DOCUMENT 00 90 10 ADDENDUM No. 1



PART 1 GENERAL

1.1 DOCUMENT INCLUDES

A. Changes to the Bid Schedule, Measurement and Payment (Document 00 41 10).

1.2 CONSTRUCTION CONTRACT

- A. The Construction Contract is known as SA009 Jefferson Area Utility Improvements
- B. Date of this Addendum: May 9, 2023

PART 2 CHANGES

2.1 CHANGES TO PRIOR ADDENDA

A. None

2.2 CHANGES TO BIDDING REQUIREMENTS

- A. Document 00 41 00 (Bid Schedule), Added Items 1.17 (Replace U-Channel), 2.05a (Quality Control Testing), and 2.24 (Replace Survey Monument)
- B. Clarifications noted below

2.3 CHANGES TO AGREEMENT AND OTHER CONTRACT FORMS

A. None

2.4 CHANGES TO CONDITIONS OF THE CONTRACT

A. None

2.5 CHANGES TO SPECIFICATIONS

A. None

2.6 CHANGE TO DRAWINGS

A. None

2.7 CLARIFICATIONS

A. Question: What are the sizes of the existing sewer lines?

Answer: Adams -33^{rd} to $34^{th} - 8$ " Clay

Porter – 32nd to 33rd – 8" Clay

Jefferson – 32nd to 31st – 10" Concrete

31st Street – Jefferson to Porter – 12" Clay on North, 12" Concrete on South

Jefferson – 31st to Patterson – 8" Concrete

Patterson – 12" Clay

Porter -29^{th} to 2950 - 8" Clay

B. Question: What are the Flow Rates of existing lines? Answer: No flow data is available for the sewer system

END OF SECTION

DOCUMENT 00 41 10 BID SCHEDULE

PART 1 GENERAL

1.1 DOCUMENT INCLUDES

- A. Bid schedules.
- B. Measurement and payment provisions.

1.2 CONSTRUCTION CONTRACT

A. The Construction Contract is known as:

Jefferson Area Utility Improvements

1.3 REFERENCES

- A. APWA 01 29 00: Payment Procedures.
- B. Document 00 50 00: Agreement.

1.4 SCHEDULE TO BE ADDED TO THE AGREEMENT

A. This document will be added to the Bid and Agreement by reference.

PART 2 BID SCHEDULES

2.1 GENERAL

A. Based upon Bidder's own estimate of quantities and costs and in accordance with paragraph 2.5B.3 of the General Conditions (Document 00 72 00), Bidder submits quantities and prices of items aggregating the Contract Price. The following articles summarize the quantities and prices. Bidder will provide additional breakdown when OWNER is considering Bidder's bid or authorizing future pay requests.

2.1 BASE BID

- A. Bid Schedule No. 1 below describes storm utility work basic to the Contract.
- B. Bid Schedule No. 2 below describes the sewer utility work basic to the Contract and general items applicable to the entire project.
- C. Bid Schedule No. 3 below describes the water utility work basic to the Contract.

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BID SCHEDULE No. 1

Jefferson Area Utility Improvements

Storm Items

Item #	Description	Bid Quantity	Unit	Unit Price	Bid Price
1.01	REMOVE ASPHALT PAVEMENT	505	SF		
1.02	REMOVE & REPLACE OVERSIZED (40") CURB & GUTTER	70	LF		
1.03	REMOVE & REPLACE CURB & GUTTER TYPE A	110	LF		
1.04	REMOVE & REPLACE DRIVEWAY 6" THICK	450	SF		
1.05	REMOVE 15" STORM DRAIN PIPE	50	LF		
1.06	REMOVE 14" x 16" RECTANGULAR CBC	10	LF		
1.07	REMOVE EXISTING STORM STRUCTURE (CATCH BASIN, JUNCTION BOX, INLET)	3	EA		
1.08	3' X 2' CATCH BASIN WITH CURB INLET	3	EA		
1.09	15" CLASS 5 REINFORCED CONCRETE PIPE	80	LF		
1.10	CAST-IN-PLACE TRANSITION FROM 15" RCP TO 14" HIGH X 16" WIDE BOX (MATCH EXISTING)	1	EA		
1.11	4' x 4' MANUFACTURED STEEL PLATE (1/2" THICK)	224	SF		
1.12	T-PATCH (HMA SP 1/2 Class II PG 58-28)	25	TON		
1.13	APWA SPEC ROADBASE (1.5" or 1" MINUS)	30	TON		
1.14	GAS LINE LOOP PREPARATION, BACKFILL, AND RELOCATION	1	EA		
1.15	REPLACE 1" WATER SERVICE LATERAL TO METER	1	EA		
1.16	LOWER SEWER LATERAL	1	EA		
1.17	REPLACE EXISTING U-CHANNEL	1	LF		

	Total = \$	
Schedule 1 Total in Words		
Signature		

BID SCHEDULE No. 2

Jefferson Area Utility Improvements

Sanitary Sewer Items

Item #	Description	Bid Quantity	Unit	Unit Price	Bid Price
2.01	MOBILIZATION / DEMOBILIZATION	1	LS		
2.02	SURVEY	1	LS		
2.03	TRAFFIC CONTROL	1	LS		
2.04	SWPPP	1	LS		
2.05	UTILITY INVESTIGATION	35	HRS		
2.05a	QUALITY CONTROL TESTING	1	LS		
2.06	REMOVE ASPHALT PAVEMENT	44520	SF		
2.07	R/R 24" SDR-35 PVC PIPE	375	LF		
2.08	R/R 15" SDR-35 PVC PIPE	50	LF		
2.09	R/R 12" SDR-35 PVC PIPE	385	LF		
2.10	R/R 10" SDR-35 PVC PIPE	1160	LF		
2.11	R/R 8" SDR-35 PVC PIPE	1620	LF		
2.12	R/R 60" PRE-CAST MANHOLE	10	EA		
2.13	R/R 48" PRE-CAST MANHOLE	8	EA		
2.14	INSTALL 48" PRE-CAST MANHOLE	1	EA		
2.15	RECONNECT SEWER LATERAL	89	EA		
2.16	INSTALL NEW 4" LATERAL & CLEANOUT	10	EA		
2.17	REMOVE AND DISPOSE OF EXISTING MANHOLE	3	EA		
2.18	EXTEND LATERAL TO NEW LINE AND CONNECT	4	EA		
2.19	BYPASS PUMPING	1	LS		
2.20	T-PATCH (HMA SP ½ CLASS II PG 58-28)	1850	TON		
2.21	APWA SPEC ROADBASE (1.5"or 1" MINUS)	2300	TON		
2.22	2" MILL AND OVERLAY	400	TON		
2.23	CRACK SEAL (FILL) T-PATCH SEAMS	1	LS		
2.24	REPLACE EXISTING SURVEY MONUMENT	1	EA		

	Total = \$	
Schedule 2 Total in Words		
Signature		

BID SCHEDULE No. 3

Jefferson Area Utility Improvements

Culinary Water Items

Item#	Description	Bid Quantity	Unit	Unit Price	Bid Price
3.01	REMOVE ASPHALT PAVEMENT	11050	SF		
3.02	CONNECT TO EXISTING WATER MAIN	2	EA		
3.03	FURNISH & INSTALL 6"x8" DUCTILE IRON REDUCER (MJxMJ)	2	EA		
3.04	FURNISH & INSTALL 8" C900 DR-18 PVC	935	LF		
3.05	FURNISH & INSTALL 8" 45° DUCTILE IRON BEND (MJxMJ)	2	EA		
3.06	FURNISH & INSTALL 8" 45° DUCTILE IRON BEND (MJxFL)	2	EA		
3.07	FURNISH & INSTALL 8" GATE VALVE (FLxFL) CLASS 250	2	EA		
3.08	FURNISH & INSTALL 6" GATE VALVE (MJ) CLASS 250	1	EA		
3.09	FURNISH & INSTALL 8"x6" DUCTILE IRON TEE (FLxFL) WITH 8" FLxMJ ADAPTORS	2	EA		
3.10	FURNISH & INSTALL FIRE HYDRANT ASSEMBLY	3	EA		
3.11	1" AWWA C901 SERVICE LATERAL	1375	LF		
3.12	FURNISH & INSTALL WATER METER ASSEMBLY	30	EA		
3.13	RECONNECT EXISTING CULINARY LATERAL (3203 & 3209 Porter Ave)	2	EA		
3.14	BORE 1" SERVICE FOR 522 33RD ST	1	LS		
3.15	BORE 1" SERVICE FOR 3265 PORTER	1	LS		
3.16	BORE 1" SERVICE FOR 3259 PORTER	1	LS		
3.17	KILL 1 1/2" LINE - RECONNECT 6" WATER MAIN (SHUTDOWN REQ'D)	1	EA		
3.18	FURNISH & INSTALL 8"x6" DUCTILE IRON TEE (MJxFL)	1	EA		
3.19	REMOVE & SALVAGE EXISTING FIRE HYDRANT TO CITY	3	EA		
3.20	REMOVE EXISTING VALVE BOX	3	EA		
3.21	FURNISH & INSTALL 1" 201C.2 SINGLE BODY COMBINATION VALMATIC AIR/VAC VALVE	1	EA		
3.22	T-PATCH (HMA SP 1/2 Class II PG 58-28)	475	TON		
3.23	2" Mill & Overlay	140	TON		
3.24	APWA SPEC ROADBASE (1.5"or 1" MINUS)	660	TON		
3.25	REMOVE & REPLACE CURB & GUTTER TYPE A	320	LF		
3.26	REMOVE & REPLACE SIDEWALK 4" THICK	250	SF		
3.27	REMOVE & REPLACE DRIVEWAY 6" THICK	400	SF		
3.28	CAMERA SEWER LINES AND LATERALS	1	LS		

	Total = \$	
Schedule 3 Total in Words		
Signature		
Grand Total Schedules 1, 2, & 3 = \$		
Grand Total in Words		
Signature		

PART 3 MEASUREMENT AND PAYMENT – SCHEDULE 1

3.1 REMOVE ASPHALT PAVEMENT, Bid Item Nos. 1.01, 2.06, & 3.01

- A. Measured by square feet (SF) of asphalt pavement removed.
- B. Remove Asphalt Pavement shall be limited to the locations indicated on the Drawings (plan quantity) or as directed by the Engineer. No direct payment shall be made for removal at locations not on the Drawings unless written direction is provided by the Engineer. The unit price named shall include all costs associated with; saw cutting; demolition, removal, and disposal of waste material; and all other work or materials required to complete the work. (Refer to Section 02 41 14, Pavement Removal).

3.2 REMOVE & REPLACE OVERSIZED (40") CURB & GUTTER, Bid Item No. 1.02

- A. Measurement will be made by linear foot (LF), measured along the top back of curb (TBC).
- B. Payment covers the cost of furnishing all necessary materials and equipment, labor, hauling, disposal, placement, compaction, and testing to replace curb and gutter in accordance with project plans and specifications).
- C. Payment includes formwork, joints, expansion, and dowelling into the existing curb and gutter.
- D. Payment includes curb & gutter transitions to existing as necessary.
- E. Payment covers all costs associated with restoring disturbed landscaping from installation of this bid item including but not limited to turf sod, topsoil, and sprinkler heads and/or damaged sprinkler lines.

3.3 REMOVE & REPLACE CURB & GUTTER TYPE "A", Bid Item Nos. 1.03 & 3.25

- A. Measurement will be made by linear foot (LF), measured along the top back of curb (TBC).
- B. Payment covers the cost of furnishing all necessary materials and equipment, labor, hauling, disposal, placement, compaction, and testing to replace curb and gutter in accordance with Ogden City Standard Drawing RD-4 (Refer to Section 32 16 13, Driveway, Sidewalk, Curb, Gutter).
- C. Payment includes formwork, joints, expansion, and dowelling into the existing curb and gutter.
- D. Payment includes curb & gutter transitions from type "A" to existing as necessary.
- E. Payment covers all costs associated with restoring disturbed landscaping from installation of this bid item including but not limited to turf sod, topsoil, and sprinkler heads and/or damaged sprinkler lines.

3.4 REMOVE & REPLACE DRIVEWAY 6" THICK, Bid Item Nos. 1.04, & 3.27

- A. Measurement will be made by square foot (SF) of 6" concrete drive installed. Removal of any existing concrete in its place is incidental to this item.
- B. Payment covers the cost of furnishing all necessary materials, equipment, and labor, incidental to the removal and disposal of concrete and base material, placement, compaction, rebar, dowelling, jointing, and testing to install concrete driveway in accordance with Ogden City Standards (Refer to Section 32 16 13, Driveway, Sidewalk, Curb, Gutter).
- C. Payment also includes expansion joints, compaction, and special formwork and finish work on the driveway for flares and curb cuts/curb forming.
- D. Payment for new curb/gutter along the driveway will not be included in the square footage.
- E. Payment covers all costs associated with restoring disturbed landscaping from installation of this bid item including but not limited to turf sod, topsoil, and sprinkler heads and/or damaged sprinkler lines.

3.5 REMOVE 15" STORM DRAIN PIPE, Bid Item No. 1.05

A. Measurement shall be made per linear foot (LF) basis, measured in the field, to the nearest foot. Unless indicated otherwise, measurement to be along the pipe from the inside face to inside face of manholes or other structures, or to the end of the pipe where no structure exists.

B. Payment include

- a. All costs for labor, tools, materials, and equipment involved in excavating, removing, hauling and disposing of the existing storm drainpipe as shown on the drawings.
- b. Excavation, supplying, installing, and compacting import granular backfill (APWA-2" Minus Granular Fill Borrow) to the bottom of the untreated base course level, and restoring any adjacent facilities disturbed by construction activities associated with this item.

3.6 REMOVE 14" x 16" RECTANGULAR CBC, Bid Item No. 1.06

A. Measurement shall be made per linear foot (LF) basis, measured in the field, to the nearest foot. Unless indicated otherwise, measurement to be along the structure from the inside face to inside face of manholes or other structures, or to the end of the pipe where no structure exists.

B. Payment includes:

- c. All costs for labor, tools, materials, and equipment involved in excavating, removing, hauling and disposing of the existing storm drain as shown on the drawings.
- d. Excavation, supplying, installing, and compacting import granular backfill (sewer rock, APWA- 3" Minus Granular Fill Borrow) to the bottom of the untreated base course level, and restoring any adjacent facilities disturbed by construction activities associated with this item.

3.7 REMOVE EXISTING STORM STRUCTURE (CATCH BASIN, JUNCTION BOX, INLET) Bid Item No. 1.07

- A. Measured by each structure (EA).
- B. Payment includes:
 - a. All costs and equipment incidental to catch basin/manhole/junction box/inlet removal and disposal.
 - b. Necessary approved backfill to the necessary grade under the direction of the ENGINEER.
 - c. Any hauling, labor, disposal, compaction, and testing which may be required by the ENGINEER.

3.8 3' X 2' CATCH BASIN WITH CURB INLET, Bid Item No. 1.08

- A. Measurement will be by each structure installed (EA).
- B. Payment includes:
 - a. All necessary materials, labor, equipment, and tools required to construct and install a complete drainage structure including but not limited to the following: Concrete, reinforcing steel, grate and frame, excavation, base and backfill material, and any other items required in standard drawings.
 - b. The connection to any pipe culvert or other drainage feature will be incidental to construction and no separate payment will be made for this work (grout and collar req'd at connections).
 - c. The concrete plug of abandoned storm pipe left in place is incidental to construction and no separate payment will be made for this work.
 - d. The City will make no separate payment for testing upon failure of visual inspection.

3.9 15" CLASS 5 REINFORCED CONCRETE PIPE, Bid Item No. 1.09

- A. Measurement will be made from structure to structure along centerline of pipe per linear foot (LF).
- B. Payment covers:
 - a. The cost of the size and type of pipe indicated, with installation per APWA Plan No. 381 and surface restoration not identified as separate pay items in the price schedule.
 - b. The cost of incidental work such as, fittings, couplings, joint lubricants; selective clearing and tree removal; removal and disposal of interfering structures and obstructions; concrete rings, frame and lid as applicable; grout; jackhammer work; trench shoring or trench boxes as applicable; underground detectable locator tape markers; cleaning of invert covers; removal and disposal of waste materials; restoration of all utilities damaged as a result of operations; site dewatering; pipe line cleaning; main repair or replacement if damaged by CONTRACTOR; and similar work to complete the installation of the pipe.
 - c. All costs to furnish and stockpile the import bedding and pipe zone material stockpile and import backfill materials (APWA 2" Minus Granular Fill Borrow); place, shape, compact and prepare the material around the pipe, provide compaction

- and gradation tests, provide certified scale tickets for the material delivered, and dewatering.
- d. All trenching is to conform to Ogden City Standards for material, placement, depth, and compaction. Trench width must be a minimum of 4' wide and must meet pipe zone width recommended by the manufacturer of the pipe.
- e. Pipe bedding and pipe zone material shall be placed a minimum of six inches below the pipe and up to spring line of the pipe per Ogden City Standards Plan SD-6.
- f. The import granular backfill borrow shall be placed directly above the import pipe bedding and pipe zone material to the bottom of the untreated base course layer.
- g. There will be no payment for over excavation unless approved in written form by the engineer prior to the excavation.
- h. The cost of quality control and all testing as required by APWA 01 45 00 and the Ogden City Standards for City Projects. Includes testing by a third party of all earthwork compaction, and concrete testing as outlined in APWA and Ogden City Standards
- i. Storm drain line must be video inspected prior to acceptance by the City.

3.10 CAST-IN-PLACE TRANSITION FROM 15" RCP TO 14" HIGH X 16" WIDE BOX (MATCH EXISTING), Bid Items No. 1.10

- A. Measurement will be made per each (EA).
- B. Payment covers:
 - a. Excavation, concrete cutting, forms, labor, concrete, reinforcement, and other materials required to create a watertight flowable transition between the RCP and the existing box channel.
 - b. The cost of incidental work such as: removal and disposal of interfering structures and obstructions; concrete, frame and lid as applicable; grout; jackhammer work; trench shoring or trench boxes as applicable; underground detectable locator tape markers; cleaning of channels; removal and disposal of waste materials; restoration of all utilities damaged as a result of operations; site dewatering; pipe line cleaning; main repair or replacement if damaged by CONTRACTOR; and similar work to complete the installation of the transition.
 - c. All costs to furnish and stockpile the import bedding and pipe zone material stockpile and import backfill materials (APWA 2" Minus Granular Fill Borrow); place, shape, compact and prepare the material around the transition, provide compaction and gradation tests, provide certified scale tickets for the material delivered, and dewatering.
 - d. All trenching is to conform to Ogden City Standards for material, placement, depth, and compaction. Trench width must be a minimum of 4' wide and must meet pipe zone width recommended by the manufacturer of the pipe.
 - e. Pipe bedding and pipe zone material shall be placed a minimum of six inches below the pipe and up to spring line of the pipe per Ogden City Standards Plan SD-6.
 - f. The import granular backfill borrow shall be placed directly above the import pipe bedding and pipe zone material to the bottom of the untreated base course layer.
 - g. There will be no payment for over excavation unless approved in written form by the engineer prior to the excavation.

- h. The cost of quality control and all testing as required by APWA 01 45 00 and the Ogden City Standards for City Projects. Includes testing by a third party of all earthwork compaction, and concrete testing as outlined in APWA and Ogden City Standards
- i. Storm drain line must be video inspected prior to acceptance by the City.

3.11 4' x 4' MANUFACTURED STEEL PLATE (1/2" THICK), Bid Item No. 1.11

A. Measurement will be made by square feet of (SF) steel plate installed on top of U-channel.

B. Payment covers:

- a. The cost of clearing/sawcutting (as necessary) the surface of the U-channel and prepping for the installation of the plate.
- b. The cost of furnishing all necessary materials and equipment, labor, placement, and testing to install manufactured steel plate.
- c. Installing 1/2" thick steel plate, neoprene pad, and headed studs used to secure plate to type A curb and gutter.

3.12 T- PATCH (HMA SP ½ CLASS II PG 58-28) Bid Item Nos. 1.12, 2.20, & 3.22

- A. Measurement will be made by tons (TONS) of HMA placed per project plans and specifications. Asphalt shall be Class II per Section 32 12 05 SP.
- B. Payment covers the cost of furnishing all necessary materials, asphalt, tack coat equipment, labor, hauling, placement, and compaction to produce an acceptably deep excavation asphalt "T" patch per Ogden City Standard Drawing RD-3. Payment covers the cost of installing the full thickness of hot-mixed, hot laid asphalt concrete pavement (with no more than 15% recycled asphalt content). (Refer to Section 32 12 05 SP, Bituminous Concrete)
- C. Payment also covers the costs of final sawcutting, "scratching" out the trench and general prep work prior to paving.
- D. Payment covers the mobilization costs to pave at each site (four separate mobilizations incrementally throughout the duration of the project).

3.13 APWA SPEC ROADBASE (1.5" or 1" MINUS), Bid Item Nos. 1.13, 2.21, & 3.24

- A. Measurement will be made by tons (TONS) of untreated base course placed and compacted.
- B. Payment covers the cost of furnishing all necessary materials, aggregate base course, labor, hauling, placement, and compaction to produce an acceptably deep aggregate base course layer per Ogden City Standard Drawings RD-3 and project plan specified thickness. Payment covers the cost of installing the full thickness of aggregate base course layer and preparation for pavement installation (or concrete). (Refer to Section 33 05 25, Pavement Restoration)
- C. No payment will be made for aggregate base course purchased and installed as a temporary construction measure.

- D. No payment for this item will be made for aggregate base used as trench backfill (below the bottom of UTBC level).
- E. Aggregate base course shall be untreated. No recycled roadbase (or any recycled material) will be accepted for roadbase on the project.

3.14 GAS LINE LOOP PREPARATION / BACKFILL / RELOCATION, Bid Item No. 1.14

- A. Measurement will be made by each (EA) gas line loop relocated.
- B. Payment covers preparation, excavation, coordination for Dominion Energy to relocate gas line loop, backfill, compaction, and restoration of surface to existing conditions.

3.15 REPLACE 1" WATER SERVICE LATERAL TO METER, Bid Item No. 1.15

- A. Measurement will be made by each (EA) water service lateral relocated.
- B. Payment covers:
 - a. Size and type of pipe indicated to replace water service line from main to the backside of meter (and subsequent connection to the house side service line), with installation per APWA Plan No. 543.
 - b. The cost of incidental work such as concrete thrust blocks, restrained joints, fittings, couplings, joint lubricants, nuts, bolts and washers; removal and disposal of interfering structures and obstructions; jackhammer work; trench shoring or trench boxes as applicable, addition/deep excavation, additional backfill/pipe bedding, underground plastic line markers; removal and disposal of waste materials; restoration of all utilities damaged as a result of operations; site dewatering; pipe line cleaning; water main repair or replacement if damaged by CONTRACTOR; adjustments to grade of existing valve boxes or traffic lids or manholes; and similar work to complete the installation of the water line loop. (Refer to Section 33 11 00, Water Distribution and Transmission).

3.16 LOWER SEWER LATERAL, Bid Item No. 1.16

- A. Measurement will be made per each (EA) sewer lateral lowered.
- B. Payments covers:
 - a. All labor, materials, transportation, and other items associated with the lowering of the pipe.
 - b. The cost of incidental work including but not limited to removal and disposal of existing sewer lateral, all trenching, shoring, rock excavation, dewatering, related earthwork, bedding material, and backfill.

3.17 REPLACE EXISTING U-CHANNEL, Bid Item No. 1.17

- A. Measurement will be made per each (LF) of U-Channel replaced.
- B. Payments covers:
 - a. All labor, materials, transportation, and other items associated with the removal and disposal of the existing channel.
 - b. The cost of forms, reinforcement, concrete, labor, and materials to recreate the

channel to its existing dimensions.

c. The cost of incidental work including but not limited to removal and disposal of existing box, all trenching, shoring, rock excavation, dewatering, related earthwork, bedding material, and backfill.

PART 4 MEASUREMENT AND PAYMENT – GENERAL

4.1 GENERAL

- A. See measurement and payment procedures in APWA Section 01 29 00.
- B. ENGINEER will take all measurements and compute all quantities.
- C. CONTRACTOR will verify measurement and quantities.
- D. CONTRACTOR will provide all equipment, workers, and survey crews to assist ENGINEER in making measurements.
- E. Units of measurement are listed above in the bid schedule(s).

4.2 MOBILIZATION/DEMOBILIZATION, Bid Item No. 2.01

- A. Measurement and Payment for this item shall be by lump sum (LS)
- B. Payment shall be made at the <u>lump sum</u> price and shall include all costs for mobilization and demobilization; including but not limited to temporary facilities, modifying, and maintaining project identification signs, movement of equipment, traffic control, coordination with all the agencies/entities having jurisdiction, utility companies and affected property owners and all necessary permits from Ogden City and other applicable entities.
- C. Payment will be made on a percentage basis per the table below

F				
PAY FACTORS FOR MOBILIZATION, TRAFFIC CONTROL, AND TEMPORARY FACILITIES				
Percent of Original Contract Amount Earned Not Including Materials Purchased	Percent of Amount Bid for Mobilization/TC to be Paid			
5	40			
15	20			
40	30			
50	10			

4.3 SURVEY, Bid Item No. 2.02

- A. Measured by lump sum (LS).
- B. Payment shall be as a portion of the lump sum price bid and shall include all costs to provide construction surveying and staking for the project including all labor by the Contractor's Surveyor, equipment, materials and supplies necessary to provide survey preparation, control, staking offsets and markers necessary for construction of the water

line system, curb & gutter elevations, sidewalk elevations, driveways, ped ramps, roadway, and appurtenances associated with the project.

4.4 TRAFFIC CONTROL, Bid Item No. 2.03

- A. Measured by lump sum (LS).
- B. Payment covers traffic control plan (accepted by Ogden City), traffic control technician, flaggers (if necessary), temporary pavement markings, signs, barricades, and all traffic control devices (Refer to Section 01 55 26, Traffic Control) meeting MUTCD and Ogden City Standards. The traffic control plan shall be stamped by a Professional Engineer and submitted to both Emergency service and Ogden City's traffic engineer for approval.

4.5 SWPPP, Bid Item No. 2.04

- A. Measured by lump sum (LS).
- B. Payment covers the CONTRACTOR in obtaining coverage and following all requirements of the State of Utah DWQ General Permit for Storm Water Discharges from Construction Activities or the "Construction General Permit" (CGP). Permit No. UTRC00000found at: https://documents.deg.utah.gov/waterquality/stormwater/construction/DWQ-2020-013890.pdf. The CONTRACTOR will be listed as an Operator and Ogden City will be listed as the Owner. Payment covers the CONTRACTOR to meet all requirements of the CGP. Requirements of this permit include, but are not limited to:
 - a. Preparation and maintenance of a storm water pollution prevention plan (SWPPP). The SWPPP must be submitted to and approved by City prior to beginning construction.
 - b. Submitting a Notice of Intent (NOI) prior to construction.
 - c. Maintaining active permit coverage throughout all phases of construction. It is the responsibility of the CONTRACTOR to ensure that permit coverage does not expire. Once the site meets the conditions for terminating CGP coverage, the CONTRACTOR must pass a final inspection with the City SWPPP inspector prior to submitting the Notice Of Termination (NOT) to DWQ.
 - d. Installing and maintaining all storm water Best Management Practices (BMPs) in accordance with the approved SWPPP that are not listed as separate bid items, which may include; silt fence, construction fencing, inlet protection, inlet clean-out (if necessary).
 - e. Performing necessary Contractor SWPPP inspections in accordance with the SWPPP.
 - f. Maintaining all required documentation (inspection reports, corrective action reports, SWPPPs, etc.). Ogden City may request documents associated with the project for up to three years from the date the site is finalized.
- C. The CGP outlines the required steps for preparing and maintaining the SWPPP, provides guidelines, examples, templates, BMP specifications, etc.
- D. Payment shall cover dust control/watering of the site, daily maintenance of the construction zone, daily sweeping at a minimum, maintaining BMP devices, and maintaining general cleanliness of the site and staging areas during the construction

- process to the satisfaction of the City. Trenches shall be maintained at all times to avoid ruts larger than a 2-inch depth.
- E. Payment shall cover temporary water meter rental fees billed to the Contractor from the City. Contractor will NOT be billed for water usage for the project but must utilize a meter to obtain City water for the project.

4.6 UTILITY INVESTIGATION, Bid Item No. 2.05

- A. Measurement will be made by counting the actual number of hours (HR) of work completed by the machine and operator to investigate miscellaneous underground features as required by the ENGINEER. No allowance of time will be made for transporting the backhoe to and from the job site when the backhoe is located on the site of the Contract.
- B. Payment covers furnishing and providing labor and equipment for investigation of existing miscellaneous pipelines, wires and cables, and sub-surface features as **required by the ENGINEER**. ENGINEER must approve time before Contractor is to proceed with any paid utility investigation.

4.7 **OUALITY CONTROL TESTING, Bid Item No. 2.05a**

A. Measurement will be made by lump sum (LS) for the total time, materials, equipment, overhead, laboratory work, retesting, labor, and materials for the performance of quality control testing by a certified third party testing company for pipes, backfill, concrete, and all other project components per Ogden City Standards and Specifications and APWA Section 01 45 00.

PART 5 MEASUREMENTS AND PAYMENT – SCHEDULE 2

5.1 R/R SDR-35 PVC PIPE (VARIOUS SIZES, Bid Items No. 2.07-2.11

- A. Measurement will be made from structure to structure along centerline of pipe per linear foot (LF).
- B. Payment includes all costs, labor, equipment and materials incidental to the removal of existing sewer pipe and the installation of new PVC SDR-35 sanitary sewer pipe (8", 12", 15", or 24" diameter) per Ogden City Engineering Standards as indicated on the project drawings and/or as indicated by the ENGINEER. Payment covers the cost of incidental work such as, fittings, couplings, joint lubricants; selective clearing and tree removal; removal and disposal of interfering structures and obstructions; concrete rings, frame and lid as applicable; grout; jackhammer work; trench shoring or trench boxes as applicable; underground line markers; cleaning of invert covers; removal and disposal of waste materials; restoration of all utilities damaged as a result of operations; site dewatering; pipe line cleaning; main repair or replacement if damaged by CONTRACTOR; all excavation, materials for foundation stabilization, bedding, haunching, pipe zone and trench zone backfill per Ogden City Standard Drawings SS-3 and SS-4, and all other appurtenant work not otherwise stipulated to be paid for separately.

- C. Payment for this bid item includes all trench backfill material placement and compaction per Ogden City Engineering and APWA standards up to the bottom elevation of the UTBC section of the roadway, or 12" below finish asphalt grade. No additional payment shall be made for additional trench backfill material used due to over-excavation of the trench zone.
- D. Payment includes removal and hauling/disposal of all existing pipe materials as indicated on the plans or as directed by the ENGINEER.
- E. Includes connecting pipe to new and/or existing structures.
- F. Sewer mainline must be video inspected prior to acceptance by the OWNER.

5.2 R/R 60" PRE-CAST MANHOLE, Bid Item No. 2.12

- A. Measurement will be actual count per each manhole removed & replaced (EA).
- B. Payment covers all necessary materials required to construct and install a complete 60" diameter pre-cast concrete sewer manhole including but not limited to the following: Concrete, reinforcing steel, sewer lid, manhole steps, cover and frame, collaring, and any other items required in standard drawings. Refer to Ogden City standard drawings SS-1 to SS-6.
- C. Payment covers the cost of excavation, bedding and backfill, potholing, acquisition and installation of new manhole, new manhole materials, relocation as needed of customer connection within manhole. Includes all other miscellaneous devices, materials, labor, and equipment associated with installation of the sewer manhole. Refer to Ogden City standard drawings SS-1 to SS-6.
- D. Payment includes all excavation, hauling and disposal of existing manhole materials.
- E. The connection to any sewer pipe or other sewer feature will be incidental to construction and no separate payment will be made for this work. Includes site dewatering.
- F. The City will make no separate payment for testing upon failure of visual inspection.

5.3 R/R 48" PRE-CAST MANHOLE, Bid Item No. 2.13

- A. Measurement will be actual count per each manhole removed & replaced (EA).
- B. Payment covers all necessary materials required to construct and install a complete 48" diameter pre-cast concrete sewer manhole including but not limited to the following: Concrete, reinforcing steel, sewer lid, manhole steps, cover and frame, collaring, and any other items required in standard drawings. Refer to Ogden City standard drawings SS-1 to SS-6.
- C. Payment covers the cost of excavation, bedding and backfill, potholing, acquisition and installation of new manhole, new manhole materials, relocation as needed of customer connection within manhole. Includes all other miscellaneous devices, materials, labor, and equipment associated with installation of the sewer manhole. Refer to Ogden City standard drawings SS-1 to SS-6.
- D. Payment includes all excavation, hauling and disposal of existing manhole materials.

- E. The connection to any sewer pipe or other sewer feature will be incidental to construction and no separate payment will be made for this work. Includes site dewatering.
- F. The City will make no separate payment for testing upon failure of visual inspection.

5.4 INSTALL NEW 48" PRE-CAST MANHOLE, Bid Item No. 2.14

- A. Measurement will be actual count per each manhole removed & replaced (EA).
- B. Payment covers all necessary materials required to construct and install a complete 48" diameter pre-cast concrete sewer manhole including but not limited to the following: Concrete, reinforcing steel, sewer lid, manhole steps, cover and frame, collaring, and any other items required in standard drawings. Refer to Ogden City standard drawings SS-1 to SS-6.
- C. Payment covers the cost of excavation, bedding and backfill, potholing, acquisition and installation of new manhole, new manhole materials, relocation as needed of customer connection within manhole. Includes all other miscellaneous devices, materials, labor, and equipment associated with installation of the sewer manhole. Refer to Ogden City standard drawings SS-1 to SS-6.
- D. The connection to any sewer pipe or other sewer feature will be incidental to construction and no separate payment will be made for this work. Includes site dewatering.
- E. The City will make no separate payment for testing upon failure of visual inspection.

5.5 RECONNECT SEWER LATERAL, Bid Item No. 2.15

- A. Measurement will be made by actual count per each 4" sewer lateral connection installed (EA).
- B. Payment covers the cost of excavation, soil preparation, potholing, installation, repair joints, sewer lateral piping, connection to existing lateral, wye, tee, Fernco shear coupling, 4-inch PVC SDR 35 sewer lateral, rubber gaskets, fitting, commissioning lateral, earthwork compaction and preparation, removal & disposal or abandonment of the existing sewer lateral tubing, disinfection and commissioning of the lateral; and other miscellaneous devices, materials, or equipment required for a complete service connection. (Refer to APWA Section 33 31 00, Sanitary Sewer Systems and Ogden City Standard Drawing SS-2). Includes all excavation, import pipe bedding, pipe zone backfill and trench backfill material; street surface restoration; and all other appurtenant work not otherwise stipulated to be paid for separately.
- C. CCTV footage required before and after construction at a minimum through the limits of disturbance (trenching/paving).

5.6 INSTALL NEW 4" LATERAL & CLEANOUT, Bid Item No. 2.16

- A. Measurement will be made by actual count per each 4" sewer lateral installed (EA).
- B. Payment covers the cost of excavation, soil preparation, potholing, installation, repair joints, sewer lateral piping, connection to existing lateral, wye, tee, Fernco shear

coupling, 4-inch PVC SDR 35 sewer lateral, rubber gaskets, fitting, commissioning lateral, earthwork compaction and preparation, removal & disposal or abandonment of the existing sewer lateral tubing, disinfection and commissioning of the lateral; and other miscellaneous devices, materials, or equipment required for a complete service connection. (Refer to APWA Section 33 31 00, Sanitary Sewer Systems and Ogden City Standard Drawing SS-2 and SS-8). Includes all excavation, import pipe bedding, pipe zone backfill and trench backfill material; street surface restoration; and all other appurtenant work not otherwise stipulated to be paid for separately.

C. Payment includes installation of Christy G08 Cleanout Box, installation of 4" sewer lateral back to the property line, and all other costs, materials, equipment and labor required to install the sewer lateral per Ogden City Standard Drawing SS-8.

5.7 REMOVE AND DISPOSE OF EXISTING MANHOLE, Bid Item No. 2.17

- A. Measurement will be made per each (EA) removed manhole as shown on plans.
- B. Payment covers all labor, materials, transportation, and other items associated with abandoning existing sewer manhole, including but not limited to:
 - a. All trenching, excavation, bedding, compaction, shoring, dewatering, and related earthwork.
 - b. Removal, disposal, loading, transportation, and backfill required to cap and abandon the existing sewer manholes according to the plans and specifications.

5.8 EXTEND LATERAL TO NEW LINE AND CONNECT, Bid Item No. 2.18

- A. Measurement will be made per each (EA) lateral.
- B. Payment covers all labor, materials, transportation, and other items associated with extending an existing sewer lateral, including but not limited to:
 - a. All trenching, excavation, bedding, compaction, shoring, dewatering, and related earthwork
 - b. Furnishing all pipe, fittings, and appurtenances required to extend an existing lateral, cleanout, and connect new portions to new gravity sewer main per the plans and specifications.
- D. CCTV footage required before and after construction at a minimum through the limits of disturbance (trenching/paving).

5.9 BYPASS PUMPING, Bid Item No. 2.19

- A. Measurement will be made by lump sum (LS).
- B. Payment covers all labor, materials, transportation, and other items associated with bypass pumping, including but not limited to:
 - a. Performing all operations required to bypass pump wastewater around a manhole or sewer section in which work is to be performed
 - b. Furnishing and installing all pumps, piping, and other equipment necessary to accomplish bypass pumping
 - c. Perform complete restoration of all existing facilities and areas disturbed to

- conditions equal or better than pre-construction conditions
- d. Verification of sewer flows for bypass pump sizing Pressure testing of bypass piping

5.10 2" MILL & OVERLAY (HMA SP 1/2, PG 58-28), Bid Item Nos. 2.22 & 3.23

- A. Measurement will be made by tons (TONS) of asphalt placed as part of the 2" overlay.
- B. Payment covers the cost of furnishing all necessary materials, asphalt, 2" rotomill, tack coat, equipment, labor, hauling, placement, and compaction to produce a 2" rotomill and overlay. Payment covers the cost of installing the full thickness of hot-mixed, hot laid asphalt concrete pavement (with no more than 15% recycled asphalt content). Refer to Section 32 12 05 SP Bituminous Concrete). Incidental sweeping (street sweeper machine required) is expected to produce a sufficient bond for tack coat application and 2" overlay. Tack coat is required on all milled surfaces. Asphalt shall be Class II per Section 32 12 05 SP.

5.11 CRACK SEAL (FILL) T-PATCH SEAMS, Bid Item Nos. 2.23

- A. Measurement will be made by Lump Sum (LS) for the entire project.
- B. Payment covers the cost of furnishing all necessary materials, equipment, labor, transportation, and any traffic control necessary to crack seal all seams of the T-patch to the existing asphalt (including any overcuts into the asphalt) according to APWA SECTION 32 01 17.
- C. Payment covers the cost to crack seal at seams of any poured collars (monuments, manholes, valves) for the project.
- D. Payment covers the cost to perform this work the Spring (2024) after the project is completed.

5.12 REPLACE EXISTING SURVEY MONUMENT, Bid Item Nos. 2.24

- A. Measurement shall be made by each monument box (EA).
- B. Payment covers all costs of monument survey before removal and actual removal of the monument, marker plate, concrete ring, and the frame and cover and all other items associated with removal of the monument.
- C. Payment covers all costs of monument survey, monument, marker plate, concrete ring, and the frame and cover and all other items associated with installing the monument per Ogden City Standard Plans SUR-1, SUR-2, and SUR-3. Payment also covers all cost, labor, and materials shown to establish the monument.
- D. Contractor required to coordinate with the Ogden City Surveyor (Steve Porter 801-629-8979) for location and installation of each monument.
- E. Includes survey monument in place following APWA Plan No. 274. Includes all permitting, fees and additional traffic control to meet said guidelines.

PART 6 MEASUREMENTS AND PAYMENT – SCHEDULE 3

6.1 CONNECT TO EXISTING WATER MAIN, Bid Item No. 3.02

- A. Measurement shall be made per each (EA) connection made to the existing water main. No additional payment will be made for additional connections due to contractor phasing of construction requiring connections from new main to new main.
- B. Payment shall be made at the unit price bid and shall include all labor, materials, tools, and equipment to furnish and install the fittings necessary to complete the connection between the existing pipe and the new pipe. Payment includes all costs to locate and excavate the existing water main and connect the new C-900 DR18 to the existing main as shown on the plans. Payment includes removal of up to 30 feet of the existing pipe, if required, to make the connection with the existing pipes including looping the new C-900 DR18 pipe to match the elevation of the existing waterline, prepare the ends of the pipe and to remove and legally dispose of the removed pipe and fittings.
- C. Contractor is responsible to pothole and verify the pipe depth, material and size of existing waterlines prior to ordering parts and fittings. Payment includes all costs to furnish and install sleeve connections with MEGA-LUG followers or approved equal on the mechanical joint ends and all costs for required concrete thrust blocks.
- D. Payment includes all costs to coordinate with the Ogden City Water Department for all water shutdowns necessary for installation of the complete connection. Payment includes 48-hour advance written notifications to all residents affected by any water service interruption. Payment includes costs for excavation, backfill and compaction, compaction testing, blue staking, potholing, legal waste disposal, all landscaping related and sod restoration not covered under other items, and plugging and blocking the end of the mains to be abandoned, and all associated work items required to complete this bid item. Total length of pipe for connection shall not exceed 20 feet.
- E. Payment includes all connection pieces to be properly swabbed and disinfected with chlorine.
- F. Payment shall be made at the unit price bid and shall include all costs to remove the existing pipe, saw-cut, remove, and legally dispose of pipe waste materials; plugging of existing pipes as required on the plans; provide trench excavation with legal disposal of excavated waste materials, shoring or stabilization, and de-watering; excavate existing excess material to provide for the finish street structure.

6.2 FURNISH & INSTALL 6"x8" DUCTILE IRON REDUCER (MJxMJ), Bid Item No. 3.03

- A. Measurement will be made per each (EA) installed reducer.
- B. Payment covers all labor, materials, transportation, and other items associated with the installation of the fitting including but not limited to:
 - a. All excavation, trenching, dewatering, bedding, backfill, compaction, and related earthwork including restoration of disturbed areas to equal or better condition.
 - b. Installation of thrust blocks (if necessary) per Ogden City standards.
 - c. Cleaning, testing, flushing, and disinfection of the fitting.

- d. Replacement of any damaged utilities as they occur at no additional cost to the Owner.
- e. All incidental work required to install the fitting per the plans and specifications.
- f. Includes all megalugs/bolt packs (blue bolts req'd).

6.3 FURNISH & INSTALL 8" C900 DR-18 PVC, Bid Item No. 3.04

- A. Measurement shall be made per linear foot (LF) of 8 INCH PVC C-900 DR18 water line installed as measured from connection point to connection point along the centerline of the pipeline.
- B. Payment shall be made at the linear foot price bid and shall include all material, labor, tools, and equipment to coordinate construction, install water line including shoring or stabilization, de-watering, and dust control following all water line trench standards per plan W-18.
 - 1. Payment covers the cost of incidental work such as potholing, fittings, couplings, joint lubricants, gaskets, jackhammer work; underground line marking tape; landscape replacement if damaged by CONTRACTOR'S operations; restoration of all utilities damaged as a result of operations; site dewatering; water main repair or replacement if damaged by CONTRACTOR; and similar work to complete the installation of the water line.
 - 2. Furnishing and installing DI bends, crosses, tees, and fittings identified on the construction drawings except those specifically listed in other bid items; plugging of existing pipes as required on the plans, etc.,
 - 3. Polywrap all Ductile fittings & valves with 8 Mil Polyethylene sheet and Tape Wrap.
 - 4. All costs for concrete thrust blocks, including fabric wrapping to protect bolts and followers from the concrete. Install the concrete thrust blocking with the minimum bearing surface indicated in the project plans.
 - 5. Provide and install all MEGA-LUG followers, pipe joint restraints as labeled in the plans, or approved equal on all fittings, tees, and bends, all costs for the labor and equipment to saw cut the pipe for connections as required.
 - 6. All C-900 DR18 PVC pipe shall have 12 ga. insulated tracing wire installed with the pipe. Tracing wires shall terminate in Snakepit tracer box style (CD14BTor approved equal) according to Ogden City Standard W-1B. Marking tape shall also be installed with the pipe per Ogden City Standards.
 - 7. Cost to clean the interior of the line by sweeping and/or spraying to remove any accumulated debris, sand or foreign materials prior to the installation of the pipe in the trench. Payment includes the cost to pressure test the line, perform bacteria tests on the line, disinfect the line and flush the line (Bacteriological sample costs will NOT be billed to the Contractor unless resampling is required due to failed samples). Payment includes all costs associated with dust control including evenings and weekends between 7:00 am and 9:00 pm, or as required by the City Engineer.
- C. Payment shall include all trenching costs associated with this item including import pipe bedding, backfill (3" minus), and compaction. Payment includes all excavation and removal of material for installation of the pipe. Sand bedding shall be placed a minimum of 6 inches below the bottom of pipe and 12 inches above the top of pipe

with 12 inches on each side of pipe bedded and haunched according to PVC pipe manufacturers' recommendations and Ogden City Standards. Material placed as backfill above the pipe bedding material shall be APWA 3" Minus Granular Fill Borrow or better.

6.4 FURNISH & INSTALL 8" 45° DUCTILE IRON BEND (MJxMJ), Bid Item No. 3.05

- A. Measurement will be made per each (EA) installed bend.
- B. Payment covers all labor, materials, transportation, and other items associated with the installation of the bend including but not limited to:
 - a. All excavation, trenching, dewatering, bedding, backfill, compaction, and related earthwork including restoration of disturbed areas to equal or better condition.
 - b. Providing and installing Megalugs on MJ connections (bolt packs to be "blue").
 - c. Installation of thrust blocks (if necessary) per Ogden City standards.
 - d. Cleaning, testing, flushing, and disinfection of the fitting.
 - e. Replacement of any damaged utilities as they occur at no additional cost to the Owner.
 - f. All incidental work required to install the bend per the plans and specifications.

6.5 FURNISH & INSTALL 8" 45° DUCTILE IRON BEND (MJxFL), Bid Item No. 3.06

- A. Measurement will be made per each (EA) installed bend.
- B. Payment covers all labor, materials, transportation, and other items associated with the installation of the bend including but not limited to:
 - a. All excavation, trenching, dewatering, bedding, backfill, compaction, and related earthwork including restoration of disturbed areas to equal or better condition.
 - b. Providing and installing Megalugs on MJ connections.
 - c. Installation of thrust blocks per Ogden City standards.
 - d. Cleaning, testing, flushing, and disinfection of the fitting.
 - e. Replacement of any damaged utilities as they occur at no additional cost to the Owner.
 - f. All incidental work required to install the bend per the plans and specifications.

6.6 FURNISH & INSTALL 8" GATE VALVE (FLxFL) CLASS 250, Bid Item No. 3.07

- A. Measurement will be made by actual count per each EA gate valve installed
- B. Payment covers the cost of excavation, foundation preparation, restraint devices, cast iron slip-type valve boxes per Ogden City Standards and project plan details. Payment covers traffic lids, valve, concrete collar sealed, backfill, backfill material, and other miscellaneous devices, materials, or equipment required for a complete installation. Ogden City's Water Department Approved Materials List should be consulted for acceptable valve types. (Refer to Section 33 12 16, Water Valves)
- C. Valves shall be greased and wrapped. Documentation of wrapped valve is required prior to backfill.
- D. Payment shall include raising the valve box to final grade and providing the 12-inch thick, 12-inch wide, concrete collar around the cover(s) meeting city standards.

Concrete for collars shall be obtained from batched concrete (i.e. Jack B. Parsons, Geneva, etc.).

6.7 FURNISH & INSTALL 6" GATE VALVE (FLxFL) CLASS 250, Bid Item No. 3.08

- A. Measurement will be made by actual count per each EA line gate valve installed (for 33rd Street location only, hydrant valves are paid for as part of the hydrant assembly).
- B. Payment covers the cost of excavation, foundation preparation, restraint devices, cast iron slip-type valve boxes per Ogden City Standards and project plan details. Payment covers traffic lids, valve, concrete collar w/seal, backfill, backfill material, and other miscellaneous devices, materials, or equipment required for a complete installation. Ogden City's Water Department Approved Materials List should be consulted for acceptable valve types. (Refer to Section 33 12 16, Water Valves)
- C. Valves shall be greased and wrapped. Documentation of wrapped valve is required prior to backfill.
- D. Payment shall include raising the valve box to final grade and providing the 12-inch thick, 12-inch wide, concrete collar around the cover(s) meeting city standards. Concrete for collars shall be obtained from batched concrete (i.e. Jack B. Parsons, Geneva, etc.).

6.8 FURNISH & INSTALL 8"x6" DUCTILE IRON TEE (FLxFL) WITH 8" FLANGE ADAPTERS, Bid Item No. 3.09

- A. Measurement will be made per each (EA) installed tee.
- B. Payment covers all labor, materials, transportation, and other items associated with the installation of the tee including but not limited to:
 - g. All excavation, trenching, dewatering, bedding, backfill, compaction, and related earthwork including restoration of disturbed areas to equal or better condition.
 - h. Installation of thrust blocks per Ogden City standards.
 - i. Cleaning, testing, flushing, and disinfection of the tee.
 - j. Replacement of any damaged utilities as they occur at no additional cost to the Owner.
 - k. All incidental work required to install the tee per the plans and specifications.

6.9 FURNISH & INSTALL FIRE HYDRANT ASSEMBLY, Bid Item No. 3.10

- A. Measurement will be made by actual count per each (EA) installed.
- B. Payment covers the cost of excavation, soil preparation, potholing, installing the new fire hydrant with surface coatings and fittings, 6-inch ductile iron supply main piping and any required bends/loops around existing utilities, connection of the new fire hydrant to new water main with ductile iron pipe with exterior of pipe tape wrapped; gate valves with cast iron slip-type valve boxes, traffic lids, concrete collar (w/seal); miscellaneous tees, sleeves, bends, gaskets, bolts, nuts; approved joint restraining devices; greasing and wrapping all exposed fittings, bolts and nuts; pipeline dewatering; concrete thrust restraints; concrete box repair, painting and other miscellaneous devices;

- snake pit boxes with tracer wire, collars; and all other materials/labor necessary to install new fire hydrant assembly according to Ogden City Standard Drawings W-1A, W-1B, & W-2.
- C. Payment shall include raising the valve box to final grade and providing the 12-inch thick, 12-inch wide, concrete collar around the cover(s) meeting city standards. Concrete for collars shall be obtained from batched concrete (i.e. Jack B. Parsons, Geneva, etc.).
- D. Payment includes painting the fire hydrant barrel safety yellow and the caps/bonnet the color determined from a flow test performed by the water department after paving is completed (Refer to Section 33 12 19 SP Hydrants for more details).
- E. Payment covers all costs associated with restoring disturbed landscaping from installation of this bid item including but not limited to turf sod, topsoil, and sprinkler heads and/or damaged sprinkler lines.

6.10 1" AWWA C901 SERVICE LATERAL, Bid Item No. 3.11

- A. Measurement will be made by linear foot (LF) of service line installed.
- B. Payment covers the cost of excavation, soil preparation, potholing, import pipe bedding and backfill, disturbed concrete repair and disposal, the new water lateral CTS Poly piping (AWWA C901), tracer wire, connection of the new water lateral to new water main, connection of the new water lateral to the servicing meter, connection of the new meter to the property side service connection, furnishing and installing any necessary adaptors/reducers, existing removal or abandonment and disposal of the existing water pipe(s), disinfection and commissioning pipeline; and other work incidental to the installation of the water lateral. It is preferred that boring/pulling of the water lateral occur before open trench excavation is used. However, all excavation, backfill material (i.e. sand/ 3 in Minus), placement, compaction (in 8" max lifts), and landscape restoration required to install the service line will be paid for under this bid item. (Refer to Section 33 12 33, Water Meter).

6.11 1" WATER METER ASSEMBLY, Bid Item No. 3.12

- A. Measurement will be made by actual count per each installed (EA).
- B. Payment covers the cost of excavation, potholing, and new meter setter materials (sand fill compacted) and devices; acquisition and installation of new Raven meter box, ring & cover, removal and disposal of existing meter assembly and meter box, extension of the service lateral from the new meter to the old meter location, connection of the new water lateral to the servicing meter in-line with the existing service connections, removal or abandonment of the existing water lateral tubing, disinfection and commissioning of the lateral; restoration of all landscaping; and other miscellaneous devices, materials, or equipment required for a complete installation; all in accordance with Ogden City Standard Drawing W-3. Note, all existing meters are 5/8" or 3/4". Payment includes the necessary adaptors to connect the new 1" line to the existing meter and piping/materials necessary to connect to the house side of the meter assembly. Ogden City's Water Department Approved Materials List should be

- consulted for acceptable equipment types. (Refer to Section 33 12 33, Water Meter), acceptable dual check valve Ford HHCA34-444-G-NL 1" Dual Check Valve. Acceptable angle valve Ford KV43-444WQ/G Angle Valve 1" COMP NL. Meter Box Raven Plastic Tapered 16x24x36 (White interior). Ring & Cover A32-LB-TP Ford Ring & Cover w/2" Hole.
- C. Payment covers the labor and tools necessary to install water meter "buttons" on the face of curb (adhesive and buttons will be provided by the Water Department).
- D. Payment covers all costs associated with restoring disturbed landscaping from installation of this bid item including but not limited to turf sod, topsoil, and sprinkler heads and/or damaged sprinkler lines.
- E. Payment covers furnishing and installing the necessary service saddle. Service saddles shall be nylon coated with double stainless steel straps
- F. Payment covers furnishing and installing the appropriate corp stop. Corp stops shall be either Mueller or Ford ball valve type with T-cap head adaptors.

6.12 RECONNECT EXISTING CULINARY LATERAL (3203 & 3209 Porter Ave), Bid Item No. 3.13

- A. Measurement will be made per each (EA) reconnected lateral.
- B. Payment covers all labor, materials, transportation, and other items associated with the reconnection of the lateral including but not limited to:
 - a. All excavation, trenching, dewatering, bedding, backfill, compaction, and related earthwork including restoration of disturbed areas to equal or better condition.
 - b. Installation of corp stop, straps, fittings, and poly pipe as shown in Ogden City standards to reconnect existing lateral to the new waterline.
 - c. Cleaning, testing, flushing, and disinfection of the lateral.
 - d. Replacement of any damaged utilities as they occur at no additional cost to the Owner.
 - e. Payment covers furnishing and installing the necessary service saddle. Service saddles shall be nylon coated with double stainless steel straps.
 - f. Payment covers furnishing and installing the appropriate corp stop. Corp stops shall be either Mueller or Ford ball valve type with T-cap head adaptors.

6.13 BORE 1" SERVCE FOR 522 33rd ST, Bid Item No. 3.14

- A. Measurement will be made on a Lump Sum (LS) quantity basis and shall include all lateral line installed as shown on the plans from the new meter on 33rd St to the connection point in front of the home of 522.
- B. Payment covers all labor, materials, transportation, and other items associated with the installation of the lateral including but not limited to:
 - a. Pipe material from the new meter to the connection point as shown on the plans (all service lateral on street side from the meter to main is paid for as part of item 3.11).
 - b. All excavation, trenching, dewatering, bedding, backfill, compaction, and related

- earthwork including restoration of disturbed areas to equal or better condition.
- c. All pits, equipment, and labor to bore the lateral as shown on plans and according to city specifications
- d. Cleaning, testing, flushing, and disinfection of the lateral (lateral will need to be sampled by Water Dept.).
- e. Replacement of any damaged utilities as they occur at no additional cost to the Owner.
- f. All incidental work required to install the lateral per the plans and specifications.
- g. All landscaped restoration to "as was" condition or better.

6.14 BORE 1" SERVCE FOR 3265 PORTER, Bid Item No. 3.15

- A. Measurement will be made on a Lump Sum (LS) quantity basis and shall include all lateral line installed as shown on the plans from the new meter on Porter to the connection point for the home of 3265.
- B. Payment covers all labor, materials, transportation, and other items associated with the installation of the lateral including but not limited to:
 - a. Pipe material from the new meter to the connection point as shown on the plans (all service lateral on street side from the meter to main is paid for as part of item 3.11).
 - b. All excavation, trenching, dewatering, bedding, backfill, compaction, and related earthwork including restoration of disturbed areas to equal or better condition.
 - c. All pits, equipment, and labor to bore the lateral as shown on plans and according to city specifications
 - d. Cleaning, testing, flushing, and disinfection of the lateral (lateral will need to be sampled by Water Dept.).
 - e. Replacement of any damaged utilities as they occur at no additional cost to the Owner.
 - f. All landscaped restoration to "as was" condition or better.

6.15 BORE 1" SERVCE FOR 3259 PORTER, Bid Item No. 3.16

- A. Measurement will be made on a Lump Sum (LS) quantity basis and shall include all lateral line installed as shown on the plans from the new meter on Porter to the connection point for the home of 3265.
- B. Payment covers all labor, materials, transportation, and other items associated with the installation of the lateral including but not limited to:
 - a. Pipe material from the new meter to the connection point as shown on the plans (all service lateral on street side from the meter to main is paid for as part of item 3.11).
 - b. All excavation, trenching, dewatering, bedding, backfill, compaction, and related earthwork including restoration of disturbed areas to equal or better condition.
 - c. All pits, equipment, and labor to bore the lateral as shown on plans and according to city specifications
 - d. Cleaning, testing, flushing, and disinfection of the lateral (lateral will need to be

- sampled by Water Dept.).
- e. Replacement of any damaged utilities as they occur at no additional cost to the Owner.
- f. All landscaped restoration to "as was" condition or better.

6.16 KILL 1-1/2" LINE – RECONNECT 6" WATER MAIN (SHUTDOWN REQ'D), Bid Item No. 3.17

- A. Measurement will be made on a per Each (EA) basis and shall include all connection work on 33^{rd} Street to the existing 6" main including capping and abandoning the existing $1 \frac{1}{2}$ " Galvanized line in the alley. Payment shall be treated as a *Connect to Existing Water Main* item.
- B. Payment shall be made at the unit price bid and shall include all labor, materials, tools, and equipment to furnish and install the fittings necessary to complete the connection between the existing pipe and the new pipe. Payment includes all costs to locate and excavate the existing water main and connect the new ductile iron pipe to the existing main as shown on the plans. Payment includes removal of up to 20 feet of the existing pipe, if required, to make the connection with the existing pipe.
- C. Contractor is responsible to pothole and verify the pipe depth, material and size of existing waterlines prior to ordering parts and fittings. Payment includes all costs to furnish and install sleeve connections with MEGA-LUG followers or approved equal on the mechanical joint ends.
- D. Payment includes all costs to coordinate with the Ogden City Water Department for all water shutdowns necessary for installation of the complete connection. Payment includes 48-hour advance written notifications to all residents affected by any water service interruption. Payment includes costs for excavation, backfill and compaction (including furnishing import fill), compaction testing, blue staking, potholing, legal waste disposal, all landscaping related and sod restoration not covered under other items, and plugging and blocking the end of the mains to be abandoned, and all associated work items required to complete this bid item. Total length of pipe for connection shall not exceed 20 feet but is estimated to be closer to 10 feet.
- E. Payment includes all connection pieces to be properly swabbed and disinfected with
- F. Payment shall be made at the unit price bid and shall include all costs to remove the existing pipe, saw-cut, remove, and legally dispose of pipe waste materials; plugging of existing pipes as required on the plans; provide trench excavation with legal disposal of excavated waste materials, shoring or stabilization, and de-watering; excavate existing excess material to provide for the finish street structure.

6.17 FURNISH & INSTALL 8"x6" DUCTILE IRON TEE (MJxFL), Bid Item No. 3.18

- A. Measurement will be made per each (EA) installed tee.
- B. Payment covers all labor, materials, transportation, and other items associated with the installation of the tee including but not limited to:
 - a. All excavation, trenching, dewatering, bedding, backfill, compaction, and related earthwork including restoration of disturbed areas to equal or better condition.

- b. Providing and installing Megalugs on MJ connections (including blue bolt packs).
- c. Installation of thrust blocks per Ogden City standards.
- d. Cleaning, testing, flushing, and disinfection of the tee.
- e. Replacement of any damaged utilities as they occur at no additional cost to the Owner.
- f. All incidental work required to install the tee per the plans and specifications.

6.18 REMOVE & SALVAGE EXISTING FIRE HYDRANT TO CITY, Bid Item No. 3.19

- A. Measured by each (EA) fire hydrant assembly removed.
- B. Payment includes removal and disposal of hydrant system including but not limited to hydrant pipe, valve, and capping of existing 6" stem at the main in an acceptable manner to Ogden City (hydrant barrel and pipe must be removed beyond the "pumpkin"). Removal includes the removal of the existing water pipe(s), the existing fire hydrant barrel, and the valve box to the hydrant. SALVAGE existing hydrant at the request of the Ogden City Water Department. Payment also includes cost of excavation, removal, hauling, properly disposing of material, and any required backfilling and backfill material in the void left. Backfill material to be structural imported fill.
- C. Payment covers all costs associated with restoring disturbed landscaping from this bid item including but not limited to turf sod, topsoil, and sprinkler heads and/or damaged sprinkler lines.

6.19 REMOVE EXISTING VALVE BOX, Bid Item No. 3.20

- A. Measured per each valve box removed (EA).
- B. Payment covers the cost of furnishing all necessary materials and equipment, labor, demolition, backfill, patchwork, compaction, disposal, to remove existing water valve boxes as specified by the ENGINEER. (Refer to Section 02 41 13, Selective Site Demolition)

6.20 FURNISH & INSTALL 1" 201C.2 SINGLE BODY COMBINATION VALMATIC AIR/VAC VALVE, Bid Item No. 3.21

- A. Measurement will be made by actual count per each installed (EA).
- B. Payment covers the cost of excavation, foundation preparation, restraint devices, manhole, saddle, combination air valve, piping, venting, bedding, backfill, and other miscellaneous devices, materials, and equipment required for a complete installation as shown on the plans and according to Ogden City Engineering Standard Drawing W-14A and W-14B. Ogden City's Water Department Approved Materials List should be consulted for acceptable equipment types. (Refer to Section 33 11 00, Water Distribution and Transmission). Vault should be sealed off from silting in.
- C. Payment includes furnish/installation of the vent pipe and vent box poured in a concrete foundation (per detail) along with protective bollards per detail.

6.21 REMOVE & REPLACE SIDEWALK 4" THICK, Bid Item No. 3.26

- A. Measured per square foot (SF) of new sidewalk placed. Removal of existing concrete in its place is incidental to this item.
- B. Payment covers the cost of furnishing all necessary materials and equipment, labor, hauling, disposal, placement, compaction, concrete and testing to remove and replace sidewalk per Ogden City Standards (Refer to Section 32 16 13, Driveway, Sidewalk, Curb, Gutter).
- C. The exact location and quantity will be determined in the field with approval from the Owner or Owner's representative.
- D. Payment covers all costs associated with restoring disturbed landscaping from installation of this bid item including but not limited to turf sod, topsoil, and sprinkler heads and/or damaged sprinkler lines.

6.22 CAMERA SEWER LINES AND LATERALS, Bid Item No. 3.28

- A. Measurement will be made by lump sum (LS).
- B. Payment covers all labor, materials, equipment, transportation, and other items associated with the video inspection and locating of the existing and/or new sewer lines and laterals that cross the proposed water main (on Porter Ave) prior to construction of the water line components and again prior to paving to verify that no settlement or damage has occurred as a result of construction.
 - a. Video submittals will be provided to Ogden City prior to construction of the water line and again prior to construction of the asphalt pavement.

END OF DOCUMENT