ADDENDUM #1 TO BID INVITATION # 207-20

Posted: 6/5/2020

DATE OF BID CLOSING: 6/11/20  TIME OF BID CLOSING: 11:00 AM (EST)

FOR: SNOW PLOWS AND WINGS

Please use the following plow wing specifications for bid 207-20

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State of New Hampshire
Bureau of Purchase and Property
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E-Mail: NH.Purchasing@das.nh.gov

NOTE: UPON EXECUTION AND SUBMISSION OF THIS DOCUMENT, THE RETURNED ADDENDA WILL SUPERSEDE PREVIOUSLY SUBMITTED BID.

BIDDER ____________________________ ADDRESS ____________________________

BY ________________________________ TEL. NO. ____________________________

(this document must be signed)

(please type or print name)
MOLDBOARD – PLOW WING

The snow wing plow shall be a full trip leveling model, right (or left) discharge as specified, designed for high speed highway plowing and shall conform with approximate dimensions as shown in chart attached for the various duty models ordered. Moldboard shall be shaped in appropriate concave manner to control discharge of snow to prevent snow from blowing over the top during plowing operations. The maximum extension of the curved discharge end shall occur above a point projected at least 15 inches beyond the discharge end of cutting edges, and no more than 12 inches below the moldboard top edge. Two 1/2" x 2" steel bars or other suitable reinforcement shall form the horizontal support for this curved discharge section. The reinforcement steel bars shall be placed at equal distances from the top and bottom of the curved discharge section. For heavy and medium snow plow wings there must be at least four alternative vertical or horizontal pin connection points, 4-1/2” out more on top then bottom holes, on the wing for the wing arm connections to insure the proper angle between arm and wing (mounting steel where the wing arm attaches shall be ¾” minimum). Proper angle connection can also be made with a movable (sliding) system on the wing. The distance between the first point of the wing arm attachment and the hole (intake end) for the box attachment shall be a minimum of 92” with a minimum of 2 additional holes, 6” apart towards discharge of wing, except for light duty wings where the minimum shall be 1 additional hole. Holes are to be 1-5/16”.

Construction of moldboard shall be of minimum 10 U.S.S. gauge steel, brake formed or paneled for additional rigidity, including a 3” x 3” x ¾” HSS angle iron or a minimum 3” x 2” full box brake at the top edge (or equivalent structural steel shape) and shall be welded to a heavy steel framework of vertical ribs and horizontal reinforcements. The bottom back area of the wing shall have a ¾” hole attachment point for a wing cable. For connection to the front post hinge, there will be a minimum of two 1-9/16" drilled holes through the nose plate, which shall be welded closed to prevent water/moisture from entering, utilizing a 1-1/2" hex head wing bolt and located approximately 16 1/2" above bottom of cutting edge. At the very nose of the wing, the edge just above where the cutting edge is attached/welded to the reinforced backer for the front post hinge, a drain hole shall be located to allow any moisture an avenue of exit. (See attached photo)

The bottom, horizontal cutting edge reinforcement shall be a minimum of 5" x 3-1/2" x 5/8" steel angle with a minimum of six (6) 3/8” steel gussets continuously electrically welded to the moldboard framework on all 4 sides and designed to withstand severe shock of high speed contact with road obstructions. Bolt holes shall be spaced to accommodate the standard 12” carbide punch and standard 8” carbide punch. See attached sketches. Dimensional tolerance between hole spacing is +/- 1/16” (non-accumulative) from center to center across the full length of the mold board.

APPROXIMATE DIMENSION AND WEIGHT REQUIREMENTS – PLOW WING

<table>
<thead>
<tr>
<th></th>
<th>Extra Heavy Duty Model</th>
<th>Heavy Duty Model</th>
<th>Medium Duty Model</th>
<th>Light Duty Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall length</td>
<td>13'</td>
<td>12'</td>
<td>11'</td>
<td>10'</td>
</tr>
<tr>
<td>Length of cutting edge</td>
<td>12'-0&quot;</td>
<td>11'-0&quot;</td>
<td>10'-0&quot;</td>
<td>9'-0&quot;</td>
</tr>
<tr>
<td>Nose height</td>
<td>29&quot;</td>
<td>29&quot;</td>
<td>29&quot;</td>
<td>29&quot;</td>
</tr>
<tr>
<td>Discharge</td>
<td>40&quot;</td>
<td>39&quot;</td>
<td>38&quot;</td>
<td>36&quot;</td>
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</table>
PAINT AND PRIMER COATING

This specification is for paint and primer (coating supplies) provided to NHDOT and for primer and paint coatings utilized on equipment supplied to NHDOT.

All coating supplies and coatings utilized on equipment surfaces that are normally primed and painted shall be suitable for severe exposure to road salt and abrasion. Coatings shall conform to all applicable federal and state regulations and criteria pertaining to chemical and VOC content.

Coatings containing any compound that would render the waste paint, in its dried form, a hazardous waste per NH Code of Administrative Rules Chapter Env-Hw 400 are prohibited. This includes RCRA listed metals (e.g., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Silver, Selenium) other than naturally occurring trace amounts associated with the coating pigments. The intent of this specification is to obtain or utilize paint such that any concentration of these metals shall not produce a TCLP test result that would fail NH DES toxicity characteristic standards and meets the latest governing regulatory criteria.

Coatings shall not contain hexavalent chromium or cadmium. For the purposes of this specification, a coating product "contains hexavalent chromium or cadmium" if hexavalent chromium or cadmium was introduced as a pigment or as an agent to impart any property or characteristic to the coating during manufacturing, distribution, or use of the applicable coating. Coatings supplied in bulk shall not contain a total VOC content greater than 2.8 lbs/gal (340 g/l).

A written certificate of conformance to these specifications shall be submitted to NHDOT, for coatings utilized on equipment supplied to NHDOT, indicating these compounds do not exceed Toxicity Characteristics of NH Code of Administrative Rules Env-Hw 403.06, Table 4.9, Regulatory Limits. Material Safety Data Sheets are not sufficient documentation of conformance. Laboratory test results must be supplied with the written certificate. The following test methods are incorporated by reference herein, and shall be used to test coatings.

4. EPA Test Methods 3010A/6010B.
5. Alternative methods which are shown to accurately determine the concentration of hexavalent chromium or cadmium compounds in a subject coating product or its emissions may be used upon written approval.

The coatings also shall meet the following criteria:

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<th>height</th>
<th>8</th>
<th>5</th>
<th>5</th>
<th>5</th>
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</thead>
<tbody>
<tr>
<td>Minimum number of vertical ribs</td>
<td>800 - 1100 lbs</td>
<td>700 - 1100 lbs</td>
<td>600 – 1000 lbs</td>
<td></td>
</tr>
</tbody>
</table>
• Solids Content
  % By Volume  45- 60
  % By Weight  55 – 70

• Recommended Dry Film Thickness (DFT)  1 – 2 ml

• Wet Film Thickness to Achieve DFT  2 ½ - 4 ½ ml

• Practical Coverage at DFT  325 – 650 sq. ft.

• Dry Time (70 – 80°F and 50% humidity)
  Tack Free  4 – 6 hours
  Handle  12 – 16 hours
  Recoat  24 hours

Prior to painting, all metal surfaces shall be abrasively blasted to a minimum Commercial Blast Cleaning SSPC-SP6, NACE 3 (reference Steel Structures Painting Council) with a surface anchor profile of 1-2 mils, unless the requirements of the coating manufacturer are more restrictive, as achieved using an abrasive mixture of shot and grit. Measure the profile using Testex Replica Tape.

Apply two separate coats of rust-inhibitive, heavy-duty primer, followed by one coat of industrial enamel topcoat. The finish color shall meet or closely approach NH Omaha Orange (Federal Standard 595B) color no. 12243. A color sample shall be submitted for approval by the Department.

Coating application and workmanship shall meet the requirements of SSPC- PA1 (Shop, Field, and Maintenance Painting), and those of the coating manufacturer, whichever is more stringent. Prepared surfaces shall be primed within 8 hours of blast cleaning and before any visible rust appears. All painting shall be performed inside a building with atmospheric controls suitable for the application of paint in accordance with the manufacturer’s requirements. A coating manufacturer’s technical representative shall visit the work at least once to assure proper surface preparation and application of the coating.

**REFERENCE – PLOW WING**

Although the following makes and models are indicative of the type and quality required, all specifications indicated in the proposal must be met:

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Plow Wing Light</th>
<th>Plow Wing Medium</th>
<th>Plow Wing Heavy</th>
<th>Plow Wing Extra Heavy</th>
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<tbody>
<tr>
<td>Everest</td>
<td>W-120</td>
<td>W-132</td>
<td>W-144</td>
<td>W-156</td>
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<tr>
<td>LaRochelle</td>
<td>10W108NH</td>
<td>11W120NH</td>
<td>12W132NH</td>
<td>13W144NH</td>
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<tr>
<td>Viking</td>
<td>120W-HD</td>
<td>132W-HD</td>
<td>144W-HD</td>
<td>156W-HD</td>
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<tr>
<td>NH Standard Carbide Blades</td>
<td>44E 28C 44E</td>
<td>44E 44C 44E</td>
<td>44E 44C 44E</td>
<td>44E 44E 44E</td>
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