

Early contractor involvement benefits SEGRO

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TOP: Winnersh Triangle link road

MIDDLE: Winnersh Triangle roundabout

BOTTOM: Winnersh Triangle approach

Project Overview

Through developing a mutually trusting and open relationship, SEGRO (Slough Estates Group) and Osborne have been developing and delivering highly efficient, innovative project solutions that benefit not only our customers, but the needs of the wider communities. Our proven track record with SEGRO extends over fifteen years and demonstrates that early contractor involvement adds value from the earliest stages of a project.

- At Winnersh Triangle our pre-contract planning included intensive liaison with Statutory Undertakers and our supply chain, enabling us to instigate design refinements that reduced time risks; offered a more predictable outcome throughout the works, and saved our customer £660k.
- At Leigh Road our extensive rail experience allowed us develop an innovative solution for the installation of a new rail over-bridge, efficiently gaining technical approvals through the Network Rail "outside parties" process.

Management of SUs at Winnersh Triangle saves SEGRO £660k

SEGRO appointed Osborne through an ECI procurement route to provide highway infrastructure improvements to support new office developments. The complex junctions links the Winnersh Triangle Business Area, Winnersh and Earley Towns with the motorway network and a park-and-ride facility and the project included the remodelling of four roundabouts, an enhanced slip road from the motorway and dual carriageway upgrades.

Scheme development delivers efficient SU solutions

Working alongside the design and local authority team, the key challenges for the project were established and SU apparatus and complex diversions were identified as a significant risk in achieving the project delivery requirements; including multiple communications providers, water, gas, electricity, street lighting and critical infrastructure such as the back-up IT services.

By arranging SU coordination meetings during the ECI phase we established the particular constraints and requirements for each

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Allan Davey, Project Manager SEGRO:

“
This was, at times, a challenging project but it has been completed very well and to a very good quality. I would like to thank you all and the rest of the team.
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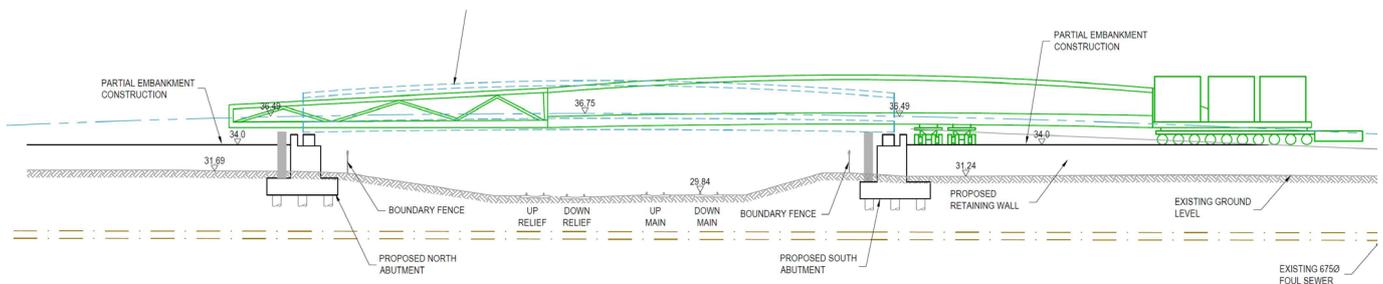
owner and through our proactive and robust management we were able to use a single supply chain partner to undertake the lowering of services for all of the providers, reducing the complexity of the operation and interfaces between stakeholders, in turn producing a cheaper and a timely solution.

Clever phasing minimises disruption to traffic

Recognising that the high volumes of traffic, work phasing and traffic management were critical to a safe delivery with the minimum of disruption, we provided a dedicated Traffic Safety and Control Officer who carried out extensive planning and coordination with the customer and Wokingham Borough Council. We maximised off-peak working, night-working and weekend-working within prescribed lane closures to minimise disruption to the travelling public in this busy commuter and business district.

Stakeholder Strategy awarded “Performing beyond Compliance”

With concurrent major works being carried out to improve Junction 11 of the M4, proactive stakeholder management and communications plans were key to successful delivery of the scheme. We co-located our project offices with the contractor that was delivering the major office project adjacent to our works. This provided excellent communication and coordination of works activities and deliveries that aided both projects and reduced impacts on the local area. We were awarded a Considerate Constructors “Performing beyond Compliance” certificate for our delivery of the scheme.



Innovative bridge design at Leigh Road reduces SEGRO risks

When SEGRO required a new road bridge on the busy Slough Trading Estate to cross the Great Western railway, through our extensive rail expertise we were immediately able to identify the key challenges and identify an innovative design and installation

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solution that will minimise risks to our customer whilst providing efficiency and value for money.

Through developing the design to allow the bridge deck to be fabricated adjacent to its final location and “driven and pushed” into position we have eliminated the need for abnormal possessions, provided savings in the associated possession costs and fees, reduced risks and removed potential disruption to train services.

Sector expertise concludes launch not lift!

Leigh Road Bridge is a major part of SEGRO’s plan for developing the Slough Trading Estate. The line of the new road and bridge is to be built over previously developed land, in the vicinity of numerous commercial premises operating 24/7, live services, and requiring close liaison and interface with Network Rail. Crossrail works are also taking place adjacent to the site in separate fenced working areas.

Safety is always at the forefront of our thinking, and by introducing the methodology into the design process, the most efficient design solution was concluded to be a steel trough which could be launched using transporters to support and move the bridge deck into its final position. We concluded that craning in a new bridge deck would be too high risk and highly weather susceptible, predominantly due to the size and weight of the structure and significant 51 metre skew span.

Bespoke works integral to launch sequence

The installation strategy requires bespoke temporary structural steel nose and tail elements to be attached to the leading and trailing ends of the permanent bridge deck; the tail section supporting counterweight units to provide stability against overturning during the launch. Once in position, the nose and tail sections will be removed, ready for jacking down the main bridge deck onto the permanent bearings.

This is requiring close liaison with our specialist launch partner and designer to develop the overarching launch methodology with critical hold points covering guiding, anchorage and other restraint mechanisms associated with movement and the final positioning of the structure.

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Meticulous planning sensitive to local needs

The launch route from fabrication area has been mapped using 3D computer modelling to protect street furniture and devise a suitable horizontal and vertical alignment. Early involvement with the Council and adjacent businesses and residents is ensuring that local arrangements associated with the required road closures are clearly communicated and consider the needs of everyone.

Leading success through continuity of asset knowledge

Through providing our customer with innovative designs, clever phasing and meticulous coordination at Winnersh Triangle, our Site Manager has remained at the Slough Trading Estate to drive the development and construction of the associated road packages in advance of this new bridge construction.

Our open relationship means that our customer trusted us to develop and deliver a cost efficient solution, right-first-time and to programme; the timing of which is critical for the final bridge launch which is planned for February 2015.