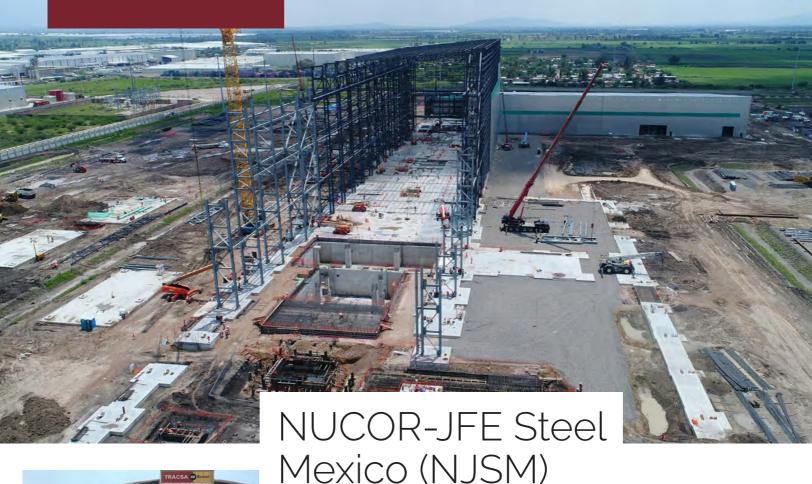
VOL 19 ISSUE 1 | JULY 2019



NEVVSLETTER







SU AO CUANA ULATO MEVICO

SILAO, GUANAJUATO, MEXICO

713,000 SQ FT

NJSM

GENERAL CONTRACTOR

NUCOR STEEL & JFE STEEL (JAPAN)
OWNER

CVE DIVISION LOGAN HEAVY INDUSTRIAL

PROJECT OVERVIEW

In 2016, Nucor Corporation (NYSE: NUE) formed a 50-50 joint venture with JFE Steel Corporation of Japan to build and operate a plant in central Mexico to supply that country's automotive market.

Today, CVE is advising and supervising all aspects of electrical construction. Scott Michi serves as the Site Superintendent, while Dave Wolf and Rafael Villegas are acting Foremen.

SCOPE OF WORK

- Coldmill facility containing CGL (continuous galvanizing line) and RCL (recoiling line)
- CGL's finished product will be automotive-grade galvanized steel cold coils of steel from U.S. and Japan, galvanized onsite with end customers being numerous car manufacturers, located within a threeor four-hour drive from the project.
- Switching station for local power company
- Receiving substation 115 KV incoming



UDOT Utah Tech Corridor

UTAH COUNTY, UTAH

UDOT GENERAL CONTRACTOR, OWNER

CVE DIVISION SIGNAL & UTILITY

PROJECT OVERVIEW

Ranked as UDOT's #1 priority project for 2018, the construction of Utah's Tech Corridor began last year. This \$430 million project to widen I-15 in Utah County will improve traffic congestion between Lehi's Main Street and S.R. 92 (Timpanogos Highway). This area is one of the fastest growing areas in Utah and is also known as Silicon Slopes for its increasing number of technology-based businesses. This project will widen the section of freeway between Salt Lake City and Spanish Fork.

UDOT SCOPE OF WORK

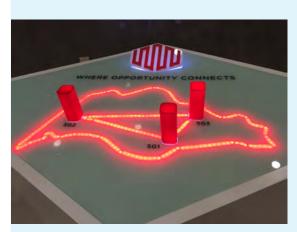
- · Two additional travel lanes in each direction
- New bridge over I-15 at Triumph Boulevard
- One-way frontage roads and redesigned interchanges between S.R. 92 and 2100 North
- Reconstructed bridges at cross streets and railroad crossings
- New bike and pedestrian connections



CVE SCOPE OF WORK

- 50 or more mast lights (measuring 80 to 120 feet high) throughout the corridor
- 9 signals including 3 major interchange signals at S.R. 92, Triumph Blvd. and 2100 North
- · 3 VMS (variable message sign) structures
- 15 ATMS (advanced traffic monitoring systems) sites that include CCTVs (closed circuit television) and traffic monitoring systems
- 5 electronic toll lane control systems
- 4 miles of 2D (8 ¼" communication conduit) and 4D (16 ¼" communication conduit) install
- 13 bridge structures with underdeck lighting
- 12,500 feet of utility betterment
- Multiple temp signals, ATMS sites, and underdeck lighting during MOT (movement of traffic) work

Project Update - Equinix Singapore



On April 6th, CVE Technologies successfully migrated the IT infrastructure for the Equinix SG1 data center in Singapore. Part of the Equinix Singapore One-North Campus, SG1 is the most networkdense data center in the region and offers access to one of the three GRX peering points worldwide. It is also home to the Equinix Cloud Exchange™ in Singapore helping SG1 to be ranked as the #1 most connected data center worldwide by Cloudscene.

After several weeks of careful preparation CVE design and network engineers diligently worked throughout the night to complete this sizable migration in under 24 hours. This was the first Equinix Gen 2.0 migration in Asia-PAC to complete within the expected migration window. Up next, the team will be focusing on the preparation for SG2, also in Singapore.



WEST JORDAN, UTAH

600,000 SQ FT

OKLAND CONSTRUCTION

GENERAL CONTRACTOR

ALIGNED ENERGY

OWNER

CVE DIVISIONS ELECTRICAL CONSTRUCTION (MISSION CRITICAL), SIGNAL & UTILITY, LINE, TELEDATA

PROJECT OVERVIEW

CVE is currently repurposing the old Fairchild Semiconductor Building for Aligned Energy. The project officially kicked off on March 8, 2018. Through March 2019, over 200,000 man hours have been safely performed at the job site. At the peak of construction, over 110 electricians were working seven days a week to meet a very aggressive schedule.



"Aligned Energy is new to the Salt Lake market so it has been very rewarding for our team to help them complete this project," says Jeff Williams, Project Manager. "Our field leadership and skilled labor really rose to the occasion every time a new obstacle came about. Our 'One Team One Dream' concept between Aligned Energy, Okland Construction, Cache Valley Electric, as well as the other subcontractors, is the reason this project was a success."

Phase One was completed in August 2018. Phase Two was completed at the end of March 2019 with Phase Three slated to go online this August.

SCOPE OF WORK

- 55 acre property, 600,000 square ft building
- 130 Megawatts
- Power is supplied through an A+B redundant distribution system backed by N+1 standby power generation.
- Transmission lines, substation new and rebuild, and distribution new build and maintenance
- All excavation for duct banks and light pole foundations

PG 2





SANDY, UTAH

327,000 SQ FT

OKLAND CONSTRUCTION GENERAL CONTRACTOR

MOUNTAIN AMERICA CREDIT UNION OWNER

CVE DIVISIONS TELEDATA & MULTIMEDIA (DAS)

PROJECT OVERVIEW

CACHE VALLEY ELECTRIC

@cachevalleyelectric

@wearecve

The 11-story Mountain America Credit Union building adjoins the Mountain America Performing Arts Center in Sandy, Utah. CVE installed a multi-carrier fiber DAS (Distributed Antenna System) capable of supporting Verizon, AT&T, T-Mobile, and Sprint. "We used low-profile antennas to ensure the system was aesthetically pleasing," says Lou Turner, DAS Manager. "Additionally, CVE installed a public safety system for the entire building required by the local AHJ (Authority Having Jurisdiction) for emergency responder radios."

SCOPE OF WORK

- Complete Radio Frequency survey for both carrier and public safety systems
- Multi-Carrier DAS
- Public Safety DAS
- · Cat 6 cable
- Server Room
- · Cisco room kits for:
- 50 Conference Rooms
- 27 Huddle Spaces
- 6 Training Rooms
- 1 Multi-use Event Center
- 2 Fitness Rooms

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@cve-technologies-group-inc













@observianhq @observian

Connect with all our CVE Divisions on social media!

Traeger WiFIRE Grills

SALT LAKE CITY, UT

TRAEGER GRILLS OWNER

CVE DIVISION OBSERVIAN

PROJECT OVERVIEW

Traeger is reinventing the grilling industry with Wi-Fi (WiFIRE) connected grills. This technology uploads data to AWS (Amazon Web Services) for big data analysis, then provides new grilling automation options to the customer.

The new WiFIRE connected grills help customers get step-by-step guidance through the entire cooking cycle on an easy to use mobile application. The new WiFIRE feature has added value and convenience to Traeger's grill lineup.

SCOPE OF WORK

- · Transform large amounts of streaming data being sent from the grills to the cloud in a Parquet (column-oriented data storage) format
- Provide easy options to utilize information from complex queries on formatted data
- Store big data output in the cloud (S3) while keeping costs to a minimum
- Utilize AWS tools to provide traceable costs

Looking Ahead...

THE FUTURE OF **ELECTRICAL CONSTRUCTION**

WHAT IS BIM?

Building Information Modeling (BIM) is a 3-dimensional digital representation of physical and functional characteristics of a facility.

WHAT ARE THE BENEFITS OF BIM?

"It gives us the opportunity to plan not just for the device itself, but for clearance zones to meet code and have maintenance access," says Jarom Worthen, BIM/VDC Department Manager. "Our BIM team can find issues in the model and correct them before they hit construction. That means a crew in the field can work continuously without delay."

WHAT IS PREFAB?

Prefab (prefabricated construction) is the practice of assembling a variety of components of a structure at a

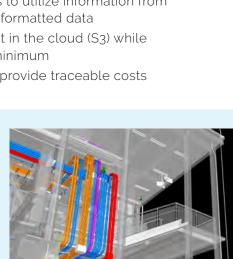
manufacturing site and transporting those sub-assemblies to the construction job site.

WHAT ARE THE BENEFITS OF PREFAB?

"From a BIM model, I can produce manufacturing drawings and premanufacture assemblies before they go into the field, decreasing the amount of labor in the field and improving efficiencies," says James Martin, Director of VDC/BIM and Prefabrication.

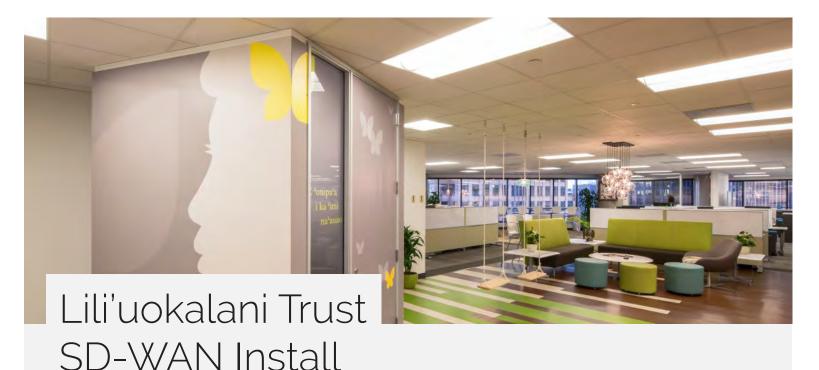
HOW DO BIM AND PREFAB WORK TOGETHER?

Utilizing both BIM and Prefab lowers supervision, the number of tools needed on site, overall management time, paperwork, and cost. Meanwhile, it increases safety and efficiency.









HAWAII

LILI'UOKALANI TRUST OWNER

CVE DIVISION CVE TECHNOLOGIES

PROJECT OVERVIEW

Lili'uokalani Trust, a private operating Hawaiian foundation, was looking for a Wide Area Network Solution that was both simple to deploy, and easy to manage. "We worked together with our engineer, Kyle Hambright, to provide the customer with two different Cisco solutions that addressed all of their needs and eventually settled on a Meraki solution," says Mike Merrill, Senior Account Manager. "This solution allows for secure and reliable data sharing throughout the customer's different locations on each of the islands."

SCOPE OF WORK

- 10 sites in Hawaii on all Islands
- Cloud-based, centralized management solution
- · Configuration done remotely, with on-site work to rack and stack equipment
- 3 years of support included with the solution

Recently Awarded Projects

ELECTRICAL CONSTRUCTION

Verizon Data Center, Salt Lake City Confidential Data Center - Phases 3 & 4. New Mexico

Aligned Energy - multiple projects Albany Engineered Composites multiple projects Confidential Manufacturing Facility -

Northern Utah Confidential Data Center - Phases 1 &

2 Utah County

Government Project, Salt Lake City

HEAVY INDUSTRIAL

Intertape Polymer Line 7 Install -Garland, UT

Eccles Theater Upgrades - Logan, UT Big River Steel (BRS) Phase 2, 15kv and 35kv power distribution – Osceola, AR BRS Coil Storage Building, Unit sub and 480-volt Distribution

BRS Cold Mill Lab Expansion BRS Heavy Gauge Sampling line embedded conduit and grounding BRS Refractory Storage Building

Grounding Nucor Florida Micro Mill -Frostproof, FL Precoat Metals Capacitor Bank

Installation - Blytheville, AR

Skyline Steel Busway 2 Replacement -Blytheville, AR Skyline Steel Yard Lighting -

Blytheville, AR Dell Power Plant Cooling Tower Fans -

Calstrip - Blytheville, AR Plum Point Powerhouse Cooling Tower MCC replacement - Osceola, AR NYS Unit-sub Scada - Blytheville, AR NYS Unit-sub 4 Feeders - Blytheville,

NYS2 Tandem Mill Project -Blytheville, AR Logan City Wastewater Facility -Design/Build Logan Gateway Project -Logan, UT

Design/Build Nucor Building Systems - Brigham City, UT Addition USU Merrill Library Lighting Control Upgrade - Logan, UT Misc. Thermo-Fisher projects -Logan, UT

Misc. Prismview projects - Logan, UT Misc. JBS projects - Hyrum, UT US Steel EAF Project - Fairfield, AL New EAF, Baghouse, Water Treatment Plant, VTD, Main Receiving Station w/ SVC, Melt Shop Building, Alloy Handling System US Steel New Caster & Revamp Project

 Fairfield, AL Nucor Steel Kankakee Reheat Furnace and Roll Mill - Kankakee, IL

CONTINUED ON PAGE 7

Recently Awarded Projects continued

HAWAII ELECTRICAL CONSTRUCTION

Kaua'i Medical Clinic Waimea Huakai Kauai Community College Various Improvements Pacific Guardian Center - ATS Replacement Kapi'olani Medical Center -Transformer Replacement Schofield Barracks Quad B Building 155 Aqua Engineer - Transformer Replacement

Aqua Engineer - ATS Replacement 1132 Bishop - Model Units

TRANSMISSION LINE & SUBSTATION

Mercer Substation - Rocky Mountain Power - UT Rexburg & Ammon Substation - Rocky

Mountain Power - ID Palo Alto Civil Construction -MidAmerican Energy - IA Maffit Lake Substation - MidAmerican

Energy - IA Q729 Airport Bullard Substation -PacifiCorp - OR

American Fork Reconductor -PacifiCorp - UT Lund South 35kV Rebuild - Mt.

Wheeler Power - NV Fire Restoration - Douglas Electric

Cooperative - OR SR10 Ridge Road - PacifiCorp - UT Casper Dock Work - Rocky Mountain

Power - WY Red Butte Central-St. George - Rocky

Mountain Power - UT Sugarmill-Rigby 161kV/Goshen -

PacifiCorp - ID

Vitesse - PacifiCorp - OR Purple Innovation Distribution - Rocky

Mountain Power - UT 46kV Bacchus East Power Line -Orbital ATK - UT

90th South Bangerter Interchange Distribution - Rocky Mountain Power

Nucor Longview 69kV Transmission Line - Nucor Steel - TX Portland Dock Work - PacifiCorp - OR Medford Dock Work - PacifiCorp - OR 2019 Yakima Reconductor - PacifiCorp

Walla Walla Dock Work - PacifiCorp

SERVICE DIVISION

Jim Bridger Power Plant - Unit 3 Precipitator Rewire - Point of Rocks, WY Endurance Data Center - Chiller Power Upgrades - Provo, UT IHC - TOSH - Chilled Water System Replacement - Murray, UT IHC - McKay Dee Hospital - Data Center Mechanical System Upgrade -Ogden, UT Discover Financial - 3rd Floor Remodel - Discover Financial - Replace Building ATSs - Salt Lake City, UT Dannon - Cooling Tunnel -West Jordan, UT Utah Sports Hall of Fame -Salt Lake City, UT

Dominion Energy - Engine Plant

Conversion - Salt Lake City, UT University of Colorado, Boulder – Folsom Field - DAS and WiFi Raceways -

Boulder, CO JCI - Grand America Chiller - Salt Lake City, UT

Eaton - Hill AFB Bldg. 1211 - UPS & Generator Installation - Ogden, UT Eaton – UTTR Multiple Sites – UPS and HVAC Upgrades - Dugway, UT Main Receiving Station w/ SVC, 44KV Transmission Line, 115KV Transmission Line - Fairfield, AL

Nucor Florida 2MW Line Construction -Frostproof, FL

Gordan Ave Aux Lanes, Layton City

SIGNAL & UTILITY

SLC Airport Rental Car Light Replace SR-134; I-15 Interchange Mods SLC Airport Exit Road Light Sandy City Overlay Logan-Cache Airport Wind Cone Install Traffic Signal at XBAR Road Wolfpack Crossing Street Lights SLC Bike Counter 9-Line Trail SR-198 at 1400 East Signal -Spanish Fork UTA First / Last Mile Summit County Bike Share Midvale Crosswalk Project SR-106; Main St to 1700 West, Bountiful 11950 South Roadway Improvements US-40; W Roosevelt to Gusher I-80 at Glendale Ave SR-126; SR-39 Intersection

AVTEC

Avista Corporation

Mission Gate 1 - Entrance Security Project

2540 West Roadway Extension

Coeur d'Alene - Video Surveillance Project

Dollar Road – Phase III

Dominion Energy:

SLOC - Security Upgrades Logan Fab Shop - Security Upgrades Logan OPS Center - Security Upgrades Cash Station - Security Upgrades

Kastler Station - Security Upgrades

Flexential

Security Controls Projects: Plano, TX Portland, OR Salt Lake City, UT

Shafter – Video Surveillance Project Park City Municipal

Public Works – Security Upgrades Public Utility District No. 1 of Chelan County

Access Control Platform Replacement Project

Rocky Mountain Power

CIP14 - System Upgrades

PacifiCorp

Substation - NVR Upgrades S-Power

Big Sky Expansion - Lancaster

GA50 - Video Project

Salt Lake City Department of

Concourse Paging Re-alignment Project South Valley Regional - Video Project

Salt Lake City Department of Public Parley's Water Treatment Project

North Salt Lake Water Reclamation -

Upgrade Project Verizon SLC

SLC Data Center Expansion Project Western Governor's University

Houston - Security Project

Santa Ana - Security Project Ohio - Security Project

Tower 4 - Security Project SLC - Video Surveillance Project

TELEDATA/MULTIMEDIA

JSMB 8th Floor - SLC. UT Doterra Call Center - Pleasant Grove,

Doterra Distribution Bldg. TI - Pleasant Grove, UT Cisco - Lehi UT

Doterra Data Center - Pleasant Grove.

Paramount Homeless Shelter - SLC,

American Express - Sandy, UT Allied Health Building - Ogden, UT Hillcrest Elementary - Logan, UT Canyon Crest Elementary - Provo, UT Cascade Elementary - American Fork,

Central Elementary - Layton, UT IHC Dixie CC Redundant Fiber - Saint George, UT

BYU Hawaii Backbone - Laie, HI Grand Wailea GPON Upgrade - Wailea,

Turtle Bay Network - Kahuku, HI

MULTIMEDIA

South Jordan City Council Chambers -South Jordan, UT Allied Health Building - Ogden, UT Okland Construction Office Remodel -Salt Lake City,UT Layton Construction South Building -

University of Utah South Campus -

Salt Lake City, UT Space Dynamics Lab Phase 2 -Logan, UT

Midwest Commercial Interiors Showroom - Salt Lake City,UT JSMB 8th Floor - Salt Lake City,UT West Valley City Police Headquarters -West Valley, UT

IHC Telehealth Services - Murray, UT CHG Healthcare - Ft. Lauderdale, FL WCF Insurance - Sandy, UT Merit Medical - Sandv. UT

Traeger - Salt Lake City, UT Herriman City Hall - Herriman, UT

UofU Housing - Salt Lake City, UT Worker Compensation Fund -Sandy, UT VZW SLC Airport A&E -Salt Lake City, UT ARUP Laboratories - Salt Lake City, UT Womens Center - Salt Lake City, UT VZW Hexcel - Salt Lake City, UT University of Wyoming - A&E -Laramie, WY

CVE TECHNOLOGIES

The Church of Jesus Christ of Latterday Saints - Unified Communications (Global)

Pacificorp - Networking, Northwest UVU - Security, Provo, UT Equinix - Security, Global Reckitt Benckiser Group - Salt Lake

State of Utah Courts - Salt Lake City Select Portfolio Services - Security, Salt Lake City

Northwest Regional ISD - Networking,

Nature's Sunshine - Utah McKinney ISD - Data Center - Dallas

OBSERVIAN

CHG Healthcare Traeger MyTechHigh Prestige Financial International Financial Services Merrick Bank Veteran's Advantage

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SALT LAKE CITY OFFICE

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ARKANSAS OFFICE

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OREGON OFFICE

12550 SW 68th Ave. Portland, OR 97223 503-431-6600

TEXAS OFFICE

2370 West Airfield Dr., Ste 200 Dallas, TX 75261 469-844-5730

HAWAII OFFICE

733 Bishop St., Ste 2170 Honolulu, HI 96813 808-354-0080

WWW.CVE.COM



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Our People are Our Power

CVE EMPLOYEE RECOGNITION BANQUET

The Annual CVE Employee Recognition Banquet was held on June 1, 2019 at Grand America Hotel.

This recognition program began in 2003 to honor employees who achieved 10+ years of service. Employees receive their first award—a three-ruby CVE ring—after their 10-year anniversary, then at each additional five-year milestone.

This year, all 10+ year recipients received a custom, carbon-fiber CVE hard hat.

CVE now has 213 current employees who have worked with Cache Valley Electric for over 10 years. Congratulations to all.



25-year Service Awards (pictured, L to R):

Paul Harris (ECD) Shawn Wright (TEL-SLC) Seth Hansen (SER) Jim Phelps (ECD) Steve Grant (ECD)



35-year Service Award: Mike Perkes (Logan)