

 **Lyminster Bypass & Fitzalan Link Road**

£3.1m
/ Project Value

January 2020
/ Project Commenced

Ongoing
/ Project Completed

Breheny Group
/ Client

The A284 Lyminster Bypass scheme is a 1.8km bypass for Lyminster which included new carriageways, pedestrian facilities, street lighting, signs and white lining. BCM Construction were responsible for the delivery of 2 bridges, a bridge over road and bridge over rail. The activities related to this package of work include the construction of both bridges included the excavation to formation level, Construction of base and subsequent backfill, construction of abutment and wing walls, lifting of beams, construction of bridge deck & ancillary works.

The Key Challenge

Key to the success of the works was the availability of access. As BCM was not the Principal Contractor, we were unable to book additional possessions to complete our works which led to BCM working in possessions already booked through liaison with Network Rail Asset Protection and Optimisation teams (ASPRO)

The Solution

To successfully complete the project to time and budget, BCM devised a method of working to limit works associated with being "On or Near the Line" To achieve this, detailed planning was completed to create high street working environments through fencing off NR property. This meant BCM could complete excavation, abutments and bearing pads without the need to close the railway and keep passenger services running.

In order to continue our work, we agreed with the Network Rail ASPRO team "Any Line Open" working procedures utilising our in-depth experience and mature risk assessment process to support our client. Any Line Open plans were produced for all plant with ALO alarms activated to prevent intrusion onto the railway. Following the installation of the bridge beams, permanent formwork and edge protection a high street environment was created in which all the reinforcement and formwork for the deck pour can be completed. This greatly reduced the need for additional possessions.

Our successful management of access has enabled BCM to successful deliver this scheme according to the programme of works from our client, Breheny Group.



The Deliverables:

The works consisted of construction of 2 concrete overbridges in Lyminster. One crossing Toddington Lane and the other crossing the up & down Brighton lines between Toddington level crossing and Lyminster level crossing. The following were the deliverables on the project

Enabling works

- Installation of temporary fencing, removal of vegetation along railway cutting, stripping topsoil, installation of temporary welfare, creation of temporary access road.

Toddington Lane Road Bridge

- Excavation and muck away of spoil
- Abutment bases - Prep & pour blinding, formwork, steelwork, concrete pour, curing & striking, backfill
- Abutment wing walls – Steel fixing, wall formwork, concrete pour, curing & striking
- Bearing pads – Steel fixing, bearing pad formwork, concrete pour & curing, bearing installation
- Bridge deck – Delivery & placement of bridge beams, Permadec installation, steel fixing, form & pour bridge deck, parapet installation
- Other works including drainage, soakaways and waterproofing.

Brighton Line Rail Bridge

- Excavation, Abutment bases, Abutment wing walls & Bearing pads – Same as above
- Bridge deck – Delivery of bridge beams, Beams & permanent formwork & edge protection installed over rail possession with 800T crane, formwork, reinforcement and pour bridge diaphragm. Parapet copings installed over rail possession. Bridge Deck poured over rail possession. Edge protection removed over rail possession
- Other works including drainage, soakaways and waterproofing.

Demobilisation Works

- Remediation works for welfare area, removal of fencing & edge protection, new Network Rail fencing, handback

Outputs and Benefits

Access Management: BCM Construction are highly experienced in managing access to constrained areas for time and site limitations which on this project we were able to complete the works in line with these limitations

High Quality: BCM commended on the quality of finished by client including minimal snagging and no defects.

Collaboration: Working with Breheny Group & interfacing with others to jointly successfully deliver the output of works

