

**BID SPECIFICATIONS
FOR
MOTORGRADER – OPTION A
VOLVO G940C
\$274,386.00 (INCLUDING OPTIONS) TIER 3**

GENERAL

These specifications shall be construed as the minimum acceptable standards for a heavy duty motor grader. Should the manufacturer's current published data or specifications exceed these standards, the manufacturer's standards shall be considered minimum and shall be furnished. All integral parts not specifically mentioned in the scope of these specifications that are necessary to provide a complete working unit shall be furnished. Additional, the machine offered for bid shall include all standard manufacturer's equipment. The motorgraders must be a new current production model and shall meet all EPA and other applicable standards at the time of manufacture.

The use of specific names or numbers in the specifications is not intended to restrict the bidder or any seller or manufacturer, but is intended solely for the purpose of indicating the type, size, and quality of equipment considered best adapted to the uses of counties participating in this joint bid.

BID SUBMITTAL FORM

Each bidder must submit his or her bid on the Bid Submittal Form included in the invitation to bid package. All written warranties to be submitted shall be attached to the Bid Submittal Form.

BID PRICE

The price bid shall include all destination charges, delivery charges, title fees, rebates and all other applicable costs and refunds.

MANUALS

Each unit shall be provided with one (1) copy of the operator's manual, one (1) copy of the repair manual and one (1) copy of the current parts manual. Units will not be accepted for delivery until the manuals as outlined above are received by the purchaser.

REPLACEMENT PARTS AVAILABILITY

Parts must be available for 5 years or 7,500 hours of use for the piece of equipment bid. If replacement parts are not delivered within three (3) working days of an order being placed, the bidder will deliver an equivalent machine for the County to use at no cost to the County until such time as the parts are delivered to the County so it can affect repairs to its machine.

FILTERS

The cost of all filters required to perform scheduled maintenance as outlined in the manufacturer's service schedule and to meet warranty requirements. Assume 1200 hours of annual use to determine filter requirements. The first three years shall cover a period of 3600 hours. The additional two years will cover a period of 2400 hours. The filters shall be furnished with each machine purchased or at the option of the purchasing County may be picked up at the dealership as needed.

WARRANTY

Bidders shall submit a copy of the manufacturer's standard warranty and a 3-year, 3600 hour power train warranty along with a complete explanation of the warranty with their bid. Warranty shall include service response time of a maximum of 36 hours within notification by county.

Yes ___ No ___
Page # _____
Attachment _____

ENGINE

Engine shall be a turbo-charged, direct injection, four stroke, 6 cylinder diesel engine and shall be electronically controlled for more efficient fuel injection and fuel burn.

Yes ___ No ___
Page # _____

Engine displacement shall not be less than 9.3L (568 in3) and shall develop, as standard, a rated net flywheel power of at least 193 HP (144 kW) in 1st gear, 203 HP (151 kW) in 2nd gear, 213 HP (159 kW) in 3rd gear, 223 HP (166 kW) in 4th gear, 228 HP (170KW) in 5th gear, 233 HP (174 kW) in 6th gear, 237 HP (174 kW) in 7th gear and 243 HP (181 kW) in 8th gear.

Yes ___ No ___
Page # _____

Engine shall be isolation/resilient mounted to minimize sound and vibration and shall meet currently required EPA emission regulations for manufacturer.

Yes ___ No ___
Page # _____

Engine compartment enclosure doors shall be lockable without the use of external locks and accessible from the ground. All daily service points shall be accessible from ground level and grouped together.

Yes ___ No ___
Page # _____

Engine will increase its low idle to 1,000 rpm when the battery voltage is below 24.5 volts for more than 5 minutes to ensure adequate system voltage and battery reliability.

Yes ___ No ___
Page # _____

STARTING SYSTEM

Shall be equipped with a 24 volt electrical system, with 24 volt to 12 volt converter for two way radio, 75 amp alternator.

Yes ___ No ___
Page # _____

TRANSMISSION

Shall be designed and built by the machine manufacturer and shall be a direct drive, power shift, counter-shaft type transmission.

Yes ___ No ___
Page # _____

Shall be equipped with built-in self-diagnostic capability

Yes ___ No ___
Page # _____

A controlled throttle shifting system shall be standard to smooth directional gear changes without use of the inching pedal.

Yes ___ No ___
Page # _____

Electronic Throttle Control (cruise control) shall be standard and shall be controlled by a push button, located on a 3-axis joystick as standard on the right joystick control for resuming and decreasing throttle set.

Yes ___ No ___
Page # _____

Direction control shall be a 3-position rocker switch for selecting forward, neutral, and reverse, while gear selection shall be controlled by dual push-buttons for up-shifting and down-shifting, both of which shall be incorporated into a single, 3-axis, multi-function, left-hand joystick control.

Yes ___ No ___
Page # _____

Differential Lock/Unlock shall be electro-hydraulically controlled, via a push-button, located on a single 3-axis, multi-function, right-hand joystick control.

Yes ___ No ___
Page # _____

Final drive shall be a planetary design.

Yes ___ No ___
Page # _____

Machine shall be equipped with an electronic inching pedal for improved modulation and machine control, and with electronic over-speed protection to protect the engine and transmission from over speeding.

Yes ___ No ___
Page # _____

Also to be equipped with transmission guard.

Yes ___ No ___
Page # _____

TANDEM

Machine to be equipped with differential lock/unlock electro-hydraulically controlled with a multi-disc design .

Yes ___ No ___
Page # _____

Tandems shall be capable of oscillating 15 degrees front tandem up and 25 degrees front tandem down, with full machine articulation and having no interference between tandem wheel and machine structure

Yes ___ No ___
Page # _____

CONTROLS AND HYDRAULICS

Hydraulics system shall be a closed center, load sensing type, with a variable Displacement, axial piston-type pump.

Yes ___ No ___
Page # _____

Implement valves shall be electro-hydraulic, designed and built by the machine manufacturer.

Yes ___ No ___
Page # _____

Lock valves shall be integrated into the main implement valve to prevent cylinder drift.

Yes ___ No ___
Page # _____

Blade lift cylinders shall have independent float capability, actuated by two, multi-functioning, 3-axis joystick controls and auxiliary controls inside the cab.

Yes ___ No ___

Hydraulic controls shall be joystick actuated.

Page # _____

Yes ___ No ___

Page # _____

BLADES

Machine shall be equipped with 14 ft. long, 24 in high and no less than 7/8 in thick moldboard with hydraulic side shift and tip control.

Yes ___ No ___

Page # _____

Blade shall also include reversible overlay end bits.

Yes ___ No ___

Page # _____

All blade functions shall be hydraulically or electronically actuated.

Yes ___ No ___

Page # _____

Blade lift accumulators shall be available, to reduce vertical impact damage.

Yes ___ No ___

Page # _____

SCARIFIER

Scarifier with teeth, mounted behind the front axle. No dealer added aftermarket scarifier will be acceptable.

Yes ___ No ___

Page # _____

DRAWBAR AND CIRCLE

Circle shall be a single piece, rolled-ring forging with raised wearing surface top and bottom

Yes ___ No ___

Page # _____

Must be equipped with replaceable wear strips between circle and support shoes.

Yes ___ No ___

Page # _____

Circle shall be rotated by a hydraulically driven motor (pinion gear) with a minimum circle pinion torque capable of 44250 ft-lbs

Yes ___ No ___

Page # _____

Rear drawbar shall be equipped with slip clutch designed to protect the circle, drawbar, and moldboard from shock when end of blade encounters, hidden objects.

Yes ___ No ___

Page # _____

Drawbar shall feature welded protective wear plates to prevent lift group contact with the primary drawbar structure.

Yes ___ No ___

Page # _____

Circle shall outside diameter shall be no less than 60.2 in.

Yes ___ No ___

Page # _____

There shall be at least 6 replaceable wear drop-in inserts between the circle and drawbar providing at least 163 in² (1051 cm²) of wear surface area.

Yes ___ No ___

Page # _____

Circle and drawbar wear strips shall be replaceable drop-in inserts, made from nylon composite material.

Yes ___ No ___

Page # _____

FRAME

Articulated type main frame.

Yes ___ No ___

Page # _____

Articulation joint shall have mechanical locking device to prevent frame articulation while servicing or transporting machine.

Yes ___ No ___

Page # _____

Shall be that of a flanged box section type frame that runs from the front bolster to the articulation joint.

Yes ___ No ___

Page # _____

STEERING

Fully hydraulic, 2-cylinder steering system, with front steering wheel angle not less than 47.5° left or right.

Yes ___ No ___

Page # _____

Machine, drawbar, circle, and moldboard shall be controlled with a maximum of two multifunction, 3-axis, joysticks, as standard.

Yes ___ No ___

Page # _____

Joystick controls shall be mounted to adjustable pedestals, hard mounted to the cab floor, independent of the operator seat.

Yes ___ No ___

Page # _____

Joystick Steering capabilities shall be ISO 5010:1992

Yes ___ No ___

Page # _____

Primary steering shall be achieved via a left hand joystick, using an intuitive steering control system.

Yes ___ No ___

Page # _____

Secondary steering shall be a standard feature.

Yes ___ No ___

Page # _____

TIRES

A 9 in (22.86 cm) by 24 in (60.96 cm) size 3-piece tire rim shall be standard to provide mounting 14.00R24 tires.

Yes ___ No ___

Page # _____

BRAKES

Service brakes shall be multi-disc, oil-cooled and completely sealed.

Yes ___ No ___

Page # _____

OIL ANALYSIS

To be included at no cost of the duration of the warranty period selected at intervals recommended by the manufacturer's warranty and maintenance schedule.

Yes ___ No ___

Page # _____

WEIGHT (STANDARD OPERATING)

Minimum operating weight of 37,900 pounds which includes enclosed ROPS cab (low profile) with factory installed air conditioner/heater (standard arrangement) and scarifiers. This is factory specified operating weight only. No additional weights may be added for purpose of meeting these specifications.

Yes ___ No ___
Page # _____

OPTIONS

Bid must include the cost for each of the following options, itemized separately on the bid:

AM/FM stereo radio

Yes ___ No ___
Page # _____

Two high and low beam cab-mounted halogen headlights

Yes ___ No ___
Page # _____

Cage top mounted yellow strobe

Yes ___ No ___
Page # _____

Rear-mounted ripper with five shank holders (This option requires the scarifier be removed and equip the machine with 17.5-R25 tires mounted on the 3-piece rims)

Yes ___ No ___
Page # _____

14.00-24 12PR bias ply tires

Yes ___ No ___
Page # _____

Side mounted mirrors (left and right)

Yes ___ No ___
Page # _____

Factory installed rearview camera with LCD color monitor

Yes ___ No ___
Page # _____

First 3 years of filters based on 1200 hours per year use

Yes ___ No ___
Page # _____

Additional 2 years of filters based on 1200 hours per year use

Yes ___ No ___
Page # _____

An extended power train warranty that covers an additional two (2) years or total of 6,000 hours, whichever occurs first

Yes ___ No ___
Page # _____

GRADE CONTROL X SLOPE

Allows the operator to manually control one end of the blade to match the curb or crown while automatically maintaining the desired slope of the blade

Yes ___ No ___
Page # _____

NOTE: Award will be made on the basis of the total cost of the machine with all options included. However, a county may, at its discretion, deduct one or more of the above-referenced options from the machine, and in such event, the cost of the options as stated on the bid shall be deducted from the total cost of the machine. There shall be no other deductions and no additions made to the machine by the purchasing county or by the vendor.

OPTION COST SHEET FOR MOTORGRADER OPTION A TIER 3

<u>Option</u>	<u>Option Price</u>
AM/FM stereo radio	<u>\$798.00</u>
Cab-mounted halogen headlights	<u>\$ STD</u>
Cage top mounted yellow strobe	<u>\$ 89.00</u>
Rear-mounted ripper (<u>This option requires the scarifier be removed and equip the machine with 17.5-R25 tires mounted on 3-piece rims</u>)	<u>\$ 28,650.00</u>
14.00-24 12PR bias ply tires	<u>\$ 7,724.00</u>
Extended warranty	<u>\$ 1,428.00</u>
First 3 years of filters	<u>\$ 2,750.00</u>
Side mounted mirrors (left and right)	<u>\$ STD</u>
Additional 2 years of filters	<u>\$ 1,785.00</u>
Factory installed rearview camera with LCD color monitor	<u>\$ STD</u>

NOTE: Award will be made on the basis of the total cost of the machine with all options included. However, a county may, at its discretion, deduct one or more of the above-referenced options from the machine, and in such event, the cost of the option as stated on the bid shall be deducted from the total cost of the machine. There shall be no other deductions and no additions made to the machine by the purchasing county or by the vendor.

COUNTY JOINT BID PROGRAM PURCHASE PROCEDURES

Effective January 1, 2008

All purchases by counties pursuant to the County Joint Bid Program shall be made by (1) mailing or faxing the appropriate Purchase Order to the vendor who has been awarded the contract for the item to be ordered and (2) faxing a copy of the Purchase Order to the Association of County Commissions of Alabama (ACCA) office at 334-263-7678. Purchase Order Forms and all necessary information regarding the vendor and items available can be obtained at the ACCA website (www.alabamacounties.org).

Each purchase order shall be signed by the person authorized by the county to sign and shall include the County Joint Bid Program Item Number. A copy of the form submitted shall be retained by the county.

The county shall deal directly with the company representative for the vendor in making purchases under this program. The vendor shall complete all orders in compliance with its agreement under the program, and shall deal directly with each county in processing and completing their orders and in complying with service and warranty requirements. Road sign vendors should keep in mind that they are required to deliver all items to the location identified by the county ordering them within thirty (30) calendar days from the date of order, and the cost of any items not delivered within this time period will be reduced in price by 10%.

It is important to remember that under Code of Alabama 1975, § 41-16-50(b), all purchases made pursuant to this program shall be subject to the terms and conditions of Alabama's Competitive Bid Law. Therefore, counties are only authorized to purchase the specific items awarded under the program according to the bid specifications and must comply with these procedures in placing all orders.

There can be no deletions or additions to items purchased under this program, except as specifically provided for in the bid specifications. Optional equipment authorized under the bid specifications on certain heavy equipment orders may be deleted by the county at the time of purchase, and in that event, the cost of that item as provided by the vendor shall be deducted from the total cost of the item.

**COUNTY JOINT BID PROGRAM
MOTORGRADER OPTION A – TIER 3
PURCHASE ORDER FORM**

***This form must be mailed or faxed to the Vendor with
Copy faxed to the ACCA Office at 334-263-7678***

Date of Order: _____ County Purchase Order No. _____

County: _____ County Contact Person: _____

County Address: _____

County Phone Number: _____

County Fax Number: _____

E-mail Address: _____

Equipment Model or Item Name and Number: VOLVO G940C

Number of items ordered: _____ Price per item: _____

Vendor: Cowin Equipment Company, Inc. Company Contact: John Edwards

Vendor address: 3120 Hayneville Road
Montgomery, AL 36108

Deliver to the Attention of: _____

Delivery Address: _____

Requested delivery date: _____

Name of person making purchase request: _____

Title: _____

Authorized County Signature: _____

Initial confirming form sent to vendor: _____

Initial confirming form sent to ACCA: _____