

**OHIO COUNTY WATER DISTRICT**  
**OHIO COUNTY, KENTUCKY**

**SERIES III**  
**WATER SYSTEM IMPROVEMENTS**  
**PIPING AND APPURTENANCES**  
**(MATERIALS ONLY)**

**GENERAL CONTRACT DOCUMENTS,**  
**SPECIFICATIONS AND DRAWINGS**

**BID: FEBRUARY, 2003**

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

**SET NO.**

**OHIO COUNTY WATER DISTRICT**  
**OHIO COUNTY, KENTUCKY**

**SERIES III**  
**WATER SYSTEM IMPROVEMENTS**  
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3220 LONE OAK ROAD □ PADUCAH, KY. 42003 □ (502) 554-2737

**SET NO. \_\_\_\_\_**

OHIO COUNTY WATER DISTRICT

OHIO COUNTY, KENTUCKY

SERIES III WATER SYSTEM IMPROVEMENTS  
PIPING AND APPURTENANCES  
(MATERIALS ONLY)

JANUARY 31, 2003

ADDENDUM NO. 1

To

GENERAL CONTRACT DOCUMENTS, SPECIFICATIONS AND PLANS

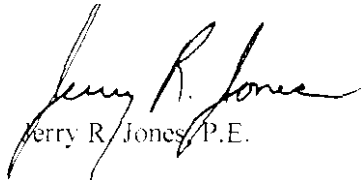
(BID FEBRUARY, 2003)

I. SPECIFICATIONS:

BID:

DELETE: The Bid (Pages B-1 - B-5) in its entirety.

ADD: The Bid (Page B-1, ADDENDUM NO. 1 - B-5, ADDENDUM NO. 1).

  
Jerry R. Jones, P.E.

ACKNOWLEDGMENT: This Addendum No. 1 is to be acknowledged on the Bid, Page B-1,  
ADDENDUM NO. 1.

## BID SCHEDULE

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

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<b>1.</b>	<b>WATER MAIN, DUCTILE</b>				
1.1	10" CLASS 350	160	LF		
1.2	8" CLASS 350	7,000	LF		
1.3	6" CLASS 350	560	LF		
1.4	4" CLASS 350	5,000	LF		
<b>2.</b>	<b>WATER MAIN, DR 14 PVC</b>				
2.1	10" C900 DR 14 PVC	160	LF		
2.2	8" C900 DR 14 PVC	7,000	LF		
2.3	6" C900 DR 14 PVC	560	LF		
2.4	4" C900 DR 14 PVC	5,000	LF		
<b>3.</b>	<b>WATER MAIN, SDR 21 PVC</b>				
3.1	10" SDR 21 PVC	1,440	LF		
3.2	8" SDR 21 PVC	83,200	LF		
3.3	6" SDR 21 PVC	45,500	LF		
3.4	4" SDR 21 PVC	41,580	LF		
3.5	3" SDR 21 PVC	1,760	LF		
3.6	2" SDR 21 PVC	4,300	LF		
<b>4.</b>	<b>HDPE PIPE</b>				
4.1	8" HDPE, DR11	325	LF		
4.2	6" HDPE, DR11	100	LF		
4.3	4" HDPE, DR11	200	LF		
<b>5.</b>	<b>TRACER WIRE</b>	195,000	LF		
<b>6.</b>	<b>GATE VALVES</b>				
6.1	10"	1	EA.		
6.2	8"	35	EA.		
6.3	6"	18	EA.		
6.4	4"	16	EA.		
6.5	3"	11	EA.		
<b>7.</b>	<b>BUTTERFLY VALVES</b>				
7.1	10"	1	EA.		
7.2	8"	1	EA.		
7.3	6"	1	EA.		
7.4	4"	1	EA.		
7.5	3"	1	EA.		
<b>8.</b>	<b>BALL VALVES</b>				
8.1	2"	2	EA.		
8.2	1-1/2"	1	EA.		
8.3	1"	1	EA.		
<b>9.</b>	<b>CAST IRON VALVE BOXES</b>	100	EA.		
<b>10.</b>	<b>VALVE BOX ADAPTORS</b>	90	EA.		
<b>11.</b>	<b>VALVE STEM EXTENSIONS</b>	20	EA.		
<b>12.</b>	<b>FITTINGS, DUCTILE IRON</b>				
12.1	10 X 10 CROSS	1	EA.		
12.2	8 X 8 CROSS	1	EA.		
12.3	6 X 6 CROSS	1	EA.		
12.4	4 X 4 CROSS	1	EA.		
12.5	10 X 10 TEE	1	EA.		

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
12.6	10 X 8 TEE	1	EA.		
12.7	10 X 6 TEE	1	EA.		
12.8	10 X 4 TEE	1	EA.		
12.9	8 X 8 TEE	4	EA.		
12.10	8 X 6 TEE	4	EA.		
12.11	8 X 4 TEE	16	EA.		
12.12	8 X 3 TEE	3	EA.		
12.13	6 X 6 TEE	1	EA.		
12.14	6 X 4 TEE	1	EA.		
12.15	6 X 3 TEE	1	EA.		
12.16	6 X 2 TEE	7	EA.		
12.17	4 X 4 TEE	5	EA.		
12.18	4 X 3 TEE	1	EA.		
12.19	4 X 2 TEE	7	EA.		
12.20	10 X 8 REDUCER	1	EA.		
12.21	10 X 6 REDUCER	2	EA.		
12.22	10 X 4 REDUCER	3	EA.		
12.23	8 X 6 REDUCER	2	EA.		
12.24	8 X 4 REDUCER	3	EA.		
12.25	8 X 3 REDUCER	1	EA.		
12.26	6 X 4 REDUCER	3	EA.		
12.27	6 X 3 REDUCER	1	EA.		
12.28	6 X 2 REDUCER	1	EA.		
12.29	4 X 3 REDUCER	3	EA.		
12.30	4 X 2 REDUCER	4	EA.		
12.31	10" CAP	1	EA.		
12.32	8" CAP	1	EA.		
12.33	6" CAP	2	EA.		
12.34	4" CAP	4	EA.		
12.35	3" CAP	1	EA.		
12.36	2" CAP	1	EA.		
12.37	10 " BEND	2	EA.		
12.38	8" BEND	5	EA.		
12.39	6" BEND	1	EA.		
12.40	4" BEND	1	EA.		
12.41	3" BEND	1	EA.		
12.42	10" SOLID SLEEVE, SHORT	1	EA.		
12.43	8" SOLID SLEEVE, SHORT	1	EA.		
12.44	6" SOLID SLEEVE, SHORT	1	EA.		
12.45	4" SOLID SLEEVE, SHORT	1	EA.		
12.46	3" SOLID SLEEVE, SHORT	1	EA.		
12.47	10" SOLID SLEEVE, LONG	1	EA.		
12.48	8" SOLID SLEEVE, LONG	1	EA.		
12.49	6" SOLID SLEEVE, LONG	1	EA.		
12.50	4" SOLID SLEEVE, LONG	1	EA.		
12.51	3" SOLID SLEEVE, LONG	1	EA.		
12.52	10" CONNECTING PIECE	1	EA.		
12.53	8" CONNECTING PIECE	1	EA.		
12.54	6" CONNECTING PIECE	1	EA.		
12.55	4" CONNECTING PIECE	1	EA.		
12.56	3" CONNECTING PIECE	1	EA.		

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<b>13.</b>	<b>FITTINGS, PVC</b>				
13.1	4"	25	EA.		
13.2	3"	10	EA.		
13.3	2" & SMALLER	750	EA.		
<b>14.</b>	<b>TAPPING SLEEVE W/ VALVES</b>				
14.1	10" X 10"	1	EA.		
14.2	10" X 8"	1	EA.		
14.3	10" X 6"	1	EA.		
14.4	10" X 4"	1	EA.		
14.5	8" X 8"	1	EA.		
14.6	8" X 6"	1	EA.		
14.7	8" X 4"	1	EA.		
14.8	6" X 6"	2	EA.		
14.9	6" X 4"	1	EA.		
14.10	4" X 4"	1	EA.		
<b>15.</b>	<b>SERVICE SADDLES</b>				
15.1	10" X 2"	1	EA.		
15.2	8" X 2"	1	EA.		
15.3	6" X 2"	1	EA.		
15.4	4" X 2"	1	EA.		
15.5	10" X 1"	1	EA.		
15.6	8" X 1"	1	EA.		
15.7	6" X 1"	1	EA.		
15.8	4" X 1"	1	EA.		
<b>16.</b>	<b>REPAIR CLAMPS</b>				
16.1	10"	1	EA.		
16.2	8"	1	EA.		
16.3	6"	1	EA.		
16.4	4"	1	EA.		
16.5	3"	1	EA.		
16.6	2"	1	EA.		
<b>17.</b>	<b>AIR VALVES</b>				
17.1	2" W/ 7/32" ORFICE	6	EA.		
<b>18.</b>	<b>CASING PIPE</b>				
18.1	16" CASING	50	LF		
18.2	14" CASING	1,190	LF		
18.3	12" CASING	360	LF		
18.4	10" CASING	200	LF		
<b>19.</b>	<b>CASING END SEALS</b>				
19.1	16" CASING	2	EA.		
19.2	14" CASING	60	EA.		
19.3	12" CASING	18	EA.		
19.4	10" CASING	10	EA.		
<b>20.</b>	<b>PIPE SPACERS</b>				
20.1	10" CARRIER	7	EA.		
20.2	8" CARRIER	190	EA.		
20.3	6" CARRIER	67	EA.		
20.4	4" CARRIER	48	EA.		
<b>21.</b>	<b>SERVICE LINES</b>				
21.1	3/4" PLASTIC	5,000	LF		
21.2	1" PLASTIC	150	LF		

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<b>22.</b>	<b>SERVICE FITTINGS</b>				
22.1	10" X 3/4" SERVICE SADDLE	1	EA.		
22.2	8" X 3/4" SERVICE SADDLE	81	EA.		
22.3	6" X 3/4" SERVICE SADDLE	81	EA.		
22.4	4" X 3/4" SERVICE SADDLE	81	EA.		
22.5	3" X 3/4" SERVICE SADDLE	5	EA.		
22.6	2" X 3/4" SERVICE SADDLE	1	EA.		
22.7	3/4" CORPORATION STOPS	250	EA.		
22.8	3/4" FITTINGS	500	EA.		

**TOTAL BID**

NOTE: The CONTRACT may be awarded based on the total bid for "PIPING AND APPURTENANCES - MATERIALS ONLY". It is understood that the OWNER may adjust the quantities of work to match available funds.

RESPECTFULLY SUBMITTED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_.

IS BIDDER AN INDIVIDUAL, A PARTNERSHIP, OR A CORPORATION? \_\_\_\_\_.

\_\_\_\_\_  
FIRM NAME

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
ADDRESS

\_\_\_\_\_  
TITLE

\_\_\_\_\_  
PHONE NUMBER

PARTNERS OR CORPORATE OFFICERS:  
\_\_\_\_\_

SEAL (IF APPLICABLE)  
\_\_\_\_\_

ATTEST:  
\_\_\_\_\_

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
TITLE

# BID

Proposal of \_\_\_\_\_ (hereinafter called "BIDDER"), organized and existing under the laws of the State of \_\_\_\_\_

doing business as \_\_\_\_\_  
(Insert "a corporation", "a partnership", or "an individual" as applicable.)

To **OHIO COUNTY WATER DISTRICT, 130 EAST WASHINGTON STREET, HARTFORD, KENTUCKY 42347** (hereinafter called OWNER).

The BIDDER hereby proposes to perform all WORK for **SERIES III WATER SYSTEM IMPROVEMENTS PIPING AND APPURTENANCES (MATERIALS ONLY)** in strict accordance with the CONTRACT DOCUMENTS, within the time set forth herein, and at the prices stated below.

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

BIDDER hereby agrees to deliver materials under this contract under the terms set forth in the CONTRACT DOCUMENTS. Failure to comply shall be reason for cancellation of the AGREEMENT.

BIDDER acknowledges receipt of the following ADDENDUM:

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



OHIO COUNTY WATER DISTRICT

OHIO COUNTY, KENTUCKY

SERIES III WATER SYSTEM IMPROVEMENTS  
PIPING AND APPURTENANCES  
( MATERIALS ONLY )

FEBRUARY 3, 2003

ADDENDUM NO. 2

TO

GENERAL CONTRACT DOCUMENTS, SPECIFICATIONS AND PLANS

( BID FEBRUARY, 2003 )

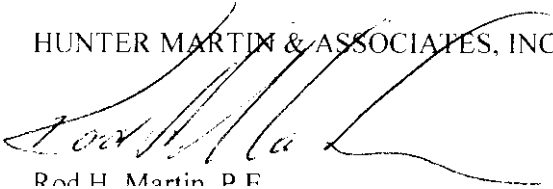
SPECIFICATIONS:

BID:

DELETE: The Bid (Pages B-1, ADDENDUM NO. 1 B-5, ADDENDUM NO. 1)  
in its entirety.

ADD: The attached Bid (Pages B-1, ADDENDUM NO. 2, - B-5, ADDENDUM NO.  
2).

HUNTER MARTIN & ASSOCIATES, INC.



Rod H. Martin P.E.

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ACKNOWLEDGMENT: This Addendum No. 2 is to be acknowledged on the BID, Page B-I.  
ADDENDUM NO. 2.

# BID

Proposal of \_\_\_\_\_ (hereinafter called "BIDDER"), organized and existing under the laws of the State of \_\_\_\_\_

doing business as \_\_\_\_\_  
(Insert "a corporation", "a partnership", or "an individual" as applicable.)

To **OHIO COUNTY WATER DISTRICT, 130 EAST WASHINGTON STREET, HARTFORD, KENTUCKY 42347** (hereinafter called OWNER).

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

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**BID SCHEDULE  
(MATERIALS ONLY)**

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

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<b>1.</b>	<b>WATER MAIN, DUCTILE</b>				
1.1	10" CLASS 350	160	LF		
1.2	8" CLASS 350	7,000	LF		
1.3	6" CLASS 350	560	LF		
1.4	4" CLASS 350	5,000	LF		
<b>2.</b>	<b>WATER MAIN, DR 14 PVC</b>				
2.1	10" C900 DR 14 PVC	160	LF		
2.2	8" C900 DR 14 PVC	7,000	LF		
2.3	6" C900 DR 14 PVC	560	LF		
2.4	4" C900 DR 14 PVC	5,000	LF		
<b>3.</b>	<b>WATER MAIN, SDR 21 PVC</b>				
3.1	10" SDR 21 PVC	1,440	LF		
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3.3	6" SDR 21 PVC	45,500	LF		
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3.5	3" SDR 21 PVC	1,760	LF		
3.6	2" SDR 21 PVC	4,300	LF		
<b>4.</b>	<b>HDPE PIPE</b>				
4.1	8" HDPE, DR11	325	LF		
4.2	6" HDPE, DR11	100	LF		
4.3	4" HDPE, DR11	200	LF		
<b>5.</b>	<b>TRACER WIRE</b>	195,000	LF		
<b>6.</b>	<b>GATE VALVES</b>				
6.1	10"	1	EA.		
6.2	8"	35	EA.		
6.3	6"	18	EA.		
6.4	4"	16	EA.		
6.5	3"	11	EA.		
<b>7.</b>	<b>BUTTERFLY VALVES</b>				
7.1	10"	1	EA.		
7.2	8"	1	EA.		
7.3	6"	1	EA.		
7.4	4"	1	EA.		
7.5	3"	1	EA.		
<b>8.</b>	<b>BALL VALVES</b>				
8.1	2"	2	EA.		
8.2	1-1/2"	1	EA.		
8.3	1"	1	EA.		
<b>9.</b>	<b>CAST IRON VALVE BOXES</b>	100	EA.		
<b>10.</b>	<b>VALVE BOX ADAPTORS</b>	90	EA.		
<b>11.</b>	<b>VALVE STEM EXTENSIONS</b>				
11.1	Less Than 2' Extension	4	EA.		
11.2	2' - 4' Extension	10	EA.		
11.3	4' - 6' Extension	2	EA.		
11.4	6' - 8' Extension	2	EA.		
11.5	8' - 10' Extension	2	EA.		
<b>12.</b>	<b>FITTINGS, DUCTILE IRON</b>				
12.1	10 X 10 CROSS	1	EA.		
12.2	8 X 8 CROSS	1	EA.		

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
12.3	6 X 6 CROSS	1	EA.		
12.4	4 X 4 CROSS	1	EA.		
12.5	10 X 10 TEE	1	EA.		
12.6	10 X 8 TEE	1	EA.		
12.7	10 X 6 TEE	1	EA.		
12.8	10 X 4 TEE	1	EA.		
12.9	8 X 8 TEE	4	EA.		
12.10	8 X 6 TEE	4	EA.		
12.11	8 X 4 TEE	16	EA.		
12.12	8 X 3 TEE	3	EA.		
12.13	6 X 6 TEE	1	EA.		
12.14	6 X 4 TEE	1	EA.		
12.15	6 X 3 TEE	1	EA.		
12.16	6 X 2 TEE	7	EA.		
12.17	4 X 4 TEE	5	EA.		
12.18	4 X 3 TEE	1	EA.		
12.19	4 X 2 TEE	7	EA.		
12.20	10 X 8 REDUCER	1	EA.		
12.21	10 X 6 REDUCER	2	EA.		
12.22	10 X 4 REDUCER	3	EA.		
12.23	8 X 6 REDUCER	2	EA.		
12.24	8 X 4 REDUCER	3	EA.		
12.25	8 X 3 REDUCER	1	EA.		
12.26	6 X 4 REDUCER	3	EA.		
12.27	6 X 3 REDUCER	1	EA.		
12.28	6 X 2 REDUCER	1	EA.		
12.29	4 X 3 REDUCER	3	EA.		
12.30	4 X 2 REDUCER	4	EA.		
12.31	10" CAP	1	EA.		
12.32	8" CAP	1	EA.		
12.33	6" CAP	2	EA.		
12.34	4" CAP	4	EA.		
12.35	3" CAP	1	EA.		
12.36	2" CAP	1	EA.		
12.37	10 " BEND	2	EA.		
12.38	8" BEND	5	EA.		
12.39	6" BEND	1	EA.		
12.40	4" BEND	1	EA.		
12.41	3" BEND	1	EA.		
12.42	10" SOLID SLEEVE, SHORT	1	EA.		
12.43	8" SOLID SLEEVE, SHORT	1	EA.		
12.44	6" SOLID SLEEVE, SHORT	1	EA.		
12.45	4" SOLID SLEEVE, SHORT	1	EA.		
12.46	3" SOLID SLEEVE, SHORT	1	EA.		
12.47	10" SOLID SLEEVE, LONG	1	EA.		
12.48	8" SOLID SLEEVE, LONG	1	EA.		
12.49	6" SOLID SLEEVE, LONG	1	EA.		
12.50	4" SOLID SLEEVE, LONG	1	EA.		
12.51	3" SOLID SLEEVE, LONG	1	EA.		
12.52	10" CONNECTING PIECE	1	EA.		
12.53	8" CONNECTING PIECE	1	EA.		
12.54	6" CONNECTING PIECE	1	EA.		
12.55	4" CONNECTING PIECE	1	EA.		
12.56	3" CONNECTING PIECE	1	EA.		

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<b>13.</b>	<b>FITTINGS, PVC</b>				
13.1	4"	25	EA.		
13.2	3"	10	EA.		
13.3	2" & SMALLER	750	EA.		
<b>14.</b>	<b>TAPPING SLEEVE W/ VALVES</b>				
14.1	10" X 10"	1	EA.		
14.2	10" X 8"	1	EA.		
14.3	10" X 6"	1	EA.		
14.4	10" X 4"	1	EA.		
14.5	8" X 8"	1	EA.		
14.6	8" X 6"	1	EA.		
14.7	8" X 4"	1	EA.		
14.8	6" X 6"	2	EA.		
14.9	6" X 4"	1	EA.		
14.10	4" X 4"	1	EA.		
<b>15.</b>	<b>SERVICE SADDLES</b>				
15.1	10" X 2"	1	EA.		
15.2	8" X 2"	1	EA.		
15.3	6" X 2"	1	EA.		
15.4	4" X 2"	1	EA.		
15.5	10" X 1"	1	EA.		
15.6	8" X 1"	1	EA.		
15.7	6" X 1"	1	EA.		
15.8	4" X 1"	1	EA.		
<b>16.</b>	<b>REPAIR CLAMPS</b>				
16.1	10"	1	EA.		
16.2	8"	1	EA.		
16.3	6"	1	EA.		
16.4	4"	1	EA.		
16.5	3"	1	EA.		
16.6	2"	1	EA.		
<b>17.</b>	<b>AIR VALVES</b>				
17.1	2" W/ 7/32" ORFICE	6	EA.		
<b>18.</b>	<b>CASING PIPE</b>				
18.1	16" CASING	50	LF		
18.2	14" CASING	1,190	LF		
18.3	12" CASING	360	LF		
18.4	10" CASING	200	LF		
18.5	8" CASING	300	LF		
<b>19.</b>	<b>CASING END SEALS</b>				
19.1	16" CASING	2	EA.		
19.2	14" CASING	60	EA.		
19.3	12" CASING	18	EA.		
19.4	10" CASING	10	EA.		
19.5	8" CASING	6	EA.		
<b>20.</b>	<b>PIPE SPACERS</b>				
20.1	10" CARRIER	7	EA.		
20.2	8" CARRIER	190	EA.		
20.3	6" CARRIER	67	EA.		
20.4	4" CARRIER	48	EA.		
<b>21.</b>	<b>SERVICE LINES</b>				
21.1	3/4" PLASTIC	5,000	LF		
21.2	1" PLASTIC	150	LF		

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<b>22.</b>	<b>SERVICE FITTINGS</b>				
22.1	10" X 3/4" SERVICE SADDLE	1	EA.		
22.2	8" X 3/4" SERVICE SADDLE	81	EA.		
22.3	6" X 3/4" SERVICE SADDLE	81	EA.		
22.4	4" X 3/4" SERVICE SADDLE	81	EA.		
22.5	3" X 3/4" SERVICE SADDLE	5	EA.		
22.6	2" X 3/4" SERVICE SADDLE	1	EA.		
22.7	3/4" CORPORATION STOPS	250	EA.		
22.8	3/4" FITTINGS	500	EA.		

<b>TOTAL BID</b>	
------------------	--

NOTE: The CONTRACT may be awarded based on the total bid for "PIPING AND APPURTENANCES - MATERIALS ONLY". It is understood that the OWNER may adjust the quantities of work to match available funds.

RESPECTFULLY SUBMITTED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_.

IS BIDDER AN INDIVIDUAL, A PARTNERSHIP, OR A CORPORATION? \_\_\_\_\_.

\_\_\_\_\_  
FIRM NAME

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
ADDRESS

\_\_\_\_\_  
TITLE

\_\_\_\_\_  
PHONE NUMBER

PARTNERS OR CORPORATE OFFICERS:  
\_\_\_\_\_

SEAL (IF APPLICABLE)

\_\_\_\_\_

ATTEST:

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
TITLE

OHIO COUNTY WATER DISTRICT

OHIO COUNTY, KENTUCKY

SERIES III WATER SYSTEM IMPROVEMENTS  
MATERIALS ONLY

FEBRUARY 12, 2003

ADDENDUM NO. 3

TO

GENERAL CONTRACT DOCUMENTS AND SPECIFICATIONS AND PLANS

NOVEMBER, 2002  
(BID FEBRUARY, 2003)

CONTRACT DOCUMENTS:

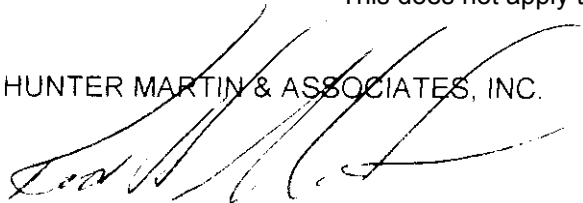
CLARIFICATION:

The Contract Documents call for mechanical joint restraining glands for all fittings. The Documents do not specify mechanical joint restraining glands for valves.

Although joint restraint will be required for some valves, the Contractor/Supplier should prepare the bid without joint restraint for valves.

This does not apply to fittings.

HUNTER MARTIN & ASSOCIATES, INC.



Rod H. Martin, P.E.

ACKNOWLEDGMENT: This Addendum No. 3 is to be acknowledged on the BID, Page B-1, ADDENDUM NO. 3.

**OHIO COUNTY WATER DISTRICT**

**OHIO COUNTY, KENTUCKY**

**SERIES III  
 WATER SYSTEM IMPROVEMENTS  
 PIPING AND APPURTENANCES  
 (MATERIALS ONLY)**

\* \* \* \* \*

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# ADVERTISEMENT FOR BIDS

**OHIO COUNTY WATER DISTRICT**

**130 EAST WASHINGTON STREET**

**HARTFORD, KY 42347**

Separate sealed BIDS for the construction of **SERIES III WATER SYSTEM IMPROVEMENTS - PIPING AND APPURTENANCES (MATERIALS ONLY)** will be received by

**OHIO COUNTY WATER DISTRICT, 130 EAST WASHINGTON STREET, HARTFORD, KY 42347**

at the office of **OHIO COUNTY WATER DISTRICT** until **2:00 P.M.**, **FRIDAY**, **FEBRUARY 14**, 20 **03**,

and then at said office publicly opened and read aloud.

The CONTRACT DOCUMENTS may be examined at the following locations:

**HUNTER MARTIN & ASSOCIATES, INC., PADUCAH, KENTUCKY**

**OHIO COUNTY WATER DISTRICT, HARTFORD, KENTUCKY**

**ASSOCIATED GENERAL CONTRACTORS, PADUCAH, KENTUCKY**

**F. W. DODGE-CIG, EVANSVILLE, INDIANA**

**BUILDERS EXCHANGE OF LOUISVILLE, LOUISVILLE, KENTUCKY**

**TRI-STATE CONSTRUCTION NEWS, EVANSVILLE, INDIANA**

Copies of the CONTRACT DOCUMENTS may be obtained at the office of **HUNTER MARTIN & ASSOCIATES, INC., 3220 Lone Oak Road, Paducah, KY 42003, PHONE: (270) 554-2737; FAX: (270) 554-2738.**

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

No BIDDER may withdraw his BID within **100 days** after the actual date of the opening thereof. The low bidder may adjust his bid after the initial 60 day period, provided the following conditions are met:

1. The Agreement has not been executed.
2. The cost of the increase in materials prices is documented by certified letters from the manufacturer.
3. The cost increase reflects only the manufacturer's increase in price and does not reflect an increase in the supplier's markup.

The adjusted BID shall extend for a 30 day period and may be extended for an additional 30 day period, provided both parties agree and the above conditions are satisfied.

**JANUARY 17, 2003**

DATE

**HENRY MORGAN, CHAIRMAN**

TITLE

## INFORMATION FOR BIDDERS

BIDS will be received by OHIO COUNTY WATER DISTRICT (herein called the "OWNER"), at 130 EAST WASHINGTON STREET, HARTFORD, KY 42347 until 2:00 P.M., FRIDAY, FEBRUARY 14, 20 03, and then BIDS shall be opened publicly and read aloud.

Each BID must be submitted in a sealed envelope, addressed to the OHIO COUNTY WATER DISTRICT. Each sealed envelope containing a BID must be plainly marked on the outside as BID FOR "SERIES III WATER SYSTEM IMPROVEMENTS PIPING AND APPURTENANCES (MATERIALS ONLY)" and the envelope shall bear on the outside the BIDDER'S name, address, and license number if applicable, and the name of the project for which the BID is submitted. If forwarded by mail, the sealed envelope containing the BID must be enclosed in another envelope addressed to the OHIO COUNTY WATER DISTRICT, 130 EAST WASHINGTON STREET, HARTFORD, KENTUCKY 42347.

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 **100 calendar days** after the actual date of the opening thereof. Should there be reasons why the contract cannot be awarded within the specified period, the time may be extended by mutual agreement between the OWNER and the BIDDER.

The low bidder may adjust his bid after the initial 60 day period, provided the following conditions are met:

1. The Agreement has not been executed.
2. The cost of the increase in materials prices is documented by certified letters from the manufacturer.
3. The cost increase reflects only the manufacturer's increase in price and does not reflect an increase in the supplier's markup.

The adjusted BID shall extend for a 30 day period and may be extended for an additional 30 day period, provided both parties agree and the above conditions are satisfied.

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.

Each BID shall be accompanied by a Bid Bond, payable to the OWNER, for 5 percent of the total amount of the BID. As soon as the BID prices have been compared, the OWNER will return the BONDS of all except the three lowest responsible BIDDERS. When the Agreement is executed, the bonds of the two remaining unsuccessful BIDDERS will be returned. The BID BOND of the successful BIDDER will be retained until the AGREEMENT is executed, after which it will be returned. A certified check may be used in lieu of a Bid Bond.

Attorneys-in-fact who sign BID 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 within 10 calendar days from the date when NOTICE OF AWARD is delivered to the BIDDER. The NOTICE OF AWARD shall be accompanied by the necessary Agreement. In case of failure of the BIDDER to execute the Agreement, the OWNER may consider the BIDDER in default, in which case the BID BOND accompanying the proposal shall become the property of the OWNER.

The OWNER within 10 calendar days of receipt of the Agreement signed by the party to whom the Agreement was awarded shall sign the Agreement and return to such party an executed duplicate of the Agreement. Should the OWNER not execute the Agreement within such period, the BIDDER may by WRITTEN NOTICE withdraw the signed Agreement. Such notice of withdrawal shall be effective upon receipt of the notice by the OWNER.

The NOTICE TO PROCEED shall be issued within 10 calendar days of the execution of the Agreement by the OWNER. Should there be reasons why the NOTICE TO PROCEED cannot be issued within such period, the time may be extended by mutual agreement between the OWNER AND BIDDER. If the NOTICE TO PROCEED has not been issued within the specified period or within the period mutually agreed upon, the BIDDER 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 responsible, responsive BIDDER. It is understood that the OWNER is also receiving BIDS under a separate contract for this project that includes "Labor and Materials" and "Labor Only". The OWNER may deem it more cost effective and efficient to award the CONTRACT for "Labor and Materials" in which case all of the BIDS for "Materials Only" will be rejected.

All applicable laws, ordinances, and the rules and regulations of all authorities having jurisdiction over the PROJECT shall apply to the contract throughout.

The ENGINEER is HUNTER MARTIN & ASSOCIATES, INC., 3220 LONE OAK ROAD, PADUCAH, KENTUCKY 42003, (PHONE 502, 554-2737; FAX 502, 554-2738).

# BID

Proposal of \_\_\_\_\_ (hereinafter called "BIDDER"), organized and existing under the laws of the State of \_\_\_\_\_

doing business as \_\_\_\_\_  
(Insert "a corporation", "a partnership", or "an individual" as applicable.)

To **OHIO COUNTY WATER DISTRICT, 130 EAST WASHINGTON STREET, HARTFORD, KENTUCKY 42347** (hereinafter called OWNER).

The BIDDER hereby proposes to perform all WORK for **SERIES III WATER SYSTEM IMPROVEMENTS PIPING AND APPURTENANCES (MATERIALS ONLY)** in strict accordance with the CONTRACT DOCUMENTS, within the time set forth herein, and at the prices stated below.

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

BIDDER hereby agrees to deliver materials under this contract under the terms set forth in the CONTRACT DOCUMENTS. Failure to comply shall be reason for cancellation of the AGREEMENT.

BIDDER acknowledges receipt of the following ADDENDUM:

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

## BID SCHEDULE

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

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<b>1.</b>	<b>WATER MAIN, DUCTILE</b>				
1.1	10" CLASS 350	160	LF		
1.2	8" CLASS 350	7,000	LF		
1.3	6" CLASS 350	560	LF		
1.4	4" CLASS 350	5,000	LF		
<b>2.</b>	<b>WATER MAIN, DR 14 PVC</b>				
2.1	10" C900 DR 14 PVC	160	LF		
2.2	8" C900 DR 14 PVC	7,000	LF		
2.3	6" C900 DR 14 PVC	560	LF		
2.4	4" C900 DR 14 PVC	5,000	LF		
<b>3.</b>	<b>WATER MAIN, SDR 21 PVC</b>				
3.1	10" SDR 21 PVC	1,440	LF		
3.2	8" SDR 21 PVC	83,200	LF		
3.3	6" SDR 21 PVC	45,500	LF		
3.4	4" SDR 21 PVC	41,580	LF		
3.5	3" SDR 21 PVC	1,760	LF		
3.6	2" SDR 21 PVC	4,300	LF		
<b>4.</b>	<b>HDPE PIPE</b>				
4.1	8" HDPE, DR11	325	LF		
4.2	6" HDPE, DR11	100	LF		
4.3	4" HDPE, DR11	200	LF		
<b>5.</b>	<b>TRACER WIRE</b>	195,000	LF		
<b>6.</b>	<b>GATE VALVES</b>				
6.1	10"	1	EA.		
6.2	8"	35	EA.		
6.3	6"	18	EA.		
6.4	4"	16	EA.		
6.5	3"	11	EA.		
<b>7.</b>	<b>BUTTERFLY VALVES</b>				
7.1	10"	1	EA.		
7.2	8"	1	EA.		
7.3	6"	1	EA.		
7.4	4"	1	EA.		
7.5	3"	1	EA.		
<b>8.</b>	<b>BALL VALVES</b>				
8.1	2"	2	EA.		
8.2	1-1/2"	1	EA.		
8.3	1"	1	EA.		
<b>9.</b>	<b>CAST IRON VALVE BOXES</b>	100	EA.		
<b>10.</b>	<b>VALVE BOX ADAPTORS</b>	90	EA.		
<b>11.</b>	<b>VALVE STEM EXTENSIONS</b>	20	EA.		
<b>12.</b>	<b>FITTINGS, DUCTILE IRON</b>				
12.1	10 X 10 CROSS	1	EA.		
12.2	8 X 8 CROSS	1	EA.		
12.3	6 X 6 CROSS	1	EA.		
12.4	4 X 4 CROSS	1	EA.		
12.5	10 X 10 TEE	1	EA.		

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
12.6	10 X 8 TEE	1	EA.		
12.7	10 X 6 TEE	1	EA.		
12.8	10 X 4 TEE	1	EA.		
12.9	8 X 8 TEE	4	EA.		
12.10	8 X 6 TEE	4	EA.		
12.11	8 X 4 TEE	16	EA.		
12.12	8 X 3 TEE	3	EA.		
12.13	6 X 6 TEE	1	EA.		
12.14	6 X 4 TEE	1	EA.		
12.15	6 X 3 TEE	1	EA.		
12.16	6 X 2 TEE	7	EA.		
12.17	4 X 4 TEE	5	EA.		
12.18	4 X 3 TEE	1	EA.		
12.19	4 X 2 TEE	7	EA.		
12.20	10 X 8 REDUCER	1	EA.		
12.21	10 X 6 REDUCER	2	EA.		
12.22	10 X 4 REDUCER	3	EA.		
12.23	8 X 6 REDUCER	2	EA.		
12.24	8 X 4 REDUCER	3	EA.		
12.25	8 X 3 REDUCER	1	EA.		
12.26	6 X 4 REDUCER	3	EA.		
12.27	6 X 3 REDUCER	1	EA.		
12.28	6 X 2 REDUCER	1	EA.		
12.29	4 X 3 REDUCER	3	EA.		
12.30	4 X 2 REDUCER	4	EA.		
12.31	10" CAP	1	EA.		
12.32	8" CAP	1	EA.		
12.33	6" CAP	2	EA.		
12.34	4" CAP	4	EA.		
12.35	3" CAP	1	EA.		
12.36	2" CAP	1	EA.		
12.37	10 " BEND	2	EA.		
12.38	8" BEND	5	EA.		
12.39	6" BEND	1	EA.		
12.40	4" BEND	1	EA.		
12.41	3" BEND	1	EA.		
12.42	10" SOLID SLEEVE, SHORT	1	EA.		
12.43	8" SOLID SLEEVE, SHORT	1	EA.		
12.44	6" SOLID SLEEVE, SHORT	1	EA.		
12.45	4" SOLID SLEEVE, SHORT	1	EA.		
12.46	3" SOLID SLEEVE, SHORT	1	EA.		
12.47	10" SOLID SLEEVE, LONG	1	EA.		
12.48	8" SOLID SLEEVE, LONG	1	EA.		
12.49	6" SOLID SLEEVE, LONG	1	EA.		
12.50	4" SOLID SLEEVE, LONG	1	EA.		
12.51	3" SOLID SLEEVE, LONG	1	EA.		
12.52	10" CONNECTING PIECE	1	EA.		
12.53	8" CONNECTING PIECE	1	EA.		
12.54	6" CONNECTING PIECE	1	EA.		
12.55	4" CONNECTING PIECE	1	EA.		
12.56	3" CONNECTING PIECE	1	EA.		

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<b>13.</b>	<b>FITTINGS, PVC</b>				
13.1	4"	25	EA.		
13.2	3"	10	EA.		
13.3	2" & SMALLER	750	EA.		
<b>14.</b>	<b>TAPPING SLEEVE W/ VALVES</b>				
14.1	10" X 10"	1	EA.		
14.2	10" X 8"	1	EA.		
14.3	10" X 6"	1	EA.		
14.4	10" X 4"	1	EA.		
14.5	8" X 8"	1	EA.		
14.6	8" X 6"	1	EA.		
14.7	8" X 4"	1	EA.		
14.8	6" X 6"	2	EA.		
14.9	6" X 4"	1	EA.		
14.10	4" X 4"	1	EA.		
<b>15.</b>	<b>SERVICE SADDLES</b>				
15.1	10" X 2"	1	EA.		
15.2	8" X 2"	1	EA.		
15.3	6" X 2"	1	EA.		
15.4	4" X 2"	1	EA.		
15.5	10" X 1"	1	EA.		
15.6	8" X 1"	1	EA.		
15.7	6" X 1"	1	EA.		
15.8	4" X 1"	1	EA.		
<b>16.</b>	<b>REPAIR CLAMPS</b>				
16.1	10"	1	EA.		
16.2	8"	1	EA.		
16.3	6"	1	EA.		
16.4	4"	1	EA.		
16.5	3"	1	EA.		
16.6	2"	1	EA.		
<b>17.</b>	<b>AIR VALVES</b>				
17.1	2" W/ 7/32" ORFICE	6	EA.		
<b>18.</b>	<b>CASING PIPE</b>				
18.1	16" CASING	50	LF		
18.2	14" CASING	1,190	LF		
18.3	12" CASING	360	LF		
18.4	10" CASING	200	LF		
<b>19.</b>	<b>CASING END SEALS</b>				
19.1	16" CASING	2	EA.		
19.2	14" CASING	60	EA.		
19.3	12" CASING	18	EA.		
19.4	10" CASING	10	EA.		
<b>20.</b>	<b>PIPE SPACERS</b>				
20.1	10" CARRIER	7	EA.		
20.2	8" CARRIER	190	EA.		
20.3	6" CARRIER	67	EA.		
20.4	4" CARRIER	48	EA.		
<b>21.</b>	<b>SERVICE LINES</b>				
21.1	3/4" PLASTIC	5,000	LF		
21.2	1" PLASTIC	150	LF		



ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<b>22.</b>	<b>SERVICE FITTINGS</b>				
22.1	10" X 3/4" SERVICE SADDLE	1	EA.		
22.2	8" X 3/4" SERVICE SADDLE	81	EA.		
22.3	6" X 3/4" SERVICE SADDLE	81	EA.		
22.4	4" X 3/4" SERVICE SADDLE	81	EA.		
22.5	3" X 3/4" SERVICE SADDLE	5	EA.		
22.6	2" X 3/4" SERVICE SADDLE	1	EA.		
22.7	3/4" CORPORATION STOPS	250	EA.		
22.8	3/4" FITTINGS	500	EA.		

**TOTAL BID**

NOTE: The CONTRACT may be awarded based on the total bid for "PIPING AND APPURTENANCES - MATERIALS ONLY". It is understood that the OWNER may adjust the quantities of work to match available funds.

RESPECTFULLY SUBMITTED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_.

IS BIDDER AN INDIVIDUAL, A PARTNERSHIP, OR A CORPORATION? \_\_\_\_\_.

\_\_\_\_\_  
FIRM NAME

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
ADDRESS

\_\_\_\_\_  
TITLE

\_\_\_\_\_  
PHONE NUMBER

PARTNERS OR CORPORATE OFFICERS:  
\_\_\_\_\_

SEAL (IF APPLICABLE)  
\_\_\_\_\_

ATTEST:  
\_\_\_\_\_

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
TITLE

## BID BOND

KNOW ALL PERSONS BY THESE PRESENTS, that we, the undersigned, \_\_\_\_\_  
 \_\_\_\_\_ as Principal, and  
 \_\_\_\_\_ as Surety, are hereby held and firmly bound  
 unto OHIO COUNTY WATER DISTRICT  
 as Owner in the penal sum of \_\_\_\_\_  
 \_\_\_\_\_ for the payment of which,  
 well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and  
 assigns.

Signed, this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_.

The Condition of the above obligation is such that whereas the Principal has submitted to OHIO COUNTY  
WATER DISTRICT a certain Bid, attached hereto and  
 hereby made a part hereof to enter into a contract in writing, for the  
SERIES III WATER SYSTEM IMPROVEMENTS – PIPING AND APPURTENANCES  
(MATERIALS ONLY)

NOW, THEREFORE,

- (a) If said Bid shall be rejected, or
- (b) If said Bid shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said Bid) and shall furnish a Bond for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said Bid,

then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its Bond shall be in no way impaired or affected by any extension of the time within which the Owner may accept such Bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

\_\_\_\_\_  
Principal (L.S.)

By: \_\_\_\_\_

\_\_\_\_\_  
Surety

By: \_\_\_\_\_

IMPORTANT - Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the project is located, and hold certificates of authority as acceptable sureties (31 CFR 223).

# AGREEMENT

THIS AGREEMENT, made this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_, by and between

OHIO COUNTY WATER DISTRICT, hereinafter called "OWNER" and

\_\_\_\_\_ doing business as

\_\_\_\_\_ hereinafter called "SUPPLIER

(an individual,) or (a partnership,) or (a corporation)

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

1. The SUPPLIER will commence and complete the WORK described as SERIES III WATER SYSTEM IMPROVEMENTS – PIPING AND APPURTENANCES (MATERIALS ONLY) .
2. Unit prices shall not be adjusted after execution of this AGREEMENT.
3. The OWNER shall place the order for all materials within 10 calendar days of the execution of this AGREEMENT.
4. The SUPPLIER will deliver materials under this AGREEMENT within 21 **calendar days** of placement of an order, unless notice is otherwise given and justified.
5. Failure to comply with the schedule for delivery shall be sufficient reason for cancellation of this AGREEMENT.
6. The SUPPLIER 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.

7. The term "CONTRACT DOCUMENTS" means and includes the following:

(A) GENERAL CONTRACT DOCUMENTS

- (1) ADVERTISEMENT FOR BIDS
- (2) INFORMATION FOR BIDDERS
- (3) BID
- (4) BID BOND
- (5) AGREEMENT
- (6) NOTICE OF AWARD
- (7) NOTICE TO PROCEED
- (8) CHANGE ORDER
- (9) SPECIAL CONDITIONS

(B) SPECIFICATIONS prepared by **HUNTER MARTIN & ASSOCIATES, INC.** dated **BID: FEBRUARY, 2003**.

(C) DRAWINGS prepared or issued by **HUNTER MARTIN & ASSOCIATES, INC.** dated **BID: FEBRUARY, 2003**.

(D) ADDENDA:

No. \_\_\_\_\_ dated \_\_\_\_\_ 19 \_\_\_\_\_

No. \_\_\_\_\_ dated \_\_\_\_\_ 19 \_\_\_\_\_

No. \_\_\_\_\_ dated \_\_\_\_\_ 19 \_\_\_\_\_

8. 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.

9. This AGREEMENT shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

**IN WITNESS WHEREOF**, the parties hereto have executed or caused to be executed by their duly authorized officials, this AGREEMENT in THREE copies each of which shall be deemed an original on the date first above written.

OWNER: OHIO COUNTY WATER DISTRICT

BY: \_\_\_\_\_

NAME: HENRY MORGAN  
(Please Type)

TITLE: CHAIRMAN

(Seal)

ATTEST:

BY: \_\_\_\_\_

NAME: \_\_\_\_\_  
(Please Type)

TITLE: \_\_\_\_\_

SUPPLIER:

---

BY:

---

NAME:

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(Please Type)

TITLE:

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(Seal)

ATTEST:

BY:

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NAME:

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(Please Type)

TITLE:

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### NOTICE OF AWARD

TO: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PROJECT DESCRIPTION: **SERIES III WATER SYSTEM IMPROVEMENTS**  
\_\_\_\_\_

The OWNER has considered the BID submitted by you for the above described WORK in response to its Advertisement for Bids dated **JANUARY 17**, 20**03**, and Information for Bidders.

You are hereby notified that your BID has been accepted for items in the amount of \$ \_\_\_\_\_.

You are required by the Information for Bidders to execute the Agreement and furnish the required CONTRACTOR'S Performance BOND, Payment BOND and Certificates of Insurance within 10 calendar days from the date of this Notice to you.

If you fail to execute said Agreement and to furnish said BONDS within 10 days from the date of this Notice, said OWNER will be entitled to consider all your rights arising out of the OWNER'S acceptance of your BID as abandoned and as a forfeiture of your BID BOND. The OWNER will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this NOTICE OF AWARD to the OWNER.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 20  .

**OHIO COUNTY WATER DISTRICT**  
OWNER

BY: \_\_\_\_\_

TITLE: **HENRY MORGAN, CHAIRMAN**

### ACCEPTANCE OF NOTICE

Receipt of the above NOTICE OF AWARD is hereby acknowledged by \_\_\_\_\_  
\_\_\_\_\_  
this the \_\_\_\_\_ day of \_\_\_\_\_, 20  .

BY: \_\_\_\_\_

TITLE: \_\_\_\_\_



### NOTICE TO PROCEED

TO: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DATE: \_\_\_\_\_

PROJECT: **SERIES III WATER SYSTEM**  
**IMPROVEMENTS – PIPING AND**  
**APPURTENANCES (MATERIALS**  
**ONLY)**

You are hereby notified to commence WORK in accordance with the Agreement dated \_\_\_\_\_ ,  
20 \_\_\_\_ , on or before \_\_\_\_\_ , 20 \_\_\_\_ , and you are to complete the WORK within  
\_\_\_\_\_ consecutive calendar days thereafter. The date of completion of all WORK is therefore  
\_\_\_\_\_ , 20 \_\_\_\_ .

**OHIO COUNTY WATER DISTRICT**  
OWNER

BY: \_\_\_\_\_

TITLE: **HENRY MORGAN, CHAIRMAN**

### ACCEPTANCE OF NOTICE

Receipt of the above NOTICE TO PROCEED is hereby acknowledged by \_\_\_\_\_

this the \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_.

BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

# CHANGE ORDER

ORDER NO.: \_\_\_\_\_

DATE: \_\_\_\_\_

AGREEMENT DATE: \_\_\_\_\_

NAME OF PROJECT: \_\_\_\_\_

OWNER: \_\_\_\_\_

SUPPLIER: \_\_\_\_\_

The following changes are hereby made to the CONTRACT DOCUMENTS:

Justification:

Change to CONTRACT PRICE:

Original CONTRACT PRICE: \$ \_\_\_\_\_

Current CONTRACT PRICE adjusted by previous CHANGE ORDER \$ \_\_\_\_\_.

The CONTRACT PRICE due to this CHANGE ORDER will be \_\_\_\_\_ by:  
(Increased / Decreased)

\$ \_\_\_\_\_.

The new CONTRACT PRICE including this CHANGE ORDER will be \$ \_\_\_\_\_.

Change to CONTRACT TIME:

The CONTRACT TIME will be \_\_\_\_\_ by \_\_\_\_\_ calendar days.  
(Increased / Decreased)

The date for completion of all work will be \_\_\_\_\_.  
(Date)

Requested by: \_\_\_\_\_ OWNER

Recommended by: \_\_\_\_\_ ENGINEER

Accepted by: \_\_\_\_\_ SUPPLIER

## **SPECIAL CONDITIONS**

### **SC-1. OWNERSHIP.**

The completed facilities shall be owned, operated and maintained by OHIO COUNTY WATER DISTRICT hereinafter referred to as the OWNER. All materials shall be in conformance with the OWNER'S requirements. Acceptance of this project and final payment therefor shall be contingent thereon.

### **SC-2. AFFIDAVIT OF PAYMENT.**

Upon completion of the WORK, the SUPPLIER shall furnish proof in documentary form that all claims, liens, or other obligations incurred by him and all of his suppliers in connection with the performance of the WORK have been properly paid and settled. This information shall be in affidavit form and shall bear the authorization of the surety company, if applicable.

### **SC-3. CONTRACT DOCUMENTS.**

The following CONTRACT DOCUMENTS shall govern the materials furnished on this contract:

GENERAL CONTRACT DOCUMENTS, SPECIFICATIONS AND DRAWINGS ENTITLED "OHIO COUNTY WATER DISTRICT, OHIO COUNTY, KENTUCKY, SERIES III WATER SYSTEM IMPROVEMENTS – PIPING AND APPURTENANCES (MATERIALS ONLY), BID: FEBRUARY, 2003."

ADDENDA (IF APPLICABLE) TO BE ACKNOWLEDGED IN THE BID.

The SUPPLIER shall be furnished, without cost, THREE COPIES of all CONTRACT DOCUMENTS with any addenda thereto. Additional copies, if required, may be obtained from the ENGINEER at cost.

### **SC-4. CLAIMS BY THE SUPPLIER.**

If the SUPPLIER believes he is entitled to a change in the contract price or time, or both, he shall give the ENGINEER written notice and documentation of the basis for the claim within 7 days of the cause of such claim. The ENGINEER will, within 7 days of such claim notice, either prepare a change order for processing or notify the SUPPLIER in writing of the reason for rejection.

If the ENGINEER'S decision is not acceptable, the SUPPLIER, within 7 days after the ENGINEER'S response, shall notify the OWNER of his intention to pursue the claim.

As the OWNER has limited funds for this project and must operate within its established budget, no claim shall be recognized or admissible for legal process unless presented as described.

### **SC-5. PROJECT INSPECTION.**

The OWNER may employ supervisors or inspectors to inspect materials furnished to see that they are in accordance with the Plans, Specifications, and the OWNER'S standards.

PROJECT INSPECTION, TESTS OR APPROVALS BY THE OWNER'S REPRESENTATIVE OR OTHERS SHALL NOT RELIEVE THE SUPPLIER FROM HIS OBLIGATIONS TO MEET THE REQUIREMENTS SET FORTH HEREIN.

Inspectors, and other properly authorized representatives of the OWNER, shall be free always to perform their duties. Intimidation or attempted intimidation of any one of them by the SUPPLIER or by any of his employees shall be sufficient reason for dismissal of said employee or annulment of the contract.

**SC-6. MATERIALS.**

Unless otherwise specified, all materials and equipment shall be new and shall be of standard quality for the use intended. Reference to a proprietary product of a particular manufacturer or vendor is to establish a standard of quality.

Approval of samples, shop drawings, etc. shall not mean final acceptance and they shall be subject to inspection and test on delivery and installation. The SUPPLIER SHALL repair, replaces, and/or adjusts any materials or equipment found defective or not operating properly for 1 year after completion and acceptance of the WORK.

**SC-7. MATERIALS COMPATIBILITY.**

All materials must be compatible with the OWNER'S existing materials concerning interchangeability and appearance unless otherwise specifically approved.

**SC-8. PROGRESS PAYMENTS.**

The cut-off date for figuring monthly partial payments shall be the 5<sup>th</sup> day of the month and requests for partial payment shall be submitted for the ENGINEER'S approval no later than the 10<sup>th</sup> day of the month. Payment of said estimate shall be made within two weeks after the District's meeting.

Payrolls, with the necessary certification, shall be submitted to the proper authorities in accordance with the applicable regulations and a copy of the transmittal letter and one copy of the payroll shall be submitted to the OWNER. One copy of the transmittal letter shall be submitted to the ENGINEER.

**SC-9. QUANTITIES OF ESTIMATE.**

The quantities of MATERIALS covered by unit prices in the bid are the ENGINEER'S estimates and may increase or decrease to complete the WORK contemplated by this project. The SUPPLIER agrees that payment for any increases or decreases in the quantities shall be based on the unit price bid and that payment shall be made only for the actual materials ordered.

**SC-10. "OR EQUAL" CLAUSE.**

It shall be the SUPPLIER'S RESPONSIBILITY to furnish substantiating data that any product is equal to or better than the proprietary product specified.

**SC-11. PROTECTION OF PROPERTY AND PUBLIC LIABILITY.**

The SUPPLIER shall indemnify and save harmless the OWNER, the OWNER'S Representatives and the ENGINEER from and against all losses and all claims, demands, payments, suits, actions, recoveries, and judgments of every nature and description brought against him due to any act or omission of the said SUPPLIER, his agents, or employees in the execution of the WORK or in its protection.

Said responsibilities shall apply despite the location of the damage and it shall be the SUPPLIER'S sole responsibility to make such corrections and adjustments to the satisfaction of those whose property or premises have been damaged by his operation.

**SC-12. SAFETY AND SANITARY REGULATIONS.**

The SUPPLIER shall comply with all local, State and Federal safety and sanitary regulations that may apply on this project.

SAFETY ON AND AROUND THE JOB SITE SHALL BE THE SOLE RESPONSIBILITY OF THE SUPPLIER.

**SC-13. SHOP DRAWINGS.**

The SUPPLIER shall submit EIGHT copies of Shop Drawings for all materials furnished and certify to their compliance with the Specifications. The SUPPLIER'S certification shall be as follows:

PROJECT TITLE	_____
CONTRACT:	_____
BID ITEM NO.:	_____
WE CERTIFY THAT THIS SHOP DRAWING SUBMITTAL IS IN COMPLIANCE WITH THE PLANS AND SPECIFICATIONS FOR THE ABOVE PROJECT.	
NO EXCEPTION:	_____
EXCEPTION:	_____
APPROVED BY:	_____
DATE:	_____

TWO COPIES of the approved shop drawings shall be returned to the SUPPLIER.

**SC-14. PATENTS, LICENSE AND ROYALTY FEES.**

It shall be the SUPPLIER'S RESPONSIBILITY to satisfy all of the demands and conditions pertaining to any patents used in this project.

**SC-15. LAWS AND ORDINANCES.**

The SUPPLIER shall always observe and comply with all ordinances, laws and regulations and shall protect and indemnify the OWNER and the OWNER'S agents against any claims or liability arising from or based on any violation of same.

**SC-16. GUARANTEE.**

The SUPPLIER shall guarantee all materials and equipment furnished and Work performed for a period of 1 year from the date of Substantial Completion. The SUPPLIER warrants and guarantees for a period of 1 year from the date of Substantial Completion of the system that the completed system is free from all defects due to faulty materials or workmanship and the SUPPLIER 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 SUPPLIER 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 SUPPLIER the cost thereby incurred.

**SC-17. ASSIGNMENTS.**

Neither the SUPPLIER nor the OWNER shall sell, transfer, assign, or otherwise dispose of the Contract or any portion thereof, or of any right, title or interest therein, or any obligations thereunder, without written consent of the other party.

**SC-18. INDEMNIFICATION.**

The SUPPLIER 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 attributed 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 SUPPLIER or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.

In any and all claims against the OWNER or the ENGINEER, or any of their agents or employees, by any employee of the SUPPLIER, 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 SUPPLIER under workmen's compensation acts, disability benefit acts or other employee benefits acts.

**SC-19. ENGINEER'S AUTHORITY.**

The ENGINEER shall act as the OWNER'S representative during the project, shall decide questions which may arise as to quality and acceptability of materials furnished and shall interpret the intent of the CONTRACT DOCUMENTS in a fair and unbiased manner. The ENGINEER will make visits to the site.

The SUPPLIER will be held strictly to the intent of the CONTRACT DOCUMENTS in regard to the quality of materials. Inspections may be made at the factory or fabrication plant of the source of material supply.

The ENGINEER shall promptly make decisions relative to interpretation of the CONTRACT DOCUMENTS.

**SC-20. BASIS OF BID.**

The bid, and all the items and sub-items thereof, shall be made on the attached form that shall be filled out completely. All the costs of MATERIALS and payment therefor shall be included in the unit prices set forth in the proposal form. No item that is required by the CONTRACT DOCUMENTS shall be paid for outside of, or in addition to, the prices submitted on the proposal form unless specifically authorized by a proper change order and unit prices shall control.

Payment shall include all costs associated with the purchase of materials including taxes, licenses, fees, etc. for delivery to the OWNER'S supply yard located on U. S. Highway 231, just North of the City of Hartford.

The following is to clarify the basis of bidding:

1. – 4. Water Mains.

Payment for the size and type of water mains shown shall be at the unit price bid and shall include jointing materials and accessories. Measurement for payment shall be the laying length of the pipe. Orders shall be for full bundles of pipe.

5. Tracer Wire.

Payment shall be at the unit price bid for the length of tracer wire ordered and shall include accessories for splicing the wire.

6. – 8.        Valves.  
Payment shall be for each size and type ordered and shall include all accessories.
9.            Valve Boxes.  
Payment shall be for each item ordered and shall include the box and lid.
10.          Valve Box Adaptors.  
Payment shall be for each item ordered and shall include all accessories.
11.          Valve Stem Extensions.  
Payment shall be for each item ordered and shall include all accessories.
12. – 13.    Fittings.  
Payment shall be for each size and type ordered and shall include all accessories.
14.          Tapping Sleeve W/Valves.  
Payment shall be for each size ordered and shall include the valve and all accessories. Valve boxes and adaptors shall be paid for under a separate item.
15.          Service Saddles.  
Payment shall be for each size ordered and shall include all accessories.
16.          Repair Clamps.  
Payment shall be for each size ordered and shall include all accessories.
17.          Air Valves.  
Payment shall be for each item ordered and shall include valve, box and lid. Payment for the service saddle and ball valve shall be under a separate item.
18.          Casing Pipe.  
Payment shall be for the length of each size ordered.
19.          Casing End Seals.  
Payment shall be for each size ordered and shall include all accessories.
20.          Pipe Spacers.  
Payment shall be for each size ordered and shall include all accessories.
21.          Service Lines.

Payment shall be for the length of each size ordered.

22. Service Fittings.

Payment shall be for each size and type ordered and shall include all accessories.



# SPECIFICATION 1

## DISTRIBUTION SYSTEM AND PIPING

### 1-1. GENERAL.

This Specification pertains to furnishing all materials and construction of the complete distribution system. The intent herein is to be in accordance with the AWWA and the National Sanitation Foundation Standards that shall complement these Specifications.

In an existing system all materials must be compatible with the existing materials with regard to wrench sizes, operation, interchangeability and appearance (fire hydrants) unless otherwise specifically shown or approved.

### 1-2. MATERIALS.

#### 1-2.1. DISTRIBUTION MAINS.

Distribution mains and fittings of a particular material shall be the product of one manufacturer. Jointing materials, including rubber gaskets, packing glands, flanges, bolts, lubricants, solvents, etc., shall be as recommended by the pipe manufacturer, shall comply with AWWA Standards and shall withstand a safe working pressure of not less than 150 psi, unless otherwise shown.

a. Iron Pipe.

Ductile iron pipe shall be AWWA C151 (ANSI A21.51). All iron pipe shall have cement-mortar lining conforming with AWWA C104 (ANSI A21.4). Jointing shall be with push-on or mechanical joints for Class 50 (150 psi working pressure) pipe.

b. Plastic Pipe.

Plastic pipe shall conform with ASTM D 2241 polyvinyl chloride (PVC) pressure pipe, 1-1/2 inches through 12 inches and shall bear the National Sanitation Foundation seal. Unless otherwise shown the pipe shall be SDR21, pressure rated at 200 psi. Jointing shall be with rubber ring gaskets.

PVC pipe, 14 inches through 30 inches, shall have an integral bell and spigot joints and shall be in accordance with AWWA C905. Pipe shall be DR18 unless otherwise shown.

PVC pipe used shall be manufactured by one of the following companies:

National Pipe & Plastics, Inc.  
J-M Manufacturing Company, Inc.  
Bristolpipe  
Diamond Plastics Corporation  
North American Pipe Corporation  
Northern Pipe Products, Inc.  
Contech Construction Products  
Freedom Plastics, Inc.  
IPEX, Inc.

Lamson Vylon Pipe  
PW Pipe  
Royal Pipe Systems  
Uponor ETI Company  
CertainTeed Corporation

c. High Density Polyethylene Pipe.

High density, polyethylene pipe (HDPE) shall be in accordance with AWWA C906 and shall have ductile iron pipe outside diameters. The working pressure rating shall be as specified on the Plans.

1-2.2. FITTINGS.

All fittings larger than 3 inches shall be gray iron or ductile iron. All fittings, 3 inches and smaller, shall be PVC.

Iron fittings shall comply with AWWA C110 (ANSI A21.10) or AWWA C153 (ANSI A21.53) and the inside of the fittings shall be cement-mortar lined in accordance with AWWA C104. The outside coating shall be bituminous material approximately one mil thick. Rubber gaskets shall conform with AWWA C111 (ANSI A21.11).

Mechanical joint restraint devices shall be as manufactured by the company furnishing the ductile iron pipe, Uni-Flange, EBAA Iron Sales, Inc. or equal.

1-2.3. VALVES.

a. Manufacturer.

All valves shall be Mueller or M & H, unless otherwise shown or approved.

b. Gate Valves.

Gate valves larger than 2 inches shall be iron body, bronze mounted, with a nonrising stem and shall comply with AWWA C500 (double-disc) or AWWA C509 (resilient-seated). Valves below ground shall be wrench operated; valves above grade shall be wheel or lever operated; and all valves shall operate clockwise to close. All valves, 2 inches and smaller, shall be bronze body.

c. Butterfly Valves.

Butterfly valves, 2 inches through 20 inches, shall conform with AWWA C504 and shall have a minimum working pressure or rating of 150 psi. They shall have semi-steel or cast iron bodies with lug end connections for use with flanged CIP. The shaft seal shall be hycar and the seat shall be neoprene. They shall have bronze discs, 416 stainless steel shafts and bronze bearings. Valves below ground shall operate with a square nut through a worm gear. For valves above grade, the actuator shall be of the lever type with 10 position or adjustable memory stops as shown on the Plans. All valves shall close clockwise and open counterclockwise.

Butterfly valves shall be installed in the distribution system with flanged to mechanical joint connecting pieces.

d. Ball Valves.

Unless otherwise shown, valves for 2 inch lines or smaller shall be ball valves. Ball valves shall be brass or bronze and shall be approved specifically for potable water use. Ball valves shall be as manufactured by Ford.

e. Valve Boxes.

Valve boxes shall be cast iron. All valve boxes shall be adjustable with a minimum adjustment of 3 inches either higher or lower. Boxes shall have a 5-1/4 inch shaft diameter and the covers shall be cast iron with the word "WATER" cast in the top surface.

Valve boxes may be extended with the use of PVC pipe, if needed, provided the PVC pipe is located adjacent to the valve and both sections of the cast iron box are utilized.

The Contractor shall install an 18" x 4" square or circular concrete pad around each box and a valve marker post at the box. Installation of the pad and marker post shall be made after proper time has elapsed to permit settling and upon written authorization by the Engineer.

f. Valve Box Adaptors.

Valve box adaptors shall be properly sized for the type and size valve used. The valve box adaptor shall be identical to those manufactured by Adaptor, Inc., or equal.

g. Valve Stem Extensions.

Valve stem extensions shall be 7/8 inch diameter hot rolled steel, as manufactured by The General Engineering Co., or equal. Extensions shall be supplied with the alignment washer and shall be securely attached to the valve with two or more set screws.

h. Valve Wrenches.

Three valve wrenches, approximately 6 feet in length, shall be furnished for each different type and/or size required.

i. Air Valves.

Air valves, either air release or combination air release and air vacuum, shall have a cast iron body, stainless steel trim and floats and a working pressure of 300 psi. They shall be direct acting or simple lever-type with full ported valves; parts shall be interchangeable; and they shall not require special tools for maintenance. The size and type air valve shall be as shown on the Plans.

All air valves shall be mounted upright on the main with a service clamp and shall have a shutoff valve between the air valve and the main. They shall be installed in a 30 inch I.D. by 30 inch deep valve box (CMP, PVC, clay or concrete) having a cast iron frame and solid lid, Neenah Foundry R-5900 series, or equal.

The box shall be centered on the valve, shall be set plumb with the top slightly above grade and shall be filled from the bottom of the main to 4 inches below the shutoff valve with No. 57 crushed stone.

#### 1-2.4. FIRE HYDRANTS.

Fire hydrants shall be three-way with two 2-1/2 inch hose nozzles and one 4-1/2 inch pumper nozzle and shall comply with AWWA C502. Hose connections and operating nuts shall be National Standard. The minimum valve opening shall be 5-1/4 inches, shall close with the pressure and shall remain closed if the hydrant barrel is broken or damaged. The hydrant shall have a replaceable, breakable flange or section. The operating nut shall be a pentagon shape, shall operate counterclockwise to open, and an "open" direction arrow shall be cast in the bonnet. The normal depth of bury shall be 42 inches. Three hydrant wrenches and one replaceable, breakable flange shall be furnished.

All hydrants shall be painted with a primer coat equal to Rustoleum No. 960 primer and a finish coat of "Fire Hydrant Red" equal to Rustoleum No. 1210.

#### 1-2.5. FLUSH ASSEMBLIES.

Flush assemblies shall be sized as shown on the Plans and in accordance with the Standard Drawings. Unless otherwise shown, flush assemblies shall be set perpendicular to the main by use of a tee.

The tee shall be "main size" by "flush" size and the number of fittings shall be minimized. Thrust restraint for all fittings shall be with mechanical joint restraint and concrete blocking.

#### 1-2.6. TAPPING, CUT-IN AND REPAIR MATERIALS.

##### a. Tapping Sleeves.

Tapping sleeves shall be Class 125 (ASA B16.1) similar to Mueller H-615. Stainless steel tapping sleeves may be used in lieu of ductile iron.

##### b. Tapping Crosses.

The tapping crosses shall be Class 125 (ASA B16.1) similar to Mueller H-715.

##### c. Tapping Valves.

Tapping valves shall be Class 125 (ASA B16.1) similar to Mueller H-667 for mechanical joint pipe or H-642 for asbestos cement pipe.

##### d. Split Repair Sleeves.

Split repair sleeves shall have 150 psi working pressure similar to Mueller H-777 for asbestos cement pipe and 200 psi working pressure similar to Mueller H-785 for mechanical joint pipe.

##### e. Cut-In Sleeves and Valves.

Cut-in sleeves shall be similar to Mueller H-840, or equal, and cut-in valves shall be similar to Mueller H-862, or equal.

##### f. Inserting Valves.

Inserting valves shall be similar to Mueller H-800.

g. Repair Clamps.

Repair clamps shall be stainless steel with stainless steel bolts, fully gasketed and pressure rated to match or exceed the pipe on which it is to be installed. Unless otherwise directed, repair clamps shall be used only on PVC pipe and shall be similar to Mueller 500 Series.

h. Service Saddles.

All service clamps or saddles shall be epoxy coated or stainless steel.

1-2.7. SERVICE LINES.

a. Plastic Pipe.

Plastic pipe and fittings for service lines shall conform with AWWA C901 for polyethylene pipe and AWWA C902 for polybutylene pipe, shall have a pressure rating of 200 psi and shall bear the National Sanitation Foundation seal.

b. Copper Pipe.

Copper pipe for service lines shall conform with ASTM B-88, "Type K".

c. Service Line Accessories.

Corporation stops, curb stops, service fittings, etc., shall be of the finest quality bronze or brass as manufactured by Ford.

d. Crossings.

All service lines crossing a dedicated road right-of-way shall be installed in casing. For ¾" and 1" services, the casing shall be plastic provided no joints are located under the roadway. Otherwise, casing shall be steel or as designated otherwise.

1-2.8. SERVICE METERS.

All new meters and service lines installed for new customers shall be made by the Owner. Reconnections or relocation of a service for an existing customer shall be made by the Contractor.

For a reconnection or relocation, the service meter, yoke, box, pressure reducing valve and customer cutoff valve shall be furnished by the Owner, unless specifically shown otherwise. The Contractor shall be responsible for the proper installation and connection to the service line.

The Contractor shall also accurately record the serial number and the initial reading of each meter set with reference to the service address as well as the date the meter was set. Records shall be turned over to the Owner.

1-2.9. CASING PIPE.

Casing pipe shall be seamless or continuous welded steel pipe having a minimum wall thickness of 0.25 inches and a minimum yield strength of 35,000 psi.

## 1-2.10. WATER MAIN LOCATORS.

### a. Tracer Wire.

Tracer wire shall be 12 gauge insulated copper wire and shall be suitable for underground installation. The tracer wire shall be securely attached to all valves, fire hydrants, flush hydrants, etc. Splices shall be made in a manner to insure conductivity.

### b. Marker Posts.

Marker posts shall be located adjacent to valves and along mains at a minimum spacing of approximately 300 feet and at all property barriers (fences, etc.) and as directed by the Engineer. Additionally, markers shall be placed at both ends of all highway, railroad and creek crossings.

Marker posts shall be 2 inch SDR 21 PVC pipe installed with 2 foot bury and a 2 inch SDR 21 PVC cap on top. A decal marked "WATER MAIN" or "WATER VALVE" shall be provided by the Owner for installation on the post by the Contractor.

## 1-2.11. RIVER CROSSING PIPE.

River crossing pipe shall be ductile iron or high density, polyethylene pipe, as shown on the Plans.

Ductile iron pipe shall be Class 5 ductile iron, 0.42 metal thickness and shall be boltless, similar to "Usiflex" as manufactured by U. S. Pipe, or equal.

High density, polyethylene pipe shall be in accordance with AWWA C906 and shall have a working pressure rating as specified on the Plans.

## 1-3. CONSTRUCTION.

### 1-3.1. RESPONSIBILITY FOR MATERIALS.

The Contractor shall be responsible for all materials furnished by him and shall replace at his own expense all materials found defective or not complying with these Specifications. His responsibility shall be in effect for 1 year after acceptance by the Owner.

The Contractor shall be responsible for any materials furnished to him by the Owner that are lost, stolen or damaged while in his possession.

### 1-3.2. ALIGNMENT AND GRADE.

The water line shall be located as shown on the Plans and shall be parallel with streets and property lines where possible. It shall have a minimum cover of 42 inches. Through areas where an adjacent roadbed is in a cut section, the main shall be laid to a minimum depth of 36 inches below the centerline crown elevation of the adjacent road or street but shall not exceed a depth of 7 feet. Exceptions to this requirement (deeper or more shallow) shall be authorized, in specific cases, by the Engineer. There shall be no additional compensation for laying depths up to 7 feet. Bends shall be used at any abrupt changes in direction and lines shall be a minimum distance of 5 feet from any pavement.

### 1-3.3. TRENCH PREPARATION.

The trench shall be dug to the alignment and grade required and shall be braced and drained for safe, efficient working conditions. Excavation shall not exceed pipe laying at the end of the working period. All pipe line trench excavation shall be considered unclassified and the cost for excavation of any material (earth, sand, gravel, rock, concrete, etc.) shall be borne by the Contractor.

a. Width.

The trench width shall be the nominal diameter of the pipe being laid plus an additional 16 inches. Open cuts across paved surfaces shall be cut in straight, neat lines approximately 12 inches wider than the trench being dug.

b. Bell Holes.

Bell holes shall be provided for properly jointing the pipe and to maintain a 2 inch clearance around the pipe joint.

c. Excavation to Grade.

The trench shall be excavated to provide a uniform and continuous bearing and support for the pipe on solid ground at every point between bell holes. Any excavation below the specified grade shall be corrected with approved material, thoroughly compacted as directed by the Engineer. The finished subgrade shall be prepared accurately by means of hand tools.

d. Unsuitable Foundation.

Where the bottom of the trench at subgrade is found unstable or to include ashes, cinders, refuse, vegetable or other organic materials, or large pieces or fragments of inorganic material that in the judgment of the Engineer should be removed, the Contractor shall excavate and remove such unsuitable material to the width and depth ordered by the Engineer. The subgrade shall then be constructed by backfilling with an approved material, thoroughly compacted in 4 inch layers to provide a uniform and continuous support for the pipe at the specified grade.

e. Clearance in Rock.

Ledge rock, boulders and large stones shall be removed to provide a clearance of at least 6 inches below and on each side of all pipe valves and fittings for pipes 24 inches in diameter or less and 9 inches for pipes larger than 24 inches in diameter. The subgrade shall then be constructed in accordance with Item d above.

### 1-3.4. CROSSINGS AND OCCUPANCY.

The Contractor shall comply with all provisions of the permits for any crossings or parallel occupancy.

For a crossing requiring boring and jacking, the Contractor shall be responsible for maintaining line and grade. Where casing is required, a continuous steel casing, with continuous welds, shall be installed by advancing the casing as the hole is being bored. The carrier pipe shall not rest on the bells or hubs and shall be supported inside the casing with manufactured plastic skids. Skid support spacing shall not exceed 4.7

feet for 4 inch pipe; 6.3 feet for 6 inch pipe; 7.4 feet for 8 inch pipe; 8.5 feet for 10 inch pipe; 9.6 feet for 12 inch pipe and 12 feet for 18 inch through 27 inch pipe.

Casing end seals shall be installed on all casings and shall be secured to the casing and carrier pipe with stainless steel bands in such a manner as to prevent damage to the seal if there is any pipe movement. The seals shall be made of oil and water resistant rubber and shall be similar to those manufactured by Maloney Pipeline Products, or equal.

For crossings not requiring casing, the bore shall be made with one continuous section of pipe having no joints under the pavement.

Open cuts shall not be closer than 5 feet from the edge of the pavement on either side or in accordance with the permit.

### 1-3.5. EXISTING MAINS AND VALVES.

Where there are existing mains along the route of a new main, the existing main and services shall be protected and maintained at the Contractor's expense. If an existing main is to remain in service, it shall not have a "dead end" but shall be connected to form a grid or loop or as directed by the Engineer.

All materials for connections of existing service lines to the new main, after testing and disinfection, must be kept clean and free from all contamination during the changeover. All customers whose water service will be interrupted shall be notified and service shall be restored when possible.

Any main or service line to be abandoned shall be disconnected and capped or plugged at its connections to the live mains. Existing valves, in the abandoned main at its connection to the live main, shall be removed.

UNDER NORMAL CIRCUMSTANCES, THE CONTRACTOR SHALL NOT OPERATE AN EXISTING VALVE. EXISTING VALVES ARE TO BE OPERATED BY THE OWNER.

### 1-3.6. TIE-INS TO EXISTING MAINS.

All tie-ins to existing mains must be kept clean and free from all contamination while the cutting-in and connecting are being done. The Contractor shall determine the type of existing pipe at each tie-in location to verify the materials required for the most economical method (for the Owner) of making the tie-in. The method of making the tie-in shall be subject to the Engineer's approval.

The following conditions shall apply to all tie-ins.

- a. The Owner shall be notified 48 hours in advance of all tie-ins.
- b. If service is to be interrupted, all affected customers shall be notified by the Contractor and service shall be restored as soon as possible.
- c. The trench or excavation shall be kept completely dry by providing a sump and by pumping, if necessary.
- d. Excavation around the existing main shall be sufficient to allow thorough cleaning with a wire brush and disinfection with a strong chlorine solution to a point 12 inches either side of the fitting(s) being installed.



- e. The inside of all valves and fittings shall be clean and shall be thoroughly swabbed with a strong chlorine solution before being placed in the existing line.
- f. All connections shall be valved for the new main being installed. This valve shall remain tightly closed until disinfection of the new main has been completed.

### 1-3.7. PIPE LAYING.

Pipe shall be laid continuously with the bell ends facing in the direction of laying. The trench shall be dewatered and every precaution shall be taken to prevent foreign material from entering the pipe during installation. All pipe must be perfectly clean before placing in the line.

All phases of installation, including handling, cutting, laying, aligning, and jointing, shall be in strict compliance with the manufacturer's recommendations and with the AWWA Standards.

At times when pipe laying is not in progress, the open ends of pipe shall be sealed by a water-tight plug. If water is in the trench, the seal shall remain in place until the trench is pumped completely dry.

Two methods of anchorage and thrust restraint shall be provided for all fittings. The methods shall consist of concrete blocking and mechanical joint restraining glands that comply with all applicable provisions of AWWA/ANSI C101 and C11/A2.11.

Concrete shall be a minimum of Class B and shall be poured against undisturbed soil. Concrete blocking shall not obstruct fitting connections and all fittings shall be wrapped in plastic prior to placement of concrete.

Prior to backfilling, anchorage and thrust restraint shall be documented and verified by the Engineer.

### 1-3.8. VALVES AND FITTINGS.

All valves and fittings, not otherwise shown on the Plans, shall be mechanical-joint. Valves shall be set level and the valve box shall be centered over the operating nut by using a valve box adaptor. All boxes shall be thoroughly tamped in a plumb position. The top surface of the valve box shall be level with the street or slightly above grade when installed in fields or yards.

The top of all valve operating nuts shall be within 36 inches of the ground surface.

Existing valves or appurtenances to be abandoned shall be removed from the line.

### 1-3.9. FIRE HYDRANTS.

All hydrants shall be set plumb and truly vertical with the pumper connection on the street side. Cast-in-place concrete thrust blocks bearing squarely against undisturbed soil shall be placed, using care not to obstruct the hydrant barrel drains. Not less than 7 cubic feet of coarse gravel or crushed stone shall be placed from the bottom of the trench to at least 6 inches above the waste opening and 1 foot around the elbow to facilitate drainage. The hydrant nozzles shall be at least 12 inches above the established grade or ground line.

**1-3.10. METER SETTINGS.**

All meters shall be set level and the meter box shall be centered over the meter and thoroughly tamped in a plumb position. Five feet of service line, with a cap on the end, shall be stubbed out on the customer side of the meter. The top of the meter box cover shall be slightly above grade to prevent the entrance of surface water

**1-3.11. HYDROSTATIC TEST.**

All distribution and piping systems shall be hydrostatically tested in accordance with Specification 12.

**1-3.12. DISINFECTION.**

All existing facilities exposed to contamination and new piping, materials and equipment shall be disinfected in strict accordance to Specification 12.

**1-3.13. BACKFILLING.**

Pipe embedment from the bottom of the trench to the centerline of the pipe shall be with fine earth or sand. It shall be placed by hand on both sides of the pipe simultaneously.

Pipe embedment from the centerline of the pipe to a point 18 inches above the top of the pipe shall consist of finely divided earth or sand free from rocks, boulders or wet or sticky masses. This embedment shall be evenly spread and carefully compacted.

Backfilling to grade under a roadway or other permanent structure shall be with a compacted granular material (sand or DGA) and to the satisfaction of the Engineer. Other backfilling to grade, not shown on the Plans, may be altered to fit the particular situation and tamping may not be required, but the Contractor shall be responsible for all settlement for 1 year.

Tracer wire shall be placed directly above the pipe and care shall be taken to avoid shifting during backfilling. At the valve boxes, the wire shall be located outside the box up to the top of the bottom section and then run inside the box up to the surface.

**1-3.14. SERVICE LINES.**

Service lines shall be connected after the main has been tested, approved, and disinfected. The minimum size service line shall be 3/4 inch and shall be connected to the main with a corporation stop. For PVC and AC main sizes 6 inches and smaller and for cast iron pipe 4 inches and smaller, connections shall be made with a service clamp or saddle. For larger size mains, the connection shall be made with a corporation stop having a tapered thread similar to the Mueller H-15000 series or having a rubber sealing sleeve similar to the "Hays-Seal", or equal. For 1 inch and 2 inch service lines, connection to the main shall be made with a double-strap service clamp. Larger service lines or mains shall be connected with a tapping sleeve or by installation of fittings in the main.

The service lines shall be run perpendicular to the main in a straight line to the meter box.

**1-3.15. CREEK CROSSINGS.**

Creek crossings, where possible, shall be made by gradually increasing the depth of the pipe to provide the specified cover at the lowest point. Crossings requiring the use of bends shall be approved by the Engineer. Payment for crossings shall be at the unit prices bid for the various items used including encasement, as directed.

**1-3.16. SPOT EXCAVATION.**

Spot excavation shall be a pay item for mobilization, all work and equipment to cover the cost for location of water mains and appurtenances and for excavation to install a valve or other appurtenance at the isolated location (where other work is not being done) as shown on the Plans and as directed by the Engineer.

Spot excavation shall include backfilling in accordance with Article 1-3.13 of this Specification.

The Contractor shall use extreme care to prevent damage to existing mains and appurtenances and the final 6 inches above the main shall be hand excavated. Valve boxes accidentally damaged during spot excavation shall be replaced at the expense of the Owner, but other damage to existing facilities shall be the responsibility of the Contractor.

If a working valve or other item is located, the Contractor shall adjust the valve box height but shall only be paid for spot excavation plus the unit price bid for any new materials used.

Payment for this item shall be at the lump sum bid and excavation at a noncontiguous location shall constitute a separate pay item.

**1-3.17. RECORDS.**

The Contractor shall be responsible for maintaining a set of Record Plans showing the size, type of material and location of all new construction and of any existing water facilities located during the work. These Record Plans must always be available to the Engineer and shall be furnished to the Engineer at the end of construction for the Owner's permanent record.