

**INVITATION TO BID
TOWN OF WEST GREENWICH**

The Town of West Greenwich is soliciting sealed bids for the purchase of the following:

**ONE (1) 2010 SIX WHEEL
ALL SEASON DUMP TRUCK
WITH SANDER AND PLOW**

Sealed bids will be received at the Office of the Town Clerk, Town of West Greenwich, Town Hall, 280 Victory highway, West Greenwich, RI 02817 until 4:00 p.m. on August 13, 2010. Bids will be opened at the West Greenwich Town Hall on August 16, 2010 at 7:30 p.m. The awarding of the bid will be made as soon thereafter as practical.

Specifications are available at the Office the Town Clerk at the Town Hall. All bids should be clearly marked "**SIX WHEEL ALL SEASON DUMP TRUCK**". The Town of West Greenwich reserves the right to reject any or all bids, to waive any informalities in a bid, to make awards to separate bidders, to make awards to more than one bidder or to accept the bid or bids which in the judgment of the awarding authority are in the best interest of the Town.

The Town of West Greenwich will provide interpreters for the hearing impaired at any meeting provided a request is received three (3) business day prior to said meeting.

By order the West Greenwich Town Council
Janet E. Olsson, CMC
Town Clerk

TOWN OF WEST GREENWICH

FAX TRANSMITTAL LETTER

DATE: July 28, 2010
TO: KENT COUNTY DAILY TIMES
FROM: JANET E. OLSSON, TOWN CLERK
RE: LEGAL AD
INVITATION TO BID - DUMP TRUCK WITH SANDER AND PLOW
OUR FAX NO.: 392-3805
NUMBER OF PAGES (INCLUDING THIS PAGE): 2

PLEASE RUN THE FOLLOWING INVITATION TO BID

IN THE **August 3, 2010** EDITION OF THE KENT COUNTY DAILY TIMES.

IF THERE ARE ANY QUESTIONS, I CAN BE REACHED AT 392-3800.

VERY TRULY YOURS,

JANET E. OLSSON, CMC
TOWN CLERK

**Town of West Greenwich
Minimum Specifications for (1) 2010 Six Wheel
All Season Dump Truck**

Vehicle Summary

Unit			Chassis	
Model:	Full Truck		Fr Axle Load (lbs):	14600
Type:			Rr Axle Load (lbs)	23000
Description:			G. C. W. (lbs)	37600
Gross Vehicle Weight:			GVW.(lbs)	36,200 min
	Application		Road Conditions:	
Intended Serv.:	Snowplow		Class A (Highway)	100
Commodity:	Other Commodity		Class B (Hwy/Mtn)	00
			Class C (Off-Hwy)	00
	Body		Class D (Off-Road)	00
Type:	End Dump		Maximum Grade:	6
Length (ft):	20	Wheelbases (in):	166	
Height (ft):	13.5	Fr Axle to BOC (in)	69.8	
Max Laden Weight (lbs):	1000	Cab to Axle (in):	96.2	
		Cab to EOF (in):	141.9	
	Trailer			
No. of Trailer Axles:	0		Special Req.	
Type:				
Length (ft):	0			
Height (ft):	0.0			
Kingpin Inset (in):	0			
Corner Radius (in):	0			
	Restrictions			
Length (ft):	40			
Width (in):	102			
Height (ft)	13.5			

Approved by: _____

Date: _____

Description

Base Model

Model

Other Commodity

Snowplow

Truck which is configured for mounting a snowplow to the front. May also have dump or other body.

End Dump

Frame & Equipment

10-5/8in Steel Rails To 285 in

10.625 X 3.45 x .313 Dimension, 1,776,000 RBM

3/4 Length Steel Inner Liner EOF

For use with 10-1/2in, 10-3/4in, or 10-5/8in rails.

Custom Wheelbase Or Overhang

Engineering approval may be required.

Three-Piece Cross members

27.8in Bumper Extension

Includes crankshaft adapter plate and stationary grille. Requires 10-3/4in or 10-5/8in frame rails, FEPTO bumper, and PX-8 engine.

EOF Square without Xmbr

For use with body builder installed cross member.

Omit Rear Mud flaps and Hangers

Front Axle & Equipment

Dana Spicer E14621 14,600 lb, 3.5in Drop

Factory front axle alignment to improve handling & reduce tire wear. Zerk fittings on tie rod ends, king pins, & draglink ball joints for ease of maintenance & help extend service life of components. Cognis EMGARD ® FE 75W-90 synthetic axle lube provides over 1% fuel economy improvement. Reduces wear & extends maintenance intervals, resulting in increased uptime. Provides improved fluid flow to protect components in extreme cold conditions & withstand the stress from high temperatures, extending component life.

Taper Leaf Springs, Shocks 14,600 lb

Power Steering TRW TAS85

Glidekote splines on steering shaft extend service life of components.

Power Steering Reservoir Frame Mounted

Description

10 Aluminum LMS Hubs

11-1/4” bolt circle. Includes a supplier extended coverage up to 3 years/350,000 miles for bearings & seals.

Air Cam Front Drum Brakes 16.5 x5

For use with 10,000 lbs to 14,600 lbs steer axles. Includes automatic Slack for adjusters& outboard mounted brake drums.

Brake Dust Shields

Rear Axle & Equipment

Dana Spicer S23-190 23,000 lbs

Laser factory axle alignment to improve handling & reduce tire wear. Magnetic rear axle oil drain plug captures & holds any metal fragments in drive axle lube to extend service life. Parking brakes on all drive axles for optimal performance. Cognis EMGARD ® FE 75 W-90 synthetic axle lube provides over 1% fuel economy improvement. Reduces wear & extends maintenance intervals, resulting in increased uptime. Provides improved fluid flow to protect components in extreme cold conditions & withstand the stress from high temperatures, extending component life.

10 Iron LMS Hub

11-1/4” bolt circle. Includes a supplier extended coverage up to 3 years / 350,000 miles for bearings & seals.

Parking Brakes (Axle Package)

Diff Lock Rear-Rear Or Single Drive Axle

(Air Rocker Switch occupies the space of one gauge)

SBM Valve

Anti-Lock Braking System (ABS) 4S4M

ABS-6. Includes air braking system

Synthetic Axle Lubricant All Axles

The conventional model product line includes Fuel Efficient Cognis EMGARD FE75W-90 which provides customers performance advantages over current synthetic lubricants with reduced gear wear and extended maintenance intervals, resulting in increased uptime. In addition, the lubricant provides improved fluid flow to protect gears in extreme cold conditions and withstand the stress from high temperatures, extending component life.

Single Drive Axle

Air Cam Rear Drum Brakes 16.5 x 7

Inc automatic slack adjusters & outboard mounted brake drums.

Ration 6.14 Rear Axle

Reyco 79KB Multi Leaf 23,000 Lb

Reyco Helper Springs 4,500 lbs

For Use with Reyco 79KB suspension

Description

Engine & Equipment

330/2200 330 @ 2000 1000@1400

(2010 Emissions) Includes alum flywheel housing, cruise control, and J1939 provisions (provides and interface point for the Electronic Service Analysis- ESA and other approved diagnostic tools). Chevron Delo LE SAE 15W40 engine oil is specially formulated for new low emissions engines. Magnetic engine oil drain plug captures and holds any metal fragments in engine oil to extend service life.

N20300 P029 No... Idle Shutdown Enable
N20320 P015 No... Engine Protection Shutdown
N20380 P001 59... Max Speed in Top Gear
N20400 P059 59... Maximum Cruise Speed
N20440 P030 5.... Idle Shutdown Timer

Belly Pan

CARB Engine Idling Compliance DECLINED by Dealer/Customer

130 Amp Alternator, Brushless w/Voltage

At low engine RPM, the Alternator puts out 80 amps. 12 Volt system with circuit Protection for reliable easy maintenance & service. Weather pack silicone sealed electrical chassis connectors enhance value, durability, reliability.

Wires numbered every 4" or less.

Immersion Type Pre-Heater 110-120V

Phillips

12V Starter

Batteries 2400 CCA

Stranded copper battery cables are double aught (00) or larger to reduce Resistance.

18.7 CFM Air Compressor

Furnished on engine. Teflon lined stainless steel braided compressor discharge line.

VGT Exhaust Brake

(Variable Geometry Turbo). Provides approximately 90-100 HP of retardation and is part of the turbocharger.

Spin-on Fuel Filter Frame Mounted, Unheated

Engine Protection Shutdown

Includes oil pressure, oil temperature, coolant temperature, and intake manifold temperature.

High Efficiency Cooling System

Silicone radiator & heater hoses enhance value, durability, & reliability. Constant Tension band clamps reduce leaks. Clima Tech extended life coolant extends maintenance intervals which reduces maintenance costs. Anti-freeze effective to -30 degrees F helps protect the engine. Low coolant level sensor warns of low coolant condition to prevent engine damage.

Description

Radial Seal, Dry Type Air Cleaner, Frontal

Air Intake. Molded rubber air intake connections with lined stainless steel clamps

Seal to prevent contaminants in air intake.

Exhaust Single RH Side of Cab

(2010 Emissions) DPF/SCR RH under cab. Includes cab entry RH under cab and full round stainless steel exhaust guard.

Curved Tip Standpipe(s)

Transmission & Equipment

Allison 3000 RDS-P Rugged Duty Service

Includes Rear Transmission Support, TranSynd Automatic Transmission Fluid, and Water Oil Heat Exchange. Also includes new features that monitor the transmission Fluid, filter and clutch condition. Will display percent life remaining for the Transmission fluid, filter and clutches on the shift selector. This information may be Displayed using the Mode and Up and Down buttons. A wrench icon will also be Included to indicate when the transmission fluid filter or clutches need servicing. (Suited for vehicles operating on/off highway and/or requiring PTO operation)

1710 HD Driveline With Single Midship Bearing

Auto Neutral Activates with Parking Brake

Allison 5-Speed Configuration-Close Ratio Gears

Allison 3000 Trans only

Allison Load Based Shift Schedule (LBSS)

Air & Trailer Equipment

Bendix AD-ISEP Air Dryer with Heater

Extended Purge (for use with higher air consumption applications). An integrated system air dryer that incorporates the functions of the air dryer, purge reservoir (which increases the drying capacity), wet air tank, pressure relief valve, single check valves, and pressure protection valve for air susp and other air accessories. Includes easy-to-service spin-on dessicant cartridge.

Nylon Chassis Hose

Steel Painted Air Tanks

All air tanks are steel with painted finish except when Code 4543330 Polish Aluminum Air Tanks is also selected (then exposed air tanks outside the frame rails will be polished aluminum). Narratives requesting a specific air tank size or location will not be accepted for factory installation. See ECAT to determine number or location of air tanks installed.

Body Connections 5ft BOC

Junction Box contains light and power circuits for Body Connections located 5ft from BOC.

Description

Trailer Hand Valve

A& E Conn EOF w/7-way Socket (w/Conn EOF Strapped To the rail)

Tires & Wheels

FF: BR 16ply 12 R22.5 M843

RR: BR 16ply12R22.5 M843

Code-rear Tire Qty 04

FF:Accur 50408 Pit 22.5x8.25 Stl Whl

Pilot Mount, Two Hand Holes. 7,400 lb. load rating per wheel

RR: Accur 29300 Pit 22.5x9.00 Stl Whl

Pilot Mount, Five Hand Holes. 9,000 lb load rating per wheel

Code-rear Rim Qty 04

Fuel Tanks

23in Aluminum 50 Gallon Fuel Tank RH BOC Addl

Paddle handle filler cap with thread less filler neck. Top draw fuel plumbing reduces chance of introducing air into the fuel system during low fuel level conditions due to the central placement of fuel pickup tube. Wire braid fuel lines increase durability & reduce potential for leaks.

23in Aluminum 50 Gallon Fuel Tank LH U/C

Includes steps for cab access. Paddle handle filler cap with thread less filler neck. Top draw fuel plumbing reduces chance of introducing air into the fuel system during low fuel level conditions due to the central placement of fuel pickup tube. Wire braid fuel lines increase durability & reduce potential for leaks.

Location LH U/C 50 Gallon

Location RH BOC 50 Gallon

DEF Tank Mounted RH BOC

DEG Tank Small

Battery Box & Bumper

Aluminum Space Saver Battery Box LH BOC

Battery Access From Side

DPF Cab Entry Alum, Non-Slip Step RH Under Cab

Steel Bumper Swept Back Painted, FEPTO Only

with two tow pin holes and step plates on top of bumper

Description

Cab & Equipment

Alum Cab 108in BBC Metton Hood w/ Bright Crown

Includes view window RH door and convex mirror over RH door.

Severe Service Cab Package #1

Includes alum side skins, alum rear skin, alum windshield mask, steel

Firewall, steel front floor sheet, steel isolator insert

UltraRide Driver Seat

UltraRide Passenger Seat

Arm Rest RH Only Driver Seat

Black Seat Color ipo Standard Color

Air Ride Driver

High Back Driver

Vinyl Driver

Non-Air Ride Passenger

Low Back Passenger

Vinyl Passenger

Adjustable Steering Column- Tilt/Telescope

Interior Grey/ Black

Includes rugged charcoal instrument panels, glare-resistant gray dash, black bezels on gauges,(2) power ports, monochromatic molded door pads with durable in-mold color, gray molded back wall, 18 inch 4-spoke soft –touch steering wheel, soft-touch steering column cover, power lift passenger window, extruded rubber floor covering, header-mounted dome light. Foot well lighting, integrated “dead pedal”, (4) inside entry grabhandles, (2) inside sunvisors, (2) coat hooks, (2) cup holders and map bin.

Day Cab Rear Window

Extended Rear Window ipo Std Window-Day Cab

The extended rear window protrudes two inches more than the standard conventional Rear cab window. Take this into consideration when determining your loadspace.

Combo Fresh Air Heater/ Air Conditioner

with radiator mounted condenser, dedicated side window defrosters, Bi-Level Heater Defroster Controls,54,500 BTU/HR, and silicone heater hoses.

Outside Sunvisor Stainless Steel

Stainless Steel Mirrors 7x16 with Heat Element

(2) Convex 8 Inch SS Mirror

Center Mounted under mirror bracket. If rear view mirrors are heated, the convex mirrors will be heated.

(2)Air Horns 24.5in Chrome-Round w/Horn Shield

ConcertClass Audio System without CD

Includes weatherband.

Plug-In Auto Reset Circuit Breaker

in place of fuses in junction box.

Stationary Grille w/o Fepto Extensions

Description

Dual Door Stops Driver and Passenger

Electric Windshield Wipers

With Intermittent Feature

Triangle Reflector Kit Shipped Loose

Backup Alarm (107dB)

Air Restriction Indic Filterminder Mounted

on air cleaner.

(2) Additional Electric Rocker Switches

Main Instrumentation Panel w/Graphics Display

Includes speedometer with tripodometer, tachometer with hourmeter and outside air temperature display, voltmeter, engine oil pressure, engine coolant temperature, fuel level, primary and secondary air pressure gauges. Includes standard warning light package: high water temperature , low oil pressure warning lights w/audible alarms, high beam, turn signal, low fuel, parking brake, and ice warning indicators; seat belt reminder; rocker switches with long-life LED indicators; multi-function turn stalk with flash-to-pass feature (night mode flashes headlights and marker lights; day mode flashes headlights only), intermittent windshield wiper and headlamp beam control. Hydraulic braked trucks do not include air pressure gauges.

Headlights Composite Fender Mounted w/Integral

Park, Turn, and Side Marker

Marker Lights (5) Rect LED

(Light Emitting Diodes)

(1) 6in Spotlight Round Halogen LH

Paint

Dupont Single Stage Non-Metallic Cab/Hood

(Solid Color Paint)

N85020 1 -	N0105EA	Green
N85200 Frame	N0001EA	Black
N85300 Wheel	N0006EA	White

Options Not Subject to Discount

Engine Surcharge- 2010 ISL9/PX-6/PX 8

Miscellaneous

Presentation Created Using Featured Spec
For model

Swansen Calcium Spray System

Truck Body Load Cover

ALL SEASONS BODY

COMPLY

YES NO

GENERAL

The specifications listed below describe a multi-purpose unit that can be used as dump body and a salt/sand spreader. As a salt/sand spreader, the curbside portion of the floor and side tilts toward the streetside conveyor that runs from rear to front.

The body is a heavy duty contractor's type for use on single and tandem axle trucks. It has a corten shell, which comes into contact with payload. The remainder of the body is fabricated of hi-tensile steel. It has a sloping runboard and a stacked, structural member subframe.

The body ends are higher than the sides with pockets for extension sideboards. The tailgate is reinforced and has proof coil spreader chains and offset upper hinges. The operating devise is positive locking and operated using an air cylinder mounted at the rear between the longmembers. Three inch diameter holes are provided for Federal Standard #108 lights.

CAPACITY

Length: 10' Capacity: 6/7 yds. Side Height: 28" Tailgate Height: 34"

FRONT HEAD

The front head is straight one piece with a one bend top 2 1/4" wide and is reinforced with four fabricated vertical box section braces. This panel is made of 3/16" corten steel, there will be a 1/2 cab shield installed on the front bulkhead.

COMPLY

YES NO

SIDES

The sides have a 4" x 4" boxed top rail and a 5 1/2" wide runboard with a 35 degree slope at the bottom. The side is formed of one 3/16" corten steel sheet. The top rail is boxed with an "L" section closure on the underside. The sides are reinforced with four vertical box section side braces 8" wide with a centerline spacing of not more than 34". The rear corner post is full depth from top of gate to bottom of rear cross-member, fabricated of one 8 gauge hi-tensile sheet to a box section of 5 1/2" x 16" (right hand corner post made from

1/4" hi-tensile). Pockets 2 7/8" wide and 6" high are provided front and rear for extension sideboards.

FLOOR

The floor, the conveyor cover and the conveyor floor are each made of one piece of 3/16" corten steel. There are bevel plate where the floor meets the sides.

TAILGATE

The tailgate panel is made of 3/16" corten material with a single bend top and bottom. Top horizontal brace is full width, boxed and welded to 1 1/2" flame cut offset hinges. The hinges are welded to the vertical end braces, which extend from under the top horizontal brace to the lower flange on the tailgate panel. The tailgate panel is reinforced with two 6" wide vertical braces and one sloping horizontal brace. Tailgate lower pins are 1 1/4" diameter and upper pins are 1 1/2". Spreader chains are zinc. plated 3/8" proof coil mounted low on the vertical end braces. Each chain has a hook on the sloping lower horizontal brace that in cab be held out of the way when not in use.

COMPLY

YES NO

OPERATING DEVICE

The operating device is air actuated and mechanical in operation locking at the rear using an over the center lever. The rear cross shaft is 1 1/4" diameter with links to the hinges. The lower hook and hinge assembly is reinforced with a 1/4" backing plate to provide extra strength to the corner post where it joins the rear apron. The lower hook is of the undershot design and is 5/8" plate, flame cut. This hook is straddled by two 5/8" plates providing a double seat for each lower tailgate pin.

SUBFRAME

The subframe is of a stacked structural steel design with 4" @ 5.4#/ft. Channel crossmembers and 10" @ 25.4#/ft. "I" beam longmembers. Stationary right hand outside member is made of 3" x 4 structural tubing. The crossmembers are spaced on 12" centers. The crossmembers are spaced on 12" centers. The rear apron is 14" deep, full width of body and welds to the full depth corner post.

SIDE TILT

Floor and right side to move as one assembly with heavy duty rubber wiper. Tilt actuated using right hand mounted 3" x 17.5" double acting cylinder and pivot on a 1 1/4" diameter stainless steel rod. The 10" unit has two cylinder, 12' unit has three cylinders and the 14' unit has 4 cylinder. All moving parts to have grease fittings.

CONVEYOR

A heavy duty drag chain type conveyor is located on the left hand portion of the body and is used to discharge material for spreader. It uses a two strand 21,000 lb. ultimate strength steel, open pintle chain (#667X) with 1/4" x 1" crossbars welded to the chain on 7 1/2" centers. The conveyor is driven by a hydraulic motor coupled to a 25:1 direct five worm reducer. Effective width of the conveyor is 16". A crank actuated gate is located on the discharge side to control material flow. A hinged 3/16" corten conveyor chain cover is supplied and will provide the conveyor chain during summer use.

COMPLY

YES NO

SPINNER

The spinner is mounted on the left hand side of the vehicle between the cab and rear wheels. It is supported by two bushings and driven by a hydraulic motor. The spinner is 18" in diameter, has 6 vanes and has 6" of height adjustment for various chassis heights. And adjustable chute positions material on spinner for varied spreading patterns and concentrations. Material also falls on only one side of spinner regardless of what position the body is in. A spinner protection guard is provided as standard.

HOIST

10' – HPT42-98TM – front mounted inverted telescopic, sleeves hard chromed plated (Vickers, DPH 900-1100), platform type flame cut hinges, minimum mounting height 13 3/8".

STANDARD EQUIPMENT AS REQUIRED BY OSHA

- Factory installed body prop for side dump position
- Body props for rear dump position
- Hoist control lever lockout kit
- Back-up alarm, conforms to SAE9948, class C sound lever, 97DB
- Unique lever control grips with operation instructions
- Body raised indicator light
- Unique lever control grips with operation instructions

BODY, HOIST AND CYLINDER SUPPLIED BY SINGLE MANUFACTURER.

COMPLY

YES NO

INSTALLATION OF THE BODY SHALL INCLUDE ALL ITEMS LISTED BELOW:

Four section body screens.

Four flaps with two in front of the drive wheels to include anti-sail brackets and two behind the drive wheels installed on a swinging bracket.

Cross flap installed in front of the drive wheels to protect the rear axle and brake cans from sand spray.

Whelen strobe system model DOT3102B installed consisting of one 360 degree cab mounted strobe and two strobes and stop-turn-tails installed in sealed boxes in the rear corner post of the dump body, lighted Whelen switch to control lights.

3/4" Pintle plate installed with D-rings and a 25 ton swivel hook with electrical socket and glad hands installed at the plate area for air brake trailers.

Body to be painted single color enamel, hitch and all attachments below the body line to be painted black.

COMPLY

YES NO

HYDRAULIC SYSTEM

SPREADER HYDRAULICS

A dual flow control shall be supplied and installed to control material spreader spinner and conveyor speed. All hydraulic lines run into the chassis cab shall be heavy duty black iron pipe – NO HOSES. Hydraulic lines outside the cab for the spreader will have short runs of hose.

OIL RESERVOIR

The hydraulic oil reservoir shall be a minimum of 30 gallon capacity fabricated from 8 gauge pickled and oiled sheet steel and shall be equipped with a vented fill cap with integral screen as well as 1/2" coupling in the bottom for draining. It shall also be equipped with a return line filter assembly with a minimum of 25 micron spin on element. Two shut-off valves, a sight glass and a temperature gauge.

MISCELLANEOUS HOSES & COUPLERS

All hose ends and fittings shall be compatible with the hose on which they are used. Suction and return lines shall meet or exceed a rating of a SAE100R4. All hoses shall be manufactures standard size and shall be routed in such a way as to avoid contact with the exhaust system and/or the drive line components of the chassis. Hoses to be wrapped in protective coil in any potential wear spots and are securely mounted to the frame rails. All controls are to be mounted in the cab and be live from the cab.

HYDRAULIC PIPING

All hydraulic pipe is to be black iron and mounted in rubber cushion clamps. ABSOLUTELY NO welding to or on the black iron pipe will be allowed.

DIRECT DISCONNECTS

Spinner and plow assembly to be hosed with quick disconnects STAINLESS STEEL series 5600 with dust cover.

COMPLY

YES NO

CABLES

Cablecraft with sealed bonnets at the valve.

VALVE BANKS

Valve assemblies will be Muncie stack type and shall have a minimum capacity of 35 GPM at pressures to 2,500 lbs. One valve will control main body up and down. A second valve for side body up and down, a third valve for plow up and

down and a fourth valve for plow right and left as well as power beyond for 2FFL sander valve mounted in the cab.

PUMP AND DRIVELINE

The pump is to be a Muncie gear type sized to fit system. Direct mounted crankshaft driven with a 1310 series driveline. Cable shift P.T.O. TO DISENGAGE SYSTEM.

TRAINING

Bidder shall conduct training sessions for both operators and mechanics until all feel comfortable with the operation and maintenance of this piece of equipment.

COMPLY

YES NO

TILT OVER CUSTOM TRUCK/PLOW ATTACHMENT

The custom truck/plow attachment shall be manufactured by a recognized snow plow manufacturer in such a way as to allow the hood of the chassis fitted with a tilt engine cowl and stationary grill work to tilt forward over the upper portion of such an attachment.

The attachment shall include 1/2" side plates reinforced and bolted as far back on the Truck frame as feasible. The top cross member and the vertical risers shall be from a minimum of 4" x 3" x 1/2" angle and the horizontal member to which the base of the lift cylinder pins shall be a minimum of 4" x 4" x 3/4" angle. The hitch

shall provide a selection of two push heights on 31" hole centers for connection of the plow while the bottom cross member behind the connecting points (for the plow) shall be adequately reinforced with not less than 6" x 4" x 3/4" angle.

The plow lift cylinder shall be double acting with a 4" bore, 10" stroke, chrome plated piston rod, adjustable chevron type packings and a wiper to clean the piston as it retracts into the cylinder. The base of the cylinder shall attach to the aforementioned horizontal member while the cylinder rod attaches to a horizontal, pivoting lift yoke weldment from 3/8" plate.

Plow lights shall be Truck-lite model 80800 installed on custom hood mounted aluminum brackets.

COMPLY

YES NO

FULL TRIP POWER REVERSIBLE PLOW

MOLDBOARD

Shall be 10' long x 36" high inside and shall extend at least 12" out over the cutting edge. The moldboard shall be fabricated as a one piece structure from 8 gauge hot rolled sheet. The moldboard shall be brake formed to a series of panels so to break up the snow as it rolls toward the discharge ends and incorporate a formed channel at the top for added rigidity. Eight vertical one piece reinforcing ribs of 1/2" plate shall be welded to the bottom cutting edge reinforcement and to the back of the moldboard. Three hinge points shall be provided spanning 88" so to connect the moldboard to the pushframe assembly.

CUTTING EDGE

Shall be abrasion resistant steel, C-1085 or equal. It shall be not less than 8" x 1/2" x 120" and shall be bolted to the plow for easy replacement with 5/8" x 2 1/2" grade 5 carriage bolts and lock nuts on 12" centers.

CUTTING EDGE REINFORCEMENT

Shall not be less than 6" x 4" x 1/2" steel angle with 1/2" steel plate gussets electrically welded to the frame work.

SHOES

Replaceable wear parts shall include two abrasion resistant moldboard shoes (minimum Brinell of 360) and two cast chilled malleable iron curb shoes.

COMPLY

YES NO

TRIP MECHANISM

The trip mechanism shall consist of two spring loaded adjustable trip arm assemblies. Trip limit stops are to be designed into the arms so that the top half of the moldboard will not contact the pavement in full trip position. The arm assemblies are pin connected to reinforced lugs on the moldboard and pin connected to reinforced lugs on the reversing frame. Each arm assembly is constructed with two 1/2" thick bars and one 3/4" thick bar, all enclosed by one compression type spring 3/4" diameter x 5 3/8" O.D. x 26" long. The trip mechanism shall also serve the dual purpose of allowing adjustment of the moldboard cutting edge angle from 25° from vertical to 15° from vertical.

REVERSING FRAME

The reversing frame shall be fabricated from 4" x 4" x 3/8" square tubing and 4" x 3" x 1/4" rectangular structural tubing gusseted at key stress points. Two

1 1/4" and two 3/4" thick connecting lugs, spanning 88", shall be welded to the 4" x 4" x 3/8" member of the reversing circle. These lugs will serve as connection points to the moldboard.

The sliding member, as noted above, shall include a 1 15/16" diameter C.R.S. pivot pin for attachment to the reversing frame. It shall seat inside the A-frame weldment where it shall be secured in position by a 9/16" diameter wire extension spring. This spring retained sliding member shall provide moldboard locking/unlocking action when the reversing cylinders are activated.

A-FRAME

The A-frame shall be constructed from 3/8" formed plates and 3/8" x 1 1/2" bar stock gusseted at key stress points. The A-frame shall connect to the reversing frame with a 1 15/16" diameter cold drawn steel pin through a 3" O.D. x 1" wall tube. Truck attachment lugs shall be 1 1/4" plate set on 30 1/2" push lug centers. Provision shall be made for plow oscillation so to allow the plow to follow the road contour.

COMPLY

YES NO

REVERSING & LOCKING MECHANISM

The hydraulic reversible pushframe shall offer nine plowing positions: four on either side of center to a maximum of 37° for discharge to the right or left. Reversing actuation shall be via two 3" diameter x 18" stroke single acting cylinders.

Cylinder protection shall be provided by the aforementioned spring retained sliding mechanism, which pulls a 1 1/4" Nicroloy locking pin located at the rear underside of the A-frame into a 3/4" thick indexed locking plate at the reversing frame.

Locking force is provided by a combination of spring tension and forward plow movement while unlocking force is provided by the reversing cylinders.

HARDWARE PLATING

All nuts, bolts and chains shall be zinc plated.

PAINT

All snow plow components shall be shot blasted and painted with one coat of primer and one coat of finish paint.

CYLINDER RODS

All snow plow hydraulic cylinder rods shall be induction hardened and chrome plate to a minimum of .04" (1mm) thickness.
