

2007-00260

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**WATER MAIN EXTENSION - PHASE 11
GRANT COUNTY**

FOR

BULLOCK PEN WATER DISTRICT

AND

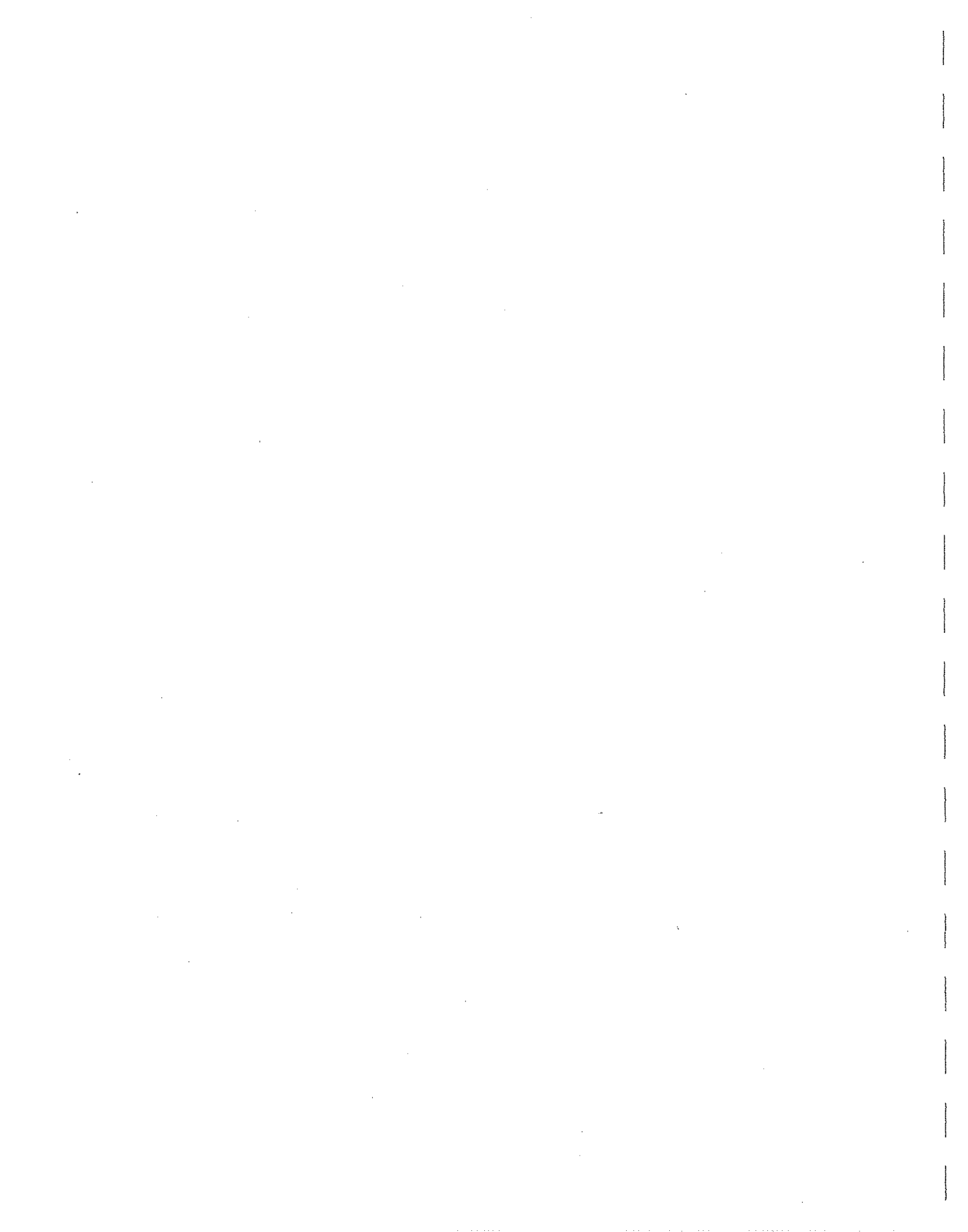
GRANT COUNTY FISCAL COURT

GRANT COUNTY, KENTUCKY

JULY, 2006

PROJECT MANUAL

Set No.



PROJECT MANUAL

FOR

**WATER MAIN EXTENSION - PHASE 11
GRANT COUNTY**

FOR

BULLOCK PEN WATER DISTRICT

OWNER:

BULLOCK PEN WATER DISTRICT

AND

GRANT COUNTY FISCAL COURT

JULY, 2006

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

CMW PROJECT NO. 04436.02

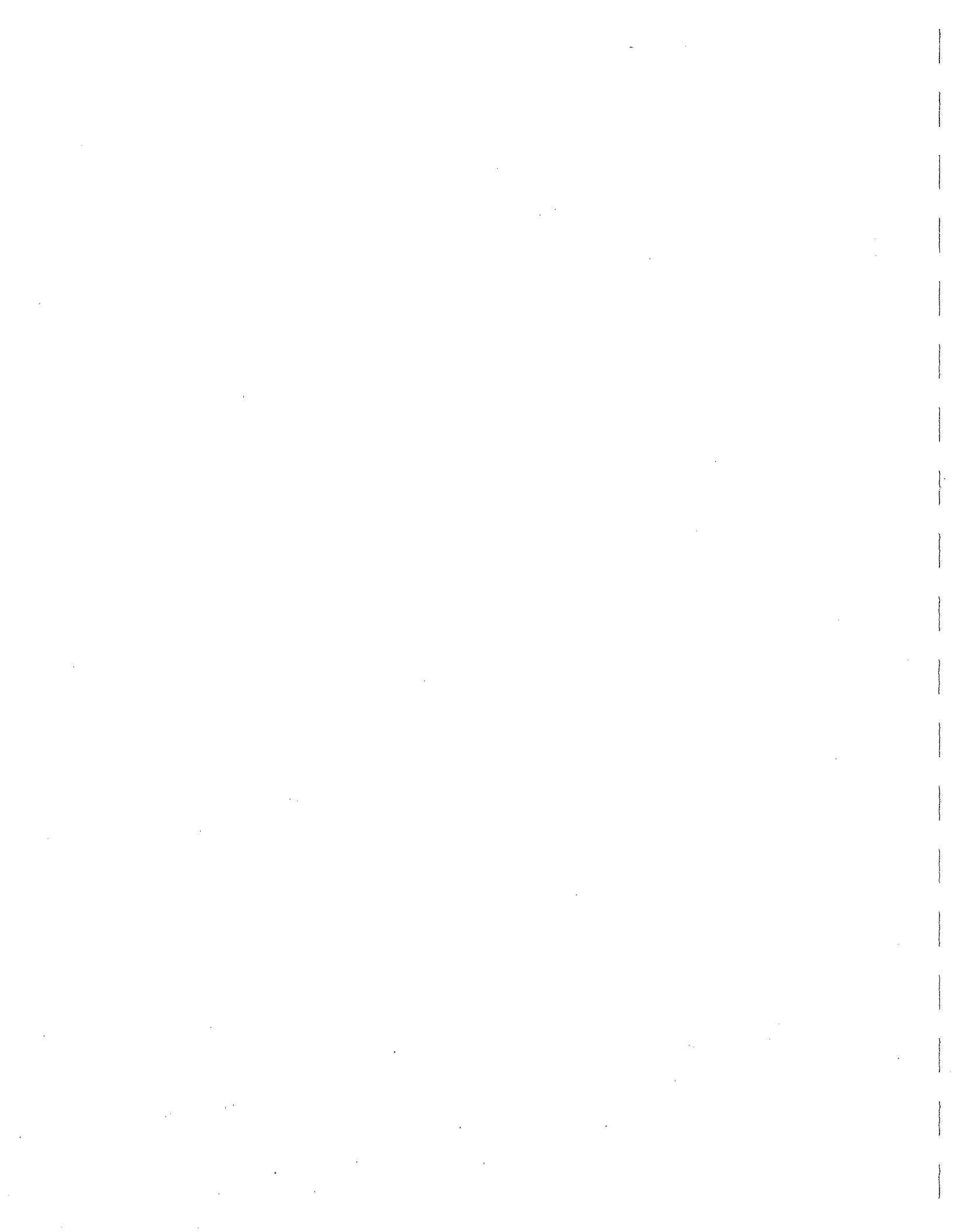


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ADVERTISEMENT FOR BIDS

Bullock Pen Water District and
Grant County Fiscal Court

Separate sealed BIDS for Water Line Extension, Phase 11, Grant County will be received by the Owner at the office of Bullock Pen Water District, Crittenden, Kentucky, until 2:00 p.m. EDT on Tuesday, May 15, 2007 and then publicly opened and read aloud.

Construction of base bid shall consist of approximately 75,080 LF of 6" PVC water line, 3,180 LF of 6" DI water line, 48 gate valves, 36 fire hydrants, 3 blow-off hydrants, 204 LF of bores with steel encasement, 13 air relief valves, 45 meters with service piping, 2 creek crossing valves, 136 LF creek crossing, 133 LF of freebore, 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/McCraw Hill/Dodge Plan Room, 950 Contract Street, Suite 100A, Lexington, KY

Associated General Contractors/McCraw Hill Plan Room, 922 North Main Street, 2nd Floor, London, 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, 2020 Liberty Road, Suite 110, 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 \$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 90 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 12, 2007 & April 26, 2007

Date

BULLOCK PEN WATER DISTRICT
CRITTENDEN, KENTUCKY

GRANT COUNTY FISCAL COURT
WILLIAMSTOWN, 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 and Grant County Fiscal Court (herein called the "OWNER") at the office of the Bullock Pen Water District, 1 Farrell Drive, Crittenden, Kentucky, until 2:00 p.m. EDT on Tuesday, May 15, 2007 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 11 - 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 2:00 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 Non-Conflict of Interest" included with bid. The responsibility 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 11
GRANT COUNTY
BULLOCK PEN WATER DISTRICT AND
GRANT COUNTY FISCAL COURT**

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 and the Grant County Fiscal Court (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 11 - 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 90 consecutive calendar days for base bid, 7 consecutive days for Alternate #1, 14 consecutive calendar days for Alternate #2, 40 consecutive days for Alternate #3, 7 consecutive calendar days for Alternate #4 and 15 consecutive days for Alternate #5. 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	31,900	LF	\$	\$
2.	6" PVC Water Main, Class 250	12,160	LF	\$	\$
3.	Connection to Existing Main (Wet Tap Performed by Bullock Pen Water District)	3	EA	\$	\$
4.	Connection to Existing Water Main (Dry Tap)	5	LF	\$	\$
5.	6" MJ Gate Valve, Complete with Box and Cover	28	EA	\$	\$
6.	6" MJ Gate Valve with Bypass Meter (Creek Crossing)	3	EA	\$	\$
7.	Air Relief Valve, Complete with Box and Cover	10	EA	\$	\$
8.	Fire Hydrant, Complete with Gate Valve	19	EA	\$	\$

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
9.	Blow-off Hydrant Complete with Gate Valve	3	EA	\$	\$
10.	Jack and Bore with 10" Steel Encasement Pipe	160	LF	\$	\$
11.	Open Cut with 10" Steel Encasement Pipe	33	LF	\$	\$
12.	Freebore for 6" Water Main	80	LF	\$	\$
13.	Creek Crossing with PVC Encasement	136	LF	\$	\$
14.	10" PVC Encasement	39	LF	\$	\$
15.	Connection to Existing Service Line	1	EA	\$	\$
16.	Concrete Encasement	10	CY	\$	\$
17.	Extra Crushed Stone Bedding	100	TONS	\$	\$
18.	5/8" x 3/4" Meter Unit without PRV	15	EA	\$	\$
19.	5/8" x 3/4" Meter Unit with PRV	10	EA	\$	\$
20.	3/4" PE Service Line	600	LF	\$	\$
21.	1" PE Service Line	260	LF	\$	\$
22.	1" PE Service Line, Jacked under Roadway	260	LF	\$	\$

Total Part I. Base Bid:

\$ _____
 (USE FIGURES)

 (USE WORDS)

Part II. Alternate Bids

Section A. Alternate #1 – Case Lane

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
1.	6" PVC Water Main, Class 200	2,320	LF	\$	\$
2.	Connection to Existing Water Main (Dry Tap)	1	EA	\$	\$
3.	6" MJ Gate Valve, Complete with Box and Cover	1	EA	\$	\$
4.	Fire Hydrant, Complete with Gate Valve	1	EA	\$	\$
5.	Freebore for 6" Water Main	33	LF	\$	\$
6.	5/8" x 3/4" Meter Unit without PRV	1	EA	\$	\$
7.	3/4" PE Service Line	60	LF	\$	\$

Total Section A. Alternate #1 – Case Lane

\$ _____
 (USE FIGURES)

 (USE WORDS)

Section B. Alternate #2 – Sugar Creek

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
1.	6" PVC Water Main, Class 200	5,480	LF	\$	\$
2.	6" PVC Water Main, Class 250	540	LF	\$	\$
3.	6" PVC Water Main C-900, Class 200	440	LF	\$	\$
4.	Connection to Existing Water Main (Dry Tap)	1	EA	\$	\$
5.	6" MJ Gate Valve, Complete with Box and Cover	4	EA	\$	\$

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
6.	Air Relief Valve, Complete with Box and Cover	1	EA	\$	\$
7.	Fire Hydrant, Complete with Gate Valve	3	EA	\$	\$
8.	5/8" x 3/4" Meter Unit without PRV	1	EA	\$	\$
9.	1" PE Service Line	30	LF	\$	\$
10.	1" PE Service Line, Jacked Under Roadway	20	LF	\$	\$

Total Section B. Alternate #2 – Sugar Creek

\$ _____
 (USE FIGURES)

(USE WORDS)

Section C. Alternate #3 – Arnolds Creek

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
1.	6" PVC Water Main, Class 200	1,540	LF	\$	\$
2.	6" PVC Water Main, Class 250	4,040	LF	\$	\$
3.	6" PVC Water Main, C-900 Class 200	14,840	LF	\$	\$
4.	Connection to Existing Water Main (Wet Tap Performed by Bullock Pen Water District)	1	EA	\$	\$
5.	Connect to Existing Water Main (Dry Tap)	1	EA	\$	\$
6.	6" MJ Gate Valve, Complete with Box and Cover	12	EA	\$	\$
7.	Air Relief Valve, Complete with Box and Cover	2	EA	\$	\$

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
8.	Fire Hydrant, Complete with Gate Valve	11	EA	\$	\$
9.	Jack and Bore with 10" Steel Encasement Pipe	24	LF	\$	\$
10.	10" PVC Encasement Pipe	182	LF	\$	\$
11.	5/8" x 3/4" meter unit with PRV	11	EA	\$	\$
12.	3/4" PE Service Line	360	LF	\$	\$
13.	1" PE Service Line	100	LF	\$	\$
14.	1" PE Service Line, Jacked Under Roadway	100	LF	\$	\$

Total Section C. Alternate #3 – Arnolds Creek

\$ _____
 (USE FIGURES)

(USE WORDS)

Section D. Alternate #4 – Campbell Branch

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
1.	6" PVC Water Main, Class 200	1,820	LF	\$	\$
2.	Connection to Existing Water Main (Dry Tap)	1	EA	\$	\$
3.	6" MJ Gate Valve, Complete with Box and Cover	1	EA	\$	\$
4.	Fire Hydrant, Complete with Gate Valve	1	EA	\$	\$
5.	Open Cut with 10" Steel Encasement Pipe	16	LF	\$	\$

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
6.	Free bore for 6" Water Main	20	LF	\$	\$
7.	5/8" x 3/4" Meter Unit without PRV	5	EA	\$	\$
8.	3/4" PE Service Line	90	LF	\$	\$
9.	1" PE Service Line	120	LF	\$	\$

Total Section D. Alternate #4 – Campbell Branch

\$ _____
 (USE FIGURES)

(USE WORDS)

Section E. Alternate #5 – Jamison Road

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
1.	6" DI Water Main	3,180	LF	\$	\$
2.	Connection to Existing Water Main (Dry Tap)	1	EA	\$	\$
3.	6" MJ Gate Valve, Complete with Box and Cover	2	EA	\$	\$
4.	Fire Hydrant, Complete with Gate Valve	1	EA	\$	\$
5.	Jack and Bore with 12" Steel Encasement Pipe	20	LF	\$	\$
6.	12" PVC Encasement Pipe	26	LF	\$	\$
7.	5/8" x 3/4" Meter Unit with PRV	2	LF	\$	\$
8.	3/4" Copper Service Line	80	LF	\$	\$

Total Section E. Alternate #5 – Jamison Road

\$ _____
 (USE FIGURES)

(USE WORDS)

Total Part II. Alternate Bid: \$ _____
(USE FIGURES)

(USE WORDS)

Total Bid (Parts I and II): \$ _____
(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.

Determination of low bidder will be based on the lowest and best Total Bid. Award will be made to the lowest responsive, responsible Bidder.

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 ninety (90) 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: _____

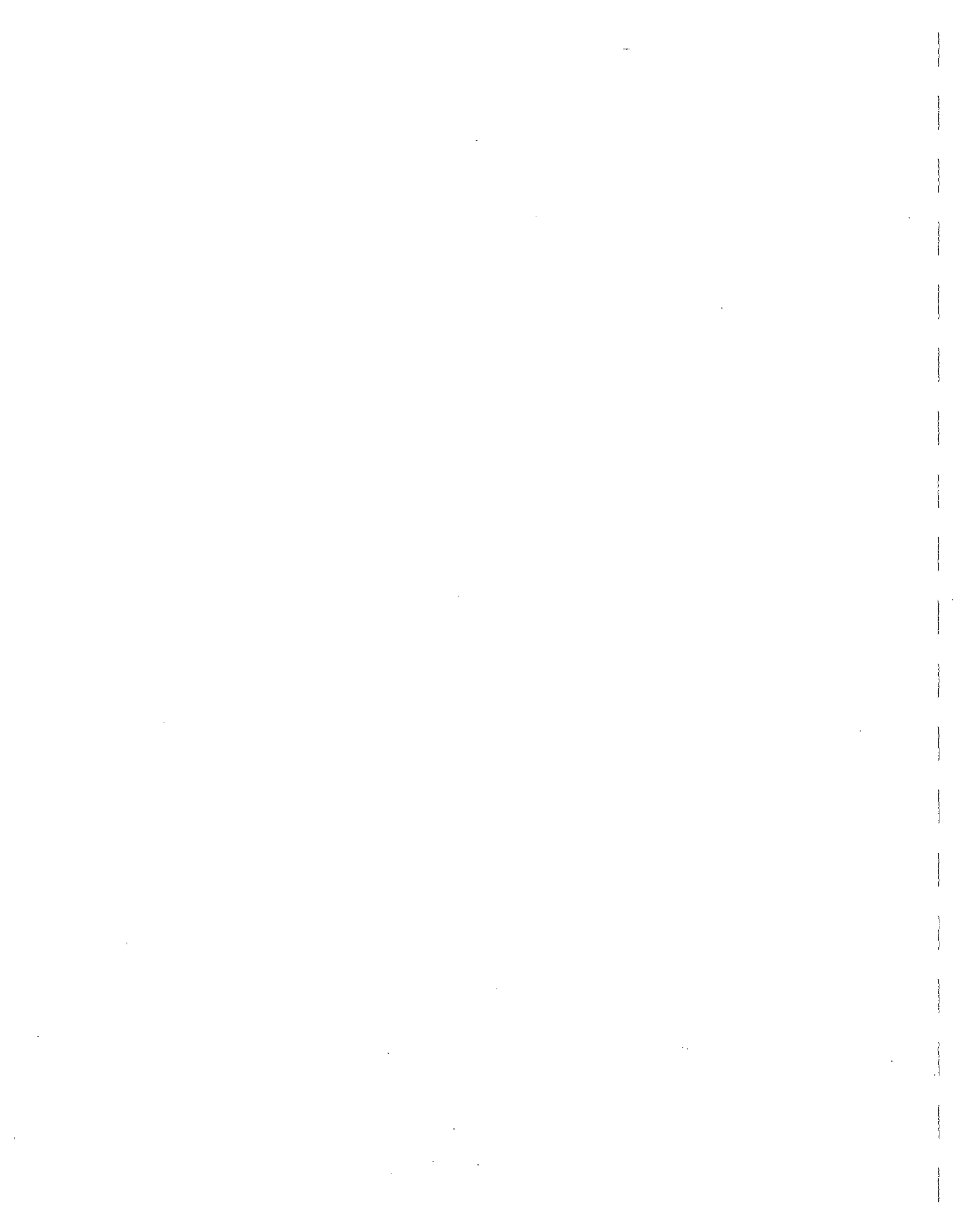
DATE: _____

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 Grant County Fiscal Court 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 90 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 and Grant County Fiscal Court 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 _____, 2006, by and between Bullock Pen Water District and Grant County Fiscal Court 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 11, 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 _____ 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 13.1 dated June, 2005.
- L. SPECIFICATIONS prepared or issued by CMW, Inc. and dated July, 2006

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

AND

(SEAL)

OWNER:

ATTEST:

GRANT COUNTY FISCAL COURT

BY _____

NAME _____
(Please Type)

NAME Darrell Link
(Please Type)

TITLE _____

TITLE Grant County Judge Executive

(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
(number)
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
(Number)
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

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

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.

1. The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the integrity of the financial system and for the ability to detect and prevent fraud.

2. The second part of the document outlines the various methods used to collect and analyze data. It describes the use of statistical techniques to identify trends and anomalies in the data, and the importance of using reliable sources of information.

3. The third part of the document discusses the role of the auditor in the process. It highlights the need for the auditor to maintain independence and objectivity, and to follow a systematic approach to the audit.

4. The fourth part of the document discusses the importance of communication in the audit process. It emphasizes the need for the auditor to communicate clearly and effectively with the client and other stakeholders.

5. The fifth part of the document discusses the importance of ethics in the audit process. It highlights the need for the auditor to adhere to a code of ethics and to act in the best interests of the public.

6. The sixth part of the document discusses the importance of the audit report. It emphasizes the need for the auditor to provide a clear and concise report that accurately reflects the results of the audit.

7. The seventh part of the document discusses the importance of the audit process in the overall financial system. It highlights the role of the auditor in maintaining the integrity of the financial system and in providing a level of assurance to the public.

8. The eighth part of the document discusses the importance of the audit process in the overall financial system. It highlights the role of the auditor in maintaining the integrity of the financial system and in providing a level of assurance to the public.

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21. The twenty-first part of the document discusses the importance of the audit process in the overall financial system. It highlights the role of the auditor in maintaining the integrity of the financial system and in providing a level of assurance to the public.

22. The twenty-second part of the document discusses the importance of the audit process in the overall financial system. It highlights the role of the auditor in maintaining the integrity of the financial system and in providing a level of assurance to the public.

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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**

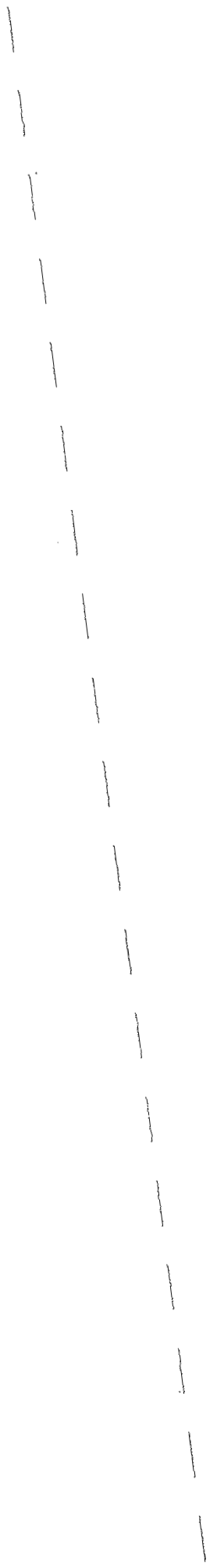
- Region 4 Disadvantaged Business Enterprise (DBE) Negotiated Rates **Attachment No. 13**

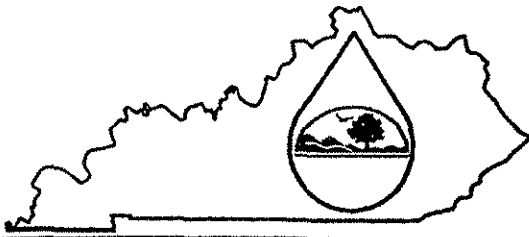
- Bonds and Insurance **Attachment No. 14**

- Outlay Management Schedule **Attachment No. 15**

- Storm Water General Permit **Attachment No. 16**

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





**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 a 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

Name:		Phone:	
Address:		Status of Owner/Operator:	
City, State, Zip Code:			

II. Facility/Site Location Information

Name:			
Address:			
City, State, Zip Code:			
County:			
Site Latitude (degrees/minutes/seconds):		Site Longitude (degrees/minutes/seconds):	

III. Site Activity Information

MS4 Operator Name:			
Receiving Water Body:			
Are there existing quantitative data?	Yes <input type="checkbox"/>	If Yes, submit with this form.	
	No <input type="checkbox"/>		
SIC or Designated Activity Code Primary:		2nd:	3rd:
If this facility is a member of a Group Application, enter Group Application Number:			
If you have other existing KPDES Permits, enter Permit Numbers:			

IV. Additional Information Required FOR CONSTRUCTION ACTIVITIES ONLY

Project Start Date:		Completion Date:	
Estimated Area to be disturbed (in acres):			
Is the Storm Water Pollution Prevention Plan in Compliance with State and/or Local Sediment and Erosion Plans?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	

V. 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 evaluate the information submitted. Based on my inquiry of the person or 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.

Printed or Typed Name:		Date:	
Signature:		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:

For 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;

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

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



Ernie Fletcher
Governor

ENVIRONMENTAL AND PUBLIC PROTECTION CABINET
DEPARTMENT OF LABOR
OFFICE OF WORKPLACE STANDARDS
1047 US Hwy 127 S STE 4
Frankfort, Kentucky 40601
Phone: (502) 564-3070
www.labor.ky.gov

LaJuana S. Wilcher
Secretary

Philip J. Anderson
Commissioner

Christopher H. Smith
Executive Director

July 26, 2006

Kerry Odle
CMW, Inc.
138 North Keeneland Drive, Ste E
Richmond KY 40475

Re: Bullock Pen Water District, Water Line Extension - Phase 11

Advertising Date as Shown on Notification: September 8, 2006

Dear Kerry Odle:

This office is in receipt of your written notification on the above project as required by KRS 337.510 (1).

I am enclosing a copy of the current prevailing wage determination number CR-2-019, dated August 11, 2005 for GRANT County. This schedule of wages shall be attached to and made a part of the specifications for the work, printed on the bidding blanks, and made a part of the contract for the construction of the public works between the public authority and the successful bidder or bidders.

The determination number assigned to this project is based 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 is as follows: 041-H-00049-05-2, Heavy/Highway

Sincerely,

John Fitzpatrick
Prevailing Wage Specialist



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

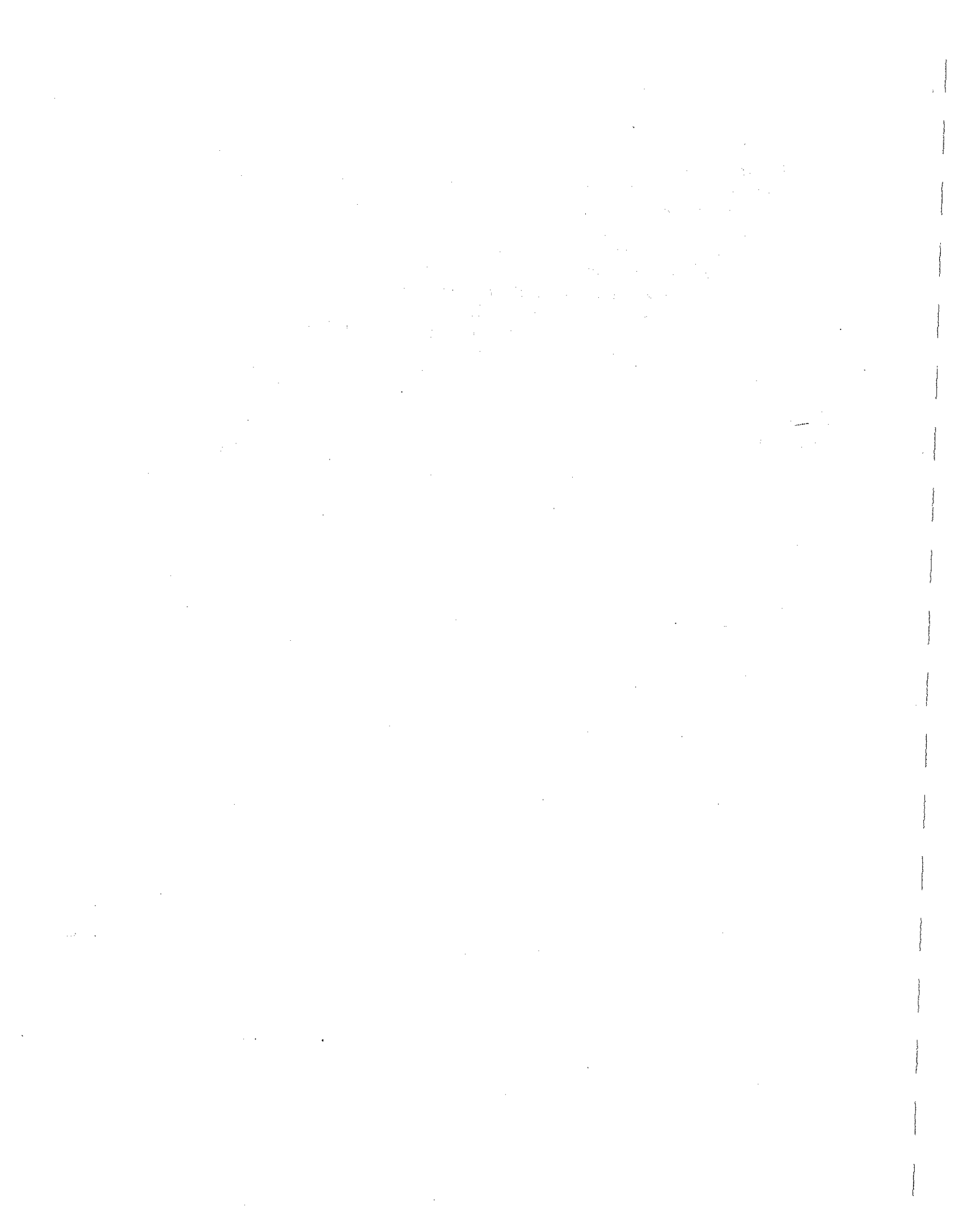
(B) The firm or individual was selected for facilities planning or design services in accordance with procedures specified in this section.

(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	26.9
AL Baldwin; AL Mobile.	
6026 Pascagoula - Moss, Point MS	16.9
MS Jackson.	
Non-SMSA Counties	26.4
AL Choctaw; AL Clarke; AL Conecuh; AL Escambia; AL Monroe; AL Washington; AL Wilcox;	
MS George; MS Greene.	
048 Montgomery, AL:	
SMSA Counties	
5240 Montgomery, AL	29.9
AL Autauga; AL Elmore; AL Montgomery.	
Non-SMSA Counties	29.9
AL Barbour; AL Bullock; AL Butler; AL Coffee; AL Coosa; AL Covington;	
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	14.3
AL Calhoun	
1000 Birmingham, AL	24.8
AL Jefferson; AL St- Clair; AL Shelby; AL Walker; AL Etowah	
8600 Tuscaloosa, AL	20.6
AL Tuscaloosa.	
Non-SMSA Counties	20.7
AL Bibb; AL Blount; AL Cherokee; AL Chilton; AL Clay; AL Cleburne; AL Cullman;	
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	11.9
AL Colbert; AL Lauderdale.	
3440 Huntsville, AL	12.0
AL Limestone; AL Madison; AL Marshall.	
Non-SMSA Counties	11.2
AL Franklin; AL Lawrence; AL Morgan; TN Lincoln.	

Georgia:

035 Augusta, GA:	
SMSA Counties:	
0600 Augusta, GA - SC	27.2
GA Columbia; GA Richmond; SC Aiken	
Non-SMSA Counties	32.8
GA Burke; GA Emanuel; GA Glascock; GA Jefferson; GA Jenkins; GA Lincoln; GA	
McDuffie; GA Taliaferro; GA Warren; GA Wilkes; SC Allendale, SC Bamberg;	
SC Barnwell; SC Edgefield; SC McCormick	
036 Atlanta, GA	
SMSA Counties	
0520 Atlanta	21.2
GA Butts; GA Cherokee; GA Clayton; GA Cobb; GA DeKalb; GA Douglas; GA Fayette;	
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 Candier; GA Coffee; GA Evans; GA Jeff Davis; GA Liberty; GA Long; GA McIntosh; GA Montgomery; GA Screven; GA Tatnall; 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 - Titusville - Cocoa, FL	10.7
FL Brevard.	
5960 Orlando, FL	15.5
FL Orange; FL Osceola; FL Seminole.	

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

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	30.3
MS Hinds; MS Rankin.	
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	20.7
NC Brunswick; NC New Hanover.	
Non-SMSA counties	23.5
NC Columbus; NC Duplin; NC Onslow; NC Pender.	
026 Fayetteville, NC:	
SMSA Counties:	
2560 Fayetteville, NC	26.2
NC Cumberland.	
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	22.8
NC Durham; NC Orange; NC Wake.	
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	16.2
NC Alamance.	
3120 Greensboro - Winston Salem - High Point NC	16.4
NC Davidson; NC Forsyth; NC Guilford,- NC Randolph; NC Stokes; NC Yadkin.	
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	18.5
NC Gaston; NC Mecklenburg; NC Union.	
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	8.5
NC Buncombe; NC Madison.	
Non-SMSA Counties	6.3
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.	
South Carolina:	
031 Greenville -Spartanburg, SC:	
SMSA Counties:	
316b Greenville -Spartanburg, SC	16.0
SC Greenville; SC Pickens; SC Spartanburg.	
Non-SMSA Counties	17.8
SC Polk; SC Abbeville; SC Anderson; SC Cherokee', SC Greenwood; SC Laurens; SC Oconee; SC Union.	
.032 Columbia, SC	
SMSA Counties:	
1760 Columbia, SC	23.4
SC Lexington; SC Richland.	
Non-SMSA Counties.	32.0
SC Calhoun SC Clarendon; SC Fairfield; SC Kershaw; SC Lee; SC Newberry; SC Orangeburg; SC Saluda; SC Sumter	
033 Florence, SC	
Non-SMSA Counties	33.0
SC Chesterfield; SC Darlington; SC Dillon; SC Florence; SC Georgetown; SC Horry; SC Marion; SC Marlboro; SC Williamsburg.	
034 Charleston - North Charleston, SC	
SMSA Counties	
1440 Charleston - North Charleston, SC	30.0
SC Berkeley; SC Charleston; SC Dorchester.	
Non-SMSA Counties	30.7
SC Collection	
Tennessee:	
051 Chattanooga, TN:	
SMSA Counties	
1560 Chattanooga, TN - GA	12.6
GA Catoosa; GA Dade; GA Walker; TN Hamilton; TN Marion; TN Sequatchie.	
Non-SMSA Counties	8.6
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.	
052 Johnson City - Kingsport - Bristol, TN-VA:	
SMSA Counties:	
3660 Johnson City - Kingsport - Bristol, TN - VA	2.6
TN Carter; TN Hawkins- TN Sullivan; TN Unicoi; TN Washington; VA Scott; VA Washington; VA Bristol.	
Non-SMSA Counties	3.2
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.	
053 Knoxville, TN	
SMSA Counties:	
3840 Knoxville, TN	6.6
TN Anderson; TN Blount; TN Knox; TN Union.	
Non-SMSA Counties	4.5
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,	

TN Hamblen; TN Jefferson; TN Loudon; TN Morgan; TN Roane; TN Scott;
 TN Sevier.

054 Nashville, TN:

SMSA Counties:

1660 Clarksville - Hopkinsville, TN - KY 18.2
 KY Christian; TN Montgomery.

5360 Nashville - Davidson, TN 15.8
 TN Cheatham, TN Davidson; TN Dickson; TN Robertson; TN Rutherford; TN Sumner;
 TN Williamson; TN Wilson.

Non-SMSA Counties 12.0
 KY Allen; KY Barren; 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:

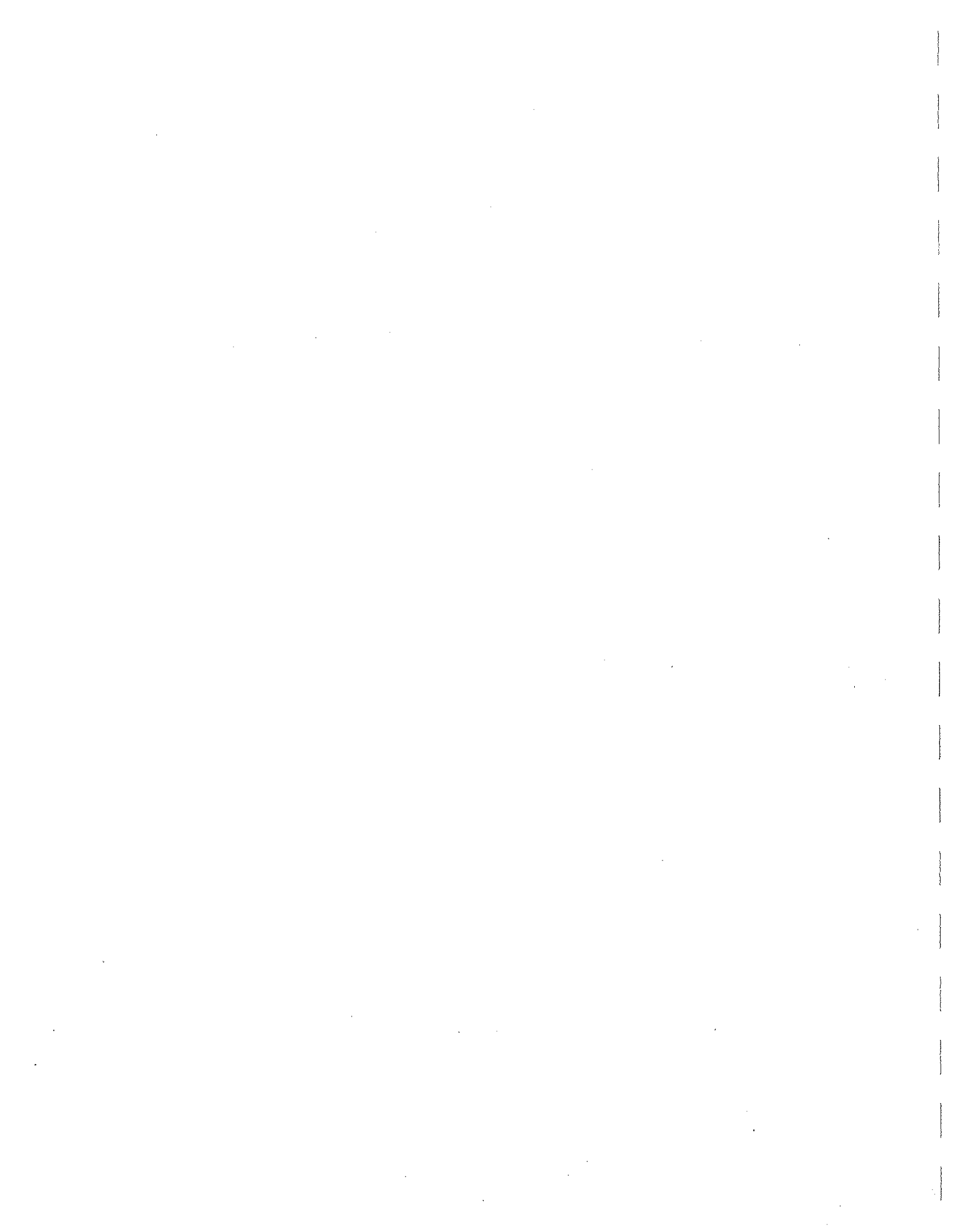
4920 Memphis, TN-AR-MS 32.3
 AR Crittenden; MS Do Soto; TN Shelby; TN Tipton.

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 Talahatchie; MS Tate; MS Tippah; MS Tishomingo;
 MS Union; MS Washington; MS Webster. MS Yalobusha; MO Dunklin;
 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/ofcp_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.

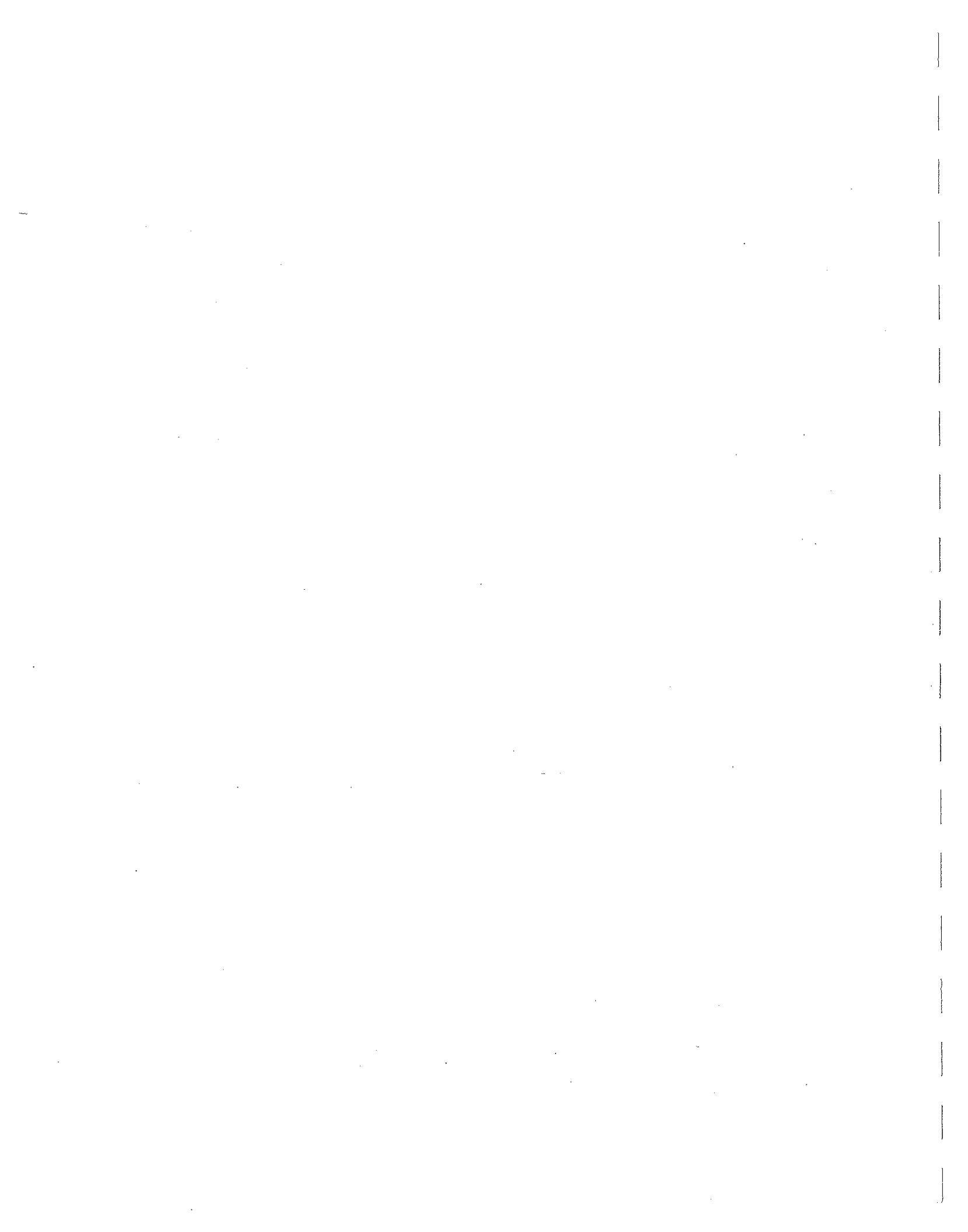
The EEO-1 Report must be filed by:

(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 an 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-216F)
U.S. Environmental Protection Agency
401 M Street, SW
Washington, DC 20460
(Telephone: 202/475-8025)

EPA Form 5700-49 (11-88)

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.

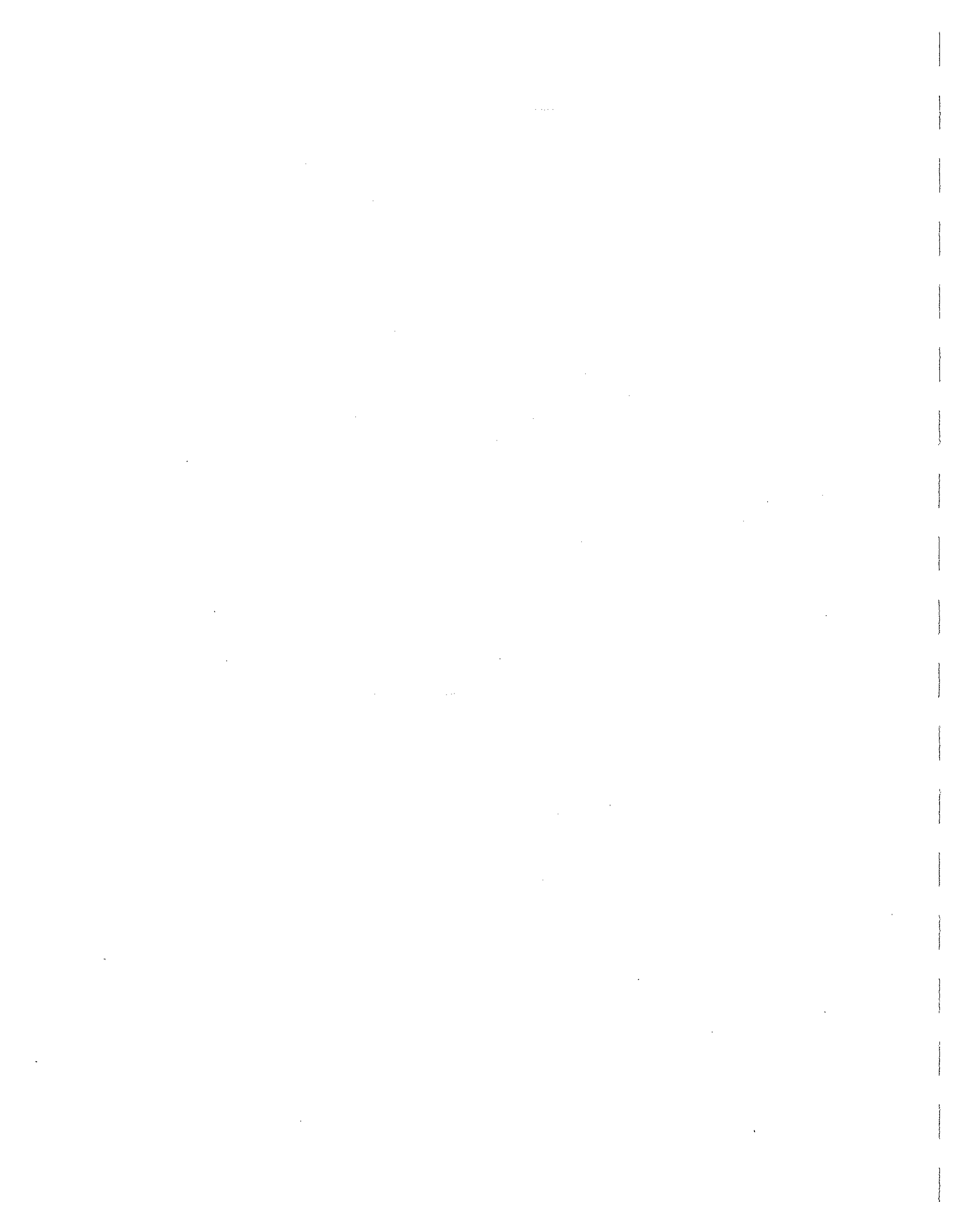
(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

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.

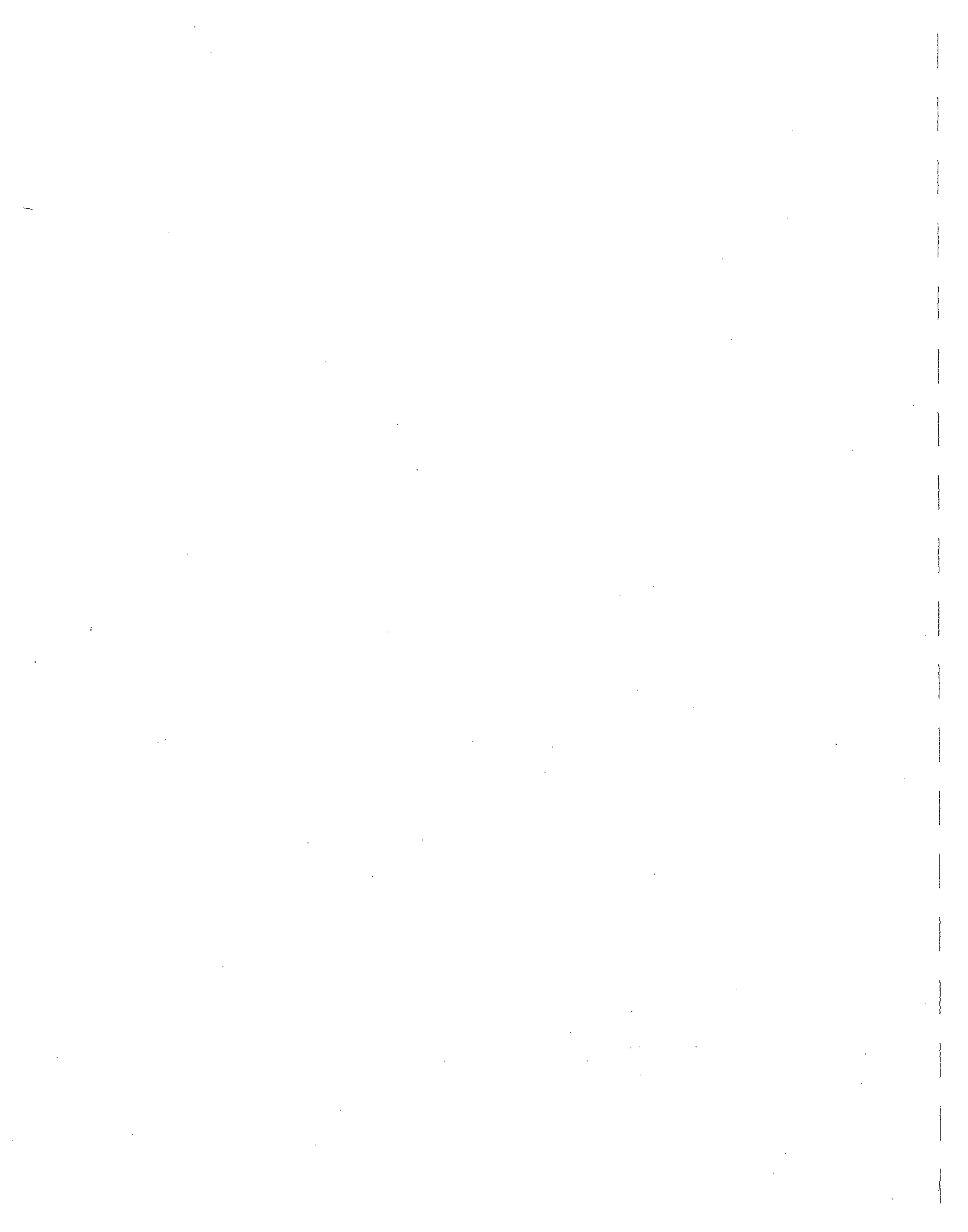
Cum EPA Amount thru 1st Qtr. Oct./Dec.: \$ _____

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.

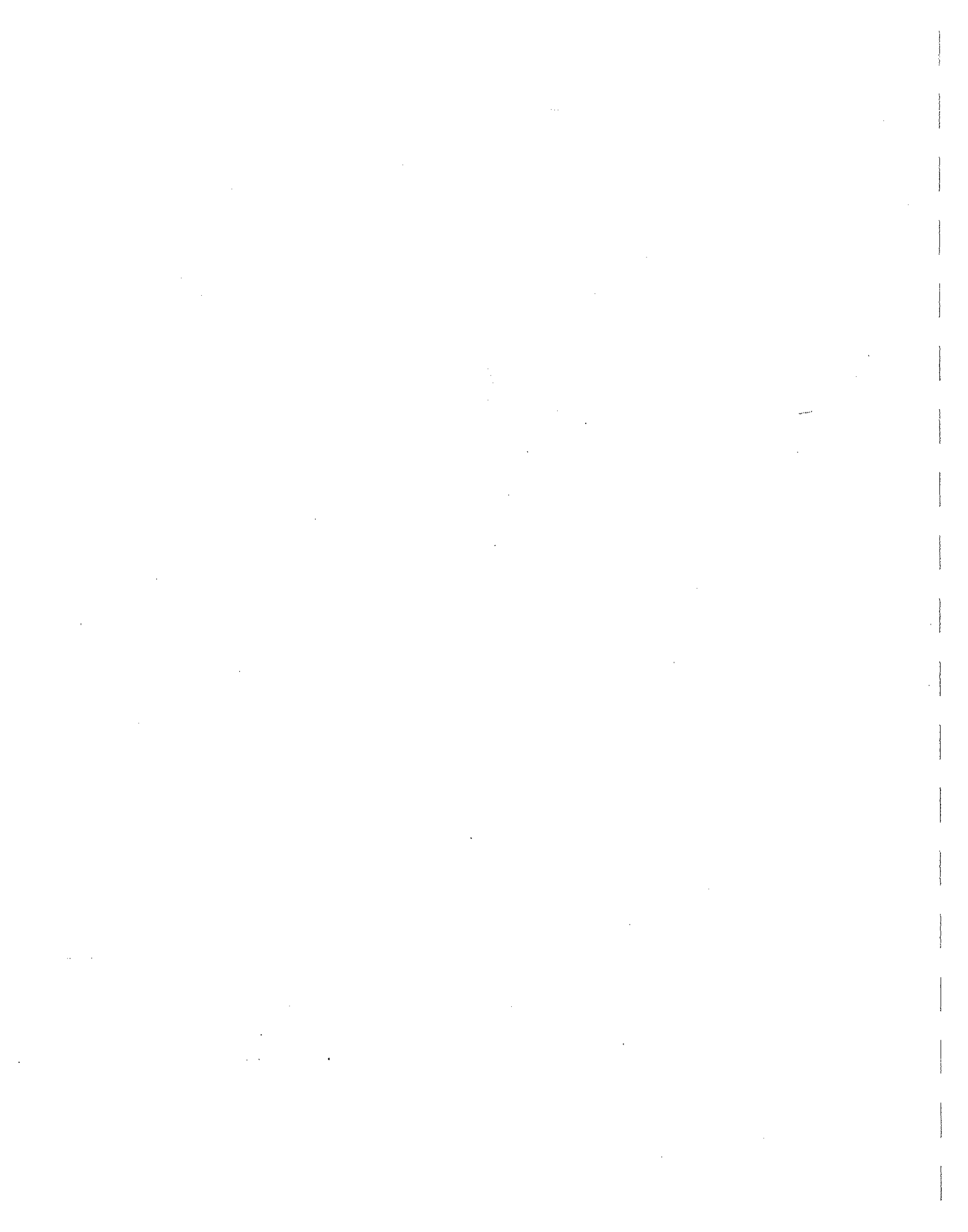
- A. The grant activities schedule shall depict the period from grant award through grant closeout and cover all major milestone date. The grant activities schedule shall include Schedule I information items as well as other appropriate items necessary to monitor the grant. Schedule II shall be filled 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 DEPARTMENT OF LABOR
PREVAILING WAGE DETERMINATION
CURRENT REVISION
LOCALITY NO. 019

Determination No. CR-2-019

Project No. 041-H-00049-05-2 Type: _____ Bldg <u>XXX</u> H/H

Date of Determination: August 11, 2005

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-2-019.

Apprentices shall be permitted to work as such subject to Administrative Regulations adopted by the Executive Director of the Office 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

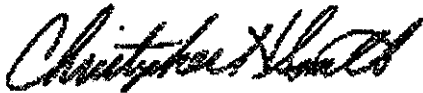
Building construction is the construction of sheltered enclosures with walk-in access for the purpose of housing persons, machinery, equipment, or supplies. It includes all construction of such structures, the installation of utilities and the installation of equipment, both above and below grade level, as well as incidental grading, utilities and paving.

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.



Christopher H. Smith
Office of Workplace Standards
Kentucky Department of Labor

Erratum, August 29, 2005

CLASSIFICATIONS

RATE AND FRINGE BENEFITS

LABORERS: BUILDING (Continued)

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, 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	\$15.88
	FRINGE BENEFITS	7.12

BUILDING GROUP 3:

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

BUILDING	*BASE RATE	\$16.08
	FRINGE BENEFITS	7.12

BUILDING GROUP 4:

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

BUILDING	*BASE RATE	\$16.18
	FRINGE BENEFITS	7.12

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	\$16.68
	FRINGE BENEFITS	7.12

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	\$16.98
	FRINGE BENEFITS	7.12

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, Batcher 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**

CLASSIFICATIONS

RATE AND FRINGE BENEFITS

OPERATING ENGINEERS: BUILDING (Continued)

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 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 & Signaller:

HEAVY & HIGHWAY	BASE RATE	\$17.84
	FRINGE BENEFITS	7.10

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 \$23.00
FRINGE BENEFITS 9.54

ROOFERS: (Excluding Metal Roofs) BASE RATE \$18.90
FRINGE BENEFITS 6.79

SHEETMETAL WORKERS: (Including Metal Roofs) BASE RATE \$26.35
FRINGE BENEFITS 11.07

SPRINKLER FITTERS: BASE RATE \$25.05
FRINGE BENEFITS 11.00

BUILDING TRUCK DRIVERS:

Truck Helper and Warehouseman:
BUILDING BASE RATE \$15.60
*FRINGE BENEFITS 6.23

CLASSIFICATIONS RATE AND FRINGE BENEFITS

BUILDING TRUCK DRIVERS: (Continued)

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: HEAVY/ HIGHWAY: (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

END OF DOCUMENT CR-2-019
August 11, 2005
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Erratum, August 29, 2005

WATER MAIN EXTENSION - PHASE 11

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 and Federal Procurement 40 CFR 31.

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) Case Road (Sheet 2.1) - If awarded
- (2) Mann Road (Sheets 3.1 - 3.2)
- (3) Campbell Branch (Sheets 12.1) - If awarded
- (4) Harrison Ridge Road (Sheet 4.1)
- (5) Sugar Creek (Sheets 6.1 - 6.2) - If awarded
- (6) Flat Creek Road (Sheet 5.1)
- (7) Arnolds Creek Road (Sheets 10.1 - 11.3) - If awarded
- (8) Jamison Road (Sheet 13.1) - If awarded
- (9) Smokey Road (Sheets 7.1 - 7.2)
- (10) Burgess/Salem Roads (Sheets 8.1 - 8.3)
- (11) Hekin - Clark Creek Road (Sheets 9.1 - 9.2)

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 11

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.

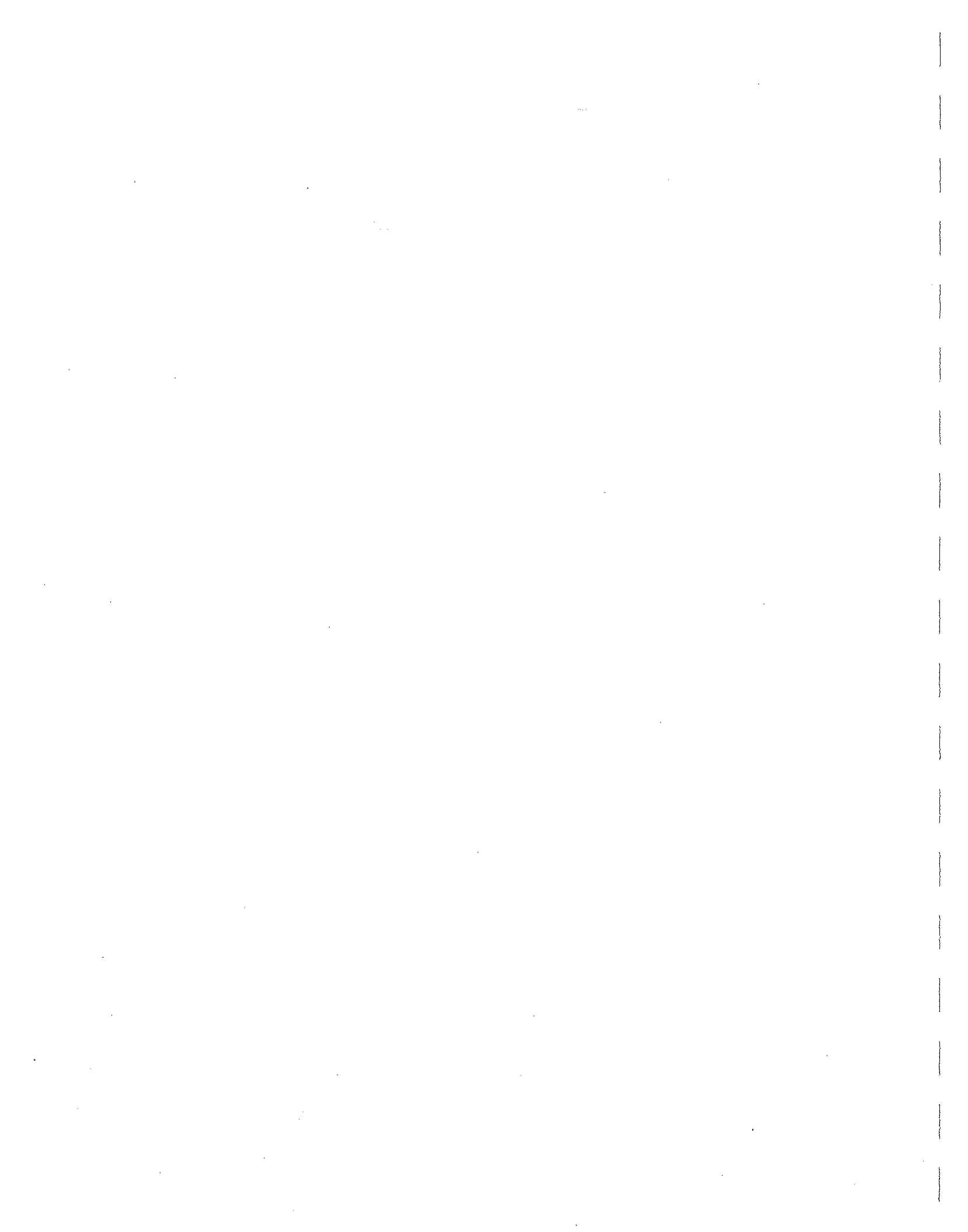
C. Stream Crossings

- (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, 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. 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.

C. 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 8 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.

D. 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 8 feet.
- (4) Manufacturers end sections shall be used at end of steel encasement.

E. 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 250 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 valve pad by 4 inches thick shall be furnished around valve boxes. 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.

F. 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 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.

G. 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.

H. 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.

I. 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 1/2" ring on bottom of lid and be VWM-18-2 by Vestal Manufacturing or approved equal. Metal lids shall be predrilled with 1 3/4 " hole to accept touch read connection.

J. Meter Setting Equipment

(1) Copper meter setters for 5/8" x 3/4" meter settings without individual pressure reducing valves, shall be catalog number B2434R-2 by Mueller Co. or approved equal. All setters shall have two valves, one being a 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 ½" and 2" meter shall have a bypass.

K. 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- ½" discharge nozzles and one 4-1/2" pumper nozzle with the blow-off hydrant having two 2- ½" 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- ½", 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 ½" 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.

L. 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 in 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.

M. 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.

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) 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.

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 1" lines.

(2) The copper meter setters shall be as previously specified except that both valves shall be ball valves (Ford #VB 72-7W-44-33).

P. Pressure Reducing Valves (PRV's)

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.

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 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 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.

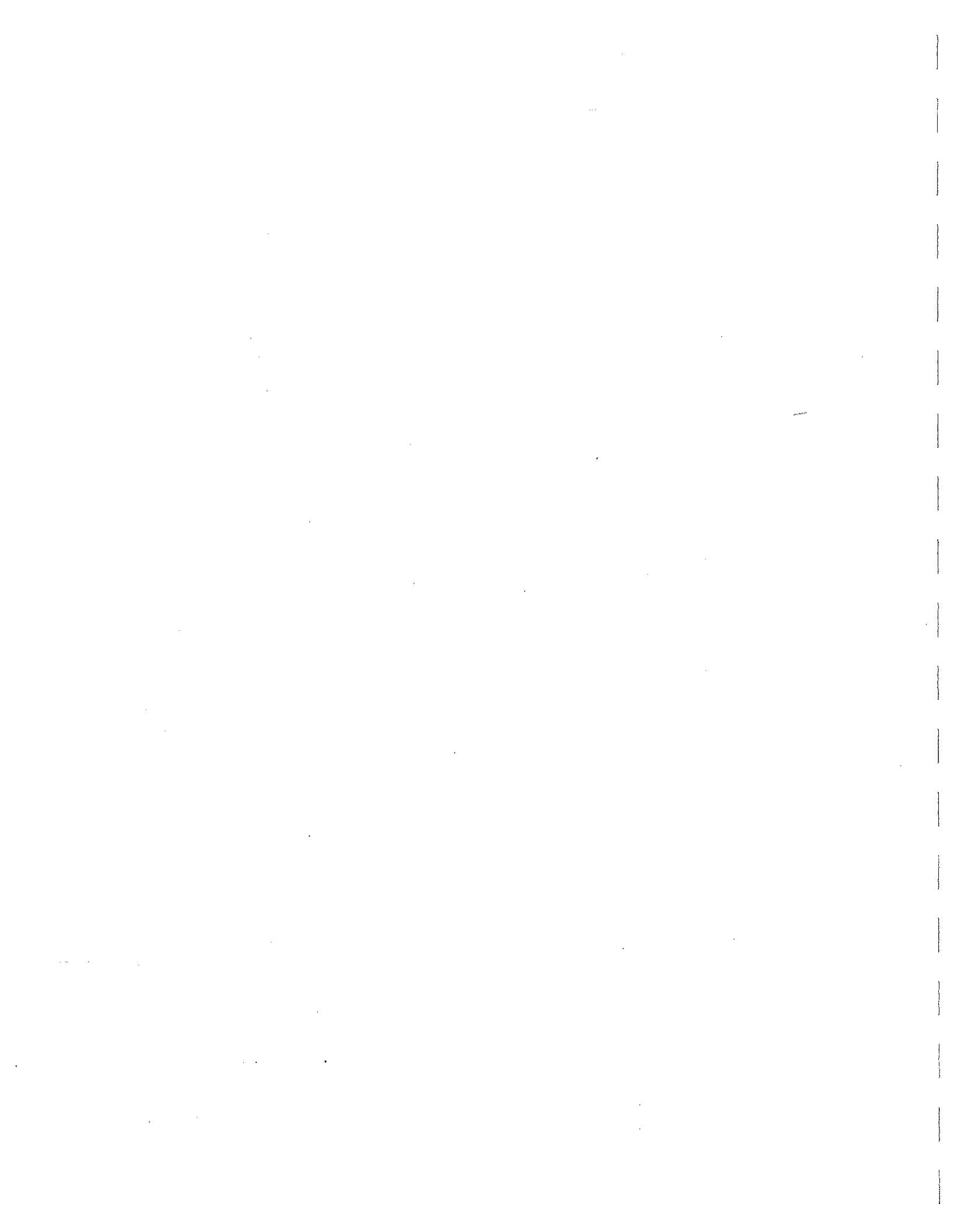
B. After testing, granular chlorine (HTH) or equal shall be introduced into the section of the line begin disinfected sufficient to insure a chlorine dosage of at least 50 ppm in the main. A chart will be supplied by water district on minimum amount of chlorine to use. While the solution is being applied, 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

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