ADDENDUM No. 1
ITB No. 4525
CREST BUENA VISTA WASHINGTON WATER MAIN PROJECT

Due: Friday, March 2, 2018 by 2:00 pm (local time)

The following changes, additions, and/or deletions shall be made to the Invitation to Bid for Crest, Buena Vista, Washington Water Main Replacement Project  ITB No. 4525, on which proposals will be received on/or before Friday March 2, 2018 at 2:00 P.M. (local time)

The information contained herein shall take precedence over the original documents and all previous addenda (if any), and is appended thereto. This Addendum includes 64 pages.

Bidder is to acknowledge receipt of this Addendum No. 1, including all attachments in its Bid by so indicating on page ITB-1 of the Invitation to Bid Form. Bids submitted without acknowledgement of receipt of this addendum may be considered nonconforming.

The following forms provided within the ITB Document must be included in submitted bids at bid opening.

- City of Ann Arbor Prevailing Wage Declaration of Compliance
- City of Ann Arbor Living Wage Ordinance Declaration of Compliance
- Vendor Conflict of Interest Disclosure Form
- City of Ann Arbor Non-Discrimination Ordinance Declaration of Compliance

Bids that fail to provide these completed forms listed above upon bid opening will be rejected as non-responsive and will not be considered for award.

I. CORRECTIONS/ADDITIONS/DELETIONS

Changes to the Bid documents which are outlined below are referenced to a page or Section in which they appear conspicuously. The Bidder is to take note in its review of the documents and include these changes as they may affect work or details in other areas not specifically referenced here.

<table>
<thead>
<tr>
<th>Section/Page(s)</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>BF 1 – BF 4</td>
<td>The Bid Form updated to include new items Integral Sidewalk Retaining Wall, 18&quot; Storm Sewer, Type I Manhole, 6&quot; 11.25 Bend, 8&quot; 11.25 Bend, 8&quot; 22.5 Bend, 12&quot; 11.5 Bend, 6&quot; x 6&quot; x 6&quot; Tee, 8&quot; x 8&quot; x 12&quot; x 12&quot; Cross, 8&quot; Gate Valve-in-Box, and 12&quot; Gate Valve-in-Box, change the unit of Remove Sanitary Sewer Lead, and change quantities.</td>
</tr>
<tr>
<td>DS 4 - DS 5</td>
<td>The “Detailed Specification for Maintenance of Traffic” was changed to update approximate quantities of traffic control devices.</td>
</tr>
<tr>
<td>DS 14 - DS 17</td>
<td>The “Detailed Specification for Item #204 – Minor Traffic Devices, Max. $15,000” was changed to update approximate quantities of traffic control devices.</td>
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<tr>
<td>DS 75</td>
<td>The “Detailed Specification for Integral Sidewalk Retaining Wall, 6 inch to 18 inch” was added.</td>
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</table>

Addendum-1-1
Plan Sheets 1-46  
The entire plan set shall be replaced with the attached plan set. Aside from small, insignificant changes, additions, or deletions on multiple sheets, the majority of changes that affect plan quantity or construction methods include sheets 13, 19, 23, 25-28, 32, 34, 35, 38, & 39-45. The significant changes to these plans sheets include the following:

On plan sheet 13, multiple curb & gutter removals and driveway removals from Washington’s STA 0+00 to 10+00 were eliminated.

On plan sheet 15, sidewalk removal was added to the corner in Buena Vista.

On plan sheet 19, new storm features were added and Water Main Construction Notes.

On plan sheet 23, the water main valve size changed in the closed valve connection of 12” water on Crest and Buena Vista’s proposed 8” water to 12” GVIW.

On plan sheet 25, storm features were added and a note about the dead end connection of water at Washington for the Buena Vista Phase I work.

On plan sheet 26 and 27, storm features were added.

On Plan Sheet 28, the connection to Huron water was eliminated. We will be capping the water main after the last valve on Crest.

On plan sheet 32, fittings to the water for Hydrant 7 were added.

On plan sheets 34 and 35, proposed storm features were added and multiple proposed driveways, M-openings, and curb & gutter were eliminated from Washington station 0+00 to 10+00.

On plan sheet 38, structure and gate box adjustments were added and the sidewalk in the corner of Buena Vista was added.

On plan sheets 39-45, structure and gate box adjustments were added.

II. QUESTIONS AND ANSWERS

The following Questions have been received by the City. Responses are being provided in accordance with the terms of the ITB. Respondents are directed to take note in its review of the documents of the following questions and City responses as they affect work or details in other areas not specifically referenced here.

Question 1:  At what percent compaction is the Aggregate Base installed in the Water Main trench?
Answer 1:  New Aggregate Base installed in the Water Main trench is compacted to 98% of its Maximum Density.
Question 2:  Is there sand base under proposed sidewalk and sidewalk ramps?
Answer 2: Yes, its pay item “Sand Subbase Course, Class II – C.I.P.” and extends past the sidewalk 6 inches on each side, and is 4 inches thick typically, 6 inches thick under proposed sidewalk with retaining wall.

Question 3:  Are the water service leads really going past the right-of-way?
Answer 3: No, the water service leads were drawn on the plans as such for clarity of location. The excavation and backfill will stop as Public Works makes their connections at the existing stop boxes.

Question 4:  Do you expect a conflict with ground water?
Answer 4: Not generally, but Public Works did encounter ground water when working between Eighth St and S. Seventh St south of the project and cautions the Contractor when abandoning the Civil Defense Water Main on S. Seventh that water may be encountered.

Question 5:  Limits of removals (stationing) and grades of curb lines at intersections were not on the plans. Will they be provided prior to construction?
Answer 5: Yes, plan sheets with limits of removals and grades along curbs at the intersections and new curb areas will be provided on new plan sheets prior to construction.

Question 6:  Are the new and replacement structure castings the City of Ann Arbor standard?
Answer 6: No, when ordering castings from your supplier, specify the new Art in Ann Arbor castings if they are available.

Question 7:  Can the HMA removal be done at one time?
Answer 7: No, The HMA removal for the water main trench shall be done first. After the water main is complete, and prior to paving, the pavement removals on the rest of the road can be done.

Question 8:  Is June 16 a hard date for completing Buena Vista, such that Crest and Washington would not be able to start until Buena Vista is done?
Answer 8: It was the intent of the City’s to finish Buena Vista before Crest and Washington were started, but we do recognize that we have outlined a tight schedule, and issues come up and testing can delay construction.

Question 9:  Is it the City’s intention to Flowable Fill the Civil Defense water main, or just cut and cap it at the ends?
Answer 9: The 12” Civil Defense water main can be cut and capped to abandon it.

Question 10:  Does the Contractor have to Flowable Fill the 20” Steel water main on Crest if it’s discovered not to be filled where removals take place?
Answer 10: No, the 20” Steel water line can be cut and capped at the removal limits.

Question 11:  Can the City exercise the valves beyond the project limits to test the shut off capabilities?
Answer 11: Yes, we will ask Public Works to exercise the valves.

Question 12:  Will the revised plan sheets show the locations of the proposed under drain?
Answer 12: No, the underdrains would not have shown up on the plans well, as storm items are shown on the water main sheets. They are intended to be installed under all
new curb and gutter if there is an existing or proposed inlet in the same run of curb. Specific locations can be confirmed at the Pre-Construction meeting.

Respondents are responsible for any conclusions that they may draw from the information contained in the Addendum.
## Bid Form

### Section 1 – Schedule of Prices

**Company:**
Project: Crest, Buena Vista, & Washinton Water Main Replacement Project

File #: 2016-029  Bid #: 4525 Addendum 1

<table>
<thead>
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<th>Item</th>
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<th>Quantity</th>
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**Total This Page (BF-1)**

(Also to be entered on page BF-4) $
Company: Crest, Buena Vista, & Washington Water Main Replacement Project  
Project: Crest, Buena Vista, & Washinton Water Main Replacement Project  
File #: 2016-029 Bid #: 4525 Addendum 1

### Section 1–Schedule of Prices

#### File #: 2016-029    Bid #: 4525 Addendum 1

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<th>Unit Price</th>
<th>Total Price</th>
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<td>244</td>
<td>6 Inch Concrete Drive - High Early</td>
<td>SYD</td>
<td>242</td>
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<td>Detectable Warning, Cast In Place</td>
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<td>Integral Sidewalk Retaining Wall, 6 inch to 18 inch</td>
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<td>$</td>
<td>$</td>
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<td>250</td>
<td>Sand Subbase Course, Class II - C.I.P.</td>
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<tr>
<td>258</td>
<td>Type I Manhole (0-10’ deep)</td>
<td>EA</td>
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<td>$</td>
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**TOTAL THIS PAGE (BF-2)**  
(Also to be entered on page BF-4)  

$ ___________________________

BF-2
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<td>$_________</td>
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<tr>
<td>417</td>
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<td>EA</td>
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TOTAL THIS PAGE (BF-3) $ _____________________
(Also to be entered on page BF-4)
### BID FORM

#### Section 1–Schedule of Prices

**Company:**
Crest, Buena Vista, & Washington Water Main Replacement Project

**File #:** 2016-029 **Bid #:** 4525 Addendum 1

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<td>443</td>
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<tr>
<td>444</td>
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<tr>
<td>446</td>
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<td>EA</td>
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<td>Celtic occidentalis, (Hackberry), 2 inch</td>
<td>EA</td>
<td>10</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>801</td>
<td>Gleditsia tracanths, (Honeylocust), 2 inch</td>
<td>EA</td>
<td>5</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>802</td>
<td>Acer rubrum, (Red Maple), 2 inch</td>
<td>EA</td>
<td>5</td>
<td>$</td>
<td>$</td>
</tr>
</tbody>
</table>

**TOTAL THIS PAGE (BF-4):** $ 

**TOTAL FROM PAGE BF-1:** $ 

**TOTAL FROM PAGE BF-2:** $ 

**TOTAL FROM PAGE BF-3:** $ 

**TOTAL BASE BID:** $
DETAILED SPECIFICATION
FOR
MAINTENANCE OF TRAFFIC

DESCRIPTION
Traffic shall be maintained in accordance with the City of Ann Arbor Public Services Department Standard Specifications except as specified in Sections 104.11, 812, and 922 of the Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Construction, the Michigan Manual of Uniform Traffic Control Devices, Latest Revised Edition (MMUTCD) and as amended herein.

The Contractor shall furnish, erect, maintain and, upon completion of the work, remove all traffic control devices and barricade lights within the project and around the perimeter of the project for the safety and protection of local traffic. This includes, but is not limited to, advance, regulatory, and warning signs; barricades and channeling devices at intersecting streets on which traffic is to be maintained; barricades at the ends of the project and at right-of-way lines of intersecting streets; portable changeable message signs; lighted arrow boards, and moving traffic control devices for construction operations. Payment shall be paid for as “Minor Traffic Devices, Max $15,000”.

MATERIALS
The materials and equipment shall meet the requirements specified in the corresponding sections of the MDOT 2012 Standard Specifications for Construction and MMUTCD. The approximate quantities of materials are as follows: 3 small Portable Changeable Message Signs, 506 sft Temporary Signs, Type B, 20 Type III Barricades, and 150 Type III Lighted Plastic Drums.

Maintenance of Local Traffic
Unless otherwise indicated on the plans, all side roads shall not be closed to through traffic except during construction operations of short duration and only upon written approval of the Engineer.

Local access shall be maintained at all times for emergency vehicles, refuse pick-up, mail delivery and ingress/egress to private properties.

Contractor must accommodate the safe access to the residential buildings and businesses located within construction area.

A lane-closure permit shall be obtained by the Contractor from the City Transportation Division, at least 48 hours in advance of any proposed lane or street closing.

The hours of work on all Local streets are 7:00 a.m. to 8:00 p.m., Monday through Saturday, or as specified on the lane-closure permit. No equipment will be allowed in the street before or after these hours. Local streets may only be closed to through traffic (local access only) with written authorization of the Engineer. Work must be completed each day such that all streets are re-opened to through traffic by 8:00 p.m. unless otherwise specified, directed, or authorized in writing by the Engineer. All major changes in traffic control shall be made either between 9:30 a.m. and 3:30 p.m., or between 7:00 p.m. and 6:30 a.m. in order to minimize interference with rush-hour traffic. All traffic controls must be in-place and ready for traffic each day by 6:30 a.m. and 3:30 p.m.

Driveways shall not be blocked for extended periods of time unless arrangements can be made with the affected property owner(s). When it becomes necessary to temporarily block driveways, the Contractor shall notify the affected property owners in advance to coordinate the work and allow sufficient time for vehicles to vacate from properties. It may be necessary to allow for vehicles to temporarily park in the roadway at locations that do not interfere with the Contractor’s work. During these periods the owners of the respective vehicles must be available to, with proper notice, move their vehicles if it becomes necessary to accommodate the work.

The Contractor shall maintain pedestrian traffic at all times covered under the pay item “Minor Traffic
Devices, Max $15,000”. For maintaining normal pedestrian traffic while performing sidewalk and driveway repair, Type I barricades shall be placed by the Contractor, as directed by the Engineer. "Sidewalk Closed" and/or "Cross Here" signs shall be placed, by the Contractor, when directed by the Engineer.

During the construction of the water main, storm sewer, and road rehabilitation, parking of residences in the construction area will not be allowed. Temporary “No Parking” signs will be supplied by the City. “No Parking” signs shall be erected after MISS DIG clearance, maintained throughout the project duration, and salvaged and returned to the City of Ann Arbor at the W. R. Wheeler Service Center at the completion of the project, as described in the Detailed Specification for “No Parking” Signs. They will be paid for at the Contract Unit Price for “No Parking” Signs. Any vehicle parked in the construction zone shall be ticketed and towed at the owner’s expense.

At times when it becomes necessary to temporarily obstruct local traffic during the performance of the work, the Contractor shall provide traffic regulation in conformance with Chapter 6E of the MMUTCD. A minimum of two traffic regulators are required. The cost of traffic regulation shall be included in the contract pay item "Minor Traffic Devices, Max $15,000"

The Contractor shall use quantities of dust palliative, maintenance aggregate, and hot patching mixture for use as temporary base, surfacing, and dust control at utility crossings, side roads and driveways (wherever required to maintain traffic), and where directed by the Engineer to maintain local access. The cost for the use of dust palliative, maintenance aggregate and HMA wedging mixture, as required and directed by the Engineer for maintenance of traffic and local access, shall be included in contract pay item "General Conditions, Max. $50,000" and it will not be paid for separately.

The Contractor shall perform the work of this Contract while maintaining traffic in accordance with the Contract Documents as specified herein. No traffic shall be allowed on newly placed asphalt surfaces until rolling has been satisfactorily completed and the surface has cooled sufficiently to prevent damage from traffic. This is to be accomplished by traffic regulators and by relocating traffic control devices to prevent traffic from entering the work area until such time that it can be safely maintained without damaging the new construction. The Contractor shall provide traffic regulators in sufficient number to maintain traffic as described herein, and to keep traffic off sections being surfaced, and provide for safe travel at all times as directed by the Engineer.

Each pressure distributor, paver and roller shall be equipped with at least one approved flasher light which shall be mounted on the equipment so as to give a warning signal ahead and behind.

There may be areas where the Engineer directs the paving of less than the full width of a phase to stagger the paving joints and to accommodate changes in crown and/or cross-sectional dimensions/locations. In these locations the gravel base courses shall be constructed to the full area of the phase, and the Contractor shall place traffic control devices on the base course grade as necessary, and shall place, maintain, and remove maintenance aggregate (MDOT 21AA) all as necessary, and as directed by the Engineer, to maintain local traffic to side streets and drives.

The City will not allow any shut down of existing water mains without prior written approval of construction methods and timing of shut down, by the City of Ann Arbor and the Engineer. All water main valves are to be operated by City of Ann Arbor personnel.

The Contractor shall place portable, changeable message signs (PCMs) a minimum of one week prior to the start of construction in locations indicated by the Engineer. PCMs shall be the smaller of the two MDOT and MMUTCD approved message signs so they can fit on Seventh Street in the lawn extension or the limited right-of-way beyond the sidewalk.

Before the detour of southbound S Seventh, the Contractor shall coordinate their activities with the City Public Works and the Signal Unit prior to setting up signs and rerouting traffic. The detour is for the water main connection in the S Seventh Street and W Washington Street intersection and the Civil Defense Water Main Abandonment along S Seventh Street, and shall not be installed until approved by the Engineer.
DETAILED SPECIFICATION
FOR
ITEM #204 - MINOR TRAFFIC DEVICES, MAX. $15,000

DESCRIPTION
The work of Temporary Traffic Devices shall consist of protecting and maintaining vehicular and pedestrian traffic as shown on the plans, in the Maintenance of Traffic specification, and as directed by the Engineer, in accordance with Sections 103.05, 103.06, and 812 of the 2012 MDOT Standard Specifications for Construction; Part 6 of the Michigan Manual of Uniform Traffic Control Devices, Latest Revised Edition (MMUTCD); and the City Standard Specifications, except as modified herein. These devices include, but not limited to, advance, regulatory, and warning signs; barricades and channeling devices at intersecting streets on which traffic is to be maintained; barricades at the ends of the project and at right-of-way lines of intersecting streets; changeable message signs; lighted arrow boards; sign/signal covers and pavement marking cover tape for construction operations.

The work of Minor Traffic Devices shall include, but not be limited to:

- The furnishing and operating of miscellaneous signs, warning devices, flag-persons, and cones;
- The operation of additional signs furnished by the City;
- Furnishing and installing meter bags;
- Coordinating with the City to have meter heads removed and reinstalled;
- Maintaining pedestrian traffic;
- Temporarily covering traffic controls;
- Temporarily covering existing signs as directed;
- Any and all other miscellaneous and/or incidental items which are necessary to properly perform the work.

The Contractor shall maintain vehicular and pedestrian traffic during the work by the use of flag-persons, channelizing devices, and signs as necessary, as directed by the Engineer, and in accordance with MMUTCD. Typical applications for maintaining pedestrian traffic in accordance with the MMUTCD are included in this detailed specification.

MATERIALS, EQUIPMENT, AND CONSTRUCTION METHODS

General
Materials and equipment shall meet the requirements specified in the above-designated sections of the MDOT Standard Specifications.

All temporary traffic/pedestrian control devices furnished by the Contractor shall remain the property of the Contractor. The City shall not be responsible for stolen or damaged signs, barricades, barricade lights or other traffic maintenance items. The Contractor shall replace missing traffic control devices immediately, at no additional cost to the City.

All existing signs, and signs erected by the City of Ann Arbor on this project shall be preserved, protected, and maintained by the Contractor. Existing City owned signs which are damaged by the Contractor during the work will be repaired by the City at the Contractor's expense.

The Contractor shall temporarily cover conflicting traffic and/or parking signs when directed by the Engineer.

When traffic control devices have been damaged by, or due to, the negligence of the Contractor, his subcontractors or material suppliers, the traffic control devices shall be replaced at the Contractor's expense.

Lighted Plastic Drums; Barricades; Temporary Signs; Portable Changeable Message Signs; Lighted Arrow Boards; Pavement Marking Cover Tape; Temporary Pavement Markings
The Contractor shall furnish and operate these items as directed by the Engineer.

Approximate quantities for these items are 3 Portable Changeable Message Signs, 506 sft Temporary Signs, Type B, 20 Type III Barricades, and 150 Type III Lighted Plastic Drums.

Traffic control devices meeting current MDOT and MMUTCD specifications shall be used on this project. Lighted plastic drums shall be sufficiently ballasted to minimize tipping.

Type I and III barricades shall have standard orange-and-white stripes on both sides of the barricade.

Sufficient signs shall be provided by the Contractor to ensure the safety of the workers and the general public in accordance with the current MMUTCD.

"Road Work Ahead" warning signs shall be placed, as indicated on the Plans, or as directed by the Engineer, prior to the start of work, regardless of the nature, magnitude or duration of the work.

Removable black pavement marking cover tape shall be used to cover conflicting pavement markings as directed by the Engineer.

Temporary pavement markings may be used within transition areas as directed by the Engineer and shall be removable.

**MEASUREMENT AND PAYMENT**

This item of work will be paid for on a pro rata basis at the time of each progress payment. Measurement will be based on the ratio between work completed during the payment period and the total contract amount. When all of the work of this Contract has been completed, the measurement of this item shall be 1.0 Lump Sum.

The completed work as measured for this item of work will be paid for at the Contract Unit Price for the following Contract (Pay) Item:

<table>
<thead>
<tr>
<th>PAY ITEM</th>
<th>PAY UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor Traffic Devices, Max 15,000</td>
<td>Lump Sum</td>
</tr>
</tbody>
</table>

The unit price for this item of work shall include all labor, material, and equipment costs to perform all the work specified in the Standard Specifications and as modified by this Detailed Specification.
Figure 6H-28. Sidewalk Detour or Diversion (TA-28)

Typical Application 28

Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.
Figure 6H-29. Crosswalk Closures and Pedestrian Detours (TA-29)

Typical Application 29

Note: For long-term stationary work, the double yellow center line and/or lane lines should be removed between the crosswalk lines.

See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.
CITY OF ANN ARBOR

SPECIAL PROVISION
FOR
INTEGRAL SIDEWALK RETAINING WALL

a. **Description.** This work shall consist of constructing concrete retaining walls adjacent to sidewalks, in accordance with Section 802 of the 2012 edition of the MDOT Standard Specifications for Construction, except as specified herein, as shown in this Detailed Specification, and as directed by the Engineer.

b. **Material.** Concrete mixtures shall be Grade P1 or S2 concrete, or as directed by the Engineer, meeting the requirements specified in Section 803 of the MDOT Standard Specifications.

c. **Construction.** The Contractor shall construct the Integral Sidewalk Retaining Walls as shown herein. Construction shall be in accordance with Section 802 of the 2012 MDOT Standard Specifications for Construction.

d. **Payment.** Payment shall be measured by the exposed face area of the retaining wall in square feet. The completed work, as described, will be measured and paid for at the contract unit price for the following pay item:

<table>
<thead>
<tr>
<th>Contract Item (Pay Item)</th>
<th>Pay Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integral Sidewalk Retaining Wall, 6 inch to 18 inch</td>
<td>Square Foot</td>
</tr>
</tbody>
</table>

Payment for “Integral Sidewalk and Retaining Wall, 6 inch to 18 inch” shall include all labor, equipment and materials to complete this work.
Pre-Bid Meeting for the  
Crest, Buena Vista, Washington Water Main Replacement Project

February 16, 2018 @ 10:00 a.m. in the Larcom Fourth Floor Conference Room, City Hall

I. Introductions

II. Addendum Items
   a. Addendum #1 – will include the following:
      i. Pre-Bid minutes, including Sign-in Sheet
      ii. Updated Plan Sheets
      iii. Updated Bid Form - Quantities
      iv. Updated Detailed Specification for Maintenance of Traffic
      v. Updated Detailed Specification for Minor Traffic Devices
      vi. New Detailed Specification for Integral Sidewalk Retaining Wall

III. General
   a. Project Overview
      i. Buena Vista, 8” and 12” water main
      ii. Crest, 8” water main north of Buena Vista
      iii. Washington, 8” and 12” water main
   b. Standard Specifications and Detailed Specifications
      i. Project Schedule
         Starting Date – May 14th – Can start earlier.
         Completion Date – September 1, 2018 (110 days after commencement of work)
         Hours of work: 7:00 a.m. to 8:00 p.m. Monday thru Saturday (Sundays with permission)
         Buena Vista done first to completion with temp water connection at Washington. Crest and Washington Starting June 16, after school’s out.
      ii. Engineer’s estimate - $1,898,295.50
      iii. General Conditions
         1. Coordination with the School
         2. Street sweeping & dust control
         3. Maintenance gravel
         4. Maintaining drainage
      iv. Access to driveways - Contractor responsible for maintaining access to driveways during construction, and notifying residents when access will be unavailable (i.e. during water main installation, during paving, concrete work)

IV. Construction
   a. Utility Construction
      i. Water Main – Installation and Testing
         1. HMA removal for trench
         2. 16” Sleeves at 16” x 16” x 12” Tee Washington and Seventh
         3. 8” x 2” Reducer and 8” x 1.5” Reducer are 8” cap with 2” or 1.5” nipple.
      ii. Sanitary leads when conflicts exist
iii. Drainage Structure replacements
   1. Removals and Installations on Water Main Plan Sheets
iv. Reminder that all new sanitary and storm sewers (including manholes) shall be cleaned and televised before final acceptance
   b. Resurfacing the road and paving –
   c. Sidewalk and ADA Ramps – ADA compliance MUST be achieved at all locations
d. Landscape Items and Restoration
   i. Topsoil and Seeding
   ii. Trees and shrubs

V. Other Items
   a. The existing 20” water main along Crest was flowable filled, which may or may not fill the entire steel pipe.
   b. The 6” underdrains are intended to be installed where new curb and gutter is proposed, when an outlet basin is present.
   c. The sanitary sewers were all inspected in 2014, and subsequently lined on Crest and Washington within the project limits. Video is available upon request.
   d. Public Works encountered ground water when working between Eighth and Seventh, south of Washington St. Be cautious when working to abandon the Civil Defense water main on Seventh.
   e. New Art in Ann Arbor castings might be ready when ordering from suppliers.

VI. Questions are due today at 1:00pm

Contact Information:

Jane Allen
Project Manager
Phone: (734) 794-6410 ext. 43678
Fax: (734) 994-1744
E-mail: jallen2@a2gov.org
# PRE-BID CONFERENCE SIGN-IN SHEET

**PROJECT:** Crest, Buena Vista, Washington Water Main Replacement Bid# 4525  
**FILE #:** 2016-029  
**DATE:** February 16, 2018 10:00am

**PLEASE PRINT (All information needs to be filled in to receive meeting minutes)**

<table>
<thead>
<tr>
<th>NAME</th>
<th>REPRESENTING</th>
<th>MAILING ADDRESS</th>
<th>TELEPHONE</th>
<th>EMAIL</th>
</tr>
</thead>
</table>
| Jane K Allen       | City of Ann Arbor - Engineering | Address: 301 E Huron St  
                    | City, State: Ann Arbor, MI  
                    | Zip: 48107                         | Direct: (734) 794-6410  
                    |                                 | Mobile: (419) 345-1976  
                    |                                 | Fax: (734) 994-1744  
                    |                                 | jallen2@aa2gov.org               |
| Michael Haussler   | Douglas Higgins               | Address: 3340 Trans Parkway Rd, Ste A  
                    | City, State: Ann Arbor, MI  
                    | Zip: 48104                         | Direct: (734) 996-9360  
                    |                                 | Mobile: (734) 260-1733  
                    |                                 | Fax:                           |
| Dustin K. Age       | E. I. MacKenzie Company       | Address: 6900 Jackson Rd  
                    | City, State: Ann Arbor, MI  
                    | Zip: 48107                         | Direct: (734) 761-6050  
                    |                                 | Mobile: (517) 772-8138  
                    |                                 | Fax:                           |
| Andy Smith         | Springline Excavation, LLC    | Address: 32945 Forsan Rd  
                    | City, State: Farmington Hills, MI  
                    | Zip: 48332                         | Direct: (734) 953-8357  
                    |                                 | Mobile: (810) 326-6930  
                    |                                 | Fax:                           |
| Mark Magner        | Baily Ge.                      | Address: 1273 Terra Dr  
                    | City, State: Jackson, MI  
                    | Zip: 49201                         | Direct: (810) 231-5198  
                    |                                 | Mobile: jheavey@fonsoninc.com  
                    |                                 | Fax:                           |
| Brendan Fons       | Fonson Company Inc.           | Address: 7641 Whitmore Lake Rd  
                    | City, State: Brighton, MI  
                    | Zip: 48116                         | Direct: 810-231-5404  
                    |                                 | Mobile:                           |

[Blank cells for additional entries]
## Construction Notes:

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<tr>
<th>BM #</th>
<th>ELEV</th>
<th>DESCRIPTION</th>
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<tr>
<td>1</td>
<td>852.599</td>
<td>RR SPIKE IN S'LY SIDE OF U.P. @ S.E. CORNER OF LIBERTY ST. &amp; SEVENTH ST. (BK 1115, PG. 29)</td>
</tr>
<tr>
<td>2</td>
<td>857.983</td>
<td>SET RR SPIKE IN N. SIDE OF U.P. ON S. SIDE OF LIBERTY ST. 30'± W OF EIGHTH ST TO NORTH.</td>
</tr>
<tr>
<td>3</td>
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<td>SET RR SPIKE IN N'LY SIDE OF U.P. ON S. SIDE OF LIBERTY ST. IN FRONT OF HSE NO. 1017</td>
</tr>
<tr>
<td>4</td>
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<td>RR SPIKE IN N. SIDE OF U.P. @ S.E. CORNER OF LIBERTY ST. &amp; EBERWHITE BLVD.</td>
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<td>5</td>
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<td>N.W. ANCHOR BOLT FOR &quot;CROSS-WALK&quot; MAST ARM POLE @ SW CORNER OF LIBERTY ST. &amp; CREST AVE.</td>
</tr>
<tr>
<td>6</td>
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<td>SET RR SPIKE IN E. SIDE OF L.P. @ S.W. CORNER OF CREST AVE. &amp; BEMIDJI DR.</td>
</tr>
<tr>
<td>7</td>
<td>858.214</td>
<td>SET RR SPIKE IN EAST SIDE OF L.P. ON W. SIDE OF CREST AVE. @ BUENA VISTA AVE.</td>
</tr>
<tr>
<td>8</td>
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<td>SET RR SPIKE IN E. SIDE OF L.P. ON W. SIDE OF CREST AVE. @ HSE NO. 240</td>
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<tr>
<td>9</td>
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<td>FRNDS RR SPIKE IN E. SIDE OF L.P. ON W. SIDE OF CREST AVE. @ DRIVE FOR HSE NO. 218</td>
</tr>
<tr>
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<td>SET RR SPIKE IN S.E. SIDE OF U.P. @ N.W. CORNER OF CREST AVE. &amp; WASHINGTON ST.</td>
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<td>SET RR SPIKE IN N.W. SIDE OF L.P. @ S.E. CORNER OF CREST AVE. &amp; HURON ST.</td>
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<td>12</td>
<td>858.162</td>
<td>SET RR SPIKE IN S. SIDE OF U.P. @ S.W. CORNER OF WASHINGTON ST. &amp; SEVENTH ST. (BK 1115, PG. 29)</td>
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<td>13</td>
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<td>SET RR SPIKE IN E. SIDE OF P.P. ON W. SIDE OF BUENA VISTA AVE. BETWEEN HSE NO. 226 &amp; 224</td>
</tr>
<tr>
<td>14</td>
<td>842.363</td>
<td>SET RR SPIKE IN N. SIDE OF U.P. ON S. SIDE OF BUENA VISTA AVE. BETWEEN HSE NO. 226 &amp; 224</td>
</tr>
<tr>
<td>15</td>
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<td>SET RR SPIKE IN S'LY SIDE OF U.P. @ N.W. CORNER OF WASHINGTON ST. &amp; NINTH ST.</td>
</tr>
<tr>
<td>16</td>
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<td>SET RR SPIKE IN N'LY SIDE OF U.P. @ S.W. CORNER OF WASHINGTON ST. &amp; EIGHTH ST.</td>
</tr>
<tr>
<td>17</td>
<td>835.276</td>
<td>SET RR SPIKE IN N'LY SIDE OF U.P. @ S.W. CORNER OF SEVENTH ST. &amp; WASHINGTON ST.</td>
</tr>
</tbody>
</table>
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org

CREST, BUENA VISTA, WASHINGTON WATER MAIN

BUENA VISTA AVENUE
TYPICAL SECTION STA 5+05 TO 5+19

BUENA VISTA AVENUE
TYPICAL SECTION STA 9+55 TO 10+95
SIDEWALK WITH WALL
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org

10 OF 46

Curb and Gutter, Conc. Det F4, Special

Tree Protection Detail

Type 'M' Drive Approach SD-R-6

MISC. DETAILS
TREE PROTECTION DETAIL
CURB AND GUTTER, CONC. DET F4, SPECIAL

10
2016029
- 10
CREST, BUENA VISTA, WASHINGTON WATER MAIN
1. All hours of service repair, for service restoration will be in accordance with City of Ann Arbor Department of Public Services - Engineering Office of Ann Arbor - Water Resources Control

2. The maintenance of traffic will be conducted to minimize impact to traffic as much as possible.

3. The maintenance of traffic will be conducted to minimize impact to traffic as much as possible.

4. The maintenance of traffic will be conducted to minimize impact to traffic as much as possible.

5. The maintenance of traffic will be conducted to minimize impact to traffic as much as possible.

6. The maintenance of traffic will be conducted to minimize impact to traffic as much as possible.

7. The maintenance of traffic will be conducted to minimize impact to traffic as much as possible.

8. The maintenance of traffic will be conducted to minimize impact to traffic as much as possible.

9. The maintenance of traffic will be conducted to minimize impact to traffic as much as possible.

10. The maintenance of traffic will be conducted to minimize impact to traffic as much as possible.
<table>
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<tr>
<th>REF</th>
<th>DESCRIPTION</th>
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<tbody>
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<tr>
<td>I</td>
<td>10X14&quot; PVC &quot;A&quot;</td>
</tr>
<tr>
<td>J</td>
<td>7X12&quot; PVC &quot;A&quot;</td>
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<tr>
<td>K</td>
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<tr>
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</tr>
<tr>
<td>N</td>
<td>7X12&quot; PVC &quot;A&quot;</td>
</tr>
</tbody>
</table>

**CAUTION:**
- WASHINGTON ST (STA: 100+00 to STA: 111+00)
- SEE SHEET 14

**REMOVAL KEY:**
- SEE ABOVE RIGHT
- STA: 106+00
- SEE BELOW LEFT
- STA: 106+00

**PLAN:**
1" = 20'

**Know what's below. Call before you dig.**

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org

2016029

CREST, BUENA VISTA, WASHINGTON WATER MAIN

WASHINGTON STREET REMOVALS
STA: 100+00 TO STA: 111+00

SEE SHEET 14
Plan: 1" = 20'

Know what's below. Call before you dig.
CAUTION

Plan: 1" = 20'

Know what's below. Call before you dig.

City of Ann Arbor - Public Services - Engineering
City of Ann Arbor
Public Services
301 East Huron Street
P.O. Box 8647
Ann Arbor, MI 48107-8647
734-794-6410
www.a2gov.org

16 OF 46

Removal Key

Key: DESCRIPTION

See Sheet 15

See W. Washington St.

Removal Sheets
CAUTION
*#<#4&175
14.(#//#$.'
/#6'4+#.

SEE SHEET 24
STA: 4+00

PLAN:
1" = 20'

PROFILE:
1" = 4'

Know what's below.
Call before you dig.

WATER MAIN STRUCTURE TABLE

<table>
<thead>
<tr>
<th>STRUCTURE</th>
<th>TYPE</th>
<th>RM</th>
<th>INV</th>
<th>NOE</th>
<th>DTM</th>
<th>#RN</th>
</tr>
</thead>
<tbody>
<tr>
<td>R12</td>
<td>CAtt</td>
<td>842.72</td>
<td>T12 830.05</td>
<td>0 ft of 10&quot; &amp; 0.75&quot;</td>
<td>102</td>
<td></td>
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<tr>
<td>R14</td>
<td>CAtt</td>
<td>842.59</td>
<td>T17 826.00</td>
<td>10 ft of 10&quot; &amp; 0.30&quot;</td>
<td>207</td>
<td></td>
</tr>
<tr>
<td>R16</td>
<td>CAtt</td>
<td>844.84</td>
<td>T17 830.05</td>
<td>10 ft of 10&quot; &amp; 0.20&quot;</td>
<td>207</td>
<td></td>
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</table>

STORM STRUCTURE TABLE

<table>
<thead>
<tr>
<th>STRUCTURE</th>
<th>TYPE</th>
<th>RM</th>
<th>INV</th>
<th>NOE</th>
<th>DTM</th>
<th>#RN</th>
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</table>

EXISTING STORM SEWER STRUCTURE REMOVAL TABLE

<table>
<thead>
<tr>
<th>STRUCTURE</th>
<th>PNT</th>
<th>RM</th>
<th>INV</th>
<th>NOE</th>
<th>DTM</th>
<th>#RN</th>
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</thead>
<tbody>
<tr>
<td>865-81223</td>
<td>SD</td>
<td>865.00</td>
<td>SD</td>
<td>865.00</td>
<td>SD</td>
<td>865.00</td>
</tr>
</tbody>
</table>
 Know what's below. Call before you dig.
# Water Main Structure Table

<table>
<thead>
<tr>
<th>STRUCTURE</th>
<th>TYPE</th>
<th>STATION</th>
<th>HTF</th>
<th>QM</th>
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</thead>
<tbody>
<tr>
<td>H1</td>
<td>PIPE</td>
<td>835.00</td>
<td>833.51</td>
<td>5.71</td>
</tr>
<tr>
<td>H2</td>
<td>PIPE</td>
<td>835.00</td>
<td>833.51</td>
<td>5.68</td>
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<tr>
<td>H3</td>
<td>MANAV</td>
<td>835.00</td>
<td>844.08</td>
<td>6.08</td>
</tr>
</tbody>
</table>

**Plan:**

1" = 20'

**Profile:**

1" = 2'

---

Know what's below. Call before you dig.

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

CITY OF ANN ARBOR

PUBLIC SERVICES

301 EAST HURON STREET

P.O. BOX 8647

ANN ARBOR, MI 48107-8647

734-794-6410

www.a2gov.org

2016029

CREST, BUENA VISTA, WASHINGTON WATER MAIN

HYDRANT PROFILES

H1, H2, H3
CAUTION

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WASHINGTON ST. ROAD PLAN AND PROFILE
STA. 100+00 TO STA. 103+50

CONSTRUCTION KEY

KEY
DESCRIPTION
HMA
CG
DO-M
DC-6
SW-4
SWR-6
DWS
ABO

SEE CREST AVE. ROAD SHEETS

CONSTRUCTION KEY

KEY
DESCRIPTION
HMA
CG
DO-M
DC-6
SW-4
SWR-6
DWS
ABO

SEE CREST AVE. ROAD SHEETS
WASHINGTON ST. ROAD PLAN AND PROFILE
STA. 107+50 TO STA. 111+50

CONSTRUCTION KEY

<table>
<thead>
<tr>
<th>KEY</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>HMA</td>
<td></td>
</tr>
<tr>
<td>CG</td>
<td></td>
</tr>
<tr>
<td>DO-M</td>
<td></td>
</tr>
<tr>
<td>DC-6</td>
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</tr>
<tr>
<td>SW-4</td>
<td></td>
</tr>
<tr>
<td>SWR-6</td>
<td></td>
</tr>
<tr>
<td>DWS</td>
<td></td>
</tr>
<tr>
<td>ABO</td>
<td></td>
</tr>
</tbody>
</table>

Know what's below. Call before you dig.
# Crest, Buena Vista, Washington Water Main

## Buena Vista Ave Road Plan and Profile

**STA: 200+00 to STA: 204+50**

### Construction Key

<table>
<thead>
<tr>
<th>KEY</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMA</td>
<td>CG</td>
</tr>
<tr>
<td>DO-M</td>
<td>DC-6</td>
</tr>
<tr>
<td>SW-4</td>
<td>SWR-6</td>
</tr>
<tr>
<td>DWS</td>
<td>ABO</td>
</tr>
</tbody>
</table>

### Plan

- **Plan:** 1" = 20'

### Profile

- **Profile:** 1" = 2'

---

**Know what's below. Call before you dig.**

---

**City of Ann Arbor - Public Services - Engineering**

**City of Ann Arbor**

**Public Services**

**301 East Huron Street**

**P.O. Box 8647**

**Ann Arbor, MI 48107-8647**

**734-794-6410**

www.a2gov.org

---

**SEE SHEET 39**

**STA: 204+50**

---

**200+00 to 204+50**

---

**CREST AVE**

---

**BUENA VISTA AVE**

---

**CONSTRUCTION KEY**

- **KEY:** HMA, CG, DO-M, DC-6, SW-4, SWR-6, DWS, ABO

---

**SEE CREST AVE. ROAD SHEETS**

---

**2016029**

---

**38 OF 40**
CAUTION

Know what's below. Call before you dig.

SEE SHEET 38 STA: 204+50

SEE SHEET 40 STA: 208+50

PLAN: 1" = 20'

PROFILE: 1" = 2'

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

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CREST, BUENA VISTA, WASHINGTON WATER MAIN
BUENA VISTA AVE ROAD PLAN AND PROFILE STA. 204+50 TO STA. 208+50

CONSTRUCTION KEY

KEY DESCRIPTION

HMA
CG
DO-M
DC-6
SW-4
SWR-6
DWS
ABO

39 OF 46
CREST AVE

CG

HMA

1

SEE SHEET 42
STA: 308+50

SEE SHEET 44
STA: 312+50

PLAN: 1" = 20'

PROFILE: 1" = 2'

Know what's below. Call before you dig.

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CREST, BUENA VISTA, WASHINGTON WATER MAIN

CONSTRUCTION KEY

KEY
DESCRIPTION
HMA
CG
DO-M
DC-6
SW-4
SWR-6
DWS
ABO
1
2
CREST AVE
W WASHINGTON ST
HMA

SEE SHEET 43
STA:312+50

SEE SHEET 45
STA:316+50

PLAN:
1" = 20'

PROFILE: 1" = 2'

Know what's below.
Call before you dig.

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44 OF 46
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