



## City of Ketchum

September 8, 2020

Mayor Bradshaw and City Councilors  
City of Ketchum  
Ketchum, Idaho

Mayor Bradshaw and City Councilors:

### **Recommendation to Approve Purchase Order 20512 With Roberts Electric for Variable Frequency Drive Relocation**

#### Recommendation and Summary

Staff is recommending the council approve Purchase Order 20512 and adopt the following motion:

**"I move to approve Purchase Order 20512 with Roberts Electric for the relocation of Variable Frequency Drives at the influent pumping station of the wastewater treatment plant in the amount of \$7,487.00 and authorize the mayor to sign the purchase order."**

The reasons for the recommendation are as follows:

- Existing influent pump Variable Frequency Drives (VFDs) need to be replaced and relocated to the same building as the pumps they are running.
- Temporary wiring of VFDs needs to be made permanent.
- VFD upgrade will improve energy efficiency of the wastewater treatment plant.

#### Introduction and History

Influent pump VFDs were intended to be moved from their current location to the new headworks building when it was built in 2018. Instead of incurring the cost of moving old VFDs, which we expected to need replacing in the near future, it was decided to temporarily wire the existing VFDs in their current location and incur only one installation/relocation cost when they were replaced.

#### Analysis

This VFD relocation will coincide with the replacement of existing VFDs which are becoming more and more unreliable and costly to repair. The temporary wiring and connections used during the construction of the headworks building needs to be made permanent.

#### Sustainability

The recommended action will further the goals of the 2020 Ketchum Sustainability Action Plan in the following ways:

- Variable frequency drives adjust power consumption as the load requirement changes allowing pumps to use less energy when flows decrease.
- Technological advances in VFDs have improved their energy efficiency capabilities.

Financial Impact

This is a budgeted expense with funds coming from the Professional Services line item of Wastewater Expenditures. This expense will be shared with the Sun Valley Water and Sewer District.

Attachments:

Purchase Order 20512  
Roberts Electric Proposal



City of Ketchum  
City Hall

## Purchase Order

Number: 20512  
Date: 9/8/2020

Vendor: Roberts Electric  
710 N Main Street  
Bellevue, ID 83313

Quote Ref: Ketchum Wastewater dated 9/2/2020

Quantity	Item # / SKU	Description	Item Cost	Total Cost
		Labor and Material to install conduit and run wiring for relocation of VFD and Filter units.		7,487.00
			<b>Total</b>	<b>7,487.00</b>

The City of Ketchum is a tax-exempt political subdivision of the State of Idaho.

Please confirm this City of Ketchum Purchase Order with expected delivery to Mick Mummert, Wastewater Dept. Supervisor, at [mmummert@ketchumidaho.org](mailto:mmummert@ketchumidaho.org) or (208) 726-7825.

Please Ship Above Listed Items to:

City of Ketchum WWTP  
Attn: Mick Mummert  
110 River Ranch Rd  
Ketchum, ID 83340

Billing Address:

City of Ketchum  
P.O. Box 2315  
Ketchum, ID 83340

Order Submitted By:

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Neil Bradshaw, Mayor



710 N Main St.  
Bellevue, Idaho 83313  
Phone 208-788-3238  
Fax 208-788-3273

PROPOSAL SUBMITTED TO:

Ketchum Wastewater

PREPARED BY PATRICK

STATE ELECTRICAL INSPECTION AND WIRING AS PER NATIONAL AND LOCAL  
ELECTRICAL CODE.

ELECTRICAL CONTRACTOR WILL NOT TAKE RESPONSIBILITY FOR MANUFACTURER  
DEFECTS IN ANY EQUIPMENT SUPPLIED BY SAID CONTRACTOR EXCEPT FOR THE  
LABOR TO REMOVE AND REINSTALL AS PER MANUFACTURERS INSTRUCTIONS FOR  
THE PERIOD OF ONE YEAR FROM COMPLETION OF PROJECT.

THE PROPOSAL INCLUDES:

Install Conduit and run wiring for relocation of VFD and Filter units. Mount units.

Run wiring from new VFD location to motor pit

Run Wiring for Low Voltage and Control

TOTAL LABOR AND MATERIAL

\$7,487.00

ROBERTS ELECTRIC, INC.  
P.O. Box 3869  
804 4th Ave. South  
Hailey, Idaho 83333  
Phone 208-788-3238  
Fax 208-788-3273

Ketchum Wastewater  
Run Conduit and power to relocate 3 VFD  
units

DESCRIPTION	QUANTITY.
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BID INCLUDES:	
2" EMT	40
2" EMT 90	2
2" EMT Set Screw Connector	2
2" EMT Coupling	5
2" Ground Bushing	2
2" Strap	8
1" EMT	40
1" EMT Set Screw Connector	30
1" EMT Coupling	8
1" T Conduit Body	2
1" LL Conduit Body	1
1" LB Conduit Body	3
1" Conduit Body Cover	3
1" Conduit Body Gasket	3
1" Chase Nipple	3
1" Strap	10
6x6x72" Hinged Wireway	1
6x6 End Cap	2
1-5/8" Strut	10
Ground distribution Block	1
#6 THHN Wire	1400
#12 THHN	1260
Shielded Cat-5e	90
Anchor Package	1
TOTAL BID:	\$7,487.00
TOTAL RETAIL	\$4,079.22
INSP.	\$208.00
FREIGHT	
RENTAL FEES	
LABOR	<u>\$3,200.00</u>
BID	\$7,487.22