

Appendix 4A

Headbolt Lane Station Transport Assessment

Buckingham Group Contracting
Limited

**170248 Headbolt Lane New
Station GRIP 4**

Transport Assessment

170248-ARU-REP-EHW-000003

Final | 30 June 2021

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 276726

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1 Introduction

Arup has been commissioned by Buckingham Group Contracting Limited (BGCL) on behalf of Network Rail to produce a Transport Assessment (TA) to assess the highway and transport impacts of the proposed new railway station at Headbolt Lane.

Headbolt Lane is an infrastructure project that will extend the Merseyrail network from the existing terminating station at Kirkby to a new station to be constructed at Headbolt Lane.

The existing rail corridor comprises a single line. The Merseyrail network will be extended east from the existing terminating station at Kirkby, and a new turnout will provide access to a new twin-track arrangement.

The existing Northern Rail platform at Kirkby station will be decommissioned and a new station interchange provided at Headbolt Lane. This new station will comprise three platforms, with two platform faces serving Merseyrail and a single platform face serving Northern Rail. Buffer stops will be provided to Merseyrail and Northern Rail to delineate between the two Train Operating Companies. The platforms will be connected by a station access arrangement replicating the operational functionality at the existing Kirkby station.

A new 300 space car park and public transport interchange facilities will be provided at Headbolt Lane. Parking facilities for 100 cycles will be provided with passive provision for a further 200 spaces.

The scheme has been developed to GRIP 3 by Network Rail. BGCL has been appointed to develop the design to GRIP 4, who in turn have appointed Arup to undertake design services.

1.1 Site location

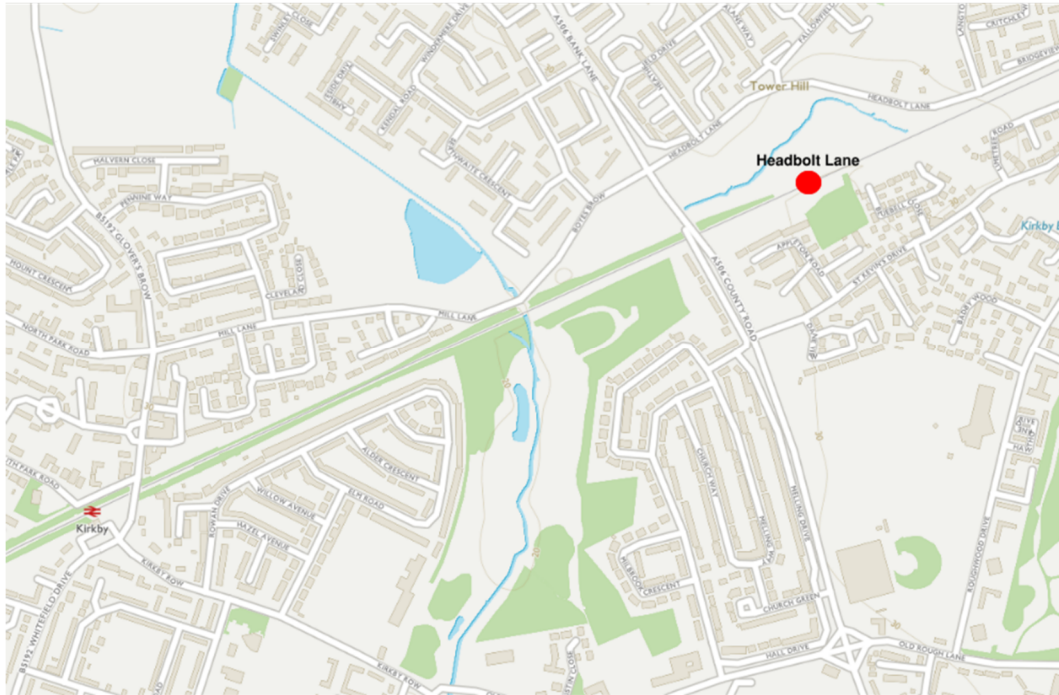
Headbolt Lane lies within the in the Northwood area of Kirkby, Merseyside.

The site is located on green space bounded by the A506 to the west, Headbolt Lane to the north and east and the Kirkby Branch railway line to the south. Kirkby Brook crosses under the railway and into the site from the south-east, before running through the centre of the site and leaving the site downstream to the west.

The surrounding area is primarily low-density housing, with Kirkby town centre located approximately 800m to the south of the site.

The site location is shown in Figure 1.

Figure 1: Site location



1.2 Scope of this report

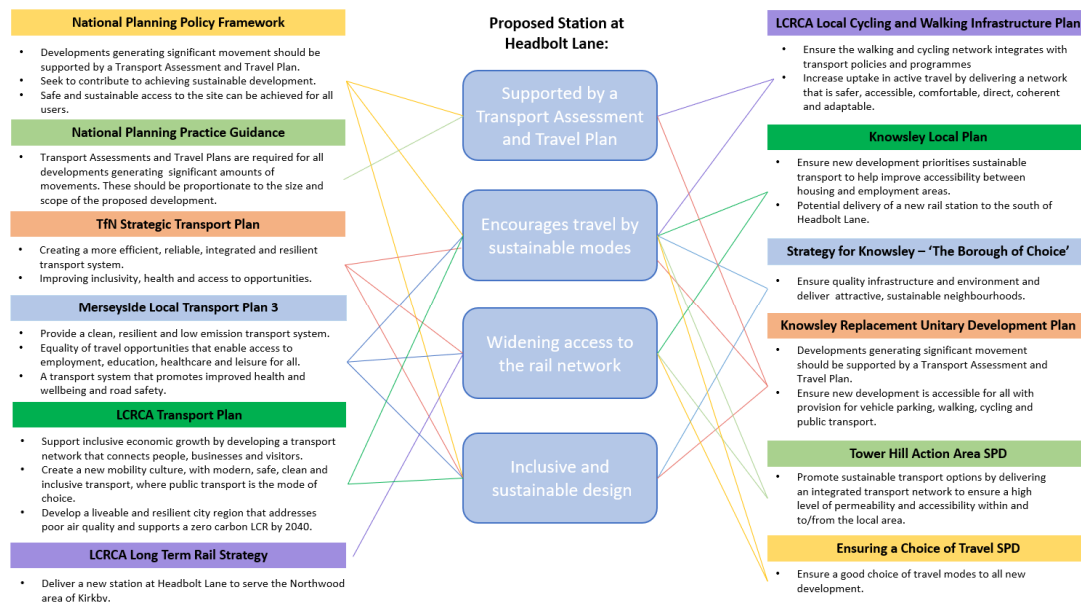
The scope of this assessment has been agreed with Knowsley Metropolitan Borough Council (KMBC) as the highway authority. A scoping meeting was held with Arup and KMBC on 5th February 2021, the minutes of which are provided in Appendix A. The purpose of this TA is to set out the existing conditions in the vicinity of the site and assess the accessibility of the proposed development by all available transport modes. An assessment of the transport impacts associated with the development has also been undertaken.

The structure of this report is as follows:

- **Section 2** discusses relevant national and local planning policy with regards to the site;
- **Section 3** sets out the existing transport at the site and surrounding area;
- **Section 4** presents the development proposals;
- **Section 5** sets out the methodology used to derive the trip generation and distribution of traffic associated with the development;
- **Section 6** presents an assessment of the highway impact of the proposed development; and
- **Section 7** draws a conclusion to the report.

2 Policy review

The proposed development has been designed with full regard to national and local transport and planning policies. A summary of the key relevant policies is provided below. A detailed analysis of these policies in relation to the proposed development is shown in Appendix C.



All relevant policy documents emphasise the need for sustainable development in accessible locations. The proposed development itself would provide a sustainable travel option for local residents and increased accessibility for all its users.

National and local policy identifies the need for all developments that generate a significant level of vehicle movements to provide a Transport Statement or Transport Assessment and Travel Plan. This Transport Assessment has been produced in support of the proposals and details the sustainable credentials of the site, as well as its anticipated highway impact. A Travel Plan has also been prepared for the development to encourage access by sustainable modes through a variety of measures.

Similarly, a key theme across all policy documents is ensuring development supports inclusive and sustainable access. Policy states that developments should seek to improve people’s health, wellbeing and environment by reducing traffic emissions, improving road safety and creating safer places for cycling and walking.

The aim of the proposed development is to minimise long vehicle trips and encourage multi-modal trips by more sustainable modes, which fully supports these key policies. Access to the site by all modes has been considered and designed for. The provision of cycle infrastructure, cycle parking, and electric vehicle charging further enhances the sustainability of the development.

The policy review demonstrates that the proposed station development at Headbolt Lane aligns with both national and local policies.

3 Existing conditions

This section outlines the baseline conditions on and in the vicinity of the development site. This assessment been undertaken entirely as a desktop review due to COVID-19 restrictions. Infrastructure and conditions are explored relating to highways, walking, cycling and public transport.

A completed 'Accessibility Assessment Form' is provided in Appendix C.

3.1 Site information

The proposed development site is an area of green space with a pedestrian route traversing from east to west. Headbolt Lane runs in an east-west alignment along the northern boundary of the site, connecting with the A506 to the west and Pingwood Lane / Dale Lane to the east.

To the north of the development site is the residential area of Tower Hill. To the south is the rail line running east to west with the residential area of Northwood and Kirkby town centre beyond. Kirkby rail station and surrounding residential areas lie to the west, and agricultural land and the William Brothers Industrial Park lie to the east.

Figure 2 shows the key transport infrastructure serving the development site

Figure 2: Key transport infrastructure



3.2 Active travel

Figure 3 provides an overview of the key walking and cycling infrastructure serving the development site.

Figure 3: Active travel infrastructure serving the development site

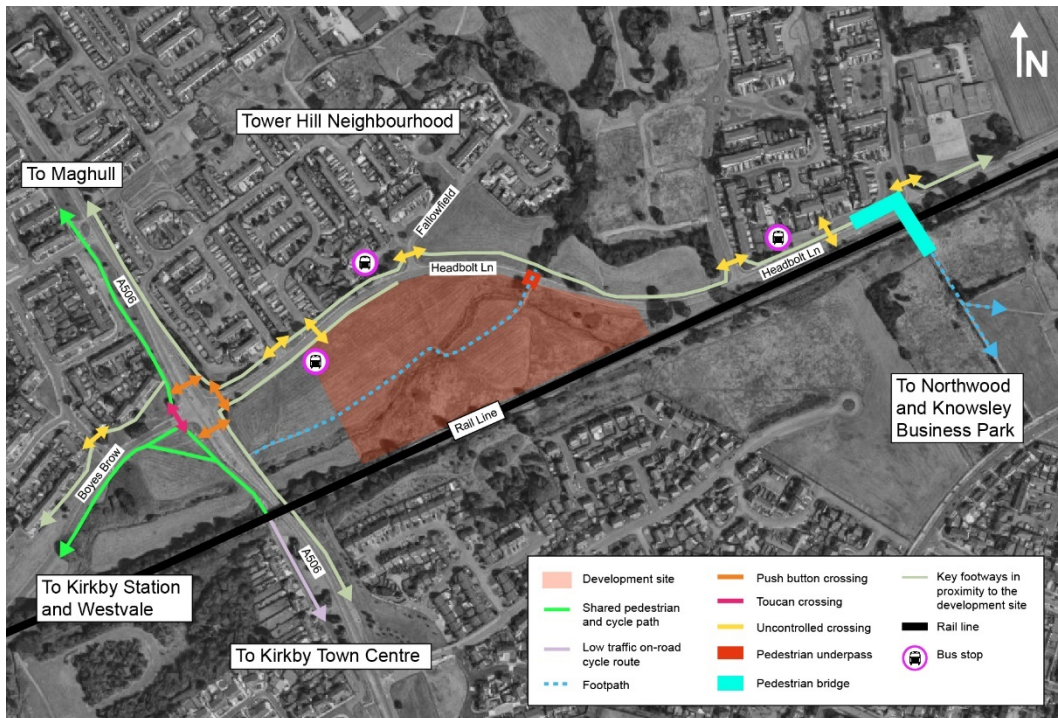
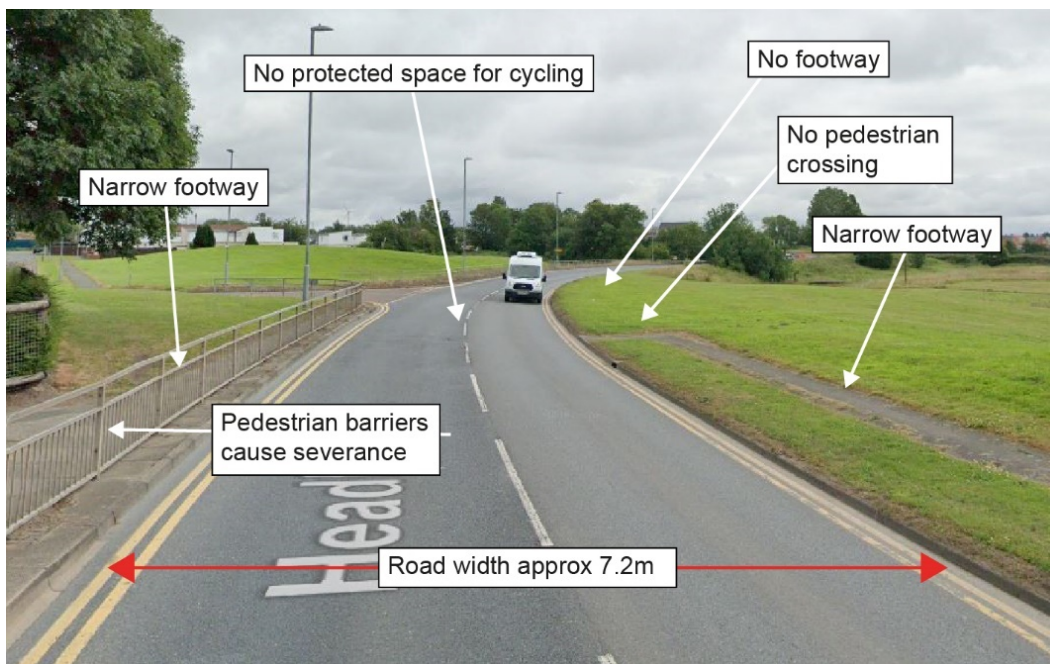


Figure 4 provides an overview of existing conditions on Headbolt Lane.

The footway on the northern side of Headbolt Lane is below the recommended 2m minimum width and guardrails separate the footways from the road, creating a degree of severance between the residential areas to the north and the proposed development site.

Figure 4: Analysis of existing conditions on Headbolt Lane

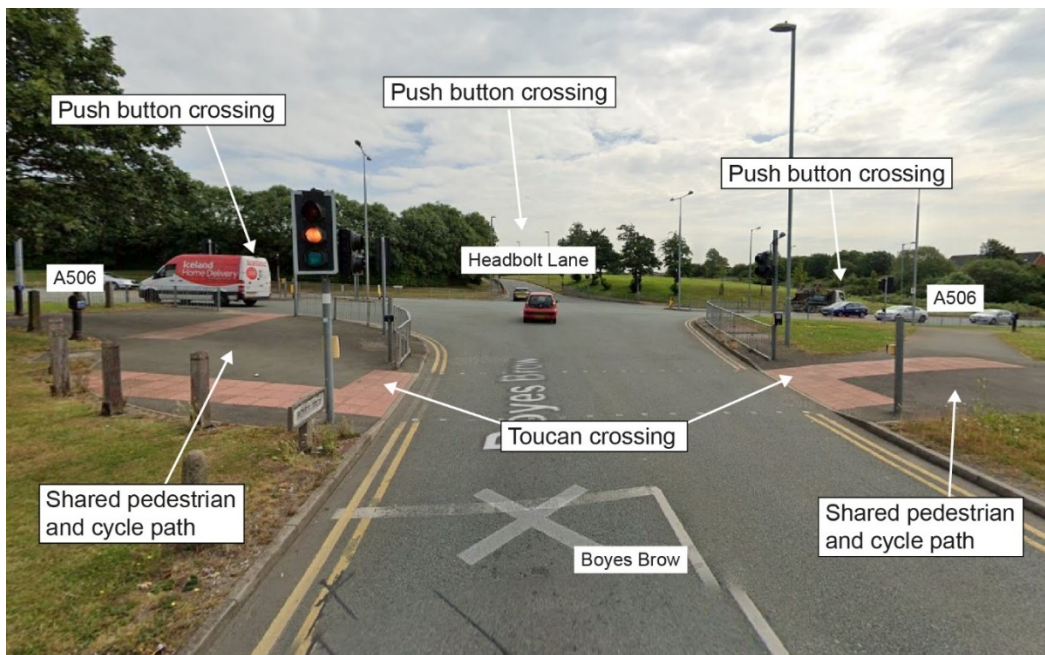


Source: Google Maps (2021)

There is a limited section of footway (approx. 220m) on the southern side of Headbolt Lane from the junction with the A506 to Fallowfield. At its eastern extent, the footway ends without providing access to the footways on the opposite side of the road.

There are three uncontrolled crossings with dropped kerbs and tactile paving along the length of the road and signalised pedestrian crossings on all arms of the A506 / Boyes Brow / Headbolt Lane junction, as shown in Figure 5.

Figure 5: Pedestrian and cycle crossings at A506 / Headbolt Lane / Boyes Brow junction



Source: Google Maps (2021)

The rail line to the south of the proposed development site causes a degree of severance for areas to the north and south. There is a pedestrian bridge approximately 300m to the east of the development site which provides access over Headbolt Lane and the rail line, as shown in Figure 6. It provides a link between the site and the Northwood area to the south, including Knowsley Business Park beyond.

Figure 6: Pedestrian bridge located to the east of the development site



Source: Google Maps (2021)

There is an existing footpath that runs in an east-west alignment across the development site from the A506 to the junction of Headbolt Lane and Southcroft Drive, as shown in Figure 7. The footway is relatively narrow with an uneven surface. At its western end the path uses an underpass below the highway, which although minimises conflict with vehicles, may be an unattractive route choice for some pedestrians. It is understood that KMBC plans to close the underpass and raise the footpath to the level of the road.

Figure 7: Footway crossing the development site, viewed looking east from the A506



Source: Google Maps (2021)

There is a shared use pedestrian and cycle path to the west of the development site along the A506 (see Figure 8), providing a link towards Kirkby town centre to the south and neighbourhoods to the north of the proposed development site. There is a toucan crossing on the western arm of the Headbolt Lane / A506 / Boyes Brow junction.

A shared footway / cycleway is also in place on Boyes Brow on approach to the A506. However, there are no cycle crossings on the northern or southern arms of the Headbolt Lane / A506 / Boyes Brow junction meaning there is no formal cycle connection across the A506.

Figure 8: Shared use pedestrian and cycle path located to the north of the A506 / Headbolt Lane / Boyes Brow junction



Source: Google Maps (2021)

The Tower Hill area to north of development site has a street network which encourages low traffic speeds, creating a more pleasant environment for pedestrians and cyclists.

3.3 Public transport

3.3.1 Bus

The number 20 bus is the only service which serves Headbolt Lane, connecting Tower Hill with Liverpool city centre via Kirkby. The service runs in an eastbound direction on Headbolt Lane before circling Tower Hill via Pingwood Drive and Shevington's Lane, returning to Liverpool via the A506.

Figure 9: Bus stop on northern side of Headbolt Lane



Source: Google Maps (2021)

There are three bus stops on the northern side of Headbolt Lane and a bus stop on the southern side of Headbolt Lane adjacent to the junction with Freckleton Drive. The stop on the southern side of Headbolt Lane is not currently operational.

The 14a, 14c, and 133 bus services operate along the A506. These services can be accessed from bus stops adjacent to Windemere Drive in a northerly direction and adjacent to St Kevin's Drive in a southerly direction. Both stops are approximately 400m walk from the proposed development site.

The number 21 service operates to the south of the proposed development site, connecting the Northwood area with Liverpool. Currently, accessing this service requires crossing the rail line over the pedestrian bridge approximately 300m to the east of the proposed development site.

Table 1 provides further details of the bus services serving the area around the development site.

Table 1: Bus services operating in the vicinity of the site

Service	Route	Stop location	Service frequency*
14**	Liverpool – Tower Hill	Boyes Brow	0
14A / 14C	Liverpool – Tower Hill	A506	2
20	Liverpool – Tower Hill	Headbolt Lane (towards Tower Hill) A506 (towards Liverpool)	5
21	Liverpool – Northwood	Roughwood Drive	5
133	Waterloo – Kirkby	Boyes Brow	1

*Services per hour in one direction

**14 only runs to and from Tower Hill before 6am.