



September 3, 2026

City Water Department
20 2nd Avenue SW
Oelwein, Iowa 50662

Attn: Mr. Herb Doudney, Public Works Director

Re: 1942 Well – Lightning Damage

Dear Herb,

As you know we have removed the pumping equipment from the 1942 Well. As suspected, the submersible motor and submersible pump cable appear to have been damaged by lightning. The motor windings on all three phases are shorted out to ground, and the 4/0 submersible pump cable measures 20 megohms. The following is the associated cost for the required replacement materials and labor resulting from the electrical surge:

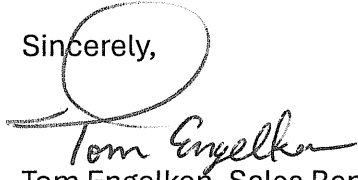
A. Oelwein 1942 Well - Material Replacement and Associated Labor Cost

1. One 150hp., 460-volt, 3600 RPM, 3 phase submersible motor	\$ 29,886.55
2. 535 Feet of 4/0 HD flat jacketed submersible pump cable @\$ 81.90 per ft.	\$ 43,816.50
3. 535 Feet of ¼" altitude tubing	\$ 393.75
4. Misc. material: Six 4/0, 3M electrical splice kits, stainless steel Banding, 2" pipe wrap	\$ 757.80
5. Freight charges	\$ 1,466.20
6. Field labor to remove damaged pumping equipment, return to Oelwein with new submersible motor and wire, reinstall equipment, flush well and test with 4 man field crew and 30-Ton service rig - estimate 45 hours @\$450.00 per hr.	\$ 20,350.00
7. Disinfect well with 5,000-gallons of pH-controlled disinfection solution, flush well and test	\$ 3,125.00
8. Per Diem	\$ 1,920.00
9. Mobilization of personnel and equipment to Oelwein	\$ 3,950.00
Total cost for the above	\$105,565.80

Herb, since the equipment could not be operated there may be some electrical damage to the control starter that will be verified when the equipment is operable.

Dave, if you have any questions, please let me know.

Sincerely,

A handwritten signature in cursive script that reads "Tom Engelken". The signature is written in black ink and is positioned above the printed name and title.

Tom Engelken, Sales Representative
NORTHWAY WELL & PUMP CO.