

Bid Specification for 200 Gallon Brush Truck Skid Unit

General Construction

The skid unit will be mounted on a 2001 Chevrolet 3500 chassis with an 8-foot-long aluminum flat bed. The skid unit will be constructed primarily of polypropylene or other appropriate plastic material. All components will be mounted to the main unit so that it may be removed from the vehicle in one piece. Operator controls and fire pump are to be mounted and accessed at the rear of the vehicle.

Water Tank

The water tank will be mounted to the skid unit or incorporated into the main construction of the skid unit and incorporate the following:

- Polypropylene or other appropriate plastic material construction
- 200 gallons capacity
- Baffles will be included in the tank to control water movement while the vehicle is in motion
- Easily accessible drain plug to completely empty the tank
- Clearly visible sight gauge for water level monitoring
- Appropriate venting to prevent pressure buildup while filling
- 3" overflow outlet

Fire Pump

A gas-powered fire pump will be mounted securely to the skid unit and be permanently plumbed to the water tank and pre-connected hoses. The fire pump will incorporate the following:

- Minimum 20hp gas engine
- Minimum flow rating of 265gpm at 50psi and 45gpm at 200psi.
- Electric start with accommodations to connect to the vehicle battery
- 3-gallon DOT approved mounted gas tank
- Lighted control panel with throttle, ignition/start switch, and pressure gauge
- Exhaust primer
- Low point drain(s) and a threaded port at the top of the pump body to be used for drying and winterizing the pump

Foam System

The skid unit will incorporate an onboard Class A foam mixing system. The foam system will incorporate the following:

- Minimum 8-gallon foam storage cell incorporated into the water tank or mounted to the skid unit
- Manual proportioning control with minimum range of 0%-3%

Discharge Manifold

The pump will be fitted with a discharge manifold. The discharge manifold will incorporate the following:

- Stainless steel construction to the extent possible
- One (1) 1" discharge with ball valve for tank filling, with a 1" flexible hose connection to the water tank
- Two (2) 1" discharges with ball valves for each of the mounted hose reels described later, with 1" flexible hose connections to the hose reels
- One (1) 2-1/2" discharge with fire service type ball valve, terminating with a 2-1/2" male NST fitting with 2-1/2" NST threaded cap
- One (1) 1-1/2" discharge with fire service type ball valve, terminating with a 1-1/2" male NST fitting, 1-1/2" female x 1" male NST reducer and threaded 1" NST cap
- One (1) 3/4" discharge with ball valve terminating with a 3/4" male garden hose fitting and 3/4" garden hose threaded cap
- One (1) 1/4" manual drain valve at the low point of the manifold

Intake Manifold

The pump and tank will be fitted with an intake manifold that will allow the pump to draw water from the water tank or from an external source through an inlet connection. The intake manifold will incorporate the following:

- Stainless steel construction to the extent possible
- Constructed of 2-1/2" stainless steel pipe with welded connections where possible
- One (1) 2-1/2" fire service type ball valve as close as possible to the water tank to serve as the tank suction valve
- T-handle control for the tank suction valve to allow efficient access to the valve by the operator
- One (1) 2-1/2" fire service type ball valve as close as possible to the inlet connection to serve as the main intake valve.
- One (1) inlet connection terminating with a 2-1/2" female NST swivel connection with a 2-1/2" NST threaded plug

Booster Hose Reels

Two low profile hose reels will be mounted on the top of the skid unit with hose deployment to the sides of the vehicle (one side per reel). The hose reels will incorporate the following:

- Stainless steel construction to the extent possible
- 1" NST male threaded connection for the booster hose
- Hose capacity of 150 feet of 1" fabric booster hose
- Electric rewind capability with easily accessible controls
- 3-way rollers for the booster hose (one set of rollers per reel allowing deployment to the side of the vehicle)
- 150 feet of 1" (50' lengths) fabric booster hose (manufacturer's preferred brand) provided on each reel (300 feet total)
- Nozzles are not included in this purchase, these will be purchased separately

Suction Hose Storage

The skid unit will include an appropriate storage area for four (4) 8 foot long 3" suction hoses. Manufacturers should describe their preferred method of suction hose storage. Suction hoses are not included in this purchase, these will be purchased separately.