

Region 2000 Services Authority Invitation for Bid (IFB)

Region 2000 Services Authority is accepting sealed bids for two (2) new Weigh-Tronix Model FCXT Steel Bridge XT, Low-Profile Motor Truck Scale-Pitless Design-Concrete Deck or equal.

For bid package please visit: <u>http://www.region2000servicesauthority.org/procurements</u> or contact Felicia West at <u>fwest@region2000.org</u> or (434) 455-6086.

BID SUBMISSION DETAILS:

Issue Date: December 11, 2020

Bids Due: No later than 2:00 pm (EST) December 28, 2020

All Bids must be **Sealed and Delivered** to:

Region 2000 Services Authority *Attn: Felicia West* 361 Livestock Road Rustburg, VA 24588

Sealed Envelopes shall be clearly marked "Scale Bid"

Bid opening: Bid opening will take place at the Region 2000 Services Authority offices located at 361 Livestock Road, Rustburg, Virginia 24588. Sealed bids must be received by 2:00 pm (EST) Monday, December 28, 2020 at which time they will be opened and read aloud. Bids received after 2:00 pm (EST) by the official clock at our main office located at 361 Livestock Road Rustburg Virginia 24588 will not be considered.

VENDOR INSTRUCTIONS:

- Vendor shall mark each specification either "YES" to indicate item being quoted is exactly as specified or a "NO" to indicate any deviation of item being bid from the specifications.
- Any "NO" response or deviation shall be explained in spaces provided.
- Where certain brands "or equal" are specified, be sure to state the brand/model of option quoted.
- Any additions, deletions, or variations from the following specifications must be noted.
- Any items appearing in the manufacturers regularly published specifications and offered as standard equipment by the manufacturer shall be included in any submitted bid, unless otherwise expressly specified herein.
- Any additions, deletions or variations from the manufacturer's regularly published specifications must be outlined in an attached letter, to provide the Region 2000 Services Authority with enough information to clearly evaluate that which is being offered. Failure to properly complete this component of a submitted bid shall, at the sole discretion of the Region 2000 Services Authority, subject your bid to rejection.
- The Region 2000 Services Authority reserves the right to utilize value engineering to determine the selection of the item most advantageous for its use and make an award in accordance with such provisions.
- There is no requirement to accept the lowest cost equipment offered and specific requirements may be waived or amended at the discretion of the Region 2000 Services Authority.

BID SPECIFICATIONS:

Section 1.0 – TRUCK SCALE SPECIFICATIONS

The **two (2) new truck** scales will be a fully electronic, low profile, concrete deck design truck scale. The scale platforms, weigh-bars or load cells and digital indicators will be 100% designed, manufactured and assembled by one manufacturer located in the United States of America.

The scale will meet the following minimum standards:

General Specifications			
Manufacturer Model No.:	Weigh-Tronix Model FCXT-7010-100T or equal		
Capacity:	135 Tons		
Platform Size:	70' x 10'		
Number of Modules:	3		
Structural Steel Content:	25,711 lbs.		
Number of Weigh Bars:	8 (maximum)		
Dual Tandem Axle Rating:	90,000 lbs.		

1.1 Scale shall be a full electronic design. Mechanical lever systems are not acceptable. Scale weighbridge will consist of three factory welded modules each having a minimum longitudinal span of 23'4" and platform width of 10'.

*Scales using flexure restraint systems will not be permitted. No field assembly or welding will be allowed.



1.2 Each scale module shall be designed with a CLC (Concentrated Load Capacity) of 45 Tons as defined by NIST. When the designed CLC is applied at midspan on a module according to NIST regulations, the maximum bending stress in the steel shall not exceed 16,000 PSI. The maximum stress due to bending in the concrete shall not exceed 1,700 PSI. The deflection at this loading condition shall not cause the scale to exceed the allowable accuracy tolerance as specified by NIST in Handbook 44.



1.3 Scale shall have a nominal capacity of 100 Tons (200,000#) and a resolution of 20# increments.

	vided will have an unobstructed weighing surface of t seventy feet (70') in length and a 14" maximum prof NO
	tem shall be a full electronic design with internal self-
checking weig External che e	ihbridge. ck rods will not be permitted.
The scale sha	ll have a minimum calculated "r" factor of 2.65.
YES	
YES	NO K thickness will be 10-1/4" including steel support
YES Minimum deck substructure.	NO A thickness will be 10-1/4" including steel support NO
YES Minimum deck substructure. YES Concrete deck strength of 40	NO K thickness will be 10-1/4" including steel support

1.9	All concrete elements within axle pattern of vehicles shall be in a compression application above the neutral axis of the structure.				
	*Concrete decks that have no steel deck substructure will not be permitted. Pre-cast concrete decks are not acceptable.				
	YES NO				
1.10	The minimum dual tandem axle ratings shall be equivalent to the CLC as approved by NIST, and shall be as follows: Dual 90,000#				
	YES NO				
1.11	The scale shall be designed to accommodate up to 270 trucks per day with a Dual Tandem Axle Load of up to 72,000 lbs. for a period of twenty (20) years without weighbridge fatigue.				
	YES NO				
1.12	The scale shall be sandblasted to SPC 6 standards.				
1.13	The scale shall receive a high-solids, urethane primer to 2-3 mils dry film thickness.				
	YES NO				

1.14 The scale shall receive a high-performance, two-part, acrylic polyurethane top coating to 2-3 mils dry film thickness.

.15	The scale will be NTEP certified and shall meet the requirements set forth
	by the NIST Handbook 44 for Class III-L devices.
	The bidder shall submit a current copy of COC (Certificate of Conformance) with bid.
	YES NO
.16	The scale provided shall be a Weigh-Tronix Steel Bridge Model FCXT- 7010 <u>or equal</u> . YES INO
.17	Concrete and steel elements of weighbridge shall be tied together with Nelson shear studs running both laterally and longitudinally insuring a composite adhesion of the steel and concrete elements.
.18	The weight sensors and junction boxes contained in the weighbridge shall be warranted by the manufacturer for a period of five (5) years from the date of installation and the weighbridge structure shall be warranted for fifteen (15) years.

Section 2.0 – WEIGH BARS

2.1 Weight sensors shall be Avery Weigh-Tronix Weigh Bars or equal.

perpendicular	r load cells will be mounted within the weighbridge to traffic flow. Suspension will be hardened, single link allow a free-floating platform.
•	r load cells will be stainless steel analog type and have acity of 75,000 lbs. each with an overload safety factor of
	al cells with analog/digital circuitry in the load cell or will not be permitted.
YES	
All access to	NO Weigh Bars or load cells will be from the top of the scale
All access to	Weigh Bars or load cells will be from the top of the scale access panels secured by stainless steel bolts.
All access to through steel	Weigh Bars or load cells will be from the top of the scale access panels secured by stainless steel bolts.
All access to through steel YES All conduit run conduit.	NO Weigh Bars or load cells will be from the top of the scale access panels secured by stainless steel bolts.

2.6 The Weigh Bar or load cell strain gauges and wire connection to the gauges shall be potted using a urethane potting material to prevent moisture, conductive dust and corrosive material from entering the gauge area as well as protecting the sensitive gauges from physical damage.

•	s (8 maximum) or load cells and load cell junction boxe ve a NEMA 4X rating and be of stainless-steel
YES	NO
•	tands will be flush mounted to concrete piers and anch ad wedge locks or similar bolts.
*Grout plates	s or flexure restraints will not be allowed.
—	
YES	NO
VES	NO
U YES	NO
All Weigh Bar	s or load cells & stainless-steel load cell cables will be
All Weigh Bar connector-les	s or load cells & stainless-steel load cell cables will be s.
All Weigh Bar connector-les * Cannon or s	s or load cells & stainless-steel load cell cables will be s. similar connectors will not be allowed.
All Weigh Bar connector-les	s or load cells & stainless-steel load cell cables will be s.
All Weigh Bar connector-les * Cannon or s	s or load cells & stainless-steel load cell cables will be s. similar connectors will not be allowed.
All Weigh Bar connector-les * Cannon or s	s or load cells & stainless-steel load cell cables will be s. Similar connectors will not be allowed.
All Weigh Bar connector-les * Cannon or s YES Surge voltage	s or load cells & stainless-steel load cell cables will be s. similar connectors will not be allowed.

2.11 Weigh Bars will be warranted a full 5-years.

12	Service and installation shall be provided by a factory-authorized distributor within a 40-mile radius of the Region 2000 Services Authority landfill in Campbell County, VA.				
13	The truck scale will be designed so that alternative brands of digital indicators can be substituted for the original equipment so that the owner of the equipment will have the option of replacing the original digital instrument with an alternative type or brand in the future, if desired.				
	YES NO				

The following items *or equal* if not standard shall be included:

3.1	Guide rails	
	YES	NO
3.2	W-T Wi-127 ir	ndicator w/ extra RS-232
	YES	NO

3.3 XR 4500 TL w/traffic light remote display

YES	NO		
Pole, base an	chor brackets		
YES	NO		
(2) red green	raffic lights	 	
YES	NO		
Stainless stee	l weigh bars		
YES	NO		
(8) bollards/gu	ideposts		
YES	NO		

Section 4.0 – VENDOR BID SHEET

Purchase Price:

	tion of existing	g foundation a	n and disposal of and approach apr	
Model #				
Price \$				
Company:				
Contact Person:				
Contact Informatio	n: Address: Phone: eMail:			
Authorized Repres	sentative Sign	nature:		
Title:				
Date:				