

**CASE**

**NUMBER:**

99-112

HISTORY INDEX FOR CASE: 1999-112  
SALT RIVER ELECTRIC COOPERATIVE CORP.  
Investigation - Service  
BARNETT INJURY

IN THE MATTER OF SALT RIVER ELECTRIC COOPERATIVE CORPORATION  
ALLEGED FAILURE PURSUANT TO 807 KAR 5:041, SECTION 3, TO  
COMPLY WITH NATIONAL ELECTRIC SAFETY CODE, 1990 EDITION,  
SECTION 42, RULE 420H, RULES FOR EMPLOYEES, TOOLS AND  
PROTECTIVE EQUIPMENT

SEQ NBR	ENTRY DATE	REMARKS
0001	03/31/1999	Order entered; resp. to allegations due 4/20/99; hearing sched. on 5/11/99.
M0001	04/20/1999	REGINA BECKMAN SALT RIVER ELECTRIC-RESPONSE TO ORDER OF MARCH 31,99
0002	04/30/1999	Order scheduling IC on 5/7/99 at 11:00 in Conference Room 2.
0003	05/10/1999	Order cancelling 5/11/99 hearing; to be rescheduled if necessary.
0004	05/11/1999	IC memo sent to parties; comments, if any, due 5/19.
0005	08/31/1999	Letter to Regina Beckman enclosing copy of Settlement Agreement.
0006	01/14/2000	Settlement Agreement
0007	02/08/2000	Final Order with Settlement Agreement
M0002	02/23/2000	SALT RIVER RECC-CHECK FOR FINES PER ORDER OF 2-8-00 FOR 200.00
0008	02/25/2000	Receipt of Payment of \$200.00 for assessed penalty.

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

SALT RIVER ELECTRIC )  
COOPERATIVE CORPORATION )

\_\_\_\_\_ )

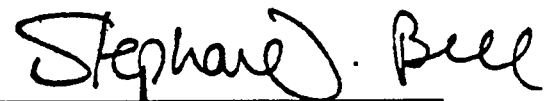
CASE NO. 99-112

ALLEGED FAILURE PURSUANT TO )  
807 KAR 5:041, SECTION 3, TO )  
COMPLY WITH NATIONAL ELECTRIC )  
SAFETY CODE, 1990 EDITION, )  
SECTION 42, RULE 420H, RULES )  
FOR EMPLOYEES, TOOLS AND )  
PROTECTIVE EQUIPMENT )

RECEIPT OF PAYMENT

This is to acknowledge receipt of one check in the amount of \$200.00 payable to Treasurer, Commonwealth of Kentucky, from Salt River Electric Cooperative Corporation.

This represents full payment of the penalty assessed against them in the above-styled action.



Stephanie Bell

Secretary of the Commission

Dated 2/25/2000



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

CERTIFICATE OF SERVICE

RE: Case No. 1999-112  
SALT RIVER ELECTRIC COOPERATIVE CORP.

I, Stephanie Bell, Secretary of the Public Service Commission, hereby certify that the enclosed attested copy of the Commission's Order in the above case was served upon the following by U.S. Mail on February 8, 2000.

Parties of Record:

Larry Hicks  
General Manager  
Salt River Electric Cooperative  
Corp.  
111 West Brashear Avenue  
P. O. Box 609  
Bardstown, KY. 40004

Honorable Regina Rapier Beckman  
Counsel for Salt River Electric  
Fulton, Hubbard & Hubbard  
117 East Stephen Foster Avenue  
P.O. Box 88  
Bardstown, KY. 40004 0088

  
Secretary of the Commission

SB/hv  
Enclosure

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

SALT RIVER ELECTRIC )  
COOPERATIVE CORPORATION )  
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ALLEGED FAILURE PURSUANT TO )  
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SECTION 42, RULE 420H, RULES )  
FOR EMPLOYEES, TOOLS AND )  
PROTECTIVE EQUIPMENT )

CASE NO. 99-112

O R D E R

On March 31, 1999, the Commission directed Salt River Electric Cooperative Corporation ("Salt River") to appear at a hearing and to show cause why it should not be penalized, pursuant to KRS 278.990(1), for its alleged violations of the National Electric Safety Code ("NESC") that the Commission enforces pursuant to 807 KAR 5:041, Section 3. Salt River's employee violated NESC Section 42, Rule 420H. Employee Billy Marks failed to use the proper protective tools and equipment.

After commencement of this proceeding, Salt River and Commission Staff entered into negotiations to resolve all outstanding issues. On September 20, 1999, they executed a Settlement Agreement which is appended hereto. In reviewing the Settlement Agreement, the Commission considered, *inter alia*, the circumstances and seriousness surrounding the incident that is the subject of this proceeding, including the

fact that Salt River has not had a fatality from electric shock in 60 years and Salt River's effort to comply with the Commission's safety regulations. Salt River took immediate disciplinary steps, changed the disciplinary system, and provided a documented procedure for every job. After reviewing the Settlement Agreement, and being otherwise sufficiently advised, the Commission finds that the Agreement is in accordance with the law, does not violate any regulatory principle, results in a reasonable resolution of this case, and is in the public interest.


IT IS THEREFORE ORDERED that:

1. The Settlement Agreement is incorporated into this Order as if fully set out herein.
2. The terms and conditions set forth in the Settlement Agreement are hereby adopted and approved.
3. Within 10 days of the date of this Order, Salt River shall pay to the Commonwealth of Kentucky the sum of Two Hundred Dollars (\$200). This payment shall be made in the form of cashier's check payable to the Kentucky State Treasurer and shall be mailed or delivered to the Office of General Counsel, Public Service Commission, 211 Sower Boulevard, Post Office Box 615, Frankfort, Kentucky 40602.
4. This case is closed and is hereby removed from the Commission's docket.

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

By the Commission

ATTEST:

  
Mark J. Huelman  
Executive Director

**APPENDIX**

APPENDIX TO AN ORDER OF THE  
KENTUCKY PUBLIC SERVICE COMMISSION

IN CASE NO. 99-112

DATED 2/8/2000



COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

SALT RIVER ELECTRIC )  
COOPERATIVE CORPORATION )

\_\_\_\_\_ )

CASE NO. 99-112

ALLEGED FAILURE PURSUANT TO )  
807 KAR 5:041, SECTION 3, TO )  
COMPLY WITH NATIONAL ELECTRIC )  
SAFETY CODE, 1990 EDITION, )  
SECTION 42, RULE 420H, RULES )  
FOR EMPLOYEES, TOOLS AND )  
PROTECTIVE EQUIPMENT )

SETTLEMENT AGREEMENT

This Settlement Agreement, made and entered into on this 20<sup>th</sup> day of September, 1999, between Salt River Electric Cooperative Corporation ("Salt River") and the Staff of the Public Service Commission ("Commission Staff").

WITNESSETH:

WHEREAS, Commission Staff issued a Utility Accident Investigation Report ("Investigation Report") dated January 11, 1999 detailing its investigation of an incident which occurred on August 28, 1998 involving Salt River employees, Travis Burns and Billy Marks. Billy Marks and Travis Burns were assigned the job task of connecting a single-phase 7200-volt underground primary meter pole installation in the area of Spencer County, Kentucky called Possum Ridge. On August 28, 1998, Mr. Marks and Mr. Burns proceeded with the installation work. Mr. Burns disconnected the

underground cable feed which he believed to be energized. They jointly decided to address the installation as if it were an energized installation. Mr. Marks was working from the truck's bucket which had been elevated into position to connect the wires and cable. While making the connection, Mr. Marks received an electrical shock which produced two small thermal-like burns to the inside of his upper left arm. He was wearing his rubber gloves but not his rubber sleeves; and

WHEREAS, on March 31, 1999, the Public Service Commission ("Commission") entered a show cause Order in Case No. 99-112 against Salt River in which it found sufficient evidence to believe that Salt River failed to comply with Commission regulations; namely, National Electric Safety Code ("NESC") Section 42, Rule 420H, provides, "Employees shall use the personal equipment, the protective devices, and the special tools provided for their work...." Mr. Marks' failure to wear his rubber sleeves was a violation of Rule 420H. NESC standards are applicable to Salt River pursuant to 807 KAR 5:041, Section 3; and

WHEREAS, the Commission ordered Salt River to show cause why it should not be subject to the penalties of KRS 278.990(1) for its alleged violation(s) and the parties hereto desire to enter into this Settlement Agreement to resolve the issues raised by the Commission's show cause Order, and have in furtherance thereof entered into the stipulations included herein and set out below;

NOW, THEREFORE, the parties hereto mutually stipulate as follows:

1. Salt River is a Kentucky corporation doing business as an electric utility in the Commonwealth of Kentucky and is regulated by the Commission.

2. Salt River installs, operates, and maintains electric facilities throughout its service area within Kentucky.

3. Salt River has a duty to comply with the provisions of Chapter 278 of the Kentucky Revised Statutes and Commission regulations promulgated thereunder, including NESC.

4. As a result of the accident, Salt River has taken a more aggressive stance in training and enforcement of its safety rules, details of which are contained in its supplemental response filed May 20, 1999.

5. Commission regulation 807 KAR 5:041, Section 3, requires each utility, other than a natural gas utility (provided for by separate regulation), to comply with the NESC, including wearing rubber gloves and sleeves.

6. On August 28, 1998 Salt River employees, Billy Marks and Travis Burns were assigned the job task of connecting a single-phase 7200-volt underground primary meter pole installation in the area of Spencer County, Kentucky called Possum Ridge. On August 28, 1998, Mr. Marks and Mr. Burns proceeded with the installation work. Mr. Burns disconnected the underground cable feed which he believed to be energized. They jointly decided to address the installation as if it were an energized installation. Mr. Marks was working from the truck's bucket which had been elevated into position to connect the wires and cable. While making the connection, Mr. Marks received an electrical shock which produced two small thermal-like burns to the inside of his upper left arm. He was wearing his rubber gloves but not his rubber sleeves

7. These stipulations are proposed by Commission Staff and Salt River for purposes of reaching a settlement in Case No. 99-112. In the event such a settlement is not reached, these proposed stipulations will be withdrawn.

8. Nothing contained herein shall be construed as an admission of a violation of any Commission regulation by Salt River, nor shall the Commission's acceptance of this agreement be construed as a finding of a violation of a Commission regulation by Salt River, and the facts contained herein shall not be cited as precedent in any other proceeding except to enforce this Settlement Agreement.

NOW, THEREFORE, Salt River and Commission Staff agree that:

1. Salt River shall receive a civil penalty of Two Hundred Dollars (\$200).
2. Within 10 days after the entry of an Order approving this Settlement Agreement, Salt River shall pay to the Commonwealth of Kentucky Two Hundred Dollars (\$200). This payment shall be in the form of a cashier's check made payable to "Treasurer, Commonwealth of Kentucky," and shall be mailed or delivered to the Office of General Counsel, Public Service Commission, 730 Schenkel Lane, Post Office Box 615, Frankfort, Kentucky 40602.
3. This agreement is subject to the acceptance of and approval by the Commission.
4. Nothing contained herein shall be construed as an admission of a violation of any Commission regulation by Salt River, nor shall the Commission's acceptance of this agreement be construed as a finding of a violation of a Commission regulation by Salt River. This Settlement Agreement and stipulations contained herein may not be cited in any other matter or proceeding except they may be used in a proceeding

between the Commission and Salt River to enforce this Settlement Agreement. This case shall be terminated upon entry of a Commission Order accepting this Settlement Agreement in satisfaction of the show cause Order of March 31, 1999.

5. If the Commission fails to accept and approve this Settlement Agreement in its entirety, this proceeding shall go forward and each of the terms of the Settlement Agreement or any matters raised during settlement negotiations or contained herein shall not be binding on any of the signatories.

6. If the Commission accepts and adopts this Settlement Agreement in its entirety and enters an Order in this proceeding to that effect, Salt River shall not apply for rehearing in this matter nor bring an action for judicial review of that Order.

AGREED TO BY:

SALT RIVER ELECTRIC COOPERATIVE CORPORATION

By

*Larry Hester*  
(name)

10/8/99  
(date)

*General Manager*  
(title)

*Regina Rapiere Beckman*

Regina Rapiere Beckman  
Counsel for Salt River Electric Cooperative Corporation

10/8/99  
(date)

PUBLIC SERVICE COMMISSION OF KENTUCKY

By

*Dale Wright*  
Dale Wright, Staff Attorney

10/20/99  
(date)



COMMONWEALTH OF KENTUCKY  
**PUBLIC SERVICE COMMISSION**  
730 SCHENKEL LANE  
POST OFFICE BOX 615  
FRANKFORT, KENTUCKY 40602  
www.psc.state.ky.us  
(502) 564-3940  
Fax (502) 564-3460

**Ronald B. McCloud, Secretary**  
**Public Protection and**  
**Regulation Cabinet**

**Helen Helton**  
**Executive Director**  
**Public Service Commission**

**Paul E. Patton**  
**Governor**

January 14, 2000

Ms. Helen C. Helton  
Executive Director  
Public Service Commission  
P. O. Box 615  
Frankfort, Kentucky 40602

Re: Salt River Electric Cooperative Corporation  
Case No. 99-112

Dear Ms. Helton:

Attached hereto is the Settlement Agreement for filing in the main case file of the above-referenced case.

Sincerely,

A handwritten signature in black ink, appearing to read "Dale Wright".

Dale Wright  
Staff Attorney

vh

cc: Parties of Record w/attachment



COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

SALT RIVER ELECTRIC )  
COOPERATIVE CORPORATION )  
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CASE NO. 99-112

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underground cable feed which he believed to be energized. They jointly decided to address the installation as if it were an energized installation. Mr. Marks was working from the truck's bucket which had been elevated into position to connect the wires and cable. While making the connection, Mr. Marks received an electrical shock which produced two small thermal-like burns to the inside of his upper left arm. He was wearing his rubber gloves but not his rubber sleeves; and

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4. As a result of the accident, Salt River has taken a more aggressive stance in training and enforcement of its safety rules, details of which are contained in its supplemental response filed May 20, 1999.

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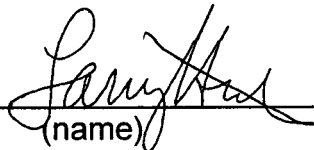
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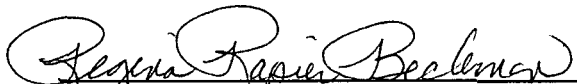
AGREED TO BY:

SALT RIVER ELECTRIC COOPERATIVE CORPORATION

By   
(name)

10/8/99  
(date)

General Manager  
(title)

  
Regina Rapien Beckman  
Counsel for Salt River Electric Cooperative Corporation

10/8/99  
(date)

PUBLIC SERVICE COMMISSION OF KENTUCKY

By   
Dale Wright, Staff Attorney

10/20/99  
(date)



COMMONWEALTH OF KENTUCKY  
**PUBLIC SERVICE COMMISSION**  
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(502) 564-3940  
Fax (502) 564-1582

**Ronald B. McCloud, Secretary**  
**Public Protection and**  
**Regulation Cabinet**

**Helen C. Helton**  
**Executive Director**  
**Public Service Commission**

**Paul E. Patton**  
**Governor**

August 31, 1999

Ms. Regina Rapier Beckman  
117 East Stephen Foster Avenue  
Bardstown, Kentucky 40004

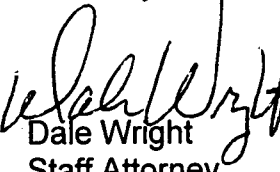
Re: Salt River Electric Cooperative Corporation  
Show Cause Cases 99-111 and 99-112

Dear Ms. Beckman:

Please find enclosed the original and one copy of Settlement Agreements in Case Nos. 99-111 and 99-112. You will notice that the recommended civil penalties are on the low side because of Salt River's excellent record and the immediate action taken in these two cases.

Please discuss these two matters with your client and if there is any problem, be sure to contact me. My telephone number is 502/564-3940, Extension 235.

Sincerely,

  
Dale Wright  
Staff Attorney

DW:v

Enclosures



COMMONWEALTH OF KENTUCKY  
**PUBLIC SERVICE COMMISSION**  
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**Ronald B. McCloud, Secretary**  
**Public Protection and**  
**Regulation Cabinet**

**Helen Helton**  
**Executive Director**  
**Public Service Commission**

**Paul E. Patton**  
**Governor**

May 11, 1999

Hon. Regina Rapier Beckman  
Fulton, Hubbard & Hubbard  
117 East Stephen Foster Avenue  
P. O. Box 88  
Bardstown, Kentucky 40004-0088

Re: Case Nos. 99-111 and 99-112  
Salt River Electric Cooperative Corporation

Dear Ms. Beckman:

Attached is a copy of the memorandum which is being filed into the record of the above-referenced case. If you have any comments that you would like to make regarding the contents of the informal conference memorandum, please do so within five days of receipt of this letter. Should you have any questions regarding same, please contact Dale Wright at (502) 564-3940, Extension 235.

Sincerely,  
  
Helen C. Helton  
Executive Director

Attachment



INTRA-AGENCY MEMORANDUM

KENTUCKY PUBLIC SERVICE COMMISSION

TO: Main Case File Nos. 99-111 and 99-112

FROM: Dale Wright *DW*  
Attorney

DATE: May 11, 1999

RE: Salt River Electric Cooperative Corporation ("Salt River")  
Case Nos. 99-111 and 99-112

An informal conference was held at the Public Service Commission offices in Frankfort, Kentucky on May 7, 1999. Present and representing the PSC was Dale Wright, Martha Morton and John Land and present and representing Salt River was Regina Rapier Beckman, Esq., Larry Hicks and Bobby Simpson.

It was first noted that the Utility Accident Investigation Report attached and made a part of Case No. 99-111 is misplaced and, in fact, is the report that should be attached to and made a part of Case No. 99-112. It is likewise with the report attached to and made a part of Case No. 99-112, it should be attached to and be a part of Case No. 99-111.

It was immediately established that there was no genuine issues of fact concerning either Case No. 99-111 and 99-112 and that the established facts could be properly stipulated to. The accident related to Case No. 99-111 occurred on September 23, 1998 and in Case No. 99-112 the accident occurred on July 28, 1998. The entire discussion was a general one which included both cases. It is acknowledged that Salt River operates one of the safest electrical utilities in operation in Kentucky. There have been no work related electrical fatalities in 60 years.

It was noted the Salt River took remedial measures immediately after each accident. In one case the employee was suspended without pay for three days. Other measures to better document accidents and immediately address the issues in each case have been taken. More aggressive attention to the safety rules and practical application are being applied by Salt River. Discipline is immediate and serious.

Training and education was also discussed short and long term.

Salt River, by counsel, Ms. Beckman, is going to file in the record a supplemental response and therein detail Salt River's action, efforts and plans.

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

RECEIVED  
MAY 20 1999  
PUBLIC SERVICE  
COMMISSION

Matter of:

SALT RIVER ELECTRIC )  
COOPERATIVE CORPORATION )  
\_\_\_\_\_ )  
\_\_\_\_\_ )

ALLEGED FAILURE PURSUANT TO )  
807 KAR 5:041, §3, TO COMPLY )  
WITH NATIONAL ELECTRIC SAFETY )  
CODE, 1990 EDITION, SECTION 42, RULE )  
420H, RULES FOR EMPLOYEES, TOOLS )  
AND PROTECTIVE EQUIPMENT )

CASE NO. 99-112

SUPPLEMENTAL RESPONSE

Pursuant to the informal conference that was held at the Public Service Commission offices in Frankfort on May 7, 1999, and a memorandum incorporating discussions therefrom, counsel for Salt River Electric files the following supplemental response to this case:

1. It has always been Salt River's policy that any time an employee is working hands on with an energized primary line, the employee must have on both gloves and sleeves. After the incident which is the subject of this action, Salt River both reinforced this policy and increased the application of this policy. Salt River's policy now requires that any time anyone is working within five feet of energized primary line, the employee must have both gloves and sleeves on. Salt River held a safety meeting to make this policy very clear to its employees.

2. Salt River has also taken a more aggressive stance on safety instruction and updates for its employees. Previously, Salt River's safety instruction program included a time for independent study by employees to review safety rules and regulations. However, to make sure that employees are understanding and retaining the knowledge learned while studying safety rules, Salt River is adding an interactive time whereby discussions, questions and answers will take place after

employees have had an opportunity to study the rules. This will make sure that the employees adequately understand the rules and will give all an opportunity to discuss any concerns they may have.

3. Salt River has also increased its disciplinary methods through its work rules both by increasing penalties for any violations and giving employees fewer steps to reach severe penalties. Prior to the implementation of the new work rules, for many offenses an employee could receive the discipline of "informal counseling." The discipline of "informal counseling" required no record keeping and was just a discussion with the employee. This method of discipline has been deleted as we believe that by documenting all warnings and discipline, Salt River will be able to better track any employee who need further attention in the areas of safety. Also Salt River has increased the amount of time that a violation remains on an employee's record. Prior to the implementation of the new rules, a violation only stayed on the person's record for six months. Now, an employee will carry any discipline for a period of two years. Copies of both the work rules that were implemented in July 20, 1995, and the work rules that were later implemented in November of 1998, are attached hereto.

4. Salt River has also implemented the checklist for supervisors to use when reviewing a site. This written inspection report allows the supervisor to note all of the safety requirements and also provides a space for any additional comments. These inspection reports will then be turned in and maintained by the safety advisor. This checklist will increase the communications among the supervisors so that employees can be tracked on their violations in a very quick manner. A copy of the checklist is attached hereto.

5. In response to this specific accident, attached is the supervisor's report for a "near miss." The "near miss" program used by Salt River requires that after any incident the employee involved



in the incident and all other employees at Salt River involved in field work will have a meeting and discussion concerning the problems and resolutions of the situation.

Further discipline was handed out and this employee was suspended for one day and the supervisor involved was also given informal counseling. (as noted earlier this is a discipline method that is not longer in use).

FULTON, HUBBARD & HUBBARD



Regina Rapiel Beckman  
117 East Stephen Foster Avenue  
P.O. Box 88  
Bardstown, Kentucky 40004  
(502) 348-6457

# *Salt River Electric Cooperative Corporation*

## **WORK RULES**

The Cooperative realizes that no single set of rules can cover every aspect of conduct. Therefore, discipline in these cases or situations which fall outside these rules will be considered and weighed on a fair basis.

Any suspension resulting from these Work Rules will be without pay.

These Work Rules have been designed to use Progressive Discipline as a way to insure that Salt River Electric Cooperative Corporation is able to be "the leading partner in providing service with excellence."

Discipline will be administered within 3 working days of the discovery of the infraction.

Disciplinary action will remain in an "active" status for a running 6 months. At the end of that time, the Disciplinary action occurring 6 months or more before will not be considered in current Disciplinary Proceedings.

## GROUP I

These problems generally result in informal counseling, but do not require a notation in the disciplinary record of the employee.

Repeated occurrences of informal counseling (more than three (3) occurrences within a six-month period) will require GROUP II action.

1. Failure to record attendance properly (non-deliberate).
2. Unexcused tardiness (without a valid reason for tardiness).
3. Abuse of established break and lunch time policy.
4. Failure to take ordinary care of Cooperative property resulting in damage.
5. Posting or altering any matter on bulletin boards or Company property or removing any posted materials from bulletin boards, without Supervisor's approval.
6. Attending to personal affairs or performing work other than Cooperative duties while on paid work time, without Supervisor's consent.
7. Unintentional failure to observe instructions of Supervisor.
8. Smoking in areas deemed restricted, but not hazardous.
9. Work performance not up to established standards (i.e., inefficiency, misuse of work time, misuse and/or waste of materials).

## GROUP II

These problems generally result in 4 steps of discipline:

- 1 - A verbal reprimand
  - 2 - A written reprimand with suspension from work without pay for one (1) day
  - 3 - A written reprimand with suspension from work without pay for three (3) days
  - 4 - A discharge
- 
1. Continued refusal to work a reasonable amount of overtime as per contract.
  2. Creating or contributing to unsanitary or unsafe working conditions.
  3. Inappropriate conduct on the Cooperative premises or work site that interferes with work.
  4. Unauthorized use or tampering with data processing/word processing equipment, computer applications (programs) or files.
  5. Continued inability to get along with supervisor and/or co-workers causing impact on operations.

## GROUP III

These problems generally result in 3 steps of discipline:

- 1 - A written reprimand with suspension from work without pay for one (1) day
  - 2 - A written reprimand with suspension from work without pay for five (5) days
  - 3 - A discharge
- 
1. Removal of Cooperative property from premises without proper permission.
  2. Failure to use safety devices or equipment, and failure to comply with safety precautions.
  3. Failure to report an on-the-job accident or citation.
  4. Violation of policy and/or procedure (including safety procedures that results in harm to employees or damage to property.
  5. Failure to wear prescribed uniform or apparel.

## GROUP IV

These problems generally result in only 2 steps of discipline. They are very serious offenses and the severity of the discipline indicates to the employee that continued employment is in jeopardy:

- 1 - A written reprimand with suspension from work without pay for five (5) days
  - 2 - Discharge
1. Refusal to carry out orders.
  - 2.. Any act which is seriously detrimental to the well-being of another employee.
  3. Solicitation (for personal use) of gifts, rewards, or payment of any kind from any Cooperative vendor or potential vendor.
  4. Deliberately falsifying reason for absences.
  5. Use of Intoxicating Beverage or Illegal Substance while on Stand-By Duty.

## GROUP V

These problems generally result in only 1 step of discipline --- discharge. They are acts of misconduct so serious that, in and of themselves, they cause the employment relationship to be broken.

1. Willful damage of Cooperative equipment or property.
2. Theft (of any kind) while on or about Cooperative property.
3. Possession of weapons, firearms, or explosives on the Cooperative's property without proper authorization. (Hunting equipment left in personal vehicles while parked on Cooperative property does not apply.)
4. Possession or use of Illegal Substance or working under the influence of any Intoxicant or Illegal Substance on the Cooperative's premises or work site.
5. Absence from work for two (2) consecutive days without valid reason or Supervisor's consent.
6. Unauthorized changing or falsifying of any Cooperative records or files.
7. Unauthorized use of or tampering with data processing or word processing applications (programs) or files in which confidential or sensitive information is contained.
8. Sexual harassment.
9. Conviction of any drug related, theft related, or sex related crime.
10. Making a false police report, false insurance claim, or false report of personal injury.

# *Salt River Electric Cooperative Corporation*

## **WORK RULES**

The Cooperative realizes that no single set of rules can cover every aspect of conduct. Therefore, discipline in these cases or situations, which fall outside these rules, will be considered and weighed on a fair basis.

Any suspension resulting from these Work Rules will be with out pay.

These Work Rules have been designed to use Progressive Discipline.

Discipline will be administered within 3 working days of the discovery of the in-fraction.

Disciplinary action will remain in an "active" status for a running 2 years.

Possession or use of Illegal Substance or working under the influence of any intoxicant or illegal substance on the Cooperative's premises or work site and inappropriate sexual harassment will be disciplined according to the respective Board Policies.



## GROUP I

These problems generally result in 5 steps of discipline:

- 1 - A verbal reprimand
- 2 - A written reprimand with suspension from work without pay for one (1) day
- 3 - A written reprimand with suspension from work without pay for three (3) days
- 4 - A written reprimand with suspension from work without pay for ten (10) days
- 5 - A discharge

1. Refusal to work a reasonable amount of overtime as per contract.
2. Creating or contributing to unsanitary or unsafe working conditions.
3. Inappropriate conduct on the Cooperative premises or work site that interferes with work.
4. Unauthorized use or tampering with data processing/word processing equipment, computer applications (programs) or files.
5. Failure to record attendance properly (non-deliberate).
6. Unexcused tardiness (without a valid reason for tardiness).
7. Abuse of established break and lunchtime policy.
8. Failure to take ordinary care of Cooperative property resulting in damage.

9. Posting or altering any matter on bulletin boards or Company property or removing any posted materials from bulletin boards, without supervisor's approval.
10. Attending to personal affairs or performing work other than Cooperative duties while on paid work time, without Supervisor's consent.
11. Unintentional failure to observe instructions of Supervisor.
12. Smoking in areas deemed restricted, but not hazardous.
13. Work performance not up to established standards (i.e., inefficiency, misuse of work time, misuse and/or waste of materials).

## GROUP II

These problems generally result in 4 steps of discipline:

- 1 - A written reprimand with suspension from work without pay for one (1) day
- 2 - A written reprimand with suspension from work without pay for five (5) days
- 3 - A written reprimand with suspension from work without pay for ten (10) days
- 4 - A discharge

1. Removal of Cooperative property from premises without proper permission.
2. Failure to use safety devices or equipment, and/or failure to comply with safety precautions.
3. Failure to report an on-the-job accident or citation.
4. Inability to get along with supervisor and/or co-workers causing impact on operations.
5. Unauthorized disclosure of known confidential information affecting employees and/or customers of Salt River ECC.
6. Failure to wear prescribed uniform or apparel.

## GROUP III

These problems generally result in only 2 steps of discipline. They are very serious offenses and the severity of the discipline indicates to the employee that continued employment is in jeopardy:

- 1 - A written reprimand with suspension from work without pay for five (5) days
  - 2 - Discharge
- 
1. Refusal to carry out orders.
  2. Any act which is seriously detrimental to the well being of ones self or another employee.
  3. Solicitation (for personal use) of gifts, rewards, or payment of any kind from any Cooperative vendor or potential vendor.
  4. Deliberately falsifying reason for absences.
  5. Use of Intoxicating Beverage or Illegal Substance while on Stand-By Duty.

## GROUP IV

These problems generally result in only 1 step of discipline --- discharge. They are acts of misconduct so serious that, in and of themselves, they cause the employment relationship to be broken.

1. Willful damage of Cooperative equipment or property.
2. Theft (of any kind) while on or about Cooperative property.
3. Possession of weapons, firearms, or explosives on the Cooperative's property without proper authorization. (Hunting equipment left in personal vehicles while parked on Cooperative property does not apply.)
4. Absence from work for two (2) consecutive days without valid reason or Supervisor's consent.
5. Unauthorized changing or falsifying of any Cooperative records or files.
6. Unauthorized use of or tampering with data processing or word processing applications (programs) or files in which confidential or sensitive information is contained.
7. Conviction of any drug related, theft related, or sex related crime.
8. Making a false police report, false insurance claim, or false report of personal injury.



**SALT RIVER SUPERVISOR  
INSPECTION REPORT**

LOCATION \_\_\_\_\_

DATE \_\_\_\_/\_\_\_\_/\_\_\_\_

INSPECTOR \_\_\_\_\_

TIME \_\_\_\_\_ AM \_\_\_\_ PM \_\_\_\_

CREW SUPERVISOR \_\_\_\_\_

\_\_\_\_ MAINTENANCE    \_\_\_\_ CONSTRUCTION    \_\_\_\_ HOT CREW    \_\_\_\_ METER READER

TRUCK NOS. _____	SAT	UNSAT	NA	COMMENTS
Traffic Control Signs				
Flagman				
Cones				
Grounding Line				
Truck				
Voltage Tester				
Personal Protective Equipment Ear Plugs				
Safety Glasses				
Hard Hats				
Rubber Gloves				
Leather Gloves				
Trucks Condition				
Position				
Explosives Storage				
Other Observations				
Employees On Job				

CONSTRUCTIVE DISCIPLINE FORM

EMPLOYEE NAME Brian Barnett JOB TITLE 3rd Class Lineman  
DATE 9-25-1998 TIME 08:00 AM DEPT Bullett County Operation

REASON FOR DISCIPLINE

ATTENDANCE  SAFETY  PERFORMANCE  OTHER

Describe specific problem(s) and employee behaviors leading to this disciplinary action:

Failure to use safety equipment and failure to comply with safety precautions

This Disciplinary Notice is:

- VERBAL REPRIMAND  WRITTEN WARNING
- SUSPENSION WITHOUT PAY FOR 1 DAYS TO BEGIN 9-28-98 AND END 9-29-98
- DISCHARGE FOR MISCONDUCT DESCRIBED ABOVE.
- OTHER \_\_\_\_\_

To avoid further discipline (except in cases of discharge) the employee must:

He must follow all policies & safety procedures that have been given to him. The particular time is not wearing rubber gloves.

SUPERVISOR: Please be specific and tell the employee exactly what behavior will be necessary to avoid further discipline.

EMPLOYEE: Please read this disciplinary action carefully. It contains important information. Your signature below indicates this disciplinary action has been discussed with you. It does not indicate that you agree with the contents.

EMPLOYEE SIGNATURE Brian C. Barnett DATE 9-25-98  
 SUPERVISOR SIGNATURE Albert G. Cahoe DATE 9-25-98  
 UNION STEWARD SIGNATURE Byron J. Jones DATE 9-25-98  
 MANAGER APPROVAL [Signature] DATE 9/24/98

CONSTRUCTIVE DISCIPLINE FORM

EMPLOYEE NAME Randy Nalley JOB TITLE 1st Class Lineman  
DATE 9-25-98 TIME 08:50 DEPT BC Operating

REASON FOR DISCIPLINE

ATTENDANCE  SAFETY  PERFORMANCE  OTHER

Describe specific problem(s) and employee behaviors leading to this disciplinary action:

Informal Counseling with Brian Bissett  
Group # 1

This Disciplinary Notice is:

- VERBAL REPRIMAND  WRITTEN WARNING
- SUSPENSION WITHOUT PAY FOR \_\_\_\_\_ DAYS TO BEGIN \_\_\_\_\_ AND END \_\_\_\_\_
- DISCHARGE FOR MISCONDUCT DESCRIBED ABOVE.
- OTHER \_\_\_\_\_

To avoid further discipline (except in cases of discharge) the employee must:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

SUPERVISOR: Please be specific and tell the employee exactly what behavior will be necessary to avoid further discipline.

EMPLOYEE: Please read this disciplinary action carefully. It contains important information. Your signature below indicates this disciplinary action has been discussed with you. It does not indicate that you agree with the contents.

EMPLOYEE SIGNATURE Randy Nalley DATE 9-25-98  
 SUPERVISOR SIGNATURE Albert C. Cobbe DATE 9-25-98  
 UNION STEWARD SIGNATURE Brian Bissett DATE 9-25-98  
 MANAGER APPROVAL \_\_\_\_\_ DATE \_\_\_\_\_



**SUPERVISOR'S REPORT  
FOR  
NEAR MISS**

Date of Incident: 9-22-98

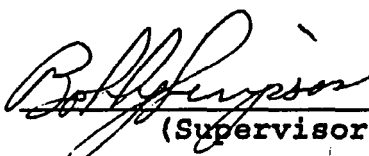
Time: 3:30

Employee(s) Involved Brian Barnett

Location: Hickory Acres Lot 36

Description of Incident: Got cross natural #120 service wire, it held him a short time. Bendy rally shock ladder this broke his contact

Follow Up: Didn't have Rubber gloves on

Signed:   
(Supervisor)

Date of Report: 9-24-98



COMMONWEALTH OF KENTUCKY  
**PUBLIC SERVICE COMMISSION**

730 SCHENKEL LANE  
POST OFFICE BOX 615  
FRANKFORT, KY. 40602  
(502) 564-3940

May 10, 1999

Larry Hicks  
General Manager  
Salt River Electric Cooperative  
Corp.  
111 West Brashear Avenue  
P. O. Box 609  
Bardstown, KY. 40004

Honorable Regina Rapier Beckman  
Counsel for Salt River Electric  
Fulton, Hubbard & Hubbard  
117 East Stephen Foster Avenue  
P.O. Box 88  
Bardstown, KY. 40004 0088

RE: Case No. 99-112

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

Sincerely,

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

Stephanie Bell  
Secretary of the Commission

SB/hv  
Enclosure

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

SALT RIVER ELECTRIC )  
COOPERATIVE CORPORATION )

) CASE NO. 99-112  
)

\_\_\_\_\_  
ALLEGED FAILURE PURSUANT TO )  
807 KAR 5:041, SECTION 3, TO COMPLY )  
WITH NATIONAL ELECTRIC SAFETY CODE, )  
1990 EDITION, SECTION 42, RULE 420H, )  
RULES FOR EMPLOYEES, TOOLS AND )  
PROTECTIVE EQUIPMENT )

O R D E R

Having been advised that Commission Staff and Salt River Electric Cooperative Corporation are currently in the midst of settlement negotiations in an attempt to resolve all of the issues in this case, the Commission HEREBY ORDERS that the hearing scheduled for May 11, 1999 is hereby cancelled, to be rescheduled at a later date if necessary.

Done at Frankfort, Kentucky, this 10th day of May, 1999.

By the Commission

ATTEST:

  
Executive Director



COMMONWEALTH OF KENTUCKY  
**PUBLIC SERVICE COMMISSION**

730 SCHENKEL LANE  
POST OFFICE BOX 615  
FRANKFORT, KY. 40602  
(502) 564-3940

April 30, 1999

Larry Hicks  
General Manager  
Salt River Electric Cooperative  
Corp.  
111 West Brashear Avenue  
P. O. Box 609  
Bardstown, KY. 40004

Honorable Regina Rapier Beckman  
Counsel for Salt River Electric  
Fulton, Hubbard & Hubbard  
117 East Stephen Foster Avenue  
P.O. Box 88  
Bardstown, KY. 40004 0088

RE: Case No. 99-112

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Sincerely,

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Stephanie Bell  
Secretary of the Commission

SB/hv  
Enclosure

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

SALT RIVER ELECTRIC )  
COOPERATIVE CORPORATION )  
\_\_\_\_\_ ) CASE NO. 99-112  
)  
ALLEGED FAILURE PURSUANT TO )  
807 KAR 5:041, SECTION 3, TO COMPLY )  
WITH NATIONAL ELECTRIC SAFETY CODE, )  
1990 EDITION, SECTION 42, RULE 420H, )  
RULES FOR EMPLOYEES, TOOLS AND )  
PROTECTIVE EQUIPMENT )

O R D E R

Salt River Electric Cooperative Corporation ("Salt River") having requested an informal conference in this matter, good cause having been shown, and being otherwise sufficiently advised, the Commission HEREBY ORDERS that an informal conference shall be held on May 7, 1999, at 11:00 a.m., Eastern Daylight Time, in Conference Room 2 of the Commission's offices at 730 Schenkel Lane, Frankfort, Kentucky.

Done at Frankfort, Kentucky, this 30th day of April, 1999.

By the Commission

ATTEST:

  
\_\_\_\_\_  
Executive Director

Law Offices  
**FULTON, HUBBARD & HUBBARD**

ERNEST N. FULTON  
(1883-1962)  
ELMER E. HUBBARD  
(1913-1995)

JOHN DOUGLAS HUBBARD  
REGINA RAPIER BECKMAN

MICHELLE BUCKLEY SPARKS  
JASON P. FLOYD

117 E. Stephen Foster Ave.

P.O. Box 88

Bardstown, Kentucky 40004-0088

April 19, 1999

Telephone

(502) 348-6457  
(502) 348-6458  
(502) 348-6459

FAX # 502 348-8748

Mr. Dale Wright  
Public Service Commission  
730 Schenkel Lane  
P. O. Box 615  
Frankfort, Kentucky 40602

RECEIVED  
APR 20 1999  
PUBLIC SERVICE  
COMMISSION

RECEIVED  
APR 20 1999  
GENERAL COUNSEL

Re: Case 99-112  
Salt River Electric  
Cooperative Corporation

Dear Mr. Wright:

Enclosed are an original and ten (10) copies of Salt River's response to the March 31, 1999, Order of the Public Service Commission.

Yours very truly,

FULTON, HUBBARD & HUBBARD



Regina Rapier Beckman

Enclosures

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

RECEIVED

APR 20 1999

PUBLIC SERVICE  
COMMISSION

IN THE MATTER OF:

SALT RIVER ELECTRIC )  
COOPERATIVE CORPORATION )  
\_\_\_\_\_ )

CASE NO. 99-112

ALLEGED FAILURE PURSUANT TO )  
807 KAR 5:041, SECTION 3, TO COMPLY )  
WITH NATIONAL ELECTRIC SAFETY CODE, )  
1990 EDITION, SECTION 42, RULE 420H, )  
RULES FOR EMPLOYEES, TOOLS AND )  
PROTECTIVE EQUIPMENT )

RESPONSE TO PUBLIC SERVICE COMMISSION  
ORDER DATED MARCH 31, 1999

Pursuant to the Commission's Order of March 31, 1999, Salt River Electric Cooperative Corporation ("Salt River") hereby files its Response in the above styled case.

1. In response to the allegations contained in paragraphs 1, 2, 3 and 4 of said Order, with reference to the Utility Accident Investigation Report, Salt River admits the allegations contained therein.

2. Salt River requests an informal conference with the Commission staff to consider the expeditious handling or disposition of this proceeding.

FULTON, HUBBARD & HUBBARD



Regina Rapiet Beckman  
117 East Stephen Foster Avenue  
Bardstown, Kentucky 40004  
(502) 348-6457  
Counsel for Salt River Electric  
Cooperative Corporation



COMMONWEALTH OF KENTUCKY  
**PUBLIC SERVICE COMMISSION**

730 SCHENKEL LANE  
POST OFFICE BOX 615  
FRANKFORT, KY. 40602  
(502) 564-3940

March 31, 1999

Larry Hicks  
General Manager  
Salt River Electric Cooperative  
Corp.  
111 West Brashear Avenue  
P. O. Box 609  
Bardstown, KY. 40004

RE: Case No. 99-112

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

Sincerely,

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

Stephanie Bell  
Secretary of the Commission

SB/hv  
Enclosure



Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1.  Addressee's Address

2.  Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

*Larry Hick*

4a. Article Number

*2 098 985 996*

4b. Service Type

Registered  Certified

Express Mail  Insured

Return Receipt for Merchandise  COD

7. Date of Delivery

*4-1-99*

5. Received By: (Print Name)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Addressee or Agent)

*X Gary C...*

PS Form 3811, December 1994 *HV 99-111 + 99-112* 102595-98-B-0229 Domestic Return Receipt

Thank you for using Return Receipt Service.

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

SALT RIVER ELECTRIC )  
COOPERATIVE CORPORATION )  
\_\_\_\_\_ ) CASE NO. 99-112  
)  
ALLEGED FAILURE PURSUANT TO )  
807 KAR 5:041, SECTION 3, TO COMPLY )  
WITH NATIONAL ELECTRIC SAFETY CODE, )  
1990 EDITION, SECTION 42, RULE 420H, )  
RULES FOR EMPLOYEES, TOOLS AND )  
PROTECTIVE EQUIPMENT )

O R D E R

Salt River Electric Cooperative Corporation ("Salt River") is a Kentucky corporation engaged in the generation, transmission, and distribution of electricity to the public for compensation for lights, heat, power, and other uses and is a utility subject to the Commission's jurisdiction. KRS 278.010(3)(a).

KRS 278.280(2) directs that the Commission is to prescribe rules and regulations for the performance of services by utilities. Pursuant to this statutory directive, the Commission promulgated administrative regulation 807 KAR 5:041, Section 3, which requires electric utilities to maintain their plant and facilities in accordance with the standards of the National Electric Safety Code, 1990 Edition ("NESC").

Commission Staff submitted to the Commission a Utility Accident Investigation Report, a copy of which is appended hereto, dated January 11, 1999, which alleges that:

1. Billy Marks and Travis Burns, employees of Salt River, were assigned the job task of connecting a single-phase 7,200 volt underground primary meter pole installation in the area of Spencer County, Kentucky called Possum Ridge.

2. On August 28, 1998, Mr. Marks and Mr. Burns proceeded with the installation work. Mr. Burns disconnected the underground cable feed which he believed to be energized. They jointly decided to address the installation as if it were an energized installation.

3. Mr. Marks was working from the truck's bucket which had been elevated into position to connect the wires and cable. While making the connection, Mr. Marks received an electrical shock which produced two (2) small thermal-like burns to the inside of his upper left arm. He was wearing his rubber gloves but not his rubber sleeves.

4. NESC, Section 42, Rule 420H, provides, "Employees shall use the personal equipment, the protective devices, and the special tools provided for their work . . . ." Mr. Marks' failure to wear his rubber sleeves was a violation of Rule 420H. NESC standards are applicable to Salt River pursuant to 807 KAR 5:041, Section 3.

The Commission, based upon the facts contained in the Utility Accident Investigation Report, finds sufficient evidence to believe that Salt River has failed to comply with 807 KAR 5:041, Section 3; and, NESC, Section 42, Rule 420H. The Commission, on its own motion, HEREBY ORDERS that:

1. Salt River shall submit to the Commission within 20 days of the date of this Order a written response to the allegations contained in the Utility Accident Investigation Report.

2. Salt River shall appear on May 11, 1999, at 10:00 a.m., Eastern Daylight Time, in Hearing Room 1 of the Commission's offices at 730 Schenkel Lane, Frankfort, Kentucky, for the purpose of presenting evidence regarding the alleged violation of Commission Regulation 807 KAR 5:041, Section 3 and NESC, Section 42, Rule 420H, and of showing cause, if any, why it should not be subject to the penalties prescribed in KRS 278.990(1) for the alleged violation.

3. The Utility Accident Investigation Report dated January 11, 1999 is hereby made a part of the record herein.

4. Any request for informal conference with Commission Staff to consider any matter which would expedite the handling or disposition of this proceeding shall be filed with the Commission no later than 20 days from the date of this Order.

Done at Frankfort, Kentucky, this 31st day of March, 1999.

By the Commission

ATTEST:

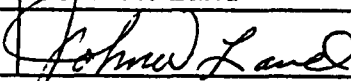
  
Executive Director

January 11, 1999

**UTILITY ACCIDENT  
 INVESTIGATION REPORT**

<b>Utility:</b>	Salt River Electric			
<b>Reported By:</b>	Robert L. Simpson			
<b>Dates &amp; Times</b>	<b>Accident Occurred:</b>	09/23/98 – Approximately 3:30 p.m.		
	<b>Utility Notified:</b>	09/24/98 – Approximately 8:30 a.m.		
	<b>PSC Notified:</b>	09/24/98 – Approximately 9:05 a.m.		
	<b>Investigated:</b>	09/25/98		
	<b>Written Report Rcvd:</b>	10/01/98		
<b>Location of Accident:</b>	Hickory Acres Trailer Park, Lot #36, Shepherdsville, Kentucky (Utility Map Location 090-14-4202B)			
<b>Description of Accident:</b>	Mr. Brian Barnett and Mr. Randy Nalley were making up a new service connection when the incident occurred. Mr. Barnett was standing on a ladder with the energized service lead and connector in one hand. At this time, he also reached out to get his squeeze on tool and inadvertently touched the service neutral. He received a shock at this time. Mr. Barnett was not wearing his rubber gloves at the time of the incident. Mr. Nalley was in charge at the work site when the incident occurred.			
<b>Victims:</b>				
<b>Name:</b>	Brian Barnett	<b>Fatal:</b>	No	<b>Age:</b> 26
<b>Addr./Empl.:</b>	111 West Brashear Avenue, Bardstown, Kentucky/Salt River Electric			
<b>Injuries:</b>	Shock			
<b>Witnesses:</b>	<b>Name</b>	<b>Address/Employment</b>		
	Randy Nalley	Employee - Salt River Electric		
<b>Sources of Information:</b>	<b>Name</b>	<b>Address/Employment</b>		
	Bobby Simpson	Employee - Salt River Electric		
	John W. Land, On-site Investigator	PSC Engineering Staff		
<b>Probable Violations:</b>	807 KAR 5:041, Section 3, National Electric Safety Code, 1990 Edition, Section 42, Rules for Employees; Rule 420 H., Tools and Protective Equipment; Rule 421.A., Duties of a First Level Supervisor or Person-in-Charge			

January 11, 1999

Line Clearances At Point of Accident:	Measured	Minimum Allowed by NESC	Applicable NESC Edition <sup>1</sup> 1990	Volt.	Constr. Date
Primary Phase:	N/A				
Date of Measurement:	N/A				
Approximate Temp.:	N/A				
Measurements Made By:	N/A				
Investigated By:	John W. Land				
Signed:					

- Attachments A. Salt River Electric's Accident Report  
B. Photographs of Accident Site

<sup>1</sup> Current edition adopted by the Commission. If clearances are not in compliance with the current edition, then the edition in effect when the facilities were last constructed or modified would apply.

**Attachment A**

---

**Salt River Electric's Accident Report**



# SALT RIVER ELECTRIC

111 West Brashear Avenue • Bardstown, Kentucky 40004  
(502) 348-3931 • (502) 955-9732 • Fax. (502) 348-1993

## ACCIDENT REPORT

RECEIVED

TO: John Land  
FROM: Robert L. Simpson, Director of Operations-Nelson District  
DATE: September 29, 1998

OCT 01 1998

DIVISION OF UTILITY  
ENGINEERING & SERVICES

\*\*\*\* \* \* \* \*

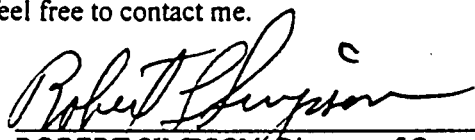
DATE OF ACCIDENT: September 23, 1998 @ 3:30 PM  
DATE OF INVESTIGATION: September 24, 1998  
INVESTIGATING PERSON: Robert L. Simpson, Les Taylor, Happy Cahoe and Tim Sharp  
LOCATION: 090-14-4202B  
Bullitt Co., KY  
ACCIDENT VICTIM: Brian Barnett  
D/H 06/01/98  
D/B 05/13/72  
WITNESS: Randy Nalley, Employee of Salt River ECC

### DESCRIPTION:

The job that was to be performed was to connect and set meter for a new trailer. The pole had been set and the wire was already run. The 37.5 KVA was feeding one other trailer at this time. Brian Barnett and Randy Nalley said they knew the service wire was hot. But thought they could connect the new service safely. B. Barnett had his crimping tool hanging on the neutral, took hold of the tool with his hand while he had his other hand on the hot service wire. B. Barnett received shock and was held to it, R. Nalley shook the ladder, this shook B. Barnett loose from the wire. B. Barnett didn't have his rubber gloves on. Salt River's Safety Rules says he should have. B. Barnett was checked out at Flaget Memorial Hospital, and checked okay. B. Barnett did not loose any time from work.

This accident was reported to the PSC on or about 9:05 AM on September 24, 1998. John Land and Robert Simpson went to the scene on September 25, 1998.

Should you have any questions, please feel free to contact me.

  
ROBERT SIMPSON, Director of Operations





# SALT RIVER ELECTRIC

*John Land*

111 West Brashear Avenue • Bardstown, Kentucky 40004  
(502) 348-3931 • (502) 955-9732 • Fax. (502) 348-1993

## ACCIDENT REPORT

# RECEIVED

TO: John Land  
FROM: Robert L. Simpson, Director of Operations-Nelson District  
DATE: September 29, 1998

SEP 29 1998  
DIVISION OF UTILITY  
ENGINEERING & SERVICES

\*\*\*\* \* \* \* \*

DATE OF ACCIDENT: September 23, 1998 @ 3:30 PM  
DATE OF INVESTIGATION: September 24, 1998  
INVESTIGATING PERSON: Robert L. Simpson, Les Taylor, Happy Cahoe and Tim Sharp  
LOCATION: 090-14-4202B  
Bullitt Co., KY  
ACCIDENT VICTIM: Brian Barnett  
D/H 06/01/98  
D/B 05/13/72  
WITNESS: Randy Nalley, Employee of Salt River ECC

### DESCRIPTION:

The job that was to be performed was to connect and set meter for a new trailer. The pole had been set and the wire was already run. The 37.5 KVA was feeding one other trailer at this time. Brian Barnett and Randy Nalley said they knew the service wire was hot. But thought they could connect the new service safely. B. Barnett had his crimping tool hanging on the neutral, took hold of the tool with his hand while he had his other hand on the hot service wire. B. Barnett received shock and was held to it, R. Nalley shook the ladder, this shook B. Barnett loose from the wire. B. Barnett didn't have his rubber gloves on. Salt River's Safety Rules says he should have. B. Barnett was checked out at Flaget Memorial Hospital, and checked okay. B. Barnett did not lose any time from work.

This accident was reported to the PSC on or about 9:05 AM on September 24, 1998. John Land and Robert Simpson went to the scene on September 25, 1998.

Should you have any questions, please feel free to contact me.

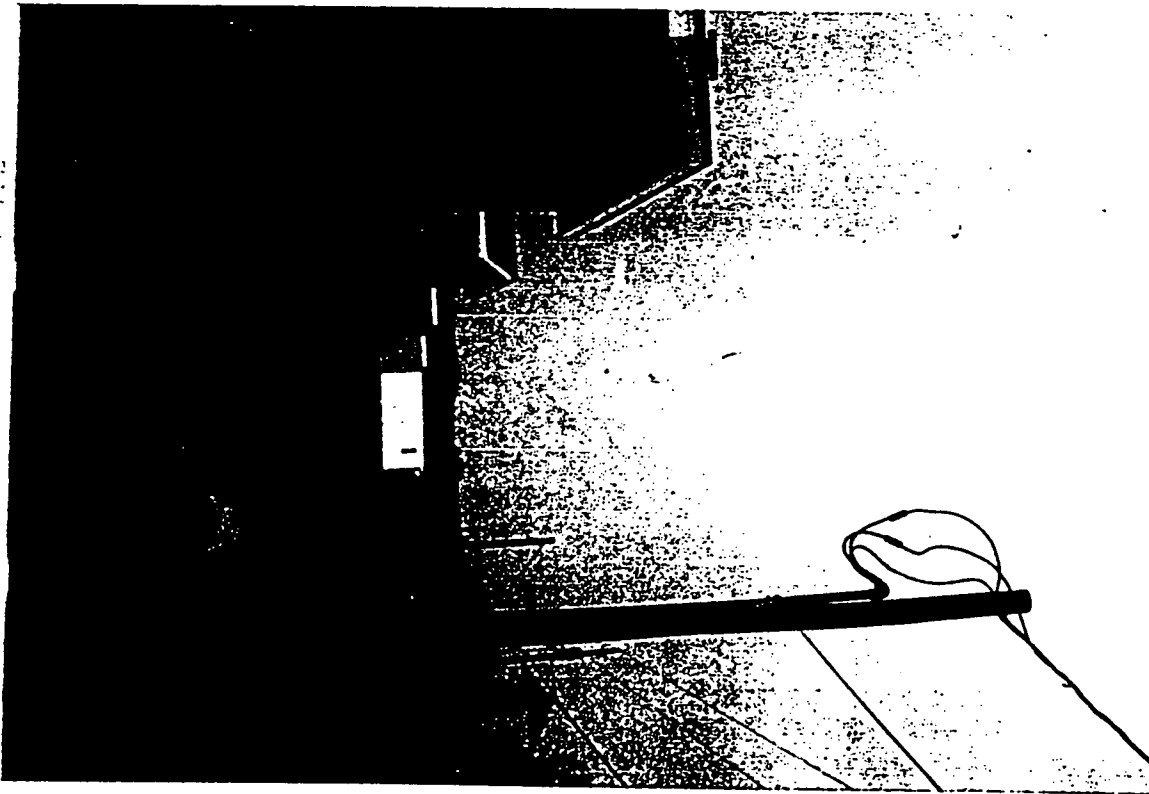
*Robert Simpson*  
ROBERT SIMPSON, Director of Operations

A Touchstone Energy™ Partner 

**Attachment B**

**Photographs of Accident Site**

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**CASE**

**NUMBER:**

99-212

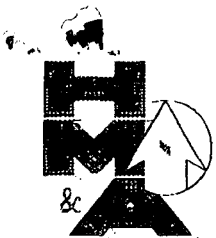
IN THE MATTER OF THE APPLICATION OF OHIO COUNTY WATER  
DISTRICT FOR AN ISSUANCE OF A CERTIFICATE OF PUBLIC  
CONVENIENCE AND NECESSITY FOR CONSTRUCTION OF THE SERIES I  
WATER SYSTEM IMPROVEMENTS, CONTRACT G

SEQ NBR	ENTRY DATE	REMARKS
0001	05/18/1999	Application.
0002	05/24/1999	Acknowledgement letter.
0003	05/27/1999	Letter to parties regarding case nature, i.e., construction only.
0004	06/08/1999	No deficiency letter.
M0001	07/09/1999	E MARTIN OHIO CO WD-MOTION FOR APPROVAL OF APPLICATION
0005	07/12/1999	Final Order entered.
0006	11/10/1999	1st reminder letter to James Porter cc: to E.F. Martin, Jr.re: as-built drawings
M0002	11/29/1999	E F MARTIN OHIO CO WD-RESPONSE TO NOV 9,99 LETTER
M0003	01/04/2000	OHIO CO WD RODMARTIN-COPIES OF CONTRACTS A,B,C,D,E,F,G SUMMARY PROJECT COSTS, CONSTRUCTION

V 11-I-254

34

99-212



"Established 1952"

# HUNTER MARTIN & ASSOCIATES, INC.

ENGINEERS & SURVEYORS

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

HUNTER H. MARTIN (1924 - 1997)  
Founder

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

MICHAEL GARDNER  
Vice President

BETTY J. GARDNER  
Secretary/Treasurer

January 3, 2000

Honorable Stephanie Bell, Secretary  
Kentucky Public Service Commission  
730 Shinkel Lane  
P. O. Box 615  
Frankfort, Ky 40602

Dear Mrs. Bell:

RE: OHIO COUNTY WATER DISTRICT - PUBLIC SERVICE COMMISSION CASE #98-015 AND

#99-212

Pursuant to your requirements and in accordance with the letter from the District's Attorney E.F. Martin, Jr. dated November 24, 1999, we are please to submit herewith 3 copies of the following information regarding the above referenced cases:

#### Contract A

Change Order No. A-1 dated October 9, 1998  
Change Order No. A-2 dated February 23, 1999  
Change Order No. A-3 dated March 12, 1999  
Change Order No. A-4 dated May 17, 1999  
Change Order No. A-5 dated December 22, 1999 (being processed for execution)  
Certification Letter to Kentucky Division of Water dated September 14, 1999  
Substantial Completion Letter dated September 28, 1999

#### Contract B

Change Order No. B-1 dated October 9, 1998  
Change Order No. B-2 dated February 23, 1999  
Change Order No. B-3 dated December 22, 1999 (being processed for execution)  
Certification Letter to Kentucky Division of Water dated September 14, 1999  
Substantial Completion Letter dated September 28, 1999

#### Contract C

Change Order C-1 dated October 12, 1998  
Change Order C-2 dated February 23, 1999  
Change Order C-3 dated March 30, 1999  
Change Order C-4 dated September 28, 1999 (being processed for execution)  
Certification Letter to Kentucky Division of Water dated September 14, 1999  
Substantial Completion Letter dated July 19, 1999

#### Contract D

Change Order No. D-1 dated February 23, 1999  
Change Order No. D-2 dated April 5, 1999  
Certification Letter to Kentucky Division of Water dated October 19, 1999  
Substantial Completion Letter dated October 26, 1999

RECEIVED  
JAN 04 2000  
PUBLIC SERVICE  
COMMISSION

**Contract E**

Change Order No. E-1 dated April 5, 1999

Change Order No. E-2 (Revised) dated May 25, 1999

Change Order No. E-3 dated September 20, 1999

Change Order No. E-4 dated November 12, 1999

Certification Letter to Kentucky Division of Water dated October 19, 1999

Substantial Completion Letter dated October 26, 1999

**Contract F**

Change Order No. F-1 dated April 5, 1999

Change Order No. F-2 dated April 27, 1999

Certification Letter to Kentucky Division of Water dated October 19, 1999

Substantial Completion Letter dated October 26, 1999

**Contract G**

Change Order No. G-1 dated November 10, 1999

Change Order No. G-2 dated December 22, 1999 (being processed for execution)

Certification Letter to Kentucky Division of Water dated November 30, 1999

Substantial Completion Letter dated November 30, 1999

**Record Plans** - for the entire district including Series I Improvements dated December, 1999. (28 Sheets)

**Summary of Project Costs (2 Sheets)**

**Notes to Summary of Project Cost (1 Sheet)**

**Summary of Construction Contracts**

Also, please note that 2 bound sets of Submittals/O & M Manuals are being transmitted under separate cover to the District for their records.

Should you have any questions, or need any additional information, please feel free to contact me.

Yours very truly,

HUNTER MARTIN & ASSOCIATES, INC.



Rod H. Martin, P.E.

RHM:as

C: Jim Porter, Superintendent, Ohio County Water District w/encls.

E. F. Martin, Attorney, w/encls. (except for Records Plans)

Mrs. Vicki Ray, Division of Water (Record Plans Only)

IN THE MATTER OF THE APPLICATION OF OHIO COUNTY WATER  
DISTRICT FOR AN ISSUANCE OF A CERTIFICATE OF PUBLIC  
CONVENIENCE AND NECESSITY FOR CONSTRUCTION OF THE SERIES I  
WATER SYSTEM IMPROVEMENTS, CONTRACT G

SEQ NBR	ENTRY DATE	REMARKS
0001	05/18/1999	Application.
0002	05/24/1999	Acknowledgement letter.
0003	05/27/1999	Letter to parties regarding case nature, i.e., construction only.
0004	06/08/1999	No deficiency letter.
M0001	07/09/1999	E MARTIN OHIO CO WD-MOTION FOR APPROVAL OF APPLICATION
0005	07/12/1999	Final Order entered.
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M0002	11/29/1999	E F MARTIN OHIO CO WD-RESPONSE TO NOV 9,99 LETTER
M0003	01/04/2000	OHIO CO WD RODMARTIN-COPIES OF CONTRACTS A,B,C,D,E,F,G SUMMARY PROJECT COSTS,CONSTRUCTION



1/4/2000 09-2.12

### CHANGE ORDER - CONTRACT "A"

ORDER NO.: A-1

DATE: OCTOBER 9, 1998

AGREEMENT DATE: SEPTEMBER 10, 1998

NAME OF PROJECT: SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "A"

OWNER: OHIO COUNTY WATER DISTRICT

CONTRACTOR: TOP GRADE EXCAVATING, INC.

The following changes are hereby made to the CONTRACT DOCUMENTS:

SEE ATTACHMENT NO. 1.

Justification:

SEE ATTACHMENT NO. 1.

Change to CONTRACT PRICE:

Original CONTRACT PRICE: \$ 323,039.00

Current CONTRACT PRICE adjusted by previous CHANGE ORDER \$ 323,039.00

The CONTRACT PRICE due to this CHANGE ORDER will be DECREASED by

(\$ 64,200.00 ) and INCREASED by \$ 157,205.00 for a NET

change of \$ 93,005.00

The new CONTRACT PRICE including this CHANGE ORDER will be \$ 416,044.00

Change to CONTRACT TIME:

The CONTRACT TIME will be N/A by - 0 - calendar days.

(Increased / Decreased)

The date for completion of all work will be DECEMBER 24, 1998

(Date)

Requested by: James E. Porter OWNER

Recommended by: [Signature] ENGINEER

Accepted by: [Signature] CONTRACTOR

From Bobby  
del. by Tom

# CHANGE ORDER - CONTRACT "A"

ORDER NO.: A-2  
DATE: FEBRUARY 23, 1999  
AGREEMENT DATE: SEPTEMBER 10, 1998

NAME OF PROJECT: SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "A"  
OWNER: OHIO COUNTY WATER DISTRICT  
CONTRACTOR: TOP GRADE EXCAVATING, INC.

The following changes are hereby made to the CONTRACT DOCUMENTS:  
**SEE ATTACHMENT NO. 1.**

Justification:

**SEE ATTACHMENT NO. 1.**

Change to CONTRACT PRICE:

Original CONTRACT PRICE: \$ 323,039.00

Current CONTRACT PRICE adjusted by previous CHANGE ORDER \$ 416,044.00

The CONTRACT PRICE due to this CHANGE ORDER will be DECREASED by

(\$ 0.00 ) and INCREASED by \$ 8,630.00 for a

NET change of \$ 8,630.00

The new CONTRACT PRICE including this CHANGE ORDER will be \$ 424,674.00

Change to CONTRACT TIME:

The CONTRACT TIME will be INCREASED by 106 calendar days.  
(Increased / Decreased)

The date for completion of all work will be APRIL 9, 1999.  
(Date)

Requested by: *James O. Doster* OWNER  
Recommended by: *[Signature]* ENGINEER  
Accepted by: *[Signature]* CONTRACTOR

*Engineer*

**OHIO COUNTY WATER DISTRICT**

**SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "A"**

**ATTACHMENT NO. 1**

**TO**

**CHANGE ORDER NO. A-2**

**CHANGES:**

This Change Order establishes a price for 8" cut-in valves and a price for plastic casing spacers used on all bores with casing. In addition, 1,200 linear feet of 4" SDR 21 PVC pipe is to be installed along Ammon Lane (see attached).

A time extension of 106 days is also granted.

The Contract Price shall be changed as follows:

**ADD THE FOLLOWING:**

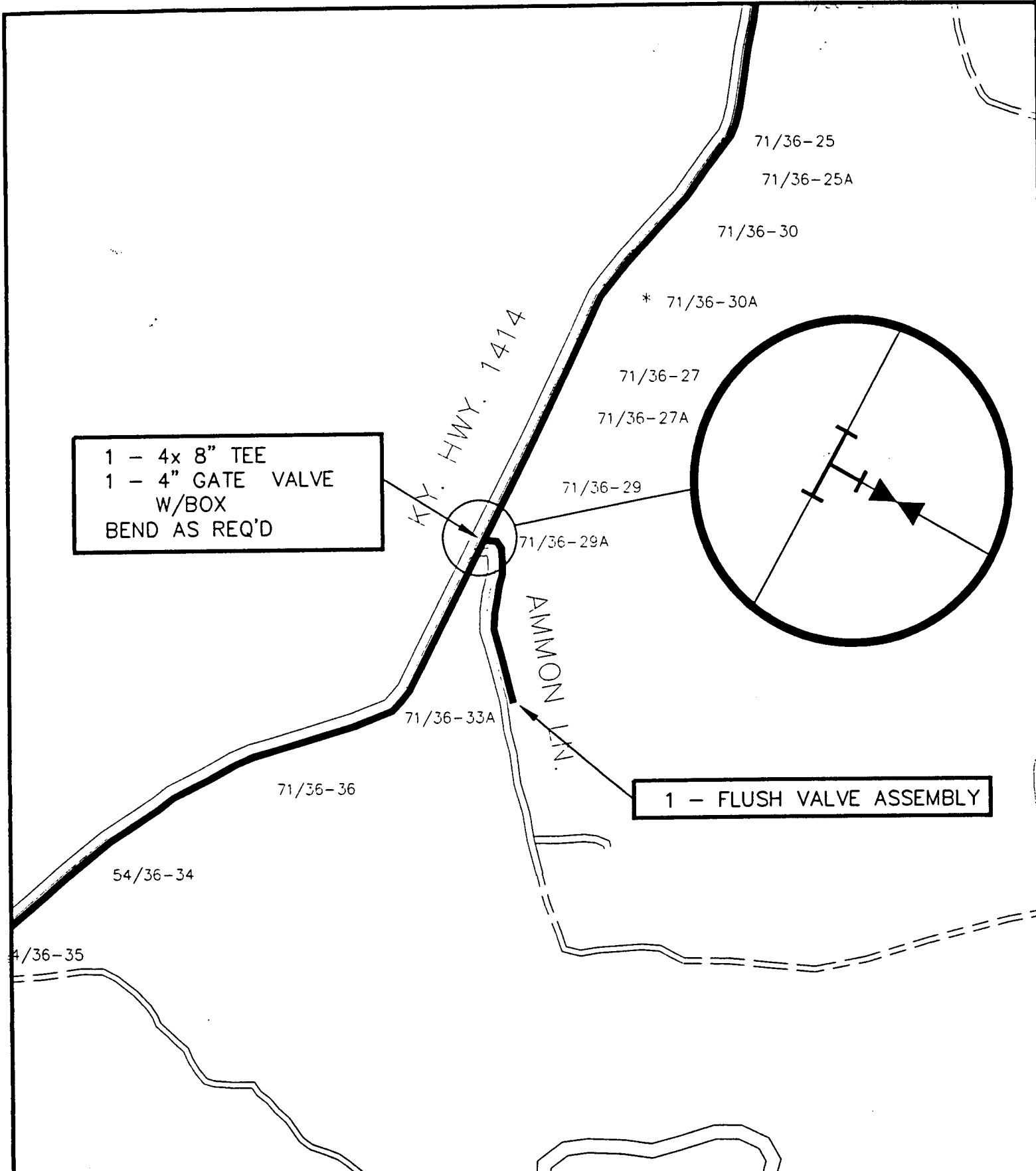
ITEM NO.	DESCRIPTION	QUAN.	UNIT	UNIT BID PRICE	AMOUNT
2.	WATER MAINS, PVC				
2.2	4" SDR 21	1200	LF	\$2.50	\$3,000.00
2.3	2" SDR 21	20	LF	\$2.00	40.00
3.	FITTINGS				
3.1	DUCTILE IRON, 8" SIZE	71	LBS.	\$2.00	142.00
3.2	DUCTILE IRON, 4" SIZE	30	LBS.	\$1.50	45.00
3.3	PVC 3" AND SMALLER	1	EA.	\$10.00	10.00
4.	VALVES, W/ CAST IRON BOX				
4.2	4" GATE	1	EA.	\$600.00	600.00
4.3	2" GATE	1	EA.	\$100.00	100.00
4.4	8" GATE (CUT-IN)	2	EA.	\$2,000.00	4,000.00
16.	SPACERS	20	EA.	\$34.65	693.00
	<b>TOTAL CHANGE ORDER A-2</b>				<b>\$8,630.00</b>

**JUSTIFICATION:**

The District has requested additional valves to be installed to assist them with maintenance. Ammon Lane will allow new customers to be served.

The time extension is granted for additional work which has been added.

At the District's December 29, 1998, meeting, a 45 day extension was granted which extended the Contract Time until February 7, 1999. At the District's meeting in January, the Contract Time was extended until February 28, 1999. At the District's meeting in February, the Contract Time was extended until April 9, 1999.



1 - 4x 8" TEE  
 1 - 4" GATE VALVE  
 W/BOX  
 BEND AS REQ'D

1 - FLUSH VALVE ASSEMBLY

 <b>HUNTER MARTIN &amp; ASSOCIATES, INC.</b> <small>ENGINEERS &amp; SURVEYORS        2220 LOWE OAK ROAD • PADUCAH KENTUCKY 42003        (502) 534-2737 • FAX (502) 534-2738</small>	Drawn by <b>SDC</b>	Checked by <b>TMH</b>	Title <b>WS187A03</b>	Date <b>10/20/03</b>	Project <b>CHANGE ORDER A2          NEW WATER LINE AT AMMON LN.          OHIO COUNTY WATER DISTRICT</b>	Sheet <b>1</b> of sheets

CHANGE ORDER - CONTRACT "A"

ORDER NO.: A-3

DATE: MARCH 12, 1999

AGREEMENT DATE: SEPTEMBER 10, 1998

NAME OF PROJECT: SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "A"

OWNER: OHIO COUNTY WATER DISTRICT

CONTRACTOR: TOP GRADE EXCAVATING, INC.

The following changes are hereby made to the CONTRACT DOCUMENTS:  
SEE ATTACHMENT NO. 1.

Justification:

SEE ATTACHMENT NO. 1.

Change to CONTRACT PRICE:

Original CONTRACT PRICE: \$ 323,039.00

Current CONTRACT PRICE adjusted by previous CHANGE ORDER \$ 424,674.00

The CONTRACT PRICE due to this CHANGE ORDER will be DECREASED by

(\$ 8,000.00 ) and INCREASED by \$ 8,600.00 for a

NET change of \$ 600.00

The new CONTRACT PRICE including this CHANGE ORDER will be \$ 425,274.00

Change to CONTRACT TIME:

The CONTRACT TIME will be N/A by N/A calendar days.

(Increased / Decreased)

The date for completion of all work will be APRIL 9, 1999

(Date)

Requested by: James C Porter OWNER

Recommended by: [Signature] ENGINEER

Accepted by: Billy [Signature] CONTRACTOR

4/28/99 - cc Billy

OHIO COUNTY WATER DISTRICT

SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "A"

ATTACHMENT NO. 1

TO

CHANGE ORDER NO. A-3

**CHANGES:**

The design for the pressure reducing assembly, which was added in Change order No. A-1, has been changed to utilize a 4 foot diameter precast concrete vault, as shown on the attached drawing.

The Contract Price shall be changed as follows:

**DELETE THE FOLLOWING:**

ITEM NO.	DESCRIPTION	QUAN.	UNIT	UNIT BID PRICE	AMOUNT
16.	PRESSURE REDUCING ASSEMBLY				
16.1	4"	1	LS	\$8,000.00	\$8,000.00
	<b>TOTAL DELETION:</b>				<b>\$8,000.00</b>

**ADD THE FOLLOWING:**

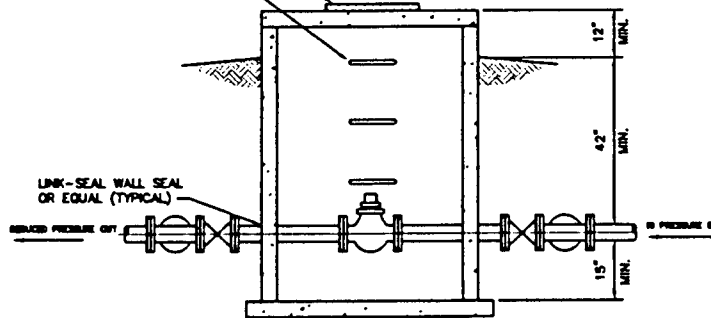
ITEM NO.	DESCRIPTION	QUAN.	UNIT	UNIT BID PRICE	AMOUNT
16.	PRESSURE REDUCING ASSEMBLY				
16.1	4"	1	LS	\$8,600.00	\$8,600.00
	<b>TOTAL ADDITION:</b>				<b>\$8,600.00</b>

**JUSTIFICATION:**

Redesign of the vault for economy.

NEENAH # R-8881-P, MANHOLE COVER 24" x 36" OPENING W/TYPICAL 1/4" CAN LUG LOCK OR EQUAL. LOCATE OVER PRESSURE REDUCING VALVE AND ACCESSIBLE TO LADDER

MANHOLE STEPS, PLASTIC COATED STEEL OR WROUGHT IRON, 18 BARS x 10" w x 10" LG. W/NON-SLIP TREAD AND SAFETY EDGES, SET STRAIGHT AT 15" O.C. (3 REQ'D)



**ELEVATION**  
SCALE: 1/4" = 1'-0"

48" INSIDE DIA. CONCRETE VAULT

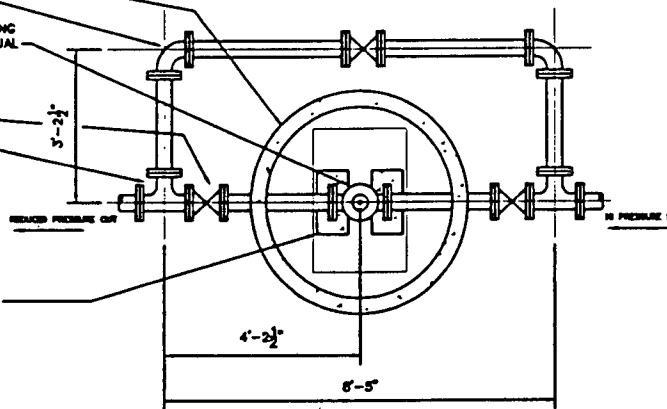
4" 90° ELBOW (2 REQ'D)

ROSS 4" PRESSURE REDUCING VALVE MODEL 82EP OR EQUAL

4" GATE VALVE (3 REQ'D)

4" x 4" TEES (2 REQ'D)

CONCRETE PERS (2 REQ'D) 8" x 16" x 26"



**PLAN**  
SCALE: 1/4" = 1'-0"

NOTE:  
ALL PIPING AND VALVES SHALL BE FLANGED D.I.P.  
ANSI CLASS 250 FLANGED AND MUST MEET THE 250 PSI TEMPLATE.



**HUNTER MARTIN & ASSOCIATES, INC.**

ENGINEERS & SURVEYORS  
3220 LOWE GALE ROAD • PADUCAH KENTUCKY 42003  
(502) 564-5737 • FAX (502) 564-5738

Drawn by SDC  
Checked by TMH  
Plr TOM-DETL  
Date 10-16-98  
Revised:

**PRESSURE REDUCING ASSEMBLY  
CHANGE ORDER A-3**

**OHIO COUNTY WATER DISTRICT**

Sheet  
**1**  
of sheets



CHANGE ORDER - CONTRACT "A"

ORDER NO.: A-4  
DATE: MAY 17, 1999  
AGREEMENT DATE: SEPTEMBER 10, 1998

NAME OF PROJECT: SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "A"  
OWNER: OHIO COUNTY WATER DISTRICT  
CONTRACTOR: TOP GRADE EXCAVATING, INC.

The following changes are hereby made to the CONTRACT DOCUMENTS:  
SEE ATTACHMENT NO. 1.

Justification:  
SEE ATTACHMENT NO. 1.  
Change to CONTRACT PRICE:

Original CONTRACT PRICE: \$ 323,039.00

Current CONTRACT PRICE adjusted by previous CHANGE ORDER \$ 425,274.00

The CONTRACT PRICE due to this CHANGE ORDER will be DECREASED by  
(\$ - 0.00 -) and INCREASED by \$ 600.00 for a

NET change of \$ 600.00

The new CONTRACT PRICE including this CHANGE ORDER will be \$ 425,874.00

Change to CONTRACT TIME:

The CONTRACT TIME will be N/A by N/A calendar days.  
(Increased / Decreased)

The date for completion of all work will be APRIL 9, 1999  
(Date)

Requested by: James C. Porter OWNER  
Recommended by: [Signature] ENGINEER  
Accepted by: [Signature] CONTRACTOR

**OHIO COUNTY WATER DISTRICT  
SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "A"**

**ATTACHMENT NO. 1  
TO  
CHANGE ORDER NO. A-4**

**CHANGES:**

The Contract Price shall be changed as follows:

**ADD THE FOLLOWING:**

<b>ITEM NO.</b>	<b>DESCRIPTION</b>	<b>QUAN.</b>	<b>UNIT</b>	<b>UNIT BID PRICE</b>	<b>AMOUNT</b>
17.	OPEN CUT CASING				
17.1	12" Casing	20	LF	\$30.00	\$600.00
	<b>TOTAL CHANGE ORDER A-4</b>				<b>\$600.00</b>

**JUSTIFICATION:**

Open cut casing is installed through creek crossings to protect the water main in the event of washouts, dredging, etc.



*Established 1952*  
**HUNTER MARTIN & ASSOCIATES, INC.**

ENGINEERS & SURVEYORS

3220 LONE OAK ROAD • PADUCAH, KENTUCKY 42003

(270) 554-2737 • FAX (270) 554-2738

<http://www.huntermartin.com> • [hma@huntermartin.com](mailto:hma@huntermartin.com)

HUNTER H. MARTIN (1924 - 1997)

Founder

ROD H. MARTIN, P.E., P.L.L.C.

President

MICHAEL GARDNER

Vice President

BETTY J. GARDNER

Secretary/Treasurer

September 14, 1999

Ms. Vicki L. Ray, Manager  
Drinking Water Branch  
Division of Water  
Frankfort Office Park  
14 Reilly Road  
Frankfort, Ky 40601

Dear Ms. Ray:

RE: OHIO COUNTY WATER DISTRICT -PWSID #0920332-97-003 WATER LINE EXTENSION  
CONTRACT "A"

In accordance with the approval letter dated November 18, 1997, for the above captioned project, this is to advise that the work will be completed in accordance with the stipulations set forth in said letter. SUBSTANTIAL COMPLETION FOR THIS PROJECT IS SEPTEMBER 2, 1999.

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

Yours very truly,

HUNTER MARTIN & ASSOCIATES, INC.

  
Rod H. Martin, P.E.

RHM:as

cc: Mr. B. J. Dickens, Chairman, Ohio County Water District



"Established 1953"

# HUNTER MARTIN & ASSOCIATES, INC.

ENGINEERS & SURVEYORS

3220 LONE OAK ROAD • PADUCAH, KENTUCKY 42003

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HUNTER H. MARTIN (1924 - 1997)

Founder

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

President

MICHAEL GARDNER

Vice President

BETTY J. GARDNER

Secretary/Treasurer

September 28, 1999

Top Grade Excavating  
409 West 12<sup>th</sup> Street  
Owensboro, Ky 47542

Gentlemen:

RE: OHIO COUNTY WATER DISTRICT (1998/99 SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT A) SUBSTANTIAL COMPLETION/ONE YEAR GUARANTEE

The District and the Engineer have agreed that the above project is SUBSTANTIALLY COMPLETE ON SEPTEMBER 10, 1999.

SUBSTANTIAL COMPLETION is granted for that date because the project was sufficiently complete for the District's use for the purpose intended (See General Conditions, Article 1.22).

Your guarantee on all materials and equipment furnished and work performed is for a period of one year from the date of substantial completion per General Conditions, Article 29.1. YOUR ONE-YEAR GUARANTEE EXPIRES SEPTEMBER 9, 2000.

Prior to that date, you will be responsible for any punch list or warranty items that occur.

Yours very truly,

HUNTER MARTIN & ASSOCIATES, INC.

Rod H. Martin, P.E.

RHM:BJG:as

CC: Mr. James C. Porter, Superintendent, Ohio County Water District  
Mr. Tom Hines, Inspector, Hunter Martin & Associates, Inc.

\*\*\*\*\*

APPROVED BY OHIO COUNTY WATER DISTRICT AT A MEETING HELD ON SEPTEMBER 28, 1999.

  
James C. Porter, Superintendent

RECEIVED NOV 2 1998  
Rec'd (2) for Top Grade  
File

### CHANGE ORDER - CONTRACT "B"

ORDER NO.: B-1

DATE: OCTOBER 9, 1998

AGREEMENT DATE: SEPTEMBER 10, 1998

NAME OF PROJECT: SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "B"

OWNER: OHIO COUNTY WATER DISTRICT

CONTRACTOR: TOP GRADE EXCAVATING, INC.

The following changes are hereby made to the CONTRACT DOCUMENTS:  
**INCREASE CONTRACT TIME 30 DAYS.**

Justification:  
**CONSTRUCTION BEGAN LATER THAN ANTICIPATED (DUE TO NO FAULT OF THE CONTRACTOR) AND THIS IS TO ALLOW FOR ANTICIPATED WINTER WEATHER CONDITIONS.**

Change to CONTRACT PRICE:

Original CONTRACT PRICE: \$ 265,089.50

Current CONTRACT PRICE adjusted by previous CHANGE ORDER \$ 265,089.50

The CONTRACT PRICE due to this CHANGE ORDER will be **DECREASED** by

\$ N/A and **INCREASED** by \$ N/A for a NET change of

\$ - 0 -

The new CONTRACT PRICE including this CHANGE ORDER will be \$ 265,089.50

Change to CONTRACT TIME:

The CONTRACT TIME will be INCREASED by 30 calendar days.  
(Increased / Decreased)

The date for completion of all work will be JANUARY 23, 1999  
(Date)

Requested by: James C. Porter OWNER

Recommended by: [Signature] ENGINEER

Accepted by: [Signature] CONTRACTOR

31001  
FIN. Bobby  
del. by Tom

CHANGE ORDER - CONTRACT "B"

ORDER NO.: B-2

DATE: FEBRUARY 23, 1999

AGREEMENT DATE: SEPTEMBER 10, 1998

NAME OF PROJECT: SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "B"

OWNER: OHIO COUNTY WATER DISTRICT

CONTRACTOR: TOP GRADE EXCAVATING, INC.

The following changes are hereby made to the CONTRACT DOCUMENTS:

**SEE ATTACHMENT 1**

Justification:

**SEE ATTACHMENT 1**

Change to CONTRACT PRICE:

Original CONTRACT PRICE: \$ 265.089.50

Current CONTRACT PRICE adjusted by previous CHANGE ORDER \$ 265.089.50

The CONTRACT PRICE due to this CHANGE ORDER will be DECREASED by

\$ -0.00- and INCREASED by \$ 6.076.25 for a NET change of

\$ 6.076.25.

The new CONTRACT PRICE including this CHANGE ORDER will be \$ 271.165.75.

Change to CONTRACT TIME:

The CONTRACT TIME will be INCREASED by 76 calendar days.  
(Increased / Decreased)

The date for completion of all work will be APRIL 9, 1999.  
(Date)

Requested by: James E. Porter OWNER

Recommended by: [Signature] ENGINEER

Accepted by: [Signature] CONTRACTOR

Engineer

**OHIO COUNTY WATER DISTRICT**

**SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "B"**

**ATTACHMENT NO. 1**

**TO**

**CHANGE ORDER NO. B-2**

**CHANGES:**

This Change Order establishes a price for plastic casing spacers for all bores with casing. In addition, it adds 520 linear feet of 3" SDR 21 PVC to be installed along a lane off Bald Knob Road, just North of Kentucky Highway 231, as shown on the attached drawing.

Time extension of 76 days is also granted.

The Contract Price shall be changed as follows:

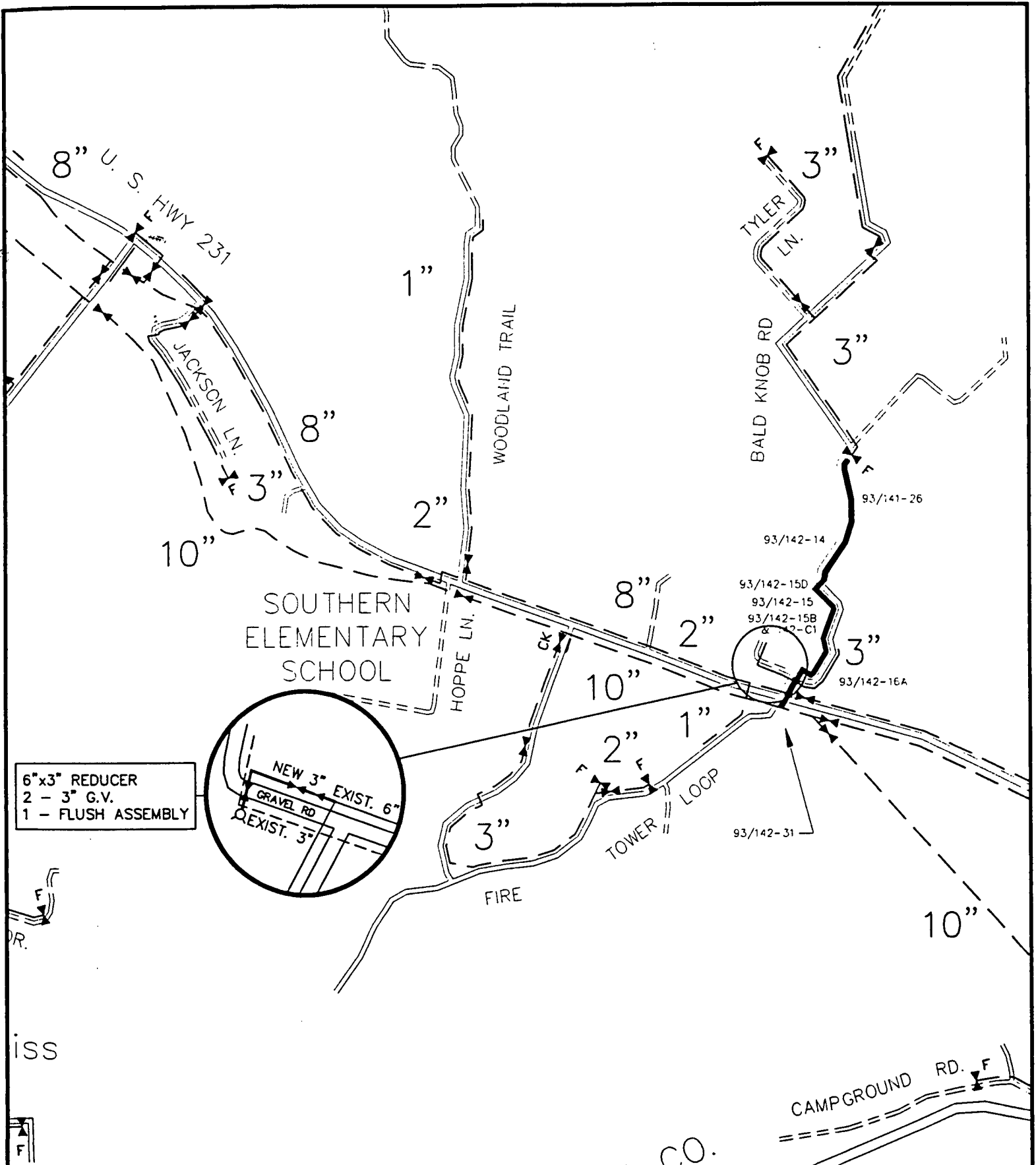
**ADD THE FOLLOWING:**

ITEM NO.	DESCRIPTION	QUAN.	UNIT	UNIT BID PRICE	AMOUNT
2.	WATER MAINS. PVC				
2.6	3" SDR 21	520	LF	\$2.95	\$1,534.00
3.	FITTINGS				
3.6	Ductile Iron, 3" Size	60	EA	\$1.50	90.00
4.	VALVES, W/ CAST IRON BOX				
4.4	3" GATE	2	EA	\$500.00	1,000.00
16.	PLASTIC SPACERS	65	EA	\$34.65	2,252.25
17.	OPEN CUT CASING				
17.1	12" Casing	40	LF	\$30.00	1,200.00
	<b>TOTAL CHANGE ORDER B-2</b>				<b>\$6,076.25</b>

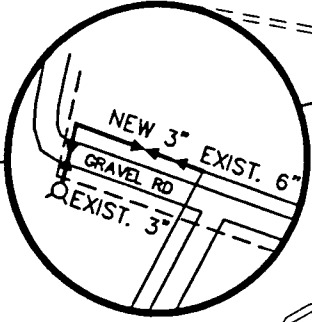
**JUSTIFICATION:**

Plastic casing spacers are added for ease of removal in the event of a repair. The 3 inch PVC reconnects existing customers.

The increase in Contract Time is granted for additional work approved. At the District's January meeting, the time was extended until the end of February. At the February meeting, the time was extended until April 9, 1999.



6"x3" REDUCER  
 2 - 3" G.V.  
 1 - FLUSH ASSEMBLY



DR.  
 ISS  
 F

 <b>HUNTER MARTIN &amp; ASSOCIATES, INC.</b> ENGINEERS & SURVEYORS 3220 LONE OAK ROAD • PADUCAH KENTUCKY 42002 (502) 564-2727 • FAX (502) 564-2728	Drawn by <b>SDC</b>	Checked by <b>TMH</b>	P.L.K. <b>WS97B05</b>	Date 	Revised 	<b>CHANGE ORDER B2          NEW WATER LINE</b>	Sheet <b>1</b>
	<b>OHIO COUNTY WATER DISTRICT</b>						of sheets





\*Established 1952\*

**HUNTER MARTIN & ASSOCIATES, INC.**  
ENGINEERS & SURVEYORS  
3220 LONE OAK ROAD • PADUCAH, KENTUCKY 42003  
(270) 554-2737 • FAX (270) 554-2738  
<http://www.huntermartin.com> • [hma@huntermartin.com](mailto:hma@huntermartin.com)

HUNTER H. MARTIN (1926 - 1997)  
President  
ROD H. MARTIN, P.E., E.S.  
President  
MICHAEL GARDNER  
Vice President  
BETTY J. GARDNER  
Secretary/Treasurer

September 14, 1999

Ms. Vicki L. Ray, Manager  
Drinking Water Branch  
Division of Water  
Frankfort Office Park  
14 Reilly Road  
Frankfort, Ky 40601

Dear Ms. Ray:

RE: OHIO COUNTY WATER DISTRICT - DW #0920332-97-004 WLE - SYSTEM  
IMPROVEMENTS - CONTRACT "B"

In accordance with the approval letter dated February 12, 1998, for the above captioned project, this is to advise that the work will be completed in accordance with the stipulations set forth in said letter. SUBSTANTIAL COMPLETION FOR THIS PROJECT IS SEPTEMBER 2, 1999.

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

Yours very truly,

HUNTER MARTIN & ASSOCIATES, INC.

Rod H. Martin, P.E.

RHM:as

cc: Mr. B. J. Dickens, Chairman, Ohio County Water District



"Established 1952"

# HUNTER MARTIN & ASSOCIATES, INC.

ENGINEERS & SURVEYORS

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(270) 554-2737 • FAX (270) 554-2738  
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HUNTER H. MARTIN (1924 - 1997)

Founder

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

President

MICHAEL GARDNER

Vice President

BETTY J. GARDNER

Secretary/Treasurer

September 28, 1999

Top Grade Excavating, Inc.  
409 West 12<sup>th</sup> Street  
Owensboro, Ky 47542

Gentlemen:

RE: OHIO COUNTY WATER DISTRICT (1998/99 SERIES I WATER SYSTEM  
IMPROVEMENTS - CONTRACT B) SUBSTANTIAL COMPLETION/ONE  
YEAR GUARANTEE

The District and the Engineer have agreed that the above project is SUBSTANTIALLY  
COMPLETE ON SEPTEMBER 10, 1999.

SUBSTANTIAL COMPLETION is granted for that date because the project was sufficiently  
complete for the District's use for the purpose intended (See General Conditions, Article 1.22).

Your guarantee on all materials and equipment furnished and work performed is for a period of  
one year from the date of substantial completion per General Conditions, Article 29.1. YOUR  
ONE-YEAR GUARANTEE EXPIRES SEPTEMBER 9, 2000.

Prior to that date, you will be responsible for any punch list or warranty items that occur.

Yours very truly,

HUNTER MARTIN & ASSOCIATES, INC.

Rod H. Martin, P.E.

RHM:BJG:as

cc: Mr. James C. Porter, Superintendent, Ohio County Water District  
Mr. Tom Hines, Inspector, Hunter Martin & Associates, Inc.

\*\*\*\*\*

APPROVED BY OHIO COUNTY WATER DISTRICT AT A MEETING HELD ON  
SEPTEMBER 28, 1999.

James C. Porter, Superintendent

RECEIVED OCT 26 1998  
Rec'd (2) J. Salmon

CHANGE ORDER - CONTRACT "C"

ORDER NO.: C-1

DATE: OCTOBER 12, 1998

AGREEMENT DATE: SEPTEMBER 10, 1998

NAME OF PROJECT: SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT C

OWNER: OHIO COUNTY WATER DISTRICT

CONTRACTOR: SALMON PLUMBING, INC.

The following changes are hereby made to the CONTRACT DOCUMENTS:

**INSTALL PIPE WITH HIGHER PRESSURE RATING AND DECREASE PIPE SIZE TO OFFSET ADDITIONAL COSTS. SEE ATTACHMENT NO. 1.**

Justification:

**SEE ATTACHMENT NO. 1.**

Change to CONTRACT PRICE:

Original CONTRACT PRICE: \$ 973,408.65

Current CONTRACT PRICE adjusted by previous CHANGE ORDER \$ 973,408.65

The CONTRACT PRICE due to this CHANGE ORDER will be **DECREASED** by

(\$ 565,494.00 ) and **INCREASED** by \$ 559,575.20 for a NET

change of (\$ 5,918.80 ).

The new CONTRACT PRICE including this CHANGE ORDER will be \$ 967,489.85.

Change to CONTRACT TIME:

The CONTRACT TIME will be INCREASED by 45 calendar days.  
(Increased / Decreased)

The date for completion of all work will be JULY 7, 1999.  
(Date)

Requested by: James C. Porter OWNER

Recommended by: [Signature] ENGINEER

Accepted by: [Signature] CONTRACTOR

## OHIO COUNTY WATER DISTRICT

## SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "C"

## ATTACHMENT NO. 1

TO

## CHANGE ORDER NO. C-1

**CHANGES:**

In lieu of the original piping configuration, shown on the Plans, the main beginning at Kentucky Highway 231 and extending Northwardly to the Windy Hill Tank site, shall be 12 inches in diameter and shall consist of C900, DR 14 pipe; C900 DR 18 pipe; and SDR 21 pipe as follows:

- ❖ 18,600 LF of 12" C900 DR 14 pipe beginning at Kentucky Highway 231 and extending Northwardly along Cromwell Road, Rob Roy Road and Flint Springs Road and ending at Kentucky Highway 505.
- ❖ 20,670 LF of 12" C900 DR 18 pipe extending from the intersection of Flint Springs Road and Kentucky Highway 505 Northwardly along Kentucky Highway 505 and Weedman Loop to its intersection with Kentucky Highway 505, North of Baizetown.
- ❖ The remaining 12" main on Kentucky Highway 505 between Weedman Loop and the Windy Hill Tank site shall be 12" SDR 21 as originally configured.

In addition to the above, a 16" x 16" x 16" tee shall be installed on Cromwell Road at the truck entrance to Perdue, as directed by the Engineer. Two 12" x 16" increasers, two 12" gate valves, and one 16" gate valve shall also be included at this location.

The Contract Price shall be changed as follows:

**DELETE THE FOLLOWING:**

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT BID PRICE	AMOUNT
2.	WATER MAINS, PVC				
2.2	16" C905, DR 18	18,600	LF	\$19.29	\$358,794.00
2.3	12" SDR 21	20,670	LF	\$10.00	206,700.00
	<b>TOTAL DELETION:</b>				<b>(\$565,494.00)</b>

**ADD THE FOLLOWING:**

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT BID PRICE	AMOUNT
2.	WATER MAINS. PVC				
2.9	12" C900, DR 14	18.600	LF	\$16.08	\$299,088.00
2.10	12" C900, DR 18	20.670	LF	\$12.26	253,414.20
3.	FITTINGS				
3.2	16" x 16" Tee	323	LBS.	\$1.00	323.00
3.3	16" x 12" Reducer	250	LBS.	\$1.00	250.00
4.	VALVES. W/CAST IRON BOX				
4.2	16" Gate	1	EA.	\$3,500.00	3,500.00
4.3	12" Gate	2	EA.	\$1,500.00	3,000.00
	<b>TOTAL ADD:</b>				<b>\$559,575.20</b>
	<b>NET CHANGE:</b>				<b>(\$5,918.80)</b>

**JUSTIFICATION:**

This Change Order establishes a unit price for 12" C900, DR 14 and 12" C900 DR 18 PVC Pipe which has a higher pressure rating and will provide a greater safety factor.

RECEIVED MAR 22 1999  
(4 rec'd by Salmon)

CHANGE ORDER - CONTRACT "C"

ORDER NO.: C-2

DATE: FEBRUARY 23, 1999

AGREEMENT DATE: SEPTEMBER 10, 1998

NAME OF PROJECT: SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT C

OWNER: OHIO COUNTY WATER DISTRICT

CONTRACTOR: SALMON PLUMBING, INC.

The following changes are hereby made to the CONTRACT DOCUMENTS:

SEE ATTACHMENT NO. 1.

Justification:

SEE ATTACHMENT NO. 1.

Change to CONTRACT PRICE:

Original CONTRACT PRICE: \$ 973,408.65

Current CONTRACT PRICE adjusted by previous CHANGE ORDER \$ 967,489.85

The CONTRACT PRICE due to this CHANGE ORDER will be DECREASED by

(\$ -0.00-) and INCREASED by \$ 22,839.80 for a NET

change of (\$ 22,839.80).

The new CONTRACT PRICE including this CHANGE ORDER will be \$ 990,329.65.

Change to CONTRACT TIME:

The CONTRACT TIME will be N/A by 0 calendar days.  
(Increased / Decreased)

The date for completion of all work will be JULY 7, 1999.  
(Date)

Requested by: James C Porter OWNER

Recommended by: [Signature] ENGINEER

Accepted by: [Signature] CONTRACTOR

OHIO COUNTY WATER DISTRICT

SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "C"

ATTACHMENT NO. 1

TO

CHANGE ORDER NO. C-2

**CHANGES:**

This change order establishes a price for 12" cut-in valves and manufactured plastic casing spacers for all road bores with casing. A price is also established for open cut casing used for the Parkway bore.

The Contract Price shall be changed as follows:

**ADD THE FOLLOWING:**

ITEM NO.	DESCRIPTION	QUAN.	UNIT	UNIT BID PRICE	AMOUNT
4.	VALVES W/ CAST IRON BOX				
4.8	12" CUT-IN VALVE	5	EA.	\$2,500.00	\$12,500.00
8.4	OPEN CUT CASING - 26"	140	LF	\$60.00	8,400
17.	PLASTIC SPACERS	60	EA.	\$32.33	1,939.80
<b>TOTAL CHANGE ORDER C-2</b>					<b>\$22,839.80</b>

**JUSTIFICATION:**

To provide better control and operation of the system.

RECEIVED  
Rec'd (2) fr. Salmon

CHANGE ORDER - CONTRACT "C"

ORDER NO.: C-3  
DATE: MARCH 30, 1999  
AGREEMENT DATE: SEPTEMBER 10, 1998

NAME OF PROJECT: SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT C"  
OWNER: OHIO COUNTY WATER DISTRICT  
CONTRACTOR: SALMON PLUMBING, INC.

The following changes are hereby made to the CONTRACT DOCUMENTS:

SEE ATTACHMENT NO. 1.

Justification:

SEE ATTACHMENT NO. 1.

Change to CONTRACT PRICE:

Original CONTRACT PRICE: \$ 973,408.65

Current CONTRACT PRICE adjusted by previous CHANGE ORDER \$ 990,329.65

The CONTRACT PRICE due to this CHANGE ORDER will be DECREASED by

(\$ -0.00-) and INCREASED by \$ 29,573.63 for a NET

change of \$ 29,573.63

The new CONTRACT PRICE including this CHANGE ORDER will be \$ 1,019,903.20

Change to CONTRACT TIME:

The CONTRACT TIME will be N/A by 0 calendar days.  
(Increased / Decreased)

The date for completion of all work will be JULY 7, 1999  
(Date)

Requested by: James C Porter OWNER

Recommended by: [Signature] ENGINEER

Accepted by: L Salmon CONTRACTOR



OHIO COUNTY WATER DISTRICT

SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "C"

ATTACHMENT NO. 1

TO

CHANGE ORDER NO. C-3

**CHANGES:**

A 4" pressure reducing assembly shall be installed at the corner of Flint Springs Road and Rob Roy Road in the 4" main to reduce the system pressure. An 8" pressure reducing valve shall be installed in the main on Cromwell Road, South of the tie-in at Perdue. The assemblies shall be as shown on the attached drawings.

The Contract Price shall be changed as follows:

**ADD THE FOLLOWING:**

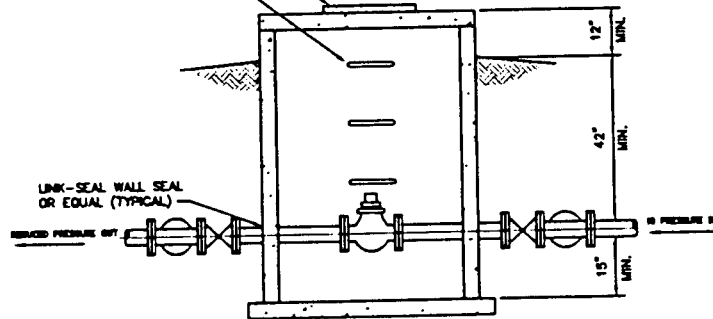
ITEM NO.	DESCRIPTION	QUAN.	UNIT	UNIT BID PRICE	AMOUNT
16.0	PRESSURE REDUCING ASSEMBLY				
16.1	8"	1	LS	\$20,186.57	\$20,186.57
16.2	4"	1	LS	\$ 9,387.06	9,387.06
	<b>TOTAL CHANGE ORDER C-2</b>				<b>\$29,573.63</b>

**JUSTIFICATION:**

To provide better control and operation of the system.

MEENAH # R-6681-JP. MANHOLE COVER, 24" x 36" OPENING W/TYPICAL GAIN LOCK OR EQUAL. LOCATE OVER PRESSURE REDUCING VALVE AND ACCESSIBLE TO LADDER

MANHOLE STEPS, PLASTIC COATED STEEL OR WROUGHT IRON, 1# BARS x 10" x 10" L.G. W/NON-SLIP TREAD AND SAFETY EDGES, SET STRAIGHT AT 15" O.C. (3 REQ'D)



**ELEVATION**  
SCALE: 1/4" = 1'-0"

48" INSIDE DIA. CONCRETE VAULT

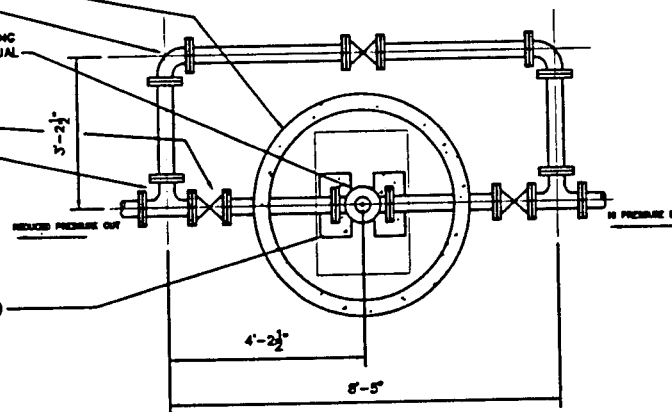
4" 90° ELBOW (2 REQ'D)

ROSS 4" PRESSURE REDUCING VALVE MODEL B2EP OR EQUAL

4" GATE VALVE (3 REQ'D)

4" x 4" TEE (2 REQ'D)

CONCRETE PERS (2 REQ'D) 8" x 16" x 28"



**PLAN**  
SCALE: 1/4" = 1'-0"

NOTE:  
ALL PIPING AND VALVES SHALL BE FLANGED D.I.P.  
ANSI CLASS 250 FLANGED AND MUST MEET THE 250 PSI TEMPLATE.



**HUNTER MARTIN & ASSOCIATES, INC.**

ENGINEERS & SURVEYORS  
3220 LONE OAK ROAD • PADUCAH, KENTUCKY 42003  
(502) 564-2727 • FAX (502) 564-2728

Drawn by	SDC
Checked by	TMH
File	TOM-DETL
Date	10-16-88
Revision	

**PRESSURE REDUCING ASSEMBLY  
CHANGE ORDER C-2**

**OHIO COUNTY WATER DISTRICT**

Sheet

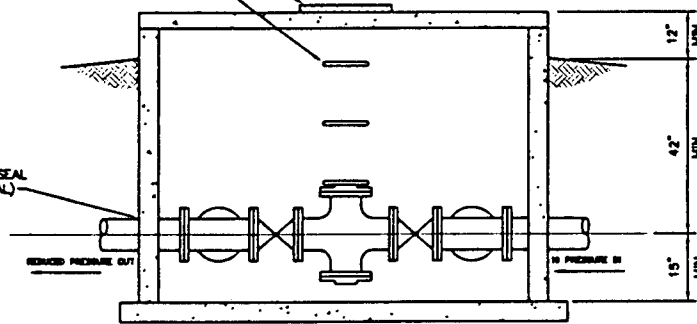
**1**

of sheets

NEENAH # R-6681-JP. MANHOLE COVER, 24" x 36" OPENING W/TYPICAL 1/2" CAM LUG LOCK OR EQUAL. LOCATE OVER ALTITUDE VALVE.

MANHOLE STEPS, PLASTIC COATED STEEL OR WROUGHT IRON, 1# BARS x 10" w x 10" L.C. W/NON-SLIP TREAD AND SAFETY EDGES, SET STRAIGHT AT 15" O.C. (3 REQ'D)

LINK-SEAL WALL SEAL OR EQUAL (TYPICAL)



**ELEVATION**  
SCALE: 1/4" = 1'-0"

96" INSIDE DIA. CONCRETE VAULT

4" GATE VALVE WHEEL ACTUATED (2 REQ'D)

CONCRETE PEIRS (2 REQ'D) 6" x 16" x 28"

4" 90° ELBOW (2 REQ'D)

ROSS 4" PRESSURE REDUCING VALVE MODEL 62EP OR EQUAL

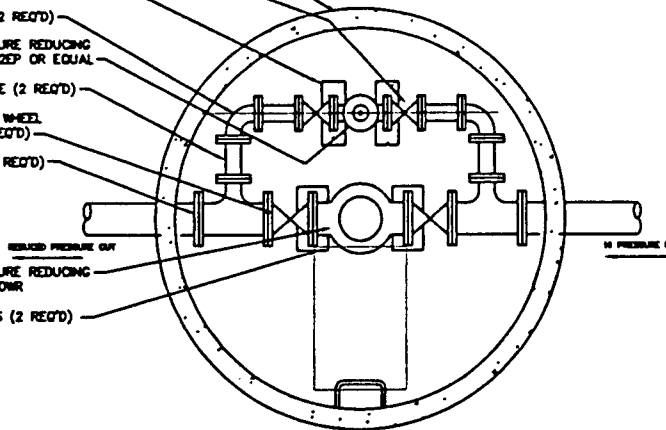
10" SPOOL PCE (2 REQ'D)

6" GATE VALVE WHEEL ACTUATED (2 REQ'D)

6" x 4" TEE (2 REQ'D)

ROSS 6" PRESSURE REDUCING VALVE MODEL 40NR

CONCRETE PEIRS (2 REQ'D) 6" x 16" x 28"



**PLAN**  
SCALE: 1/4" = 1'-0"

NOTE:  
ALL PIPING WITHIN VAULT TO BE FLANGED ANSI 250.



**HUNTER MARTIN & ASSOCIATES, INC.**

ENGINEERS & SURVEYORS  
3220 LOWE GAZ ROAD • PADUCAH KENTUCKY 40303  
(502) 564-2727 • FAX (502) 564-2728

Drawn by: SOC  
Checked by: TMH  
File: TOM-DETL  
Date: 10-16-88  
Revised:

**PRESSURE REDUCING ASSEMBLY  
CHANGE ORDER C-2**

**OHIO COUNTY WATER DISTRICT**

Sheet

1

of sheets

Attachment No. 1

C.O. No. C-3

Page 3



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# HUNTER MARTIN & ASSOCIATES, INC.

ENGINEERS & SURVEYORS

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<http://www.huntermartin.com> • [hma@huntermartin.com](mailto:hma@huntermartin.com)

HUNTER H. MARTIN (1924 - 1997)

Founder

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

President

MICHAEL GARDNER

Vice President

BETTY J. GARDNER

Secretary/Treasurer

September 14, 1999

Ms. Vicki L. Ray, Manager  
Drinking Water Branch  
Division of Water  
Frankfort Office Park  
14 Reilly Road  
Frankfort, Ky 40601

Dear Ms. Ray:

RE: OHIO COUNTY WATER DISTRICT -DW #0920332-97-005 WATER LINE  
EXTENSION - CONTRACT "C"

In accordance with the approval letter dated January 22, 1998, for the above captioned project, this is to advise that the work will be completed in accordance with the stipulations set forth in said letter. SUBSTANTIAL COMPLETION FOR THIS PROJECT IS JUNE 29, 1999.

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

Yours very truly,

HUNTER MARTIN & ASSOCIATES, INC.

Rod H. Martin, P.E.

RHM:as

cc: Mr. B. J. Dickens, Chairman, Ohio County Water District



"Established 1952"

# HUNTER MARTIN & ASSOCIATES, INC.

ENGINEERS & SURVEYORS

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

RECEIVED JUN 23 1999

HUNTER H. MARTIN (1924 - 1997)  
Founder

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

MICHAEL GARDNER  
Vice President

BETTY J. GARDNER  
Secretary/Treasurer

July 19, 1999

Salmon Plumbing, Inc.  
P. O. Box 97  
Mt. Washington, Ky 40047

Gentlemen:

RE: OHIO COUNTY WATER DISTRICT (1998/99 SERIES I WATER SYSTEM  
IMPROVEMENTS - CONTRACT C) SUBSTANTIAL COMPLETION/ONE  
YEAR GURANTEE

The District and the Engineer have agreed that the above project was SUBSTANTIALLY  
COMPLETE ON JUNE 29, 1999.

SUBSTANTIAL COMPLETION is granted for that date because the project was sufficiently  
complete for the District's use for the purpose intended (See General Conditions, Article 1.22).

Your guarantee on all materials and equipment furnished and work performed is for a period of one  
year from the date of substantial completion per General Conditions, Article 29.1. YOUR ONE  
YEAR GUARANTEE EXPIRES JUNE 28, 2000.

Prior to that date, you will be responsible for any punch list or warranty items that occur.

Yours very truly,

HUNTER MARTIN & ASSOCIATES, INC.

Rod H. Martin, P.E.

RHM:BJG:as

cc: Mr. James C. Porter, Superintendent, Ohio County Water District  
Mr. Tom Hines, Inspector, Hunter Martin & Associates, Inc.

\*\*\*\*\*

APPROVED BY OHIO COUNTY WATER DISTRICT AT A MEETING HELD ON JUNE 29, 1999.

James C. Porter, Superintendent

# CHANGE ORDER - CONTRACT "D"

RECEIVED FEB 26 1999

RECEIVED MAR - 8 1999  
Plaid(?) CCWD 1. RD

ORDER NO.:

D-1

DATE:

FEBRUARY 23, 1999

AGREEMENT DATE:

SEPTEMBER 10, 1998

NAME OF PROJECT: SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "D"

OWNER: OHIO COUNTY WATER DISTRICT

CONTRACTOR: CALDWELL TANKS, INC.

The following changes are hereby made to the CONTRACT DOCUMENTS:

SEE ATTACHMENT NO. 1.

Justification:

SEE ATTACHMENT NO. 1.

Change to CONTRACT PRICE:

Original CONTRACT PRICE: \$ 821,100.00

Current CONTRACT PRICE adjusted by previous CHANGE ORDER \$ 821,100.00

The CONTRACT PRICE due to this CHANGE ORDER will be DECREASED by

(\$ - 0 -) and INCREASED by \$ 4,970.12 for a NET

change of \$ 4,970.12

The new CONTRACT PRICE including this CHANGE ORDER will be \$ 826,070.12

Change to CONTRACT TIME:

The CONTRACT TIME will be N/A by - 0 - calendar days.

(Increased / Decreased)

The date for completion of all work will be MAY 23, 1999

(Date)

Requested by:

James C. Porter

OWNER

Recommended by:

[Signature]

ENGINEER

Accepted by:

J. G. Cook 2/25/99

CONTRACTOR

**OHIO COUNTY WATER DISTRICT**  
**SERIES I WATER SYSTEM IMPROVEMENTS**  
**CONTRACT "D"**

**ATTACHMENT NO. 1**  
**TO**  
**CHANGE ORDER NO. D-1**

**CHANGES:**

This Change Order establishes a price for the relocation of the existing water line at the Hoover Hill Tank Site. It also relocates the overflow for both the Windy Hill and Hoover Hill Tanks to the front of the property to drain toward the road ditch. The ladder of both tanks shall be relocated to be on the same leg as the overflow. See drawings on Pages 2 and 3.

The Contract Price shall be changed as follows:

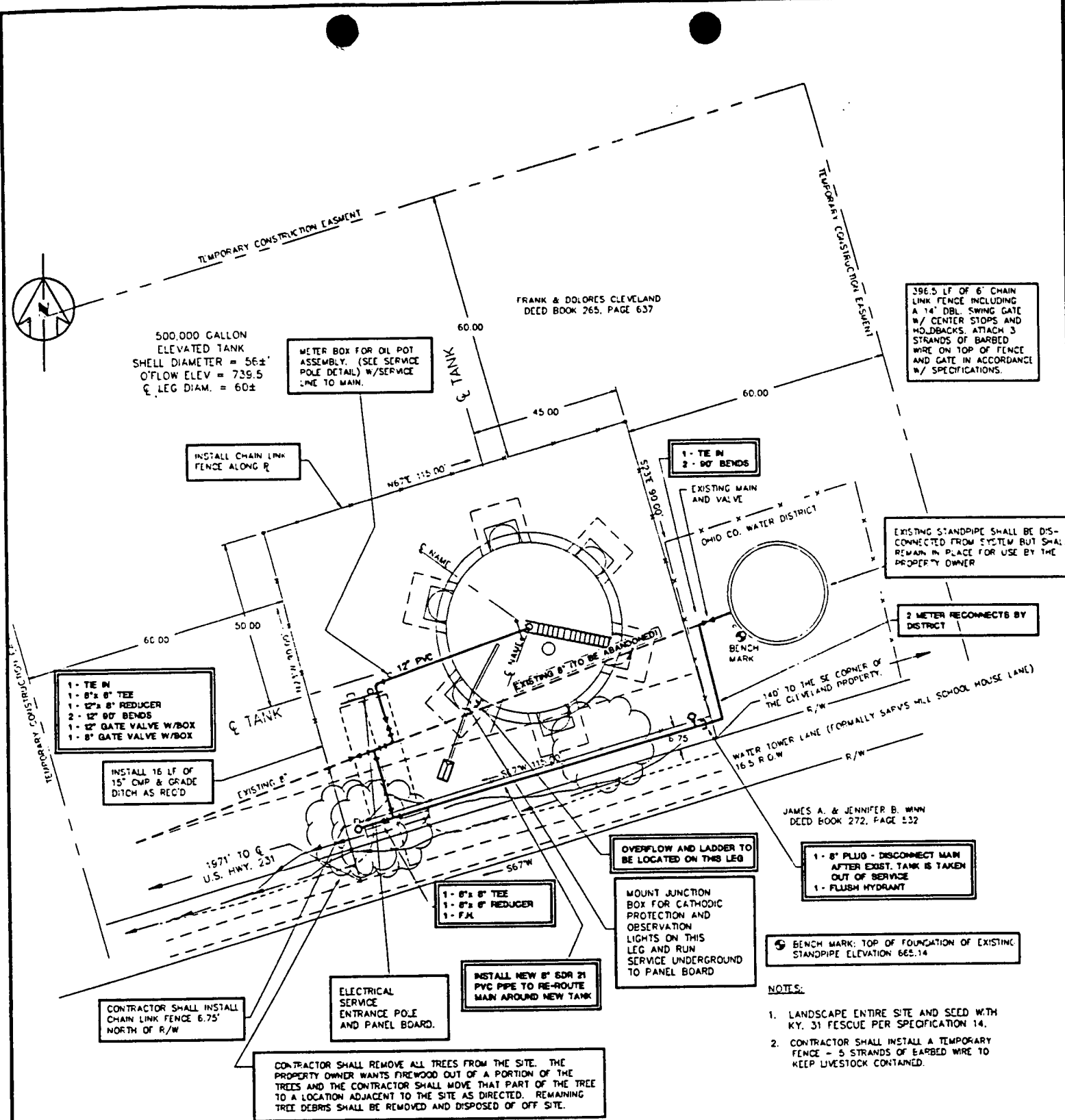
**ADD THE FOLLOWING:**

ITEM NO.	DESCRIPTION	QUAN.	UNIT	UNIT BID PRICE	AMOUNT
1.7	ADDITIONAL PIPING @HOOVER HILL	1	LS	\$4,970.12	\$4,970.12
	<b>TOTAL CHANGE ORDER D-1:</b>				<b>\$4,970.12</b>

**JUSTIFICATION:**

The piping must be altered at the Hoover Hill Tank Site so that the existing tank can remain in service during the construction of the new tank. The existing main is located through the center of the new tank site. Changes to the Contract Price are justified on the attached pages.

Overflows have been relocated to avoid future problems with adjoining property owners.



500,000 GALLON  
ELEVATED TANK  
SHELL DIAMETER = 56±'  
O'FLOW ELEV = 739.5  
EQ LEG DIAM. = 60±

METER BOX FOR OIL POT  
ASSEMBLY. (SEE SERVICE  
POLE DETAIL) W/SERVICE  
LINE TO MAIN.

396.5 LF OF 6" CHAIN  
LINK FENCE INCLUDING  
A 14' DBL SWING GATE  
W/ CENTER STOPS AND  
HOLDBACKS. ATTACH 3  
STRANDS OF BARBED  
WIRE ON TOP OF FENCE  
AND GATE IN ACCORDANCE  
W/ SPECIFICATIONS.

INSTALL CHAIN LINK  
FENCE ALONG R

1 - TEE IN  
2 - 90° BENDS

EXISTING STANDPIPE SHALL BE DIS-  
CONNECTED FROM SYSTEM BUT SHAL  
REMAIN IN PLACE FOR USE BY THE  
PROPERTY OWNER

2 METER RECONNECTS BY  
DISTRICT

1 - TEE IN  
1 - 8" x 8" TEE  
1 - 12" x 8" REDUCER  
2 - 12" 90° BENDS  
1 - 12" GATE VALVE W/BOX  
1 - 8" GATE VALVE W/BOX

INSTALL 16 LF OF  
15" CMP & GRADE  
DITCH AS REC'D

140' TO THE SE CORNER OF  
THE CLEVELAND PROPERTY.

JAMES A. & JENNIFER B. MNN  
DEED BOOK 272, PAGE 132

OVERFLOW AND LADDER TO  
BE LOCATED ON THIS LEG

1 - 8" PLUG - DISCONNECT MAIN  
AFTER EXIST. TANK IS TAKEN  
OUT OF SERVICE  
1 - FLUSH HYDRANT

1 - 8" x 8" TEE  
1 - 8" x 8" REDUCER  
1 - F.M.

MOUNT JUNCTION  
BOX FOR CATHODIC  
PROTECTION AND  
OBSERVATION  
LIGHTS ON THIS  
LEG AND RUN  
SERVICE UNDERGROUND  
TO PANEL BOARD

BENCH MARK: TOP OF FOUNDATION OF EXISTING  
STANDPIPE ELEVATION 665.14

CONTRACTOR SHALL INSTALL  
CHAIN LINK FENCE 6.75'  
NORTH OF R/W

ELECTRICAL  
SERVICE  
ENTRANCE POLE  
AND PANEL BOARD.

INSTALL NEW 8" SDR 21  
PVC PIPE TO RE-ROUTE  
MAIN AROUND NEW TANK

CONTRACTOR SHALL REMOVE ALL TREES FROM THE SITE. THE  
PROPERTY OWNER WANTS FIREWOOD OUT OF A PORTION OF THE  
TREES AND THE CONTRACTOR SHALL MOVE THAT PART OF THE TREE  
TO A LOCATION ADJACENT TO THE SITE AS DIRECTED. REMAINING  
TREE DEBRIS SHALL BE REMOVED AND DISPOSED OF OFF SITE.

NOTES:

1. LANDSCAPE ENTIRE SITE AND SEED WITH  
KY. 31 FESCUE PER SPECIFICATION 14.
2. CONTRACTOR SHALL INSTALL A TEMPORARY  
FENCE - 5 STRANDS OF BARBED WIRE TO  
KEEP LIVESTOCK CONTAINED.

CONSTRUCT DRIVEWAY PER  
TYPICAL ROAD SECTION  
THIS SHEET

**HOOVER HILL  
ELEVATED TANK SITE PLAN**  
SCALE: 1" = 40'



**HUNTER MARTIN & ASSOCIATES, INC.**  
ENGINEERS & SURVEYORS  
2320 LONE OAK ROAD • PARAGRAPH EIGHTYSEVEN (800)  
(602) 554-2727 • FAX (602) 554-2728

Drawn by SUC	Checked by RHM	Plat CHANGED1	Date 1-14-09	Revised
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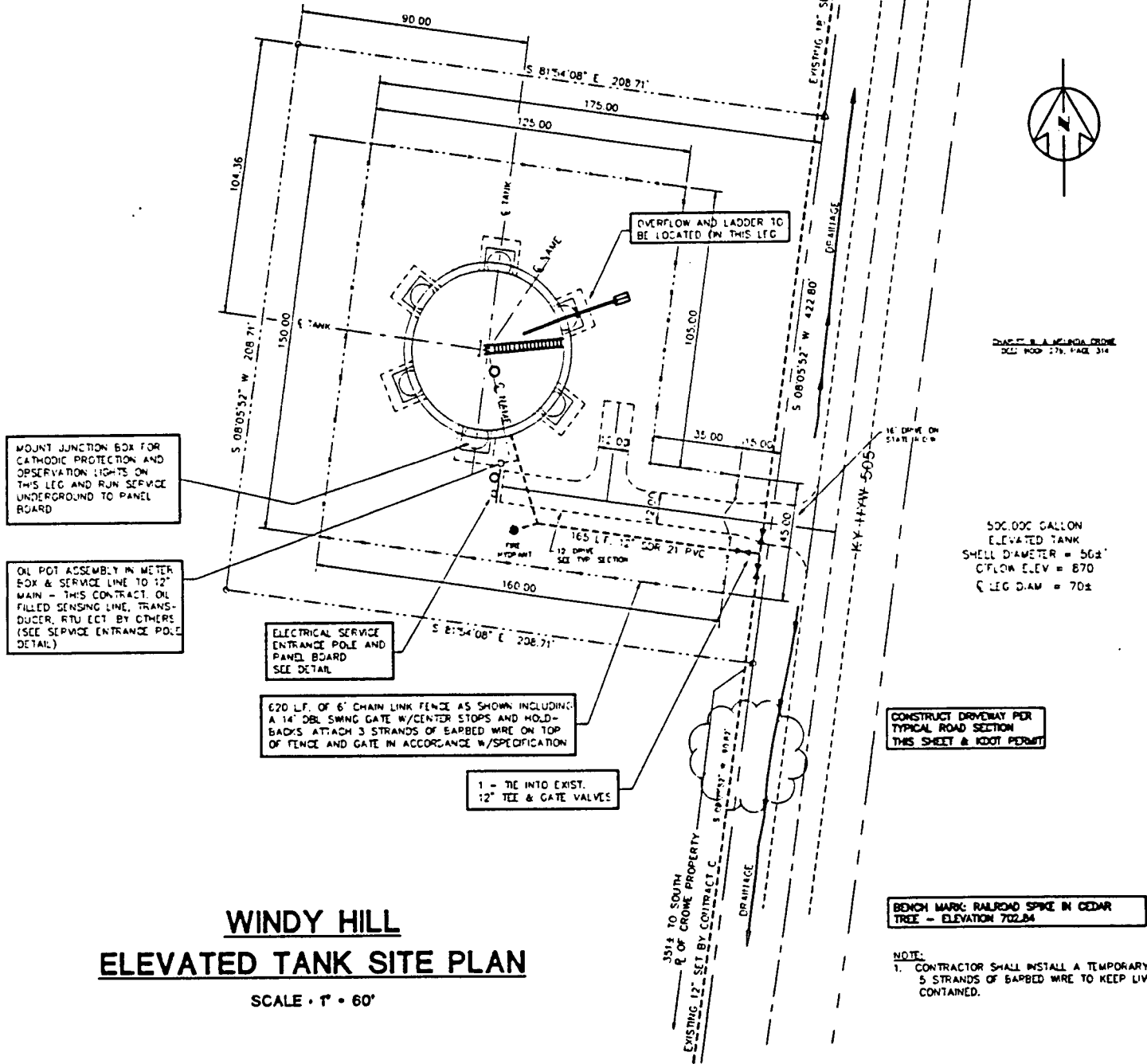
**SERIES I - CONTRACT D  
CHANGE ORDER D1**  
**OHIO COUNTY WATER DISTRICT**

Sheet  
**1**  
of 1 sheets



NOTE:  
CONTRACTOR SHALL LANDSCAPE & SEED ALL  
DISTURBED AREAS IN ACCORDANCE WITH  
SPECIFICATION 14 AND GRADING PLAN

CHARLES W. & MELINDA CROME  
DEED BOOK 279, PAGE 314



**WINDY HILL**

**ELEVATED TANK SITE PLAN**

SCALE • 1" = 60'



**HUNTER MARTIN & ASSOCIATES, INC.**

ENGINEERS & SURVEYORS  
2229 LORIE GALE ROAD • PARULGAR, KENTUCKY 40303  
(502) 264-2727 • FAX (502) 264-2728

Drawn by: SOC  
Checked by: RHM  
File: WS187D04  
Date:  
Revised:

**SERIES I - CONTRACT D  
CHANGE ORDER D1**

**OHO COUNTY WATER DISTRICT**

Sheet

**1**

of 1 sheets

# FAITH, INC.

P.O. BOX 1353  
HENDERSON, KENTUCKY 42420  
(502) 826-0476  
FAX (502) 826-7532

Post-It Fax Note 7671		Date 1/27/99	# of pages 6
To Rod H. Martin	From Fred L. Cook		
Co. Hunter Manufacturing	Co. Caldwell Tanks, Inc.		
Phone (502) 554-2737	Phone (502) 964-3361		
Fax (502) 554-2738	Fax (502) 966-2732		

January 21, 1999

Caldwell Tanks, Inc.  
P.O. Box 35770  
Louisville, KY 40232-5770  
Attn: Fred Cook, Project Manager

*REVISED C.O. REQUEST ON  
PIPES RELOCATION*

Re: F-324-A, E-4411, Ohio County Water District, OH  
Hoover Hill Site - Existing Waterline Relocation - Revised

Fred,

At this time, we are requesting a change order for additional monies in the lump sum amount of \$4,516.80. This change order involves relocating an existing 8" waterline to allow for the installation of the foundations for the new water tank. The following is a breakdown of this sum.

Labor - 3 Men - 2 Days @ \$29.10/Hour	\$1,396.80
Back Hoe - 2 Days @ \$60.00/Hour	\$ 960.00 ✓
Original Material Costs	\$1,407.64 ✓
Material Cost of Last Minute Items (See Attached Sheet)	\$ <del>752.00</del> 557.40
<b>TOTAL LUMP SUM AMOUNT</b>	<b>\$4,516.80 4321.84</b>

*C.T.I. 1st = ~~677.47~~ 648.28*

If you have any questions, please do not hesitate to contact our office. ~~\$5194.00~~ 4970.12

Sincerely,

E. J. O'Nan, President  
Faith, Inc.

**FAITH, INC.**

P.O. BOX 1353  
HENDERSON, KENTUCKY 42420  
(502) 826-0478  
FAX (502) 826-7532

January 21, 1999

Caldwell Tanks, Inc.  
P.O. Box 35770  
Louisville, KY 40232-5770  
Attn: Fred Cook, Project Manager

Re: F-324, E-4411  
Relocation of Waterline - Ohio County, KY

Fred,

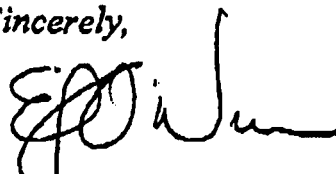
Listed below is our labor pricing breakdown for the above referenced project.

<i>Laborer Base Pay Scale</i>		<i>\$18.85/Per Hour</i>
7.65 %	<i>FICA</i>	
3.8 %	<i>State &amp; Federal Unemployment</i>	
12.3 %	<i>Workman's Comp</i>	
7.2 %	<i>Liability BI/PD Insurance</i>	
3.4 %	<i>Umbrella Insurance</i>	
10.0 %	<i>Office Overhead</i>	
<u>10.0 %</u>	<u><i>Profit</i></u>	
54.35 %	<i>Hourly Wage Mark-Up</i>	

$\$18.85/\text{Hour} + \$10.25 = \$29.10/\text{Hour}$  for Base Scale Wages

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

Sincerely,



E. J. O'Nan, President  
Faith, Inc.

QUINTATTON  
UTILITY PIPE SALES CO.  
8117 BURCH PARK ROAD  
EVANSVILLE, IN 47711  
812-887-7471 FAX 812-887-7476

NO. 004851

Page 1

01/21/99

Ship-to: 1  
FAITH INC. & E. J. O'NAN  
836 US 41A SOUTH  
HENDERSON, KY 42420

Bill-to: FAITH  
FAITH INC. & E. J. O'NAN  
PO BOX 1353  
HENDERSON KY 42420

REFERENCE # | EXPIRES | SLSP | TERMS | WH | FREIGHT | SHIP VIA

02/01/99 | 112 | 04 90 DAYS NET | 06 | BILLED | COST WAY

QUOTED BY: JF | QUOTED TO:

ITEM | DESCRIPTION | ORDERED | UM | PRICE | UM | EXTENSION

AMIS	#101HM FLUSHING HYDRANT 2" R BURY RTI INDUSTRIES	1.00	EA	289.00	EA	289.00
AMIS	#101HB, HYDRANT GAP HOSE BIBB	1.00	EA	29.95	EA	29.95
AMIS	#101BG, HOSE BIBB GAUGE	1.00	EA	39.95	EA	39.95
AMIS	#101CG, HYDRANT CAP GAUGE	1.00	EA	39.95	EA	39.95

JF

#289 F  
CHANGE ORDER  
\$1

506<sup>40</sup>  
\$684  
TOTAL  
(10%)  
\$684  
+ \$51  
\$735  
TOTAL  
\$557<sup>40</sup>

MERCHANDISE	MISC	TAX	FREIGHT	TOTAL
398.85	.00	23.83	.00	422.78

JF

Jan. 28, 1999 2:58PM  
8117 BURCH PARK ROAD  
EVANSVILLE, IN 47711  
(800) 234-7471 • (812) 867-7471  
FAX (812) 867-7476

5121 CHARTER OAK DRIVE  
PADUCAH, KY 42001  
(800) 942-1112 • (502) 441-7276  
FAX (502) 441-8080  
049914



# UTILITY PIPE SALES

COMPANY, INCORPORATED

E/MAIL: UPSCO@UTILPIPE.COM

INVOICE NO. FAITH  
CUSTOMER NO.

## INVOICE

FAITH INC. & E.J. O'NAN  
PO BOX 1353  
HENDERSON KY 42420

WINDY  
FAITH INC. & E.J. O'NAN  
WINDY HILLS PROJECT  
OHIO COUNTY, KY

Whse 02 Tax KY

DATE: 01/21/99 OUR TRUCK 2X30 DAYS N31  
PURCHASE ORDER NUMBER: 01/19/99 SALES PERSON: CRAIG WALT CUR ORDER NUMBER: 036054

QUANTITY ORDERED	QUANTITY SHIPPED	S.O.	ITEM NUMBER	DESCRIPTION	UNIT PRICE	EXTENDED PRICE
1	1	0	BH104878X75	8" X 3/4" CC (8.29-8.78) DI SADDLE, SINGLE STRP	19.89	19.89
1	1	0	BH134338X1	8" X 1" CC (8.63) BRASS SADDLE FOR IPS PVC	36.25	36.25
1	1	0	BH10036175	1" X 3/4" CC MALE X FEMAL BRASS REDUCER BUSHING	14.56	14.56
2	2	0	BH15008.75	3/4" CC X CTS COMP CORP STOP	11.50	23.00
1	1	0	BH99692	2" IP X MIP CORP STOP	84.51	84.51
1	1	0	BH134838X2	8" X 2" IP (8.63) BRASS SADDLE FOR IPS PVC	51.36	51.36
1	1	0	TRANSITION GASKET			

NOT USED.

\*\*IF PAID BY 2-21-99

DEDUCT \$20.98\*\*\*\*\*

*Handwritten:* 51.36  
Total ~~229.57~~  
CHANGE ORDER #1

LEASE DEDUCT 20.98  
PAID BY 01/21/99

Merchandise	1048.80
Miscellaneous	.00
Tax	62.93
Freight	.00
<b>Total</b>	<b>1111.73</b>

Jan 26, 1999 2:58PM

No. 0122 P. 5

8117 BURGH PARK ROAD  
EVANSVILLE, IN 47711  
(800) 234-7471 • (812) 867-7471  
FAX (812) 867-7470

5121 CHARTER OAK DRIVE  
PADUCAH, KY 42001  
(800) 842-1112 • (502) 441-7276  
FAX (502) 441-9080  
049915



# UTILITY PIPE SALES

COMPANY, INCORPORATED

E/MAIL: UPSCOBUTILPIPE.COM

INVOICE NO. FAITH  
CUSTOMER NO.

## INVOICE

FAITH INC. & E.J. O'NAN  
PO BOX 1353  
HENDERSON KY 42420

WINDY  
FAITH INC. & E.J. O'NAN  
WINDY HILLS PROJECT  
OHIO COUNTY, KY

Whse 02 Tax KY

DATE: 01/21/99 OUR TRUCK 2ND 30 DAYS N31  
PURCHASE ORDER NUMBER: DEPTO. CO. ORDER DATE: 01/19/99 SALES PERSON: 66 CRAIG WALT OUR ORDER NUMBER: 036075

QUANTITY ORDERED	QUANTITY SHIPPED	LD.	ITEM NUMBER	DESCRIPTION	UNIT PRICE	EXTENDED PRICE
2	2	0	CO8BB	8" COUPLING; BARREL-55152 (6)90297 & (6)100025	35.60	71.20
2	2	0	CO8PVC	8" GLAND AND GASKET PVC 8.63	23.71	47.42
2	2	0	CO8AC	8" AC GLAND & GASKET 9.46 - 9.85	23.71	47.42

\*\*IF PAID BY 2-21-99  
DEDUCT \$3.32\*\*\*\*\*

TOTAL \$ 166.04  
CHANGE ORDER  
#1

PLEASE DEDUCT 3.32  
IF PAID BY 01/21/99

Merchandise	166.04
Miscellaneous	.00
Tax	9.96
Freight	.00
<b>Total</b>	<b>176.00</b>

PLEASE SEND REMITTANCE TO: UTILITY PIPE SALES CO., INC. 8117 BURGH PARK RD EVANSVILLE, IN 47711

Attachment No. 1  
C. O. No. D-1  
Page 8

QUOTATION  
 UTILITY PIPE SALES CO.  
 8117 BURCH PARK ROAD  
 EVANSVILLE, IN 47711  
 812-867-7471 FAX 812-867-7476

NO. 004740

Page 1

12/29/98

Ship-to: SAME  
 FAITH INC. & E. J. O'NAN  
 PO BOX 1353  
 HENDERSON KY 42420

Bill-to: FAITH  
 FAITH INC. & E. J. O'NAN  
 PO BOX 1353  
 HENDERSON KY 42420

REFERENCE #	EXPIRES	SLSP	TERMS	WH	FREIGHT	SHIP VIA
F-324-B	01/29/99	HS	2% 30 DAYS N31	02	PREPAID	OUR TRUCK

QUOTED BY: JF\* QUOTED TO: ERNEST O'NAN

ITEM	DESCRIPTION	ORDERED	UM	PRICE	UM	EXTENSION
P218G	8" SDR 21 PVC PIPE GASKET JOINT, 20' LENGTH	40	FT	3.23	FT	129.20
P268G	8" SDR 26 PVC PIPE GASKET JOINT, 20' LENGTH	120	FT	2.64	FT	316.80
MJ890B	8" MJ 90 BEND	2	EA	60.11	EA	120.22
MJ8T	8" X 8" MJ TEE	1	EA	81.35	EA	81.35
MJ86RED	8" X 8" MJ REDUCER	1	EA	41.46	EA	41.46
MJ8SSLP	8" MJ SOLID SLEEVE LP	1	EA	48.19	EA	48.19
MJ8PLUG	8" MJ PLUG	1	EA	23.83	EA	23.83
VARW8MJL	8" MJ GATE VALVE OL RESILIENT WEDGE DESIGN	1	EA	391.00	EA	391.00
CV8562	VALVE BOX CI ADJUSTABLE 24" -36" SCREW TYPE	1	EA	26.00	EA	26.00
CV8LID	VALVE BOX LID MARKED "WATER"	1	EA	.00	EA	.00
BNG34EB	3/4" X 4" BENT EYE BOLT	12	EA	2.03	EA	24.36
BNG34HON	3/4" HEAVY DUTY HEX NUT	12	EA	.40	EA	4.80

MERCHANDISE	MISC	TAX	FREIGHT	TOTAL
1207.21	.00	72.43	.00	1279.64

+10% 12890  
 81607.61

RECEIVED APR 26 1999  
Rec'd (?) fr Caldwell

CHANGE ORDER - CONTRACT "D"

ORDER NO.: D-2

DATE: APRIL 5, 1999

AGREEMENT DATE: SEPTEMBER 10, 1998

NAME OF PROJECT: SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "D"

OWNER: OHIO COUNTY WATER DISTRICT

CONTRACTOR: CALDWELL TANKS, INC.

The following changes are hereby made to the CONTRACT DOCUMENTS:

**SEE ATTACHMENT NO. 1.**

Justification:

**SEE ATTACHMENT NO. 1.**

Change to CONTRACT PRICE:

Original CONTRACT PRICE: \$ 821.100.00

Current CONTRACT PRICE adjusted by previous CHANGE ORDER \$ 826.070.12

The CONTRACT PRICE due to this CHANGE ORDER will be DECREASED by

(\$ -0.00- ) and INCREASED by \$ -0.00- for a NET

change of \$ -0.00-

The new CONTRACT PRICE including this CHANGE ORDER will be \$ 826.070.12

Change to CONTRACT TIME:

The CONTRACT TIME will be N/A by 0 calendar days.  
(Increased / Decreased)

The date for completion of all work will be MAY 23, 1999  
(Date)

Requested by: James C. Partes OWNER

Recommended by: [Signature] ENGINEER

Accepted by: [Signature] CONTRACTOR

4/25/99 - cc Betty



**OHIO COUNTY WATER DISTRICT**  
**SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "D"**

**ATTACHMENT NO. 1**  
**TO**  
**CHANGE ORDER NO. D-2**

**ITEM 1:****CHANGES:**

The Rosine Standpipe will remain in place instead of being removed as originally bid.

The Hoover Hill standpipe shall be removed instead of being left in place as originally bid.

The Contract shall be changed as follows:

**DELETE THE FOLLOWING:**

ITEM NO.	DESCRIPTION	QUAN.	UNIT	UNIT BID PRICE	AMOUNT
3.	ROSINE STANDPIPE REMOVAL	1	LS	\$11,000.00	\$11,000.00
	<b>SUBTOTAL ITEM 3</b>				<b>\$11,000.00</b>

**ADD THE FOLLOWING:**

ITEM NO.	DESCRIPTION	QUAN.	UNIT	UNIT BID PRICE	AMOUNT
4.	HOOVER HILL STANDPIPE REMOVAL	1	LS	\$11,000.00	\$11,000.00
	<b>SUBTOTAL ITEM 4</b>				<b>\$11,000.00</b>

**JUSTIFICATION:**

The property owners at the respective sites requested the change.



"Established 1952"

# HUNTER MARTIN & ASSOCIATES, INC.

ENGINEERS & SURVEYORS

3220 LONE OAK ROAD • PADUCAH, KENTUCKY 42003

(270) 554-2737 • FAX (270) 554-2738

<http://www.huntermartin.com> • [hma@huntermartin.com](mailto:hma@huntermartin.com)

HUNTER H. MARTIN (1924 - 1997)  
Founder

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

MICHAEL GARDNER  
Vice President

BETTY J. GARDNER  
Secretary/Treasurer

October 19, 1999

Ms. Vicki L. Ray, Manager  
Drinking Water Branch  
Division of Water  
Frankfort Office Park  
14 Reilly Road  
Frankfort, KY 40601

Dear Ms. Ray:

RE: OHIO COUNTY WATER DISTRICT (WATER LINE EXTENSION - CONTRACT D) -  
DW#0920332-98002

In accordance with the approval letter dated May 26, 1998, for the above project, this is to advise that the work was completed in accordance with the stipulations set forth in said letter.

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

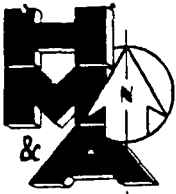
Yours very truly,

HUNTER MARTIN & ASSOCIATES, INC.

Rod H. Martin, P.E.

RHM:dc

cc: Mr. James C. Porter, General Superintendent, Ohio County Water District, Hartford, KY



"Established 1952"

# HUNTER MARTIN & ASSOCIATES, INC.

ENGINEERS & SURVEYORS

3220 LONE OAK ROAD • PADUCAH, KENTUCKY 42003  
(270) 554-2737 • FAX (270) 554-2738  
<http://www.huntermartin.com> • [hma@huntermartin.com](mailto:hma@huntermartin.com)

HUNTER H. MARTIN (1924 - 1997)

Founder

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

President

MICHAEL GARDNER

Vice President

BETTY J. GARDNER

Secretary/Treasurer

October 26, 1999

Caldwell Tanks, Inc.  
4000 Tower Road  
P. O. Box 35770  
Louisville, KY 40232

Gentlemen:

RE: OHIO COUNTY WATER DISTRICT (1998/99 SERIES I WATER SYSTEM  
IMPROVEMENTS - CONTRACT D) SUBSTANTIAL COMPLETION/ONE  
YEAR GUARANTEE

The District and the Engineer have agreed that the above project was SUBSTANTIALLY COMPLETE ON OCTOBER 15, 1999.

SUBSTANTIAL COMPLETION is granted for that date because the project was sufficiently complete for the District's use for the purpose intended (See General Conditions, Article 1.22).

Your guarantee on all materials and equipment furnished and work performed is for a period of one year from the date of substantial completion per General Conditions, Article 29.1. YOUR ONE-YEAR GUARANTEE EXPIRES OCTOBER 14, 2000.

Prior to that date, you will be responsible for any punch list or warranty items that occur.

Yours very truly,

HUNTER MARTIN & ASSOCIATES, INC.

Rod H. Martin, P.E.

RHM:dc

cc: Mr. James C. Porter, Superintendent, Ohio County Water District  
Mr. Tom Hines, Inspector, Hunter Martin & Associates, Inc.

\*\*\*\*\*

APPROVED BY OHIO COUNTY WATER DISTRICT AT A MEETING HELD ON OCTOBER 26, 1999.

  
James C. Porter, Superintendent

CHANGE ORDER - CONTRACT "E"

RECEIVED APR 1 1999  
Rec'd (3) fr Salmon  
RECEIVED APR 16 1999  
Rec'd (2) fr OCWD  
E-1

ORDER NO.:

DATE:

APRIL 5, 1999

AGREEMENT DATE:

JANUARY 11, 1999

NAME OF PROJECT: SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT E

OWNER: OHIO COUNTY WATER DISTRICT

CONTRACTOR: SALMON PLUMBING, INC.

The following changes are hereby made to the CONTRACT DOCUMENTS:

**INCREASE CONTRACT TIME BY 79 DAYS.**

Justification:

**DUE TO EXTENDED DELIVERY DATE FOR PUMPS.**

Change to CONTRACT PRICE:

Original CONTRACT PRICE: \$ 155,120.00

Current CONTRACT PRICE adjusted by previous CHANGE ORDER \$ .00

The CONTRACT PRICE due to this CHANGE ORDER will be **DECREASED** by

(\$ -0.00- ) and **INCREASED** by \$ -0.00- for a NET

change of \$ -0.00-.

The new CONTRACT PRICE including this CHANGE ORDER will be \$ 155,120.00.

Change to CONTRACT TIME:

The CONTRACT TIME will be INCREASED by 79 calendar days.  
(Increased / Decreased)

The date for completion of all work will be JULY 30, 1999.  
(Date)

Requested by: James C. Porter OWNER

Recommended by: [Signature] ENGINEER

Accepted by: L. Salmon CONTRACTOR

CHANGE ORDER - CONTRACT

RECEIVED JUL 1 1999  
Rec'd 3/4 Salmon

ORDER NO.: E-2 (REVISED)

DATE: MAY 25, 1999

AGREEMENT DATE: JANUARY 11, 1999

NAME OF PROJECT: SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT E"

OWNER: OHIO COUNTY WATER DISTRICT

CONTRACTOR: SALMON PLUMBING, INC.

The following changes are hereby made to the CONTRACT DOCUMENTS:

SEE ATTACHMENT NO. 1.

Justification:

SEE ATTACHMENT NO. 1.

Change to CONTRACT PRICE:

Original CONTRACT PRICE: \$ 155,120.00

Current CONTRACT PRICE adjusted by previous CHANGE ORDER \$ 155,120.00

The CONTRACT PRICE due to this CHANGE ORDER will be DECREASED by

(\$ 74,000.00 ) and INCREASED by \$ 63,619.15 for a NET

change of (\$ 10,380.85 ).

The new CONTRACT PRICE including this CHANGE ORDER will be \$ 144,739.15

Change to CONTRACT TIME:

The CONTRACT TIME will be N/A by 0 calendar days.  
(Increased / Decreased)

The date for completion of all work will be JULY 30, 1999  
(Date)

Requested by: James C. Porter OWNER

Recommended by: [Signature] ENGINEER

Accepted by: [Signature] CONTRACTOR

**OHIO COUNTY WATER DISTRICT**

**SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "E"**

**ATTACHMENT NO. 1**

**TO**

**CHANGE ORDER NO. E-2  
(REVISED)**

**CHANGES:**

This Change Order establishes the price changes for the modifications made to Contract "E".  
The Contract Price shall be changed as follows:

**DELETE THE FOLLOWING:**

ITEM NO.	DESCRIPTION	QUAN.	UNIT	UNIT BID PRICE	AMOUNT
12.1	HIGH SERVICE PUMPS	1	LS	\$41,000.00	(\$41,000.00)
12.3	PIPING VALVES & METER	1	LS	\$6,000.00	(\$6,000.00)
12.4	CHLORINATION FACILITIES	1	LS	\$24,000.00	(\$24,000.00)
12.7	BACKFLOW PREVENTER	1	LS	\$3,000.00	(\$3,000.00)
	<b>TOTAL DELETION:</b>				<b>(\$74,000.00)</b>

**ADD THE FOLLOWING:**

ITEM NO.	DESCRIPTION	QUAN.	UNIT	UNIT BID PRICE	AMOUNT
12.1	HIGH SERVICE PUMPS	1	LS	\$36,800.00	\$36,800.00
12.3	PIPING VALVES & METER	1	LS	\$5,900.00	\$5,900.00
12.4	CHLORINATION FACILITIES	1	LS	\$20,200.00	\$20,200.00
13.0	2" POST HYDRANT & VALVE	1	EA	\$719.15	\$719.15
	<b>TOTAL ADDITION:</b>				<b>\$63,619.15</b>

<b>TOTAL - CHANGE ORDER E-1</b>					<b>\$10,380.85</b>
---------------------------------	--	--	--	--	--------------------

**JUSTIFICATION:**

This Change Order establishes price changes due to the availability of materials and Engineering changes per request of Perdue as follows.

The Fairbanks Morse pumps, originally specified, have been replaced by J-Line pumps because of a shorter delivery time on the J-Line pumps.

The butterfly valves have been replaced with gate valves due to the pressure requirements and result in a net savings..

The 1 ton chlorine cylinder has been replaced with 150 lb. cylinders due to suggestions from the manufacturer and request of Perdue.

The material for the service line has been changed from DR7 PVC to rolled CTS due to availability. The location of the service line has been changed per Perdue's request to avoid conflicts with future improvements to Perdue's facilities. A 2 inch post hydrant and valve were requested to be installed at the end of the service line by Perdue.

The location of the chlorine feed line has been changed from underground to a fixed position along the building wall per request of the Perdue.

A backflow preventer, capable of operating at the design pressures, is unavailable and will be addressed by Perdue.

CHANGE ORDER - CONTRACT

ORDER NO.: E-3

DATE: SEPTEMBER 20, 1999

AGREEMENT DATE: JANUARY 11, 1999

NAME OF PROJECT: SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT E"

OWNER: OHIO COUNTY WATER DISTRICT

CONTRACTOR: SALMON PLUMBING, INC.

The following changes are hereby made to the CONTRACT DOCUMENTS:

**SEE ATTACHMENT NO. 1.**

Justification:

**SEE ATTACHMENT NO. 1.**

Change to CONTRACT PRICE:

Original CONTRACT PRICE: \$ 155,120.00

Current CONTRACT PRICE adjusted by previous CHANGE ORDER \$ 144,739.15

The CONTRACT PRICE due to this CHANGE ORDER will be DECREASED by

(\$ - 0 - ) and INCREASED by \$ 2,466.38 for a NET

change of \$ 2,466.38

The new CONTRACT PRICE including this CHANGE ORDER will be \$ 147,205.53

Change to CONTRACT TIME:

The CONTRACT TIME will be N/A by 0 calendar days.

(Increased / Decreased)

The date for completion of all work will be JULY 30, 1999

(Date)

Requested by: James E. Porter OWNER

Recommended by: Leo Salmon ENGINEER

Accepted by: Leon Salmon CONTRACTOR

*Oug*



OHIO COUNTY WATER DISTRICT

SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "E"

ATTACHMENT NO. 1

TO

CHANGE ORDER NO. E-3

CHANGES:

This Change Order establishes a price for installation of two swing arm check valves, and one drain for each air release valve.

The Contract Price shall be changed as follows:

ADD THE FOLLOWING:

ITEM NO.	DESCRIPTION	QUAN.	UNIT	UNIT BID PRICE	AMOUNT
14.	8" F X F SWING ARM CHECK VALVES	2	LS		\$2,286.34
15.	2" DRAIN FOR EACH AIR RELEASE VALVE	1	LS		\$180.04
TOTAL CHANGE ORDER E-3					\$2,466.38

JUSTIFICATION:

- Item No. 14 - Two swing arm check valves were installed in lieu of a reduced pressure principal backflow preventer. The backflow preventer is not suitable for high pressure that will be experienced at the plant.
- Item No. 15 - Drain lines installed to minimize moisture in the plant building.

CHANGE ORDER - CONTRACT

RECEIVED File

ORDER NO.: E-4  
DATE: November 12, 1999  
AGREEMENT DATE: JANUARY 11, 1999

NAME OF PROJECT: SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT E"  
OWNER: OHIO COUNTY WATER DISTRICT  
CONTRACTOR: SALMON PLUMBING, INC.

The following changes are hereby made to the CONTRACT DOCUMENTS:

SEE ATTACHMENT NO. 1.

Justification:

SEE ATTACHMENT NO. 1.

Change to CONTRACT PRICE:

Original CONTRACT PRICE: \$ 155,120.00

Current CONTRACT PRICE adjusted by previous CHANGE ORDER \$ 147,205.53

The CONTRACT PRICE due to this CHANGE ORDER will be DECREASED by

(\$ 0 ) and INCREASED by \$ 14,718.17 for a NET

change of \$ 14,718.17

The new CONTRACT PRICE including this CHANGE ORDER will be \$161,923.70

Change to CONTRACT TIME:

The CONTRACT TIME will be INCREASED by 76 calendar days.  
(Increased / Decreased)

The date for completion of all work will be OCTOBER 15, 1999  
(Date)

Requested by: James E. Porter OWNER  
Recommended by: [Signature] ENGINEER  
Accepted by: [Signature] CONTRACTOR

OHIO COUNTY WATER DISTRICT

SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "E"

ATTACHMENT NO. 1

TO

CHANGE ORDER NO. E-4

**CHANGES:**

This change order establishes the change of price for the modifications made to contract "E".  
The Contract Price shall be changed as follows:

**ADD THE FOLLOWING:**

ITEM NO.	DESCRIPTION	QUAN.	UNIT	UNIT BID PRICE	AMOUNT
16.	Surge control protection valve assembly	1	LS	\$8,600.00	\$8,600.00
17.	Screens and Gauges	1	LS	\$1,193.99	\$1,193.99
18.	Bracing outside plant and concrete	1	LS	\$4,924.18	\$4,924.18
	<b>SUBTOTAL CHANGE ORDER</b>				<b>\$14,718.17</b>

**JUSTIFICATION:**

This Change Order establishes prices for (1) surge control protection valve assembly that adds additional safety in case of power loss; (2) screens and gauges that protect plant operators from the pump shafts and gives them additional information on chlorination; and (3) bracing outside the plant that was needed due to soft soil conditions created by a leak in the Purdue plant. Quotes from Salmon Construction are attached.

**Salmon Construction, Inc.**

RECEIVED NOV 12 1999

P. O. Box 97,  
149 S. Main St.,  
Mt. Washington, KY 40047

Phone (502) 538-7676 or 955-9228  
Fax (502) 538-3616

November 12, 1999

*Ohio County Contract E*

*Change Order*

*Surge Control Protection Valve Assembly      \$8,600.00*

**Salmon Construction, Inc.**

RECEIVED NOV 12 1999

P. O. Box 97,  
149 S. Main St.,  
Mt. Washington, KY 40047

Phone (502)538-7676 or 933-9228  
Fax (502) 538-3616

November 12, 1999

**Ohio County Contract E**

**Change Order**

**Outside Plant & Concrete                      \$4,924.18**

**Salmon Construction, Inc.**

P. O. Box 97,  
149 S. Main St.,  
Mt. Washington, KY 40047

Phone (502) 538-7676 or 955-9228  
Fax (502) 538-3616

RECEIVED NOV 12 1999

November 12, 1999

***Ohio County Contract E***

***Change Order***

***Screens & Guages***

***\$1,193.99***

Attachment No. 1  
Change Order No. E-4  
Page 4



"Established 1952"

# HUNTER MARTIN & ASSOCIATES, INC.

ENGINEERS & SURVEYORS

3220 LONE OAK ROAD • PADUCAH, KENTUCKY 42003

(270) 554-2737 • FAX (270) 554-2738

<http://www.huntermartin.com> • [hma@huntermartin.com](mailto:hma@huntermartin.com)

HUNTER H. MARTIN (1924 - 1997)

Founder

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

President

MICHAEL GARDNER

Vice President

BETTY J. GARDNER

Secretary/Treasurer

October 19, 1999

Ms. Vicki L. Ray, Manager  
Drinking Water Branch  
Division of Water  
Frankfort Office Park  
14 Reilly Road  
Frankfort, KY 40601

Dear Ms. Ray:

RE: OHIO COUNTY WATER DISTRICT (WATER LINE EXTENSION - CONTRACT E) -  
DW#0920332-98006

In accordance with the approval letter dated July 28, 1998, for the above project, this is to advise that the work was completed in accordance with the stipulations set forth in said letter.

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

Yours very truly,

HUNTER MARTIN & ASSOCIATES, INC.

Rod H. Martin, P.E.

RHM:dc

cc: Mr. James C. Porter, General Superintendent, Ohio County Water District, Hartford, KY



"Established 1952"

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

MICHAEL GARDNER  
Vice President

BETTY J. GARDNER  
Secretary/Treasurer

October 26, 1999

Salmon Plumbing, Inc.  
P. O. Box 97  
Mt. Washington, KY 40047

Gentlemen:

RE: OHIO COUNTY WATER DISTRICT (1998/99 SERIES I WATER SYSTEM  
IMPROVEMENTS - CONTRACT E) SUBSTANTIAL COMPLETION/ONE  
YEAR GUARANTEE

The District and the Engineer have agreed that the above project was **SUBSTANTIALLY COMPLETE** ON OCTOBER 15, 1999.

SUBSTANTIAL COMPLETION is granted for that date because the project was sufficiently complete for the District's use for the purpose intended (See General Conditions, Article 1.22).

Your guarantee on all materials and equipment furnished and work performed is for a period of one year from the date of substantial completion per General Conditions, Article 29.1. **YOUR ONE-YEAR GUARANTEE EXPIRES OCTOBER 14, 2000.**

Prior to that date, you will be responsible for any punch list or warranty items that occur.

Yours very truly,

HUNTER MARTIN & ASSOCIATES, INC.

Rod H. Martin, P.E.

RHM:dc

cc: Mr. James C. Porter, Superintendent, Ohio County Water District  
Mr. Tom Hines, Inspector, Hunter Martin & Associates, Inc.

\*\*\*\*\*

APPROVED BY OHIO COUNTY WATER DISTRICT AT A MEETING HELD ON OCTOBER 26, 1999.

  
James C. Porter, Superintendent



CHANGE ORDER - CONTRACT

RECEIVED APR 05 1999  
Rec'd (3) by H.T.L.  
RECEIVED APR 19 1999  
Rec'd (2) by H.T.L.

ORDER NO.: F-1  
DATE: APRIL 5, 1999  
AGREEMENT DATE: JANUARY 11, 1999

NAME OF PROJECT: SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "F"  
OWNER: OHIO COUNTY WATER DISTRICT  
CONTRACTOR: H.T.L, INC.

The following changes are hereby made to the CONTRACT DOCUMENTS:

SEE ATTACHMENT NO. 1.

Justification:

SEE ATTACHMENT NO. 1.

Change to CONTRACT PRICE:

Original CONTRACT PRICE: \$ 117,859.00

Current CONTRACT PRICE adjusted by previous CHANGE ORDER \$ 117,859.00

The CONTRACT PRICE due to this CHANGE ORDER will be DECREASED by

(\$ -0.00- ) and INCREASED by \$ 28,549.00 for a NET

change of \$ 28,549.00

The new CONTRACT PRICE including this CHANGE ORDER will be \$ 146,408.00

Change to CONTRACT TIME:

The CONTRACT TIME will be N/A by 0 calendar days.  
(Increased / Decreased)

The date for completion of all work will be MAY 12, 1999  
(Date)

Requested by: James C. Porter OWNER  
Recommended by: [Signature] ENGINEER  
Accepted by: Bud L. Morris - president CONTRACTOR

**OHIO COUNTY WATER DISTRICT**

**SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "F"**

**ATTACHMENT NO. 1**

**TO**

**CHANGE ORDER NO. F-1**

**CHANGES:**

This change order expands the existing Radio Telemetry Project, to include the Taylor Mines Tank and the Beaver Dam Pump Station. This will eliminate the hardware of the old system and bring all existing control points into the new Telemetry System. All equipment will be compatible with the new equipment previously specified and includes additional software points and development to include the new locations at the Master Station.

Also four additional sites will be licensed with the FCC at the time the original application is made.

The Contract Price shall be changed as follows:

**ADD THE FOLLOWING:**

ITEM NO.	DESCRIPTION	QUAN.	UNIT	UNIT BID PRICE	AMOUNT
<b>8.</b>	<b>BEAVER DAM PUMP STATION</b>				
8.1	Materials	1	LS	\$8,974.00	XXXXXXXX
8.2	Labor	1	LS	\$1,950.00	XXXXXXXX
	<b>TOTAL ITEM 8</b>				<b>\$10,924.00</b>
<b>9.</b>	<b>TAYLOR MINES TANK SITE</b>				
9.1	Materials	1	LS	\$7,350.00	XXXXXXXX
9.2	Labor	1	LS	\$1,760.00	XXXXXXXX
	<b>TOTAL ITEM 9</b>				<b>\$9,110.00</b>
<b>10.</b>	<b>MASTER STATION - ADDITIONAL WORK</b>				
10.1	Materials	1	LS	\$2,900.00	XXXXXXXX
10.2	Labor	1	LS	\$3,040.00	XXXXXXXX
	<b>TOTAL ITEM 10</b>				<b>\$5,940.00</b>
<b>11.</b>	<b>SPARE RADIO/MODEM</b>	<b>1</b>	<b>LS</b>	<b>\$1,875.00</b>	<b>\$1,875.00</b>
<b>12.</b>	<b>ADDITIONAL FCC LICENSING</b>	<b>1</b>	<b>LS</b>	<b>\$700.00</b>	<b>\$700.00</b>
	<b>TOTAL CHANGE ORDER F-1</b>				<b>\$28,549.00</b>

**JUSTIFICATION:**

Changing the old system to the new Telemetry System will avoid conflicts in operation and provide for a more reliable system.

Additional sites can be licensed at this time at a savings of \$650.00 for the District.

Spare units are advisable to increase reliability of the system.

RECEIVED MAY - 3 1999  
Rec'd (27) for 471

CHANGE ORDER - CONTRACT "F"

ORDER NO.: F-2

DATE: APRIL 27, 1999

AGREEMENT DATE: JANUARY 11, 1999

NAME OF PROJECT: SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "F"

OWNER: OHIO COUNTY WATER DISTRICT

CONTRACTOR: H.T.I., INC.

The following changes are hereby made to the CONTRACT DOCUMENTS:

**INCREASE CONTRACT TIME BY 79 CALENDAR DAYS.**

Justification:

**TO COORDINATE WORK WITH CONTRACT "E".**

Change to CONTRACT PRICE:

Original CONTRACT PRICE: \$ 117,859.00

Current CONTRACT PRICE adjusted by previous CHANGE ORDER \$ 146,408.00

The CONTRACT PRICE due to this CHANGE ORDER will be DECREASED by

(\$ -0.00- ) and INCREASED by \$ -0.00- for a NET

change of \$ -0.00-

The new CONTRACT PRICE including this CHANGE ORDER will be \$146,408.00

Change to CONTRACT TIME:

The CONTRACT TIME will be INCREASED by 79 calendar days.  
(Increased / Decreased)

The date for completion of all work will be JULY 30, 1999  
(Date)

Requested by: James J. Doty OWNER

Recommended by: [Signature] ENGINEER

Accepted by: [Signature] CONTRACTOR

Engineer

File

CHANGE ORDER - CONTRACT "F"

ORDER NO.: F-3

DATE: November 12, 1999

AGREEMENT DATE: JANUARY 11, 1999

NAME OF PROJECT: SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "F"

OWNER: OHIO COUNTY WATER DISTRICT

CONTRACTOR: H.T.I., INC.

The following changes are hereby made to the CONTRACT DOCUMENTS:

**SEE ATTACHMENT NO. 1.**

Justification:

**SEE ATTACHMENT NO. 1.**

Change to CONTRACT PRICE:

Original CONTRACT PRICE: \$ 117,859.00

Current CONTRACT PRICE adjusted by previous CHANGE ORDER \$ 146,408.00

The CONTRACT PRICE due to this CHANGE ORDER will be DECREASED by

(\$ -0.00- ) and INCREASED by \$ \$4,700.00 for a NET

change of \$ \$4,700.00

The new CONTRACT PRICE including this CHANGE ORDER will be \$ 151,108.00

Change to CONTRACT TIME:

The CONTRACT TIME will be INCREASED by 76 calendar days.

(Increased / Decreased)

The date for completion of all work will be OCTOBER 15, 1999

(Date)

Requested by: James C. Porter OWNER

Recommended by: [Signature] ENGINEER

Accepted by: H.T.I. Inc. By: [Signature] CONTRACTOR

OHIO COUNTY WATER DISTRICT

SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "F"

ATTACHMENT NO. 1

TO

CHANGE ORDER NO. F-3

**CHANGES:**

This change order establishes the change of price for the modifications made to contract "E".  
The Contract Price shall be changed as follows:

**ADD THE FOLLOWING:**

ITEM NO.	DESCRIPTION	QU AN.	UN IT	UNIT BID PRICE	AMOUNT
13.	Alarm at Purdue	1	LS	\$775.00	\$775.00
14.	New FCC license	1	LS	\$1,450.00	\$1,450.00
15.	Inc. power of 3 radios	1	LS	\$1,500.00	\$1,500.00
16.	Common alarm at WTP	1	LS	\$975.00	\$975.00
SUBTOTAL CHANGE ORDER					\$4,700.00

**JUSTIFICATION:**

This Change Order establishes price changes per attached letters.



## Experience Serving Your Process Control Needs

9560 HWY 62 EAST - HORSE BRANCH, KY 42349

PHONE 502-274-4632/502-274-6700 - FAX 502-274-9885/ 502-274-6777

e-mail [hii.inc@mindspring.com](mailto:hii.inc@mindspring.com)

Thursday, October 21, 1999

Rod Martin  
Hunter Martin & Associates  
3220 Loane Oak Rd.  
Paducah, KY 42003

Re: Ohio County Water District radio frequency license

Rod:

As you know there are problems with interference on the existing licensed telemetry radio frequency at the Ohio County Water District. The Webster County Water District and the OCWD share the identical assigned operating frequency. Due to the fact that some of the OCWD remote sites and Webster County are as close as 30 miles, and the effective power for both systems is quite strong. The inference is above the threshold for proper radio communications. We have worked directly with Webster County and their telemetry vendor in an attempt to correct the problem, and have exhausted all attempts to work around the problem with no success.

Due to planned system expansion for OCWD and scheduled expansion of Webster County's system, I feel that there is no alternative but to change the operational frequency. Unfortunately, other available VHF frequencies are very limited and busy. We have tested other adjacent frequencies to the best of our ability and it appears we can establish adequate communications for operation on one of these frequencies. The permanent operation on other frequencies will require a re-submittal of the FCC application process. Our cost for the re-submittal is approximately \$1450.00. We will gladly re-apply on the District's behalf at our cost for the license, plus any additional administrative cost or expenses that we may incur.

I am very sorry for the inconvenience that this may have caused for you or the District. As the FCC coordinator previously assigned the operating frequency, this problem was not anticipated by anyone until it became apparent of the interference. The District has the ability to file a complaint with the FCC's representative agency on this matter. I have been informed that this is a lengthy and complicated process. If you decide to take action, I will provide you with contact information to file a complaint.

Sincerely,

Jeff Morris

**ROD MARTIN**

---

**From:** Jeff Morris [hti.inc@mindspring.com]  
**Sent:** Tuesday, October 26, 1999 9:02 AM  
**To:** Rod Martin  
**Subject:** OCWD\_F\_Perdue common visual alarm

9560 HWY 62 EAST - HORSE BRANCH, KY 42349  
PHONE 502-274-4632/502-274-6700 - FAX 502-274-9885/ 502-274-6777  
e-mail hti.inc@mindspring.com

Tuesday, October 26, 1999

Rod Martin  
Hunter Martin & Associates  
3220 Loane Oak Rd.  
Paducah, KY 42003

RE: OCWD Contract F-Perdue water plant common visual alarm

Dear Rod:

I have estimated the cost for installing a common visual alarm at the Perdue water plant RTU to be \$775.00. This would give the Perdue plant operators visual indication (via a local red warning light) of any problems that may be active in the telemetry RTU. The alarms would be specific for the OCWD-Perdue plant equipment only. The plant operator would be able to acknowledge the common visual alarm via a front panel pushbutton. They can then review the Operator Interface Panel to obtain detailed information on the individual alarms.

The estimated cost for this project includes additional PLC and Panelview programming, wiring installation and testing. Please let me know if this meets your approval and we will proceed as soon as possible.

Sincerely,



Jeff Morris



## ROD MARTIN

---

**From:** ROD MARTIN  
**Sent:** Tuesday, August 17, 1999 5:33 PM  
**To:** Jeff Morris (E-mail)  
**Cc:** TOM HINES  
**Subject:** OCWD - RADIO CONTROLS

JEFF,

WE RECEIVED YOUR MESSAGES RE: THE HIGHER POWERED UNIT AT TAYLOR MINES. THIS SOUNDS PROMISING AND I UNDERSTAND THAT WE ARE TALKING AROUND \$500 PER SITE TO UPGRADE. STILL HAVE NOT TALKED TO JIM ON THE BEST WAY TO HANDLE THIS. I WILL TRY TO DISCUSS THIS WITH HIM TOMORROW AFTERNOON.

ALSO RECEIVED THE SPECS FOR NEW EQUIPMENT ON THE OLATON TANK SITE...CONTRACT E SERIES II. TOM IS WORKING ON THIS AND HOPEFULLY GET OUT OF OFFICE IN NEAR FUTURE. IF THERE ARE ANY QUESTIONS ONE OF US WILL CONTACT YOU.

FOR YOU INFO, WE RECEIVED THE OLATON INFO ON WEDNESDAY 8/11/99 WITH THE CORRECTION RE: 200 PSI ON FRIDAY 8/13/99. THE INFORMATION RE: THE UPGRADE CAME IN ON THURSDAY 8/12/99 AND TODAY 8/17/99. APPARENTLY OUR E-MAIL IS WORKING OK.

THANKS,  
ROD

**Tracking:**

**Recipient**  
Jeff Morris (E-mail)  
TOM HINES

**Delivery**

Delivered: 8/17/99 5:33 PM

## ROD MARTIN

---

**From:** Jeff Morris [hti.inc@mindspring.com]  
**Sent:** Tuesday, August 17, 1999 8:22 AM  
**To:** Rod Martin  
**Subject:** Fw: OCWD radio upgrade

----- Original Message -----

**From:** Jeff Morris <hti.inc@mindspring.com>  
**To:** Rod Martin <hma@apex.net>  
**Sent:** Thursday, August 12, 1999 8:48 AM  
**Subject:** OCWD radio upgrade

> Rod:  
>  
> FYI: After our conversation yesterday I installed a radio unit with  
> the  
> higher powered amplifier at the Taylor Mines tank site. I saw  
> immediate  
> improvement in performance at the station and it also went through the  
> night  
> with no problems. Time will tell the full story, but I think it might  
> be  
> worth the effort to look at doing the same to the other communications  
> trouble spots in the system.  
>  
>  
> Thanks,  
>  
>

Attachment No. 1  
Change Order F-3  
Page 4

**ROD MARTIN**

---

**From:** Jeff Morris [hti.inc@mindspring.com]  
**Sent:** Monday, November 22, 1999 10:48 AM  
**To:** Rod Martin  
**Subject:** Fw: OCWD "F" waterplant alarm

— Original Message —

**From:** Jeff Morris  
**To:** Tom Hines  
**Sent:** Friday, November 19, 1999 8:00 AM  
**Subject:** OCWD "F" waterplant alarm

Tom:

We can install the telemetry system common trouble alarm at the water plant as requested. This alarm would give a visual and audible alarm to the water plant operator upon any alarm generated from the telemetry Master computer. The addition would include needed RSView configuration, PLC programming and alarm materials. Estimated cost: \$975.00

Note: I failed to include a needed PLC input card for this project during our conversation. This card will accommodate the alarm project and also will handle several other inputs later on if needed. Sorry for the inconvenience. If this creates a problem please let me know. If you have any questions concerning this matter please contact me.

Thanks,

Jeff Morris  
H.T.I. Inc.  
hti.inc@mindspring.com

Attachment No. 1  
Change Order No. F-3  
Page 5

11/22/99



"Established 1952"

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ENGINEERS & SURVEYORS

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Founder

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

President

MICHAEL GARDNER

Vice President

BETTY J. GARDNER

Secretary/Treasurer

October 19, 1999

Ms. Vicki L. Ray, Manager  
Drinking Water Branch  
Division of Water  
Frankfort Office Park  
14 Reilly Road  
Frankfort, KY 40601

Dear Ms. Ray:

RE: OHIO COUNTY WATER DISTRICT (WATER LINE EXTENSION - CONTRACT F) -  
DW#0920332-98007

In accordance with the approval letter dated July 27, 1998, for the above project, this is to advise that the work was completed in accordance with the stipulations set forth in said letter.

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

Yours very truly,

HUNTER MARTIN & ASSOCIATES, INC.

Rod H. Martin, P.E.

RHM:dc

cc: Mr. James C. Porter, General Superintendent, Ohio County Water District, Hartford, KY



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Vice President

BETTY J. GARDNER  
Secretary/Treasurer

October 26, 1999

H.T.I., Inc.  
9560 Highway 62 East  
Horse Branch, KY 42349

Gentlemen:

RE: OHIO COUNTY WATER DISTRICT (1998/99 SERIES I WATER SYSTEM  
IMPROVEMENTS - CONTRACT F) SUBSTANTIAL COMPLETION/ONE  
YEAR GUARANTEE

The District and the Engineer have agreed that the above project was SUBSTANTIALLY COMPLETE  
ON OCTOBER 15, 1999.

SUBSTANTIAL COMPLETION is granted for that date because the project was sufficiently complete  
for the District's use for the purpose intended (See General Conditions, Article 1.22).

Your guarantee on all materials and equipment furnished and work performed is for a period of one year  
from the date of substantial completion per General Conditions, Article 29.1. YOUR ONE-YEAR  
GUARANTEE EXPIRES OCTOBER 14, 2000.

Prior to that date, you will be responsible for any punch list or warranty items that occur.

Yours very truly,

HUNTER MARTIN & ASSOCIATES, INC.

Rod H. Martin, P.E.

RHM:dc

cc: Mr. James C. Porter, Superintendent, Ohio County Water District  
Mr. Tom Hines, Inspector, Hunter Martin & Associates, Inc.

\*\*\*\*\*

APPROVED BY OHIO COUNTY WATER DISTRICT AT A MEETING HELD ON OCTOBER 26,  
1999.

  
James C. Porter, Superintendent

RECEIVED NOV 17 1999  
File

CHANGE ORDER - CONTRACT "G"

ORDER NO.: G-1

DATE: NOVEMBER 10, 1999

AGREEMENT DATE: AUGUST 5, 1999

NAME OF PROJECT: SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "G"

OWNER: OHIO COUNTY WATER DISTRICT

CONTRACTOR: GREGORY PIPING CO., INC.

The following changes are hereby made to the CONTRACT DOCUMENTS:

SEE ATTACHMENT NO. 1.

Justification:

SEE ATTACHMENT NO. 1.

Change to CONTRACT PRICE:

Original CONTRACT PRICE: \$ 237,395.00

Current CONTRACT PRICE adjusted by previous CHANGE ORDER \$ 237,395.00

The CONTRACT PRICE due to this CHANGE ORDER will be DECREASED by

(\$ 0.00 ) and INCREASED by \$ 6,341.80 for a

NET change of \$ 6,341.80

The new CONTRACT PRICE including this CHANGE ORDER will be \$243,736.80.

Change to CONTRACT TIME:

The CONTRACT TIME will be N/A by N/A calendar days.  
(Increased / Decreased)

The date for completion of all work will be DECEMBER 13, 1999  
(Date)

Requested by: James C. Porter OWNER

Recommended by: [Signature] ENGINEER

Accepted by: Ray Gregory CONTRACTOR

**OHIO COUNTY WATER DISTRICT**

**SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "G"**

**ATTACHMENT NO. 1**

**TO**

**CHANGE ORDER NO. G-1**

**CHANGES:**

The Contract Price shall be changed as follows:

**ADD THE FOLLOWING:**

				UNIT	
ITEM				BID	
NO.	DESCRIPTION	QUAN.	UNIT	PRICE	AMOUNT
2.	WATER MAINS, PVC				
2.4	4" SDR 21	760	LF	\$2.43	\$1,846.80
4.	VALVES, W/CAST IRON BOX				
4.5	3" Gate	1	EA.	\$245.00	\$245.00
6.	TIE-INS				
6.5	12 Inch	1	EA.	\$450.00	\$450.00
16	SPECIAL TAPS AND FITTINGS				
16.1	4" X 4" TAPPING SADDLE W/ 4" VALVE	1	EA.	\$1,500.00	\$1,500.00
16.2	12" X 6" TAPPING SADDLE W/ 6" VALVE	1	EA.	\$2,300.00	\$2,300.00
	<b>TOTAL CHANGE ORDER G-1</b>				<b>\$6,341.80</b>

**JUSTIFICATION:**

This Change Order establishes a unit bid price for a 4" by 4" tapping sleeve w/ 4" valve, a 12" by 6" tapping sleeve w/ 6" valve, a 12" tie-in, additional lineal feet of 4" SDR 21 water main with cost of materials increase, and a 3" gate valve.

RECEIVED NOV 17 1999  
File

CHANGE ORDER - CONTRACT "G"

ORDER NO.: G-1

DATE: NOVEMBER 10, 1999

AGREEMENT DATE: AUGUST 5, 1999

NAME OF PROJECT: SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "G"

OWNER: OHIO COUNTY WATER DISTRICT

CONTRACTOR: GREGORY PIPING CO., INC.

The following changes are hereby made to the CONTRACT DOCUMENTS:

SEE ATTACHMENT NO. 1.

Justification:

SEE ATTACHMENT NO. 1.

Change to CONTRACT PRICE:

Original CONTRACT PRICE: \$ 237,395.00

Current CONTRACT PRICE adjusted by previous CHANGE ORDER \$ 237,395.00

The CONTRACT PRICE due to this CHANGE ORDER will be DECREASED by

(\$ 0.00 ) and INCREASED by \$ 6,341.80 for a

NET change of \$ 6,341.80

The new CONTRACT PRICE including this CHANGE ORDER will be \$ 243,736.80

Change to CONTRACT TIME:

The CONTRACT TIME will be N/A by N/A calendar days.  
(Increased / Decreased)

The date for completion of all work will be DECEMBER 13, 1999  
(Date)

Requested by: James C. Porter OWNER

Recommended by: [Signature] ENGINEER

Accepted by: Ray Gregory CONTRACTOR

**OHIO COUNTY WATER DISTRICT**  
**SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "G"**

**ATTACHMENT NO. 1**

**TO**

**CHANGE ORDER NO. G-1**

**CHANGES:**

The Contract Price shall be changed as follows:

**ADD THE FOLLOWING:**

ITEM NO.	DESCRIPTION	QUAN.	UNIT	UNIT BID PRICE	AMOUNT
2.	<b>WATER MAINS, PVC</b>				
2.4	4" SDR 21	760	LF	\$2.43	\$1,846.80
4.	<b>VALVES, W/CAST IRON BOX</b>				
4.5	3" Gate	1	EA	\$245.00	\$245.00
6.	<b>TIE-INS</b>				
6.5	12 Inch	1	EA	\$450.00	\$450.00
16	<b>SPECIAL TAPS AND FITTINGS</b>				
16.1	4" X 4" TAPPING SADDLE W/ 4" VALVE	1	EA	\$1,500.00	\$1,500.00
16.2	12" X 6" TAPPING SADDLE W/ 6" VALVE	1	EA	\$2,300.00	\$2,300.00
	<b>TOTAL CHANGE ORDER G-1</b>				<b>\$6,341.80</b>

**JUSTIFICATION:**

This Change Order establishes a unit bid price for a 4" by 4" tapping sleeve w/ 4" valve, a 12" by 6" tapping sleeve w/ 6" valve, a 12" tie-in, additional lineal feet of 4" SDR 21 water main with cost of materials increase, and a 3" gate valve.





"Established 1952"

# HUNTER MARTIN & ASSOCIATES, INC.

ENGINEERS & SURVEYORS

3220 LONE OAK ROAD • PADUCAH, KENTUCKY 42003

(270) 554-2737 • FAX (270) 554-2738

<http://www.huntermartin.com> • [hma@huntermartin.com](mailto:hma@huntermartin.com)

HUNTER H. MARTIN (1924 - 1997)

Founder

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

President

MICHAEL GARDNER

Vice President

BETTY J. GARDNER

Secretary/Treasurer

November 30, 1999

Ms. Vicki L. Ray, Manager  
Drinking Water Branch  
Division of Water  
Frankfort Office Park  
14 Reilly Road  
Frankfort, Ky 40601

Dear Ms. Ray:

RE: OHIO COUNTY WATER DISTRICT -DW #0920332-98-004 WATER LINE EXTENSION  
CONTRACT "G"

In accordance with the approval letter dated July 28, 1998, for the above captioned project, this is to advise that the work was completed in accordance with the stipulations set forth in said letter. SUBSTANTIAL COMPLETION FOR THIS PROJECT IS NOVEMBER 30, 1999.

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

Yours very truly,

HUNTER MARTIN & ASSOCIATES, INC.

Rod H. Martin, P.E.

RHM:as

cc: Mr. B. J. Dickens, Chairman, Ohio County Water District



"Established 1952"

# HUNTER MARTIN & ASSOCIATES, INC.

ENGINEERS & SURVEYORS

3220 LONE OAK ROAD • PADUCAH, KENTUCKY 42003

(270) 554-2737 • FAX (270) 554-2738

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HUNTER H. MARTIN (1924 - 1997)

Founder

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

President

MICHAEL GARDNER

Vice President

BETTY J. GARDNER

Secretary/Treasurer

November 30, 1999

Gregory Piping, Inc.  
P. O. Box 7867  
Paducah, Ky 42002-7867

Gentlemen:

RE: OHIO COUNTY WATER DISTRICT (1998/99 SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT G) SUBSTANTIAL COMPLETION/ONE YEAR GUARANTEE

The District and the Engineer have agreed that the above project is SUBSTANTIALLY COMPLETE ON NOVEMBER 30, 1999.

SUBSTANTIAL COMPLETION is granted for that date because the project was sufficiently complete for the District's use for the purpose intended (See General Conditions, Article 1.22).

Your guarantee on all materials and equipment furnished and work performed is for a period of one year from the date of substantial completion per General Conditions, Article 29.1. YOUR ONE-YEAR GUARANTEE EXPIRES NOVEMBER 29, 2000.

Prior to that date, you will be responsible for any punch list or warranty items that occur.

Yours very truly,

HUNTER MARTIN & ASSOCIATES, INC.

Rod H. Martin, P.E.

RHM:BJG:as

CC: Mr. James C. Porter, Superintendent, Ohio County Water District  
Mr. Tom Hines, Inspector, Hunter Martin & Associates, Inc.

\*\*\*\*\*

APPROVED BY OHIO COUNTY WATER DISTRICT AT A MEETING HELD ON NOVEMBER 30, 1999.

James C. Porter, Superintendent

**OHIO COUNTY WATER DISTRICT  
WATER SYSTEM IMPROVEMENTS  
SUMMARY OF PRELIMINARY PROJECT COSTS  
SERIES I**

	Original Contract	CO 1	CO 2	CO 3	CO 4	CO 5	Subtotal	PROJECTED
<b>CONSTRUCTION COSTS:</b>								
Contract A (Hwy 1414, etc.)	\$323,039.00	\$93,005.00	\$8,630.00	\$600.00	\$600.00	\$8,789.05	\$434,663.050	\$434,663.050
Contract B (Halls Cr. Rd, etc.)	\$265,089.50		\$6,076.25	\$17,734.20			\$253,431.550	\$253,431.550
Contract C (Hwy 505, etc.)	\$973,408.65	\$5,918.80	\$22,839.80	\$29,573.63	(\$64,940.92)		\$954,962.360	\$954,962.360
Contract D (2 Tanks)	\$821,100.00	\$4,970.12					\$826,070.120	\$826,070.120
Contract E (Perdue Tie-in)	\$155,120.00		\$10,380.85	\$2,466.38	\$14,718.17		\$161,923.700	\$165,596.720
Contract F (Radio Controls)	\$117,859.00	\$28,549.00		\$4,700.00			\$151,108.000	\$151,108.000
Contract G (Crane Pond Rd.)	\$237,393.00	\$6,341.80	\$14,187.93				\$257,924.730	\$257,924.730
<b>TOTAL CONSTRUCTION</b>	<b>\$2,893,011.15</b>	<b>\$126,947.12</b>	<b>\$41,353.13</b>	<b>\$19,605.81</b>	<b>-\$49,622.75</b>		<b>\$3,040,083.51</b>	<b>\$3,044,556.530</b>
<b>TECHNICAL</b>								
Preliminary Engineering								
Series I, II, & III							\$12,000.000	
Subtotal - Preliminary Engineering							\$12,000.000	\$12,000.000
Basic Engineering Fee								
(1) Preliminary Basic (10%)								
Series I, II, & III								
Subtotal - Preliminary Basic								
Percent Of Construction								
Fixed								
6.030%							\$43,974.380	\$43,974.380
Subtotal							\$43,974.380	\$43,974.380
(2) Design Basic (60%)								
Fixed								
6.030%								
6.030%							\$15,726.110	\$15,726.109
6.030%							\$9,169.150	\$9,169.153
6.030%							\$34,550.540	\$34,550.538
6.030%							\$29,916.160	\$29,916.161
6.030%							\$5,991.290	\$5,991.289
6.030%							\$5,467.090	\$5,467.087
6.030%							\$9,331.720	\$9,331.717
Additional Work To Use Monies								
6.030%							\$110,152.060	\$110,152.055
Subtotal Design Basic							\$110,152.060	\$110,152.055
(3) Bidding/Award (10%)								
Fixed								
6.770%							\$2,942.670	\$2,942.669
6.770%							\$1,715.730	\$1,715.732
6.770%							\$6,465.100	\$6,465.095
6.770%							\$5,597.910	\$5,597.911
6.770%							\$1,121.090	\$1,121.090
6.770%							\$1,023.000	\$1,023.001
6.770%							\$1,746.150	\$1,746.150
Additional Work To Use Monies								
6.770%							\$20,611.650	\$20,611.648
Subtotal Bidding/Award							\$20,611.650	\$20,611.648
(4) Construction Basic (20%)								
Fixed								
6.770%							\$5,885.340	\$5,885.338
6.770%							\$3,431.460	\$3,431.463
6.770%							\$12,930.190	\$12,930.190
6.770%							\$11,195.820	\$11,195.821
6.770%							\$2,242.180	\$2,242.180

**OHIO COUNTY WATER DISTRICT  
WATER SYSTEM IMPROVEMENTS  
SUMMARY OF PRELIMINARY PROJECT COSTS  
SERIES I**

							Subtotal	PROJECTED
Contract F	6.770%					\$151,108.000	\$2,046.000	\$2,046.000
Contract G	6.770%					\$257,924.730	\$3,492.300	\$3,492.300
Additional Work To Use Monies								
Subtotal Construction Basic							\$41,223.290	\$41,223.290
Inspection	Percentage Of Construction					Projected Construction		
Contract A	3.000%					\$434,663.050	\$13,039.890	\$13,039.892
Contract B	3.000%					\$233,431.550	\$7,602.950	\$7,602.947
Contract C	3.000%					\$934,962.360	\$28,648.870	\$28,648.871
Contract D	3.000%					\$826,870.120	\$24,806.100	\$24,806.100
Contract E	3.000%					\$165,596.720	\$4,967.900	\$4,967.900
Contract F	3.000%					\$151,108.000	\$4,333.240	\$4,333.240
Contract G	3.000%					\$257,924.730	\$7,737.740	\$7,737.742
Additional Work To Use Monies	3.000%							
Subtotal Inspection							\$91,336.690	\$91,336.696
Extra								
Surveys	Hourly						\$1,200.000	\$4,000.000
Easements	Hourly						\$12,000.000	\$13,060.500
Permits	Hourly						\$9,500.000	\$11,057.000
Soil Investigation	Hourly						\$10,000.000	\$3,500.000
Shop Drawings Manual	Hourly						\$10,500.000	\$10,500.000
Critical Phase Inspection	Hourly						\$5,000.000	\$5,000.000
Financing Assistance	Hourly						\$25,000.000	\$23,000.000
Pac Rate & Construction Case	Hourly						\$11,000.000	\$10,808.000
Hydraulic Analysis	Hourly						\$85,200.000	\$81,925.500
Subtotal - Extra								\$401,223.574
<b>TOTAL TECHNICAL</b>							\$4,450.000	\$383,125.960
<b>FINANCING EXPENSES</b>							\$101,538.300	
<b>CONTINGENCIES</b>							\$157,853.930	
Office Space at Perdue								
Administration, Land, Legal & Miscellaneous - Reimbursement to District								
Contingencies For Additional Work To Be Submitted								
Subtotal - Contingencies								
<b>TOTAL PROJECT COSTS</b>								\$263,842.230
								\$4,092,748.294
<b>FUNDS:</b>								
Par Amount Of Bond								\$ 4,000,000.000
Interest Earned To Date Thru 11/5/99								\$ 92,748.290
<b>TOTAL FUNDS</b>								\$ 4,092,748.290
<b>AVAILABLE FOR DISTRICT USE:</b>								
Beginning Balance								\$ 3,616,874.040

**OHIO COUNTY WATER DISTRICT  
WATER SYSTEM IMPROVEMENTS  
SERIES I  
NOTES TO SUMMARY OF PROJECT COST**

1. Final Adjusting Change Orders for Contracts A, B, C & G have been approved and are being processed for execution by the Contractor and District.
2. Final Adjusting Change Orders for Contracts D & E are pending approval by the District.
3. A Final Adjusting Change Order for Contract F is not required.
4. Estimated Contingencies for Series I will be \$157,853.93. The District plans to use this money for painting & repair work to the existing Clearwells. This work will bid and submitted to PSC prior to commencement of the work



**E. F. MARTIN, JR.**  
ATTORNEY AT LAW

OTTO C. MARTIN (1890-1962)  
EARL F. MARTIN (1917-1980)

408 SOUTH MAIN STREET  
HARTFORD, KY 42347

November 24, 1999

Hon. Stephanie Bell  
Secretary, Kentucky Public Service Commission  
730 Shinkel Lane  
P.O. Box 615  
Frankfort, Ky. 40602

RECEIVED  
NOV 29 1999  
PUBLIC SERVICE  
COMMISSION

In Re: Ohio County Water District  
PSC Case #99-212 ✓  
PSC Case #98-015

This letter is in response to your November 9, 1999, correspondence in Case #99-212 and also will serve as an update in regard to full compliance with the PSC orders in Case #98-015.

The requirements which you set out in your November 9, 1999, correspondence as filings required for the Ohio County Water District to be in full compliance with the Commission's Order in Case #99-212 is under preparation but, as I am advised by the District's engineer, Rod Martin, cannot be completed and filed before January 4, 2000.

These filings are required in both cases referenced, and include total costs of project, including the costs of construction and all other capitalized costs, copies of the as-built drawings, and certified statements that the construction on all contracts has been satisfactorily completed in accordance with contract plans and specifications.

These filings are being prepared and will be filed by no later than January 4, 2000 on all contracts under both cases, identified as Contracts A through F, (Case #98-015), and Contract G, (Case #99-212).

Accordingly, I request your approval of this request for an extension to January 4, 2000, to file the requested documents.

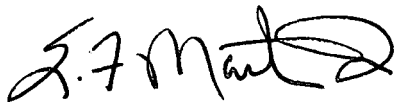
November 24, 1999

Page 2

Hon. Stephanie Bell

For general information all contracts, A through G, are expected to be completed at a final total costs of at least \$150,000 below projected costs.

Yours truly,

A handwritten signature in black ink, appearing to read "E. F. Martin, Jr.", with a stylized flourish at the end.

E. F. Martin, Jr.

CC: James C. Porter, Superintendent  
Rod Martin, Engineer  
Howell Braddy, Principal Assistant Ex. Dir.

mlm



**E. F. MARTIN, JR.**  
ATTORNEY AT LAW

OTTO C. MARTIN (1890-1962)  
EARL F. MARTIN (1917-1980)

408 SOUTH MAIN STREET  
HARTFORD, KY 42347

November 24, 1999

Hon. Stephanie Bell  
Secretary, Kentucky Public Service Commission  
730 Shinkel Lane  
P.O. Box 615  
Frankfort, Ky. 40602

RECEIVED  
NOV 29 1999  
PUBLIC SERVICE  
COMMISSION

In Re: Ohio County Water District  
PSC Case #99-212  
PSC Case #98-015

This letter is in response to your November 9, 1999, correspondence in Case #99-212 and also will serve as an update in regard to full compliance with the PSC orders in Case #98-015.

The requirements which you set out in your November 9, 1999, correspondence as filings required for the Ohio County Water District to be in full compliance with the Commission's Order in Case #99-212 is under preparation but, as I am advised by the District's engineer, Rod Martin, cannot be completed and filed before January 4, 2000.

These filings are required in both cases referenced, and include total costs of project, including the costs of construction and all other capitalized costs, copies of the as-built drawings, and certified statements that the construction on all contracts has been satisfactorily completed in accordance with contract plans and specifications.

These filings are being prepared and will be filed by no later than January 4, 2000 on all contracts under both cases, identified as Contracts A through F, (Case #98-015), and Contract G, (Case #99-212).

Accordingly, I request your approval of this request for an extension to January 4, 2000, to file the requested documents.

November 24, 1999

Page 2

Hon. Stephanie Bell

For general information all contracts, A through G, are expected to be completed at a final total costs of at least \$150,000 below projected costs.

Yours truly,

A handwritten signature in black ink, appearing to read "E. F. Martin, Jr.", with a stylized flourish at the end.

E. F. Martin, Jr.

CC: James C. Porter, Superintendent  
Rod Martin, Engineer  
Howell Braddy, Principal Assistant Ex. Dir.

mlm



COMMONWEALTH OF KENTUCKY  
**PUBLIC SERVICE COMMISSION**  
730 SCHENKEL LANE  
POST OFFICE BOX 615  
FRANKFORT, KENTUCKY 40602  
www.psc.state.ky.us  
(502) 564-3940  
Fax (502) 564-1582

**Ronald B. McCloud, Secretary**  
**Public Protection and**  
**Regulation Cabinet**

**Helen Helton**  
**Executive Director**  
**Public Service Commission**

**Paul E. Patton**  
**Governor**

November 9, 1999

Mr. James C. Porter  
Superintendent  
Ohio County Water District  
130 Washington St.  
Hartford, KY 42347

The Honorable E.F. Martin, Jr.  
408 South Main Street  
Hartford, KY 42347

Re: Case No. 99-212

Dear Gentlemen:

The Commission entered the Final Order in this case on July 12, 1999. Among other things, the Commission ordered Ohio County Water District to file total costs of this project including the cost of construction and all other capitalized costs (engineering, legal, administrative, etc.) within 60 days of the date that construction is substantially completed. The Commission also ordered Ohio County Water District to file a copy of the "as-built" drawings and a certified statement that the construction has been satisfactorily completed in accordance with the contract plans and specifications within 60 days of the substantial completion of the construction certificated herein. To date, we have not received this filing. This must be filed to fully comply with the Commission's order. Please make this filing, referencing the case number 99-212, not later than 15 days from the date of this letter.

If you have questions concerning this filing, please contact Howell Brady, Principal Assistant to the Executive Director at 502-564-3940, extension 265.

Sincerely,

A handwritten signature in black ink that reads "Stephanie Bell".

Stephanie Bell  
Secretary to the Commission

SB/lc





COMMONWEALTH OF KENTUCKY  
**PUBLIC SERVICE COMMISSION**

730 SCHENKEL LANE  
POST OFFICE BOX 615  
FRANKFORT, KY. 40602  
(502) 564-3940

CERTIFICATE OF SERVICE

RE: Case No. 99-212  
OHIO COUNTY WATER DISTRICT

I, Stephanie Bell, Secretary of the Public Service Commission, hereby certify that the enclosed attested copy of the Commission's Order in the above case was served upon the following by U.S. Mail on July 12, 1999.

See attached parties of record.

*Stephanie Bell*

Secretary of the Commission

SB /lnh  
Enclosure

Mr. Kenneth Autry  
President  
Green River Regional Poultry  
Producers Association  
1013 U.S. Highway 62 East  
Horse Branch, KY. 42349

Honorable Randy Jones  
Attorney  
Rubin & Hays  
First Trust Centre  
200 South Fifth Street  
Louisville, KY. 40202

Honorable E.F. Martin  
Attorney at Law  
408 South Main Street  
Hartford, KY. 42347

Mr. Rod H. Martin  
P.E.  
Hunter Martin & Associates, Inc.  
3220 Lone Oak Road  
Paducah, KY. 42003

Bob Pennington  
Vice President  
Public Finance Department  
J.J.B. Hilliard, W.L. Lyons, Inc.  
P. O. Box 32760  
Louisville, KY. 40232 2760

W. Gerald Watts  
CPA  
Clemens, Guthrie & Robinson, LLP  
Certified Public Accountants  
130 Veller Drive  
Beaver Dam, KY. 42320

Attorney General  
Utility Intervention & Rate Division  
P. O. Box 2000  
Frankfort, KY. 40602 2000

Mr. Bernard Ballard  
Chairman  
Ohio County Water District  
130 Washington Street  
Hartford, KY. 42347

Mr. James C. Porter  
Superintendent  
Ohio County Water District  
130 Washington Street  
Hartford, KY. 42347

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF OHIO COUNTY WATER DISTRICT )	
FOR ISSUANCE OF A CERTIFICATE OF PUBLIC )	CASE NO.
CONVENIENCE AND NECESSITY FOR CONSTRUCTION )	99-212
OF THE SERIES I WATER SYSTEM IMPROVEMENTS, )	
CONTRACT G )	

O R D E R

By application filed May 18, 1999, Ohio County Water District ("Ohio District") is seeking authorization to construct a \$237,395 waterworks improvement project. Project funding includes \$237,395 of the \$4,000,000 in revenue bonds issued pursuant to the Commission's order dated August 19, 1998 in Case No. 98-015.<sup>1</sup>

The proposed project includes the construction of approximately 1,000 linear feet of 18" DR 18 PVC, 17,100 linear feet of 8" SDR 21 PVC, 12,700 linear feet of 6" SDR 21 PVC, and 19,500 linear feet of 4" SDR 21 PVC water main and related appurtenances. This project will provide service to a potential of 10 new customers and will improve the hydraulics to the distribution system. Plans and specifications for the proposed improvements prepared by Hunter Martin and Associates, Inc. of Paducah, Kentucky, have

---

<sup>1</sup> Case No. 98-015, The Application of Ohio County Water District for (1) Issuance of a Certificate of Public Convenience and Necessity for Construction of the 1997 Water System Improvements; (2) Authorization to Issue Series I Revenue Bonds in the Amount of \$4,000,000; and Authorization to Raise Rates to Pay for the Additional Indebtedness.

been approved by the Division of Water of the Natural Resources and Environmental Protection Cabinet.

IT IS THEREFORE ORDERED that:

1. Ohio District is granted a Certificate of Public Convenience and Necessity for the proposed construction project.

2. The proposed construction consists of approximately 1,000 linear feet of 18" DR 18 PVC, 17,100 linear feet of 8" SDR 21 PVC, 12,700 linear feet of 6" SDR 21 PVC, and 19,500 linear feet of 4" SDR 21 PVC water main and related appurtenances. The total construction cost for this project is approximately \$237,395.

3. Ohio District should obtain approval from the Commission prior to performing any additional construction not expressly authorized by this Order.

4. Any deviation from the construction approved should be undertaken only with the prior approval of the Commission.

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

6. Ohio District should require construction to be inspected under the general supervision of a professional engineer with a Kentucky registration in civil or mechanical engineering, to ensure that the construction work is done in accordance with the contract

drawings and specifications and in conformance with the best practices of the construction trades involved in the project.

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

Nothing contained herein shall be deemed a warranty of the Commonwealth of Kentucky, or any agency thereof, of the financing herein accepted.

Done at Frankfort, Kentucky, this 12th day of July, 1999.

By the Commission

ATTEST:

  
Executive Director



**E. F. MARTIN, JR.**  
ATTORNEY AT LAW

OTTO C. MARTIN (1890-1962)  
EARL F. MARTIN (1917-1980)

408 SOUTH MAIN STREET  
HARTFORD, KY 42347

July 7, 1999

Hon. Helen Helton, Executive-Director  
Public Service Commission  
730 Schenkel Lane  
P.O. Box 615  
Frankfort, KY 40602

Re: Ohio County Water District  
PSC Case No. 99-212

Dear Ms. Helton:

You will find enclosed the original and ten copies of the "Motion Of Ohio County Water District", seeking approval by July 26, 1999, of the Certificate of Convenience and Necessity upon the application pending in this case.

Yours truly,



E. F. Martin, Jr.

EFM:gms

Enclosures

RECEIVED  
JUL - 9 1999  
PUBLIC SERVICE  
COMMISSION

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

JUL - 9 1999  
PUBLIC SERVICE COMMISSION

In The Matter of:

THE APPLICATION OF OHIO COUNTY WATER )  
DISTRICT FOR: ISSUANCE OF A CERTIFICATE )  
OF PUBLIC CONVENIENCE AND NECESSITY FOR ) CASE NO.  
CONSTRUCTION OF WATER SYSTEM ) 99-212  
IMPROVEMENTS CONTRACT G (SERIES I) )

MOTION OF OHIO COUNTY WATER DISTRICT

Comes the Ohio County Water District, by counsel, and moves the Commission as follows:


1. That the application for approval of "Contract G" be expedited and an Order granting the requested Certificate be approved and entered before July 26, 1999.
2. To the extent it will expedite the review of the application pending in this case or as may be necessary for a complete review of the pending application, that the record of PSC Case No. 98-015 be incorporated by reference into the record of this proceeding.
3. If necessary or helpful in the review of the pending application, that an informal conference of the PSC staff and appropriate representatives of the Ohio County Water District be scheduled at the earliest convenient date to the PSC staff prior to July 26, 1999.

As shown by the application filed in this case by the Ohio County Water District, bids have been advertised and received on the proposed Contract G project with the lowest bid, that of Gregory Piping, Inc., having provided very favorable pricing, particularly on PVC pipe, the price of which has substantially increased since the April 27, 1999 contract bid date. See May 14, 1999 Application, Exhibit S.

Approval of the application on "Contract G" and entry of an appropriate order by the Commission by July 26, 1999 will assure the award of a contract on this favorable bid to the financial benefit of the District and its customers. The District proposes to pay for the construction under "Contract G" with funds remaining from Revenue Bonds issued pursuant to PSC's Order in Case No. 98-015 (dated August 19, 1998), and will not require an additional rate increase by the District.

WHEREFORE, the Ohio County Water District respectfully requests approval and entry of an Order of the Commission approving the issuance of a Certificate of Convenience and Necessity for construction of the said "Contract G" project as bid.

This 7<sup>th</sup> day of July, 1999.

  
E. F. Martin, Jr., Attorney  
Ohio County Water District  
408 S. Main Street  
Hartford, KY 42347  
Phone: 270-298-3283  
Fax: 270-298-3284

CERTIFICATE OF SERVICE

The undersigned, attorney for the Ohio County Water District, hereby certifies that the attached "Motion Of Ohio County Water District" was served upon the following by U. S. Mail on July 7, 1999:

Mr. Kenneth Autry, President  
Green River Regional Poultry  
Producers Association  
1013 U.S. Hwy 62 E.  
Horse Branch, KY 42349

Mr. Gerald Watts, CPA  
Clemens, Gutherie & Robinson, LLP, CPA's  
130 Veller Drive  
Beaver Dam, KY 42320

Mr. Bernard Ballard, Chairman  
Ohio County Water District  
Ohio County Water District  
130 Washington Street  
Hartford, KY 42347

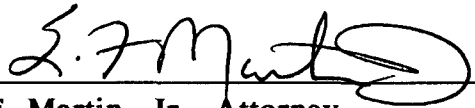
Mr. Randy Jones, Esq.  
Attorney at Law  
Rubin & Hayes  
First Trust Centre  
200 South Fifth St.  
Louisville, KY 40202

Mr. Bob Pennington, Vice Pres.  
Public Finance Dept.  
J.J.B. Hillard, W.L. Lyons, Inc.  
P.O. Box 32760  
Louisville, KY 40232-2760

Kentucky Attorney General Office  
Utility Intervention & Rate Div.  
P.O. Box 2000  
Frankfort, KY 40602-2000

Mr. James C. Porter  
Superintendent  
Ohio County Water District  
130 Washington Street  
Hartford, KY 42347

Mr. Rod H. Martin, P.E.  
Hunter Martin & Associates, Inc.  
3220 Lone Oak Road  
Paducah, KY 42003

  
E. F. Martin, Jr., Attorney



COMMONWEALTH OF KENTUCKY  
**PUBLIC SERVICE COMMISSION**

730 SCHENKEL LANE  
POST OFFICE BOX 615  
FRANKFORT, KY. 40602  
(502) 564-3940

June 8, 1999

To: All parties of record

RE: Case No. 99-212  
OHIO COUNTY WATER DISTRICT

The Commission staff has reviewed your application in the above case and finds that it meets the minimum filing requirements. Enclosed please find a stamped filed copy of the first page of your filing. This case has been docketed and will be processed as expeditiously as possible.

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

Sincerely,  
*Stephanie Bell*

Stephanie Bell  
Secretary of the Commission

SB/sh  
Enclosure

Mr. Kenneth Autry  
President  
Green River Regional Poultry  
Producers Association  
1013 U.S. Highway 62 East  
Horse Branch, KY. 42349

Honorable Randy Jones  
Attorney  
Rubin & Hays  
First Trust Centre  
200 South Fifth Street  
Louisville, KY. 40202

Honorable E.F. Martin  
Attorney at Law  
408 North Main Street  
P. O. Box 207  
Hartford, KY. 42347 0207

Mr. Rod H. Martin  
P.E.  
Hunter Martin & Associates, Inc.  
3220 Lone Oak Road  
Paducah, KY. 42003

Bob Pennington  
Vice President  
Public Finance Department  
J.J.B. Hilliard, W.L. Lyons, Inc.  
P. O. Box 32760  
Louisville, KY. 40232 2760

W. Gerald Watts  
CPA  
Clemens, Guthrie & Robinson, LLP  
Certified Public Accountants  
130 Veller Drive  
Beaver Dam, KY. 42320

Attorney General  
Utility Intervention & Rate Division  
P. O. Box 2000  
Frankfort, KY. 40602 2000

Mr. Bernard Ballard  
Chairman  
Ohio County Water District  
130 Washington Street  
Hartford, KY. 42347

Mr. James C. Porter  
Superintendent  
Ohio County Water District  
130 Washington Street  
Hartford, KY. 42347

Before the Public Service Commission

RECEIVED

MAY 18 1999

PUBLIC SERVICE COMMISSION

IN THE MATTER OF PSC CASE NO. 98-015, )  
OHIO COUNTY WATER DISTRICT )  
REQUESTS AN AMENDMENT TO THE )  
ORDER DATED AUGUST 19, 1998, FOR: )

No. 99-212  
98-015

(1) ISSUANCE OF A CERTIFICATE OF )  
PUBLIC CONVENIENCE AND )  
NECESSITY FOR CONSTRUCTION OF )  
THE SERIES I WATER SYSTEM )  
IMPROVEMENTS, CONTRACT G )

FILED

MAY 18 1999

PUBLIC SERVICE COMMISSION

APPLICATION

This Application of OHIO COUNTY WATER DISTRICT (the "Applicant") of Ohio County, Kentucky, respectfully states:

1. Applicant is a water district of Ohio County, Kentucky, created and existing under and by virtue of Chapter 74 of the Kentucky Revised Statutes, pursuant to Order No. 138 by the County Court of Ohio County, Kentucky, duly entered on APRIL 2, 1962, and previously filed in Case No. 7667.
2. By order of the Public Service Commission dated August 19, 1998, in Case No. 98-015, Ohio County Water District was authorized to issue Revenue bonds in the principal amount not to exceed \$4,000,000 to be used for improvements to the Water System in accordance with the District's Application.



COMMONWEALTH OF KENTUCKY  
**PUBLIC SERVICE COMMISSION**  
730 SCHENKEL LANE  
POST OFFICE BOX 615  
FRANKFORT, KENTUCKY 40602  
www.psc.state.ky.us  
(502) 564-3940  
Fax (502) 564-3460

**Ronald B. McCloud, Secretary**  
**Public Protection and**  
**Regulation Cabinet**

**Helen Helton**  
**Executive Director**  
**Public Service Commission**

**Paul E. Patton**  
**Governor**

May 27, 1999

To: All parties of record

Re: Case No. 99-212  
OHIO COUNTY WATER DISTRICT  
(Construct)

This letter is to advise that we have amended our records to reflect that the above case concerns construction only. We originally established it as a construction and financing case.

If you have any question concerning this matter, please contact my staff at 502/564-3940.

Sincerely,

*Stephanie Bell*

Stephanie Bell  
Secretary of the Commission

SB/hv





Mr. Kenneth Autry  
President  
Green River Regional Poultry  
Producers Association  
1013 U.S. Highway 62 East  
Horse Branch, KY. 42349

Honorable Randy Jones  
Attorney  
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Ohio County Water District  
130 Washington Street  
Hartford, KY. 42347

Mr. James C. Porter  
Superintendent  
Ohio County Water District  
130 Washington Street  
Hartford, KY. 42347



COMMONWEALTH OF KENTUCKY  
**PUBLIC SERVICE COMMISSION**

730 SCHENKEL LANE  
POST OFFICE BOX 615  
FRANKFORT, KY. 40602  
(502) 564-3940

May 24, 1999

To: All parties of record

RE: Case No. 99-212  
OHIO COUNTY WATER DISTRICT  
(Construct, Financing)

This letter is to acknowledge receipt of initial application in the above case. The application was date-stamped received May 18, 1999 and has been assigned Case No. 99-212. In all future correspondence or filings in connection with this case, please reference the above case number.

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

Sincerely,

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

Stephanie Bell  
Secretary of the Commission

SB/jc

Mr. Kenneth Autry  
President  
Green River Regional Poultry  
Producers Association  
1013 U.S. Highway 62 East  
Horse Branch, KY. 42349

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Ohio County Water District  
130 Washington Street  
Hartford, KY. 42347

Mr. James C. Porter  
Superintendent  
Ohio County Water District  
130 Washington Street  
Hartford, KY. 42347



"Established 1952"

# HUNTER MARTIN & ASSOCIATES, INC.

ENGINEERS & SURVEYORS

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

HUNTER H. MARTIN (1924 - 1997)  
Founder

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

MICHAEL GARDNER  
Vice President

BETTY J. GARDNER  
Secretary/Treasurer

May 17, 1999

FILED

MAY 18 1999

PUBLIC SERVICE  
COMMISSION

RECEIVED  
MAY 18 1999  
PUBLIC SERVICE  
COMMISSION

Honorable Helen C. Helton, Executive Director  
Public Service Commission  
P. O. Box 615  
730 Schenkel Lane  
Frankfort, KY 40602

Dear Ms. Helton:

RE: OHIO COUNTY WATER DISTRICT, OHIO COUNTY, KENTUCKY - PSC CASE NO. ~~98-015~~ <sup>CASE 99-212</sup>

We are pleased to submit herewith the original and 10 copies of the following:

- Exhibit J8 - Plans and Specifications for Contract "G"
- Exhibit K8 - Letters Dated July 28, 1998 & May 4, 1999 from Kentucky Division of Water approving Plans and Specifications for Contract "G"
- Exhibit S - Items 1 through 6 of Information Pertaining to Contract "G"

Copies of this letter with enclosures are also being forwarded to all Parties of Record (attached) with the exception of Gerald Wuetcher who will receive a copy through your office.

All of this information is to be included with the Application for the above referenced Case.

If you have any questions or need any additional information, please feel free to contact me.

Yours very truly,

HUNTER MARTIN & ASSOCIATES, INC.

Rod H. Martin, P.E.

RHM:dc

Enclosures

OHIO COUNTY WATER DISTRICT  
PARTIES OF RECORD

May 17, 1999

Honorable Helen C. Helton, Executive Director  
Kentucky Public Service Commission  
730 Schenke Lane  
P.O. Box 615  
Frankfort, KY 40602

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Green River Regional Poultry  
Producers Association  
1013 U.S. Hwy 62 E  
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Chairman  
Ohio County Water District  
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Hartford, KY 42347

Honorable Gerald Wuetcher  
Counsel for Kentucky Public  
Service Commission  
730 Schenkel Lane  
P.O. Box 615  
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3220 Lone Oak Road  
Paducah, KY 42003

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

**RECEIVED**  
MAY 18 1999  
PUBLIC SERVICE  
COMMISSION

99-212

**PSC CASE NO. ~~98-015~~**

**IN THE MATTER OF THE APPLICATION FOR:**  
**(1) CONSTRUCTION, (2) RATES & (3) FINANCING**

**EXHIBIT J8, K8, & S**

**MAY 14, 1999**

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

99-212  
PSC CASE NO. ~~98-015~~

IN THE MATTER OF THE APPLICATION FOR:  
(1) CONSTRUCTION, (2) RATES AND (3) FINANCING

**LIST OF SUBMITTALS**

MAY 14, 1998

SUBMITTAL DATE		PAGES
1/6/98	Application	1 - 6
1/6/98	Parties of Record	1
1/6/98	<u>EXHIBIT A</u>	
	- Schedule of Principal and Interest Requirements - All Outstanding Bond Issues	1
1/6/98	<u>EXHIBIT B</u>	
	- B1 - Schedule of Presently Approved Water Rates effective February 26, 1997	1
	- B2 - Proposed Tariff PSC No. 5	1 - 2
	- B3 - Comparative Form of New and Old Tariffs	1
1/6/98	<u>EXHIBIT C</u>	
	- Agreement for Engineering Services No. 114 between the District and Hunter Martin & Associates, Inc. dated 12/5/95	1 - 13
1/6/98	<u>EXHIBIT D</u>	
	- D1 - Statement Of Revenues And Expenses For Twelve Months Ended September 30, 1997	1 - 3
	- D2 - General Ledger Accounts For Revenues and Expenses for Twelve Month Ended September 30, 1997	1 - 3
1/6/98	<u>EXHIBIT E</u>	
	- E1 - User Analysis For Year Ended September, 1997 (All Meters)	1 - 20
	- E2 - User Analysis For Pro Forma Period	1 - 12
	- E3 - Graphical Representation of User Data	1 - 2
	- E4 - User and Usage Trends (Table and Graphs) - Actual & Pro Forma Periods	1 - 3
	- E5 - Revenue Matrix (12 Months Ending September, 1997) Existing Rates	1 - 15
	- E6 - Revenue Matrix - Pro Forma Period (Existing Rates)	1 - 15
1/6/98	<u>EXHIBIT F</u>	
	- F1 - Estimated Source & Uses Of Funds From Series I Bonds	1
	F2 - Estimated Debt Service Schedule For Series I Bonds	1
	F3 - Estimated Net Debt Service Requirements For Series I Bonds	1

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1/6/98	<u>EXHIBIT G</u>	
	- G1 - Summary of Preliminary Project Costs	1 - 3
1/6/98	<u>EXHIBIT H</u>	
	- H1 - Pro Forma Statement of Revenue and Expense REV. - EXHIBIT N	1 - 3
	- H2 - Analysis of Revenue Required REV. - EXHIBIT N	1 - 1
	- H3 - Revenue Matrix - Pro Forma Period (Proposed Rates) REV. - EXHIBIT N	1 - 21
	- H4 - Analysis of Revenue Requirements for Proposed Rates REV. - EXHIBIT N	1 - 1
1/6/98	<u>EXHIBIT I</u>	
	- Preliminary Engineering Report of Hunter Martin & Associates, Inc., March, 1996	1
1/6/98	<u>EXHIBIT J</u>	
	- J1 - Plans and Specifications For "WATER SYSTEM IMPROVEMENTS, CONTRACT A, Dated September, 1997" (Set Nos. 6, 7, & 8)	BOUND SEP.
	- J2 - Plans and Specifications For "WATER SYSTEM IMPROVEMENTS, CONTRACT B, Dated October, 1997 (Set Nos. 6, 7, & 8)	BOUND SEP.
	- J3 - Plans and Specifications For "WATER SYSTEM IMPROVEMENTS CONTRACT A, Dated December, 1997" (Set Nos. 6, 7, & 8)	BOUND SEP.
5/22/98	- J4 - Plans and Specifications For "WATER SYSTEM IMPROVEMENTS CONTRACT D, Dated April, 1998" (Set Nos. 6, 7, & 8)	BOUND SEP.
7/28/98	- J5 - Plans and Specifications For "WATER SYSTEM IMPROVEMENTS CONTRACT E, Dated June, 1998" (Bid August, 1998) - Set Nos. 7, 8 & 9)	BOUND SEP.
7/28/98	- J6 - Plans and Specifications For "WATER SYSTEM IMPROVEMENTS CONTRACT F, Dated June, 1998" (Bid August, 1998) - Set Nos. 6, 7 & 8)	BOUND SEP.
8/3/98	- J7 - Plans and Specifications For "WATER SYSTEM IMPROVEMENTS CONTRACT G, Dated June, 1998" (Bid August, 1998) - Set Nos. 6, 7 & 8)	BOUND SEP.
5/14/99	- J8 - Plans and Specifications For "WATER SYSTEM IMPROVEMENTS CONTRACT G, Dated June, 1998"(Additional Work March, 1999) (Bid, April, 1999 - Set Nos. 12, 13, & 14)	BOUND SEP.
1/6/98	<u>EXHIBIT K</u>	
	- K1 - Letter dated November 18, 1997 from Kentucky Division of Water approving Plans and Specifications. For Contract A	1 - 3
1/30/98	- K2 - Letter Dated February 12, 1998 from Kentucky Division of Water approving Plans and Specification. For Contract B	1 - 5
1/30/98	- K3 - Letter Dated January 22, 1998 from Kentucky Division of Water approving Plans and Specifications. For Contract C	1 - 6
6/22/98	- K4 - Letter Dated May 22, 1998 from Kentucky Division of Water approving Plans and Specifications. For Contract D	1 - 5
7/28/98	- K5 - Letter Dated July 28, 1998 from Kentucky Division of Water approving Plans and Specifications. For Contract E	1 - 4
7/28/98	- K6 - Letter Dated July 28, 1998 from Kentucky Division of Water approving Plans and Specifications. For Contract F	1 - 2
8/3/98	- K7 - Letter Dated July 28, 1998 from Kentucky Division of Water approving Plans and Specifications. For Contract G	1 - 5
5/14/99	- K8 - Letter Dated July 28, 1998 & May 4, 1999 from Kentucky Division of Water approving Plans and Specifications. For Contract G	1 - 3



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1/6/98	<u>EXHIBIT L</u>	
	- L1 - Motion for Extension of Time (Case No. 97-423) Advising PSC of Proposed Rate Increase	1 - 3
	- L2 - Transmittal Letter dated 1/6/98 Regarding Advertisement of Notice	1
	- L3 - Notice	1
	- L4 - Publisher's Affidavit (Will be submitted when received.)	
	- L5 - Proof of Advertisement (Will be submitted when received.)	
1/6/98	<u>EXHIBIT M</u>	
	- M1 - Long Range Plan	BOUND SEP.
2/12/98	<u>EXHIBIT N</u>	
	- List of Submittals	1 - 3
	- Supplement - PSC Letter Dated 1/29/98 Requesting Additional Information	1 - 2
	- Item No. 1 - Estimated Cost of Operation After Completion of Proposed Facilities	1
	- Item No. 2 - Preliminary and Final Engineering Reports	1
	- Item No. 3 - Summary of Latest Depreciation Study	1 - 2
	- <del>Item No. 4 - Starting Date, Proposed In-Service Date and Total Estimated Cost REV. - EXHIBIT Q, ITEM 1</del>	1
	- Item No. 5 - Description of Plant Retirements	1
	- Item No. 6 - Original Cost, Cost of Removal and Salvage for Retired Components	1
	- Item No. 7 - Explanation of Differences in Amounts Contained in Capital Construction Budget and Amounts of Capital Construction Cost Contained in Pro Forma Adjustment Period	1
	- Item No. 8 - Impact of Depreciation Expense of Pro Forma Adjustments for Plant Additions and Retirements Incl. Rev. Exhibit H1, H2, H3 and H4.	1 - 27
4/15/98	<u>EXHIBIT O</u>	
	- List of Submittals	1 - 3
	- Item No. 1 - Publisher's Affidavit W/Copy of Advertisements of Rates	1 - 3
	- Item No. 2 - Bid Tabulations (Contracts A, B and C)	1 - 34
	- Item No. 3 - Copy of the Minutes of the Ohio County Water District Regular Meeting, 3/31/98	1 - 3
4/22/98	- AFFIDAVITS OF BOB PENNINGTON, ROD MARTIN, JAMES PORTER AND GERALD WATTS	1 - 67
5/22/98	<u>EXHIBIT P</u>	
	- List of Submittals	1 - 3
	- Supplement - PSC Order Dated May 8, 1998 Requesting Additional Information	1 - 5
	- Item No. 1 - Test Period Billing Analysis on Electronic Media	1
	- Item No. 2 - Construction and Installation of Pumping Facilities at Perdue	1
	- Item No. 3 - Explanation of "Miscellaneous Service Revenues" of \$23,334.00.	1 - 2
	- Item No. 4 - Overall Benefits of Fiscal Court Projects	1
	- Item No. 5 - Further Explanation of Exhibit H1	1
	- Item No. 6 - Invoices for Purchased Water Expense	1 - 7
	- Item No. 7 - Explanation of Why Chemical Costs Increased	1 - 3
	- Item No. 8 - Monthly Invoices for Materials and Supplies and Contractual Services	

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	- Item No. 9 - Determination of Bad Debts and Revenue of Applicable Charge-offs	1 - 2
	- Item No. 10 - Amortization of Case No. 95-459	1 - 2
	- Item No. 11 - Detailed Schedule of Depreciation	1 - 3
	- Item No. 12 - Further Explanation of Exhibit H4	1
	- Item No. 13 - Hydraulic Analysis	1 - 7
	Item No. 14 - Operational Deficiencies Indicated by Hydraulic Analysis	1
	Item No. 15 - Demonstration of Design for Proposed Improvements	1
	Item No. 16 - Final Engineering Report	1 - 44
6/23/98	<u>EXHIBIT Q</u>	
	- List of Submittals	1 - 3
	- Supplement - PSC Order Dated June 5, 1998 Requesting Additional Information	1 - 20
	- Item No. 1 - Date for Completion of Construction Plans and Specifications for Each Contract	1
	- Item No. 2 - Person Responsible for Preparation of Proposed Schedule for Series I Construction with Experience with KDW and PSC	1
	- Item No. 3 - Submission of Proposed Plans and Specifications to KDW in a Piece-meal Fashion	1
	- Item No. 4 - Submission of Proposed Plans and Specifications to PSC in a Piece-meal Fashion	1
	- Item No. 5 - Current Status of all Contracts and Time Estimates	1
	- Item No. 6 - Advertisement of Portions of Series I Water System Improvements	1
	- Item No. 7 - Material Changes and Effect on June, 1995 Hydraulic Analysis	1
	- Item No. 8 - Meeting Between Commission Staff and Ohio County Water District Representatives	1
	- Item No. 9 - Calculations Showing a Cost of \$1,210,000 for One Million Gallons of Water Per Year from Ohio County Fiscal Court	
	- Item No. 10 - Ohio County Water District Written Agreement with Ohio County Fiscal Court	1
	- Item No. 11 - Agreement Between Fiscal Court, Hartford, Beaver Dam, Ohio Co. Development Authority and Perdue Farms Regarding the Location of Perdue's Processing Plant	1 - 65
	- Item No. 12 - District's Rights to Perdue's Water at the Conclusion of the Agreement	1
	- Item No. 13 - District's Recovery Costs from the Agreement with Fiscal Court	
	- Item No. 14 - Ohio County Water District's Written Agreement with Fiscal Court	1 - 3
	- Item No. 15 - "Free Water"	1
	- Item No. 16 - Use of 1 MGD from Perdue	1
	- Item No. 17 - Construction of Contracts C, D E and F	1
	- Item No. 18 - New Customers and Revenue Generated After Construction	1
	- Item No. 19 - Meter Size to Serve Each Poultry Producer	1
	- Item No. 20 - Funding	1
7/9/98	- Item No. 21 - Bond Ordinance	1 - 43
	- Item No. 22 - Deficiencies in the System	1
7/21/98	- Item No. 23 - Reconciling Items	1 - 8

SUBMITTAL DATE		PAGES
	- Item No. 24 - Purchased Water Expense	1
	- Item No. 25 - Chemicals and Dosages	1
	- Item No. 26 - Capital Expense	1
	- Item No. 27 - Contractual Service Expense	1
	- Item No. 28 - Contractual Service Expenses Classified as Recurring Expenses	1
	- Item No. 29 - Depreciation Expense for Proposed Improvements	1
	- Item No. 30 - Hoover Hill Elevated Tank	1
8/3/98	<u>EXHIBIT R</u>	
	- List of Submittals	1 - 5
	- Item No. 1 - Bid Tabulation (Contract "D")	1 - 2
	- Item No. 2 - Publisher's Affidavits	1 - 12
	- Item No. 3 - Analysis of Chemical Use for Proforma	1 - 10
	- Item No. 4 - Depreciation Schedule for Raw Water Pumps	1 - 2
	- Item No. 5 - Updated Project Schedule	1 - 3
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5/14/99	<u>EXHIBIT S</u>	
	- List of Submittals	
	- Item No. 1 - Application	1 - 4
	- Item No. 2 - Requisition Certificate No. 8	1 - 2
	- Item No. 3 - Advertisement For Bids & Affidavit	1 - 2
	- Item No. 4 - Bid Opening Sign In Sheet	1 - 2
	- Item No. 5 - Bid Tabulation	1 - 3
	- Item No. 6 - Notice of Award - Contract "G"	1 - 1



OHIO COUNTY WATER DISTRICT  
OHIO COUNTY, KENTUCKY

EXHIBIT J8

EXHIBIT J8 - 3 Sets of Plans and Specifications for 1997 Water System Improvements -  
Contract "G" dated June, 1998 (Additional Work March, 1999) - Bid April,  
1999 (Sets Nos. 12, 13 and 14) are bound separately.



90000 SERIES  
10% P.C.W.

Hunter Martin & Assoc  
RECEIVED JUL 30 1998

JAMES E. BICKFORD  
SECRETARY



PAUL E. PATTON  
GOVERNOR

*Orig Letter + Copies  
of Attachments - File*

COMMONWEALTH OF KENTUCKY  
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

FRANKFORT OFFICE PARK  
14 REILLY RD  
FRANKFORT KY 40601

*Copy of Letter +  
Orig. Attachments  
in File Room*

July 28, 1998

*P & S  
Cont. G.*

Ohio County Water District  
130 Washington Street  
Hartford, Kentucky 42347

RE: DW #0920332-98-004  
Water Line Extension  
Contract G, Series II  
Ohio County, Kentucky

Dear Sirs:

This is to advise that an exception to the Ohio County Water District's water line extension/tap-on ban is granted for the above referenced project. This exception is granted because the project improves the system. The plans and specifications covering the above referenced subject are APPROVED with respect to sanitary features of design as of this date with the following stipulations:

1. No new customers shall be connected to the extension until the water line extension/tap-on ban is lifted.
2. Upon completion of construction, disinfection shall be strictly in accordance with the procedure designated in the State Regulations, which reads as follows:

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

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

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

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

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

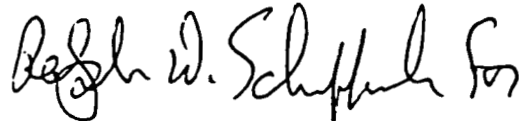


Contract G, Series II  
July 28, 1998  
Page three

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

Unless construction of this project is begun within one year from the date of approval, the approval shall expire. If you have any questions concerning this project, please contact Donna Marlin at 502/564-2225, extension 541.

Sincerely,



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

VLR:DSM:lm

Enclosures

C: Hunter Martin & Assoc.  
Daviess County Health Department  
Ohio County Health Department  
Public Service Commission  
Bowling Green Regional Office  
Madisonville Regional Office  
Drinking Water Files

JAMES E. BICKFORD  
SECRETARY



RECEIVED MAY 11 1999 *cc: Gerry*

PAUL E. PATTON  
GOVERNOR

*orig. letter &  
copies of attachments  
in file.*

COMMONWEALTH OF KENTUCKY  
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

FRANKFORT OFFICE PARK  
14 REILLY RD  
FRANKFORT KY 40601

May 4, 1999

*copy of letter  
and orig.  
attachments  
in file soon.*

Ohio County Water District  
130 Washington Street  
Hartford, Kentucky 42347

RE: DW #0920332-99-001  
Water Line Extension  
Series I, Contract G  
Ohio County, Kentucky

Dear Sirs:

This is to advise that the plans submitted for the above referenced project are APPROVED with respect to sanitary features of design in accordance with our original approval letter dated July 28, 1998 (DW #0920332-98-004). All stipulations of that letter remain in effect.

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

Sincerely,

*Vicki L. Ray*

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

VLR:RNA:lm

C: Hunter Martin & Assoc, Inc.  
Ohio County Health Department  
Daviess County Health Department  
Public Service Commission  
Bowling Green Regional Office  
Madisonville Regional Office  
Drinking Water Files



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EXHIBIT K8  
Page 3 of 3



Before the Public Service Commission

RECEIVED

MAY 18 1999

PUBLIC SERVICE COMMISSION

IN THE MATTER OF PSC CASE NO. 98-015, )  
OHIO COUNTY WATER DISTRICT )  
REQUESTS AN AMENDMENT TO THE )  
ORDER DATED AUGUST 19, 1998, FOR: )

No. 99-212  
~~98-015~~

(1) ISSUANCE OF A CERTIFICATE OF )  
PUBLIC CONVENIENCE AND )  
NECESSITY FOR CONSTRUCTION OF )  
THE SERIES I WATER SYSTEM )  
IMPROVEMENTS, CONTRACT G )

FILED

MAY 18 1999

PUBLIC SERVICE COMMISSION

APPLICATION

This Application of OHIO COUNTY WATER DISTRICT (the "Applicant") of Ohio County, Kentucky, respectfully states:

1. Applicant is a water district of Ohio County, Kentucky, created and existing under and by virtue of Chapter 74 of the Kentucky Revised Statutes, pursuant to Order No. 138 by the County Court of Ohio County, Kentucky, duly entered on APRIL 2, 1962, and previously filed in Case No. 7667.
2. By order of the Public Service Commission dated August 19, 1998, in Case No. 98-015, Ohio County Water District was authorized to issue Revenue bonds in the principal amount not to exceed \$4,000,000 to be used for improvements to the Water System in accordance with the District's Application.

3. A Certificate of Public Convenience and Necessity to proceed with the construction of Contracts A through F was granted. Construction of these projects is nearing completion and documentation, including Record Plans, will be submitted to PSC within 60 days of substantial completion of the Contracts.
4. As of the District's last regular meeting, \$2,433,675.34 has been expended, as shown on Requisition Certificate No. 8 dated April 27, 1999, and included herein as Item No. 2.
5. On July 28, 1998, the Kentucky Division of Water reviewed and approved Plans and Specifications covering Contract G. On May 4, 1999, revised Plans and Specifications were reviewed and approved for Contract G. Copies of the approval letters are included herein as Exhibit K-8.
6. On March 30, 1999, an Advertisement for Bids for Contract G was mailed to Contractors. The Advertisement was published in the Ohio County Times News. Copies of the Advertisement for Bids and the Publisher's Affidavit are included herein as Item No. 3.
7. Sealed Bids were received and opened at the Ohio County Water District Office at 2:00 P.M., CDT, April 27, 1999. Copies of the Bid Opening Sign-In Sheet is included herein as Item No. 4.
8. Bids were tabulated and distributed to all Bidders. A copy of the Bid Tabulation is included herein as Item No. 5.
9. Gregory Piping, Inc. submitted the low Bid of \$237,395.00. The Bid received was responsive and responsible and the District authorized the Notice of Award to be issued (subject to PSC approval). A copy of the executed Notice of Award - Contract "G" is included herein as Item No. 6.

10. The Applicant seeks approval to construct Contract "G" in order for it to implement its Long Range Plans to eliminate deficiencies within the system. The proposed new construction is in the best interest of the Applicant, its present customers and will therefore clearly serve the public convenience and necessity of the entire District.
11. The Applicant proposes to finance the construction of Contract "G" with the Revenue Bonds issued pursuant to PSC's Order dated August 19, 1998. No additional rate increase is needed for this work.
12. Sets Nos. 12, 13 and 14 of the Plans and Specifications are included herein as Exhibit J-8.

WHEREFORE, the Applicant, **OHIO COUNTY WATER DISTRICT**, respectfully requests an Order approving issuance of a Certificate of Convenience and Necessity for construction of the Series I Water System Improvements - Contract "G".

**OHIO COUNTY WATER DISTRICT**

  
Bernard Ballard, Chairman

**ATTORNEY FOR PETITIONER:**

Honorable E. F. Martin, Jr.  
Attorney At Law  
408 North Main  
P. O. Box 207  
Hartford, KY 42347 -0207

**STATEMENT BY APPLICANT:**

The undersigned, BERNARD BALLARD, Chairman of the **OHIO COUNTY WATER DISTRICT**, hereby verifies that he has personal knowledge of the matters set forth in the above stated application, that the information set forth therein is true and correct and that he is duly designated by **OHIO COUNTY WATER DISTRICT** to sign this application on its behalf.

  
Bernard Ballard, Chairman

May 14, 1999; application

10. The Applicant seeks approval to construct Contract "G" in order for it to implement its Long Range Plans to eliminate deficiencies within the system. The proposed new construction is in the best interest of the Applicant, its present customers and will therefore clearly serve the public convenience and necessity of the entire District.
11. The Applicant proposes to finance the construction of Contract "G" with the Revenue Bonds issued pursuant to PSC's Order dated August 19, 1998. No additional rate increase is needed for this work.
12. Sets Nos. 12, 13 and 14 of the Plans and Specifications are included herein as Exhibit J-8.

WHEREFORE, the Applicant, **OHIO COUNTY WATER DISTRICT**, respectfully requests an Order approving issuance of a Certificate of Convenience and Necessity for construction of the Series I Water System Improvements - Contract "G".

**OHIO COUNTY WATER DISTRICT**

  
Bernard Ballard, Chairman

**ATTORNEY FOR PETITIONER:**

Honorable E. F. Martin, Jr.  
Attorney At Law  
408 North Main  
P. O. Box 207  
Hartford, KY 42347 -0207

**STATEMENT BY APPLICANT:**

The undersigned, **BERNARD BALLARD**, Chairman of the **OHIO COUNTY WATER DISTRICT**, hereby verifies that he has personal knowledge of the matters set forth in the above stated application, that the information set forth therein is true and correct and that he is duly designated by **OHIO COUNTY WATER DISTRICT** to sign this application on its behalf.

  
Bernard Ballard, Chairman

May 14, 1999; application

EXHIBIT S  
Item No. 1  
Page 3 of 4

STATE OF KENTUCKY  
COUNTY OF OHIO

Subscribed and sworn to before me this 17 day of May, 1999, by

**BERNARD BALLARD, CHAIRMAN OF OHIO COUNTY WATER DISTRICT.**

My Commission Expires: 1-20-03

James C Porter  
Notary Public, State of Kentucky at Large

(Seal)



STATE OF KENTUCKY  
COUNTY OF OHIO

Subscribed and sworn to before me this 17 day of May, 1999, by  
**BERNARD BALLARD, CHAIRMAN OF OHIO COUNTY WATER DISTRICT.**

My Commission Expires: 1-20-03

James C. Porter  
Notary Public, State of Kentucky at Large

(Seal)



REQUISITION CERTIFICATE NO. 8

RE: OHIO COUNTY WATER DISTRICT WATERWORKS REVENUE BONDS, SERIES 1998, IN THE AMOUNT OF \$4,000,000.

The undersigned hereby certify as follows:

1. That they are the signatories required for construction and/or administrative draws pursuant to the Bond Resolution adopted by the Issuer, Ohio County Water District (the "District").
2. That the named firms and/or persons set forth on Exhibit A attached hereto are now entitled to the aggregate sum of \$275,415.77, itemized as set forth in said Exhibit A and as per approved invoices attached hereto.
3. That upon said amount being lent to said District and/or obtained by said District from the proceeds of the Current Bonds and/or other sources, the undersigned approve such expenditure and the payment of said amounts to said firms and/or persons, either directly or from amounts on deposit in the "Ohio County Water District Waterworks Construction Account".
4. That we hereby certify that we have carefully inspected the work and, as a result of our inspection and to the best of our knowledge and belief, the amounts shown in this Requisition Certificate are correct and the work has been performed in accordance with the agreements between the District and the parties requesting payment.

IN TESTIMONY WHEREOF, witness the signature of the undersigned, this 27<sup>th</sup> day of

APRIL, 19 99.

OHIO COUNTY WATER DISTRICT

By James C. Porter  
James C. Porter, Superintendent

Approved on 4/27/99

HUNTER MARTIN & ASSOCIATES, INC.

By Rod H. Martin  
Rod H. Martin, Kentucky P.E. No. 10,846

Approved on 4/26/99

Amount expended heretofore \$2,158,259.57

Amount approved herein 275,415.77

Total \$2,433,675.34

DISTRIBUTION:

- Bank
- District
- Engineer
- Meeting
- Engineer - Hold

NAME OF ENTITY/PERSON	EST. NO.	PERCENT COMPLETE	AMOUNT
OHIO COUNTY WATER DISTRICT 130 Washington Street Hartford, KY 42347	-	-	\$ .00
HUNTER MARTIN & ASSOCIATES, INC. 3220 Lone Oak Road Paducah, KY 42003	12	-	19,606.72
TOP GRADE EXCAVATING, INC. - "A" 409 West 12 <sup>th</sup> Street Huntingburg, IN 47542	6A	88.67%	41,514.90
TOP GRADE EXCAVATING, INC. - "B" 409 West 12 <sup>th</sup> Street Huntingburg, IN 47542	5B	57.85%	37,468.62
SALMON PLUMBING, INC. - "C" P. O. Box 97 Mt. Washington, KY 40047	6C	91.02%	45,410.47
CALDWELL TANKS, INC. - "D" P. O. Box 35770 Louisville, KY 40232			
NOTE: AUTOMATIC CLEARINGHOUSE (ACH)			
BANK NAME : National City - Louisville, KY			
Routing # : 083000056			
Account # : 70550008			
or			
FEDERAL EXPRESS (SEE ATTACHMENT)	3D	80.36%	112,905.00
SALMON PLUMBING, INC. - "E" P. O. Box 97 Mt. Washington, KY 40047	1E	35.60 36.60%	18,510.06
H.T.I., INC. - "F" 9560 Highway 62 East Horse Branch, KY 42349-9535	1F	35.20%	.00
<b>TOTAL:</b>			<b>\$275,415.77</b>

## ADVERTISEMENT FOR BIDS - CONTRACT "G"

OHIO COUNTY WATER DISTRICT130 WASHINGTON STREETHARTFORD, KY 42347

Separate sealed BIDS for the construction of SERIES I WATER SYSTEM IMPROVEMENTS -  
CONTRACT "G" (INCLUDING 1,000 LF OF 18" PVC ; 17,100 LF OF 8" PVC ; AND 12,700 LF OF 6" PVC ;  
19,500 LF OF 4" PVC; 200 LF OF 2" PVC AND APPURTENANCES)

will be received by OHIO COUNTY WATER DISTRICT, 130 WASHINGTON STREET, HARTFORD, KY  
 at the office of OHIO COUNTY WATER DISTRICT until  
2:00 P.M., CDT , TUESDAY , APRIL 27 , 19 99 ,  
 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, KENTUCKYOHIO COUNTY WATER DISTRICT, HARTFORD, KENTUCKYASSOCIATED GENERAL CONTRACTORS, PADUCAH, KENTUCKYF. W. DODGE-CIG, EVANSVILLE, INDIANABUILDERS EXCHANGE OF LOUISVILLE, LOUISVILLE, KENTUCKYTRI-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, upon payment of \$ 100.00 for each set.

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

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

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

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

MARCH 30, 1999

DATE

BERNARD BALLARD, CHAIRMAN

TITLE

PUBLISHERS AFFIDAVIT

The affiant, Mrs. Andy Anderson, Owner/Publisher of The Ohio County Times News, a newspaper published at Hartford in Ohio County, Kentucky, hereby affirms that the ADVERTISEMENT FOR BIDS - CONTRACT "G" for OHIO COUNTY WATER DISTRICT was published in this newspaper on April 8, 1999, page 13-A, Columns 5-6.

Mrs. Andy Anderson

Subscribed and sworn to before me by Mrs. Andy Anderson this 27th day of April, 1999.

Doris L. Hicks  
Notary Public

My commission expires February 21, 2000

## SIGN-IN SHEET

OWNER: OHIO COUNTY WATER DISTRICT	ENGINEER: HUNTER MARTIN & ASSOCIATES, INC. 3220 Lone Oak Road Paducah, KY 42003
PROJECT: SERIES I WATER SYSTEM IMPROVEMENTS CONTRACT G	
BID: APRIL 27, 1999	
OPENING: 2:00 P.M., CDT	

NAME	COMPANY	TELEPHONE
Colburn CLARK	Top Grade Excavating	502-683-5779
Bill Thompson	Top Grade Exc. Inc	" " "
Paul Catts	W.W. Sply	800-944-7473
LARRY SCHROEDER	GREGORY PIPING	502-443-4122
Jacob Knight	Knight's Const. & Excavating	502-884-7400
Jim Fleun	Jim Skaggs	502-526-7067
Bug Stotts	Stotts Const.	502-384-4901
Doug Melton	Stotts Const	502-384-3843
Rob Ben	Latham Backhoe	502-657-2101
Brook Griffin	Twin Rivers	502-091-1000
James D. Hatt	Kelly, F. Wilmore	502-683-6995
Donald Peters	" " "	502-827-5214

### SIGN-IN SHEET

<p><b>OWNER:</b> OHIO COUNTY WATER DISTRICT</p> <p><b>PROJECT:</b> SERIES I WATER SYSTEM IMPROVEMENTS CONTRACT G</p> <p><b>BID OPENING:</b> APRIL 27, 1999 2:00 P.M., CDT</p>	<p><b>ENGINEER:</b> HUNTER MARTIN &amp; ASSOCIATES, INC. 3220 Lone Oak Road Paducah, KY 42003</p>
---	---

NAME	COMPANY	TELEPHONE
<i>Jim Porter</i>	<i>Ohio Co Water</i>	<i>298-7704</i>
<i>Wayne Smith</i>	<i>Smith &amp; Sons</i>	<i>298-7861</i>
<i>John Housley</i>	<i>Salmon Const</i>	<i>538-7676</i>
<i>ROD MARTINI</i>	<i>HM FA</i>	
<i>Tom Hines</i>	<i>HM FA</i>	

**OHIO COUNTY WATER DISTRICT**  
 OHIO COUNTY, KY.  
 SERIES I WATER SYSTEM IMPROVEMENTS  
 CONTRACT "0"  
**BID TABULATION**  
 (REVISED 5/03/99)

<b>BID OPENING:</b> APRIL 27, 1999 <b>TIME:</b> 2:00 P.M., CDT <b>PLACE:</b> OHIO COUNTY WATER DISTRICT 130 WASHINGTON STREET HARTFORD, KY 42347	<b>GREGORY PIPING CO., INC.</b> 3300 Coleman Rd. Paducah, KY 42003	<b>SALMON PLUMBING, INC.</b> 149 S. Bardstew Rd. Mt. Washington, KY 40047	<b>TOP GRADE EXCAVATING, INC.</b> 3115 Commonwealth Court Owensboro, KY 42303	<b>GARRISON CONSTRUCTION</b> 6960 Greenburg Rd. Greenburg, KY 42743	<b>DONALD PETERS CONSTRUCTION</b> 4948 Highway 1078 North Henderson, KY 42420
--	--	---	---	---	---

ITEM	DESCRIPTION	QUANTITY	UNIT	GREGORY PIPING CO., INC.		SALMON PLUMBING, INC.		TOP GRADE EXCAVATING, INC.		GARRISON CONSTRUCTION		DONALD PETERS CONSTRUCTION	
				UNIT PRICE BID	AMOUNT	UNIT PRICE BID	AMOUNT	UNIT PRICE BID	AMOUNT	UNIT PRICE BID	AMOUNT	UNIT PRICE BID	AMOUNT
1.	MOBILIZATION/DEMOBILIZATION	1	LS	\$500.00	\$500.00	\$0.00	\$0.00	\$3,000.00	\$3,000.00	\$2,060.00	\$2,060.00	\$3,000.00	\$3,000.00
2.	WATER MAINS, PVC												
2.1	18" DR 18	1,000	LF	\$24.00	\$24,000.00	\$24.12	\$24,120.00	\$23.50	\$23,500.00	\$26.78	\$26,780.00	\$26.00	\$26,000.00
2.2	8" SDR 21	17,100	LF	\$4.50	\$76,950.00	\$4.12	\$70,452.00	\$4.85	\$82,935.00	\$5.15	\$88,065.00	\$5.73	\$97,983.00
2.3	6" SDR 21	12,700	LF	\$3.10	\$39,370.00	\$3.16	\$40,132.00	\$3.60	\$45,720.00	\$3.35	\$42,545.00	\$3.60	\$45,720.00
2.4	4" SDR 21	19,500	LF	\$1.85	\$36,075.00	\$2.42	\$47,190.00	\$2.10	\$40,950.00	\$2.16	\$42,120.00	\$2.50	\$48,750.00
2.5	2" SDR 21	200	LF	\$1.25	\$250.00	\$1.62	\$324.00	\$2.00	\$400.00	\$1.70	\$340.00	\$1.50	\$300.00
3.	FITTINGS												
3.1	Ductile Iron, 18" Size	200	LBS	\$3.00	\$600.00	\$1.00	\$200.00	\$2.00	\$400.00	\$4.38	\$876.00	\$3.00	\$600.00
3.2	Ductile Iron, 12" Size	100	LBS	\$1.90	\$190.00	\$1.00	\$100.00	\$1.80	\$180.00	\$2.11	\$211.00	\$2.00	\$200.00
3.3	Ductile Iron, 8" Size	600	LBS	\$1.90	\$1,140.00	\$1.00	\$600.00	\$1.00	\$600.00	\$2.16	\$1,296.00	\$2.00	\$1,200.00
3.4	Ductile Iron, 6" Size	200	LBS	\$1.90	\$380.00	\$1.00	\$200.00	\$1.00	\$200.00	\$2.27	\$454.00	\$1.80	\$360.00
3.5	Ductile Iron, 4" Size	300	LBS	\$1.90	\$570.00	\$1.00	\$300.00	\$1.00	\$300.00	\$2.52	\$756.00	\$3.00	\$900.00
3.6	PVC, 3" and Smaller	5	EA	\$15.00	\$75.00	\$20.00	\$100.00	\$50.00	\$250.00	\$9.27	\$46.35	\$10.00	\$50.00
4.	VALVES, W/IRON BOX												
4.1	8" Gate	4	EA	\$550.00	\$2,200.00	\$500.00	\$2,000.00	\$505.00	\$2,020.00	\$587.10	\$2,348.40	\$620.00	\$2,480.00
4.2	6" Gate	4	EA	\$350.00	\$1,400.00	\$400.00	\$1,600.00	\$375.00	\$1,500.00	\$386.25	\$1,545.00	\$415.00	\$1,660.00
4.3	4" Gate	6	EA	\$270.00	\$1,620.00	\$300.00	\$1,800.00	\$275.00	\$1,650.00	\$314.15	\$1,884.90	\$310.00	\$1,860.00
4.4	2" Gate	5	EA	\$180.00	\$900.00	\$200.00	\$1,000.00	\$200.00	\$1,000.00	\$272.95	\$1,364.75	\$150.00	\$750.00
5.	CLAMPS AND COUPLINGS												
5.1	8 Inch	2	EA	\$150.00	\$300.00	\$100.00	\$200.00	\$100.00	\$200.00	\$175.10	\$350.20	\$100.00	\$200.00
5.2	4 Inch	2	EA	\$95.00	\$190.00	\$100.00	\$200.00	\$55.00	\$110.00	\$135.96	\$271.92	\$80.00	\$160.00
5.3	3 Inch and Smaller	2	EA	\$90.00	\$180.00	\$100.00	\$200.00	\$40.00	\$80.00	\$53.56	\$107.12	\$25.00	\$50.00
6.	TIE-INS												
6.1	18 Inch	1	EA	\$500.00	\$500.00	\$100.00	\$100.00	\$2,000.00	\$2,000.00	\$1,091.80	\$1,091.80	\$400.00	\$400.00
6.2	8 Inch	1	EA	\$400.00	\$400.00	\$100.00	\$100.00	\$800.00	\$800.00	\$618.00	\$618.00	\$1,000.00	\$1,000.00
6.3	6 Inch	2	EA	\$450.00	\$900.00	\$100.00	\$200.00	\$800.00	\$1,600.00	\$515.00	\$1,030.00	\$600.00	\$1,200.00
6.4	4 Inch & Smaller	3	EA	\$300.00	\$900.00	\$60.00	\$180.00	\$300.00	\$900.00	\$412.18	\$1,236.54	\$400.00	\$1,200.00
7.	AIR RELEASE VALVES W/BOX												
7.1	2" w/ 7/32" Orifice	2	EA	\$750.00	\$1,500.00	\$600.00	\$1,200.00	\$1,400.00	\$2,800.00	\$875.50	\$1,751.00	\$800.00	\$1,600.00
8.	BORE W/CASING												
8.1	14" Casing	393	LF	\$75.00	\$29,475.00	\$90.00	\$35,550.00	\$65.00	\$25,665.00	\$92.70	\$36,616.50	\$62.00	\$24,490.00
8.2	12" Casing	165	LF	\$53.00	\$8,745.00	\$40.00	\$6,600.00	\$60.00	\$9,900.00	\$72.10	\$11,896.50	\$60.00	\$9,900.00
8.3	10" Casing	80	LF	\$45.00	\$3,600.00	\$40.00	\$3,200.00	\$57.00	\$4,560.00	\$66.95	\$5,356.00	\$50.00	\$4,000.00
9.	BORE W/O CASING												
9.1	8" Carrier	40	LF	\$15.00	\$600.00	\$40.00	\$1,600.00	\$30.00	\$1,200.00	\$46.35	\$1,854.00	\$25.00	\$1,000.00
10.	MARKER POSTS	40	EA	\$10.00	\$400.00	\$50.00	\$2,000.00	\$40.00	\$1,600.00	\$30.90	\$1,236.00	\$6.00	\$240.00
11.	CRUSHED STONE	110	CY	\$16.00	\$1,760.00	\$10.00	\$1,100.00	\$12.00	\$1,320.00	\$15.45	\$1,699.50	\$10.00	\$1,100.00
12.	CONCRETE ENCASEMENT	20	LF	\$10.00	\$200.00	\$60.00	\$1,200.00	\$50.00	\$1,000.00	\$12.36	\$247.20	\$20.00	\$400.00
13.	ASPHALT PAVEMENT REPLACEMENT	20	SY	\$35.00	\$700.00	\$50.00	\$1,000.00	\$27.00	\$540.00	\$8.24	\$164.80	\$12.00	\$240.00
14.	CONCRETE PAVEMENT REPLACEMENT	5	CY	\$75.00	\$375.00	\$100.00	\$500.00	\$100.00	\$500.00	\$92.70	\$463.50	\$100.00	\$500.00
15.	ADDITIONAL DEPTH	200	LF	\$1.50	\$300.00	\$1.00	\$200.00	\$2.00	\$400.00	\$2.06	\$412.00	\$2.00	\$400.00
<b>TOTAL BID - CONTRACT G</b>					\$237,395.00		\$245,448.00		\$259,790.00		\$279,094.98		\$279,893.00



**OHIO COUNTY WATER DISTRICT**  
 OHIO COUNTY, KY.  
 SERIES I WATER SYSTEM IMPROVEMENTS  
 CONTRACT "G"  
**BID TABULATION**  
 (REVISED 5/03/99)

BID OPENING: APRIL 27, 1999 TIME: 2:00 P.M. CDT PLACE: OHIO COUNTY WATER DISTRICT 130 WASHINGTON STREET HARTFORD, KY 42347				BOBBY LUTTRELL & SONS 5276 Cedar Grove Road Olaton, KY 42361		KNIGHT'S CONSTRUCTION & EXCAVATING, INC. 98 Jewel City Road Simpson, KY 42456		STOTTS CONSTRUCTION CO., INC. 3415 Burkhardt Road Columbia, KY 42728		JIM SKAGGS, INC. 2325 AIRWAY COURT BOWLING GREEN, KY 42103	
ITEM	DESCRIPTION	QUANTITY	UNIT	BOBBY LUTTRELL & SONS		KNIGHT'S CONSTRUCTION		STOTTS CONSTRUCTION		JIM SKAGGS, INC.	
				UNIT PRICE BID	AMOUNT	UNIT PRICE BID	AMOUNT	UNIT PRICE BID	AMOUNT	UNIT PRICE BID	AMOUNT
1.	MOBILIZATION/DEMOBILIZATION	1	LS	\$0.00	\$0.00	\$11,512.00	\$11,512.00	\$500.00	\$500.00	\$5,000.00	\$5,000.00
2.	WATER MAINS, PVC										
2.1	18" DR 18	1,000	LF	\$25.00	\$25,000.00	\$32.32	\$32,320.00	\$28.85	\$28,850.00	\$27.49	\$27,490.00
2.2	8" SDR 21	17,100	LF	\$5.65	\$96,615.00	\$5.00	\$85,500.00	\$5.00	\$85,500.00	\$6.70	\$114,370.00
2.3	6" SDR 21	12,700	LF	\$3.60	\$45,720.00	\$3.50	\$44,450.00	\$4.05	\$51,435.00	\$3.75	\$47,625.00
2.4	4" SDR 21	19,500	LF	\$2.50	\$48,750.00	\$2.00	\$39,000.00	\$3.25	\$63,375.00	\$2.75	\$53,250.00
2.5	2" SDR 21	200	LF	\$2.00	\$400.00	\$3.00	\$600.00	\$2.75	\$550.00	\$2.47	\$494.00
3.	FITTINGS										
3.1	Ductile Iron, 18" Size	200	LBS	\$2.00	\$400.00	\$4.00	\$800.00	\$1.50	\$300.00	\$2.68	\$536.00
3.2	Ductile Iron, 12" Size	100	LBS	\$2.00	\$200.00	\$2.80	\$280.00	\$1.25	\$125.00	\$2.00	\$200.00
3.3	Ductile Iron, 8" Size	600	LBS	\$2.00	\$1,200.00	\$4.16	\$2,496.00	\$1.25	\$750.00	\$3.00	\$1,800.00
3.4	Ductile Iron, 6" Size	200	LBS	\$2.00	\$400.00	\$2.50	\$500.00	\$1.25	\$250.00	\$2.15	\$430.00
3.5	Ductile Iron, 4" Size	300	LBS	\$2.00	\$600.00	\$4.00	\$1,200.00	\$1.00	\$300.00	\$2.37	\$711.00
3.6	PVC, 3" and Smaller	5	EA	\$50.00	\$250.00	\$100.00	\$500.00	\$20.00	\$100.00	\$15.00	\$75.00
4.	VALVES, W/IRON BOX										
4.1	8" Gate	4	EA	\$600.00	\$2,400.00	\$900.00	\$3,600.00	\$650.00	\$2,600.00	\$575.00	\$2,300.00
4.2	6" Gate	4	EA	\$400.00	\$1,600.00	\$600.00	\$2,400.00	\$400.00	\$1,600.00	\$375.00	\$1,500.00
4.3	4" Gate	6	EA	\$350.00	\$2,100.00	\$433.33	\$2,599.98	\$375.00	\$2,250.00	\$315.00	\$1,890.00
4.4	2" Gate	5	EA	\$275.00	\$1,375.00	\$400.00	\$2,000.00	\$275.00	\$1,375.00	\$245.00	\$1,225.00
5.	CLAMPS AND COUPLINGS										
5.1	8 inch	2	EA	\$100.00	\$200.00	\$200.00	\$400.00	\$100.00	\$200.00	\$200.00	\$400.00
5.2	4 inch	2	EA	\$75.00	\$150.00	\$190.00	\$380.00	\$85.00	\$170.00	\$200.00	\$400.00
5.3	3 inch and Smaller	2	EA	\$50.00	\$100.00	\$160.00	\$320.00	\$75.00	\$150.00	\$200.00	\$400.00
6.	TIE-INS										
6.1	18 inch	1	EA	\$200.00	\$200.00	\$1,200.00	\$1,200.00	\$400.00	\$400.00	\$500.00	\$500.00
6.2	8 inch	1	EA	\$500.00	\$500.00	\$900.00	\$900.00	\$400.00	\$400.00	\$300.00	\$300.00
6.3	6 inch	2	EA	\$500.00	\$1,000.00	\$400.00	\$800.00	\$400.00	\$800.00	\$300.00	\$600.00
6.4	4 inch & Smaller	3	EA	\$400.00	\$1,200.00	\$133.33	\$399.99	\$300.00	\$900.00	\$300.00	\$900.00
7.	AIR RELEASE VALVES W/BOX										
7.1	2" w/ 7/32" Orifice	2	EA	\$500.00	\$1,000.00	\$1,500.00	\$3,000.00	\$1,000.00	\$2,000.00	\$750.00	\$1,500.00
8.	BORE W/CASING										
8.1	14" Casing	395	LF	\$80.00	\$31,600.00	\$85.00	\$33,575.00	\$115.00	\$45,425.00	\$70.00	\$27,650.00
8.2	12" Casing	165	LF	\$75.00	\$12,375.00	\$75.00	\$12,375.00	\$80.00	\$13,200.00	\$48.00	\$7,920.00
8.3	10" Casing	80	LF	\$70.00	\$5,600.00	\$65.00	\$5,200.00	\$75.00	\$6,000.00	\$40.00	\$3,200.00
9.	BORE W/O CASING										
9.1	8" Carrier	40	LF	\$25.00	\$1,000.00	\$50.00	\$2,000.00	\$25.00	\$1,000.00	\$25.00	\$1,000.00
10.	MARKER POSTS	40	EA	\$10.00	\$400.00	\$2.00	\$80.00	\$10.00	\$400.00	\$10.00	\$400.00
11.	CRUSHED STONE	110	CY	\$15.00	\$1,650.00	\$12.00	\$1,320.00	\$10.00	\$1,100.00	\$11.00	\$1,210.00
12.	CONCRETE ENCASEMENT	20	LF	\$20.00	\$400.00	\$50.00	\$1,000.00	\$40.00	\$800.00	\$50.00	\$1,000.00
13.	ASPHALT PAVEMENT REPLACEMENT	20	SY	\$20.00	\$400.00	\$50.00	\$1,000.00	\$30.00	\$600.00	\$50.00	\$1,000.00
14.	CONCRETE PAVEMENT REPLACEMENT	5	CY	\$100.00	\$500.00	\$120.00	\$600.00	\$80.00	\$400.00	\$50.00	\$250.00
15.	ADDITIONAL DEPTH	200	LF		\$0.00	\$25.00	\$5,000.00	\$2.00	\$400.00	\$5.00	\$1,000.00
<b>TOTAL BID - CONTRACT G</b>					\$285,285.00		\$299,307.97		\$314,205.00		\$308,711.00

**OHIO COUNTY WATER DISTRICT**  
 OHIO COUNTY, KY.  
 SERIES I WATER SYSTEM IMPROVEMENTS  
 CONTRACT "G"  
**BID TABULATION**  
 (REVISED 5/03/99)

BID OPENING: APRIL 27, 1999  
 TIME: 2:00 P.M. CDT  
 PLACE: OHIO COUNTY WATER DISTRICT  
 136 WASHINGTON STREET  
 HARTFORD, KY 42347

TWIN RIVERS  
 CONSTRUCTION, INC.  
 7167 KY. HWY. 8150  
 Owensboro, KY 42301

KELLY & WILMORE CO.  
 INC.  
 P. O. Box 885  
 Owensboro, KY 42302

ENVIRONMENTAL WORKS, INC.  
 100 East Pillow Street  
 Clarksville, TN 38415

LATHAM'S BACKHOE  
 & EXCAVATING  
 2987 Dunbar Dierick  
 Road  
 Lewisburg, KY 42256

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE		UNIT PRICE		UNIT PRICE		UNIT PRICE	
				BID	AMOUNT	BID	AMOUNT	BID	AMOUNT	BID	AMOUNT
1.	MOBILIZATION/DEMOBILIZATION		1 LS	\$12,250.00	\$12,250.00	\$0.00	\$0.00	\$14,300.00	\$14,300.00	\$2,500.00	\$2,500.00
2.	WATER MAINS, PVC										
2.1	18" DR 18	1,000	LF	\$22.89	\$22,890.00	\$32.00	\$32,000.00	\$26.42	\$26,420.00	\$26.00	\$26,000.00
2.2	8" SDR 21	17,100	LF	\$4.76	\$81,396.00	\$6.50	\$111,150.00	\$5.65	\$96,615.00	\$8.60	\$147,060.00
2.3	6" SDR 21	12,700	LF	\$3.67	\$46,609.00	\$4.70	\$59,690.00	\$4.40	\$55,880.00	\$4.55	\$57,785.00
2.4	4" SDR 21	19,500	LF	\$2.48	\$48,360.00	\$3.25	\$63,375.00	\$3.50	\$68,250.00	\$3.00	\$58,500.00
2.5	2" SDR 21	200	LF	\$1.57	\$314.00	\$3.25	\$650.00	\$3.15	\$630.00	\$2.38	\$476.00
3.	FITTINGS										
3.1	Ductile Iron, 18" Size	200	LBS	\$4.06	\$812.00	\$5.00	\$1,000.00	\$3.10	\$620.00	\$2.00	\$400.00
3.2	Ductile Iron, 12" Size	100	LBS	\$6.40	\$640.00	\$3.50	\$350.00	\$2.26	\$226.00	\$2.00	\$200.00
3.3	Ductile Iron, 8" Size	600	LBS	\$0.86	\$516.00	\$3.00	\$1,800.00	\$2.39	\$1,434.00	\$2.00	\$1,200.00
3.4	Ductile Iron, 6" Size	200	LBS	\$1.08	\$216.00	\$2.50	\$500.00	\$2.45	\$490.00	\$2.00	\$400.00
3.5	Ductile Iron, 4" Size	300	LBS	\$1.45	\$435.00	\$2.50	\$750.00	\$2.72	\$816.00	\$2.00	\$600.00
3.6	PVC, 3" and Smaller	5	EA	\$115.40	\$577.00	\$75.00	\$375.00	\$20.00	\$100.00	\$20.00	\$100.00
4.	VALVES, W/IRON BOX										
4.1	8" Gate	4	EA	\$1,900.24	\$7,600.96	\$775.00	\$3,100.00	\$670.00	\$2,680.00	\$570.00	\$2,280.00
4.2	6" Gate	4	EA	\$1,549.20	\$6,196.80	\$585.00	\$2,340.00	\$470.00	\$1,880.00	\$400.00	\$1,600.00
4.3	4" Gate	6	EA	\$1,207.70	\$7,246.20	\$515.00	\$3,090.00	\$400.00	\$2,400.00	\$300.00	\$1,800.00
4.4	2" Gate	5	EA	\$285.50	\$1,427.50	\$465.00	\$2,325.00	\$315.00	\$1,575.00	\$150.00	\$750.00
5.	CLAMPS AND COUPLINGS										
5.1	8 inch	2	EA	\$224.64	\$449.28	\$300.00	\$600.00	\$150.00	\$300.00	\$100.00	\$200.00
5.2	4 inch	2	EA	\$155.12	\$310.24	\$250.00	\$500.00	\$115.00	\$230.00	\$75.00	\$150.00
5.3	3 inch and Smaller	2	EA	\$155.12	\$310.24	\$200.00	\$400.00	\$100.00	\$200.00	\$50.00	\$100.00
6.	TIE-INS										
6.1	18 inch	1	EA	\$3,500.00	\$3,500.00	\$2,200.00	\$2,200.00	\$1,500.00	\$1,500.00	\$200.00	\$200.00
6.2	8 inch	1	EA	\$1,375.00	\$1,375.00	\$1,500.00	\$1,500.00	\$950.00	\$950.00	\$200.00	\$200.00
6.3	6 inch	2	EA	\$1,000.00	\$2,000.00	\$885.00	\$1,770.00	\$900.00	\$1,800.00	\$200.00	\$400.00
6.4	4 inch & Smaller	3	EA	\$500.00	\$1,500.00	\$700.00	\$2,100.00	\$800.00	\$2,400.00	\$200.00	\$600.00
7.	AIR RELEASE VALVES W/BOX										
7.1	2" w/ 7/32" Orifice	2	EA	\$1,209.48	\$2,418.96	\$2,200.00	\$4,400.00	\$1,250.00	\$2,500.00	\$800.00	\$1,600.00
8.	BORE W/CASING										
8.1	14" Casing	395	LF	\$87.00	\$34,365.00	\$85.00	\$33,575.00	\$107.00	\$42,265.00	\$120.00	\$47,400.00
8.2	12" Casing	165	LF	\$85.00	\$14,025.00	\$75.00	\$12,375.00	\$100.00	\$16,500.00	\$100.00	\$16,500.00
8.3	10" Casing	80	LF	\$80.00	\$6,400.00	\$75.00	\$6,000.00	\$94.00	\$7,520.00	\$90.00	\$7,200.00
9.	BORE W/O CASING										
9.1	8" Carrier	40	LF	\$45.00	\$1,800.00	\$40.00	\$1,600.00	\$50.00	\$2,000.00	\$40.00	\$1,600.00
10.	MARKER POSTS	40	EA	\$20.00	\$800.00	\$15.00	\$600.00	\$36.00	\$1,440.00	\$50.00	\$2,000.00
11.	CRUSHED STONE	110	CY	\$30.00	\$3,300.00	\$20.00	\$2,200.00	\$28.00	\$3,080.00	\$16.00	\$1,760.00
12.	CONCRETE ENCASEMENT	20	LF	\$150.00	\$3,000.00	\$20.00	\$400.00	\$22.00	\$440.00	\$40.00	\$800.00
13.	ASPHALT PAVEMENT REPLACEMENT	20	SY	\$50.00	\$1,000.00	\$35.00	\$700.00	\$29.00	\$580.00	\$20.00	\$400.00
14.	CONCRETE PAVEMENT REPLACEMENT	5	CY	\$300.00	\$1,500.00	\$35.00	\$175.00	\$245.00	\$1,225.00	\$300.00	\$1,500.00
15.	ADDITIONAL DEPTH	200	LF	\$19.00	\$3,800.00	\$7.50	\$1,500.00	\$6.00	\$1,200.00	\$4.00	\$800.00
<b>TOTAL BID - CONTRACT G</b>					<b>\$319,340.18</b>		<b>\$355,090.00</b>		<b>\$360,446.00</b>		<b>\$385,061.00</b>

I hereby state that this BID TABULATION was made under my supervision and is true and accurate to the best of my knowledge and belief.  
 Given under my hand and seal this 27th day of April, 1999.

*[Signature]*  
 Rod E. Martin, P. E. No. 10,345

**CORRECTED BY ENGINEER**

NOTICE OF AWARD - CONTRACT "G"

(SUBJECT TO PSC APPROVAL)

TO: GREGORY PIPING, INC.  
3340 COLEMAN ROAD  
PADUCAH, KY 42001

PROJECT DESCRIPTION: SERIES I WATER SYSTEM IMPROVEMENTS -  
CONTRACT "G"

The OWNER has considered the BID submitted by you for the above described WORK in response to its Advertisement for Bids dated MARCH 30, 19 99, and Information for Bidders.

You are hereby notified that your BID has been accepted for items in the amount of \$ 237,395.00.

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 14TH day of MAY, 19 99.

OHIO COUNTY WATER DISTRICT  
OWNER

BY: Bernard Ballard

TITLE: BERNARD BALLARD, CHAIRMAN

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE OF AWARD is hereby acknowledged by \_\_\_\_\_

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

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

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

**NOTICE OF AWARD - CONTRACT "G"**

**(SUBJECT TO PSC APPROVAL)**

**TO: GREGORY PIPING, INC.**  
**3340 COLEMAN ROAD**  
**PADUCAH, KY 42001**

**PROJECT DESCRIPTION: SERIES I WATER SYSTEM IMPROVEMENTS -**  
**CONTRACT "G"**

The OWNER has considered the BID submitted by you for the above described WORK in response to its Advertisement for Bids dated MARCH 30, 19 99, and Information for Bidders.

You are hereby notified that your BID has been accepted for items in the amount of \$ 237,395.00.

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 14TH day of MAY, 19 99.

**OHIO COUNTY WATER DISTRICT**  
OWNER

BY: Bernard Ballard

TITLE: BERNARD BALLARD, CHAIRMAN

**ACCEPTANCE OF NOTICE**

Receipt of the above NOTICE OF AWARD is hereby acknowledged by \_\_\_\_\_

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

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

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

# OHIO COUNTY WATER DISTRICT

## OHIO COUNTY, KENTUCKY

### SERIES I

### WATER SYSTEM IMPROVEMENTS

### CONTRACT "G"

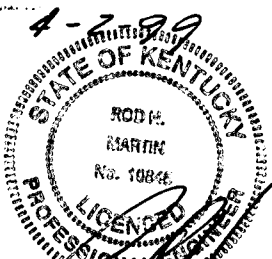
## GENERAL CONTRACT DOCUMENTS AND SPECIFICATIONS

JUNE, 1998  
(ADDITIONAL WORK MARCH, 1999)



A handwritten signature in black ink, appearing to be "Rod H. Martin", written over the seal.

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



A handwritten signature in black ink, appearing to be "Rod H. Martin", written over the seal.

EXHIBIT J8

SET NO. 12

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

**SERIES I  
WATER SYSTEM IMPROVEMENTS  
CONTRACT "G"**

\* \* \* \* \*

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## ADVERTISEMENT FOR BIDS - CONTRACT "G"

OHIO COUNTY WATER DISTRICT130 WASHINGTON STREETHARTFORD, KY 42347

Separate sealed BIDS for the construction of SERIES I WATER SYSTEM IMPROVEMENTS -  
CONTRACT "G" (INCLUDING 1,000 LF OF 18" PVC ; 17,100 LF OF 8" PVC ; AND 12,700 LF OF 6" PVC ;  
19,500 LF OF 4" PVC ; 200 LF OF 2" PVC AND APPURTENANCES)

will be received by OHIO COUNTY WATER DISTRICT, 130 WASHINGTON STREET, HARTFORD, KY  
 at the office of OHIO COUNTY WATER DISTRICT until  
2:00 P.M., CDT , TUESDAY , APRIL 27 , 19 99 ,  
 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, KENTUCKYOHIO COUNTY WATER DISTRICT, HARTFORD, KENTUCKYASSOCIATED GENERAL CONTRACTORS, PADUCAH, KENTUCKYF. W. DODGE-CIG, EVANSVILLE, INDIANABUILDERS EXCHANGE OF LOUISVILLE, LOUISVILLE, KENTUCKYTRI-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, upon payment of \$ 100.00 for each set.

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

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

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

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

MARCH 30, 1999

DATE

BERNARD BALLARD, CHAIRMAN

TITLE

## INFORMATION FOR BIDDERS - CONTRACT "G"

BIDS will be received by OHIO COUNTY WATER DISTRICT (herein called the "OWNER"), at  
130 WASHINGTON STREET, HARTFORD, KENTUCKY 42347 until  
2:00 P.M., CDT , TUESDAY , APRIL 27 , 19 99 ,  
 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 I WATER SYSTEM IMPROVEMENTS - CONTRACT "G"" 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 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 90 calendar days after the actual date of the opening thereof. Should there be reasons why the contract cannot be awarded within the specified period, the time may be extended by mutual agreement between the OWNER and the BIDDER.

BIDDERS must satisfy themselves of the accuracy of the estimated quantities in the BID Schedule by examination of the site and a review of the drawings and specifications including ADDENDA. After BIDS have been submitted, the BIDDER shall not assert that there was a misunderstanding concerning the quantities of WORK or of the nature of the WORK to be done.

If requested, the OWNER shall provide to BIDDERS prior to BIDDING, all information which is pertinent to, and delineates and describes, the land owned and rights-of-way acquired or to be acquired.

The CONTRACT DOCUMENTS contain the provisions required for the construction of the PROJECT. Information obtained from an officer, agent, or employee of the OWNER or any other person shall not affect the risks or obligations assumed by the CONTRACTOR or relieve the CONTRACTOR from fulfilling any of the conditions of the contract.



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

A PERFORMANCE BOND and a PAYMENT BOND, each in the amount of 100 percent of the CONTRACT PRICE with a corporate surety approved by the OWNER, shall be required for the faithful performance of the CONTRACT.

Attorneys-in-fact who sign BID BONDS, PAYMENT BONDS and PERFORMANCE BONDS must file with each BOND a certified and effective dated copy of their power of attorney.

The party to whom the contract is awarded will be required to execute the Agreement and obtain the performance BOND and payment BOND within 10 calendar days from the date when NOTICE OF AWARD is delivered to the BIDDER. The NOTICE OF AWARD shall be accompanied by the necessary Agreement and BOND forms. In case of failure of the BIDDER to execute the Agreement, the OWNER may consider the BIDDER in default, in which case the BID BOND accompanying the proposal shall become the property of the OWNER.

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

The NOTICE TO PROCEED shall be issued within 10 calendar days of the execution of the Agreement by the OWNER. Should there be reasons why the NOTICE TO PROCEED cannot be issued within such period, the time may be extended by mutual agreement between the OWNER AND CONTRACTOR. If the NOTICE TO PROCEED has not been issued within the specified period or within the period mutually agreed upon, the CONTRACTOR may terminate the Agreement without further liability on the part of either party. The CONTRACTOR shall commence work within 10 calendar days of receipt of the NOTICE TO PROCEED.

The OWNER may make such investigations as deemed necessary to determine the ability of the BIDDER to perform the WORK, and the BIDDER shall furnish to the OWNER all such information and data for this purpose as the OWNER may request. The OWNER reserves the right to reject any BID if the evidence submitted by, or investigation of, such BIDDER fails to satisfy the OWNER that such BIDDER is properly qualified to carry out the obligations of the Agreement and to complete the WORK contemplated therein.

A conditional or qualified BID will not be accepted.

Award will be made to the lowest responsible, responsive BIDDER.

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

Each BIDDER is responsible for inspecting the site and for reading and being thoroughly familiar with the CONTRACT DOCUMENTS. The failure or omission of any BIDDER to do any of the foregoing shall in no way relieve any BIDDER from any obligation in respect to its BID.

The low bidder shall supply the names and addresses of major material SUPPLIERS and SUBCONTRACTORS when required to do so by the OWNER.

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

An inspection for prospective BIDDERS will leave from the office of OHIO COUNTY WATER DISTRICT ,  
130 WASHINGTON STREET, HARTFORD, KENTUCKY at 10:00 A.M., CDT , FRIDAY ,  
APRIL 16 , 19 99 .

BID - CONTRACT "G"

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 WASHINGTON STREET, HARTFORD, KENTUCKY 42347 (hereinafter called OWNER).

The BIDDER hereby proposes to perform all WORK for the installation of SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "G" in strict accordance with the CONTRACT DOCUMENTS, within the time set forth herein, and at the prices stated below.

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

BIDDER hereby agrees to commence WORK under this contract on or before a date to be specified in the NOTICE TO PROCEED and to fully complete the PROJECT within 120 consecutive calendar days thereafter. BIDDER further agrees to pay as liquidated damages, the sum of \$ 500.00 for each consecutive calendar day thereafter.

BIDDER acknowledges receipt of the following ADDENDUM:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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

## BID SCHEDULE

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

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE BID	AMOUNT
<b>1.</b>	<b>MOBILIZATION/ DEMOBILIZATION</b>	1	LS		
<b>2.</b>	<b>WATER MAINS, PVC</b>				
2.1	18" DR 18	1,000	LF		
2.2	8" SDR 21	17,100	LF		
2.3	6" SDR 21	12,700	LF		
2.4	4" SDR 21	19,500	LF		
2.5	2" SDR 21	200	LF		
<b>3.</b>	<b>FITTINGS</b>				
3.1	Ductile Iron, 18" Size	200	LBS.		
3.2	Ductile Iron, 12" Size	100	LBS.		
3.3	Ductile Iron, 8" Size	600	LBS.		
3.4	Ductile Iron, 6" Size	200	LBS.		
3.5	Ductile Iron, 4" Size	300	LBS.		
3.6	PVC, 3" and Smaller	5	EA.		
<b>4.0</b>	<b>VALVES, W/ CAST IRON BOX</b>				
4.1	8" Gate	4	EA.		
4.2	6" Gate	4	EA.		
4.3	4" Gate	6	EA.		
4.4	2" Gate	5	EA.		
<b>5.</b>	<b>CLAMPS AND COUPLINGS</b>				
5.1	8 Inch	2	EA.		
5.2	4 Inch	2	EA.		
5.3	3 Inch and Smaller	2	EA.		
<b>6.</b>	<b>TIE-INS</b>				
6.1	18 Inch	1	EA.		
6.2	8 Inch	1	EA.		
6.3	6 Inch	2	EA.		
6.4	4 Inch & Smaller	3	EA.		
<b>7.</b>	<b>AIR RELEASE VALVES W/BOX</b>				
7.1	2" w/ 7/32" Orifice	2	EA.		
<b>8.</b>	<b>BORE W/CASING</b>				
8.1	14" Casing	395	LF		
8.2	12" Casing	165	LF		
8.3	10" Casing	80	LF		

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE BID	AMOUNT
9.	<b>BORE W/O CASING</b>				
9.1	8" Casing	40	LF		
10.	<b>MARKER POSTS</b>	40	EA.		
11.	<b>CRUSHED STONE</b>	110	CY		
12.	<b>CONCRETE ENCASEMENT</b>	20	LF		
13.	<b>ASPHALT PAVEMENT REPLACEMENT</b>	20	SY		
14.	<b>CONCRETE PAVEMENT REPLACEMENT</b>	5	CY		
15.	<b>ADDITIONAL DEPTH</b>	200	LF		
<b>TOTAL BID - CONTRACT "G"</b>					

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

RESPECTFULLY SUBMITTED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 19 \_\_\_\_\_

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

_____	_____
FIRM NAME	SIGNATURE
_____	_____
FIRM ADDRESS	TITLE
_____	LIST OF PARTNERS, OR CORPORATE OFFICERS WITH TITLES IF APPLICABLE:
_____	_____
_____	_____
PHONE NUMBER	_____

SEAL (IF APPLICABLE)

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

\_\_\_\_\_

TITLE

BID BOND - CONTRACT "G"

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 I WATER SYSTEM IMPROVEMENTS - CONTRACT "G"  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

NOW, THEREFORE,

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

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

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

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

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

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

\_\_\_\_\_  
Surety

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

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

AGREEMENT - CONTRACT "G"

THIS AGREEMENT, made this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_\_, by and between

OHIO COUNTY WATER DISTRICT, hereinafter called "OWNER" and

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

\_\_\_\_\_ hereinafter called "CONTRACTOR".

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

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

1. The CONTRACTOR will commence and complete the PROJECT described as SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "G".
2. The CONTRACTOR will furnish all of the materials, supplies, tools, equipment, labor, and other services necessary for the construction and completion of the PROJECT described herein.
3. The CONTRACTOR will commence the work required by the CONTRACT DOCUMENTS within 10 calendar days after the date of the NOTICE TO PROCEED and will complete the same within 120 calendar days unless the period for completion is extended otherwise by the CONTRACT DOCUMENTS.
4. The CONTRACTOR agrees to perform all of the WORK described in the CONTRACT DOCUMENTS and comply with the terms therein for the sum of \$ \_\_\_\_\_, or as shown in the BID schedule.



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

(A) GENERAL CONTRACT DOCUMENTS

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

(B) SPECIFICATIONS prepared by HUNTER MARTIN & ASSOCIATES, INC.  
dated JUNE, 1998 (ADDITIONAL WORK MARCH, 1999).

(C) DRAWINGS prepared or issued by HUNTER MARTIN & ASSOCIATES,  
INC. dated JUNE, 1998 (ADDITIONAL WORK MARCH, 1999).

(D) ADDENDA:

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

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

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

- 6. The OWNER will pay to the CONTRACTOR in the manner and at such times as set forth in the General Conditions such amounts as required by the CONTRACT DOCUMENTS.
- 7. This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

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

OWNER: OHIO COUNTY WATER DISTRICT

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

NAME: BERNARD BALLARD  
(Please Type)

TITLE: CHAIRMAN

(Seal)

ATTEST:

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

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

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

CONTRACTOR:

---

BY:

---

NAME:

---

(Please Type)

TITLE:

---

(Seal)

ATTEST:

BY:

---

NAME:

---

(Please Type)

TITLE:

---

### PERFORMANCE BOND - CONTRACT "G"

KNOW ALL PERSONS BY THESE PRESENTS: that

\_\_\_\_\_

(Name Of Contractor)

\_\_\_\_\_

(Address Of Contractor)

a \_\_\_\_\_ hereinafter called PRINCIPAL and

(Corporation, Partnership or Individual)

\_\_\_\_\_

(Name Of Surety)

hereinafter called SURETY, are held and firmly bound unto

**OHIO COUNTY WATER DISTRICT**

\_\_\_\_\_

(Name of Owner)

**130 WASHINGTON STREET, HARTFORD, KY 42347**

\_\_\_\_\_

(Address of Owner)

hereinafter called OWNER in the total aggregate penal sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_) in lawful money

of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the PRINCIPAL entered into a certain contract with the OWNER, dated the \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_\_

a copy of which is hereto attached and made a part hereof for the construction of:

**SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "G"**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PROVIDED, FURTHER, that no final settlement between the OWNER and the PRINCIPAL shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in FOUR counterparts, each of which shall be deemed an original, this \_\_\_\_\_ day of \_\_\_\_\_ 19 \_\_\_\_.

ATTEST:

\_\_\_\_\_

(SEAL)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

ATTEST:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

By: \_\_\_\_\_ (s)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**NOTE:** Date of BOND must not be prior to date of CONTRACT.  
If CONTRACT is partnership, all partners should execute BOND.

**IMPORTANT:** Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the Project is located.

# PAYMENT BOND - CONTRACT "G"

KNOW ALL PERSONS BY THESE PRESENTS: that

\_\_\_\_\_  
(Name Of Contractor)

\_\_\_\_\_  
(Address Of Contractor)

a \_\_\_\_\_ hereinafter called PRINCIPAL and  
(Corporation, Partnership or Individual)

\_\_\_\_\_  
(Name Of Surety)

hereinafter called SURETY, are held and firmly bound unto

**OHIO COUNTY WATER DISTRICT**  
(Name of Owner)

**130 WASHINGTON STREET, HARTFORD, KY 42347**  
(Address of Owner)

hereinafter called OWNER and unto all persons, firms, and corporations who or which may furnish labor, or who furnish materials to perform as described under the contract and to their successors and assigns in the total aggregate penal sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_)

in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the PRINCIPAL entered into a certain contract with the OWNER, dated the \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_\_, a copy of which is hereto attached and made a part hereof for the construction of:

**SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "G"**  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

NOW, THEREFORE, if the PRINCIPAL shall promptly make payment to all persons, firms, and corporations furnishing materials for or performing labor in the prosecution of the WORK provided for in such contract, and any authorized extensions or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such WORK, and for all labor cost incurred in such WORK including that by a SUBCONTRACTOR, and to any mechanic or materialman lien holder whether it acquires its lien by operation of State or Federal law; then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, that beneficiaries or claimants hereunder shall be limited to the SUBCONTRACTORS, and persons, firms, and corporations having a direct contract with the PRINCIPAL or its SUBCONTRACTORS.

PROVIDED, FURTHER, that the said SURETY for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any way affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of this contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no suit or action shall be commenced hereunder by any claimant: (a) unless claimant, other than one having a direct contract with the PRINCIPAL, shall have given written notice to any two of the following: the PRINCIPAL, the OWNER, or the SURETY above named within ninety (90) days after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the PRINCIPAL, OWNER, or SURETY, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the aforesaid project is located, save that such service need not be made by a public officer, (b) after the expiration of one (1) year following the date of which PRINCIPAL ceased work on said CONTRACT, is being understood, however, that if any limitation embodied in the BOND is prohibited by any law controlling the construction hereof, such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.

PROVIDED, FURTHER, that it is expressly agreed that this BOND shall be deemed amended automatically and immediately, without formal and separate amendments hereto, upon amendment to the Contract not increasing the contract price more than 20 per cent, so as to bind the PRINCIPAL and the SURETY to the full and faithful performance of the CONTRACT as so amended. The term "Amendment", wherever used in this BOND and whether referring to this BOND, or the CONTRACT, shall include any alteration, addition, extension or modification of any character whatsoever.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in FOUR counterparts, each of which shall be deemed an original, this \_\_\_\_\_ day of \_\_\_\_\_ 19 \_\_\_\_.

Number

ATTEST:

\_\_\_\_\_

(SEAL)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

ATTEST:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Principal

By: \_\_\_\_\_ (s)

\_\_\_\_\_

(Address)

\_\_\_\_\_

\_\_\_\_\_

Surety

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

\_\_\_\_\_

Attorney-In-Fact

\_\_\_\_\_

(Address)

\_\_\_\_\_

**NOTE:** Date of BOND must not be prior to date of CONTRACT.  
If CONTRACT is partnership, all partners should execute BOND.

**IMPORTANT:** Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the Project is located.



# NOTICE OF AWARD - CONTRACT "G"

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

PROJECT DESCRIPTION: SERIES I WATER SYSTEM IMPROVEMENTS -  
CONTRACT "G"

The OWNER has considered the BID submitted by you for the above described WORK in response to its Advertisement for Bids dated MARCH 30, 19 99, 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 \_\_\_\_\_, 19 \_\_\_\_.

OHIO COUNTY WATER DISTRICT  
OWNER

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

TITLE: BERNARD BALLARD, CHAIRMAN

### ACCEPTANCE OF NOTICE

Receipt of the above NOTICE OF AWARD is hereby acknowledged by \_\_\_\_\_

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

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

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

# NOTICE TO PROCEED - CONTRACT "G"

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

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

PROJECT: SERIES I WATER SYSTEM  
IMPROVEMENTS - CONTRACT "G"

You are hereby notified to commence WORK in accordance with the Agreement dated \_\_\_\_\_, 19 \_\_\_\_\_, on or before \_\_\_\_\_, 19 \_\_\_\_\_, and you are to complete the WORK within 120 consecutive calendar days thereafter. The date of completion of all WORK is therefore \_\_\_\_\_, 19 \_\_\_\_\_.

**OHIO COUNTY WATER DISTRICT**

OWNER

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

TITLE: BERNARD BALLARD, CHAIRMAN

## ACCEPTANCE OF NOTICE

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

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

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

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

# CHANGE ORDER - CONTRACT "G"

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

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

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

NAME OF PROJECT: SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT G

OWNER: OHIO COUNTY WATER DISTRICT

CONTRACTOR: \_\_\_\_\_

The following changes are hereby made to the CONTRACT DOCUMENTS:

Justification:

Change to CONTRACT PRICE:

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

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

The CONTRACT PRICE due to this CHANGE ORDER will be \_\_\_\_\_ 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: \_\_\_\_\_ CONTRACTOR

## GENERAL CONDITIONS

- |  |  |
|--|--|
| 1. Definitions                                 | 17. Subsurface Conditions                      |
| 2. Additional Instructions and Detail Drawings | 18. Suspension of Work, Termination, and Delay |
| 3. Schedules, Reports, and Records             | 19. Payments to Contractor                     |
| 4. Drawings and Specifications                 | 20. Acceptance of Final Payment as Release     |
| 5. Shop Drawings                               | 21. Insurance                                  |
| 6. Materials, Services, and Facilities         | 22. Contract Security                          |
| 7. Inspection and Testing                      | 23. Assignments                                |
| 8. Substitutions                               | 24. Indemnification                            |
| 9. Patents                                     | 25. Separate Contracts                         |
| 10. Surveys, Permits, Regulations              | 26. Subcontracting                             |
| 11. Protection of Work, Property, Persons      | 27. Engineer's Authority                       |
| 12. Supervision by Contractor                  | 28. Land and Rights-of-Way                     |
| 13. Changes in the Work                        | 29. Guaranty                                   |
| 14. Changes in Contract Price                  | 30. Arbitration                                |
| 15. Time for Completion and Liquidated Damages | 31. Taxes                                      |
| 16. Correction of Work                         |  |

### 1. DEFINITIONS.

- 1.1. Wherever used in the CONTRACT DOCUMENTS, the following terms shall have the meanings indicated and shall be applicable to both the singular and plural thereof:
- 1.2. **ADDENDA** - Written or graphic instruments issued prior to the execution of the Agreement which modify or interpret the CONTRACT DOCUMENTS, DRAWINGS and SPECIFICATIONS, by additions, deletions, clarifications, or corrections.
- 1.3. **BID** - The offer or proposal of the BIDDER submitted on the prescribed form setting forth the prices for the WORK to be performed.
- 1.4. **BIDDER** - Any person, firm, or corporation submitting a BID for the WORK.
- 1.5. **BONDS** - Bid, Performance, and Payment Bonds and other instruments of surety, furnished by the CONTRACTOR and the CONTRACTOR'S surety in accordance with the CONTRACT DOCUMENTS.
- 1.6. **CHANGE ORDER** - A written order to the CONTRACTOR authorizing an addition, deletion, or revision in the WORK within the general scope of the CONTRACT DOCUMENTS, or authorizing an adjustment in the CONTRACT PRICE or CONTRACT TIME.
- 1.7. **CONTRACT DOCUMENTS** - The CONTRACT, including Advertisement For BIDS, Information for BIDDERS, BID, BID BOND, AGREEMENT, PAYMENT BOND, PERFORMANCE BOND, NOTICE OF AWARD, NOTICE TO PROCEED, CHANGE ORDER, DRAWINGS, SPECIFICATIONS, and ADDENDA.
- 1.8. **CONTRACT PRICE** - The total monies payable to the CONTRACTOR under the terms and conditions of the CONTRACT DOCUMENTS.
- 1.9. **CONTRACT TIME** - The number of calendar days stated in the CONTRACT DOCUMENTS for the completion of the WORK.

- 1.10. DEVELOPER - A corporation, association, partnership, or an individual for whom the WORK is to be performed.
- 1.11. CONTRACTOR - The person, firm, or corporation with whom the OWNER has executed the Agreement.
- 1.12. DRAWINGS - The parts of the CONTRACT DOCUMENTS which show the characteristics and scope of the WORK to be performed and which have been prepared or approved by the ENGINEER.
- 1.13. ENGINEER - The person, firm, or corporation named as such in the CONTRACT DOCUMENTS.
- 1.14. FIELD ORDER - A written order affecting a change in the WORK not involving an adjustment in the CONTRACT PRICE or an extension of the CONTRACT TIME, issued by the ENGINEER to the CONTRACTOR during construction.
- 1.15. NOTICE OF AWARD - The written notice of the acceptance of the BID from the OWNER to the successful BIDDER.
- 1.16. NOTICE TO PROCEED - Written communication issued by the OWNER to the CONTRACTOR authorizing him/her to proceed with the WORK and establishing the date for commencement of the WORK.
- 1.17. OWNER - A public or quasi-public body or authority, corporation, association, partnership, or an individual for whom the WORK is to be performed.
- 1.18. PROJECT - The undertaking to be performed as provided in the CONTRACT DOCUMENTS.
- 1.19. RESIDENT PROJECT REPRESENTATIVE - The authorized representative of the OWNER who is assigned to the PROJECT site or any part thereof.
- 1.20. SHOP DRAWINGS - All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the CONTRACTOR, a SUBCONTRACTOR, manufacturer, SUPPLIER or distributor, which illustrate how specific portions of the WORK shall be fabricated or installed.
- 1.21. SPECIFICATIONS - A part of the CONTRACT DOCUMENTS consisting of written descriptions of a technical nature of materials, equipment, construction systems, standards and workmanship.
- 1.22. SUBCONTRACTOR - An individual, firm, or corporation having a direct contract with the CONTRACTOR or with any other SUBCONTRACTOR for the performance of a part of the WORK at the site.
- 1.23. SUBSTANTIAL COMPLETION - That date certified by the ENGINEER when the construction of the PROJECT or a specified part thereof is sufficiently completed, in accordance with the CONTRACT DOCUMENTS, so that the PROJECT or specified part can be utilized for the purposes for which it is intended.
- 1.24. SUPPLEMENTAL GENERAL CONDITIONS - Modifications to General Conditions required by a Federal agency for participation in the PROJECT and approved by the agency in writing prior to inclusion in the CONTRACT DOCUMENTS, or such requirements that may be imposed by applicable state laws.
- 1.25. SUPPLIER - Any person or organization who supplies materials or equipment for the WORK, including that fabricated to a special design, but who does not perform labor at the site.

- 1.26. WORK - All labor necessary to produce the construction required by the CONTRACT DOCUMENTS, and all materials and equipment incorporated or to be incorporated in the PROJECT.
- 1.27. WRITTEN NOTICE - Any notice to any party of the AGREEMENT relative to any part of this AGREEMENT in writing and considered delivered and the service thereof completed, when posted by certified or registered mail to the said party at their last given address, or delivered in person to said party or their authorized representative on the WORK.

**2. ADDITIONAL INSTRUCTIONS AND DETAIL DRAWINGS.**

- 2.1. The CONTRACTOR may be furnished additional instructions and detail drawings, by the ENGINEER, as necessary to carry out the WORK required by the CONTRACT DOCUMENTS.
- 2.2. The additional drawings and instructions thus supplied will become a part of the CONTRACT DOCUMENTS. The CONTRACTOR shall carry out the WORK in accordance with the additional detail drawings and instructions.

**3. SCHEDULES, REPORTS AND RECORDS.**

- 3.1. The CONTRACTOR shall submit to the OWNER such schedule of quantities and costs, progress schedules, payrolls, reports, estimates, records and other data where applicable as are required by the CONTRACT DOCUMENTS for the WORK to be performed.

With each succeeding progress payment request, the progress schedule shall be reviewed and revised (if necessary) and shall show the per cent complete of each major feature of the work.

- 3.2. Prior to the first partial payment estimate, the CONTRACTOR shall submit construction progress schedules showing the order in which the CONTRACTOR proposes to carry on the WORK, including dates at which the various parts of the WORK will be started, estimated date of completion of each part and, as applicable:

3.2.1. The dates at which special detail drawings will be required; and

3.2.2. Respective dates for submission of SHOP DRAWINGS, the beginning of manufacture, the testing and the installation of materials, supplies and equipment.

- 3.3. The CONTRACTOR shall also submit a schedule of payments that the CONTRACTOR anticipates will be earned during the course of the WORK.

**4. DRAWINGS AND SPECIFICATIONS.**

- 4.1. The intent of the DRAWINGS and SPECIFICATIONS is that the CONTRACTOR shall furnish all labor, materials, tools, equipment, and transportation necessary for the proper execution of the WORK in accordance with the CONTRACT DOCUMENTS and all incidental work necessary to complete the PROJECT in an acceptable manner, ready for use, occupancy or operation by the OWNER.
- 4.2. In case of conflict between the DRAWINGS and SPECIFICATIONS, the SPECIFICATIONS shall govern. Figure dimensions on DRAWINGS shall govern over general DRAWINGS.
- 4.3. Any discrepancies found between the DRAWINGS and SPECIFICATIONS and site conditions or any inconsistencies or ambiguities in the DRAWINGS or SPECIFICATIONS shall be immediately reported to the ENGINEER, in writing, who shall promptly correct such inconsistencies or ambiguities in writing. WORK done by the CONTRACTOR after discovery of such discrepancies, inconsistencies or ambiguities shall be done at the CONTRACTOR'S risk.

## 5. SHOP DRAWINGS.

- 5.1. The CONTRACTOR shall provide SHOP DRAWINGS of all mechanical and electrical equipment and all appearance items. The ENGINEER shall promptly review all SHOP DRAWINGS. The ENGINEER'S approval of any SHOP DRAWING shall not release the CONTRACTOR from responsibility for deviations from the CONTRACT DOCUMENTS. The approval of any SHOP DRAWING which substantially deviates from the requirements of the CONTRACT DOCUMENTS shall be evidenced by a CHANGE ORDER.
- 5.2. When submitted for the ENGINEER'S review, SHOP DRAWINGS shall bear the CONTRACTOR'S certification that he has reviewed, checked and approved the SHOP DRAWINGS and that they are in conformance with the requirements of the CONTRACT DOCUMENTS.
- 5.3. Portions of the WORK requiring a SHOP DRAWING or sample submission shall not begin until the SHOP DRAWING or submission has been approved by the ENGINEER. A copy of each approved SHOP DRAWING and each approved sample shall be kept in good order by the CONTRACTOR at the site and shall be available to the ENGINEER.

## 6. MATERIALS, SERVICES AND FACILITIES.

- 6.1. It is understood that, except as otherwise specifically stated in the CONTRACT DOCUMENTS, the CONTRACTOR shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, supervision, temporary construction of any nature, and all other services and facilities of any nature whatsoever necessary to execute, complete, and deliver the WORK within the specified time.
- 6.2. Materials and equipment shall be so stored as to insure the preservation of their quality and fitness for the WORK. Stored materials and equipment to be incorporated in the WORK shall be located so as to facilitate prompt inspection.
- 6.3. Manufactured articles, materials, and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturer.
- 6.4. Materials, supplies, and equipment shall be in accordance with samples submitted by the CONTRACTOR and approved by the ENGINEER.
- 6.5. Materials, supplies, or equipment to be incorporated into the WORK shall not be purchased by the CONTRACTOR or the SUBCONTRACTOR subject to a chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller.

## 7. INSPECTION AND TESTING.

- 7.1. All materials and equipment used in the construction of the PROJECT shall be subject to adequate inspection and testing in accordance with generally accepted standards, as required and defined in the CONTRACT DOCUMENTS.
- 7.2. The OWNER shall provide all inspection and testing services not required by the CONTRACT DOCUMENTS.
- 7.3. The CONTRACTOR shall provide at the CONTRACTOR'S expense the testing and inspection services required by the CONTRACT DOCUMENTS.
- 7.4. If the CONTRACT DOCUMENTS, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any WORK to specifically be inspected, tested, or approved by someone other than the CONTRACTOR, the CONTRACTOR will give the ENGINEER timely

notice of readiness. The CONTRACTOR will then furnish the ENGINEER the required certificates of inspection, testing or approval.

- 7.5. Inspections, tests, or approvals by the ENGINEER or others shall not relieve the CONTRACTOR from the obligation to perform the WORK in accordance with the requirements of the CONTRACT DOCUMENTS.
- 7.6. The ENGINEER and the ENGINEER'S representatives will at all times have access to the WORK. In addition, authorized representatives and agents of any participating Federal or State agency shall be permitted to inspect all work, materials, payrolls, records or personnel, invoices of materials, and other relevant data and records. The CONTRACTOR will provide proper facilities for such access and observation of the WORK and also for any inspection or testing thereof.
- 7.7. If any WORK is covered contrary to the written instructions of the ENGINEER, it must, if requested by the ENGINEER, be uncovered for the ENGINEER'S observation and replaced at the CONTRACTOR'S expense.
- 7.8. If the ENGINEER considers it necessary or advisable that covered WORK be inspected or tested by others, the CONTRACTOR, at the ENGINEER'S request, will uncover, expose or otherwise make available for observation, inspection or testing as the ENGINEER may require, that portion of the WORK in question, furnishing all necessary labor, materials, tools and equipment. If it is found that such WORK is defective, the CONTRACTOR will bear all the expense of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction, if, however, such WORK is not found to be defective, the CONTRACTOR will be allowed an increase in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction and an appropriate CHANGE ORDER shall be issued.

## 8. SUBSTITUTIONS.

- 8.1. Whenever a material, article, or piece of equipment is identified on the DRAWINGS or SPECIFICATIONS by reference to brand name or catalogue numbers, it shall be understood that this is referenced for the purpose of defining the performance or other salient requirements and that other products of equal capacities, quality and function shall be considered. The CONTRACTOR may recommend the substitution of a material, article, or piece of equipment of equal substance and function for those referred to in the CONTRACT DOCUMENTS by reference to brand name or catalogue number, and if, in the opinion of the ENGINEER, such material, article, or piece of equipment is of equal substance and function to that specified, the ENGINEER may approve its substitution and use by the CONTRACTOR. Any cost differential shall be deductible from the CONTRACT PRICE and the CONTRACT DOCUMENTS shall be appropriately modified by CHANGE ORDER. The CONTRACTOR warrants that if substitutes are approved, no major changes in the function or general design of the PROJECT will result. Incidental changes or extra component parts required to accommodate the substitute will be made by the CONTRACTOR without a change in the CONTRACT PRICE or CONTRACT TIME.

## 9. PATENTS.

- 9.1. The CONTRACTOR shall pay all applicable royalties and license fees, and shall defend all suits or claims for infringement of any patent rights and save the OWNER harmless from loss on account thereof, except that the OWNER shall be responsible for any such loss when a particular process, design, or product of a particular manufacturer or manufacturers is specified; however, if the CONTRACTOR has reason to believe that the design, process or product specified is an infringement of a patent, the CONTRACTOR shall be responsible for such loss unless the CONTRACTOR promptly gives such information to the ENGINEER.



## 10. SURVEYS, PERMITS, REGULATIONS.

- 10.1. The OWNER shall furnish all boundary surveys and establish all base lines for locating the principal component parts of the WORK together with a suitable number of bench marks adjacent to the WORK as shown in the CONTRACT DOCUMENTS. From the information provided by the OWNER, unless otherwise specified in the CONTRACT DOCUMENTS, the CONTRACTOR shall develop and make all detail surveys needed for construction such as slope stakes, batter boards, stakes for pipe locations and other working points, lines, elevations and cut sheets.
- 10.2. The CONTRACTOR shall carefully preserve bench marks, reference points and stakes and, in case of willful or careless destruction, shall be charged with the resulting expense and shall be responsible for any mistake that may be caused by their unnecessary loss or disturbance.
- 10.3. Permits and licenses of a temporary nature necessary for the prosecution of the WORK shall be secured and paid for by the CONTRACTOR unless otherwise stated in the SUPPLEMENTAL GENERAL CONDITIONS. Permits, licenses and easements for permanent structures or permanent changes in existing facilities shall be secured and paid for by the OWNER, unless otherwise specified. The CONTRACTOR shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the WORK as drawn and specified. If the CONTRACTOR observes that the CONTRACT DOCUMENTS are at variance therewith, the CONTRACTOR shall promptly notify the ENGINEER in writing, and any necessary changes shall be adjusted as provided in Section 13, CHANGES IN THE WORK.

## 11. PROTECTION OF WORK, PROPERTY, AND PERSONS.

- 11.1. The CONTRACTOR will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the WORK. The CONTRACTOR will take all necessary precautions for the safety of, will provide the necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury or loss to all employees on the WORK and other persons who may be affected thereby, all the WORK and all materials or equipment to be incorporated therein, whether in storage on or off the site, and other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.
- 11.2. The CONTRACTOR will comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction. The CONTRACTOR will erect and maintain, as required by the conditions and progress of the WORK, all necessary safeguards for safety and protection. The CONTRACTOR will notify owners of adjacent utilities when prosecution of the WORK may affect them. The CONTRACTOR will remedy all damage, injury or loss to any property caused, directly or indirectly, in whole or part, by the CONTRACTOR, any SUBCONTRACTOR or anyone directly or indirectly employed by any of them or anyone directly or indirectly employed by any of them or anyone of whose acts any of them may be liable, except damage or loss attributable to the fault of the CONTRACT DOCUMENTS or to the acts or omissions of the OWNER, of the ENGINEER or anyone employed by either of them or anyone for whose acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of the CONTRACTOR.
- 11.3. In emergencies affecting the safety of persons or the WORK or property at the site or adjacent thereto, the CONTRACTOR, without special instructions or authorization from the ENGINEER or OWNER, shall act to prevent threatened damage, injury or loss. The CONTRACTOR will give the ENGINEER prompt WRITTEN NOTICE of any significant changes in the WORK or deviations from the CONTRACT DOCUMENTS caused thereby, and a CHANGE ORDER shall thereupon be issued covering the changes and deviations involved.

**12. SUPERVISION BY CONTRACTOR.**

- 12.1. The CONTRACTOR will supervise and direct the WORK. He will be solely responsible for the means, methods, techniques, sequences and procedures of construction. The CONTRACTOR will employ and maintain on the WORK a qualified supervisor or superintendent who shall have been designated in writing by the CONTRACTOR as the CONTRACTOR'S representative at the site. The supervisor shall have full authority to act on behalf of the CONTRACTOR and all communications given the supervisor shall be as binding as if given to the CONTRACTOR. The supervisor shall be present on the site at all times as required to perform adequate supervision and coordination of the WORK.

**13. CHANGES IN THE WORK.**

- 13.1. The OWNER may at any time, as the need arises, order changes within the scope of the WORK without invalidating the AGREEMENT. If such changes increase or decrease the amount due under the CONTRACT DOCUMENTS, or in the time required for performance of the WORK, an equitable adjustment shall be authorized by CHANGE ORDER.
- 13.2. The ENGINEER also may, at any time, by issuing a FIELD ORDER, make changes in the details of the WORK. The CONTRACTOR shall proceed with the performance of any changes in the WORK so ordered by the ENGINEER unless the CONTRACTOR believes that such FIELD ORDER entitles the CONTRACTOR to a change in CONTRACT PRICE or TIME, or both, in which event the CONTRACTOR shall give the ENGINEER WRITTEN NOTICE thereof within 7 days after the receipt of the ordered change. Thereafter, the CONTRACTOR shall document the basis for the change in CONTRACT PRICE or TIME within 30 days. The CONTRACTOR shall not execute such changes pending the receipt of an executed CHANGE ORDER or further instruction from the OWNER.

**14. CHANGES IN CONTRACT PRICE.**

- 14.1. The CONTRACT PRICE may be changed only by a CHANGE ORDER. The value of any WORK covered by a CHANGE ORDER or of any claim for increase or decrease in the CONTRACT PRICE shall be determined by one or more of the following methods in the order of precedence listed below:
- a. Unit prices previously approved.
  - b. An agreed lump sum.

**15. TIME FOR COMPLETION AND LIQUIDATED DAMAGES.**

- 15.1. The date of beginning and the time for completion of the WORK are essential conditions of the CONTRACT DOCUMENTS and the WORK embraced shall be commenced on a date specified in the NOTICE TO PROCEED.
- 15.2. The CONTRACTOR will proceed with the WORK at such rate of progress to insure full completion within the CONTRACT TIME. It is expressly understood and agreed, by and between the CONTRACTOR and the OWNER, that the CONTRACT TIME for the completion of the WORK described herein is a reasonable time, taking into consideration the average climatic and economic conditions and other factors prevailing in the locality of the WORK.
- 15.3. If the CONTRACTOR shall fail to complete the WORK within the CONTRACT TIME, or extension of time granted by the OWNER, then the CONTRACTOR will pay to the OWNER the amount for liquidated damages as specified in the BID for each calendar day that the CONTRACTOR shall be in default after the time stipulated in the CONTRACT DOCUMENTS.

15.4. The CONTRACTOR shall not be charged with liquidated damages or any excess cost when the delay in completion of the WORK is due to the following and the CONTRACTOR has promptly given WRITTEN NOTICE of such delay to the OWNER or ENGINEER.

15.4.1. To any preference, priority or allocation order duly issued by the OWNER .

15.4.2. To unforeseeable causes beyond the control and without the fault or negligence of the CONTRACTOR, including but not restricted to, acts of God, or of the public enemy, acts of the OWNER, acts of another CONTRACTOR in the performance of a contract with the OWNER, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and abnormal and unforeseeable weather, and

15.4.3. To any delays of SUBCONTRACTORS occasioned by any of the causes specified in paragraphs 15.4.1 and 15.4.2 of this article.

**16. CORRECTION OF WORK.**

16.1. The CONTRACTOR shall promptly remove from the premises all WORK rejected by the ENGINEER for failure to comply with the CONTRACT DOCUMENTS, whether incorporated in the construction or not, and the CONTRACTOR shall promptly replace and re-execute the WORK in accordance with the CONTRACT DOCUMENTS and without expense to the OWNER and shall bear the expense of making good all WORK of other CONTRACTORS destroyed or damaged by such removal or replacement.

16.2. All removal and replacement WORK shall be done at the CONTRACTOR'S expense. If the CONTRACTOR does not take action to remove such rejected WORK within 10 days after receipt of WRITTEN NOTICE, the OWNER may remove such WORK and store the materials at the expense of the CONTRACTOR.

**17. SUBSURFACE CONDITIONS.**

17.1. The CONTRACTOR shall promptly, and before such conditions are disturbed, except in the event of an emergency, notify the OWNER by WRITTEN NOTICE of:

17.1.1. Subsurface or latent physical conditions at the site differing materially from those indicated in the CONTRACT DOCUMENTS; or

17.1.2. Unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in WORK of the character provided for in the CONTRACT DOCUMENTS.

17.2. The OWNER shall promptly investigate the conditions, and if it is found that such conditions do so materially differ and cause an increase or decrease in the cost of, or in the time required for, performance of the WORK, an equitable adjustment shall be made and the CONTRACT DOCUMENTS shall be modified by a CHANGE ORDER. Any claim of the CONTRACTOR for adjustment hereunder shall not be allowed unless the required WRITTEN NOTICE has been given; provided that the OWNER may, if the OWNER determines the facts so justify, consider and adjust any such claims asserted before the date of final payment.

**18. SUSPENSION OF WORK, TERMINATION, AND DELAY.**

18.1. The OWNER may suspend the WORK or any portion thereof for a period of not more than 90 days or such further time as agreed upon by the CONTRACTOR, by WRITTEN NOTICE to the CONTRACTOR and the ENGINEER which shall fix the date on which WORK shall be resumed. The CONTRACTOR will resume that WORK on the date so fixed. The CONTRACTOR will be

allowed an increase in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, directly attributable to any suspension.

- 18.2. If the CONTRACTOR is adjudged bankrupt or insolvent, or makes a general assignment for the benefit of its creditors, or if a trustee or receiver is appointed for the CONTRACTOR or for any of its property, or if CONTRACTOR files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or applicable laws, or repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment, or repeatedly fails to make prompt payments to SUBCONTRACTORS or for labor, materials or equipment or disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction of the WORK or disregards the authority of the ENGINEER or otherwise violates any provision of the CONTRACT DOCUMENTS, then the OWNER may, without prejudice to any other right or remedy and after giving the CONTRACTOR and its surety a minimum of 10 days from delivery of a WRITTEN NOTICE, terminate the services of the CONTRACTOR and take possession of the PROJECT and of all materials, equipment, tools, construction equipment and machinery thereon owned by the CONTRACTOR, and finish the WORK by whatever method the OWNER may deem expedient. In such case, the CONTRACTOR shall not be entitled to receive any further payment until the WORK is finished. If the unpaid balance of the CONTRACT PRICE exceeds the direct and indirect costs of completing the PROJECT, including compensation for additional professional services, such excess SHALL BE PAID TO THE CONTRACTOR. If such costs exceed such unpaid balance, the CONTRACTOR will pay the difference to the OWNER. Such costs incurred by the OWNER will be determined by the ENGINEER and incorporated in a CHANGE ORDER.
- 18.3. Where the CONTRACTOR'S services have been so terminated by the OWNER, said termination shall not affect any right of the OWNER against the CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of monies by the OWNER due the CONTRACTOR will not release the CONTRACTOR from compliance with the CONTRACT DOCUMENTS.
- 18.4. After 10 days from delivery of WRITTEN NOTICE to the CONTRACTOR and the ENGINEER, the OWNER may, without cause and without prejudice to any other right or remedy, elect to abandon the PROJECT and terminate the CONTRACT. In such case, the CONTRACTOR shall be paid for all WORK executed and any expense sustained plus reasonable profit.
- 18.5. If, through no act or fault of the CONTRACTOR, the WORK is suspended for a period of more than 90 days by the OWNER or under an order of court or other public authority, or the ENGINEER fails to act on any request for payment within 30 days after it is submitted, or the OWNER fails to pay the CONTRACTOR substantially the sum approved by the ENGINEER or awarded by arbitrators within 30 days of its approval and presentation, then the CONTRACTOR may, after 10 days from delivery of a WRITTEN NOTICE to the OWNER and the ENGINEER terminate the CONTRACT and recover from the OWNER payment for all WORK executed and all expenses sustained. In addition and in lieu of terminating the CONTRACT if the ENGINEER has failed to act on a request for payment or if the OWNER has failed to make any payment as aforesaid, the CONTRACTOR may upon 10 days written notice to the OWNER and the ENGINEER stop the WORK until paid all amounts then due, in which event and upon resumption of the WORK, CHANGE ORDERS shall be issued for adjusting the CONTRACT PRICE or extending the CONTRACT TIME or both to compensate for the costs and delays attributable to the stoppage of the WORK.
- 18.6. If the performance of all or any portion of the WORK is suspended, delayed, or interrupted as a result of a failure of the OWNER or ENGINEER to act within the time specified in the CONTRACT DOCUMENTS, or if no time is specified, within a reasonable time, an adjustment in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, shall be made by CHANGE ORDER to compensate the CONTRACTOR for the costs and delays necessarily caused by the failure of the OWNER or ENGINEER.

## 19. PAYMENT TO CONTRACTOR.

- 19.1. At least 10 days before each progress payment falls due (but not more often than once a month), the CONTRACTOR will submit to the ENGINEER a partial payment estimate filled out and signed by the CONTRACTOR covering the WORK performed during the period covered by the partial payment estimate and supported by such data as the ENGINEER may reasonably require. If payment is requested on the basis of materials and equipment not incorporated in the WORK but delivered and suitably stored at or near the site, the partial payment estimate shall also be accompanied by such supporting data, satisfactory to the OWNER as will establish the OWNER'S title to the material and equipment and protect the OWNER'S interest therein, including applicable insurance. The ENGINEER will, within 10 days after receipt of each partial payment estimate, either indicate in writing approval of payment, and present the partial payment estimate to the OWNER, or return the partial payment estimate to the CONTRACTOR indicating in writing the reasons for refusing to approve payment. In the latter case, the CONTRACTOR may make the necessary corrections and resubmit the partial payment estimate. The OWNER will, within 10 days of presentation of an approved partial payment estimate, pay the CONTRACTOR a progress payment on the basis of the approved partial payment estimate less the retainage. The retainage shall be an amount equal to 10 percent of said estimate until 50 percent of the work has been completed. At 50 percent completion, further partial payments shall be made in full to the CONTRACTOR and no additional amounts may be retained unless the ENGINEER certifies that the job is not proceeding satisfactorily, but amounts previously retained shall not be paid to the CONTRACTOR. At 50 percent completion or any time thereafter when the progress of the WORK is not satisfactory, additional amounts may be retained but in no event shall the total retainage be more than 10 percent of the value of the work completed. Upon substantial completion of the work, any amount retained may be paid to the CONTRACTOR. When the WORK has been substantially completed except for WORK which cannot be completed because of weather conditions, lack of materials or other reasons which, in the judgment of the OWNER, are valid reasons for noncompletion, the OWNER may make additional payments, retaining at all times an amount sufficient to cover the estimated cost of the WORK still to be completed.
- 19.2. The request for payment may also include an allowance for the cost of such major materials and equipment which are suitably stored either at or near the site.
- 19.3. Prior to SUBSTANTIAL COMPLETION, the OWNER, with the approval of the ENGINEER and with the concurrence of the CONTRACTOR, may use any completed or substantially completed portions of the WORK. Such use shall not constitute an acceptance of such portions of the WORK.
- 19.4. The OWNER shall have the right to enter the premises for the purpose of doing work not covered by the CONTRACT DOCUMENTS. This provision shall not be construed as relieving the CONTRACTOR of the sole responsibility for the care and protection of the WORK, or the restoration of any damaged WORK except such as may be caused by agents or employees of the OWNER.
- 19.5. Upon completion and acceptance of the WORK, the ENGINEER shall issue a certificate attached to the final payment request that the WORK has been accepted under the conditions of the CONTRACT DOCUMENTS. The entire balance found to be due the CONTRACTOR, including the retained percentages, but except such sums as may be lawfully retained by the OWNER, shall be paid to the CONTRACTOR within 30 days of completion and acceptance of the WORK.
- 19.6. The CONTRACTOR will indemnify and save the OWNER or the OWNER'S agents harmless from all claims growing out of the lawful demand of SUBCONTRACTORS, laborers, workmen, mechanics, materialmen, and furnishers of machinery and parts thereof, equipment, tools, and all supplies, incurred in the furtherance of the performance of the WORK. The CONTRACTOR shall, at the OWNER'S request, furnish satisfactory evidence that all obligations of the nature designated above have been paid, discharged, or waived. If the CONTRACTOR fails to do so, the OWNER may, after having notified the CONTRACTOR, either pay unpaid bills or withhold from

the CONTRACTOR'S unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to the CONTRACTOR shall be resumed in accordance with the terms of the CONTRACT DOCUMENTS, but in no event shall the provisions of this sentence be construed to impose any obligations upon the OWNER to either the CONTRACTOR, the CONTRACTOR'S Surety, or any third party. In paying any unpaid bills of the CONTRACTOR, any payment so made by the OWNER shall be considered as a payment made under the CONTRACT DOCUMENTS by the OWNER to the CONTRACTOR and the OWNER shall not be liable to the CONTRACTOR for any such payments made in good faith.

- 19.7. If the OWNER fails to make payment 30 days after approval by the ENGINEER, in addition to other remedies available to the CONTRACTOR, there shall be added to each such payment interest at the maximum legal rate commencing on the first day after said payment is due and continuing until the payment is received by the CONTRACTOR.

## 20. ACCEPTANCE OF FINAL PAYMENT AS RELEASE.

- 20.1. The acceptance by the CONTRACTOR of final payment shall be and shall operate as a release to the OWNER of all claims and all liability to the CONTRACTOR other than claims in stated amounts as may be specifically excepted by the CONTRACTOR for all things done or furnished in connection with this WORK and for every act and neglect of the OWNER and others relating to or arising out of this WORK. Any payment, however, final or otherwise, shall not release the CONTRACTOR or its sureties from any obligations under the CONTRACT DOCUMENTS or the PERFORMANCE and PAYMENT BONDS.

## 21. INSURANCE.

- 21.1. The CONTRACTOR shall purchase and maintain such insurance as will protect it from claims set forth below which may arise out of, or result from the CONTRACTOR'S execution of the WORK, whether such execution be by the CONTRACTOR, any SUBCONTRACTOR, or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:
- 21.1.1. Claims under workmen's compensation, disability benefit and other similar employee benefit acts;
  - 21.1.2. Claims for damages because of bodily injury, occupational sickness or disease, or death of employees;
  - 21.1.3. Claims for damages because of bodily injury, sickness or disease, or death of any person other than employees;
  - 21.1.4. Claims for damages insured by usual personal injury liability coverage which are sustained (1) by any person as a result of an offense directly or indirectly related to the employment of such person by the CONTRACTOR, or (2) by any other person; and
  - 21.1.5. Claims for damages because of injury to or destruction of tangible property, including loss of use resulting therefrom.
- 21.2. Certificates of Insurance acceptable to the OWNER shall be filed with the OWNER prior to commencement of the WORK. These Certificates shall contain a provision that coverages afforded under the policies will not be canceled unless at least 15 days prior WRITTEN NOTICE has been given to the OWNER.
- 21.3. The CONTRACTOR shall procure and maintain, at the CONTRACTOR'S own expense, during the CONTRACT TIME, liability insurance as hereinafter specified:

21.3.1. CONTRACTOR'S General Public Liability and Property Damage Insurance including vehicle coverage issued to the CONTRACTOR and protecting the CONTRACTOR from all claims for personal injury, including death, and all claims for destruction of or damage to property, arising out of or in connection with any operations under the CONTRACT DOCUMENTS, whether such operations be by the CONTRACTOR or by any SUBCONTRACTOR employed by the CONTRACTOR or anyone directly or indirectly employed by the CONTRACTOR or by a SUBCONTRACTOR employed by the CONTRACTOR. Insurance shall be written with a limit of liability of not less than \$500,000 for all damages arising out of bodily injury, including death, at any time resulting therefrom, sustained by any one person in any one accident; and a limit of liability of not less than \$500,000 aggregate for any such damages sustained by two or more persons in any one accident. Insurance shall be written with a limit of liability of not less than \$200,000 for all property damage sustained by any one person in any one accident; and a limit of liability of not less than \$200,000 aggregate for any such damage sustained by two or more persons in any one accident.

21.3.2. The CONTRACTOR shall acquire and maintain, if applicable, Fire and Extended Coverage Insurance upon the PROJECT to the full insurable value thereof for the benefit of the OWNER, the CONTRACTOR, and SUBCONTRACTORS as their interest may appear. This provision shall in no way release the CONTRACTOR or CONTRACTOR'S surety from obligations under the CONTRACT DOCUMENTS to fully complete the PROJECT.

21.4. The CONTRACTOR shall procure and maintain, at the CONTRACTOR'S own expense, during the CONTRACT TIME, in accordance with the provisions of the laws of the state in which the WORK is performed, Workmen's Compensation Insurance, including occupational disease provisions, for all of the CONTRACTOR'S employees at the site of the PROJECT and in case any WORK is sublet, the CONTRACTOR shall require such SUBCONTRACTOR similarly to provide Workmen's Compensation Insurance, including occupational disease provisions for all of the latter's employees unless such employees are covered by the protection afforded by the CONTRACTOR. In case any class of employees engaged in hazardous work under this contract at the site of the PROJECT is not protected under Workmen's Compensation statute, the CONTRACTOR shall provide, and shall cause each SUBCONTRACTOR to provide adequate and suitable insurance for the protection of its employees not otherwise protected.

21.5. The CONTRACTOR shall secure, if applicable, "All Risk" type Builder's Risk Insurance for WORK to be performed. Unless specifically authorized by the OWNER, the amount of such insurance shall not be less than the CONTRACT PRICE totaled in the BID. The policy shall cover not less than the losses due to fire, explosion, hail, lightning, vandalism, malicious mischief, wind, collapse, riot, aircraft, and smoke during the CONTRACT TIME and until the WORK is accepted by the OWNER. The policy shall name as the insured the CONTRACTOR, and the OWNER.

## 22. CONTRACT SECURITY.

22.1. The CONTRACTOR shall within 10 days after the receipt of the NOTICE OF AWARD furnish the OWNER with a PERFORMANCE BOND and a PAYMENT BOND in penal sums equal to the amount of the CONTRACT PRICE, conditioned upon the performance by the CONTRACTOR of all undertakings, covenants, terms, conditions and agreements of the CONTRACT DOCUMENTS, and upon the prompt payment by the CONTRACTOR to all persons supplying labor and materials in the prosecution of the WORK provided by the CONTRACT DOCUMENTS. Such BONDS shall be executed by the CONTRACTOR and a corporate bonding company licensed to transact such business in the state in which the WORK is to be performed and named on the current list of "Surety Companies Acceptable on Federal Bonds" as published in the Treasury Department Circular Number 570. The expense of these BONDS shall be borne by the CONTRACTOR. If at any time a surety on any such BOND is declared bankrupt or loses its right to do business in the state in which the WORK is to be performed or is removed from the list of Surety Companies

accepted on Federal Bonds, CONTRACTOR shall within 10 days after notice from the OWNER to do so, substitute an acceptable BOND (or BONDS) in such form and sum and signed by such other surety or sureties as may be satisfactory to the OWNER. The premium on such BOND shall be paid by the CONTRACTOR. No further payment shall be deemed due nor shall be made until the new surety or sureties have furnished an acceptable BOND to the OWNER.

### 23. ASSIGNMENTS.

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

### 24. INDEMNIFICATION.

- 24.1. The CONTRACTOR will indemnify and hold harmless the OWNER and the ENGINEER and their agents and employees from and against all claims, damages, losses and expenses including attorney's fees arising out of or resulting from the performance of the WORK, provided that any such claims, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property including the loss of use resulting therefrom; and is caused in whole or in part by any negligent or willful act or omission of the CONTRACTOR, and SUBCONTRACTOR, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.
- 24.2. In any and all claims against the OWNER or the ENGINEER, or any of their agents or employees, by any employee of the CONTRACTOR, any SUBCONTRACTOR, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the CONTRACTOR or any SUBCONTRACTOR under workmen's compensation acts, disability benefit acts or other employee benefits acts.
- 24.3. The obligation of the CONTRACTOR under this paragraph shall not extend to the liability of the ENGINEER, its agents or employees arising out of the preparation or approval of maps, DRAWINGS, opinions, reports, surveys, CHANGE ORDERS, designs or SPECIFICATIONS.

### 25. SEPARATE CONTRACTS.

- 25.1. The OWNER reserves the right to let other contracts in connection with this PROJECT. The CONTRACTOR shall afford other CONTRACTORS reasonable opportunity for the introduction and storage of their materials and the execution of their WORK, and shall properly connect and coordinate the WORK with theirs. If the proper execution or results of any part of the CONTRACTOR'S WORK depends upon the WORK of any other CONTRACTOR, the CONTRACTOR shall inspect and promptly report to the ENGINEER any defects in such WORK that render it unsuitable for such proper execution and results.
- 25.2. The OWNER may perform additional WORK related to the PROJECT or the OWNER may let other contracts containing provisions similar to these. The CONTRACTOR will afford the other CONTRACTORS who are parties to such Contracts (or the OWNER, if the OWNER is performing the additional WORK) reasonable opportunity for the introduction and storage of materials and equipment and the execution of WORK, and shall properly connect and coordinate the WORK with theirs.
- 25.3. If the performance of additional WORK by other CONTRACTORS or the OWNER is not noted in the CONTRACT DOCUMENTS prior to the execution of the CONTRACT, written notice thereof shall be given to the CONTRACTOR prior to starting any such additional WORK. If the CONTRACTOR believes that the performance of such additional WORK by the OWNER or others



involves it in additional expense or entitles it to an extension of the CONTRACT TIME, the CONTRACTOR may make a claim thereof as provided in Sections 14 and 15.

## 26. SUBCONTRACTING.

- 26.1. The CONTRACTOR may utilize the services of specialty SUBCONTRACTS on those parts of the WORK which, under normal contracting practices, are performed by specialty SUBCONTRACTORS.
- 26.2. The CONTRACTOR shall not award WORK to SUBCONTRACTOR(S), in excess of 50 percent of the CONTRACT PRICE, without prior written approval of the OWNER.
- 26.3. The CONTRACTOR shall be fully responsible to the OWNER for the acts and omissions of its SUBCONTRACTORS, and of persons either directly or indirectly employed by them, as the CONTRACTOR is for the acts and omissions of persons directly employed by the CONTRACTOR.
- 26.4. The CONTRACTOR shall cause appropriate provisions to be inserted in all subcontracts relative to the WORK to bind SUBCONTRACTORS to the CONTRACTOR by the terms of the CONTRACT DOCUMENTS insofar as applicable to the WORK of SUBCONTRACTORS and to give the CONTRACTOR the same power as regards terminating any subcontract that the OWNER may exercise over the CONTRACTOR under any provision of the CONTRACT DOCUMENTS.
- 26.5. Nothing contained in this CONTRACT shall create any contractual relationship between any SUBCONTRACTOR and the OWNER.

## 27. ENGINEER'S AUTHORITY.

- 27.1. The ENGINEER shall act as the OWNER'S representative during the construction period, shall decide questions which may arise as to quality and acceptability of materials furnished and WORK performed, and shall interpret the intent of the CONTRACT DOCUMENTS in a fair and unbiased manner. The ENGINEER will make visits to the site and determine if the WORK is proceeding in accordance with the CONTRACT DOCUMENTS.
- 27.2. The CONTRACTOR will be held strictly to the intent of the CONTRACT DOCUMENTS in regard to the quality of materials, workmanship, and execution of the WORK. Inspections may be made at the factory or fabrication plant of the source of material supply.
- 27.3. The ENGINEER will not be responsible for the construction means, controls, techniques, sequences, procedures, or construction safety.
- 27.4. The ENGINEER shall promptly make decisions relative to interpretation of the CONTRACT DOCUMENTS.

## 28. LAND AND RIGHTS-OF-WAY.

- 28.1. Prior to issuance of the NOTICE TO PROCEED, the OWNER shall obtain all land and rights-of-way necessary for carrying out and for the completion of the WORK to be performed pursuant to the CONTRACT DOCUMENTS, unless otherwise mutually agreed.
- 28.2. The OWNER shall provide to the CONTRACTOR information which delineates and describes the lands owned and rights-of-way acquired.
- 28.3. The CONTRACTOR shall provide at its own expense and without liability to the OWNER any additional land and access thereto that the CONTRACTOR may desire for temporary construction facilities, or for storage of materials.

**29. GUARANTEE.**

29.1. The CONTRACTOR shall guarantee all materials and equipment furnished and WORK performed for a period of 1 year from the date of SUBSTANTIAL COMPLETION. The CONTRACTOR warrants and guarantees for a period of 1 year from the date of SUBSTANTIAL COMPLETION of the system that the completed system is free from all defects due to faulty materials or workmanship and the CONTRACTOR shall promptly make such corrections as may be necessary by reason of such defects including the repairs of any damage to other parts of the system resulting from such defects. The OWNER will give notice of observed defects with reasonable promptness. In the event that the CONTRACTOR should fail to make such repairs, adjustments, or other WORK that may be made necessary by such defects, the OWNER may do so and charge the CONTRACTOR the cost thereby incurred. The PERFORMANCE BOND shall remain in full force and effect through the guarantee period.

**30. ARBITRATION BY MUTUAL AGREEMENT.**

30.1. All claims, disputes, and other matters in question arising out of, or relating to, the CONTRACT DOCUMENTS or the breach thereof, except for claims which have been waived by making an acceptance of final payment as provided by Section 20, may be decided by arbitration if the parties mutually agree. Any agreement to arbitrate shall be specifically enforceable under the prevailing arbitration law. The award rendered by the arbitrators shall be final, and judgment may be entered upon it in any court having jurisdiction thereof.

30.2. Notice of the request for arbitration shall be filed in writing with the other party to the CONTRACT DOCUMENTS and a copy shall be filed with the ENGINEER. Request for arbitration shall in no event be made on any claim, dispute, or other matter in question which would be barred by the applicable statute of limitations.

30.3. The CONTRACTOR will carry on the WORK and maintain the progress schedule during any arbitration proceedings, unless otherwise mutually agreed in writing.

**31. TAXES.**

31.1. The CONTRACTOR will pay all sales, consumer, use, and other similar taxes required by the laws of the place where the WORK is performed.

## SPECIAL CONDITIONS

### SC-1. GENERAL.

The following Special Conditions, particular to this project, are intended to complement or supplement the preceding General Conditions and shall be of like import.

### SC-2. OWNERSHIP.

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

### SC-3. AFFIDAVIT OF PAYMENT.

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

### SC-4. CONTRACT DOCUMENTS.

The following CONTRACT DOCUMENTS shall govern the materials furnished and the WORK to be performed on this contract:

GENERAL CONTRACT DOCUMENTS AND SPECIFICATIONS ENTITLED "OHIO COUNTY WATER DISTRICT, OHIO COUNTY, KENTUCKY, SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "G", JUNE, 1998 (ADDITIONAL WORK MARCH, 1999)."

CONTRACT DRAWINGS BEING PLANS SHEETS COVER THROUGH 4 ENTITLED "OHIO COUNTY WATER DISTRICT, OHIO COUNTY, KENTUCKY, SERIES I WATER SYSTEM IMPROVEMENTS - CONTRACT "G", JUNE, 1998 (ADDITIONAL WORK MARCH, 1999)".

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

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

### SC-5. CLAIMS BY THE CONTRACTOR.

If the CONTRACTOR believes he is entitled to a change in the contract price or time, or both, he shall give the ENGINEER written notice and documentation of the basis for the claim within 7 days of the cause of such claim. The ENGINEER will, within 7 days of such claim notice, either prepare a change order for processing or notify the CONTRACTOR in writing of the reason for rejection. Also see GC-13 and GC-14.

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

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

**SC-6. PROJECT INSPECTION.**

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

Suggestions by or approval of any plan or method of WORK by the OWNER'S representative shall imply consent, but adoption of any such plan or method shall be at the CONTRACTOR'S own risk and responsibility.

PROJECT INSPECTION, TESTS OR APPROVALS BY THE OWNER'S REPRESENTATIVE OR OTHERS SHALL NOT RELIEVE THE CONTRACTOR FROM HIS OBLIGATIONS TO PERFORM THE WORK IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH HEREIN.

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

**SC-7. ENVIRONMENTAL PROTECTION.**

The CONTRACTOR shall minimize siltation and bank erosion during construction and shall restore disturbed areas to present or better conditions. All chemicals used during project construction or furnished for project operation, whether herbicide, pesticide, disinfectant, polymer, reactant, or of other classification, must show approval by either EPA or USDA. Use of all such chemicals and disposal of residue shall be in strict conformance with the instructions.

**SC-8. MATERIALS, EQUIPMENT AND WORKMANSHIP.**

Unless otherwise specified, all materials and equipment shall be new and shall be of standard quality for the use intended. Reference to a proprietary product of a particular manufacturer or vendor is to establish a standard of quality. The CONTRACTOR may furnish with his bid the name and identifying information of each item upon which his bid is based and if this information is not submitted, he shall be obligated to furnish the product specified.

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

The CONTRACTOR shall always require strict discipline and good order among his employees and shall not employ on the WORK any unfit person or anyone not skilled in the WORK assigned to him. Any careless, untrustworthy, or incompetent workers shall be removed upon the request of the ENGINEER or his representative.

**SC-9. MATERIALS COMPATIBILITY.**

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

**SC-10. SAMPLES.**

It shall be the CONTRACTOR'S responsibility to obtain and submit samples of "appearance" materials to the ENGINEER for approval as to color, texture, etc.

**SC-11. CONSTRUCTION PROCEDURE.**

A complete organization, equipment and ample materials shall be on hand before WORK commences. They shall be satisfactory for securing the quality of WORK specified and for continuous progress for the earliest possible completion of the project.

The CONTRACTOR shall provide and maintain a local project or field office and field telephone throughout the term of the project. A representative of the CONTRACTOR should be available to receive notices and messages during working hours and a local telephone shall be maintained for 24 hour emergency calls.

The Resident Inspector shall be permitted access to and use of the CONTRACTOR'S field office to maintain his records and his communications.

Prior to commencement of WORK, the CONTRACTOR shall:

- a. Notify the ENGINEER of the project superintendent's name and telephone number.
- b. Contact utility companies for location and protection of their facilities.
- c. Notify the ENGINEER, 3 days in advance, of when construction will commence.

No underground WORK shall be covered until it has been inspected by the OWNER'S representative.

**SC-12. PROGRESS SCHEDULE.**

Prior to commencement of WORK, the CONTRACTOR shall submit a Progress Schedule for the ENGINEER'S approval. The schedule shall show the sequence of the WORK for continuous progress. It shall be used for coordination of the OWNER'S operations, for the Inspector's scheduling, and as a basis for justifying a time extension, if required.

The Progress Schedule shall be revised (as required) and updated at the time each payment request is submitted as outlined in the General Conditions.

**SC-13. SALVAGED MATERIALS.**

Salvaged materials shall remain the property of the OWNER, unless otherwise shown, and shall be removed from the site to the OWNER'S storage yard, or as otherwise directed.

**SC-14. RIGHTS-OF-WAY.**

The OWNER shall furnish all land and rights-of-way required on this project. He shall obtain all permits and easements for crossings or occupancy of highways, railroads and other public and private property. No WORK shall be begun until the CONTRACTOR has a copy of said permit or easement and can comply with all requirements thereof.

**SC-15. PERMITS.**

Unless otherwise noted, the CONTRACTOR shall be responsible for the cost of all electric service hookups, Building Permits, Electrical Inspection Permits, Plumbing Permits, etc., and shall arrange for such permits to prevent delay in his WORK.

The CONTRACTOR shall also be responsible for the cost of running new electrical service, if required.

**SC-16. WORKING HOURS.**

WORK shall not exceed 40 hours per week and no WORK will be done between the hours of 6:00 P.M. and 7:00 A.M. nor on Saturdays, Sundays or legal holidays, without the written approval or permission of the ENGINEER in each case.

**SC-17. CLEANUP AND RESTORATION.**

The CONTRACTOR shall continuously maintain cleanup operations along the line of WORK and near any structures. Cleanup shall include the removal of all refuse, rubbish, scrap materials and debris and the finish dressing (hand raking, if necessary) of all areas to the satisfaction of the ENGINEER. Restoration shall include maintenance of any settled trenches and landscaping, if required. No item of WORK shall be considered complete until cleanup and restoration are accomplished and, if not satisfactory in the opinion of the ENGINEER, payment may be withheld until such cleanup and restoration are accomplished.

The Contractor shall protect all shrubbery and shall be responsible for replacing any damaged shrubbery to the property owner's satisfactions. Restoration shall be in accordance with Specification 14.

**SC-18. MAINTENANCE OF TRAFFIC AND SAFETY.**

The CONTRACTOR shall, at his own expense, provide and maintain suitable accommodations for public and private travel near his WORK. Adequate warning signs, lights, barricades and other safety devices shall be maintained and shall comply with the requirements of any governing agency.

The local fire department, school district, etc., shall be notified of all detours and route changes.

**SC-19. EXISTING UTILITIES.**

It shall be the CONTRACTOR'S sole responsibility to learn the exact location of all utilities; to notify the utility OWNER; to protect all utilities through his operations; and to pay for any damage that may occur.

The exact location of existing utilities, either aboveground or underground, shall be determined by the CONTRACTOR far enough in advance of the WORK to permit adjustments in alignment or protection of the utility. Existing utilities, if shown on the Plans, are only approximate to alert the CONTRACTOR of their existence.

If the CONTRACTOR fails to locate existing utilities far enough in advance to permit realignment of the WORK, relocation of the existing utility or of the WORK shall be at his expense.

**SC-20. MAINTAINING WATER SERVICE.**

The CONTRACTOR shall maintain water service to all customers throughout construction and shall organize his WORK for the least inconvenience to all customers and residents. All customers whose water service will be interrupted shall be notified by the CONTRACTOR, in advance, and service shall be restored as soon as possible.

**SC-21. SEQUENCE OF WORK.**

The entire system shall remain in operation throughout construction and bypass pumping shall be employed when required to maintain service without backup into any house service lines.

The CONTRACTOR shall be responsible for any damage which may occur due to insufficient maintenance of service.

**SC-22. PROGRESS PAYMENTS.**

The District meets the last Tuesday of each month and the cut-off date for figuring monthly partial payments shall be two weeks prior to the District's meeting. Requests for partial payment shall be submitted for the ENGINEER'S approval no later than one week prior to the District's meeting. 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-23. QUANTITIES OF ESTIMATE.**

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

The CONTRACTOR shall verify all quantities before preparing his bid or placing his order.

**SC-24. FINAL ADJUSTING CHANGE ORDER.**

At the end of this project, a final adjusting change order shall be prepared to show overruns and underruns to balance all of the quantities.

**SC-25. RECORDS.**

The CONTRACTOR shall be responsible for maintaining a set of Record Plans showing the size, type of material and location of all new construction and of any existing facilities located during the WORK.

An extra set of Plans shall be furnished for records and shall be submitted to the ENGINEER at the end of the project for the OWNER'S permanent record.

**SC-26. "OR EQUAL" CLAUSE.**

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

**SC-27. PROTECTION OF PROPERTY AND PUBLIC LIABILITY.**

The CONTRACTOR shall assume full responsibility for the protection of all public and private property both above and below ground where WORK under this project is being performed.

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

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

**SC-28. LIABILITY.**

The OWNER or ENGINEER shall not be liable for the safety of persons or property on or about a construction project site, or for the construction techniques, procedures, sequences and schedules, or for the conduct, action, errors, or omissions of the CONTRACTOR, his subcontractors, or his material suppliers, their agents or employees.

Further, it is the CONTRACTOR'S responsibility to protect and save harmless the OWNER and ENGINEER from any suits arising out of claims including the hiring, at his own expense, of the necessary professional help to defend the OWNER and ENGINEER.

The CONTRACTOR is also referred to the General Conditions regarding liability, protection of property, etc.

**SC-29. EMERGENCIES.**

In an emergency that threatens loss or injury to persons or property, the CONTRACTOR will be allowed to act diligently without previous instructions from the ENGINEER.

Wherever, in the opinion of the ENGINEER, an emergency exists and immediate action is considered necessary, the performance of emergency WORK under the direction of the ENGINEER, with or without notice to the CONTRACTOR, shall in no way relieve the CONTRACTOR of responsibility for damage that may occur.

**SC-30. SAFETY AND SANITARY REGULATIONS.**

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

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

**SC-31. TRENCH SETTLEMENT.**

The CONTRACTOR shall be responsible for all trench settlement for 1 year after final acceptance by the OWNER.

**SC-32. SHOP DRAWINGS.**

In accordance with the General Conditions, the CONTRACTOR shall submit EIGHT COPIES of Shop Drawings for all materials furnished and certify to their compliance with the Specifications. The CONTRACTOR'S certification shall be as follows:

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

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



**SC-33. WAGE DETERMINATION.**

WORK on this project shall be subject to prevailing wage rates for public works that are current at the time of bidding and are included herein.

The CONTRACTOR, in preparing his Bid, agrees to the terms of the prevailing wage rates as part of this project without additional compensation.

**SC-34. WEATHER CONDITIONS.**

No portion of the WORK shall be constructed under conditions that would adversely affect the quality or efficiency thereof. The CONTRACTOR shall be responsible for protecting his WORK and materials against damage or injury from the weather.

**SC-35. TIME EXTENSIONS FOR ABNORMAL WEATHER.**

This section specifies the procedure for the determination of time extensions due to abnormal and unforeseeable weather as outlined in the General Conditions, Section 15.4.2. Reference is also made to Section 15.4 regarding prompt written notice.

For the purposes of this section the term "adverse weather day" shall mean a day when construction cannot proceed due to precipitation (not wet conditions caused by precipitation), provided the CONTRACTOR is prevented from working for 50 percent or more of his normal WORK day.

The listing below defines the monthly anticipated adverse weather days (including weekends and holidays) and shall form the "base line" for monthly (or portion thereof) weather time evaluation.

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
12	12	10	10	10	8	8	8	7	10	11	11

Upon acknowledgment of the Notice To Proceed, the CONTRACTOR shall keep an accurate and detailed record of actual adverse weather days monthly (including weekends and holidays) and this shall be compared with the anticipated adverse weather days listed above.

Time extensions shall be granted only where adverse weather affects WORK shown on the Progress Schedule.

At the end of each month, the CONTRACTOR shall request from the ENGINEER, in writing, a time extension based on the number of actual adverse days that exceeded the anticipated adverse days. Supporting documentation shall be furnished.

The ENGINEER shall review the information and notify the CONTRACTOR whether the request is justified. If the request is justified, a change order will be processed later.

**SC-36. PRECONSTRUCTION CONFERENCE.**

The CONTRACTOR shall attend a preconstruction conference with the OWNER, ENGINEER, and any other interested parties prior to commencement of WORK. Construction procedures and requirements shall be outlined and discussed in detail.

**SC-37. CORRECTION OF WORK.**

The ENGINEER shall be the final judge of the quality and suitability of the WORK, materials, processes of manufacture, and methods of construction for the purpose for which they are used. Should they fail to meet the ENGINEER'S approval, they shall be corrected prior to acceptance of the extension.

**SC-38. PATENTS, LICENSE AND ROYALTY FEES.**

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

**SC-39. INSURANCE.**

The CONTRACTOR shall have and maintain, during the life of this project, workmen's compensation insurance, public liability insurance, property damage insurance and automobile liability insurance in legal and/or reasonable limits of liability. Also see GC-21.

**SC-40. LAWS AND ORDINANCES.**

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

**SC-41. GUARANTEE.**

The CONTRACTOR shall guarantee all materials and equipment furnished and Work performed for a period of 1 year from the date of Substantial Completion. The CONTRACTOR warrants and guarantees for a period of 1 year from the date of Substantial Completion of the system that the completed system is free from all defects due to faulty materials or workmanship and the CONTRACTOR shall promptly make such corrections as may be necessary by reason of such defects including the repairs of any damage to other parts of the system resulting from such defects. The OWNER will give notice of observed defects with reasonable promptness. In the event that the CONTRACTOR should fail to make such repairs, adjustments, or other Work that may be made necessary by such defects, the OWNER may do so and charge the CONTRACTOR the cost thereby incurred. The Performance Bond shall remain in full force and effect through the guarantee period.

**SC-42. BASIS OF BID.**

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

The following is to clarify the basis of bidding:

CONTRACT "G":

1. Mobilization/Demobilization.

Mobilization/Demobilization cost on this project shall be shown as one lump sum and may include the cost of insurance, bonds, site office, moving equipment, etc. Mobilization/demobilization shall not exceed 4 per cent of the total construction cost. Payment of mobilization/demobilization shall be as follows:

70% with the first monthly estimate.

30% when the project is 95 percent complete.

2. Water Mains.

Payment for water mains (including jointing materials) shall be at the unit price bid per lineal foot, for each size and type of pipe, and shall include excavation, furnishing, laying, connections, embedment, testing, disinfecting and backfilling. Measurement for payment will be straight through with no deduction for the length of fittings.

3. Fittings.

Payment for iron fittings shall be at the unit price bid per pound based on published weights for compact (AWWA C153) M.J. fittings not including accessories and cement linings. Unit prices shall be the one average price bid per pound for the fitting size shown (largest pipe size of fitting).

Payment for PVC fittings (3 inches and smaller) shall be at the average unit price bid.

Payment shall include installation and blocking/anchorage/restraint.

4. Valves W/Cast Iron Box.

Payment for valves with the valve box shall be at the unit price bid for each size and shall include furnishing and installation complete.

5. Clamps and Couplings.

Payment for clamps and couplings, for jointing and repairing all types and sizes of pipes, shall be at the average unit price bid for each size pipe. Payment shall include installation complete. No payment shall be allowed where the Contractor skips for road crossings, bores, etc., instead of pipe laying straight through or continuous.

6. Tie-ins.

Payment for a tie-in, where shown on the Plans, shall be for labor and equipment only where tie-in is made to an existing line with standard fittings. Payment for all materials required shall be made under a separate bid item. A wet tie-in made with special fittings (tapping sleeves, inserting valves, saddles, etc.) shall be included in the cost of the special.

7. Air Release Valves W/Box.

Payment for air release valves shall be at the unit price bid for each valve and shall include the box and cover, all accessories and installation complete.

8. Bore With Casing.

Payment for a bore with casing shall be made at the unit price bid per lineal foot for the size casing required and shall include the bore, casing and installation complete. Payment for the carrier pipe (same material as other mains) shall be made under a separate bid item. Measurement will be made by the minimum length of casing required by the permit or specified by the Engineer.

9. Bore Without Casing.

Payment for a bore without casing shall be made at the unit price bid per lineal foot for the size of the carrier pipe and shall include the bore and installation complete. Payment for the carrier pipe (same material as other mains) shall be made under a separate bid item. Measurement for payment shall be the actual length of the area being bored, unless otherwise directed by the Engineer.

10. Marker Posts.

Payment for marker posts shall be at the unit price bid for each marker post and shall include furnishing and installation complete.

11. Crushed Stone.

Payment for all grades of crushed stone in place, at authorized locations, shall be at the unit price bid per cubic yard. Authorized locations include resurfacing, special foundations and backfill under permanent surface. Measurement for payment for resurfacing shall be based on the normal trench width plus one foot times the length of the surface crossed times a compacted thickness of 6 inches. Measurement for payment for special foundations and backfill under a permanent surface shall be based on the normal trench width times the length required times the depth as directed by the Engineer. Payment shall not be made for replacement due to settlement or for pipe embedment.

12. Concrete Encasement.

Payment for concrete pipe encasement shall be made at the unit price bid per lineal foot in place, at authorized locations.

13. Asphalt Pavement Replacement.

Payment for asphalt pavement replacement shall be at the unit price bid per square yard for 2 inch compacted thickness. Measurement of the area for payment shall be based on the normal trench width plus 2 feet times the length of the surface crossed. Payment for other depths, approved by the Engineer, shall be proportioned. Payment shall not include replacement due to settlement.

14. Concrete Pavement Replacement.

Payment for concrete pavement replacement, at authorized locations, shall be at the unit price bid per cubic yard of concrete in place and shall include all materials and finishing to match the existing surfaces. Measurement for payment shall be based on the normal trench width plus one foot times the length of the surface crossed times the depth required to match the existing surface or as directed by the Engineer. Replacement due to settlement shall be at the Contractor's expense.

15. Additional Depth.

Payment for additional depth required to install the water mains between 7'-1" and 15' deep shall be paid for at the unit price bid per lineal foot of main installed at the extra depth. Payment shall include additional excavation, shoring, etc., but shall not include pipe which shall be paid under a separate bid item. Additional depth shall be paid for at authorized locations only.

PAUL E. PATTON  
GOVERNOR



DIVISION OF EMPLOYMENT STANDARDS,  
APPRENTICESHIP AND TRAINING

JOE NORSWORTHY  
SECRETARY

LABOR CABINET  
1047 U S HWY 127 S STE 4  
FRANKFORT KY 40601-4381

DENNIS J. LANGFORD  
DIRECTOR

April 2, 1999

Mr. Rod H. Martin  
Hunter, Martin & Associates, Inc.  
3220 Lone Oak Road  
Paducah, Kentucky 42003

Re: Ohio County Water District  
Series I, Water System Improvements-Ct. "G"  
Advertising Date as Shown on Notification: March 30, 1999

Dear Mr. Martin:

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

I am enclosing a copy of the current prevailing wage determination number CR-1-249, dated February 5, 1999, for Ohio County. This schedule of wages shall be attached to and made a part of the specifications for the work, printed on the bidding blanks, and made a part of the contract for the construction of the public works between the public authority and the successful bidder or bidders.

The determination number assigned to this project is based on the date contained in your notification as the date the project is advertised for bids. If this is changed in any way, it will be the responsibility of the public authority to contact this office and reascertain the correct schedule of the prevailing rates of wages.

Your project number is as follows: 183-2-0019-99-1

Respectfully,

Handwritten signature of Dennis J. Langford in cursive.  
Dennis J. Langford  
Director

lprh

Enclosure

TELEPHONE: (502) 564-2784

An Equal Opportunity Employer M/F/D



COMMISSIONER'S CURRENT REVISION  
KENTUCKY PREVAILING WAGE DETERMINATION  
SENATORIAL DISTRICT 005

**NOTICE**

Determination No. CR-1-249

(THIS DETERMINATION APPLIES TO

Date of Determination: February 5, 1999

PROJECT NO. 183-2-0019-99-1

This schedule of the prevailing rate of wages for Senatorial District No. 005, which includes the counties of Breckinridge, Grayson, Hart, Meade and Ohio has been determined in accordance with the provisions of KRS 337.505 to 337.550. This determination shall be referred to as Prevailing Wage Determination No. CR-1-249.

Apprentices or trainees shall be permitted to work as such subject to Administrative Regulations adopted by the Commissioner of Workplace Standards. Copies of these regulations will be furnished upon request to any interested person.

Overtime is to be computed at not less than one and one-half (1 1/2) times the indicated BASE RATE for all hours worked in excess of eight (8) per day, or in excess of forty (40) per week. However, KRS 337.540 permits an employee and employer to agree, in writing, that the employee will be compensated at a straight time base rate for hours worked in excess of eight (8) hours in any one workday, but not more than ten (10) hours worked in any one workday, if such written agreement is prior to the over eight (8) hours in a workday actually being worked, or where provided for in a collective bargaining agreement. The fringe benefit rate is to be paid for each hour worked at a straight time rate for all hours worked.

No laborer, workman or mechanic shall be paid at a rate less than that of the General Laborer except those classified as bona fide apprentices registered with the Kentucky State Apprenticeship Supervisor unless otherwise specified in this schedule of wage rates.

Fringe benefit amounts are applicable for all hours worked except when otherwise noted.

<u>CLASSIFICATIONS</u>	<u>RATE AND FRINGE BENEFITS</u>	
ASBESTOS/INSULATION WORKERS	BASE RATE	\$12.59
	FRINGE BENEFITS	2.00
BOILERMAKERS	BASE RATE	\$21.75
	FRINGE BENEFITS	10.76
BRICKLAYERS	*BASE RATE	\$17.28
	FRINGE BENEFITS	4.13

\*Add \$.50 for refractory.

\*Add \$.25 for Layout & Sawmen

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CLASSIFICATIONS RATE AND FRINGE BENEFITS

CARPENTERS:	BUILDING	BASE RATE	\$17.45
		FRINGE BENEFITS	4.67

Carpenters - when working in excess of 30 ft. to 100 ft. above ground or a solid floor on scaffold, skip hoist, tower, or slipform, suspended or swing scaffold, and when working with creosote or other injurious materials.

BUILDING	BASE RATE	\$17.70
	FRINGE BENEFITS	4.67

Carpenters - when working in excess of 100 ft. above ground or solid floor on scaffold, skip hoist, tower or slipform.

BUILDING	BASE RATE	\$17.95
	FRINGE BENEFITS	4.67

Carpenters	HEAVY & HIGHWAY	BASE RATE	\$18.45
		FRINGE BENEFITS	4.93

Divers	HEAVY & HIGHWAY	BASE RATE	\$28.05
		FRINGE BENEFITS	4.93

Piledrivers	BUILDING	BASE RATE	\$17.70
		FRINGE BENEFITS	4.67

HEAVY & HIGHWAY	BASE RATE	\$18.70
	FRINGE BENEFITS	4.93

CEMENT MASONS	BASE RATE	\$ 13.14
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ELECTRICIANS	BASE RATE	\$22.25
	FRINGE BENEFITS	5.51 +
		3 3/4% gross wages

ELEVATOR CONSTRUCTORS	BASE RATE	\$20.725
	FRINGE BENEFITS	7.37

ELEVATOR CONSTRUCTOR HELPERS	BASE RATE	\$14.51
	FRINGE BENEFITS	7.00

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CLASSIFICATIONS RATE AND FRINGE BENEFITS

GLAZIERS		*BASE RATE	\$ 18.41
		FRINGE BENEFITS	3.88

\*Add \$.35 for glaziers working on a scaffold 30 ft. or more above the ground or any permanent part of a structure.

IRONWORKERS	BUILDING	BASE RATE	\$20.15
		FRINGE BENEFITS	7.30

	HEAVY & HIGHWAY	BASE RATE	\$20.26
		FRINGE BENEFITS	9.32

LABORERS:

General laborers, watchman, water boy, wrecking labor on building and structures, clearing of right-of-way and building site, carpenter tender, deck hand flagging traffic, truck spotters and dumpers, axe and cross cut saw filer, concrete puddlers and form strippers, asbestos abatement laborers, toxic waste removal laborer, lead abatement laborer.

	BUILDING	*BASE RATE	\$14.77
		FRINGE BENEFITS	4.53

All power driven tools, hod carriers, mason tenders, finishing tenders, mortar mixers, jack hammer, vibrators, wagon drill, core drill, test drill, well drill, concrete pump machine, tunnel boring machine, men in tunnel and crib ditch work, signal men, riprap rock setters and handlers, asphalt rakers, tampers and smoothers, pipe layers, grout pump man, chain saw, pipe clearing, doping and wrapping, swampers and straight cable hooking, cement guns, grade checkers machine excavating, tool room checkers, batch plant scale man, sand hog free air, sand hog compressed air, cutting torch man on salvage work, road form setters, brick slingers, hand spikers, power buggy, handling of creosote material, sandblasters, curing of concrete and apply hardener, air and gas tampers, concrete saw, power post hole diggers and green cut men on concrete work, pavement breakers, multi-craft tender.

	BUILDING	*BASE RATE	\$14.97
		FRINGE BENEFITS	4.53

Powderman and Blaster	BUILDING	*BASE RATE	\$15.27
		FRINGE BENEFITS	4.53

\*Add the following amounts to the laborers' base rate: \$1.00 for work with toxic waste, Level A; \$.50 for work with toxic waste, Level B; and \$.25 for work with toxic waste, Level C and chemically treated materials. There is no additional amount for work with toxic waste, Level D.



CLASSIFICATIONS

RATE AND FRINGE BENEFITS

LABORERS: (Continued)

Aging and curing of concrete (any mode or method), asbestos abatement worker, asphalt plant laborers, asphalt laborers, batch truck dumpers, carpenter tenders, cement mason tenders, cleaning of machines, concrete laborers, demolition laborers, dredging laborers, drill helper, environmental laborer - nuclear, radiation, toxic and hazardous waste - Level D, flagmen, grade checkers, all hand digging and hand back filling, highway marker placers, landscaping laborers, mesh handlers and placers, puddler, railroad laborers, rip-rap and grouters, right of way laborers, sign, guard rail and fence installers (all types), signal men, sound barrier installer, storm and sanitary sewer laborers, swampers, truck spotters and dumpers, and wrecking of concrete forms.

HEAVY & HIGHWAY                      BASE RATE                      \$14.97  
FRINGE BENEFITS                      4.53

Batter board men (sanitary and storm sewer), brick mason tenders, mortar mixer operator, burner and welder, bushammers, chain saw operator, concrete saw operators, deckhand scow man, dry cement handlers, environmental laborers - nuclear, radiation, toxic and hazardous waste - Level C, forklift operators for masonry, form setters, green concrete cutting, hand operated grouter and grinder machine operator, jack hammers, lead paint abatement, pavement breakers, paving joint machine, pipe layers-laser operators (non-metallic), plastic pipe fusion, power driven georgia buggy or wheelbarrow, power post hole diggers, precast manhole setters, walk-behind tampers, walk-behind trenchers, sand blasters, concrete chippers, surface grinders, vibrator operators, wagon drillers.

HEAVY & HIGHWAY                      BASE RATE                      \$15.22  
FRINGE BENEFITS                      4.53

Air track driller (all types), asphalt luteman and rakers, gunnite nozzleman, gunnite operators and mixers, grout pump operator, powderman and blaster, side rail setters, rail paved ditches, screw operators, tunnel laborers (free air), and water blasters.

HEAVY & HIGHWAY                      BASE RATE                      \$15.27  
FRINGE BENEFITS                      4.53

Caisson workers (free air), cement finishers, environmental laborer - nuclear, radiation, toxic and hazardous waste - Levels A and B, miners and drillers (free air), tunnel blasters, and tunnel muckers (free air).

HEAVY & HIGHWAY                      BASE RATE                      \$15.87  
FRINGE BENEFITS                      4.53

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CLASSIFICATIONS		RATE AND FRINGE BENEFITS	
MARBLE, TILE & TERRAZZO FINISHERS		BASE RATE	\$12.33
		FRINGE BENEFITS	2.65
MARBLE, TILE & TERRAZZO WORKERS		BASE RATE	\$18.13
		FRINGE BENEFITS	3.25
MILLWRIGHTS		BASE RATE	\$19.00
		FRINGE BENEFITS	5.42
PAINTERS	BUILDING	BASE RATE	\$11.17
		FRINGE BENEFITS	1.73
Brush, roller & paperhangers	HEAVY & HIGHWAY	BASE RATE	\$19.15
		FRINGE BENEFITS	4.88
Drywall Finishers, Plasterers	HEAVY & HIGHWAY	BASE RATE	\$19.40
		FRINGE BENEFITS	4.88
Spray, sandblast, power tools, waterblast, steam cleaning, brush and roller of mastics, creosotes, kwinch koate and coal tar epoxy.			
	HEAVY & HIGHWAY	BASE RATE	\$20.15
		FRINGE BENEFITS	4.88
Spray of mastics, creosotes, kwinch koate and coal tar epoxy.			
	HEAVY & HIGHWAY	BASE RATE	\$21.15
		FRINGE BENEFITS	4.88
PLASTERERS	BUILDING	BASE RATE	\$11.81
		FRINGE BENEFITS	1.59
PLUMBERS		BASE RATE	\$22.16
		FRINGE BENEFITS	\$5.17
PIPEFITTERS		BASE RATE	\$22.40
		FRINGE BENEFITS	\$7.45
ROOFERS		BASE RATE	\$7.17
SHEETMETAL WORKERS		BASE RATE	\$22.13
		FRINGE BENEFITS	7.89

CLASSIFICATIONS RATE AND FRINGE BENEFITS

SPRINKLER FITTERS BASE RATE \$20.05  
 FRINGE BENEFITS 6.28

TEAMSTERS:

Truck helper and warehouseman.

BUILDING BASE RATE \$10.06  
 \*FRINGE BENEFITS 1.33

Driver - 3 tons and under, greaser, tire changer and mechanic helper.

BUILDING BASE RATE \$10.18  
 \*FRINGE BENEFITS 1.33

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 \$10.29  
 \*FRINGE BENEFITS 1.33

Drivers, concrete mixer trucks (all types, hauling on job sites only); truck mechanics.

BUILDING BASE RATE \$10.36  
 \*FRINGE BENEFITS 1.33

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; fork lift truck when used inside warehouse or storage area.

BUILDING BASE RATE \$10.46  
 \*FRINGE BENEFITS 1.33

\*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.

Truckhelper and warehouseman, mobile batch truck helper.

HEAVY & HIGHWAY BASE RATE \$17.78  
 \*FRINGE BENEFITS 2.28

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CLASSIFICATIONSRATE AND FRINGE BENEFITS

## TEAMSTERS: (Continued)

Greaser, tire changer and mechanic helper.

HEAVY & HIGHWAY	BASE RATE	\$17.83
	*FRINGE BENEFITS	2.28

Truck mechanic	HEAVY & HIGHWAY	BASE RATE	\$18.06
		*FRINGE BENEFITS	2.28

Driver-single axle dump and flatbed truck, semi-trailer or pole trailer when used to pull building materials and equipment, tandem axle dump truck, driver of distributors, driver on mixer trucks (all types).

HEAVY & HIGHWAY	BASE RATE	\$18.13
	*FRINGE BENEFITS	2.28

Driver-Euclid and other heavy earthmoving equipment and low-boy, articulator, cat truck, 5-axle wheel, winch truck and A-Frame truck when used in transporting materials, Ross Carrier, forklift truck when used to transport building materials, driver on pavement breakers.

HEAVY & HIGHWAY	BASE RATE	\$18.14
	*FRINGE BENEFITS	2.28

\*FRINGE BENEFITS apply to employees who have been employed a minimum of twenty (20) workdays within any ninety (90) consecutive day period of that employer.

## OPERATING ENGINEERS:

BUILDING	BASE RATE	\$13.44
	FRINGE BENEFITS	1.57

A-Frame winch truck, auto patrol, backfiller, batcher plant, bituminous paver, bituminous transfer machine, all types of boom cats, bulldozer, cableway, carry-all scoop, carry deck crane, central compressor plant operator, clamshell, concrete mixer (21 cu. ft. or over), concrete paver, truck-mounted concrete pump, core drills, crane, crusher plant, derrick, derrick boat, ditching and trenching machine, dragline, dredge operator, dredge engineer, earth movers, elevating grader and all types of loaders, grade-all, guries, heavy equipment robotics operator/mechanic, high lift, hoe-type machine, hoist (two or more drums), hoisting engine (two or more drums), horizontal directional drill operator, hydraulic boom truck, hydrocrane, hyster, Ke-Cal loader, Letourneau, locomotive, mechanic, mechanically operated laser screed, mechanic welder,

CLASSIFICATIONS RATE AND FRINGE BENEFITS

OPERATING ENGINEERS: (Continued)

mucking machine, motor scraper, orangepeel bucket, piledriver, power blade, pumpcrete, push dozer, rock spreader attached to equipment, all rotary drills, roller (bituminous), scarifier, scoopmobile, shovel, side boom, subgrader, tailboom, telescoping type forklift, tow or push boat, tower cranes (French, German and other types), tractor shovel and truck crane, tunnel mining machines including moles, shields, or similar types of tunnel mining equipment.

HEAVY & HIGHWAY      \*BASE RATE      \$19.85  
FRINGE BENEFITS      6.40

All air compressors (over 900 cu. ft. per min.), bituminous mixer, boom type tamping machine, bull float, concrete mixer (under 21 cu. ft.), electric vibrator compactor/self-propelled compactor, elevator (one drum or buck hoist), elevator (regardless of ownership when used to hoist building material), finish machine, firemen, flex-plane, forklift (regardless of lift height), form grader, hoist (one drum), joint sealing machine, mechanic helper, outboard motor boat, power sweeper (riding type), roller (rock), ross carrier, skid mounted or trailer mounted concrete pumps, switchman or brakeman, throttle valve man, tractair and road widening trencher, tractor (50 HP and over), truck crane oiler, tugger, welding machine, well points, and whirley oiler.

HEAVY & HIGHWAY      BASE RATE      \$17.43  
FRINGE BENEFITS      6.40

Greaser on grease facilities servicing heavy equipment.

HEAVY & HIGHWAY      BASE RATE      \$17.81  
FRINGE BENEFITS      6.40

Bituminous distributor, burlap and curing machine, caisson drill and core drill helper (track or skid mounted), cement gun, concrete saw, conveyor, deckhand oiler, grout pump, hydraulic post driver, hydro seeder, mud jack, oiler, paving joint machine, power form handling equipment, pump, roller (earth), steermen, tamping machine, tractors (under 50 H.P.) and vibrator.

HEAVY & HIGHWAY      BASE RATE      \$17.17  
FRINGE BENEFITS      6.40

\*Operators on cranes with booms one hundred fifty (150) feet and over (including jib) shall receive \$.50 above base rate.

CLASSIFICATIONS

RATE AND FRINGE BENEFITS

OPERATING ENGINEERS: (Continued)

Employees assigned to work below ground level are to be paid 10% above basic wage rate. This does not apply to open cut work.

WELDERS - Receive rate for craft in which welding is incidental.

NOTE: The type of construction shall be determined by applying the following definitions.

BUILDING CONSTRUCTION

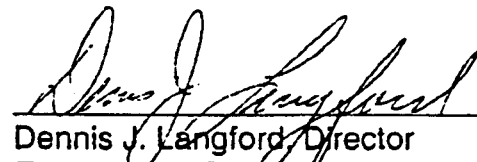
Building construction is the construction of sheltered enclosures with walk-in access for the purpose of housing persons, machinery, equipment, or supplies. It includes all construction of such structures, the installation of utilities and the installation of equipment, both above and below grade level,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

HIGHWAY CONSTRUCTION

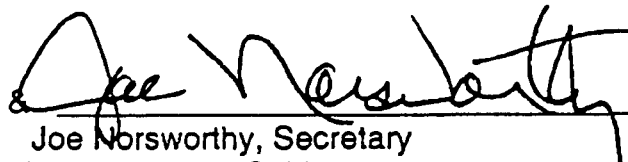
Highway construction includes the construction, alteration or repair of roads, streets, highways, runways, taxiways, alleys, trails, paths, parking areas, and other similar projects not incidental to building or heavy construction. It includes all incidental construction in conjunction with the highway construction project.

HEAVY CONSTRUCTION

Heavy projects are those projects that are not properly classified as either "building" or "highway". For example, dredging projects, water and sewer line projects, dams, flood control projects, sewage treatment plants and facilities, and water treatment plants and facilities are considered heavy.



Dennis J. Langford, Director  
Employment Standards,  
Apprenticeship & Training  
Kentucky Labor Cabinet



Joe Norsworthy, Secretary  
Kentucky Labor Cabinet  
Frankfort, Kentucky 40601

This 5th day of February, 1999.

# SPECIFICATION 1

## DISTRIBUTION SYSTEM AND PIPING

### 1-1. GENERAL.

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

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

### 1-2. MATERIALS.

#### 1-2.1. DISTRIBUTION MAINS.

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

##### a. Iron Pipe.

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

##### b. Plastic Pipe.

Plastic pipe shall conform with ASTM D 2241 polyvinyl chloride (PVC) pressure pipe, 1-1/2 inches through 12 inches and shall bear the National Sanitation Foundation seal. Unless otherwise shown the pipe shall be SDR26, pressure rated at 160 psi. Jointing shall be with rubber ring gaskets.

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

#### 1-2.2. FITTINGS.

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

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

## 1-2.3.

## VALVES.

## a. Gate Valves.

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

## b. Butterfly Valves.

Butterfly valves, 2 inches through 20 inches, shall conform with AWWA C504 and shall have a minimum working pressure or rating of 150 psi. They shall have semi-steel or cast iron bodies with lug end connections for use with flanged CIP. The shaft seal shall be hycar and the seat shall be neoprene. They shall have bronze discs, 416 stainless steel shafts and bronze bearings. Valves below ground shall operate with a square nut through a worm gear and 3 operating wrenches shall be furnished for each size operating nut. For valves above grade, the actuator shall be of the lever type with 10 position or adjustable memory stops as shown on the Plans. All valves shall close clockwise and open counterclockwise.

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

## c. Valve Boxes.

Valve boxes shall be cast iron if located where subject to traffic. PVC boxes may be used at other locations. All valve boxes shall be adjustable with a minimum adjustment of 3 inches either higher or lower. Boxes for 2 inch through 14 inch valves shall have a 5-1/4 inch shaft diameter and the covers shall be cast iron with the word "WATER" cast in the top surface.

## d. Valve Wrenches.

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

## e. Air Valves.

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

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

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



#### 1-2.4. FIRE HYDRANTS.

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

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

#### 1-2.5. FLUSH HYDRANTS.

Flush hydrants shall be of the post type having 150 psi working pressure, 2-1/8 inch valve opening and a single 2-1/2 inch hose nozzle. In all other respects, the flush hydrant shall be the same as the standard fire hydrant.

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

##### a. Tapping Sleeves.

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

##### b. Tapping Crosses.

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

##### c. Tapping Valves.

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

##### d. Split Repair Sleeves.

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

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

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

##### f. Inserting Valves.

Inserting valves shall be similar to Mueller H-800.

##### g. Repair Clamps.

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

## 1-2.7.

## SERVICE LINES.

## a. Plastic Pipe.

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

## b. Copper Pipe.

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

## c. Service Line Accessories.

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

## 1-2.8.

## SERVICE METERS.

All service meters shall be of the nutating disc type or oscillating piston type and shall be straight reading in U. S. gallons. They shall have a magnetic coupled drive and shall comply with AWWA C700.

Residential meters, unless otherwise noted, shall be 5/8 inch x 3/4 inch size. All meters 5/8 inch through 1 inch shall be installed in a meter yoke. One and one-half inch and 2 inch meters shall have flanged ends with suitable adaptors and shall have an accuracy of 100 plus or minus 1.5 percent of actual thruput.

## a. Meter Yokes.

Meter yokes shall have a horizontal inlet and outlet and shall have multipurpose end connections with a 1/4 turn stop and a lock wing stop on the inlet side. The height of the yoke shall be approximately 7 inches and it shall securely support the meter in a horizontal position. Meter yokes shall be Ford, Mueller, or equal.

## b. Meter Boxes.

Meter boxes may be plastic, clay or concrete with an inside area equivalent to an 18 inch diameter. They shall be 24 inches deep with cut-outs for the service lines.

Covers shall be cast iron, painted with a coal tar enamel and shall have an 11 inch minimum diameter (or equivalent) opening. The lid shall be equipped with a lock and lifting device and a total of three keys shall be furnished.

Standard covers (not subject to traffic) shall weigh 30 to 40 pounds and shall be Mueller H-10810, Ford No. A 32, Neenah R-1914-B, or equal.

Extra heavy covers (subject to light traffic) shall be Ford No. A 32H, Neenah R-1914-B, or equal.

Boxes, for meters 1-1/2 inches and larger, shall be brick masonry or concrete approximately 30 inches deep and large enough to permit convenient service or removal of the meter. Frames and lids shall be cast iron, shall have a locking device and shall have the word "WATER" cast in the top. They shall be Ford Monitor covers or Ford rectangular meter pit covers, or equal.

### 1-2.9. CASING PIPE.

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

### 1-2.10. WATER MAIN LOCATORS.

#### a. Identifying/Detectable Tape.

Identifying/detectable tape shall be a minimum of 3 inches wide, shall be inert plastic film, highly resistant to acids and alkalis and a bright color. It shall be imprinted with "WATER LINE BELOW" and shall be "Terratape Detectable" or equal.

#### b. Tracer Wire.

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

### 1-2.11. RIVER CROSSING PIPE.

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

## 1-3. CONSTRUCTION.

### 1-3.1. RESPONSIBILITY FOR MATERIALS.

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

### 1-3.2. ALIGNMENT AND GRADE.

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

### 1-3.3. TRENCH PREPARATION.

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

## a. Width.

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

## b. Bell Holes.

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

## c. Excavation to Grade.

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

## d. Unsuitable Foundation.

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

## e. Clearance in Rock.

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

## 1-3.4. CROSSINGS AND OCCUPANCY.

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

For a crossing requiring boring and jacking, the Contractor shall be responsible for maintaining line and grade. Where casing is required, a continuous steel casing, with continuous welds, shall be installed by advancing the casing as the hole is being bored. The carrier pipe shall be supported inside of the casing with 18 inch long pressure treated wooden skids which shall be double strapped with No. 10 gauge stainless steel wire or stainless steel straps. The carrier pipe shall not rest on the bells or hubs. Carrier pipe 12 inches and smaller shall be encircled with 4 skids at 90° and carrier pipe from 14 inches to 24 inches shall have 6 skids at 60°. Skid support spacing shall not exceed 4.7 feet for 4 inch pipe; 6.3 feet for 6 inch pipe; 7.4 feet for 8 inch pipe; 8.5 feet for 10 inch pipe; 9.6 feet for 12 inch pipe and 12 feet for 18 inch through 27 inch pipe.

Manufactured plastic skids may be permitted.

Casing end seals shall be installed on all casings and shall be secured to the casing and carrier pipe with stainless steel bands in such a manner as to prevent damage to the seal if

there is any pipe movement. The seals shall be made of oil and water resistant rubber and shall be similar to those manufactured by Maloney Pipeline Products, or equal.

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

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

#### 1-3.5. EXISTING MAINS.

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

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

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

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

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

The following conditions shall apply to all tie-ins.

- a. If necessary to cut the line out of service, the water operator and all affected customers shall be notified and service shall be restored when possible.
- b. The trench or excavation shall be kept completely dry by providing a sump and by pumping, if necessary.
- c. Excavation around the existing main shall be sufficient to allow thorough cleaning with a wire brush and disinfection with a strong chlorine solution to a point 12 inches either side of the fitting(s) being installed.
- d. The inside of all valves and fittings shall be clean and shall be thoroughly swabbed with a strong chlorine solution before being placed in the existing line.
- e. All connections shall be valved for the new main being installed. This valve shall remain tightly closed until disinfection of the new main has been completed.

#### 1-3.7. PIPE LAYING.

Pipe shall be laid continuously with the bell ends facing in the direction of laying. The trench shall be dewatered and every precaution shall be taken to prevent foreign material from

entering the pipe during installation. All pipe must be perfectly clean before placing in the line.

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

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

Anchorage and blocking shall be as shown on the Plans.

#### 1-3.8. VALVES AND FITTINGS.

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

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

#### 1-3.9. FIRE HYDRANTS.

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

#### 1-3.10. METER SETTINGS.

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

#### 1-3.11. HYDROSTATIC TEST.

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

#### 1-3.12. DISINFECTION.

All existing facilities exposed to contamination and all new piping, materials and equipment shall be disinfected in strict conformance with Specification 12 before placing or replacing in service. The Engineer shall be furnished with a copy of the State approved bacteriological test report before the facilities are put into service.

#### 1-3.13. BACKFILLING.

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

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

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

Identifying/detectable tape shall be laid continuously and directly above the pipe with the printed side up. The tape shall be installed approximately 12 to 18 inches below the ground surface. Tracer wire shall be placed directly above the pipe.

#### 1-3.14. SERVICE LINES.

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

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

#### 1-3.15. CREEK CROSSINGS.

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

#### 1-3.16. SPOT EXCAVATION.

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

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

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

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

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

## SPECIFICATION 3

### CONCRETE WORK

#### 3-1. GENERAL.

This Specification shall include all labor, equipment and materials to complete the concrete work on this project. The Contractor shall supply the Engineer with a certificate for each design mix from the ready mix supplier for approval before ordering.

#### 3-2. MATERIALS.

##### 3-2.1. CONCRETE.

###### a. General.

Cement for all concrete shall conform with standard specifications for "portland cement", ASTM Designation C-150, Type I.

Fine aggregate shall consist of sand having clean, sound, hard, durable particles and shall be free from clay and organic impurities. The gradation shall be as follows: 100% passing a 3/8 inch sieve; 85-100% passing a No. 4 sieve; 40-80% passing a No. 16 sieve; 5-25% passing a No. 50 sieve; 0-5% passing a No. 100 sieve.

Coarse aggregate shall be crushed stone or washed gravel having hard, strong, durable qualities and shall be free from adherent coatings and laminated, soft or disintegrated pieces. Coarse aggregate for concrete shall be as follows: 100% passing a 1-1/2 inch sieve; 95-100% passing a 1 inch sieve; 25-60% passing a 1/2 inch sieve; 0-10% passing a No. 4 sieve; 0-5% passing a No. 8 sieve.

Water shall be clear, clean and free from injurious substances.

The concrete shall have 6% air plus or minus 1-1/2%. Admixtures containing more than 0.1% shall not be used.

###### b. Classification.

###### (1) Structural Concrete.

Structural concrete shall be Class A and is defined as floors, walls, roofs, foundations, footings, etc., having reinforcing steel and requiring form work.

###### (2) Plain Concrete.

Plain concrete shall be Class B and shall be used only if specified with or without WWF and minor forms.

###### (3) Encasement Concrete.

Concrete for encasement may be Class C.

###### c. Strength.

Concrete mixes shall be as follows:



Class A - 3,500 psi in 28 days with 6 bags of cement (minimum).  
 Class B - 2,500 psi in 28 days with 5 bags of cement (minimum).  
 Class C - 4 bag mix for encasement only (no test required).

d. Consistency.

Concrete shall be proportioned to give a plastic, workable mix meeting the strength requirements by the absolute volume method. Slump tests shall be made in accordance with ASTM Designation C-143. The slump shall not exceed 4 inches for concrete vibrated in place or 5 inches (authorized by Engineer only) for hand consolidation in very thin walls.

3-2.2. REINFORCEMENT.

Bars for concrete reinforcement shall conform with ASTM Designation A-615, Grade 60 (yield strength 60,000 psi) for deformed bars and ASTM Designation A-185 for welded wire fabric (WWF). All reinforcement shall be free from rust, scale, grease or other coatings that might destroy or reduce its bond with the concrete.

3-2.3. JOINT FILLERS.

Preformed fillers shall be furnished in a single piece for the full depth and width required for the joint unless otherwise authorized. When use of more than one piece is authorized for a joint, the abutting ends shall be fastened securely and held accurately to shape.

All joint fillers shall conform with AASHTO Standards and be as approved by the ENGINEER.

3-2.4. JOINT SEALERS.

a. Hot-poured elastic.

Hot-poured elastic joint sealers shall conform with ASTM D 3405 and all applicable Kentucky Transportation Cabinet, Department of Highways Standard Specifications and/or Illinois Department of Transportation Standard Specifications.

b. Preformed Compression Joint Sealers with Lubricant Adhesive.

Preformed compression joint sealers shall be of approved shapes and sizes for the joints to be sealed. The sealers shall conform with ASTM D 2628. The lubricant adhesive shall be compatible with the sealer, concrete, and steel. The sealer manufacturer shall recommend a lubricant adhesive which will be compatible with and which will meet the requirements of ASTM D 2835.

3-3. CONSTRUCTION.

3-3.1. REINFORCEMENT.

The clear distance between parallel bars shall not be less than 1-1/2 times the diameter of the bars. Bars shall have a minimum of 3 inches of concrete covering where concrete is cast directly against the ground; 2 inches of covering where concrete is exposed to earth, water or weathering conditions; and for concrete not exposed to ground or the weather, the reinforcement steel covering shall be not less than 1-1/2 inches for beams, girders, and columns and not less than 3/4 inch for slabs and walls.

Welded wire fabric in slabs shall be placed 1-1/2 inches from the bottom of 4 inch slabs and 2 inches from the bottom of 6 inch slabs.

Splices, where required in the reinforcement steel, shall be Class C in accordance with ACI-318. Chairs, ties, spacers, etc., shall be used to secure reinforcement in place throughout the concreting operation.

### 3-3.2. EMBEDDED ITEMS.

Sleeves, conduit, bolts, anchors, waterstops, etc., shall be securely anchored in place and thoroughly cleaned before placing the concrete.

### 3-3.3. FORMS.

Forms shall be secured in place to withstand the placing and the weight of the concrete without bulging, sagging, or deflecting from the line and grade. Forms shall be tight enough to prevent the leakage of mortar, shall be clean from all dirt, debris, etc., and shall be properly coated with a nonstaining mineral form oil for easy removal. Forms shall not be removed until the concrete has sufficient strength, and during removal, care shall be taken so as not to chip corners or damage the concrete.

### 3-3.4. PLACING CONCRETE.

Concrete may not be placed when the air temperature is 40 degrees F and falling. Concrete placed during hot weather shall be cooled by frequent spraying and protected from curing too rapidly.

Concrete shall be placed within 45 minutes after water has been added. The maximum free-fall in placing concrete shall be 5 feet. A mechanical vibrator shall be used to cause the concrete to flow or settle but care shall be taken to prevent overvibrating and segregation of the aggregate.

Vibrators shall not be used to transport concrete within form work.

### 3-3.5. JOINTS.

All joints, longitudinal and transverse, shall conform with all details shown on the Plans, and shall be installed at the locations so indicated, or as directed.

Saw-cut joints shall be cut to the depth and width indicated on the Plans and shall be of uniform width throughout. The sawing equipment shall be capable of cutting the joint in strict conformity with the required alignment and depth, and shall be so operated. Transverse saw cuts for joints to be sealed with preformed compression joint seals shall be one continuous cut across the pavement being sawed. Water may be sprayed on the saw blades during the cutting. The joints shall not be sawed until the concrete has hardened to the extent that tearing and raveling will not occur, but as soon thereafter as deemed necessary to preclude random cracking.

All sawed joints shall be thoroughly flushed with clean water or cleaned with compressed air immediately after sawing so the vertical surfaces of the joint will be clean and allow proper adherence of the joint sealer to the surfaces.

All joints shall be protected from intrusion of injurious foreign material until sealed. Temporary seals, when used, shall consist of an acceptable material designed for this use firmly embedded in the joint. The material shall be placed 1/4 inch below the pavement

surface and shall be sufficiently strong and durable to resist intrusion of incompressible materials, and to permit complete removal after its usefulness has ended.

3-3.6. FINISHING.

All exposed concrete surfaces, not otherwise specified, shall have a wood float finish to the lines and grades shown.

Walls, after removal of the forms, shall be rubbed to a reasonable smoothness, eliminating fins, cavities, honeycomb, and other defects on the exposed surfaces. Pointing and rubbing shall be with a mortar of sand and cement and shall be kept moist for 24 hours.

Floors shall have a monolithic, smooth, dense trowel finish.

3-3.7. CURING.

All fresh concrete shall be adequately protected from injurious weather conditions until properly cured. It shall be protected from the sun, heavy rain, flowing water, freezing, or mechanical injury. It shall be kept wet for not less than 7 days and during cold weather shall be maintained at temperatures between 50 degrees F and 70 degrees F for at least 5 days.

3-3.8. TESTING.

Excessive honeycomb, poor alignment, excessive roughness or unevenness, leaking where watertightness is required, or deficient test results may be causes for rejection. The Contractor shall be responsible for collecting, curing and testing of 4 cylinders per 100 cubic yards or part thereof and/or for each separate day's pour all in accordance with generally accepted standards. The Engineer shall be furnished 3 certified copies of all test results.

## SPECIFICATION 8

### GENERAL EQUIPMENT STIPULATIONS

#### 8-1. SCOPE.

This Specification covers the obligations and responsibilities of the Contractor, his suppliers or vendors and the manufacturers for mechanical and electrical equipment, instruments and devices about this Contract.

#### 8-2. MATERIALS AND WORKMANSHIP.

The materials and equipment furnished under this contract shall be constructed and finished in a workmanlike manner. Materials shall be suitable for the service intended and selected and fabricated following the best engineering practice. All materials and equipment shall be new.

All exposed surfaces of machines shall be finished smooth and shall be painted with a sufficient number of undercoats to provide a smooth, uniform surface. They shall then be finished with a high grade lacquer or spar enamel in an approved and efficient manner. Polished and machined metal surfaces and electrical equipment, not subject to painting, shall be protected from corrosion, moisture, or damage during shipment and erection.

#### 8-3. SOURCE OF EQUIPMENT AND MATERIALS.

Wherever equipment or materials are specified or shown on the Plans by using the proprietary product of a particular manufacturer or vendor, it is to establish a standard of quality, operation and appearance. Acceptance or approval of a substitute is only for conformance with the design concept of the project for compliance with the information given in the Contract Documents and does not relieve the Contractor of his responsibility for the satisfactory configuration, operation, use or appearance intended.

#### 8-4. EQUIPMENT TO OPERATE IN STRUCTURES AS DESIGNED.

It is the intent of the Plans, Specifications, and Contract that equipment shall be furnished which can be installed and operated properly in the structures as designed and shown on the Plans. The Owner will assume no responsibility for any alteration in, addition to, enlargement of, or any other change from the shape, size, arrangement and dimensions of any structure as designed and detailed, where such alteration, etc., is required for the installation and proper operation of any alternate equipment. Acceptance of alternate equipment will be contingent on any such alterations, additions, enlargements or other changes being made at the sole cost and expense of the Contractor, which shall be included in his base bid.

#### 8-5. PATENTS AND PATENT ROYALTIES.

All royalties and fees for and in connection with patented articles, devices, apparatus, machines, and other equipment (but not including royalties, fees, or other costs in connection with any patented process required by the Owner in the design of the work or operation thereof) shall be included in the price or prices quoted by the equipment supplier to, and paid by, the Contractor.

#### 8-6. EQUIPMENT GUARANTEE.

Each item of mechanical and electrical equipment, instrument, and device, furnished for and in connection with the contract, shall be guaranteed against (a) faulty or inadequate design by the manufacturer or supplier of such item, (b) improper assembly, (c) defective materials or workmanship, or both, and (d) leakage, breakage, or other failure that might occur, under normal and proper operation of the equipment under specified

conditions, for one year from and after the date of acceptance of the work by the Owner, and each item of equipment or part thereof thus proving defective within the 1 year guarantee period shall be replaced, without cost to the Owner.

#### 8-7. LUBRICATION.

All bearings and other points of contact of all equipment shall be provided with adequate lubrication and complete lubrication instructions shall be supplied for each piece of equipment. Sufficient lubricants of the proper grade and quality shall be furnished and installed to fill all oil or grease cups, containers, and reservoirs and properly lubricate all equipment for initial startup and operation and until acceptance by the Owner.

#### 8-8. ELECTRICAL EQUIPMENT.

All electrical equipment furnished under these Specifications shall be constructed and rated in accordance with the "Standards of AIEE" and shall pass temperature and insulation tests as recommended therein for the operating conditions required. All other electrical work shall conform with Specification 9, "Electrical and Control Work".

#### 8-9. SPECIAL TOOLS AND ACCESSORIES.

With each piece of equipment or machine having parts and requiring periodic repairs and adjustment, there shall be furnished all special tools, wrenches and accessories required for removing worn parts and for making such adjustments. There shall also be furnished all gauges, indicators, lubricating devices, etc., necessary for proper operation of machines whether or not such accessories are specified.

#### 8-10. SATISFACTORY OPERATION.

All mechanical equipment furnished by the Contractor shall operate satisfactorily without excessive wear, excessive lubrication, or undue attention required from its operator. All rotating parts shall be in true rotational balance and operate without vibration caused by mechanical defects or misalignment of parts.

#### 8-11. INSTALLATION AND OPERATION INSTRUCTIONS.

The Contractor shall obtain from the equipment manufacturer, and deliver to the Engineer, not less than 9 copies of all necessary shop drawings, instructions and specifications relative to foundation requirements or piping connections, assembly, installation alignment, checking and placing in operation of each item of mechanical and electrical equipment furnished by him. Also, 9 copies of all instructions relative to maintenance and operation and drawings and descriptive data necessary for identification of parts for ordering replacements shall be furnished.

#### 8-12. PLACING EQUIPMENT IN SERVICE.

The Contractor shall be responsible for the proper installation, alignment, and operating condition of all equipment and processes furnished. He shall furnish a written statement to the Engineer certifying that the equipment or process furnished (1) has been properly installed, packed and lubricated; (2) is in accurate alignment, secure and free from any undue stress; and (3) has been operated under normal conditions and that its operation is satisfactory and proper.

He shall provide the services of a manufacturer's or supplier's representative who is completely familiar with the operation of the equipment, who shall check over and verify the complete installation, start the equipment in operation, adjust and test all units and instruct the Owner's regular operator in the proper care and operation of said equipment.

## SPECIFICATION 12

### TESTING AND DISINFECTING

#### 12-1. SCOPE.

The work under this Specification consists of testing and disinfecting of all water mains and appurtenances, plant equipment, pumping facilities, and storage facilities. Testing and disinfection shall be done by the CONTRACTOR in the presence of the ENGINEER. The cost of testing and disinfecting (including water, chemicals, equipment, etc.) shall be included in the unit and/or lump-sum prices bid. No additional payment shall be made for performance of these items.

#### 12-2. TESTING.

All testing shall be done at the CONTRACTOR'S expense and in accordance with AWWA Standards and manufacturers' recommendations, unless otherwise specified. Any defects in materials or workmanship shall be corrected and retesting shall be at the CONTRACTOR'S expense.

##### 12-2.1. DISTRIBUTION SYSTEM AND APPURTENANCES.

Hydrostatic tests shall be performed on all newly laid pipe and shall consist of a pressure and leakage test. The test shall be run before disinfection and before making service connections. The CONTRACTOR shall furnish the water, pump, piping, meters, connections, and all the necessary apparatus and labor to conduct the test. All pipe shall be tested in accordance with AWWA C600 unless otherwise specified.

Hydrostatic tests shall be performed between all valved and end sections; on shorter sections where practical; and as required to meet the test restrictions contained herein. The test shall be run only after concrete blocking has properly cured (5 days for regular cement and 2 days for high-early strength cement). All fittings, hydrants, plugs, etc., shall be properly blocked and protected.

The testing method described in this section is specific for water pressure testing and is not to be applied for air pressure testing due to the serious safety hazards involved.

##### a. Test Restrictions.

1. The test pressure, as measured at the point where the highest pressure occurs during normal operation, shall be at least equal to the maximum pressure rating of the pipe.

For systems using different classes of pipe, a separate test shall be run on each section at the respective pressure rating of the pipe being tested. The CONTRACTOR may, at his option and risk, test different sections of pipe simultaneously provided the higher test pressure is used and all other conditions are met.

2. The duration of the test shall be at least 2 hours.
3. The test pressure shall not vary more than 5 psi for the duration of the test.
4. The test pressure shall not exceed the pipe or thrust-restraint design pressures nor be more than twice the rated pressure of the valves or hydrants.

b. Pressurization.

Initial filling of the main to be tested shall be at a rate such that the velocity in the main does not exceed 1 fps. The CONTRACTOR shall take great care to assure that all air is expelled from the main. Where air vents are not located at high points, corporation stops shall be installed as required to expel the air during the filling process. After completion of the test, the corporation stops shall be removed at the discretion of the ENGINEER or used for service line connections, if practical.

Pressurization of the main shall begin only after the main is completely filled with water and all air is removed. Pressure shall be applied through a corporation stop set by the CONTRACTOR. Testing shall not begin until the test pressure has stabilized.

c. Examination.

All exposed pipe, fittings, valves, hydrants, joints, etc., shall be examined during the test. Any visible leaks or defects shall be corrected despite the results of the leakage test and the test shall be repeated until it is satisfactory to the ENGINEER.

d. Leakage.

Leakage is defined as the amount of water that must be added to the test section to maintain the test pressure. The duration of the test shall be 2 hours. At the end of the test, the Contractor shall meter and record accurately the amount of water required to restore the test pressure in the section being tested. The allowable leakage shall be determined by the following formula:

$$L = S \cdot D \cdot [P^{0.5}] / 133,200$$

Where,

L	=	Allowable leakage, in gallons per hour
S	=	Length of the test section, in feet
D	=	Diameter of the pipe being tested, in inches
$P^{0.5}$	=	Square root of the average test pressure

If the test shows any section with leakage greater than the allowable, the leak shall be located and repaired and the section retested.

## 12-2.2. OTHER TESTS.

Other tests, as required for equipment, storage facilities, etc., shall be conducted in accordance with the applicable specifications.

## 12-3. DISINFECTION.

All existing facilities exposed to possible contamination and all new facilities shall be thoroughly disinfected and tested for the absence of coliform organisms before placing or replacing into service. All disinfection shall be with chlorine or chlorine compounds in such amounts as to produce a concentration of at least 50 mg/1 and a residual of at least 25 mg/1 at the end of 24 hours.

Disinfection shall be in accordance with State Regulations.

### 12-3.1. GENERAL.

The general procedure for disinfection is outlined as follows:

- a. The CONTRACTOR shall prevent any contaminating materials from coming into contact with the facilities by utilizing good construction procedure.
- b. The CONTRACTOR shall remove all possible contaminating materials by flushing or other means.
- c. The CONTRACTOR shall chlorinate any residual contamination that may remain and dispose of the chlorinated water.
- d. The CONTRACTOR shall determine the bacteriological quality of the water through certified laboratory testing.

### 12-3.2. FORMS OF CHLORINE.

The forms of chlorine that may be used in the disinfection process are liquid chlorine, sodium hypochlorite solution, and calcium hypochlorite granules or tablets. The procedure for use and handling of the chlorine shall be in strict compliance with all AWWA and applicable safety standards.

Liquid chlorine contains 100 per cent available chlorine and is produced by mixing chlorine gas with water and injecting the solution into the facilities being disinfected. Direct feed of chlorine gas into the main shall not be permitted.

Sodium hypochlorite is in liquid form and contains approximately 5 to 15 per cent available chlorine. It is fed into the facilities by hand-pouring and mixing with the incoming water or by pumping a solution of known strength into the facilities.

Calcium hypochlorite is in either granular or tablet form and contains approximately 65 per cent available chlorine by weight. It is fed into the facilities by hand-pouring or pumping as described above. One pound of calcium hypochlorite added to 8.5 gallons of water produces a 1 per cent solution.

### 12-3.3. PREVENTIVE AND CORRECTIVE MEASURES DURING CONSTRUCTION.

It is essential that the facilities are thoroughly clean prior to disinfection and good construction procedures shall be used.

If, in the opinion of the ENGINEER, it appears that all dirt and debris cannot be removed hydraulically, the facilities shall be mechanically cleaned and swabbed with a 1 per cent hypochlorite disinfecting solution.

In cases of pipe contamination by flooding during installation, the main shall be flushed until clean and disinfected so that a 25 mg/l solution is maintained at the end of a 24 hour period. After cleaning and disinfecting, construction may resume.



### 12-3.4. DISINFECTION OF NEW MAINS.

Two methods of disinfecting mains are offered and the CONTRACTOR shall be responsible for selecting the method best suited for the conditions encountered.

#### a. Preliminary Flushing.

Preliminary flushing to remove visible evidence of contamination shall be at a rate to produce a velocity of 2.5 fps within the main unless it is determined by the ENGINEER that conditions do not permit the flow. As a guide, Table 12-1 shows the required flow and number of openings to produce a flushing velocity of 2.5 fps in various size mains at 40 psi residual pressure. It shall be the CONTRACTOR'S responsibility to verify the rate required for the actual field conditions.

Pipe Diameter Inches	Flow Required To Produce 2.5 fps Velocity in Main GPM	TYPE OF DISCHARGE OUTLET		
		Size of Main,** Tap On Inches	Hydrant Outlets	
			Number	Size, Inches
4	100	0-15/16	1	2-1/2
6	220	1-3/8	1	2-1/2
8	390	1-7/8	1	2-1/2
10	610	2-5/16	1	2-1/2
12	880	2-13/16	1	2-1/2
16	1,565	2-5/8	2	2-1/2

\* With a 40 psi pressure in the main with the hydrant flowing to atmosphere, a 2-1/2 inch hydrant outlet will discharge approximately 1,000 GPM. A 4-1/2 inch hydrant outlet will discharge approximately 2,500 GPM.

\*\* Size of tap on main, with no significant length of discharge piping.

#### b. Methods of Application.

All sections being disinfected shall be properly valved or otherwise disconnected to prevent the strong chlorine solution from entering the mains in active service. All valves and hydrants within the section shall be operated to assure contact with the disinfectant.

Two acceptable methods of application are as follows:

##### 1. Tablet Method.

This method may be used only when the pipes and appurtenances are kept clean and dry during construction and for mains smaller than 24 inches in diameter. It shall not be used on solvent welded plastic or screwed joint steel pipe.

Under this method, hydrostatic tests will be run while disinfection is taking place. If any leaks are detected and the main is either partially or completely drained to make the necessary repairs, the CONTRACTOR shall start the disinfection over using the continuous feed method.

During construction, 5-g calcium hypochlorite tablets shall be placed in each section of pipe and one tablet in each hydrant, hydrant branch and other appurtenances. The number of tablets to place in each pipe section shall be sufficient to produce a concentration of 50 mg/l. As a guide, Table 12-2 is presented. The tablets shall be attached to the inside top of the pipe with an adhesive such as Permatex No. 1 or equal.

Pipe Diameter, Inches	Length Of Pipe Section				
	13 Feet or Less	18 Feet	20 Feet	30 Feet	40 Feet
4	1	1	1	2	2
6	2	2	2	3	4
8	2	3	3	5	6
10	3	5	5	7	9
12	5	6	7	10	14
16	8	12	14	20	26

Preliminary flushing of the main is eliminated for this method. The mains shall be filled as specified herein and chlorinated water shall remain in the main for 24 hours unless the water temperature is less than 41 degrees Fahrenheit, in which case the contact time shall be extended to 48 hours. After the required contact time, and verification of the 25 mg/l residual, final flushing of the main shall take place as specified.

## 2. Continuous Feed Method.

This method is suitable for general applications. Initial filling, testing and preliminary flushing shall be in accordance with the procedures previously set forth.

The main shall be refilled at a constant measured rate while injecting chlorinated solution into the main at a point no further than 10 feet downstream from the beginning. The chlorine shall be continuously fed into the main at a constant rate such that the water in the main has a concentration of at least 50 mg/l free chlorine. Measurements shall be taken at regular intervals along the new main to assure that this concentration is maintained. The contact time shall be 24 hours and the free chlorine residual at the end of the contact period shall not be less than 25 mg/l as specified. After verification of the residual, final flushing may take place.

Table 12-3 gives the amount of chlorine required to produce 50 mg/l in 100 feet of pipe for the diameters shown.

**TABLE 12-3  
CHLORINE REQUIRED TO PRODUCE 50 mg/l  
CONCENTRATION IN 100 FEET OF PIPE BY DIAMETER**

Pipe Diameter Inches	100 Per Cent Chlorine Pounds	1 Per Cent Chlorine Solution Gallons
4	.027	0.33
6	.061	0.73
8	.108	1.30
10	.170	2.04
12	.240	2.88
16	.435	5.20

#### 12-3.5. MISCELLANEOUS DISINFECTION.

All cutting into or repairing of existing mains and all pumps, valves and appurtenances in a treatment plant, coming into contact with a potable water, shall be thoroughly cleaned and then shall be swabbed or sprayed with a 1 per cent hypochlorite solution before installation. Flushing, the most practical means of removing contamination introduced during repairs, shall be started when the repairs are completed and shall be continued until discolored water is eliminated.

#### 12-3.6. DISINFECTION OF STORAGE FACILITIES.

Two methods of disinfecting storage facilities are offered and it shall be the CONTRACTOR'S responsibility to select the method best suited for the conditions.

##### a. Method 1.

For this method, the storage facility shall be slowly filled to the overflow with potable water to which enough chlorine has been added to provide a concentration of at least 50 mg/l and a residual of 25 mg/l at the end of the 24 hour contact period. The chlorine shall be introduced into the water as early during the filling operation as possible. Approximately 60 pounds of high test hypochlorite will produce 50 mg/l in 100,000 gallons of water.

After verification of the residual, the facility may be flushed as specified herein.

##### b. Method 2.

For this method, a solution of 250 mg/l available chlorine shall be applied directly to all surfaces of the storage facility that come in contact with the potable water including inlet piping. The solution shall be applied with suitable brushes or spray equipment and the necessary safety precautions shall be taken.

The spraying procedure shall be repeated within 1 hour of completion of the initial spraying. After completion of the second spraying and within 30 minutes of completion, the tank shall be drained and the filling procedure started.

12-3.7. FINAL FLUSHING.

After the specified contact time and after verification of the chlorine residuals, the heavily chlorinated water shall be flushed from the system. Flushing shall be done in a manner to protect the environment and the chlorinated water shall be neutralized with a reducing agent, if necessary. Water remaining in the main or storage facilities shall have a chlorine concentration no higher than that generally prevailing in the system but no less than 1 mg/l.

12-3.8. BACTERIOLOGICAL TESTS.

After final flushing, and before the new main is placed in service, a sample or samples shall be collected from the ends of the lines and tested by an approved laboratory to show the absence of coliform organisms. The results shall conform with the applicable State Standards. State Regulations regarding the method of collecting samples, the number of samples required and any other conditions, more stringent than those specified, shall prevail.

The ENGINEER shall be furnished with a copy of the State approved bacteriological test report before the facilities are put into service.

12-3.9. REDISINFECTION.

If the initial disinfection fails to produce satisfactory results, the facility shall be reflashed and resampled. If the additional samples reveal contamination, the facility shall be drained and rechlorinated. At the CONTRACTOR'S discretion, samples of the water entering the facility may be tested as well.

## SPECIFICATION 14

### ASSOCIATED MISCELLANEOUS WORK

#### 14-1. GENERAL.

This Specification covers the furnishing of all labor, materials and equipment for associated miscellaneous work to be incorporated in the project. All materials and equipment shall be new and unused and workmanship shall be of the highest quality and in accordance with the best standard practice to result in a finished product ready for the use intended.

Payment for associated miscellaneous work, unless itemized in the proposal, shall be included in the lump sum or unit price of the particular work item and there shall be no additional payment.

#### 14-2. LANDSCAPING.

This work shall include final grading, seedbed preparation and seeding and/or planting for replacement of areas disturbed during the work and for other sites or areas designated for landscaping. No item of work shall be considered complete until completion of landscaping.

Seeding and planting shall be done during the proper season and moisture conditions established by good horticultural practices to insure the best results. The CONTRACTOR shall be responsible for a good stand of grass and healthy plants for one year.

##### 14-2.1. FINAL GRADING AND SEEDBED PREPARATION.

Final grading shall be to the lines, grades and elevations shown on the Plans. Surface drainage shall be away from any structures and no low spots shall exist.

Six inches of topsoil, free from roots, stones and other objectionable material, suitable for top dressing of a seedbed shall be used in all areas designated for landscaping where gravel, stones, clay and other unsuitable materials exist as determined by the ENGINEER.

After final grading and application of topsoil, if required, the CONTRACTOR shall take soil samples (by the approved method) from all areas of differing soil conditions as directed by the ENGINEER. These samples shall be taken to the local farm bureau for a soil analysis that shall form the basis for lime, nitrogen, phosphoric acid and potash to be used for the particular seeds and/or plantings.

The agricultural lime and fertilizer shall be applied uniformly over the area and the seedbed shall be prepared to a minimum depth of three inches. All clods, rocks, roots and other undesirable material shall be removed. Gentle berms shall be constructed around the various units and all areas shall be dressed by hand to form a satisfactory seedbed as approved by the ENGINEER.

##### 14-2.2. SEEDING AND PLANTING.

Seeding and planting shall be performed immediately after the seedbed has been prepared and seed shall be uniformly distributed over the area to be seeded.

All plants and trees shall be delivered to the site balled or potted, shall have a healthy appearance and shall be guaranteed by the nursery. All seed shall be delivered to the site in sealed bags certified to show the percentage of purity and germination. Lawn replacement of

areas disturbed during the work shall be of the same grass variety as the original lawn. If this cannot be determined, a certified lawn mixture shall be furnished and the application rate of any grass variety shall be as recommended on the container or tag. Any other areas where the seed variety is not specified shall be seeded with Kentucky 31 fescue at the rate of 35 pounds per acre. No seed shall have a test date of more than 120 days before the date of the seeding.

Mulch consisting of wheat or rye straw, or threshed fescue straw, shall be applied uniformly over all seeded areas at the rate of 2 tons per acre. The mulch shall be stabilized (especially on slopes) by stakes and twine; a weighted disk set straight; or any method approved by the ENGINEER.

### 14-3. ROADWAYS AND BLACKTOPPING.

This work applies to repairing an existing bituminous concrete road or drive or construction of a new bituminous concrete road or drive. This consists of the base course, prime or tack coat and surface course.

#### 14-3.1. SEASONAL AND WEATHER LIMITATIONS.

No bituminous concrete shall be laid between November 15 and April 1, nor when the temperature is below 40 degrees F except by written permission of the ENGINEER, nor when the underlying course is wet, nor when other weather conditions are unsuitable.

#### 14-3.2. BASE COURSE.

The base course shall be 8 inches of compacted bank gravel or 6 inches of compacted dense grade crushed stone. Either base course used shall be approved for highway use. The base course shall be accurately graded to provide adequate drainage both off of and away from the roadbed. New surfaces shall be uniformly crowned at 1/2 inch per foot unless otherwise shown on the Plans. The base course shall be compacted by a roller weighing not less than 3 tons.

#### 14-3.3. REPAIRS TO EXISTING SURFACES.

Where an existing surface is destroyed and repairs are specified, the entire area so disturbed shall be thoroughly cleaned and the base course (specified above) shall be compacted in 4 inch layers to the required depth for making the new surface level with the existing surface.

#### 14-3.4. PRIME COAT.

A prime coat to seal and stabilize the surface of the base shall be liquid asphalt MC-1, liquid asphalt RC-2, or CBAE primer L and shall be applied, as specified, at the rate of 0.3 gallons per square yard.

#### 14-3.5. TACK COAT.

A tack coat, to insure adhesion with an existing surface, shall be RS-2 emulsion and shall be applied at the rate of 0.1 gallon per square yard.

#### 14-3.6. SURFACE COURSE.

The surface course to be used shall be 2 inches of hot-mixed, hot-laid, bituminous concrete with the following composition limits by weight:

Passing 1/2 inch, retained on No. 4 sieve	40 - 55 %
Passing No. 4, retained on No. 10 sieve	15 - 30 %
Passing No. 10 sieve	15 - 30 %
Hydrated lime	0.5 - 1.0%
Asphalt cement (other than liquefier)	5.0 - 7.5%
Liquefier	0.4 - 1.2%

#### 14-4. GENERAL CLEANUP.

Cleanup, as directed by the ENGINEER, shall be maintained throughout the time of construction. Trench settlement and additional earth fill, if required, shall be included in cleanup and shall be the responsibility of the CONTRACTOR for one year after substantial completion.

All areas and locations of the work under this contract shall be left in a neat and clean condition. All debris, scrap, waste and other undesirable and objectionable material shall be completely removed from the site. All areas shall be restored and/or replaced to a condition equal to or better than conditions before construction and to the satisfaction of the property owner.

#### 14-5. CHAIN LINK FENCE.

This article shall govern all material, equipment, labor and construction complete for a chain link fence and gates as shown on the Plans.

##### 14-5.1. POSTS, RAILS AND BRACES.

All structural and roll-formed shapes shall conform with provisions of ASTM A123 for galvanized coating and all tubular members shall comply with provisions for ASTM A120, Schedule 40 steel pipe.

- a. End, corner, pull and gate posts shall be 3 inch O.D. set 3 feet deep in concrete footings with 3 inches of concrete below.
- b. Line posts (10'-0" maximum spacing) shall be 2 inch O.D. and shall be set 3 feet deep in concrete footings with 3 inches of concrete below.
- c. Top rails and gate posts shall be 1-5/8 inch O.D.

##### 14-5.2. CHAIN LINK FABRIC.

The fabric shall be 2 inch mesh, No. 9 gauge, heavy galvanized with 2.0 ounces zinc per square foot complying with ASTM A392, Class 2, or aluminum coated complying with ASTM A491, Class 2. The chain link fabric shall be 6'-0" in height.

##### 14-5.3. ACCESSORIES.

All accessories, except tie wires and barbed wire, shall be galvanized to comply with ASTM A153.

- a. Barbed wire supporting arms shall be integral with post top weather cap, shall have hole for passage of top rail and shall support 3 strands of barbed wire at an angle of 45 degrees.

- b. Barbed wire shall have 2 strand, 12-1/2 gauge wire with No. 14 gauge, 4 point round barbs and shall be galvanized per ASTM A121, Class 3.
- c. Fabric ties shall be No. 9 gauge aluminum wire and shall be spaced at 14 inches o/c on the posts and 24 inches o/c on the rails.

#### 14-5.4. GATES.

Fabricated gates, as shown on the Plans, shall be adequately braced for proper operation and to prevent sagging. Gate hardware shall be heavy galvanized and shall include:

- a. Hinges of pressed steel or malleable iron of the non-lift-off type, offset to permit 180 degrees gate opening.
- b. Latch of the forked type or plunger-bar type with a padlock eye to permit operation from either side of gate.
- c. Keeper for all vehicle gates to engage automatically and hold the gate in the open position until manually released.
- d. Double gates provided with a mushroom-type or flush plate with anchors set in concrete to engage the center drop rod.

#### 14-6. FARM-TYPE FENCE.

The farm-type fence and gate(s) shall be woven wire with barbed wire above and below as shown on the detailed Plans.

##### 14-6.1. FENCE MATERIALS.

- a. Barbed Wire.

Barbed wire shall be 12-1/2 gauge steel and shall comply with ASTM A121 and shall have Class 2 zinc coating.

- b. Woven Wire.

Woven wire shall be general-purpose field wire, closely spaced at the bottom with 10 gauge top and bottom wires and 12-1/2 gauge line and stay wires. It shall be 32 inches in height, have 6 inch spacing between stays and shall contain 8 line wires. It shall have an ASTM A116, Class 1 zinc coating.

- c. Brace & Tension Wire.

Brace and tension wire shall be 9 gauge steel, shall comply with ASTM A121 and shall have a Class 2 zinc coating.

- d. Staples.

Staples shall be 9 gauge, 1-1/2 inches long and shall be zinc coated.

- e. Posts.

Wooden posts shall be new, straight and sound and shall be pressure treated in accordance with Federal Specification TT-W-571c.



Steel posts shall be the studded tee type, galvanized with minimum dimensions of 1-1/2 inches x 1-1/2 inches x 1/8 inch.

All end, corner, brace and gate posts shall be wood, having a minimum diameter of 6 inches and shall be set 3-1/2 feet deep.

Line posts, set 2-1/2 feet deep, shall be either wood with a minimum diameter of 4 inches or steel tee type posts that may be substituted between each fifth wooden post.

f. Wooden Braces.

Wooden braces shall be installed between brace posts and end posts or gate posts and shall be 4 inch x 4 inch pressure treated lumber.

14-6.2. CONSTRUCTION.

Construction of the farm-type fence shall be in accordance with the detailed Plans and wood posts shall be set at all corners, angles, ends and gates with wooden brace posts set as shown on the Plans. All posts shall be set to the required depth in holes large enough to allow room for alignment and tamping on all sides. They shall be set vertically, shall be firmly tamped and the tops shall be beveled at 45 degrees.

Wire shall be fastened to the post outside of the area being enclosed, except in corners or curves, where the wire shall be placed on the outer side of the corner or curve. The wire shall be placed as shown on the Plans with a single strand of barbed wire near the bottom, the 32 inch woven wire in the center and two strands of barbed wire above the woven wire.

The wire shall be attached to the wood posts with staples and to the steel posts with approved fastener clips. Staples and/or fasteners shall allow horizontal movement of the line wire and shall securely support the fence. At end and gate posts, the wire shall be wrapped once around the post and secured by splicing each line wire to itself with no less than six complete turns.

Gates shall be installed at locations shown on the Plans and shall be considered a part of the complete fence.

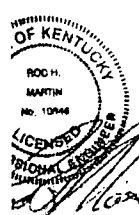
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## INDEX

P	TITLE
	COVER
	OVERALL MAP
	OVERALL MAP
	CRANE POND ROAD, KY. HWY. 762 AND McCORMIC ROAD
	PARKWAY CROSSING DETAIL
	KY HWY 369, VAUGHT RD. AND RENFROW - HORSE BRANCH RD.
	WATER SYSTEM STANDARDS

RECEIVED  
MAY 1 8 1999  
PUBLIC WORKS DIVISION  
COMMUNITY DEVELOPMENT

99-212



SET NO. 12

# DISTRICT

# ENTS

## INDEX

EET

TITLE

1

COVER

INDEXED  
SERVICES  
1989

0925

# IES I IMPROVEMENTS ACT "G"

## SIONERS

RD, CHAIRMAN  
SECRETARY  
E, TREASURER  
MORGAN  
ALBIN  
STERFIELD  
BROWN

## ERINTENDENT

PORTER

**1998**  
K - MARCH 1999)

**N & ASSOCIATES, INC.**  
ERS & SURVEYORS  
D • PADUCAH KENTUCKY 42003  
37 • FAX (502) 554-2738

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1	COVER
2	OVERALL MAP
3	OVERALL MAP
4	CRANE POND ROAI McCORMIC ROAD
5	PARKWAY CROSSIN
6	KY HWY 369, VAUC HORSE BRANCH RI
7	WATER SYSTEM ST



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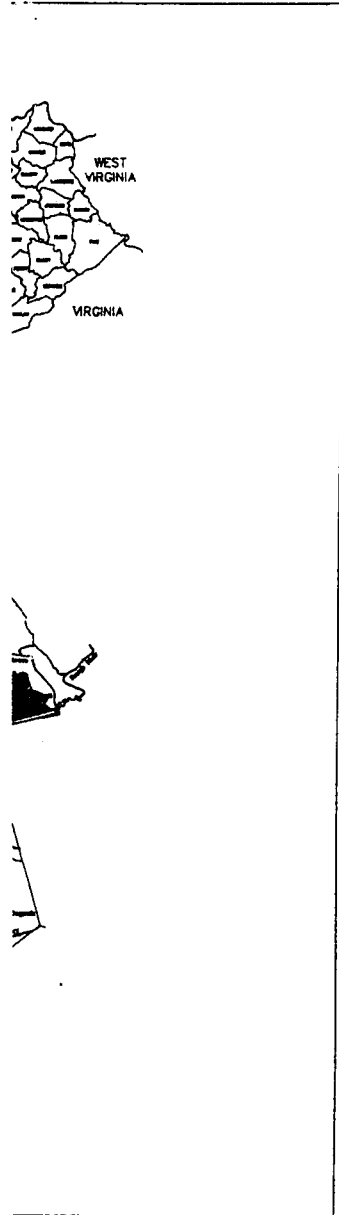
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## SIONERS

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SECRETARY  
, TREASURER  
ORGAN  
LBIN  
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ROWN

INDEX	
SHEET	TITL
1	COVER

# SERIES WATER SYSTEM IM CONTRACT



## COMMISSIONERS

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B.J. DICKENS, SECRETARY  
ERNIE WALLACE, TREASURER  
HENRY MORGAN  
EDDIE ALBIN  
BETTY WESTERFIELD  
LANE BROWN

## GENERAL SUPERINTENDENT

JAMES C. PORTER

JUNE, 1998  
(ADDITIONAL WORK - MARC)



*HUNTER MARTIN & ASSOCIATES*  
ENGINEERS & SURVEYORS  
3220 LONE OAK ROAD \* PADUCAH  
(502) 554-2737 \* FAX (502)

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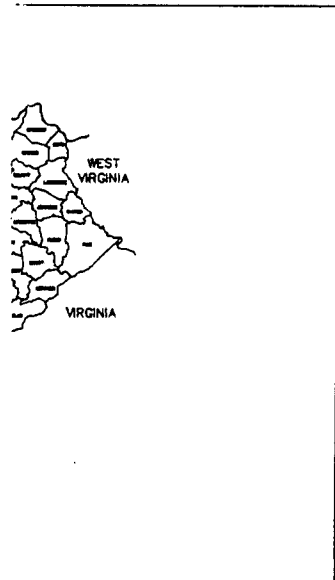
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# OHIO COUNTY, K

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# SERIES WATER SYSTEM IM CONTRACT

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## COMMISSIONERS

BERNARD BALLARD, CHAIRMAN

B.J. DICKENS, SECRETARY

ERNIE WALLACE, TREASURER

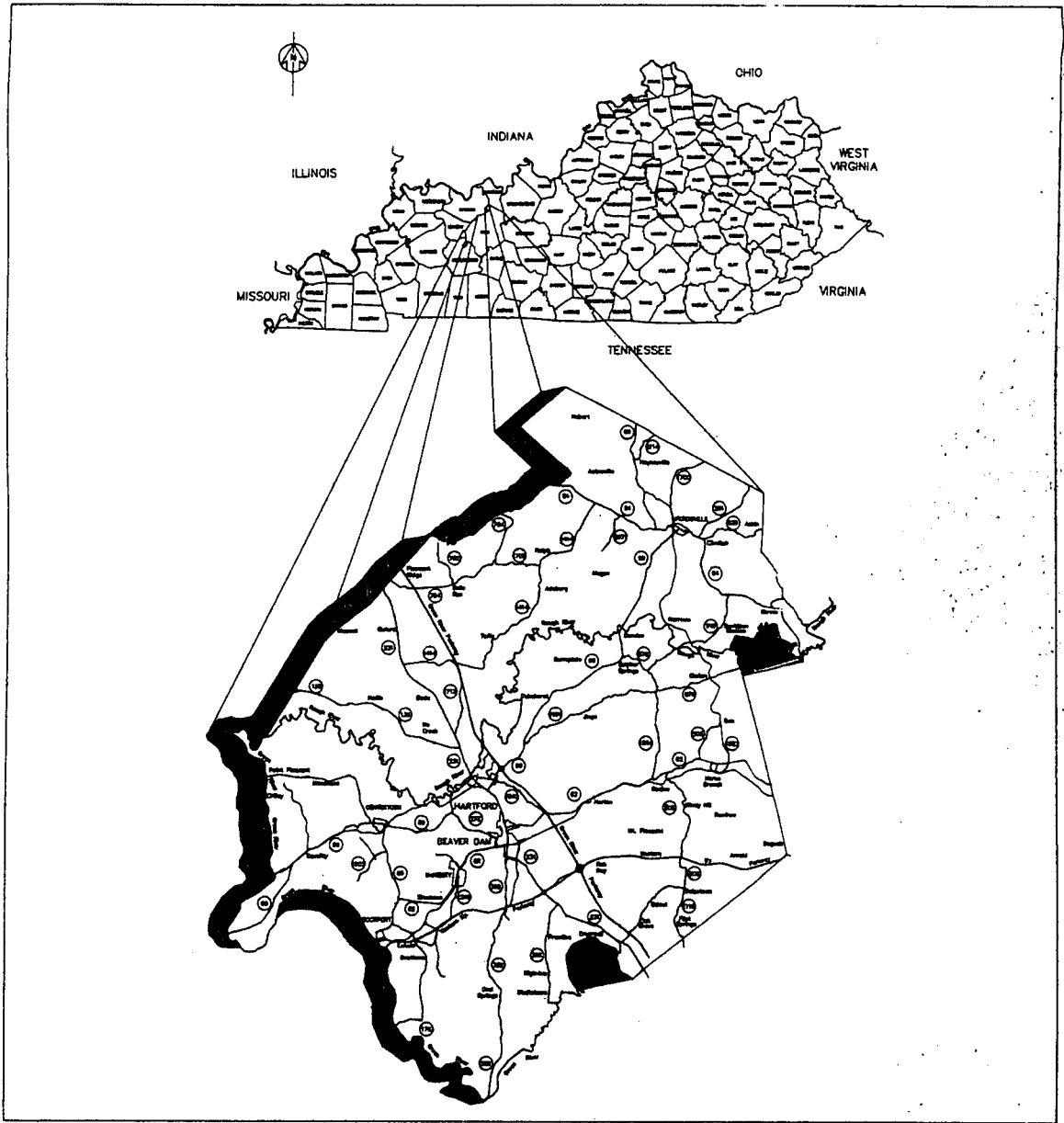
HENRY MORGAN

EDDIE ALBIN

BETTY WESTERFIELD

LANE BROWN

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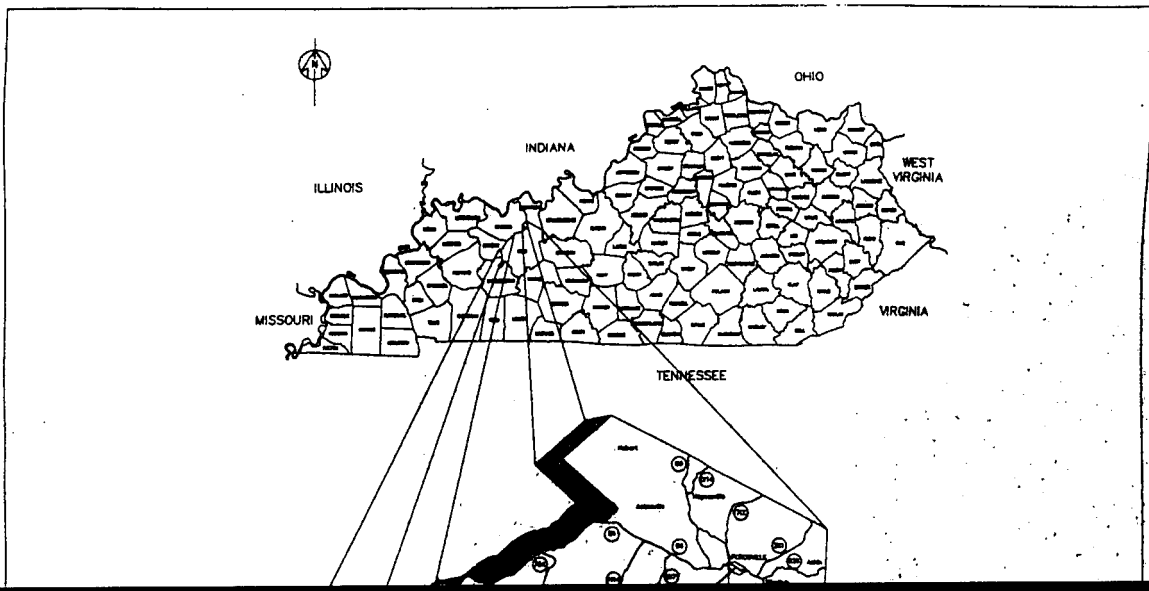
LOCATION MAP

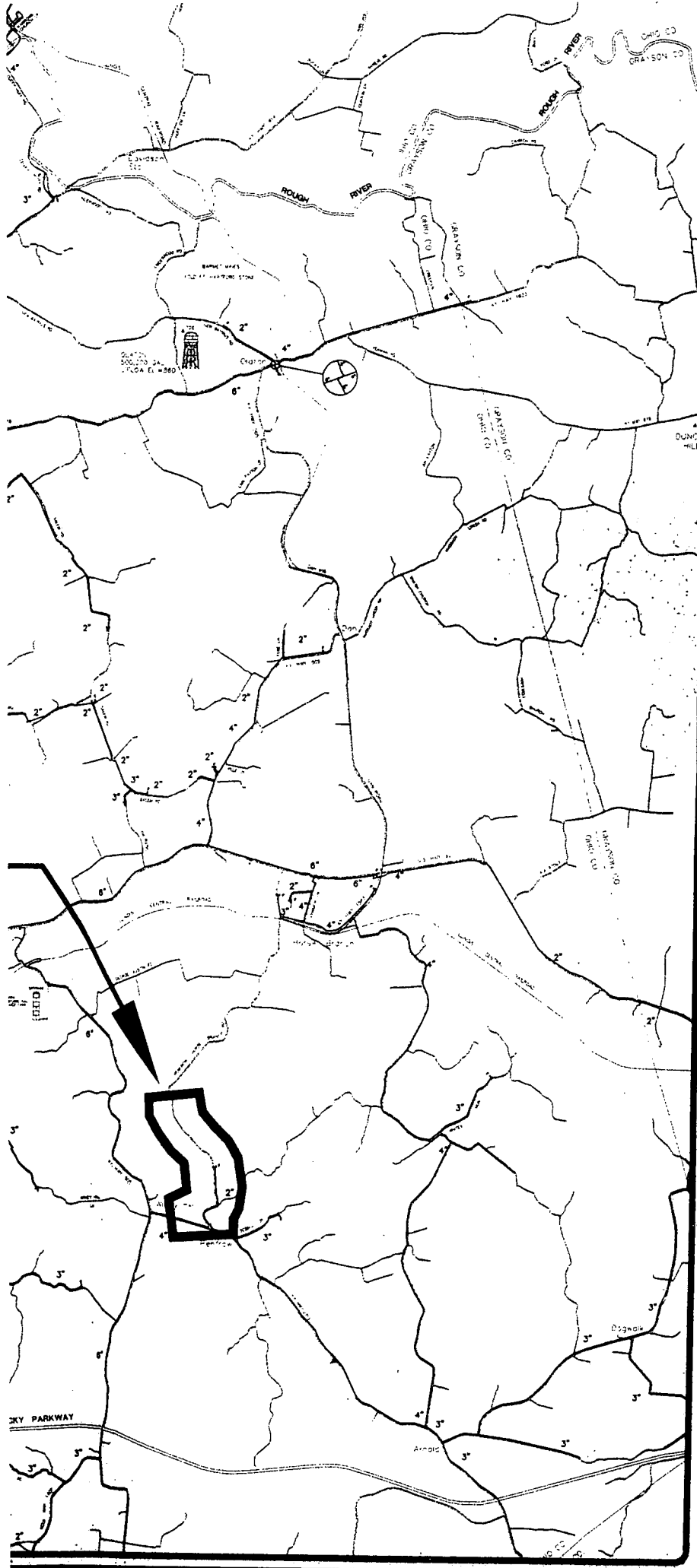


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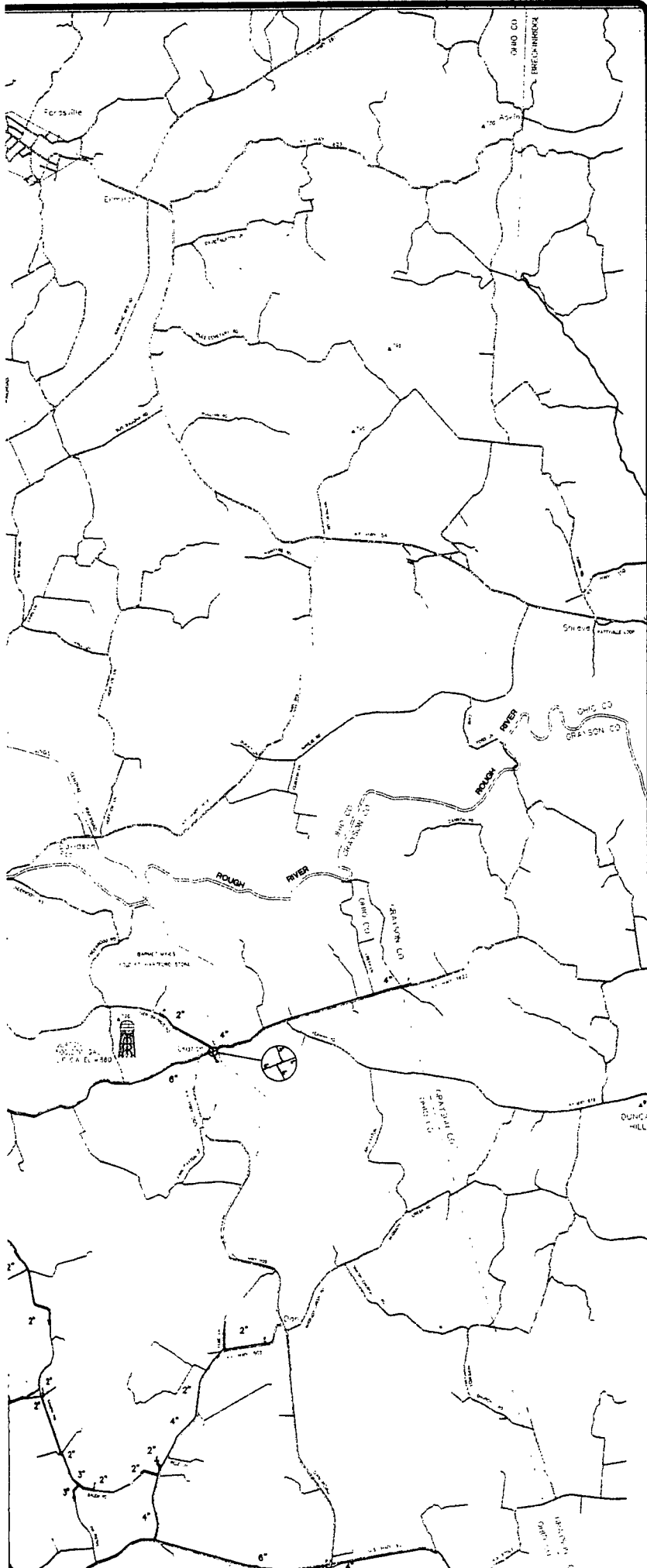


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 SDC  
 Checked by:  
 JRJ  
 File:  
 WSI97F02  
 Date:  
 3-25-99  
 Revised:

**OVERALL MAP**  
**WATER SYSTEM IMPROVEMENTS**  
**CONTRACT "G"**  
**OHIO COUNTY WATER DISTRICT**

Sheet

**G2**



**HUNTER MARTIN & ASSOCIATES, INC.**

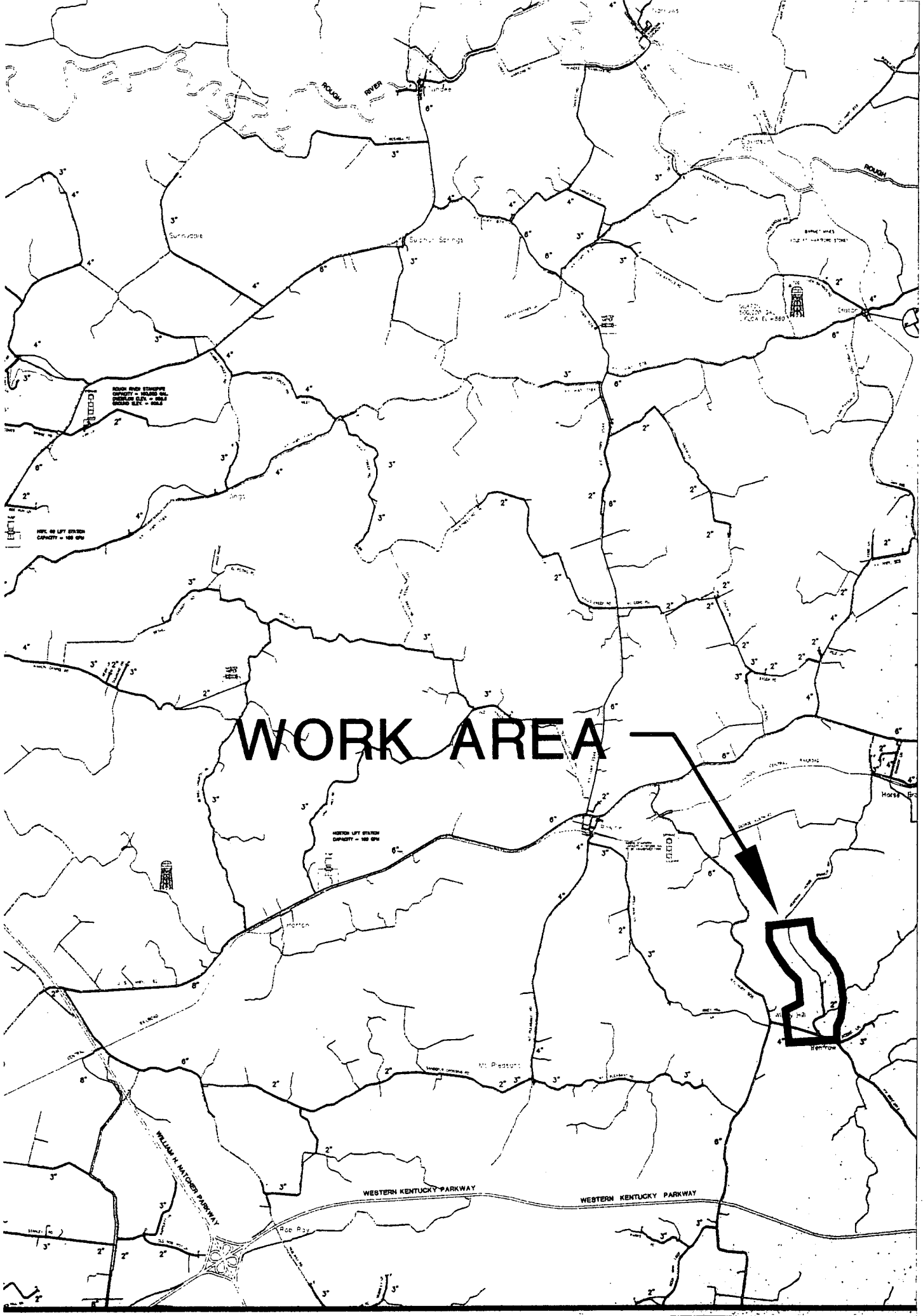
**ENGINEERS & SURVEYORS**  
 3220 LONE OAK RIDGE • PADUCAH, KENTUCKY 42003  
 (502) 534-2737 • FAX (502) 534-2738



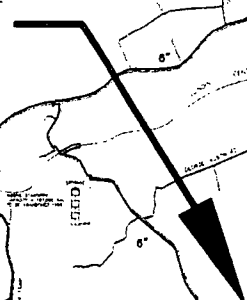
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File:	WSI97F02
Date:	3-25-99
Revised:	

**EMENTS**

**STRICT**



**WORK AREA**



ROUGH RIVER STATION  
CAPACITY = 100 GPM  
ELEVATION 815' - 818'  
DRAINAGE AREA = 100 AC

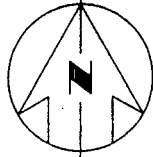
NORTH LIFT STATION  
CAPACITY = 100 GPM

ROUGH RIVER STATION  
CAPACITY = 100 GPM  
ELEVATION 815' - 818'  
DRAINAGE AREA = 100 AC

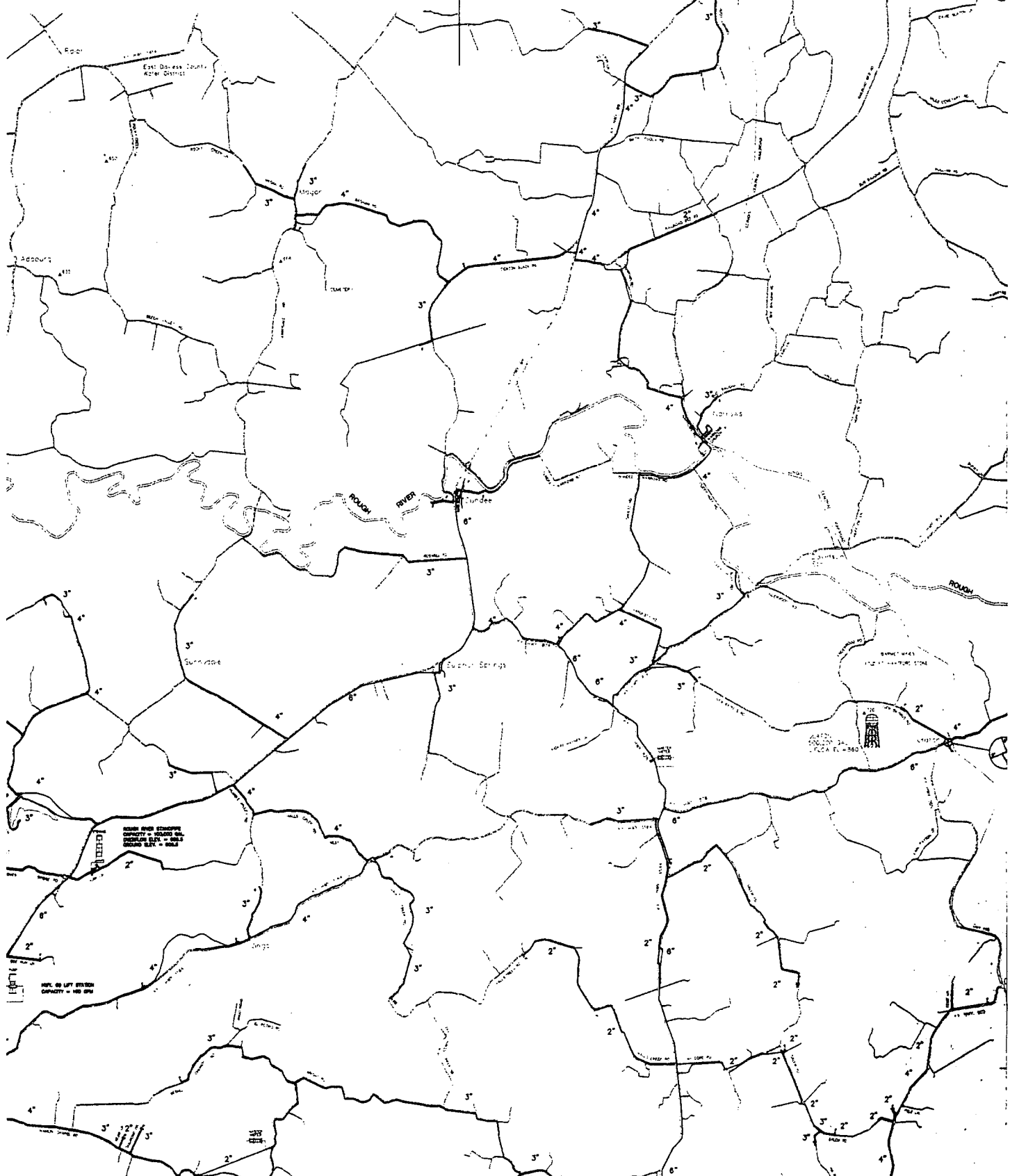
WILLIAM H. HATCHER PARKWAY

WESTERN KENTUCKY PARKWAY

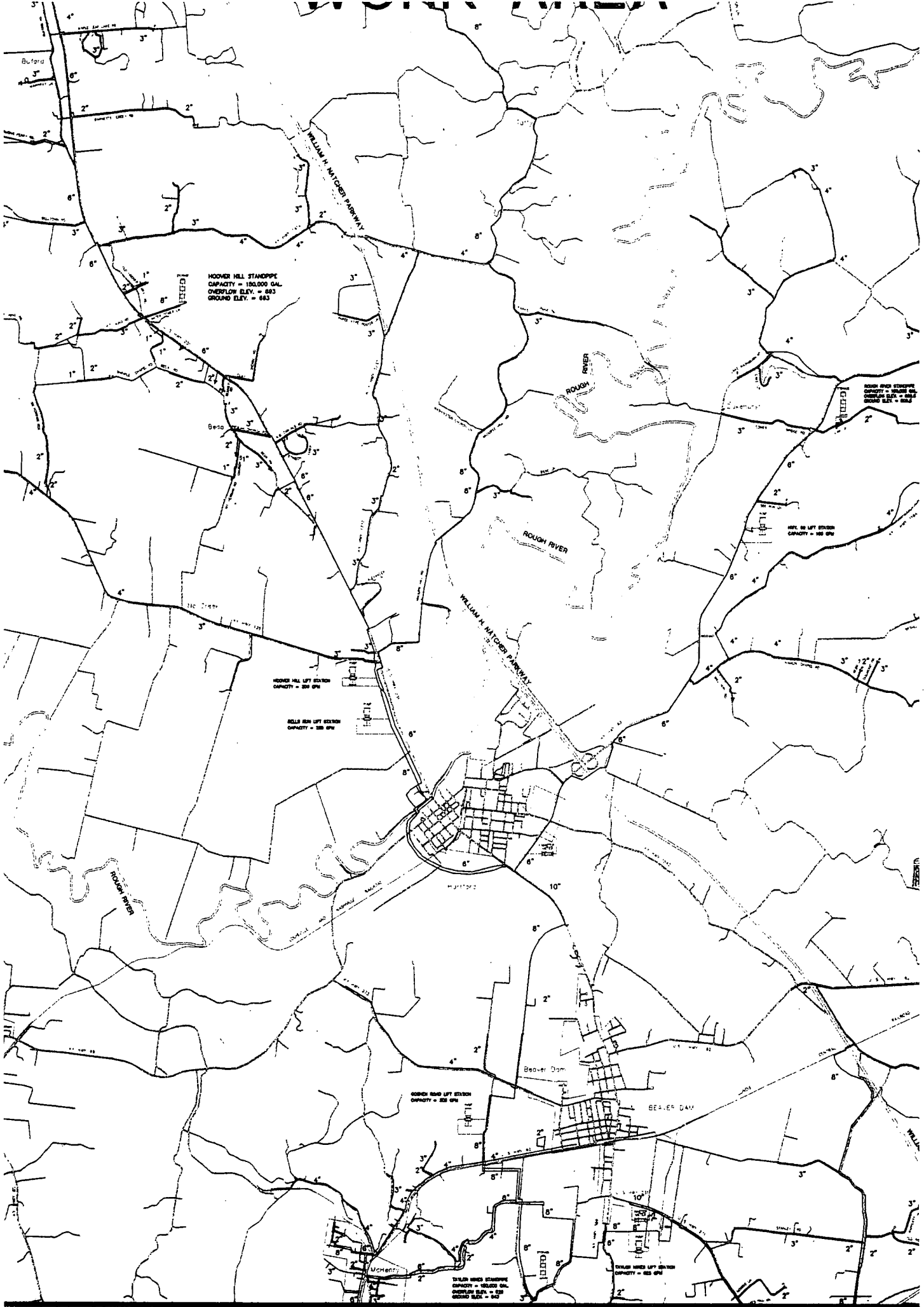
WESTERN KENTUCKY PARKWAY



SCALE: 1" = 4,000'



**WORK AREA** [arrow pointing right]



HOOKER HILL STANDOFF  
CAPACITY = 150,000 GAL.  
OVERFLOW ELEV. = 663  
GROUND ELEV. = 663

HOOKER HILL STANDOFF  
CAPACITY = 150,000 GAL.  
OVERFLOW ELEV. = 663  
GROUND ELEV. = 663

100 GPM LIFT STATION  
CAPACITY = 100 GPM

HOOKER HILL LIFT STATION  
CAPACITY = 200 GPM

HILLS HILL LIFT STATION  
CAPACITY = 200 GPM

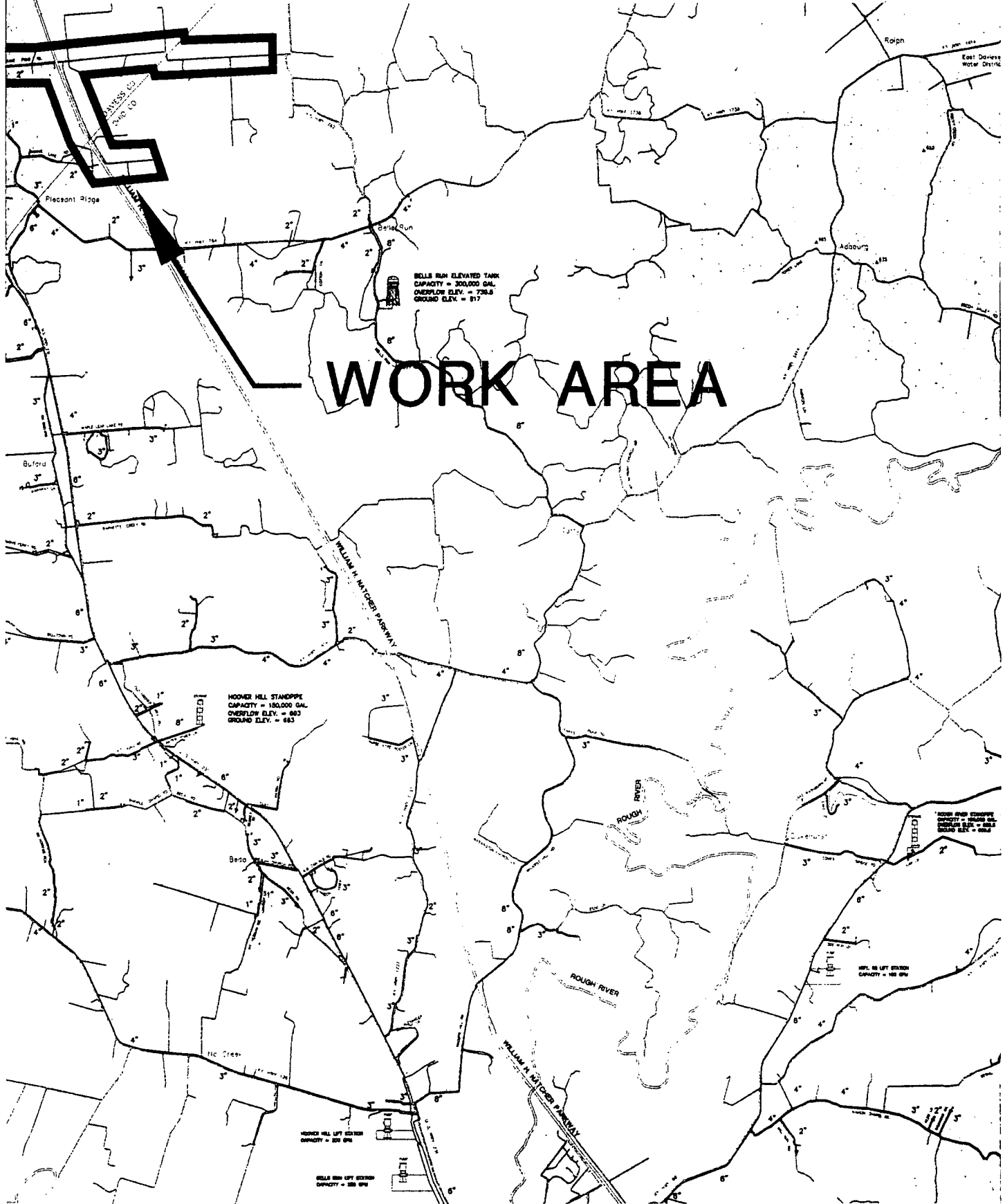
BEAVER DAM LIFT STATION  
CAPACITY = 200 GPM

HOOKER HILL STANDOFF  
CAPACITY = 150,000 GAL.  
OVERFLOW ELEV. = 663  
GROUND ELEV. = 663

HOOKER HILL LIFT STATION  
CAPACITY = 200 GPM



*Rood M. Martin*  
4-2-97



BULL RUN ELEVATED TANK  
CAPACITY = 300,000 GAL.  
OVERFLOW ELEV. = 738.5  
GROUND ELEV. = 617

HOOPER HILL STANDPIPE  
CAPACITY = 150,000 GAL.  
OVERFLOW ELEV. = 663  
GROUND ELEV. = 643

HOOPER HILL STANDPIPE  
CAPACITY = 150,000 GAL.  
OVERFLOW ELEV. = 663  
GROUND ELEV. = 643

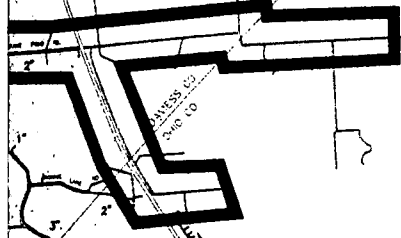
18" LF 18" DIAM  
CAPACITY = 180 GPM

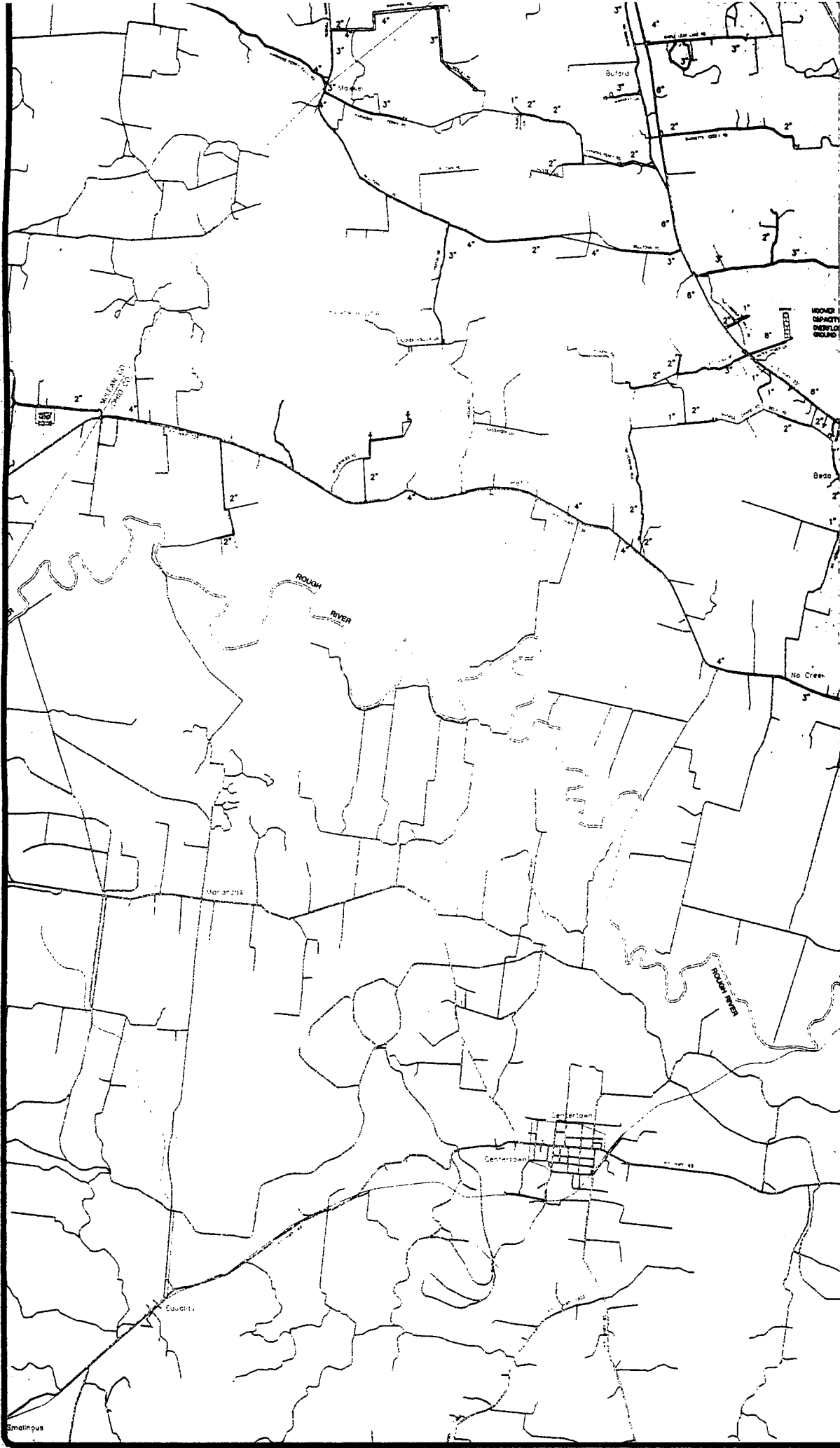
HOOPER HILL LF 18" DIAM  
CAPACITY = 180 GPM

BULL RUN LF 18" DIAM  
CAPACITY = 180 GPM

**WORK AREA**

East Darius  
Water District





WOODEN  
CAPACITY  
CHESTFLOW  
BOUND

ROUGH  
RIVER

Buda

Moore Creek

Marantz

ROUGH RIVER

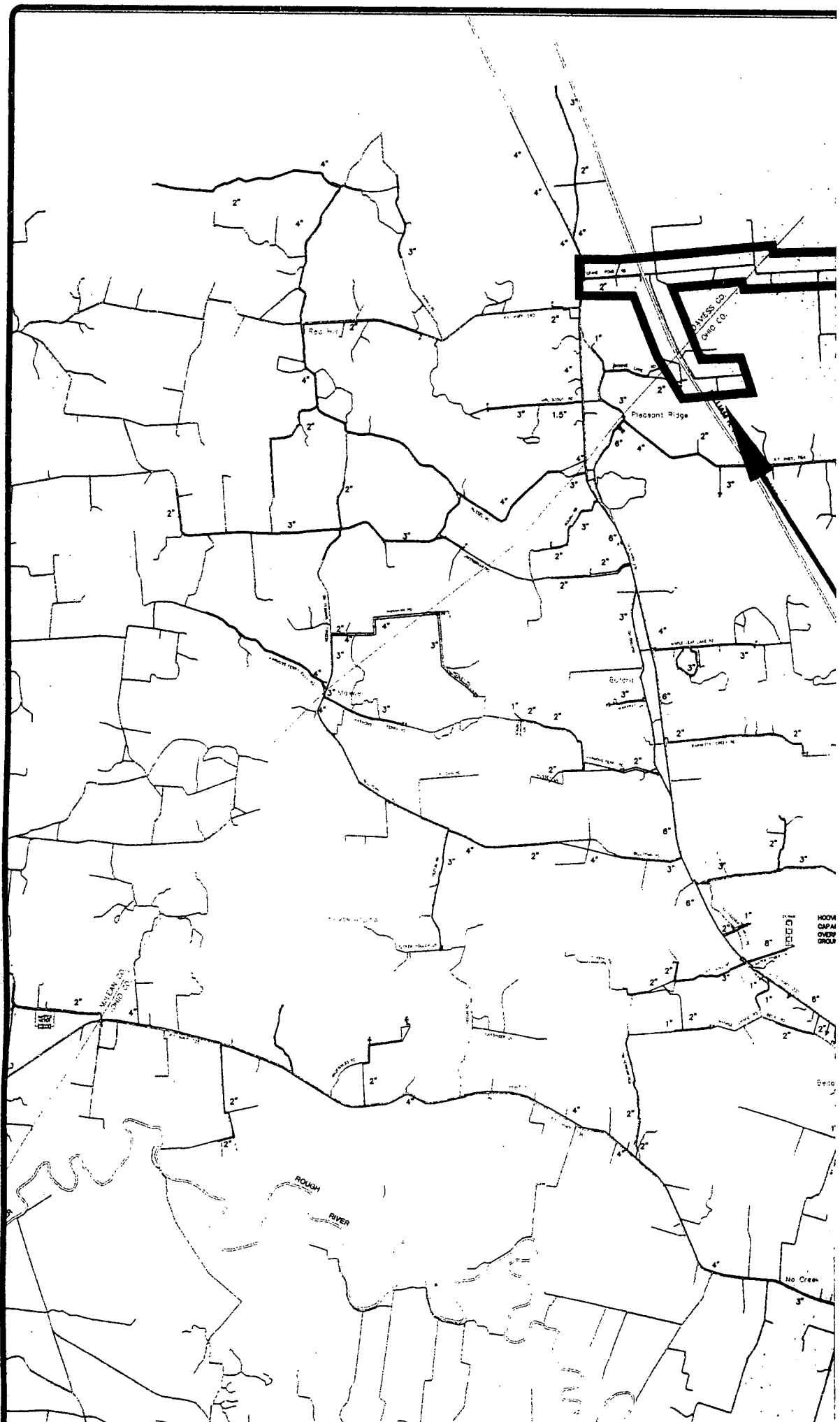
Center town

Center town

Eau Claire

Smallpox





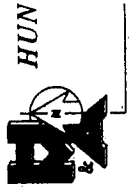
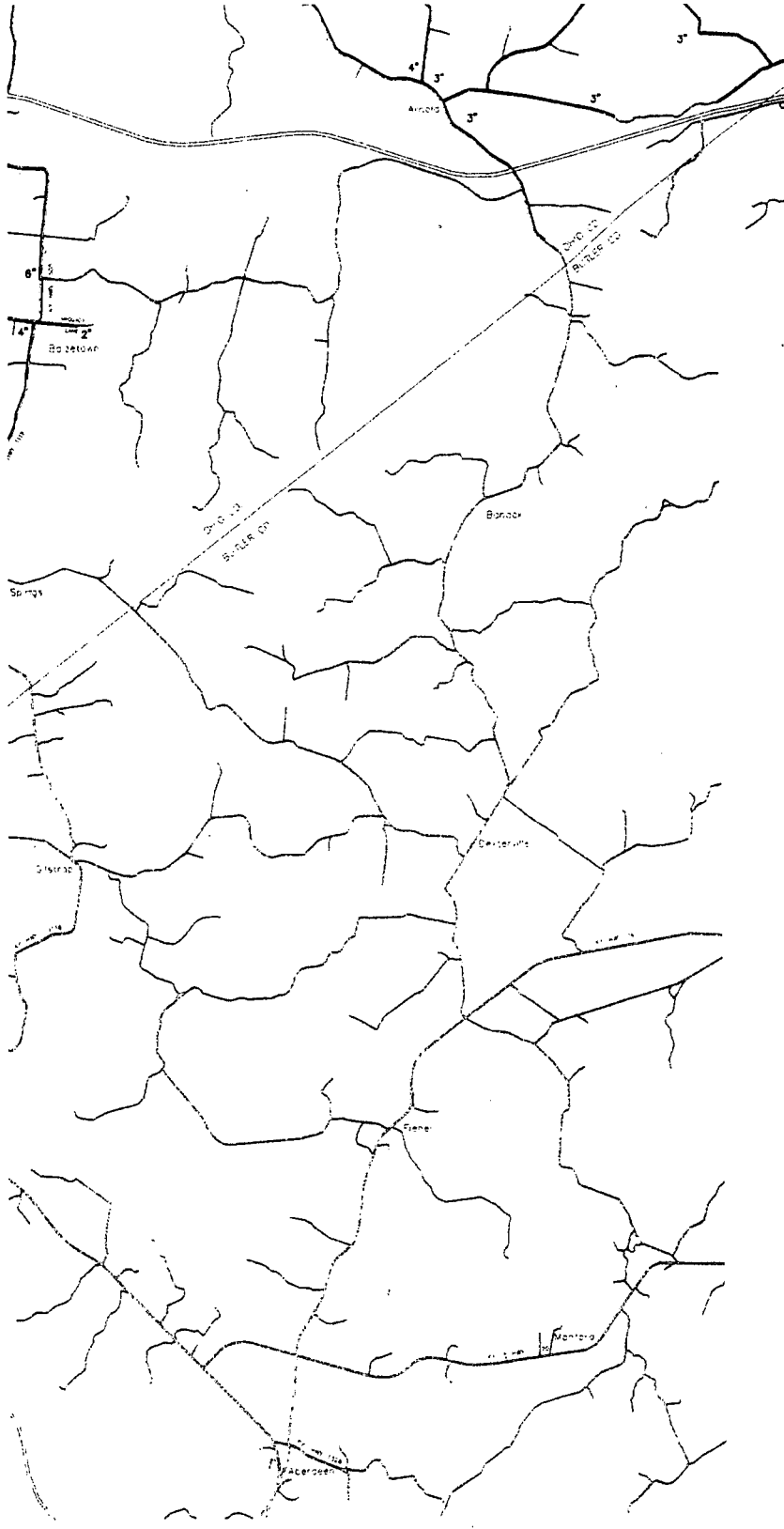
MILAN CO  
OHIO CO.

Pleasant Ridge

ROUGH  
RIVER

HOOB  
CAPM  
OVER  
CROSS

No Creek



Drawn by:  
 SDC  
 Checked by:  
 JRJ  
 File:  
 WSI97F02  
 Date:  
 3-25-99  
 Revised:

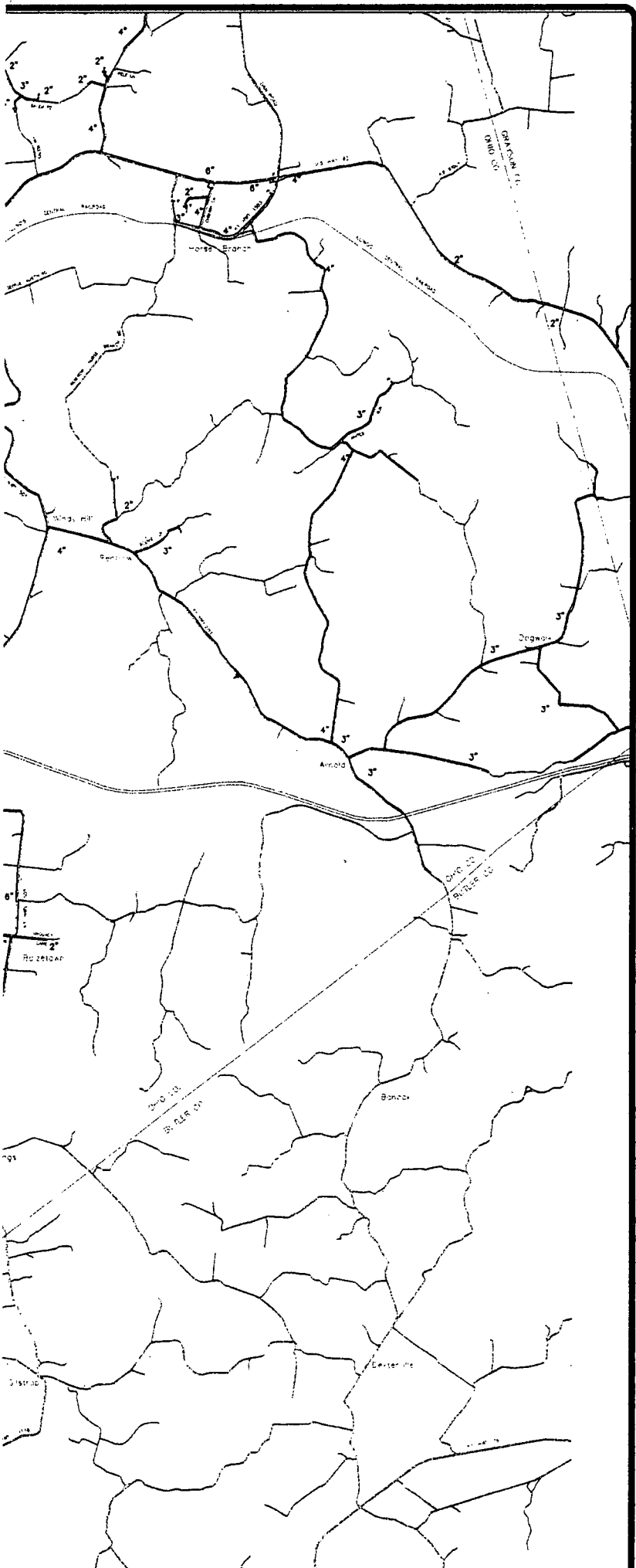
**OVERALL MAP**  
**WATER SYSTEM IMPROVEMENTS**  
**CONTRACT 'G'**  
**OHIO COUNTY WATER DISTRICT**



*Rod H. Martin*  
 3-25-99

Sheet  
**G3**

1  
 ✓  
 7



**HUNTER MARTIN & ASSOCIATES, INC.**

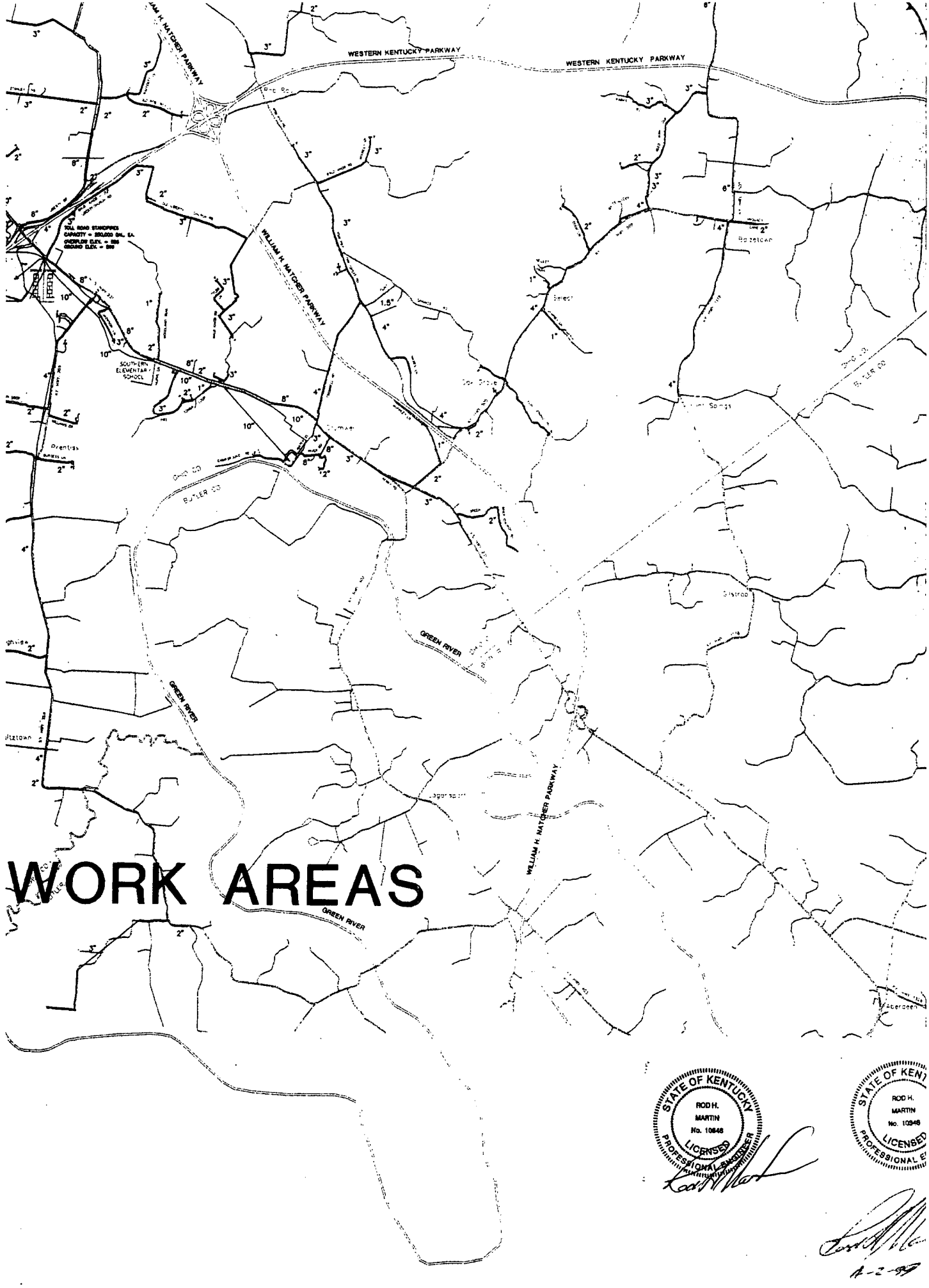
**ENGINEERS & SURVEYORS**  
 3220 LONE OAK ROAD • PADUCAH, KENTUCKY 42003  
 (502) 534-2737 • FAX (502) 534-2738



Drawn by:	SDC
Checked by:	JRJ
File:	WS197F02
Date:	3-25-99
Revised:	

**EMENTS**  
**STRICT**

Handwritten notes and signatures on the right margin, including the name 'J. F. ...' and other illegible markings.



# WORK AREAS



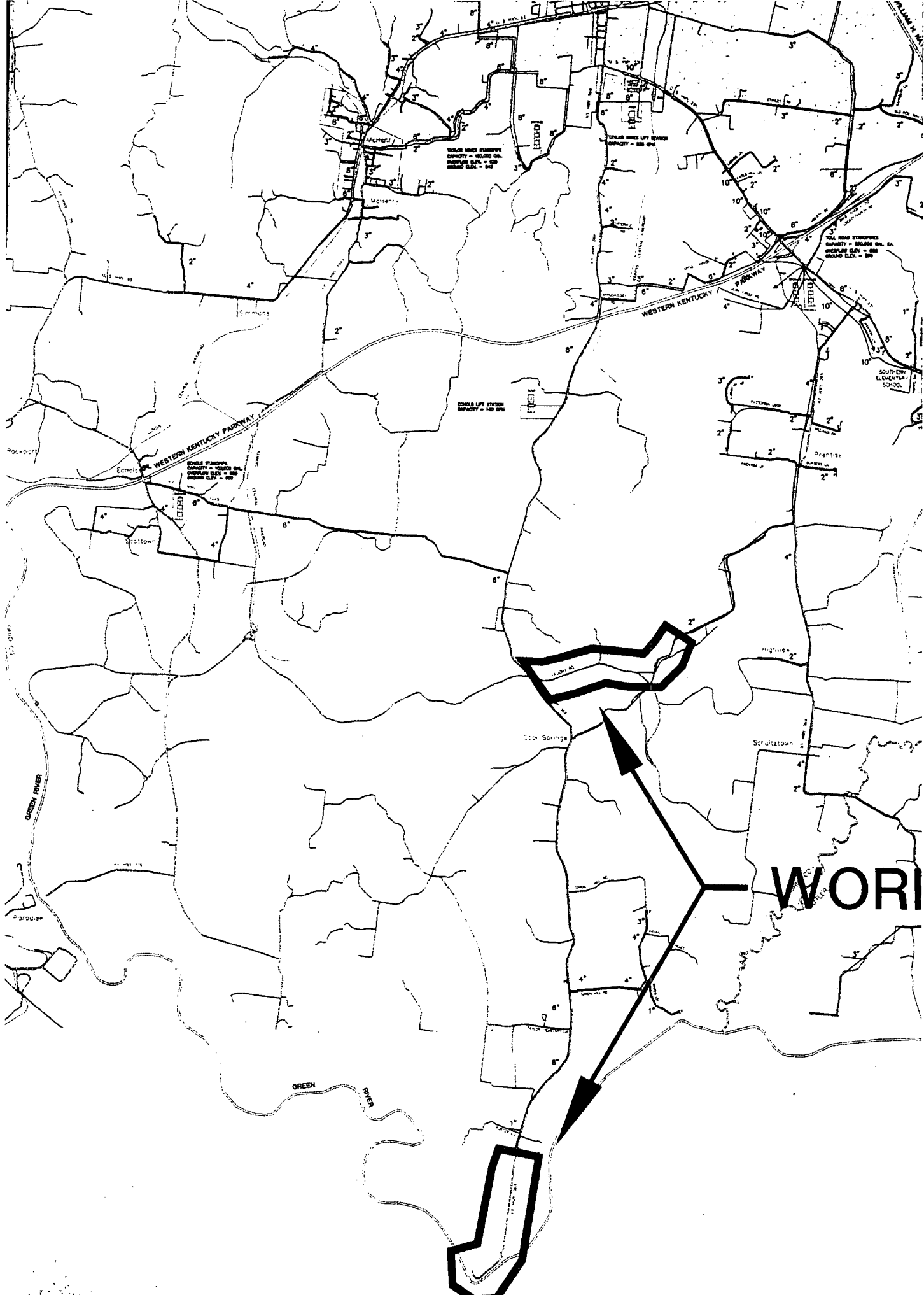
*Rod H. Martin*



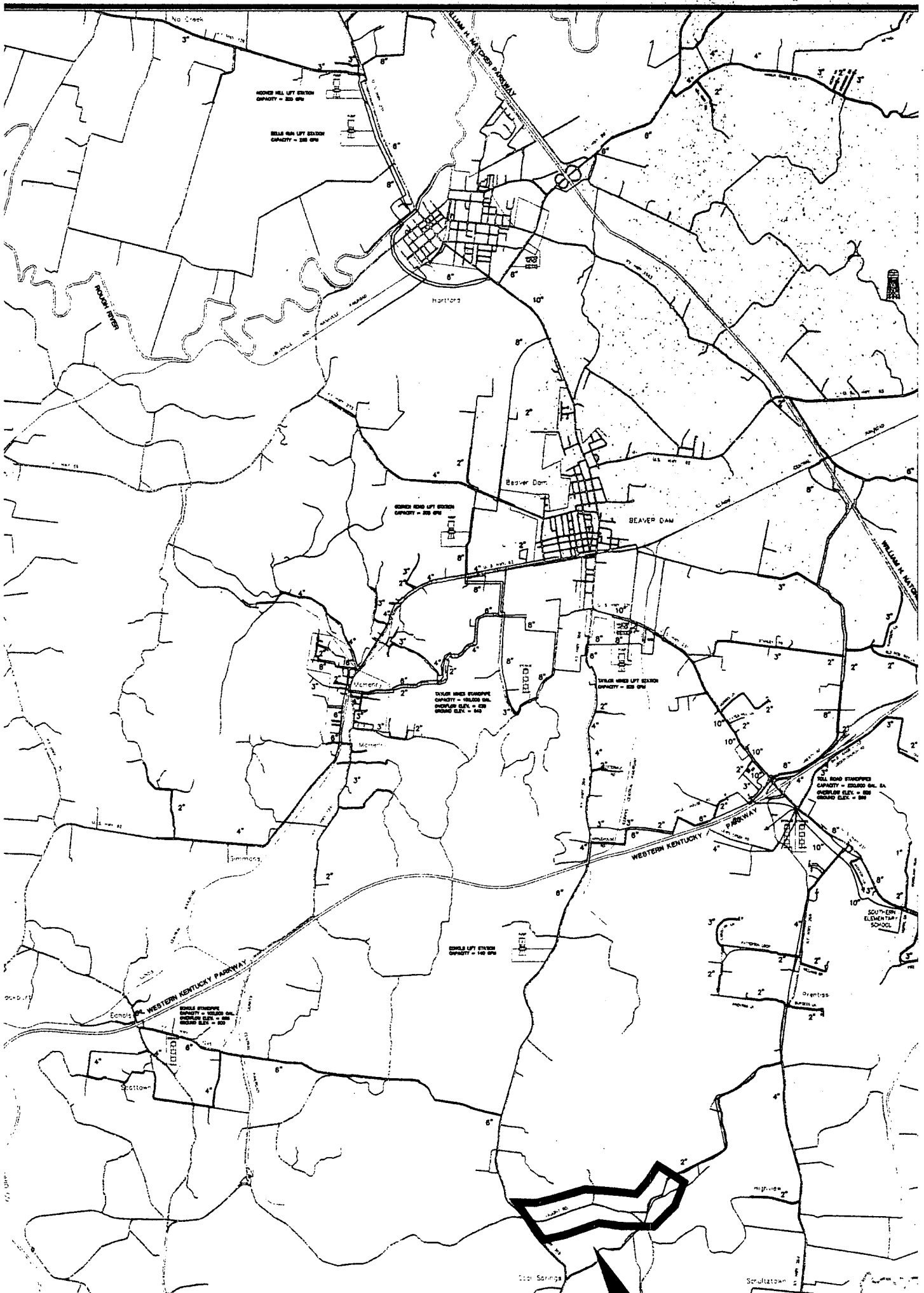
*Rod H. Martin*

A-2-89





**WORI**



HICKER HILL LIFT STATION  
CAPACITY = 200 GPM

BEAVER DAM LIFT STATION  
CAPACITY = 200 GPM

BEAVER DAM LIFT STATION  
CAPACITY = 200 GPM

MEMPHIS LIFT STATION  
CAPACITY = 1000 GPM  
OVERLAP ELEV. = 50'  
GROUND ELEV. = 50'

BEAVER DAM LIFT STATION  
CAPACITY = 200 GPM

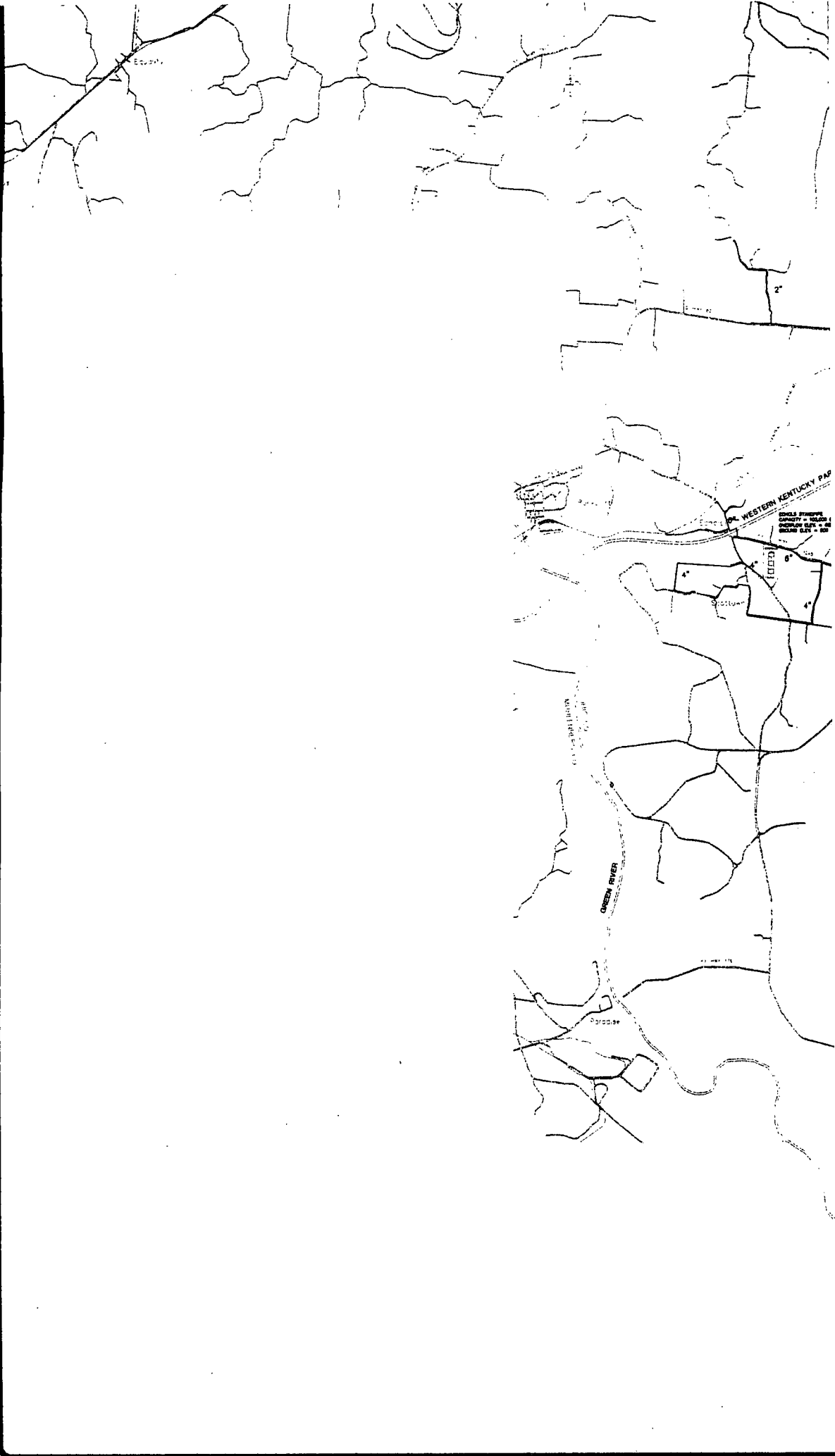
ROLL ROAD STOPPING  
CAPACITY = 25000 GAL. DA  
OVERLAP ELEV. = 50'  
GROUND ELEV. = 50'

EONOLS LIFT STATION  
CAPACITY = 100 GPM

SCOTTOWN LIFT STATION  
CAPACITY = 10000 GAL.  
OVERLAP ELEV. = 50'  
GROUND ELEV. = 50'

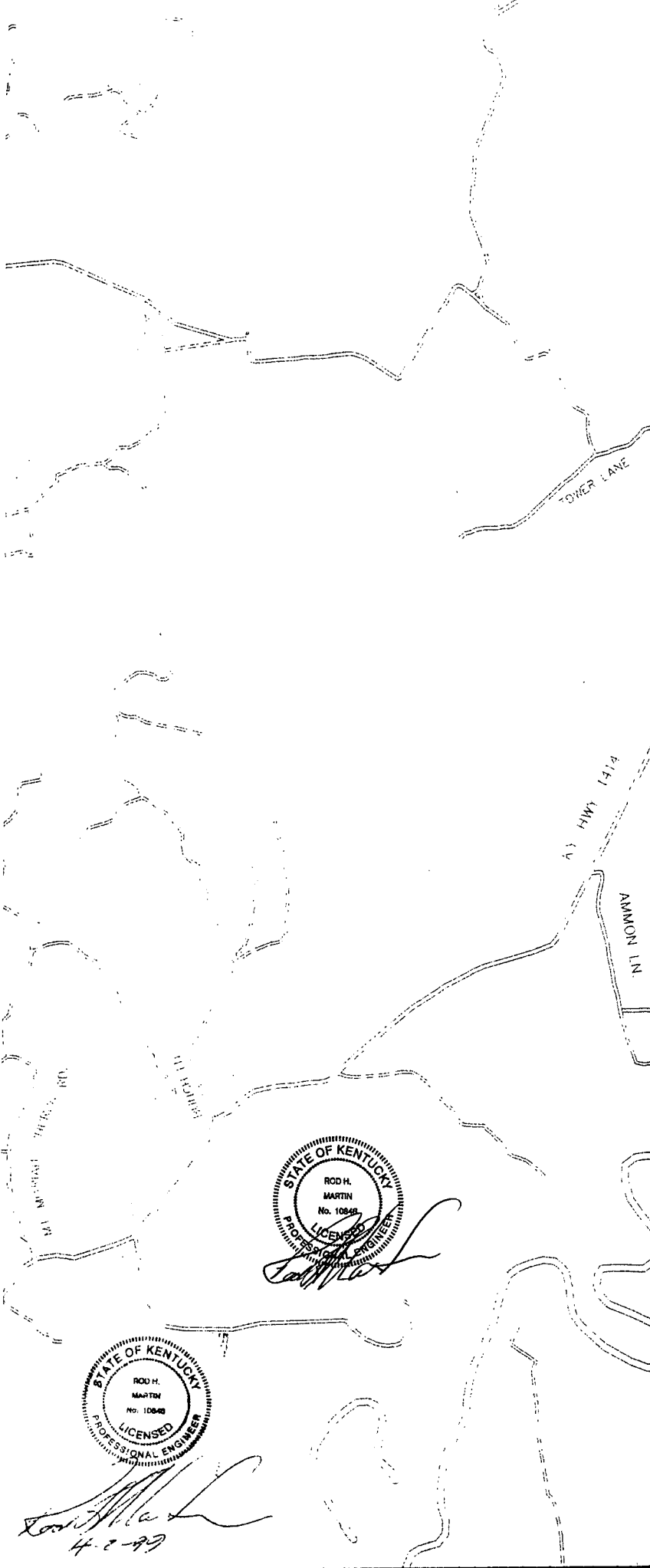
COOL SPRINGS

SCOTTSTOWN







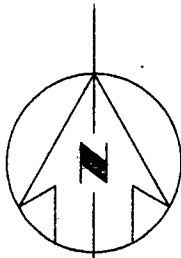


Drawn by:  
 SDC  
 Checked by:  
 JRJ  
 File:  
 WSI97F03  
 Date:  
 3-25-99  
 Revised:

**CRANE POND ROAD, KY. HWY. 762 AND MCCORMICK ROAD**  
**WATER SYSTEM IMPROVEMENTS**  
**CONTRACT 'G'**  
 OHIO COUNTY WATER DISTRICT

Sheet

**G4**



SCALE: 1" = 1500'



**HUNTER MARTIN & ASSOCIATES, INC.**

**ENGINEERS & SURVEYORS**

3220 LONE OAK ROAD • PADUCAH KENTUCKY 42003  
(502) 554-2737 • FAX (502) 564-2738



Drawn by:

SDC

Checked by:

JRJ

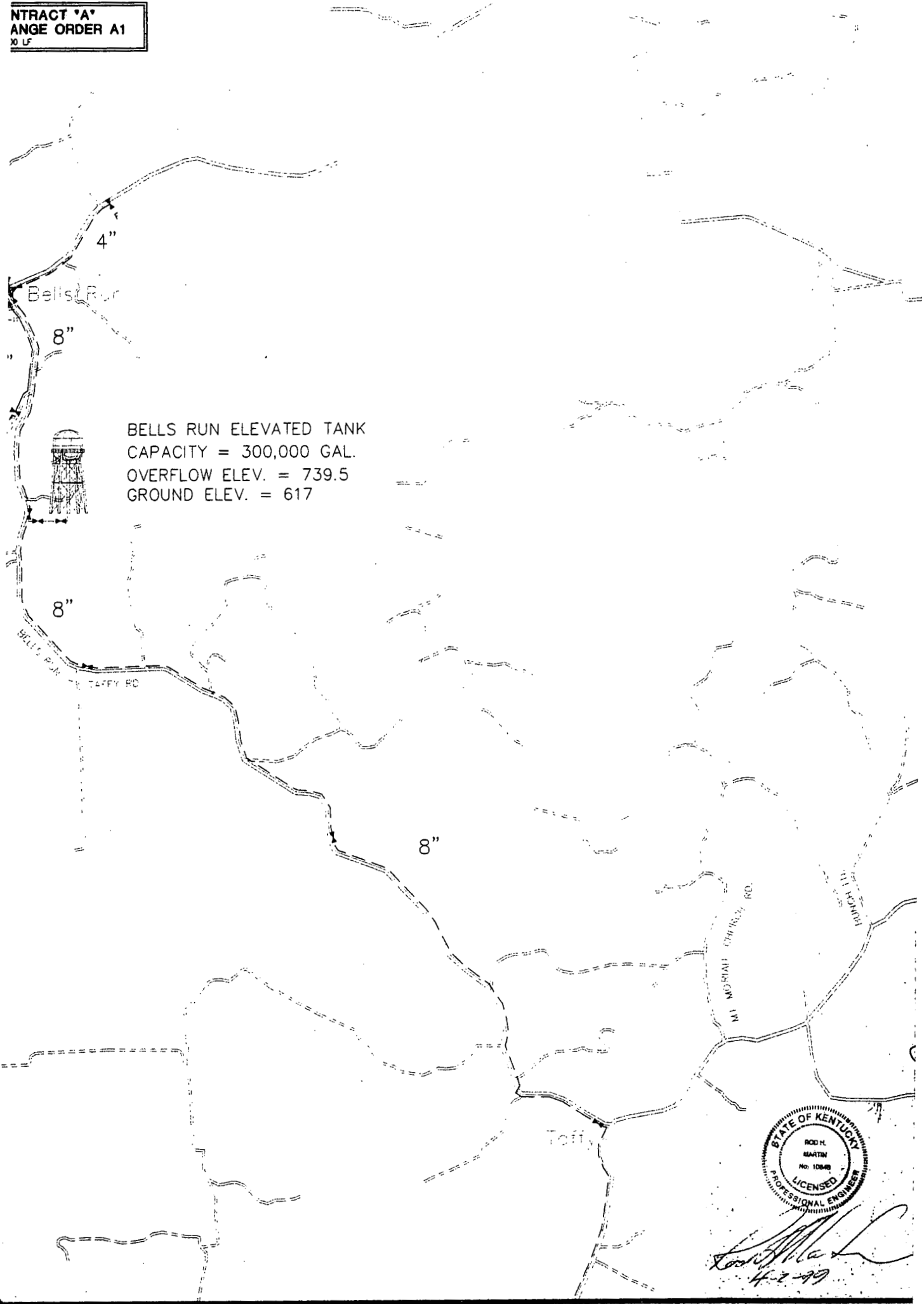
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WSI97F03

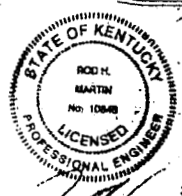
Date:

3-25-99

Revised:



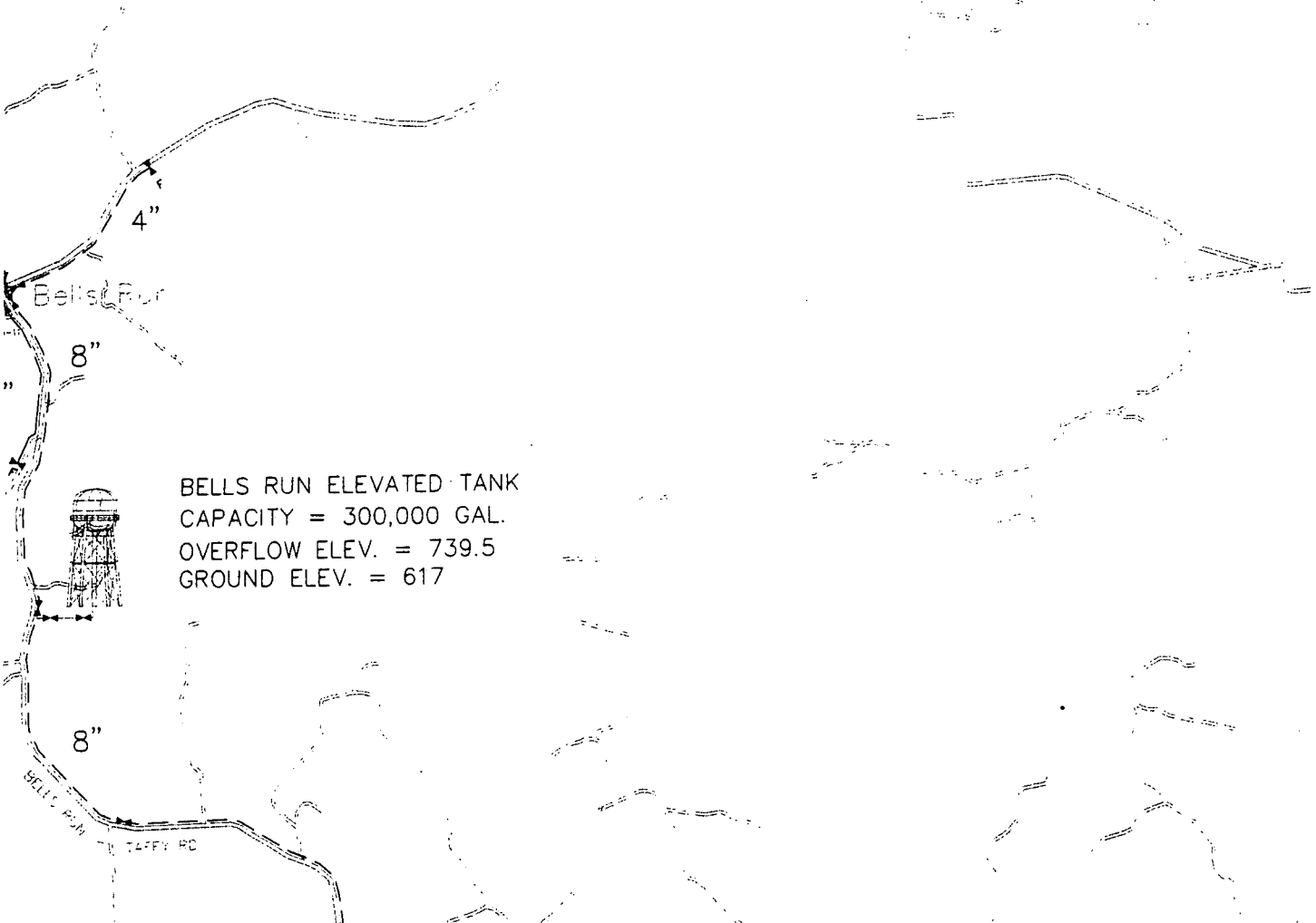
BELLS RUN ELEVATED TANK  
CAPACITY = 300,000 GAL.  
OVERFLOW ELEV. = 739.5  
GROUND ELEV. = 617



*Rod H. Martin*  
4-2-99

4"  
TER  
MENT

TRACT 'A'  
ANGE ORDER A1  
0 LF



BELLS RUN ELEVATED TANK  
CAPACITY = 300,000 GAL.  
OVERFLOW ELEV. = 739.5  
GROUND ELEV. = 617

Bells Run

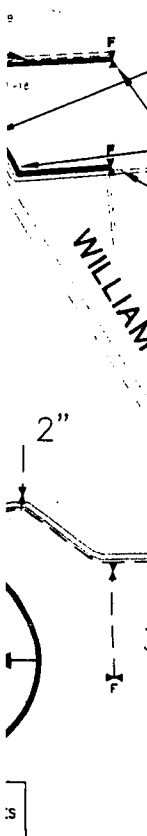
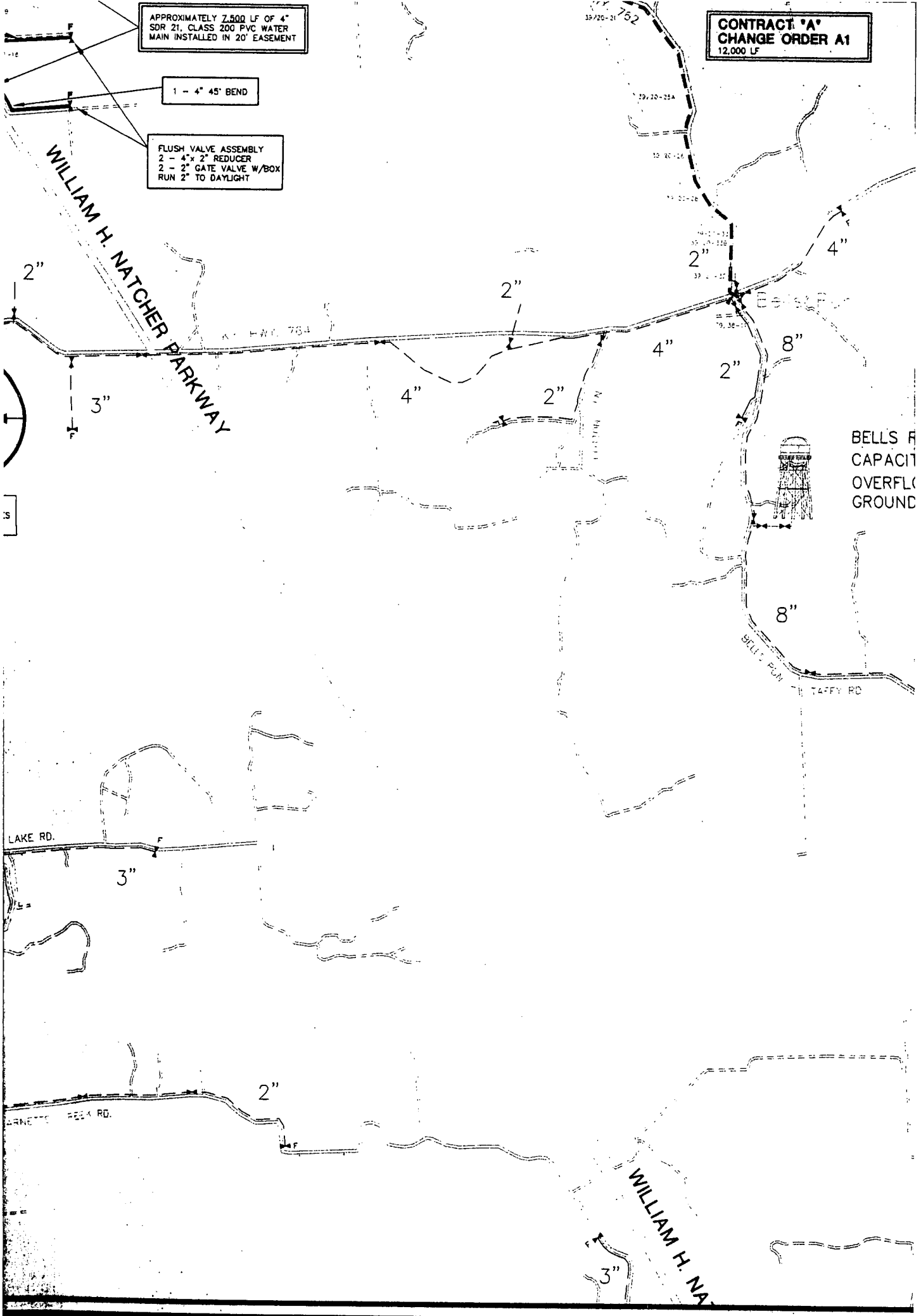
BELLS RUN  
747EV RD

APPROXIMATELY 2,500 LF OF 4" SDR 21, CLASS 200 PVC WATER MAIN INSTALLED IN 20' EASEMENT

1 - 4" 45° BEND

FLUSH VALVE ASSEMBLY  
2 - 4" x 2" REDUCER  
2 - 2" GATE VALVE W/BOX  
RUN 2" TO DAYLIGHT

CONTRACT 'A'  
CHANGE ORDER A1  
12,000 LF



LAKE RD.

ARNETTE PEAK RD.

19/20-21 752

19/20-25A

15 20-126

15 20-226

15 20-313

15 20-316

39 20-225

19 30-

East Pk

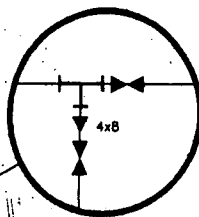
BELLS F  
CAPACIT  
OVERFLC  
GROUND

8"

TAFFY RD

WILLIAM H. NA

3"



- 1 - 8" x 4" TEE
- 1 - 4" GATE VALVE W/BOX
- 1 - 8" GATE VALVE W/BOX

- FLUSH VALVE ASSEMBLY
- 1 - 4" x 2" REDUCER
  - 1 - 2" GATE VALVE W/BOX
  - RUN 2" TO DAYLIGHT

1/10" CASING

BORE W/14" CASING

8" 45° BENDS

40 LF OF BORE W/14" CASING

8" GATE VALVE W/BOX

**THIS CONTRACT**

APPROXIMATELY 3,300 LF OF 4" SDR 21, CLASS 200 PVC WATER MAIN INSTALLED IN 20' EASEMENT

BENDS AS REQUIRED

1 - 4" TIE IN REMOVE EXISTING 4" PLUG & TIE INTO EXIST. MAIN

40 LF OF BORE W/14" CASING

APPROXIMATELY 14,600 LF OF 8" SDR 21, CLASS 200 PVC WATER MAIN INSTALLED IN 20' EASEMENT

1 - 8" TIE IN REMOVE EXISTING 8" PLUG & TIE INTO EXIST. MAIN

APPROXIMATELY 7,500 LF OF 4" SDR 21, CLASS 200 PVC WATER MAIN INSTALLED IN 20' EASEMENT

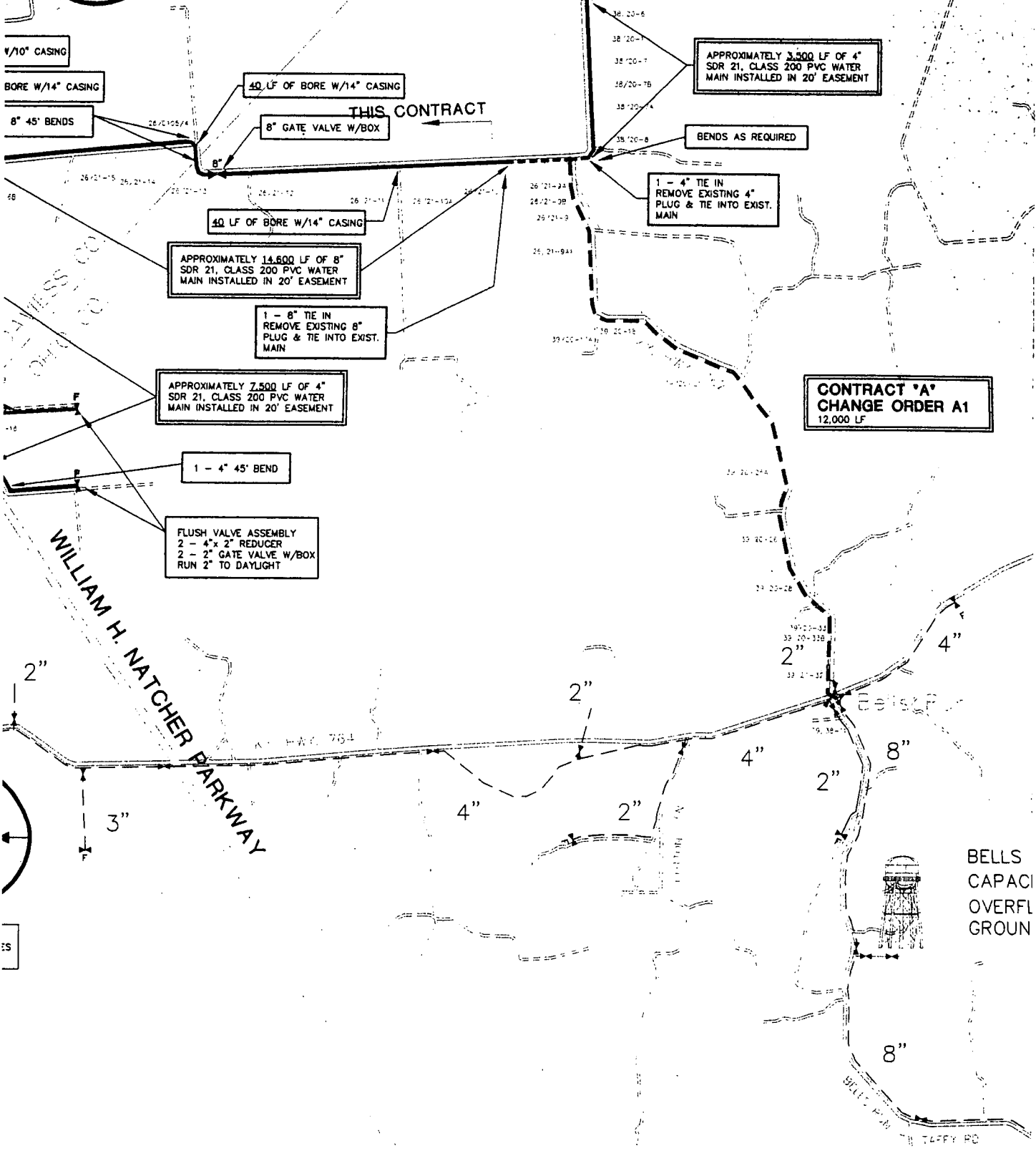
1 - 4" 45° BEND

- FLUSH VALVE ASSEMBLY
- 2 - 4" x 2" REDUCER
  - 2 - 2" GATE VALVE W/BOX
  - RUN 2" TO DAYLIGHT

**CONTRACT 'A'**  
CHANGE ORDER A1  
12,000 LF

WILLIAM H. NATCHER PARKWAY

BELLS  
CAPACI  
OVERFL  
GROUN



SDR 21, CLASS 200 PVC  
WATER MAIN INSTALLED IN  
20' EASEMENT

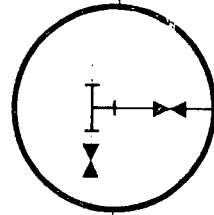
40 LF BORE W/10"  
CASING

APPROXIMATELY 2  
SDR 21, CLASS 200  
MAIN INSTALLED

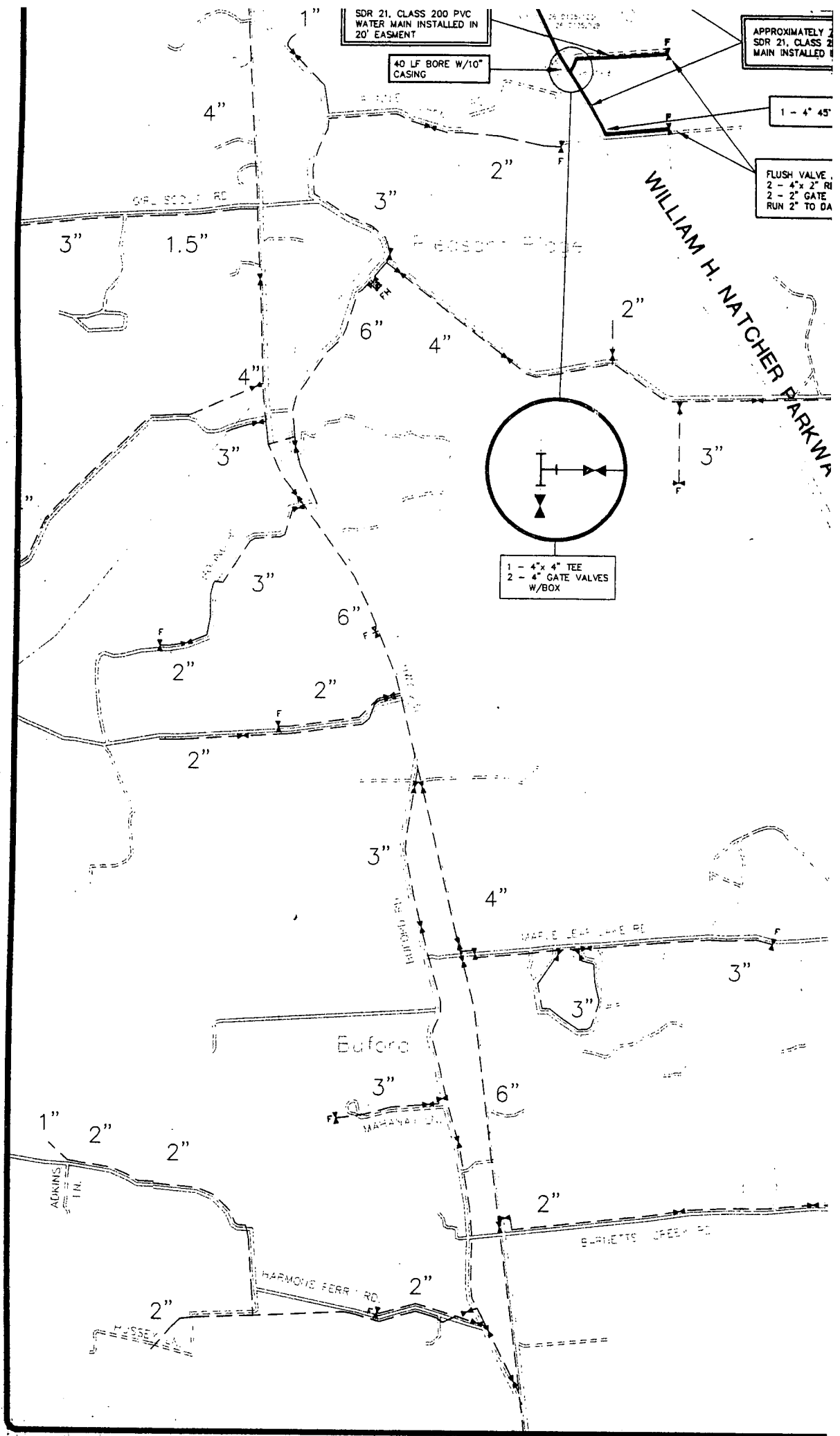
1 - 4" 45°

FLUSH VALVE  
2 - 4" x 2" RI  
2 - 2" GATE  
RUN 2" TO DA

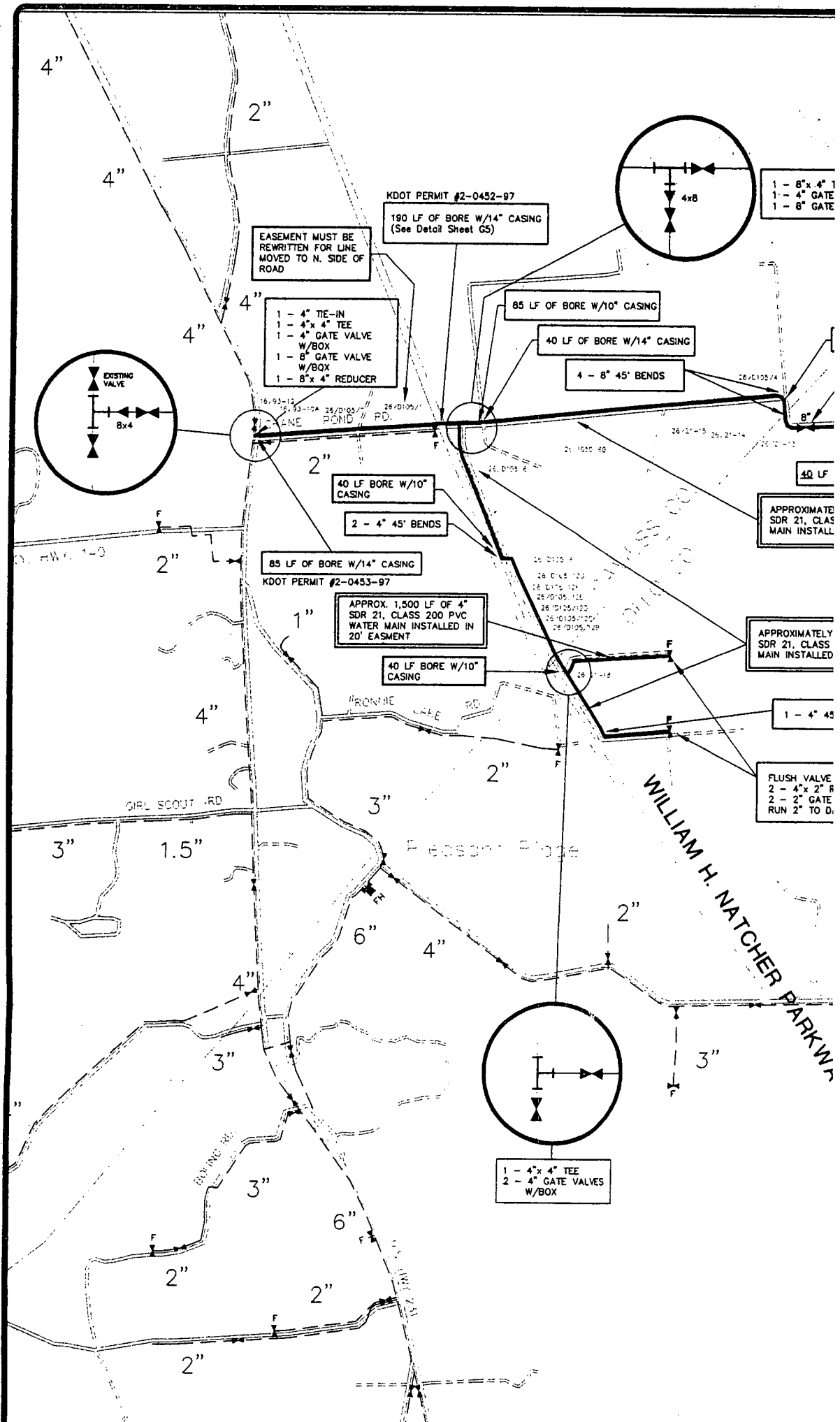
WILLIAM H. NATCHER PARKWAY



1 - 4" x 4" TEE  
2 - 4" GATE VALVES  
W/BOX







4"

2"

4"

4"

EASEMENT MUST BE  
REWRITTEN FOR LINE  
MOVED TO N. SIDE OF  
ROAD

KDOT PERMIT #2-0452-97  
190 LF OF BORE W/14" CASING  
(See Detail Sheet GS)

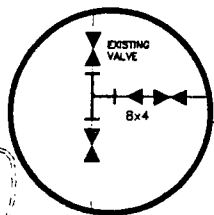
1 - 4" TIE-IN  
1 - 4" x 4" TEE  
1 - 4" GATE VALVE  
W/BOX  
1 - 8" GATE VALVE  
W/BOX  
1 - 8" x 4" REDUCER

85 LF OF BORE W/10" CASING

40 LF OF BORE W/14" CASING

4 - 8" 45° BENDS

1 - 8" x 4" T  
1 - 4" GATE  
1 - 8" GATE



LAKESHORE POND

40 LF BORE W/10" CASING

2 - 4" 45° BENDS

85 LF OF BORE W/14" CASING

KDOT PERMIT #2-0453-97

APPROX. 1,500 LF OF 4" SDR 21, CLASS 200 PVC WATER MAIN INSTALLED IN 20' EASEMENT

40 LF BORE W/10" CASING

40 LF  
APPROXIMATE SDR 21, CLASS MAIN INSTALL

APPROXIMATELY SDR 21, CLASS MAIN INSTALLED

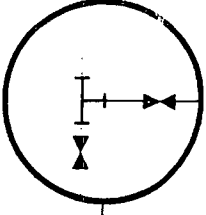
1 - 4" 45

FLUSH VALVE  
2 - 4" x 2" R  
2 - 2" GATE  
RUN 2' TO D.

GIRL SCOUT RD

FRONTRIDGE LAKE RD

WILLIAM H. NATCHER PARKWAY



1 - 4" x 4" TEE  
2 - 4" GATE VALVES  
W/BOX

3"

1.5"

3"

6"

4"

3"

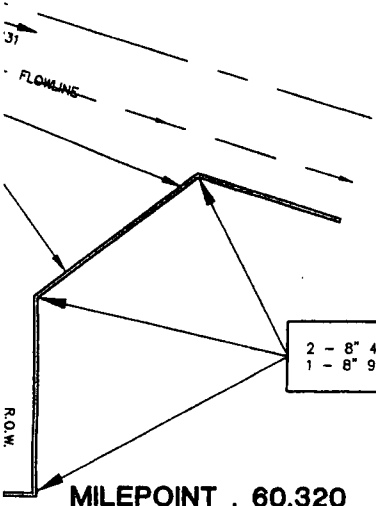
6"

2"

2"

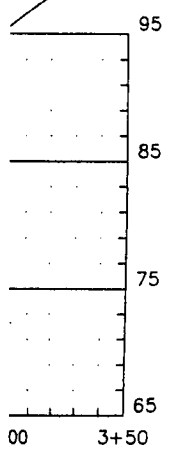
2"

2"



2 - 8" 45° BENDS  
1 - 8" 90° BEND

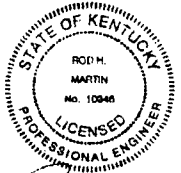
190 LF OF BORE W/  
12" SEAMLESS STEEL  
CASING AND 8"  
CARRIER PIPE.



12" SEAMLESS STEEL CASING



*Rod H. Martin*



*Rod H. Martin*  
4-2-99



Drawn by:  
SDC  
Checked by:  
JRJ  
File:  
WSI97F03  
Date:  
3-25-99  
Revised:

**PARKWAY CROSSING DETAIL  
WATER SYSTEM IMPROVEMENTS  
CONTRACT 'G'  
OHIO COUNTY WATER DISTRICT**

Sheet

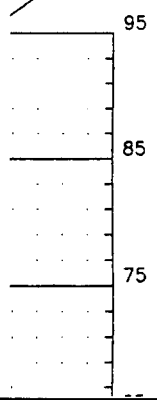
**G5**



2 - 8" 45° BENDS  
1 - 8" 90° BEND

MILEPOINT . 60.320

190 LF OF BORE W/  
12" SEAMLESS STEEL  
CASING AND 8"  
CARRIER PIPE.



**HUNTER MARTIN & ASSOCIATES, INC.**

ENGINEERS & SURVEYORS  
3220 LONE OAK ROAD • PADUCAH KENTUCKY 42003  
(502) 554-2737 • FAX (502) 554-2738



Drawn by:	SDC
Checked by:	JRJ
File:	WSI97F03
Date:	3-25-99
Revised:	

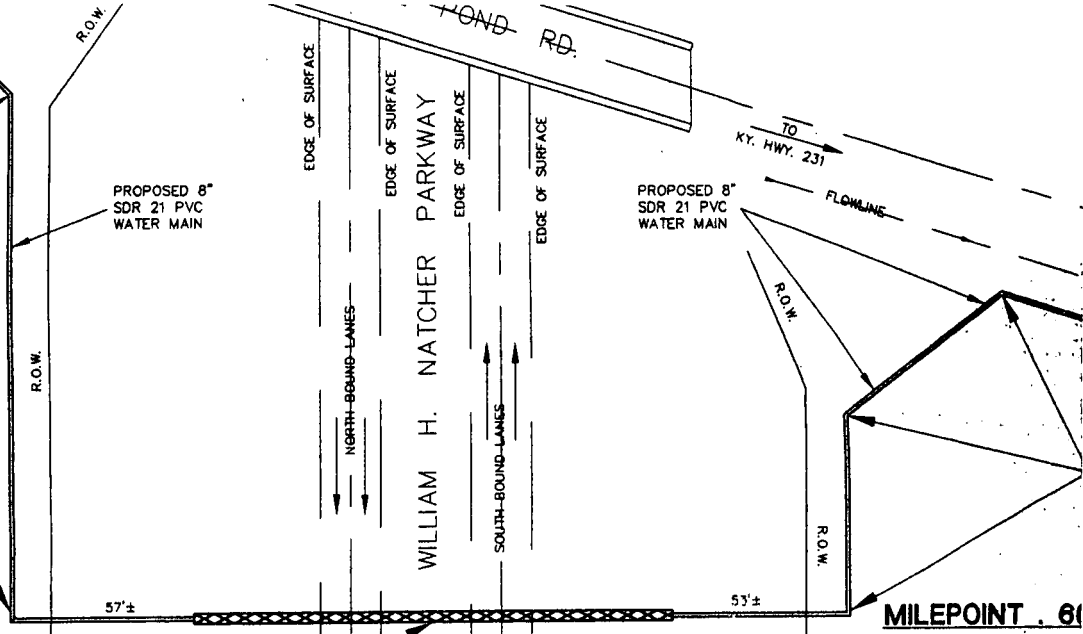
DETAIL  
ELEMENTS  
STRICT

M

DE CONCRETE DITCH

1 - 8" 45° BEND  
1 - 8" 90° BEND

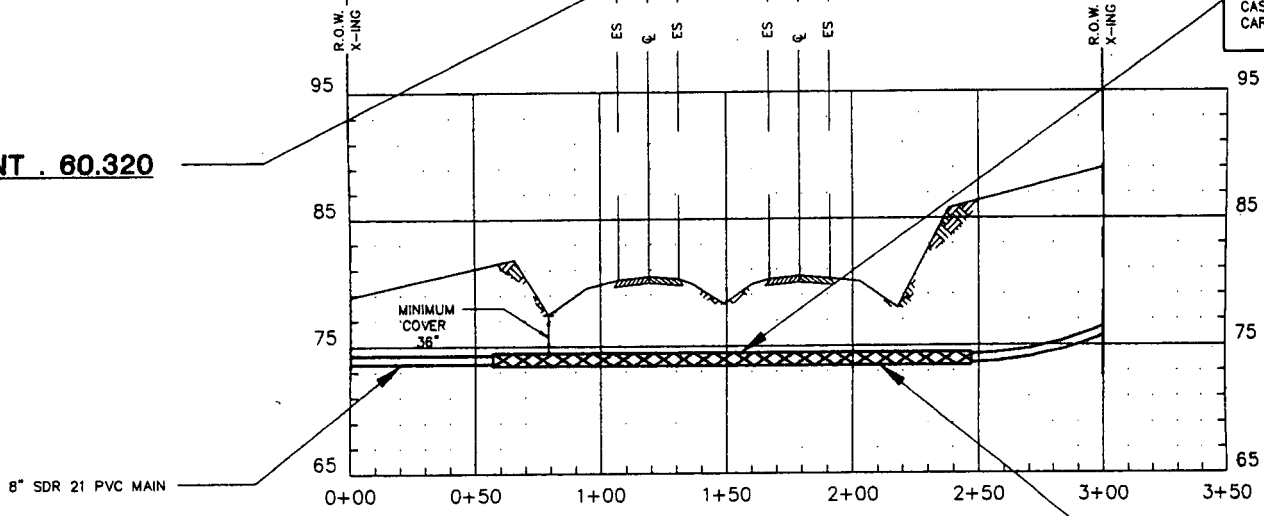
A.E. 1" = 50'



MILEPOINT . 61

190 LF OF BORE W  
12" SEAMLESS STEEL  
CASING AND 8"  
CARRIER PIPE.

POINT . 60.320

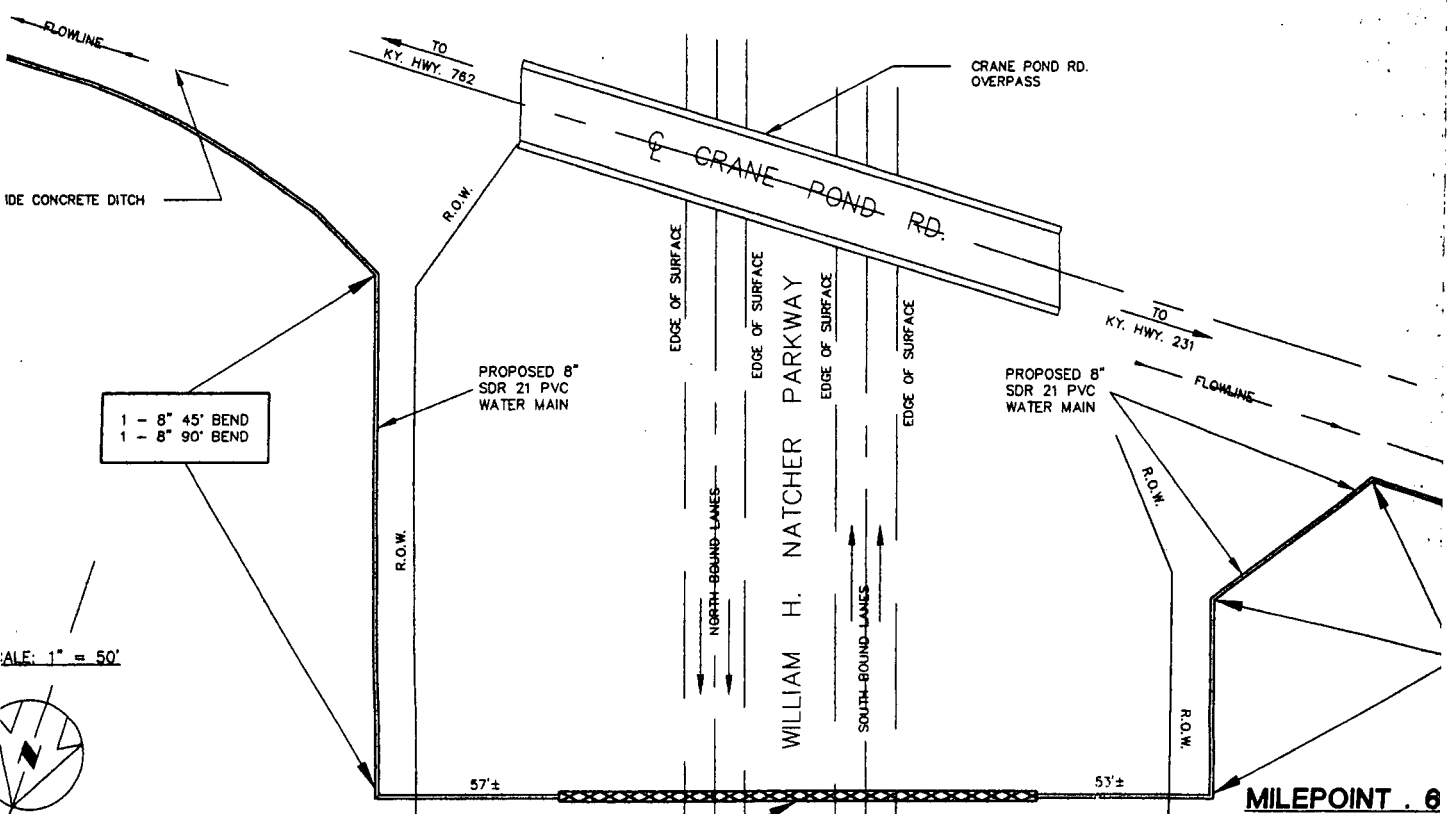


### PARKWAY CROSSING DETAIL AT CRANE POND RD.

HORIZONTAL SCALE: 1" = 50'  
VERTICAL SCALE: 1" = 10'



*Rod M. Martin*  
4-2-99



1 - 8" 45° BEND  
 1 - 8" 90° BEND

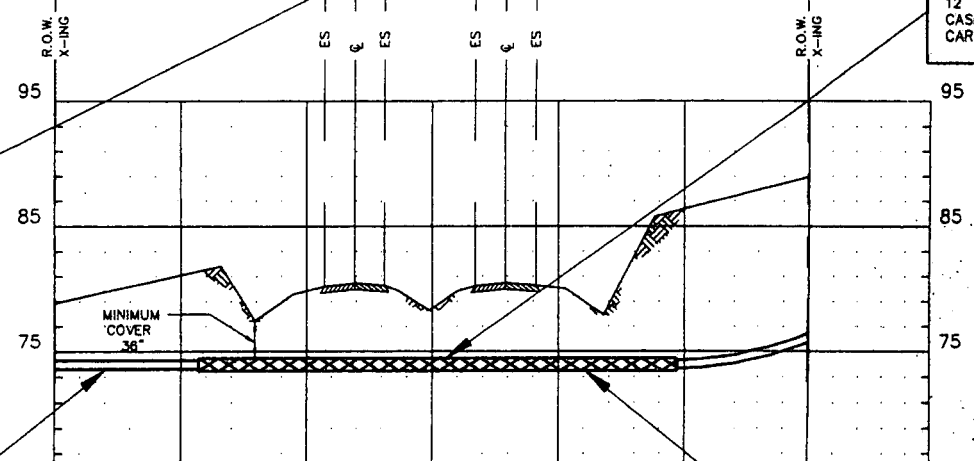
SCALE: 1" = 50'



POINT . 60.320

MILEPOINT . 6

190 LF OF BORE W  
 12" SEAMLESS ST  
 CASING AND 8"  
 CARRIER PIPE.



8" WIDE CONCRETE DITCH

1 - 8" 45' BEND  
1 - 8" 90' BEND

SCALE: 1" = 50'



MILEPOINT . 60.320 —

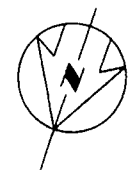
8" SDR 21 PVC MAIN —

FLOWLINE

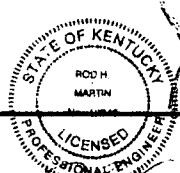
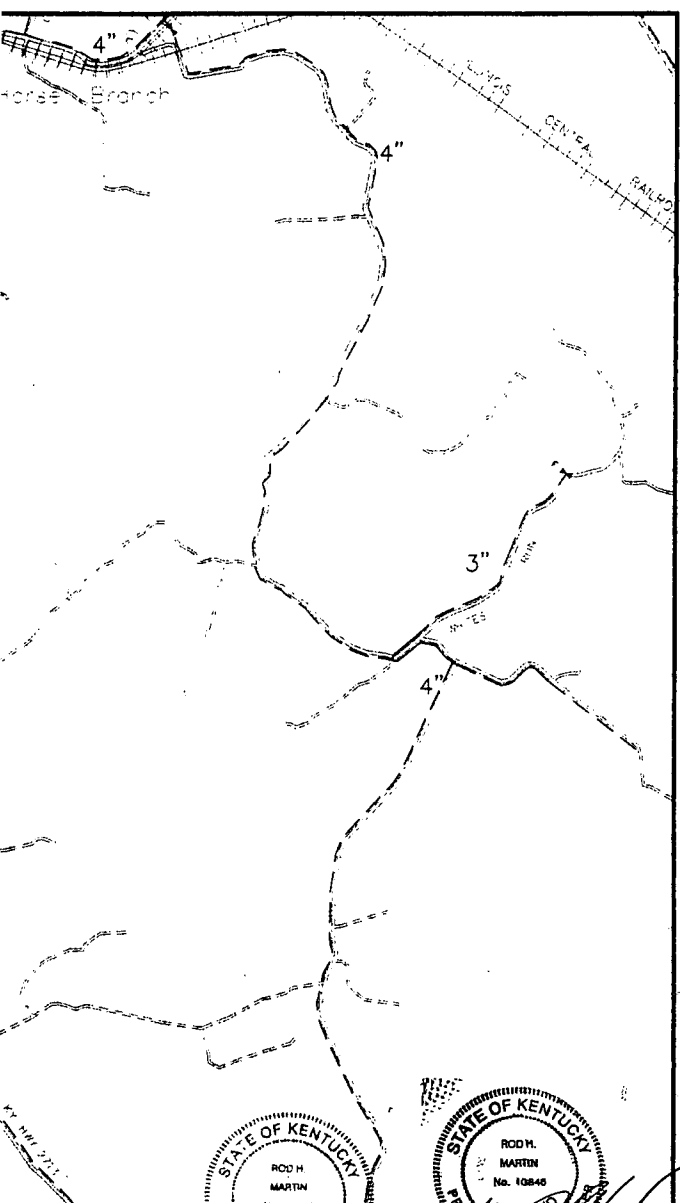
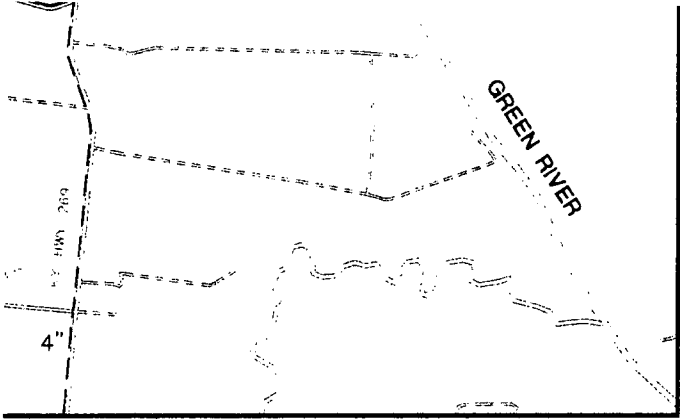
6' WIDE CONCRETE DITCH

1 - 8" 45° BEND  
1 - 8" 90° BEND

SCALE: 1" = 50'



MILEPOINT . 60.320 —



*[Handwritten Signature]*  
 4-2-99

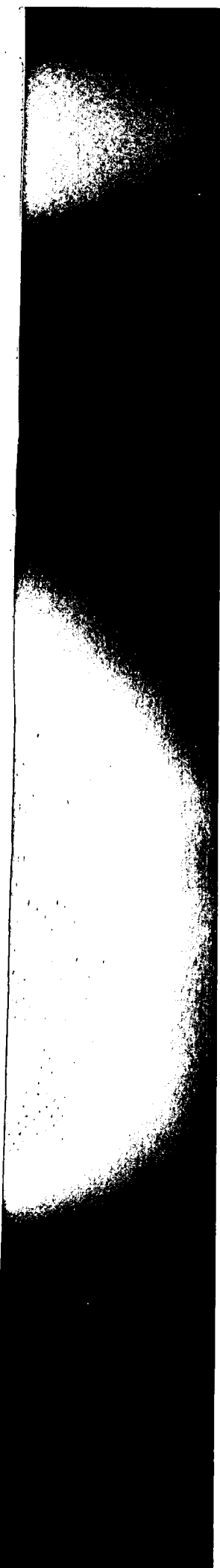


Drawn by:  
 SDC  
 Checked by:  
 JRJ  
 File:  
 WSI97F06  
 Date:  
 12-5-97  
 Revised:

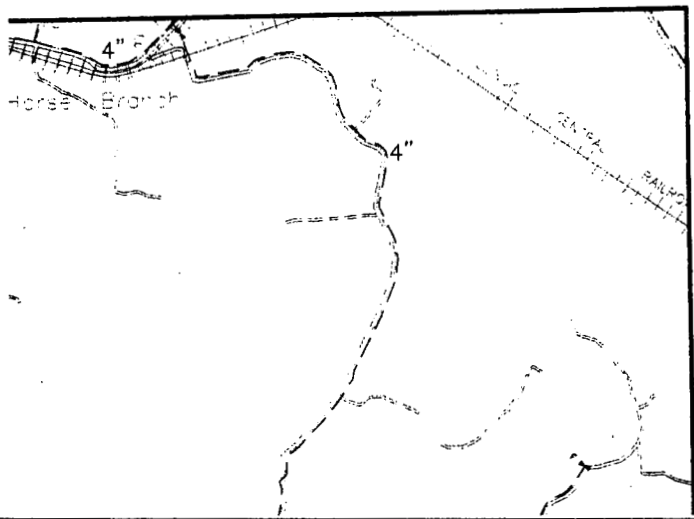
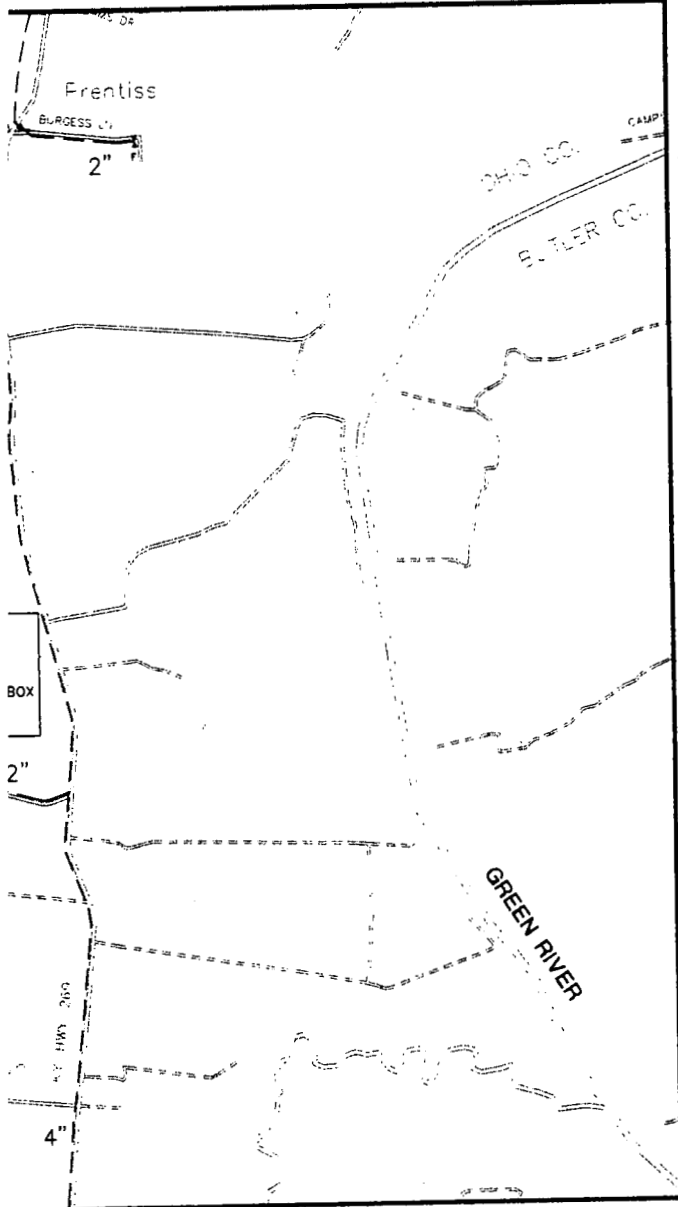
KY HWY 369, VAUGHT RD. AND RENFROW - HORSE BRANCH RD.  
 WATER SYSTEM IMPROVEMENTS  
 CONTRACT 'G'  
 OHIO COUNTY WATER DISTRICT

Sheet

G6







**HUNTER MARTIN & ASSOCIATES, INC.**

ENGINEERS & SURVEYORS  
 3220 LONE OAK ROAD • PADUCAH KENTUCKY 42003  
 (502) 554-2737 • FAX (502) 554-2738



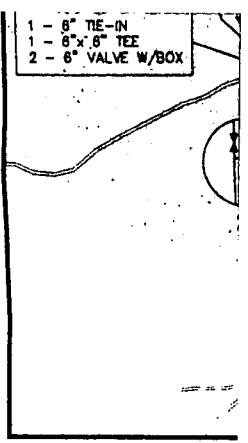
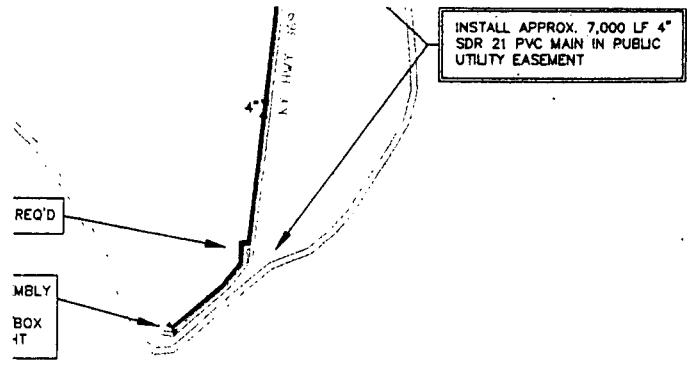
Drawn by:  
SDC  
 Checked by:  
JRJ  
 File:  
WS197F06  
 Date:  
12-5-97  
 Revised:

**W - HORSE BRANCH RD.**  
**LEMENTS**  
**ISTRIC**

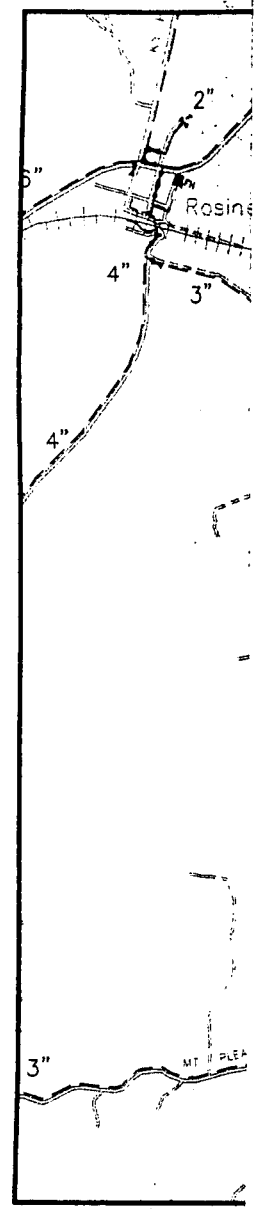


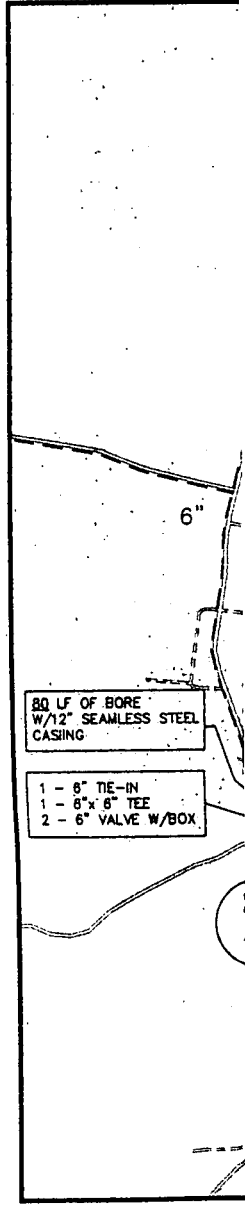
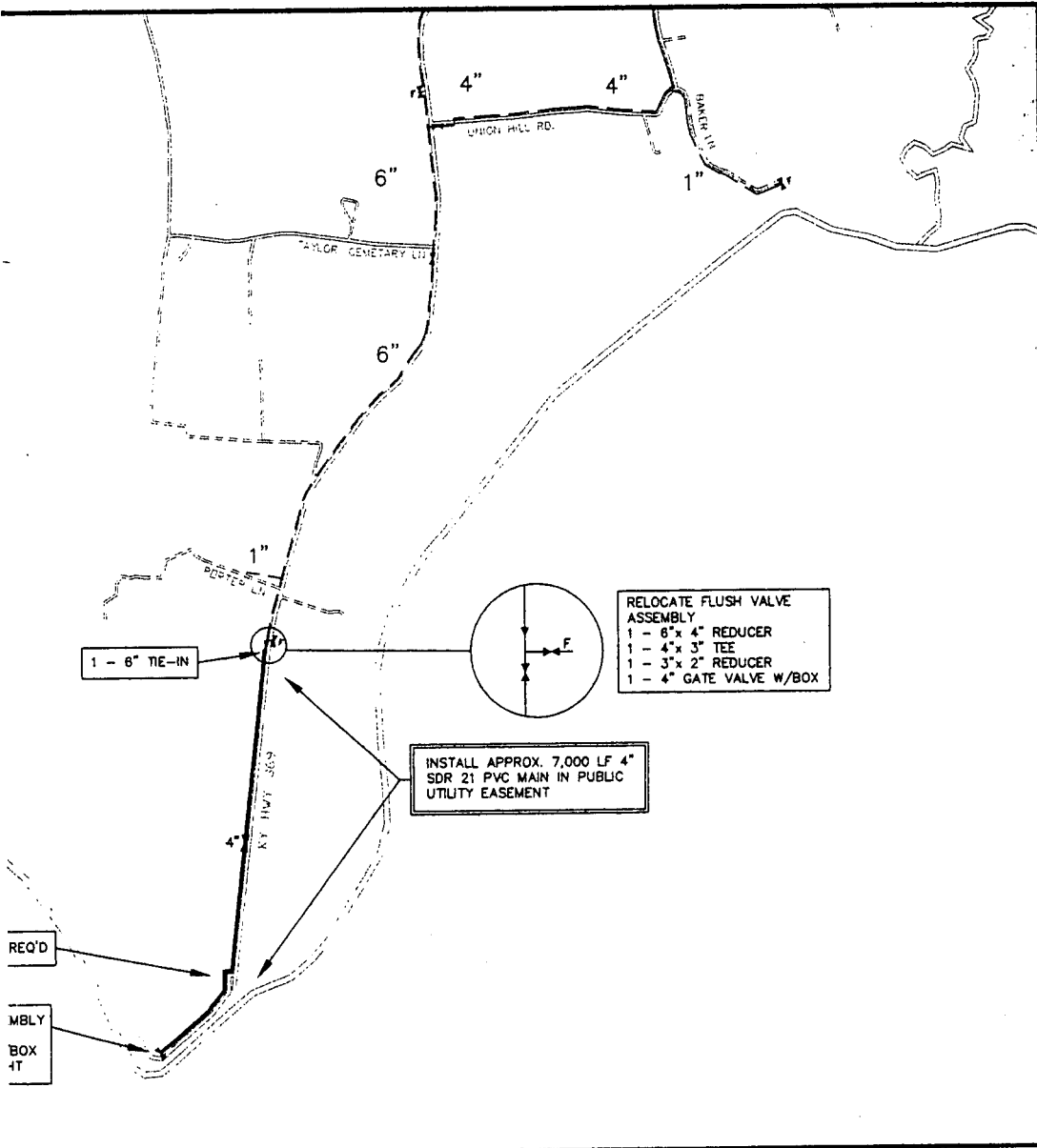




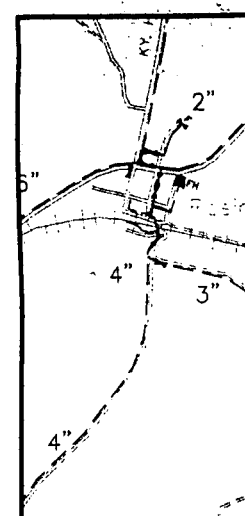


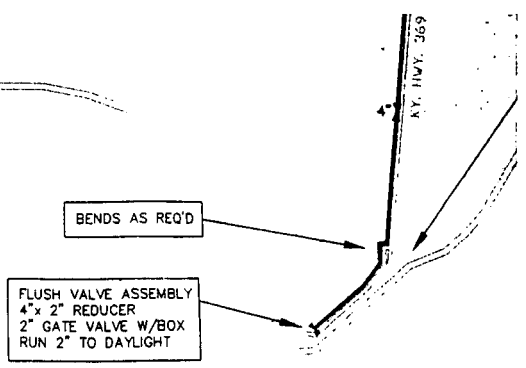
**KY HWY 369**  
 SCALE : 1" = 2,000'



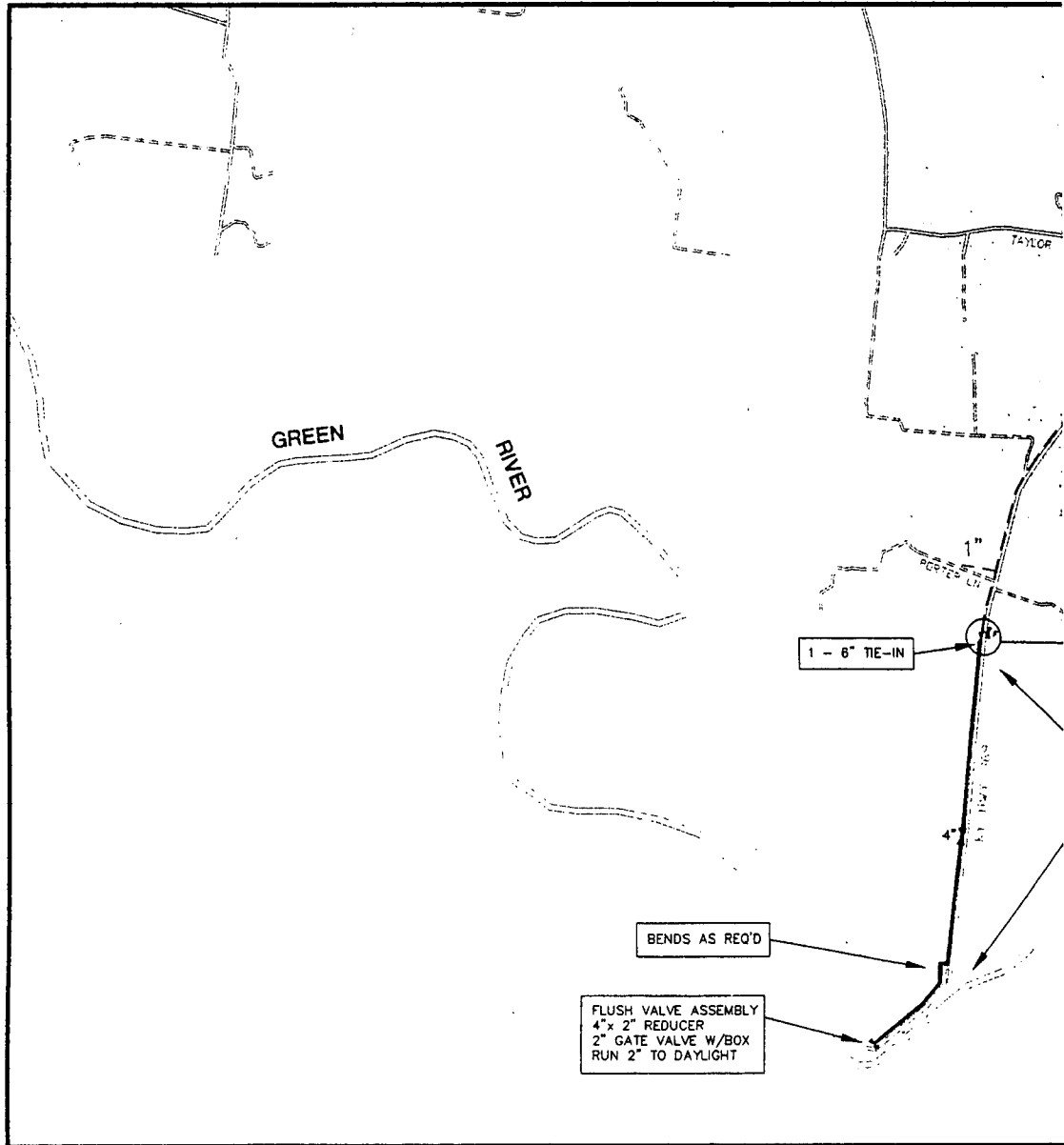


**KY HWY 369**  
 SCALE : 1" = 2,000'





**KY HWY 369**  
SCALE : 1" = 2,000'

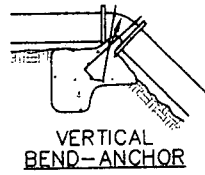
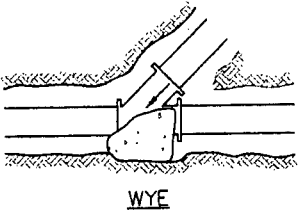
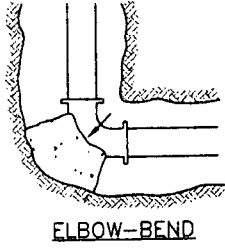
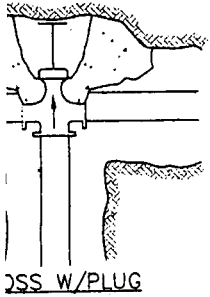


**KY HWY 369**  
SCALE : 1" = 2,000'

& BOX  
TAIL

**INSTALLATION**

0 SCALE



**LENGTH OF SOILS**

Spring Loads	Lbs. Sq. Ft.
10,000	
4,000	
3,000	
2,000	
1,000	
0	

**THRUST PER POUND  
OF WATER PRESSURE**

Pipe Size	Dead End or Tee	90° Elbow	45° Elbow	22 1/2° Elbow
4	20	40	27	20
6	39	80	54	39
8	66	100	66	51
10	110	160	89	66
12	155	220	120	82
14	210	300	168	107
16	270	400	225	131
18	380	500	280	165
20	480	670	370	190
24	690	970	530	270

**LOCKING DETAILS**

NOT TO SCALE



*[Handwritten signatures and date 4-2-99]*



Drawn by:  
SDC  
Checked by:  
JRJ  
File:  
WSI97F07  
Date:  
3-25-99  
Revised:  
3-2-98

WATER SYSTEM STANDARDS  
WATER SYSTEM IMPROVEMENTS  
CONTRACT 'G'  
OHIO COUNTY WATER DISTRICT

Sheet

**G7**

WITH DU  
) BENDS

E IN

OVER 2".  
) & COMPACTED  
URBED BY WOR  
E LEFT OPEN.  
ED WITH SKIDS

THE SPECS.  
THOUT CASING.

CE

R PIPE BO

CROSS

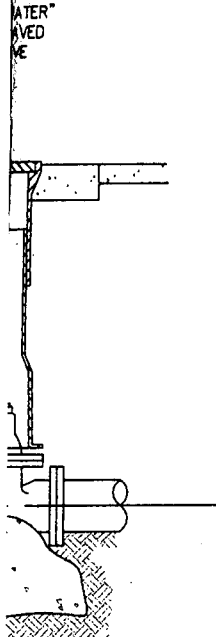
3'

2'

ARKER P

NOT T

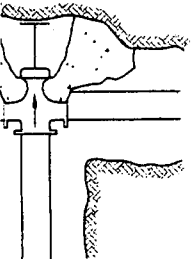




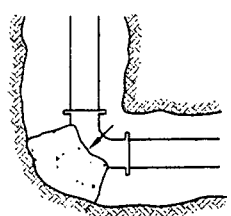
& BOX  
AIL

**TALLATION**

SCALE



SS W/PLUG



ELBOW-BEND

**HUNTER MARTIN & ASSOCIATES, INC.**  
**ENGINEERS & SURVEYORS**  
 3250 JONE OAK ROAD • PADUCAH KENTUCKY 42003  
 (502) 554-2737 • FAX (502) 554-2738



Drawn by:  
SDC  
 Checked by:  
JRJ  
 File:  
WSI97F07  
 Date:  
3-25-99  
 Revised:  
3-2-98

STANDARDS  
 MOVEMENTS  
 G.  
 DISTRICT

5'-6" MIN.

WITH DU  
 D BENDS

BE IN  
 S OVER 2".  
 ED & COMPACTE  
 TURBED BY WOR  
 BE LEFT OPEN.  
 LED WITH SKIDS  
 I THE SPECS.  
 ITHOUT CASING.

ACE

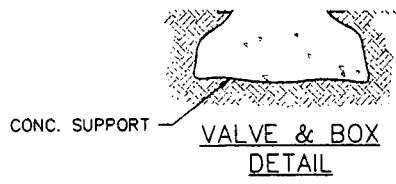


OR PIPE BO

CROS

E

TILE

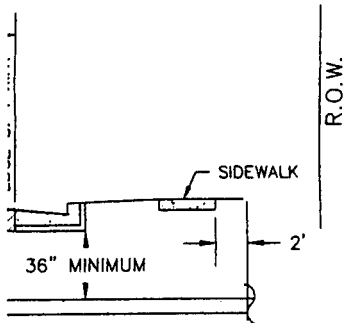


### VALVE INSTALLATION

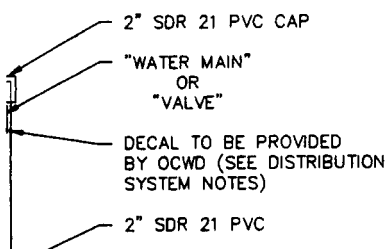
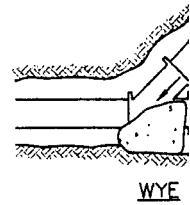
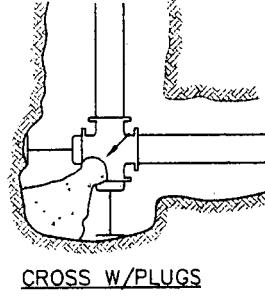
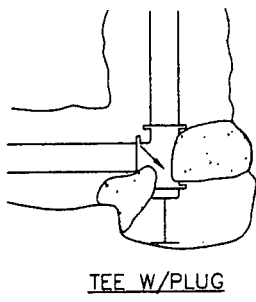
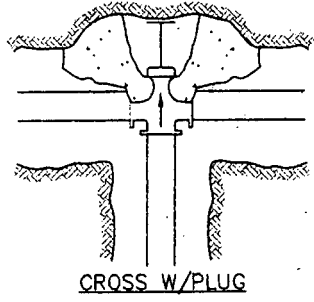
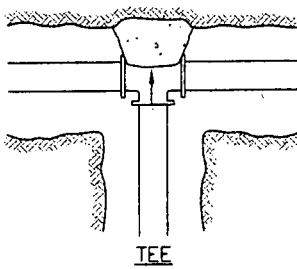
NOT TO SCALE

#### IMPROVED SECTION

1. LIMIT OF OPEN CUT IS 5' FROM PVMT. OR CURB AND 2' FROM SIDEWALK.



IG



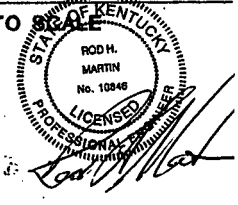
- NOTES:
1. ARROWS SHOW DIRECTION OF THRUST.
  2. BLOCKING SHALL BEAR AGAINST UNDISTURBED EARTH.
  3. BRACE PLUGS AGAINST UNDISTURBED EARTH.
  4. THRUST BLOCKS SHALL BE 2500 P.S.I. (5 BAG MIX) CONCRETE.
  5. CONCRETE SHALL NOT OBSTRUCT FITTING CONNECTIONS.

#### BEARING STRENGTH OF SOILS

Soils and Safe Bearing Loads	Lbs. Sq. Ft.
Sound Shale	10,000
Cemented Gravel and Sand (difficult to pick)	4,000
Coarse and fine compact Sand	3,000
Medium Clay - Can be spaded	2,000
Soft Clay	1,000
Muck	0

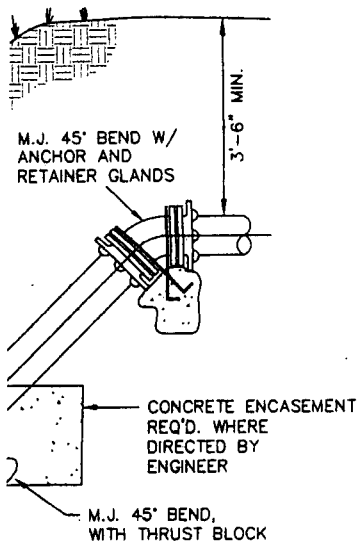
### THRUST BLOCKING DETAILS

NOT TO SCALE

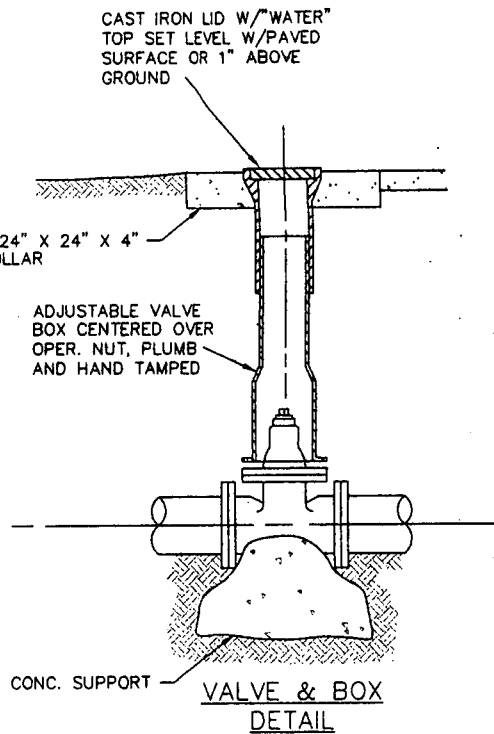


IT DETAIL

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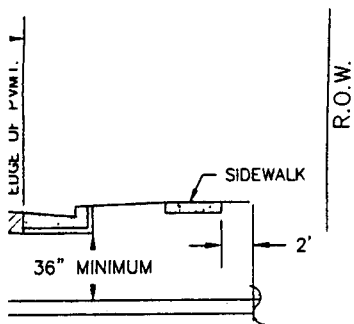
**TILE**



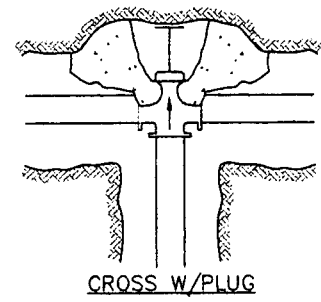
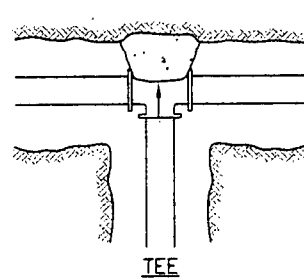
**VALVE INSTALLATION**  
NOT TO SCALE

**IMPROVED SECTION**

1. LIMIT OF OPEN CUT IS 5' FROM PVMT. OR CURB AND 2' FROM SIDEWALK.



**VG**



## CREEK CROSSING WITH DUCTILE IRON PIPE AND BENDS

### RURAL SECTION

1. LIMIT OF OPEN CUT IS 5' FROM PVMT.

### GENERAL

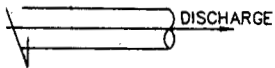
1. ALL WORK WITHIN ROW SHALL BE IN ACCORDANCE WITH THE PERMIT.
2. CASING IS REQ'D. ON ALL MAINS OVER 2".
3. BORE PITS SHALL BE BACKFILLED & COMPACTED.
4. SEED & STRAW ALL AREAS DISTURBED BY WORK.
5. ALL DRAINAGE DITCHES SHALL BE LEFT OPEN.
6. CARRIER PIPE SHALL BE INSTALLED WITH SKIDS PER THE SPECIFICATIONS.
7. SEAL THE ENDS OF CASING PER THE SPECS.
8. NO JOINTS UNDER PAVEMENT WITHOUT CASING.

### IMPROVED SECTION

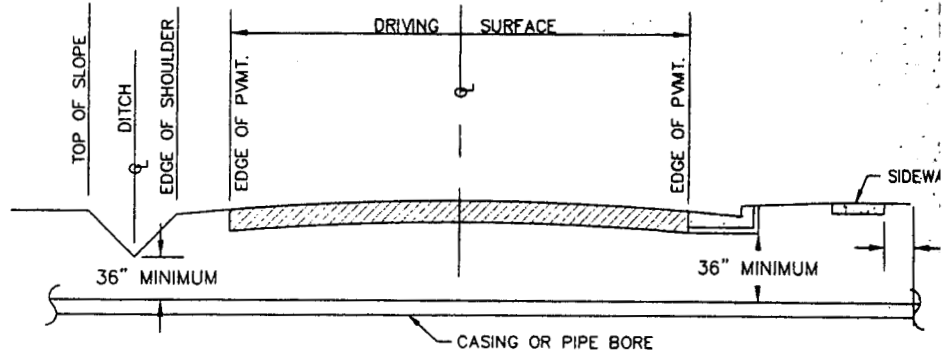
1. LIMIT OF OPEN CUT FROM PVMT. OR 2' FROM SIDEWALK

2" GATE VALVE W/BOX

EXACT DISCHARGE OF FLUSH VALVE ASSEMBLY TO NEAREST DITCH AS DIRECTED BY ENGINEER.



R.O.W.



## HIGHWAY OR ROAD CROSSING

NOT TO SCALE

### NOTES

MAINS AND SERVICE LINES TO BE ABANDONED SHALL BE DISCONNECTED FROM THE LIVE MAINS AND THE LIVE MAINS SHALL BE SEALED AND BLOCKED AS SPECIFIED.

HIGHWAY (STATE AND FEDERAL) AND RAILROAD CROSSINGS SHALL BE MADE WITH A BORE AND CASING AS SHOWN ON PLANS AND PER THE RESPECTIVE PERMIT.

DESCRIPTIONS AND LOCATIONS OF EXISTING WATER MAINS AND OTHER UTILITIES ARE FROM RECORDS AND HERESAY EVIDENCE ONLY. THE EXACT LOCATION, PROTECTION AND REPAIR (IF DAMAGED) SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

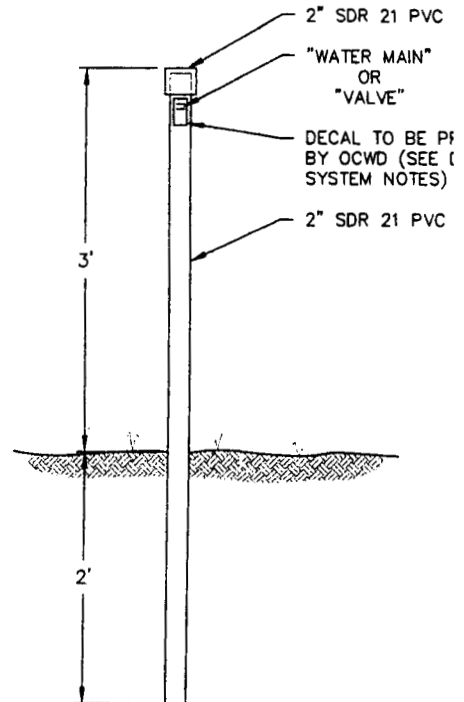
BEFORE ARE EXISTING TELEPHONE, ELECTRIC, NATURAL GAS MAINS AND POSSIBLE OTHER UTILITIES. THE CONTRACTOR SHALL CONTACT THE OWNER OF EACH UTILITY FOR ASSISTANCE WITH LOCATION AND PROTECTION. THE EXACT LOCATION, PROTECTION AND REPAIR (IF DAMAGED) SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL CONDITIONS OF EASEMENTS.

SPACERS FOR ALL BORES W/CASING SHALL BE MANUFACTURED STIC.

**NOTE:**  
PAYMENT SHALL BE AT UNIT PRICE BID FOR EACH MARKER POST

**NOTE:**  
MARKER TO BE LOCATED ADJACENT TO NEW VALVES AND DIRECTLY ABOVE NEW WATER MAINS AT BOTH SIDES OF HIGHWAY, RAILROAD, CREEK CROSSINGS AND AS DIRECTED BY ENGINEER. THE APPROPRIATE DECAL ("WATER MAIN" OR "VALVE") SHALL BE PROVIDED BY THE WATER DISTRICT AND APPLIED TO THE 2" POST BY THE CONTRACTOR. THE DECAL SHALL BE LOCATED DIRECTLY BELOW THE PVC CAP AND SHALL FACE NEAREST ROADWAY FOR EASY RECOGNITION.



## MARKER POST DETAIL

NOT TO SCALE

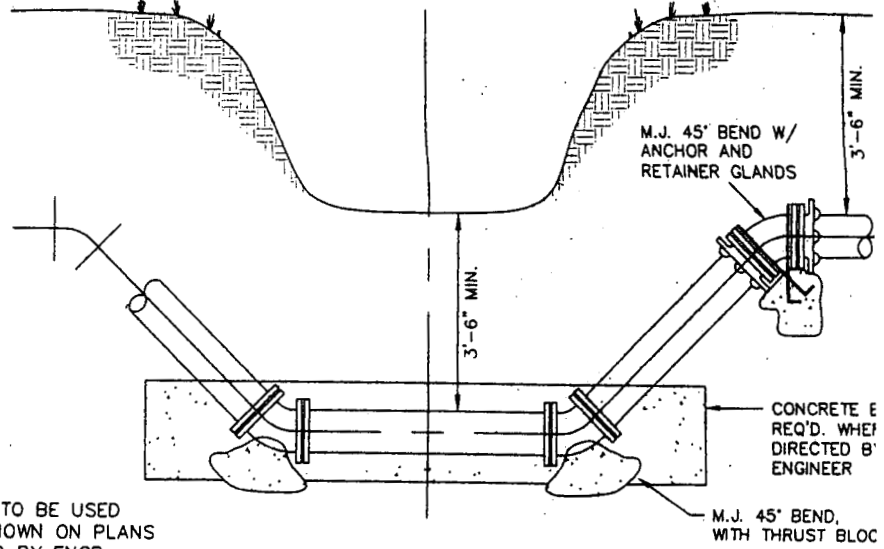
SOLID  
AH SERIES  
OR EQUAL  
CLOCKING LID.

X 30" DEEP  
LAY, OR  
VE BOX

COMPACTED FILL OR  
CRUSHED STONE

ATER MAIN

ON



**NOTE:**  
THIS CROSSING TO BE USED  
ONLY WHERE SHOWN ON PLANS  
OR AS DIRECTED BY ENGR.  
PAYMENT SHALL BE AT UNIT  
PRICES BID FOR ITEMS USED.

**CREEK CROSSING WITH DUCTILE  
IRON PIPE AND BENDS**

**RURAL SECTION**

1. LIMIT OF OPEN CUT IS 5' FROM PVMT.

**GENERAL**

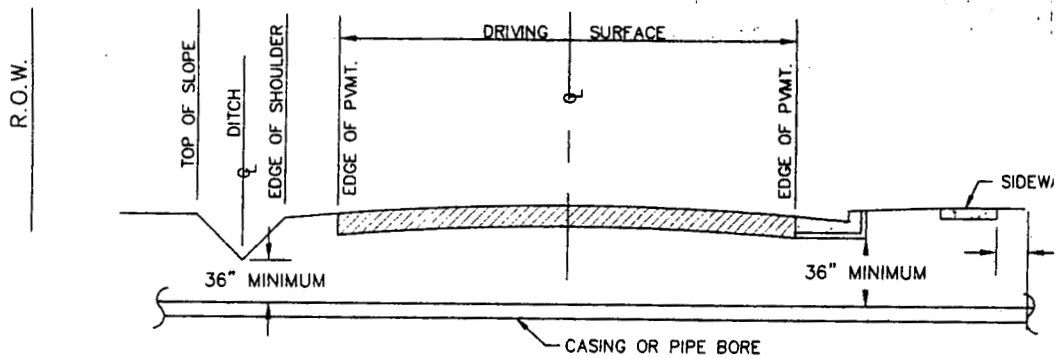
1. ALL WORK WITHIN ROW SHALL BE IN ACCORDANCE WITH THE PERMIT.
2. CASING IS REQ'D. ON ALL MAINS OVER 2".
3. BORE PITS SHALL BE BACKFILLED & COMPACTED.
4. SEED & STRAW ALL AREAS DISTURBED BY WORK.
5. ALL DRAINAGE DITCHES SHALL BE LEFT OPEN.
6. CARRIER PIPE SHALL BE INSTALLED WITH SKIDS PER THE SPECIFICATIONS.
7. SEAL THE ENDS OF CASING PER THE SPECS.
8. NO JOINTS UNDER PAVEMENT WITHOUT CASING.

**IMPROVED SECTION**

1. LIMIT OF OPEN CUT FROM PVMT. OR C AND 2' FROM SIDE

2" GATE VALVE  
W/BOX

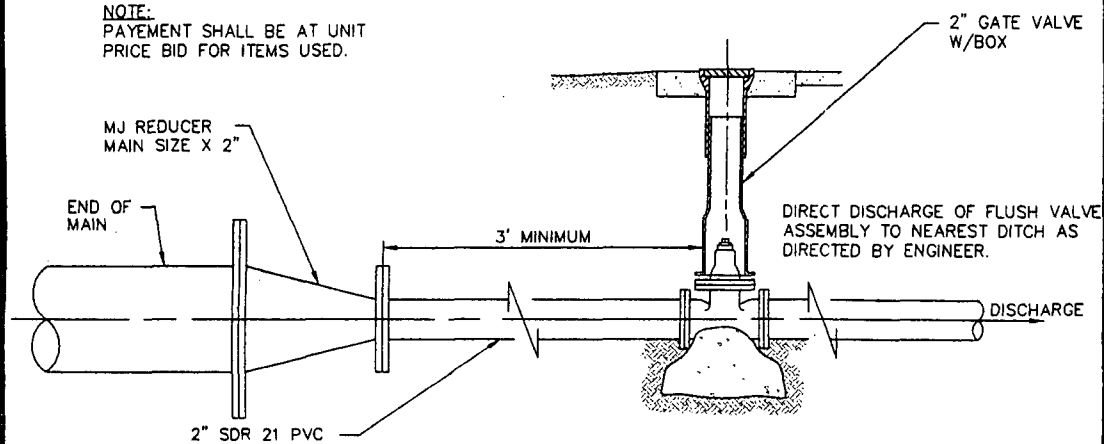
CT DISCHARGE OF FLUSH VALVE  
SEMBLY TO NEAREST DITCH AS  
CTED BY ENGINEER.



**HIGHWAY OR ROAD CROSSING**

NOT TO SCALE

NOT TO SCALE

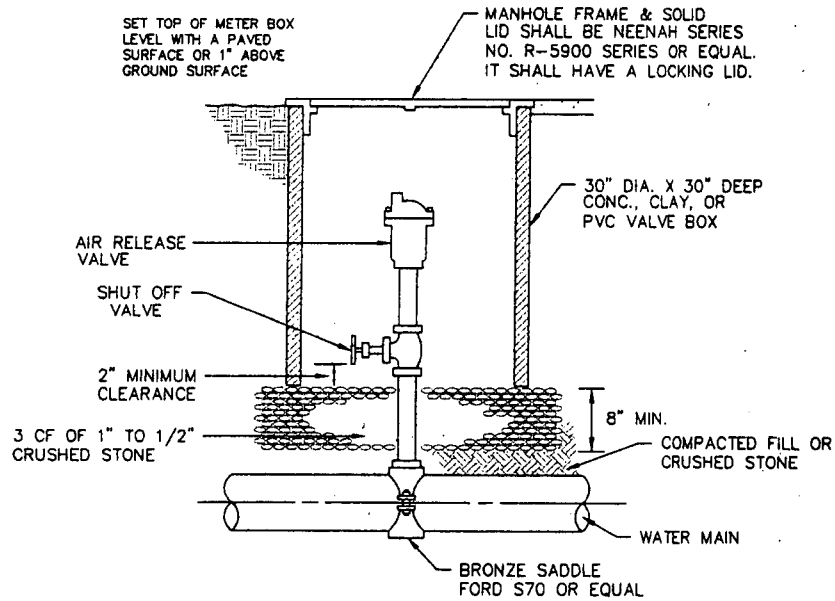


### FLUSH VALVE ASSEMBLY

NOT TO SCALE

### DISTRIBUTION SYSTEM NOTES

1. ALL NEW MAINS SHALL BE SDR 21, CLASS 200 PVC OR AS SHOWN ON THE PLANS.
2. 12 GA. TRACER WIRE SHALL BE PLACED IN THE WATER MAIN TRENCH AND SHALL BE CONNECTED TO ALL VALVES AND FITTINGS TO ASSURE CONDUCTIVITY.
3. VALVES AND MAINS SHALL BE LOCATED PER MARKER POST DETAIL.
4. ALL FITTINGS, 4" AND LARGER, SHALL BE DUCTILE IRON, MECHANICAL JOINT.
5. VALVES SHALL BE LOCATED ADJACENT TO THE FITTINGS IN THE BRANCHES AS SHOWN ON THE PLANS.
6. THE LENGTH OF MAINS SHOWN ARE APPROXIMATE AND MAY BE MORE OR LESS TO FIT THE FIELD CONDITIONS.
7. ALL HOUSE SERVICES (NEW AND RECONNECTIONS) WILL BE MADE BY THE DISTRICT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF HIS WORK WITH THE DISTRICT SO THAT NEW MAINS ARE TESTED, DISINFECTED AND READY FOR USE AND SERVICE CONNECTIONS ARE COMPLETE PRIOR TO ABANDONING OLD MAINS.
8. MAINS ADJACENT TO A ROAD CUT SECTION SHALL BE LAID DEEPER AND/OR LOCATED TO PREVENT RELOCATION OR DAMAGE BY FUTURE EXCAVATION OF BANK. SEE SPECS.
9. ALL MAINS AND SERVICE LINES TO BE ABANDONED SHALL BE DISCONNECTED FROM THE LIVE MAINS AND MAINS SHALL BE SEALED AND BLOCKED AS SHOWN ON THE PLANS.
10. HIGHWAY (STATE AND FEDERAL) AND RAILROAD CROSSINGS SHALL BE MADE WITH A BORE AND CASING AS SHOWN ON THE PLANS AND PER THE RESPECTIVE PERMITS.
11. THE DESCRIPTIONS AND LOCATIONS OF EXISTING MAINS AND OTHER UTILITIES ARE FROM RECORD DRAWINGS ONLY. THE EXACT LOCATION, PERMITS, AND REPAIR (IF DAMAGED) SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
12. THERE ARE EXISTING TELEPHONE, ELECTRIC, GAS, AND POSSIBLE OTHER UTILITIES. THE CONTRACTOR SHALL CONTACT THE OWNER OF EACH UTILITY IN ADVANCE TO DETERMINE LOCATION AND PROTECTION. THE EXACT PROTECTION AND REPAIR (IF DAMAGED) SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF EASEMENTS.
14. PIPE SPACERS FOR ALL BORES W/CASING SHALL BE PLASTIC.

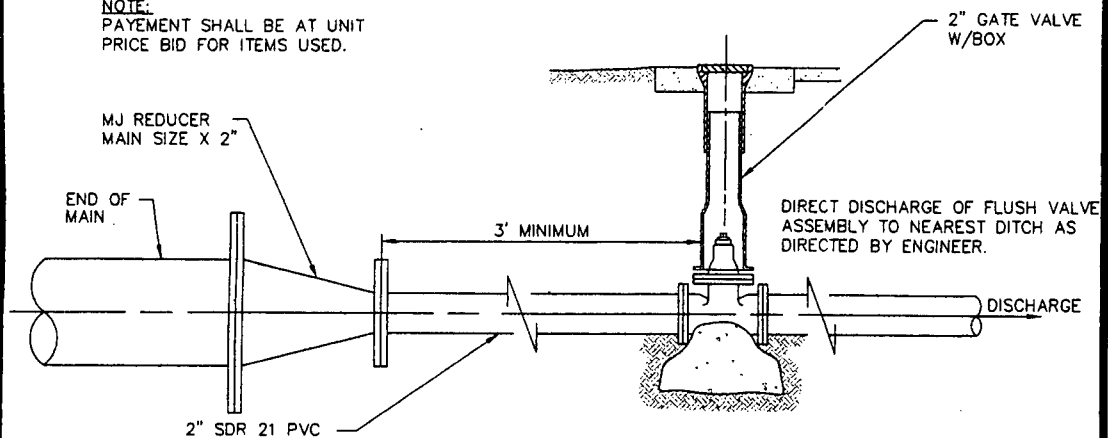


**AIR RELEASE VALVE INSTALLATION**

(VALVE SIZE PER PLANS)

NOT TO SCALE

**NOTE:**  
PAYMENT SHALL BE AT UNIT  
PRICE BID FOR ITEMS USED.



**FLUSH VALVE ASSEMBLY**

NOT TO SCALE