



CASE STUDY

Works: Demolition with planned road closure

Sector: Regeneration scheme

Demolition of footbridges associated to Multi-Storey Car Parks, Swindon

OVERVIEW: Phase 2 of this contract consisted of the demolition of two footbridges. The first stood between Swindon's Wyvern Theatre and the Wyvern multi-storey car park and the second located next to the theatre that spanned across a dual carriageway. These works formed part of the contract with the demolition of the Wyvern multi-storey car park itself. Due to the location of the footbridges, Lawson Group worked closely with the highways agency, the client and the Wyvern Theatre to ensure minimal disruption.

CHALLENGE:

Bridge no.1



The demolition of this footbridge would require a managed closure to be implemented which would require the creation a temporary closure to Islington Street and would enable the shops behind the site to still be accessible whilst allowing vehicles to still pass through. The public footpath and the disabled access to the Wyvern Theatre would have to remain open throughout the works and an area of the flat car park would also have to be open for customers of the theatre.

Bridge no.2

Road closure, traffic diversion, protection of road, footpath and surrounding trees would be required for this bridge. Site security would be paramount to this element of the project located in a busy town centre and close to a popular and busy bars and restaurants complex; there was heavy pedestrian and vehicle traffic in close proximity.



SOLUTION: Working closely with the client and businesses within the surrounding area of a project was important to ensure that all requirements were met. Lawson Group's method statements and construction phase health and safety plans were all sent to the CDM coordinator for approval prior to the works starting.

Removal of footbridge No.1

A gateman and the site manager communicated and if a vehicle wished to pass, work stopped to allow them to go through to the destination of choice. Due to the location of the site, in agreement with the client, the work was required to be undertaken on a Saturday



night. Lawson Group's specialist demolition operatives started work at six o'clock in the evening and cleared the site by four o'clock on the Sunday afternoon when the managed closure to Islington Street ended. Communication was continuous between Lawson Group and the client and the Wyvern Theatre throughout this period to ensure that minimal disruption was maintained throughout the works.

The scope of work was completed utilising two of Lawson Group's company owned demolition excavators: the Liebherr 944 and CAT 336. The two excavators were continuously in use utilising a multi-processor and MP30 and MP20 breaker attachments to crush the concrete. A drop zone was created underneath the bridge in addition to an exclusion zone which prevented unauthorised persons from entering the demolition zone.

The demolition machine operatives started the demolition in the middle of the bridge, working their way out towards the entrances of the footbridge.

Removal of footbridge No.2

For the demolition of the footbridge spanning a four-lane dual carriage way, works were completed over a continual 24hr shift period, 12 hours ahead of programme. Road closure, traffic diversion, protection of road, footpath and surrounding trees were required. Traffic management with a full road closure and diversion of dual carriage way was implemented.

Lawson Group had been granted possession of the dual carriageway by the Highways Agency for a 36-hour period. The road required complete protection to ensure it was safe and in the same condition to reopen following the bridge demolition. The roads were protected using bog mats with all plant working from within protected laid areas.



All concrete and steel waste was removed directly from the site. As the bridge was progressively demolished, waggons were on hand waiting to transport all demolition arisings to Lawson Group's waste recycling centre.

RESULT: This phase of the project was completed to programme and within specification to the client's requirements. As planned, minimal disruption was experienced by both local pedestrians and motorists alike.

Watch the Bridge Demolition Video with the below link:



[https://www.youtube.com/
watch?v=XoFG1w6QOsw](https://www.youtube.com/watch?v=XoFG1w6QOsw)

To find out more on how we can help with your next demolition or asbestos removal project, call Lawson Group on 01793 782000, email enquiries@lawsongroup.co.uk or visit www.lawsongroup.co.uk