BID FORM P.N. 4-C-011-16 CITY OF OLATHE, KANSAS

The following table is a list of bid items, estimated quantities, and the unit prices submitted by the bidder for the Cedar Creek Trail - Phase 1, Project Number 4-C011-16.

Schedule of Values

F	The state of the s	UNITS APPROX.			RICE	AMOUNT	
<u> </u>	ITEM	UNITS	QUANTITY	DOLLARS	CENTS	DOLLARS	
			QUANTIT	DOLLARG	OLIVIO	BOLLANG	
	P.N. 4-C011-16			55,000	00	55,000	
	Mobilization	LS	1		00	18,000	
	Contractor Construction Staking	LS	1	18,000	00	5,500	
-	Field Office and Laboratory (Type C)	EA	1	5,500	00	\$60,000.00	
	Owners Contingency Allowance	LS	1	60,000			
-	Clearing and Grubbing	AC	7.3	13,000	_00	94,900	
	Salvaged Topsoil	SY	34,896	0	90	31,406.40	
	Unclassified Excavation	CY	6,351	20	00	127,020	
	Rock Excavation	CY	32	85	00	2,720	
	Compaction of Earthwork (Type B) (MR-90)	CY	3,354	2	00	6,708	
10	Compaction of Earthwork (Type AA) (MR-3-3)	CY	333	5	00	1,665	
	Water (Grading) (Set Price)	MGAL	1	35	00	\$35.00	
12	Foundation Stabilization (Set Price)	CY	1	40	00	\$40.00	
13	Cross Road Pipe (12") (RCP)	LF	24	85	00	2,040	
14	Cross Road Pipe (15") (RCP)	LF	24	90	00	2,160	
15	Cross Road Pipe (18") (RCP)	LF	112	92	00	10,304	
16	Cross Road Pipe (24") (RCP)	LF	140	95	00	13,300	
17	Cross Road Pipe (30") (RCP)	LF	112	120	00	13,440	
18	Cross Road Pipe (36") (RCP)	LF	64	135	00	8,640	
	Cross Road Pipe (48") (RCP)	LF	54	190	00	10,260	
	End Section (12") (RC)	Each	2	850	00	1,700	
21	End Section (15") (RC)	Each	2	900	00	1,800	
	End Section (18") (RC)	Each	6	975	00	5,850	
-	End Section (24") (RC)	Each	8	1,225	00	9,800	
24	End Section (30") (RC)	Each	7	1,400	00	9,800	
	End Section (36") (RC)	Each	4	1,950	00	7,800	
	End Section (48") (RC)	Each	2	2,500	00	5,000	
27	6" Pipe Underdrains (H)	LF	1,122	8	00	8,976	
		LF	364	17	00	6,188	
	6" Pipe Underdrains (K)	CY	187	125	00	23,375	
	Aggregate for Blanket Underdrains	LS	1	95,000	00	95,000	
30	Double Reinforced Concrete Box (2-8'x7') (22 LF) + Wingwalls	LF	36	120	00	4,320	
31	Storm Sewer (30") (RCP)		1	5,250	00	5,250	
32	Junction Box	Each	63	80		5,040	
33	Riprap (Light Stone) (100 LB)	SY		99	00	13,068	
34	Riprap (Heavy Stone) (1/4 Ton)	SY	132	80	 	4,080	
35	Aggregate Ditch Lining (6")	TON	51	21	00	6,195	
36	Fence (Special)	LF	295		00	28,894.80	
37	Sidewalk Construction (4")(AE)	SY	398	72	60		
. 38	Sidewalk Construction (5")(AE)	SY	599	66	75	39,983.25	
39	Distribution Slab (6")	SY	44	91	20	4,012.80	
40	Concrete (Grade 4.0) (AE) - Wall Section	CY	448	495	00	221,760	
41	Reinforcing Steel (Grade 60) - Wall Section	LBS	59,491	1	15	68,414.65	
42	Prefabricated Bridge (Steel)	EA	1	155,000	00	155,000	
43	Concrete (Grade 4.0) (AE)	CY	34	1,150	00	39,100	
44	Reinforcing Steel (Grade 60)	LB	5,020	1	60	8,032	
45	Abutment Strip Drain	SY	23	60	00	1,380	
46	Bridge Backwall Protection System	SY	29	55	00	1,595	
47	Class III Excavation	CY	66	75	00	4,950	
48	Slope Protection (Riprap Stone) (Light 18")	CY	626	90	00	56,340	
49	Asphalt BM-2B Base Course	TON	1,570	64	00	100,480	
50	Asphalt BM-2 Surface Course	TON	1,047	75		78,525	
51	Aggregate Base (AB-3) (4")	SY	1,447	9	00	13,023	
52	Aggregate Base (AB-3) (4") Aggregate Base (AB-3) (6")	SY	13,848	8		114,246	
-	Water (Aggregate Base) (Set Price)	MGal	1	38			
53	Temporary Surfacing Material (Aggregate)	CY	270	65		17,550	
54		EACH	4	500		2,000	
55	Signing Delineator (Type A) (White Flexible) (Type 1 Anchor)	LS	1	5,000		5,000	
56	Permanent Signage & Pavement Markings	LB LB	900	3,000		891	
57	Temporary Fertilizer (15-30-15)	1 60	300		1 29	L	

58	Temporary Seed (Canada Wildrye)	LB	120	16	51	1,981.20
59	Temporary Seed (Grain Oats)	LB	270	1	12	302.40
60	Temporary Seed (Sterile Wheatgrass)	LB	270	8	65	2,335.50
61	Sediment Removal (Set Price)	CU YD	1	35	00	\$35.00
62	Temporary Berm (Set Price)	LF	1	. 1	00	\$1.00
63	Temporary Ditch Check (Rock)	CU YD	28	90	00	2,520
64	Blodegradable Log (9")	LF	450	4	79.	2,155.50
65	Biodegradable Log (20")	LF	280	9,	3.3	2,612.40
66	Silt Fence	LF	9,700	1	30	12,610
67	SWPPP Design	LS	1	1,500	0.0	1,500
68	SWPPP Inspection	EACH	16	225	00	3,600
69	Water Pollution Control Manager	EACH	30	200	00	6,000
70	Mulch Tacking Slurry	LB	5,400	0	75	4,050
	Mulching (Temporary)	TON	12	775	. 00	9,300
72	Water (Erosion Control) (Set Price)	MGAL	.1	35	00	\$35.00
	Fertilizer (15-30-15)	LB	600	0,	99	594
74	Seed (Fescue) (Turf Type Tall Fescue Blend)	LB	1,080	4	50	4,860
75	Traffic Control	LS	1	7,500	00	7,500
		**			TOTAL:	1,699,584.90

ASPHALT MATERIAL INDEX:

The price included for Asphaltic Concrete Surface will be based on the computed monthly Asphalt Material Index for the month of the bid opening, if current month is not available at the time of bid opening the previous month prior to the bid opening month's index value will be used, as listed at the following web site, http://www.ksdot.org/burconsmain/ppreq/asphaltpriceindex.asp. The bid unit price for Asphaltic Concrete Surface shall be adjusted in subsequent months based on specification number 07-01009-R05, Price Adjustment for Asphalt Materials, in the 2007 Edition of Kansas Department of Transportation Special Provisions for the Standard Specification.

The undersigned successfully completed the bid process online at www.publicpurchase.com and affirms that the schedule of values table above matches the unit prices, line item amounts, and bid total amount submitted electronically.

REQUIRED CONTRACT PROVISIONS:

The current versions of the following Required Contract Provisions (I-IV) require the Contractor to furnish information. The Contractor shall complete and submit with its proposal these provisions. The City of Olathe will reject proposals that fail to contain completed Required Contract Provisions I, II and III and may reject proposals that fail to contain completed Required Contract Provision IV.

- I. 08-10-66 (LPA) Certification Non-collusion & History of Debarment
- II. 04-26-90 (LPA) Declaration Limitations on Use of Federal Funds for Lobbying
- III. 07-19-80 (LPA) DBE Contract Goal
- IV. 01-01-11 (LPA) Tax Clearance Certificate

CERTIFICATION:

I CERTIFY THAT I AM AUTHORIZED TO REPRESENT THE CONTRACTOR IN PREPARING AND PRESENTING THIS PROPOSAL. I CERTIFY UNDER PENALTY OF PERJURY THAT THE FOREGOING (INCLUDING, BUT NOT LIMITED TO, THE INFORMATION CONTAINED IN THE REQUIRED CONTRACT PROVISIONS REFERENCED ABOVE) IS TRUE AND CORRECT, EXECUTED ON 11/3/2020 (DATE).

Pyramid Contractors, Inc	44.
Contractor Auc tau	
Bycavin T. Barmby	0
President Title	
11/3/2020 Date	
(913) 764-6225 Telephone Number	
Gavin T. Barmby	
Contact Person	

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KANSAS DEPARTMENT OF TRANSPORTATION SPECIAL PROVISION TO THE STANDARD SPECIFICATIONS, 2015 EDITION

PEDESTRIAN BRIDGE

A.0 DESCRIPTION

Provide a fully engineered prefabricated pedestrian bridge superstructure and erect at locations designated in the Contract Documents. Except as noted in this specification, all materials shall conform to KDOT specifications.

BID ITEM

Prefabricated Bridge (Steel)

UNITS

Each

1.0 GENERAL

1.1 Scope

These specifications are for a fully engineered clear span bridge of steel construction and shall be regarded as minimum standards for design and construction.

1.2 Qualified Suppliers

* Proposed suppliers must have at least five (5) years experience designing and fabricating these type structures and a minimum of five (5) successful bridge projects, of similar construction, each of which has been in service at least three (3) years. List the location, bridge size, owner, and a contact for reference for each project.

The engineer will evaluate and verify the accuracy of the submittal prior to bid. If the engineer determines that the qualifying criteria have not been met, the contractor's proposed supplier shall be rejected. The engineer's ruling shall be final.

2.0 GENERAL FEATURES OF DESIGN

2.1 Span

Provide bridge spans as shown in the contract documents (straight line dimension), as measured from each end of the bridge structure.

2.2 Width

Provide a bridge width of 14'-0", measured from the inside face of structural elements at deck level.

2.3 Bridge System Type

Provide bridge(s) as a truss that has one (1) diagonal per panel and plumb end vertical members. Interior vertical members may be either plumb or perpendicular to the chord faces.

- 2.3.1 Provide bridge(s) utilizing an underhung floor beam (top of floor beam welded to the bottom of the bottom chord) or be designed utilizing an H-Section configuration where the floor beams are placed up inside the trusses and attached to the truss verticals.
- 2.3.2 The bridge manufacturer shall determine the distance from the top of the deck to the top and bottom truss members based upon structural and/or shipping requirements.

2.3.3 The top of the top chord shall not be less than 42 inches above the deck (measured from the high point of the riding surface) on bike path structures.

2.4 Member Components

All members of the vertical trusses (top and bottom chords, verticals, and diagonals) shall be fabricated from square and/or rectangular structural steel tubing. Other structural members and bracing shall be fabricated from structural steel shapes or square and rectangular structural steel tubing.

Unless the floor and fastenings are specifically designed to provide adequate lateral support to the top flange of open shape stringers (w-shapes or channels), a minimum of one stiffener shall be provided in each stringer at every floor beam location.

2.5 Attachments

2.5.1 Safety Rails

Place vertical safety pickets on the structure up to at least the bottom of the top chord. Safety pickets shall be placed so as to prevent a 4" sphere from passing through the truss. Safety pickets shall be placed on the inside or outside of the structure at the bridge fabricator's option. The top of the vertical pickets (if accessible to users) shall have a continuous cap angle or some other end treatment to prevent cuts or scrapes to bridge user's hands and arms.

The safety rail system shall be designed for an infill loading of 200 pounds, applied horizontally at right angles, to a one square foot area at any point in the system.

2.5.3 Toe Plate

The bridge shall be supplied with a steel toe plate mounted to the inside face of both trusses. The toe plate shall be a minimum of 4 inches high. Toe plating will be welded to the truss members at a height adequate to provide a 2" gap between the bottom of the plate and the top of the deck or the top of the bottom chord, whichever is higher. The span of unstiffened flat toe plating (from center to center of supports) shall not exceed 5'-8".

2.5.5 Rubrails

The bridge will be supplied with a 1-1/4"x 6" (nominal size) naturally durable hardwood rubrail. Rubrail shall be partially air dried to a moisture content of 15% to 20%, shall be supplied S4S (surfaced four sides), E4E (eased four edges), with the edges eased to a radius of 1/8". Measured at 30% moisture content, the width and thickness shall not vary from specified dimensions by more than \pm 0.04 inches. Ends of each piece shall be sealed with "Anchorseal" Mobil CER-M or an equal aquious wax log sealer.

Rubrails shall be attached flush to the inside face of the bridge truss verticals and fastened with two carriage bolts at each support location. The span of the rubrail from centerline to centerline of support shall not exceed 6'-6".

Place centerline of the rubrail at "handlebar height" above the top of the deck (measured at the outside edge of the deck).

2.6 Camber

The bridge shall have a vertical camber dimension at midspan equal to 100% of the full dead load deflection plus 1% of the full length of the bridge.

2.7 Elevation Difference

Unless shown otherwise in the contract documents, the bridge abutments shall be constructed at the same elevation on

both ends of the bridge.

3.0 ENGINEERING

Structural design of the bridge structure(s) shall be performed by or under the direct supervision of a licensed professional engineer and done in accordance with recognized engineering practices and principles. The engineer shall be licensed to practice in the State of Kansas.

3.1 Design Loads

In considering design and fabrication issues, this structure shall be assumed to be statically loaded. No dynamic analysis shall be required nor shall fabrication issues typically considered for dynamically loaded structures be considered for this bridge.

3.1.1 Dead Load

The bridge structure design shall consider its own dead load (superstructure and original decking), as well as the additional loads listed below:

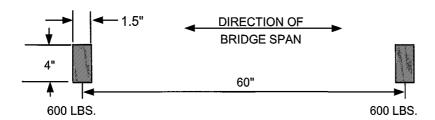
3.1.2 Uniform Live Load (Pedestrian)

Main Members: Main supporting members, including girders, trusses and arches shall be designed for a pedestrian live load of 90 pounds per square foot of bridge walkway area. The pedestrian live load shall be applied to those areas of the walkway so as to produce maximum stress in the member being designed

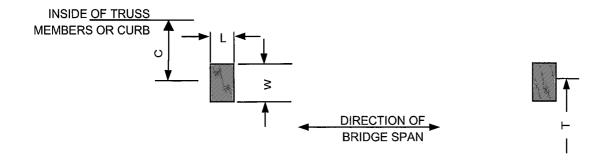
3.1.3 Concentrated Loads

The bridge superstructure, floor system and decking shall be designed for each of the following point load conditions:

- 3.1.3.1 A concentrated load of 1000 pounds placed on any area 2.5 ft x 2.5 ft square.
- 3.1.3.2 A 1200 pound two wheel vehicle with a wheelbase and tire print area as shown in the following diagram:



3.1.3.3 A 10,000 pound four wheeled vehicle (H-5) with the appropriate wheelbase, tire track and tire print area as shown in the following diagram: (See **Table 1** for the values corresponding to the selected vehicle.)



TARIF 1

				ADLE I							
Vehicle		and Wheel	Front Wheels				Rear Wheels				
Weight	WB	Т	P _F	L	W	P_R	L	W	C*		
4,000#	48"	32"	1,000#	2.0"	5.0"	1,000#	2.0"	5.0"	9"		
6,000#	66"	48"	1,500#	2.5"	6.0"	1,500#	2.5"	6.0"	12"		
8,000#	102"	60"	1,600#	3.0"	8.0"	2,400#	3.0"	8.0"	15"		
10,000#	120"	72"	1,000#	3.5"	8.5"	4,000#	3.5"	8.5"	18"		

(*C is the minimum dimension from center of wheel to the inside face of truss or curb.)

All of the concentrated or wheel loads shall be placed so as to produce the maximum stress in each member being analyzed. Critical stresses need be calculated assuming there is only one vehicle on the bridge at any given time. Assumptions that vehicles only travel down the center of the bridge or that the vehicle load is a uniform line load will not be allowed.

Each four wheeled vehicle load listed in **Table 1**, up to and including the maximum weight vehicle selected, must be used in determining critical deck stresses. The wheel distribution for deck design shall be as specified in **subsection 4.2**. Stringers shall be designed for the applied wheel loads assuming no lateral load distribution to adjacent stringers.

A vehicle impact allowance is not required.

3.1.4 Wind Load

3.1.4.1 Horizontal Forces

The bridge(s) shall be designed for a wind load of 35 pounds per square foot on the full vertical projected area of the bridge as if enclosed. The wind load shall be applied horizontally at right angles to the longitudinal axis of the structure.

The wind loading shall be considered both in the design of the lateral load bracing system and in the design of the truss vertical members, floor beams and their connections.

3.1.4.2 Overturning Forces

The effect of forces tending to overturn structures shall be calculated assuming that the wind direction is at right angles to the longitudinal axis of the structure. In addition, an upward force shall be applied at the windward quarter point of the transverse superstructure width. This force shall be 20 pounds per square foot of deck.

3.1.5 Top Chord/Railing Loads

The top chord, truss verticals, and floor beams shall be designed for lateral wind loads (per **subsection 3.1.4.1**) and for any loads required to provide top chord stability as outlined in Section 3.3.5; however, in no case shall the load be less than 50 pounds per lineal foot or a 200 pound point load, whichever produces greater stresses, applied in any direction at any point along the top chord or at the top of the safety system (42" or 54" above deck level), if higher than the top chord.

3.1.6 Load Combinations

The loads listed herein shall be considered to act in the following combinations, whichever produce the most unfavorable effects on the bridge superstructure or structural member concerned.

[DL=Dead Load; LL = Live Load; WL = Wind Load; VEH = Vehicle Load]

DL + LL DL + VEH DL+WL DL+LL+.3WL DL+VEH+.3WL

NOTE: For service load design, the percentage of the basic unit stress used for each combination shall be in accordance with table 3.22.1A of the AASHTO "Standard Specifications for Highway Bridges".

It shall be the responsibility of the foundation engineer to determine any additional loads (i.e. earth pressure, stream force on abutments, wind loads other than those applied perpendicular to the long axis of the bridge, etc.) and load combinations required for design of the abutments.

3.2 Design Limitations

3.2.1 Deflection

3.2.1.1 Vertical Deflection

The vertical deflection of the main trusses due to service pedestrian live load shall not exceed 1/500 of the span.

The vertical deflection of cantilever spans of the structure due to service pedestrian live load shall not exceed 1/300 of the cantilever arm length.

The deflection of the floor system members (floor beams and stringers) due to service pedestrian live load shall not exceed 1/360 of their respective spans.

The service pedestrian live load shall be 85 PSF, reduced in accordance with subsection 3.1.2, but should in no case be less than 65 PSF for deflection checks.

Deflection limits due to occasional vehicular traffic shall not be considered.

3.2.1.2 Horizontal Deflection

The horizontal deflection of the structure due to lateral wind loads shall not exceed 1/500 of the span under an 85 MPH (25 PSF) wind load.

3.2.2 Minimum Thickness of Metal

The minimum thickness of all structural steel members shall be 1/4" nominal and be in accordance with the AISC Manual of Steel Constructions' "Standard Mill Practice Guidelines". For ASTM A500 and ASTM A847 tubing, the

section properties used for design shall be per the Steel Tube Institute of North America's Hollow Structural Sections "Dimensions and Section Properties".

3.3 Governing Design Codes / References

Structural members shall be designed in accordance with recognized engineering practices and principles as follows:

3.3.1 Structural Steel Design

American Association of State Highway and Transportation Officials (AASHTO). Guide Specifications for Pedestrian Bridges 2009 LRFD.

3.3.2 Welded Tubular Connections

American National Standards Institute / American Welding Society (ANSI/AWS) and the Canadian Institute of Steel Construction (CISC).

All welded tubular connections shall be checked, when within applicable limits, for the limiting failure modes outlined in the ANSI/AWS D1.1 Structural Welding Code or in accordance with the "Design Guide for Hollow Structural Section Connections" as published by the Canadian Institute of Steel Construction (CISC).

When outside the "validity range" defined in these design guidelines, the following limit states or failure modes must be checked:

- * Chord face plastification
- * Punching shear (through main member face)
- * Material failure
 - Tension failure of the web member
 - Local buckling of a compression web member
- * Weld failure
 - Allowable stress based on "effective lengths"
 - "Ultimate" capacity
- * Local buckling of a main member face
- * Main member failure:
 - Web or sidewall yielding
 - Web or sidewall crippling
 - Web or sidewall buckling
 - Overall shear failure

All tubular joints shall be plain unstiffened joints (made without the use of reinforcing plates) except as follows:

- * Floor beams hung beneath the lower chord of the structure may be constructed with or without stiffener (or gusset) plates, as required by design.
- * Floor beams which frame directly into the truss verticals (H-Section bridges) may be designed with or without end stiffening plates as required by design.
- * Where chords, end floor beams and in high profiles the top end struts weld to the end verticals, the end verticals (or connections) may require stiffening to transfer the forces from these members into the end vertical.
- * Truss vertical to chord connections.

NOTE: The effects of fabrication tolerances shall be accounted for in the design of the structure. Special attention shall be given to the actual fit-up gap at welded truss joints.

3.3.3 Wood

American Institute of Timber Construction (AITC), the U.S. Forest Products Laboratory, and the American Forest & Paper Association (AF&PA).

Sawn lumber shall be designed in accordance with the ANSI/AF&PA NDS, "National Design Standard for Wood Construction", as published by the American Forest & Paper Association or the "Timber Construction Manual" as published by the American Institute of Timber Construction (AITC). Design properties for naturally durable hardwoods shall be in accordance with "Tropical Timbers of the World", as published by the U.S. Forest Products Laboratory.

3.3.4 Concrete

American Concrete Institute (ACI)

Reinforced concrete shall be designed in accordance with the "Building Code Requirements for Structural Concrete" (ACI 318).

3.3.5 Top Chord Stability

Structural Stability Research Council (SSRC), formerly Column Research Council.

The top chord shall be considered as a column with elastic lateral supports at the panel points. The critical buckling force of the column, so determined, shall exceed the maximum force from dead load and live load (uniform or vehicular) in any panel of the top chord by not less than 50 percent for parallel chord truss bridges or 100 percent for bowstring bridges. The design approach to prevent top chord buckling shall be as outlined by E.C. Holt's research work in conjunction with the Column Research Council on the stability of the top chord of a half-through truss. See **Appendix A** (below) for the calculation of the spring constant C and the determination of an appropriate K factor for out-of-plane buckling.

In addition, for the dead load plus vehicle load combination, the spring constant "C" furnished by the transverse "U-Frames" shall not be less than "C" required as defined by:

$$C required = \frac{1.46 P_c}{L}$$

where P_c is the maximum top chord compression due to dead load plus the vehicle load times the appropriate safety factor (1.5 for parallel chord truss bridges or 2.0 for bowstring bridges) and L is the length in inches of one truss panel or bay.

For uniformly loaded bridges, the vertical truss members, the floor beams and their connections (transverse frames) shall be proportioned to resist a lateral force of not less than 1/100k times the top chord compressive load, but not less than .004 times that top chord load, applied at the top chord panel points of each truss. The top chord load is determined by using the larger top chord axial force in the members on either side of the "U-frame" being analyzed. For end frames, the same concept applies except the transverse force is 1% of the axial load in the end post member.

For bridges with vehicle loads, the lateral force applied at the top chord elevation for design of the transverse frames shall not be less than 1% of the top chord compression due to dead load plus any vehicle loading.

The bending forces in the transverse frames, as determined above, act in conjunction with all forces produced by the actual bridge loads as determined by an appropriate analysis which assumes that the floor beams are "fixed" to the trusses at each end.

NOTE: The effects of three dimensional loading (including "U-frame" requirements) shall be considered in the

design of the structure. The "U-frame" forces shall be added to the forces derived from a three dimensional analysis of the bridge.

4.0 MATERIALS

4.1 Unpainted Weathering Steel

Bridges which are not to be painted shall be fabricated from high strength, low alloy, atmospheric corrosion resistant ASTM A847 cold-formed welded square and rectangular tubing and/or ASTM A588, or ASTM A242, ASTM A606 plate and structural steel shapes (Fy = 50,000 psi). The minimum corrosion index of atmospheric corrosion resistant steel, as determined in accordance with ASTM G101, shall be 6.0.

4.2 Concrete Deck

The bridge shall be furnished with a stay-in-place galvanized steel form deck suitable for pouring a reinforced concrete slab. The form deck shall be designed to carry the dead load of the wet concrete, weight of the form decking, plus a construction load of 20 PSF uniform load or a 150 pound concentrated load on a 1'-0" wide section of deck. When edge supports are used, deflection is limited to 1/180 of the span or 3/4", whichever is less. Without edge supports, deflection shall be limited to 1/180 of the span or 3/8", whichever is less.

The form deck shall be either smooth or composite. Composite decking shall not be used as reinforcing when designing for vehicular wheel loads. The form deck material shall be supplied in accordance with ASTM A653 and galvanized to a minimum G90 coating weight.

The deck slab shall be constructed using concrete with a minimum 28-day strength (f'_c) of 4,000 PSI. Use Normal weight concrete (145 PCF).

Concrete deck design shall be performed by the bridge manufacturer. Concrete decks shall be designed for concentrated loads as specified in **subsection 3.1.3**. The wheel loads used for deck design shall be distributed per the Structural Engineering Handbook, 4th Ed., by Gaylord, Gaylord and Stallmeyer. The load distribution width is equal to the tire width plus 0.6 times the slab span but in no case will it be greater than the smallest of the following values:

- 1. 1/2 the deck width,
- 2. 75% of the wheel track spacing, or
- 3. 4' + 0.06S, per AASHTO, where S = slab span in feet

5.0 WELDING

5.1 Welding

Welding and weld procedure qualification tests shall conform to the provisions of ANSI/AWS D1.1 "Structural Welding Code", 2010 Edition. Filler metal shall be in accordance with the applicable AWS Filler Metal Specification (i.e. AWS A5.28 for the GMAW Process). For exposed, bare, unpainted applications of corrosion resistant steels (i.e. ASTM A588 and A847), the filler metal shall be in accordance with AWS D1.1, subclause 3.7.3.

5.2 Welders

Welders shall be properly accredited operators, each of whom shall submit certification of satisfactorily passing AWS standard qualification tests for all positions with unlimited thickness of base metal, have a minimum of 6 months experience in welding tubular structures and have demonstrated the ability to make uniform sound welds of the type required.

6.0 SUBMITTALS

6.1 Submittal Drawings

Schematic drawings and diagrams shall be submitted to the customer for their review after receipt of order. Submittal drawings shall be unique drawings, prepared to illustrate the specific portion of the work to be done. All relative design information such as member sizes, bridge reactions, and general notes shall be clearly specified on the drawings. Drawings shall have cross referenced details and sheet numbers. All drawings shall be signed and sealed by a Professional Engineer who is licensed in accordance with **subsection 3.0**.

6.2 Structural Calculations

Structural calculations for the bridge superstructure shall be submitted by the bridge manufacturer and reviewed by the approving engineer. All calculations shall be signed and sealed by a Professional Engineer who is licensed in accordance with **subsection 3.0**. The calculations shall include all design information necessary to determine the structural adequacy of the bridge. The calculations shall include the following:

- * All AASHTO allowable stress checks for axial, bending and shear forces in the critical member of each truss member type (i.e. top chord, bottom chord, floor beam, vertical, etc.).
- * Checks for the critical connection failure modes for each truss member type (i.e. vertical, diagonal, floor beam, etc.). Special attention shall be given to all welded tube on tube connections (see **subsection 3.3.2** for design check requirements).
- * All bolted splice connections.
- * Main truss deflection checks.
- * U-Frame stiffness checks (used to determine K factors for out-of-plane buckling of the top chord) for all half through or "pony" truss bridges.
- * Deck design.

NOTE: The analysis and design of triangulated truss bridges shall account for moments induced in members due to joint fixity where applicable. Moments due to both truss deflection and joint eccentricity must be considered.

- 6.3 Welder certifications in compliance with AWS standard qualification tests.
- 6.4 Welding procedures in compliance with subsection 5.1.

7.0 FABRICATION

7.1 General Requirements

7.1.1 Drain Holes

When the collection of water inside a structural tube is a possibility, either during construction or during service, the tube shall be provided with a drain hole at its lowest point to let water out.

7.1.2 Welds

Special attention shall be given to developing sufficient weld throats on tubular members. Fillet weld details shall be in accordance with AWS D1.1, subclause 3.9 (See AWS Figure 3.2). Unless determined otherwise by testing, the loss factor "Z" for heel welds shall be in accordance with AWS Table 2.9. Fillet welds which run onto the radius of a tube shall be built up to obtain the full throat thickness (See **Figure 1** below). The maximum root openings of fillet welds shall not exceed 3/16" in conformance with AWS D1.1, subclause 5.22. Weld size or effective throat dimensions shall be increased in accordance with this same AWS section when applicable (i.e. fit-up gaps> 1/16").

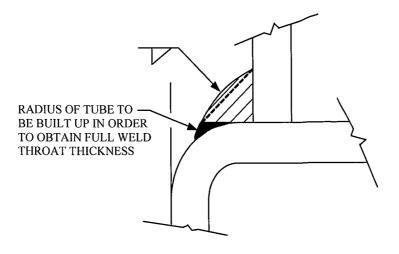


FIGURE 1
BUILD UP RADIUS WELD

The fabricator shall have verified that the throat thickness of partial joint penetration groove welds (primarily matched edge welds or the flare-bevel-groove welds on underhung floor beams) shall be obtainable with their fit-up and weld procedures. Matched edge welds shall be "flushed" out when required to obtain the full throat or branch member wall thickness.

For full penetration butt welds of tubular members, the backing material shall be fabricated prior to installation in the tube so as to be continuous around the full tube perimeter, including corners. Backing may be of four types:

- * A "box" welded up from four (4) plates.
- * Two "channel" sections, bent to fit the inside radius of the tube, welded together with full penetration welds.
- * A smaller tube section which slides inside the spliced tube.
- * A solid plate cut to fit the inside radius of the tube.

Corners of the "box" backing, made from four plates, shall be welded and ground to match the inside corner radii of the chords. The solid plate option shall require a weep hole either in the chord wall above the "high side" of the plate or in the plate itself. In all types of backing, the minimum fit-up tolerances for backing must be maintained at the corners of the tubes as well as across the "flats".

7.2 Quality Certification

Bridge(s) shall be fabricated by a fabricator who is currently certified by the American Institute of Steel Construction to have the personnel, organization, experience, capability, and commitment to produce fabricated structural steel for the category "Major Steel Bridges" as set forth in the AISC Certification Program with Fracture Critical Endorsement. Quality control shall be in accordance with procedures outlined for AISC certification. For painted structures, the fabricator must hold a "Sophisticated Paint Endorsement" as set forth in the AISC certification program. Furthermore, the bridge(s) shall be fabricated in a facility owned and/or leased by the corporate owner of the manufacturer, and fully dedicated to bridge manufacturing.

8.0 BLAST CLEANING

8.1 General Requirements

All Blast Cleaning shall be done in a dedicated OSHA approved indoor facility owned and operated by the bridge fabricator. Blast operations shall use Best Management Practices and exercise environmentally friendly blast media recovery systems.

8.2 Enhanced corrosion resistant "weathering" steels.

To aid in providing a uniformly "weathered" appearance, all exposed surfaces of steel shall be blast cleaned in accordance with Steel Structures Painting Council Surface Preparation Specifications No. 7 Brush-Off Blast Cleaning, SSPC-SP7 latest edition.

Exposed surfaces of steel shall be defined as those surfaces seen from the deck and from outside of the structure. Stringers, floor beams, lower brace diagonals and the inside face of the truss below deck and bottom face of the bottom chord shall not be blasted.

9.0 DELIVERY AND ERECTION

Delivery is made to a location nearest the site which is easily accessible to normal over-the-road tractor/trailer equipment. All trucks delivering bridge materials will need to be unloaded at the time of arrival.

The manufacturer will provide detailed, written instruction in the proper lifting procedures and splicing procedures (if required). The method and sequence of erection shall be the responsibility of others.

The bridge manufacturer shall provide written inspection and maintenance procedures to be followed by the bridge owner.

10.0 BEARINGS

Bridge bearings shall consist of a steel setting or slide plate placed on the abutment or grout pad. The bridge bearing plate which is welded to the bridge structure shall bear on this setting plate. One end of the bridge will be fixed by fully tightening the nuts on the anchor bolts at that end. The opposite end will have finger tight only nuts to allow movement under thermal expansion or contraction.

The bridge bearings shall sit in a recessed pocket on the concrete abutment. Minimum 28-day strength for the abutment concrete shall be 4,000 PSI. The bearing seat shall be a minimum of 12" wide. The step height (from bottom of bearing to top-of-deck) shall be determined by the bridge manufacturer.

Bridges in excess of 100 feet in length or bridges with dead load reactions of 15,000 pounds or more (at each bearing location) shall have teflon on teflon or stainless steel on teflon slide bearings placed between the bridge bearing plate and the setting plate. The top slide plate shall be large enough to cover the lower teflon slide surface at both temperature extremes.

11.0 FOUNDATIONS

Unless specified otherwise, the bridge manufacturer shall determine the number, diameter, minimum grade and finish of all anchor bolts. The anchor bolts shall be designed to resist all horizontal and uplift forces to be transferred by the superstructure to the supporting foundations. Engineering design of the bridge supporting foundations (abutment, pier, bracket and/or footings), including design of anchor bolt embedments, shall be the responsibility of the foundation engineer. The contractor shall provide all materials for (including anchor bolts) and construction of the bridge supporting foundations. The contractor shall install the anchor bolts in accordance with the manufacturer's anchor bolt spacing dimensions.

Information as to bridge support reactions and anchor bolt locations will be furnished by the bridge manufacturer after receipt of order and after the bridge design is complete.

12.0 BASIS OF ACCEPTANCE

15-PS0079 Sheet 12 of 14 46 N-0669-01

Visual inspection at the job site for general compliance with the plans and specification plus evaluation of the following submittals for compliance with the contract documents. The following checklist will be used in the evaluation of all submittals to assure compliance with the Special Specifications for Prefabricated Bridge. This checklist is considered the minimum acceptable requirements for compliance with these specifications. Any deviations from this checklist shall be considered grounds for rejection of the submittal. Any costs associated with delays caused by the rejection of the submittal, due to non-compliance with this checklist, shall be fully borne by the contractor and bridge supplier.

SUBMITTAL DRAWINGS

Data I	Required	to be Shown:		
	•			Weld Failure Checks (Ultimate)
	Bridg	e Elevation		Local Buckling of the Main Member Face Checks
	Bridg	e Cross Section		Main Member Yielding Failure Checks
	All M	lember Sizes		Main Member Crippling Failure Checks
	All V	ertical Truss Members are Square		Main Member Buckling Failure Checks
		ctangular Tubing		Main Member Shear Failure Checks
		e Reactions		All Bolted Splice Checks (if applicable)
		ral Notes Indicating		Main Truss Deflection Checks
		AISC Stress Conformance		Decking Material Checks
		Material Specifications to be Followed		"U-Frame" Stiffness Checks (if applicable)
		Design Live Load		☐ Interior and End Portal Design Checks (if applicable)
		Design Vehicle Load (If Applicable)		Determination of Top Chord K Factor Based on "U-Frame"
		Design Wind Load		Stiffness (if applicable)
		Other Specified Design Loads		Consideration of Individual Member Moments Due to
		Welding Process		Truss Deflection, Joint Fixity and Joint Eccentricity
		Blast Cleaning		
		Paint System to be Used (If Applicable)	FABR	RICATION SUBMITTALS
	Paint	Color Chart (If Applicable)	Data I	Required to be Shown:
		led Bolted Splices (If Applicable)		
		d Splice Location (If applicable)	□* *	Written Installation Instructions
		ature and Seal of Professional Engineer,	□* *	Written Splicing Instructions
	_	ensed in Accordance with Section 3.0	□* *	Written Maintenance & Inspection Instructions
			-**	Welder Certifications
DESI	GN CA	LCULATIONS	-**	Welding Procedures
Data	Required	d to be Shown:		Material Certifications (if applicable)

Data Input for 3-D Analysis of Bridge

- Joint Coordinates & Member Incidences
 - Joint and Member Loads
 - **Member Properties**
 - **Load Combinations**
- AASHTO Member Stress Checks for Each Member Type
- Critical Connection Failure Mode Checks For Each

Member Type

- **Chord Face Plastification Checks**
- **Punching Shear Checks**
- Material Failure Checks (Truss Webs)
- Weld Failure Checks (Effective Length)

- Material Certifications (if applicable)
 - Structural Steel (if applicable)
 - Decking (if applicable)
 - Structural Bolts (if applicable)
 - □** Quality Control Section of AISC
 - Certification Manual (if applicable)
 - □** Painter Certifications (if applicable)
 - Weld Testing Reports (if applicable)

** NOTE: These items are required to be submitted along with Submittal Drawings and Design Calculations. Those Fabrication Submittal Items not marked are to be submitted prior to shipment of the bridge.

13.0 MEASUREMENT AND PAYMENT

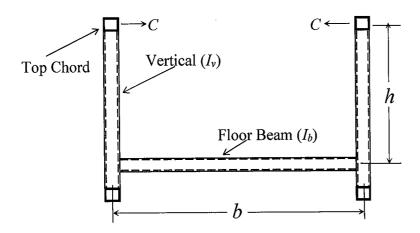
The Engineer will measure EACH Prefabricated Bridge as a unit.

Payment for "Prefabricated Bridge (Steel)" at the contract unit price is full compensation for the specified work.

05-18-16 BLP (WFL) / C&M (CFN)

1/K FOR VARIOUS VALUES OF CL/Pc and n

				n			
1/K	4	6	8	10	12	14	16
1.000	3.686	3.616	3.660	3.714	3.754	3.785	3.809
0.980		3.284	2.944	2.806	2.787	2.771	2.774
0.960		3.000	2.665	2.542	2.456	2.454	2.479
0.950			2.595				
0.940		2.754		2.303	2.252	2.254	2.282
0.920		2.643		2.146	2.094	2.101	2.121
0.900	3.352	2.593	2.263	2.045	1.951	1.968	1.981
0.850		2.460	2.013	1.794	1.709	1.681	1.694
0.800	2.961	2.313	1.889	1.629	1.480	1.456	1.465
0.750		2.147	1.750	1.501	1.344	1.273	1.262
0.700	2.448	1.955	1.595	1.359	1.200	1.111	1.088
0.650		1.739	1.442	1.236	1.087	0.988	0.940
0.600	2.035	1.639	1.338	1.133	0.985	0.878	0.808
0.550		1.517	1.211	1.007	0.860	0.768	0.708
0.500	1.750	1.362	1.047	0.847	0.750	0.668	0.600
0.450		1.158	0.829	0.714	0.624	0.537	0.500
0.400	1.232	0.886	0.627	0.555	0.454	0.428	0.383



" <u>U - Frame</u>"

Where:
$$C = \frac{E}{h^2 [h/3I_v + b/2I_b]}$$

L = Length in inches of one truss panel

 P_c = Buckling Load (= Top Chord Compression x F.S.)

 $n = Number\ of\ Panels$

Reference:

Galambos, T.V. (1988) "Guide to Stability Design Criteria for Metal Structures", 4th Ed., PP 515-529. Copyright © 1988. Reprinted by permission of John Wiley and Sons, Inc.



Cedar Creek Trail - Phase 1 City of Olathe Parks & Recreation Project No. 4-C-011-16

Addendum No. 2 Issued on October 16, 2020

The conditions set forth in this addendum shall become a part of the Specifications and Contract documents for the above referenced improvement project. All items, conditions, and requirements of the Specification and Contract Documents not specifically addressed in this addendum shall remain in effect. Contractor shall acknowledge this addendum in the Bid Form for the project. The following are clarifications to the contract and construction documents:

- 1. The Bid Date shall remain unchanged with Bids Due on November 3, 2020 at 2:00 PM local time. Bids will be received electronically at www.publicpurchase.com.
- 2. A non-mandatory Pre-bid Conference was held October 14, 2020. A list of attendees and meeting minutes are attached to this document.
- 3. The geotechnical report for Cedar Creek Trail Phase 1 has been made available and is attached to this document.

The following are clarifications to the contract and construction documents:

- 4. Bridge manufacturers are <u>not</u> required to be prequalified, but steel truss bridge design must meet specifications as published with Addendum 1. Bridge manufacture's wanting an evaluation by the engineer, must submit all relevant materials to Shelbi.swacker@mhseng.com, prior to Friday October 23, 2020.
- 5. Inspection services will be provided by the City of Olathe. Third-party material testing will be administered by the City.
- 6. The contract is set for 210 Calendar Days for substantial completion of construction. The City will allow the latest notice to proceed date to be February 15, 2021.
- 7. The following permits have been issued for this project (and attached to Addendum No. 2) KDHE Conditional NOI, KS Division of Water Resources Floodplain Fill, USACE NWP, and City of Olathe Floodplain Fill. The contractor shall be responsible for ensuring they are following these agencies permit guidelines.

CITY OF OLATHE PARKS & RECREATION PRE-BID MEETING October 14, 2020

PROJECT: Cedar Creek Trail - Phase 1, Project No. 4-C-011-16

LOCATION: Olathe City Hall: 100 E Santa Fe Street, Olathe, KS

1. Introductions & Project Summary

2. Contacts

a. City of Olathe Parks & Recreation

Tod Hueser, Parks Project Manager

Office: 913-971-8613

Email: TEHueser@olatheks.org

b. City of Olathe Purchasing

(For Questions Regarding PublicPurchase.com)

Shari Pine

Office: 913-971-9005

c. McAfee Henderson Solutions (Design)

Matt Henderson, PE Office: 913-888-4647

Email: matt.henderson@mhs-eng.com

Shelbi Swacker

Office: 913-888-4647

Email: shelbi.swacker@mhs-eng.com

3. Bid Information

a. Bid date: November 3, 2020 @ 2:00 pm CST

i. Submitted electronically at www.publicpurchase.com

- b. Documentation to include with bid
 - i. Bid Form
 - ii. Bid Bond
 - iii. Bid Addendum Form

4. Project Schedule

- a. Proposed Start Date: Mutually Agreeable Start Date.
 - i. Latest Start Date of February 15, 2021
 - ii. Substantial Completion within 210 Calendar Days

5. Project Information

- a. Project is KDOT funded and administered by the City of Olathe, Parks and Recreation.
- b. City of Olathe Public Works will provide inspection services.
- c. MHS will provide project administration.
- d. Trail originally designed as a 3 mile project connecting Cedar Lake and Lake Olathe. Due to property acquisition challenges, Phase 1 will include the northern portion of the total proposed trail from the City of Olathe property limits south of Old 56 Highway to Lake Olathe, known as Trail 2.
 - i. The southern portion of the total trail "Trail 1" as referenced in the plans, will be Phase 2 construction and is preliminarily slated to be let as a separate project in 2021.
 - ii. The Cedar Creek Project is part of a larger overall effort to establish a shared-use path network. Future plans are also underway for a future extension of the Cedar Creek Trail to cross Lake Olathe at the northern terminus of the project.
- e. Field adjustments may be made to the northern and southern terminus of Cedar Creek Trail Phase 1 to accommodate a temporary cul-de-sac turn around until future connections are established.
- f. The project will be paid as quantity based pricing, which will accommodate any field adjustments.
- g. A Geotech investigation has been conducted. The full report will be included with Addendum 2.

6. Documentation

- a. Reference Technical Specifications
 - i. City of Olathe Technical Specifications.
 - ii. Kansas Department of Transportation Specifications.

7. Permitting

- a. NOI has received Conditional Authorization from KDHE
 - i. Contractor will be responsible for design and submittal of SWPPP and Erosion and Sedimentation Control Plan in accordance with KDOT and KDHE requirements.
- b. KS DWR has issued a Floodplain Fill and Stream Obstruction Permit.
- c. USACE has authorized NWP.
- d. City of Olathe has issued Floodplain Development Permit.
- e. A City of Olathe Right of Way Permit will not be required.

8. Additional Statements/Clarifications

- a. Site Access / Staging at Dennis Avenue and Old 56 Highway
 - i. Staging and Access will be allowed on City of Olathe property including:

- Olathe property adjacent to Dennis Avenue, including the existing gravel loop drive north of the intersection with S Palmer Drive.
- 2. The City of Olathe has acquired the tract of property the trail will be located on.
- 3. Temporary Construction Easements have been acquired from the property owner, Shumaker, for construction activities outside of Olathe's tract from Old 56 Highway to Dennis Avenue.
- 4. Property information and Temporary Construction easements are shown in the plans.
- 5. There is an agreement for a reasonable Contractor access from Old 56 Highway to access the future trail on both the north and south right of way.

b. Pedestrian Bridge

- i. The pedestrian bridge shall be a steel truss bridge. No other materials will be considered for this project.
- ii. Bridge manufacturers do <u>not</u> need to be prequalified, but bridge design must meet specifications as published with Addendum 1.
- c. Utilities identified by One-Call have been contacted regarding this project
 - i. No conflicts have been identified.
 - ii. Contractor shall use best practices for identifying existing utilities prior to construction.
 - iii. There is an existing sanitary easement running through the project area. This easement is for future expansion and is not currently occupied.

9. Questions

- a. Is a Field Office required? Where is it to be located?
 - A Field Office (KDOT Type C) is required and can be located on City of Olathe property in a mutually agreeable location. We suggest the property bordered by Dennis Avenue to the south and Lake Olathe to the north.
- b. Is the Contractor responsible for material testing?
 - i. For this project, the City shall secure the services of a qualified testing laboratory to perform sampling and testing of poured in-place concrete, sampling and testing of soils including proctors, Atterberg limits, and compaction (nuclear density and moisture), in-place compaction testing (nuclear density) for asphalt pavements and aggregate gradation analysis for pavement subgrade and pipe bedding. This specified sampling and testing shall be paid by the City. However, in the event that any test indicates non-compliance with

Cedar Creek Trail – Phase 1 Pre-Bid Meeting Page 4 of 4

specifications, at least one additional test will be paid for by the CONTRACTOR to determine acceptability of material or methods

- c. What are the limits on DBE?
 - i. Per the Required Contract Provision DBE Contract Goal (page 157 of the Project Manual pdf), "The percentage goal to be subcontracted to KDOT-Certified DBE firms on this contract is 10%."
- d. What are the requirements for Self Performance?
 - i. Please refer to the Instructions to Bidders, Item 10.
- e. Is the Contractor responsible for any permit fees?
 - i. Agency permit fees have been paid for by the City of Olathe. Any specialized permits (e.g. temporary electrical or water connections) shall be contractor's responsibility.
- f. Are there prevailing wage requirements for this project?
 - i. Davis Bacon wage rates apply to this project. Refer to pages 153 and 202 of the Project Manual.

Pre-Bid Meeting Cedar Creek Trail - Phase 1, Olathe Parks & Recreation October 14. 2020

22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	בן	No.	
																			BRIAC WILLOW	RENEE BURILITARIA	Haven Lauten	Name	
																			MEGAKC,	J'M PAHOY	Dandlinger Construction	Company	October 14, 2020
																				bids @ intakey com	a carter or And linger constrom	Email	020
																			816-477-8722	816-763-3010	316-452-0454	Phone #	



Cedar Creek Trail - Phase 1 City of Olathe Parks & Recreation Project No. 4-C-011-16

Addendum No. 3

Issued on October 28, 2020

The conditions set forth in this addendum shall become a part of the Specifications and Contract documents for the above referenced improvement project. All items, conditions, and requirements of the Specification and Contract Documents not specifically addressed in this addendum shall remain in effect. Contractor shall acknowledge this addendum in the Bid Form for the project. The following are clarifications to the contract and construction documents:

- 1. The Bid Date shall remain unchanged with Bids Due on November 3, 2020 at 2:00 PM local time. Bids will be received electronically at www.publicpurchase.com.
- 2. The Bid Form has been reissued and is attached to this addendum. Revisions include:
 - a. Bid item "HMA-Commercial Grade (Class A)" has been replaced and separated into two bid items, "Asphalt BM-2B Base Course" and "Asphalt BM-2 Surface Course". The total asphalt quantity remains unchanged.
 - b. The bid item "Slope Protection (Riprap Stone)" has been revised to "Slope Protection (Riprap Stone) (Light 18")". The quantity remains unchanged.
 - c. Quantities for bid items "Concrete (Grade 4.0) (AE) Wall Section" and "Reinforcing Steel (Grade 60) Wall Section" have been updated.
 - d. The bid item "Distribution Slab (6")" has been added and includes the construction of a 6-inch Distribution slab across the RFB located at Station 84+36.51.
 - e. Unit prices for Set Price items have been added.
 - f. Bid items have been renumbered to account for additional bid items.

The following are clarifications to the contract and construction documents:

- 3. Precast wingwalls will not be accepted for this project.
- 4. The Slope Protection detail is located on Sheet 32. Geotextile fabric is subsidiary to the bid item "Slope Protection (Riprap Stone) (Light 18")" and shall be installed at a minimum width of 10 feet centered along the drip line of the bridge. The approximate quantity for geotextile fabric totals 157 SY.
- 5. Sheet 42. Reinforcing within the 5" trail section of the Retaining Wall in detail 3/42 shall be #4 bars at 18" O.C.



6. Sheet 42. The tables below contain updated concrete and reinforcing steel quantities for each retaining wall.

OLD 56 HWY WALL (Detail 2/24)								
Bid Item	QTY	UNIT						
Concrete (Grade 4.0) (AE)	122	CY						
Reinforcing Steel (Grade 60)	15,574	LBS						

WALL AT HILL (Detail 3/24)								
Bid Item	QTY	UNIT						
Concrete (Grade 4.0) (AE)	99	CY						
Reinforcing Steel (Grade 60)	8,700	LBS						

DENNIS AVE (Detail 2/24)									
Bid Item	QTY	UNIT							
Concrete (Grade 4.0) (AE)	227	CY							
Reinforcing Steel (Grade 60)	35,217	LBS							

- 7. The sidewalk to be constructed across the RFB, from Station 84+27.85 to 84+45.17 shall be a 6" distribution slab as detailed on Sheet 45.2.
- 8. The "C" and "F" values shown on the plan cross sections represent cut/fill volumes calculated using the average end area method to compare the existing and proposed ground surfaces. These values do not incorporate a cut or fill VMF factor or pavement removal, and are for general informational purposes only.

The earthwork quantities calculated for the Bid Form and summary of quantities were determined by a more detailed analysis that takes into account excavation for the construction of subgrade and pavements and VMF factors, as summarized in the earthwork table on Sheet 30.

BID FORM P.N. 4-C-011-16 CITY OF OLATHE, KANSAS

The following table is a list of bid items, estimated quantities, and the unit prices submitted by the bidder for the Cedar Creek Trail - Phase 1, Project Number 4-C011-16.

Schedule of Values

		e of Values		LINET	PICE	AMOUNT
. ,	ITEM	UNITS	APPROX.	DOLLARS	CENTS	DOLLARS
	A CONTRACT OF THE CONTRACT OF		QUANTITY	DOLLARS	CENTO	DOLLARO
	P.N. 4-C011-16	- 10				
	Mobilization	LS	1			
	Contractor Construction Staking	LS	1	 		
-	Field Office and Laboratory (Type C)	EA	1	60,000	00	\$60,000.00
$\overline{}$	Owners Contingency Allowance	LS	7.3	00,000		400,000.00
-	Clearing and Grubbing	AC SY	34,896			
-	Salvaged Topsoil			 		
	Unclassified Excavation	CY	6,351 32			
	Rock Excavation	CY	3,354			
	Compaction of Earthwork (Type B) (MR-90)	CY	3333	1		
-	Compaction of Earthwork (Type AA) (MR-3-3)	MGAL	1	35	00	\$35.00
	Water (Grading) (Set Price)	CY	1	40	00	\$40.00
	Foundation Stabilization (Set Price)	LF	24	10		
	Cross Road Pipe (12") (RCP)	LF	24			
	Cross Road Pipe (15") (RCP)			-		
$\overline{}$	Cross Road Pipe (18") (RCP)	LF LF	112 140			
-	Cross Road Pipe (24") (RCP)	LF	112			
	Cross Road Pipe (30") (RCP)	LF LF	64	 		
-	Cross Road Pipe (36") (RCP)		54			
	Cross Road Pipe (48") (RCP)	LF C	2			
-	End Section (12") (RC)	Each	2	-	·····	. ""
	End Section (15") (RC)	Each				
-	End Section (18") (RC)	Each	6	-		
	End Section (24") (RC)	Each	8 7	-		
_	End Section (30") (RC)	Each				· · · · · · · · · · · · · · · · · · ·
	End Section (36") (RC)	Each	4			
-	End Section (48") (RC)	Each	2		-	
	6" Pipe Underdrains (H)	LF	1,122			<u> </u>
	6" Pipe Underdrains (K)	LF	364	 	-	
	Aggregate for Blanket Underdrains	CY	187			
	Double Reinforced Concrete Box (2-8'x7') (22 LF) + Wingwalls	LS	1 26			
31	Storm Sewer (30") (RCP)	LF	36			
32	Junction Box	Each	63			
33	Riprap (Light Stone) (100 LB)	SY				
	Riprap (Heavy Stone) (1/4 Ton)	SY	132	<u> </u>		
_	Aggregate Ditch Lining (6")	TON	51		-	
	Fence (Special)	LF OV	295		-	
37	Sidewalk Construction (4")(AE)	SY	398			
38	Sidewalk Construction (5")(AE)	SY	599		1	
39	Distribution Slab (6")	SY	44	- 	-	
40	Concrete (Grade 4.0) (AE) - Wall Section	CY	448			
	Reinforcing Steel (Grade 60) - Wall Section	LBS	59,491	-		
_	Prefabricated Bridge (Steel)	EA CY	1 24		-	
43	Concrete (Grade 4.0) (AE)	CY	5 020	 	 	
44	Reinforcing Steel (Grade 60)	LB	5,020	+	ļ	
45	Abutment Strip Drain	SY	23			
46	Bridge Backwall Protection System	SY	29		-	
47	Class III Excavation	CY	66		 	
	Slope Protection (Riprap Stone) (Light 18")	CY	626	- 	 	
	Asphalt BM-2B Base Course	TON	1,570			
50	Asphalt BM-2 Surface Course	TON	1,047		 	
	Aggregate Base (AB-3) (4")	SY	1,447		 	
	Aggregate Base (AB-3) (6")	SY	13,848	 	F 00	\$35.00
53		MGal	1 270	3:	5 00	\$35.00
	Temporary Surfacing Material (Aggregate)	CY	270			
	Signing Delineator (Type A) (White Flexible) (Type 1 Anchor)	EACH	4			
	Permanent Signage & Pavement Markings	LS	1 200		 	
57	Temporary Fertilizer (15-30-15)	LB	900	l		<u> </u>

58	Temporary Seed (Canada Wildrye)	LB	120			
59	Temporary Seed (Grain Oats)	LB	270			
60	Temporary Seed (Sterile Wheatgrass)	LB	270			
61	Sediment Removal (Set Price)	CU YD	1	35	00	\$35.00
62	Temporary Berm (Set Price)	LF	1	1	00	\$1.00
63	Temporary Ditch Check (Rock)	CU YD	28			
64	Biodegradable Log (9")	LF	450			
65	Biodegradable Log (20")	LF	280			
66	Silt Fence	LF	9,700			
67	SWPPP Design	LS	1			
68	SWPPP Inspection	EACH	16			
69	Water Pollution Control Manager	EACH	30			
70	Mulch Tacking Slurry	LB	5,400			
71	Mulching (Temporary)	TON	12			
72	Water (Erosion Control) (Set Price)	MGAL	1	35	00	\$35.00
73	Fertilizer (15-30-15)	LB	600			
74	Seed (Fescue) (Turf Type Tall Fescue Blend)	LB	1,080			
75	Traffic Control	LS	1			
					TOTAL:	

ASPHALT MATERIAL INDEX:

The price included for Asphaltic Concrete Surface will be based on the computed monthly Asphalt Material Index for the month of the bid opening, if current month is not available at the time of bid opening the previous month prior to the bid opening month's index value will be used, as listed at the following web site, http://www.ksdot.org/burconsmain/ppreq/asphaltpriceindex.asp. The bid unit price for Asphaltic Concrete Surface shall be adjusted in subsequent months based on specification number 07-01009-R05, Price Adjustment for Asphalt Materials, in the 2007 Edition of Kansas Department of Transportation Special Provisions for the Standard Specification.

The undersigned successfully completed the bid process online at www.publicpurchase.com and affirms that the schedule of values table above matches the unit prices, line item amounts, and bid total amount submitted electronically.

REQUIRED CONTRACT PROVISIONS:

The current versions of the following Required Contract Provisions (I-IV) require the Contractor to furnish information. The Contractor shall complete and submit with its proposal these provisions. The City of Olathe will reject proposals that fail to contain completed Required Contract Provisions I, II and III and may reject proposals that fail to contain completed Required Contract Provision IV.

l.	08-10-66 (LPA)	Certification - Non-collusion & History of Debarment
	04.26.00 (LDA)	Designation Limitations on Use of Federal Funds for

II. 04-26-90 (LPA) Declaration - Limitations on Use of Federal Funds for Lobbying III. 07-19-80 (LPA) DBE Contract Goal

III. 07-19-80 (LPA) DBE Contract Goal
IV. 01-01-11 (LPA) Tax Clearance Certificate

CERTIFICATION:
I CERTIFY THAT I AM AUTHORIZED TO REPRESENT THE CONTRACTOR IN PREPARING AND PRESENTING THIS
PROPOSAL. I CERTIFY UNDER PENALTY OF PERJURY THAT THE FOREGOING (INCLUDING, BUT NOT LIMITED TO, THE
INFORMATION CONTAINED IN THE REQUIRED CONTRACT PROVISIONS REFERENCED ABOVE) IS TRUE AND CORRECT,
EXECUTED ON(DATE).

Contractor			
Ву			
Title		,	
Date	<u> </u>		
Telephone Number			
Contact Person			

Cedar Creek Trail – Phase I City of Olathe Parks and Recreation Project No. 4-C-011-16

Addendum No. 4

Issued on October 29, 2020

No more questions will be allowed after 12:00 noon (CMT) October 30, 2020.

AGREEMENT BETWEEN OWNER AND CONTRACTOR FOR CONSTRUCTION CONTRACT (STIPULATED PRICE)

THIS	AGREEMENT is dated as of the day of, 20, 20 ("Effective Date"), by
and b	etween the City of Olathe, Kansas ("Owner") andPyramid Contractors,
Inc	("Contractor"). Owner and Contractor, in consideration of the mutual covenants
herei	nafter set forth, agree as follows:
ARTI	CLE 1 – WORK
1.01	Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:
	1.8 Miles of 10-foot Recreational Trail (Generally Asphalt Construction)
	Installation of a 110 LF, 14-foot wide, Pedestrian Bridge
	Two Concrete Integral Retaining Wall and Toe Wall Road Underpasses (470 LF Total)
	225 LF Integral Retaining Wall

ARTICLE 2 – THE PROJECT

2.01 The Project, of which the Work under the Contract Documents is a part, is generally described as follows: Cedar Creek Trail - Phase 1, Project Number 4-C-011-16.

ARTICLE 3 – ENGINEER

- 3.01 The Project has been designed by McAfee Henderson Solutions, Inc.
- 3.02 The Owner has retained McAfee Henderson Solutions, Inc. ("Engineer") to act as Owner's representative, assume all duties and responsibilities, and have the rights and authority assigned to Engineer in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.

ARTICLE 4 – CONTRACT TIMES

- 4.01 Time of the Essence
 - A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.
- 4.02 Contract Times: Days
 - A. The Work will be substantially completed within 210 days after the date when the Contract Times commence to run as provided in Paragraph 4.01 of the General Conditions, and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions within 240 days after the date when the Contract Times commence to run.

4.03 Liquidated Damages

- A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial and other losses if the Work is not completed and Milestones not achieved within the times specified in Paragraph 4.02 above, plus any extensions thereof allowed in accordance with the Contract. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration preceding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):
 - 1. Substantial Completion: Contractor shall pay Owner \$500 for each day that expires after the time (as duly adjusted pursuant to the Contract) specified in Paragraph 4.02.A above for Substantial Completion until the Work is substantially complete.
 - 2. Completion of Remaining Work: After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Time (as duly adjusted pursuant to the Contract) for completion and readiness for final payment, Contractor shall pay Owner \$500 for each day that expires after such time until the Work is completed and ready for final payment.
 - 3. Liquidated damages for failing to timely attain Substantial Completion and Final Completion are not additive and will not be imposed concurrently.
 - 4. Milestones: Contractor shall pay Owner \$500 for each day that expires after the time (as duly adjusted pursuant to the Contract) specified above for achievement of Milestone 1, until Milestone 1 is achieved.

4.04 Incentive Award

A.	The amount of the incentive award for early completion of the Work compared to the
	Contract Times will be \$ per calendar day, up to a maximum of
	calendar days, counted from the actual date of completion of all Work required by
	any partial day will be rounded to the nearest full day compared to the anticipated date
	of completion in the Contract Times. The maximum incentive award to be paid under
	the Contract under any circumstances will not exceed \$

ARTICLE 5 – CONTRACT PRICE

5.01	Owner shall	pay	Contractor	for	completion	of	the	Work in	accordance	with	the	Contract
	Documents in	curr	ent funds th	ne ar	mount that fo	ollo	ws, s	ubject to	adjustment	under	the C	Contract:

\$ 1,699,584.90	 	

[Here insert a lump sum, unit prices or both, if necessary attach exhibits and list them in Article 8.]

[CONTRACTOR's Bid may be attached as an exhibit to avoid lengthy retyping of unit price schedules, formulae for escalation of prices, information as to alternatives, etc.]

ARTICLE 6 – PAYMENT PROCEDURES

6.01 Submittal and Processing of Payments

A. Contractor shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.

6.02 Progress Payments; Retainage

- A. Owner shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment on or about the <u>first</u> day of each month during performance of the Work as provided in Paragraph 6.02.A.1 below, provided that such Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract. All such payments will be measured by the Schedule of Values established as provided in the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no Schedule of Values, as provided elsewhere in the Contract.
 - 1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Owner may withhold, including but not limited to liquidated damages, in accordance with the Contract.
 - a. 95% percent of Work completed (with the balance being retainage) and
 - b. <u>95%</u> percent of cost of materials and equipment not incorporated in the Work (with the balance being retainage).
- B. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to 97% of the Work completed, less such amounts set off by Owner pursuant to Paragraph 15.01.E of the General Conditions, and less 200% of Engineer's estimate of the value of Work to be completed or corrected as shown on the punch list of items to be completed or corrected prior to final payment.

6.03 Final Payment

A. Upon final completion and acceptance of the Work in accordance with Paragraph 15.06 of the General Conditions, Owner shall pay the remainder of the Contract Price as recommended by Engineer as provided in said Paragraph 15.06.

ARTICLE 7 – INTEREST

7.01 All amounts not paid when due shall bear interest at the rate prescribed under K.S.A. 16-1901 et seq., and any amendments thereto.

ARTICLE 8 – CONTRACTOR'S REPRESENTATIONS

- 8.01 In order to induce Owner to enter this Contract, Contractor makes the following representations:
 - A. Contractor has examined and carefully studied the Contract Documents, and any data and reference items identified in the Contract Documents.

- B. Contractor has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. Contractor is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Contractor has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, if any.
- E. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Site-related reports and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (3) Contractor's safety precautions and programs, if any such reports and drawings are so identified.
- F. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
- G. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
- H. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
- I. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
- J. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.

ARTICLE 9 – CONTRACT DOCUMENTS

9.01 Contents

- A. The Contract Documents consist of the following:
 - 1. This Agreement (pages xiii to xx, inclusive).
 - 2. Performance & Maintenance bond (pages xxi to xxvi inclusive).
 - 3. Statutory bond (pages xxvii to xxxi, inclusive).

- 4. Appointment of Process Agent.
- 5. Non-collusive Affidavit of Prime Bidder.
- 6. General Conditions (pages 1 to 65, inclusive).
- 7. Supplementary Conditions (pages 1 to 34, inclusive).
- 8. Specifications as listed in the table of contents of the Project Manual.
- 9. Drawings (not attached but incorporated by reference) consisting of 127 sheets with each sheet bearing the following general title: Cedar Creek Trail Trail 2.
- 10. Addenda (numbers ____ to ____, inclusive).
- 11. Exhibits to this Agreement (enumerated as follows):
 - a. Contractor's Bid (pages ____ to ____, inclusive).
 - b. Bid Documents (Notice to Bidders, Instructions to Bidders, Questionnaire of Personnel Practices Bid Bond, Bid Form).
 - c. Certificates (Compliance with Personnel Practices, Good Standing to Conduct Business in Kansas, Insurance).
 - d. Federal Funds Project Documents (if applicable) (Standard General Conditions Division 100, General Specifications Division 200, Required Contract Specifications, General Wage Decision).
 - e. Project Requirements.
 - f. Temporary Facilities.
 - g. Submittals.
 - h. Technical Specifications.
 - i. General Special Conditions.
 - j. Measurements and Payments.
- 12. The following which may be delivered or issued on or after the Effective Date of the Contract and are not attached hereto:
 - Notice to Proceed.
 - b. Work Change Directives.
 - c. Change Orders.
 - d. Field Orders.
- B. The documents listed in Paragraph 9.01.A are attached to this Agreement (except as expressly noted otherwise above).
- C. There are no Contract Documents other than those listed above in this Article 9.
- D. The Contract Documents may only be amended, modified, or supplemented as provided in the General Conditions.

ARTICLE 10 - MISCELLANEOUS

10.01 Terms

A. Terms used in this Agreement will have the meanings stated in the General Conditions and the Supplementary Conditions.

10.02 Assignment of Contract

A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

10.03 Successors and Assigns

A. Owner and Contractor each represent that they are duly authorized to enter into the Contract, and binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

10.04 Severability

A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

10.05 Contractor's Certifications

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 10.05:
 - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process or in the Contract execution;
 - "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 - 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and

 "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

10.06 Other Provisions

- A. Owner stipulates that if the General Conditions that are made a part of this Contract are based on EJCDC® C-700, Standard General Conditions for the Construction Contract, published by the Engineers Joint Contract Documents Committee®, and if Owner is the party that has furnished said General Conditions, then Owner has plainly shown all modifications to the standard wording of such published document to the Contractor in the Supplementary Conditions.
- B. Prohibited Use of Certain Technologies. As of August 13, 2020, all Parties agree that they will comply with 2 CFR 200.216 and 2 CFR 200.471 regulations. Such regulations provide that recipients and sub-recipients of federal funds are prohibited from obligating or expending loan or grant funds, if any, to 1) procure or obtain; 2) extend or renew a contract to procure or obtain, or; 3) or enter into a contract to procure or obtain telecommunication or video surveillance equipment, services, or systems produced by: Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities); and Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities). Any expenditures for such telecommunication or video surveillance equipment, services or systems are unallowable costs and will not be reimbursed.

[REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement.

OWNER:	CONTRACTOR:					
City of Olathe, Kansas	Pyramid Contractors, Inc.					
Ву:	Ву:					
Title: Mayor	Title: (If Contractor is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)					
Attest:	Attest:					
Title:	Title:					
Address for giving notices: P.O. Box 768 Olathe, KS 66051-0768	Address for giving notices:					
	(913) 764-6225					
	License No.: (where applicable)					
	Agent for service of process:					
If Owner is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of this Agreement.)						
Approved as to form:						
Deputy City Attorney	_					