

VILLAGE OF LOMBARD REQUEST FOR BOARD OF TRUSTEES ACTION

For Inclusion on Board Agenda Bids and Proposals

TO:	President and	d Village Boa	rd of Tr	ustees		
FROM :	Scott Niehau	s, Village Ma	nager			
DATE :	April 23, 202	4	Agend	la Date	May 2, 2024	$\underline{4}$
TITLE :	Waiver of Bi Horizontal D	ds - Vermeer Directional Dr		est /		
SUBMITTED BY:	Brian Jack, U	tilities Super	intende:	h		
RESULTS:						
Date Bid Was Publi	ished	Biddi	ng Clos	ed		
Total Number of Bi	ds Received	-				
Total Number of Bi	ds Meeting Sp	pecifications				
Bid Security Requir	red		_Yes	X	No	
Performance Bond			_Yes	X	No	
Were Any Bids Wit	hdrawn		_Yes	x	No	
Explanation:						
Waiver of Bids Req	uested?	X	_Yes		No	
If yes, explain: See	attached.					
Award Recommend	ded to Lowest		_Yes		No	
Responsible Propos	ser?	X	_Yes		No	
If no, explain:						
FISCAL IMPACT:						
Engineer's estimate Amount of Award		nate \$100,000	0.00			
7 mount of 7 ward	<u>φ100/077,17</u>					
BACKGROUND/I						
Approve a purchas					zontal Direc	ctional Drill and
supporting equipm	ent to Vermee	er Midwestof	Aurora	, IL,		
Has Recommended	l Bidder Work	ed for Village	e Previo	usly _	X Yes _	_No
If yes, was quality					X_Yes _	
REVIEW (as neede	d):					
Village Attorney X	,			Da	te	
Finance Director X						
Village Manager X						
0						

NOTE: All materials must be submitted to and approved by the Village Manager's Office by 4:30 pm, Wednesday, prior to the Board Agenda distribution.

MEMORANDUM



To: Scott Niehaus

From: Brian Jack, Utilities Superintenden

Through: Carl Goldsmith, Director of Public Works

Date: April 23, 2024

Subject: Horizontal Directional Drill

Background

The Underground Utilities Division maintains the water distribution system that includes water mains, fire hydrants, main line valves, and water service connections to homes and businesses. Effective January 1, 2022, the Lead Service Line Replacement and Notification Act (LSLRNA Public Act 102-0613) replaced the former lead materials inventory requirements found in the Illinois Environmental Protection Agency Act 415 ILCS 5/17.11. The purpose of the new Act is to require community water suppliers to develop, implement, and maintain a comprehensive water service line inventory and replacement plan for lead water services. Illinois is estimated to have over 680,000 lead-based water service lines still in use.

Starting April 15, 2024, each community water supply is required to submit a complete material inventory stating the composition of water service material on both the public and private sides as well as type of connection to the community's water distribution system as well as the initial Lead Service Line Replacement Plan to the IEPA.

Beginning April 15, 2027, the final LSLR Plan is due to the IEPA for official approval. Once the plan is approved by the IEPA, the community water supply is required to begin the replacement of lead lines at a schedule calculated from the number of lead service lines within the community water supply. The Village of Lombard falls into the category of 1,200 – 4,999 verified lead lines which will be replaced at an annual rate of no less than 6% for up to 17 years.

The Village has been replacing lead water service lines during regular Capital Improvement Projects, emergency repairs for leaking service lines, and lead service line replacements when homeowners replace their portion. Currently in-house Village crews will replace the lead water service in the public right-of-way using a trenchless pneumatic mole to install the new water service line. This technology is adequate for the limited number of water services the Utilities Division is currently installing each year, but as the number of required lead service line replacements increases starting in 2027 this technology would not be sufficient.

Staff researched directional boring machines and spoke with private contractors regarding boring technology for water service installations. This technology is more efficient and easier to control than the traditional pneumatic mole. The Village has hired a contractor in the past to directional bore a number of water services in 2017 during the polar vortex to replace and lower frozen water service lines. Multiple water services were able to be bored in one day than the typical one to two services using the mole.

It was determined that the Vermeer Horizontal Directional Drill is the far superior manufacturer of this type of equipment and is the industry standard. Staff contacted the local distributer Vermeer Midwest of Aurora, IL for pricing (enclosed) and is listed below.

Total	\$ 158,8	
Freight and Prep	, 4 1/1	00.00
New 2024 Behnke CBCT1920E-BT-R Trailer	\$ 22,22	22.49
New 2024 DCI F1 Falcon	\$ 15,5	75.00
New 2024 Vermeer MX125	\$ 10,80	00.00
New 2024 Vermeer D8x12	\$ 105,90	00.00

A directional boring machine is budgeted for in the FY2024 budget in the amount of \$100,000 of which \$60,000 from the Water/Sewer Oper & Maint Fund and \$40,000 from the General Fund Public Works Street Lighting. The portion from the General Fund is based upon dual use of this piece of equipment to install and repair street light cables and conduit.

The original budget estimate of \$100,000 for this machine was received from the distributor at the end of 2022. As prices for construction equipment and vehicles continue to be on the rise, the 2024 cost is over the budgeted amount for 2024. There is approximately a nine-month production time for the machine that would put delivery in December of 2024 at the earliest or the beginning of 2025. If this purchase is approved, the quoted pricing would be locked in until delivery of the equipment.

The quoted price is utilizing Sourcewell Cooperative Purchasing Advantages.

Staff is recommending waving the bidding process and approving the purchase of the Vermeer Horizontal Directional Drill and supporting equipment from Vermeer Midwest of Aurora, IL in an amount of \$158,891.49. Please present to the Village BoT at their regular meeting on May 2, 2024.



2801 Beverly Drive Aurora, IL 60502 630-820-3030 www.vermeermidwest.com

4/9/2024

Quote #: Q-25880-2 PO #:

Bill To: Village of Lombard 255 E Wilson Ave Lombard, IL 60148

Ship To: Village of Lombard 255 E Wilson Ave Lombard, IL 60148

Please see current Sourcewell Pricing below:

1 New 2024 Vermeer D8x12

DESCRIPTION

~ #110421-VRM Vermeer Source Well Number

- ~ D-8x12 Navigator
- ~ 48 H.P. Kohler Tier 4F Fuel Injected Turbocharged Diesel Engine
- ~ Rack and Pinion System (Lifetime Warranty On Gears)
- ~ 1,200 lbs. Of Rotational Torque
- ~ 7,850 lbs. Of Thrust/Pullback
- ~ 159 FPM Carriage Speed
- ~ 180' (Qty 30) 1.66" x6' Firestick Rod Option
- ~ 182 RPM Rotational Speed
- ~ 9 GPM On~Board Water Pump At 1,000 PSI Maximum Pressure
- ~ Separate Hydraulic Pumps For Rotation, Thrust/Pullback And Aux. Functions
- ~ CAN Bus Electric Over Hydraulic Control System
- ~ Rubber Track System
- ~ Hydrostatic Ground Drive System, Max Speed 2.8 mph
- ~ 35.5" in Width, 139" in Length
- ~ Dual Stationary Stake Down System
- ~ Dual Joystick Controls _ Common Control Platform
- ~ 85 dBa Low Sound Levels At Operator Station
- ~ 18 Gallon Fuel Capacity @ 2.5 GPH
- ~ 25 Gallon Hydraulic Capacity
- ~ Remote Lockout Safety System
- ~ Strike Alert Safety System
- ~ Auto Greaser Kit
- ~ Drill Head Package
- ~ 1 Year /1,000 hours Parts/Labor Warranty on Vermeer Components
- ~ 2 Year/2,000 hours Parts/Labor Warranty on Kohler Diesel Engine

1 New 2024 Vermeer MX125

\$10,800.00

\$105,900.00

Mud Mixing System Water Supply Tank

- ~ 5.5 HP Honda Gas Engine
- ~ Fuel Capacity 6 Gallon
- ~ Pump Type Monarch 3" grease seal
- ~ Integrated Mixing Hopper (Venturi System) Round Plastic
- ~ 300 Gallon Tank with 4 inline educator nozzles
- ~ Height 69.5"~ Width 28.5"

- 2 Years/ Unlimited Hour Engine Warranty
- ~ 1 Year Parts and Labor Standard Limited Vermeer Warranty

1 New 2024 DCI F1 Falcon

\$15,575.00

Digitrak F1 Directional Drilling Locating System

- ~ LCD Graphic Display Picture Driven Menu
- ~ FCD Remote Display Monitor (30221358)
- ~ Ball~in~the~Box™ guidance technology
- ~ Remote Steering Capability
- ~ Falcon Technology Scans Active Interference Noise for Frequency Optimization(30221621)
- ~ Transmitter Supports Frequencies in Single band Between 9~13 kHz 50' depth rating
- ~ Real Time Data; Predicted Depth
- ~ 3 NiMH Batteries (23-11-28)
- ~ Charger (23-06-06)
- Carry Case
- ~ 1 Year Parts and Labor Standard Limited Warranty on Electronics
- ~ 3 year/500 hour Parts and Labor Limited Warranty on Transmitters

Untaxed Machine \$132,275.00
Freight and Prep \$4,400.00
Grand Total \$136,675.00

Total Due \$136,675.00

Finance Options with Approved Credit

Payment Details	Monthly Payment
Approximate payment on 60 months based on \$0 down	\$2,765.03

Additional Options

Quantity	Product Name	Net Total	Additional Price Per Month
1.00	**CONFIDENCE PLUS 3 YRS (D10X15III)-PREMIUM COV W/	\$12,161.00	\$245.13
CONFIDE	NCE PLUS 3 YRS (D10X15III)-PREMIUM COV W/MN		

Proposal good for 30 days; we reserve the right at any time prior to acceptance to revoke this quotation.

Accepted by:	Date:	
Thank you for your consideration.		
Sincerely,		
Kyle Cline kyle.cline@vermeermidwest.com		

Initia		



2801 Beverly Drive Aurora, IL 60502 630-820-3030 www.vermeermidwest.com

4/9/2024

Bill To: Village of Lombard 255 E Wilson Ave Lombard, IL 60148 Quote #: Q-25904-1 PO #:

Ship To: Village of Lombard 255 E Wilson Ave Lombard, !L 60148

To Whom It May Concern:

I would like to submit this quote to you.

1 New 2024 Behnke CBCT1920E-BT-R

Directional Drill Spec Trailer

- ~ 10" x 20 lbs Channel Frame
- ~ 21' bed w/3' steel beavertail w/: traction cleats
- ~ (2)10,000 lb. Dexter Axles w/: Electric brakes and spring suspension
- ~ (4) 235-75R-17.5 18 Ply tires
- ~ 2.5" Pintle eye hitch rated for 42,000 lbs.
- ~ HD Tube Style ramps offset for loading on drivers side of trailer
- ~ Semi Style Jack
- ~ (2) Extra Heavy 1/8" formed fenders
- ~ D-rings for machine tie down
- ~ Oak Decking
- ~ Lip on drivers side of trailer
- ~ Chest style toolbox mounted on trailer
- ~ Cone holder
- ~ Cold weather harness w/7 way RV Plug
- ~ Extra Rod box
- ~ Hose reel w/:100' of 1.5" hose
- ~ Chain tray on both sides of tongue area
- ~ 12-volt breakaway kit w/: switch & battery
- ~ Rubber mounted sealed LED Lights
- ~ Zinc rich primer& powder coated paint-black
- ~ Pintle Hitch with Full DOT Lighting and Electric Brakes

\$21,873.49

Untaxed Machine License and Title' Grand Total \$21,873.49 T. B.D. \$22,222.49

Total Due

\$22,222.49

Initials:

Finance Options with Approved Credit

Payment Details	Monthly Payment
Approximate payment on 48 months based on \$0 down	\$552.06

Proposal good for 30 days; we reserve the	right at any time prior to acceptance to revoke this que	itation.
Accepted by:	Date:	
Thank you for your consideration.		
Sincerely,		
Alex DeGaetano alex.degaetano@vermeermidwest.com		

Initials:



STRAIGHTFORWARD CONTROLS. Controls with minimal electrical components, bringing you back to the basics with modern technology.



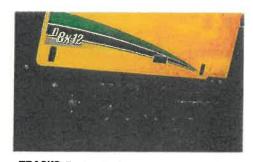
NARROW FOOTPRINT. This drill is 8.5" (21.6 cm) narrower in width than the next sized drill in the lineup and can get through a 36" (91.4 cm) gate or fit on a narrow trailer with other jobsite essentials.



LOW SOUND LEVELS. Low noise emission levels at the operator's ear of 85 dBa and a guaranteed sound power of 104 dBa make this drill perfect for installing small utilities in an urban environment with minimal disruption.



MORE POWER. Equipped with a 48 hp (35.8 kW) Kohler engine, this drill offers 1200 ft-lb (1627 Nm) of spindle torque and 7850 lb (3563.9 kg) of thrust/pullback.



TRACKS. Tracks offer ideal traction for operation while providing minimal ground disturbance. This track system design allows a forward ground drive speed of 2.8 mph (4.5 km/h), which is 45% faster than the leading competitor.



MULTIPLE ROD OPTIONS. Equip your drill with either a 6' (1.8 m), 1.66" or 1.31" (4.2 cm or 3.3 cm) Firestick® drill rod and save time on the job with 180' (54.9 m) of on-machine rod carrying capacity.



DO MORE:









D8x12 NAVIGATOR® HORIZONTAL DIRECTIONAL DRILL

GENERAL WEIGHTS AND DIMENSIONS

Min transport length: 139" (353.1 cm)
Min transport width: 35.5" (90.2 cm)
Min transport height: 65" (165.1 cm)
Min weight: 6000 lb (2721.6 cm)
Max weight: 6600 lb (2993.7 cm)

Angle of approach: 18 deg Angle of departure: 20 deg

ENGINE

Make and model: Kohler KDI1903 Fuel type: Ultra-low sulfur diesel Max engine rpm: 2200 rpm

Gross horsepower: 48 hp (35.8 kW)

Aspiration at full engine load: Turbocharged Max fuel consumption: 2.5 gph (9.4 lph)
Emissions rating: Tier 4 Final (Stage IV)
Max operating angle (fore/aft): 25 deg
Max operating angle (left/right): 25 deg

OPERATIONAL

Thrust rod: 7850 lb (3563.9 kg) Pullback rod: 7850 lb (3563.9 kg)

Max carriage speed at max engine rpm - fpm (m/min): 159 fpm (48.5 m/min)

Max spindle torque (max engine rpm) - ft-lb (Nm): 1200 ft-lb (1627 Nm)

Max spindle torque - smaller rod option (max engine rpm) - ft-lb

(Nm): 900 ft-lb (1220 Nm)

Max spindle speed at max engine rpm - (rpm): 182 rpm

Min bore diameter: 2.5" (6.4 cm)

Max ground drive speed at max engine rpm - mph: 2.8 mph (4.5 km/h)

Noise level at operator's ear: 85 dB(A)
Guaranteed sound power engine: 104 dB(A)

FLUID CAPACITIES

Fuel tank: 15 gal (56.7 L)

Hydraulic system: 25 gal (94.6 L)

DRILLING FLUID SYSTEM

Max flow: 9 gpm (34.1 L/min)
Max pressure: 750 psi (50.2 bar)

Brand: FMC

Onboard tank capacity: 25 gal

FEATURES

Breakout system: Standard hydraulic vise

Drilling lights: Optional

Stakedown system: Standard

Strike Alert: Standard

Remote Lockout Control: Standard

Rod greaser: Optional Wash wand: Optional

DRILL PIPE OPTION ONE

Thread type: Firestick drill rod (#200)

Length: 6" (1.8 m)

Rod diameter: 1.31" (3.3 cm)

Joint inside diameter: .8" (2 cm)

Joint outside diameter: 1.88" (4.8 cm)

Weight: 18 lb (8.2 kg)

Bend radius: 57' (17.4 m)

Total machine rod capacity: 180' (54.9 m)

DRILL PIPE OPTION TWO

Thread type: Firestick drill rod (#200)

Length: 6' (1.8 m)

Rod diameter: 1.66" (4.2 cm)

Joint inside diameter: .8" (2 cm)

Joint outside diameter: 1.88" (4.8 cm)

Weight: 26 lb (11.8 kg)
Bend radius: 95.5' (29.1 m)

Total machine rod capacity: 180' (54.9 m)

Vermeer

DO MORE.





START YOUR ENGINES. The MX125 is available with either a 5.5 hp (4.1 kW) Honda gas engine or 6.7 hp (5 kW) Hatz diesel engine.



MODULAR DESIGN. Allows the power pack to be mounted on either end of the tank or trailer, enhancing operator accessibility to the unit.



KEEP IT MIXED. A hopper with a round design and cone-shaped bottom helps prevent drilling fluid additives from settling.



SLIM FIT. The MX125 [500 gal (1892.7 L) option only] features a narrow profile for easy side-by-side trailer transport with a HDD.









MX125 DRILLING FLUID SYSTEM

POWER PACK

Length: 36" (91.4 cm) Width: 30" (76.2 cm)

Height: 44.5" (113 cm)
Weight: 340 lb (154.2 kg)
Fuel capacity: 6 gal (22.7 L)

Pump type: Monarch 3" (7.6 cm) grease seal Integrated mixing hopper: Round plastic

250 GAL (946 L) TANK OPTION

Length: 64" (162.6 cm) Width: 28" (71.1 cm) Height: 61" (155.0 cm)

Mixing jets: 2 in-line eductor nozzles Empty weight: 380 lb (173 kg)

At-capacity weight: 2500 lb (1134 kg)

300 GAL (1135.6 L) TANK OPTION

Length: 74" (188 cm) Width: 38" (96.5 cm) Height: 52" (132.1 cm)

Mixing jets: 3 in-line eductor nozzles Empty weight: 600 lb (272.2 kg)

At-capacity weight: 3220 lb (1460.6 kg)

500 GAL (1892.7 L) TANK OPTION

Length: 106" (269.2 cm) Width: 28.5" (72.4 cm) Height: 69.5" (176.5 cm)

Mixing jets: 4 in-line eductor nozzles Empty weight: 687 lb (311.6 kg)

At-capacity weight: 4970 lb (2254.4 kg)

ENGINE OPTION ONE

Gas: Honda

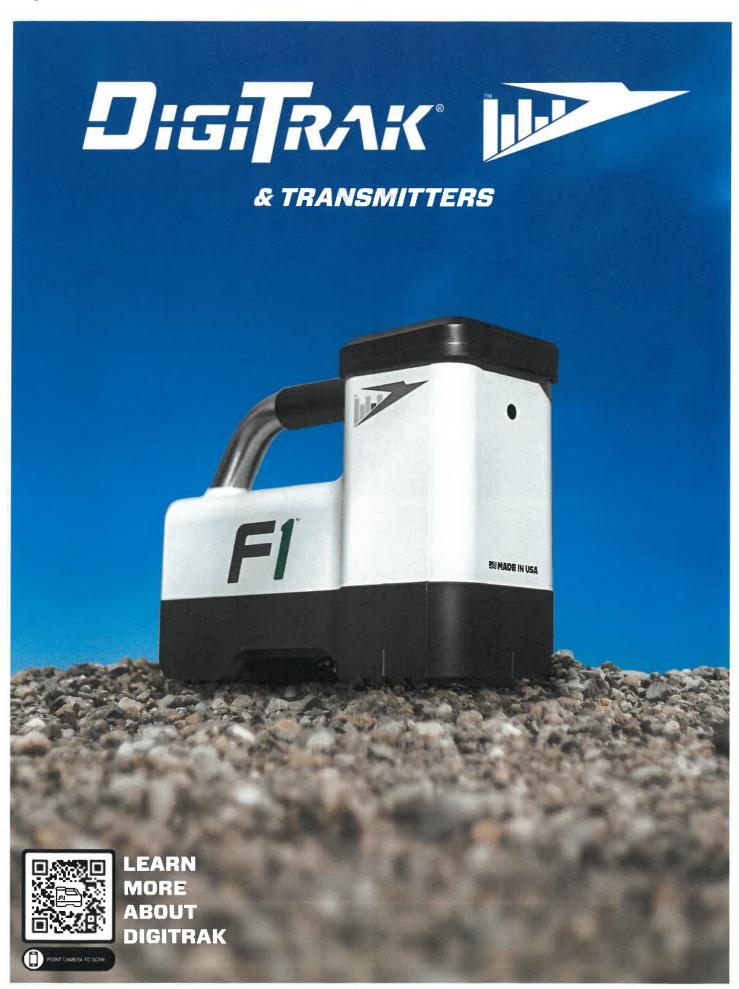
Gross horsepower: 5.5 hp (4.1 kW)

ENGINE OPTION TWO

Diesel: Hatz

Gross horsepower: 6.7 hp (5 kW)





DIGITRAK® F1 FEATURES

THE F1™ YOU KNOW, WITH ADDED BENEFITS*



Increased depth and data range - 30/38m combined with 17 frequencies to tackle jobs more efficiently.



Quick Scan Pair - with just two clicks, it's now easier to scan, pick and pair your locator to custom frequencies.



Dual Power - Two easily selectable power modes for longer battery life and faster data rates.



Scans over 60 frequencies to customize your locator to find the best selection for your job site



Use with Falcon Compact Display or with an Aurora Remote display for access to Target steering.



With the DigiTrak Falcon F1 you can upgrade to Falcon F2+ at any time, and it's quick, easy and affordable.

BUILDING ON SUCCESS

In May 2021, DCI released the re-branded Falcon F1™ aligning the design and user experience across all the DigiTrak® platforms. Now the F1 is easier to use and more powerful than ever before. The result is easier training, faster setup, and more time to complete more jobs.

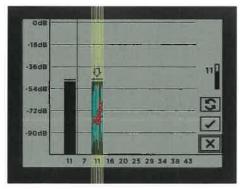
FALCON F1™ SPECIFICATIONS

Product ID / Model Number	FF1 / FAR2
Receiving Frequencies	9.0-13.5 kHz
Accuracy	±5% up to max depth range
Compatible Transmitter Models	FT1, FT1S
Compatible Receiver Batteries	Lithium-lon FBP and NiMH SBP
Battery Life ¹	Up to 14 hrs
Compatible Remote Displays	Aurora and FCD
Telemetry Range²	·
*** · · * · · · · · · · · · · · · · · ·	

Obtainable with Falcon Battery Pack (FBP).

FALCON EQUALS FLEXIBILITY

Falcon F1™ automatically scans and chooses the best frequencies within band 11 for your job site. Using 17 frequencies simultaneously allows you to get the job done the first time, while the competition is



Scans over 60+ frequencies, 17 best are selected for your band.

TRANSMITTER SPECIFICATIONS

THE FI™ FAMILY, NOW WITH NEW OPTIONS



	F1 Singleband		
Product #	FT1s	FT1	
V2 Dual-Power		0	
V2 Increased Depth		0	
LiR Rechargeable		0	
V2 Custom Battery Life		0	
0.1% Pitch (when level)	9	0	
Falcon Pairing	0	0	



Rechargeable Lithium-Ion batteries compatible with new adapter!

TRANSMITTER SPECIFICATIONS

TRANSPIR TER STEEL TEATION

FT1 SPECIFICATIONS

Product ID / Model NumberFT1/BTW	,
Standard power depth / data range ^{1,2} 30m/38m	1
Low power depth / data range ^{1,2,3} 15m/20m	1
Length / Diameter15in/1.25in	1
Standard power battery life, alkaline/LiR/SuperCell™Up to 20/30/80hrs	í
Low power battery life, alkaline/LiR/SuperCell™Up to 36/60/140hrs	í

ETIS SPECIFICATIONS

FTIS SPECIFICATIONS
Product ID / Model NumberFT1s/BTS
Low power depth $/$ data range 1,2,3 7.6 m/9.1 m
Length / Diameter8in/1.0in
Battery Life, 123 3V LithiumUp to 18hrs

- ¹ Data Range is based on using Max Mode.
- ²Range figures based on SAE Standard J2520. Actual ranges and battery life will vary based on interference, transmitter housing, frequency and other factors.
- ³ V2 Low Power has faster data with Falcon 1.1 QSP Software

limited to using only one frequency at a time while drilling. Sidestep active interference with new V2 Dual-Power capability and give yourself an edge with lithium-ion transmitter batteries.



Two clicks to scan, and pair, with new Quick Scan Pair (QSP) feature.

²Obtainable with Aurora remote display and Yagi Antenna.