OPERATING DESIGN: Tarpaulin shall deploy manually from a roller spool, without using any pivots or arms attached to the side of the dump body, or fitted with the optional Manual Pullarm System. Complete tarping function to be performed from ground level. Tarp system shall come with all required hinge hardware, rope hooks, and tarp return ramps. Nuts, bolts, brackets, hardware, and spring shaft shall be zinc plated to prevent rust.

A. TARPAULIN ROLLER SPOOL: Tarp spool shall consist of the following:

A.1 Shall be spring-loaded and self-retracting.

A.1.1 Tarpaulin roller spool spring shall be zinc plated.

A.1.2 Tarpaulin roller spool spring shall be enclosed in a one piece, three inch diameter, extruded, minimum 6063 aluminum or galvanized steel tube and shall be sealed from weather.

A.1.2.1 Roller tube shall have a groove for full width insertion and retention of the tarpaulin, by means of a nylon hem tube.

A.1.3 Tarpaulin roller spool shall be under minimum tension when tarp retracted.

A.2 Tarpaulin roller spool shall pivot on heavy-duty nylon bushings.

A.2.1 Bushings shall pivot on a minimum 1/2 inch diameter, zinc plated steel spring shaft.

A.3 Tarpaulin roller spool shall be designed so that the tarp shall roll off the top or bottom of the spool by positioning the spool in one of two horizontal positions. Unless otherwise specified in the invitation for bids, tarp shall roll off the bottom of the spool.

A.4 The ends the roller spool shall be supported by a minimum 3/16” thick steel end plates.

B. TARPAULIN FABRIC: Tarpaulin fabric shall consist of one of the following:

B.1. Asphalt tarpaulin fabric shall be 14-ounce nylon vinyl fabric coated on both sides (A-2) with urethane. Tarpaulin fabric shall be impermeable to water or moisture, and shall be resistant to mildew and ultra violet light. Tarpaulin fabric shall withstand normal handling and placement at temperatures from -35 degrees Fahrenheit to 400 degrees Fahrenheit without endangering the structural integrity and serviceability of the fabric.
B.2. Heavy duty open weave black or red PVC coated polyester mesh.

B.3. 18-ounce vinyl coated nylon fabric. Tarpaulin fabric shall be impermeable to water or moisture, and shall be resistant to mildew and ultra violet light. Tarpaulin fabric shall withstand normal handling and placement at temperatures from -35 degrees Fahrenheit to 375 degrees Fahrenheit without endangering the structural integrity and serviceability of the fabric.

C. Pull Rod: System supplied with a pull rod which shall be a minimum 1.25 inch in diameter and shall be constructed of a minimum 6063 aluminum extrusion. Pull rod shall function in its intended application without bending.

C.1 Each pull rod end shall be equipped with a PVC roller bushing, retained by two minimum 3.5 inch long aluminum pullrod guides with outside washers.

C.2 Pull rod shall be supplied with an attached rope with bungee (for easy securing) of sufficient strength and length to deploy the tarpaulin from the back of the vehicle bed to the front.

C.3 Pullrod one piece aluminum extrusion with integrated hem tube groove to support the full tarp width.

D. PAINTING: The end plates shall be painted with a manufacture’s standard lead-free baked on powder coating black color and/or full galvanized plating.

E. TARPAULIN CONSTRUCTION: Double-lock stitching

F. SIDE FLAPS: Ground operated integrated system.

F.1 Side flaps to be integral part of tarp and retract fully into the housing enclosure. Side flaps to be secured by flap rope passing through heavy duty #4 grommets. Side flaps to be constructed of fabric matching that of the tarp and extend a maximum of 17” from edge of tarp.

G. OPTIONAL LOAD CLIMBER: Pull rod fitted with one 4.5 inch roller allowing pull rod to negotiate material loads exceeding the vehicle side board height.

H. WARRANTY:

H.1 All moving parts, spring and torque block shall have no cost replacement warranty for as long as the system is in use.