The GRIDSMART SYSTEM in the EXTREME WEATHER conditions of Laramie, WY.

THE SETUP

The City of Laramie sees more than 64 inches of snow per year, three times the national average. Situated perfectly between the Great Basin and plains in southeast Wyoming, Laramie also ranks as one of the windiest cities in the state. These extreme conditions created problems for the city's radar detection system, which ultimately resulted in a loss of detection. Additionally, construction and weathering on the community's roads led to many inductive loop failures, requiring time-consuming and costly repairs.

City managers in Laramie knew these traffic infrastructure failures could lead to potentially dangerous situations for road users. The managers teamed together with local traffic engineers to search for alternative detection systems that would overcome these environmental obstacles while staying in line with their budget.

THE SOLUTION

The GRIDSMART System, a single-camera video detection system that delivers horizon-to-horizon tracking, is proven in extreme weather conditions. The SMARTMOUNT Bell Camera uses thermostatically controlled heaters and forced air circulation to prevent fogged lenses and maintain visibility. Every camera is flooded with argon gas to evacuate the internal workings of moisture and create a positive-pressure, airtight seal. Each camera is then submerged in water for 24 hours to ensure it is impermeable. Finally, each SMARTMOUNT Bell undergoes cold testing down to -40 degrees Celsius, proving it could endure even Laramie's most frigid winters.

In addition to snow and ice, Laramie's infrastructure is put to the test with winds. Its geographic location in relation to the jet stream and high elevation causes an average annual wind speed of over 21mph (according to usa.com). GRIDSMART performed advanced wind tunnel testing on the GRIDSMART System with a third-party laboratory and concluded that the hardware can withstand hurricane-force winds in excess of 150mph. These test results were more than enough to answer the technician's questions about how GRIDSMART would operate in Laramie.

Unlike the radar devices Laramie had in their intersections, the SMARTMOUNT Bell's unique design, with a downward facing lens, ensures the camera is better protected from all elements. The ability to perform in treacherous weather set it apart from other above-ground detection options.

Laramie traffic technicians were able to install a GRIDSMART System in less than three hours, reducing prior detection installation times by 15 percent and saving the city more than $24,000 in labor costs. With GRIDSMART's proven ability to perform in hazardous conditions and reduce installation times for technicians, the GRIDSMART System is the video detection standard for the City of Laramie.

QUALITY TESTED

-40˚F (-40˚C)
COLD

130˚F (54˚C)
HEAT

150MPH (241KMH)
WIND