



Countryside Properties PLC

Ash Bank Road, Werrington

Transport Assessment Addendum

October 2021



Countryside Properties PLC

Ash Bank Road, Werrington

Transport Assessment Addendum

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1. Introduction

1.1 Overview

- 1.1.1 mode transport planning (mode) has been appointed by Countryside Properties PLC to provide highways and transport advice in relation to the submission of a planning application for a new residential development on land to the south of Ash Bank Road, Werrington, c. 6.5km west of Stoke-on-Trent City Centre.
- 1.1.2 The site comprises two separate land parcels (ref: WE003 and WE052) both of which are allocated for residential development in the Staffordshire Moorlands Local Plan (SMLP) (2014-2033), specifically Policy DSR 3 'Land off Ash Bank Road Werrington'. Both land allocations are also bound by the HM Young Offenders Institute (YOI), to the south-east of the WE003 allocation, and to the south of the WE052 allocation, respectively.

1.2 Development Proposals

- 1.2.1 The proposed development comprises a total of 75 dwellings across the two land parcels; with 71 dwellings promoted on land parcel WE003 and four dwellings on parcel WE052. Access to the main site (WE003) is to be provided via an improvement to the existing access which serves the site and the adjacent YOI. Access to parcel WE052 will be provided via a new dropped kerb crossover to a parking court directly adjacent to the four new residential dwellings.

1.3 Purpose of Report

- 1.3.1 A Transport Assessment (TA) was prepared in November 2020 (ref: 41103_WOOD) for a previous scheme at the site; comprising a total development quantum of 78 dwellings. This document has been prepared as an Addendum Report to the previous TA, in order to consider the impact of the revised development scheme. A copy of the previous TA is provided at **Appendix A**, for reference.
- 1.3.2 A Residential Travel Plan (RTP) has also been produced in order to demonstrate that efforts to encourage long-term sustainable transport behaviour have been considered as part of the proposed development. The RTP should be read in conjunction with this Addendum Report.
- 1.3.3 The scope and content of this document has been informed by scoping discussions with Staffordshire County Council (SCC), in their capacity as Local Highway Authority (LHA). A copy of the relevant scoping discussions with SCC are provided in **Appendix B**.

1.4 Report Structure

- 1.4.1 As outlined above, the Addendum Report should be read in conjunction with TA prepared for the previous development scheme at the site in November 2020 (ref: 41103_WOOD).

- 1.4.2 The Addendum Report considers the amended development quantum for the site and identifies the likely impact on the surrounding highway network in the context of the evidence submitted as part of the consented TA, with all modes of travel considered. It considers the existing opportunities for sustainable travel to and from the site, with a focus on local walking and cycling routes, and accessibility to public transport.
- 1.4.3 The Addendum Report has been produced in line with 'Planning Practice Guidance (PPG) – *Travel Plans, Transport Assessments and Statement in Decision-Taking*' published by the Ministry of Housing, Communities and Local Government (MHCLG) in 2014, and is structured as follows:
- **Chapter 2** – provides a review of relevant national and local planning policies, which have been updated since the previous TA was submitted;
 - **Chapter 3** – reviews the existing transport infrastructure in the area surrounding the site, with a focus on opportunities for travel via sustainable modes, this also provides a review of Recorded Collision Data;
 - **Chapter 4** – outlines the development proposals, including details of the revised access and servicing strategy for the site;
 - **Chapter 5** – provides an overview of the trip generation associated with the proposed development, in addition to details regarding the distribution of traffic and subsequent assignment of trips onto the local highway network, as taken from the previous TA;
 - **Chapter 6** – reviews the potential impact on the local highway network; and,
 - **Chapter 7** – summarises and concludes the TA Addendum.

2. Policy Review

2.1 Introduction

2.1.1 This chapter introduces the statutory transport policy and best practice guidance relevant to the proposed development, which is found within the following documents:

- National Planning Policy Framework (NPPF) – 2021;
- Planning Practice Guidance (PPG) – 2018;
- Staffordshire Local Transport Plan (LTP) – 2011;
- Staffordshire Moorlands Local Plan (SMLP) – 2020; and
- Staffordshire Moorlands Integrated Transport Strategy (ITS) – 2018.

2.2 National Policy

National Planning Policy Framework (NPPF)

2.2.1 The National Planning Policy Framework (NPPF) sets out the Government's key objectives for achieving sustainable development. The NPPF was published in March 2012 and revised in February 2019. This document was again revised in July 2021 and replaces the previous version in order to streamline the national planning policies set out in previous policy guidance and a number of related circulars. These have been combined into a single document to make the planning system more accessible, whilst still protecting the environment and promoting sustainable growth.

2.2.2 The NPPF sets out the government's planning policies for England, and how these are expected to be applied, stating that all developments generating significant amounts of movement should be supported by a TA or Transport Statement (TS), alongside a Travel Plan (TP). Within the NPPF, it is suggested that an economic, social and environmental objective should be at the heart of the planning process.

2.2.3 Under the 'Promoting sustainable transport' chapter of the NPPF, it is stated that transport issues should be considered from the earliest stages of plan-making and development proposals (Para. 104). By doing this the potential impacts of development on transport networks can be addressed and the appropriate transport infrastructure can be implemented. By considering transport at the earliest stages, it allows the opportunity to promote walking, cycling and public transport, and mitigate any problems.

2.2.4 Significant developments should be focused on being sustainable, this can be done through limiting the need to travel and offering a genuine choice of transport modes.

2.2.5 The NPPF states (Para. 106, pg.30) that planning policies should:

- “Support an appropriate mix of uses across an area, and within larger scale sites, to minimise the number and length of journeys needed for employment, shopping, leisure, education and other activities;
- Be prepared with the active involvement of local highways authorities, other transport infrastructure providers and operators and neighbouring councils, so that strategies and investments for supporting sustainable transport and development patterns are aligned;
- Provide for attractive and well-designed walking and cycling networks with supporting facilities such as secure cycle parking, Local Cycling and Walking Infrastructure Plans.”

2.2.6 Within the context of assessing sites for that may be allocated for development in plans, or specific applications for development, it should be ensured that (Para. 110, pg.31):

- “Appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;
- safe and suitable access to the site can be achieved for all users;
- the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and
- any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.”

2.2.7 Within this context, new developments should (Para. 112, pg.32):

- “give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas... facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use.
- address the needs of people with disabilities and reduced mobility in relation to all modes of transport;
- create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;
- allow for the efficient delivery of goods, and access by service and emergency vehicles; and
- be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.”

2.2.8 Paragraph 111 states that:

“Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.”

2.2.9 Paragraph 113 concludes that all developments expected to generate significant amounts of movement should provide a TP, and applications should also be supported by a TS or TA to assess the likely impacts of the proposals.

2.2.10 The sustainable credentials and accessibility of the site are presented in **Chapters 3 and 4** of this report, where it is demonstrated that the site is accessible and accords with relevant national policy. **Chapters 5 and 6** demonstrate that the traffic associated with the proposed development would not have a severe and/or detrimental impact on the local highway network.

Planning Practice Guidance (PPG)

2.2.11 Planning Practice Guidance (PPG) provides detailed advice to support the NPPF. PPG contains further information for planners, developers and the public on the types of assessment required to support planning applications and the approach to considering applications on their various merits.

2.2.12 The NPPG was published in 2012 and most recently revised in 2018. The updated guidance aims to facilitate the development of a robust and well thought out site, enabling an assessment of the transport impacts of both existing and proposed developments. The guidance can inform sustainable approaches to transport. A strong assessment will establish evidence that may be useful in:

- Improving the sustainability of transport provision;
- Enhancing the levels of accessibility;
- Creating a choice amongst different modes of transport;
- Improving health and well-being;
- Supporting economic vitality;
- Improving public understanding of the transport implications of development;
- Enabling other highway and transport authority's/service providers to support and deliver the transport infrastructure that conforms to the Local Plan; and
- Supporting local businesses and the regional economy.

2.2.13 The sustainable credentials and accessibility of the site are presented in **Chapter 3** of this report. Further details in respect of the opportunities to promote sustainable travel to and from the site are set out in the RTP which accompanies the application.

2.3 Local Policy

Staffordshire Local Transport Plan (2011 - 2026)

2.3.1 SCC's third Local Transport Plan (LTP) sets out the County Council's proposals for transport provision in the county, including walking, cycling, public transport, car based travel and freight together with the management and maintenance of local roads and footways, for the period from 2011 – 2026.

2.3.2 The LTP sets out the following strategies for local transport provision and maintenance:

- Enabling economic growth through transport without causing congestion;
- Creating opportunities for residents and visitors to access jobs and education;
- Maintaining the current highway;
- Improving travel safety;
- Responding to current and future climate issues;
- Encouraging and providing active travel choices; and
- Minimising the negative impacts of transport on the environment.

2.3.3 The LTP identifies the following areas which the LHA can influence through the implementation of the principles advocated above:

- Stimulating areas of regeneration and deprivation;
- Supporting rural communities;
- Facilitating tourist activity;
- Maximising the impact of events on traffic movements;
- Managing networking capacity;
- Keeping the highway in good state of repair; and
- Improving the efficiency of freight distribution.

2.3.4 The document emphasises the importance of the LTP strategies in supporting growth and regeneration, and contributing towards wider local objectives around health, air quality, education, housing, social inclusion and quality of life.

2.3.5 The proposed development conforms with the principles of the LTP, in that it seeks to promote sustainable and inclusive accessibility both through good design and through the measures set out in the corresponding RTP. The sustainable credentials and accessibility of the site are presented in **Chapters 3 and 4** of this report. **Chapters 5 and 6** demonstrate that the traffic associated with the proposed development would not have a severe and/or detrimental impact on the local highway network.

Staffordshire Moorlands Local Plan (2014 – 2033)

2.3.6 The SMLP is a district wide development plan which provides a framework for delivering development for the period from 2014 – 2033. The SMLP sets out the development strategy and management policies for the district, and sets out what Staffordshire Moorlands District Council (SMDC) is seeking to achieve in each of the main towns and the rural areas outside the Peak District National Park over the plan period.

2.3.7 The site is allocated for residential development under Policy DSR 3 of the SMLP. The allocation comprises the two land parcels WE003 and WE052, which yield potential for a total development quantum of 75 dwellings.

2.3.8 The SMLP outlines that access to parcel WE003 should be from *“the eastern length of the frontage with Ash Bank Road. The Highway Authority advise access from the west frontage would not be supported and any access would need to provided adequate visibility splays and ensure it did not form a crossroads with Oakmount Road. A traffic assessment will be required to look at the effect of traffic from the development on Ash Bank Road.”*

2.3.9 With regard to parcel WE052, the SMLP states that *“Access to the site will need to consider the impact on the bus stop on Ash Bank Road and ensure adequate visibility splays are provided.”*

2.3.10 The proposed scheme seeks to provide a total of 75 dwellings, along with associated infrastructure. This will be delivered across two land parcels; however in contrast to the allocation for the two parcels and on account of the area within each parcel which is considered suitable for development c. 71 dwellings will be delivered on site WE003 and c.4 dwellings on site WE052. In accordance with Policy DSR 3 access to parcel WE003 is to be provided from the eastern part of the site, via the access road serving the adjacent HM Young Offenders Institute, which connects with Ash Bank Road via an existing priority junction.

2.3.11 Further details with respect to the access arrangements for the two parcels are provided in **Chapter 4**, for reference.

Staffordshire Moorlands District Integrated Transport Strategy (2018 – 2031)

2.3.12 The Staffordshire Moorlands Integrated Transport Strategy (ITS) is intended to help prioritise SCC's expenditure on transport improvements in the short term and during the period of the planning authority's Local Plan. The objectives of the ITS are as follows:

- Summarise the key highway and transport issues;
- Integrate transport and planning policy;
- Identify transport solutions that will help to:
 - Achieve Staffordshire County Council vision and outcomes;
 - Deliver the Local Plan;
 - Support Local Enterprise Partnership objectives; and
 - Reflect communities concerns.
- Outline funding options and delivery mechanisms.

2.3.13 Key highways issues covered within the Transport Strategy include:

- Condition of local roads – preventative and structural highway maintenance schemes identified through condition surveys;
- Traffic concerns across the local highway network – establishing junctions operating at / above capacity and determining suitable mitigation strategies;
- Car parking – on-street enforcement and locating areas of concern for residents;
- Road safety – use of collision data providing an indication of where to focus road safety initiatives

- Walking and cycling – maintaining walking / cycling routes in the area;
- Public transport – access to rail and bus services

2.4 Summary

- 2.4.1 In summary the planning policy described above collectively seeks to ensure that development is located to ensure future residents and visitors are provided with genuine modal choice by situating development in locations that reduce the need to travel, reduce average journey lengths and benefit from local infrastructure to enable use of modes of transport other than the single occupancy private car.
- 2.4.2 Furthermore, the planning policy considered also seeks to ensure that the impacts of the development are properly considered and mitigated via the preparation of appropriate transportation reports to accompany the planning application and where necessary the provision of mitigation in order to temper the impacts of a given development, to ensure that any residual impacts are not *“severe”*.
- 2.4.3 This TA has been prepared in line with current best practice guidance, policy and methodology.

3. Existing Conditions

3.1 Overview

3.1.1 This chapter considers the existing conditions of the site in relation to the local highway network and accessibility by various sustainable modes of transport; providing an update to the existing conditions set up within the original TA.

3.2 Local Highway Network

3.2.1 An overview of the local highway network in the vicinity of the site is provided in **Figure 3.1**.



Ash Bank Road (A52)

3.2.2 Ash Bank Road (A52) is a single carriageway road that provides connections between Stoke-on-Trent to the west of the site, and rural settlements to the east. The road routes between the Werrington Road (A52) in the Bucknall area of Stoke-on-Trent and Cellarhead Road (A52) to the east of Werrington.

3.2.3 Ash Bank Road is subject to a 40mph speed limit and has a carriageway width of c.7m. In the vicinity of the site the road benefits from streetlighting and pedestrian footway provision along both sides of the carriageway.

3.2.4 **Figure 3.2** illustrates the highway layout along Ash Bank Road in a westbound direction adjacent to the frontage of parcel WE052.

Figure 3.2: Ash Bank Road – Westbound



3.2.5 The road is part of a bus route, with bus lay-bys on both side of the carriageway, accompanied by shelters and timetable information. **Figure 3.3** provides an overview of the highway along Ash Bank Road in an eastbound direction, along with the location of the two existing bus stops.

Figure 3.3: Ash Bank Road – Eastbound



Washerwall Lane

3.2.6 Washerwall Lane is a single carriageway road that routes from the Ash Bank Road/Salters Lane/Washerwall Lane signalised cross roads in the south and provides access to the main residential area of Werrington, in addition to a network of rural lanes to the north of the village.

3.2.7 The road is residential in nature and also provides access to Werrington Primary School and a small local centre. The road is subject to a 30mph speed limit and includes traffic calming measures in the form of speed bumps along its entirety. The road also benefits from streetlighting and pedestrian footways on both sides of the carriageway, the footways on the eastern side being largely set back from the carriageway behind grassed verges.

Salters Lane

3.2.8 Salters Lane is a single carriageway road that routes from the Ash Bank Road/Salters Lane/Washerwall Lane signalised crossroads junction in the north to the A520 Leek Road in the south (via a short 50m section of Malthouse Lane at its southern end). The road is rural in nature with the majority of the carriageway subject to the national speed limit.

- 3.2.9 The speed limit is reduced in advance of entering Werrington village to 30mph, approximately 300m south of the Ash Bank Road/Salters Lane/Washerwall Lane junction. A footway is provided on the west side of the carriageway close to the northern end of the road, linking between footways on Chatsworth Drive and the A52 Ash Bank Road.

Armshead Road

- 3.2.10 Armshead Road routes from a priority crossroads with Rownall Road, close to the eastern extent of Ash Bank Road whilst also continuing on the eastern arm of the crossroads to a further priority T-junction with Ash Bank Road (out only).
- 3.2.11 In the vicinity of the site the road routes west from the crossroads junction, along the northern extent of Werrington village with residential frontages located on the southern side of the carriageway and agricultural land to the north. The road benefits from streetlighting along the entirety of this section and includes a pedestrian footway on the northern side of the carriageway for the first 130m which then routes along the southern side of the carriageway. This section of the road is also subject to a 30mph speed limit and includes traffic calming measures in the form of speed cushions.

Leek Road (A520)

- 3.2.12 Leek Road (A520) runs to the south of the site, from the signalised crossroads with the A52 to the residential area of Weston Coyney; where the A52 continues as Weston Road. Leek Road connects with Malthouse Lane and subsequently Salter Lane providing connections to and from the site.

3.3 Road Collision Analysis

- 3.3.1 Planning Practice Guidance states that in assessing highway safety an assessment should be made of the most recently available three-year period of collision data, unless a high collision rate has been identified. For completeness, a review of collision data for the most recently available five-year period has been undertaken.
- 3.3.2 Collision data recorded by Staffordshire Police in the vicinity of the site has been obtained for a five-year period between 01/01/2015 and 31/12/2019 along section of Ash Bank Road in the vicinity of the site. Data has been obtained from Staffordshire Police's online portal <https://www.ssrptraffweb.co.uk>. The accident plot and data are included within **Appendix C**.
- 3.3.3 The analysis demonstrates that three collisions have been recorded along Ash Bank Road in the vicinity of the site; two of which were classified as serious and one of which was classified as slight in terms of severity.

- 3.3.4 The first collision was recorded to the north of HM Young Offenders Institute and was classified as serious in severity. The collision involved two vehicles, and was not at, or within 20m of a junction. The collision report provided includes somewhat limited details, however it is noted that this occurred during hours of darkness in poor weather conditions, with fog / mist present, along with frost / ice on the road surface which are considered to be a contributing factor in the cause of the collision. On account of the conditions listed within the collision report, it is not considered that this represents a highway safety issue which would likely be exacerbated by the development.
- 3.3.5 The second collision occurred along Ash Bank Road to the east of the junction with Johnstone Avenue and was classified as serious in nature. The collision involved two vehicles, and was not at, or within 20m of a junction. The vehicles were travelling in opposing directions, during hours of daylight in dry conditions. The collision report does not list any causation factors, however given that the collision involved vehicles in favourable conditions travelling in opposite directions on a section of lit, straight carriageway, it is conceivable that this occurred as a result of an inappropriate manoeuvre / driver error.
- 3.3.6 The final collision recorded in the study area occurred to the east of the Windmill Pub and was classified as slight in severity. The collision involved a car and a motorcycle, and occurred as a result of the motorcycle turning right out of a vehicle crossover onto the main carriageway, before being struck by a car travelling westbound along Ash Bank Road. On account of the findings of the collision report it is considered that the collision occurred as a result of an inappropriate manoeuvre by the motorcyclist.
- 3.3.7 As set out above, the number of collisions recorded in the study area is relatively low on account of the nature of the road, which is subject to high volumes of through traffic. Given the limited details provided in the collision reports, and based on the description and weather conditions stated, it is considered likely that all three conditions occurred as a result of driver error. It is not therefore considered that there are any inherent safety issues on the local highway network surrounding the site which would likely be exacerbated by the additional traffic associated with the development proposals.

3.4 Existing Pedestrian Accessibility

- 3.4.1 There is a wide network of existing footways in the vicinity of the application site. Ash Bank Road (A52) benefits from footway provision along both sides of the carriageway, which are set back from the road behind grassed verges for the majority of this section and have a typical width of between 1.5m and 2m. These footways are typically lit and provide access to a number of amenities and services in the village of Werrington to the north of the site, as well as west towards the residential areas of Washerwall and Ash Bank.
- 3.4.2 A pelican crossing is located on the Washerwall Lane and Ash Bank Road (West) arms of the Ash Bank Road/Salters Lane/Washerwall Lane crossroads junction to the west of the site. Pedestrian crossing points in the immediate vicinity of the site are typically limited to dropped kerbs on minor arms which link with Ash Bank Road.

3.4.3 A number of PRow are located within the vicinity of the site, which are demonstrated in **Figure 3.4**. These routes provide connections north from the site through the village of Werrington and south towards Leek Road and the south-eastern residential suburbs of Stoke-on-Trent including Weston Coyney and Lightwood.

Figure 3.4: PRow Network



3.5 Existing Cycle Accessibility

- 3.5.1 Currently no cycle infrastructure is located within the vicinity of the site however Salters Lane, Hulme Lane, Washerwall Lane/Stonehouse Road/Russell Grove/Moorland Avenue and Armshead Road are SCC advisory cycle routes, which provide links north towards the villages of Stanley and Longsdon, as well as south and west towards the city centre and residential suburbs of Stoke-on-Trent.
- 3.5.2 Route 550 of the National Cycle Network (NCN) routes approximately 5km west of the site and can be accessed via the A52. From here Route 550 can be used to access Stoke on Trent City centre and the wider Stoke on Trent area (linking to Routes 5, 55 and 555) or northwest to Leek.

3.6 Bus Services

- 3.6.1 The Institution of Highways & Transportation (IHT) publication, Guidelines for Planning for Public Transport in Developments, 1999, suggests that “the maximum walking distance to a bus stop should not exceed 400m and preferably be no more than 300m”.
- 3.6.2 Two sets of bus stops (in both directions) are located within 400m walking distance from the centre of the development parcels, of which two are located either side of the Ash Bank Road / Salters Lane / Washerwall Lane crossroads on Ash Bank Road, and two located immediately adjacent to the northern boundary of the WE052 site on Ash Bank Road.
- 3.6.3 All bus stops have shelters and the westbound stop adjacent immediately adjacent to the WE052 site and the eastbound stop at the crossroads have dedicated bus laybys. The services serving these bus stops are summarised below by route and peak hour frequency. An overview of the frequency of the bus services operating from these stops is provided in **Table 3.1**.

Table 3.1: Bus Service Peak Hour Frequency*

Service No.	Route	Peak Hour Frequency		
		Weekday (Mon – Fri)	Saturday	Sunday
16	Leek – Cheddleton - Werrington - Hanley	2 an hour	2 an hour	-
32X	Hanley – Werrington – Cheadle - Tean	1 an hour	1 an hour	-
Kingfisher	Uttoxeter – Tean – Cheadle - Hanley	1 an hour	1 an hour	1 an hour

*Bus service frequencies may be affected as a result of the Covid-19 pandemic – times correct as of 09/08/21

- 3.6.4 As is shown in **Table 3.1**, regular bus services are available from bus stops accessible within a short walk from the site, providing links to destinations such as Hanley and Leek. In addition to these services, the no. 31A local school bus service also stops at these bus stops.
- 3.6.5 From Hanley onward connections are provided towards Stoke-on-Trent via the 9, 14, 21 and 23 services and to Newcastle-under-Lyme via the 4 and 101 services respectively.

3.7 Rail Services

- 3.7.1 The nearest train station to the site is Stoke-on-Trent, which is located approximately 7.3km to the west of the development site, from which a range of regional and national destinations can be accessed. The station can be accessed via the no. 16 and Kingfisher bus services which operate from the site, providing connections to Hanley, where the 9, 21, 23 and 25 services provide onwards connections to Stoke-on-Trent railway station, with an overall journey time of approximately 38 minutes.
- 3.7.2 **Table 3.2** provides a summary of routes and times of the rail services available from Stoke-on-Trent railway station.

Table 3.2: Rail Services available from Stoke-on-Trent Railway Station*

Destination	Peak Hour Frequency	Typical Journey Time
Birmingham New Street	2 an hour	58 min
Manchester Piccadilly	3 an hour	40 mins
Crewe	2 an hour	25 mins
Derby	1 an hour	51 mins
Wolverhampton	2 an hour	32 mins
London Euston	2 an hour	1 hr 39 mins

*Train service frequencies may be affected as a result of the Covid-19 pandemic – times correct as of 09/08/21

3.8 Proximity to Local Services and Facilities

- 3.8.1 The development site is located in an area benefitting from a range of facilities / services within walking and cycling distance. The accessibility of the site is demonstrated within this section through the identification of local services and facilities that are accessible by walking and / or cycling.
- 3.8.2 Guideline walking distances provided in the Chartered Institution of Highways and Transportation (CIHT) document 'Guidelines for Providing for Journeys on Foot (2000)', are shown in **Table 3.3**.

Table 3.3: CIHT Guideline Acceptable Walking Distances

Criteria	Town Centre	Commuting/School	Elsewhere
Desirable	200m	500m	400m
Acceptable	400m	1,000m	800m
Preferred Maximum	800m	2,000m	1,200m

- 3.8.3 Appropriate walking distances are dependent upon the location of the specific development; more remote locations will see people being prepared to walk further to their end destination. Similarly, appropriate walking distances are also dependent upon the standard of existing pedestrian infrastructure provision, with further walking distances achievable in locations with extensive and high-quality pedestrian footways, crossings and pedestrianised areas.
- 3.8.4 As with pedestrian accessibility, the level of a site's cycle accessibility depends upon a combination of the distance from the local amenities and the standard of existing cycle infrastructure. It should, however, be noted that the cycle infrastructure can include facilities shared with vehicles and pedestrians as well as dedicated cycle infrastructure.

3.8.5 In respect of acceptable cycle distances, 'Local Transport Note 1/20: Cycle Infrastructure Design', published by DfT, states that 'two out of every three personal trips are less than five miles in length - which is an achievable distance to cycle for most people'. The document also states that 'for schoolchildren the opportunities are even greater: three quarters of children live within a 15-minute cycle ride of a secondary school, while more than 90% live within a 15-minute walk of a primary school'.

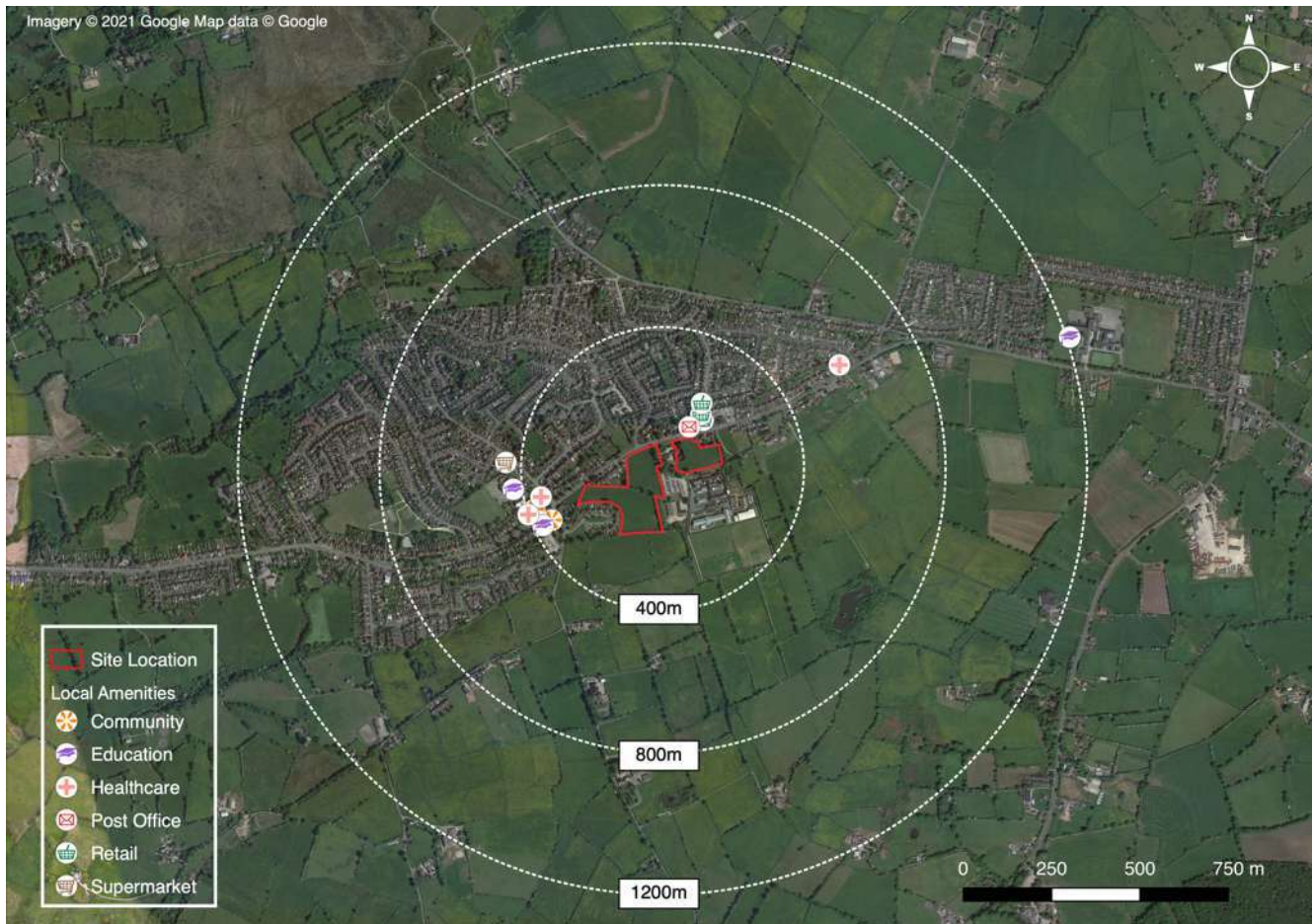
3.8.6 **Table 3.4** provides an indication of the approximate distances and walking / cycling times to local amenities and facilities. The measurements have been taken from the existing access from which parcel WE003 will be served, and the times are based on an average walking speed of 1.4 metres per second and average cycling speed of 4.4m/s.

Table 4.4: Accessibility to Local Amenities / Facilities

Amenity / Facility	Distance from Site (m)	Estimated Walking Journey Time (mins)	Estimated Cycling Journey Time (mins)
Werrington Pre School	400	5	2
Post Office	100	1	1
Werrington News	200	2	1
Premier Stores: Shopeezy	250	3	1
Brian Roberts Butchers	300	4	1
Trent Health Pharmacy	350	4	1
Werrington Village Surgery	400	5	2
St Phillips Church	400	5	2
Werrington Library	400	5	2
Werrington Primary School	450	5	2
Co-op Food	500	6	2
Werrington Dental Practice	550	7	2
Moorside High School	1200	15	5

3.8.7 An overview of the location of the amenities relative to the site is provided in **Figure 3.5**, for reference.

Figure 3.5: Local Amenities Map



3.8.8 As illustrated above, the development site is located within an accessible distance of a range of amenities / facilities including a primary and secondary school, medical facilities and a supermarket. Further amenities can be accessed via the bus services which operate along Ash Bank Road.

3.9 Summary

- 3.9.1 The level of accessibility to the site is considered to be good with a range of opportunities for sustainable travel, by walking and cycling, with some limited existing public transport provision.
- 3.9.2 Analysis of the local highway network in the vicinity of the site has demonstrated that there are not any inherent highway safety issues on the local highway network surrounding the site which would likely be exacerbated by the development.

4. Proposed Development

4.1 Overview

- 4.1.1 This chapter provides an overview of the development proposals, including details of the proposed access arrangements, as well as the servicing and parking strategy for the site.

4.2 Development Schedule

- 4.2.1 The proposed scheme comprises a reduced development quantum when compared to that assessed as part of the previous TA (ref: 41103_WOOD) prepared for the site; down from 78 dwellings to 75 dwellings. These dwellings cover the two land parcels, comprising 71 dwellings as part of land parcel WE003 and four dwellings for WE052.
- 4.2.2 A copy of the illustrative masterplan for the site is provided at **Appendix D**, for reference.

4.3 Access

Land Parcel WE003

- 4.3.1 In accordance with the SMLP, access to land parcel WE003 will be achieved via an improvement to the existing priority junction serving the YOI and the site from Ash Bank Road (A52).

Feasibility Work / Discussions with SCC

- 4.3.2 As part of the feasibility work undertaken in relation to the current development scheme, an Access Appraisal Review was prepared in March 2021, in order to discuss and agree the proposed access strategy for the site with SCC; in their capacity as LHA. The initial feasibility work aimed to provide access to WE003 at the north-eastern corner of the site via a priority junction with the internal access road currently serving the HM Young Offenders Institute, which subsequently connects with Ash Bank Road via an existing bell mouth junction.
- 4.3.3 Subsequent discussions were held with SCC where it was suggested that the access proposed would not be suitable for adoption on account of the topography change into the site. An alternative western access option was consequently considered but disregarded given the lack of land availability to provide such an option and also the potential conflict between the access and any queues forming from the adjacent signalised junction of Ash Bank Road / Salters Lane / Washerwall Lane.

- 4.3.4 SCC also made the following point with regards to the alternative access arrangement to the western corner of the site as part of discussions in relation to the previous TA (ref: 41103_WOOD):

“Unfortunately, Highways would not be able to support an access at this point. Vehicles waiting at the Salters Lane traffic lights regularly queue back past this point particularly at (but not confined to) AM peak. It wouldn't take many vehicles queueing behind a vehicle blocked from turning right to queue back across the signal controlled junction. Detector loops for the lights are in the carriageway at the proposed point of access. The bus stop opposite would only add to potential problems.

There is no objection to this area of land being included in the development but access would need to be through the shared access with the YOI.”

Proposed Access Strategy – Residential Site

- 4.3.5 In light of the above, and in order to mitigate the impact of level variations within the site, access to land parcel WE003 has been progressed via an alternative improvement scheme for the existing priority access serving the YOI, from Ash Bank Road (A52).
- 4.3.6 The improvement scheme includes a newly constructed priority junction from the Ash Bank Road (A52), which has been designed to adoptable standards in accordance with Manual for Streets (MfS) and SCC's Residential Design Guide.
- 4.3.7 The proposed access strategy comprises a new section of highway, which will connect the proposed residential development directly to Ash Bank Road (A52) via a new priority junction. Access to the YOI will be taken via a new priority junction from the access road serving the residential development.
- 4.3.8 The new access road serving the residential site will incorporate a 5.5m wide carriageway, with 2m wide footway provision along either side of the carriageway. The new priority junction linking the residential access road with Ash Bank Road (A52) includes 6m corner radii. An overview of the proposed access arrangements is provided in **Drawing J32-5522-PS-001**, attached as **Appendix E**, for reference.
- 4.3.9 Swept-path analysis for the proposed access road has been undertaken using a c.11.7m refuse vehicle and c.8.7m fire appliance. A copy of tracking drawings is provided in **Drawing J32-5522-PS-007** and **PS-008**, which demonstrate that the above design vehicles can access and egress the site.
- 4.3.10 As part of the previous TA for the site an Automatic Traffic Count (ATC); (including speed surveys) was undertaken along Ash Bank Road (A52) approximately 60m west of the existing access to the YOI. The speed survey was undertaken for a seven-day period between 11th and 17th September 2018. An overview of the 7-day average mean and 85th percentile speeds recorded by the ATC is provided in **Table 4.1**.

Table 4.1: Ash Bank Road Weekday Average Vehicle Speeds

Direction	Mean Average (Mph)	85 th Percentile (Mph)
Eastbound	31.5	36.0
Westbound	29.7	36.2
Two-Way	30.6	36.2

4.3.11 As outlined above, the average speed of vehicles recorded past the site is lower than the posted speed limit of 40mph. Taking the average two-way vehicle speed as 37mph, the visibility requirements from the site accesses will be set against the standards outlined in MfS, which specifies splays of 59m at a 2.4m setback from the give-way line.

4.3.12 The required visibility splays are achievable from the proposed priority junction in accordance with MfS and the recorded 85th percentile speeds along Ash Bank Road (A52) of 37mph. The visibility splays are outlined in **Drawing J32-5522-PS-001**, attached as **Appendix E**, for reference.

Proposed Access Strategy – YOI

4.3.13 The new priority junction linking the YOI with the new residential access road will incorporate a 5.0m wide carriageway with 4m corner radii on the north-eastern side of the access (towards Ash Bank Road) and 2m corner radii on the south-western side of the access (towards the residential site).

4.3.14 The residential access road adjacent to the YOI access assumes a design speed of 20mph, in accordance with the requirements of the Staffordshire Residential Design Guide (2000). In accordance with MfS, this equates to required visibility splays of 25m in each direction, at a standard 2.4m setback from the give-way line. **Drawing J32-5522-PS-001**, attached at **Appendix E**, demonstrates that the required visibility splays are achievable from the priority junction.

4.3.15 Following prior engagement with representatives at the YOI, a 10m compound curve has also been included on the north-eastern side of the priority access serving the YOI. This compound curve has been incorporated in order to accommodate the track of a 12m rigid truck; it is understood that access for this vehicle is infrequently required for larger / bulk deliveries to the YOI.

4.3.16 The placement of the new residential access road will require an existing vehicle crossover to the west of the access road to be extinguished; which currently serves a collection of storage sheds associated with the YOI. The proposed development will therefore deliver a new access road which connects the YOI access road with the storage sheds. An overview of the access arrangement is provided in **Drawing J32-5522-PS-001** and **PS-012**, attached at **Appendix E**

4.3.17 Swept-path analysis for the proposed access road for the YOI has been undertaken using a 12m rigid truck. A copy of tracking drawing is provided in **Drawing J32-5522-PS-012**, which demonstrates that the design vehicle can access and egress the site.

Land Parcel WE052

4.3.18 Access to a parking court on the smaller land parcel serving four dwellings will be provided via a vehicle crossover to the west of the existing bus lay-by along Ash Bank Road. 2m footway provision will be provided between the car park and Ash Bank Road in order to facilitate pedestrian access to the front doors of the new dwellings, which will face directly onto Ash Bank Road. An overview of the proposed access arrangements are shown in **Drawing J23-5522-PS-001**, provided as **Appendix E**.

4.3.19 In order to achieve the required visibility splays along Ash Bank Road for the proposed vehicle crossover, the existing bus shelter facility along the westbound carriageway will be moved to the back of the footway; further details in respect of this arrangement and the achievable visibility splays at the site access are provided in **Drawing J23-5522-PS-001**, provided as **Appendix E**, for reference.

4.3.20 Access to the four dwellings on parcel WE052 for refuse and service vehicles will be provided from kerbside, along Ash Bank Road (A52).

4.4 Parking

Car Parking

4.4.1 Local car parking standards are outlined in the SMLP (Appendix 2), which provides the following parking guidance for Class C3 – Residential Dwellings.

- Detached or semi detached
 - Up to 3 bedrooms – 2 spaces (2.4 x 4.8m) for residents and visitors within curtilage of dwelling; and
 - 4 or more dwellings – 3 spaces (2.4 x 4.8m) for residents and visitors within the curtilage of the dwelling. An extension of a smaller dwelling to 4 or more bedrooms would normally be expected to meet this guidance.
- Forms other than detached or semi detached
 - Up to 2 bedrooms - 1 space per dwelling plus 1 space per 4 dwellings for visitors. Spaces should be provided within curtilage of dwelling if possible, otherwise communally within curtilage of the development, and wherever possible within sight of dwelling and/or within 45 metres thereof; and
 - 3 or more bedrooms - 2 spaces per dwelling plus 1 per 4 for visitors. Spaces should be provided within the curtilage of the dwelling if possible, otherwise communally within the curtilage of the development, and wherever possible within sight of the dwelling and/or within 45 metres thereof.

- 4.4.2 Car parking provision at the site will be provided in accordance with the above referenced standards.

Cycle Parking

- 4.4.3 In accordance with the recommendations of central government, SCC has recently published their Local Cycling and Walking Infrastructure Plan (LCWIP) covering the period from 2021 – 2031. As outlined within the publication, the vision of the LCWIP is to "Increase people's connectivity through cycling and walking to employment, education and leisure, leading to positive changes in modal shift, enabling people to lead safer, healthier and more independent lives".
- 4.4.4 The SMLP does not provide any specific standards for cycle parking, however it does state that new developments should provide proactive facilities and measures to support sustainable travel methods, such as cycle storage facilities.
- 4.4.5 Suitable cycle parking provision will be provided within the curtilages of the new residential dwellings. This will be accompanied by a series of targeted measures to promote sustainable travel to and from the site; which are set out in the accompanying RTP.

5. Trip Generation

5.1 Overview

5.1.1 This chapter provides a review of the likely traffic generation associated with the proposed development, through consideration of traffic profiles for comparable sites from the TRICS database.

5.2 Trip Generation

5.2.1 In order to determine the likely traffic impact of the proposed development on the surrounding highway network, trip rates have been obtained to establish the forecast traffic generation of the scheme. Trip rates have been obtained from the TRICS database (v 7.7.4), with data selected for the following parameters:

- Land Use: 03/A – Residential, Houses privately owned;
- Locations – Suburban Area, Edge of Town;
- Survey Days – Weekdays; and
- Population - <5 miles: 125,000+.

5.2.2 Sites located in Greater London and outside of England have been excluded.

5.2.3 An average of the resultant trip rates for both the AM and PM peak hours was derived and a summary of the trip rates and resultant vehicle trips is detailed below in **Table 5.1**.

Table 5.1 : Vehicle Trip Rates and Trip Generation

	AM Peak (08:00 - 09:00)			PM Peak (17:00 – 18:00)		
	Arrive	Depart	Total	Arrive	Depart	Total
Trip Rate (per dwelling)	0.131	0.345	0.476	0.31	0.152	0.462
WE003 (71 dwellings)	9	24	34	22	10	33
WE052 (4 dwellings)	1	2	2	1	1	1
Total (75 dwellings)	10	26	36	23	11	34

5.2.4 As summarised in **Table 5.1**, the development is expected to generate in the region of 36 two-way trips during the AM peak hour and 34 two-way trips during the PM peak hour, which is equivalent to just over one trip every 2 minutes during the peak periods.

5.3 Trip Distribution

5.3.1 The vehicular trips associated with the scheme have been distributed on the local highway network based on the gravity model used in the previous TA, which was based on the 2011 Census Journey to Work data for the Staffordshire Moorlands 009B (E01029780) Mid Layer Super Output Area (MSOA).

5.3.2 A summary of the traffic distribution and the resultant flows arriving and departing from the respective access junctions are outlined in **Table 5.2**.

Table 5.2 : Development Traffic Distribution Route Assignment – Respective Land Parcels

Direction	Proportion of Travel (%)	
	AM Peak (0800 – 0900)	PM Peak (1700 – 1800)
WE003		
To West	74%	76%
From West	74%	72%
To East	21%	19%
From East	21%	23%
WE052		
To / From West	4%	4%
To / From East	1%	1%
WE003 + WE052		
To West	78%	80%
From West	78%	76%
To East	22%	20%
From East	22%	24%

5.3.3 A summary of the traffic flows at the two site access junctions is provided in **Figure 5.1** and **Figure 5.2**, with an overview of the full traffic flows for the study area provided at **Appendix F**.

Figure 5.1 : Development Traffic Flows – AM Peak (0800 – 0900)

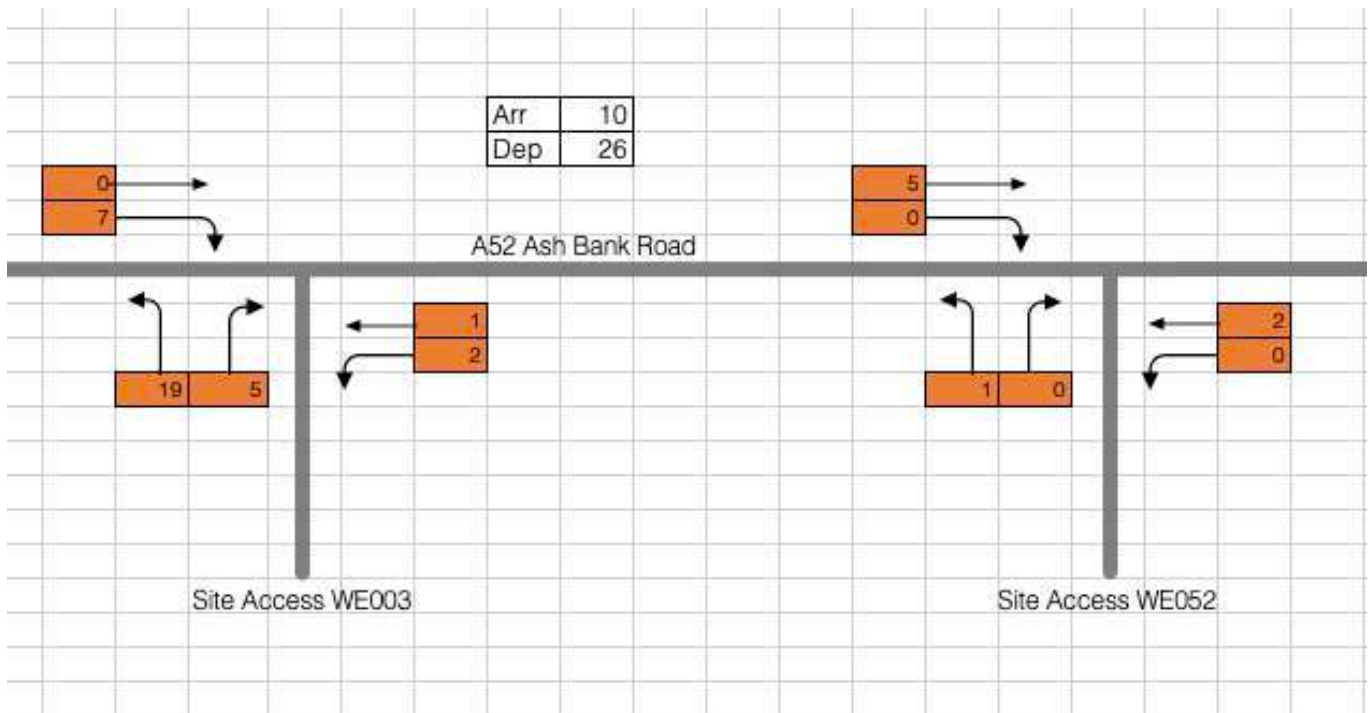
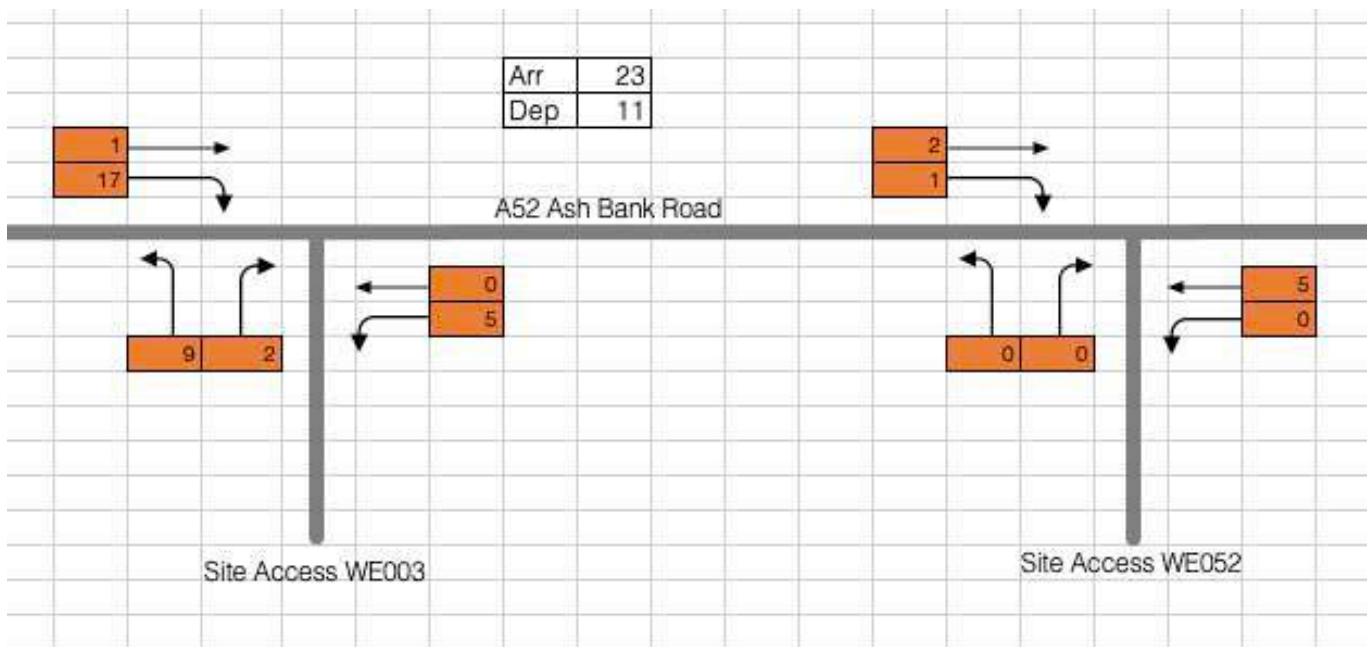


Figure 5.2 : Development Traffic Flows – PM Peak (1700 – 1800)



5.4 Traffic Growth

5.4.1 TEMPro has been used to forecast traffic growth between the survey period in 2019, and the standard five-year post submission assessment year of 2026. In accordance with current guidance, Dataset 72 was used.

- 5.4.2 The study area was defined by the Staffordshire Moorlands Local Authority district. For the interrogation of the TEMPRO database the growth rates for 'car drivers only' were selected with the trip end type being defined as 'origin/destination'. Trip rates were obtained for the weekday AM and PM peak periods.
- 5.4.3 Once the trip rates had been calculated, an adjustment was applied to provide a local growth rate. An NTM growth calculation for 'Principal' was weighted to the TEMPRO growth rates. The TEMPRO assessment has predicated growth from 2019 to the 2026 assessment year. A summary of the TEMPRO rates is provided in **Table 5.3**.

Table 5.3 Summary of TEMPro Growth Factors

Growth Period	Road Type	Adjusted Growth Factor	
		AM	PM
2019 – 2026	Principal	1.0443	1.0431

- 5.4.4 These growth rates have been applied to the 2019 surveyed traffic flows in order to provide a representative baseline from which to consider the operation of key junctions in the 2026 assessment year.

6. Traffic Impact

6.1 Introduction

6.1.1 This chapter describes the junction capacity assessments carried out in order to determine the suitability of the proposed site access junction, in addition to off-site junctions where a material impact is forecast. A standard five-year post submission assessment year of 2026 has been incorporated into the assessments.

6.2 Study Parameters

Study Area

6.2.1 As outlined in **Chapter 4**, the current development scheme comprises a reduced development quantum when compared to that assessed as part of the previous TA (ref: 41103_WOOD) prepared for the site; down from 78 dwellings to 75 dwellings.

6.2.2 As part of the previous TA it was agreed, through completion of a scoping exercise with SCC, that detailed capacity assessments would be required at the following three junctions:

- Junction 1 : Site Access / Ash Bank Road (A52) – Priority Junction ;
- Junction 2 : Washerwall Lane / Ash Bank Road (A52) / Salters Lane – Signalised Crossroads;
- Junction 3 : Leek Road (A520) / Kingsley Road (A52) / Cellarhead Road (A42) – Signalised Crossroads.

6.2.3 The current development schedule is comparable to that proposed as part of the previous TA and therefore the same detailed capacity assessments have been undertaken as part of the Addendum Report.

Software

6.2.4 The new priority junction has been modelling using the PICADY module of the industry standard JUNCTIONS 9 modelling package. When assessing junction capacity using JUNCTIONS 9, it is generally accepted that a Ratio of Flow to Capacity (RFC) value of below 0.85 represents a junction that is considered to be operating satisfactorily (within practical capacity). At junctions operating at or close to zero practical reserve capacity, which equates to an RFC value of approximately 1.00 or above, small reductions in capacity may result in exponential queuing and/or delay results.

6.2.5 For signalised junctions, industry standard LINSIG 3 software has been utilised, and junctions are considered to be operating above their theoretical capacity when the Practical Reserve Capacity (PRC) exceeds 90%.

6.3 Junction 1 – Site Access / Ash Bank Road (A52)

6.3.1 The results of the capacity assessment undertaken at the Site Access / Ash Bank Road (A52) junction are provided in **Table 6.1**, with the full outputs provided at **Appendix G**.

Table 6.1 : Site Access / Ash Bank Road (A52) Priority Junction - Results Summary

Arm	AM Peak Hour (0800 – 0900)			PM Peak Hour (1700 – 1800)		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2026 – Base + Development						
Site Access	0	12	0.05	0	16	0.19
Ash Bank Road (W)	0	5	0.10	0	5	0.08

6.3.2 The results demonstrate that the site access junction will operate with significant reserve capacity during the 2026 Base + Development future year scenario, with a maximum RFC of 0.19 recorded on the site access arm during the PM peak hour. This denotes that the site access junction will operate with sufficient reserve capacity and is therefore acceptable from a capacity perspective.

6.4 Junction 2 – Washerwall Lane / Ash Bank Road (A52)

6.4.1 The results of the capacity assessment undertaken at the Washerwall Lane / Ash Bank Road (A52) junction are provided in **Table 6.2**, with the full outputs provided at **Appendix G**.

Table 6.2 : Washerwall Lane / Ash Bank Road (A52) Signalised Junction – Results Summary

Arm	AM Peak Hour (0800 – 0900)			PM Peak Hour (1700 – 1800)		
	DoS (%)	MMQ (PCU)	Delay / PCU (s)	DoS (%)	MMQ (PCU)	Delay / PCU (s)
2026 Base						
Washerwall Lane	77.4%	7	70	65%	4	41
Ash Bank Road (E)	72.8%	12	21	84.1%	9	20
Salters Lane	66.9%	5	56	76.7%	5	47
Ash Bank Road (W)	77.8%	17	29	83.3%	7	22
PRC		15.6%			7%	
2026 Base + Development						
Washerwall Lane	79.7%	7	71	65.4%	4	43
Ash Bank Road (E)	75.2%	13	21	85.4%	9	22
Salters Lane	68.8%	5	59	80.1%	6	54
Ash Bank Road (W)	79.6%	17	29	84.3%	11	23
PRC		12.9%			5.4%	

- 6.4.2 The results demonstrate that the Washerwall Lane / Ash Bank Road (A52) signalised junction will operate with ample spare reserve capacity during the 2026 Base future year assessment scenario, with a maximum DoS of 84.1% recorded on the Ash Bank Road (E) during the PM peak hour.
- 6.4.3 Following the introduction of the additional traffic associated with the proposed development, the maximum DoS recorded increases to 85.4% on the Ash Bank Road (E) during the PM peak hour. There is a minor increase in the delay recorded on this arm following the introduction of development traffic; from 20 to 22, however no increase is recorded in the mean max queue at the junction.
- 6.4.4 In light of the above, the results of the capacity assessment indicate that the junction will continue to operate with reserve capacity following the introduction of the proposed development. This denotes that the Washerwall Lane / Ash Bank Road (A52) is therefore acceptable from a capacity perspective.

6.5 Junction 3 – Leek Road (A520) / Kingsley Road (A52)

- 6.5.1 The results of the capacity assessment undertaken at the Leek Road (A520) / Kingsley Road (A52) junction are provided in **Table 6.2**, with the full outputs provided at **Appendix G**.

Table 6.3 : Leek Road (A520) / Kingsley Road (A52) Signalised Junction – Results Summary

Arm	AM Peak Hour (0800 – 0900)			PM Peak Hour (1700 – 1800)		
	DoS (%)	MMQ (PCU)	Delay / PCU (s)	DoS (%)	MMQ (PCU)	Delay / PCU (s)
2026 Base						
Leek Road (N)	83.3%	12	55	71.1%	10	38
Kingsley Road	63.1%	11	32	78.7%	17	28
Leek Road (S)	91%	18	65	76.2%	11	41
Cellarhead Road	90.7%	16	64	76.4%	10	32
PRC		-1.2%			14.3%	
2026 Base + Development						
Leek Road (N)	87.6%	12	63	72%	10	41
Kingsley Road	63.2%	11	32	78.9%	17	28
Leek Road (S)	91%	18	65	76.4%	11	41
Cellarhead Road	91.9%	17	68	76.5%	10	32
PRC		-2.1%			14.1%	

- 6.5.2 The results demonstrate that the Leek Road (A520) / Kingsley Road (A52) signalised junction will operate beyond its theoretical capacity in the 2026 Base future year assessment scenario, prior to the introduction of traffic associated with the proposed development. A maximum DoS of 91% is observed on the Leek Road (S) during the AM peak hour. A DoS of 90.7% is also recorded on the Cellarhead Road arm during the AM peak hour.
- 6.5.3 Following the introduction of the additional traffic associated with the proposed development, there is no increase recorded for the DoS on the Leek Road (S) arm. On the Cellarhead Road arm the recorded DoS increases from 90.7% to 91.9% following the introduction of development traffic. The associated increase in queueing and delay on this approach is relatively minor, with the MMQ increasing from 16 to 17 and the delay increasing from 64 to 68 seconds.
- 6.5.4 In light of the above, it is considered that the proposed scheme will have a relatively minor impact at the junction, which is already predicted to operate beyond its theoretical capacity in 2026, prior to the onset of additional traffic associated with the proposed development. The reported development traffic impacts are not considered to be severe and therefore no mitigation as a result of the development proposals is considered to be necessary.

7. Summary & Conclusion

7.1 Summary

- 7.1.1 mode transport planning (mode) has been appointed by Countryside Properties PLC to provide highways and transport advice in relation to the submission of a planning application for a new residential development on land to the south of Ash Bank Road, Werrington, c. 6.5km west of Stoke-on-Trent City Centre.
- 7.1.2 The proposed development comprises a total of 75 dwellings across the two land parcels; with 71 dwellings promoted on land parcel WE003 and four dwellings on parcel WE052. Both parcels are allocated for residential development (ref: WE003 and WE052) in the Staffordshire Moorlands Local Plan (SMLP) (2014-2033), specifically Policy DSR 3 'Land off Ash Bank Road Werrington'.
- 7.1.3 A TA was prepared in November 2020 (ref: 41103_WOOD) for a previous scheme at the site; comprising a total development quantum of 78 dwellings. This document has been prepared as an Addendum Report to the previous TA, in order to consider the impact of the updated development scheme, and should therefore be read in conjunction with the previous TA.
- 7.1.4 A RTP has been produced in order to demonstrate that efforts to encourage long-term sustainable transport behaviour have been considered as part of the proposed development. The RTP should be read in conjunction with this Addendum Report.
- 7.1.5 The level of accessibility to the site is considered to be good with a range of opportunities for sustainable travel, by walking, cycling, or utilising the existing public transport provision. A separate RTP has been submitted as part of the planning application in order to encourage the uptake of sustainable modes of transport by future occupiers.
- 7.1.6 Analysis of the local highway network in the vicinity of the site has demonstrated that there are not any inherent highway safety issues on the local highway network surrounding the site which would likely be exacerbated by the development.
- 7.1.7 Access to the main site (WE003) is to be provided via an improvement to the existing access which serves the site and the adjacent YOI. The improvement scheme includes a newly constructed priority junction from the A52 Ash Bank Road, which has been designed to adoptable standards in accordance with Manual for Streets (MfS) and SCC's Residential Design Guide. The new section of highway will connect the proposed residential development directly to Ash Bank Road (A52) via a new priority junction. Access to the YOI will be taken via a new priority junction from the access road serving the residential development.
- 7.1.8 Access to parcel WE052 will be provided via a new dropped kerb crossover to a parking court directly adjacent to the four new residential dwellings. In order to achieve the required visibility splays along Ash Bank Road for the proposed vehicle crossover, the existing bus shelter facility along the westbound carriageway will be moved to the back of the footway.

- 7.1.9 In order to determine the likely traffic impact of the proposed development on the surrounding highway network, trip rates have been obtained for comparable sites from the TRICS database (v 7.7.4). The development is expected to generate 36 two-way trips during the AM peak hour and 34 two-way trips during the PM peak hour, which is equivalent to approximately one trip every 2 minutes during the peak periods. This is not considered to represent a significant volume of traffic.
- 7.1.10 As part of the Addendum Report, detailed capacity assessments have been undertaken at the following three junctions:
- Junction 1 : Site Access / Ash Bank Road (A52) – Priority Junction ;
 - Junction 2 : Washerwall Lane / Ash Bank Road (A52) / Salters Lane – Signalised Crossroads;
 - Junction 3 : Leek Road (A520) / Kingsley Road (A52) / Cellarhead Road (A42) – Signalised Crossroads.
- 7.1.11 The capacity assessment results for the site access junction formed with Ash Bank Road (A52) demonstrate that this will operate with significant reserve capacity, with a maximum RFC of 0.19 recorded on the site access arm during the PM peak hour.
- 7.1.12 The capacity assessment for the Washerwall Lane / Ash Bank Road (A52) signalised junction demonstrate that the junction will within its theoretical capacity following the introduction of development traffic, with a maximum DoS of 85.4% recorded on the Ash Bank Road (E) during the PM peak hour.
- 7.1.13 The capacity assessment for the Leek Road (A520) / Kingsley Road (A52) signalised junction demonstrate that the junction will operate beyond its theoretical capacity but within absolute capacity in the 2026 Base future year assessment scenario, prior to the introduction of traffic associated with the proposed development. A maximum DoS of 91% is observed on the Leek Road (S) during the AM peak hour. A DoS of 90.7% is also recorded on the Cellarhead Road arm during the AM peak hour.
- 7.1.14 Following the introduction of the additional traffic associated with the proposed development, there is no increase recorded for the DoS on the Leek Road (S) arm. On the Cellarhead Road arm the recorded DoS increases from 90.7% to 91.9% following the introduction of development traffic. The associated increase in queueing and delay on this approach is relatively minor, with the MMQ increasing from 16 to 17 and the delay increasing from 64 to 68 seconds.
- 7.1.15 In light of the above, it is considered that the proposed scheme will have a relatively minor impact at the junction, which is already predicted to operate at its theoretical capacity in 2026, prior to the onset of additional traffic associated with the proposed development. The reported development traffic impacts are not considered to be severe and therefore no mitigation as a result of the development proposals is considered to be necessary.

7.2 Conclusion

- 7.2.1 In conclusion it is considered the proposals would deliver a development which would be accessible by a variety of modes of travel. The junction capacity assessments carried out demonstrate that the proposed development will not have a severe impact on the operation of the local highway network within the vicinity of the site.
- 7.2.2 Based upon the findings of this TA, it is demonstrated that the proposed development will not have a severe impact on the surrounding highway network in terms of capacity and safety, and accordingly can be considered acceptable in terms of transport and highways.