

Case Study: Mobile Surveillance



Site Secure are security experts in Arizona who specialize in mobile surveillance as well as live remote monitoring for perimeter protection of construction sites, residential areas, events, critical infrastructure, public spaces and vacant land.

They have completely autonomous mobile surveillance towers that illuminate, record, and protect vulnerable vacant areas without the need for a security guard. Site Secure builds all towers in-house, meticulously fabricating every part and choosing the latest and greatest technology. Site Secure is contracted to assist several police forces, city government branches, and even to protect election ballot boxes.

The Challenge

Site Secure was given the challenge of protecting the perimeter of a new build-to-rent development, which are homes purpose-built to be rented, rather than sold to home buyers. In this site, active construction of small single-family homes was underway. The area was vulnerable to theft, vandalism and robberies, as unmonitored construction sites are a hot spot for those seeking to take advantage. The insurance company involved with the development required 100% security coverage for the client to be able to proceed; they needed robust and dependable security on site. Site Secure required excellent video quality in both in daytime and nighttime with high accuracy of up to 175 feet in distance.



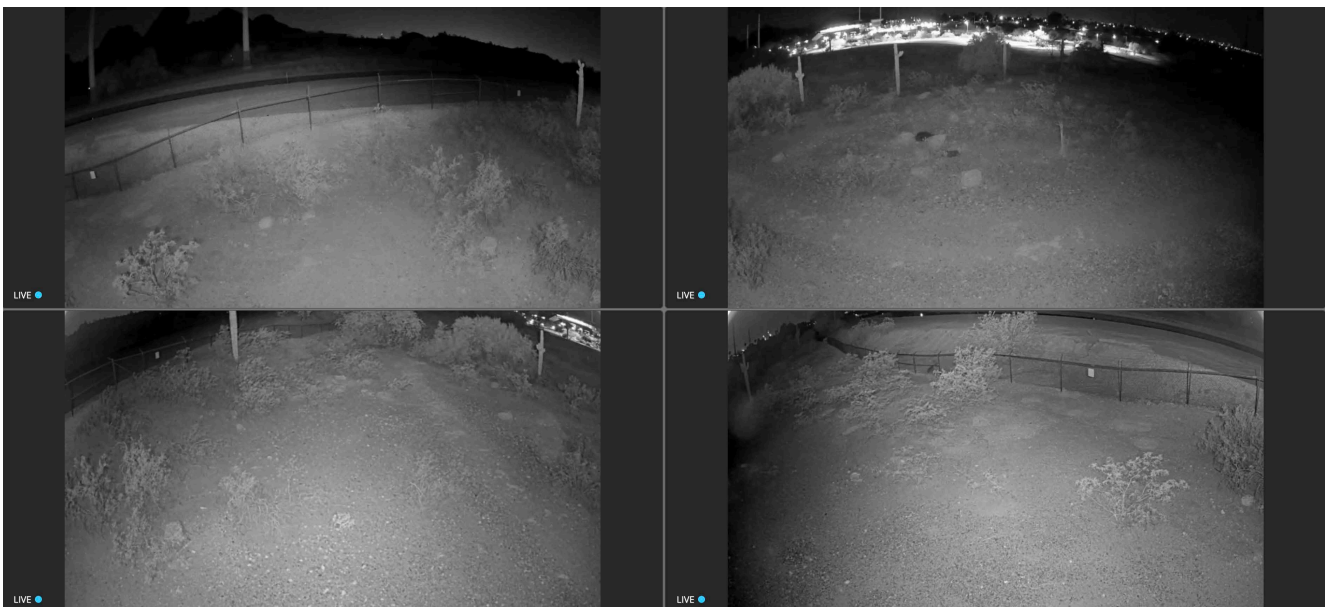
The Solution:

Site Secure chose to outfit their 12 towers around the site with 2 Raytec InfraRed illuminators per tower. 10 VAR2-i4-1's and 14 VAR2-i2-1s. The VAR2-i2-1 illuminates up to 177 feet in distance and the VAR2-i4-1 up to 256 feet, each at the standard factory lens of 35 degrees. The additional distance coverage was a crucial part of the towers and the problem they needed to solve. Raytec's long range infrared illuminators were paired with Hanwha cameras, enabling Site Secure's surveillance towers to be able to see everything on the site with around the clock surveillance, and comprehensive live remote monitoring.

The surveillance towers are equipped with solar panels and the power is run entirely off solar and battery power, therefore Raytec's low-voltage illuminators were also a terrific choice in that regard; low consumption with high light output means great efficacy.



View from the mobile surveillance tower at night without lighting



View from the mobile surveillance tower at night with Raytec IR, allowing visibility to the camera along the entire perimeter as well as the road.

Why Raytec?

- **Long Range:** Raytec was Site Secure's ideal partner for this project due to the industry leading long-range abilities of Raytec's infrared illuminators. The distance was an integral part of the application and a problem only Raytec could solve.
- **High Efficacy:** The low consumption of Raytec's IR illuminators enables the mobile surveillance towers to run completely on solar power and battery. Illuminators that have a higher power draw would not be suitable for this type of application.
- **Durability:** Raytec's illuminators are rated IP66 –fully suitable for outdoor installations. They are robust units immune from water ingress and have a 5 year warranty – making Raytec a solid choice for outdoor mobile units.
- **Integration:** Raytec's intelligent IPPOE range of illuminators integrate with most VMS systems, making it easy to control the lamps in groups, triggered by events and commands from the VMS.
- **Automatic Illumination:** The in-built photocell (if not programmed with a different trigger) will automatically turn on the lamp when the photocell detects darkness, and shuts it off when light is detected. In the case of the Site Secure application, this works tremendously well, as not a moment of camera footage is missed.



VAR2-i2-1



VAR2-i4-1