CITY OF BARSTOW
REQUEST FOR PROPOSALS

The City of Barstow is accepting proposals for a

SIX WHEEL, SINGLE COMPRESSED NATURAL GAS ENGINE, BROOM STREET SWEEPER WITH CONVEYOR

SUBMITTAL LOCATION, CLOSING DATE, AND TIME: Proposals will not be received after the closing date and time indicated. Faxed or emailed proposals will not be accepted.

INQUIRIES: Any prospective Proposer desiring an explanation or interpretation of the solicitation, specifications, etc. must request it in writing at least three (3) days before proposal due date. Inquiries should be directed to:

Ronny Zamora, Public Works Superintendent
Phone (760) 255-5141, Fax (760) 256-3213, Email rzamora@barstowca.org

For equipment specifications visit the City of Barstow Web Page, http://www.barstowca.org/ under "Bid Opportunities" in the Barstow for Business heading or call the City Clerk's Office at (760) 255-5122 to obtain a copy.

Dated:
11-16-10

/s/ JoAnne Cousino, City Clerk

Submittal Closing; November 30, 2010 at 4:30 PM (Close of Business) PST
Location: City of Barstow-City Hall

DEPARTMENT OF PUBLIC WORKS
220 EAST MOUNTAIN VIEW
BARSTOW, CALIFORNIA 92311

TECHNICAL SPECIFICATIONS FOR
SIX WHEEL, SINGLE COMPRESSED NATURAL GAS ENGINE, BROOM STREET SWEEPER WITH CONVEYOR

This motor sweeper shall be to the manufacture's standards. It shall be equipped with the manufacture's equipment and accessories which are included as standard in the advertised and published literature for the unit. No such item of equipment or accessories shall be removed or omitted for the reason that it was not specified in the bid.

If it is necessary to bid alternate equipment, this must be stated in your bid. For each item, please place a X in the appropriate space (YES__ No__) to signify whether or not you are in compliance with the specification. Failure to follow the format or answer the specification may cause your bid to be disqualified. If you need extra space to describe your product, please attach extra sheets. When doing this, be sure your description references the appropriate question number.

Section A - Chassis

1.0 CHASSIS (FREIGHTLINER M2 106 OR EQUAL)		**COMPLY Yes**	**No**
1.1	For safety, service, parts availability, etc the chassis shall be of a commercially available conventional cab type configuration. A purpose built chassis manufactured by the sweeper company will not be acceptable.	____	____
1.2	The wheelbase shall not exceed 136 inches. The Cab to axle shall be no greater than 69 inches.	____	____
1.3	Gross Vehicle Weight Rating (GVWR) shall be not less than 33,000 pounds.	____	____
1.4	For safety, certification of Federal Motor Vehicle Safety Standard (FMVSS) compliance must be submitted with the proposal. Failure to comply will result in proposal being rejected as "non-responsive".	____	____
1.5	Chassis shall be capable of safely propelling the sweeper, loaded to the maximum GVWR, under all normal sweeping and transport conditions.	____	____
1.6	Vehicle shall be rated for carrying an 11,000 lbs. load in the hopper at highway speed of 55 MPH and should not be speed restricted by tire limitations.	____	____
1.7	Speed shall be governed at 55 MPH.	____	____

1.8	Front axle shall be an I-beam type; with a minimum capacity of 12,000 lbs. Front axle shall have leaf spring suspension and shock absorbers as standard equipment to avoid high stress areas and cracking of the chassis.	____	____
1.9	Rear axle shall have a minimum capacity of 23,000 lbs.	____	____
1.10	Rear suspension shall be provided through a Chalmers rubber cushion suspension system having a minimum capacity of 23,000 pounds.	____	____
1.11	Rear axle shall provide a full width heavy duty, 80" track.	____	____
1.12	Two-speed rear axle shall have a 6.67/9.08 ratio. An auxiliary transmission for sweeping is not acceptable.	____	____
1.13	Turning radius shall not exceed 19-ft. curb to curb. Front axle steering cut shall be 50 degrees minimum.		
1.14	Brakes shall be full air dual circuit type with auto slack adjusters, front and rear. Rockwell WABCO ABS brakes shall be supplied. Hydraulic brakes shall not be acceptable.	____	____
1.15	Air compressor shall be 18.7 CFM.	____	____
1.16	Parking brake shall be spring applied rear wheel drum and shoe.	____	____
1.17	Access to frame on both sides of machine for jacking purposes shall be available.	____	____

2.0 CHASSIS ENGINE		**COMPLY** Yes	No
2.1	Engine shall be a dedicated compressed natural gas (CNG) type. The CNG engine shall be installed by an authorized OEM engine distributor and specifically designed for the chassis. For reliability and serviceability, aftermarket CNG conversions of gasoline or diesel engines are not permitted. Engine must be certified meet EPA/CARB 2007 on-highway emission standards.	____	____
2.2	Engine shall be at least 543 cubic inch displacement (8.9 ISL-G). Horsepower rating shall be 260 HP @ 2200 RPM. Torque rating shall be 660 ft-lbs. @ 1300 RPM.	____	____
2.3	Engine shall be supplied with a low oil pressure and high water temperature warning system integrated in the engine electronic system.	____	____
2.4	Engine shall be equipped with a through the hood air filter with active pre-cleaner, spin-on CNG fuel filter, full flow oil filter.	____	____
2.5	Radiator fan shall be a viscous drive type. Direct drive fans shall not be acceptable.	____	____
2.6	Anti-freeze/water mixture shall be rated at –30 F degrees. An engine block heater shall be provided.	____	____
2.7	Fuel system shall have at least three minimum, aluminum cores, filament reinforced, fuel cylinders that can contain a minimum of 53 gallons total diesel fuel equivalent. The system shall have a fast fill port and include	____	____

high and low pressure gauges. Fuel system must be able to fill to 3600 psi and meet all North American Natural Gas Vehicle system standards including NFPA-52 requirements.

2.8 Exhaust system shall include a three way catalyst muffler and a right hand curved vertical tailpipe B-pillar mounted ____ ____

<u>3.0 TRANSMISSION</u> — **COMPLY** **<u>Yes No</u>**

3.1 Automatic transmission shall have five forward speeds and one reverse. (Allison RDS 3500 or equal). A dash mounted transmission oil temperature gauge shall be supplied. ____ ____

3.2 Transmission shift pattern shall be illuminated for night operation. Shift operation shall be by push button in lieu of shift lever. ____ ____

3.3 Transmission shall be equipped with a heavy-duty oil cooler and magnetic drain plugs. ____ ____

<u>4.0 TIRES AND WHEELS</u> — **COMPLY** **<u>Yes No</u>**

4.1 Front and rear tires shall be first line quality tubeless radial tires, 11R X 22.5, 14 ply rating. ____ ____

4.2 Tires shall be mounted on 10 stud hub piloted steel disc 22.5/8.25 rims. ____ ____

4.3 Rear axle shall be equipped with dual tires for load capacity and stability. Rear mud flaps shall be supplied. ____ ____

4.4 All wheels shall be interchangeable to allow for emergency change at the job site. ____ ____

<u>5.0 CAB</u> — **COMPLY** **<u>Yes No</u>**

5.1 Steering shall be full power with dual operator controls. Dual OEM dash mounted instrumentation, including speedometer, odometer, tachometer, hour meter, water temperature, oil pressure, voltmeter, fuel gauge and transmission temperature gauge on the left side and FMVSS specified primary gauges on the right side. ____ ____

5.2 Dual steering shall include right and left steering wheels, brake and throttle pedals, stalk mounted single windshield wiper controls, dual turn signal controls, and tilt adjustment. ____ ____

5.3 Console shall have Left / Right primary driver switch which changes controls for the operator station and instrumentation from left to right and back. For safety driver switch can only be activated with the parking brake applied. ____ ____

5.4 Dual Bostrom vinyl air ride seats with armrests shall be supplied. ____ ____

5.5 Each seat shall have a 3-point seat belt with automatic retractors. ____ ____

5.6	Sweeper shall include two (2) outside west coast type mirrors with 8-inch convex auxiliary mirrors.	____	____
5.7	Cab shall be full width steel cab with one-piece fiberglass tilting hood.	____	____
5.8	Hydraulic functions shall be controlled by a single rocker switch, which activates the hydraulic power, which is supplied from the "HOT SHIFT" PTO on the transmission. The hydraulic system must be able to be disengaged in case of a hydraulic oil leak, thus allowing transport capability without draining the hydraulic oil tank. Full time live hydraulics or the use of an auxiliary transmission in the drive train will not be acceptable.	____	____
5.9	For safety during night sweeping, rocker switches shall be illuminated and clearly marked for easy identification. All sweeper controls shall be mounted between the two operator stations for easy reach and visibility.	____	____
5.10	Single electric horn shall be supplied.	____	____
5.11	Cab interior environment shall be fully conditioned by fresh air heater / ventilator / defroster / air conditioning with a four speed fan.	____	____
5.12	Cab shall have full flow through ventilation.	____	____
5.13	Windshield wipers shall be two speeds with washer.	____	____
5.14	Wipers shall have an intermittent feature.	____	____
5.15	Interior of cab shall have acoustical insulation, automotive type trim, and center console.	____	____
5.16	Dashboard shall be fully faced with soft molded plastic; two cup holders shall be included.	____	____
5.17	Left and right hand side grab handles shall be supplied to aid in operator entry and exit from the cab.	____	____
5.18	Sweeper shall have an automatic electronic back-up alarm.	____	____
5.19	Each operator station shall have an adjustable sun visor.	____	____
5.20	Doors and ignition shall be key locked alike.	____	____
5.21	All glass shall be tinted safety glass.	____	____
5.22	Side windows shall have a defogger.	____	____
5.23	Door windows shall be roll down type. Sliding windows are not acceptable.	____	____
5.24	Fender mounted stainless steel 8” convex mirror shall be provided to increase operator visibility	____	____

		COMPLY	
6.0 ELECTRICAL		**Yes**	**No**

6.1	Chassis alternator shall not be less than 160 amps.	____	____
6.2	Shall be a 12-volt negative ground system.	____	____
6.3	Dual batteries shall be maintenance free, 12 volt, and 1900 CCA total and located under the left-hand door of the cab for easy access and service.	____	____
6.4	For safety, all electrical circuits must be protected by manual reset circuit breakers.	____	____
6.5	Circuit breakers shall be mounted in the center control panel for easy access.	____	____
6.6	All lighting shall be DOT approved including combination stop and tail lights, backup lights, sealed multiple beam headlights, high beam - low beam switch, adjustable side broom and main broom spotlights, clearance and running lights, front parking and signal lights, four way flashers, dome light, illuminated gauges and instrument panel, illuminated rocker switches, self canceling directional signals, and hazard switch.	____	____
6.7	Warning lights shall indicate glow plug, air brakes, stop and tail light failure, charging system, park brake, engine oil system, hydraulic oil filter restriction and low spray water.	____	____

7.0 LIGHTING

		COMPLY	
		Yes	**No**
7.1	All lighting shall meet DOT safety requirements.	____	____
7.2	Front and rear shall have clearance lights.	____	____
7.3	Left and right sides shall each contain two clearance lights.	____	____
7.4	Front and rear directional lights with emergency flasher shall be provided.	____	____
7.5	Work lights for each gutter broom and the rear broom shall be provided.	____	____
7.6	Dash, all console switches and all gauges shall be illuminated.	____	____
7.7	An automatic back-up light and electric alarm shall be activated when transmission is placed into reverse.	____	____
7.8	License plate holder shall be illuminated.	____	____
7.9	Vehicle shall have two rear side combination light/reflectors.	____	____

***Section B* - Sweeper Module**

COMPLY
Yes No

1.0 INTENT

____ ____

It is the intent of this specification to provide for the purchase of one (1) new and unused street sweeper having a six wheel configuration, single engine for propulsion and sweeping, 4.5 cubic yard right side variable high dumping hopper, automatic transmission, dual steering and operator controls, squeegee flight conveyor, left side and right side broom with variable down pressure controlled from cab.

The following specification is based upon an Elgin Sweeper Broom Bear street sweeper mounted on a Freightliner M2 chassis. The City of Barstow has evaluated different types of street sweepers and has determined that this product is well suited and equipped for the City of Barstow's needs in safety, quality, performance, and standardization. This specification is not to be interpreted as restrictive, but rather as a measure of the safety, quality and performance against which all sweepers bid will be compared.

In comparing proposals, consideration will not be confined to price only. Contract will be awarded for the product which best serves the interests of the city when cost, product, safety, quality and delivery are considered. The City reserves the right to reject any or all bids or any part thereof, and to waive any minor technicalities. A contract will be awarded to the bidder submitting the lowest responsible bid meeting the requirements.

COMPLY
Yes No

2.0 EQUIVALENT PRODUCT

____ ____

Bids will be accepted for consideration on any make or model that is equal or superior to the sweeper specified. Decisions of equivalency will be at the sole interpretation of the City of Barstow. A blanket statement that equipment proposed will meet all requirements will not be sufficient to establish equivalence. Original manufacturer's brochures of the proposed unit are to be submitted with the proposal. All modifications made to the standard production unit described in the manufacturer's brochures must be certified by the manufacturer and submitted with the bid, or the bid will be deemed "non-responsive" and rejected without further review. Bidder must be prepared to demonstrate a unit similar to the one proposed, if requested.

COMPLY
Yes No

3.0 INTERPRETATIONS

____ ____

In order to be fair to all bidders, no oral interpretations will be given to any bidder as to the meaning of the specification documents or any part thereof. Every request for such a consideration shall be made in writing to the City Clerk. Based upon such inquiry, the City of Barstow may choose to issue an Addendum.

COMPLY
Yes No

4.0 GENERAL

____ ____

The specification herein states the minimum requirements of the City of Barstow. All bids must be regular in every respect. Unauthorized conditions, limitations, or provisions shall be cause for rejection. The City will consider as "irregular" or "non-responsive" any bid not prepared and submitted in accordance with the bid document and specification, or any bid lacking sufficient technical literature to enable the City of Barstow to make a reasonable determination of compliance to the specification.

It shall be the bidder's responsibility to carefully examine each item of the specification. Failure to offer a completed bid or failure to respond to each section of the technical specification (COMPLY: YES NO) will cause the proposal to be rejected without review as "non-responsive". All variances, exceptions and/or deviations shall be fully described in the appropriate section. Deceit in responding to the specification will be cause for rejection.

5.0 SIDE BROOMS		**COMPLY Yes**	**No**
5.1	Brooms shall be driven by a hydraulic motor directly mounted to broom disc plate. They shall be the vertical digger type, trailing arm design, mounted on right and left side.	____	____
5.2	To hold broom pattern, regardless of up and down motion, arm suspension design shall be the parallelogram type.	____	____
5.3	Broom rotation speed shall be constant governed by load sensing hydraulic system, regardless of engine RPM or sweeper ground speed.	____	____
5.4	Broom down pressure shall be adjustable by operator from the cab while moving.	____	____
5.5	Broom shall be five (5) plastic segments, filled with 26" long tempered wire. Discs shall be cross-drilled for 5 or 4 segment usage.	____	____
5.6	Broom diameter shall not be less than 44", protruding not less than 13" beyond outside of tire while sweeping.	____	____
5.7	Broom location shall be directly below the operator’s seat for maximum visibility.	____	____
5.8	Each broom shall have a spotlight for night operation.	____	____
5.9	Side brooms must be capable of extending from 110" (2794 mm) to 144" (3657 mm) with both side brooms activated.		
5.10	Tilting of right side broom shall be variable from the cab. An electrically controlled linear actuator shall allow the operator to tilt the side broom inward and outward from the cab, while sweeping.	____	____
5.11	Tilting of left side broom shall be variable from the cab. An electrically controlled linear actuator shall allow the operator to tilt the side broom inward and outward from the cab, while sweeping.		
5.12	A variable speed control shall be provided for the right hand side broom. This will allow independent control of boom speed from engine RPM or travel speed.		

6.0 MAIN BROOM		**COMPLY Yes**	**No**
6.1	Broom shall be driven by a hydraulic motor through a chain and sprocket drive.	____	____
6.2	Broom shall be not less than 34.5" diameter and not less than 58" long.	____	____
6.3	Broom rotation speed shall be constant, governed by load sensing hydraulic system,	____	____

regardless of engine RPM or ground speed.

6.4	Broom shall be full floating with self-aligning bearings.	____	____
6.5	Broom shall be prefab disposable type, filled with 26" long polypropylene.	____	____
6.6	Broom side plates shall be equipped with steel drag shoes.	____	____
6.7	Sweeping path shall be not less than 7-1/2 feet wide with one side broom activated, and not less than 10 feet wide with both side brooms activated.	____	____
6.8	Main broom shall be shielded by a steel broom hood. Plastic hoods shall not be acceptable due to cracking.	____	____
6.9	Broom shall hydraulically slide rearward not less than 12 inches for ease of maintenance.	____	____
6.10	Main broom and conveyor shall have a work light.	____	____
6.11	Broom shall be hydraulically raised/lowered and be capable of movement independent of the conveyor assembly to effectively sweep varying debris. This independent movement also avoids damage to the main broom or the conveyor assembly during sweeping.	____	____

7.0 CONVEYOR		**COMPLY** Yes	No
7.1	Conveyor shall be able to load hopper to 100% of rated useable capacity.	____	____
7.2	Conveyor rotation, forward or reverse shall be selectable without leaving the cab. Hydraulic conveyor speed shall be constant governed by load sensing hydraulic system, independent of engine RPM or ground speed.	____	____
7.3	Conveyor shall be constructed of 11 rubber edged flights driven by steel roller type chain on polyurethane sprockets (rubber chains with steel sprockets are not acceptable). The floor plate shall be a bolt in construction, two piece design, manufactured of abrasion resistant steel.	____	____
7.4	Conveyor shall be reversible in direction. The main broom shall stop rotation while conveyor is reversed.	____	____
7.5	Conveyor shall be capable of effectively sweeping debris of varying sizes without the need to make any manual adjustments to the conveyor system. In cab conveyor height adjustment, independent of the main broom shall be supplied.	____	____
7.6	To provide proper clearance during variable sweeping conditions, the lower portion of the conveyor shall be capable of raising 3 inches while sweeping, independent of main broom height.	____	____
7.7	Conveyor to be full width of the main broom, 58" minimum. An auger system for feeding the conveyor is not acceptable.	____	____
7.8	Conveyor shall be capable of easy removal in the field by a trained technician.	____	____
7.9	Access doors and inspection panels shall be hinged for quick access to side of conveyor.	____	____

7.10 An audible conveyor stall alarm is to be provided as a warning to the operator.

8.0 HOPPER		**COMPLY Yes**	**No**
8.1	For safety, the hopper shall be right side dumping, allowing an operator to observe the dump target and surrounding area at all times from the cab, without the use of mirrors. All dump controls to be cab mounted and controlled for up and down and side dump.	____	____
8.2	Volumetric capacity shall be not less than 4.5 cubic yards, useable capacity not less than 3.3 yards. A hopper inspection door shall be supplied.	____	____
8.3	Hopper shall dump at varying heights ranging from 38 inches through a height of 10 feet. Dump angle to be 50 degrees minimum. Fixed height dump systems are not allowed.	____	____
8.4	Lift mechanism shall be double stage, scissors lift system. Hopper lift cylinders to be 3.5" x 33.5" stroke minimum, hopper dump cylinders to be 3.5" x 19.8" stroke minimum.	____	____
8.5	Hopper to offer not less than 11" side shift of load for maximum dumping efficiency and for extra clearance between sweeper and dump truck. Minimum clearance between sweeper and truck shall be 28".	____	____
8.6	Hopper load shall be visible at all times from the cab through a glass window and skylight.	____	____
8.7	Maximum time for dump cycle shall not exceed 70 seconds.	____	____
8.8	Lift capacity shall be not less than 11,000 lbs.	____	____
8.9	Hopper to be constructed of 7 gauge abrasion resistant steel floor and 11 gauge door, top, and sides.	____	____
8.10	Units that require use of jack stands and/or outriggers to stabilize chassis during dumping procedure shall not be acceptable.	____	____
8.11	A hopper full indicator shall be supplied with in cab warning light.		
8.12	A Lifeliner hopper system shall be provided to protect the hopper against corrosion and wear and to facilitate the removal of the debris when dumping. This liner system shall provide protection such that the hopper will be warranted for the life of the sweeper. Bar steels including stainless steels are unacceptable as they do not provide sufficient protection long term wear.		

9.0 WATER SYSTEM		**COMPLY Yes**	**No**
9.1	Tank capacity shall be not less than 350 U.S. gallons.	____	____
9.2	Tank shall be constructed of a non-metallic, non-rusting polyethylene material. Removable manhole cover for tank access shall be supplied.	____	____
9.3	Water pump shall be centrifugal type capable of running dry without damage.	____	____

		Yes	No
9.4	A water level gauge indicator shall be located within the cab.	____	____
9.5	Shall be equipped with 12 brass spray nozzles for dust suppression. 2 spray nozzles shall be over each side broom, 8 spray nozzles shall be located on the front bumper mounted spray bar. The front spray bar shall have left and right shut off valves for independent operation of the spray bar or adjustment of the spray water pattern.	____	____
9.6	Water fill hose shall be not less than 15' in length, equipped with 2-1/2" NST hydrant coupler.	____	____
9.7	Water to each area, side broom left or right, front spray bar shall be cab controlled with electrical activation switches. Valves, which control water flow, shall be heavy-duty "agricultural" type.	____	____
9.8	An in-line water filter with shut off valve shall be in water system to prevent contaminants from entering the water system.	____	____
9.9	To prevent the contamination of the water supply, tank shall be equipped with an anti-siphon device.	____	____
9.10	An elevator flush out system shall be supplied. The system shall include an operating valve and plumbing from the hydrant fill to flush the elevator during water tank filling or upon end of the day clean up.		
9.11	The sweeper shall be fully compliant to SCAQMD Rule 1186 for PM 10 sweep and dust containment efficiency.		
9.12	PM 10 front spray bar to be supplied.		

<u>10.0 HYDRAULIC SYSTEM</u>

		COMPLY Yes	COMPLY No
10.1	Reservoir shall have a capacity of 25 gallons with outside level and temperature indicator.	____	____
10.2	Pump shall be a variable displacement piston type, 6 cubic inch per revolution displacement maximum pump, directly driven, with load sensing to adjust flow based upon hydraulic oil demand in the sweeping gear to maximize efficiency and reduce heat for longevity of all the hydraulic systems.	____	____
10.3	To prevent contamination of the reservoir during the dump cycle, the reservoir vent shall be equipped with 10 micron, spin on filter.	____	____
10.4	To prevent the possibility of contamination and the resulting damage to the hydraulic system, return lines for drive shall have a 10-micron full flow filter with bypass.	____	____
10.5	To minimize environmental damage caused by leaking fittings, all pressure hydraulic fittings must be ORFS type. All solenoids to be located in a single easily accessible location. A tank shut off valve shall be supplied.	____	____
10.6	For ease and accuracy of testing, all circuits shall have quick-disconnect check ports.	____	____

<u>11.0 PNEUMATIC SYSTEM</u> **COMPLY** **<u>Yes No</u>**

11.1 There shall be a PR4 type pressure protector for the chassis air system to protect the chassis air system. ____ ____

11.2 All pneumatic cylinders shall be interchangeable. ____ ____

11.3 All pneumatic cylinders must be rated to 150 PSI and have a separate rod seal and wiper to prevent contamination entering the cylinder. ____ ____

12.0 ELECTRICAL SYSTEM	**COMPLY** **Yes No**
12.1 Sweeper electrical system shall be integral to the chassis electrical system.	____ ____
12.2 Sweeper shall have an electronic back-up alarm for additional warning and safety when chassis is in reverse.	____ ____
12.3 Sweeper lighting shall include rear identification lights, side broom and rear clearance lights.	____ ____
12.4 Sweeper wiring harnesses shall be color-coded and hot stamped with circuit name.	____ ____
12.5 For safety, all electrical circuits must be protected by circuit breakers or fuses.	____ ____

13.0 CONTROLS	**COMPLY** **Yes No**
13.1 All sweeper controls shall be mounted on a fixed central console located between the left and right operator's position and access.	____ ____
13.2 The controls shall include all sweep, hopper, elevator, and lighting functions and shall all be located on the fixed operator control console.	____ ____
13.3 The controls for sweep, spray water, and lighting functions shall be conventional rocker switches.	____ ____
13.4 The unit shall include sweep resume option. Sweep resume will pick up and stow all sweep gear by operating one switch. Reactivating the switch will engage all sweep gear to preset operating conditions.	

14.0 SWEEPER INSTRUMENTS /MISCELLANEOUS	**COMPLY** **Yes No**
14.1 Sweeper instruments shall include, right and left side broom down pressure, hydraulic filter restriction indicator, hydraulic oil temperature, spray water level indicator.	____ ____
14.2 Unit to include low hydraulic light/alarm indicator.	
14.3 Unit to include Whelen LED safety lighting package. To include TAL85 LED Traffic advisor, LED Flashers (2 frt & 2 rear), 4 Grille Master HSG, (1) TAPVC15 Cable, 15', (2) 25' Extension cables, (1) PCC6R Power Controller, (2) L31HAF LED Beacons.	
14.4 Provide 10# Fire Extinguisher	

15.0 PAINT	**COMPLY** **Yes No**

15.1 All visible exterior metallic surfaces shall be coated prior to assembly with polyester powder coat. The paint must be a minimum of 2 mils thick. The uses of acrylic enamels and/or polyurethane's are not acceptable. ____ ____

15.2 Color shall be the City of Barstow's color of "White". ____ ____

15.3 Vehicle shall have an accent color of Grey on the lower portions of the unit. ____ ____

16.0 SWEEPER BODY LUBRICATION SYSTEM — **COMPLY** **Yes No**

16.1 An automatic lubrication system to provide appropriately timed grease application to all greasable points shall be provided for the sweeper and chassis. ____ ____

17.0 MANUALS — **COMPLY** **Yes No**

17.1 A parts manual shall be provided. ____ ____

17.2 An operation and maintenance manual shall be provided. ____ ____

17.3 An engine manual shall be provided. ____ ____

17.4 All manuals shall be originals; photocopies shall not be acceptable. ____ ____

18.0 WARRANTY — **COMPLY** **Yes No**

18.1 Manufacturer's warranty shall be not less than one (1) year on entire sweeper, including all parts and labor. ____ ____

18.2 Bidders submitting literature stating warranties which do not fully comply with warranty requirements of this specification must submit a letter from the manufacturer certifying warranty compliance as an integral part of their proposal. Failure to comply may cause the proposal to be deemed "non-responsive" and rejected without further review. ____ ____

19.0 SERVICE AND TRAINING — **COMPLY** **Yes No**

19.1 Vendors shall have a full parts and service facility within a reasonable distance from the City of Barstow's Garage. State location and distance. ____ ____

____

19.2 A qualified technician shall provide complete training to the City of Barstow's personnel at the City of Barstow's Garage. Training shall include safety, operation, maintenance and service. ____ ____

19.3 Bidder shall have in-house certified CNG mechanics with tank inspection certification.

20.0 DELIVERY

20.1 Sweeper shall be delivered F.O.B. in first class operating condition within 90-120 Days upon receipt of order. Bidder shall state delivery time after receipt of order. ____ ____

20.2 Acceptance shall be subject to the inspection and approval of the City. ____ ____

21.0 QUALITY

Sweeper shall be manufactured by a company with a registered quality standard no less than ISO 9001. ____ ____