



SOLUTION NOTE **CONSTRUCTION**



Construction Connectivity Anywhere

Wireless Infrastructure for Improved Predictability, Productivity, and Profitability

The Challenges

Construction contractors nowadays need 24/7 connectivity to monitor site safety and to gain access to the latest BIM files. Good governance over all IT systems for IoT technologies is an increasingly important component to complete projects on time.

Leaders in the construction industry survive in the world of “**high risk, high reward**” by driving projects in an efficient, safe and profitable manner. According to a 2019 **KPMG Report on Global Engineering & Construction Practices**, innovative leaders are proactively using technology to resolve their challenges in workforce productivity, labour shortages, and staying resilient to the industry's shifts and increasing competition. Over 90% of the industry leaders have technology vision and roadmap, 69% have integrated project management reporting systems, and 76% focus on technology and innovation to attract and maintain new recruits.

High-bandwidth, low-latency demanding applications such as HD video surveillance, the use of numerous IoT-based smart helmets and gears and robotic automation are all being used on-site to collect live-data for video analytics, assessment on project progress, and alerting workers of safety measures. Without a cost-efficient and flexible solution to maintain connectivity throughout the site, site managers are finding it difficult to make the most out of their technology investments available in the market today.

The Solution

The **Smart Wireless Mesh** network by Anywhere Networks plays a core part in providing the connectivity required for improving collaboration with all parties for project efficiency. It is the backhaul IT network connecting the challenging Video Surveillance system, the mission-critical Access Control, versatile LoRa Wan IoT gateways, network audio systems and just any other IT system on the site.

The wireless mesh forms a web of connectivity across the entire construction site. This guarantees a robust and redundant 24/7 connectivity. The IT professionals are given a unified, fully secured network instead of a plethora of various networking systems to maintain and that operates in silos.

In contrast to a Private LTE that requires a massive infrastructure investment, a wireless mesh network is more cost-efficient plus easier and faster to deploy. And the confidential corporate data is put on a public telco network with a 4G or 5G connectivity while our **Smart Wireless Mesh** network like an enterprise intranet is corporate-owned and fully encrypted with AES-256 end-to-end, for maximum Cybersecurity.

Project Managers

Project Governance
BIM Management

IT Managers

IT System Management
Video Surveillance
Video Analytics
IoT Data

Safety and Security

Site Access Control
Safety Compliance

Environment and Regulations

Noise Pollution
Air Pollution
Gas Leakage Detection



The Benefits

Anywhere Networks is the **most cost-efficient** network connectivity alternative for the dynamic and demanding construction industry. Compared with a conventional fibre cable infrastructure, a Smart Wireless Mesh network has a breakeven cost after 3 months of operation given all the maintenance required in keeping the wired network functional.

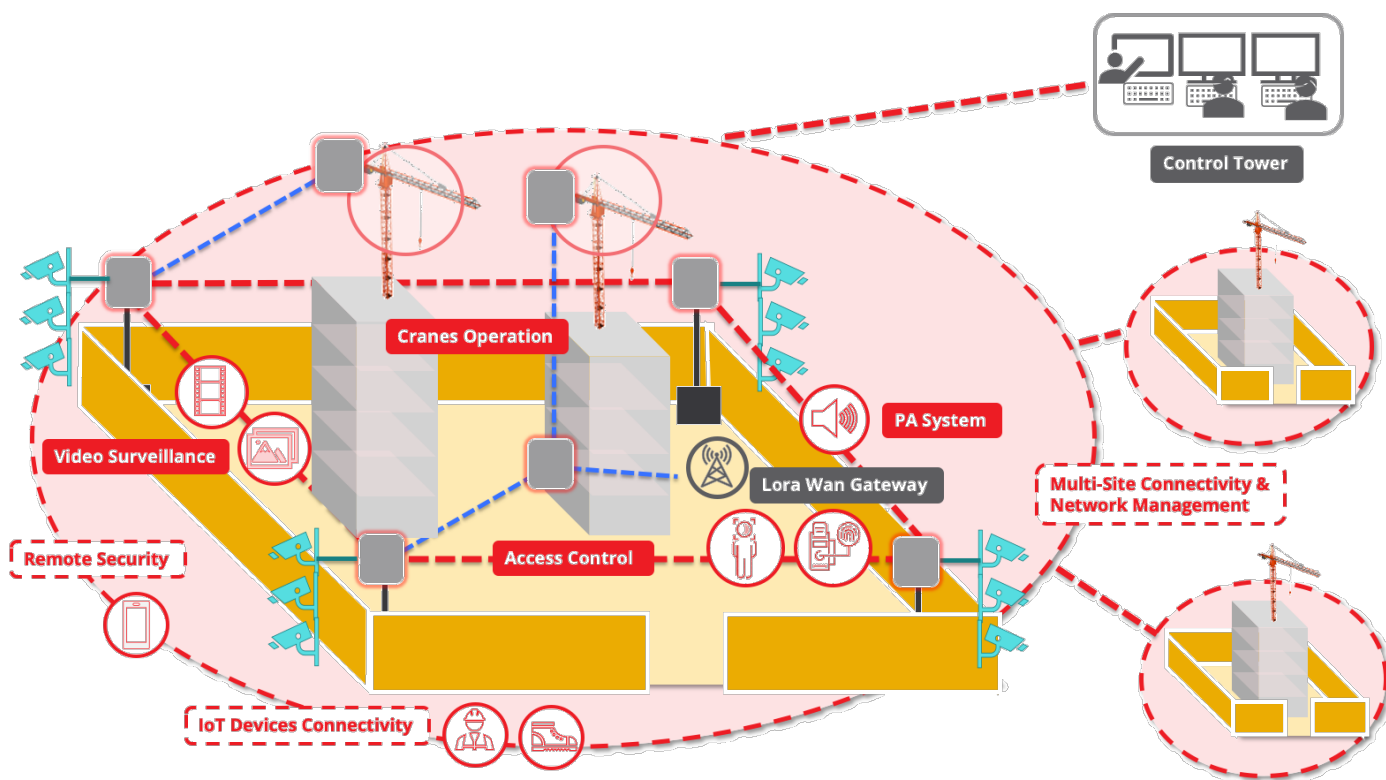
Due to the rapid deployment capabilities of the Wireless Mesh Network, it eliminates the time-consuming trenching and other civil works. To achieve a fully operational network infrastructure, the **timesaving** is in many cases as much as 40%. That is, the wireless network can be deployed in almost half the time of installing a wired network.

With its built-in redundancy, fail-over and self-forming connectivity technology, the **Smart Wireless Mesh** network ensures a **non-interrupted connection** throughout the project lifecycle for optimum uptime and instant communication. The wireless network can easily be extended as the building grows taller or adapts to new needs as the project evolves.

Apart from the cost-saving and time-saving advantages of wireless network infrastructure, it is also the **most flexible connectivity** for the construction site. The Smart Wireless Mesh not only connects Video Surveillance Monitoring, Access Control Management, LoRa Wan IoT Gateways, and Audio Networking but also connects the moving cranes and the buildings on the sites seamlessly, maximizing the return in the Connected Construction.

Anywhere Networks – A truly Smart Wireless Mesh network designed for the Construction Industry.

The **Anywhere Networks** for the **Connected Construction Sites**



High-Capacity Throughput • Security • Automatic Load Balancing • Flexible Topology Design
Redundant Smart Routing • Rapid and Easy Deployment