

Invitation to Bid

City of Canton, Ohio
Purchasing Department
218 Cleveland Ave. SW, 4th floor
Canton, Ohio 44702

Pipe and Pipe Fittings

Item/Project

Water Department

Responsible Department

Friday, February 15, 2019 on or before 2:00 PM local time

Bids Due

Bid Proposal Submitted By:

Company Name

Street Address

City

State

Zip

Contact Person

Phone No.

Email Address

**Pipe and Pipe Fittings
Water Department**

LEGAL NOTICE
Ordinance 270/2018

The Director of Public Service of the City of Canton, Ohio will accept sealed bids on or before **2:00 PM local time** Friday, February 15, 2019, for the purpose of entering into contract for as needed:

Pipe and Pipe Fittings

The City will disqualify any bid not received on or before 2:00 PM local time on Friday, February 15, 2019. Shortly after the deadline for the submission of bids, bids received on time will be publicly opened and read aloud. The Sixth Floor Conference Room of Canton City Hall is the location for the bid opening.

Submit all bids to the City of Canton Purchasing Department, 218 Cleveland Avenue SW, Purchasing Department/**Fourth Floor**, Canton, Ohio 44702 according to the instructions in the Invitation to Bid posted on the City of Canton Purchasing Department website at <https://cantonohio.gov/purchasing>.

A certified check, cashier's check or surety bond made payable to the City of Canton must accompany the bid. Draw this check or bond from a solvent bank or bonding company satisfactory to the Director of Public Service as a guaranty the contract and its performance are properly secured if the bid is accepted. The Bidder shall verify the certified check, cashier's check or bid bond for five hundred dollars (\$500.00). The City of Canton will only accept original checks and bid bonds. Therefore, if any company and/or bidder submits a copy (including faxed copies) of his \$500.00 security, the City will disqualify the bid. The Director of Public Service reserves the right to waive any technical defects in any bid bond submitted so long as the bond is in substantial compliance with State law. Should any bid not be awarded or be rejected, such check or bond will be returned to the bidder or bidders after the execution of the contract.

Any bidder may withdraw his bid, by written request, at any time prior to the deadline set for the bid opening. Please be advised, the City of Canton may impose a \$500.00 penalty to any bidder that withdraws his bid after the bid opening and prior to a contract award(s).

Each bid must contain the full name of every person or company participating in the bid.

The Board of Control reserves the right to reject any or all bids and to accept the bid(s) deemed most beneficial to the City of Canton.

All companies must submit their Federal ID Number for IRS purposes.

The bidder is responsible for monitoring the above named website for any official addenda.

It is requested that the bidder print the entire Invitation to Bid and submit it in its entirety. The City also requests that the bidder submits an original completed bid packet and two (2) copies of that completed packet for a total of three (3) bid packet copies.

Please contact Assistant Director of Purchasing Katie Wise at kathryn.wise@cantonohio.gov if you have any questions regarding this bid.

By order of the Director of Public Service: John M. Highman, Jr.

Published in the Canton Repository: January 31, 2019 and February 7, 2019

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Water Department**

Section I: Table of Contents and Bidder's Checklist

A complete bid packet will consist of the items listed below.

Complete this checklist to confirm the items required in your bid. Place a checkmark or "X" next to each item that you are submitting to the City of Canton. Failure to submit the listed documents may be cause for rejection of your bid. This checklist should be returned with your bid.

- _____ Cover sheet (Page 1)
- _____ Legal Notice (Page 2)
- _____ Section I: Table of Contents and Bidder's Checklist (Page 3)
- _____ Section II: Bid Forms and Instructions (Pages 4-22)
 - _____ Bid Form Instructions
 - _____ Bid Form 1: Bidder and Contractor Employment Practices Report
 - _____ Bid Form 2: Authority of Signatory
 - _____ Bid Form 3: Bid Guaranty
 - _____ Bid Form 4: Bidder Information
 - _____ Bid Form 5: Non-Collusion Affidavit
 - _____ Bid Form 6: Insurance Requirements
 - _____ Bid Form 7: Affidavit for Foreign Corporations
 - _____ Bid Form 8: Personal Property Tax Certification (ORC 5719.042)
 - _____ Bid Form 9: Certification – Auditor of the State Of Ohio
 - _____ Bid Form 10: Articles of Incorporation
 - _____ Bid Form 11: W9 Tax Form
- _____ Section III: City of Canton Income Tax Information (Page 23-24)
- _____ Section IV: Canton Codified Ordinances (Pages 25-29)
- _____ Section V: Bid Specifications (Pages 30-43)
- _____ Section VI: Proposal and Signature Pages (Pages 34-85)

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Section II: Bid Forms and Instructions

Bid Form Instructions

Failure to submit bid forms 1 through 6 with the bid may cause the bid to be deemed non-responsive, and therefore it may not be considered.

Bid forms 7 through 10 will be required of the successful bidder but may be submitted after the awarding of the contract.

*****The City of Canton does encourage bidders to submit all bid forms with their bids*****

Bid Form 1: Bidder and Contractor Employment Practices Report

This form is designed to provide an evaluation of a bidder's policies and practices relating to the extension of equal employment opportunity to all persons without regard to race, religion, color, sex or national origin. The successful bidder will be required to complete and submit the Bidder and Contractor Employment Practices Report. Additionally, the successful bidder will be required to submit an "affirmative action plan" and/or "EEO policy." If the successful bidder does not have a formal EEO policy, it will be required to complete and submit the provided EEO policy statement.

Bid Form 2: Authority of Signatory

The authority of the bid signatory must be established. Bid Form 2 provides the means by which the bidder can identify the type of business organization it is (corporation, partnership, etc.) and instructions as to how signature authority is commonly established.

Bid Form 3: Bid Guaranty

A **certified check, cashier's check** or **surety bond** made payable to the City of Canton must accompany the bid. Draw this check or bond from a solvent bank or bonding company satisfactory to the Director of Public Service as a guaranty the contract and its performance are properly secured if the bid is accepted.

Bid Form 4: Bidder Information

The bidder shall submit the required information on the included form and shall supplement the information there given as may be required by the City after the receipt of bids. Low bidders may be interviewed by the City and shall furnish such information as the City may deem necessary to consider prior to making an award.

Bid Form 5: Non-Collusion Affidavit

Each bidder is required to submit with the bid an affidavit stating that neither he nor his agents, nor any other party for him, has paid or agreed to pay, directly or indirectly, any person, firm or corporation any money or valuable consideration for assistance in procuring or attempting to procure the contract herein referred to, and further agreeing that no such money

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or reward will be hereafter paid. This affidavit must be on the form provided.

Bid Form 6: Insurance Requirements

The successful bidder will be required to have the required insurance as outlined in Bid Form 6 and should be prepared to submit proof thereof.

All bidders would be well advised to consult their insurance agents as soon as possible so that all questions and concerns can be given due consideration.

Bid Form 7: Affidavit for Foreign Corporations

A successful bidder who is a foreign corporation, (**a corporation not chartered in the State of Ohio**), will be required to submit an affidavit duly executed by the authorized bid signatory stating in said affidavit that said foreign corporation has, in accordance with the provisions of the laws of the State of Ohio, obtained a certificate authorizing it to do business in the State of Ohio.

Bid Form 8: Personal Property Tax Certification (ORC 5719.042)

This form/certification must be retyped on the successful bidder's letterhead and notarized utilizing either paragraph (A) or (B) as it applies to the successful bidder's company.

Bid Form 9: Certification – Auditor of the State Of Ohio

This form is used to certify that the bidder does not have outstanding unresolved finding for recovery issued by the Auditor of the State of Ohio.

Bid Form 10: Articles of Incorporation

The successful bidder may be required to submit a copy of the company's articles of incorporation.

Bid Form 11: W9 Tax Form

Please provide an up to date copy of your Company's W9.

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Bid Form 1: Bidder and Contractor Employment Practices Report

**Bidder and Contractor Employment Practices Report
City of Canton Office of Compliance**

I. INSTRUCTIONS

- A. This form is designed to provide an evaluation of your policies and practices as they relate to the extension of equal employment opportunity to all persons regardless to race, religion, color, sex, age, national origin, disability, sexual orientation, or sexual identity.

- B. City of Canton Codified Ordinance 507 and rules and regulations pursuant thereto provide for a contract compliance inspection of personnel policies and practices related to any contract with the City including contracts for work, labor, services, supplies, equipment, materials, leases, concession agreements, and permits.

- C. Completion of this Contractor and Bidder Employment Practices Report is one of the steps which demonstrate compliance with the City’s Equal Employment Opportunity Program. Responsibility for demonstrating compliance with the Program by the vendor and its subcontractors rests with the vendor or subcontractor. Such demonstration is a prerequisite for continued eligibility for the award City contracts.

II. VENDOR OR BIDDER INFORMATION

1. Reporting Status A. Prime Contractor B. Prime Subcontractor C. Supplier D. Other (Specify)
2. Name, Address and Telephone Number of Bidder Covered by This Report
3. Name, Address and Telephone Number of Principal Official or Manager of Bidder
4. Name, Address and Telephone Number of Principal Office of Bidder

Evaluation (Office Use Only)

- Compliant

- Non-Compliant

- Follow up needed _____

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III. POLICIES AND PRACTICES

The bidder and the Contractor will indicate his willingness or unwillingness to comply with the requirements of the Equal Employment Opportunity Program of the City of Canton by encircling the applicable letter associated with each item below. The letters are interpreted as follows:

A – Current Practice **B** – Company will immediately adopt this policy **C** – Company is unwilling or is unable to adopt policy.

Circle One	Items	State Reason if (C) is checked
A B C	1. The company will adopt a policy of non-discrimination on the basis of race, religion, color, sex, age, national origin, disability, sexual orientation, or sexual identity, with regard to recruitment, hiring, training, upgrading, promotion and discipline of employees or applicants for employment. This policy will be communicated in writing to all employees, subcontractors, recruitment sources and all relevant labor organizations and unions.	
A B C	2. The Company will develop procedures which will assure that this policy is understood and carried out by managerial, administrative, supervisory personnel.	
A B C	3. The company will use recruitment sources such as employment agencies, unions, and schools which have a policy of referring applicants on a non-discriminatory basis.	
A B C	4. The company will participate in training programs for the benefit of employees or prospective employees, according to the intent of City Codified Ordinance 507.	
A B C	5. Company recruiters will seek a broad recruitment base in order that a representative cross-section of applications might be obtained, and will refrain from a hiring policy which limits job applicants to persons recommended by company personnel.	
A B C	6. Company will take steps to integrate any position, departments, or plant locations which have no minority persons, or are almost completely staffed with one particular ethnic or racial group.	
A B C	7. The Company will review its qualifications for each job to determine whether such standards eliminate unemployed persons who could, if hired, perform the duties of the job adequately. The following qualifications should be reviewed: Education, Experience, Tests, and Criminal Records.	
A B C	8. Residence in a particular geographical area will not be a qualifying or disqualifying criterion for employment with the Company.	
A B C	9. The Company will provide that all bargaining agreements with employee organizations, including labor unions, have non-discrimination clauses requiring equal employment opportunity.	

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IV. EMPLOYMENT DATA

Please note that this data may be obtained by visual survey or post-employment records. Neither visual surveys nor post-employment records are prohibited by any Federal, State or local law. All specified data are required to be filled in by law. Please provide truthful and accurate information. If information provided is found to be false, bidder/contractor will be subject to the loss of all future awards.

Categories	Overall Total	MALE:					FEMALE:				
		Total Male	Total Female	African American	Asian American	Native American	Hispanic	African American	Asian American	Native American	Hispanic
Officials, Managers and Supervisors											
Professionals											
Technicians											
Part-Time Seasonal											
Office & Clerical											
Craftsman (skilled)											
Operatives (semi-skilled)											
Laborers (un-skilled)											
Service Workers											
Total:											

REMARKS: Please explain any identification data appearing on the last report which differs from that given above. This includes major changes in employment, changes in composition of reporting units, and other pertinent information. Use a separate sheet if additional space is required.

V. ADDITIONAL INFORMATION (Optional)

Describe any other actions taken which show that all employees are recruited, hired, trained, and promoted without regard to their race, religion, color, sex, age, national origin, disability, sexual orientation, or sexual identity. Use a separate sheet if additional space is required.

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VI. POLICY STATEMENT

The City of Canton, Ohio in conformance with local, state, and federal regulations requires each vendor, contractor, and material suppliers working on city projects or awarded City contracts be signatures of the following statements:

- 1) It is the policy of _____ that equal employment opportunities be afforded to all qualified persons without regard to race, religion, color, sex, age, national origin, disability, sexual orientation, or sexual identity.

- 2) In support of this document _____ will not discriminate against any employee or applicant because of race, religion, color, sex, age, national origin, disability, sexual orientation, or sexual identity.

- 3) _____ will take affirmative action to ensure that applicants for employment and current employees are treated fairly without regard to race, religion, color, sex, age, national origin, disability, sexual orientation, or sexual identity. Such action will include but not be limited to recruitment, advertising, or solicitation for employment, hiring, placement, upgrading, transfer or demotion, selection for training including apprenticeship rates of pay or other forms of compensation, layoffs or termination.

- 4) _____ will make every effort to comply with minority utilization goals as follows: (9%) nine percent minorities in your workforce on the job, (6.9%) six point nine percent female utilization on this job, and (10%) ten percent of contract amount expended with minority business enterprises, women-owned business enterprises or a combination of both.

- 5) _____ shall require each sub-contractor hired for this project to adhere to this statement.

VII. SIGNATURE

The undersigned certifies that he/she is legally authorized by the vendor/bidder to affirm all information and statements included in this employment practices report. That he/she has read all of the foregoing statements, representations, and affirmations and that they are true and correct to the best of his/her knowledge and belief. The undersigned, understands that if any of the statements and representations are made knowing them to be false or there is a failure to implement any of the stated intentions or objectives, set forth herein, without prior notice to the Office of Compliance, the bidder/contractor could be subject to loss of current and future awards.

Firm or Corporation Name:

Signature:

Title:

Date of Signing:

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Bid Form 3: Bid Guaranty

A **certified check, cashier's check or surety bond** made payable to the City of Canton must accompany the bid. Draw this check or bond from a solvent bank or bonding company satisfactory to the Director of Public Service as a guaranty the contract and its performance are properly secured if the bid is accepted.

The Bidder shall verify the **certified check, cashier's check or bid bond for five hundred (\$500.00) dollars**. The City of Canton will **only accept original checks and bid bonds**. Therefore, if any company and/or bidder submits a copy (including faxed copies) of his/her \$500.00 security, the City will disqualify the bid.

The Director of Public Service reserves the right to waive any technical defects in any bid bond submitted so long as the bond is in substantial compliance with State Law.

Any bidder may withdraw his bid, by written request, at any time prior to the deadline set for the bid opening. Please be advised, the City of Canton may impose a \$500.00 penalty to any bidder that withdraws his bid after the bid opening and prior to a contract award(s).

Should any bid not be awarded or be rejected, such check or bond will be returned to the bidder or bidders after the execution of the contract.

Please place your bid guaranty at the front of your submitted bid.

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Bid Form 4: Page 2

2. Form of Business Organization.

_____ Corporation

_____ Partnership

_____ Other

3. The bidder shall provide the names and addresses of all persons interested as principals (officers, partners, and associates) in this proposal. Write first name in full, and give titles for offices.

_____	_____
_____	_____
_____	_____
_____	_____

All of the above, including the signatory to this bid, are citizens of the United States, except the following. (Provide names and addresses of those not a citizen of the United States.)

_____	_____
_____	_____
_____	_____
_____	_____

4. Name and address of other person, firms or companies interested in this contract.

_____	_____
_____	_____
_____	_____
_____	_____

5. Local Bidder Preference Information: Does your company have a headquarters, division, sales office, sales outlet, manufacturing facility, or similar significant business-related location in Stark County, Ohio? If yes, please provide the name and address of the location below.

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Bid Form 5: Page 2

statements contained in said proposal or bid are true; that such bidder has not, directly or indirectly submitted this bid, or the contents thereof, or divulged information or data relative thereto any association or to any member or agent thereof; and further says that all the statements made by him in said proposal or bid are true.

Affiant

Sworn to and subscribed before me this _____ day of
_____, 20 ____.

Notary Public in and for

_____ County,

My Commission Expires:

_____, 20 ____.

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Bid Form 6: Insurance Requirements, Page 1

Instructions

All successful bidders will be required to possess the following items per the requirements below and should be prepared to submit proof thereof:

1. Liability Insurance Certificate
2. Worker's Compensation Certificate

Insurance Requirements

The following standard indemnity agreement and minimum insurance requirements are incorporated in the specifications for all work performed by the Contractor for the Owner, its affiliated and associated organizations or subsidiaries, hereinafter referred to as Owner.

- I. The Contractor agrees to indemnify and save the Owner harmless from and against any and all costs, loss and expense, liability damages, or claims for damages, including cost for defending any action, on account of any injury to persons (including death) or damage to or destruction of property of the Owner, arising or resulting from the work provided for or performed, or from any act, omission, or negligence of the Contractor, Subcontractor and his or their agents or employees. The foregoing provisions shall in no way be deemed released, waived or modified in any respect by reason of any insurance or surety provided by the Contractor.
- II. The Contractor shall maintain liability insurance and furnish the Owner with Certificates of Insurance as evidence thereof in the prescribed form. If any work provided for or to be performed under any Specifications is sublet (as otherwise permitted by the terms of such Specifications), the Contractor shall require the sub-contractors to maintain and furnish him with satisfactory evidence of Worker's Compensation, Employer's Liability and such other forms and amounts of insurance which Contractor deems reasonably adequate.
- III. In accordance with Item II, the Contractor shall maintain the following insurance:
 1. Worker's Compensation and Employer's Liability Insurance affording,
 - a. Protection under the Worker's Compensation Law in the State of Ohio.
 - b. Employer's Liability protection subject to a minimum limit of \$100,000.00.
 2. General Liability Insurance in amounts not less than:

a. General Aggregate Limit	\$2,000,000.00
b. Personal and Advertising Injury Limit	\$1,000,000.00
c. Each Occurrence Limit	\$1,000,000.00
d. Fire Damage	\$ 100,000.00
e. Medical Expense Limit	\$ 5,000.00

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Bid Form 6: Page 2

3. Commercial Automobile Liability Insurance in the following minimum amounts:
 - a. Bodily Injury and Property Damage
any one accident or loss: \$1,000,000.00

VI. This insurance shall:

1. include coverage for the liability assumed by Contractor under Item I (Indemnity);
2. be evidenced by Certificates of Insurance furnished by the Contractor that show by specific reference that each of the foregoing items have been provided for;
3. not be subject to any of the special property damage liability exclusions commonly referred to as the XCU exclusions pertaining to blasting or explosion, collapse or structural damage and underground property;
4. provide the City of Canton **“additional insured status”** and shall **contain an endorsement by the insurance carrier providing thirty (30) days’ notice to both the City and insured in the event of any change in coverage under the policy.** No less than thirty (30) days advance notice of cancellation of the insurance policy shall be given to the City by the insurer.

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Bid Form 7: Bidder's Affidavit: Foreign Corporation

***Any corporation that is not incorporated in the State of Ohio is a foreign corporation.**

The undersigned certifies that _____ is a foreign corporation incorporated in the State of _____, whose principal place of business is _____ and is required to obtain authorization to transact business in the State of Ohio.

The undersigned bidder further certifies that said authorization has been obtained and is in effect and the bidder has a designated statutory agent upon whom process against bidder corporation may be served within the State of Ohio. The designated

statutory agent is _____
(name and address)

_____.

Process served upon the designated statutory agent named above shall be effective service, unless the Owner has been informed, by certified mail or its equivalent (return receipt), of a change in the agent upon whom process can be served.

Date

Signed

Title

Note: This statement is to be reproduced on the bidder's letterhead, signed by the authorized bid signatory, notarized and submitted with the bid.

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Bid Form 8: Personal Property Tax Certification (ORC 5719.042)

NOTE: The below form and/or certification must be retyped on the bidder's letterhead and notarized utilizing either paragraph (A) or (B), and paragraph (C) as it applies to your company.

Office of the Auditor
City of Canton
218 Cleveland Avenue S.W., 2nd floor
Canton, OH 44702

To Whom It May Concern:

(A) The undersigned hereby certifies that the party for whom the contract award is being considered was not charged with any delinquent personal property tax at the time of the bid opening for the project nor is said party currently charged with such a delinquency on the general tax list of personal property for Stark County, Ohio.

Or

(B) The undersigned hereby certifies that the party for whom the contract award is being considered has been charged with a delinquency regarding personal property tax on the general tax list of personal property for Stark County, Ohio, either currently, or at the time of bid opening for the project. The amount of the due and unpaid delinquent taxes, including any due and unpaid penalties and interest thereon is _____.

and

(C) It is understood that, under Ohio law, this statement is to be signed by the party whose bid has been tentatively accepted, and must be affirmed under oath. The law also requires that his statement is to be submitted to the City Auditor and this statement must be incorporated into the pending contract before any payment can be made under the subject contract.

Name of Company

Signatory

Secretary

Sworn to and subscribed in my presence this _____ day of _____, 20 _____

(Notary Public)

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Bid Form 9: Certification: Auditor of the State of Ohio

I, _____
(Name of person signing affidavit) (Title)

do hereby certify that _____ does not have an
(Company or Individual Name)

outstanding unresolved finding for recovery issued by the Auditor of the State of Ohio as defined

by Ohio Revised Code (ORC) Section 9.24 as of _____.
(Current date)

Signature of Officer or Agent

Name (Print)

Sworn to and subscribed in my presence this _____ day of _____, 20 _____

(Notary Public)

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Bid Form 10: Articles of Incorporation

Please provide a copy of the company's articles of incorporation. The City of Canton may request this information if it is not provided.

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Bid Form 11: W9 Tax Form

Please provide an up to date copy of your Company's W9.

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Section III: City of Canton Income Tax Information

1. All successful bidders shall be required to comply with all City of Canton income tax ordinances including the following:
 - a. No person, partnership, corporation or unincorporated association may be awarded a contract with the City under Sections 105.09 or 105.10, unless the vendor is paid in full or is current and not otherwise delinquent in the payment of City income taxes, including any obligation to pay taxes withheld from employees under Section 182.05 and any payment on net profits under Section 182.06.
 - b. Falsification of any information related to or any post-contractual violation of the requirement to pay City income taxes set forth in subsection (a) shall constitute cause for the rescission of the balance of the contract at the City's discretion.
 - c. No partnership, corporation or unincorporated association which has as one of its partners, shareholders or owners a person who is a twenty percent (20%) or greater equity owner in such partnership, corporation or unincorporated association and who is delinquent in the payment of City income taxes as set forth in subsection (a), may be awarded a contract with the City under Sections 105.09 or 105.10.
 - d. A person who is a twenty percent (20%) or greater equity owner in any partnership, corporation or unincorporated association which is delinquent in the payment of City income taxes as set forth in subsection (a) may not be awarded a contract with the City under Sections 105.09 or 105.10.
 - e. By entering into contract with the City of Canton the vendor agrees with the City regarding the manner of withholding of City income taxes as provided in Section 718.011(F) of the Ohio Revised Code including the following:
 - i. Municipal income tax withholding provisions of Sections 718.011(B)(1) and 718.011(D) ORC shall not apply to qualifying wages paid to employees for work done or services performed or rendered inside the City or on City property.
 - ii. The vendor agrees to withhold income tax for the City from employees' qualifying wages earned inside the City or on City property, beginning with the first day of work done or services performed or rendered inside the City.
2. Vendors will be registered with the City of Canton Income Tax Department to ensure that the above qualifications are met. Vendors are encouraged to contact the City of Canton Income Tax Department prior to bidding with any questions regarding these provisions and for registration. Please use the contact information on the following page.

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City of Canton Income Tax Department

Office Address

424 Market Ave. N
Canton OH 44702

Phone: (330) 430-7900

Fax: (330) 430-7944

Email: cantontax@cantonohio.gov

Correspondence Address

P.O. Box 9940
Canton, OH 44711

3. Additionally, all public improvement, professional services, and services contracts shall also contain the following provisions:

Provision 1

Said _____ hereby further agrees to withhold all City income taxes due or payable under Chapter 182 of the Codified Ordinances for wages, salaries, fees and commissions paid to its employees and further agrees that any of its subcontractors shall be required to agree to withhold any such City income taxes due for services performed under this contract. Furthermore, any person, firm or agency that has a contract or agreement with the City shall be subject to City income tax whether a resident or nonresident in the City, and whether the work being done is in the City or out of the City. In addition to the tax withheld for employees, the net profits on the contract shall be subject to City income tax.

Provision 2

By entering into contract with the City of Canton _____ agrees with the City regarding the manner of withholding of City income taxes as provided in Section 718.011(F) of the Ohio Revised Code.

- i. Municipal income tax withholding provisions of Sections 718.011(B)(1) and 718.011(D) ORC shall not apply to qualifying wages paid to employees for work done or services performed or rendered inside the City or on City property.
- ii. _____ agrees to withhold income tax for the City from employees' qualifying wages earned inside the City or on City property, beginning with the first day of work done or services performed or rendered inside the City.
(Ord. 238-2015. Passed 11-30-15.)

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Section IV: City of Canton Codified Ordinances

Bidders shall take notice that they are to comply with the Codified Ordinances of the City of Canton including but not limited to the following:

1. Chapter 105.06 – Minority contract provision.

- a. All contracts with the City shall include the following clause:

The bidder agrees to expend at least \$_____ of the Contract in the event the contract is awarded to such bidder for minority/women's business enterprises. For purposes of this pledge, the term "minority/women's business enterprise" means a bona fide business established as a sole proprietorship, partnership or corporation owned, operated and controlled by one or more minority persons or women who have at least fifty-one percent (51%) ownership. "Minority" includes African Americans, Asian/Pacific Islanders, Hispanic/Latino Americans and Native American Indians. The minority or woman must have operational and managerial control, interest in capital, and earnings commensurate with the percentage of ownership. Minority/women's business enterprises may be employed as construction contractors, subcontractors, vendors or suppliers.

(Ord.185-2011. Passed 10-31-11.)

2. Chapter 105.12 – Local Bidder Preference.

- a. The Board of Control, in determining the lowest and best bidder in the award of contracts to which this section is applicable, is authorized to award contracts to local bidders as hereinafter defined, whose bid is not more than five percent (5%) higher, subject to a maximum amount of twenty thousand dollars (\$20,000.00), than the lowest dollar bid submitted by non-local bidders. The Board of Control's decision in making such an award shall be final.
- b. For purposes of this section, "local bidder" means an individual or business entity which at the time of the award of the contract has a headquarters, division, sales office, sales outlet, manufacturing facility, or similar significant business-related location in Stark County, Ohio.
- c. All contract specifications and/or bid documents that are distributed by Canton for the purpose of soliciting bids for goods and/or services shall contain the following notice:

Prospective bidders will take notice that the City of Canton, in determining the lowest and best bidder in the award of this contract, may award a local bidder preference to any qualified bidder pursuant to Section 105.12 of the Codified Ordinances of the City of Canton. The determination of whether a bidder qualifies for the local preference shall be made by Board of Control. The Board's decision shall be final. A copy of Section 105.12 is attached.

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- d. This section shall be applicable to all contracts for equipment, goods, machinery, materials, supplies, vehicles and/or services, which are purchased, leased and/or constructed at a cost in excess of fifty thousand dollars (\$50,000.00) and which require bidding pursuant to Ohio R.C. 735.05 through 735.09 and Ohio R.C. 737.03.
(Ord. 115-2018. Passed 5-14-18.)

3. Chapter 105.15 – City Income Tax

- a. No person, partnership, corporation or unincorporated association may be awarded a contract with the City under Sections 105.09 or 105.10, unless the bidder is paid in full or is current and not otherwise delinquent in the payment of City income taxes, including any obligation to pay taxes withheld from employees under Section 182.05 and any payment on net profits under Section 182.06.
- b. Falsification of any information related to or any post-contractual violation of the requirement to pay City income taxes set forth in subsection (a) shall constitute cause for the rescission of the balance of the contract at the City's discretion.
- c. No partnership, corporation or unincorporated association which has as one of its partners, shareholders or owners a person who is a twenty percent (20%) or greater equity owner in such partnership, corporation or unincorporated association and who is delinquent in the payment of City income taxes as set forth in subsection (a), may be awarded a contract with the City under Sections 105.09 or 105.10.
- d. A person who is a twenty percent (20%) or greater equity owner in any partnership, corporation or unincorporated association which is delinquent in the payment of City income taxes as set forth in subsection (a) may not be awarded a contract with the City under Sections 105.09 or 105.10.
- e. A contract awarded under Sections 105.09 or 105.10 for a public improvement project, services other than personal or professional services, and personal or professional services shall not be binding or valid unless such contract contains the following provisions:

Said _____ hereby further agrees to withhold all City income taxes due or payable under Chapter 182 of the Codified Ordinances for wages, salaries, fees and commissions paid to its employees and further agrees that any of its subcontractors shall be required to agree to withhold any such City income taxes due for services performed under this contract. Furthermore, any person, firm or agency that has a contract or agreement with the City shall be subject to City income tax whether a resident or nonresident in the City, and whether the work being done is in the City or out of the City. In addition to the tax withheld for employees, the net profits on the contract shall be subject to City income tax.

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Water Department**

(Ord. 238-2015. Passed 11-30-15.)

4. Chapter 182.30 – Contract Provisions

- a. No contract on behalf of the City under Sections 105.09 or 105.10 of the Codified Ordinances of Canton for a public improvement project, services other than personal or professional services, and personal or professional services shall be binding or valid unless such contract contains the following provisions:

Said _____ hereby further agrees to withhold all City income taxes due or payable under Chapter 182 of the Codified Ordinances for wages, salaries, fees and commissions paid to its employees and further agrees that any of its subcontractors shall be required to agree to withhold any such city income taxes due for services performed under this contract. Furthermore, any person, firm or agency that has a contract or agreement with the city shall be subject to city income tax whether a resident or nonresident in the city, and whether the work being done is in the City or out of the City. In addition to the tax withheld for employees, the net profits on the contract shall be subject to City income tax.

- b. By entering into contract with the city of Canton _____ agrees with the City regarding the manner of withholding of City income taxes as provided in Section 718.011(F) of the Ohio Revised Code.
 - i. Municipal income tax withholding provisions of Sections 718.011(B)(1) and 718.011(D) ORC shall not apply to qualifying wages paid to employees for work done or services performed or rendered inside the City or on City property.
 - ii. _____ agrees to withhold income tax for the City from employees' qualifying wages earned inside the City or on City property, beginning with the first day of work done or services performed or rendered inside the City.

(Ord. 238-2015. Passed 11-30-15.)

5. Chapter 507.03 – Equal Employment Opportunity clause.

- b. During the performance of this contract, the contractor agrees as follows:
 - 1. The contractor shall not discriminate against any employee or applicant for employment because of race, age, handicap, religion, color, sex, national origin, sexual orientation or gender identity. The contractor shall take affirmative action to insure that applicants are employed and that employees are treated during employment without regard to race, religion, color, sex, national origin, military status, sexual orientation or gender identity. As used herein, the word "treated" shall mean and include without limitation the following: recruited, whether by advertising or other means; compensation, whether in the form of rates or pay or other forms of compensation; selected for training, including apprenticeship; promoted; demoted; upgraded; downgraded; transferred; laid off; and terminated. The contractor agrees to and shall post in

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conspicuous places available to employees and applicants for employment notices to be provided by the contracting officers setting forth the provisions of this nondiscrimination clause.

2. The contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the contractor; state that all qualified applicants will receive consideration for employment without regard to race, age, handicap, religion, color, sex, national origin, military status, sexual orientation or gender identity.

(Ord. 153-2012. Passed 9-24-12.)

3. The contractor shall send to each labor union or representative of workers, with which he has a collective bargaining agreement or other contract or understanding, a notice advising the labor union or workers' representative of the contractor's commitments under the equal opportunity clause of the City; and he shall post copies of the notice in conspicuous places available to employees and applicants for employment.
4. The contractor shall submit in writing to the City his affirmative action plan, and each subcontractor and supplier of equipment or supplies shall submit to the general contractor his affirmative action plan. The responsibility for securing these affirmative action plans falls upon the general contractor and shall be on file at the office of the general contractor. The contractor shall furnish all information and reports required by the City or its representative pursuant to this chapter, and shall permit access to his books, records, and accounts by the contracting agency and by the Executive Secretary for purposes of investigation to ascertain compliance with the program.
5. The contractor shall take such action with respect to any subcontractor as the City may direct as a means of enforcing the provisions of this equal opportunity clause, including penalties and sanctions for noncompliance; provided, however, that in the event the contractor becomes involved in or is threatened with litigation as the result of such direction by the City, the City will enter into such litigation as is necessary to protect the interests of the City and to effectuate the City's equal opportunity program and, in the case of contracts receiving Federal assistance, the contractor or the City may request the United States to enter into such litigation to protect the interests of the United States.
6. The contractor shall file and shall cause his subcontractors, if any, to file compliance reports with the City in the form and to the extent prescribed by the City or its representative. Compliance reports filed at such times as directed shall contain information as to the employment practices, policies, programs and statistics of the contractor and his subcontractors.
7. The contractor shall include the provisions of this equal employment opportunity clause in every subcontract or purchase order, so that such provisions will be binding upon each subcontractor or vendor.

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8. Refusal by the contractor or subcontractor to comply with any portion of this program as herein stated and described will subject the offending party to any or all of the following penalties:
 - A. Withholding of all future payments under the involved public contract to the contractor in violation, until it is determined that the contractor or subcontractor is in compliance with the provisions of this contract.
 - B. Refusal of all future bids for any public contract with the City or any of its departments or divisions, until such time as the contractor or subcontractor demonstrates that he has established and shall carry out the policies of the program as herein outlined.
 - C. Cancellation of the public contract and declaration of forfeiture of the performance bond.
 - D. In cases in which there is substantial or material violation or the threat of substantial or material violation of the compliance procedure or as may be provided by contract, appropriate proceedings may be brought to enforce these provisions, including the enjoining within applicable laws of contractors, subcontractors or other organizations, individuals or groups who prevent, directly or indirectly, or seek to prevent, directly or indirectly, compliance with the policy as herein outlined.

(Ord. 179-74. Passed 6-17-74.)

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Water Department**

Section V: Bid Specifications

1.0 Scope and Classification

- 1.1 **Scope:** The City of Canton, Ohio Water Department is seeking bids for one-year, as-needed, supply contracts for pipe and pipe fittings.
- 1.2 **Classification:** The successful bidder(s) will furnish to the City of Canton, Ohio Water Department the materials in the estimated quantities as stated (more or less), F.O.B. destination, freight prepaid and allowed per truck load anywhere in the Canton area and as per these specifications and per the information contained on the proposal pages.

2.0 Applicable Publications and Standards

- 2.1 Please refer to the requirements section and proposal pages for specific requirements and standards.

3.0 Requirements

3.1 General Requirements

- 3.1.1 **Price:** All bidders are requested to bid fixed, firm pricing for the duration of the contract. Bids subject to an escalator clause will not be considered. Delivery shall be included in the bid price.
- 3.1.2 **Term:** Contracts resulting from this bid will be one-year supply contracts beginning upon the date of the certification of funds by the Auditor of the City of Canton. All resulting contracts can be extended for one additional thirty (30) day period at the sole discretion of the City of Canton.
- 3.1.3 **Quality:** All bids must meet the minimum specifications listed herein.
- 3.1.4 **Quantity:** The materials will be requested as needed. Specific locations will be identified throughout the year.
- 3.1.5 The City of Canton reserves the right to award multiple contracts as a result of this bid and to split the awards between multiple vendors.
- 3.1.6 **Non-Exclusivity:** The City of Canton reserves the right to contract for the same or similar items covered in this bid from additional vendors not awarded contracts resulting from this bid if found to be in the best interest of the City.
- 3.1.7 The City will award only one (1) manufacturer in each bid section and all items in each section must be bid for an award to be made.

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3.1.8 The City will award bids from manufacturers only for ductile iron pipe and ductile iron fittings. Bids submitted by distributors will be rejected for ductile iron pipe and ductile iron fittings.

3.2 Specification Requirements

3.2.1 See the proposal pages for the list of requested materials and the necessary requirements for each individual item.

3.2.2 Brass goods furnished under this contract shall be new and unused.

3.2.3 Except where as noted, all fittings shall conform to ANSI/AWWA Standard C800, latest revision.

3.2.4 Any metal part of the fitting in contact with potable water must be made of a “Lead Free” brass, defined for this specification as Sebiloy II (Envirobrass) ASTM B584 (UNS Alloy C89520) or Federalloy UNS Alloy C89833. Residual lead levels of the metal shall not exceed .25% by weight as cast or extruded. Coated or washed metals are not acceptable if their residual lead levels exceed .25% by weight prior to the coating or washing process.

3.2.5 Metal components that do not contact the water shall comply with the requirements of ASTM B62 or ASTM B584 copper alloy C83600 and AWWA C-800.

3.2.6 All fittings shall be stamped or embossed with a mark or name indicating that the product is manufactured from the low-lead alloy as specified above.

3.2.7 All service fittings shall be manufactured in accordance with the latest revision of the Safe Water Drinking Act.

3.3 Contract Non-Performance and Cancellation

3.3.1 If it is determined by the City of Canton that a contractor has failed to perform or otherwise breached their contract with the City, the City will give notice to the contractor of said non-performance or breach, and the contractor will have thirty (30) days from the time of said notice to remedy the non-performance or breach to the complete satisfaction of the City of Canton.

3.3.2 If a non-performance or breach is not remedied pursuant to specification 3.3.1, the City of Canton reserves the right to terminate the contract and re-award to a different bidder or vendor.

**Pipe and Pipe Fittings
Water Department**

4.0 Sampling, Inspection, and Test Procedures

- 4.1 All purchases made under agreements resulting from this bid will be to the satisfaction of the City of Canton, Ohio Water Department.

5.0 Delivery and Invoicing

- 5.1 The successful bidder will furnish to the City of Canton, Ohio Water Department the materials in the estimated quantities as stated (more or less), F.O.B. destination, freight prepaid and allowed, per truck load anywhere in the Canton area and as per the specifications.
- 5.2 Invoices shall show the City's purchase order number, the item number, the quantity, a brief description of the item, the unit price and the total amount. Invoices shall be submitted to the address on the purchase order.

6.0 Notes

6.1 Award Process

- 6.1.1 Contracts will be awarded in accordance with Section 105.09 of the City of Canton Codified Ordinances using the standard of lowest and best bidder.
- 6.1.2 The Board of Control reserves the right to reject any or all bids and to accept the bid(s) deemed most beneficial to the City of Canton.
- 6.1.3 Prospective bidders will take notice that the City of Canton, in determining the lowest and best bidder in the award of this contract, may award a local bidder preference to any qualified bidder pursuant to Section 105.12 of the Codified Ordinances of the City of Canton. The determination of whether a bidder qualifies for the local preference shall be made by Board of Control. The Board's decision shall be final. A copy of City Code Section 105.12 is attached.
- 6.1.4 The Board of Control reserves the right waive minor deficiencies contained within a bid.

6.2 Questions and Addenda

- 6.2.1 All questions should be submitted in writing at least five (5) business days prior to the day and time of the bid opening. Answers to questions will be issued in writing as official addenda no later than seventy two (72) hours prior to the time of the bid opening. Said addenda will become a component of the Invitation to Bid and should be acknowledged as received on the proposal page. Failure to acknowledge all official addenda in this manner may result in your bid being disqualified.

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Water Department**

- 6.2.2 All questions should be directed to:
Katie Wise
City of Canton Purchasing Department
Email: kathryn.wise@cantonohio.gov
- 6.2.3 Bidders are expected to and responsible for monitoring the City's website for all official addenda.
- 6.2.4 Oral instructions or decisions, unless confirmed by addenda, will not be considered valid, legal or binding.
- 6.3 Proposal Page Instructions:
- 6.3.1 Bidder shall provide unit pricing for the various items listed on the proposal pages.
- 6.3.2 Please be sure to bid based on the unit of measure specified.
- 6.3.3 Bidders are required to fill out the proposal pages completely. Failure to do so may result in your bid being disqualified.
- 6.3.4 Prices shall include all of the requirements listed in the specifications.
- 6.4 Please be advised that when you submit a bid to the City of Canton, the City will assume that an authorized representative of your company reviewed said bid to assure that the bid is correct and/or accurate.
- 6.5 Any bidder may withdraw a bid, by written request, at any time prior to the time set for the bid opening. This request must be made to Katie Wise, Assistant Director of Purchasing at kathryn.wise@cantonohio.gov. If there is no withdrawal of the bid, in accordance to this procedure, the City reserves the right to enforce said bid prices(s) and/or contract(s).
- 6.6 If a bidder attempts to alter any of the terms and/or conditions of these bid specifications the City of Canton may reject said bid.
- 6.7 The party submitting a bid is solely responsible for the delivery of the bid to the specified location prior to the deadline for the receipt of bids. The Purchasing Department time stamp clock is the official time used for the deadline of the submission of bids.

**Pipe and Pipe Fittings
Water Department**

Section VI: Proposal and Signature Pages

**Proposal Page
Pipe and Pipe Fittings**

We (I), the below signed hereby propose to furnish the following article(s) and/or service(s) at the price(s) and terms stated subject to all instructions, conditions, specifications, and all attachments hereto. We (I) have read all attachments including the specifications and fully understand what is required.

1. DUCTILE CAST IRON PIPE 4"-12" - PUSH ON JOINTS, CEMENT LINED, AMERICAN STANDARDS ASSOCIATION THICKNESS, MANUFACTURING STANDARDS ASA A21.51 AND ASA A21.4 (WITH ACCESSORIES)
F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Per Foot</u>
1	4000 ft. - 4" Class 52 pipe	\$ _____
2	4000 ft. - 6" Class 52 pipe	\$ _____
3	4000 ft. - 8" Class 52 pipe	\$ _____
4	500 ft. - 10" Class 52 pipe	\$ _____
5	4000 ft. - 12" Class 53 pipe	\$ _____

Terms _____
Manufacturer's Name _____
Delivery _____
Remarks _____

2. DUCTILE CAST IRON PIPE 16"-36" - PUSH ON JOINTS, CEMENT LINED, AMERICAN STANDARDS ASSOCIATION THICKNESS, MANUFACTURING STANDARDS ASA A21.51 AND ASA A21.4 (WITH ACCESSORIES)
F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Per Foot</u>
1	500 ft. - 16" Class 54 pipe	\$ _____
2	500 ft. - 18" Class 54 pipe	\$ _____
3	500 ft. - 20" Class 54 pipe	\$ _____
4	500 ft. - 24" Class 54 pipe	\$ _____
5	500 ft. - 30" Class 54 pipe	\$ _____
6	500 ft. - 36" Class 54 pipe	\$ _____

Terms _____
Manufacturer's Name _____
Delivery _____
Remarks _____

**Pipe and Pipe Fittings
Water Department**

**3. MECHANICAL JOINT DUCTILE IRON PIPE 4"-12" - AMERICAN STANDARDS ASSOCIATION THICKNESS, MANUFACTURING STANDARDS ASA A21.51 AND ASA A21.4 (WITH ACCESSORIES)
F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO**

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Per Foot</u>
1	750 ft. - 4" Class 52 pipe	\$ _____
2	750 ft. - 6" Class 52 pipe	\$ _____
3	750 ft. - 8" Class 52 pipe	\$ _____
4	750 ft. - 12" Class 53 pipe	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

**4. MECHANICAL JOINT DUCTILE IRON PIPE 16"-36" - AMERICAN STANDARDS ASSOCIATION THICKNESS, MANUFACTURING STANDARDS ASA A21.51 AND ASA A21.4 (WITH ACCESSORIES)
F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO**

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Per Foot</u>
1	750 ft. - 16" Class 54 pipe	\$ _____
2	750 ft. - 20" Class 54 pipe	\$ _____
3	750 ft. - 24" Class 54 pipe	\$ _____
4	750 ft. - 30" Class 54 pipe	\$ _____
5	750 ft. - 36" Class 54 pipe	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

**Pipe and Pipe Fittings
Water Department**

5. PVC WATER DISTRIBUTION PIPE 4”-8” - AWWA C909 MOLECULARLY ORIENTED POLY VINYL CHLORIDE (PVCO)

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

This specification covers the requirements for AWWA C909 Molecularly Oriented Poly Vinyl Chloride (PVCO) water distribution pipes with integral bell and spigot gasketed joints in Cast Iron Outside Diameter (CIOD) nominal sizes 4", 6", and 8". The pipes must meet the requirements of American Water Works Association standard ANSI/AWWA C-909 and must be 235 psi rated.

The pipe must be manufactured from virgin PVC compound meeting the requirements of cell class 12454 as defined by ASTM D-1784, Standard Specification for Rigid Poly (Vinyl Chloride) PVC Compounds. These compounds must have a hydrostatic design basis rating of 7,100 psi for water at 73.4 degree F. The pipe must be certified by NFS International to ANSI/NSF Standard 61 and must meet all quality assurance testing requirements as specified in ANSI/AWWA C-909.

The pipes must be manufactured to the Cast Iron Outside Diameter nominal size series for use as a pressure conduit. The pipes must be rated as Pressure Class 165 or 235. The pipe must utilize a locked integral gasket joint design meeting the requirements of ASTM D-3139, Standard Specification for Joints for Plastic Pressure Pipes Using Flexible Elastomeric Seals. The gaskets must be reinforced with a steel band and conform to the requirements of ASTM F-477, Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipes. Markings shall be as specified in ANSI/AWWA C-909.

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Per Foot</u>
1	4" DR18 AWWA C900 PVC pipe (PC 235 psi)	\$ _____
2	6" PC 165 psi, AWWA C909 PVC pipe	\$ _____
3	8" PC 165 psi, AWWA C909 PVC pipe	\$ _____
4	4" DR14 AWWA C900 PVC pipe (PC 305 psi)	\$ _____
5	6" PC 235 psi, AWWA C909 PVC pipe	\$ _____
6	8" PC 235 psi, AWWA C909 PVC pipe	\$ _____

Terms _____

Manufacturer's Name _____

Delivery _____

Remarks _____

**Pipe and Pipe Fittings
Water Department**

6. PVC WATER DISTRIBUTION PIPE 12"-16" - AWWA C909 MOLECULARLY ORIENTED POLY VINYL CHLORIDE (PVCO)

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

This specification covers the requirements for AWWA C909 Molecularly Oriented Poly Vinyl Chloride (PVCO) water distribution pipes with integral bell and spigot gasketed joints in Cast Iron Outside Diameter (CIOD) nominal sizes 12" and 16". The pipes must meet the requirements of American Water Works Association standard ANSI/AWWA C-909 and must be 165 or 235 psi rated.

The pipe must be manufactured from virgin PVC compound meeting the requirements of cell class 12454 as defined by ASTM D-1784, Standard Specification for Rigid Poly (Vinyl Chloride) PVC Compounds. These compounds must have a hydrostatic design basis rating of 7,100 psi for water at 73.4 degree F. The pipe must be certified by NFS International to ANSI/NSF Standard 61 and must meet all quality assurance testing requirements as specified in ANSI/AWWA C-909.

The pipes must be manufactured to the Cast Iron Outside Diameter nominal size series for use as a pressure conduit. The DR-14 wall thickness class pipes must be rated as Pressure Class 165 or 235. The pipe must utilize a locked integral gasket joint design meeting the requirements of ASTM D-3139, Standard Specification for Joints for Plastic Pressure Pipes Using Flexible Elastomeric Seals. The gaskets must be reinforced with a steel band and conform to the requirements of ASTM F-477, Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipes. Markings shall be as specified in ANSI/AWWA C-909.

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Per Foot</u>
1	12" PC 165 psi AWWA C909 PVC pipe	\$ _____
2	16" PC 165 psi AWWA C909 PVC pipe	\$ _____
3	12" PC 235 psi AWWA C909 PVC pipe	\$ _____
4	16" PC 235 psi AWWA C909 PVC pipe	\$ _____

Terms _____

Manufacturer's Name _____

Delivery _____

Remarks _____

**Pipe and Pipe Fittings
Water Department**

7. REDUCERS - COMPACT DUCTILE MECHANICAL JOINT ENAMEL LINED HALF THICKNESS – CLASS 250 W/ACCESSORIES (FLANGES, RUBBERS, NUTS, BOLTS PACKED AS ONE UNIT)

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OH

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Clow or Equal</u>	<u>Each</u>
1	10 - 6 x 4 red.-full (sp to sp)	C153	\$ _____
2	5 - 8 x 6 reducer (sp to sp)	C153	\$ _____
3	5 - 12 x 8 reducer (sp to sp)	C153	\$ _____
4	5 - 12 x 10 reducer (sp to sp)	C153	\$ _____
5	5 - 6 x 8 reducer (sp to lep)	C153	\$ _____
6	5 - 8 x 6 reducer (lep to sp)	C153	\$ _____
7	5 - 8 x 6 reducer (sp-leb)	C153	\$ _____
8	5 - 6 x 4 reducer (seb-lep)	C110	\$ _____
9	5 - 6 x 4 reducer (leb-sep)	C110	\$ _____
10	5 - 6 x 4 reducer (b to b)	C110	\$ _____
11	5 - 8 x 6 reducer (b to b)	C110	\$ _____
12	10-6 x 4 reducer (sp to sp)	C110	\$ _____
13	5 - 12 x 10 reducer (b to b)	C110	\$ _____
14	5 - 12 x 10 reducer (sp to b)	C110	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

8. REDUCERS - MECHANICAL JOINT ENAMEL LINED HALF THICKNESS - CLASS 250 W/ACCESSORIES (FLANGES, RUBBERS, NUTS, BOLTS PACKED AS ONE UNIT)

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Clow or Equal</u>	<u>Each</u>
1	5 - 12 x 8 reducer (b to b)		\$ _____
2	5 - 12 x 8 reducer (leb-sep)		\$ _____
3	5 - 12 x 6 reducer (b to b)		\$ _____
4	5 - 12 x 6 reducer (leb-sep)		\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

**Pipe and Pipe Fittings
Water Department**

9. BENDS - MECHANICAL JOINT ENAMEL LINED HALF THICKNESS CLASS 350 - DUCTILE IRON-W/ACCESSORIES (FLANGES, RUBBERS, NUTS, BOLTS PACKED AS ONE UNIT)

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Clow or Equal Compact Ductile</u>	<u>Each</u>
1	20 - 4" 90 deg bend (b to b)	C153	\$ _____
2	20 - 6" 90 deg bend (b to b)	C153	\$ _____
3	20 - 8" 90 deg bend (b to b)	C153	\$ _____
4	20 - 12" 90 deg bend (b to b)	C153	\$ _____
5	20 - 4" 45 deg bend (b to b)	C153	\$ _____
6	20 - 6" 45 deg bend (b to b)	C153	\$ _____
7	20 - 8" 45 deg bend (b to b)	C153	\$ _____
8	20 - 12" 45 deg bend (b to b)	C153	\$ _____
9	20 - 4" 22-1/2 deg bend (b to b)	C153	\$ _____
10	20 - 6" 22-1/2 deg bend (b to b)	C153	\$ _____
11	20 - 8" 22-1/2 deg bend (b to b)	C153	\$ _____
12	20 - 12" 22-1/2 deg bend (b to b)	C153	\$ _____
13	20 - 4" 11-1/4 deg bend (b to b)	C153	\$ _____
14	20 - 6" 11-1/4 deg bend (b to b)	C153	\$ _____
15	20 - 8" 11-1/4 deg bend (b to b)	C153	\$ _____
16	20 - 12" 11-1/4 deg bend (b to b)	C153	\$ _____
17	20 - 6"x18" offset bend (b to b)	C110	\$ _____
18	20 - 6"x24" offset bend (b to b)	C110	\$ _____
19	20 - 4"x18" offset bend (b to b)	C110	\$ _____
20	20 - 4"x24" offset bend (b to b)	C110	\$ _____
21	20 - 8"x18" offset bend (b to b)	C110	\$ _____
22	20 - 8"x24" offset bend (b to b)	C110	\$ _____
23	20 - 12"x18" offset bend (b to b)	C110	\$ _____
24	20 - 12"x24" offset bend (b to b)	C110	\$ _____
25	6 - 6" x 12" offset bend (b to b)	C110	\$ _____
26	6 - 8" x 12" offset bend (b to b)	C110	\$ _____
27	6 - 12" x 12" offset bend (b to b)	C110	\$ _____
28	20 - 490 deg bend (b to Sp)	C153	\$ _____
29	20 - 6" 90 deg bend (b to Sp)	C153	\$ _____
30	20 - 8" 90 deg bend (b to Sp)	C153	\$ _____
31	20 - 12" 90 deg bend (b to Sp)	C153	\$ _____
32	20 - 4" 45 deg bend (b to Sp)	C153	\$ _____
33	20 - 6" 45 deg bend (b to Sp)	C153	\$ _____
34	20 - 8" 45 deg bend (b to Sp)	C153	\$ _____
35	20 - 12" 45 deg bend (b to Sp)	C153	\$ _____
36	20 - 4" 22-1/2 deg bend (b to Sp)	C153	\$ _____
37	20 - 6" 22-1/2 deg bend (b to Sp)	C153	\$ _____
38	20 - 8" 22-1/2 deg bend (b to Sp)	C153	\$ _____

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Water Department**

39	20 - 12" 22-1/2 deg bend (b to Sp)	C153	\$ _____
40	20 - 4" 11-1/4 deg bend (b to Sp)	C153	\$ _____
41	20 - 6" 11-1/4 deg bend (b to Sp)	C153	\$ _____
42	20 - 8" 11-1/4 deg bend (b to Sp)	C153	\$ _____
43	20 - 12" 11-1/4 deg bend (b to Sp)	C153	\$ _____
44	5 - 16" 22-1/2 deg bend (b to b)	C153	\$ _____
45	5 - 16" 45 deg bend (b to b)	C153	\$ _____
46	5 - 16" 90 deg bend (b to b)	C153	\$ _____
47	5 - 16" 11-1/4 deg bend (b to b)	C153	\$ _____
48	5 - 20" 22-1/2 deg bend (b to b)	C153	\$ _____
49	5 - 20" 45 deg bend (b to b)	C153	\$ _____
50	5 - 20" 90 deg bend (b to b)	C153	\$ _____
51	5 - 24" 22-1/2 deg bend (b to b)	C153	\$ _____
52	5 - 24" 45 deg bend (b to b)	C153	\$ _____
53	5 - 24" 90 deg bend (b to b)	C153	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

10. ANCHOR TEES - MECHANICAL JOINT C-153 OR EQUAL - DUCTILE IRON - CLASS 350 W/ACCESSORIES (FLANGES, RUBBERS, NUTS, BOLTS **PACKED AS ONE UNIT**) - F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	20 - 6 x 6 anchor tee	\$ _____
2	20 - 8 x 6 anchor tee	\$ _____
3	20 - 8 x 8 anchor tee	\$ _____
4	20 - 12 x 6 anchor tee	\$ _____
5	20 - 12 x 8 anchor tee	\$ _____
6	10 - 16 x 6 anchor tee	\$ _____
7	8 - 20 x 6 anchor tee	\$ _____
8	8 - 24 x 6 anchor tee	\$ _____
9	8 - 10 x 6 anchor tee	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

**Pipe and Pipe Fittings
Water Department**

11. SMITH BLAIR COUPLING #441 - MUST HAVE #316 STAINLESS STEEL NUTS & BOLTS. F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	10- 3" coupling 441-000-396-931	\$ _____
2	40- 4" coupling 441-000-510-931	\$ _____
3	85 - 6" coupling 441-000-722-931	\$ _____
4	60 - 8" coupling 441-000-945-931	\$ _____
5	10 -10" coupling 441-001-140-900	\$ _____
6	10 - 12" coupling 441-001-350-900	\$ _____
7	10 - 16" coupling 441-000-1780-931	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

12. SMITH BLAIR COUPLING #442 - MUST HAVE 431 STAINLESS STEEL NUTS & BOLTS. F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	40- 4" coupling 442-00000-510-431	\$ _____
2	85 - 6" coupling 442-00000-722-431	\$ _____
3	60 - 8" coupling 442-00000-945-431	\$ _____
4	10 -10" coupling 442-0000-1160-431	\$ _____
5	10 - 12" coupling 442-0000-1350-431	\$ _____
6	10 - 14" coupling 442-0000-1550-431	\$ _____
7	10 - 16" coupling 442-0000-1780-431	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

**Pipe and Pipe Fittings
Water Department**

**13. BELL JOINT LEAK CLAMPS 4" – 12" - SMITH BLAIR STYLE 274 – MUST HAVE #316 STAINLESS STEEL NUTS & BOLTS
F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO**

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	10- 4" bell joint leak clamp	\$ _____
2	10 - 6" bell joint leak clamp	\$ _____
3	10 - 8" bell joint leak clamp	\$ _____
4	10 -10" bell joint leak clamp	\$ _____
5	10 - 12" bell joint leak clamp	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

**14. BELL JOINT LEAK CLAMPS 16" – 24" - SMITH BLAIR STYLE 274 – MUST HAVE #316 STAINLESS STEEL NUTS & BOLTS.
F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO**

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	10- 16" bell joint leak clamp	\$ _____
2	10 - 18" bell joint leak clamp	\$ _____
3	10 - 20" bell joint leak clamp	\$ _____
4	10 -24" bell joint leak clamp	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

**15.TPS HYMAX COUPLINGS - MUST HAVE STAINLESS STEEL NUT & BOLTS
F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO**

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Part Number</u>	<u>Overall Range</u>	<u>Each</u>
1	10 1.5coupling	2000-0213-260	1.61-2.13"	\$ _____
2	10 2coupling	2000-0303-260	2.10-3.03"	\$ _____
3	10 3coupling	2000-0433-260	3.46-4.33"	\$ _____
4	10 4coupling	2000-0511-260	4.25-5.11"	\$ _____
5	10 4o.s. coupling	2000-0561-260	4.75-5.61"	\$ _____
6	10 6coupling	2000-0768-260	6.42-7.68"	\$ _____

**Pipe and Pipe Fittings
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7	10 8coupling	2000-0984-260	8.54-9.84"	\$ _____
8	10 10coupling	2000-1200-260	10.70-12.00"	\$ _____
9	10 10o.s. coupling	2000-1226-260	10.96-12.26"	\$ _____
10	10 12coupling	2000-1366-260	12.40-13.66"	\$ _____
11	10 12s.s. coupling	2000-1441-260	13.15-14.41"	\$ _____
12	10 16coupling	2000-1920-260	17.10-19.20"	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

16. PLUGS W/ACCESSORIES (FLANGES, RUBBERS, NUTS, BOLTS PACKED AS ONE UNIT) –
 F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Clow or Equal</u>	<u>Each</u>
1	2 - 4" mechanical plug w/2" outlet	F-1054	\$ _____
2	4 - 6" mechanical plug w/2" outlet	F-1054	\$ _____
3	4 - 8" mechanical plug w/2" outlet	F-1054	\$ _____
4	2 - 12" mechanical plug w/2" outlet	F-1054	\$ _____
5	2 - 4" mechanical plug	F-1035	\$ _____
6	3 - 6" mechanical plug	F-1035	\$ _____
7	3 - 8" mechanical plug	F-1035	\$ _____
8	2 - 12" mechanical plug	F-1035	\$ _____
9	4 - 4" restrained plug solid w/2" tap	F-1159	\$ _____
10	6 - 6" restrained plug solid w/2" tap	F-1159	\$ _____
11	6 - 8" restrained plug solid w/2" tap	F-1159	\$ _____
12	4 - 12" restrained plug solid w/2" tap	F-1159	\$ _____
13	4 - 4" restrained plug solid	F-1159	\$ _____
14	6 - 6" restrained plug solid	F-1159	\$ _____
15	6 - 8" restrained plug solid	F-1159	\$ _____
16	4 - 12" restrained plug solid	F-1159	\$ _____
17	6 - 16" mechanical plug	F-1035	\$ _____
18	6 - 20" mechanical plug	F-1035	\$ _____
19	6 - 24" mechanical plug	F-1035	\$ _____
20	6 - 16" mechanical plug w/2" outlet	F-1054	\$ _____
21	6 - 20" mechanical plug w/2" outlet	F-1054	\$ _____
22	6 - 24" mechanical plug w/2" outlet	F-1054	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

**Pipe and Pipe Fittings
Water Department**

17. SLEEVES - SOLID – DUCTILE IRON CL53 W/ACCESSORIES (FLANGES, RUBBERS, NUTS, BOLTS PACKED AS ONE UNIT) – F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Clow or Equal</u>	<u>Each</u>
1	10 - 4" solid sleeve 12" length Class 53 Ductile	FI014	\$ _____
2	20 - 6" solid sleeve 12" length Class 53 Ductile	FI014	\$ _____
3	10 - 8" solid sleeve 12" length Class 53 Ductile	FI014	\$ _____
4	10 - 10" solid sleeve 12" length Class 53 Ductile	FI014	\$ _____
5	10 - 12" solid sleeve 12" length Class 53 Ductile	FI014	\$ _____
6	5 - 16" solid sleeve 15" length Class 53 Ductile	FI014	\$ _____
7	5 – 18" solid sleeve 15" length Class 53 Ductile	FI014	\$ _____
8	6 - 20" solid sleeve 15" length Class 53 Ductile	FI014	\$ _____
9	6 - 24" solid sleeve 15" length Class 53 Ductile	FI014	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

18. SLEEVES - DUO - DUCTILE IRON CL 53 W/ACCESSORIES (FLANGES, RUBBERS, NUTS, BOLTS) – F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Clow or Equal</u>	<u>Each</u>
1	10 - 4" duo sleeve Class 53 Ductile	F-1208	\$ _____
2	10 - 6" duo sleeve Class 53 Ductile	F-1208	\$ _____
3	10 - 8" duo sleeve Class 53 Ductile	F-1208	\$ _____

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4	1 - 10" duo sleeve Class 53 Ductile	F-1208	\$ _____
5	5 - 12" duo sleeve Class 53 Ductile	F-1208	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

19. SLEEVES - CUTTING IN - DUCTILE IRON CL 53 W/ACCESSORIES (FLANGES, RUBBERS, NUTS, BOLTS **PACKED AS ONE UNIT) – MUST HAVE TEST PLUG IN SLEEVE BODY – F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO**

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Clow or Equal</u>	<u>Each</u>
1	10 - 4" cutting in sleeve	F1220	\$ _____
2	10 - 6" cutting in sleeve	F1220	\$ _____
3	10 - 8" cutting in sleeve	F1220	\$ _____
4	10 - 10" cutting in sleeve	F1220	\$ _____
5	10 - 12" cutting in sleeve	F1220	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

20. ANCHOR COUPLINGS – 12" LONG W/ROTO RING FLANGED - C-153 F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	1 - 4" anchor coupling	\$ _____
2	30 - 6" anchor coupling	\$ _____
3	25 - 8" anchor coupling	\$ _____
4	12 - 12" anchor coupling	\$ _____
5	12 - 16" anchor coupling	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

**Pipe and Pipe Fittings
Water Department**

21. ANCHOR COUPLINGS – 24” LONG W/ROTO RING FLANGED - C-153
F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	1 - 4" anchor coupling	\$ _____
2	30 - 6" anchor coupling	\$ _____
3	25 - 8" anchor coupling	\$ _____
4	12 - 12" anchor coupling	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

22. MECHANICAL JOINT Y FITTINGS 4” – 12” - COMPACT DUCTILE IRON
MJ X MJ W/ACCESSORIES (FLANGES, RUBBERS, NUTS, BOLTS **PACKED AS ONE**
UNIT) C-153 –
F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	10 – 4” mech joint Y fitting	\$ _____
2	10 – 6” mech joint Y fitting	\$ _____
3	10 – 8” mech joint Y fitting	\$ _____
4	10 – 10” mech joint Y fitting	\$ _____
5	10 – 12” mech joint Y fitting	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

**Pipe and Pipe Fittings
Water Department**

23. MECHANICAL JOINT Y FITTINGS 16” – 24” - COMPACT DUCTILE IRON MJ X MJ W/ACCESSORIES (FLANGES, RUBBERS, NUTS, BOLTS **PACKED AS ONE UNIT) C-153 OR EQUAL - F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO**

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	10 – 16” mech joint Y fitting	\$ _____
2	10 – 20” mech joint Y fitting	\$ _____
3	10 – 24” mech joint Y fitting	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

24. TEES - MECHANICAL JOINT ENAMEL LINED HALF THICKNESS - CLASS 350 DUCTILE IRON W/ACCESSORIES (FLANGES, RUBBERS, NUTS, BOLTS **PACKED AS ONE UNIT) C-153 OR EQUAL – F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO**

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	10 - 4 x 4 mechanical tee	\$ _____
2	10 - 6 x 4 mechanical tee	\$ _____
3	10 - 6 x 6 mechanical tee	\$ _____
4	10 - 8 x 4 mechanical tee	\$ _____
5	10 - 8 x 6 mechanical tee	\$ _____
6	10 - 8 x 8 mechanical tee	\$ _____
7	10 – 12 x 4 mechanical tee	\$ _____
8	10 - 12 x 6 mechanical tee	\$ _____
9	10 - 12 x 8 mechanical tee	\$ _____
10	10 - 12 x 12 mechanical tee	\$ _____
11	5 - 16 x 6 mechanical tee	\$ _____
12	5 - 16 x 8 mechanical tee	\$ _____
13	5 - 16 x 12 mechanical tee	\$ _____
14	5 - 16 x 16 mechanical tee	\$ _____
15	5 - 20 x 6 mechanical tee	\$ _____
16	5 - 20 x 8 mechanical tee	\$ _____
17	5 - 20 x 12 mechanical tee	\$ _____
18	5 - 20 x 16 mechanical tee	\$ _____
19	5 - 20 x 20 mechanical tee	\$ _____
20	5 - 24 x 6 mechanical tee	\$ _____

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21	5 - 24 x 8 mechanical tee	\$ _____
22	5 - 24 x 12 mechanical tee	\$ _____
23	5 - 24 x 16 mechanical tee	\$ _____
24	5 - 24 x 24 mechanical tee	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

25. CROSSES 4"-12" MECHANICAL JOINT ENAMEL LINED HALF THICKNESS - CLASS 350 DUCTILE IRON W/ACCESSORIES (FLANGES, RUBBERS, NUTS, BOLTS **PACKED AS ONE UNIT**) C-153 OR EQUAL - COMPACT – F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OH

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	5 - 4 x 4 mechanical cross	\$ _____
2	5 - 6 x 6 mechanical cross	\$ _____
3	5 - 8 x 8 mechanical cross	\$ _____
4	5 - 10 x 10 mechanical cross	\$ _____
5	5 - 12 x 12 mechanical cross	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

26. CROSSES 16"-24" MECHANICAL JOINT ENAMEL LINED HALF THICKNESS - CLASS 350 DUCTILE IRON W/ACCESSORIES (FLANGES, RUBBERS, NUTS, BOLTS **PACKED AS ONE UNIT**) C-153 OR EQUAL - COMPACT – F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OH

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	5 – 16 x 6 mechanical cross	\$ _____
2	5 – 16 x 8 mechanical cross	\$ _____
3	5 - 16 x 12 mechanical cross	\$ _____
4	5 – 16 x 16 mechanical cross	\$ _____

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5	5 – 20 x 6 mechanical cross	\$ _____
6	5 – 20 x 8 mechanical cross	\$ _____
7	5 – 20 x 12 mechanical cross	\$ _____
8	5 – 20 x 16 mechanical cross	\$ _____
9	5 – 20 x 20 mechanical cross	\$ _____
10	5 – 24 x 6 mechanical cross	\$ _____
11	5 – 24 x 8 mechanical cross	\$ _____
12	5 – 24 x 12 mechanical cross	\$ _____
13	5 – 24 x 16 mechanical cross	\$ _____
14	5 – 24 x 20 mechanical cross	\$ _____
15	5 – 24 x 24 mechanical cross	\$ _____

Terms _____
Manufacturer's Name _____
Delivery _____
Remarks _____

27. VALVES 4" – 12"

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

The items covered by this specification shall meet all applicable AWWA C509 standards and the following specifications:

All valves shall be non-rising stem, iron body, resilient wedge disc.

The design of the thrust collar shall be such that the thrust collar is sealed from line pressure by means of an "O" ring seal.

All valves shall be furnished with a two (2) inch square operating nut, OPEN RIGHT.

All valves shall be furnished with mechanical joint end connections.

The stem shall be protected from external grit by a weather shield and an upper "O" ring. Stem shall be lubricated.

Gate coating shall have a minimum thickness of 10 mils.

Valve shall be tested at the rated working pressure of 250 psi with no leakage. Shell test of 500 psi shall be applied to body with valve in the open position with no leakage through the metal, stem seals or joints.

Valve must have traditional stuffing box.

**Pipe and Pipe Fittings
Water Department**

All bolting material in the thrust collar and bonnet shall be #316 ss 4” bolts.

All valves with accessories (flanges, rubbers, nuts, bolts **packed as one unit**).

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	15 - 4" mechanical gate valve	\$ _____
2	40 - 6" mechanical gate valve	\$ _____
3	30 - 8" mechanical gate valve	\$ _____
4	2 - 10" mechanical gate valve	\$ _____
5	15 - 12" mechanical gate valve	\$ _____

Terms _____

Manufacturer's Name _____

Delivery _____

Remarks _____

28. VALVES 16” – 24”

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

The items covered by this specification shall meet all applicable AWWA C509 standards and the following specifications:

All valves shall be non-rising stem, iron body, resilient wedge disc.

The design of the thrust collar shall be such that the thrust collar is sealed from line pressure by means of an "O" ring seal.

All valves shall be furnished with a two (2) inch square operating nut, OPEN RIGHT.

All valves shall be furnished with mechanical joint end connections.

The stem shall be protected from external grit by a weather shield and an upper "O" ring. Stem shall be lubricated.

Gate coating shall have a minimum thickness of 10 mils.

Valve shall be tested at the rated working pressure of 250 psi with no leakage. Shell test of 500 psi shall be applied to body with valve in the open position with no leakage through the metal, stem seals or joints.

Valve must have traditional stuffing box.

All bolting material in the thrust collar and bonnet shall be #316 ss bolts

**Pipe and Pipe Fittings
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All valves with accessories (flanges, rubbers, nuts, bolts **packed as one unit**).

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	2 - 16" mechanical gate valve	\$ _____
2	2 - 18" mechanical gate valve	\$ _____
3	2 - 20" mechanical gate valve	\$ _____
4	2 - 24" mechanical gate valve	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

29. RESILIENT WEDGE GATE VALVE WITH ALPHA RETAINED JOINT ENDS – AMERICAN FLOW CONTROL

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

Hydrant or valve inlet shall be designed for use with ductile iron, cast iron, HDPE and PVC pipe materials. Inlet shall incorporate a stab-fit design requiring the use of only one Type 304 stainless steel fastener. The assembly of flange, or mechanical joint restrainers using multiple fasteners or wedge bolts is not permitted. Restraint accessories shall be factory installed. All hydrant or valve inlets shall be the ALPHA design, by American Flow Control.

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	20 – 4" gate valve	\$ _____
2	20 - 6" gate valve	\$ _____
3	20 – 8" gate valve	\$ _____
4	20 - 10" gate valve	\$ _____
5	20 – 12" gate valve	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

**Pipe and Pipe Fittings
Water Department**

30. CUT IN VALVES - MUELLER 863 OR EQUAL - OPEN RIGHT - RESILIENT SEAL WITH #316 SS BONNET BOLTS –
F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	10 - 4" cut in valve	\$ _____
2	15 - 6" cut in valve	\$ _____
3	10 - 8" cut in valve	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

31. BUTTERFLY VALVES 150B – OPEN RIGHT W/ACCESSORIES (FLANGES, RUBBERS, NUTS, BOLTS PACKED AS ONE UNIT) –
F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	1 - 16" butterfly valve	\$ _____
2	1 - 18" butterfly valve	\$ _____
3	1 - 20" butterfly valve	\$ _____
4	1 - 24" butterfly valve	\$ _____
5	1 - 30" butterfly valve	\$ _____
6	1 - 36" butterfly valve	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

**Pipe and Pipe Fittings
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32. MECHANICAL JOINT CAPS W/ACCESSORIES (FLANGES, RUBBERS, NUTS, BOLTS PACKED AS ONE UNIT) –

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	-	<u>Each</u>
1	6 - 4" cap	F1040	\$ _____
2	6 - 6" cap	F1040	\$ _____
3	6 - 8" cap	F1040	\$ _____
4	4 - 12" cap	F1040	\$ _____
5	4 - 16" cap	F1040	\$ _____
6	4 - 20" cap	F1040	\$ _____
7	4 - 24" cap	F1040	\$ _____
8	4 - 4" cap w/2" tapped outlet	F1042	\$ _____
9	4 - 6" cap w/2" tapped outlet	F1042	\$ _____
10	4 - 8" cap w/2" tapped outlet	F1042	\$ _____
11	4 - 12" cap w/2" tapped outlet	F1042	\$ _____
12	4 - 16" cap w/2" tapped outlet	F1042	\$ _____
13	4 - 20" cap w/2" tapped outlet	F1042	\$ _____
14	4 - 24" cap w/2" tapped outlet	F1042	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

33. TAPPING SLEEVE

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

The Fast Tapping Sleeve will be constructed of Grade 18-8, Type 304 stainless steel and will feature stainless steel bolts with heavy hex nuts. The heavy hex nuts and washers must have special lubricating fluorocarbon coating, heat cured to prevent galling. Stainless steel lifter bars will be incorporated in the design of the Tapping Sleeve and each bar will span the sleeve length to provide even torque distribution.

The Fast Sleeve will be furnished with a gridded rubber gasket, consisting of SBR compounded for water service meeting ASTM D2000 80M4AA607. The gasket will provide 360 degree circumferential support and will have 16 gauge, 1/4 hard stainless steel armors, a minimum of 2.25 inches wide, molded in place to span the gap between the two Tapping Sleeve sections. Each Fast Sleeve will also have a Buna-N outlet gasket to provide primary seal.

Each sleeve will be furnished with a 3/4" test port with a square head plug for easy use. The stainless steel flange will conform to AWWA C207, Class D-ANSI 150 pound drilling and will be recessed to accept standard tapping valves. The flange face shall be smooth. A weld on the

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flange face, covered with a glued-on flange gasket, will not be acceptable. The outlet neck will be welded at two locations (inside and out) to the flange and also to the sleeve. Each Fast Sleeve will be rated for 150 PSI working pressure, and 225 PSI test pressure.

All stainless steel welds used in the construction of the Sleeve will conform to AWS Codes and will be passivated in order to return the stainless steel material to its original corrosive resistant condition. The flange outlet section will be double welded, inside and out, to provide maximum strength.

Sleeves furnished for the nominal pipe sizes listed below shall have the corresponding O.D. Ranges.

<u>Nominal Pipe Size</u>	<u>O. D. Range</u>
4"	4.80-5.10
6"	6.90-7.30
8"	9.05-9.45
12"	13.10-13.50
16"	17.40-17.80

Sleeves furnished will be the FAST, as manufactured by The Ford Meter Box Company, Inc., Wabash, Indiana.

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED Canton, Ohio

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	10 - 4 x 4 tapping sleeve	\$ _____
2	10 - 6 x 4 tapping sleeve	\$ _____
3	12 - 6 x 6 tapping sleeve	\$ _____
4	10 - 8 x 4 tapping sleeve	\$ _____
5	12 - 8 x 6 tapping sleeve	\$ _____
6	12 - 8 x 8 tapping sleeve	\$ _____
7	10 - 12 x 4 tapping sleeve	\$ _____
8	12 - 12 x 6 tapping sleeve	\$ _____
9	12 - 12 x 8 tapping sleeve	\$ _____
10	12 - 12 x 12 tapping sleeve	\$ _____
11	5 - 16 x 4 tapping sleeve	\$ _____
12	5 - 16 x 6 tapping sleeve	\$ _____
13	5 - 16 x 8 tapping sleeve	\$ _____
14	5 - 16 x 12 tapping sleeve	\$ _____
15	2 - 20 x 4 tapping sleeve	\$ _____
16	2 - 20 x 6 tapping sleeve	\$ _____
17	2 - 20 x 8 tapping sleeve	\$ _____
18	2 - 20 x 12 tapping sleeve	\$ _____
19	2 - 24 x 4 tapping sleeve	\$ _____
20	2 - 24 x 6 tapping sleeve	\$ _____
21	2 - 24 x 8 tapping sleeve	\$ _____
22	2 - 24 x 12 tapping sleeve	\$ _____

Terms _____

Manufacturer's Name _____

**Pipe and Pipe Fittings
Water Department**

Delivery _____
Remarks _____

**34. TAPPING SLEEVE WITH MECHANICAL JOINT ADAPTER OUTLET
OPTION WITH STAINLESS STEEL FLANGE**

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

The Fast Tapping Sleeve will be constructed of Grade 18-8, Type 304 stainless steel and will feature stainless steel bolts with heavy hex nuts. The heavy hex nuts and washers must have special lubricating fluorocarbon coating, heat cured to prevent galling. Stainless steel lifter bars will be incorporated in the design of the Tapping Sleeve and each bar will span the sleeve length to provide even torque distribution.

The Fast Sleeve will be furnished with a gridded rubber gasket, consisting of SBR compounded for water service meeting ASTM D2000 80M4AA607. The gasket will provide 360 degree circumferential support and will have 16 gauge, 1/4 hard stainless steel armors, a minimum of 2.25 inches wide, molded in place to span the gap between the two Tapping Sleeve sections. Each Fast Sleeve will also have a Buna-N outlet gasket to provide primary seal.

Each sleeve will be furnished with a 3/4" test port with a square head plug for easy use. The stainless steel flange will conform to AWWA C207, Class D-ANSI 150 pound drilling and will be recessed to accept standard tapping valves. The flange face shall be smooth. A weld on the flange face, covered with a glued-on flange gasket, will not be acceptable. The outlet neck will be welded at two locations (inside and out) to the flange and also to the sleeve. Each Fast Sleeve will be rated for 150 PSI working pressure, and 225 PSI test pressure.

All stainless steel welds used in the construction of the Sleeve will conform to AWS Codes and will be passivated in order to return the stainless steel material to its original corrosive resistant condition. The flange outlet section will be double welded, inside and out, to provide maximum strength.

Sleeves furnished for the nominal pipe sizes listed below shall have the corresponding O.D. Ranges.

<u>Nominal Pipe Size</u>	<u>O. D. Range</u>
4"	4.80-5.10
6"	6.90-7.30
8"	9.05-9.45
12"	13.10-13.50
16"	17.40-17.80

Sleeves furnished will be the FAST, as manufactured by The Ford Meter Box Co., Inc., Wabash, Indiana.

WITH MECHANICAL JOINT ADAPTER OUTLET OPTION

**Pipe and Pipe Fittings
Water Department**

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	10 - 4 x 4 tapping sleeve	\$ _____
2	10 - 6 x 4 tapping sleeve	\$ _____
3	12 - 6 x 6 tapping sleeve	\$ _____
4	10 - 8 x 4 tapping sleeve	\$ _____
5	12 - 8 x 6 tapping sleeve	\$ _____
6	12 - 8 x 8 tapping sleeve	\$ _____
7	10 - 12 x 4 tapping sleeve	\$ _____
8	12 - 12 x 6 tapping sleeve	\$ _____
9	12 - 12 x 8 tapping sleeve	\$ _____
10	12 - 12 x 12 tapping sleeve	\$ _____
11	5 - 16 x 4 tapping sleeve	\$ _____
12	5 - 16 x 6 tapping sleeve	\$ _____
13	5 - 16 x 8 tapping sleeve	\$ _____
14	5 - 16 x 12 tapping sleeve	\$ _____
15	2 - 20 x 4 tapping sleeve	\$ _____
16	2 - 20 x 6 tapping sleeve	\$ _____
17	2 - 20 x 8 tapping sleeve	\$ _____
18	2 - 20 x 12 tapping sleeve	\$ _____
19	2 - 24 x 4 tapping sleeve	\$ _____
20	2 - 24 x 6 tapping sleeve	\$ _____
21	2 - 24 x 8 tapping sleeve	\$ _____
22	2 - 24 x 12 tapping sleeve	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

35. TAPPING VALVE

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

The items covered by this specification shall meet all applicable AWWA C509 standards and the following specifications:

All valves shall be non-rising stem, iron body, resilient wedge disc.

The design of the thrust collar shall be such that the thrust collar is sealed from line pressure by means of an "O" ring seal.

All valves shall be furnished with a two (2) inch square operating nut, OPEN RIGHT.

All valves shall be furnished with mechanical joint end connections.

**Pipe and Pipe Fittings
Water Department**

Valve square must be bolted, not pinned.

The stem shall be protected from external grit by a weather shield and an upper "O" ring. Stem shall be lubricated.

Gate coating shall have a minimum thickness of 10 mils.

Valve shall be tested at the rated working pressure of 250 psi with no leakage. Shell test of 500 psi shall be applied to body with valve in the open position with no leakage through the metal, stem seals or joints.

All bolting material in the thrust collar and bonnet shall be 316 ss bolts.

Valves must take full size cutter.

All valves with accessories (flanges, rubbers, nuts, bolts **packed as one unit**).

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	20 - 4" tapping valve	\$ _____
2	20 - 6" tapping valve	\$ _____
3	20 - 8" tapping valve	\$ _____
4	20 -12" tapping valve	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

36. POLYETHYLENE SERVICE TUBING – SHALL BE COPPER TUBE SIZE, SDR 9, WITH A MINIMUM PRESSURE CLASS OF 200 PSI AND MEET STANDARDS ASTM-D2737 PE4710 AND AWWA C901. MUST BE **POLYFLEX BY ADVANCED DRAINAGE SYSTEM, INC.** IN 100 FOOT ROLLS ONLY NO EXCEPTIONS F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO.

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Per Foot</u>
1	3,000 ft. - 3/4 plastic tubing	\$ _____
2	3,000 ft. - 1" plastic tubing	\$ _____
3	3,000 ft. - 1-1/2" plastic tubing	\$ _____
4	3,000 ft. - 2" plastic tubing	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

**Pipe and Pipe Fittings
Water Department**

37. POLYETHYLENE SERVICE TUBING – SHALL BE COPPER TUBE SIZE, SDR 9, WITH A MINIMUM PRESSURE CLASS OF 200 PSI AND MEET STANDARDS ASTM-D2737 PE4710 AND AWWA C901. MUST BE **BLUE ICE BY CHARTER PLASTICS** IN 100 FOOT ROLLS ONLY NO EXCEPTIONS
F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO.

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Per Foot</u>
1	3,000 ft. - 3/4 plastic tubing	\$ _____
2	3,000 ft. - 1" plastic tubing	\$ _____
3	3,000 ft. - 1-1/2" plastic tubing	\$ _____
4	3,000 ft. - 2" plastic tubing	\$ _____

Terms _____
Manufacturer's Name _____
Delivery _____
Remarks _____

38. POLYETHYLENE SERVICE TUBING – SHALL BE COPPER TUBE SIZE, SDR 9, WITH A MINIMUM PRESSURE CLASS OF 200 PSI AND MEET STANDARDS ASTM-D2737 PE4710 AND AWWA C901. MUST BE **ENDOPURE BY ENDOT INDUSTRIES, INC.** IN 100 FOOT ROLLS ONLY NO EXCEPTIONS
F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO.

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Per Foot</u>
1	3,000 ft. - 3/4 plastic tubing	\$ _____
2	3,000 ft. - 1" plastic tubing	\$ _____
3	3,000 ft. - 1-1/2" plastic tubing	\$ _____
4	3,000 ft. - 2" plastic tubing	\$ _____

Terms _____
Manufacturer's Name _____
Delivery _____
Remarks _____

**Pipe and Pipe Fittings
Water Department**

39. COPPER TUBING - TYPE "K" OR EQUAL - 60 FOOT COILS

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Per Foot</u>
1	500 ft. - 3/4" copper tubing	\$ _____
2	300 ft. - 1" copper tubing	\$ _____
3	500 ft. - 1-1/4" copper tubing	\$ _____
4	200 ft. - 1-1/2" copper tubing	\$ _____
5	300 ft. - 2" copper tubing	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

40. ACCESSORIES FOR MECHANICAL JOINT FITTINGS

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	40 - 10' lengths 3/4"x10' all thread rod n.c. underground - Stainless	\$ _____
2	200 - 3/4" duc lugs S-14 underground	\$ _____
3	50 - 3/4"x10" 90 deg eyebolts n.c. underground with nuts	\$ _____
4	500 - 3/4"x10"x3-1/2" T bolts underground with nuts	\$ _____
5	500 - 3/4"x10"x4" T bolts underground with nuts	\$ _____
6	500 - 3/4"x10"x4-1/2" bolts underground with nuts	\$ _____
7	500 - 3/4"x10"x5" T bolts underground with nuts	\$ _____
8	500 - 3/4"x10"x5-1/2" T bolts underground with nuts	\$ _____
9	1000 - 3/4" nut for T bolts underground with nuts	\$ _____
10	100 - 4" mechanical joint rubber gasket	\$ _____
11	100 - 6" mechanical joint rubber gasket	\$ _____
12	100 - 8" mechanical joint rubber gasket	\$ _____
13	100 - 12" mechanical joint rubber gasket	\$ _____
14	25 - 16" mechanical joint rubber gasket	\$ _____
15	500 - 3-1/2" lughead T7 bolts (anti-rotating) with nuts	\$ _____

**Pipe and Pipe Fittings
Water Department**

16	500 - 4" lughead T7 bolts (anti-rotating) with nuts	\$ _____
17	500 - 4-1/2" lughead T7 bolts (anti-rotating) with nuts	\$ _____
18	500 - 3/4"x10"x5" T7 bolts (anti-rotating) with nuts	\$ _____
19	500 -eye bolts 3-1/2" x 3/4" with nuts	\$ _____
20	500 -eye bolts 4-1/2" x 3/4" with nuts	\$ _____
21	500 -coupling nut 3/4" (stainless)	\$ _____
22	25 - 4" field lock gasket	\$ _____
23	25 - 6" field lock gasket	\$ _____
24	25 - 8" field lock gasket	\$ _____
25	25 - 12" field lock gasket	\$ _____
26	25 - 16" field lock gasket	\$ _____
27	25 - 20" field lock gasket	\$ _____
28	25 - 24" field lock gasket	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

41. CORPORATION STOPS (1" AND UNDER)

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

All corporation stops shall be of the round way type for insertion into water mains under pressure. The inlet thread shall be Mueller (AWWA) and conform to table one (1) of AWWA C-800 latest revision. All threads shall be protected in shipment by a plastic coating or other equally satisfactory means. All corporation stops one inch (1") and under shall be designed as to rotate about the axis of the flow passageway inside a minimum of 2-7/8" circle of rotation.

The plugs of corporation stops one inch (1") and under shall be provided with integral cast tee heads 3/8" high by 3/8" wide for shut off key. All corporation stops must operate (open and close) with a fifty (50) foot pound maximum torque at 40 degrees F. under a head of sixty (60) psi. The key and the body shall be tapered and shall be accurately fitting together by turning the key and reaming the body and the seating surfaces shall be lapped together using abrasive suspension to insure accurate fit. The key shall be securely fastened in place with the 5/8" threaded brass nut and washer at the bottom of the plug. The nut must be pre-staked to distort the last thread and prevent accidental backing off of the nut.

The outlet connection may be one of two types as called for in the bid items, copper flare or compression (see specifications for compression joints) flare joints for copper tubing, services shall have threads which comply to and conform with table two of AWWA C-800 latest revision; coupling nut threads shall conform to table three of AWWA C-800 latest revision. The length of the tube nut must be of sufficient length to support pipe loading.

NO BALL VALVES WILL BE ACCEPTED.

**Pipe and Pipe Fittings
Water Department**

CORPORATION STOPS (1-1/2" X 2")

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

All corporation stops must be of the straight or tapered plug type using rubber "O" rings as pressure seals. The inlet threads shall be Mueller (AWWA) as listed above. The outlet shall be of the compression type. (See compression joint specification). All corporation stops must operate (open and close) with a fifty (50) foot pound maximum torque at 40 degrees F. under a head of sixty (60) p.s.i.

Bidder to furnish the following test data:

For corporation stops - the torque required to operate (open and close) at 40 degrees F. under a head of sixty (60) p.s.i. A fifty (50) foot pound torque maximum is required.

NO BALL VALVES WILL BE ACCEPTED.

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Mueller or Equal</u>	<u>Each</u>
1	200 - 3/4" cop less flaring nut	H15000	\$ _____
2	150 - 1" cop less flaring nut	H15000	\$ _____
3	5 - 1-1/4" cop less flaring nut	H15000	\$ _____
4	200 - 1-1/2" cop less flaring nut	H15000	\$ _____
5	100 - 2" cop less flaring nut	H15000	\$ _____
6	100 - 3/4" ip x cop less flaring nut	H15025	\$ _____
7	50 - 1" ip x cop less flaring nut	H15025	\$ _____
8	10 - 1-1/4" ip x cop less flaring nut	H15025	\$ _____
9	20 - 1-1/2" ip x cop less flaring nut	H15025	\$ _____
10	20 - 2" ip x cop less flaring nut	H15025	\$ _____
11	10 - 1" i corp stop	H10003	\$ _____
12	20 - 1-1/2" i corp stop	H10003	\$ _____
13	5 - 2" i corp stop	H10003	\$ _____
14	10 - 3/4" Mueller cc thread plug(sq head)	H10033	\$ _____
15	10 - 1" Mueller cc thread plug(sq head)	H10033	\$ _____
16	10 - 1-1/4" Mueller cc thread plug(sq head)	H10033	\$ _____
17	10 - 1-1/2" Mueller cc thread plug(sq head)	H10033	\$ _____
18	10 - 2" Mueller cc thread plug(sq head)	H10033	\$ _____

Terms _____

Manufacturer's Name _____

Delivery _____

Remarks _____

**Pipe and Pipe Fittings
Water Department**

42. SERVICE FITTINGS 3/4", 1", 1-1/4", 1-1/2" & 2"

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

All service fittings shall fully comply with the latest AWWA Standards, and the following design requirements. The end connections shall be male iron pipe, female iron pipe, copper flare, or compression joint (see specifications for compression joints.)

<u>Item</u>	<u>Estimated Quantity & Size</u>	<u>Mueller or Equal</u>	<u>Each</u>
1	25 - 3/4" c x 1" c	H15062	\$ _____
2	25 - 1-1/4" c x 1" c	H15062	\$ _____
3	25 - 1" c x 3/4" c	H15062	\$ _____
4	200 - 3/4" copper ell	H15068	\$ _____
5	200 - 1" copper ell	H15068	\$ _____
6	10 - 1-1/4" copper ell	H15068	\$ _____
7	50 - 1-1/2" copper ell	H15068	\$ _____
8	50 - 2" copper ell	H15068	\$ _____
9	100 - 3/4" male coupling c.i.	H15425	\$ _____
10	100 - 1" male coupling c.i.	H15425	\$ _____
11	30 - 1-1/4" male coupling c.i.	H15425	\$ _____
12	30 - 1-1/2" male coupling c.i.	H15425	\$ _____
13	25 - 2" male coupling c.i.	H15425	\$ _____
14	150 - 3/4" female coupling c.i.	H15450	\$ _____
15	100 - 1" female coupling c.i.	H15450	\$ _____
16	15 - 1-1/4" female coupling c.i.	H15450	\$ _____
17	15 - 1-1/2" female coupling c.i.	H15450	\$ _____
18	15 - 2" female coupling c.i.	H15450	\$ _____
19	10 - 3/4" corp stop adapter	H15082	\$ _____
20	10 - 1" corp stop adapter	H15082	\$ _____
21	10 - 1-1/2" corp stop adapter	H15082	\$ _____
22	10 - 2" corp stop adapter	H15082	\$ _____
23	50 - 3/4" CI ell	H15460	\$ _____
24	75 - 2" CI ell	H15460	\$ _____
25	20 - 1-1/4" CI ell 90 deg	H15460	\$ _____
26	50 - 1-1/2" CI ell	H15460	\$ _____
27	50 - 2" C x I ell 45 deg	H15460	\$ _____
28	50 - 3/4" cop to cop ell	H15525	\$ _____
29	50 - 1" cop to cop ell	H15525	\$ _____
30	100 - 3/4" cop ell 45 deg	H15063	\$ _____
31	100 - 1" cop ell 45 deg	H15063	\$ _____
32	25 - 1-1/2" cop ell 45 deg	H15063	\$ _____
33	20 - 2" cop ell 45 deg	H15063	\$ _____
34	20 - 3/4" male ell 90 deg	H15530	\$ _____
35	20 - 1" male ell 90 deg	H15530	\$ _____

**Pipe and Pipe Fittings
Water Department**

36	75 - 2" comp x iron ell 90 deg	H15533	\$ _____
37	50 - 1-1/2" comp x iron ell 90 deg	H15533	\$ _____
38	25 - 1" comp x iron ell 90 deg	H15533	\$ _____
39	25 - 3/4" comp x iron ell 90 deg	H15533	\$ _____
40	25 - 3/4" comp x c ell 90 deg	H15067	\$ _____
41	25 - 1" comp x c ell 90 deg	H15067	\$ _____
42	25 - 3/4" ell comp x c 45 deg	H15075	\$ _____
43	25 - 1" ell comp x c 45 deg	H15075	\$ _____
44	25 - 1-1/2" c ell 90 deg	H15069	\$ _____
45	30 - 3/4" comp x male ell	H15531	\$ _____
46	30 - 1" comp x male ell	H15531	\$ _____
47	25 - 3/4" comp x c 45 deg ell		\$ _____
48	25 - 1" comp x c 45 deg ell		\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

43. MECHANICAL JOINT RESTRAINTS

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

Mechanical joint restraint shall be incorporated in the design of the follower gland and shall include a restraining mechanism which, when actuated, imparts multiple wedging action against the pipe, increasing its resistance as the pressure increases. Flexibility of the joint shall be maintained after burial. Glands shall be manufactured of ductile iron conforming to ASTM A 536-80. Restraining devices shall be of ductile iron heat treated to a minimum hardness of 370 FHN. Dimensions of the gland shall be such that it can be used with the standardized mechanical joint bell and tee-head bolts conforming to ANSI/AWWA A21.11 and ANSI/AWWA C153/A21.53 of latest revision. Twist-off nuts, sized same as tee-head bolts, shall be used to insure proper actuating of restraining devices. The mechanical joint restraint device shall have a working pressure of at least 250 psi with a minimum safety factor of 2:1 and shall be EBAA Iron, Inc., MEGALUG or equal.

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	50 - 4" mechanical joint restraint	\$ _____
2	50 - 6" mechanical joint restraint	\$ _____
3	50 - 8" mechanical joint restraint	\$ _____
4	50 - 10" mechanical joint restraint	\$ _____
5	50 - 12" mechanical joint restraint	\$ _____
6	10 - 16" mechanical joint restraint	\$ _____
7	10 - 20" mechanical joint restraint	\$ _____
8	10 - 24" mechanical joint restraint	\$ _____

Terms _____
 Manufacturer's Name _____

**Pipe and Pipe Fittings
Water Department**

Delivery _____
Remarks _____

44. MECHANICAL JOINT RESTRAINTS FOR AWWA C900 SERIES PVC

- 2000PV Mechanical Joint Restraint Specifications

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

Restraint devices for mechanical joint fittings and appurtenances conforming to either ANSI/AWWA C111/A21.11 or ANSI/AWWA C153/A21.53, shall conform to the following:

Design

1. Restraint devices for nominal pipe sizes 3 inch through 36 inch shall consist of multiple gripping wedges incorporated into a follower gland meeting the applicable requirements of ANSI/AWWA C110/A21.10.
2. The devices shall have a working pressure rating equal to that found in the most current product brochure. Ratings are for water pressure and must include a minimum safety factor of 2:1 in all sizes.

Material

1. Gland body, wedges and wedge actuating components shall be cast from grade 65-45-12 ductile iron material in accordance with ASTM A536.
2. Three (3) test bars shall be incrementally poured per production shift as per Underwriter's Laboratory (U.L.) specifications and ASTM A536. Testing for tensile, yield and elongation shall be done in accordance with ASTM E8.
3. Chemical and nodularity tests shall be performed as recommended by the Ductile Iron Society, on a per ladle basis.

Traceability

1. An identification number consisting of year, day, plant and shift (YYDDD) (plant designation) (Shift number), shall be cast into each gland body.
2. All physical and chemical test results shall be recorded such that they can be accessed via the identification number on the casting. These Material Traceability Records (MTR's) are to be made available, in hard copy, to the purchaser that requests such documentation and submits his gland body identification number.
3. Production pieces that are too small to accommodate individual numbering, such as fasteners and wedges, shall be controlled in segregate inventory until such time as all quality control tests are passed. These component parts may then be released to a general inventory for final assembly and packaging.
4. All components shall be manufactured and assembled in the United States. The purchaser shall, with reasonable notice, have the right to plant visitation at his/her expense.

**Pipe and Pipe Fittings
Water Department**

Installation

1. Mechanical joint restraint shall require conventional tools and installation procedures per AWWA C600, while retaining full mechanical joint deflection during assembly.
2. Proper actuation of the gripping wedges shall be ensured with torque limiting twist off nuts.

Approvals

1. Mechanical Joint Restraints shall be listed by Underwriters Laboratories in the 4 inch through 12 inch sizes.
2. Mechanical Joint Restraints shall be Factory Mutual Approved in the 4 inch through 12 inch sizes.
3. Mechanical Joint Restraints, 4 inch through 24 inch, shall meet or exceed the requirements of ASTM F1674 of the latest revision.
4. Mechanical joint restraint shall be Series 2000PV produced by EBAA Iron Inc. or approved equal.

MEGA-BOND® Restraint Coating System

Coating for restraint devices shall consist of the following:

All wedge assemblies and related parts shall be processed through a phosphate wash, rinse and drying operation prior to coating application. The coating shall consist of a minimum of two coats of liquid thermoset epoxy coating with heat cure to follow each coat.

All casting bodies shall be surface pretreated with a phosphate wash, rinse and sealer before drying. The coating shall be electrostatically applied and heat cured. The coating shall be a polyester based powder to provide corrosion, impact and UV resistance.

The coating system shall be MEGA-BOND by EBAA Iron, Inc. or approved equal. Requests for approved equal must submit coating material and process details for review prior to bid.

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	10 - 4" mechanical joint restraint for PVC pipe	\$ _____
2	10 - 16" mechanical joint restraint for PVC pipe	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

**Pipe and Pipe Fittings
Water Department**

**45. MECHANICAL JOINT RESTRAINTS FOR AWWA C909 SERIES PVC
- Specification for Restraint of C909 PVC 6in – 12in**

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

Restraint for AWWA C909 PVC Pipe shall consist of the following: The restraint shall be manufactured of ductile iron conforming to ASTM A536. The restraint devices shall be coated with MEGA-BOND. (For complete specifications on MEGA-BOND visit www.ebaa.com.) The combination of the restraint(s) and fasteners shall have a pressure rating to the full pressure rating of the pipe. The restraint shall have a two to one safety factor.

Restraint at Ductile Iron Fittings: A split serrated ring shall be used to grip the plain-end of the pipe, a sufficient number of bolts shall connect the restraint ring to the ductile iron fitting. The restraint for mechanical joint fittings shall be the Series 19MJ00. The restraint for push-on fittings with restraining ears shall be the 19PF00.

Restraint Harness: A split serrated ring shall be used to grip the plain-end of the pipe. A split serrated ring shall also be used to grip the barrel of the pipe behind the bell, and a sufficient number of bolts shall be used to connect the restraint rings. The combination shall be Model 1900.

All Series manufactured by EBAA Iron, Inc.

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	10 - 6" mechanical joint restraint for PVC pipe	\$ _____
2	10 - 8" mechanical joint restraint for PVC pipe	\$ _____
3	10 - 12" mechanical joint restraint for PVC pipe	\$ _____

Terms _____

Manufacturer's Name _____

Delivery _____

Remarks _____

**46. RESTRAINT DEVICE FOR AWWA C909 SERIES PVC PIPE BELL
JOINTS** F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

Uni-Flange Series #1559 or equal. Restraint device for bell and spigot joints of AWWA C909 Series PVC pipe shall consist of one installed on the spigot, connected to one installed on the pipe barrel behind the bell. The restraint device shall incorporate a series of serrations on the inside diameter to provide positive restraint, exact fit, 360 degrees contact and support of the pipe wall. Restraint device shall be of ductile iron, ASTM A536, Grade 65-45-12 or ASTM A36 structural steel, and connecting rods shall be of high strength, low alloy material in accordance with ANSI/AWWA C111/A21.11.

**Pipe and Pipe Fittings
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Restraint device shall have a water working pressure rating equivalent to the full rated pressure of the C909 PVC pipe they are installed on with a minimum 2:1 safety factor in any nominal pipe size. Notarized certification from the manufacturer of the restraint device shall be provided with submittals. Restraint device for bell and spigot joints of PVC pipe shall be Uni-Flange 1559 or approved equal.

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	75 - 4" restraint for PVC pipe bell joints	\$ _____
2	75 - 6" restraint for PVC pipe bell joints	\$ _____
3	75 - 8" restraint for PVC pipe bell joints	\$ _____
4	75 - 10" restraint for PVC pipe bell joints	\$ _____
5	75 - 12" restraint for PVC pipe bell joints	\$ _____
6	75 - 16" restraint for PVC pipe bell joints	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

47. CURB VALVES

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

All curb valves are to be of the cylindrical or tapered plug type with an integrally cast tee head drilled or cored to permit attachment of operating rods. Curb valves shall be of the resilient seat type using "O" rings as pressure seals. All valves when in the closed position must have zero (0) leakage thru the top, bottom, and ports at the maximum rated working pressure of 175 p.s.i.

All curb valves must be able to withstand minimum torque requirements of 125 ft. pounds input turning torque: a) Against the check in the opening direction
 b) Against the check in the closing direction
 c) With plug restrained in the open position (to stimulate blockage)

The inlet and outlet connections may be one of two types as called for in the bid items, copper flare or compression (see specification for compression joints) flare joints for copper tubing services shall have threads which comply to and conform with table two and conform with table two of AWWA C-800 latest revision; coupling nut threads shall conform to table three of AWWA C-800 latest revision. The length of tube nut must be of sufficient length to support pipe loading.

For curb valves - the torque that the valve can withstand against the check in the opening direction, against the check in the closing direction and with the plug restrained in the open position (to stimulate blockage). A 125 foot pound torque minimum is required for each of the three tests.

**Pipe and Pipe Fittings
Water Department**

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Mueller or equal</u>	<u>Each</u>
1	200 - 3/4" curb valve II	H10283	\$ _____
2	200 - 1" curb valve II	H10283	\$ _____
3	10 - 1-1/4" curb valve II	H10283	\$ _____
4	20 - 1-1/2" curb valve II	H10283	\$ _____
5	20 - 2" curb valve II	H10283	\$ _____
6	250 - 3/4" curb valve CI	H15174	\$ _____
7	200 - 1" curb valve CI	H15174	\$ _____
8	10 - 1-1/4" curb valve CI	H15174	\$ _____
9	20 - 1-1/2" curb valve CI	H15174	\$ _____
10	20 - 2" curb valve CI	H15174	\$ _____
11	50 - 3/4" cop x cop curb stop	H15204	\$ _____
12	50 - 1" cop x cop curb stop	H15204	\$ _____
13	25- 3/4" curb valve comp x iron	H15172	\$ _____
14	25- 1" curb valve comp x iron	H15172	\$ _____
15	30 - 1-1/2" curb valve comp x iron	H15172	\$ _____
16	30 - 2" curb valve comp x iron	H15172	\$ _____
17	25 - 3/4" comp x comp curb stop	H15209	\$ _____
18	25 - 1" comp x comp curb stop	H15209	\$ _____
19	30 - 1-1/2" comp x comp curb stop	H15209	\$ _____
20	30 - 2" comp x comp curb stop	H15209	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

48. CURB VALVES – STOP & DRAIN FIPXFIP

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	20 - 3/4" stop & drain curb stop	\$ _____
2	20 - 1" stop & drain curb stop	\$ _____
3	20 - 1-1/2" stop & drain curb stop	\$ _____
4	20 - 2" stop & drain curb stop	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

**Pipe and Pipe Fittings
Water Department**

49. MUELLER BALL VALVES COMPRESSION X COMPRESSION B-25209 OR EQUAL F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity & Size</u>	<u>Mueller or Equal</u>	<u>Each</u>
1	20 - 1-1/2" curb valve	B25209	\$ _____
2	20 - 2" curb valve	B25209	\$ _____
3	20 - 1-1/2" comp x I curb valve	B25172	\$ _____
4	20 - 2" comp x I curb valve	B25172	\$ _____
5	10 - 2" comp x comp curb valve	B25209	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

50. COMPRESSION JOINTS

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

All compression joints must be of the conductive type. The compression nut must have a baked on coating to reduce friction and prevent the gasket from gaulding to the nut. All compression joints must be of the design so that the gasket cannot be over compressed. The joint design must permit a stab connection not requiring total disassembly of the joint. All 1-1/2" and 2" compression joints must be able to withstand a pull out of 3000 lbs. tensile load.

Bidder to furnish the following test data:

For compression joints - the tensile load pull out the joint can withstand.
 A 3000 pound tensile pull out minimum is required.

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Mueller or Equal</u>	<u>Each</u>
1	40 - 3/4" stainless insert	H55	\$ _____
2	40 - 1" stainless insert	H55	\$ _____
3	300 - 1-1/2" stainless insert	H55	\$ _____
4	300 - 2" stainless insert	H55	\$ _____
5	30 - 3/4" female comp coup	H15071	\$ _____
6	30 - 1" female comp coup	H15071	\$ _____
7	20 - 1-1/4" female comp coup	H15071	\$ _____
8	200 - 1-1/2" female comp coup	H15071	\$ _____
9	200 - 2" female comp coup	H15071	\$ _____
10	200 - 3/4" female instatite	H15074	\$ _____
11	200 - 1" female instatite	H15074	\$ _____
12	20 - 3/4" cop union	HI5400	\$ _____

**Pipe and Pipe Fittings
Water Department**

13	20 - 1" cop union	HI5400	\$ _____
14	20 - 1-1/4" cop union	HI5400	\$ _____
15	20 - 1-1/2" cop union	HI5400	\$ _____
16	20 - 2" cop union	HI5400	\$ _____
17	50 - 3/4" dresser coupling	HI5403	\$ _____
18	50 - 1" dresser coupling	HI5403	\$ _____
19	50 - 1-1/4" dresser coupling	HI5403	\$ _____
20	50 - 1-1/2" dresser coupling	HI5403	\$ _____
21	50 - 2" dresser coupling	HI5403	\$ _____
22	50 - 1"x 3/4" comp dresser coup	HI5403N	\$ _____
23	50 - 3/4" male instatite	HI5424	\$ _____
24	50 - 1" male instatite	HI5424	\$ _____
25	30 - 3/4" male comp coup	HI5428	\$ _____
26	30 - 1" male comp coup	HI5428	\$ _____
27	20 - 1-1/4" male comp coup	HI5428	\$ _____
28	100 - 1-1/2" male comp coup	HI5428	\$ _____
29	100 - 2" male comp coup	HI5428	\$ _____
30	20 - 3/4"x 1" male comp coup	HI5428	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

51. SERVICE AND VALVE BOXES AND PARTS (BUFFALO TYPE)
 MUST BE GENERAL FOUNDRY ONLY - HEAVY DUTY
 F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

VALVE BOX

These specifications provide for three piece round head screw type valve boxes and parts. These valve boxes consist of a lid, top, middle, and base section. Also, included is a screw type extension.

Nothing in these specifications shall be interpreted as relieving the manufacturer or supplier of the responsibility of furnishing a product suitable for the intended purpose.

Quality of Material - The lid, top, middle, and base section, and extension, shall be made of good quality gray cast iron conforming to Class 25 in the latest ASTM Specification A-48, saving a minimum tensile strength of 25,000 p.s.i.

Design and Dimensions - The design and dimensions shall be Buffalo type three piece screw type as manufactured by Bingham and Taylor Corporation, or other approved equal.

Pipe and Pipe Fittings Water Department

The lids shall fit snug and shall not be removable except by lifting up straight from the shoulder of the top section shaft. The lids, top sections, and middles and extension of any manufacturer shall be made in such manner in conformance with the dimensions shown that will be interchangeable and fit the base section.

Coating - All castings shall be thoroughly cleaned by sand blasting, tumbling or other approved process. When entirely clean and free from rust, all castings shall be completely covered with one coat of approved asphaltum or coal tar paint which shall be allowed to dry thoroughly before shipment.

CURB BOX

These specifications provide for Buffalo type two piece screw type curb boxes and parts. These curb boxes consist of a lid and screw, top, and bottom. Also, included in these specifications is a screw type extension for the two piece screw type curb boxes.

Nothing in these specifications shall be interpreted as relieving the manufacturer or supplier of the responsibility for furnishing a product suitable for the intended purpose.

Quality of Material - The lid, top, and bottom section and extension shall be made of good quality gray cast iron conforming to Class 25 in the latest ASTM Specification S-48, having a minimum tensile strength of 25,000 p.s.i.

The screw shall be brass pentagon head and machined from brass bar stock.

Design and Dimensions - The design and dimensions shall be Buffalo type, new style, two piece screw type as manufactured by Bingham and Taylor Corporation, or other approved equal.

The lid shall be affixed to the top section with a brass screw. The screw shall be a pentagon head, 7/8" from flat to point 1-3/16" under the head, diameter 17/32" and 12 threads per inch.

The lids, screws, tops and extensions of any manufacturer shall be made in such a manner in conformance with dimensions shown that they will be interchangeable and that the top and extension shall fit the bottom section.

Workmanship - Castings shall be of uniform quality, true to the drawing, strong, tough, of even grain, sound, smooth without cold shuts, swell, scales, blisters and sand holes, cracks, or other defects.

Coating - All castings shall be thoroughly cleaned by sand blasting, tumbling or other approved process. When entirely clean and free from rust, all castings shall be completely covered with one coat of approved asphaltum or coal tar paint which shall be allowed to dry thoroughly before shipment.

MUST STAY WITH SAME MANUFACTURER FOR LENGTH OF CONTRACT

**Pipe and Pipe Fittings
Water Department**

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	100 - "A" valve box with lid & #6 base	\$ _____
2	100 - "B" valve box with lid & #6 base	\$ _____
3	100 - "C" valve box with lid & #6 base	\$ _____
4	75 - "D" valve box with lid & #6 base	\$ _____
5	50 - valve box extension #58 - 14"	\$ _____
6	50 - valve box extension #59 - 20"	\$ _____
7	750 - 94E service box 2-1/2" shaft screw type	\$ _____
8	100 - No. 4 svc. box 2-1/2" shaft screw type	\$ _____
9	50 - service box extension #155 - 20"	\$ _____
10	50 - service box extension #151 - 9"	\$ _____
11	50 - service box extension #152 - 16"	\$ _____
12	300 - 2" valve box adapter less lid	\$ _____
13	100 - 3" valve box adapter less lid	\$ _____
14	75 - 4" valve box adapter less lid	\$ _____
15	300 - 1" valve box adapter w/lid	\$ _____
16	200 - 2-1/2" outside lid #10374	\$ _____
17	200 - 2-1/2" inside lid #10373	\$ _____
18	175 - hd long style roadway box with lid (R144) complete	\$ _____
19	40 - 18" roadway box extension #49	\$ _____
20	300 - #6 base for "A", "B" & "C" valve box	\$ _____
21	100 - valve box lid for "A", "B" & "C" valve box	\$ _____
22	75 - top section with lid & bolt for 94E	\$ _____
23	50 - top section for A, B, C, D valve box	\$ _____
24	100 - A valve box w/lid, less base	\$ _____
25	100 - B valve box w/lid, less base	\$ _____
26	100 - C valve box w/lid, less base	\$ _____
27	100 - D valve box w/lid, less base	\$ _____
28	100 - top section for R144 roadway boxes with lid	\$ _____

Terms _____

Manufacturer's Name _____

Delivery _____

Remarks _____

**Pipe and Pipe Fittings
Water Department**

52. BRASS ELLS

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	10 - 3/4" brass ell	\$ _____
2	10 - 1" brass ell	\$ _____
3	10 - 1-1/4" brass ell	\$ _____
4	20 - 1-1/2" brass ell	\$ _____
5	20 - 2" brass ell	\$ _____
6	6 - 3/4" brass street ell	\$ _____
7	6 - 1" brass street ell	\$ _____
8	6 - 1-1/4" brass street ell	\$ _____
9	6 - 1-1/2" brass street ell	\$ _____
10	6 - 2" brass street ell	\$ _____
11	10 - 2" brass ell 45 deg	\$ _____
12	10 - 1-1/2" brass ell 45 deg	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

53. BRASS BUSHINGS - STANDARD #570

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	50 - 1" x 3/4" brass bushing	\$ _____
2	50 - 1-1/4" x 3/4" brass bushing	\$ _____
3	50 - 1-1/4" x 1" brass bushing	\$ _____
4	50 - 1-1/2" x 1-1/4" brass bushing	\$ _____
5	20 - 2" x 3/4" brass bushing	\$ _____
6	20 - 2" x 1" brass bushing	\$ _____
7	50 - 2" x 1-1/4" brass bushing	\$ _____
8	50 - 2" x 1-1/2" brass bushing	\$ _____
9	30 - 1-1/2" x 3/4" brass bushing	\$ _____
10	30 - 1-1/2" x 1" brass bushing	\$ _____
11	10 - 3/4" x 1/2" brass bushing	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

**Pipe and Pipe Fittings
Water Department**

54. BRASS COUPLINGS - STANDARD

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	20 - 3/4" brass coupling	\$ _____
2	20 - 1" brass coupling	\$ _____
3	20 - 1-1/4" brass coupling	\$ _____
4	20 - 1-1/2" brass coupling	\$ _____
5	20 - 2" brass coupling	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

55. BRASS REDUCING COUPLINGS

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	12 - 1" x 3/4" brass reducing coupling	\$ _____
2	12 - 1-1/4" x 1" brass reducing coupling	\$ _____
3	12 - 1-1/2" x 1-1/4" brass reducing coupling	\$ _____
4	12 - 2" x 1-1/2" brass reducing coupling	\$ _____
5	12 - 3/4" x 1/2" brass reducing coupling	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

56. BRASS TEES

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	50 - 2" x 2" x 2" brass tee	\$ _____
2	100 - 2" x 2" x 3/4" brass tee	\$ _____
3	100 - 2" x 2" x 1" brass tee	\$ _____
4	50 - 2" x 2" x 1-1/2" brass tee	\$ _____
5	50 - 1-1/2" x 1-1/2" x 1-1/2" brass tee	\$ _____
6	100 - 1-1/2" x 1-1/2" x 3/4" brass tee	\$ _____
7	100 - 1-1/2" x 1-1/2" x 1" brass tee	\$ _____

**Pipe and Pipe Fittings
Water Department**

8	50 - 1-1/4" x 1-1/4" x 1-1/4" brass tee	\$ _____
9	25 - 1-1/4" x 1-1/4" x 3/4" brass tee	\$ _____
10	25 - 1-1/4" x 1-1/4" x 1" brass tee	\$ _____
11	50 - 1" x 1" x 1" brass tee	\$ _____
12	50 - 3/4" x 3/4" x 3/4" brass tee	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

57. BRASS NIPPLES

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	30 - 1/2" x 2" brass nipple	\$ _____
2	30 - 1/2" x 3" brass nipple	\$ _____
3	30 - 1/2" x 4" brass nipple	\$ _____
4	30 - 1/2" x 5" brass nipple	\$ _____
5	30 - 1/2" x 6" brass nipple	\$ _____
6	30 - 3/4" x 2" brass nipple	\$ _____
7	30 - 3/4" x 3" brass nipple	\$ _____
8	30 - 3/4" x 4" brass nipple	\$ _____
9	30 - 3/4" x 5" brass nipple	\$ _____
10	30 - 3/4" x 6" brass nipple	\$ _____
11	30 - 1" x 2" brass nipple	\$ _____
12	30 - 1" x 3" brass nipple	\$ _____
13	30 - 1" x 4" brass nipple	\$ _____
14	30 - 1" x 5" brass nipple	\$ _____
15	30 - 1" x 6" brass nipple	\$ _____
16	30 - 1-1/4" x 2" brass nipple	\$ _____
17	30 - 1-1/4" x 3" brass nipple	\$ _____
18	30 - 1-1/4" x 4" brass nipple	\$ _____
19	30 - 1-1/4" x 5" brass nipple	\$ _____
20	30 - 1-1/4" x 6" brass nipple	\$ _____
21	30 - 1-1/2" x 2" brass nipple	\$ _____
22	30 - 1-1/2" x 3" brass nipple	\$ _____
23	30 - 1-1/2" x 4" brass nipple	\$ _____
24	30 - 1-1/2" x 5" brass nipple	\$ _____
25	30 - 1-1/2" x 6" brass nipple	\$ _____
26	30 - 2" x 2" brass nipple	\$ _____
27	30 - 2" x 3" brass nipple	\$ _____
28	30 - 2" x 4" brass nipple	\$ _____
29	30 - 2" x 5" brass nipple	\$ _____
30	30 - 2" x 6" brass nipple	\$ _____

**Pipe and Pipe Fittings
Water Department**

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

58. BRASS PLUGS

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	25 - 3/4" standard pipe thread (n.c.)	\$ _____
2	25 - 1" standard pipe thread (n.c.)	\$ _____
3	25 - 1-1/4" standard pipe thread (n.c.)	\$ _____
4	25 - 1-1/2" standard pipe thread (n.c.)	\$ _____
5	25 - 2" standard pipe thread (n.c.)	\$ _____
6	25 - 3/4" standard pipe thread brass cap	\$ _____
7	25 - 1" standard pipe thread brass cap	\$ _____
8	25 - 1-1/4" standard pipe thread brass cap	\$ _____
9	25 - 1-1/2" standard pipe thread brass cap	\$ _____
10	25 - 2" standard pipe thread brass cap	\$ _____
11	25 - 2-1/2" standard pipe thread brass cap	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

59. SMITH BLAIR #411 AND #413

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	5 - 16" #411-1740-15-003 3/8 x 15 Smith Blair	\$ _____
2	5 - 18" #411-1950-15-003 3/8 x 15 Smith Blair	\$ _____
3	5 - 18" #411-1950-15-003 3/8 x 15 Smith Blair	\$ _____
4	5 - 20" #411-2160-15-003 3/8 x 15 Smith Blair	\$ _____
5	5 - 24" #411-2580-15-003 3/8 x 15 Smith Blair	\$ _____
6	5 - 30" #411-3200-15-003 3/8 x 15 Smith Blair	\$ _____

**Pipe and Pipe Fittings
Water Department**

7 5 - 36" #411-3910-15-003 3/8 x 15 Smith Blair \$ _____
 8 5 - 16" #413-1740-1706-202 Smith Blair \$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

60. FORD REPAIR COUPLING EPOXY COATED
 F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	1 – 20” trans fab – FC23-2206-2206-07Y - Ford	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

61. SMITH BLAIR DRESSER COUPLING #65 GALVANIZED LONG
 SMITH BLAIR ONLY –
 F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	100 - 3/4" dresser coupling galv #65 long	\$ _____
2	100 - 1" dresser coupling galv #65 long	\$ _____
3	100 - 1-1/4" dresser coupling galv #65 long	\$ _____
4	100 - 1-1/2" dresser coupling galv #65 long	\$ _____
5	100 - 2" dresser coupling galv #65 long	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

**Pipe and Pipe Fittings
Water Department**

62. PIPE REPAIR CLAMPS - SMITH BLAIR SERIES 244 FOR GALVANIZED PIPE - FULL CIRCLE WITH ELECTRO GALVANIZED BOLTS

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	5 - 1-1/4"x3" 244-000-166-0300	\$ _____
2	5 - 1-1/4"x6" 244-000-166-0600	\$ _____
3	5 - 1-1/2"x3" 244-000-19003-000	\$ _____
4	5 - 1-1/2"x6" 244-000-19006-000	\$ _____
5	5 - 2"x3" 244-000-23803-000	\$ _____
6	5 - 2"x6" 244-000-23806-000	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

63. DRESSER COUPLING STYLE 38

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	2 - 20" Dresser coup O.D. 21.60 for Class A Pipe	\$ _____
2	2 - 20" Dresser coup O.D. 21.60 for Class B Pipe	\$ _____
3	2 - 20" Dresser coup O.D. 22.06 for Class C Pipe	\$ _____
4	2 - 20" Dresser coup O.D. 22.06 for Class D Pipe	\$ _____
5	2 - 24" Dresser coup O.D. 25.80 for Class A Pipe	\$ _____
6	2 - 24" Dresser coup O.D. 25.80 for Class B Pipe	\$ _____
7	2 - 24" Dresser coup O.D. 26.32 for Class C Pipe	\$ _____
8	2 - 24" Dresser coup O.D. 26.32 for Class D Pipe	\$ _____
9	2 - 30" Dresser coup O.D. 31.74 for Class A Pipe	\$ _____
10	2 - 30" Dresser coup O.D. 32.00 for Class B Pipe	\$ _____
11	2 - 30" Dresser coup O.D. 32.40 for Class C Pipe	\$ _____
12	2 - 30" Dresser coup O.D. 32.74 for Class D Pipe	\$ _____
13	2 - 36" Dresser coup O.D. 37.96 for Class A Pipe	\$ _____
14	2 - 36" Dresser coup O.D. 38.30 for Class B Pipe	\$ _____
15	2 - 36" Dresser coup O.D. 38.70 for Class C Pipe	\$ _____
16	2 - 36" Dresser coup O.D. 39.16 for Class D Pipe	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

**Pipe and Pipe Fittings
Water Department**

64. FULL SEAL MUELLER ALL STAINLESS STEEL CLAMP SINGLE BOLT

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	25 - 2" 520-9-2.35-2"x 9"	\$ _____
2	25 - 2-1/4" 520-9-2.70-2-1/4"x 9"	\$ _____
3	25 - 3" 520-9-2.97-3"x 9"	\$ _____
4	25 - 3" 520-9-3.46-3"x 9"	\$ _____
5	25 - 3-1/2" 520-9-3.96-3-1/2"x 9"	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

65. PIPE REPAIR CLAMPS - MUELLER SERIES 520, 530, 220 AND 510 CLAMPS

MUST BE ALL STAINLESS STEEL BAND AND BOLTING MECHANISM

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	5 - #520-9-3.73-3"x9" Mueller All SS Clamp, Single Bolt	\$ _____
2	50 - #520-9-4.74-4"x9" Mueller All SS Clamp, Single Bolt	\$ _____
3	50 - #520-9-6.84-6"x9" Mueller All SS Clamp, Single Bolt	\$ _____
4	50 - #520-9-8.99-8"x9" Mueller All SS Clamp, Single Bolt	\$ _____
5	5 - #520-12-2.35-2"x12" Mueller All SS Clamp, Single Bolt	\$ _____
6	5 - #520-12-2.70-2"x12" Mueller All SS Clamp, Single Bolt	\$ _____
7	5 - #520-12-3.73-3"x12" Mueller All SS Clamp, Single Bolt	\$ _____
8	5 - #520-12-4.74-4"x12" Mueller All SS Clamp, Single Bolt	\$ _____
9	5 - #520-12-6.84-6"x12" Mueller All SS Clamp, Single Bolt	\$ _____
10	3 - #520-12-8.99-8"x12" Mueller All SS Clamp, Single Bolt	\$ _____
11	5 - #520-16-4.74-4"x16" Mueller All SS Clamp, Single Bolt	\$ _____
12	5 - #520-16-6.84-6"x16" Mueller All SS Clamp, Single Bolt	\$ _____
13	5 - #520-16-8.99-8"x16" Mueller All SS Clamp, Single Bolt	\$ _____
14	5 - #520-16-13.14-12"x16" Mueller All SS Clamp, Single Bolt	\$ _____
15	2 - #520-12-11.04-10"x12" Mueller All SS Clamp, Single Bolt	\$ _____
16	6 - #520-12-13.14-12"x12" Mueller All SS Clamp, Single Bolt	\$ _____
17	5 - #520-16-3.73-3"x16" Mueller All SS Clamp, Single Bolt	\$ _____
18	5 - #520-18-2.35-2"x18" Mueller All SS Clamp, Single Bolt	\$ _____
19	6 - #520-18-4.74-4"x18" Mueller All SS Clamp, Single Bolt	\$ _____
20	5 - #520-18-6.84-6"x18" Mueller All SS Clamp, Single Bolt	\$ _____

**Pipe and Pipe Fittings
Water Department**

21	10 - #520-18-8.99-8"x18" Mueller All SS Clamp, Single Bolt	\$ _____
22	3 - #520-18-11.04-10"x18" Mueller All SS Clamp, Single Bolt	\$ _____
23	4 - #520-18-13.14-12"x18" Mueller All SS Clamp, Single Bolt	\$ _____
24	5 - #522-9-4.74-4"x9"x3/4"cc Mueller All SS Clamp-Tapped, Single Bolt	\$ _____
25	6 - #522-9-6.84-6"x9"x3/4"cc Mueller All SS Clamp-Tapped, Single Bolt	\$ _____
26	5 - #522-9-8.99-8"x9"x3/4"cc Mueller All SS Clamp-Tapped, Single Bolt	\$ _____
27	4 - #522-12-13.14-12"x12"x3/4"cc Mueller All SS Clamp-Tapped, Single Bolt	\$ _____
28	5 - #524-9-4.74-4"x9"x1"cc Mueller All SS Clamp-Tapped, Single Bolt	\$ _____
29	4 - #524-9-6.84-6"x9"x1"cc Mueller All SS Clamp-Tapped, Single Bolt	\$ _____
30	2 - #524-9-8.99-8"x9"x1"cc Mueller All SS Clamp-Tapped, Single Bolt	\$ _____
31	4 - #524-12-13.14-12"x12"x1"cc Mueller All SS Clamp-Tapped, Single Bolt	\$ _____
32	3 - #526-9-4.74-4"x9"x1-1/2"cc Mueller All SS Clamp-Tapped, Single Bolt	\$ _____
33	3 - #526-9-6.84-6"x9"x1-1/2"cc Mueller All SS Clamp-Tapped, Single Bolt	\$ _____
34	11 - #526-9-8.99"x9"x1-1/2"cc Mueller All SS Clamp-Tapped, Single Bolt	\$ _____
35	4 - #526-12-13.14-12"x12"x1-1/2"cc Mueller All SS Clamp-Tapped, Single Bolt	\$ _____
36	35 - #220-3-1.05-3/4"x3" Mueller Pipe Saver Clamp	\$ _____
37	20 - #220-6-1.05-3/4"x6" Mueller Pipe Saver Clamp	\$ _____
38	20 - #220-3-1.31-1"x3" Mueller Pipe Saver Clamp	\$ _____
39	20 - #220-6-1.31-1"x6" Mueller Pipe Saver Clamp	\$ _____
40	50 - #220-3-1.66-1-1/4"x3" Mueller Pipe Saver Clamp	\$ _____
41	50 - #220-6-1.66-1-1/4"x6" Mueller Pipe Saver Clamp	\$ _____
42	30 - #210-3-1.66-1-1/4"x3" Mueller Pipe Saver Clamp	\$ _____
43	30 - #210-6-1.66-1-1/4"x6" Mueller Pipe Saver Clamp	\$ _____
44	100 - #212-3-1.90-1-1/2"x3" Mueller Pipe Saver Clamp Gridded gasket (full seal)	\$ _____
45	100 - #212-6-1.90-1-1/2"x6" Mueller Pipe Saver Clamp Gridded gasket (full seal)	\$ _____
46	100 - #212-3-2.37-2"x3" Mueller Pipe Saver Clamp Gridded gasket (full seal)	\$ _____
47	100 - #212-6-2.37-2"x6" Mueller Pipe Saver Clamp Gridded gasket (full seal)	\$ _____
48	50 - #530-9-4.70-4"x9" Mueller All SS Clamp-double bolt	\$ _____
49	50 - #530-9-6.75-6"x9" Mueller All SS Clamp-double bolt	\$ _____
50	50 - #530-9-8.88-8"x9" Mueller All SS Clamp-double bolt	\$ _____

**Pipe and Pipe Fittings
Water Department**

51	5 - #530-12-4.70-4"x12" Mueller All SS Clamp-double bolt	\$ _____
52	5 - #530-12-6.75-6"x12" Mueller All SS Clamp-double bolt	\$ _____
53	3 - #530-12-8.88-8"x12" Mueller All SS Clamp-double bolt	\$ _____
54	2 - #530-12-11.05-10"x12" Mueller All SS Clamp-double bolt	\$ _____
55	6 - #530-12-13.10-12"x12" Mueller All SS Clamp-double bolt	\$ _____
56	6 - #530-18-4.70-4"x18" Mueller All SS Clamp-double bolt	\$ _____
57	5 - #530-18-6.75-6"x18" Mueller All SS Clamp-double bolt	\$ _____
58	10 - #530-18-8.88-8"x18" Mueller All SS Clamp-double bolt	\$ _____
59	3 - #530-18-11.05-10"x18" Mueller All SS Clamp-double bolt	\$ _____
60	4 - #530-18-13.10-12"x18" Mueller All SS Clamp-double bolt	\$ _____
61	5 - #532-9-4.70-4"x9"x3/4" cc Mueller All SS Clamp-tapped, double bolt	\$ _____
62	6 - #532-9-6.75-6"x9"x3/4" cc Mueller All SS Clamp-tapped, double bolt	\$ _____
63	5 - #532-9-8.88-8"x9"x3/4" cc Mueller All SS Clamp-tapped, double bolt	\$ _____
64	5 - #534-9-4.70-4"x9"x1" cc Mueller All SS Clamp-tapped, double bolt	\$ _____
65	5 - #534-9-6.75-6"x9"x1" cc Mueller All SS Clamp-tapped, double bolt	\$ _____
66	5 - #534-9-8.88-8"x9"x1" cc Mueller All SS Clamp-tapped, double bolt	\$ _____
67	5 - #536-9-4.70-4"x9"x1-1/2" cc Mueller All SS Clamp-tapped, double bolt	\$ _____
68	5 - #536-9-6.75-6"x9"x1-1/2" cc Mueller All SS Clamp-tapped, double bolt	\$ _____
69	11 - #536-9-8.88-8"x9"x1-1/2" cc Mueller All SS Clamp-tapped, double bolt	\$ _____
70	1 - #510-18-15.10-14"x18" Mueller clamp, Iron Bolts, double bolt	\$ _____
71	1 - #510-18-17.20-16"x18" Mueller clamp, Iron Bolts double bolt	\$ _____
72	1 - #510-18-19.50-18"x18" Mueller clamp, Iron Bolts, double bolt	\$ _____
73	1 - #510-18-21.60-20"x18" Mueller clamp, Iron Bolts, double bolt	\$ _____
74	1 - #510-18-25.66-24"x18" Mueller clamp, Iron Bolts, double bolt	\$ _____
75	1 - #510-18-31.22-30"x18" Mueller clamp, Iron Bolts, double bolt	\$ _____
76	1 - #510-18-37.86-36"x18" Mueller clamp, Iron Bolts, double bolt	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

**Pipe and Pipe Fittings
Water Department**

**66. PIPE REPAIR CLAMPS EXTRA RANGE - MUELLER SERIES 550 CLAMPS - MUST BE ALL STAINLESS STEEL-FULL SEAL W/SS NUTS & BOLTS
F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO**

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	4 - #550-12-4.44-5.24 Mueller extra range clamp	\$ _____
1	4 - #550-12- 6.62-7.42 Mueller extra range clamp	\$ _____
1	4 - #550-12- 8.62-9.42 Mueller extra range clamp	\$ _____
1	4 - #550-12- 10.75-11.55 Mueller extra range clamp	\$ _____
1	4 - #550-12- 12.75-13.55 Mueller extra range clamp	\$ _____
1	4 - #550-15- 4.44-5.24 Mueller extra range clamp	\$ _____
1	4 - #550-15- 6.62-7.42 Mueller extra range clamp	\$ _____
1	4 - #550-15- 8.62-9.42 Mueller extra range clamp	\$ _____
1	4 - #550-15- 10.75-11.55 Mueller extra range clamp	\$ _____
1	4 - #550-15- 12.75-13.55 Mueller extra range clamp	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

**67. RETAINER CLAMPS OR FRICTION CLAMP - W/UNDERGROUND WASHERS
F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO**

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	15 - 4" retainer clamp	\$ _____
2	15 - 6" retainer clamp	\$ _____
3	15 - 8" retainer clamp	\$ _____
4	1 - 10" retainer clamp	\$ _____
5	10 - 12" retainer clamp	\$ _____
6	3 - 16" retainer clamp	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

**Pipe and Pipe Fittings
Water Department**

68. INSERTING VALVE COMPLETE WITH SLEEVE-

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON

Must be stainless steel, open right, complete with sleeve and compatible with City of Canton Water Department's Hydro-Stop Insta-Valve inserting machine.

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Part No.</u>	<u>Each</u>
1	2 - 4" s.s. inserting valve complete		
	o.d. 4.50 - range 4.30-4.70	2204321000	\$ _____
	o.d. 4.80 - range 4.60-5.00	2204121000	\$ _____
2	2 - 6" s.s. inserting valve complete		
	o.d. 6.63 - range 6.43-6.83	2206221000	\$ _____
	o.d. 6.90 - range 6.70-7.10	2206121000	\$ _____
3	2 - 8" s.s. inserting valve complete		
	o.d. 8.63 - range 8.43-8.83	2208231000	\$ _____
	o.d. 9.05 - range 8.85-9.25	2208131000	\$ _____
	o.d. 9.79 - range 9.59-9.99	2208331000	\$ _____
4	1 - 10" s.s. inserting valve complete		
	o.d. 11.50 - range 11.35-11.70	2210432100	\$ _____
	o.d. 10.75 - range 10.55-10.95	2210241100	\$ _____
	o.d. 11.10 - range 10.90-11.3	2210141100	\$ _____
5	2 - 12" s.s. inserting valve complete		
	o.d. 13.50 - range 13.35-13.65	2212442100	\$ _____
	o.d. 12.75 - range 12.55-12.95	2212241100	\$ _____
	o.d. 13.20 - range 13.00-13.50	2212141100	\$ _____
	o.d. 13.75 - range 13.55-13.95	2212541100	\$ _____

Terms _____

Manufacturer's Name _____

Delivery _____

Remarks _____

**Pipe and Pipe Fittings
Water Department**

**69. INSERTING VALVE INSTALLED BY CONTRACTOR - ROMAC OR
EQUAL - CITY WILL EXCAVATE**

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	1 - 4" inserting valve complete installed by contractor	\$ _____
2	1 - 6" inserting valve complete installed by contractor	\$ _____
3	1 - 8" inserting valve complete installed by contractor	\$ _____
4	1 - 10" inserting valve complete installed by contractor	\$ _____
5	1 - 12" inserting valve complete installed by contractor	\$ _____

Terms _____

Manufacturer's Name _____

Delivery _____

Remarks _____

70. TAP SADDLES

F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

Tap saddles for pre-stressed concrete cylinder pipe must have straps in lieu of a solid back half. The gland and the saddle shall be separate pieces such that the saddle can be installed prior to cutting the pre-stressed wires and installing the gland. The saddle shall have gasket seals around its periphery and openings in the saddle for the purpose of grouting an annular space of approximately 1/2" thickness between the exterior surface of the pipe and the underside of the saddle. The gland shall have a rubber gasket for making a watertight seal between the gland and the steel cylinder of the pre-stressed concrete cylinder pipe. The inside surface of the gland neck which will be in contact with the water shall be lined with cement mortar or a fusion applied epoxy per AWWA.

<u>Item</u>	<u>Estimated Quantity and Size</u>	<u>Each</u>
1	10 - 24" saddle w/1" cc tapered thread tap for 24" concrete pipe complete with band	\$ _____
2	10 - 30" saddle w/1" cc tapered thread tap for 30" concrete pipe complete with band (92")	\$ _____
3	10 - 36" saddle w/1" cc tapered thread tap for 36" concrete pipe complete with band (107")	\$ _____
4	6 - 42" saddle w/1" cc tapered thread tap for 42" concrete pipe complete with band (130")	\$ _____
5	10 -16" x 1" saddle w/1" cc tapered thread tap for 16" concrete pipe complete with band	\$ _____
6	4 -16" saddle w/1-1/2" cc tapered thread tap for 16" concrete pipe complete with band	\$ _____

**Pipe and Pipe Fittings
Water Department**

7	4 -24" saddle w/1-1/2" cc tapered thread tap for 24" concrete pipe complete with band	\$ _____
8	4 -30" saddle w/1-1/2" cc tapered thread tap for 30" concrete pipe complete with band	\$ _____
9	4 -36" saddle w/1-1/2" cc tapered thread tap for 36" concrete pipe complete with band	\$ _____
10	4 - 42" saddle w/1-1/2" cc tapered thread tap for 42" concrete pipe complete with band	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

71. SERVICE SADDLES - FORD ONLY FC 202 DESIGN - SINGLE BANDED - STAINLESS STEEL - EPOXY COATED - WITH AWWA TAPER THREAD OR EQUAL F.O.B. DESTINATION, FREIGHT PREPAID AND ALLOWED CANTON, OHIO

<u>Items</u>	<u>Estimated Quantity and Size</u>	<u>Ford</u>	<u>Each</u>
1	25 - 4" x 1-1/2" service saddle	FC202-5.26-CC6	\$ _____
2	25 - 4" x 1" service saddle	FC202-5.26-CC6	\$ _____
3	25 - 6" x 1-1/2" service saddle	FC202-7.60-CC6	\$ _____
4	25 - 6" x 1" service saddle	FC202-7.60-CC6	\$ _____
5	20 - 8" x 1-1/2" service saddle	FC202-9.79-CC6	\$ _____
6	20 - 8" x 1" service saddle	FC202-9.79-CC6	\$ _____
7	10 - 10" x 1-1/2" service saddle	FC202-12.12-CC6	\$ _____
8	10 - 10" x 1" service saddle	FC202-12.12-CC6	\$ _____
9	20 - 12" x 1-1/2" service saddle	FC202-14.38-CC6	\$ _____
10	20 - 12" x 1" service saddle	FC202-14.38-CC6	\$ _____
11	10 - 16" x 1-1/2" service saddle	FC202-18.40-CC6	\$ _____
12	10 - 16" x 1" service saddle	FC202-18.40-CC6	\$ _____
13	4 - 18" x 1-1/2" service saddle	FC202-20.50-CC6	\$ _____
14	4 - 20" x 1-1/2" service saddle	FC202-22.20-CC6	\$ _____
15	4 - 24" x 1-1/2" service saddle	FC202-26.50-CC6	\$ _____

Terms _____
 Manufacturer's Name _____
 Delivery _____
 Remarks _____

Addenda Acknowledgement

I hereby acknowledge the following official addenda (leave blank if no addenda were issued)

Addenda Number(s) _____

**Pipe and Pipe Fittings
Water Department**

**Signature Page
Pipe and Pipe Fittings**

To the Director of Public Service of the City of Canton:

The undersigned, having carefully examined the complete invitation to bid, herewith proposes to furnish all of the goods and/or services contained within the bid for **Pipe and Pipe Fittings** in accordance with all specifications on file to the satisfaction of the Director of Public Service of said City.

The bidder hereby agrees that the Director of Public Service has the right to reject any and all bids and to accept the bid(s) deemed most beneficial to the City of Canton.

The bidder herewith encloses a _____ (**Bid Bond, Certified/Cashier's Check**) in the sum of \$ _____ dollars made payable to the CITY OF CANTON as a guaranty that if awarded the contract _____ will enter into contract therefore, within the prescribed time of ten (10) days from the date of service of notice of award, otherwise such bond or checks shall become the property of said City.

The bidder acknowledges receipt of Addenda Numbers: _____

SIGNATURE OF BIDDER: _____

NOTE: If bidder is a corporation, set forth the legal name of the corporation, together with the signature of the officer or officers authorized to sign contracts on behalf of the corporation. If bidder is a partnership, set forth the name of the firm, together with the signature of the partner or partners authorized to sign contracts on behalf of the partnership.

Please have this page Notarized.