

# **A38 Bromsgrove Route Enhancement Programme**

## **Outline Business Case**

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## Introduction

# A38 Bromsgrove Route Enhancement Programme

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Project Manager: Paul Bufton

Author: TA

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Jacobs U.K. Limited

7th Floor, 2 Colmore Square

38 Colmore Circus, Queensway

Birmingham, B4 6BN

United Kingdom

+44 (0)121 237 4000

+44 (0)121 237 4001

[www.jacobs.com](http://www.jacobs.com)

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## Document history and status

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## Context

The A38 in Bromsgrove is an important corridor on the Major Road Network (MRN). It acts as a key strategic link, providing access to the Strategic Road Network (SRN), as well as offering an important local function as an eastern bypass to Bromsgrove and providing access to housing, services and employment frontages.

This Outline Business Case (OBC) seeks funding to deliver a major upgrade of the A38 corridor, between M5 Junction 4 to the north and the junction of the A38 with B4094 Worcester Road to the south which is approximately 7.5 miles (12 km) long. This corridor forms part of the strategic north south spine through Worcestershire, connecting Worcester, Droitwich, Bromsgrove to Birmingham to the North and Gloucester and Bristol to the south as an alternative to the M5 route. The study area is shown in as shown on Figure 1.1.

The A38 corridor is a multi-functional route serving a range of users which contributes to the problems and issues discussed later in this chapter. The key characteristics are:

- The route performs a range of different functions, acting as a link to the Strategic Road Network, as a bypass to Bromsgrove town centre, a distributor road for journeys that have an origin and/or destination in Bromsgrove and a local access route for residents and businesses that have direct frontages on to the corridor.
- The corridor comprises sections with differing speed limits, levels of frontage and access points in addition to varying levels of pedestrian and cyclist provision. In addition, the driving experience along the route varies due to the differing land uses along sections of the A38 from residential, open field to employment and retail.
- High levels of car dependency across Bromsgrove leading to congestion on the corridor which is expected to worsen due to high economic growth and buoyant housing market.

The A38 Bromsgrove Route Enhancement Programme (BREP – or ‘the scheme’) comprises a package of schemes delivering targeted improvements to junctions and significant enhancement of facilities for active modes.

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Figure 1.1 – Scheme location



This situation is projected to worsen in the future as new housing and employment planned for the local area are delivered. To effectively support the future development of Bromsgrove and to deliver economic growth, significant improvements are required to the corridor itself, supported by targeted improvements for other modes.

The scheme for which funding is sought through this MRN bid is an important part of the overall approach to transport in Bromsgrove. It would support ongoing work that is aiming to enhance both the major and local road network, as well as encouraging walking, cycling and the use of public transport.

## Background to the scheme

Worcestershire County Council (WCC) is undertaking a project to deliver a series of infrastructure interventions comprising of active mode, public transport and highway schemes that make up the A38 BREP. The key objectives of the project are to:

- Reduce congestion and transport costs.
- Maximise the efficiency of the road network.
- Increase journey time reliability.
- Support the delivery of housing and employment growth, as outlined in the adopted Local Plans.
- Improve connectivity for pedestrians and cyclists on and across the A38 corridor.

A corridor based enhancement to the A38 was identified within the Bromsgrove Transport Package works as part of the development of Local Transport Plan 3, and subsequently Local Transport Plan 4. Initial scheme development was undertaken in 2015/2016 to support funding bids made in 2016 to Worcestershire Local Enterprise Partnership (WLEP), Greater Birmingham and Solihull Local Enterprise Partnership (GBSLEP) and

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National Highways (previously called Highways England). WCC has undertaken further scheme development and remains committed to delivering improvements to the A38 corridor.

The scheme is being delivered in three parts, and these parts are described below:

- Part 1 (funded by WLEP, GBSLEP and National Highways' Growth and Housing Fund (GHF)), provided for capacity upgrades at M5 Junction 4, M42 Junction 1 (completed in 2020/21) and the Barley Mow Lane junction with the A38 (completed in 2019). The works are included in the Do Minimum scenario for BREP, as these have now been completed on site. (Historically, this has been referred to as Phase 1 of A38 Package 1, for this OBC submission, this will now be referred to as Part 1).
- Part 2 comprises of the early delivery elements of the BREP Package presented at SOBC stage and submitted in November 2020. The early delivery schemes have been delivered using WLEP local contribution funding, and are referred to as Schemes 2a, 2b and 4. These works are an important part of the overall BREP scheme, contributing to the improvement of active mode facilities on the corridor. They have been delivered early to take advantage of the local funding availability.
  - Scheme 2a was identified in the SOBC as Scheme 2 and provides an active mode corridor between Harvington Road and Charford Road, the new scheme 2a also includes the connecting bridge to Charford Road that in the SOBC was included in Scheme C. Leading to an enhanced scheme 2a at an earlier stage.
  - Scheme 2b is a shared active mode corridor along the northern side of Charford Road, to connect scheme 2a to South Bromsgrove High School. This scheme was added further to public engagement in early 2020, and after the SOBC submission.
  - Scheme 4 is a new toucan crossing as outlined in the SOBC, over the A448 Stratford Road and localised path improvements to facilitate walking and cycling.

Schemes have been developed as part of the overall strategic active modes upgrade as part of the A38 BREP Package. A copy of the approved WLEP Full Business Case (FBC) is appended (Appendix S.6) to the overall A38 BREP OBC. These schemes form part of the Do Minimum scenarios, and their economic and financial impacts will be informed by their FBC. It should be noted that the Part 2 package offered a High Value for Money to taxpayers.

- Part 3 includes a number of active modes, local public transport and highways improvement schemes which were originally included in the SOBC submission to DfT in 2019, alongside the initial OAR document.

Part 2 and Part 3 form the overall BREP Package, with Part 2 being delivered using local contribution, and Part 3 to be delivered with local and MRN funding contributions. The overall BREP package is broadly the same as the SOBC stage, with improvements to the scheme added following on from discussion with the DfT and public engagement.

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# Overview of this MRN bid

This MRN OBC builds upon the SOBC submitted to DfT in 2019. At that time, the DfT assessed the SOBC recognising its advanced stage of development. The OBC reflects the progression of the modelling, assessment and appraisal and the development of the design. In particular all traffic modelling data has been updated since SOBC stage, reflecting the development of a Production – Attraction (PA) based model which has evolved since SOBC in response to DfT feedback. The economic appraisal is also fundamentally enhanced compared to that presented at SOBC stage.

This MRN OBC seeks funding for a comprehensive package of measures for the A38 corridor which:

- Cater for all modes. The BREP scheme includes junction capacity enhancements, walking and cycling provision and localised small-scale measures for prioritising late running buses. These measures help to tackle congestion as well as improve accessibility by non-car modes and reduce the severance effect of the A38.
- Builds further on the measures identified in the 2019 SOBC, reflecting feedback from engagement exercises and the results of additional and refined assessments.
- Build on other recent/ongoing investment in Bromsgrove, notably the BREP scheme complements:
  - The walking and cycling schemes currently being delivered via the National Productivity Infrastructure Fund (NPIF) process.
  - The Part 1 (Historically, this has been referred to as A38 Package 1) enhancements to the junctions with Barley Mow Lane, M5 Junction 4 and M42 Junction 1, funded by National Highways, WLEP and GBSLEP.
  - Walking and cycling improvements funded by WLEP as early delivery elements of the overall BREP scheme.
- Will deliver a step change in provision for pedestrians and cyclists, providing a north-south route on/alongside the A38 and fundamentally improving crossing provision along the corridor.
- Provides improvements to traffic signalling, to improve traffic flow and help improve journey time reliability
- Provides junction capacity optimised to cater for future traffic conditions, helping to provide improved access to the SRN and address congestion and journey time issues.

## Updates to the MRN bid

Following on from the prior work undertaken at SOBC stage, a review of all prior work was undertaken as a means of rebasing the project to a more up to date viewpoint, with consideration of updated policy, guidance and design standards. As part of this update, the following has been undertaken in preparation of the OBC:

- Updating of the traffic model to take into account the DfT comments on the model form, at SOBC stage the 2017 Base year model utilised an Origin – Destination method for determining the 2025 and 2040 forecast year travel patterns. For this OBC, the model has been converted to a Production – Attraction (PA) model. Information on the model update is included in chapter 3 of the OBC.
- Updating of the active mode provision to take into account public engagement feedback, LTN 1/20 guidance, and best practice up to 2021. The active mode schemes also deliver enhanced linkages to residential areas to support the strategic case in linking the town centre and residential areas to the rail station.
- Review of the highway schemes prepared for SOBC stage, taking into account public engagement responses, updated DMRB guidance, LTN 1/20, and the latest modelling information for the 2040 design year.

## Purpose and structure of this document

This document presents an OBC to DfT for consideration through the MRN programme. In doing so it addresses the feedback provided by DfT on the SOBC.

Following this introduction:

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- Chapter 2 sets out the Strategic Case
- Chapter 3 explains the traffic modelling used to underpin the OBC appraisal
- Chapter 4 presents the Economic Case
- Chapter 5 explains the Commercial Case
- Chapter 6 sets out the Finance Case
- Chapter 7 presents the Management Case.