A QUARTERLY NEWSLETTER PUBLISHED BY NECA-IBEW

The Silicon Valley Wire

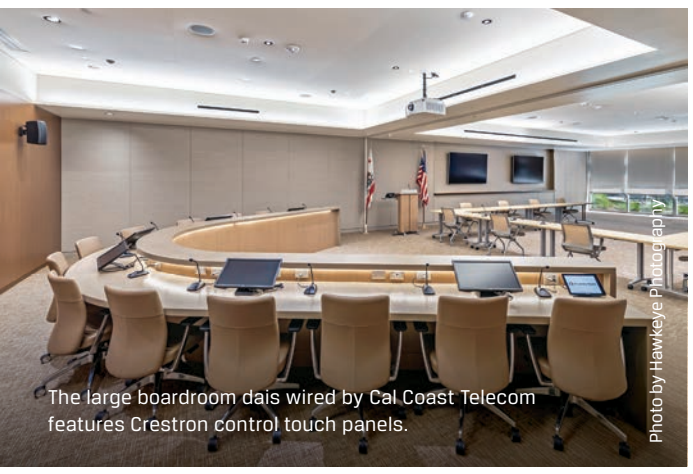
The latest news from the electrical industry in Silicon Valley 4th Quarter 2020

Cal Coast Telecom Installs DAS, AV and More At The New Sobrato Pavilion On The Campus Of El Camino Hospital

Cal Coast Telecom wired the low voltage services for the Sobrato Pavilion on the El Camino Hospital Campus, Mountain View, CA

Photo by Hawkeye Photography

The new Sobrato Pavilion, an integrative medical office building on the Mountain View campus of El Camino Hospital, is all wired up, thanks to Cal Coast Telecom.



The large boardroom dais wired by Cal Coast Telecom features Crestron control touch panels.

Photo by Hawkeye Photography

Cal Coast installed a number of low voltage services in the 7-story, 265,000 sq. ft. medical outpatient facility in Mountain View, including the distributed antenna system (DAS); the public safety emergency response system; structured cabling; voice data, and the audio-visual systems. The project was completed earlier this year.

The Pavilion adjoins the main hospital, and was made possible in part through a generous donation from John and Susan Sobrato of the Sobrato Organization. The Sobrato Pavilion has a mix of uses and serves patients through many different clinics and centers. It also contains medical offices for physicians serving the community. The architect for the project is WRNS Studio, San Francisco; Rudolph and Sletten is the general contractor.

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The video wall in the lobby of Sobrato Pavilion is one of many AV installations by Cal Coast Telecom.

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Photo by Hawkeye Photography

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The 7-story, 265,000 sq. ft. Sobrato Pavilion has been equipped with state-of-the art low voltage services by Cal Coast Telecom.

Patients and visitors are welcomed into the Sobrato Pavilion by a video wall installed by Cal Coast Telecom.

Photo by Hawkeye Photography

Cal Coast Telecom Installs DAS, AV and More At The New Sobrato Pavilion On The Campus Of El Camino Hospital

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Cal Coast installed the Sobrato Pavilion's distributed antenna system (DAS), which carries wireless service within the building through a network of spatially separated antennas connected to a common source. For this project, Cal Coast installed 34 carrier antennas.

For the DAS, Cal Coast pulled the fiber connections into the Pavilion's ground floor (Building Distribution Floor) from another building on the hospital campus where the fiber connection comes in from the carrier. Cal Coast pulled 24 strand fiber into the electrical closet or BDF, and then ran six strand fiber over to the antennas.

From the BDF, Cal Coast wired the fiber up walls and ceilings to six IDFs, one on each of the building's six upper floors. The BDF is not aligned or stacked with the IDFs. However, the IDF on the first floor is stacked with the other IDFs on the higher floors; the fiber is then connected to the other IDFs with riser cables.

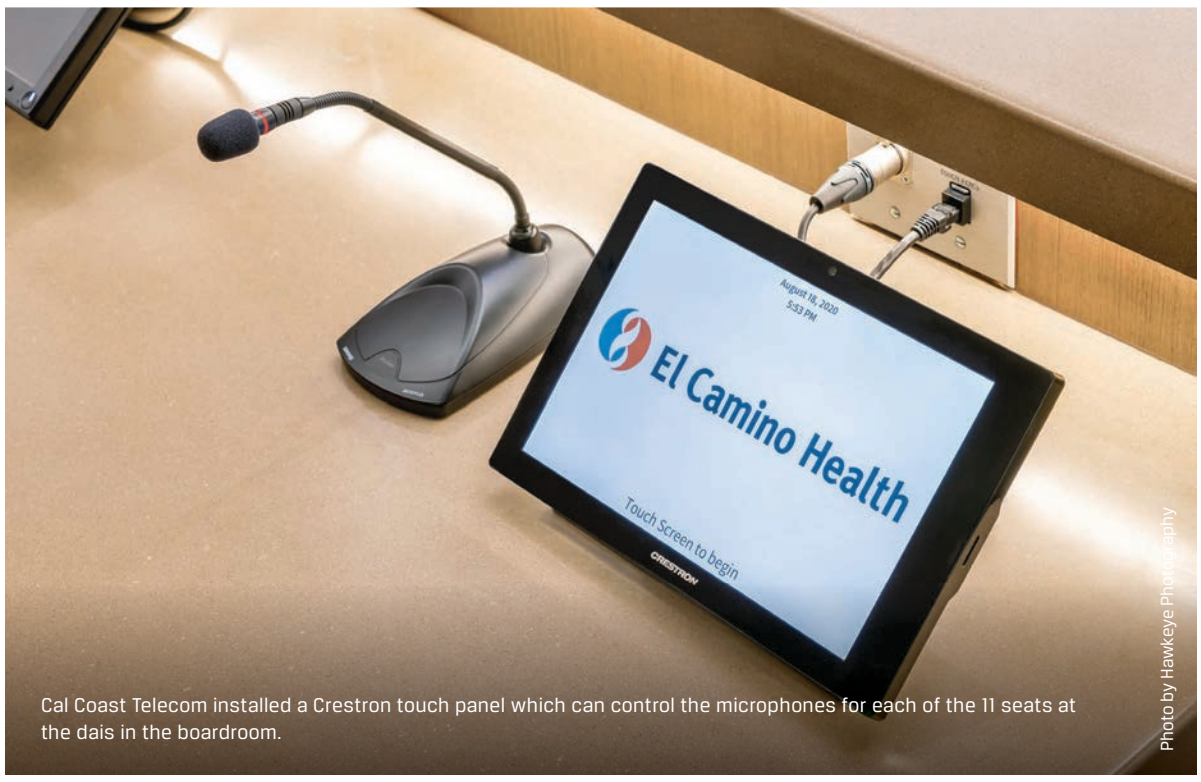
Cal Coast installed 6 antennas on the ground floor, 6 on the first floor, 6 on the second floor, 5 on the third floor, 3 on the fourth, 3 on the fifth floor and 3 on the sixth, also known as the Penthouse.

Cal Coast installed a remote antenna unit or RAU next to each antenna. The RAU is a small (13" x 13") square box mounted on the wall. Cal Coast installed the fiber to this box; the signal goes via a fiber jumper from the RAU to the antenna.

Mitch Fontaine, Project Manager for both the DAS system, and the AV system, said one of the biggest challenges of installing the DAS system was meeting OSHPD standards, which are specific to medical facilities and are mandated by California's Office of Statewide Health Planning and Development (OSHPD). Six technicians from the International Brotherhood of Electrical

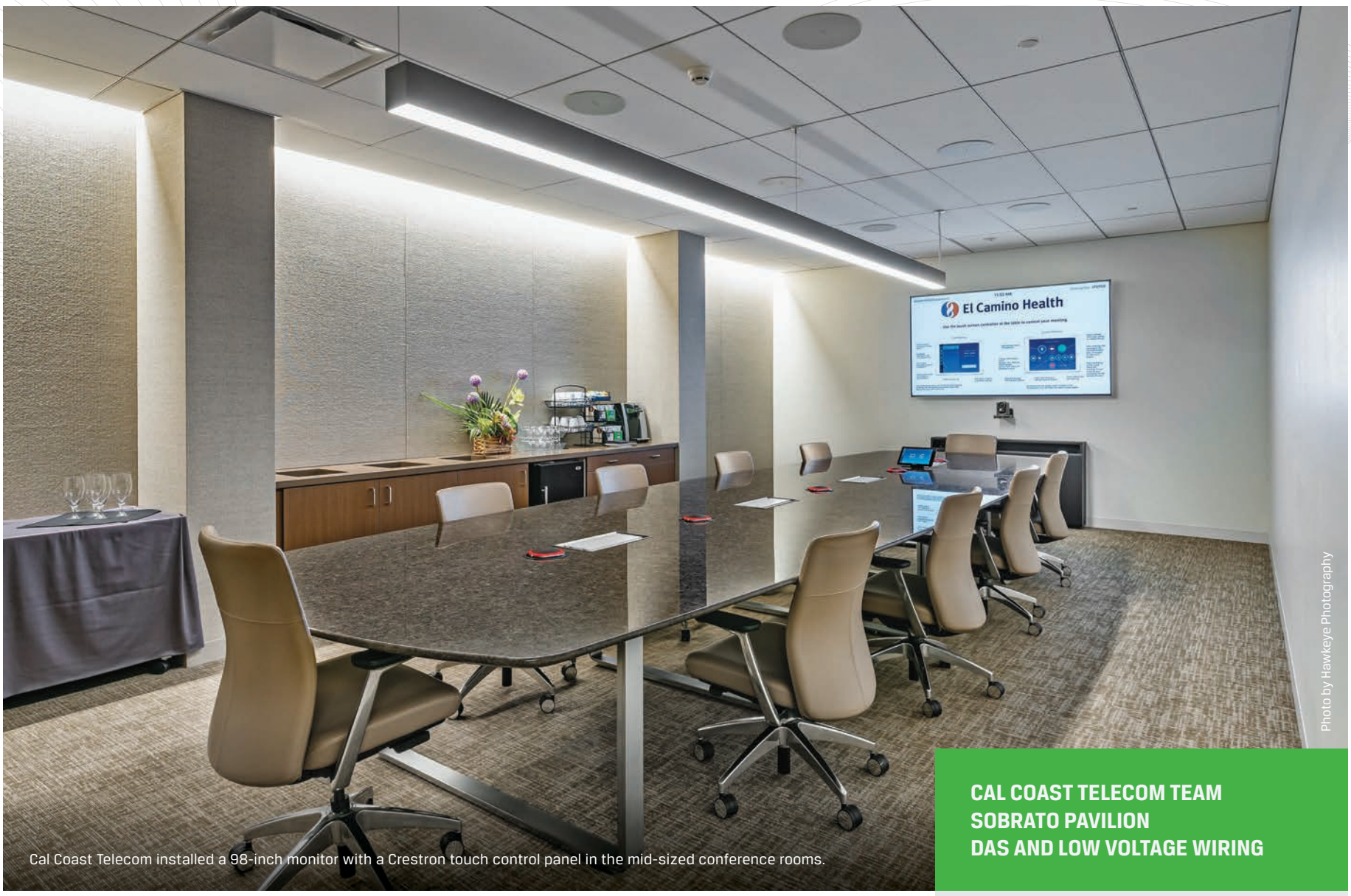
Esteban Martinez checks the voice data terminations in one of the IDFs installed by Cal Coast Telecom.

Photo by Hawkeye Photography



Cal Coast Telecom installed a Crestron touch panel which can control the microphones for each of the 11 seats at the dais in the boardroom.

Photo by Hawkeye Photography



Cal Coast Telecom installed a 98-inch monitor with a Crestron touch control panel in the mid-sized conference rooms.

Photo by Hawkeye Photography

CAL COAST TELECOM TEAM SOBRATO PAVILION DAS AND LOW VOLTAGE WIRING

OWNER:
El Camino Hospital, Mountain View

ARCHITECT:
WRNS Studio, San Francisco

GENERAL CONTRACTOR:
Rudolph and Sletten, San Carlos

ART CURATOR:
Andrea Schwartz Gallery, San Francisco

COMMUNICATIONS CONTRACTOR:
Cal Coast Telecom, San Jose
Rick Radonich, RCDD, Project Executive.
Mitch Fountaine, DAS and AV Project Manager
Matt Fardig, Project Manager (El Camino Hospital)
Frano Vrankic, Structured Cabling Project Foreman
Matt Casas, Audio Visual Project Foreman
Marty Kobaly, Project Engineer (El Camino Hospital)

PROJECT TECHNICIANS:
International Brotherhood of Electrical Workers (IBEW) Local 332, San Jose
International Brotherhood of Electrical Workers (IBEW) Local 617, San Mateo

Workers (IBEW) Local 332 and IBEW Local 617 worked on the project.

Cal Coast also wired the Public Safety Installation, a special communication system for police, fireman, and first responders so that they can speak by radio within the building and back to their headquarters if there is an emergency.

Included in the project was the installation of 21 emergency response antennas beginning with a donor antenna that lives on the roof. It runs on 700 megahertz and points to a UHF VHF antenna that is connected to the local fire department in Mountain View.

The donor antenna sends and receives the radio connections and pipes them down to a building distribution amplifier on the 7th floor, situated in a fire rated room. From there the cabling runs back from the public safety antennas installed on the lower floors to the fire rated room. Cal Coast used half inch coaxial cable for the public safety installation.

Cal Coast also installed the structured cabling and the wireless access points throughout the building. Because there are many individual medical offices in the building there are a plethora of access points including: 20 on the ground floor, 26 on the first floor floor, 30 on the second floor, 46 on the third floor, 19 on the fourth floor, 7 on the fifth floor, 4 on the sixth floor and 21 in the garage.

All of the voice data outlets for the building were installed by Cal Coast. Because of the number of tenants occupying the facility, Cal Coast installed specific suite cabinets on the 5th and 6th floors,

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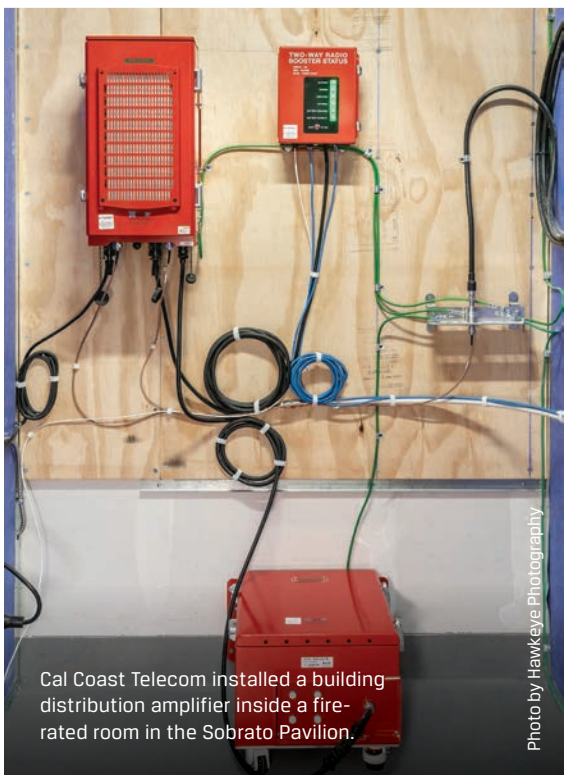

Cal Coast Telecom installed a building distribution amplifier inside a fire-rated room in the Sobrato Pavilion.

Photo by Hawkeye Photography

Cal Coast installed a donor antenna on the roof of the Sobrato Pavilion as part of the public safety installation.

Photo by Hawkeye Photography

Intrepid Electronic Systems installed the fire alarm system for five modular buildings including sleeping facilities.

Photo by Hawkeye Photography

Intrepid Electronic Systems Installs Fire Alarm System For Fremont Navigation Center

Intrepid Electronic Systems has been tapped by the City of Fremont to install a fire alarm system for the homeless at a temporary housing navigation center (HNC) in Fremont.

The center, composed of five modular buildings, is constructed in the rear fenced off parking lot of Fremont City Hall. The 5 modular buildings contain areas for sleeping, showering, and cleaning, and provide a quick and cost effective way to get people off the street. The idea of temporary housing centers has become increasingly important with the spread of COVID-19 among at risk communities. The center, which will open later this year, is funded through state, county, and local funds and can serve up to 90 homeless people a year.

Intrepid Electronic Systems worked directly with the city of Fremont to design the fire alarm system, a Notifier

Intrepid installed pull switches and visual alerts as part of a comprehensive fire alarm system for the Fremont Navigation Center.

Photo by Hawkeye Photography

Intrepid installed heat and smoke detectors to communicate on a network between the modular buildings.

Photo by Hawkeye Photography

In addition to the fire alarm work that Intrepid Electronic Systems performed to keep tenants safe, the facility includes picnic and recreational spaces.

Photo by Hawkeye Photography

NFS-320 system that is scalable and cost effective, created to work well within all of the modular buildings. The design had to be completed in a week due to the fast track nature of the job. The budget was under $50,000.

The main fire alarm panel is located in the administrative office, one of the 5 modular buildings. The system is wired to devices located in the 4 other buildings, including two buildings used for sleeping areas, a third used for laundry, shower and bathing, and a fourth used as a transition/community room.

A data network communicates to all of the devices, which are located in each of the modular buildings. The devices include heat detectors (in the laundry), smoke detectors and pull stations as well a tamper and flow switch, which monitors the sprinkler system.

A SLC (signaling line circuit) cable connects the building with the administrative office, so that the smart devices can send signals back to the main fire alarm panel. If there is an incident, the devices go off and there are audio and visual alerts. If an alert sounds at the main fire panel, a signal is sent off site to a monitoring station, and the fire department is alerted.

Low frequency devices are located in the two buildings used for sleeping areas, to help wake up residents if there is an incident. Low frequency devices are used because the fine pattern on a low frequency device is easier for the human ear to hear while asleep. The low frequency device looks like a horn strobe.

The notifier system meets the

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Intrepid installed the main fire alarm panel that communicates between all detectors and devices inside the modular administration building.

Photo by Hawkeye Photography

The temporary housing center became increasingly important due to COVID-19, creating a narrow window of time for Intrepid to install the fire alarm system.

Photo by Hawkeye Photography

In addition to the fire alarm system installed by Intrepid, the government-funded facility includes storage for tenant's belongings.

Photo by Hawkeye Photography

Intrepid Electronic Systems Installs Fire Alarm System For Fremont Navigation Center

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requirements of the California Building Code because of the number of residents that are sleeping within the structure at any given time.

Stephen Zimmerman, Senior Project Manager, served as the lead on the project. Zimmerman, who holds a NICET level certification, is studying to be a fire protection engineer. Two senior technicians, Mike Walden and Johnny Ponce, also worked on the project. They are from the International Brotherhood of Electricals Workers (IBEW) Local 332 and IBEW Local 595. Smith and Sons, Fremont, was the electrical contractor.

While installing the system, Intrepid Electronics maintained COVID-19 restrictions on the site, including social distances and frequent deep cleaning.

For more information about Intrepid Electronic Systems and its services, contact Kurt Brinkman, CEO, 888.826.3040 or kurt@intrepidelectronic.com.

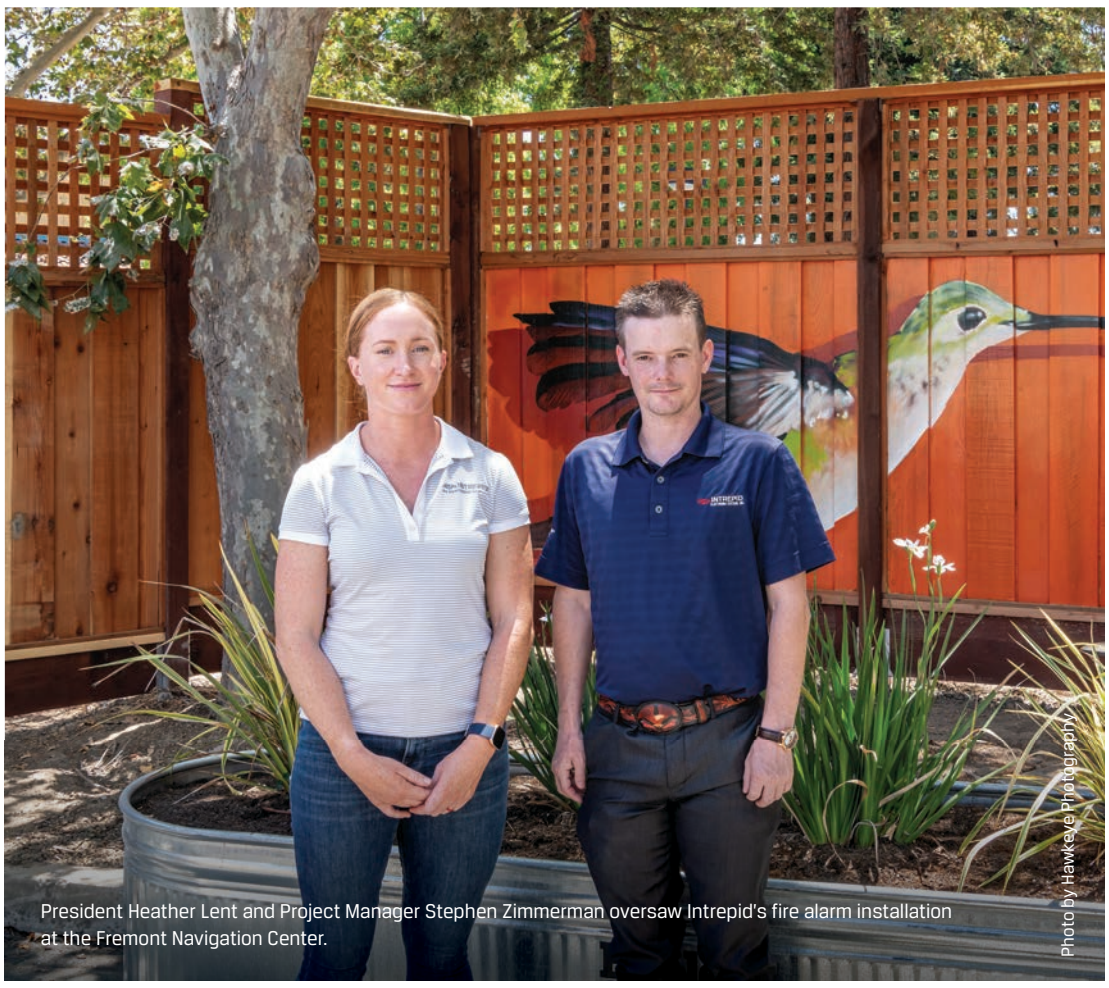
INTREPID ELECTRONIC SYSTEMS TEAM LIST
CITY OF FREMONT HOUSING NAVIGATION CENTER

CLIENT:
City of Fremont

ELECTRICAL CONTRACTOR:
Smith & Sons Electric, Fremont

FIRE ALARM CONTRACTOR:
Intrepid Electronic Systems, San Jose and Crockett, CA
Kurt Brinkman, CEO
Heather Lent, President
Stephen Zimmerman, Senior Project Manager
Mike Walden, Senior Technician
Johnny Ponce, Senior Technician
Jenny Macias-Ramirez, Apprentice

TECHNICIANS:
2 senior technicians and an apprentice from the International Brotherhood of Electrical Workers (IBEW) Local 332, San Jose and IBEW Local 595, Dublin



President Heather Lent and Project Manager Stephen Zimmerman oversaw Intrepid's fire alarm installation at the Fremont Navigation Center.

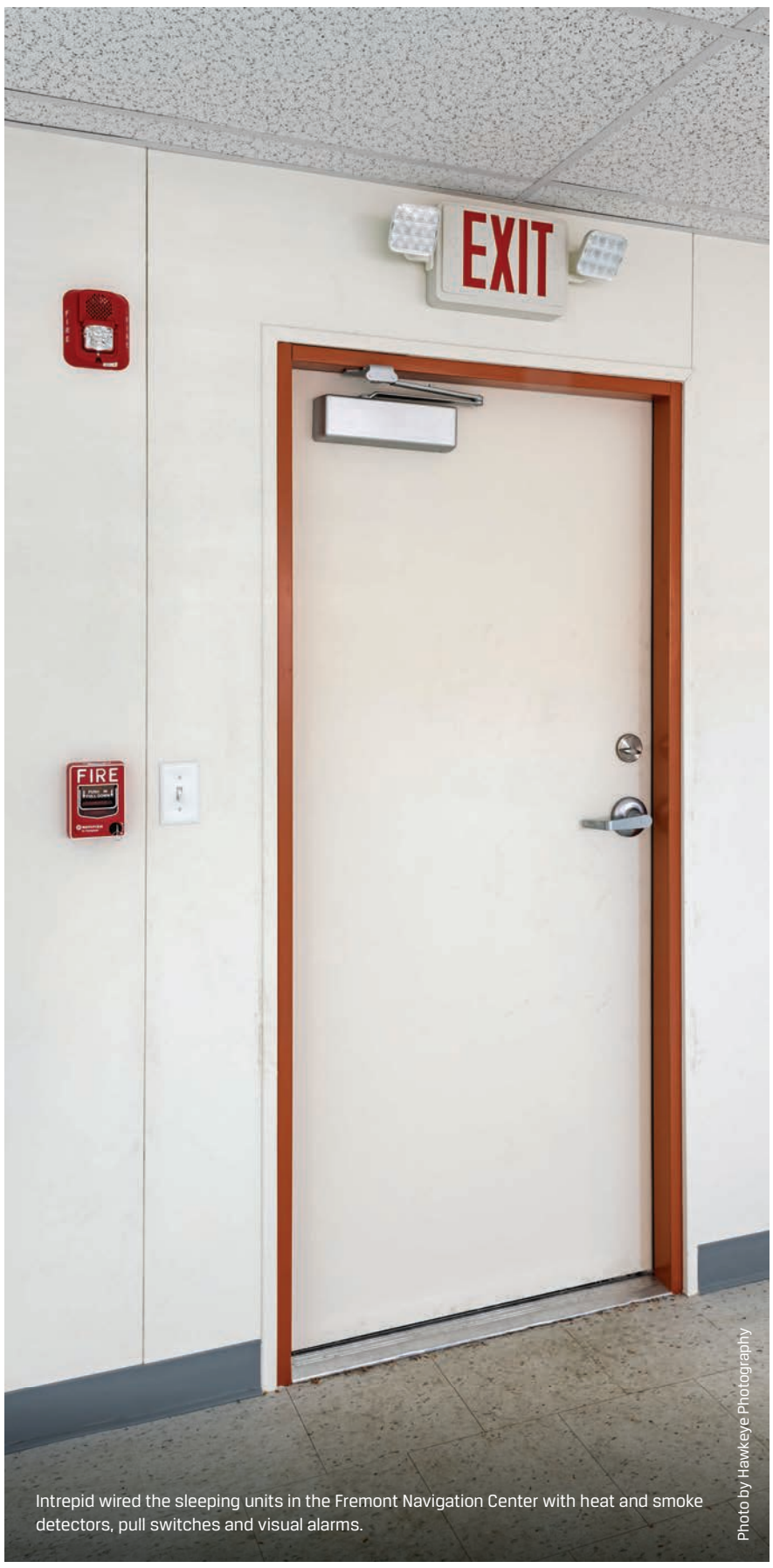
Photo by Hawkeye Photography

In addition to keeping tenants safe via Intrepid's fire alarm system, the facility features recreational spaces complete with murals by local artists.

Photo by Hawkeye Photography

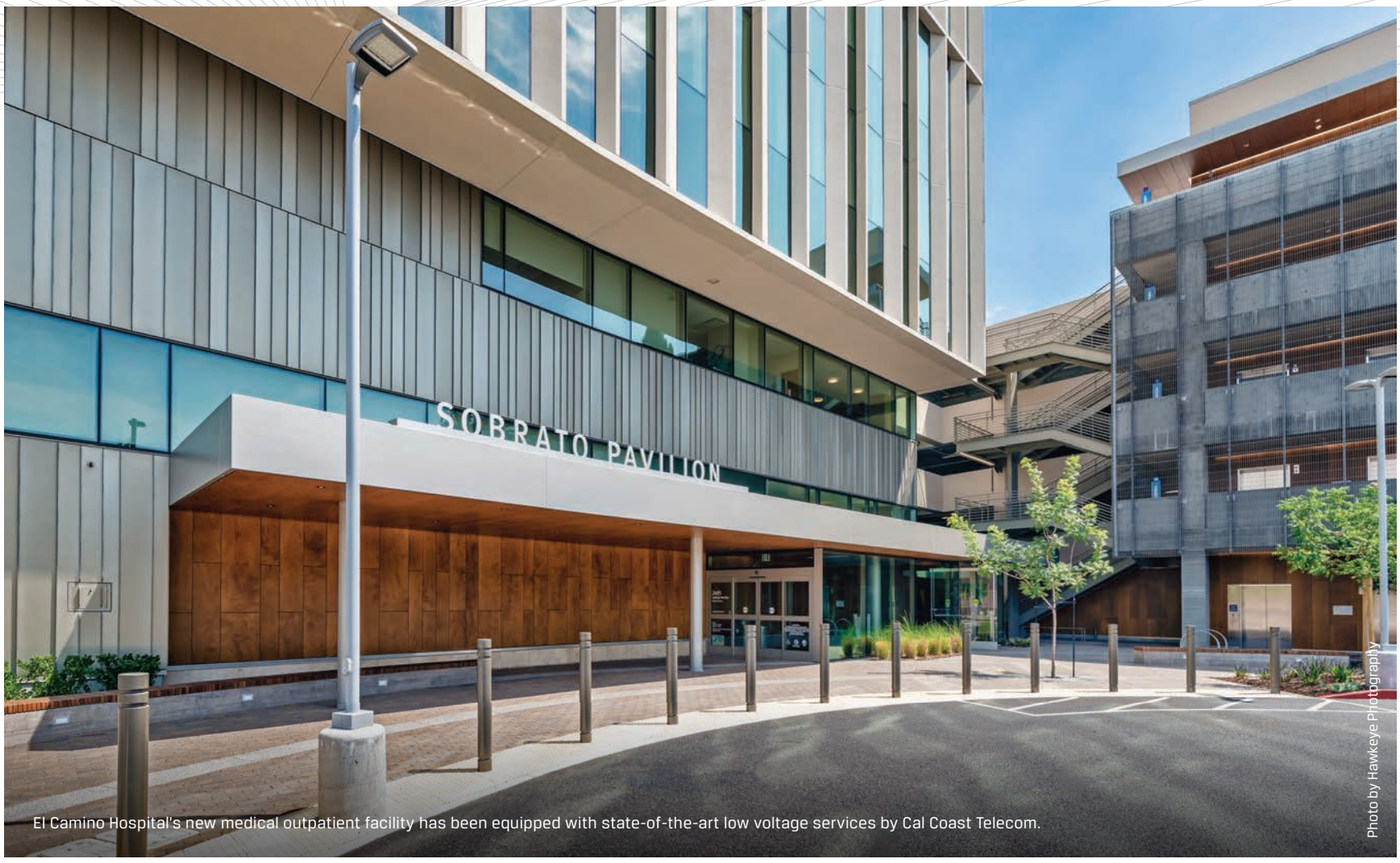
The fire alarm devices at each modular building at the Fremont Navigation Center communicated independently with the network installed by Intrepid Electronic Systems.

Photo by Hawkeye Photography



Intrepid wired the sleeping units in the Fremont Navigation Center with heat and smoke detectors, pull switches and visual alarms.

Photo by Hawkeye Photography



El Camino Hospital's new medical outpatient facility has been equipped with state-of-the-art low voltage services by Cal Coast Telecom.

Photo by Hawkeye Photography

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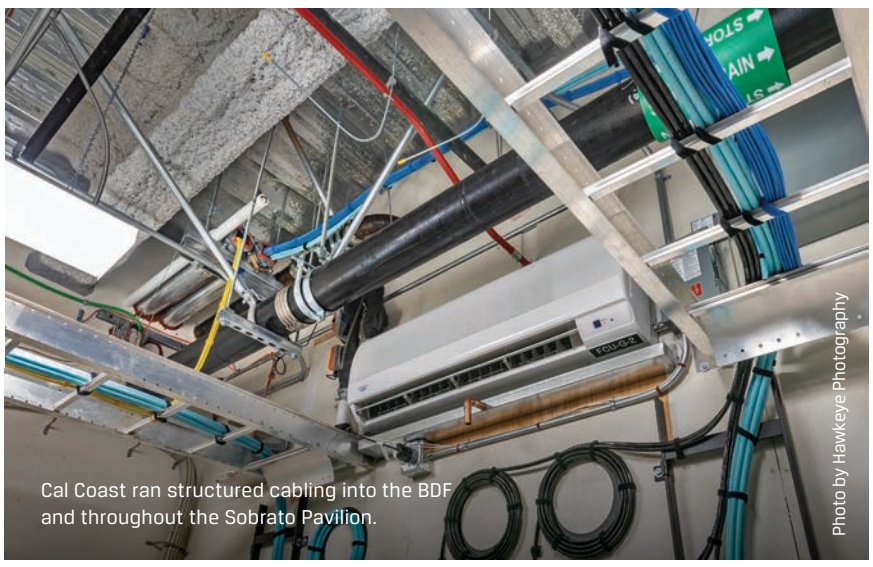
so that each suite has a designated cabinet, and thus private access to the equipment.

Cal Coast Telecom also installed AV systems in several rooms throughout the facility including conference rooms of various sizes, training rooms, a boardroom, and digital signage and a video wall at the main entrance. Cal Coast worked with El Camino Health to develop standards for each room type featuring Crestron control and Shure microphones integrated into Zoom Room systems.

In the boardroom there is a dais that features positions for eleven board members to sit. Each position is assigned a microphone and a 20" display mirroring the presentation that is on the 169" projection screen behind them. It features a Crestron control system that allows control of the customized moderation system for those seated at the dais. The boardroom is divisible and there are dual 85" displays and cameras that can be utilized for conferencing and various meeting needs.

For more information about Cal Coast Telecom and its services, please contact Todd Young, sales manager, at tyoung@cctcom.net or call 408-454-7227.



Cal Coast ran structured cabling into the BDF and throughout the Sobrato Pavilion.

Photo by Hawkeye Photography

A custom-made console in a medium sized conference rooms houses the AV equipment.

Photo by Hawkeye Photography