

The Commonwealth Quarterly

News from around the circuit.

Fall 2017



Commonwealth Electric Company of the midwest

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Lincoln Service Department

Matt Briggs - General Service Manager

The Lincoln Service Department has expanded in 2017 adding service coordinator Kelle Kage and assistant service manager Alan Pendleton. These additions will allow our department to expand even further with plans to add more service tech positions in the very near future.

Additionally, we have recently implemented a cloud based service work order system which allows us to send work orders directly to the tech's cell phone via an app. The technician can then enter all the data into the work order on their phone, including all paperwork, material, pictures and signatures. Since it is cloud based the office has immediate access to all this information. It was a challenge to get everyone to buy in to this change at first, but once the guys figured out it makes their job easier, then they quickly became fans.

We are confident that these new additions to our team, as well as integrating new technologies, are going to help our department to grow which helps our entire company. We are very excited about the future of the Lincoln Service Department.



Left to Right: Matt Briggs, Kelle Kage, Alan Pendleton.

Safety Award

Ruben J. Bera - Corporate Safety Director

Commonwealth Electric again has received the Award of Excellence from our insurance company for our safety performance. This is the fifth time we have won this award. As I noted in previous articles, we are judged by our carrier on a variety of safety items. How many accidents, how many lost time accidents and of course our on-site safety performance, to name a few. This involves site visits by our carrier representative.

During this past audit, we were told by our carrier's representative that he was very impressed on how well we looked compared to other trades on site. Hard hats, safety glasses and hi vis vest and shirts. This is an image we have become to be known for. It is a compliment to all Commonwealth Electric workers who continue to demonstrate safe work practices and behavior. Awards are never expected. We do what we do because we are not only trained, skilled electricians, but we are also informed and trained on safe work practices. Congratulations on another great safety performance.

Commonwealth Electric Safety - Sell it, promote it, be proud of it!

Commonwealth Electricians Help Avoid a Disaster

Ruben J. Bera - Corporate Safety Director

This past summer, I received a call from our safety manager, Dave Stading. He informed me that Commonwealth Electric in Omaha was working on a remodel job at an old private school. I was informed a fire had occurred. Dave went to the site and conducted an investigation.

The project deadline was fast approaching. The job site is in maximum production mode with several trades and sub-contractors. Our crews are hard at work, scattered around multiple floors and areas throughout the building. Top floor is a focal point. There are a few people in a crawl space, just below a roof top unit, more sprinkled down a long hallway, while others are knocking out items on floors below.

One electrician noticed a hint of green smoke, another smelled something like firecrackers, while a few could see small bits of burning ash like material just barely cresting over the parapet roof edge. Everyone knows the roofers are working in that area doing some type of tarring work. It takes an extra second to sink in but when it does, our electricians take immediate action. Bolting up from a floor below, find the correct door, then throw open the access to the roof. FIRE! Quick assessments, quicker discussions, several hollers and radio call outs have each one of our crew taking emergency action. Electricians are scrambling to locate the closest fire extinguishers, while another dart to pull the fire alarm. Commonwealth reinforcements arrive within seconds with a few more fire extinguishers in hand. As a small group starts extinguishing the fire, others continue radio call outs providing critical warnings, the "Fire alarm is real! Get everyone out of the building!" The rest of the crew divides and moves quickly throughout the floors below. Pushing down the halls, ducking in every room, urgently motivating everyone else to evacuate the building. Thankfully, emergency responders were swarming the scene within minutes and took control of the situation. They identified the fire, coordinated their efforts, reduced the flames to a mere smoldering pile of roof materials and safely cleared the building.

Commonwealth electricians could not have responded better to an extremely challenging situation. They helped prevent, what could have been, a catastrophic fire, smoke and water damage to another historic building in Omaha. Commonwealth electricians demonstrated tremendous judgement that reflects positively on Commonwealth Electric. The fortitude, professionalism and integrity of this collective crew is the definition of excellence and we are all very proud. Great job!

Electricians on site who helped avert serious property damage included, Mike Hayes – Foreman, Jim Connolly – Foreman, Bob Keister, Russell Swanson, Erik Anderson, Todd Omer, Aaron Roubal, Corey Barber, Richard Persing, Frank Shymkwich, Jose Reicks, Colin Kennedy, Tim Justus, Branson McClaron, Adam Straight and Stuart Wilson.

New C-6 Building for Microchip Technology, Inc., Chandler, AZ

Joe Wall - Director of Business Development

CECM Phoenix has recently secured the award for the new C-6 building for Microchip Technology, Inc.

Our contract is with Overton Builders LLC, who is the general contractor for the project. Overton is a new client and we are excited to be able to partner with them on this new endeavor and look forward to upcoming opportunities with Microchip.

The new building will be located in Chandler, AZ on a 3.2-acre site that will encompass a 4-story ground up structure. The majority will be office space, but there will also be approximately 30,000 sq. ft. of research and lab space at the ground floor area.

The project started this past June 2017 and the completion date is set for May of 2018. The original contract amount was \$1,349,000. To date there has been over \$78,000 in additional change orders bringing the new total to \$1,427,117.

The project manager for CECM is Caleb Graham and the project estimator is Jeff Campbell. Our field operations manager is Jason Turner and he has selected Chris Azzaro as our field foreman.



Commonwealth Electric Company of the Midwest remodels and constructs an addition at the Salvation Army Kroc Center

Max Hoobler - Electrical Project Engineer Intern

Commonwealth Electric was selected to perform the electrical work for the Kroc Center, owned by the Salvation Army, which is located in Omaha, NE. The project was started in May 2016 and will be completed within the next few months. The scope of work consisted of an interior and exterior renovation to improve the quality of the customer's experience while at the Kroc Center. Along with the renovation was a new addition used for fitness and aerobics.

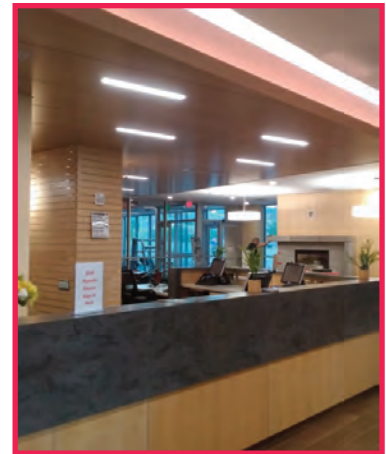
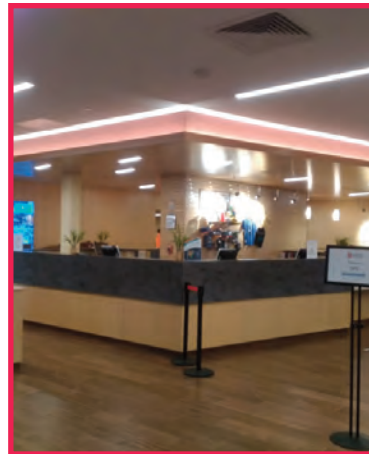
We are currently in the closeout stages of this project. Throughout the course of the project, we have made several electrical renovations to the building. We established intercom and sound systems in the aerobics, fitness, and pool areas of the building.

In addition, numerous light fixtures were removed and replaced with ones that are more applicable. As for larger scale work, we installed panels that ranged from 600A to 100A, which fed the newly renovated electrical system and addition. This job had multiple construction phases that made it tricky. Along with that, was the fact that the building never shut down and was open to the public.

The remodeled areas consist of two party rooms, two kid zones, a vending nook, an indoor playground area, a lobby and lounge, a huge double pool, a lofted computer room, art rooms, and three multipurpose rooms. As you can see we had multiple areas to work and move material to and from. This was a challenge at times, but in the end, Bob and the crew did a great job. The addition was where a majority of the work consisted. It is roughly 15,800 sq. ft. of fitness, cardio, and aerobics. This scope of the work had its challenges with trying to tie the new addition into the existing building.

The project has been designed by BRS Architecture and engineered by Reese Engineering, both of which are out of Colorado. The general contractor for the project was the Omaha-based company, MCL. Each of the three companies have been a pleasure to work alongside and we are looking forward to finishing up the job.

The project is being managed by Dan Cahalan, while Bob Nocita is on-site as the foreman. Alongside Bob, multiple others have been crucial to the completion of this project thus far. These crewmembers include Bob Bergamine, Steven Sears Jr, Coleman Wright, Aaron Roubal, Jeff Chvatal, AJ Vanwinkle, Mike Burke, Ron Murray, Dan Workman, and Seth Pearson.



Commonwealth Electric Company of the Midwest expands the emergency power system for Creighton University

Max Hoobler - Electrical Project Engineer Intern



Commonwealth Electric was selected to perform the electrical work for the Science Complex on Creighton University's campus, located in Omaha, NE. The scope included four separate divisions of work. The first two divisions were comprised of installing a new CAT emergency generator as well as relocating an existing emergency generator within the complex. The third section of work involved expanding the current emergency power system by incorporating additional panels and transfer switches, while the last portion was providing supplemental emergency outlets across the complex. The timeline was a 10-month project, elapsing from December 2016 through September 2017.



The scope of work was in four different buildings within the complex. These buildings are the Criss 2 & 3 Science, Rigge Science, and Criss 1 science/Bierne Tower. In Criss 1/Bierne Tower buildings, we installed a 75kVA, wall-mounted transformer for feeding the new panels and transfer switches as well as relocated a 300kW generator for the emergency system. Within the Rigge Science building, we implemented additional emergency power systems, which include panels and transfer switches that are fed from a new 112.5kVA, floor-mounted transformer. Lastly, the Criss 2 & 3 science building is where a new 500kW emergency generator was installed.

A significant portion of the work was done while school & labs were in session; therefore, we were extremely aware of the safety of Creighton University's students and staff. Safety resides as our number one concern.

Alvine Engineering, out of Omaha, NE, has designed the project. Additionally, with help from a local construction management firm, Project Advocates, we could successfully tackle the task of expanding Creighton's emergency power system.

The crew, run by foreman Gary Jones, has done outstanding work to this point and are continuing to put in maximum effort to wrap up this job. Other crew members that have significantly impacted the project with their time and effort include: Chris Knecht, Adam Hopple, Jacob McGuire, Blake Woodcock, Joseph Johnson, and Colton Yeager. The office staff supporting Gary and his crew are Fay Klock – office admin, Troy Savich – fab shop, Ruben, Ann, Todd, & Dave - safety department, and project manager Dan Cahalan. We are excited to complete this project for all the students and staff of Creighton University. Go Bluejays!!!



Scheel's Project, Lincoln, NE

Brian Buskirk - System's Service Manager

Commonwealth Electric (Lincoln Branch) has recently had the opportunity to partner with a local IBEW/NECA contractor on the low voltage side. The \$100 million dollar, 220,000 sq. ft. Scheels will be the biggest store in Nebraska. CECM will be doing all the voice, data and fiber optic cable. Roughly there will be about 300,000 ft. of Cat 6 wire on this project. CECM



has also been assigned the task of roughing in all the fire alarm and security wire for Scheels as well.

We were excited to have Greg Konwinski as our general foreman for the Scheel's project. Greg, has been at Commonwealth for 8 years and did his apprenticeship through CECM/IBEW 265 as well, so he is no stranger to the CECM way. He will tackle this job with integrity and some great help with other members of our team later this fall.

Look for Scheels being open to the public September 2018!

Union Pacific Sorensen Data Center

Mark Ross - Project Manager

Union Pacific Railroad purchased the old First Data data center at 8949 Sorensen Parkway to remodel as their remote data center location. Commonwealth was awarded the project by MCL Construction in mid-March. The challenge to this project was we couldn't start demolition until late April and had to be done with the project by August 1st.

Our first task was to identify who would be our lead people in the field. Bob Bohling was chosen to be the general foreman. Bob identified Andrew Chapman and Ralph Maynes as his primary foreman and then filled out the rest of the crew. Andrew would oversee the lighting, lighting control and the miscellaneous systems work. Ralph would be in charge of all the power conduit layout and install from the electrical rooms to the data hall and PDUs to the RX Panels. I believe part of the success of this project was that we brought Bob into the office two weeks before getting on-site to go through the specifications and drawings. This gave him the opportunity to develop any RFIs, formulate his miscellaneous material order and get his tools established for the project.

The first task of the project was to sit down with MCL and the other subcontractors and establish the flow of the work. The data hall is 120' x 216'. The entire suspended ceiling in it had to be taken out and all above ceiling conduit and sprinkler piping had to be raised up for the new suspended ceiling that would be two feet higher. At the same time, demolition under the raised floor had to start to remove all the existing feeders, cable tray and equipment power whips. The new ceiling was identified as the primary pathway due to the timeframe of its installation plus the fact that the new light and all the new basket tray would be supported from the ceiling grid. So, we started; ceiling grid east to west and underfloor demo west to east. The equipment on the floor that had to be removed was coordinated between the two. Because of the amount of demolition, we had Midwest Wire bring dumpsters to the site for us to fill up and they would take it off site for recycling and send us a check for the scrap value. They even took the old PDUs in whole sections for scrap value, picking them up from the jobsite.

Commonwealth purchased six new 300kVa Precision Power Centers (PDU) and forty RX Distribution Panels from Vertiv (Liebert) for installation. We also furnished and installed 155 new 8' LED strip fixtures that mounted directly to the ceiling grid stringers using a "Z" clip. The low voltage group furnished and installed over 3,500' of basket tray that was also supported by the ceiling grid. The ceiling grid was a heavy-duty system that was supported by 3/8" all-thread on 4' centers anchored in the concrete roof.

The data hall was split north/south with three PDUs and twenty RX Panels lined up on each side, with the RX Panels in a row just four feet in front of the PDUs. All the feeders to the PDUs and RX panels had to be installed under the existing raised floor. The RX feeders from the PDUs were a 400A with 3-500MCM phase and 2-500MCM neutrals. So that the air flow was not restricted all the feeders out of the PDUs had to exit perpendicular to the unit down to the floor level before turning and traveling east or west. Because of this we had a conduit field that extended 20' out in front of the PDUs.

The engineer's design to feed the new PDUs was to run 3 parallel 2" conduits with #3/0 cable from the UPS distribution switchboard in the back of house. Each PDU static switch required two independent feeds so we needed to get thirty-six 2" conduits from the electrical rooms out to the data hall and under the raised floor. There were no existing pathways established as the original building design had conduits installed under the slab. Some of the conduits had to go through as many as five concrete block walls and some as few as three. Once under the raised floor we utilized the chilled water piping trench walls to support the conduits until they got to their PDU static switch. It's hard to put down on paper the vision our guys had in laying out these conduit runs but I know the Owner was very impressed with their work.

We also had close to 500 power whips to install from the RX Panels to the equipment cabinets under the raised floor. The specifications had UL and testing requirements for the whips, so we ordered them from PDU Cables out of Minnesota.

We subcontracted for a turn-key install of a dual A/B side 1200A D.C. Plant. It had two battery racks with 24 batteries each, three rectifier cabinets and three DC distribution cabinets on the data floor. There were also miscellaneous system modifications throughout the building incorporating new security pathways, additional grounding and new power and lighting.

Schneider Electric (Sq.D) was not able to come to terms with Union Pacific for the cleaning and maintenance work to the existing UPS, switchgear, switchboards, panels and transformer so we were asked to give them a quote for this work. Eric Hoge provided them with a scope and quote that was accepted. In doing this work for Union Pacific, they indicated that we would be their first call for future maintenance work at this facility.

Our low voltage group, managed by Dan Maca and Tony Boyd, played a big role in this project. During the demolition

Union Pacific Sorensen Data Center (continued)

phase, they had to go into the data hall and raise all the smoke heads up out of the way for the install of the new ceiling. Once the new ceiling was installed they had to go back and reinstall the smoke heads in the ceiling pads. The Owner was providing close to two hundred equipment cabinets that they needed to set. These cabinets also needed to have the appropriate UPS strips installed in them and each cabinet had a top hat to be installed that extended to the ceiling. The Owner had them phased by priority so over a four-week period they received three shipments. There were a few hiccups from the shipping side but Dan's men did an excellent job. Jeremy Englehart was Dan's foreman on-site. We worked with Paul Beller (office) and Tom Holmes (field) from MCL Construction. Because it was an existing building, the electrical work was 50% of the job so they were relying on Commonwealth to be out in front to keep the job moving. There were a few challenges along the way but we collectively worked through them and gave Union Pacific a first-class data center. Bringing Bob in two weeks early as part of our Preconstruction Process to go over the project documents and choosing the right people for the job benefitted the entire project.

Menards Store Remodel - Columbus, NE

Dusty Romshek - Assistant Project Manager

Commonwealth Electric (Columbus branch) has just begun work with BD Construction on a fast-paced Menards store remodel in Columbus, NE. This is a three-phase project consisting of an addition to the accessory storage building at the rear of the store, upgrades to the garden center, and a large mezzanine addition to the main store area. The Columbus branch put together a very competitive budget and was awarded the project over other local and non-local electrical contractors. One of our most experienced general foreman, Jeremy Stutzman, will be running this project for us.



The largest portion of the project is the 3rd phase, which will be the demolition of the existing store mezzanine and the construction of an approximately 12,500 sq. ft. mezzanine addition. This new mezzanine will add just over 12,000 sq. ft. of additional retail space for the store. Some of the key highlights of the project are the addition of LED under-mezzanine lighting, upgrades to fire alarm, PA, and security systems, and the relocation of the contractor service counters to the back of the store for convenience when ordering and picking up building materials. The store will remain operational during all phases of construction with much of the work performed during normal business hours. This will be a great opportunity for the public to see Commonwealth's focus on the standards of professionalism, workmanship, and safety.

Menards has completed this remodel to many of its stores already with plans of completing over 80 additional stores this year. We are hoping that by gaining the experience on this project, it could give us an advantage on bidding and performing the same work at other local Menard's store locations.

