

PUBLIC WORKS & UTILITIES

PAVING THE WAY FOR A BRIGHTER FUTURE BY EDUCATING, ENGAGING AND EMPOWERING OUR EMPLOYEES.

<http://lincoln.ne.gov/city/pworks/docs/newsletter/>

2013 October / November
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Water Meter Replacement Program Under Way



Only 79,376 water meters to go ...

This fall, Lincoln Water System (LWS) is beginning a 20-year meter replacement program. About 4,000 meters will be replaced each year. Over a 10-year period beginning in 1997, LWS implemented an automated meter reading system. These meters transmit readings to a mobile collector device mounted in a vehicle, allowing one employee to more accurately collect over 3,500 readings every day with no intrusion on private property.

The radio device that transmits the readings uses non-replaceable batteries, which unfortunately lose power over time. Although these batteries are projected to have an average life of 20 years, officials predict a significant number will fail before that. LWS will begin by replacing the meters installed in southwest Lincoln nearly 17 years ago.

Visit water.lincoln.ne.gov or use the QR code, below, to view a video on the water meter replacement program.



SOLID WASTE BEGINS COLLECTING LANDFILL GAS

In 2008, the City of Lincoln and Lincoln Electric System (LES) began an exciting joint venture to generate electricity by using methane from the Bluff Road Landfill. Recently, the engines at LES's Terry Bundy Generating Station (TBGS) began generating electricity from this source. The gas is extracted from the landfill through a network of 54 wells placed 40 to 100 feet into the waste. The gas is cleaned and piped to the TBGS where three large methane-powered engines generate electricity.



Cutting the ribbon for the new landfill gas system are Marilyn McNabb, LES Board Chair; Mayor Beutler; and Kevin Wailes, LES Administrator and CEO.

Under the 20-year contract, LES will purchase as much as 300,000 million British Thermal Units of methane gas from the City each year to help serve the annual energy needs of about 2,500 households. "Together, we are taking a major step forward in providing renewable energy that will benefit residents for decades to come through a cleaner environment, a local source of energy, continued low utility rates and the unlocking of new economic development," said Mayor Beutler.

Landfill gas is naturally produced by decomposing garbage. It consists of about 50 percent methane, and 45 percent carbon dioxide. The remaining 5 percent is made up of other gases such as nitrogen and oxygen. The Environmental Protection Agency estimates that methane is over 20 times more potent than carbon dioxide in terms of global warming potential. Methane is the second most prevalent greenhouse gas emitted in the U.S. By creating the opportunity to capture the landfill gas and use the methane to generate electricity, officials estimate that the reduction in carbon emissions will be equivalent to the annual emissions of about 24,000 cars.

Staff at the landfill will operate and maintain the wells, the equipment that extracts the gas from the landfill and the equipment that cleans the gas. LES employees will operate and maintain the pipeline, the electricity-generating engines and the switchgear that allows the electricity to flow to the power transmission lines.

For additional information, visit lincoln.ne.gov (keyword: landfill), and click on "Projects."

STRONG LINGS

"THERE IS NO 'DIVISION' AMONG OUR DIVISIONS."

Miki Esposito

PWU Director Miki Esposito is pleased to announce the Strong Linc Award recipients for the workplace principle of collaboration. Please congratulate these Strong Lings for their valued service:

The following individuals are recognized for their team effort for pre-planning and for providing the smooth traffic flow for Husker football games:

Scott Opfer

(Engineering Services Street and Traffic Operations)

Larry Jochum, Kelly Sieckmeyer, Greg Topil, Shane Dostal

(Engineering Services Traffic Operations)

Jim Tompsett

(Engineering Services Signing and Striping)

Erin Sokolik

(Engineering Services Design Construction)

Mike Weston *(StarTran)*

Tony Bisesi

(Urban Development Parking Services)

Kim Koluch; Ed Sheridan

(Lincoln Police Department)

Roger Kalkwarf *(Nebraska Department of Roads)*

Jared Nelson *(Watershed Management)*

- Jared is the City project manager for the [Lincoln Children's Zoo Water Quality Education Project](#) that includes drainage improvements and water quality features at the zoo. This multi-agency project is in collaboration with the Zoo, Lower Platte South Natural Resources District, Lincoln Parks and Recreation and the Nebraska Department of Environmental Quality.

Wayne Harpin and Jim Tompsett

(Engineering Services Signing and Striping) – Wayne and Jim are recognized for their collaborative work with a citizen in the South Salt Creek neighborhood. She reported that Wayne and Jim were “absolutely wonderful to work with” and praised them for their customer service skills and support.

Tim Gulbrandson, Ron Swanson and

Brad Barber *(Wastewater Treatment)* -

This group successfully created and implemented an operation and maintenance plan to safely transfer 3.3 million gallons of anaerobic digester bio-solids between process structures to facilitate construction activities in the digester complex at the Theresa Street Wastewater Treatment Facility. Because of their collaborative efforts with Wastewater, consulting engineers and contractor staff, 440,000 cubic feet of digester methane gas was also safely transferred and completely used for the generation of electricity.

Ron Wigle, Larry Smisek and Roger Helmick

also worked very closely with the project team and made significant contributions to put the City's portion of the work ahead of schedule.

Rex Jordan, Phil Deschane, and

Frank Newell *(Wastewater Treatment)* –

These three individuals collaborate on a daily basis with division and department staff to provide assistance in many phases of our daily operation:

- Working closely with operations, maintenance and supervisory staff, Rex prioritizes and schedules electrical and instrumentation work for minimal interruption to our treatment process operations. Rex also chairs the Section Safety Committee, routinely training staff in the proper use of electrical testing equipment for safe access into panels or to troubleshoot equipment failures.
- Phil manages the treatment facilities' computerized maintenance management system (CMMS) which automatically creates operational and maintenance work orders for about 4,500 equipment assets used by the two Wastewater treatment facilities and the remote wastewater and stormwater pumping stations. He works closely with Wastewater staff to provide training and support for effective use of the CMMS and PC hardware.

- Frank manages the treatment facilities' supervisory, control and data acquisition system to provide Wastewater staff with computer-aided remote monitoring and control of treatment processes and data management. Frank works closely with staff to create and maintain operator interface computer screens and to provide updated programming. In person or remotely connected, Frank is never far from our operations.

*The next workplace principle will focus on **honesty**. Nominations are due to Miki no later than Thursday, November 14.*

City Officials Respond to Roundabout Concerns

A roundabout professional reviewing the large number of crashes occurring at the 14th and Superior roundabout revealed two surprising results – the roundabout can handle much more traffic, and visibility is too good. “At most intersections, we create as much capacity and sight distance as possible, so this was unusual,” said Devin Biesecker, Engineering Services.

To mitigate the crash problem, the roundabout's outside traffic lane was removed, and fences were erected to limit visibility as motorists approach. Other minor changes to pavement markings, signing and nearby pedestrian signals will also help reduce the number of crashes. Lincoln's other roundabouts, even multi-lane roundabouts, have not experienced significant crash numbers, usually faring better than the intersections that preceded their construction. The proposed changes should improve safety at 14th and Superior.

The previous signalized intersection consistently ranked as one of the highest crash locations in the City prior to the roundabout. For more information visit lincoln.ne.gov (keyword: roundabouts).



**Saturday
through Wednesday
October 26 through 30**

StarTran shuttle for Boo At The Zoo
Lincoln Children's Zoo
4:30 to 9 p.m.

**Saturdays
November 2, 16 and 29**

Big Red Express
Husker Football Shuttle
startran.lincoln.ne.gov

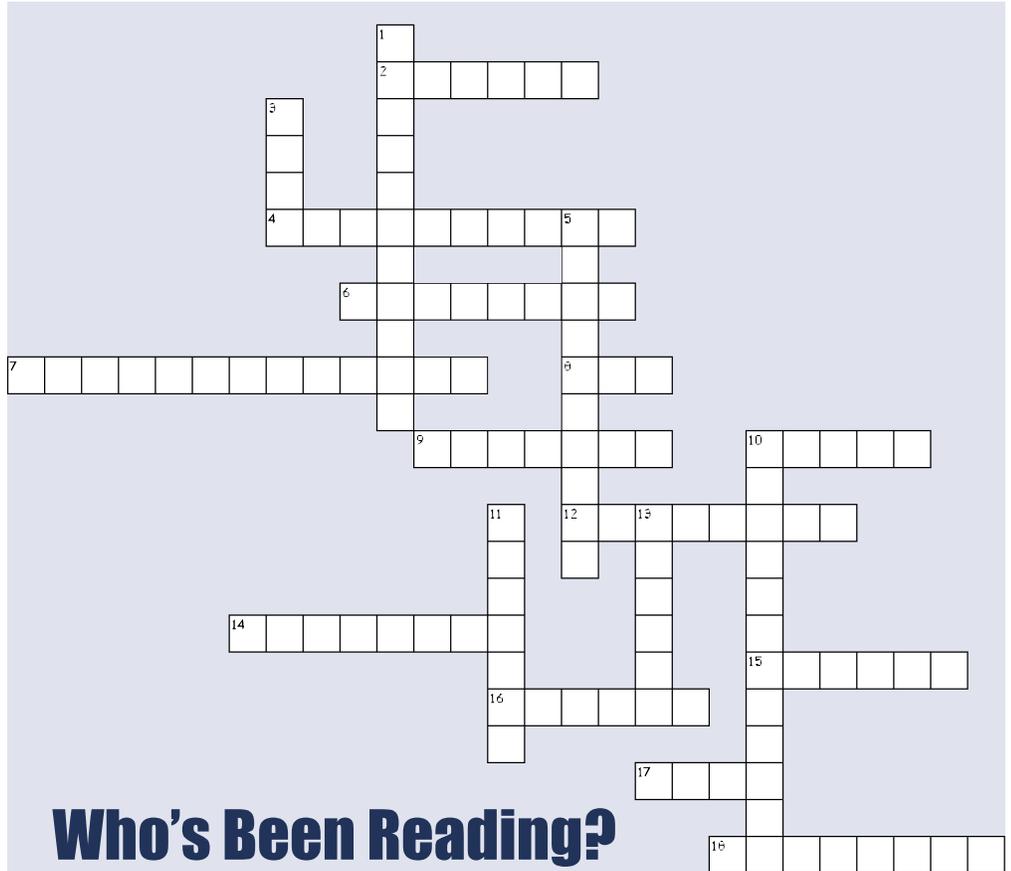
**UPCOMING
CONSTRUCTION
PROJECTS**

Construction projects and
street closures can be found at
lincoln.ne.gov
(keyword: closures).

REMINDER



Daylight Savings Time
will end at
2 a.m. Sunday,
November 3



Who's Been Reading?

ACROSS

2. This compost, produced from yard waste, is an excellent soil conditioner.
4. This fund is supported by utility revenues.
6. There is no ___ among our divisions.
7. StarTran's Husker football shuttle service
8. Public Works Week month
9. Landfill gases are comprised mostly of ___.
10. Water conservation poster contest winners are in this school grade.
12. PWU: Paving the way for a brighter future by educating, ___ and empowering our employees
14. The month of the first PWU newsletter issue
15. A top priority for the Director
16. This construction company was the first recipient of Engineering Services Golden Shovel Award.
17. The type of new phone system
18. A winter nuisance for drivers
19. Types of e-mails being sent in an effort to better communicate with staff

DOWN

1. Well fields that supply Lincoln's drinking water are located in the ___ valley aquifer.
3. National Safety Month
5. In compliance with the Clean Water Act, the City holds a permit to discharge ___.
10. Stuff the Bus is an annual event to help the ___.
11. Reduce, Reuse, ___
13. This is one of four items that can create a blockage in a sewer pipe.
20. On Husker game days, 160 ___ along 10 corridors run on different patterns than normal Saturdays.

DOLLARS & CENTS

Public Works and Utilities (PWU) manages some of the most capital-intensive operations in City government. A quick look at the City of Lincoln's [Capital Improvement Program \(CIP\)](#) confirms that PWU accounts for 45 percent of the CIP, with Lincoln Electric System taking an equal share. Lincoln's City Charter describes capital improvements as property, equipment or facility improvements with a lifetime of 15 years or greater. The sources for the funds to build CIP projects varies greatly from division to division.

Streets and other transportation projects are funded from a combination of gas tax, [wheel tax](#) and [impact fees](#). Many of the gas tax dollars are channeled through State and federal agencies.

Water and Wastewater improvements come in the form of pipelines, and pumping and treatment facilities. These improvements are funded primarily from utility revenues from customers, impact fees or borrowed money (bonds or State Revolving Fund loans), which are repaid in future years.

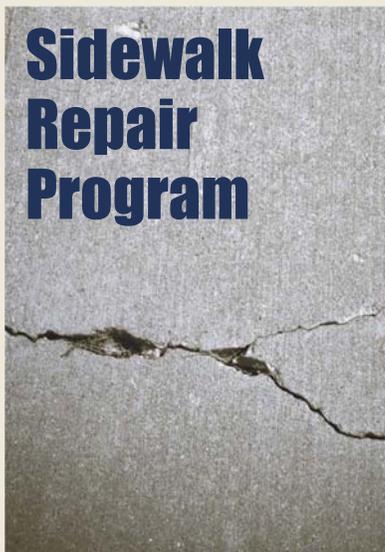
Because they have a longer life, StarTran buses are also considered Capital Improvements. These are paid for with both general revenues and federal funds.

Solid Waste Operations provides locations to dispose of waste as well as recycling programs and sites. Landfill tipping fees and the solid waste occupation tax provide the financial resources for these improvements.

[Watershed Management projects](#) are funded by general obligation bonds, which require a vote of the citizens. A bond issue is generally scheduled for an election every other year. State and federal funds and/or grants provide additional funding.

Repair and replacement of deteriorating infrastructure and projects that serve a growing community are both necessary. Pressures to hold down rates and taxes will continue to provide the right balance of CIP projects for the future of Lincoln.

Sidewalk Repair Program



In September, PWU allotted \$50,000 to assist citizens in getting their sidewalks repaired through a reimbursement program. Reimbursement funds were available on a first-come, first-served basis until the money was exhausted. Interested property owners called with requests. If approved, they paid for the initial repairs and submitted receipts for reimbursement. PWU maintains a list of requests that were not approved at this time in case more funds become available. Reimbursement rates are \$3 per square foot for mud-jacking and \$4 per square foot for replacement. Tina Queen and Barnie Blum oversee the process to ensure timely responses to requests. Sidewalks must meet minimum qualifications to qualify for the program. For more information, visit lincoln.ne.gov (keyword: sidewalks).

Crossword Answers

ACROSS

2. LinGro
4. Enterprise
6. Division
7. Big Red Express
8. May
9. Methane
10. Fifth
12. Engaging
14. February
15. Safety
16. Lipsey
17. VOIP
18. Potholes
19. Alerts

DOWN

1. Platte River
3. June
5. Stormwater
10. Friendship Home
11. Recycle
13. Grease
20. Signals

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Marketing Team Wants You!

Are you a PWU employee interested in becoming a member of the Marketing Team? If so, please contact Ellen Wright at 402-441-7075.