CASE STUDY- WHITTON STATION
Modern Methods of Construction

TOP: iSIP's Panels erected

MIDDLE: Miimising Disruption

MIDDLE: Roof Cassettes installation

BOTTOM: Station Complete

Modular construction ensured Whitton Station was rebuilt and fully operational in time for the 2015 Rugby World Cup. As a critical gateway for rail passengers attending Twickenham Stadium, efficient methods of construction was paramount.

We met the critical time constraints using the innovative i-SIP building system developed by our sister company Innovare. The high performing product saved 5 weeks on the programme enabling the station to be reconstructed in just 3 weeks of on-site work.

Network Rail and their passengers reaped the benefit of our rail expertise and off-site manufacture which minimised disruption and provided a new station fitting for this world class event.

Efficient Design

To minimise impact and met the deadline, the £3m upgrade works were split into separate phases. The initial focus for the World cup was the station entrance with a large welcoming booking hall, retail unit and toilet facilities, which were completed on time. Subsequently the platform improvements, access footbridge and lift were completed.

Network Rail required a robust fast to erect design and they demanded meticulous planning to prevent disruption to services. The use of Level 2 BIM Model facilitated these demands. Valuable time was saved through the merging of M&E, Civils and Building design information into one federated model. Trade conflicts became visible and were resolved very early before they impacted on fabrication. This meant the on-site erection went without a hitch.

iSIP's Optimises Programme

Innovare's high performing i-SIP building system ensured the structure was watertight within one week compared to the traditional 8 weeks. The structural insulated panel solution provided a thermally efficient ticket office, which could be built in a matter of days, minimising the impact to passengers.

"Flatpack" on-site assembly facilitated quick, simple erection and required less upfront design work than with an all-out volumetric solution, and overcame the logistical constraints of transporting and installing an intact building. Day time installation eliminated night time disturbance and the small manoeuvrable panels only required a small on-site team in this restricted high street location

Efficient productivity ensured we went from bare floor slab to a structural building with internal walls in just two weeks. With the final roof parapets and waterproofing completed, programme gains were made as the fit out commenced on the watertight structure as we brought the station to life.

"Our Innovaré colleagues provided great support and having the same 'line of site' and values allowed our teams to form together quickly and perform. Whitton Station shows the potential SIP panel buildings can provide for station redevelopment."

Bruce Williams, Site Manager