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The Silicon Valley Wire

The latest news from the electrical industry in Silicon Valley

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Prime Electric Upgrades Power For The Renovation Of LinkedIn's Headquarters

Prime Electric upgraded the electrical infrastructure of LinkedIn's new high-end office space in Sunnyvale.

Prime Electric's electrical upgrade at LinkedIn's high-end office space in Sunnyvale is complete, part of an extensive renovation of the site.



Prime Electric's design-build power upgrade for LinkedIn at 950 W. Maude Ave. and 1000 W. Maude Ave. includes electrical distribution, an electrical service upgrade, lighting, installation of lighting controls, and wiring for the fire/life safety system.

RMW architecture & interiors was the architect and XL Construction was the general contractor for the 280,000-sq.-ft. electrical contracting project. Intrepid



Prime Electric wired a high-end lighting fixture package that includes LED tape light and contemporary chandeliers. Electronic Systems installed the fire/life safety system.

Prime Electric installed major power upgrades at both buildings to meet customer standards and power needs.

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Prime Electric installed Enlighted's distributed lighting controls and light sensors in both buildings, enabling each light to be programmed individually.

Inside This Issue



Prime Electric Completes Electrical Upgrades At LinkedIn's High-End Office Space in Sunnyvale CSI Electric Completes Buildout of Foothill College Sunnyvale Center ELECTRICAL CONTRACTORS, IN WWW.CSIELECTRIC.COM

CSI Electric Breaks Ground On Foothill-De Anza New District Office Building



Prime Electric Upgrades Power Distribution At LinkedIn

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Prime Electric also coordinated extensive BIM modeling at both buildings to facilitate installation of overhead electrical systems for the open architecture requirements. Prime Electric worked with 50+ electricians from the International Brotherhood of Electrical Workers (IBEW) Local 332 in San Jose to wire the project.

The ground floor of each of the two buildings contains the majority of the common spaces, while levels 2-4 are primarily office space. As part of the renovation, 950 W. Maude Ave. expanded its common space on the first floor, adding a full service kitchen, a large café and an auditorium. To facilitate the building's added load requirements, Prime Electric upgraded the power distribution to the existing PG&E service.

To accomplish the load expansion, Prime Electric upgraded the main switchboard, and swapped out several of the distribution breakers feeding the floors for bigger breakers. The existing breakers, which were 100 amp rated, were upgraded to 225 amps in every panel in both buildings on every floor. This improvement also helped to accommodate the electrical service to over 40 electric vehicle charging stations placed throughout the site in the parking lot and existing parking garage.

At 1000 W. Maude Ave., the first floor common space renovation included a 7,500-sq.-ft. indoor/outdoor fitness area with showers and lockers on the first floor, as well as a juice bar and a center for meeting and training. At this site, Prime Electric reused the existing switchboard, and the PG&E incoming service stayed the same.







In both buildings, floors 2-4 are used for offices. A grand staircase in the center of the buildings promotes interaction and communications between floors and is topped by a large skylight. An adjacent lounge and open break area reinforces this zone as the hub of the floor.

Prime Electric faced a wiring challenge with the open architecture in the two buildings (the only areas that have ceilings are the small offices). In order to accommodate the architecture, Prime Electric ran visible conduit and wire throughout the building. Because the exterior of the building is slightly curved, electricians put a bend in the conduit that Prime Electric ran parallel to the glass. Prime Electric installed standard

metallic conduit and cable trays.

Another challenge that Prime Electric faced was the implementation of a high-end fixture package that was specified by the architects and designed by Lightswitch in San Francisco. The lighting includes LED tape light inside the wood millwork features, and contemporary chandeliers.

Prime Electric installed Enlighted's distributed lighting controls and light sensors in the IDF rooms of both buildings. A network switch distributed the lighting to each floor through a wireless gateway. The lighting can be programmed to control each light individually, since there is a single sensor for each fixture.

PRIME ELECTRIC TEAM LIST LINKEDIN HEADOUARTERS **RENOVATION:**

OWNER: LinkedIn

ARCHITECT: RMW architecture & interiors

GENERAL CONTRACTOR: XL Construction

ELECTRICAL CONTRACTOR: Prime Electric

FIRE ALARM SYSTEMS CONTRACTOR: Intrepid Electronic Systems

LIGHTING CONSULTANT: Lightswitch

PRIME ELECTRIC MANAGEMENT TEAM:

Don Dixon, Group Executive Victor Hernandez, Project Manager Rich Corvello, Project Manager Natalie Strange, Project Manager Heather Gard, Project Manager Cory Lemm, Superintendent

PRIME ELECTRIC PROJECT DESIGN TEAM: Bob Hashemi, Chief Engineer Marty Evans, Design Engineer Tony Duong, BIM Engineer

ELECTRICIANS FROM THE INTERNATIONAL **BROTHERHOOD OF ELECTRICAL WORKERS** (IBEW) LOCAL 332, SAN JOSE:

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Photo Courtes



Prime Electric Executive Team:

LEFT TO RIGHT: TONY DUONG, BIM Engineer; Marty Evans, Design Engineer; Fernando Januario, General Foreman; Cory Lemm, Superintendent; Victor Hernandez, Project Manager; Rich Corvello, Project Manager; Natalie Strange, Project Manager; Heather Gard, Project Manager; Dave Redgrave, General Foreman; Jake Mahler, General Foreman; Jon Maiwald, General Foreman; Bob Hashemi, Chief Engineer

950 W. MAUDE AVE. FIELD TEAM

Jon Maiwald, General Foreman; Fernando Januario, General Foreman (Café); Sidney Blanchard, Foreman; Alan Anderson, Foreman: David Garcia. Foreman: Joshua Bowling; Patrick Bowling; James Charles; Brian Flynn; Daniel Forren; Scott Halvorsen; Thomas Henderson; John Holloway; Joseph Keglovich; Bradley Lawry; Edward Long; Rodrigo Machado; Glenn Pardo; Scott Peterson; Gordon Reed; Ryan Pellizzer, Apprentice; Robert Cano, Apprentice; LB Johnson, Material Handler

1000 W. MAUDE AVE. FIELD TEAM

Dave Redgrave, General Foreman; Jeremy Howard, Foreman; Eric Tetherow, Foreman; Emlin Fazlic, Foreman; Tim Albers; Thomas Blaker; Kimberly Davis; William Delgado; Samiuela Esau; John Gonzalez; Mark Jones; Jeff Lloyd; Dana McCourt; Sean McDermott; Martin Randisi; Deborah Ramirez; Marvin Settles; Nelson Simon; Christopher White; Adrian Ibarra, Apprentice; Jose Moreno, Material Handler



Foothill College Sunnyvale Center, Wired By CSI Electric, Replaces The Iconic Blue Cube

CSI Electric recently completed wiring the Foothill College Sunnyvale Center at the former Onizuka Air Force Station near Moffett Business Park.

The site once housed the Blue Cube, a secretive Cold War icon that tracked Soviet satellites for decades and was demolished in 2014, after the base was closed. The new state-of-theart Foothill College Sunnyvale Center includes classrooms, offices and student spaces, and offers opportunities to the community to participate in diverse scholastic activities and events. The General Contractor is C.W. CSI Electric's services for the \$3.8 million electrical contracting project included installation of the electrical infrastructure, power distribution to the building, lighting and lighting control, and installation of the raceways for the AV, security, data and fire alarm systems.

After bringing power into the building from the street over a medium voltage line, CSI Electric was faced with the install the lighting with an open atrium.

The building's unique open atrium/ ceiling design made the logistics of installing the power and various electrical systems within the building a challenge, according to Mike Mortl, CSI Electric Project Executive.

"The atrium was 3 stories high with exposed I-beams," said Mortl. "The

Driver and the architect is Lionakis.

question of how to wire the building and

center of the building goes all the way





to the third level, so it is pretty much an open ceiling. We had to devise a wiring system that would look clean and appealing to the eye and would function efficiently. We ended up using a mounting system to install the lighting.

"We drilled a hole in the I-beams and then installed quarter-inch rods to hang the light fixtures on at the bottom of the beams. It solved our wiring issues and it looks great as well."

It was also challenging for CSI Electric to wire the five classrooms on the second floor, since the southwest side has an exposed ceiling open to the atrium. In order to wire the classrooms on the other side of the building, CSI electricians had to go through the first-floor ceiling and drill through to the second floor to get to the second-floor electricians ran the wiring across the I-beams and concealed some of it in the I-beams.

CSI Electric installed the specialty lighting control system, Wattstopper Digital Light Management System, throughout the building. The same system controls the lighting for the exterior of the building and parking lot. The lighting control panel is located in the electrical room on the second floor. Some 20 members of the International Brotherhood of Electrical Workers (IBEW) Local 332 worked on the project. (See Project Team Box)

The new Foothill College Sunnyvale Center, built to LEED Gold Certification, features radiant floor heating and cooling, and a natural ventilation system. The natural ventilation system at the roof level uses massive exhaust fans with motorized louvers.

FOOTHILL COLLEGE SUNNYVALE CENTER PROJECT TEAM:

OWNER:

Foothill-De Anza Community College District

ARCHITECT: Lionakis

GENERAL CONTRACTOR: C.W. Driver

ELECTRICAL CONTRACTOR: CSI Electric VICE PRESIDENT NORTHERN CALIFORNIA OPERATIONS: Andy Klein **PROJECT EXECUTIVE** Mike Mortl PROJECT MANAGER Trinidad Pizano **GENERAL FOREMAN** Kris Maltes **ELECTRICIANS** 20 Electricians from IBEW Local 332, San Jose **TELECOM CONTRACTOR:** Cal Coast Telecom **OPERATIONS MANAGER** Gary Olson PROJECT MANAGER, DATA **Doug Wright** PROJECT MANAGER, AV Mitch Fountaine **PROJECT MANAGER,** SECURITY AND ACCESS CONTROL James Hartley

ceiling. To reach the ceiling with wiring,

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NECA-IBEW In The Community



CSI Electric Wires New Foothill College Sunnyvale Center

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Headquartered in Los Angeles, CSI Electric opened its San Jose office in 2013 and performs work throughout Silicon Valley and the region. In addition to the higher education arena, CSI Electric is experienced in commercial, institutional and mission critical sectors.

"We are excited to be working with Foothill-De Anza on this project," said Mortl. "Our strong background in community college work and our proven track record with higher education facilities gives us the expertise to deliver this project successfully."

CSI Electric has completed many other community college and higher education projects, including those for Pasadena City College, Loyola Marymount, CSULB, CSUN, CSUB, Emerson College, Claremont McKenna, Harvey Mudd, UCLA, USC, and Cal Tech.





CSI Electric ran all the infrastructure raceways for the communication and security systems, and then subcontracted with Cal Coast Telecom to install the security system, the data system, and the AV system.

Cal Coast Telecom used the infrastructure raceways installed by CSI Electric to install 24 CCTV cameras and wire 46 access control doors. Each perimeter door and classroom has intrusion sensors (a total of 104 sensors). Cal Coast Telecom pulled Category 6 Cable to wire 250 workstations per floor on two floors, and also installed AV in 24 classrooms.

For more information about CSI Electric, or its work with Foothill-De Anza Community College District, contact Mike Mortl, Project Executive, (Mike.Mortl@csielectric.com) or call (408) 641-2500.







CSI Electric Begins Work On New District Office For Foothill-De Anza Community College District

CSI Electric is wiring the electrical infrastructure for Foothill-De Anza's new district office, now under construction at Foothill College in Los Altos Hills.

CSI Electric will also be installing the lighting, energy management systems, and the raceways for several low voltage systems for the \$3 million electrical project, including AV, security, fire alarm and data.

The 30,000-sq.-ft. building, constructed on part of an existing parking lot that is adjacent to the Foothill College campus, is expected to be completed in the spring of 2018. The general contractor for the \$18 million project is Alten Construction. Ratcliff Architects is the architect.

The building will house office space for about 70 district administrative employees, including the chancellor, human resources, business services, purchasing and the district's charitable foundation,

floor and we will be installing floor boxes, so we need to be precise in getting our underground work set properly. It will take a lot of preplanning to make sure it all gets in correctly," added Boehmer.

Headquartered in Los Angeles, CSI Electric opened its San Jose office in 2013 and performs work throughout Silicon Valley and the region. In addition to higher education, CSI Electric is experienced in the commercial, institutional and mission critical sectors.

CSI Electric is working with electricians from the International Brotherhood of Electrical Workers (IBEW) Local 332 on the project. CSI Electric will bring power in from one of the College's nearby buildings, boring over to an existing transformer to bring 600 amp, 480 volt service to the building.

campuses in Silicon Valley. Together the colleges currently serve some 60,000 students a year and offer more than 200 degree and certificate programs.

For more information about CSI Electric, or its work with the Foothill-De Anza **Community College District, contact Mike** Mortl, Project Executive, (Mike.Mortl@ csielectric.com) or call (408) 641-2500.

FOOTHILL-DE ANZA COMMUNITY **COLLEGE DISTRICT NEW DISTRICT OFFICE PROJECT TEAM:**

OWNER: Foothill-DeAnza Community College District

ARCHITECT: Ratcliff Architects

As part of its state-of-the-art design, the two-story facility features a connected elliptical single-story board room. The board room, which can also function as an auditorium that seats up to 215 people, will be used to host the district's monthly board of trustees meeting as well as other functions. Small meeting rooms and extra storage for records are also being constructed.

Pat Boehmer, project manager for CSI Electric, said the biggest challenge for the wiring is working with the unique characteristics of the design of the building, including the elliptical boardroom. "There are a lot of systems in the boardroom, including the AV," he said.

"The front of the auditorium has a sloped

CSI Electric recently completed the underground wiring for the building.

CSI Electric is also installing all the energy management devices, including controls for new receptacles and automatic sensor controls for lighting.

CSI Electric has completed many other community college and higher education projects, including those for Pasadena City College, Loyola Marymount, CSULB, CSUN, CSUB, Emerson College, Claremont McKenna, Harvey Mudd, UCLA, USC, and Cal Tech.

Foothill-De Anza Community College District provides workforce, basic skills and university transfer preparation to more than one million students at its two GENERAL CONTRACTOR: Alten Construction

CONSULTING ELECTRICAL ENGINEER: Gayner Engineers

ELECTRICAL CONTRACTOR: CSI Electric VICE PRESIDENT NORTHERN CALIFORNIA **OPERATIONS** Andy Klein PROJECT EXECUTIVE Mike Mortl PROJECT MANAGER Pat Boehmer **GENERAL FOREMAN** Stan Jacobi **ELECTRICIANS** International Brotherhood of Electrical Workers (IBEW) Local 332, San Jose

LOW VOLTAGE TECHNOLOGY SYSTEMS: Signawest Systems **Custom Controls**



Prime Electric Meets Tight Timelines To Complete LinkedIn's Sunnyvale Offices

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Other challenges to the project included a tight design and construction timeline, which became more intense when LinkedIn took over from the previous tenant of the building mid-way through the renovation.



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"The project was very successful for Prime Electric," said Project Manager Victor Hernandez. "We were able to design and build a high-end office space while meeting LinkedIn's design and intent, and we were able to complete the project by long-established LinkedIn move-in dates."

For more information about Prime Electric and its services, contact Don Dixon, Group Executive, Principal (ddixon@ primeelectric.com) or call (925) 961-1600.

