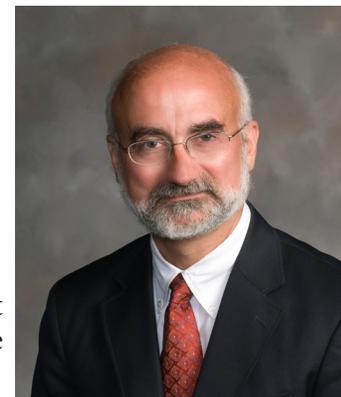


December 2009

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A Message from Ted Weidner



Welcome to the first edition of the department wide newsletter for FMP. This springboards off the newsletter of Custodial Services to reach out to everyone in Facilities Management and Planning.

Each director has been allotted two pages to present an article which is timely, informative, or uplifting. I will not exercise any editorial authority, but I will encourage regular contributions. The sharing of information about the hard work of over 400 highly dedicated people within FMP is important for those in this large organization, as well as those with whom many of you interact throughout campus.

This academic (and fiscal) year continues to present challenges to the FMP leadership. While we all attempt to minimize the effect of any budget cuts that might be assigned to us, we are all facing the reality that UNL is being asked to spend less of the State's resources. Many may view the budget cuts personally; it might increase your workload or responsibility. While there's no doubt that may be happening we must all remember that we're preserving the capability of the University to attract new students, support our talented faculty, and to provide valuable research to the state and nation. That's the duty of everyone working at a land grant institution.

I've been at UNL for a little over five years now. They have been five years of exciting events and opportunities. I've discovered some talented and skilled people in FMP and enjoyed working with many other people outside our department. I know many of you have the opportunity to interact with faculty, staff, and students when you do your job; I hope these are pleasant and that your hard work is recognized as much as I hear it is when I'm on campus. I'm truly proud to be working with all of you even when we don't have an opportunity to meet regularly. Your hard work keeps UNL running every day and it's noticed.

Thanks to the efforts of Donna Martin, Laurel Jinright, and Jeanette Fisher for taking the time to learn some publishing software and the University's publication guidelines. I'm always impressed when folks step outside their normal job duties to help with this and other special projects.

Finally, I'll wish everyone a safe and prosperous New Year.

DID YOU KNOW??

As a staff member of Facilities Management and Planning you can submit suggestions and feedback to your own department electronically via the UNL Web. Just follow the link on the Facilities Management and Planning Web page. Since this is an employee only Feedback Form you will need to obtain a password from your supervisor for access. Feedback is anonymous.

[Faculty Staff>FMP>Business and Finance>Facilities Management and Planning>FMP Staff Feedback Form](#)

BSM

MMeet Bob (Witt) Widhalm. His is the new voice you will hear when you call the BSM Service Desk/FMP Help Desk. Witt started with the University in 1989 as a warehouse worker for the Nebraska Press when it was located in Nebraska Hall. Through a series of promotions he became their customer service manager before transferring to BSM in November.

BSM Assistant Director, Jim Jackson, said Witt's experience at the Nebraska Press has provided him with a wealth of experience that is a perfect fit for his duties at BSM. Witt said he has found his new job "Awesome." He said he has really enjoyed his new co-workers, adding "It's wonderful to come into a job where people are glad to see you every day." When not at work he enjoys slow pitch softball, computer games and science fiction. He is also an author who has had several "offbeat fantasy" stories published. Witt replaces Jillian Savage, who is leaving the University in January to pursue teaching and travel opportunities.



Holiday Break Energy Conservation

On December 23, the students will be gone and University employees will be heading home for nearly two weeks on their holiday break. As the lights go out across campus, Building Systems Maintenance will begin a special regimen to assure that the buildings will be safe and ready to come back to life when the people return in January. Since the 1980's the University has used the winter holiday break as an opportunity to scale back energy consumption and save money. It has been BSM's responsibility to manage this curtailment.

"We try to shut down as many pieces of equipment as we can, while still keeping the buildings safe and providing sufficient levels of services to support areas containing sensitive items, such as musical instruments or certain kinds of research, that require constant temperature and humidity control," said Ron Peters, HVAC Operations Manager. Air handling systems are shut off wherever possible, but the buildings are constantly monitored so the systems can be restarted if the temperature in the building drops too low. There will also be a team of BSM employees who will be walking through the buildings and checking for problems.

Peters said the buildings will be divided into ten zones of approximately ten buildings in each zone. Each employee on the team will be assigned a zone. He said every building will be thoroughly checked at least twice over the break. "Most importantly, we will be checking the mechanical rooms for any water leaking or equipment that has malfunctioned," he said. "We also pay particular attention to entrances to be sure heaters and fire sprinklers haven't frozen."

Kirk Conger, BSM's Energy Projects Manager, said reducing building temperatures has gotten less risky over the years because our increasingly sophisticated energy management system has grown to the point where we now have the ability to monitor and control temperatures in more than 10,000 individual areas.

Kirk said most areas are usually kept near 70 degrees, but during the break the temperatures will be allowed to fluctuate down to 60 degrees or up to 85 degrees before consideration is given to restarting the HVAC system. Conger noted that even though the buildings will not be tightly controlled, it is still important that the occupants close any curtains or blinds to provide added insulation and shut off lights, computers and any other unnecessary equipment while they are away.

Chancellor Harvey Perlman has long been a supporter of the steps BSM has taken to control energy costs during times of reduced campus activity and says, "Now, more than ever, we all need to save money on energy, and I'm asking for your help once again. I will make certain my office lights, computer and power strip are off before I leave for the holiday close-down. I will be most reluctant to approve additional heat for offices for those who decide they need to come to work during the break. I will hope that additional clothing or careful planning would make this unnecessary in most instances."



BSM Electrician, Jeff Green prepares a NanoStat base for installation



*FALL 2009 GOODNUz
Published by the Nebraska
Alumni Association
Article By Bill Citro, '09*

Technology Allows for Energy Savings in UNL

A professor enters her office on a cold, winter morning. The lights flicker on, and she feels fresh warm air coming from the ventilation duct. She leaves to grab a cup of coffee and returns to find the room has reached her desired temperature. After an hour, she leaves to teach class, and 10 minutes pass before her lights, ventilation and heat fade. Class ends, she comes back to her office for lunch, and the room quickly returns to normalcy. Changes in heating, ventilation and air conditioning (HVAC) systems are capable of saving the University of Nebraska–Lincoln thousands of dollars, helping to relieve a strained budget and make UNL greener. “We call it a homegrown energy management control system,” said Jim Hines, Director of Building Systems Maintenance (BSM) at UNL. While the professor in the example has enjoyed a normal day, the university has saved big in energy costs.

“The conversion was so seamless,” said Verda Schweitzer, administrative assistant at Varner Hall, which houses the NU Office of the President and central administrative offices. “People weren’t really even aware that we did this..” The energy saved from periods when someone has left his or her office accumulates quickly. Varner Hall, which recently installed the updated HVAC system, conserved enough energy to pay for the project in about one year. UNL’s Building Systems Maintenance department began looking for savings options several years ago. “What are ways to save energy? How would we do it? How would we implement it?” said Hines. Talk converged on occupancy sensors, which most people have encountered in public spaces. “Occupancy sensors are pretty common,” said Hines. When someone walks into a space, the sensor detects a warm body and the lights automatically turn on.

The BSM engineers decided to experiment with controlling more than just the lights with occupancy sensors. “What we’ve done is attached an occupancy sensor to our thermostat, which then controls both the lighting and HVAC system,” Hines said. Internally dubbed “nanoStats,” the sensors’ ability to control and optimize the HVAC system makes the homegrown thermostats invaluable. “What we discovered is that controlling the HVAC with the occupancy sensors saved way more money than shutting off the lights,” he said. “It’s that reduction of ventilation that saves a lot of money. That’s pretty unique.” Of course, to make the installation of the nanoStats cost effective, the energy savings must be high. “It’s not immediately intuitive ... You would think, okay, somebody comes to work and they are here from 8 to 5 or 7 to 6 and they are probably in their office all day long,” said Hines. However, professors buzz around campus, from research labs to classrooms to meetings, reducing office occupancy.

Peak usage in Oldfather Hall was 72 percent on one day during finals week. At highest use, savings was still more than 25 percent. Shutting off the HVAC system while professors are gone allows BSM to optimize energy usage. BSM saves additional funds by producing the nanoStats in-house. “About 30 years ago, we took the path of deciding to build our own – grow our own, so to speak,” said Hines. This allows the department to further reduce the cost of installing the improved technology. Circuit boards are the only system parts that aren’t made on site at 942 North 22nd Street. Engineers, with help from students, design the printed circuits. Technicians and students assemble them. Programmers allow for the system to efficiently operate based on schedules, load and weather conditions. They also have developed software that enables anyone to see what’s cookin’ in any building at a given time. You can download the ability to see it for yourself at http://emcs-ws-app1.unl.edu/webcontent/downloads_jems.shtml. Although installation of this system requires a large upfront investment, the savings continue indefinitely into the future. Varner Hall’s one-year payback speaks volumes to that.

For new buildings, such as the Physical Sciences Building nearing completion on 16th Street, the installation of nanoStats is a no-brainer. Older buildings such as Andrews Hall have a dated HVAC system that is incompatible with the nanoStats. In this case, the blood and guts of the heating and cooling system must be revamped, adding to the cost; the payback would take five or six years on average. However, in newer buildings with electronic nanoStat controls, the payback would occur between one and three years. NanoStats are helping UNL’s efforts in “doing the right thing as far as greening up the campus in addition to other energy conservation projects,” said Hines. “We are just making use of the technology that’s out there today.”

Business Operations Welcomes New Manager

Greetings from Business Operations! My name is Dori Smidt. As the new Business Operations Manager I wanted to take this opportunity to introduce myself. I am originally from Mullen, NE where I grew up riding horses and working cattle. I came to Lincoln to attend college at Nebraska Wesleyan University where I graduated with a business degree focusing on accounting. I have been married to a wonderful man for 8 years and we have been blessed with a very spirited 2 ½ year old and have another bundle of joy expected to arrive in April.



I started my career as an auditor for Deloitte where I became a Certified Public Accountant. During my time at Deloitte, I worked on numerous clients including the University of Nebraska. This sparked my interest in working at an educational setting. Therefore, when the position opened up for Cost Accountant in the UNL Accounting department I was excited for the opportunity. I served as part of the Accounting department for 5 ½ years. As Cost Accountant I implemented the Service Center policy helping to ensure compliance with all the University service centers. I was in charge of the University Facilities and Administrative proposal for both the 2005 and 2008 submissions working with the consultants and the federal government to negotiate an increase for our campus. I also worked on the University year-end financial statements, revised the plant

fund procedures for capitalizing university property, and worked on numerous other projects to ensure compliance and proper reporting.

During my 8 months so far in Facilities Management and Planning, I have seen a lot of exciting changes. We have improved procedures, worked with Accounting to develop new reports, and implemented a new billing process and website. In 2010 I am looking forward to the continued changes that will occur, strengthening not only FMP but the University as a whole.

Basic Skills Computer Training

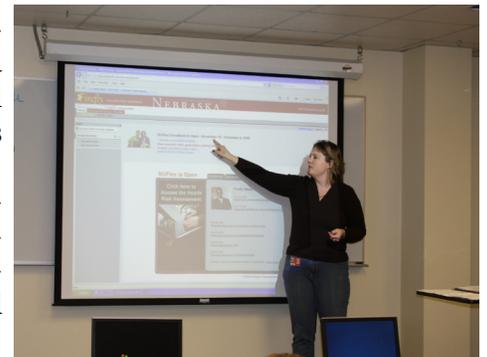
By Nicki Evans

Financial Systems Training Specialist

My name is Nicki Evans. I was the main instructor for the Basic Skills computer classes that were held in the months of November and December. In preparation of the increasing demands of technology used in the workplace, Financial Services conducted a series of training classes specifically for FMP Custodial and BSM employees. These hands-on classes were aimed at helping employees learn or brush up on basic computer and internet skills. During these sessions students learned how to use the mouse, learned some of the basic components of the Windows operating system, practiced using the Internet, and Firefly. More advanced students also learned some additional tips and tricks about tab-browsing, internet searching, printing, and zooming. A total of 14 classes were held, covering all shifts, and approximately 90 employees received training.

The Basic Skills classes were followed up by another round of hands-on training classes where the focus was specifically on Firefly. During these classes, assistance was provided for the online NuFlex Benefits enrollment, Paycheck Inquiry, and various other iViews in Firefly. A total of 14 classes for the Custodial staff were conducted and approximately 180 employees received the training.

I would like to thank everyone in Business Operations, Accounting, and the Custodial managers and supervisors who assisted as coaches, those who helped prepare the class material, and the two special ladies that filled in for me once at a moment's notice! I would also like to thank Al Stark who helped arrange use of the Animal Science Complex training room and the very accommodating guys in the Architecture Hall Media Center, Brad Severa and Sourabh Chakraborty. An extra BIG THANKS goes to Greg Clayton and Sue Turco in the benefits office who have attended all of the Firefly training session to offer their valuable guidance and support. The training classes have been a huge success and I greatly enjoyed meeting and working with the Custodial and BSM employees. I am looking forward to the next round of training. Remember change is inevitable; you are not done with me yet! And finally, for my students who took the Basic Skills classes...remember to PRACTICE, PRACTICE, PRACTICE!



Custodial Services

WELCOME TO OUR NEW EMPLOYEES!!



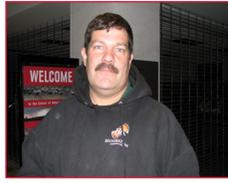
Evan Brunkow



Rajko Kuljanin



Delbert Boese



Calvin Foster



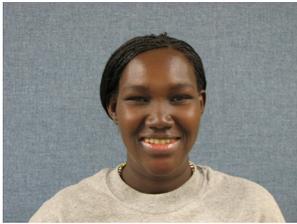
Andrew Leeds



Acie Bettinger



Custodian Awake Le retired on 10/30/09



Nyater Lok is now a U.S. Citizen. Congratulations!

2009 Service Award Recipients

35 years

Mack Beatty
William Messman

30 years

Elaine Ziems

25 years

Douglas Stephen
Ron Bailey

5 years

Robert Newton
Larry Lyons
Nyok Deng
Su Van Ha
Dale McReynolds
Hong Ha
La Nguyen
Loan Vo
Nyater Lok
Rebecca Jock
Lidiya Volyanyk

20 years

Karen Dettmann
Matt Klipfel
Lanny Goering
Deanna Yznaga
Michael Noonan
Frances Noble

15 years

Larry Pierce
John Slater

10 years

Liem Tran
Rose Neemann
Toby Casper

Housekeeper's Week Celebrations



Building Maintenance Reporters for University Services

University Services, a division of Business & Finance encompasses many departments. It includes Parking and Transit, Environmental Health and Safety, Purchasing, Inventory, Shared Computing, Printing and Copy, Mail and Distribution, NCard, Travel, University Bookstore and Vending Operations. Housed at 1700 Y Street are the offices of Rhonda Zugmier, 24 years with UNL and 19 years as a BMR. Scott Hawco, he has been with UNL 11 years and 5 years as a BMR. Karen Ouellette (pronounced Olet) 20 years with UNL and 4 years as a BMR. Last but not least, Barb Carley, 17 years with UNL and 2 years as a BMR. These are the individuals that are on the frontline, concerning themselves with the structural issues of the building, restroom dispenser problems and the general maintenance needs of the building. Their mission is to keep the occupants of the complex safe and happy.

Scott Hawco, Bindery Supervisor, recalls the time a front end loader busted through the paper storage warehouse, formally used as a deep freeze when food service was stationed in the building. It was quickly repaired by maintenance. The bindery contains a quarter of a million dollar inventory. This includes the equipment which is the biggest cost, the paper and the ink. That is why Scott appreciates the quick response he gets when he calls on maintenance. When he has a leak in the roof over a piece of expensive equipment he knows it will be taken care of quickly and efficiently. Scott appreciates the Custodial staff for keeping the red production path, also known as the "Red Brick Road" clean and polished for tours and customer production checks.

Rhonda Zugmier is the Administrative Assistant for University Services. She agrees that the Maintenance and Custodial staff are responsive and helpful. An experience that she remembers vividly is returning from the 4th of July holiday to notice the smell of a skunk. Unfortunately a skunk had fallen into her basement office window well and was unable to get out. The skunk had died but maintenance had responded quickly and devised a critter proof screen for the window well.

Karen Ouellette, Mail Route Supervisor and Barb Carley, Staff Secretary for Buying and Administrative staff agree that the Custodial and Maintenance staff are consistently helpful with all the day to day problems related to the building. University Services is located in an older building so it is a challenge to keep it looking as good as it does. They see this as a true example of University staff team-work when the folks that occupy the building find their work spaces clean and safe every working day. Barb adds that having a safe, clean environment to work in reinforces a long term commitment to the job. The BMRs also work closely with the building's Safety Committee assuring that many problems are addressed before they become safety issues.



**Pictured left (left to right):
The "Red Brick Road"**

**BMRs Barb Carley, Karen Ouellette,
Scott Hawco, and Rhonda Zugmier**

UNL Annual Picnic Photos



Facilities Planning & Construction

New Director at FPC

Please welcome Rich Byfield, AIA, MBA, the new Director of Facilities Planning and Construction. Rich started with UNL on June 1, 2009, and moved his family here from Sacramento, California in August. He has over twenty years of experience in facilities design, construction management and business practices. Rich is a recognized problem solver with a reputation for strategic insight and innovative solutions. He was previously director for the Division of Facilities Construction and Management in the State of Utah where his work included projects for the 2002 Winter Olympics.

FPC Staff works on Stimulus Fund grants

Facilities Planning and Construction staff have been busy working to get UNL its share of the Federal stimulus grants funds that have been in the news. We have teamed with grant writers and researchers to prepare grant requests from the American Recovery and Reinvestment Act (ARRA) of 2009 for new and renovated research buildings. We are waiting to hear news on whether we will receive funding for the following projects:

Ken Morrison Life Sciences Research Center Addition – A request for \$8,000,000 from the National Institute of Health to construct a 26,000 gross square foot addition to the Morrison Center to expand the critical virology research conducted in that building. Chad Lea is the Project Manager.

Convert Manter Hall Library Space to Labs – A request for \$2,749,000 from the National Institute of Health to renovate the old biology library space into research labs. The researchers will study how complex elements, from individual genes to entire organs, work together in a feat of biological teamwork to promote normal development and sustain health. Howard Parker is the Project Manager.

Complete Shell Space in Othmer Hall – A request for \$2,856,000 from the National Institute of Health to complete shell space in the basement of Othmer Hall. The space will be used for transition cutting-edge engineering discoveries into healthcare solutions (benchtop to bedside). Anne DeVries is the Project Manager.

Hamilton Hall 6th Floor Renovation – We're requesting \$6,730,000 from the National Institute of Health to renovate the 6th floor (similar to the already completed 7th and 8th floor renovations). The research will focus on new bioanalytical tools which should lead to improved methods for disease diagnosis and treatment. Howard Parker is the Project Manager.

Behlen Laser Lab Renovation – A request for \$1,999,000 from the National Science Foundation to renovate the basement and sub-basement of Behlen Hall to accommodate and provide support space for the installation of a new laser. Alan Wedige is the project manager.

NanoScience Building - A request for \$6,986,000 from the National Institute for Standards and Technology for the construction of the 32,000 gross square foot NanoScience Building and completion of shell space in the adjacent Physical Sciences Building. The project has been designed and is "shovel ready". Brad Muehling is the Project Manager.

Husker Vision Video Displays

Joe Goodwater was responsible for assuring that the HuskerVision Control Room in Memorial Stadium was able to go digital for the 2009 Football Season. The project he managed replaced the original 1994 equipment in the control room. Additional digital HuskerVision features included video displays on the northwest tower of the west stadium, on the southeast corner of the field, and ribbon displays on the face of the east and west balconies. All were ready prior to the first game in August.



University of Nebraska-Lincoln Children's Center

The UNL Children's Center, located north of the former Whittier Junior High School in the old shop class building, opened August 24, 2009, and has enough space to provide care to 150 children. The University was able to select a designer experienced in child care facility design to provide the highest quality of program delivery. Tish Roland, Director of the Center is thrilled to have this wonderful facility. She describes it as "out of this world."

Facilities Planning and Construction has been pleased to direct the design and construction of the Children's Center for two reasons: It is a great new building providing an essential space for the university to offer children and their parents a special place, and it is thrilling to see the impact that excellent designing brings to enhance the university's strong commitment to the children.

The architecture was the responsibility of two firms, RDG and Sinclair Hille. The contractor was Sampson Construction. Tish said that the key to success is the work of the partners, every member of the team dedicated to creating our center. They spoke our language and responded to our questions. The successful results can be quickly seen by every visitor. In some cases, RDG suggested design features that Tish said she had not thought of, but that she appreciates now that the Center has been operating for a few months.

Another example that points to the project team's success came from the University Police. We have the "Fred Gardy door," which was added to the reception area because of his recommendations. The FPC Project Manager, Alan Wedige, "was wonderful."

The classrooms were designed to stimulate play with different shapes, colors, textures, and levels in the surfaces and finishes. The floor includes radiant heating to allow children and staff to spend time playing and crawling on the floor. The interior corridors open to an indoor play area where children have space to ride tricycles in inclement weather. The use of windows to carry natural light throughout the building makes the space more alive. This is a dynamic place for our young children. Outside is a play area divided into three sections for the different age groups. There are areas with artificial turf, sand, and water features. The infant area is designed under a cover to provide shade and there are "fall surfaces," special ground cover material, that cushion the fall impact while children learn to walk. The landscape around the edge of the built playground combines areas for exploration and plantings that provide texture and color. Plants were chosen that could provide new experiences but would also be tolerable of curious hands. Other areas were filled with soil and gravel so children can dig, explore, and create.



Landscape Services

Landscape Services Offers Garden Volunteer Program

Last summer, Landscape Services trialed a new Garden Volunteer program on campus. Our program was spearheaded by two area supervisors, Amy Alderman and Michelle Dipple. Amy and Michelle welcomed volunteers to help with tasks on campus on Tuesdays and Thursdays from 9 to 11 am, May through September. We also offered two Saturday morning volunteer opportunities.

Nine people and two groups recorded a total of 184.5 hours volunteering in the gardens on campus. They worked on projects on city campus in many locations including Love Gardens, Sheldon Sculpture Garden, Burnett and Andrews Hall perennial gardens, Cather Garden, Weaver Garden at the Beadle Center, Teachers College Courtyard, and on east campus at the Varner Hall trial gardens. The tasks they completed included weeding, deadheading, dividing perennials, removing weed trees, pruning shrubs, mulching, planting, and potting plants.

We offered this garden volunteer program to find new ways to add campus maintenance care without adding more staff to our department. We found that the volunteer program did increase the maintenance on campus, especially for tasks that may have not been completed or may have been delayed. It was also helpful having a couple of large student groups volunteer their time and they were able to complete large and time consuming tasks very quickly. For example, fourteen students worked for 1 ½ hours each removing concrete and adding fill soil into the planting beds on the west side of the Abel Sandoz welcome center. Landscape Services thanked our regular volunteers at a special cookout held in the fall.

Landscape Services is planning to continue a similar volunteer program next summer however; we would like to increase the amount of time people can volunteer outside of the work day, such as on Saturday morning. We plan to continue volunteers helping with similar tasks as last summer and will also have a couple of special projects planned. These projects will include renovating the Love and Cather Gardens and replanting the Andrews and Burnett Gardens. We are excited about the possibilities the volunteer program offers our department and we have heard that the volunteers are also eager to help next summer. If you are interested in volunteering, please contact us at 472-2679.



**Landscape Services Area Supervisors:
Amy Alderman and Michelle Dipple**

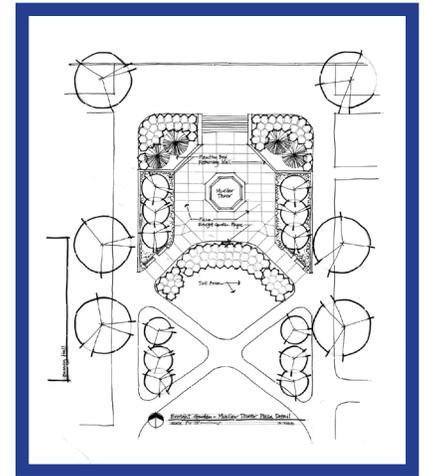


**Custodial Services Employee
Anh Le helps with the
Garden Volunteer Program**





Mueller Tower



Mueller Tower
Site Plan

Enright Garden – Mueller Tower Plaza Project

Recently a major renovation took place in the Enright Garden – a campus green space that encompasses the area between Mueller Tower and the Greenpoint sculpture. The stairs, wall and paving around Mueller Tower were removed and replaced in a new design that pays homage to the original site design and invites people to use the space. The project was made possible by a donation from Dorothy Enright through the Enright Garden Fund at the University of Nebraska Foundation.

Previously, the area around Mueller Tower had been an un-inviting place for the campus community, with stairs to access the space hidden behind a concrete wall, deteriorating brick paving and crumbling stone walls. Now as you walk up to the tower a large set of stairs has opened up the space and invites people to use it. New concrete walls and walks replaced the deteriorating areas that were a safety hazard and offer an open space for activities to take place. Planting beds on either side of the stairs and on the upper walls will offer color and interest throughout the year and benches will be installed in the paving around the tower. New plants in the planting beds include China Snow Tree Lilac, Star Magnolia, Blue Shag White Pine, Hancock Coralberry, Isaii Beautyberry, VooDoo Sedum, Missouri Primrose, and Bloody Cranesbill. New lighting was also installed to help reduce maintenance on old globe lights and improve lighting in the area.

Construction work on the project was completed by Dickey Burham, Inc. and their sub-contractor Lottman Carpenter. Construction started in mid-June and was completed in late September in time for Homecoming activities on campus. Throughout construction there were many challenges which included building over major utilities serving campus, the discovery of old wall and stair remnants and maneuvering concrete trucks around campus pedestrian traffic. Construction of this project was facilitated by Landscape Services, but also utilized the expertise and construction services of several Facilities departments including Utility Services, Facilities Management and Planning Inspectors, and Building Systems Maintenance.

While the construction of this project was a challenge due to its prominent location on campus, the end product is a major improvement to the aesthetics and usefulness of the space. And while this improvement has made a big difference in the Enright Garden, there is still more work to do to renovate the area. Future plans include paving the temporary paths, new lighting, and raising the center of the green space to allow for better turf growth over an existing steam tunnel. Once these improvements are made, the space can be restored as an iconic collegiate space on the University of Nebraska-Lincoln City Campus.

Utility Services

Utility Services Training Program

On June 23rd 2009, Utility Services rolled out its Operational Staff Development Program. This program is designed to offer better training and to compensate operators based on skill performance. The rationale for the program is the fact that UNL has several million dollars worth of infrastructure that relies on steam for heat and other processes and chilled water for cooling. The efficient operation of this equipment is crucial to the effective delivery of services in support of the mission of education and research at UNL.

In the event of a pandemic, utility plant operation has been designated as essential to the preservation of the University as a functioning body. The key component is a trained and motivated work force overseeing the day to day safe production and distribution of steam and chilled water with the knowledge and skills necessary to anticipate need, minimize downtime, respond to emergencies with a minimum of interruption of service, and provide the safest and most economical use of resources, fuel, equipment, and staffing.

As an incentive, Utility Services will compensate Utility Operators that enhance their professional knowledge and skills. For a demonstration of knowledge Utility Services is using third party certification in the form of certifications offered by the National Institute for the Uniform Licensing of Power Engineers, Inc. (NIULPE) Utility Services will compensate for the attainment of the fourth, third, and second class certifications. Each certification requires a minimum amount of experience along with passing a comprehensive examination. To aid applicants there is a High Pressure Engineering course offered by SCC and taught by Glenn Martin, to prepare individuals for the fourth class exam. The 24 week course is considered worth six months practical experience towards the one year minimum required for the fourth class exam. To direct and certify on-the-job training a working job task list is required to be filled out by employees training as operators. Each task requires two Chief Operator signatures to certify competence. Utility Services will also compensate for the attainment of a Universal Refrigerant handling certification. The new program also allows maintenance personnel the opportunity to cross-train in operations enhancing their knowledge and increasing the plants' staffing flexibility.

The program is the result of research conducted in how other institutions were coping with the lack of qualified applicants and the need for comprehensive and verifiable training of steam plant operators. James Fischer, Tim Barker and Glenn Martin put in many hours of defining the needs and refining the process required to insure a sustainable program. The mission was to provide enough of an incentive to motivate current employees to participate in rigorous training and to have an on-going program that was adaptable and broad enough to encompass the needs of the two UNL central Utility Plants. With this program Utility Services has the tools necessary to build and maintain a highly specialized, skilled, and motivated Utility work force.

Facts about utilities

Did you know: City Campus has 3.5 miles of steam mains and 89 vaults
East Campus has 2.3 miles of steam mains and 70 vaults
City Campus has 4.2 miles of chilled water mains
East Campus has 1.7 miles of chilled water mains
City Campus has 10.8 miles of high voltage ductbank & 144 manholes
East Campus has 7.6 miles of high voltage ductbank & 83 manholes



UNL East Campus Utility Plant Chief Operator Dave Cramer demonstrates a water test for Operator Trainee Anthony Gomez

Three new Employees have joined Utility services city plant personnel:

(no pictures available)

Tom Hedges has joined City Utility Plant Team, Tom will be Chief Utility Operator on the 11 P.M. to 7 A.M. shift, Tom has thirty-five plus years of experience and has a Chief certification with National Institute For The Uniform Licensing of Power Engineers. Tom worked for Goodyear Tire company in Lincoln for 31 years before coming to University.

David Otto has joined City Utility Plant Team, David will be an Operator Three on 7 A.M. to 3 P.M. shift. David has sixteen plus years experience, six years with the US Navy and ten years with State of Nebraska. David has First Class Stationary Engineer certification with National Institute For The Uniform Licensing of Power Engineers.

Rick Sipes has joined the City Utility Plant Team as a Maintenance Mechanic 3. Rick has been a full time temporary employee for the City Utility Plant for the past 2 years. Prior to his temporary status Rick graduated from SECC Milford campus with a degree in HVAC-R. His prior work experience includes 23 years with Cushman Corporation.

City Campus Water Main Upgrades

Over the summer of 2009, the City of Lincoln replaced over 2500 feet of water main through the heart of city campus. Most of the water mains in the core of campus were installed when city streets ran all through campus, some of which were installed over 120 years ago. As campus grew and city streets were vacated, the Lincoln Water Department had the difficult task of trying to maintain a large network of piping throughout a very busy campus with limited access. Over time, the water needs of campus changed and grew, but were still being supplied by infrastructure that was designed for a much different campus.

In 2006, the city's water department hired HDR to perform a campus master plan for water and wastewater infrastructure on city campus. This study identified areas of campus that were being supplied by infrastructure that was inadequate due to size, areas that were lacking fire protection from fire hydrants, and mains that needed to be replaced due to their age or location. To remedy these issues a list of projects was produced that would replace the appropriate infrastructure to solve the identified problems.

The first project was the replacement of the R Street water main from 12th to 18th Streets which took place over the summer of 2008. This was in effect a test run for the summer of 2009. The R Street water main was replaced in an active city street where the city owns and operates the street and all of the parking. The work in 2009 was going to be in the middle of campus on 12th, T, and U Street corridors where all of the property is owned and operated by UNL.

So in anticipation of needing a flawless project, the city water department hired HDR to perform a series of workshops where the design engineer, city water department, and various UNL representatives got together and worked out all the issues that could make the project difficult.

In May 2009 the contract was awarded to K2 construction and as soon as students vacated campus they moved in. The contractor managed to install over 2500 feet of 12 inch diameter water main with minimal impact to campus. The installation required working around several events like Jazz in June, Larry the Cable Guy performing at the stadium, conferences, classes, and a marathon. There were outages that had to be scheduled around these activities that affected 17 campus buildings. To help accomplish this, several staff from UNL Parking

Services, Landscape Services, Building Systems Maintenance, and Utility Services had to coordinate with the contractor to ensure that the effect of the project was minimized to people on campus.

The project was so successful that HDR has submitted the project to the American Council of Engineering Companies for their annual Engineering Excellence Award. The city also managed to complete the project for \$76,315 under budget and ahead of schedule. The university now has adequate fire protection and ample capacity for future growth and development of city campus.

