

CONTRACT DOCUMENTS

FOR

PROJECT 26-WD-01:

SOUTH STREET WATER REPLACEMENT

**Department of Engineering
City of Greenfield**

**Guy Titus.....Mayor
Glen E. Morrow, PE.... City Engineer**

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NOTICE TO QUOTERS
City of Greenfield

Department: **Department of Engineering**
10 S. State Street
Greenfield, Indiana 46140

Project/Work: **26-WD-01: SOUTH STREET WATER REPLACEMENT**

Notice is hereby given that the City of Greenfield will receive sealed quotes for the above described "Project/Work" at Clerk-Treasurer's Office, 10 S. State Street, Greenfield, Indiana, until 9:30 a.m. prevailing local time, 10 S. State Street, on **February 10, 2026** and commencing as soon as practicable thereafter on the same date such quotes will be publicly opened. No late Quotes will be accepted.

The Work consists of, but is not necessarily limited to the following:

Installation of approximately 559 LFT of 8" D.I.P. water main and appurtenances in W. South Street between S. State Street and S. Pennsylvania Street in Greenfield, IN.

Contract Documents for the Project/Work have been assembled into one or more bound Project Manuals which, together with Drawings, may be examined at the Clerk-Treasurer's Office or the Department of Engineering at 10 S. State Street, Greenfield, Indiana 46140.

Copies of such Drawings and Project Manuals will be available for pick-up or delivery at the Clerk-Treasurer's Office. Payment may be made by check, credit card, or cash. NO DEPOSITS ACCEPTED. Make checks payable to City of Greenfield. All payments and costs of Contract Documents and related supplemental materials are non-refundable. QUOTE PACKAGES WILL NOT BE AVAILABLE FOR SALE IN THE DEPARTMENT OF ENGINEERING. Electronic copies of the Drawings and Project Manuals will be available on the City of Greenfield website at <https://www.greenfieldin.gov/government/engineering>. Quoters will be responsible to contact the Clerk-Treasurers office to be added to the plan-holders list if downloading electronic contract documents.

Quoters shall assure that they have obtained complete sets of drawings and Contract Documents and shall assume the risk of any errors or omissions in Quotes prepared in reliance on incomplete sets of drawings and Contract Documents.

A pre-quote conference for this Work will not be held. Questions regarding the Work should be directed to Glen E. Morrow, PE, City Engineer at (317) 325-1322 or glen.morrow@greenfieldin.gov.

For accommodations needed by persons with disabilities to attend the public Quote opening meeting, please call (317) 477-4320.

The City of Greenfield reserves the right to reject any or all quotes or to waive any informalities and to accept the quote which it deems most favorable to the interest of the City after all quotes have been examined and canvassed.

INSTRUCTIONS TO QUOTERS

City of Greenfield

Department (“Owner”): **Department of Engineering
10 S. State Street
Greenfield, Indiana 46140**

Project/Work: **26-WD-01: SOUTH STREET WATER REPLACEMENT**

Owner’s Representative: **Charles Gill, Water Manager**

Engineer: **Glen E. Morrow, PE**

1. GENERAL

- 1.1 Submission of a Quote shall constitute an unconditional agreement and acknowledgment by the Quoter to be bound by all terms and conditions set forth herein and in any of the documents assembled or referred to in the bound Project Manual of which these Instructions to Quoters are a part.
- 1.2 Sample forms are included in the Project Manual to acquaint Quoters with the form and provisions of various Quote Documents and other documentation required by the Contract Documents to be executed, completed and submitted by some or all Quoters, either as part of a Quote Submission or after the Quote Date. Such sample forms are not to be detached from the Project Manual or filled out or executed. Separate copies of such forms and any other required documentation prescribed by the Contract Documents have been or will be furnished separately by the Owner and must be obtained directly from the City.
- 1.3 Instructions and requirements printed on any sample form included in the Project Manual or any form not so included but required to be completed, signed or furnished by a Quoter as part of a Quote Submission or after receipt and opening of Quotes shall be deemed requirements established by these Instructions to Quoters to the same extent as if fully restated herein.
- 1.4 By submitting quote the Quoter agrees the quote proposal and price(s) contained herein shall be valid for ninety (90) days from quote opening.

2. DEFINITIONS

The following definitions shall apply to these Instructions to Quoters (ITQ):

- 2.1 Quoter - Any person or entity who submits a Quote.
- 2.2 Quote - A written proposal submitted by a Quoter as part of the form prescribed herein offering to perform and complete the Work and to fulfill all other requirements of the Contract Documents for one or more specified prices.
- 2.3 Quote Documents - All documents and completed forms required to be submitted by a Quoter with and as integral parts of a Quote Submission, whether or not included as sample forms

assembled in the Project Manual of which these Instructions to Quoters are a part. Such Quote Documents are listed and more fully described in ITQ Section 5.3 hereof.

- 2.4 Quote Date - The date when Quotes are to be received, opened and publicly read aloud as established by the Notice to Quoters as may be modified by Addenda.
- 2.5 Quote Submission - All documents presented by a Quoter for receipt and opening on the Quote Date.
- 2.6 Contract Documents - The Agreement and any exhibits thereto, Addenda (which pertain to the Contract Documents), Instructions to Quoters, Advertisement, Notice to Quoters, Quoter's Quote (including documentation accompanying the Quote and any post-Quote documentation submitted prior to the Notice of Award), Notice to Proceed, the Bonds, the General Conditions, the Additional Requirements Section, any supplemental conditions, the Specifications and the Drawings as the same are more specifically identified in the Agreement.
- 2.7 E-Verify Program - A electronic verification of work authorization program of the Illegal Immigration Reform and Immigration Responsibility Act of 1996 (P.L. 104-208), Division C, Title IV, s.403(a), as amended, operated by the United States Department of Homeland Security or successor work authorization program designated by the United States Department of Homeland Security or other federal agency authorized to verify the work authorization status of newly hired employees under the Immigration Reform and control Act of 1986 (P.L. 99-603).
- 2.8 Owner - The City of Greenfield acting by and through the Department or other agency designated above.
- 2.9 Project Manual - The bound set of documents, sample forms, and Contract Documents (excluding plans and Addenda) approved by the Owner for the Work and/or Project described in the Notice to Quoters and of which these Instructions to Quoters are a part.

In all other respects, terms used herein shall have the meanings as stated in the General Conditions or other Contract Documents.

3. EXAMINATION OF SITE AND DOCUMENTS

- 3.1 Before the Quote Date, all Quoters shall carefully and thoroughly examine and inspect the entire site of the proposed Work and adjacent premises and the various means of approach and access thereto by means of a site inspection visit, and make all necessary investigations to inform themselves thoroughly as to the facilities necessary for delivering, placing and operating the necessary construction equipment, and for delivering and handling materials at the site, and shall inform themselves thoroughly as to any and all actual or potential difficulties, hindrances, delays and constraints involved in the commencement, prosecution and completion of the proposed Work in accordance with the requirements of the Contract Documents.
- 3.2 It shall be the sole responsibility of Quoters to make borings, test pits and to conduct such other investigations at or near the site of the proposed Work as they deem necessary to determine the character, location, and amount of materials to be encountered or other subsurface conditions which could affect the manner, cost or time required to perform the Work.
- 3.3 Quoters shall carefully and thoroughly examine the plans, specifications and other Contract and/or Project Manual Documents and shall assume the full risk of their own judgments as to the

nature, quality and amount of the whole of the Work to be done, and for the price Quote must assume all risk of any and all variances or errors in any computation or statement of amounts or quantities necessary to complete the Work in strict compliance with the Contract Documents.

- 3.4 Elevations of the existing ground surface or structures at the site of the Work as shown on the plans are believed to be reasonably correct but are not guaranteed to be absolutely so and are presented only as an approximation. Quoters shall satisfy themselves as to the correctness of all elevations.
- 3.5 Information stated or depicted on plans concerning the location, dimensions, depth and other characteristics of underground structures and utilities is given only as general information and shall not be construed or relied upon by Quoters as a representation or assurance that such structures or utilities will be found or encountered as plotted, or that such information is complete or accurate. Quoters, therefore, shall satisfy themselves by such means as they may deem proper as to the location of all structures and utilities that may be encountered in construction of the Work and shall bear the risk of the number, type, location, dimensions and depth of all structures and utilities thus encountered.
- 3.6 The City of Greenfield Standard General Conditions for Construction Contracts, August 2018, is incorporated by reference as part of this quote. Copies are available on the City website at <https://www.greenfieldin.gov/government/engineering>.

4. CLARIFICATIONS AND ADDENDA

- 4.1 If a Quoter finds conflicts, errors, discrepancies or ambiguities in the Contract Documents or any sample form, or if the Quoter is in doubt as to the intended meaning of any portion or provision therein, the Quoter shall at once give written notice thereof to the Owner's Representative, at least seven (7) consecutive calendar days prior to the Quote Date. No Quoter shall be allowed any extra compensation or time extension by reason of any conflict, error, discrepancy or ambiguity of which the Quoter had actual knowledge or reasonably should have known and which he/she failed to report within the period and in the manner required by these Instructions to Quoters.
- 4.2 No material changes, clarifications or interpretations of the Contract Documents will be issued except by written or graphic Addenda mailed or delivered to record holders of Contract Documents not less than three (3) days prior to the Quote Date. All such Addenda must be acknowledged by Quoter and will become a part of the Contract Documents. The Owner will not be responsible for or bound by any oral or written interpretations or clarifications of the Contract Documents which anyone presumes to make on its behalf, except by an Addendum issued in accordance with this Section.

5. QUOTE SUBMISSION

- 5.1 All Quote Documents shall be placed within the sealed envelope which shall be plainly labeled on the outside with the name of the Project as set forth above, and the name and address of the Quoter along with the RFQ number. If forwarded by mail, the sealed envelope must be enclosed in another envelope addressed to: City of Greenfield, Clerk-Treasurer, 10 S. State Street, Greenfield, Indiana 46140.
- 5.2 All Quote Documents as herein prescribed must be submitted with and as integral parts of each Quote Submission and shall be subject to all requirements of the Contract Documents, including

drawings and these Instructions to Quoters. Quote Documents must be properly filled in and completed in every material respect and without interlineations, excisions, special conditions, qualifications or exceptions. Each Quote Document requiring a signature shall be signed by an individual duly authorized to execute such document on Quoter's behalf. A Quote executed by a corporation, joint venture, or other entity with an assumed name shall have the legal and correct name thereof followed by the word "by" and the signature and title of the officer or other person authorized to sign for it.

5.3 The Quote Documents to be thus submitted by each Quoter shall consist of all of the following (5.3.1):

- .1 Quoter's Itemized Proposal and Declarations. A sample of this form is included in the Project Manual and must be utilized by all Quoters. Such document includes and consists of the following constituent "Parts":

"Part 1 - Quoter Information"

"Part 2 - Proposal (Quote)"

"Part 3 - Contract Items and Unit Prices"

"Part 4 - Contract Documents and Addenda"

"Part 5 - Exceptions"

"Part 6 - Nepotism Disclosure Form"

"Part 7 - Additional Declarations, including certification required by IC 5-22-16.5"

"Part 8 - Non-Collusion Affidavit"

"Part 9 - E-Verify Affidavit"

"Part 10-Disbarment declaration "

"Part 11- Signatures"

- 5.4 Quotes may be withdrawn in person by a Quoter during normal hours of business prior to the time fixed for opening of Quotes. In the event of a valid withdrawal of a Quote, the Quote Security of the withdrawing Quoter will be returned promptly. No Quote may be withdrawn after opening of Quotes has commenced except after expiration of such period following the Quote Date as specifically provided by law, plus any extension thereof as provided elsewhere in these Instructions to Quoters. Quoters failure to provide all completed documentation as required in ITQ Section 5.3 may result in Quote being deemed non-responsive.

6. POST-QUOTE REQUIREMENTS

Within three (3) business days of notification by Owner, the apparent lowest responsive Quoter will be required to submit additional documents and satisfy additional requirements as conditions to such Quoter being found by the Owner to be a responsible Quoter, as follows:

- 6.1 Proof of Insurability. The Quoter shall furnish: (1) proof of insurance showing existing coverage in accordance with the terms and amounts stated in the General Conditions, or (2) a letter or statement certifying that, in the event that the Quote is awarded by the Owner, an insurance company will provide the required coverage to the Quoter submitting the Quote. Such proof of insurance or the letter/statement shall be issued by a financially responsible insurance company authorized to do business in the State of Indiana.
- 6.2 Joint Venture Agreement. If the Quoter is a joint venture, partnership or other combination of two or more persons or entities, the Quoter shall submit a copy of the joint venture or other agreement by which such joint venture, partnership or other association has been formed,

executed by all such participating persons or entities. If the Quote is signed by less than all parties that comprise the Quoter, suitable written evidence of the authority of such signing party to bind all such parties must also be furnished.

- 6.3 Subcontractor Supplier List. Quoter shall submit a complete list of subcontractors and suppliers as required (POST-QUOTE-1).
- 6.4 Manufacturers List. The Quoter shall submit a complete list of all equipment and supplies that are listed in the Manufacturer's List (POST-QUOTE-2).
- 6.5 E-Verify Documentation. The Quoter shall submit verification that it is enrolled in and participating in the E-Verify program (POST-QUOTE-3).

7. QUOTE EVALUATION AND AWARD

- 7.1 **Award of the Contract will be made to the lowest, responsive and responsible Quoter, where the Quote is reasonable and does not exceed the funds available for the Project.** The Owner reserves the right to reject all Quotes and may waive or allow a Quoter to correct errors, omissions or other irregularities in Quote Documents that are found not to have afforded the Quoter a substantial competitive advantage over other Quoters.
- 7.2 The Owner shall have the right to reject any Quote if investigation of the Quoter fails to satisfy the Owner that such Quoter is properly qualified to carry out the obligations and complete the Work. Any or all Quotes will be rejected if there is reason to believe that collusion exists among Quoters.
- 7.3 For unit price Contract Items, estimated quantities and unit prices will serve as the basis for determining the proposed price of each Quote. Patent math errors in statements of Quote prices or totals may be corrected by the Owner or Engineer, in which case the corrected amounts will be used for the purpose of Quote evaluation, comparison and other award considerations. However, neither the Owner nor the Engineer shall be required to discover or correct any error or omission in a Quote and the Quoter shall assume the risk of and be bound to the consequences of any such error or omission.
- 7.4 The Owner may, at its sole option, award the Contract to a Quoter on a conditional basis to afford the Quoter additional time and opportunity to submit required documents or to fulfill other requirements. In such case, the Owner will furnish to the Quoter a notice of conditional award which will establish (1) the additional conditions to be fulfilled for the award to become effective, and (2) the time limit within which such conditions shall be satisfied. If the Quoter fails to satisfy the conditions in the manner and within the time specified in such notice, the Owner may declare such Quoter to be non-responsible and award the Contract, conditionally or unconditionally, to another Quoter. Time limitations governing the Owner's award of the Contract shall be extended for such additional period as may be required to effectuate the conditional award procedure set forth in this sub-section, and no Quote may be withdrawn during such period of extension.

8. CONTRACT EXECUTION; SUBMITTALS

- 8.1 Within three (3) business days after the award notice, the successful Quoter shall sign and deliver at least three (3) counterparts of the Agreement, utilizing the form thereof included in the Project

Manual and make delivery thereof to the Owner, along with other documents as prescribed by the Contract Documents.

- 8.2 If the Quoter fails or neglects to execute and deliver the Agreement and other required documents as prescribed by the preceding sub-section, the Quoter shall be deemed to have repudiated the Contract and thereupon the award shall be null and void.
- 8.3 Concurrently with the execution and delivery of the Agreement to the Owner, or within such other period as the Owner may prescribe, the successful Quoter (Contractor) shall submit the following as conditions to the Quoter's right to proceed with and receive payment for any Work:
- .1 Proof of all required insurance coverage;
 - .2 The preliminary schedules required by Paragraph 2.7 of the General Conditions;
 - .3 Other post-Quote submittals required by the Contract Documents.

9. LIQUIDATED DAMAGES

- 9.1 The Contract Documents provide for the payment of liquidated damages in the event of unexcused failure by the Contractor to complete the Work within the time required by the Contract Documents. **Such liquidated damages are to be assessed and recovered at the rate of \$500.00 per day for delay in achieving the Substantial Completion and at the rate of \$250.00 per day for delay in achieving Final Completion date of all Work. In the event that Contractor fails to achieve Substantial Completion by the deadline to achieve Final Completion, liquidated damages will run concurrent until Substantial Completion is achieved.**
- 9.2 The per diem rate(s) of liquidated damages established by the preceding sub-section have been determined and are intended as reasonable prospective estimate(s) of the type and amount of actual damages which the Owner may sustain in the event of such delay(s). Submission of a Quote shall constitute an unconditional acknowledgment and agreement by the Quoter that such liquidated damages are fair and reasonable and do not and will not constitute a penalty, and that such liquidated damages may be assessed and recovered by the Owner as against the successful Quoter/Contractor and its Surety in lieu of actual damages for delayed completion.

10. CHANGE ORDERS

- 10.1 During the course of the Work, should the Owner or Quoter determine that additional work which was foreseeable is required, such work shall not be automatically awarded through change orders. However, the Owner reserves the right to award additional work which was foreseeable to the original Quoter where doing so is in the best interest of the Owner. All such awards are and will remain subject to necessary approvals.

END OF INSTRUCTIONS TO QUOTERS

PART 1
QUOTER'S ITEMIZED PROPOSAL
AND DECLARATIONS
City of Greenfield

Instructions to Quoters:

This form shall be utilized by all Quoters. Except as otherwise specifically provided, all Parts shall be fully and accurately filled in and completed and notarized.

Project: **26-WD-01: SOUTH STREET WATER REPLACEMENT**

Proposal For Construction of: **Installation of approximately 559 LFT of 8" D.I.P. water main and appurtenances in W. South Street between S. State Street and S. Pennsylvania Street in Greenfield, IN.**

Date: _____

To: **City of Greenfield, Department of Engineering
10 S. State Street, Greenfield, Indiana 46140**

PART 1
QUOTER INFORMATION
(Print)

1.1 Quoter Name: _____

1.2 Quoter Address: Street Address: _____
City: _____ State: _____ Zip: _____
Phone #: () _____ Fax #: () _____
Email Address: _____

1.3 Quoter is a/an *[mark one]*:
____ Individual ____ Partnership ____ Indiana Corporation
____ Foreign (Out of State) Corporation
____ Joint Venture
Other: _____

PART 2
PROPOSAL (QUOTE)

- 2.1 The undersigned Quoter proposes to furnish all necessary labor, machinery, tools, apparatus, materials, equipment, service and other necessary supplies, and to perform and fulfill all obligations incident thereto in strict accordance with and within the time(s) provided by the terms and conditions of the Contract Documents for the above described Work and Project, including any and all addenda thereto, for the Lump Sum Total of _____ Dollars (\$_____).
- 2.2 By submitting quote the Quoter agrees the quote proposal and price(s) contained herein shall be valid for ninety (90) days from quote opening.

PART 3
CONTRACT ITEMS AND UNIT PRICES

Item No.	Item Description	Estimated Quantity	Item Unit	Unit Price	Total Cost
1	Mobilization/Demobilization	1	LS		
2	Construction Engineering	1	LS		
3	Traffic Control	1	LS		
4	D.I.P. Water Main, 8-inch, Granular Backfill	559	LFT		
5	Connection to Existing DIP, 4"-8"	3	EA		
6	Hydrant Assembly, Complete	1	EA		
7	Gate Valve, 8"	1	EA		
8	Gate Valve, 4"	1	EA		
9	DIP Watermain Fitting, 8"	3	EA		
10	New ¾" Water Service connection	3	EA		
11	Asphalt Pavement Repair	930	SYS		
12	Concrete Curb / Sidewalk	24	SYS		
13	Abandon/ Removal Existing Watermain/ Appurtenances	1	LS		

Total Lump Sum Quote: \$_____

PART 4
CONTRACT DOCUMENTS AND ADDENDA

- 4.1 The Quoter agrees to be bound by the terms and provisions of all Contract Documents as defined in the General Conditions and incorporates such Contract Documents herein by reference
- 4.2 The Quoter acknowledges receipt of the following addenda:

<u>Addendum Number</u>	<u>Date</u>
_____	_____
_____	_____
_____	_____
_____	_____

PART 5
EXCEPTIONS

Instructions to Quoters:

- 5.1 *The Quoter shall fully state each exception taken to the Specifications or other Contract Documents in Section 5.3 of this Part.*
- 5.2 *Quoter is cautioned that any exception taken by Quoter and deemed by Owner to be a material qualification or variance from the terms of the Contract Documents may result in this Quote being rejected as non-responsive.*
- 5.3 *Exceptions:*

PART 6
NEPOTISM DISCLOSURE

Contractor: _____

Project: _____

For purposes of compliance with Indiana Code Chap. 36-1-21, please specify below whether Contractor (individual), or a person who wholly or partially owns Contractor (business), is a relative, as that term is defined by Indiana Code § 36-1-21-3, of either the Mayor of Greenfield, Indiana, or a member of the City Council of Greenfield, Indiana.

- ☐ Contractor (individual) or Contractor (business) does NOT have a relative who is either the Mayor of Greenfield, Indiana or a member of the City Council of Greenfield, Indiana.
- ☐ Contractor (individual) or Contractor (business) DOES have a relative who is either the Mayor of Greenfield, Indiana or member of the City Council of Greenfield, Indiana (must specify all relatives below):

☐ Mayor Guy Titus

☐ City Councilor [please specify name of Councilor(s)]:

Name of Authorized Representative (Printed):

Signature of Authorized Representative:

Date: _____

PART 7
ADDITIONAL DECLARATIONS

- 7.1 Quoter certifies for itself and all its subcontractors compliance with existing laws of the City of Greenfield, the State of Indiana and the United States regarding (a) prohibition of discrimination in employment practices on the basis of race, sex, disability, religion, national origin, disabled veteran status and Vietnam-era veteran status.
- 7.2 Quoter certifies that it has thoroughly examined the site of the Work and informed itself fully regarding all conditions under which he/she will be obligated to operate and that in any way affect the Work, and knows, understands and accepts the existing conditions. Quoter further certifies that it has thoroughly reviewed the Contract Documents, including all Addenda, and has had the opportunity to ask questions and obtain interpretations or clarifications concerning Contract Documents.
- 7.3 Hiring Practices. The Quoter shall, upon request of the Owner, make available its policies, practices and standards for the hiring of applicants, except as prohibited under Indiana Code section 22-2-17-3, to the extent such information is related to the provision of services under this Quote.

PART 8
NON-COLLUSION AFFIDAVIT

The individual person(s) executing this Proposal, being first duly sworn, depose(s) and state(s) that the Quoter has not directly or indirectly entered into a combination, collusion, undertaking or agreement with any other Quoter or person (i) relative to the price(s) proposed herein or to be Quote by another person, or (ii) to prevent any person from Quoting, or (iii) to induce a person to refrain from Quoting; and furthermore, this Quote Proposal is made and submitted without reference to any other Quotes and without agreement, understanding or combination, either directly or indirectly, with any persons with reference to such Quoting in any way or manner whatsoever.

PART 9
E-VERIFY PROGRAM

Pursuant to Indiana Code 22-5-1.7-11, the contractor awarded the Quote is required to enroll in and verify the work eligibility status of all its newly hired employees through the E-Verify program. The contractor who is awarded the Quote is not required to verify the work eligibility status of all its newly hired employees through the E-Verify program if the E-Verify program no longer exists.

The individual person(s) executing this Proposal, being first duly sworn, depose(s) and state(s) that the Quoter does not knowingly employ an unauthorized alien. The undersigned further affirms that, prior to entering into an agreement for this Quote, the undersigned business entity will enroll in and agrees to verify the work eligibility status of all its newly hired employees through the E-Verify program.

PART 10
CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND
VOLUNTARY EXCLUSION CONTRACTS/SUBCONTRACTS

This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, signed February 18, 1986. The guidelines were published in the May 29, 1987 Federal Register (52 Fed. Reg., pages 20360 - 20369).

INSTRUCTIONS

1. Each provider whose contract/subcontract equals or exceeds \$25,000 in federal moneys must sign this certification prior to execution of each contract/subcontract. Additionally, providers who audit federal programs must also sign, regardless of the contract amount. The Department of Children and Families cannot contract with these types of providers if they are debarred or suspended by the federal government.
2. This certification is a material representation of fact upon which reliance is placed when this contract/subcontract is entered into. If it is later determined that the signer knowingly rendered an erroneous certification, the Federal Government may pursue available remedies, including suspension and/or debarment.
3. The provider shall provide immediate written notice to the contract manager at any time the provider learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. 4. The terms "debarred", "suspended", "ineligible", "person", "principal", and "voluntarily excluded", as used in this certification, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department's contract manager for assistance in obtaining a copy of those regulations.
5. The provider agrees by submitting this certification that, it shall not knowingly enter into any subcontract with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this contract/subcontract unless authorized by the Federal Government.
6. The provider further agrees by submitting this certification that it will require each subcontractor of this contract/subcontract, whose payment will equal or exceed \$25,000 in federal moneys, to submit a signed copy of this certification.
7. The Department of Children and Families may rely upon a certification of a provider that it is not debarred, suspended, ineligible, or voluntarily excluded from contracting/subcontracting unless it knows that the certification is erroneous.
8. This signed certification must be kept in the contract manager's contract file. Subcontractor's certification must be kept at the provider's business location.

CERTIFICATION

(1) The prospective provider certifies, by signing this certification, that neither he nor his principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this contract/subcontract by any federal department or agency.

(2) Where the prospective provider is unable to certify to any of the statements in this certification, such prospective provider shall attach an explanation to this certification.

Signature

Date

Name (type or print)

Title

PART 11
SIGNATURES

[Signature by or on behalf of the Quoter in the spaces provided below shall constitute execution of each and every Part of this Itemized Proposal and Declarations document. SIGNATURE MUST BE PROPERLY NOTARIZED.]

Written Signature: _____

Printed Name: _____

Title: _____

Important - Notary Signature and Seal Required in the Space Below

STATE OF _____

SS:

COUNTY OF _____

Subscribed and sworn to before me this _____ day of _____, 20____.

My commission expires: _____ (Signed) _____

Residing in _____ County, State of _____

POST QUOTE SUBMITTAL
SUBCONTRACTOR/SUPPLIER PARTICIPATION

A. SUBCONTRACTORS AND SUPPLIERS LIST

Instructions to Quoters: The Quoter shall submit a completed Subcontractor/Supplier list (see below) as required in ITQ 6.3.

*The Quoter shall enter the names, the type of work to be done, and the price, in the Subcontractors/Suppliers List for each subcontractor/supplier that the Quoter proposes to use for any part of the Work for the Project at an agreed price of **\$10,000.00** or greater, as part of the total amount Quote as stated above in Part 2.*

Only one subcontractor/supplier shall be listed for each line. Upon award of a contract, the named subcontractors/suppliers shall be employed to perform the work, unless changes are specifically authorized by the Owner. Failure to furnish all information requested may render the Quote non-responsive if it is determined that such omission materially affords the Quoter a substantial advantage over other Quoters.

Except as otherwise specifically stated by the Quoter in this Part, omission of any names of subcontractors/suppliers herein shall constitute an affirmative representation and statement that the Quoter proposes to use its own work force for that portion of the Work

Quoter's attention is directed to paragraphs 6.8, 6.9, and 6.11 of the City of Greenfield Standard General Conditions for Construction Contracts as they relate to use of subcontractors/suppliers.

Subcontractor Name	Work	Price
		\$
		\$
		\$
		\$
		\$
		\$

Supplier Name	Work	Price
		\$
		\$
		\$
		\$
		\$
		\$

(please duplicate and use this form, if additional sheets are necessary)

POST QUOTE SUBMITTAL
MANUFACTURERS LIST

Instructions to Quoters:

The Quoter shall enter, in the spaces provided below, the name of the manufacturer for ALL material and equipment listed below, to be incorporated into the Work.

Failure to enter a manufacturer's name for each listed equipment item may render the Quote non-responsive.

Preliminary acceptance of equipment listed by the manufacture's name shall not in any way constitute a waiver of the Drawing and Specification requirements covering such equipment. Acceptance will be based on full conformity with the Drawings and Specifications covering the equipment.

The Information submitted on this Post-Quote-2 page does not alleviate the Quoter from submitting the same required Subcontractor/Supplier information on the Post-Quote-1 page.

Material/Equipment Item

Manufacturer

POST QUOTE SUBMITTAL
E-VERIFY DOCUMENTATION
SEE ITQ SECTION 6.5

Pursuant to Indiana Code 22-5-1.7-11.1 the Contractor shall provide documentation that it has enrolled and is participating in the E-Verify program. Contractor is required to submit proof from the E-Verify Program that it is currently enrolled in the Program. An example of confirmation is the confirmation e-mail received from E-Verify that the Contractor has successfully enrolled in E-Verify.

AGREEMENT
City of Greenfield

THIS AGREEMENT is made and entered into as of the ____th day of _____, 2026.

by and between

“OWNER”: City of Greenfield, Indiana, by and through its Board of Public Works
10 S. State Street, Greenfield, Indiana 46140

and

“CONTRACTOR”:

concerning the following:

“PROJECT”: **26-WD-01: SOUTH STREET WATER REPLACEMENT**

“WORK”: **Installation of approximately 559 LFT of 8” D.I.P. water main and appurtenances in W. South Street between S. State Street and S. Pennsylvania Street in Greenfield, IN.**

“ENGINEER”: **Glen E. Morrow, PE**

RECITALS:

- A. The OWNER has heretofore caused to be prepared certain plans, specifications and other “Contract Documents” as hereinafter listed pertaining to the above described Project and Work, and the CONTRACTOR has filed Proposal to furnish said labor, tools, material, equipment, services, and perform said Work upon the terms and for the price(s) therein fully stated and set forth;
- B. The said Contract Documents accurately and fully describe the terms and conditions upon which the CONTRACTOR is willing to furnish the labor, tools, material, equipment, services, and perform the Work called for by the Contract Documents and in the manner and time and for the price(s) set forth herein.

THE OWNER AND CONTRACTOR AGREE AS FOLLOWS:

1. Contract Documents

1.1 This Agreement consists of the following Contract Documents all of which are as fully a part of this Agreement as if set out verbatim herein or attached hereto and the same do in all particulars become the Agreement between the parties hereto in all matters and things set forth herein and described:

- .1 This Agreement;
- .2 All Addenda issued prior to receipt of Quotes, whether or not receipt thereof has been acknowledged by CONTRACTOR in its Quote;
- .3 Special Conditions;
- .4 General Conditions;
- .5 CONTRACTOR's Itemized Proposal and Declarations;
- .6 Technical Specifications;
- .7 Plans;
- .8 City Standards and Specifications;
- .9 INDOT Standard Drawings;
- .10 INDOT Supplemental Specifications Sections 200 Series through Sections 900 Series;
- .11 INDOT Standard Specifications Sections 200 Series through Sections 900 Series;
- .12 Additional Requirements Section of the Quote Documents (change order forms, etc.);
- .13 Instructions to Quoters; and
- .14 Advertisement or Notice to Quoters;

1.2 In resolving conflicts, errors, discrepancies and disputes concerning the nature, character, scope or extent of Work to be performed or furnished by the CONTRACTOR, or other rights and obligations of the OWNER and CONTRACTOR, arising from or prescribed by one or more of the Contract Documents, the following rules shall govern:

- .1 A requirement occurring in one Contract Document is as binding as though occurring in all Contract Documents;
- .2 Calculated dimensions shall govern over scaled dimensions;
- .3 The Contract Documents shall be given precedence in the order listed in Paragraph 1.1 above; and

4. In documents of equal priority, if any such conflict, error, discrepancy or dispute cannot be resolved or reconciled by application of the rules stated in Subparagraphs 1.2.1 through 1.2.3, then the provision expressing the greater quantity, quality, or scope of work, or imposing the greater obligation upon the CONTRACTOR or affording the greater right or remedy to the OWNER shall govern, without regard to the party who drafted such provision.

2. Contract Price

- 2.1 The CONTRACTOR shall, in strict conformity with the Contract Documents, furnish all labor, tools, materials, equipment, services, assume and fulfill all obligations and perform all Work required to construct, complete, and make ready for use by the OWNER for the lump sum of _____ dollars (\$_____).
- 2.2 The summation of all Item Costs for the Contract Items shall equal the Lump Sum amount. The submitted Unit Prices for various Contract Items are for the purpose of establishing Change Orders. Change Orders are only for substantial changes beyond the intent of the project as illustrated on the project plans and specifications. Any necessary work not specifically itemized shall be considered incidental to any or all Contract Items.
- 2.3 The above stated Contract Sum will be paid to the CONTRACTOR in the manner and at such times as set forth in the Contract Documents.

3. Contract Time

- 3.1 It is hereby understood and mutually agreed, by and between the CONTRACTOR and OWNER, that the date of commencement and the time for completion of the Work as specified in the Contract Documents are ESSENTIAL CONDITIONS of this Agreement.
- 3.2 The CONTRACTOR agrees that the Work shall be commenced no later than the date indicated in the Notice to Proceed and that the Work shall be prosecuted regularly, diligently and uninterruptedly at such a rate of progress as will insure **Substantial Completion on or before 60 calendar days after Notice to Proceed, and Final Completion on or before 90 calendar days after Notice to Proceed.**
- 3.3 The CONTRACTOR and OWNER acknowledge and agree that the time allotted by this Agreement for the performance and completion of the Work is reasonable and takes into account any and all risks and adverse conditions assumed by CONTRACTOR hereunder.

4. Liquidated Damages

The CONTRACTOR and OWNER recognize and contemplate that unexcused failure by the CONTRACTOR to complete the Work within the Contract Time will cause the OWNER and the Public to suffer financial losses or inconvenience the full and exact extent and character of which cannot be measured as a basis for recovery by the OWNER of actual damages, and that liquidated damages as prescribed in the Contract Documents represent a fair, reasonable and appropriate estimate thereof. Accordingly, the CONTRACTOR agrees that such liquidated damages may be assessed and recovered by the OWNER, as against CONTRACTOR and its Surety, in the event of delayed completion and without the OWNER being required to present

any evidence of the amount or character of actual damages sustained by reason thereof. **Such liquidated damages shall be assessed and recovered at the rate of \$500.00 per day for delay in achieving Substantial Completion and at the rate of \$100.00 per day in achieving Final Completion of the Work.**

5. Effective Date

This Agreement shall be deemed effective as of the date and year first above written notwithstanding the date on which this Agreement has been executed by the respective parties or their representatives as stated below.

[REST OF PAGE INTENTIONALLY LEFT BLANK]

“CONTRACTOR” SIGNATURE:

IN TESTIMONY THEREOF, the CONTRACTOR has hereunder set his hand this _____ day
of _____, 20____.

Firm Name _____

Address _____

Telephone No. _____ Fax No. _____

By: _____
Signature

Printed: _____

Title: _____

“OWNER” SIGNATURES:

IN WITNESS WHEREOF, the OWNER does hereby accept the foregoing Agreement, and has
herewith set his/her hand this _____ day of _____, 20____.

For and on behalf of the City of Greenfield by its Board of Public Works.

Guy Titus, Mayor,

Katherine N. Locke, Member

Larry J. Breese, Member

Brent Robertson, Member

Glenna Shelby, Member

ATTEST:

Lori Elmore, Clerk Treasurer

Date: _____

ADDITIONAL REQUIREMENTS

TABLE OF CONTENTS

City of Greenfield Sample Change Order Forms	AR-2
Additional Indiana Code (IC) Requirements	AR-7
IC 5-16-13	AR-7

Following are specimen forms proposed to be used for the issuance of change orders, field orders, and work directive changes. Procedure for the development, submittal and processing of these forms will be discussed during the preconstruction conference.

CITY OF GREENFIELD

OWNER: CITY OF GREENFIELD

FIELD ORDER NUMBER: _____

DATE: _____

PROJECT NAME: _____

PROJECT NO: _____

You are hereby directed to execute promptly this Field Order which interprets the Contract Documents or orders minor changes in the Work without change in Contract Sum or Contract Time.

If you consider that a change in Contract Sum or Contract Time is required, please submit your itemized proposal to the Engineer immediately and before proceeding with this Work. If your proposal is found to be satisfactory and in proper order, this Field Order will in that event be superseded by a Change Order.

Description:

Attachments:

PROJECT MANAGER:

By: _____

Date: _____

CITY OF GREENFIELD

TO: WORK DIRECTIVE CHANGE NO. _____
DATE: _____
PROJECT NAME: _____
PROJECT NO.: _____

Specification Reference: _____

Drawing Reference: _____

DESCRIPTION OF WORK COVERED BY THIS DIRECTIVE CHANGE:

REASON FOR THIS ORDER:

AUTHORIZATION:

THIS WORK DIRECTIVE CHANGE AUTHORIZES THE WORK TO BE COMPLETED AS OUTLINED. A Contract Change Order in the amount of \$_____ will be issued to you in the near future to cover this Work Directive Change.

PROJECT COMPLETION DATE: ADD/DEDUCT/UNCHANGED _____ DAYS.

By: _____
Project Manager (Engineering)

By: _____
Resident Project Representative

By: _____
Project Manager (Construction)

By: _____
Administrator of Construction Services

CITY OF GREENFIELD

TO:

REQUEST FOR PROPOSAL NO.: _____

DATE: _____

PROJECT NAME: _____

PROJECT NO.: _____

Specification Reference: _____

Drawing Reference: _____ Drawing Date: _____

Identification of Attachments: _____

Please submit within fifteen calendar days of this request date a proposal showing increase, decrease or no change in contract price and/or contract time. Proposal shall be accompanied by four (4) copies of breakdown showing quantities, cost of material, equipment, labor, overhead, profit and basis for the additional time if any.

DESCRIPTION OF PROPOSED CHANGE COVERED BY THIS REQUEST:

REASON FOR CHANGE:

SPECIAL INSTRUCTIONS:

THIS REQUEST DOES NOT AUTHORIZE YOU TO PROCEED WITH THE ABOVE WORK NOR STOP PREVIOUSLY SCHEDULED WORK. Upon approval a Contract Change Order and a Notice to Proceed will be issued.

Please state in your proposal the effect the acceptance of this REQUEST will have on the project completion, if accepted within ____ days of proposal due date.

YOUR PROPOSAL DUE DATE: _____

By:

Project Manager

Date

CITY OF GREENFIELD

TO: CONTRACT CHANGE REQUEST NO.: _____

DATE: _____

PROJECT NAME: _____

FROM:

IT IS REQUESTED THAT A CONTRACT CHANGE BE MADE TO THE ABOVE REFERENCED CONTRACT.

1. SCOPE OF WORK (USE ADDITIONAL PAGES IF REQUIRED. ALSO LIST OTHER CONTRACTS INVOLVED.)

2. REASON FOR CHANGE:

3. APPROXIMATE COST CHANGE TO CONTRACT PRICE:

4. WILL THE CONTRACT NEED ADDITIONAL CONTRACT TIME TO COMPLETE THE CHANGE IN WORK SCOPE? ____ -YES ____ -NO ____ -(CALENDAR DAYS)

5. WILL THE CONTRACTOR NEED ADDITIONAL PERSONNEL TO COMPLETE THE CHANGE IN WORK SCOPE? ____ -YES ____ -NO

IF NO, TRADE(S): _____

NO. OF PERSONNEL: _____

DURATION: _____

6. IDENTIFICATION OF ATTACHMENTS:

DATE: _____ DATE: _____

PREPARED

REVIEWED BY: _____ REVIEWED BY: _____

Project Manager

Comments and Recommendation:

CITY OF GREENFIELD

TO: CONTRACT CHANGE ORDER NO.: _____
DATE: _____
PROJECT NAME: _____
ORIGINAL CITY P.O. NO.: _____

I. You are directed to make the following changes in this contract:

<u>ITEM</u>	<u>AMOUNT</u>	<u>SCHEDULED ADJUSTMENT</u> <u>(+) OR (-) DAYS</u>
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II. The following referenced documents further describe the changes outlined in Paragraph I, and are to be considered a part of this Change Order:

R.F.P.: _____ W.D.C.: _____

The changes result in the following adjustment of Contract Price and Contract Time:

Contract Sum prior to this Change Order	\$ _____
Contract Sum will be increased/decreased by this Change Order	\$ _____
New Contract Sum including this Change Order	\$ _____
Contract Time Prior to this Change Order _____	Substantial Completion Date _____
	Final Completion Date _____
Net increased/decreased resulting from this Change Order _____ Days	
Current Contract Time including this Change Order _____	Substantial Completion Date _____
	Final Completion Date _____

This Change Order is for full and final settlement of all direct, indirect, impact costs and time extension incurred at any time resulting from the performance of the changed work.

The Above Changes Are
Recommended:

The Above Changes Are
Accepted:

Approved:

Engineer

Contractor

Owner

Address

Address

Address

City/State/Zip

City/State/Zip

City/State/Zip

By _____

By _____

By _____

Phone _____

Phone _____

Phone _____

Date _____

Date _____

Date _____

INDIANA CODE (IC) ADDITIONAL REQUIREMENTS

I. IC 5-16-13

1. The definitions in IC 5-16-3 are incorporated by reference into this Section.
2. In accordance with IC 5-16-13-9, the Bidder, as a “Tier 1 contractor” (as defined in IC 5-16-3-4), if awarded a contract for the Work contemplated by this Bid must contribute:
 - (a) Work performed by the tier 1 contractor’s employees;
 - (b) Materials supplied directly by the tier 1 contractor;
 - (c) Services supplied directly by the tier 1 contractor’s employees; or
 - (d) Any combination of subdivisions (a) through (d);at least fifteen percent (15%) of the tier 1 contractor’s total contract price as determined at the time the contract is awarded.

NOTE: In accordance with Subsection 6.8.1 of the City of Greenfield Standard General Conditions for Construction Contracts (August 2018), the successful Bidder is required to perform with its own organization Work amounting to **not less than thirty percent (30%)** of the original or revised contract amount, whichever is less.

3. In accordance with IC 5-16-13-10, if awarded a contract for the Work contemplated by this Bid, the Bidder, as a “Tier 1 contractor”, and each “Tier 2 contractor” and “Tier 3 contractor” (as defined in IC 5-16-3-4 (i.e., subcontractors and sub-subcontractors)) employed to perform Work on the Project must maintain general liability insurance in at least the following amounts:
 - (a) For the each occurrence limit, one million dollars (\$1,000,000).
 - (b) For the general aggregate limit, two million dollars (\$2,000,000).

NOTE: The successful Bidder, its subcontractors and sub-subcontractors, are required to maintain all insurance coverage as provided for in Article 5 of the City of Greenfield Standard General Conditions for Construction Contracts (August 2018).

4. In accordance with IC 5-16-13-11, if awarded a contract for the Work contemplated by this Bid, the Bidder as a “Tier 1 contractor” and each “Tier 2 contractor” and “Tier 3 contractor” employed to perform Work on the Project:
 - (a) Shall submit, before Work begins, the E-Verify case verification number for each individual who is required to be verified under IC 22-5-1.7. An individual who is required to be verified under IC 22-5-1.7 whose final case result is final non-confirmation may not be employed on the Project.
 - (b) May not pay cash to any individual employed by the contractor for Work done by the individual on the Project.
 - (c) Must be in compliance with the federal Fair Labor Standards Act of 1938, as amended (29 U.S.C. 201-209) and IC 22-2-2-1 through IC 22-2-2-8.
 - (d) Must be in compliance with IC 22-3-5-1 and IC 22-3-7-34.
 - (e) Must be in compliance with IC 22-4-1 through IC 22-4-39.5.
 - (f) Must be in compliance with IC 4-13-18-1 through IC 4-13-18-7.
 - (g) Must comply with IC 5-16-13-12, if applicable.

5. In accordance with IC 5-16-13-12, if awarded a contract for the Work contemplated by this Bid, the Bidder as a “Tier 1 contractor” and each “Tier 2 contractor” employed to perform Work on the Project,

if they employ fifty (50) or more journeymen:

- (a) Must provide access to a training program applicable to the tasks to be performed in the normal course of the employee's employment with the contractor.
- (b) Shall participate in an apprenticeship training program that meets the standards established by the United States Department of Labor, Bureau of Apprenticeship and Training.
- (c) May comply with this section through any of the following:
 - (1) An apprenticeship program.
 - (2) A program offered by Ivy Tech Community College of Indiana.
 - (3) A program offered by Vincennes University.
 - (4) A program established by or for the contractor.
 - (5) A program offered by an entity sponsored by the United States Department of Labor, Bureau of Apprenticeship and Training.
 - (6) A program that results in the award of an industry recognized portable certification.

- 6. In accordance with IC 5-16-13-13, if awarded a contract for the Work contemplated by this Bid, the payroll and related records of the Bidder as a "Tier 1 contractor" and each "Tier 2 contractor" and "Tier 3 contractor" employed to perform Work on the Project, must be:
 - (a) Preserved by the contractor for a period of three (3) years after completion of the Project Work; and
 - (b) Open to inspection by the Indiana Department of Workforce Development (DWD).

In accordance with IC 5-16-13-14, if the City of Greenfield suspects a misclassification of one (1) or more workers by a contractor in any contractor tier working on the Project may request in writing that DWD investigate the suspected worker misclassification, and in so doing shall provide to DWD any information or records that the City has concerning the misclassification. DWD may investigate such a request, and if it finds information or records that support a finding that worker misclassification has occurred, DWD may refer the matter to the appropriate agency or official for further action.

- 7. In accordance with IC 5-16-13-15, if the City of Greenfield reasonably suspects the Bidder awarded a contract for the Work contemplated by this Bid or any "Tier 2 contractor" and "Tier 3 contractor" employed to perform Work on the Project has violated a provision of IC 5-16-13, the City is required to do one (1) of the following:
 - (a) If the suspected violation concerns or is related to any of the following provisions, the City shall refer the matter to the appropriate agency as follows:
 - (1) For a suspected violation of IC 5-16-13-11(1) (E-Verify), the Indiana Department of Labor.
 - (2) For a suspected violation of IC 5-16-13-11(3) (the federal FLSA or state minimum wage law), the Indiana Department of Labor.
 - (3) For a suspected violation of IC 5-16-13-11(4) (worker's compensation or occupational diseases), the Worker's Compensation Board of Indiana.
 - (4) For a suspected violation of IC 5-16-13-11(5) (unemployment insurance), the Department of Workforce Development.
 - (b) If the suspected violation concerns a provision of IC 5-16-13 other than a provision listed in subdivision (a), the City shall require the contractor to remedy the violation not later than thirty (30) days after the City notifies the contractor of the violation in accordance with IC 5-16-13-15(b)(2). During the thirty (30) day period, the contractor may continue to work on the Project; however, if the contractor fails to remedy the violation within the thirty (30) day period, the City shall find the contractor not responsible and shall determine the length of time the contractor is considered not responsible by the City based on the severity of the violation. The period during which a contractor is considered not responsible:

- (1) May not exceed forty-eight (48) months; and
- (2) Begins on the date of substantial completion of the Project.

A finding by the City that a contractor is not responsible under this section may not be used by another public agency in making a determination as to whether the contractor is responsible for purposes of that public agency's award of a public works contract to that contractor.

TECHNICAL SPECIFICATIONS

City of Greenfield

408 WATER DISTRIBUTION SYSTEM

1. The plans for the installation of a public water main supply system shall be as shown on the plan set labeled “South Street Watermain Replacement.”
2. The purpose of these Water Distribution System Construction Standard Specifications is to ensure quality workmanship, adequate pressure and fire protection, and last but not least, to guarantee the residential, commercial, and industrial customers of the Greenfield Water Utility clean and safe water.
3. Failure to abide by these Specifications and or City of Greenfield Ordinance will result in the immediate suspension of any waterline construction activities.
 - a. A full-time Water Utility Inspector may be required for work to resume.
 - b. See section 52.16 of the Water Utility Ordinances.
4. PUBLIC WATER SYSTEM SPECIFICATIONS
 - a. GENERAL
 - i. SCOPE
 1. WATER DISTRIBUTION SYSTEM STANDARD SPECIFICATIONS - The City of Greenfield Water Utility (Public Water System Identification Number 5230004) has established the following Specifications for contractors to follow when installing water lines in the City of Greenfield.
 - b. DEFINITIONS
 - i. The following definitions/ abbreviations shall apply
 1. ASTM- American Society for Testing and Materials, Latest Edition
 2. City- City of Greenfield
 3. Engineer- City of Greenfield Engineer
 4. INDOT- Indiana Department of Transportation
 5. IDEM- Indiana Department of Environmental Management
 6. NOI- Notification of Intent to Construct a Water Main Extension
 7. Utility- City of Greenfield Municipal Water Utility
 8. Waterlines- Any pipe that carries potable water from the public water main to the meter.
5. SUMMARY OF STANDARDS SECTION
 - A. Submittals
 - B. Products for Potable Water distribution system
 - C. Execution of the Installation of Potable Water System pipes
 - D. Installation of all required and restraint couplings.
 - E. Flushing, cleansing, and disinfecting of Piping System.
 - F. Pressure Testing of Piping System.
 - G. Bacteria Testing of Piping System
 - H. Back-Flow Preventers Requirements
 - I. Utility Regulations for Water Service Connections
 - J. Requirements for Existing Water system testing
 - K. Charges Established.

6. STANDARDS SECTION

A. SUBMITTALS

1. Along with the City of Greenfield Specifications, any contractor installing waterlines must submit a construction permit or NOI application to the Drinking Water Branch of the Indiana Department of Environmental Management.
 - a. No construction will be allowed without first obtaining a NOI, or permit (if required), approval from IDEM.
 - b. The City of Greenfield Water Utility must sign this application for approval before it will be accepted by IDEM.
 - c. The Water Systems capacity information will be provide to the applicant at technical review meeting. This information and subsequent calculations must be submitted to the Greenfield Water Utility prior to the project being approved to be constructed.
 - d. When submitting this application to the Water Utility, a set of Final Approved construction plans must be included.
 - e. These plans, along with the application, must be stamped and signed by a State of Indiana Registered Professional Engineer.
 - f. Applicants whom are submitting plot plans for approval for the construction of a building on a lot within the City of Greenfield, shall be reviewed for compliance with the current City Water Main Standard Specifications.
 - i. The City of Greenfield and or the Greenfield Water Utility shall not be held liable for any infrastructure changes that may or may not be required to accommodate the construction on a lot within the Limits City of Greenfield.
 - ii. Product data sheets must be submitted on all Contractor supplied materials including pipe, valve boxes, valves, mechanical joints, fittings, tees, and all other miscellaneous products proposed for use.
 - iii. All material used in the construction of waterlines and mains in the Greenfield Municipal Service Territory must be Domestic made and purchased unless otherwise approved.

2. PROJECT RECORD DOCUMENTS

- a. Record drawings shall be supplied to the City within 90 days of the completion, testing, and acceptance of installed water system.
- b. The record drawings shall be submitted as hard copy and digital copy, as well as ARCGIS drawing file or format approved by Greenfield GIS Coordinator.
- c. The ARCGIS drawing file and hard copy will identify all locations of installed piping, valves, fittings, hydrants, and service lines from known reference points.
- d. The final record documents will clearly state if the subdivision will have private infrastructure if applicable.

3. QUALITY ASSURANCE

a. CODES AND STANDARDS

- i. Comply with all Current City of Greenfield Water Ordinances.
- ii. Comply with these standards as addition to City of Greenfield Water Ordinances.
- iii. Comply with "American Water Works Association" (AWWA) standards to extent indicated by references herein. All references shall imply the latest revision.
- iv. Comply with "Recommended Standards for Water Works" (Ten States Standards) to extent indicated by references herein. All references shall imply the latest revision.
- v. Comply with requirements of the City of Greenfield Engineering Department for work along property lines, on public property, and utility easements.

b. Installer's Qualifications:

- i. Contractor shall have a minimum of three years of verifiable experience installing water distribution systems of type required.
 1. This three years of water installation projects must be submitted prior to the primary Technical Review Committee Meeting.
- ii. This experience, as expressed in previous projects, shall be submitted by the Contractor at least two weeks prior to the primary Technical Review Committee Meeting for the application being considered for approval for construction.

4. PROJECT CONDITIONS

- a. In the event that any unknown or unmarked active utilities be broken during excavation work, stop work immediately. Do not proceed further with work until decision has been reached regarding repair, disposition, or relocation of utilities. Notice must be made to the Greenfield Water Utility.
 - i. The City of Greenfield Engineer, Project Manager, and or the Water Utility Manager or their designee will make any determination of impact utilities.
 - ii. Storm water field tiles must be repaired, rerouted, or connected to a storm sewer system when encountered.
 - iii. Any drainage tiles, regardless of its apparent condition, that is damaged or severed during construction must be repaired.
 - iv. Examine areas and conditions under which water system's materials and products are to be installed.
 1. Do not proceed with work until satisfactory conditions are present.
 2. 48 hour notice and site inspection by the Water Utility must proceed any water line installation.

5. SEQUENCING AND SCHEDULING

- a. Construction Sequence:
 - i. 48 hour notice must be given to the Water Utility prior to the start of any construction.
 1. Based on the City of Greenfield business schedule
 - ii. Contractor shall submit proposed detailed construction sequence for:
 1. Connection to active water mains by hot tap. No contractor shall initiate shutting down of active water mains unless said shut down has been coordinated with and at the direction of the Greenfield Water Utility.
 2. Proposed method of disinfecting of new system or main.
 3. Coordination with Greenfield Water Utility is defined as scheduling construction, inspection, valve actions, or any other city involved activity; must be done with at least two City of Greenfield business day notice.

6. ISOLATION OF NEW IMPROVEMENTS

- a. The new construction water main isolation valves shall remain closed until all testing has been completed and accepted by the Water Utility.
 - i. At no time shall any contractor open or close any water valve.

B. PRODUCTS

1. All products used in any and all water line or main installation will be domestic material only.
 - a. If any product to be used in the installation of water main is found to be non-domestically made or incorrectly installed, the developer will be required to remove the unapproved materials and re-install the correct approved materials.

2. WATER MAINS

- a. Pipe shall be ductile iron manufactured in accordance with the requirements of ANSI/AWWA/WA C111/A21.1
- b. DUCTILE PIPE
 - i. Class 52 and Class 350 pressure pipe.
 - ii. Pipe and fittings shall meet or exceed ANSI/AWWA C104/A21.4
- c. SDR 11 HDPE
 - i. Pipe may be used for boring under highways, creeks, ditches, etc. as approved by the Water Manager or their representative on a stamped set of plans.
 - ii. Ductile iron fittings must be used with HDPE pipe
 - 1. Harvey adaptors are required to transition from HDPE to Ductile Iron pipe.
 - iii. Contractors are required to pull back a minimum of two sets of tracer wires with any bored in main or line.
- d. ACCEPTABLE MANUFACTURERS
 - i. Will be determined when material submittals are reviewed prior to the start of site construction.

3. CORPORATION STOP (TAP) – $\frac{3}{4}$ " – 1"–1 $\frac{1}{2}$ "–2"

- a. Tap is to be easy turning, ball valve having a round, full-open, unobstructed flow way with AWWA taper threads (CCI) and CTS compression outlet.

4. FITTINGS

- a. Ductile-iron, cement lined AWWA C 104; and rubber-gasket joints, AWWA C111.
- b. Fittings shall be ductile iron and in accordance with the requirements of either ANSI/AWWA C153/A21.53 or ANSVAWWA C110/A21.10.
- c. Mechanical joints shall conform to ANSI/AWWA C111/A21.11. TAPS MADE ON WATER MAIN
 - i. New subdivision main installation shall be made by hot tap of existing city water mains.
 - ii. Single service taps shall be made by using a Stainless Steel Full Circle Clamp type tapping sleeve.

5. TAPPING VALVES

- a. AWWA C509 compatible with stainless steel tapping sleeve
 - i. 175 psi minimum working pressure.
 - ii. Iron body, resilient wedge, non-rising stem, O-ring type packing, and left hand open.
 - iii. 2" square operating nut, flanged inlet, and mechanical joint outlet connection.
 - iv. Acceptable manufacturer is Mueller or Kennedy.

6. GATE VALVES

- a. AWWA C509,
 - i. 175 psi minimum working pressure.
 - ii. Iron body, resilient wedge, non-rising stem, left hand open,
 - iii. 2" square operating nut, mechanical joint ends, O-ring packing.
 - iv. Acceptable manufacturer is Mueller or Kennedy.

7. VALVE BOXES

- a. Two-piece screw type shaft,
 - i. 5" minimum inside diameter
 - ii. Cast iron of 1/4" minimum thickness, flared base.
 - iii. Centering disk
 - iv. Appropriate water labeled valve box lid
- 8. GLANDS, GASKETS, BOLTS, AND NUTS
 - a. AWWA C111 MEGA LUG restraints shall be used on all mechanical joints.
- 9. FIRE HYDRANT ASSEMBLIES (Includes anchor tee, valve, valve box, adapter pipe, and hydrant)
 - a. Assembly must be approved by the City.
 - i. TEE:
 - 1. Mechanical joint with 6" branch line for anchoring and locking hydrant assembly in place
 - 2. Include split gland.
 - 3. 6" Valve and Valve Box: See Items 6 and 7 of this section
 - ii. ADAPTER PIPE
 - 1. 6" diameter by 2'-0" long minimum for locking valve to hydrant.
 - 2. Use anchor couplings when distance permits
 - iii. HYDRANT
 - 1. AWWA C502, 5-1/4" valve opening with 6" barrel.
 - a. Two 2-1/2" nozzles, one 5" Storz Connection
 - b. Ground line breakable flange
 - c. Self-draining
 - d. Left Hand open
 - e. Stainless steel bolts threads and operating nut sizes conforming to municipality standard.
 - f. Mueller Super Centurion, Kennedy K81 Guardian are accepted.
 - b. PIPE COUPLINGS
 - i. Suitable for size and gap between pipes being coupled.
 - c. BACKFILL
 - i. #8 stone is the only material to be placed around hydrant drain holes.
 - ii. #8 stone must cover to a minimum of 18" above drain holes
 - iii. #24 sand is the only backfill allowed for all pipe materials and sizes.
 - d. COLOR
 - i. All hydrants will have the barrels painted safety yellow.
 - 1. Public Hydrants
 - a. The 2 1/2" hose caps will be painted the color of the size of the main the hydrant leg is attached.
 - 2. Private hydrants
 - a. The bonnets painted to match the 2 1/2" hose caps. These caps will be painted the color of the size of the main that the hydrant leg is attached.

ii. Color reference by main size:

1. 20" - Gold
2. 16" – Orange
3. 12" – Yellow
4. 10" – Black
5. 8" – Green
6. 6" – Red

10. BUILDING WATER SERVICE LINES

a. PIPE MATERIAL

- i. Type K soft copper required from tap and tapping saddle to stub out.
- ii. Water service lines will be installed perpendicular from the water main to the location of the water service meter pit.
- iii. There will be one water service line for each lot sized appropriately for the building to be served by the Municipal Water System.
- iv. No other connection will be made inside the City meter pit.

11. CUSTOMER METER PITS

i. 5/8" Standard Meter Pit- Residential standard

1. 18"x 36" polyethylene pit body.
2. The meter pit cover shall be an 18" Ford ring and lid, pierced for a radio read antennae. Lids to have recessed centers.
3. Packed #24 sand shall serve as the pit base.

ii. 1" Standard Meter Pit- As Approved

1. 24"x36" to 48" polyethylene pit body
2. The meter pit cover shall be a 24"x18" expansion ring with a pierced 18" Ford ring and recessed center lid.
3. Packed #24 sand shall serve as the pit base.

iii. 1.5" or 2" services

1. Require a 2" tap with 2" gate valve and 5 1/4" valve box
2. 1.5" or 2" curb stops shall not be permitted.

b. INDOOR WATER METERS

- i. 1" or larger, along with the check valve assemblies, shall be placed indoors in the manner approved by Water Utility Distribution Foreman or appointed representative.
- ii. A meter set drawing is available at the Water Utility for 1" and larger interior meter setting.
- iii. Interior meter settings will be made in accordance with AWWA Standard M33 current edition.

12. RECORD DRAWINGS

- a. The Developer shall provide the City with record drawings for all water mains with services, in accordance with Section B(a)(iii)(5) of the current water standard specifications
- b. The Contractor shall provide the City with all internal "As-Built" locations upon completion of the water main installation and prior to pressure testing of the main.

- c. Submission to include shape file drawing for GIS update as per City GIS Coordinator.

13. SITE RESTORATION

- a. All areas disturbed by any construction on and off site, shall be restored to its original condition.
- b. Excess construction material shall be removed from the project area as directed by the Developer at the Contractor's expense.
- c. All disturbed area shall be seeded.
- d. All City easements shall be seeded and straw covered.
- e. Netting may be required depending upon construction location.

14. EXECUTION OF THE INSTALLATION OF POTABLE WATER SYSTEM PIPES

1. BONDS, LOCATES, AND PERMITS

- a. The contractor shall furnish all bonds necessary to get permits from the City prior to starting construction.
- b. It shall be the responsibility of the Contractor to determine the location of existing utilities by calling IN811 48 hours prior to any excavating.
- c. The Contractor will be further responsible for maintaining operation of the active utilities.
 - i. The Contractor and or developer will be responsible for any modification of any installed Water infrastructure.
 - ii. The Contractor and or developer will be responsible for the due diligence to survey and plan any require infrastructure modifications or replacements.
- d. The Engineer will not be responsible for any damages caused by erroneous location shown or by the omission of a utility location on the plans. An IDEM approved application must be on file with the utility prior to the start of water main systems.
- e. The Developer shall be responsible for all approvals, permits, and easements.
- f. The Developer shall dedicate all water mains and easements containing public water mains to the City.

2. PRE-CONSTRUCTION CONFERENCE

- a. Prior to the beginning of any construction on the project site, a pre-construction conference will be scheduled with the City.

3. GENERAL REQUIREMENTS

- a. The current City Water Standard Specification shall prevail as to materials and methods of construction.
 - i. All future water main installation, either connected to or extended from this system shall be constructed in accordance with these specifications.
 - ii. All lots shall be served by a 3/4-inch water service line, as a minimum.
 - iii. Irrigation systems shall not be connected inside the City meter pit.
 - 1. Separate meter setting is required.
 - 2. Irrigation services shall be a separate water main tap and setting.

4. EROSION CONTROL

- a. The contractor shall be responsible for temporary erosion control measures during construction (i.e., straw bales around storm inlets and swales that exit the site). Where required, the Contractor shall be responsible for obtaining a Storm Water

NPDES permit for the project. All erosion measure shall be made in accordance with current City Storm Water Standard Specifications.

5. SAFETY

- a. The Contractor is required to adhere to City of Greenfield Safety Policies, regulations, and requirements at all times.
- b. Failure to comply with any safety requirement will result in a stop of all work on the site until the safety deficiency is corrected.
- c. No animals, children, non-essential employees on city property. Only the individuals completing the task assigned.
- d. Contractors are to follow all OSHA State, Federal and Greenfield guidelines (always adhering to the more stringent regulation).
- e. Contractors are to check in with the department Manager or PM when starting a project.

6. TRENCH SAFETY AND CONFINED SPACE ENTRY

- a. The contractor is responsible for safety at the job site. Compliance with all City of Greenfield, State, and Federal safety regulation, including but not limited to construction trench safety and confined space entry regulations, shall be the responsibility of the Contractor.

7. SEPERATION DISTANCES

- a. Sewer (to include Storm Water sewer) and water mains shall be laid with at least a 10-foot horizontal separation. The distance shall be edge to edge. In cases where it is not practical to maintain a 10-foot separation, deviation may be allowed on a case-by-case basis. Such deviation may allow installations of sewers and water mains closer provided that the water main is in a separate trench or on an undisturbed earth shelf located on one side of the sewer and at an elevation so the bottom of the water main is at least 18-inches above the top of the sewer.
- b. For crossings of water main and sewers, a minimum 18-inch vertical separation between the two pipes shall be provided as measured from the outside of the sewer to the outside of the water main. The crossing shall be arranged so that the sewer joints will be equidistant and as far as possible from the water main joints.
- c. Where it is impossible to obtain proper horizontal or vertical separation, as indicated above, both the water main and sewer shall be constructed of ductile iron pipe with mechanical joints complying with the current City Water Main Standard Specification and be pressure tested to 150 PSI to assure water tightness before backfilling

C. INSTALLATION OF ALL REQUIRED MAIN, HYDRANTS, SERVICE LINES, AND RESTRAINT COUPLINGS.

1. EXCAVATION

- a. Perform excavating work through whatever materials are encountered (including rock), in obtaining indicated elevations.
- b. Perform removals of any obstructions to obtain this condition at no cost to Owner.
- c. Use shoring to support trench walls as required per OSHA Standards.
- d. Remove excess and unsatisfactory excavated materials from site and dispose of in a legal manner.
- e. Stockpile satisfactory excavated material at distance from banks of trenches sufficient to avoid overloading and cave-ins, but in no case closer than 1/2 depth of excavation.
- f. Provide adequate drainage around stockpiled material, shunting surface water away from open trenches.

2. PIPING INSTALLATION

- a. All water main to be installed in the City of Greenfield shall be designed and installed to create loops and prevent the addition of non-connected mains in any water main system.
 - i. If a non-connected section must be built due to limitations beyond the control of the petitioner a blow off hydrant and valve will be installed to allow future expansion without taking customers out of service. See subsection 5.
- b. Pipe for water mains shall be a minimum of 6-inch diameter or larger as indicated for the particular project for areas that require fire protection in accordance with Ten States Standards.
- c. Inspect pipe before installation for apparent defects. Mark individual defective materials with white paint and promptly remove from site.
- d. Pipe stored onsite will be stored in such a manner to prevent infiltration of dirt and untreated water from entering the pipe.
- e. The pipes will be covered with an impermeable cover that is securely attached to the pipe.
- f. Valves for Water Mains, "T's", Hydrants, etc. shall be clustered as close as practical to facilitate ease of operation and locating in future required maintenance.
 - i. Valves must be placed at all points on tees and crosses.
 - ii. Distances must not exceed 600 feet between valves.
- g. Install system in accordance with AWWA C600 "Standard for Installation of Ductile-Iron Water Mains, C900, DR14 and HDPE Pipe Water Mains and Their Appurtenances."
 - i. All codes and standards shall meet or exceed state regulations 327 IAC 8-3.2 Technical Standards for Water Mains.
 - ii. A copy of this standard shall be maintained at project site for reference.
- h. HDPE water mains shall be installed with minimum of two #10 tracer wire.
 - i. Tracer wire shall be fastened to the main at intervals not to exceed 10 ft. and shall be positioned at the top or 12 o'clock position of the pipe.
 - ii. Tracer Wire may be spliced by using a sealed DryConn connector.
 - iii. The wire's coating must be stripped at these connections to ensure electrical continuity to facilitate future utility locating requirements.
 - iv. Water main "T" junctions shall also be connected at these locations to facilitate the same.
 - v. Tracer wires for hydrants shall be exposed, stripped and fastened to the upper most flange bolts above ground level.
- i. In placing pipe, jointing, bleeding, backfill and embankment construction, exercise care to see that the pipe is not damaged during unloading or placement on bed.
- j. During compacting of backfill, by movement of heavy equipment over fill, or by any other forces that may cause damage.
- k. Remove and replace any pipe which is not in true alignment and grade, or which shows undue settlement after laying or is otherwise damaged.
- l. Install piping only by laying sections of pipe up slope
 - i. Install spigot ends into previously laid bell ends.
 - ii. Install piping with uniform bearing along its length.
 - iii. Pipe deflection will not be accepted.
 - iv. Pipe ends must be protected by placing a protective cover over the pipe at the end of each work day.

- m. Backfill under pipe 6" with #24 sand. Extend up around and 24" over the pipe. Above this level use one of the following methods:
 - i. In lawn areas, use clean earth backfill and place 6" lifts and compact to 90% maximum density (at optimum moisture content) as determined by Modified Proctor Tests. ASTM D 1557.
 - ii. In paved areas backfill, compact, and fill with concrete per applicable standards
 - 1. City Street Principles and Standards of Design
 - 2. Current INDOT Standards and Specifications
 - 3. Full depth granular material and #24 sand must be used within 5 feet of all pavement areas and under sidewalks.
 - 4. Cut off sheeting at 2'-0" below finish grade when backfilling reaches that approximate level.
 - 5. Curbs shall be marked with "W" where the service line crosses onto lot from the water main.
 - 6. The water service line shall be installed perpendicular from the water main to the water meter pit.
- n. Water for testing, filling and flushing shall be from approved source available from the City without charge.
- o. Unless otherwise approved the Contractor will not permit the use of hydrants, or other water sources for construction activity without the expressed written permission of the Water Utility.
- p. Pipe shall be a minimum of 8" Ductile Iron Pipe (DIP) for the main public roads of a new subdivision.
- q. Pipe shall be a minimum of 6" DIP for a subdivision cul-de-sac following the curve of the road ending with a 5' bury height hydrant as per these standards.
- r. 54 inch minimum cover shall be maintained for new work except as required to transition to meet existing water line elevations.
 - i. Not more than 30 feet of trench shall be dug in advance of completed pipe laying excavation.
 - ii. Blocking as specified in AWWA C600 Section 8 shall not be provided except concrete blocks shall be used.
 - iii. Concrete shall not be poured on any water line.
 - iv. Mega-lug restraint collars shall be used.
 - v. Restraint collars 2 joints on each side of a 90 degree change in direction and one joint on each 45, 22.5, 11.25 degree change in direction.
- s. Stock pilings of granular materials must be surrounded by approved erosion control material such as coconut logs or approved equal.
- t. AWWA C600 Section 11.4 shall not apply, and Section 11.5 shall not apply unless indicated otherwise.
- u. Anchorage for hydrants shall be through anchorage fittings as specified. No other means are acceptable.
- v. Fire Hydrants will be used as the only means for dead end blow off.
 - i. Upon extension of the water main, the blow off fire hydrant will be returned to the Water Utility.
 - ii. Fire Hydrants shall be placed no more than 400 feet from one hydrant to the next.

3. SITE RESTORATION

- a. All areas disturbed by any construction on and off site, shall be restored to near its original condition.
- b. Excess construction materials shall be removed from the project area as outlined in construction plans.
- c. All disturbed area shall be seeded in the best method required to prevent erosion.
- d. All City easements shall be seeded and covered.
- e. Lawn netting may be required depending upon construction location.

D. CLEANING AND DISINFECTION WATER DISTRIBUTION PIPING REQUIREMENTS

1. CLEANING OF WATER MAINS

- a. Notify the Utility representative at least 2 working days prior to the commencement of cleaning and disinfecting activities.
- b. Water for testing, filling, and flushing shall be from approved source available from the City without charge.
- c. Contractor shall not permit the use of hydrants or other water sources for construction activity without the expressed written permission of the Water Utility Manager or their designee.
- d. Contractor shall purge all new water distribution piping systems and parts of existing systems that have been altered, extended, or repaired, prior to use.
- e. Use the purging and disinfecting procedure proscribed by the City jurisdiction or, in case a method is not proscribed by that authority, use the procedure described in AWWA C65 1, or as described below.
- f. Comply with NFPA 24 for flushing of piping, flush the piping system with clean, potable water until discolored water does not appear at the points of outlet.
- g. Fill the system or part thereof with a water/chorine solution or place granular chlorine as main is installed to achieve 50 parts per million chlorine residual.
 - i. City of Greenfield Water Utility personnel will Isolate (valve off) the system or part thereof and allow to stand for 24 hours.
 - ii. Drain the system or part thereof of the previous solution
 - 1. When the main is to be drained containing high strength chlorine, the chlorinated water must be de-chlorinated prior to any discharge to storm or sanitary sewer system, or open ground.
 - 2. Following the allowed standing time, flush the system with clean, potable water until chlorine levels above 1.5 ppm does not remain in the water coming from the system.
 - 3. When the main is to be drained containing high strength chlorine, the chlorinated water must be de-chlorinated prior to any discharge to storm or sanitary sewer system, or open ground.

2. SHUTDOWN OF ACTIVE WATER MAINS

- a. "Hot Taps" are the preferred method of extending or adding a section of water main to an existing main.
- b. Only in extreme cases will the utility permit the isolation of an existing water main.
- c. If in these extreme and rare cases, portions of existing water distribution system is required to be isolated to make new connections, minimum two (2) week advance notice shall be given to Utility.
- d. These shutdowns shall be shown on the construction schedule.
- e. Times for shutdown shall be coordinated with and shall be at discretion of the Utility
- f. Existing valves shall be operated only by Utility personnel.

- g. New connections shall be made in such a manner that the water service is shut off to existing users for a maximum of 4 hours.
- h. 48- Hour advance notice shall be given to affected water users that their water will be shut off after authorization from the Utility has been obtained.
- i. Contractors shall be responsible for the delivery of notices to those affected indicating date, time, and duration of shut down.
- j. Contractors must confirm with Utility those services that may be affected and then adhere to the times stated in notice.

E. PIPE TESTING

1. HYDROSTATIC TESTS

a. NOTIFICATION

- i. The Contractor shall notify the Utility 2 working day prior to testing.
 - 1. A Utility representative shall be present for all testing.
 - 2. The Contractor shall provide all temporary bracing for testing operations.
 - 3. Refer to Water Utility Ordinances for charges involved with water main testing or when additional inspection services are required due to poor construction practices witnessed by Utility Employees.

b. TEST PROCEDURE

- i. Test at not less than 150 psi for 4 hours.
- ii. Maximum allowable loss 5 psi over 4 hours.
- iii. Remake leaking joints with new materials and repeat test until leakage is within above limits.
- iv. Prepare reports for all testing activities.

c. BACTERIA TESTING

- i. A Certified Greenfield Utility Water Operator shall be responsible to collect and submit the first three sets of water samples to the City of Greenfield's designated State approved Laboratory for testing. Sample collection will be scheduled at the discretion of the Water Utility.
 - 1. A set of samples is defined as the collection of two specimens from each required location in the newly constructed water main.
 - 2. Should subsequent sets of samples be required, the contractor will be financially responsible for each additional set.
 - 3. At least one set of samples shall be collected from every 1,200 ft (366 m) of the new water main, plus one set from the end of the line and at least one set from each branch.
 - 4. Under no circumstance will any water line be accepted by the City until the Utility has received completed testing paperwork from the City of Greenfield's designated State Approved Laboratory stating the bacteriological testing is satisfactory.

F. CROSS CONNECTION AND BACKFLOW PREVENTION DEVICES

- 1. Backflow preventers shall comply with AWWA standard C511.
- 2. Double backflow assemblies shall comply with AWWA standard C510.
- 3. In no case will any backflow preventer be housed in a vault or below ground.
- 4. Backflow prevention devices shall be installed after the Public Water Utility Meter in all cases.

5. No installation of public water supply piping or part thereof shall be made in such a manner that it will be possible for used, unclean, polluted or contaminated water, mixtures or substances to enter any portion of such piping from any tank, receptacle, equipment or plumbing fixture by reason of back siphonage or any other cause, either during normal use and operation thereof or when any such tank, receptacle, equipment or plumbing fixture is flooded or subject to pressure in excess of the pressure in the hot-or-cold-water piping;
6. No person shall make a connection or allow one to exist between pipes or conduits carrying domestic water supplied by any public or private water service system, and any pipes, conduits or fixtures containing or carrying water from any other source or containing or carrying water which has been used for any purpose whatsoever, or any piping carrying chemicals, liquids, gases, or any substance, unless there is provided an approved backflow prevention device.
 - a. IDEM's approval must be obtained before any connection is made between the domestic supply and any contaminated, polluted, or auxiliary water system; and,
7. No plumbing fixture, device or construction shall be installed or maintained or shall be connected to any domestic water supply when such installation or connection may provide a possibility of polluting such water supply or may provide a cross connection between a distributing system of water for drinking and domestic purposes and water which may become contaminated by such plumbing fixture devices or construction unless there is provided an approved backflow prevention device.
8. All connections from the public water supply to the temporary location will be made with:
 - a. No-lead connections wyes or valves
 - b. Food grade water hose for the entire length from the first connection to the public water supply to the end consumer
 1. All food grade hoses will be set in such a manner to prevent any connection or portion of the hose to lay in standing water or come in contact with unsanitary conditions.

G. UTILITY REGULATIONS FOR WATER SERVICE LINE CONNECTIONS

1. The Builder or Contractor must obtain both the water and sewer permits at the same time, assuming that both types of permits are required.
2. All permits issued must have the appropriate address and/or lot number. The Builder's name must also appear on the permit. If the builder has not been determined, then the Owner's name must appear on the permit.
 - a. If connecting to the Public Water System from a private well on an existing parcel the home/land owner will be required to provide a letter from a licensed plumber certifying that well has been disconnected from the customer owned service line.
 - b. Type K soft copper to installed from main to water service pit.
 - i. Only Type K Copper tubing will be accepted in the meter pit.
 - ii. Copper tubing must start at the in-line stub out valve.
 - iii. The tubing must then turn up in the pit and connect to the yoke with a ball angle valve, leave the opposite side of the yoke from a ball angle valve, exit the meter pit and end with a CTS coupling about 3' from the meter pit toward the structure.
 - iv. The water line, pit base and 50% of the barrel must be backfilled with #24 sand after the first inspection.
 - v. Meter pit standard drawing must be used for installation as approved in current Greenfield City Water standards.
 - c. #10 Tracer wire is required to be installed from the meter pit to the house. Must have excess wire in the meter pit to reach 2' above meter pit.

- d. Under no conditions shall any water service lines be backfilled until a Representative of the Utility has inspected all work.
- e. The water service lines and water main taps to all lots shall be located in such a manner that the water service line to the meter pit is not located in the driveway pavement area.
 - i. If the water service lines are found to be in conflict with a proposed driveway or private sidewalk pavement area, the Contractor shall be required to relocate the service line.
 - ii. Water service line relocation shall be done so at the Builder's/Owner's/Developer's expense
- f. The meter pit should be located in such a manner to prevent vehicle traffic from causing damage to the installation.
- g. The Utility should be notified at least one week prior to the date the meter pit scheduled for completion.
- h. If water service lines are stubbed onto the property before construction of the building, it is the responsibility of the contractor to keep this line marked with a steel sign post during construction.
- i. The Water Utility will not install the meter unless the line meter pit has passed the final inspection. This is the responsibility of the builder.
- j. Business and/or commercial structure meters must be installed in a mechanical room or utility room approved by the Water Utility.
- k. The required backflow device must be installed after the meter.
- l. No water meter shall be installed by the Utility or Metering Department until a finish grade has been established.
- m. Once the meter pit has met the requirements of the Utility at the final inspection the new service would be approved for the meter installation.
- n. The 10-foot horizontal and 18-inch vertical separation rule must be maintained between water, storm, and sanitary sewer lines or mains.
- o. After the meter pit has been installed, it shall be the Builders/ Owners responsibility to maintain the integrity of said meter pit for a minimum of 3 years from the time of the meter installation.
- p. Any damages to the meter pit that requires the re-excavation by the Utility shall result in a service charge in the amount of \$2500.00
- q. No water service line construction shall be initiated until the Builder/Owner has the following in his/her possession:
 - i. A Valid Building Permit (if applicable)
 - ii. A Valid Water Service Permit
 - iii. A Valid Sewer Connection Permit (if applicable)
 - iv. A Street Cut Permit (if applicable)

H. REGULATION OF EXISTING WATER SYSTEM TESTING

- 1. This section applies to all existing and future commercial, industrial, or municipal entities that have a fire suppression loops or systems that are connected and or served by the Public Water System.
- 2. The Builder or contractor that performs fire suppression loop or system testing within the City of Greenfield Water Service Territory shall be required to do the following:
 - a. Contact the Greenfield Water Utility via phone or email no less than 48 business hours prior to the planned system testing/maintenance event.
 - i. The builder or contractor shall be required to provide:

1. The number of hydrants, fire pumps, booster pumps, valves, or any other water device or mechanism that will require water to be used for the testing or maintenance procedure; and
2. The duration of the test and or maintenance work
3. Violation of this section will result in the assessment of a \$2,500 fee for each event.

END OF TECHNICAL SPECIFICATIONS