

City of Portsmouth
Portsmouth, New Hampshire
Department of Public Works

Bid#38-19
Mac Granite 64FR
or
Equivalent

INVITATION TO BID

The City of Portsmouth is soliciting bids for a new, latest model year Mack Granite 64 FR MP-8 with 425 HP torque curve to be flat from 1050-1400 RPM or equivalent with a Vactor 2100i with Roots 824-18” Hg. Blower with 1500 gallon stainless steel water tanks, with IntuiTouch capabilities, or equivalent, for the Water/Sewer Division of the City of Portsmouth Public Works Department.

The City will trade in a 1997 International 7400 Vactor truck. Mileage is 57,098.

Sealed bid proposals, plainly marked “**Bid#38-19 Mac Granite 64FR or Equivalent**” on the outside of the, addressed to the Finance/Purchasing Department, City Hall, 1 Junkins Avenue, Portsmouth, New Hampshire, 03801, will be accepted until **1:00 p.m., March 13, 2019** at which time all bids will be publicly opened and read aloud.

This bid is available at <http://www.cityofportsmouth.com/finance/purchasing.htm> or by contacting the Finance/Purchasing Department at the following number: (603) 610-7227.

Questions may be directed to the Finance/Purchasing Department. Addenda to this proposal, if any, including written answers to questions will be posted on the City of Portsmouth website under the project heading. Any addenda will be not sent directly to vendors.

The City of Portsmouth reserves the right to reject any or all bids, to waive technical or legal deficiencies, and to accept any bid that it may deem to be in the best interest of the City.

INSTRUCTION TO BIDDERS

I. Preparation of Bid Proposal

- A. The Bidder shall submit its proposal upon the form furnished by the City (attached). Prices shall be given in both words and figures.
- B. Corrections made to amounts or information requested on the bid form should be made by crossing out the error and entering the new price or information above or below it. The correction must be initialed. In case of discrepancy between the prices written in words and those written in figures, the prices written in words shall govern.
- C. The bidder's proposal must be signed by the individual, by one or more members of the partnership, by one or more members or officers of each firm representing a joint venture; by one or more officers of a corporation, or by an agent of the contractor legally qualified and acceptable to the owner. If the proposal is made by an individual, his/her name and post office address must be shown, by a partnership the name and post office address if each partnership member must be shown; as a joint venture, the name and post office address of each must be shown; by a corporation, the name of the corporation and its business address must be shown, together with the name of the state in which it is incorporated, and the names, titles, and business addresses of the President, Secretary, and Treasurer.
- D. All words, figures, corrections shall be in ink or typed. All signatures shall be in ink.
- E. Addenda to this proposal, if any, including written answers to questions, will be posted on the City of Portsmouth website at <http://www.cityofportsmouth.com/finance/purchasing.htm> under the project heading. Addenda and updates will NOT be sent directly to firms. Bidders submitting a proposal should check the web site for addenda and updates after the release date. Bidders should print out, sign and return addenda with the proposal. Failure to do so may result in disqualification.
- F. Disadvantaged Business Enterprises (DBEs) as defined in 49 CFR Part 26 are encouraged to submit a proposal. If applicable, documentation of DBE status shall be included with the submittal.

II. Delivery of Bid Proposals

When sent by mail, the sealed proposal shall be addressed to the owner at the address and in the care of the official in whose office the bids are to be received. All proposals shall be filed prior to the time and at the place specified in the invitation for bids. Proposals received after the time for opening of the bids will be returned to the bidder, unopened. Faxed bid proposals are not acceptable.

III. Withdrawal of Bid Proposals

A bidder will be permitted to withdraw his/her proposal unopened after it has been deposited if such request is received in writing prior to the time specified for opening the proposals.

IV. Public Opening of Bid Proposals

Proposals will be opened and read publicly at the time and place indicated in the invitation for bids. Bidders, their authorized agents, and other interested parties are invited to be present.

V. Irregular Proposals and Disqualification of Bidders

Bid proposals that are irregular may be rejected. Irregular bid proposals include the following:

- A. Failure to use the bid form provided or alteration of the form.
- B. Unauthorized additions, conditional or alternated bids, incomplete bids, or irregularities of any kind which may tend to make the proposal incomplete, indefinite or ambiguous as to its meaning.
- C. The addition of any provision reserving the right to accept or reject an award, or to enter into a contract pursuant to an award.

Bidders may be disqualified and the bid proposal rejected for the following reasons:

- A. More than one proposal for the same work from an individual, firm, or corporation under the same or different name;
- B. Evidence of collusion among bidders;
- C. Failure to submit all required information requested in bid specifications;
- D. Bidder is not qualified or able to provide the services or product(s) described in the bid specifications; or
- E. Disqualification is in the best interest of the City of Portsmouth.

AWARD

I. Consideration of Proposals and Award

After the proposals are opened and read, bid results will be available to the public. In case of discrepancy between the prices written in words and those written figures, the prices written in words shall govern.

Within 30 calendar days after the opening of proposals, if an award is made, it will be made to the lowest, responsible, qualified bidder whose proposal complies with all the

requirements prescribed. The successful bidder will be notified by mail at the address indicated on the proposal.

The award shall not be considered official until such time that a purchase order, fully executed contract or an award letter has been issued by the Finance Director.

No presumption of award shall be made by the bidder until such documents are in hand. Verbal notification of award is not considered official. Any action by the bidder to assume otherwise is done so at his/her own risk and the City will not be held liable for any expense incurred by a bidder that has not received an official award.

III. Reservation of Rights

The City reserves the right to cancel the award at any time before final notification of the successful bidder without any liability against the City. The City of Portsmouth reserves the right to reject any or all bids, to waive technical or legal deficiencies, and to accept any bid that it may deem to be in the best interest of the City.

Bid Specification

The intent of this specification is to procure a new or latest model year Mack Granite 64 FR MP-8 with 425 HP torque curve to be flat from 1050-1400 RPM or equivalent with a Vactor 2100i with Roots 824-18" Hg. Blower with 1500 gallon stainless steel water tanks, with IntuiTouch capabilities, or equivalent, for the Water/Sewer Division of the City of Portsmouth Public Works Department.

The City will trade in one vehicle:

1997 International 7400 Vactor truck
Mileage: 57,098

An equivalent Vactor truck must be of equivalent quality and meet the bid specifications. The City in its sole discretion will determine if an equivalent meets the bid specifications.

The following are minimum acceptable specifications, any exceptions shall be noted In the column titled "Actual Bid".

Minimum Requested:

Actual Bid:

Application Packages:

Mack Granite 64FR	_____
Module Paint Match Cab – Yes	_____
Module Paint Color – White	_____
Cab Color – White	_____
Chassis Axle – Tandem	_____

Granite BR Config. Pkg.	
PK7 179A: CTO; LH BB, 33L DEF 93 gallon	
Sleeved, outboard air	_____

Application Recommendations	
Without special sales package	_____

Ground clearance related packages

Standard ground clearance
(Most applications)

Customer/Vehicle Info:

Vehicle use & body/trailer type
Tanker or Pumper Truck

Topography
Grades <3% greater than 98% of driving
Distance max grade 8%

Ambient temp upper limit (GTA)
Ambient temperature very hot. Warmer
than 104F (40C) more than 25 hours
per year

Sales Promotion
Rapid quote management program - US

Program Financial Tracking
Sales program tracking 3 - USA

Marketing Promotion
Fair market value lease commitment

Engine/Transmissions:

Engine package
MP8-425M Mack 425HP@1500-1900 RPM (Peak)
2100 RPM (GOV) 1560 LB-FT, US'17

Transmission
4500 RDS 6 SP-Allison rugged duty series
Gen 5 w/prognostics

Exhaust/Emissions:

PPF Cover
DPF cover stainless steel, polished

Exhaust

Single vertical right side cab mounted,
Lower venturi diffuser, turned end

Exhaust system material finish
Single, bright finish heat shield, stack and
SCR cover (if equipped)

Engine Equipment:

Alternator
Delco 12V 145A (24SI) brush-type

Batteries
(3) Mack 12V 1000/3000 CCA threaded
Stud type

Battery disconnect switch
Flaming river big switch wired to positive
Side

Starter
Mitsubishi electric 105P planetary gear
Reduction starter

Coolant protection
Chevron extended life coolant w/o
Nitrite (50/50 mix dyed red) to -34DEG

Coolant filter/conditioner
Spin on canister w/o chemical for use
W/Texaco extended life coolant only

Hoses - Radiator/Heater
Silicone hoses, spring clamps on radiator &
Heater, ¼ turn ball valve heater hose

Oil pan
Corrosion resistant oil pan

Engine block heater
120V 1500 watt engine block heater

Engine starting aid

Electric preheater

Clutch/Trans Equipment:

Gear shifter
Allison dash MTD shifter w/neutral to
range inhibit (HD Series)

Clutch
Omit clutch

Driveline - Main
Meritor 18 MXL "XTENDED LUBE"

Driveline - Interaxle
Meritor 17 MXL "EXTENDED LUBE"

Propeller shaft main, Unvsl Jnt
Universal joint half-rounded type

Transmission output torque
Transmission output torque basic

Transmission oil cooler
Funrish for Allison trans. w/direct
Mount cooler & SS coolant tubes

Front Axle Equipment:

Front Axle
20000#(9100 KG) MACK FXL20 wide
pivot center straight spindle/unitized bearings

Springs - Front
Mack taper leaf 20000# (9100 KG) ground
load rating

Front Axle Brakes
Meritor "S" cam type 16.5"x6 Q+

Front Axle Brake Dust Shield
Dust shields for front axle

Steering
Sheppard SD110 + HD94

Rear Axle Equipment:

Rear Axles - Tandem
46000# (20900KG) Mack S462R cast
ductile iron housing, dual reduction

Carrier - Rear Axle
CRDP150/151 available with optional
driver controlled interwheel differential
locks, see 254 symbol

Rear Axle Ratio
5.31 ratio

Rear Suspension - Tandem
SS462 Mack multileaf (camelback) 46000# -
Extra thick spring thickness

Bogie Spread, Rear
55" axle spacing (bogie wheelbase)

Rear Spring Insulator Mat'l
Urethane shock insulators, heavy duty,
Highly recommended w/SS582 & SS652
Rear susp

Transverse Torque Rods, R Susp
Transverse torque rod (rear axle only)

Brakes - Rear
Meritor "S" cam 16.5"x7" Q+ (Total for QTY=2)

Drive Axle Brake Dust Shield
Dust shields for rear axle

Traction Differential
Driver controlled interwheel differential lock
RR-RR axle only, manual air valve w/warning light

Cab Interior (S-Z):

Seat - Driver's
Mack-Air, high back, 4 chamber air lumbar,
bolster extension

Seat Covering - Driver's
Driver's seat - steel grey vinyl/cloth mix

Seat - Passenger
Mack-Fixed, bench seat, mid back

Seat Support, Dust Cover
Seat, dust cover for driver's seat

Seat Armrest
Inboard mounted armrest, driver's seat only

Seatbelt(s)
Lap & shoulder (both seats) & lap belt for
inboard rider

Steering Wheel
2 spoke urethane grip, satin aluminum
spokes, with switches

Cab Exterior:

Grab Handles
BF exterior cab grab handles, BL grab handle
RH interior windshield post

Horn - Electrical
Dual tone

Mirrors - Exterior
Flat mirror - polished aluminum finish, heated
w/out lamps

Mirrors - Convex Type Cab Doors
Bright finish, LH & RH 8" diameter, heated convex

Mirrors - Convex Hood & Fender
8" round BF fender MTD w/SS brackets & adj.
arms RH & LH (same as 15H2001)

Mirrors – Proximity
Rect convex above RH door window

Sun visor - Exterior
Sun visor, exterior, fiberglass (painted)

Wheels & Tires:

Tires Brand/Type - Front
425/65R22.5 L Bridgestone M864 (Total for QTY=2)

Wheels - Front
22.5x12.25 Alcoa Lvl One Alum Disc, 10-hole hub
piloted (11 ¼"/286mm BC) 5.81" offset
(Total for QTY=2)

Wheel Finishing, Front
Polished w/dura-bright protection (Total for QTY=2)

Tires Brand/Type - Rear
11R22.5 H Bridgestone M799 (drive only)
(Total for QTY=8)

Wheels - Rear
22.5x8.25 Hayes Lemmerz steel disc 10-hole hub
piloted, two hand holes (11 ¼"/286mm BC)
(Total for QTY=8)

Drive Wheel Studs
Drive wheel studs longer length
All wheels must be White

Communication Systems:

Co-Pilot - Display Features Access Level
Display features access, full driver access

Unladen 5th Wheel Height	0.0 inches	_____
Unladen Frame Height	44.3 inches	_____
Cab Height	70.9 inches	_____
Overall Height	115.2 inches	_____
Driver CG	70.9 inches	_____
55" Axle Spacing (Bogie wheelbase)	55.0 inches	_____
Second Front Axle Spacing	0.0 inches	_____

Calculated Codes – KAX:

Front Ride Height at Full Load Ride height 206-215mm CL axle to lower frame flange		_____
Rear Ride Height at Full Load (CA) Ride height 271-290mm, CL axle to lower frame flange		_____
Number of Optional Switches Number of optional switches, 6		_____
Number of Prop. Shafts Three piece prop shafts		_____
Prop. Shaft Length, Main Axle Main prop. shaft length 1225		_____
Prop. Shaft Length, First Axle First prop. shaft length 1425		_____
Prop. Shaft Length, Second Axle Second prop. shaft axle length, 1225		_____
Prop. Shaft First Brkt Vertical		

Prop. shaft first brkt, pos 05 _____

Prop. Shaft 1 Brkt Pos. Horizontal
Prop. shaft 1 brkt pos C _____

Prop. Shaft Brkt, First, Angle
Prop. shaft bracket first position angle (95 degrees) _____

Prop. Shaft Second Brkt Vertical
Prop. shaft second brkt, pos 08 _____

Prop. Shaft 2 Brkt, Pos. Horizontal
Prop. shaft brkt position C _____

Prop. Shaft Brkt, Second, Angle
Prop. shaft bracket second position angle
basic (90 degrees) _____

Crossmember '1' Location
Crossmember1 X=5400MM _____

Crossmember '2' Location
Crossmember2 X=6600MM _____

Auto Routing & Clipping Center
Automatic routing and clipping placement,
center section _____

Routing Bracket Position 1A RH
Routing bracket position 1A (right frame),
XM=5200 _____

Routing Bracket Position 3A RH
Routing bracket position 3A (right frame),
XM=5950 _____

Routing Bracket Position 3B
Routing bracket position 3B (right frame),
XM=6350 _____

Routing Bracket Position 4A LH

Routing bracket position 4A (left frame),
XM=5950

Routing Bracket Position 4B LH
Routing bracket position 4B (left frame),
XM=6350

Routing Bracket Position 5A RH
Routing bracket position 5A (right frame),
XM=7250

Routing Bracket Position 6A LH
Routing bracket position 6A (left frame),
XM=7250

**Product Description, Single Engine Chassis Driven,
Vector Combo Sewer Cleaner, w/Intuitouch One
Button Activation Capabilities**

2100i with Roots 824-18" Hg. Blower, 12 yard debris body,
1500 gallons of fresh water

Standard Features:

48"x22"x24" CURBSIDE ALUMINUM TOOLBOX

Aluminum or Poly fenders over rear tandems

Mud flaps

Electric/hydraulic four way boom

Color coded sealed electrical system

Remote pendant control w/35' cord

INTUITOUCH ELECTRONIC PACKAGE

Double acting dump hoist cylinder

Handgun assembly w/35'x 1/2" hose w/quick disconnects

High pressure up to 3,000 PSI, low/high pressure _____

3" Y-strainer at water pump inlet _____

EX-TEN STEEL CYLINDRICAL DEBRIS TANK _____

Flexible hose guide _____

30 deg. sand nozzle w/carbide inserts _____

30 deg. sanitary nozzle w/carbide inserts _____

15 deg. penetrator nozzle w/carbide inserts _____

Nozzle storage rack _____

Vacuum tube storage, for pipes _____

10' leader hose _____

Flat rear door w/hydraulic locks and door power-up/
down, open/close feature _____

Dual 10" stainless steel float shut off system/
rear mounted _____

Stainless steel Micro strainers prior to blower _____

Debris body vacuum relief system _____

Debris deflector plate _____

60" dump height _____

Water sight gauge DS/PS _____

Liquid float level indicator for Debris body _____

Digital Water Pressure Gauge _____

Boom transport post storage _____

Front Joy Stick Boom Control	_____
3" Y-strainer @ water pump	_____
PERFORMANCE PACKAGE	_____
Hydraulic cooling package	_____
Midship Handgun Coupling	_____
Side mounted water pump	_____
Hose wind guide (dual roller)	_____
Hose footage counter - mechanical	_____
Hose reel manual hyd. extend/retract	_____
Hose reel chain cover (full)	_____
Tachometer/chassis engine w/hour meter At Hose Reel	_____
Tachometer & Hour Meter/Blower at Hose Reel	_____
Circuit breakers	_____
LED lights, clearance, back-ups, stop, tail & turn	_____
Tow hooks, front and rear	_____
Electronic back up alarm	_____
Hydraulic tank shut off valves	_____
8" vacuum pipe package	_____
Emergency flare kit	_____
Fire extinguisher 5lbs	_____
Low water alarm w/water pump flow indicator	_____

Digital hose footage counter _____

Water pump hour meter _____

PTO hour meter _____

Digital water pressure gauge _____

Vactor 2100i body decal- multi-colored _____

Vactor manual, partial manual and USB version -1+dealer _____

Additional Features:

304 STAINLESS STEEL WATER TANKS UPGRADE
IN LIEU OF ALUMINUM _____

180 degree rotation, 10 ft. hydraulic telescoping boom,
front loading 8" suction hose _____

Telescopic boom elbow, nickel plated _____

80 GPM/2500PSI Variable Flow Water System _____

1"x600' Piranha sewer hose, 2500 PSI _____

Hydraulic extending/rotating 15" hose reel
(1"x800') capacity _____

Module paint, Dupont Imron Elite -
Sanded primer base _____

Debris body flush out system _____

6" Decant System w/Knife Valve, Curbside _____

6" knife valve w/Cam-Loc, rear door, 3:00 position _____

Additional water, water and debris tanks connected

For additional water capacity _____

Centrifugal separators cyclones, 2 ea. side _____

Full rear door swinging screen _____

Rear door valve flush out _____

Folding pipe rack, curbside (3) _____

Folding pipe rack, street side (3) _____

Folding pipe rack, rear door (2) _____

Rear door splash shield _____

Lube manifold _____

Plastic lube chart _____

Air purge _____

Hot shift blower drive _____

Blower high temp safety shutdown _____

Wireless controls, including hose reel controls
Two way communication LCD display _____

Rotatable boom inlet hose, telescoping boom _____

Anti-splash valve _____

Cold weather recirculator, PTO driven, 25 GPM _____

RODDER SYSTEM ACCUMULATOR - JACK HAMMER ON/OFF
CONTROL W/MANUAL VALVE _____

Handgun couplers, front and rear _____

HYDRO EXCAVATION KIT - INCLUDES LANCES, NOZZLES,
STORAGE TRAY AND VACUUM TUBES _____

Automatic hose level wind guide, indexing _____

CYCLONE WASHOUT SYSTEM _____

High alloy stainless steel water barrel designed to improve
Water barrel life in application where harsh water is used _____

Single High pressure hose reel to operate both hand gun
And Hydro-x system _____

Rodder pump drain valves _____

Rear directional control, signal master LED arrow stick,
8 lights _____

Waterproof, rechargeable, wireless, handheld, LED spotlight w/12V
charger and plug _____

14 lighting package, 14 federal signal strobe lights, LED _____

LED mid-ship turn signals _____

Work lights (2), LED, telescoping boom _____

Work lights (2), LED Rear door _____

Work light, LED, operator's station _____

Work light, LED, hose reel manhole _____

Toolbox, front bumper mounted, 16x12x18 w/(2)
LED side markers _____

Toolbox, behind cab _____

Toolbox, driver side chassis frame, 24w x 24h x 24d _____

Toolbox, driver side sub frame, 18w x 24h x 24d _____

Extra nozzle kit to include bulldog anti blast w/6" chisel _____

Camera system, front and rear _____

Safety cone storage rack - drop in style _____

One (1) 8" x 3' aluminum vacuum tube _____

Two (2) 8" x 5' aluminum vacuum tube _____

Four (4) 8" quick clamp assembly _____

One (1) 8" adjustable air adaptor _____

Two (2) 3" Y-strainer screen _____

One (1) Flexible hose guide _____

Work zone lighting package _____

(2) Full printed Vector manual _____

Complete wiring schematic from Vector _____

Complete hydraulic schematic from Vector _____

Vector factory training for one operator
and one Mechanic _____

Vector right start training _____

Vector extended Warranty _____

Vector must supply one years' worth
of maintenance parts In order to stay in
Compliance with Vector's Preventive schedule
and to adhere to Vector's warranty terms. _____

Mack Granite 64FR Extended Warranty _____

Guaranteed buy back at 10 & 15 _____

Year maturations _____

Complete Mack operators manual _____

Complete Mack parts manual _____

Mack Factory training for two mechanics _____

Mack Factory Diagnostic scanner, software & cables _____

Module Paint Match Cab – Yes _____

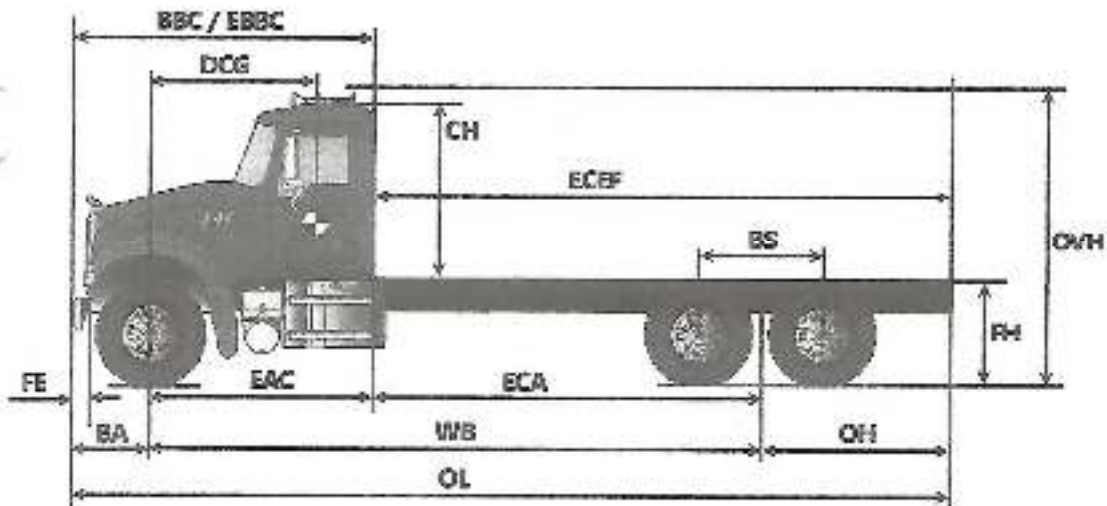
Module Paint Color – White _____

Cab Color – White _____

Chassis Axle – Tandem _____

Cab and Chassis Dimension:

VEHICLE SPECIFICATION/CALCULATED PERFORMANCE SUMMARY				
Description	Code	Dim. No.	Value	Unit
Front Frame Extension	N/A	FE	81.0	INCHES
Bumper to Front Axle	N/A	BA	40.0	INCHES
Wheelbase	N/A	WB	238.8	INCHES
Rear Overhang	N/A	OH	106.2	INCHES
Overall Length	N/A	OL	456.0	INCHES
Bumper to Back of Cab	N/A	BBC	188.5	INCHES
Eff. Bumper to Back of Cab	N/A	EBBC	135.0	INCHES
BT. Cab to Rear Axle	N/A	LOA	195.8	INCHES
Eff. Front Axle to Back of Cab	N/A	EAC	87.8	INCHES
Eff. Cab to End of Frame	N/A	ECBF	302.4	INCHES
Unladen 5th Wheel Height	RH57X	57	0.0	INCHES
Unladen Frame Height	N/A	FH	44.3	INCHES
Cab Height	N/A	CH	70.9	INCHES
Overall Height	N/A	OVH	115.2	INCHES
Driver CG	N/A	DCG	70.9	INCHES
55" AXLE SPACING (ECCIE W/ ETL BASE)	GA/KAGX	AS	50.0	INCHES
Second Front Axle Spacing	RHX71X	SPS3	0.0	INCHES



TRADE-IN:

1997 International 7400 Vactor truck

Mileage: 57,098

Trade-in vehicle will take a DOT sticker and is in fairly good condition

The City of Portsmouth will trade in a 1997 International 7400 Vactor Truck with 57,098 miles. You may set up an appointment to see the vehicle by calling Bill Faulkner, Maintenance Garage Foreman at (603) 766-6210.









Bid Price Proposal Form

Mack Granite 64FR

Model Year: _____ Equivalent Model: _____

\$ _____ \$ _____
Price in Words Price in Figures

Mack Granite Extended Warranty

\$ _____ \$ _____
Price in Words Price in Figures

Trade-in: 1997 International 7400 Vactor truck

\$ _____ \$ _____
Price in Words Price in Figures

BASIS OF AWARD:

Grand Total Bid: Mac Granite 64FR plus extended warranty less Trade In

\$ _____ \$ _____
Price in Words Price in Figures

DELIVERY: Delivery is expected no later than six months (180 days) from receipt of award. Bidder must deliver vehicle to Department of Public Works, 680 Peverly Hill Road, Portsmouth, NH 03801.

APPROXIMATE NUMER OF DAYS FOR DELIVERY: _____

The undersigned agrees that he/she on behalf of Bidder has read the bid proposal documents, the instruction to bidders' specifications and agrees to the terms and conditions set forth herein.

Bidder understands that bid prices shall include delivery FOB to the address identified in the bid documents and bid price shall be firm for at least 45 days.

Bidder further agrees that this bid is not made jointly or in conjunction, cooperation or collusion with any person, firm, corporation or other legal entity.

Bidder agrees no officer, agent or employee of the Owner is directly or indirectly interested in this Bid.

Submitted by Authorized Agent:

(Print Name & Title)

Signature: _____

Date: _____

Company: _____

Address: _____

City/State/Zip: _____

E-mail address: _____

Telephone: _____

Fax: _____

Please complete attached questionnaire.

