

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

RECEIVED

JUN 17 2005

PUBLIC SERVICE
COMMISSION

In the matter of:

APPLICATION OF THE BULLOCK PEN WATER)
DISTRICT FOR A CERTIFICATE OF PUBLIC)
CONVENIENCE AND NECESSITY TO CONSTRUCT)
AND FINANCE IMPROVEMENT PROJECTS) CASE NO. 2005-00231
AND TO IMPLEMENT SURCHARGES TO ITS)
EXISTING RATES PURSUANT TO KRS 278.020)
AND KRS 278.300)

APPLICATION

The Bullock Pen Water District (“DISTRICT”), through counsel, pursuant to KRS 278.020 and KRS 278.300 petitions the Public Service Commission of Kentucky (“COMMISSION”) for a Certificate of Public Convenience and Necessity to construct and finance two water works improvement projects referred to herein as the Phase 8 Water Line Extension Project (“Phase 8”) and the Phase 10 Water Line Extension Project (“Phase 10”). The DISTRICT also petitions the COMMISSION for approval of a surcharge to its existing rates with respect to the Phase 8 and Phase 10 Projects in order to pay the debt service on the indebtedness necessary to finance a portion of these Projects. The following information is filed in accordance with the COMMISSION’s Regulations:

1. The DISTRICT’s office address is P.O. Box 188, One Farrell Drive, Crittenden, Kentucky 41030. Its principal officers are listed in its 2004 Annual Report which is on file with the COMMISSION.
2. The DISTRICT is a non-profit water district organized under KRS Chapter 74 and has no separate Articles of Incorporation or By-Laws.

3. A description of the DISTRICT's water system and its property stated accounts is contained in its 2004 Annual Report (Exhibit "C") which is incorporated by reference pursuant to 807 KAR 5:001 Section (5)(5). All required normal financial schedules and other data are in the Annual Report.

4. The DISTRICT serves approximately 6,000 residential customers in Grant, Kenton, Pendleton, Boone and Gallatin Counties. The bulk of the DISTRICT's customers are located in Grant County and the DISTRICT has a very limited amount of non-residential customers.

PHASE 8 PROJECT

5. The Phase 8 Water System Improvements Project consists of the installation of approximately 21.75 miles of new water lines to serve 173 new customers in Grant County. See the attached Preliminary Engineering Report (Exhibit "A") for a more detailed description of the Phase 8 Project.

6. The Phase 8 Project is in the public interest and is required to permit continued growth in the Grant County service area and contemplates service to approximately 173 new customers.

7. The total Phase 8 Project cost is approximately \$1,886,000.00 as detailed in the Final Project Cost filed herewith as Exhibit "A".

8. The DISTRICT has obtained all easements required for the Phase 8 Project.

9. The service will not compete with any other utility in the area.

10. Based on these facts, the DISTRICT believes that it is in the public interest that a Certificate be granted and that the plan of financing be authorized for the Phase 8 Project.

11. Copies of the certified bid tabulations for the Phase 8 Project are contained in the Final Engineering Report (Exhibit "B").

12. The following information is provided in response to 807 KAR 5:001 Section (8)(3):

- (a) Articles of Incorporation – none. The DISTRICT is a statutorily created water district under KRS Chapter 74.

13. The following information is supplied in response to 807 KAR 5:001 Section (9)(2):

- (a) Facts relied upon to show that the Phase 8 Project is in the public interest:

The area scheduled for inclusion in the Phase 8 Project was selected and determined by the DISTRICT based upon engineering requirements and the DISTRICT's ability to provide water service to the largest number of customers while constructing the least amount of required improvements. The completion of the Phase 8 Project will have no adverse impact or effect on the remaining customers of the DISTRICT nor will the Phase 8 Project adversely affect the DISTRICT's ability to provide adequate water pressure and water supply to its existing and projected future customers located within the DISTRICT's geographical boundaries.

- (b) No new franchises are required. Copies of the permits are contained in the Final Engineering Report (Exhibit "B").

- (c) Diagrams of the proposed construction and construction specifications are contained in the plans and specifications on file with the COMMISSION.

- (d) Three maps of suitable scales showing the location of the proposed facilities are filed with this Application (Exhibit "E").

- (e) The construction costs will be funded by:

- i. KIA Tobacco Grant - \$725,000.00
- ii. Tap-on fees - \$66,500.00
- iii. KIA Grant (2005) - \$600,000.00
- iv. KRWA Loan - \$494,500.00

TOTAL \$1,886,000.00

- (f) The estimated cost of operation of the system after construction is completed will not change due to the fact that the Project consists mainly of additional water lines. All water meters are radio read so there will not be any increase in labor expense for the reading of additional meters.

14. The following information is provided as required by 807 KAR 5:001 Section (11)(1):

- (a) A general description of the DISTRICT's property is contained in its 2004 Annual Report (Exhibit "C").
- (b) Financial information relating to the KRWA Loan is obtained in the schedules referred to in paragraph 13(e) above.
- (c) All funds are to be used in accordance with the Project Budget as detailed in the Phase 8 Final Engineering Report (Exhibit "B").
- (d) No property will be required in connection with the Phase 8 Project.
- (e) No proceeds from the KRWA Loan will be used to refund outstanding obligations.
- (f) The KRWA Loan will be repaid out of the revenues of the DISTRICT's systems.

15. The following Exhibits are provided pursuant to 807 KAR 5:001 Section (11)(2):

- (a) The DISTRICT hereby requests and moves for a deviation pursuant to 807 KAR 5:001 Section 14 from the requirements of 807 KAR 5:001 Section 6 which requires that the financial data filed with the Application be for a 12 month period ending within 90 days of the filing of the Application. The DISTRICT states that there has been no material change in the nature of the financial condition or operation of the DISTRICT since December 31, 2004. The financial data filed herewith as the DISTRICT's 2004 Annual Report, a copy of which is on file with the COMMISSION, and attached hereto as Exhibit "C", is for the 12 month period ending December 31, 2004. This is the most recent published financial data available. Because the Project has been bid and the DISTRICT is under a bid-hold by the contractor, the DISTRICT cannot run the risk of delaying the commencement of the Project and losing the favorable bids while more current financial data is compiled.
- (b) There are no trusts, deeds or mortgages relevant to this Project.
- (c) Maps and detailed plans are on file with the COMMISSION.

16. The DISTRICT proposes to implement a monthly surcharge to each customer requesting water within the Phase 8 Project area. This monthly surcharge will be charged to each customer who initially signs for water service as well as any new customer who may request water service within the Phase 8 Project area in the future. The surcharge will continue until the loan has been paid in full. Additional information regarding the Phase 8 Project surcharge follows:

- (a) The initial monthly surcharge has been calculated as \$15.12 per month per customer (round to \$15.00). The method of calculation is described in the Phase 8 Final Engineering Report, Exhibit "A".
- (b) All surcharge amounts received by the District would be placed in a separate interest bearing account with the District and would be restricted to loan repayment only for the Phase 8 Project.
- (c) The DISTRICT proposes to recalculate the surcharge amount at the end of each 60 month anniversary of the date of the loan in order to provide for the loan payments taking into account any change in the number of customers in the Phase 8 Project area.
- (d) The DISTRICT would reserve the right to recalculate the surcharge prior to the 60th month anniversary should a significant number of new customers be added to the Phase 8 Project area. Any subsequent assessment of the surcharge would then be made on the 60th month anniversary of any accelerated assessment modification in the surcharge.
- (e) All monthly surcharges would terminate at such time as the loan on the Phase 8 Project is paid in full.
- (f) Potential customers in the Phase 8 Project area have been contacted by the DISTRICT. For the most part, potential customers have indicated their support for the Project and have not objected to the assessment of a monthly surcharge for the Phase 8 Project. It is anticipated that the average cost of a customer's monthly base water bill and monthly surcharge will be substantially less than the cost a potential customer currently incurs for water based on current water hauling charges.

17. The DISTRICT requests that it be granted a deviation under 807 KAR 5:001(14) if necessary to accommodate any situation where inflexible compliance with a regulation would be impracticable, onerous, or which would hinder the DISTRICT's daily operations.

18. Applicant incorporates herein Exhibit "D", Project Manual for the Phase 8 Project.

19. The DISTRICT incorporates Exhibit "E", Engineering Drawing Specifications for the Phase 8 Project.

PHASE 10 PROJECT

20. The Phase 10 Water Line Improvement Project consists of installation of approximately 7.9 miles of water line extension to serve 152 new customers in Boone County. See the attached Phase 10 Preliminary Engineering Report, Phase 10, Exhibit "F", for a more detailed description of the Phase 10 Project.

21. The Phase 10 Project is in the public interest and is required to permit continued growth in the Boone County Service area of the DISTRICT and contemplate service to an additional 152 customers.

22. The total Phase 10 Project cost is approximately \$926,800.00 as shown in the final Project cost calculations contained in the Phase 10 Final Engineering Report (Exhibit "G").

23. The DISTRICT has obtained all easements required for the Phase 10 Project.

24. This service will not compete with any other utility in the area.

25. Based on these facts, the DISTRICT believes that it is in the public interest that a Certificate of Convenience be granted and that the plan of financing be authorized.

26. Copies of the certified bid tabulations are contained in the Phase 10 Final Engineering Report (Exhibit "G").

27. The following information is provided in response to 807 KAR 5:001 Section (8)(3):

- (a) Articles of Incorporation – none. The DISTRICT is a statutorily created water district under KRS Chapter 74.

28. The following information is supplied in response to 807 KAR 5:001 Section (9)(2):

- (a) Facts relied upon to show that the Phase 10 Project is in the public's interest:

The area scheduled for inclusion in the Phase 10 Project was selected and determined by the DISTRICT based upon engineering requirements and the DISTRICT's ability to provide water service to the largest number of customers while constructing the least amount of required improvements. The completion of the Phase 10 Project will have no adverse effect or impact on the remaining customers of the DISTRICT nor will the Phase 10 Project adversely affect the DISTRICT's ability to provide adequate water pressure and water supply to its existing and projected future customers located within the DISTRICT's geographical boundaries.

- (b) No new franchises are required. Copies of the permits are contained in the final Engineering Report.
- (c) Diagrams of the proposed construction and construction specifications are contained in the plans and specifications on file with the COMMISSION.
- (d) Three maps of suitable scales showing the location of the proposed facilities are filed with this Application.
- (e) The construction costs will be funded as follows:
 - i. KIA Grant - \$300,000.00
 - ii. Tap-on fees - \$39,115.00
 - iii. Boone County Fiscal Court Contribution (1/3 of Project cost) - \$308,933.00
 - iv. KRWA Loan - \$278,752.00
- (f) The estimated cost of operation of the system after construction is completed will not change due to the fact that the project consists mainly of additional water lines. All water meters are radio read so there will not be any increase in labor expense for the reading of the additional meters.

29. The following information is provided as required by 807 KAR 5:001 Section (11)(1):

- (a) A general description of the property of the DISTRICT is contained in its 2004 Annual Report.
- (b) Financial information relating to the KRWA Loan is obtained in the schedules referred to in paragraph 28(e) above.
- (c) All funds are to be used in accordance with the Project Budget as set forth in the final Engineering Report (Exhibit "G").
- (d) No property will be required in connection with the Phase 10 Project.
- (e) No proceeds of the KRWA Loan will be used to refund outstanding obligations.
- (f) The KRWA Loan will be repaid out of the revenues of the DISTRICT's systems.

30. The following Exhibits are provided pursuant to 807 KAR 5:001 Section 11(2):

- (a) The DISTRICT hereby requests and moves for deviation pursuant to 807 KAR 5:001 Section 14 from the requirements of 808 KAR 5:001 Section 6 which requires that the financial data filed with the Application be for a 12 month period ending within 90 days of the filing of the Application. The DISTRICT states that there has been no change that is material in nature in the financial condition or operation of the DISTRICT since December 31, 2004. The financial data filed herewith as Exhibit "C" is for the 12 month period ending December 31, 2004. This is the most recent published financial data available. Because the Project has been bid and the DISTRICT is under a bid-hold by the contractor, the DISTRICT cannot run the risk of delaying the commencement of the Project and losing the favorable bids while more current financial data is compiled.
- (b) There are no trusts, deeds or mortgages relevant to this project.
- (c) Maps and detailed plans are on file with the COMMISSION.

31. The DISTRICT proposes to implement a monthly surcharge to each customer requesting water within the Phase 10 Project area. This monthly surcharge will be charged to each customer who initially signs up for water service as well as any new customer who may

request water service within the Phase 10 Project area in the future. The surcharge will continue until the Phase 10 Project loan has been paid in full. Other relevant information regarding the Phase 10 surcharge follows:

- (a) The initial monthly surcharge has been established at \$14.37. The method of calculation is described in the Final Engineering Report, Exhibit "G".
- (b) All surcharge amounts received by the DISTRICT would be placed in a separate interest bearing account with the DISTRICT and would be restricted to loan payments only for the Phase 10 Project.
- (c) The DISTRICT proposes to recalculate the surcharge amount at the end of each 60 month anniversary of the date of the Phase 10 Project loan in order to provide for the loan payments taking into account any change in the number of customers in the Phase 10 Project area.
- (d) The DISTRICT would reserve the right to recalculate the Phase 10 surcharge prior to the 60th month anniversary should a significant number of new customers be added to the Phase 10 Project area. Any subsequent reassessment of the Phase 10 surcharge would then be made on the 60th month anniversary of any accelerated assessment modification in the surcharge.
- (e) All monthly Phase 10 surcharges would terminate at such time as the Phase 10 loan is paid in full.
- (f) Potential customers in the Phase 10 Project area have been contacted by the DISTRICT. For the most part, potential customers have indicated their support for the Phase 10 Project and have not objected to the assessment of a monthly surcharge in order to provide funding for the Phase 10 Project. It is anticipated that the average cost of a customer's monthly base water bill and monthly surcharge will be substantially less than the cost a potential customer currently incurs for water based on current water hauling charges.

32. The DISTRICT requests that it be granted a deviation under 807 KAR 5:001(14) if necessary to accommodate any situation where inflexible compliance with a regulation would be impracticable, onerous, or which would hinder the DISTRICT's daily operations.

WHEREFORE, the Applicant, Bullock Pen Water District, requests that the Public Service Commission of Kentucky grant to the Applicant:

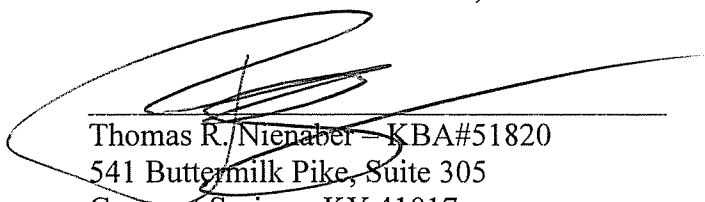
A. A Certificate of Public Convenience and Necessity permitting the Applicant to construct two water system improvement projects referred to as the Phase 8 Project and the Phase 10 Project;

B. An Order approving the financing arrangements, including the loan from the Kentucky Rural Water Association in the amount of \$278,752.00 on the Phase 10 Project and the loan to the Kentucky Rural Water Association in the amount of \$494,500.00 on the Phase 8 Project;

C. An Order granting the DISTRICT's surcharge in the amount of \$15.00 per customer per month on the Phase 8 Project and the amount of \$14.37 per month per customer on the Phase 10 Project with recalculation every 60th month from the date of the loan of each Project until the loan is paid in full;

D. The Applicant's Motion for a deviation from the 90 day requirement for financial information as required by 807 KAR 5:001 Section 11(11)(2)(a).

THE HORWITZ LAW FIRM, P.S.C.



Thomas R. Nienaber – KBA#51820
541 Buttermilk Pike, Suite 305
Crescent Springs, KY 41017
(859) 578-1000

VERIFICATION

Comes now Bobby Burgess, Chairman, Bullock Pen Water District, and states that he has read the foregoing Application and that the statements contained therein are true and correct as he verily believes.

BULLOCK PEN WATER DISTRICT

BY: *Bobby Burgess*
BOBBY BURGESS, CHAIRMAN

COMMONWEALTH OF KENTUCKY

COUNTY OF GRANT

SUBSCRIBED, SWORN TO AND ACKNOWLEDGED before me by the said BOBBY BURGESS, Chairman of the Bullock Pen Water District, this 16th day of June, 2005.

Paula A. Massie
Notary Public
My Commission Expires: 9-15-2007

EXHIBIT “A”

Phase 8 Preliminary Engineering Report

Preliminary Engineering Report

Bullock Pen Water Line Extension Phase 8

Bullock Pen Water District

By

**CMW, Inc.
138 N. Keeneland Drive
Suite E
Richmond, KY 40475**

November, 2002

Table of Contents

1. General Description of Project
2. Project Map
3. Project Profile
4. Preliminary Project Summary
5. Preliminary Project Cost

General Description of Project

Bullock Pen Water District serves approximately 5,100 customers in Grant, Boone, Kenton, Pendleton and Gallatin Counties. Potable water that supplies the district comes from the Bullock Pen Water Treatment Plant, City of Walton, City of Williamstown and Northern Kentucky Water Service District.

The proposed project will consist of 21.75 miles of water line extension to serve 173 new customers in Grant County. Project will consist of new water line extension along Chapman Road, Lawrenceville Road, Juett Road, Gold Valley Road, Tanglewood Estates, Mt. Pisgah Road, Gold Valley Spur, Kinman Road, Kentucky 36, Jonesville Folsom Road, Calendar Road, and Buffalo Ridge. The potential customers currently use cisterns and bottle water for their water needs. The proposed water lines will be connecting to existing water lines of the Bullock Pen Water District in Grant County.

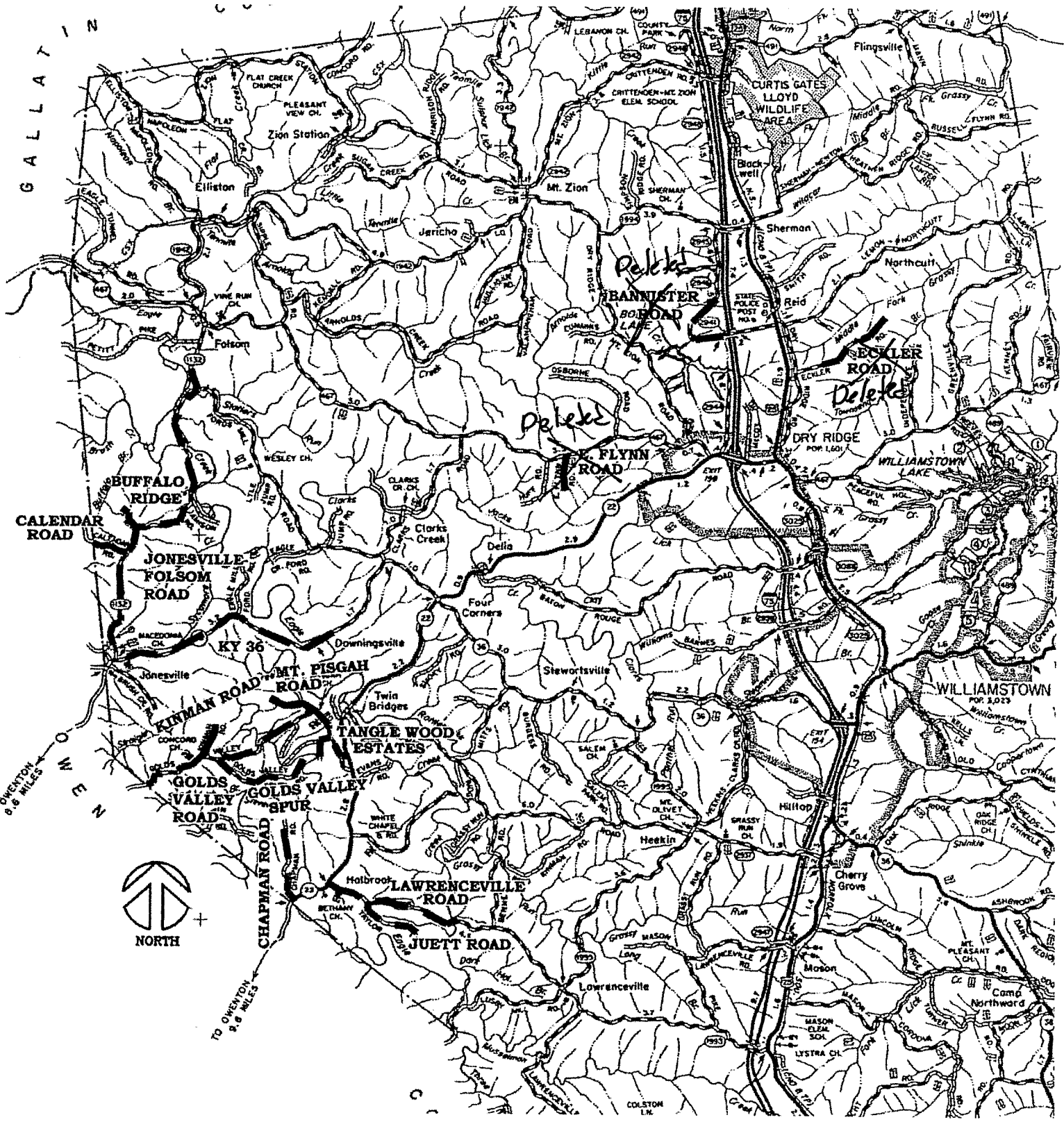
Preliminary hydraulics have been done for the potential water line extension which shows that the areas can be served by the existing water lines, water storage tanks and master meters.

Funding for project will consist of a potential KIA grant, customer tap-on fees and a surcharge loan.

COVER SHEET

INDEX SHEET

SCALE 1" = 2 MILES



VICINITY MAP

PHASE 8 WATERLINE EXTENSION
 BULLOCKPEN WATER ASSOCIATION
 GRANT COUNTY, KENTUCKY

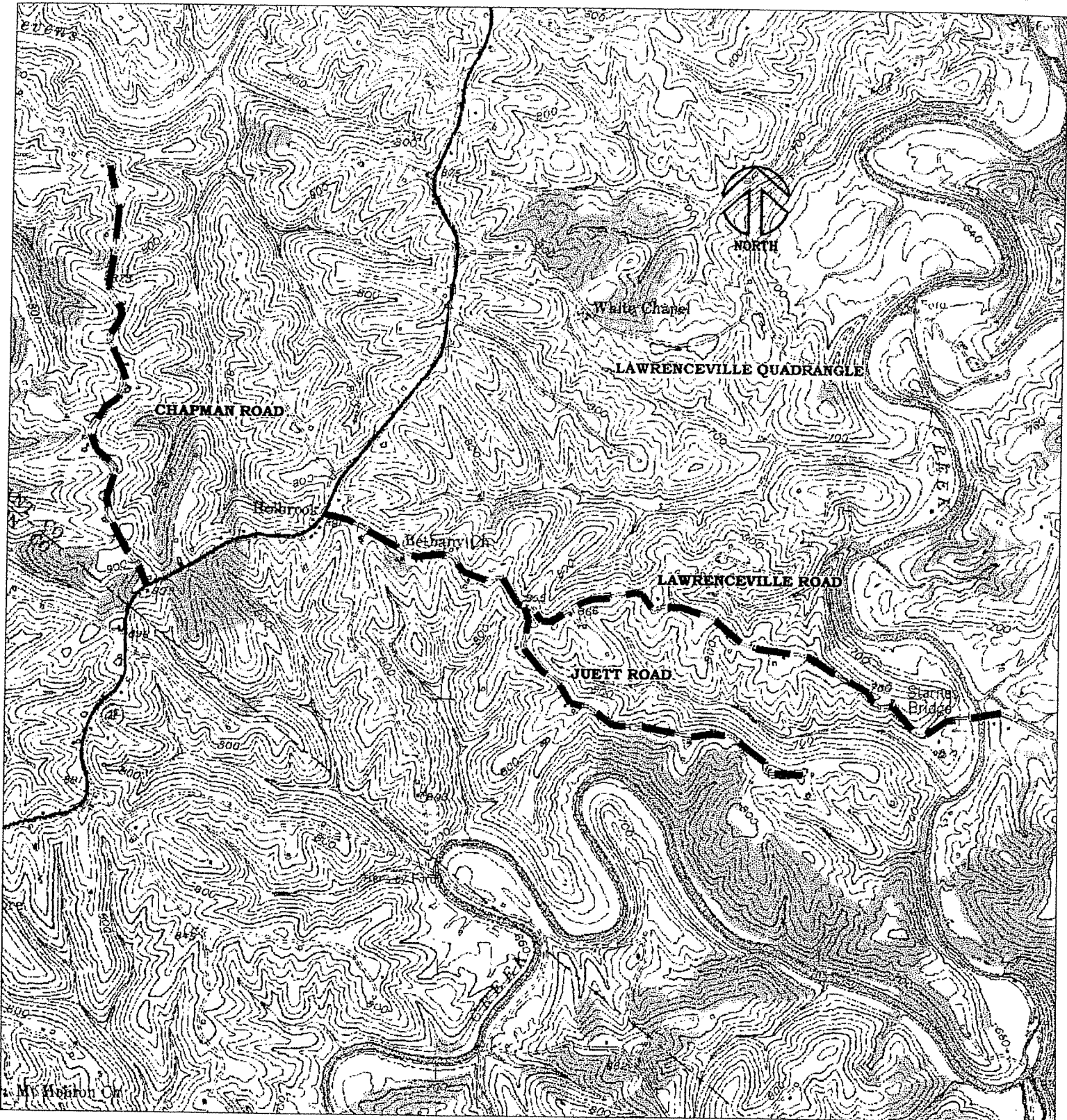


CHRISMAN MILLER WOODFORD INC.
 LAND SURVEYING SITE PLANNING CIVIL ENGINEERING LANDSCAPE ARCHITECTURE
 136 BIG HILL AVE RICHMOND, KENTUCKY 40475 (859) 623-8966

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LAWRENCEVILLE, KENTUCKY QUADRANGLE

SCALE 1"=2000'



USGS MAP

PHASE 8 WATERLINE EXTENSION
 BULLOCKPEN WATER ASSOCIATION
 GRANT COUNTY, KENTUCKY



CHRISMAN MILLER WOODFORD INC.
 LAND SURVEYING SITE PLANNING CIVIL ENGINEERING LANDSCAPE ARCHITECTURE
 136 BIG HILL AVE RICHMOND, KENTUCKY 40475 (659) 623-2966

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1 OF 6

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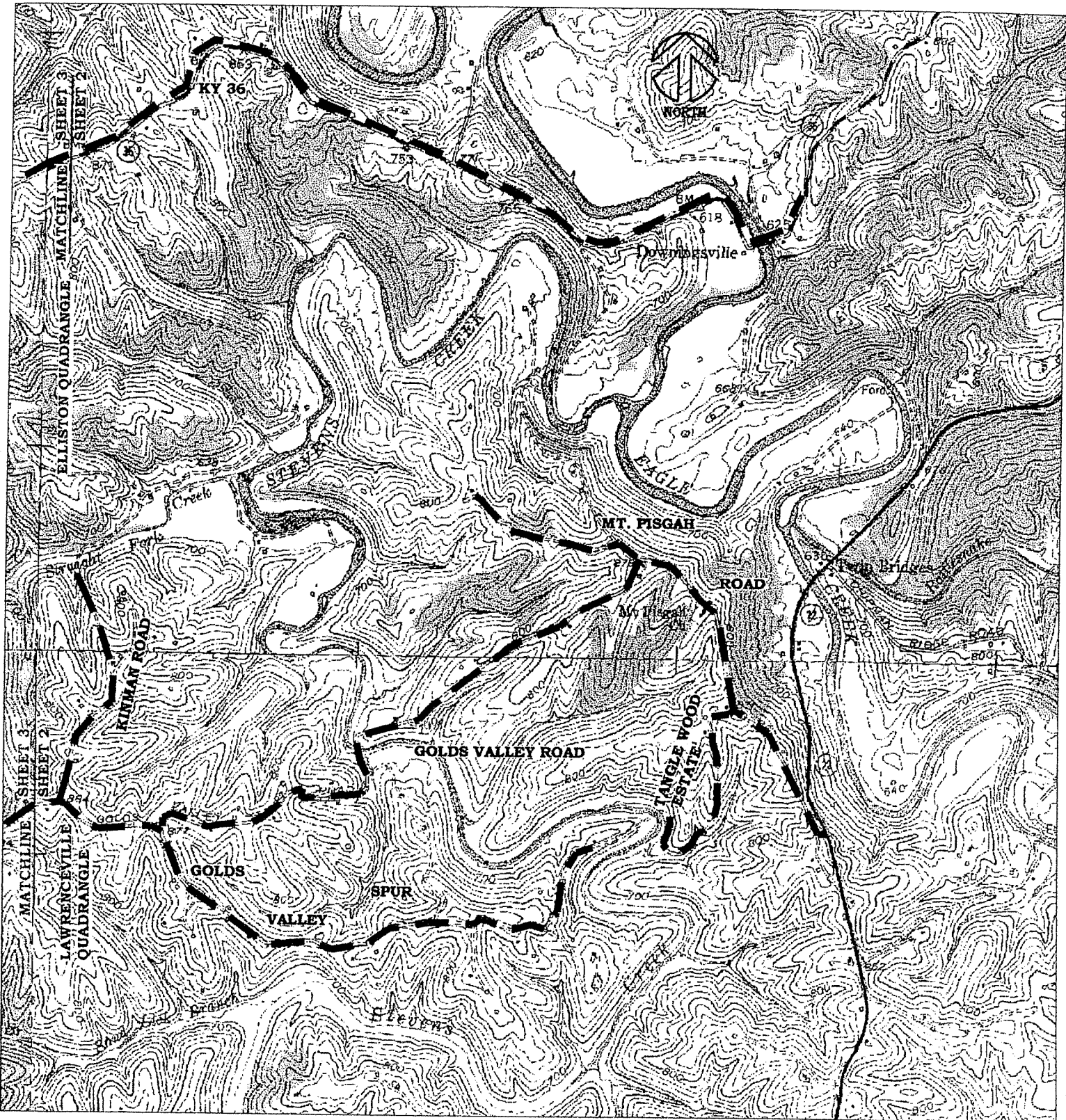
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SCALE 1"=2000'



USGS MAP

PHASE 8 WATERLINE EXTENSION
 BULLOCKPEN WATER ASSOCIATION
 GRANT COUNTY, KENTUCKY

CMW

CHRISMAN MILLER WOODFORD INC.
 LAND SURVEYING SITE PLANNING CIVIL ENGINEERING LANDSCAPE ARCHITECTURE
 136 BIG HILL AVE RICHMOND, KENTUCKY 40475 (859) 623-2966

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2 OF 6

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 DATE: 6-2001

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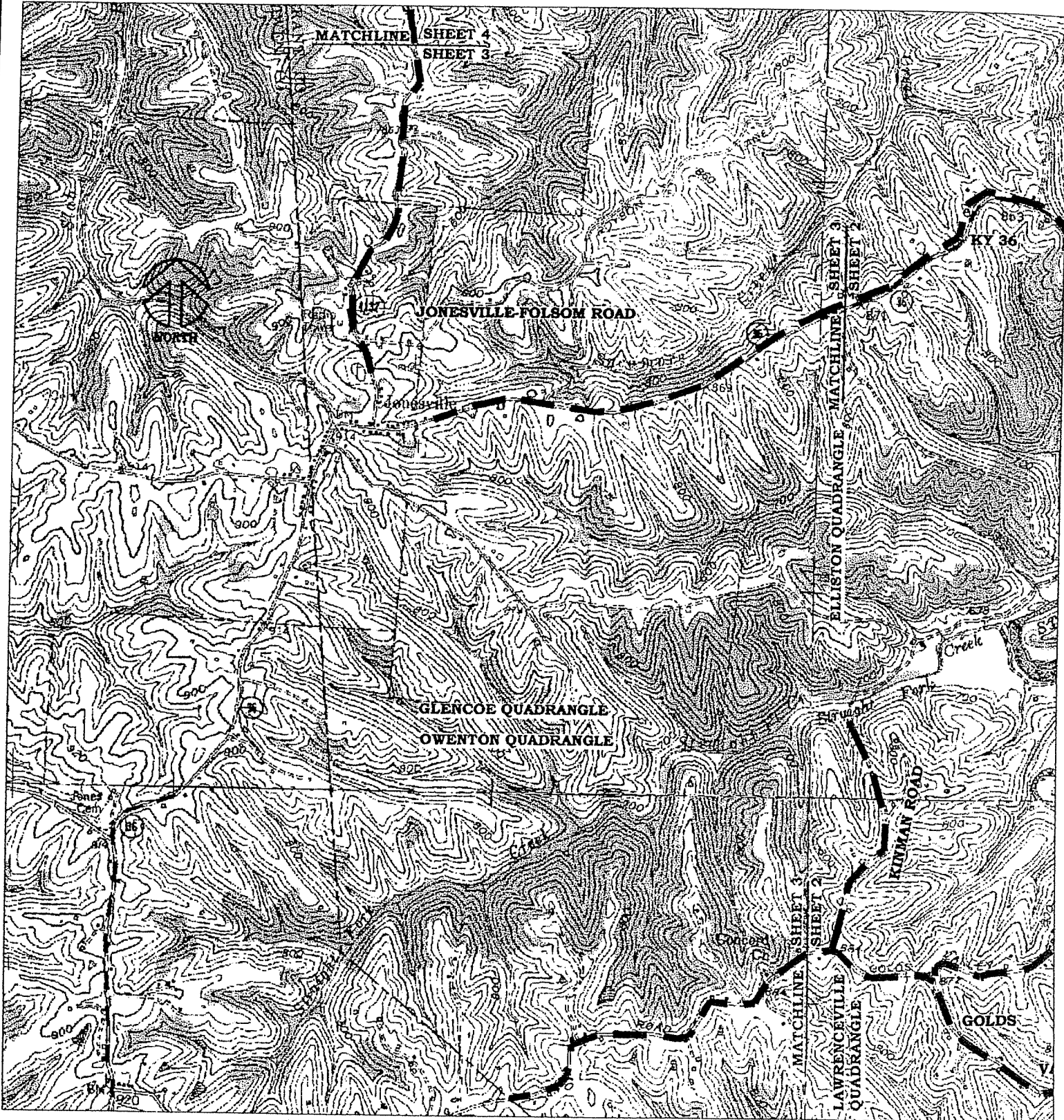
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USGS MAP

PHASE 8 WATERLINE EXTENSION
 BULLOCKPEN WATER ASSOCIATION
 GRANT COUNTY, KENTUCKY

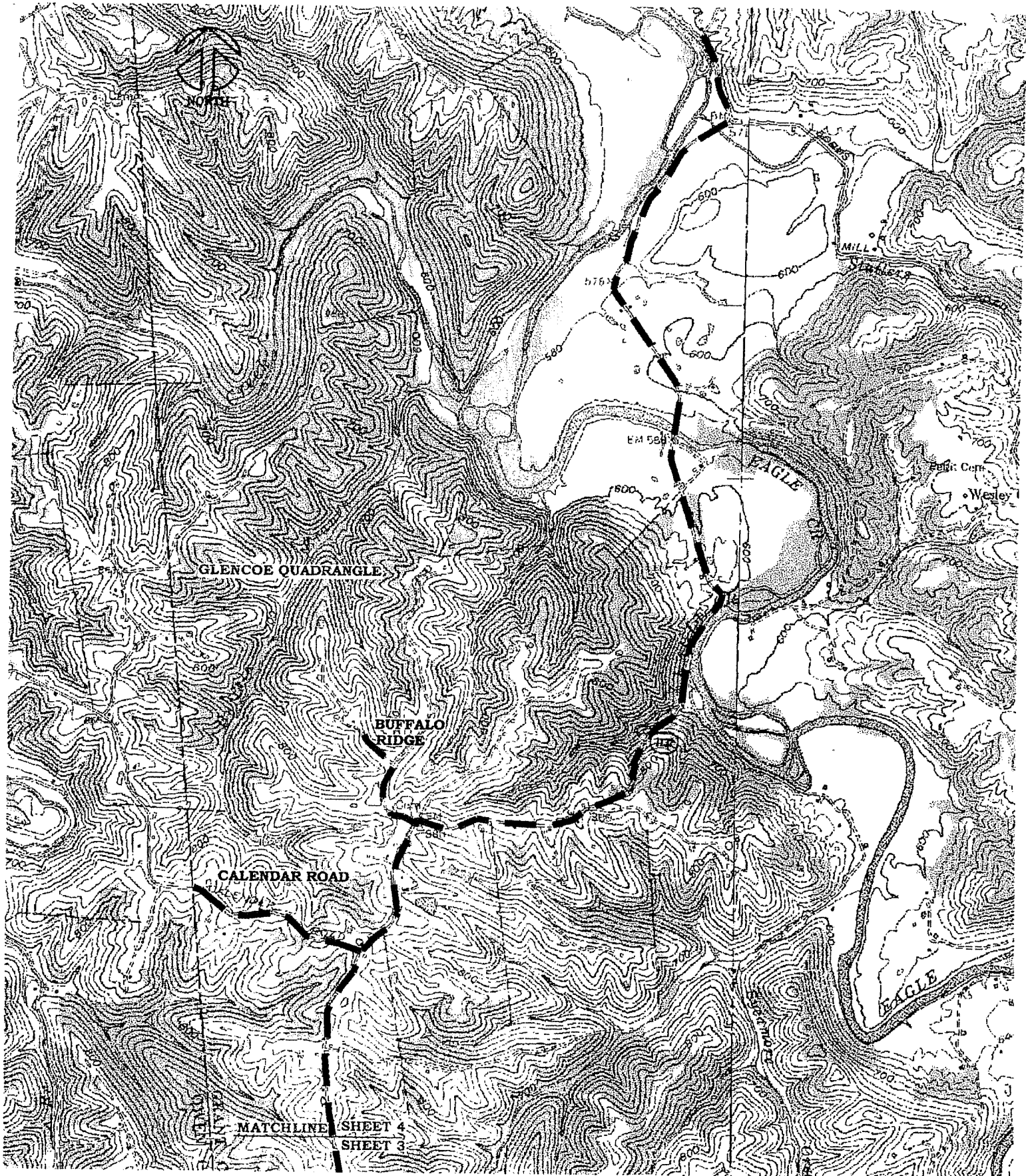


CHRISMAN MILLER WOODFORD INC.
 LAND SURVEYING SITE PLANNING CIVIL ENGINEERING LANDSCAPE ARCHITECTURE
 136 BIG HILL AVE. RICHMOND, KENTUCKY 40475 (609) 623-2966

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USGS MAP

PHASE 8 WATERLINE EXTENSION
 BULLOCKPEN WATER ASSOCIATION
 GRANT COUNTY, KENTUCKY



CHRISMAN MILLER WOODFORD INC.
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 136 BIG HILL AVE RICHMOND, KENTUCKY 40475 (859) 623-2966

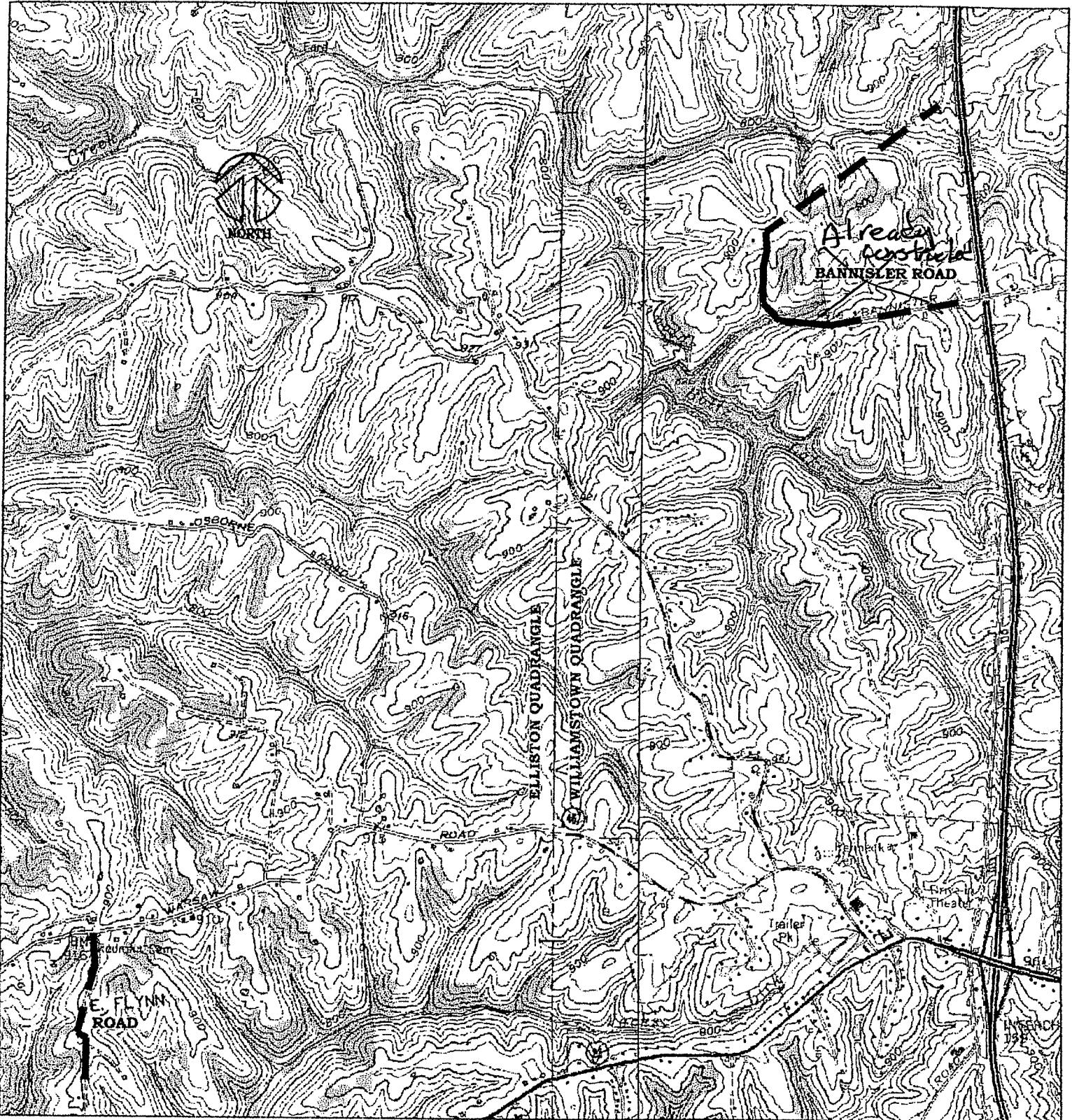
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SCALE 1"=2000'



USGS MAP
 PHASE 8 WATERLINE EXTENSION
 BULLOCKPEN WATER ASSOCIATION
 GRANT COUNTY, KENTUCKY

CMW

CHRISMAN MILLER WOODFORD INC.
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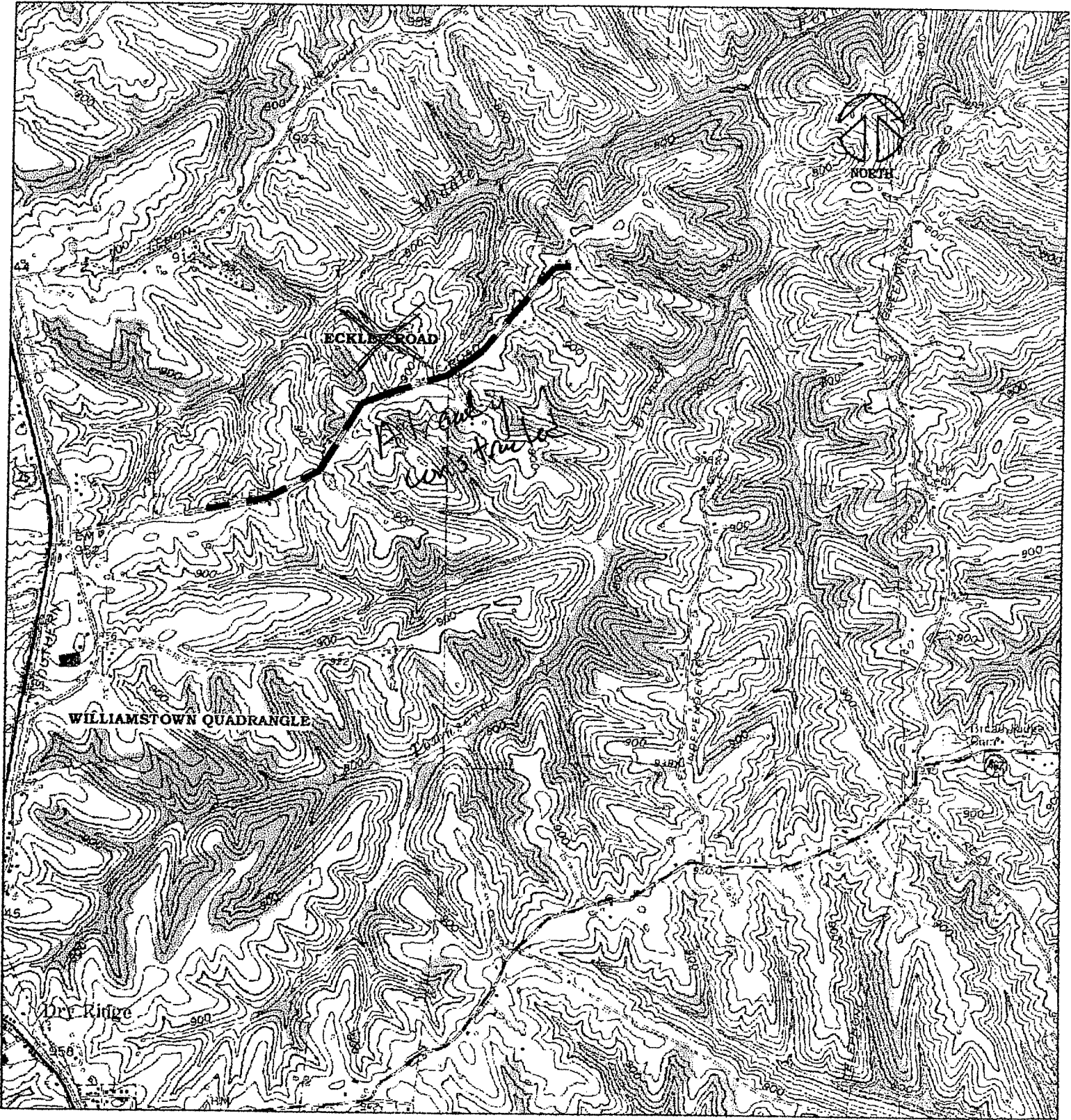
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WILLIAMSTOWN, KENTUCKY QUADRANGLE

SCALE 1"=2000'



USGS MAP

PHASE 8 WATERLINE EXTENSION
 BULLOCKPEN WATER ASSOCIATION
 GRANT COUNTY, KENTUCKY



CHRISMAN MILLER WOODFORD INC.
 LAND SURVEYING SITE PLANNING CIVIL ENGINEERING LANDSCAPE ARCHITECTURE
 136 BIG HILL AVE RICHMOND, KENTUCKY 40475 (609) 623-2966

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KENTUCKY WATER/WASTEWATER PROJECT PROJ

1. Project Title:

Bullock Pen Water Extension, Phase 8

2. Project Description:

Water line extension of 21.75 miles to serve a potential 173 customers in Grant County. The areas to be served are Chapman Road, Lawrenceville Road, Juet Road, Gold Valley Road, Tangle Wood Estates, Mt. Pisgah Road, Gold Valley Spur, Kinman Road, Ky. 36, Jonesville Folsom Road, Calendar Road and Buffalo Ridge.

WRIS Project Number: *

**This number shall be assigned by the ADDs through the Water Management and will tie each project to mapped/spatial information in the Water Resource Information System (WRIS). Submitted projects without this number AND the appropriate mapped/spatial information will NOT be accepted.*

3. Legal Applicant

Applying Entity:

Authorized Official:

Title:

Street/PO Box:

City:

Zip Code:

Contact Person:

Telephone:

Fax:

E-Mail Address:

Project Administrator:

Consulting Engineer:

Phone:

Phone:

If water project
PWSID#

0410047

If wastewater
project, KPDES#(s):

If wastewater collect
project, KIMOP#(s)

4. Application:

New Revision

If revision, originally directed to: (agency)

5. Project Type (check all that apply):

- Planning
- Sewer System Evaluation Survey Report
- Design
- Construction
- Managment

6. Project Alternatives: Please list a minimum of three:

- a.
- b.
- c.

7. Special Impact(s) of Proposed Water/Wastewater Project:

a. New service/improve service to unserved underserved hous

b. Number of jobs: new retained

c. Other beneficial technical, managerial, fiscal impacts: (20 words or less)

d. Rate impact/reasonableness of cost:

e. If proposed extension of service to existing home is related to public health protection, please describe the source water quality and availability:

Cisterns and shallow wells

8. Median House Hold Income of Service Area:

\$ 1997 - U. L. Study

9. Project Start Schedule:

- Years 0-2
- Years 3-10
- Years 11-20

10. Estimated Funding Sources:

TABLE 1: ESTIMATED FUNDING

	Total	SRF Amount Water	SRF Amount Wastewater	CDBG Amount	KIA 2020	Other (name)
0-2 Years	<input type="text" value="1,249,000"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
3-10 Years	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="624,500"/>	<input type="text" value="624,500"/>
11-12 Years	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
TOTAL	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text"/>

Continue with Water Project

Continue with Wastewater Project

11. Project Data - Water (complete all items which apply to your project)

Source Protection

Acres

Cost (\$acre)

Use control (r/c)

Drinking Water Facilities

a. Source (gpd)

Number of new surface/spring sources

Total GPD

Number of new wells

Total GPD

Elimination of Public Water Systems through Mergers (guidelines)

Systems serving 500 or fewer population

Systems serving 501-3,000 population

Systems serving 3,001-10,000 population

Systems serving 10,001 or greater population

Interconnections

Elimination of water treatment plants

Supplemental potable water supply

Emergency backup potable water supply

Source Water Quantity and Quality

Replace existing raw water source

Supplemental existing raw water source

Briefly describe why the above items apply to your project:

b. Water Treatment

Proposed design capacity MGD (as a result of this project) (guidelines)

Project will involve expansion or modification of

- Pre-titration
- Filtration
- Disinfection Process

Microbiology and Turbidity

- CT removal requirements
- CT inactivation requirements
- Finished water turbidity

Best Available Technologies

- VOCs IOCs SOCs Radionuclides
- Disinfectants Disinfection by-products
- Secondary contaminants

Briefly describe why the above items, if checked, apply to your project:

c. Water Distribution (Rehab/Improvements)

Proposed project involves construction of line

Total linear feet

Line Size (in inches) 2 4 6 8 10 greater than 10

Material Ductile Iron PVC PE Other

Project activity improves pressure, as a result of

Replacement of total linear feet of inadequately sized lines

total gallons of increased storage

Leaks, Breaks, or restrictive flows due to age

Project activity improves water quality by providing:

Adequate turnover of water

Proper maintenance of disinfection residual

Replacement of total linear feet of lead, copper, asbestos-cement lines

Briefly describe why the above items apply to your project:

d. Management (describe)(guidelines)

e. Other (describe) (guidelines)

Total Estimated Project Cost (water) \$

**Summary of Project
Water Line Extension Phase 8
Grant County
Bullock Pen Water District
(REVISED 10/10/02)**

<u>Road</u>	<u>Customers</u>	<u>Length</u>	<u>Construction Cost</u>
1. Chapman Road	15	1.3 mi.	\$62,210
2. Lawrenceville Road	17	2.8 mi.	\$131,170
3. Juett Road	12	1.1 mi.	\$49,850
4. Gold Valley Road	30	4.35 mi.	\$197,860
5. Tangle Wood Estates	6	0.7 mi.	\$31,380
6. Mt. Pisgah Road	6	0.4 mi.	\$18,940
7. Gold Valley Spur	9	1.5 mi.	\$63,840
8. Kinman Road	4	0.5 mi.	\$22,770
9. Ky. 36	30	3.15 mi.	\$151,570
10. Jonesville Folsom Road	37	5.0 mi.	\$237,370
11. Calendar Road	4	0.65 mi.	\$28,360
12. Buffalo Ridge	<u>3</u>	<u>0.3 mi.</u>	<u>\$14,090</u>
Total:	173	21.75 mi.	\$1,009,410

**Preliminary Project Cost
Water Line Extension, Phase 8
Grant County
Bullock Pen Water District
(REVISED 10/10/02)**

1.	Construction Cost	\$1,009,410
2.	Legal Expense	\$20,000
3.	Easements	\$1,200
4.	Environmental	\$5,000
5.	Preliminary Engineering	\$5,000
6.	Engineering Design	\$81,672
7.	Resident Inspection	\$46,338
8.	Loan Expenses	\$10,000
9.	Contingencies	<u>\$70,380</u>
Total Preliminary Project Cost:		\$1,249,000

EXHIBIT “B”

Phase 8 Final Engineering Report

Final Engineering Report

Bullock Pen Water Line Extension Phase 8

Bullock Pen Water District

By

**CMW, Inc.
138 N. Keeneland Drive
Suite E
Richmond, KY 40475**

May, 2005

Table of Contents

1. Bid Advertisement
2. Bid Tabulation
3. Minutes of Bid Opening
4. Engineer's Recommendation
5. Bid of Low Bidder
6. Revised Project Cost
7. Division of Water Approval Letter

ADVERTISEMENT FOR BIDS

Bullock Pen Water District

Separate sealed BIDS for Water Line Extension, Phase 8, Grant County will be received by the Owner at the office of Bullock Pen Water District, Crittenden, Kentucky, until 3:00 p.m. EDT on Tuesday, May 17, 2005 and then publicly opened and read aloud.

Construction of base bid shall consist of approximately 128,280 LF of 6" PVC water line, 15,520 LF of 6" DI water line, 96 gate valves, 40 fire hydrants, 21 blow-off hydrants, 758 LF of bores with steel encasement, 15 air relief valves, 140 meters with service piping, 4 creek crossing valves, 143 LF creek crossing, 381 LF of freebore, 746 LF of directional bore with HDPE encasement pipe, 1,356 LF of 8" HDPE water line, 1 - 4" PRV station and all other necessary appurtenances.

The CONTRACT DOCUMENTS may be examined at the following locations:

CMW, Inc., 138 N Keeneland Drive, Suite E, Richmond, KY
Bullock Pen Water District, 1 Farrell Drive, Crittenden, KY
Associated General Contractors/Dodge Plan Room, 950 Contract Street, Suite 100A, Lexington, KY
Allied Construction Industries, 1010 Yale Avenue, Cincinnati, OH
Reed Construction Data/ABC Plan Room, 1812 Taylor Avenue, Louisville, KY
Reed Construction Data/ABC Plan Room, 132 Venture Court, Suite 12, Lexington, KY
F. W. Dodge Plan Room, Grant Baldwin Building, 655 Eden Park Road, Suite 515, Cincinnati, OH 45202

Copies of the CONTRACT DOCUMENTS may be obtained from Lynn Imaging, 328 Old East Vine Street, Lexington, KY 40507, phone 859\255-1021 upon the following non-refundable payment of \$100.00 for each set. Make checks payable to CMW, Inc.

If bidding documents are requested to be sent by mail, include an additional \$11.00 for each set to cover cost of handling and postage. This check shall be made payable to Lynn Imaging.

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 120 days after the actual date of the opening thereof.

Award will be made to the lowest responsive, responsible Bidder unless all bids are rejected.

Each bidder will make positive efforts to use small, minority, woman owned and disadvantaged businesses.

Each bidder must comply with Title VI of the Civil Rights Act of 1964, the Anti-Kickback Act, and Contract Work Hours Standard Act.

Each bidder must comply with the President's Executive Order No. 11246 as amended, which prohibits discrimination in employment regarding race, creed, color, sex or national origin.

Each bidder shall provide a Certification of Prior Work under Executive Order 11246 (Equal Employment Opportunity) as amended.

Each bidder and their subcontractors will comply with 41 CFR 60-4, in regard to Affirmative Action, to insure equal opportunity to females and minorities and will apply the time table and goal set forth in 41 CFR 60-4.

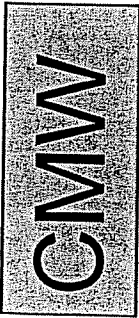
This contract is being funded in part with a EPA Special Appropriations Grant.

April 14, 2005

Date

BULLOCK PEN WATER DISTRICT
CRITTENDEN, KENTUCKY

CMW, INC.
138 NORTH KEENELAND DRIVE
SUITE E
RICHMOND, KENTUCKY



BID TABULATION FORM

138 N. KEENELAND DRIVE, SUITE E
RICHMOND, KENTUCKY 40475

PROJECT: Bullock Pen Water District
Phase 8, Water Main Extension
#03423.01

REBID DATE: May 17, 2005 - 3:00 p.m.

GENERAL CONTRACTORS	BID BOND	TOTAL BASE BID	NOTES
B.P. Pipeline	X	\$1,862,784.00	
Coomer Contracting	X	\$1,546,550.52	
Midwest Mole, Inc.			
Staton's Construction			
Stotts Construction	X	\$1,617,843.50	
Tilton Excavating, LLC		\$1,712,315.00	
Engineer's Estimate		\$1,615,879.00	

I CERTIFY THAT THE ABOVE IS A TRUE AND ACCURATE TABULATION OF THE BIDS RECEIVED FOR THIS PROJECT ON THE DATE LISTED ABOVE.

CMW, INC.
By: *Kerry Dolly*

May 18, 2005

To: Bobby Burgess
Bullock Pen Water District

From: Kerry Odle
CMW, Inc.

Re: Water Line Extension, Phase 8
Grant County

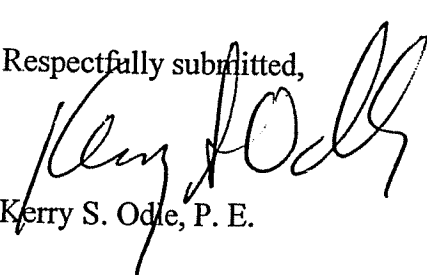
Subject: Bid Opening Minutes

Bids were accepted for Bullock Pen Water Line Extension, Phase 8, until 3:00 p.m. on Tuesday, May 17, 2005. All bidders were thanked for their bids and told that the bids will be reviewed and recommendation will be given to Bullock Pen Water District for consideration.

Kerry Odle, project engineer, opened and read aloud all bids, as shown on the attached "Tabulation of Bids". The apparent low bidder was announced as Coomer Contractors with a bid of \$1,546,550.52. The engineer's estimate was announced as \$1,615,879.00.

Attached is a List of Attendees of the bid opening. With no further business, the bid opening was completed.

Respectfully submitted,


Kerry S. Odle, P. E.

KSO/jp

Attachment

c: Honorable Darrell Link W/A
File W/A

CMW inc.

ARCHITECTURE CIVIL ENGINEERING SURVEYING SITE PLANNING
138 N. Keeneland Dr., Suite E, Richmond, KY 40475 859.623.2966 Fax 859.623.0886

Bullock Pen Water District
Water Main Extension - Phase 8
Project No. 03423.01
Bid Opening - 5/17/05

LIST OF ATTENDEES

<u>Name</u>	<u>Company</u>
1. Kerry Odle	Cmw Inc
2. Dugue Ritchie	Tilton Excavating
3. Tony Palaxie	B.P. Pipeline
4. Roger Cobb	Stotts Const.
5. S Coome	Coome Const
6. Dave Denton	Hayes Pipe Supply
7. Bill Catlett	Bullock Pen W.D.
9.	
10.	
11.	
12.	
13.	
14.	
15.	
16.	
17.	
18.	
19.	
20.	

md. 5-19-05

May 18, 2005

Mr. Bobby Burgess
Bullock Pen Water District
P. O. Box 188
Crittenden, KY 41030

Re: Water Line Extension Phase 8
Grant County

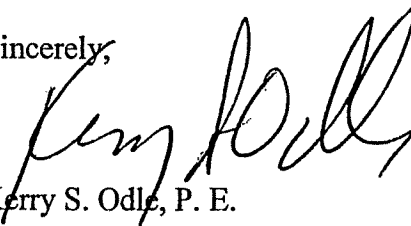
Dear Bobby:

I have reviewed all bids and found no errors. The low bidder on the project is Coomer Contractors with a bid of \$1,546,550.52. Coomer Contractors have worked on several projects for the water district and is capable of doing the work. On the last project we had a problem getting cleanup done in a timely manner. To eliminate this problem, the contractor will be told and contract requirements enforced related to cleanup being done prior to leaving a road and starting another road.

I recommend that the Water Line Extension, Phase 8, be awarded to Coomer Contractors with a bid of \$1,546,550.52. Attached is a copy of the "Tabulation of Bids" and a revised budget with surcharge cost. The budget and surcharge cost were based on the EPA grant not being in this project but being in Phase 11.

If you have any questions, give me a call.

Sincerely,



Kerry S. Odle, P. E.

KSO/jp

Attachments

c: Honorable Darrell Link W/A
File W/A

CMW inc.

ARCHITECTURE CIVIL ENGINEERING SURVEYING SITE PLANNING
138 N. Keeneland Dr., Suite E, Richmond, KY 40475 859.623.2966 Fax 859.623.0886

BID

**WATER MAIN EXTENSION - PHASE 8
GRANT COUNTY
BULLOCK PEN WATER DISTRICT**

Proposal of Coomer Contractors (hereinafter called "BIDDER"), a corporation organized and existing under the laws of the State of Kentucky doing business as an individual *.

To the Bullock Pen Water District (hereinafter called "OWNER").

In compliance with your Advertisement for Bids, BIDDER hereby proposes to perform all WORK for the construction of Water Main Extension - Phase 8 - Grant County in strict accordance with the CONTRACT DOCUMENTS, within the time set forth therein, and at the prices stated below.

By submission of this BID, the 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 200 consecutive calendar days. BIDDER further agrees to pay as liquidated damages, the sum of \$300 for each consecutive calendar day thereafter as hereinafter provided in Section 15 of the General Conditions.

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

BIDDER acknowledges receipt of the following ADDENDUM:

No. _____ Dated _____ No. _____ Dated _____
 No. _____ Dated _____ No. _____ Dated _____

BIDDER agrees to perform all the work described in the CONTRACT DOCUMENTS for the following unit prices:

- NOTE: (1) BIDS shall include sales tax and all other applicable taxes and fees.
- (2) Breakdown of work is for general information. Any work shown on Drawings and/or specified but not listed below shall be included in total base bid. Cost of items of work not specifically described below may be added to related bid item(s) at bidder's discretion.

BID SCHEDULE

Part I. Base Bid

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
1.	6" PVC Water Main, Class 200	103,000	LF	\$ 6.00	\$ 618,000.00
2.	6" PVC Water Main, Class 250	13,940	LF	\$ 6.60	\$ 92,004.00
3.	6" PVC Water Main, C-900, Class 200	11,360	LF	\$ 7.60	\$ 86,336.00
4.	6" DI Water Main	15,520	LF	\$ 11.35	\$ 176,152.00
5.	8" HDPE; SDR 7.3	1,356	LF	\$ 22.52	\$ 30,537.12
6.	2" PVC Water Main, Class 200	980	EA	\$ 3.58	\$ 3,508.40
7.	Connection to Existing Water Main (Dry Tap)	8	LF	\$ 300.00	\$ 2,400.00
8.	6" MJ Gate Valve, Complete with Box and Cover	97	EA	\$ 585.00	\$ 56,745.00
9.	2" MJ Gate Valve, Complete with Box and Cover	1	EA	\$ 400.00	\$ 400.00
10.	6" MJ Gate Valve with Bypass Meter (Creek Crossing)	4	EA	\$ 890.00	\$ 3,560.00

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
11.	Air Relief Valve, Complete with Box and Cover	15	EA	\$ 490.00	\$ 7,350.00
12.	Fire Hydrant, Complete with Gate Valve	40	EA	\$ 2300.00	\$ 92,000.00
13.	Blow-off Hydrant Complete with Gate Valve	21	EA	\$ 1900.00	\$ 39,900.00
14.	3" End-of-Line Blow-off	1	EA	\$ 500.00	\$ 500.00
15.	Jack and Bore with 10" Steel Encasement Pipe	758	LF	\$ 100.00	\$ 75,800.00
16.	Open Cut with 10" Steel Encasement Pipe	93	LF	\$ 40.00	\$ 3,720.00
17.	Freebore for 6" Water Main	411	LF	\$ 50.00	\$ 20,550.00
18.	Creek Crossing with PVC Encasement	143	LF	\$ 25.00	\$ 3,575.00
19.	Directional Bore with 14" PE Encasement Pipe	746	LF	\$ 145.00	\$ 108,170.00
20.	Blacktop Replacement	80	LF	\$ 60.00	\$ 4,800.00
21.	4" Pressure Reducing Valve Station	1	EA	\$ 6,500.00	\$ 6,500.00
22.	Concrete Encasement	20	CY	\$ 100.00	\$ 2,000.00
23.	Extra Crushed Stone Bedding	150	TONS	\$ 30.00	\$ 4,500.00
24.	5/8" x 3/4" Meter Unit without PRV	101	EA	\$ 510.00	\$ 51,510.00
25.	5/8" x 3/4" Meter Unit with PRV	39	EA	\$ 585.00	\$ 22,815.00
26.	3/4" PE Service Line	1,585	LF	\$ 3.30	\$ 5,230.50
27.	1" PE Service Line	1,525	LF	\$ 3.50	\$ 5,337.50
28.	1" PE Service Line, Jacked under Roadway	1,510	LF	\$ 15.00	\$ 22,650.00

Total Part I. Base Bid:

\$ 1,546,550.52
 (USE FIGURES)

One million five hundred forty six thousand five hundred
 (USE WORDS)

fifty dollars and fifty two cents

TOTAL AMOUNTS SHALL BE SHOWN IN BOTH WORDS AND FIGURES. IN CASE OF DISCREPANCIES, THE AMOUNT AS WRITTEN IN WORDS SHALL GOVERN.

The above price shall include all labor, materials, bailing, shoring, removal, overhead, profit, insurance, etc., to cover the finished work of the several kinds called for. Changes shall be processed in accordance with the General Conditions.

Award of the Contract will be based on the lowest and best Total Base Bid.

The Bidder agrees that the Owner reserves the right to delete the whole or any part of the project from the Contract.

The Bidder understands that the Owner reserves the right to reject any or all bids and to waive any informalities in the bidding.

The Bidder agrees that this bid shall be good and may not be withdrawn for a period of one hundred twenty (120) calendar days after the scheduled closing time for receiving bids.

Upon receipt of written notice of the acceptance of this bid, Bidder will execute the formal contract attached within ten (10) days and deliver a surety bond or bonds as required by Article 22 of the General Conditions.

Respectfully submitted:

Coomer Contractors
(Name of Contracting Firm)

BY: _____

TITLE: Owner

ADDRESS: 5635 Napoleon Lion Sta. Rd.
Dry Ridge, Ky. 41035

DATE: May 17, 2005

License No. (if applicable)

Seal (If Bid by Corporation)

Attest: _____

END BID FORM

Bullock Pen Water District
Phase 8 Water Line Extension
(Revised 5/18/05)

Preliminary Project Cost

1.	Construction Cost	\$1,546,551
2.	Legal Expense	\$15,000
3.	Easements	\$24,000
4.	Preliminary Engineering	\$5,000
5.	Engineering Design	\$117,229
6.	Resident Inspection	\$62,635
7.	Loan Expense	\$7,000
8.	Contingencies	<u>\$108,585</u>
Total Preliminary Project Cost:		\$1,886,000

Funding

KIA Tobacco Grant	\$725,000
Tap-on Fees	\$66,500
KIA Grant (2005)	\$600,000
KRWA Loan	<u>\$494,500</u>
Total Preliminary Project Cost:	\$1,886,000

Bullock Pen Water District Yearly Contribution

\$56.82 x 140 = \$7,955

Average Annual Debt Payment
(25 yrs, 4 ½ % interest)

\$494,500 x 0.06744 = \$33,349

Bullock Pen Yearly Contribution (-\$7,955)

Surcharge Loan Payment \$25,394

Yearly Surcharge \$25,394/140 = \$181.39

Monthly Surcharge \$15.12 (use \$15.00)

Notes: 1. EPA Grant Funds and costs will be included in Phase 11.

2. BPWD contribution based on PSC ruling for Phase 7. The proforma will probably have minor changes.



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

July 21, 2004

Bullock Pen Water District
Mr. William R. Catlett, Superintendent
P.O. Box 188, 1 Farrell Drive
Crittenden, Kentucky 41030

RE: Agency ID# 1476 APE20040007
DW # 0410047-04-007
Phase VIII wle
Grant County, Kentucky


Dear Mr. Catlett:

We have reviewed the plans and specifications for the above referenced project. The plans include the construction of approximately 1,156 ft of 8-inch PE, 15,372 ft of 6-inch DI and 127,066 ft of 6-inch PVC waterline. This is to advise that plans and specifications for the above referenced project are APPROVED with respect to sanitary features of design, as of this date with the requirements contained in the attached construction permit and the following stipulation:

1. Based on the hydraulic analysis/data submitted, the areas served by the following extension(s) are considered to be underserved: **Jonesville Road from Sta 125+00 to EOL, Hwy 36 from Sta 155+00 to EOL, and Gold Valley Road from Kinman to EOL.** 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.


If you have any questions concerning this project, please contact Scott Thomson at (502) 564-2225, extension 549.

Sincerely,

for 
Donna S. Marlin, Manager
Drinking Water Branch
Division of Water

DSM:JST

Enclosures

C: CMW, Inc.
Grant County Health Department
PSC
Division of Plumbing 

Distribution-Major Construction
 Bullock Pen Water District
 Facility Requirements

Activity ID No.: APE20040007

GACT6 (Phase VIII) Install 143,594 feet of waterline along 18 roads in Wester Grant County:

Monitoring Requirements:

Condition No.	Parameter	Condition
M-1	Coliform	The presence or absence of total Coliform monitored by sampling and analysis as needed shall be determined for the new or relocated water line(s). Take samples at connection points to existing lines, at 1 mile intervals, and at dead ends without omitting any branch of the new or relocated water line. Sample bottles shall be clearly identified as "special" construction tests. [401 KAR 8:100 Section 1(7), 401 KAR 8:150 Section 4, Recommended Standards for Water Works 8.5.6] This requirement is applicable during the following months: All Year. Statistical basis: Instantaneous determination.

Submittal/Action Requirements:

Coliform:

Condition No.	Condition
S-1	Coliform For new construction projects, the distribution system, using the most expedient method, shall submit Coliform test results to the Cabinet: Due immediately following disinfection and flushing. [401 KAR 8:150 Section 4(2)]

Condition No.	Condition
S-2	For proposed changes to the approved plan, submit information: Due prior to any modification to the Cabinet for approval. Changes to the approved plan shall not be implemented without the prior written approval of the Cabinet. [401 KAR 8:100 Section 1(8)]

Distribution-Major Construction

Bullock Pen Water District
Facility Requirements

Activity ID No.: APE20040007

Submittal/Action Requirements:

Condition No.	Condition
S-3	The person who presented the plans shall submit the professional engineer's certification: Due when construction is complete to the Division of Water. The certification shall be signed by a registered professional engineer and state that the water project has been constructed and tested in accordance with the approved plans, specifications, and requirements. [401 KAR 8:100 Section 1(8)]

Narrative Requirements:

Additional Limitations:

Condition No.	Condition
T-1	Additional Limitations: Chlorinated water resulting from disinfection of project components shall be disposed in a manner which will not violate 401 KAR 5:031. [401 KAR 8:020 Section 2(20)]
T-2	This project has been permitted under the provisions of KRS Chapter 224 and regulations promulgated pursuant thereto. Issuance of this permit 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. [401 KAR 8:100 Section 1(7)]
T-3	Unless construction of this project is begun within 1 year from the issuance date of this permit, the permit shall expire. If requested prior to the permit expiration, an official extension from the Division of Water may be granted. If this permit expires, the original plans and specifications may be resubmitted for a new comprehensive review. If you have any questions concerning this project, please contact the Drinking Water Branch at 502/564-3410. [401 KAR 8:100 Section 1(9)]
T-4	During construction, a set of approved plans and specification shall be available at the job site at all times. All work shall be performed in accordance with the approved plans and specifications. [401 KAR 8:100 Section 1(7)(a)]

Distribution-Major Construction

Bullock Pen Water District
Facility Requirements

Activity ID No.: APE20040007

Page 3 of 8

PORT5 (waterlines) Install 1,156 ft of 8-inch PE, 15,372 ft of 6-inch DI and 127,066 ft of 6-inch PVC along 18 roads in Wester Grant County:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1	Depth	A continuous and uniform bedding shall be provided in the trench for all buried pipe. Backfill material shall be tamped in layers around the pipe and to a sufficient height above the pipe to adequately support and protect the pipe. Stones found in the trench shall be removed for a Depth ≥ 6 in below the bottom of the pipe. [Recommended Standards for Water Works 8.5.2] This requirement is applicable during the following months: All Year. Statistical basis: Not applicable.
L-2	Depth	All water lines shall be covered to a Depth ≥ 30 in to prevent freezing. [Recommended Standards for Water Works 8.5.3, 401 KAR 8:100 Section 1(7)] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.
L-3	Diameter	All new and existing water lines serving fire hydrants or where fire protection is provided shall have Diameter ≥ 6 in. [Recommended Standards for Water Works 8.1.2] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.
L-4	Distance	Water lines shall have a sufficient quantity of valves so that inconvenience and sanitary hazards will be minimized during repairs. A valve spacing Distance ≤ 1.0 mi should be utilized. [Recommended Standards for Water Works 8.2] This requirement is applicable during the following months: All Year. Statistical basis: Not applicable.
L-5	Distance	Hydrant drains shall not be connected to sanitary sewers or storm drains and shall be located a Distance > 10 ft from sanitary sewers and storm drains. [Recommended Standards for Water Works 8.3.4] This requirement is applicable during the following months: All Year. Statistical basis: Not applicable.
L-6	Distance	Except when not practical, water lines shall be laid a horizontal Distance ≥ 10 ft from any existing or proposed sewer. The distance shall be measured edge to edge. In cases where it is not practical to maintain a 10 foot separation, water lines may be installed closer to a sewer provided that the water lines shall be 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 line is at least 18 inches above the top of the sewer. [Recommended Standards for Water Works 8.6.2] This requirement is applicable during the following months: All Year. Statistical basis: Not applicable.

Distribution-Major Construction

Bullock Pen Water District
Facility Requirements

Activity ID No.: APE20040007

Limitation Requirements:

Condition No.	Parameter	Condition
L-7	Distance	<p>When water lines and sewers cross,</p> <ol style="list-style-type: none"> 1) water lines shall be laid such that the bottom of the water line is a vertical Distance ≥ 18 in above the top of the sewer line, 2) 1 full length of the water pipe shall be located so that both joints of the water pipe will be as far from the sewer as possible, and 3) special structural support for the water and sewer pipes may be required. [Recommended Standards for Water Works 8.6.3] This requirement is applicable during the following months: All Year. Statistical basis: Not applicable. <p>The open end of an air relief pipe from automatic valves shall be extended a Distance ≥ 1.0 ft above grade and provided with a screened, downward-facing elbow. The pipe from a manually operated valve shall be extended to the top of the pit. Use of manual air relief valves is recommended wherever possible. [Recommended Standards for Water Works 8.4.2] This requirement is applicable during the following months: All Year. Statistical basis: Not applicable.</p>
L-8	Distance	<p>Pipes shall not be installed unless all points of the distribution system remain designed for ground level Pressure ≥ 20 psi under all conditions of flow. [Recommended Standards for Water Works 8.1.1] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.</p>
L-9	Pressure	<p>Pressure ≥ 30 psi must be available on the discharge side of all meters. [401 KAR 8:100 Section 4(2)] This requirement is applicable during the following months: All Year. Statistical basis: Instantaneous determination.</p>
L-10	Pressure	<p>New or relocated water lines shall be thoroughly disinfected (in accordance with AWWA Standard C651) upon completion of construction and before being placed into service. To disinfect the new or relocated lines use chlorine or chlorine compounds in such amounts as to produce an initial disinfectant concentration of at least 50 ppm and a Residual Disinfection ≥ 25 ppm at the end of 24 hours. Follow the line disinfection with thorough flushing and place the lines into service if, and only if, Coliform monitoring applicable to the line does not show the presence of Coliform.</p> <p>If Coliform is detected, repeat flushing of the line and Coliform monitoring. If Coliform is still detected, repeat disinfection and flushing as if the line has never been disinfected. Continue the described process until monitoring does not show the presence of Coliform. [401 KAR 8:150 Section 4(1), Recommended Standards for Water Works 8.5.6] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.</p>
L-11	Residual Disinfection	

Distribution-Major Construction
 Bullock Pen Water District
 Facility Requirements

Activity ID No.: APE20040007

Limitation Requirements:

Condition No.	Parameter	Condition
L-12	Velocity	<p>Except in underserved areas, each fire hydrant shall be sized so that Velocity \geq 2.5 ft/sec can be achieved in the water main served by the hydrant during flushing.</p> <p>Based on the hydraulic analysis/data submitted, the areas served by the following extension(s) are considered to be underserved:</p> <ul style="list-style-type: none"> a) Jonesville Road from Sta 125+000 to EOL , b) Hwy 36 from Sta 155+00 to EOL , c) Gold Valley Road from Kinman to EOL . <p>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. [Recommended Standards for Water Works 8.1.6.b, 401 KAR 8:100 Section 1(7)] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.</p>

Monitoring Requirements:

Condition No.	Parameter	Condition
M-1	leaks	<p>The presence or absence of leaks monitored by physical testing as needed shall be determined in all types of installed pipe. Pressure testing and leakage testing shall be in accordance with the latest edition of AWWA Standard C600. [Recommended Standards for Water Works 8.5.5] This requirement is applicable during the following months: All Year. Statistical basis: Instantaneous determination.</p>

Distribution-Major Construction
 Bullock Pen Water District
 Facility Requirements

Activity ID No.: APE20040007

Narrative Requirements:

Asbestos (Friable):

Condition No.	Condition
T-1	Asbestos (Friable): If the existing water line to be tapped is asbestos concrete, then the contractor shall conform to OSHA regulations governing the handling of hazardous waste during the process of tapping the asbestos concrete line. Pieces of asbestos concrete resulting from the tap shall be double bagged, placed in a rigid container and disposed of in an approved landfill. [401 KAR 8:100 Section 1(7)]

Additional Limitations:

Condition No.	Condition
T-2	Additional Limitations: Water line installation shall be in accordance with AWWA standards or manufacturer recommendations. [Recommended Standards for Water Works 8.5.1]
T-3	Additional Limitations: Pipes, fittings, valves and fire hydrants shall conform to the latest standards issued by the AWWA or NSF (if such standards exist). PVC and PE piping used must be certified to ANSI/NSF Standard 61. [Recommended Standards for Water Works 8.0.1]
T-4	Additional Limitations: At high points in water lines, 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 manhole or chamber flooding may occur. [Recommended Standards for Water Works 8.4.1]
T-5	Additional Limitations: All tees, bends, plugs and hydrants shall be provided with reaction blocking, tie rods or joints designed to prevent movement. [Recommended Standards for Water Works 8.5.4]
T-6	Additional Limitations: A fire hydrant shall be required at the end of each dead end line. [Recommended Standards for Water Works 8.1.6]
T-7	Additional Limitations: For each fire hydrant, auxiliary valves shall be installed in the hydrant lead pipe. [Recommended Standards for Water Works 8.3.3]

Distribution-Major Construction

Bullock Pen Water District
Facility Requirements

Activity ID No.: APE20040007

Narrative Requirements:

Additional Limitations:

Condition No.	Condition
T-8	<p>Additional Limitations: No flushing device, blow-off, or air relief valve shall be directly connected to any sewer. Chambers, pits or manholes containing valves, blow-offs, meters, or other such appurtenances shall not be directly connected to any storm drain or sanitary sewer. Such chambers, pits or manholes shall be drained to absorptions pits underground or to the surface of the ground where they are not subject to flooding by surface water. [Recommended Standards for Water Works 8.1.6, Recommended Standards for Water Works 8.4.3]</p>
T-9	<p>Additional Limitations: If water lines are installed or replaced in areas of organic contamination or in areas within 200 ft of underground or petroleum storage tanks, ductile iron or other nonpermeable materials shall be used in all portions of the water line installation or replacement. [401 KAR 8:100 Section 1(5)(d)6, Recommended Standards for Water Works 8.0.2]</p>
T-10	<p>Additional Limitations: No water pipe shall pass through or come in contact with any part of a sewer manhole. [Recommended Standards for Water Works 8.6.6]</p>
T-11	<p>Additional Limitations: If a fire sprinkler system is to be installed, a double check detector assembly approved for backflow prevention shall be utilized. The double check detector assembly of the system shall be accessible for testing. [401 KAR 8:100 Section 1(7)]</p>
T-12	<p>Additional Limitations: If water lines cross a stream or wetland, the provisions in the attached Water Quality Certification shall apply. If you have any questions please contact John Dovak of the Water Quality Branch at (502) 564-2225, extension 485. [401 KAR 8:100 Section 1(7)]</p>

Distribution-Major Construction
 Bullock Pen Water District
 Facility Requirements

Activity ID No.: APE20040007

Narrative Requirements:

Subfluvial Pipe Crossings:

Condition No.	Condition
T-13	<p>Subfluvial Pipe Crossings: For subfluvial pipe crossings, a floodplain construction permit will not be required pursuant to KRS 151.250 if the following requirements of 401 KAR 4:050 Section 2 are met.</p> <ol style="list-style-type: none"> 1) 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. during construction of pipe crossings. 2) Crossing trenches shall be backfilled as closely as possible to the original contour. 3) All excess material resulting from construction displacement in a crossing trench shall be disposed of outside the flood plain. 4) For erodible channels, there shall be at least 30 inches of backfill on top of all pipe or conduit points in the crossing. 5) For nonerodible channels, pipes or conduits in the crossing shall be encased on all sides by at least 6 inches of concrete with all pipe or conduit points in the crossing at least 6 inches below the original contour of the channel. [401 KAR 8:100 Section 1(7)]
T-14	<p>Subfluvial Pipe Crossings: For subfluvial pipe crossings greater than 15 feet in width,</p> <ol style="list-style-type: none"> 1) the pipe shall be of special construction, having flexible, restrained, or welded watertight joints, and 2) valves shall be provided at both ends of water crossings so that the section can be isolated for testing or repair. <p>Valves shall</p> <ol style="list-style-type: none"> a) be easily accessible, b) not be subject to flooding, and c) if closest to the supply source, be in a manhole with permanent taps made on each side of the valve to allow insertion of a small meter to determine leakage and for sampling purposes. [Recommended Standards for Water Works 8.7.2]

Distribution-Major Construction

Bullock Pen Water District
Subject Item Inventory

Activity ID No.: APE20040007

Subject Item Inventory:

ID	Designation	Description
AIOO1476		
PORT5	waterlines	Install 1,156 ft of 8-inch PE, 15,372 ft of 6-inch DI and 127,066 ft of 6-inch PVC along 18 roads in Wester Grant County

Subject Item Groups:

ID	Description	Components
GACT6	Install 143,594 feet of waterline along 18 roads in Wester Grant County	PORT5 Install 1,156 ft of 8-inch PE, 15,372 ft of 6-inch DI and 127,066 ft of 6-inch PVC along 18 roads in Wester Grant County

KEY

ACTV = Activity
 AREA = Area
 EQPT = Equipment
 PERS = Personnel
 STOR = Storage
 TRMT = Treatment

AIOO = Agency Interest
 COMB = Combustion
 MNPT = Monitoring Point
 PORT = Transport
 STRC = Structure

EXHIBIT “C”

Bullock Pen Water District 2004 Annual Report

2004

MORRIS & BRESSLER

BULLOCK PEN WATER DISTRICT

REPORT ON AUDITS
FOR THE YEARS ENDED
DECEMBER 31, 2004 AND 2003

MORRIS & BRESSLER, PSC
Certified Public Accountants

7309 Dixie Highway • P.O. Box 545 • Florence, KY 41022-0545 • 525-6306

BULLOCK PEN WATER DISTRICT

REPORT CONTENTS
DECEMBER 31, 2004 AND 2003

	<u>Page</u>
Independent Auditor's Report	2 - 3
Management's Discussion and Analysis	4 - 8
Financial Statements:	
Balance Sheets	9 - 10
Statements of Revenues, Expenses and Changes in Net Assets	11
Statements of Cash Flows	12 - 13
Notes to Financial Statements	14 - 35
Supplemental Information:	
Schedules of Operations, Maintenance and Administrative Expenses	36
Report on Compliance and on Internal Control over Financial Reporting Based on an Audit of Financial Statements Performed in Accordance with <i>Government Auditing Standards</i>	37 - 38

MORRIS & BRESSLER

To the Commissioners of
Bullock Pen Water District
P. O. Box 188
Crittenden, Kentucky 41030

INDEPENDENT AUDITOR'S REPORT

We have audited the accompanying balance sheets of the Bullock Pen Water District as of December 31, 2004 and 2003 and the related statements of revenues, expenses and changes in net assets and of cash flows for the years then ended. These financial statements are the responsibility of the District's 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 our 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 the Bullock Pen Water District as of December 31, 2004 and 2003 and the results of its operations and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

As described in Note 1, the District has implemented a new financial reporting model as required by provisions of Governmental Accounting Standards Board (GASB) Statement No. 34, *Basic Financial Statements - Management's Discussion and Analysis - for State and Local Governments*; Statement No. 37, *Basic Financial Statements - and Management's Discussion and Analysis - for State and Local Governments; Omnibus*; and Statement No. 38, *Certain Financial Statement Note Disclosures*, as of December 31, 2004.

In accordance with *Government Auditing Standards*, we have also issued our report dated March 3, 2005, on our consideration of Bullock Pen 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 audit.

-2-

MORRIS & BRESSLER, PSC
Certified Public Accountants

7309 Dixie Highway • P.O. Box 545 • Florence, KY 41022-0545 • (859) 525-6306

Management's Discussion and Analysis is not a required part of the basic financial statements, but is supplementary information required by Governmental Accounting Standards Board. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the required supplementary information. However, we did not audit the information and express no opinion on it.

Our audits were conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The schedule of operations, maintenance and administrative expenses on page 36 is presented for purposes of additional analysis and is not a required part of the financial statements of Bullock Pen Water District. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

Respectfully,

Morris & Bressler, PSC

Morris & Bressler, PSC
Certified Public Accountants

March 3, 2005

Bullock Pen Water District

P.O. Box 188 • 1 Farrell Drive
Crittenden, Kentucky 41030
(859) 428-2112

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

Our discussion and analysis of the District's financial performance provides an overview of the District's financial activities for the year ended December 31, 2004. The information is presented in conjunction with the audited financial statements that follow this section.

Financial Highlights

- The assets of the District exceeded its liabilities at the close of the most recent year by \$8,818,166 (net assets). This was an increase of \$827,694 in comparison to the prior year. The increase was mainly the result of the District acquiring fixed capital assets from new construction and an increase in operating revenue.
- At the end of the current year, unrestricted net assets were \$1,172,702.

Overview of the Financial Statements

The financial statements presented herein included all of the activities of the District as prescribed in GASB Statement No. 34. The District's basic financial statements include the statements of net assets, statements of revenues, expenses and changes in net assets and statements of cash flows and the notes to the financial statements. This report also contains supplementary information in addition to the basic financial statements themselves.

Basis of Accounting

The District's financial statements are prepared using the accrual basis of accounting.

The Statement of Net Assets and the Statement of Revenues, Expenses and Changes in Net Assets

In the Statements of Net Assets and the Statements of Revenues, Expenses and Changes in Net Assets, we report the District's activities:

- The District charges rates on water consumption to customers to help it cover all or most of the cost of certain services it provides.

Overview of Annual Financial Report

Table 1 provides a summary of the District's net assets at December 31, 2004 and 2003.

Table 1
Net Assets

	<u>2004</u>	<u>2003</u>
Current Assets	\$ 1,101,504	\$ 885,855
Restricted Assets	854,025	1,446,810
Noncurrent Assets	<u>13,846,761</u>	<u>12,820,664</u>
 Total Assets	 <u>15,802,290</u>	 <u>15,153,329</u>
Current Liabilities	201,963	194,770
Liabilities Payable from Restricted Assets ...	650,365	1,012,432
Long Term Liabilities	<u>6,131,796</u>	<u>5,955,655</u>
 Total Liabilities	 <u>6,984,124</u>	 <u>7,162,857</u>
 Net Assets:		
Invested in Capital assets, net of Related Debt	7,225,342	6,487,458
Restricted	420,122	413,501
Unrestricted	<u>1,172,702</u>	<u>1,089,513</u>
 Total Net Assets	 <u>8,818,166</u>	 <u>7,990,472</u>
 Total Liabilities and Net Assets	 <u>\$15,802,290</u>	 <u>\$15,153,329</u>

The District's net assets for 2004 increased 10%, \$827,694 as compared to \$391,708 in the previous year. This increase was mainly attributable to additional capital assets acquired from new construction, and an increase in operating revenue. The largest portion of the District's net assets (82%) reflects its investment in capital assets (e.g. land, buildings, infrastructure, machinery and equipment), less any related debt used to acquire those assets still outstanding. The District uses these capital assets to provide services to its customers; consequently, these assets are not available for future spending. Although the District's investments in its capital assets is reported net of related debt, it should be noted that the resources needed to repay this debt must be provided from other sources, since the capital assets themselves cannot be used to liquidate the debt.

An additional portion of the District's net assets (5%) is considered to be restricted. This amount represents resources that are subject to external restrictions on how they may be used.

The unrestricted net assets may be used to meet the District's ongoing obligations to customers and creditors.

Table 2 shows the annual changes in net assets for 2004, as well as revenue and expense comparisons to 2003.

Table 2
Changes in Net Assets

	<u>2004</u>	<u>2003</u>
Operating Revenues:		
Water Sales	\$2,451,697	\$1,749,964
Forfeited Discounts	54,153	39,586
Miscellaneous Services Revenues	29,925	37,054
Management Fees	<u>100,932</u>	<u>-0-</u>
 Total Operating Revenues	 <u>2,636,707</u>	 <u>1,826,604</u>
Operating Expenses:		
Operations, Maintenance and Administrative Expenses	1,704,640	1,517,957
Depreciation & Amortization	<u>340,928</u>	<u>311,436</u>
 Total Operating Expenses	 <u>2,045,568</u>	 <u>1,829,393</u>
 Net Operating Income/(Loss)	 <u>591,139</u>	 <u>(2,789)</u>
Non-Operating Income(Expenses)		
Investment Income	18,343	10,825
Loss on Disposition of Assets	(12,687)	(689)
Interest on Long-Term Debt	(273,275)	(246,168)
Amortization of Debt Discount and Expenses ..	<u>(7,292)</u>	<u>(6,608)</u>
 Net Non-Operating Expenses	 <u>(274,911)</u>	 <u>(242,640)</u>
 Income/(Loss) Before Capital Contributions ...	 316,228	 (245,429)
 Capital Contributions	 <u>511,466</u>	 <u>637,137</u>
 Change in Net Assets	 827,694	 391,708
 Net Assets - January 1	 <u>7,990,472</u>	 <u>7,598,764</u>
 Net Assets - December 31	 <u>\$8,818,166</u>	 <u>\$7,990,472</u>

The basic financial statements of the District are included in this report. Operations are accounted for in such a manner as to show changes in net assets and the District is intended to be entirely or predominantly self supported from water user charges.

In reviewing income before capital contributions, the financial statements showed net income for the year of \$316,228. Operating revenues increased 44% due to an increase in water rates that took place with the December 2003 billing and a management contract that the District signed with the Grant County Sanitary Sewer District. Operating expenses increased by 12%. The increase was primarily due to increased water costs, an increase in employee wages due to raises and overtime, and an increase in employee benefit costs.

Debt and Capital Asset Administration

Table 3 Summarizes the District's outstanding debt at the end of 2004 as compared to 2003.

**Table 3
Outstanding Debt at Year End**

	<u>2004</u>	<u>2003</u>
Bond Payable Obligations	\$2,580,000	\$2,588,000
Notes Payable	1,879,368	1,699,461
Capitalized Leases	<u>2,028,726</u>	<u>1,962,050</u>
Total	<u>\$6,488,094</u>	<u>\$6,249,511</u>

At year-end, the District had \$6,488,094 in outstanding notes and bonds compared to \$6,249,511 last year. That is an increase of 4%. The District did issue new debt during the current year to pay construction costs and to purchase radio read meter equipment.

Capital Assets

At December 31, 2004, the capital assets reported amounted to \$13,687,838 invested in land, buildings, waterlines, equipment, and vehicles. This represents a net increase of \$1,035,711 or 8% over last year due to the construction of additional waterlines and two elevated storage tanks, and equipment purchases during the year.

**Table 4
Capital Assets, Net of Depreciation**

	<u>2004</u>	<u>2003</u>
Not being Depreciated:		
Land	\$ 161,757	\$ 160,857
Construction in Progress	314,342	1,182,198
Other Capital Assets:		
Utility Plants:		
Transmission &		
Distribution System Plant and Equipment ...	16,568,871	14,425,926
General Plant and Equipment	<u>559,897</u>	<u>541,069</u>
Sub-Total	17,604,867	16,310,050
Accumulated Depreciation	<u>(3,917,029)</u>	<u>(3,657,923)</u>
Totals	<u>\$13,687,838</u>	<u>\$12,652,127</u>

Economic Factors and Next Year's Budget

The District's budget for 2005 calls for a slight increase in water revenue due to additional customers added by construction projects completed during 2004 and expected to be completed during 2005. An increase of approximately 11% is planned for operating expenses as a result of increases in the costs of purchased water and employee wages and benefits, and operating supply costs.

Contacting The District's Financial Management

This financial report is designed to provide our customers and creditors with a general overview of the District's finances and to show the District's accountability for the money it receives. If you have questions about this report or need additional financial information, contact the District Administrative Office at Farrell Drive, Crittenden, Kentucky 41030.

William Catlett

William Catlett, General Manager
Bullock Pen Water District

BULLOCK PEN WATER DISTRICT

BALANCE SHEETS
DECEMBER 31, 2004 AND 2003

	<u>ASSETS</u>	<u>2004</u>	<u>2003</u>
CURRENT ASSETS			
Cash and Cash Equivalents	\$	419,853	\$ 305,943
Certificates of Deposit		140,567	138,291
Accounts Receivable - Customers		260,866	165,937
- Unbilled		81,121	85,814
- Management Fees		66,790	-0-
- Other		6,585	3,528
Inventories		100,646	162,208
Prepaid Expenses		10,343	9,989
Accrued Interest Income		410	228
Unamortized Expenses		14,323	13,917
Total Current Assets		<u>1,101,504</u>	<u>885,855</u>
RESTRICTED ASSETS			
Loan Proceeds Fund		120,367	359,091
Debt Service Reserve Fund - Kentucky Infrastructure		8,904	151,220
Current Reserve Fund - Rural Development		281,937	244,286
Debt Payment Account		152,172	166,939
Maintenance and Replacement Reserve		32,426	32,264
Customer Deposits		100,257	113,051
Construction Funds		151,494	375,642
Accounts Receivable - Surcharges		6,468	4,317
Total Restricted Assets		<u>854,025</u>	<u>1,446,810</u>
NONCURRENT ASSETS			
Miscellaneous Deferred Charges			
Unamortized Issue Costs		85,041	88,254
Unamortized Tap-In Expenses		58,377	60,010
Deferred Rate Case Expense		15,505	20,273
Total Miscellaneous Deferred Charges		<u>158,923</u>	<u>168,537</u>
Capital Assets			
Land, System, Building & Equipment		17,290,525	15,127,852
Construction in Progress		314,342	1,182,198
Total Capital Assets			
Before Accumulated Depreciation		17,604,867	16,310,050
Less Accumulated Depreciation		(3,917,029)	(3,657,923)
Total Capital Assets, Net of accumulated Depreciation		<u>13,687,838</u>	<u>12,652,127</u>
Total Noncurrent Assets		<u>13,846,761</u>	<u>12,820,664</u>
Total Assets		<u>\$15,802,290</u>	<u>\$15,153,329</u>

SEE ACCOMPANYING NOTES TO FINANCIAL STATEMENTS

BULLOCK PEN WATER DISTRICT

BALANCE SHEETS
DECEMBER 31, 2004 AND 2003

LIABILITIES AND EQUITY CAPITAL

	<u>2004</u>	<u>2003</u>
CURRENT LIABILITIES		
Accounts Payable - General	\$ 107,477	\$ 154,659
Withheld & Accrued Liabilities	44,591	40,111
Note Payable - Eagle Bank	49,895	-0-
Total Current Liabilities	<u>201,963</u>	<u>194,770</u>
CURRENT LIABILITIES		
PAYABLE FROM RESTRICTED ASSETS		
Revenue Bonds - Current Portion	114,000	106,000
Notes Payable - Current Portion	112,142	100,229
Lease Obligations -		
Current Portion	130,156	87,627
Customer Deposits	89,148	90,091
Accrued Interest Payable	44,696	49,442
Accounts Payable - Construction & Meters	160,223	579,043
Total Current Liabilities Payable from Restricted Assets	<u>650,365</u>	<u>1,012,432</u>
LONG - TERM DEBT		
Revenue Bonds Payable	2,466,000	2,482,000
Notes Payable	1,767,226	1,599,232
Capital Lease Obligations	1,898,570	1,874,423
Total Long-Term Debt	<u>6,131,796</u>	<u>5,955,655</u>
Total Liabilities	<u>6,984,124</u>	<u>7,162,857</u>
NET ASSETS		
Invested in Capital Assets, Net of Related Liabilities	7,225,342	6,487,458
Restricted	420,122	413,501
Unrestricted	1,172,702	1,089,513
Total Net Assets	<u>8,818,166</u>	<u>7,990,472</u>
Total Liabilities & Net Assets	<u>\$15,802,290</u>	<u>\$15,153,329</u>

SEE ACCOMPANYING NOTES TO FINANCIAL STATEMENTS

BULLOCK PEN WATER DISTRICT

STATEMENTS OF REVENUES, EXPENSES AND
CHANGES IN NET ASSETS
FOR THE YEARS ENDED DECEMBER 31, 2004 AND 2003

	<u>2004</u>	<u>2003</u>
OPERATING REVENUES		
Water & Penalties	\$2,505,850	\$1,789,550
Miscellaneous Service Revenues	29,925	37,054
Management Fees	<u>100,932</u>	<u>-0-</u>
Total Operating Revenues	<u>2,636,707</u>	<u>1,826,604</u>
OPERATING EXPENSES		
Operations, Maintenance and Administrative Expenses	1,704,640	1,517,957
Depreciation & Amortization	<u>340,928</u>	<u>311,436</u>
Total Operating Expenses	<u>2,045,568</u>	<u>1,829,393</u>
OPERATING INCOME/(LOSS)	<u>591,139</u>	<u>(2,789)</u>
NON-OPERATING INCOME (EXPENSES)		
Interest on Investments	18,343	10,825
Loss on Disposition of Assets	(12,687)	(689)
Interest on Long Term Debt	(273,275)	(246,168)
Amortization of Debt Discount and Expense	<u>(7,292)</u>	<u>(6,608)</u>
Net Non-Operating Income (Expenses)	<u>(274,911)</u>	<u>(242,640)</u>
INCOME/(LOSS) BEFORE CONTRIBUTIONS	316,228	(245,429)
CAPITAL CONTRIBUTIONS	<u>511,466</u>	<u>637,137</u>
CHANGE IN NET ASSETS	827,694	391,708
Net Assets - Beginning of Year	<u>7,990,472</u>	<u>7,598,764</u>
Net Assets - End of Year	<u>\$8,818,166</u>	<u>\$7,990,472</u>

SEE ACCOMPANYING NOTES TO FINANCIAL STATEMENTS

BULLOCK PEN WATER DISTRICT

STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2004 AND 2003

	<u>2004</u>	Restated <u>2003</u>
CASH FLOWS FROM OPERATING ACTIVITIES		
Received from Customers	\$ 2,474,580	\$ 1,811,531
Paid to Suppliers for Goods & Services	(870,586)	(824,612)
Paid to or on Behalf of Employees for Services	(813,504)	(698,778)
Net Cash Flows from Operating Activities .	<u>790,490</u>	<u>288,141</u>
CASH FLOWS FROM INVESTING ACTIVITIES		
Interest on Investments	18,161	11,201
Invest In Certificate of Deposit	(2,276)	(2,038)
Net Cash Provided by Investing Activities	<u>15,885</u>	<u>9,163</u>
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES		
Acquisition and Construction of Capital Assets	(1,209,625)	(1,802,867)
Deferred Rate Case Expenses	(500)	(21,866)
Contributed Capital	338,466	371,554
Proceeds from Line of Credit	75,000	-0-
Proceeds from Long Term Debt	703,942	1,890,278
Debt Issuance Costs	(4,385)	(15,800)
Proceeds from Sale of Assets	100	-0-
Insurance Proceeds for Fixed Assets Replacement	-0-	11,346
Interest on Long-Term Debt	(273,275)	(246,168)
Payment on Line of Credit	(25,105)	-0-
Retirement of Long-Term Debt	(465,359)	(452,508)
(Increase)/Decrease in Restricted Assets	592,785	(608,579)
Increase/(Decrease) in Customer Deposits and Restricted Payables	(424,509)	433,058
Net Cash Used In Capital and Related Financing Activities	<u>(692,465)</u>	<u>(441,552)</u>
INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	113,910	(144,248)
CASH AND CASH EQUIVALENTS - BEGINNING OF YEAR .	<u>305,943</u>	<u>450,191</u>
CASH AND CASH EQUIVALENTS - END OF YEAR	<u>\$ 419,853</u>	<u>\$ 305,943</u>
RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES		
Net Income/(Loss) from Operations	\$ 591,139	\$ (2,789)
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation & Amortization	340,928	311,436
Change in Operating Assets & Liabilities:		
(Increase) in Receivables	(160,083)	(14,973)
(Increase)/Decrease in Inventories	61,562	(59,078)
(Increase)/Decrease in Prepaid Assets	(354)	393
Increase/(Decrease) in Accounts Payable	(47,182)	49,237
Increase in Accrued & Withheld Liabilities.	<u>4,480</u>	<u>3,915</u>
Net Cash Provided by Operating Activities	<u>\$ 790,490</u>	<u>\$ 288,141</u>

SEE ACCOMPANYING NOTES TO FINANCIAL STATEMENTS

BULLOCK PEN WATER DISTRICT

STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2004 AND 2003

Interest paid was \$305,759 and \$244,144 during 2004 and 2003, respectively.

Bullock Pen Water District is a governmental agency that is not subject to income tax, therefore, no income taxes were paid during 2004 and 2003.

NON-CASH TRANSACTIONS

During 2004 and 2003 the District received title to \$173,000 and \$256,643, respectively of waterlines, meters, and hydrants without cost as these items were installed in subdivisions and mobile home parks by developers or by Grant County and after a one year warranty period became the property of Bullock Pen Water District or were installed by The Kentucky Department of Transportation as part of a line relocation project. The cost of these contributed assets were estimated by the District.

During 2004 and 2003 Boone County Fiscal Court paid engineering fees in the amount of \$-0- and \$8,940, respectively, related to construction. These amounts were included in the cost of these projects and were capitalized in the District's books.

During 2004 and 2003 the District disposed of assets having a cost of \$97,863 and \$27,245, respectively and accumulated depreciation of \$85,076 and \$15,210, respectively.

During 2004 and 2003 the District capitalized depreciation expense of \$10,056 and \$9,736, respectively, as construction costs.

SEE ACCOMPANYING NOTES TO FINANCIAL STATEMENTS

BULLOCK PEN WATER DISTRICT

NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2004 AND 2003

NOTE 1) DESCRIPTION OF ENTITY AND SIGNIFICANT ACCOUNTING POLICIES

Description of Entity

Bullock Pen Water District is a water utility that was established by the Grant County Fiscal Court in 1957. It was organized and operates under the provisions of Chapter 74 of the Kentucky Revised Statutes. The District owns and operates water distribution facilities that are used to furnish water supplies to residential, commercial and industrial customers within their service area as approved by the Commonwealth of Kentucky Public Service Commission. Currently their service area includes areas in Grant, Boone, Kenton, Pendleton and Gallatin Counties.

Basis of Presentation and Accounting

The financial statements of the Bullock Pen Water District are presented on the accrual basis in accordance with accounting principles generally accepted in the United States of America. The District applies all Governmental Accounting Standards Board (GASB) pronouncements as well as Financial Accounting Standards Board (FASB) statements and interpretations, and the Accounting Principles Board (APB) of the Committee on Accounting Procedure issued on or before November 30, 1989, unless those pronouncements conflict with or contradict GASB pronouncements.

The District has adopted GASB Statements 33 through 38, and related interpretations issued through June 30, 2003. Statement No. 33 required capital contributions to be recorded in the statement of revenues, expenses and changes in net asset. Statement No. 34 and subsequent statements and interpretations required certain other changes in terminology, format and content, as well as inclusion of the management's discussion and analysis as required supplementary information.

All activities of the District are accounted for within a single proprietary (enterprise) reporting entity. Proprietary entities are used to account for operations that are (a) financed and operated in a manner similar to private business enterprises where the intent of the governing body is that the cost (expenses, including depreciation) of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges; or (b) where the governing body has decided that periodic determination of revenues earned, expenses incurred, and/or net income is appropriate for capital maintenance, public policy, management control, accountability, or other purposes.

The accounting and financial reporting treatment applied to the District is determined by its measurement focus. The transactions of the District are accounted for on a flow of economic resources measurement focus. With this measurement focus, all assets and all liabilities associated with the operations are included on the balance sheet. Net assets (i.e., total assets net of total liabilities) are segregated into invested in capital assets, net of related liabilities; restricted; and unrestricted components.

BULLOCK PEN WATER DISTRICT

NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2004 AND 2003

NOTE 1) DESCRIPTION OF ENTITY AND
SIGNIFICANT ACCOUNTING POLICIES (continued)

Fund Structure

The activities of the accounts included in the accompanying financial statements are summarized below.

General Revenue Account

All monies received by the District as pledged receipts are deposited in the General Revenue Account. Transfers from the General Revenue Account to other designated accounts follow the requirements of the General Bond Resolution.

Operation and Maintenance Account

The Operation and Maintenance Account is used to pay operating and maintenance costs of the District in accordance with the annual budget.

Loan Proceeds Fund

This fund contains loan proceeds that are available for paying the cost of construction and acquisition contracts relating to the water system as provided in the loan agreements.

Loan Proceeds Fund Assets:

	<u>2004</u>	<u>2003</u>
Cash and Cash Equivalents	<u>\$120,367</u>	<u>\$359,091</u>

Debt Service Reserve Fund - Kentucky Infrastructure

Kentucky Infrastructure Authority retained these funds when the loans were established to provide for debt repayment in the case of default. The funds were assets of the Kentucky Infrastructure Authority that were pledged to bondholders. It was the policy of the Authority to use these funds to make final payments on loans assuming no defaults by pool participants. Interest was credited biannually at the six month Treasury Bill rate. During 2004, the related notes were refinanced and almost all of these reserve funds were used to pay down on the principal of these notes. All remaining amounts will be applied to the loan during the final year to lower the required amounts payable during that year. Interest is being added to these accounts monthly in order to bring the balance up to the amount expected to be credited during the final year.

Debt Service Reserve Fund - Kentucky Infrastructure Assets:

	<u>2004</u>	<u>2003</u>
Cash and Cash Equivalents	<u>\$ 8,904</u>	<u>\$151,220</u>

BULLOCK PEN WATER DISTRICT

NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2004 AND 2003

NOTE 1) DESCRIPTION OF ENTITY AND
SIGNIFICANT ACCOUNTING POLICIES (continued)

Current Reserve Fund - Rural Development

This Debt Service Reserve Fund holds amounts for the purpose of paying principal and interest requirements on Rural Development Bonds as they mature if said funds are unavailable in the sinking fund. Monthly deposits are to be deposited into this fund for the purpose of accumulating and maintaining therein a balance of \$143,400.

Current Reserve Fund - Rural Development Assets:

	<u>2004</u>	<u>2003</u>
Cash and Cash Equivalents	<u>\$281,937</u>	<u>\$244,286</u>

Debt Payment Account

The Debt Payment Account accumulates monies for the purpose of paying interest and principal payments on all debt when due and payable.

Debt Payment Account Assets:

	<u>2004</u>	<u>2003</u>
Cash and Cash Equivalents	<u>\$152,172</u>	<u>\$166,939</u>

Maintenance and Replacement Reserve Fund

The Maintenance and Replacement Reserve Fund may be used for extraordinary maintenance expenses related to the assets obtained with the loan proceeds or for the unbudgeted costs of replacing worn or obsolete portions of project assets. Commencing December 1, 2003 the District was required to deposit \$14,000 per year into this account until the balance reached \$140,000 and then maintain that balance for the life of the loan. Effective December 1, 2004 the District began making payments on a second loan requiring an additional deposit of \$36,000 per year into this account until the balance reaches \$360,000. The District failed to deposit the additional \$36,000 during 2004 but has made up the shortfall during 2005.

Maintenance and Replacement Reserve Fund Assets:

	<u>2004</u>	<u>2003</u>
Cash and Cash Equivalents	<u>\$ 32,426</u>	<u>\$ 32,264</u>

Customer Deposits Account

The Customer Deposits Account holds the customer deposits plus investment interest earned for the purpose of repaying customer's deposits when necessary.

Customer Deposits Account Assets:

	<u>2004</u>	<u>2003</u>
Cash and Cash Equivalents	<u>\$100,257</u>	<u>\$113,051</u>

BULLOCK PEN WATER DISTRICT

NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2004 AND 2003

NOTE 1) DESCRIPTION OF ENTITY AND
SIGNIFICANT ACCOUNTING POLICIES (continued)

Construction Funds Accounts

The Construction Funds Accounts holds capital contributions designated for construction that are available for paying the cost of construction and acquisition contracts relating to the water system.

Construction Funds Accounts Assets:

	<u>2004</u>	<u>2003</u>
Cash and Cash Equivalents	\$151,494	\$162,518
Accounts Receivable	<u>-0-</u>	<u>213,124</u>
Total	<u>\$151,494</u>	<u>\$375,642</u>

Accounts Receivable - Surcharges

This account represents capital contributions billed monthly to customers on specific waterlines for the purpose of paying down the debt related to the project that added the lines to the system.

Accounts Receivable - Surcharges Assets:

	<u>2004</u>	<u>2003</u>
Accounts Receivable	<u>\$ 6,468</u>	<u>\$ 4,317</u>

Summary of Significant Accounting Policies:

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Cash and Cash Equivalents

For purposes of the statements of cash flows, the District considers all highly liquid unrestricted debt instruments purchased with a maturity of three months or less to be cash equivalents.

The District is authorized by bond resolution to invest in direct obligations of the United States, or obligations guaranteed by the United States and obligations of certain federal agencies and instrumentalities, including U.S. dollar-denominated checking, savings and certificates of time deposits in commercial banks which are insured by the Federal Deposit Insurance Corporation or fully collateralized by the foregoing.

BULLOCK PEN WATER DISTRICT

NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2004 AND 2003

NOTE 1) DESCRIPTION OF ENTITY AND
SIGNIFICANT ACCOUNTING POLICIES (continued)

Accounts Receivable - Customers and Estimated Unbilled Water Delivered

The District bills customers monthly based on meter readings taken between the 15th and 20th of each month. When meter reading is delayed, estimated bills are rendered to promote consistency of water revenue. In order to accomplish a proper matching of revenues with expenses and to fairly state assets. An analysis is prepared to determine the estimated amount of water delivered but unbilled at year end.

The direct write-off method is used to recognize uncollectible accounts receivable.

Accounts Receivable - Management Fees

During 2004 the District signed a contract with the Grant County Sanitary Sewer District (GCSSD) to manage the daily operations of the GCSSD in exchange for a management fee. The fee is based on hours worked by District personnel at specified rates plus additional charges for use of District office space and equipment. The District took over the management of the GCSSD on April 23, 2004 and have issued monthly bills to them. The bills have averaged approximately \$11,000 per month. As of December 31, 2004 GCSSD has only paid for the months of April through June. During 2005 they have continued to pay on a monthly basis but remain approximately six months behind in their payments. The GCSSD is considering a rate increase during 2005 so that they can bring these and other payments up to date.

Inventory

Inventory is valued at cost using the first in first out (FIFO) method. Inventories consist of expendable supplies held for new water line installations and maintenance and are charged to expenditures on an as used basis.

Utility Plant

Utility plant assets are stated at cost. Interest related to the financing of projects under construction is capitalized as part of the projects' basis. During 2004 and 2003, interest in the amount of \$10,056 and \$9,736, respectively, has been capitalized. The cost of current repairs and maintenance is charged to expense, while the cost of replacements or betterments are capitalized.

Depreciation of the utility plant is computed on the straight-line method over the estimated useful lives of the assets.

Unamortized Issue Costs

Bond discounts, premiums and costs of issuance are deferred and amortized over the life of the related bonds.

BULLOCK PEN WATER DISTRICT

NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2004 AND 2003

NOTE 1) DESCRIPTION OF ENTITY AND
SIGNIFICANT ACCOUNTING POLICIES (continued)

Unamortized Tap-In Expense

The cost of construction of a master meter in order to tap into the waterlines of the Northern Kentucky Water Service District as an additional source of water were deferred and are being amortized over the life of the related water purchase contract.

Deferred Rate Case Expense

The costs associated with obtaining a rate increase that became effective with the water billing due January 15, 2004 were accumulated and are being amortized over a five year period.

Construction in Progress

Capitalizable costs incurred on projects which are not in use or ready for use are held in construction in progress. When the asset is ready for use, related costs are transferred to utility plant.

Capital Contributions

These contributions represent tap on fees and other contributions to recover the costs of new services and extensions of the distribution system. Included in capital contributions are the estimated costs incurred and contributed by outside contractors for installation of distribution systems which the District absorbs and provides for their operations and maintenance. During 2004 and 2003 these contributions consisted of:

	<u>2004</u>	<u>2003</u>
Tap on Fees and Other Costs paid by Customers	\$182,416	\$ 83,991
Waterlines, etc. Received without Cost	173,000	157,410
Construction Funding from Counties and KDOT	77,459	355,080
Surcharges Paid by Customers	37,755	30,144
Grant Funds	<u>40,836</u>	<u>10,512</u>
Total	<u>\$511,466</u>	<u>\$637,137</u>

Restricted Net Assets

Net assets comprise the various net earnings from operating and non-operating revenues, expenses and contributions of capital. Net assets are classified in the following three components; invested in capital assets, net of related debt; restricted; and unrestricted net assets. Invested in capital assets, net of related debt, consists of all capital assets, net of accumulated depreciation and reduced by outstanding debt that is attributable to the acquisition, construction and improvement of those assets. Restricted net assets consists of net assets for which constraints are placed thereon by external parties, such as lenders, grantors, contributors, laws, regulations and enabling legislation, including self-imposed legal mandates. Unrestricted net assets consists of all other net assets not included in the above categories.

BULLOCK PEN WATER DISTRICT

NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2004 AND 2003

NOTE 1) DESCRIPTION OF ENTITY AND
SIGNIFICANT ACCOUNTING POLICIES (continued)

Included in restricted net assets at December 31,

	<u>2004</u>	<u>2003</u>
Loan Proceeds Fund	\$ 93,258	\$359,091
Debt Service Reserve Funds	152,304	294,620
Debt Payment Accounts	72,363	52,552
Maintenance and Replacement Reserve	64,000	14,000
Construction Funds - Prepaid Tap on Fees	129,690	52,329
Construction Funds - Receivable	-0-	209,325
Surcharges Receivable	1,765	-0-
Unused Bond Proceeds	(93,258)	(167,193)
Construction Accounts Payable	-0-	(401,223)
Total	<u>\$420,122</u>	<u>\$413,501</u>

BULLOCK PEN WATER DISTRICT

NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2004 AND 2003

NOTE 2) CHANGES IN UTILITY PLANT IN SERVICE

The changes in utility plant in service are as follows:

	<u>Useful Life</u>	<u>2003</u>	<u>Additions</u>	<u>Deletions</u>	<u>2004</u>
Land & Land Rights.....	N/A	\$ 160,857	\$ 900	\$	\$ 161,757
Structures & Improvements.....	7-50 Yrs.	1,465,388	4,461		1,469,849
Pumping Equipment.....	5-15 Yrs.	79,016			79,016
Water Treatment Equipment.....	5-50 Yrs.	72,939	9,762		82,701
Distribution Reservoirs & Standpipes.....	5-50 Yrs.	1,044,031	928,567		1,972,598
Transmission & Distribution Mains.....	50 Yrs.	8,729,706	857,918	72,342	9,515,282
Meters & Meter Installations.....	50 Yrs.	2,564,148	297,002		2,861,150
Hydrants.....	50 Yrs.	470,698	117,577		588,275
Other Plant & Miscellaneous Equipment....	5-15 Yrs.	230,394	2,280		232,674
Office Furniture & Equipment.....	3-10 Yrs.	69,127	12,988	25,521	56,594
Transportation Equipment.....	5 Yrs.	183,700	28,527		212,227
Tools & Equipment.....	5-15 Yrs.	57,848	554		58,402
Total		\$ 15,127,852	\$ 2,260,536	\$ 97,863	\$ 17,290,525
Less Accumulated Depreciation		(3,657,923)		(3,917,029)	(3,917,029)
					<u>\$13,373,496</u>

Depreciation for 2004 and 2003 was \$344,182 and \$319,539 of which \$10,055 and \$9,736 was capitalized as construction costs, respectively.

Depreciation expense reported on the books was \$334,127 and \$309,803 during 2004 and 2003, respectively.

BULLOCK PEN WATER DISTRICT

NOTES TO FINANCIAL STATEMENT
DECEMBER 31, 2004 AND 2003

NOTE 3) BOND DEBT

Water Works System Revenue Bonds Insured by the United States:

	<u>Original</u> <u>Issues</u>	<u>Unmatured</u> <u>at</u> <u>12/31/04</u>	<u>Unmatured</u> <u>at</u> <u>12/31/03</u>
Bonds issued per resolution dated December 31, 1978, 5%, maturities 1981 - 2018	\$1,330,000	\$742,000	\$782,000
Bonds issued per resolution dated August 6, 1982, 5%, maturities 1985 - 2022	<u>125,000</u>	<u>85,000</u>	<u>88,000</u>
Less Current Portion	<u>\$1,455,000</u>	827,000 <u>(45,000)</u>	\$870,000 <u>(43,000)</u>
		<u>\$782,000</u>	<u>\$827,000</u>

Insured Water Works Systems Revenue Bond maturities are as follows:

	<u>Interest</u>	<u>Principal</u>	<u>Total</u>
2005	\$ 41,350	\$ 45,000	\$ 86,350
2006	39,100	47,000	86,100
2007	36,750	50,000	86,750
2008	34,250	53,000	87,250
2009	31,600	55,000	86,600
2010-2014 ..	113,900	319,000	432,900
2015-2019 ..	29,950	244,000	273,950
2020-2022 ..	<u>1,050</u>	<u>14,000</u>	<u>15,050</u>
Total.....	<u>\$327,950</u>	<u>\$827,000</u>	<u>\$1,154,950</u>

All bonds are issued in denominations of \$1,000, \$500 or \$100, are numbered, and mature in varying and increasing principal amounts on January 1 of each year beginning in 1981 and ending in 2022. So long as all of the bonds are held by the Government, all or any of the Bonds, or installments in a multiple of \$1,000, \$500 or \$100, may be prepaid at any time in inverse chronological order of the installment due date, at face amount plus accrued interest without any prepayment penalty. Interest is payable January 1 and July 1 of each year.

BULLOCK PEN WATER DISTRICT

NOTES TO FINANCIAL STATEMENT
DECEMBER 31, 2004 AND 2003

NOTE 3) BOND DEBT (continued)

Water Works System Revenue Bonds Insured by the United States:

These bonds are secured on a parity second lien basis by and payable solely from the gross revenues of the District. They are a valid claim against the second lien sinking fund created for the benefit of such bond holders. (See information on the Current Reserve Fund under restrictions below.) In addition they are further secured by a statutory mortgage lien upon the District and all of the properties constituting the District.

Restrictions - the bond form provides that in addition to the monthly payments to be deposited in a special fund for the purpose of paying interest and principal requirements as they mature, monthly payments are to be made to a Current Reserve Fund. The amount of the required monthly payment has increased with each bond issue. The current required payment is \$1,195 per month until there is accumulated in this fund the sum of \$143,400. This amount must then be maintained, and when necessary, restored to said sum of \$143,400 so long as any of the Bonds insured by the United States are outstanding and unpaid. At December 31, 2004 and 2003, the balance in this fund was \$281,937 and \$244,286, respectively.

Kentucky Rural Water Finance Corporation Multimodel Public Projects Revenue Bonds, Series 2001C

On May 15, 2002, the District participated in the Kentucky Rural Water Finance Corporation's Flexible Term Finance Program wherein the proceeds of the revenue bonds issued were used to provide funds for several systems throughout Kentucky. The District's share of the bond proceeds were \$717,154 which included a bond premium of \$2,154 and \$715,000 of new bonds payable by the District. The bond proceeds were used to pay \$25,962 of bond issue costs, \$689,054 of construction costs on the Phase V construction project adding new water lines to the District, and \$2,138 of additional cash was retained by the District. The bonds bear interest rates of 5.15% to 5.45%. Interest is due semi-annually on January 1 and July 1 beginning in 2002 and ending in 2027. The total amount of the bond issue has been broken down into two loans of which \$341,000 is payable from District funds and \$374,000 is payable from surcharges billed monthly to all customers who tap on to the lines that were built by this project.

The District is required to make monthly sinking fund payments to Regions Bank. The required monthly payment of 1/6th of the semi-annual interest payment and 1/12th of each annual principal payment is deposited into an account at Regions Bank. The bank then uses these funds to make the required principal and interest payments on the bonds as they come due. The balance in this account at December 31, 2004 and 2003 was \$35,726 and \$31,669, respectively and are included in the Debt Payment Account described in Note 1.

All bond indenture requirements have been met. The balance due on these bonds at December 31, 2004 and 2003 was \$690,000 and \$705,000, respectively.

BULLOCK PEN WATER DISTRICT

NOTES TO FINANCIAL STATEMENT
DECEMBER 31, 2004 AND 2003

NOTE 3) BOND DEBT (continued)

Kentucky Rural Water Finance Corporation Public Projects Refunding Revenue Bonds, Series 2002A

On July 31, 2002, the District participated in the Kentucky Rural Water Finance Corporation's Flexible Term Finance Program wherein the proceeds of the revenue bonds issued were used to provide refunding for four systems throughout Kentucky. The District's share of the bond proceeds were \$572,535 which included \$574,000 of new bonds payable by the District less a bond discount of \$1,465. The bond proceeds were used to pay \$27,739 of bond issue costs, \$543,438 to retire three bond issues and \$1,358 of additional cash was retained by the District. The bonds bear interest rates of 3.15% to 5.00%. Interest is due semi-annually on January 1 and July 1 beginning in 2003 and ending in 2021.

The District is required to make monthly sinking fund payments to Regions Bank. The required monthly payment of 1/6th of the semi-annual interest payment and 1/12th of each annual principal payment is deposited into an account at Regions Bank. The bank then uses these funds to make the required principal and interest payments on the bonds as they come due. The balance in this account at December 31, 2004 and 2003 was \$35,656 and \$32,118, respectively and are included in the Debt Payment Account described in Note 1.

All bond indenture requirements have been met. The balance due on these bonds at December 31, 2004 and 2003 was \$530,000 and \$553,000, respectively.

Kentucky Rural Water Finance Corporation Public Projects Revenue Bonds, Series 2001G

On July 29, 2003, the District participated in the Kentucky Rural Water Finance Corporation's Flexible Term Finance Program wherein the proceeds of the revenue bonds issued were used to provide funds for several systems throughout Kentucky. The District's share of the bond proceeds were \$449,843, which included \$460,000 of new bonds payable by the District less a bond discount of \$10,157. The bond proceeds were used to pay \$5,600 of bond issue costs, and \$444,243 of construction costs for a new water tower in Dry Ridge, KY. The bonds bear interest rates of 1.47% to 4.52%. Interest is due semi-annually on January 1 and July 1 beginning in 2004 and ending in 2018.

The District is required to make monthly sinking fund payments to Regions Bank. The required monthly payment of 1/6th of the semi-annual interest payment and 1/12th of each annual principal payment is deposited into an account at Regions Bank. The bank then uses these funds to make the required principal and interest payments on the bonds as they come due. The balance in this account at December 31, 2004 and 2003 was \$39,960 and \$32,215, respectively and are included in the Debt Payment Account described in Note 1.

All bond indenture requirements have been met. The balance due on these bonds at December 31, 2004 and 2003 was \$435,000 and \$460,000, respectively.

BULLOCK PEN WATER DISTRICT

NOTES TO FINANCIAL STATEMENT
DECEMBER 31, 2004 AND 2003

NOTE 3) BOND DEBT (continued)

Kentucky Rural Water Finance Corporation Multimodel Public Projects Revenue Bonds, Series 2004D

On October 19, 2004, the District participated in the Kentucky Rural Water Finance Corporation's Flexible Term Finance Program wherein the proceeds of the revenue bonds issued were used to provide funds for several systems throughout Kentucky. The District's share of the bond proceeds were \$98,948 which included a bond premium of \$769, accrued interest of \$180 and \$98,000 of new bonds payable by the District. The bond proceeds were used to pay \$5,510 of bond issue costs, \$180 of accrued interest and the remaining \$93,258 is being held in an agency account at Regions Bank to be used as needed to pay the construction costs of the Phase VII project. The bonds bear interest rates of 3.12% to 4.12%. Interest is due semi-annually on January 1 and July 1 beginning in 2005 and ending in 2019. The bonds are to be repaid from surcharges billed monthly to all customers who tap on to the lines that are built by this project.

The District is required to make monthly sinking fund payments to Regions Bank. The required monthly payment of 1/6th of the semi-annual interest payment and 1/12th of each annual principal payment is deposited into an account at Regions Bank. The bank then uses these funds to make the required principal and interest payments on the bonds as they come due. The balance in this account at December 31, 2004 and 2003 was \$7,738 and \$-0- respectively.

All bond indenture requirements have been met. The balance due on these bonds at December 31, 2004 and 2003 was \$98,000 and \$-0-, respectively.

Kentucky Rural Water Revenue Bond maturities are as follows:

	<u>Interest</u>	<u>Principal</u>	<u>Total</u>
2005	\$ 77,707	\$ 69,000	\$ 146,707
2006	76,086	69,000	145,086
2007	73,623	75,000	148,623
2008	70,824	79,000	149,824
2009	67,786	80,000	147,786
2010-2014 ..	285,394	449,000	734,394
2015-2019 ..	172,278	513,000	685,278
2020-2024 ..	70,310	279,000	349,310
2025-2027 ..	11,718	140,000	151,718
Total	<u>\$905,726</u>	<u>\$1,753,000</u>	<u>\$2,658,726</u>

BULLOCK PEN WATER DISTRICT

NOTES TO FINANCIAL STATEMENT
DECEMBER 31, 2004 AND 2003

NOTE 3) BOND DEBT (continued)

Changes in long-term debt are as follows

	<u>Balance</u> <u>12/31/03</u>	<u>Additions</u>	<u>Retirements</u>	<u>Balance</u> <u>12/31/04</u>
Bond Indebtness				
Revenue Bonds of 1978 ..	\$ 782,000	\$ 0	\$ 40,000	\$ 742,000
Revenue Bonds of 1982 ..	88,000	0	3,000	85,000
Series 2001C	705,000	0	15,000	690,000
Series 2002A	553,000	0	23,000	530,000
Series 2001G	460,000	0	25,000	435,000
Series 2004D	0	98,000	0	98,000
Total Bond Indebtness ..	<u>2,588,000</u>	<u>98,000</u>	<u>106,000</u>	<u>2,580,000</u>
Capitalized Lease-1995 .	1,218,000	0	50,000	1,168,000
Capitalized Lease-1996 .	267,000	0	14,000	253,000
Capitalized Lease-2003 .	477,050	0	23,627	453,423
Capitalized Lease-2004 .	0	170,450	16,147	154,303
Total Capitalized Leases	<u>1,962,050</u>	<u>170,450</u>	<u>103,774</u>	<u>2,028,726</u>
Notes Payable -				
Integra Bank	15,246	0	4,060	11,186
KY Infrastructure	257,983	0	100,983	157,000
KY Infrastructure	382,124	0	117,124	265,000
KY Infrastructure	705,708	435,492	20,991	1,120,209
KY Infrastructure	338,400	0	12,427	325,973
Total Notes Payable	<u>1,699,461</u>	<u>435,492</u>	<u>255,585</u>	<u>1,879,368</u>
Total Long Term Debt ...	6,249,511	<u>\$703,942</u>	<u>\$465,359</u>	6,488,094
Less Current Portion ...	<u>(293,856)</u>			<u>(356,298)</u>
Total Long Term Debt				
Less Current Portion ..	<u>\$5,955,655</u>			<u>\$6,131,796</u>

NOTE 4) NOTES PAYABLE

INTEGRA BANK

During 1992, the District received a 15 year unsecured note payable from the Integra Bank. The note is due in monthly installments of \$403, bears interest at 5.75% and is due to mature on June 20, 2007. The balance of the note as of December 31, 2004 and 2003 was \$11,186 and \$15,246, respectively. Future minimum cash requirements are as follows:

	<u>Interest</u>	<u>Principal</u>	<u>Total</u>
2005	\$ 532	\$ 4,308	\$ 4,840
2006	278	4,562	4,840
2007	<u>102</u>	<u>2,316</u>	<u>2,418</u>
Total	<u>\$ 912</u>	<u>\$11,186</u>	<u>\$12,098</u>

BULLOCK PEN WATER DISTRICT

NOTES TO FINANCIAL STATEMENT
DECEMBER 31, 2004 AND 2003

NOTE 4) NOTES PAYABLE (continued)

KENTUCKY INFRASTRUCTURE AUTHORITY

	<u>Original</u> <u>Issues</u>	<u>Unmatured at</u>	
		12/31/04	12/31/03
Issued August 29, 1991, Refunded and Refinanced - December 19, 2002 and August 1, 2004, 2.25% - 4.84%, maturities 2004 - 2011	\$ 437,655	\$157,000	\$257,983
Issued April 7, 1993, Refunded and Refinanced - December 19, 2002 and August 1, 2004, 2.25% to 5.19%, maturities 2004 - 2013 ..	<u>582,599</u>	<u>265,000</u>	<u>382,124</u>
Total	<u>\$1,020,254</u>	422,000	640,107
Less Current Portion		<u>52,000</u>	<u>61,088</u>
Total		<u>\$370,000</u>	<u>\$579,019</u>

On August 1, 2004 Kentucky Infrastructure Authority refunded and refinanced these bonds applying almost all of the debt service reserve held for these bonds to the outstanding principal and changing the interest rates from 2.5% - 5% to the rates indicated above.

These notes payable are secured by and payable solely from the gross revenues of the District. They are a valid claim against the debt service reserve funds created for the benefit of the note holders. At December 31, 2004 and 2003, there was \$8,904 and \$151,220 respectively in these funds. In addition, they are further secured by a statutory mortgage lien upon the District and all of the properties constituting the District.

Future minimum cash requirements are as follows:

	<u>Interest</u>	<u>Principal</u>	<u>Total</u>
2005	\$19,303	\$ 52,000	\$ 71,303
2006	16,151	52,500	68,651
2007	14,374	55,000	69,374
2008	12,276	55,000	67,276
2009	9,972	55,000	64,972
2010-2013 ...	<u>16,029</u>	<u>152,500</u>	<u>168,529</u>
Total	<u>\$88,105</u>	<u>\$422,000</u>	<u>\$510,105</u>

BULLOCK PEN WATER DISTRICT

NOTES TO FINANCIAL STATEMENT
DECEMBER 31, 2004 AND 2003

NOTE 4) NOTES PAYABLE (continued)

KENTUCKY INFRASTRUCTURE AUTHORITY DRINKING WATER STATE
REVOLVING FUND LOAN

Project F01-06

On February 1, 2002 the District entered into a loan agreement with the Kentucky Infrastructure Authority to provide funding for a line replacement project. The loan is to be repaid over 20 years at an interest rate of 3.8% with an annual debt service payment of \$25,169. Payments of principal and interest are payable semiannually on June 1 and December 1. Beginning on June 1, 2003 and ending on December 1, 2022. At December 31, 2004 and 2003 the loan balance was \$325,973 and \$338,400, respectively.

This loan requires the District to set up a Maintenance and Replacement Reserve account and deposit \$14,000 into the account on or before December 1st of each year commencing in 2003. The annual deposits are to be made until the balance reaches \$140,000 and is to be maintained for the life of the loan. At December 31, 2004 and 2003 the deposits in this account amounted to \$32,426 and \$32,264, respectively.

Project F02-11

On November 1, 2003 the District entered into a second loan agreement for \$1,229,000 with the Kentucky Infrastructure Authority to provide funding for additional line replacement and a 300,000 gallon elevated storage tank. The loan is to be repaid over 20 years at an interest rate of 3%. The District has received a repayment schedule based on a principal balance of \$1,139,135. The annual debt service on this amount is \$76,156. Payments of principal and interest are due semiannually on June 1 and December 1 beginning on December 1, 2004 and ending on June 1, 2024. Since there are additional funds available under this loan agreement, this schedule will be revised at a later date. During 2003 and 2004 the District drew down \$1,141,200 of these funds and has made one payment of \$20,991 on this note. The balance on this note at December 31, 2004 and 2003 was \$1,120,209 and \$705,708, respectively.

This loan requires the District to setup a replacement reserve account and deposit \$36,000 into the account on or before December 1st of each year commencing on December 1, 2004. The annual deposits are to be made until the balance reaches \$360,000 and maintained for the life of the loan. At December 31, 2004 there have been no deposits into this account. During March 2005, the District transferred funds from their overfunded Current Reserve Account into this account to bring the balance up to the required amount.

BULLOCK PEN WATER DISTRICT

NOTES TO FINANCIAL STATEMENT
DECEMBER 31, 2004 AND 2003

NOTE 4) NOTES PAYABLE (continued)

KENTUCKY INFRASTRUCTURE AUTHORITY DRINKING WATER STATE
REVOLVING FUND LOAN

Currently the future minimum cash requirements for these two notes are expected to be as follows:

	<u>Interest</u>	<u>Principal</u>	<u>Total</u>
2005	\$ 45,491	\$ 55,834	\$ 101,325
2006	43,698	57,627	101,325
2007	41,847	59,478	101,325
2008	39,936	61,389	101,325
2009	37,963	63,362	101,325
2010-2014	157,899	348,724	506,623
2015-2019	98,000	408,623	506,623
2020-2024	29,128	391,145	420,273
	<u>\$493,962</u>	<u>\$1,446,182</u>	<u>\$1,940,144</u>

NOTE 5) UNUSED FINANCING COMMITMENT

At December 31, 2004 the District had a \$300,000 line of credit with a local bank to be drawn upon as needed, with an interest rate at 3%. The line of credit expires April 1, 2005. During 2004 the District borrowed \$75,000 on this line of credit and repaid \$25,105. The funds have been used to meet the day to day operating expenses of the District.

NOTE 6) ASSETS HELD UNDER CAPITAL LEASES

The District holds equipment under two capital subleases, one capital lease that began during 2003 and another capital lease that began during 2004. The assets and liabilities under capital leases are recorded at the fair value of the assets. The assets are amortized over the expected useful lives of the assets as all leases contain a bargain purchase option.

	<u>2004</u>	<u>2003</u>
Waterlines, Meters & Hydrants	\$2,261,629	\$2,261,629
Storage Tank	296,608	296,608
Touch Read Meter Adapters & Equipment	647,500	437,030
	3,205,737	2,995,267
Less Accumulated Amortization	<u>(437,518)</u>	<u>(379,693)</u>
Balance at December 31	<u>\$2,768,219</u>	<u>\$2,615,574</u>

Amortization of assets held under capital leases is included in depreciation expense for fixed assets.

BULLOCK PEN WATER DISTRICT

NOTES TO FINANCIAL STATEMENT
DECEMBER 31, 2004 AND 2003

NOTE 7) CAPITAL LEASE OBLIGATIONS

The District is liable under two sublease agreements and two lease agreements for equipment of which \$130,156 is a current obligation. The minimum future lease payments and present value of net minimum lease payments are as follows:

	December 31,	
	<u>2004</u>	<u>2003</u>
Total Minimum Lease Payments	\$2,831,516	\$2,863,489
Less: Imputed Interest	<u>802,790</u>	<u>901,439</u>
Present Value of Net Minimum Lease Payments	<u>\$2,028,726</u>	<u>\$1,962,050</u>

Future minimum cash requirements are as follows: 2005-\$130,156; 2006-\$136,908; 2007-\$142,779; 2008-\$149,776; 2009-\$157,905; 2010-2014-\$751,202; 2015-2019-\$560,000.

NOTE 8) EMPLOYEE RETIREMENT SYSTEM

County Employees Retirement System (CERS)

Water District employees who work at least 100 hours per month participate in the County Employees Retirement System (CERS). Under the provision of Kentucky Revised Statute 61.645, the Board of Trustees of Kentucky Retirement Systems administers the CERS.

The plan issues separate financial statements which may be obtained by request from Kentucky Retirement Systems, 1260 Louisville Road, Frankfort, Kentucky 40601.

Plan Description - CERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in positions of each county and school board, and any additional eligible local agencies electing to participate in the System. The plan 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.

Non-hazardous Contributions - For the year ended December 31, 2004, plan members were required to contribute 5% of their annual creditable compensation. Participating employees were 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, 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. For the year ended December 31, 2004, participating employers contributed 7.34%/8.48% of each employee's creditable compensation. The actuarially determined rate set by the Board for the year ended December 31, 2004, was 7.34% through June 30, 2004 and 8.48% after June 30, 2004 of creditable compensation. Administrative costs of Kentucky Retirement System are financed through employer contributions and investment earnings.

BULLOCK PEN WATER DISTRICT

NOTES TO FINANCIAL STATEMENT
DECEMBER 31, 2004 AND 2003

NOTE 8) EMPLOYEE RETIREMENT SYSTEM (continued)

County Employees Retirement System (CERS)

The District has made 100% of all required contributions for each of the years ended December 31, 2004, 2003, and 2002. Information about the contributions made by the District and the employees, as well as gross payroll and covered payroll follows:

	<u>2004</u>	<u>2003</u>	<u>2002</u>
Gross Payroll - All Employees	\$587,769	\$519,481	\$484,633
Gross Payroll - Covered Employees ...	551,348	496,951	461,045
Employee Contribution	27,568	24,848	23,052
Employer Contribution (expense)	43,815	34,129	29,388

NOTE 9) INVESTMENT OF FUNDS

The District at its December 5, 1995 meeting adopted the following investment policy and strategy with respect to the investment of all funds, as required by KRS 66.480.

Funds not needed for current expenses or obligations of the District may be invested in any of the following:

- 1) Obligations of the United States and of its agencies and instrumentalities, including obligations subject to repurchase agreements, provided that delivery of these obligations subject to repurchase agreements is taken either directly or through an authorized custodian. The investments may be accomplished through repurchase agreements reached with sources including but not limited to national or state banks chartered in Kentucky;
- 2) Obligations and contracts for future delivery or purchase of obligations backed by the full faith and credit of the United States or a United States government agency;
- 3) Obligations of any corporation of the United States Government;
- 4) Certificates of deposit issued by or other interest bearing accounts of any bank or savings and loan institution which are insured by the Federal Deposit Insurance Corporation or similar entity or which are collateralized to the extent uninsured, by any obligations permitted by KRS 41.240(4);
- 5) Uncollateralized certificates of deposit issued by any bank or savings and loan institutions rated in one (1) of the three (3) highest categories by a nationally recognized rating agency;

BULLOCK PEN WATER DISTRICT

NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2004 AND 2003

NOTE 9) INVESTMENT OF FUNDS (continued)

6) Bankers' acceptances for banks rated in one (1) of the three (3) highest categories by a nationally recognized rating agency;

7) Commercial paper rated in the highest category by a nationally recognized rating agency;

8) Bonds or certificates of indebtedness of this state and of its agencies and instrumentalities; and

9) Securities issued by a state or local government, or any instrumentality or agency thereof, in the United States, and rated in one (1) of the three (3) highest categories by a nationally recognized rating agency.

Effective January 1, 1998, investments are reported at fair value which is determined using selected bases. Short-term investments are reported at cost, which approximates fair value. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates, and investments that do not have an established market are reported at estimated fair value. Cash deposits are reported at carrying amount which reasonably estimates fair value.

Investment obligations are deemed to be part of the fund or account for which purchased, and income, interest, gains and losses on an investment obligation are credited or charged to the fund or account for which such investment obligation was purchased, subject, in the case of the debt service reserve, that so long as the aggregate debt service reserve requirement is being maintained, income and revenues from such Fund may be transferred to the Water Revenue Fund.

The District's investments are categorized to give an indication of the level of risk assumed by the District at December 31, 2004. The categories are described as follows:

Category 1 - Insured or registered, with securities held by the entity or its agent in the entity's name.

Category 2 - Uninsured and unregistered, with securities held by the counterparty's trust department or agent in the entity's name.

Category 3 - Uninsured and unregistered, with securities held by the counterparty, or its trust department or agent but not in the entity's name.

BULLOCK PEN WATER DISTRICT

NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2003 AND 2002

NOTE 9) INVESTMENT OF FUNDS (continued)

Fund:	<u>1</u>	Category <u>2</u>	<u>3</u>	Fair Value/ Carrying Amount	<u>Cost</u>
Operation & Maintenance.....	\$ 560,420	\$	\$	\$ 560,420	\$ 560,420
Customer Deposit.....	100,257			100,257	100,257
Debt Payment Accounts.....	33,093		119,079	152,172	152,172
Current and Replacement Reserve Funds.....	314,363		8,904	323,267	323,267
Construction Funds.....	145,791		5,703	151,494	151,494
Loan Proceeds Funds.....			<u>120,367</u>	<u>120,367</u>	<u>120,367</u>
	<u>\$1,153,924</u>	<u>\$ -0-</u>	<u>\$254,053</u>	<u>\$1,407,977</u>	<u>\$1,407,977</u>

NOTE 10) CREDIT RISK

Bullock Pen Water District is a government agency operating with one office in Crittenden, Kentucky. It grants credit to customers who are primarily local residents and businesses.

Bullock Pen Water District has amounts on deposit with banks in excess of FDIC insured amounts. The banks have pledged collateral to cover such excess amounts.

NOTE 11) COMMITMENTS

The District has a water purchase contract with the City of Williamstown through 2015 which requires that they purchase on average of 150,000 gallons of water per day from the City. If they are unable to use that amount of water, the minimum must still be purchased. The District was able to use the minimum number of gallons during one month of 2004 and six months of 2003.

The District has a second water purchase contract with the City of Walton through 2023. This contract requires that they purchase less than 100,000 gallon per day on an average. The District exceeded this limit during twelve months in 2004 and 2003. The City has agreed to allow the District to use the excess water until another source can be obtained.

The District has a third water purchase contract with the Northern Kentucky Water Service District through 2040 that requires them to purchase 150,000 gallon per day averaged on a monthly basis. The District was able to use the required 150,000 gallons during twelve months of 2004 and eight months of 2003.

BULLOCK PEN WATER DISTRICT

NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2003 AND 2002

NOTE 11) COMMITMENTS (continued)

The District plans to proceed with a construction project that will add 2.6 miles of waterlines and a potential of 75 customers to their system. The project is expected to cost \$362,300 and be financed as follows:

Customer Tap on Fees	\$	19,475
Boone County Contribution		120,767
2020 Grant		128,800
Surcharge Loan (Net Proceeds)		<u>93,258</u>
Total	\$	<u>362,300</u>

The project has been bid and the loan funds are available for draw at December 31, 2004. Construction on this project is expected to begin as soon as the weather permits during 2005.

The District has placed a second project in Boone County on hold until Boone County can commit sufficient funds to this project to make it feasible to fund the project with a surcharge loan. The project will add 9.85 miles of water line and approximately 152 customers to the District at a cost of \$858,000. Currently it is anticipated that it will be feasible if financed as follows:

Customer Tap on Fees	\$	32,300
Boone County Contribution		286,200
Surcharge Loan		<u>539,500</u>
Total	\$	<u>858,000</u>

The District is involved in a third construction project that will add 28.35 miles of water line and 232 new customers to the system at a cost of \$1,879,000. The District plans to finance this project as follows:

Customer Tap on Fees	\$	71,250
EPA Grant (Net Proceeds)		194,000
KIA Tobacco Grant		725,000
Surcharge Loan (Net Proceeds)		<u>888,750</u>
Total	\$	<u>\$1,879,000</u>

The District has additional loan funds of \$87,800 available from Kentucky Infrastructure Authority under a loan agreement dated November 1, 2003. The District expects to make additional draws on these funds during 2005 as follows:

Payment of retainage to the project contractors	\$	32,566
Reimbursement of construction costs already paid by the District		25,838
Upgrade Water Pumps at the Crittenden Pump Station		<u>3,280</u>
Total	\$	<u>61,684</u>

BULLOCK PEN WATER DISTRICT

NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2003 AND 2002

NOTE 12) RATE STRUCTURE

On December 3, 2003, the District received approval from the Public Service Commission for a rate increase. The rates approved increased the average bill for 5,000 gallons of usage by 35%. The District implemented the increase on their December 31, 2003 billing.

NOTE 13) ECONOMIC DEPENDENCY

In prior years the District reached capacity on the amount of water it can produce in any one year and has negotiated long term contracts with the City of Walton, the City of Williamstown and the Northern Kentucky Water Service District to supply water in excess of this capacity that is needed for sale. The District purchased approximately 45% of the water it sold during 2004 and 2003, respectively.

NOTE 14) RELATED PARTY TRANSACTIONS

Bullock Pen Water District has several employees on staff that are family members. The manager and assistant manager of the District are father and son. In addition the office staff includes two sisters and a mother and her daughter.

NOTE 15) REPORT CLASSIFICATIONS

Certain previously reported amounts have been reclassified to conform to 2004 classifications.

BULLOCK PEN WATER DISTRICT

SCHEDULES OF OPERATION, MAINTENANCE AND
ADMINISTRATIVE EXPENSES
FOR THE YEARS ENDED DECEMBER 31, 2004 AND 2003

	<u>2004</u>	<u>2003</u>
Salaries & Wages - Employees	\$ 548,516	\$ 491,872
Salaries & Wages - Commissioners	8,599	9,549
Employee Pensions & Benefits	222,704	165,007
Payroll Taxes	40,210	36,363
Purchased Water	473,243	406,407
Purchased Power	51,722	49,420
Chemicals	57,510	54,808
Materials & Supplies	81,883	93,827
Contractual Services - Engineering Fees	18,750	7,887
Contractual Services - Accounting	44,934	46,425
Contractual Services - Legal	2,206	13,079
Contractual Services - Management	3,144	2,698
Contractual Services - Other	39,804	41,799
Rental of Real Property & Equipment	9,653	10,142
Transportation Expenses	25,775	21,666
Insurance - Vehicle	10,117	9,311
Insurance - General Liability	18,127	15,709
Insurance - Workers' Compensation	16,395	12,170
Insurance - Other	6,593	7,331
Advertising Expenses	810	554
Bad Debt Expense	17,208	15,417
Miscellaneous Expenses	3,584	3,212
Utility Regulatory Assessment	<u>3,153</u>	<u>3,304</u>
 Total Operating Expenses	 <u>\$1,704,640</u>	 <u>\$1,517,957</u>

SEE ACCOUNTANTS' REPORT ON SUPPLEMENTAL INFORMATION

MORRIS & BRESSLER

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 Commissioners of
Bullock Pen Water District
P. O. Box 188
Crittenden, Kentucky 41030

We have audited the financial statements of Bullock Pen Water District as of and for the year ended December 31, 2004, and have issued our report thereon dated March 3, 2005. 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 Bullock Pen 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 one instance of noncompliance that is required to be reported under *Government Auditing Standards*.

Kentucky Infrastructure Authority-Assistance Agreement F02-11 Compliance

For the year ended December 31, 2004 the District is not in compliance with the terms of this agreement requiring the transfer of \$36,000 into a replacement reserve account on or before December 1, 2004. The District was made aware of this oversight during our audit and transferred the required funds into this account during March of 2005. They are currently making monthly transfers to this account so that this transfer will not be overlooked in the future.

Internal Control Over Financial Reporting

In planning and performing our audit, we considered Bullock Pen 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 a reportable condition. 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 judgment, could adversely affect Bullock Pen Water District's ability to record, process, summarize and report financial data consistent with the assertions of management in the financial statements.

Segregation of Duties

Condition: Several office employees are related to each other and all office personnel have access to customer payments and can make adjustments to customer accounts.

Criteria: The process of executing a transaction should be segregated from the process of recording the transaction.

Effect: Because of the lack of segregation of duties, customer payments could be posted to the customer's account without being deposited into the District's cash account.

Recommendation: Due to the size of the District and other financial considerations, internal controls have been implemented by the District to segregate the duties of their limited personnel. These controls should be monitored by management to ascertain that they are sufficient to reduce the risk of material misstatement to an acceptable level.

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 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 that the reportable condition described above is not a material weakness. We also noted other matters involving the internal control over financial reporting that we have reported to the management of Bullock Pen Water District in a separate letter dated March 3, 2005.

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

Respectfully,

Morris & Bressler, PSC

Morris & Bressler, PSC
Certified Public Accountants

March 3, 2005

EXHIBIT “D”

Phase 8 Project Manual

CMMW inc.

ARCHITECTURE

CIVIL ENGINEERING

SURVEYING

SITE PLANNING

RECEIVED

JUN 17 2005

PUBLIC SERVICE
COMMISSION

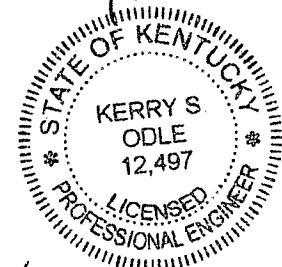
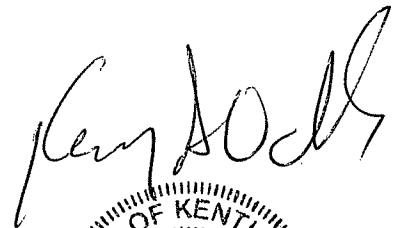
WATER MAIN EXTENSION - PHASE 8 GRANT COUNTY

FOR

BULLOCK PEN WATER DISTRICT

GRANT COUNTY, KENTUCKY

APRIL, 2004



6/7/05

PROJECT MANUAL

Set No.

PROJECT MANUAL

FOR

**WATER MAIN EXTENSION - PHASE 8
GRANT COUNTY**

FOR

BULLOCK PEN WATER DISTRICT

OWNER:

BULLOCK PEN WATER DISTRICT

APRIL, 2004

**CMW, INC
138 NORTH KEENELAND DRIVE, SUITE E
RICHMOND, KENTUCKY 40475**

CMW PROJECT NO. 03423.01

TABLE OF CONTENTS

<u>SECTION NO.</u>	<u>TITLE</u>	
<u>DIVISION 0 - BIDDING AND CONTRACT DOCUMENTS</u>		
00010	Advertisement for Bids	1 - 2
00100	Information for Bidders	1 - 3
00300	Bid Bond Form	1 - 2
00400	Bid Form	1 - 4
00450	Non-Collusion Affidavit	1
00600	Agreement	1 - 3
00610	Payment Bond	1 - 2
00615	Performance Bond	1 - 2
00800	General Conditions	1 - 9
00820	USEPA Supplemental General Conditions for Federally Assisted Construction Contracts	1 - 47
00840	State Wage Rates	1 - 13
<u>DIVISION 1 - GENERAL REQUIREMENTS</u>		
01010	Special Conditions	1 - 10
<u>DIVISION 2 - TECHNICAL SPECIFICATIONS</u>		
02235	Siltation Control	1 - 3
02510	Water Mains	1 - 17
02920	Seeding, Fertilizing and Mulching	1 - 4
03300	Concrete	1 - 4
END OF TABLE OF CONTENTS		

ADVERTISEMENT FOR BIDS

Bullock Pen Water District

Separate sealed BIDS for Water Line Extension, Phase 8, Grant County will be received by the Owner at the office of Bullock Pen Water District, Crittenden, Kentucky, until 3:00 p.m. EDT on Tuesday, May 17, 2005 and then publicly opened and read aloud.

Construction of base bid shall consist of approximately 128,280 LF of 6" PVC water line, 15,520 LF of 6" DI water line, 96 gate valves, 40 fire hydrants, 21 blow-off hydrants, 758 LF of bores with steel encasement, 15 air relief valves, 140 meters with service piping, 4 creek crossing valves, 143 LF creek crossing, 381 LF of freebore, 746 LF of directional bore with HDPE encasement pipe, 1,356 LF of 8" HDPE water line, 1 - 4" PRV station and all other necessary appurtenances.

The CONTRACT DOCUMENTS may be examined at the following locations:

CMW, Inc., 138 N Keeneland Drive, Suite E, Richmond, KY
Bullock Pen Water District, 1 Farrell Drive, Crittenden, KY
Associated General Contractors/Dodge Plan Room, 950 Contract Street, Suite 100A, Lexington, KY
Allied Construction Industries, 1010 Yale Avenue, Cincinnati, OH
Reed Construction Data/ABC Plan Room, 1812 Taylor Avenue, Louisville, KY
Reed Construction Data/ABC Plan Room, 132 Venture Court, Suite 12, Lexington, KY
F. W. Dodge Plan Room, Grant Baldwin Building, 655 Eden Park Road, Suite 515, Cincinnati, OH 45202

Copies of the CONTRACT DOCUMENTS may be obtained from Lynn Imaging, 328 Old East Vine Street, Lexington, KY 40507, phone 859\255-1021 upon the following non-refundable payment of \$100.00 for each set. Make checks payable to CMW, Inc.

If bidding documents are requested to be sent by mail, include an additional \$11.00 for each set to cover cost of handling and postage. This check shall be made payable to Lynn Imaging.

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 120 days after the actual date of the opening thereof.

Award will be made to the lowest responsive, responsible Bidder unless all bids are rejected.

Each bidder will make positive efforts to use small, minority, woman owned and disadvantaged businesses.

Each bidder must comply with Title VI of the Civil Rights Act of 1964, the Anti-Kickback Act, and Contract Work Hours Standard Act.

Each bidder must comply with the President's Executive Order No. 11246 as amended, which prohibits discrimination in employment regarding race, creed, color, sex or national origin.

Each bidder shall provide a Certification of Prior Work under Executive Order 11246 (Equal Employment Opportunity) as amended.

Each bidder and their subcontractors will comply with 41 CFR 60-4, in regard to Affirmative Action, to insure equal opportunity to females and minorities and will apply the time table and goal set forth in 41 CFR 60-4.

This contract is being funded in part with a EPA Special Appropriations Grant.

April 14, 2005

Date

BULLOCK PEN WATER DISTRICT
CRITTENDEN, KENTUCKY

CMW, INC.
138 NORTH KEENELAND DRIVE
SUITE E
RICHMOND, KENTUCKY

SECTION 00100 - INFORMATION FOR BIDDERS

BIDS will be received by Bullock Pen Water District, (herein called the "OWNER") at the office of the Bullock Pen Water District, 1 Farrell Drive, Crittenden, Kentucky, until 3:00 p.m. EDT on Tuesday, May 17, 2005 and then publicly opened and read aloud.

Each BID must be submitted in a sealed envelope, addressed to Bullock Pen Water District, 1 Farrell Drive, Crittenden, Kentucky 41311. Each sealed envelope containing a BID must be plainly marked on the outside as BID for Water Main Extension, Phase 8 – Grant County and the envelope should bear on the outside the name of the BIDDER, his address, his 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 OWNER at 1 Farrell Drive, Crittenden, KY 41030.

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 120 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.

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 must be accompanied by a BID bond payable to the OWNER for five 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, will be required for the faithful performance of the contract.

Attorneys-in-fact who sign BID BONDS or 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 ten (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 ten (10) 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 his 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 ten (10) 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 ten (10) day period or within the period mutually agreed upon, the CONTRACTOR may terminate the Agreement without further liability on the part of either party.

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 responsive, responsible BIDDER unless all bids are rejected. Determination of responsive bid will be based on bid being delivered before 3:00 p.m. on the day of the bid opening, all items completed on bid form, all addendums (if any) acknowledged on bid form, bid bonds included with bid and "Authentication of Bid and Affidavit of Non-Collusion and and Non-Conflict of Interest" included with bid. The responsible ness of bidder will be determined after evaluation of bid and review of contractor's qualifications, as listed in Section 01010-3.

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 his BID.

BIDDER agrees to fully complete project within 200 consecutive calendar days and BIDDER further agrees to pay as liquidated damages, the sum of \$300 for each consecutive day thereafter.

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 CMW, Inc. The ENGINEER'S address is P. O. Box 831, 138 N Keeneland Drive, Suite E, Richmond, KY 40475.

END SECTION

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned, _____

_____ as Principal, and

_____ as Surety, are hereby

held and firmly bound unto _____ 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, successors and assigns.

Signed, this _____ day of _____, 19_____

The Condition of the above obligation is such that whereas the Principal has submitted to _____ a certain BID, attached hereto and hereby made a part hereof to enter into a contract in writing, for the

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.)

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.

BID

**WATER MAIN EXTENSION - PHASE 8
GRANT COUNTY
BULLOCK PEN WATER DISTRICT**

Proposal of _____ (hereinafter called "BIDDER"), a corporation organized and existing under the laws of the State of _____ doing business as _____*.

To the Bullock Pen Water District (hereinafter called "OWNER").

In compliance with your Advertisement for Bids, BIDDER hereby proposes to perform all WORK for the construction of Water Main Extension - Phase 8 - Grant County in strict accordance with the CONTRACT DOCUMENTS, within the time set forth therein, and at the prices stated below.

By submission of this BID, the 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 200 consecutive calendar days. BIDDER further agrees to pay as liquidated damages, the sum of \$300 for each consecutive calendar day thereafter as hereinafter provided in Section 15 of the General Conditions.

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

BIDDER acknowledges receipt of the following ADDENDUM:

No. _____ Dated _____ No. _____ Dated _____
 No. _____ Dated _____ No. _____ Dated _____

BIDDER agrees to perform all the work described in the CONTRACT DOCUMENTS for the following unit prices:

- NOTE: (1) BIDS shall include sales tax and all other applicable taxes and fees.
- (2) Breakdown of work is for general information. Any work shown on Drawings and/or specified but not listed below shall be included in total base bid. Cost of items of work not specifically described below may be added to related bid item(s) at bidder's discretion.

BID SCHEDULE

Part I. Base Bid

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
1.	6" PVC Water Main, Class 200	103,000	LF	\$	\$
2.	6" PVC Water Main, Class 250	13,940	LF	\$	\$
3.	6" PVC Water Main, C-900, Class 200	11,360	LF	\$	\$
4.	6" DI Water Main	15,520	LF	\$	\$
5.	8" HDPE; SDR 7.3	1,356	LF	\$	\$
6.	2" PVC Water Main, Class 200	980	EA	\$	\$
7.	Connection to Existing Water Main (Dry Tap)	8	LF	\$	\$
8.	6" MJ Gate Valve, Complete with Box and Cover	97	EA	\$	\$
9.	2" MJ Gate Valve, Complete with Box and Cover	1	EA	\$	\$
10.	6" MJ Gate Valve with Bypass Meter (Creek Crossing)	4	EA	\$	\$

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
11.	Air Relief Valve, Complete with Box and Cover	15	EA	\$	\$
12.	Fire Hydrant, Complete with Gate Valve	40	EA	\$	\$
13.	Blow-off Hydrant Complete with Gate Valve	21	EA	\$	\$
14.	3" End-of-Line Blow-off	1	EA	\$	\$
15.	Jack and Bore with 10" Steel Encasement Pipe	758	LF	\$	\$
16.	Open Cut with 10" Steel Encasement Pipe	93	LF	\$	\$
17.	Freebore for 6" Water Main	411	LF	\$	\$
18.	Creek Crossing with PVC Encasement	143	LF	\$	\$
19.	Directional Bore with 14" PE Encasement Pipe	746	LF	\$	\$
20.	Blacktop Replacement	80	LF	\$	\$
21.	4" Pressure Reducing Valve Station	1	EA	\$	\$
22.	Concrete Encasement	20	CY	\$	\$
23.	Extra Crushed Stone Bedding	150	TONS	\$	\$
24.	5/8" x 3/4" Meter Unit without PRV	101	EA	\$	\$
25.	5/8" x 3/4" Meter Unit with PRV	39	EA	\$	\$
26.	3/4" PE Service Line	1,585	LF	\$	\$
27.	1" PE Service Line	1,525	LF	\$	\$
28.	1" PE Service Line, Jacked under Roadway	1,510	LF	\$	\$

Total Part I. Base Bid:

\$ _____
 (USE FIGURES)

 (USE WORDS)

TOTAL AMOUNTS SHALL BE SHOWN IN BOTH WORDS AND FIGURES. IN CASE OF DISCREPANCIES, THE AMOUNT AS WRITTEN IN WORDS SHALL GOVERN.

The above price shall include all labor, materials, bailing, shoring, removal, overhead, profit, insurance, etc., to cover the finished work of the several kinds called for. Changes shall be processed in accordance with the General Conditions.

Award of the Contract will be based on the lowest and best Total Base Bid.

The Bidder agrees that the Owner reserves the right to delete the whole or any part of the project from the Contract.

The Bidder understands that the Owner reserves the right to reject any or all bids and to waive any informalities in the bidding.

The Bidder agrees that this bid shall be good and may not be withdrawn for a period of one hundred twenty (120) calendar days after the scheduled closing time for receiving bids.

Upon receipt of written notice of the acceptance of this bid, Bidder will execute the formal contract attached within ten (10) days and deliver a surety bond or bonds as required by Article 22 of the General Conditions.

Respectfully submitted:

(Name of Contracting Firm)

BY: _____

TITLE: _____

ADDRESS: _____

DATE: _____

License No. (if applicable)

Seal (If Bid by Corporation)

Attest: _____

END BID FORM

**AUTHENICATION OF BID AND AFFIDAVIT OF NON-COLLUSION AND
NON-CONFLICT OF INTEREST**

I hereby swear (or affirm) under the penalty for false swearing as provided by KRS 432.170:

1. That I am the bidder (if the bidder is an individual), a partner in the bidder (if the bidder is a partnership), or an officer or employee of the bidding corporation having authority to sign on its behalf (if the bidder is a corporation);
2. That the attached bid has been arrived at by the bidder independently and has been submitted without collusion with, and without any agreement, understanding or planned common course of action with, any other contractor, vendor of materials, supplies, equipment, or services described in the Invitation to Bid, designed to limit independent bidding or competition;
3. That the contents of the bid has not been communicated by the bidder or its employees or agents to any person not an employee or agent of the bidder or its surety on any bond furnished with the bid and will not be communicated to any such person prior to the official opening of the bid;
4. That the bidder is legally entitled to enter into the contracts with the Bullock Pen Water District and is not in violation of any prohibited conflicts of interest;
5. (Applicable to corporations only) That as a foreign corporation we are registered with the Secretary of State, Commonwealth of Kentucky, and authorized to do business in the State of _____ or, that as a domestic corporation we are in good standing with the Secretary of State, Commonwealth of Kentucky _____. (Check the statement applicable.)
6. That this offer is for 120 calendar days from the date this bid is opened. In submitting the above, it is expressly agreed that, upon proper acceptance by the Bullock Pen Water District of any or all items bid above, a contract shall thereby be created with respect to the items accepted.
7. That I have fully informed myself regarding the accuracy of the statements made in this Affidavit.

READ CAREFULLY - SIGN IN SPACE BELOW - FAILURE TO SIGN INVALIDATES BID

Signed by _____
Title _____
Firm _____ Telephone No. _____
Address _____ Area Code _____
Date _____
City _____ State _____ Zip _____

END SECTION

AGREEMENT

THIS AGREEMENT, made this _____ day of _____, 2005, by and between Bullock Pen Water District hereinafter called "OWNER" and _____, doing business as a corporation, hereinafter called "CONTRACTOR".

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned:

1. The CONTRACTOR will commence and complete the construction of Water Main Extension, Phase 8, Grant County.
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 water line within 200 consecutive 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. Advertisement
 - B. Information to Bidders
 - C. Bid
 - D. Bid Bond
 - E. Agreement
 - F. General Conditions

- G. Payment Bond
- H. General Conditions
- I. Notice to Proceed
- J. Change Order
- K. Drawings prepared by CMW, Inc. numbered 1.1 through 6.2 dated April, 2003.
- L. SPECIFICATIONS prepared or issued by CMW, Inc. and dated April, 2004

ADDENDA:

No. _____, dated _____, 20____.

_____ , dated _____, 20____.

_____ , dated _____, 20____.

_____ , 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 official, this Agreement in 6 copies each of which shall be deemed an original on the date first above written.

(SEAL)

OWNER:

ATTEST:

BULLOCK PEN WATER DISTRICT

BY _____

NAME Paula Massie
(Please Type)

NAME Bobby Burgess
(Please Type)

TITLE Office Manager

TITLE Chairman

(SEAL)

CONTRACTOR:

ATTEST:

BY _____

NAME _____
(Please Type)

NAME _____
(Please Type)

TITLE _____

ADDRESS _____

EMPLOYER IDENTIFICATION NUMBER:

END SECTION

KNOW ALL MEN BY THESE PRESENTS: that

(Name of Contractor)

(Address of Contractor)

a _____ hereinafter called Principal,
(Corporation, Partnership or Individual)

and _____
(Name of Surety)

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto _____

(Name of Owner)

(Address of Owner)

hereinafter called OWNER, in the 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, 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 _____ 19_____, a copy of which is hereto attached and made a part hereof for the construction of:

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms, SUBCONTRACTORS, and corporations furnishing materials for or performing labor in the prosecution of the WORK provided for in such contract, and any authorized extension 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 all insurance premiums on said WORK, and for all labor, performed in such WORK whether by SUBCONTRACTOR or otherwise, 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 the WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any wise 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 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 _____ counterparts, each one of which shall be deemed an original, this the _____ day of _____ 19 _____

ATTEST:

(Principal) Secretary

(SEAL)

Witness as to Principal

(Address)

ATTEST:

Witness as to Surety

(Address)

Principal

By _____ (s)

(Address)

Surety

By _____
Attorney-in-Fact

(Address)

NOTE: Date of BOND must not be prior to date of Contract.
If CONTRACTOR 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.

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: that

(Name of Contractor)

(Address of Contractor)

a

(Corporation, Partnership, or Individual)

hereinafter called Principal, and

(Name of Surety)

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto

(Name of owner)

(Address of Owner)

hereinafter called OWNER, in the 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, 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 19, a copy of which is hereto attached and made a part hereof for the construction of:

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 he 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 the same shall in any wise 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 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 _____ counterparts, each one of which shall be deemed an original, this the _____ day of _____ 19____

ATTEST:

(Principal) Secretary
(SEAL)

(Witness as to Principal)

(Address)

Principal
By _____ (S)

(Address)

Surety

ATTEST:

(Surety) Secretary
(SEAL)

Witness as to Surety

(Address)

By _____
Attorney-in-Fact

(Address)

NOTE: Date of BOND must not be prior to date of Contract.
If CONTRACTOR 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.

GENERAL CONDITIONS

1. Definitions
2. Additional Instructions and Detail Drawings
3. Schedules, Reports and Records
4. Drawings and Specifications
5. Shop Drawings
6. Materials, Services and Facilities
7. Inspection and Testing
8. Substitutions
9. Patents
10. Surveys, Permits, Regulations
11. Protection of Work, Property, Persons
12. Supervision by Contractor
13. Changes in the Work
14. Changes in the Contract Price
15. Time for Completion and Liquidated Damages
16. Correction of Work

1. DEFINITIONS

- 1.1 Wherever used in the CONTRACT DOCUMENTS, the following terms shall have the meanings indicated which 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 security, furnished by the CONTRACTOR and his 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 **CONTRACTOR** -- The person, firm or corporation with whom the OWNER has executed the Agreement.
- 1.11 **DRAWINGS** -- The part of the CONTRACT

DOCUMENTS which show the characteristics and scope of the WORK to be performed and which have been

17. Subsurface Conditions
18. Suspension of Work, Termination and Delay
19. Payments to Contractor
20. Acceptance of Final Payment as Release
21. Insurance
22. Contract Security
23. Assignments
24. Indemnification
25. Separate Contracts
26. Subcontracting
27. Engineer's Authority
28. Land and Rights of Way
29. Guaranty
30. Arbitration
31. Taxes

prepared or approved by the ENGINEER.

1.12 **ENGINEER** -- The person, firm or corporation named as such in the CONTRACT DOCUMENTS.

1.13 **FIELD ORDER** -- A written order effecting 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.

1.14 **NOTICE OF AWARD** -- The written notice of the acceptance of the BID from the OWNER to the successful BIDDER.

1.15 **NOTICE TO PROCEED** -- Written communication issued by the OWNER to the CONTRACTOR authorizing him to proceed with the WORK and establishing the date of commencement of the WORK.

1.16 **OWNER** -- A public or quasi-public body or authority, corporation, association, partnership, or individual for whom the WORK is to be performed.

1.17 **PROJECT** -- The undertaking to be performed as provided in the CONTRACT DOCUMENTS.

1.18 **RESIDENT PROJECT REPRESENTATIVE** -- The authorized representative of the OWNER who is assigned to the PROJECT site or any part thereof.

1.19 **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.

1.20 **SPECIFICATIONS** -- A part of the CONTRACT DOCUMENTS consisting of written descriptions of a technical nature of materials, equipment, construction systems, standards and workmanship.

1.21 **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.

1.22 **SUBSTANTIAL COMPLETION** — That date as 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.

1.23 **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.

1.24 **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.

1.25 **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.

1.26 **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 his last given address, or delivered in person to said party or his 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 instruction 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.

3.2 Prior to the first partial payment estimate the CONTRACTOR shall submit construction progress schedules showing the order in which he proposes to carry on the WORK, including dates at which he will start the various parts of the WORK, 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 he anticipates he will earn

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 scale dimensions, and detailed 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 his 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 as may be necessary for the prosecution of the WORK as required by the CONTRACT DOCUMENTS. 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 his 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 his obligations to perform the WORK in accordance with the requirements of the CONTRACT DOCUMENTS.

7.6 The ENGINEER and his 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 of 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 his 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 expenses 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 number, 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. He 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 the 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, he shall be responsible for such loss unless he 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 pile 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, he shall be charged with the resulting expense and shall be responsible for any mistakes 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, he 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. He will take all 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. He will erect and maintain, as required by the conditions and progress of the WORK, all necessary safeguards for safety and protection. He 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 in part, by the CONTRACTOR, any SUBCONTRACTOR or anyone directly or indirectly employed by any of them or anyone for whose acts any of them be liable, except damage or loss attributable to the fault of the CONTRACT DOCUMENTS or to the acts or omissions of the OWNER or 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 instruction or authorization from the ENGINEER or OWNER, shall act to prevent threatened damage, injury or loss. He 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 to 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 him to a change in CONTRACT PRICE or TIME, or both, in which event he shall give the ENGINEER WRITTEN NOTICE thereof within seven (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 thirty (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.
- (c) The actual cost for labor, direct overhead, materials, supplies, equipment, and other services necessary to complete the work. In addition there shall be added an amount to be agreed upon but not to exceed fifteen (15) percent of the actual cost of the WORK to cover the cost of general overhead and profit.

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 ten (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 he finds 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 he has given the required WRITTEN NOTICE; provided that the OWNER may, if he 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 ninety days or such further time as agreed upon by the CONTRACTOR by WRITTEN NOTICE to the CONTRACTOR and the ENGINEER which notice 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 as bankrupt or insolvent, or if he makes a general assignment for the benefit of his creditors, or if a trustee or receiver is appointed for the CONTRACTOR or for any of his property, or if he files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or applicable laws, or if he repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment, or if he repeatedly fails to make prompt payments to SUBCONTRACTORS or for labor, materials or equipment or if he disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction of the WORK or if he disregards the authority of the ENGINEER, or if he 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 his surety a minimum of ten (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 he 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 ten (10) days from delivery of a 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 ninety (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 thirty (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 thirty (30) days of its approval and presentation, then the CONTRACTOR may, after ten (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 ten (10) days written notice to the OWNER and the ENGINEER stop the WORK until he has been 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. PAYMENTS TO CONTRACTOR

19.1 At least ten (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 his interest therein, including applicable insurance. The ENGINEER will, within ten (10) days after receipt of each partial payment estimate, either indicate in writing his approval of payment and present

the partial payment estimate to the OWNER, or return the partial payment estimate to the CONTRACTOR indicating in writing his 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 ten (10) days of presentation to him of an approved partial payment estimate, pay the CONTRACTOR a progress payment on the basis of the approved partial payment estimate. The OWNER shall retain ten (10) percent of the amount of each payment until final completion and acceptance of all work covered by the CONTRACT DOCUMENTS. The OWNER at any time, however, after fifty (50) percent of the WORK has been completed, if he finds that satisfactory progress is being made, shall reduce retainage to five (5%) percent on the current and remaining estimates. When the WORK is substantially complete (operational or beneficial occupancy), the retained amount may be further reduced below five (5) percent to only that amount necessary to assure completion. On completion and acceptance of a part of the WORK on which the price is stated separately in the CONTRACT DOCUMENTS, payment may be made in full, including retained percentages, less authorized deductions.

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 by him 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 thirty (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 demands 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

or 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, his 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 thirty (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 his sureties from any obligations under the CONTRACT DOCUMENTS or the Performance BOND and Payment BONDS.

21. INSURANCE

21.1 The CONTRACTOR shall purchase and maintain such insurance as will protect him 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 himself or by 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 his employees;

21.1.3 Claims for damages because of bodily injury, sickness or disease, or death of any person other than his 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 fifteen (15) days prior WRITTEN NOTICE has been given to the OWNER.

21.3 The CONTRACTOR shall procure and maintain, at his 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 him 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 himself or by any SUBCONTRACTOR under him, or anyone directly or indirectly employed by the CONTRACTOR or by a SUBCONTRACTOR under him. 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 his 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 his 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 his employees not otherwise protected.

21.5 The CONTRACTOR shall secure, if applicable, "All Risk" type Builder's Risk Insurance for WORK to

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, the ENGINEER, and the OWNER.

22. CONTRACT SECURITY

22.1 The CONTRACTOR shall within ten (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 a 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, the CONTRACTOR shall within ten (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 premiums on such BOND shall be paid by the CONTRACTOR. No further payments shall be deemed due nor shall be made until the new surety or sureties shall 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 his right, title or interest therein, or his 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, his 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 his 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 by himself, or he 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 he is performing the additional WORK himself), reasonable opportunity for the introduction and storage of materials and equipment and the execution of WORK, and shall properly connect and coordinate his 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 him in additional expense or entitles him to an extension of the CONTRACT TIME, he may make a claim therefor as provided in Sections 14 and 15.

26. SUBCONTRACTING

26.1 The CONTRACTOR may utilize the services of specialty SUBCONTRACTORS 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 fifty (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 his SUBCONTRACTORS, and of persons either directly or

indirectly employed by them, as he is for the acts and omissions of persons directly employed by him.

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 relation 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. He shall decide questions which may arise as to quality and acceptability of materials furnished and WORK performed. He 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 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 his 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. GUARANTY

29.1 The CONTRACTOR shall guarantee all materials and equipment furnished and WORK performed for a period of one (1) year from the date of SUBSTANTIAL COMPLETION. The CONTRACTOR warrants and guarantees for a period of one (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

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 the making and acceptance of final payment as provided by Section 20, shall be decided by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association. This 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 demand for arbitration shall be filed in writing with the other party to the CONTRACT DOCUMENTS and with the American Arbitration Association, and a copy shall be filed with the ENGINEER. Demand 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 law of the place where the WORK is performed.

Revised: MARCH 10, 2004

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4**

SUPPLEMENTAL GENERAL CONDITIONS

FOR

FEDERALLY ASSISTED CONSTRUCTION CONTRACTS

EPA SPECIAL CONDITIONS

The attached instructions and regulations as listed below shall be incorporated into the Specifications and comprise EPA's Special Conditions.

- EPA Special Provisions Attachment No. 1
- Requirements for Subagreements Awarded by Prime Contractors Attachment No. 2
- 40 CFR 31.36 (Procurement) Attachment No. 3
- Equal Employment Opportunity (EEO) Documents:
 - Notice of Requirement for Affirmative Action Attachment No. 4
 - Contract Specifications (Executive Order 11246) Attachment No. 5
 - EEO Goals for Region 4 Economic Areas Attachment No. 6
 - Special Notice #1 - Check List of EEO Documentation Attachment No. 7
 - Employer Information Report EEO-1 (SF 100) Attachment No. 8
- Labor Standards Provisions for Federally Assisted Construction, EPA Form 5720-4 Attachment No. 9
- Certifications
 - Debarment, Suspension and Other Responsibility Matters Attachment No. 10
 - Anti-lobbying Attachment No. 11
- Utilization of Small, Minority and Women's Businesses Attachment No. 12
- Region 4 Disadvantaged Business Enterprise (DBE) Negotiated Rates Attachment No. 13
- Bonds and Insurance Attachment No. 14
- Outlay Management Schedule Attachment No. 15
- Storm Water General Permit Attachment No. 16

These specials conditions shall supersede any conflicting provisions of this contract.

EPA SPECIAL PROVISIONS

- (a) The construction of the project shall conform to the applicable requirements for state, territorial and local laws and ordinances to the extent that such requirements do not conflict with Federal laws.
- (b) The EPA shall have access to the site and the project.
- (c) Any contract(s) awarded under this invitation for Bids are expected to be funded in part by a grant from the U.S. Environmental Protection Agency. Neither the United States nor any of its departments, agencies or employees are or will be a part to this Invitation for Bids or any resulting contract.
- (d) The Method of Award is to the lowest responsible responsive bidder
- (e) A statement that the bidder must make positive efforts to use small and minority owned business and women business enterprises.

REQUIREMENTS FOR SUBAGREEMENTS
AWARDED BY A PRIME CONTRACTOR

A contractor must comply with the following provisions in its award of subagreements. (This section does not apply to a supplier's procurement of materials to produce equipment, materials and catalog, off-the-shelf, or manufactured items.)

- (a) 40 CFR Part 32 (Debarment and Suspension Under EPA Assistance Programs);
- (b) The limitations and subagreement award in 40 CFR 31.35, and 31.36(i) (3,4,6,10,12) ;
- (c) The requirement for small, small rural, minority, women's and labor surplus area business in 40 CFR.31.36(e);
- (d) The specifications requirements of 40 CFR 31.36(c) (1);
- (e) The Federal cost principles in 40 CFR 31.22 and 31.36(f)(3);
- (f) The prohibited types of subagreements in 40 CFR 31.36(f)(4);
- (g) 40 CFR Part 34 (Anti-Lobbying under EPA Assistance Programs).

TITLE 40--PROTECTION OF ENVIRONMENT
CHAPTER I--ENVIRONMENTAL PROTECTION AGENCY

PART 31--UNIFORM ADMINISTRATIVE REQUIREMENTS FOR GRANTS AND
COOPERATIVE AGREEMENTS TO STATE AND LOCAL GOVERNMENTS

Subpart C--Post-Award Requirements

Sec. 31.36 Procurement.

(a) States. When procuring property and services under a grant, a State will follow the same policies and procedures it uses for procurements from its non-Federal funds. The State will ensure that every purchase order or other contract includes any clauses required by Federal statutes and executive orders and their implementing regulations. Other grantees and subgrantees will follow paragraphs (b) through (i) in this section.

(b) Procurement standards. (1) Grantees and subgrantees will use their own procurement procedures which reflect applicable State and local laws and regulations, provided that the procurements conform to applicable federal law, the standards identified in this section, and if applicable, Sec. 31.38.

(2) Grantees and subgrantees will maintain a contract administration system which ensures that contractors perform in accordance with the terms, conditions, and specifications of their contracts or purchase orders.

(3) Grantees and subgrantees will maintain a written code of standards of conduct governing the performance of their employees engaged in the award and administration of contracts. No employee, officer or agent of the grantee or subgrantee shall participate in selection, or in the award or administration of a contract supported by Federal funds if a conflict of interest, real or apparent, would be involved. Such a conflict would arise when:

(i) The employee, officer or agent,

(ii) Any member of his immediate family,

(iii) His or her partner, or

(iv) An organization which employs, or is about to employ, any of the above, has a financial or other interest in the firm selected for award. The grantee's or subgrantee's officers, employees or agents will neither solicit nor accept gratuities, favors or anything of monetary value from contractors, potential contractors, or parties to subagreements. Grantee and subgrantees may set minimum rules where the financial interest is not substantial or the gift is an unsolicited item of nominal intrinsic value. To the extent permitted by State or local law or regulations, such standards or conduct will provide for penalties, sanctions, or other disciplinary actions for violations of such standards by the grantee's and subgrantee's officers, employees, or agents, or by contractors or their agents. The awarding agency may in regulation provide additional prohibitions relative to real, apparent, or potential conflicts of interest.

(4) Grantee and subgrantee procedures will provide for a review of proposed procurements to avoid purchase of unnecessary or duplicative items. Consideration should be given to consolidating or breaking out procurements to obtain a more economical purchase. Where

appropriate, an analysis will be made of lease versus purchase alternatives, and any other appropriate analysis to determine the most economical approach.

(5) To foster greater economy and efficiency, grantees and subgrantees are encouraged to enter into State and local intergovernmental agreements for procurement or use of common goods and services.

(6) Grantees and subgrantees are encouraged to use Federal excess and surplus property in lieu of purchasing new equipment and property whenever such use is feasible and reduces project costs.

(7) Grantees and subgrantees are encouraged to use value engineering clauses in contracts for construction projects of sufficient size to offer reasonable opportunities for cost reductions. Value engineering is a systematic and creative analysis of each contract item or task to ensure that its essential function is provided at the overall lower cost.

(8) Grantees and subgrantees will make awards only to responsible contractors possessing the ability to perform successfully under the terms and conditions of a proposed procurement. Consideration will be given to such matters as contractor integrity, compliance with public policy, record of past performance, and financial and technical resources.

(9) Grantees and subgrantees will maintain records sufficient to detail the significant history of a procurement. These records will include, but are not necessarily limited to the following: rationale for the method of procurement, selection of contract type, contractor selection or rejection, and the basis for the contract price.

(10) Grantees and subgrantees will use time and material type contracts only--

(i) After a determination that no other contract is suitable, and

(ii) If the contract includes a ceiling price that the contractor exceeds at its own risk.

(11) Grantees and subgrantees alone will be responsible, in accordance with good administrative practice and sound business judgment, for the settlement of all contractual and administrative issues arising out of procurements. These issues include, but are not limited to source evaluation, protests, disputes, and claims. These standards do not relieve the grantee or subgrantee of any contractual responsibilities under its contracts. Federal agencies will not substitute their judgment for that of the grantee or subgrantee unless the matter is primarily a Federal concern. Violations of law will be referred to the local, State, or Federal authority having proper jurisdiction.

(12) Grantees and subgrantees will have protest procedures to handle and resolve disputes relating to their procurements and shall in all instances disclose information regarding the protest to the awarding agency. A protestor must exhaust all administrative remedies with the grantee and subgrantee before pursuing a protest with the Federal agency. Reviews of protests by the Federal agency will be limited to:

(i) Violations of Federal law or regulations and the standards of this section (violations of State or local law will be under the jurisdiction of State or local authorities) and

(ii) Violations of the grantee's or subgrantee's protest procedures for failure to review a complaint or protest. Protests received by the Federal agency other than those specified above will be referred to the grantee or subgrantee.

(c) Competition. (1) All procurement transactions will be conducted in a manner providing full and open competition consistent with the standards of Sec. 31.36. Some of the situations considered to be restrictive of competition include but are not limited to:

- (i) Placing unreasonable requirements on firms in order for them to qualify to do business,
- (ii) Requiring unnecessary experience and excessive bonding,
- (iii) Noncompetitive pricing practices between firms or between affiliated companies,
- (iv) Noncompetitive awards to consultants that are on retainer contracts,
- (v) Organizational conflicts of interest,
- (vi) Specifying only a "brand name" product instead of allowing "an equal" product to be offered and describing the performance of other relevant requirements of the procurement, and
- (vii) Any arbitrary action in the procurement process.

(2) Grantees and subgrantees will conduct procurements in a manner that prohibits the use of statutorily or administratively imposed in-State or local geographical preferences in the evaluation of bids or proposals, except in those cases where applicable Federal statutes expressly mandate or encourage geographic preference. Nothing in this section preempts State licensing laws. When contracting for architectural and engineering (A/E) services, geographic location may be a selection criteria provided its application leaves an appropriate number of qualified firms, given the nature and size of the project, to compete for the contract.

(3) Grantees will have written selection procedures for procurement transactions. These procedures will ensure that all solicitations:

(i) Incorporate a clear and accurate description of the technical requirements for the material, product, or service to be procured. Such description shall not, in competitive procurements, contain features which unduly restrict competition. The description may include a statement of the qualitative nature of the material, product or service to be procured, and when necessary, shall set forth those minimum essential characteristics and standards to which it must conform if it is to satisfy its intended use. Detailed product specifications should be avoided if at all possible. When it is impractical or uneconomical to make a clear and accurate description of the technical requirements, a "brand name or equal" description may be used as a means to define the performance or other salient requirements of a procurement. The specific features of the named brand which must be met by offerors shall be clearly stated; and

(ii) Identify all requirements which the offerors must fulfill and all other factors to be used in evaluating bids or proposals.

(4) Grantees and subgrantees will ensure that all prequalified lists of persons, firms, or products which are used in acquiring goods and services are current and include enough qualified sources to ensure maximum open and free competition. Also, grantees and subgrantees will not preclude potential bidders from qualifying during the solicitation period.

(5) Construction grants awarded under Title II of the Clean Water Act are subject to the following "Buy American" requirements in paragraphs (c)(5) (i)-(iii) of this section. Section 215 of the Clean Water Act requires that contractors give preference to the use of domestic material in the construction of EPA-funded treatment works.

(i) Contractors must use domestic construction materials in preference to nondomestic material if it is priced no more than 6 percent higher than the bid or offered price of the nondomestic material, including all costs of delivery to the construction site and any applicable duty, whether or not assessed. The grantee will normally base the computations on prices and costs in effect on the date of opening bids or proposals.

(ii) The award official may waive the Buy American provision based on factors the award official considers relevant, including:

- (A) Such use is not in the public interest;
- (B) The cost is unreasonable;
- (C) The Agency's available resources are not sufficient to implement the provision, subject to the Deputy Administrator's concurrence;
- (D) The articles, materials or supplies of the class or kind to be used or the articles, materials or supplies from which they are manufactured are not mined, produced or manufactured in the United States in sufficient and reasonably available commercial quantities or satisfactory quality for the particular project; or
- (E) Application of this provision is contrary to multilateral government procurement agreements, subject to the Deputy Administrator's concurrence.

(iii) All bidding documents, subagreements, and, if appropriate, requests for proposals must contain the following "Buy American" provision: In accordance with section 215 of the Clean Water Act (33 U.S.C. 1251 et seq.) and implementing EPA regulations, the contractor agrees that preference will be given to domestic construction materials by the contractor, subcontractors, materialmen and suppliers in the performance of this subagreement.

(d) Methods of procurement to be followed--(1) Procurement by small purchase procedures. Small purchase procedures are those relatively simple and informal procurement methods for securing services, supplies, or other properties that do not cost more than the simplified acquisition threshold fixed at 41 U.S.C. 403(11) (currently set at \$100,000). If small purchase procedures are used, price or rate quotations shall be obtained from an adequate number of qualified sources.

(2) Procurement by sealed bids (formal advertising). Bids are publicly solicited and a firm-fixed-price contract (lump sum or unit price) is awarded to the responsible bidder whose bid, conforming with all the material terms and conditions of the invitation for bids, is the lowest in price. The sealed bid method is the preferred method for procuring construction, if the conditions in 31.36(d)(2)(i) apply.

(i) In order for sealed bidding to be feasible, the following conditions should be present:

- (A) A complete, adequate, and realistic specification or purchase description is available;
- (B) Two or more responsible bidders are willing and able to compete effectively and for the business; and

(C) The procurement lends itself to a firm fixed price contract and the selection of the successful bidder can be made principally on the basis of price.

(ii) If sealed bids are used, the following requirements apply:

(A) The invitation for bids will be publicly advertised and bids shall be solicited from an adequate number of known suppliers, providing them sufficient time prior to the date set for opening the bids;

(B) The invitation for bids, which will include any specifications and pertinent attachments, shall define the items or services in order for the bidder to properly respond;

(C) All bids will be publicly opened at the time and place prescribed in the invitation for bids;

(D) A firm fixed-price contract award will be made in writing to the lowest responsive and responsible bidder. Where specified in bidding documents, factors such as discounts, transportation cost, and life cycle costs shall be considered in determining which bid is lowest. Payment discounts will only be used to determine the low bid when prior experience indicates that such discounts are usually taken advantage of; and

(E) Any or all bids may be rejected if there is a sound documented reason.

(3) Procurement by competitive proposals. The technique of competitive proposals is normally conducted with more than one source submitting an offer, and either a fixed-price or cost-reimbursement type contract is awarded. It is generally used when conditions are not appropriate for the use of sealed bids. If this method is used, the following requirements apply:

(i) Requests for proposals will be publicized and identify all evaluation factors and their relative importance. Any response to publicized requests for proposals shall be honored to the maximum extent practical;

(ii) Proposals will be solicited from an adequate number of qualified sources;

(iii) Grantees and subgrantees will have a method for conducting technical evaluations of the proposals received and for selecting awardees;

(iv) Awards will be made to the responsible firm whose proposal is most advantageous to the program, with price and other factors considered; and

(v) Grantees and subgrantees may use competitive proposal procedures for qualifications-based procurement of architectural/engineering (A/E) professional services whereby competitors' qualifications are evaluated and the most qualified competitor is selected, subject to negotiation of fair and reasonable compensation. The method, where price is not used as a selection factor, can only be used in procurement of A/E professional services. It cannot be used to purchase other types of services though A/E firms are a potential source to perform the proposed effort.

(4) Procurement by noncompetitive proposals is procurement through solicitation of a proposal from only one source, or after solicitation of a number of sources, competition is determined inadequate.

(i) Procurement by noncompetitive proposals may be used only when the award of a contract is infeasible under small purchase procedures, sealed bids or competitive proposals and one of the following circumstances applies:

(A) The item is available only from a single source;

(B) The public exigency or emergency for the requirement will not permit a delay resulting from competitive solicitation;

(C) The awarding agency authorizes noncompetitive proposals; or

(D) After solicitation of a number of sources, competition is determined inadequate.

(ii) Cost analysis, i.e., verifying the proposed cost data, the projections of the data, and the evaluation of the specific elements of costs and profits, is required.

(iii) Grantees and subgrantees may be required to submit the proposed procurement to the awarding agency for pre-award review in accordance with paragraph (g) of this section.

(e) Contracting with small and minority firms, women's business enterprise and labor surplus area firms.

(1) The grantee and subgrantee will take all necessary affirmative steps to assure that minority firms, women's business enterprises, and labor surplus area firms are used when possible.

(2) Affirmative steps shall include:

(i) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;

(ii) Assuring that small and minority businesses, and women's business enterprises are

solicited whenever they are potential sources;

(iii) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority business, and women's business enterprises;

(iv) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority business, and women's business enterprises;

(v) Using the services and assistance of the Small Business Administration, and the Minority Business Development Agency of the Department of Commerce; and

(vi) Requiring the prime contractor, if subcontracts are to be let, to take the affirmative steps listed in paragraphs (e)(2) (i) through (v) of this section.

(f) Contract cost and price.

(1) Grantees and subgrantees must perform a cost or price analysis in connection with every procurement action including contract modifications. The method and degree of analysis is dependent on the facts surrounding the particular procurement situation, but as a starting point, grantees must make independent estimates before receiving bids or proposals. A cost analysis must be performed when the offeror is required to submit the elements of his estimated cost, e.g., under professional, consulting, and architectural engineering services contracts. A cost analysis will be necessary when adequate price competition is lacking, and for sole source procurements, including contract modifications or change orders, unless price reasonableness can be established on the basis of a catalog or market price of a commercial product sold in substantial quantities to the general public or based on prices set by law or regulation. A price analysis will be used in all other instances to determine the reasonableness of the proposed contract price.

(2) Grantees and subgrantees will negotiate profit as a separate element of the price for each contract in which there is no price competition and in all cases where cost analysis is performed. To establish a fair and reasonable profit, consideration will be given to the complexity of the work to be performed, the risk borne by the contractor, the contractor's investment, the amount of subcontracting, the quality of its record of past performance, and industry profit rates in the surrounding geographical area for similar work.

(3) Costs or prices based on estimated costs for contracts under grants will be allowable only to the extent that costs incurred or cost estimates included in negotiated prices are consistent with Federal cost principles (see Sec. 31.22). Grantees may reference their own cost principles that comply with the applicable Federal cost principles.

(4) The cost plus a percentage of cost and percentage of construction cost methods of contracting shall not be used.

(g) Awarding agency review.

(1) Grantees and subgrantees must make available, upon request of the awarding agency, technical specifications on proposed procurements where the awarding agency believes such review is needed to ensure that the item and/or service specified is the one being proposed for purchase. This review generally will take place prior to the time the specification is incorporated into a solicitation document. However, if the grantee or subgrantee desires to have the review accomplished after a solicitation has been developed, the awarding agency may still review the specifications, with such review usually limited to the technical aspects of the proposed purchase.

(2) Grantees and subgrantees must on request make available for awarding agency pre-award

review procurement documents, such as requests for proposals or invitations for bids, independent cost estimates, etc. when:

- (i) A grantee's or subgrantee's procurement procedures or operation fails to comply with the procurement standards in this section; or
- (ii) The procurement is expected to exceed the simplified acquisition threshold and is to be awarded without competition or only one bid or offer is received in response to a solicitation; or
- (iii) The procurement, which is expected to exceed the simplified acquisition threshold, specifies a "brand name" product; or
- (iv) The proposed award is more than the simplified acquisition threshold and is to be awarded to other than the apparent low bidder under a sealed bid procurement; or
- (v) A proposed contract modification changes the scope of a contract or increases the contract amount by more than the simplified acquisition threshold.

(3) A grantee or subgrantee will be exempt from the pre-award review in paragraph (g)(2) of this section if the awarding agency determines that its procurement systems comply with the standards of this section.

(i) A grantee or subgrantee may request that its procurement system be reviewed by the awarding agency to determine whether its system meets these standards in order for its system to be certified. Generally, these reviews shall occur where there is a continuous high-dollar funding, and third-party contracts are awarded on a regular basis.

(ii) A grantee or subgrantee may self-certify its procurement system. Such self-certification shall not limit the awarding agency's right to survey the system. Under a self-certification procedure, awarding agencies may wish to rely on written assurances from the grantee or subgrantee that it is complying with these standards. A grantee or subgrantee will cite specific procedures, regulations, standards, etc., as being in compliance with these requirements and have its system available for review.

(h) Bonding requirements. For construction or facility improvement contracts or subcontracts exceeding the simplified acquisition threshold, the awarding agency may accept the bonding policy and requirements of the grantee or subgrantee provided the awarding agency has made a determination that the awarding agency's interest is adequately protected. If such a determination has not been made, the minimum requirements shall be as follows:

(1) A bid guarantee from each bidder equivalent to five percent of the bid price. The "bid guarantee" shall consist of a firm commitment such as a bid bond, certified check, or other negotiable instrument accompanying a bid as assurance that the bidder will, upon acceptance of his bid, execute such contractual documents as may be required within the time specified.

(2) A performance bond on the part of the contractor for 100 percent of the contract price. A "performance bond" is one executed in connection with a contract to secure fulfillment of all the contractor's obligations under such contract.

(3) A payment bond on the part of the contractor for 100 percent of the contract price. A "payment bond" is one executed in connection with a contract to assure payment as required by law of all persons supplying labor and material in the execution of the work provided for in the contract.

(i) Contract provisions. A grantee's and subgrantee's contracts must contain provisions in paragraph (i) of this section. Federal agencies are permitted to require changes, remedies,

changed conditions, access and records retention, suspension of work, and other clauses approved by the Office of Federal Procurement Policy.

(1) Administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as may be appropriate. (Contracts more than the simplified acquisition threshold)

(2) Termination for cause and for convenience by the grantee or subgrantee including the manner by which it will be effected and the basis for settlement. (All contracts in excess of \$10,000)

(3) Compliance with Executive Order 11246 of September 24, 1965, entitled "Equal Employment Opportunity," as amended by Executive Order 11375 of October 13, 1967, and as supplemented in Department of Labor regulations (41 CFR chapter 60). (All construction contracts awarded in excess of \$10,000 by grantees and their contractors or subgrantees)

(4) Compliance with the Copeland "Anti-Kickback" Act (18 U.S.C. 874) as supplemented in Department of Labor regulations (29 CFR part 3). (All contracts and subgrants for construction or repair)

(5) Compliance with the Davis-Bacon Act (40 U.S.C. 276a to 276a-7) as supplemented by Department of Labor regulations (29 CFR part 5). (Construction contracts in excess of \$2000 awarded by grantees and subgrantees when required by Federal grant program legislation)

(6) Compliance with Sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-330) as supplemented by Department of Labor regulations (29 CFR part 5). (Construction contracts awarded by grantees and subgrantees in excess of \$2000, and in excess of \$2500 for other contracts which involve the employment of mechanics or laborers)

(7) Notice of awarding agency requirements and regulations pertaining to reporting.

(8) Notice of awarding agency requirements and regulations pertaining to patent rights with respect to any discovery or invention which arises or is developed in the course of or under such contract.

(9) Awarding agency requirements and regulations pertaining to copyrights and rights in data.

(10) Access by the grantee, the subgrantee, the Federal grantor agency, the Comptroller General of the United States, or any of their duly authorized representatives to any books, documents, papers, and records of the contractor which are directly pertinent to that specific contract for the purpose of making audit, examination, excerpts, and transcriptions.

(11) Retention of all required records for three years after grantees or subgrantees make final payments and all other pending matters are closed.

(12) Compliance with all applicable standards, orders, or requirements issued under section 306 of the Clean Air Act (42 U.S.C. 1857(h)), section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 CFR part 15). (Contracts, subcontracts, and subgrants of amounts in excess of \$100,000)

(13) Mandatory standards and policies relating to energy efficiency which are contained in the State energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub. L. 94-163, 89 Stat. 871).

(j) Payment to consultants.

(1) EPA will limit its participation in the salary rate (excluding overhead) paid to individual consultants retained by grantees or by a grantee's contractors or subcontractors to the maximum daily rate for a GS-18. (Grantees may, however, pay consultants more than this amount). This

limitation applies to consultation services of designated individuals with specialized skills who are paid at a daily or hourly rate. This rate does not include transportation and subsistence costs for travel performed; grantees will pay these in accordance with their normal travel reimbursement practices. (Pub. L. 99-591).

(2) Subagreements with firms for services which are awarded using the procurement requirements in this part are not affected by this limitation.

(k) Use of the same architect or engineer during construction.

(1) If the grantee is satisfied with the qualifications and performance of the architect or engineer who provided any or all of the facilities planning or design services for a waste-water treatment works project and wishes to retain that firm or individual during construction of the project, it may do so without further public notice and evaluation of qualifications, provided:

(i) The grantee received a facilities planning (Step 1) or design grant (Step 2), and selected the architect or engineer in accordance with EPA's procurement regulations in effect when EPA awarded the grant; or

(ii) The award official approves noncompetitive procurement under Sec. 31.36(d)(4) for reasons other than simply using the same individual or firm that provided facilities planning or design services for the project; or

(iii) The grantee attests that:

(A) The initial request for proposals clearly stated the possibility that the firm or individual selected could be awarded a subagreement for services during construction; and

(B) The firm or individual was selected for facilities planning or design services in accordance with procedures specified in this section.

(C) No employee, officer or agent of the grantee, any member of their immediate families, or their partners have financial or other interest in the firm selected for award; and

(D) None of the grantee's officers, employees or agents solicited or accepted gratuities, favors or anything of monetary value from contractors or other parties to subagreements.

(2) However, if the grantee uses the procedures in paragraph (k)(1) of this section to retain an architect or engineer, any Step 3 subagreements between the architect or engineer and the grantee must meet all of the other procurement provisions in Sec. 31.36.

[53 FR 8068 and 8087, Mar. 11, 1988, and amended at 53 FR 8075, Mar. 11, 1988; 60 FR 19639, 19644, Apr. 19, 1995; 66 FR 3794, Jan. 16, 2001]

**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE
EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)**

The following excerpts are from 45 FR 65984 (October 3, 1980):

The minority and female goals apply to Federal and federally assisted construction contractors and subcontractors which have covered contracts. The goals are expressed as a percentage of the total hours worked by such a covered or subcontractor's entire onsite construction workforce which is working on any construction site within a relevant area. The goal applies to each construction craft and trade in the contractor's entire workforce in the relevant area including those employees working on private nonfederally involved projects.

Until further notice, the following goals for minority utilization in each construction craft and trade shall be included in all Federal or federally assisted construction contracts and subcontracts in excess of \$10,000 to be performed in the respective geographic area. The goals are applicable to each nonexempt contractor's total onsite construction workforce, regardless of whether or not part of that workforce is performing work on a Federal, federally assisted or nonfederally related project, contract or subcontract.

Construction contractors which are participating in an approved Hometown Plan (see 41 CFR 60-4.5) are required to comply with the goals of the Hometown Plan with regard to construction work they perform in the area covered by the Hometown Plan. With regard to all their other covered construction work, such contractors are required to comply as follows:

Goals for female participation in each trade.....6.9%
Goals for minority participation in each trade.....Insert goals for each year
(see Attachment Number 6)

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or Federally assisted) performed in the covered area.

The following excerpts are from 45 FR 65977 (October 3, 1980):

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals established for the geographical area where the contract resulting from this solicitation is to be performed. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor

shall make a good faith effort to employ minority and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the contract is to be performed.

4. As used in this Notice, and in the contract resulting from this solicitation, the covered area is (insert description of the geographical areas where the contract is to be performed giving the state, country, and city, if any).

**STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION
CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246)**

EEO Specifications

Following is the standard language which must be incorporated into all solicitations for offers and bids on all Federal and Federally assisted construction contracts or subcontracts in excess of \$10,000 to be performed in designated geographical areas:

1. As used in these specifications:
 - a. Covered Area means the geographical area described in the solicitation from which this contract resulted.
 - (b) Director means Director, Office of Federal Contract Compliance Program, United States Department of Labor, or any person to whom the Director delegates authority;
 - (c) Employer identification number means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
 - (d) Minority includes:
 - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
 - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

2. Whenever the Contractor or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take a good faith efforts to achieve the Plan goals and timetables.
4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7-a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. The Contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.
5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
6. In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

7. The Contractor shall take specific affirmative action to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative actions steps at least as extensively as the following:
- a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
 - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the contractor or its unions have employment opportunities available, and maintain a record of the organizations responses.
 - c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the contractor may have taken.
 - d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligation.
 - e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7-b above.
 - f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the

Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

- g.** Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, lay-off, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Foreman, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h.** Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
- i.** Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
- j.** Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's workforce.
- k.** Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
- l.** Conduct, at least annually, an inventory and evaluation of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

- m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that EEO policy and the Contractor's obligations under these specifications are being carried out.
 - n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
 - o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
 - p. Conduct a review, at least annually, of all supervisor's adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative actions obligations (7 a through p). The efforts of a contractor association, joint contractor-union, contractor-community, of other similar group of which the contractor is a member and participant may be asserted as fulfilling any one or more of its obligations under 7 a through p of these specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be defense for the Contractor's noncompliance.
9. A single goal for minorities and a separate single goal for women have been established. The contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example: even though the Contractor has achieved its goal for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).
10. The Contractor shall not use the goals and timetables for affirmative action standards to discriminate against any person because of race, color, religion, sex or national origin.

11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and executive Order 11246, as amended.
13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation, if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.
15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

EEO Goals for Economic Areas in Region 4

Source: Appendix B-80 in 45 FR 65984 (October 3, 1980)

Alabama:

047 Mobile, AL

SMSA Counties:

5160 Mobile, AL

AL Baldwin; AL Mobile.

26.9

6026 Pascagoula - Moss, Point MS

MS Jackson.

16.9

Non-SMSA Counties

AL Choctaw; AL Clarke; AL Conecuh; AL Escambia; AL Monroe; AL Washington; AL Wilcox;

26.4

MS George; MS Greene.

048 Montgomery, AL:

SMSA Counties

5240 Montgomery, AL

AL Autauga; AL Elmore; AL Montgomery.

29.9

Non-SMSA Counties

AL Barbour; AL Bullock; AL Butler; AL Coffee; AL Coosa; AL Covington;

29.9

AL Crenshaw; AL Dale; AL Dallas; AL Geneva; AL Henry; AL Houston.;

AL Lowndes; AL Macon; AL Perry; AL Pike; AL Tallapoosa.

049 Birmingham, AL:

SMSA Counties:

0450 Anniston, AL

AL Calhoun

14.3

1000 Birmingham, AL

AL Jefferson, AL St. Clair; AL Shelby; AL Walker; AL Etowah

24.9

8600 Tuscaloosa, AL

AL Tuscaloosa.

20.6

Non-SMSA Counties

AL Bibb; AL Blount; AL Cherokee; AL Chilton; AL Clay; AL Cleburne; AL Cullman;

20.7

AL Fayette; AL Greene; AL Hale; AL Lamar; AL Marion; AL Pickens; AL Randolph;

AL Sumter; AL Talladega; AL Winston.

050 Huntsville - Florence, AL:

SMSA Counties:

2650 Florence, AL

AL Colbert; AL Lauderdale.

11.9

3440 Huntsville, AL

AL Limestone; AL Madison; AL Marshall.

12.0

Non-SMSA Counties

AL Franklin; AL Lawrence; AL Morgan; TN Lincoln.

11.2

Georgia:

035 Augusta, GA:

SMSA Counties:

0600 Augusta, GA - SC

GA Columbia; GA Richmond; SC Aiken

27.2

Non-SMSA Counties

GA Burke; GA Emanuel; GA Glascock; GA Jefferson; GA Jenkins; GA Lincoln; GA

32.8

McDuffie; GA Taliaferro; GA Warren; GA Wilkes; SC Allendale, SC Bamberg;

SC Barnwell; SC Edgefield; SC McCormick

036 Atlanta, GA

SMSA Counties

0520 Atlanta

GA Butts; GA Cherokee; GA Clayton; GA Cobb; GA DeKalb; GA Douglas; GA Fayette;

21.2

GA Forsyth; GA Fulton; GA Gwinnett; GA Henry; GA Newton; GA Paulding; GA Rockdale;

GA Walton

Non-SMSA Counties	19.5
GA Banks; GA Barrow; GA Bartow; GA Carroll; GA Clarke; GA Coweta; GA Dawson; GA Elbert; GA Fannin; GA Floyd; GA Franklin; GA Gilmer; GA Gordon; GA Greene; GA Habersham; GA Hall; GA Haralson; GA Hart; GA Heard; GA Jackson; GA Jasper; GA Lamar; GA Lumpkin; GA Madison; GA Morgan; GA Oconee; GA Oglethorpe; GA Pickens; GA Pike; GA Polk; GA Rabun; GA Spalding; GA Stephens; GA Towns; GA Union; GA Upson; GA White.	
037 Columbus, GA:	
SMSA Counties	
1800 Columbus	29.6
AL Russell; GA Chattahoochee; GA Columbus.	
Non-SMSA Counties	31.6
AL Chambers; AL Lee; GA Harris; GA Marion; GA Meriwether; GA Quitman; GA Schley; GA Stewart; GA Sumter; GA Talbot; GA Troup; GA Webster.	
038 Macon, GA:	
SMSA Counties	
4660 Macon, GA	27.5
GA Bibb; GA Houston; GA Jones; GA Twiggs.	
Non-SMSA Counties	31.7
GA Baldwin; GA Bleckley; GA Crawford; GA Crisp; GA Dodge; GA Dooly; GA Hancock; GA Johnson; GA Laurens; GA Macon; GA Monroe; GA Peach; GA Pulaski; GA Putnam; GA Taylor; GA Telfair; GA Treutlen; GA Washington; GA Wheeler; GA Wilcox; GA Wilkinson.	
039 Savannah, GA:	
SMSA Counties:	
7520 Savannah, GA	30.6
GA Bryan; GA Chatham; GA Effingham	
Non-SMSA Counties	29.8
GA Appling; GA Atkinson; GA Bacon; GA Bullock; GA Candler; GA Coffee; GA Evans; GA Jeff Davis; GA Liberty; GA Long; GA McIntosh; GA Montgomery; GA Screven; GA Tattnall; GA Toombs; GA Wayne; SC Beaufort; SC Hampton; SC Jasper.	
040 Albany, GA	
SMSA Counties	
0120 Albany, GA	32.1
GA Dougherty; GA Lee.	
Non-SMSA Counties	31.1
GA Baker; GA Ben Hill; GA Berrien; GA Brooks; GA Calhoun; GA Clay; GA Clinch; GA Colquitt; GA Cook; GA Decatur; GA Early; GA Echols; GA Grady; GA Irwin; GA Lanier; GA Lowndes; GA Miller; GA Mitchell; GA Randolph; GA Seminole; GA Terrell; GA Thomas; GA Tift; GA Turner; GA Worth	
Florida:	
041 Jacksonville, FL:	
SMSA Counties	
2900 Gainesville, FL	20.6
FL Alachua	
3600 Jacksonville, FL	21.8
FL Baker; FL Clay; FL Duval; FL Nassau; FL St. Johns.	
Non-SMSA Counties	22.2
FL Bradford; FL Columbia; FL Dade; FL Gilchrist; FL Hamilton; FL LaFayette; FL Levy; FL Marion; FL Putnam; FL Suwannee; FL Union; GA Brantley; GA Camden; GA Charlton; GA Glynn; GA Pierce; GA Ware.	
042 Orlando - Melbourne - Daytona Beach, FL	
SMSA Counties:	
2020 Daytona Beach, FL	15.7
FL Volusia.	
4900 Melbourne - Tutusville - Cocoa, FL	10.7
FL Brevard.	
5960 Orlando, FL	15.5
FL Orange; FL Osceola; FL Seminole.	

Non-SMSA Counties	
FL Flagler; FL Lake; FL Sumter.	14.9
043 Miami - Fort Lauderdale, FL:	
SMSA Counties:	
2680 Fort Lauderdale - Hollywood, FL	
FL Broward.	15.5
5000 Miami, FL	
FL Dade.	39.5
8960 West Palm Beach - Boca Raton, FL	
FL Palm Beach.	22.4
Non-SMSA Counties	
FL Glades; FL Hendry; FL Indian River, FL Martin; FL Monroe:	
FL Okeechobee; FL St. Lucie.	30.4
044 Tampa - St Petersburg, FL	
SMSA Counties:	
1140 Bradenton, FL	
FL Manatee.	15.9
2700 Fort Myers, FL	
FL Lee.	15.3
3980 Lakeland - Winter Haven, FL	
FL Polk	18.0
7510 Sarasota, FL	
FL Sarasota.	10.5
8280 Tampa - St. Petersburg, FL	
FL Hillsborough, FL Pasco; FL Pinellas	17.9
Non-SMSA Counties	
FL Charlotte; FL Citrus; FL Collier, FL Desoto; FL Hardee; FL Hernando; FL Highlands.	17.1
045 Tallahassee. FL:	
SMSA Counties:	
8240 Tallahassee, FL	
FL Leon; FL Wakulla.	24.3
Non-SMSA Counties:	
FL Calhoun; FL Franklin; FL Gadsden; FL Jackson; FL Jefferson; FL Liberty;	
FL Madison; FL Taylor.	29.5
046 Pensacola - Panama City, FL	
SMSA Counties:	
8615 Panama City, FL	
FL Bay.	14.1
6080 Pensacola, FL	
FL Escambia; FL Santa Rosa.	18.3
Non-SMSA Counties	
FL Gulf, FL Holmes; FL Okaloosa; FL Walton; FL Washington.	15.4
Kentucky:	
056 Paducah, KY:	
Non-SMSA Counties	
IL Hardin; IL Massac; IL Pope; KY Ballard; KY Caldwell; KY Calloway. KY Carlisle;	
KY Crittenden; KY Fulton; KY Graves; KY Hickman; KY Livingston; KY Lyon. KY	
McCracken; KY Marshall.	5.2
057 Louisville, KY:	
SMSA Counties:	
4520 Louisville, KY-IN	
IN Clark; IN Floyd; KY Bullitt; KY Jefferson; KY Oldham.	11.2
Non-SMSA Counties	
IN Crawford; IN Harrison; IN Jefferson; IN Orange; IN Scott; IN Washington;	
KY Breckinridge; KY Grayson; KY Hardin; KY Hart; KY Henry; KY Larue; KY Marion;	
KY Meade; KY Nelson; KY Shelby; KY Spencer; KY Trimble; KY Washington.	9.6
058 Lexington, KY	
SMSA Counties	
4280 Lexington-Fayette, KY	
KY Bourbon; KY Clark; KY Fayette; KY Jessamine; KY Scott; KY Woodford.	10.8

Non-SMSA Counties	7.0
KY Adair KY Anderson; KY Bath; KY Boyle; KY Breathitt; KY Casey; KY Clay; KY Estill; KY Franklin- KY Garrard; KY Green; KY Harrison-KY Jackson; KY Knott; KY Lee; KY Leslie; KY Letcher; KY Lincoln; KY Madison; KY Magoffin; KY Menifee; KY Mercer; KY Montgomery; KY Morgan. KY Nicholas; KY Owsley; KY Perry; KY Powell; KY Pulaski; KY Rockcastle; KY Russell; KY Taylor; KY Wolfe.	
Mississippi:	
112 Jackson, MS:	
SMSA Counties;	
3560 Jackson, MS	
MS Hinds; MS Rankin.	30.3
Non-SMSA Counties	32.0
MS Attala; MS Choctaw; MS Choctaw; MS Clarke; MS Copiah; MS Covington; MS Franklin; MS Holmes; MS Humphreys; MS Issaquena; MS Jasper; MS Jefferson; MS Jefferson Davis; MS Jones; MS Kemper; MS Lauderdale; MS Lawrence; MS Leake; MS Lincoln; MS Lowndes; MS Madison; MS Neshoba; MS Newton; MS Noxubee.- MS Oktibbeha; MS Scott; MS Sharkey; MS Simpson; MS Smith; MS Warren; MS Wayne; MS Winston; MS Yazoo.	
North Carolina:	
024 Rocky Mount - Wilson - Greenville NC:	
Non-SMSA Counties	31.7
NC Beaufort; NC Carteret; NC Craven.- NC Dare; NC Edgecombe; NC Greene; NC Halifax; NC Hyde; NC Jones; NC Lenoir, NC Martin; NC Nash; NC Northampton; NC Pamlico; NC Pitt; NC Tyrrell; NC Washington; NC Wayne; NC Wilson	
025 Wilmington, NC:	
SMSA Counties:	
9200 Wilmington, NC	
NC Brunswick; NC New Hanover.	20.7
Non-SMSA counties	23.5
NC Columbus; NC Duplin; NC Onslow; NC Pender.	
026 Fayetteville, NC:	
SMSA Counties:	
2560 Fayetteville, NC	
NC Cumberland.	26.2
Non-SMSA Counties	33.5
NC Bladen; NC Hoke; NC Richmond; NC Robeson; NC Sampson; NC Scotland.	
027 Raleigh - Durham, NC.	
SMSA Counties:	
6640 Raleigh - Durham	
NC Durham; NC Orange; NC Wake.	22.8
Non-SMSA Counties	24.7
NC Chatham; NC Franklin; NC Granville; NC Harnett; NC Johnston; NC Lee; NC Person; NC Vance; NC Warren.	
028 Greensboro - Winston Salem - High Point, NC:	
SMSA Counties:	
1300 Burlington, NC	
NC Alamance.	16.2
3120 Greensboro - Winston Salem - High Point NC	
NC Davidson; NC Forsyth; NC Guilford.- NC Randolph; NC Stokes; NC Yadkin.	16.4
Non-SMSA Counties	15.5
NC Alleghany; NC Ashe; NC Caswell; NC Davie; NC Montgomery; NC Moore; NC Rockingham; NC Surry; NC Watauga; NC Wilkes.	
029 Charlotte, NC:	
SMSA Counties:	
1520 Charlotte - Gastonia, NC	
NC Gaston; NC Mecklenburg; NC Union.	18.5
Non-SMSA Counties	15.7
NC Alexander; NC Anson; NC Burke; NC Cabarrus; NC Caldwell; NC Catawba;	

NC Cleveland; NC Iredell; NC Lincoln; NC Rowan; NC Rutherford; NC Stanley; SC Chester; SC Lancaster SC York.		
030 Asheville, NC		
Non-SMSA Counties:		
0480 Asheville, NC		
NC Buncombe; NC Madison.		8.5
Non-SMSA Counties		
NC Avery,- NC Cherokee; NC Clay; NC Graham; HC Heywood, NC Henderson; NC Jackson; NC McDowell; NC Macon; NC Mitchell; NC Swain; NC Transylvania; NC Yancey.		6.3
South Carolina:		
031 Greenville -Spartanburg, SC:		
SMSA Counties:		
316b Greenville -Spartanburg, SC		
SC Greenville; SC Pickens; SC Spartanburg.		16.0
Non-SMSA Counties		
SC Polk; SC Abbeville; SC Anderson; SC Cherokee', SC Greenwood; SC Laurens; SC Oconee; SC Union.		17.8
032 Columbia, SC		
SMSA Counties:		
1760 Columbia, SC		
SC Lexington; SC Richland.		23.4
Non-SMSA Counties		
SC Calhoun SC Clarendon; SC Fairfield; SC Kershaw; SC Lee; SC Newberry; SC Orangeburg; SC Saluda; SC Sumter		32.0
033 Florence, SC		
Non-SMSA Counties		
SC Chesterfield; SC Darlington; SC Dillon; SC Florence; SC Georgetown; SC Horry; SC Marion; SC Marlboro; SC Williamsburg.		33.0
034 Charleston - North Charleston, SC		
SMSA Counties		
1440 Charleston - North Charleston, SC		
SC Berkeley; SC Charleston; SC Dorchester.		30.0
Non-SMSA Counties		
SC Collection		30.7
Tennessee:		
051 Chattanooga, TN:		
SMSA Counties		
1560 Chattanooga, TN - GA		
GA Catoosa; GA Dade; GA Walker; TN Hamilton; TN Marion; TN Sequatchie.		12.6
Non-SMSA Counties		
AL De Kalb; AL Jackson; GA Chattooga; GA Murray; GA Whitfield; TN Bledsoe; TN Bradley; TN Grundy; TN McMinn; TN Meigs; TN Monroe; TN Polk; TN Rhea.		8.6
052 Johnson City - Kingsport - Bristol, TN-VA:		
SMSA Counties:		
3660 Johnson City - Kingsport - Bristol, TN - VA		
TN Carter; TN Hawkins- TN Sullivan; TN Unicoi; TN Washington; VA Scott; VA Washington; VA Bristol.		2.6
Non-SMSA Counties		
TN Greene; TN Hancock; TN Johnson; VA Buchanan; VA Dickenson; VA Lee; VA Russell; VA Smyth; VA Tazewell; VA Wise; VA Norton; WV McDowell, WV Mercer.		3.2
053 Knoxville, TN		
SMSA Counties:		
3840 Knoxville, TN		
TN Anderson; TN Blount; TN Knox; TN Union.		6.6
Non-SMSA Counties		
KY Bell; KY Harlan; KY Knox; KY Laurel; KY McCreary; KY Wayne; KY Whitley; TN Campbell; TN Claiborne; TN Cocke; TN Cumberland; TN Fentress; TN Grainger,		4.5

TN Hamblen; TN Jefferson; TN Loudon; TN Morgan; TN Roane; TN Scott; TN Sevier.	
054 Nashville, TN:	
SMSA Counties:	
1660 Clarksville - Hopkinsville, TN - KY KY Christian; TN Montgomery.	18.2
5360 Nashville - Davidson, TN TN Cheatham, TN Davidson; TN Dickson; TN Robertson; TN Rutherford; TN Sumner; TN Williamson; TN Wilson.	15.8
Non-SMSA Counties	12.0
KY Allen; KY Baren; KY Butler; KY Clinton; KY Cumberland; KY Edmonson; KY Logan; KY Metcalfe; KY Monroe; KY Simpson; KY Todd; KY Trigg; KY Warren; TN Bedford; TN Cannon; TN Clay; TN Coffee; TN DeKalb; TN Franklin; TN Giles; TN Hickman; TN Houston; TN Humphreys; TN Jackson; TN Lawrence; TN Lewis; TN Macon; TN Marshall; TN Maury; TN Moore; TN Overton; TN Perry; TN Pickett; TN Putnam; TN Smith; TN Stewart; TN Trousdale; TN Van Buren; TN Warren; TN Wayne; TN White.	
055 Memphis, TN:	
SMSA Counties:	
4920 Memphis, TN-AR-MS AR Crittenden; MS Do Soto; TN Shelby; TN Tipton.	32.3
Non-SMSA Counties	26.5
AR Clay; AR Craighead; AR Cross; AR Greene; AR Lawrence; AR Lee; AR Mississippi; AR Phillips-AR. Poinsett; AR Randolph; AR St. Francis; MS Alcorn, MS Benton; MS Bolivar; MS Calhoun; MS Carroll; MS Chickasaw, MS Clay; MS Coahoma; MS Grenada; MS Itawamba; MS Lafayette; MS Lee; MS Leflore; MS Marshall; MS Monroe; MS Montgomery; MS Panola; MS Pontotoc; MS Prentiss; MS Quitman; MS Sunflower; MS Tallahatchie; MS Tate; MS Tippah; MS Tishomingo; MS Union; MS Washington; MS Webster. MS Yalobusha; MO Dunkin; MO New Madrid; MO Pemiscot; TN Benton; TN Carroll; TN Chester; TN Crockett; TN Decatur; TN Dyer; TN Fayette; TN Gibson; TN Hardeman; TN Hardin; TN Haywood; TN Henderson- TN Henry; TN Lake; TN Lauderdale; TN McNairy; TN Madison; TN Obion; TN Weakley.	

**CHECK LIST OF EEO DOCUMENTATION FOR BIDDERS
ON EPA ASSISTED CONSTRUCTION
(Required by Executive Order 11246 as amended)**

The low, responsive responsible bidder must forward the following items, in duplicate, to the owner (grantee) no later than ten (10) days after bid opening. The owner (grantee) shall have one (1) copy available for inspection by the Office of Federal Contracts Compliance within 14 days after the bid opening. The web site for the OFCC is <http://www.dol.gov/esa/ofcc/org.htm>.

1. EPA Project Number. Project Location. Type of Construction.
2. Proof of registration with the Joint Reporting Commission. (See Attachment Number 8.)
3. Copy of Affirmative Action Plan of contractor. Indicate company official responsible for EEO.
4. List of current construction contracts, with dollar amount. List contracting Federal Agency, if applicable.
5. Statistics concerning company percent workforce, permanent and temporary, by sex, race, trade, handicapped, and age. 40 CFR Part 7.
6. List of employment sources for project in question. If union sources are utilized, indicate percentage of minority membership within the union crafts.
7. Anticipated employment needs for this project, by sex, race and trade, with estimate of minority participation in specific trades.
8. List of subcontractors (name, address and telephone) with dollar amount and duration of subcontract. Subcontractor contracts over \$10,000 must submit items 1- 8.
9. List of any subcontract work yet to be committed with estimate of dollar amount and duration of contract.
10. Contract Price. Duration of prime contract.
11. DBE Documents - See special instructions regarding use of Minority, and Women Owned, and Small Businesses.

Employer Information Report EEO-1

Under the direction of the US Equal Employment Opportunity Commission, the Joint Reporting Committee is responsible for the full-length, multi-phase processing of employment statistics collected on the Employer Information Report EEO-1. This report, also termed Standard Form 100, details the sex and race/ethnic composition of an employer's work force by job category.

The Employer Information EEO-1 survey is conducted annually under the authority of Public Law 88-352, Title VII of the Civil Rights Act of 1964, as amended by the Equal Employment Opportunity Act of 1972. All employers with 15 or more employees are covered by Public Law 88-352 and are required to keep employment records as specified by Commission regulations. Based on the number of employees and federal contract activities, certain large employers are required to file an EEO-1 Report on an annual basis.

The EEO-1 Report must be filed by:

(A) All private employers who are: (1) subject to Title VII of the Civil Rights Act of 1964 (as amended by the Equal Employment Opportunity Act of 1972) with 100 or more employees EXCLUDING State and local governments, primary and secondary school systems, institutions of higher education, Indian tribes and tax-exempt private memberships clubs other than labor organizations; OR (2) subject to Title VII who have fewer than 100 employees if the company is owned or affiliated with another company, or there is centralized ownership, control or management (such as central control of personnel policies and labor relations) so that the group legally constitutes a single enterprise and the entire enterprise employs a total of 100 or more employees.

(B) All federal contractors (private employers), who: (1) are not exempt as provided for by 41 CFR 60-1.5, (2) have 50 or more employees, and (a) are prime contractors or first-tier subcontractors, and have a contract, subcontract, or purchase order amounting to \$50,000 or more; or (b) serve as depository of Government funds in any amount, or (c) is a financial institution which is issuing or paying agent for U.S. Savings Bonds and Notes.

Only those establishments located in the District of Columbia and the 50 states are required to submit the EEO-1 Report. No Reports should be filed for establishments in Puerto Rico, the Virgin Islands or other American Protectorates.

When filing for the EEO-1 Report for the first time, go to the web site at: <http://www.mimdms.com/jrc.html> and select "Filing for the first time" from the box labeled INFORMATION. File out the electronic questionnaire to enter your company into Joint Reporting Committee (JRC) system. Once you have completed the registration process, you will be contacted on how to proceed with the EEO-1 Report. If you have previously registered with the JRC, follow their instructions to update your information.

Labor Standards Provisions For Federally Assisted Construction

Labor standards provisions applicable to contracts covering federally financed and assisted construction (29 CFR 5.5, Contract Provisions and Related Matters) that apply to EPA Special Appropriations Projects grants are:

- (a)(4)(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.
- (a)(5) Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.
- (a)(6) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5 (a) (1) through (10) and such other clauses as the U.S. Environmental Protection Agency may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- (a)(7) Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
-
- (b) Contractor Work Hours and Safety Standards Act. The Administrator, EPA shall cause or require the contracting officer to insert the following clauses set forth in paragraph (b)(1),(2),(3), and (4) of this section in full in any contract subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by *Section 5.5(a) of this title. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.
- (1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any work week in which he or she is employed on such work to in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (b) (1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for unliquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b)(1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.

(3) Withholding for unpaid wages and liquidated damages. The U.S. Environmental Protection Agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally- assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b) (2) of this section.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (b)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (b)(1) through (4) of this section.

(c) In addition to the clauses contained in paragraph (b), in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in section 5.1, the Administrator of EPA shall cause or require the contracting officer to insert a clause requiring that the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly worked, deductions made, and actual wages paid. Further, the Administrator of EPA shall cause or require the contracting officer to insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the U.S. Environmental Protection Agency and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job. (Approved by the Office of Management and Budget under OMB control numbers 1215-0140 and 1215-0017.)

CERTIFICATIONS

Debarred Firms

All prime Construction Contractors shall certify that Subcontractors have not and will not be awarded to any firm that is currently on the EPA Master List of Debarred, Suspended and Voluntarily Excluded Persons in accordance with the provisions of 40 CFR 32.500(c). Debarment action is taken against a firm for noncompliance with Federal Law.

All bidders shall complete the attached certification (Attachment Number 10) in duplicate and submit both copies to the owner with the bid proposal. The owner (grantee) shall transmit one copy to EPA within 14 days after bid opening.

Anti-lobbying Certification

All prime Construction Contractors must certify (Attachment Number 11) that no appropriated funds were or will be expended for the purpose of lobbying the Executive or Legislative Branches of the Federal Government or Federal Agency concerning this contract (contract in excess of \$100,000). If the Contractor has made or agreed to make payment to influence any member of Congress in regard to award of this contract, a Disclosure Form must be completed and submitted to the owner (grantee) with the bid proposal. The owner must transmit one copy to the EPA Grants Management Office.

All prime Contractors must require all Subcontractors to submit the certification which must also be submitted to the owner (grantee).

**CERTIFICATION REGARDING DEBARMENT,
SUSPENSION AND OTHER RESPONSIBILITY MATTERS**

The prospective participant certifies to the best of its knowledge and belief that it and its principals:

- (A) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- (b) Have not within a three year period preceding this proposal been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (c) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
- (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.

I understand that a false statement on this certification may be grounds for rejection of this proposal or termination of the award. In addition, under 18 USC Sec. 1001, a false statement may result in a fine of up to \$10,000 or imprisonment for up to 5 years, or both.

Typed Name & Title of Authorized Representative

Signature of Authorized Representative

Date

I am unable to certify to the above statements. My explanation is attached.

Instructions for Certification Regarding Debarments

Under Executive Order 12549, an individual or organization debarred or excluded from participation in Federal assistance or benefit programs may not receive any assistance award under a Federal program, or a subagreement thereunder for \$25,000 or more.

Accordingly, each prospective recipient of an EPA grant, loan, or cooperative agreement and any contract or subagreement participant thereunder must complete the attached certification or provide an explanation why they cannot. For further details, see 40 CFR 32.510, Participants' responsibilities, in the attached regulation.

Where To Submit:

The prospective EPA grant, loan, or cooperative agreement recipient must return the signed certification or explanation with its application to the appropriate EPA Headquarters or Regional office, as required in the application instructions.

A prospective prime contractor must submit a completed certification or explanation to the individual or organization awarding the contract.

Each prospective subcontractor must submit a completed certification or explanation to the prime contractor for the project.

How To Obtain Forms:

EPA includes the certification form, instructions, and a copy of its implementing regulation (40 CFR Part 32) in each application kit. Applicants may reproduce these materials as needed and provide them to their prospective prime contractor, who, in turn, may reproduce and provide them to prospective subcontractors.

Additional copies/assistance may be requested from:

Compliance Branch
Grants Administration Division (PM-21 6F)
U.S. Environmental Protection Agency
401 M Street, SW
Washington, DC 20460
(Telephone: 202/475-8025)

EPA Form 5700-49 (11-88)

Revised 03/10/04

33 of 41

EPA Region 4

CERTIFICATION REGARDING LOBBYING
Certification for Contracts, Grants,
Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

TYPED NAME & TITLE OF AUTHORIZED REPRESENTATIVE

SIGNATURE OF AUTHORIZED REPRESENTATIVE DATE

___ I am unable to certify to the above statements. My explanation is attached.

UTILIZATION OF SMALL, MINORITY AND WOMEN'S BUSINESSES

The provisions of PL 102-389 and EPA's implementing regulation 40 CFR 31.36(e) require recipients of Federal assistance to award a fair share of subagreements to small, small rural, minority and women's businesses on contracts and subagreement performed under EPA Assistance Agreements.

The following procedures are to be followed for procurement under EPA Assistance Agreements.

The successful bidder must submit to the grantee within 10 days after bid opening, evidence of the positive steps taken to utilize small, minority and women's businesses. Information should include the following:

EPA Project Number. Project Location. Type of Construction.

List of current construction contracts, with dollar amount. List contracting Federal Agency, if applicable.

List of subcontractors (name, address and telephone) with dollar amount and duration of subcontract.

List of any subcontract work yet to be committed with estimate of dollar amount and duration of contract.

Contract Price. Duration of prime contract.

Such positive efforts shall include:

- (1) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
- (2) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
- (3) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority business, and women's business enterprises;
- (4) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority business, and women's business enterprises;

- (5) Using the services and assistance of the Small Business Administration, and the Minority Business Development Agency of the Department of Commerce; and
- (6) Requiring each party to a subagreement to take the affirmative steps listed in paragraphs 1 through 5 of this section.

For purposes of clarification:

- " This requirement applies to any EPA Financially assisted procurement.
- " This requirement mandates three responsibilities. Separate solicitations must be made of small, small rural, minority and women's businesses enterprises.
- " A minority business is a business, at least 51 percent of which is owned and controlled by minority group members (Black; Hispanic; Asian American; American Indian; and any other designations approved by the Office of Management and Budget that are U.S. citizens. Any specific clarification concerning the ownership and/or control issues will be provided by the EPA Regional Office.
- " A women's business is a business, at least 51 percent of which is owned and controlled by one or more women who are U.S. citizens.
- " The control determination will revolve around the minority or women owner's involvement in the day-to-day management of the business enterprise.
- " Solicitation should allow adequate time for price analysis; EPA recommends that contact be made no later than 15 days before bid opening.
- " Efforts taken to comply with this requirement must be documented in detail; maintain records of firms contacted, including any negotiation efforts to reach competitive price levels, and awards to the designated firms.
- " Any proposed changes from the approved Minority/Women/Small business participation after EEO/MBE approval shall be reported to EPA prior to initiation of the action, with the reason for the proposed deviation.
- " The EPA recommends that the grantee as well as the prime contractor utilize the services of the following agencies to find information on certified Minority/Women/Small business. Use of these services does not absolve the prime contractors from pursuing additional efforts to comply with this requirement.

Minority Business Development Service Centers These Centers are funded by the U.S. Department of Commerce to provide technical, financial and contracting assistance to minority, women's and small rural business enterprises. The locations of the Centers are

available by selecting the appropriate Minority Business Development Agency regional office from: <http://www.mbda.gov/>.

U.S. Small Business Administration Central Contractor Registration (procurement marketing and access network) at <http://www.ccr.gov/>.

U.S. Small Business Administration (SBA) Online Women's Business Center. For the Women's Business Center nearest you, go to: <http://www.onlinewbc.gov/> and select Women's Business Centers.

For additional information on listings of certified MBE/WBE contractors and subcontractors in the States of Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee, contact Rafael Santamaria in EPA Region 4 at 404 562-8312.

For the State of Alabama, MBE/WBE contacts include:

Governor's Office of Minority and Women's Business Enterprises
401 Adams Avenue, Suite 360
Montgomery, AL 36130
1-800-477-4191 334/242-2220 334/242-4203 FAX

Alabama Small Business Development Consortium
ATTN: Charles Hopson
1717 11th Avenue, Suite 419
Birmingham, AL 35294 205/934-7260 205/934-7645

U.S. Small Business Administration
<http://www.ccr.gov/>

Alabama Department of Transportation
ATTN: Chester Thomas
1409 Coliseum Boulevard, Room N-101
Montgomery, AL 36130 1-800-247-3618

U.S. Department of Commerce
Minority Business Development Agency
401 West Peachtree Street NW - Suite 1715
Atlanta, GA 30308 404/730-3300 404/730/3313 FAX
<http://www.mbda.gov>

Birmingham MBOC
City of Birmingham
710 20th Street North
Birmingham, AL 35203 **205/254-2799** **205/254-7741 FAX**
ajmayo@ci.birmingham.al.us

Birmingham Construction Industrial Authority
Michael Bell, Executive Director
David Merrida, Associate Director
3600 4th Avenue South
Birmingham, AL 35222 **205/324-6202** **205/324-6210 FAX**

REGION 4 DISADVANTAGED BUSINESS ENTERPRISE (DBE) NEGOTIATED RATES
 (Subject to change - refer to grant award for specific fair share objectives)

ALABAMA

Supplies (commodities)	2% MBE and 2.6% WBE
Services (contractual)	4% MBE and 4.9% WBE
Equipment	3.3% MBE and 3.3% WBE
Construction	3.1% MBE and 2.4% WBE

FLORIDA

SRF Construction (both SRF)	11% MBE and 3% WBE
A & E Services:	10% MBE and 15% WBE
Commodities:	7% MBE and 17% WBE
Contractual:	14% MBE and 36% WBE
Construction: (non SRF)	10% MBE and 11% WBE

GEORGIA

<u>GA DNR</u>	
Construction: (includes all SRF)	4% MBE and 4% WBE
All Other Categories:	4.75% MBE and 1% WBE

<u>GA EFA</u>	
SRF Construction: (Drinking & Clean Water Program)	4.6% MBE and 2.7% WBE

KENTUCKY

SRF Construction: (both programs)	3% MBE and 5% WBE
Equipment:	1.5% MBE and 6.4% WBE
Services:	4% MBE and 1.8% WBE
Supplies:*	2% MBE and 5% WBE

* As explained elsewhere, this goal applies to only non-State grantees in Kentucky as State recipients are already contractually committed to an exclusive supplier.

MISSISSIPPI

SRF Construction	
Drinking Water:	2.9% MBE and 0.64% WBE
Clean Water:	5.9% MBE and 1.6% WBE
Equipment:	3.7% MBE and 3.0% WBE
Commodities: (supplies)	1.1% MBE and 1.8% WBE
Contractual: (services)	1.7% MBE and 2.3% WBE

NORTH CAROLINA

SRF Construction: (both programs)	8% MBE and 5% WBE
Agriculture (only)	
Supplies:	1.5% MBE and 1.5% WBE
Services:	0% MBE and 8.8% WBE
Professional Services: (statewide)	4% MBE and 10% WBE
Goods & Services: (includes all equipment, supplies & services)	7% MBE and 9% WBE

SOUTH CAROLINA

Construction: (all SRF)	3.6% MBE and 2.4% WBE
Services:	11% MBE and 11% WBE
Equipment:	10% MBE and 10% WBE
Supplies:	9% MBE and 9% WBE
UST Services:	0% MBE and 1.44% WBE

TENNESSEE

All Categories: (includes all SRF)	7% MBE and 1% WBE
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BONDS AND INSURANCE

Bonding requirements for contracts of \$100,000 or less are contained in 40 CFR 31.36(h).

Bond requirements for contracts in excess of \$100,000 are:

Bid guarantee equivalent to five percent of the bid price. The bid guarantee shall consist of a firm commitment such as a certified check or bid bond submitted with the bid;

Performance bond equal to 100 percent of the contract price, and

Payment bond equal to 100 percent of the contract price. Bonds must be obtained from companies holding Certificates of Authority as acceptable sureties, issued by the U.S. Treasury.

Insurance requirements are contained in the General Conditions of the contract. In addition to the other required insurance, the owner or the contractor, as appropriate, must acquire any flood insurance made available by the Federal Emergency Management Agency as required by 44 CFR Parts 59-79, if construction will take place in a flood hazard area identified by the Federal Emergency Management Agency. The owner's requirements on Flood Insurance are contained in the Special Conditions Section of the Contracts Documents.

OUTLAY MANAGEMENT

The contractor must provide a contract progress schedule of percentage of work in place and costs against time; and a schedule of projected payments (cumulative) for construction and for the architectural/engineering contract when the contract is awarded. The payment schedule must be submitted, in a format similar to the attached sample, to the owner for forwarding to the State when the contract is awarded, and whenever actual payments on a project vary beyond -5 percent and +10 percent from the schedule, as determined by the grantee.

Contractor will be required to review each of these contract schedules during the month of June and to submit revised schedules, as necessary, no later than July 1st of each year.

CONSTRUCTION AND OUTLAY SCHEDULE

Project No.: _____

Applicant: _____

Contract Identification: _____

Description of Contract: _____

(INSTRUCTIONS FOR USE ON REVERSE SIDE)

SCHEDULE I - CONSTRUCTION SCHEDULE

Date for Advertisement: _____

Date for Opening Bids: _____

Pre-Construction Conference Date: _____

Date of Contract Award: _____

Contract Period: _____ days Projected Contract Completion Date: _____

Total Eligible Contract Amount: _____

Work Order Date: _____

Start Construction Date: _____

Contract Completed: _____

SCHEDULE II - CUMULATIVE OUTLAY SCHEDULE (55% EPA Share) - Projection
only for quarters that remain in the fiscal year (FY) plus cumulative
annual amount for the next FY.

Cum EPA Amount thru 1st Qtr. Oct./Dec.: \$ _____

Cum EPA Amount thru 2nd Qtr. Jan./Mar.: \$ _____

Cum EPA Amount thru 3rd Qtr. Apr./June: \$ _____

Cum EPA Amount thru 4th Qtr. July/Sept.: \$ _____

Cum EPA Amount for Next Fiscal Year: \$ _____

INSTRUCTIONS

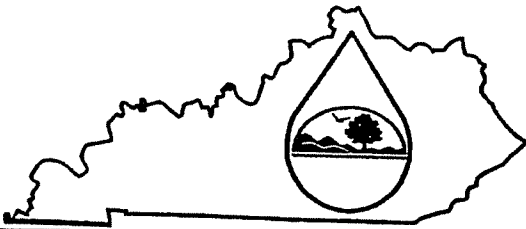
To insure timely achievement of the grant objectives the owner (grantee) must provide EPA with a grants activities schedule, contract construction schedules and corresponding payment outlay schedules for the grant and each contract under the grant. One copy of information similar to that showing the Construction and Outlay Schedule Form will be submitted for the grant schedule with the grant acceptance. A separate form will accompany each contract at time of contract award.

- A. The grant activities schedule shall depict the period from grant award through grant closeout and cover all major milestone date. The grant activities schedule shall include Schedule I information items as well as other appropriate items necessary to monitor the grant. Schedule II shall be filled out to estimate the cumulative (all construction and architectural/engineering contracts) payment schedule to be requested by the grantee from EPA during the grant period, and whenever actual outlays vary beyond -5% and +10% from the schedule.
- B. Individual contractor's construction schedules for each contract will be submitted to support the grant activities schedule. The Schedule I shall be submitted prior to date of advertisement of each contract and Schedule II along with the contractor's construction schedule shall be submitted seven (7) calendar days prior to the dates of the pre-construction conference. The contractor's construction schedule shall depict the contractor's plan for completing all contract requirements and show work placement in dollars versus contract time. Schedule II shall depict the contract payment outlay by month or quarter. The contract schedule will be coordinated with all parties at the pre-construction conference.
- C. The grants activities schedule, contractor construction schedules, will be the basis for monitoring progress towards completion of the project. The schedules shall be maintained at the available for inspection and updated at least monthly. The schedules shall be revised to incorporate approved change orders as they occur.
- D. All of the schedules will be submitted to the State Division of Water.

NOTICE OF INTENT

All construction projects with surface disturbance of more than 1 acre during the period of construction must have a KPDES Storm Water General Permit. The contractor must complete and submit the attached form at least 48 hours prior to start of construction to the address below:

Section Supervisor
Inventory and Data Management Section
KPDES Branch
Kentucky Division of Water
14 Reilly Road, Frankfort Office Park
Frankfort, Kentucky 40601



Kentucky Pollutant Discharge Elimination System (KPDES) Notice of Intent (NOI) for Storm Water Discharges Associated with Industrial Activity Under the KPDES General Permit

Submission of this Notice of Intent constitutes notice that the party identified in Section I of this form intends to be authorized by KPDES permit issued for storm water discharges associated with industrial activity. Becoming a permittee obligates such discharger to comply with the terms and conditions of the permit.

ALL NECESSARY INFORMATION MUST BE PROVIDED ON THIS FORM (See instructions on back)

I. Facility Operator Information

Form section I: Facility Operator Information. Fields include Name, Address, City, State, Zip Code, Phone, Station, and Owner/Operator.

L. Facility/ Site Location Information

Form section L: Facility/ Site Location Information. Fields include Name, Address, City, State, Zip Code, County, Site Latitude (Degrees/minutes/seconds), and Site Longitude (Degrees/minutes/seconds).

M. Site Activity Information

Form section M: Site Activity Information. Fields include KS Operator Name, Receiving Water Body, Whether existing industrial activity, SIC or Designated Activity Code, Primary, and Secondary, and this facility is member of a Group Application and a Group Application Number.

N. Additional Information Required for Construction Activities Only

Form section N: Additional Information Required for Construction Activities Only. Fields include Project Start Date, Estimated Area to be Disturbed (in acres), and Completion Date.

Certification: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and report the information submitted. Based on my inquiry of the persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Form section for Signature and Date. Fields include Printed or Typed Name and Date.

Kentucky Pollutant Discharge Elimination System (KPDES)
Instructions
Notice of Intent (NOI) for Storm Water Discharges Associated with Industrial Activity
To Be Covered Under The KPDES General Permit

WHO MUST FILE A NOTICE OF INTENT (NOI) FORM

Federal law at 40 CFR Part 122 prohibits point source discharges of stormwater associated with industrial activity to a water body of the Commonwealth of Kentucky without a Kentucky Pollutant Discharge Elimination System (KPDES) permit. The operator of an industrial activity that has such a storm water discharge must submit a NOI to obtain coverage under the KPDES Storm Water General Permit. If you have questions about whether you need a permit under the KPDES Storm Water program, or if you need information as to whether a particular program is administered by the state agency, call the Storm Water Contact, Industrial Section, Kentucky Division of Water at (502) 564-3410.

WHERE TO FILE NOI FORM

NOIs must be sent to the following address:

Section Supervisor
Inventory & Data Management Section
KPDES Branch, Division of Water
Frankfort Office Park
14 Reilly Road
Frankfort, KY 40601

COMPLETING THE FORM

Type or print legibly in the appropriate areas only. If you have any questions regarding the completion of this form call the Storm Water Contact, Industrial Section, at (502) 564-3410.

SECTION I - FACILITY OPERATOR INFORMATION

Give the legal name of the person, firm, public organization, or any other entity that operates the facility or site described in this application. The name of the operator may or may not be the same as the name of the facility. The responsible party is the legal entity that controls the facility's operation, rather than the plant or site manager. Do not use a colloquial name. Enter the complete address and telephone number of the operator.

Enter the appropriate letter to indicate the legal status of the operator of the facility.

F = Federal M = Public (other than federal or state)
S = State P = Private

SECTION II - FACILITY/SITE LOCATION INFORMATION

Enter the facility's or site's official or legal name and complete street address, including city, state, and ZIP code.

SECTION III - SITE ACTIVITY INFORMATION

If the storm water discharges to a municipal separate storm sewer system (MS4), enter the name of the operator of the MS4 (e.g., municipality name, county name) and the receiving water of the discharge from the MS4. (A MS4 is defined as a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) that is owned or operated by a state, city, town, borough, county, parish, district, association, or other public body which is designed or used for collecting or conveying storm water.)

If the facility discharges storm water directly to receiving water(s), enter the name of the receiving water.

Indicate whether or not the owner or operator of the facility has existing quantitative data that represent the characteristics and concentration of pollutants in storm water discharges. If data is available submit with this form.

List, in descending order of significance, up to four 4-digit standard industrial classification (SIC) codes that best describe the principal products or services provided at the facility or site identified in Section II of this application.

If the facility listed in Section II has participated in Part 1 of an approved storm water group application and a group number has been assigned, enter the group application number in the space provided.

If there are other KPDES permits presently issued for the facility or site listed in Section II, list the permit numbers.

SECTION IV - ADDITIONAL INFORMATION REQUIRED FOR CONSTRUCTION ACTIVITIES ONLY

Construction activities must complete Section IV in addition of Sections I through III. Only construction activities need to complete Section IV.

Enter the project start date and the estimated completion date for the entire development plan.

Provide an estimate of the total number of acres of the site on which soil will be disturbed (round to the nearest acre).

Indicate whether the storm water pollution prevention plan for the site is in compliance with approved state and/or local sediment and erosion plans, permits, or storm water management plans.

SECTION V - CERTIFICATION

Federal statutes provide for severe penalties for submitting false information on this application form. Federal regulations require this application to be signed as follows:

a corporation: by a responsible corporate officer, which means: (i) president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions, or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

a partnership or sole proprietorship: by a general partner or the proprietor; or

a municipality, state, Federal, or other public facility: by either a principal executive officer or ranking elected official.



Commonwealth of Kentucky
Environmental and Public Protection Cabinet
Department of Labor
1047 US HWY 127 S STE 4
FRANKFORT, KY 40601
(502) 564-3070

April 5, 2005

Mr. Kerry Odle
CMW, Inc.
138 North Keeneland, Suite E
Richmond, Kentucky 40475

Re: Bullock Pen Water District, Water Main Extension Ph. 8

Advertising Date as Shown on Notification: April 14, 2005

Dear Mr. Odle:

This office is in receipt of your fax dated April 5th notifying us that the above referenced project was put on hold and will be advertised for bid on April 14, 2005. The same prevailing wage determination numbered CR 1-019, dated January 24, 2003 for GRANT County is still applicable for this public works project. 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 assigned to this project is based upon the advertising date contained in your notification. There may be modifications to this wage determination prior to the advertising date indicated. In addition, if the contract is not awarded within 90 days of this advertising date or if the advertising date is modified, a different set of prevailing rates of wages may be applicable. It will be the responsibility of the public authority to contact this office and verify the correct schedule of the prevailing rates of wages for use on the project. Your project number will remain as follows: 041-H-00042-03-1, Heavy/Highway

Sincerely,

A handwritten signature in cursive script, appearing to read "Patty Lacy".

Patty Lacy
Prevailing Wage Specialist

COMMISSIONER'S CURRENT REVISION
KENTUCKY PREVAILING WAGE DETERMINATION
LOCALITY NO. 019

Determination No. CR-1-019

Project No. 041-H-00042-03-1
Type: ___ Bldg ___X___ HH

Date of Determination: January 24, 2003

This schedule of the prevailing rate of wages for Locality No. 019, which includes Grant, Owen & Scott Counties, has been determined in accordance with the provisions of KRS 337.505 to 337.550. This determination shall be referred to as Prevailing Wage Determination No. CR-1-019.

Apprentices 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, and/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. Fringe benefit amounts are applicable for all hours worked except when otherwise noted. Welders will receive rate for craft in which welding is incidental.

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.

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.


CR-1-019
January 24, 2003

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.



Guy R. Patterson, Jr., Director
Employment Standards,
Apprenticeship & Training
Kentucky Labor Cabinet

& 

Joe Norsworthy, Secretary
Kentucky Labor Cabinet
Frankfort, Kentucky 40601

CR-1-019
 January 24, 2003

CLASSIFICATIONS		RATE AND FRINGE BENEFITS	
ASBESTOS/INSULATION WORKERS:		BASE RATE	\$19.48
		FRINGE BENEFITS	5.55
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BOILERMAKERS:		BASE RATE	\$24.65
		FRINGE BENEFITS	12.94
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BRICKLAYERS:			
Bricklayers:		BASE RATE	\$20.43
		FRINGE BENEFITS	5.33
Layout & Sawmen:		BASE RATE	\$20.68
		FRINGE BENEFITS	5.33
Refractory/Acid Brick/Glass:		BASE RATE	\$20.93
		FRINGE BENEFITS	5.33
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CARPENTERS:			
Carpenters:	BUILDING	BASE RATE	\$16.52
		FRINGE BENEFITS	5.63
Piledrivermen	BUILDING	BASE RATE	\$17.02
		FRINGE BENEFITS	5.63
Carpenters:	HEAVY & HIGHWAY	BASE RATE	\$20.70
		FRINGE BENEFITS	5.68
Pildrivermen:	HEAVY & HIGHWAY	BASE RATE	\$20.95
		FRINGE BENEFITS	5.68
Divers:	HEAVY & HIGHWAY	BASE RATE	\$31.43
		FRINGE BENEFITS	5.68
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CEMENT MASONS:		BASE RATE	\$ 17.50
		FRINGE BENEFITS	4.95
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CR-1-019
January 24, 2003

CLASSIFICATIONS

RATE AND FRINGE BENEFITS

ELECTRICIANS:	BASE RATE	\$24.25
	FRINGE BENEFITS	8.24

ELEVATOR CONSTRUCTORS:	BASE RATE	\$20.13
	FRINGE BENEFITS	5.63

OWEN COUNTY:

GLAZIERS:	BASE RATE	\$18.01
	FRINGE BENEFITS	3.88

GRANT & SCOTT COUNTIES:

GLAZIERS:	BASE RATE	\$15.45
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IRONWORKERS:	BASE RATE	\$22.26
	FRINGE BENEFITS	10.65

LABORERS:

BUILDING GROUP 1:

General laborers, asbestos abatement laborer, toxic waste removal laborer, water boys, tool room checker, carpenter tenders, (civil engineer helper, rodman, grade checkers excluding all field work performed by engineering firms), concrete pouring and curing, concrete form stripping and wrecking, hand digging and backfilling of ditches, clearing of right of ways and building sites, wood sheeting and shoring, signalman for concrete bucket and general cleaning, and environmental laborer - nuclear, radiation, toxic and hazardous waste - Level D:

BUILDING	*BASE RATE	\$13.78
	FRINGE BENEFITS	5.82

BUILDING GROUP 2:

All air tool operators, air track drills, asphalt rakers, tampers, batchers plant and scale man, chain saw, concrete saw, electric hand grinder, all electric bush and chipping hammers, flagmen, forklift operators, form setter (street or highway), metal form setters, heaters, mesh handlers on walkways, streets and roadways outside building, gunnite laborers, hand spiker,

CLASSIFICATIONS

RATE AND FRINGE BENEFITS

LABORERS: (Continued)

introflax burning rod, joint makers, mason tenders, multi-trade tender, pipe layers, plaster tenders, powderman helpers, power driven Georgia buggies, power posthole diggers, railroad laborers, sandblaster laborers, scow man and deck hand, signal man, sweeper and cleaner machines, vibrator operators, walk behind trenching machines, mortar mixer machines, water pumpmen, and environmental laborers - nuclear, radiation, toxic and hazardous waste - Level C:

BUILDING	*BASE RATE	\$14.18
	FRINGE BENEFITS	5.82

BUILDING GROUP 3:

Gunnite nozzleman and gunnite nozzle machine operator, sand blaster nozzleman, concrete or grout pumpman, plaster pumpman:

BUILDING	*BASE RATE	\$14.38
	FRINGE BENEFITS	5.82

BUILDING GROUP 4:

Powderman and blaster, and environmental laborer - nuclear, radiation, toxic and hazardous waste - Level B:

BUILDING	*BASE RATE	\$14.48
	FRINGE BENEFITS	5.82

BUILDING GROUP 5:

Caisson holes (6 ft. and over) pressure and free air including tools, construction specialist, and environmental laborer-nuclear, radiation, toxic and hazardous waste - Level A:

BUILDING	*BASE RATE	\$14.98
	FRINGE BENEFITS	5.82

BUILDING GROUP 6:

Tunnel man and tunnel sand miner, cofferdam (pressure and free air), sand hog or mucker (pressure or free air):

BUILDING	*BASE RATE	\$15.28
	FRINGE BENEFITS	5.82

LABORERS ON BUILDING: *Employees handling chemically treated materials which are harmful to the skin shall receive an additional \$.25 above base rate. Any employee working on high work such as towers or smoke stacks or any type of work putting the employee 50 feet above the ground or a solid floor shall receive an additional \$.50 per hour above the base rate. Any employee working on boilers, kilns, melting tanks, furnaces, or when refractory is done using live fire, drying fires, heatups or any hot work shall receive an additional 25% premium above the base rate.

CLASSIFICATIONS

RATE AND FRINGE BENEFITS

LABORERS: (Continued)

HEAVY HIGHWAY GROUP 1:

Asphalt Laborer; Carpenter Tender; Concrete Curing applicator; Dump Man (Batch Truck); Guardrail and Fence Installer; Joint Setter; Laborer (Construction); Landscape Laborer; Mesh Handlers & Placer; Right-of way Laborer; Riprap Laborer & Grouter; Scaffold Erector; Seal Coating; Surface Treatment or Road Mix Laborer; Sign Installer; Slurry Seal; Utility Man; Bridge Man; Handyman; Waterproofing Laborer; Flagperson; Hazardous Waste (Level D); Diver Tender; Zone Person & Traffic Control:

HEAVY & HIGHWAY	*BASE RATE	\$21.32
	FRINGE BENEFITS	4.40

HEAVY HIGHWAY GROUP 2:

Skid Steer; Asphalt Raker; Concrete Puddler; Kettle Man (Pipeline); Machine Driven Tools (Gas, Electric, Air); Mason Tender; Brick Paver; Mortar Mixer; Power Buggy or Power Wheelbarrow; Sheeting & Shoring Man; Surface Grinder Man; Plastic Fusing Machine Operator; Pug Mill Operator; & Vacuum Devices (wet or dry); Rodding Machine Operator; Diver; Screwman or Paver; Screed Person; Water Blast, Hand Held Wand; Pumps 4" & Under (Gas, Air or Electric) & Hazardous Waste (Level C); Air Track and Wagon Drill; Bottom Person; Cofferdam (below 25 ft. deep); Hand Held or Walk Behind Concrete Saw Person; Cutting with Burning Torch; Form Setter; Hand Spiker (Railroad); Pipelayer; Tunnel Laborer (without air) & Caisson; Underground Person (working in Sewer & Waterline, Cleaning, Repairing & Reconditioning); Sandblaster Nozzle Person; & Hazardous Waste (Level B):

HEAVY & HIGHWAY	*BASE RATE	\$21.49
	FRINGE BENEFITS	4.40

HEAVY HIGHWAY GROUP 3:

Blaster; Mucker; Powder Person; Top Lander; Wrencher (Mechanical Joints & Utility Pipeline); Yarner; Hazardous Waste (Level A); Concrete Crew in Tunnels (With air-pressurized - \$1.00 premium); Curb Setter & Cutter; Grade Checker; Utility Pipeline Tapper; Waterline; and Caulker:

HEAVY & HIGHWAY	*BASE RATE	\$21.82
	FRINGE BENEFITS	4.40

HEAVY HIGHWAY GROUP 4:

Miner (With Air-pressurized - \$1.00 premium); & Gunnite Nozzle Person:

HEAVY & HIGHWAY	*BASE RATE	\$22.27
	FRINGE BENEFITS	4.40

***Signal Person will receive the rate equal to the rate paid the laborer classification for which he or she is signaling.**

CLASSIFICATIONS

RATE AND FRINGE BENEFITS

MARBLE, TILE & TERRAZZO:

Finishers:	BASE RATE	\$13.34
	FRINGE BENEFITS	3.05
Workers:	BASE RATE	\$19.59
	FRINGE BENEFITS	3.70

MILLWRIGHTS:	BASE RATE	\$19.34
	FRINGE BENEFITS	8.58

OPERATING ENGINEERS:

BUILDING CLASS A:

Auto Patrol, Batch Plant, Bituminous Paver, Cableway, Central Compressor Plant, Clamshell, Concrete Mixer (21 cu. ft. or over), Concrete Pump, Crane, Crusher Plant, Derrick, Derrick Boat, Ditching and Trenching Machine, Dragline, Dredge Operator, Dredge Engineer, Elevating Grader and all types of Loaders, Forklift (regardless of lift height), Hoe-Type Machine, Hoist (1 drum when used for stack or chimney construction or repair), Hoisting Engine (2 or more drums), Locomotive, Motor Scraper, Carry-all Scoop, Bulldozer, Heavy Duty Welder, Mechanic, Orangepeel Bucket, Piledriver, Power Blade, Motor Grader, Roller (bituminous), Scarifier, Shovel, Tractor Shovel, Truck Crane, Winch Truck, Push Dozer, Highlift, All types of Boom Cats, Core Drill, Hopto, Tow or Push Boat, A-Frame Winch Truck, Concrete Paver, Gradeall, Hoist, Hyster, Pumpcrete, Ross Carrier, Boom, Tail Boom, Rotary Drill, Hydro Hammer, Mucking Machine, Rock Spreader attached to equipment, Scoopmobile, KeCal Loader, Tower Cranes (French, German and other types), Hydrocrane, Backfiller, Gurries, Sub-Grader, Tunnel Mining Machines including Moles, Shields, or similar types of Tunnel Mining Equipment:

BUILDING	*BASE RATE	\$19.95
	FRINGE BENEFITS	8.40

***Operators on cranes with boom one-hundred fifty feet (150') and over including jib, shall receive seventy-five cents (\$.75) above base rate. All cranes with piling leads will receive \$.50 above base rate regardless of boom length**

BUILDING CLASS B:

All Air Compressors (over 900 cfm), Bituminous Mixer, Joint Sealing Machine, Concrete Mixer (under 21 cu. ft), Form Grader, Roller (rock), tractor (50 HP and over), Bull Float, Finish Machine, Outboard Motor Boat, Flexplane, Fireman, Boom Type Tamping Machine, Greaser on Grease Facilities servicing Heavy Equipment, Switchman or brakeman, Mechanic Helper, Whirley Oiler, Self-Propelled Compactor, Tractair and Road Widening Trencher and Farm Tractor with Attachments (except backhoe, highlift and endloader), Elevator (regardless of ownership when used for hoisting any building materials), Hoisting Engineer (1 drum or buck

CLASSIFICATIONS RATE AND FRINGE BENEFITS
OPERATING ENGINEERS: (Continued)

hoist), Forklift (when used for masonry construction, Firebrick Masonry Excluded), Well Points, Grout Pump, Throttle-Valve Man, Tugger, Electric Vibrator Compactor and Caisson Drill Helper:

BUILDING	BASE RATE	\$17.21
	FRINGE BENEFITS	8.40

BUILDING CLASS C:

Bituminous Distributor, Cement Gun, Conveyor, Mud Jack, Paving Joint Machine, Roller (earth), Tamping Machine, Tractors (under 50 HP), Vibrator, Oiler, Concrete Saw, Burlap and Curing Machine, Truck Crane Oiler, Hydro-Seeder, Power Form handling Equipment, Deckhand Steersman, Hydraulic Post Driver and Drill Helper:

BUILDING	BASE RATE	\$16.44
	FRINGE BENEFITS	8.40

HEAVY HIGHWAY OPERATING ENGINEERS:

Master Mechanic:	HEAVY & HIGHWAY	BASE RATE	\$25.59
		FRINGE BENEFITS	7.10

CLASS A:

Air Compressor on Steel Erection; Barrier Moving Machine; Boiler Operator on Compressor or Generator when mounted on a Rig; Cableway; Combination Concrete Mixer & Tower; Concrete Plant (over 4 yd. Cap.); Concrete Pump; Crane (Including Boom Truck, Cherry Picker); Derrick; Dragline; Dredge (Dipper, Clam or Suction); Elevating Grader or Euclid Loader; Floating Equipment; Gradeall; Helicopter Crew (Operator- Hoist or Winch); Hoe; Hoisting Engine on Shaft or Tunnel Work; Horizontal Directional Drill(over 500,000 ft. lbs. thrust) Industrial-Type Tractor; Jet Engine Dryer (D8 or D9) Diesel Tractor; Locomotive (Standard Gauge); Maintenance Operator Class A; Mixer, Paving (Single or Double Drum); Mucking Machine; Multiple Scraper; Piledriving Machine; Power Shovel; Prentice Loader; Quad 9 (Double Pusher); Refrigerating Machine (Freezer Operation); Side-Boom; Slip-Form Paver; Tower Derrick; Tree Shredder; Trench Machine (Over 24" wide); Truck Mounted Concrete Pump; Tug Boat; Tunnel Machine and/or Mining Machine; Wheel Excavator; Hydraulic Gantry (Lifting System); Rail Tamper (w/Auto Lifting & Alignment Device); Rough Terrain Fork Lift with Winch/Hoist:

HEAVY & HIGHWAY	BASE RATE	\$25.34
	FRINGE BENEFITS	7.10

CLASSIFICATIONS RATE AND FRINGE BENEFITS
OPERATING ENGINEERS (continued)

CLASS B:

Asphalt Paver; Automatic Subgrader Machine, Self-Propelled (CMI Type); Bobcat Type and/or Skid Steer Loader with Hoe Attachment Greater than 7,000 lbs.; Boring Machine More than 48"; Bulldozer; Endloader; Kolman-type Loader (production type-Dirt); Lead Greaseman; Power Grader; Power Scraper; Push Cat; Trench Machine (24" wide & under); Concrete Grinder/Planer; Pettibone-Rail Equipment; Vermeer type Concrete Saw; Hydro Milling Machine; Lighting & Traffic Signal Installation Equipment; Material Transfer Equipment (shuttle buggy) Asphalt:

HEAVY & HIGHWAY	BASE RATE	\$25.22
	FRINGE BENEFITS	7.10

CLASS C:

A-Frame; Air Compressor on Tunnel Work (low pressure); Asphalt Plant Engineer; Locomotive (narrow gauge); Mixer, Concrete (more than one bag cap.); Mixer, one bag cap. (Side Loader); Power Boiler, 15 lb. Pressure & Over; Pump Operator installing & operating Well Points; Pump (4" & over discharge); Roller - Asphalt; Utility Operator (Small equipment); Welding Machine; Bobcat Type and/or Skid Steer Loader; Switch and Tie Tamper (w/o Lifting & Aligning Device); Highway Drills; Railroad Tie Inserter/Remover; & Rotovator (Lime-Soil Stabilizer):

HEAVY & HIGHWAY	BASE RATE	\$24.18
	FRINGE BENEFITS	7.10

CLASS D:

Backfiller; Bar & Joint Installing Machine; Batch Plant; Boring Machine Operator (48" or less); Bull Floats; Burlap & Curing Machine; Concrete Plant (capacity 4 yd. & under); Concrete Saw (Multiple); Conveyor (Highway); Crusher; Deckhand; Farm-type Tractor with attachments (highway, except Masonry); Finishing Machine; Fireperson, Floating Equipment; Fork Lift (highway); Form Trencher; Hydro Hammer; Hydro Seeder; Pavement Breaker; Plant Mixer; Post Driver; Post Hole Digger (Power Auger); Road Widening Trencher; Roller (Brick, Grade & Macadam); Self-Propelled Power Spreader; Self-Propelled Subgrader; Steam Fireperson; Tractor (Pulling Sheepfoot, Roller or Grader); Power Brush Burner; Power Form Handling Equipment; Vibratory Compactor with Integral Power; & Ballast Re-Locator:

HEAVY & HIGHWAY	BASE RATE	\$23.00
	FRINGE BENEFITS	7.10

CLASS E:

Compressor (Portable, Sewer, Heavy & Highway); Drum Fireperson (In Asphalt Plant); Generator; Masonry Fork Lift; Inboard-Outboard Motor Boat - Launch; Power Scrubber; Power Sweeper; Oil Heater (Asphalt Plant); Oiler; Power Driven Heater; Pump (under 4" discharge); Tire Repairperson; VAC/ALLS & Signalperson:

HEAVY & HIGHWAY	BASE RATE	\$17.84
	FRINGE BENEFITS	7.10

CR-1-019
January 24, 2003

CLASSIFICATIONS

RATE AND FRINGE BENEFITS

PAINTERS:

Painters:	BUILDING	BASE RATE	\$14.70
		FRINGE BENEFITS	3.06

Brush & Roller:	HEAVY & HIGHWAY	BASE RATE	\$18.20
		FRINGE BENEFITS	5.08

Drywall Finishers & Plasterers:	HEAVY & HIGHWAY	BASE RATE	\$18.45
		FRINGE BENEFITS	5.08

Spray, Sandblast, Power Tools, Waterblast, Steam Cleaning; Brush & Roller of Mastics, Creosotes, Kwinch Koate and Coal Tar Epoxy:

	HEAVY & HIGHWAY	BASE RATE	\$19.20
		FRINGE BENEFITS	5.08

Spray of Mastics, Creosotes, Kwinch Koate and Coal Tar Epoxy:

	HEAVY & HIGHWAY	BASE RATE	\$20.20
		FRINGE BENEFITS	5.08

PLUMBERS & PIPEFITTERS:		BASE RATE	\$22.30
		FRINGE BENEFITS	7.72

ROOFERS:		BASE RATE	\$17.50
		FRINGE BENEFITS	5.35

SHEETMETAL WORKERS:		BASE RATE	\$24.17
		FRINGE BENEFITS	9.20

SPRINKLER FITTERS:		BASE RATE	\$24.80
		FRINGE BENEFITS	8.50

CLASSIFICATIONS RATE AND FRINGE BENEFITS

BUILDING TRUCK DRIVERS:

Truck Helper and Warehouseman:

BUILDING	BASE RATE	\$15.60
	*FRINGE BENEFITS	6.23

Driver - 3 tons and under, Greaser, Tire Changer and Mechanic Helper:

BUILDING	BASE RATE	\$15.72
	*FRINGE BENEFITS	6.23

Driver - over 3 tons, Drivers, Semi-Trailer or Pole Trailer; Dump Trucks, Tandem Axle; Farm Tractor when used to pull building material or equipment:

BUILDING	BASE RATE	\$15.83
	*FRINGE BENEFITS	6.23

Drivers, Concrete Mixer Trucks (all types, hauling on job sites only); Truck Mechanics:

BUILDING	BASE RATE	\$15.90
	*FRINGE BENEFITS	6.23

Drivers, Euclid and other Heavy Earth Moving Equipment and Low Boy, Winch Truck and A-Frame Truck and Monorail Truck when used to transport building materials, Forklift Truck when used inside warehouse or storage area:

BUILDING	BASE RATE	\$16.00
	*FRINGE BENEFITS	6.23

Truck Drivers performing work on or hauling from a hazardous or toxic waste site, add \$4.00 to base.

*TRUCK DRIVER Fringe benefits - Apply to each employee (whose name appears on the payroll that week) who has been employed a minimum of twenty (20) work days within any ninety (90) consecutive day period for that employer.

HEAVY HIGHWAY TRUCK DRIVERS:

Four-wheel service trucks, four-wheel dump trucks, Batch Trucks, Oil Distributors, Asphalt Distributors:

HEAVY & HIGHWAY	BASE RATE	\$19.34
	FRINGE BENEFITS	7.02

Tandems:

HEAVY & HIGHWAY	BASE RATE	\$19.39
	FRINGE BENEFITS	7.02

CLASSIFICATIONS RATE AND FRINGE BENEFITS
TRUCK DRIVERS (Continued):

Tractor-Trailer; including semi-tractors, pole-trailers, ready-mix trucks; fuel trucks, asphalt-oil spraybar men (see also next line):

HEAVY & HIGHWAY	BASE RATE	\$19.44
	FRINGE BENEFITS	7.02

Asphalt-Oil spraybar men when operated from cab, Five-Axle trucks & over:

HEAVY & HIGHWAY	BASE RATE	\$19.54
	FRINGE BENEFITS	7.02

Belly Dumps, End Dumps, Articulated Dumps, Low-boys & Heavy Duty Equipment, Truck Mechanics:

HEAVY & HIGHWAY	BASE RATE	\$19.81
	FRINGE BENEFITS	7.02

WATER MAIN EXTENSION - PHASE 8

**GRANT COUNTY
BULLOCK PEN WATER DISTRICT**

DIVISION 1 - GENERAL REQUIREMENTS

SECTION 01010 - SPECIAL CONDITIONS

1. **RELATED DOCUMENTS**

General Provisions of Contract, General and Supplementary Conditions apply to this section.

2. **DESCRIPTION OF WORK**

Provide labor, materials, equipment and services necessary for proper and complete construction of this contract for Bullock Pen Water District.

3. **CONTRACTOR'S QUALIFICATIONS**

At the request of the Owner, each bidder shall submit, in writing, the following information:

- A. Name and address of principal owner of contracting company.
- B. Net worth statement.
- C. A list of all similar work performed within the past five (5) years with name and address of Engineer on each project.

4. **CONTRACTOR'S SUPERINTENDENT**

Contractor shall keep on his work, at all times during its progress, a competent superintendent satisfactory to Engineer. The Superintendent shall not be changed, except with consent of Engineer, unless he proves to be unsatisfactory to Contractor and ceases to be in his employ. Superintendent shall represent Contractor in his absence and all directives given to him shall be binding as if given to Contractor.

5. **INTENT**

The intent of these Specifications is to require a high level of quality in materials and workmanship resulting in timely completion of all Work in an orderly sequence and manner without inconvenience to the Owner, adjacent property owners or the public.

6. **WORK REASONABLY INFERRED BUT NOT PARTICULARLY DELINEATED OR SPECIFIED**

A. Contractor shall make a thorough examination of site and study all drawings and specifications and all conditions relating to work, and if any materials or labor are evidently necessary for proper and complete execution of work which are not specifically mentioned and included in drawings and specifications, although reasonably inferred therefrom, unless eliminated by special mention, or if any error or inconsistency appears therein, or in the event of any doubts arising as to the true intent and meaning of drawings or specifications, he shall report it to Engineer at least five (5) days in advance of date set for receiving bids. If appropriate, Engineer will then issue an addendum containing the proper information to all Contractors not later than three (3) days prior to the date set for opening of bids.

B. If Contractor fails to make such report and Engineer is not otherwise advised of such doubtful matters, Contractor is hereby made responsible for furnishing all necessary labor and material reasonably inferred for any additional work involved in correction of apparent errors or inconsistencies and in executing the true intent and meaning of drawings and specifications as interrupted by Engineer, and all such labor and material shall be provided at Contractor's expense and under no circumstances will any such labor and material be allowed as extra cost.

7. QUALITY OF MATERIALS, EQUIPMENT AND WORKMANSHIP

A. Unless otherwise specified, all materials shall be new and both workmanship and materials shall be of good quality. Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

B. Approval of manufacturer's shop drawings of materials and equipment shall not mean final acceptance, but they shall be subject to inspection and test on delivery and installation. Contractor shall repair, replace, or adjust any materials or equipment found defective or not operating properly due to improper materials, workmanship, and adjustment for a period of one year after completion and acceptance of work.

C. Contractor shall at all times enforce strict discipline and good order among his employees, and shall not employ anyone not skilled in the work assigned to him.

8. TRADE NAMES

Whenever manufactured products, devices or materials are specified under a particular trade name or name of manufacturer, it shall be understood that the specifications are open to other manufacturers whether or not the clause "or approved equal" is included. Other products comparable in type, quality, utility and price are acceptable if approved by Engineer and Owner. The burden of proof of equality shall rest with Contractor. Owner shall be the sole judge of equality and reserves the right to require the product or material specified by name and furnished at no increase in contract amount.

9. MANUFACTURER'S EQUIPMENT - SHOP DRAWINGS

A. Various items of equipment indicated on Drawings have been indicated schematically only; actual details of each item of equipment shall be verified in shop drawings submitted to Engineer for approval. Data shown on shop drawings shall be complete with respect to dimensions, design criteria, materials of construction, wiring diagrams and component parts, and all details to enable Engineer to review the information as required. At the time of submission, the manufacturer shall in writing, call Engineer's attention to any deviations that shop drawings may have from requirements of Engineer's specifications, or deviation in dimension or equipment weight which might affect structural design or stability. Engineer's approval of shop drawings shall not relieve Contractor from responsibility for compliance with requirements of specifications. Engineer shall not be held responsible for omission or deletion of any components of manufacturer's equipment. Equipment manufacturer shall be responsible for all components of equipment and shall guarantee that equipment will perform and operate satisfactorily in accordance with requirements set forth in these specifications.

B. Contractor shall furnish six (6) copies of all shop drawings to Engineer for review. No equipment or materials shall be ordered prior to Engineer's written approval of shop drawings.

10. EXISTING UTILITIES

A. Before proceeding with work, Contractor shall verify location of, and possible interference with, existing utilities, arrange for necessary suspension of service, and make arrangements to locate and avoid interference with all utilities.

B. Contractor shall protect all utility lines which are to remain in service.

C. Special precautions shall be taken by Contractor to avoid damage to existing overhead and underground utilities owned and operated by Owner or by public or private utility companies.

D. With particular respect to existing underground utilities, the available information concerning their location has been indicated on Drawings. While it is believed that the locations shown are reasonably correct, neither Engineer nor Owner can guarantee accuracy of adequacy of this information.

E. Before proceeding with work, Contractor shall confer with all public or private companies, agencies, or departments that own and operate utilities in vicinity of construction. The purpose of the conference, or conferences, shall be to notify said companies, agencies, or departments of proposed construction schedule, verify location of, and possible interference with, existing utilities that are indicated on Drawings, arrange for necessary suspension of service, and make arrangements to locate and avoid interference with all utilities (including house connections) that are not indicated on Drawings. Engineer and Owner have no objection to Contractor arranging for said utility companies, agencies, or departments to locate and uncover their own utilities; however, Contractor shall bear entire responsibility for and cost of locating and avoiding or repairing damage to any and all existing utilities.

F. Contractor shall be diligent in his efforts and use every possible means to locate existing utilities. Any claims for unavoidable damage, based on improper or unknown locations, will be thoroughly examined in light of Contractor's efforts to locate said utilities or obstructions prior to beginning construction.

G. For General Utility Information call:

B.U.D. (Before You Dig)
1-800-752-6007

11. DAMAGE TO EXISTING UTILITIES

A. Contractor shall be responsible for any and all damage done to existing utilities.

B. Damage done to existing utilities shall be repaired promptly, to satisfaction of utility company, at no cost to Owner.

12. PUBLIC AND PRIVATE HIGHWAYS AND STREETS

A. Contractor shall ascertain and obey all State and County road load limits in order to prevent damage to pavements resulting from his operation.

B. Public Convenience and Safety

(1) Contractor shall, at all times, conduct work in such manner as to insure minimum obstruction to public travel. Convenience of general public and of residents along and adjacent to area of work shall be provided for in a satisfactory manner, consistent with operation and local conditions and as directed by the Engineer.

(2) Flagmen shall be used at any time that work of any kind is being performed on any portion of roadway pavement, shoulder or ditch.

(3) "Construction" signs shall be placed immediately adjacent to work, in conspicuous positions at such locations as traffic demands. Signs shall conform to requirements of Manual on Uniform Traffic Control Devices (MUTCD) published by U.S. Department of Transportation, Federal Highway Administration, latest edition. The manual is for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. At any time that streets are required to be closed, Contractor shall notify law enforcement agencies, fire departments, and parties operating emergency vehicles before streets are closed and again as soon as it is reopened. Access to fire hydrants and other fire extinguishing equipment shall be provided and maintained at all times.

(4) Trenches shall be backfilled at end of each day's work as directed by Engineer. Trenches left open shall be adequately protected with suitable flashing barricades, in compliance with MUTCD and as approved by Engineer. All trenches are required to be backfilled at end of work week. No trenches shall remain open over a weekend. Contractor shall place and maintain DGA or crush stone on streets and in trenches in construction area when directed by Engineer to maintain roads in safe and traversable condition. Placement of DGA or crush stone and maintenance of traffic in construction area is considered incidental to construction and will not be paid for separately.

(5) At anytime when excavated material is placed on a paved road, the road shall be cleaned at the end of the day with a power broom and at times as directed by the Engineer.

(6) When excavated material is placed or stockpiled on gravel roads, the contractor shall place crushed stone in these areas to the thickness as approved by the Engineer. The road shall have as much or more gravel or crushed stone as prior to construction as determined by Engineer.

13. WORK ON PRIVATE PROPERTY

A. In connection with work performed on "private property" (property other than public rights-of-way), Contractor shall confine equipment, storage of materials, and operation of his workmen to limits indicated on plans, or to lands and rights-of-way provided for the project by Owner, and shall take every precaution to avoid damage to private property owners' buildings, grounds and facilities.

B. Fences, hedges, shrubs, etc. within construction limits, shall be carefully removed, preserved, and replaced after construction on the private property is completed. Private property owners' facilities, and grounds, shall be restored to as good or better condition than found, as quickly as possible, at Contractor's expense.

C. Reasonable care shall be taken during construction to avoid damage to vegetation. Ornamental shrubbery and tree branches shall be temporarily tied back, where appropriate, to minimize damage. Trees that receive damage to branches shall be trimmed of those branches to improve the appearance of the tree. Tree trunks receiving damage from equipment shall be treated with a tree dressing.

D. Large trees or other facilities within construction limits that cannot be preserved and replaced shall be removed by Contractor with approval of Engineer, but Owner will assume responsibility for settling with property owner for loss of said trees or facilities. Such trees and facilities, however, may be indicated on Drawings. Contractor shall be solely and entirely responsible for any damage to trees or facilities whether indicated on Drawings or not.

E. Foundations, adjacent to excavations made below bottoms of the foundations, shall be supported by shoring, bracing, and underpinning as required as long as excavations remain open, and Contractor shall be responsible for any damage to foundations.

14. BLASTING

A. All blasting operations shall be conducted in strict accordance with Kentucky Revised Statutes 351.320 to 351.340 and 351.340, effective October 6, 1972, and subsequent revisions, which shall be deemed to be included in these specifications the same as though herein written out in full. Contractor shall also comply with applicable municipal ordinances, Federal safety regulations and Section 9 of the Manual of Accident Prevention in Construction published by the Associated General Contractors of America, Inc. All explosives shall be stored in conformity with said ordinances, laws and safety regulations. No blasting shall be done within any other underground utility lines, except with light charges of explosives. Any damage done by blasting is the responsibility of the Contractor and shall be promptly and satisfactorily repaired by him.

B. If directed by Engineer, all shots shall be covered with heavy timber or steel blasting mats to prevent flying material. Unless otherwise specified or directed, delay caps shall be used to reduce earth vibrations and noise.

C. All blasting shall be supervised and performed by qualified personnel.

15. CLEAN-UP

A. Clean-up shall be performed on a daily basis. All debris shall be removed from site regularly. The site shall be kept in a neat condition, ready for subsequent operations.

B. If Contractor fails to perform proper or adequate cleanup behind pipe laying operations, an additional ten (10) percent of retainage will be withheld from payment(s) due Contractor.

16. PRECONSTRUCTION CONFERENCE

A. Following signing of Contract Documents and prior to actual beginning of construction, a Pre-Construction Conference will be held. Contractor, Contractor's Superintendent, and major subcontractors, shall be present to discuss the Construction Schedule, Contractor's Plan of Operation, Engineer's authority, Resident Inspector's authority, procedures for monthly progress reviews and payments, and other relevant questions. Preconstruction conference will be scheduled by Engineer within ten (10) calendar days following date of signing of Agreement.

B. Unless otherwise instructed by Engineer, Contractor shall prepare and submit five (5) copies of his proposed Construction and Payment Schedules for review at Preconstruction Conference.

- (1) Construction Schedule shall be in a line-item/bar chart format showing anticipated starts, durations and completion of all major items, operations or disciplines or work.

17. TEMPORARY TOILETS, UTILITIES, STORAGE, ETC.

A. Contractor shall be responsible for providing suitable temporary toilets for use by all workmen.

B. Contractor shall be responsible for providing suitable sources of potable water for all operations required for completion of work.

C. Contractor shall make arrangements for on-site areas for storage of materials and equipment, etc.

D. Costs for any and all items covered under this paragraph shall be at Contractor's expense.

18. SECURITY

A. Contractor shall be responsible for protection of his materials, equipment and work during period of Contract. Damage done to construction stakes or to material, equipment, or to completed work shall be replaced or repaired to Engineer's satisfaction and at no additional cost to Owner.

B. Contractor shall be responsible for protection of adjacent public and private property affected by work performed under this Contract, and shall make all necessary and appropriate arrangements with adjacent property owners and with Engineer for such protection prior to commencing work. Damage done to adjacent property resulting from Contractor's operations, or loss suffered by owners of adjacent property, shall be repaired or otherwise compensated by Contractor to satisfaction of Engineer and the affected owner of adjacent property at no additional cost to Owner.

19. LAYING OUT WORK

Contractor will be responsible for layout of all lines and shall furnish all materials required for layout. Contractor's personnel engaged in layout work shall be capable of performing duties set out herein.

20. MEASUREMENTS

A. Contractor and each subcontractor shall be responsible for verification of all measurements at site before ordering materials or doing work. No extra charge or compensation shall be allowed due to differences between actual dimensions found in the field and dimensions indicated on Bid Form or on Drawings.

B. Contractor shall be prepared to guarantee to each of his subcontractors dimensions which he may require for layout and fitting of his work to surrounding work.

21. RECORD DOCUMENTS

Contractor shall maintain in good condition at project site one (1) set of prints of all Contract Drawings, upon which Contractor's Representative will record periodically as required the actual location and conditions of construction, if different than shown or indicated on Drawings. Approval of final payment is contingent in part, upon receipt of record drawings by Engineer.

22. PARTIAL PAYMENT SCHEDULE

A. Partial Payment Estimate forms will be furnished by Engineer at Preconstruction Conference. Contractor shall prepare monthly Payment Request Forms, as described in General Conditions.

B. Contractor shall attend monthly Progress Meetings, scheduled by Engineer, for purpose of reviewing Contractor's Request for Payment and other matters pertaining to performance of work. If directed by Engineer, Contractor shall arrange for his subcontractors to be present at Progress Meetings.

C. Payments Withheld

(1) Engineer may withhold or, on account or subsequently discovered evidence, nullify the whole or part of any certificate to such extent as may be necessary to protect Owner from loss on account of:

- a. Defective work not remedied.
- b. Claims filed or reasonable evidence indicating probable filing of claims.
- c. Failure of the contractor to make payments properly to subcontractors or for material or labor.
- d. A reasonable doubt that the contract can be completed for the balance then unpaid.
- e. Damage to another Contractor.
- f. Performance of work in violation of the terms of the contract.

D. Where work on unit price items is substantially complete but lacks clean-up and/or corrections order by Engineer, amounts shall be deducted from unit prices in payment certificates to amply cover such clean-up and corrections. When the above clean-up and/or corrections are made, payment shall be made for amounts withheld.

23. APPROVALS AND PERMITS

- A. Kentucky Highway Department Encroachment Permits have been approved for all state roads.
- B. Permission has been obtained for construction on all county roads as shown in the plans.
- C. Contractor shall not begin work in road rights-of-way until he is furnished with copy of approved encroachment permit by Engineer.
- D. Use of rights-of-way shall be subject to written conditions on permits. Contractor shall comply with all requirements of access documents, for storage of materials, traffic control, restoration, etc.

24. USE OF PREMISES AND REMOVAL OF DEBRIS

Contractor shall, at his own expense:

- A. Take every precaution against injuries to persons or damage to property;
- B. Store his apparatus, materials, supplies and equipment in such orderly fashion at site of work as will not unduly interfere with progress of his work or work of any other contractors or subcontractors;
- C. Place upon the work or any part thereof only such loads as are consistent with the safety of that portion of the work;
- D. Clean up daily all refuse, rubbish, scrap materials, and debris caused by his operations, to the end that at all times the site of work shall present a neat, orderly and workmanlike appearance.
- E. Before final inspection, remove all surplus materials, falsework, temporary structures, including foundations thereof, all debris resulting from his operation, and put the site in a neat, orderly condition;
- F. Effect all cutting, fitting or patching of his work required to make same conform to intent of Plans and Specifications and, except with consent of Engineer, no cut or otherwise alter the work of any other Contractor.
- G. Reasonable care shall be taken during construction to avoid damage to vegetation. Ornamental shrubbery and tree branches shall be temporarily tied back, where appropriate to minimize damage. Trees which received damage to branches shall be trimmed of those branches to improve the appearance of the tree. Tree trunks receiving damage from equipment shall be treated with tree dressing.

25. CHANGE ORDERS

A. Change Orders shall be negotiated between the Engineer and Contractor. No work on Change Order shall proceed until change or has been approved by all parties.

B. Change Orders to the construction contract must comply with Division of Water Procurement Guidance for Construction and Equipment Contracts.

C. On Change Orders exceeding \$25,000, cost, pricing and certificates shall be provided as required by Division of Water Procurement Guidance for Construction and Equipment Contracts.

26. FIELD CHANGES

Engineer may issue written "Changes" which interpret Contract Documents without change in contract price or contract time, and Contractor shall carry out such field orders promptly.

27. GENERAL GUARANTY

The Contractor shall guarantee all materials and equipment furnished and work performed for a period of one (1) year from date of substantial completion. Contractor warrants and guarantees for a period of one (1) year from date of substantial completion of system that completed system is free from all defects due to faulty materials or workmanship and Contractor shall promptly make such corrections as may be necessary by reason of such defects including repairs or damage of other parts of system resulting from such defects. Owner will give notice of observed defects with reasonable promptness. In the event that 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 Contractor the cost thereby incurred. The Performance Bond shall remain in full force and effect through the guarantee period.

28. SPECIFICATIONS BY REFERENCE

A. Whenever the term "Standard Specifications" is used, it shall mean "Standard Specifications for Road and Bridge Construction" of the Kentucky Transportation Cabinet, Department of Highways, Edition of 1998. Items described by reference to "Standard Specifications" shall comply with "Standard Specifications" as if they were printed herein.

B. Copies of "Standard Specifications" may be obtained from: Transportation Cabinet, Department of Administration, Division of Management Services, State Office Building, Frankfort, Kentucky 40622.

29. SAFETY STANDARDS

Contractor shall be in compliance with OSHA (P.L. 91-596) and the Contract Work Hours and Safety Standards Act (P.L. 91-54).

30. SUBCONTRACTORS

Contractor shall submit names and superintendents of all subcontractors to be used on project prior to any work by the subcontractor. The contractor is responsible for all acts and omissions of its subcontractors.

31. INSPECTION

A. One inspector will be working on this project. If more than one crew is working, trenches must remain open until the inspector approves the work.

B. If inspector is not contacted by contractor concerning no work due to rain or wet weather conditions and comes to job site, no rain day will be allowed for the contract time.

C. If more than one crew is working on project, the starting time for all crews shall be the same.

32. CONSTRUCTION SEQUENCE

A. The construction sequence of this project will be as follows:

- (1) Reed Kinman (Sheet 7.1)
- (2) Lawrenceville Road/Juett Road (Sheets 5.1 – 5.4)
- (3) Chapman Road (Sheets 6.1 – 6.2)
- (4) Gold Valley Road, Stevens Creek Road, Stevens Creek Lane, Kinman Road and Gold Valley Spur (Sheets 4.1 – 4.8)
- (5) Highway 36 and Eagle Ford Mill Road (Sheets 3.1 – 3.5)
- (6) Fords Mill, Folsom-Jonesville Road, Buffalo Ridge, Calendar Road, Clifford Road, Slaughter Lane and Ash Road (Sheets 2.1 – 2.10)

B. No water line shall be constructed that is not connected to an existing water line that can immediately receive water.

C. The water lines constructed in this project will immediately be filled with water, pressure tested, sterilized, all meters set and water line placed in service. No new water lines constructed shall be started until this work is done or is in the process of being done.

33. CUTTING OF TREES

Trees shall only be cut between October 15 and March 31. In cases where trees have to be cut from April 1 to October 15, a biologist will be required to evaluate the site and certify no Indiana bats are present.

END SECTION

WATER MAIN EXTENSION - PHASE 8

**GRANT COUNTY
BULLOCK PEN WATER DISTRICT**

DIVISION 2 - TECHNICAL SPECIFICATIONS

SECTION 02235 - SILTATION CONTROL

1. **RELATED DOCUMENTS**

General provisions of Contract, General and Supplementary General Conditions, and General Requirements apply to this Section.

2. **DESCRIPTION OF WORK**

A. Provide labor, material, equipment and services necessary for proper and complete siltation control.

B. This work shall consist of temporary control measures as ordered by Engineer during life of contract to control siltation through use of erosion control methods; and coordinating these measures with permanent erosion control features specified elsewhere in contract to extent practicable to assure effective and continuous erosion control throughout construction and postconstruction period.

C. Intent of this specification is to protect quality of water through prevention, control, and abatement of siltation resulting from construction project.

D. Contractor shall exercise every reasonable precaution at all times to prevent siltation of all streams. He shall conduct and schedule his operations so as to avoid or minimize muddying or siltation of all streams. No partially completed item of work shall be left in a manner that will contribute to erosion during period in which work on item is suspended.

3. **QUALITY ASSURANCE**

A. **Progress Requirements**

(1) Both permanent and temporary erosion control measures shall be progressively coordinated with construction operations throughout duration of project.

(2) As areas of erodible earth material are exposed to elements of erosion, every effort should be made to stabilize and protect areas as quickly as possible, and as directed. Upon failure of Contractor to coordinate erosion control measures with construction operations in a manner to effectively control erosion and to prevent water pollution, Engineer may suspend Contractor's operations and withhold monies due Contractor on current estimates until such time that all aspects of work are coordinated in an acceptable manner.

B. **Payment**

(1) Temporary erosion and pollution control measures which are required which are ordered by Engineer, shall be performed by Contractor at his own expense.

4. CONSTRUCTION

A. Prevention of Pollution

(1) Construction operations shall not be performed in stream channels except in those areas where creek crossings are indicated on Drawings or where necessary for temporary or permanent structure.

(2) Material removed from excavation shall not be deposited in streams, stream channels, other areas subject to flooding, or other locations where it may be washed away by high stream flows or fast runoff.

(3) Fuels, oils, bitumens, calcium chloride, or other harmful materials shall not be placed where they may be carried into a stream or underground waters at any time.

(4) Duration of exposure of uncompleted construction shall be as short as practicable. All backfilled trenches shall be permanently vegetated progressively with construction.

(5) Contractor shall exercise every reasonable effort to prevent grass or brush fires that will expose areas of soil to erosion. Areas exposed to erosion by fire resulting from Contractor's operations shall be seeded and protected at no cost to Owner.

(6) Lands and waters outside limits of construction, shall not be disturbed, except as may be found necessary and as permitted. Before final acceptance of work, all such disturbed areas, including abandoned haul roads, storage areas and plant sites, shall be reshaped to conform to adjacent ground and shall be revegetated by Contractor at his expense.

B. Temporary Control Measures

(1) Engineer may limit surface area of erodible earth material exposed by trenching and backfilling operations, and may direct Contractor to provide immediate permanent or temporary pollution control measures to prevent contamination of adjacent streams.

(2) Temporary pollution control measures shall be coordinated with permanent erosion control features to extent deemed practicable by Engineer to assure effective and continuous erosion control throughout construction and post-construction periods.

(3) Temporary erosion control measures shall be used at any time during life of project when directed to prevent soil erosion and pollution of streams.

(4) Erosion control features installed by Contractor shall be acceptably maintained by him.

C. Stream Crossings

- (1) All stream crossings shall be constructed perpendicular to the stream.
- (2) Silt fence will be placed on each side of stream to be crossed to prevent siltation and erosion.
- (3) Stream crossing site shall be regraded and reseeded within 14 days after disturbance.
- (4) No excavated material shall be placed in stream bed during construction.
- (5) Stream crossings shall be done at periods of low flow.

5. CLEAN-UP

At completion of project, and when approved by Engineer, all materials (straw bales, silt fences, etc.) shall be removed from the site and properly disposed of.

END SECTION

SECTION 02510 - WATER MAINS

1. **RELATED DOCUMENTS**

General Provisions of Contract, General, Supplemental and Special Conditions, and General Requirements apply to this Section.

2. **DESCRIPTION OF WORK**

Provide labor, material, equipment and services necessary for proper and complete installation of water pipe, valves and valve boxes, fire hydrants, blow-off hydrants, pressure reducing valve vault, air releases, meters, road bores, creek crossings and miscellaneous appurtenances.

3. **MATERIALS**

A. Polyvinyl Chloride Pipe (PVC)

(1) Standard Polyvinyl Chloride Pipe

a. Polyvinyl Chloride Pipe shall conform to ASTM Specification D-2241, latest revision. Pipe shall be pressure rated Class 200 (SDR 21) and Class 250 (SDR 17). Pipe material shall conform to latest revisions of ASTM D-1784 (PVC pipe compounds), ASTM D-2241 (PVC plastic pipe, SDR), and ASTM D-2672 (Bell-End PVC pipe).

b. Joints for PVC pipe shall conform to latest revision of ASTM D-3139, (joints for plastic pressure pipes using flexible elastomeric seals). Joints shall be bells that consist of an integral wall section with a locked-in, solid cross section elastomeric ring which meets requirements of ASTM F-477. Bell sections shall be at least as hydrostatically strong as pipe wall.

c. Fittings shall be ductile iron, mechanical joint, Class 250, conforming to AWWA specifications C110 for short body cast iron fittings. Fittings shall be tar-coated outside and shall receive standard cement lining with bituminous seal coat on inside as specified for ductile iron pipe.

d. Joints for ductile iron fittings shall be of push-type, conforming to AWWA C111 (ANSI A21.11). Bells for push-on type joints shall have an annular recess in pipe socket to accommodate a single rubber gasket. Plain ends shall be suitably beveled to permit easy entry into bell. Basket and annular recess of socket shall be so designed and shaped that gasket is locked in place against displacement as joint is assembled.

(2) C-900 Polyvinyl Chloride Pipe

a. Polyvinyl Chloride Pipe shall conform to AWWA Specifications C-900, pressure rated Class 200 (SDR 14).

b. Fitting shall be cast iron Mechanical Joint Class 250 conforming to AWWA Specification C-110 for short body cast iron fittings. Fittings shall be tar-coated outside, and shall receive the standard cement lining with bituminous seal coat on the inside.

c. Joints shall be of push-on type conforming the AWWA Specifications for C-900 water mains.

d. AWWA Specification C-900 pressure rated Class 150 (SRR 18) can be used and is considered an equal to ASTM Specification Class 250 pipe.

(3) All 90° bends and other fittings that require trust blocks shall be ductile iron (or approved equal) with transition gaskets to accommodate outside diameter of PVC pipe.

(4) Lubrication for rubber connected joints and fittings shall be water soluble, non-toxic, non-objectionable in taste and odor and have no deteriorating effect on PVC or gaskets and shall be supplied by pipe manufacturer.

(5) All PVC pipe and fittings shall bear National Sanitation Foundation (NSF) approved seal for potable water.

(6) Grip rings (mega lug style or allgrip #3600) shall be used in joining PVC pipe to ductile iron fittings, valves, etc. Grip rings will be required only on bends, tees or end of lines.

B. High Density Polyethylene Pipe

(1) High density polyethylene pipe shall conform to AWWA C906, latest revision. Pipe shall have a minimum be pressure rated DR 7.5 for water lines and DR 17 for encasement pipe. Pipe material shall conform to latest revisions for PE 3408 high density polyethylene for ASTM D3350 cell classification 345444C.

(2) Polyethylene fittings shall be made from material meeting the same requirements as the pipe. Polyethylene fittings shall be molded or fabricated by the manufacturer of the pipe. Fittings shall meet the requirements of AWWA C906. Molded fittings shall be manufactured in accordance with either ASTM D2682 (socket fused) or ASTM D3261 (butt fused) and shall be so marked.

(3) Joints between plain ends of polyethylene pipe shall be made by butt fusion. The Pipe Manufacturer's fusion procedures shall be followed at all times as well as the recommendations of the Fusion Machine Manufacturer. The wall thickness of the adjoining pipes shall have the same DR at the point of fusion. All employees working on fusions connections shall be certified by the pipe manufacturer as qualified to perform fusion connects.

(4) On each day butt fusions are to be made, the first fusion of the day shall be a trial fusion. The trial fusion shall be allowed to cool completely, then fusion test straps shall be cut out. The test strap shall be 12" or 30 times the wall thickness in length (minimum) and 1" or 1.5 times the wall thickness in width of the strap touch. If the fusion fails at the joint, a new trail fusion shall be made, cooled completely and tested. Butt fusion of pipe to be installed shall not commence until a trail fusion has passed the bent strap test.

C. Ductile Iron Pipe - Mechanical and Rubber Slip Joint Type

(1) Pipe

a. Ductile iron pipe shall be furnished for all piping 3 inches and over in size designated "D.I." on Drawings and shall be designed in accordance with ANSI-AWWA C1150/A21.50-91 and ANSI/AWWA C151/A21.51-91 specifications and supplements thereto.

b. Ductile iron pipe shall be designed for a minimum 350 psi operating pressure plus 100 psi water hammer allowance.

c. The net weight, class or nominal thickness, and casting period shall be shown on each pipe. The manufacturer's mark, the year in which the pipe was produced and the letters "DI" or "DUCTILE" SHALL BE CAST OR STAMPED ON THE PIPE.

d. The spigot end of the pipe shall be free of blemishes and defects which might be responsible for a poor fit with the rubber ring gasket and result in leakage.

e. All ductile iron pipe for water service shall have manufacturer's standard outside bituminous or asphaltic base coating and cement lining and bituminous seal coat on the inside. Cement mortar lining and bituminous seal coat inside shall conform to ANSI/AWWA C104/A21.4-90.

(2) Fittings

a. Ductile iron compact fittings, meeting the requirements of ANSI/AWWA C153/A21.53-88, will be accepted through 16" diameter. Fittings larger than 16" diameter shall meet the requirements of ANSI/AWWA C110/A21.10-87.

b. Fittings shall be 350 psi pressure rating for all sizes through 30".

c. All fittings shall be lined and coated the same as adjacent pipe.

(3) Joints

a. Pipe joints shall be mechanical joint or rubber ring slip joint.

b. All items used for jointing pipe shall be furnished with the pipe. The joints shall be made with tools and lubricant in strict conformity with the manufacturer's instructions. Copies of the instructions shall be delivered to the ENGINEER at start of construction in sufficient numbers that will permit the ENGINEER to retain 3 copies.

c. Mechanical joints are to be furnished according to ANSI/AWWA C111/A21.11-90. All pipe joints must be furnished complete with all accessories. Mechanical joint bolts and nuts shall be of alloy cast iron or alloy steel (Corten type such as U.S. Alloy) or equal. Rubber gaskets shall be made of plain first grade rubber, free of imperfections and porosity. Hardness shall be 75±5 durometer.

d. Rubber ring slip joint shall be equal to ANSI/AWWA C1111/A21.11-90.

e. If the water main is located within 200 foot radius of an underground storage tank (UST), special rubber gaskets shall be provided for the water main joints. These gaskets shall be manufactured of "nitrile rubber" material or other acceptable material possessing superior resistance to deterioration from petroleum based products. This requirement will apply to the gaskets supplied for mechanical joints and push-on joints.

D. Encasement Pipe

(1) Where indicated on Drawings, Contractor shall install encasement pipe by boring method. Encasement pipe shall be installed using equipment that mechanically bores the hole with a cutting head and continuous auger inside the encasement pipe. Encasement pipe shall be installed simultaneously with boring the hole.

(2) Encasement pipe shall be steel, plain end, uncoated and unwrapped, have a minimum yield point strength of 35,000 psi and conform to ASTM A252 Grade 2 or ASTM A139 Grade B without hydrostatic tests. Steel pipe shall have welded joints and be in at least 18-foot lengths. Used pipe can be used if the minimum wall thickness is met.

(3) Wall thickness of pipe shall be a minimum of 0.250 inches. Diameter of pipe shall conform to requirements of Kentucky Transportation Cabinet, Bureau of Highways for highway crossings.

(4) Spacers shall be used at every 10 feet.

(5) Manufactured end sections shall be used at the end of the steel encasement.

(6) Attached threaded rod to nearest fitting outside of encasement pipe.

E. Encasement Pipe (creek crossings)

(1) On creek crossings encasement pipe shall be installed as shown on the typical details with a minimum of 12" concrete over top of encasement pipe.

(2) PVC encasement pipe shall have a minimum dimension ratio of 35.

(3) Spacers shall be used at every 10 feet.

(4) Manufacturers end sections shall be used at end of steel encasement.

F. Gate Valves and Boxes

(1) All gate valves shall be of double disc, parallel seat type or resilient seated type, iron body, non-rising stem, fully bronze mounted with O-ring seals. Valves shall be of standard manufacture and of highest quality both as to materials and workmanship and shall conform to latest revisions of AWWA Specification C-500. Valves shall have a rated working pressure of 200 psi, with standard mechanical joint, A-2380-23 as manufactured by Mueller Co., Darling, Smith, Kennedy, or approved equal.

(2) Gate valves for buried service shall be furnished with mechanical joint end connections, unless otherwise indicated on Drawings. End connections shall be suitable to receive ductile iron, or PVC.

(3) Gate valves for inside service shall be handwheel operated, double disc, parallel seat type, iron body, fully bronze mounted with O-ring stem seals, flanged faced and drilled to match ASA Class 125.

(4) All gate valves shall have name or monogram of manufacturer, year valve casting was made, size of valve, and working pressure cast on the body of valve.

(5) Gate valves set with valve boxes shall be provided with a 2" square operating nut and shall be opened by turning to left (counterclockwise); gate valves set in vaults or pits shall be furnished with handwheels.

(6) Gate valves shall be installed in a vertical position with 6" PVC pipe serving as a valve box. A ductile iron lid shall be furnished being marked "WATER". They shall be set vertically and properly adjusted so that cover will be in the same plane as finished surface of ground, street, or sidewalk.

(7) Valve boxes shall be accurately centered over valve operating nut, and backfill thoroughly tamped about them. Valve box bases shall not rest on valves but shall be supported on crushed stone fill. They shall be set vertically and properly cut and/or adjusted so that tops of boxes will be at grade in any paving, walk or road surface, and two to three inches above ground in grass plots, fields, woods or other open terrain. Valve boxes shall be as manufactured by Mueller, M & H Valve Company, Darling, Russell Pipe and Foundry, or approved equal.

(8) A pre-cast 24" diameter concrete pad shall be furnished around valve boxes.

(9) Tracer wire shall be run outside of valve box and then laid inside the top of the box below the cap.

G. Air Release Valves

(1) Air release valves and boxes shall be installed at high points in lines as indicated on Drawings or as directed by Engineer.

(2) Valve shall have a 1" screwed inlet diameter with a minimum 3/32" size orifice. Body and cover shall be constructed of cast iron and float shall be of stainless steel or hard rubber. Valves shall be suitable for use in lines with an operating pressure range of 0 to 150 psi. Valves shall be equivalent to APCO No. 75, or approved equal.

(3) Air release valve box shall be 24 inch reinforced concrete pipe conforming to ASTM C76, Class II, Wall B, and shall be set on a No. 9 crushed stone or gravel base. Cover shall be cast iron, medium duty, perforated and of proper size to fit bell of pipe.

H. Meter Services

(1) Service clamps or saddles shall be used for service connections to PVC pipe of all sizes. Saddles for PVC mains shall be bronze and be Mueller Series H-13000 or S-1300 O Series or approved equal.

(2) Corporation stops for use in service clamps or in direct taps shall be Mueller H1500 or approved equal, for PVC pipe. Stops shall be appropriate for 3/4 and 1" size polyethylene service pipe or 1-1/2 and 2" size PVC service pipe. Corporation stop valves shall be ball valves when pressure is over 100 psi. Corporation valves shall be installed in the upper half of pipe as shown on typical detail. Plastic insert stiffeners shall be used inside polyethylene pipe at junction with corporation stop.

I. Service Pipe

(1) 3/4" and 1" Polyethylene Pipe (PE)

a. Pipe shall be made from virgin, ultra-high molecular weight polyethylene resin.

b. Dimensions and tolerances shall meet values as listed in ASTM D-2737, latest revision, "Specifications for Polyethylene Plastic Pipe (SDR-PR)". Standard dimension ratio shall be SDR9-PE3048.

c. Pipe shall be rated for use with water at 73.4° F at hydrostatic design stress of 630 psi and a maximum working pressure of 200 psi. Pipe shall sustain water pressure of 340 psi for 1000 hours with water at 73.4°F.

d. Surface shall be homogeneous inside and out and completely free of irregularities. Random testing shall be performed at intervals during all production runs to assure uniformity in all respects. The tubing shall carry the National Sanitation Foundation seal of approval for potable water.

e. Pipe shall be marked in lettering at intervals of not more than five (5) feet and such marking shall include nominal size; manufacturer's name or trademark; pressure rating for water at 73.4° F., 200 psi; applicable ASTM specification; ASTM material specification, PE 3408; standard dimension ratio, SDR-9; the National Sanitation Foundation Seal of Approval (NSF mark) and production code.

f. All service piping crossing under roads and streets shall be 1" minimum diameter.

(2) 2" service pipe shall be HDPE pipe and meet the same requirements as those for HDPE water mains.

J. Meter Boxes

(1) Meter boxes shall be P.V.C. and shall be 18" in diameter x 30".

(2) Metal lids for boxes shall be flat type solid with 1/4" ring on bottom of lid and be VWM-18-2 by Vestal Manufacturing or approved equal. Metal lids shall be predrilled to accept touch read connection.

K. Meter Setting Equipment

(1) Copper meter setters for 5/8" x 3/4" meter settings without individual pressure reducing valves, shall be catalog number B1434-22 by Mueller Co. or approved equal. All setters shall have two valves, one being an angle ball valve and the other being a double check valve. Locking devices with pins and seals furnished, shall be provided for all setters. All connections shall be the type for PE pipe. Meter setters for settings having individual PRV's shall be those corresponding to the catalog numbers listed above.

(2) A plastic insert stiffener shall be used inside the PE pipe at its connection to both sides of the meter yoke. Stiffener shall be approved equal to Ford Catalog insert 71 for 3/4" pipe and insert 72 for 1" pipe.

(3) A 3/4" X 18" P.V.C. pipe shall be installed in box to hold the meter setter in place. The meter setter should have a brace eye to accommodate this pipe.

(4) Meter setters for 1 1/2" and 2" meter shall have a bypass.

L. Fire Hydrants/Blow-offs

(1) Contractor shall furnish and install dry head type fire and blow-off hydrants where indicated on Drawings or as directed by Engineer. Hydrants shall conform in all respects to requirements of AWWA C502-73. Hydrant barrel shall have safety breakage feature above the ground line. All hydrants shall have mechanical joint shoe connection with the fire hydrant having, two 2- 1/2" discharge nozzles and one 4-1/2" pumper nozzle with the blow-off hydrant having two 2- 1/2" inch discharge nozzels and with both having caps fitted with cap chains. Connection threads and operating nuts shall conform to National Standard Specification as adopted by National Board of Fire Underwriters.

(2) Operating nut shall be 1- 1/2", and shall open left (counterclockwise). Main valve shall have 5-1/4" full opening for 6" hydrants and 4-1/2" opening for 4" hydrants, and be of the compression type opening against water pressure so that valve remains closed should the barrel be broken off.

(3) Hydrant shall be fully bronze mounted. Main valve shall have a threaded bronze seat ring assembly of such design that it is easily removable by unscrewing from a threaded bronze drain ring. Bronze drain ring shall have multiple ports providing positive automatic drainage as the main valve is opened or closed.

(4) Drainage waterways shall be completely bronze to prevent rust or corrosion.

(5) Operating stem shall be equipped with anti-friction thrust bearing to reduce operating torque and assure easy opening. Stop shall be provided to limit a stem travel. Stem threads shall be enclosed in a permanently sealed lubricant reservoir protected from weather and the waterway with O-ring seals.

(6) Hydrants shall be designed for 150 psi working pressure and shop tested to 300 psi pressure with main valve both opened and closed. Under test the valve shall not leak, the automatic drain shall function and there shall be no leakage into the bonnet.

(7) Hydrants shall be set plumb with not less than three cubic feet of crushed stone and backed with at least one cubic foot of Class "C" concrete or equivalent. Hydrants shall be attached to water main by an anchor tee, gate valve and 36" ductile iron anchor coupling. All piping from water main to hydrant shall be ductile iron. All piping from water main to hydrant shall be ductile iron.

(8) Hydrants shall be installed with a vertical distance from the center of the pumper nozzle to the ground of 16 to 18". Gradelok by Assured Flows, Inc. shall be installed between the gate valve and hydrant when the 16 to 18" clearance cannot be obtained with finish grade. All fire hydrants shall be provided with a shut-off valve in the hydrant lateral as indicated on Drawings. Inlet cover depth shall be minimum 36".

(9) Fire hydrants shall be Centurion Model A423 with 5-1/4" opening for 6" hydrants.

(10) Blow-off hydrant shall be Mueller A420 two way hydrant with a 4 1/2" barrel.

(11) Hydrants shall be painted with one (1) coat of No. 2472 Safety Red (Porter Paint or approved equal.) All cleaning, priming and painting shall be in accordance with paint manufacturers recommendations

(12) Pay item for fire hydrant and blow-off hydrant shall include all material from the main water to hydrant including tee, valve, hydrant, piping, grip rings, grade lock, gravel, concrete blocks, meter box and lid and etc.

(13) Hydrants shall have bags placed over them until they are in operation.

M. Marking Tape

(1) Tape shall consist of a solid aluminum foil coil encased in a protective plastic jacket. The materials and ink color shall not change when exposed to the alkalis, acids and other destructive chemical variances commonly found in soil. The foil coil shall be visible to ensure continuity. Tape shall be a minimum width of 2 inches and colored blue with the word "water" marked on the tape. The minimum thickness shall be 5.5 mil with a minimum tensile strength of 4000 psi. Tape shall be installed a minimum of one foot above the top of the pipe".

(2) Marking tape shall be considered incidental to the water line and no additional payment will be made for the marking tape.

N. Tracer Wire

(1) A No. 12 coated copper wire shall be installed parallel to all nonmetallic pipe.

(2) Tracer wire shall be installed to ground level for all valves and hydrants as shown on typical details.

(3) Tracer wire shall be run outside valve box to top of valve box then over top of valve box with 4 feet of tracer wire in the valve box.

(4) All service lines running under road will have tracer wire with 4 feet inside meter box.

O. Tapping Sleeves and Valves

(1) Tapping sleeves for connections to existing water lines shall be of the mechanical joint type suitable for working pressures comparable to the pipe class being tapped and shall be 3490 MJ Power Seal (fully gasketed) depending on pipe thickness or approved equal.

(2) Tapping valves shall be of mechanical joint type suitable for working pressures of 250 psi and shall be Mueller No. H-902020 or approved equal.

(3) One week notice on wet taps shall be given.

(4) All wet taps shall be done by water district. Contractor shall excavate site as needed and provide all materials.

P. Creek Crossing Valve

(1) The creek crossing valve will consist of a gate valve installed in the main water line, two saddles and one inch PE pipe on either side of the gate valve and a meter setting connecting the two 1" lines.

(2) The copper meter setters shall be as previously specified except that both valves shall be angle ball valves (Ford #VB 72-7W-44-33).

Q. Pressure Reducing Valves (PRV's)

(1) Main Line Installation

a. Pressure reducing valves shall be located where indicated on drawings or where directed by Engineer. Valve shall be installed in reinforced concrete pipe vault and entire unit shall be constructed as indicated on Drawings.

b. The 1 inch valves shall be direct acting, diaphragm actuated type with threaded ends. Maximum inlet pressure shall be 300 psi. Outlet pressures shall be as indicated on drawings. Valves shall be preceded by "Y" strainers. Valves and strainers shall be Wilkins Series 500 YSBR or approved equal.

c. The 4-inch valve shall be hydraulically operated, diaphragm actuated, and shall maintain a constant downstream pressure regardless of inlet pressure variations. The main valve body and cover shall be of fabricated steel and shall be fusion bonded epoxy coated. The entire actuator assembly consisting of the main valve cover, diaphragm, washer plates, stem, bearing, main valve spring and shut-off plate shall be removable as a unit for ease of maintenance. The stainless steel stem shall be guided in the center for a minimum of 100% of the stem travel. The bronze housed stem bearing shall have a replaceable, reinforced teflon insert. The pilot control system shall be supplied with inlet and outlet isolation valves and an inlet wye strainer. The pilot valve shall be adjustable, bronze bodied, direct acting, spring loaded and normally open. The valve shall be Ames model A810 as manufactured by Ames Company, Woodland, CA, or approved equal.

d. Pressure gauges within the valve vault shall have 4-1/2" minimum diameter faces. The case shall be lack, cast aluminum, flanged back type with close type ring and clear glass face. The gauge connections shall be at the bottom of the gauge and will be 1/4" N.P.T. The gauge internal construction shall include phosphor bronze bourdon tube with a brass movement, bronze bushed independently mounted. Pressure gauge range and scale graduations shall be in pounds per square inch as follows:

(1) INLET PRESSURE - 0 - 200 psi, 20 psi figure intervals, with graduating marks every 2 psi.

(2) OUTLET PRESSURE - 0 - 200 psi, 20 psi figure intervals, with graduating marks every 1 psi.

e. All piping within valve vault shall be ductile iron or copper (hard type).

(2) Individual Residences

Pressure reducing valves for individual residences shall be installed as shown on plan as directed by Engineer, and shall be Wilkins Model 600 No. 2 or approved equal, with a maximum inlet pressure 200 psi, factory set outlet pressure 60 psi. PRVs shall be installed in customer's meter box in tandem copper meter setter.

All setters shall have two valves, one angle ball valve and one angle check valve. All connections shall be suitable for Polyethylene service pipe. Setters shall be a TVB-172-7W by Ford or approved equal.

4. SHOP DRAWINGS

Contractor shall furnish to Engineer for approval, six (6) sets of shop drawings, catalog cuts and certifications for all materials used in construction of water lines. Contractor shall not order material or equipment until approval is given by Engineer.

5. EXCAVATION FOR TRENCHES

A. Except as otherwise noted or directed by Engineer, trenches in which water lines are to be laid shall be excavated in open cut to depths as indicated on Drawings. In general, this shall be interpreted to mean that machine excavation in earth shall not extend below an elevation permitting lower quadrant of pipe to be bedded in undisturbed ground, and excavation in rock shall extend below invert elevation a distance to accommodate a layer of bedding material as specified elsewhere in this section.

B. When excavated material is placed on paved roads, the contractor shall clean road with power broom at the end of each days work or as directed by the Engineer.

C. When excavated material is placed on gravel or dirt roads, the contractor shall place crushed stone to the same thickness of the road prior to construction as determined by the Engineer.

D. If foundation is good firm earth and machine excavation has been accomplished as set out hereinbefore, remainder of material shall be excavated by hand and earth pared or molded to give full support to lower quadrant of barrel of each pipe. Where bell and spigot pipe are involved, bell holes shall be excavated during this latter operation to prevent bells from being supported on undisturbed earth. If for any reason machine excavation in earth is carried below an elevation that will permit type of bedding specified, then a layer of granular material shall be placed so that lower quadrant of pipe will be securely bedded in granular fill.

E. If foundation is rock and excavation has been undercut as set out hereinbefore, a bed of No. 9 crushed stone or tamped earth shall be placed to provide continuous support for lower quadrant of pipe. No extra payment will be made for this No. 9 crushed stone.

F. Trenches shall be a minimum width of 12" plus to diameter of the pipe to provide free working space on each side of pipe and to permit proper backfilling around pipe, but unless specifically authorized by Engineer, trenches shall in no case be excavated or permitted to become wider than 2'-0" plus nominal diameter of pipe at level of or below top of pipe. If trench does become wider than 2' plus nominal diameter of pipe at level of or below top of pipe, special precautions may be necessary such as providing compacted, granular fill up to top of pipe or providing pipe with additional crushing strength as determined by Engineer after taking into account actual trench loads that may result and strength of pipe being used; Contractor shall bear the cost of such special precautions as are necessary. Trenches cut in roads and streets shall not exceed a maximum width of 3'-6" plus nominal diameter of pipe at level of road or street surface.

G. Unless specifically directed otherwise by Engineer, not more than 1000 feet of trench shall be opened ahead of pipe laying work of any one crew, and not more than 1000 feet of open ditch shall be left behind pipe laying work of any one crew. Watchmen or barricades, lanterns and other such signs and signals as may be necessary to warn public of dangers in connection with open trenches, excavations and other obstructions, shall be provided by and at expense of Contractor.

H. Pipe laying operation shall be continuous from beginning to end with no gaps allowed in the line unless approved by the Engineer.

6. REMOVAL OF WATER

Contractor, at his own expense, shall provide adequate facilities for promptly and continuously removing water from all excavation.

7. UNAUTHORIZED EXCAVATION

Whenever excavation is carried beyond or below required lines and grades, except as, and where authorized by Engineer, Contractor, at his own expense, shall refill said excavated space with suitable material in a manner approved by Engineer.

8. LAYING DEPTHS FOR WATER MAINS

In general, water mains shall be laid with a minimum cover of 36", unless otherwise indicated on Drawings or directed by Engineer.

9. PIPE BEDDING

A. Foundation for pipes laid in trenches shall be prepared so that entire load of backfill on top of pipe will be carried uniformly on barrel of pipe. Pipe bells shall not carry any load of backfill.

B. In trenches where solid rock is removed from trench bottom, pipe shall be bedded on six (6)" thickness of No. 9 crushed stone. No extra payment will be made for rock excavation or No. 9 crushed stone.

C. When wet, mucky, yielding or otherwise unsuitable material is located below proposed pipe bedding elevation, such material shall be removed and replaced with No. 9 crushed stone. In such case, payment will be made per ton of "Extra Crushed Stone Bedding" actually placed in trench to replace unsuitable material excavated. Unsuitable material shall be removed and replaced with crushed stone at direction of Engineer.

10. PIPE LAYING

A. All pipe shall be laid with ends abutting and true to lines indicated on Drawings or as directed by Engineer. Pipe shall be fitted and matched so that it will provide a smooth and uniform invert and be centered in the trench. All pipe shall be laid uphill when grade exceeds five percent.

B. Fittings and special attachments for water main shall be provided and laid as pipe is laid and where directed by Engineer or as indicated on Drawings.

C. Before each piece of pipe is lowered into trench, it shall be thoroughly swabbed out to insure its being clean. Any piece of pipe or fitting which is known to be defective shall not be laid or placed in trench. If defective pipe or fittings shall be discovered after pipe is laid, it shall be removed and replaced with a satisfactory pipe or fitting without additional charge. In case a length of pipe is cut to fit in a line, it shall be so cut as to leave a smooth end at right angles to longitudinal axis of pipe.

D. Jointing shall be accomplished in accordance with the manufacturer's recommendations.

E. Interior of pipe shall be cleaned of dirt, jointing materials, and superfluous materials of every description. When laying pipe is stopped for any reason, exposed end of pipe shall be closed with a plug fitted into pipe bell so as to exclude earth or other material and precautions taken to prevent floatation of pipe by runoff into trench.

F. No backfilling (except for securing pipe in place) over pipe will be allowed until Engineer has had an opportunity to make an inspection of joints, alignment and grade in section laid, but such inspection shall not relieve Contractor of further liability in case of defective joints, misalignment caused by backfilling and other such deficiencies that are noted later.

G. Anchorage of Bends, Tees, Plugs, Hydrants and Valves

(1) At all tees, plugs, caps and bends of 1 1/4° and greater, and at reducers or in fittings where changes in pipe diameter occur, movement shall be prevented by using suitable harness, thrust blocks or ballasts. Hydrants and valves shall be provided with similar protection. Thrust blocks and supports shall be as indicated on Drawings, with sufficient volumes of concrete being provided; however, care shall be taken to leave weep holes unobstructed and allow for future tightening of all nearby joints. Unless otherwise directed by Engineer, thrust blocks shall be placed so that pipe and fitting joints will be accessible for repair.

(2) Bridles, harness or pipe ballasting shall meet with approval of Engineer. Steel rods and clamps shall be galvanized or otherwise rust-proofed.

(3) No extra pay shall be allowed for work on proper anchorage of pipe, fittings or other appurtenances; such items shall be included in unit price bid for supported item.

H. In cold weather, extra caution shall be used in handling and laying PVC pipe.

I. No more pipe than can be used in one week shall be strung out in advance.

11. BACKFILLING PIPELINE TRENCHES

A. Backfilling pipeline trenches shall be accomplished in accordance with methods outlined hereinafter, and as indicated on Drawings. In all cases, walking or working on the completed pipelines, except as may be necessary in tamping or backfilling, will not be permitted until trench has been backfilled to a point one (1) foot above top of pipe. Filling of trench shall be carried on simultaneously on both sides of the pipe in such a manner that completed pipeline will not be disturbed and injurious side pressures do not occur.

The methods of backfilling shall be as follows:

Method A - Areas Not Subject to Vehicular Traffic

The lower part of the trench up to a point one (1) foot above the top of the pipe shall be hand placed backfilled with earth free from rock, acceptable to the Engineer, or with crushed stone when a condition exists as mentioned in Paragraph B, this article. In the remainder of the trench, the backfill material shall be reasonably free from large rock (over one-half cubic foot in volume) and may be shoveled into the trench without compacting and heaped over whenever, in the opinion of the Engineer, this method of backfilling may be used without inconvenience to the public. The backfilling of earth material or crushed stone under this method is NOT a separate pay item.

Method B - All Existing Gravel Streets, Roads and Drives
(Open Cut Method)

(1) Trench shall be backfilled with DGA. Backfill shall be placed full depth in trench to bottom of surfacing material.

(2) No extra payment will be made for crushed stone or backfilling.

Method C - All Existing Asphalt or Concrete Paved Drives.

(1) All existing paved driveways shall be free bored unless indicated otherwise on plans.

B. In areas where large quantities of rock are excavated, and the available excavated earth in the immediate vicinity is insufficient for placing the required amount of backfill over the top of pipe as set forth in Method A this article, then the Contractor must either haul in earth or order crushed stone aggregate for backfilling over the top of the pipe. Neither the hauling in and placing of earth nor the ordering and placing of crushed stone aggregate to fulfill the backfill requirements set forth in the aforesaid Method A is considered a pay item.

C. When directed by the Engineer, the Contractor shall add water to the backfill material or dry out the material when needed to attain a condition near optimum moisture content for a maximum density of the material when it is tamped. The Contractor shall obtain a compaction of the backfill of at least 90 percent of standard (ASTM D-698) Proctor density where mechanical tamping of backfill is required.

12. CONCRETE ENCASEMENT

Concrete encasement shall be placed where shown on contract drawings, or as directed by Engineer. Concrete shall be Class 3500 psi and shall be mixed sufficiently wet to permit it to flow under pipe to form a continuous bed. In tamping concrete, care shall be taken not to disturb grade or line of pipe or injure joints. Concrete placed outside specified limits or without authorization from Engineer will not be subject to payment.

13. CREEK CROSSINGS

A. Major creek crossings shall be installed by directional bore method with 14" HDPE Encasement Pipe.

B. Water Main at creek crossings not shown for direction bore shall be encased in P.V.C. pipe. Encasement Pipe shall be encased in concrete as shown on the typical details.

C. Silt fence shall be placed on each side of creek to be crossed to prevent siltation and erosion.

D. No excavated material shall be placed in creek beds during construction.

E. Creek crossings which are open cut shall be done at time of no flow.

F. Creek crossings shall be regraded and reseeded immediately following completion of stream crossing.

G. Disturbed areas shall be restored to original contour.

14. CLEAN-UP

Contractor shall remove all debris and surplus construction materials resulting from his work on a daily basis. Contractor shall grade ground along each side of pipe trench in a uniform and neat manner leaving construction area in a shape as near as possible to original ground line. If cleanup is not performed daily, Engineer will shut down project and/or suspend payments.

15. CONNECTION TO EXISTING SYSTEM

(1) Unless otherwise directed by the Water District, Contractor shall make dry taps connection to the new water main to the existing water system. The Contractor must notify the Water District when the connection is to be made so that representatives of the Water District may operate existing valves and witness the connection. A minimum notice of 48 hours must be given.

(2) All wet tap connections will be done by water district. A trench 1 foot below pipe, 6 feet long and 4 feet wide shall be excavated by contractor. All materials required for wet tap shall be provided by contractor.

16. SEEDING, FERTILIZING AND MULCHING

Trenches in areas that are not paved shall be prepared for seeding. Materials and methods for seeding, fertilizing and mulching are described elsewhere in these specifications.

17. RESTORATION

A. In general, contractor shall be responsible for proper care and maintenance of all existing structures, both above and below surface, which are encountered during progress of work. No structures of any kind shall be removed without consent of Engineer.

B. Contractor shall care for and maintain all pipes and services for gas, sewer, telephone or electricity where same are encountered in prosecution of work. In event any such services for water, gas, electricity, sewer or telephone are disturbed, damaged or destroyed, Contractor shall arrange with owner of such service, or facility, for its replacement and restoration at Contractor's expense.

18. TESTING

A. Water mains, services and all appurtenances, shall be tested to 50 psi over the operating pressure of the pipe. The operating pressure will be considered the pressure that would come from connecting to the Boone County Water Association at Highway 42. Defective joints of pipe shall be cut out and replaced as directed by Engineer. Cracked or defective pipe fittings, valves or hydrants disclosed in pressure test shall be replaced by Contractor with sound material, and test shall be repeated until test results are satisfactory to Engineer.

B. Contractor shall maintain required pressure for six hours and shall measure the amount of water necessary to maintain this pressure for this length of time. The amount of water used to maintain pressure shall not exceed five gallons per 24 hours per mile of pipe per inch nominal diameter of the pipe.

C. All leaks shall be repaired whenever or wherever there is evidence of a leak. Water used by Contractor shall be paid for by Contractor at the rate of \$3.00 per 1,000 gallons.

D. All fittings, meters, equipment, tools and other material required for testing shall be provided by Contractor, and remain property of Contractor at completion of project.

19. DISINFECTION OF WATER LINES

A. New potable water lines shall not be placed in service, either temporarily or permanently, until they have been thoroughly disinfected in accordance with the following requirements and to the satisfaction of Engineer.

B. After testing, granular chlorine (HTH) or equal shall be introduced into the section of the line begin disinfected sufficient to insure a chlorine dosage of at least 50 ppm in the main. A chart will be supplied by water district on minimum amount of chlorine to use. While the solution is being applied, the water should be allowed to escape at the ends of the line until tests indicate that a dosage of at least 50 ppm has been obtained throughout the pipe. Open and close all valves and cocks while chlorinating agent is in the piping

system. The chlorinated water shall be allowed to remain in the pipe for 24 hours, after which a residual of at least 25 ppm shall be obtained. The disinfection shall be repeated until 25 ppm is obtained, after which time the main shall be thoroughly flushed until the residual chlorine content is not greater than 1.0 ppm. Contractor shall have testing equipment for testing chlorine content. Chlorinated water resulting from disinfection of water line shall be disposed in a manner which will not violate 401 KAR 5:031.

C. Following disinfection of the line, bacteriological samples shall be collected and analyzed in accordance with the requirements of Kentucky Department for Natural Resources and Environmental Protection. Samples shall be taken at connection points to existing lines, at 1 mile intervals, and at dead ends without omitting any branch lines. When the samples have been approved, the new line then may be connected to the system. Cost of collecting and analyzing samples shall be paid by Contractor.

20. METER CONNECTIONS

Upon completion of laying of water main on each individual line, the meter boxes will be set, the line tested and sterilized and the line put in service. Before the contractor will be allowed to start another individual line, work must be completed or work being performed on the previously constructed line and completed on all other constructed lines. If the contractor has more than one crew on the project, additional lines can be started upon the approval of the Engineer.

END SECTION

SECTION 02920 - SEEDING, FERTILIZING AND MULCHING

1. **RELATED DOCUMENTS**

General provisions of Contract, and General, Supplemental, and Special Conditions apply to this Section.

2. **DESCRIPTION OF WORK**

Provide labor, material, equipment and services necessary for proper and complete seeding and mulching.

3. **QUALITY ASSURANCE**

The intent of these Specifications is to require the Contractor to provide, in all areas to be seeded, fertilized and mulched, a smooth uniform turf of the grasses specified free from bare spots, eroded areas, weeds or other deficiencies. Acceptance by the Engineer is conditional upon compliance with this intent after the initial growing season.

4. **MATERIALS**

A. Mulch shall be a high quality small-grain straw or a hydraulically applied wood-cellulose fiber mulch approved by Engineer.

B. Commercial fertilizer shall be a complete fertilizer, uniform in composition, dry and free flowing. Fertilizer which becomes caked or otherwise damaged making it unsuitable for use will not be accepted.

C. Lime shall be agricultural limestone containing not less than 85% of total carbonates and shall be ground to a fineness that 50% will pass through a 100-mesh sieve and 80% will pass through a 20-mesh sieve. Coarser material will be acceptable provided that specified rates of application are increased proportionally on basis of quantities passing 100-mesh sieve.

D. **Seed Mixture**

(1) Lawn Seed shall be guaranteed by dealer and distributed as follows:

A. **Farm or pasture**

80% Kentucky 31 Tall Fescue
20% Annual Ryegrass

B. Residential Yards

40% Kentucky Bluegrass
40% Fine Leaf Fescue
20% Annual Ryegrass

(2) Seed mixture shall be sown at rate of 5 pounds per 1000 square feet.

5. SOIL IMPROVEMENTS

Fertilizer shall be applied to all seeded areas as follows:

A. Agricultural limestone - 75 pounds per 1000 square feet.

B. Fertilizer - 20 pounds, 10-10-10 fertilizer per 1,000 square feet.

C. Application

(1) Limestone shall be thoroughly mixed into topsoil as far ahead of seeding as will not interfere with other grading operations.

(2) Fertilizer shall be applied to areas being prepared for seeding and shall be mixed lightly in top few inches of topsoil.

6. SEEDING AND MULCHING

A. Seeding

(1) Immediately before seed is sown, loosen soil to a depth of 3 inches by rotary tools, discs, harrows, or other approved methods. Engineer may reduce depth to which soil is loosened on steep slopes or places inaccessible to mechanical equipment.

(2) Remove all large or unsightly clods or stones, and other foreign material brought to surface and repair all gullies, washes, or disturbed areas before seed is applied.

(3) Seed shall be broadcast either by hand or by approved sowing equipment at rate specified.

(4) Do not perform seeding during high winds that would prevent uniform distribution of seed.

B. Mulching

(1) All seeded areas shall be mulched with straw to depth of approximately 1-1/2 inches. Mulching shall follow seeding operation not later than 48 hours.

7. PLANTING SEASON

Spring seeding season shall be between February 15 and April 15. Fall seeding season shall be between August 1 and October 20. Seeding seasons may be extended only at direction of Engineer.

8. CLEAN-UP

Soil, peat or similar material which has been brought onto paved areas within or outside construction limit by hauling operations or otherwise shall be removed promptly, keeping these areas clean at all times. Upon completion of seeding, all excess soil, stones and debris which have not previously been cleaned up shall be removed from site or disposed of as directed by Engineer. All lawn areas shall be prepared for final inspection.

9. MAINTENANCE

Maintenance shall begin immediately following last operation of seeding and shall continue until lawn is formally accepted. Maintenance shall include sufficient watering, weeding, cultivating, mulching, regular mowing of seeded areas, and removal of dead materials.

10. INSPECTION FOR ACCEPTANCE

Inspection of work of this section to determine completion, exclusive of possible replacement of seed, will be made by Engineer upon written notice requesting such inspection submitted at least ten (10) days prior to anticipated date of inspection and provided that an 80% minimum coverage per square foot for all seeded lawn areas has been established. Contractor shall guarantee, at the time of this inspection, that the seeded areas will be in compliance with the intent of this Specification described herein. This guarantee shall apply to all permanent seeding performed in conjunction with project, regardless of type protection used or season in which seeding is performed.

11. GUARANTEE

A. When seeding does not meet guarantee requirements at time of inspection, Contractor will be advised of amount and location of corrective work deemed necessary. Additional work required may include preparation of a new seedbed, refertilizing, reseeding, remulching, or any erosion control items that are required. Contractor shall perform all corrective work as soon as favorable working conditions occur after being advised of corrective work required. Corrective work and materials required to fulfill guarantee requirements will not be paid for, except as hereinafter provided for unavoidable damage.

B. When unavoidable damage occurs after date project is declared complete and before inspection previously described, then payment will be made at original contract unit prices for additional seeding and protection work ordered by Engineer. Unavoidable damage may result from slides, vehicular traffic, fires, and deluges. Failure of seed to sprout and grow will not be considered unavoidable damage.

C. From time seeding and protection work begins until date project is declared complete, keep all seeded areas in good condition at all times. Damage to seeded areas or to mulch materials shall be promptly repaired as directed. All work and materials necessary to protect, maintain, and restore seeded areas during life

of contract shall be performed at no additional cost to Owner, except additional work caused by changes in project authorized by Engineer.

D. When it becomes necessary to disturb previously seeded areas at direction of Engineer, payment for a reasonable amount of additional work, as determined by Engineer, will be made at original contract unit price. No payment will be made for additional work due to changes made for benefit of Contractor, nor will payment be made for corrective work required because Contractor has failed to properly coordinate his entire erosion control schedule thus causing previously seeded areas to be disturbed by operations that could have been performed prior to seeding.

END SECTION

SECTION 03300 - CAST-IN-PLACE CONCRETE

1. **RELATED DOCUMENTS**

General Provisions of Contract, General, Supplemental and Special Conditions, and General Requirements apply to this Section.

2. **DESCRIPTION OF WORK**

Provide labor, transportation, materials, tools, equipment and appliances necessary for proper and complete installation of all concrete work.

3. **MATERIALS**

A. General

All materials used in the work shall be stored and handled in such a manner as will prevent deterioration or intrusion of foreign matter. Material which has deteriorated or has been damaged shall be immediately and completely removed for premises. All material shall comply with requirements of standards of American Society for Testing and Materials.

B. Manufactured Materials

Manufactured materials such as cement, shall be delivered and stored in original packages, plainly marked with brand and maker's name. Material in broken containers or in packages showing water marks or other evidence of damage will be rejected. Unless otherwise noted, all materials used in concrete work shall be as specified below:

(1) Portland Cement---Type I or Type III - ASTM C-150.

(2) Aggregates-----ASTM C-33.

a. Fine aggregates shall consist of natural sand having clean, hard, uncoated particles and free from injurious amounts of soft friable, thin, elongated or laminated pieces. Aggregates shall not absorb more than 3% moisture by weight. Maximum size of pieces shall be 3/4".

b. Coarse aggregates shall be crushed stone having clean, hard, uncoated particles and free from injurious amounts of soft friable thin elongated or laminated pieces. Aggregate shall not absorb more than 3% by weight.

(3) Air Entraining Agent-----ASTM C-33.

(4) Water shall be clean and free from deleterious amounts of acids, alkalis or organic materials.

- C. Metal Reinforcement: All reinforcing shall be ASTM A-615, with a minimum yield of 60,000 psi.
- D. Concrete Curing and Hardening Compound shall be Sonneborne "Kure-N-Seal" or equal.
- E. Anti-spalling compound shall be Sonneborne "Pitt-Loc" or equal.
- F. Expansion joint material shall be premoulded filler as manufactured by Homasote Co. (Homex 300); Dayton SURE-Grip (G-30) or equal.

4. CONCRETE - QUALITY

A. Ready-mixed concrete complying with these Specifications and conforming to ASTM designation C-94, Strength Method shall be used:

B. Type Concrete

Min. Compressive Strength at 28 days-----3,000 psi
Slump-----3-5 inches
Air Content-----4%

C. Use of admixtures is prohibited except where written consent is given by Engineer.

D. Ready mix design shall be submitted to Engineer for approval prior to ordering concrete for project.

5. REINFORCING

Detailing, fabrication and placing shall conform to American Concrete Institute "Manual of Standard Practice for Detailing Reinforced Structures" (ACI-315).

6. CONVEYING AND DEPOSITING CONCRETE

Procedures shall be in accordance with American Concrete Institute Standard "Recommended Practice for Measuring, Mixing and Placing Concrete." (ACI-614).

7. CURING

Concrete shall be maintained in a moist condition for seven (7) days after placing. Curing shall begin immediately after completion of final finishing operation.

8. COLD WEATHER REQUIREMENTS

Procedures shall be in accordance with American Concrete Institute "Recommended Practice for Winter Concreting" (ACI-604). Section "Minimum Requirements for Job Taking Maximum Risk" shall not be considered a part of this Specification.

9. FINISHING

A. Slabs

(1) Under no circumstances shall dry cement or a mixture of dry cement and sand be sprinkled directly on surface to absorb moisture or to stiffen mix.

(2) Finish for floor slabs shall be as follows:

Surface of slab shall be struck off true to elevations called for, and all surface water, laitance and dirt removed. After allowing the concrete to dry out from 20-30 minutes, depending on weather conditions, the surfaces shall be brought to final grade with a wood float. Surfaces shall be tested with a straight edge to detect high and low spots which shall be eliminated. After concrete has hardened sufficiently to prevent excess fine material from working to surface, surface shall be steel troweled to a smooth hard finish, impervious and free from imperfections, pits and other irregularities, and true to a maximum tolerance of 1/8" in six (6) feet.

10. CRUSHED ROCK FILL

Install a 4" crushed rock fill under all floor slabs on earth. Rock shall be clean crushed limestone, graded from 3/4" to 1-1/2" in diameter, spread evenly, tamped solid and brought to the proper elevation for the reception of the concrete slab, placed only after approval of graded and properly compacted subsurface.

11. INSPECTION

A. Concrete shall not be placed over pipes and conduits until such work has been tested, inspected and approved.

B. All concrete placed in violation of these provisions shall be subject to rejection.

12. NOTIFYING OTHER TRADES

Notify plumbing and Electrical Contractors and all other Contractors, at proper time to install all pipes, conduits, anchors or other equipment coming under their respective contracts in form work.

13. TESTING CONCRETE

A. Slump Test

At least one slump test shall be made before first concrete pour, at start of pouring any concrete at each 5 cubic yards deposited during one operation. These shall be made for the same samples as those taken for cylinder tests, and records of same kept therewith. Test shall be made according to ASTM Designation (C-143), and as required under ASTM Designation C-94 for ready-mixed concrete. Mix designed

for a slump test of 2" and not more than 4", except in cases where thin sections would indicate in the opinion of the Engineer that a wetter mix is more desirable. The Contractor shall furnish necessary equipment for the slump test.

B. Cylinder Test

(1) At the start of concreting, the Contractor shall make from a single batch a set of four (4) cylinders per ASTM Designation C-31. Two shall be tested at 7 days and two at 28 days, per ASTM Designation C-39.

(2) At each time when twenty or more cubic yards of concrete are placed during one operation, and when the sum of smaller deposits of concrete equal thirty cubic yards since previous tests, and at any change in mix, four (4) cylinder tests will be required, two tested at 7 days and two at 28 days, per ASTM Designation C-39. In case of C-94 and C-172 shall be added. Class "A" concrete samples shall show a compressive strength of not less than 3500 lbs. per square inch in 28 days.

(3) The Contractor shall furnish all equipment for sampling and curing on the job, and shall bear the cost of laboratory curing and testing.

END SECTION

EXHIBIT “E”

Phase 8 Engineering Drawing and Specifications

EXHIBIT “F”

Phase 10 Preliminary Engineering Report

Preliminary Engineering Report

Bullock Pen Water Line Extension Phase 10

Bullock Pen Water District

By

**CMW, Inc.
138 N. Keeneland Drive
Suite E
Richmond, KY 40475**

May, 2003

Table of Contents

1. General Description of Project
2. Project Map
3. Project Profile
4. Preliminary Project Summary
5. Preliminary Project Cost
6. Preliminary Construction Estimate

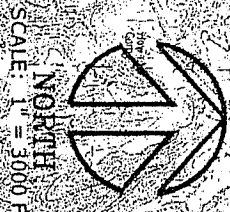
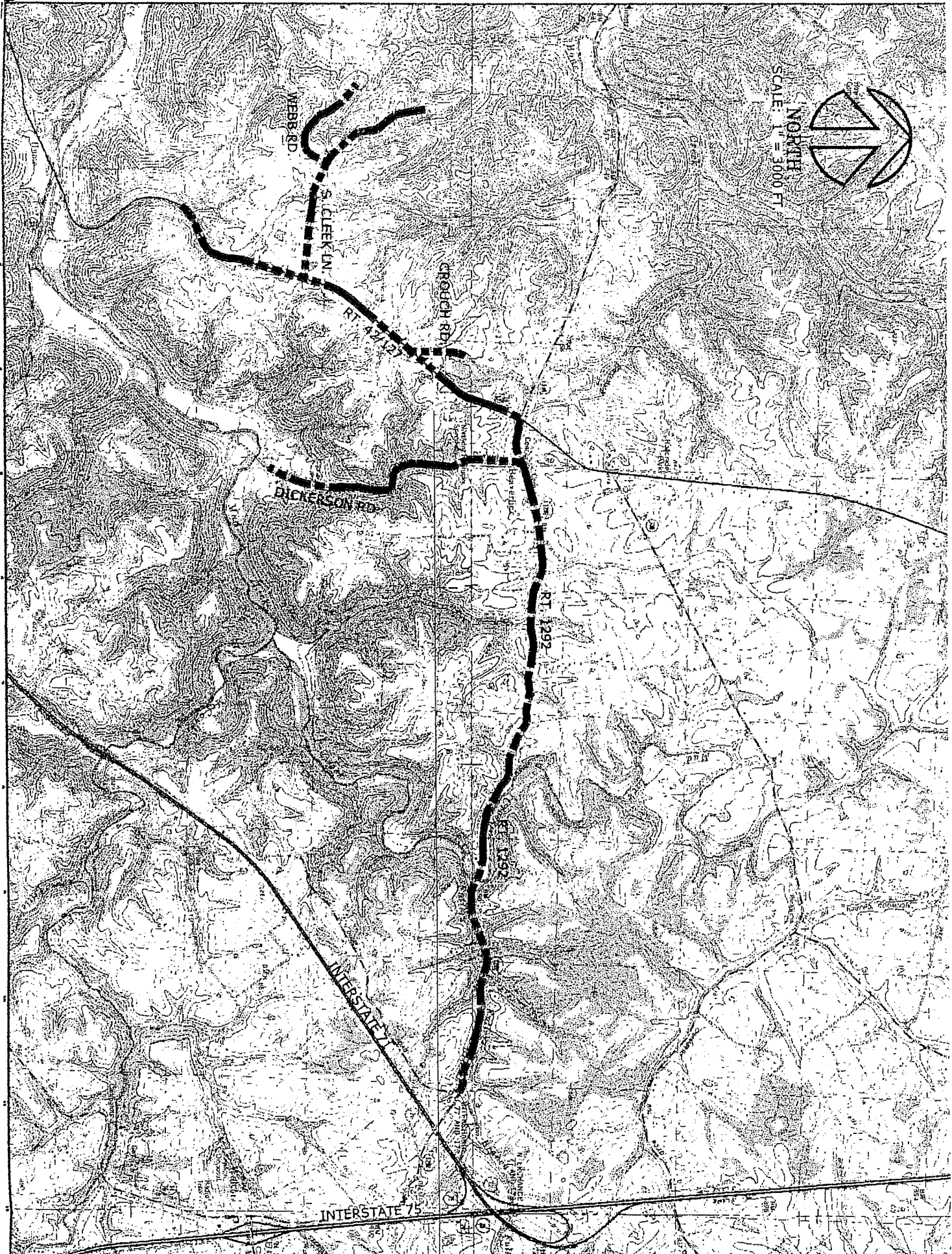
General Description of Project

Bullock Pen Water District serves approximately 5,500 customers in Grant, Boone, Kenton, Pendleton and Gallatin Counties. Potable water that supplies the district comes from the Bullock Pen Water Treatment Plant, City of Walton, City of Williamstown and Northern Kentucky Water Service District.

The proposed project will consist of 7.9 miles water line extension to serve 152 new customers in Boone County. Project will consist of new water line extension along Buffalo Road (Highway 1292), Highway 42, Dickerson Road, Crouch Road, Cleeks Lane and Webb Road. The potential customers currently use cisterns and bottle water for their water needs. The Boone County Fiscal Court has a water line at the intersection of Highways 1292 and 42 where a potential master meter can be located and water purchased from Boone County. The potential customers currently use cisterns and bottle water for their water needs.

Preliminary hydraulics have been done for the potential water line extension which shows that the areas can be served by the existing water lines, water storage tanks and master meters.

Funding for project will consist of a potential KIA grant, customer tap-on fees, contribution from Boone County Fiscal Court and a surcharge loan.



DISPLAY

DATE	TIME	BY	REVISION

VICINITY MAP
 BULLOCK PEN WATER DISTRICT
 PHASE 10 - WATER LINE EXTENSION
 BOONE COUNTY - KENTUCKY



CMW PROJECT No.
 02411.02



KENTUCKY WATER PROJECT PROFILE

1. Project Title (use title which will be identifiable by local community):

Bullock Pen Water District - Phase 10 Water Line Extension

2. Project Description:

Provide a brief narrative denoting if project relates to source, distribution, treatment, storage or other)

7.9 miles of 8" water line will be extended in Boone County, Kentucky within Bullock Pen Water District's jurisdiction. This project will connect to Bullock Pen Water District's Phase 7 project and will eventually set up an alternate source of water from Boone County Water District for the water distribution system.

Project Descriptor: _____

WRIS Project Number (PNUM): * _____

*This number is assigned by an ADD through the respective Area Water Management Planning Council once the project profile is approved by the Council. This number ties each project to mapped/spatial information in the Water Resource Information System (WRIS). Project profiles without this number AND the required corresponding mapped/spatial information will NOT be accepted.

Project County:

Is it a multi-county project: Yes No

Project Submitted By:

Select the PWSID# from the list below:

- Available:
- 0010082
 - 0010702
 - 0020386
 - 0020956
 - 0030007
 - 0030239
 - 0030660
 - 0040015
 - 0040020
 - 0040223

- Selected:
- None Selected..
 - 0410047

3. Legal Applicant

Legal Applicant:

Water Utility which will own proposed improvements:
(if different from Legal Applicant)

Organizational Structure:

Authorized Official Information

First Name: Last Name: M.I.:

Title:

Street Address Line 1:

Street Address Line 2:

P.O. Box:

City: State: Zip:

County:

Telephone: Ext:

Fax:

Email:

Contact Person Information

First Name: Last Name: M.I.:

Title:

Street Address Line 1:

Street Address Line 2:

P.O. Box:

City: State: Zip:

County:

Telephone: Ext:

Fax:

Email:

Project Administrator Information

First Name: Last Name: M.I.:

Title:

Street Address Line 1:

Street Address Line 2:

P.O. Box:

City: State: Zip:

County:

Telephone: Ext:

Fax:

Email:

Consulting Engineer Information

First Name: Kerry Last Name: Odle M.I.: S
 Firm: CMW Engineering, Inc.
 Street Address Line 1: 138 N. Keeneland Drive
 Street Address Line 2: Suite E
 P.O. Box: 831
 City: Richmond State: KY Zip: 40475
 County: Madison
 Telephone: 859.623.2966 ext: 111
 Fax: 859.623.0886
 Email: kodle@cmwaec.com

4. Project Type (check all that apply):

- Planning
- Design
- Construction
- Management

5. Project Alternatives: Please list a minimum of three:

- a. No service to customers
- b. Negotiate with Boone County Water District to serve area
- c. Line sizes, pressure control valves and connection area were discussed prior to hydraulic analysis was completed.

6. Special Impact(s) of Proposed Water Project:

- a. New service/improve service to 152 unserved underserved households
- b. Number of new jobs: 0 Number of retained jobs: 0
- c. Other beneficial technical, managerial, fiscal impacts: (20 words or less)
Water line extension project will move both Bullock Pen Water District and Boone County Water District water system into a better position to have an alternate source of water supply.
- d. Does proposed activity relate to public health protection emergency: Yes No
- e. Does project involve regionalization: Yes No
- f. Number of systems affected/involved: 1

7. Median Household Income of Service Area:

\$ 48,999.00 (Boone County, 1997 U of L Study)

8. Project Start Schedule:

Years 0-2 Years 3-10 Years 11-20

9. Estimated Funding Sources:

Estimated Local Funding Amount \$ 72,200
 Estimated Other Funding Amount (all sources) \$ 780,100
 Total Estimated Project Cost \$ 852,300

10. Project Data - Water (complete all items which apply to your project)

- a. Is project related to source protection? Yes No
 Acres 0

Cost (\$/acre)
Use control (r/c)

Drinking Water Facilities

b. Is project related to source? Yes No
Number of new surface/spring sources Total MGD
Number of new wells Total MGD

Elimination of Public Water Systems through Mergers

Number of systems serving 500 or fewer population
 Number of systems serving 501-3,000 population
 Number of systems serving 3,001-10,000 population
 Number of systems serving 10,001 or greater population

Interconnections

Number of water treatment plants eliminated
* Number of supplemental potable water supply
* Number of emergency backup potable water supply

Source Water Quantity and Quality

Number of existing raw water sources replaced
 Number of existing raw water sources supplemented

Briefly describe why the above items apply to your project:

* Phase 10 project will expand to the perimeter of both Bullock Pen Water District and Boone County Water District's jurisdiction. This will create an opportunity for both systems to have an emergency back-up or a daily zoned consumption.

c. Is project related to water treatment? Yes No
If new or expanded plant, proposed design capacity MGD (as a result of this project)

Project will involve expansion or modification of

Microbiology and Turbidity

Pre-filtration (CT/Microbial removal)
Filtration (Surface Water Treatment Rule Compliance)
Disinfection Process (CT/Microbial Inactivation)

Best Available Technologies

VOCs IOCs SOCs Radionuclides
Disinfectants Disinfection by-products
Secondary contaminants

d. Is project related to distribution (Extension/Rehab)? Yes No
Check all that apply to your project

Extension Water Tank
 Rehab/Improvement Pump Station

Proposed project involves construction of line

Total linear feet of new line
Line Size (in inches) 2 3 4 6 8 10 greater than 10
Material Ductile Iron PVC PE Other

Project activity improves pressure, as a result of

Replacement of total linear feet of inadequately sized lines
 total gallons of increased storage due to additional demand

Leaks, Breaks, or restrictive flows due to age

Project activity improves water quality by providing:

Adequate turnover of water
Proper maintenance of disinfection residual

Replacement of [] total linear feet of lead, copper, asbestos-cement lines

Briefly describe why the above items apply to your project:

In the project area, there has been several extravagant homes constructed with several older

homes. The population in this area continues to grow from the Florence base.

e. Management (describe) This project will supply residents with fire protection flow and a reliable source of potable water supply.

[]

f. Other (describe)

[]

g. Date Project was approved by the Area Water Management Planning Council: []

Project Summary
Bullock Pen Water Line Extension
Phase 10
Boone County

	<u>Road Name</u>	<u>Length</u>	<u>Customers</u>	<u>Construction</u>
1.	Highway 42	2.95 mi.	40	\$198,325
2.	Cleeks Lane	1.25 mi.	28	\$89,200
3.	Croach Road	0.3 mi.	8	\$23,550
4.	Webb Road	0.5 mi.	8	\$33,850
5.	Beaver Road	3.45 mi.	48	\$242,450
6.	Dickerson Road	<u>1.40 mi.</u>	<u>20</u>	<u>\$90,800</u>
Total:		9.85 mi.	152	\$678,175

**Preliminary Project Cost
Bullock Pen Water Extension
Phase 10
Boone County**

1.	Construction Cost	\$678,175
2.	Legal Expense	\$12,000
3.	Environmental	\$5,000
4.	Preliminary Engineering	\$5,000
5.	Engineer Design	\$59,408
6.	Resident Inspection	\$37,232
7.	Loan Expense	\$8,000
8.	Contingencies	<u>\$47,485</u>
		\$852,300

Financing

1.	Tap-on fees - 152 customers @ \$475/EA =	\$72,200
2.	Other funds =	<u>\$780,100</u>
	Total =	\$852,300

**Preliminary Construction Estimate
Bullock Pen Water Extension
Phase 10
Boone County**

1.	Highway 42 – 40 customers – 2.95 miles	
	a. 8” PVC Water Line – 15,600 LF @ \$8.50/LF	\$132,600
	b. 8” Gate Valve – 9 EA @ \$575/EA	\$5,175
	c. Fire Hydrant – 16 EA @ \$1,800/EA	\$28,800
	d. Creek Crossing – 1 EA @ \$5,000/EA	\$5,000
	e. Creek Crossing Gate Valve – 1 EA @ \$750/EA	\$750
	f. Meters with Service Line – 40 EA @ \$650/EA	<u>\$26,000</u>
	Total Highway 42 =	\$198,325
2.	Cleeks Lane – 28 customers – 1.25 miles	
	a. 8” PVC Water Line – 6,600 LF @ \$8.50/LF	\$56,100
	b. 8” Gate Valve – 4 EA @ \$575/EA	\$2,300
	c. Fire Hydrant – 7 EA @ \$1,800/EA	\$12,600
	d. Meters w/ Service Line – 28 EA @ \$650/EA	<u>\$18,200</u>
	Total Cleeks Lane	\$89,200
3.	Crouch Road – 8 customers – 0.3 miles	
	a. 8” PVC Water Line – 1,600 LF @ \$8.50/LF	\$13,600
	b. 8” Gate Valve – 2 EA @ \$575/EA	\$1,150
	c. Fire Hydrant – 2 EA @ \$1,800/EA	\$3,600
	d. Meters with Service Line – 8 EA @ \$650/EA	<u>\$5,200</u>
	Total Crouch Road	\$23,550
4.	Webb Road – 8 customers – 0.5 miles	
	a. PVC Water Line – 2,600 LF @ \$8.50/LF	\$22,100
	b. 8” Gate Valve – 2 EA @ \$575/EA	\$1,150
	c. Fire Hydrants – 3 EA @ \$1,800/EA	\$5,400
	d. Meters with Service Line – 8 EA @ \$650/EA	<u>\$5,200</u>
	Total Webb Road	\$33,850

5.	Beaver Road – 48 customers – 3.45 miles	
	a. 8” PVC Water Line – 18,200 LF @ \$8.50/LF	\$154,700
	b. 8” Gate Valve – 12 EA @ \$575/EA	\$6,900
	c. Creek Crossings Valve – 3 EA @ \$750/EA	\$2,250
	d. Fire Hydrant – 18 EA @ \$1,800/EA	\$32,400
	e. Creek Crossing – 3 EA @ \$5,000/EA	\$15,000
	f. Meters with Service Line – 48 EA @ \$650/EA	<u>\$31,200</u>
	Total Beaver Road	\$242,450
6.	Dickerson Road – 20 customers – 1.40 miles	
	a. 8” PVC Water Lines – 7,400 LF @ \$8.50/LF	\$62,900
	b. 8” Gate Valve – 4 EA @ \$575/EA	\$2,300
	c. Fire Hydrant – 7 EA @ \$1,800/EA	\$12,600
	d. Meters with Service Line – 20 EA @ \$650/EA	<u>\$13,000</u>
	Total Dickerson Road	\$90,800

EXHIBIT “G”

Phase 10 Final Engineering Report

Final Engineering Report

Bullock Pen Water Line Extension Phase 10

Bullock Pen Water District

By

**CMW, Inc.
138 N. Keeneland Drive
Suite E
Richmond, KY 40475**

May, 2005

Table of Contents

1. Bid Advertisement
2. Bid Tabulation
3. Tabulation of Unit Prices
4. Minutes of Bid Opening
5. Engineer's Recommendation
6. Bid of Low Bidder
7. Revised Project Cost
8. Division of Water Approval Letter

ADVERTISEMENT FOR BIDS

Bullock Pen Water District

Separate sealed BIDS for Water Line Extension, Phase 10, Boone County will be received by the Owner at the office of Bullock Pen Water District, Crittenden, Kentucky, until 3:00 p.m. EDT on Tuesday, April 26, 2005 and then publicly opened and read aloud.

Construction of base bid shall consist of approximately 40,720 LF of 8" water line, 55 gate valves, 36 fire hydrants, 500 LF of bores with steel encasement, 2 air relief valves, 80 meters with service piping, 6 creek crossing valves, 203 LF creek crossing, 242 LF of free bore, 192 LF of open cut with steel encasement pipe, and all other necessary appurtenances.

The CONTRACT DOCUMENTS may be examined at the following locations:

CMW, Inc., 138 N Keeneland Drive, Suite E, Richmond, KY
Bullock Pen Water District, 1 Farrell Drive, Crittenden, KY
Associated General Contractors/Dodge Plan Room, 950 Contract Street, Suite 100A, Lexington, KY
Allied Construction Industries, 1010 Yale Avenue, Cincinnati, OH
Reed Construction Data/ABC Plan Room, 1812 Taylor Avenue, Louisville, KY
Reed Construction Data/ABC Plan Room, 132 Venture Court, Suite 12, Lexington, KY
F. W. Dodge Plan Room, Grant Baldwin Building, 655 Eden Park Road, Suite 515, Cincinnati, OH

Copies of the CONTRACT DOCUMENTS may be obtained from Lynn Imaging, 328 Old East Vine Street, Lexington, KY 40507, phone 859\255-1021 upon the following non-refundable payment of \$75.00 for each set. Make checks payable to CMW, Inc.

If bidding documents are requested to be sent by mail, include an additional \$11.00 for each set to cover cost of handling and postage. This check shall be made payable to Lynn Imaging.

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 120 days after the actual date of the opening thereof.

Award will be made to the lowest responsive Bidder unless all bids are rejected.

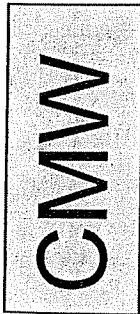
Each bidder will make positive efforts to use small, minority, woman owned and disadvantaged businesses.

April 8, 2005

Date

BULLOCK PEN WATER DISTRICT
CRITTENDEN, KENTUCKY

CMW, INC.
138 NORTH KEENELAND DRIVE
SUITE E
RICHMOND, KENTUCKY



BID TABULATION FORM

138 N. KEENELAND DRIVE, SUITE E
 RICHMOND, KENTUCKY 40475

PROJECT: Bullock Pen Water District
 Phase 10 Water Line Extension
 #02411.05
 REBID DATE: April 26, 2005 - 3:00 p.m.

GENERAL CONTRACTORS	BID BOND	TOTAL BASE BID	NOTES
Armrel Byrnes			
B.P. Pipeline	X	\$742,050.00	\$742,050.00 - Corrected Bid - Math Error
Coomer Contracting			
GM Pipeline, Inc.			
Larry Smith Contractors			
Lykins Contracting, Inc.			
Music Construction, Inc.	X	\$1,396,110.00	
S. J. Cox Enterprises	X	\$985,451.00	
Staton's Construction	X	\$891,240.00	
Stotts Construction	X	\$814,009.50	
Tilton Excavating, LLC	X	\$947,440.00	
United Plumbing & Sewer Services			
Engineer's Estimate		\$796,792.00	

I CERTIFY THAT THE ABOVE IS A TRUE AND ACCURATE TABULATION OF THE BIDS RECEIVED FOR THIS PROJECT ON THE DATE LISTED ABOVE.

CMW, INC.

By: _____

TABULATION OF UNIT PRICES

**BULLOCK PEN WATER DISTRICT
WATER MAIN EXTENSION,
PHASE 10 (REBID)
PROJECT #02411.05**

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICES						
				BP PIPELINE, LLC	STOTTS CONSTRUCTION CO., INC.	STATION'S CONSTRUCTION CO., INC.	TILTON EXCAVATING, LLC	S. J. COX ENTERPRISES, INC.	MUSIC CONSTRUCTION	
1.	8" PVC Water Main, Class 200	14,400	LF	\$10.50	\$13.10	\$12.50	\$15.00	\$15.50	\$24.50	
2.	8" PVC Water Main, Class 250	24,260	LF	\$11.50	\$14.30	\$13.50	\$16.00	\$16.75	\$26.50	
3.	8" PVC Water Main, C-900, Class 200	2,060	LF	\$13.50	\$16.40	\$15.50	\$18.00	\$19.00	\$28.50	
4.	8" MJ Gate Valve, Complete with Box and Cover	55	EA	\$700.00	\$825.00	\$975.00	\$600.00	\$715.00	\$800.00	
5.	8" MJ Gate Valve with Bypass Meter (Creek Crossing)	6	EA	\$900.00	\$1,200.00	\$1,150.00	\$1,500.090	\$1,250.00	\$1,200.00	
6.	Air Relief Valve, Complete with Box and Cover	2	EA	\$300.00	\$625.00	\$570.00	\$400.00	\$400.00	\$500.00	
7.	Fire Hydrant, Complete with Gate Valve	36	LF	\$2,300.00	\$2,200.00	\$2,800.00	\$2,500.00	\$2,500.00	\$2,500.00	
8.	Jack and Bore with 12" Steel Encasement Pipe	500	LF	\$120.00	\$75.00	\$90.00	\$125.00	\$125.00	\$180.00	
9.	Open Cut with 12" Steel Encasement Pipe	192	LF	\$40.00	\$55.00	\$70.00	\$40.00	\$65.00	\$90.00	
10.	Free Bore for 8" Water Main	242	LF	\$40.00	\$30.00	\$75.00	\$75.00	\$50.00	\$20.00	

TABULATION OF UNIT PRICES

**BULLOCK PEN WATER DISTRICT
WATER MAIN EXTENSION,
PHASE 10 (REBID)
PROJECT #02411.05**

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICES						
				BP PIPELINE, LLC	STOTTS CONSTRUCTION CO., INC.	STATON'S CONSTRUCTION CO., INC.	TILTON EXCAVATING, LLC	S. J. COX ENTERPRISES, INC.	MUSIC CONSTRUCTION	
11.	Creek Crossing with PVC Encasement	177	LF	\$80.00	\$35.00	\$130.00	\$60.00	\$85.00	\$50.00	
12.	Concrete Encasement	15	CY	\$80.00	\$65.00	\$75.00	\$150.00	\$200.00	\$150.00	
13.	Extra Crushed Stone Bedding	100	TONS	\$20.00	\$25.00	\$20.00	\$20.00	\$20.00	\$15.00	
14.	5/8" x 3/4" Meter Unit without PRV	40	EA	\$600.00	\$350.00	\$475.00	\$550.00	\$520.00	\$400.00	
15.	5/8" x 3/4" Meter Unit with PRV	38	EA	\$600.00	\$450.00	\$550.00	\$650.00	\$585.00	\$500.00	
16.	3/4" PE Service Line	760	LF	\$3.50	\$3.50	\$6.50	\$5.00	\$8.00	\$9.00	
17.	1" PE Service Line	1,360	LF	\$4.50	\$4.50	\$7.00	\$5.00	\$8.10	\$10.00	
18.	1" PE Service Line, Jacked under Roadway	1,290	LF	\$5.00	\$5.25	\$25.00	\$10.00	\$12.00	\$15.00	

May 2, 2005

To: Bobby Burgess
Bullock Pen Water District

From: Kerry Odle
CMW, Inc.

Re: Water Line Extension, Phase 10
Boone County

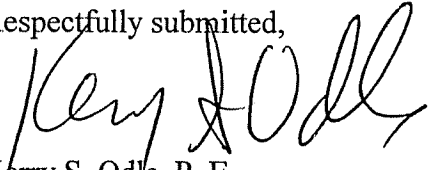
Subject: Bid Opening Minutes

Bids were accepted of Bullock Pen Water Line Extension, Phase 10 until 3:00 p.m. on Tuesday, April 26, 2005. All bidders were thanked for their bid.

Kerry Odle, Project Engineer, opened and read aloud all bids as shown on the attached "Tabulation of Bids". The apparent low bidder was announced as B. P. Pipeline LLC with a bid of \$745,050.00. The engineer's estimate was not announced but was \$796,792.00.

Mr. Odle announced that all bids would be reviewed and a recommendation given to Bullock Pen Water District for consideration. Attached is a List of Attendees at the bid opening.

Respectfully submitted,



Kerry S. Odle, P. E.

KSO/jp

Attachment

c: Jim Parsons W/A
File W/A

CMW inc.

ARCHITECTURE CIVIL ENGINEERING SURVEYING SITE PLANNING
138 N. Keeneland Dr., Suite E, Richmond, KY 40475 859.623.2966 Fax 859.623.0886

Bullock Pen Water District
Phase 10
Project No. 02411.05
Rebid Opening - 4/26/05
List of Attendees

<u>Name</u>	<u>Company</u>
1. <i>Norm Staba</i>	<i>Staba Const.</i>
2. <i>Joe Co</i>	<i>Joe Co Enterprises Inc</i>
3. <i>Randy Curry</i>	<i>Staba Const</i>
4. <i>Bill Catlett</i>	<i>BPWD</i>
5. <i>Kerry Odle</i>	<i>CMW</i>
6.	
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May 2, 2005

Mr. Bobby Burgess, Chairman
Bullock Pen Water District
P. O. Box 188
Crittenden, KY 41030

Re: Water Line Extension, Phase 10
Boone County

Dear Bobby:

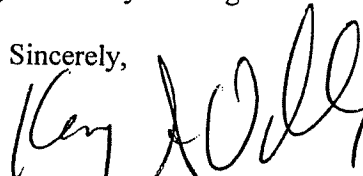
I have reviewed all bids and found a math error in the bid of B. P. Pipeline LLC, which lowered their bid to \$742,050.00. B.P. Pipeline LLC was the low bidder on the project.

I have never worked with B. P. Pipeline LLC on a project but have checked the references which they have submitted. All the engineers contacted stated that they were a good contractor and they would recommend them on any future projects.

Based on the above information, I recommend that the Water Line Extension, Phase 10 be awarded to B. P. Pipeline LLC with a corrected bid of \$742,050.00. Attached is a copy of the "Tabulation of Bids" and a revised budget and surcharge cost.

I will be able to answer any questions at Tuesday's monthly meeting.

Sincerely,



Kerry S. Odle, P. E.

Attachment

c: Jim Parsons W/A
File W/A

CMW inc.

ARCHITECTURE CIVIL ENGINEERING SURVEYING SITE PLANNING
138 N. Keeneland Dr., Suite E, Richmond, KY 40475 859.623.2966 Fax 859.623.0886

BID

**WATER MAIN EXTENSION - PHASE 10
BOONE COUNTY
BULLOCK PEN WATER DISTRICT**

Proposal of B.P. Pipeline, LLC (hereinafter called "BIDDER"), a corporation organized and existing under the laws of the State of Ky doing business as Corporation (LLC) *.

To the Bullock Pen Water District (hereinafter called "OWNER").

In compliance with your Advertisement for Bids, BIDDER hereby proposes to perform all WORK for the construction of Water Main Extension - Phase 10 – Boone County in strict accordance with the CONTRACT DOCUMENTS, within the time set forth therein, and at the prices stated below.

By submission of this BID, the 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 120 consecutive calendar days. BIDDER further agrees to pay as liquidated damages, the sum of \$300 for each consecutive calendar day thereafter as hereinafter provided in Section 15 of the General Conditions.

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

BIDDER acknowledges receipt of the following ADDENDUM:

No. _____ Dated _____ No. _____ Dated _____
 No. _____ Dated _____ No. _____ Dated _____

BIDDER agrees to perform all the work described in the CONTRACT DOCUMENTS for the following unit prices:

- NOTE: (1) BIDS shall include sales tax and all other applicable taxes and fees.
- (2) Breakdown of work is for general information. Any work shown on Drawings and/or specified but not listed below shall be included in total base bid. Cost of items of work not specifically described below may be added to related bid item(s) at bidder's discretion.

BID SCHEDULE

Part I. Base Bid

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
1.	8" PVC Water Main, Class 200	14,400	LF	\$ 10.50	\$ 151,200.00
2.	8" PVC Water Main, Class 250	24,260	LF	\$ 11.50	\$ 278,990.00
3.	8" PVC Water Main, C-900, Class 200	2,060	LF	\$ 13.50	\$ 27,810.00
4.	8" MJ Gate Valve, Complete with Box and Cover	55	EA	\$ 700.00	\$ 38,500.00
5.	8" MJ Gate Valve with Bypass Meter (Creek Crossing)	6	EA	\$ 900.00	\$ 5,400.00
6.	Air Relief Valve, Complete with Box and Cover	2	EA	\$ 300.00	\$ 600.00
7.	Fire Hydrant, Complete with Gate Valve	36	LF	\$ 2300.00	\$ 82,800.00
8.	Jack and Bore with 12" Steel Encasement Pipe	500	LF	\$ 120.00	\$ 60,000.00
9.	Open Cut w/ 12" Steel Encasement Pipe	192	LF	\$ 40.00	\$ 7,680.00
10.	Free Bore for 8" Water Main	242	LF	\$ 40.00	\$ 9,680.00

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
11.	Creek Crossing with PVC Encasement	177	LF	\$ 80.00	\$ 14,160.00
12.	Concrete Encasement	15	CY	\$ 80.00	\$ 1,200.00
13.	Extra Crushed Stone Bedding	100	TONS	\$ 20.00	\$ 2,000.00
14.	5/8" x 3/4" Meter Unit without PRV	40	EA	\$ 600.00	\$ 24,000.00
15.	5/8" x 3/4" Meter Unit with PRV	38	EA	\$ 600.00	\$ 22,800.00
16.	3/4" PE Service Line	760	LF	\$ 3.60	\$ 2,660.00
17.	1" PE Service Line	1,360	LF	\$ 4.50	\$ 6,120.00
18.	1" PE Service Line, Jacked under Roadway	1,290	LF	\$ 5.00	\$ 6,450.00

Total Part I. Base Bid:

\$ 745,050.00 ¹⁴⁵⁰ 742,050.00
 (USE FIGURES)

Seven hundred forty two thousand and fifty dollars ^{no} cents
 (USE WORDS)

TOTAL AMOUNTS SHALL BE SHOWN IN BOTH WORDS AND FIGURES. IN CASE OF DISCREPANCIES, THE AMOUNT AS WRITTEN IN WORDS SHALL GOVERN.

The above price shall include all labor, materials, bailing, shoring, removal, overhead, profit, insurance, etc., to cover the finished work of the several kinds called for. Changes shall be processed in accordance with the General Conditions.

Award of the Contract will be based on the lowest and best Total Base Bid.

The Bidder agrees that the Owner reserves the right to delete the whole or any part of the project from the Contract.

The Bidder understands that the Owner reserves the right to reject any or all bids and to waive any informalities in the bidding.

The Bidder agrees that this bid shall be good and may not be withdrawn for a period of one hundred twenty (120) calendar days after the scheduled closing time for receiving bids.

Upon receipt of written notice of the acceptance of this bid, Bidder will execute the formal contract attached within ten (10) days and deliver a surety bond or bonds as required by Article 22 of the General Conditions.

Respectfully submitted:

B.P. Pipeline, LLC
(Name of Contracting Firm)

BY: Tony Palarie

TITLE: manager

ADDRESS: HC 76 Box 838

Quincy, Ky 41166

DATE: 5-24-05

License No. (if applicable)

Seal (If Bid by Corporation)

Attest: _____

END BID FORM

**Bullock Pen Water District Phase 10
Surcharge Calculations
(Revised 5/2/05)**

82 Customer Sign-ups - \$39,115

Project Cost

1. Construction	\$742,050
2. Legal	\$10,000
3. Easement Preparation	\$5,000
4. Obtaining Easements	\$2,000
5. Recording Fees	\$400
6. Legal Advertisement, Prints & Postage	\$1,300
7. Preliminary Engineering	\$5,000
8. Engineering Design	\$59,408
9. Resident Inspection	\$37,232
10. Engineering for Rebid	\$5,500
11. Loan Expense	\$7,000
12. Contingencies	<u>\$51,910</u>
 Total Project Cost:	 \$926,800

Funding

KIA Grant	\$300,000
Tap-on Fees	\$39,115
Boone County (1/3 project cost)	\$308,933
KRWA Loan	<u>\$278,752</u>
 Total	 \$926,800

Bullock Pen Yearly Contribution

\$56.82 x 82	\$4,659
--------------	---------

Surcharge Calculations

Average Annual Debt Payment (25 years, 4 1/2% interest)	
\$278,752 x 0.06744	\$18,799
Bullock Pen Yearly Contribution	<u>(-\$4,659)</u>
Surcharge Loan Payment	\$14,140
Yearly Surcharge \$14,140/82	\$172.44
Monthly Surcharge	\$14.37

Note: Based on PSC Ruling for Phase 7. The proforma will probably have minor changes.

HENRY C. LIST
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
November 14, 2003

Bullock Pen Water District
ATTN: William R. Catlett
PO Box 188
Crittenden, Kentucky 41030

RE: DW # 0410047-03-006
Water Line Extension
Phase 10
Boone Co., Kentucky

Dear Mr. Catlett:

We have reviewed the plans and specifications for the above referenced project. The plans include the construction of approximately 43,281 feet of 8-inch PVC and 550 feet of 6-inch PVC water line. This is to advise that plans and specifications for the above referenced project are APPROVED with respect to sanitary features of design, as of the date of this approval letter, with the following stipulations:

1. If PVC piping is used, it must be NSF approved and manufactured in accordance with ASTM standards.
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. Fire hydrants shall not be installed on lines less than six inches in diameter or served by other lines less than six inches in diameter. No flushing device shall be directly connected to any sewer.
3. 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 twenty-four (24) hours and the disinfection shall be followed by a thorough flushing.”

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.

4. 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.
5. 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.

6. Chlorinated water resulting from disinfection of treatment facilities and new, repaired, or extended distribution systems shall be disposed in a manner which will not violate 401 KAR 5:031.
7. 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.

8. For underwater crossings 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.
9. 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.
10. A minimum free chlorine residual of 0.2 pm must be maintained throughout the distribution system. If this residual can not be maintained, booster chlorination facilities must be provided. If chloramination is used, a minimum combined residual of 0.5 ppm must be maintained throughout the distribution system.
11. 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.

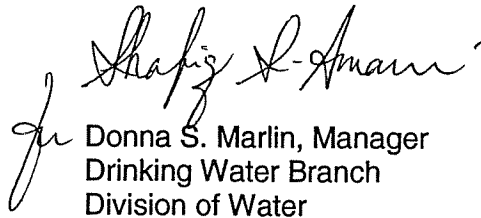
Since the requirements of Administrative Regulations 401 KAR 4:050, Section 2 are met with regard to subfluvial pipe crossings, a floodplain construction permit will not be required pursuant to KRS 151.250 for this aspect of the project. Please note the reference to subfluvial pipe line crossings in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

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.

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 permits or licenses required by this Cabinet and other state, federal and local agencies.

Unless construction of this project commences within one year from the date of this approval letter, Bullock Pen Water District shall request an official extension from the Division of Water prior to the first anniversary of this approval letter, or resubmit the original plans and specifications for a new comprehensive review. If you have any questions concerning this project, please contact Stephanie Rich at (502) 564-2225, extension 422.

Sincerely,


Donna S. Marlin, Manager
Drinking Water Branch
Division of Water

DSM:SSR

Enclosures

C: CMW, Inc.
Boone County Health Department
Public Service Commission
Division of Plumbing
Florence Regional Office
Water Quality
Water Resources
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 March 17, 2002, 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. This general Water Quality Certification is limited to the crossing of streams by utility lines. The length of a single utility stream crossing shall not exceed twice the width of the stream. This document does not authorize the installation of utility lines in a linear manner within the stream channel or below the top of the stream bank.
2. The provisions of 401 KAR 5:005 Section 8 are hereby incorporated into this General Water Quality Certification. Namely, "Sewer lines shall be located at least 50 feet away from a stream which appears as a blue line on a USGS 7 1/2 minute topographic map except where the sewer alignment crosses the stream. The distance shall be measured from the top of the stream bank. The cabinet may allow construction within the 50' buffer if adequate methods are used to prevent soil from entering the stream.

Gravity sewer lines and force mains that cross streams shall be constructed by methods that maintain normal stream flow and allow for a dry excavation. Water pumped from the excavation shall be contained and allowed to settle prior to re-entering the stream. Excavation equipment and vehicles shall operate outside of the flowing portion of the stream. Spoil material from the sewer line excavation shall not be allowed to enter the flowing portion of the stream." The provisions of this condition shall apply to all types of utility line stream crossings.

3. Removal of riparian vegetation in the utility line right-of-way shall be limited to that necessary for equipment access. Effective erosion and sedimentation control measures must be employed at all times during the project to prevent degradation of waters of the Commonwealth. Site regarding and reseeded will be accomplished within 14 days after disturbance.



4. Utility line construction projects through jurisdictional wetlands shall not result in conversion of the area to non-wetland status.
5. This General Certification shall not apply to those waters of the Commonwealth identified as Outstanding State Resource Waters, Exceptional Waters or Cold Water Aquatic Habitat Waters, as designated by the Division of 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 March 19, 2007, or sooner if the COE makes significant changes to this nationwide permit.

EXHIBIT “H”

Phase 10 Project Manual

CMMW Inc.

ARCHITECTURE

CIVIL ENGINEERING

SURVEYING

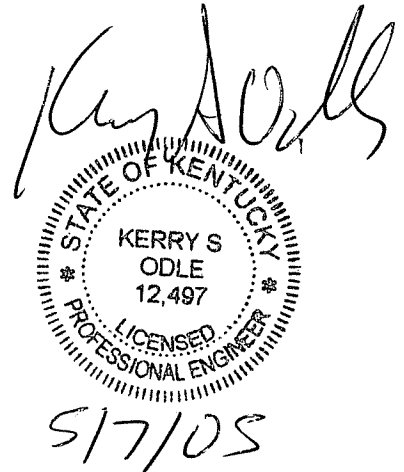
SITE PLANNING

WATER MAIN EXTENSION - PHASE 10 BOONE COUNTY

FOR

BULLOCK PEN WATER DISTRICT
BOONE COUNTY, KENTUCKY

JULY, 2003



PROJECT MANUAL

Set No.

Set #1

Digital Planroom
www.lynnimaging.com

PROJECT MANUAL

FOR

**WATER MAIN EXTENSION - PHASE 10
BOONE COUNTY**

FOR

BULLOCK PEN WATER DISTRICT

OWNER:

BULLOCK PEN WATER DISTRICT

JULY, 2003

**CMW, INC
138 NORTH KEENELAND DRIVE, SUITE E
RICHMOND, KENTUCKY 40475**

CMW PROJECT NO. 02411.02

TABLE OF CONTENTS

SECTION NO.

TITLE

DIVISION 0 - BIDDING AND CONTRACT DOCUMENTS

00010	Advertisement for Bids	1 - 2
00100	Information for Bidders	1 - 3
00300	Bid Bond Form	1 - 2
00400	Bid Form	1 - 4
00450	Non-Collusion Affidavit	1
00600	Agreement	1 - 3
00610	Payment Bond	1 - 2
00615	Performance Bond	1 - 2
00800	General Conditions	1 - 8
00840	State Wage Rates	1 - 14

DIVISION 1 - GENERAL REQUIREMENTS

01010	Special Conditions	1 - 10
-------	--------------------	--------

DIVISION 2 - TECHNICAL SPECIFICATIONS

02235	Siltation Control	1 - 3
02510	Water Mains	1 - 14
02920	Seeding, Fertilizing and Mulching	1 - 4
03300	Concrete	1 - 4

END OF TABLE OF CONTENTS

ADVERTISEMENT FOR BIDS

Bullock Pen Water District

Separate sealed BIDS for Water Line Extension, Phase 10, Boone County will be received by the Owner at the office of Bullock Pen Water District, Crittenden, Kentucky, until 3:00 p.m. EDT on Tuesday, April 26, 2005 and then publicly opened and read aloud.

Construction of base bid shall consist of approximately 40,720 LF of 8" water line, 55 gate valves, 36 fire hydrants, 500 LF of bores with steel encasement, 2 air relief valves, 80 meters with service piping, 6 creek crossing valves, 203 LF creek crossing, 242 LF of free bore, 192 LF of open cut with steel encasement pipe, and all other necessary appurtenances.

The CONTRACT DOCUMENTS may be examined at the following locations:

CMW, Inc., 138 N Keeneland Drive, Suite E, Richmond, KY
Bullock Pen Water District, 1 Farrell Drive, Crittenden, KY
Associated General Contractors/Dodge Plan Room, 950 Contract Street, Suite 100A, Lexington, KY
Allied Construction Industries, 1010 Yale Avenue, Cincinnati, OH
Reed Construction Data/ABC Plan Room, 1812 Taylor Avenue, Louisville, KY
Reed Construction Data/ABC Plan Room, 132 Venture Court, Suite 12, Lexington, KY
F. W. Dodge Plan Room, Grant Baldwin Building, 655 Eden Park Road, Suite 515, Cincinnati, OH

Copies of the CONTRACT DOCUMENTS may be obtained from Lynn Imaging, 328 Old East Vine Street, Lexington, KY 40507, phone 859\255-1021 upon the following non-refundable payment of \$75.00 for each set. Make checks payable to CMW, Inc.

If bidding documents are requested to be sent by mail, include an additional \$11.00 for each set to cover cost of handling and postage. This check shall be made payable to Lynn Imaging.

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 120 days after the actual date of the opening thereof.

Award will be made to the lowest responsive Bidder unless all bids are rejected.

Each bidder will make positive efforts to use small, minority, woman owned and disadvantaged businesses.

April 8, 2005

Date

BULLOCK PEN WATER DISTRICT
CRITTENDEN, KENTUCKY

CMW, INC.
138 NORTH KEENELAND DRIVE
SUITE E
RICHMOND, KENTUCKY

SECTION 00100 - INFORMATION FOR BIDDERS

BIDS will be received by Bullock Pen Water District, (herein called the "OWNER") at the office of the Bullock Pen Water District, 1 Farrell Drive, Crittenden, Kentucky, until 3:00 p.m. EDT on Tuesday, April 26, 2005 and then publicly opened and read aloud.

Each BID must be submitted in a sealed envelope, addressed to Bullock Pen Water District, 1 Farrell Drive, Crittenden, Kentucky 41311. Each sealed envelope containing a BID must be plainly marked on the outside as BID for Water Main Extension, Phase 10 – Boone County and the envelope should bear on the outside the name of the BIDDER, his address, his 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 OWNER at 1 Farrell Drive, Crittenden, KY 41030.

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 120 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.

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 must be accompanied by a BID bond payable to the OWNER for five 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, will be required for the faithful performance of the contract.

Attorneys-in-fact who sign BID BONDS or 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 ten (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 ten (10) 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 his 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 ten (10) 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 ten (10) day period or within the period mutually agreed upon, the CONTRACTOR may terminate the Agreement without further liability on the part of either party.

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 responsive BIDDER unless all bids are rejected.

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 his 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 CMW, Inc. The ENGINEER'S address is P. O. Box 831, 138 N Keeneland Drive, Suite E, Richmond, KY 40475.

END SECTION

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned, _____
_____ as Principal, and
_____ as Surety, are hereby
held and firmly bound unto _____ 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, successors and assigns.

Signed, this _____ day of _____, 19_____

The Condition of the above obligation is such that whereas the Principal has submitted
to _____ a certain BID,
attached hereto and hereby made a part hereof to enter into a contract in writing, for the

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.)

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.

BID

**WATER MAIN EXTENSION - PHASE 10
BOONE COUNTY
BULLOCK PEN WATER DISTRICT**

Proposal of _____ (hereinafter called "BIDDER"), a corporation organized and existing under the laws of the State of _____ doing business as _____*.

To the Bullock Pen Water District (hereinafter called "OWNER").

In compliance with your Advertisement for Bids, BIDDER hereby proposes to perform all WORK for the construction of Water Main Extension - Phase 10 – Boone County in strict accordance with the CONTRACT DOCUMENTS, within the time set forth therein, and at the prices stated below.

By submission of this BID, the 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 120 consecutive calendar days. BIDDER further agrees to pay as liquidated damages, the sum of \$300 for each consecutive calendar day thereafter as hereinafter provided in Section 15 of the General Conditions.

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

BIDDER acknowledges receipt of the following ADDENDUM:

No. _____ Dated _____ No. _____ Dated _____
 No. _____ Dated _____ No. _____ Dated _____

BIDDER agrees to perform all the work described in the CONTRACT DOCUMENTS for the following unit prices:

- NOTE: (1) BIDS shall include sales tax and all other applicable taxes and fees.
- (2) Breakdown of work is for general information. Any work shown on Drawings and/or specified but not listed below shall be included in total base bid. Cost of items of work not specifically described below may be added to related bid item(s) at bidder's discretion.

BID SCHEDULE

Part I. Base Bid

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
1.	8" PVC Water Main, Class 200	14,400	LF	\$	\$
2.	8" PVC Water Main, Class 250	24,260	LF	\$	\$
3.	8" PVC Water Main, C-900, Class 200	2,060	LF	\$	\$
4.	8" MJ Gate Valve, Complete with Box and Cover	55	EA	\$	\$
5.	8" MJ Gate Valve with Bypass Meter (Creek Crossing)	6	EA	\$	\$
6.	Air Relief Valve, Complete with Box and Cover	2	EA	\$	\$
7.	Fire Hydrant, Complete with Gate Valve	36	LF	\$	\$
8.	Jack and Bore with 12" Steel Encasement Pipe	500	LF	\$	\$
9.	Open Cut w/ 12" Steel Encasement Pipe	192	LF	\$	\$
10.	Free Bore for 8" Water Main	242	LF	\$	\$

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
11.	Creek Crossing with PVC Encasement	177	LF	\$	\$
12.	Concrete Encasement	15	CY	\$	\$
13.	Extra Crushed Stone Bedding	100	TONS	\$	\$
14.	5/8" x 3/4" Meter Unit without PRV	40	EA	\$	\$
15.	5/8" x 3/4" Meter Unit with PRV	38	EA	\$	\$
16.	3/4" PE Service Line	760	LF	\$	\$
17.	1" PE Service Line	1,360	LF	\$	\$
18.	1" PE Service Line, Jacked under Roadway	1,290	LF	\$	\$

Total Part I. Base Bid:

\$ _____
 (USE FIGURES)

 (USE WORDS)

TOTAL AMOUNTS SHALL BE SHOWN IN BOTH WORDS AND FIGURES. IN CASE OF DISCREPANCIES, THE AMOUNT AS WRITTEN IN WORDS SHALL GOVERN.

The above price shall include all labor, materials, bailing, shoring, removal, overhead, profit, insurance, etc., to cover the finished work of the several kinds called for. Changes shall be processed in accordance with the General Conditions.

Award of the Contract will be based on the lowest and best Total Base Bid.

The Bidder agrees that the Owner reserves the right to delete the whole or any part of the project from the Contract.

The Bidder understands that the Owner reserves the right to reject any or all bids and to waive any informalities in the bidding.

The Bidder agrees that this bid shall be good and may not be withdrawn for a period of one hundred twenty (120) calendar days after the scheduled closing time for receiving bids.

Upon receipt of written notice of the acceptance of this bid, Bidder will execute the formal contract attached within ten (10) days and deliver a surety bond or bonds as required by Article 22 of the General Conditions.

Respectfully submitted:

(Name of Contracting Firm)

BY: _____

TITLE: _____

ADDRESS: _____

DATE: _____

License No. (if applicable)

Seal (If Bid by Corporation)

Attest: _____

END BID FORM

**AUTHENICATION OF BID AND AFFIDAVIT OF NON-COLLUSION AND
NON-CONFLICT OF INTEREST**

I hereby swear (or affirm) under the penalty for false swearing as provided by KRS 432.170:

1. That I am the bidder (if the bidder is an individual), a partner in the bidder (if the bidder is a partnership), or an officer or employee of the bidding corporation having authority to sign on its behalf (if the bidder is a corporation);
2. That the attached bid has been arrived at by the bidder independently and has been submitted without collusion with, and without any agreement, understanding or planned common course of action with, any other contractor, vendor of materials, supplies, equipment, or services described in the Invitation to Bid, designed to limit independent bidding or competition;
3. That the contents of the bid has not been communicated by the bidder or its employees or agents to any person not an employee or agent of the bidder or its surety on any bond furnished with the bid and will not be communicated to any such person prior to the official opening of the bid;
4. That the bidder is legally entitled to enter into the contracts with the Bullock Pen Water District and is not in violation of any prohibited conflicts of interest;
5. (Applicable to corporations only) That as a foreign corporation we are registered with the Secretary of State, Commonwealth of Kentucky, and authorized to do business in the State of _____ or, that as a domestic corporation we are in good standing with the Secretary of State, Commonwealth of Kentucky _____. (Check the statement applicable.)
6. That this offer is for 120 calendar days from the date this bid is opened. In submitting the above, it is expressly agreed that, upon proper acceptance by the Bullock Pen Water District of any or all items bid above, a contract shall thereby be created with respect to the items accepted.
7. That I have fully informed myself regarding the accuracy of the statements made in this Affidavit.

READ CAREFULLY - SIGN IN SPACE BELOW - FAILURE TO SIGN INVALIDATES BID

Signed by _____
Title _____
Firm _____ Telephone No. _____
Address _____ Area Code _____
Date _____
City _____ State _____ Zip _____

END SECTION

AGREEMENT

THIS AGREEMENT, made this _____ day of _____, 2005, by and between Bullock Pen Water District hereinafter called "OWNER" and _____, doing business as a corporation, hereinafter called "CONTRACTOR".

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned:

1. The CONTRACTOR will commence and complete the construction of Water Main Extension, Phase 10, Boone County.
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 water line within 120 consecutive 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. Advertisement
 - B. Information to Bidders
 - C. Bid
 - D. Bid Bond
 - E. Agreement
 - F. General Conditions

- G. Payment Bond
- H. General Conditions
- I. Notice to Proceed
- J. Change Order
- K. Drawings prepared by CMW, Inc. numbered 1.1 through 6.1 dated
January, 2003.
- L. SPECIFICATIONS prepared or issued by CMW, Inc. and dated July, 2003.
- M. ADDENDA:
 - No. _____, dated _____, 20____.
 - _____, dated _____, 20____.
 - _____, dated _____, 20____.
 - _____, 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 official, this Agreement in 6 copies each of which shall be deemed an original on the date first above written.

(SEAL)

OWNER:

ATTEST:

BULLOCK PEN WATER DISTRICT

BY _____

NAME Paula Massie
(Please Type)

NAME Bobby Burgess
(Please Type)

TITLE Office Manager

TITLE Chairman

(SEAL)

CONTRACTOR:

ATTEST:

BY _____

NAME _____
(Please Type)

NAME _____
(Please Type)

TITLE _____

ADDRESS _____

EMPLOYER IDENTIFICATION NUMBER:

END SECTION

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: that

(Name of Contractor)

(Address of Contractor)

a _____ hereinafter called Principal,

(Corporation, Partnership or Individual)

and _____

(Name of Surety)

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto _____

(Name of Owner)

(Address of Owner)

hereinafter called OWNER, in the 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, 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 _____ 19_____, a copy of which is hereto attached and made a part hereof for the construction of:

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms, SUBCONTRACTORS, and corporations furnishing materials for or performing labor in the prosecution of the WORK provided for in such contract, and any authorized extension 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 all insurance premiums on said WORK, and for all labor, performed in such WORK whether by SUBCONTRACTOR or otherwise, 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 the WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any wise 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 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 _____ counterparts, each one of which shall be deemed an original, this the _____ day of _____ 19 _____

ATTEST:

(Principal) Secretary

(SEAL)

Witness as to Principal

(Address)

ATTEST:

Witness as to Surety

(Address)

Principal

By _____ (s)

(Address)

Surety

By _____
Attorney-in-Fact

(Address)

NOTE: Date of BOND must not be prior to date of Contract.
If CONTRACTOR 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.

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: that

(Name of Contractor)

(Address of Contractor)

a _____ hereinafter called Principal, and

(Corporation, Partnership, or Individual)

(Name of Surety)

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto _____

(Name of owner)

(Address of Owner)

hereinafter called OWNER, in the 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, 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 _____, 19____, a copy of which is hereto attached and made a part hereof for the construction of:

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 he 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 the same shall in any wise 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 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 _____ counterparts, each one of which shall be deemed an original, this the _____ day of _____ 19_____

ATTEST:

(Principal) Secretary
(SEAL)

(Witness as to Principal)

(Address)

Principal
By _____ (s)

(Address)

Surety

ATTEST:

(Surety) Secretary
(SEAL)

Witness as to Surety

(Address)

By _____
Attorney-in-Fact

(Address)

NOTE: Date of BOND must not be prior to date of Contract.
If CONTRACTOR 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.

GENERAL CONDITIONS

1. Definitions
2. Additional Instructions and Detail Drawings
3. Schedules, Reports and Records
4. Drawings and Specifications
5. Shop Drawings
6. Materials, Services and Facilities
7. Inspection and Testing
8. Substitutions
9. Patents
10. Surveys, Permits, Regulations
11. Protection of Work, Property, Persons
12. Supervision by Contractor
13. Changes in the Work
14. Changes in the Contract Price
15. Time for Completion and Liquidated Damages
16. Correction of Work

1. DEFINITIONS

- 1.1 Wherever used in the CONTRACT DOCUMENTS, the following terms shall have the meanings indicated which 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 security, furnished by the CONTRACTOR and his 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 **CONTRACTOR** -- The person, firm or corporation with whom the OWNER has executed the Agreement.
- 1.11 **DRAWINGS** -- The part of the CONTRACT

DOCUMENTS which show the characteristics and scope of the WORK to be performed and which have been

17. Subsurface Conditions
18. Suspension of Work, Termination and Delay
19. Payments to Contractor
20. Acceptance of Final Payment as Release
21. Insurance
22. Contract Security
23. Assignments
24. Indemnification
25. Separate Contracts
26. Subcontracting
27. Engineer's Authority
28. Land and Rights of Way
29. Guaranty
30. Arbitration
31. Taxes

prepared or approved by the ENGINEER.

1.12 **ENGINEER** -- The person, firm or corporation named as such in the CONTRACT DOCUMENTS.

1.13 **FIELD ORDER** -- A written order effecting 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.

1.14 **NOTICE OF AWARD** -- The written notice of the acceptance of the BID from the OWNER to the successful BIDDER.

1.15 **NOTICE TO PROCEED** -- Written communication issued by the OWNER to the CONTRACTOR authorizing him to proceed with the WORK and establishing the date of commencement of the WORK.

1.16 **OWNER** -- A public or quasi-public body or authority, corporation, association, partnership, or individual for whom the WORK is to be performed.

1.17 **PROJECT** -- The undertaking to be performed as provided in the CONTRACT DOCUMENTS.

1.18 **RESIDENT PROJECT REPRESENTATIVE** -- The authorized representative of the OWNER who is assigned to the PROJECT site or any part thereof.

1.19 **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.

1.20 **SPECIFICATIONS** -- A part of the CONTRACT DOCUMENTS consisting of written descriptions of a technical nature of materials, equipment, construction systems, standards and workmanship.

1.21 **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.

1.22 **SUBSTANTIAL COMPLETION** — That date as 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.

1.23 **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.

1.24 **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.

1.25 **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.

1.26 **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 his last given address, or delivered in person to said party or his 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 instruction 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.

3.2 Prior to the first partial payment estimate the CONTRACTOR shall submit construction progress schedules showing the order in which he proposes to carry on the WORK, including dates at which he will start the various parts of the WORK, 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 he anticipates he will earn

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 scale dimensions, and detailed 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 his 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 as may be necessary for the prosecution of the WORK as required by the CONTRACT DOCUMENTS. 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 his 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 his obligations to perform the WORK in accordance with the requirements of the CONTRACT DOCUMENTS.

7.6 The ENGINEER and his 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 of 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 his 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 expenses 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 number, 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. He 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 the 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, he shall be responsible for such loss unless he 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 pile 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, he shall be charged with the resulting expense and shall be responsible for any mistakes 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, he 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. He will take all 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. He will erect and maintain, as required by the conditions and progress of the WORK, all necessary safeguards for safety and protection. He 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 in part, by the CONTRACTOR, any SUBCONTRACTOR or anyone directly or indirectly employed by any of them or anyone for whose acts any of them be liable, except damage or loss attributable to the fault of the CONTRACT DOCUMENTS or to the acts or omissions of the OWNER or 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 instruction or authorization from the ENGINEER or OWNER, shall act to prevent threatened damage, injury or loss. He 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 to 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 him to a change in CONTRACT PRICE or TIME, or both, in which event he shall give the ENGINEER WRITTEN NOTICE thereof within seven (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 thirty (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.
- (c) The actual cost for labor, direct overhead, materials, supplies, equipment, and other services necessary to complete the work. In addition there shall be added an amount to be agreed upon but not to exceed fifteen (15) percent of the actual cost of the WORK to cover the cost of general overhead and profit.

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 ten (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 he finds 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 he has given the required WRITTEN NOTICE; provided that the OWNER may, if he 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 ninety days or such further time as agreed upon by the CONTRACTOR by WRITTEN NOTICE to the CONTRACTOR and the ENGINEER which notice 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 as bankrupt or insolvent, or if he makes a general assignment for the benefit of his creditors, or if a trustee or receiver is appointed for the CONTRACTOR or for any of his property, or if he files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or applicable laws, or if he repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment, or if he repeatedly fails to make prompt payments to SUBCONTRACTORS or for labor, materials or equipment or if he disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction of the WORK or if he disregards the authority of the ENGINEER, or if he 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 his surety a minimum of ten (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 he 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 ten (10) days from delivery of a 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 ninety (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 thirty (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 thirty (30) days of its approval and presentation, then the CONTRACTOR may, after ten (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 ten (10) days written notice to the OWNER and the ENGINEER stop the WORK until he has been 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. PAYMENTS TO CONTRACTOR

19.1 At least ten (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 his interest therein, including applicable insurance. The ENGINEER will, within ten (10) days after receipt of each partial payment estimate, either indicate in writing his approval of payment and present

the partial payment estimate to the OWNER, or return the partial payment estimate to the CONTRACTOR indicating in writing his 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 ten (10) days of presentation to him of an approved partial payment estimate, pay the CONTRACTOR a progress payment on the basis of the approved partial payment estimate. The OWNER shall retain ten (10) percent of the amount of each payment until final completion and acceptance of all work covered by the CONTRACT DOCUMENTS. The OWNER at any time, however, after fifty (50) percent of the WORK has been completed, if he finds that satisfactory progress is being made, shall reduce retainage to five (5%) percent on the current and remaining estimates. When the WORK is substantially complete (operational or beneficial occupancy), the retained amount may be further reduced below five (5) percent to only that amount necessary to assure completion. On completion and acceptance of a part of the WORK on which the price is stated separately in the CONTRACT DOCUMENTS, payment may be made in full, including retained percentages, less authorized deductions.

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 by him 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 thirty (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 demands 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, his 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 thirty (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 his sureties from any obligations under the CONTRACT DOCUMENTS or the Performance BOND and Payment BONDS.

21. INSURANCE

21.1 The CONTRACTOR shall purchase and maintain such insurance as will protect him 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 himself or by 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 his employees;

21.1.3 Claims for damages because of bodily injury, sickness or disease, or death of any person other than his 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 fifteen (15) days prior WRITTEN NOTICE has been given to the OWNER.

21.3 The CONTRACTOR shall procure and maintain, at his 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 him 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 himself or by any SUBCONTRACTOR under him, or anyone directly or indirectly employed by the CONTRACTOR or by a SUBCONTRACTOR under him. 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 his 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 his 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 his 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, the ENGINEER, and the OWNER.

22. CONTRACT SECURITY

22.1 The CONTRACTOR shall within ten (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 a 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 ten (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 premiums on such BOND shall be paid by the CONTRACTOR. No further payments shall be deemed due nor shall be made until the new surety or sureties shall 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 his right, title or interest therein, or his 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, his 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 his 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 by himself, or he 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 he is performing the additional WORK himself), reasonable opportunity for the introduction and storage of materials and equipment and the execution of WORK, and shall properly connect and coordinate his 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 him in additional expense or entitles him to an extension of the CONTRACT TIME, he may make a claim therefor as provided in Sections 14 and 15.

26. SUBCONTRACTING

26.1 The CONTRACTOR may utilize the services of specialty SUBCONTRACTORS 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 fifty (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 his SUBCONTRACTORS, and of persons either directly or



Commonwealth of Kentucky
Environmental and Public Protection Cabinet
Department of Labor
1047 US HWY 127 S STE 4
FRANKFORT, KY 40601
(502) 564-3070

April 1, 2005

Mr. Kerry Odle
CMW, Inc.
138 North Keeneland Drive, Suite E
Richmond, Kentucky 40475

Re: Bullock Pen Water District-Water Line Extension Phase 10

Advertising Date as Shown on Notification: April 8, 2005

Dear Mr. Odle:

This office is in receipt of your fax advising of a new advertising date of April 8, 2005 on the above referenced project. I am enclosing a copy of the current prevailing wage determination numbered CR-1-013, dated November 15, 2004 for BOONE 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 assigned to this project is based upon the advertising date contained in your notification. There may be modifications to this wage determination prior to the advertising date indicated. In addition, if the contract is not awarded within 90 days of this advertising date or if the advertising date is modified, a different set of prevailing rates of wages may be applicable. It will be the responsibility of the public authority to contact this office and verify the correct schedule of the prevailing rates of wages for use on the project. Your revised project number is as follows: 008-H-00280-04-1, Heavy/Highway

Sincerely,

A handwritten signature in black ink, appearing to read "Patty Lacy".

Patty Lacy
Prevailing Wage Specialist

COMMISSIONER'S CURRENT REVISION
KENTUCKY PREVAILING WAGE DETERMINATION
LOCALITY NO. 13

BOONE COUNTY

Determination No. CR-1-13 2004

Date of Determination: November 15, 2004

Project No.
Type: <input type="checkbox"/> Bldg <input checked="" type="checkbox"/> HH
Project No. 008-H-00280-04-1
Type: <input type="checkbox"/> Bldg <input checked="" type="checkbox"/> HH

This schedule of the prevailing rate of wages for Boone County has been determined in accordance with the provisions of KRS 337.505 to 337.550. This determination shall be referred to as Prevailing Wage Determination No. CR-1-13 2004

Apprentices 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, and/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 calendar day, but not more than ten (10) hours worked in any one calendar day, if such written agreement is prior to the over eight (8) hours in a calendar day 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. Fringe benefit amounts are applicable for all hours worked except when otherwise noted. Welders will receive rate for craft in which welding is incidental.

NOTE: The type of construction shall be determined by applying the following definitions:

BUILDING CONSTRUCTION

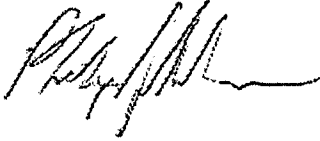
Building construction is the construction of sheltered enclosures with walk-in access for the purpose of housing persons, machinery, equipment, or supplies. It includes all construction of such structures, the installation of utilities and the installation of equipment, both above and below grade level, 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.



Philip J. Anderson, Commissioner

Determination No. CR-1-13 2004

CLASSIFICATIONS**RATE AND FRINGE BENEFITS****ASBESTOS/INSULATION WORKERS:**

Asbestos/Insulation Workers: (Includes application of all insulating materials, protective coverings, coatings and finishings to all types of mechanical systems):

BASE RATE	\$22.72
FRINGE BENEFITS	9.75

Hazardous Material Handlers: (Includes preparation, wetting, stripping, removal, scrapping, vacuuming, bagging & disposing of all insulation materials, whether they contain asbestos or not, from mechanical systems):

BASE RATE	\$19.60
FRINGE BENEFITS	7.00

BOILERMAKERS:

BASE RATE	\$31.29
FRINGE BENEFITS	15.67

BRICKLAYERS:

Bricklayers, Caulkers, Cleaners, Pointers & Stone Masons:

BASE RATE	\$23.71
FRINGE BENEFITS	7.89

Refractory:

BUILDING

BASE RATE	\$24.21
FRINGE BENEFITS	7.89

Marble Setters, Terrazzo Workers, & Tile Setters:

BUILDING

BASE RATE	\$25.42
FRINGE BENEFITS	6.84

MARBLE, TERRAZZO & TILE FINISHERS:

Finishers:

BUILDING

BASE RATE	\$20.98
FRINGE BENEFITS	6.84

Marble Sanders, Polishers, Waxers, & Sawyers:

BUILDING

BASE RATE	\$21.05
FRINGE BENEFITS	6.84

CLASSIFICATIONS**RATE AND FRINGE BENEFITS****BRICKLAYERS/MARBLE, TERRAZZO & TILE FINISHERS: (Continued)**

Terrazzo Base Grinders (While operating base grinding machine):

BUILDING	BASE RATE	\$21.40
	FRINGE BENEFITS	6.84

CARPENTERS:

Carpenters & Piledrivermen (Does not include Walls & Ceiling Work):

BUILDING	BASE RATE	\$19.22
	FRINGE BENEFITS	4.77

HEAVY & HIGHWAY	BASE RATE	\$22.42
	FRINGE BENEFITS	4.73

Carpenters & Lathers (Walls & Ceiling Work Only):

BUILDING	BASE RATE	\$18.99
	FRINGE BENEFITS	4.98

Divers:

HEAVY & HIGHWAY	BASE RATE	\$33.63
	FRINGE BENEFITS	4.73

CEMENT MASONS:

BUILDING	BASE RATE	\$20.70
	FRINGE BENEFITS	7.05

HEAVY & HIGHWAY	BASE RATE	\$22.00
	FRINGE BENEFITS	6.60

ELECTRICIANS:

Electricians:

BASE RATE	\$24.24
FRINGE BENEFITS	8.39

ELECTRICIAN/LINE CONSTRUCTION:

Linemen:

BUILDING	BASE RATE	\$24.10
	FRINGE BENEFITS	6.66

Equipment Operator:

BUILDING	BASE RATE	\$21.69
	FRINGE BENEFITS	6.21

CLASSIFICATIONS

RATE AND FRINGE BENEFITS

ELECTRICIAN/LINE CONSTRUCTION: (Continued)

Groundmen:	BUILDING	BASE RATE	\$15.67
		FRINGE BENEFITS	5.10

ELECTRICIAN/SOUND COMMUNICATION:

Installer:		BASE RATE	\$18.00
		FRINGE BENEFITS	3.475

Cable Puller:		BASE RATE	\$9.00
		FRINGE BENEFITS	2.64

ELEVATOR MECHANICS:		BASE RATE	\$26.255
		FRINGE BENEFITS	7.455

GLAZIERS:		BASE RATE	\$21.00
		FRINGE BENEFITS	7.50

IRONWORKERS:

Structural, & Ornamental		BASE RATE	\$24.00
		FRINGE BENEFITS	11.58

Fence Erector		BASE RATE	\$22.05
		FRINGE BENEFITS	11.58

Reinforcing:			
Beyond 30-mile radius of Hamilton County, OH Courthouse		BASE RATE	\$22.96
		FRINGE BENEFITS	10.47

Up to and including 30-mile radius of Hamilton County, OH Courthouse		BASE RATE	\$22.71
		FRINGE BENEFITS	10.47

LABORERS/BUILDING:

Building & Common Laborer, Cement Mason Tender, Hand Operated Mechanical Mule, Mechanical Sweeper, Signal Person, Asbestos Removal, & Tunnel Laborer:			
	BUILDING	BASE RATE	\$21.00
		FRINGE BENEFITS	5.25

CLASSIFICATIONS

RATE AND FRINGE BENEFITS

LABORERS/BUILDING: (Continued)

Skid Steer, Burning Torch Operator, Jackhammer, Air Spade, Chipping Hammer, Mechanical & Air Tamper Operator, Mechanical Concrete Buggy, Power Operated Mechanical Mule, Concrete Pump Hose Man, Vibrator Man, CERCLA Trained Hazardous Material Removal – Levels A, B, C:

BUILDING	BASE RATE	\$21.15
	FRINGE BENEFITS	5.25

Gunnite Nozzle Operator:

BUILDING	BASE RATE	\$21.75
	FRINGE BENEFITS	5.25

LABORERS/HEAVY HIGHWAY

GROUP 1:

Asphalt Laborer, Carpenter Tender, Concrete Curing applicator, Dump Man (Batch Truck), Guardrail and Fence Installer, Joint Setter, Laborer (Construction), Landscape Laborer, Mesh Handlers & Placer, Right-of-way Laborer, Riprap Laborer & Grouter, Scaffold Erector, Seal Coating, Surface Treatment or Road Mix Laborer, Sign Installer, Slurry Seal, Utility Man, Bridge Man, Handyman, waterproofing Laborer, Flagperson, Hazardous Waste (Level D), Diver Tender, Zone Person & Traffic Control:

HEAVY & HIGHWAY	BASE RATE	\$22.47
	FRINGE BENEFITS	5.15

GROUP 2:

Skid Steer, Asphalt Raker, Concrete Puddler, Kettle Man (Pipeline), Machine Driven Tools (Gas, Electric, Air), Mason Tender, Brick Paver, Mortar Mixer, Power Buggy or Power Wheelbarrow, Sheeting & Shoring Man, Surface Grinder Man, Plastic Fusing Machine Operator, Pug Mill Operator, & Vacuum Devices (wet or dry), Rodding Machine Operator, Diver, Screwman or Paver, Screed Person, Water Blast, Hand Held Wand, Pumps 4" & Under (Gas, Air or Electric) & Hazardous Waste (Level C), Air Track and Wagon Drill, Bottom Person, Cofferdam (below 25 ft. deep), Concrete Saw Person, Cutting with Burning Torch, Form Setter, Hand Spiker (Railroad), Pipelayer, tunnel Laborer (without air) & Caisson, Underground Person (working in Sewer and Waterline, Cleaning, Repairing & Reconditioning), Sandblaster Nozzle Person, & Hazardous Waste (Level B):

HEAVY & HIGHWAY	BASE RATE	\$22.64
	FRINGE BENEFITS	5.15

CLASSIFICATIONS

RATE AND FRINGE BENEFITS

LABORERS/HEAVY HIGHWAY: (Continued)

GROUP 3:

Blaster, Mucker, Powder Person, Top Lander, Wrencher (Mechanical Joints & Utility Pipeline), Yarnier, Hazardous Waste (Level A), Concrete Specialist, Concrete Crew in Tunnels (With Air-pressurized - \$1.00 premium), Curb Setter & Cutter, Grade Checker, Utility Pipeline Tapper, Waterline, and Caulker:

HEAVY & HIGHWAY	BASE RATE	\$22.97
	FRINGE BENEFITS	5.15

GROUP 4:

Miner (With Air-pressurized - \$1.00 premium), & Gunnite Nozzle Person:

HEAVY & HIGHWAY	BASE RATE	\$23.42
	FRINGE BENEFITS	5.15

Signal Person will receive the rate equal to the rate paid the laborer classification for which he or she is signaling

MILLWRIGHTS:

BASE RATE	\$21.90
FRINGE BENEFITS	7.92

OPERATING ENGINEERS/BUILDING:

Boom & Jib 250' over:	BUILDING	BASE RATE	\$27.14
		FRINGE BENEFITS	8.60

Boom & Jib Over 180' through 249:		BUILDING	BASE RATE
	\$26.89		
		FRINGE BENEFITS	8.60

Boom & Jib 150' through 180':	BUILDING	BASE RATE	\$26.39
		FRINGE BENEFITS	8.60

Master Mechanic:	BUILDING	BASE RATE	\$26.14
		FRINGE BENEFITS	8.60

Barrier Moving Machine, Boiler or Compressor Mounted on Crane (Piggy-Back Operation), Boom Truck, Cableway, Cherry Picker, Combination Concrete Mixer & Tower, Concrete Pump with Booms, Crane, Derrick, Dragline, Dredge (Dipper, Clam or Suction) 3 Man Crew, Elevating Grader or Euclid Loader, Floating Equipment, Forklift (rough terrain with winch/hoist), Gradeall, Helicopter Operator & Helicopter Winch Operator (Hoisting Builders Materials), Hoe, Hoist (Two or More Drums), Horizontal Directional Drill, Hydraulic Gantry (Lift System), Laser Finishing Machine, Laser Screed and Like Equipment, Lift Slab or Panel Jack, Locomotive, Maintenance Engineer (Mechanic), Mixer, Paving (Multiple Drum), Mobile Concrete Pump with Boom, Panelboard, Pile Driver, Power Shovel, Prentice

CLASSIFICATIONS**RATE AND FRINGE BENEFITS****OPERATING ENGINEERS/BUILDING: (Continued)**

Loader, Rail Tamper with automatic lifting & align device, Rotary Drill used on Caisson Work for Foundation & Substructure Work, Side Boom, Slip Form Paver, Straddle Carrier, Trench Machine (Over 24" Wide), & Tug Boat:

BUILDING	BASE RATE	\$25.89
	FRINGE BENEFITS	8.60

Asphalt Paver, Bobcat-type and/or Skid Steer Loader with Hoe Attachment Greater than 7,000 lbs., Bulldozer, C.M.I. Type Equipment, Concrete Grinder/Planer, Endloader, Hydro Milling Machine, Kolman Type Loader (Dirt Loading), Lead Greaseman, Mucking Machine, Pettibone-Fail Equipment, Power Grader, Power Scoop, Power Scraper, Push Cat, & Vermeer Type Concrete Saw:

BUILDING	BASE RATE	\$25.77
	FRINGE BENEFITS	8.60

A-Frame, Air Compressor (Pressurizing Shafts or Tunnels), Asphalt Roller, Bobcat-type and/or Skid steer Loader with or without Attachments, Concrete Pump without Booms & with 5" System, Highway Drillers with Integral Power, Hoist (One Drum), Boiler (15 lbs. Pressure & Over), Forklift (except Masonry), House Elevator (except those automatic call button controlled), Man Lift, Mud Jack, Pressure Grouting, Pump (Installing or Operating Well Points or other Type of Dewatering Systems), Pump (4" and over Discharge), submersible Pump (4" and over Discharge), Switch & Tire Tamper w/o lifting & aligning device, Trench Machine (24" & under), Utility, Railroad Tie Inserter/Remover, & Rotovator (Lime-Soil Stabilizer):

BUILDING	BASE RATE	\$24.73
	FRINGE BENEFITS	8.60

Compressor, Concrete Mixer (Capacity more than one bag), Concrete Mixer (one bag capacity, side loader), Conveyor, Generator, Gunnite Machine, Pavement Breaker (Hydraulic or Cable), Post Driver, Post Hole Digger, Road Widening Trencher, Roller (except Asphalt), Ballast Relocator, Backfiller & Tamper, Bar & Joint Installing Machine, Batch Plant, Bullfloat, Burlap & Curing Machine, Clefplane, Concrete Spreader, Crusher, Deckhand, Drum Fireperson (In Asphalt Plant), Farm-type Tractor (Pulling Attachments), Finishing Machine, Form Trencher, Hydro Seeder, Pressure Pump (over 1/2" discharge), Self-Propelled Sub-Grader, Tire Repairman, Tractor (Pulling Sheep Foot Roller or Grader), Vibratory Compactor (with Integral Power), Vac/All, Concrete Pump without Booms with 4" or Smaller System, Self-Propelled Power Spreader, & Shotcrete Machine:

BUILDING	BASE RATE	\$23.55
	FRINGE BENEFITS	8.60

CLASSIFICATIONS**RATE AND FRINGE BENEFITS****OPERATING ENGINEERS/BUILDING: (Continued)**

Allen Screed Paver (concrete), Boiler (Less than 15 lbs. Pressure), Directional Drill "Locator", Masonry Fork Lift, Inboard & Outboard Motor Boat Launch, Light Plant, Oiler, Power Driven Heater (Oil Fired), Power Scrubber, Power Sweeper, Pump (Under 4" discharge), Signal Person, & Submersible Pump (Under 4" discharge):

BUILDING	BASE RATE	\$18.09
	FRINGE BENEFITS	8.60

OPERATING ENGINEERS/HEAVY HIGHWAY

Master Mechanic:	HEAVY & HIGHWAY	BASE RATE	\$26.14
		FRINGE BENEFITS	8.60

Air Compressor on Steel Erection, Barrier Moving Machine, Boiler Operator on Compressor or Generator when mounted on a Rig, Cableway, Combination Concrete Mixer & Tower, Concrete Plant (over 4 yd. Cap.), Concrete Pump, Crane (Including Boom Truck, Cherry Picker), Derrick, Dragline, Dredge (Dipper, Clam or Suction), Elevating Grader or Euclid Loader, Floating Equipment, Gradeall, Helicopter Crew (Operator-Hoist or Winch), Hoe, Hoisting Engine on Shaft or Tunnel Work, Horizontal Directional Drill (over 500,000 ft. lbs. Thrust), Industrial-Type Tractor, Jet Engine Dryer (D8 or D9) Diesel, Tractor, Locomotive (Standard Gauge), Maintenance Operator Class A, Mixer, Paving (Single or Double Drum), Mucking Machine, Multiple Scraper, Piledriving Machine, Power Shovel, Prentice Loader, Quad 9 (Double Pusher), Refrigerating Machine (Freezer Operation), Side-Boom, Slip-Form Paver, Tower Derrick, Concrete Pump, Tug Boat, Tunnel Machine and/or Mining Machine, Wheel Excavator, Hydraulic Gantry (Lifting System), Rail Tamper (w/Auto Lifting & alignment Device), Rough Terrain Fork Lift with Winch/Hoist:

HEAVY & HIGHWAY	BASE RATE	\$25.89
	FRINGE BENEFITS	8.60

Asphalt Paver, Automatic Subgrader Machine, Self-Propelled (CMI Type), Bobcat Type and/or Skid Steer Loader with Hoe attachment Greater than 7,000 lbs., Boring Machine More than 48", Bulldozer, Endloader, Kolman-type Loader (production type Dirt), Lead Greaseman, Power Grader, Power Scraper, Push Cat, Trench Machine (24" wide & under), Concrete Grinder/Planer, Pettibone-Rail Equipment, Vermeer type Concrete Saw, Hydro Milling Machine, Lighting & Traffic Signal Installation Equipment, Material Transfer Equipment (shuttle buggy) Asphalt:

HEAVY & HIGHWAY	BASE RATE	\$25.77
	FRINGE BENEFITS	8.60

CLASSIFICATIONS**RATE AND FRINGE BENEFITS****OPERATING ENGINEERS/HEAVY HIGHWAY: (Continued)**

A-Frame, air Compressor on Tunnel Work (low pressure), Asphalt Plant Engineer, Locomotive (narrow gauge), Mixer, Concrete (more than one bag cap.), Mixer, one bag cap (Side Loader), Power Boiler, 15 lb Pressure & Over, Pump Operator installing & operating Well Points, Pump (4" & over discharge), Roller – Asphalt, Utility Operator (Small equipment), Welding Machine, Bobcat Type and/or Skid Steer Loader, Switch and Tie Tamper (w/o Lifting & Aligning Device), Highway Drills, Railroad Tie Inserter/Remover, Rotovator (Lime-Soil Stabilizer):

HEAVY & HIGHWAY	BASE RATE	\$24.73
	FRINGE BENEFITS	8.60

Backfiller, Bar & Joint Installing Machine, Batch Plant, Boring Machine, Operator (48" or less), Bull Floats, Burlap & Curing Machine, concrete Plant (capacity 4 yd. & under), Concrete Saw (Multiple), Conveyor (Highway), Crusher, Deckhand, Farm-type Tractor with attachments (highway, except Masonry), Finishing Machine, Fireperson, Floating Equipment, Fork Lift (highway), Form Trencher, Hydro Hammer, Hydro Seeder, Pavement Breaker, Plant Mixer, Post Driver, Post Hole Digger (Power Auger), Road Widening Trencher, Roller (Brick, Grade & Macadam), Self-Propelled Power Spreader, Self-Propelled Subgrader, Steam Fireperson, Tractor (Pulling Sheepfoot, Roller or Grader), Power Brush Burner, Power Form Handling Equipment, Vibratory Compactor with Integral Power, & Ballast Re-Locator:

HEAVY & HIGHWAY	BASE RATE	\$23.55
	FRINGE BENEFITS	8.60

Compressor (Portable, Sewer, Heavy & Highway), Drum Fireperson (In Asphalt Plant), Generator, Masonry Fork Lift, Inboard-Outboard Motor Boat – Launch, Power Scrubber, Power Sweeper, Oil Heater (Asphalt Plant), Oiler, Power Driven Heater, Pump (under 4" discharge), Tire Repairperson, VAC/ALLS & Signalperson:

HEAVY & HIGHWAY	BASE RATE	\$18.09
	FRINGE BENEFITS	8.60

PAINTERS:

Brush, Roller, Steam Cleaning, Tanks, Taping & Washing, Paper Hanging & Wall Covering:

BUILDING	BASE RATE	\$21.30
	FRINGE BENEFITS	5.90

CLASSIFICATIONSRATE AND FRINGE BENEFITS

PAINTERS: (Continued)

Spray:	BUILDING	BASE RATE	\$21.80
		FRINGE BENEFITS	5.90
Sandblasting, Waterblasting, & Hopper Tender:	BUILDING	BASE RATE	\$22.05
		FRINGE BENEFITS	5.90
Hazardous Work, Elevated Tanks 40 Feet or Above, High Work, & Lead Abatement Projects:	BUILDING	BASE RATE	\$22.30
		FRINGE BENEFITS	5.90
Sandblasting, Hopper Tender & Waterblasting Under Hazardous Conditions:	BUILDING	BASE RATE	\$23.05
		FRINGE BENEFITS	5.90
Painters/Sign Painter & Erector:	BUILDING	BASE RATE	\$17.57
		FRINGE BENEFITS	4.55
BRIDGES – GUARDRAILS-LIGHTPOLES – STRIPING:			
Bridge/Equipment Tender and/or Containment Builder:	HEAVY & HIGHWAY	BASE RATE	\$18.90
		FRINGE BENEFITS	5.90
Elevated Tanks:	HEAVY & HIGHWAY	BASE RATE	\$22.30
		FRINGE BENEFITS	5.90
Brush & Roller:	HEAVY & HIGHWAY	BASE RATE	\$21.30
		FRINGE BENEFITS	5.90
Spray:	HEAVY & HIGHWAY	BASE RATE	\$21.80
		FRINGE BENEFITS	5.90
Sandblasting & Hopper Tender; Water Blasting:	HEAVY & HIGHWAY	BASE RATE	\$22.05
		FRINGE BENEFITS	5.90

CLASSIFICATIONS

RATE AND FRINGE BENEFITS

PAINTERS: (Continued)

Bridges when highest point of clearance is 60 feet or more & Lead Abatement Projects:

HEAVY & HIGHWAY	BASE RATE	\$22.30
	FRINGE BENEFITS	5.90

Sandblasting, Hopper Tender, Waterblasting (Bridges when highest point of clearance is 60 feet or more):

HEAVY & HIGHWAY	BASE RATE	\$23.05
	FRINGE BENEFITS	5.90

PIPEFITTERS & PLUMBERS:

BASE RATE	\$26.27
FRINGE BENEFITS	10.47

PLASTERERS:

BUILDING

BASE RATE	\$20.65
FRINGE BENEFITS	7.25

ROOFERS:

Roofers:

BASE RATE	\$25.15
FRINGE BENEFITS	6.04

Pitch:

BASE RATE	\$26.15
FRINGE BENEFITS	6.04

SHEETMETAL WORKERS:

BASE RATE	\$23.62
FRINGE BENEFITS	11.05

SPRINKLER FITTERS:

BASE RATE	\$25.05
FRINGE BENEFITS	10.95

TRUCK DRIVERS/BUILDING:

3 Tons & Under, Greaser, Tire Changer, & Mechanic Tender:

BUILDING

*BASE RATE	\$17.52
FRINGE BENEFITS	8.04

CLASSIFICATIONS**RATE AND FRINGE BENEFITS****TRUCK DRIVERS/BUILDING: (Continued)**

Over 3 Tons, Semi-Trailer or Pole Trailer, Dump Tandem Axles, Farm Tractor (When used to pull building material & equipment):

BUILDING	*BASE RATE	\$17.63
	FRINGE BENEFITS	8.04

Concrete Mixer (Hauling on jobsites), & Truck Mechanic:

BUILDING	*BASE RATE	\$17.70
	FRINGE BENEFITS	8.04

Euclids & Other Heavy Moving Equipment, Lowboy, Winch, A-Frame & Monorail Truck (To transport building materials):

BUILDING	*BASE RATE	\$17.80
	FRINGE BENEFITS	8.04

* Work on Hazardous or Toxic Waste Site - \$4.00 Premium on all of the above

TRUCK DRIVERS/HEAVY HIGHWAY:

Driver:	HEAVY & HIGHWAY	BASE RATE	\$15.85
		FRINGE BENEFITS	4.60

Euclid Wagon, End Dump, Lowboy, Heavy Duty Equipment, Tractor-Trailer Combination, & Drag:

HEAVY & HIGHWAY	BASE RATE	\$16.29
	FRINGE BENEFITS	4.60

END OF DOCUMENT: CR-1-13 2004 Page 14 of 14

WATER MAIN EXTENSION - PHASE 10

BOONE COUNTY
BULLOCK PEN WATER DISTRICT

DIVISION 1 - GENERAL REQUIREMENTS

SECTION 01010 - SPECIAL CONDITIONS

1. **RELATED DOCUMENTS**

General Provisions of Contract, General and Supplementary Conditions apply to this section.

2. **DESCRIPTION OF WORK**

Provide labor, materials, equipment and services necessary for proper and complete construction of this contract for Bullock Pen Water District.

3. **CONTRACTOR'S QUALIFICATIONS**

At the request of the Owner, each bidder shall submit, in writing, the following information:

A. Name and address of principal owner of contracting company.

B. Net worth statement.

C. A list of all similar work performed within the past five (5) years with name and address of Engineer on each project.

4. **CONTRACTOR'S SUPERINTENDENT**

Contractor shall keep on his work, at all times during its progress, a competent superintendent satisfactory to Engineer. The Superintendent shall not be changed, except with consent of Engineer, unless he proves to be unsatisfactory to Contractor and ceases to be in his employ. Superintendent shall represent Contractor in his absence and all directives given to him shall be binding as if given to Contractor.

5. **INTENT**

The intent of these Specifications is to require a high level of quality in materials and workmanship resulting in timely completion of all Work in an orderly sequence and manner without inconvenience to the Owner, adjacent property owners or the public.

6. **WORK REASONABLY INFERRED BUT NOT PARTICULARLY DELINEATED OR SPECIFIED**

A. Contractor shall make a thorough examination of site and study all drawings and specifications and all conditions relating to work, and if any materials or labor are evidently necessary for proper and complete execution of work which are not specifically mentioned and included in drawings and specifications, although reasonably inferred therefrom, unless eliminated by special mention, or if any error or inconsistency appears therein, or in the event of any doubts arising as to the true intent and meaning of drawings or specifications, he shall report it to Engineer at least five (5) days in advance of date set for receiving bids. If appropriate, Engineer will then issue an addendum containing the proper information to all Contractors not later than three (3) days prior to the date set for opening of bids.

B. If Contractor fails to make such report and Engineer is not otherwise advised of such doubtful matters, Contractor is hereby made responsible for furnishing all necessary labor and material reasonably inferred for any additional work involved in correction of apparent errors or inconsistencies and in executing the true intent and meaning of drawings and specifications as interrupted by Engineer, and all such labor and material shall be provided at Contractor's expense and under no circumstances will any such labor and material be allowed as extra cost.

7. QUALITY OF MATERIALS, EQUIPMENT AND WORKMANSHIP

A. Unless otherwise specified, all materials shall be new and both workmanship and materials shall be of good quality. Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

B. Approval of manufacturer's shop drawings of materials and equipment shall not mean final acceptance, but they shall be subject to inspection and test on delivery and installation. Contractor shall repair, replace, or adjust any materials or equipment found defective or not operating properly due to improper materials, workmanship, and adjustment for a period of one year after completion and acceptance of work.

C. Contractor shall at all times enforce strict discipline and good order among his employees, and shall not employ anyone not skilled in the work assigned to him.

8. TRADE NAMES

Whenever manufactured products, devices or materials are specified under a particular trade name or name of manufacturer, it shall be understood that the specifications are open to other manufacturers whether or not the clause "or approved equal" is included. Other products comparable in type, quality, utility and price are acceptable if approved by Engineer and Owner. The burden of proof of equality shall rest with Contractor. Owner shall be the sole judge of equality and reserves the right to require the product or material specified by name and furnished at no increase in contract amount.

9. MANUFACTURER'S EQUIPMENT - SHOP DRAWINGS

A. Various items of equipment indicated on Drawings have been indicated schematically only; actual details of each item of equipment shall be verified in shop drawings submitted to Engineer for approval. Data shown on shop drawings shall be complete with respect to dimensions, design criteria, materials of construction, wiring diagrams and component parts, and all details to enable Engineer to review the information as required. At the time of submission, the manufacturer shall in writing, call Engineer's attention to any deviations that shop drawings may have from requirements of Engineer's specifications, or deviation in dimension or equipment weight which might affect structural design or stability. Engineer's approval of shop drawings shall not relieve Contractor from responsibility for compliance with requirements of specifications. Engineer shall not be held responsible for omission or deletion of any components of manufacturer's equipment. Equipment manufacturer shall be responsible for all components of equipment and shall guarantee that equipment will perform and operate satisfactorily in accordance with requirements set forth in these specifications.

B. Contractor shall furnish six (6) copies of all shop drawings to Engineer for review. No equipment or materials shall be ordered prior to Engineer's written approval of shop drawings.

10. EXISTING UTILITIES

A. Before proceeding with work, Contractor shall verify location of, and possible interference with, existing utilities, arrange for necessary suspension of service, and make arrangements to locate and avoid interference with all utilities.

B. Contractor shall protect all utility lines which are to remain in service.

C. Special precautions shall be taken by Contractor to avoid damage to existing overhead and underground utilities owned and operated by Owner or by public or private utility companies.

D. With particular respect to existing underground utilities, the available information concerning their location has been indicated on Drawings. While it is believed that the locations shown are reasonably correct, neither Engineer nor Owner can guarantee accuracy of adequacy of this information.

E. Before proceeding with work, Contractor shall confer with all public or private companies, agencies, or departments that own and operate utilities in vicinity of construction. The purpose of the conference, or conferences, shall be to notify said companies, agencies, or departments of proposed construction schedule, verify location of, and possible interference with, existing utilities that are indicated on Drawings, arrange for necessary suspension of service, and make arrangements to locate and avoid interference with all utilities (including house connections) that are not indicated on Drawings. Engineer and Owner have no objection to Contractor arranging for said utility companies, agencies, or departments to locate and uncover their own utilities; however, Contractor shall bear entire responsibility for and cost of locating and avoiding or repairing damage to any and all existing utilities.

F. Contractor shall be diligent in his efforts and use every possible means to locate existing utilities. Any claims for unavoidable damage, based on improper or unknown locations, will be thoroughly examined in light of Contractor's efforts to locate said utilities or obstructions prior to beginning construction.

G. For General Utility Information call:

B.U.D. (Before You Dig)
1-800-752-6007

11. DAMAGE TO EXISTING UTILITIES

A. Contractor shall be responsible for any and all damage done to existing utilities.

B. Damage done to existing utilities shall be repaired promptly, to satisfaction of utility company, at no cost to Owner.

12. PUBLIC AND PRIVATE HIGHWAYS AND STREETS

A. Contractor shall ascertain and obey all State and County road load limits in order to prevent damage to pavements resulting from his operation.

B. Public Convenience and Safety

(1) Contractor shall, at all times, conduct work in such manner as to insure minimum obstruction to public travel. Convenience of general public and of residents along and adjacent to area of work shall be provided for in a satisfactory manner, consistent with operation and local conditions and as directed by the Engineer.

(2) Flagmen shall be used at any time that work of any kind is being performed on any portion of roadway pavement, shoulder or ditch.

(3) "Construction" signs shall be placed immediately adjacent to work, in conspicuous positions at such locations as traffic demands. Signs shall conform to requirements of Manual on Uniform Traffic Control Devices (MUTCD) published by U.S. Department of Transportation, Federal Highway Administration, latest edition. The manual is for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. At any time that streets are required to be closed, Contractor shall notify law enforcement agencies, fire departments, and parties operating emergency vehicles before streets are closed and again as soon as it is reopened. Access to fire hydrants and other fire extinguishing equipment shall be provided and maintained at all times.

(4) Trenches shall be backfilled at end of each day's work as directed by Engineer. Trenches left open shall be adequately protected with suitable flashing barricades, in compliance with MUTCD and as approved by Engineer. All trenches are required to be backfilled at end of work week. No trenches shall remain open over a weekend. Contractor shall place and maintain DGA or crush stone on streets and in trenches in construction area when directed by Engineer to maintain roads in safe and traversable condition. Placement of DGA or crush stone and maintenance of traffic in construction area is considered incidental to construction and will not be paid for separately.

(5) At anytime when excavated material is placed on a paved road, the road shall be cleaned at the end of the day with a power broom and at times as directed by the Engineer.

(6) When excavated material is placed or stockpiled on gravel roads, the contractor shall place crushed stone in these areas to the thickness as approved by the Engineer. The road shall have as much or more gravel or crushed stone as prior to construction as determined by Engineer.

13. WORK ON PRIVATE PROPERTY

A. In connection with work performed on "private property" (property other than public rights-of-way), Contractor shall confine equipment, storage of materials, and operation of his workmen to limits indicated on plans, or to lands and rights-of-way provided for the project by Owner, and shall take every precaution to avoid damage to private property owners' buildings, grounds and facilities.

B. Fences, hedges, shrubs, etc. within construction limits, shall be carefully removed, preserved, and replaced after construction on the private property is completed. Private property owners' facilities, and grounds, shall be restored to as good or better condition than found, as quickly as possible, at Contractor's expense.

C. Reasonable care shall be taken during construction to avoid damage to vegetation. Ornamental shrubbery and tree branches shall be temporarily tied back, where appropriate, to minimize damage. Trees that receive damage to branches shall be trimmed of those branches to improve the appearance of the tree. Tree trunks receiving damage from equipment shall be treated with a tree dressing.

D. Large trees or other facilities within construction limits that cannot be preserved and replaced shall be removed by Contractor with approval of Engineer, but Owner will assume responsibility for settling with property owner for loss of said trees or facilities. Such trees and facilities, however, may be indicated on Drawings. Contractor shall be solely and entirely responsible for any damage to trees or facilities whether indicated on Drawings or not.

E. Foundations, adjacent to excavations made below bottoms of the foundations, shall be supported by shoring, bracing, and underpinning as required as long as excavations remain open, and Contractor shall be responsible for any damage to foundations.

14. BLASTING

A. All blasting operations shall be conducted in strict accordance with Kentucky Revised Statutes 351.320 to 351.340 and 351.340, effective October 6, 1972, and subsequent revisions, which shall be deemed to be included in these specifications the same as though herein written out in full. Contractor shall also comply with applicable municipal ordinances, Federal safety regulations and Section 9 of the Manual of Accident Prevention in Construction published by the Associated General Contractors of America, Inc. All explosives shall be stored in conformity with said ordinances, laws and safety regulations. No blasting shall be done within any other underground utility lines, except with light charges of explosives. Any damage done by blasting is the responsibility of the Contractor and shall be promptly and satisfactorily repaired by him.

B. If directed by Engineer, all shots shall be covered with heavy timber or steel blasting mats to prevent flying material. Unless otherwise specified or directed, delay caps shall be used to reduce earth vibrations and noise.

C. All blasting shall be supervised and performed by qualified personnel.

15. CLEAN-UP

A. Clean-up shall be performed on a daily basis. All debris shall be removed from site regularly. The site shall be kept in a neat condition, ready for subsequent operations.

B. If Contractor fails to perform proper or adequate cleanup behind pipe laying operations, an additional ten (10) percent of retainage will be withheld from payment(s) due Contractor.

16. PRECONSTRUCTION CONFERENCE

A. Following signing of Contract Documents and prior to actual beginning of construction, a Pre-Construction Conference will be held. Contractor, Contractor's Superintendent, and major subcontractors, shall be present to discuss the Construction Schedule, Contractor's Plan of Operation, Engineer's authority, Resident Inspector's authority, procedures for monthly progress reviews and payments, and other relevant questions. Preconstruction conference will be scheduled by Engineer within ten (10) calendar days following date of signing of Agreement.

B. Unless otherwise instructed by Engineer, Contractor shall prepare and submit five (5) copies of his proposed Construction and Payment Schedules for review at Preconstruction Conference.

- (1) Construction Schedule shall be in a line-item/bar chart format showing anticipated starts, durations and completion of all major items, operations or disciplines or work.

17. TEMPORARY TOILETS, UTILITIES, STORAGE, ETC.

A. Contractor shall be responsible for providing suitable temporary toilets for use by all workmen.

B. Contractor shall be responsible for providing suitable sources of potable water for all operations required for completion of work.

C. Contractor shall make arrangements for on-site areas for storage of materials and equipment, etc.

D. Costs for any and all items covered under this paragraph shall be at Contractor's expense.

18. SECURITY

A. Contractor shall be responsible for protection of his materials, equipment and work during period of Contract. Damage done to construction stakes or to material, equipment, or to completed work shall be replaced or repaired to Engineer's satisfaction and at no additional cost to Owner.

B. Contractor shall be responsible for protection of adjacent public and private property affected by work performed under this Contract, and shall make all necessary and appropriate arrangements with adjacent property owners and with Engineer for such protection prior to commencing work. Damage done to adjacent property resulting from Contractor's operations, or loss suffered by owners of adjacent property, shall be repaired or otherwise compensated by Contractor to satisfaction of Engineer and the affected owner of adjacent property at no additional cost to Owner.

19. LAYING OUT WORK

Contractor will be responsible for layout of all lines and shall furnish all materials required for layout. Contractor's personnel engaged in layout work shall be capable of performing duties set out herein.

20. MEASUREMENTS

A. Contractor and each subcontractor shall be responsible for verification of all measurements at site before ordering materials or doing work. No extra charge or compensation shall be allowed due to differences between actual dimensions found in the field and dimensions indicated on Bid Form or on Drawings.

B. Contractor shall be prepared to guarantee to each of his subcontractors dimensions which he may require for layout and fitting of his work to surrounding work.

21. RECORD DOCUMENTS

Contractor shall maintain in good condition at project site one (1) set of prints of all Contract Drawings, upon which Contractor's Representative will record periodically as required the actual location and conditions of construction, if different than shown or indicated on Drawings. Approval of final payment is contingent in part, upon receipt of record drawings by Engineer.

22. PARTIAL PAYMENT SCHEDULE

A. Partial Payment Estimate forms will be furnished by Engineer at Preconstruction Conference. Contractor shall prepare monthly Payment Request Forms, as described in General Conditions.

B. Contractor shall attend monthly Progress Meetings, scheduled by Engineer, for purpose of reviewing Contractor's Request for Payment and other matters pertaining to performance of work. If directed by Engineer, Contractor shall arrange for his subcontractors to be present at Progress Meetings.

C. Payments Withheld

(1) Engineer may withhold or, on account or subsequently discovered evidence, nullify the whole or part of any certificate to such extent as may be necessary to protect Owner from loss on account of:

- a. Defective work not remedied.
- b. Claims filed or reasonable evidence indicating probable filing of claims.
- c. Failure of the contractor to make payments properly to subcontractors or for material or labor.
- d. A reasonable doubt that the contract can be completed for the balance then unpaid.
- e. Damage to another Contractor.
- f. Performance of work in violation of the terms of the contract.

D. Where work on unit price items is substantially complete but lacks clean-up and/or corrections order by Engineer, amounts shall be deducted from unit prices in payment certificates to amply cover such clean-up and corrections. When the above clean-up and/or corrections are made, payment shall be made for amounts withheld.

23. APPROVALS AND PERMITS

A. Kentucky Highway Department Encroachment Permits have been approved for all state roads.

B. Owner will obtain a permit from Boone County Fiscal Court for construction within county rights-of-way.

C. Contractor shall not begin work in road rights-of-way until he is furnished with copy of approved encroachment permit by Engineer.

D. Use of rights-of-way shall be subject to written conditions on permits. Contractor shall comply with all requirements of access documents, for storage of materials, traffic control, restoration, etc.

24. USE OF PREMISES AND REMOVAL OF DEBRIS

Contractor shall, at his own expense:

A. Take every precaution against injuries to persons or damage to property;

B. Store his apparatus, materials, supplies and equipment in such orderly fashion at site of work as will not unduly interfere with progress of his work or work of any other contractors or subcontractors;

C. Place upon the work or any part thereof only such loads as are consistent with the safety of that portion of the work;

D. Clean up daily all refuse, rubbish, scrap materials, and debris caused by his operations, to the end that at all times the site of work shall present a neat, orderly and workmanlike appearance.

E. Before final inspection, remove all surplus materials, falsework, temporary structures, including foundations thereof, all debris resulting from his operation, and put the site in a neat, orderly condition;

F. Effect all cutting, fitting or patching of his work required to make same conform to intent of Plans and Specifications and, except with consent of Engineer, no cut or otherwise alter the work of any other Contractor.

25. CHANGE ORDERS

Change Orders shall be negotiated between the Engineer and Contractor. No work on Change Order shall proceed until change or has been approved by all parties.

26. FIELD CHANGES

Engineer may issue written "Changes" which interpret Contract Documents without change in contract price or contract time, and Contractor shall carry out such field orders promptly.

27. GENERAL GUARANTY

The Contractor shall guarantee all materials and equipment furnished and work performed for a period of one (1) year from date of substantial completion. Contractor warrants and guarantees for a period of one (1) year from date of substantial completion of system that completed system is free from all defects due to faulty materials or workmanship and Contractor shall promptly make such corrections as may be necessary by reason of such defects including repairs or damage of other parts of system resulting from such defects. Owner will give notice of observed defects with reasonable promptness. In the event that 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 Contractor the cost thereby incurred. The Performance Bond shall remain in full force and effect through the guarantee period.

28. SPECIFICATIONS BY REFERENCE

A. Whenever the term "Standard Specifications" is used, it shall mean "Standard Specifications for Road and Bridge Construction" of the Kentucky Transportation Cabinet, Department of Highways, Edition of 1998. Items described by reference to "Standard Specifications" shall comply with "Standard Specifications" as if they were printed herein.

B. Copies of "Standard Specifications" may be obtained from: Transportation Cabinet, Department of Administration, Division of Management Services, State Office Building, Frankfort, Kentucky 40622.

29. SAFETY STANDARDS

Contractor shall be in compliance with OSHA (P.L. 91-596) and the Contract Work Hours and Safety Standards Act (P.L. 91-54).

30. SUBCONTRACTORS

Contractor shall submit names and superintendents of all subcontractors to be used on project prior to any work by the subcontractor. The contractor is responsible for all acts and omissions of its subcontractors.

31. INSPECTION

A. One inspector will be working on this project. If more than one crew is working, trenches must remain open until the inspector approves the work.

B. If inspector is not contacted by contractor concerning no work due to rain or wet weather conditions and comes to job site, no rain day will be allowed for the contract time.

- C. If more than one crew is working on project, the starting time for all crews shall be the same.

END SECTION

WATER MAIN EXTENSION - PHASE 10

BOONE COUNTY
BULLOCK PEN WATER DISTRICT

DIVISION 2 - TECHNICAL SPECIFICATIONS

SECTION 02235 - SILTATION CONTROL

1. RELATED DOCUMENTS

General provisions of Contract, General and Supplementary General Conditions, and General Requirements apply to this Section.

2. DESCRIPTION OF WORK

A. Provide labor, material, equipment and services necessary for proper and complete siltation control.

B. This work shall consist of temporary control measures as ordered by Engineer during life of contract to control siltation through use of erosion control methods; and coordinating these measures with permanent erosion control features specified elsewhere in contract to extent practicable to assure effective and continuous erosion control throughout construction and postconstruction period.

C. Intent of this specification is to protect quality of water through prevention, control, and abatement of siltation resulting from construction project.

D. Contractor shall exercise every reasonable precaution at all times to prevent siltation of all streams. He shall conduct and schedule his operations so as to avoid or minimize muddying or siltation of all streams. No partially completed item of work shall be left in a manner that will contribute to erosion during period in which work on item is suspended.

3. QUALITY ASSURANCE

A. Progress Requirements

(1) Both permanent and temporary erosion control measures shall be progressively coordinated with construction operations throughout duration of project.

(2) As areas of erodible earth material are exposed to elements of erosion, every effort should be made to stabilize and protect areas as quickly as possible, and as directed. Upon failure of Contractor to coordinate erosion control measures with construction operations in a manner to effectively control erosion and to prevent water pollution, Engineer may suspend Contractor's operations and withhold monies due Contractor on current estimates until such time that all aspects of work are coordinated in an acceptable manner.

B. Payment

(1) Temporary erosion and pollution control measures which are required which are ordered by Engineer, shall be performed by Contractor at his own expense.

4. CONSTRUCTION

A. Prevention of Pollution

(1) Construction operations shall not be performed in stream channels except in those areas where creek crossings are indicated on Drawings or where necessary for temporary or permanent structure.

(2) Material removed from excavation shall not be deposited in streams, stream channels, other areas subject to flooding, or other locations where it may be washed away by high stream flows or fast runoff.

(3) Fuels, oils, bitumens, calcium chloride, or other harmful materials shall not be placed where they may be carried into a stream or underground waters at any time.

(4) Duration of exposure of uncompleted construction shall be as short as practicable. All backfilled trenches shall be permanently vegetated progressively with construction.

(5) Contractor shall exercise every reasonable effort to prevent grass or brush fires that will expose areas of soil to erosion. Areas exposed to erosion by fire resulting from Contractor's operations shall be seeded and protected at no cost to Owner.

(6) Lands and waters outside limits of construction, shall not be disturbed, except as may be found necessary and as permitted. Before final acceptance of work, all such disturbed areas, including abandoned haul roads, storage areas and plant sites, shall be reshaped to conform to adjacent ground and shall be revegetated by Contractor at his expense.

B. Temporary Control Measures

(1) Engineer may limit surface area of erodible earth material exposed by trenching and backfilling operations, and may direct Contractor to provide immediate permanent or temporary pollution control measures to prevent contamination of adjacent streams.

(2) Temporary pollution control measures shall be coordinated with permanent erosion control features to extent deemed practicable by Engineer to assure effective and continuous erosion control throughout construction and post-construction periods.

(3) Temporary erosion control measures shall be used at any time during life of project when directed to prevent soil erosion and pollution of streams.

(4) Erosion control features installed by Contractor shall be acceptably maintained by him.

5. CLEAN-UP

At completion of project, and when approved by Engineer, all materials (straw bales, silt fences, etc.) shall be removed from the site and properly disposed of.

END SECTION

SECTION 02510 - WATER MAINS

1. **RELATED DOCUMENTS**

General Provisions of Contract, General, Supplemental and Special Conditions, and General Requirements apply to this Section.

2. **DESCRIPTION OF WORK**

Provide labor, material, equipment and services necessary for proper and complete installation of water pipe, valves and valve boxes, fire hydrants, air releases, meters, road bores, creek crossings and miscellaneous appurtenances.

3. **MATERIALS**

A. Polyvinyl Chloride Pipe (PVC)

(1) Standard Polyvinyl Chloride Pipe

a. Polyvinyl Chloride Pipe shall conform to ASTM Specification D-2241, latest revision. Pipe shall be pressure rated Class 200 (SDR 21) and Class 250 (SDR 17). Pipe material shall conform to latest revisions of ASTM D-1784 (PVC pipe compounds), ASTM D-2241 (PVC plastic pipe, SDR), and ASTM D-2672 (Bell-End PVC pipe).

b. Joints for PVC pipe shall conform to latest revision of ASTM D-3139, (joints for plastic pressure pipes using flexible elastomeric seals). Joints shall be bells that consist of an integral wall section with a locked-in, solid cross section elastomeric ring which meets requirements of ASTM F-477. Bell sections shall be at least as hydrostatically strong as pipe wall.

c. Fittings shall be ductile iron, mechanical joint, Class 250, conforming to AWWA specifications C110 for short body cast iron fittings. Fittings shall be tar-coated outside and shall receive standard cement lining with bituminous seal coat on inside as specified for ductile iron pipe.

d. Joints for ductile iron fittings shall be of push-type, conforming to AWWA C111 (ANSI A21.11). Bells for push-on type joints shall have an annular recess in pipe socket to accommodate a single rubber gasket. Plain ends shall be suitably beveled to permit easy entry into bell. Basket and annular recess of socket shall be so designed and shaped that gasket is locked in place against displacement as joint is assembled.

(2) C-900 Polyvinyl Chloride Pipe

a. Polyvinyl Chloride Pipe shall conform to AWWA Specifications C-900, pressure rated Class 150 (SDR 18) and Class 200 (SDR 14).

b. Fitting shall be cast iron Mechanical Joint Class 250 conforming to AWWA Specification C-110 for short body cast iron fittings. Fittings shall be tar-coated outside, and shall receive the standard cement lining with bituminous seal coat on the inside.

c. Joints shall be of push-on type conforming the AWWA Specifications for C-900 water mains.

d. AWWA Specification C-900 pressure rated Class 150 (SRR 18) can be used and is considered an equal to ASTM Specification Class 250 pipe.

(3) C-909 Molecular Oriented Polyvinyl Chloride Pipe

a. Molecular oriented polyvinyl chloride pipe shall conform to AWWA Specifications C-909 pressure rated class 150 and class 200.

b. Fittings shall be cast iron mechanical joint class 250 conforming to AWWA specifications C-110 for short body cast iron fittings. Fittings shall be tar-coated outside and shall receive the standard cement lining with bituminous seal coat on the inside.

c. Joints shall be of push-on type conforming to AWWA Specifications for C-909 water mains.

d. AWWA Specification C-909 pressure rated Class 150 pipe can be used and is considered an equal to ASTM Specification Class 250 pipe.

(4) All 90° bends and other fittings that require trust blocks shall be ductile iron (or approved equal) with transition gaskets to accommodate outside diameter of PVC pipe.

(5) Lubrication for rubber connected joints and fittings shall be water soluble, non-toxic, non-objectionable in taste and odor and have no deteriorating effect on PVC or gaskets and shall be supplied by pipe manufacturer.

(6) All PVC pipe and fittings shall bear National Sanitation Foundation (NSF) approved seal for potable water.

(7) Grip rings (megalug style or allgrip #3600) or approved equal shall be used at all times in joining PVC pipe to ductile iron fittings, valves, hydrants, etc. Grip rings will be required only on bends, tees or end of lines.

B. Encasement Pipe

(1) Where indicated on Drawings, Contractor shall install encasement pipe by boring method. Encasement pipe shall be installed using equipment that mechanically bores the hole with a cutting head and continuous auger inside the encasement pipe. Encasement pipe shall be installed simultaneously with boring the hole.

(2) Encasement pipe shall be steel, plain end, uncoated and unwrapped, have a minimum yield point strength of 35,000 psi and conform to ASTM A252 Grade 2 or ASTM A139 Grade B without hydrostatic tests. Steel pipe shall have welded joints and be in at least 18-foot lengths. Used pipe can be used if the minimum wall thickness is met.

(3) Wall thickness of pipe shall be a minimum of 0.250 inches. Diameter of pipe shall conform to requirements of Kentucky Transportation Cabinet, Bureau of Highways for highway crossings.

(4) Spacers shall be used at every 10 feet.

(5) Manufactured end sections shall be used at the end of the steel encasement.

(6) Attach threaded rod to nearest fitting outside of encasement pipe.

C. Gate Valves and Boxes

(1) All gate valves shall be of double disc, parallel seat type or resilient seated type, iron body, non-rising stem, fully bronze mounted with O-ring seals. Valves shall be of standard manufacture and of highest quality both as to materials and workmanship and shall conform to latest revisions of AWWA Specification C-500. Valves shall have a rated working pressure of 200 psi, with standard mechanical joint, A-2380-23 as manufactured by Mueller Co., Darling, Smith, Kennedy, or approved equal.

(2) Gate valves for buried service shall be furnished with mechanical joint end connections, unless otherwise indicated on Drawings. End connections shall be suitable to receive ductile iron, or PVC.

(3) Gate valves for inside service shall be handwheel operated, double disc, parallel seat type, iron body, fully bronze mounted with O-ring stem seals, flanged faced and drilled to match ASA Class 125.

(4) All gate valves shall have name or monogram of manufacturer, year valve casting was made, size of valve, and working pressure cast on the body of valve.

(5) Gate valves set with valve boxes shall be provided with a 2" square operating nut and shall be opened by turning to left (counterclockwise); gate valves set in vaults or pits shall be furnished with handwheels.

(6) Gate valves shall be installed in a vertical position with 6" PVC pipe serving as a valve box. A ductile iron lid shall be furnished being marked "WATER". They shall be set vertically and properly adjusted so that cover will be in the same plane as finished surface of ground, street, or sidewalk.

(7) Valve boxes shall be accurately centered over valve operating nut, and backfill thoroughly tamped about them. Valve box bases shall not rest on valves but shall be supported on crushed stone fill. They shall be set vertically and properly cut and/or adjusted so that tops of boxes will be at grade in any paving, walk or road surface, and two to three inches above ground in grass plots, fields, woods or other open terrain. Valve boxes shall be as manufactured by Mueller, M & H Valve Company, Darling, Russell

Pipe and Foundry, or approved equal.

(8) A pre-cast concrete valve pad 24 inches in diameter by four (4) inches thick shall be furnished around valve box. A blue stake shall be installed to mark all valve locations.

(9) Tracer wire shall be run outside of valve box and then laid inside the top of the box below the cap.

D. Air Release Valves

(1) Air release valves and boxes shall be installed at high points in lines as indicated on Drawings or as directed by Engineer.

(2) Valve shall have a 1 inch screwed inlet diameter with a minimum 3/32 inch size orifice. Body and cover shall be constructed of cast iron and float shall be of stainless steel or hard rubber. Valves shall be suitable for use in lines with an operating pressure range of 0 to 150 psi. Valves shall be equivalent to APCO No. 75, or approved equal.

(3) Air release valve box shall be 18 inch by 30 inch PVC meter box, and shall be set on a No. 9 crushed stone or gravel base. Cover shall be cast iron, medium duty, perforated and of proper size to fit bell of pipe.

E. Meter Services

(1) Service clamps or saddles shall be used for service connections to PVC pipe of all sizes. Saddles for PVC mains shall be bronze and be Mueller Series H-13000 or approved equal.

(2) Corporation stops for use in service clamps or in direct taps shall be Mueller H1500 or approved equal, for PVC pipe. Stops shall be appropriate for 3/4 and 1 inch size polyethylene service pipe or 1-1/2 and 2 inch size PVC service pipe. Plastic insert stiffeners shall be used inside polyethylene pipe at junction with corporation stop.

F. Service Pipe

(1) 3/4" and 1" Polyethylene Pipe (PE)

a. Pipe shall be made from virgin, ultra-high molecular weight polyethylene resin.

b. Dimensions and tolerances shall meet values as listed in ASTM D-2737, latest revision, "Specifications for Polyethylene Plastic Pipe (SDR-PR)". Standard dimension ratio shall be SDR9-PE3048.

c. Pipe shall be rated for use with water at 73.4° F at hydrostatic design stress of 630 psi and a maximum working pressure of 200 psi. Pipe shall sustain water pressure of 340 psi for 1000 hours with water at 73.4° F.

d. Surface shall be homogeneous inside and out and completely free of irregularities. Random testing shall be performed at intervals during all production runs to assure uniformity in all respects. The tubing shall carry the National Sanitation Foundation seal of approval for potable water.

e. Pipe shall be marked in lettering at intervals of not more than five (5) feet and such marking shall include nominal size; manufacturer's name or trademark; pressure rating for water at 73.4° F., 200 psi; applicable ASTM specification; ASTM material specification, PE 3408; standard dimension ratio, SDR-9; the National Sanitation Foundation Seal of Approval (NSF mark) and production code.

(2) 2" polyvinyl chloride service pipe shall meet the same requirements as those for PVC water mains.

G. Meter Boxes

(1) Meter boxes shall be utta-ribbed P.V.C. and shall be 18" in diameter x 30".

(2) Metal lids for boxes shall be solid with ½ ring around bottom (vestal) with a predrilled to accept touch read connection (1 ¾").

H. Meter Setting Equipment

(1) Copper meter setters for 5/8" x 3/4" meter settings without individual pressure reducing valves, shall be catalog number B1434-22 by Mueller Co. or approved equal. All setters shall have two valves, one being an angle ball valve and the other being a double check valve. Locking devices with pins and seals furnished, shall be provided for all setters. All connections shall be the type for PE pipe. Meter setters for settings having individual PRV's shall be those corresponding to the catalog numbers listed above.

(2) A plastic insert stiffener shall be used inside the PE pipe at its connection to both sides of the meter yoke. Stiffener shall be approved equal to Ford Catalog insert 71 for 3/4" pipe and insert 72 for 1" pipe.

(3) A 3/4" X 18" P.V.C. pipe shall be installed in box to hold the meter setter in place. The meter setter should have a brace eye to accommodate this pipe.

I. Fire Hydrants

(1) Contractor shall furnish and install dry head type fire hydrants where indicated on Drawings or as directed by Engineer. Hydrants shall conform in all respects to requirements of AWWA C502-73. Hydrant barrel shall have safety breakage feature above the ground line. All hydrants shall have mechanical joint shoe connection, two 2-1/2 inch discharge nozzles and one 4-1/2 inch pumper nozzle with caps fitted with cap chains. Connection threads and operating nuts shall conform to National Standard Specification as adopted by National Board of Fire Underwriters.

- (2) Operating nut shall be 1-1/2 inches, and shall open left (counterclockwise). Main valve shall have 5-1/4 inch full opening for 6" hydrants and 4-1/2" opening for 4" hydrants, and be of the compression type opening against water pressure so that valve remains closed should the barrel be broken off.
- (3) Hydrant shall be fully bronze mounted. Main valve shall have a threaded bronze seat ring assembly of such design that it is easily removable by unscrewing from a threaded bronze drain ring. Bronze drain ring shall have multiple ports providing positive automatic drainage as the main valve is opened or closed.
- (4) Drainage waterways shall be completely bronze to prevent rust or corrosion.
- (5) Operating stem shall be equipped with anti-friction thrust bearing to reduce operating torque and assure easy opening. Stop shall be provided to limit a stem travel. Stem threads shall be enclosed in a permanently sealed lubricant reservoir protected from weather and the waterway with O-ring seals.
- (6) Hydrants shall be designed for 150 psi working pressure and shop tested to 300 psi pressure with main valve both opened and closed. Under test the valve shall not leak, the automatic drain shall function and there shall be no leakage into the bonnet.
- (7) Hydrants shall be set plumb with not less than three cubic feet of crushed stone and backed with at least one cubic foot of Class "C" concrete or equivalent. Hydrants shall be attached to water main by an anchor tee, anchor coupling, gate valve and 36 inch ductile iron connecting coupling. All piping from water main to hydrant shall be ductile iron. All piping from water main to hydrant shall be ductile iron.
- (8) Hydrants shall be installed with a vertical distance from the center of the pumper nozzle to the ground of 16 to 18 inches. Gradelok by Assured Flows, Inc. shall be installed between the gate valve and hydrant when the 16 to 18 inch clearance cannot be obtained with finish grade. All fire hydrants shall be provided with a shut-off valve in the hydrant lateral as indicated on Drawings. Inlet cover depth shall be minimum 36 inches.
- (9) Hydrants shall be Centurion Model A423 with 5-1/4" opening for 6" hydrants.
- (10) Hydrants shall be painted with one (1) coat of No. 2472 Safety Red (Porter Paint or approved equal.) All cleaning, priming and painting shall be in accordance with paint manufacturers recommendations
- (11) Pay item for fire hydrant shall include all material from the main water to hydrant including tee, valve, hydrant, piping, grip rings, grade lock, gravel, concrete blocks, meter box and lid and etc.

J. Marking Tape

- (1) Tape shall consist of a solid aluminum foil coil encased in a protective plastic jacket. The materials and ink color shall not change when exposed to the alkalis, acids and other destructive chemical variances commonly found in soil. The foil coil shall be visible to ensure continuity. Tape shall be a minimum width of 2 inches and colored blue with the word "water" marked on the tape. The minimum thickness shall

be 5.5 mil with a minimum tensile strength of 4000 psi. Tape shall be installed a minimum of one foot above the top of the pipe".

(2) Marking tape shall be considered incidental to the water line and no additional payment will be made for the marking tape.

K. Tracer Wire

(1) A No. 12 copper wire shall be installed parallel to all nonmetallic pipe.

(2) Tracer wire shall be installed to ground level for all valves and hydrants as shown on typical details.

(3) Tracer wire shall be considered incidental to the water line and no additional payment will be made for the marking tape.

L. Pressure Reducing Valves (PRV's)

(1) Individual Residences

Pressure reducing valves for individual residences shall be installed as shown on plan as directed by Engineer, and shall be Wilkins Model 70 or approved equal, with a maximum inlet pressure 200 psi, factory set outlet pressure 60 psi. PRVs shall be installed in customer's meter box in tandem copper meter setter.

M. Encasement Pipe (creek crossings)

(1) On creek crossings encasement pipe shall be installed as shown on the typical details with a minimum of 12" concrete over top of encasement pipe. All pipes to receive concrete encasement shall be sleeved in PVC encasement pipe.

(2) PVC encasement pipe shall have a minimum dimension ratio of 35.

(3) Spacers shall be used every 10 feet.

(4) Manufactured end sections shall be used at the end of the PVC encasement.

N. Tapping Sleeves and Valves

(1) Tapping sleeves for connections to existing water lines shall be of the mechanical joint type suitable for working pressures comparable to the pipe class being tapped and shall be 3490 MJ Power Seal (fully gasketed).

(2) Tapping valves shall be of mechanical joint type suitable for working pressures of 250 psi and shall be Mueller No. H902020, or approved equal.

(3) All wet taps will be done by Bullock Pen Water District.

O. Creek Crossing Valve

(1) The creek crossing valve will consist of a gate valve installed in the main water line, two saddles and one inch PE pipe on either side of the gate valve and a meter setting connecting the two one inch lines.

(2) The copper meter setters shall be as previously specified except that both valves shall be angle ball valves (Ford #VB 72-7W-44-33).

4. SHOP DRAWINGS

Contractor shall furnish to Engineer for approval, six (6) sets of shop drawings, catalog cuts and certifications for all materials used in construction of water lines. Contractor shall not order material or equipment until approval is given by Engineer.

5. EXCAVATION FOR TRENCHES

A. Except as otherwise noted or directed by Engineer, trenches in which water lines are to be laid shall be excavated in open cut to depths as indicated on Drawings. In general, this shall be interpreted to mean that machine excavation in earth shall not extend below an elevation permitting lower quadrant of pipe to be bedded in undisturbed ground, and excavation in rock shall extend below invert elevation a distance to accommodate a layer of bedding material as specified elsewhere in this section.

B. When excavated material is placed on paved roads, the contractor shall clean road with power broom at the end of each days work or as directed by the Engineer.

C. When excavated material is placed on gravel or dirt roads, the contractor shall place crushed stone to the same thickness of the road prior to construction as determined by the Engineer.

D. If foundation is good firm earth and machine excavation has been accomplished as set out hereinbefore, remainder of material shall be excavated by hand and earth pared or molded to give full support to lower quadrant of barrel of each pipe. Where bell and spigot pipe are involved, bell holes shall be excavated during this latter operation to prevent bells from being supported on undisturbed earth. If for any reason machine excavation in earth is carried below an elevation that will permit type of bedding specified, then a layer of granular material shall be placed so that lower quadrant of pipe will be securely bedded in granular fill.

E. If foundation is rock and excavation has been undercut as set out hereinbefore, a bed of No. 9 crushed stone or tamped earth shall be placed to provide continuous support for lower quadrant of pipe. No extra payment will be made for this No. 9 crushed stone.

F. Trenches shall be a minimum width of 12 inches plus to diameter of the pipe to provide free working space on each side of pipe and to permit proper backfilling around pipe, but unless specifically authorized by Engineer, trenches shall in no case be excavated or permitted to become wider than 2'-0" plus nominal diameter of pipe at level of or below top of pipe. If trench does become wider than 2' plus nominal diameter of pipe at level of or below top of pipe, special precautions may be necessary such as providing compacted, granular fill up to top of pipe or providing pipe with additional crushing strength as determined by Engineer after taking into account actual trench loads that may result and strength of pipe being used; Contractor shall bear the cost of such special precautions as are necessary. Trenches cut in roads and streets shall not exceed a maximum width of 3'-6" plus nominal diameter of pipe at level of road or street surface.

G. Unless specifically directed otherwise by Engineer, not more than 1000 feet of trench shall be opened ahead of pipe laying work of any one crew, and not more than 1000 feet of open ditch shall be left behind pipe laying work of any one crew. Watchmen or barricades, lanterns and other such signs and signals as may be necessary to warn public of dangers in connection with open trenches, excavations and other obstructions, shall be provided by and at expense of Contractor.

H. Pipe laying operation shall be continuous from beginning to end with no gaps allowed in the line unless approved by the Engineer.

6. REMOVAL OF WATER

Contractor, at his own expense, shall provide adequate facilities for promptly and continuously removing water from all excavation.

7. UNAUTHORIZED EXCAVATION

Whenever excavation is carried beyond or below required lines and grades, except as, and where authorized by Engineer, Contractor, at his own expense, shall refill said excavated space with suitable material in a manner approved by Engineer.

8. LAYING DEPTHS FOR WATER MAINS

In general, water mains shall be laid with a minimum cover of 36 inches, unless otherwise indicated on Drawings or directed by Engineer.

9. PIPE BEDDING

A. Foundation for pipes laid in trenches shall be prepared so that entire load of backfill on top of pipe will be carried uniformly on barrel of pipe. Pipe bells shall not carry any load of backfill.

B. In trenches where solid rock is removed from trench bottom, pipe shall be bedded on six (6) inches thickness of No. 9 crushed stone. No extra payment will be made for rock excavation or No. 9 crushed stone.

C. When wet, mucky, yielding or otherwise unsuitable material is located below proposed pipe bedding elevation, such material shall be removed and replaced with No. 9 crushed stone. In such case, payment will be made per ton of "Extra Crushed Stone Bedding" actually placed in trench to replace unsuitable material excavated. Unsuitable material shall be removed and replaced with crushed stone at direction of Engineer.

10. PIPE LAYING

A. All pipe shall be laid with ends abutting and true to lines indicated on Drawings or as directed by Engineer. Pipe shall be fitted and matched so that it will provide a smooth and uniform invert and be centered in the trench. All pipe shall be laid uphill when grade exceeds five percent.

B. Fittings and special attachments for water main shall be provided and laid as pipe is laid and where directed by Engineer or as indicated on Drawings.

C. Before each piece of pipe is lowered into trench, it shall be thoroughly swabbed out to insure its being clean. Any piece of pipe or fitting which is known to be defective shall not be laid or placed in trench. If defective pipe or fittings shall be discovered after pipe is laid, it shall be removed and replaced with a satisfactory pipe or fitting without additional charge. In case a length of pipe is cut to fit in a line, it shall be so cut as to leave a smooth end at right angles to longitudinal axis of pipe.

D. Jointing shall be accomplished in accordance with the manufacturer's recommendations.

E. Interior of pipe shall be cleaned of dirt, jointing materials, and superfluous materials of every description. When laying pipe is stopped for any reason, exposed end of pipe shall be closed with a plug fitted into pipe bell so as to exclude earth or other material and precautions taken to prevent floatation of pipe by runoff into trench.

F. No backfilling (except for securing pipe in place) over pipe will be allowed until Engineer has had an opportunity to make an inspection of joints, alignment and grade in section laid, but such inspection shall not relieve Contractor of further liability in case of defective joints, misalignment caused by backfilling and other such deficiencies that are noted later.

G. Anchorage of Bends, Tees, Plugs, Hydrants and Valves

(1) At all tees, plugs, caps and bends of 11-1/4° and greater, and at reducers or in fittings where changes in pipe diameter occur, movement shall be prevented by using suitable harness, thrust blocks or ballasts. Hydrants and valves shall be provided with similar protection. Thrust blocks and supports shall be as indicated on Drawings, with sufficient volumes of concrete being provided; however, care shall be taken to leave weep holes unobstructed and allow for future tightening of all nearby joints. Unless otherwise directed by Engineer, thrust blocks shall be placed so that pipe and fitting joints will be accessible for repair.

(2) Bridles, harness or pipe ballasting shall meet with approval of Engineer. Steel rods and clamps shall be galvanized or otherwise rust-proofed.

(3) No extra pay shall be allowed for work on proper anchorage of pipe, fittings or other appurtenances; such items shall be included in unit price bid for supported item.

H. In cold weather, extra caution shall be used in handling and laying PVC pipe.

I. No more pipe then can be used in one week shall be strung out in advance.

11. BACKFILLING PIPELINE TRENCHES

A. Backfilling pipeline trenches shall be accomplished in accordance with methods outlined hereinafter, and as indicated on Drawings. In all cases, walking or working on the completed pipelines, except as may be necessary in tamping or backfilling, will not be permitted until trench has been backfilled to a point one (1) foot above top of pipe. Filling of trench shall be carried on simultaneously on both sides of the pipe in such a manner that completed pipeline will not be disturbed and injurious side pressures do not occur.

The methods of backfilling shall be as follows:

Method A - Areas Not Subject to Vehicular Traffic

The lower part of the trench up to a point one (1) foot above the top of the pipe shall be hand placed backfilled with earth free from rock, acceptable to the Engineer, or with crushed stone when a condition exists as mentioned in Paragraph B, this article. In the remainder of the trench, the backfill material shall be reasonably free from large rock (over one-half cubic foot in volume) and may be shoveled into the trench without compacting and heaped over whenever, in the opinion of the Engineer, this method of backfilling may be used without inconvenience to the public. The backfilling of earth material or crushed stone under this method is NOT a separate pay item.

Method B - All Existing Gravel Streets, Roads and Drives (Open Cut Method)

(1) Trench shall be backfilled with DGA. Backfill shall be placed full depth in trench to bottom of surfacing material.

(2) No extra payment will be made for crushed stone or backfilling.

Method C - All Existing Asphalt or Concrete Paved Drives.

(1) All existing paved driveways shall be free bored unless indicated otherwise on plans.

B. In areas where large quantities of rock are excavated, and the available excavated earth in the immediate vicinity is insufficient for placing the required amount of backfill over the top of pipe as set forth in Method A this article, then the Contractor must either haul in earth or order crushed stone aggregate for backfilling over the top of the pipe. Neither the hauling in and placing of earth nor the ordering and placing of crushed stone aggregate to fulfill the backfill requirements set forth in the aforesaid Method A is considered a pay item.

C. When directed by the Engineer, the Contractor shall add water to the backfill material or dry out the material when needed to attain a condition near optimum moisture content for a maximum density of the material when it is tamped. The Contractor shall obtain a compaction of the backfill of at least 90 percent of standard (ASTM D-698) Proctor density where mechanical tamping of backfill is required.

12. CONCRETE ENCASEMENT

Concrete encasement shall be placed where shown on contract drawings, or as directed by Engineer. Concrete shall be Class 3500 psi and shall be mixed sufficiently wet to permit it to flow under pipe to form a continuous bed. In tamping concrete, care shall be taken not to disturb grade or line of pipe or injure joints. Concrete placed outside specified limits or without authorization from Engineer will not be subject to payment.

13. CLEAN-UP

Contractor shall remove all debris and surplus construction materials resulting from his work on a daily basis. Contractor shall grade ground along each side of pipe trench in a uniform and neat manner leaving construction area in a shape as near as possible to original ground line. If cleanup is not performed daily, Engineer will shut down project and/or suspend payments.

14. CONNECTION TO EXISTING SYSTEM

Unless otherwise directed by the Water District, Contractor shall connect the new water main to the existing water system. The Contractor must notify the Water District when the connection is to be made so that representatives of the Water District may operate existing valves and witness the connection. A minimum notice of 48 hours must be given.

15. SEEDING, FERTILIZING AND MULCHING

Trenches in areas that are not paved shall be prepared for seeding. Materials and methods for seeding, fertilizing and mulching are described elsewhere in these specifications.

16. RESTORATION

A. In general, contractor shall be responsible for proper care and maintenance of all existing structures, both above and below surface, which are encountered during progress of work. No structures of any kind shall be removed without consent of Engineer.

B. Contractor shall care for and maintain all pipes and services for gas, sewer, telephone or electricity where same are encountered in prosecution of work. In event any such services for water, gas, electricity, sewer or telephone are disturbed, damaged or destroyed, Contractor shall arrange with owner of such service, or facility, for its replacement and restoration at Contractor's expense.

17. TESTING

A. Water mains, services and all appurtenances, shall be tested to 50 psi over the operating pressure of the pipe. The operating pressure will be considered the pressure that would come from connecting to the Boone County Water Association at Highway 42. Defective joints of pipe shall be cut out and replaced as directed by Engineer. Cracked or defective pipe fittings, valves or hydrants disclosed in pressure test shall be replaced by Contractor with sound material, and test shall be repeated until test results are satisfactory to Engineer.

B. Contractor shall maintain required pressure for six hours and shall measure the amount of water necessary to maintain this pressure for this length of time. The amount of water used to maintain pressure shall not exceed five gallons per 24 hours per mile of pipe per inch nominal diameter of the pipe.

C. All leaks shall be repaired whenever or wherever there is evidence of a leak. Water used by Contractor shall be paid for by Contractor at the rate of ~~\$2.50~~ per 1,000 gallons.

#3.00

D. All fittings, meters, equipment, tools and other material required for testing shall be provided by Contractor, and remain property of Contractor at completion of project.

18. DISINFECTION OF WATER LINES

A. New potable water lines shall not be placed in service, either temporarily or permanently, until they have been thoroughly disinfected in accordance with the following requirements and to the satisfaction of Engineer.

B. After testing, a solution of hypochlorite using HTH or equal shall be introduced into the section of the line begin disinfected sufficient to insure a chlorine dosage of at least 50 ppm in the main. While the solution is being applied, the water should be allowed to escape at the ends of the line until tests indicate that a dosage of at least 50 ppm has been obtained throughout the pipe. Open and close all valves and cocks while chlorinating agent is in the piping system. The chlorinated water shall be allowed to remain in the pipe for 24 hours, after which a residual of at least 25 ppm shall be obtained. The disinfection shall be repeated until 25 ppm is obtained, after which time the main shall be thoroughly flushed until the residual chlorine content is not greater than 1.0 ppm. Contractor shall have testing equipment for testing chlorine content. Chlorinated water resulting from disinfection of water line shall be disposed in a manner which will not violate 401 KAR 5:031.

C. Following disinfection of the line, bacteriological samples shall be collected and analyzed in accordance with the requirements of Kentucky Department for Natural Resources and Environmental Protection. When the samples have been approved, the new line then may be connected to the system. Cost of collecting and analyzing samples shall be paid by Contractor.

19. METER CONNECTIONS

Upon completion of laying of water main on each individual line, the meter boxes will be set, the line tested and sterilized and the line put in service. Before the contractor will be allowed to start another individual line, work must be completed or work being performed on the previously constructed line and completed on all other constructed lines. If the contractor has more than one crew on the project, additional lines can be started upon the approval of the Engineer.

END SECTION

SECTION 02920 - SEEDING, FERTILIZING AND MULCHING

1. RELATED DOCUMENTS

General provisions of Contract, and General, Supplemental, and Special Conditions apply to this Section.

2. DESCRIPTION OF WORK

Provide labor, material, equipment and services necessary for proper and complete seeding and mulching.

3. QUALITY ASSURANCE

The intent of these Specifications is to require the Contractor to provide, in all areas to be seeded, fertilized and mulched, a smooth uniform turf of the grasses specified free from bare spots, eroded areas, weeds or other deficiencies. Acceptance by the Engineer is conditional upon compliance with this intent after the initial growing season.

4. MATERIALS

A. Mulch shall be a high quality small-grain straw or a hydraulically applied wood-cellulose fiber mulch approved by Engineer.

B. Commercial fertilizer shall be a complete fertilizer, uniform in composition, dry and free flowing. Fertilizer which becomes caked or otherwise damaged making it unsuitable for use will not be accepted.

C. Lime shall be agricultural limestone containing not less than 85% of total carbonates and shall be ground to a fineness that 50% will pass through a 100-mesh sieve and 80% will pass through a 20-mesh sieve. Coarser material will be acceptable provided that specified rates of application are increased proportionally on basis of quantities passing 100-mesh sieve.

D. Seed Mixture

(1) Lawn Seed shall be guaranteed by dealer and distributed as follows:

A. Farm or pasture

80% Kentucky 31 Tall Fescue
20% Annual Ryegrass

B. Residential Yards

40% Kentucky Bluegrass
40% Fine Leaf Fescue
20% Annual Ryegrass

- (2) Seed mixture shall be sown at rate of 5 pounds per 1000 square feet.

5. SOIL IMPROVEMENTS

Fertilizer shall be applied to all seeded areas as follows:

- A. Agricultural limestone - 75 pounds per 1000 square feet.
B. Fertilizer - 20 pounds, 10-10-10 fertilizer per 1,000 square feet.
C. Application

(1) Limestone shall be thoroughly mixed into topsoil as far ahead of seeding as will not interfere with other grading operations.

(2) Fertilizer shall be applied to areas being prepared for seeding and shall be mixed lightly in top few inches of topsoil.

6. SEEDING AND MULCHING

A. Seeding

(1) Immediately before seed is sown, loosen soil to a depth of 3 inches by rotary tools, discs, harrows, or other approved methods. Engineer may reduce depth to which soil is loosened on steep slopes or places inaccessible to mechanical equipment.

(2) Remove all large or unsightly clods or stones, and other foreign material brought to surface and repair all gullies, washes, or disturbed areas before seed is applied.

(3) Seed shall be broadcast either by hand or by approved sowing equipment at rate specified.

(4) Do not perform seeding during high winds that would prevent uniform distribution of seed.

B. Mulching

(1) All seeded areas shall be mulched with straw to depth of approximately 1-1/2 inches. Mulching shall follow seeding operation not later than 48 hours.

7. PLANTING SEASON

Spring seeding season shall be between February 15 and April 15. Fall seeding season shall be between August 1 and October 20. Seeding seasons may be extended only at direction of Engineer.

8. CLEAN-UP

Soil, peat or similar material which has been brought onto paved areas within or outside construction limit by hauling operations or otherwise shall be removed promptly, keeping these areas clean at all times. Upon completion of seeding, all excess soil, stones and debris which have not previously been cleaned up shall be removed from site or disposed of as directed by Engineer. All lawn areas shall be prepared for final inspection.

9. MAINTENANCE

Maintenance shall begin immediately following last operation of seeding and shall continue until lawn is formally accepted. Maintenance shall include sufficient watering, weeding, cultivating, mulching, regular mowing of seeded areas, and removal of dead materials.

10. INSPECTION FOR ACCEPTANCE

Inspection of work of this section to determine completion, exclusive of possible replacement of seed, will be made by Engineer upon written notice requesting such inspection submitted at least ten (10) days prior to anticipated date of inspection and provided that an 80% minimum coverage per square foot for all seeded lawn areas has been established. Contractor shall guarantee, at the time of this inspection, that the seeded areas will be in compliance with the intent of this Specification described herein. This guarantee shall apply to all permanent seeding performed in conjunction with project, regardless of type protection used or season in which seeding is performed.

11. GUARANTEE

A. When seeding does not meet guarantee requirements at time of inspection, Contractor will be advised of amount and location of corrective work deemed necessary. Additional work required may include preparation of a new seedbed, refertilizing, reseeding, remulching, or any erosion control items that are required. Contractor shall perform all corrective work as soon as favorable working conditions occur after being advised of corrective work required. Corrective work and materials required to fulfill guarantee requirements will not be paid for, except as hereinafter provided for unavoidable damage.

B. When unavoidable damage occurs after date project is declared complete and before inspection previously described, then payment will be made at original contract unit prices for additional seeding and protection work ordered by Engineer. Unavoidable damage may result from slides, vehicular traffic, fires, and deluges. Failure of seed to sprout and grow will not be considered unavoidable damage.

C. From time seeding and protection work begins until date project is declared complete, keep all seeded areas in good condition at all times. Damage to seeded areas or to mulch materials shall be promptly repaired as directed. All work and materials necessary to protect, maintain, and restore seeded areas during life

of contract shall be performed at no additional cost to Owner, except additional work caused by changes in project authorized by Engineer.

D. When it becomes necessary to disturb previously seeded areas at direction of Engineer, payment for a reasonable amount of additional work, as determined by Engineer, will be made at original contract unit price. No payment will be made for additional work due to changes made for benefit of Contractor, nor will payment be made for corrective work required because Contractor has failed to properly coordinate his entire erosion control schedule thus causing previously seeded areas to be disturbed by operations that could have been performed prior to seeding.

END SECTION

SECTION 03300 - CAST-IN-PLACE CONCRETE

1. RELATED DOCUMENTS

General Provisions of Contract, General, Supplemental and Special Conditions, and General Requirements apply to this Section.

2. DESCRIPTION OF WORK

Provide labor, transportation, materials, tools, equipment and appliances necessary for proper and complete installation of all concrete work.

3. MATERIALS

A. General

All materials used in the work shall be stored and handled in such a manner as will prevent deterioration or intrusion of foreign matter. Material which has deteriorated or has been damaged shall be immediately and completely removed for premises. All material shall comply with requirements of standards of American Society for Testing and Materials.

B. Manufactured Materials

Manufactured materials such as cement, shall be delivered and stored in original packages, plainly marked with brand and maker's name. Material in broken containers or in packages showing water marks or other evidence of damage will be rejected. Unless otherwise noted, all materials used in concrete work shall be as specified below:

(1) Portland Cement---Type I or Type III - ASTM C-150.

(2) Aggregates-----ASTM C-33.

a. Fine aggregates shall consist of natural sand having clean, hard, uncoated particles and free from injurious amounts of soft friable, thin, elongated or laminated pieces. Aggregates shall not absorb more than 3% moisture by weight. Maximum size of pieces shall be 3/4".

b. Coarse aggregates shall be crushed stone having clean, hard, uncoated particles and free from injurious amounts of soft friable thin elongated or laminated pieces. Aggregate shall not absorb more than 3% by weight.

(3) Air Entraining Agent-----ASTM C-33.

(4) Water shall be clean and free from deleterious amounts of acids, alkalis or organic materials.

- C. Metal Reinforcement: All reinforcing shall be ASTM A-615, with a minimum yield of 60,000 psi.
- D. Concrete Curing and Hardening Compound shall be Sonneborne "Kure-N-Seal" or equal.
- E. Anti-spalling compound shall be Sonneborne "Pitt-Loc" or equal.
- F. Expansion joint material shall be premoulded filler as manufactured by Homasote Co. (Homex 300); Dayton SURE-Grip (G-30) or equal.

4. CONCRETE - QUALITY

- A. Ready-mixed concrete complying with these Specifications and conforming to ASTM designation C-94, Strength Method shall be used.
- B. Type Concrete
 - Min. Compressive Strength at 28 days-----3,000 psi
 - Slump-----3-5 inches
 - Air Content-----4%
- C. Use of admixtures is prohibited except where written consent is given by Engineer.
- D. Ready mix design shall be submitted to Engineer for approval prior to ordering concrete for project.

5. REINFORCING

Detailing, fabrication and placing shall conform to American Concrete Institute "Manual of Standard Practice for Detailing Reinforced Structures" (ACI-315).

6. CONVEYING AND DEPOSITING CONCRETE

Procedures shall be in accordance with American Concrete Institute Standard "Recommended Practice for Measuring, Mixing and Placing Concrete." (ACI-614).

7. CURING

Concrete shall be maintained in a moist condition for seven (7) days after placing. Curing shall begin immediately after completion of final finishing operation.

8. COLD WEATHER REQUIREMENTS

Procedures shall be in accordance with American Concrete Institute "Recommended Practice for Winter Concreting" (ACI-604). Section "Minimum Requirements for Job Taking Maximum Risk" shall not be considered a part of this Specification.

9. FINISHING

A. Slabs

(1) Under no circumstances shall dry cement or a mixture of dry cement and sand be sprinkled directly on surface to absorb moisture or to stiffen mix.

(2) Finish for floor slabs shall be as follows:

Surface of slab shall be struck off true to elevations called for, and all surface water, laitance and dirt removed. After allowing the concrete to dry out from 20-30 minutes, depending on weather conditions, the surfaces shall be brought to final grade with a wood float. Surfaces shall be tested with a straight edge to detect high and low spots which shall be eliminated. After concrete has hardened sufficiently to prevent excess fine material from working to surface, surface shall be steel troweled to a smooth hard finish, impervious and free from imperfections, pits and other irregularities, and true to a maximum tolerance of 1/8" in six (6) feet.

10. CRUSHED ROCK FILL

Install a 4" crushed rock fill under all floor slabs on earth. Rock shall be clean crushed limestone, graded from 3/4" to 1-1/2" in diameter, spread evenly, tamped solid and brought to the proper elevation for the reception of the concrete slab, placed only after approval of graded and properly compacted subsurface.

11. INSPECTION

A. Concrete shall not be placed over pipes and conduits until such work has been tested, inspected and approved.

B. All concrete placed in violation of these provisions shall be subject to rejection.

12. NOTIFYING OTHER TRADES

Notify plumbing and Electrical Contractors and all other Contractors, at proper time to install all pipes, conduits, anchors or other equipment coming under their respective contracts in form work.

13. TESTING CONCRETE

A. Slump Test

At least one slump test shall be made before first concrete pour, at start of pouring any concrete at each 5 cubic yards deposited during one operation. These shall be made for the same samples as those taken for cylinder tests, and records of same kept therewith. Test shall be made according to ASTM Designation (C-143), and as required under ASTM Designation C-94 for ready-mixed concrete. Mix designed

for a slump test of 2" and not more than 4", except in cases where thin sections would indicate in the opinion of the Engineer that a wetter mix is more desirable. The Contractor shall furnish necessary equipment for the slump test.

B. Cylinder Test

(1) At the start of concreting, the Contractor shall make from a single batch a set of four (4) cylinders per ASTM Designation C-31. Two shall be tested at 7 days and two at 28 days, per ASTM Designation C-39.

(2) At each time when twenty or more cubic yards of concrete are placed during one operation, and when the sum of smaller deposits of concrete equal thirty cubic yards since previous tests, and at any change in mix, four (4) cylinder tests will be required, two tested at 7 days and two at 28 days, per ASTM Designation C-39. In case of C-94 and C-172 shall be added. Class "A" concrete samples shall show a compressive strength of not less than 3500 lbs. per square inch in 28 days.

(3) The Contractor shall furnish all equipment for sampling and curing on the job, and shall bear the cost of laboratory curing and testing.

END SECTION

EXHIBIT “I”

Phase 10 Engineering Drawing and Specifications

OS - 2

(10/84)

KENTUCKY PUBLIC SERVICE COMMISSION

MAIN CASE FILE NOTES

Case 2005-00231: 6/17/2005

There are 2 large maps in map hanger that were filed as exhibits to application in this proceeding. To view, please ask for assistance.

Thank you

JDC