VILLAGE OF HOMEWOOD



BOARD AGENDA MEMORANDUM

DATE OF MEETING: May 14, 2024

To: Village President and Board of Trustees

Through: Napoleon Haney, Village Manager

From: John Schaefer, Director of Public Works

Topic: Backhoe #207 Replacement – Volvo EWR130E Wheeled Excavator

PURPOSE:

The backhoe is an essential piece of equipment that could be typified as the Swiss army knife of construction equipment. The backhoe is used for various types of projects that require digging, trenching, and earthmoving. The Public Works Department utilizes its current backhoe for work associated with water main, sanitary sewer, and storm sewer repairs/replacements.

Due to the current age (16 years) and high operating hours (6,000), the Public Works Department is requesting that Unit #207, (2008 John Deere 410J Backhoe), be replaced with a Volvo EWR130E Wheeled Excavator. A wheeled excavator is similar to a backhoe, but is mounted on wheels instead of tracks. This makes the machinery more mobile and allows it to travel on roads and other hard surfaces easily. Wheeled excavators are commonly used in urban areas for road construction and utility projects where mobility and flexibility are important. The wheels provide the machinery with the ability to move quickly between job sites without needing to be transported on a trailer, making wheeled excavators versatile and efficient.

PROCESS:

Efficiency was prioritized as the *primary requirement* when selecting the new piece of equipment to replace backhoe unit #207. The Public Works Department debated whether or not purchasing another backhoe would enhance the department's needs. Staff compared the capabilities of a backhoe to a wheeled excavator and determined the wheeled excavator to be the better option. Compared to backhoes, wheeled excavators provide excellent maneuverability, are more fuel efficient, and are able to accommodate a wide array of attachments to complete complex jobs.

Once staff determined that a wheeled excavator would be the best fit for the department, an evaluation of manufacturers and specifications was conducted. Staff reached out to Caterpillar, John Deere, and Volvo. The Caterpillar and John Deere units were too large for routine operations. The Volvo EWR130E perfectly matched the department needs. Its features include: four-wheel steering, shortest swing radius (an advantage in tight environments/close quarters), advanced LED working/warning lights, blind spot cameras that provide greater visibility around

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the machine for the operator, ergonomic and easy to use controls for enhanced comfort and reduced strain on the operator, and finally, the machine boosted work productivity with an available Steel Wrist Tiltrotator, "quick connect" attachments and tow behind trailer. Imagine being able to rotate your hand 360 degree while holding material. The Tiltrotator enables this level of agility.

Public Works staff had the opportunity to evaluate the Volvo EWR130E with the tiltrotator in person and were highly impressed with its capabilities. The municipality we visited had just replaced their backhoe with this unit last year. Although they are still experimenting with all of the machine's features, the municipality made it very clear that they are pleased with the purchase.

Staff intends to purchase the machine through a Joint Governmental/Cooperative purchasing program called Sourcewell Cooperative Purchasing Advantages. Cooperative purchasing is "procurement conducted by, or on behalf of, one or more Public Procurement Units" as defined by the American Bar Association Model Procurement Code for State and Local Governments. Sourcewell, as a coorperative has already bidded the machinery to determine the best and lowest cost. Sourcewell's analysts streamlines the procurement process by developing Requests for Proposals (RFPs) and Invitation for Bids (IFBs) for national, competitive solicitations that meet or exceed local requirements. Their rigorous process is continually refined to best meet the needs of participating agencies and allows the group to offer exceptional products from nationally acclaimed suppliers and solid prices.

Public Works plans to proceed quickly to secure this equipment due to current lead times (purchase to delivery) of 18 to 20 weeks. The Village's Purchasing Policy authorizes the Board to waive competitive bidding when purchasing through a governmental cooperative and/or a joint purchasing cooperative.

OUTCOME:

Replacing backhoe Unit# 207 will decrease maintenance cost, increase safety, increase job and work efficiency and maintain Village work and quality standards. The addition of a Volvo EWR130E Wheeled Excavator would give the Department a competitive advantage in terms of productivity, quality of service, and customer satisfaction.

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FINANCIAL IMPACT

- Funding Source: General Capital Account \$189,000
 Water & Sewer Capital \$189,000
 - Water & Sewer Capital \$189,000
- Total Budgeted Amount (water and general capital): \$378,000
- **Cost:** \$377,505

LEGAL REVIEW:

Not Required

RECOMMENDED BOARD ACTION:

Waive competitive bidding due to purchasing through a Joint Governmental or Cooperative purchasing program, Sourcewell Cooperative Purchasing Advantages; and authorize the purchase and delivery of a Volvo EWR130E Wheeled Excavator from Alta Equipment Company, LLC of Orland Park, IL in the amount of \$377,505.

ATTACHMENT(S):

- Alta Equipment Company Proposal
- Sourcewell Contract Proposal (Alta Equipment Company)
- Pictures of Volvo EWR130E Wheel Excavator