

Site 20/20 leverages NEWCOM and Taoglas for technology upgrades



BACKGROUND

The Site 20/20 Guardian SmartFlagger enhances safety and efficiency in traffic control at construction sites. Taoglas selected NEWCOM as the system integrator to upgrade the existing antennas and seamlessly integrate them into the hardware. This upgrade aims to meet the evolving demands of traffic management and reduce risks to human flaggers.

THE CHALLENGE

The Site 20/20 Guardian SmartFlagger faced challenges that hindered its effectiveness in reliable connectivity for roadside workers on construction sites. Originally equipped with outdated technology, the product struggled to meet the growing demands of connectivity, resulting in limited uptime and reduced reliability during operation. The internal antennas restricted the capabilities of the Guardian SmartFlagger, compromising both its performance and the safety of work zones.

Site 20/20 required a robust communication solution capable of functioning effectively in diverse environments—from sparse rural areas with weak network signals to noisy urban settings with high levels of interference. Ensuring consistent and reliable connectivity in such varying conditions was critical for enhancing traffic management efficiency while minimizing the risks associated with human flaggers.

CUSTOMER PROFILE

Site 20/20 empowers companies to create safer job sites, foster efficient work crews, and optimize resource management.

Site 20/20 was in need of an antenna that would increase connectivity in order to improve uptime and reliability of Guardian SmartFlagger - an Automated Flagging Assistance Device (AFAD).

INDUSTRY

Automation Machinery
Manufacturing

CHALLENGES

- Increase connectivity, uptime and reliability
- Finding an antenna that fit product properly within specs needed
- Meet upgrades and troubleshoot in a timely manner

A comprehensive approach was necessary to address these challenges. This included upgrading the existing technology to modern standards, ensuring reliable communication and signal strength, and prioritizing the safety of workers while maintaining cost efficiency in work zones. NEWCOM recognized the importance of tackling these issues head-on to optimize Site 20/20's operations, enhance safety measures, and deliver a sustainable solution for their connectivity needs.



“ We were having troubles that were affecting performance which filtered through our entire relationship with our customers. Taoglas had a great solution and NEWCOM had the support that has greatly improved our product. We look forward to continuing our work in improving our GSFs and our entire suite of safety technology for the traffic control industry.”

- Mike Book, Site 20/20 Vice President of Production

PROPOSED SOLUTION

NEWCOM, an authorized partner of Taoglas, acted as the trusted service provider to deliver a comprehensive range of connectivity solutions to help Site 20/20 enhance safety and cost efficiency in work zones. This collaboration ensured the on-time delivery of the correct parts and seamless integration of the solution into Site 20/20's Guardian SmartFlagger. These solutions provided reliable and consistent control of the flaggers from a single position without concerns about signal degradation.

The solution incorporated key Taoglas products, including the AA.180 Magnetic Mount Low Axial Ratio Dual-Pin GNSS Patch Antenna and the Olympian G30 4G/3G/2G LTE Permanent Mount Antenna with a 1m RG-316 cable. These components were selected to support diverse configurations and allow for the simultaneous use of cellular and GPS signals, guaranteeing continuous and robust functionality.

Key enhancements:

- **Enhanced Worker Safety:** Workers can operate away from oncoming traffic, reducing exposure to dangerous work zones.
- **Improved Video Surveillance:** Strong and reliable signal strength supported high-quality video monitoring, improving driver compliance.
- **Real-Time Communication:** Instant alerts ensured swift communication to address any intrusions or issues in the work zone.
- **GPS-Based Traffic Awareness:** Reliable GPS connectivity enabled real-time location-based services, providing essential data for traffic management and operational efficiency.



FUTURE PLANS

Site 20/20 is committed to building on this foundation of enhanced connectivity and operational efficiency. Plans are in place to double the number of installed antennas, further extending reliable coverage and ensuring seamless communication across even more work zones. Site 20/20 aims to explore advancements in IoT integration and real-time data analytics to enhance traffic management and worker safety further. Site 20/20 is poised to stay at the forefront of innovative solutions for construction site connectivity and safety by leveraging emerging technologies and continuing its collaboration with NEWCOM.

Technology
Solutions

for Today

with Tomorrow

in Mind

SUMMARY

The collaboration between NEWCOM and Taoglas transformed how Site 20/20 manages connectivity for its Guardian SmartFlagger devices. Site 20/20 achieved improved uptime, enhanced safety for workers, and seamless communication in both rural and urban work zones by upgrading outdated technology with reliable antennas and delivering tailored solutions on time. This modern technology has optimized operations, reduced risks, and ensured cost-efficient traffic management.

OUR PARTNER



“ We were thrilled to work with NEWCOM to help Site 20/20 bring their Guardian SmartFlagger AFAD to market. Site 20/20 needed a unique solution that could handle both cellular and location data, and we were able to design and build a custom device that perfectly fit their needs. NEWCOM provided excellent support throughout the process.”

- Bryan Young, Taoglas
Channel Sales Manager