

**Bob Hindhaugh Associates**  
Highway Development Control & Traffic Engineering and Planning

TRANSPORT STATEMENT IN SUPPORT

OF A

PROPOSED AFFORDABLE HOUSING DEVELOPMENT

THE OLD BUILDER'S YARD

WINTERFIELD LANE, WESTON COYNEY, STOKE-ON-TRENT

CLIENT: Mr J Carnell

June 2013

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## TRANSPORT STATEMENT

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### Document History

Revision	Date	Status	Prepared By	Approved By
0	15 <sup>th</sup> April 2013	1 <sup>st</sup> Draft	R Chiverton – Principal Consultant	B Hindhaugh - Director
1	29 <sup>th</sup> July 2013	Final	R Chiverton – Principal Consultant	B Hindhaugh - Director
Version				

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## Highway Development Control & Traffic Engineering and Planning

### 1 INTRODUCTION

- 1.1 Bob Hindhaugh Associates Ltd has been appointed to prepare a Transport Statement (TS) on behalf of Mr J Carnell for a proposed 40 unit affordable housing development on land at The Old Builder's Yard, Winterfield Lane, Weston Colney, Stoke-on-Trent.
- 1.2 The scale of the proposed development falls below the normal threshold requiring the submission of a formal TS as set out in Department for Transport document 'Guidance for Transport Assessment' published in 2007. However, Mr Carnell has commissioned the production of a Transport Statement to demonstrate the suitability of the site for affordable residential development and to provide supplementary information to accompany the planning application for the proposed development.
- 1.3 At a meeting between Mr David Taylor, planning consultant to Mr Carnell and officers of Staffordshire Moorlands District Council to discuss the proposed development of the site, the Council raised no highway objection to the principle of the proposed development.
- 1.4 The TS will consider the relatively low transport implications of the proposed development on the local highway network and demonstrate how the level of accessibility by sustainable modes of transport will help minimise new trips by car to/from the site in line with current policy.
- 1.5 The TS will also demonstrate that the proposed development will not materially affect traffic conditions within the area, in accordance with local and national planning policy and guidance.

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1.6 The structure of the report is set out as follows:

- Section 2 describes the existing area and land-use, including the site location, the surrounding area, and the local highway network;
- Section 3 considers the development proposals with regards to the proposed land use and site access;
- Section 4 examines the development proposals with regard to local and national planning policy guidance;
- Section 5 considers the local sustainable transport infrastructure in relation to the site including public transport provision, pedestrian and cycle facilities;
- Section 6 details the trip generation / attraction associated with both the existing and the proposed land uses, in order to determine the net impact on vehicular movements associated with the proposed housing development;
- Section 7 considers development parking provision; and
- Section 8 provides a conclusion to the TS, derived from the analysis presented in the above chapters.

1.7 The report is prepared solely in connection with the proposed development site as stated above. The site has been independently assessed, together with the respective travel patterns on the local highway network. As such, no responsibility is accepted to any third party for all or any part of this report, or in connection with any other development.

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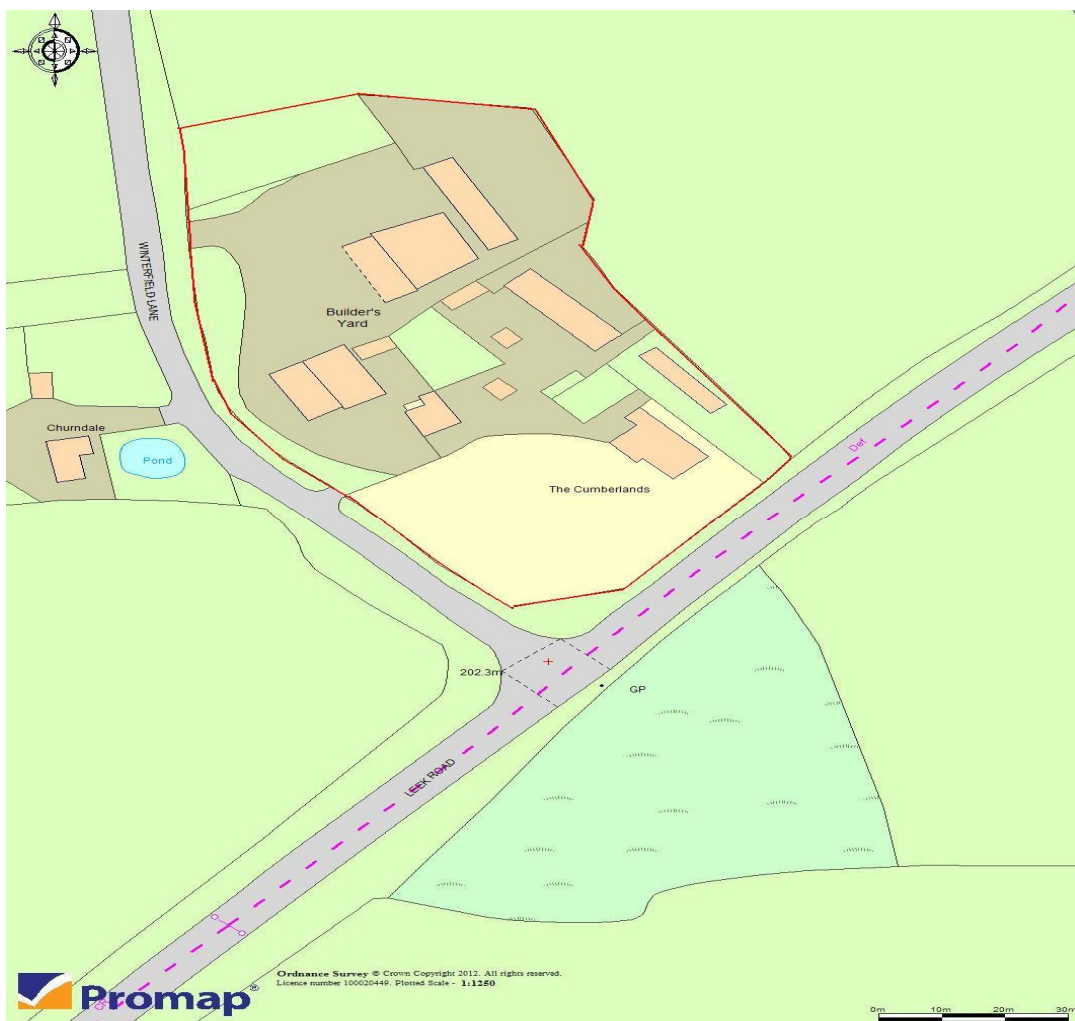
### 2 SITE LOCATION & DEVELOPMENT SITE AREA

#### 2.1 Site Location

2.1.1 The site is located on land known as The Old Builder's Yard, Winterfield Lane, Weston Coyney, Stoke-on-Trent and has direct frontage with Winterfield Lane to the west and A520 Leek Road to the south. The site is situated approximately 7km east of the city of Stoke-on Trent and 14km south of the town of Leek. Weston Coyney, a suburb of Stoke-on Trent is located 1km to the southwest of the site.

2.1.2 The location of the site is shown in Figure 1 below.

Figure 1 Site Location Plan – The Old Builder's Yard, Winterfield Lane, Weston Coyley



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### 2.2 Site Description.

2.2.1 The site is located at the junction of Winterfield Lane/A520 Leek Road, Weston Coyney, and has a direct frontage with both of these public highways. The area of the site is approximately 0.70 Ha. The site is predominantly a collection of buildings used as an old builder's yard. The location of the site is also shown above in Figure 1.

### 2.3 Local Highway Network

2.3.1 Winterfield Lane runs north from its junction with the A520 Leek Road, to the east of the village of Hulme, where it becomes Hulme Lane and turns northeastwardly to join Salters Lane at a priority junction

2.3.2 Winterfield Lane is a rural lane with a carriageway width of 5.9 meters. It has no footways or street lighting and is subject to the National Speed Limit (60mph for a single carriageway road). Winterfield Lane is a bus route and there are unmarked bus stops along its length.

2.3.3 At its south end, Winterfield Lane forms a priority junction with the A520 Leek Road, whilst at its north eastern end it becomes Hulme Lane and joins Salters Lane at a priority junction.

2.3.4 The A520 Leek Road is a Class 1 highway linking the market town of Leek with the Stoke-on-Trent urban conurbation and the market town of Stone. In the vicinity of Winterfield Lane, Leek Road is 7.5 metres wide, has no footways or street lighting and is subject to the National Speed Limit (60mph for a single carriageway road). It is a bus route with sections designated 'hail & ride' stops located on either side of the carriageway.

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### 3 DEVELOPMENT PROPOSALS

#### 3.1 Overview

- 3.1.1 The development proposals for this site are the construction of approximately 38 affordable housing units within the area of land as shown on the plan in Appendix 5. Details for the layout of this residential scheme including the on-site arrangement of roads, footpaths and cycle routes will be formulated and submitted to the Council at the time of detailed planning application submission

#### 3.2 Pedestrian Facilities

- 3.2.1 Pedestrian links are to be provided throughout the site from the main access, with a high quality pedestrian route from Winterfield Lane. This will provide pedestrian access to the existing bus stop facilities on Winterfield Lane and Leek Road.
- 3.2.2 Pedestrian accessibility is discussed in further detail within Section 5.

#### 3.3 Cycling Facilities

- 3.3.1 In terms of cycle access, the proposed vehicular access point from Winterfield Lane will provide suitable and sufficient means of access/egress for cyclists joining the local highway network. Within the site the internal layout will be designed to safely accommodate cycle traffic.
- 3.3.2 Further cycle accessibility is discussed later in Section 5.

#### 3.4 Public Transport Facilities

- 3.4.1 There are unmarked bus stops on both sides of Winterfield Lane and there are sections of the A520 Leek Road on either side of the carriageway that are designated 'hail & ride' stops. Public transport accessibility is discussed in further detail within Section 5 and bus timetable information is attached in Appendix 4 of this report.

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### 3.5 Vehicular Access

3.5.1 Vehicular access to the site will be provided from Winterfield Lane. The access will be designed to current standards to provide safe and commodious access for all vehicles seeking ingress and egress to the site.

3.5.2 AM and PM traffic counts were undertaken at the A520 Leek Road/Winterfield Lane junction, the results of which are shown in Appendix 2.

3.5.3 Details of the proposed access are shown in Appendix 5.

### 3.6 Parking

3.6.1 Parking on the development site will be provided in full accordance with Staffordshire Moorlands District Council car parking standards and is outlined further in Section 7 of this report.

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### 4 PLANNING & TRANSPORTATION POLICY

#### 4.1 Overview

4.1.1 The TS examines the development proposal in the context of the relevant planning and transportation policy guidance issued by the Department for Transport (DfT) and the Department for Communities and Local Government (DCLG), together with local policies issues by Staffordshire Moorlands District Council (SMDC) and Staffordshire County Council (SCC). A wide ranging approach needs to be fully considered when providing a suitable and deliverable development transport strategy. All issues must be taken into account relating to current and emerging policy and guidance documents. In terms of this development proposal I have balanced my report on the following key policies relating to new residential development proposals.

- National Planning Policy Framework (NPPF), March 2012;
- Manual for Streets(MfS);
- Staffordshire Moorlands District Council Development Plan; and
- Staffordshire County Council Local Transport Plan (LTP).

4.1.2 The golden thread of current national and local policies is to promote and deliver sustainable transport objectives and this is a key factor in defining the transport strategy for the proposed development. There are a range of documents that provide advice and guidance identifying that the historic approach of adopting rigid highway design standards and considering this in isolation is not appropriate or desirable in today's world. These include, for example, the Design Manual for Roads and Bridges (DMRB) and Manual for Streets (MfS) and its companion guide Manual for Streets 2 (MfS2).

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### 4.2 NATIONAL PLANNING POLICY FRAMEWORK (NPPF):

4.2.1 The Government's commitment to sustainable development is emphasised in NPPF regarding transport related issues, this includes the basic land-use planning principle to:

"actively manage patterns of growth to make the fullest possible use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable" (Core Planning Principles - Para 17).

4.2.2 This proposal development does take into account this NPPF policy requirement as demonstrated later in Section 5 of this TS.

4.2.3 With regard to promoting sustainable transport, NPPF also sets out quite clearly that:

"Transport policies have an important role to play in facilitating sustainable development but also in contributing to wider sustainability and health objectives. Smarter use of technologies can reduce the need to travel. The transport system needs to be balanced in favour of sustainable transport modes, giving people a real choice about how they travel." (Promoting Sustainable Transport - Para 29), and identifies that "Local planning authorities should therefore support a pattern of development which, where reasonable to do so, facilitates the use of sustainable modes of transport." (Promoting Sustainable Transport - Para 30).

"Plans and decisions should take account of whether:

- the opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;

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- safe and suitable access to the site can be achieved for all people; and
- Improvements can be undertaken within the transport network that cost effectively limits the transport impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe." ( Promoting Sustainable Transport - Para 32)

### 4.2.4 NPPF goes on to state that:

"Developments should be located and designed where practical to:

- accommodate the efficient delivery of goods and supplies;
- give priority to pedestrian and cycle movements, and have access to high quality public transport facilities;
- create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, avoiding street clutter and where appropriate establishing home zones;
- incorporate facilities for charging plug-in and other low emission vehicles; and
- Consider the needs of people with disabilities by all modes of transport." (Promoting Sustainable Transport - Para 35)

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### 4.3 Manual for Streets

4.3.1 Manual for Street was published by the DfT and DCLG in 2007, whilst its companion document Manual for Streets 2 was published in 2010. Both documents give advice on the design of residential streets and roads, giving guidance on:

- Connections to surrounding areas;
- Connections through the site;
- Building lines;
- Building heights; and
- Routes for utilities.

### 4.4 Local Policy

4.4.1 At a local level, the content, scope and methodology of the TS seeks to achieve sustainable transport patterns in accordance with the Staffordshire Moorlands District Council Development Plan and the Staffordshire County Council Local Transport Plan.

#### 4.4.2 The Staffordshire Moorlands District Council Development Plan

The current development plan for Staffordshire Moorlands District currently consists of the following documents, not all of which are relevant to this planning application:

- The West Midlands Regional Spatial Strategy (RSS) (Incorporating Phase 1) (Jan 2008);
- The Staffordshire and Stoke-on-Trent Structure Plan 1996-2011 (Adopted March 2001);
- Staffordshire Moorlands Local Plan (Adopted September 1998);
- The Minerals Local Plan (Adopted in December 1999);
- The Waste Local Plan (Adopted in February 2002);and
- The Peak District National Park Core Strategy (Adopted October 2011)

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4.4.3 The situation is further confused by the government's intention to abolish Regional Strategies which at the time of writing this report is in the last stages of implementation.

4.4.3 The Regional Spatial Strategy for the West Midlands

The Regional Spatial Strategy for the West Midlands (RSS) sets out a framework for development and investment in the region. The RSS provides a strategic, upper tier of planning guidance covering the region as a whole and compliments national policy to provide an understanding of how the delivery of such policies can address specific challenges and opportunities in the West Midlands.

4.4.4 The RSS is part of the statutory development plan for every local authority in the West Midlands who must each prepare Local Development Documents (LDD) which generally conform with the RSS. Planning applications are considered against the provisions of the RSS and relevant LDD's. The Government revoked the West Midlands Regional Spatial Strategy on the 6th July 2010. However, a High Court decision reinstated it on 10th November 2010 and it still forms part of the statutory development plan under the Planning and Compulsory Purchase Act 2004. The Government has since reconfirmed its intention to abolish Regional Strategies following a review of the sustainability implications of doing so.

4.4.5 The RSS transport policies aim to achieve a shared vision of sustainable development with emphasis placed on the reduction in travel demand and a shift towards modes with lower environmental impacts. Policy T2 (Reducing the need to Travel) states that developments should be located so as to reduce the need to travel by car and increase accessibility to local services. Transport Assessments and Statements are part of implementing the strategy by encouraging developers to consider access to the site and variety of modes of transport that are currently and potentially available.

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- 4.4.6 Policy T3 (Walking & Cycling) seeks to encourage walking and cycling, ensuring that new developments and infrastructure proposals improve walking and cycle access. Whilst Policy T5 (Public Transport) promotes the provision of an integrated public transport services across the region.
- 4.4.7 Staffordshire and Stoke-on-Trent Structure Plan 1996-2011  
The saved policies of the Staffordshire and Stoke-on-Trent Structure Plan 1996-2011 seek to manage the demand for travel through land use policy and improvements to the transport network to help reduce the level and speed of traffic in sensitive areas and provide a safe environment to encourage individuals to walk, cycle and use public transport.
- 4.4.8 Policy T1A (Sustainable Location) promotes the siting of new developments in sustainable locations, whilst Policy T3 (Rural Areas) supports rural transport services and facilities to encourage the use of alternative modes of travel to the motor car.
- 4.4.9 Policies T4 (Walking), T5 (Cycling) and T7 (Public Transport) all seek to encourage the use of alternative modes of travel together with seeking improvement to existing sustainable travel infrastructure and facilities.
- 4.4.10 Finally, Policies T16 (Car Parking) and T18A (Transport & Development) identify the need for consistent car parking standards to be set out within Staffordshire's District Local Plans and that new development will not normally be permitted if it would cause demonstrable harm to the function of the transport network.

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### 4.4.11 Staffordshire Moorlands District Council Local Plan

In September 2007 Staffordshire Moorlands District Council received a direction from the Secretary of State confirming which policies in the Staffordshire Moorlands Local Plan should be saved. All saved policies will remain in force until such time as they are replaced by new policies in the Local Development Framework.

### 4.4.12 Of the twenty local plan policies relating to transport the following four policies were saved:

- Policies T6 and T7 relating to railways.
- Policy T13 relating to the protection of major road schemes and
- Policy T14 which states that 'Planning permission will not be granted for development which would lead to additional cars or commercial vehicles entering unsuitable areas, particularly those that are environmentally sensitive.

### 4.4.13 Staffordshire Local Transport Plan 2011 – Strategy Plan

The Staffordshire Local Transport Plan 2011 – Strategy Plan (LTP) sets out 7 key objectives for the plan period:

- Supporting Growth and Regeneration;
- Maintaining the Highway Network;
- Making transport easier to use and places easier to get to;
- Improving Safety and Security;
- Reducing road transport emissions and their effects on the highway network;
- Improving Health and Quality of Life; and
- Respecting the Environment.

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4.4.16 Of particular relevance is Objective 1 – Supplying growth and regeneration by enabling economic growth without causing congestion on the highway network.

4.4.17 Also of relevant to this proposed development is Objective 3 - Making transport easier to use and places easier to get to. This objective involves improving accessibility to key services (employment, education, health, shopping and leisure) and reducing the need to travel. This is similar to the sustainable accessibility requirements of the NPPF, and therefore it is considered that the development proposals are in line with the objective.

### 4.5 Summary

4.5.1 The proposed development is compliant with local and national policy for a number of reasons including:

- Provision for access into and throughout the site will be made for all road users, namely pedestrians, cyclists, and motor vehicles including service and emergency vehicle access;
- The development adopts the sustainable approach highlighted in both local and national policy. Its location on Winterfield Lane, a bus route, provides sustainable transport facilities that will help limit the emission of greenhouse gases;
- The location of the development will promote sustainability by reducing the number of car trips to the facility through the promotion of sustainable modes of travel such as walking, cycling and the use of public transport;
- The traffic generated by this application after the initial construction phase will be essentially residential in character. The existing local highway network is not environmentally sensitive and there are no heritage assets near the site which could be adversely affected by the proposal.

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- 4.5.2 Furthermore, as set out in the following section, good sustainable travel linkages to a number of locations, facilities and public transport services all ensure that the development is sustainable as required by national and local policy.

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### 5 SUSTAINABILITY

The following section on sustainability examines the modes of transport around the site in order of their sustainability, namely:

- Pedestrian routes;
- Cycle provision; and
- Public transport.

#### 5.1 Pedestrian Accessibility

5.1.1 The Institute of Highways and Transportation (IHT) in their document "Guidelines for Providing Journeys of Foot" state that 'walking accounts for over a quarter of all journeys and four fifths of journeys less than one mile'

5.1.2 With regard to pedestrian access the general consensus of an acceptable walking distance is considered to be a maximum of 2km (24 mins at 1.4m/sec), as was initially stated within Planning Policy Guidance 13 - Transport (PPG 13) and confirmed within the IHT guidelines referred to above. (Note: In March 2012, PPG 13 was replaced by the National Planning Policy Framework.)

5.1.3 All pedestrian access to the proposed development site will be taken from Winterfield Lane and within the site itself well designed pedestrian facilities will provide safe pedestrian access to all dwellings.

5.1.4 Although Winterfield Lane has no footways, vehicle traffic flows are low (see Appendix 2) and it is safe to walk on Winterfield Lane following the 'Rules for Pedestrians' advice set out within the Highway Code.

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5.1.5 The A520 Leek Road has no footways in a south-westerly direction from its junction with Winterfield Lane until the boundary with Stoke-on-Trent City Council, a distance of approximately 200m. However, there are wide grass verges on either side of the carriageway that provide a safe walking environment for pedestrians and the grass verges are worn, showing sign of significant pedestrian use.

5.1.6 From the development site on Winterfield Lane the local facilities at Weston Colney (shops, chemist, Post Office, church) and the local infant, junior and primary schools are all within a 2km walking distance.

### 5.2 Cycling Accessibility

5.2.1 Cycling is widely recognised as a sustainable, healthy and environmentally friendly form of transport. Local cycling policy is identified under Policy T5 (see Para 4.4.9), whilst PPG13 also emphasised that cycling has the potential to substitute for shorter car trips, particularly those less than 5km (20min at 4.2m/sec) and to form part of longer journeys by public transport.

5.2.2 Based upon a cycle speed of 4.2m per second, Weston Coyney, Werrington and Longton are accessible by cycle from the proposed development site. Furthermore, Stoke-on-Trent City Centre can be accessed from the site in a cycle journey time of approximately 30 minutes. Not only are the employment, retail and leisure facilities in the city centre accessible from the site by cycle, but also the bus and train facilities located there. This increases the options available to residents and visitors to the site to travel sustainably for longer multi-modal trips by including cycling as part of that journey.

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- 5.2.4 Overall, the sites location and the proposed internal cycle facilities, as discussed in Section 3, make the site accessible by cycle for both residents and visitors associated with the development.

### 5.3 Public Transport

- 5.3.1 Public transport has an important role to play in planning for sustainability and future needs by encouraging a shift towards low carbon transport. It is essential in providing access for a large part of the population to jobs, education, shopping, leisure and healthcare.

#### 5.3.2 Bus

Guidance published by the IHT 'Planning for Public Transport in Developments' (1999), recommends that the preferred maximum walking distance to a bus stop should be 400m, approximately equating to a five minute walk. This is supported by advice given by the DfT within their 'Inclusive Mobility document', which suggests that the maximum acceptable walking distance to public transport facilities from any development is some 400m and this distance should be reduced by 10 metres for every 1 metre rise or fall.

- 5.3.3 There are existing unmarked bus stops located along Winterfield Lane which do not exceed the preferred maximum walking distance to a bus stop from the site. There are also sections of the A520 Leek Road that are designated as 'hail & ride' stops for bus services. The above guidance also notes that direct and simple bus routes are more important than walking distances slightly more than 400m for a few passengers or destinations.

- 5.3.4 The bus services 106, 1A, 26/26A and X50 can be seen in Appendix 4. The 106 Service operates along Winterfield Lane, whilst the 1A and 26/26A operate on A520 Leek Road, Weston Coyney. The X50 service operates along the A50 Uttoxeter Road. These services operate to destinations including, Stoke-on-Trent, Leek, Newcastle, Uttoxeter and Derby.

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- 5.3.5 It can be seen from this information that the services from the nearby bus stops provide a good level of service through the week. Sunday services are quite infrequent; however, it is very unlikely that bus patronage would create a high demand during a Sunday. The level of provision is therefore more than adequate in serving residents of the proposed developments, and provides public transport accessibility to most of the surrounding areas

*NB At the time of writing this report the bus services highlighted above were still in full operation. Since then funding has been withdrawn and services no longer available. The applicant has written to Arriva asking if the bus service can be revived with some pump prime funding as part of this development.*

### 5.3.6 Train

Longton railway station is situated approximately 5 km southwest of the site. The station is served by trains on the Crewe to Derby Line which is also a community rail line known as the North Staffordshire line. The station is owned by Network Rail and managed by East Midlands Trains. It provides a regular train services to Stoke, Crewe and Derby. It is accessible from the site by both bus and cycle and therefore travel by train from Longton to the national rail network is a viable travel choice.

- 5.3.7 Blythe Bridge railway station is situated approximately 6 km southwest of the site. It is on the same line as Longton Station and provides a regular train services to Stoke, Crewe and Derby

### 5.4 Summary

- 5.4.1 The site is accessible by foot, cycle and bus, and is within easy reach of many further transport links providing access to wider areas. As demonstrated, the site is within a short walk of Weston Coyney which includes a variety of local services and facilities.

- 5.4.3 In conclusion, the site is located in a sustainable location, more than would be expected with such a rural location. It can therefore be stated that alternative modes of transport, rather than the private car, could offer a realistic modal choice in accessing the local and regional areas if Arriva agree to revive the bus service.

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### 6 TRAFFIC FLOWS

#### 6.1 Traffic Generation

- 6.1.1 In order to assess any potential impact that may result from the proposals on the surrounding local highway network, it is necessary to forecast the number of trips that would be generated by the proposed development, compared to that of the existing site.
- 6.1.2 As currently the site is stabling, a riding school and a single dwelling it is considered that there are no significant vehicle movements associated with the site at present.
- 6.1.3 To establish the likely traffic impact of the proposed development the Trip Rate Information Computer System (TRICS) 2009(b) database, version 6.4.1, has been used to establish the associated trip rates during the weekday AM and PM peak periods. The trip rates have been derived using sites within the 'Residential – Private Houses' category (50 – 250 houses), with sites in Greater London, Ireland, Scotland and Wales removed in order to retain a representative sample. The derived 85% trip rates and trip generation are summarised in Table 1 and Table 2 below.
- 6.1.4 To ensure that a robust assessment of the traffic generated by the proposed development site is undertaken the trip rates used are for standards residential dwellings, rather than affordable housing types which in general produce a lower trip rate.

Table 1. TRICS TRIP RATE SUMMARY FOR RESIDENTIAL USE

Land Use – C3 Residential Dwellings	Trip Rate per Dwelling	
	Arrivals	Departures
AM Peak (08:00 - 09:00 Hrs)	0.20	0.54
PM Peak (17:00 – 18:00 Hrs)	0.48	0.31

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Table 2. GENERATED TRIPS FOR 40 RESIDENTIAL DWELLINGS

Land Use – C3 Residential Dwellings	Trips per Dwelling	
	Arrivals	Departures
AM Peak (08:00 - 09:00 Hrs)	8	21
PM Peak (17:00 – 18:00 Hrs)	19	12

6.1.4 As demonstrated above, the residential land-use on the proposed Winterfield Lane site would generate a total of 29 vehicular movements in the AM peak and 31 movements in the PM peak periods using the TRICS Database. It should also be noted that some delivery and service vehicles also access the site on a daily basis although this rate is very low.

6.1.5 To provide a robust assessment it is assumed that the generated development traffic from the proposed development site will have a proportionate split in flow when it enters the existing highway network. I have assumed a 75% - 25% split in distributing traffic onto the network for both peak periods. In the AM Peak Hour 75% of traffic will turn left out of the site towards the A520 Leek Road junction, 25% will turn right towards Werrington. Traffic entering the site in the AM Peak Hour will be of a similar distribution. For the PM Peak Hour period the inbound and outbound distributions will be reversed.

6.1.6 Therefore, for the AM Peak Hour period 6 vehicles will turn right out of the site, whilst 23 will turn left out of the site. 6 vehicles will turn right into the site and 2 vehicles will turn left into the site.

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- 6.1.7 For the PM Peak Hour period 3 vehicles will turn right out of the site, whilst 9 will turn left out of the site. 14 vehicles will turn right into the site and 5 will turn left into the site.
- 6.1.8 As demonstrated above, the proposed land-use on site would generate a total of 29 vehicular movements in the AM Peak Hour period and 31 vehicular movements in the PM Peak Hour period. I consider this to be a robust assessment of the proposed site traffic generation presenting a worse case situation. The generated traffic figures equate to approximately one additional vehicle on the existing highway network every three minutes during peak hour periods.
- 6.1.9 I consider that these predicted trip rates could be further reduced accordingly to correspond with sustainable means of travel as set out in table 6 below. In this case it would not be unreasonable to predict a further reduction of around 13% on the above predicted flows in line with current sustainable travel to work patterns.
- 6.1.10 Based upon these traffic generation calculations the site access and the surrounding highway network will not have any capacity related issues when this development is completed.

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Table 3: 2001 Census Method of Travel to Work

	StaffCC Authority %	North West Region %	National %
On Foot	9.7	11.1	11.0
Bicycle	3.3	2.5	3.1
Bus, Mini Bus or coach	5.7	9.4	8.3
Train, Tram etc.	1.0	2.7	8.2
Motorcycle, Moped or Scooter	1.2	1.0	1.2
Taxi, Mini cab	0.6	0.9	0.6
Passenger in Car or Van	8.6	8.2	6.8
Driver in Car or Van	70.0	64.2	60.8

6.1.11 The above data is taken from National Statistics 'Method of Travel to Work – Daytime Population (UV37)'.

6.1.12 Of the proposed 40 housing units at the proposed development site i.e. all residents living on the proposed development during the peak periods, this would generate an estimated total of 3-4 cycle trips in each of the AM and PM peak periods.

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### 6.2 Existing Traffic Flow Data

6.2.1 To determine the actual peak hour traffic flows, a traffic count was undertaken on 4<sup>th</sup> December 2012 at the Winterfield Lane/A520 Leek Road junction

6.2.2 There were no road works, special events or other circumstance that would alter the traditional travel pattern when the peak hour count was undertaken that would affect the vehicle numbers. Details of the traffic count are shown in Appendix 2 of this TS.

6.2.3 Vehicle speed surveys were carried out on A520 Leek Road in the vicinity of the Winterfield Lane junction on 10<sup>th</sup> December 2013. The purpose of this exercise was to confirm that there was satisfactory visibility for vehicles entering A520 Leek Road from the Winterfield Lane junction. The results of the speed surveys are set out in Appendix 3 of this TS.

6.2.4 85<sup>th</sup>ile speeds readings were calculated in accordance with guidance given within Department of Transport Advice Note TA22/81 'Vehicle Speed Measurement on All Purpose Roads'. 85<sup>th</sup>ile speed reading were calculated as 47mph for vehicles travelling towards Stoke-on-Trent and 48 mph for vehicles travelling towards Leek.

### 6.3 Summary

6.3.1 It can be seen that the proposed development will result in a very small increase in vehicular trips during the peak periods of 29 in the AM peak and 31 in the PM peak.

6.3.2 It is my professional view that the addition of 29 vehicles in the morning peak hour period and 31 vehicles in the evening peak hour period (busiest peaks in terms of development traffic) from the site, are minimal and will have no adverse impact on the operation of the existing surrounding highway network.

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- 6.3.3 The speed readings taken on A520 Leek Road show that the visibility from Winterfield Lane which is in excess of 215m is more than adequate to safely accommodate the additional vehicular traffic generated by the proposed development that will use this junction.

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### 7 PARKING ASSESSMENT

#### 7.1 Parking Policy

7.1.1 Existing national planning policy guidance stresses the need for land-use planning policies which reduce the need for travel. However, if such policies are to succeed, they need to be supported by other measures such as transport. In particular, the availability of car parking has a major influence on the choice of means of travel and therefore, appropriate car parking policies are necessary.

7.1.2 For new developments, local and national policies suggests that maximum levels of car parking provision should be set for broad land-use classes and locations, but it is unlikely to be appropriate in future for development. In this way, reduced levels of parking will act as a demand management tool as part of package of measures designed to influence and encourage more sustainable travel behaviour

#### 7.2 Development Parking Provision

7.2.1 Within the site off-street car parking provision will be provided to meet the requirements of the Local planning Authority, Staffordshire Moorlands District Council.

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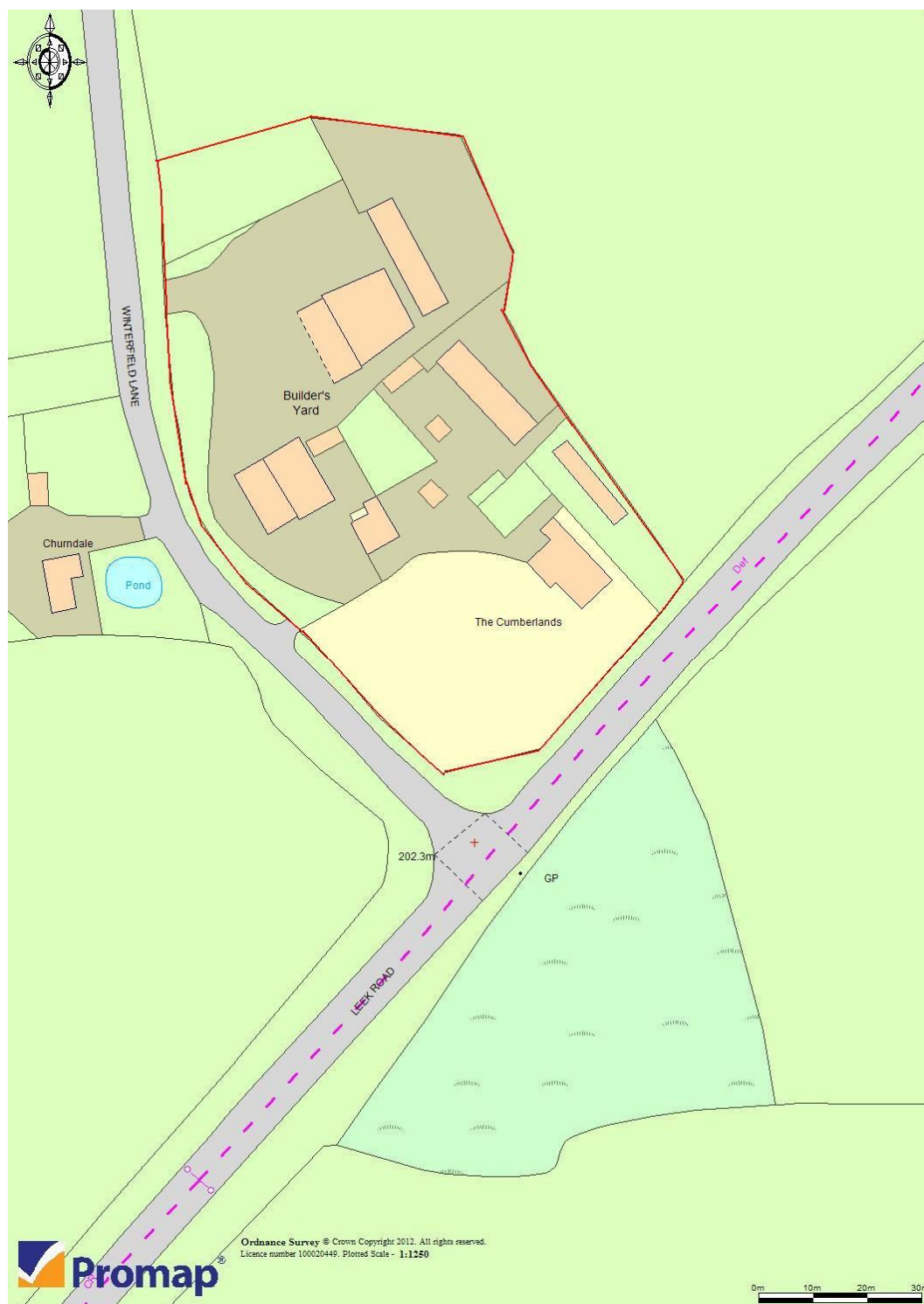
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### 8.0 CONCLUSION

- 8.1 The TS has considered the transport and highway implications for the proposed affordable housing development at Winterfield Lane. It is proposed that vehicular access to the facility will be located off Winterfield Lane where visibility can be achieved to comply with Manual for Streets requirements and good access arrangements can be provided. Pedestrian access points will be located to aid pedestrian access from the public highway to provide a sustainable links to bus stops and the local facilities within Weston Coyley.
- 8.2 The development needs to balance the need to provide for on-site parking whilst encouraging the use of sustainable modes of transport. This is amplified by its sustainable location close to existing bus stops which provide good accessibility opportunities to the site by sustainable modes such as walking, cycling and public transport.
- 8.3 It has been demonstrated that the proposed development will result in a minor increase of 29 two-way vehicle trips during the AM Peak Hour period and of 31 two-way vehicle trips during the PM Peak Hour period. There will also be a likely increase in the number of cycling trips in the area of some 2 - 3% during the AM peak period and the PM peak periods. Therefore, traffic flows to and from the proposed development will be low and it is therefore unlikely this development would contribute to safety problems in the local area.
- 8.4 In Conclusion, the applicant aims to deliver a quality development on the outskirts of Weston Coyney and the opportunity for access by sustainable modes is both realistic and achievable. It is reasonable to conclude that there is no transport or highway related reasons why the proposed development should not be granted planning consent.

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APPENDIX 1 – SITE PLAN



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## APPENDIX 2 – TRAFFIC FLOW DATA

**Traffic Count Data carried out by Accesshdpc**  
simon.boone@accesshdpc.co.uk

Ref: TrafficCountB.H.WinterfieldLaneAM

Location / Details of Survey			
Location	A520 Leek Road junction with Winterfield Lane	Date	04/12/2012
	Stoke-On-Trent.	Time	08:00hrs to 09:00hrs
Classes	De-restricted (60 mph)		
Observed			
Weather	Wet, Cloudy		
Notes	Traffic volumes less after 08:30hrs.		
		OS Grid Ref	SJ94SW68
Name	Simon Boone		

### Traffic Count Summary

A520 Leek Road

Direction 1: Towards Leek
<b>513</b> Vehicle movements per hour

A520 Leek Road

Direction 2: Towards Stoke-On-Trent
<b>525</b> Vehicle movements per hour

A520 Leek Road

Turning Right into Winterfield Lane

Direction 3: Towards Leek
<b>43</b> Vehicle movements per hour

A520 Leek Road

Turning Left into Winterfield Lane.

Direction 4: Towards Stoke-On-Trent
<b>108</b> Vehicle movements per hour

Winterfield Lane

Turning Left onto Leek Road

Direction 5: Towards Leek
<b>10</b> Vehicle movements per hour

Winterfield Lane

Turning Right onto Leek Road

Direction 6: Towards Stoke-On-Trent
<b>103</b> Vehicle movements per hour

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## Traffic Count Data carried out by Accesshdp simon.boone@accesshdp.co.uk

Ref: TrafficCountB.H, WinterfieldLanePM

Location / Details of Survey			
Location	A520 Leek Road junction with Winterfield Lane	Date	03/12/2012
	Stoke-On-Trent.	Time	17:00hrs to 18:00hrs
Classes	De-restricted (60 mph)		
Observed			
Weather	Dark, Dry		
Notes			
		OS Grid Ref	SJ94SW68
Name	Simon Boone		

### Traffic Count Summary

#### A520 Leek Road

Direction 1: Towards Leek
485 Vehicle movements per hour

#### A520 Leek Road

Direction 2: Towards Stoke-On-Trent
388 Vehicle movements per hour

#### A520 Leek Road

##### Turning Right into Winterfield Lane

Direction 3: Towards Leek
15 Vehicle movements per hour

#### A520 Leek Road

##### Turning Left into Winterfield Lane.

Direction 4: Towards Stoke-On-Trent
97 Vehicle movements per hour

#### Winterfield Lane

##### Turning Left onto Leek Road

Direction 5: Towards Leek
8 Vehicle movements per hour

#### Winterfield Lane

##### Turning Right onto Leek Road

Direction 6: Towards Stoke-On-Trent
42 Vehicle movements per hour

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## APPENDIX 3 SPEED SURVEY

*Speed Survey carried out by Accesshdpc*  
*simon.boone@accesshdpc.co.uk*

*Client: Bob Hindhaugh.*

*Survey Ref. SpeedSurveyB.H,TilstonRdAM*

Location / Details of Survey			
Location	Leek Road A520 junction with Winterfield Lane	Date	10/12/2012
	Malpas	Time	09:30hrs to 10:45hrs.
Classes			
Observed			
Weather	Dry, Sunny.		
Notes			
			100 speed readings taken
		OS Grid Ref	SJ94SW68
Name	Simon Boone		

### Summary Information

Direction 1: Towards Stoke-On-Trent.	
Mean	41.65
Standard Deviation	4.31
85 Percentile (Calculated)	45.96
85 Percentile (Manual)	47.00
Top Speed	50.00

Direction 2: Towards Leek.	
Mean	42.19
Standard Deviation	4.80
85 Percentile (Calculated)	46.99
85 Percentile (Manual)	48.00
Top Speed	54.00

All speeds shown are in mph.

All formulae and methods for the calculations are taken from the Department of Transport Advice Note TA22/81.  
"Vehicle Speed Measurement on all Purpose Roads".

The 85 Percentile (Calculated) figure is calculated using the following formula:

85 Percentile = Mean + Standard Deviation

The 85 Percentile (Manual) figure is derived by listing all the recorded speeds in ascending order and counting from the highest value until 15% of the total number of values has been passed.

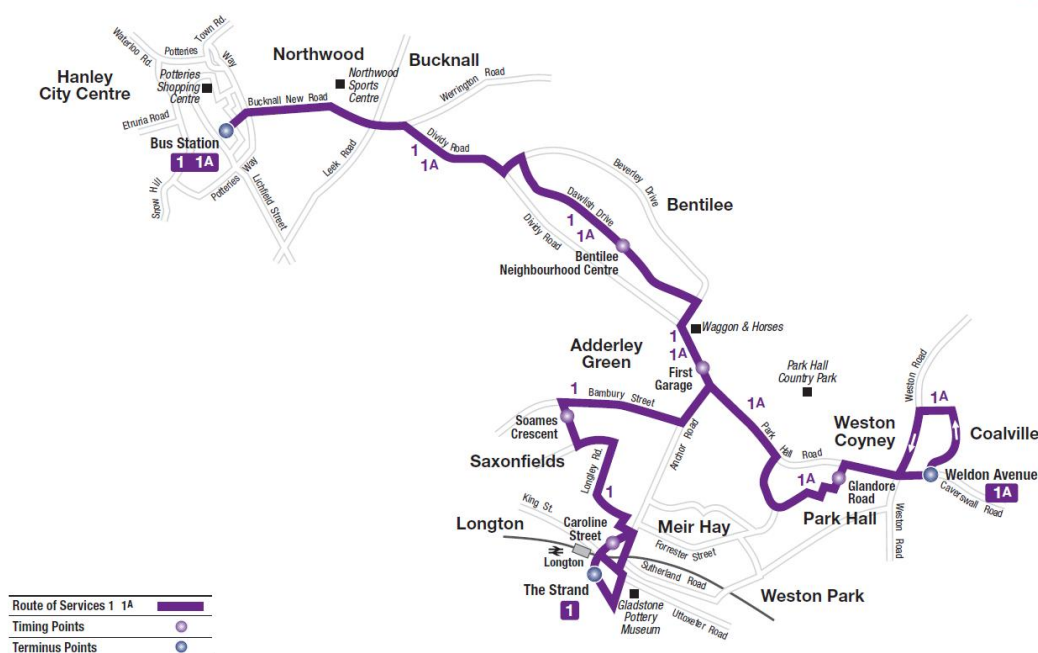
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## APPENDIX 4 BUS ROUTES AND TIMETABLES

1 1A



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## Highway Development Control & Traffic Engineering and Planning



### X50

### Hanley - Uttoxeter - Etwall - Derby

Wardle Transport

The information on this timetable is expected to be valid until at least 20th February 2013. Where we know of variations, before or after this date, then we show these at the top of each affected column in the table.

Direction of stops: where shown (eg: W-bound) this is the compass direction towards which the bus is pointing when it stops

#### Mondays to Fridays

Service Restrictions Notes	↑											↓		
	H											H		
Hanley, Bus Station (Stand K)	0615	0705	0815	0915	1015	1115	1215	1315	1415	1515	—	1615	1715	1815
Stoke-upon-Trent, opp Stoke-on-Trent Railway Station	0623	0713	0823	0923	1023	1123	1223	1323	1423	1523	—	1623	1723	1823
Meir, adj Broadway	0629	0719	0829	0929	1029	1129	1229	1329	1429	1529	—	1629	1729	1829
Meir Heath, opp St Francis Church	0633	0723	0833	0933	1033	1133	1233	1333	1433	1533	—	1633	1733	1833
Meir Park, adj Tesco superstore	0638	0728	0838	0938	1038	1138	1238	1338	1438	1538	—	1638	1738	1838
Blythe Bridge, opp Railway Station	0640	0731	0841	0941	1041	1141	1241	1341	1441	1541	—	1641	1741	—
Checkley, opp Cranberry Avenue	0651	0742	0852	0952	1052	1152	1252	1352	1452	1552	—	1652	1752	—
The Wharf, adj The Fire Station	0703	0754	0904	1004	1104	1204	1304	1404	1504	1604	—	1704	1804	—
Uttoxeter Town Centre, Bus Station (Stand 1)	arr	0705	0756	0906	1006	1106	1206	1306	1406	1506	1606	—	1706	1806
Uttoxeter Town Centre, Bus Station (Stand 1)	dep	—	0757	—	1007	—	1207	—	1407	—	—	1607	1707	—
Doveridge, opp Marston Lane	—	0805	—	1015	—	1215	—	1415	—	—	1615	1715	—	—
Sudbury, opp Garden Cottages	—	0812	—	1022	—	1222	—	1422	—	—	1622	1722	—	—
Hatton, opp Church Avenue	—	0820	—	1030	—	1230	—	1430	—	—	1630	1730	—	—
Hilton, opp Peacraft Lane	—	0823	—	1033	—	1233	—	1433	—	—	1633	1733	—	—
Etwall, opp Spread Eagle	—	0828	—	1038	—	1238	—	1438	—	—	1638	1738	—	—
Mickleover, Tesco (E-bound)	—	0834	—	1044	—	1244	—	1444	—	—	1644	1744	—	—
California, opp Royal Derby Hospital	—	0838	—	1048	—	1248	—	1448	—	—	1648	1748	—	—
Derby, Bus Station (Bay 23)	—	0851	—	1101	—	1301	—	1501	—	—	1701	1801	—	—

#### Saturdays

Hanley, Bus Station (Stand K)	0705	0815	0915	1015	1115	1215	1315	1415	1515	1615	1715	—	—	—
Stoke-upon-Trent, opp Stoke-on-Trent Railway Station	0713	0823	0923	1023	1123	1223	1323	1423	1523	1623	1723	—	—	—
Meir, adj Broadway	0719	0829	0929	1029	1129	1229	1329	1429	1529	1629	1729	—	—	—
Meir Heath, opp St Francis Church	0723	0833	0933	1033	1133	1233	1333	1433	1533	1633	1733	—	—	—
Meir Park, adj Tesco superstore	0728	0838	0938	1038	1138	1238	1338	1438	1538	1638	1738	—	—	—
Blythe Bridge, opp Railway Station	0731	0841	0941	1041	1141	1241	1341	1441	1541	1641	1741	—	—	—
Checkley, opp Cranberry Avenue	0742	0852	0952	1052	1152	1252	1352	1452	1552	1652	1752	—	—	—
The Wharf, adj The Fire Station	0754	0904	1004	1104	1204	1304	1404	1504	1604	1704	1804	—	—	—
Uttoxeter Town Centre, Bus Station (Stand 1)	arr	0756	0906	1006	1106	1206	1306	1406	1506	1606	1706	1806	—	—
Uttoxeter Town Centre, Bus Station (Stand 1)	dep	0757	—	1007	—	1207	—	1407	—	1607	—	—	—	—
Doveridge, opp Marston Lane	—	0805	—	1015	—	1215	—	1415	—	1615	—	—	—	—
Sudbury, opp Garden Cottages	—	0812	—	1022	—	1222	—	1422	—	1622	—	—	—	—
Hatton, opp Church Avenue	—	0820	—	1030	—	1230	—	1430	—	1630	—	—	—	—
Hilton, opp Peacraft Lane	—	0823	—	1033	—	1233	—	1433	—	1633	—	—	—	—
Etwall, opp Spread Eagle	—	0828	—	1038	—	1238	—	1438	—	1638	—	—	—	—
Mickleover, Tesco (E-bound)	—	0834	—	1044	—	1244	—	1444	—	1644	—	—	—	—
California, opp Royal Derby Hospital	—	0838	—	1048	—	1248	—	1448	—	1648	—	—	—	—
Derby, Bus Station (Bay 23)	—	0851	—	1101	—	1301	—	1501	—	1701	—	—	—	—

#### Sundays

no service

Service Restrictions: 1 - to 24.5.13, not 18.2.13 to 22.2., 2.4. to 10.4.

Notes: H - Mondays to Fridays in school holidays only

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## Highway Development Control & Traffic Engineering and Planning



### X50

### Derby - Etwall - Utttoxeter - Hanley

Wardle Transport

The information on this timetable is expected to be valid until at least 20th February 2013. Where we know of variations, before or after this date, then we show these at the top of each affected column in the table.

Direction of stops: where shown (eg: W-bound) this is the compass direction towards which the bus is pointing when it stops

#### Mondays to Fridays

Service Restrictions		1									
Notes		H									
Derby, Bus Station (Bay 23)	—	—	0915	—	1115	—	1315	—	1515	1715	1815
Derby, Albert Street (Stop B2)	—	—	0916	—	1116	—	1316	—	1516	1716	1816
California, adj Royal Derby Hospital	—	—	0927	—	1127	—	1327	—	1527	1727	1827
Mickleover, Tesco (W-bound)	—	—	0930	—	1130	—	1330	—	1530	1730	1830
Etwall, adj Spread Eagle	—	—	0938	—	1138	—	1338	—	1538	1738	1838
Hilton, adj Old Talbot	—	—	0942	—	1142	—	1342	—	1542	1742	1842
Hatton, adj Church Avenue	—	—	0946	—	1146	—	1346	—	1546	1746	1846
Sudbury, adj Garden Cottages	—	—	0956	—	1156	—	1356	—	1556	1756	1856
Doveridge, adj Marston Lane	—	—	1004	—	1204	—	1404	—	1604	1804	1904
Utttoxeter Town Centre, adj Bus Station	arr	—	1012	—	1212	—	1412	—	1612	1812	1912
Utttoxeter Town Centre, adj Bus Station	dep	0715	0915	1015	1115	1215	1315	1415	1515	1615	1815
The Wharf, nr The Fire Station	0717	0917	1017	1117	1217	1317	1417	1517	1617	1817	1917
Checkley, adj Cranberry Avenue	0730	0930	1030	1130	1230	1330	1430	1530	1630	1830	1930
Blythe Bridge, adj Railway Station	0740	0940	1040	1140	1240	1340	1440	1540	1640	1840	1940
Meir Park, adj Tesco superstore	0744	0944	1044	1144	1244	1344	1444	1544	1644	1844	1944
Meir Heath, adj St Francis Church	0749	0949	1049	1149	1249	1349	1449	1549	1649	1849	1949
Meir, opp Broadway	0754	0954	1054	1154	1254	1354	1454	1554	1654	1854	1954
Stoke-upon-Trent, adj Stoke-on-Trent Railway Station	0800	1000	1100	1200	1300	1400	1500	1600	1700	1900	2000
Hanley, Bus Station	0810	1010	1110	1210	1310	1410	1510	1610	1710	1910	2010

#### Saturdays

Derby, Bus Station (Bay 23)	—	0915	—	1115	—	1315	—	1515	1715		
Derby, Albert Street (Stop B2)	—	0916	—	1116	—	1316	—	1516	1716		
California, adj Royal Derby Hospital	—	0927	—	1127	—	1327	—	1527	1727		
Mickleover, Tesco (W-bound)	—	0930	—	1130	—	1330	—	1530	1730		
Etwall, adj Spread Eagle	—	0938	—	1138	—	1338	—	1538	1738		
Hilton, adj Old Talbot	—	0942	—	1142	—	1342	—	1542	1742		
Hatton, adj Church Avenue	—	0946	—	1146	—	1346	—	1546	1746		
Sudbury, adj Garden Cottages	—	0956	—	1156	—	1356	—	1556	1756		
Doveridge, adj Marston Lane	—	1004	—	1204	—	1404	—	1604	1804		
Utttoxeter Town Centre, adj Bus Station	arr	—	1012	—	1212	—	1412	—	1612	1812	
Utttoxeter Town Centre, adj Bus Station	dep	0915	1015	1115	1215	1315	1415	1515	1615	1815	
The Wharf, nr The Fire Station	0917	1017	1117	1217	1317	1417	1517	1617	1817		
Checkley, adj Cranberry Avenue	0930	1030	1130	1230	1330	1430	1530	1630	1830		
Blythe Bridge, adj Railway Station	0940	1040	1140	1240	1340	1440	1540	1640	1840		
Meir Park, adj Tesco superstore	0944	1044	1144	1244	1344	1444	1544	1644	1844		
Meir Heath, adj St Francis Church	0949	1049	1149	1249	1349	1449	1549	1649	1849		
Meir, opp Broadway	0954	1054	1154	1254	1354	1454	1554	1654	1854		
Stoke-upon-Trent, adj Stoke-on-Trent Railway Station	1000	1100	1200	1300	1400	1500	1600	1700	1900		
Hanley, Bus Station	1010	1110	1210	1310	1410	1510	1610	1710	1910		

#### Sundays

no service

Service Restrictions: 1 - to 24.5.13, not 18.2.13 to 22.2., 2.4. to 10.4.

Notes: H - Mondays to Fridays in school holidays only

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# Bob Hindhaugh Associates

## Highway Development Control & Traffic Engineering and Planning

### Bus Service 106 Longton – Meir – Werrington – Cheddleton - Leek

106 Longton - Meir - Werrington - Cheddleton - Leek

#### Monday to Friday

	Operator:	WDL	WDL	WDL
Longton, Transport Interchange (Stand 3)		1000	1200	1440
Meir, adj Broadway		1006	1206	1446
Weston Coyney, adj Weston Road		1011	1211	1451
Caverswall, adj The Hollow		1016	1216	1456
Hulme, opp Malthouse Lane		1025	1225	1505
Werrington, opp Clough Lane		1027	1227	1507
Werrington, adj Post Office		1028	1228	1508
Cellarhead, opp The Bowling Green		1031	1231	1511
Wetley Rocks, opp Plough Bank		1034	1234	1514
Cheddleton, opp The Avenue		1038	1238	1518
Cheddleton, adj St Edwards Hospital		1041	1241	1521
Leek Town Centre, adj Bus Station		1051	1251	1531

City of Stoke on Trent 12/03/2013 0723  
Route 106 is operated by Wardle Transport

106 Leek - Cheddleton - Werrington - Meir - Longton

#### Monday to Friday

	Operator:	WDL	WDL	WDL
Leek Town Centre, adj Bus Station		0900	1100	1340
Cheddleton, adj St Edwards Hospital		0910	1110	1350
Cheddleton, adj The Avenue		0913	1113	1353
Wetley Rocks, adj Plough Bank		0917	1117	1357
Cellarhead, nr Crossroads		0920	1120	1400
Werrington, opp Post Office		0923	1123	1403
Werrington, adj Clough Lane		0924	1124	1404
Hulme, adj Malthouse Lane		0926	1126	1406
Weston Coyney, adj Weston Road		0930	1130	1410
Caverswall, adj The Hollow		0935	1135	1415
Weston Coyney, adj St Andrew's Church		0940	1140	1420
Meir, opp Broadway		0945	1145	1425
Longton, Transport Interchange		0953	1153	1433

City of Stoke on Trent 12/03/2013 0723  
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APPENDIX 5 – PROPOSED SITE LAYOUT AND ACCESS  
ARRANGEMENT

# Bob Hindhaugh Associates

Highway Development Control & Traffic Engineering and Planning

## APPENDIX 6 – PHOTOGRAPHIC SURVEY

***Photo Survey Prepared on behalf of  
Bob Hindhaugh Associates.***

Winterfield Lane, junction with  
Leek Road A520, Stoke-On-Trent.

**Date of Surey 0312/2012.**

**Winterfield Lane junction with  
Leek Road A520.**



Carried out by Simon Boone of Access highway design planning consultancy.  
[simon.boone@accesshdpc.co.uk](mailto:simon.boone@accesshdpc.co.uk)

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# Bob Hindhaugh Associates

Highway Development Control & Traffic Engineering and Planning

Winterfield Lane.



**Photo N1**

Looking east towards Leek Road from Winterfield Lane.



**Photo N2**

Looking west along Winterfield Lane.



**Photo N3**

Looking east towards Leek Road from Winterfield Lane.



**Photo N4**

Looking west across Leek Road across Winterfield Lane.

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Leek Road A520.



**Photo N5**

Looking south and right from Winterfield Lane along Leek Road A5320.



**Photo N6**

Looking north and left from Winterfield Lane along Leek Road A5320.



**Photo N7**

Looking north along Leek Road A5320, towards Winterfield Lane.

The white car on the left is at the junction of Winterfield Lane with Leek Road A520.



**Photo N8**

Looking south along Leek Road A5320, towards Winterfield Lane.

The white lorry on the right is at the junction of Winterfield Lane with Leek Road A520.

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