

ADDENDUM NO. 2
TO THE BID DOCUMENTS
Alder Ln. Water Main Extension
CITY OF HOMER, ALASKA

Addendum Issue Date: November 23, 2021

Bid Submittal Date: December 7, 2021

Previous Addenda Issued: 1

Issued By: Janette Keiser, PE
Public Works Director
City of Homer

Notice to Bidders:

Bidders must **acknowledge receipt of this addendum** by including the Addenda Acknowledgement Form with the bid.

Bidders are required to acknowledge each addenda separately on the Addenda Acknowledgement Form. Any bids received without acknowledgment of addenda may be rejected prior to evaluation.

The Bid Documents for the above project are amended as follows (all other terms and conditions remain unchanged):

- 1. The Addenda Acknowledgement Form is attached.**
- 2. New Special Provisions are attached to incorporate a change to the length of time that bids will remain open from 30 days to 49 days.**

ADDENDA ACKNOWLEDGMENT

Project Name: Alder Lane Water Main Extension Re-Bid

I hereby acknowledge addenda numbers:

_____	_____
_____	_____
_____	_____

Name of Firm: _____

Signature of Bidder: _____

Date: _____

This Acknowledgement must be included in the Bid/Proposal for the project if any Addenda are issued or the Bid/Proposal could be considered non-responsive.

SPECIAL PROVISIONS

Alder Lane Water Main Extension

The construction contract for this project will be administered in accordance with the General Provisions of the City's Standard Construction Specifications (2011).

MODIFICATIONS TO GENERAL PROVISIONS

SP - 1: Section 10.02 – Article 2.5 – Bids to Remain Open

Change language to:

“All Bids shall remain open for forty-nine (49) days after the day of the Bid Opening but the City may, at its sole discretion, release any Bid and return the Bid Security prior to that date.”

SP - 2: Section 10.02 - Add New Article 2.6 – Anti-Discrimination

The contractor shall not discriminate on the basis of race, color, national origin or sex in the performance of this contract. The contractor shall carry out applicable requirements of 40 CFR part 33 in the award and administration of contracts awarded under EPA financial assistance agreements. Failure by the contractor to carry out these requirements is a material breach of this contract which may result in the termination of this contract or other legally available remedies.

SP - 3: Section 10.04 – Add New Article 4.6 – Scope of Work

The Work included under this Contract consists of furnishing all labor, materials, equipment, supervision, and other facilities necessary to successfully complete the Work set forth in the drawings, specifications, and the terms of the Contract, including, but not limited to the following work:

- Excavation required to bury a new water main at a depth of 7 feet and expose an existing water main connection so that the new water main can be connected to it.
- Installation of 1,216 feet of 8-inch HDPE pipe rated for 125 psi and terminated by a gate valve. The new pipe will be connected to the existing 6-inch HDPE stub out via an 8x6 HDPE reducer and bolted flange connection.
- Installation of an 8-inch gate valve downstream of the reducer.
- Installation of a fire hydrant within 6 feet of the termination point of the new water main.

- Installation of 1-inch diameter copper service pipes to connect each of the properties to be serviced to the new water main.
- Backfilling the trench with Class B Bedding directly around the water main itself. All remaining backfill must be Type II Classified Fill.
- All materials will be provided by the Contractor except for the following:
 1. 1216 feet of 8 x 40 SDR11 HDPE pipe
 2. Three 7' fire hydrants
 3. Three 8" IPS SDR11 tees
 4. Three 8" DI flanged gate valves
 5. Six 8" IPS SDR11 flanged adapters
 6. Six 8" AWWA 304SS backing rings
 7. Three 6" IPS SDR11 flanged gate valves
 8. Six 6" IPS SDR11 flanged adapters
 9. Six 6" AWWA 304SS backing rings
 10. Eight polycam 415 saddles
 11. Four 8 x 6 IPS SDR11 Reducer

Note that the plans call for three 8 x 6 molded reducing tees, but supply shortages meant that shipping times for molded reducing tees would be very long. Instead, three 8" tees and three 8 x 6 reducers are included to make the reducing tees.

- Work required by the SWPPP
- Traffic control

SP - 4: Article 5.12 - Temporary Erosion Control During Construction

Add the following language:

“The City has prepared a Storm Water Pollution Prevention Plan (SWPPP), which will be included in an Addenda. The Contractor is required to implement the Best Management Practices in the SWPPP and otherwise comply with the terms of the SWPPP. Compensation will be paid under Bid Item #8, SWPPP Implementation.”

SP - 5: Article 5.19 - Easement and Rights-of-way

Add the following language:

“The Contractor will be provided access to a laydown area for material storage, laydown, job shack, and other uses. The location of this area will be shown in the site map.”

SP - 6: Article 5.25 - Unusual Work Hours

Add the following sentence:

“The noise level from work completed before 8:00 AM and after 8:00 PM cannot exceed 75 db at a distance of 50 feet.”

SP – 7: Article 6.7 Traffic

Add the following language:

“The Contractor must submit a traffic control plan for approval by the City before work begins.”

MODIFICATIONS TO STANDARD SPECIFICATIONS

DIVISION 100 GENERAL DIVISION

SECTION 102 CONSTRUCTION SURVEYING BY THE CONTRACTOR

SP – 8: 102.1 General

Add the following paragraph:

“The Contractor shall submit all survey data with each pay application; Field Books with sketches, professionally scaled plan set redlines, electronic survey coordinates. These items shall be submitted in entirety within 10 days of t project completion. In addition, the as-built information shall also be in NAD 83 datum, the City of Homer will provide the coordinate system at the time of contract award.”

DIVISION 200 EARTHWORK

SECTION 201 GENERAL

SP – 9: 201.6 Subsurface Investigation

Add the following language:

The Contractor should note that two test wells were created on September 6, 2021. The northern test well found groundwater at 3 feet below the surface and the southern test well found groundwater at 2 feet below the surface. Exact locations of the test wells are shown on the site map.

SP – 10: Delete all text within section 208 and replace with:

“The City shall provide field compaction testing for quality control.”

DIVISION 600 WATER SYSTEMS
SECTION 601 GENERAL

SP – 11: Add 601.4 Pipe Standards

Reads as follows:

“All pipe, flux, and solder shall be lead free. All water system materials shall be certified by the National Sanitation Foundation (NSF), Underwriter Laboratories, or an equivalent organization that evaluates products using ANSI/NSF Standards 61 approved.”

SECTION 602 FURNISH AND INSTALL PIPE

SP – 12: 602.1 General

Add the following language:

“1.01 – Description

A. This section covers high density polyethylene (HDPE) piping systems for water systems. The requirements of this section are intended to be additional to the other requirements of Section 602 Furnish and Install Pipe. Other requirements of Section 602 shall also apply to HDPE piping systems specified herein.

B. High density polyethylene piping systems shall be of the diameter and SDR rating as shown on the Drawings and as specified herein.

C. The pipe system furnished shall be complete with all adapters, fittings, pipe plugs, jointing materials, accessories and all other necessary appurtenances needed for a complete installation. All items shall be properly packaged for shipment to the project location.

1.02 - Governing Standards

Except as modified or otherwise provided herein, the manufacturer of the pipe system shall be governed by the standards listed below:

American Society for Testing and Materials (ASTM) Specifications:

No. F 1248 Polyethylene Plastics Molding and Extrusion Materials

No. D 3035 Polyethylene Plastics Pipe Based on Controlled Outside Diameter

No. D 3350 Polyethylene Plastics Pipe and Fitting Materials

1.03 - Submittals

- A. The Supplier is required to submit the pipe supplier's written certification of compliance with the requirements of this section including:
1. ASTM D 3350 cell classification.
 2. Manufacturer's literature on service life, temperature, and pressures as related to the SDR number, ASTM D 2837 pressure rating.
 3. National Sanitation Foundation (NSF) listing for potable water service.
- B. Standard dimensions of pipe and fittings.
- C. Manufacturer's recommended procedures for installation. This should include standard procedures manual for Contractor's use when installing pipe.”

SP – 13: 602.2(d) Material

Add the following language:

“Pipe and Fitting Material:

- The pipe shall be extruded with pre-compounded resin. In-plant blending of carbon black, thermal stabilizers and anti-oxidants shall not be allowed.
- The material shall be listed by the Plastic Pipe Institute with a designation P3408.
- All pipe and fittings shall be designed for thermal butt fusion jointing except as otherwise defined in this section.
- The pipe and fittings shall be homogeneous throughout and shall be free of visible cracks, holes, foreign inclusions, or other deleterious defects. Pipe and fittings shall be uniform in color, opacity, density and other physical properties.

Pipe Design:

- A. The pipe shall be designed in accordance with the relationships of the ISO - modified formula (See ASTM F714-83).

$$2S=DO-1$$

Pt

Where: S = hydrostatic design stress (psi), DO = outside diameter (inches), P = design pressure rating (psi) and t = minimum wall thickness (inches).

The design pressure rating shall be expressed in terms of the static working pressure in psi for water at 73 degrees Fahrenheit according to ASTM D 2837.

- B. The minimum design pressure rating for the pipe shall be 160 psi.
- C. The pipe shall be rated SDR 11.

Fittings:

A. Polyethylene fittings for pipe shall be molded, or fabricated, as specified on the drawings. The fittings shall be the same grade resin as the pipe. Fabricated fittings shall be made from pipe with an SDR 9.3 rating.

B. All fabricated fittings shall be manufactured, using the thermal butt fusion process, under controlled factory conditions. Fabricated pipe fittings shall be thermal butt fused to the polyethylene pipe unless otherwise specified on the drawings.

C. Where flanged fittings are specified on the drawings, the Contractor shall provide the proper stainless steel bolts, stainless steel back-up rings, and gaskets for the fittings. Gaskets shall be reinforced black rubber, Buna N, or red rubber.

Butt-Fusion Equipment

The Contractor shall provide butt-fusion equipment compatible with the piping system being used as necessary to complete all joints on the project. All costs in connection with the above equipment shall be included in the unit prices bid for pipe installation.

Flanged Adapter Coupling

Flanged adapter coupling shall be ROMAC FCA501 ductile iron fittings.

Flanged Fittings

Flanged fittings shall be Class 150 Ductile Iron, with minimum design pressure rating of 150 psi.

Inspection on Receipt

The Contractor shall be responsible for certifying upon receipt that all components meet specifications. Any material found not to meet specification or found to have defects, or that have been damaged during transport shall be so indicated and put aside for inspection by the Engineer.”

SP – 14: 602.3 Construction

Add the following language:

“ f. System Dimensional Tolerances:

Polyethylene pipe ends shall be dressed for field butt fusion as necessary. End surfaces shall be smooth and their orientation perpendicular to the pipe centerline axis and shall be suitable for field butt fusion.

g. Installation of HDPE Pipe

(1) General:

Installation of all components shall be accomplished using the pipe manufacturer's recommendations. Unless the Contractor's personnel are experienced in the installation of polyethylene piping systems, the pipe suppliers shall be requested to provide personnel to instruct the Contractor in the handling, installation and testing of their products. This shall include, but not be limited to, the Pre-Construction Planning Meeting. The Contractor shall pay for the on-site services of a pipe supplier representative to provide the necessary instruction.

(2) Pipe Laying:

- a. The Contractor shall provide machinery, tools, and facilities for the safe and efficient execution of the work. Pipe and accessories shall be lowered into the trench in a manner that will prevent damage to pipe and fittings. Pipe and accessories shall be inspected for defects prior to their being lowered into the trench. Any defective, damaged or unsound material shall be repaired or replaced as directed by the Engineer. All foreign matter or dirt shall be removed from the interior and ends of pipe and accessories before they are lowered into position in the trench. Pipe shall be kept clean during and after laying.
- b. The pipe may be joined above ground, and lowered in the trench afterwards.

- c. Radius of bends shall not be less than the minimum set by the pipe manufacturer. Bedding and backfill shall be as shown on the drawings and specified in the Contract Documents.
- d. After pipe is laid, care shall be taken to avoid the entrance of dirt or water from the trench into the pipe by the use of tight pipe seals. No pipe shall be laid when the trench bottom is under water, or when, in the Engineer's opinion, the trench conditions or the weather are unsuitable for such work. If water is in the trench, the seal shall remain in place until the trench is pumped completely dry.
- e. Any pipe which has floated shall be removed from the trench and be re-laid as directed by the Engineer.
- f. After each section of joined pipe has been laid in the trench and all connections made, the Engineer and Contractor shall perform a joint visual inspection to ensure that the pipe is completely intact, and all mechanical connections have been made according to supplier's recommendations and specifications.
- g. Grade tolerance on water lines shall be +/- 0.05ft/40ft and +/- 0.10ft cumulatively.

3. Pipe Location Tape

- a. The detectable tape shall be installed directly above the pipe in the trench and shall be approximately 12 inches above the pipe. The tape shall be placed during backfill operations.
- b. Tape installation shall be performed in a continuous operation. A 4 foot overlap shall be provided between the ends of rolls.

4. Locator Wire

- a. The wire shall be installed directly above the pipe in the trench and shall be approximately 24 inches below finish grade. The wire shall be placed during backfill operations.
- b. Locator wire installation shall be performed in a continuous operation. Wire shall be spliced as required to form a continuous strand along the length of the pipeline. The locator wire shall be brought to the surface at the point of connection at each end of the 8" HDPE pipeline and at the 8" gate valve at Station 22+14.00."

SP-15: Section 602.4 Flushing and Testing

Make the following changes to item (b):

1. In the second paragraph, delete the sentence: “*The Contractor, at its option, can either use a pressure test or a leakage test*” and substitute the following in its place: “*The Contractor shall perform a pressure test.*”
2. In the fifth paragraph, delete the words “*test copper*”, and substitute the following language:
“*...a 3/4 inch polyethylene pipe, installed at the main according to the typical water service detail. Test section shall be run to the surface, adjacent to the water main, for testing.*”

Add the following language to item (c):

1. Disinfection tests will be performed by the City.
2. The Contractor must submit a disinfection plan to the engineer before work begins on the project.
3. Disinfection water shall not be released overland or to any creeks, streams, temporary or permanent drainage swales or ditches. Disinfection water shall be flushed into the City of Homer sanitary sewer system through a sanitary sewer manhole or cleanout located within 100 feet of the disinfection water discharge point. Alternatively, if no City sanitary sewer manhole or cleanout is located within 100 feet of the disinfection water discharge point, the disinfection water shall be retained in tank truck or other transportable container and discharged into the City of Homer sanitary sewer system at a location to be determined by the engineer.

SP-16: Section 606.5 Basis of Payment

Change the following language:

“

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
606	Water Service Connection	Each”

To:

“

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
606	Water Service Connection (Per Detail on Sheet C-4 of the Construction Drawings)”	Each

SP-17: Add New Section 609 Connection to Existing Water Main Stubout

SECTION 609 CONNECTION TO EXISTING WATER MAIN STUBOUT

609.1 General

There is a water main stub out extending approximately 100 feet into Alder Lane from the water main running along East End Road. The new 8" water main will be connected to this stub out. This item consists of furnishing all labor, equipment and materials necessary to expose the existing water main stub out, modify the end of the stub out as required and connect the new main to the stub out.

609.2 Construction

- A. Rinse all pipe, fittings, and couplings to be used in the connection with a 5% solution of sodium hypochlorite or calcium hypochlorite immediately prior to installation.
- B. Leave the entire reconnection assembly exposed to view until water pressure has been applied, and all joints have been examined for leaks.

SP – 18: Add New Section 610 Install City-Provided Materials

SECTION 610 INSTALL CITY-PROVIDED MATERIALS

610.1 General

This specification covers the installation of all City provided materials as mentioned in SP-2 and throughout this bid package. All aforementioned materials have been delivered to a City of Homer parcel at 1725 East End Road and will be available for the Contractor to inspect. The Contractor shall inspect the materials and if no defects are found, accept them. This inspection shall be completed no more than 14 days after the notice to proceed is issued. Once accepted, the Contractor shall accept responsibility for the materials as if the Contractor had procured them. In the event the Contractor identifies defects in the materials, the Contractor shall promptly notify the City.

The contractor shall deliver the City-furnished material to the job site and store it. The Contractor is responsible for the cost of replacing lost or damaged City-furnished material. The City deducts replacement costs. City-furnished material not used in the work remains the property of the City.

Upon receiving a termination notice, protect unused City-furnished materials until the Engineer confirms that unused materials furnished by the City have been delivered to the City's Public Works Department premises at 3575 Heath Street and stored as ordered. The Contractor must dispose of materials that will not be retained by the City.