



# Request for Quote

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS  
 ONE CAPITOL HILL  
 PROVIDENCE RI 02908

BUYER: Hill, Lisa  
 PHONE #: 401-574-8118

CREATION DATE: 09-OCT-15  
 BID NUMBER: 7549962  
 TITLE: CABLE TYPE CATCH BASIN CLEANER TRUCKS - DOT  
 BID CLOSING DATE AND TIME: 03-NOV-2015 11:00:00

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 DOT MAINTENANCE BUSINESS OFFICE  
 360 LINCOLN AVE  
 WARWICK, RI 02888  
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 DOT MAINTENANCE BUSINESS OFFICE  
 360 LINCOLN AVE  
 WARWICK, RI 02888  
 US

Requisition Number: 1430148

Line	Description	Quantity	Unit	Unit Price	Total
1	<p>QUESTIONS CONCERNING THIS SOLICITATION MAY BE ADDRESSED TO LISA HILL AT <a href="mailto:lisa.hill@purchasing.ri.gov">lisa.hill@purchasing.ri.gov</a> NO LATER THAN OCTOBER 27, 2015 AT 4:00 P.M.            ANTICIPATED DELIVERY OF EQUIPMENT:</p> <hr/> <p>CABLE TYPE CATCH BASIN CLEANER TRUCKS PER ATTACHED SPECIFICATIONS</p>	6.00	Each		

Delivery: \_\_\_\_\_

Terms of Payment: \_\_\_\_\_

It is the Vendor's responsibility to check and download any and all addenda from the RIVIP. This offer may not be considered unless a signed RIVIP generated Bidder Certification Cover Form is attached and the Unit Price column is completed. The signed Certification Cover Form must be attached to the front of the offer

**2016 OR CURRENT MODEL YEAR CABLE TYPE CATCH BASIN CLEANING TRUCK MINIMUM REQUIREMENTS**

Each chassis is to be outfitted with a Cable type Catch Basin Cleaner and Debris Body. If the below listed requirements and minimum requirements require alterations to properly execute this build, then it is the BIDDERS responsibility to bid accordingly. Note; all hoses and wiring shall be water tight and loomed.

**CHASSIS**

**A. Dimensions/G.V.W MINIMUM REQUIREMENTS**

- GVW rating – 35,000 #
- Wheelbase – 174” approx.
- CA – 108”, must be verified with the body installer
- Platform – 150” LP, 62”AF , verify with body installer

**B. Frames MINIMUM REQUIREMENTS**

- Frame - single rail, RBM- 2,592,000 in. lbs. per rail
- Swept back steel bumper
- Front tow hooks
- Two rear tow hooks
- LH 50 gallon aluminum fuel tank
- 6 gallon diesel exhaust fluid tank
- Clear back-of-cab outside frame rails both sides

**C. Engine Diesel/Engine Equipment MINIMUM REQUIREMENTS**

- Diesel engine – 8.9 Liter, wet sleeved, 300 HP at 2000 RPM minimum, electronic controls, 860 lb ft. torque minimum @ 1300 RPM
- Engine block heater 120 volt/1000 watt includes block heater socket receptacle
- Air compressor, 18.7 CFM
- Alternator –12V 160A
- Batteries – (2) 12V, 2250 CCA
- Bug screen, behind grille
- Engine hoses and tubing, premium grade.
- Diesel Particulate Filter, DPF & SCR frame mtd, both RH side under cab step
- Exhaust after-treatment system - diesel particulate filter ceramic passive regeneration
- Engine aftertreatment device, automatic over the road regeneration and dash mounted regeneration request switch,.
- Exhaust - clear back of cab, single R/S vert exhaust cab mounted, lower venturi diffuser, turned end
- Single bright finish stack
- Stainless steel heat shield for frame mounted DPF
- Fuel-Water Separator with heated bowl
- Hand primer pump
- Engine compression brake with selector switch
- Starter – 12V 39MT HD/OCP with thermal protection and integrated magnetic switch

#### **D. Transmission and Equipment/Drivelines**

- Allison automatic, 3000-RDS-6 six-speed rugged duty series Gen 5
- Transynd synthetic lube
- Driveline – Meritor 17N MXL “xtended lube” or equivalent
- Vehicle interface wiring with body builder connector mounted back of cab.
- Push button electronic shift control dash mounted.
- Transmission prognostics.

#### **E. Front axle/Equipment/Tires**

- Front axle – I-Beam type 12,000 lbs. capacity
- Tires –(2) 11R22.5 16H steer design
- Wheels – steel disc (10-hole), 22.5x8.25 hub piloted (two hand hole)
- Brakes – 16.5”x5” cast spider
- Brake drums – cast, outboard mtd
- Dust shields
- Hubs – ferrous
- Shock absorbers
- Springs – HD taperleaf 12,000#
- Steering – full power

#### **F. Rear axle/Equipment/Tires/Ratio**

- Rear axle – 23,000#
- Tires – (4) 11R22.5 16H traction tread design
- Carrier ratio – 5.63
- Wheels – steel disc (10 hole), 22.5x8.25 hub piloted (two hand hole)
- Brakes –16.5x7 cast spider
- Brake drums – cast outboard mtd
- Dust shields
- Hubs – ferrous
- Suspension – 23,000# multi-leaf w/helper springs and radius rods.
- Spring brake chambers – type 30/30

#### **G. Air/Brake**

- Air dryer, premium heated
- Anti-lock brake system, with traction control
- Single valve park brake system with dash valve control autoneutral and warning indicator
- Drain valves, manual petcock on all tanks

#### **H. Electrical**

- Battery boxes, steel w/molded plastic covers
- Battery box mounting – (1) battery box left hand frame rail
- Waterproof electrical connections w/protective coating

## **I. Cab**

- Conventional Cab, air suspended (aluminum or welded steel galvanized shell) to include rust preventative procedures
- Roped-in windshield, tinted with operable side windows, rear window.
- Grab handles, stainless steel, right & left handle behind doors.
- Hood and fenders, fiberglass – tiltable with frame mounted fender splash shield section
- Identification/clearance lights (5)
- Self-adjusting rear back alarm.
- Mirrors, exterior west coast RH and LH bright finish – heated
- Convex spot mirrors
- Single air horn mounted under cab and dual electric horns.
- Fresh air inlet for heater with shield.
- Radio – AM/FM CD player with weather band
- Winter wiper blades
- Daytime running lights

## **J. Cab Interior**

- Interior of cab shall be custom quiet to reduce engine noise and vibration, padding on head liner, back of cab, and interior door panel
- Steering wheel, tilt/telescopic
- Arm rest (2) molded plastic, gray or black, one each door
- Floor covering rubber, black
- Interior sheet metal painted, color based on the window ledge color of the exterior
- Console, overhead molded plastic with dual storage pockets and retainer nets and CB pocket with cover w/cover
- Gauge cluster, English with electronic speedometer and tachometer
- Gauge package to include air restriction monitor, hour meter, engine oil temp., and transmission temp gauges.
- (6) dash mtd misc switches – (2) 15A ign, (1) 20A ign, (1) 10A ign, (1) 15A bat, and (1) 20A bat
- Dash mounted PTO switch with indicator lamp – park brake and neutral interlock
- **Power Windows and Power Door Locks**
- Driver seat shall have air-suspension, high back vinyl with two-position front cushion and adjustable mechanical lumbar support (Includes high visibility seatbelt three-point, lap and shoulder type belt).
- Passenger seat, non-suspension, high back, vinyl (includes high visibility seatbelt three-point, lap and shoulder type belt).
- Air conditioner with integral heater and defroster

## **K. Paint**

- Shall be White, Dupont L0006EB over proper primer for cab and sheet metal. No other color will be accepted by DOT, Chassis and running gear shall be black. Front and rear disc wheels, powder white.

#### **L. Accessories**

- Two wheel chocks
- Fire extinguisher - #5 ABC
- Three safety triangles
- One (1) front and two (2) rear spare tires/rims to match chassis
- Three sets keys
- Textured Poly Fenders (installed at drive wheels/affixed)
- Back up alarm
- In cab power source
- Air conditioning
- One First-Aid Kit
- One Spill Response Kit
- One 800 MHz digital radio installed and ready for use, powered by key-switch accessory (RADIO WILL BE SUPPLIED BY RIDOT).
- Ignition keyed synonymously with all vehicles.
- Floor Mats (must be installed upon delivery)
- 600 Watt inverter (Vanner 600W no exceptions) installed under passenger seat, this unit will power the operators lap top computer and cell phone with 120 V power.
- GPS/AVL with telematics to be installed and operational with each vehicle. GPS transponder, advanced telematics box, modem, GPS antenna and all required wiring/components shall be fully furnished and installed upon delivery. Components, mapping, and data service must be able to work in conjunction with the Department's current system (Web Tech Wireless). GPS/AVL data functioning shall include advanced reporting, telematics and real time mapping with a minimum of 10 second update intervals with a service period of one year.
- Each vehicle shall come with a standard length basin spoon installed on custom designed basin spoon rack affixed to each dump body
- Backup camera fully installed and operational. Will provide automatic rear view camera and monitor for priority view of rear of vehicle when truck is in reverse.
- Chassis mounted ¾" pintle plate with a 25-ton swivel hook, Two "D" rings, electrical socket connector (per attached spec).

#### **M. Safety Lighting/Arrow-board**

- Whelan lighting system: consisting of (2) front grill mount flashers (oval style)- (2) flashers installed in a stainless steel box welded into the rear body posts. Stop, tail, back up, turn signals LED style will also be furnished. Factory switch in the cab from truck manufacturer provided.
- Whelan tail gate mounted arrow board to be furnished and to exhibit the latest technology, efficiency and safety features available

#### **N. Tool Box**

- A lockable weatherproof toolbox with T-handle latches shall be mounted to the frame on the curb side, under the body. The toolbox shall be approximately 36 inches long by 18 inches high by 18 inches wide. To be constructed of 12 gauge 201 Stainless Steel minimum, with curbside opening stainless steel door with stainless steel piano hinge. Front panel shall have exterior jam lip designed to deflect water away from the door opening. Edges of door shall seal tightly against weather stripping and chain door retainer. Two keys shall be provided with each unit. The unit shall be bolted to the frame using cradle type mounting brackets.

#### **O. Warranties**

**Engine** – 60 months/100,000 miles, complete engine including injectors, turbocharger, electrical harnesses, lines and tubes – 100% parts and labor.

**Engine Aftertreatment system and EA Harness and sensors** – 60 months/100,000 miles – 100% parts and labor

**Chassis** - “Bumper to bumper” - 60 months/100,000 miles – 100% parts and labor - including components (but not limited to) such as radiators, cab, suspension, and electrical.

**Allison Transmission** – 60 months/no mileage limits – 100% parts and labor

**No engine hour limitation on the above warranties**

#### **P. Training**

A "hands on" operator/technician training session shall be provided at RIDOT Division of Highway & Bridge Maintenance Headquarters. The training session topics will be coordinated through RIDOT Motor Pool section and may include but are not limited to diesel engine maintenance and operation, proper basin cleaning operation, complete vehicle operation, engine tune-up and maintenance, multiplex systems, and use of purchased software. The training session shall accommodate at least 12 RIDOT employees at each session. Training shall be provided no later than 3 weeks after delivery of the first unit.

There shall be a one day (1) seminar, to instruct RIDOT personnel on the operation, servicing and repair of the hydraulic system, at each delivery location. 1/2 of the day shall be for operator training and the other 1/2 for mechanics. This seminar is separate from the training required on above covering the truck package excluding the hydraulics. A web broadcast shall be an allowed method of conducting this seminar.

A follow up session is required for operators after the trucks have been used one Basin Cleaning Season. These sessions are to be held Division of Highway & Bridge Maintenance Headquarters. The operator's session is to be approximately 4 to 6 hours. All training sessions shall be scheduled on a date mutually agreed upon by RIDOT and the hydraulics supplier. All training sessions shall be performed by competent technician thoroughly trained in the use, service, and operation of the unit.

**Q. Software, Manuals, Laptop**

Vendor shall provide current editions of all relevant cab and chassis manuals. This must include but not be limited to overhaul and tune-up manuals, diagnostic, wiring, troubleshooting, and parts manuals for engine, transmission, differential and all components.

One (1) Panasonic "Toughbook" lap-top/tablet computer, Windows 7 compatible shall be provided with the capability to interface with the vehicle.

Chassis manufacturer's diagnostic software shall be loaded in computer and licensed to the Rhode Island Department of Transportation. Electronic media shall include annual subscription renewals for five (5) year. Electronic media shall be capable of being moved to new computer or reloaded in the event of hard drive crash without additional charges. An example of engine software required would be Cummins Insite Lite, Navistar Service Maxx Fleet Pro, or approved equal.

One operator's manual detailing the recommended operating procedure shall be delivered with each unit.

Sets shall consist of the following: shop manual, parts manual including exploded views of major components with their part numbers, wiring diagram, operator's manual, and a summary of warranties offered in excess of the standard one year.

The manuals shall fully and clearly cover all components of the unit, including the pump, valves, controls, tanks, etc. Manuals shall also include comprehensive trouble shooting and diagnosis information for all functions.

Shop manual shall explain, in detail, procedures for overhauling all major components. Failure to provide manuals may result in 5 percent of total bid. The content of the set will be evaluated for approval at the prototype approval meeting.

Complete shop drawings for the hydraulic oil supply, control valve box, and related systems shall be submitted to the RIDOT Division of Highway & Bridge Maintenance. Manuals shall also cover all allied equipment and components installed on chassis provided by body installer.

Any deviations from this system must be noted on the bid and approved by the RIDOT Division of Highway & Bridge Maintenance Administration. A complete system description and product literature for major components shall accompany the bid.

### **Cable Type Catch Basin Cleaner – Stetco model 950T/13 or equivalent**

- If the manufacturer suggests that additional mounts or cradles are required to allow for boom and related component safety/securement/longevity during on the road transportation then it is the manufacturer's responsibility to estimate/design/build accordingly.
- Manufacturer must have a two (2) year warranty on all parts and labor. Bumper to bumper on the equipment supplied.
- Manufacturer must have a three (3) year structural warranty.
- Catch basin cleaner to be painted White N0006 – Dupont Elite (no exceptions)
- **SKF Manufacturing or equivalent automatic greasing system-** this system to grease entire Catch basin cleaner joints along w/ body joints.
- **Boom up / PTO inter lock system** – installed and operational for preventing movement of truck when boom up or PTO is engaged.
- **Base:** Base to be designed so it can be mounted to the chassis frame in a space that does not exceed 36". The base itself shall have internal reinforcing plates no less than 3/8" thick welded in place for extra strength. The base shall have a 3 point mount to absorb stress.
- **Rotation:** Boom shall swing hydraulically no less than 370 degrees. The swing assembly must be a rack and pinion type equipped with two cross over relief valves to protect the unit from damage. Ball bearing type rotation mechanisms will **not** be accepted. The swing assembly shall be located at the base of the unit for greater operator visibility.
- **Mast:** The mast and boom assemblies shall rotate as a unit in a socket with a single bronze bushing with 260 square inch of bearing surface. The mast must be centrally located on the chassis to ensure equal boom reach on both sides of the truck. The mast must be manufactured of 3/8" thick steel plate and be continuous welded from top to bottom.
- **Boom Assembly:** Boom must be a telescopic style boom, articulating booms will not be acceptable. Two section boom to extend to 13'6" of hydraulic reach. The jib boom shall extend by means of a double acting cylinder mounted under the main boom. The extension cylinder must be externally located for ease of service.
- **Main Lift Cylinder:** The main lift cylinder must be no less than 4" in diameter (outside dimension) and be equipped with a holding valve (pad mounted style). Cylinder rod to have a self aligning ball bushing to prevent side loading on the piston and gland nut. The cylinder must have a minimum wall thickness of 1/4" and be rated for 5,000 psi of hydraulic pressure.

- **Winch:** Hydraulic planetary winch shall be mounted as an integral part of the main boom. The winch to be equipped with a hydraulic release and a spring applied brake system for safe operation. Winch line speed to be a minimum of 200 fpm (single line speed) . Winch must have a minimum capacity of 2,000 lbs. The wire rope shall be 3/8" in diameter and be spin resistant style. The winch drum shall have a steel cover.
- **Hose Reels:** Two hose reels with no less than 60' of 1/2" inside diameter two wire braided hose each to be supplied with wear cuffs. A quick disconnect for each hose to be supplied for removal of bucket from hose. The hose must be able to reach 35' below ground.
- **Controls:** two sets of control levers vertically mounted (one on each side of unit) the controls must be identical on each side of unit. Functions from top to bottom as follows: winch, main boom, extend boom, dump body, swing, blank and bucket. Main control valve bank must be an open center style with an operating pressure of 2,100 psi and 13 gpm of flow. The valve must be able to perform two or more at the same time.
- **Hydraulic System:** Hot shift PTO mounted to truck transmission with PTO switch mounted with telltale light on dash. Gear pump direct mounted to the PTO shall deliver 13 gpm of hydraulic flow at 1,200 rpm approximately. 37 Gallon hydraulic oil tank (steel construction only) equipped with a filter assembly and sight gauge.
- **Orange Peel Bucket:** Bucket for the catch basin cleaner shall be a double acting type, Bucket must be constructed that the opening motion does not exceed 63 degrees, When the bucket is in the open position. This will allow the material to discharge out of the bucket. The bucket blades must be die cast and have smooth outside surface (cast iron blades will not be accepted). The minimum thickness of the blades to be 3/8" thick. All pin holes to be bushed, All bushings to be hardened and the pins must be a minimum of 5/8" diameter and be hardened steel. The bucket must have (4) blades.
- **Orange Peel Bucket Specifications:** Closed outside diameter : 15"  
Maximum blade opening : 37"  
Closed height : 50"  
Open height : 45'  
Material capacity : 1.3 cubic feet

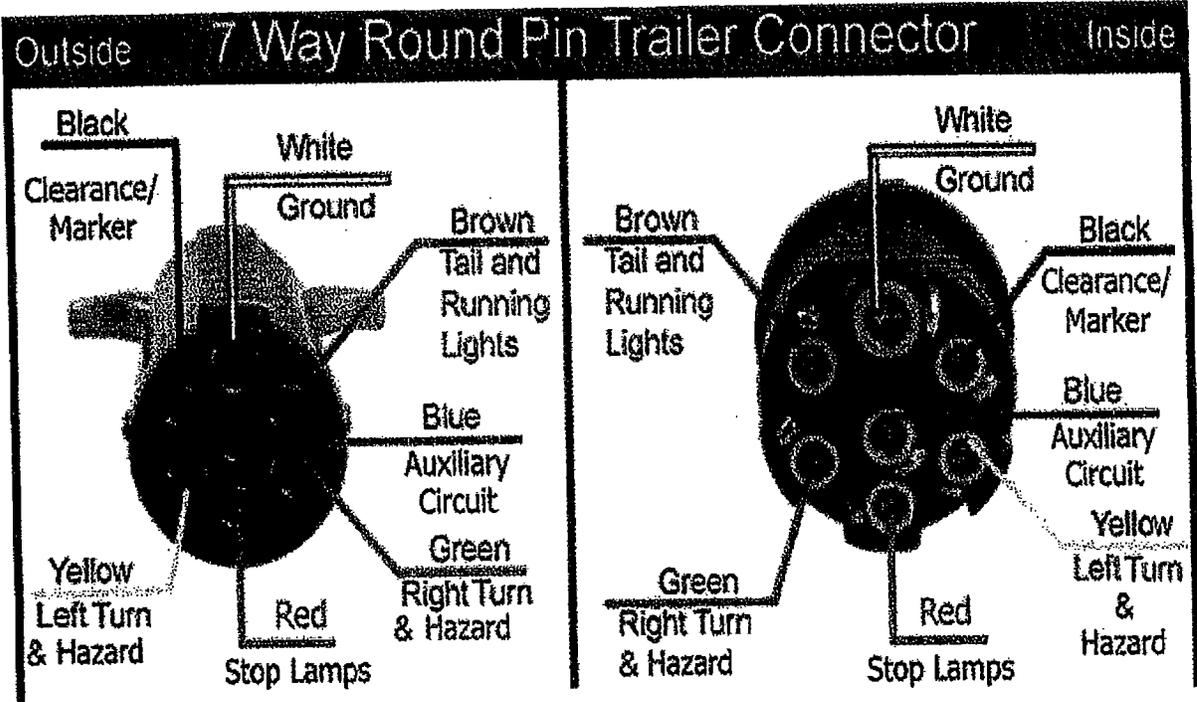
**EACH VEHICLE SHALL COME WITH 2 IDENTICAL ORANGE PEEL BUCKETS. ONE (1) BUCKET TO BE INSTALLED AND OPERATIONAL ON BOOM, ONE (1) BUCKET TO BE SUPPLIED AS A SPARE.**

- **Body dumping safety device:** Mechanical-hydraulic body dumping safety device to prevent the dumping of the body without the boom being 90 degrees from the body.
- **Boom up alarm:** Red light and buzzer will be activated if the boom is not in the down position.
- **Catch Basin Cleaner Lift Capacity:** unit only no bucket attached  
8,260 lbs @ 5' , 4,130 lbs @ 10' , 2,860 lb @ 13'
- **Performance of Catch Basin Cleaner:** 1,200 rpm of engine speed the unit must safely perform a complete cycle in 30 seconds. Lifting an open bucket 9' feet from the ground, close the bucket, swing the bucket 45 degrees from the center line of the unit, lower the bucket to ground to ground level, open and close bucket two times, raise the bucket back to 9' above ground (bucket in closed position), swing boom back to the center of body and open the bucket (to simulate discharge of material).
- **Debris Body/Accessories: Minimum length to be 10'**
  - 6 Yard capacity
  - 30" High sides, ends and tail gate full perimeter
  - 3/16" Thick steel sides – Stainless steel
  - 3/16" Thick steel floor - Cor-ten steel
  - 3/16" Thick steel tail gate – Stainless steel
  - Boxed side braces – Stainless steel
  - Boxed top braces – Stainless steel
  - Splash shields full perimeter – Stainless steel
  - Heavy duty front panel – Stainless steel
  - Tail Gate: air release
  - Water tight tail gate
  - Tail gate locks @ rear of body
  - Class 50 hoist under body style (17 ton capacity)
  - Drivers side step and grab handle
  - OSHA safety prop
  - Mud flaps
  - Manual pull tarp (Pioneer or equivalent)
  - Each unit to be supplied with a standard 10' basin spoon/shovel.
  - Bucket basket mount to rear tail gate w/ guide rod.
  - Custom Basin Spoon/Shovel stow/rack designed to hold a standard 10' basin spoon

# RIDOT

## STANDARD TRAILER

### WIRING DIAGRAM



PLASTIC GROTE PLUG	#82-2140
FITS PLASTIC GROTE SOCKET	#82-2145

**CERTIFICATE OF ORIGIN :**

The Contractor shall furnish a Certificate of Origin to RIDOT  
The Certificate shall be completed as follows:

- Name of Purchaser: State of RI/Fleet Operations
- Address of Purchaser: One Capitol Hill Providence, RI 02908

**CONCLUDING STATEMENTS**

Notwithstanding the above, the State reserves the right not to award this contract or to award on the basis of cost alone, to accept or reject any or all proposals, and to award in its best interest.

Proposals found to be technically or substantially non-responsive at any point in the evaluation process will be rejected and not considered further.

The State may, at its sole option, elect to require presentation(s) by offeror clearly in consideration for award.

End of Specification

**Contract Terms and Conditions**

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**Terms and Conditions**

**BID STANDARD TERMS AND CONDITIONS**

**TERMS AND CONDITIONS FOR THIS BID**

**RIVIP INFO - BID SUBMISSION REQUIREMENTS**

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MAILING ADDRESS FOR BID PROPOSALS ISSUED BY THE STATE OF RHODE ISLAND,  
DIVISION OF PURCHASES

All Bid Proposals must be submitted by mail or hand delivered to:

- State of Rhode Island
- Department of Administration
- Division of Purchases, Second floor
- One Capitol Hill
- Providence, RI 02908-5855

**DIVESTITURE OF INVESTMENTS IN IRAN REQUIREMENT:**

No vendor engaged in investment activities in Iran as described in R.I. Gen. Laws §37-2.5-2(b) may submit a bid proposal to, or renew a contract with, the Division of Purchases. Each vendor submitting a bid proposal or entering into a renewal of a contract is required to certify that the vendor does not appear on the list maintained by the General Treasurer pursuant to R.I. Gen. Laws §37-2.5-3.

**DELIVERY PER AGENCY**

DELIVERY OF GOODS OR SERVICES AS REQUESTED BY AGENCY.