JOB SITE
**INSIGHTS**

# CGC DELTA REMEDIATION

## CASE STUDY

### *AT A GLANCE*

#### PROJECT DETAILS

**Project start date:**
November 2020

**Project end date:**
January 2021

**Project location:**
Delta, British Columbia

#### CHALLENGES

- A fire broke out in the central office of this completed greenhouse complex.
- PCL was contracted to complete renovations and repairs between November 2020 and February 2021.
- Because the greenhouse structures are made of glass, which is not a good insulator, air temperatures inside had to be maintained to keep snow off the roofs.
- A snow load, along with a freeze-thaw cycle, could cause the roofs to crack and/or collapse.

## THE PROJECT

After a fire in their Greenhouse, PCL was contracted by Canopy Growth Corporation (CGC) for emergency response remediation and cleanup, as well as the installation of temporary electrical and mechanical services.

## THE CHALLENGE

The main challenge was keeping the two million square feet across four greenhouses warm enough so snow did not accumulate on the roofs during the remediation and cleanup. Any snow load on the glass roofs, coupled with a freeze-thaw cycle, could result in cracks in the glass and/or a complete collapse of the roof.

This had to be done while also keeping costs in line. Completely heating the greenhouse structures could mean thousands of dollars a day in natural gas costs, which was not feasible.

## THE SOLUTION

JSI technology and sensors let the project team know when the temperatures in the greenhouses were dipping too low to keep snow off the roofs. The sensors were set to send alerts as temperatures approached 0°C — first at 5°C, then 3°C, then 0°C. If an alert was received, heaters could be activated to bring temperatures back up.

# CGC DELTA REMEDIATION
CASE STUDY *CONTINUED*

## SPECIFIC FEATURES USED ON PROJECT

Each of the four greenhouses had a gateway and 10 temperature sensors, all powered by JSI. The sensors also measured humidity and air pressure. The data was transmitted to the JSI web portal using cellular data.

## HOW DID THE PROJECT TEAM INTERACT WITH TECHNOLOGY?

This technology was particularly useful around Christmas 2020, when a major snowfall hit the Delta area. Sensor alerts allowed the team to monitor conditions and avoid any structural damage to the greenhouses.

At the end of the project, the team sent the data collected through the sensors to the clients as documentation that site conditions were properly maintained.