



**OHIO TURNPIKE AND
INFRASTRUCTURE COMMISSION**

ADDENDUM NO. 2
ISSUED JULY 28, 2023

to

BID INVITATION NO. 4437

FURNISHING SNOW PLOW BLADES

OPENING DATE: 2:00 P.M. (EASTERN TIME), AUGUST 2, 2023

ATTENTION OF BIDDERS IS DIRECTED TO:

ANSWERS TO QUESTIONS RECEIVED THROUGH 11:00 A.M. ON JULY 28, 2023

Issued by the Ohio Turnpike and Infrastructure Commission through Aimee W. Lane, Esq., Director of Contracts Administration.

Aimee W. Lane

Aimee W. Lane, Esq.
Director of Contracts Administration

July 28, 2023

ANSWERS TO QUESTIONS RECEIVED THROUGH 11 A.M. ON JULY 28, 2023:

Q#2 Is there a brand you are looking for ?

A#2 The Commission does not have a specific brand called out, all that is required is that the vendor meets the specifications.

Q#3 I would like to submit the following material for approval for Group II rubber plow blades on Bid #4437

"SNOW PLOW RUBBER"

***Compound Physical Properties— Textured Impression Finish**

ASTM D 412 —

| | | |
|--------------------|---|------------------------------------|
| TENSILE | — | 2400 psi (15.9 MPa) minimum |
| Modulus @ 100% | — | 500 psi (typical) |
| Modulus @ 200% | — | 900 psi (typical) |
| Modulus @ 300% | — | 1200 psi (typical) |
| Elongation @ Break | — | 450 % minimum |

ASTM D2240: Hardness — 60 ± 5 Durometer (Shore A)

ASTM D 624: Tear Resistance (Die C) — 229 ppi (lbs per inch) minimum

ASTM D 297: Density / Specific Gravity— 1.135 typical

ASTM D 395: Compression Set:

| | | |
|------------------|---|------------------------|
| 22 hrs. @ 158° F | — | 15% typical (25% max) |
| 22 hrs. @ 212° F | — | 25% typical (50% max.) |

**ASTM D 573: Deterioration of Properties (% Difference from Originals)
 (Heat Aging – Air Oven)**

| | | | |
|----------------|------------|---|--------------|
| 70 hrs. 158° F | Tensile | — | -20% max. |
| | Elongation | — | -35% max. |
| | Durometer | — | ± 6 pts. max |

ASTM D 2137: Low Temperature Brittleness (- 40° F) — Pass

ASTM D 2137: Ozone Resistance (3 days @ 25 pphm) — Pass

| | Original Specifications | Proposed Material |
|-------------------------------------|-------------------------|--------------------------------|
| ASTM D412: Tensile | 2500 psi minimum | 2400 psi (15.9 MPa) minimum |
| Modulus @ 100% | 300 psi minimum | 500 psi (typical) |
| Modulus @ 200% | 800 psi minimum | 900 psi (typical) |
| Modulus @ 300% | 1350 psi minimum | 1200 psi (typical) |
| Elongation @ Break | 500% minimum | 450% minimum |
| ASTM D2240: Hardness | 60 +/- 5 Durometer | 60 +/- 5 Durometer (Shore A) |
| ASTM D624: Tear Resistance (Die C) | 200 ppi minimum | 229 ppi (lbs per inch) minimum |
| ASTM D297: Density/Specific Gravity | 1.15 typical | 1.135 typical |
| Modulus @ 100% | 300 psi minimum | Not noted |

| | | |
|---|--|---|
| ASTM D395 Compression Set | Not noted | 22 hrs @ 158 deg F – 15% typical, 25% max |
| | Not noted | 22 hrs @ 212 deg F – 25% typical, 50% max |
| ASTM D573: Deterioration of Properties (% Difference from Originals) Heat Aging by Air Oven | Tensile, 70 hrs at 70 deg C: 30% maximum | Tensile, 70 hours @ 158 deg F: -20% maximum |
| | Elongation: 50% maximum | Elongation: -35% maximum |
| ASTM D2137 Low Temperature Brittleness | (-40 deg C) Pass | (-40 deg F) Pass |
| ASTM D1149 Ozone Resistance | 3 days @ 25pphm – Pass | 3 days @ 25pphm - Pass |

Please let me know if this is an approved material to bid for Group II.

A#3 The proposed equal meets and is approved as an equal.

END OF ADDENDUM NO. 2