

CASE STUDY:

> Collaboration

Project:
**A611 Rolls Royce Access
scheme**

Client:
**Nottinghamshire County
Council / Via East Midlands**

Design consultant: **Via East
Midlands/ Reform Landscape
Architecture**

Contractor: **Galliford Try**

Contract value: **£3.1m**

Length of project: **42 weeks**

Completion date:
February 2017

> Background

The need for a new access road for Rolls Royce in place of the existing Watnall Road access was identified.

As the first stage in the redevelopment of the Rolls Royce airfield site, there were several issues that needed to be incorporated into the scheme including:

- » Satisfying the needs of the client authority.
- » Facilitating the provision of additional homes, schools, new businesses, and future employment and aiding long term positive economic development within the Hucknall area.

The scheme involved the construction of a new roundabout on the A611; a new reinforced concrete highway bridge over Farley's brook together with a second roundabout, 250m of new carriageway, a Pegasus crossing and associated street lighting and landscaping.



ACCIDENT FREQUENCY RATE
**42,000 MAN
HOURS WORKED**

Objectives

The main objective of the scheme was to deliver a high-quality product on time in a safe manner.

The MHA's collaborative approach was adopted to foster a positive yet relaxed atmosphere across the teams and stakeholders. This approach encouraged staff to develop a sense of pride and ownership in the work that they were completing, creating a cohesive workforce able to meet the deadlines of the scheme on budget.

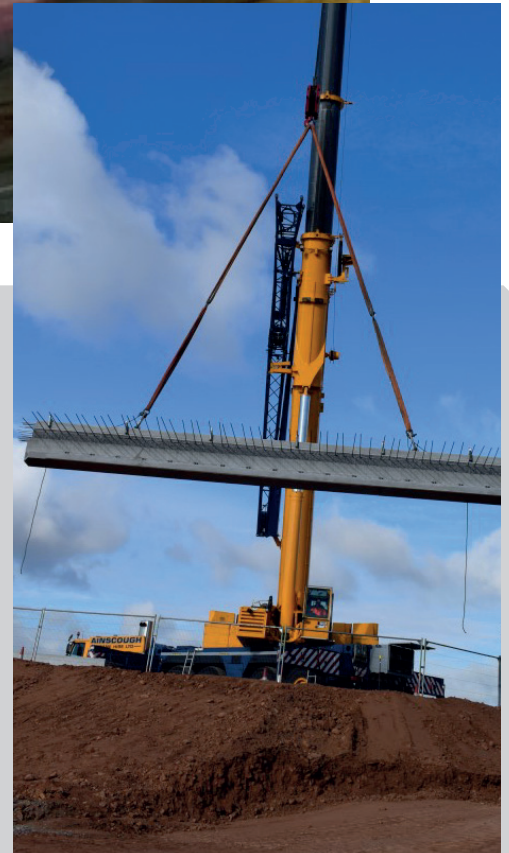


Key achievements

Regular progress meetings, site visits and monthly programme updates were put in place to ensure that communications with all stakeholders were maintained throughout the scheme including:

- » Monthly No Accident Behaviour (NAB) meetings held with the workforce. All actions raised every month were closed.

- » Regular meetings with Nottinghamshire County Council traffic management team prior to works to agree disruption reduction measures.
- » Regular meetings with the client's supervisor and the relevant subcontractors to brief key events such as the surfacing night shifts on the A611.



“I attended the Considerate Contractors Award ceremony with Galliford Try and they won a gold award for the A611 Rolls Royce Access scheme. It's great news and a just reward for the well organised and professional manner they managed the project.”

Rob Driver, Team Manager,
Highways Design and Structures,
Via East Midlands Ltd

Early Contractor Involvement (ECI) brought about key savings before works commenced and produced an overall scheme saving of 13%. Key ECI benefits included:

- » Modifying the bridge design so that all beams were a standard length saved approximately £15k in construction costs, plus an estimated three weeks from the programme.

- » The free issue of Class 1A material to Nottinghamshire County Council as a result of Galliford Try's existing involvement with the site developer resulted in significant savings to the initial target price of £351,246.



“From the outset of the works the ethos was collaboration and team work. Through a shared dedication to delivering the key project objectives, major savings were identified and made a reality on the scheme. Above all else, the highest standards of health, safety, environment and sustainability were maintained throughout.”

Graham Littlewood, Construction Manager, Galliford Try

During the works as problems were encountered they were dealt with efficiently with minimum cost and delay to the overall scheme by utilising the talents and experience of the whole site team.

During the bridge deck pour the C40/50 concrete began to cure whilst being placed. Following consultation with the designers and their agreement, the pour continued. Extra concrete was ordered and it was agreed that the finish was checked once the shutters were stripped. In future, anytime this strength concrete is used, a pour sequence will be established to allow for stop ends.



Value Engineering (VE)

Value engineering saved three weeks off the programme and contributed to reducing the carbon footprint of scheme by:

- » Using site won Class 1A in lieu of 6N for the backfill of the bridge.
- » Using planings from the

A611 works in lieu of Type 1 in the footpaths.

- » Reducing the sub-base layer in the road construction in fill areas due the high CBR results of the Class 1A fill.
- » Redesigning a section of the carriageway to avoid the need to excavate and reconstruct the existing A611.



The scheme was registered with the Considerate Constructors Scheme and achieved a Gold Award in the £1m to <£5m category in March 2017.



Community Engagement and Employment Skills

The successful implementation of an Employment and Skills Plan (ESP) during this scheme resulted in the continued development of apprentices in formwork and materials testing. There were also a range of positive training outcomes for subcontractors including NVQs, Supervisor Training and Advanced Health and Safety Training.

Environmental concerns were addressed throughout the scheme and an ecological survey for Water Vole activity was carried out on Farley's brook prior to works being carried out.

With Nottinghamshire County Council's consent a temporary flume was installed across Farley's brook for the duration of the construction programme. This reduced the distance from the stockpile to the deposition point from 3.5km to 250m. As no vehicle had to leave the construction site, this allowed for increased loads of 30t so 1,100 potential movements were reduced to 760.

Throughout the scheme relations with the local community were

generally positive with regular site visits organised and only one complaint received.

Contractors ensured the Bridleway was maintained at all times, with a well signed diversion route. A controlled pedestrian crossing was also installed on the A611 which was not there before and was not part of the original plan. The scheme also donated £500 to Papplewick Pre-School for school supplies.

Lessons learned

- A Contractor/Supervisor NEC pre-start meeting and contract training day at the outset of the project and the development of a site charter would have ensured everyone on site was aware of their obligations from the outset.
- Hold points from Inspection and Test Plans (ITPs) should be listed separately and briefed to the workforce.
- The continuous collaboration of all stakeholders via regular meetings and a clear planning strategy contributed to the high quality of the finished scheme and the efficiency savings identified.