Utilities Section Newsletter

League of Nebraska Municipalities

August 2023

All About NDEE: Clay-Lined Lagoons

This article was written by the Nebraska Department of Environment and Energy. More articles, tools, and resources can be found at dee.ne.gov or email the NDEE public information office at ndee.moreinfo@nebraska.gov.

From personal onsite wastewater lagoons to municipal wastewater treatment facilities and animal feeding operations, thousands of homes and businesses across the State of Nebraska rely on clay-lined lagoons and holding ponds as a trusted technology to control wastewater.

Clay-lined lagoons and holding ponds are engineered systems that are designed and constructed uniquely based on their location and intended use. To protect groundwater, the Nebraska Department of Environment and Energy (NDEE) evaluates site criteria and regulates engineering and design specifications used in these systems through <u>Title 123 - Rules</u> and Regulations For The Design, Operation And Maintenance Of Wastewater Works; Title 124 -Onsite Wastewater Treatment Systems; and Title 130 – Livestock Waste Control Regulations.

Before construction can begin on any proposed municipal wastewater treatment facility or animal feeding operation lagoon or holding pond, NDEE groundwater geologists conduct a review of site evaluation documents to determine potential impacts to groundwater.

For all permitted animal feeding operation lagoons, municipal wastewater treatment facility lagoons, and personal onsite lagoons that have a flow rate in excess of 1,000 gallons per day, NDEE engineers review the engineering specifications and the results of a seepage test before these systems can become operational.

Engineering considerations for a lagoon or holding pond can include capacity requirements; surface area that is sufficient to expedite evaporation; interior and exterior slope requirements that mitigate erosion; minimum dike width; minimum freeboard height (distance between the normal maximum operating water surface of the pond and the top of the dike); and, among other considerations, a minimum operating depth to prevent drying and degradation of the liner.

The liner itself also undergoes an engineering process to determine a thickness and compaction rate that prevents seepage of more than one-eighth inch per day, which is the regulatory limit established by the above titles. If soil borings and tests at a proposed lagoon site are not conducive to sufficient compaction to meet this seepage requirement, the facility will be required to source soil that satisfies that criteria or install a synthetic liner.

After wastewater lagoons or

holding ponds become operational at municipal wastewater treatment facilities or animal feeding operations, NDEE performs routine inspections to ensure compliance with regulatory standards.

Milestone recognition

Is your municipality or utility celebrating a historic milestone? We are encouraging members to provide any information on milestones being celebrated such as 75 years of operating the electric system. About 1942, private electric systems were phased out in Nebraska and several municipalities took over the systems in the 1940s.

When was your water, wastewater, electric, power generation system established? When were facilities built, improvements made, etc. If your utility is celebrating a 25-, 50-, 75-, or 100-year milestone, let the Utilities Section help you celebrate by recognizing it in the newsletter.



UTILITIES SECTION

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Utilities Section Director
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Utilities Field Representative

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Classifieds

Sanitation Driver-Loader. City of North Platte is hiring a Sanitation Driver-Loader. Please refer to the City of North Platte's website for the job description: ci.north-platte. ne.us/employment. A job application is on the City of North Platte's website or you may get an application at the City Clerk's Office at City Hall. Please submit completed job application by email to info@ci.north-platte.ne.us. Mail to: City of North Platte, Attn: City Clerk's Office, 211 West 3rd Street, North Platte, NE 69101.

Apprentice Lineman. City of Benkelman is accepting applications for the position of Apprentice Lineman in the Electric Department. This position's responsibilities include, but aren't limited to: Construction and maintenance of overhead and underground electric distribution systems, operate a high

lift bucket truck, digger derrick, and other equipment, assists other city operations, and perform other duties as required, available for 24-hour emergency calls. Requirements include high school graduation, ability to obtain a CDL license issued by the State of Nebraska within one year of hire. Excellent benefits package is included. Employment is contingent upon successful completion of a post-offer physical and drug test. Applications can be picked up at the City of Benkelman Office located at 126 7th Ave E, Benkelman, NE 69021 or by calling 308-423-2540. The City of Benkelman is an EOE.

Journeyman Lineman. Village of Morrill (Population 934) is accepting applications for the position of full-time Electric Journeyman Line Worker with a pay range of \$22-\$30 per hour DOQ. This in-

dividual will perform skilled line work in the operation, construction, maintenance and repair of overhead and underground electric distribution and transmission systems. A Class B CDL with Airbrakes is required. Applications, with resumes, will be accepted until the position is filled. A complete job description for this position and an application is available at www. villageofmorrill.com or at the Village Office located at 118 S Center Avenue, Morrill, NE. This position includes an excellent benefit package including health insurance, retirement, vacation, sick leave, and paid holidays.

For Sale. City of Friend has Sensus Series B Electrical meters for sale. \$5 each. Contact John R. Schwab, City Clerk/Treasurer, 235 Maple Street, Friend, NE 68359; phone: 402-947-2711.

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North Platte

The Utilities Section Newsletter will continue to feature histories of both utilities and associate members. Any historical data and/or photos of your utilities, a specific facility, or articles already written are welcome, along with permission to print. If you have questions, contact Rob at 402-476-2829 or robp@lonm.org.

By Rob Pierce, Utilities Field Rep./Training Coordinator

Beaver Crossing, located in Seward County, had settlers in the area by 1862 and a ranch opened on the old freight road by 1863. The first tayern was located at the Fouse Ranch in 1863 with whiskey, an important trade item. One reference noted a post office was established at the Roland Reed Ranch called "Beaver Crossing" in 1866. On Jan. 22, 1868, a post office was established in Precinct L, about a mile west of Beaver Creek, also named Beaver Crossing. Ross Nichols had a small portion of his land surveyed into a town site, which some called Nicholsville. In the spring or early summer of 1871, a three-story frame flour mill was built on the Blue River, south of town on the Nichols Ranch. One source noted the mill was built in 1870 and sold soon after it was

The post office was moved to the new townsite which was housed at the flour mill. Soon the site had two general stores, a blacksmith shop, and a hotel. The population was about 50 and a 12 ft x 12 ft school

was built which was encased in sod. Construction began on a tavern "Dimery House" which was completed in 1874, the year the bridge over the Blue River was washed out. The first framed school (30 ft x 60 ft) was built in 1874 and completed on July 4. On March 18, 1874, nine blocks were surveyed and platted either in March or November of 1874 as two sources had two different dates. A plat was filed in May 1875 at the county seat in anticipation of the building of the railroad. The site was named for a nearby crossing of the Overland Trail over Beaver Creek.

The population was noted at 49 in 1880 but a newspaper in 1885 reported a population of 750 (might be debatable). In the spring of 1887, the Chicago & North Western Railroad, later called the Fremont, Elkhorn & Missouri Valley Railroad, built through the area. A railroad water tank, windmill, and depot were built, and the settlement soon had eight stores, a hotel, a mill, and a lumberyard. A bank was incorporated March 12, 1887, and four more additions were platted/filed (1887) along with two brickyards in operation. In 1877, the Fremont,



Beaver Crossing park entrance. 2014 photo.

Elkhorn & Missouri Valley Railroad, a branch of the Chicago & Northwestern, arrived. On March 31, a meeting was held to organize a cemetery association and on April 27, 1877, the Beaver Crossing Bugle newspaper was established. The mill dam was raised by one foot in 1887 but in April 1888 had to be repaired due to high water from rains. A meat market opened and by 1888, the businesses operating included a bank, two blacksmiths, two lumberyards, a hotel, two livery shops, and a newspaper. The population was 218 and on May 21, 1888, a plat was filed for Dimery's second addition of blocks 18 to 21. In 1889, part of the mill Continued on page 4

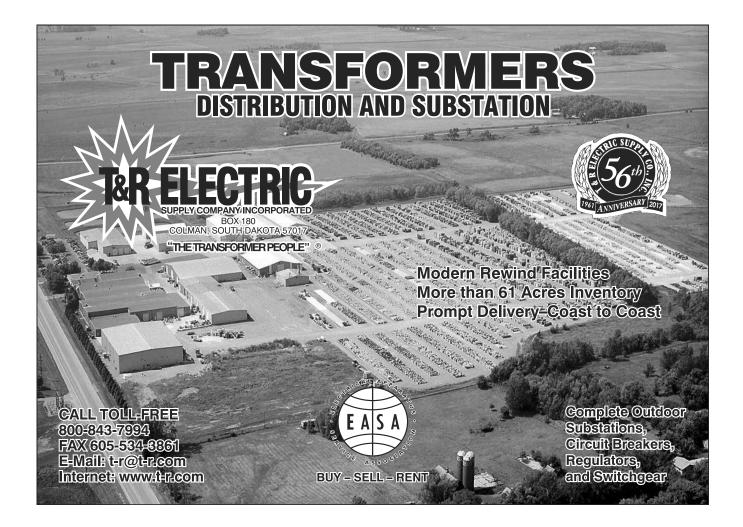
600 400 200 1871 1890 1900 1920 1940 1960 1980 2000 2020

Continued from page 3

dam washed out and muskrats were blamed. The school added a ninth grade in 1891 and a two-story frame high school with bell tower was built in 1893. In June 1892, Beaver Crossing was incorporated as a village. In 1892, the population was 212 and a guard rail was put on the bridge crossing the creek. By 1893, the population was estimated at 400 and another addition was platted in 1899. In January 1894, the "Hotel De Cooler" opened and in the fall, a new bridge replaced the old one

crossing Spring Creek, which was dubbed "Tadpole Run." The fire brigade put out a fire in 1895 by using water from Mayhew's fishpond. The *Weekly Review* newspaper was being published by 1897 and in March 1898, a 60-barrel capacity roller mill was completed. The "flowing" or artesian wells first were being used by 1894 with some wells dug between 110-140 ft, producing one inch to four-inch flows. One well had enough pressure to shoot the water 10 feet out of the ground.

In August 1896, the mill dam was washed out due to flooding from heavy rains and the population was 359 by 1900. Bricks were laid in 1901 replacing the boardwalks and in September, the county replaced the bridge over Spring Creek. A new school was built in 1902-03 for \$1,100 and an 11th grade was added to the high school in 1903. A roller flour mill was operating in 1903 and the Beaver Crossing Telephone Company was incorporated. Later that year, the telephone *Continued on page 5*



Continued from page 4

company reorganized as the Seward Telephone Company which had 584 phones of which 145 were in Beaver Crossing. Cement sidewalks were being installed and a new foot bridge was constructed (1905) over Spring Creek in the western part of town. Industry included a tomato canning factory and a cement block factory and in 1905, the Citizen State Bank was incorporated. In August 1905, a discussion of fire protection prompted approval in September of \$25,000 bonds for a fire engine, hose, cart, fire house, and the digging of cisterns. The new fire hall was a one-stall building (24 ft x 32 ft x 12 ft). On Dec. 12, 1905, a volunteer fire department was formed with an engine company and a hose company. The hook and ladder had no formal organization. Cisterns were built on each block at strategic points with more dug as the village grew. One cistern built in back of the fire house was 12 ft deep and 16 ft in diameter with a 18,000-gallon capacity. In 1906, an addition was made to the north end of the school building with 12th grade added in 1909. In January 1908, a need for a water sprinkler to control the dust was petitioned for

as the streets were drug and leveled. A large whistle had been installed at the power plant for use as a fire alarm. A railway spur and turntable were constructed southwest of the depot in 1907 and by October, a fund was raising money for a light plant. On Oct. 17, 1907, the Beaver Crossing Light & Power Company was incorporated with \$20,000 in capital. On Oct. 24, a franchise was granted to the Beaver Crossing Light & Power Company by the village. The powerhouse building (22 ft x 36 ft) was completed Dec. 5 for \$1,200 and located on the block across the street from Clarence Wambold's home in about the second or third lot from the east corner. A decision was made to purchase a 50 horsepower (HP) Hornby Ackroid but was later changed to a 45 HP Otto gas engine for \$3,800. The internal combustion engine didn't use gasoline, it manufactures its own gas from coal, consuming not over one-and-one-half pounds (lbs.) of coal per horsepower hour, making it more economical in price. The engine weighed 26,000 lbs. with fly wheels 8 ft in diameter weighing 6,500 lbs. each. On April 9, 1908, an election was held for electric lights and approved by a vote of 53

to 28 with lights turned on in May. Lights were to be free until June 1, 1908, and streetlights were to be installed running from twilight to midnight. In November, businesses were wired for electricity, some of which included the State and Citizens Bank, the church, Dermond's Store, and the *Times* printery. A park association was organized (1908) and the Beaver Crossing Times newspaper was being published by 1909.

The population was 542 in 1910 and additions were platted in 1900, 1908, and 1910 (21 lots) and on Feb. 2, 1912, an annex was granted adding more land. A new addition to west end of the power plant was added in 1912 and the plant would flicker the lights at 11:45 p.m. before the lights went out at midnight. In June, the electric rates were: the first 15 kilowatts (kW) or less per month at \$0.20, over 15 kW at \$0.185, over 25 kW per month at \$0.17, and over 50 kW at \$0.155, with all flat rates without a meter at \$1.25 per month. Minimum charge with meter was \$1 and with meter rent, was \$0.25 per month. More cement sidewalks were being laid in 1912 as the community now had

Continued on page 6



Engineering a world where everyone thrives.





Continued from page 5 close to one-and-one-half miles of concrete walks. A new park was established in 1912 and an iron fence was added at the cemetery in 1913. The women's club voted to organize a library in 1913 and used a room at the rear of the post office building. On Aug. 14, 1913, the Beaver Crossing Light & Power Company contracted for electric current from Blue River Power Company to be furnished as soon as poles and wiring were completed to town, which was to be completed in about 30 days. The population was 840 and a room was added at the primary school building in 1913 and electricity was added at the school (1914). Artesian wells had been sunk in a 15 mile-long valley along the Blue River. Three wells were used to fill a city swimming pool with 54-degree crystal clear water attracting as many as 700 swimmers in a single day. Twenty-five dollars was raised at the Opera House for a library (1915), and a small building

north of the Citizens State Bank (IOOF Hall). The Beaver Crossing Light & Power Company had a 45 HP gas engine with a generator rating of 27 kilovolt amps and by August, the streets were lit with new 100- and 200-watt lamps. Hitching posts were removed on Main Street in 1915, as an area south of the Opera House was set up as a hitching area. Ash and cinders were hauled in to fill the low spots in the hitching area (1916). In 1917, a new concrete bridge across Spring Creek was completed and a 40 ft flagpole with an electric light was added at the park. On March 28, 1917, a special election was held (96 for, 12 against) for the purpose of the village to own a municipal light plant. Another election was held in July and on Dec. 11, the electric light bonds carried on a vote of 77 to 9. The municipal power plant started operation in January 1918 and by April 10, had 10 light poles, each with a cluster of five globes with more installed as equipment arrived.

The population was 543 by 1920 and work began on the curb/gutter project by 1922. In October, discussions of erecting a dam for generating electric current was estimated to cost \$25,000-\$40,000. By November, the discussion of dam building was dropped and the village paid \$3,379 to Blue River Power Company to furnish power. The Blue River Power Company provided current for about three years (1922-25), but a franchise for the next 10 years was not given and the business was taken over by the village. A dining hall was added to the park in 1923, streets were being graveled (1924-25), and a bus service operated from Beaver Crossing to Milford and Lincoln. A curbing/ gutter and graveling ordinance was adopted and by December, the village had three miles of graveled streets. A new \$65,000 two-story brick high school building was erected in 1927 and the fire department installed a fire siren in 1929.

By 1930, the population decreased *Continued on page 7*

Water Workshops scheduled

was purchased, which was located

The fall Water Operator Training Workshops are scheduled for Sept. 19 in North Platte, Sept. 20 in McCook, Oct. 17 in Norfolk, Oct. 18 in South Sioux City, Dec. 5 in Lincoln, and Dec. 6 in Auburn.

The topics include sampling requirements and plans, sampling techniques/procedures, evaluations of sample site plans with an emphasis on lead/copper issues, along with a regulatory and industry update.

Work Zone Safety Training Workshops scheduled

Work Zone Safety Training Workshops are scheduled for Sept. 21 in Grand Island, Oct. 19 in South Sioux City, Nov. 7 in Blair, and Jan 23 in Kearney.

These workshops are designed to benefit all departments that set up or work in the streets/roadways (water, wastewater, streets, natural gas, and electric departments).

Megan Patent-Nygren (Nebraska LTAP) will cover work zone prac-

tices such as the fundamentals of temporary traffic control, control devices, site evaluations, general safety, flagging, and an update on MUTCD requirements. The last hour will cover an update on regulatory and industry issues.

These workshops are sponsored by the League of Nebraska Municipalities Utilities Section and the Nebraska Section of the American Water Works Association.

Continued from page 6 to 522 and in 1931, the village sold the franchise of providing electric service to the Iowa-Nebraska Light & Power Company. In 1934, the council voted to purchase a fire truck and new stop signs were installed. A Progress Works Administration (PWA) project allowed \$1,684 for repairs and changes to the park. In 1936, a special election for bonds to construct a waterworks system was held as work was to be done by Works Progress Administration (WPA) and PWA labor. In February 1937, a special election for bonds to construct a waterworks

system passed.

The PWA and the WPA had matching funds for improvements for both the water and sewer. Sanitary sewer districts were set up with bids accepted (\$19,000) with the village responsible for \$9,000. The disposal plant was to be located to the south near the river. A 130 ft deep well was dug in 1937 which had a capacity of 200 gallons per minute (gpm). In November, bids were opened for the water lines and a water storage tower. The cost was \$28,269.74 and was let to Chambers Construction Company of which the PWA paid \$12,721.26. The water system was completed in April 1938 and a new fire insurance classification was given to the area due to improvements.

The village revised its ordinances in 1938 and by 1940, the population increased to 550. The electric system changed from being supplied by the Iowa-Nebraska Light & Power Company to the Consumers Public Power District. Due to area irrigation lowering the water table, many of the artesian wells stopped flowing, thus closing the swimming

pool and Smiley's Water Garden/ Trout Fishery which were fed by the artesian wells. In December 1941, an electric contract with Consumers Public Power District allowed for all night lights for the first time.

The cemetery consisted of three acres, as one acre was added in 1950. A flood damaged the disposal plant and in 1955, a new fire barn was built. In 1956, the village operated a sewer, disposal plant, and a water plant with 150 meters in operation. Water rates were: first 5,000 gallons (gals.) at \$2.25, next 5,000 gals. at \$0.75 per 1,000 gals., and all over at \$0.10 per 1,000 gals. with a meter deposit of \$2. The cost of street lighting was \$53 per month and the cost for pumping water was \$25 per month. The village organized a library board in 1957 and donated \$50 per year for upkeep of a library.

From 1950 to 1960, the population increased slightly from 425 to 439. In 1962, Main Street was paved along with several streets with an estimated project cost of \$42,700 with a 50-50 deal paid by the village and property owners. Ambulance service began that year and an addition was made to the school. By 1965, some streetlights were updated with mercury vapor lights. Wastewater treatment sewage lagoons were constructed on the southwest edge of the village. Consolidation in 1967 of surrounding rural York and Seward County schools resulted in the forming of the Centennial School District (Beaver Crossing, Utica, and Waco). Elementary school was held in Utica and Beaver Crossing with a junior-senior high in Utica. The new school colors were blue and white.

The population was about 400 by 1970 and the Beaver Crossing Community Library was organized and housed in a brick building by 1972. In 1972, a new 40 ft x 70 ft swimming pool was completed and a fire truck and an ambulance were purchased. The railroad abandoned service to town in 1972 and a paving project was formed in 1973 with paving and storm sewers/curbing installed. The electrical system was owned by Nebraska Public Power District and by 1975, nearly all streets had been updated with mercury vapor lighting. The elementary school was moved to the Centennial School site in 1976 and the old twostory brick schoolhouse became the Faith Christian Mennonite School. In 1980, the population was 458 and a wastewater treatment plant project was underway in 1989. By 1990, the population was 448, the village was a member of "Tree City USA," and the park received a M-60 tank. The wastewater treatment facility was a facultative controlled discharge lagoon system designed for 0.15 million gallons per day (mgd).

In 2000, the population was 457 and by 2001, the electric system was operated and supplied by Seward County Rural Public Power District. By 2010, the population was 427 and on May 11, 2014, a powerful EF-3 tornado struck Beaver Crossing, damaging virtually every structure but there were no fatalities. By 2017, the electric distribution system was operated and supplied by Norris Public Power District when the Seward County Rural Public Power District merged with Norris. The village in 2018 had two active and three inactive municipal wells with 13 commercial and 187 Continued on page 8

Continued from page 7 residential customers. Gas service consisted of individual propane tanks.

Today, Beaver Crossing has a population of 375, has been incorporated since 1892, and is a League of Nebraska Municipalities and Utilities Section member.

References: Nebraska Directory of Municipal Officials, 1956, 1958, 1960, 1962, 1964-75, 1977-87, 1990-97, 2000-2007, 2009-2022; Nebraska Municipal Review Magazine, 2010; Water Resources of Nebraska, Dec. 1936; Nebraska Place Names, 1925, 1960; History of Seward County, 1888; Nebraska Forest Service Newsletter, April 2002; Community History of Beaver Crossing Nebraska, 1872-1932, Dec. 1932; Beaver Crossing Times newspaper, 1908-12; Beaver Crossing internet site, 2004; History of Beaver Crossing, Nebraska 1875-1975, 1975; Nebraska Our Towns... Central Southeast, 1991; Maps Tell A Story, 1991; NEDED Website, 2005; Wikipedia website, 2018-2019; History of Seward County Vol. VII, 1888; Johnson's History of Nebraska, 1880; Electric Power Development in the United States, Dept. of Agriculture, Jan. 1916; Seward County Bicentennial 1776-1976 Official Souvenir, 1975; Nebraska Blue Book, 1920, 1928, 1942, 1946, 1978; Early days of Seward County, Nebraska, 1937; and the General History of Seward County, Nebraska, 1927.

Crow Line: A line of positive communication that all can share

By Rob Pierce, Utilities
Field Rep./Training
Coordinator

Congratulations! Incorporation Anniversary Recognition: 110 years – Fordyce (1913 village) and Pickrell (1913-village); 140 years – Stromsburg (1883-village) and Humphrey (1883-village); and 145 years – Red Cloud

(1878-village).

Congratulations to the Nebraska chapter of SWANA for 35 years (Aug. 25, 1988) since the Nebraska and Iowa Section separated. The Iowa-Nebraska Section was initiated in 1981.

Utilities Section members and associate members are bolded.

Do you, your department or facility have



something to crow about – new hires, promotions, awards, certifications, anniversaries/milestones, accomplishments, grants/funding, or projects? Let

us help you celebrate events and accomplishments!

Please send information to any of the League/Utilities staff.

HAROLD K SCHOLZ CO.

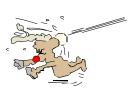
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Future "Snowball" Wastewater Conferences

The dates for future "Snowball" Wastewater Conferences have been scheduled and contracts signed with the Kearney Holiday Inn. Please note the upcoming Snowball Conference schedule:



- Jan. 24-25, 2024
- Jan. 22-23, 2025
- Jan. 28-29, 2026
- Jan. 27-28, 2027Jan. 26-27, 2028

The Utilities Section Newsletter will continue to feature histories of both utilities and associate members. Any historical data and/or photos of your utilities, a specific facility, or articles already written are welcome, along with permission to print. If you have questions, contact Rob at 402-476-2829 or robp@lonm.org.

By Rob Pierce, Utilities Field Rep./Training Coordinator

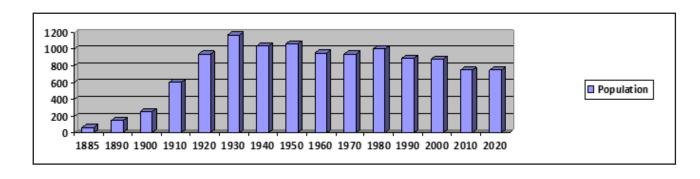
eshler, located in Thayer County, had settlers in the area by 1874. The German settlement of Friedensau, located about two miles east of present-day Deshler, established a post office May 9, 1878. It was noted that by 1885, there were about 70 residents in the Deshler area. In 1887, the Chicago, Rock Island & Pacific Railroad arrived in the Deshler town site. Since the community of Friedensau was bypassed by the railroad, the 100 residents, their stores, and the railroad tracks were moved to the new town site in 1887. A post office and Peace Lutheran Cemetery was established in 1887. About 1889, a school was established with a bond issued for the first school building. In 1890, the community had a population of 150 and the settlement boasted a railroad station, a flour mill, an ag implement, a hardware store, a saloon, a blacksmith, a millinery, a creamery, a general store, a harness shop, and a broom factory. In 1893, the Deshler Roller Mills was operating and by 1894, a two-story Pacific Hotel was built. In March 1894, the *Deshler Herald* newspaper was published and a small jail was built.

By 1900, the population was 258 and the community had several businesses, including a knitting mill, a cigar factory, a creamery, a mausoleum plant, a foundry, a turkey processing plant, a hatchery, a grist mill, a wholesale grocery house, an implement factory, and a small college. In December 1900, the streets were graded for proper drainage and wooden sidewalks were installed. Grading was done using an old grader pulled by mules. By 1902, one source noted the population at about 400 and the Friedensau post office closed in 1903. A brick manufacturer was established and in full operation by June 1903. The telephone lines were completed from Deshler to Hebron. By 1904, the lines were interconnected to the Nuckolls County Telephone Company. The first bridge over Snake Creek was built in 1904. In 1905, the first concrete sidewalks were installed in Deshler. In June 1908, a municipal water system was established as a city



Deshler water tower. 2001 photo.

well was dug by Albrecht & Son. Prior to this, each house had its own well, hand pump, and/or windmill. A water tower was erected in 1908 along with the completion of a new brick city hall/fire station building. In 1908-09, a new public-school building was erected for \$25,000. In 1909, the Deshler Volunteer Fire Department was organized and by July, had a Deshler No. 1 and No. *Continued on page 10*



Continued from page 9 2 Hose Company.

By 1910, the population increased to 609 and the fire department was honing their skills with water fighting competitions. On March 2, 1911, the first use of gasoline power for dragging the dirt streets was recorded. In June, over two blocks of sidewalk and concrete curb and gutter were installed in the business district. In 1912, the church bell served as a fire alarm, the water system had about 72 connections, and the public school

added a 10th grade. In July, John and Frank Bokenkamp (principal stockholders) formed the Deshler Light and Power Company to install an electric light and power plant in Deshler. A steam-driven engine fueled by coal was installed. It was designed to handle the electrical needs of the broom factory, the Deshler Roller Mills, the two elevators, and to have sufficient capacity to serve the business district. The plant was located next to Main Street, west of the broom factory and on the creek bank. By September, an ordinance

was passed to make sure sidewalks are repaired. In December, the street lighting system was activated on Main Street. In 1913, a three-story brick Deshler Lutheran High School (private) and Business College was built. Electric light poles were extended south to the college campus and into the residential areas. In March 1914, the village purchased six-acres for use as a park and an eight-sided Agriculture Hall was built at the fairgrounds. In 1915, the Deshler Light & Power Company

Continued on page 11



Continued from page 10 had a 70 horsepower (HP) gas engine with a generator rating of 50 kilovolt amps (kVA). In 1916, the broom factory needed more capacity and being the primary customer, it purchased an interest in the electric company. By December, a new 165 HP (one source noted 160 HP)

165 HP (one source noted 160 HP) steam-powered engine was installed and was fueled by waste from the broom factory and/or coal in the boilers. It was mounted in the engine room of the broom factory. In February, the town was temporarily out of light as it switched from the old plant to the new facility built in conjunction with the broom factory. As soon as the new plant was up and running, the old power plant building was abandoned. By 1917, the population was 1,100 and Deshler was incorporated as a city. On Jan. 1, 1917, a meeting was held by the Deshler Hook & Ladder Company. The Deshler Rustler newspaper was published in 1917 and on Oct.

29, 1917, the Deshler Light and

Power was formally incorporated.

Directors were John Bokenkamp

and H.C. Struve, who represented

the interest of the Deshler Broom

Factory. Reinke Hall was built in

1918 and in April 1919, a new cor-

poration was set up, the One-Man

Straw and Manure Factory.

In 1920, the population was 944, the Deshler Artificial Ice Company was delivering ice to neighboring towns, and some businesses included a cigar factory, a knitting mill, a wholesale grocer, a creamery, and a turkey processing plant. In October 1920, Frank and John Bokenkamp sold their interest in the Deshler Light and Power Company to C.P. Brewer and H.C. Struve. Another generator was purchased in 1921 and service was extended

to serve the towns of Hardy, Byron, and farmers along the way. In consideration of a loan of \$5,000 for five years at 7 percent interest from the village of Hardy and a \$3,000 for the same length of time from Byron, the Deshler Power & Light Company was granted a franchise for 25 years to supply these towns with electricity. Eventually during that year, arrangements were made to interconnect with the Southern Nebraska Power Company of Superior.

A sanitary sewer system was completed in 1922-23 with a large septic tank. The Southern Nebraska Power Company purchased the controlling interest in the Deshler Light and Power Company. In April 1922, a contract was approved to pave Main Street with brick and by January 1923, seven blocks were paved and a storm sewer system was installed. In 1923, the water system had two wells and in June, a public drinking fountain was installed. Deshler's first new fire truck was purchased in the 1920s for \$12,500. In 1925, the private electric plant had electric rates of \$0.12-\$0.15 per kilowatt (kW). The municipal water system had rates of \$0.25 per 1,000 cubic feet (cuft) with a minimum of \$6 per year. About 1927, the Lutheran School building was sold to the Thayer County Public School District #60 and become Deshler Public School. Deshler was a member of the League of Nebraska Municipalities in 1928.

In 1930, the population was 1,176, the Deshler Broom Factory employed about 300 and in 1931, the municipal electric system was established. In July 1931, work was underway installing gas lines by the Nebraska Natural Gas Company. In February 1932, William Ude

installed the first automatic "serve yourself and pay yourself" gasoline pump at the south end of Main Street, near the east-west highway. The general store and a variety store closed. The City Office/Municipal Power Plant building was built in 1932 with the first generator capable of generating 130 kW.

On April 17, 1934, a \$29,500 bond issue was voted on (347 for 103 against) for the construction of a power plant.

The first Fairbanks-Morse diesel generating unit was a 165 HP engine with direct connection to a Fairbanks-Morse alternator. A second Fairbanks-Morse engine unit (five cylinder 350 HP) was added (1935) and went into service. The third generator, a 235-kW unit, replaced the original 1932 generator which had produced 130 kW. The city library was moved from the room on top of the Sittler Drugstore and into the room originally constructed to serve as a restroom in the Werner Service Station. Library hours were from 2-6 p.m. on Saturdays. In March 1937, the library moved from the north room of the Werner Service Station into the former State Bank building. A huge red granite boulder weighing 2,400 pounds was placed as a memorial in Washington Park in the spring of 1937.

By 1940, the population was 1,037, the broom factory had 400 employees, and the city flooded in August 1942. The broom factory had a series of fires in 1943, 1946, and 1947, with the last destroying the factory. In 1945, over 100 elm and hackberry trees were planted in the city park. The west addition was added to the power plant in the 1940s and by 1946, the city was

Continued on page 12

Continued from page 11 using natural gas. In October 1950, construction began on a library building using a \$19,500 bond issue (20 years at 3 percent interest). In 1954, Reinke Manufacturing moved to a building located west of Deshler. The municipal water plant had 425 meters in service in 1956 and in 1957, a swimming pool was completed. The fire department had 36 volunteer firefighters in 1958 and the village-owned cemetery was maintained by a tax levy. The municipal sewer system and disposal plant also were maintained by a tax levy.

The population decreased from 1,063 in 1950 to 956 in 1960, and the natural gas system was owned by the Kansas-Nebraska Natural Gas Company. Reinke Manufacturing began operation (center pivot systems) in 1960. In 1961, the village was in a lawsuit with the Kansas-Nebraska Natural Gas Company for condemnation acquisition of the gas system. A paving project was in progress in 1962 and a new brick school was built at Plum and 3rd Streets. The electrical generation and distribution system were owned by the village with 376 meters in service. Ordinances were revised (1962), and a project was in progress to purchase the natural gas distribution system. On May 21, 1964, the Deshler Egg Plant burned down and in October 1967, a new rescue unit was purchased and a new rural fire truck in 1968.

By 1972, Deshler had a population of 937, was a city of the second class, and had a wastewater treatment facility project in progress. In June, all telephones were converted to the dial system and the community was notified in 1973 that

the Rock Island Depot had closed. The city water tower was repaired/repainted white with a huge purple dragon (school mascot) emblazoned on the north side in October 1978. In 1979, the electric generation (standby) and distribution system was operated by the city and supplied by the Nebraska Public Power District (NPPD). In October, a small park was designated as Bicentennial Park (west side of the city library).

The population was 997 in 1980 and funding for a new swimming pool was approved in October.

In June 1982, a franchise was approved for installation of cable television within the city and the natural gas system was operated/supplied by the Kansas-Nebraska Natural Gas Company. The new swimming pool was built (cost \$180,000) and opened in August. The municipal electrical system was supplied by NPPD and WAPA by 1982. Bricks were re-laid on Main Street in 1986 and the city purchased the corner west of the Peace Lutheran Congregation Cemetery to install a new city well. In June 1987, a new \$60,000 fire truck was purchased, the water tower was getting painted, and on May 24, a new welcome sign was dedicated.

The water system in 1990 had an 80 ft, 55,000-gallon water storage tower and 90 percent of the streets were hard surfaced. In 1995, the city received a \$19,000 grant for a woodchipper, and the wastewater facility consisted of a facultative flow through lagoon system designed for 0.065 million gallons per day (mgd) in 1999.

The population in 2000 was 879 and a water project of constructing a bulb-shaped water tower started in 2002. The tower was painted white

with an American flag and black lettering. The natural gas system in 2002 was operated/supplied by Kinder Morgan and by 2008, by SourceGas. A private company, "The Garbage Company," provided collection service in 2009. By 2015, the natural gas system was operated by Black Hills Energy. Land was donated for a new library with a ground-breaking ceremony May 12, 2015. The Jennifer Reinke Public Library was dedicated June 17, 2016.

Today, Deshler has a population of 752, has been incorporated since 1917, and is a League of Nebraska Municipalities and Utilities Section member.

References: Nebraska Directory of Municipal Officials, 1956, 1958, 1960, 1962, 1964-75, 1977-87, 1990-2018, 2020-2023; Nebraska Municipal Review Magazine, 1925, 1928, 1934, 1995; The Ansley Herald, 1931; Perkey's Nebraska Place Names, 1995; Nebraska Place Names, 1925, 1960; Water Resources of Nebraska, December 1936; History of Deshler, Nebraska First 100 Years (1887-1987) Vol. 1, 1987; Public Power Magazine, Vol. 51, Number 1, January-February 1993; Department of Energy Website, 2004; Nebraska Our Towns... Central Southeast, 1991; Maps Tell a Story, 1991; NEDED Website, 2005; Nebraska History Magazine, 2009; Nebraska State Gazetteer & Business Directory, 1890-91, 1917; *Electric Power Development in the* United States, Dept. of Agriculture, January 1916; Nebraska Historical Building Survey, Reconnaissance Survey Final Report of Thayer County Nebraska, Aug. 1, 1991 and Nebraska Blue Book, 1918, 1928, 1936, 1942, 1946, 1978.

SAFETY/HEALTH CORNER

Office/shop safety tips

By Rob Pierce, Utilities Field Rep./ Training Coordinator

Does your office or shop have a shortage of electrical outlets? Many of our municipal buildings were constructed before computers, iPads, cellphones, and a multitude of other pieces of office equipment that require being plugged in. This also pertains to all portable equipment such as two-way radios, cell phones, laptops, meter readers, and locating equipment with global positioning systems (GPS).

It seems almost everything else these days is wireless, but we still need one, if not multiple, chargers plugged in. Once again, technology is outpacing the updating of electrical wiring in most of our facilities, causing us to cut corners with multiple extension cords and surge strips. Often, it can be found where surge strips are plugged into each other with all ports in use. Amperage ratings easily can be overcome by tripping a breaker, overheating a cord, or equipment creating a potential fire hazard. If the surge

strip has a built-in breaker, it might need reset or possibly the entire unit may need to be replaced. The surge strip might become a multi-port unit with little to no protection if it cannot be reset.

Another item is extension cord abuse around the office or shop. Extension cords are to be used as temporary devices, not to be used in place of permanent wiring. Often these cords are not rated for high amperage equipment that is plugged into them, such as space heaters. A good measure of how heavy duty is your extension cord is what did you pay for it and is the cord fairly thick in diameter.

Trip hazards also can be a problem associated with extension cord use. When stepped on, they can roll, causing a fall or you can trip on them if they are not secured/taped to the floor. Stepping on or running over cords with a vehicle, a heavy cart, or just walking on them can put pressure on internal wires causing them to fray or break. Another electrical issue of concern is when the electrical outlets



Adobe Stock photo

are not grounded or cords with twoprongs (no ground prong) are used. Sometimes, we get too creative by removing or cutting off the ground prong on the plug. I have even seen the ground prong bent backwards out of the way, so the equipment could be plugged into a two-slot socket. An adapter is usually not recommended as you may not be able to properly ground it. Removing a ground eliminates protection and often the outlet screw connecting an adapter may not provide an adequate ground. Using an adapter often can add enough weight to cause the cord to sag, pulling the prongs partially out of the outlet. This may cause sparking and a fire could result.

Next time you walk through your office or shop, take time to observe and evaluate the electrical outlets and the equipment plugged into them to prevent a potential fire. During the holidays, we tend to find a lot of decorative lights and decorations that can overload an outlet. Many offices and shops tend to utilize shop heaters and heaters are located under an office desk. If we must use them, try to purchase heaters with a safety shut off in case they are tipped over. This may prevent a potential fire. The updating of electrical wiring within our buildings may cost thousands but a fire can cost a lot more.

Compressed air safety

Reprinted with permission from the LARM newsletter

One of the most useful tools that any shop can have is an air compressor. Compressed air can be used for power tools such as impact wrenches, saws, and hammers. No matter how useful compressed air is in the workplace, it also can be dangerous. Remember that compressed air can cause air embolisms if forced into the body and it can rupture the esophagus or lungs if blown into the mouth. As little as 10 pounds per square inch (PSI) can blow an eye out of its socket, rupture an ear drum, or inflate intestines. If used for cleaning, compressed air can blow particles or debris at high speeds causing eye and skin *Continued on page 14*

Compressed air safety

Continued from page 13 injuries.

The following are some compressed air safety tips:

- 1. Hoses and line should be rated for the proper operating pressure and inspected regularly.
- 2. Personal protective equipment (PPE) should be worn whenever working with compressed air.
- 3. If cleaning must be done with compressed air, the pressure

must be under 30 PSI and proper equipment must be used.

- 4. Never use compressed air to clean clothing or hair.
- 5. Never point compressed air at yourself or another person.
- 6. Know where the shutoff valves are located in the event that a tool or hose breaks. Keep safety in mind when using compressed air as it can cause injury if used incorrectly.

Electric Meter Conferences scheduled

Future dates for Electric Meter Conferences have been scheduled and contracts signed with the Kearney Holiday Inn.

- Feb. 6-7, 2024 changed to Feb. 13-14, 2024
- Feb. 11-12, 2025
- Feb. 3-4, 2026
- Feb. 9-10, 2027
- Feb. 8-9, 2028

Nebraska Breaktime Trivia "Just For Fun"

- Q-1. Nebraska is separated from what other state or states by the Missouri River?
- Q-2. How many incorporated villages/cities start with the letter K?
- Q-3. Which communities/post offices were located south of the Niobrara River between Valentine and Niobrara on the 1880 Nebraska map?



Q-4. Where in Nebraska is this former electric power plant?

Answers on page 19.

August: Monthly celebration acknowledgments

Drive Sober or Get Pulled Over <u>www.nhtsa.gov</u> Safe+Sound Week (Aug. 14-20) <u>www.osha.gov</u>

Go to www.calendarr.com/united-states/observances-2023/ for a list of celebrations or events for every day of the year.



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The Utilities Section Newsletter will continue to feature histories of both utilities and associate members. Any historical data and/or photos of your utilities, a specific facility, or articles already written are welcome, along with permission to print. If you have questions, contact Rob at 402-476-2829 or robp@lonm.org.

By Rob Pierce, Utilities Field Rep./Training Coordinator

Laurel, located in Cedar County, had land surveyed about 1856-58, which later was a site of settlement in the 1870s.

On June 12, 1884, a post office was established as Claramont Junction. In the early 1880s, School District #54 was organized. Land was platted in 1891 from a portion of farmland owned by William Martin, at the crossing of the North Western railway and the Pacific Short Line railway (about one mile from the depot of Claremont).

From April 1892-1893, the population increased from about 75 to about 200. The settlement was founded and named Laurel after Laura Martin, the daughter of an early founder. By February 1892, a temporary depot was in service and a store was opened. On May 28, 1892, the Claramont post office closed and a post office was established as Laurel. By 1893, a railroad depot with a water tank was operating, the Laurel Advocate newspaper was established, and a grain elevator and section house were moved from Claremont to Laurel. On May 15. 1893, the village was incorporated

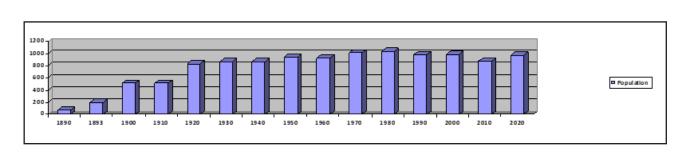
on a square section of land. The first town council consisted of chairman L.B. Payne, Chas. Metz, A.E. Maun, Oscar Waite, and Otto Carr as clerk. Land was acquired for a cemetery (1883) and the town site company donated a block of land for a park (1895). The Laurel Brickyard was in operation as funding was needed to construct sidewalks and grade streets. School was held above a store until the new two-story (54 ft x 42 ft x 24 ft) frame high school was built (1894-95) for \$4,000. By 1895, new hitching posts were in front of Coburns & Fischer's Store and in 1897, telephone poles were being installed between Belden and Laurel and a hotel was built.

In 1899, the Fourth Street drainage ditch was repaired and the population by 1900 increased to 514. No large-scale fire protection was available and in 1900, a fire destroyed 12 buildings. By 1901, a bond was issued for water storage and mains. The first telephone lines were installed, ground was secured for tennis courts, and the tennis club was organized. By 1902, the new water system consisted of wells and pumps near the corner of First and Elm Streets along with a water storage standpipe erected northeast



Laurel wastewater treatment plant oxidation ditch.

of the school. A volunteer fire department was established and a hose cart with 500 feet of hose was purchased. The first cement sidewalks were laid and tile was laid to help drain the business district areas. The Manton Addition was platted and concrete sidewalks were laid. W.H. Nightwine constructed an acetylene gas plant and laid gas lines in the business area (1902). A project of raising streets continued in 1903 and 10 poles were installed in the business district in 1904 for mounting acetylene streetlights. The fire department purchased more hose and a fire bell in 1904. More drain tile was installed in 1905 and new phone equipment was installed for long distance improvement. A new Continued on page 16



Continued from page 15 brick school was erected in 1908 and the Logan ditch was dug north of Laurel.

The population by 1910 was 514 and a block of land was deeded for a baseball park in 1911. A sewer system was established in 1912 and a city auditorium was built in 1913. The first sewer lines were laid, and a disposal plant was built one-half mile east of Laurel (1913). A vote in 1913 to install an electric light system resulted in a 4 to 1 approval. In September/October 1915, a vote for a \$12,000 bond at five percent interest was approved and a contract was let for the construction of a municipal electric light plant. In January 1916, a DeLaVergne engine, 70 horsepower (hp) and 37.5 kilowatt (kW), was installed and began generating April 16, 1916. A Chicago pneumatic engine (80 hp), 40 kW was purchased in August. The gas light era was beginning to fade as electricity was introduced and an electrically operated moving picture machine was installed. A new Smith-Voile single action triplex water pump was installed in 1916 with a new well drilled in 1917. A new tractor was purchased to drag the streets and four tons of ice was processed every 24 hours at the ice plant (1918). The hard surfacing of streets (bricks from Second to Highway 20 then to Bruce Street) were underway by 1919 at a cost of \$4.10 per square yard.

The population was 830 by 1920, Highway #20 was hard surfaced, new sewer lines were installed, and a new water well was drilled near the ball field. Acetylene gas was provided by Laurel Acetylene Gas Light Company in 1922, supplying three miles of mains, 13 public

lamps, and 75 meters in service. The granite street light poles erected in the business district (1922) were supplied by underground electric wiring. A new high school was being built in 1922 and in 1923, a new 200 hp, 130 kW Fairbanks-Morse (F-M) engine was installed at the power plant. The municipal power plant in 1925 had rates of \$0.18 per kW. The municipal water rates were \$0.40 per 1,000 gallons with a minimum of \$0.75 per month. An April snowstorm broke six telephone poles on Main Street, as Northwestern Bell reported 10,000 downed poles and Western Union reported 1,000 downed poles. By 1923, the fire department had a new (used) chemical fire truck and a paving petition was passed in 1927.

The population had increased to 864 by 1930 and a 240 hp, 170 kW F-M engine was installed at the power plant.

A new Ford fire truck was purchased in 1931 and Laurel selected the "hydrangea" as the village flower. The highway through Laurel was paved (1935-36) and the power plant had a capacity of 250 kW of internal combustion power generation. New playground equipment was installed in the park in 1937 and heavy rains caused the drainage ditch to overflow flooding the lower part of village. In 1938, a swimming pool bond issue of \$5,000 was passed. L.C. Walling, who was the manager of the municipal electric plant for several years left to become District Manager at O'Neill for the Interstate Power Company (over their Nebraska territories) in

By 1940, the population was 861 and WPA projects were underway, installing new water and sewer lines. The auditorium was purchased by the village from Bill Chambers. The Laurel Municipal Power Plant in 1941 installed a F-M engine and by 1947, a 0.3 megawatt (MW) natural gas/diesel unit was in operation. Several blocks of concrete street paving were completed in 1941 and a new water well was drilled. In 1946-47, new water mains were laid along Third Street on the west hill and sewer lines were installed. A new 120 feet (ft) water well at 513 West 3rd was drilled in 1948.

The population increased to 944 in 1950 and a new 300 hp engine was installed at the power plant. The electrical distribution system began rebuilding in 1952 with new poles, wire, transformers, and other equipment. In 1953, a flare lighting ceremony inaugurated natural gas service in Laurel with a contract with the Kansas-Nebraska Natural Gas Company. In 1955, the Gavins Point Dam was completed, which generates electricity to the surrounding area. The Laurel Power Plant purchased and installed a used 300 hp diesel generation unit. A (40 ft x 100 ft) swimming pool was completed in 1955 for \$20,091, financed by bonds and donations. The water well drilled in 1920 was decommissioned in 1956 and the electric system had 500 meters in service with a power plant capacity of 545 kilowatt hours (kWh). The water system had 500 meters in service with rates for 2,500 gallons (gals.) at \$1, then \$0.15 per 1,000 gals. over 2,500 gallons. The cost of electric current for pumping water was \$40 per month and in 1956, a new well was drilled. The fire department in 1956 consisted

Continued on page 17

Continued from page 16 of 30 volunteer firefighters and a street project entailed the paving of all north to south streets. The sewer system was maintained from a \$0.25 per month charge and the natural gas system was operated by the Kansas-Nebraska Natural Gas Company. A new gymnasium was built at the school and the village auditorium was maintained from a one mill tax levy and all revenue received from rentals. Solid waste collection was provided by a private firm with the village collecting a charge of \$1 per month for residences and \$4 per month for businesses. A new 0.2-megawatt natural gas/diesel unit was in operation at the power plant in 1958.

In 1960, 0.5 megawatts, 640 hp engine was installed at the power plant along with new switchboard and radiator system. The airport was municipally operated and a new water well with a capacity of 450 gallons per day (gpd) was drilled as water consumption amounted to 400,000 gpd. Bridges were erected over the Fourth Street ditch (1961-62) and the Laurel and Concord School Systems merged, forming the Laurel-Concord High School. The electric distribution system consisted of three miles of lines and 450 meters. The water system has 360 in service with rates of first 7,500 gals. at \$3 per quarter minimum, then \$0.20 per 1,000 gals. over 7,500 gallons. The sewer system and disposal plant were maintained from a sewer charge of \$1 per month for residential and \$1.50 for commercial. The cemetery was owned by the city and operated by the Cemetery Association (1962). In 1964, a new library and city offices were added on the north side

of the auditorium building. The city offices previously were in the power plant building. Also in 1964, an EMT unit was formed in the fire department. A new water well was drilled on West First Street and a natural gas, 960 hp engine was installed at the power plant in 1964. The 61-acre 36-hole Cedar View Golf Course began construction in 1964 with the old Liberty School building to serve as the club house. A new 0.7-megawatt natural gas/ diesel engine was installed at the power plant in 1965 and by 1966, the streetlights were converted from incandescent to mercury vapor. A new 200,000-gallon water storage tank was erected in 1966, replacing the old standpipe. A new oxidation ditch sewer treatment plant was built (1967-68), located one-half mile north of Laurel on Logan Creek. Note: One source noted the first in the nation to construct a plant of this type. A new city auditorium was completed in 1969 and by 1970, the population increased from 922 in 1960 to 1,009. In 1971, Laurel received honorable mention in the Nebraska Community Improvement Program and in 1972, a new city maintenance/warehouse building was constructed on 102 West Second Street. The school. built in 1908, was demolished in 1978 and a new 55-bed nursing home was constructed. The newly renovated park was dedicated in 1976 along with ballfield in 1979.

In 1980, the population was 1,031 and the former local dump was closed due to new regulations. The new 911 emergency system was inaugurated in 1981. In 1982, the telephone system was installing a remote switching phone system, the fire department purchased a "Jaws of Life" for \$5,000, and a new 3,400 ft grass airstrip opened at the airport. The electric distribution system was owned by the city and supplied by Cedar-Knox Public Power District. A street project (1983) included an asphalt armor coat overlay on Second Street and the swimming pool bathhouse was enlarged and reroofed in 1984. By 1990, the population was 981, the Elm Street bridge was replaced in 1991, and the power plant purchased a 1,920 hp unit, which survived a fire, from the City of Randolph. In 1993, the electric system had 556 customers and by 1999, about 90 percent of Laurel's street were hard surfaced (paved).

The sewer treatment facility was an activated sludge oxidation ditch system designed for 0.168 million gallons per day (mgd) with anaerobic digester single-stage sludge treatment. The municipal system had two active wells (average depth 75 ft) with average consumption of 250,000 gals. per day. Peak consumption was 600,000 gals. per day.

The municipal power plant in 2001 consisted of six engines installed in 1956, 1960, 1965, 1970, 1974, and 1992 with a total generation capacity of 5.0 megawatts. In 2005, the city had 14 miles of streets, 12 miles hard surfaced with concrete and asphalt, 100 percent curbed, and 60 percent with sidewalks. The fire department had 30 volunteer firefighters, 12 EMTs and an ISO insurance rating of 7 inside and 10 outside city limits. The water system had 50 Mueller, Waterous, Iowa, and Eclipse fire hydrants. Water rates were \$8 per quarter, then \$0.80 per 1,000 gallons with a minimum bill of \$8. The water Continued on page 18

Continued from page 17 connection fee was \$150 for new water service. In 2005, the natural gas system was supplied by Kinder Morgan and by 2008, was supplied by KN Energy and ACE and operated by SourceGas.

The population decreased from 986 in 2000 to 870 in 2010 and a water project included a new water well and the replacement of undersized mains. The city provided collection services of solid waste which is hauled to the L.P. Gill Landfill at Jackson. In 2015, the natural gas system was operated by Black Hills Energy Corporation. By 2018, the water system had three active municipal wells, serving 83 commercial, and 436 residential connections. Since 2020, the city adopted a new one- and six-year street plan which included street/ sidewalk replacement, downtown renovation, a water tower maintenance plan, along with a new fire department building and community center facility.

Today, Laurel has a population of 972, has been incorporated since 1893, a city of the second class

since 1972, and a long-time member of the League of Nebraska Municipalities and Utilities Section.

References: Nebraska Directory of Municipal Officials, 1956-1967, 1969-1991, 1993, 1996, 1998, 2000-2021; Nebraska Municipal Review magazine, 1925, 1989; History of Clarmont And Laurel, Nebraska, 978.224 H673; Perkey's Nebraska Place Names. 1995: Nebraska Place Names, 1925, 1960; Water Resources of Nebraska, December 1936; Public Power Magazine, Volume 51, Number 1. January-February 1993; Nebraska A Guide to the Cornhusker State 1979; Lincoln Journal Star Newspaper, 2010, 2020; Department of Energy Website, 2004; Laurel Website, 2004-2021; Nebraska Our Towns...North Northeast. 1990: Maps Tell a Story, 1991; NEDED Website, 2005; Wikipedia website, 2018; Who's Who in Nebraska, 1940; Sargent Leader Newspaper, October 1915; Water & Sewer Rate Comparison Study (NeRWA), 2010-2011; Nebraska Blue Book, 1928, 1942, 1946, 1978; Biennial Report of Audits of Public Accounts to the

Governor, 1935; U.S. Congressional Serial Set, House Document, Vol. 238, April 14, 1936; Directory of Electric Utilities in the United States, Federal Power Commission, 1941; Browns Directory of American Gas Companies and Gas Engineering Appliances Catalogue, 1922 and Utilities Section solid waste survey, 2015.

Need a water operator licensed?

Water operator training courses, provided by the Drinking Water Program, are scheduled for the remainder of the year The registration form for water operator training courses can be found on the Drinking Water Program webpage at dee.ne.gov/NDE-QProg.nsf/OnWeb/PWS.

Grade IV Courses

- Sept. 6-8 in Fremont
- Dec. 5-7 in Grand Island

Grade III Courses

• Oct. 2-6 in Beatrice

Grades I & II Courses

• Aug. 14-18 in Grand Island (grades 1 & 2 course)

Water (Fluoride School)

• Oct. 25 in Columbus

Need a wastewater operator licensed?

The Nebraska Water Environment Association (NWEA) is conducting the following licensure training course on Oct. 3-4 in Norfolk. This class is intended for municipal levels 1-3. Material for level 4 is covered but not comprehensively. Contact Ryan Hurst (hurst@wahoo.ne.us) for information on these wastewater (licensure) training classes or go to www.nebwea.org.

Note: A separate registration is needed for the exam (contact NDEE-Mike McBride at mike. mcbride@nebraska.gov).

NDEE Wastewater Operator Training Classes (for license)

- Oct. 11 Norfolk (WW Lagoons)
- Oct. 12 Norfolk (WW test day)
- Dec. 13 Grand Island (WW Lagoons)
- Dec. 14 Grand Island (WW test day)

Check out the League's
Facebook page at
www.facebook.com/leaguene.
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2023 Training calendar

Visit our website at lonm.org/education-events/ for a complete list of workshops and conferences.

Aug. 29-31Electric Rubber Gloving School
SeptemberSept. 19Water Operator Training Workshop Water Shop, North PlatteSept. 20Water Operator Training Workshop City Hall, McCookSept. 21Work Zone Safety Training Workshop Utilities Services Building, Grand IslandSept. 27-29League Annual Conference
Oct. 17Water Operator Training WorkshopPublic Library, Norfolk Oct. 18Water Operator Training WorkshopFire Hall, South Sioux City Oct. 19Work Zone Safety Training WorkshopFire Hall, South Sioux City
November Nov. 7Work Zone Safety Training Workshop Library, Blair
December Dec. 5Water Operator Training Workshop

"Just For Fun" Answers

A-1. South Dakota, Iowa, and Missouri.

Amount

- **A-2.** Five Kenard, Kilgore, **Kearney**, **Kenesaw**, and **Kimball**. Eighty-six communities/post offices were listed in "Perkey's Nebraska Place Names" book. Many of which never existed into the 1900's and some were railroad stations or stops.
- A-3. Grand Rapids, Keya Paha, Lavina, Chelsea,

Paddock, Red Bird, Welch, Pishelville, and Dukeville. Eighty-six communities/post offices were listed in "Perkey's Nebraska Place Names" book. Many of which never existed into the 1900s and some were railroad stations or stops.

A-4. Potter.

(Utilities Section members noted in bold.)

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Utilities Section Newsletter

Utilities Section Webinars

(Credit hours for water 1-4, 6, and wastewater available where listed)

Email info@lonm.org to request a webinar.

Safety Committees by speakers Rob Pierce and Lash Chaffin, LNM; covers requirements, liabilities, financial benefits, unions, etc.

(Approved for 1 hour grades 1-4 and 1 hour wastewater)

Members \$0 (free), non-members \$35

Safety Session Series (If you purchase all five sessions as a bundle, the cost for members is \$140 and for non-members is \$180.)

Implementing an Effective Safety Meeting by speaker Rob Pierce, LNM; covers requirements, topics selection, how and when to present, safety focus, and building a safety culture.

(Approved for 1 hour grades 1-4 and 1 hour wastewater)

Members \$35, non-members \$45

Safety: Lockout/Tagout Programs (Practices and Procedures) by speaker Rob Pierce, LNM.

(Approved for 1 hour grades 1-4 and 1 hour wastewater)

Members \$35, non-members \$45

Safety: Personal Protective Equipment (PPE) by speaker Rob Pierce, LNM.

(Approved for 1 hour grades 1-4 and 1 hour wastewater)

Members \$35, non-members \$45

Safety: General Roundtable Discussion by speaker Rob Pierce, LNM; covers safety programs, injury/near miss issues, and hot topics.

(Approved for 1 hour grades 1-4 and 1 hour wastewater)

Members \$35, non-members \$45

Safety: Slips, Trips & Falls by Speaker Rob Pierce, LNM.

(Approved for 1 hour grades 1-4 and 1 hour wastewater)

Members \$35, non-members \$45

Water/Wastewater Sessions

Asset Management by speaker Shelly Rekte, DHHS; covers a general overview on asset management and associated recordkeeping options.

(Approved for 1 hour grades 1-4 and 1 hour wastewater)

Members \$35, non-members \$45

Pump Application, Operations & Maintenance by speaker Brad Harris, Layne Christensen.

(Approved for 1 hour grades 1-4 and 1 hour wastewater)

Members \$35, non-members \$45

Well Rehabilitation and Relining by speaker Brad Harris, Layne Christensen.

(Approved for 1.5 hours grades 1-4 and 1.5 hours wastewater)

Members \$35, non-members \$45

Steps and Guidelines to Drilling a New Water Well by speaker Brad Harris, Layne Christensen.

(Approved for 1.5 hours grades 1-4 and 1.5 hours wastewater)

Members \$35, non-members \$45

Water Storage Tank: Operation/Maintenance by speaker Jake Dugger, Maguire Iron.

(Approved for 1.5 hours grades 1-4 and 1.5 hours wastewater)

Members \$35, non-members \$45

Utilities Section Webinars

Backflow Sessions (If you purchase all four sessions as a bundle, the cost for members is \$60 and for non-members is \$100.)

Cross Connection Control Programs: Past & Present by speaker Mike Wentink, DHHS.

(Approved for 1 hour grades 1-4, 1 hour grade 6 and 1 hour wastewater)

Members \$35, non-members \$45

Cross Connection/Backflow Safety: Confined Space by speaker Rob Pierce, LNM; covers a variety of confined space issues.

(Approved for 1.5 hours grades 1-4, 1.5 hours grade 6 and 1.5 hours wastewater)

Members \$35, non-members \$45

Basic Requirements of a Cross Connection Control Program by speaker Rich Koenig, DHHS; covers requirements and regulations in a summary overview.

(Approved for 1 hour grades 1-4, 1 hour grade 6, and 1 hour wastewater)

Members \$35, non-members \$45

Public Education concerning a Cross Connection Control Program by speaker Rob Pierce, LNM; covers options for educations, communication options, monitoring, feedback, etc.

(Approved for 1.5 hours grades 1-4, 1.5 hours grade 6, and 1.5 hours wastewater)

Members \$35, non-members \$45

Landfill/Transfer Station Session

Hazardous Waste Identification and Random Load Inspections by speaker Rob Pierce, LNM. Members \$35, non-members \$45