



Request for Quote

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

CREATION DATE : 07-JUN-16
 BID NUMBER: 7550689
 TITLE: TRUCKS WITH MOUNTED ATTENUATORS - DOT
 BID CLOSING DATE AND TIME:06-JUL-2016 11:00:00

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

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

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

Requisition Number: 1462628

Line	Description	Quantity	Unit	Unit Price	Total
1	<p>BID RESPONSES MUST BE SUBMITTED IN DUPLICATE. THE STATE ISSUED SPECIFICATION MUST BE RETURNED WITH THE SOLICITATION AND MUST INDICATE COMPLIANCE OR EXCEPTION TO EACH OF THE SPECIFICATIONS. ANY AND ALL EXCEPTIONS MUST BE NOTED. QUESTIONS CONCERNING THIS SOLICITATION MUST BE DIRECTED TO LISA HILL AT LISA.HILL@PURCHASING.RI.GOV NO LATER THAN ONE (1) WEEK PRIOR TO THE BID CLOSING DATE AND TIME.</p> <p>TELEPHONED QUESTIONS WILL NOT BE ACCEPTED.</p> <p>TRUCKS AND MOUNTED ATTENUATORS YEAR _____ CHASSIS MAKE _____ MODEL _____ ATTENUATOR _____ ANTICIPATED DELIVERY _____</p>	10.00	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

Truck & Mounted TMA Spec.

APPLICATION:	Stake Flat with Platforms on both sides	Comply___
MISSION:	Requested GVWR: 25500. Calc. GVWR: 25999	Comply___
	Calc. Start/Grade Ability: 26.44%/2.06% @ 55 MPH	Comply___
	Calc. Geared Speed: 85.6 MPH	Comply___
DIMENSION:	Wheelbase: 195.00, CA: 84.00, Axle to Frame: 75.00	Comply___
ENGINE, DIESEL:	245 HP @ 2200 RPM, 660 lb-ft Torque @ 1300 RPM, 2400 RPM, Governed Speed, 245 Peak HP (Max)	Comply___
TRANSMISSION, AUTOMATIC:	{Allison 2500_RDS_P} 5th Generation Controls; Wide Ratio, 6-Speed, with Double Overdrive; with PTO Provision, Less Retarder, with 33,000-lb GVW & GCW Max	Comply___
CLUTCH:	Omit Item (Clutch & Control)	Comply___
AXLE, FRONT NON-DRIVING:	{Meritor MFS-10-143A} Wide Track, I-Beam Type, 10,000-lb Capacity	Comply___
AXLE, REAR, SINGLE:	{Dana Spicer 17060S} Single Reduction, 17,500-lb Capacity, 190 Wheel Ends Gear Ratio: 5.29	Comply___
CAB:	Conventional 5-Man Crew Cab	Comply___
TIRE, FRONT:	(2) 11R22.5 G661 HSA (GOODYEAR) 497 rev/mile, load range G, 14 ply	Comply___
TIRE, REAR:	(4) 11R22.5 G622 RSD (GOODYEAR) 497 rev/mile, load range G, 14 ply	Comply___
SUSPENSION, RR, SPRING, SINGLE:	Vari-Rate; 20,000-lb Capacity, With 4500 lb Auxiliary Rubber Spring	Comply___
PAINT:	Cab schematic 100GA	Comply___
	Location 1: 9219, Winter White (Std)	Comply___
	Chassis schematic N/A	Comply___

Truck & Mounted TMA Spec.

Vehicle Specifications

Description:

- Base Chassis with 195.00 Wheelbase, 84.00 CA, and 75.00 Axle to Frame. Comply____
- TOW HOOK, FRONT (2) Frame Mounted Comply____
- FRAME RAILS High Strength Low Alloy Steel (80,000 PSI Yield); 10.250" x 3.092" x .0375" (260.4mm x 78.5mm x 9.5mm); 427.0" (10846mm) Maximum OAL Comply____
- LICENSE PLATE HOLDER Includes Upper & Lower Mounting Plate Hardware, Mounted in Existing Holes in Front Bumper Comply____
- BUMPER, FRONT, Full Width, Aerodynamic, Steel; 0.142" Material Thickness Comply____

Includes:

- : BUMPER, FRONT Powder Coated Gray (Argent) Color Comply____
- : WHEELBASE RANGE 134" (340cm) Through and Including 197" (500cm) Comply____
- : AXLE, FRONT, NON-DRIVING {Meritor MFS-10-143A} Wide Track, I-Beam Type, 10,000-lb Capacity Comply____

Notes:

- : The following features should be considered when calculating Front GAWR: Front Axles; Front Suspension; Brake System; Brakes; Front Air Cam; Wheels; Tires. Comply____
- SUSPENSION, FRONT, SPRING Parabolic, Taper Leaf; 10,000-lb Capacity; With Shock Absorbers Comply____

Includes:

- : SPRING PINS Rubber Bushings, Maintenance-Free Comply____

Notes:

- : The following features should be considered when calculating Front GAWR: Front Axles; Front Suspension; Brake System; Brakes; Front Air Cam; Wheels; Tires. Comply____

BRAKE SYSTEM, AIR Dual System for Straight Truck Applications Comply____

Includes:

- : BRAKE LINES Color and Size Coded Nylon Comply____
- : DRAIN VALVE Twist -Type Comply____
- : GAUGE, AIR PRESSURE (2) Air 1 and Air 2 Gauges; Located in Instrument Cluster Comply____

Truck & Mounted TMA Spec.

- : PARKING BRAKE CONTROL Yellow Knob, Located on Instrument Panel Comply____
- : PARKING BRAKE VALVE For Truck Comply____
- : QUICK RELEASE VALVE Bendix on Rear Axle for Spring Brake Release:
1 for 4x2, 2 for 6x4 Comply____
- : SLACK ADJUSTERS, FRONT Automatic Comply____
- : SLACK ADJUSTERS, REAR Automatic Comply____
- : SPRING BRAKE MODULATOR VALVE R-7 for 4x2, SR-7 with relay
valve for 6x4 Comply____

Notes:

- : Front and Rear Dust Shields not Included Comply____
- : Rear Axle is Limited to 19,000-lb GAWR with Code 04091 BRAKE SYSTEM,
AIR and Code 04NCL BRAKES, REAR, AIR CAM Regardless of Axle/
Suspension Ordered. Comply____
- : Rear Axle is Limited to 20,000-lb GAWR with Code 04091 BRAKE SYSTEM,
AIR and Code 04NCG BRAKES, REAR, AIR CAM Regardless of Axle/
Suspension Ordered. Comply____
- : Rear Axle is Limited to 23,000-lb GAWR with Code 04091 BRAKE SYSTEM,
AIR and Standard Rear Air Cam Brakes Regardless of Axle/Suspension Ordered. Comply____

DRAIN VALVE {Bendix DV-2} Automatic; With Heater; for Air Tank Comply____

Includes:

- : DRAIN VALVE Mounted in Wet Tank Comply____

AIR BRAKE ABS {Bendix Anti-Lock Brake System} Full Vehicle Wheel Control
System (4-Channel) Comply____

AIR DRYER {Bendix AD-IP} With Heater Comply____

Includes:

AIR DRYER LOCATION Inside Left Rail, Back of Cab Comply____

Vehicle Specifications

Description:

BRAKE CHAMBERS, FRONT, AXLE {Haldex} 20 Sqn Comply____

BRAKE CHAMBERS, REAR AXLE {Haldex GC3030LHDHO} 30/30 Spring Brake Comply____

Truck & Mounted TMA Spec.

Includes:

- : BREAK CHAMBERS, SPRING (2) Rear Parking; WITH TRUCK BREAKS: All 4x2, 4x4; WITH TRACTOR BREAKS: All 4x2, 4x4; 6x4 & 6x6 with Rear Tandem Axles Less Than 46,000-lb. or GVWR Less Than 54,000-lb. Comply_____

BREAKS, FRONT, AIR CAM S-Cam; 15.0" x 4.0"; Includes 20 Sq. In Long Stroke Brake Chambers. Comply_____

Notes:

- : Front Axle with 14,000-lb GAWR is Limited to 13,200-lb GAWR when used in Conjunction with 15" BRAKES, FRONT, AIR CAM. Comply_____
- : The following features should be considered when calculating Front GAWR: Front Axles; Front Suspension; Brake System; Brakes, Front Air Cam; Wheels; Tires. Comply_____

BRAKES, REAR, AIR CAM S-Cam; 16.5" x 7.0", Includes 30/30 Sq. In. Long Stroke Break Chamber and Spring Actuated Parking Brake Comply_____

Notes:

- : The following should be considered when calculating Front GAWR: Front Axles; Front Suspension; Brake System; Brakes, Front Air Cam; Wheels; Tires. Comply_____

AIR COMPRESSOR {Bendix Tu-Flo 550} 13.2 CFM Capacity Comply_____

STEERING COLUMN Tilting Comply_____

STEERING WHEEL 2-Spoke, 18" Diam.. Black Comply_____

STEERING GEAR {Sheppard HD94} Power Comply_____

EXHAUST SYSTEM Single, Horizontal, After-treatment Device Frame Mounted Right Side Back of Cab, Includes Horizontal Tail Pipe Comply_____

Includes:

- : NOTE: The Horizontal Tailpipe Includes a Temperature Control Device Comply_____

SWITCH, FOR EXHAUST 2 Positon, Lighted & Latching, ON/OFF Type, Mounted in IP, Inhibits Diesel Particulate Filter Regeneration as Long as Switch is in ON Position Comply_____

ELECTRICAL SYSTEM 12-Volt, Standard Equipment Comply_____

Includes:

- : BATTERY BOX Steel Comply_____
- : DATA LINK CONNECTOR For Vehicle Programming and Diagnostics In Cab Comply_____
- : FUSES, ELECTRICAL SAE Blade -Type Comply_____

Truck & Mounted TMA Spec.

- : HAZARD SWITCH Push On/Push Off, Located on Top of Steering Column Cover Comply____
 - : HEADLIGHT DIMMER SWITCH Integral with Turn Signal Lever Comply____
 - : JUMP START STUD Located on Positive Terminal of Outermost Battery Comply____
 - : PARKING LIGHT Integral with Front Turn Signal and Rear Tail Light Comply____
 - : STARTER SWITCH Electric, Key Operated Comply____
 - : STOP, TURN, TAIL & B/U LIGHTS Dual, Rear, Combination with Reflector Comply____
 - : TURN SIGNAL SWITCH Self-Cancelling for Trucks, Manual Cancelling for Tractors, with Lane Change Features Comply____
 - : TURN SIGNALS, FRONT Includes Reflectors and Auxiliary Side Turn Signals, Solid State Flashers; Flush Mounted Comply____
 - : WINDSHIELD WIPER SWITCH 2-Speed with Wash and Intermittent Feature (5 Pre-Set Delays), Integral with Turn Signal Lever Comply____
 - : WINDSHIELD WIPERS Single Motor, Electric, Cowl Mounted Comply____
 - : WIRING, CHASSIS Color Coded and Continuously Numbered Comply____
- POWER SOURCE Cigar Type Receptacle without Plug and Cord. Comply____
- ALTERNATOR {Leece-Neville AVI160P2013} Brush Type; 12 Volt 160 Amp. Capacity, Pad Mount, With Remote Sense Comply____
- BODY BUILDER WIRING Back of Standard Cab at Left of Frame or Under Extended or Crew Cab at Left Frame; Includes Sealed Connectors for Tail/Amber Turn /Marker/ Backup/Accessory Power/Ground and Sealed Connector for Stop/Turn ALL LED Comply____
- (2) LED 360° Strobe lights mounted Drivers and Passengers Door Mirrors and (2) Oval LED lights mounted on rear of truck bed visibly when Attenuator is in operation. Comply____
- A PA System mounted in the cab with a speaker mounted outside of truck affixed to the body back board. Comply____
- BATTERY SYSTEM : Maintenance-Free (2) 12-Volt 1300CCA Total Comply____

Vehicle Specifications

Description:

- RADIO AM/FM/WB/ Clock/ 3MM/Auxiliary Input, with Multiple Speakers, With CD Player, Blue Tooth for Hands Free Comply____
- BACK-UP ALARM Electric, 107 dBA Comply____
- STOP, TURN TAIL & B/U LIGHTS {Truck Lite} Super 44, With LED Lamps for Stop, Turn & Tail Lights and Truck Lite Super 40 Lamps for Backup lights, Less Power Module, Less Rubber Mount, Includes Separate Rear Reflectors Comply____
- HORN, ELECTRIC Disc Style Comply____

Truck & Mounted TMA Spec.

HORN, AIR Black, Single Trumpet, Air Solenoid Operated	Comply____
SPECIAL WIRING HARNESS, BODY for Chassis, With 6' Additional Length to Accommodate Drop Frame Beverage Body Application	Comply____
HEADLIGHTS Halogen; Composite Aero Design for Two Light System; Includes Daytime Running Lights	Comply____
CLEARANCE/MARKER LIGHTS (5) {Truck Lite} Amber LED Lights, Flush Mounted on Cab or Sunshade	Comply____
HEADLIGHTS ON W/WIPERS Headlights Will Automatically Turn on if Windshield Wipers are turned on	Comply____
STARTING MOTOR {Delco Remy 38MT Type 300} 12 Volt; Less Thermal Over-Crank Protection	Comply____
INDICATOR, LOW COOLANT LEVEL With Audible Alarm	Comply____
CIRCUIT BREAKERS Manual-Reset (Main Panel) SAE Type III With Trip Indicators, Replaces All Fuses Except For 5-Amp Fuses	Comply____
TURN SIGNALS, FRONT LED, Includes LED Side Marker Lights, Mounted on Fender	Comply____
GRILLE Chrome	Comply____
FRONT END Tilting, Fiberglass, With Three Piece Construction	Comply____
PAINT SCHEMATIC, PT-1 Single Color, Design 100	Comply____

Includes:

: PAINT SCHEMATIC ID LETTERS "GA"	Comply____
PAINT TYPE Base Coat/Clear Coat, 1-2 Tone	Comply____
SPECIAL RATING, GVWR Limited to 25,999-lb GVWR	Comply____
CLUTCH Omit Item (Clutch & Control)	Comply____
ENGINE, DIESEL, 245 HP @ 2200 RPM, 660 lb-ft Torque @ 1300 RPM, 2400 RPM Governed Speed, 245 Peak HP (Max)	Comply____

Includes:

: AIR COMPRESSOR AIR SUPPLY LINE Naturally-Aspirated (Air Brake Chassis Only)	Comply____
: ANTI-FREEZE Red Shell Rotella Extended Life Coolant; -40 Degrees F/-40 Degrees C; for MaxxFace and Navistar Engines	Comply____

Truck & Mounted TMA Spec.

- : COLD STARTING EQUIPMENT Intake Manifold Electric Grid Heater with Engine ECM Control Comply____
- : CRUISE CONTROL Electronic; Controls Integral to Steering Wheel Comply____
- : ENGINE OIL DRAIN PLUG Magnetic Comply____
- : ENGINE SHUTDOWN Electric; Key Operated Comply____
- : FUEL FILTER Included with Fuel/Water Separator Comply____
- : FUEL/WATER SEPARATOR Fuel/Water Separator and Fuel Filter in a Single Assembly; With Water-in Fuel Sensor; Engine Mounted Comply____
- : GOVERNOR Electronic Comply____
- : OIL FILTER, ENGINE Spin-On Type Comply____
- : WET TYPE CYLINDER SLEEVES Comply____

Notes:

Recommended Code 12THT when using front mount obstructions (winches, cones, reels, etc.) that restrict air flow through the radiator. Comply____

FAN DRIVE {Borg-Warner SA85} Viscous Type, Screw On Comply____

Includes: FAN Nylon Comply____

Vehicle Specifications

Description:

RADIATOR Aluminum; 2-Row, Cross Flow, Over Under System, 1045 Ssqln Louvered, With 302 Ssqln CAC, With 369 Ssqln LTR, Includes In-Tank Transmission Oil Cooler Comply____

Includes:

- : DEARATION SYSTEM with Surge Tank Comply____
- : HOSE CLAMS, RADIATOR HOSES Gates Shrink Band Type; Thermoplastic Coolant Hose Clamps Comply____
- : RADIATOR HOSES Premium, Rubber Comply____

FEDERAL EMISSIONS EPA, OBD and GHG Certified for Calendar Year 2016 Comply____

AIR CLEANER With Service Protection Element Comply____

Includes:

- : GAUGE, AIR CLEANER RESTRICTION Air Cleaner Mounted Comply____

THROTTLE, HAND CONTROL Engine Speed Control; Electronic, Stationary, Variable Speed; Mounted on Steering Wheel Comply____

Truck & Mounted TMA Spec.

ENGINE CONTROL, REMOTE MOUNTED Provision for; Includes Wiring for Body Builder Installation of PTO Controls; With Ignition Switch Control for Emissions Electronic Engines Comply____

FAN DRIVE SPECIAL EFFECTS Fan Cooling Ring with Fan Shroud Effects, Engine Mounted Comply____

EMISSION COMPLIANCE Federal, Does Not Comply with California Clean Air Idle Regulations Comply____

TRANSMISSION, AUTOMATIC {Allison 2500_RDS_P} 5th Generation Controls; Wide Ratio, 6 Speed, with Double Overdrive; with PTO Provision, Less Retarder, with 33,000-lb GVW & GCW Max Comply____

Includes:

: OIL FILTER, TRANSMISSION Mounted on Transmission Comply____

: TRANSMISSION OIL PAN Magnet in Oil Pan Comply____

TRANSMISSION OIL Synthetic; 20 thru 28 Pints Comply____

SHIFT CONTROL PARAMETERS Allison 1000 or 2000 Series Transmissions, 5th Generation Controls, Performance Programming Comply____

AXLE, REAR, SINGLE {Dana Spicer 17060S} Single Reduction, 17,500-lb Capacity, 190 Wheel Ends. Gear Ratio: 5.29 Comply____

Includes:

: REAR AXLE DRAIN PLUG (1) Magnetic, For Single Rear Axle Comply____

Notes:

: The following feature should be considered when calculating Rear GAWR: Rear Axles; Rear Suspension; Brake System; Brakes, Rear Air Cam, Brake Shoes, Rear; Special Rating, GAWR; Wheels; Tires. Comply____

: When Specifying Axle Ratio, Check Performance Guidelines and TCAPE for Startability and Performance Comply____

SUSPENSION, RR, SPRING, SINGLE Vari-Rate; 20,000-lb Capacity, With 4500 Auxiliary Rubber Spring Comply____

Notes:

: The following features should be considered when calculating Rear GAWR: Rear Axles; Rear Suspension; Brake System; Brakes, Rear Air Cam, Brake Shoes, Rear; Special Rating; Wheels; Tires. Comply____

Truck & Mounted TMA Spec.

FUEL TANK Top Draw; D Style, Non Polished Aluminum, 16" Tank Depth, 100 U.S. Gal., 189 L Capacity, with Quick Connect Outlet, Mounted Right Side, Under Cab Comply____

CAB Conventional 6-Man Crew Cab Comply____

Includes:

- : ARM REST (2) Molded Plastic; One Each Door Comply____
- : CLEARANCE/MARKER LIGHTS (5) Flush Mounted Comply____
- : COAT HOOK, CAB Located on Rear Wall, Centered Above Rear Window Comply____
- : CUP HOLDERS Two Cup Holders, Located in Lower Center of Instrument Panel Comply____
- : DOME LIGHT, CAB Rectangular, Door Activated and Push On-Off at Light Lens, Timed Theater Dimming, Integral to Console, Center Mounted Comply____
- : GLASS, ALL WINDOWS Tinted Comply____
- : GRAB HANDLE, CAB INTERIOR (1) "A" Pillar Mounted, Passenger Side Comply____
- : POWER WINDOWS AND DOOR LOCKS Comply____

Truck & Mounted TMA Spec.

Vehicle Specifications

Description:

- : GRAB HANDLE, CAB INTERIOR (2) Front of "B" Pillar Mounted, One Each Side Comply____
- : GRAB HANDLE, CAB INTERIOR (4) Two Each Side, Rear Door Mounted at Hinge Side and "C" Pillar Mounted Comply____
- : INTERIOR SHEET METAL Upper Door (Above Window Ledge) Painted Exterior Color Comply____
- : STEP (8) TWO Steps Per Door Comply____

Notes:

- 43.9" CA Loss Comply____
- GAUGE CLUSTER English With English Electronic Speedometer Comply____

Includes:

- : GAUGE CLUSTER (5) Engine Oil Pressure (Electronic), Water Temperature (Electronic), Fuel (Electronic), Tachometer (Electronic), Voltmeter Comply____
- : ODOMETER DISPLAY, Miles, Trip Miles, Engine Hours, Trip Hours, Fault Code Readout Comply____
- : WARNING SYSTEM Low Fuel, Low Oil Pressure, High Engine Coolant Temp, and Low Battery Voltage (Visual and Audible) Comply____
- GAUGE, OIL TEMP, ALLISON TRAN Comply____
- IP CLUSTER DISPLAY On Board Diagnostics Display of Fault Codes in Gauge Cluster Comply____
- SEAT, DRIVER : Air Suspension, High Back With Integral Headrest, Cloth, Isolator, 1 Chamber Lumbar, 2 Position Front Cushion Adjust, -3 to +14 Degree Back Angle Adjust Comply____

Includes:

- : SEAT BELT 3-Point, Lap and Shoulder Belt Type Comply____
- MIRRORS (2) {Lang Mekra} Styled; Rectangular, 7.09" x 15.75" & Integral Convex Both Sides, 102" Inside Spacing, Breakaway Type, Thermostatically Controlled Heated Heads, Clearance Lights LED, Bright Heads and Brackets Comply____
- SEAT, TWO BUCKET SEATS {National} Fixed Back, Integrated Headrest in Both Occupant Positons, Vinyl , Less Under Seat Storage Compartment Comply____
- SEAT, REAR{National} BENCH; Full Width; Vinyl, With Fixed Back and Two Integral Outboard Headrests
- AIR CONDITIONER {Blend-Air} With Integral Heater & Defroster Comply____

Truck & Mounted TMA Spec.

Includes:

- : HEATER HOSES Premium Comply____
- : HOSE CLAMPS, HEATER HOSE Mubea Constant Tension Clamps Comply____
- : REFRIGERANT Hydrofluorocarbon HFC-134A Comply____

INSTRUMENT PANEL Center Section, Flat Panel Comply____

CAB INTERIOR TRIM Deluxe; for Crew Cab Comply____

Includes:

- : "A" Pillar Cover Molded Plastic Comply____
- : CAB INTERIOR TRIM PANELS Cloth Covered Molded Plastic, Full Height;
All Exposed Interior Sheet Metal is Covered Except for the Following: with a
Two-Man Passenger Seat or with a Full Bench Seat the Back Panel is Completely
Void of Covering Comply____
- : CONSOLE, OVERHEAD Molded Plastic; With Dual Storage Pockets with Retainer
Nets and CB Radio Pocket (**INSTALL TWO WAY RADIO STATE SUPPLIED**) Comply____
- : DOOR TRIM PANELS Molded Plastic; Driver and Passenger Doors Comply____
- : FLOOR COVERING Rubber, Black Comply____
- : HEADLINER Soft Padded Cloth Comply____
- : INSTRUMENT PANEL TRIM Molded Plastic with Black Center Section Comply____
- : STORAGE POCKET, DOOR (1) Molded Plastic. Full-Length; Driver Door Comply____
- : SUN VISOR (2) Padded Vinyl with Driver Side Toll Ticket Strap, Integral to Console
Comply____

CAB REAR SUSPENSION Air Bag Type

WHEELS, FRONT {Accuride} DISC; 22.5" Painted Steel, 10-Stud (285.75MM BC)
Hub Piloted, 5 Hand Hole, Flanged Nut, Metric Mount, 7.50 DC Rims; with Steel Hubs. Comply____

Includes:

PAINT IDENTITY, FRONT WHEELS White Comply____

Vehicle Specifications

Description:

Notes:

Compatible Tire Sizes: 11R22.5 Comply____

WHEELS, REAR{Accuride} DUAL DISC; 22.5" Painted Steel, 10-Stud (285.75MM BC)
Hub Piloted, 5 Hand Hole, Flanged Nut, Metric Mount, 7.50 DC Rims; With Steel Hubs Comply____

Truck & Mounted TMA Spec.

Includes:

: PAINT IDENTITY, REAR WHEELS White Comply____

Notes:

: Compatible Tire Sizes: 11R22.5 Comply____

WHEELS SEALS, FRONT : Oil-Lubricated Wheel Bearings Comply____

WHEEL BEARING, FRONT, LUBE {EmGard 50W} Synthetic Oil Comply____

(4) TIRE, REAR 11R22.5 G622 RSD (GOODYEAR) 497 rev/mile, load range G, 14 ply Comply____

(2) TIRE, FRONT 11R22.5 G661 HSA (GOODYEAR) 497 rev/mile load range G, 14 ply Comply____

Services Section:

3 Year Warranty

INSTALL TWO WAY RADIO SUPPLIED BY (RIDOT)

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

ALL BIDS SUBMITTED MUST BE IN DUPLICATE

Truck & Mounted TMA Spec.

SPECIFICATION FOR TRUCK MOUNTED ATTENUATOR MODEL TL3 WITH TWO 90° TILT FOR TRANSPORT MODES OR EQUAL

SCOPE

1. Product

The specifications describe a truck mounted attenuator (TMA) which is mounted to a shadow vehicle for purposes of protecting the work crew in front of the shadow vehicle and protecting the motorist that might drive into the lane closed off by the shadow vehicle. Shadow vehicles should be trucks in a weight range of 12,000-lbs to 25,200-lbs. And preferably 20,000 lbs., which is the weight of the truck tested for certification.

Comply_____

The Scorpion TMA 10,000 is available in three basic models.

- a. Model A: Is a TL-2 device tested a 70 km/hr., figures 1 & 2 for use on trucks needing low speed protection or as a replacement cartridge for trucks already equipped with a TL-2 attenuator cartridge.

Comply_____

- b. Model B: Uses a strut section in addition to the TRL-2 cartridge section to achieve a higher speed device, figures 3 & 4. The rear cartridge section has a hinged hydraulic coupling with fluid on both sides of the cylinders and solenoid valve lockouts. The rear cartridge can be raised to 90° where a scissors lock engages to lock the cartridge in the 90° position. An operators switch has an up and down button and the down button releases the lockout and lowers the cartridge. The release of the up or down button stops the cartridge at that angle. The Model B has a 10° tilt at the strut to allow clearance at driveways fig. 5. During construction when the shadow vehicle truck has to drive in and out of sloped areas such as the drainage median or a driveway, the strut can be temporarily raised 10° to travel over this terrain. In the normal transport mode, the rear cartridge is elevated and locked at 90° for the Model B.

Comply_____

- c. Model C: Uses a 90° hydraulic tilt attached to the strut, fig. 6. This allows the Model C system to raise the strut to the vertical position with the cartridge in a horizontal position over the top of the truck for normal transport mode.

Comply_____

The Scorpion MA 10,000 is mounted to a truck at a road clearance height of 12" +/-1". In the deployed mode shown in fig. 7, the system extends 13' to the rear of the truck.

Comply_____

Truck & Mounted TMA Spec.

2. The Product Specification

Construction – The Scorpion TMA 10,000 consists of three basic components. A steel backup is attached to the rear of the truck with an all-steel support structure fig. 8. An all aluminum tube frame extends out 13' from the backup. Inside the tube frame is a series of four aluminum boxes filled with energy absorbing boxes filled with energy absorbing aluminum honeycombing fig.9.

Comply_____

Materials – The backup support structure uses all steel, angles, plates, and C-channels welded using wire feed mix welding. The tube frame construction uses all aluminum tube and plate construction welded using wire feed mix welding on both sides of the tube/plate interface. The aluminum boxes use closed end-sealing rivets for joining the sheet metal. The aluminum honeycomb is joined to the aluminum face sheets using oven cured epoxy resin.

Aluminum tubing – 6063 Aluminum T4 Comply_____

Aluminum plate – 5052 Aluminum 0.250 “ Comply_____

Aluminum sheet – 5052 Aluminum 0.062” Comply_____

Aluminum honeycomb – Commercial Grade 1” and ½” cell size Comply_____

Aluminum rivets – 3/16” sealed Comply_____

Backup bolts – 1” and 7/8” bolts grade #5 Comply_____

3. Dimensions and Weights

The outside dimensions of the crushable attenuator portion are to be 152” long plus or minus one inch, 95” plus or minus one inch wide, and 25” plus or minus one inch deep. The cantilevered crushable attenuator portion shall weigh a maximum of 1,375 lbs.

Comply_____

Note: In the “up” or travel position, the top of the TMA shall be a maximum of 10’8” from the ground (as installed on the truck). The lowest portion of the unit in the travel position shall not be less than 12” plus or minus one inch from the ground.

Comply_____

4. Performance Requirement

The attenuator is to have been tested and certified to NCHRP 350 for test level 3 tests: 3-50, 3-51, 3-52, and 3-53. It is required that in order to be considered responsive for this bid requirement, that all angular impact testing be successfully completed and federally certified to meet ALL NCHRP 350 test level 3 requirements.

Comply_____

Truck & Mounted TMA Spec.

The cartridge and strut sections of the attenuator shall be constructed with two structurally redirective side members. The side members are to be made of two 4 ½" diameter rolled and curved aluminum tubes having a 0.30", wall thickness. The redirective structural aluminum tube members shall protect the full truck width and have a side-to-side width of 95" plus or minus one inch.

Comply_____

5. Structural Steel Backup

The structural steel truck mounting backup; the truck support hardware and all hydraulic components shall be identical for the TL-2 and TL-3 models. Upgrading from the TL-2 to the TL-3 attenuator shall be accomplished by adding the strut attenuator to the cartridge attenuator system without changing the backup, support structure, or hydraulics.

Comply_____

6. Replacement Cartridge and Strut

The cartridge and strut attenuator sections shall be constructed with progressively collapsing modular components, which can be replaced, in successive stages depending on the accident severity; the first cartridge attenuator module shall provide a 5 mph bumper, the second cartridge attenuator module shall provide 45 mph or 70 kph cushion for light 1800 lb. vehicle, the third cartridge attenuator module shall provide a 62.5 mph or 100 kph cushion for the light 1800 lb. vehicle, the fourth strut attenuator module working in concert with the cartridge module shall provide a 62.5 mph or 100 kph cushion for heavy 4400 lb. vehicles.

Comply_____

Product Specifications Continued

7. Hydraulic 90° and 180 ° Tilt: Power Up and Down Feature

Hydraulic system shall have hydraulic fluid on both sides on the cylinders to prevent corrosion and enhance user safety. By hydraulically powering the TMA down and hydraulically linking it in the down or use position, it will eliminate the possibility of an impacting vehicle under riding the TMA in the use of deployed position.

Comply_____

Truck & Mounted TMA Spec.

APPLICATION:	Stake Flat with Platforms on both sides	Comply___
MISSION:	Requested GVWR: 25500. Calc. GVWR: 25999	Comply___
	Calc. Start/Grade Ability: 26.44%/2.06% @ 55 MPH	Comply___
	Calc. Geared Speed: 85.6 MPH	Comply___
DIMENSION:	Wheelbase: 195.00, CA: 84.00, Axle to Frame: 75.00	Comply___
ENGINE, DIESEL:	245 HP @ 2200 RPM, 660 lb-ft Torque @ 1300 RPM, 2400 RPM, Governed Speed, 245 Peak HP (Max)	Comply___
TRANSMISSION, AUTOMATIC:	{Allison 2500_RDS_P} 5th Generation Controls; Wide Ratio, 6-Speed, with Double Overdrive; with PTO Provision, Less Retarder, with 33,000-lb GVW & GCW Max	Comply___
CLUTCH:	Omit Item (Clutch & Control)	Comply___
AXLE, FRONT NON-DRIVING:	{Meritor MFS-10-143A} Wide Track, I-Beam Type, 10,000-lb Capacity	Comply___
AXLE, REAR, SINGLE:	{Dana Spicer 17060S} Single Reduction, 17,500-lb Capacity, 190 Wheel Ends Gear Ratio: 5.29	Comply___
CAB:	Conventional 5-Man Crew Cab	Comply___
TIRE, FRONT:	(2) 11R22.5 G661 HSA (GOODYEAR) 497 rev/mile, load range G, 14 ply	Comply___
TIRE, REAR:	(4) 11R22.5 G622 RSD (GOODYEAR) 497 rev/mile, load range G, 14 ply	Comply___
SUSPENSION, RR, SPRING, SINGLE:	Vari-Rate; 20,000-lb Capacity, With 4500 lb Auxiliary Rubber Spring	Comply___
PAINT:	Cab schematic 100GA	Comply___
	Location 1: 9219, Winter White (Std)	Comply___
	Chassis schematic N/A	Comply___

Truck & Mounted TMA Spec.

Vehicle Specifications

Description:

- Base Chassis with 195.00 Wheelbase, 84.00 CA, and 75.00 Axle to Frame. Comply____
- TOW HOOK, FRONT (2) Frame Mounted Comply____
- FRAME RAILS High Strength Low Alloy Steel (80,000 PSI Yield); 10.250" x 3.092" x .0375" (260.4mm x 78.5mm x 9.5mm); 427.0" (10846mm) Maximum OAL Comply____
- LICENSE PLATE HOLDER Includes Upper & Lower Mounting Plate Hardware, Mounted in Existing Holes in Front Bumper Comply____
- BUMPER, FRONT, Full Width, Aerodynamic, Steel; 0.142" Material Thickness Comply____

Includes:

- : BUMPER, FRONT Powder Coated Gray (Argent) Color Comply____
- : WHEELBASE RANGE 134" (340cm) Through and Including 197" (500cm) Comply____
- : AXLE, FRONT, NON-DRIVING {Meritor MFS-10-143A} Wide Track, I-Beam Type, 10,000-lb Capacity Comply____

Notes:

- : The following features should be considered when calculating Front GAWR: Front Axles; Front Suspension; Brake System; Brakes; Front Air Cam; Wheels; Tires. Comply____
- SUSPENSION, FRONT, SPRING Parabolic, Taper Leaf; 10,000-lb Capacity; With Shock Absorbers Comply____

Includes:

- : SPRING PINS Rubber Bushings, Maintenance-Free Comply____

Notes:

- : The following features should be considered when calculating Front GAWR: Front Axles; Front Suspension; Brake System; Brakes, Front Air Cam; Wheels; Tires. Comply____
- BRAKE SYSTEM, AIR Dual System for Straight Truck Applications Comply____

Includes:

- : BRAKE LINES Color and Size Coded Nylon Comply____
- : DRAIN VALVE Twist -Type Comply____
- : GAUGE, AIR PRESSURE (2) Air 1 and Air 2 Gauges; Located in Instrument Cluster Comply____

Truck & Mounted TMA Spec.

- : PARKING BRAKE CONTROL Yellow Knob, Located on Instrument Panel Comply____
- : PARKING BRAKE VALVE For Truck Comply____
- : QUICK RELEASE VALVE Bendix on Rear Axle for Spring Brake Release:
1 for 4x2, 2 for 6x4 Comply____
- : SLACK ADJUSTERS, FRONT Automatic Comply____
- : SLACK ADJUSTERS, REAR Automatic Comply____
- : SPRING BRAKE MODULATOR VALVE R-7 for 4x2, SR-7 with relay
valve for 6x4 Comply____

Notes:

- : Front and Rear Dust Shields not Included Comply____
- : Rear Axle is Limited to 19,000-lb GAWR with Code 04091 BRAKE SYSTEM,
AIR and Code 04NCL BRAKES, REAR, AIR CAM Regardless of Axle/
Suspension Ordered. Comply____
- : Rear Axle is Limited to 20,000-lb GAWR with Code 04091 BRAKE SYSTEM,
AIR and Code 04NCG BRAKES, REAR, AIR CAM Regardless of Axle/
Suspension Ordered. Comply____
- : Rear Axle is Limited to 23,000-lb GAWR with Code 04091 BRAKE SYSTEM,
AIR and Standard Rear Air Cam Brakes Regardless of Axle/Suspension Ordered. Comply____

DRAIN VALVE {Bendix DV-2} Automatic; With Heater; for Air Tank Comply____

Includes:

- : DRAIN VALVE Mounted in Wet Tank Comply____

AIR BRAKE ABS {Bendix Anti-Lock Brake System} Full Vehicle Wheel Control
System (4-Channel) Comply____

AIR DRYER {Bendix AD-IP} With Heater Comply____

Includes:

AIR DRYER LOCATION Inside Left Rail, Back of Cab Comply____

Vehicle Specifications

Description:

BRAKE CHAMBERS, FRONT, AXLE {Haldex} 20 Sqn Comply____

BRAKE CHAMBERS, REAR AXLE {Haldex GC3030LHDHO} 30/30 Spring Brake Comply____

Truck & Mounted TMA Spec.

Includes:

- : BREAK CHAMBERS, SPRING (2) Rear Parking; WITH TRUCK BREAKS: All 4x2, 4x4; WITH TRACTOR BREAKS: All 4x2, 4x4; 6x4 & 6x6 with Rear Tandem Axles Less Than 46,000-lb. or GVWR Less Than 54,000-lb. Comply_____

BREAKS, FRONT, AIR CAM S-Cam; 15.0" x 4.0"; Includes 20 Sq. In Long Stroke Brake Chambers. Comply_____

Notes:

- : Front Axle with 14,000-lb GAWR is Limited to 13,200-lb GAWR when used in Conjunction with 15" BRAKES, FRONT, AIR CAM. Comply_____
- : The following features should be considered when calculating Front GAWR: Front Axles; Front Suspension; Brake System; Brakes, Front Air Cam; Wheels; Tires. Comply_____

BRAKES, REAR, AIR CAM S-Cam; 16.5" x 7.0", Includes 30/30 Sq. In. Long Stroke Break Chamber and Spring Actuated Parking Brake Comply_____

Notes:

- : The following should be considered when calculating Front GAWR: Front Axles; Front Suspension; Brake System; Brakes, Front Air Cam; Wheels; Tires. Comply_____

AIR COMPRESSOR {Bendix Tu-Flo 550} 13.2 CFM Capacity Comply_____

STEERING COLUMN Tilting Comply_____

STEERING WHEEL 2-Spoke, 18" Diam.. Black Comply_____

STEERING GEAR {Sheppard HD94} Power Comply_____

EXHAUST SYSTEM Single, Horizontal, After-treatment Device Frame Mounted Right Side Back of Cab, Includes Horizontal Tail Pipe Comply_____

Includes:

- : NOTE: The Horizontal Tailpipe Includes a Temperature Control Device Comply_____

SWITCH, FOR EXHAUST 2 Positon, Lighted & Latching, ON/OFF Type, Mounted in IP, Inhibits Diesel Particulate Filter Regeneration as Long as Switch is in ON Position Comply_____

ELECTRICAL SYSTEM 12-Volt, Standard Equipment Comply_____

Includes:

- : BATTERY BOX Steel Comply_____
- : DATA LINK CONNECTOR For Vehicle Programming and Diagnostics In Cab Comply_____
- : FUSES, ELECTRICAL SAE Blade -Type Comply_____

Truck & Mounted TMA Spec.

- : HAZARD SWITCH Push On/Push Off, Located on Top of Steering Column Cover Comply___
- : HEADLIGHT DIMMER SWITCH Integral with Turn Signal Lever Comply___
- : JUMP START STUD Located on Positive Terminal of Outermost Battery Comply___
- : PARKING LIGHT Integral with Front Turn Signal and Rear Tail Light Comply___
- : STARTER SWITCH Electric, Key Operated Comply___
- : STOP, TURN, TAIL & B/U LIGHTS Dual, Rear, Combination with Reflector Comply___
- : TURN SIGNAL SWITCH Self-Cancelling for Trucks, Manual Cancelling for Tractors, with Lane Change Features Comply___
- : TURN SIGNALS, FRONT Includes Reflectors and Auxiliary Side Turn Signals, Solid State Flashers; Flush Mounted Comply___
- : WINDSHIELD WIPER SWITCH 2-Speed with Wash and Intermittent Feature (5 Pre-Set Delays), Integral with Turn Signal Lever Comply___
- : WINDSHIELD WIPERS Single Motor, Electric, Cowl Mounted Comply___
- : WIRING, CHASSIS Color Coded and Continuously Numbered Comply___

POWER SOURCE Cigar Type Receptacle without Plug and Cord. Comply___

ALTERNATOR {Leece-Neville AVI160P2013} Brush Type; 12 Volt 160 Amp. Capacity, Pad Mount, With Remote Sense Comply___

BODY BUILDER WIRING Back of Standard Cab at Left of Frame or Under Extended or Crew Cab at Left Frame; Includes Sealed Connectors for Tail/Amber Turn /Marker/ Backup/Accessory Power/Ground and Sealed Connector for Stop/Turn ALL LED Comply___

(2) LED 360° Strobe lights mounted Drivers and Passengers Door Mirrors and (2) Oval LED lights mounted on rear of truck bed visibly when Attenuator is in operation. Comply___

A PA System mounted in the cab with a speaker mounted outside of truck affixed to the body back board. Comply___

BATTERY SYSTEM : Maintenance-Free (2) 12-Volt 1300CCA Total Comply___

Vehicle Specifications

Description:

RADIO AM/FM/WB/ Clock/ 3MM/Auxiliary Input, with Multiple Speakers, With CD Player, Blue Tooth for Hands Free Comply___

BACK-UP ALARM Electric, 107 dBA Comply___

STOP, TURN TAIL & B/U LIGHTS {Truck Lite} Super 44, With LED Lamps for Stop, Turn & Tail Lights and Truck Lite Super 40 Lamps for Backup lights, Less Power Module, Less Rubber Mount, Includes Separate Rear Reflectors Comply___

HORN, ELECTRIC Disc Style Comply___

Truck & Mounted TMA Spec.

HORN, AIR Black, Single Trumpet, Air Solenoid Operated	Comply____
SPECIAL WIRING HARNESS, BODY for Chassis, With 6' Additional Length to Accommodate Drop Frame Beverage Body Application	Comply____
HEADLIGHTS Halogen; Composite Aero Design for Two Light System; Includes Daytime Running Lights	Comply____
CLEARANCE/MARKER LIGHTS (5) {Truck Lite} Amber LED Lights, Flush Mounted on Cab or Sunshade	Comply____
HEADLIGHTS ON W/WIPERS Headlights Will Automatically Turn on if Windshield Wipers are turned on	Comply____
STARTING MOTOR {Delco Remy 38MT Type 300} 12 Volt; Less Thermal Over-Crank Protection	Comply____
INDICATOR, LOW COOLANT LEVEL With Audible Alarm	Comply____
CIRCUIT BREAKERS Manual-Reset (Main Panel) SAE Type III With Trip Indicators, Replaces All Fuses Except For 5-Amp Fuses	Comply____
TURN SIGNALS, FRONT LED, Includes LED Side Marker Lights, Mounted on Fender	Comply____
GRILLE Chrome	Comply____
FRONT END Tilting, Fiberglass, With Three Piece Construction	Comply____
PAINT SCHEMATIC, PT-1 Single Color, Design 100	Comply____

Includes:

: PAINT SCHEMATIC ID LETTERS "GA"	Comply____
PAINT TYPE Base Coat/Clear Coat, 1-2 Tone	Comply____
SPECIAL RATING, GVWR Limited to 25,999-lb GVWR	Comply____
CLUTCH Omit Item (Clutch & Control)	Comply____
ENGINE, DIESEL, 245 HP @ 2200 RPM, 660 lb-ft Torque @ 1300 RPM, 2400 RPM Governed Speed, 245 Peak HP (Max)	Comply____

Includes:

: AIR COMPRESSOR AIR SUPPLY LINE Naturally-Aspirated (Air Brake Chassis Only)	Comply____
: ANTI-FREEZE Red Shell Rotella Extended Life Coolant; -40 Degrees F/-40 Degrees C; for MaxxFace and Navistar Engines	Comply____

Truck & Mounted TMA Spec.

: COLD STARTING EQUIPMENT Intake Manifold Electric Grid Heater with Engine ECM Control	Comply____
: CRUISE CONTROL Electronic; Controls Integral to Steering Wheel	Comply____
: ENGINE OIL DRAIN PLUG Magnetic	Comply____
: ENGINE SHUTDOWN Electric; Key Operated	Comply____
: FUEL FILTER Included with Fuel/Water Separator	Comply____
: FUEL/WATER SEPARATOR Fuel/Water Separator and Fuel Filter in a Single Assembly; With Water-in Fuel Sensor; Engine Mounted	Comply____
: GOVERNOR Electronic	Comply____
: OIL FILTER, ENGINE Spin-On Type	Comply____
: WET TYPE CYLINDER SLEEVES	Comply____

Notes:

Recommended Code 12THT when using front mount obstructions (winches, cones, reels, etc.) that restrict air flow through the radiator. Comply____

FAN DRIVE {Borg-Warner SA85} Viscous Type, Screw On Comply____

Includes: FAN Nylon Comply____

Vehicle Specifications

Description:

RADIATOR Aluminum; 2-Row, Cross Flow, Over Under System, 1045 SqIn Louvered, With 302 SqIn CAC, With 369 SqIn LTR, Includes In-Tank Transmission Oil Cooler Comply____

Includes:

: DEARATION SYSTEM with Surge Tank	Comply____
: HOSE CLAMS, RADIATOR HOSES Gates Shrink Band Type; Thermoplastic Coolant Hose Clamps	Comply____
: RADIATOR HOSES Premium, Rubber	Comply____

FEDERAL EMISSIONS EPA, OBD and GHG Certified for Calendar Year 2016 Comply____

AIR CLEANER With Service Protection Element Comply____

Includes:

: GAUGE, AIR CLEANER RESTRICTION Air Cleaner Mounted	Comply____
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THROTTLE, HAND CONTROL Engine Speed Control; Electronic, Stationary, Variable Speed; Mounted on Steering Wheel Comply____

Truck & Mounted TMA Spec.

ENGINE CONTROL, REMOTE MOUNTED Provision for; Includes Wiring for Body Builder Installation of PTO Controls; With Ignition Switch Control for Emissions Electronic Engines Comply_____

FAN DRIVE SPECIAL EFFECTS Fan Cooling Ring with Fan Shroud Effects, Engine Mounted Comply_____

EMISSION COMPLIANCE Federal, Does Not Comply with California Clean Air Idle Regulations Comply_____

TRANSMISSION, AUTOMATIC {Allison 2500_RDS_P} 5th Generation Controls; Wide Ratio, 6 Speed, with Double Overdrive; with PTO Provision, Less Retarder, with 33,000-lb GVW & GCW Max Comply_____

Includes:

- : OIL FILTER, TRANSMISSION Mounted on Transmission Comply_____
- : TRANSMISSION OIL PAN Magnet in Oil Pan Comply_____

TRANSMISSION OIL Synthetic; 20 thru 28 Pints Comply_____

SHIFT CONTROL PARAMETERS Allison 1000 or 2000 Series Transmissions, 5th Generation Controls, Performance Programming Comply_____

AXLE, REAR, SINGLE {Dana Spicer 17060S} Single Reduction, 17,500-lb Capacity, 190 Wheel Ends. Gear Ratio: 5.29 Comply_____

Includes:

- : REAR AXLE DRAIN PLUG (1) Magnetic, For Single Rear Axle Comply_____

Notes:

- : The following feature should be considered when calculating Rear GAWR: Rear Axles; Rear Suspension; Brake System; Brakes, Rear Air Cam, Brake Shoes, Rear; Special Rating, GAWR; Wheels; Tires. Comply_____
- : When Specifying Axle Ratio, Check Performance Guidelines and TCAPE for Startability and Performance Comply_____

SUSPENSION, RR, SPRING, SINGLE Vari-Rate; 20,000-lb Capacity, With 4500 Auxiliary Rubber Spring Comply_____

Notes:

- : The following features should be considered when calculating Rear GAWR: Rear Axles; Rear Suspension; Brake System; Brakes, Rear Air Cam, Brake Shoes, Rear; Special Rating; Wheels; Tires. Comply_____

Truck & Mounted TMA Spec.

FUEL TANK Top Draw; D Style, Non Polished Aluminum, 16" Tank Depth, 100 U.S. Gal., 189 L Capacity, with Quick Connect Outlet, Mounted Right Side, Under Cab Comply_____

CAB Conventional 6-Man Crew Cab Comply_____

Includes:

- : ARM REST (2) Molded Plastic; One Each Door Comply_____
- : CLEARANCE/MARKER LIGHTS (5) Flush Mounted Comply_____
- : COAT HOOK, CAB Located on Rear Wall, Centered Above Rear Window Comply_____
- : CUP HOLDERS Two Cup Holders, Located in Lower Center of Instrument Panel Comply_____
- : DOME LIGHT, CAB Rectangular, Door Activated and Push On-Off at Light Lens, Timed Theater Dimming, Integral to Console, Center Mounted Comply_____
- : GLASS, ALL WINDOWS Tinted Comply_____
- : GRAB HANDLE, CAB INTERIOR (1) "A" Pillar Mounted, Passenger Side Comply_____
- : POWER WINDOWS AND DOOR LOCKS Comply_____

Truck & Mounted TMA Spec.

Vehicle Specifications

Description:

- : GRAB HANDLE, CAB INTERIOR (2) Front of "B" Pillar Mounted, One Each Side Comply____
- : GRAB HANDLE, CAB INTERIOR (4) Two Each Side, Rear Door Mounted at Hinge Side and "C" Pillar Mounted Comply____
- : INTERIOR SHEET METAL Upper Door (Above Window Ledge) Painted Exterior Color Comply____
- : STEP (8) TWO Steps Per Door Comply____

Notes:

- 43.9" CA Loss Comply____
- GAUGE CLUSTER English With English Electronic Speedometer Comply____

Includes:

- : GAUGE CLUSTER (5) Engine Oil Pressure (Electronic), Water Temperature (Electronic), Fuel (Electronic), Tachometer (Electronic), Voltmeter Comply____
- : ODOMETER DISPLAY, Miles, Trip Miles, Engine Hours, Trip Hours, Fault Code Readout Comply____
- : WARNING SYSTEM Low Fuel, Low Oil Pressure, High Engine Coolant Temp, and Low Battery Voltage (Visual and Audible) Comply____

GAUGE, OIL TEMP, ALLISON TRAN Comply____

IP CLUSTER DISPLAY On Board Diagnostics Display of Fault Codes in Gauge Cluster Comply____

SEAT, DRIVER : Air Suspension, High Back With Integral Headrest, Cloth, Isolator, 1 Chamber Lumbar, 2 Position Front Cushion Adjust, -3 to +14 Degree Back Angle Adjust Comply____

Includes:

- : SEAT BELT 3-Point, Lap and Shoulder Belt Type Comply____

MIRRORS (2) {Lang Mekra} Styled; Rectangular, 7.09" x 15.75" & Integral Convex Both Sides, 102" Inside Spacing, Breakaway Type, Thermostatically Controlled Heated Heads, Clearance Lights LED, Bright Heads and Brackets Comply____

SEAT, TWO BUCKET SEATS {National} Fixed Back, Integrated Headrest in Both Occupant Positons, Vinyl , Less Under Seat Storage Compartment Comply____

SEAT, REAR{National} BENCH; Full Width; Vinyl, With Fixed Back and Two Integral Outboard Headrests

AIR CONDITIONER {Blend-Air} With Integral Heater & Defroster Comply____

Truck & Mounted TMA Spec.

Includes:

- : HEATER HOSES Premium Comply____
- : HOSE CLAMPS, HEATER HOSE Mubea Constant Tension Clamps Comply____
- : REFRIGERANT Hydrofluorocarbon HFC-134A Comply____

INSTRUMENT PANEL Center Section, Flat Panel Comply____

CAB INTERIOR TRIM Deluxe; for Crew Cab Comply____

Includes:

- : "A" Pillar Cover Molded Plastic Comply____
- : CAB INTERIOR TRIM PANELS Cloth Covered Molded Plastic, Full Height; All Exposed Interior Sheet Metal is Covered Except for the Following: with a Two-Man Passenger Seat or with a Full Bench Seat the Back Panel is Completely Void of Covering Comply____
- : CONSOLE, OVERHEAD Molded Plastic; With Dual Storage Pockets with Retainer Nets and CB Radio Pocket (**INSTALL TWO WAY RADIO STATE SUPPLIED**) Comply____
- : DOOR TRIM PANELS Molded Plastic; Driver and Passenger Doors Comply____
- : FLOOR COVERING Rubber, Black Comply____
- : HEADLINER Soft Padded Cloth Comply____
- : INSTRUMENT PANEL TRIM Molded Plastic with Black Center Section Comply____
- : STORAGE POCKET, DOOR (1) Molded Plastic. Full-Length; Driver Door Comply____
- : SUN VISOR (2) Padded Vinyl with Driver Side Toll Ticket Strap, Integral to Console Comply____

CAB REAR SUSPENSION Air Bag Type

WHEELS, FRONT {Accuride} DISC; 22.5" Painted Steel, 10-Stud (285.75MM BC)
Hub Piloted, 5 Hand Hole, Flanged Nut, Metric Mount, 7.50 DC Rims; with Steel Hubs. Comply____

Includes:

PAINT IDENTITY, FRONT WHEELS White Comply____

Vehicle Specifications

Description:

Notes:

Compatible Tire Sizes: 11R22.5 Comply____

WHEELS, REAR{Accuride} DUAL DISC; 22.5" Painted Steel, 10-Stud (285.75MM BC)
Hub Piloted, 5 Hand Hole, Flanged Nut, Metric Mount, 7.50 DC Rims; With Steel Hubs Comply____

Truck & Mounted TMA Spec.

Includes:

: PAINT IDENTITY, REAR WHEELS White Comply_____

Notes:

: Compatible Tire Sizes: 11R22.5 Comply_____

WHEELS SEALS, FRONT : Oil-Lubricated Wheel Bearings Comply_____

WHEEL BEARING, FRONT, LUBE {EmGard 50W} Synthetic Oil Comply_____

(4) TIRE, REAR 11R22.5 G622 RSD (GOODYEAR) 497 rev/mile, load range G, 14 ply Comply_____

(2) TIRE, FRONT 11R22.5 G661 HSA (GOODYEAR) 497 rev/mile load range G, 14 ply Comply_____

Services Section:

3 Year Warrantanty

INSTALL TWO WAY RADIO SUPPLIED BY (RIDOT)

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

ALL BIDS SUBMITTED MUST BE IN DUPLICATE

Truck & Mounted TMA Spec.

SPECIFICATION FOR TRUCK MOUNTED ATTENUATOR MODEL TL3 WITH TWO 90° TILT FOR TRANSPORT MODES OR EQUAL

SCOPE

1. Product

The specifications describe a truck mounted attenuator (TMA) which is mounted to a shadow vehicle for purposes of protecting the work crew in front of the shadow vehicle and protecting the motorist that might drive into the lane closed off by the shadow vehicle. Shadow vehicles should be trucks in a weight range of 12,000-lbs to 25,200-lbs. And preferably 20,000 lbs., which is the weight of the truck tested for certification.

Comply_____

The Scorpion TMA 10,000 is available in three basic models.

- a. Model A: Is a TL-2 device tested a 70 km/hr., figures 1 & 2 for use on trucks needing low speed protection or as a replacement cartridge for trucks already equipped with a TL-2 attenuator cartridge.

Comply_____

- b. Model B: Uses a strut section in addition to the TRL-2 cartridge section to achieve a higher speed device, figures 3 & 4. The rear cartridge section has a hinged hydraulic coupling with fluid on both sides of the cylinders and solenoid valve lockouts. The rear cartridge can be raised to 90° where a scissors lock engages to lock the cartridge in the 90° position. An operators switch has an up and down button and the down button releases the lockout and lowers the cartridge. The release of the up or down button stops the cartridge at that angle. The Model B has a 10° tilt at the strut to allow clearance at driveways fig. 5. During construction when the shadow vehicle truck has to drive in and out of sloped areas such as the drainage median or a driveway, the strut can be temporarily raised 10° to travel over this terrain. In the normal transport mode, the rear cartridge is elevated and locked at 90° for the Model B.

Comply_____

- c. Model C: Uses a 90° hydraulic tilt attached to the strut, fig. 6. This allows the Model C system to raise the strut to the vertical position with the cartridge in a horizontal position over the top of the truck for normal transport mode.

Comply_____

The Scorpion MA 10,000 is mounted to a truck at a road clearance height of 12" +/-1". In the deployed mode shown in fig. 7, the system extends 13' to the rear of the truck.

Comply_____

Truck & Mounted TMA Spec.

2. The Product Specification

Construction – The Scorpion TMA 10,000 consists of three basic components. A steel backup is attached to the rear of the truck with an all-steel support structure fig. 8. An all aluminum tube frame extends out 13' from the backup. Inside the tube frame is a series of four aluminum boxes filled with energy absorbing boxes filled with energy absorbing aluminum honeycombing fig.9.

Comply_____

Materials – The backup support structure uses all steel, angles, plates, and C-channels welded using wire feed mix welding. The tube frame construction uses all aluminum tube and plate construction welded using wire feed mix welding on both sides of the tube/plate interface. The aluminum boxes use closed end-sealing rivets for joining the sheet metal. The aluminum honeycomb is joined to the aluminum face sheets using oven cured epoxy resin.

Aluminum tubing – 6063 Aluminum T4 Comply_____

Aluminum plate – 5052 Aluminum 0.250 “ Comply_____

Aluminum sheet – 5052 Aluminum 0.062” Comply_____

Aluminum honeycomb – Commercial Grade 1” and ½” cell size Comply_____

Aluminum rivets – 3/16” sealed Comply_____

Backup bolts – 1” and 7/8” bolts grade #5 Comply_____

3. Dimensions and Weights

The outside dimensions of the crushable attenuator portion are to be 152” long plus or minus one inch, 95” plus or minus one inch wide, and 25” plus or minus one inch deep. The cantilevered crushable attenuator portion shall weigh a maximum of 1,375 lbs.

Comply_____

Note: In the “up” or travel position, the top of the TMA shall be a maximum of 10’8” from the ground (as installed on the truck). The lowest portion of the unit in the travel position shall not be less than 12” plus or minus one inch from the ground.

Comply_____

4. Performance Requirement

The attenuator is to have been tested and certified to NCHRP 350 for test level 3 tests: 3-50, 3-51, 3-52, and 3-53. It is required that in order to be considered responsive for this bid requirement, that all angular impact testing be successfully completed and federally certified to meet ALL NCHRP 350 test level 3 requirements.

Comply_____

Truck & Mounted TMA Spec.

The cartridge and strut sections of the attenuator shall be constructed with two structurally redirective side members. The side members are to be made of two 4 ½" diameter rolled and curved aluminum tubes having a 0.30", wall thickness. The redirective structural aluminum tube members shall protect the full truck width and have a side-to-side width of 95" plus or minus one inch.

Comply_____

5. Structural Steel Backup

The structural steel truck mounting backup; the truck support hardware and all hydraulic components shall be identical for the TL-2 and TL-3 models. Upgrading from the TL-2 to the TL-3 attenuator shall be accomplished by adding the strut attenuator to the cartridge attenuator system without changing the backup, support structure, or hydraulics.

Comply_____

6. Replacement Cartridge and Strut

The cartridge and strut attenuator sections shall be constructed with progressively collapsing modular components, which can be replaced, in successive stages depending on the accident severity; the first cartridge attenuator module shall provide a 5 mph bumper, the second cartridge attenuator module shall provide 45 mph or 70 kph cushion for light 1800 lb. vehicle, the third cartridge attenuator module shall provide a 62.5 mph or 100 kph cushion for the light 1800 lb. vehicle, the fourth strut attenuator module working in concert with the cartridge module shall provide a 62.5 mph or 100 kph cushion for heavy 4400 lb. vehicles.

Comply_____

Product Specifications Continued

7. Hydraulic 90° and 180 ° Tilt: Power Up and Down Feature

Hydraulic system shall have hydraulic fluid on both sides on the cylinders to prevent corrosion and enhance user safety. By hydraulically powering the TMA down and hydraulically linking it in the down or use position, it will eliminate the possibility of an impacting vehicle under riding the TMA in the use of deployed position.

Comply_____

Contract Terms and Conditions

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Terms and Conditions

BID STANDARD TERMS AND CONDITIONS

TERMS AND CONDITIONS FOR THIS BID

PURCHASE AGREEMENT BID

BIDDING (a) A single price shall be quoted for each item against which a proposal is submitted. This price will be the maximum in effect during the agreement period. Any price decline at the manufacturer's level shall be reflected in a reduction of the agreement price to the State. (b) Quantities, if any, are estimated only. The agreement shall cover the actual quantities ordering during the period. Deliveries will be billed at the single, firm, awarded unit price quoted regardless of the quantities ordered. (c) Bid price is net F.O.B. destination and shall include inside delivery at no extra cost. (d) Bids for single items and/or a small percentage of total items listed, may, at the State's sole option, be rejected as being non-responsive to the intent of this request. **ORDERING** (a) The User Agency(s) will submit individual orders for the various items and various quantities as may be required during the agreement period. (b) Exception - Regardless of any agreement resulting from this bid, the State reserves the right to solicit prices separately for any extra large requirements for delivery to specific destinations.

Mailing Address for Bid Proposals issued by the State of Rhode Island, Division of Purchases:

All Bid Proposals must be submitted to the following address:

State of Rhode Island
Department of Administration
Division of Purchases, 2nd Floor
One Capitol Hill
Providence, RI 02908

DELIVERY PER AGENCY

DELIVERY OF GOODS OR SERVICES AS REQUESTED BY AGENCY.

PURCHASE AGREEMENT BID

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