

## **ADDENDUM NO. 1**

**BID NO.: R0107977 / B0005067 – Street Sweeper**

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**ORIGINAL DATE OF BID OPENING: 4-16-08**

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**REVISED DATE OF BID OPENING: 4-23-08**

**DEPARTMENT: Fleet Maintenance Division 2**

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**REASON: Additional Information, revised Specifications.**

**Two sets of Specifications are issued herewith, which replace the original set of Specifications sent with the Bid Package.**

**See Street Sweeper Specifications (12 pages) and Chassis Sweeper Specifications (5 pages).**

Revised Bid Solicitation forms are also issued herewith (2 pages). Please use the revised forms in submitting your bid, and attach both sets of revised Specifications to your bid.

Please submit sealed bids to:

Purchasing Department  
City of Chattanooga  
101 East 11<sup>th</sup> Street, Suite G13  
Chattanooga, TN 37402  
423-757-0649

**PLEASE SIGN ADDENDUM AND FAX SIGNED COPY TO PURCHASING DEPARTMENT at 423-757-0949, Attn: William Tucker. RETAIN FOR YOUR FILES.**

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# BID SOLICITATION



**City of Chattanooga**  
101 East 11th Street, Suite G13  
Chattanooga TN 37402

**BID OPENING DATE AND TIME:**  
**04/23/2008 2:00 PM**  
**BID NUMBER: B0005067**

**SEALED BIDS**

Mail or submit two (2) signed copies of bid form to this office in the enclosed envelope. Retain one copy for your file.

BUYER: Tucker, William  
PHONE #: (423) 757 - 0649 ext.  
DELIVERY REQUIRED: 04/23/2008 2:00 PM

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City of Chattanooga  
101 East 11th Street, Suite G13  
Chattanooga TN 37402

Item	Class-Item	Quantity	Unit	Unit Price	Total
	Requisition No. R0107977 Ordering Dept.: Fleet Maintenance Div 2 Buyer: William Tucker Phone No.: (423) 757-0649 ***** Item Being Purchased: Street Sweeper ***** ATTACHMENTS: Street Sweeper Specifications (12 pages) Chassis Sweeper Specifications (5 pages) Affirmative Action Plan (2 pages) ***** City of Chattanooga Terms and Conditions are posted on Website <a href="http://www.chattanooga.gov/finance/66_standardtermsandconditions.htm">http://www.chattanooga.gov/finance/66_standardtermsandconditions.htm</a> If you cannot download call buyer for a copy. ***** NOTE: ALL BIDS MUST BE SIGNED All bids received are subject to the terms and conditions contained herein and as listed in the above referenced website. The undersigned Bidder acknowledges having received, reviewed, and agrees to be bound to these terms and conditions, unless specific written exceptions are otherwise stated. ***** Any manufacturer's names, trade names, brand names, or catalog numbers used in the specifications are for the purpose of describing and establishing general quality levels. Such references are not intended to be restrictive. Bids will be considered for any brand which meets or exceeds the quality of the specifications listed for any item.  The City of Chattanooga reserves the right to reject any and/or all bids, waive any informalities in the bids received, and to accept any bid which in its opinion may be for the best interest of the city.  The City of Chattanooga will be non-discriminatory in the purchase of all goods and services on the basis of race, color, or national origin.				

NOTE: ALL BIDS RECEIVED ARE SUBJECT TO THE TERMS AND CONDITIONS.

ALL BIDS MUST BE SIGNED: The undersigned offers the above quoted prices under the conditions contained herein.

The City is Exempt from all Federal and State Tax.  
Bids will be received at the above mentioned address.

COMPANY: \_\_\_\_\_

TERMS OF PAYMENT: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

TELEPHONE NUMBER: \_\_\_\_\_

NAME AND TITLE: \_\_\_\_\_

# BID SOLICITATION



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Chattanooga TN 37402

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City of Chattanooga  
101 East 11th Street, Suite G13  
Chattanooga TN 37402

Item	Class-Item	Quantity	Unit	Unit Price	Total
	<p>***** *** BIDS MUST BE RECEIVED NO LATER THAN *** *** 2:00 PM EST on April 23, 2008 *** ***** NOTE *****  PLEASE PROVIDE US WITH THE FOLLOWING INFORMATION:  Company Name _____ Address _____ Phone/Toll-Free No. _____ Fax No. _____ eMail Address _____ Contact Person's Name _____ Employer's ID No. _____ Estimated Delivery _____ Minority-Owned Business ___ Small Business ___ Veteran ___ Minority Woman Owned Business ___ Disabled Veteran ___ Women-Owned Business ___  ***** ALL ITEMS MUST BE QUOTED F.O.B. DESTINATION *****</p>				
1.0	765-77 2008 Model REGENERATIVE AIR STREET SWEEPER.	1.00	EA		
				<b>TOTAL:</b>	

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COMPANY: \_\_\_\_\_

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SIGNATURE: \_\_\_\_\_

TELEPHONE NUMBER: \_\_\_\_\_

NAME AND TITLE: \_\_\_\_\_

## STREET SWEEPER SPECIFICATIONS

### 1 INTENT

2 It is the intent of these specifications to describe a regenerative air street sweeper with  
3 hydraulic drives, 4.3 cubic yard hopper, and 80" wide pickup head. The unit must be  
4 equipped with vertical digger-type gutter brooms, pressurized dust control spray system  
5 and an independent engine to power the sweeping functions. The chassis for this sweeper  
6 is to be sufficiently rated to transport a full load of sweeping debris at speeds up to 55  
7 MPH. For safety and comfort of the operator and for quick, local service along with local  
8 availability of repair parts, the chassis will NOT be a purpose built chassis built by the  
9 sweeper manufacturer. The chassis shall be equipped with spring suspension, dual  
10 steering, dual operator controls, and an automatic transmission. All tires shall be the  
11 same size and have dual tires on each side of the rear axle (six-wheel configuration).  
12 The unit shall be new of current manufacture. No prototype, demo, used, vacuum type,  
13 or mechanical type sweepers will be accepted.  
14 All parts not specifically mentioned which are necessary to provide a complete street  
15 sweeper shall be included in the bid and shall conform in strength, quality of materials,  
16 and workmanship to what is normally provided to the trade in general.

17

18

19 Bidders must indicate compliance for each item throughout the bid by writing "YES" or  
20 "NO". Failure to do so may be cause to reject the bid. All "NO" answers must be fully  
21 explained on a separate sheet of paper and be attached to and submitted with bid. Failure  
22 to explain "NO" answers may be cause to reject bid.

STREET SWEEPER SPECIFICATIONS

23 SWEEPER ENGINE

24

25 \_\_\_\_\_ A. An auxiliary diesel engine shall be provided to power the sweeper. The  
26 engine shall be a Tier 2 compliant four-cylinder turbo-charged Perkins  
27 (or equivalent) with a horsepower rating of not less than 60 H.P. at  
28 2,800 RPM. Minimum displacement shall be not less than 149 cubic  
29 inches.

30

31 \_\_\_\_\_ B. Engine shall be equipped with a full-flow spin-on oil filter, fuel filter  
32 and fuel water separator.

33

34 \_\_\_\_\_ C. Unit shall have a heavy-duty two-stage dry type air cleaner with a  
35 centrifugal pre-cleaner and air filter restriction indicator.

36

37 \_\_\_\_\_ D. Engine shall be equipped with a 3-point safety engine shutdown device  
38 that shuts down the engine for low oil pressure, high coolant  
39 temperature, and low coolant level.

40

41 \_\_\_\_\_ E. Injector pump shall have centrifugal type variable speed governor for  
42 speed control of auxiliary engine RPM.

43

44 \_\_\_\_\_ F. Twelve (12) volt electrical system, electric starter and 65 amp  
45 alternator shall be provided. Sweeper shall have re-settable circuit  
46 breakers.

47

48 \_\_\_\_\_ G. Sweeper auxiliary engine to share 50 gallon fuel tank and batteries with  
49 chassis engine.

50

51 \_\_\_\_\_ H. Auxiliary engine, muffler, blower housing, fuel tank, battery box, and  
52 hydraulic tank and cooler shall be protected by a shroud.

53

54 HYDRAULIC SYSTEM

55

56 \_\_\_\_\_ A. Hydraulic power shall be used to operate all broom rotation, lifting  
57 functions, and dust suppression systems of the sweeper. All functions  
58 shall operate independently of each other with their own in-cab controls  
59 to include separate controls for each gutter broom. Systems  
60 incorporating pneumatic-type controls will not be accepted.

61

62 \_\_\_\_\_ B. Sweeper shall utilize a direct drive, gear driven hydraulic pump,  
63 minimum 16 gallon vented hydraulic reservoir with 80 mesh suction  
64 strainer, a spin-on 10 micron return filter, and high pressure hoses and  
65 fittings. Hydraulic reservoir to have tank mounted level and  
66 temperature indicator. Hydraulic reservoir to be mounted above  
67 hydraulic pump.

68

## STREET SWEEPER SPECIFICATIONS

- 69 \_\_\_\_\_ C. Hydraulic system shall have a 12,500 BTU oil to air radiator type  
70 hydraulic oil cooler.  
71
- 72 \_\_\_\_\_ D. Hydraulic tank shall have shut-off valves for hydraulic oil filter  
73 servicing.  
74
- 75 \_\_\_\_\_ E. Hydraulic pressure shall not exceed 2,250 PSI.  
76
- 77 \_\_\_\_\_ F. Hydraulic system shall have quick disconnect relief pressure check  
78 ports mounted in the hydraulic manifold.  
79
- 80 \_\_\_\_\_ G. For safety of the operator, no sweeper hydraulic lines shall run into or  
81 through the cab.  
82
- 83 \_\_\_\_\_ H. Hydraulic valves shall have built-in diagnostic system lighting for  
84 troubleshooting hydraulic flow.  
85
- 86 \_\_\_\_\_ I. A 12-volt DC hydraulic backup system shall be provided which may be  
87 used to operate all hydraulic functions without starting the auxiliary  
88 engine.  
89

### DUST SEPARATOR

- 91
- 92 \_\_\_\_\_ A. Separation of the dirt and refuse from the air stream shall be  
93 accomplished within the hopper by means of a circular centrifugal dust  
94 separator. The dust separator shall be designed so that it will not plug  
95 with normally encountered debris.  
96
- 97 \_\_\_\_\_ B. The dust separator shall have a clean-out door that opens automatically  
98 and discharges debris from the separator when the hopper is raised to  
99 the dump position. The dust separator must be automatic self-emptying  
100 each time the hopper is dumped.  
101
- 102 \_\_\_\_\_ C. Cable or other manual/mechanical means required for discharging  
103 debris from the separator will not be allowed.  
104
- 105 \_\_\_\_\_ D. Dust separation filters will not be accepted due to them clogging, the  
106 cost of replacement, and cleaning.  
107

### HOPPER

- 108
- 109
- 110 \_\_\_\_\_ A. The volumetric capacity of the hopper shall not be less than 4.3 cubic  
111 yards.  
112
- 113 \_\_\_\_\_ B. A heavy gauge steel hopper screen of not less than 10 gauge steel shall  
114 be provided to allow air to move freely from the hopper into the

## STREET SWEEPER SPECIFICATIONS

- 115 centrifugal dust separator. Screen shall be bolt-in design for easy  
116 replacement.  
117
- 118 \_\_\_\_\_ C. Hopper roof shall include a hinged door allowing access for washout of  
119 the screen. This door shall be in addition to the dump door. Access  
120 door shall be constructed from heavy duty ABS plastic.  
121
- 122 \_\_\_\_\_ D. Dumping shall be accomplished hydraulically by tilting the hopper a  
123 minimum of 88 degrees. Contents to be dumped to the rear of the  
124 vehicle at a height of 67 inches. Twin dumping cylinders to be used for  
125 tilting hopper. Tilting of hopper to be controlled from within the  
126 sweeper cab.  
127
- 128 \_\_\_\_\_ E. Hopper shall be airtight through the use of rubber seals on all doors and  
129 openings.  
130
- 131 \_\_\_\_\_ F. Hopper shall be constructed with a minimum of 10-gauge steel.  
132
- 133 \_\_\_\_\_ G. Large 24" X 10" inspection doors shall be provided on left and right  
134 sides of hopper. These doors provide an easy way to manually load  
135 debris and provide a convenient access for hopper inspection and  
136 cleaning.  
137
- 138 \_\_\_\_\_ H. Hopper interior shall be coated with an anti-wear/anti-seize coating.  
139
- 140 \_\_\_\_\_ I. Sweepers that use a no tilt method of dumping hopper or use an inside  
141 of hopper mechanical means of pushing debris out of the hopper will  
142 not be accepted.  
143
- 144 \_\_\_\_\_ J. Hopper shall have a shroud enclosing the auxiliary engine, muffler,  
145 blower housing, fuel tank, battery box, and hydraulic tank and cooler.  
146 Shroud shall be designed to help protect components from the elements  
147 and vandals. Shroud shall also be designed to reduce auxiliary engine  
148 noise by having a minimum of 1" thick sound deadening material  
149 attached to the inside of shroud in the engine compartment area. Sound  
150 deadening material must consist of at least 28 square feet of material.  
151 Shroud must be part of the hopper and lift when the hopper is raised  
152 and be designed to give the sweeper a neat well thought out streamlined  
153 appearance. In the interest of sweeper protection, public safety, and  
154 sweeper noise reduction, sweepers that do not meet all of these  
155 requirements will not be accepted.  
156  
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160

## STREET SWEEPER SPECIFICATIONS

### 161 BLOWER

162

163 \_\_\_\_\_ A. Heavy-duty steel blower shall be used to create air pressure and suction  
164 (regenerative air) for removing debris from road surface. Sweepers that  
165 clean road surface by using suction only (pure vacuum) will not be  
166 accepted.

167

168 \_\_\_\_\_ B. Blower to be powered by the sweeper auxiliary engine via a heavy-duty  
169 3v 8-groove belt. A belt safety guard shall be supplied.

170

171 \_\_\_\_\_ C. The blower shall be a closed face turbine type with 10 curved blades,  
172 having a 30-inch diameter. The blower shall be constructed of T-42  
173 steel. Fan to be fully balanced within 1.5 grams on both sides for long  
174 fan and bearing life. A die-cast aluminum alloy open face blower,  
175 either covered with rubber or not, or a die cast steel open face blower  
176 will not be acceptable.

177

178 \_\_\_\_\_ D. Blower shall have a rated performance of 40 inches of water and  
179 12,000 CFM.

180

181 \_\_\_\_\_ E. Must be equipped to provide a 360 degree average dB(a) rating of 72.0  
182 or less at an unobstructed distance of 50 feet at 2000 RPM. Sound  
183 dampening material is required in the area of the auxiliary engine and  
184 blower to aid in soundproofing.

185

186 \_\_\_\_\_ F. The blower housing shall be constructed of 10-gauge steel with the  
187 inside of the housing covered with a replaceable rubber liner.

188

189 \_\_\_\_\_ G. Blower housing shall have a vacuum enhancer for discharging a portion  
190 of the blast air for sweeping light materials such as leaves and paper.  
191 The vacuum enhancer shall be electrically powered by a DC actuator  
192 and controlled from a switch located on the control panel inside the  
193 cab. The vacuum enhancer to be capable of 0 - 80% air diversion for  
194 maximum control.

195

196 \_\_\_\_\_ H. Blower housings shall not be an integral part of the hopper.  
197 Replacement of the blower housing must be possible without having to  
198 cut the housing from the hopper and having to re-weld a new housing  
199 into the hopper.

200

201 \_\_\_\_\_ I. Blower shall be mounted on self-aligning sealed anti-friction bearings,  
202 blower shaft to have greaseable shaft bearings requiring a 1/4-ounce of  
203 grease every 250 hours to ensure maximum life expectancy. Non-  
204 grease able sealed bearings are unacceptable.

205

206



## STREET SWEEPER SPECIFICATIONS

207

208

209 PICKUP HEAD

210

211 \_\_\_\_\_ A. Pickup head shall be spring balanced all steel fabricated with separate  
212 upper and lower chambers where pressurized air is blasted from the  
213 upper chamber through an elongated blast orifice to the lower chamber.

214

215 \_\_\_\_\_ B. The pickup head shall not be less than 80 inches wide and 26 inches  
216 long giving a total head area of 2080 square inches.

217

218 \_\_\_\_\_ C. Pressure and suction hoses shall be twelve inches in diameter and be  
219 constructed from 3/8-inch thick heavy-duty molded wire reinforced  
220 rubber.

221

222 \_\_\_\_\_ D. Pressure and suction hose clamps shall be constructed from stainless  
223 steel.

224

225 \_\_\_\_\_ E. Sweeping paths shall be:  
226 Pickup head only = 80 inches  
227 Pickup head and one gutter broom = 100 inches  
228 Pickup head and two gutter brooms = 120 inches

229

230

231 \_\_\_\_\_ F. Pickup head shall be equipped with doublewide full-length carbide drag  
232 shoes for maximum life. Front and rear of drag shoe to be snowshoe  
233 design to follow road contour without damage. Shoes shall be  
234 interchangeable from either the left or right side.

235

236 \_\_\_\_\_ G. Drag shoes shall be warranted against wear-out for a minimum of two  
237 years/2000 hours, prorated.

238

239 \_\_\_\_\_ H. Sweeping head shall be raised and lowered hydraulically by a single  
240 switch located in the cab.

241

242

243 GUTTER BROOMS

244

245 \_\_\_\_\_ A. Dual gutter brooms shall be 26" minimum diameter, wire filled vertical  
246 digger type for removing debris from gutter area.

247

248 \_\_\_\_\_ B. Gutter brooms shall be hydraulic motor driven and shall be positioned  
249 laterally and vertically by hydraulic cylinders.

250

## STREET SWEEPER SPECIFICATIONS

- 251 \_\_\_\_\_ C. Each gutter broom shall have an adjustment to allow downward  
252 compensation for bristle contact, pattern and wear and shall be free  
253 floating to follow street contour.  
254
- 255 \_\_\_\_\_ D. Each gutter broom shall have lateral flexibility to swing rearward 12"  
256 under the chassis when encountering the impact of an immovable  
257 object thus avoiding damage to the broom assembly.  
258
- 259 \_\_\_\_\_ E. Each gutter broom shall be held in the up and transit position by use of  
260 an electric lock valve attachment.  
261
- 262 \_\_\_\_\_ F. Upward motion of gutter broom to be regulated by an adjustable flow  
263 control valve.  
264
- 265 \_\_\_\_\_ G. Gutter broom disk shall be recessed to prevent such items as cassette  
266 tape, string, and small rope like material from being wrapped around  
267 and damaging the gutter broom motor. Disk to be designed as to allow  
268 water to drain off, therefore eliminating water damage to the gutter  
269 broom motor seals.  
270
- 271 \_\_\_\_\_ H. A center deflector shall be provided to direct debris thrown by the  
272 gutter brooms into the path of the pickup head. Deflector shall be  
273 positioned under the belly of the sweeper and in between the gutter  
274 brooms. Deflector to raise and lower with pick-up head.  
275
- 276 \_\_\_\_\_ I. Each gutter broom shall additionally incorporate an electrically  
277 actuated tilt capability of 27 degrees, remotely controlled from the  
278 operator's seat to allow instant adjustment for debris removal from deep  
279 gutters (such as those resulting from multiple overlays of blacktop).  
280
- 281 \_\_\_\_\_ J. Each gutter broom shall have an electrically actuated in-cab controls to  
282 be able to extend and retract while in sweeping mode. This will allow  
283 the gutter brooms to scrub the pavement surface in front of the pickup  
284 head. All controls shall be in-cab. At no time shall the operator have  
285 to leave the cab to activate this function.  
286  
287

### DUST CONTROL SYSTEM

- 288  
289
- 290 \_\_\_\_\_ A. Water spray shall be supplied by a hydraulically driven roller type  
291 piston water pump. The water pump shall produce sufficient GPM's to  
292 produce a minimum of 150 PSI. The water pump to automatically  
293 disengage when the water supply is depleted.  
294

## STREET SWEEPER SPECIFICATIONS

- 295 \_\_\_\_\_ B. Water tank capacity shall not be less than 105 gallons and shall be  
296 constructed of polyethylene for strength and corrosion resistance. Shall  
297 be bolt-on design for easy removal.  
298
- 299 \_\_\_\_\_ C. No part of the water system shall be made with ferrous metal.  
300
- 301 \_\_\_\_\_ D. A minimum 25-foot long fire hydrant fill hose shall be provided with  
302 2.5" NST coupling to fill water tank. A 2" air gap shall be provided  
303 between water fill tube and water tank. Hydrant hose shall include a  
304 hydrant wrench and hose storage area.  
305
- 306 \_\_\_\_\_ E. Water system to be filtered by an 100 mesh cleanable filter located  
307 between tank and water pump.  
308
- 309 \_\_\_\_\_ F. Each water spray function shall have its own independent on/off cab  
310 controlled solenoid valve.  
311
- 312 \_\_\_\_\_ G. An in-cab low water indicator light shall warn operator when water  
313 supply is near depletion.  
314
- 315 \_\_\_\_\_ H. Water spray nozzles shall be provided as follows: four nozzles at  
316 pickup head, four nozzles inside hopper, two nozzles at right gutter  
317 broom, and two nozzles at left gutter broom.  
318
- 319 \_\_\_\_\_ I. The water system shall incorporate an air purge system for flushing  
320 water lines during freezing conditions.  
321
- 322 \_\_\_\_\_ J. Sweeper shall be equipped with a front spray bar with 7 nozzles. Spray  
323 bar to be mounted on front bumper.  
324

### OPERATING CONTROLS

- 326
- 327 \_\_\_\_\_ A. Sweeper shall be equipped with dual steering and controls for left or  
328 right hand operations. Center mounted steering or single steering is not  
329 acceptable.  
330
- 331 \_\_\_\_\_ B. Auxiliary engine control and gauges shall be mounted on the control  
332 console inside the cab. They shall consist of: keyed ignition, manual  
333 lever type throttle control, leaf bleeder control, oil pressure gauge,  
334 water temperature gauge, voltmeter, tachometer, and hour meter. All  
335 gauges to be lighted.  
336
- 337 \_\_\_\_\_ C. Console shall have independent switches for operating left gutter  
338 broom, tilt and GEO, right gutter broom, tilt and GEO, and pickup  
339 head. All switches to be lighted and have international symbols for  
340 easy identification.

## STREET SWEEPER SPECIFICATIONS

- 341  
342 \_\_\_\_\_ D. Console shall have water pump on switch and low water level warning  
343 light. Independent water control switches for left gutter broom, right  
344 gutter broom, pickup head, hopper, and nozzles at front axles. All  
345 switches shall be lighted and have international symbols for easy  
346 identification.  
347  
348 \_\_\_\_\_ E. Console shall have independent switches for each gutter broom light.  
349  
350  
351 \_\_\_\_\_ F. All sweeper main electrical systems to be separately fused at the  
352 control console by re-settable circuit breakers.  
353

### HAND HOSE EQUIPMENT

- 354  
355  
356 \_\_\_\_\_ A. Sweeper shall have auxiliary hand hose for cleaning remote areas  
357 inaccessible to the sweeping head and for cleaning out catch basins.  
358  
359 \_\_\_\_\_ B. Hand hose shall be minimum 5" in diameter with an aluminum  
360 collection nozzle.  
361  
362 \_\_\_\_\_ C. Hand hose shall not have to be taken out of a storage compartment and  
363 assembled on site to use. Hand hose shall be stored on the sweeper at  
364 the location in which it will be used.  
365  
366 \_\_\_\_\_ D. A block off plate shall be provided.  
367

### SAFETY EQUIPMENT

- 368  
369  
370 \_\_\_\_\_ A. Sweeper shall meet all federal motor vehicle safety standards. All  
371 flashing warning lights will be amber.  
372  
373 \_\_\_\_\_ B. Sweeper shall be equipped with a cab-mounted LED bar light with in-  
374 cab controls.  
375  
376 \_\_\_\_\_ C. Sweeper shall include two hopper safety struts that lock hopper in the  
377 raised position such as during maintenance.  
378  
379 \_\_\_\_\_ D. The sweeper shall have two lower stoplights mounted into the rear  
380 bumper. The sweeper to also have a third, center positioned high  
381 mounted stoplight.  
382  
383 \_\_\_\_\_ E. Sweeper shall be equipped with backup alarm, cab mounted 5 lb. fire  
384 extinguisher, and a boxed warning triangle kit.  
385  
386 \_\_\_\_\_ F. Permanent warning decals shall be provided at all hazard areas.

STREET SWEEPER SPECIFICATIONS

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ACCESSORIES

- A. Sweeper to have two toolboxes complete with lockable doors. Toolboxes to be located on either side of sweeper's rear fenders. Tool boxes to be a total of 20 Cu. Ft. The interior wall of each toolbox shall have connecting tubes for storage of long items such as brooms and rakes.
- B. Sweeper must have a full width steel rear bumper mounted to frame.
- C. 8" chrome cab mounted parabolic mirrors shall be provided to aid operator in observing gutter brooms. They shall be mounted below the west coast mirrors on chassis doors.
- D. Sweeper chassis shall be equipped with an Auto Lube System set to maintain all lube points for the sweeper body and chassis.
- E. AVL

Must include the following:  
One (1) Location Technologies brand LT5 Mobile GPS/AVL Modem unit with Control Head Interface Cable  
One (1) LT Battery Guard Vehicle Power Timer and cables  
One (1) Location Technology permanent mount GPS Antenna (positioned on top, center of cab) and cable  
One (1) Modem Interface Assembly and cables  
Data-only Radio: Motorola CDM-750, 4 channel UHF, 25 watt dash mount with 3.5 db gain antenna for the GPS/AVL system and cables

All equipment must work with current AVL system used by the City of Chattanooga, Department of Public Works, Division of City-Wide Services. All wires and parts to make AVL fully functional on the vehicle must be included.

Installation instructions:  
Installation specifics to be determined by City personnel.

Contact Information:  
Location Technologies, Inc.  
5207 NW Crooked Road, Parkville, MO 64152  
<http://www.loctech.com>

## STREET SWEEPER SPECIFICATIONS

### 433 PAINT COLOR

434

435 \_\_\_\_\_ A. The sweeper shall be painted with 1 coat of sealer/primer and 2 coats of  
436 DuPont Imron 5000 polyurethane paint in the manufacturers' standard  
437 white color.

438

439 \_\_\_\_\_ B. Gutter brooms, pickup head, sweeper and truck frame shall be painted  
440 black.

441

### 442 SWEEPER WARRANTY

443

444 \_\_\_\_\_ A. Warranty, sweeper body and chassis shall be warranted (bumper to  
445 bumper) for a period of 60 months from date of delivery, excluding  
446 wear items (wear items not covered shall be listed).

447

448 \_\_\_\_\_ B. All warranty registrations will be filed by vendor and copies provided.  
449 In-service date will begin warranty period.

450

451 \_\_\_\_\_ C. All paperwork manuals will be delivered when unit is delivered.

452

453 \_\_\_\_\_ D. Drive out tag shall be provided on Delivery or in-service date will start  
454 when  
455 registered.

456

457 \_\_\_\_\_ E. Factory service manuals on cab, chassis, body, electrical wiring and  
458 component location provided on compact disc or manual.

459

460

461

### 462 DELIVERY

463

464 \_\_\_\_\_ A. The unit shall be delivered completely assembled, serviced, and ready  
465 to operate. The successful bidder shall have a qualified service  
466 representative in attendance with the sweeper during start up operations  
467 to make any adjustments needed and to give operator instruction on the  
468 proper operation and care of the sweeper. Contact Jack Cobb at 423-  
469 757-5249 to arrange this initial set up.

470

471 \_\_\_\_\_ B. Bidder shall state delivery date.

472

473 \_\_\_\_\_ A. The bidder shall supply a complete Factory sweeper manual. Manual  
474 shall include system/component descriptions, sweeper operation,  
475 maintenance, troubleshooting, illustrated parts listing with part  
476 numbers, and Wiring schematics for the sweeper. Manual shall also  
477 include reproducible periodic maintenance schedules.

478

## STREET SWEEPER SPECIFICATIONS

- 479 \_\_\_\_\_ B. Auxiliary engine manuals shall also be provided. They shall consist of  
480 operations & factory recommended maintenance schedules, component  
481 Locator, technical manual, and an illustrated parts catalog. Computer  
482 software & hardware to be provided for diagnostic data and repair  
483 information.  
484
- 485 \_\_\_\_\_ C. The bidder shall supply a maintenance and operations video for the  
486 sweeper. The video shall outline operations, operator maintenance, and  
487 safety items relating to the safe and efficient operation of the sweeper.  
488

## CHASSIS SWEEPER SPECIFICATIONS

### 1 **Intent**

- 2 It is the intent of these specifications to describe a chassis for use with the regenerative air street sweeper.  
3 The chassis for this sweeper shall be a cabover type chassis and is to be sufficiently rated to transport a full  
4 load of sweeping debris at speeds up to 55 MPH. For safety and comfort of the operator and for quick,  
5 local service along with local availability of repair parts, the chassis will NOT be a purpose built chassis  
6 built by the sweeper manufacturer. The chassis shall be equipped with spring suspension on both axles,  
7 dual steering and operator controls, and automatic transmission. All tires shall be the same size and have  
8 dual tires on each side of the rear axle (six-wheel configuration).  
9 The unit shall be new of current manufacture. No prototype, demo, used, vacuum type, or mechanical type  
10 sweepers will be accepted.  
11 All parts not specifically mentioned which are necessary to provide a complete street sweeper shall be  
12 included in the bid and shall conform in strength, quality of materials, and workmanship to what is  
13 normally provided to the trade in general.  
14 No deviations to these specifications will be allowed.  
15  
16 **Bidders must indicate compliance for each item throughout the bid by writing "YES" or "NO".**  
17 **Failure to do so may be cause to reject the bid. All "NO" answers must be fully explained on a**  
18 **separate sheet of paper and be attached to and submitted with bid. Failure to explain "NO" answers**  
19 **may be cause to reject bid.**



## CHASSIS SWEEPER SPECIFICATIONS

### 20 CHASSIS ENGINE

#### 21 Compliance

- 22 \_\_\_\_\_
- 23 \_\_\_\_\_ A. Engine shall be a heavy-duty water cooled, in-line four cylinder, turbo-charged diesel  
24 with direct injection and overhead cam, model 4HK1-TC.
- 25 \_\_\_\_\_
- 26 \_\_\_\_\_ B. Horsepower rating shall be 190 HP @ 2600 RPM. Torque rating shall be 387 LB/FT  
27 @ 1500 RPM.
- 28 \_\_\_\_\_
- 29 \_\_\_\_\_ C. The air cleaner shall be a heavy-duty Donaldson air cleaner. Dry paper element shall  
30 be 12.6" diameter with filter minder.
- 31 \_\_\_\_\_
- 32 \_\_\_\_\_ D. Alternator shall be 110 Amps.
- 33 \_\_\_\_\_
- 34 \_\_\_\_\_ E. Two maintenance free Delco batteries shall be provided with 750 CCA each.
- 35 \_\_\_\_\_
- 36 \_\_\_\_\_ F. Chassis engine shall share 50-gallon fuel tank and batteries with auxiliary engine. No  
37 exceptions.
- 38 \_\_\_\_\_
- 39 \_\_\_\_\_ G. Engine exhaust shall be horizontal.

#### 40 41 TRANSMISSION

- 42 \_\_\_\_\_
- 43 \_\_\_\_\_ A. Transmission shall be 4-speed automatic.
- 44 \_\_\_\_\_
- 45 \_\_\_\_\_ B. Shift lever shall be mounted in center of the cab so it can be reached from either  
46 driving position.

#### 47 48 DUAL STEERING

- 49 \_\_\_\_\_
- 50 \_\_\_\_\_ A. Chassis shall be equipped with dual steering.
- 51 \_\_\_\_\_
- 52 \_\_\_\_\_ B. Each driving position shall have a foot throttle, foot brake, turn signal switch, and  
53 horn button.
- 54 \_\_\_\_\_
- 55 \_\_\_\_\_ C. Maximum turning radius shall not exceed 19 feet (Wall to wall). No exceptions.

#### 56 57 FRONT AXLE & SUSPENSION

- 58 \_\_\_\_\_
- 59 \_\_\_\_\_ A. Front axle shall be I-beam type with a capacity of 6,830 lbs.
- 60 \_\_\_\_\_
- 61 \_\_\_\_\_ B. Front suspension shall be semi-elliptical leaf springs with a capacity of 6830 lbs.
- 62 \_\_\_\_\_
- 63 \_\_\_\_\_ C. Front suspension shall include shock absorbers and stabilizer bar.

#### 64 65 REAR AXLE & SUSPENSION

- 66 \_\_\_\_\_
- 67 \_\_\_\_\_ A. Rear axle shall be single speed with a capacity of 14,550 lbs.
- 68 \_\_\_\_\_
- 69 \_\_\_\_\_ B. Rear suspension shall be semi-elliptical leaf springs with a capacity of 9,880 lbs.
- 70 \_\_\_\_\_
- 71 \_\_\_\_\_ C. Rear suspension shall include shock absorbers.

#### 72 73 BRAKE SYSTEM EQUIPMENT

74

CHASSIS SWEEPER SPECIFICATIONS

- 75 \_\_\_\_\_ A. Brake system shall be anti-lock, dual circuit hydro-boost hydraulic.
- 76
- 77 \_\_\_\_\_ B. Front brakes shall be disc-type, non-asbestos linings.
- 78
- 79 \_\_\_\_\_ C. Rear brakes shall be disc-type, non-asbestos linings.
- 80
- 81 \_\_\_\_\_ D. Brakes shall be self-adjusting.
- 82
- 83 \_\_\_\_\_ E. Parking brake shall be mechanical transmission mounted.
- 84
- 85 \_\_\_\_\_ F. Chassis shall include a Butterfly valve type exhaust brake.
- 86

FRAME & WHEELBASE

- 87
- 88
- 89 \_\_\_\_\_ A. Wheelbase shall be no longer than 109 inches. Sweepers that use longer wheelbases to accommodate toolboxes will not be excepted. No exceptions.
- 90
- 91
- 92 \_\_\_\_\_ B. Frame shall be ladder-type channel frame full C-section straight frame 33.5 in. wide. Yield strength shall be 44,000 psi. Section modulus to be 7.20 cu. in. RBM shall be 316,800 lb.-ft/in.
- 93
- 94
- 95
- 96 \_\_\_\_\_ C. Turning radius to be no more than 19.05 feet (Wall to wall). No exceptions.
- 97
- 98 \_\_\_\_\_ D. Cab to axle to be a maximum of 88.4 inches.
- 99
- 100 \_\_\_\_\_ E. GVW to be a minimum of 17,950 lbs.
- 101
- 102 \_\_\_\_\_ F. Chassis provided from vendor must have adequate axle, frame and spring ratings to carry specified body under severe conditions and total weight rating and foundation braking capability.
- 103
- 104
- 105

MISCILANEOUS

- 106
- 107
- 108 \_\_\_\_\_ A. Must be capable of sweeping up a 30 degree incline fully loaded.
- 109
- 110 \_\_\_\_\_ B. Vendor will supply any special software and compatible com device to read engine and trans fault and repair information.
- 111
- 112
- 113 \_\_\_\_\_ C. Provide Transmission SCAAN based on GVWR.
- 114
- 115

TIRES & WHEELS

- 116
- 117
- 118 \_\_\_\_\_ A. Tires shall be 225/70R 19.5F radial tubeless all season tread 10 ply. No exceptions.
- 119
- 120 \_\_\_\_\_ B. Rear axle shall have dual tires and wheels on each side of axle.
- 121
- 122 \_\_\_\_\_ C. Wheels shall be 19.5" X 6", 6-hole disc painted white.
- 123

CAB EXTERIOR

- 124
- 125
- 126 \_\_\_\_\_ A. Cab shall be cabover type cab only. No conventional type chassis will be accepted.
- 127
- 128 \_\_\_\_\_ B. Chassis shall have dual west coast mirrors.
- 129

## CHASSIS SWEEPER SPECIFICATIONS

- 130 \_\_\_\_\_ C. 8" diameter chrome parabolic mirrors mounted under west coast mirrors shall be  
131 provided.  
132  
133 \_\_\_\_\_ D. Door windows shall roll down type. No sliding windows.  
134  
135 \_\_\_\_\_ E. Sweeper height shall not extend over 92" above ground (not including optional cab  
136 lighting).  
137

### CAB INTERIOR

- 138  
139  
140 \_\_\_\_\_ A. Heater, defroster, and air conditioner shall be provided.  
141  
142 \_\_\_\_\_ B. Both seats shall be non-suspension seats.  
143  
144 \_\_\_\_\_ C. Chassis to be equipped with power windows and door locks.  
145  
146 \_\_\_\_\_ D. Three point seat belts shall be provided.  
147  
148 \_\_\_\_\_ E. Chassis shall have an AM/FM radio with CD player.  
149

### INSTRUMENTS & CONTROLS

- 150  
151  
152 \_\_\_\_\_ A. Gauges shall consist of coolant temperature, fuel, and electronic speedometer with  
153 trip odometer. Chassis shall also have warning lights for oil, volts, and water  
154 temperature with an automatic shutdown system.  
155  
156 \_\_\_\_\_ B. Chassis shall be equipped with cruise control.  
157  
158 \_\_\_\_\_ C. Chassis shall have cigar lighter and ashtray.  
159  
160 \_\_\_\_\_ D. Chassis shall have two speed windshield wipers with interval feature and windshield  
161 washer.  
162

### PAINT COLOR

- 163  
164  
165 \_\_\_\_\_ A. The chassis and wheels shall be painted white.  
166  
167 \_\_\_\_\_ B. Chassis frame shall be painted black.  
168

### CHASSIS WARRANTY

- 169  
170  
171 \_\_\_\_\_ A. Basic chassis warranty shall be 3 years/unlimited miles.  
172  
173 \_\_\_\_\_ B. Chassis engine warranty shall be 3 years/unlimited miles.  
174  
175 \_\_\_\_\_ C. Transmission warranty shall be 3 year/unlimited miles.  
176  
177 \_\_\_\_\_ D. Frame rails shall be 3 years/unlimited miles on.  
178  
179 \_\_\_\_\_ E. Engine emissions shall be 5 years 100,000 miles.  
180  
181 \_\_\_\_\_ F. Corrosion (rust through) shall be 4 years/unlimited miles.  
182

### DELIVERY

- 183  
184  
185 \_\_\_\_\_ A. The chassis shall be delivered completely assembled, serviced, and ready to operate.

CHASSIS SWEEPER SPECIFICATIONS

- 186  
187 \_\_\_\_\_ B. Bidder shall state delivery date.  
188  
189 \_\_\_\_\_ C. Bidder shall supply a chassis owner's manual.  
190  
191  
192 \_\_\_\_\_ D. Factory service manuals, wiring diagrams as well as component locators to be  
193 provided.  
194  
195 \_\_\_\_\_ E. All warranty registrations will be completed by vendor and copies provided.  
196  
197 \_\_\_\_\_ F. Warranty will start on in-service date on chassis and body.  
198  
199  
200 \_\_\_\_\_ G. Training for sweeper repair and maintenance will be provided for shop personnel with  
201 a minimum of 2 days.

## Affirmative Action Plan

The City of Chattanooga is an equal opportunity employer and during the performance of this Contract, the Contractor agrees to abide by the equal opportunity goals of the City of Chattanooga as follows:

1. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, or handicap. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, national origin, or handicap. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay, or other forms of compensation, and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin, or handicap.
3. The Contractor will send to each labor union or representative of workers with which he/she has a collective bargaining agreement or other contract or understanding, a notice advising the said labor union or workers' representatives of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
4. In all construction contracts or subcontracts in excess of \$10,000 to be performed for the City of Chattanooga, any contractor and/or subcontractor is further required to file in duplicate within ten (10) days of being notified that it is the lowest responsible bidder, an affirmative action plan with the EEO Director of the City of Chattanooga. This plan shall state the Contractor's goals for minority and women utilization as a percentage of the work force on this project.
5. This Plan or any attachments thereto shall further provide a list of all employees annotated by job function, race, and sex who are expected to be utilized on this project. This plan or attachment thereto shall further describe the methods by which the Contractor or Subcontractor will utilize to make good faith efforts at providing employment opportunities for minorities and women.

During the term of this contract, the Contractor upon request of the City, will make available for inspection by the City of Chattanooga copies of payroll records, personnel documents and similar records or documents that may be used to verify the Contractor's compliance with these Equal Opportunity provisions.

6. The Contractor will include the portion of the sentence immediately preceding paragraph 1 and the provisions of paragraphs 1 through 6 in every subcontract so that such provisions will be requested of each subcontractor. The Contractor agrees to notify the City of Chattanooga of any subcontractor who refuses or fails to comply with these equal opportunity provisions. Any failure or refusal to comply with these provisions the contractor and/or subcontractor shall be a breach of this contract.

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(Signature of Contractor)

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(Title and Name of Company)

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(Date)