

ADDENDUM No. 2

To

Contract Documents, Specifications, and Plans

For

**AMERICAN FORK CITY
FY 2020 PAVEMENT REHABILITATION PROJECT**

March 31, 2020



ADDENDUM No. 2

To

Contract Documents, Specifications, and Plans

For

American Fork City
FY 2020 Pavement Rehabilitation Project

March 31, 2020

These Contract Documents, Specifications, and Plans are hereby revised to include the following changes. Contractors bidding the project shall conform to these revisions and acknowledge receipt of this Addendum on Page 1 of the Bid Form (003000-1).

SPECIFICATIONS

REPLACE: Section 003000 with the attached.

REPLACE: Section 010190 with the attached.

ADD: Table of Contents to the SPECIFICATIONS AS REFERENCED add,
“Pleasant Grove Public Works Standard Specifications and Drawings (November 2017)
- can be found at www.plgrove.org/public-works/services/engineering.html”

CLARIFICATION: Chips and/or pea gravel will not be allowed as a pipe zone material or as an import backfill material.

CLARIFICATION: Prime coat will not be allowed as a curing seal on FDR areas. Water cure will be used.

CHANGE: Separate Bids for the Construction of the American Fork City FY 2020 Pavement Rehabilitation Project will be received by American Fork City online through the Utah Division of Purchasing and General Services at the website purchasing.utah.gov until 2:00 p.m., **Monday, April 6, 2020**.

REPLACE: Section 105000 Part 1.04 G Replace “Solar Panel, 55 Watt” with the following:
“Battery, 48 AH”

REPLACE: Section 105000 Part 1.05 B with the following:
“Warning Sign Pole
a. Pole shall be 2 7/8” O.D. schedule 80 galvanized steel, 13’ to 15’ in length.”

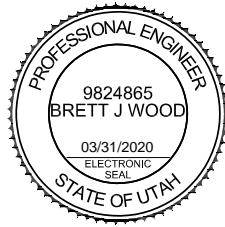
PLANS

REPLACE: Replace the attached sheets.

ADD: Add the attached sheet DT-07.

Addendum #2 is hereby approved and issued on Date March 31, 2020.

By Horrocks Engineers



Brett J. Wood, P.E.

END ADDENDUM

DOCUMENT 003000

BID

**AMERICAN FORK CITY
FY 2020 PAVEMENT REHABILITATION PROJECT**

Date _____

Proposal of _____ (hereinafter called "BIDDER", organized and existing under the laws of the State of Utah, doing business as _____.*

*Insert "a corporation", "a partnership", or "an individual" as applicable.

To American Fork City (hereinafter called "OWNER").

In compliance with the Advertisement for Bids, BIDDER hereby proposes to perform all work for the construction of the American Fork City **FY 2020 Pavement Rehabilitation Project** in strict accordance with the CONTRACT DOCUMENTS, within the time set forth therein, and at the prices stated below.

By submission of this BID, each BIDDER certifies, and in the case of a joint BID, each party thereto certifies as to his own organization that this BID has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this BID with any other BIDDER or with any competitor.

BIDDER hereby agrees to commence work under this contract on or before a date to be specified in the Notice to Proceed and to fully complete the project by October 15, 2020. The UDOT contributing portion of the work shall be completed within 45 calendar days of the Notice to Proceed.

BIDDER further agrees to pay as liquidated damages, the sum of \$500 for each consecutive calendar day thereafter as provided in section 15 of the General Conditions.

BIDDER acknowledges receipt of the following ADDENDA:

The BIDDER agrees to perform all the work described in the specifications and shown on the plans for the following BASE BID AMOUNT (Figures are to be typewritten or clearly and legibly printed in ink.):

The BIDDER agrees that this bid shall be good and may not be withdrawn for 60 calendar days as stated in the specifications after the scheduled closing time for receiving bids.

The BID unit prices shall include all labor, materials, mobilization, rentals, trench dewatering, shoring, removal, overhead, profit, insurance, sales tax, other applicable taxes and fees, etc., to cover the finished work of the several kinds called for.

Upon receipt of written notice of the acceptance of this bid, BIDDER will execute the formal contract attached within 10 days and deliver a Surety Bond or Bonds as required by the General Conditions. The bid security amounting to five (5) percent of the base bid is hereby attached in the sum of (\$ _____) and is to become the property of the OWNER in the event the contract and bond are not executed within the time above set forth, as liquidated damages for the delay and additional expense to the OWNER caused thereby.

**SCHEDULE OF VALUES – BASE BID A
50 South**

For a responsive bid, write in the unit price for each item, multiply by the respective units, and total for the total price.

Item Number	Description	Quantity	Units	Unit Price	Total Price
1	Mobilization	1	LS		
2	Traffic Control	1	LS		
3	Storm Water Pollution Prevention Plan	1	LS		
4	Tree Trimming	1	LS		
5	Hot Mix Asphalt (4 Inch)	820	TON		
6	Remove Asphalt	3390	SY		
7	Roadway Excavation	200	CY		
8	Granular Borrow	200	CY		
9	Grading	1	LS		
10	Intersection Radius	4	EA		
11	One Direction ADA Pedestrian Ramp	4	EA		
12	Adjust Valve Box	9	EA		
13	Adjust Manhole	2	EA		
14	Paint Markings and Striping	1	LS		
	TOTAL BASE BID PRICE	1	LS	-----	

**SCHEDULE OF VALUES – BASE BID B
100 East**

For a responsive bid, write in the unit price for each item, multiply by the respective units, and total for the total price.

Item Number	Description	Quantity	Units	Unit Price	Total Price
100	Mobilization	1	LS		
101	Traffic Control	1	LS		
102	Storm Water Pollution Prevention Plan	1	LS		
103	Tree Trimming	1	LS		
104	Hot Mix Asphalt (4 Inch)	1310	TON		
105	Remove Asphalt	5480	SY		
106	Intersection Radius	2	EA		
107	Roadway Excavation	200	CY		

108	Granular Borrow	200	CY		
109	Grading	20	LS		
110	Remove Curb and Gutter	20	LF		
111	24 Inch Curb and Gutter	20	LF		
112	One Direction ADA Pedestrian Ramp	3	EA		
113	Two Direction ADA Pedestrian Ramp	2	EA		
114	Adjust Valve Box	5	EA		
115	Adjust Manhole	6	EA		
116	Paint Markings and Striping	1	LS		
117	Catch Basin	1	EA		
	TOTAL BASE BID PRICE	1	LS	-----	

SCHEDULE OF VALUES – BASE BID C
200 North

For a responsive bid, write in the unit price for each item, multiply by the respective units, and total for the total price.

Item Number	Description	Quantity	Units	Unit Price	Total Price
200	Mobilization	1	LS		
201	Traffic Control	1	LS		
202	Storm Water Pollution Prevention Plan	1	LS		
203	Tree Trimming	1	LS		
204	Remove Excess Material	910	CY		
205	Roadway Excavation	100	CY		
206	Granular Borrow	100	CY		
207	Full Depth Reclamation (6 Inch)	1820	CY		
208	Hot Mix Asphalt (3 Inch)	1970	TON		
209	Adjust Valve Box	32	EA		
210	Adjust Manhole	17	EA		
211	Two Direction ADA Pedestrian Ramp	7	EA		
212	One Direction ADA Pedestrian Ramp	17	EA		
213	Paint Markings and Striping	1	LS		
214	Remove and Dispose Large Diversion Structure	1	LS		
215	60 Inch Manhole	2	EA		
216	Remove and Dispose of Storm Drain Structure	6	LS		
217	18 Inch CMP Pipe	10	LF		
218	18 Inch CMP Coupling	1	EA		
219	24 Inch HDPE Pipe	23	LF		

220	24 Inch HDPE Coupling	2	EA		
221	Cap Existing Pipe with Concrete	10	EA		
222	Remove Existing Storm Drain Pipe	212	LF		
223	Flared End Section	1	EA		
224	Import Backfill Material	140	TON		
225	Intersection Radius	1	EA		
226	Remove Curb and Gutter	130	LF		
227	24 Inch Curb and Gutter	170	LF		
228	Valley Gutter	150	SF		
229	6 Inch Driveway	60	SF		
230	Pretreatment Inlet and Sump	1	EA		
	TOTAL BASE BID PRICE	1	LS	-----	

SCHEDULE OF VALUES – BASE BID D
200 West

For a responsive bid, write in the unit price for each item, multiply by the respective units, and total for the total price.

Item Number	Description	Quantity	Units	Unit Price	Total Price
300	Mobilization	1	LS		
301	Traffic Control	1	LS		
302	Storm Water Pollution Prevention Plan	1	LS		
303	Tree Trimming	1	LS		
304	Hot Mix Asphalt (3.5 Inch)	980	TON		
305	Full Depth Reclamation (6 Inch)	780	CY		
306	Roadway Excavation	100	CY		
307	Granular Borrow	100	CY		
308	Remove Excess Material	460	CY		
309	Intersection Radius	1	EA		
310	Adjust Monument Box	1	EA		
311	Adjust Valve Box	10	EA		
312	Adjust Manhole	4	EA		
313	Catch Basin with Flat Grate	1	EA		
314	15 Inch RCP	26	LF		
315	One Direction ADA Pedestrian Ramp	1	EA		
316	Two Direction ADA Pedestrian Ramp	2	EA		
317	Paint Markings and Striping	1	LS		
318	Remove Curb and Gutter	65	LF		

319	30 Inch Curb and Gutter	65	LF		
320	Remove and Dispose Valve Box and Collar	1	EA		
	TOTAL BASE BID PRICE	1	LS	-----	

SCHEDULE OF VALUES – BASE BID E
700 North

For a responsive bid, write in the unit price for each item, multiply by the respective units, and total for the total price.

Item Number	Description	Quantity	Units	Unit Price	Total Price
400	Mobilization	1	LS		
401	Traffic Control	1	LS		
402	Storm Water Pollution Prevention Plan	1	LS		
403	Tree Trimming	1	LS		
404	Hot Mix Asphalt	3860	TON		
405	Untreated Base Course (12 Inch)	580	CY		
406	Edge Mill	6980	SY		
407	Heavy Duty Paving Fabric	22240	SY		
408	Remove Asphalt	3160	SY		
409	Roadway Excavation	470	CY		
410	Granular Borrow	200	CY		
411	HMA Leveling Course	70	TON		
412	Intersection Radius	16	EA		
413	Two Direction ADA Pedestrian Ramp	25	EA		
414	One Direction ADA Pedestrian Ramp	12	EA		
415	Adjust Valve Box	73	EA		
416	Adjust Manhole	44	EA		
417	Paint Markings and Striping	40	GAL		
418	Pavement Messages	20.5	EA		
419	24 inch Curb and Gutter	694	LF		
420	Remove Curb and Gutter	275	LF		
421	6 Inch Driveway	534	SF		
422	4 Foot Sidewalk	1465	SF		
423	Stamped Concrete	450	SF		
424	Valley Gutter	480	SF		
425	RRFB System	1	LS		
426	Retaining Wall	500	SF		
427	1 Inch Water Lateral Pipe (Trenchless)	765	LF		

428	Water Service Connection	35	EA		
429	Hot Tap Connection	11	EA		
430	12 Inch PVC C-900 DR-18 Pipe	75	LF		
431	12 x 8 Inch Reducer	1	EA		
432	12 Inch 22.5 Degree Bend	1	EA		
433	12 Inch Cut and Cap	2	EA		
434	10 Inch Gate Valve	1	EA		
435	10 Inch Cut and Cap	1	EA		
436	10 Inch PVC C-900 DR-18 Pipe	25	LF		
437	8 Inch PVC C-900 DR-18 Pipe	585	LF		
438	8 Inch Gate Valve	36	EA		
439	8 x 8 Inch Tee	4	EA		
440	8 Inch Long Sleeve	29	EA		
441	8 x 6 Inch Reducer	5	EA		
442	8 x 4 Inch Reducer	2	EA		
443	8 Inch 45 Degree Bend	28	EA		
444	8 Inch 11.25 Degree Bend	1	EA		
445	8 Inch Blind Flange	4	EA		
446	8 Inch Cut and Cap	14	EA		
447	6 Inch 45 Degree Bend	10	EA		
448	6 Inch PVC C-900 DR-18 Pipe	100	LF		
449	6 Inch Gate Valve	7	EA		
450	6 Inch Long Sleeve	12	EA		
451	6 Inch Cut and Cap	6	EA		
452	Remove Existing Water Valve Box	18	EA		
453	Remove Existing Cross	4	EA		
454	4 Inch Cut and Cap	10	EA		
455	4 Inch 45 Degree Bend	4	EA		
456	4 Inch PVC C-900 DR-18 Pipe	20	LF		
457	4 Inch Long Sleeve	2	EA		
458	Remove Existing 4 Inch Ductile Iron Pipe	20	LF		
459	Remove Existing Tee	2	EA		
460	4 Inch Blind Flange	1	EA		
461	Verify Service by Pothole	29	EA		
462	Import Backfill	560	CY		

463	Owner's Contingency	1	LS	\$50,000	\$50,000
	TOTAL BASE BID PRICE	1	LS	-----	

SCHEDULE OF VALUES – ADDITIVE ALTERNATE 1

For a responsive bid, write in the unit price for each item, multiply by the respective units, and total for the total price.

Item Number	Description	Quantity	Units	Unit Price
500	1 Inch Water Lateral Pipe (Open Trench)	-----	LF	
501	Setter	-----	EA	
502	Plus or Minus Cement Content	-----	CY	
503	Pulverized Lateral Repair and Reconnect	-----	EA	
504	12 Inch Line Stop	-----	EA	
505	10 Inch Line Stop	-----	EA	
506	8 Inch Line Stop	-----	EA	
507	6 Inch Line Stop	-----	EA	
508	4 Inch Line Stop	-----	EA	

SCHEDULE OF VALUES – ADDITIVE ALTERNATE 2

50 South Water Line

For a responsive bid, write in the unit price for each item, multiply by the respective units, and total for the total price.

Item Number	Description	Quantity	Units	Unit Price	Total Price
600	Mobilization	1	LS		
601	Traffic Control	1	LS		
602	8 Inch PVC C-900 DR-18 Pipe	640	LF		
603	1 Inch Water Lateral Pipe (Trenchless)	105	LF		
604	Water Service Connection	3	EA		
605	8 Inch Gate Valve	1	EA		
606	8 x 8 Inch Tee	1	EA		
607	8 Inch Long Sleeve	1	EA		
608	8 Inch Cap	2	EA		
609	Fire Hydrant	1	EA		
610	Import Backfill (100%)	285	TON		
611	2 Inch Stabilization Rock	25	TON		
612	Untreated Base Course (8 Inch)	90	CY		
	TOTAL BASE BID PRICE	1	LS	-----	

Measurement and Payment Descriptions are included in Section 010190.

ATTEST:

License No.

Respectfully Submitted:

Signature

Address

Title

Date

SECTION 010190

CONTRACT CONSIDERATIONS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Application for payment.
- B. Change procedures.
- C. Measurement and payment - unit prices.

1.02 RELATED SECTIONS

- A. Section 01600 - Material and Equipment: Product substitutions and options.

1.03 APPLICATIONS FOR PAYMENT

- A. Submit three copies of each application.
- B. Content and Format: Utilize Schedule of Values for listing items in Application for Payment.
- C. Payment Period: Monthly.
- D. Include an updated construction progress schedule.
- E. 5 percent retainage shall be held until construction is complete.

1.04 CHANGE PROCEDURES

- A. The Engineer will advise of minor changes in the Work not involving an adjustment to Contract Price or Contract Time as authorized by EJCDC, 1996 Edition Paragraph 9.05.
- B. The Engineer may issue a Notice of Change which includes a detailed description of a proposed change with supplementary or revised Drawings and specifications, a change in Contract Time for executing the change. Contractor will prepare and submit an estimate within 5 days.
- C. The Contractor may propose changes by submitting a request for change to the Engineer, describing the proposed change and its full effect on the Work. Include a statement describing the reason for the change, and the effect on the Contract Price and Contract Time with full documentation.
- D. Unit Price Change Order: For contract unit prices and quantities, the Change Order will be executed on a fixed unit price basis. For unit costs or quantities of units of work which are not pre-determined, execute Work under a Work Directive Change. Changes in Contract Price or Contract Time will be computed as specified for Force Account Change Order.
- E. Work Directive Change: Engineer may issue a directive, signed by the Owner, instructing the Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order. Document will describe changes in the Work, and designate method of determining any change in Contract Price or Contract Time. Promptly execute the change.

- F. Execution of Change Orders: Engineer will issue Change Orders for signatures of parties as provided in the Conditions of the Contract.

1.05 DEFECT ASSESSMENT

- A. Replace the Work, or portions of the Work, not conforming to specified requirements.
- B. If, in the opinion of the Engineer, it is not practical to remove and replace the Work, the Engineer will direct an appropriate remedy or adjust payment.

1.06 MEASUREMENT AND PAYMENT - UNIT PRICE

- A. Authority: Measurement methods are delineated as follows.
- B. Take measurements and compute quantities. The Engineer will verify measurements and quantities.
- C. Unit Quantities: Quantities and measurements indicated in the Bid Form are for contract purposes only. Quantities and measurements supplied or placed in the Work shall determine payment.
- D. Payment Includes: Full compensation for required labor, Products, tools, equipment, plant and facilities, transportation, services and incidentals; erection, application or installation of an item of the Work; overhead and profit.
- E. Measurement and Payment Description:

1. Mobilization - Bid Items 1, 100, 200, 300, 400, and 600

- A. Measurement and payment for mobilization will be paid as a LUMP SUM payment. As much as 50% of this item will be paid with the first progress payment. The remaining amount of this item will be paid with the subsequent progress payments as a percentage of work completed as determined by the engineer. Limit amounts included under mobilizations to the following items:
- B. Moving on the site any equipment required for first month operations.
- C. Installing temporary construction power and wiring.
- D. Developing construction water supply.
- E. Providing on-site sanitary facilities and potable water facilities as specified.
- F. Arranging for and erection of Contractor's work and storage yard.
- G. Contractor and Subcontractor insurance and bonds.
- H. Obtaining all required permits, licenses, and fees.
- I. Developing construction schedule.
- J. Contract closeout, site cleanup, and demobilization.

2. Traffic Control - Bid Items 2, 101, 201, 301, 401, and 601

- A. Measurement and payment for Traffic Control shall be LUMP SUM. This item will be paid for as a percentage in relationship to the project percent complete. This item will be compensation in full for flagging, furnishing, installing and moving all traffic control devices. This item shall also include maintaining safe access to all residences and businesses.

3. Storm Water Pollution Prevention Plan - Bid Items 3, 102, 202, 302, and 402

- A. Measurement shall be made on a LUMP SUM basis for preparing and implementing an approved Storm Water Pollution Prevention Plan.
- B. Payment for this item shall be made based on the proportion of the total contract completed. Such payment will be compensation in full for furnishing all materials, labor, equipment, tools, and incidentals necessary to establish adequate sediment and erosion control, implement Best Management Practices (BMPs) for the protection of waterways from sediment laden runoff due to construction activities, and dust and mud control. This item shall include installation, maintenance and removal of sediment fencing, waddles, inlet protection, construction entrance, stockpile protection, port-a-johns, orange barrier fence, etc. This item shall include appropriate dewatering procedures per State of Utah requirements. Such payment shall also

include any additional measures necessary to ensure State (UPDES) and Federal (NPDES) compliance for BMP for storm water protection. Prepared plan shall meet the requirement of the City's current Storm Water Management Plan.

4. Tree Trimming – Bid Items 4, 103, 203, 303, and 403

- A. Measurement shall be made on a LUMP SUM basis for tree trimming.
- B. Payment shall be compensation in full for tree trimming the whole length of the road construction area to make room for all construction equipment, including all costs of man lifts, chain saws, branch stabilization, chippers, disposal of material, and certified arborist. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.
- C. Contractor shall include a certified arborist as part of the team to verify trees remain healthy during trimming activities.
- D. Tree trimming shall be performed with chains saws or similar and not with equipment buckets.

5. Hot Mix Asphalt - Bid Items 5, 104, 208, 304, 404, and 411

- A. Measurement shall be made on a PER TON basis for installation of the hot mix asphalt as shown on the plans and described in the specifications.
- B. Payment shall be compensation in full for installing the hot mix asphalt. Payment shall be made at the unit price bid per ton as identified in the bid schedule. Such payment shall be compensation in full for the complete furnishing and installing of the bituminous road surface material and tack coat. This item shall include the cost of all saw cutting, hauling, placing, rolling, and compaction of hot mix asphalt, and regrading of shoulders after paving is complete. Bituminous thickness shall be as specified on the typical section. This item shall also include compaction testing and any restoration requirements required of the roadway excavation permittee. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.
- C. Hot Mix Asphalt will meet APWA 32 12 05: ½” nominal gradation 75 gyration, 15% RAP max, PG 64-34 Binder, 15.0% VMA calculated using Gsb (Dry), 3.5% Design air voids, dust/binder=1.2 max.
 - a. Use 3/8” nominal gradation for leveling course.
- D. Quantities may vary due to field conditions.
- E. Maximum lift thickness shall be 3 inches.

6. Remove Asphalt – Bid Items 6, 105, and 408

- A. Measurement shall be made on a SQUARE YARD basis for removal of asphalt as shown on the plans and described in the specifications.
- B. Payment shall be made at the unit price bid per square yard as identified in the bid schedule. Such payment shall be compensation in full for removing and disposing the asphalt layer in its entirety and proof rolling grade to check for soft spots. On 200 N, 200 W, and 700 N see test pit logs for existing asphalt thickness. On 50 S and 100 E assume a four inch depth of existing asphalt. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.

7. Roadway Excavation – Bid Items 7, 107, 205, 306, and 409

- A. Measurement shall be made on a CUBIC YARD basis for excavation of existing material within the limits shown on the plans to a depth required to meet the roadway surfacing section.
- B. Payment shall be compensation in full for the excavation and disposing of material to meet the roadway surfacing section. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.
- C. If soft spots are encountered during excavation for roadway construction, repair as directed by the engineer, over excavation volume to be paid for under roadway excavation bid item and fill with granular borrow paid for under granular borrow item.
- D. Quantities may vary due to field conditions.

8. Granular Borrow - Bid Items 8, 108, 206, 307, and 410

- A. Measurement shall be made on a CUBIC YARD basis for Granular Borrow placed above the subgrade and below untreated base course.
- B. Such payment shall be compensation in full for the complete furnishing and installing of the granular borrow. This item shall include the cost of hauling, subgrade preparation, rolling and compaction of

granular borrow. Thickness shall be as specified in the plans. Specified thicknesses are minimums. This item shall also include compaction testing. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.

- C. Payment will not include quantities exceeding specified thicknesses, unless over excavation is directed by the engineer.
- D. If soft spots are encountered during excavation for roadway construction, repair as directed by the engineer, over excavation volume to be paid for under roadway excavation bid item and fill with granular borrow paid for under granular borrow item.
- E. Quantities may vary due to field conditions.

9. Grading – Bid Items 9 and 109

- A. Measurement shall be made on a LUMP SUM basis for grading.
- B. Payment shall be compensation in full for cost of grading surface irregularities after asphalt removal and grading for the asphalt gutter. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.
- C. Any materials used will be paid for under the associated material item.

10. Intersection Radius – Bid Items 10, 106, 225, 309, and 412

- A. Measurement shall be made on a PER EACH basis for installing the radius as shown on the plans and described in the specifications.
- B. Payment shall be compensation in full for installing the radius for roadway improvements including all cost of saw cutting asphalt or concrete, removal and disposal of concrete or asphalt, excavation (including 8 inches of additional material beneath the structure), 8 inches of untreated base course, compaction, testing, forming, rebar, placing concrete, finishing surface, and landscape restorations. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.

11. ADA Pedestrian Ramp – Bid Items 11, 112, 113, 211, 212, 315, 316, 413, and 414

- A. Measurement shall be made on a PER EACH basis for installing the ADA ramp as shown on the plans and described in the specifications.
- B. Payment shall be compensation in full for installing an approved ADA ramp including removal and replacement of any sidewalk necessary to meet required grades, removal and replacement of any existing concrete necessary for the ramp, excavation of 6 inches of material below ADA ramp and curb/gutter and installation, grading, compaction and testing of 6 inches of UTBC, landscape restoration and sprinkler repair adjacent to the ramp, replacement of curb/gutter adjacent to ramp, and replacement of concrete to connect to water ways. Payment will also cover the costs of installing detectable warning surfaces and curb wall behind the ramp. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.
- C. On two direction ramps, truncated domes will be installed wide enough to service both directions with full access. Payment will cover the cost of installing sufficient widths to service both directions.
- D. Payment includes relocating street signs when necessary.
- E. All truncated domes to be yellow polymer.

12. Adjust Valve Box, Manhole, or Monument - Bid Items 12, 13, 114, 115, 209, 210, 310, 311, 312, 415, and 416

- A. Measurement shall be made on a PER EACH basis for the adjustment of the valve box, manhole, or monument to finish grade as shown on the plans and described in the specifications.
- B. Payment covers the cost of lowering the existing valve box, manhole, or monument to the required depth for construction, removal and disposal of existing collars, saw cutting or jack hammering out the new asphalt after placement, raising the valve box lid, manhole lid, or monument lid to grade, placing the collar, and sucking out any debris found in the valve box, manhole, or monument. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.
- C. Pulverize around utilities that are unable to be lowered to an adequate depth.
- D. Lower utilities prior to milling.
- E. Do not raise/lower main shaft of monuments. Disturbed monument cap must be reset by professional surveyor at contractor's expense. Contractor is responsible to survey monument cap prior and post construction to ensure it has not been disturbed.

- F. Contractor is expected to collar all valves and manholes as soon as possible after paving is completed.
- G. Contractor will be allowed 1 week after collaring valves and manholes in which to clean them out satisfactory to the public works department.

13. Paint Markings and Striping – Bid Items 14, 116, 213, 317, and 417

- A. Measurement shall be made on a LUMP SUM basis for all pavement markings and striping as shown on the plans and described in the specifications on the following streets 50 S, 100 E, 200 N, and 200 W.
- B. Measurement shall be made on a PER GALLON basis for all pavement striping as shown on the plans and described in the specifications for 700 N.
- C. Payment shall be compensation in full for paint markings and striping including furnishing and placement. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.

14. Pavement Message – Bid Item 418

- A. Measurement shall be made on a PER EACH basis for all pavement messages on 700 N. Messages on all other streets are included in the lump sum price. Each of the following will be paid as one pavement message; turn arrow, combination turn and through arrow, the word “School”, railroad crossing, bike symbol, stop bar for the width of two lanes, school cross walk for the width of one lane, and cross walk for the width of one lane.
- B. Payment shall be compensation in full for paint markings and striping including furnishing and placement. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.
- C. All existing pavement markings and striping must be replaced.

15. Remove Curb and Gutter – Bid Items 110, 226, 318, and 420

- A. Measurement shall be made on a PER LINEAL FOOT basis for the removal of existing curb and gutter shown on the plans.
- B. Payment shall be compensation in full for removal of the curb and gutter including all cost of saw cutting concrete, jack hammering, removal and disposal of existing curb and gutter, excavation (including 6 inches of additional material beneath the curb and gutter). Payment will cover the cost of all labor, materials, equipment and tools to complete this item.

16. Curb and Gutter - Bid Items 111, 227, 319, and 419

- A. Measurement shall be made on a PER LINEAL FOOT basis for installing the curb and gutter as shown on the plans and described in the specifications.
- B. Payment shall be compensation in full for installing the curb and gutter for roadway improvements including all cost of saw cutting asphalt, excavation (including 6 inches of additional material beneath the curb and gutter), 6 inches of untreated base course, compaction, testing, forming, expansion joint, placing concrete, finishing surface, landscape restorations, transitioning curb shape to match existing curb, and disposal of existing materials. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.

17. Storm Drain Structures - Bid Items 117, 215, 230, and 313

- A. Measurement shall be made on a PER EACH basis for installation of the structure as shown on the plans and described in the specifications.
- B. Payment shall be compensation in full for installing the structure including all cost of saw cutting asphalt, excavation, removal of obstructions, bedding material, pipe stub outs, grate and frame or manhole lid, connection to pipes, grouting, concrete, reinforcing, sidewalk and driveway replacement, curb and gutter repair, landscape restoration, and proper disposal of existing materials. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.

18. Remove Excess Material - Bid Items 204 and 308

- A. Measurement shall be made on a CUBIC YARD basis for removing excess material within the limits shown on the plans to a depth required to meet the roadway surfacing section.
- B. Payment shall be compensation in full for the removing and disposing of pulverized material to meet the roadway surfacing section. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.

19. Full Depth Reclamation - Bid Items 207 and 305

- A. Measurement shall be made on a CUBIC YARD basis for full depth reclamation as shown on the plans and described in the specifications.
- B. Payment shall be made at the unit price bid per cubic yard as identified in the bid schedule. Such payment shall be compensation in full for pulverizing the roadway to the depths specified, potholing as necessary ahead of pulverizing, cement treating, grading the material to the lines and grades shown in the plans, surveying and setting red heads at centerline to verify grades, compaction of pulverized material and string lining the roadway in the presence of the Engineer prior to paving. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.
- C. Pressurized irrigation system must be turned off before pulverizing begins. After pulverizing, verify if any pressurized irrigation services were damaged and notify the engineer so they can be replaced.
- D. The lowering and raising of utility valve boxes and manholes before and after pulverizing and paving is paid for separately. Pulverize around utilities that are unable to be lowered to an adequate depth.
- E. Excess Material that must be removed to meet the roadway surfacing section will be paid for under the Remove Excess Material item.
- F. Payment of this item is for 5% cement content as specified. If lab test results show more or less cement is needed, the additive alternate item for cement content will be used for compensation to add or subtract cement to the reclamation process.

20. Remove Existing Structure - Bid Items 214 and 216

- A. Measurement shall be made on a PER EACH basis for the removal of the structure.
- B. Payment shall be compensation in full for this item. Payment covers saw cutting concrete and asphalt, excavation, removal, and proper disposal of existing materials. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.

21. RCP Class III, CMP, and HDPE Storm Drain Pipe - Bid Items 217-220, 223, and 314

- A. Measurement shall be made on a PER LINEAL FOOT basis for installing the pipe as shown on the plans and described in the specifications.
- B. Payment will be made at the unit price bid per linear foot. Such payment will be compensation in full for furnishing and installing pipe complete in place including all cost of clearing and grubbing, stripping, excavation, removal of obstructions, saw cutting, pavement removal and disposal, concrete removal and disposal, shoring and bracing, dewatering, bedding material, pipe connections, backfilling and compaction, flushing, testing, video inspections, damaged curb gutter and sidewalk replacement, fence replacement, pipe, culvert and creek crossings, potholing ahead of construction, driveway replacement, surface restoration, landscape replacement, structure connections, and all appurtenances as specified or indicated on the plans.

22. Cap Pipe w Concrete - Bid Item 221

- A. Measurement shall be made on a PER EACH basis for installation of concrete caps as shown on the plans.
- B. Payment shall be compensation in full for installing the caps including all cost of excavation, installation of caps, backfill, and landscape restoration. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.

23. Remove Existing Pipe - Bid Items 222 and 458

- A. Measurement shall be made on a PER LINEAL FOOT basis for removal and disposal of existing pipe as shown on the plans.
- B. Payment shall be compensation in full for this item. Payment covers saw cutting and removing asphalt, excavation, removal and disposal of pipe, and landscape restoration. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.
- C. Water line pipe that will be removed in order to install new water line pipe will not be covered by this item. The removal of that pipe is covered by the payment of the new water line pipe item.

24. Import Backfill - Bid Items 224, 462, and 610

- A. Measurement shall be made on a PER TON basis for installation of import backfill placed above the bedding material and below the UBC.

- B. Payment shall be compensation in full for import backfill including the removal and disposal of excavated and excess material. Payment shall cover all materials, labor, equipment and tools related to this item. It shall also include compaction and testing.
- C. 100 percent of the backfill material shall be import backfill.

25. Valley Gutter – Bid Items 228 and 424

- A. Measurement shall be made on a SQUARE FOOT basis for installing the valley gutters as shown on the plans and described in the specifications.
- B. Payment shall be compensation in full for installing the valley gutters for roadway improvements including all cost of saw cutting asphalt or concrete, removal and disposal of concrete or asphalt, excavation (including 6 inches of additional material beneath the cross gutter), 6 inches of untreated base course, compaction, testing, forming, rebar, placing concrete, finishing surface, and landscape restoration. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.

26. Driveway 6 Inch Thick - Bid Items 229 and 421

- A. Measurement shall be made on a PER SQUARE FOOT basis for installing 6 inch concrete as shown on the plans and described in the specifications.
- B. Payment shall be compensation in full for installing the driveway approach including all cost of saw cutting concrete, jack hammering, removal and disposal of existing concrete, excavation (including 6 inches of additional material beneath the driveway), 6 inches of untreated base course, compaction, testing, forming, placing concrete, finishing surface, expansion joint, and landscape restorations. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.

27. Remove Existing Water Valve Cover and Box - Bid Items 230 and 452

- A. Measurement shall be made on a PER EACH basis for the removal of the water valve cover and box as shown on the plans and described in the specifications.
- B. Payment shall be compensation in full for removing the water valve cover and removing the water valve box all the way down to the existing valve; including all cost of saw cutting and removing asphalt, excavation, disposal of existing valve cover and box, verifying the existing valve is open or closed as necessary, sidewalk and driveway replacement, curb and gutter repair, landscape restoration, proper disposal of existing materials and all other items necessary to complete the work. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.

28. Untreated Base Course - Bid Items 405 and 612

- A. Measurement shall be made on a CUBIC YARD basis for untreated base course placed above the subgrade and below finished asphalt.
- B. Such payment shall be compensation in full for the complete furnishing and installing of the untreated base course. This item shall include the cost of hauling, subgrade preparation, installation, grading, and compacting untreated base course. Thickness shall be as specified in the plans. Specified thicknesses are minimums. This item shall also include compaction testing. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.
- C. Payment will not include quantities exceeding specified thicknesses.

29. Edge Mill - Bid Item 406

- A. Measurement shall be made on a SQUARE YARD basis for milling asphalt as shown on the plans and described in the specifications.
- B. Payment shall be made at the unit price bid per square yard as identified in the bid schedule. Such payment shall be compensation in full for milling the asphalt to the depths specified, removal of obstructions ahead of milling as necessary, and removal and proper disposal of mill tailings. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.

30. Paving Fabric - Bid Item 407

- A. Measurement shall be made on a SQUARE YARD basis for installing paving fabric as shown on the plans and described in the specifications.

- B. Payment shall be made at the unit price bid per square yard as identified in the bid schedule. Such payment shall be compensation in full for installing the fabric including the cost of cleaning the roadway, cleaning or filling of cracks, tack coat, placement of fabric, and other activities required for placing the fabric
- C. Fabric overlaps will not be paid for.

31. Concrete Sidewalk 4 Inch Thick – Bid Item 422

- A. Measurement shall be made on a PER SQUARE FOOT basis for installing the sidewalk as shown on the plans and described in the specifications.
- B. Payment shall be compensation in full for installing the sidewalk including all cost of saw cutting concrete, excavation (including 6 inches of additional material beneath the sidewalk), 6 inches of untreated base course, compaction, testing, forming, placing concrete, expansion joint, finishing surface, landscape restorations and disposal of existing materials. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.

32. Stamped Concrete 4 Inch Thick – Bid Item 423

- A. Measurement shall be made on a PER SQUARE FOOT basis for installing the concrete as shown on the plans and described in the specifications.
- B. Payment shall be compensation in full for installing the concrete including all cost of saw cutting concrete, excavation (including 6 inches of additional material beneath the concrete), 6 inches of untreated base course, compaction, testing, forming, concrete coloring, placing concrete, expansion joint, stamping surface, finishing surface, landscape restorations and disposal of existing materials. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.

33. RRFB System – Bid Item 425

- A. Measurement shall be made on a LUMP SUM basis for installing the RRFB System as shown on the plans and described in the specification.
- B. Payment shall be compensation in full for installing the RRFB System including two separate devices (one on each side of the road), all costs of excavating, drilling, concrete anchor, placing the pole, installing components on pole, electrical connections, programming the system to operate as specified, and initiating the system. Payment shall cover all materials, labor, equipment and tools related to this item.

34. Retaining Wall – Bid Item 426

- A. Measurement shall be made on a PER SQUARE FOOT basis of vertical wall face constructed as shown on the plans and described in the manufacturer's directions. Such measurement shall be made based on area of wall face from base elevation of retained areas to top of wall elevation not including sidewalk.
- B. Payment shall be compensation in full for clearing and grubbing, excavation, removal and disposal of existing materials, base preparation, wall construction, backfilling, any UTBC necessary to backfill wall up to sidewalk elevation, and landscape restoration. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.
- C. Retaining wall shall be a stepped wall, varying in height to meet design grade from existing elevations. Excessive excavation to increase the height of the wall will not be paid.

35. Water Pipe - Bid Items 427, 430, 436, 437, 448, 456, 500, 602, and 603

- A. Measurement shall be made on a PER LINEAL FOOT basis for installing the pipe as shown on the plans and described in the specifications.
- B. Payment shall be compensation in full for installing the pipe including all cost of excavation, saw cutting and removal of asphalt, potholing ahead of construction, bedding material, connections to existing pipes, disconnections, locator wire, marking tape, landscape restoration, and disposal of existing materials. Payment will also cover the cost of identifying and relocating conflicting utilities including coordination with utility owners, and utility crossings. Payment will cover the cost of all labor, materials, equipment and tools to complete this item. Payment also covers the cost of temporary blow-off, pressure testing, disinfection and flushing of the culinary water pipe. Any work such as additional shoring or closer backfill spacing to keep the existing pipes or ditches from pushing into the trench shall be compensated for by the payment of this item.
- C. 1 inch lateral water pipe shall be installed with a trenchless method unless conditions prevent it. If conditions prevent it then it shall be installed by open trench methods under Additive Alternate #1. Import

backfill, untreated base course, and hot mix asphalt quantities may increase/decrease with the installation method.

- D. The costs associated with locating buried existing connection points and coordination with the city for locating these points shall be covered by the payment of this item.

36. Water Service Connection - Bid Items 428 and 604

- A. Measurement shall be made on a PER EACH basis for installation of the water lateral connection as shown on the plans and described in the specifications.
- B. Payment shall be compensation in full for installing the water lateral connection complete including all cost of excavation, bedding material, saddle, connections and fittings (transition couplers, corp stop, etc.), locator wire, disconnection from old main, meter can and lid, piping and valves and setter within the meter can to connect to the meter and the homeowners existing line, sidewalk and driveway replacement, curb and gutter repair, landscape restoration, backfill and compaction and proper disposal of existing materials. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.
- C. City to provide meter for installation by Contractor.
- D. Poly Pipe shall be paid for under the water pipe item.
- E. If only the setter and meter box need replaced, the work will be paid for under the "Setter" item.

37. Hot Tap Connection - Bid Item 429

- A. Measurement shall be made on a PER EACH basis for installation of the hot tap as shown on the plans and described in the specifications.
- B. Payment shall be compensation in full for all labor, materials, equipment and tools to complete this item including all cost of excavation, bedding material, tapping saddle, thrust blocks, and proper disposal of existing materials.

38. Valves, Fittings, and Caps - Bid Items 431-435, 438-447, 449-451, 454-455, 457, 460, and 605-608

- A. Measurement shall be made on a PER EACH basis for installation of the valves, fittings, and caps as shown on the plans and described in the specifications
- B. Payment shall be compensation in full for installing the valves, fittings (vertical or horizontal), and caps including all cost of excavation, bedding material, connections, disconnections, valve boxes, megalugs, thrust blocks, and proper disposal of existing materials. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.

39. Remove Existing Fitting - Bid Items 453 and 459

- A. Measurement shall be made on a PER EACH basis for removal and disposal of existing fittings as shown on the plans.
- B. Payment shall be compensation in full for this item. Payment covers saw cutting and removing asphalt, excavation, removal and disposal of fittings, and landscape restoration. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.
- C. Fittings that will be removed in order to install new water line pipe will not be covered by this item. The removal of those fittings is covered by the payment of the new water line pipe or fittings item.

40. Verify Service by Pothole – Bid Item 461

- A. Measurement shall be made on a PER EACH basis for verifying service line material as shown on the plans and described in the specifications.
- B. Payment shall be compensation in full for verifying service line material type by means of potholing including all cost of excavation, vacuum truck or excavator use, flowable backfill, sidewalk and driveway replacement, curb and gutter repair, landscape restoration, and proper disposal of existing materials. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.

41. Owner's Contingency – Bid Item 463

- A. Measurement shall be made on a LUMP SUM basis for payment of Owner's Contingency. This item will be paid for as a percentage of the lump sum in relation to work approved by the owner.
- B. Payment shall be compensation in full for work approved by the owner for unexpected conditions, additional work or materials, and other incidental expenses. Payment will cover the cost of all labor, materials, equipment and tools to complete the work agreed upon.

- C. The item will only be paid for work that has been approved by the owner. If the owner does not approve any additional work to be covered by this item, 0% of this item will be paid.

42. Setter – Bid Item 501

- A. Measurement shall be made on a PER EACH basis for replacing setters as shown on the plans and described in the specifications.
- B. Payment shall be compensation in full for installing the setter including all cost of excavation, bedding material, connections and fittings, meter can and lid, valves within the meter can, sidewalk and driveway replacement, curb and gutter repair, landscape restoration, backfill and compaction and proper disposal of existing materials. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.
- C. City to provide meter for installation by Contractor.
- D. Full service line replacements shall be paid for under the water pipe and water connection items and the setter item will not be paid.
- E. If the existing water service line will remain in place but be reconnected at the new main, the water connection item shall pay for the work and will cover the cost of replacing the setter, meter box, saddle, corp. stop, etc. and the setter item will not be paid.

43. Plus or Minus Cement Content– Bid Item 502

- A. Measurement shall be made on a CUBIC YARD basis of cement slurry added or removed beyond 5% cement for full depth reclamation to achieve specified strengths only as approved by the engineer.
- B. Payment shall be made at the unit price bid per cubic yard as identified in the bid schedule. Such payment shall be compensation in full for any additional costs associated with a change of cement content such as changes in trucking, grading, removal of excess material, compacting, mixing, etc. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.
- C. For measurement purposes, this bid item shall be based on a water/cement ratio of 0.40 of the cement slurry.
- D. Payment of this item is for cement content in addition to/or less than the 5% specified. Payment of the original specified 5% cement content will be covered by the standard full depth reclamation item.

44. Pulverized Lateral Repair and Reconnect- Bid Item 503

- A. Measurement shall be made on a PER EACH basis for repair and reconnection of pulverized service laterals.
- B. Payment shall be compensation in full for reconnecting the service connection complete at the pressurized irrigation waterline and at the irrigation box including all cost of any transition couplers needed between existing features, saw cutting asphalt, excavation, bedding material, connections and fittings, sidewalk and driveway replacement, curb and gutter repair, landscape restoration, and proper disposal of existing materials. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.
- C. The full length of pipe shall be replaced from the main to the service box. Poly Pipe shall be paid for under the Water Pipe item.

45. Line Stop- Bid Items 504-508

- A. Measurement shall be made on a PER EACH basis for line stops.
- B. Payment shall be compensation in full for installing temporary line stops to shut off water including all cost of any excavation, fittings, sleeves, saddles, drilling, tapping, devices used to perform the line stop, draining line after stoppage, removal of stoppage devices, sealing items that will remain once the water line is put back in service with the line stop removed, bedding material, landscape restoration, proper disposal of existing materials, and down time and stand by time of contractor crews and equipment while awaiting line stop installation. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.
- C. This item will only be used when directed by the engineer, for situations where existing valves are not able to be shut.

46. Install Fire Hydrant - Bid Item 609

- A. Measurement shall be made on a PER EACH basis for installation of the fire hydrant as shown on the plans and described in the specifications.

- B. Payment shall be compensation in full for this item. Payment covers saw cutting and removal of asphalt and installing the new fire hydrant including all cost of excavation, bedding material, connections and fittings (valve, tee, long sleeves, megalugs, etc.), pipe, ductile iron pipe, isolation valve, sidewalk repair, curb and gutter repair, landscape restoration, draining water, and proper disposal of existing materials. Payment will cover the cost of all labor, materials, equipment and tools to complete this item.

47. 2 Inch Stabilization Rock - Bid Item 611

- A. Measurement shall be made on a PER TON basis for material placed for stabilization as directed by the engineer.
- B. Payment shall be compensation in full for this item including removal and disposal of excavated and excess material. Payment will cover the cost of all materials, labor, equipment and tools related to this item.
- C. Stabilization Rock shall be placed as directed by the engineer to stabilize foundation soils below pipe bedding if necessary.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION