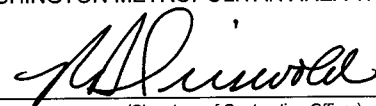




WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
Office of Procurement & Materials
600 Fifth Street, NW , Washington DC 20001

AMENDMENT OF SOLICITATION / MODIFICATION OF CONTRACT

1. AMENDMENT/MODIFICATION Amendment 03		2. EFFECTIVE DATE SAME AS BOX 17	
3. ISSUED BY PURCHASING SECTION George W. Fletcher Contract Administrator Office of Procurement & Materials		4. ADMINISTERED BY (If other than block 3)	
5. CONTRACTOR NAME AND ADDRESS		6. FORM TYPE (Check only one) <input checked="" type="checkbox"/> 03 AMENDMENT OF SOLICITATION NO. IFB ES9113/GWF . DATE: Same as box 17 (see block 7) MODIFICATION OF CONTRACT/ORDER NO. _____ Date: _____ (See block 9)	
7. THIS BLOCK APPLIES ONLY TO AMENDMENTS OF SOLICITATIONS The above numbered solicitation is amended as set forth in block 10. The hour and date specified for receipt of Offers <input checked="" type="checkbox"/> is extended, is not extended. Offerors must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation, or as amended, by one of the following methods; (a) By signing and returning <u>1</u> copies of this amendment; (b) by acknowledging receipt of this amendment on each copy of the offer submitted; or (c) by separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE ISSUING OFFICE PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If, by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided such telegram makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.			
8. ACCOUNTING AND APPROPRIATION DATA (If required)			
9. THIS BLOCK APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS (a) _____ This Change Order is issued pursuant to _____ The Changes set forth in block 10 are made to the above numbered contract/order. (b) _____ The above numbered contract/order is modified to reflect the administrative changes (such as changes in paying office, appropriation data, etc.) set forth in block 10. (c) _____ This Supplemental Agreement is entered into pursuant to authority of _____ It modifies the above numbered contract as set forth in block 10.			
10. DESCRIPTION OF AMENDMENT/MODIFICATION 1) The technical specifications have been revised and are attached to this amendment. All bids must comply with the new specifications issued 6/12/09. 2) The bid open date has been extended to July 1, 2009. <p style="text-align: center;">“END OF AMENDMENT 03”</p> <p>“Except as provided herein, all terms and conditions of the document referenced in block 6, as heretofore changed, remain unchanged and in full force and effect.”</p>			
11. _____ CONTRACTOR/OFFEROR IS REQUIRED TO SIGN THIS AMENDMENT/MODIFICATION AND RETURN _____ COPIES TO ISSUING OFFICE.		_____ CONTRACTOR/OFFEROR IS NOT REQUIRED TO SIGN THIS DOCUMENT	
12. NAME OF CONTRACTOR/OFFICE BY _____ <small>(Signature of person authorized to sign)</small>		15. WASHINGTON METROPOLITAN AREA TRANSIT BY  <small>(Signature of Contracting Officer)</small>	
13. NAME AND TITLE OF SIGNER (Type or print)	14. DATE SIGNED	16. NAME OF CONTRACTING OFFICER (Type or print) Raymond B. Griswold	17. DATE SIGNED 6/12/09

June 12, 2009

IFB ES9113/GWF

SEE AMENDMENT #03 SPECIFICATIONS REVISED 6/12/2009

WMATA

Procurement of

Maintenance And Way

Equipment

IFB NO. ES-9113/GWF

Hi-Rail Lubrication Maintenance Equipment

“VEHICLE SPECIFICATIONS”

HI-RAIL LUBRICATION MAINTENANCE EQUIPMENT

WMATA

VEHICLE SPECIFICATIONS

Type of Vehicle: 25,999 GVWR 3-Man Maintenance Vehicle with Welder, Compressor, Crane and Railgear.

Specifics - This vehicle is to be used in a railroad operation and must meet this specific end use. The vehicle shall comply with all applicable specifications, standards, codes and regulations for the type specified. All specified components and equipment refer to minimum requirements. This vehicle shall comply with the following minimum requirements.

NOTE: HD or Heavy Duty denotes one level above standard unless otherwise specified. Vendor to supply data to support what constitutes HD and what is the manufacturer's standard.

- I. **BASIC DESCRIPTION** - Fuel-efficient vehicle with a HD Platform body that measures approximately 152 inches long X 94 inches wide with a welder and railgear. Intended payload must include three (3) people (800 lbs.) and a full fuel tank.

- II. **GENERAL SPECIFICATION:**

Various general specifications required for proposal compliance on appropriate vehicles.

- A. All craftsmanship shall be of the highest degree and will be subject to periodic inspection during fabrication and assembly.
- B. Chassis and equipment must be equipped with all-standard items and features, unless upgraded or deleted by this specification.
- C. Upon submission of bid, vendors shall supply technical data and manufacturer's literature containing the specifications for all specialized equipment and options added or proposed for this vehicle.
- D. Vehicle must comply with Virginia, Maryland and DC emission standards.
- E. Vehicle cargo capacity may not be less than specification. Weight analysis must be performed and must show the weight of all components and distribution between front and rear axles.

- F. Each completed vehicle type must be furnished with a certified weight certificate showing:
 - 1. Actual weight on front axle.
 - 2. Actual weight on rear axle.
 - 3. Total weight of completed vehicle.
- G. The vendor is to supply a layout-drawing (to scale) showing the component placement on the completed vehicle. Drawing must also show approach angle, break-over angle, departure angle, and Obstruction Clearances. Drawing is to be submitted as part of the submission package.
- H. Warranty to be completed and supplied at time of delivery. Warranty on vehicle and components will start at time of in-service.
- I. The vehicle Manufactures Certificate of Origin to be reassigned at delivery as follows:

WMATA

2250 26th Street

Washington, DC 20018

- J. Completed hirail vehicles must conform to all system clearances and track conditions. **Refer to WMATA supplied diagrams or contact The WMATA TRACK Dept for additional information.**
- K. All fluids, with the exception of fuel, shall be checked and topped off if necessary, prior to delivery. Prime bidder shall be responsible for compliance.
- L. Supply four-(4) complete sets of tested keys for each vehicle.

1.0 SCOPE

The Contractor shall deliver a new, current model year International 7300 series or WMATA approved equal, FLAT BED TRUCK, 25,999 GVWR, diesel powered, 4 x 2, with crane, lift gate hi-rail attachment and welder for use in summer operating temperatures one hundred (100) degrees Fahrenheit, and low winter operating temperatures zero (0) degrees Fahrenheit. This unit is required to provide the capacity to carry tools, special equipment, and large system components, to and from the job site. The hi-rail attachment permits the carrying of crew and materials on the rail of the WMATA Rail System, including tunnels from the nearest roadway. Furnished complete with factory installed standard equipment and accessories listed below (whether standard or optional equipment).

2.0 REFERENCE DOCUMENTATION

SAE – J 336, Sound Level For Truck Cab Interior

SAE – J 1292, Automobile, Truck, Truck-Tractor, Trailer, and Motor Coach Wiring

SAE – J 293, Vehicle Grade Parking Performance Requirements

SAE – J 560, Seven Conductor Electrical Connector fir Truck-Trailer Jumper Cable

SAE – J 369, Flammability of Polymeric Interior Materials-Horizontal Test Method

ASTM D-5132, Standard Test Method for Horizontal Burning Rate of Polymeric Materials used in Occupant Compartments of Motor Vehicles

FMVSS 301, Fuel System Integrity

FMVSS 302, Flammability of Interior Materials

VKM-001, Clearance Reference Drawings

3.0 DEFINITIONS I ABBREVIATIONS

SAE – Society of Automotive Engineers

ASTM – American Society For Testing and Materials

FMVSS – Federal Motor Vehicle Safety Standards

GVW – Gross Vehicle Weight

WMATA – Washington Metropolitan Area Transit Authority

GVWR – Gross Vehicle Weight Rating

DBA – Decibels, Unit of Sound Measurement

VDC – Volts Direct Current

OSHA – Occupational Health and Safety Administration

DOT – Department of Transportation

ICC – Interstate Commerce Commission

4.0 REQUIREMENTS

- 4.1 The equipment furnished under these specifications shall be new and of the latest type in production at the time of delivery. Manufacturer shall not use components known to be obsolete, nearing the end of production, or out of production.
- A. Design, construction, and materials used in the equipment, repair parts, and accessories, shall assure that the unit will function reliably and efficiently in sustained operation, under hard usage.
 - B. Materials shall be suitable for the intended service and shall be resistant to rust, corrosion, wear, and the harmful effects of dust, sunlight and water.
 - C. The design shall provide for ease of service, replacement, and adjustment of parts and accessories with minimum disturbance to other elements.
 - D. The equipment as installed, used, and maintained, according to the vendor's manuals and training program, shall meet the requirements of OSHA.
 - E. Caution decals and warning lights shall be provided for personnel and public safety, where the equipment can be damaged by improper operations, adjustment maintenance. Decals, alerting the operator and WMATA personnel to the proximity of the high voltage wires must be prominently displayed.
 - F. Construction and assembly of the unit and appurtenances shall be in accordance with approved manufacturer's drawings.
 - G. All metal components shall be free from burrs and sharp edges.
 - H. Dealership logos shall not be attached to any part of the unit.
 - I. Design and construction shall be such that the need of special equipment for maintenance is kept to a minimum. Any special equipment required shall be supplied with the equipment. Special equipment is defined as that which is not normally available through commercial channels.
 - J. The equipment shall be free from defects. These shall include, but not be limited to, incomplete welds, rust, cracks, and other defects that could impair its operation or serviceability.

- K. The vehicle shall comply fully with all applicable State and local regulations in effect at the time of its manufacture; also all FMVSS and S.A.E. Standards and recommended practices shall be followed wherever applicable.

4.2 Weight Rating:

GVWR: 25,999 Pounds, and not to exceed individual axle weight.

4.3 Engine:

- A. Diesel, SAE minimum net horsepower of two hundred and twenty-five (225) hp.
- B. Dry-type air cleaner.
- C. Replaceable full flow spin-on cartridge oil filter and spin-on fuel filter(s).
- D. In line water separator.
- E. Largest fuel tank available.

4.4 Transmission:

The unit shall be equipped with an Allison model 3500RDS 5-speed automatic transmission designed for GVW rating of the unit. The transmission shall use a torque converter and be calibrated for a diesel application. Minimum of five-(5) forward, and one being overdrive, and one (1) reverse speeds. Must include PTO provisions. Provide automatic transmission oil cooler.

4.5 Steering:

Integral power type steering. Maximum outside turning radius, wall to wall, sixty-three (63) feet.

4.6 Front Axle:

Ten thousand (10,000) pounds minimum, with multi leaf spring suspension with heavy-duty shock absorbers.

4.7 Rear Axle

Seventeen thousand five hundred (17,500) pounds minimum, with multi leaf main springs with multi-leaf suspension auxiliary.

4.8 Service Brakes

NOTE: Must conform with the FRA 49CFR, Part 214, Section 214.525 regulations (or the most recent FRA regulation) for safe braking capabilities.

4.8.1 Brakes system shall be Air, ABS. Front shall be 15 x 4; rear shall be 16.5 x 7. The Slack Adjusters shall be Haldex, automatic.

4.8.1 Parking Brake shall be standard OEM.

4.8.2 Air Dryer shall be a Meritor system saver or approved equal; shall include moisture ejector. Install on inside of frame.

4.8.3 Compressor shall be a 13.2 cfm.

4.8.4 Glad Hands - Supply trailer brake glad hands at rear of chassis, controlled by foot pedal and by separate hand valve. Must be recessed behind rear bumper for maximum protection. Emergency shall be Sloan Swing Away; part #441069; Service shall be Sloan Swing Away; part #441070

4.9 Parking Brake System:

The parking brake system, shall be capable of being operated independently of the service brake, and be of sufficient design to hold the weight of a fully loaded unit with a dead engine on a five-(5) percent grade and comply with SAE J-293.

4.10 Tires:

Tires (tubeless, radial) and wheels, shall be sized to properly handle the maximum rating, sized and spaced to provide proper traction for the operation of the unit over a curve two hundred fifty (250) foot radius, using the hi-rail attachment in over the rail configuration. Include one full size spare tire and wheel, of equal size and rating to the other tires.

4.11 Chassis:

Minimum chassis specifications; wheelbase minimum one hundred fifty two (152") inches. Steel frame to carry all options. Minimum cab to axle eighty four (84") inches with sixty three (63") after frame. Minimum one hundred thousand (120,000) PSI frame rails. Must meet body requirement.

- A. Jacking Points Install front and rear of reinforced jacking points at front and rear railgear mounting locations for re-railing the vehicle. Chassis must include front and rear jacking points, using rear frame extensions and front reinforced railgear mounting for use with the re-railing equipment.
- B. Towing Eyes Front and rear reinforced tow plates with 2 1/16" towing eyes. The tow plates shall be centered 14" +1/2" from the top of the running rail as measured with new wheels. A 2" pin and ball lock will be provided for each tow plate, and shall be secured to bumper to the prevent loss. **The tow plates must not interfere with the re-railing equipment.**
- C. Tow Bar - Include one-(1) adjustable tow bar for emergency rescue; Model RST-STB2. Tow bar must include convenient storage brackets on the vehicle. The tow bar must be properly sized and compatible with the tow plates both on this vehicle and on the rescue vehicle.
- D. Rear Vision System shall consist of a camera, TST/Rail Tek model RTOC-100 or approved equal, mounted in a protected area in the rear channel of the body and a monitor, TST/Rail Tek model RTLKM-600CS or approved equal; mounted on the cab dash for the best possible drivers line-of-sight. All cables and wiring shall be routed through conduit. The main power switch shall be located on the Rail Tek control panel.
- E. Emergency Power Pack - Install in an enclosed vented compartment. Power unit shall supply hydraulic power to railgear and crane in the event of engine failure.

4.12 Engine Cooling System:

Heavy-duty large capacity radiator, and shall be filled with manufacturer's approved antifreeze solution, that provides protection to at least minus thirty (-30) degrees Fahrenheit.

4.13 Electrical System:

- A. Direct electric starting system. Two batteries, which shall have a minimum rating each of nine hundred twenty five (925) CCA at zero (0) degrees. Heavy-duty alternator, with integral voltage regulator, shall be a brushless type, minimum of one hundred eighty-five (185) amps.
- B. The lighting system shall meet the current Federal and State laws and/or regulations and will include, backup lights, marker lights/reflectors, clearance lights, front and rear turn signals, parking lights, tail/stop lights, hazard warning lights, cargo area lamps, halogen sealed beam headlights. Maximum use of exterior LED lighting.
- C. A railroad lighting package is to be installed. This includes a set of halogen sealed beam head lights mounted on the rear and a set of stoplights mounted on the front. Light wired to a separate off/on switch in cab. One additional light will be installed at the operation station of both the front and rear rail gear.

4.14 Engine Exhaust System:

A catalytic type stainless steel permanent catalyst exhaust conditioner shall be supplied as part of the engine exhaust system. Engine exhaust conditioner shall meet the requirements of the United States Department of Labor, Mine Safety and Health Administration, 30 CFR part 32 (formerly Schedule 24) Mobile Diesel Powered Equipment for Non-Coal Mines for tunnel and mine operations. The exhaust system shall consist of a horizontal muffler/conditioner and a vertical exhaust pipe. The exhaust system shall not impinge on any piping, tubing, electrical conduit or wiring of the unit, or equipment pulled by the unit.

4.15 Cab:

Cab shall be of standard seating for a minimum of three-(3). The following are to be installed: heating and air conditioning system, HD vinyl interior, bench seat, seat belts for three-(3) (belts to be orange), floor mats in lieu of carpet, light and convenience group, headliner and insulation package, AM/FM stereo with clock, West Coast type mirrors shall be heated and power both sides with convex section at bottom of each mirror, left and right side sun visors,

interval windshield wipers, tinted glass on all windows, heavy duty running boards, and grab handles both sides. Upfitter must install additional access handles and steps on both curbside and streetside for on rail application.

4.16 Bed:

- A. Platform body one hundred fifty-two inches (152") by minimum ninety-four inches (94") inches wide with a minimum four (4") inch frame out rails, welded seams, steel tread plate floor three-sixteen (3/16") thick non-slip additive.
- B. Bulkhead and interlocking sides minimum thirty-six (36") high with wire mesh window. Mount two (2) work light six (6") inch twelve (12) volts running lights on top of bulkhead facing to the rear of body. Platform reinforced for Crane – street side. Install mudguards and flaps to protect equipment.
- C. Bed will have storage and holding compartment for Oxy/Act tanks.

4.17 Crane:

Crane shall be a Maxi-lift, Model 160, or WMATA approved equal. The crane shall be fully hydraulic activated, operating with vehicles PTO driven system through a diverter valve. The hydraulic extension shall be a minimum 9'-10" with a manual extension to a minimum of 12'6". Minimum capacity at 7' shall be 1,400 lbs; minimum capacity fully extended shall be a minimum of 600 lbs. A single fully hydraulic stabilizer shall be mounted with the crane at the rear curbside of the platform body. A winch shall be installed at the boom base that matches the capacity of the crane. Shall include a load block for two parting the line, boom base controls and remote control pendant.

4.18 Lift Gate:

Stowaway lift gate with minimum two thousand (2000) pounds lifting capacity - Twin arm load area seventy-two (72") by thirty six (36") with six (6") ramp.

4.19 Tool and Material Boxes:

Formed ten- (10) gauge steel with triple bend door frames, formed to resist moisture-entering compartment, doors hung on "bullet" style grease able hinges. All compartment locks keyed alike. Two (2) compartment constructed on truck/bed platform framework sixteen (16") inches high by fourteen (14") inches wide by one hundred eight (108") inches long. Provide locking "T" handle hardware with three (3) point latches. Provide rear wood end panel across bed. Install underbody tool box thirty-six (36") inches wide by eighteen (18") inches high by eighteen (18") inches deep. Vehicle shall be outfitted with a hose reel for Oxy/Act hoses mounted in the appropriate location for continuous usage.

4.20 Additional Equipment:

Unit shall be equipped with all standard equipment and shall include: Fire extinguisher of the type containing liquid carbon dioxide, pulsating electronic reverse actuated travel alarm transmission with separate off/on switch, which can be heard above eighty three (83) dBA of background noise, off road skip plates for transmission, engine, fuel tank, and amber high intensity strobe warning light. Luminator that meets the following specification: VDC power equivalent to unit electrical system voltage, amber Lexan lens, double flash pulse at 70+1-10 flashes per minute, light output of four hundred (400) candela, not exceeding five and three quarter (5-3/4") inches in height, located on top of the bulkhead and flush mounted in such away that it complies with the overall height limitations.

4.21 Axle Weights and Dimensions:

GVWR, weight per axle and overall dimensions in the over the highway configuration shall not exceed the legal GVWR, weight per axle and overall dimensions for the United States Department of Transportation for interstate and designated routes as stated by Department of Transportation. The unit shall be so constructed that when assembled in the over the rail configuration, with all appurtenances attached, no part will be beyond the clearance limitations of the Standard Clearance Reference Drawings. All parts shall be at least eight (8) inches above top of rail in the dynamic mode. Vehicle must not exceed 11'-2" on rail.

4.22 Miller Welder – Trail Blazer 310D Tied into Chassis Fuel System

- A. Engine - diesel spark arrestor muffler and exhaust scrubber for tunnel operation.
- B. Secure unit on the bed so that it can only be removed by under the bed access; shall include twist lock plugs for easy removal.
- C. Rating - 310 AMPS AC; 300 AMPS DC at 100% duty cycle
- D. Receptacles - two-(2) 120V and one-(1) 240Vat welder control panel. Install one-(1) 120VAC wp duplex gfi receptacle on the exterior front curbside of body and one-(1) 120VAC wp duplex gfi receptacle on the exterior rear curbside of body.
- E. Equipment - cold weather, starting aid, fuel gauge.
- F. Fuel System - shall be tied into vehicle fuel system.
- G. Welding Leads - include one hundred (100') of both welding cable and grounding cable with the proper HD connectors and ends. Cable shall store on a Hannay welding cable reel.

4.23 Hi-Rail Attachment:

Hi-Rail equipment shall be DMF Model 1212 or approved equal. Rail gear must have shunting device.

The minimum GVWR and weight per axle rating of the unit, in a hi-rail configuration, shall not be less than the unit described in these specifications for an over the road configuration. The rail wheels shall be insulated and permanently attached to truck frame and shall be capable of being raised and lowered hydraulically. The rail wheel system shall be design to operate on a track gauge of fifty-six and one half (56 ½") inches, a minimum curve radius of two hundred fifty (250) feet and be able to stop and start with truck fully loaded on a maximum five (5) percent grade. All rail wheels systems shall be from one single manufacturer. The front set of rail wheels are to be attached to the front suspension with integral steering wheel lock. The rear gear must have four (4) inches to five (5) inches of horizontal adjustment in each direction. Rail wheels mounted in any other way are not acceptable. A minimum of ten (10) inches of clearance on both front and rear rail wheels. Wheels shall be steel and fourteen (14) inch in diameter. Locking pin must be provided on front wheels for the rail travel position only. Rear locking pins are to be provided for both deployed and stowed positions. Rail wheels include front and rear EXTERNAL BRAKES. Site rods are mounted on the front of vehicle

outside bumper. Install rail shunts to front rail wheels with off/on switch mounted near hydraulic controls. Rear Railgear shall have a through axle with a center pivot to allow rear rail gear axle to osculate through a center pin, allowing the vehicle wheels to maintain contact when negotiating crossings, embedded rail, raised guard rail, etc. Truck chassis to be laser aligned for alignment trueness before guide wheel attachments are installed. After installation assemblies will be aligned to chassis to assure proper on rail performance.

4.24 Performance:

The unit, fully loaded, shall be capable of operating on standard fifty-six and one quarter (56-1/4) inch gauge track or on fifty-six and one half (56 ½) up to fifty seven and one quarter (57-1/4") restraining rail installation. Traveling fully loaded in forward and reverse direction, on WMATA trackway, with two hundred and fifty (250) foot curve radius, at constant speeds of fifteen (15) mph. Maximum speed shall be controlled at thirty five (35) mph. The maximum grade of six (6) percent.

Note: If transmission is not capable of 15 MPH in reverse, contractor must supply and install a reversing transmission that is capable of a minimum of 15MPH in reverse without over-revving the engine.

4.25 Power Unit:

- A. Air Compressor - Flooded screw, 40 CFM or 80 CFM @110 PSI (using the selector).
- B. Air Outlets - One-(1) 3/a" claw type and two-(2) ¼" QD
- C. Hydraulic-driven Generator - 4000W, 120VAC, 60 HZ, 12V excited.
- D. Power Outlets - Two-(2) 110VAC, 30 amp and two-(2) 12VDC
- E. Hydraulic Tool Circuits - Two-(2) adjustable flow, 0 to 10 GPM @ 2000 PSI (both circuits).
- F. Cooling - Two-(2) 60,000 BTU heat exchangers; one-(1) for the compressor and one-(1) for the hydraulic system.
- G. Reservoir - Twelve-(12) gallon; mounted in load space or under body, as close to power unit as possible.

- H Load Sensing - Automatically adjusts to load demands as tools come on and off line during operation. Unit is capable of operating any two functions simultaneously, except when in the 80 CFM setting.
- I Instrument Package - Hour meter, hydraulic and compressor oil temp light, air pressure gauge, 30 amp breaker, hydraulic and air compressor oil sight gauge and PTO safety shutdown systems for high hydraulic oil, compressor oil and transmission oil temperatures.
- J. Dimensions: Approx. 68" L x 20" W x 20" H

4.26 Radios: Mobile Radio – Vehicle will be equipped with the following radio

- Astro Digital Spectra Mobile Series (T99DX)
- Mobile Astro Spectra W5 482-512 MHZ 20-40 Watts 128 Channel (120w)
- ENH: Software Astro Digital Common Air Interface Operations (G806)
- ENH: Software Smartnet System (G50)
- ENH: Digital ID Display (G114)
- ALT : Remote Mount W4, W5, or W7 with 17 Foot Cable (W496)
- Antenna with cables
- Programming: Talkgroup, templet, etc.

4.26.1 Antenna – Shall be compatible with Astro Digital Spectra Mobile Series Radio listed in section 1.7.12.

4.26.2 Contractor shall supply one Handheld Portable Radio as listed below:

- XTS3000 Portable (H09SDH9PW7BN)
- Carry Strap (NTN5243A)
- Case/Belt Loop/T-Strap (NTN8385B)
- Speaker Mic (NMN6193)
- Battery (NTN8923A)

- Antenna
- Detachable Belt Clip
- Programming: Talkgroup template, etc..
- Single and Multi-Unit Charger (NTN1168 & NTN1177)

4.26.3 Installation – The mobile radio shall be securely mounted within the cab and protected from the weather in a container capable of radio associated accessories.

The radio shall be positioned for easy operator accessibility, while seated in the vehicle. The radio shall be tied into the control panel and shall include the proper circuit protection.

4.27 Paint/Color:

- Cab – OEM Yellow (National School Bus or equal)
- Body – Gloss black
- Below Body Line – Railgear, bumpers, tanks and frame shall be painted gloss black.
- Tank painting (for quick visual fluid ID)
- Diesel Fuel – Eight-inch square, to be painted according to Federal Standards. (green #14062)
- Hydraulic Oil Eight-inch square, to be painted according to Federal Standards. (blue #15180)
- Tank Identification – Type of fluid shall be stenciled or decaled with 1 1/2" letters on each tank in a conspicuous place using a contrasting color.
- Decals – Supply all operational and safety decals.
- Conspicuity Tape shall be 3M or approved equal; install full length of body side rails and rear bumper.

4.28 Noise Emission:

The unit shall meet current United States Government, State of Maryland, Virginia, and District of Columbia and local noise emission standards, as a minimum seventy (70) dBA idle, eighty seven (87) dBA operating, when measured at fifty (50) feet from the unit.

4.29 Hi-Rail Experience:

The successful contractor shall have a minimum of three (3) years experience in manufacture of hi-rail vehicles meeting the FRA/FTA rail requirements for trucks.

4.30 Repair Parts and Service:

The successful vendor must supply a list of OEM of parts for this equipment.

Since the continuous operation of this vehicle is *of* the utmost importance and sometimes *of* an emergency nature, it is necessary that the successful contractor be in a position to render prompt parts and service.

The successful contractor shall maintain and/or have access to parts inventory within the Washington Metropolitan Area. Bidder shall attach a copy of its proposed program for parts and service availability to the bid, for evaluation.

Review *of* the bidder's ability to provide prompt parts and service will be used in determining qualified bidders.

4.31 Manuals:

The successful bidder shall provide for the units, and all attachments, four (4) copies of the operator's manual and four (4) copies of the current parts, repair manuals, lubrication and preventive maintenance schedules, troubleshooting guides, electrical diagrams, etc., within 30 days after the contract award date.

4.32 Training: See Section 7.0 Training Requirement

4.33 Demonstration:

The vendor, or manufacturer of the vehicle, which is identified as the apparent successful bidder for award shall, at the request of WMATA demonstrate its representative vehicle at a location chosen by WMATA and in the presence of an authorized WMATA representative(s) to prove out any features, which may be in question. Failure of the demonstration of machine/vehicle to meet WMATA requirements may be deemed as non-compliant to these specifications.

4.34 Safety:

The unit shall meet all Society of Automotive Engineers, ICC, DOT, Occupational Safety and Health Administration, International Standards Organizations safety standards, laws and regulations of all jurisdictions where applicable.

5.0 VERIFICATION

WMATA representative shall perform on site inspection of vehicle at various stages of construction and will verify that the completed vehicle meets specifications before delivery to the Authority.

6.0 DELIVERY AND PACKAGING

- A. Delivery must be within one hundred and eighty (180) days after notice to proceed (NTP).
- B. The unit shall be delivered fully serviced, completely lubricated, all tanks filled and complete as specified herein.
- C. The vehicle shall have all necessary Inspection stickers and front and rear license plate frames attached.
- D. Prior to delivery, the completed unit shall be inspected for compliance with the requirements in these specifications. WMATA shall have seven (7) days advance notice of inspection of this unit and may choose to send a representative to review the completed unit prior to delivery.

7.0 TRAINING REQUIREMENTS

- 7.0 Training:** When purchases of materials or equipment are made by WMATA, the supplier or vendor is responsible for providing:
 - 7.1 Training in the maintenance and operation of the contracted item(s),
 - 7.2 Training materials sufficient to support continued in-house WMATA training, and
 - 7.3 Updated training and training materials when, in the scope of the contract, changes or modifications are made that affect the operation or maintenance of the item(s) contracted for. This addendum specifies the nature of the training activities and training materials that are required from vendors.
 - 7.4 Scope of Work: Training for the **MOW Truck** will require a minimum of sixteen (16) hours; eight (8) for operators and (8) hours for maintenance. The training shall cover

safe operation and maintenance of the chassis, crane, tools and tool system, railgear, and gearbox.

7.5 All training, as described below, shall take place by the vendor prior to acceptance of equipment or materials by WMATA. Operations and maintenance training may take place as a combined class by agreement of the Department of Technical and Document Control (TTDC). The number of WMATA employees to be trained will be specified on a contract-by-contract basis. However, the minimum number shall be 5 for operation training and 5 for maintenance training. Those persons shall be identified by WMATA.

7.5.1 **Operations training** will be tailored specifically to WMATA equipment, and designed to teach the day to day operations of all equipment. The training will be sufficient to bring personnel to a level of operating proficiency such that routine vendor support is not needed.

7.5.2 **Maintenance training** will be tailored specifically to WMATA equipment, and be designed to develop the knowledge and skills required to maintain all item(s) delivered under the contract. Maintenance training will be subdivided into two major levels. They are:

7.5.2.1 **System Level Maintenance Training**, covering:

- Theory of operation of the system and its major components.
- System configuration
- Preventative maintenance, consisting of written procedures and schedules for the periodic maintenance of all equipment.
- Written and validated inspection procedures and a system level troubleshooting guide (to the lowest field replaceable unit).

7.5.2.2 **Shop Level Maintenance Training**, covering:

- Detailed theory of operation to module, board, and device level.
- Component level troubleshooting and component replacement.
- Testing and alignment procedures of repaired units.

7.6 **Deliverables:** The Department of Technical Training and Document Control (TTDC) requires the following non-copyrighted course materials to be delivered by the vendor, according to the following specifications:

7.6.1 Training Plan containing the data necessary to begin scheduling instruction. The plan must be submitted to WMATA ten days after NTP.

The plan must address for approval a proposed time line that ensures that all deliverables are approved and training is presented before the equipment is placed into service.

- 7.6.2 A List of courses and their duration.
 - 7.6.3 Recommended class size.
 - 7.6.4 Student qualifications. Prerequisites. For the purpose of course development and presentation, vendors should assume all WMATA students are high school graduates (or equivalent), and that maintenance personnel will possess the ability to use basic hand tools and electronic test equipment.
 - 7.6.5 Instructor qualifications. A description of instructor qualifications, a resume, curriculum vitae, or other description of instructional qualifications must be submitted to WMATA as part of the Training Plan. The description should document a thorough knowledge of the subject equipment, an understanding of the adult learning process, and demonstrated experience in vocational instruction.
- 7.7 Instructor's Guide containing all the information and direction necessary for the instructor to make an effective presentation. It shall include adequate guidelines to conduct a comprehensive training program. Individual lessons within the course will be organized as separate blocks (or modules) which may be taught as a unit. In some instances, the same standard operating procedures could be used for train operators, transportation supervisors, and central control supervisors. The Instructor Guide should contain, at a minimum:
- 7.7.1 **Program Overview**
 - 7.7.2 A statement of overall program goals
 - 7.7.3 Lessons plans (a session by session outline containing the following):
 - Student learning objectives, stated in measurable terms
 - Overview of each lesson
 - Suggested instructional methods/learning activities
 - Required equipment and /or resources
- 7.8 Evaluation device(s) (written and /or practical tests) designed to measure the extent to which student have met the learning objectives, with an answer key for each of the tests developed. Tests should use a multiple choice format, and have been validated in a pilot course or by some other means agreed to by

WMATA. Whenever possible, a practical hands-on test shall be developed to demonstrate the transference of skills.

7.8.1 Student Manual, to include all materials for the student to interact in the

learning situation. It shall contain, at a minimum:

- Program overview/introduction
- Statement of overall program goals
- Learning objectives, stated in measurable terms that specifically describe desired behaviors or knowledge to be gained.
- Prose treatment (not outline format) fully developed content presentation, developed in the same modular format as the Instructor=s Guide.
- Illustrations, charts, graphics, and duplication of each visual aid used during course presentation in order to enhance content presentation and provide a course reference.
- Problems/questions related to lesson content, as appropriate.
- Audio-visual aids (handouts, transparencies, slides, films, and computer presentations). Visual aids are required for each circuit or wiring diagram and all activities not demonstrable in the classroom.
- Supplemental materials. A functional mockup, or a functional representation, is required of any equipment which requires theoretical discussion. This may be in the form of an animated schematic, a model of the equipment, an actual device, an interactive video training device, or a WMATA approved substitute. All mock-ups become the property of WMATA.

7.9 **Number of Copies:** The vendor shall deliver final copies to WMATA as follows:

7.9.1 One complete set of training materials that is in a specified electronic format or camera ready copy.

7.9.2 Five copies of all student and instructor materials, to be used for archival purpose in the WMATA Technical Document Center (TDC).

7.9.3 A set of complete student materials for each participant enrolled in training classes

7.10 **Delivery of Instruction:** All instruction will be presented in accordance with approved training materials as specified under deliverables.

- 7.10.1 All training will be coordinated through WMATA TRAINING. Courses will be attended and monitored by WMATA TRAINING.
- Unsatisfactory performance may result in the suspension of the training until such time as the specified discrepancies are corrected.
- 7.10.2 Training shall be performed between 11:00 p.m. to 6:00 p.m.
- 7.10.3 Training shall cover safe operation of the Chassis, Crane, tools and tool system, Railgear and Gearbox. All Hi-Rail equipment must be demonstrated on rail.
- 7.10.4 All training shall be performed at the location specified by WMATA TRAINING.
- 7.10.5 The Trainer must have a minimum of five (5) years of experience on the specified equipment.
- 7.10.6 All Operators shall receive a "Certificate of Completion" on the successful completion of training.