

## INVITATION TO BID

Charter Township of Union

2010 South Lincoln Road

Mt. Pleasant, MI 48858

Separate sealed Bids for the Charter Township of Union Filter Media Replacement Project will be received by the Charter Township of Union at the Charter Township of Union Public Services Office located at, 5228 S. Isabella Road, Mt. Pleasant, Michigan 48858 until **10:00 AM Local Time, Tuesday, September 26, 2023,** and then at said location publicly opened and read aloud.

The Information for Bidders, may be examined/obtained on the Charter Township of Union website as follows:

[http://www.uniontownshipmi.com/Departments/PublicServicesDepartment/RequestforProposals\(RFP\)-PublicServicesDepartment.aspx](http://www.uniontownshipmi.com/Departments/PublicServicesDepartment/RequestforProposals(RFP)-PublicServicesDepartment.aspx)

Bids received after the above date and time will not be considered. Fax transmittals and e-mailed Bids will not be accepted.

**The Owner reserves the right to waive any informality or to reject any or all Bids.**

**No Bidder may withdraw their Bid within 90 days after the actual date of Bid opening.**

Charter Township of  
Union Public Services  
Department



# **FILTER MEDIA REPLACEMENT PROJECT**

September 2023

Charter Township of Union  
Public Services Department  
5228 South Isabella Road, Mt. Pleasant MI 48858  
(989)772-4600

## **BID INVITATION PACKAGE**

Charter Township of Union  
Isabella County MI

### FILTER MEDIA REPLACEMENT PROJECT

#### Bid Package Contents:

1. Notice and Invitation to Bidders;
2. Instructions to Bidders;
3. Bid Form;
4. List of Proposed Subcontractors;
5. Bid Bond
6. General Conditions;
7. Certificate Regarding Workers' Compensation;
8. Project Contract Execution Document;
9. Specifications

#### Other Bid Documents:

A Drawings

Bid Invitation Package

## NOTICE AND INVITATION TO BIDDERS

Charter Township of Union  
Isabella County MI

### Filter Media Replacement Project

NOTICE IS HEREBY GIVEN that sealed bids for the above project shall be received in the offices of the Public Service Director at the Charter Township of Union at 5228 S. Isabella Rd., Mt. Pleasant, MI 48858, until **10:00 a.m.** Eastern Standard Time on Tuesday, September 26, 2023. Bids will be publicly opened on **Tuesday, September 26, 2023** or as soon thereafter as possible, at the Charter Township of Union Public Services Administrative Office located at 5228 S. Isabella Rd., Mt. Pleasant, MI 48858.

The Charter Township of Union reserves the right to reject any and all bids.

#### PROJECT DESCRIPTION:

Contractor shall furnish all labor, material, equipment and services necessary to perform and complete all work required for the FILTER MEDIA REPLACEMENT PROJECT as per the project Specifications.

#### MISCELLANEOUS:

All inquiries regarding this project should be directed in writing to:

Charter Township of Union  
Shawn McBride – Chief Water Operator  
5228 S. Isabella Rd.  
Mt. Pleasant, MI 48858  
[smcbride@uniontownshipmi.com](mailto:smcbride@uniontownshipmi.com)

# INSTRUCTIONS TO BIDDERS

THE CHARTER TOWNSHIP  
OF UNION  
STATE OF MICHIGAN  
FILTER MEDIA REPLACEMENT PROJECT

1 Explanations to Bidders

(a) Any explanation desired by a bidder regarding the meaning or interpretation of the Invitation for Bids, including drawings, specifications, prior approvals, etc., must be requested in writing no later than 5 calendar days before the bid deadline. Any interpretation made will be in the form of an addendum to the Invitation for Bids and will be furnished to all prospective bidders. Receipt of Addenda by the bidder must be acknowledged in the space provided on the Bid Form or by letter of transmittal received before the time set for opening of sealed bids. Verbal explanations or instructions given before the award of the contract will not be binding.

(b) All questions regarding the Invitation for Bids shall be in writing and directed to:

Charter Township of Union  
Shawn McBride – Chief Water Operator  
5228 S. Isabella Rd.  
Mt. Pleasant, MI 48858  
smcbride@uniontownshipmi.com

2 Conditions Affecting the Work

(a) Before submitting a bid, each bidder must (1) examine the bid and contract documents thoroughly, (2) visit the site to familiarize himself with local conditions that may in any manner affect cost, progress or performance of the work (**Optional**), (3) familiarize herself/himself with federal, state and local laws, ordinances, rules and regulations that may in any manner affect cost, progress or performance of the work; and (4) study and carefully correlate bidder's observations with the bid and contract documents. Failure to do so will not relieve bidders from responsibility for estimating properly the difficulty or cost of successfully performing the work. The Township will assume no responsibility for any understanding or representations concerning conditions made by any of its officers or agents prior to the execution of the contract, unless included in the bid or contract documents.

- (b) The submission of a bid will constitute an incontrovertible representation by the Bidder that it has complied with every requirement of the request for bids and that the bid and contract documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the work.

3 Bid Guaranty

- (a) The bid guaranty shall be in the form of a bid bond, certified check, or cashier's check, payable to the order of the Charter Township of Union, in an amount not less than 5% of the Bid. Any bid bond shall be executed by a corporate surety acceptable to the Township and authorized to issue such surety bond in the State of Michigan. Bid guaranties, other than bid bonds, will be returned (1) to unsuccessful Bidders as soon as practicable after the opening of bids, and (2) to the successful Bidder upon execution and delivery of all contract documents. However, the Township reserves the right to retain the bid guaranty of the second lowest qualified Bidder until the lowest qualified Bidder executes and delivers all required contract documents to the Township or until 90 calendar days after bid opening, whichever occurs first.
- (b) Failure to furnish a bid guaranty in the proper form and amount, by the time set for the receipt of bids, shall be cause for rejection of the bid.
- (c) If the successful Bidder, upon acceptance of its bids by the Township fails to execute and deliver all contract documents within 10 calendar days after receipt of Township's Notice of Award, the successful Bidder's bid guaranty shall be retained by the Township as liquidated damages. Such failure on the Bidder's part to execute and deliver those documents will cause substantial damage to the Township, including delay in its construction program, which damage is not easily reduced to monetary terms and, therefore, the full amount of the bid guaranty is properly considered to be liquidated damages.

4 Preparation of Bids

- (a) Bids shall be submitted on the forms furnished, or copies thereof, and must be manually signed. All blank spaces shall be filled in. If erasures or other changes appear on the forms, each erasure or change must be initialed by the person signing the bid. Emailed or fax bids will not be considered.
- (b) Substitutions for specified materials will not be considered without prior approval.
- (c) Modifications of bids already submitted will be considered if received at the office designated in the invitation for bids by the time set for receipt of bids. Telephonic, emailed, or fax modifications will not be considered.
- (d) Discrepancies between words and figures shall be resolved in favor of words.
- (e) Discrepancies between the indicated sum of any column of figures and the correct sum thereof shall be resolved in favor of the correct sum.

5 Submission of Bids

- (a) Bids must be sealed, marked, and addressed as indicated below. Failure to do so may result in a premature opening of, or a failure to open, such bid, thereby eliminating that Bidder from consideration. If the bid is mailed, the sealed envelope containing the bid should be enclosed in another envelope addressed as indicated below.
- (b) All bids shall be received no later than **10:00 a.m. Local Time**, on **September 26, 2023** hand-delivered or mailed, addressed to:

Kim Smith, Public Services Director  
Charter Township of Union  
5228 South Isabella Road  
Mt. Pleasant MI 48858

- (c) The envelope containing the original copy of the bid must be sealed, marked, and addressed as follows:
  - (1) Name and address of Bidder
  - (2) Marked - Filter Media Replacement Bid

**CHARTER TOWNSHIP OF UNION, FILTER MEDIA  
REPLACEMENT PROJECT, BID 2015-02**

The original bid shall consist of those documents listed below. The original documents shall be returned with the bid.

- (1) Bid Form;
- (2) List of Proposed Subcontractors;
- (3) 5% Bid Bond; and
- (4) Contractor's Certificate Regarding Workers' Compensation

6 Late Bid, Modification or Withdrawal of Bid by Bidder

- (a) Any bid received by the Township after the exact time specified for receipt will be returned unopened.
- (b) Any modification or withdrawal of bids must be made in writing and is subject to the same condition as in (a) above. A bid may be withdrawn by written or transmittal request received from a Bidder prior to the time set for opening bids. A bid may also be withdrawn in person by a Bidder or the Bidder's authorized representative, provided the representative's identity is made known and the representative signs a receipt for the bid, but only if the withdrawal is made prior to the time set for opening bids.

7 Township Modifications Prior to Date Set for Opening Bids

The Township may revise or amend the bid or contract documents, including the specifications and drawings, prior to the date set for opening bids. Such revisions and addenda, if any, will be announced by addenda to the Invitation for Bids. If the revisions and addenda are of a nature which requires material changes in the bid, the date set for opening bids may be postponed by such number of days as in the opinion of the Township will enable Bidders to revise their bids. In such a case, the addendum will include an announcement of the new date and time for opening bids. The modifications will be posted on the Township's website at:

[http://www.uniontownshipmi.com/Departments/PublicServicesDepartment/RequestforProposals\(RFP\)-PublicServicesDepartment.aspx](http://www.uniontownshipmi.com/Departments/PublicServicesDepartment/RequestforProposals(RFP)-PublicServicesDepartment.aspx)

8 Public Opening of Bids

Bids will be publicly opened at the time set for opening in the Notice to Bidders. Their content will be made public for the information of Bidders and others interested, who may be present either in person or by representative.

9 Award of Contract

- (a) Award of contract will be made to the Bidder deemed most responsible whose bid, conforming to the Invitation for Bids, is most advantageous to the Township, price and other factors considered.
- (b) The Township may, when in its interest, reject any or all bids.
- (c) The Township may accept any item or combination of items of a bid, unless precluded by the Invitation for Bids or the Bidder includes in its bid a restrictive limitation.

10 Bonds and Insurance

- (a) If the successful bid is in excess of \$25,000, the bidder to whom the contract is awarded shall furnish a Payment Bond on forms approved by the Township, executed by a corporate surety acceptable to the Township and authorized to issue such surety bonds in the State of Michigan. The Payment Bond shall be in an amount equal to 100% of the Contract Price. The entire cost of bond shall be borne by the successful Bidder.
- (b) The successful Bidder shall furnish a Performance Bond on forms approved by the Township, executed by a corporate surety acceptable to the Township, and authorized and admitted to issue surety bonds in Michigan. The Performance Bond shall be in an amount equal to 100% of the Contract Price. The entire cost of the Performance Bond shall be borne by the successful Bidder.
- (c) The successful Bidder shall deliver to the Township certification attesting to the fact that the required policies of insurance have been obtained by the Bidder.
- (d) The signed contract, required bonds and certificates of insurance shall be delivered to the Township within 10 calendar days after receipt by Bidder of Township's Notice of Award.

11 Subcontractors

- (a) Each Bidder in its bid shall set forth the following:
  - (1) The name and location of the place of business of each subcontractor whom it intends to use to perform work or labor, or render service to the Bidder in or about construction of any work, in an amount in excess of 0.5% of the Base Bid.

Instructions to Bidders

- (2) The portion of the work which will be done by each such proposed subcontractor, if the Bidder is awarded the Contract.
- (b) Each Bidder shall furnish such information in substantially the form set forth in the Invitation for Bids. If no subcontractors are to be used, other than within the 0.5% limit referred to above the Bidder shall state “None” on the form.
- (c) Each proposed subcontractor must complete a Subcontractor’s Experience Statement, which shall be attached to the List of Proposed Subcontractors in order for the bid to be considered complete.

12 Permits and Fees

The Bidder’s attention is called to the requirements of the General Conditions regarding the acquisition of and payment for permits, licenses and fees related to the work of this project. All such acquisitions and payments are the sole responsibility of the Contractor. It is the sole responsibility of the Bidder to contact agencies or utilities having jurisdiction over the project to ascertain the extent of permits and fees required and the cost thereof, and to include all such costs in its bid.

13 Construction Schedule

After the Contract Documents are executed, the Township will provide the Contractor notice to proceed. After this notice is given, the Contractor shall substantially complete the project within 90 Calendar days. The Contractor will be liable for damages for any inexcusable delay beyond this period. Liquidated damages for such delay shall be \$500 per working day for each day past the substantial completion date.

## **BID FORM**

CHARTER TOWNSHIP  
OF UNION  
STATE OF MICHIGAN

### **FILTER MEDIA REPLACEMENT PROJECT**

To: Charter Township of Union  
Kim Smith – Public Service Director  
Department of Public Services  
5228 South Isabella Road  
Mt Pleasant MI 48858

In response to the Invitation for Bids, the undersigned Bidder hereby proposes to furnish all labor, material, equipment and services and perform and complete all work required for the Filter Media Replacement Project as described in the attached Specifications.

Performance shall include all work necessary to complete the Project in strict accordance with the Contract and for the price(s) to be specified by the Bidder below, including all applicable taxes.

Bidder certifies that it has examined and is fully familiar with all of the provisions of the Invitation for Bids and any Addenda thereto; that it is submitting this Bid in strict accordance with the Instructions to Bidders; and that it has carefully reviewed the accuracy of all statements attached to this Bid.

Bidder certifies that it has visited and examined the work site (**Optional**), and is satisfied with the nature and location of all work, the general and local conditions to be encountered in the performance of the work, the requirements of the Contract and all other matters which can in any way affect the work or the cost thereof. Bidder further certifies that Bidder has performed such tests deemed necessary for the preparation of this bid.

Bidder agrees that this Bid constitutes a firm offer to the township which cannot be withdrawn by Bidder for 90 calendar days from the date of actual opening of bids. If awarded the Contract, Bidder agrees to execute and deliver to the Township within 10 calendar days after receipt of Township's Notice of Award, the applicable Construction Contract form and the required Payment Bond, Certificates of Insurance, and any other required Contract Documents.

**ATTACHMENTS**

Attached are the following forms which have been completed by Bidder and made a part of this bid:

- 1. List of Proposed Subcontractors;
- 2. Contractor’s Certificate Regarding Workers’ Compensation
- 3. List of three (3) references who the bidder has completed similar work for in the past five years.

**ADDENDA**

Bidder also acknowledges receipt of the following Addenda, which Addenda have been considered by Bidder in submitting this Bid (if none, state “None”).

Addenda Nos. \_\_\_\_\_

**COMPLETION TIME**

The Project, including its respective components, must be substantially completed within **90 calendar** days after the notice to proceed. Substantial completion is defined in the Special Requirements. Bidder certifies that it can complete the Project within this time period.

TOTAL AMOUNT OF BID (NUMBERS)\_\_\_\_\_

TOTAL AMOUNT OF BID (WORDS)\_\_\_\_\_

\_\_\_\_\_

Submitted by,

BIDDER'S NAME:

\_\_\_\_\_

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

Title: \_\_\_\_\_

BIDDER'S BUSINESS ADDRESS:

\_\_\_\_\_

\_\_\_\_\_

BIDDER'S TELEPHONE AND FAX NUMBERS:

\_\_\_\_\_

\_\_\_\_\_

IF BIDDER IS A CORPORATION:

State and date of incorporation

\_\_\_\_\_

IF A PARTNERSHIP OR JOINT VENTURE:

Full names of all partners or joint venturers (attach additional pages if necessary)

\_\_\_\_\_

\_\_\_\_\_

**DIRECTIONS FOR SUBMITTING BIDS:**

1. The envelope containing the original of this Bid Form with all attachments must be sealed, marked, and addressed as follows:

The Charter Township of Union, FILTER MEDIA  
REPLACEMENT PROJECT BID

Addressed to:

**Kim Smith**  
**Public Services Director**  
**Charter Township of Union**  
**5228 South Isabella Road**  
**Mt Pleasant MI 48858**

**LIST OF PROPOSED SUBCONTRACTORS**

CHARTER TOWNSHIP  
OF UNION

FILTER MEDIA REPLACEMENT PROJECT

NAME OF BIDDER: \_\_\_\_\_

If awarded the Contract, Bidder shall employ the following subcontractors who will perform work or labor, or render service to the Bidder in or about the project, in an amount in excess of 0.5% of the bid lump sum listed on the Bid Form. If no subcontract work is proposed, other than within the 0.5% limit set forth, Bidder shall so state.

(Attach additional pages if necessary.)

Names and Addresses  
of Subcontractors

Description of Work  
to be Subcontracted

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Bidder \_\_\_\_\_ Date \_\_\_\_\_  
Firm Name

Signed by \_\_\_\_\_ Title \_\_\_\_\_  
Name

List of Proposed Subcontractors

**BID BOND**

CHARTER TOWNSHIP OF UNION  
STATE OF MICHIGAN  
FILTER MEDIA REPLACEMENT PROJECT

(Not required if Certified Check of Cashier's Check accompanies Bid)

KNOW ALL PERSONS BY THESE PRESENTS: That we \_\_\_\_\_  
as Principal, and \_\_\_\_\_  
as Surety, are lend and firmly bound unto the Charter Township of Union, in the sum of \$ \_\_\_\_\_  
[5% OF THE TOTAL AMOUNT OF THE BID] for the payment of which sum we hereby bind  
ourselves, our successors, heirs, executors, and administrators, jointly and severally, firmly as set  
out more fully herein.

The condition of the foregoing obligation is such that, whereas the above principal is about  
to submit to the Charter Township of Union a bid for the performance of the work for the above  
project in compliance with the plans and specifications therefore and pursuant to a published notice  
inviting bids.

Now, if the bid of the principal is accepted and the work awarded to the principal by the  
Charter Township of Union, and if the principal shall fail or neglect to enter into a contract,  
therefore, in accordance with the provision of said bid and the accompanying instructions to  
Bidders and to furnish adequate faithful performance and labor and material surety bonds and  
certificates of insurance to the satisfaction of the Charter Township of Union; then the total sum  
guaranteed by the bond is forfeited to the Charter Township of Union as liquidated damages.

In the event suit is brought by the Charter Township of Union and judgment is entered in  
its favor, the surety shall pay all costs incurred by the Township in such suit, including reasonable  
attorneys' fees to be fixed by the Court, in addition to the above sum.

WITNESS our hands and seals this \_\_\_\_\_ day of \_\_\_\_\_, 2023.

(Seal)

By \_\_\_\_\_ Name/Title \_\_\_\_\_

(Seal)

NOTE: Signatures of those executing for the surety must be properly acknowledged.

Bond No. \_\_\_\_\_

Bid Bond

**Professional Reference**

CHARTER TOWNSHIP OF UNION

Filter Media Replacement Project

(3- Required / work within Last 5 years)

Reference Names and Addresses	Description of Work	Date of Work
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

\_\_\_\_\_  
Bidder

\_\_\_\_\_  
Date

## GENERAL CONDITIONS

### CHARTER TOWNSHIP OF UNION STATE OF MICHIGAN FILTER MEDIA REPLACEMENT PROJECT

#### PARAGRAPH HEADINGS AND DEFINITIONS

- 1.0 Paragraph headings in this Contract are for convenience only, and are not to be construed to define, limit, expand, interpret, or amplify the provisions of this Contract. When initially capitalized in this Contract, or amendments hereto, the following words or phrases shall have the meanings specified;
- 1.2.1 Adjusted Contract Price – the initial Contract Price adjusted for change orders, Force Majeure, termination for convenience or any other reason permitted by this Contract.
- 1.2.2 Best Efforts – Those efforts which a competent, experienced, and prudent contractor would use to perform and complete the requirements of this Contract in a timely manner, exercising the degree of care, competence, and prudence customarily imposed on a contractor performing similar work in the State of Michigan.
- 1.2.3 Contract – This agreement, including all referenced documents, between the Charter Township of Union and Contractor for the performance of the Work, and subsequent written modifications executed by the Township and Contractor.
- 1.2.4 Contractor – The legal entity which executes this Contract with the Township to perform the Work.
- 1.2.5 Contract Manager – The title of the person designated by the Township to be its representative with authority to act for and bind the Township.
- 1.2.6 Documentation – Drawings, plans, models, studies, surveys, specifications, reports, design analysis, data, policies, information, work product, proposals, and any other similar documents or material prepared or used in connection with the Work.
- 1.2.7 Final Completion Date - The date when the Work is completed in accordance with the Contract, including all Punch List Items.
- 1.2.8 Force Majeure – An act of God, or event beyond the control of a party, including an act or omission of government, act or omission of civil or military authority, strike or lockout, act of a public enemy, war, blockade, insurrection, riot, epidemic, landslide, earthquake, fire, storm, lightning, flood, washout, or civil disturbance which could not have been avoided through the exercise of reasonable care and prudence.

General Conditions

1.2.9 Price or Contract Price – The total sum to be paid by the Township to Contractor for performance of the Work.

1.2.10 Project – Contractor shall furnish all labor, material, equipment and services and perform and complete all work required as per the project specifications.

1.2.11 Project Engineer or Coordinator – The title of the person designated by the Township to be its representative with authority to act for the Township regarding engineering and construction matters.

1.2.12 Punch List Items – Items of work comprising a part of the Work as set out on a Punch List prepared by the Township, with said items to be completed by Contractor consistent with the terms and conditions and scope of the Contract.

1.2.13 Schedule – The time frame for the construction project as established by the Township and/or the Contract Documents.

1.2.14 Site – The area where Contractor shall perform the Work.

1.2.15. Work or Scope of Work – All obligations undertaken by Contractor pursuant to the Contract.

## 2.0 SCOPE OF WORK

Contractor shall perform and complete the Work in a safe manner, and shall supply all personnel, tools, equipment, and material to complete the Work. The scope of work is further established in the following documents: Specifications.

## 3.0 SCHEDULE

Contractor shall perform and substantially complete the Work with **90** Calendar days after the date in the notice to proceed. After execution of this Contract, Contractor shall develop and submit for Township's approval, a detailed construction schedule designed to meet Township's project schedule. Any abnormal expenses such as premium time of overtime incurred by Contractor to meet the detailed schedule, unless specifically directed or approved by the Township in writing, shall be borne by Contractor.

## 4.0 COMPENSATION AND PAYMENT

The Township shall compensate Contractor through progress payments according to percentage of completions and/or milestones as determined by the Township Contract Administrator or as agreed hereafter by the parties. The Township shall not be obligated to make final payment(s) until Contractor has submitted to the Township written evidence that the Work has been fully completed in accordance with this Contract, and satisfactory evidence that all of

General Conditions

Contractor's indebtedness in connection with the Work has been paid or written releases provided of all potential liens arising out of this Contract. Upon receipt of such evidence, the Township will provide a Notice of Completion.

## 5.0 INSURANCE AND BONDS

5.1 Insurance – Contractor agrees to provide insurance in accordance with the requirements set forth herein. If Contractor uses existing coverage to comply with these requirements and that coverage does not meet the requirements, Contractor agrees to modify the existing coverage to do so.

The following coverages will be provided by Contractor and maintained on behalf of the Township and in accordance with the following requirements:

5.1.1 Commercial General Liability Insurance – Commercial General Liability Insurance shall be provided on an occurrence form or equivalent. Claims made or modified occurrence forms will not be accepted. Total limits for all coverage shall be no less than \$1,000,000 per occurrence and \$2,000,000 general aggregate. The aggregate amount shall apply per location. The Township and its employees and agents shall be added as additional insured using the Industry Standard form. Coverage shall apply on a primary non-contributing basis in relation to any other insurance or self-insurance, primary or excess, available to the Township or any employee or agent of the Township. Coverage shall not be limited to the vicarious liability or supervisory role of any additional insured. There shall be no endorsement or modification limiting the scope of coverage for liability arising from explosion, collapse, or underground property damage.

5.1.2 Workers' Compensation/Employers' Liability – Workers' Compensation/Employers' Liability coverage shall be written on a policy form providing workers' compensation statutory benefits as required by law. Employer's liability limits shall be no less than \$1,000,000 per accident or disease. This policy shall waive any right of subrogation with respect to the Township, its employees or agents.

5.1 Additional Insurance Provision – Contractor and the Township further agree as follows:

5.2.1 This Section supersedes all other sections and provisions of this Contract to the extent that any other section or provisions conflicts with or impairs the provisions of this Section.

5.2.2 Nothing contained in this Section is to be construed as affecting or altering the legal status of the parties to this Contract.

5.2.3 The insurance requirements set forth in this Section are intended to be separate and distinct from any other provision in this Contract and shall be interpreted as such.

General Conditions

5.2.4 All insurance coverage and limits provided pursuant to this Contract shall apply to the full extent of the policies involved, available or applicable. Nothing contained in this Contract or any other agreement relating to the Township or its operations limits the application of such insurance coverage.

5.2.5 Requirements of Specific minimum coverage features or limits contained in this Section are not intended as a constraint on coverage, or other requirements, or a waiver of any coverage. Specific reference to a given coverage feature is for purposes of clarification only and is not intended by any party to be all inclusive, or to the exclusion of other coverage, or a waiver of any type.

5.2.6 For purposes of insurance coverage only, this Contract will be deemed to have been executed immediately upon any party hereto taking any steps in furtherance of performance of this Contract.

5.2.7 Unless otherwise approved by the Township, Contractor's insurance shall be written by insurers and with a minimum "Best's" Insurance Guide rating of "A-VII." Self-insurance will not comply with these insurance specifications.

5.2.8 In the event any policy of insurance required under this Contract does not comply with these requirements or is canceled and not replaced, the Township has the right but not the duty to obtain the insurance it deems necessary and any premium paid by the Township will be promptly reimbursed by Contractor.

5.2.9 Contractor agrees to provide evidence of the insurance required herein, satisfactory to the Township, consisting of certificate(s) of insurance evidencing all of the coverages required and additional insured endorsement to Contractor's liability policies. Certificate(s) are to reflect that the insurer will provide 30 days' notice of any cancellation of coverage. Contractor agrees to require its insurer to modify such certificates to delete any exculpatory wording stating that failure of the insurer to mail written notice of cancellation imposes no obligation, and to delete the word "endeavor" with regard to any notice provisions. Contractor agrees to provide complete certified copies of policies to the Township upon request.

5.2.10 Contractor shall provide the Township with proof that policies of insurance required herein expiring during the term of this Contract have been renewed or replaced with other policies providing at least the same coverage. Such proof will be furnished prior to the expiration of the coverages.

5.2.11 Any failure on the part of the Township or any other additional insured under these requirements to obtain proof of insurance required under this Contract in no way waives any right or remedy of the Township or any additional insured, in this or any other regard.

General Conditions

5.2.12 Contractor shall require all subcontractors or other parties hired for this project to provide general liability insurance with coverage identical to that required for Contractor naming the Township, its employees and agents as additional insured where applicable. Contractor shall obtain certificates evidencing such coverage and make reasonable efforts to ensure that such coverage is provided as required herein.

Contractor shall require that no contract used by any subcontractor, or other contracts Contractor enters into on behalf of the Township, will reserve the right to charge back to the Township the cost of insurance required by this Contract. Contractor agrees that upon request, all agreements with subcontractors or others with whom Contractor contracts with on behalf of the Township, will be submitted to Township for review. Failure of the Township to request copies of such agreements will not impose any liability on the Township, or its employees.

5.2.13 If Contractor is a limited liability company, general liability coverage must be amended so that the limited liability company and its managers, affiliates, employees, agents, and other persons necessary or incidental to its operation are insured.

5.2.14 Contractor agrees to provide immediate notice to the Township of any claim or loss against Contractor that includes the Township as a defendant. The Township assumes no obligation or liability by such notice, but has the right (but not the duty) to monitor the handling of any claim likely to involve the Township.

5.2.15 In the event of any loss that is not insured due to the failure of Contractor to comply with these requirements, Contractor agrees to be personally responsible for any and all losses, claims suits, damages, defense obligations and liability of any kind attributed to the Township or its employees as a result of such failure.

5.2.16 Coverage will not be limited to the specific location designated as the address of the project.

5.3 Bonds – Contractor shall furnish the following surety bond with surety acceptable to Township.

5.3.1 If the successful bid is in excess of \$25,000, the successful bidder shall be required to post a payment bond in the amount of the bid. This bond shall give labor and material suppliers direct right of action against the surety. Contractor shall furnish the Payment bond on a form acceptable by the Township.

5.3.2 Successful Bidder shall post a Performance Bond in the amount of 100% of the Contract Price by a corporate surety authorized and admitted to issue such surety bond in the State of Michigan.

General Conditions

## 5.4 Sureties

5.4.1 Should any surety upon any bond furnished in connection with this Contract become unacceptable to the Township, or should any such surety fail to furnish reports as to its financial condition as may be requested by the Township at any time while the bond is in force, Contractor shall promptly furnish such additional surety or alternate bond at Contractor's expense as may be required by the Township to protect the interest of the Township or of persons supplying labor or material in the performance of this Contract.

5.4.2 Contractor shall keep the sureties informed as to all material matters or changes affecting the project and this Contract.

## 6.0 INDENMIFICATION

To the fullest extent permitted by law, Contractor shall defend, indemnify and hold harmless the Township, its employees, agents and officials, from any: liability, claims, suits or actions; alternative dispute resolution, losses, expenses, fees, or costs of any kind, whether actual, alleged or threatened; administrative, and regulatory proceedings; and any other costs or expenses of any kind whatsoever without restriction or limitation; so long as such things are in relation to, as a consequence of, arising out of, or in any way attributable actually, allegedly or implied, in whole or in part, to the performance of this Contract. All obligations under this provision are to be paid by Contractor as they are incurred by the Township.

Without affecting the rights of the Township under any provision of this Contract or this section, Contractor shall not be required to indemnify and hold harmless the Township as set forth above for liability attributable to the sole fault of the Township, provided such sole fault is determined by agreement between the parties or the findings of a court of competent jurisdiction.

## 7.0 GENERAL REQUIREMENTS

7.1 Physical Site Conditions – Contractor shall satisfy itself concerning the nature and location of the Work, the general and local conditions, and other restrictions affecting the Work. The failure of Contractor to acquaint itself with any applicable conditions and restrictions shall not relieve it from the responsibility for properly estimating either the difficulties or the costs of successfully performing the Work and completing this Contract, and shall not be grounds for adjusting either the price or the schedule.

7.2 Independent Contractor – Contractor represents that it is fully experienced and properly qualified to perform the Work, is properly licensed in the state where the Work is performed, and is equipped, organized, and financed to perform such Work. The Contractor or a subcontractor of the Contractor shall act as an independent contractor and not as an agent of the Township in performing the Work and duties of this Contract.

General Conditions

### 7.3 Performance Requirements

7.3.1 Best Efforts – Contractor shall use Best Efforts in the performance of this Contract. Contractor shall, to the best of its abilities, cooperate with the Township to enable the successful completion of the Work according to the terms of this Contract including, but not limited to, commitment of additional resources, material and personnel, if requested by the Township, to assure that the Work is properly performed on time and completed in accordance with the provisions of this Contract.

7.3.2 Quality of Equipment Supplied by Contractor – Contractor shall provide and use only such construction equipment and facilities as are capable of producing the quality and quantity of Work required by this Contract within the time specified herein. Upon written notice from the Township or its designated representative, Contractor shall promptly remove from the Site all unsatisfactory construction equipment and facilities furnished or provided by Contractor.

7.4 Precedence of Operating Facilities – Continuity of service of the operating facilities is of the essence. In the event of a conflict of interest between any and all Work and any operating facilities, the operating facilities shall have precedence.

7.5 Responsibility for Work and Material – Contractor shall be responsible for and shall bear all risk of loss of or damage to Work in progress, all Work-related material and equipment delivered to the Site or in transit under Contractor control, until completion and final acceptance of the Work

### 8.0 CHANGES

8.1 General – Notwithstanding any other provisions of this Contract to the contrary, the Township reserves the right for any reason, without invalidating this Contract or without notice to sureties, to make any changes in the Work including the performance of additional services. Such change shall be made in writing by a Township representative, except for emergency conditions, where such change shall be confirmed in writing.

8.2 Price of Change – All change orders shall be accepted by Contractor pursuant to the terms contained in this Contract and Contractor shall promptly proceed to implement such change. Should any change result in an increase or decrease in Price or a change in Schedule, Contractor shall, within 10 calendar days following receipt of the written change order, submit to the Township a written proposal which illustrates the price for Contractor to perform the change and the proposed adjustment to the Schedule. Sufficient detail shall be given in the proposal to permit a thorough analysis and evaluation. No claim shall be made by Contractor based solely on the number or volume of changes made.

8.3 Price Adjustment – The price of such change will be agreed upon by the parties. If the parties cannot agree, and adjustment will be determined by the Township on the basis of  
General Conditions

Contractor's reasonable expenditures and savings, including a reasonable allowance for overhead and profit.

8.4 Delegation – Only a Township officer, or the designated Township representative concerning the Project, may issue and sign written change orders on behalf of the Township.

8.5 Contractor Objections – In the event of a change requested by the Township would, in the opinion of Contractor, affect Contractor's ability to meet its obligation under the Contract, Contractor will deliver to the Township, within 5 calendar days of receipt of the change request, written notice of the fact before accepting such change request. If the Township feels such a change is warranted, an appropriate modification to the Contract shall be made before the Contractor is required to proceed.

8.6 Changes by Contractor – The Contractor may propose changes in the specifications for reasons of improved quality, delivery or economy provided such changes do not impair quality or delivery. Such changes must be approved in writing by the Township prior to implementation. Approval shall be at the discretion of the Township.

## 9.0 WARRANTY

9.1 Performance and Workmanship – Contractor warrants that the workmanship performed by Contractor and its subcontractors will be performed in accordance with Best Efforts. The warranty period shall be for a period equal to 1 year after the Final Completion Date.

## 10. RETENTION AND ACCEPTANCE OF MATERIAL AND WORKMANSHIP

10.1 Retention – The Township shall retain 5% of the Contract price. The retention shall be released (with the exception of 150% of any disputed amount) within 45 days after the date of final completion of the work.

10.2 Inspection of Work – All Work and materials, both before and after installation, shall be subject to Township's inspection, and any deficiencies detected by the Township will be addressed by Contractor immediately. The Township may take inventory and inspect the Work and witness tests thereon at all reasonable times and places during the progress of the Work. If Contractor covers all or any portion of the Work prior to any inspections or tests as required by the Scope of Work, the cost of any necessary uncovering and replacing shall be borne by Contractor.

### 10.3 Notice of Completion

10.3.1 When Contractor, in its opinions, has completed the performance of the

General Conditions

Work, it shall so notify the Township in writing that the Work is completed and ready for final acceptance by the Township. Within 10 calendar days after receipt of such written notice, the Township shall inspect the Work and advise Contractor of its concurrence.

10.3.2 If the Township advises Contractor that the Work is not satisfactorily completed, the Township shall at the time of such notice, submit to Contractor, a Punch List of all additions and corrections necessary for the completion of this Contract.

10.3.3 Upon receipt of the Punch List, Contractor shall commence action with respect thereto at no cost to the Township. All corrections shall be made within the time period given in the Contract as established in the Project Schedule. Upon completion of such work, Contractor shall again notify the Township in writing that the Work is completed and ready for final acceptance by the Township. Within 10 calendar days after receipt of such written notice, the Township shall inspect the Work and advise Contractor whether it concurs. The Punch List process will continue until the Work is completed to the satisfaction of the Township. Contractor shall be obligated to make good, correct or modify any rejected material or workmanship prior to final acceptance of the work by the Township.

10.3.4 If the Township concurs that the Work has been completed satisfactorily, the Township will provide a Notice of Final Completion to the Contractor which will specify the Final Completion Date. Such Notice of Completion shall not be unreasonably withheld.

#### 11.0 FORCE MAJEURE

In the event either party by reason of a Force Majeure is rendered unable to perform its duties under this Contract then upon the party giving written notice of the particulars and estimated duration of Force Majeure to the other party within 5 calendar days after knowledge of the occurrence of the Force Majeure, the party may have the time for performance of its duties extended for the period equal to the time performance is delayed by the Force Majeure. The effects of the Force Majeure shall be remedied with all reasonable dispatch, and the party giving notice shall use Best Efforts to eliminate and mitigate all consequences. A Force Majeure for which notice has not been given shall be an unexcused delay.

#### 12.0 DELAYS AND EXTENSION OF TIME

Time for performance may be extended by the Township because of delays such as Force Majeure, changes, material or equipment delivery times, or suspension. Any such extension shall not be grounds for a claim by Contractor for damages or for additional compensation, except as specifically authorized in this Contract. In the event of delay in the performance of the Work not caused by the Township or its representatives, whether or not the cause thereof is within the control of Contractor, the Township shall be entitled to suspend the applicable portion of the scheduled payments for the period of such delay.

General Conditions

### 13.0 TERMINATION FOR CONVENIENCE

13.1 General – The Township may, at any time, terminate the Contract or any portion of the Work not then completed by giving Contractor written notice of termination. Upon receipt of notice of termination, Contractor, unless the notice requires otherwise, shall (1) discontinue Work on the date and to the extent specified in the notice, except work necessary to preserve and protect the Work in progress, (2) place no further orders or subcontracts for material, services, or supplies related to terminated Work, (3) make every reasonable effort to procure termination of all orders, subcontracts, and rental agreements to the extent they relate to performance of Work terminated upon terms satisfactory to the Township, and (4) otherwise minimize costs and mitigate damages to the Township.

13.2 Compensation – In the event of termination under this Section, there shall be an equitable adjustment to the Contract Price taking into account, among other things (1) decreases for Work not performed, (2) the cost of any work requested by the Township from the date of termination.

### 14.0 TERMINATION FOR CAUSE; NOTICE AND CURE OF DEFAULT

14.1 General – The Township may declare this Contract canceled for default by notifying Contractor in writing, should Contractor at any time (1) materially refuse or neglect to meet the Schedule(s), (2) refuse to supply sufficient and appropriately skilled workmen or equipment to perform the Work, (3) become insolvent or unable to meet its payroll or other current obligations.

14.2 Notice of Termination – Prior to termination for cause, the Township shall give Contractor written notice describing such default in reasonable detail and demand that Contractor cures such default within 30 calendar days after receipt of such notice of default. If Contractor does not cure the default within 30 calendar days after its receipt of such notice of if the default cannot be cured within such 30-calendar day period and Contractor has not initiated action or proposed a plan within such 30-calendar day period to cure the default within a reasonable period which the Township reasonably agrees will cure such default, then the Township shall have the right to terminate this Contract.

### 15.0 LAWS AND REGULATIONS

Contractor and its employees shall at all times comply with all applicable laws, including those relating to wages, hours, discrimination, and safety (including MI/OSHA).

### 16.0 GOVERNING LAW AND VENUE

This Contract shall be interpreted in accordance with the substantive and procedural laws of the State of Michigan.

### 17.0 AUTHORIZED REPRESENTATIVES AND NOTICES

17.1 Representatives – Prior to commencement of the Work, the Township and Contractor shall each designate a representative authorized to act in behalf of each party and shall advise the other party in writing of the name, address and telephone number of such designated representative and shall inform the other party of any subsequent change in such designation.

17.2 Notice and Communications – All communications relating to the day-to-day activities under this Contract shall be exchanged between the representatives of the Township and Contractor. All legal notices and communications required under or related to this Contract shall be in writing, and shall be delivered personally or mailed by certified mail, postage prepaid, return receipt requested, to the representative of the Township and Contractor identified below. Notice shall be effective on the date of delivery.

To the Township:

**Kim Smith**  
**Public Service Director**  
**Charter Township of Union**  
**5228 South Isabella Road**  
**Mt. Pleasant, MI 48858**

To Contractor:

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

A party may change or supplement the addresses given above, or designate additional addresses, for purposes of this Section by giving the other party written notice of the new address in the manner set forth above.

## 18.0 ATTORNEYS FEES

If either party to this Contract shall bring any action, claim, appeal, or alternative dispute resolution proceedings, for any relief against the other, declaratory or otherwise, to enforce the terms of or to declare rights under this Contract (collectively, an Action), the losing party shall pay to the prevailing party a reasonable sum for attorneys' fees and costs incurred in bringing and prosecuting such Action and/or enforcing any judgment, order, ruling, or award (collectively, a Decision) granted therein. Any Decision entered in such Action shall provide for the recovery of attorneys' fees and costs incurred in enforcing such Decision. The court or arbitrator may fix the number of reasonable attorneys' fees and costs on the request of either party. For the purposes of this paragraph, attorneys' fees shall include, without limitation, fees incurred in the following: (1) post judgment motions and collection actions; (2) contempt proceedings; (3) garnishment, levy, and debtor and third-party examinations; (4) discovery; and (5) bankruptcy litigation. "Prevailing party" within the meaning of this paragraph includes, without limitation, a party who agrees to dismiss an Action on the other party's payment of the sums allegedly due or performance of the covenants allegedly breached, or who obtains substantially the relief it seeks.

## 21.0 WAIVER

The failure of the Township to insist upon strict performance of any of the terms and conditions of this Contract, or to exercise or delay the exercise of any rights or remedies provided

Charter Township of Union  
Filter Media Replacement

by this Contract or by law, or the acceptance of Work or payment for Work shall not release Contractor from any of the responsibilities or obligations imposed by law or by this Contract and shall not be deemed a waiver of any right of the Township to insist upon strict performance of this Contract. None of the provisions of the Contract shall be considered waived by either party except when such waivers are agreed upon in writing by the parties.

22. ASSIGNMENT

Contractor shall not assign the rights, nor delegate the duties, or otherwise dispose of any right, title, or interest in all or any part of this Contract, or assign any monies due or to become due to Contractor without the prior written consent of the Township. Any such approved assignment or delegation shall be for the benefit of, and shall be binding on Contractor, assignee, and all future successors; and shall not relieve Contractor, assignee, or future successors of any duties or obligations. If the Township approves any assignment of monies due or to become due to Contractor hereunder, such assignment shall not become effective until at least 30 calendar days after Township's approval.

23. ACCEPTANCE

The Township will be deemed to have accepted Contractor's performance of the Work when the Township officer or Township Manager signing this Contract, or the designated representative of said officer or manager, provide a Notice of Completion that the Work is accepted.

24. EXECUTION AND EFFECTIVE DATE

This Contract has been executed by the duly authorized officers of the parties and shall be effective as of the date that the **PROJECT CONTRACT EXECUTION DOCUMENT** is signed by the parties.

General Conditions

**CERTIFICATE OF CONTRACTOR REGARDING  
WORKERS' COMPENSATION**

The successful Bidder shall execute the following certificate:

I am aware of the provisions of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this Contract.

Dated: \_\_\_\_\_

Contractor

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

Certificate of Workers' Compensation

# **PROJECT CONTRACT EXECUTION DOCUMENT**

CHARTER TOWNSHIP OF UNION  
STATE OF MICHIGAN  
FILTER MEDIA REPLACEMENT PROJECT

DATE OF CONTRACT:

NAME AND ADDRESS OF CONTRACTOR:

The Charter Township of Union and Contractor named above hereby mutually agree to perform this Contract in strict accordance with the following designated documents which were a part of the bid or required to be submitted under the Invitation for Bids as a part of the Contract Documents and which are hereby incorporated into this Contract by reference:

## **CONTRACT DOCUMENTS**

1. Notice to Bidders;
2. Instructions to Bidders;
3. Bid Form, with Required Attachments;
4. General Conditions;
5. Specifications;
6. All Addenda to the Contract Documents;
7. Payment and Performance Bonds Submitted by Contractor;
8. Certificates of Insurance Submitted by Contractor; and
9. Certificate Regarding Workers' Compensation.

Contract Doc

This Contract, together with all documents and exhibits incorporated herein by reference, constitutes the entire agreement of the parties. All prior or contemporaneous verbal agreements between the parties are revoked by this Contract.

In the event any section, sentence, clause or phrase of the Contract is adjudicated by a court of last resort, and of competent jurisdiction, to be invalid or illegal, the remainder of this Contract shall be unaffected by such adjudication, and all other provisions of this Contract shall remain in full force and effect as though the section, sentence, clause or phrase so adjudicated to be invalid had not been included herein.

**PROJECT DESCRIPTION**

Contractor shall furnish all labor, material, equipment, and services and perform and complete all work required for the FILTER MEDIA REPLACEMENT PROJECT

**ALTERATIONS**

The following alterations were made in this contract before it was signed by the parties hereto (if no alternates, state "NONE").

The Project must be completed as set forth in the Project Schedule. Bidder certifies that he/she can complete the Project, ignoring Delays and Changes as defined in the General Conditions as set forth in the Project Schedule.

IN WITNESS WHEREOF, the parties hereto have executed this contract as of the date entered on the first page of the contract.

CHARTER TOWNSHIP OF UNION

CONTRACTOR

Signature \_\_\_\_\_

Signature \_\_\_\_\_

Title \_\_\_\_\_

Name \_\_\_\_\_

Title

Attest:

\_\_\_\_\_  
Mark Stuhldreher  
Township Manager

## **DETAILED SPECIFICATIONS**

CHARTER TOWNSHIP OF UNION  
STATE OF MICHIGAN

### **FILTER MEDIA REPLACEMENT**

#### **Filter Media Removal and Replacement, Installation of Airwash grid and Airwash Blower Equipment Package**

**1. Location.**

The work will be performed at the Charter Township of Union Water Treatment Plant, located at 2279 S Meridian Rd., Mt. Pleasant, MI 48858.

**2. Description of Work, Statement of Work/Technical Specifications.**

Provide the following equipment and services for the refurbishment of two (2) existing 10ft diameter vertical pressure filters, originally provide by Tonka Equipment Co. in 2005, Tonka serial number 04211.

Filter media removal and replacement, installation of airwash grid and airwash blower equipment package, provide and replacement eight (8) sample taps, and provide and replace two (2) manway gaskets.

The existing filters have an air wash connection but no internal air wash grid or supports. Components are shipped loose for installation by others unless noted.

Include the following:

Support Gravels and Anthracite Filter Media.

Support gravels, gradations per specifications, to provide 15" vertical inch profile to meet existing elevation.

- 4" of ¾" x 1/2" gravel (50 lbs. bags)
- 4" of ½" x ¼" gravel (50 lbs. bags)
- 4" of ¼" x 1/8" grave (50 lbs. bags)
- 3" 0.8-1.2 mm torpedo sand (50 lbs. bags)

Anthracite media with an effective size of 0.6 mm to 0.8 mm and a uniformity coefficient not exceeding 1.75 to provide a depth of 30". Anthracite to be shipped in 50-pound, one cubic foot bags for installation by bidder. Note: All media and support gravels will be shipped on pallets with approximately 2,000 lbs. per pallet. Off-loading of filter media from trailers is the responsibility of the owner.

Airwash Grid.

The header will be 3" sch. 80 PVC while the laterals will be ¾" sch. 80 PVC, will be

located on 12” centers and will be connected to the header pipe via solvent welded connections. New stainless steel support angles and fasteners to be provided for supporting airwash grid.

### **3. Media Removal and Installation Services**

Bidder is to provide a high velocity high vacuum industrial vacuum truck operation for the removal of existing filter media from both vessels. Once collected in the vacuum truck, the media will be taken to an offsite location determined by the bidder and disposed of.

Bidder must provide an entire crew for the removal of the existing damaged media and the installation of the new media and graded gravels into both filters, one at a time. One filter will always remain in service.

Filter media will be installed in strict accordance with AWWA B100-96 specifications for filtering material. All personnel involved in media installation shall be qualified under the confined space entry program. All personnel will have received specified training according to OSHA/MIOSHA Standards including, but not limited to, confined space entry and rescue, fall arrest and lockout/tag out procedures and other specified training. Before entry into any confined space, the air will be monitored for appropriate oxygen and LEL levels. Upon completion of an air test, confined space entry permits will be filled out by the supervisor and posted near the entry point. An individual will be present at all times at the entry point.

### **4. Auxiliary Components**

Provide and Replace Manway Gaskets: Two (2) 14” x 18” manways gaskets for replacement of existing manway gaskets.

Provide and Replace Sample Taps: Eight (8) new sample taps (Essex Compression Gauge Cock Model 25B) will be provided to replace all existing sample taps on the pressure filters. The sample taps will be ½” NPT, smooth nosed design and brass construction with Bakelite handle.

### **5. Installation of Packaged Air wash Blower Package:**

Airwash blower package: Provide and install One (1) regenerative blower sized for 160 cfm @ 5 psi, 7.5 HP, 230/460V, 3 phase motor direct connected to blower. The package shall also include the following items for field installation: blower inlet filter, blower discharge pressure relief valve with canister silencer, discharge pressure gauge, discharge 3” PVC check valve, discharge lever operated butterfly valve. Two (2) 3” Air wash Influent 120-volt electric motor operated Bray butterfly valves Three (3) 2” Drain down 120-volt electric motor operated Bray

Provide and install two (2) 1” filter combination air release valves (to replace existing 1” filter air release valves)

## **6. Start-up Services**

Bidder’s technician to be onsite for a minimum of 3 days in one trip to start-up the airwash blower and assist with the filter airwash sequence to ensure proper functionality.

## **7. Equipment Shipping.**

All equipment shipping delivered as part of this bid shall be shipped F.O.B. Destination, Freight Prepaid to the Charter Township of Union Water Treatment Plant located at 2279 S Meridian Road, Mt. Pleasant, MI 48858. Associated costs related to freight, transport, installation, and/or set in place and equipment orientation to be included in the “Total Bid Price”. Expected delivery date shall be provided to owner upon execution of “Notice of Award”.

## **8. Equipment Acceptance.**

Acceptance of equipment, materials and workmanship shall be based on the Township’s right to inspect and test equipment in order to ascertain complete compliance to the specifications contained herein. Acceptance and subsequent payment will be at the sole judge of the Township.

In the event of rejection by the Township, all equipment and/or accessories furnished hereunder shall be replaced at vendor’s sole expense. Vendor must remedy within no more than (30) thirty calendar days from first notice or be subject to further damages as may be sustained by Township. Permission to keep or store the equipment on any Township property during the above specified time will not constitute acceptance.

## **9. Award of Bid.**

The most responsive and responsible bidder shall be awarded the bid. Evaluation will be made on technical merit and ability to meet product specification; references from other governmental agencies to accepted business practices, completeness of bid, submitted work schedule, price, degree and number of exceptions. The Township reserves the right to reject any and all bids.

## **10. Site Conditions.**

It is the responsibility of each bidder before submitting a bid to examine the bid documents thoroughly, visit the site to become familiar with local conditions that may affect cost, progress, or performance of the work.

Before submitting a Bid, each Bidder must, at the Bidders own expense, make or obtain any additional examinations, investigations, explorations, tests, and studies and obtain any additional information and data which pertain to the physical conditions at/or contiguous to the site or otherwise which may affect cost, progress, or performance of the

work and which the Bidder deems necessary to determine its Bid for performing the work in accordance with the time, price, and other terms and conditions of the Contract Documents.

**Quantities of Work.**

**General:** (a) the quantities of work or material stated in unit price items of the Bid are supplied only to give an indication of the general scope of the Work; the Township does not express or by implication agrees that the actual amount of work or material will correspond therewith.

## Section 13222 – FILTER MEDIA

1. SCOPE. This section covers furnishing and installation of support gravel and dual media for the two filters.
2. GENERAL. Filter media shall be furnished and installed in each filter as indicated on the drawings, as specified, and as required to provide a properly operating filter installation acceptable to the Owner.
  - 2.01. Manufacturer's Experience. The media supplier shall have furnished media of the type specified which have been in successful operation for not less than the past five years.
  - 2.02. Coordination. Installation of media specified herein shall be coordinated with the installation of related items of filter equipment and materials covered in other sections and contracts.
  - 2.03. Installation Supervision. Installation of filter media shall be under the direct supervision and control of a competent and experienced field representative employed by the media supplier and acceptable to the Owner.

### 3. FILTER MEDIA

3.01 Materials. Filter media materials shall comply with AWWA 3100, except as modified herein. Gradation sizes shall be based on square hole sieves conforming to ASTM E11.

3.02 30" Anthracite. Anthracite media with an effective size of 0.6 mm to 0.8 mm and a uniformity coefficient not exceeding 1.75 to provide a depth of 30". Anthracite to be shipped in 50-pound, one cubic foot bags for installation by bidder. Note: All media and support gravels will be shipped on pallets with approximately 2,000 lbs. per pallet. Off-loading of filter media from trailers is the responsibility of the owner.

3.03 Installation. Placement shall comply with AWWA B100, except as modified herein. Support gravel or media which becomes dirty or contaminated shall be removed and replaced with clean material.

The bottom layer shall be carefully placed to avoid damage to the nozzle underdrain system. Each layer shall be completed before starting the layer above. For materials less than ½ inch in size, workmen shall not stand or walk directly on the media, but on boards which will sustain their weight without displacing the media.

Each layer of filter media shall be deposited by means of a tremie system to a uniform thickness, with the top surface screeded or otherwise brought to a true level plane. Care shall be taken in depositing each layer not to damage the quality or integrity of the media or to

disturb the level surface of the layer beneath. The correct thickness of each layer shall be determined by screeding each layer to a continuous level line on the side of the filter box. The layer shall then be leveled with a water surface maintained at the appropriate elevation mark.

Washing, Scraping, and Skimming. Material in the sand passing a No. 50 sieve shall be removed by scraping the surface after washing but before the anthracite is installed. Flat particles shall be removed from the anthracite by skimming.

Washing and scraping shall comply with the governing standard, except initial sand scraping shall follow five filter washes of five minutes each, and approximately 1/3 of the total excess fines shall be removed.

Skimming of anthracite shall be done as follows:

- a. Initial Skimming. After five filter washes, a layer approximately 3/8 inch thick shall be removed by skimming.
- b. Subsequent Skimming. Allowing three washes between each subsequent skimming, two additional skimming operations shall be performed.

4.FILTER DISINFECTION. The filters, nozzle underdrains, and wash water troughs shall be disinfected after installation of the filter underdrains and media, including scraping and skimming operations required for placement of media. Disinfection shall be accomplished in accordance with AWWA C653 by filling the filter boxes with water containing sufficient chlorine to produce an initial chlorine residual of 25 mg/1 chlorine residual content of not less than 15 mg/1 after 12 hours. At the contractor's option, chlorine in the form of calcium hypochlorite (HTH) shall be added as the filter box is filled.

Should the initial treatment fail to produce the required residual content, the original chlorination procedure shall be repeated until satisfactory results are obtained. Following chlorination, all treated water shall be flushed from all filters until the replacement water, on test, is satisfactory to Union Township.

Prior to starting any disinfection work, the Contractor shall submit to Union Township a detailed outline of the procedures proposed, the coordination and sequence of operations, manner of filling and flushing structures to be disinfected, and disposal of wasted water. All procedures shall be acceptable to Union Township. The chlorinating agent shall be approved by Union Township.

5.DRAWINGS AND DATE. Complete descriptive data for filter support gravel and media shall be submitted for review prior to shipment, in accordance with the submittals section. Information shall include, but not be limited to, the following:

Filter Media Materials

Name of supplier

Name of field supervisor and experience record

Specific gravities

Sieve analyses

Effective size and uniformity coefficient for fine sand and anthracite

Mohs Hardness for anthracite

Acid solubilities

Caustic solubility for anthracite

Loss on ignition for filter sands

Media placement equipment and procedure