

RFB NO. 107119



CONSTRUCTION DOCUMENTS PROJECT MANUAL

DANE COUNTY DEPARTMENT OF ADMINISTRATION

PURCHASING DIVISION
ROOM 425, CITY-COUNTY BUILDING
MADISON, WISCONSIN 53703

REQUEST FOR BIDS NO. 107119 WATER SERVICE INSTALLATION DANE COUNTY LANDFILL SITE #2 7102 U.S. HIGHWAY 12 & 18 MADISON, WISCONSIN

Opening Date: **August 30, 2007**

Bid Deposit: **5% OF BID AMOUNT**

Time: **2:00 P.M.**

Performance / Payment Bond: **100% OF CONTRACT AMOUNT**

Location: **ROOM 425, CITY-COUNTY BUILDING**

FOR INFORMATION ON THIS REQUEST FOR BIDS, PLEASE CONTACT:

JOHN WELCH, PROJECT MANAGER
DANE COUNTY DEPARTMENT OF PUBLIC WORKS,
HIGHWAY & TRANSPORTATION
1919 ALLIANT ENERGY CENTER WAY
MADISON, WISCONSIN 53713
TELEPHONE NO.: 608/266-4592
FAX NO.: 608/267-1533
E-MAIL: WELCH@CO.DANE.WI.US

DOCUMENT INDEX FOR RFB NO. 107119

PROCUREMENT AND CONTRACTING REQUIREMENTS

Project Manual Cover Page
Documents Index and Dane County Vendor Registration Program
Invitation to Bid (Legal Notice)
Instructions to Bidders
Bid Form
Fair Labor Practices Certification
Sample Public Works Contract
Sample Bid Bond
Sample Performance / Payment Bond
Conditions of Contract
Supplementary Conditions

DIVISION 1 - GENERAL REQUIREMENTS

01000 - Basic Requirements
01508 - Recycling

DIVISION 2 – SITE CONSTRUCTION

02512 – Site Water Distribution
02740 - Asphaltic Road Patching

DIVISION 3 - CONCRETE

NOT USED

DIVISION 4 - MASONRY

NOT USED

DIVISION 5 - METALS

NOT USED

DIVISION 6 - WOOD AND PLASTICS

NOT USED

DIVISION 7 – THERMAL AND MOISTURE PROTECTION

NOT USED

DIVISION 8 – DOORS AND WINDOWS

NOT USED

DIVISION 9 - FINISHES

NOT USED

DIVISION 10 - SPECIALTIES

NOT USED

DIVISION 11 - EQUIPMENT

NOT USED

DIVISION 12 - FURNISHINGS

NOT USED

DIVISION 13 – SPECIAL CONSTRUCTION

NOT USED

DIVISION 14 – CONVEYING SYSTEMS

NOT USED

DIVISION 15 - MECHANICAL

NOT USED

DIVISION 16 - ELECTRICAL

NOT USED

DRAWINGS

Standard Detail Drawing 7.03 - Standard Thrust Blocking

Standard Detail Drawing 7.04 - Typical Hydrant Installation

Drawing 1- Site Plan

Drawing 2 - Utilities

DANE COUNTY VENDOR REGISTRATION PROGRAM

All bidders / proposers wishing to submit a bid / proposal must be a *paid registered vendor* with Dane County. Prior to the bid / proposal opening, you can complete a registration form online by visiting our web site at www.danepurchasing.com, or you can obtain a Vendor Registration Form by calling 608/266-4131. Your completed Vendor Registration Form and Registration Fee must be received for your bid / proposal to be considered for an award.

LEGAL NOTICE

REQUEST FOR BIDS

Sealed bids will be received by the Dane County Purchasing Division, Room 425, City-County Building, 210 Martin Luther King Jr. Blvd., Madison, WI 53703, until:

2:00 P.M., THURSDAY, AUGUST 30, 2007

BID NO. 107119
WATER SERVICE INSTALLATION
DANE COUNTY SANITARY LANDFILL SITE #2
MADISON WI 53718

Plans and Specifications may be obtained at the Dane County Public Works, Highway & Transportation Dept., 1919 Alliant Energy Center Way, Madison, WI 53713, by calling 608-266-4018, or downloading it from www.countyofdane.com/pwht/bid. For additional information, contact John Welch at 608-266-4592 or welch@co.dane.wi.us.

Bidders are strongly encouraged to attend a pre-bid tour at 1:00 p.m. on Thursday, August 23, 2007 at the Landfill.

All bidders wishing to submit a bid must be registered with Dane County prior to bid opening. Complete a Vendor Registration Form online or obtain one by calling 608-266-4131.

PUBLISH: August 6 and 13, 2007 – WISCONSIN STATE JOURNAL

August 13 and 20, 2007 – WESTERN BUILDER

INSTRUCTIONS TO BIDDERS

**WATER SERVICE INSTALLATION
DANE COUNTY LANDFILL SITE #2
7102 U.S. HIGHWAY 12 & 18
MADISON, WISCONSIN**

1. SECURING DOCUMENTS

- A. Construction Documents may be obtained at:
Dane County Department of Public Works, Highway & Transportation
1919 Alliant Energy Center Way, Madison, Wisconsin 53713
608/266-4018
www.co.dane.wi.us/danedept/purch/rfpsbids/display.asp
- B. If Construction Documents are obtained from the Dane County web site, Bidder is responsible to check back regularly at the web site for Addenda.
- C. Deposit for Drawings and Specifications is not required.

2. BID REQUIREMENTS

- A. Bidder shall submit lump sum bid for providing all labor, equipment, tools and materials necessary to perform all Work described in Construction Documents. Only firms with capabilities, experience and expertise with similar projects should submit bids.
- B. One (1) Bid Form shall be submitted with your Bid. Bid Form is provided with Construction Documents; no other form or letter shall be accepted.
- C. Bidders shall not add any conditions, escalator clauses or qualifying statements to Bid Form.
- D. Erasures or other changes to Bid must be explained or noted, and shall be accompanied by initials of bidder.
- E. Envelope containing Bid shall be clearly marked as for this project (note title at top of page). Bids shall be delivered to:
Dane County Department of Public Works, Highway & Transportation
c/o Dane County Purchasing Agent
210 Martin Luther King Jr. Blvd. - Room 425
Madison, Wisconsin 53703
- F. Legally authorized official of bidder's organization must sign Bids.
- G. Bid Bond shall be made payable to Dane County in amount of five percent (5%) of bid amount. Bid Bond shall be either certified check or bid bond issued by surety licensed to conduct business in the State of Wisconsin. Successful bidder's Bid Bond shall be retained until Contract is signed; and required Performance / Payment Bond is submitted. Bids shall be binding on bidder for sixty (60) days after Bid Opening. Bid Bond must be submitted with Bid.

- H. Successful bidder shall furnish and pay for Performance / Payment Bond as called for in Conditions of Contract.

3. INQUIRIES

- A. Written inquiries regarding intent of Construction Documents should be directed to:
John Welch, Project Manager
Dane County Department of Public Works, Highway & Transportation
1919 Alliant Energy Center Way, Madison, Wisconsin 53713
Fax: 608/267-1533
- B. Bidders shall bring questions, discrepancies, omissions, conflicts or doubt as to meaning of any part of Construction Documents to attention of Department of Public Works, Highway & Transportation at least ten (10) days before due date for Bids. Prompt clarification of intent of Construction Documents shall be made available to bidders in form of Addendum. Bidder shall acknowledge all Addenda on Bid Form.
- C. Failure to request clarification of interpretation of Construction Documents shall not relieve bidders of their responsibilities to perform Work.

4. EXAMINATION OF SITE

- A. Coordinate site access activities with Abdullah Younes, 608/516-6228.
- B. Bidder shall carefully examine project site. Investigate all site conditions that may affect execution of Work as detailed in Construction Documents.
- C. A bidders facility tour will be held on August 23, 2007 at 1:00 PM at Dane County Landfill Site #2, 7102 US Highway 12 & 18, Madison, WI starting in front of building. This tour will go until approximately 2:00 PM. Bidders are strongly encouraged to attend this tour, however attendance is optional.

5. ALTERNATES

- A. Each bidder shall carefully read requests for alternate bids. Thoroughly examine Drawings and Specifications to determine to what extent various changes and conditions affect Bids. Base Bid may be considered void if alternate bids are not submitted in space available on Bid Form. Award of Contract shall be based on lowest qualified Base Bid amount.
- B. Bidders shall state amount to be added or deducted from Base Bid for making changes, including all incidentals, omissions, additions, and adjustments as may be necessary of required by stated alternates.
- C. See Bid Form, Section 01000 - Basic Requirements, and indicated specification sections for alternates included in this project.

6. WITHDRAWAL OF BIDS

- A. Any bidder may withdraw their Bid any time prior to Bid Opening. Withdrawn Bids shall be returned unopened.

7. BID OPENING

- A. See Legal Notice (advertisement).

8. COMMENCEMENT AND COMPLETION OF WORK

- A. Work shall commence by October 15, 2007.
- B. Work shall be completed by November 16, 2007.

9. RESERVATION

- A. Dane County reserves the right to reject any or all Bids, to waive any informalities in the Bid, and to accept any Bid which shall be in the best interest of Dane County.

BID FORM

BID NO. 107119

**PROJECT: WATER SERVICE INSTALLATION
DANE COUNTY LANDFILL SITE #2**

**TO: DANE COUNTY PURCHASING AGENT
210 MARTIN LUTHER KING, JR. BLVD. - ROOM 425
MADISON, WISCONSIN 53703**

BASE BID - LUMP SUM:

This project consists of providing approximately 925 LF of 6" PVC water service lateral to connect an existing 1" copper lateral to a 12" Madison Utilities water main, two valves, one (1) hydrant, and all appurtenances. Water service lateral construction consists of excavating the required trenches; laying the required pipe, fittings, valves, valve boxes, hydrants, and appurtenances; backfilling trenches; and restoring site to existing conditions. The undersigned, having examined the site where the Work is to be executed and having become familiar with local conditions affecting the cost of the Work and having carefully examined the Drawings and Specifications, all other Construction Documents and Addenda thereto prepared by Dane County Department of Public Works, Highway & Transportation hereby agrees to provide all labor, materials, equipment and services necessary for the complete and satisfactory execution of the entire Work, as specified in the Construction Documents, for the Base Bid stipulated sum of:

_____ and _____ /100 Dollars
Written Price

\$ _____
Numeric Price

ALTERNATE BID 1 - LUMP SUM:

Providing and adjusting one (1) hydrant with all necessary thrust blocking, valve, and appurtenances as indicated on drawings and described in Construction Documents.

_____ and _____ /100 Dollars
Written Price

\$ _____
Numeric Price

Receipt of the following addenda and inclusion of their provisions in this Bid is hereby acknowledged:

Addendum No(s). _____ through _____

Dated _____

Dane County Solid Waste must have this project completed by November 16, 2007. Assuming a Notice to Proceed is issued by October 11, 2007, what dates can you commence and complete this job?

Commencement Date: _____ Completion Date: _____
(final, not substantial)

Name of Bidder: _____

Address: _____

Telephone No.: _____ Fax No.: _____

Contact Person: _____

SIGNATURE: _____
(Bid is invalid without signature)

FAIR LABOR PRACTICES CERTIFICATION

Dane County Ordinance 25.11(28)

The undersigned, for and on behalf of the PROPOSER, BIDDER OR APPLICANT named herein, certifies as follows:

1. That he or she is an officer or duly authorized agent of the above-referenced PROPOSER, BIDDER OR APPLICANT, which has submitted a proposal, bid or application for a contract with the county of Dane.

2. That PROPOSER, BIDDER OR APPLICANT has: (Check One)

_____ not been found by the National Labor Relations Board ("NLRB") or the Wisconsin Employment Relations Commission ("WERC") to have violated any statute or regulation regarding labor standards or relations in the seven years prior to the date this Certification is signed.

_____ been found by the National Labor Relations Board ("NLRB") or the Wisconsin Employment Relations Commission ("WERC") to have violated any statute or regulation regarding labor standards or relations in the seven years prior to the date this Certification is signed

Date Signed: _____

Officer or Authorized Agent

Business Name

NOTE: You can find information regarding the violations described above at:
www.nlrb.gov and <http://werc.wi.gov>.

For Reference Dane County Ord. 28.11 (28) is as follows:

(28) BIDDER RESPONSIBILITY. (a) Any bid, application or proposal for any contract with the county, including public works contracts regulated under chapter 40, shall include a certification indicating whether the bidder has been found by the National Labor Relations Board (NLRB) or the Wisconsin Employment Relations Committee (WERC) to have violated any statute or regulation regarding labor standards or relations within the last seven years. The purchasing manager shall investigate any such finding and make a recommendation to the committee, which shall determine whether the conduct resulting in the finding affects the bidder's responsibility to perform the contract.

If you indicated that you have been found by the NLRB or WERC to have such a violation, you must include a copy of any relevant information regarding such violation with your proposal, bid or application.

COUNTY OF DANE

PUBLIC WORKS CONTRACT

Contract No. _____ Bid No. 107119

THIS CONTRACT, made and entered into as of the date by which authorized representatives of both parties have affixed their signatures, by and between the County of Dane (hereafter referred to as "COUNTY") and _____ (hereafter, "CONTRACTOR"), and

WITNESSETH:

WHEREAS, COUNTY, whose address is c/o Associate Public Works Director, 1919 Alliant Energy Center Way, Madison, WI 53713, desires to have CONTRACTOR provide all labor, materials, equipment and services necessary for the complete and satisfactory execution of WATER SERVICE INSTALLATION, including Alternate Bid 1, ("the Project"); and

WHEREAS, CONTRACTOR, whose address is _____ is able and willing to construct the Project, in accordance with the Construction Documents;

NOW, THEREFORE, in consideration of the above premises and the mutual covenants of the parties hereinafter set forth, the receipt and sufficiency of which is acknowledged by each party for itself, COUNTY and CONTRACTOR do agree as follows:

1. CONTRACTOR agrees to construct, for the price of \$_____ the Project and at the CONTRACTOR'S own proper cost and expense to furnish all materials, supplies, machinery, equipment, tools, superintendence labor, insurance, and other accessories and services necessary to complete the Project in accordance with the conditions and prices stated in the Bid Form, Conditions of Contract, the drawings which include all maps, plats, plans, and other drawings and printed or written explanatory matter thereof, and the specifications therefore as prepared by _____ (hereinafter referred to as "the Architect / Engineer"), and as enumerated in the Project Manual Document Index, all of which are made a part hereof and collectively evidence and constitute the Contract.
2. COUNTY agrees to pay the CONTRACTOR in current funds for the performance of the Contract subject to additions and deductions, as provided in the Conditions of Contract, and to make payments on account thereof as provided in Article entitled, "Payments to Contractor" of the Conditions of Contract.
3. During the term of this Agreement, CONTRACTOR agrees to take affirmative action to ensure equal employment opportunities. The CONTRACTOR agrees in accordance with Wisconsin Statute 111.321 and Chapter 19 of the Dane County Code of Ordinances not to discriminate on the basis of age, race, ethnicity, religion, color, gender, disability, marital status, sexual orientation, national origin, cultural differences, ancestry, physical appearance, arrest record or conviction record, military participation or membership in the national guard, state

defense force or any other reserve component of the military forces of the United States, or political beliefs. Such equal opportunity shall include, but not be limited to, the following: employment, upgrading, demotion, transfer, recruitment, advertising, layoff, termination, training, rates of pay, and any other form of compensation. CONTRACTOR agrees to post in conspicuous places, available to all employees and applicants for employment, notices setting forth the provisions of this paragraph.

4. CONTRACTOR shall file an Affirmative Action Plan with the Dane County Contract Compliance Officer in accord with Chapter 19 of the Dane County Code of Ordinances. CONTRACTOR must file such plan within fifteen (15) days of the effective date of this Agreement. During the term of this Agreement CONTRACTOR shall also provide copies of all announcements of employment opportunities to COUNTY'S Contract Compliance Office, and shall report annually the number of persons, by race, ethnicity, gender, and disability status, which apply for employment and, similarly classified, the number hired and number rejected.

5. During the term of this Agreement, all solicitations for employment placed on CONTRACTOR'S behalf shall include a statement to the effect that CONTRACTOR is an "Equal Opportunity Employer."

6. CONTRACTOR agrees to furnish all information and reports required by COUNTY'S Contract Compliance Officer as the same relate to affirmative action and nondiscrimination, which may include any books, records, or accounts deemed appropriate to determine compliance with Chapter 19, Dane County Code of Ordinances, and the provisions of this Agreement.

7. CONTRACTOR agrees that all persons employed by CONTRACTOR or any subcontractor shall be paid no less than the minimum wage established under Chapter 40, Subchapter II, Dane County Code of Ordinances. CONTRACTOR agrees to abide by and comply with the provisions of Chapter 40, Subchapter II of the Dane County Code of Ordinances, and said Subchapter is fully incorporated herein by reference.

8. This Contract is intended to be a Contract solely between the parties hereto and for their benefit only. No part of this Contract shall be construed to add to, supplement, amend, abridge or repeal existing rights, benefits or privileges of any third party or parties including, but not limited to, employees of either of the parties.

9. The entire agreement of the parties is contained herein and this Contract supersedes any and all oral agreements and negotiations between the parties relating to the subject matter hereof. The parties expressly agree that the express terms of this Contract shall not be amended in any fashion except in writing, executed by both parties.

IN WITNESS WHEREOF, COUNTY and CONTRACTOR, by their respective authorized agents, have caused this Contract and its Schedules to be executed, effective as of the date by which all parties hereto have affixed their respective signatures, as indicated below.

* * * * *

FOR CONTRACTOR:

Signature Date

Printed or Typed Name and Title

Signature Date

Printed or Typed Name and Title

NOTE: If CONTRACTOR is a corporation, Secretary should attest. In accordance with IRS Regulations, unincorporated entities are required to provide either their Social Security or Employer Number in order to receive payment for services rendered.

* * * * *

This Contract is not valid or effectual for any purpose until approved by the appropriate authority designated below, and no work is authorized until the CONTRACTOR has been given notice to proceed by COUNTY'S Associate Public Works Director.

FOR COUNTY:

Kathleen M. Falk, County Executive Date

Robert Ohlsen, County Clerk Date

UNITED STATES FIDELITY AND GUARANTY COMPANY



BID BOND

BOND NUMBER

KNOW ALL MEN BY THESE PRESENTS:

THAT

..... of

....., as Principal, and UNITED STATES FIDELITY AND GUARANTY COMPANY, a Maryland corporation, as Surety, are held and firmly bound unto.....

as Oblige, in the full and just sum of.....

..... Dollars,
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.

WHEREAS, the said Principal is herewith submitting its proposal

THE CONDITION OF THIS OBLIGATION is such that if the aforesaid Principal shall be awarded the contract the said Principal will, within the time required, enter into a formal contract and give a good and sufficient bond to secure the performance of the terms and conditions of the contract, then this obligation to be void; otherwise the Principal and Surety will pay unto the Oblige the difference in money between the amount of the bid of the said Principal and the amount for which the Oblige legally contracts with another party to perform the work if the latter amount be in excess of the former, but in no event shall liability hereunder exceed the penal sum hereof.

Signed, sealed and delivered.....
(Date)

.....(SEAL)

.....(SEAL)

UNITED STATES FIDELITY AND GUARANTY COMPANY

.....
Attorney-in-fact

THE AMERICAN INSTITUTE OF ARCHITECTS



AIA Document A312

Performance Bond

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):

SURETY (Name and Principal Place of Business):

OWNER (Name and Address):

SAMPLE

CONSTRUCTION CONTRACT

Date:

Amount:

Description (Name and Location):

BOND

Date (Not earlier than Construction Contract Date):

Amount:

Modifications to this Bond:

None

See Page 3

CONTRACTOR AS PRINCIPAL

Company: (Corporate Seal)

SURETY

Company: (Corporate Seal)

Signature: _____
Name and Title:

Signature: _____
Name and Title:

(Any additional signatures appear on page 3)

(FOR INFORMATION ONLY—Name, Address and Telephone)

AGENT or BROKER:

OWNER'S REPRESENTATIVE (Architect, Engineer or other party):

1 The Contractor and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

2 If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except to participate in conferences as provided in Subparagraph 3.1.

3 If there is no Owner Default, the Surety's obligation under this Bond shall arise after:

3.1 The Owner has notified the Contractor and the Surety at its address described in Paragraph 10 below that the Owner is considering declaring a Contractor Default and has requested and attempted to arrange a conference with the Contractor and the Surety to be held not later than fifteen days after receipt of such notice to discuss methods of performing the Construction Contract. If the Owner, the Contractor and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default; and

3.2 The Owner has declared a Contractor Default and formally terminated the Contractor's right to complete the contract. Such Contractor Default shall not be declared earlier than twenty days after the Contractor and the Surety have received notice as provided in Subparagraph 3.1; and

3.3 The Owner has agreed to pay the Balance of the Contract Price to the Surety in accordance with the terms of the Construction Contract or to a contractor selected to perform the Construction Contract in accordance with the terms of the contract with the Owner.

4 When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

4.1 Arrange for the Contractor, with consent of the Owner, to perform and complete the Construction Contract; or

4.2 Undertake to perform and complete the Construction Contract itself, through its agents or through independent contractors; or

4.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and the contractor selected with the Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 6 in excess of the Balance of the Contract Price incurred by the Owner resulting from the Contractor's default; or

4.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:

.1 After investigation, determine the amount for

which it may be liable to the Owner and, as soon as practicable after the amount is determined, tender payment therefor to the Owner; or

.2 Deny liability in whole or in part and notify the Owner citing reasons therefor.

5 If the Surety does not proceed as provided in Paragraph 4 with reasonable promptness, the Surety shall be deemed to be in default on this Bond fifteen days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Subparagraph 4.4, and the Owner refuses the payment tendered or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

6 After the Owner has terminated the Contractor's right to complete the Construction Contract, and if the Surety elects to act under Subparagraph 4.1, 4.2, or 4.3 above, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. To the limit of the amount of this Bond, but subject to commitment by the Owner of the Balance of the Contract Price to mitigation of costs and damages on the Construction Contract, the Surety is obligated without duplication for:

6.1 The responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;

6.2 Additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 4; and

6.3 Liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

7 The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators or successors.

8 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

9 Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation avail-

able to sureties as a defense in the jurisdiction of the suit shall be applicable.

10 Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the signature page.

11 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

12 DEFINITIONS

12.1 Balance of the Contract Price: The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made, including allowance to the Con-

tractor of any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

12.2 Construction Contract: The agreement between the Owner and the Contractor identified on the signature page, including all Contract Documents and changes thereto.

12.3 Contractor Default: Failure of the Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Construction Contract.

12.4 Owner Default: Failure of the Owner, which has neither been remedied nor waived, to pay the Contractor as required by the Construction Contract or to perform and complete or comply with the other terms thereof.

MODIFICATIONS TO THIS BOND ARE AS FOLLOWS:

SAMPLE

(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)

CONTRACTOR AS PRINCIPAL
Company: _____ (Corporate Seal)

SURETY
Company: _____ (Corporate Seal)

Signature: _____
Name and Title:
Address:

Signature: _____
Name and Title:
Address:

CONDITIONS OF CONTRACT

TABLE OF CONTENTS

1. BIDS AND QUOTATIONS	1
2. GUARANTEE AND BOND	2
3. SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.....	3
4. AWARDS	4
5. CONTRACT PROVISIONS.....	5
6. GENERAL GUARANTEE.....	10
7. IDENTICAL BIDDING	11
8. BINDING CONTRACTS	11
9. AFFIRMATIVE ACTION PROVISION AND MINORITY / WOMEN / DISADVANTAGED BUSINESS ENTERPRISES.....	11
10. COMPLIANCE WITH FAIR LABOR STANDARDS.....	12
11. INSURANCE REQUIREMENTS	12

1. BIDS AND QUOTATIONS

- A. **Addressing of Bids.** Bids shall be addressed to the attention of Dane County Purchasing Agent and received at the Dane County Purchasing Division, 210 Martin Luther King, Jr. Blvd., Room 425, Madison, WI 53703, on or before the local time and date specified herein for the Bid Opening. Seal all bids in envelopes provided by Dane County or similar and clearly mark the front with bid number and a reference to the specified contents of the bid. All uses of the term “County” in the Construction Documents shall mean Dane County.
- B. **Only One Copy Required.** Unless otherwise specified, only one copy of a bid or quotation on prescribed Bid Form will be required.
- C. **Additional Data with Bid.** Bidder may submit, on the firm’s letterhead only, additional data and information deemed advantageous to the County. The County shall hold optional the consideration of such data and information.
- D. **More than One Bid.** Bidders desiring to submit more than one bid may do so provided such additional bid or bids are properly submitted on the Dane County Department of Public Works, Highway & Transportation’s Bid Form. Obtain extra sets of Construction Documents from the Dane County Department of Public Works, Highway & Transportation. All uses of the term “Department” in the Construction Documents shall mean the Department of Public Works, Highway & Transportation, which is a unit of Dane County government.
- E. **Withdrawal or Late Bids.** The County will not accept formal bids, amendments thereto, or requests for withdrawal of a bid or any part thereof, after the time of Bid Opening.
- F. **Preparation and Submission.** All written bids, unless otherwise provided for, must be submitted on and in accordance with forms provided by the County properly signed in ink. Bids not signed by hand are not accepted. Bidders must register in advance with the Purchasing Division.
- G. **Products by Name.** Intention of Specifications of products by name is to be descriptive of quality, workmanship, finish, function and approximate characteristics desired; intention is not necessarily restriction. Consideration of products substitution for those named is possible, provided the substitute offered is, in the opinion of the Dane County Public Works

Project Engineer, equal or superior in quality, workmanship, finish, function and approximate characteristics to that specified in the Project Manual Specifications listed herein.

- H. **Visitation of Sites.** Bidder shall visit the site(s) that will receive the intended work or installation, and in so doing, be held responsible for a job deemed satisfactory by the County after completion of the Work or installation. No additional compensation shall be allowed for any condition of which bidder could have been informed.
- I. **Completeness.** Supply all information required by Construction Documents to constitute a regular bid. This includes:
 - 1. Signed Bid Form;
 - 2. Bid Bond made payable to Dane County in amount of five percent (5%) of bid amount. Bid Bond shall be either certified check or bid bond issued by surety licensed to conduct business in the State of Wisconsin;
 - 3. A complete Dane County vendor registration form. Vendor registration form can be obtained online by visiting our web site at www.danepurchasing.com or by calling 608/266-4131; and
 - 4. Completed Fair Labor Practices Certification form.
- J. **Bids Binding Sixty (60) Days.** Unless otherwise specified all formal bids submitted shall be binding for sixty (60) calendar days following Bid Opening date.
- K. **Conditional Bids.** Qualified bids are subject to complete rejection, or partial rejection.
- L. **All or Part.** Bids or quotations may be considered and award made for all or any part of total quantities as specified in the Construction Documents.
- M. **Errors.** Unit bid price shall govern when extending total prices has errors.. Carelessness in quoting prices or in preparation of bid otherwise, will not relieve the bidder. Explain all erasures in bids and include signature of bidder.
- N. **Regulation by State Statutes.** The bidding and letting of contracts are subject to provisions of Wisconsin Statutes 59.52(29) and 66.0901 and all subsequent sections and amendments thereof.
- O. **Bidders Present.** The Bid Opening is the time fixed for the opening of formal bids. The Bids' contents will be made public for the information of bidders and others properly interested, who may be present either in person or by representative. Bidders are encouraged to attend all openings, and to offer constructive suggestions for improvements to bid format or ways in which County can realize greater savings.
- P. **Taxes.** Contractor shall pay applicable State and local sales taxes.

2. GUARANTEE AND BOND

- A. **Bid Bond / Guarantee.** A Bid Bond shall accompany Bids, which shall be either a flat sum or a percentage figure as shown on the Project Manual Cover. This Bid Bond shall serve as a warrant that the successful bidder will fulfill the terms of the bid within the time limit as indicated in the bid after notice of award by the Dane County. The Bid Bond may be a certified check (note: uncertified checks will not be acceptable), a cashier's check or a United State money order payable to the order of the Treasurer of Dane County; or on a Bid Bond with corporate surety authorized to do business in the State of Wisconsin and a warranty of attorney to confess judgment thereon attached thereto. The County will return negotiable Bid

Bonds to unsuccessful bidders after awarding of bid. The County shall return a check held from a Contractor after satisfactory completion of the Contract or after receipt by the County of a Performance Bond from the Contractor, if one is required. Surety Bid Bonds will not be returned unless specifically requested by individual bidders.

- B. **Guarantor Liability.** When guarantee is required, failure of bidder to furnish an acceptable Performance Bond (Article 2.C.) within twenty (20) days after receipt of notice of award shall render the guarantor liable to the County. Bids covered by certified check or bond such security shall become the absolute property of the County and shall be deposited with the County Treasurer for the benefit of the County as liquidated damages. The County shall forthwith proceed to collect on the Bid Bond.
- C. **Performance / Payment Bond.** When required, file a guarantee that the successful bidder will faithfully perform the obligations of the bid as accepted. Such guarantee must be a bond complying with Wisconsin Statute 779.14 with corporate surety authorized to do business in this State, and that the Contractor or subcontractors will be responsible for all claims for injuries to persons or damages to property or premises arising out of or in connection with their operations prior to the acceptance of the finished work or supplies, and that they will promptly make payments to all persons supplying them with labor or materials in the execution of the Work provided for in the Contract; guarantee to indemnify and hold the County and its Agencies and employees harmless from all costs, damages and expenses growing out of or by reason of the successful bidder's failure to comply and perform the Work and complete the Contract in accordance with the Construction Documents; attach thereto a warrant of attorney authorizing the confession of judgment thereon for the benefit of the County.

3. SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

- A. Shop Drawings are drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or a subcontractor, sub-subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.
- B. Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.
- C. Samples are physical examples that illustrate materials, equipment or workmanship and establish standards to compare the Work.
- D. Shop Drawings, Product Data, Samples and similar submittals are not Construction Documents. The purpose of their submittal is to demonstrate for those portions of the Work for which submittals are required the way the Contractor proposes to conform to the information given and the design concept expressed in the Construction Documents.
- E. The Contractor shall review, approve and submit to the Public Works Project Engineer Shop Drawings, Product Data, Samples and similar submittals required by the Construction Documents with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the County or of separate contractors. Submittals made by the Contractor not required by the Construction Documents, may be returned without action.
- F. The Contractor shall perform no portion of the Work requiring submittal and review of Shop Drawings, Product Data, Samples or similar submittals until the Public Works Project

Engineer has approved the respective submittal. Such Work shall be in accordance with approved submittals.

- G. By approving and submitting, Shop Drawings, Product Data, Samples and similar submittals, the Contractor represents that the Contractor has determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Construction Documents.
- H. The Contractor shall not be relieved of responsibility for deviations from requirements of the Construction Documents by the Public Works Project Engineer's approval of Shop Drawings, Product Data, Samples and similar submittals unless the Contractor has specifically informed the Public Works Project Engineer in writing of such deviation at the time of submittal and the Public Works Project Engineer has given written approval to the specific deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Sample or similar submittals by the Public Works Project Engineer's approval thereof.
- I. The Contractor shall in writing direct specific attention to revised and / or resubmitted Shop Drawings, Product Data, Samples or similar submittals that were not requested by the Architect / Engineer or the Public Works Project Engineer on previous submittals.
- J. Unless specified otherwise, Contractor shall submit three (3) copies of all Shop Drawings, Product Data, Samples or similar submittals for each submission, until receiving final approval. After final approval, provide five (5) additional copies for distribution and such other copies as may be required.

4. AWARDS

- A. **Lowest Responsible Bidder.** Award will be to the lowest responsible bidder conforming to Construction Documents or on the most advantageous bid to the County.
- B. **Other Considerations.** Quantities involved, time of delivery, purpose for which required, competency of bidder, the ability to render satisfactory service and past performance will be considered in determining responsibility.
- C. **Rejection of Bids.** The County reserves the right to reject any or all bids or quotations in whole or in part and to award by items, parts of items, or by any aggregate group of items specified. The County reserves also the right to waive technical defects when in its judgment the best interests of the County thereby will be served.
- D. **Notice of Acceptance.** Sufficient notification of acceptance of bid will be written notice of award to a bidder in the form of a Purchase Order or similar, mailed or delivered to the address shown on the Bid Form.
- E. **Tie Bids.** If two or more bidders submit identical bids, the decision of the County to make award to one or more of such bidders shall be final. Cash discount will be taken into consideration determining an award. Also, see Article 7.A. IDENTICAL BIDDING, Antitrust Laws.
- F. **Qualifying Bidders.** Prior to solicitation and / or awarding of bid, the County may require submission by bidder of complete financial statement and questionnaire describing bidder's

financial ability and experience in performance of similar work. Refer to Instructions to Bidders.

- G. **Disqualification.** Awards will not be made to any person, firm or company in default of a Contract with the County, or to any bidder having as its sales agent or representative or as a member of the firm, any individual previously in default or guilty of misrepresentation.
- H. **Bid Results.** Bidders may secure information pertaining to results of bids by visiting the County Purchasing Division Office Monday through Friday, between 7:45 a.m. and 4:30 p.m.

5. CONTRACT PROVISIONS

- A. **Acceptance Constitutes Contract.** Written acceptance by the Public Works Project Engineer of a proposal for services shall constitute a Contract, which shall bind the bidder to perform the Work as detailed in the Construction Documents, for the bid amount and in accordance with all conditions of said accepted bid. A formal Contract containing all provisions of the Contract signed by both parties shall be used when required by the Public Works Project Engineer.
- B. **Local Restrictions and Permits.** All work shall be done according to applicable laws, ordinances and codes. The Contractor shall procure and pay for all required permits for permanent or temporary work.
- C. **Payment of Invoices.** Payment may be made only after inspection and acceptance by the using agency and approval by the Dane County Public Works Project Engineer, and, where required by ordinances, approval by the Dane County Board of Supervisors. If materials or equipment were delivered, constructed, erected, installed or tested on site, payment shall be made based on ninety-five percent (95%) of the value of all Work performed up to fifty percent (50%) of scheduled values less the total of previous payments. Authorized extra work will be included in progress payments. Payment of balances will be made only after approval and final acceptance by the County in consideration and elimination of the possibilities of imperfect work, faulty materials or equipment, liens that have been filed, or if evidence indicates the possible filing of claims.
- D. **Contract Alterations.** No alterations or variables in the terms of a contract shall be valid or binding upon the County unless made in writing and signed by the Purchasing Agent or authorized agent.
- E. **Assignments.** No contract may be assigned, sublet or transferred without written consent of the Public Works Project Manager.
- F. **Cancellations.** A contract may be canceled or voided by the Public Works Project Engineer upon non-performance or violation of contract provisions, and an award made to the next low bidder or articles specified may be purchased on the open market. In either event, the defaulting contractor (or their surety) shall be liable to Dane County for costs to the County in excess of the defaulting contractor's contract prices.
- G. **Right of the Department to Terminate Contract.**
 - 1. In the event that the Contractor or any subcontractors violate any of the provisions of this Contract, the County may serve written notice upon the Contractor and the Surety of its intention to terminate the Contract. Such notice to contain the reasons for such intention to terminate the Contract, and unless within ten (10) days after the serving of such notice upon the Contractor, such violation or delay shall cease and satisfactory arrangement or

correction be made, the Contract shall, upon the expiration of said ten (10) days, cease and terminate.

2. In the event of any such termination, the County shall immediately serve notice thereof upon the Surety and the Contractor, and the Surety shall have the right to take over and perform the Contract subject to County's approval. However, if the Surety does not commence performance thereof within ten (10) days from the date of the mailing to such Surety of notice of termination, the County may take over the Work and prosecute the same to completion by Contract or by force account for the account and at the expense of the Contractor. The Contractor and Surety shall be liable to the County for any excess cost occasioned the County thereby, and in such event the County may take possession of and utilize in completing the Work, such equipment, materials and / or supplies as may be on the site of the Work and therefore necessary.

H. **Non-Liability.** The Contractor shall not be liable in damages for delay in shipment or failure to deliver when such delay or failure is the result of fire, flood, strike, the transporting carrier, act of God, act of government, act of an alien enemy or by any other circumstances which, in the Public Works Project Engineer's opinion, is beyond the control of the Contractor. Under such circumstances, however, the Public Works Project Engineer may in the discretion, cancel the Contract.

I. **Quality Assurance.** Inspection of equipment, materials and / or supplies shall be made by or at the direction of the County or the Agency to which the goods are delivered, and any articles supplied that are defective, or fails in any way to meet Specifications or other requirements of the Contract, will be rejected. The Public Works Project Manager shall direct all required laboratory tests. The decision of the Purchasing Agent on acceptance shall be final.

J. **Time for Completion.** The Contractor agrees that the Work shall be prosecuted regularly and diligently and complete the entire project as stated in the Construction Documents.

K. **Changes in the Work.**

1. Except in cases of emergency, no changes in the Work covered by the approved Construction Documents shall be made without having prior written approval of the Department. Charges or credits for the work covered by the approved change shall be determined by one of the following methods:
 - a) Unit bid prices previously approved.
 - b) An agreed lump sum based on actual cost of:
 - 1) Labor, including foremen, and all fringe benefits that are associated with their wages;
 - 2) Materials entering permanently into the Work;
 - 3) The ownership or rental cost of construction plant and equipment during the time of use on the extra work;
 - 4) Power and consumable supplies for the operation of construction or power equipment;
 - 5) Workmen's Compensation Insurance, Contractor's Public Liability and Property Damage Insurance, and Comprehensive Automobile Liability Insurance;
 - 6) Social Security, pension and unemployment contributions;
 - 7) To the cost under K.1.b) 2), there shall be added a fixed fee to be agreed upon, but not to exceed fifteen percent (15%) of the actual cost of the Work performed with their own labor force; the fee shall be compensation to cover the cost of supervision, overhead, bond, profit and any other general expense;

- 8) On that portion of the work under K.1.b) 2) done under subcontract, the Contractor may include not over seven and one-half percent (7½%) for supervision, overhead, bond, profit and any other general expense; and
 - 9) The Contractor shall keep and present in such form as directed, a correct amount of the cost together with such supporting vouchers as may be required by the Department.
- c) Cost-Plus Work, with a not-to-exceed dollar limit, based on actual cost of:
- 1) Labor, including foremen, and all fringe benefits that are associated with their wages;
 - 2) Materials entering permanently into the Work;
 - 3) The ownership or rental cost of construction plant and equipment during the time of use on the extra work. (Rental cost cannot exceed fifty percent (50%) replacement value of rented equipment);
 - 4) Power and consumable supplies for the operation of construction or power equipment;
 - 5) Workmen's Compensation, Contractor's Public Liability and Property Damage Insurance, and Comprehensive Automobile Liability Insurance;
 - 6) Social Security, pension and unemployment contributions;
 - 7) To the cost under K.1.c) 3) there shall be added a fixed fee to be agreed upon, but not to exceed fifteen percent (15%) of the actual cost of the Work performed with their own labor force; the fee shall be compensation to cover the cost of supervision, overhead, bond, profit, and any other general expense;
 - 8) On that portion of the work under K.1.c) 3) done under subcontract, the Contractor may include not over seven and one-half percent (7½%) for supervision, overhead, bond, profit, and any other general expense; and
 - 9) The Contractor shall keep and present in such form as directed, a correct amount of the cost together with such supporting vouchers as may be required by the Department.
2. If the Contractor claims that by any instructions given by the Architect / Engineer, the Department, by drawings or otherwise, regarding the performance of the Work or the furnishing of material under the Contract, involves extra cost, the Contractor shall give the Department written notice thereof within two weeks after the receipt of such instructions and in any event before proceeding to execute the work, unless delay in executing the work would endanger life or property.
 3. No claim for extra work or cost shall be allowed unless the same was done in pursuance of a written order of the Architect / Engineer and approved by the Department, as previously mentioned, and the claim presented with the payment request submitted after the changed or extra work is completed.
 4. Negotiation of cost for a change in the Work shall not be cause for the Contractor to delay prosecution of the Work if the Contractor has been authorized in writing by the Public Works Project Engineer to proceed.

L. Payments to Contractor.

1. The County will make partial payments to the Contractor for the value, proportionate to the amount of the Contract, of all labor and material incorporated in the work during the preceding calendar month upon receipt of approved Application and Certificate of Payment from the Architect / Engineer and approval of the Department.
2. The Contractor shall submit to the Architect / Engineer an Application and Certificate of Payment. The Architect / Engineer will review and approve this before sending it to the

Public Works Project Engineer. Evidence may be required, and supplied on demand, that supports the request and the Contractor's right to the payment claimed.

3. Request for payment for preparatory work and materials delivered and suitably stored at the site to be incorporated into the Work at some future period, will be given due consideration. Requests involving materials stored off the site, may be rejected; however, if deemed essential for reasons of job progress, protection, or other sufficient cause, requests will be considered conditional upon the submission by the Contractor of bills of sale and such other procedures as will adequately protect the County's interest such as storage in a bonded warehouse with adequate coverage. If there is any error in a payment, the Contractor is obligated to notify the Department immediately, but no longer than ten (10) days from receipt of payment.
4. Payments by the County will be due within forty-five (45) days after receipt by the Department of a certified request.
5. Five percent (5%) of each request for certification will be retained until final completion and acceptance of all the Work covered by the Contract. However, anytime after fifty percent (50%) of the Work has been furnished and installed at the site, the remaining payments will be made in full if the Architect / Engineer and Public Works Project Engineer find that the progress of the Work corresponds with the construction progress schedule. If the Architect / Engineer and Public Works Project Engineer find that the progress of the Work does not correspond with the construction progress schedule, up to ten percent (10%) of each request for payment may be retained for the Work completed.
6. All material and work covered by partial payments made shall become the sole property of the County. This provision shall not be construed as relieving the Contractor from the sole responsibility for the care and protection of materials and work upon which payments have been made or the restoration of any damaged work, or as a waiver of the right of the County to require the fulfillment of all of the terms of the Contract.
7. Final payment will be made within sixty (60) days after final completion of the Work, and will constitute acceptance thereof.
8. On completion and acceptance of each separate division of the Contract, on which the stated price is separated in the Contract, payment may be made in full, including retained percentages thereon, less authorized deductions.
9. Every contractor engaged in performance of any contract for Department of Public Works, Highway & Transportation shall submit to this Department, as requested and with final application for payment for work under said contract, affidavit(s) as required to prove that all debts and claims against this Work are paid in full or otherwise satisfied, and give final evidence of release of all liens against the Work and County. If Wisconsin Prevailing Wage Rate Determination is required for this Work, use "Prime Contractor Affidavit of Compliance With Prevailing Wage Rate Determination" and "Agent or Subcontractor Affidavit of Compliance With Prevailing Wage Rate Determination" (if applicable). If Wisconsin Prevailing Wage Rate Determination is not required for this Work, use "Dane County, Wisconsin_Contractor Wage Affidavit". Forms of such affidavits are included in Supplementary Conditions.

M. Withholding of Payments.

1. The County, after having served written notice on the said Contractor, may either pay directly any unpaid bills of which the Department has written notice, 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. Then payment to the Contractor shall be resumed in accordance with the terms of this Contract, but in no event shall these provisions be construed to impose any obligations upon the County to either the Contractor or the Contractor's Surety.

2. In paying any unpaid bills of the Contractor, the County shall be deemed the Agent of the Contractor, and any payment so made by the County, shall be considered as a payment made under the Contract by the County to the Contractor and the County shall not be liable to the Contractor for any such payment made in good faith.
3. The Contractor agrees to indemnify and hold the County, its officers, agents, servants, and employees harmless from all claims growing out of the lawful demands of subcontractors, laborers, workmen, mechanics, material men, and furnishers of machinery and parts thereof, equipment, power tools, and all supplies, including commissary, incurred in the performance of this Contract.
4. At the Department's request, the Contractor shall furnish satisfactory evidence that all obligations of the nature designated above have been paid, discharged or waived.

N. Acceptance of Final Payment as Release.

1. The making of final payment shall constitute a waiver of all claims by the County except those arising from:
 - a) Unsettled lien;
 - b) Faulty or defective work appearing after substantial completion;
 - c) Failure of the work to comply with the requirements of the Construction Documents; or
 - d) Terms of any special guarantees required by the Construction Documents.
2. The acceptance of final payment shall constitute a waiver of all claims by the Contractor.

O. Lien Waivers. The Contractor warrants that title to all work covered by an application for Payment will pass to the County no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all work for which Certificates for Payment have been previously issued and payments received from the County shall, to the best of the Contractor's knowledge, information and belief, be free and clear of liens, claims, security interests or encumbrances in favor of the Contractor, subcontractor, material suppliers, or other persons or entities making a claim by reason of having provide labor, materials and equipment related to the Work.

P. Use and Occupancy Prior to Acceptance. The Contractor agrees to the use and occupancy of a portion or unit of the project before formal acceptance by the Department, provided the Department:

1. Secures written consent of the Contractor; except when in the opinion of the Department's Public Works Project Engineer, the Contractor is chargeable with unwarranted delay in final cleanup of punch list items or other Contract requirements;
2. Secures endorsement from the insurance carrier and consent of the Surety permitting occupancy of the building or use of the project during the remaining period of construction, or, secures consent of the Surety;
3. Assumes all costs and maintenance of heat, electricity and water; and
4. Accepts all work completed within that portion or unit of the project to be occupied, at time of occupancy.

Q. Correction of Work.

1. All work, all materials whether incorporated in the Work or not, and all processes of manufacture shall at all times and places be subject to the inspection of the Architect / Engineer and the Public Works Project Engineer who shall be the judge of the quality and suitability of the work, materials, and processes of manufacture for the purposes for which they are used. Should they fail to meet the Architect / Engineer's and the Public Works Project Engineer's approval they shall be reconstructed, made good, replaced or corrected, as the case may be, by the Contractor at the Contractor's expense. Rejected material shall immediately be removed from the site.
2. If the Contractor defaults or neglects to carry out the Work in accordance with the Construction Documents or fails to perform any provision of the Contract, the Department may, after ten (10) days written notice to the Contractor and without prejudice to any other remedy the County may have, make good such deficiencies. In such case, an appropriate Change Order shall be issued deducting from the payments then or thereafter due the Contractor the cost of correcting such deficiencies, including the cost of the Architect / Engineer's additional services made necessary by such default, neglect or failure.

6. GENERAL GUARANTEE

- A. Neither the final certificate of payment nor any provision in the Construction Documents nor partial or entire occupancy of the premises by the County shall constitute an acceptance of work not done in accordance with the Construction Documents or relieve the Contractor of liability in respect to any expressed warranties or responsibility for faulty materials or workmanship.
 1. In no event shall the making of any payment required by the Contract constitute or be construed as a waiver by County of any breach of the covenants of the Contract or a waiver of any default of Contractor and the making of any such payment by County while any such default or breach shall exist shall in no way impair or prejudice the right of County with respect to recovery of damages or other remedy as a result of such breach or default.
- B. The Contractor shall remedy and make good all defective workmanship and materials and pay for any damage to other work resulting therefrom, which appear within a period of one year from the date of substantial completion, providing such defects are not clearly due to abuse or misuse by the County. The Department will give notice of observed defects with reasonable promptness.
- C. Guarantee on work executed after certified date of substantial completion will begin on the date when such work is inspected and approved by the Architect / Engineer and the Public Works Project Engineer.
- D. Where guarantees or warranties are required in sections of Construction Documents for periods in excess of one year, such longer terms shall apply; however, the Contractor's Performance / Payment Bond shall not apply to any guarantee or warranty period in excess of one year.

7. IDENTICAL BIDDING

- A. **Antitrust Laws.** All identical bids submitted to the County because of advertised procurement for materials, supplies, equipment or services exceeding \$1,000,000.00 in total amount shall be reported to the Attorney Generals of the United States and the State of Wisconsin for possible violation and enforcement of antitrust laws.

8. BINDING CONTRACTS

- A. **Contract Commitment.** Any contracts resulting from this bid shall be binding on a successful bidder(s) to its conclusion and on its assigns, heirs, executors, administrators or successors.

9. AFFIRMATIVE ACTION PROVISION AND MINORITY / WOMEN / DISADVANTAGED BUSINESS ENTERPRISES

- A. **Affirmative Action Provisions.** During the term of its Contract, Contractor agrees not to discriminate on the basis of race, religion, color, sex, handicap, age, sexual preference, marital status, physical appearance, or national origin against any person, whether a recipient of services (actual or potential), an employee, or an applicant for employment. Such equal opportunity shall include but not be limited to the following: employment, upgrading, demotion, transfer, recruitment, advertising, layoff, termination, training, rates of pay, and any other form of compensation or level of service(s). Contractor agrees to post in conspicuous places, available to all employees, service recipients and applicants for this paragraph. The listing of prohibited bases for discrimination shall no be construed to amend in any fashion state or federal law setting forth additional bases and exceptions shall be permitted only to the extent allowable in state or federal law.
- B. Contractor is subject to this paragraph only if Contractor has ten (10) or more employees and receives \$10,000.00 or more in annual aggregate contracts with County. Contractor shall file an Affirmative Action Plan with the Dane County Contract Compliance Officer in accord with Chapter 19 of the Dane County Code of Ordinances. Contractor must file such plan within fifteen (15) days of the effective date of this Contract and failure to do so by that date shall constitute grounds for immediate termination of the Contract. During the term of this Contract, Contractor shall also provide copies of all announcements of employment opportunities to the County's Contract Compliance Office, and shall report annually the number of persons, by race, sex and handicap status, which apply for employment and, similarly classified, the number hired and the number rejected.
- C. Contact the Dane County Contract Compliance Officer at Dane County Contract Compliance Office, 210 Martin Luther King, Jr. Blvd., Room 421, Madison, WI 53703, 608/266-4114.
- D. In all solicitations for employment placed on Contractor's behalf during the term of this Contract, Contractor shall include a statement to the effect the Contractor is an "Equal Opportunity Employer."
- E. Contractor agrees to furnish all information and reports required by County's Contract Compliance Officer as the same relate to affirmative action and nondiscrimination, which may include any books, records, or accounts deemed appropriate to determine compliance with Chapter 19, Dane County Code of Ordinances, and the provision of this Contract.
- F. **Minority / Women / Disadvantaged / Emerging Small Business Enterprises.** Chapter 19.508 of the Dane County Code of Ordinances is the official policy of Dane County to utilize Minority Business Enterprises (MBEs), Women Business Enterprises (WBEs),

Disadvantage Business Enterprises (DBEs) and Emerging Small Business Enterprises (ESBEs) fully.

- G. The Contractor may utilize MBEs / WBEs / DBEs / ESBEs as subcontractors or suppliers. A list of subcontractors will be required of the low bidder as stated in this Contract. The list shall indicate which subcontractors or suppliers are MBEs / WBEs / DBEs / ESBEs and what percentage of subcontract is awarded, shown as a percentage of the total dollar amount of the bid.

10. COMPLIANCE WITH FAIR LABOR STANDARDS

- A. During the term of this Agreement, PROVIDER shall report to the County Contract Compliance Officer, within ten (10) days, any allegations to, or findings by the National Labor Relations Board (NLRB) or Wisconsin Employment Relations Commission (WERC) that PROVIDER has violated a statute or regulation regarding labor standards or relations,. If an investigation by the Contract Compliance Officer results in a final determination that the matter adversely affects PROVIDER'S responsibilities under this Agreement, and which recommends termination, suspension or cancellation of this agreement, the County may take such action.
- B. PROVIDER may appeal any adverse finding by the Contract Compliance Officer as set forth in sec. 25.015(11)(c) through (e).
- C. PROVIDER shall post the following statement in a prominent place visible to employees: "As a condition of receiving and maintaining a contract with Dane County, this employer shall comply with federal, state and all other applicable laws prohibiting retaliation or union organizing."

11. INSURANCE REQUIREMENTS

- A. The Contractor shall indemnify, hold harmless and defend the County, its boards, commissions, agencies, officers, employees and representatives from and against all claims, damages, losses and expenses including attorneys' fees arising out of or resulting from the performance of the Work, provided that any such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including the loss of use resulting there from, and is caused in whole or in part by any act or omission 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, regardless of whether or not it is caused in part by a part indemnified hereunder.
- B. In any and all claims against the County or any of its boards, commissions, agencies, officers, employees or representatives or 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 under this Contract 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 worker's compensation acts, disability benefits or other employee benefit acts.
- C. The obligations of the Contractor under this Contract shall not extend to the liability of the Architect / Engineer, its agents or employees arising out of (1) the preparation or approval of

maps, drawings, opinion, reports, surveys, change orders, designs or specifications; or (2) the giving of or the failure to give directions or instruction by the Architect / Engineer, its agents or employees provided such giving or failure to give is the primary cause of the injury or damage.

- D. The County shall not be liable to the Contractor for damages or delays resulting from work by third parties or by injunctions or other restraining orders obtained by third parties.
- E. **Contractor Carried Insurance.** In order to protect itself and the County, the Contractor shall not commence work under this Contract until obtaining all the required insurance and the County has approved such insurance. The Contractor shall not allow any subcontractor to commence work on the subcontract until the insurance required of the subcontractor has been so obtained and approved.
 - 1. **Worker's Compensation Insurance**
The Contractor shall procure and shall maintain during the life of this Contract, Worker's Compensation Insurance as required by statute for all of its employees engaged in work at the site of the project under this Contract and, in case of such work sublet, the Contractor shall require the subcontractor similarly to provide Worker's Compensation Insurance for all of the latter's employees to be engaged in such work unless such employees are covered by the protection afforded by the Contractor's Worker's Compensation Insurance.
 - 2. **Contractor's Public Liability and Property Damage Insurance**
The Contractor shall procure and maintain during the life of this Contract, Contractor's Public Liability Insurance and Contractor's Property Damage Insurance in an amount not less than \$1,000,000.00 per occurrence for bodily injury and death, and Contractor's Property Damage Insurance in an amount not less than \$1,000,000.00 and shall be primary with Dane County as an "Additional Insured".
 - 3. **Auto Liability Insurance**
The Contractor shall procure and maintain during the life of this Contract, Comprehensive Automobile Liability Insurance covering owned, non-owned and hired automobiles for limits of not less than \$1,000,000.00 and shall be primary with Dane County as an "Additional Insured".
- F. The Contractor either (1) shall require each of the subcontractors to procure and to maintain during the life of the subcontract, subcontractor's Public Liability Property Damage Insurance, and Comprehensive Automobile Liability Insurance of the type and in the same amount specified in the preceding paragraphs; or (2) insure that activities of the subcontractors in their own policy.
- G. The Contractor shall furnish the County with certificates showing the type, amount, class of operations covered, effective dates and dates of expiration of policies. Such certificates shall also contain substantially the following statement: "The insurance covered by this certificate will not be canceled or materially altered, except after ten (10) days written notice has been received by the County."
- H. **County Provided Protection.** The County shall provide a Builder's Risk policy when applicable to the project. The County's Risk Manager, upon the Contractor's request, will make available the terms of this policy. By executing this contract, the Contractor warrants it is familiar with the terms of said policy.

SUPPLEMENTARY CONDITIONS

1. APPLICATION & CERTIFICATE FOR PAYMENT

- A. Every contractor engaged in performance of any contract for Department of Public Works, Highway & Transportation shall submit partial and final Application & Certificate for Payment for work under said contract. Form shall provide similar information as shown on AIA G702™ and G703™ forms (samples shown below). Forms shall be submitted to project Architect / Engineer for approval.


AIA Document G702™ – 1992

Application and Certificate for Payment

TO OWNER:	PROJECT:	APPLICATION NO:	Distribution to:
		PERIOD TO:	OWNER <input type="checkbox"/>
		CONTRACT FOR:	ARCHITECT <input type="checkbox"/>
FROM CONTRACTOR:	VIA ARCHITECT:	CONTRACT DATE:	CONTRACTOR <input type="checkbox"/>
		PROJECT NOS:	FIELD <input type="checkbox"/>
			OTHER <input type="checkbox"/>

CONTRACTOR'S APPLICATION FOR PAYMENT
Application is made for payment, as shown below, in connection with the Contract. Continuation Sheet, AIA Document G703, is attached.

1. ORIGINAL CONTRACT SUM \$

2. Net change by Change Orders \$

3. CONTRACT SUM TO DATE (Line 1 + 2) \$

4. TOTAL COMPLETED & STORED TO DATE (Column G on G703) \$

5. RETAINAGE:

 a. % of Completed Work (Column D + E on G703) \$

 b. % of Stored Material (Column F on G703) \$

Total Retainage (Lines 5a + 5b or Total in Column I of G703) \$

6. TOTAL EARNED LESS RETAINAGE (Line 4 Less Line 5 Total) \$

7. LESS PREVIOUS CERTIFICATE FOR PAYMENT (Line 6 from prior Certificate) \$

8. CURRENT PAYMENT DUE \$

9. BALANCE TO FINISH, INCLUDING RETAINAGE (Line 3 less Line 8) \$

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR:
By: _____ Date: _____
State of _____
County of _____
Subscribed and sworn to before me this _____ day of _____
Notary Public
My Commission expires: _____

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Total changes approved in previous months by Owner	\$	\$
Total approved this Month	\$	\$
TOTALS	\$	\$
NET CHANGES by Change Order	\$	\$

ARCHITECT'S CERTIFICATE FOR PAYMENT
In accordance with the Contract Documents, based on on-site observations and the data comprising this application, the Architect certifies to the Owner that to the best of the Architect's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED \$
(Attach explanation if amount certified differs from the amount applied. Initial all figures on this Application and on the Continuation Sheet that are changed to conform with the amount certified.)

ARCHITECT:
By: _____ Date: _____

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

AIA Document G702™ – 1992 Copyright © 1993, 1993, 1993, 1971, 1976, 1983 and 1992 by The American Institute of Architects. All rights reserved. **WARNING:** This AIA™ Document is protected by U.S. Copyright Law and International Treaties. Unauthorized reproduction or distribution of this AIA™ Document, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law. Purchasers are permitted to reproduce ten (10) copies of this document when completed. To report copyright violations of AIA Contract Documents, e-mail The American Institute of Architects legal counsel, copyright@aia.org.

Continuation Sheet

AIA Document G703. APPLICATION AND CERTIFICATION FOR PAYMENT, containing Contractor's signed certification is attached.
 In tabulations below, amounts are stated in the nearest dollar.
 Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NO:
 APPLICATION DATE:
 PERIOD TO:
 ARCHITECT'S PROJECT NO.:

A ITEM NO.	B DESCRIPTION OF WORK	C SCHEDULED VALUE	D WORK COMPLETED		F MATERIALS PRESENTLY STORED (SHEETS DASH)	G TOTAL COMPLETED AND STORED TO DATE (D+G)	H % (G ÷ C)	I BALANCE TO FINISH (C - G)	J RETAINAGE (IF VARIABLE RATE)
			E FROM PREVIOUS APPLICATION (D + E)	E THIS PERIOD					

CAUTION: You should sign an original AIA Contract Document, on which this text appears in RED. An original assures that changes will not be obscured.
 AIA Document G703™ – 1992. Copyright © 1963, 1965, 1966, 1967, 1970, 1976, 1983 and 1992 by The American Institute of Architects. All rights reserved. (AIA/INHS). This AIA® Document is protected by U.S. Copyright Law and International Treaties. Unauthorized reproduction or distribution of this AIA® Document, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law. Purchasers are permitted to reproduce ten (10) copies of this document when completed. To report copyright violations of AIA Contract Documents, e-mail The American Institute of Architects' legal counsel, copyright@aia.org.

2. CONTRACTOR WAGE AFFIDAVIT

- A. Every contractor engaged in performance of any contract for Department of Public Works, Highway & Transportation shall submit to this Department, as requested and with final application for payment for work under said contract, affidavit in form as hereinafter set forth in this section. Affidavit affirms that all persons employed by contractor or by any of contractor's subcontractors on such contract have been paid no less than minimum wages established under Dane County Ordinances, Chapter 40, Subchapter II (Minimum Wage Ordinance) and in effect at date of execution of contract, that full payment of wages earned has been made, and that no rebates either directly or indirectly have been made. Form of such affidavit is included in this section.

SECTION 01000

BASIC REQUIREMENTS

PART 1 GENERAL

1.1 SECTION SUMMARY

- A. Section Includes:
1. Section Summary
 2. Summary of the Work
 3. Contractor Use of Premises
 4. Applications for Payment
 5. Alternates
 6. Coordination
 7. Cutting and Patching
 8. Conferences
 9. Progress Meetings
 10. Submittal Procedures
 11. Proposed Products List
 12. Shop Drawings
 13. Product Data
 14. Quality Assurance / Quality Control of Installation
 15. References
 16. Protection of Installed Work
 17. Parking
 18. Progress Cleaning
 19. Products
 20. Transportation, Handling, Storage and Protection
 21. Product Options
 22. Substitutions
 23. Starting Systems
 24. Demonstration and Instructions
 25. Contract Closeout Procedures
 26. Final Cleaning
 27. Adjusting
 28. Operation and Maintenance Data
 29. As-Built Drawings

1.2 SUMMARY OF THE WORK

- A. Project Description: Perform the Work as specified and detailed in Construction Documents package. Contractor to provide all labor, equipment, tools and materials necessary to provide approximately 925 LF of 6" PVC water service lateral construction. Water service lateral construction consists of excavating the required trenches and

tunnels; laying the required pipe, fittings, special castings, valves, valve boxes, hydrants, and appurtenances; at the locations and to the required lines and grades; backfilling and compacting the trenches; and restoring the site of the work; all as shown on the drawings and provided by the Contract. Specifically, the project includes:

1. Providing the ditch for the Water Utility to make the tap. Backfilling this ditch and patching the road to meet pre-existing conditions;
2. Providing approximately 925 LF of 6" PVC for water service lateral. Bidder is responsible for verifying this length prior to bid opening. This Work includes making the necessary excavations, inspecting materials, laying pipe, doing the necessary bracing, pumping, backfilling, and compacting;
3. Setting and adjusting two (2) valves and two (2) valve boxes on water service lateral in locations shown on Drawings;
4. Providing and adjusting one (1) hydrant with all necessary thrust blocking, valves, and appurtenances per the requirements of Standard Detail Drawing 7.04, as included in Base Bid;
5. Providing and adjusting one (1) hydrant with all necessary thrust blocking, valves, and appurtenances per the requirements of Standard Detail Drawing 7.04, as included in Alternate Bid #1;
6. Providing connection to existing 1" copper service lateral, including all reducers and other needed materials and equipment;
7. Repairing any and all damage caused to sewers, gas, telephone, or power facilities, or any other obstructions encountered in the prosecution of the work.
8. Backfilling and compacting trenches, clearing roads and grounds of all rubbish and refuse caused by the above work, resurfacing all affected areas of roadways, and providing concrete and asphalt concrete street patches as directed.
9. Performing water quality testing and hydrostatic pressure testing, and repairing all defective work at no additional cost to Dane County.

B. Work by Owner: Not applicable.

C. Permits:

1. Owner will secure permit to excavate in public right-of-way.
2. Prior to commencement of the Work, Contractor to secure any and all other necessary permits for completion of the Work and facility occupancy. This includes, but is not limited to, any permits from Madison needed to excavate in the street and to connect to the City of Madison water main.

1.3 CONTRACTOR USE OF PREMISES

A. Limit use of premises to allow access by Owner.

1.4 APPLICATIONS FOR PAYMENT

- A. Submit two (2) copies of each application on AIA Form G702 or approved contractors invoice form.
- B. Content and Format: Utilize Schedule of Values for listing items in Application for Payment.

C. Payment Period: Weekly.

1.5 ALTERNATES

- A. Alternates quoted on Bid Form shall be reviewed and accepted or rejected at the Owner's option.
- B. Coordinate related work and modify surrounding work as required.
- C. Schedule of Alternates:
 - 1. Alternate Bid #1
 - a. Providing and adjusting one (1) hydrant with all necessary thrust blocking, valve, and appurtenances as indicated on drawings and described in Construction Documents.

1.6 COORDINATION

- A. Coordinate scheduling, submittals, and work of various sections of Specifications to assure efficient and orderly sequence of installation of interdependent construction elements.
- B. Verify utility requirement characteristics of operating equipment are compatible with building utilities.
- C. Coordinate space requirements and installation of mechanical and electrical work that are indicated diagrammatically on Drawings.

1.7 CUTTING AND PATCHING

- A. Employ a skilled and experienced installer to perform cutting and patching new work; restore work with new Products.
- B. Submit written request in advance of cutting or altering structural or building enclosure elements.
- C. Fit work tight to adjacent elements. Maintain integrity of wall, ceiling, or floor construction; completely seal voids.
- D. Refinish surfaces to match adjacent finishes.

1.8 CONFERENCES

- A. Dane County Department Public Works, Highway & Transportation will schedule a preconstruction conference after Award of Contract for all affected parties.
- B. When required in individual Specification section, convene a pre-installation conference at project site prior to commencing work of the section.

1.9 PROGRESS MEETINGS

- A. Owner shall schedule and administer meetings throughout progress of the Work at minimum of one (1) per week.
- B. Owner shall preside at meetings, record minutes, and distribute copies within two (2) days to those affected by decisions made.

1.10 SUBMITTAL PROCEDURES

- A. Submittal form to identify Project, Contractor, Subcontractor or supplier; and pertinent Construction Documents references.
- B. Apply Contractor's stamp, signed or initialed, certifying that review, verification of Products required, field dimensions, adjacent construction work, and coordination of information is in accordance with requirements of the Work and Construction Documents.
- C. Identify variations from Construction Documents and Product or system limitations that may be detrimental to successful performance of completing the Work.
- D. Revise and resubmit submittals as required; identify all changes made since previous submittal.

1.11 PROPOSED PRODUCTS LIST

- A. Within fifteen (15) days after date of Award of Contract, submit complete list of major Products proposed for use, with name of manufacturer, trade name, and model number of each Product.

1.12 SHOP DRAWINGS

- A. Submit number of copies that Contractor requires, plus two (2) copies that shall be retained by Public Works Project Engineer.

1.13 PRODUCT DATA

- A. Submit number of copies that Contractor requires, plus two (2) copies that shall be retained by Public Works Project Engineer.
- B. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturer's standard data to provide information unique to this Project.

1.14 QUALITY ASSURANCE / QUALITY CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, Products, services, site conditions, and workmanship, to produce work of specified quality.
- B. Comply fully with manufacturers' instructions.

- C. Comply with specified standards as minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.

1.15 REFERENCES

- A. Conform to reference standard by date of issue current as of date for receiving bids.
- B. Should specified reference standard conflict with Construction Documents, request clarification from Public Works Project Engineer before proceeding.

1.16 PROTECTION OF INSTALLED WORK

- A. Protect installed work and provide special protection where specified in individual Specification sections.

1.17 PARKING & SITE ACCESS

- A. Arrange for temporary parking areas to accommodate construction personnel. Parking shall be available at the Work site.
- B. Neither parked cars nor construction equipment shall block or impede access to businesses using this road.
- C. All Work, including street cuts, shall be done in a manner as to not limit access to and passage along existing road.

1.18 PROGRESS CLEANING

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in clean and orderly condition.

1.19 PRODUCTS

- A. Products: Means new material, machinery, components, equipment, fixtures, and systems forming the Work, but does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work. Products may also include existing materials or components specifically identified for reuse.
- B. Do not use materials and equipment removed from existing premises, except as specifically identified or allowed by Construction Documents.

1.20 TRANSPORTATION, HANDLING, STORAGE AND PROTECTION

- A. Transport, handle, store and protect Products in accordance with manufacturer's instructions.

1.21 PRODUCT OPTIONS

- A. Where definite material is specified, it is not intention to discriminate against "equal" product made by another manufacturer. Intention is to set definite standard of material quality. Should bidder choose to bid materials other than those specified, bidder shall submit said materials specifications to Department Public Works, Highway & Transportation for approval at least seven (7) days prior to Bid Opening.
- B. Products and materials that are not specified, but have been approved for use by Public Works Project Engineer shall be identified in addenda to all bidding contractors.

1.22 SUBSTITUTIONS

- A. Public Works Project Engineer shall consider requests for Substitutions up to seven (7) days prior to date of Bid Opening.
- B. Public Works Project Engineer may also consider requests for Substitutions after Bid Opening, but only if requests are made within fifteen (15) days after date of Public Works Contract. Dane County reserves right to not consider any and all product substitutions submitted after Bid Opening. Dane County also reserves the right to approve or reject substitutions based on Specification requirements and intended use.
- C. Document each request with complete data substantiating compliance of proposed Substitution with Construction Documents.
- D. Submit three (3) copies of requests for Substitution for consideration. Limit each request to one (1) proposed Substitution.
- E. Substitutions shall not change contract price established at Bid Opening..

1.23 STARTING SYSTEMS

- A. Provide written notification prior to testing and start-up of system.
- B. Ensure that each piece of equipment or system is ready for operation.
- C. Execute start-up under supervision of responsible persons in accordance with manufacturers' instructions.
- D. Submit written report that equipment or system has been properly installed and is functioning correctly.

1.24 DEMONSTRATION AND INSTRUCTIONS

- A. Demonstrate operation and maintenance of Products to Owner's personnel prior to date of final inspection.

- B. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance, and shutdown of each item of equipment at agreed-upon times, at designated location.

1.25 CONTRACT CLOSEOUT PROCEDURES

- A. Submit written certification that Construction Documents have been reviewed, the Work has been inspected, and the Work is complete in accordance with Construction Documents and ready for Public Works Project Engineer's inspection.
- B. Submit final Application for Payment identifying total adjusted Contract Sum / Price, previous payments, and amount remaining due.

1.26 FINAL CLEANING

- A. Execute final cleaning prior to final inspection.
- B. Clean interior and exterior surfaces exposed to view.
- C. Remove waste and surplus materials, rubbish, and construction facilities from site.

1.27 ADJUSTING

- A. Adjust operating Products and equipment to ensure smooth and unhindered operation.

1.28 OPERATION AND MAINTENANCE DATA

- A. Provide operation and maintenance data for all mechanical and electrical equipment supplied and installed in project.

1.29 AS-BUILT DRAWINGS

- A. Contractor-produced Drawings and Specifications shall remain property of Contractor whether Project for which they are made is executed or not. Contractor shall furnish Public Works Project Engineer with original tracings of drawings and prints of specifications in reproducible format, one set of Drawings and Specifications and one set of as-builts drawings in AutoCAD 2004 (or lower) format.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01508

RECYCLING

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Waste Management Goals
 - 2. Waste Management Plan
 - 3. Reuse
 - 4. Recycling
 - 5. Materials Sorting and Storage On Site
 - 6. Lists of Recycling Facilities Processors and Haulers
 - 7. Waste Management Plan Form

1.2 WASTE MANAGEMENT GOALS

- A. Dane County requires that as many waste materials as possible produced as result of this project be salvaged, reused or recycled in order to minimize impact of construction waste on landfills and to minimize expenditure of energy and cost in fabricating new materials. Additional information may be found in The Dane County Green Building Policy, Resolution 299, 1999-2000.
- B. Contractor shall develop, with assistance of Public Works Project Engineer and Architect / Engineer, Waste Management Plan (WMP) for this project. Outlined in RECYCLING section of this specification are examples of materials that can be recycled or reused as well as recommendations for waste sorting methods.

1.3 WASTE MANAGEMENT PLAN

- A. Contractor shall complete WMP and include cost of recycling / reuse in Bid. WMP will be submitted to Public Works Project Engineer within fifteen (15) days of Notice to Proceed date. Copy of blank WMP form is in this Section. Submittal shall include cover letter and WMP form with:
 - 1. Information on:
 - a. Types of waste materials produced as result of work performed on site;
 - b. Estimated quantities of waste produced;
 - c. Identification of materials with potential to be recycled or reused;
 - d. How materials will be recycled or reused;
 - e. On-site storage and separation requirements (on site containers);
 - f. Transportation methods; and
 - g. Destinations.

1.4 REUSE

- A. Contractors and subcontractors are encouraged to reuse as many waste materials as possible. Salvage should be investigated for materials not reusable on site.

1.5 RECYCLING

- A. These materials can be recycled in Dane County area:
 1. Wood.
 2. Wood Pallets.
 3. Fluorescent Lamps.
 4. Foam Insulation & Packaging (extruded and expanded).
 5. PVC Plastic (pipe, siding, etc.).
 6. Concrete.
 7. Corrugated Cardboard.
 8. Metal.
 9. Carpet Padding.
 10. Gypsum Drywall.
 11. Barrels & Drums.
 12. Solvents.

1.6 MATERIALS SORTING AND STORAGE ON SITE

- A. Contractor shall provide separate containers for recyclable materials. Number of containers will be dependent upon project and site conditions.
- B. Contractor shall provide on-site locations for subcontractors supplied recycling containers to help facilitate recycling.

1.7 LISTS OF RECYCLING FACILITIES PROCESSORS AND HAULERS

- A. Web site www.countyofdane.com has recycling symbol (link) near top of page that lists current information for Dane County Recycling Markets. Contractors can also contact Dane County's Recycling Manager at 608/267-8815, or local city, village, town recycling staff listed in above referenced web site. Statewide listings of recycling / reuse markets at available from Wisconsin Department of Natural Resources, www.dnr.state.wi.us/org/aw/wm/markets.

1.8 WASTE MANAGEMENT PLAN FORM

A. Contractor Information:

Name: _____

Address: _____

Phone No.: _____ Recycling Coordinator: _____

MATERIAL	ESTIMATED QUANTITY	DISPOSAL METHOD (CHECK ONE)		RECYCLING / REUSE COMPANY OR DISPOSAL SITE
Salvaged & reused building materials	_____ cu. yds. _____ tons	_____ Recycled	_____ Reused	Name: _____
Wood	_____ cu. yds. _____ tons	_____ Recycled	_____ Reused	Name: _____
Wood Pallets	_____ units	_____ Recycled	_____ Reused	Name: _____
Foam Insulation	_____ cu. ft. _____ lbs.	_____ Recycled	_____ Reused	Name: _____
Asphalt & Concrete	_____ cu. ft. _____ lbs.	_____ Recycled	_____ Reused	Name: _____
PVC Plastic	_____ cu. ft. _____ lbs.	_____ Recycled	_____ Reused	Name: _____
Corrugated Cardboard	_____ cu. ft. _____ lbs.	_____ Recycled	_____ Reused	Name: _____
Solvents	_____ gallons	_____ Recycled	_____ Reused	Name: _____
Other	_____	_____ Recycled	_____ Reused	Name: _____
Other	_____	_____ Recycled	_____ Reused	Name: _____

END OF SECTION

SECTION 02512

SITE WATER DISTRIBUTION

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Pipe and fittings for site water line including domestic water line.
 - 2. Valves.
 - 3. Hydrants.
 - 4. Underground pipe markers.
 - 5. Bedding and cover materials.

1.2 REFERENCES

- A. ASTM International:
 - 1. ASTM D1557 - Standard Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (6,000 ft-lbf/ft³ (2,700 kN-m/m^{3 - 2. ASTM D3139 - Standard Specification for Joints for Plastic Pressure Pipes Using Flexible Elastomeric Seals.}
- B. American Water Works Association:
 - 1. AWWA C111 - American National Standard for Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings.
 - 2. AWWA C509 - Resilient-Seated Gate Valves for Water-Supply Service.
 - 3. AWWA C605 - Underground Installation of Polyvinyl Chloride (PVC) Pressure Pipe and Fittings for Water
 - 4. AWWA C900 - Polyvinyl Chloride (PVC) Pressure Pipe, 4 in. through 12 in., for Water Distribution.

1.3 SUBMITTALS

- A. Product Data: Submit data on pipe materials, pipe fittings, valves and accessories.

1.4 CLOSEOUT SUBMITTALS

- A. Project Record Documents: Record actual locations of piping, valves, connections, thrust restraints, and invert elevations.
- B. Identify and describe unexpected variations to subsoil conditions or discovery of uncharted utilities.

1.5 QUALITY ASSURANCE

- A. Perform Work in accordance with City of Madison Water Utility and State of Wisconsin standards.
- B. Valves: Manufacturer's name and pressure rating marked on valve body.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store valves in shipping containers with labeling in place.

PART 2 PRODUCTS

2.1 WATER PIPING

- A. 6" PVC Pressure Pipe: AWWA C900, Class 150, SDR 18:
 - 1. Approximately 925 LF of 6" PVC pipe. Actual length is from water main near existing hydrant shown on plan to existing lateral and new hydrant near well shown on plan.
 - 2. Fittings: AWWA C111, cast iron.
 - 3. Joints: ASTM D3139 compression gasket ring.

2.2 GATE VALVES

- A. Manufacturers:
 - 1. Kennedy Model K4571 or equal.
 - 2. Mueller Model A2360 or equal.
 - 3. Clow Model F6100 or equal.
 - 4. AFC Model Series 500 or equal.
- B. Valve Description: AWWA C509, Iron body, bronze trim, with O-ring packing, non-rising stem with 2" square operating nut, single wedge, resilient seat, mechanical joint ends, conductive mechanical joint (no lead) gaskets, control rod, and extension box. Valves shall be left open when installed.

2.3 VALVE BOXES & EXTENSIONS

- A. Valve boxes:
 - 1. Tyler or Bingham and Taylor cast-iron, size "DD" 50 inches to 70 inches
 - 2. Three (3) piece screw type
 - 3. No. 6 round base
 - 4. 5-1/4" shaft
 - 5. With stay-put covers marked "WATER."
- B. Valve Box Extensions: As needed for adjusting height.
 - 1. Tyler, or equal
 - 2. Screw type
 - 3. 5-1/4" shaft

4. No. 58 – 12” long
5. No. 59 – 18” long
6. No. 60 – 26” long.

2.4 HYDRANT

A. Manufacturers:

1. Kennedy Model Guardian K-81.
2. Mueller Model Super Centurion A423.
3. Waterous Model Pacer WB-67.

B. Hydrant Description:

1. “Breakaway” design.
2. Two 2-1/2-IN diameter nozzles.
3. One 4-1/2-IN diameter pumper nozzle.
4. The nozzles shall have National Standard threads and the nozzle caps shall have chains attaching the caps to the hydrant.
5. The word OPEN and an arrow showing that the hydrant opens left shall be embossed on every fire hydrant.
6. The hydrant valve opening shall be 5-1/4-IN with National Standard operating nut shape.
7. Hydrants shall be painted red with white nozzle caps.
8. 360 degree top rotation.
9. “Dry top”- operating threads to be sealed when open.
10. The hydrant shall have a six (6) inch mechanical joint bottom connection with conductive mechanical joint (no lead) gasket and necessary accessories.
11. The upper valve plate shall be brass with a brass-to-brass foot valve.

2.5 UNDERGROUND PIPE MARKERS

- A. Trace Wire: Magnetic detectable conductor, brightly colored plastic covering, imprinted with "Water Service" in large letters.

2.6 BEDDING AND COVER MATERIALS

A. Bedding Material Options:

1. Gradation for Sand Bedding:

Sieve Size	% Passing (by Wt)
1 inch	100
No. 16	45-80
No. 200	2-10

2. Gradation for Crushed Stone Chip Bedding:

Sieve Size	% Passing (by Wt)
1 inch	100
No. 16	45-80
No. 200	2-10

- B. Soil Backfill from Above Pipe to Finish Grade: Subsoil with no rocks over 6 inches in diameter, organic material, perishable material, frozen earth, or foreign matter.

2.7 ACCESSORIES

- A. Thrust blocking is required behind all hydrants, tees, caps, plugs and bends.
- B. Concrete for Thrust Restraints: Use concrete with a minimum 3,000 psi, 28 day compressive strength. Use ready mix concrete with a minimum of a six (6) bag mix, with air entrainment unless other wise approved for smaller quantities by Project Manager.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify existing building service connection and municipal utility water main size, location, and invert.
- B. Verify the locations of any water, gas, sewer, telephone, or landfill leachate lines which may be encountered during excavation.

3.2 PREPARATION

- A. Cut pipe ends square, ream pipe and tube ends to full pipe diameter, remove burrs.
- B. Remove scale and dirt on inside and outside before assembly.
- C. Prepare pipe connections to equipment with flanges or unions.

3.3 EXCAVATION & BACKFILL

- A. All excavation shall be in accordance with the Wisconsin Administrative Code for “Trench, Excavation, and Tunnel Construction” and any additional requirements called for in the Construction Documents. Unless otherwise provided in the Contract or permitted by the Engineer, complete the work of constructing water service and appurtenances in open trenches and in a manner to protect the pipe and appurtenances from unusual stresses.
- B. Provide and maintain all fencing, barricades, signs, warning lights, and/or other equipment necessary to keep all excavation pits and trenches and the entire subgrade area safe under all circumstances and at all times. No excavation shall be left unattended without adequate protection.
- C. Provide shoring and bracing to prevent earth from caving or washing into the excavation.
- D. Provide, operate, and maintain all pumps and other equipment necessary to drain and keep free from water all excavation pits and trenches under all circumstances. If

dewatering is needed, obtain general permit from the Wisconsin Department of Natural Resources district office for discharge of construction dewatering effluent.

- E. Remove rock encountered in the excavation to a minimum dimension of six (6) inches outside the pipe. Rock excavation includes all hard, solid rock in ledges, bedded deposits, and unstratified masses, all natural conglomerate deposits so firmly cemented as to present all the characteristics of solid rock.
- F. Do not place excavated materials where they will impede surface drainage unless such drainage is being safely rerouted away from the excavation.
- G. Strip topsoil from area to be excavated, free from subsoil and debris, and store for later respreading.
- H. Excavate whatever materials are encountered as required to place all pipes, hydrants, valves, and other work. Remove debris and rubbish from excavations before placing bedding and backfill material. Remove surplus excavated materials from site.
- I. Underpin and support all water, gas, sewer, telephone, or landfill leachate lines which may be encountered during excavation. Repair any damage to lines caused by Work included in these Construction Documents.
- J. Perform all excavation and backfill work necessary to accomplish water service installation. Top of pipe shall have with not less than five (5) feet of cover, and, when possible, entire length of pipe shall have a positive slope from the water main connection to the existing 1" CPR line near the buildings. When crossing leachate line, install water service lateral at least 18" below leachate line in order to maintain appropriate cover unless otherwise directed by Dane County Project Manager.
- K. Excavate to bottom of pipe and structure bedding. Bedding shall be a minimum compacted depth, compacted to 95%, of 4" in stable soils, 6" in rock or wet trenches, and 8" in unstable soils. Finish bottom of excavations to true, level surface.
- L. Form and place concrete for pipe thrust restraints at change of pipe direction, including near risers for hydrants. Place concrete to permit full access to pipe and pipe accessories.
- M. Bed pipe up to a point 12" above the top of the pipe. Take care during bedding, compaction, and backfill not to disturb or damage piping. Wrap bedding materials in filter fabric where native soils are such that they will migrate from the trench wall into the bedding materials.
- N. Backfill around sides and to top of pipe with cover fill and mechanically compact bedding and backfill to prevent settlement. The initial compacted lift shall not exceed 24" compacted to 95% density per the Modified Proctor Test (ASTM D-1557). In subsequent lifts, the compacted lift shall not exceed 24" compacted to 90% density per the Modified Proctor Test.
- O. In areas under the road, backfill around sides and to top of pipe with cover fill and mechanically compact bedding and backfill to prevent settlement. the compacted lift

shall not exceed 12” compacted to 95% density per the Modified Proctor Test. Take care not to damage Work performed, and repair any damage caused by backfilling and compaction.

- P. Maintain optimum moisture content of fill material to attain required compaction density.
- Q. Completely restore the surface of all disturbed areas to a like condition of the surface prior to the work. Level off all waste disposal areas, and cleanup all areas used for the storage of materials or the temporary deposit of excavated earth. Remove all surplus material, tools, and equipment.
- R. After compaction, provide 6” topsoil lift to match existing grade. Plant a 50/50 blend of Vetch and Bluegrass seed at a rate of 10 lbs/acre, and mulch with a layer of 2” chopped straw or equal.

3.4 INSTALLATION - PIPE

- A. Maintain separation of water main from leachate piping in accordance with WI Administrative Code 82.40. Unless otherwise directed by Dane County Project Manager, install water service lateral at least 18” below leachate line in order to maintain appropriate cover. In conditions where the Project Manager directs that this is not feasible, one of the methods outlined in the code below may be used. Project Manager must give written approval before Work is performed according to methods 1(a) or 1(c). The leachate line is considered a sewer line. This is specifically addressed in the code as follows:
 - 1. If a private water main or water pipe service crosses a sanitary sewer, the water piping within 10 feet of the point of crossing shall be installed:
 - a. at least 12” above the top of the sewer from the bottom of the water piping;
 - b. at least 18” below the bottom of the sewer from the top of the water piping; or
 - c. within a waterproof sleeve made of materials as specified for sanitary building sewers in s. Comm. 84.30(2).
 - 2. Private water mains and water services 2-1/2” or larger in diameter or larger shall be installed at least 8 feet horizontally from any sanitary sewer with the exceptions listed above. The distance shall be measured from center to center of the piping.
- B. Install pipe with not less than five (5) feet of cover. When crossing leachate line, install water service lateral at least 18” below leachate line in order to maintain appropriate cover unless otherwise directed by Dane County Project Manager.
- C. Install joints to ASTM D3139.
- D. Route pipe in straight line.
- E. Install pipe to allow for expansion and contraction without stressing pipe or joints.

- F. Provide concrete thrust blocks per the requirements of Standard Detail Drawing 7.03. Form and place concrete for thrust restraints behind all hydrants, tees, caps, plugs and bends.
- G. Establish elevations of buried piping with not less than five (5) feet of cover.
- H. Connect to existing 1" copper building water service where indicated on Drawings.
- I. Install trace wire continuous, buried above pipe line along entire length of pipe. Extend tape to surface at valve boxes and hydrants. When running tape up to the surface at valve boxes, place tape outside the box so tape is not damaged by valve operation. After installation, test the warning tape to ensure continuity over the entire pipe length.

3.5 INSTALLATION - VALVES AND HYDRANTS

- A. Install hydrants and valves at the locations shown on the drawings, and set to existing grade. The Engineer or Water Utility Inspector must authorize in writing any variation from the locations or grades shown on the drawings.
- B. Set all hydrants per the requirements of Standard Detail Drawing 7.04. Place a wooden block or a brick under the hydrant lead to prevent the hydrant from leaning after being set.
- C. Restrain the full length of all hydrants lead from the tee on the water main to the hydrant, including the hydrant valve and any associated fittings, with mechanical joint restraints - MEGALUG® Series 1100 or equal.
- D. Install a 4-IN x 8-IN x 16-IN solid concrete masonry unit, laid flat, in the excavation to provide as a firm base for the hydrant. Set the hydrant in a truly vertical position and securely brace it until backfilling is complete.
- E. Provide concrete thrust blocks per the requirements of Standard Detail Drawing 7.03. Thrust blocking is required behind all hydrants, tees, caps, plugs and bends.
- F. Backfill the space around the lower portion of the hydrant with clear gravel and stones up to three (3) inches in size. Cover the two weep holes in the hydrant elbow with clear gravel backfill. When placing the clear gravel, take special care to keep the drain holes open for drainage. Cover the two weep holes in the hydrant elbow with clear gravel backfill. When placing the clear gravel, take special care to keep the drain holes open for drainage.
- G. Cover the clear gravel with six (6)-mil polyethylene, or suitable geotextile fabric to prevent loose dirt from filling in the voids in the stones.
- H. Fill the remainder of the excavation with the excavated material and compact it evenly in 12-inch lifts, so that the pressure of the backfill on the stem is equally distributed.
- I. Set valves on compacted soil.

J. Center and plumb valve box over valve. Set box cover flush with finished grade.

3.6 DISINFECTION OF DOMESTIC WATER PIPING SYSTEM

A. Deposit one (1) ounce of Calcium Hypochlorite (HTH or equal - 65% available chlorine by weight), granular form only in each eighteen (18) foot length of pipe:

3.7 FIELD QUALITY CONTROL

A. Water Quality Test

1. After the water service lateral has been completely installed and backfilled, assist the Water Utility Inspector to slowly fill the new lateral from an uncontaminated source by operating the necessary valves. **DO NOT** operate any valves under any circumstances, except as directly instructed to do so, by and in the presence of Water Utility personnel. Loosen one nozzle cap per hydrant to allow air pockets to dissipate along the full length of the pipe being filled.
2. The chlorinated water shall remain in the newly installed main for a minimum of 48 hours. Following the 48-hour period, schedule flushing and sampling activities with Project Manager. Dane County Project Manager must be present when contractor flushes the main and collects samples for bacteriological testing. The newly installed system will not be put into service until the receipt of a safe bacteriological sample result from the certified lab.
3. Do not discharge highly chlorinated water to any surface water bodies. Neutralize the chlorine in the water flushed from the pipe following any disinfection operation. This may include but will not necessarily be limited to setting up and operating equipment, monitoring the flushing operation, sampling, and delivering chemicals needed to neutralize the chlorine.
4. If a sample receives an unsafe result, schedule with the County to have the lateral flushed and sampled a second time. If the samples collected the second time do not pass the test, the pipe shall be disinfected again per AWWA C651 latest revision as modified herein and the chlorinated water held in the pipe for a minimum of 48 hours. Following the 48-hour holding period, flush the line again and resample. This process will be repeated at no additional cost to the County until a safe sample is received from a certified testing lab.

B. Pressure test system to 150 psi. Repair leaks and re-test.

1. After completion of pipeline installation, including backfill, but prior to final connection to existing system, conduct, in presence of Dane County Project Manager, concurrent hydrostatic pressure and leakage tests in accordance with AWWA C605.
2. Provide equipment required to perform leakage and hydrostatic pressure tests.
3. Test Pressure: Not less than 150 psi.
4. Conduct hydrostatic test for at least two-hour duration.
5. No pipeline installation will be approved when pressure varies by more than 5 psi at completion of hydrostatic pressure test.
6. Before applying test pressure, completely expel air from section of piping under test. Provide corporation cocks so air can be expelled as pipeline is filled with water. After air has been expelled, close corporation cocks, and apply test

pressure. At conclusion of tests, remove corporation cocks and plug resulting piping openings.

7. Slowly bring piping to test pressure and allow system to stabilize prior to conducting leakage test. Do not open or close valves at differential pressures above rated pressure.
8. Examine exposed piping, fittings, valves, hydrants, and joints carefully during hydrostatic pressure test. Repair or replace damage or defective pipe, fittings, valves, hydrants, or joints discovered, following pressure test.
9. No pipeline installation will be approved when leakage is greater than that determined by the following formula:
$$L = \frac{SD\sqrt{P}}{133,200}$$

L = allowable, in gallons per hour
S = length of pipe tested, in inches
D = nominal diameter of pipe, in inches
p = average test pressure during leakage test, in pounds per square inch (gauge)
10. When leakage exceeds specified acceptable rate, locate source and make repairs. Repeat test until specified leakage requirements are met.

- C. Compaction Testing for Bedding: In accordance with ASTM D1557.
- D. When tests indicate Work does not meet specified requirements, remove Work, replace and retest.

3.8 FINAL INSPECTION

- A. Prior to final inspection, repair, replace, and/or adjust any and all valve boxes, curb boxes, and hydrants disturbed or damaged by construction activities. Final inspection will not be scheduled until all final grading, all other utility work, all sodding, pavement, roadway surfacing are complete, and any other work in the right of way is completed.
- B. Final inspection will not be scheduled until all water system testing is satisfactorily completed as specified.
- C. Prior to notifying Dane County, inspect all valve boxes, curb boxes, and hydrants to ensure that they are plumb and centered as specified and that all covers are in place. When satisfied that all work is complete, notify Dane County that the project is ready for final inspection
- D. Dane County Project Manager will complete the final inspection and review all of the project records and paperwork for completeness. Deficiencies will be noted and the Contractor will be notified and requested to make the necessary repairs and/or corrections.

END OF SECTION

SECTION 02740

ASPHALTIC ROAD PATCHING

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Asphaltic concrete paving, wearing, binder and base course.
 - 2. Surface sealer.
 - 3. Aggregate subbase course.
- B. Repair all concrete, asphalt, and gravel pavements; stone flagging or paving; culverts; fences; or other structures damaged or displaced during construction. Surfaces shall be rebuilt or re-laid properly to the original line and grade in accordance with pertinent parts of these Specifications, or in the absence of applicable specifications, to original condition.
- C. Maintain all repaired, restored, or replaced asphalt and gravel surfaces until final acceptance of the project by the Project Manager. Restore or replace all failures occurring during the guarantee period at no additional cost to the County.

1.2 REFERENCES

- A. State of Wisconsin Department of Transportation:
 - 1. State of Wisconsin Standard Specifications for Highway and Structure Construction.

1.3 PERFORMANCE REQUIREMENTS

- A. Paving: Designed for movement of trucks up to 60,000 lbs.

1.4 SUBMITTALS

- A. Product Data: Submit product information and mix design.

1.5 QUALITY ASSURANCE

- A. Perform Work in accordance with State of Wisconsin Department of Transportation standards.
- B. Mixing Plant: Conform to State of Wisconsin Department of Transportation standards.

1.6 QUALIFICATIONS

- A. Installer: Company specializing in performing work of this section with minimum five (5) years experience.

1.7 ENVIRONMENTAL REQUIREMENTS

- A. Do not place asphaltic material when ambient air or base surface temperature is less than 40 degrees Fahrenheit, or surface is wet or frozen.
- B. Place bitumen mixture when temperature is not more than 15 degrees F below temperature at when initially mixed and not more than maximum specified temperature.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Asphalt Cement: In accordance with State of Wisconsin Department of Transportation's standards.
- B. Aggregate for Binder Course Mix: 19 mm in accordance with State of Wisconsin Department of Transportation's standards.
- C. Aggregate for Wearing Course Mix: Type 12.5 mm in accordance with State of Wisconsin Department of Transportation's standards.
- D. Fine Aggregate: In accordance with State of Wisconsin Department of Transportation's standards.
- E. Mineral Filler: Finely ground particles of limestone, hydrated lime or other mineral dust, free of foreign matter.
- F. Primer: Homogeneous, medium curing, liquid asphalt or cut-back petroleum asphalt. In accordance with State of Wisconsin Department of Transportation's standards.
- G. Tack Coat: Homogeneous, medium curing, liquid asphalt or emulsified asphalt. In accordance with State of Wisconsin Department of Transportation's standards.

2.2 ASPHALT PAVING MIX

- A. Use dry material to avoid foaming. Mix uniformly.
- B. Base Course: 3.0 to 6 percent of asphalt cement by weight in mixture in accordance with State of Wisconsin Department of Transportation's standards.
- C. Binder Course: 4.5 to 6 percent of asphalt cement by weight in mixture in accordance with State of Wisconsin Department of Transportation's standards.

- D. Wearing Course: 5 to 7 percent of asphalt cement by weight in mixture in accordance with State of Wisconsin Department of Transportation's standards.
- E. Mix Temperature: Between 255 and 295 degrees F.

2.3 SOURCE QUALITY CONTROL AND TESTS

- A. Submit proposed mix design for review prior to beginning of Work.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify compacted subgrade is dry and ready to support paving and imposed loads.
- B. Verify gradients and elevations of base are correct.

3.2 BACKFILL & SUBBASE

- A. In areas under the road, backfill around sides and to top of pipe with cover fill and mechanically compact bedding and backfill to prevent settlement. the compacted lift shall not exceed 12" compacted to 95% density per the Modified Proctor Test. Take care not to damage Work performed, and repair any damage caused by backfilling and compaction.
- B. Prepare subbase in accordance with State of Wisconsin Department of Transportation's standards.

3.3 PREPARATION - PRIMER

- A. Apply primer on subbase at uniform rate of 1/2 gal/sq yd.
- B. Use clean sand to blot excess primer.

3.4 PREPARATION - TACK COAT

- A. Apply tack coat in accordance with State of Wisconsin Department of Transportation's standards.

3.5 PLACING ASPHALT PAVEMENT - DOUBLE COURSE

- A. Place asphalt binder course within 24 hours of applying primer or tack coat.
- B. Place binder course to 3 inch compacted thickness.
- C. Place wearing course within 24 hours of placing and compacting binder course. When binder course is placed more than 24 hours before placing wearing course, clean surface and apply tack coat before placing wearing course.

- D. Place wearing course to 3 compacted thickness.
- E. Compact each course by rolling to specified density. Do not displace or extrude pavement from position. Hand compact in areas inaccessible to rolling equipment.
- F. Perform rolling with consecutive passes to achieve even and smooth finish, without roller marks.

3.6 TOLERANCES

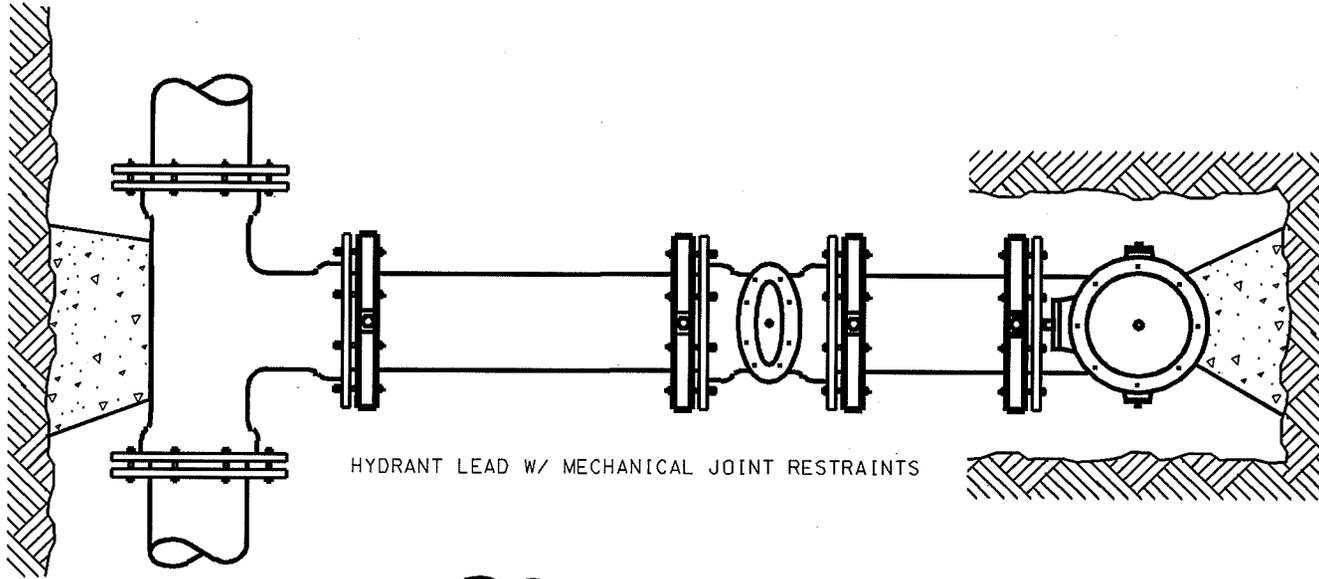
- A. Flatness: Maximum variation of 1/4 inch measured with 10 foot straight edge.
- B. Scheduled Compacted Thickness: Within 1/4 inch.
- C. Variation from Existing Asphalt Elevation: Within 1/8 inch.

3.7 PROTECTION OF FINISHED WORK

- A. Immediately after placement, protect pavement from mechanical injury for 24 hours or until surface temperature is less than 140 degrees F.

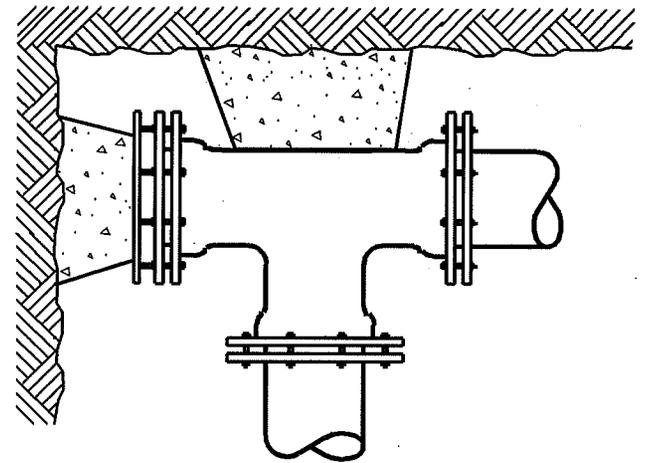
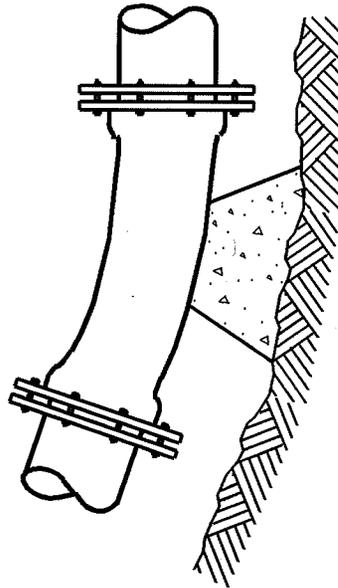
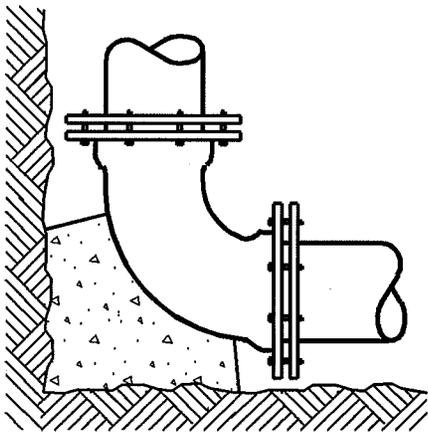
END OF SECTION

7.03



HYDRANT LEAD W/ MECHANICAL JOINT RESTRAINTS

REQUIRED BEARING AREA PER
MASTER SPECIFICATIONS SECTION 703.



DENOTES UNDISTURBED SOIL

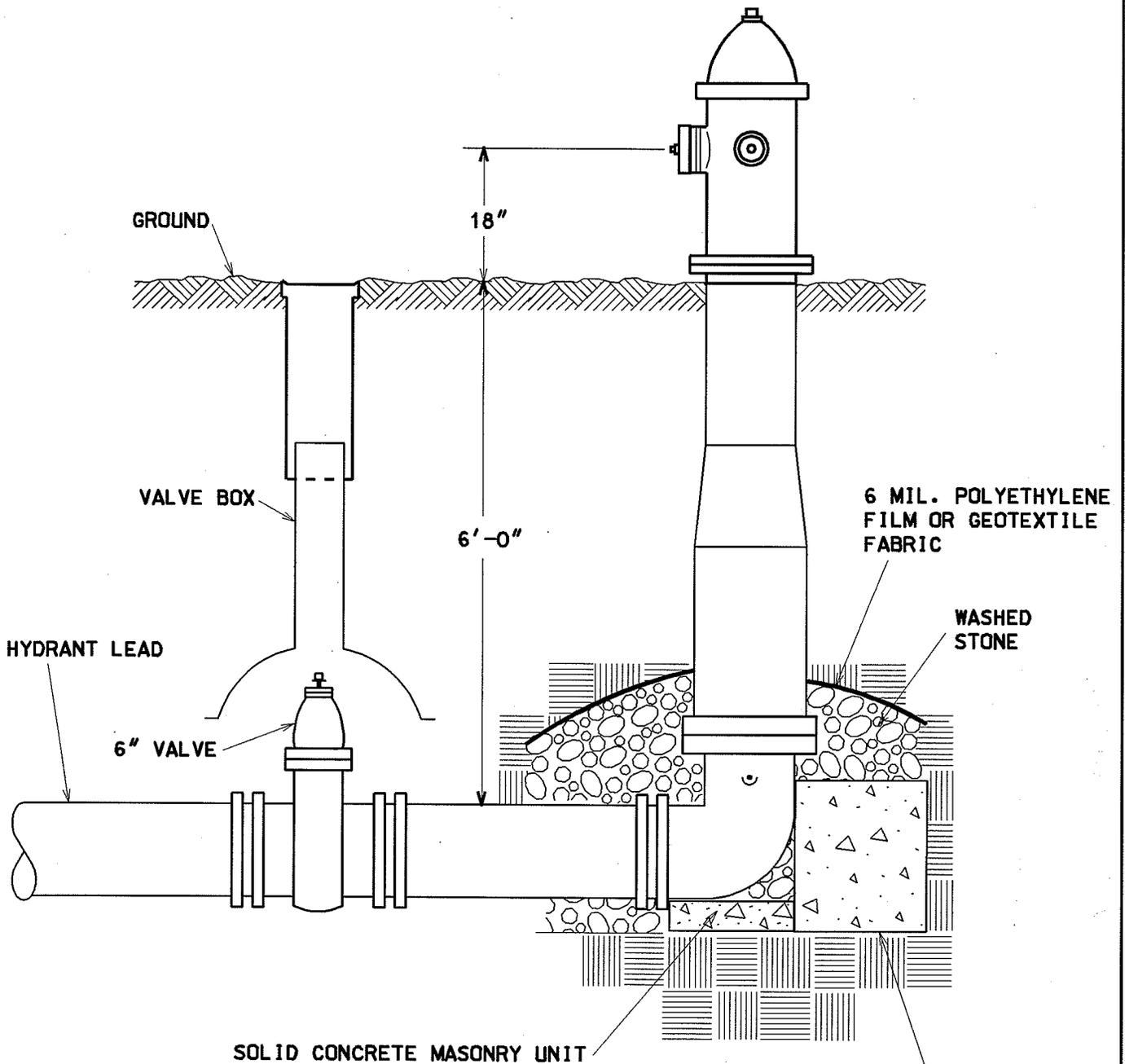
DENOTES POURED CONCRETE

2004

CITY OF MADISON
WATER UTILITY

STANDARD THRUST
BLOCKING

STANDARD DETAIL DRAWING 7.03



NOTE: RESTRAIN ENTIRE LENGTH OF HYDRANT LEAD FROM THE TEE THROUGH THE VALVE TO THE HYDRANT AS SPECIFIED USING MECHANICAL JOINT REDRAINTS.

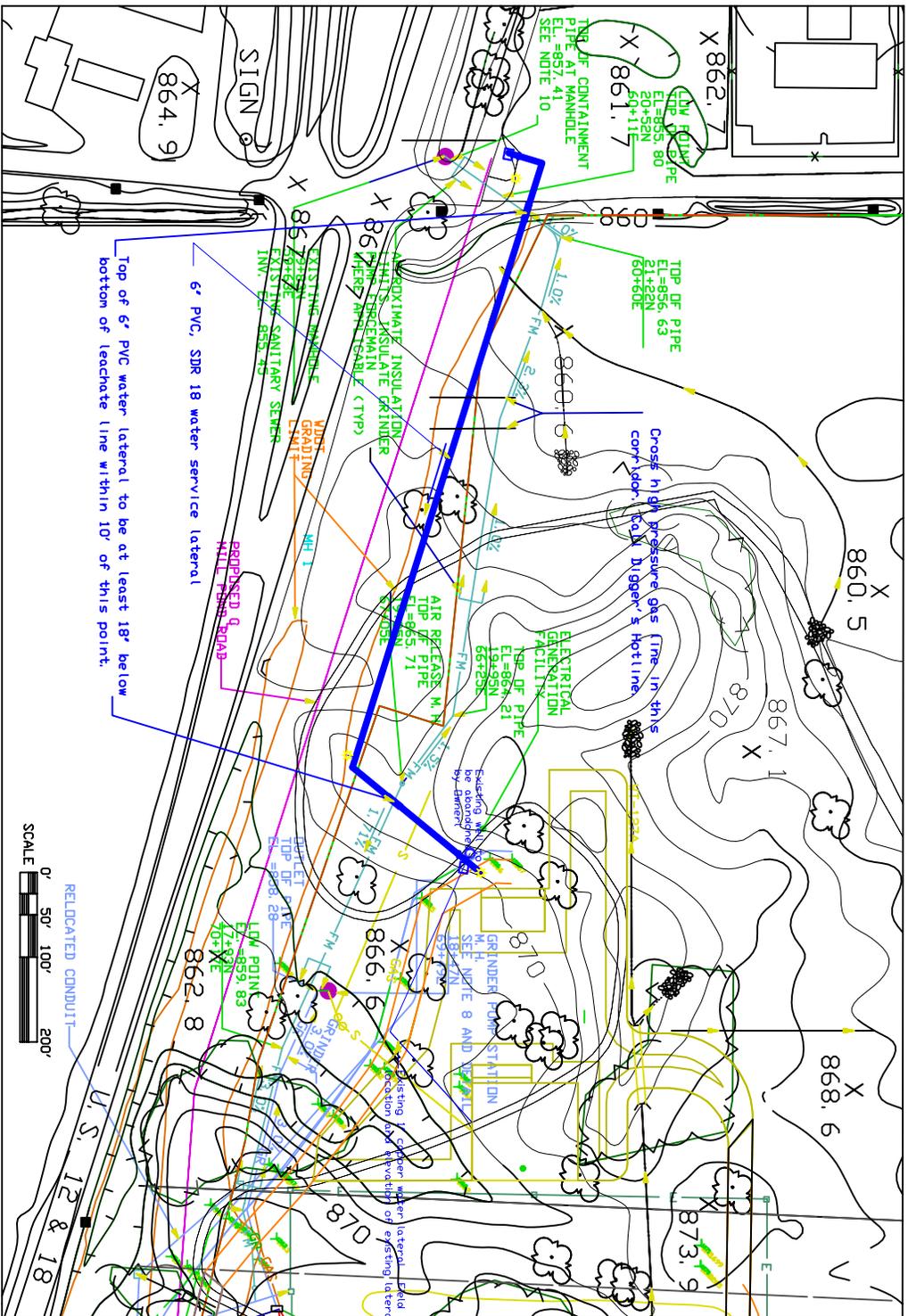
POURED CONCRETE THRUST BLOCK TO UNDISTURBED SOIL

2004

CITY OF MADISON
WATER UTILITY

TYPICAL HYDRANT
INSTALLATION

STANDARD DETAIL DRAWING 7.04



LEGEND

	EXISTING TOPOGRAPHY
	APPROXIMATE PROPERTY LINE (SEE NOTE 3)
	PERMITTED LIMITS OF WASTE
	DRAINAGE DITCH
	MANHOLE
	ELECTRIC CONDUIT
	ELECTRIC HANDHOLE
	NEW FORCE MAIN (6" SDR-11, INSIDE 10" SDR-17)
	GAS AND LEACHATE GAS = (12" SDR-17) LEACHATE = (8" SDR-11 INSIDE 10" SDR-17)
	LEACHATE ONLY (8" SDR-11, INSIDE 12" SDR-17)
	LANDFILL GAS ONLY (12" SDR-17)
	ASSUMED LOCATION OF EXISTING SANITARY/CONDENSATE LINES SEE NOTE 8
	GRINDER PUMP FORCE MAIN (2" SDR-11 INSIDE 4" SDR-17)
	RELOCATED ELECTRICAL CONDUIT
	PROPOSED 6" PVC WATER SERVICE

The purpose of this drawing is to show the proposed location of new water service lateral with respect to existing utilities. This drawing is for informational purposes only. This is not intended to be a complete or accurate drawing or all utilities located on site. Contractor is responsible for field verifying all existing utility and all proposed water service locations, elevations, and slopes.

Maintain a minimum of 5' of cover over water service lateral at all locations. Maintain positive slope in water service lateral from tie in at the water main to the tie in at the existing 1" copper lateral.

Where new water service lateral crosses the leachate line (twice), maintain a minimum of 18" distance between the bottom of the leachate pipe and the top of the water service pipe.

Drawing 2 - Utilities