ADDENDUM TO THE CONTRACT

for the

F STREET RECONSTRUCTION
Contract No. BE17-215

ADDENDUM NO.: **THREE** **CURRENT DEADLINE FOR BIDS:** **August 9, 2017**

PREVIOUS ADDENDA: **TWO**

ISSUED BY: City and Borough of Juneau
ENGINEERING DEPARTMENT
155 South Seward Street
Juneau, Alaska 99801

DATE ADDENDUM ISSUED: **August 1, 2017**

The following items of the contract are modified as herein indicated. All other items remain the same. This addendum has been issued and is posted online. Please refer to the CBJ Engineering Contracts Division webpage at: http://www.juneau.org/engineering_ftp/contracts/Contracts.php

PROJECT MANUAL:

Item No. 1: SECTION 00310 – BID SCHEDULE, labeled, Addendum No. 1. ***Delete*** in its entirety, and ***replace*** with the attached SECTION 00310 – BID SCHEDULE, labeled Addendum No. 3.

Item No. 2: SPECIAL PROVISIONS, labeled Addendum No. 1, SECTION 01025 – MEASUREMENT AND PAYMENT, Article 2.5 – SANITARY SEWER PIPE, 8-INCH PVC (Pay Item Nos. 2401.1) PRICE BASED ON QUANTITY, LINEAR FOOT. ***Add*** Paragraph D.

"D. Removal of existing sewer system shall be incidental to this pay item."

Item No. 3: SPECIAL PROVISIONS, labeled Addendum No. 1, SECTION 01025 – MEASUREMENT AND PAYMENT, Article 2.7 – LOCATE SEWER SERVICES (Pay Item Nos. 2401.3) PRICE BASED ON LUMP SUM. ***Add*** the following Paragraph E.

"E. WORK shall include verifying existing sewer services depths at the property line for each residence **prior to installing the service wye**. This sewer system is on a hill and many residences may have sewer services serving a basement that would require the tee to be located further downhill than expected in order to install a gravity sewer service with the proper minimum 2% slope."

Item No. 4: SPECIAL PROVISIONS, labeled Addendum No. 1, SECTION 01025 – MEASUREMENT AND PAYMENT, Article 2.15 – 10 – INCH HDPE WATER PIPE (Pay Item No. 2601.1) PRICE BASED ON QUANTITY, LINEAR FOOT. ***Delete*** Paragraph C and ***replace*** with the following:

"C. Removal of existing water system piping shall be incidental to work under this pay item."

Item No. 5: SPECIAL PROVISIONS, labeled Addendum No. 1, SECTION 01025 – MEASUREMENT AND PAYMENT. ***Add*** the following Article 2.28.

"2.28 CONNECT TO EXISTING WATER PIPE (Pay Item No. 2601.2) PRICE BASED ON QUANTITY, EACH.

A. Measurement for payment of Connect to Existing Water Pipe will be based on all the work required to mate the connections to existing pipe in accordance with the requirements of the Contract Documents.

B. The WORK under this Pay Item includes all excavation and backfill, cutting and removing sections of existing water pipe, and all materials including reducers, DI water pipe, joint restraints, and all other WORK and materials necessary to complete connections of new water pipe to existing water pipes including the connection to existing 8-inch DI mainline at approximate Sta 10+35, the two connections to the existing water system at 4th Street and existing gate valve at 5th Street.

C. This work will require shutting down water service to significant portions of 4th Street and 5th Street water system to complete the tie in. Contract shall notify all affected residents with door knockers at least 48 hours prior to shut down. Each shut down will only be allowed for a period of no more than 4 hours between 9:00 AM and 3:00 PM. It is anticipated that two shut downs will take place, one for 4th Street tie in and one for the 5th Street tie in.

D. The CONTRACTOR shall utilize the connection to the existing water system at F Street and 5th Street as the water supply for the purpose of providing water for testing disinfection and flushing. It is understood that the water supply is from the top, however, the CBJ will not allow an additional valve at the connection to the existing point at the intersection of 3rd Street and F Street, as one already exists on the existing leg from 3rd Street. The CONTRACTOR shall plan appropriately, install the appropriate fittings and flush and test the water system as provided for in the specifications. Any additional service saddles installed by the CONTRACTOR to facilitate air venting, disinfection, testing, etc., shall be directly plugged with a threaded brass plug prior to acceptance of the waterline for operations.

E. This work will also include installing the F Street waterline under the existing 6-inch CI waterline on 4th Street unless the CONTRACTOR verifies in advance that the new waterline can be installed above the existing 4th Street mainline and maintain 5' of cover over the top of the new pipe. CONTRACTOR shall provide the necessary bends and fittings to accomplish this.

F. Payment for Connect to Existing Water Pipe will be made at the Unit Price named in the Bid Schedule under Pay Item No. 2601.2, which payment will constitute full compensation for all WORK described in Section 02601 – Water Pipe, as shown on the Drawings and as directed by the ENGINEER."

Item No. 6: SPECIAL PROVISIONS, labeled Addendum No. 1, SECTION 01025 – MEASUREMENT AND PAYMENT. ***Add*** the following Article 2.29.

"2.29 TEMPORARY WATER SYSTEM (Pay Item No. 2601.3) PRICE BASED ON LUMP SUM PAY UNIT

"A. Measurement for payment for Temporary Water System will be based upon the completion of the entire WORK as a lump sum Pay Unit, complete, all in accordance with the requirements of the Contract Documents.

B. Payment for Temporary Water System will be made at the amount named in the Bid Schedule under Pay Item No. 2601.3, which payment will constitute full compensation for allWORK described in Section 02601 – Water Pipe, as shown on the Drawings and as directed by the ENGINEER."

Item No. 7: SPECIAL PROVISIONS, labeled Addendum No. 1, SECTION 01025 – MEASUREMENT AND PAYMENT. ***Add*** the following Article 2.30.

"2.30 10-INCH GATE VALVES (Pay Item No. 2602.2) PRICE BASED ON QUANTITY, EACH.

A. Measurement for payment of gate valves and valve boxes will be based on the actual quantity, each, of such valves and boxes furnished and installed in accordance with the requirements of the Contract Documents.

B. This pay item includes four (4) new 10" gate valves. Payment for 10-Inch Gate Valves will be made at the Unit Price named in the Bid Schedule under Pay Item No. 2602.2, which payment will constitute full compensation for all WORK described in Section 02602 - Valves, as shown on the Drawings and as directed by the ENGINEER."

Item No. 8: SPECIAL PROVISIONS, labeled Addendum No. 1, SECTION 01025 - MEASUREMENT AND PAYMENT, Article 2.24 – REMOVE AND DISPOSE OF EXISTING STORM DRAINAGE SYSTEM, (Pay Item No. 2716.1) PRICE BASED ON LUMP SUM. ***Delete*** and ***replace*** with the following.

"2.24 REMOVE AND DISPOSE STORM DRAIN PIPE (Pay Item No. 2716.1) PRICE BASED ON LUMP SUM

A. Measurement for payment for Remove and Dispose Storm Drain Pipe will be based upon the completion of the entire WORK as a Lump Sum Pay Unit, complete, all in accordance with the requirements of the Contract Documents.

B. Work under this item shall include removal and disposal of ALL Storm Drainage Pipes and Structures within or projecting into the road prism (defined for this purposed as within the area between the top back of curbs).

C. The Contractor may choose to abandon the existing Storm Drain pipe outside of the roadway prism. Abandon existing pipe shall consist of filling the existing pipes with concrete slurry and securely plugging the ends.

D. The excavation, suitable backfill and installation of the appropriate disturbed or specified finished surfacing for pipe removal and disposal outside of the road prism will be incidental to this pay item.

E. Payment for Remove and Dispose/Abandon of Storm Drain Pipe will be made at the Unit Price named in the Bid Schedule under Pay Item No. 2716.1, which payment will constitute full compensation for all WORK described in Section 02716 – Water, Storm and Sanitary Pipe Removal, as shown on the Drawings and as directed by the ENGINEER.

Item No. 9: SPECIAL PROVISIONS, labeled Addendum No. 1, SECTION 01025 - MEASUREMENT AND PAYMENT, Article 2.25 – ABANDON EXISTING STORM DRAINAGE SYSTE (Pay Item No. 2717.1) PRICE BASED ON LUMP SUM. ***Replace*** with the following:

"REMOVE AND DISPOSE STORM DRAIN STUCTURES (Pay Item No. 2717.1) PRICE BASED ON LUMP SUM

A. Measurement for payment for Remove and Dispose Storm Drain Structures will be based upon the completion of the entire WORK as a Lump Sum Pay Unit, complete, all in accordance with the requirements of the Contract Documents.

B. Work under this pay item shall include removal and disposal of storm drain structures

C. The Contractor may choose to abandon the existing Storm Drain Structure outside of the road prism. This work includes removing the top of the storm drain structures to a minimum of 24" below finish grade, punching at least four 1-inch diameter drain holes in the bottom, filling with crushed rock, covering with fabric and restoring the area to the appropriate grade and finish.

D. The excavation, suitable backfill and restoring the area to the appropriate grade and specified finish for storm drain structure removal and disposal outside of the road prism will be incidental to work under this pay item.

E. Payment for Remove and Dispose Storm Drainage System will be made at the Unit Price named in the Bid Schedule under Pay Item No. 2717.1, which payment will constitute full compensation for all WORK described in Section 02717 –Storm and Sanitary Structure Removal, as shown on the Drawings, and as directed by the ENGINEER."

Item No. 10: SPECIAL PROVISIONS, labeled Addendum No. 1, Section 02601 – WATER PIPE, PART 2 – PRODUCTS, Article 2.1 – PIPE. ***Add*** the following Paragraph B.

"B. High-Density Polyethylene (HDPE) pipe shall be produced with approved bimodal PE 3408 / PE 100 / PE 4710 listed resins. The resin shall be DOW Continuum DGDC 2480K, High Density Polyethylene – PE 100 / PE 4710, or approved equal. The pipe shall have a minimum pressure rating of 160 pounds per square inch, and a standard dimension ratio (SDR) of 11. All HDPE water pipe shall have a standard iron pipe size (IPS) outside diameter.

1. The pipe and fitting material shall have a cell classification of 445574 in accordance with ASTM D3350.
2. Compounds shall have a PPI recommended Design Basis (HDB) of 1,600 psi at 68˚F (20˚C). Compounds shall have a PI recommended HDB of 1,000 psi at 176˚F (80˚C).
3. Slow Crack Growth Resistance shall be measured in accordance with ASTM F1473 (PENT). The minimum required time to failure shall be 4,000 hours.
4. HDPE pipe shall comply with AWWA Specifications C906.
5. The material shall be listed by the N.S.F. for potable water service.
6. In-plant blending shall not be allowed.
7. Butt fusion of the pipe and fittings shall be performed in accordance with the manufacturer's recommendations as to the equipment and technique. The fusion operation shall be performed by an individual who has demonstrated the ability to fuse polyethylene pipe in a manner

recommended by the pipe supplier. The individual performing the fusing procedure must hold a current certification for fusing HDPE as stated in Title 49.1 DOT Certification."

Item No. 11: SPECIAL PROVISIONS, labeled Addendum No. 1, SECTION 02601 – WATER PIPE, PART 2 – PRODUCTS, Article 2.3 – Fittings. ***Add*** the following Paragraphs:

"D. All HDPE molded fittings and fabricated fittings shall be fully pressure rated to match the pipe SDR pressure rating to which they are made. All fittings shall be molded or fabricated by the manufacturer. No Contractor fabricated fittings shall be used unless approved by the ENGINEER.

E. The manufacturer of the HDPE pipe shall supply all HDPE fittings and accessories as well as any adapters and/or specials required to perform the WORK as shown on the Drawings, in these Specifications, or as directed by the ENGINEER.

F. All HDPE fittings shall be installed using butt-fused fittings, thermo-fused fittings/couplings, or flanged adapters and must be approved by the ENGINEER. No size on size wet taps shall be permitted.

G. All transitions from HDPE pipe to ductile iron or cast iron shall be made per the HDPE pipe manufacturer's recommendations and specifications and approval of the ENGINEER.

1. Transition from HDPE to ductile iron fittings shall utilize Butt Fusion to Mechanical Joint adaptors with stainless steel stiffeners. The backer rings shall be epoxy coated ductile iron.
2. Fittings and transitions shall be as manufactured by Phillips Driscopipe, Inc., 1000 Series Pressure Pipe, Chevron Chemical Company Plexco/Spiralite Pipe, or equal.
3. The pipe supplier must certify compliance with the above requirements."

Item No. 12: SPECIAL PROVISIONS, labeled Addendum No. 1, SECTION 02601 – WATER PIPE, PART 2 – PRODUCTS, Article 2.9 – TEMPORARY WATER SYSTEM. ***Add*** the following Paragraphs:

"B. The use of garden hoses shall be restricted to a maximum lenth of 20-feet for each residence. All temporary water system piping and materials shall meet NSF 61 standards.

C. No WORK shall begin with the installation of a temporary water system until all affected residents have been notified a minimum of 24 hours in advance. At least one member of each household shall have the installation method explained to them, with an estimate of the duration of the use of the temporary water system."

Item No. 13: SPECIAL PROVISIONS, labeled Addendum No. 1, SECTION 02601 – WATER PIPE, PART 3 – EXECUTION, Article 3.2 – INSTALLATION. ***Add*** the following Paragraphs:

"Q. HDPE pipe shall be joined in continuous lengths on the jobsite above ground. The joining method shall be the butt fusion method and shall be performed in strict accordance with the manufacturer's recommendations.

1. Mechanical joint adapters shall be attached to the HDPE pipe and fittings using butt fusion. Align and center the mechanical joint adapter relative to

the pipe. Mechanical joint adapters shall be square with the receiving valve or other fitting before tightening of bolts. Bolts shall not be used to draw the joints into alignment. Bolt threads shall be lubricated. Bolts shall be tightened in accordance with the manufacturer's recommendations. All bolts and associated hardware shall be stainless steel. The tightening torque shall be as indicated by the manufacturer. Gasket material shall conform to NSF 61.

2. Install tracer wire per manufacture's recommendations. Tracer wire for HDPE pipes shall be taped to the water pipe and located on the bottom quadrant of the pipe so as not to be damaged by excavation for water service installations or future excavation to locate the water main. Tracer wire shall be installed in continuous lengths with no splices. Terminate each end of tracer wire at a valve box, or furnish and install a valve box top section and cap for termination. Drill a ¾" hole in the valve box top similar to the water service standard detail for thaw wires to extend the trace wire into the valve box. Terminate tracer wire at ground surface and provide a minimum of five (5) feet of additional wire neatly coiled within valve box. The trace wire shall be tested for continuity following all backfilling operations to top of shot rock borrow.
3. Flange connections ARE NOT ALLOWED on this project.

R. The CONTRACTOR shall provide and submit to the ENGINEER for review and approval a HDPE fusion plan prior to beginning pipe fusion. The plan shall include:

1. CONTRACTOR's fusion machine including make, model and year.
2. Temperatures and pressures to be used for each size and class of HDPE pipe.
3. Fusion machine manufacturer's procedures for pipe fusion.
4. Fusion data logger."

Item No. 14: SPECIAL PROVISIONS, labeled Addendum No. 1, SECTION 02601 – WATER PIPE, PART 3 – EXECUTION, Article 3.5 – HYDROSTATIC TESTING. ***Add*** the following Paragraph J.

"J. HDPE pipe testing procedures shall conform to ASTM F2164-13. The hydrostatic pressure shall be a minimum of 150 psi or 1-1/2 times the operating pressure of the water pipe measured at the highest elevation of the newly installed water pipe, whichever is greater, unless otherwise directed by the ENGINEER. Acceptance pressure testing shall be done with all service lines installed, corporation stopes open and pressure against the closed curb stops.

1. Check for leaks or significant pressure drops. Correct all leaks and significant pressure drops that require more makeup water than allowable and retest pipe."

Item No. 15: SPECIAL PROVISIONS, labeled Addendum No. 1, SECTION 02601 – WATER PIPE, PART 3 – EXECUTION. ***Add*** the following Article 3.8.

"3.8 CONNECT TO EXISTING WATER PIPE

A. Water pipes shall be capped at a point within 5-feet of the connection points to existing water pipes for testing purposes. No added valves will be considered for payment. Any added valves shall be at the CONTRACTOR's expense.

B. The water pipe connections to the existing water pipes will be visually checked for leakage by the ENGINEER, and shall be swabbed with disinfectant from the new valve to the connection point."

Item No. 16: SPECIAL PROVISIONS, labeled Addendum No. 1, SECTION 02605 – WATER SERVICES, PART 2 – PRODUCTS, Article 2.1 – WATER SERVICES. ***Add*** the following Paragraph H.

"H. Water service saddles for HDPE water mains shall be fusion fittings designed for use with the HDPE pipe and heat fused to the main line pipe."

Item No. 17: SPECIAL PROVISIONS, labeled Addendum No. 1, SECTION 02605 – WATER SERVICES, PART 3 – EXECUTION, Article 3.1 – CONSTRUCTION. ***Add*** the following Paragraphs.

"G. Locate Water Services will require that the CONTRACTOR locate the existing water services that have not been found during the design phase. These services are shown based on existing as-builts or resident comments and are not to be considered reliable indications of actual locations. The other services are shown based on actual survey shots taken at the existing service boxes. These services may not run in a straight line to the water main as shown. The CONTRACTOR shall also verify the actual point of connection for the new water service.

H. Service saddles for HDPE pipe shall be installed in accordance with the manufacturer's installation guidelines.

I. All HDPE service pipe shall be installed with the same No.10 AWG tracer wire specified for the water main. The tracer wire shall be attached to the pipe at or below the spring line of the pipe and connected to the mainline trace wire with Snake Bite corrosion proof wire connectors by Copperhead Industries, LLC, or approved equal. Trace wire shall be extended to the top of the valve box at the property line and extended a minimum of 5' feet through a ¾" hole in the valve box top similar to the water service standard drawing for thaw wires."

Item No. 18: ***Add*** attached intersection detail of Fourth Street and F Street, labeled Addendum No. Three.

Item No. 19: SHEET 7A of 9 – PLAN – F STREET B.O.P. TO STA 13+00, SHEET 8 of 9 – PLAN – F STREET, STA 13+00 TO STA 15+35, and SHEET 9 of 9 – PLAN – F STREET, STA 15+35 to EOP, NOTES. ***Add*** the following to the end of Note 1 on each sheet.

"This note is Typical for all new connections to existing Storm, Water and Sanitary Sewer pipes."

By: _____
For: Greg Smith,
Contract Administrator

Total number of pages contained within this Addendum: 10

SECTION 00310 - BID SCHEDULE

PAY ITEM NO.	PAY ITEM DESCRIPTION	PAY UNIT	APPROX. QUANTITY	UNIT PRICE		AMOUNT	
				DOLLARS	CENTS	DOLLARS	CENTS
1505.1	Mobilization	Lump Sum	All Req'd	Lump	Sum		
1570.1	Erosion and Sediment Control	Lump Sum	All Req'd	Lump	Sum		
2202.1	Excavation	CY	642				
2202.2	Shot Rock Borrow	CY	382				
2202.3	Mining Restoration and Road Cleaning Guarantee	Contingent Sum	All Req'd	Contingent	Sum		
2204.1	2-Inch Minus Shot Rock w/ Base Course	CY	242				
2401.1	Sanitary Sewer Pipe, 8-Inch PVC	LF	504				
2401.2	Sanitary Sewer Service Lateral, 6-Inch	Each	5				
2401.3	Locate Sewer Services	Lump Sum	All Req'd	Lump	Sum		
2402.1	Sanitary Sewer Manhole, Type 1	Each	2				
2501.1	6-Inch Pipe Culvert	LF	261				
2501.2	12-Inch Pipe Culvert	LF	138				
2501.3	18-Inch Pipe Culvert	LF	658				
2501.4	6" Underdrain	LF	50				
2501.5	CPP Saddle Tee	Each	7				
2502.1	Storm Drain Manhole, Type I	Each	4				
2502.2	Storm Drain Manhole, Type II	Each	1				
2502.3	Catch Basin, Type III	Each	4				
2601.1	10-Inch HDPE Water Pipe	LF	504				
2601.2	Connect to Existing Water Pipe	Each	5				
2601.3	Temporary Water System	Lump Sum	All Req'd	Lump	Sum		
2602.1	Replace Valve Box	Each	1				

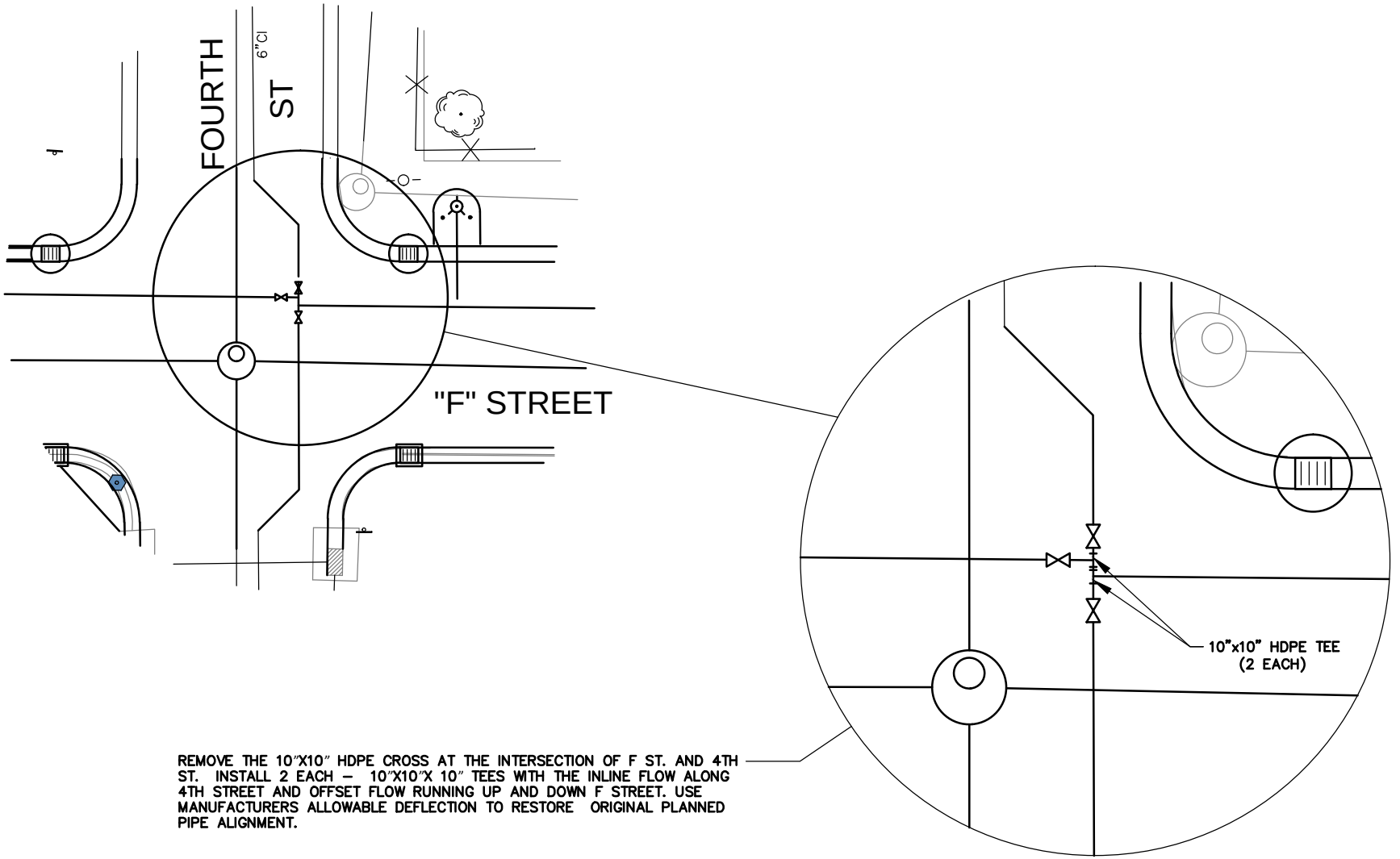
COMPANY NAME _____

SECTION 00310 - BID SCHEDULE

PAY ITEM NO.	PAY ITEM DESCRIPTION	PAY UNIT	APPROX. QUANTITY	UNIT PRICE		AMOUNT	
				DOLLARS	CENTS	DOLLARS	CENTS
2602.2	10" Gate Valves	Each	4				
2603.1	Fire Hydrant Assembly with Access Pad	Each	1				
2605.1	1-Inch HDPE Water Service	Each	4				
2605.2	Locate Water Services	Lump Sum	All Req'd	Lump	Sum		
2702.1	Construction Surveying	Lump Sum	All Req'd	Lump	Sum		
2709.1	Topsoil	CY	25				
2709.2	Topsoil Finish Grading	Lump Sum	All Req'd	Lump	Sum		
2710.1	Seeding, Hydraulic Method, Type III	SU	5				
2716.1	Remove and Dispose of Existing Storm Drain System	Lump Sum	All Req'd	Lump	Sum		
2717.1	Remove and Dispose Storm Draing Structures	Lump Sum	All Req'd	Lump	Sum		
2801.1	A.C. Pavement, Type II-A, Class B	Ton	237				
2806.1	Remove Existing Asphalt Surfacing	SY	1,449				
3302.1	Concrete Headwall with Trashrack	Each	1				
3303.2	Curb and Gutter, Type I	LF	45				
3303.3	Valley Gutter	LF	874				
3304.1	Removal of Curb and Gutter	LF	45				
3304.2	Removal of Valley Gutter	LF	874				

TOTAL BID _____

COMPANY NAME: _____



REMOVE THE 10"X10" HDPE CROSS AT THE INTERSECTION OF F ST. AND 4TH ST. INSTALL 2 EACH – 10"X10"X 10" TEES WITH THE INLINE FLOW ALONG 4TH STREET AND OFFSET FLOW RUNNING UP AND DOWN F STREET. USE MANUFACTURERS ALLOWABLE DEFLECTION TO RESTORE ORIGINAL PLANNED PIPE ALIGNMENT.

Prepared by:

CITY AND BOROUGH OF JUNEAU

ALASKA'S CAPITAL CITY

ENGINEERING DEPARTMENT

F STREET RECONSTRUCTION
CONTRACT NO. BE17-215
ADDENDUM NO. THREE