



DeKalb County
G E O R G I A

The Department of
Purchasing and
Contracting

ITB No. 17-100849- 49 Metric Ton Excavator with Long Reach Heavy Duty Boom

User Department's Recommendation

Recommended Bidder: Tractor and Equipment Company meets our approval.

Amount Spent on Previous Contract: N/A

Funding:

General Enterprise 3 Digit Fund Code 621

CIP Line Item No. (if applicable): _____

Project Amount This Term: \$449,700.00

Justification:

Tractor and Equipment Co. (Bid # 4) is recommended as the responsive, and responsible bidder, as it meets the specifications that provide the most beneficial impact related to the operation, productivity, and longevity of the machine.

DeKalb County prefers to buy items produced and/or manufactured in the United State of America, and this unit bid by Tractor and Equipment Co. (Bid #4) is produced in the USA.

The exceptions detailed limit the operational functionality, capabilities, and efficiency of the unit. Not all exceptions are detailed, only those which are most impactful to the operation, productivity, and longevity of the machine.

Heavy Machines Inc. (Bid #1) is not acceptable and unit bid took multiple exceptions to the minimum bid specifications. Support for this decision is detailed below:

DeKalb County prefers to buy items produced and/or manufactured in the United State of America, and this unit is not produced in the USA. It is produced in Tokyo, Japan.

B. Engine

Item# 21. The engine displacement bid (600 cubic inches) is more than 10% lower than our requested 670 cubic inches. That will have a great impact on the power that will be needed for this excavator to lift and move the volume of dirt that it will be required to lift for its intended purpose. This unit is underpowered and does not meet our specification.

Item# 3. The machine bid does not have all of the required emissions treatment systems specified. The bid shows that our requirement for a Diesel Particulate Filter (DPF) does not apply for this



machine because it uses a Cooled Exhaust Gas Recirculation (CEGR) treatment system in conjunction with the other two treatment systems we required. At the Final Tier 4 Emissions level, the CEGR treatment system does not provide the level of performance (such as power available to handle loads) and the fluid economy (total fuel and DEF used) we require. One of the reasons the DPF filter is required is because this emission treatment system provides the flexibility to fuel the engine as quickly as torque is required and to deliver peak performance in demanding applications. This unit will be used to enlarge Ward Lake, and the unit bid will not achieve the performance level to handle the extreme loads of dirt that will be excavated out of that site. This does not meet our specification.

D. Hydraulic System

Item# 1. The bidder took exception by responding "No" to our requirement that the "hydraulic system shall be a closed center system with load sensing and pressure compensated valves." This unit does not have the capability of sensing when it is lifting a load that is too heavy. Because the machine can't sense the load capacity, the machine could allow the operator to lift a load that is too heavy and overload the system and causing loads to be dropped and damage to the equipment. That type of occurrence would cause the machine to be out of service for repairs. It poses a safety issue which could lead to a potential injury for anyone near the machine when it drops the load it was not capable of lifting because the load was too heavy. This does not meet our specification.

G. Stick and Boom

Item# 3. The bidder does not meet our requirement to provide a 3 year, 10,000 hour warranty. The bid offers to provide a warranty that is 5 years, 5,000 hours. The warranty offered by this vendor would run out of warranty hours too soon. The warranty offered would only last approximately 1.5 years, rather than the 3 years we required. This warranty does not meet our specifications.

M. Service and Maintenance

Item# 4. The bidder provided a recommended maintenance interval of less than our request 1,000 hours interval for the front linkage. This is important because a machine that is built to achieve this interval is of a better quality, more durable and requires less downtime for the maintenance of this linkage. This linkage is a part that receives a lot of usage, wear and heat so it has to be durable. Any unit not capable of meeting the 1,000 hour interval would create time inefficiencies for the user department due to being out of service more frequently to maintain this linkage that has to be serviced on a lesser interval than 1,000 hours. This does not meet our specification.

Item# 5. The bidder provided a recommended maintenance interval of less than our request 1,000 hours interval for the bucket linkage. This is important because a machine that is built to achieve this interval is of a better quality, more durable and requires less downtime for the maintenance of this linkage. This linkage is a part that receives a lot of usage, wear and heat so it has to be durable. Any unit not capable of meeting the 1,000 hour interval would create time inefficiencies for the user department due to being out of service more frequently to maintain this linkage that has to be serviced on a lesser interval than 1,000 hours. This does not meet our specification.

O. References and Miscellaneous Product Detail

Item# 1. The vendor cannot meet our request to provide at least 10 references for customers that



have purchased the unit being bid. We can't get a good understanding of what others who have purchased the machine think about the machine's performance, reliability, serviceability, etc. if we can't get enough customer references to contact. The bidder has only bid this machine 3 times in the last year. It is possible that there are very few customers who have actually purchased this machine, therefore we can't really get any user insight if there are very few users available to talk with.

P. Additional Features

Item# 1. The unit bid does not meet our requirement for a system to assist with fleet management monitoring. Having a unit that provides all of the required features is essential to proactively monitor and obtain all machine mechanical functions, machine performance levels, diagnostic assessments, location, and security. These are critical activities that our maintenance department and machine operators need on hand to make operational or service decisions.

Border Equipment (Bid:#2) is not acceptable and unit bid took multiple exceptions to the minimum bid specifications. Support for this decision is detailed below:

DeKalb County prefers to buy items produced and/or manufactured in the United State of America, and this unit is not produced in the USA. It is produced in Sumitomo, Japan.

B. Engine

Item# 3. The machine bid does not have all of the required emissions treatment systems specified. The bid shows that our requirement for a Diesel Particulate Filter (DPF) does not apply for this machine because it uses a Cooled Exhaust Gas Recirculation (CEGR) treatment system in conjunction with the other two treatment systems we required. At the Final Tier 4 Emissions level, the CEGR treatment system does not provide the level of performance (such as power available to handle loads) and the fluid economy (total fuel and DEF used) we require. One of the reasons the DPF filter is required is because this emission treatment system provides the flexibility to fuel the engine as quickly as torque is required and to deliver peak performance in demanding applications. This unit will be used to enlarge Ward Lake, and the unit bid will not achieve the performance level to handle the extreme loads of dirt that will be excavated out of that site. The does not meet our specifications.

Item#-11 (a,b). The unit provided does not provide for any means of executing the after-treatment regeneration that must occur in all machines with Final Tier 4 emissions requirements. The bidder has stated these requirements are not applicable to their machine. All machines using Final Tier 4 emissions must provide a means to perform after treatment regenerations. The response does meet our specification requirements.

Item# 21. The engine displacement bid (600 cubic inches) is more than 10% lower than our requested 670 cubic inches. That will have a great impact on the power that will be needed for this excavator to lift and move the volume of dirt that it will be required to lift for its intended purpose. This unit is underpowered and does not meet our specification.

D. Hydraulic System

Item# 1. The bidder took exception by responding "No" to our requirement that the "hydraulic



system shall be a closed center system with load sensing and pressure compensated valves." This unit does not have the capability of sensing when it is lifting a load that is too heavy. Because the machine can't sense the load capacity, the machine could allow the operator to lift a load that is too heavy and overload the system and causing loads to be dropped and damage to the equipment. That type of occurrence would cause the machine to be out of service for repairs. It poses a safety issue which could lead to a potential injury for anyone near the machine when it drops the load it was not capable of lifting because the load was too heavy. This does not meet our specification.

P. Additional Features

Item #1. While the vendor does provide the requested features, the vendor limits the time to 7 years rather than providing access to these features for the life of the machine (as we required) which would be 10 years. We would lose 3 years of accessibility to functions and features that are essential to proactively monitor and obtain all machine mechanical functions, machine performance levels, diagnostic assessments, location, and security. These are critical activities that our maintenance department and machine operators need on hand to make operational or service decisions. This does not meet our specification.

Item # 2. The machine bid lacks the capability of recording and reporting key operation information by individual operator identification codes. This is critical for accountability and training. This feature allows the department managers and fleet department the ability to pinpoint users who make operation errors that could result in machine malfunctions or operational issues that could cause the machine to be out of service. The ability to pinpoint these users allows the department to target training for each user that will allow each to learn how to operate the machine most effectively. This does not meet our specification.

Chapman Alder 10-17-17
Name, Title Date
Fleet Specifications Analyst

Robert Gordon 10-17-17
Department Director Date

Approved
Chris Hood
10-17-17