

McHenry Township Fire Protection District Invitation to Bid

Bid # 24-004 – Extrication Equipment

The McHenry Township Fire Protection District (MTFPD) invites interested and qualified parties to bid on the purchase of extrication equipment.

This bid process and award of the contract will be made in accordance with Section 11k of the Illinois Fire Protection District Act (70 ILCS 705/11k). The MTFPD reserves the right to reject any and all bids, or any part thereof, or to accept any bid or any part thereof, or to waive technical or legal deficiencies if deemed to be in the best interest of the District.

Bid packages will be available for pick up at the District office located at 3610 W. Elm St., McHenry, IL 60050. Bid packages may also be downloaded from the District website www.mtfpd.org, or emailed by contacting Deputy Chief Karen Bush at bushkaren@fire.mtfpd.org beginning March 26th, 2024.

Two (2) original bid packages in the prescribed format must be addressed to Deputy Chief Karen Bush in a sealed envelope clearly labeled "Extrication Equipment Bid." The outside of the envelope must include the name, phone number, and email address of the designated contact person. The envelope is to be delivered to MTFPD 3610 W. Elm St. McHenry, IL 60050, by **9:00 AM (Local Time) on Thursday, April 11, 2024.**

Bids <u>will not</u> be accepted via email, fax, or after the deadline. It is the responsibility of the Bidder to meet the specified deadline and to provide complete information as requested in the bid. Bids arriving after the specified deadline, whether sent by mail, courier, or in person will not be accepted.

These submittals will either be refused or returned unopened. Mailed submittals that are delivered after the specified deadline will not be accepted, regardless of the postmark on the envelope.

The bid opening will be held at 9:01 AM on Thursday, April 11, 2024, at the District office located at 3610 W. Elm Street, McHenry, IL.

All questions about this bid document must be submitted via email as follows:

Deputy Chief Karen Bush

Email: bushkaren@fire.mtfpd.org

All requested clarifications to any bid documents must be provided in writing via email as indicated above unless otherwise provided. No other responses, whether verbal or otherwise, shall be deemed official unless they are in writing by the MTFPD. The District reserves the right to forward the question and answer to all prospective bidders. Please provide a return email address and phone number for responses.



McHenry Township Fire Protection District

General information

This bid is for the provision of extrication equipment.

Bids shall only be considered from companies that have been in business for at least three years and are authorized distributors of extrication equipment. Equipment shall be new. Refurbished or used equipment is not accepted unless specified in the bid.

Each bidder shall hold their bid price for at least 120 days.

Bidder shall identify the expected delivery time once an order is placed.

Bidder is responsible for explaining <u>ALL</u> exceptions to bid specifications in writing. When variations are not stated clearly, it will be understood the bidder proposed to meet all details of the specifications.

Bidder shall provide training sessions for members of the fire department as part of the purchase. This training session shall be offered on at least 3 different days. At least 1 training session shall be offered in the evenings.

Bids shall be submitted in the same sequence as specifications for ease of evaluation, comparison, and checking compliance.

Bid price shall not include any federal or state taxes.

Bid price shall state equipment warranty (including warranty on batteries), location of the local service center, cost of additional batteries (where applicable), loaner policy, and cost of annual preventative maintenance.

Bidders may bid on any or all combination of items.

Pricing information shall be clearly listed and identified and shall include any shipping and installation costs. The district reserves the right to make a purchase without trading in equipment. Trade-in equipment is available for inspection by contacting Deputy Chief Bush.

Bid #24-003 - Extrication Equipment

<u>Item #1</u>

Qty	Item Description
1	Battery operated hydraulic Cutting Tool
	The hydraulic cutting tool shall be third-party tested and certified to NFPA 1936-2020 (latest edition). The manufacturer must provide documentation of this certification to the end user.
	The hydraulic cutting tool shall have a minimum NFPA 1936 rating of: A9/B9/C9/D9/E9/F5.
	Public documentation from the manufacturer must be submitted with the bid for the tool being proposed, which includes all NFPA 3rd-party performance data (NFPA Cutter Rating). In addition to the manufacturer logo, this documentation must include the name or logo of the testing company. Bids not including this documentation will be considered non-responsive.
	The cutting tool shall have a 360° adjustable, rotating carrying handle for comfort, the ability to keep the rescuer's hands out of pinch zones, and the ability to reduce the potential for restricted cuts due to the tool profile. The handle should be made of an impact-resistant fiberglass-infused poly material to reduce the potential for electrocution.
	This tool will be used in rescue situations where the operating area is minimal and where maximum cutting force is necessary. The following performance criteria will be considered as a minimum. The hydraulic cutting tool shall have a minimum blade opening of at least 7.9 inches.
	This component shall be as small and compact as possible. The cutting tool shall not exceed 39.4 inches in length, 11.7 inches in width, and 9 inches in depth. The width dimension shall include any handles or extensions.
	The cutter blades must be forged to ensure longer life. Non-forged cutter blades (for example, blades machined from stock or cast) are not acceptable since they do not last as long as forged blades and pose a higher danger of catastrophic failure.
	To improve cutting performance and reduce the overall cost of ownership and maintenance, the cutter blades shall have replaceable inserts. These inserts allow for the ability to cut high-strength materials. The replaceable insert will follow the contour or the cutting edge of the blade and be field removable and replaceable by the end user.
	The cutter tool blades shall be made from high-quality, shock-resistant forged tool steel. The blades will also have an area specifically designed to cut round stock. The "round stock" cutter will be capable of cutting round pieces of metal without the hazard of propelling the cut object. This is useful for cutting steering wheel rings, brake pedals, shifting handles, and other materials made of high-strength steel (HSS). The bidder will provide proof

with this submission of the cutter's ability to cut solid bar material without
causing a dangerous release of the cut material.
To maintain consistent operation methods throughout the department, the
control valve shall have a finger lever "deadman" control characteristic
which is located on the handle itself for ease of operating the tool with index
finger and thumb while maintaining full grip of the control handle. That is to
say that the finger control shall be spring-loaded in such a way as to allow
the control valve to return to the "stop" position when the control valve is
released. The return spring shall be an internal type and not exposed to be
damaged. No "star knob" or motorcycle-style "twist grip" controls will be
considered.
To maintain operator familiarity with this rescue system, the operating
· · · · · · · · · · · · · · · · · · ·
controls of the cutting tool shall be designed and operate as those found on
the spreading and ram tools. Therefore, the cutting tool control mechanism
shall meet all requirements as found in the other control mechanisms being
presented.
For reduction of heat production during operation and less strain on the
tool's electrical system, the motor shall only be of a brushless design.
The motor shall be controlled electronically to protect it from overheating
and overloading.
The electronic controller shall operate the tool to optimal performance while
conserving energy.
The hydraulic system will be of a minimum of 3-stage design.
The hydraulic system shall have precision cross-over valves to precisely
control the speed of the tool in relation to the applied load. The ability to
"feather" the speed of the tool is critical to operating safely in proximity to
rescuers and victims being rescued. Any tool that does not have the ability
to control tool speed will not be accepted.
Motor housing must be fully enclosed with no vents to prevent moisture or
particulates from affecting the electrical components. The housing must
allow for rear, vertical battery attachment in line with the hydraulic cylinder.
The battery must be an 18v 8amp-hr, high-output, Lithium-Ion battery
, , , , , , , , , , , , , , , , , , , ,
designed for optimum performance and manufactured by the Milwaukee
Power Tool company.
The tool could potentially be used in adverse environments; therefore, the
Ingress Protection (IP) Rating shall be no less than IP68. Tools being
presented in this process with an Ingress Protection Rating of less than 68
will not be accepted.

<u>Item #2</u>

Qty	Item Description
1	Battery operated hydraulic Spreading Tool
	The spreader shall be 3rd party tested and certified to NFPA 1936 (2020
	Edition). The manufacturer must provide documentation of this certification
	to the end user.
	The spreader tool shall have a minimum NFPA Lowest Spreading Force
	(LSF) of 11,475lbf of force per 3rd party testing and in compliance with
	NFPA 1936. The spreader tool shall have a minimum NEDA Highest Bulling Force (HDE)
	The spreader tool shall have a minimum NFPA Highest Pulling Force (HPF) of 12,150lbf of force per third-party testing and in compliance with NFPA
	1936.
	Public documentation from the manufacturer must be submitted with the
	bid for the tool being proposed and must include all NFPA 3rd party
	performance data (HSF, LSF, HPF, LPF, etc.). In addition to the
	manufacturer logo, this documentation must include the name or logo of the
	testing company. Bids not including this documentation will be considered
	non-responsive.
	This component shall be as small and compact as possible. The spreading
	tool shall not exceed 39.3 inches in length and not more than 11.1 inches in
	width. The width dimension is taken when the tool is in the fully closed
	position, including the handle. The height cannot exceed 9.5 inches.
	The spreading tool shall have an open distance of no less than 29 inches. The spreading tool shall not exceed an overall weight of 47.6 lbs. The
	weight must be considered a "wet" weight, which includes the battery.
	To prevent corrosion, the spreader arms shall have an anodized finish.
	To maintain consistent operation methods throughout the department, the
	control valve shall have a finger lever "deadman" control characteristic
	which is located on the handle itself for ease of operating the tool with index
	finger and thumb while maintaining full grip of the control handle. That is to
	say that the finger control shall be spring-loaded in such a way as to allow
	the control valve to return to the "stop" position when the control valve is
	released. The return spring shall be an internal type and not exposed to be
	damaged. No "star knob" or motorcycle-style "twist grip" controls will be
	considered.
	To maintain operator familiarity with this rescue system, the operating controls of the spreading tool shall be designed and operate as those found
	on the cutter and ram tools. Therefore, the spreading tool control
	mechanism shall meet all requirements as found in the other control
	mechanisms being presented.
	For reduction of heat production during operation and less strain on the
	tool's electrical system, the motor shall only be of a brushless design.

The motor shall be controlled electronically to protect it from overheating
and overloading.
The electronic controller shall operate the tool to optimal performance while
conserving energy.
The hydraulic system will be of a minimum of 3-stage design.
The hydraulic system shall have precision cross-over valves to precisely control the speed of the tool in relation to the applied load. The ability to "feather" the speed of the tool is critical to operating safely in proximity to rescuers and victims being rescued. Any tool that does not have the ability to control tool speed will not be accepted.
Motor housing must be fully enclosed with no vents to prevent moisture or particulates from affecting the electrical components. The housing must allow for rear, vertical battery attachment in line with the hydraulic cylinder.
The battery must be an 18v 8amp-hr, high-output, Lithium-Ion battery designed for optimum performance and manufactured by the Milwaukee Power Tool company.
The tool could potentially be used in adverse environments; therefore, the Ingress Protection (IP) Rating shall be no less than IP68. Tools being presented in this process with an Ingress Protection Rating of less than 68 will not be accepted.

Item #3

Qty	Item Description
1	Large Telescopic Ram
	The ram shall be of "telescopic" design, meaning that two pushing pistons extend from the base section of the tool. Extension attachments added to the ram in order to meet the minimum pushing distance requirements of this specification will not be accepted.
	This component shall be as small and compact as possible. The ram tool shall not exceed 23.1 inches in length, 5.9 inches in width, and 13.6 inches in depth.
	This tool will be used in rescue situations where the operating area is minimal and where maximum pushing distance is necessary. The following performance criteria will be considered as a minimum. The ram tool shall have a minimum pushing distance of 54.1".
	The ram tool shall weigh no more than 47.2 pounds. This shall be a "wet" weight and shall include the ram and battery.
	The hydraulic ram tool shall be 3rd party tested and certified to NFPA 1936-2020 (latest edition). The manufacturer must provide documentation of this certification to the end user.

The ram shall have 3rd party verified pushing forces of no less than 24,279lbf of force in the first stage and no less than 13,938lbf of force in the second stage.
To maintain consistent operation methods throughout the department, the control valve shall have a finger lever "deadman" control characteristic which is located on the handle itself for ease of operating the tool with index finger and thumb while maintaining full grip of the control handle. That is to say that the finger control shall be spring-loaded in such a way as to allow the control valve to return to the "stop" position when the control valve is released. The return spring shall be an internal type and not exposed to be damaged. No "star knob" or motorcycle-style "twist grip" controls will be considered.
To maintain operator familiarity with this rescue system, the operating controls of the ram shall be designed and operate as those found on the cutter and ram tools. Therefore, the spreading tool control mechanism shall meet all requirements as found in the other control mechanisms being presented.
For reduction of heat production during operation and less strain on the tool's electrical system, the motor shall only be of a brushless design.
The motor shall be controlled electronically to protect it from overheating and overloading.
The electronic controller shall operate the tool to optimal performance while conserving energy.
The hydraulic system will be of a minimum of 3-stage design.
The hydraulic system shall have precision cross-over valves to precisely control the speed of the tool in relation to the applied load. The ability to "feather" the speed of the tool is critical to operating safely in proximity to rescuers and victims being rescued. Any tool that does not have the ability to control tool speed will not be accepted.
Motor housing must be fully enclosed with no vents to prevent moisture or particulates from affecting the electrical components. The housing must allow for rear, vertical battery attachment in line with the hydraulic cylinder.
The battery must be an 18v 8amp-hr, high-output, Lithium-Ion battery designed for optimum performance and manufactured by the Milwaukee Power Tool company.
The tool could potentially be used in adverse environments; therefore, the Ingress Protection (IP) Rating shall be no less than IP68. Tools being presented in this process with an Ingress Protection Rating of less than 68 will not be accepted.

<u>Item #4</u>

Qty	Item Description
1	Small Telescopic Ram
	The ram shall be a single-pushing rod design, meaning that one pushing
	piston extends from the base section of the tool. Extension attachments
	added to the ram in order to meet the minimum pushing distance
	requirements of this specification will not be accepted.
	This component shall be as small and compact as possible. The ram tool shall not exceed 21.3 inches in length, 6.1 inches in width, and 14 inches in depth.
	This tool will be used in rescue situations where the operating area is
	minimal and where maximum pushing distance is necessary. The following performance criteria will be considered as a minimum. The ram tool shall have a minimum pushing distance of 35.7".
	The ram tool shall weigh no more than 41 pounds. This shall be a "wet" weight and shall include the ram and battery.
	The hydraulic ram tool shall be 3rd party tested and certified to NFPA 1936-
	2020 (latest edition). The manufacturer must provide documentation of this certification to the end user.
	The ram shall have 3rd party verified pushing forces of no less than 25,021lbf of force.
	To maintain consistent operation methods throughout the department, the control valve shall have a finger lever "deadman" control characteristic which is located on the handle itself for ease of operating the tool with index finger and thumb while maintaining full grip of the control handle. That is to say that the finger control shall be spring-loaded in such a way as to allow the control valve to return to the "stop" position when the control valve is released. The return spring shall be an internal type and not exposed to be damaged. No "star knob" or motorcycle-style "twist grip" controls will be considered.
	To maintain operator familiarity with this rescue system, the operating controls of the ram shall be designed and operate as those found on the cutter and spreader tools. Therefore, the ram tool control mechanism shall meet all requirements as found in the other control mechanisms being presented.
	For reduction of heat production during operation and less strain on the
	The motor shall be controlled electronically to protect it from overheating and overloading.
	9
	For reduction of heat production during operation and less strain on the tool's electrical system, the motor shall only be of a brushless design. The motor shall be controlled electronically to protect it from overheating

The hydraulic system shall have precision cross-over valves to precisely control the speed of the tool in relation to the applied load. The ability to "feather" the speed of the tool is critical to operating safely in proximity to rescuers and victims being rescued. Any tool that does not have the ability to control tool speed will not be accepted.
Motor housing must be fully enclosed with no vents to prevent moisture or particulates from affecting the electrical components. The housing must allow for rear, vertical battery attachment in line with the hydraulic cylinder.
The battery must be an 18v 8amp-hr, High Output, Lithium-Ion battery designed for optimum performance and be manufactured by the Milwaukee Power Tool company.
The tool could potentially be used in adverse environments; therefore, the Ingress Protection (IP) Rating shall be no less than IP68. Tools being presented in this process with an Ingress Protection Rating of less than 68 will not be accepted.

<u>Item # 5</u>

1	3 Bank 18v Rapid charger
	Charger must contain a minimum of 3 slots designed for charging 18v High Output, Lithium-Ion batteries manufactured by the Milwaukee Power Tool company.
	Charger must be capable of charging in a "Rapid" fashion.
	Charger must operate from a 110v residential power source.

<u>Item # 6</u>

4	Spare 18v 8amp-hr Batteries
	Battery must be an 18v 8amp-hr, High Output, Lithium-Ion battery designed for optimum performance and be manufactured by the Milwaukee Power Tool company.

<u>Item # 7</u>

1	Gas Powered Simo Pump (Power unit)
	Unit must be powered by a minimum of a 6.5hp Gasoline engine manufactured by the Honda Motor Company.

	Unit must be capable of supplying a minimum of 2 tools simultaneously with hydraulic power, with each supply port having an independent control lever.
2	30' hydraulic supply Hoses
	Hydraulic supply hoses must be a minimum of 30' in length and have a "Hot-swappable" coupling at the tool end of the hose.

^{*} Bidder has the option to propose a refurbished power unit when bidding

Addendum

Please present your bid for Item # 7 with the possibility of a trade-in allowance for the following equipment.

- 1. Genesis M1 Electric Hydraulic Pump
- 2. Genesis Electric HO Pump
- 3. 2 qty 100' electric rewind, Hannay Hydraulic Reels