIN.

Inspectors, and other properly authorized representatives of the OWNER, shall be free always to perform their duties. Intimidation or attempted intimidation of any one of them by the CONTRACTOR or by any of his employees shall be sufficient reason for dismissal of said employee or annulment of the contract.

SC-6. ENVIRONMENTAL PROTECTION.

The CONTRACTOR shall minimize siltation and bank erosion during construction and shall restore disturbed areas to present or better conditions. All chemicals used during project construction or furnished for project operation, whether herbicide, pesticide, disinfectant, polymer, reactant, or of other classification, must show approval by either EPA or USDA. Use of all such chemicals and disposal of residue shall be in strict conformance with the instructions.

SC-7. MATERIALS, EQUIPMENT AND WORKMANSHIP.

Unless otherwise specified, all materials and equipment shall be new and shall be of standard quality for the use intended. Reference to a proprietary product of a particular manufacturer or vendor is to establish a standard of quality. The CONTRACTOR may furnish with his bid the name and identifying information of each item upon which his bid is based and if this information is not submitted, he shall be obligated to furnish the product specified.

Approval of samples, shop drawings, etc. shall not mean final acceptance and they shall be subject to inspection and test on delivery and installation. The CONTRACTOR shall repair, replace, and/or adjust any materials or equipment found defective or not operating properly for 1 year after completion and acceptance of his WORK.

The CONTRACTOR shall always require strict discipline and good order among his employees and shall not employ on the WORK any unfit person or anyone not skilled in the WORK assigned to him. Any careless, untrustworthy, or incompetent workers shall be removed upon the request of the ENGINEER or his representative.

SC-8. MATERIALS COMPATIBILITY.

All materials must be compatible with the OWNER'S existing materials concerning interchangeability and appearance unless otherwise specifically approved.

SC-9. SAMPLES.

It shall be the CONTRACTOR'S responsibility to obtain and submit samples of painting, brick and similar "appearance" materials to the ENGINEER for approval as to color, texture, etc.

SC-10. CONSTRUCTION PROCEDURE.

A complete organization, equipment and ample materials shall be on hand before WORK commences. They shall be satisfactory for securing the quality of WORK specified and for continuous progress for the earliest possible completion of the project.

The CONTRACTOR shall provide and maintain a local project or field office and field telephone throughout the term of the project. A representative of the CONTRACTOR should be available to receive notices and messages during working hours and a local telephone shall be maintained for 24 hour emergency calls.

The Resident Inspector shall be permitted access to and use of the CONTRACTOR'S field office to maintain his records and his communications.

Prior to commencement of WORK, the CONTRACTOR shall:

- a. Notify the ENGINEER of the project superintendent's name and telephone number.
- b. Contact utility companies for location and protection of their facilities.
- c. Notify the ENGINEER, 3 days in advance, of when construction will commence.

No underground WORK shall be covered until it has been inspected by the OWNER'S representative.

SC-11. PROGRESS SCHEDULE.

Prior to commencement of WORK, the CONTRACTOR shall submit a Progress Schedule for the ENGINEER'S approval. The schedule shall show the sequence of the WORK for continuous progress. It shall be used for coordination of the OWNER'S operations, for the Inspector's scheduling, and as a basis for justifying a time extension, if required.

The Progress Schedule shall be revised (as required) and updated at the time each payment request is submitted as outlined in the General Conditions.

SC-12. SALVAGED MATERIALS.

Salvaged materials shall remain the property of the OWNER, unless otherwise shown, and shall be removed from the site to the OWNER'S storage yard, or as otherwise directed.

SC-13. RIGHTS-OF-WAY.

The OWNER shall furnish all land and rights-of-way required on this project. He shall obtain all permits and easements for crossings or occupancy of highways, railroads and other public and private property. No WORK shall be begun until the CONTRACTOR has a copy of said permit or easement and can comply with all requirements thereof.

SC-14. PERMITS.

Unless otherwise noted, the CONTRACTOR shall be responsible for the cost of all electric service hookups, Building Permits, Electrical Inspection Permits, Plumbing Permits, etc. and shall arrange for such permits to prevent delay in his WORK.

The CONTRACTOR shall also be responsible for the cost of running new electrical service, if required.

SC-15. WORKING HOURS.

WORK shall not exceed 40 hours per week and no WORK will be done between the hours of 6:00 P.M. and 7:00 A.M. nor on Saturdays, Sundays or legal holidays, without the written approval or permission of the ENGINEER in each case.

SC-16. CLEANUP AND RESTORATION.

The CONTRACTOR shall continuously maintain cleanup operations along the line of WORK and near any structures. Cleanup shall include the removal of all refuse, rubbish, scrap materials and debris and the finish dressing (hand raking, if necessary) of all areas to the satisfaction of the ENGINEER. Restoration shall include maintenance of any settled trenches and landscaping, if required. No item of WORK shall be

considered complete until cleanup and restoration are accomplished and, if not satisfactory in the opinion of the ENGINEER, payment may be withheld until such cleanup and restoration are accomplished.

The Contractor shall protect all shrubbery and shall be responsible for replacing any damaged shrubbery to the property owner's satisfactions. Restoration shall be in accordance with Specification 14.

SC-17. MAINTENANCE OF TRAFFIC AND SAFETY.

The CONTRACTOR shall, at his own expense, provide and maintain suitable accommodations for public and private travel near his WORK. Adequate warning signs, lights, barricades and other safety devices shall be maintained and shall comply with the requirements of any governing agency.

The local fire department, school district, etc. shall be notified of all detours and route changes.

SC-18. EXISTING UTILITIES.

It shall be the CONTRACTOR'S sole responsibility to learn the exact location of all utilities; to notify the utility OWNER; to protect all utilities through his operations; and to pay for any damage that may occur.

The exact location of existing utilities, either aboveground or underground, shall be determined by the CONTRACTOR far enough in advance of the WORK to permit adjustments in alignment or protection of the utility. Existing utilities, if shown on the Plans, are only approximate to alert the CONTRACTOR of their existence.

If the CONTRACTOR fails to locate existing utilities far enough in advance to permit realignment of the WORK, relocation of the existing utility or of the WORK shall be at his expense.

SC-19. MAINTAINING WATER SERVICE.

The CONTRACTOR shall maintain water service to all customers throughout construction and shall organize his WORK for the least inconvenience to all customers and residents. All customers whose water service will be interrupted shall be notified by the CONTRACTOR, in advance, and service shall be restored as soon as possible.

SC-20. PROGRESS PAYMENTS.

The 14th day of the month shall be used as a cut-off date for figuring monthly partial payments. Requests for partial payments shall be submitted for the ENGINEER'S approval not later than the 18th day of the month. Payment of said estimate shall be made by the 29th day of the following month.

Payrolls, with the necessary certification, shall be submitted to the proper authorities in accordance with the applicable regulations and a copy of the transmittal letter and one copy of the payroll shall be submitted to the OWNER. One copy of the transmittal letter shall be submitted to the ENGINEER.

SC-21. QUANTITIES OF ESTIMATE.

The quantities of WORK covered by unit prices in the bid are the ENGINEER'S estimates of the WORK to be done and may increase or decrease to complete the WORK contemplated by this project. The CONTRACTOR agrees that payment for any increases or decreases in the quantities shall be based on the unit price bid and that payment shall be made only for the actual WORK performed.

The CONTRACTOR shall verify all quantities before preparing his bid or placing his order.

SC-22. AFFIDAVIT OF PAYMENT.

Upon completion of the WORK, but before the acceptance thereof by the OWNER, the CONTRACTOR shall furnish proof in documentary form that all claims, liens, or other obligations incurred by him and all of his contractors in connection with the performance of the WORK have been properly paid and settled. This information shall be in affidavit form and shall bear the authorization of the surety company, if applicable.

SC-23. FINAL ADJUSTING CHANGE ORDER.

At the end of this project, a final adjusting change order shall be prepared to show over-runs and under-runs to balance all of the quantities.

SC-24. RECORDS.

The CONTRACTOR shall be responsible for maintaining a set of Record Plans showing the size, type of material and location of all new construction and of any existing facilities located during the WORK.

An extra set of Plans shall be furnished for records and shall be submitted to the ENGINEER at the end of the project for the OWNER'S permanent record.

SC-25. "OR EQUAL" CLAUSE.

It shall be the CONTRACTOR'S responsibility to furnish substantiating data that any product is equal to or better than the proprietary product specified.

SC-26. PROTECTION OF PROPERTY AND PUBLIC LIABILITY.

The CONTRACTOR shall assume full responsibility for the protection of all public and private property both above and below ground where WORK under this project is being performed.

The CONTRACTOR shall indemnify and save harmless the OWNER, the OWNER'S Representatives and the ENGINEER from and against all losses and all claims, demands, payments, suits, actions, recoveries, and judgments of every nature and description brought against him due to any act or omission of the said CONTRACTOR, his agents, or employees in the execution of the WORK or in its protection.

Said responsibilities shall apply despite the location of the damage and it shall be the CONTRACTOR'S sole responsibility to make such corrections and adjustments to the satisfaction of those whose property or premises have been damaged by his operation.

SC-27. LIABILITY.

The OWNER or ENGINEER shall not be liable for the safety of persons or property on or about a construction project site, or for the construction techniques, procedures, sequences and schedules, or for the conduct, action, errors, or omissions of the CONTRACTOR, his subcontractors, or his material suppliers, their agents or employees.

Further, it is the CONTRACTOR'S responsibility to protect and save harmless the OWNER and ENGINEER from any suits arising out of claims including the hiring, at his own expense, of the necessary professional help to defend the OWNER and ENGINEER.

The CONTRACTOR is also referred to the General Conditions regarding liability, protection of property, etc.

SC-28. EMERGENCIES.

In an emergency that threatens loss or injury to persons or property, the CONTRACTOR will be allowed to act diligently without previous instructions from the ENGINEER.

Wherever, in the opinion of the ENGINEER, an emergency exists and immediate action is considered necessary, the performance of emergency WORK under the direction of the ENGINEER, with or without notice to the CONTRACTOR, shall in no way relieve the CONTRACTOR of responsibility for damage that may occur.

SC-29. SAFETY AND SANITARY REGULATIONS.

The CONTRACTOR shall comply with all local, State and Federal safety and sanitary regulations that may apply on this project.

SAFETY ON AND AROUND THE JOB SITE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

SC-30. SHOP DRAWINGS.

In accordance with the General Conditions, the CONTRACTOR shall submit EIGHT copies of Shop Drawings for all materials furnished and certify to their compliance with the Specifications. The CONTRACTOR'S certification shall be as follows:

PROJECT TITLE	_____
CONTRACT:	_____
BID ITEM NO.:	_____
WE CERTIFY THAT THIS SHOP DRAWING SUBMITTAL IS IN COMPLIANCE WITH THE PLANS AND SPECIFICATIONS FOR THE ABOVE PROJECT.	
NO EXCEPTION:	_____
EXCEPTION:	_____
APPROVED BY:	_____
DATE:	_____

TWO COPIES of the approved shop drawings shall be returned to the CONTRACTOR.

SC-31. WAGE DETERMINATION.

WORK on this project shall be subject to prevailing wage rates for public works that are current at the time of bidding and are included herein.

The CONTRACTOR, in preparing his bid, agrees to the terms of the prevailing wage rates as part of this project without additional compensation.

SC-32. WEATHER CONDITIONS.

No portion of the WORK shall be constructed under conditions that would adversely affect the quality or efficiency thereof. The CONTRACTOR shall be responsible for protecting his WORK and materials against damage or injury from the weather.

SC-33. TIME EXTENSIONS FOR ABNORMAL WEATHER.

This section specifies the procedure for the determination of time extensions due to abnormal and unforeseeable weather as outlined in the General Conditions, Section 15.4.2. Reference is also made to Section 15.4 regarding prompt written notice.

For the purposes of this section the term "adverse weather day" shall mean a day when construction cannot proceed due to precipitation (not wet conditions caused by precipitation), provided the CONTRACTOR is prevented from working for 50 percent or more of his normal WORK day.

The listing below defines the monthly anticipated adverse weather days (including weekends and holidays) and shall form the "base line" for monthly (or portion thereof) weather time evaluation.

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
12	12	10	10	10	8	8	8	7	10	11	11

Upon acknowledgment of the Notice To Proceed, the CONTRACTOR shall keep an accurate and detailed record of actual adverse weather days monthly (including weekends and holidays) and this shall be compared to the anticipated adverse weather days listed above.

Time extensions shall be granted only where adverse weather affects WORK shown on the Progress Schedule.

At the end of each month, the CONTRACTOR shall request from the ENGINEER, in writing, a time extension based on the number of actual adverse days that exceeded the anticipated adverse days. Supporting documentation shall be furnished.

The ENGINEER shall review the information and notify the CONTRACTOR whether the request is justified. If the request is justified, a change order will be processed later.

SC-34. PRECONSTRUCTION CONFERENCE.

The CONTRACTOR shall attend a preconstruction conference with the OWNER, ENGINEER, and any other interested parties prior to commencement of WORK. Construction procedures and requirements shall be outlined and discussed in detail.

SC-35. TRENCH SETTLEMENT.

The CONTRACTOR shall be responsible for all trench settlement for 1 year after final acceptance by the OWNER.

SC-36. CORRECTION OF WORK.

The ENGINEER shall be the final judge of the quality and suitability of the WORK, materials, processes of manufacture, and methods of construction for the purpose for which they are used. Should they fail to meet the ENGINEER'S approval, they shall be corrected prior to acceptance of the extension.

SC-37. PATENTS, LICENSE AND ROYALTY FEES.

It shall be the CONTRACTOR'S responsibility to satisfy all of the demands and conditions pertaining to any patents used in this project.

SC-38. INSURANCE.

The CONTRACTOR shall have and maintain, during the life of this project, workmen's compensation insurance, public liability insurance, property damage insurance and automobile liability insurance in legal and/or reasonable limits of liability.

SC-39. LAWS AND ORDINANCES.

The CONTRACTOR shall always observe and comply with all ordinances, laws and regulations and shall protect and indemnify the OWNER and the OWNER'S agents against any claims or liability arising from or based on any violation of same.

SC-40. GUARANTEE.

The CONTRACTOR shall guarantee all materials and equipment furnished and Work performed for a period of 1 year from the date of Substantial Completion. The CONTRACTOR warrants and guarantees for a period of 1 year from the date of Substantial Completion of the system that the completed system is free from all defects due to faulty materials or workmanship and the CONTRACTOR shall promptly make such corrections as may be necessary by reason of such defects including the repairs of any damage to other parts of the system resulting from such defects. The OWNER will give notice of observed defects with reasonable promptness. In the event that the CONTRACTOR should fail to make such repairs, adjustments, or other Work that may be made necessary by such defects, the OWNER may do so and charge the CONTRACTOR the cost thereby incurred. The Performance Bond shall remain in full force and effect through the guarantee period.

SC-41. BASIS OF BID.

The bid, and all the items and sub-items thereof, shall be made on the attached form that shall be filled out completely. All the costs of the WORK and payment therefor shall be included in the lump-sum and unit prices set forth in the proposal form. No item of WORK that is required by the CONTRACT DOCUMENTS shall be paid for outside of, or in addition to, the prices submitted on the proposal form unless specifically authorized by a proper change order and unit prices shall control.

The following is to clarify the basis of bidding:

CONTRACT "B":

1. Mobilization/Demobilization.

Mobilization/Demobilization cost on this project shall be shown as one lump sum and may include the cost of insurance, bonds, site office, moving equipment, etc. Mobilization/demobilization shall not exceed 4 per cent of the total construction cost. Payment of mobilization/demobilization shall be as follows:

70% with the first monthly estimate.

30% when the project is 95 per cent complete.

2. Water Mains.

Payment for water mains (including jointing materials) shall be at the unit price bid per lineal foot, for each size and type of pipe, and shall include excavation, furnishing, laying, connections, embedment, testing, disinfecting and backfilling. Measurement for payment will be straight through with no deduction for the length of fittings.

3. Fittings.

Payment for iron fittings shall be at the unit price bid per pound based on published weights for compact (AWWA C153) M.J. fittings not including accessories and cement linings. Unit prices shall be the one average price bid per pound for the fitting size shown (largest pipe size of fitting).

Payment for PVC fittings (3 inches and smaller) shall be at the average unit price bid.

Payment shall include installation and blocking/anchorage/restraint.

4. Valves W/Cast Iron Box.

Payment for valves with the valve box shall be at the unit price bid for each size and shall include furnishing and installation complete.

5. Special Fittings.

Payment for special fittings, service saddles, tapping sleeves, inserting valves, etc. shall be made at the unit price bid for each size and/or type and shall include furnishing and installation complete.

6. Clamps and Couplings.

Payment for clamps and couplings, for joining and repairing all types and sizes of pipes, shall be at the average unit price bid for each size pipe. Payment shall include installation complete. No payment shall be allowed where the Contractor skips for road crossings, bores, etc. instead of pipe laying straight through or continuous.

7. Tie-ins.

Payment for a tie-in, where shown on the Plans, shall be for labor and equipment only where tie-in is made to an existing line with standard fittings. Payment for all materials required shall be made under a separate bid item. A wet tie-in made with special fittings (tapping sleeves, inserting valves, saddles, etc.) shall be included in the cost of the special.

8. Hydrants.

Payment for hydrants shall be at the unit price bid per size and type of hydrant shown and shall include the hydrant, thrust blocking, gravel or stone drain and extensions (if required) installed complete. Payment for valves (if required), connecting pieces, couplings, and all fittings shall be made under a separate bid item.

9. Air Release Valves W/Box.

Payment for air release valves shall be at the unit price bid for each valve and shall include the box and cover, all accessories and installation complete.

10. Meter Settings.

Payment for a meter setting shall be at the unit price bid for each size meter and shall include the meter, meter box and lid, service clamp, corporation stop and meter valve installed complete. The meter and meter box shall be furnished by the OWNER. Payment for the service line shall be made under a separate bid item.

Payment for meter reconnections shall be made at the unit price bid and shall include the service clamp, corporation stop, meter valve and connection to the existing meter setting complete. Payment shall also include relocation of existing meters if required. New meters and meter boxes shall be supplied by the OWNER. Payment for the new service line shall be made under a separate bid item.

11. Service Lines.

Payment for service lines shall be at the unit price bid for the size and type material used and for the type of installation (bore or open cut). Measurement, where a bore is required, will be for the length of the bore required plus any additional service line in open cut.

12. Bore With Casing.

Payment for a bore with casing shall be made at the unit price bid per lineal foot for the size casing required and shall include the bore, casing and installation complete. Payment for the carrier pipe (same material as other mains) shall be made under a separate bid item. Measurement will be made by the minimum length of casing required by the permit or specified by the Engineer.

13. Bore Without Casing.

Payment for a bore without casing shall be made at the unit price bid per lineal foot for the size of the carrier pipe and shall include the bore and installation complete. Payment for the carrier pipe (same material as other mains) shall be made under a separate bid item. Measurement for payment shall be the length of the area being bored plus 10 feet, unless otherwise directed by the Engineer.

14. Open Cut Casing.

Payment for open-cut casing shall be made at the unit price bid per lineal foot for the size of casing shown and shall include the cost of the casing installation complete. Payment for the carrier pipe (same material as other mains) and crushed stone backfill shall be made under separate bid items. Measurement for payment shall be the length of the casing installed unless otherwise directed by the Engineer.

15. Additional Depth.

Payment for additional depth required to install the water mains between 7'-1" and 15' deep shall be paid for at the unit price bid per lineal foot of main installed at the extra depth. Payment shall include additional excavation, shoring, etc., but shall not include pipe which shall be paid under a separate bid item. Additional depth shall be paid for at authorized locations only.

16. Crushed Stone.

Payment for all grades of crushed stone in place, at authorized locations, shall be at the unit price bid per cubic yard. Authorized locations include resurfacing, special foundations and backfill under permanent surface. Measurement for payment for resurfacing shall be based on the normal trench width plus one foot times the length of the surface crossed times a compacted thickness of 6 inches. Measurement for payment for special foundations and backfill under a permanent surface shall be based on the normal trench width times the length required times the depth as directed by the Engineer. Payment shall not be made for replacement due to settlement or for pipe embedment.

17. Rip Rap.

Payment for 150# grade of rip rap stone in place, at authorized locations, shall be at the unit price bid per cubic yard. Authorized locations include ditch and creek crossing as directed by the engineer.

18. Concrete Encasement.

Payment for concrete pipe encasement shall be made at the unit price bid per lineal foot in place, at authorized locations.

19. Asphalt Pavement Replacement.

Payment for asphalt pavement replacement shall be at the unit price bid per square yard for 2 inch compacted thickness. Measurement of the area for payment shall be based on the normal trench width plus two feet times the length of the surface crossed. Payment for other depths, approved by the Engineer, shall be proportioned. Payment shall not include replacement due to settlement.

20. Concrete Pavement Replacement.

Payment for concrete pavement replacement, at authorized locations, shall be at the unit price bid per cubic yard of concrete in place and shall include all materials and finishing to match the existing surfaces. Measurement for payment shall be based on the normal trench width plus one foot times the length of the surface crossed times the depth required to match the existing surface or as directed by the Engineer. Replacement due to settlement shall be at the Contractor's expense.

PAUL E. PATTON
GOVERNOR



RECEIVED FEB 23 2000

DIVISION OF EMPLOYMENT STANDARDS,
APPRENTICESHIP AND TRAINING

JOE NORSWORTHY
SECRETARY

Larry L. Roberts
~~XXXXXXXXXXXX~~
DIRECTOR

LABOR CABINET
1047 US HWY 127 S STE 4
FRANKFORT KY 40601-4381

February 18, 2000

Mr. Rod H. Martin
Hunter Martin & Associates
3220 Lone Oak Road
Paducah, Kentucky 42003

Re: Henderson County Water District
1999/2000 Water Distribution System Improvements

Advertising Date as Shown on Notification: February 23, 2000

Dear Mr. Martin:

This office is in receipt of your written notification on the above project as required by KRS 337.510(1).

I am enclosing a copy of the current prevailing wage determination number CR-7-101, dated February 14, 2000, for Henderson County. This schedule of wages shall be attached to and made a part of the specifications for the work, printed on the bidding blanks, and made a part of the contract for the construction of the public works between the public authority and the successful bidder or bidders.

The determination number assigned to this project is based on the date contained in your notification as the date the project is advertised for bids. The commissioner has chosen to adopt the prevailing wages as determined by the United States Department of Labor for the aforementioned county. There may be modifications to this rate determination prior to your advertising date. It is the responsibility of the public authority to contact this office a few days before advertising to be certain the correct schedule of the prevailing rates of wages are included in the project.

Your project number is as follows: 101-2-0061-00-7

Sincerely,

Larry L. Roberts
Director

rprh

Enclosure

INTERNET ADDRESS:
<http://www.state.ky.us/agencies/labor>



An Equal Opportunity Employer M/F/D

PHONE: (502) 564-3070
FAX: (502) 564-2248

SC-12

COMMISSIONER'S CURRENT REVISION
KENTUCKY PREVAILING WAGE DETERMINATION
HENDERSON COUNTY

NOTICE

Determination No. CR-7-101

(THIS DETERMINATION APPLIES TO

Date of Determination: February 14, 2000 PROJECT NO. 101-2-0061-00-7

This schedule of the prevailing rate of wages for Henderson County has been determined in accordance with the provisions of KRS 337.505 to 337.550. The commissioner has chosen to adopt the prevailing wages as determined by the United States Department of Labor for this county. This determination shall be referred to as Prevailing Wage Determination No. CR-7-101, which includes General Decision Nos. KY000029 for Building Construction and KY000025 for Heavy/Highway Construction. This will also include any modifications since the original publication date of this determination.

Apprentices or trainees shall be permitted to work as such subject to Administrative Regulations adopted by the Commissioner of Workplace Standards. Copies of these regulations will be furnished upon request to any interested person.

Overtime is to be computed at not less than one and one-half (1 1/2) times the indicated BASE RATE for all hours worked in excess of eight (8) per day, or in excess of forty (40) per week. However, KRS 337.540 permits an employee and employer to agree, in writing, that the employee will be compensated at a straight time base rate for hours worked in excess of eight (8) hours in any one workday, but not more than ten (10) hours worked in any one workday, if such written agreement is prior to the over eight (8) hours in a workday actually being worked, or where provided for in a collective bargaining agreement. The fringe benefit rate is to be paid for each hour worked at a straight time rate for all hours worked.

No laborer, workman or mechanic shall be paid at a rate less than that of the General Laborer except those classified as bona fide apprentices registered with the Kentucky State Apprenticeship Supervisor unless otherwise specified in this schedule of wage rates.

Fringe benefit amounts are applicable for all hours worked except when otherwise noted.

NOTE: The type of construction shall be determined by applying the following definitions.

BUILDING CONSTRUCTION

Building construction is the construction of sheltered enclosures with walk-in access for the purpose of housing persons, machinery, equipment, or supplies. It includes all construction of such structures, the installation of utilities and the installation of equipment, both above and below grade level, as well as incidental grading, utilities and paving.

HIGHWAY CONSTRUCTION

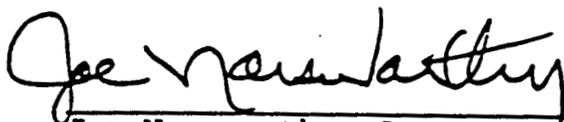
Highway construction includes the construction, alteration or repair of roads, streets, highways, runways, taxiways, alleys, trails, paths, parking areas, and other similar projects not incidental to building or heavy construction. It includes all incidental construction in conjunction with the highway construction project.

HEAVY CONSTRUCTION

Heavy projects are those projects that are not properly classified as either "building" or "highway". For example, dredging projects, water and sewer line projects, dams, flood control projects, sewage treatment plants and facilities, and water treatment plants and facilities are considered heavy.


Larry L. Roberts, Director
Employment Standards,
Apprenticeship & Training
Kentucky Labor Cabinet

&


Joe Norsworthy, Secretary
Kentucky Labor Cabinet
Frankfort, Kentucky 40601

This 14th day of February, 2000.

GENERAL DECISION KY000025 02/18/00 KY25
General Decision Number KY000025

Superseded General Decision No. KY990025

State: Kentucky

Construction Type:
HEAVY
HIGHWAY

County(ies):

ALLEN	FULTON	MCCRACKEN
BALLARD	GRAVES	MCLEAN
BUTLER	HANCOCK	MUHLENBERG
CALDWELL	HENDERSON	OHIO
CALLOWAY	HICKMAN	SIMPSON
CARLISLE	HOPKINS	TODD
CHRISTIAN	LIVINGSTON	TRIGG
CRITTENDEN	LOGAN	UNION
DAVISS	LYON	WARREN
EDMONSON	MARSHALL	WEBSTER

Heavy and Highway Construction Projects

Modification Number	Publication Date
0	02/11/2000
1	02/18/2000

COUNTY(ies):

ALLEN	FULTON	MCCRACKEN
BALLARD	GRAVES	MCLEAN
BUTLER	HANCOCK	MUHLENBERG
CALDWELL	HENDERSON	OHIO
CALLOWAY	HICKMAN	SIMPSON
CARLISLE	HOPKINS	TODD
CHRISTIAN	LIVINGSTON	TRIGG
CRITTENDEN	LOGAN	UNION
DAVISS	LYON	WARREN
EDMONSON	MARSHALL	WEBSTER

BRIN0004C 04/01/1999

	Rates	Fringes
CRITTENDEN, DAVISS, HANCOCK, HENDERSON, LIVINGSTON, MCLEAN, OHIO, UNION & WEBSTER COUNTIES:		

BRICKLAYERS	22.41	5.15
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BRTN0004E 05/01/1999

	Rates	Fringes
ALLEN, BALLARD, BUTLER, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, EDMONSON, FULTON, GRAVES, HICKMAN, HOPKINS, LOGAN, LYON, MARSHALL, MCCRACKEN, MUHLENBERG, SIMPSON, TODD, TRIGG & WARREN		

COUNTIES:

BRICKLAYERS	20.16	1.60
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CARP0357C 07/01/1999

	Rates	Fringes
CARPENTERS	19.20	5.18
FILEDRIVERMEN	19.45	5.18
DIVERS	29.175	5.18

CARP1031M 06/01/1999

	Rates	Fringes
ALLEN, BUTLER, EDMONSON, LOGAN, SIMPSON & WARREN COUNTIES:		
MILLWRIGHTS	20.41	8.74

CARP1080E 06/16/1997

	Rates	Fringes
BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON, GRAVES, HICKMAN, HOPKINS, LIVINGSTON, LYON, MARSHALL, MCCRACKEN, TODD & TRIGG COUNTIES:		
MILLWRIGHTS	19.05	5.37

CARP1080G 06/01/1997

	Rates	Fringes
DAVISS, HANCOCK, HENDERSON, MCLEAN, MUHLENBERG, OHIO, UNION & WEBSTER COUNTIES:		
MILLWRIGHTS	19.40	6.67

ELEC0369I 08/01/1999

	Rates	Fringes
BUTLER, EDMONSON, LOGAN, TODD & WARREN COUNTIES:		
ELECTRICIANS	22.60	6.91

ELEC0429B 01/01/1998

	Rates	Fringes
ALLEN & SIMPSON COUNTIES:		
ELECTRICIANS	15.85	4.115

ELEC0816E 06/01/1999

	Rates	Fringes
BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON (Except a 5 mile radius of City Hall in Fulton), GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN & TRIGG COUNTIES:		
ELECTRICIANS:		

Electricians	22.00	7.42
Cable Splicers	22.25	7.47

ELEC1701C 06/01/1999

	Rates	Fringes
DAVIESS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, MUHLENBERG, OHIO, UNION & WEBSTER COUNTIES:		

ELECTRICIANS:

Electricians	22.04	7.015
Heilarc Welding; & Cable Splicing	22.29	7.06

ELEC1925B 07/01/1999

	Rates	Fringes
FULTON COUNTY (Up to a 5 mile radius of City Hall in Fulton):		

ELECTRICIANS	14.90	6.75
CABLE SPLICERS	15.40	6.76

ENGI0181X 01/01/2000

	Rates	Fringes
<u>POWER EQUIPMENT OPERATORS:</u>		
GROUP 1	20.35	6.90
GROUP 2	17.93	6.90
GROUP 3	18.31	6.90
GROUP 4	17.67	6.90

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1 - A-Frame Winch Truck; Auto Patrol; Backfiller; Batcher Plant; Bituminous Paver; Bituminous Transfer Machine; Boom Cat; Bulldozer; Mechanic; Cableway; Carry-All Scoop; Carry Deck Crane; Central Compressor Plant; Clamshell; Concrete Mixer (21 cu. ft. or Over); Concrete Paver; Truck-Mounted Concrete Pump; Core Drill; Crane; Crusher Plant; Derrick; Derrick Boat; Ditching & Trenching Machine; Dragline; Dredge Operator; Dredge Engineer; Elevating Grader & Loaders; Grade-All; Gurrries; Heavy Equipment Robotics Operator/Mechanic; High Lift; Hoe-Type Machine; Hoist (Two or More Drums); Hoisting Engine (Two or More Drums); Horizontal Directional Drill Operator; Hydrocrane; Hyster; KeCal Loader; LeTourneau; Locomotive; Mechanic; Mechanically Operated Laser Screed; Mechanic Welder; Mucking Machine; Motor Scraper; Orangepeel Bucket; Piledriver; Power Blade; Pumpcrete; Push Dozer; Rock Spreader, attached to equipment; Rotary Drill; Roller (Bituminous); Scarifier; Scoopmobile; Shovel; Side Boom; Subgrader; Tailboom; Telescoping Type Forklift; Tow or Push Boat; Tower Crane (French, German & other types); Tractor Shovel; Truck Crane; Tunnel Mining Machines, including Moles, Shields or similar types of Tunnel Mining Equipment

GROUP 2 - Air Compressor (Over 900 cu. ft. per min.); Bituminous Mixer; Boom Type Tamping Machine; Bull Float; Concrete Mixer

(Under 21 cu. ft.); Dredge Engineer; Electric Vibrator; Compactor/Self-Propelled Compactor; Elevator (One Drum or Buck Hoist); Elevator (When used to Hoist Building Material); Finish Machine; Firemen & Hoist (One Drum); Flexplane; Forklift (Regardless of Lift Height); Form Grader; Joint Sealing Machine; Outboard Motor Boat; Power Sweeper (Riding Type); Roller (Rock); Ross Carrier; Skid Mounted or Trailer Mounted Concrete Pump; Switchman or Brakeman; Throttle Valve Person; Tractair & Road Widening Trencher; Tractor (50 H.P. or Over); Truck Crane Oiler; Tugger; Welding Machine; Well Points; & Whirley Oiler

GROUP 3 - Greaser on Grease Facilities servicing Heavy Equipment

GROUP 4 - Bituminous Distributor; Burlap & Curing Machine; Cement Gun; Concrete Saw; Conveyor; Deckhand Oiler; Grout Pump; Hydraulic Post Driver; Hydro Seeder; Mud Jack; Oiler; Paving Joint Machine; Power Form Handling Equipment; Pump; Roller (Earth); Steerman; Tamping Machine; Tractor (Under 50 H.P.); & Vibrator

CRANES WITH BOOMS 150 ft. & Over (Including JIB) \$.50 Premium

EMPLOYEES ASSIGNED TO WORK BELOW GROUND LEVEL ARE TO BE PAID 10% ABOVE BASIC WAGE RATE. THIS DOES NOT APPLY TO OPEN CUT WORK.

IRON0070G 06/01/1999

	Rates	Fringes
BUTLER COUNTY (Eastern eighth, including the Townships of Decker, Lee & Tilford);		

EDMONSON COUNTY (Northern three-fourths, including the Townships of Asphalt, Bee Spring, Brownsville, Grassland, Huff, Kyrock, Lindseyville, Mammoth Cave, Ollie, Prosperity, Rhoda, Sunfish & Sweden):

IRONWORKERS:

Structural; Ornamental;
Reinforcing; Precast Concrete
Erectors

20.96	9.67
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IRON0103E 04/01/1999

	Rates	Fringes
BUTLER COUNTY (Townships of Aberdeen, Bancock, Casey, Dexterville, Dunbar, Elfie, Gilstrap, Huntsville, Logansport, Monford, Morgantown, Provo, Rochester, South Hill & Welchs Creek);		

CALDWELL COUNTY (Northeastern third, including the Township of Creswell);

CHRISTIAN COUNTY (Northern third, including the Townships of Apex, Crofton, Kelly, Mannington & Wynns);

CRITTENDEN COUNTY (Northeastern half, including the Townships of Grove, Mattoon, Repton, Shady Grove & Tribune);

MUHLENBERG COUNTY (Townships of Bavier, Beech Creek Junction, Benton, Brennen, Browder, Central City, Cleaton, Depoy, Drakesboro, Eunis, Graham, Hillside, Luzerne, Lynn City, Martwick, McNary, Millport, Moorman, Nelson, Paradise, Powderly, South Carrollton, Tarina & Weir);

DAVISS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, OHIO, UNION & WEBSTER COUNTIES:

IRONWORKERS	20.90	9.05
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IRON0492C 05/01/1999

	Rates	Fringes
BUTLER COUNTY (Southern third, including the Townships of Boston, Berrys Lick, Dimple, Jetson, Quality, Sharer, Sugar Grove & Woodbury);		

CHRISTIAN COUNTY (Eastern two-thirds, including the Townships of Bennettstown, Casky, Herndon, Hopkinsville, Howell, Masonville, Pembroke & Thompsonville);

EDMONSON COUNTY (Southern fourth, including the Townships of Chalybeate & Rocky Hill);

MUHLENBERG COUNTY (Southern eighth, including the Townships of Dunnior, Penrod & Rosewood);

ALLEN, LOGAN, SIMPSON, TODD & WARREN COUNTIES:

IRONWORKERS	17.16	5.39
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IRON0782H 08/01/1999

	Rates	Fringes
CALDWELL COUNTY (Southwestern two-thirds, including the Townships of Cedar Bluff, Cider, Claxton, Cobb, Crowtown, Dulaney, Farmersville, Fredonia, McGowan, Otter Pond & Princeton);		

CHRISTIAN COUNTY (Western third, Excluding the Townships of Apex, Crofton, Kelly, Mannington, Wynns, Bennettstown, Casky, Herndon, Hopkinsville, Howell, Masonville, Pembroke & Thompsonville);

CRITTENDEN COUNTY (Southwestern half, including the Townships of Crayne, Dycusburg, Frances, Marion, Mexico, Midway, Sheridan & Told);

BALLARD, CALLOWAY, CARLISLE, FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCrackEN & TRIGG COUNTIES:

IRONWORKERS:

Projects with a total contract cost of \$20,000,000.00 or above	20.15	9.36
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All Other Work	18.85	8.40
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LABO0189E 07/01/1999

	Rates	Fringes
LABORERS:		
GROUP 1	15.35	5.13
GROUP 2	15.60	5.13
GROUP 3	15.65	5.13
GROUP 4	16.25	5.13

LABORER CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; & Wrecking of Concrete Form

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer); Brickmason

Tender; Mortar Mixer Operator; Burner & Welder; Bushhammer; Chain Saw Operator; Concrete Saw Operator; Deckhand Scow Man; Dry Cement Handler; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level C; Forklift Operator for Masonary; Form Setter; Green Concrete Cutting; Hand Operated Grouter & Grinder Machine Operator; Jackhammer; Pavement Breaker; Paving Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven Georgia Buggy & Wheel Barrow; Power Post Hole Digger; Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind Trencher; Sand Blaster; Concrete Chipper; Surface Grinder; Vibrator Operator; & Wagon Driller

GROUP 3 - Air Track Driller; Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Powderman & Blaster; Side Rail Setter; Rail Paved Ditch; Screw Operator; Tunnel (Free Air); & Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air)

PAIN0032E 05/01/1999

	Rates	Fringes
BALLARD COUNTY:		
PAINTERS:		
Bridges & Dams	23.07	6.03
All Other Work	18.77	6.03

Spray, Blast, Steam, High & Hazardous (Including Lead Abatement)
and All Epoxy - \$1.00 Premium

PAIN0118C 05/01/1999

	Rates	Fringes
EDMONSON COUNTY:		
PAINTERS:		
Brush	16.17	4.15
Abrasive Blaster; Fireproofing; Lead Abatement; Spray; & Waterblasting 4000 PSI and Above	16.67	4.15

PAIN0156G 04/01/1999

	Rates	Fringes
DAVISS, HANCOCK, HENDERSON, MCLEAN, OHIO, UNION & WEBSTER COUNTIES:		

PAINTERS:

BRIDGES, LOCKS & DAMS:

GROUP 1	20.65	5.88
GROUP 2	20.90	5.88
GROUP 3	21.65	5.88
GROUP 4	22.65	5.88

ALL OTHER WORK:

GROUP 1	19.50	5.88
GROUP 2	19.75	5.88
GROUP 3	20.50	5.88
GROUP 4	21.50	5.88

PAINTER CLASSIFICATIONS

GROUP 1 - Brush & Roller

GROUP 2 - Plasterers

GROUP 3 - Spray; Sandblast; Power Tools; Waterblast;
Steamcleaning; Brush & Roller of Mastics, Creosotes, Kwinch
Koate & Coal Tar Epoxy

GROUP 4 - Spray of Mastics, Creosotes, Kwinch Koate & Coal Tar
Epoxy

PAIN0456D 05/01/1999

	Rates	Fringes
ALLEN, BUTLER, LOGAN, MUHLENBERG, SIMPSON, TODD & WARREN COUNTIES:		

PAINTERS:

Brush	15.43	4.30
Spray; Sandblast; Boswain Chair		

or Heights over 50 feet 15.93 4.30

PAIN0500C 05/01/1999

 Rates Fringes
CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON,
GRAVES, HICKMAN, HOPKINS, LIVINGSTON, LYON, MARSHALL, MCCRACKEN
& TRIGG COUNTIES:

PAINTERS:

Bridges & Dams 20.00 4.52
All Other Work 15.00 4.52

Spray, Sandblasting & Waterblasting - units with 3500 PSI and
above - \$.50 premium

Work 40 ft. and above ground level - \$1.00 premium

PLUM0107E 08/01/1999

 Rates Fringes
ALLEN, BUTLER, EDMONSON, SIMPSON & WARREN COUNTIES:

PLUMBERS; GAS FITTERS:

Plumbing contracts less than

\$150,000.00 17.84 5.32
All Other Plumbing contracts 22.76 5.32

PLUM0184C 05/01/1999

 Rates Fringes
BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN (Excluding
Ft. Campbell), CRITTENDEN, FULTON, GRAVES, HICKMAN, LIVINGSTON,
LYON, MARSHALL, MCCRACKEN & TRIGG COUNTIES:

PLUMBERS & STEAMFITTERS 22.33 7.26

* PLUM0522C 08/01/1999

 Rates Fringes
ALLEN, BUTLER, EDMONSON, SIMPSON & WARREN COUNTIES:

PIPEFITTERS & STEAMFITTERS 23.40 7.73

PLUM0572F 05/01/1999

 Rates Fringes
CHRISTIAN COUNTY (Ft. Campbell Only):

PIPEFITTER; PLUMBER 20.04 4.85

PLUM0633B 01/01/1999

 Rates Fringes
DAVISS, HANCOCK, HENDERSON, HOPKINS, LOGAN, MCLEAN, MUHLENBERG,
OHIO, TODD, UNION & WEBSTER COUNTIES:

PLUMBERS & PIPEFITTERS 22.435 5.58

TEAM0089C 03/31/1999

Rates Fringes

TRUCK DRIVERS:

ALLEN, BUTLER, EDMONSON, LOGAN, SIMPSON & WARREN COUNTIES:

GROUP 1	15.94	7.275
GROUP 2	16.17	7.275
GROUP 3	16.24	7.275
GROUP 4	16.25	7.275

BALLARD, CALLOWAY, CALDWELL, CARLISLE, CHRISTIAN, CRITTENDEN,
FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN,
TODD & TRIGG COUNTIES:

GROUP 1	20.34	2.95
GROUP 2	20.57	2.95
GROUP 3	20.64	2.95
GROUP 4	20.65	2.95

DAVISS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, MUHLENBERG, OHIO,
UNION & WEBSTER COUNTIES:

GROUP 1	17.58	6.30
GROUP 2	17.81	6.30
GROUP 3	17.88	6.30
GROUP 4	17.89	6.30

TRUCK DRIVER CLASSIFICATIONS

GROUP 1 - Greaser, Tire Changer

GROUP 2 - Truck Mechanic

GROUP 3 - Single Axle Dump & Flatbed; Terrain Vehicle when used
to haul materials; Semi-Trailer or Pole Trailer when used to
pull building materials & equipment; Tandem Axle Dump;
Distributor; & Mixer

GROUP 4 - Euclid, Other Heavy Earthmoving Equipment & Lowboy;
Articulator Cat Truck & 5 Axle Vehicle; Winch & A-Frame when
used in transporting materials; Ross Carrier; Fork Lift Truck
when used to transport building materials; & Drivers on
Pavement Breaker

WELDERS - Receive rate prescribed for craft performing operation
to which welding is incidental.

Unlisted classifications needed for work not included within
the scope of the classifications listed may be added after
award only as provided in the labor standards contract clauses
(29 CFR 5.5(a)(1)(v)).

In the listing above, the "SU" designation means that rates listed under that identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests

for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final.
END OF GENERAL DECISION

SUPPLEMENT
TO
SPECIFICATION 1, DISTRIBUTION AND PIPING
FOR
HENDERSON COUNTY WATER DISTRICT
WATER MAIN EXTENSION ON KENTUCKY HIGHWAY 283

OCTOBER, 1998

1-2. MATERIALS.

DELETE THE FOLLOWING:

- 1-2.7. SERVICE LINES.
- 1-2.8. SERVICE METERS.
- 1-2.10. WATER MAIN LOCATORS.

ADD THE FOLLOWING:

- 1-2.7. SERVICE LINES AND ACCESSORIES.
 - a. Pipe.

All service lines shall be Type K copper conforming with ASTM B88.
 - b. Saddles.

Saddles shall be Ford S70 Series for 6 inch main size and smaller. For pipe larger 6 inch, they shall be Smith-Blair double strap, No. 317.
 - c. Corporation Stops.

Corporation stops shall be Ford F600.
 - d. Eighth Bends.

Eighth bends shall be Ford LA 04-33 SG.

1-2.8. SERVICE METERS AND ACCESSORIES.

Water Dist.

a. Meter Boxes.

Meter boxes shall be Goddard Concrete Products No. 36 series with two 12 inch sections (24").

b. Ball Valves.

Ball valves shall be Ford B 43-232 WG (with winglock grip).

Water Dist.

c. Meters.

Service meters shall be Rockwell Sensus II, sealed register, oscillating piston type with magnetic drive and shall be straight reading in U. S. gallons. The shall have a plastic break.

d. Meter Couplings (House Side).

Meter couplings shall be Ford C38-23-2.5.

1-2.10 IDENTIFYING/DETECTABLE WIRE.

Identifying/detectable wire for laying in the trench above the water line shall be 12 gauge copper wire.

1-3. CONSTRUCTION.

1-3.13. BACKFILLING.

DELETE:

Delete the last paragraph in its entirety.

ADD:

Identifying/detectable 12 gauge copper wire shall be laid continuously and directly above the pipe approximately 12" to 18" below the ground surface.

SPECIFICATION 1

DISTRIBUTION SYSTEM AND PIPING

1-1. GENERAL.

This Specification pertains to furnishing all materials and construction of the complete distribution system. The intent herein is to be in accordance with the AWWA and the National Sanitation Foundation Standards that shall complement these Specifications.

In an existing system all materials must be compatible with the existing materials with regard to wrench sizes, operation, interchangeability and appearance (fire hydrants) unless otherwise specifically shown or approved.

1-2. MATERIALS.

1-2.1. DISTRIBUTION MAINS.

Distribution mains and fittings of a particular material shall be the product of one manufacturer. Jointing materials, including rubber gaskets, packing glands, flanges, bolts, lubricants, solvents, etc., shall be as recommended by the pipe manufacturer, shall comply with AWWA Standards and shall withstand a safe working pressure of not less than 150 psi, unless otherwise shown.

a. Iron Pipe.

Ductile iron pipe shall be AWWA C151 (ANSI A21.51). All iron pipe shall have cement-mortar lining conforming with AWWA C104 (ANSI A21.4). Jointing shall be with push-on or mechanical joints for Class 50 (150 psi working pressure) pipe.

b. Plastic Pipe.

Plastic pipe shall conform with ASTM D 2241 polyvinyl chloride (PVC) pressure pipe, 1-1/2 inches through 12 inches and shall bear the National Sanitation Foundation seal. Unless otherwise shown the pipe shall be SDR26, pressure rated at 160 psi. Jointing shall be with rubber ring gaskets.

PVC pipe, 14 inches through 30 inches, shall have an integral bell and spigot joints and shall be in accordance with AWWA C905. Pipe shall be DR18 unless otherwise shown.

1-2.2. FITTINGS.

All fittings larger than 3 inches shall be gray iron or ductile iron. All fittings, 3 inches and smaller, shall be PVC.

Iron fittings shall comply with AWWA C110 (ANSI A21.10) or AWWA C153 (ANSI A21.53) and the inside of the fittings shall be cement-mortar lined in accordance with AWWA C104. The outside coating shall be bituminous material approximately one mil thick. Rubber gaskets shall conform with AWWA C111 (ANSI A21.11).

1-2.3.

VALVES.

a. Gate Valves.

Gate valves larger than 2 inches shall be iron body, bronze mounted, with a nonrising stem and shall comply with AWWA C500 (double-disc) or AWWA C509 (resilient-seated). Valves below ground shall be wrench operated; valves above grade shall be wheel or lever operated; and all valves shall operate clockwise to close. All valves, 2 inches and smaller, shall be bronze body.

b. Butterfly Valves.

Butterfly valves, 2 inches through 20 inches, shall conform with AWWA C504 and shall have a minimum working pressure or rating of 150 psi. They shall have semi-steel or cast iron bodies with lug end connections for use with flanged CIP. The shaft seal shall be hycar and the seat shall be neoprene. They shall have bronze discs, 416 stainless steel shafts and bronze bearings. Valves below ground shall operate with a square nut through a worm gear and 3 operating wrenches shall be furnished for each size operating nut. For valves above grade, the actuator shall be of the lever type with 10 position or adjustable memory stops as shown on the Plans. All valves shall close clockwise and open counterclockwise.

Butterfly valves shall be installed in the distribution system with flanged to mechanical joint connecting pieces.

c. Valve Boxes.

Valve boxes shall be cast iron if located where subject to traffic. PVC boxes may be used at other locations. All valve boxes shall be adjustable with a minimum adjustment of 3 inches either higher or lower. Boxes for 2 inch through 14 inch valves shall have a 5-1/4 inch shaft diameter and the covers shall be cast iron with the word "WATER" cast in the top surface.

d. Valve Wrenches.

Three valve wrenches, approximately 6 feet in length, shall be furnished for each different type and/or size required.

e. Air Valves.

Air valves, either air release or combination air release and air vacuum, shall have a cast iron body, stainless steel trim and floats and a working pressure of 300 psi. They shall be direct acting or simple lever-type with full ported valves; parts shall be interchangeable; and they shall not require special tools for maintenance. The size and type air valve shall be as shown on the Plans.

All air valves shall be mounted upright on the main with a service clamp and shall have a shutoff valve between the air valve and the main. They shall be installed in a 30 inch I.D. by 30 inch deep valve box (CMP, PVC, clay or concrete) having a cast iron frame and locking, solid lid, Neenah Foundry R-5900 series, or equal.

The box shall be centered on the valve, shall be set plumb with the top slightly above grade and shall be filled from the bottom of the main to 4 inches below the shutoff valve with No. 57 crushed stone.

1-2.4. FIRE HYDRANTS.

Fire hydrants shall be three-way with two 2-1/2 inch hose nozzles and one 4-1/2 inch pumper nozzle and shall comply with AWWA C502. Hose connections and operating nuts shall be National Standard. The minimum valve opening shall be 5-1/4 inches, shall close with the pressure and shall remain closed if the hydrant barrel is broken or damaged. The hydrant shall have a replaceable, breakable flange or section. The operating nut shall be a pentagon shape, shall operate counterclockwise to open, and an "open" direction arrow shall be cast in the bonnet. The normal depth of bury shall be 42 inches. Three hydrant wrenches and one replaceable, breakable flange shall be furnished.

All hydrants shall be painted with a primer coat equal to Rustoleum No. 960 primer and a finish coat of "Fire Hydrant Red" equal to Rustoleum No. 1210.

1-2.5. FLUSH HYDRANTS.

Flush hydrants shall be of the post type having 150 psi working pressure, 2-1/8 inch valve opening and a single 2-1/2 inch hose nozzle. In all other respects, the flush hydrant shall be the same as the standard fire hydrant

1-2.6. TAPPING, CUT-IN AND REPAIR MATERIALS.

a. Tapping Sleeves.

Tapping sleeves shall be Class 125 (ASA B16.1) similar to Mueller H-615. Stainless steel tapping sleeves may be used in lieu of ductile iron.

b. Tapping Crosses.

The tapping crosses shall be Class 125 (ASA B16.1) similar to Mueller H-715.

c. Tapping Valves.

Tapping valves shall be Class 125 (ASA B16.1) similar to Mueller H-667 for mechanical joint pipe or H-642 for asbestos cement pipe.

d. Split Repair Sleeves.

Split repair sleeves shall have 150 psi working pressure similar to Mueller H-777 for asbestos cement pipe and 200 psi working pressure similar to Mueller H-785 for mechanical joint pipe.

e. Cut-In Sleeves and Valves.

Cut-in sleeves shall be similar to Mueller H-840, or equal, and cut-in valves shall be similar to Mueller H-862, or equal.

f. Inserting Valves.

Inserting valves shall be similar to Mueller H-800.

g. Repair Clamps.

Repair clamps shall be stainless steel, fully gasketed and pressure rated to match or exceed the pipe on which it is to be installed. Unless otherwise directed, repair clamps shall be used only on PVC pipe and shall be similar to Mueller 500 Series.

1-2.7. SERVICE LINES.

a. Plastic Pipe.

Plastic pipe and fittings for service lines shall conform with AWWA C901 for polyethylene pipe and AWWA C902 for polybutylene pipe, shall have a pressure rating of 200 psi and shall bear the National Sanitation Foundation seal.

b. Copper Pipe.

Copper pipe for service lines shall conform with ASTM B-88, "Type K".

c. Service Line Accessories.

Corporation stops, curb stops, service fittings, etc., shall be of the finest quality bronze or brass as manufactured by Hays, Mueller, Ford or equal.

1-2.8. SERVICE METERS.

All service meters shall be of the nutating disc type or oscillating piston type and shall be straight reading in U. S. gallons. They shall have a magnetic coupled drive and shall comply with AWWA C700.

Residential meters, unless otherwise noted, shall be 5/8 inch x 3/4 inch size. All meters 5/8 inch through 1 inch shall be installed in a meter yoke. One and one-half inch and 2 inch meters shall have flanged ends with suitable adaptors and shall have an accuracy of 100 plus or minus 1.5 percent of actual thruput.

a. Meter Yokes.

Meter yokes shall have a horizontal inlet and outlet and shall have multipurpose end connections with a 1/4 turn stop and a lock wing stop on the inlet side. The height of the yoke shall be approximately 7 inches and it shall securely support the meter in a horizontal position. Meter yokes shall be Ford, Mueller, or equal.

b. Meter Boxes.

Meter boxes may be plastic, clay or concrete with an inside area equivalent to an 18 inch diameter. They shall be 24 inches deep with cut-outs for the service lines.

Covers shall be cast iron, painted with a coal tar enamel and shall have an 11 inch minimum diameter (or equivalent) opening. The lid shall be equipped with a lock and lifting device and a total of three keys shall be furnished.

Standard covers (not subject to traffic) shall weigh 30 to 40 pounds and shall be Mueller H-10810, Ford No. A 32, Neenah R-1914-B, or equal.

Extra heavy covers (subject to light traffic) shall be Ford No. A 32H, Neenah R-1914-B, or equal.

Boxes, for meters 1-1/2 inches and larger, shall be brick masonry or concrete approximately 30 inches deep and large enough to permit convenient service or removal of the meter. Frames and lids shall be cast iron, shall have a locking device and shall have the word "WATER" cast in the top. They shall be Ford Monitor covers or Ford rectangular meter pit covers, or equal.

1-2.9. CASING PIPE.

Casing pipe shall be seamless or continuous welded steel pipe having a minimum wall thickness of 0.25 inches and a minimum yield strength of 35,000 psi.

1-2.10. WATER MAIN LOCATORS.

a. Identifying/Detectable Tape.

Identifying/detectable tape shall be a minimum of 3 inches wide, shall be inert plastic film, highly resistant to acids and alkalis and a bright color. It shall be imprinted with "WATER LINE BELOW" and shall be "Terratape Detectable" or equal.

b. Tracer Wire.

Tracer wire shall be 12 gauge insulated copper wire and shall be suitable for underground installation. The tracer wire shall be securely attached to all valves, fire hydrants, flush hydrants, etc. Splices shall be made in a manner to insure conductivity.

1-2.11. RIVER CROSSING PIPE.

River crossing pipe shall be Class 5 ductile iron, 0.42 metal thickness and shall be boltless, similar to "Usiflex" as manufactured by U. S. Pipe, or equal.

1-3. CONSTRUCTION.

1-3.1. RESPONSIBILITY FOR MATERIALS.

The Contractor shall be responsible for all materials furnished by him and shall replace at his own expense all materials found defective or not complying with these Specifications. His responsibility shall be in effect for 1 year after acceptance by the Owner.

1-3.2. ALIGNMENT AND GRADE.

The water line shall be located as shown on the Plans and shall be parallel with streets and property lines where possible. It shall have a minimum cover of 42 inches. Through areas where an adjacent roadbed is in a cut section, the main shall be laid to a minimum depth of 36 inches below the centerline crown elevation of the adjacent road or street but shall not exceed a depth of 7 feet. Exceptions to this requirement (deeper or more shallow) shall be authorized, in specific cases, by the Engineer. There shall be no additional compensation for laying depths up to 7 feet. Bends shall be used at any abrupt changes in direction and lines shall be a minimum distance of 5 feet from any pavement.

1-3.3. TRENCH PREPARATION.

The trench shall be dug to the alignment and grade required and shall be braced and drained for safe, efficient working conditions. Excavation shall not exceed pipe laying at the end of the working period. All pipe line trench excavation shall be considered unclassified and the cost for excavation of any material (earth, sand, gravel, rock, concrete, etc.) shall be borne by the Contractor.

a. Width.

The trench width shall be the nominal diameter of the pipe being laid plus an additional 16 inches. Open cuts across paved surfaces shall be cut in straight, neat lines approximately 12 inches wider than the trench being dug.

b. Bell Holes.

Bell holes shall be provided for properly jointing the pipe and to maintain a 2 inch clearance around the pipe joint.

c. Excavation to Grade.

The trench shall be excavated to provide a uniform and continuous bearing and support for the pipe on solid ground at every point between bell holes. Any excavation below the specified grade shall be corrected with approved material, thoroughly compacted as directed by the Engineer. The finished subgrade shall be prepared accurately by means of hand tools.

d. Unsuitable Foundation.

Where the bottom of the trench at subgrade is found unstable or to include ashes, cinders, refuse, vegetable or other organic materials, or large pieces or fragments of inorganic material that in the judgment of the Engineer should be removed, the Contractor shall excavate and remove such unsuitable material to the width and depth ordered by the Engineer. The subgrade shall then be constructed by backfilling with an approved material, thoroughly compacted in 4 inch layers to provide a uniform and continuous support for the pipe at the specified grade.

e. Clearance in Rock.

Ledge rock, boulders and large stones shall be removed to provide a clearance of at least 6 inches below and on each side of all pipe valves and fittings for pipes 24 inches in diameter or less and 9 inches for pipes larger than 24 inches in diameter. The subgrade shall then be constructed in accordance with Item d above.

1-3.4.

CROSSINGS AND OCCUPANCY.

The Contractor shall comply with all provisions of the permits for any crossings or parallel occupancy.

For a crossing requiring boring and jacking, the Contractor shall be responsible for maintaining line and grade. Where casing is required, a continuous steel casing, with continuous welds, shall be installed by advancing the casing as the hole is being bored. The carrier pipe shall be supported inside of the casing with 18 inch long pressure treated wooden skids which shall be double strapped with No. 10 gauge stainless steel wire or stainless steel straps. The carrier pipe shall not rest on the bells or hubs. Carrier pipe 12 inches and smaller shall be encircled with 4 skids at 90° and carrier pipe from 14 inches to 24 inches shall have 6 skids at 60°. Skid support spacing shall not exceed 4.7 feet for 4 inch pipe; 6.3 feet for 6 inch pipe; 7.4 feet for 8 inch pipe; 8.5 feet for 10 inch pipe; 9.6 feet for 12 inch pipe and 12 feet for 18 inch through 27 inch pipe.

Manufactured plastic skids may be permitted.

Casing end seals shall be installed on all casings and shall be secured to the casing and carrier pipe with stainless steel bands in such a manner as to prevent damage to the seal if

there is any pipe movement. The seals shall be made of oil and water resistant rubber and shall be similar to those manufactured by Maloney Pipeline Products, or equal.

For crossings not requiring casing, the bore shall be made with one continuous section of pipe having no joints under the pavement.

Open cuts shall not be closer than 5 feet from the edge of the pavement on either side or in accordance with the permit.

1-3.5. EXISTING MAINS.

Where there are existing mains along the route of a new main, the existing main and services shall be protected and maintained at the Contractor's expense. If an existing main is to remain in service, it shall not have a "dead end" but shall be connected to form a grid or loop or as directed by the Engineer.

All materials for connections of existing service lines to the new main, after testing and disinfection, must be kept clean and free from all contamination during the changeover. All customers whose water service will be interrupted shall be notified and service shall be restored when possible.

Any main or service line to be abandoned shall be disconnected and capped or plugged at its connections to the live mains. Existing valves, in the abandoned main at its connection to the live main, shall be removed.

1-3.6. TIE-INS TO EXISTING MAINS.

All tie-ins to existing mains must be kept clean and free from all contamination while the cutting-in and connecting are being done. The Contractor shall determine the type of existing pipe at each tie-in location to verify the materials required for the most economical method (for the Owner) of making the tie-in. The method of making the tie-in shall be subject to the Engineer's approval.

The following conditions shall apply to all tie-ins.

- a. If necessary to cut the line out of service, the water operator and all affected customers shall be notified and service shall be restored when possible.
- b. The trench or excavation shall be kept completely dry by providing a sump and by pumping, if necessary.
- c. Excavation around the existing main shall be sufficient to allow thorough cleaning with a wire brush and disinfection with a strong chlorine solution to a point 12 inches either side of the fitting(s) being installed.
- d. The inside of all valves and fittings shall be clean and shall be thoroughly swabbed with a strong chlorine solution before being placed in the existing line.
- e. All connections shall be valved for the new main being installed. This valve shall remain tightly closed until disinfection of the new main has been completed.

1-3.7. PIPE LAYING.

Pipe shall be laid continuously with the bell ends facing in the direction of laying. The trench shall be dewatered and every precaution shall be taken to prevent foreign material from

entering the pipe during installation. All pipe must be perfectly clean before placing in the line.

All phases of installation, including handling, cutting, laying, aligning, and jointing, shall be in strict compliance with the manufacturer's recommendations and with the AWWA Standards.

At times when pipe laying is not in progress, the open ends of pipe shall be sealed by a water-tight plug. If water is in the trench, the seal shall remain in place until the trench is pumped completely dry.

Anchorage and blocking shall be as shown on the Plans.

1-3.8. VALVES AND FITTINGS.

All valves and fittings, not otherwise shown on the Plans, shall be of the slip-joint or mechanical-joint type. Valves shall be set level and the valve box shall be centered over the operating nut and thoroughly tamped in a plumb position. The top surface of the valve box shall be level with the street or slightly above grade when installed in fields or yards.

Existing valves or appurtenances to be abandoned shall be removed from the line.

1-3.9. FIRE HYDRANTS.

All hydrants shall be set plumb and truly vertical with the pumper connection on the street side. Cast-in-place concrete thrust blocks bearing squarely against undisturbed soil shall be placed, using care not to obstruct the hydrant barrel drains. Not less than 7 cubic feet of coarse gravel or crushed stone shall be placed from the bottom of the trench to at least 6 inches above the waste opening and 1 foot around the elbow to facilitate drainage. The hydrant nozzles shall be at least 12 inches above the established grade or ground line.

1-3.10. METER SETTINGS.

All meters shall be set level and the meter box shall be centered over the meter and thoroughly tamped in a plumb position. Five feet of service line, with a cap on the end, shall be stubbed out on the customer side of the meter. The top of the meter box cover shall be slightly above grade to prevent the entrance of surface water. The OWNER shall be notified of the date a meter is installed, the serial number of the meter and the initial meter reading.

1-3.11. HYDROSTATIC TEST.

All distribution and piping systems shall be hydrostatically tested in accordance with Specification 12.

1-3.12. DISINFECTION.

All existing facilities exposed to contamination and all new piping, materials and equipment shall be disinfected in strict conformance with Specification 12 before placing or replacing in service. The Engineer shall be furnished with a copy of the State approved bacteriological test report before the facilities are put into service.

1-3.13. BACKFILLING.

Pipe embedment from the bottom of the trench to the centerline of the pipe shall be with fine earth or sand. It shall be placed by hand on both sides of the pipe simultaneously.

Pipe embedment from the centerline of the pipe to a point 18 inches above the top of the pipe shall consist of finely divided earth or sand free from rocks, boulders or wet or sticky masses. This embedment shall be evenly spread and carefully compacted.

Backfilling to grade under a roadway or other permanent structure shall be with a compacted granular material (sand or DGA) and to the satisfaction of the Engineer. Other backfilling to grade, not shown on the Plans, may be altered to fit the particular situation and tamping may not be required, but the Contractor shall be responsible for all settlement for 1 year.

Identifying/detectable tape shall be laid continuously and directly above the pipe with the printed side up. The tape shall be installed approximately 12 to 18 inches below the ground surface. Tracer wire shall be placed directly above the pipe.

1-3.14. SERVICE LINES.

Service lines shall be connected after the main has been tested, approved, and disinfected. The minimum size service line shall be 3/4 inch and shall be connected to the main with a corporation stop. For PVC and AC main sizes 6 inches and smaller and for cast iron pipe 4 inches and smaller, connections shall be made with a strap service clamp or saddle. For larger size mains, the connection shall be made with a corporation stop having a tapered thread similar to the Mueller H-15000 series or having a rubber sealing sleeve similar to the "Hays-Seal", or equal. For 1 inch and 2 inch service lines, connection to the main shall be made with a double-strap service clamp. Larger service lines or mains shall be connected with a tapping sleeve or by installation of fittings in the main.

The service lines shall be run perpendicular to the main in a straight line to the meter box.

1-3.15. CREEK CROSSINGS.

Creek crossings, where possible, shall be made by gradually increasing the depth of the pipe to provide the specified cover at the lowest point. Crossings requiring the use of bends shall be approved by the Engineer. Payment for crossings shall be at the unit prices bid for the various items used including encasement, as directed.

1-3.16. SPOT EXCAVATION.

Spot excavation shall be a pay item for mobilization, all work and equipment to cover the cost for location of water mains and appurtenances and for excavation to install a valve or other appurtenance at the isolated location (where other work is not being done) as shown on the Plans and as directed by the Engineer.

Spot excavation shall include backfilling in accordance with Article 1-3.13 of this Specification.

The Contractor shall use extreme care to prevent damage to existing mains and appurtenances and the final 6 inches above the main shall be hand excavated. Valve boxes accidentally damaged during spot excavation shall be replaced at the expense of the Owner, but other damage to existing facilities shall be the responsibility of the Contractor.

If a working valve or other item is located, the Contractor shall adjust the valve box height but shall only be paid for spot excavation plus the unit price bid for any new materials used.

Payment for this item shall be at the lump sum bid and excavation at a noncontiguous location shall constitute a separate pay item.

1-3.17.

RECORDS.

The Contractor shall be responsible for maintaining a set of Record Plans showing the size, type of material and location of all new construction and of any existing water facilities located during the work. These Record Plans must always be available to the Engineer and shall be furnished to the Engineer at the end of construction for the Owner's permanent record.

SPECIFICATION 3

CONCRETE WORK

3-1. GENERAL.

This Specification shall include all labor, equipment and materials to complete the concrete work on this project. The Contractor shall supply the Engineer with a certificate for each design mix from the ready mix supplier for approval before ordering.

3-2. MATERIALS.

3-2.1. CONCRETE.

a. General.

Cement for all concrete shall conform with standard specifications for "portland cement", ASTM Designation C-150, Type I.

Fine aggregate shall consist of sand having clean, sound, hard, durable particles and shall be free from clay and organic impurities. The gradation shall be as follows: 100% passing a 3/8 inch sieve; 85-100% passing a No. 4 sieve; 40-80% passing a No. 16 sieve; 5-25% passing a No. 50 sieve; 0-5% passing a No. 100 sieve.

Coarse aggregate shall be crushed stone or washed gravel having hard, strong, durable qualities and shall be free from adherent coatings and laminated, soft or disintegrated pieces. Coarse aggregate for concrete shall be as follows: 100% passing a 1-1/2 inch sieve; 95-100% passing a 1 inch sieve; 25-60% passing a 1/2 inch sieve; 0-10% passing a No. 4 sieve; 0-5% passing a No. 8 sieve.

Water shall be clear, clean and free from injurious substances.

The concrete shall have 6% air plus or minus 1-1/2%. Admixtures containing more than 0.1% shall not be used.

b. Classification.

(1) Structural Concrete.

Structural concrete shall be Class A and is defined as floors, walls, roofs, foundations, footings, etc., having reinforcing steel and requiring form work.

(2) Plain Concrete.

Plain concrete shall be Class B and shall be used only if specified with or without WWF and minor forms.

(3) Encasement Concrete.

Concrete for encasement may be Class C.

c. Strength.

Concrete mixes shall be as follows:

- Class A - 3,500 psi in 28 days with 6 bags of cement (minimum).
- Class B - 2,500 psi in 28 days with 5 bags of cement (minimum).
- Class C - 4 bag mix for encasement only (no test required).

d. Consistency.

Concrete shall be proportioned to give a plastic, workable mix meeting the strength requirements by the absolute volume method. Slump tests shall be made in accordance with ASTM Designation C-143. The slump shall not exceed 4 inches for concrete vibrated in place or 5 inches (authorized by Engineer only) for hand consolidation in very thin walls.

3-2.2. REINFORCEMENT.

Bars for concrete reinforcement shall conform with ASTM Designation A-615, Grade 60 (yield strength 60,000 psi) for deformed bars and ASTM Designation A-185 for welded wire fabric (WWF). All reinforcement shall be free from rust, scale, grease or other coatings that might destroy or reduce its bond with the concrete.

3-2.3. JOINT FILLERS.

Preformed fillers shall be furnished in a single piece for the full depth and width required for the joint unless otherwise authorized. When use of more than one piece is authorized for a joint, the abutting ends shall be fastened securely and held accurately to shape.

All joint fillers shall conform with AASHTO Standards and be as approved by the ENGINEER.

3-2.4. JOINT SEALERS.

a. Hot-poured elastic.

Hot-poured elastic joint sealers shall conform with ASTM D 3405 and all applicable Kentucky Transportation Cabinet, Department of Highways Standard Specifications and/or Illinois Department of Transportation Standard Specifications.

b. Preformed Compression Joint Sealers with Lubricant Adhesive.

Preformed compression joint sealers shall be of approved shapes and sizes for the joints to be sealed. The sealers shall conform with ASTM D 2628. The lubricant adhesive shall be compatible with the sealer, concrete, and steel. The sealer manufacturer shall recommend a lubricant adhesive which will be compatible with and which will meet the requirements of ASTM D 2835.

3-3. CONSTRUCTION.

3-3.1. REINFORCEMENT.

The clear distance between parallel bars shall not be less than 1-1/2 times the diameter of the bars. Bars shall have a minimum of 3 inches of concrete covering where concrete is cast directly against the ground; 2 inches of covering where concrete is exposed to earth, water or weathering conditions; and for concrete not exposed to ground or the weather, the reinforcement steel covering shall be not less than 1-1/2 inches for beams, girders, and columns and not less than 3/4 inch for slabs and walls.

Welded wire fabric in slabs shall be placed 1-1/2 inches from the bottom of 4 inch slabs and 2 inches from the bottom of 6 inch slabs.

Splices, where required in the reinforcement steel, shall be Class C in accordance with ACI-318. Chairs, ties, spacers, etc., shall be used to secure reinforcement in place throughout the concreting operation.

3-3.2. EMBEDDED ITEMS.

Sleeves, conduit, bolts, anchors, waterstops, etc., shall be securely anchored in place and thoroughly cleaned before placing the concrete.

3-3.3. FORMS.

Forms shall be secured in place to withstand the placing and the weight of the concrete without bulging, sagging, or deflecting from the line and grade. Forms shall be tight enough to prevent the leakage of mortar, shall be clean from all dirt, debris, etc., and shall be properly coated with a nonstaining mineral form oil for easy removal. Forms shall not be removed until the concrete has sufficient strength, and during removal, care shall be taken so as not to chip corners or damage the concrete.

3-3.4. PLACING CONCRETE.

Concrete may not be placed when the air temperature is 40 degrees F and falling. Concrete placed during hot weather shall be cooled by frequent spraying and protected from curing too rapidly.

Concrete shall be placed within 45 minutes after water has been added. The maximum free-fall in placing concrete shall be 5 feet. A mechanical vibrator shall be used to cause the concrete to flow or settle but care shall be taken to prevent overvibrating and segregation of the aggregate.

Vibrators shall not be used to transport concrete within form work.

3-3.5. JOINTS.

All joints, longitudinal and transverse, shall conform with all details shown on the Plans, and shall be installed at the locations so indicated, or as directed.

Saw-cut joints shall be cut to the depth and width indicated on the Plans and shall be of uniform width throughout. The sawing equipment shall be capable of cutting the joint in strict conformity with the required alignment and depth, and shall be so operated. Transverse saw cuts for joints to be sealed with preformed compression joint seals shall be one continuous cut across the pavement being sawed. Water may be sprayed on the saw blades during the cutting. The joints shall not be sawed until the concrete has hardened to the extent that tearing and raveling will not occur, but as soon thereafter as deemed necessary to preclude random cracking.

All sawed joints shall be thoroughly flushed with clean water or cleaned with compressed air immediately after sawing so the vertical surfaces of the joint will be clean and allow proper adherence of the joint sealer to the surfaces.

All joints shall be protected from intrusion of injurious foreign material until sealed. Temporary seals, when used, shall consist of an acceptable material designed for this use firmly embedded in the joint. The material shall be placed 1/4 inch below the pavement

surface and shall be sufficiently strong and durable to resist intrusion of incompressible materials, and to permit complete removal after its usefulness has ended.

3-3.6. FINISHING.

All exposed concrete surfaces, not otherwise specified, shall have a wood float finish to the lines and grades shown.

Walls, after removal of the forms, shall be rubbed to a reasonable smoothness, eliminating fins, cavities, honeycomb, and other defects on the exposed surfaces. Pointing and rubbing shall be with a mortar of sand and cement and shall be kept moist for 24 hours.

Floors shall have a monolithic, smooth, dense trowel finish.

3-3.7. CURING.

All fresh concrete shall be adequately protected from injurious weather conditions until properly cured. It shall be protected from the sun, heavy rain, flowing water, freezing, or mechanical injury. It shall be kept wet for not less than 7 days and during cold weather shall be maintained at temperatures between 50 degrees F and 70 degrees F for at least 5 days.

3-3.8. TESTING.

Excessive honeycomb, poor alignment, excessive roughness or unevenness, leaking where watertightness is required, or deficient test results may be causes for rejection. The Contractor shall be responsible for collecting, curing and testing of 4 cylinders per 100 cubic yards or part thereof and/or for each separate day's pour all in accordance with generally accepted standards. The Engineer shall be furnished 3 certified copies of all test results.

SPECIFICATION 8

GENERAL EQUIPMENT STIPULATIONS

8-1. SCOPE.

This Specification covers the obligations and responsibilities of the Contractor, his suppliers or vendors and the manufacturers for mechanical and electrical equipment, instruments and devices about this Contract.

8-2. MATERIALS AND WORKMANSHIP.

The materials and equipment furnished under this contract shall be constructed and finished in a workmanlike manner. Materials shall be suitable for the service intended and selected and fabricated following the best engineering practice. All materials and equipment shall be new.

All exposed surfaces of machines shall be finished smooth and shall be painted with a sufficient number of undercoats to provide a smooth, uniform surface. They shall then be finished with a high grade lacquer or spar enamel in an approved and efficient manner. Polished and machined metal surfaces and electrical equipment, not subject to painting, shall be protected from corrosion, moisture, or damage during shipment and erection.

8-3. SOURCE OF EQUIPMENT AND MATERIALS.

Wherever equipment or materials are specified or shown on the Plans by using the proprietary product of a particular manufacturer or vendor, it is to establish a standard of quality, operation and appearance. Acceptance or approval of a substitute is only for conformance with the design concept of the project for compliance with the information given in the Contract Documents and does not relieve the Contractor of his responsibility for the satisfactory configuration, operation, use or appearance intended.

8-4. EQUIPMENT TO OPERATE IN STRUCTURES AS DESIGNED.

It is the intent of the Plans, Specifications, and Contract that equipment shall be furnished which can be installed and operated properly in the structures as designed and shown on the Plans. The Owner will assume no responsibility for any alteration in, addition to, enlargement of, or any other change from the shape, size, arrangement and dimensions of any structure as designed and detailed, where such alteration, etc., is required for the installation and proper operation of any alternate equipment. Acceptance of alternate equipment will be contingent on any such alterations, additions, enlargements or other changes being made at the sole cost and expense of the Contractor, which shall be included in his base bid.

8-5. PATENTS AND PATENT ROYALTIES.

All royalties and fees for and in connection with patented articles, devices, apparatus, machines, and other equipment (but not including royalties, fees, or other costs in connection with any patented process required by the Owner in the design of the work or operation thereof) shall be included in the price or prices quoted by the equipment supplier to, and paid by, the Contractor.

8-6. EQUIPMENT GUARANTEE.

Each item of mechanical and electrical equipment, instrument, and device, furnished for and in connection with the contract, shall be guaranteed against (a) faulty or inadequate design by the manufacturer or supplier of such item, (b) improper assembly, (c) defective materials or workmanship, or both, and (d) leakage, breakage, or other failure that might occur, under normal and proper operation of the equipment under specified

Enrollment Application

We look forward to serving you.

Anthem Life



Please complete in ink. Read and complete all of this form, if you need more space, attach a separate sheet of paper. Please use 4 digits for years (e.g., 1999 not 99).

Reason for application <input type="checkbox"/> New enrollment <input type="checkbox"/> Changing status (See Section B.) <input type="checkbox"/> Reinstatement <input type="checkbox"/> Rehire Date of rehire _____ <input type="checkbox"/> Are you a current COBRA participant? If yes, COBRA effective date _____ <input type="checkbox"/> Choosing state continuation coverage. Effective date _____	Must be filled out by Employer/Group	Group number	Employee number or department name	
	Group name	Subgroup number	Requested effective date	
	Anthem Use Only - Effective date for health			Life group number
COBRA qualifying event	Effective date for life	Contract type	COB <input type="checkbox"/> Yes <input type="checkbox"/> No	
State continuation coverage qualifying event	PCP <input type="checkbox"/> Yes <input type="checkbox"/> No	Package number	Region	Pre-existing

Section A. Applicant Information

Last name Luttrell		First name, MI Cindy, K.		Social Security Number 407-19-2972	
Home address 14912 State Route 69 N			City, State, ZIP code Fordsville, KY 42343		
County (Ky residents include municipality) Ohio		Height 5'6"	Weight 135lb	Sex <input type="checkbox"/> Male <input checked="" type="checkbox"/> Female	Date of birth 08-21-77
Status <input type="checkbox"/> Single <input type="checkbox"/> Widowed <input checked="" type="checkbox"/> Married <input type="checkbox"/> Divorced	Home telephone (include area code) 270-276-3106		Business telephone (include area code) 270-276-3265		Occupation
Title	Hours working per week for this employer 40	Income reported by <input type="checkbox"/> W2 <input type="checkbox"/> 1099 <input type="checkbox"/> Other	Date of hire as full-time		Are you retired? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Select product/type of health coverage <input type="checkbox"/> HMO <input type="checkbox"/> Indemnity <input type="checkbox"/> Employee <input type="checkbox"/> Employee/child(ren) <input type="checkbox"/> POS <input type="checkbox"/> Life <input type="checkbox"/> Employee/spouse <input type="checkbox"/> Employee/spouse/child(ren) <input type="checkbox"/> PPO <input type="checkbox"/> Dental*					

*Please check if coverage for DENTAL is different than selection above.
 Employee Employee/spouse Employee/child(ren) Employee/spouse/child(ren)

Section B. Status Changes Only (Complete this Section, Section A and sign at end of Sections I and J. If adding dependent(s), also complete sections C, E, F, and D if HMO/POS). To change Primary Care Physician, complete this Section, Section A and Section D.)

Change is for <input type="checkbox"/> Health only <input type="checkbox"/> Life only <input checked="" type="checkbox"/> Health and Life	Date of event	Change coverage to <input type="checkbox"/> Employee only <input type="checkbox"/> Employee/spouse <input type="checkbox"/> Employee/child(ren)	<input checked="" type="checkbox"/> Employee/spouse/child(ren)	Change status due to <input type="checkbox"/> Divorce <input type="checkbox"/> Spouse deceased <input type="checkbox"/> Medicare extended	<input checked="" type="checkbox"/> Marriage <input type="checkbox"/> Termination of employment
Change last name to		Change address to		<input type="checkbox"/> Delete the following dependents	
<input type="checkbox"/> Adding dependent(s) (Complete in Sections C, E and F) (D is applicable).		Reason for addition/deletion	Date of birth/date of adoption or placement for adoption (Attach copy of adoption papers.)		
<input type="checkbox"/> Change primary care physician (Explain reason for change here, and enter new PCP information in Section D.)					
<input type="checkbox"/> Change of beneficiary for Life	Primary (Include name, age, relationship of beneficiary to insured).		Contingent (name, age, relationship of beneficiary to insured)		
<input type="checkbox"/> Change in Life Insurance classification	From/to		<input type="checkbox"/> Other change (explain)		

Section C. If applying for other than Employee Only coverage, list spouse and unmarried children below. (Attach a separate sheet if necessary).

First, MI, Last Name	SSN	Sex	Age and Date of birth	Relationship to applicant	Height/weight	Eligible for federal income tax exemption?	Court ordered health coverage for child?

Is any dependent listed above over age 19 and currently a full-time student (12 or more hours) at an accredited educational institution? <input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, provide dependent's name and address, if different than the applicant's address. Documentation of full-time student status may be required.	
Name and address of any other dependent (if different than the applicant's address)	Is any dependent currently hospitalized or disabled? <input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, reason

Section J. AICI Proxy Statement.

I understand that the Annual Meeting of the Members of Anthem Insurance Companies, Inc., will be held on the fourth Thursday of March each year at Anthem's principal office in Indianapolis, Indiana at 11 a.m., or at such other date, place (within or outside the State of Indiana) or time as may be designated by the Board of Directors upon notice to the Members. I also understand that Special Meetings of the Members of Anthem may be held from time to time upon prior notice giving the place, day, hour and purposes for any such Special Meeting. I understand that I may vote at any Annual Meeting or any Special Meeting in person or by proxy. I hereby voluntarily grant my proxy to the Board of Directors of Anthem to vote on my behalf at any and all Meetings of the Members of Anthem. I understand that my granting of the proxy is not a condition of membership and that my proxy only becomes effective upon my acceptance as a Member by Anthem. I understand that, without limit as to time, this proxy to Anthem's Board of Directors will remain in effect until I revoke it or until I am no longer a Member of Anthem. I also understand that I may revoke this proxy by attending any meeting of the Members of Anthem or by sending a written revocation to the attention of the Corporate Secretary of Anthem at its principal office in Indianapolis, Indiana. The revocation of this proxy by my attendance at any Meeting shall operate to revoke this proxy for that Meeting only. Please check the applicable box and sign below.

Yes, I grant my proxy to the Board of Directors of Anthem. No, I do not grant my proxy to the Board of Directors of Anthem.

Signature *Cindy Luttrell* Date *March 9, 2000*

Section K. Waiver of coverage.

Check the box next to coverage(s) waived.

Employee name _____ Social Security number _____

Employer name _____ I am already protected by the coverage of my Spouse Parent None

Through his/her place of employment (give name) _____ Whose carrier is Anthem Blue Cross and Blue Shield (Give certificate/policy number) Other carrier (Give name, ID number)

I certify that I have been given an opportunity to apply for Anthem Blue Cross and Blue Shield coverage and after careful consideration, have decided not to take advantage of this offer. In the event I wish to apply for such service hereafter, I may do so, only during regular reopening periods of the group and subject to established procedures.

If I am declining enrollment for myself or my dependents (including my spouse) because of other health coverage, I may in the future be able to enroll myself or my dependents in this plan, provided that enrollment is requested within 31 days after other coverage ends. My dependent(s) or I may be subject to pre-existing condition restrictions or waiting periods specified in the group certificate, if a dependent or I are late enrollees. In addition, if I have a new dependent as a result of marriage, birth, adoption or placement for adoption, I may be able to enroll myself and my dependents, provided that I request enrollment within 31 days after the marriage, birth, adoption or placement for adoption.

I certify that I have been given the opportunity to apply for the available group life benefits offered by my employer, the benefits have been explained to me, and I and/or my dependent(s) decline to participate. Neither my dependent(s) nor I were induced or pressured by my employer, agent or life carrier, into declining this coverage, but elected of my (our) own accord to decline coverage. I understand that if I wish to apply for such coverage in the future, I may be required to provide evidence of insurability at my expense.

Signature of person(s) waiving _____ Date _____

conditions, for one year from and after the date of acceptance of the work by the Owner, and each item of equipment or part thereof thus proving defective within the 1 year guarantee period shall be replaced, without cost to the Owner.

8-7. LUBRICATION.

All bearings and other points of contact of all equipment shall be provided with adequate lubrication and complete lubrication instructions shall be supplied for each piece of equipment. Sufficient lubricants of the proper grade and quality shall be furnished and installed to fill all oil or grease cups, containers, and reservoirs and properly lubricate all equipment for initial startup and operation and until acceptance by the Owner.

8-8. ELECTRICAL EQUIPMENT.

All electrical equipment furnished under these Specifications shall be constructed and rated in accordance with the "Standards of AIEE" and shall pass temperature and insulation tests as recommended therein for the operating conditions required. All other electrical work shall conform with Specification 9, "Electrical and Control Work".

8-9. SPECIAL TOOLS AND ACCESSORIES.

With each piece of equipment or machine having parts and requiring periodic repairs and adjustment, there shall be furnished all special tools, wrenches and accessories required for removing worn parts and for making such adjustments. There shall also be furnished all gauges, indicators, lubricating devices, etc., necessary for proper operation of machines whether or not such accessories are specified.

8-10. SATISFACTORY OPERATION.

All mechanical equipment furnished by the Contractor shall operate satisfactorily without excessive wear, excessive lubrication, or undue attention required from its operator. All rotating parts shall be in true rotational balance and operate without vibration caused by mechanical defects or misalignment of parts.

8-11. INSTALLATION AND OPERATION INSTRUCTIONS.

The Contractor shall obtain from the equipment manufacturer, and deliver to the Engineer, not less than 9 copies of all necessary shop drawings, instructions and specifications relative to foundation requirements or piping connections, assembly, installation alignment, checking and placing in operation of each item of mechanical and electrical equipment furnished by him. Also, 9 copies of all instructions relative to maintenance and operation and drawings and descriptive data necessary for identification of parts for ordering replacements shall be furnished.

8-12. PLACING EQUIPMENT IN SERVICE.

The Contractor shall be responsible for the proper installation, alignment, and operating condition of all equipment and processes furnished. He shall furnish a written statement to the Engineer certifying that the equipment or process furnished (1) has been properly installed, packed and lubricated; (2) is in accurate alignment, secure and free from any undue stress; and (3) has been operated under normal conditions and that its operation is satisfactory and proper.

He shall provide the services of a manufacturer's or supplier's representative who is completely familiar with the operation of the equipment, who shall check over and verify the complete installation, start the equipment in operation, adjust and test all units and instruct the Owner's regular operator in the proper care and operation of said equipment.

SPECIFICATION 12

TESTING AND DISINFECTING

12-1. SCOPE.

The work under this Specification consists of testing and disinfecting of all water mains and appurtenances, plant equipment, pumping facilities, and storage facilities. Testing and disinfection shall be done by the CONTRACTOR in the presence of the ENGINEER. The cost of testing and disinfecting (including water, chemicals, equipment, etc.) shall be included in the unit and/or lump-sum prices bid. No additional payment shall be made for performance of these items.

12-2. TESTING.

All testing shall be done at the CONTRACTOR'S expense and in accordance with AWWA Standards and manufacturers' recommendations, unless otherwise specified. Any defects in materials or workmanship shall be corrected and retesting shall be at the CONTRACTOR'S expense.

12-2.1. DISTRIBUTION SYSTEM AND APPURTENANCES.

Hydrostatic tests shall be performed on all newly laid pipe and shall consist of a pressure and leakage test. The test shall be run before disinfection and before making service connections. The CONTRACTOR shall furnish the water, pump, piping, meters, connections, and all the necessary apparatus and labor to conduct the test. All pipe shall be tested in accordance with AWWA C600 unless otherwise specified.

Hydrostatic tests shall be performed between all valved and end sections; on shorter sections where practical; and as required to meet the test restrictions contained herein. The test shall be run only after concrete blocking has properly cured (5 days for regular cement and 2 days for high-early strength cement). All fittings, hydrants, plugs, etc., shall be properly blocked and protected.

The testing method described in this section is specific for water pressure testing and is not to be applied for air pressure testing due to the serious safety hazards involved.

a. Test Restrictions.

1. The test pressure, as measured at the point where the highest pressure occurs during normal operation, shall be at least equal to the maximum pressure rating of the pipe.

For systems using different classes of pipe, a separate test shall be run on each section at the respective pressure rating of the pipe being tested. The CONTRACTOR may, at his option and risk, test different sections of pipe simultaneously provided the higher test pressure is used and all other conditions are met.

2. The duration of the test shall be at least 2 hours.
3. The test pressure shall not vary more than 5 psi for the duration of the test.
4. The test pressure shall not exceed the pipe or thrust-restraint design pressures nor be more than twice the rated pressure of the valves or hydrants.

b. Pressurization.

Initial filling of the main to be tested shall be at a rate such that the velocity in the main does not exceed 1 fps. The CONTRACTOR shall take great care to assure that all air is expelled from the main. Where air vents are not located at high points, corporation stops shall be installed as required to expel the air during the filling process. After completion of the test, the corporation stops shall be removed at the discretion of the ENGINEER or used for service line connections, if practical.

Pressurization of the main shall begin only after the main is completely filled with water and all air is removed. Pressure shall be applied through a corporation stop set by the CONTRACTOR. Testing shall not begin until the test pressure has stabilized.

c. Examination.

All exposed pipe, fittings, valves, hydrants, joints, etc., shall be examined during the test. Any visible leaks or defects shall be corrected despite the results of the leakage test and the test shall be repeated until it is satisfactory to the ENGINEER.

d. Leakage.

Leakage is defined as the amount of water that must be added to the test section to maintain the test pressure. The duration of the test shall be 2 hours. At the end of the test, the Contractor shall meter and record accurately the amount of water required to restore the test pressure in the section being tested. The allowable leakage shall be determined by the following formula:

$$L = S \cdot D \cdot [p^{0.5}] / 133,200$$

Where,

L	=	Allowable leakage, in gallons per hour
S	=	Length of the test section, in feet
D	=	Diameter of the pipe being tested, in inches
$p^{0.5}$	=	Square root of the average test pressure

If the test shows any section with leakage greater than the allowable, the leak shall be located and repaired and the section retested.

12-2.2. OTHER TESTS.

Other tests, as required for equipment, storage facilities, etc., shall be conducted in accordance with the applicable specifications.

12-3. DISINFECTION.

All existing facilities exposed to possible contamination and all new facilities shall be thoroughly disinfected and tested for the absence of coliform organisms before placing or replacing into service. All disinfection shall be with chlorine or chlorine compounds in such amounts as to produce a concentration of at least 50 mg/l and a residual of at least 25 mg/l at the end of 24 hours.

Disinfection shall be in accordance with State Regulations.

12-3.1. GENERAL.

The general procedure for disinfection is outlined as follows:

- a. The CONTRACTOR shall prevent any contaminating materials from coming into contact with the facilities by utilizing good construction procedure.
- b. The CONTRACTOR shall remove all possible contaminating materials by flushing or other means.
- c. The CONTRACTOR shall chlorinate any residual contamination that may remain and dispose of the chlorinated water.
- d. The CONTRACTOR shall determine the bacteriological quality of the water through certified laboratory testing.

12-3.2. FORMS OF CHLORINE.

The forms of chlorine that may be used in the disinfection process are liquid chlorine, sodium hypochlorite solution, and calcium hypochlorite granules or tablets. The procedure for use and handling of the chlorine shall be in strict compliance with all AWWA and applicable safety standards.

Liquid chlorine contains 100 per cent available chlorine and is produced by mixing chlorine gas with water and injecting the solution into the facilities being disinfected. Direct feed of chlorine gas into the main shall not be permitted.

Sodium hypochlorite is in liquid form and contains approximately 5 to 15 per cent available chlorine. It is fed into the facilities by hand-pouring and mixing with the incoming water or by pumping a solution of known strength into the facilities.

Calcium hypochlorite is in either granular or tablet form and contains approximately 65 per cent available chlorine by weight. It is fed into the facilities by hand-pouring or pumping as described above. One pound of calcium hypochlorite added to 8.5 gallons of water produces a 1 per cent solution.

12-3.3. PREVENTIVE AND CORRECTIVE MEASURES DURING CONSTRUCTION.

It is essential that the facilities are thoroughly clean prior to disinfection and good construction procedures shall be used.

If, in the opinion of the ENGINEER, it appears that all dirt and debris cannot be removed hydraulically, the facilities shall be mechanically cleaned and swabbed with a 1 per cent hypochlorite disinfecting solution.

In cases of pipe contamination by flooding during installation, the main shall be flushed until clean and disinfected so that a 25 mg/l solution is maintained at the end of a 24 hour period. After cleaning and disinfecting, construction may resume.

12-3.4. DISINFECTION OF NEW MAINS.

Two methods of disinfecting mains are offered and the CONTRACTOR shall be responsible for selecting the method best suited for the conditions encountered.

a. Preliminary Flushing.

Preliminary flushing to remove visible evidence of contamination shall be at a rate to produce a velocity of 2.5 fps within the main unless it is determined by the ENGINEER that conditions do not permit the flow. As a guide, Table 12-1 shows the required flow and number of openings to produce a flushing velocity of 2.5 fps in various size mains at 40 psi residual pressure. It shall be the CONTRACTOR'S responsibility to verify the rate required for the actual field conditions.

TABLE 12-1 REQUIRED FLOW AND OPENINGS TO FLUSH PIPELINES* (40 PSI Residual Pressure In Water Main)				
Pipe Diameter Inches	Flow Required To Produce 2.5 fps Velocity in Main GPM	TYPE OF DISCHARGE OUTLET		
		Size of Main,** Tap On Inches	Hydrant Outlets	
			Number	Size, Inches
4	100	0-15/16	1	2-1/2
6	220	1-3/8	1	2-1/2
8	390	1-7/8	1	2-1/2
10	610	2-5/16	1	2-1/2
12	880	2-13/16	1	2-1/2
16	1,565	2-5/8	2	2-1/2

* With a 40 psi pressure in the main with the hydrant flowing to atmosphere, a 2-1/2 inch hydrant outlet will discharge approximately 1,000 GPM. A 4-1/2 inch hydrant outlet will discharge approximately 2,500 GPM.

** Size of tap on main, with no significant length of discharge piping.

b. Methods of Application.

All sections being disinfected shall be properly valved or otherwise disconnected to prevent the strong chlorine solution from entering the mains in active service. All valves and hydrants within the section shall be operated to assure contact with the disinfectant.

Two acceptable methods of application are as follows:

1. Tablet Method.

This method may be used only when the pipes and appurtenances are kept clean and dry during construction and for mains smaller than 24 inches in diameter. It shall not be used on solvent welded plastic or screwed joint steel pipe.

Under this method, hydrostatic tests will be run while disinfection is taking place. If any leaks are detected and the main is either partially or completely drained to make the necessary repairs, the CONTRACTOR shall start the disinfection over using the continuous feed method.

During construction, 5-g calcium hypochlorite tablets shall be placed in each section of pipe and one tablet in each hydrant, hydrant branch and other appurtenances. The number of tablets to place in each pipe section shall be sufficient to produce a concentration of 50 mg/l. As a guide, Table 12-2 is presented. The tablets shall be attached to the inside top of the pipe with an adhesive such as Permatex No. 1 or equal.

Pipe Diameter, Inches	Length Of Pipe Section				
	13 Feet or Less	18 Feet	20 Feet	30 Feet	40 Feet
4	1	1	1	2	2
6	2	2	2	3	4
8	2	3	3	5	6
10	3	5	5	7	9
12	5	6	7	10	14
16	8	12	14	20	26

Preliminary flushing of the main is eliminated for this method. The mains shall be filled as specified herein and chlorinated water shall remain in the main for 24 hours unless the water temperature is less than 41 degrees Fahrenheit, in which case the contact time shall be extended to 48 hours. After the required contact time, and verification of the 25 mg/l residual, final flushing of the main shall take place as specified.

2. Continuous Feed Method.

This method is suitable for general applications. Initial filling, testing and preliminary flushing shall be in accordance with the procedures previously set forth.

The main shall be refilled at a constant measured rate while injecting chlorinated solution into the main at a point no further than 10 feet downstream from the beginning. The chlorine shall be continuously fed into the main at a constant rate such that the water in the main has a concentration of at least 50 mg/l free chlorine. Measurements shall be taken at regular intervals along the new main to assure that this concentration is maintained. The contact time shall be 24 hours and the free chlorine residual at the end of the contact period shall not be less than 25 mg/l as specified. After verification of the residual, final flushing may take place.

Table 12-3 gives the amount of chlorine required to produce 50 mg/l in 100 feet of pipe for the diameters shown.

TABLE 12-3
CHLORINE REQUIRED TO PRODUCE 50 mg/l
CONCENTRATION IN 100 FEET OF PIPE BY DIAMETER

Pipe Diameter Inches	100 Per Cent Chlorine Pounds	1 Per Cent Chlorine Solution Gallons
4	.027	0.33
6	.061	0.73
8	.108	1.30
10	.170	2.04
12	.240	2.88
16	.435	5.20

12-3.5. MISCELLANEOUS DISINFECTION.

All cutting into or repairing of existing mains and all pumps, valves and appurtenances in a treatment plant, coming into contact with a potable water, shall be thoroughly cleaned and then shall be swabbed or sprayed with a 1 per cent hypochlorite solution before installation. Flushing, the most practical means of removing contamination introduced during repairs, shall be started when the repairs are completed and shall be continued until discolored water is eliminated.

12-3.6. DISINFECTION OF STORAGE FACILITIES.

Two methods of disinfecting storage facilities are offered and it shall be the CONTRACTOR'S responsibility to select the method best suited for the conditions.

a. Method 1.

For this method, the storage facility shall be slowly filled to the overflow with potable water to which enough chlorine has been added to provide a concentration of at least 50 mg/l and a residual of 25 mg/l at the end of the 24 hour contact period. The chlorine shall be introduced into the water as early during the filling operation as possible. Approximately 60 pounds of high test hypochlorite will produce 50 mg/l in 100,000 gallons of water.

After verification of the residual, the facility may be flushed as specified herein.

b. Method 2.

For this method, a solution of 250 mg/l available chlorine shall be applied directly to all surfaces of the storage facility that come in contact with the potable water including inlet piping. The solution shall be applied with suitable brushes or spray equipment and the necessary safety precautions shall be taken.

The spraying procedure shall be repeated within 1 hour of completion of the initial spraying. After completion of the second spraying and within 30 minutes of completion, the tank shall be drained and the filling procedure started.

12-3.7. FINAL FLUSHING.

After the specified contact time and after verification of the chlorine residuals, the heavily chlorinated water shall be flushed from the system. Flushing shall be done in a manner to protect the environment and the chlorinated water shall be neutralized with a reducing agent, if necessary. Water remaining in the main or storage facilities shall have a chlorine concentration no higher than that generally prevailing in the system but no less than 1 mg/l.

12-3.8. BACTERIOLOGICAL TESTS.

After final flushing, and before the new main is placed in service, a sample or samples shall be collected from the ends of the lines and tested by an approved laboratory to show the absence of coliform organisms. The results shall conform with the applicable State Standards. State Regulations regarding the method of collecting samples, the number of samples required and any other conditions, more stringent than those specified, shall prevail.

The ENGINEER shall be furnished with a copy of the State approved bacteriological test report before the facilities are put into service.

12-3.9. REDISINFECTION.

If the initial disinfection fails to produce satisfactory results, the facility shall be reflushed and resampled. If the additional samples reveal contamination, the facility shall be drained and rechlorinated. At the CONTRACTOR'S discretion, samples of the water entering the facility may be tested as well.

SPECIFICATION 14

ASSOCIATED MISCELLANEOUS WORK

14-1. GENERAL.

This Specification covers the furnishing of all labor, materials and equipment for associated miscellaneous work to be incorporated in the project. All materials and equipment shall be new and unused and workmanship shall be of the highest quality and in accordance with the best standard practice to result in a finished product ready for the use intended.

Payment for associated miscellaneous work, unless itemized in the proposal, shall be included in the lump sum or unit price of the particular work item and there shall be no additional payment.

14-2. LANDSCAPING.

This work shall include final grading, seedbed preparation and seeding and/or planting for replacement of areas disturbed during the work and for other sites or areas designated for landscaping. No item of work shall be considered complete until completion of landscaping.

Seeding and planting shall be done during the proper season and moisture conditions established by good horticultural practices to insure the best results. The CONTRACTOR shall be responsible for a good stand of grass and healthy plants for one year.

14-2.1. FINAL GRADING AND SEEDBED PREPARATION.

Final grading shall be to the lines, grades and elevations shown on the Plans. Surface drainage shall be away from any structures and no low spots shall exist.

Six inches of topsoil, free from roots, stones and other objectionable material, suitable for top dressing of a seedbed shall be used in all areas designated for landscaping where gravel, stones, clay and other unsuitable materials exist as determined by the ENGINEER.

After final grading and application of topsoil, if required, the CONTRACTOR shall take soil samples (by the approved method) from all areas of differing soil conditions as directed by the ENGINEER. These samples shall be taken to the local farm bureau for a soil analysis that shall form the basis for lime, nitrogen, phosphoric acid and potash to be used for the particular seeds and/or plantings.

The agricultural lime and fertilizer shall be applied uniformly over the area and the seedbed shall be prepared to a minimum depth of three inches. All clods, rocks, roots and other undesirable material shall be removed. Gentle berms shall be constructed around the various units and all areas shall be dressed by hand to form a satisfactory seedbed as approved by the ENGINEER.

14-2.2. SEEDING AND PLANTING.

Seeding and planting shall be performed immediately after the seedbed has been prepared and seed shall be uniformly distributed over the area to be seeded.

All plants and trees shall be delivered to the site balled or potted, shall have a healthy appearance and shall be guaranteed by the nursery. All seed shall be delivered to the site in sealed bags certified to show the percentage of purity and germination. Lawn replacement of

areas disturbed during the work shall be of the same grass variety as the original lawn. If this cannot be determined, a certified lawn mixture shall be furnished and the application rate of any grass variety shall be as recommended on the container or tag. Any other areas where the seed variety is not specified shall be seeded with Kentucky 31 fescue at the rate of 35 pounds per acre. No seed shall have a test date of more than 120 days before the date of the seeding.

Mulch consisting of wheat or rye straw, or threshed fescue straw, shall be applied uniformly over all seeded areas at the rate of 2 tons per acre. The mulch shall be stabilized (especially on slopes) by stakes and twine; a weighted disk set straight; or any method approved by the ENGINEER.

14-3. ROADWAYS AND BLACKTOPPING.

This work applies to repairing an existing bituminous concrete road or drive or construction of a new bituminous concrete road or drive. This consists of the base course, prime or tack coat and surface course.

14-3.1. SEASONAL AND WEATHER LIMITATIONS.

No bituminous concrete shall be laid between November 15 and April 1, nor when the temperature is below 40 degrees F except by written permission of the ENGINEER, nor when the underlying course is wet, nor when other weather conditions are unsuitable.

14-3.2. BASE COURSE.

The base course shall be 8 inches of compacted bank gravel or 6 inches of compacted dense grade crushed stone. Either base course used shall be approved for highway use. The base course shall be accurately graded to provide adequate drainage both off of and away from the roadbed. New surfaces shall be uniformly crowned at 1/2 inch per foot unless otherwise shown on the Plans. The base course shall be compacted by a roller weighing not less than 3 tons.

14-3.3. REPAIRS TO EXISTING SURFACES.

Where an existing surface is destroyed and repairs are specified, the entire area so disturbed shall be thoroughly cleaned and the base course (specified above) shall be compacted in 4 inch layers to the required depth for making the new surface level with the existing surface.

14-3.4. PRIME COAT.

A prime coat to seal and stabilize the surface of the base shall be liquid asphalt MC-1, liquid asphalt RC-2, or CBAE primer L and shall be applied, as specified, at the rate of 0.3 gallons per square yard.

14-3.5. TACK COAT.

A tack coat, to insure adhesion with an existing surface, shall be RS-2 emulsion and shall be applied at the rate of 0.1 gallon per square yard.

14-3.6. SURFACE COURSE.

The surface course to be used shall be 2 inches of hot-mixed, hot-laid, bituminous concrete with the following composition limits by weight:

Passing 1/2 inch, retained on No. 4 sieve	40 - 55 %
Passing No. 4, retained on No. 10 sieve	15 - 30 %
Passing No. 10 sieve	15 - 30 %
Hydrated lime	0.5 - 1.0%
Asphalt cement (other than liquefier)	5.0 - 7.5%
Liquefier	0.4 - 1.2%

14-4. GENERAL CLEANUP.

Cleanup, as directed by the ENGINEER, shall be maintained throughout the time of construction. Trench settlement and additional earth fill, if required, shall be included in cleanup and shall be the responsibility of the CONTRACTOR for one year after substantial completion.

All areas and locations of the work under this contract shall be left in a neat and clean condition. All debris, scrap, waste and other undesirable and objectionable material shall be completely removed from the site. All areas shall be restored and/or replaced to a condition equal to or better than conditions before construction and to the satisfaction of the property owner.

14-5. CHAIN LINK FENCE.

This article shall govern all material, equipment, labor and construction complete for a chain link fence and gates as shown on the Plans.

14-5.1. POSTS, RAILS AND BRACES.

All structural and roll-formed shapes shall conform with provisions of ASTM A123 for galvanized coating and all tubular members shall comply with provisions for ASTM A120, Schedule 40 steel pipe.

- a. End, corner, pull and gate posts shall be 3 inch O.D. set 3 feet deep in concrete footings with 3 inches of concrete below.
- b. Line posts (10'-0" maximum spacing) shall be 2 inch O.D. and shall be set 3 feet deep in concrete footings with 3 inches of concrete below.
- c. Top rails and gate posts shall be 1-5/8 inch O.D.

14-5.2. CHAIN LINK FABRIC.

The fabric shall be 2 inch mesh, No. 9 gauge, heavy galvanized with 2.0 ounces zinc per square foot complying with ASTM A392, Class 2, or aluminum coated complying with ASTM A491, Class 2. The chain link fabric shall be 6'-0" in height.

14-5.3. ACCESSORIES.

All accessories, except tie wires and barbed wire, shall be galvanized to comply with ASTM A153.

- a. Barbed wire supporting arms shall be integral with post top weather cap, shall have hole for passage of top rail and shall support 3 strands of barbed wire at an angle of 45 degrees.

- b. Barbed wire shall have 2 strand, 12-1/2 gauge wire with No. 14 gauge, 4 point round barbs and shall be galvanized per ASTM A121, Class 3.
- c. Fabric ties shall be No. 9 gauge aluminum wire and shall be spaced at 14 inches o/c on the posts and 24 inches o/c on the rails.

14-5.4. GATES.

Fabricated gates, as shown on the Plans, shall be adequately braced for proper operation and to prevent sagging. Gate hardware shall be heavy galvanized and shall include:

- a. Hinges of pressed steel or malleable iron of the non-lift-off type, offset to permit 180 degrees gate opening.
- b. Latch of the forked type or plunger-bar type with a padlock eye to permit operation from either side of gate.
- c. Keeper for all vehicle gates to engage automatically and hold the gate in the open position until manually released.
- d. Double gates provided with a mushroom-type or flush plate with anchors set in concrete to engage the center drop rod.

14-6. FARM-TYPE FENCE.

The farm-type fence and gate(s) shall be woven wire with barbed wire above and below as shown on the detailed Plans.

14-6.1. FENCE MATERIALS.

- a. Barbed Wire.

Barbed wire shall be 12-1/2 gauge steel and shall comply with ASTM A121 and shall have Class 2 zinc coating.

- b. Woven Wire.

Woven wire shall be general-purpose field wire, closely spaced at the bottom with 10 gauge top and bottom wires and 12-1/2 gauge line and stay wires. It shall be 32 inches in height, have 6 inch spacing between stays and shall contain 8 line wires. It shall have an ASTM A116, Class 1 zinc coating.

- c. Brace & Tension Wire.

Brace and tension wire shall be 9 gauge steel, shall comply with ASTM A121 and shall have a Class 2 zinc coating.

- d. Staples.

Staples shall be 9 gauge, 1-1/2 inches long and shall be zinc coated.

- e. Posts.

Wooden posts shall be new, straight and sound and shall be pressure treated in accordance with Federal Specification TT-W-571c.

Steel posts shall be the studded tee type, galvanized with minimum dimensions of 1-1/2 inches x 1-1/2 inches x 1/8 inch.

All end, corner, brace and gate posts shall be wood, having a minimum diameter of 6 inches and shall be set 3-1/2 feet deep.

Line posts, set 2-1/2 feet deep, shall be either wood with a minimum diameter of 4 inches or steel tee type posts that may be substituted between each fifth wooden post.

f. Wooden Braces.

Wooden braces shall be installed between brace posts and end posts or gate posts and shall be 4 inch x 4 inch pressure treated lumber.

14-6.2. CONSTRUCTION.

Construction of the farm-type fence shall be in accordance with the detailed Plans and wood posts shall be set at all corners, angles, ends and gates with wooden brace posts set as shown on the Plans. All posts shall be set to the required depth in holes large enough to allow room for alignment and tamping on all sides. They shall be set vertically, shall be firmly tamped and the tops shall be beveled at 45 degrees.

Wire shall be fastened to the post outside of the area being enclosed, except in corners or curves, where the wire shall be placed on the outer side of the corner or curve. The wire shall be placed as shown on the Plans with a single strand of barbed wire near the bottom, the 32 inch woven wire in the center and two strands of barbed wire above the woven wire.

The wire shall be attached to the wood posts with staples and to the steel posts with approved fastener clips. Staples and/or fasteners shall allow horizontal movement of the line wire and shall securely support the fence. At end and gate posts, the wire shall be wrapped once around the post and secured by splicing each line wire to itself with no less than six complete turns.

Gates shall be installed at locations shown on the Plans and shall be considered a part of the complete fence.

RSON COUNTY

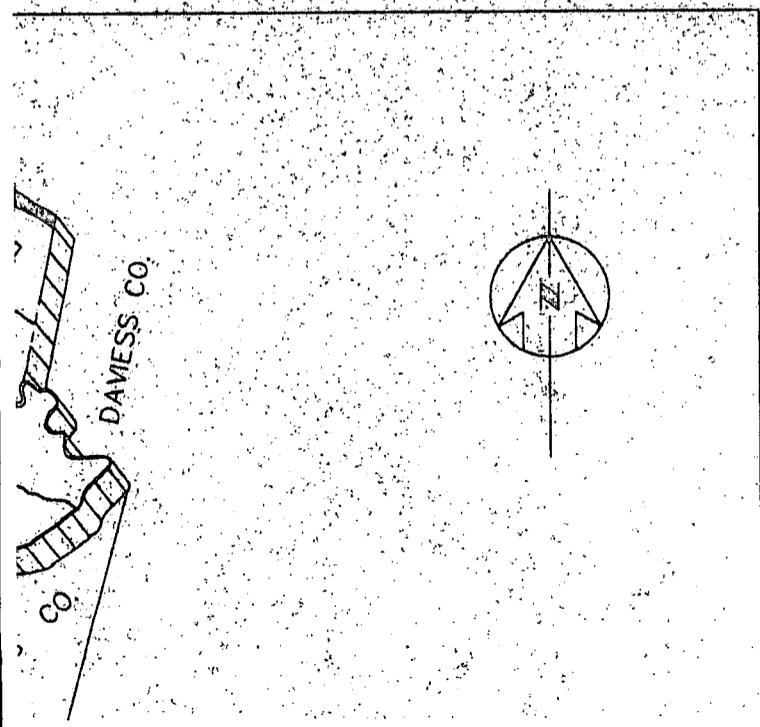
ENDERSON COUNTY

**1999 / 2000 DIST
SYSTEM IMPRO
CONTRACT**

COMMISSIONERS

D. C. HOUSE, CHAIRMAN
ROBERT L. McINDOO, SECRETARY
DAVID SPAINHOWARD, TREASURER
JIMMIE L. RUSSELL
JAMES TOMLINGSO

MANAGER



1999 / 2000 DISTRICT SYSTEM IMPROVEMENT CONTRACT

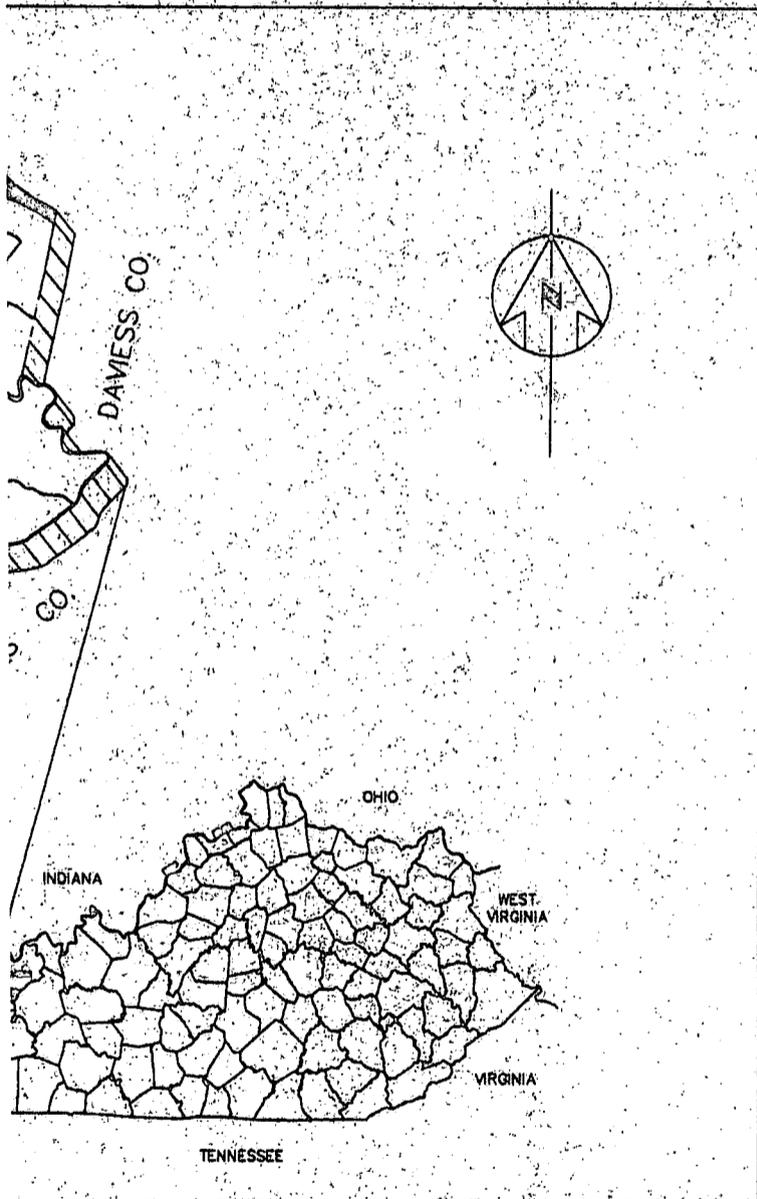
COMMISSIONERS

D. C. HOUSE, CHAIRMAN
ROBERT L. McINDOO, SECRETARY
DAVID SPAINHOWARD, TREASURER
JIMMIE L. RUSSELL
JAMES TOMLINGSON

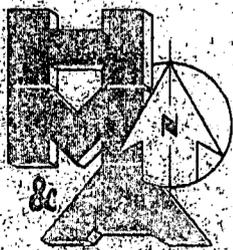
MANAGER

ALLAN VAN METER

NOVEMBER, 1999
(BID: MARCH, 2000)



P



HUNTER MARTIN & ASSOCIATES

ENGINEERS & SURVEYORS
3220 LONE OAK ROAD * PADUCAH, KY 40301
(502) 554-2737 * FAX (502) 554-2738

RY WATER DIS' UNTY, KENTUCKY

DISTRIBUTION PROVEMENTS ACT "B"

IONERS

CHAIRMAN
OO, SECRETARY
RD, TREASURER
RUSSELL
ALINGSON

GER

SHEET	TITLE
1	COVER
2	OVERALL PLAN
3	KY HWY 136, MIDDLE PLEASANT VALLEY R
4	JONES BROS RD. ANI
5	PLEASANT HILL RD. A

DISTRIBUTION IMPROVEMENTS TRACT "B"

MEMBERS

CHAIRMAN
SECRETARY
Treasurer
RUSSELL
MILINGSON

OWNER
METER

APR, 1999
MAY, 2000)

ENGINEERS & ASSOCIATES, INC.

ENGINEERS & SURVEYORS
* PADUCAH KENTUCKY 42003
* FAX (502) 554-2738

SHEET	TITLE
1	COVER
2	OVERALL PLAN
3	KY HWY 136, MIDDLE PLEASANT VALLEY
4	JONES BROS RD. AND
5	PLEASANT HILL RD.
6	HATCHET MILL RD. AND
7	PETERS LONDON RD.
8	AUDUBON PARKWAY
9	WATER SYSTEM STA

GENERAL NOTES

1. RIP RAP SHALL BE 150# GRADE, CONTRA (SEE DETAIL SHEET "B-9") AS REQUIRED BY ENGINEER.
2. ALL WATER MAIN SHALL BE INSTALLED W/ CROWN OF ADJACENT ROAD OR AT A DEP. DETERMINED BY ENGINEER. PAYMENT FOR SHALL BE AS STATED IN THE BASIS OF BI.
3. IN LIEU OF PVC PIPE, AS SPECIFIED ON IT A MINIMUM WATER WORKING PRESSURE OF



DISTRICT

KY

INDEX

TITLE

L. PLAN

**136, MIDDLE DELAWARE RD., CASH CREEK RD.,
MOUNT VALLEY RD. AND ROBARDS RD.**

WINDS RD. AND KY HWY 416

MOUNT HILL RD. AND BIRK CITY RD.

WINDS RD. AND KY HWY 416

INDEX

TITLE

PLAN

136, MIDDLE DELAWARE RD., CASH CREEK RD.,
MOUNT VALLEY RD. AND ROBARDS RD.

BROS RD. AND KY HWY 416
MOUNT HILL RD. AND BIRK CITY RD.

WEST MILL RD. AND CONOWAY RD.

LONDON RD. AND CHASE RD.

DRIVE ON PARKWAY CROSSING

SYSTEM STANDARDS

ES:
150# GRADE. CONTRACTOR SHALL INSTALL RIP-RAP DITCH
("B-9") AS REQUIRED BY R.O.W. PERMIT OR AS DETERMINED

SHALL BE INSTALLED W/ A MINIMUM DEPTH OF 36" BELOW
MOUNT ROAD OR AT A DEPTH REQUIRED BY R.O.W. PERMIT OR AS
ENGINEER. PAYMENT FOR ADDITIONAL DEPTH (GREATER THAN 7")
SHALL BE MADE IN THE BASIS OF BID.
PIPE, AS SPECIFIED ON THE PLANS. DUCTILE IRON PIPE WITH
WORKING PRESSURE OF 200 PSI MAY BE USED.

Before the Public Service Commission

IN THE MATTER OF THE APPLICATION OF
HENDERSON COUNTY WATER DISTRICT FOR)

- (1) ISSUANCE OF CERTIFICATE OF
CONVENIENCE AND NECESSITY
AND
- (2) AUTHORIZATION TO BORROW FUNDS
AND TO ISSUE ITS EVIDENCE OF
INDEBTEDNESS THEREFOR
AND
- (3) AUTHORIZATION TO ADJUST RATES

No. 99-388

EXHIBIT 3

RECEIVED

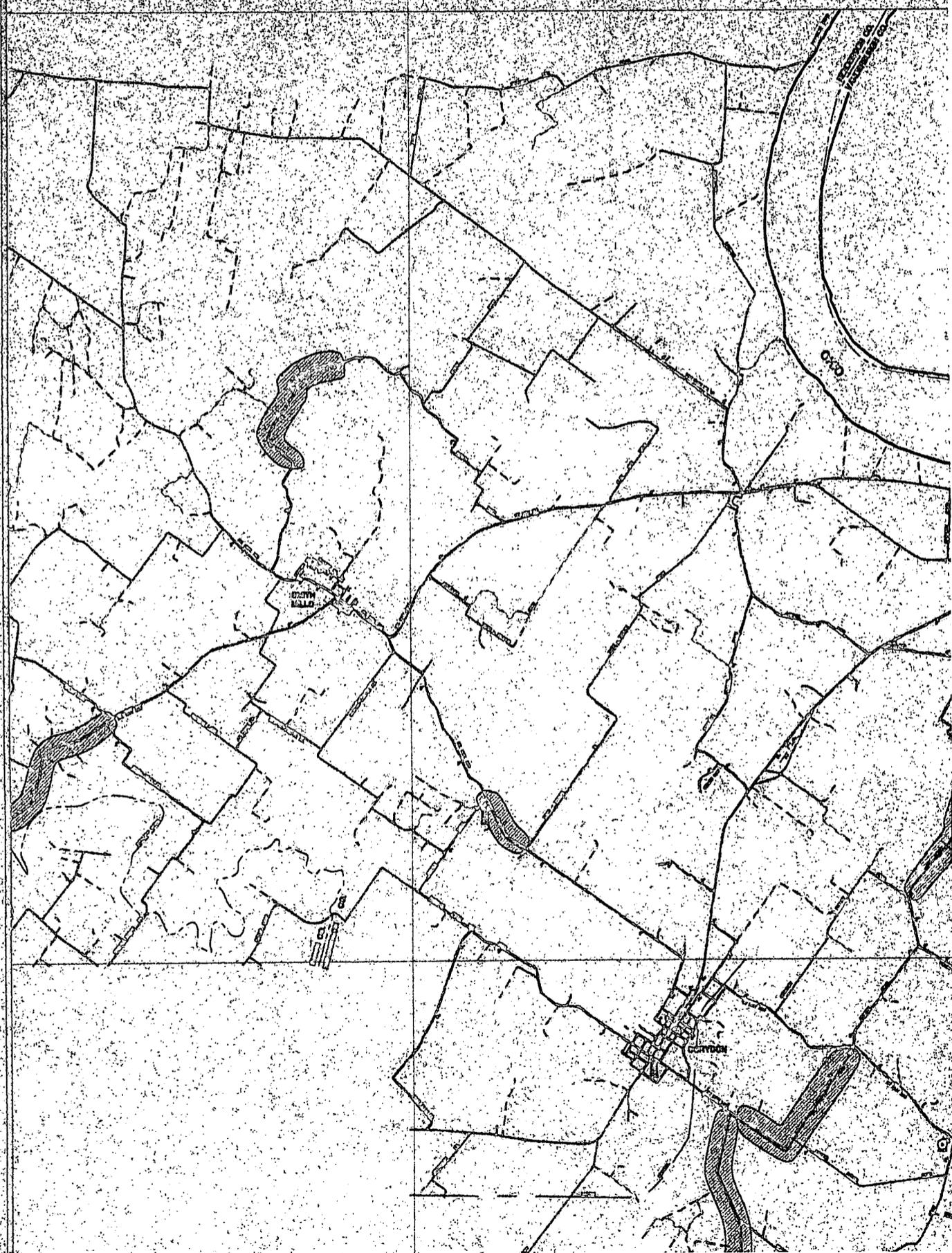
APR 19 2000

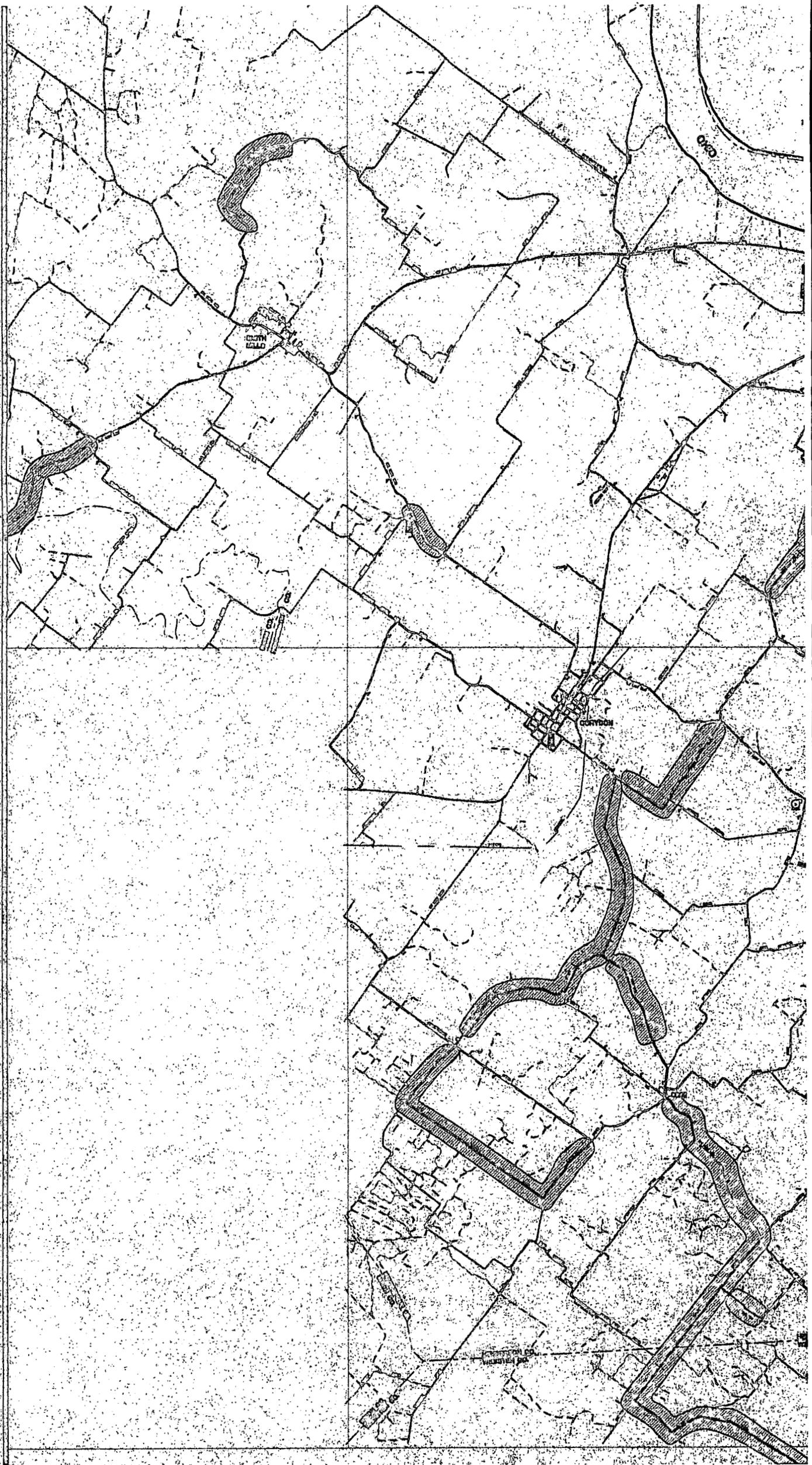
PUBLIC SERVICE
COMMISSION

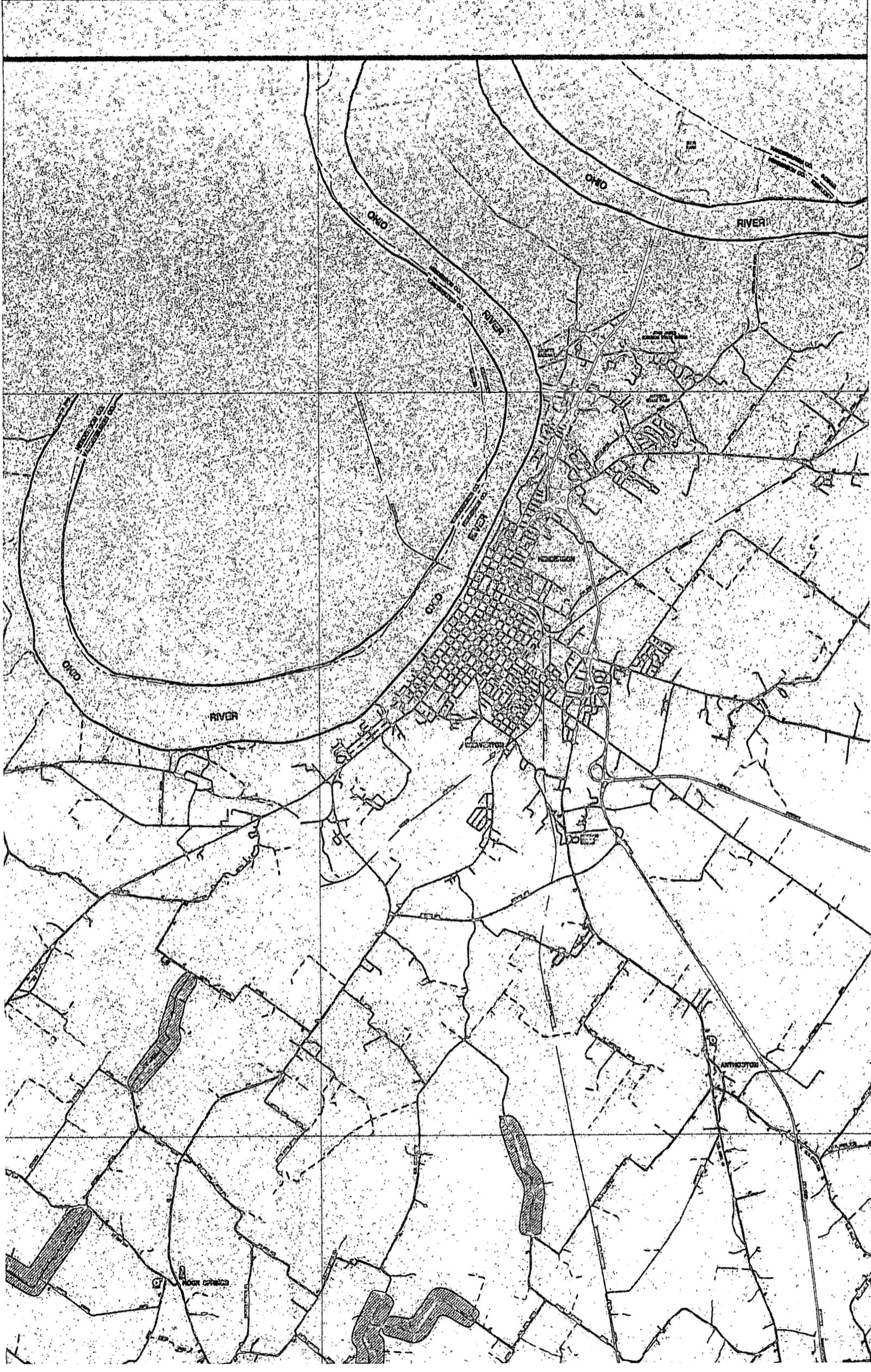
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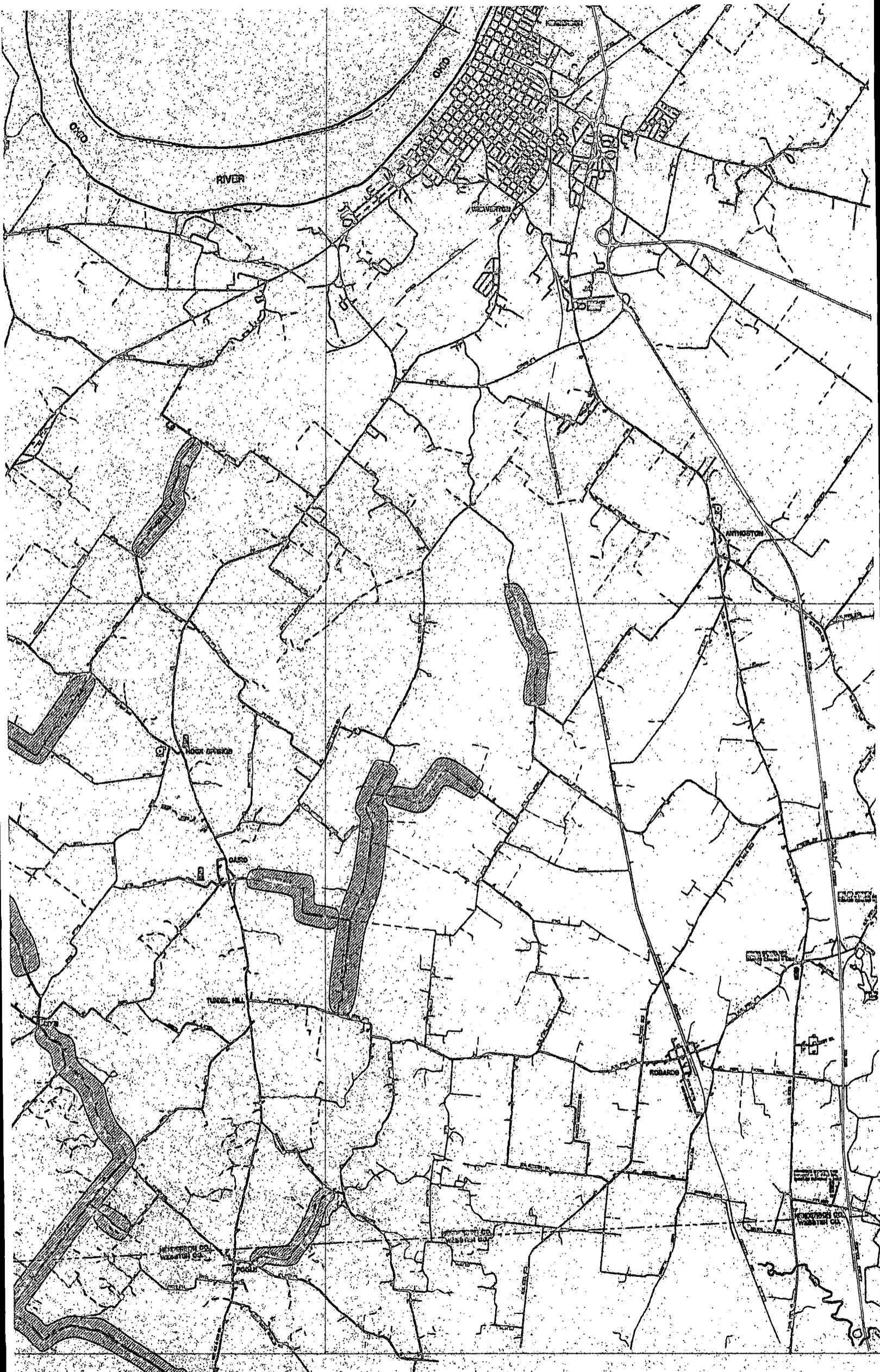
EXHIBIT
3

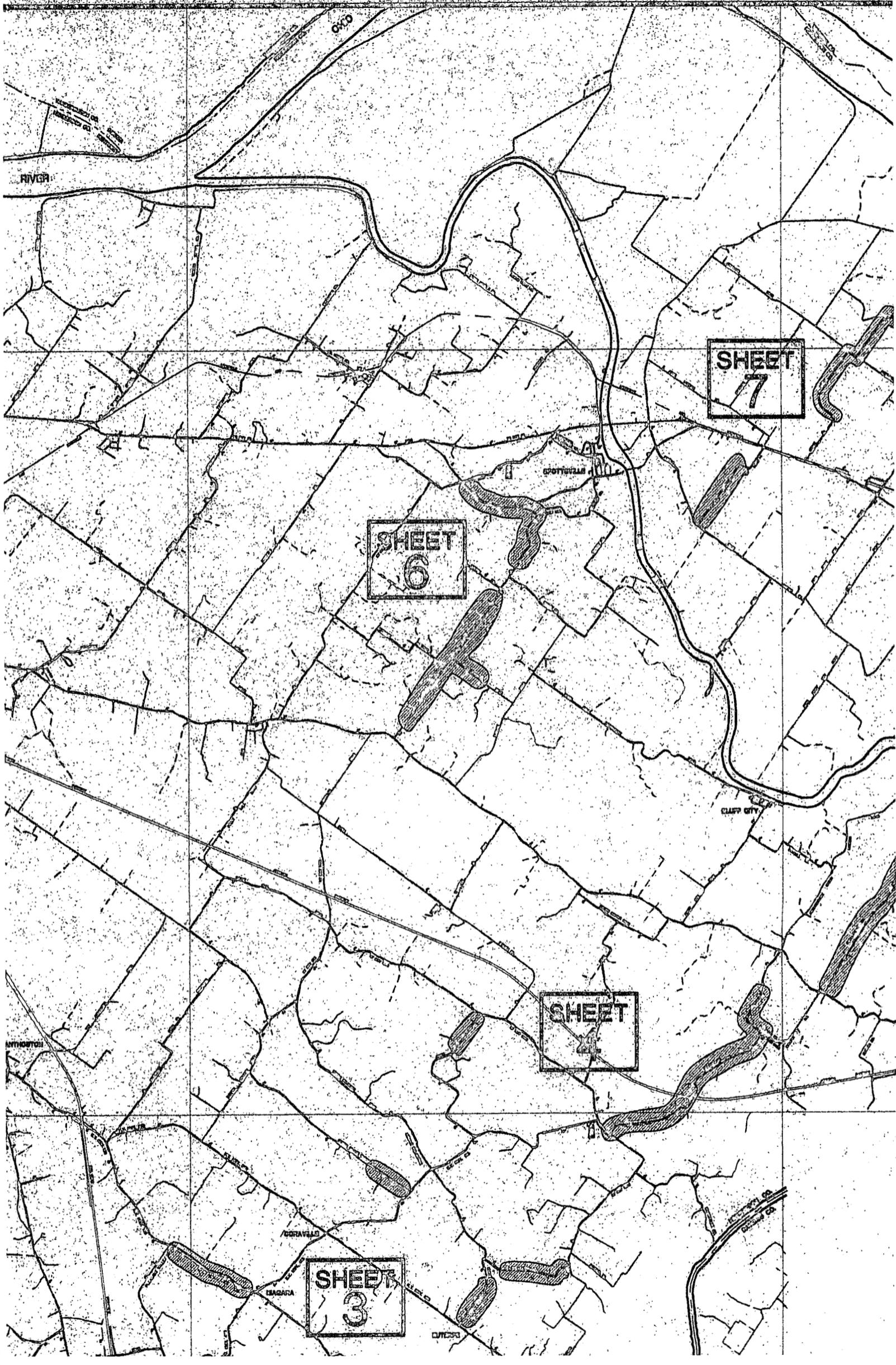








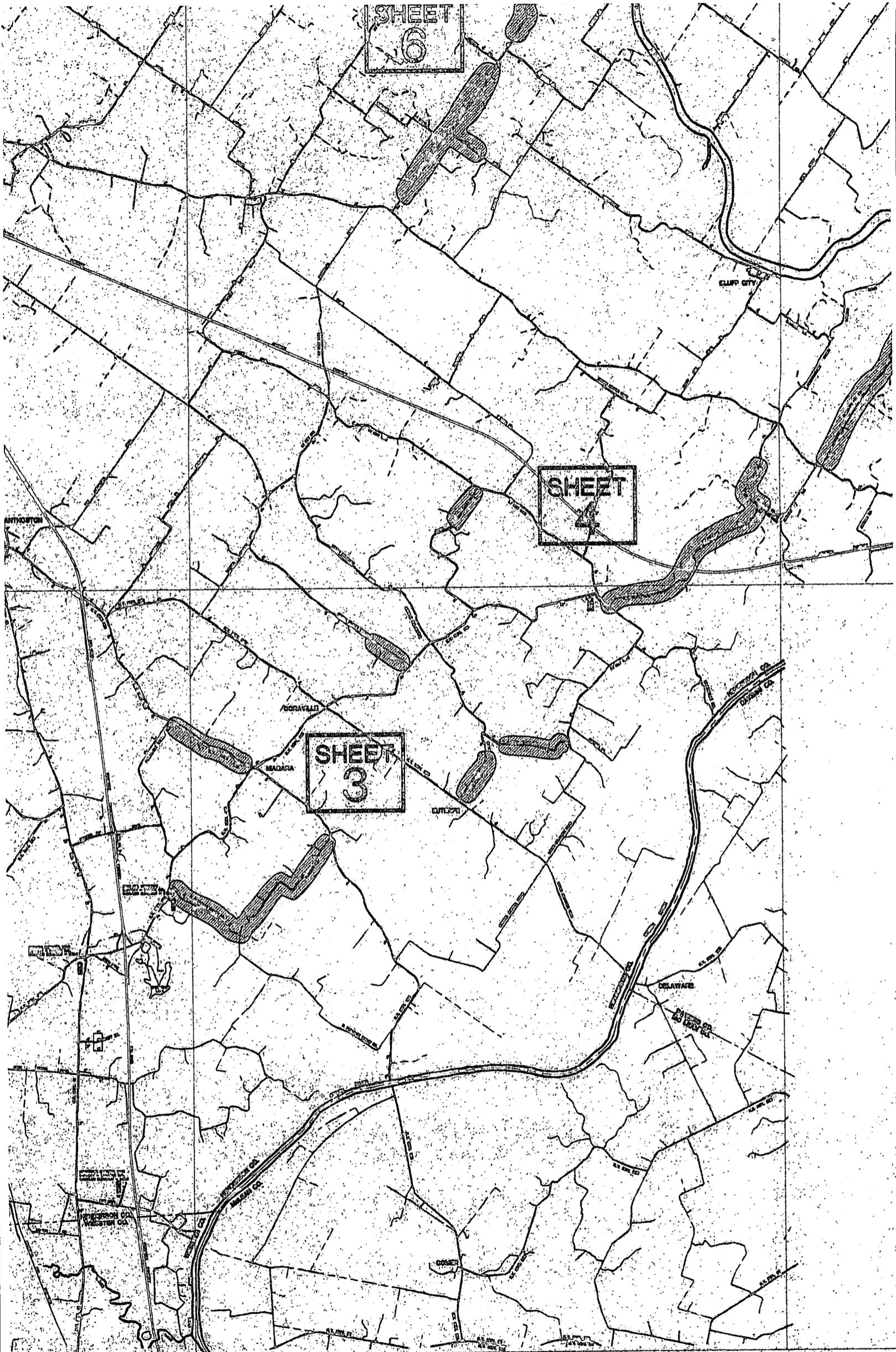


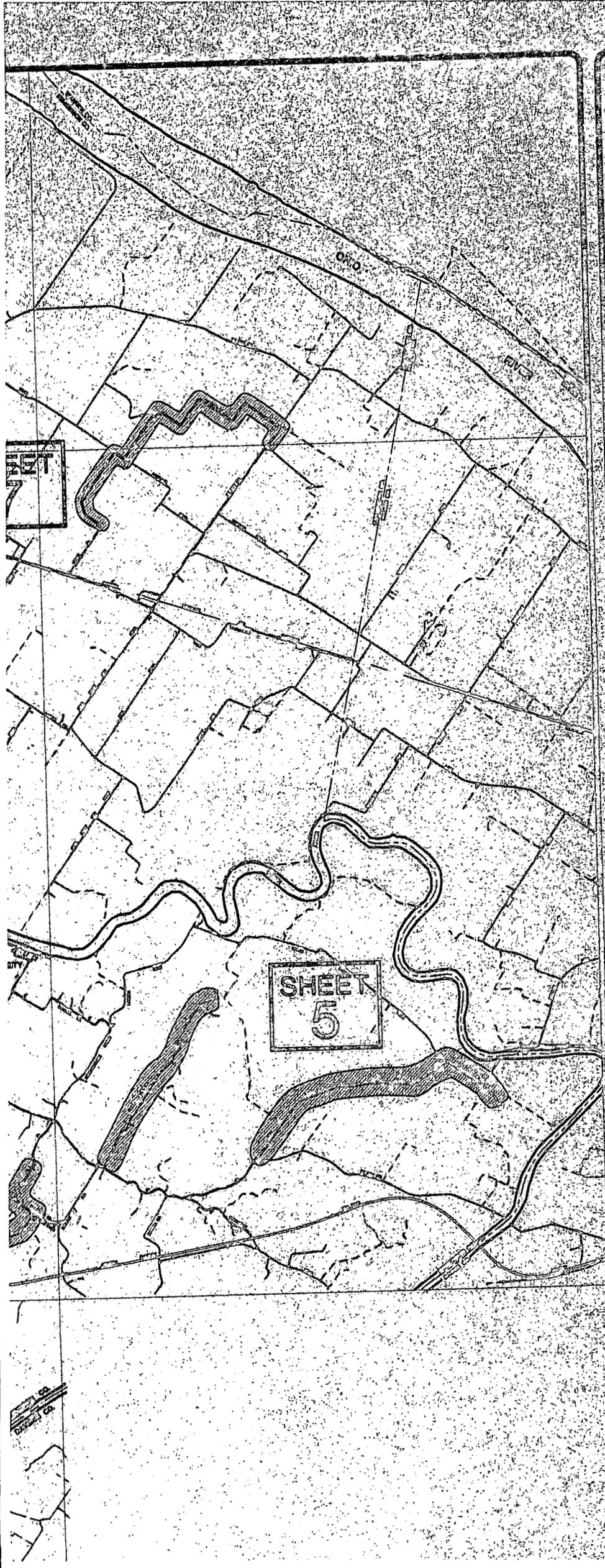


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HUNTER MARTIN & ASSOCIATES, INC.

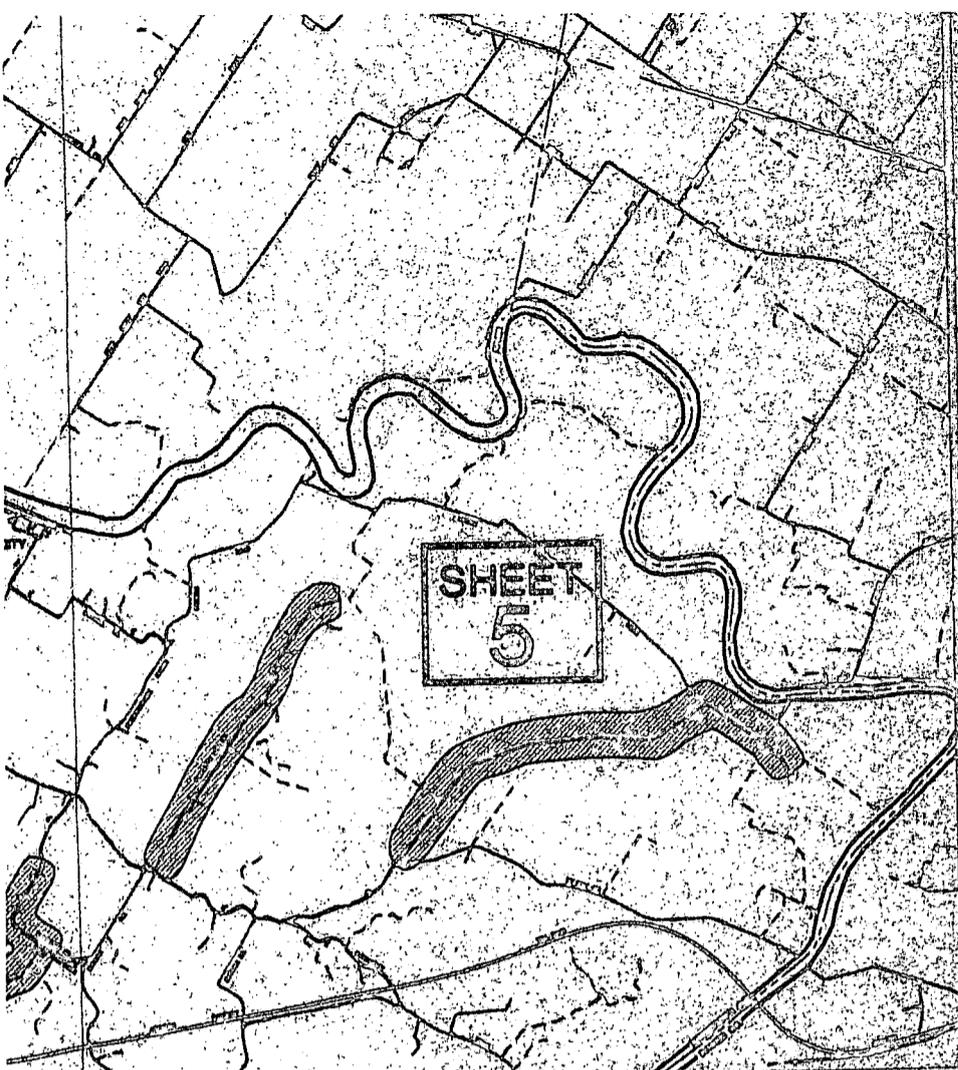
ENGINEERS & SURVEYORS
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Drawn by:	SDG
Checked by:	JRJ
File:	2000IMP2
Date:	11-28-99
Revised:	

IMPROVEMENTS

ER DISTRICT



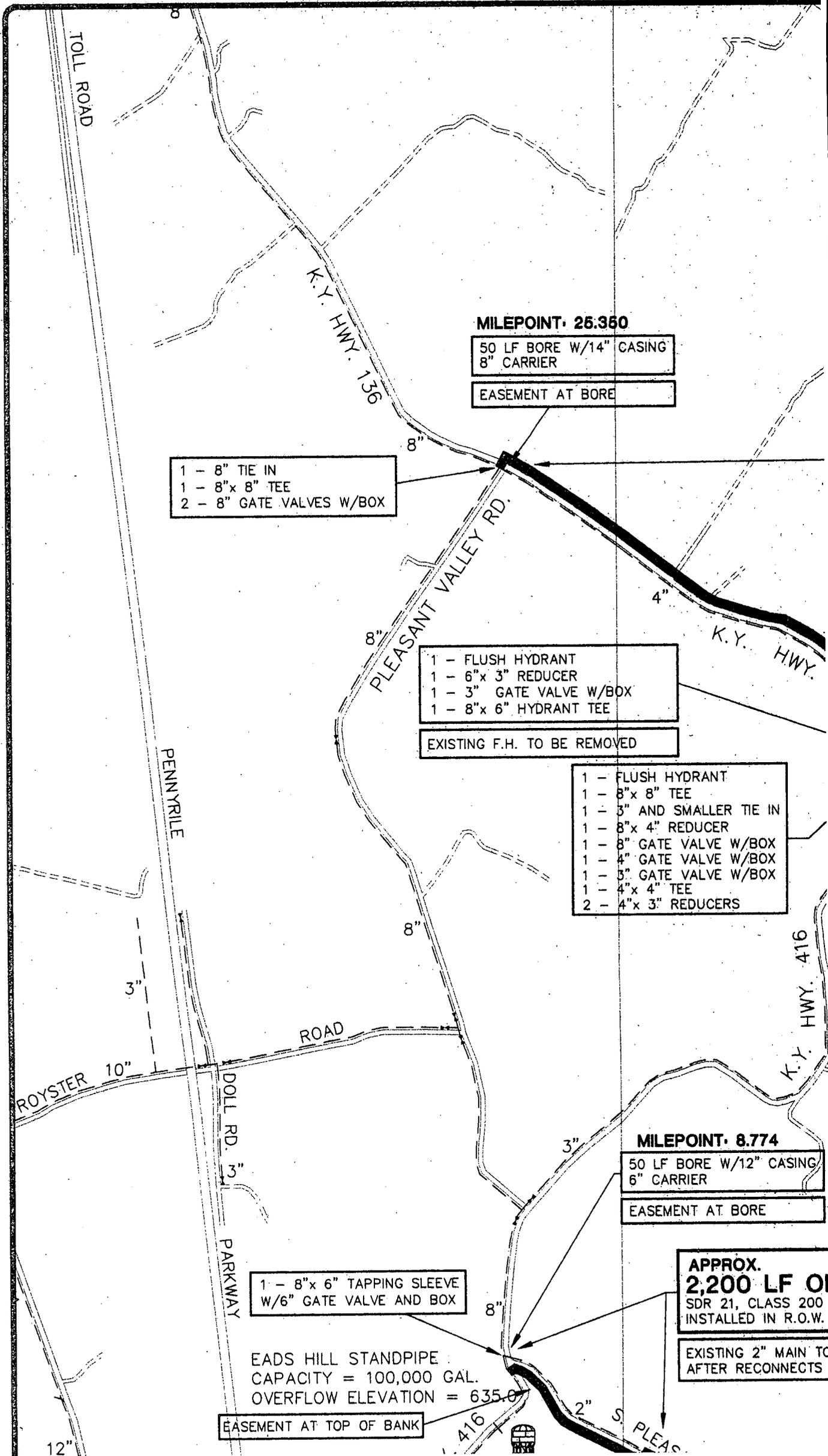
HUNTER

Drawn by:	SDC
Checked by:	JRU
File:	2000IMP2
Date:	11-28-99
Revised:	

1929/2000 DISTRIBUTION SYSTEM IMPROVEMENTS
 CONTRACT "B"
 OVERALL PLAN
 HENDERSON COUNTY WATER DISTRICT

Sheet

B2



MILEPOINT 26.360

50 LF BORE W/14" CASING
8" CARRIER

EASEMENT AT BORE

1 - 8" TIE IN
1 - 8"x 8" TEE
2 - 8" GATE VALVES W/BOX

1 - FLUSH HYDRANT
1 - 6"x 3" REDUCER
1 - 3" GATE VALVE W/BOX
1 - 8"x 6" HYDRANT TEE

EXISTING F.H. TO BE REMOVED

1 - FLUSH HYDRANT
1 - 8"x 8" TEE
1 - 3" AND SMALLER TIE IN
1 - 8"x 4" REDUCER
1 - 8" GATE VALVE W/BOX
1 - 4" GATE VALVE W/BOX
1 - 3" GATE VALVE W/BOX
1 - 4"x 4" TEE
2 - 4"x 3" REDUCERS

MILEPOINT 8.774

50 LF BORE W/12" CASING
6" CARRIER

EASEMENT AT BORE

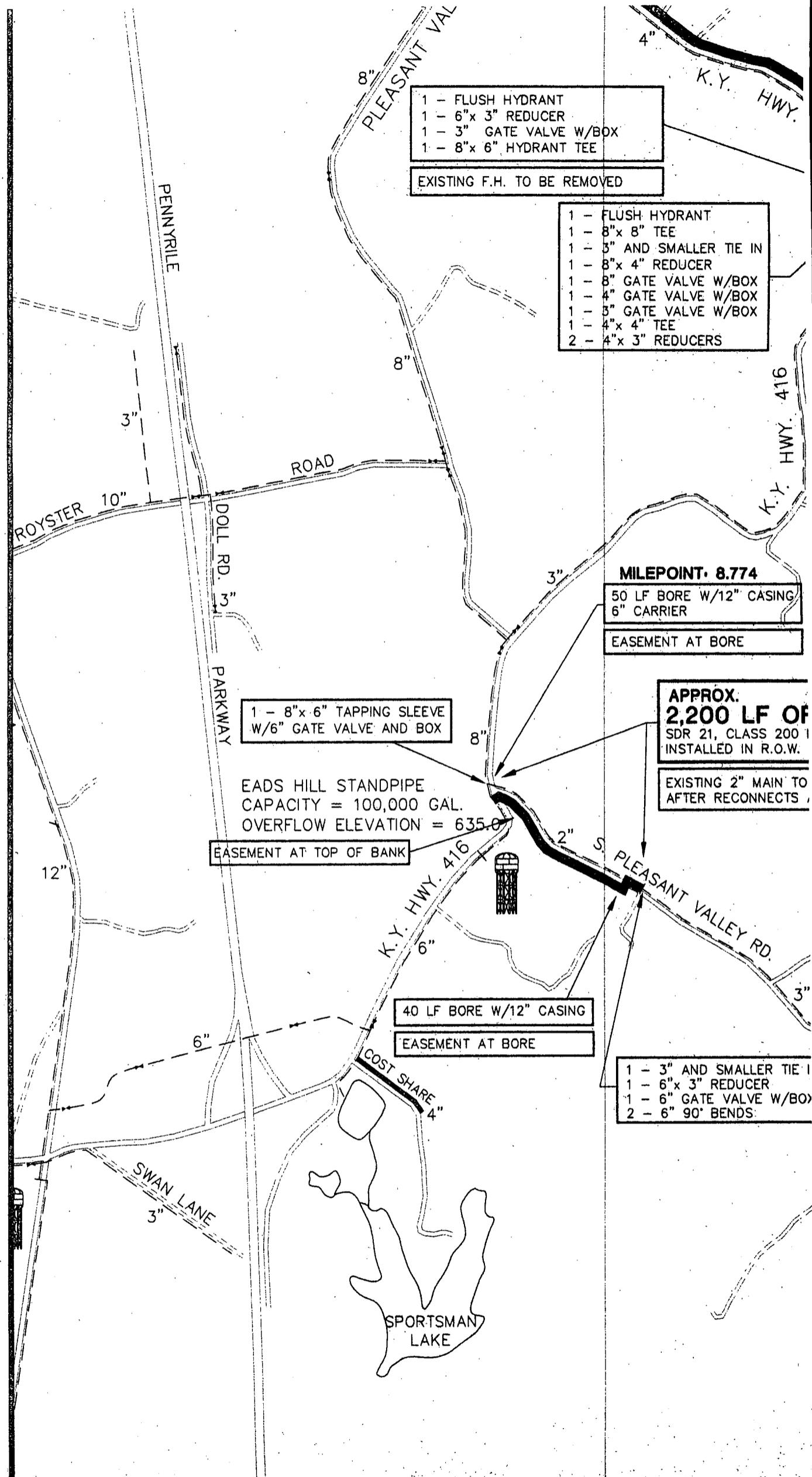
1 - 8"x 6" TAPPING SLEEVE
W/6" GATE VALVE AND BOX

EADS HILL STANDPIPE
CAPACITY = 100,000 GAL.
OVERFLOW ELEVATION = 635.0

EASEMENT AT TOP OF BANK

**APPROX.
2,200 LF OF**
SDR 21, CLASS 200
INSTALLED IN R.O.W.

EXISTING 2" MAIN TO
AFTER RECONNECTS



- 1 - FLUSH HYDRANT
- 1 - 6" x 3" REDUCER
- 1 - 3" GATE VALVE W/BOX
- 1 - 8" x 6" HYDRANT TEE

EXISTING F.H. TO BE REMOVED

- 1 - FLUSH HYDRANT
- 1 - 8" x 8" TEE
- 1 - 3" AND SMALLER TIE IN
- 1 - 8" x 4" REDUCER
- 1 - 8" GATE VALVE W/BOX
- 1 - 4" GATE VALVE W/BOX
- 1 - 3" GATE VALVE W/BOX
- 1 - 4" x 4" TEE
- 2 - 4" x 3" REDUCERS

- 1 - 8" x 6" TAPPING SLEEVE W/6" GATE VALVE AND BOX

EADS HILL STANDPIPE
CAPACITY = 100,000 GAL.
OVERFLOW ELEVATION = 635.0

EASEMENT AT TOP OF BANK

- MILEPOINT 8.774**
- 50 LF BORE W/12" CASING 6" CARRIER
- EASEMENT AT BORE

- APPROX. 2,200 LF OF**
SDR 21, CLASS 200 I
INSTALLED IN R.O.W.
- EXISTING 2" MAIN TO AFTER RECONNECTS

- 40 LF BORE W/12" CASING
- EASEMENT AT BORE

- 1 - 3" AND SMALLER TIE IN
- 1 - 6" x 3" REDUCER
- 1 - 6" GATE VALVE W/BOX
- 2 - 6" 90° BENDS

SPORTSMAN LAKE

- 1 - 3" AND LESS TIE IN
- 1 - 3"x 2" REDUCER
- 1 - 6" GATE VALVE W/BOX
- 1 - 6"x 3" REDUCER
- 1 - 6"x 6" TEE W/PLUG

**APPROX.
100 LF OF 3"**
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN R.O.W. AND EASEMENTS

**APPROX.
3,200 LF OF 6"**
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN R.O.W. AND EASEMENTS

PARALLEL OCCUPANCY
FROM MILEPOINT: 25.350
TO MILEPOINT: 26.420

**APPROX.
5,900 LF OF 8"**
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN R.O.W. AND EASEMENTS

EXISTING 4" MAIN TO BE ABANDONED
AFTER RECONNECTS ARE MADE

MILEPOINT: 26.420
50 LF BORE W/14" CASING
8" CARRIER

CORAVILLE

K.Y. HWY. 416

K.Y. HWY. 136

NIAGARA

- HYDRANT TEE
- SMALLER TIE IN
- REDUCER
- 6" VALVE W/BOX
- 6" VALVE W/BOX
- 6" VALVE W/BOX
- TEE
- REDUCERS

- 1 - 4" TIE-IN
- 1 - 8"x 4" REDUCER

MILEPOINT: 10.740
80 LF BORE W/14" CASING
8" CARRIER

MILEPOINT: 8.774
BORE W/12" CASING
CARRIER
INSTALLED AT BORE

- 1 - 3" AND SMALLER TIE IN
- 1 - 6"x 3" REDUCER
- 1 - 6" GATE VALVE W/BOX

2 - 6" 90° BENDS

**APPROX.
2,200 LF OF 6"**
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN R.O.W. AND EASEMENTS

EXISTING 2" MAIN TO BE ABANDONED
AFTER RECONNECTS ARE MADE

- 1 - FLUSH HYDRANT
- 1 - 6"x 3" REDUCER
- 1 - 3" GATE VALVE W/BOX
- 1 - 6"x 6" HYDRANT TEE

ROBERTS RD.

G

5

MILEPOINT 26.420

50 LF BORE W/14" CASING
8" CARRIER

NIAGARA

HYDRANT TEE
1 - SMALLER TIE IN
1 - REDUCER
1 - GATE VALVE W/BOX
1 - GATE VALVE W/BOX
1 - TEE
1 - REDUCERS

1 - 4" TIE-IN
1 - 8"x 4" REDUCER

MILEPOINT 10.740

80 LF BORE W/14" CASING
8" CARRIER

MILEPOINT 8.774
BORE W/12" CASING
CARRIER
MENT AT BORE

1 - 3" AND SMALLER TIE IN
1 - 6"x 3" REDUCER
1 - 6" GATE VALVE W/BOX

APPROX. 2,200 LF OF 6"
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN R.O.W. AND EASEMENTS

EXISTING 2" MAIN TO BE ABANDONED
AFTER RECONNECTS ARE MADE

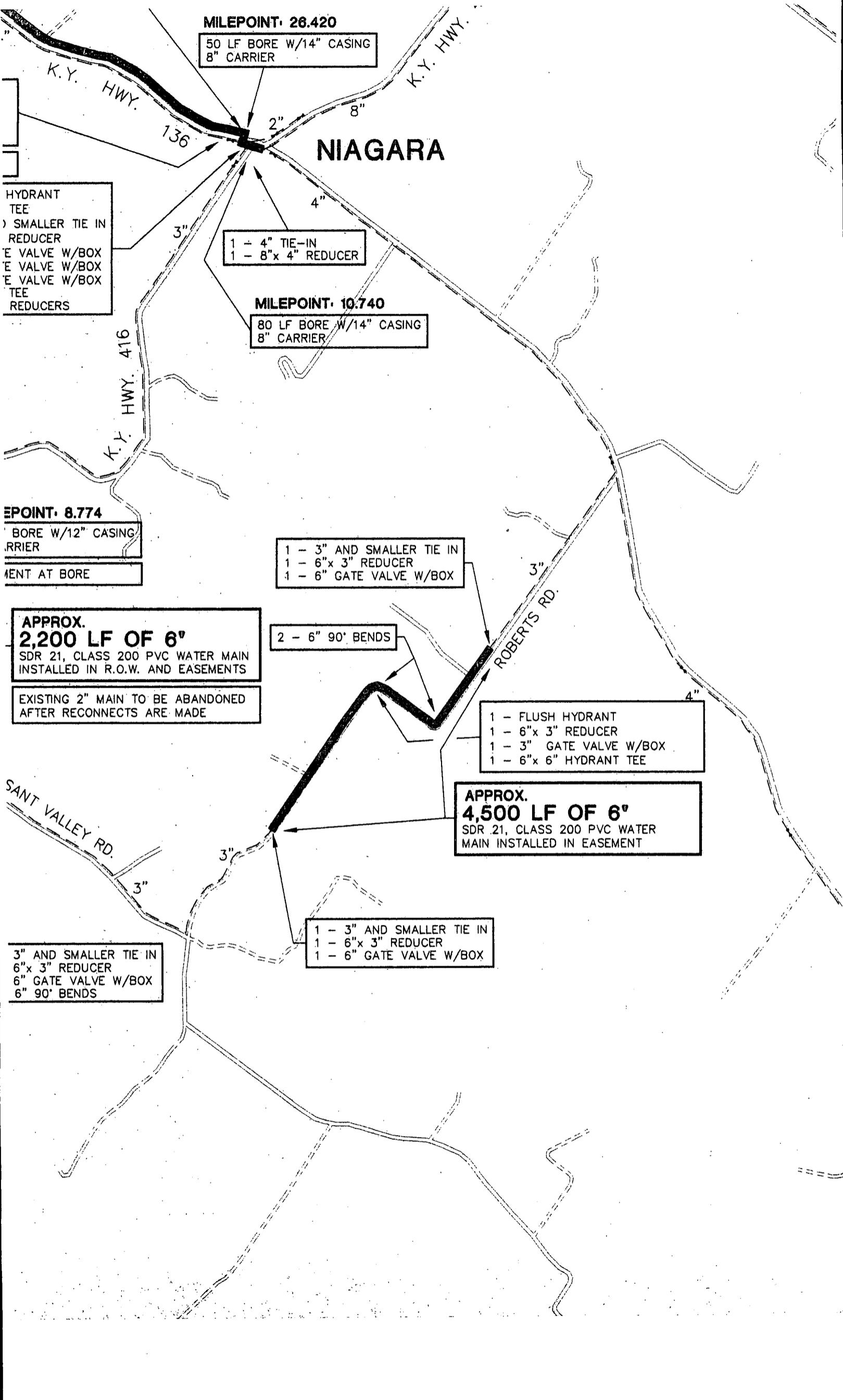
2 - 6" 90° BENDS

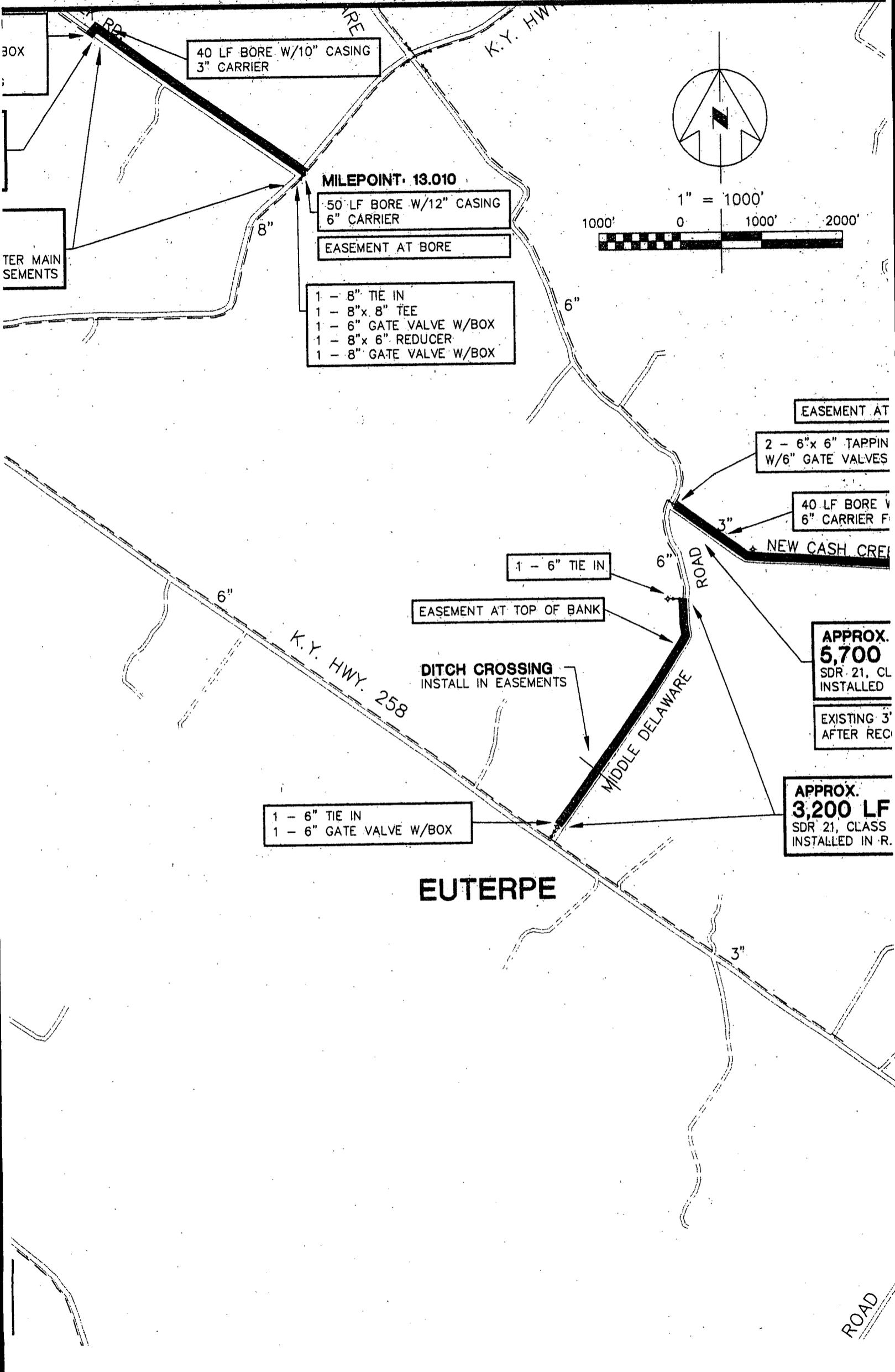
1 - FLUSH HYDRANT
1 - 6"x 3" REDUCER
1 - 3" GATE VALVE W/BOX
1 - 6"x 6" HYDRANT TEE

APPROX. 4,500 LF OF 6"
SDR 21, CLASS 200 PVC WATER
MAIN INSTALLED IN EASEMENT

3" AND SMALLER TIE IN
6"x 3" REDUCER
6" GATE VALVE W/BOX
6" 90° BENDS

1 - 3" AND SMALLER TIE IN
1 - 6"x 3" REDUCER
1 - 6" GATE VALVE W/BOX





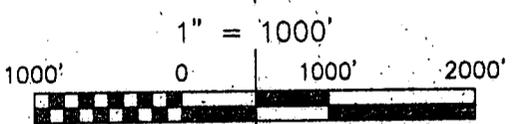
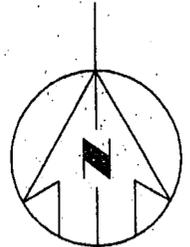
40 LF BORE W/10" CASING
3" CARRIER

MILEPOINT 13.010

50 LF BORE W/12" CASING
6" CARRIER

EASEMENT AT BORE

- 1 - 8" TIE IN
- 1 - 8"x 8" TEE
- 1 - 6" GATE VALVE W/BOX
- 1 - 8"x 6" REDUCER
- 1 - 8" GATE VALVE W/BOX



BOX

TER MAIN
SEMENTS

EASEMENT AT

2 - 6"x 6" TAPPIN
W/6" GATE VALVES

40 LF BORE W
6" CARRIER F

NEW CASH CREEK

1 - 6" TIE IN

EASEMENT AT TOP OF BANK

DITCH CROSSING
INSTALL IN EASEMENTS

APPROX.
5,700
SDR 21, CL
INSTALLED

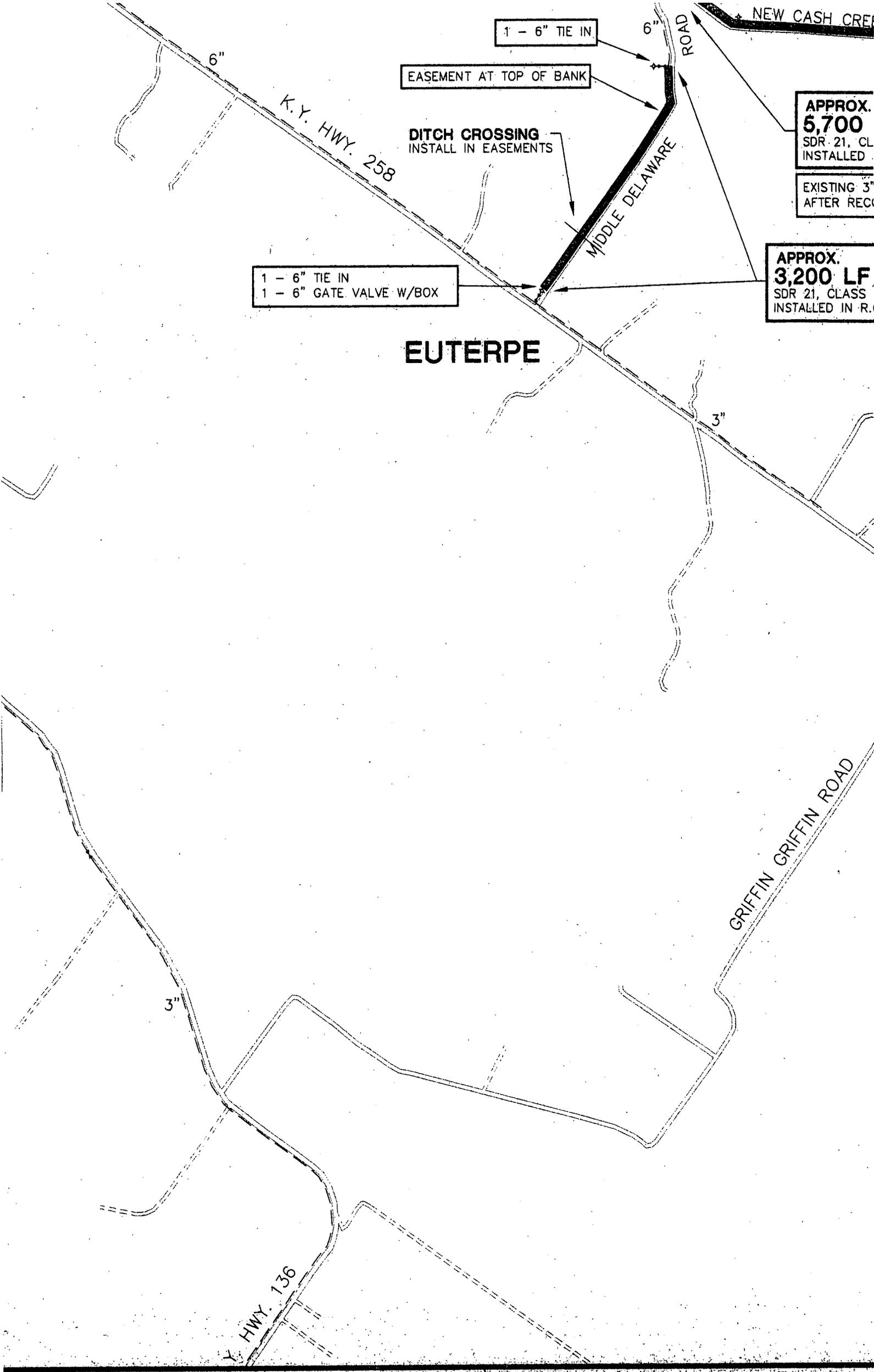
EXISTING 3"
AFTER REC

1 - 6" TIE IN
1 - 6" GATE VALVE W/BOX

APPROX.
3,200 LF
SDR 21, CLASS
INSTALLED IN R.

EUTERPE

ROAD



1 - 6" TIE IN

EASEMENT AT TOP OF BANK

DITCH CROSSING
INSTALL IN EASEMENTS

1 - 6" TIE IN
1 - 6" GATE VALVE W/BOX

APPROX.
5,700
SDR 21, CL
INSTALLED

EXISTING 3"
AFTER REC

APPROX.
3,200 LF
SDR 21, CLASS
INSTALLED IN R.

EUTERPE

Y. HWY. 136

GRIFFIN GRIFFIN ROAD

NEW CASH CREEK

ROAD

K.Y. HWY. 258

MIDDLE DELAWARE

6"

6"

3"

3"

APPROX.
5,700 LF OF 6"
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN R.O.W. AND EASEMENTS

EXISTING 3" MAIN TO BE ABANDONED
AFTER RECONNECTS ARE MADE

APPROX.
3,200 LF OF 6"
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN R.O.W. AND EASEMENTS

LOWER DELAWARE ROAD

UPPER DELAWARE ROAD

GRIFFIN GRIFFIN ROAD

HUNTI



Drawn by:
SDC

Checked by:
JRJ

File:
2000IMPB3

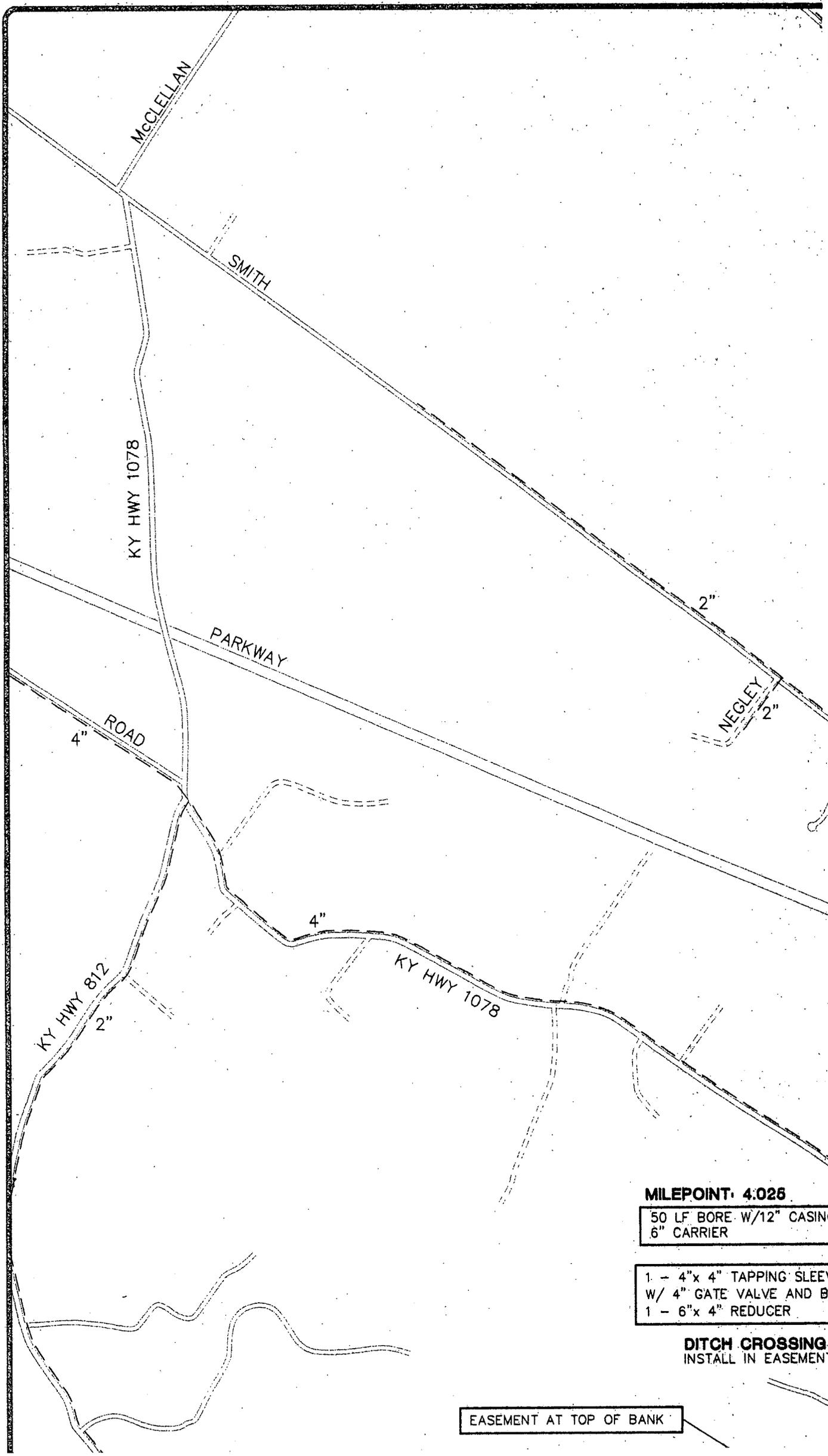
Date:
11-28-99

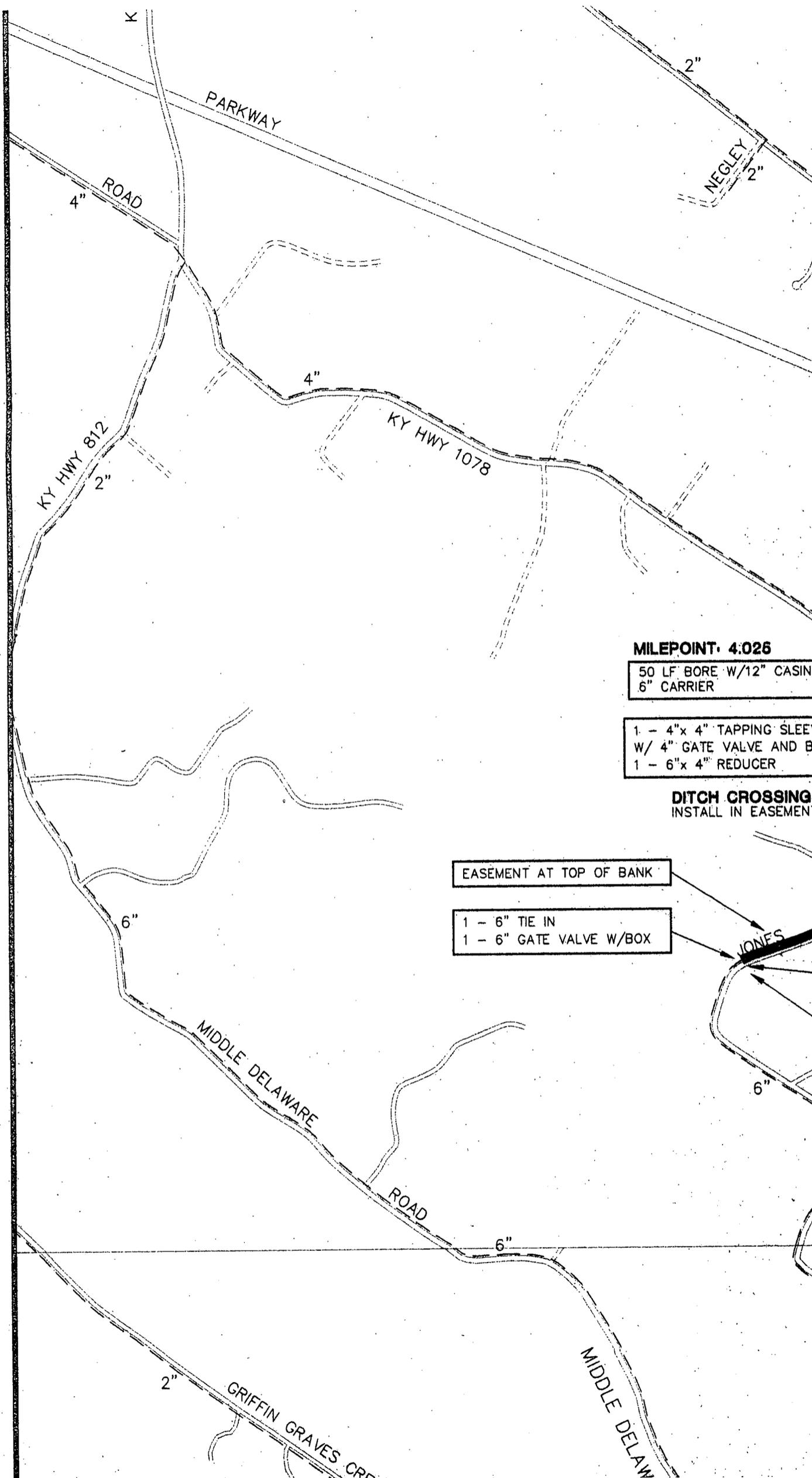
Revised:

1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS CONTRACT "B"
KY HWY 136, MIDDLE DELAWARE RD., CASH CREEK RD.
PLEASANT VALLEY RD. AND ROBARDS RD.
HENDERSON COUNTY WATER DISTRICT

Sheet

B3





MILEPOINT: 4.026

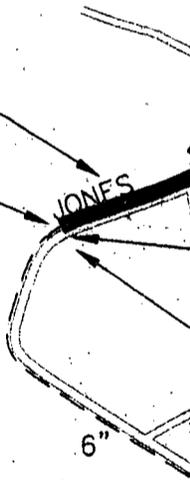
50 LF BORE W/12" CASING
6" CARRIER

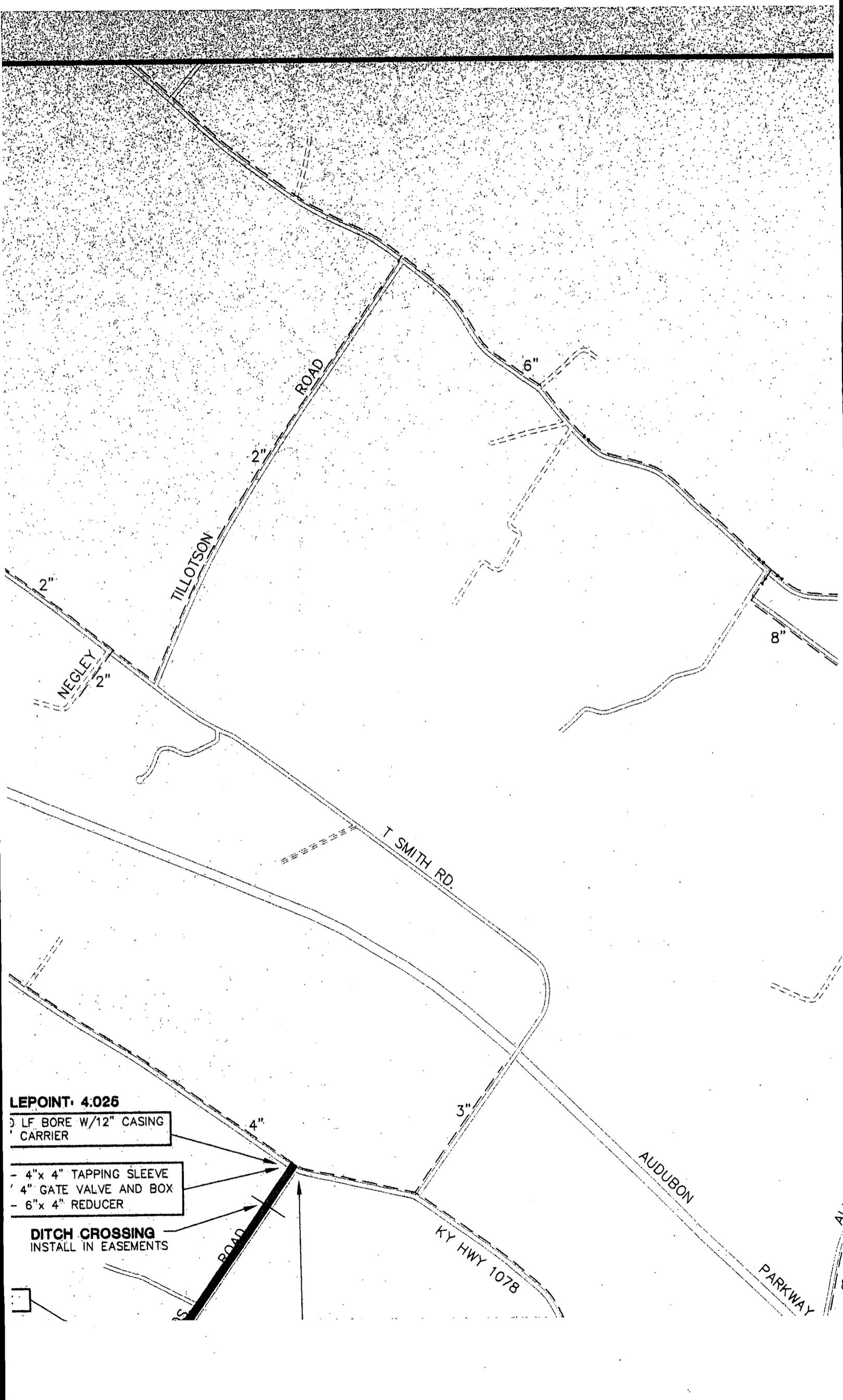
1 - 4" x 4" TAPPING SLEEVE
W/ 4" GATE VALVE AND BOX
1 - 6" x 4" REDUCER

DITCH CROSSING
INSTALL IN EASEMENT

EASEMENT AT TOP OF BANK

1 - 6" TIE IN
1 - 6" GATE VALVE W/BOX





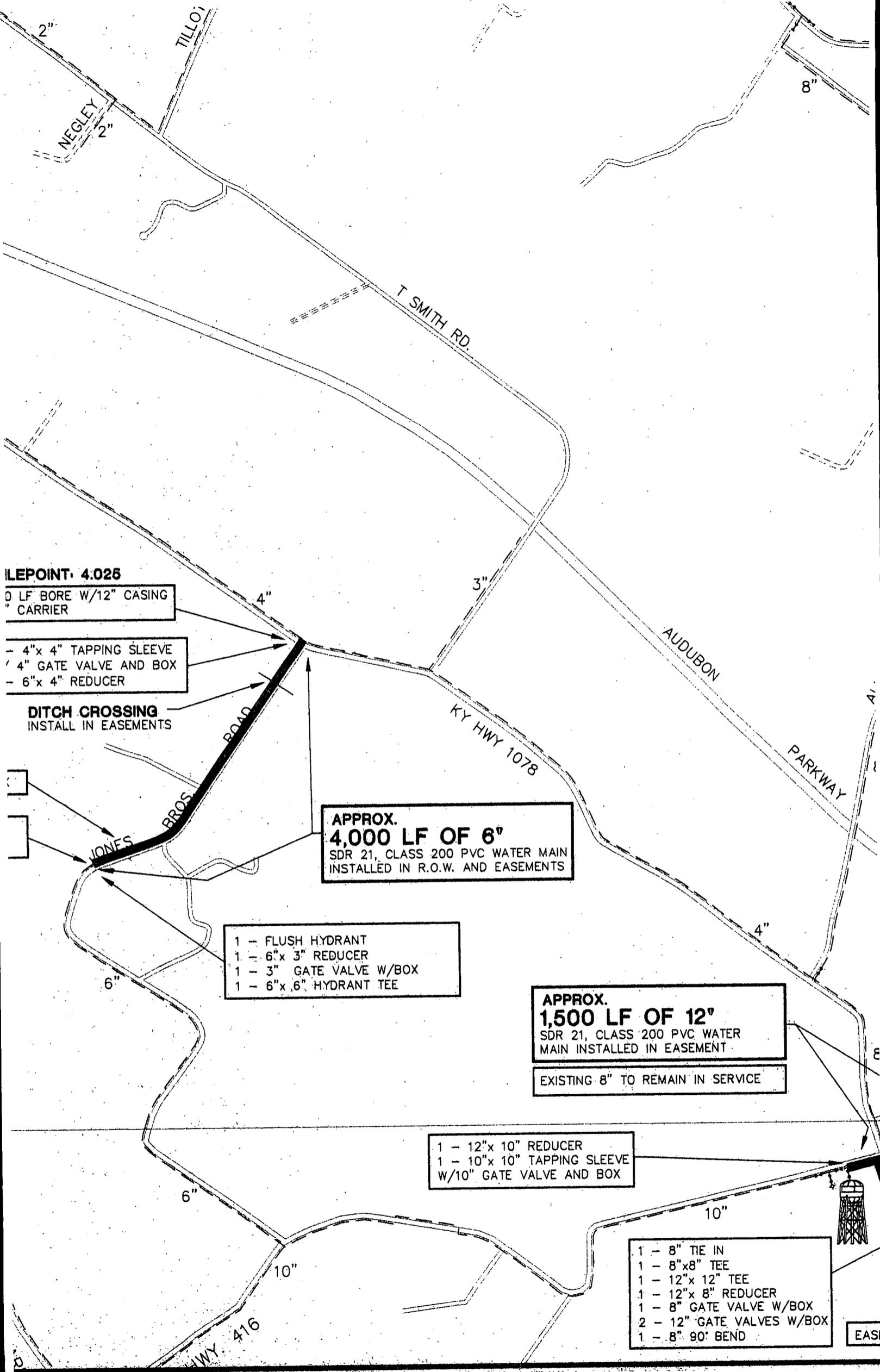
LEPOINT 4.025

10 LF BORE W/12" CASING
' CARRIER

- 4" x 4" TAPPING SLEEVE
- 4" GATE VALVE AND BOX
- 6" x 4" REDUCER

DITCH CROSSING
INSTALL IN EASEMENTS





ILEPOINT: 4.026

0 LF BORE W/12" CASING
" CARRIER

- 4"x 4" TAPPING SLEEVE
- 4" GATE VALVE AND BOX
- 6"x 4" REDUCER

DITCH CROSSING
INSTALL IN EASEMENTS

**APPROX.
4,000 LF OF 6"**
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN R.O.W. AND EASEMENTS

- 1 - FLUSH HYDRANT
- 1 - 6"x 3" REDUCER
- 1 - 3" GATE VALVE W/BOX
- 1 - 6"x 6" HYDRANT TEE

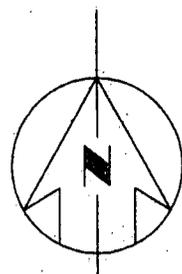
**APPROX.
1,500 LF OF 12"**
SDR 21, CLASS 200 PVC WATER
MAIN INSTALLED IN EASEMENT

EXISTING 8" TO REMAIN IN SERVICE

- 1 - 12"x 10" REDUCER
- 1 - 10"x 10" TAPPING SLEEVE
W/10" GATE VALVE AND BOX

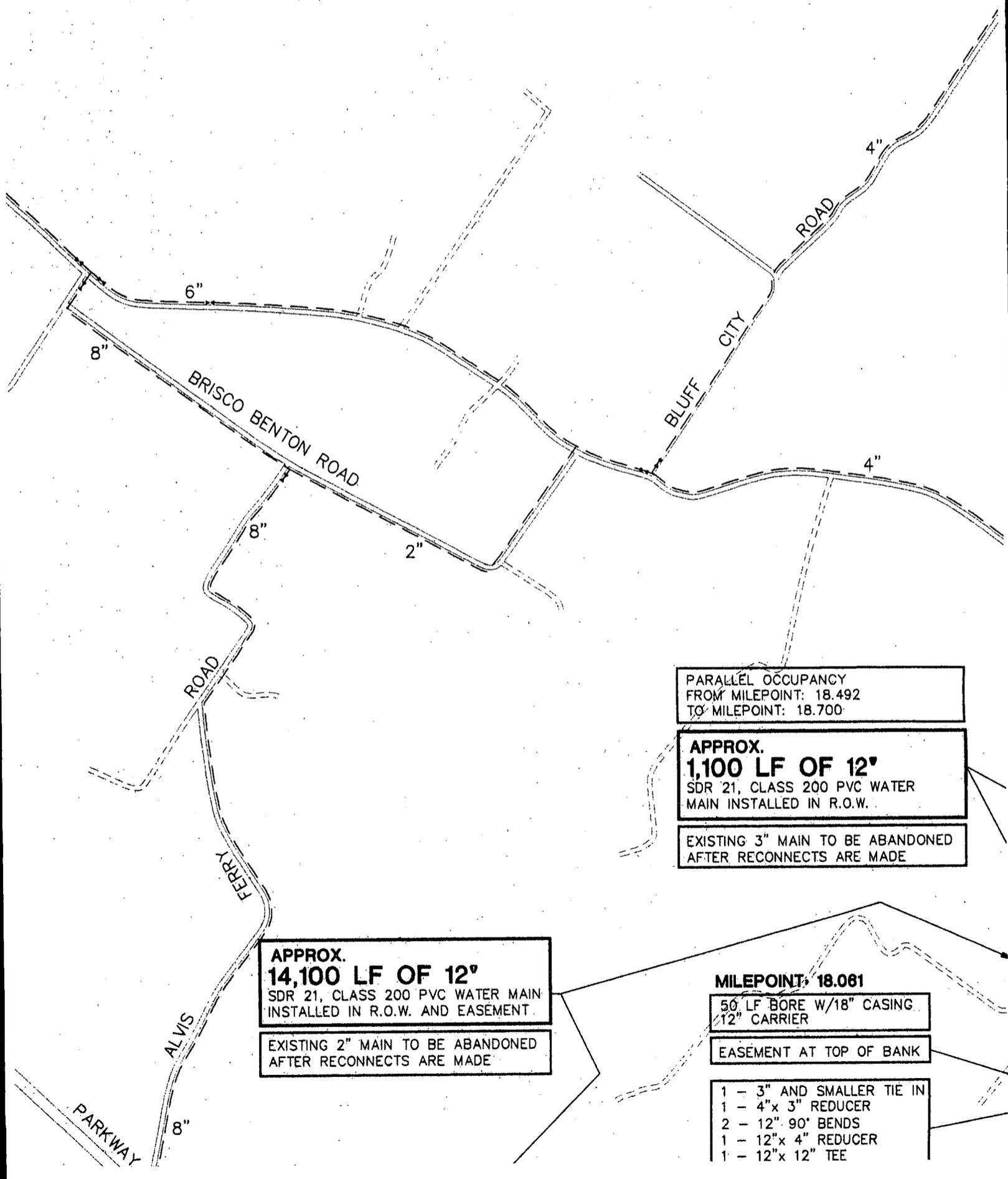
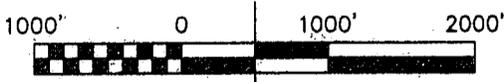
- 1 - 8" TIE IN
- 1 - 8"x 8" TEE
- 1 - 12"x 12" TEE
- 1 - 12"x 8" REDUCER
- 1 - 8" GATE VALVE W/BOX
- 2 - 12" GATE VALVES W/BOX
- 1 - 8" 90° BEND

EASE



BLUFF

1" = 1000'



PARALLEL OCCUPANCY
FROM MILEPOINT: 18.492
TO MILEPOINT: 18.700

**APPROX.
1,100 LF OF 12"**
SDR 21, CLASS 200 PVC WATER
MAIN INSTALLED IN R.O.W.

EXISTING 3" MAIN TO BE ABANDONED
AFTER RECONNECTS ARE MADE

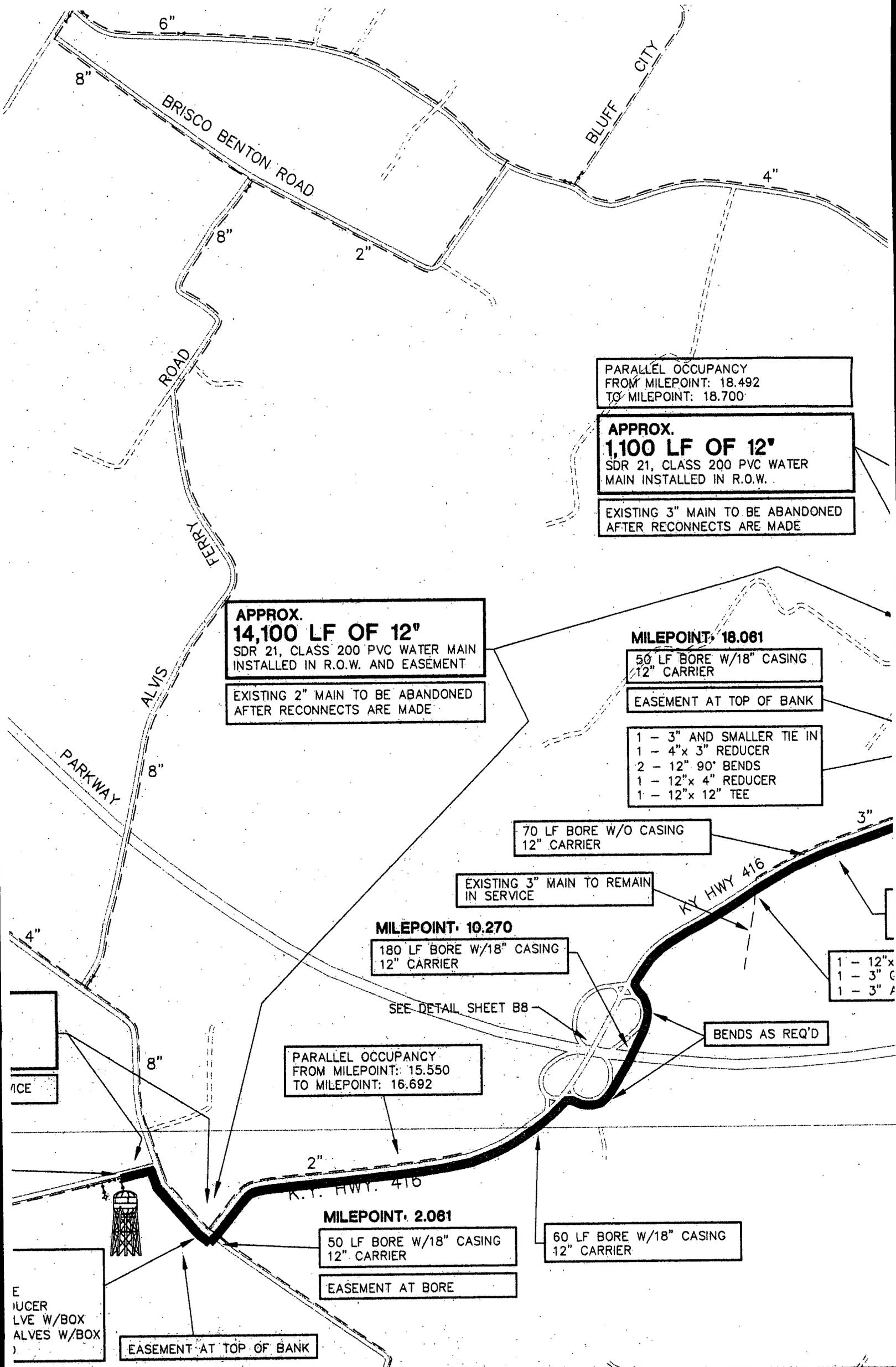
**APPROX.
14,100 LF OF 12"**
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN R.O.W. AND EASEMENT

EXISTING 2" MAIN TO BE ABANDONED
AFTER RECONNECTS ARE MADE

MILEPOINT: 18.061
50 LF BORE W/18" CASING
12" CARRIER

EASEMENT AT TOP OF BANK

- 1 - 3" AND SMALLER TIE IN
- 1 - 4"x 3" REDUCER
- 2 - 12" 90° BENDS
- 1 - 12"x 4" REDUCER
- 1 - 12"x 12" TEE



PARALLEL OCCUPANCY
FROM MILEPOINT: 18.492
TO MILEPOINT: 18.700

**APPROX.
1,100 LF OF 12"**
SDR 21, CLASS 200 PVC WATER
MAIN INSTALLED IN R.O.W.

EXISTING 3" MAIN TO BE ABANDONED
AFTER RECONNECTS ARE MADE

**APPROX.
14,100 LF OF 12"**
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN R.O.W. AND EASEMENT

EXISTING 2" MAIN TO BE ABANDONED
AFTER RECONNECTS ARE MADE

MILEPOINT: 18.061
50 LF BORE W/18" CASING
12" CARRIER

EASEMENT AT TOP OF BANK

- 1 - 3" AND SMALLER TIE IN
- 1 - 4"x 3" REDUCER
- 2 - 12" 90° BENDS
- 1 - 12"x 4" REDUCER
- 1 - 12"x 12" TEE

70 LF BORE W/O CASING
12" CARRIER

EXISTING 3" MAIN TO REMAIN
IN SERVICE

MILEPOINT: 10.270
180 LF BORE W/18" CASING
12" CARRIER

SEE DETAIL SHEET B8

PARALLEL OCCUPANCY
FROM MILEPOINT: 15.550
TO MILEPOINT: 16.692

BENDS AS REQ'D

- 1 - 12"x
- 1 - 3" C
- 1 - 3" A

MILEPOINT: 2.081
50 LF BORE W/18" CASING
12" CARRIER

EASEMENT AT BORE

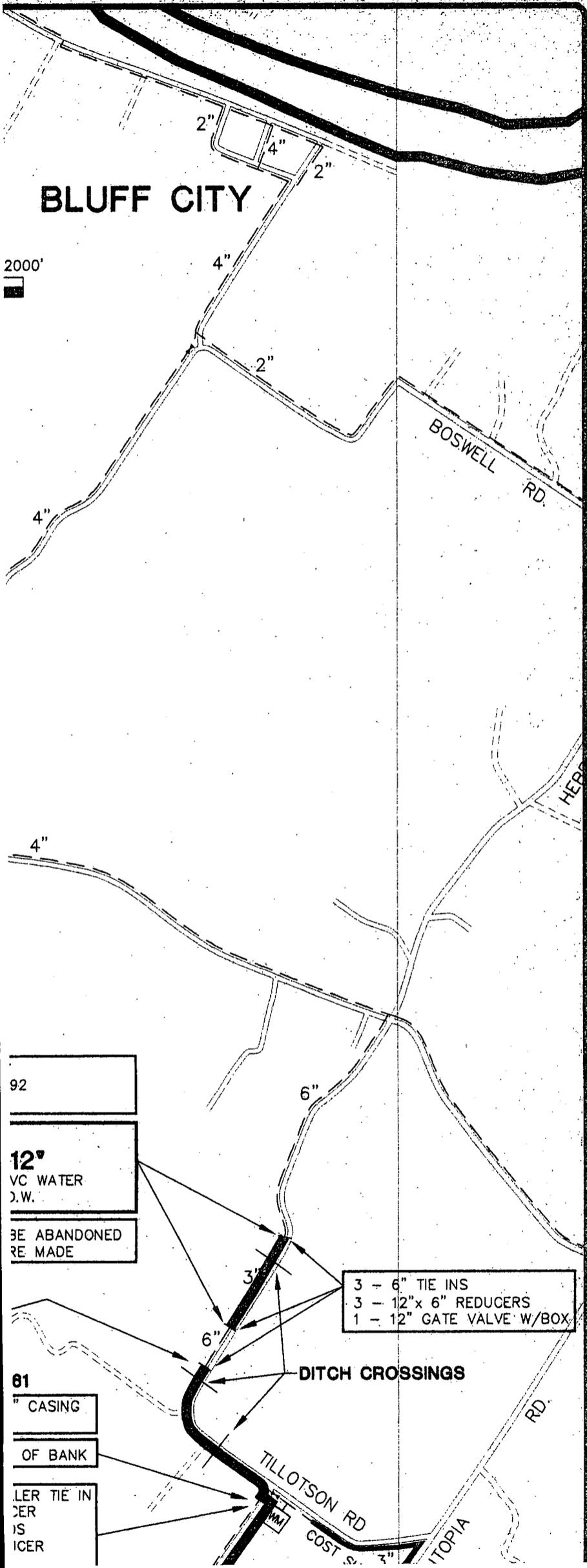
60 LF BORE W/18" CASING
12" CARRIER

EASEMENT AT TOP OF BANK

E
UCER
LVE W/BOX
ALVES W/BOX

BLUFF CITY

2000'



92

12"
VC WATER
D.W.

BE ABANDONED
RE MADE

61

" CASING

OF BANK

LER TIE IN
DER
IS
ICER

3 - 6" TIE INS
3 - 12" x 6" REDUCERS
1 - 12" GATE VALVE W/BOX

DITCH CROSSINGS

TILLOTSON RD

COST S...

TOPIA

HUNTER MARTIN & ASSOCIATES, INC.



ENGINEERS & SURVEYORS
3220 LONE OAK ROAD • PADUCAH, KENTUCKY 42003
(502) 554-2737 • FAX (502) 554-2738

Drawn by:
SDC

Checked by:
JRJ

File:
2000IMPB4

Date:
11-28-99

Revised:

LEMENTS CONTRACT "B"

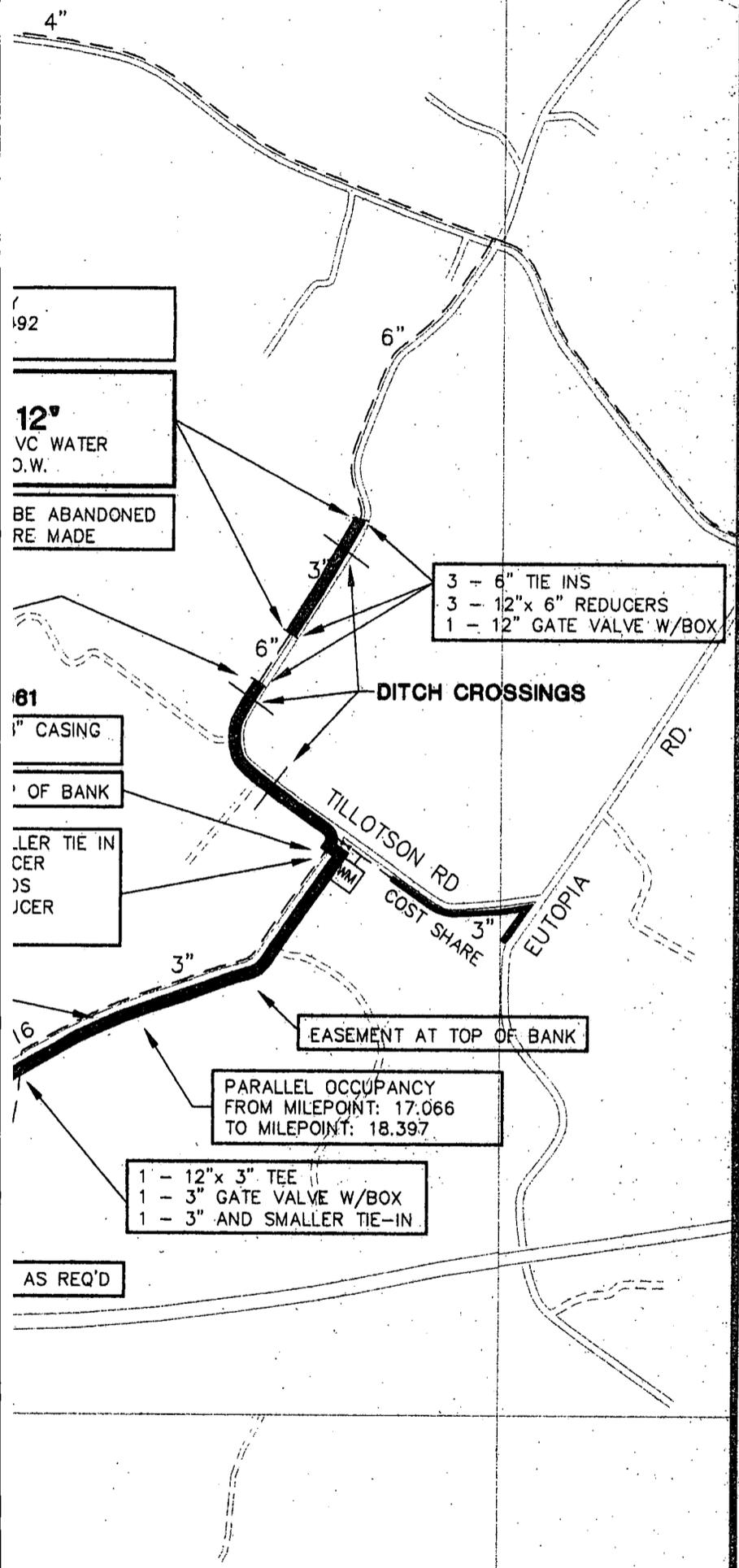
HWY 416

R DISTRICT

Drawn by:
 SDC
 Checked by:
 JRJ
 File:
 2000IMPB4
 Date:
 11-28-99
 Revised:

1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS CONTRACT "B"
JONES BROS. RD. AND KY HWY 416
HENDERSON COUNTY WATER DISTRICT

Sheet
B4



192
12"
 VC WATER
 O.W.
 BE ABANDONED
 RE MADE

3 - 6" TIE INS
 3 - 12"x 6" REDUCERS
 1 - 12" GATE VALVE W/BOX

61
 6" CASING
 OF BANK
 LER TIE IN
 CER
 DS
 JCKER

DITCH CROSSINGS

TILLOTSON RD
 COST SHARE
 EUTOPIA

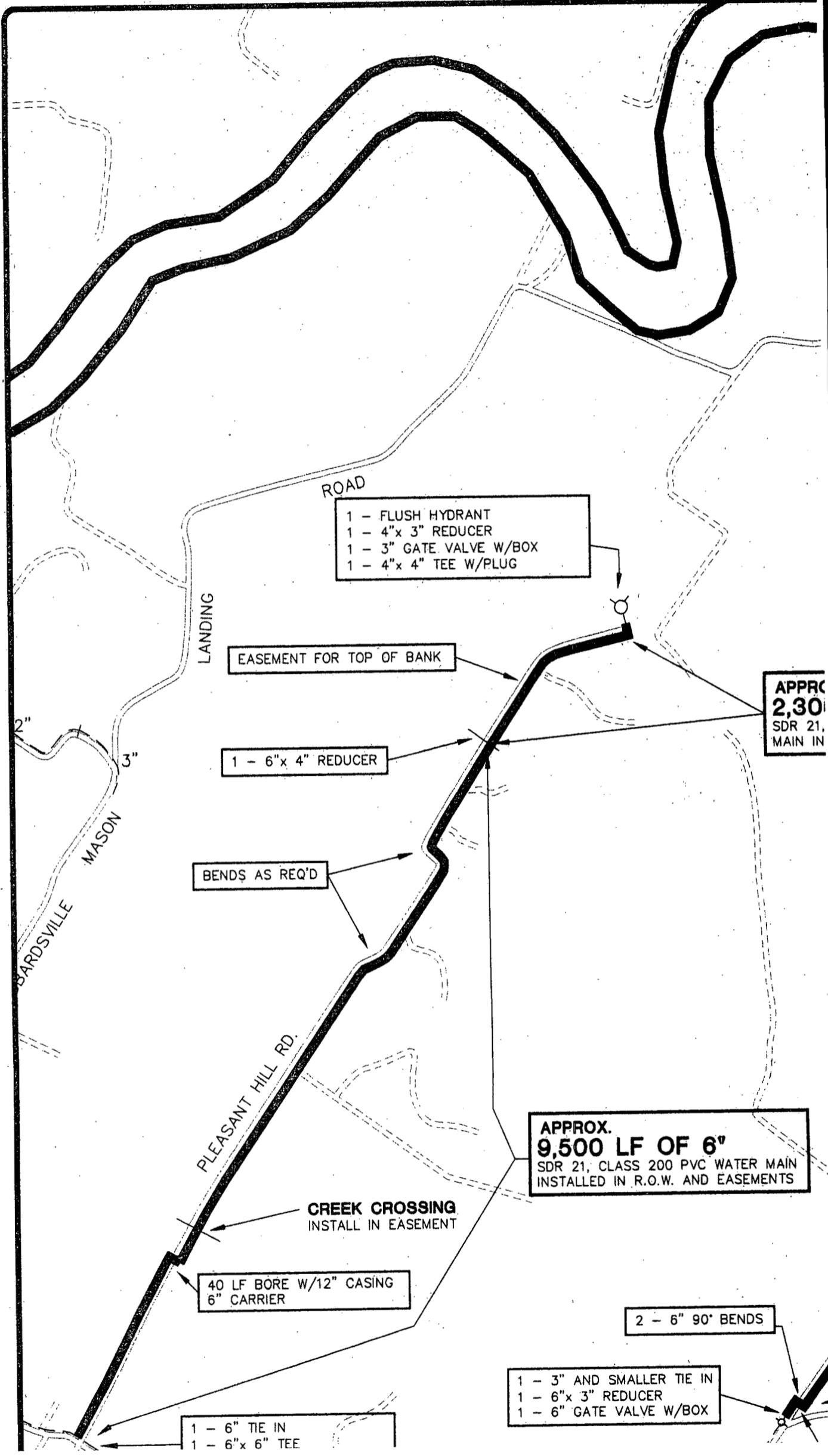
EASEMENT AT TOP OF BANK

PARALLEL OCCUPANCY
 FROM MILEPOINT: 17.066
 TO MILEPOINT: 18.397

1 - 12"x 3" TEE
 1 - 3" GATE VALVE W/BOX
 1 - 3" AND SMALLER TIE-IN

AS REQ'D

10
 12"
 8"
 GATE
 VALVE



- 1 - FLUSH HYDRANT
- 1 - 4" x 3" REDUCER
- 1 - 3" GATE VALVE W/BOX
- 1 - 4" x 4" TEE W/PLUG

EASEMENT FOR TOP OF BANK

- 1 - 6" x 4" REDUCER

APPROX
2,300
SDR 21,
MAIN IN

BENDS AS REQ'D

APPROX.
9,500 LF OF 6"
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN R.O.W. AND EASEMENTS

CREEK CROSSING
INSTALL IN EASEMENT

40 LF BORE W/12" CASING
6" CARRIER

2 - 6" 90° BENDS

- 1 - 3" AND SMALLER TIE IN
- 1 - 6" x 3" REDUCER
- 1 - 6" GATE VALVE W/BOX

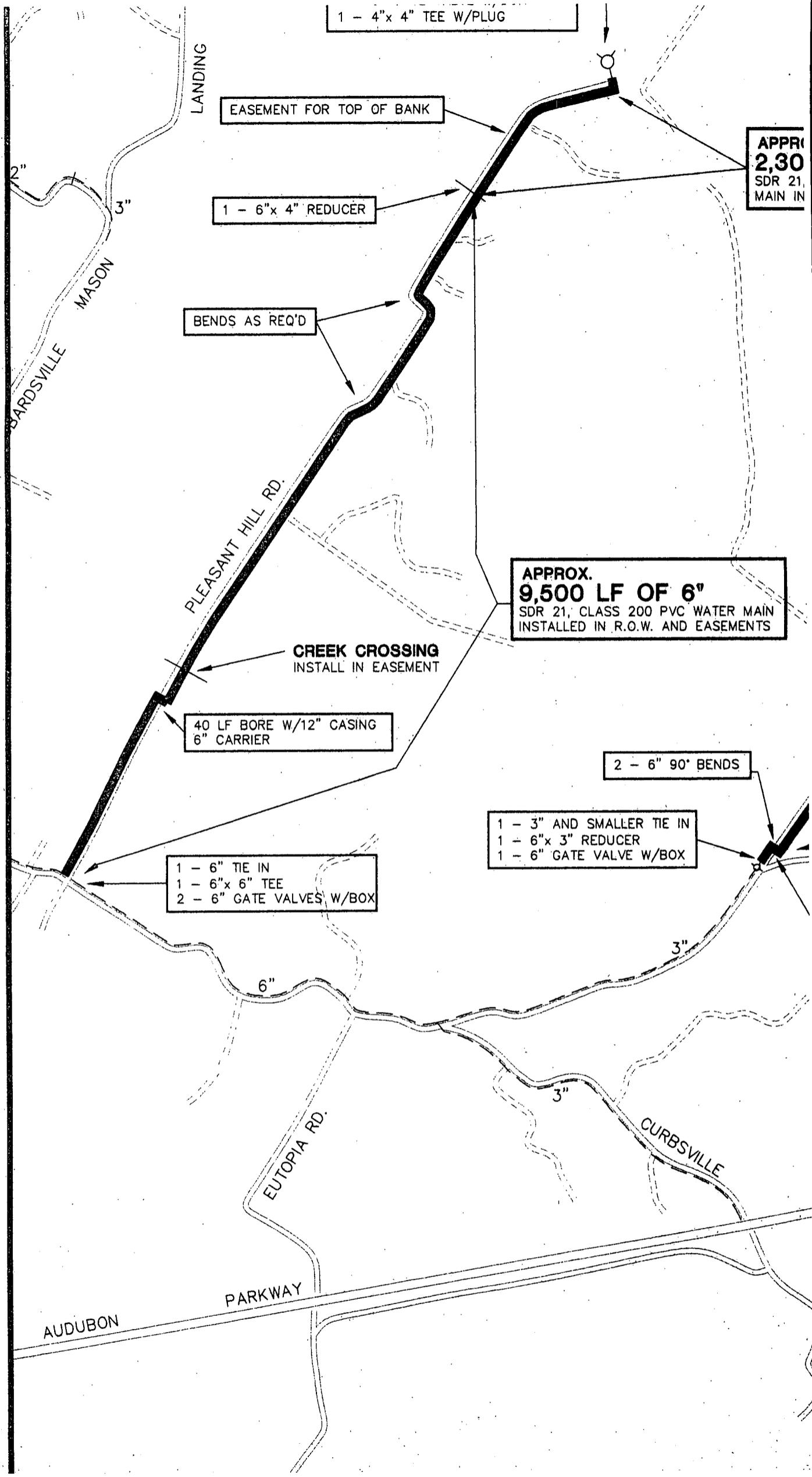
- 1 - 6" TIE IN
- 1 - 6" x 6" TEE

2"
3"
BARDSVILLE
MASON

PLEASANT HILL RD.

ROAD

LANDING



1 - 4" x 4" TEE W/PLUG

EASEMENT FOR TOP OF BANK

APPROX. 2,300 SDR 21, MAIN IN

1 - 6" x 4" REDUCER

BENDS AS REQ'D

APPROX. 9,500 LF OF 6" SDR 21, CLASS 200 PVC WATER MAIN INSTALLED IN R.O.W. AND EASEMENTS

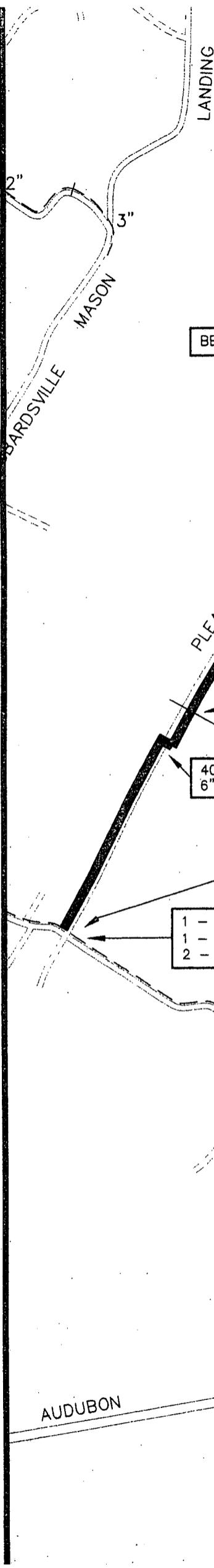
CREEK CROSSING INSTALL IN EASEMENT

40 LF BORE W/12" CASING 6" CARRIER

2 - 6" 90° BENDS

1 - 3" AND SMALLER TIE IN
1 - 6" x 3" REDUCER
1 - 6" GATE VALVE W/BOX

1 - 6" TIE IN
1 - 6" x 6" TEE
2 - 6" GATE VALVES W/BOX



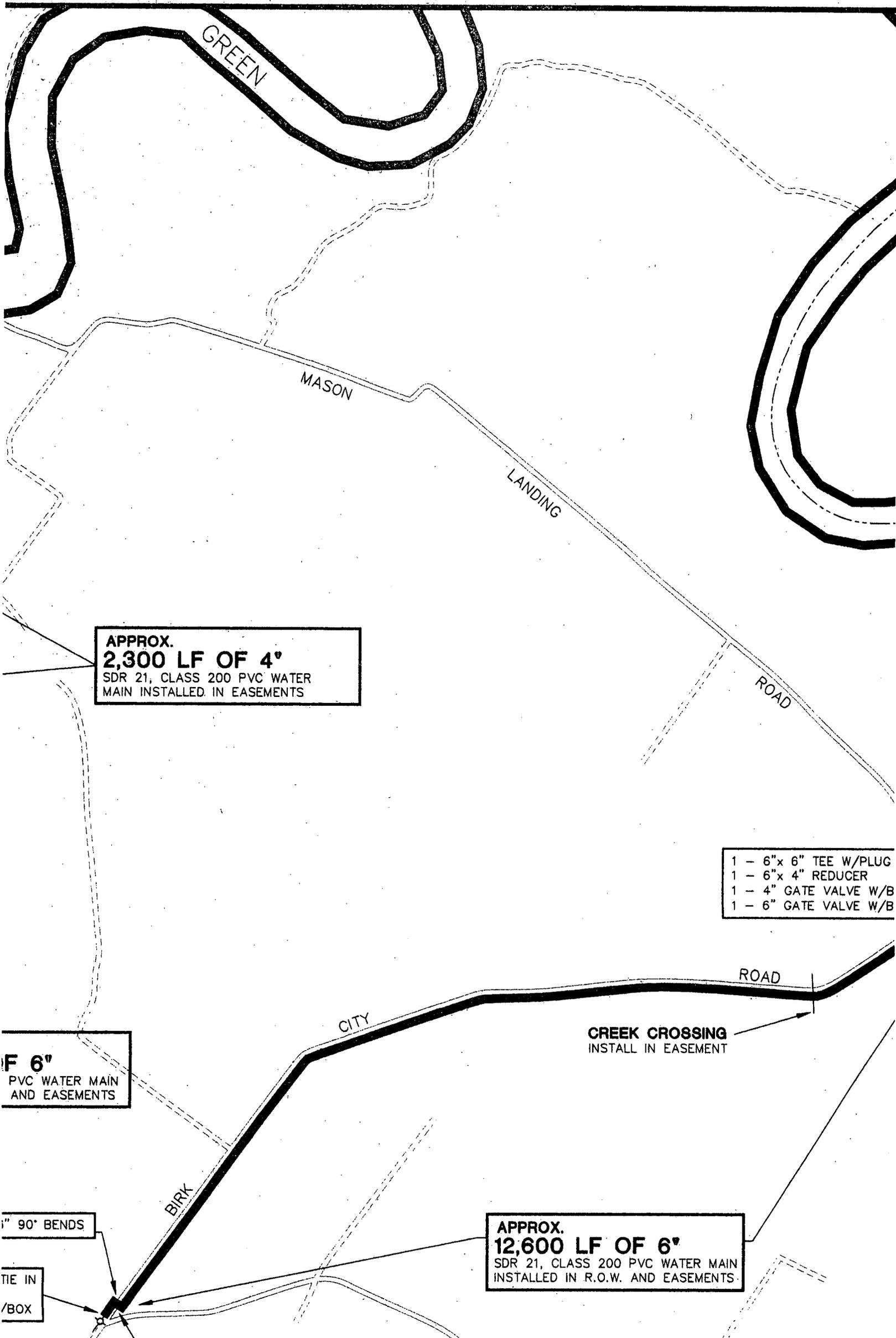
PLEASANT HILL RD.

EUTOPIA RD.

CURBSVILLE

AUDUBON

PARKWAY



**APPROX.
2,300 LF OF 4"**
SDR 21, CLASS 200 PVC WATER
MAIN INSTALLED IN EASEMENTS

- 1 - 6"x 6" TEE W/PLUG
- 1 - 6"x 4" REDUCER
- 1 - 4" GATE VALVE W/B
- 1 - 6" GATE VALVE W/B

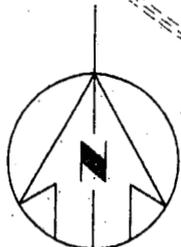
6"
PVC WATER MAIN
AND EASEMENTS

**APPROX.
12,600 LF OF 6"**
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN R.O.W. AND EASEMENTS.

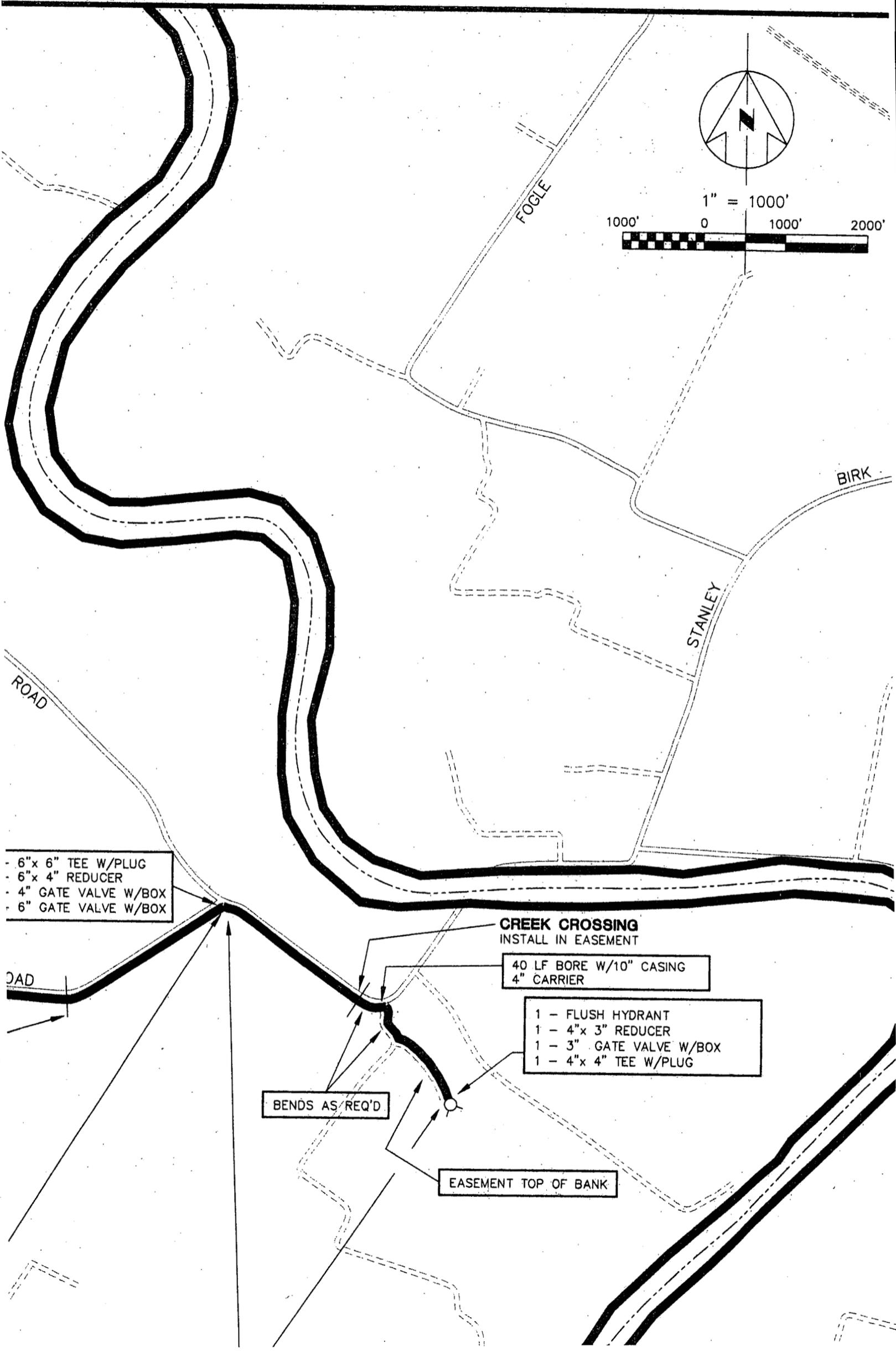
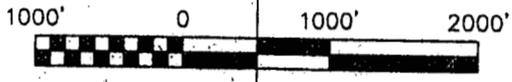
1" 90° BENDS

TIE IN
/BOX

CREEK CROSSING
INSTALL IN EASEMENT



1" = 1000'



- 6" x 6" TEE W/PLUG
- 6" x 4" REDUCER
- 4" GATE VALVE W/BOX
- 6" GATE VALVE W/BOX

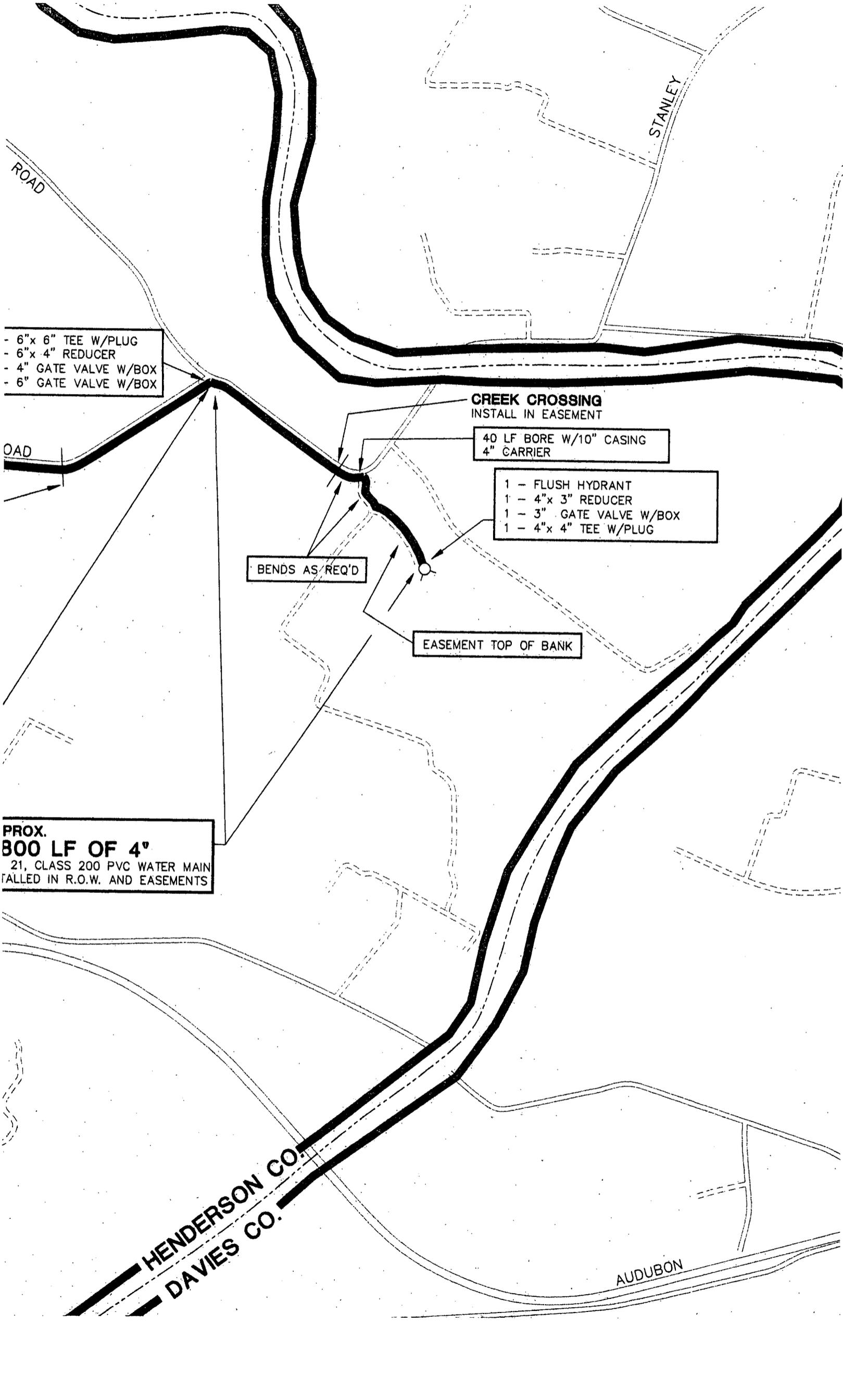
CREEK CROSSING
INSTALL IN EASEMENT

40 LF BORE W/10" CASING
4" CARRIER

- 1 - FLUSH HYDRANT
- 1 - 4" x 3" REDUCER
- 1 - 3" GATE VALVE W/BOX
- 1 - 4" x 4" TEE W/PLUG

BENDS AS REQ'D

EASEMENT TOP OF BANK



ROAD

STANLEY

- 6" x 6" TEE W/PLUG
- 6" x 4" REDUCER
- 4" GATE VALVE W/BOX
- 6" GATE VALVE W/BOX

CREEK CROSSING
INSTALL IN EASEMENT

40 LF BORE W/10" CASING
4" CARRIER

- 1 - FLUSH HYDRANT
- 1 - 4" x 3" REDUCER
- 1 - 3" GATE VALVE W/BOX
- 1 - 4" x 4" TEE W/PLUG

ROAD

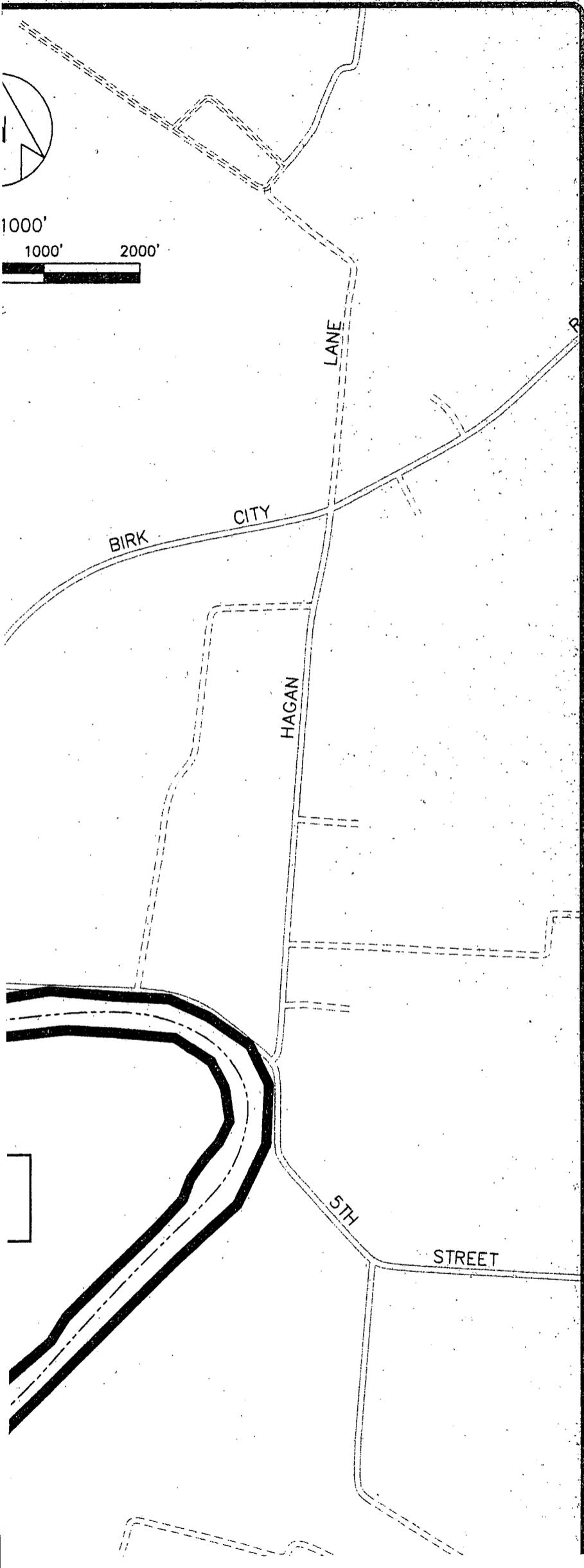
BENDS AS REQ'D

EASEMENT TOP OF BANK

**PROX.
800 LF OF 4"**
21, CLASS 200 PVC WATER MAIN
LAIED IN R.O.W. AND EASEMENTS

HENDERSON CO.
DAVIES CO.

AUDUBON



HUNTER MARTIN & ASSOCIATES, INC.

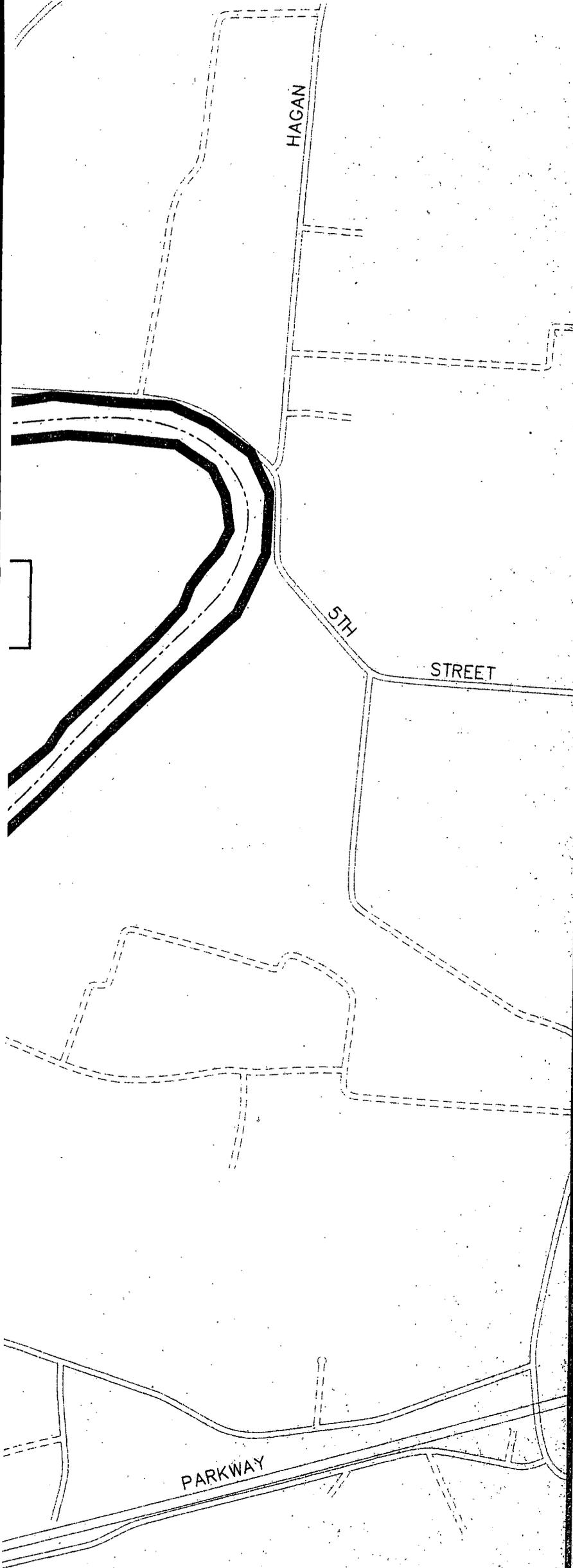


ENGINEERS & SURVEYORS
 3220 LONE OAK ROAD • PADUCAH, KENTUCKY 42003
 (502) 554-2737 • FAX (502) 554-2738

Drawn by:	SDC
Checked by:	JRJ
File:	2000IMPB5
Date:	11-28-99
Revised:	

LEMENTS CONTRACT "B"
ARK CITY RD.

R DISTRICT



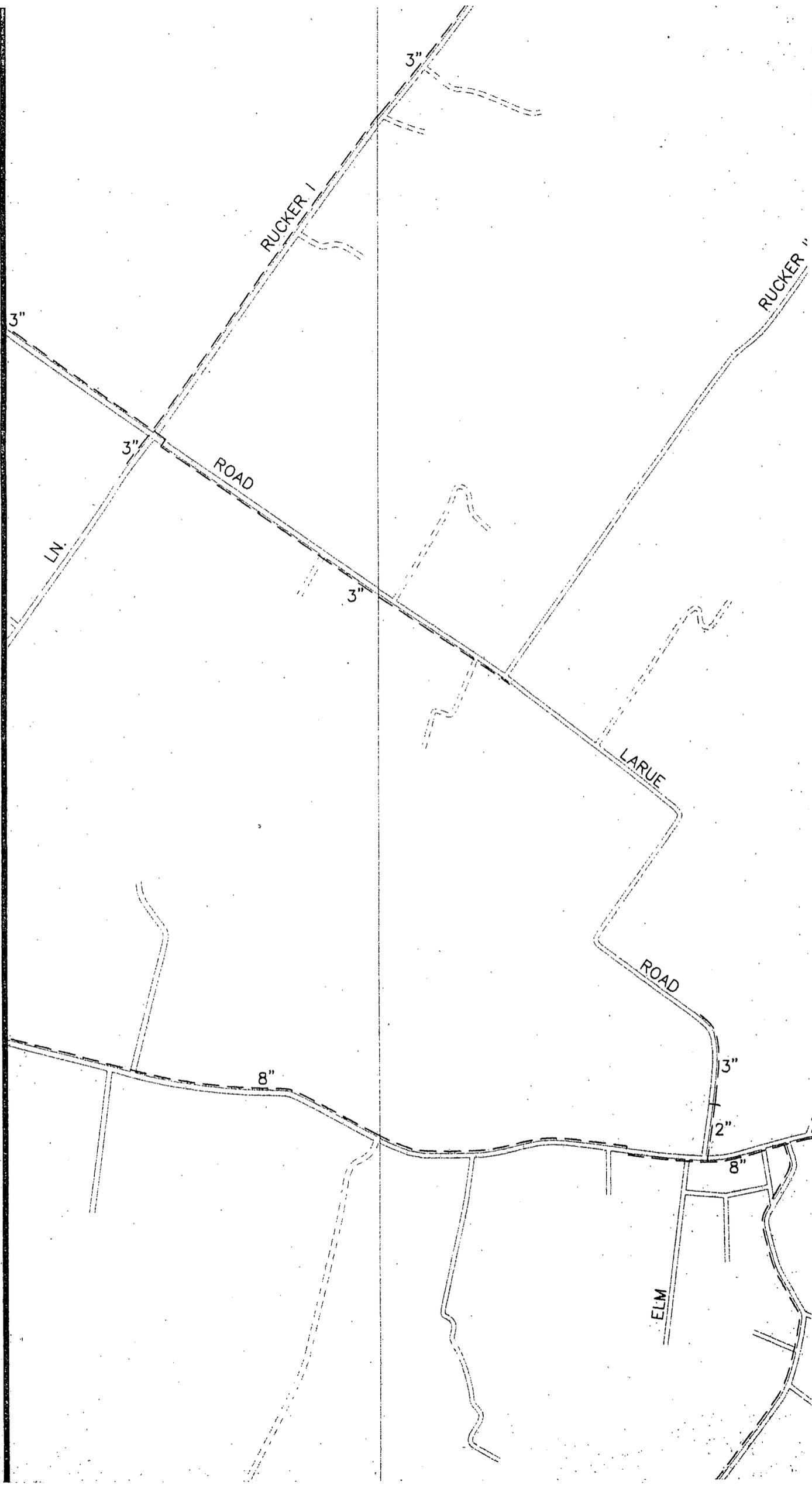
HUNTER M
3220 LONI
(50)

Drawn by: SDC
Checked by: JRJ
File: 2000IMPB5
Date: 11-28-99
Revised:

**1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS CONTRACT "B"
PLEASANT HILL RD. AND BIRK CITY RD.**

HENDERSON COUNTY WATER DISTRICT

Sheet
B5



HWY 60

8"

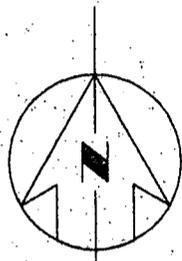
6"

8"

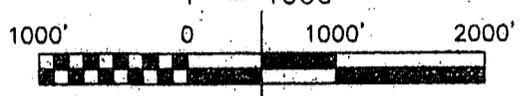
6"

CLOSED

8"



1" = 1000'



RD.

2"

RUCKER II

8"

KY HWY 1078

8"

2"

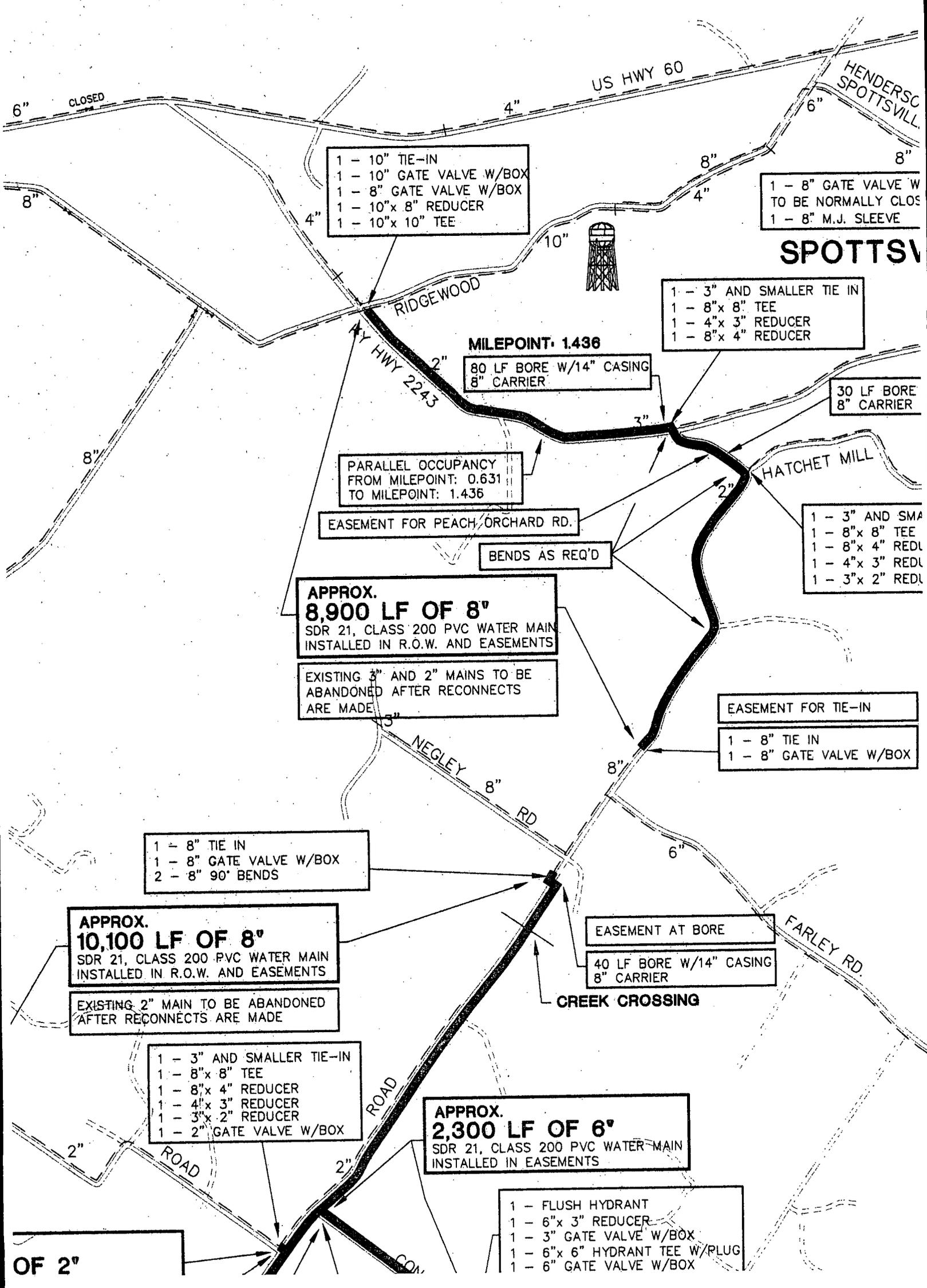
APPROX
10,100
SDR 21, CI
INSTALLED.

EXISTING 2"
AFTER REC

GREGORY

2"

APPROX
100 LF OF 2"



- 1 - 10" TIE-IN
- 1 - 10" GATE VALVE W/BOX
- 1 - 8" GATE VALVE W/BOX
- 1 - 10"x 8" REDUCER
- 1 - 10"x 10" TEE

- 1 - 8" GATE VALVE W TO BE NORMALLY CLOS
- 1 - 8" M.J. SLEEVE

- 1 - 3" AND SMALLER TIE IN
- 1 - 8"x 8" TEE
- 1 - 4"x 3" REDUCER
- 1 - 8"x 4" REDUCER

MILEPOINT 1.436
80 LF BORE W/14" CASING
8" CARRIER

30 LF BORE
8" CARRIER

PARALLEL OCCUPANCY
FROM MILEPOINT: 0.631
TO MILEPOINT: 1.436

EASEMENT FOR PEACH ORCHARD RD.

BENDS AS REQ'D

APPROX. 8,900 LF OF 8"
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN R.O.W. AND EASEMENTS

EXISTING 3" AND 2" MAINS TO BE
ABANDONED AFTER RECONNECTS
ARE MADE

- 1 - 3" AND SMA
- 1 - 8"x 8" TEE
- 1 - 8"x 4" REDU
- 1 - 4"x 3" REDU
- 1 - 3"x 2" REDU

- EASEMENT FOR TIE-IN
- 1 - 8" TIE IN
 - 1 - 8" GATE VALVE W/BOX

- 1 - 8" TIE IN
- 1 - 8" GATE VALVE W/BOX
- 2 - 8" 90° BENDS

APPROX. 10,100 LF OF 8"
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN R.O.W. AND EASEMENTS

EXISTING 2" MAIN TO BE ABANDONED
AFTER RECONNECTS ARE MADE

EASEMENT AT BORE
40 LF BORE W/14" CASING
8" CARRIER

CREEK CROSSING

- 1 - 3" AND SMALLER TIE-IN
- 1 - 8"x 8" TEE
- 1 - 8"x 4" REDUCER
- 1 - 4"x 3" REDUCER
- 1 - 3"x 2" REDUCER
- 1 - 2" GATE VALVE W/BOX

APPROX. 2,300 LF OF 6"
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN EASEMENTS

- 1 - FLUSH HYDRANT
- 1 - 6"x 3" REDUCER
- 1 - 3" GATE VALVE W/BOX
- 1 - 6"x 6" HYDRANT TEE W/PLUG
- 1 - 6" GATE VALVE W/BOX

OF 2"

PARALLEL OCCUPANCY
FROM MILEPOINT: 0.631
TO MILEPOINT: 1.436

EASEMENT FOR PEACH ORCHARD RD.

BENDS AS REQ'D

- 1 - 3" AND SM.
- 1 - 8"x 8" TEE
- 1 - 8"x 4" REDUCER
- 1 - 4"x 3" REDUCER
- 1 - 3"x 2" REDUCER

APPROX. 8,900 LF OF 8"
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN R.O.W. AND EASEMENTS

EXISTING 3" AND 2" MAINS TO BE
ABANDONED AFTER RECONNECTS
ARE MADE

EASEMENT FOR TIE-IN
1 - 8" TIE IN
1 - 8" GATE VALVE W/BOX

1 - 8" TIE IN
1 - 8" GATE VALVE W/BOX
2 - 8" 90° BENDS

APPROX. 10,100 LF OF 8"
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN R.O.W. AND EASEMENTS

EXISTING 2" MAIN TO BE ABANDONED
AFTER RECONNECTS ARE MADE

EASEMENT AT BORE
40 LF BORE W/14" CASING
8" CARRIER

CREEK CROSSING

1 - 3" AND SMALLER TIE-IN
1 - 8"x 8" TEE
1 - 8"x 4" REDUCER
1 - 4"x 3" REDUCER
1 - 3"x 2" REDUCER
1 - 2" GATE VALVE W/BOX

APPROX. 2,300 LF OF 6"
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN EASEMENTS

1 - FLUSH HYDRANT
1 - 6"x 3" REDUCER
1 - 3" GATE VALVE W/BOX
1 - 6"x 6" HYDRANT TEE W/PLUG
1 - 6" GATE VALVE W/BOX

OF 2"
SDR 21, CLASS 200 PVC WATER MAIN
INSTALLED IN R.O.W. AND EASEMENTS

40 LF BORE W/14" CASING
CARRIER

40 LF OPEN CUT W/14" CASING

1 - 8"x 8" TEE
1 - 8"x 6" REDUCER
1 - 6" GATE VALVE W/BOX
1 - 8" GATE VALVE W/BOX

DITCH CROSSING
INSTALL IN EASEMENT

HATCHET MILL

NEGLEY RD

FARLEY RD.

ROAD

ROAD

CONOWAY

ROAD

ROAD

CHANNEY

BLUE

8"

2"

8"

8"

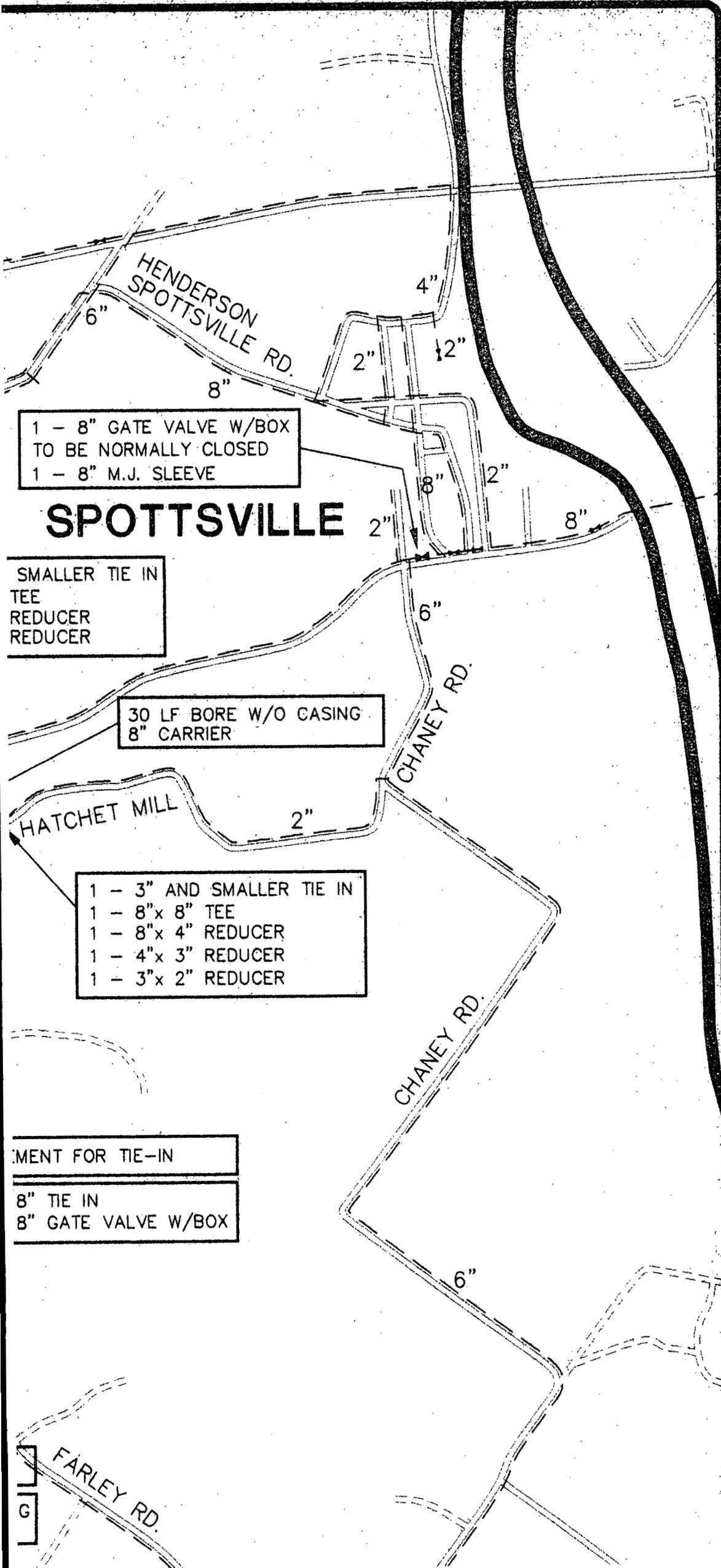
6"

2"

2"

8"

2"



1 - 8" GATE VALVE W/BOX
TO BE NORMALLY CLOSED
1 - 8" M.J. SLEEVE

SPOTTSVILLE

SMALLER TIE IN
TEE
REDUCER
REDUCER

30 LF BORE W/O CASING
8" CARRIER

- 1 - 3" AND SMALLER TIE IN
- 1 - 8"x 8" TEE
- 1 - 8"x 4" REDUCER
- 1 - 4"x 3" REDUCER
- 1 - 3"x 2" REDUCER

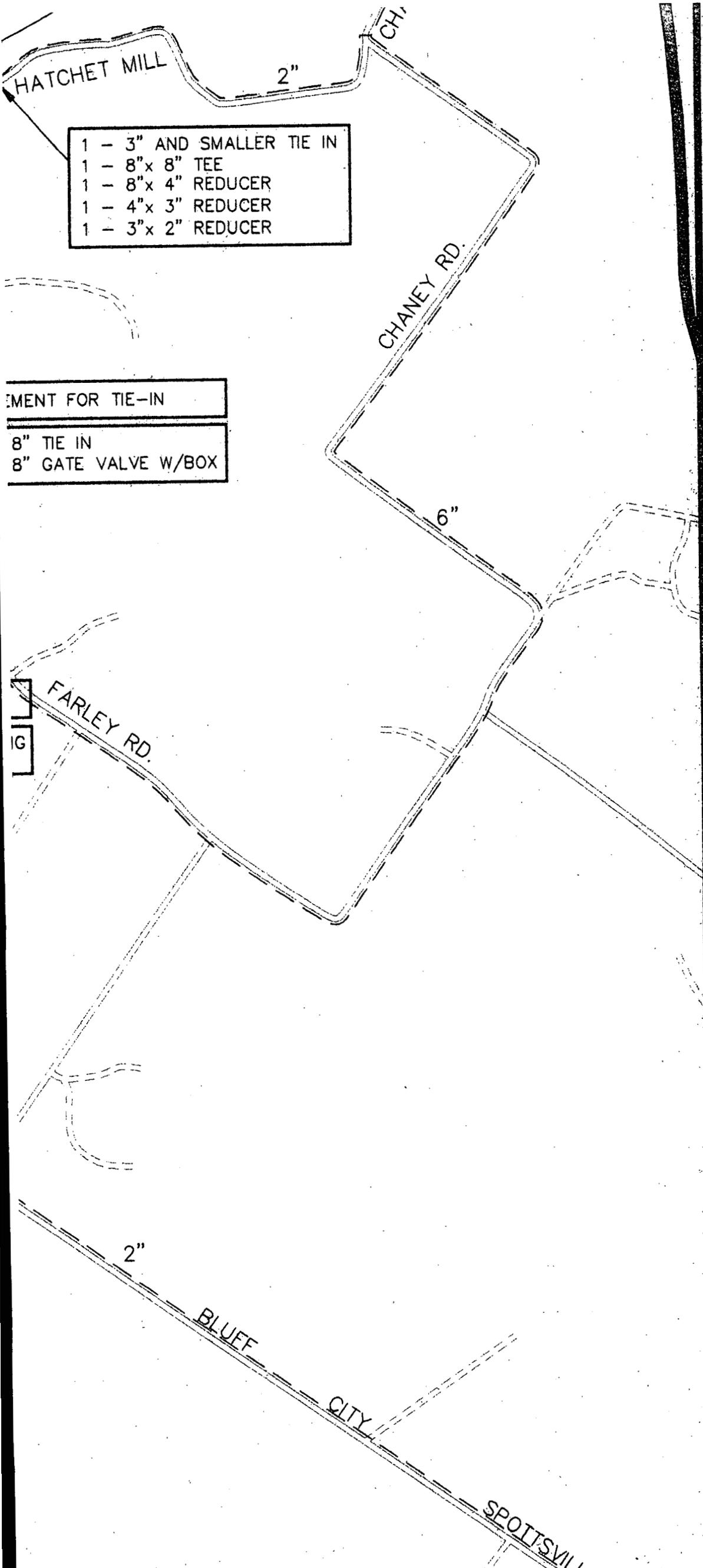
MENT FOR TIE-IN

8" TIE IN
8" GATE VALVE W/BOX

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ENGINEERS & SURVEYORS
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Date:	11-28-99
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- 1 - 3" AND SMALLER TIE IN
- 1 - 8" x 8" TEE
- 1 - 8" x 4" REDUCER
- 1 - 4" x 3" REDUCER
- 1 - 3" x 2" REDUCER

MENT FOR TIE-IN

8" TIE IN
8" GATE VALVE W/BOX

HUNTER 1

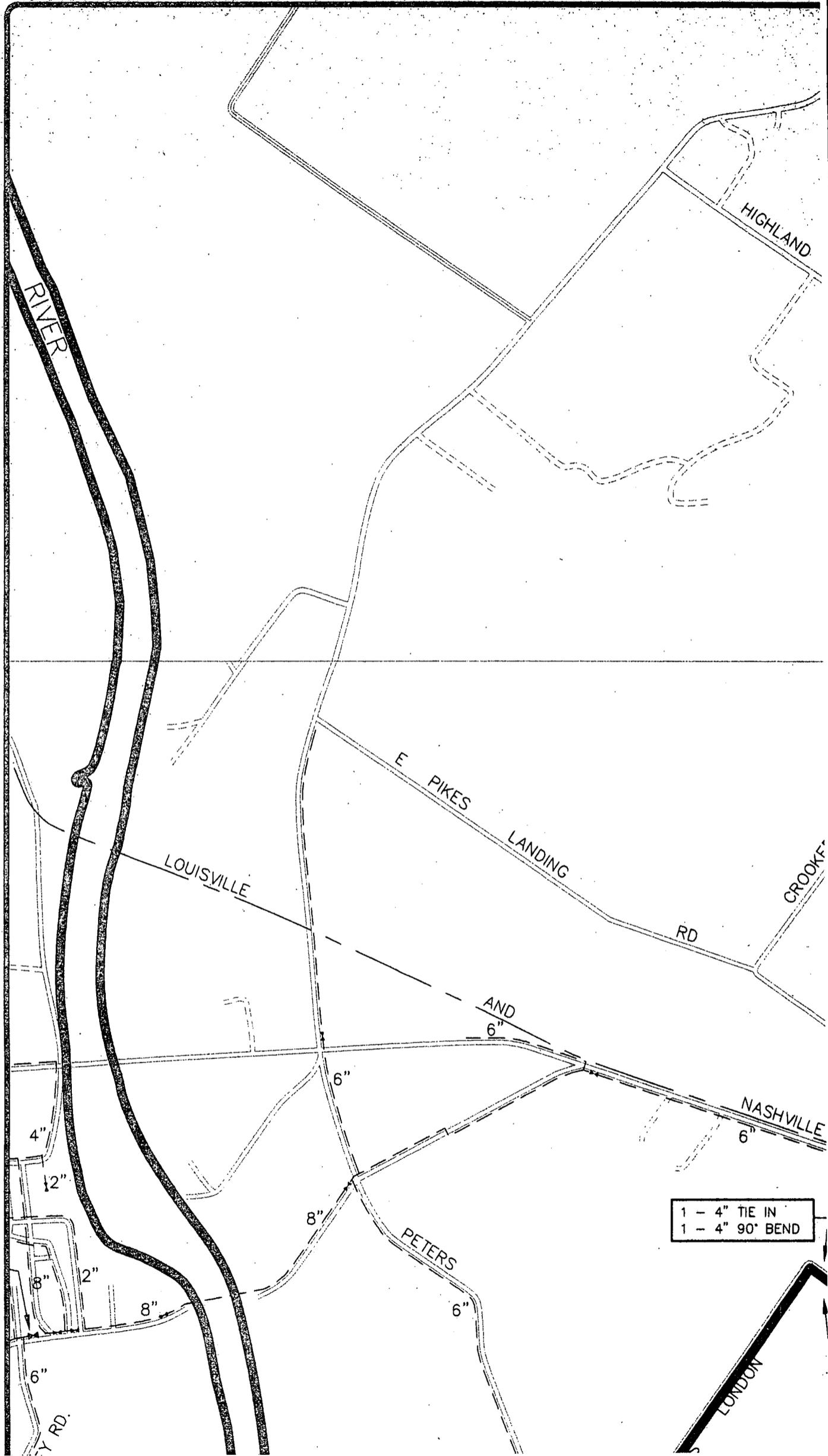


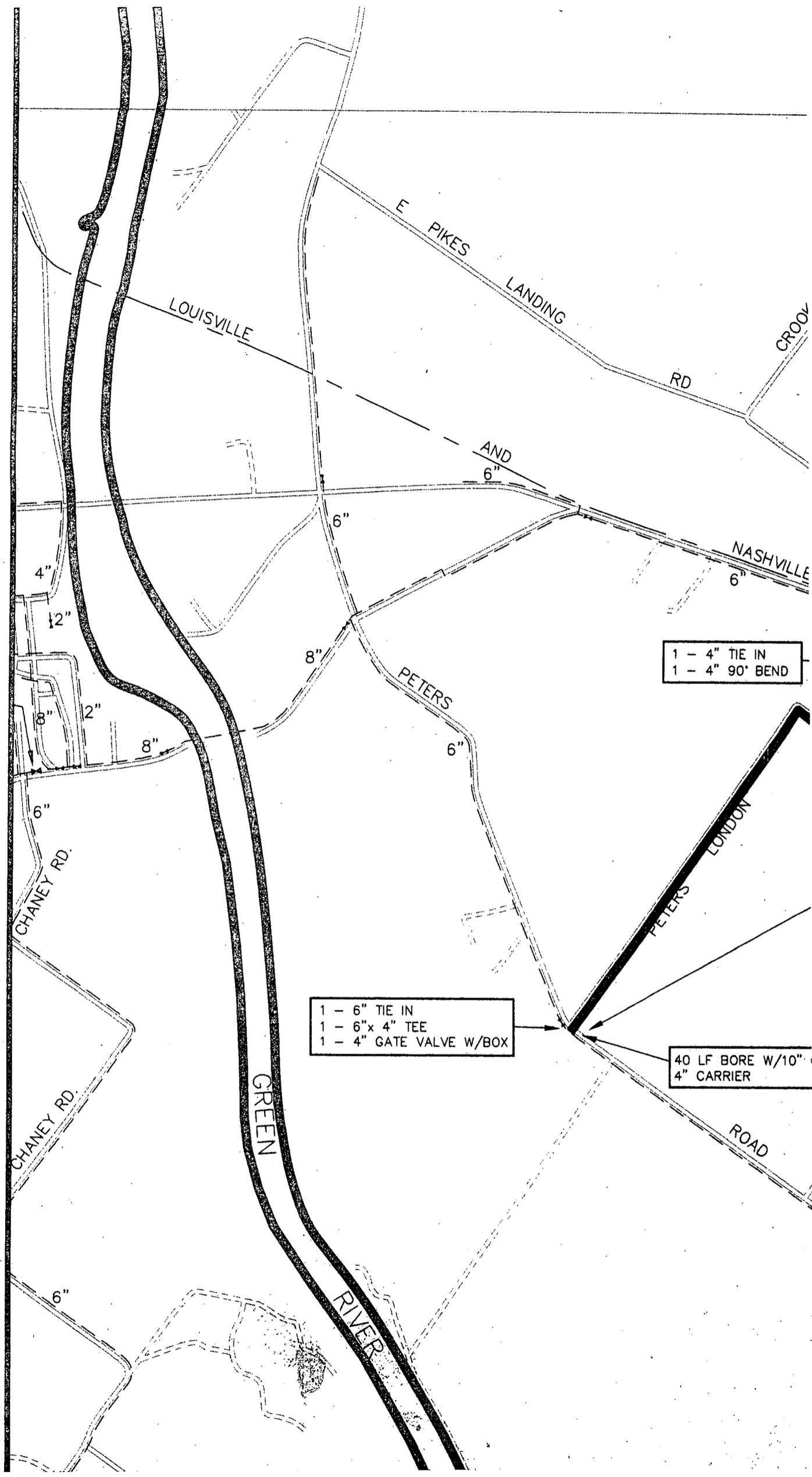
3220-10 (5)

Drawn by: JRJ
Checked by: RHM
File: 2000IMB6
Date: 11-28-99
Revised:

DISTRIBUTION SYSTEM IMPROVEMENTS CONTRACT "B"
HATCHET MILL RD. AND CONOWAY RD.

HENDERSON COUNTY WATER DISTRICT

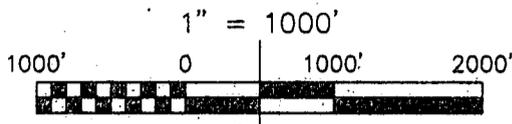
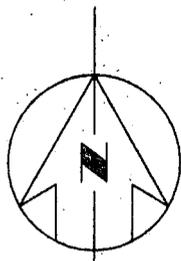
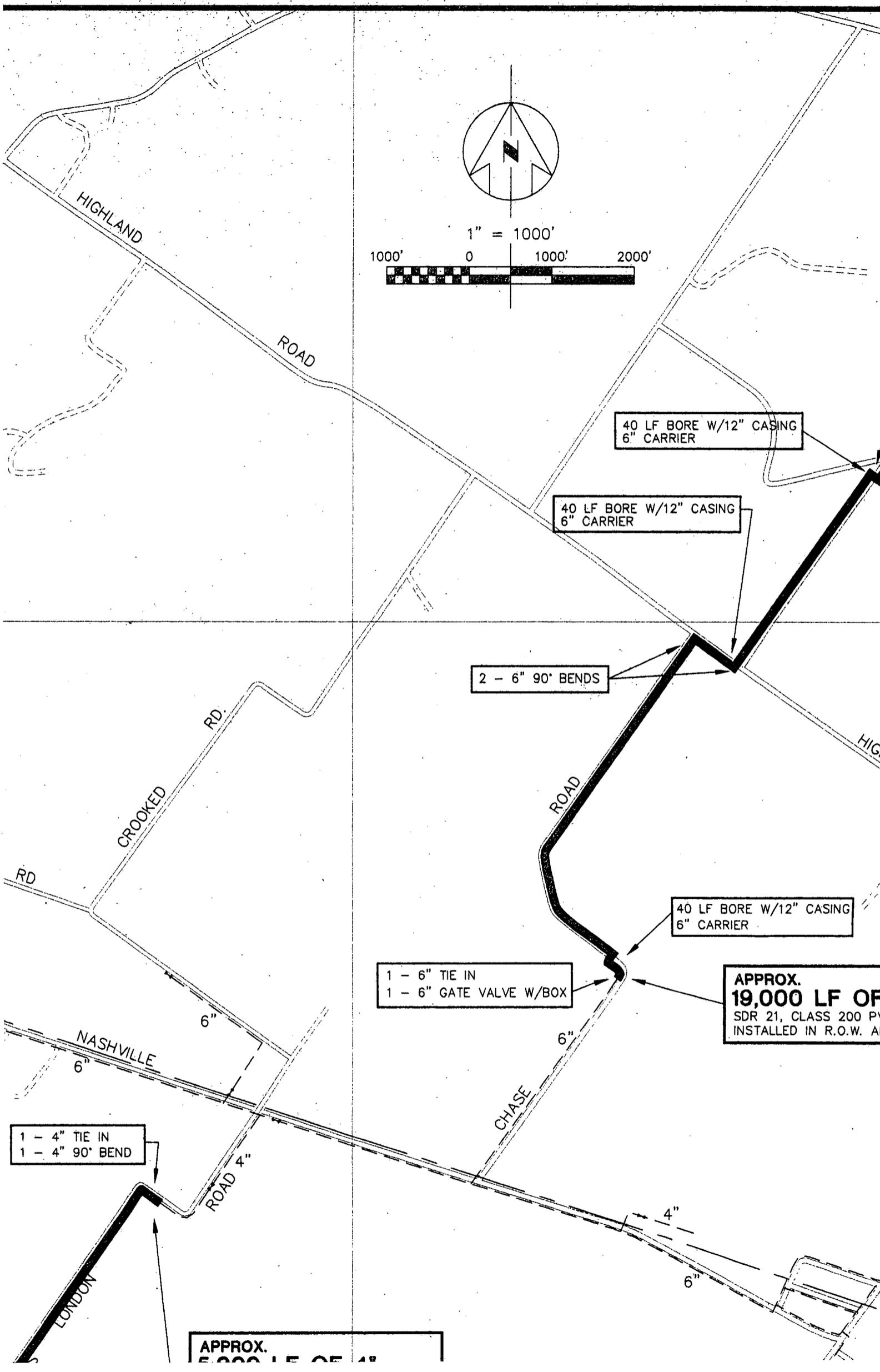




1 - 4" TIE IN
 1 - 4" 90° BEND

1 - 6" TIE IN
 1 - 6" x 4" TEE
 1 - 4" GATE VALVE W/BOX

40 LF BORE W/10"
 4" CARRIER



40 LF BORE W/12" CASING
6" CARRIER

40 LF BORE W/12" CASING
6" CARRIER

2 - 6" 90° BENDS

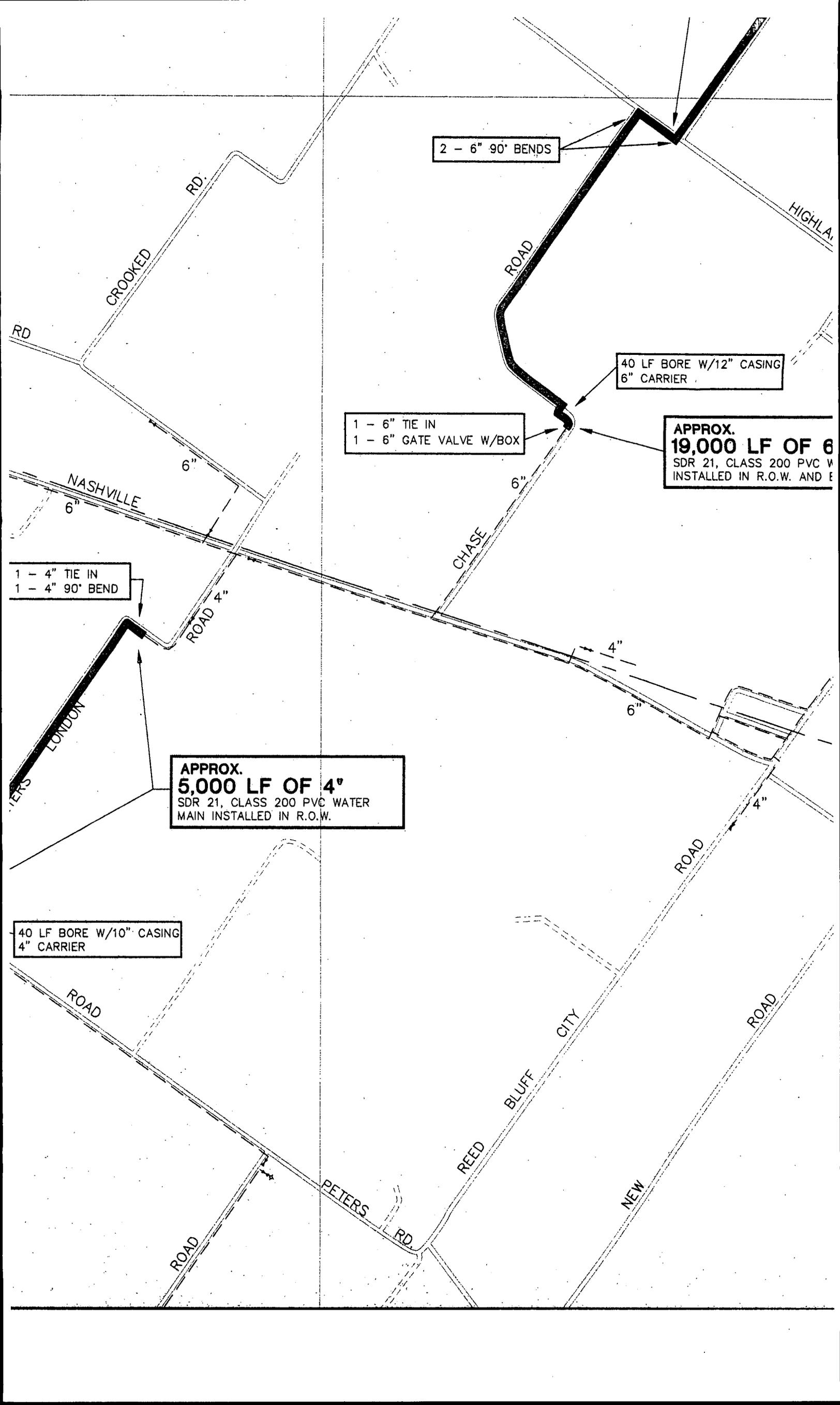
40 LF BORE W/12" CASING
6" CARRIER

1 - 6" TIE IN
1 - 6" GATE VALVE W/BOX

**APPROX.
19,000 LF OF**
SDR 21, CLASS 200 PVC
INSTALLED IN R.O.W. AND

1 - 4" TIE IN
1 - 4" 90° BEND

**APPROX.
5,000 LF OF 4"**



2 - 6" 90° BENDS

40 LF BORE W/12" CASING
6" CARRIER

1 - 6" TIE IN
1 - 6" GATE VALVE W/BOX

APPROX.
19,000 LF OF 6"
SDR 21, CLASS 200 PVC W
INSTALLED IN R.O.W. AND E

1 - 4" TIE IN
1 - 4" 90° BEND

APPROX.
5,000 LF OF 4"
SDR 21, CLASS 200 PVC WATER
MAIN INSTALLED IN R.O.W.

40 LF BORE W/10" CASING
4" CARRIER

CROOKED RD.

ROAD

HIGHWAY

RD

NASHVILLE

CHASE

LONDON

ROAD 4"

ROAD

ROAD

CITY

REED BLUFF

PETERS RD.

NEW

ROAD

ROAD

6"

6"

6"

4"

6"

4"

5,000 LF OF 4"

19,000 LF OF 6"

- 1 - FLUSH HYDRANT
- 1 - 6" x 3" REDUCER
- 1 - 3" GATE VALVE W/BOX
- 1 - 6" x 6" HYDRANT TEE W/PLUG
- 1 - 6" 90° BEND

40 LF BORE W/12" CASING
6" CARRIER

3 - 6" 90° BENDS

EASEMENT AT TOP OF BANK

MILEPOINT 6.569

50 LF BORE W/12" CASING
6" CARRIER

4 - 6" 90° BENDS

1 - 6" 90° BEND

PARALLEL OC
FROM MILEPOI
TO MILEPOINT:

1 - 6" TIE IN

SING

CROOKED RD.

KY HWY 811

HIGHLAND

KY HWY 811

12" CASING

ROAD

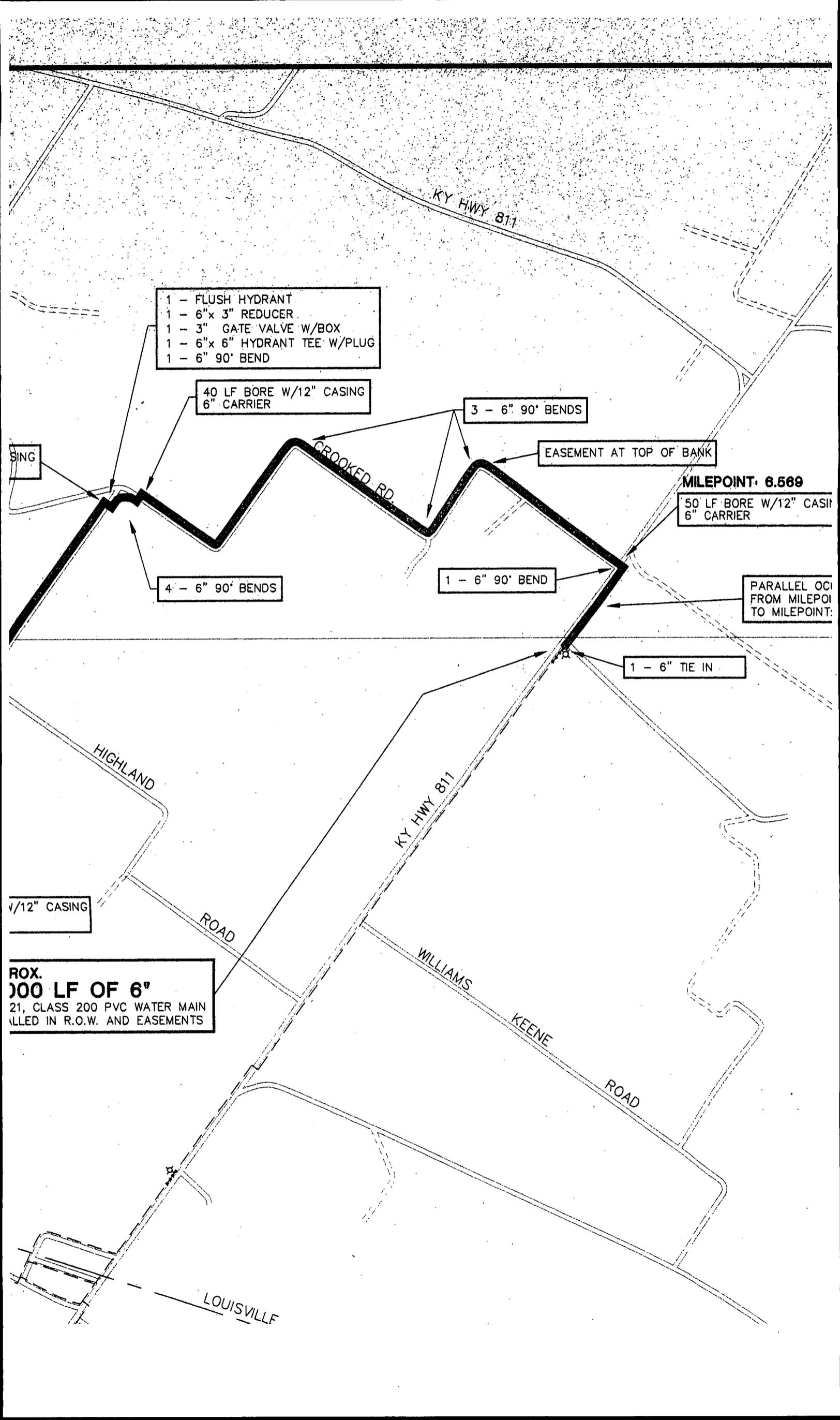
WILLIAMS

KEENE

ROAD

ROX.
100 LF OF 6"
21, CLASS 200 PVC WATER MAIN
LAPPED IN R.O.W. AND EASEMENTS

LOUISVILLE



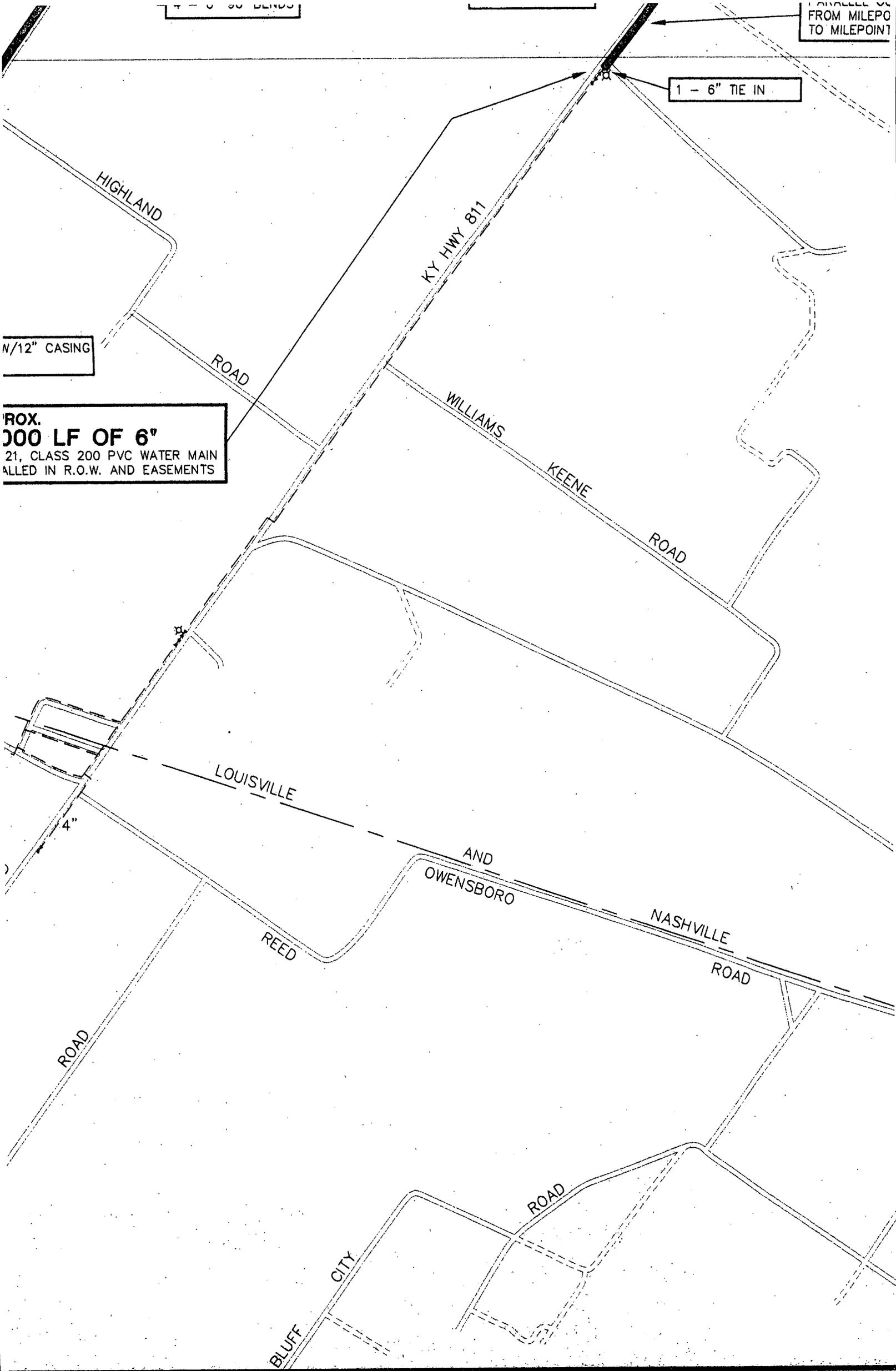
4 - 30' BENDS

1 - 6" TIE IN FROM MILEPO TO MILEPOINT

1 - 6" TIE IN

N/12" CASING

PROX. 300 LF OF 6" 21, CLASS 200 PVC WATER MAIN LLAIED IN R.O.W. AND EASEMENTS



ANK

MILEPOINT: 6.569

0 LF BORE W/12" CASING
" CARRIER

PARALLEL OCCUPANCY
FROM MILEPOINT: 6.566
TO MILEPOINT: 6.831

IN

HENDERSON

HENDERSON CO.
DAVIES CO.



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Drawn by:	SDC
Checked by:	JRJ
File:	2000IMB7
Date:	11-28-99
Revised:	

PARALLEL OCCUPANCY
FROM MILEPOINT: 6.566
TO MILEPOINT: 6.831

E IN

HENDERSON CO.
DAVIES CO.

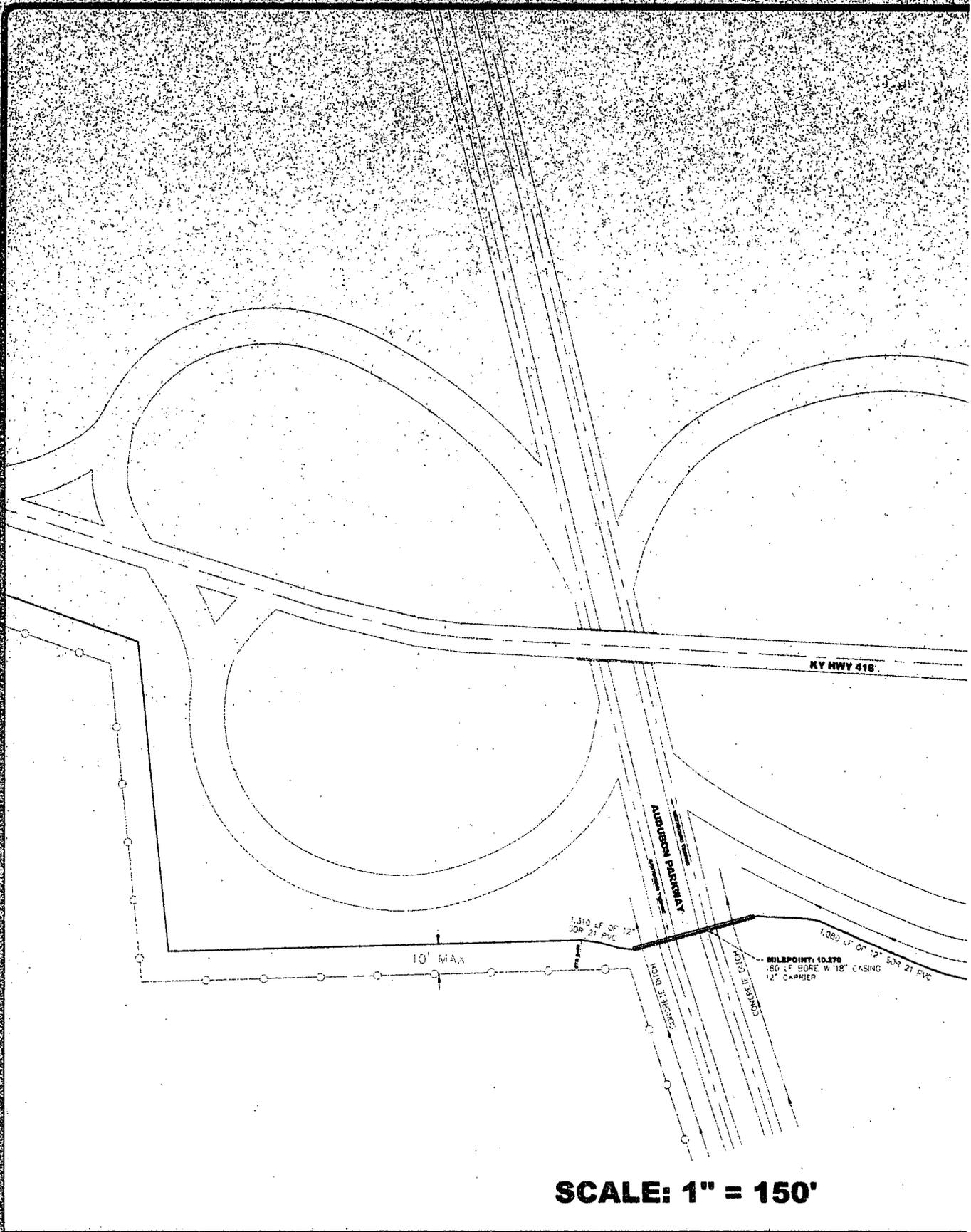
WOODS



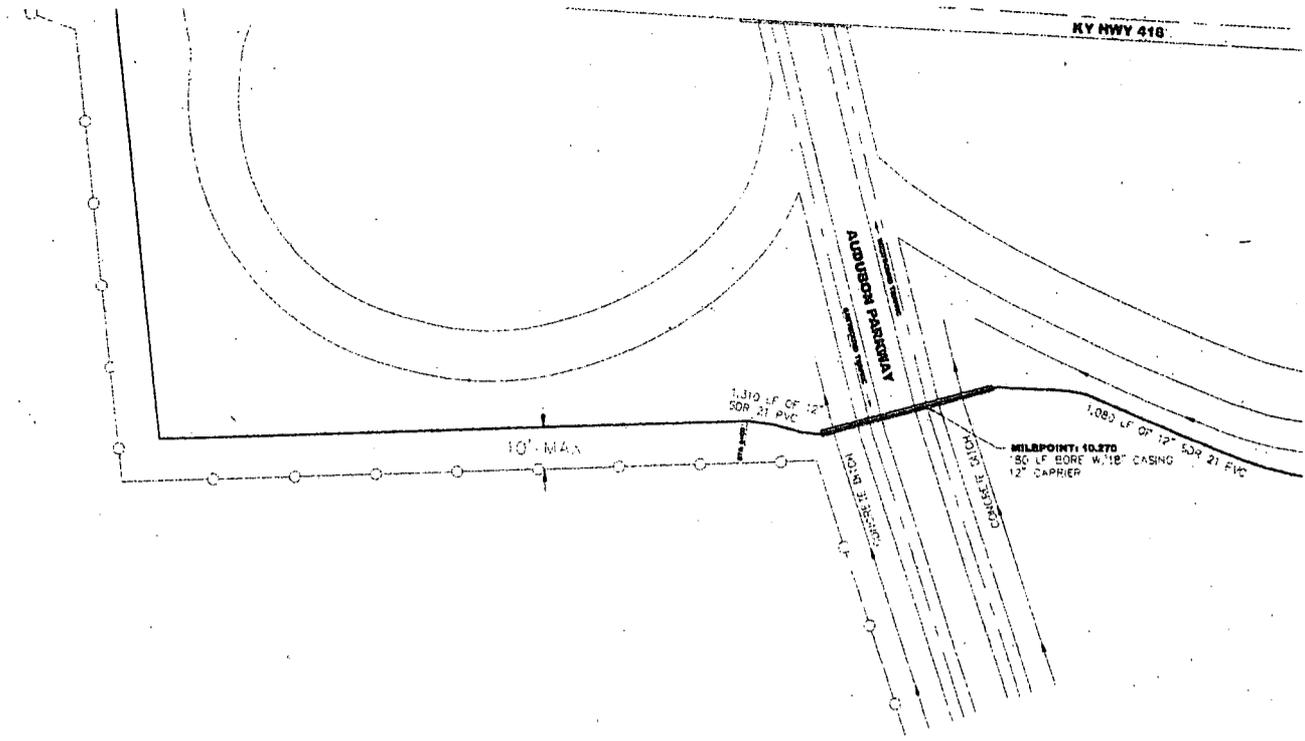
Drawn by:	SDC
Checked by:	JRJ
File:	2000IMB7
Date:	11-28-99
Revised:	

**D DISTRIBUTION SYSTEM IMPROVEMENTS CONTRACT "B"
PETERS LONDON RD. AND HIGHLAND RD.**

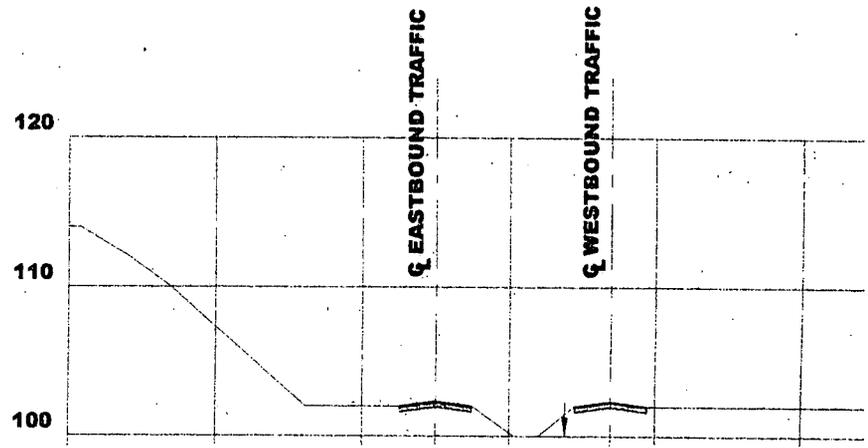
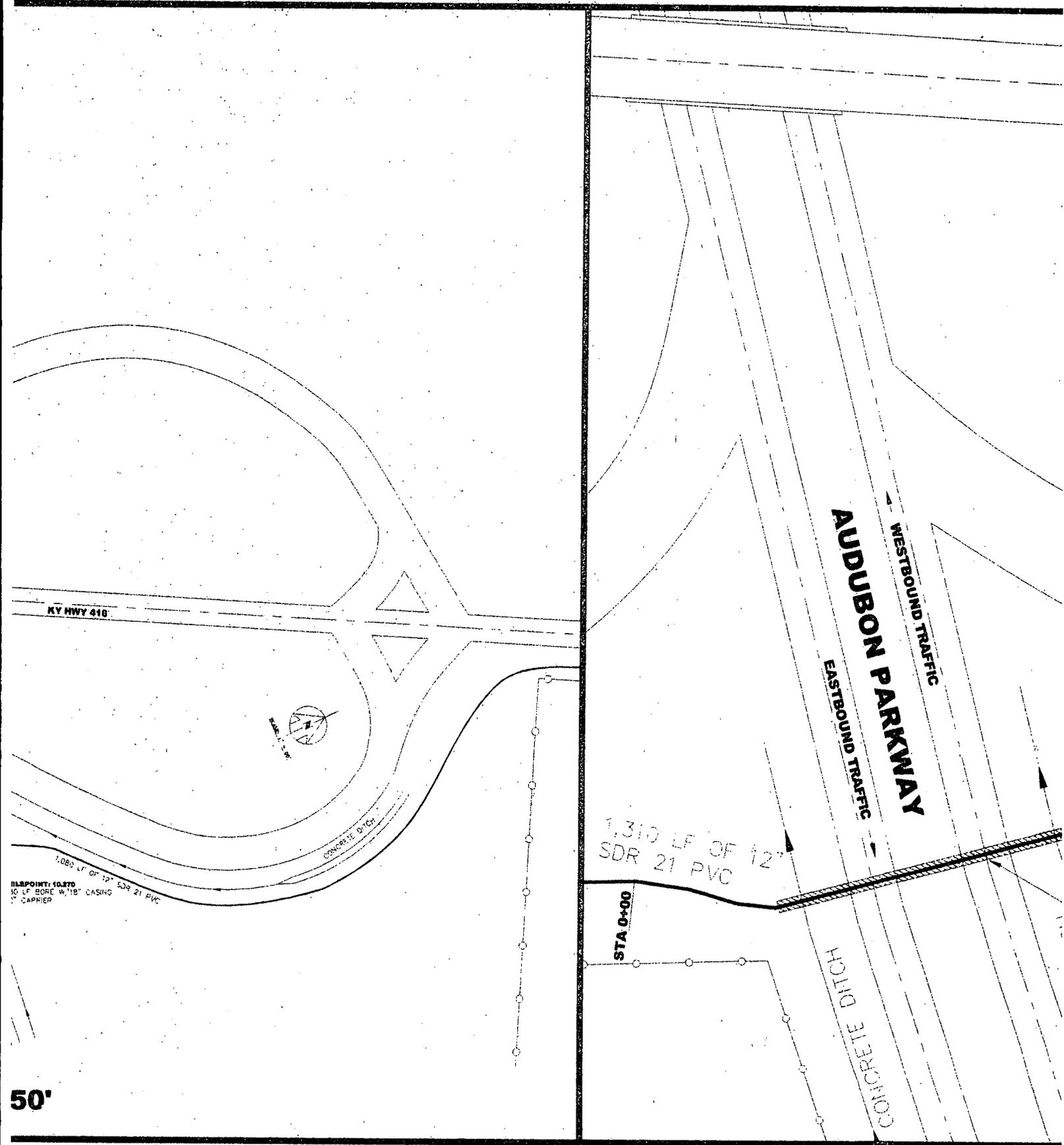
HENDERSON COUNTY WATER DISTRICT

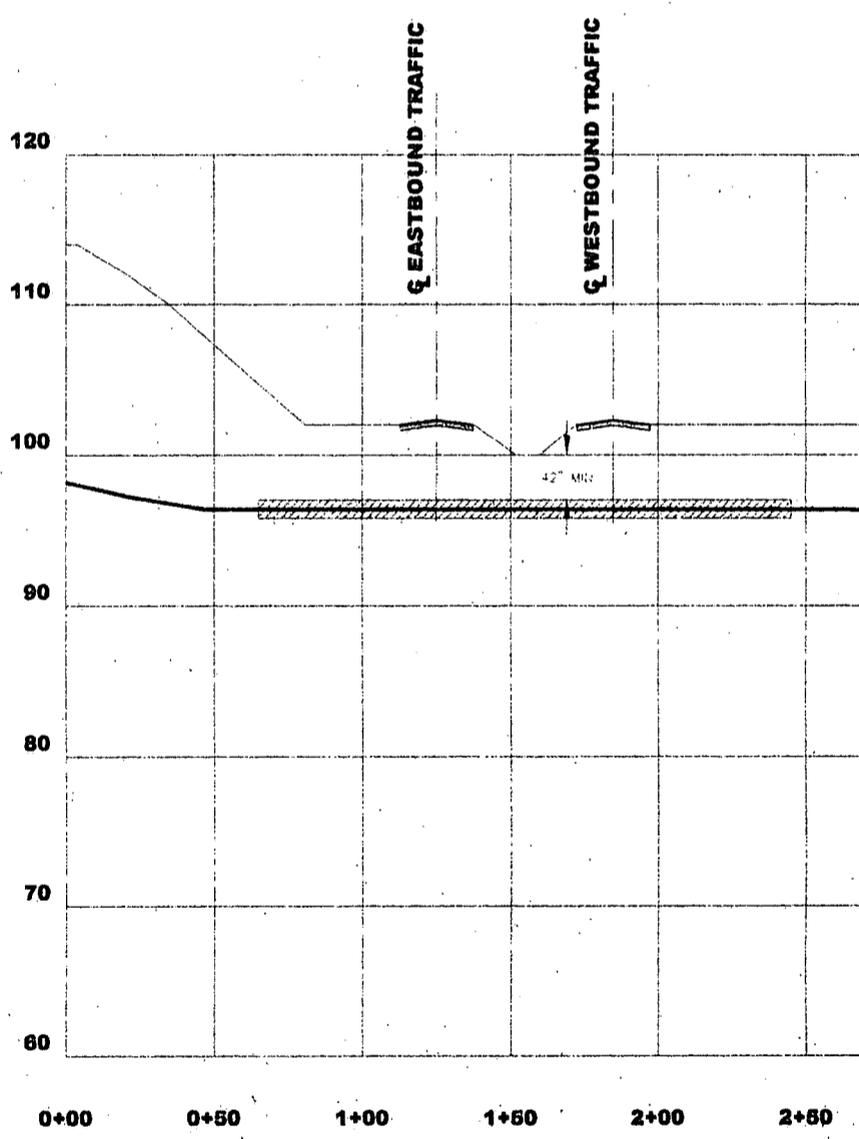
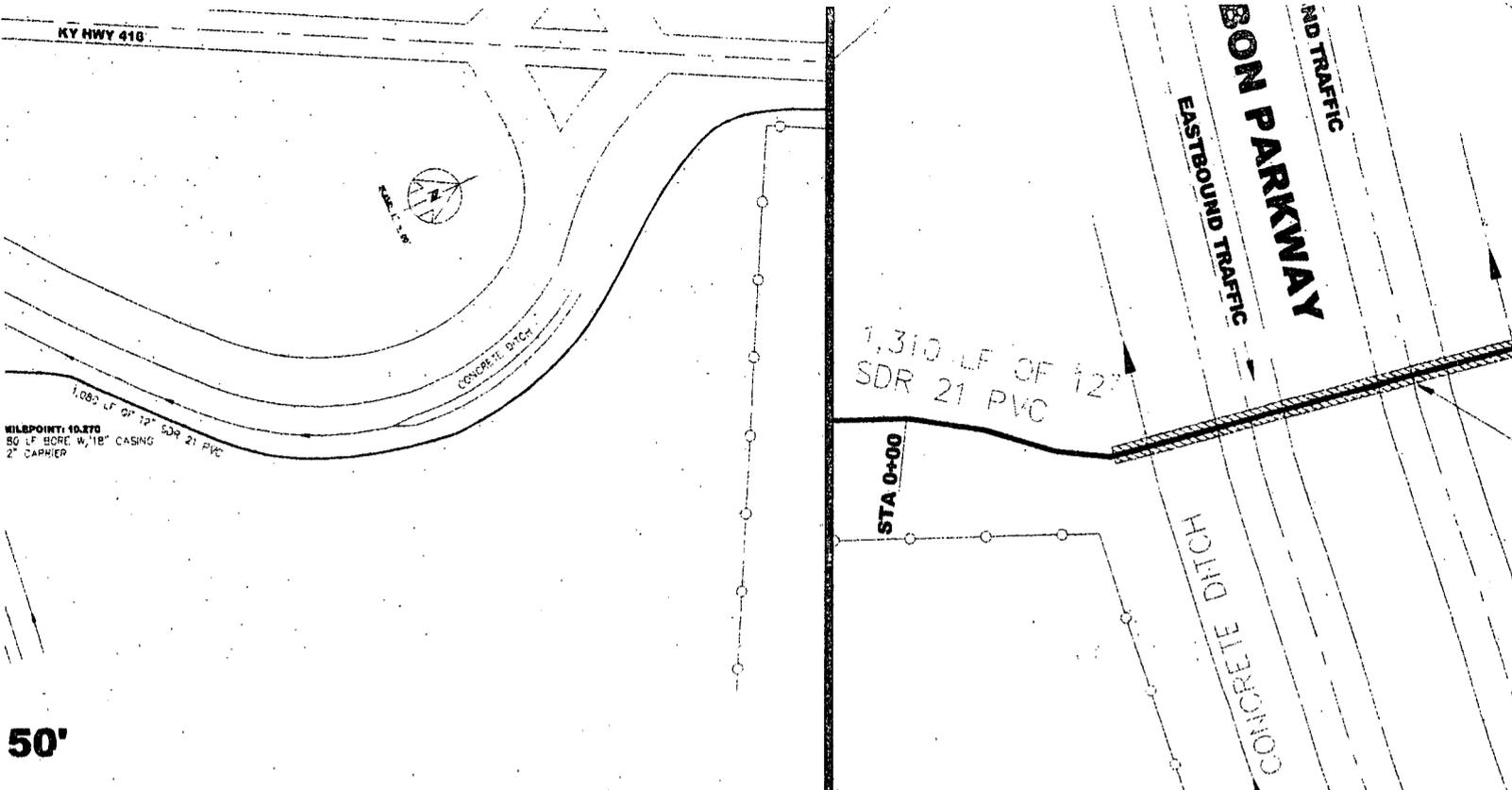


SCALE: 1" = 150'



SCALE: 1" = 150'





KY HWY 416

WESTBOUND TRAFFIC
PARKWAY

HOLD DITTO
CONCRETE ELEVATION

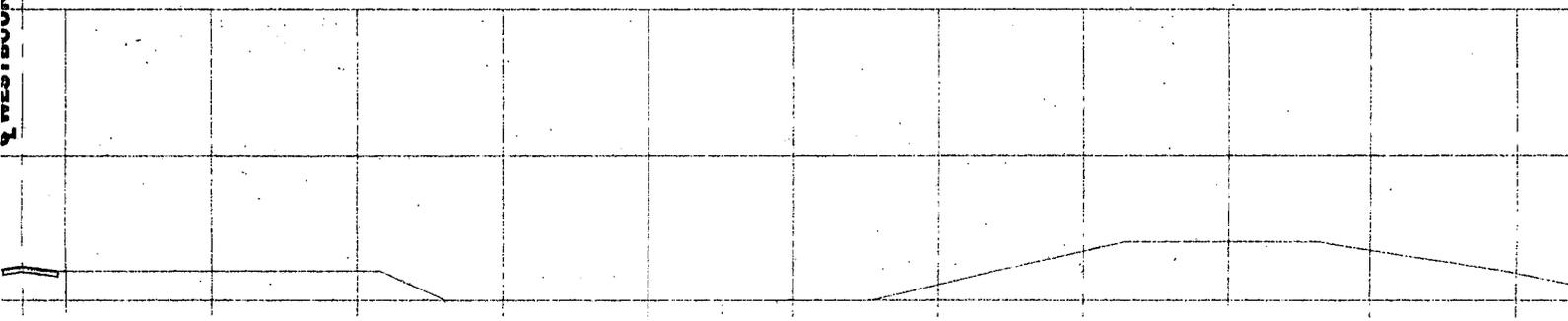
MILEPOINT: 10.270

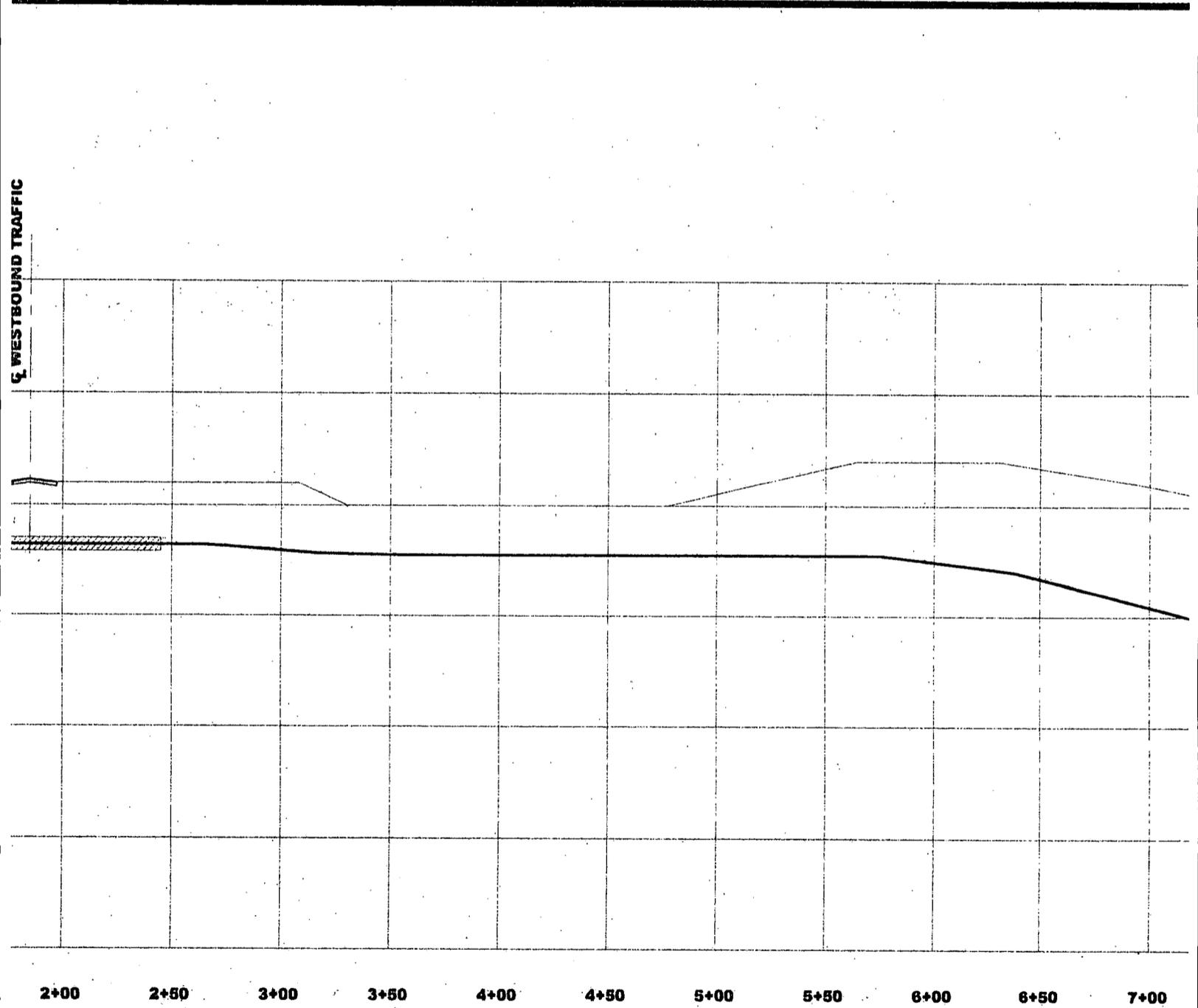
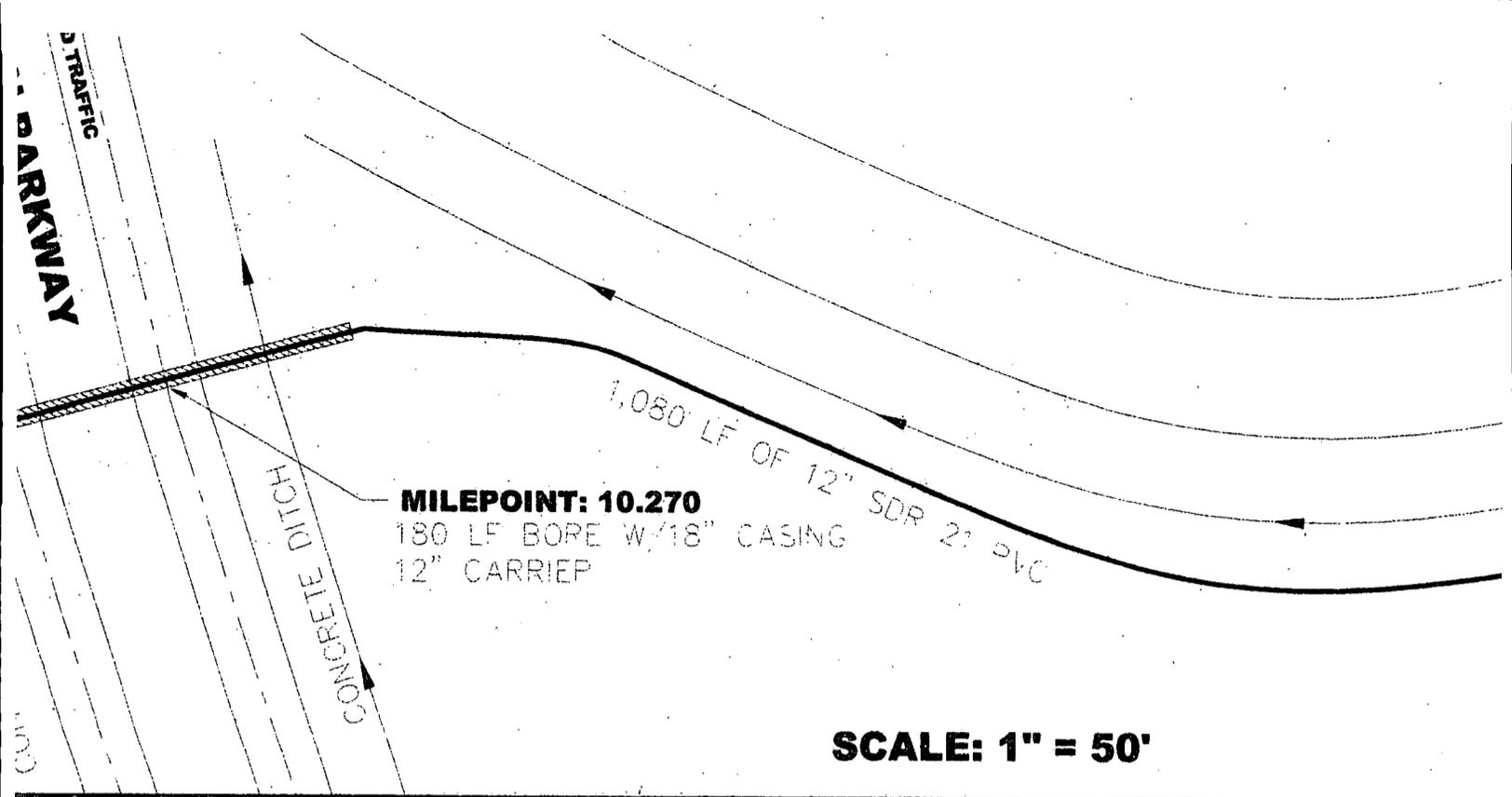
180 LF BORE W/18" CASING
12" CARRIER

1,080 LF OF 12" SDR 21 PVC

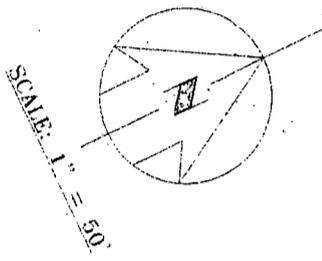
SCALE: 1" = 50'

WESTBOUND TRAFFIC





VERTICAL SCALE: 1" = 10'
HORIZONTAL SCALE: 1" = 50'



CONCRETE DITCH

HUNTER MARTIN & ASSOCIATES, INC.



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Drawn by:
SDC

Checked by:
TMH

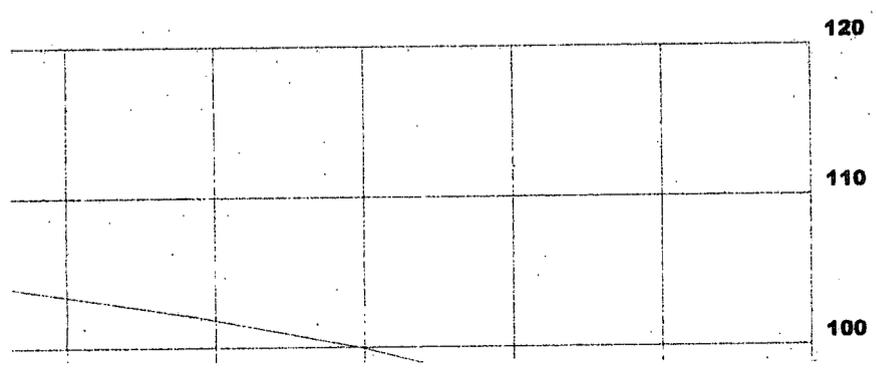
File:
AUDOBON

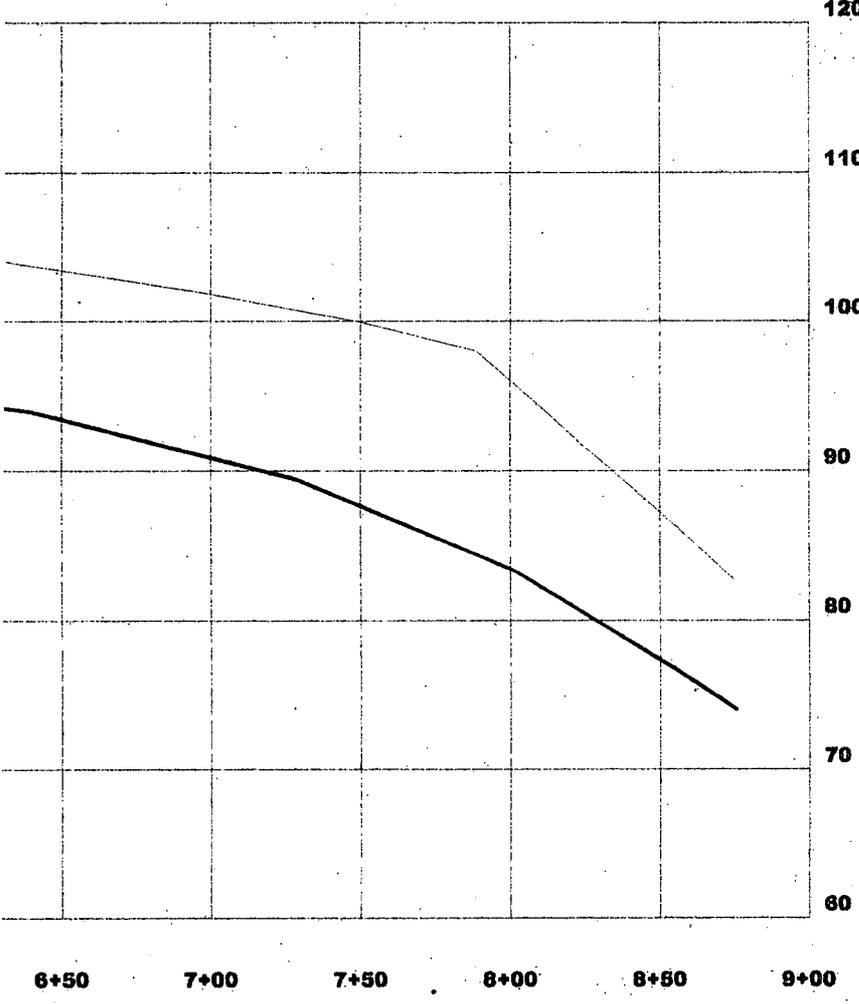
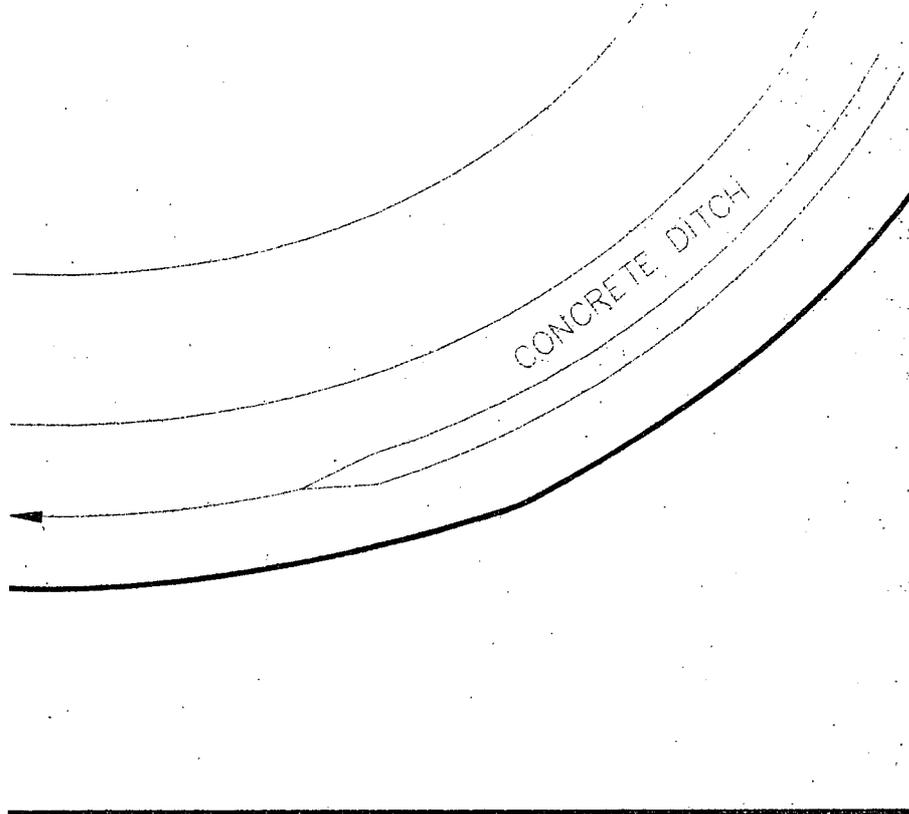
Date:
11-28-99

Revised:

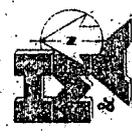
MOVEMENTS CONTRACT "B"
 MILEPOINT 10.270

ER DISTRICT





HUNTER A
3220 LOP
(27)



Drawn by:
SDC
Checked by:
TMH
File:
AUDOBON
Date:
11-28-99
Revised:

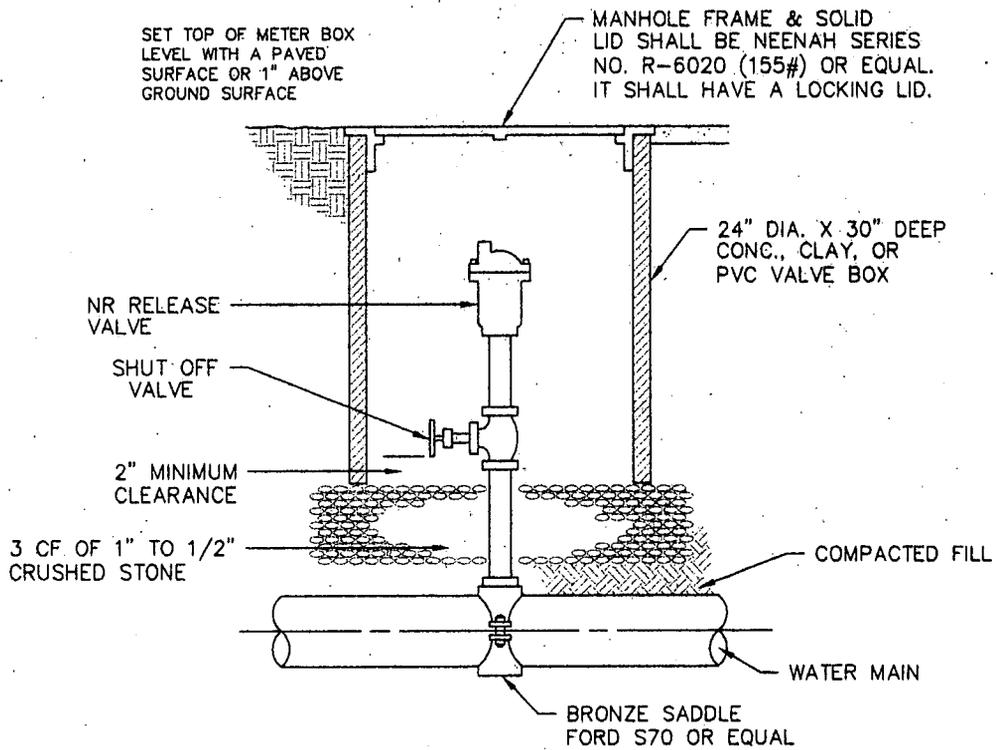
**1999/2000 DISTRIBUTION SYSTEM IMPROVEMENTS CONTRACT "B"
AUDUBON PARKWAY CROSSING MILEPOINT 10.270**

HENDERSON COUNTY WATER DISTRICT

Sheet

B8

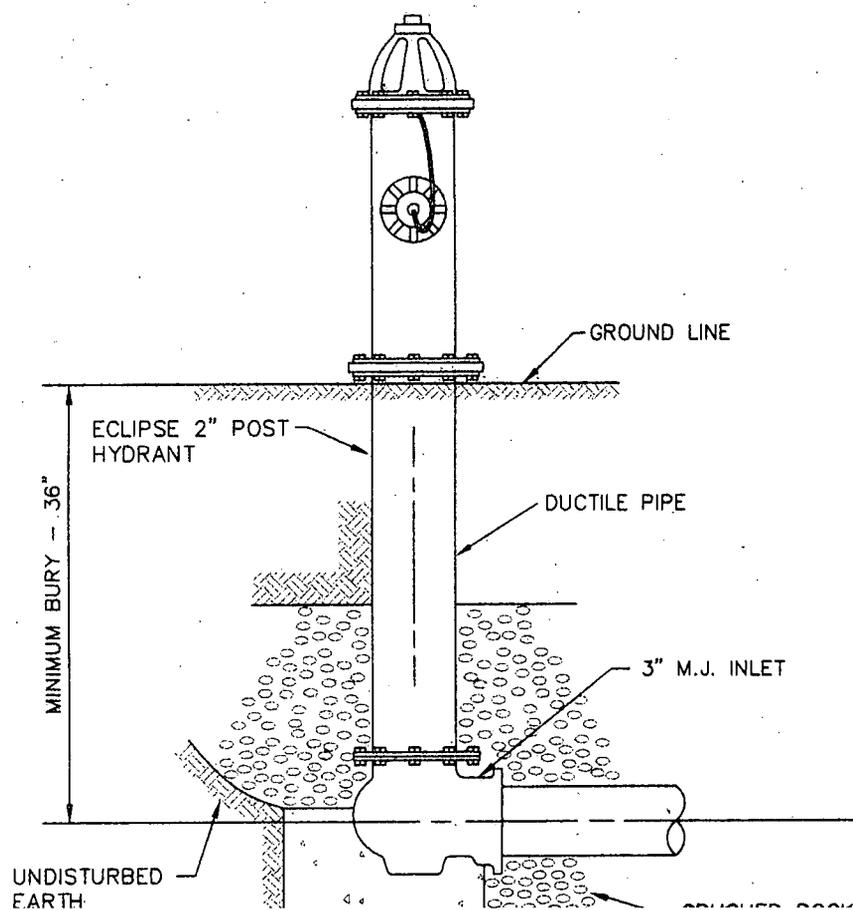
FOR - 101
11-28-99



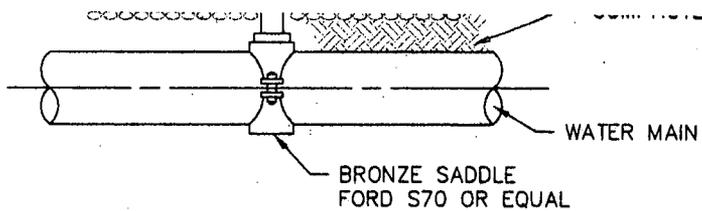
AIR RELEASE VALVE INSTALLATION

(VALVE SIZE PER PLANS)

NOT TO SCALE



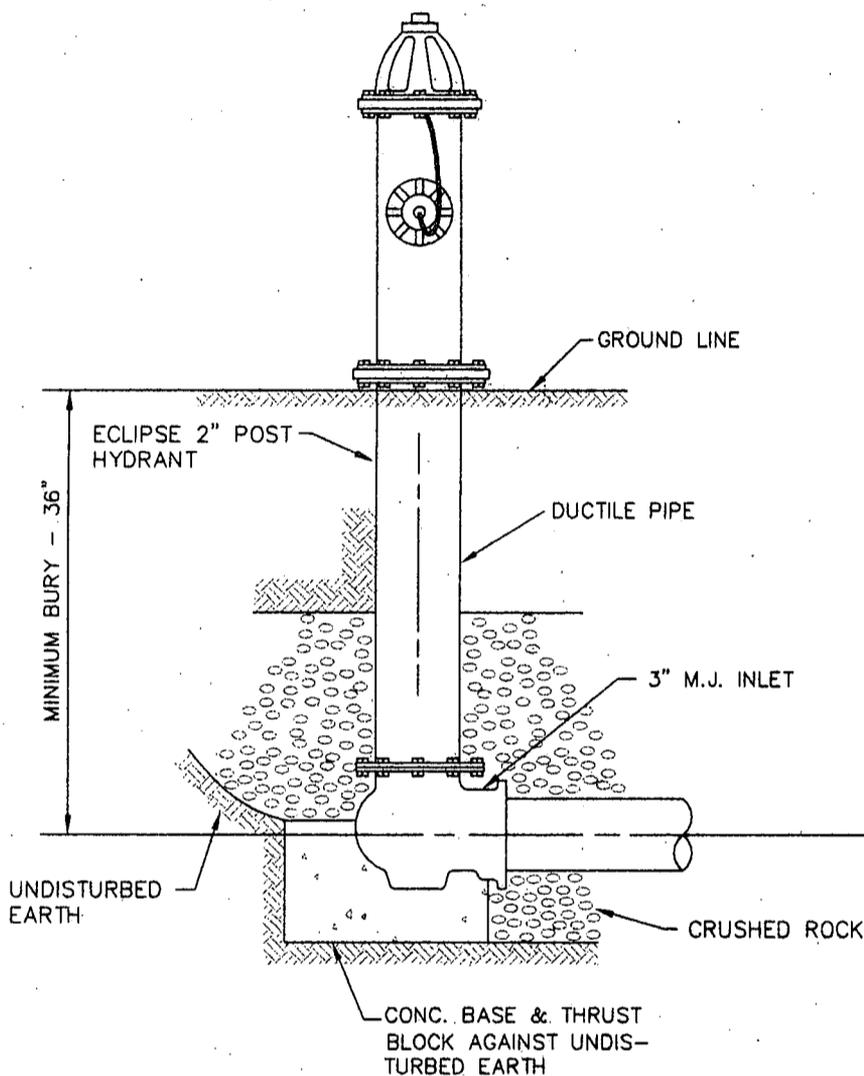
CRUSHED STONE



AIR RELEASE VALVE INSTALLATION

(VALVE SIZE PER PLANS)

NOT TO SCALE



FLUSH HYDRANTS SHALL BE ECLIPSE NO.2 POST HYDRANTS OR APPROVED EQUAL.

HYDRANTS SHALL BE SELF DRAINING, NON-FREEZING, COMPRESSION TYPE WITH 2-3/16" MAIN VALVE OPENING. INLET CONNECTION SHALL BE 3" M.J. OUTLET SHALL BE 2-1/2" NST.

HYDRANTS SHALL HAVE A 3" DUCTILE IRON PIPE RISER WITH A CAST IRON STOCK TOP, AND NON-TURNING OPERATING ROD. PRINCIPAL INTERIOR OPERATING PARTS SHALL BE BRASS AND REMOVABLE FROM THE HYDRANT FOR SERVICING WITHOUT EXCAVATING THE HYDRANT.

HYDRANTS SHALL BE SET IN 4 CUBIC FEET OF CRUSHED STONE TO ALLOW FOR PROPER DRAINAGE. RECOMMENDATIONS OF THE AWWA SHOULD BE FOLLOWED WHEN INSTALLING THE HYDRANTS.

FLUSH HYDRANT

NOT TO SCALE

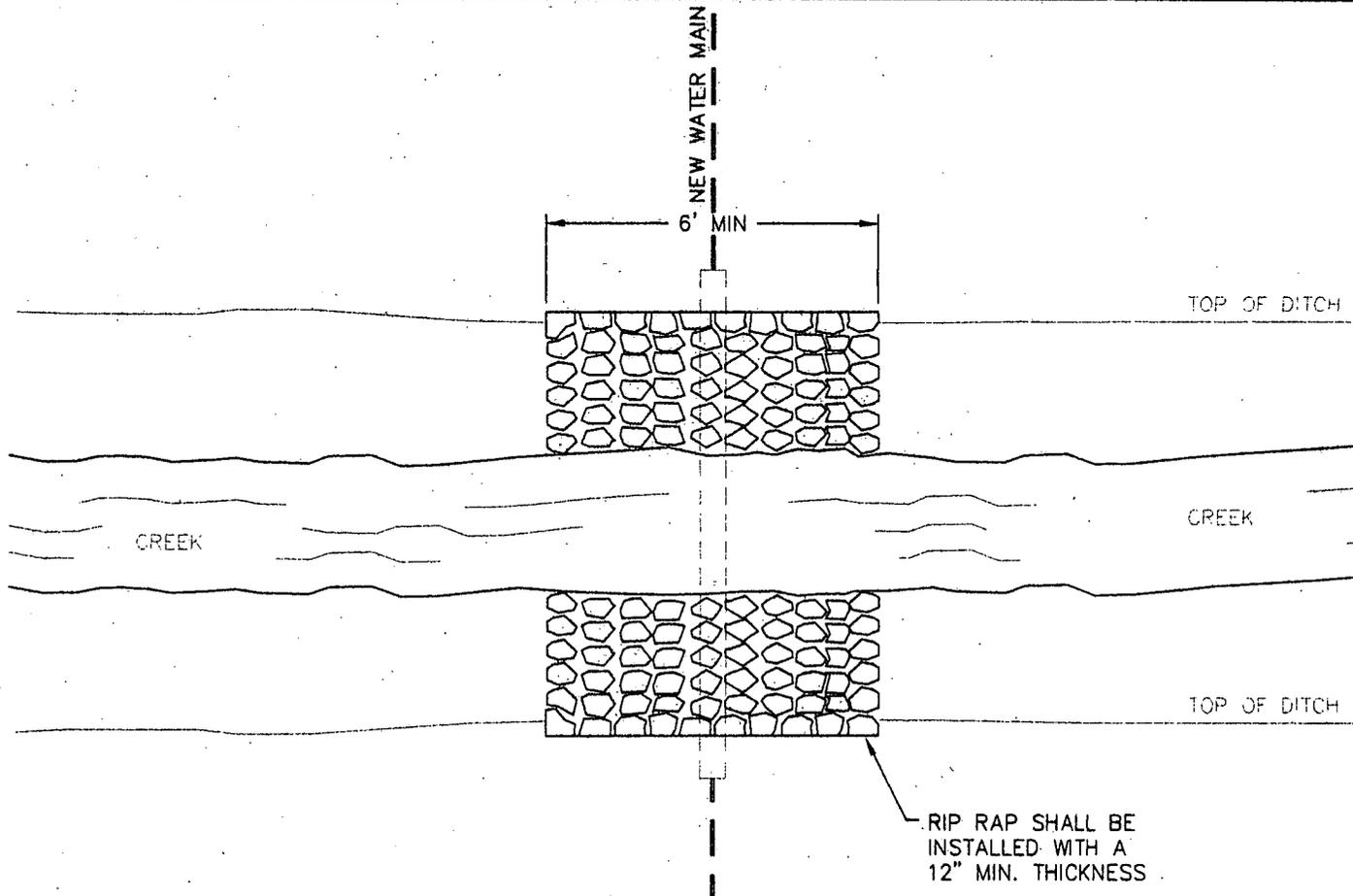
R.O.W.

MAIN

SUPPORT SERVICE LINE AND
CURVE GENTLY TO PREVENT
KINKING.

SERVICE CONNECTION DETAILS AND METER SETTING

NOT TO SCALE



RIP-RAP DETAIL

NOT TO SCALE

RURAL SECTION

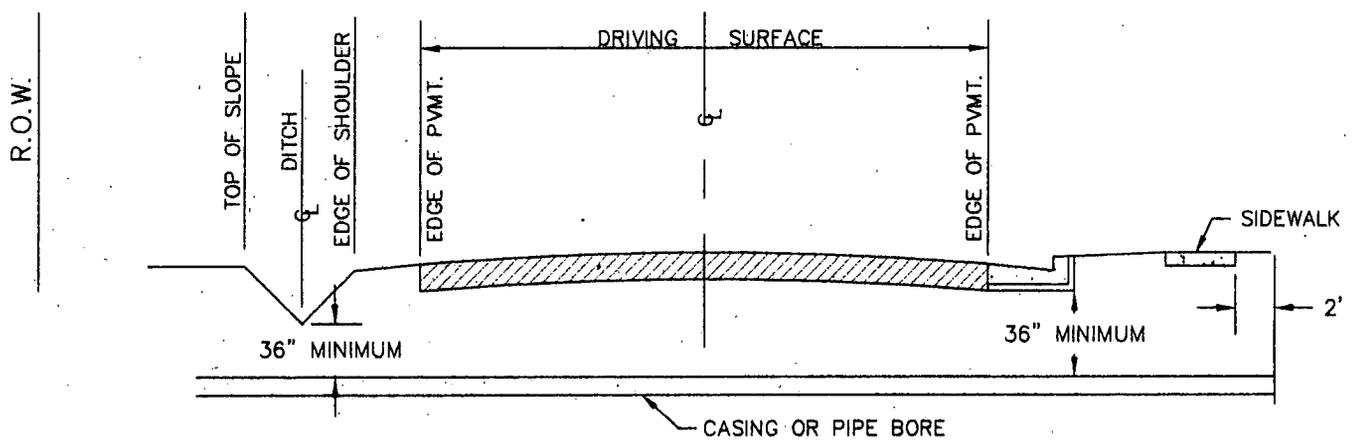
1. LIMIT OF OPEN CUT IS 5' FROM PVMT.

GENERAL

1. ALL WORK WITHIN ROW SHALL BE IN ACCORDANCE WITH THE PERMIT.
2. CASING IS REQ'D. ON ALL MAINS OVER 2".
3. BORE PITS SHALL BE BACKFILLED & COMPACTED.
4. SEED & STRAW ALL AREAS DISTURBED BY WORK.
5. ALL DRAINAGE DITCHES SHALL BE LEFT OPEN.
6. CARRIER PIPE SHALL BE INSTALLED WITH SKIDS PER THE SPECIFICATIONS.
7. SEAL THE ENDS OF CASING PER THE SPECS.
8. NO JOINTS UNDER PAVEMENT WITHOUT CASING.

IMPROVED SECTION

1. LIMIT OF OPEN CUT IS 5' FROM PVMT. OR CURB AND 2' FROM SIDEWALK.



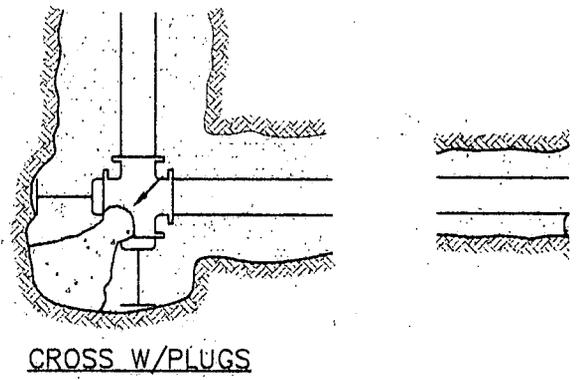
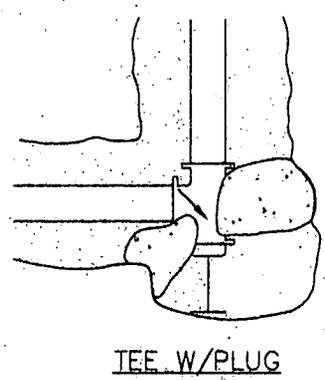
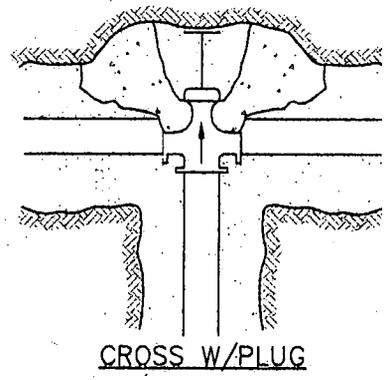
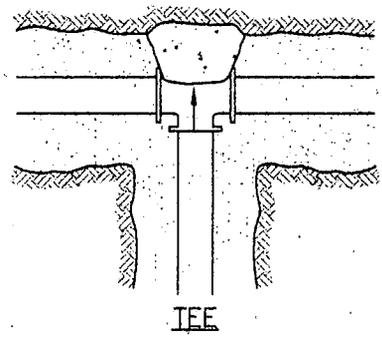
HIGHWAY OR ROAD CROSSING

NOT TO SCALE

TOP OF METER
 1" ABOVE GROUND
 SURFACE.

METERS SHALL BE NEPTUNE,
 ROCKWELL, OR BADGER.

5' ON CUST.
 CAP END FOR
 12-IN

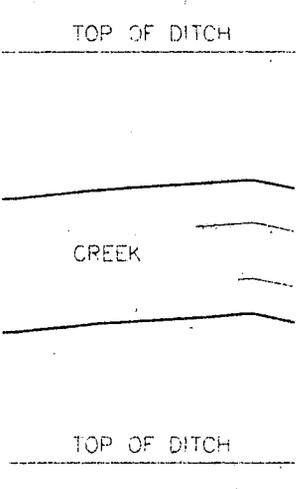


- NOTES:
1. ARROWS SHOW DIRECTION OF THRUST.
 2. BLOCKING SHALL BEAR AGAINST UNDISTURBED EARTH.
 3. BRACE PLUGS AGAINST UNDISTURBED EARTH.
 4. THRUST BLOCKS SHALL BE 2500 P.S.I. (5 BAG MIX) CONCRETE.
 5. CONCRETE SHALL NOT OBSTRUCT FITTING CONNECTIONS.

BEARING STRENGTH OF SOILS

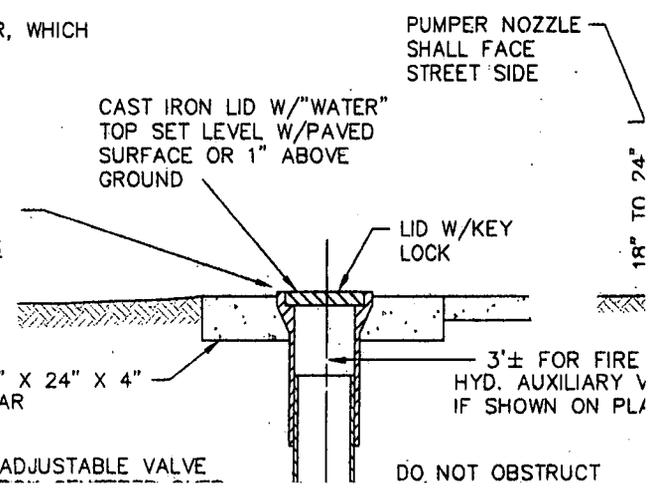
Soils and Safe Bearing Loads	Lbs. Sq. Ft.
Sound Shale	10,000
Cemented Gravel and Sand difficult to pick	4,000
Coarse and fine compact Sand	3,000
Medium Clay - Can be spaded	2,000
Soft Clay	1,000
Muck	0

THRUST BLOCKING DETAIL
 NOT TO SCALE



FIRE HYDRANTS SHALL BE MUELLER, WHICH IS THE OWNER'S STANDARD.

NOTE: AUXILIARY VALVES ARE REQUIRED FOR ALL FIRE HYDRANTS



NOTE: WHERE POSSIBLE THE AUXILIARY VALVE SHALL BE ATTACHED DIRECTLY TO A F.H.

IE
 A
 SS

PROVIDED SECTION

S

NOTES:

1. ARROWS SHOW DIRECTION OF THRUST.
2. BLOCKING SHALL BEAR AGAINST UNDISTURBED EARTH.
3. BRACE PLUGS AGAINST UNDISTURBED EARTH.
4. THRUST BLOCKS SHALL BE 2500 P.S.I. (5 BAG MIX) CONCRETE.
5. CONCRETE SHALL NOT OBSTRUCT FITTING CONNECTIONS.

BEARING STRENGTH OF SOILS

Soils and Safe Bearing Loads	Lbs. Sq. Ft.
Sound Shale	10,000
Cemented Gravel and Sand difficult to pick	4,000
Coarse and fine compact Sand	3,000
Medium Clay - Can be spaded	2,000
Soft Clay	1,000
Muck	0

THRUST BLOCKING DETAIL
NOT TO SCALE

TOP OF DITCH

CREEK

TOP OF DITCH

E
SS

FIRE HYDRANTS SHALL BE MUELLER, WHICH IS THE OWNER'S STANDARD.

NOTE: AUXILLARY VALVES ARE REQUIRED FOR ALL FIRE HYDRANTS

NOTE: WHERE POSSIBLE THE AUXILLARY VALVE SHALL BE ATTACHED DIRECTLY TO A F.H. ANCHORING TEE W/D.I. ROTATING GLAND. OTHERWISE, A STD. TEE AND A CONNECTING PIECE W/D.I. INTEGRAL GLAND & ROTATING GLAND SHALL BE PROVIDED TO SECURELY FASTEN THE VALVE TO THE MAIN.

PROVIDE 24" X 24" X 4" CONC. COLLAR

ADJUSTABLE VALVE BOX CENTERED OVER OPER. NUT, PLUMB AND HAND TAMPED

PUMPER NOZZLE SHALL FACE STREET SIDE

CAST IRON LID W/"WATER" TOP SET LEVEL W/PAVED SURFACE OR 1" ABOVE GROUND

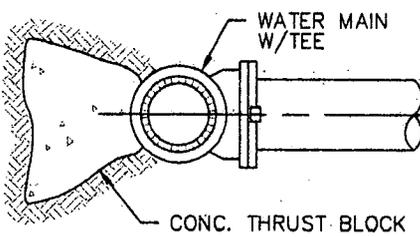
LID W/KEY LOCK

18" TO 24"

3'± FOR FIRE HYD. AUXILIARY V IF SHOWN ON PLA

DO NOT OBSTRUCT HYDRANT DRAINS

7 C.F. OF 1" TO 1/2" CRUSHED STONE FOR DRAIN



CONC. SUPPORT

VALVE & BOX DETAIL

CONC. BLOCK TURBED

FIRE HYDRANT AND VALVE INSTAL

NOT TO SCALE

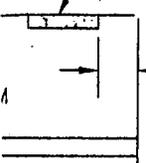
PROVED SECTION

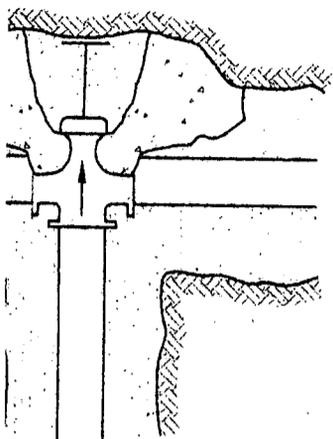
LIMIT OF OPEN CUT IS 5' FROM PVMT. OR CURB AND 2' FROM SIDEWALK.

R.O.W.

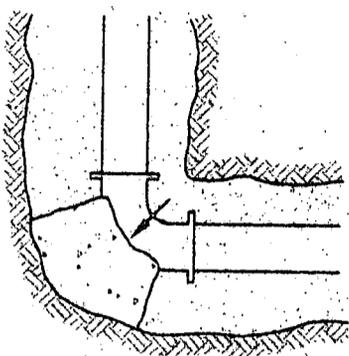
SIDEWALK

2'

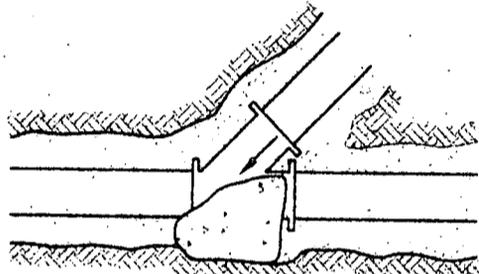




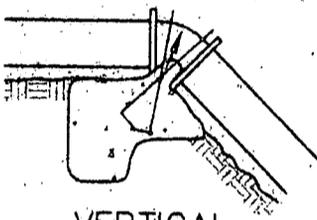
CROSS W/PLUG



ELBOW-BEND



WYE



VERTICAL BEND-ANCHOR

LENGTH OF SOILS

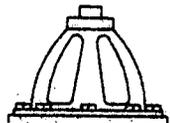
Soil Loads	Lbs. Sq. Ft.
	10,000
Sand	4,000
loose Sand	3,000
compacted	2,000
	1,000
	0

THRUST PER POUND OF WATER PRESSURE

Pipe Size	Dead End or Tee	90° Elbow	45° Elbow	22 1/2° Elbow
4	20	40	27	20
6	39	80	34	19
8	68	100	56	31
10	110	160	89	48
12	165	220	120	62
14	210	300	168	87
16	270	400	225	121
18	380	500	280	145
20	480	670	370	190
24	690	970	530	270

INSTALLATION DETAILS

TO SCALE



2 - 2 1/2" HOSE NOZZLES

HUNTER MARTIN & ASSOCIATES, INC.
 ENGINEERS & SURVEYORS
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Drawn by:	SDC
Checked by:	RHM
File:	2000IMPST
Date:	6-22-99
Revised:	

STRENGTH OF SOILS

Bearing Loads	Lbs. Sq. Ft.
Ordinary Sand	10,000
Compact Sand	4,000
Can be spaded	3,000
	2,000
	1,000
	0

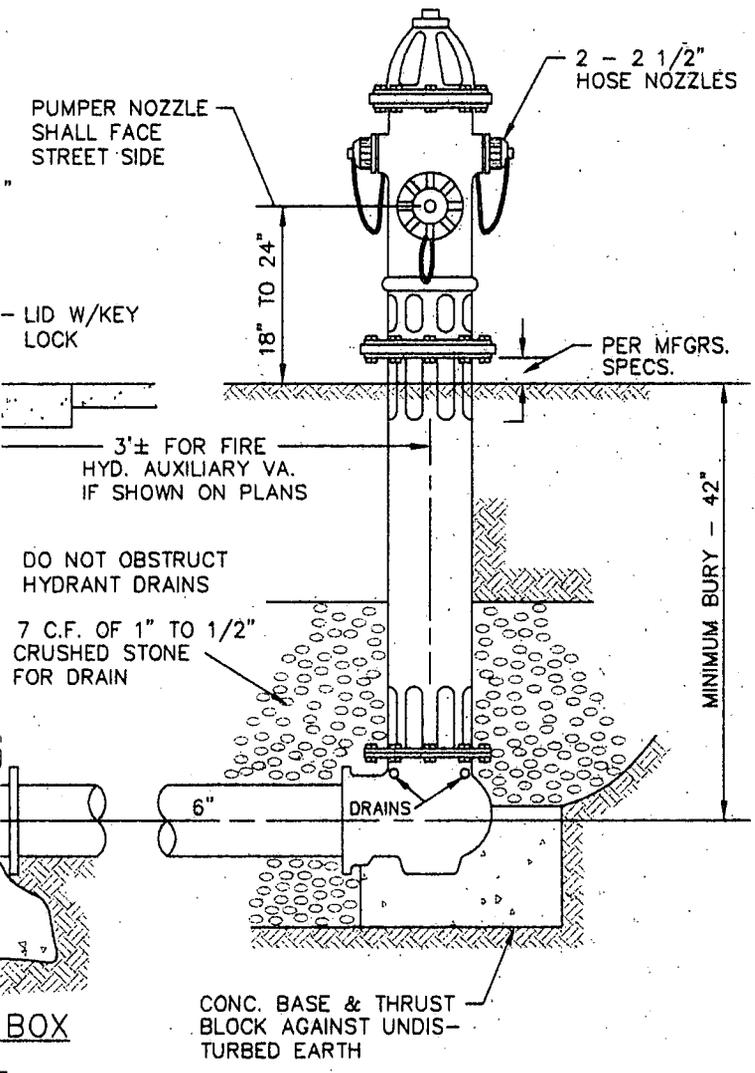
THRUST PER POUND OF WATER PRESSURE

Pipe Size	Dead End or Tee	90° Elbow	45° Elbow	22 1/2° Elbow
4	20	40	27	20
6	39	80	34	19
8	68	100	56	31
10	110	160	89	48
12	155	220	120	62
14	210	300	188	87
16	270	400	225	121
18	380	500	280	145
20	480	670	370	190
24	690	970	530	270

LOCKING DETAILS
NOT TO SCALE



Drawn by:
SDC
Checked by:
RHM
File:
2000IMPST
Date:
6-22-99
Revised:



VALVE INSTALLATION
NOT TO SCALE

**1999 / 2000 IMPROVEMENTS
WATER SYSTEMS STANDARDS**
HENDERSON COUNTY WATER DISTRICT

Sheet
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