

**M42 Junction 6 Improvement
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6.1 Environmental Statement
Chapter 2 – Site and Surroundings**

Regulation 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed
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The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

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6.1 Environmental Statement Chapter 2 Site and Surroundings

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2 Site and surroundings

2.1 Introduction

- 2.1.1 This chapter presents an overview of the existing environmental conditions of the land associated with the Scheme and the surrounding area.
- 2.1.2 A detailed description of the Scheme is presented in Chapter 3 The project.

2.2 Location and Order Limits

- 2.2.1 **Figure 2.1** in **TR010027/APP/6.2** illustrates the extents of land required to construct, operate and maintain the Scheme (referred to as the Order Limits), and also illustrates the key features, interests and designations both within and surrounding the Order Limits as outlined within this chapter.
- 2.2.2 All land within the Order Limits is located within the administrative boundary of Solihull Metropolitan Borough Council (SMBC).

2.3 Transportation

M42 motorway

- 2.3.1 The M42 motorway is a strategic route that forms an important connection between the East and West Midlands.
- 2.3.2 The motorway runs from the south-west of Birmingham near Bromsgrove, where it connects to the M5 motorway, to the north-east of Tamworth where it turns into the A42 at the A42/A444 Junction. It passes to the south and east of Birmingham, Solihull, Tamworth and various smaller towns, and connects with the M40, M6, M6 (toll) and M5 motorways and a number of trunk roads.
- 2.3.3 Technology was installed on the M42 motorway in 2006 as part of improvements to control traffic and ease congestion, between Junction 9 (east of Curdworth) and a point approximately 3km east of Junction 3 (north of Wood End).

M42 Junction 6

- 2.3.4 M42 Junction 6 is a key junction on the M42 motorway and lies at the heart of an area of dynamic growth on the eastern edge of Birmingham, approximately 15km from the city centre.
- 2.3.5 The junction provides connections between the motorway network and the A45 Coventry Road (A45), and serves a number of strategic and expanding economic assets in the area including: Birmingham Airport, the National Exhibition Centre (NEC), Jaguar Land Rover (JLR), the National Motorcycle Museum and National Conference Centre (NMM), Birmingham International Railway Station, and Birmingham Business Park.
- 2.3.6 The junction comprises a tiered circulatory island that provides both direct and indirect access to a number of these businesses, the western and eastern extents of which are positioned above and beneath the A45 respectively. Slip roads on the island connect the M42 motorway to the A45 and provide connections to the local road network to the south and west of Middle Bickenhill.

- 2.3.7 The junction is one of the busiest interchanges on the strategic road network. Existing problems associated with congestion and journey delays relate to:
- daily through-traffic movements at M42 Junction 6 totalling around 102,000 vehicles per day on the M42, and around 26,000 vehicles per day on the A45;
 - turning movements at M42 Junction 6 totalling around 68,000 vehicles per day;
 - daily through-traffic movements on the A45 at Clock Interchange totalling around 43,000 vehicles per day, and junction turning movements totalling around 31,000 vehicles per day; and
 - variable increases in traffic levels associated with people making journeys to and from the NEC, NMM, Birmingham Airport, Birmingham International Railway Station and JLR.
- 2.3.8 Additionally, the M42 northbound to Airport Way free flow link was constructed in 2016 to facilitate free flow of traffic from the M42 Junction 6 to Airport Way; however, this link is frequently used by motorists to bypass the queueing at the junction and cross over the segregated tiger tail road markings to access the A45 westbound.
- 2.3.9 Further information regarding existing traffic movements is presented in the Transport Assessment Report [TR010027/APP/7.2].

A45 Coventry Road

- 2.3.10 The A45 provides access to a number of strategic economic assets in Birmingham. It connects Clock Interchange, approximately 850m to the west of Junction 6, with the A452 Stonebridge Island, approximately 1.5km east of Junction 6.
- 2.3.11 The western stretch of the A45 between M42 Junction 6 and Clock Interchange was widened in August 2016 as part of a local network improvement scheme.

Clock Interchange

- 2.3.12 Clock Interchange links the A45 with the B4438 Catherine-de-Barnes Lane (Catherine-de-Barnes Lane) to the south and Bickenhill Lane to the north via a roundabout and slip roads. An off-slip is provided for westbound traffic to exit the A45 and continues through to Airport Way, north of the interchange.

Local road network

- 2.3.13 Catherine-de-Barnes Lane is a busy local road running in a north-south direction between Clock Interchange and the B4102 Solihull Road (Solihull Road). It provides the main link between Solihull to Birmingham Airport, the NEC and Marston Green to the north of Clock Interchange, and passes west of Bickenhill.
- 2.3.14 Solihull Road passes over the M42 motorway some 1.8km south of M42 Junction 6 via a bridge. The road connects the settlements of Catherine-de-Barnes, located 1km west of the bridge, with Hampton in Arden, located 1.2km east of the bridge.

- 2.3.15 Shadowbrook Lane provides a further connection between the western fringes of Hampton in Arden and Catherine-de-Barnes Lane some 500m south of Bickenhill, and passes over the M42 motorway via a bridge approximately 1.6km south of M42 Junction 6.
- 2.3.16 A number of smaller lanes and unclassified roads connect with these routes and provide access to more remote and isolated areas. Such routes include: St. Peters Lane, which connects Bickenhill to Catherine-de-Barnes Lane at two locations to the south of Clock Interchange; Church Lane, provides access to residents adjacent to the A45 east of Clock Interchange; Clock Lane, which provides local access to housing immediately south west of Clock Interchange; and service roads such as East Way and Middle Bickenhill Lane between M42 Junction 6 and A452 Stonebridge Island, which provide access to Middle Bickenhill and local businesses.

Public transport

- 2.3.17 A section of the West Coast Mainline railway runs in a north west to south east direction approximately 300m south west of M42 Junction 6. Local communities are served by Hampton in Arden railway station and at Birmingham International Railway Station.
- 2.3.18 A number of bus and coach routes use the local road network, with services accessible from the A45, Solihull Road and Catherine-de-Barnes Lane.

2.4 Landform and topography

- 2.4.1 The area surrounding M42 Junction 6 is characterised by gently varying topography, the majority of which is relatively flat in profile and situated around 90m to 100m above Ordnance Datum (AOD).
- 2.4.2 The landform rises gradually from east to west towards the settlement of Bickenhill, reaching a height of approximately 115m AOD to the west of the village and around 120m to 130m AOD at Catherine-de-Barnes.
- 2.4.3 Smaller topographical variations are associated with the shallow valleys of watercourses crossing the area.

2.5 Settlement and land use

- 2.5.1 Land use is marked by a contrast of urban development immediately north west of M42 Junction 6 set against the more open agricultural landscapes and settlements found to the south, east and north east of the junction.
- 2.5.2 Land north east of M42 Junction 6 predominantly comprises arable farmland and mineral extraction.
- 2.5.3 Land to the north west of the junction is occupied by major commercial and transport enterprises including the NEC, Birmingham Business Park, Birmingham International Railway Station and Birmingham Airport. The NMM is also accessed directly off M42 Junction 6. Arden Eco Park, located some 600m east of the junction, is served by a local connecting road parallel to the A45.

- 2.5.4 Bickenhill and Catherine-de-Barnes, located south west of M42 Junction 6, and Hampton in Arden, located south east of the junction, are the main settlements in the area, all of which are set within rural farmland. Approximately 350m north-east of the M42 Junction 6 lies Middle Bickenhill, a small dispersed community set within open agricultural land but located in close proximity to the motorway and major roads. Ribbon development forms a notable area of settlement between M42 Junction 6 and Hampton in Arden, focused along Old Station Road approximately 150m south east of the junction.
- 2.5.5 Local businesses and smaller commercial enterprises throughout the area include plant nurseries and garden centres, liveries, fitness clubs, fleet hire, taxi services, breweries and public houses. Bed and breakfast accommodation also forms part of the local trade within the settlements of Bickenhill and Hampton in Arden.
- 2.5.6 The agricultural landscapes south of M42 Junction 6 are interspersed by small blocks and pockets of mature woodland, with particularly prominent examples located around the western fringes of Hampton in Arden, at Barber's Coppice on the eastern fringes of Catherine-de-Barnes, and at Aspbury's Copse adjacent to the Solihull Road bridge over the M42 motorway.
- 2.5.7 A regionally important recreational facility (Páirc na hÉireann), the base for the Warwickshire Gaelic Athletic Association, is located opposite the junction of Shadowbrook Lane and Catherine-de-Barnes Lane. Equestrian activities also form a key part of the recreational offer of the local area, with opportunities for recreational walking and cycling also provided through the extensive network of roads and public rights of way.
- 2.5.8 Community facilities include small areas of public open space, village halls and churches within the settlements of Bickenhill, Hampton in Arden and Catherine-de-Barnes.

2.6 Hydrology

- 2.6.1 The Grand Union Canal, which passes through Catherine-de-Barnes, forms the first of two major watercourses in the area. The second major watercourse comprises the River Blythe, which passes beneath the M42 motorway immediately east of A452 Stonebridge Island and meanders through the open landscapes north east of Hampton in Arden.
- 2.6.2 Smaller watercourses include Shadow Brook, which crosses agricultural fields and passes beneath the M42 motorway some 300m north of Solihull Road, and Hollywell Brook, which flows from the NEC under the M42 motorway approximately 500m north of M42 Junction 6 and parallel to the A45.
- 2.6.3 Small ponds and lakes punctuate the landscape of the local area, many of which have associated biodiversity value.
- 2.6.4 Surface water from the M42 motorway is managed through a combination of filter drains within the highway verges and central reserve, gullies positioned at different locations, and kerb drainage incorporating pollution control features.

2.7 Public utilities

- 2.7.1 Equipment and apparatus associated with public utilities is located in the M42 Junction 6 locality. Other apparatus in the surrounding area includes National Grid 400kV and Western Power Distribution 132kV overhead electricity transmission cabling and associated infrastructure, the Severn Trent Water aqueduct, underground electrical and telecommunications cabling, and underground pipelines including Cadent Gas.

2.8 Planning and environmental designations

- 2.8.1 Landscapes to the south, east and north east of M42 Junction 6 within an area referred to as the Meriden Gap are protected from inappropriate development through green belt designation.
- 2.8.2 Parts of Bickenhill and Hampton in Arden are designated as conservation areas for their built heritage interest, and contain listed buildings of different grades and historic importance. Listed buildings are also associated with the village of Eastcote located approximately 1.5km south of Hampton in Arden, which also contains a historic moated site designated as a Scheduled Monument.
- 2.8.3 Areas protected at the national level for their biodiversity value include: Bickenhill Meadows Site of Special Scientific Interest (SSSI), located within two separate units (Shadowbrook Meadows east of Catherine-de-Barnes Lane and First Castle Meadow south west of Clock Interchange). The River Blythe SSSI is located some 1.5km east of M42 Junction 6.
- 2.8.4 Local Wildlife Sites have been designated across the area. These are principally associated with established features such as woodland, grassland and watercourses and include: Aspbury's Copse, located adjacent to Solihull Road; Castle Hill Farm Meadows, located west of Bickenhill; and Hollywell Brook located north of M42 Junction 6.
- 2.8.5 Shadowbrook Meadows Nature Reserve, located in close proximity to the junction of Catherine-de-Barnes Lane and Shadowbrook Lane, is a designated site of interest for its meadow and wet woodland habitats.
- 2.8.6 A number of individual trees, tree groups and woodland to the west of Hampton in Arden, to the east of Bickenhill, close to the M42 near Friday Lane, and surrounding the junction of Solihull Road and Catherine-de-Barnes Lane, are protected by Tree Preservation Order (TPO). TPOs are also in place to the north of Eastcote, within Catherine-de-Barnes, and across the extensive woodlands of Hampton Coppice 2km west of the M42 motorway, and Bickenhill Plantations some 300m north west of M42 Junction 6.
- 2.8.7 Barber's Coppice and Aspbury's Copse, located adjacent to Solihull Road, comprise two stands of woodland designated as Ancient Woodland. Aspbury's Copse is divided into two separate parcels by the M42 motorway, following its construction in the mid-1970s.

- 2.8.8 A network of public rights of way traverses the landscape south of the A45, providing connections between villages and dispersed settlements to the east and west of the M42 motorway. The long distance Green Man Trail route stretches from Castle Bromwich in the north to Solihull town centre, sections of which follow the existing public rights of way and local road networks to pass through Hampton in Arden and Bickenhill.
- 2.8.9 Undesignated recreational routes comprise a segregated cycle path along Catherine-de-Barnes Lane, and the Grand Union Canal located west of Catherine-de-Barnes, both of which have recreational value.
- 2.8.10 A large tract of agricultural land located adjacent to the north eastern boundary of M42 Junction 6 has been identified for future development by SMBC to deliver the proposed mixed use UK Central development, and to accommodate the programmed delivery of the consented High Speed 2 Birmingham Interchange Station.