

City of Fremont Update

Date: April 9, 2021

To: City Employees/ City Boards/ Mayor & City Council

April 12, 2021 – Lineman Appreciation Day

In Nebraska, April 12 is Lineman Appreciation Day; a day to express our appreciation to the great men and women that work so hard to keep



When the power goes down, they go up. #ThankALineworker

the power on for us every day. It's our honor to celebrate the hard work, innovation, and dedication of electrical lineworkers at the City and across the state. Thank you for what you do!

275 Overpass - Southeast Beltway Progress

As shown in the aerial view on the right, the first of three overpasses that will be built on the Southeast Beltway is beginning to taking shape. This overpass, over US-275, has much of the approach work and steel decking complete. The other two overpasses, one over the Burlington Northern Railroad tracks and the other over the Union Pacific Railroad tracks/Old Hwy 275, are also moving along.



The \$61.9 million Southeast Beltway project was awarded to Graham Construction in 2020 and is scheduled to be complete in Summer of 2023.

A History of Vaccinations

The earliest written mention of variolation, the technique of inoculating a person with a virus to induce a mild form of the illness, was in China. Here, health practitioners removed dried scabs from people with smallpox, ground them, and blew the powder into the nostrils of the uninfected. About 1 to 2 percent of those who underwent the technique died from smallpox, compared to 30 percent of people who contracted the disease and died without variolation.

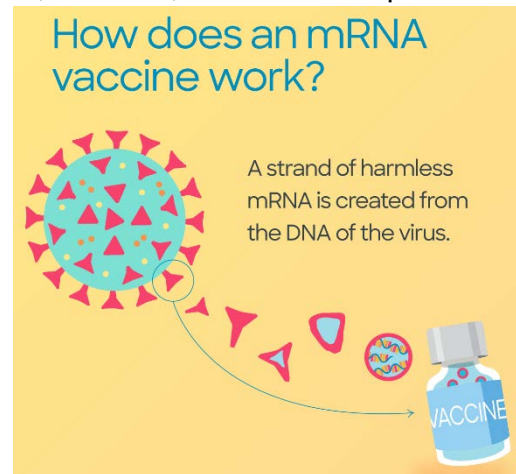
In 1796, Edward Jenner, a London doctor inoculated an eight-year-old boy with liquid drawn from the lesions of a milkmaid who had contracted cowpox, a significantly milder ailment than smallpox. Jenner's variolation made the boy immune to smallpox. He called his discovery "vaccination," from the Latin word *vacca*, meaning cow.

There is no job so important and no service so urgent that we cannot take the time to do the work safely!

After a field trial in 1955, involving 1.8 million Americans, Thomas Salk's polio vaccine is declared safe, effective, and potent. The vaccine used cells from a cancer patient whose story was made famous in the 2010 book *The Immortal Life of Henrietta Lacks*.

Routine smallpox vaccinations in the U.S. ended in 1972; however, fearful of smallpox being used as a biological weapon by Iraq, President Bush laid out a plan to inoculate 500,000 troops and up to 10 million emergency healthcare workers. The vaccine was comprised of 15 tiny bifurcated needles, each holding a droplet of vaccine virus derived from an infected cow.

In 2020, researchers found a way to use genetic material called mRNA (messenger RNA), rather than using killed or weakened viruses, as a means to vaccinate people. This revolutionary type of vaccine, which has been studied for several decades and trialed since the 1990s on other diseases, is found to be much safer than the traditional method of using live whole virus. Experts predict the breakthrough of this successful technique will forever change the course of vaccine development and production.



Out with the Old, In with the New

The two photos on the right are four of the six old 13,800-volt breakers (top photo) that were removed from Substation E and the new breakers (bottom photo) that replaced them. The old breakers were life-cycled out of service because they are 1970 vintage and most of this age have already been replaced.



The City budgeted \$275,000 in the Capital Improvement Plan to replace these breakers in the 2020-2021 budget year. Council approved the purchase of the breakers at the November 24, 2020 meeting by awarding the contract to Siemens for \$164,840. The estimated lead time was expected to be 14-16 weeks. However, the actual lead time was around 20 weeks, which is not that bad considering how the pandemic has affected shipping for other material.



After recent power outages (one in October 2020 and another in March 2021) that caused damage to one or two of the old breakers, the electric department was glad to get the old breakers replaced.

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