

**ADDENDUM ONE**  
**QUESTIONS and ANSWERS**  
**6652 OF**

Date: 01/31/22

To: All Bidders

From: Rob Taylor , Procurement Contract Officer  
AS Materiel State Purchasing Bureau (SPB)

RE: Addendum for Invitation to Bid (ITB) Number 6652 OF for Hydraulically Reversible, Trip Edge, Snow Plows with Twelve Foot Steel Moldboard & Twelve Foot Polymer Moldboard to be opened on February 18, 2022 at 2:00 p.m. Central Time

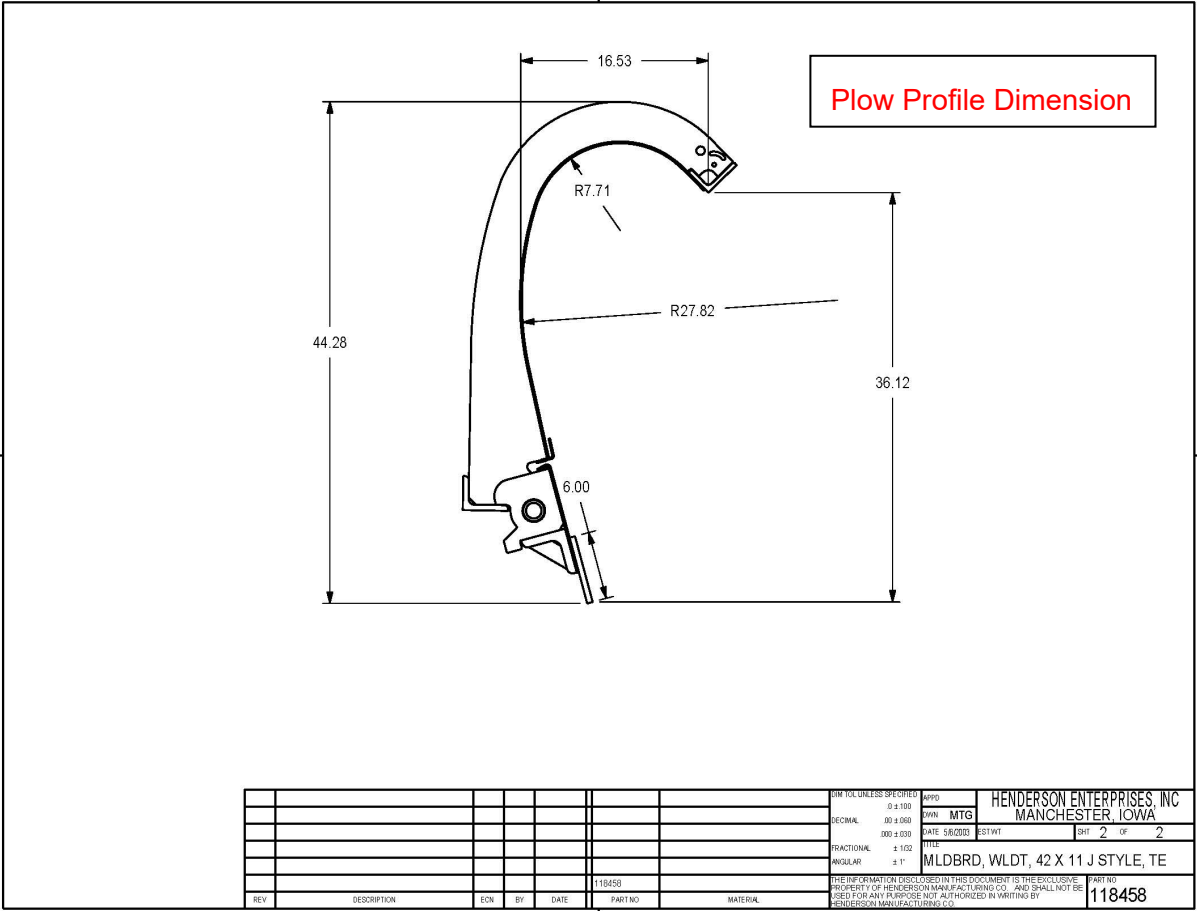
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Following are the questions submitted and answers provided for the above-mentioned Invitation To Bid. The questions and answers are to be considered as part of the Invitation To Bid. It is the Bidder's responsibility to check the SPB website for all Addenda or Amendments.

<u>Question Number</u>	<u>ITB Section Reference</u>	<u>ITB Page Number</u>	<u>Question</u>	<u>State Response</u>
1	C2	Design of J-style per drawing	Would Nebraska accept Henderson design of J-style plow as depicted in drawing Plow Profile Dimension?	Bid as per NDOT supplied drawing.
2	C7	One piece trip edge with six adjustable torsion springs.	Would Nebraska accept Henderson 5 springs?	Bid as per specification Section C7
3	C8	Springs shall be from not less than 3/4" square wire, having a 3-3/4" O.D. with fifteen active coils each	Would Nebraska accept Henderson spring as per attached drawing 95297PROPOSAL?	Yes, and long as they meet the quantity in section C7
4	C11	Spring shaft shall be solid rod.	Would Nebraska accept a tube of 1875 OD x .25 W in lieu of the solid rod?	Bid as per specification written in C11
5	C23	Moldboard must have ten 1/2 inch one piece steel reinforcing ribs.	Would Nebraska accept eight 1/2 inch ribs?	Bid as per specification written C23

6	D4 and D5	Polymer sheet to have a minimum tensile strength of 7,000 PSI. Sheet to be of ultra-high molecular weight polyethylene.	Would Nebraska accept Very-High molecular weight poly with a tensile strength of 35,000 PSI?	Bid as per specification in section D4 & D5
7	F4	...and shall include two moldboard braces made from two inch square tubing with 1-1/8 inch diameter attaching pins...	Would Nebraska accept three moldboard braces made of 1/2"x 3/4" x 2" bar welded braces per the attached picture Moldboard Braces?	Yes, this is acceptable.

This Addendum will become part of the ITB and should be acknowledged with the ITB.



					DIM TOL UNLESS SPECIFIED		APP'D		HENDERSON ENTERPRISES, INC	
					0 ± .000		OWN MTG		MANCHESTER, IOWA	
					DECIMAL .00 ± .000		DATE 5/8/2020		SHT 2 OF 2	
					FRACTIONAL ± 1/32		TITLE			
					ANGULAR ± 1°		MLDBRD, WLDT, 42 X 11 J STYLE, TE			
					118458		THE INFORMATION DISCLOSED IN THIS DOCUMENT IS THE EXCLUSIVE PROPERTY OF HENDERSON MANUFACTURING CO. AND SHALL NOT BE USED FOR ANY PURPOSE NOT AUTHORIZED IN WRITING BY HENDERSON MANUFACTURING CO.		PART NO 118458	
REV	DESCRIPTION	ECN	BY	DATE	PART NO	MATERIAL				

**MATERIAL:**

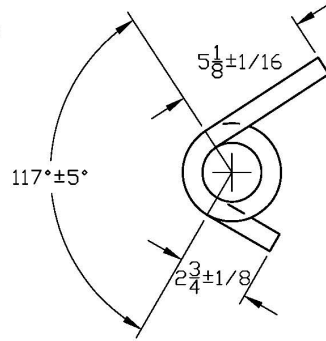
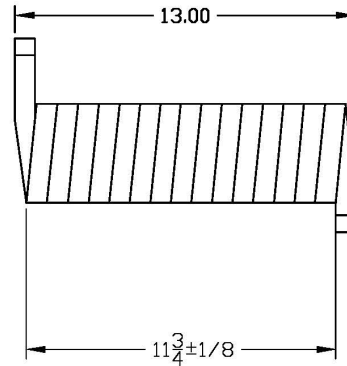
.75 SQUARE BAR SPRING STEEL ASI 4340 (ATLAS ULTIMO 4)  
14 ACTIVE COILS 3.75 OD X 2.25 ID  
Y.S. = 200 KSI MIN., HARDNESS = 46-48 ROCKWELL C  
HARDENING = QUENCH IN OIL FROM 1550° F  
DRAW TEMP. = 600° F QUENCH IN WATER  
PRELOAD ON SPRING = 35°  
PAINT BLACK WIRE LENGTH = 143.5

**SPRING DATA:**

SPRING RATE = 93.5 INCH-LBS./ DEGREE  
PRELOAD ANGLE FROM RELAXED 45°  
PRELOAD 4207.5 INCH-LBS.  
TRIP ANGLE FROM RELAXED 88°  
TRIP LOAD 8228 INCH-LBS. (@ 88°)

**TYP. ANALYSIS OF MATERIAL:**

CARBON C = 0.40  
MANGANESE MN = 0.70  
PHOSPHOROUS P = 0.020  
SULPHUR S = 0.020  
SILICON SI = 0.25  
CHROMIUM CR = 0.80  
NICKEL NI = 1.75  
MOLYBDENUM MO = 0.25

**95297PROPOSAL****95297**

ALTERNATE MATERIAL: SAE 4140

0051-6-106

						DIM TOL UNLESS SPECIFIED	APPD:	HENDERSON MANUFACTURING	
						DECIMAL .0 ± .100 .00 ± .060 .000 ± .030	CHKD:	MANCHESTER, IOWA	
						FRACTIONAL ± 1/32	DWN: MSH	DATE: 8/18/00	EST. WEIGHT:
						ANGULAR ± 1°	DESCRIPTION		
---	117° WAS +/- 2°		MTG	10-31-02			SPRING, TOR., .75 SQx3.75x11.75		
---	NEW RELEASE	1146	MSH	8/18/00		MATERIAL			PART NO
REV	DESCRIPTION	ECN	BY	DATE		4340 ST. (ATLAS ULTIMO	95297PROPOS		

