2.5 Existing Public Transport Services

2.5.1 Public Transport - Bus Services

Bus stops with timetables are available on Birk Avenue with a good range of services to Barnsley, Kendray, Worsbrough Dale, Ward Green, Worsborough Common School, Ardsley, Stairfoot, Cundy Cross and Lundwood School. The nearest bus stop to the proposed site is located on Birk Avenue directly adjacent to the site access and consists of a flag pole and shelter with seating bar and timetable.

A recent site survey showed that services 6, 458 and 479 can be accessed via these bus stops and Brightbus, and Stagecoach Yorkshire are the public transport operators.

A summary of the available services are shown in Table 1.

Table 1: Local Bus Services and Headways

Service Number	Operator	Start	Ends	Areas served	Frequency Mon - Sat	Frequency Sun
6	Stagecoach Yorkshire	Barnsley Interchange	Worsbrough Dale	Barnsley, Kendray, and Worsbrough Dale	Every 10mins	Every 30mins
458	BrightBus	Ardsley	Shafton ALC	Ardsley, Kendray, Stairfoot, Cundy, Cross, Lundwood and School	School Bus Timetable 1 Service in the AM at 7:53am & 1 Service in the PM at 15:03pm Mon-Fri, No Sat Service	No Service
479	BrightBus	Barnsley	Horizon ALC	Barnsley, Kendray – Worsbrough, Ward Green, Worsborough, Common, and School	School Bus Timetable – 1st Service in the morning starts from Barnsley at 07:09am & every 35min till 9:22am and 1st Service in the afternoon starts from Horizon ALC at 14:40pm and every 30min till 16:40pm. Mon-Fri, No Sat Service	No Service

2.5.2 Public Transport - Rail Services

Barnsley Rail Station is located on Schwabisch Gmund Way is approximately 3 kilometres to the north-west of the proposed development. This service is managed by Northern Rail. Barnsley Rail Station provide services from Barnsley to Leeds, Nottingham, Huddersfield and Sheffield

Barnsley Rail Station is outside the preferred maximum walking distance of 1200 metres, as suggested in Table 3.2 of the Institution of Highways and Transportation (IHT): Guidelines for Providing for Journeys on Foot (2000).

There are seven Park and Ride facilities in Barnsley and National Rail, all encourage the integrated use of cycles and trains as two convenient and environmentally friendly methods of transport.

A summary of the available train services are shown in Table 2.

Table 2: Train Service

Service Provider	Route	Areas served	Frequency Mon - Fri	Frequency Sat	Frequency Sun & Public Holiday
Northern Rail	From Barnsley to Nottingham	Meadowhall, Sheffield, Dronfield, Chesterfield, Alfreton, Langley Mill and Nottingham	Morning service starts at 6:38am and runs every 60 min until 19.41pm	Morning service starts at 6.22am and runs every 60 min until 19:41pm	Morning service starts at 09:41am and runs every 60 min until 19:40pm.
Northern Rail	Form Barnsley to Leeds	Wakefield Kirkgate and Leeds	Morning service starts at 07:12am and runs every 60 min until 20:42pm	Morning service starts at 08:42am and runs every 60 min until 20:42pm	Morning service starts at 11:37am and runs every 60 min until 20:37pm. And last single service at 23:10pm

It is apparent from the rail services summary that Northern Rail provide regular services to all local areas during weekdays and over the morning and evening peak periods.

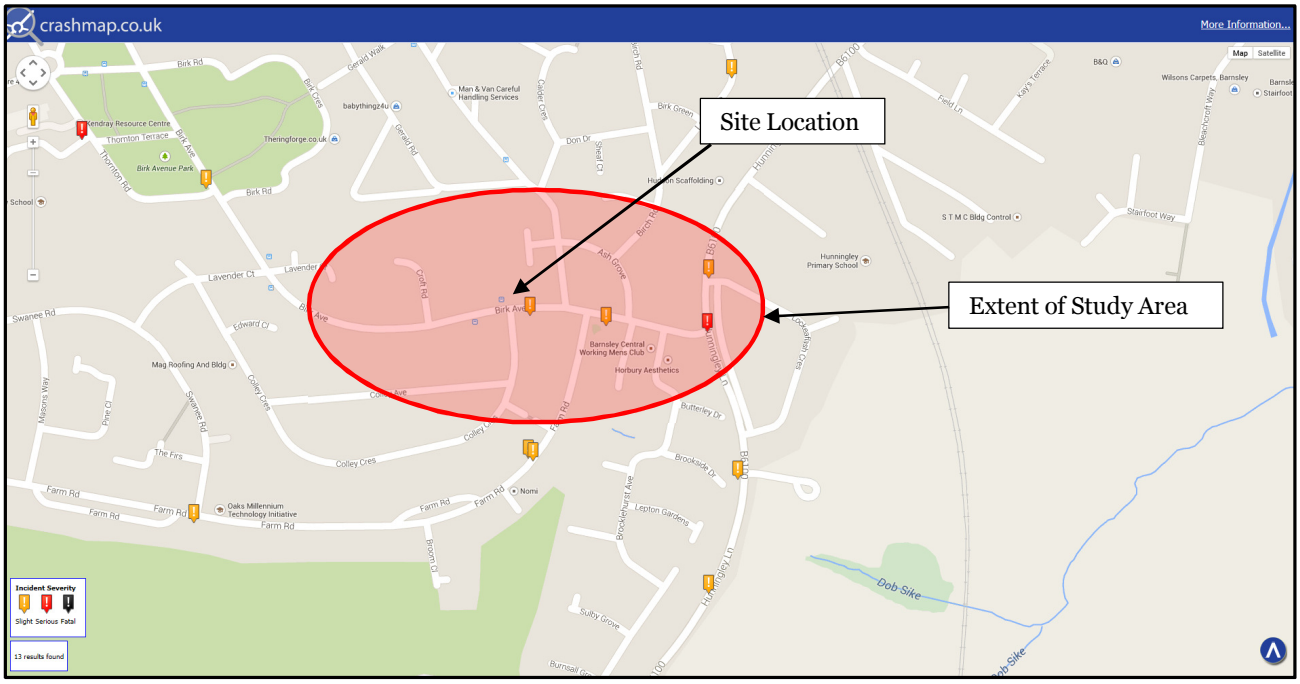
2.6 Historic Accident Data Adjacent to the Site

2.6.1 Safety considerations and accident analysis

An assessment has been undertaken based on information contained within the www.crashmap.co.uk website to identify the recent level of personal injury accidents (PIA's) that have occurred adjacent to the site.

The data relates to the area immediately around the site.

For the purpose of this assessment the extent of accident study area to be adopted includes Hunningley Lane and the frontage of the site along Birk Avenue as delineated in Figure 7.



(Note: Data extract from www.crashmaps.co.uk)

Figure 7: Extent of Accident Data and Collision Locations

Personal Injury Accident data was obtained for the period between June 2009 and December 2013. For the accident study area a total of 4 personal injury accidents occurred during this time period. A breakdown of the total number of PIA's within the area and their severity is shown in Tables 3 & 4.

Table 3: Total Number of Accidents and Casualties

Year	Total		Pedestrians		Motorcycles	
	Accidents	Casualties	Accidents	Casualties	Accidents	Casualties
2009	1	2	0	0	0	0
2010	1	2	0	0	0	0
2011						
2012						
2013	2	2	0	0	0	0
Totals	**4**	**6**	**0**	**0**	**0**	**0**

Table 4: Accident Severity

Year	Fatal	Serious	Slight	Total
2009	-	-	1	1
2010	-	-	1	1
2011	-	-	-	-
2012	-	-	-	-
2013	-	1	1	2
Totals	**-**	**1**	**3**	**4**

2.6.2 Accident summary

It is appreciated that a slight accident involving two cars occurred in the immediate vicinity of the proposed site access onto Birk Avenue in June 2009. However, no trends or patterns have been identified in the accident records appraised. Therefore it is considered that there is no evidence to suggest an existing accident issue in this location.

2.7 Existing Traffic Data and Extent of Assessment

Fully classified turning counts were carried out on 4th November 2014 at two junctions on the highway network in the vicinity of the site. The extent of the study area included:

- Birk Avenue / Colley Crescent (Priority junction); and,
- Hummingley Lane / Birk Avenue (Priority junction).

The traffic counts were carried at 15 min intervals between 08:00 and 9:00 in the morning and between 17:00 and 18:00 in the evening.

These peak periods have been adopted as part of this reports junction capacity assessment in order to ascertain the likely traffic impact the development will create on the surrounding highway network.

The traffic survey results are contained in Appendix A.

3 Planning and Policy Context

3.1 Policy Context

3.1.1 National Planning Policy Framework

The National Planning Policy Framework (NPPF) replaced PPG13 in March 2012 and covers the current national policy for promoting sustainable transport. Within this document, it is stated 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 ultra-low emission vehicles; and,
- consider the needs of people with disabilities by all modes of transport."

NPPF also states that *"Planning policies should aim for a balance of land uses within their area so that people can be encouraged to minimise journey lengths for employment, shopping, leisure, education and other activities."*

The preparation of a Transport Assessment /Statement in support of a proposed development is also identified as a key document in encouraging the use of more sustainable modes of transport. Developments should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.

On larger scale developments, NPPF recommends that planning policies should promote a mix of uses to provide opportunities for day to day activities to be carried out on foot, e.g. local shops and employment.

While the NPPF is the current policy document, it is recognised that there are some gaps in the guidance provided. In such cases, the information contained within PPG13 is used as a sound basis for assessment.

3.1.2 DfT "Transport evidence bases in plan making" dated 10th October 2014

In October 2014 the former DFTs Guidance documents, "Guidance on Transport Assessments" was archived and new guidance provided. Paragraph 32 of the National Planning Policy Framework sets out that all developments that generate significant amounts of transport movement should be supported by a Transport Statement or Transport Assessment.

The new guidance considers that Local planning authorities must make a judgement as to whether a development proposal would generate significant amounts of movement on a case by case basis.

In determining whether a Transport Assessment or Statement will be needed for a proposed development local planning authorities consider the following:

- Local Plan Policies;
- the scale of the proposed development;
- existing intensity of transport use and the availability of public transport;
- proximity to nearby environmental designations or sensitive areas;
- impact on other priorities/ strategies; and,
- the cumulative impacts of multiple developments within a particular area;

To confirm with this guidance a scoping report was prepared and submitted to Barnsley Highways Authority indicating the intended approach of this Transport Statement. At the time of preparing this report no response had been received.

3.1.3 DfT Guidance on Transport Assessments (Archived)

The Department for Transport document "Guidance on Transport Assessments", published in March 2007, expanded on the scope of the guidance available at that time to include the assessment of the potential implications of development proposals on the entire transport system. This includes the public transport system (buses, rail, trams), the Strategic Road Network (SRN), local highways and footways.

The guidance dictates that the following considerations will be relevant to this Transport Assessment:

3.1.2.1 Encouraging environmental sustainability

- **Reducing the need to travel, especially by car** – reducing the need for travel, reducing the length of trips and promoting multi-purpose or linked trips by promoting more sustainable patterns of development and more sustainable communities that reduce the physical separation of key land uses;
- **Tackling the environmental impact of travel** – by improving sustainable transport choices, and by making it safer and easier for people to access jobs, shopping and leisure facilities and services by public transport, walking and cycling;
- **The accessibility of the location** – the extent to which a site is, or is capable of becoming, accessible by non-car modes, particularly for large developments that involve major generators of travel demand;
- **Other measures which may assist in influencing travel behaviour (ITB)** – achieving reductions in car usage (particularly single occupancy vehicles), by measures such as car sharing/pooling, high occupancy vehicle (HOV) lanes and parking control.

3.1.2.2 Managing the existing network

- **Making best possible use of existing transport infrastructure** – for instance by low-cost improvements to the local public transport network and using advanced signal control systems, public transport priority measures (bus lanes), or other forms of Intelligent Transport Systems (ITS) to improve operations on the network;
- **Managing access to the highway network** – taking steps to maximise the extent to which the development can be made to "fit" within available capacity by managing access from developments onto the highway network;

3.1.2.3 Mitigating residual impacts

- **Through demand management** – using traffic control measures across a wide network to regulate flows;
- **Through improvements to the local public transport network, and walking and cycling facilities** – for example by extending bus routes and increasing bus frequencies and designing sites to facilitate walking and cycling;
- **Through minor physical improvements to existing roads** – it may be possible ion some circumstances, to improve the capacity of existing roads by relatively minor physical adjustments such as improving the geometry of junctions etc. within the existing highway boundary;
- **Through provision of new or expanded roads** – it is considered good transport planning practice to demonstrate that the other opportunities have been fully explored before considering the provision of additional road space, such as new roads and major junction upgrades.

3.1.3 Design Manual for Roads and Bridges

The Design Manual for Roads and Bridges (DMRB) was introduced in 1992 in England and Wales, and subsequently Scotland and Northern Ireland. It provides a comprehensive manual system which accommodates all current standards, advice notes and other published documents relating to the design, assessment and operation of trunk roads (including motorways).

It has been developed from a number of separate series of documents previously published by the Overseeing Organisations of England, Scotland, Wales and Northern Ireland. These documents, together with the later additions, have been gathered together in a consistent series of volumes within the manual to help ion meeting the requirements of quality assurance procedures.

This Transport Assessment refers to and utilises guidance from Volumes 5 to 8 where appropriate.

Where appropriate, highway improvements measures determined within this assessment have been designed to, or are to be in accordance with, DMRB.

3.1.4 Manual for Streets and Manual for Streets 2

Manual for Streets (MfS), published in 2007, is aimed at any organisation or discipline with an interest in residential streets, ranging from access officers to the emergency services. It focuses on lightly-trafficked residential streets, but many of its key principles may be applicable to other types of street, for example high streets and lightly-trafficked lanes in rural areas.

MfS considers that streets should not be designed simply to meet the requirements of motor vehicles. A prime consideration is that they meet the needs of pedestrians and cyclists.

MfS2 was published in September 2010 and builds on the guidance contained in MfS, exploring in greater detail how and where its key principles can be applied to busier streets and non-trunk roads, thus helping to fill the perceived gap in design guidance between MfS and the Design Manual for Roads and Bridges (DMRB). It is intended to provide advice and does not set out any new policy or legal requirements.

3.1.5 South Yorkshire Local Transport Plan 3 (LTP3) 2011-2015

The SYLTP partnership is made up of the four Local Authorities in South Yorkshire (Barnsley, Doncaster, Rotherham and Sheffield) and the South Yorkshire Passenger Transport Executive (SYPTE). The work of the partnership is managed by the SYLTP Central Team. The partnership coordinates and implements South Yorkshire's transport strategy. The Local Transport Plan (LTP) for South Yorkshire covers the wider Sheffield City Region (SCR) and sets out its strategy that defines the SCR partners priorities for transport system to be implemented over the next 15 years.

SCR transport strategy 2011 - 2026 as set out in this Local Transport Plan (LTP) will help the County Council to make progress on its corporate priorities, and identified four goals for its transport system:

- The first and primary goal is for the transport system to supporting the economic growth of SCR;
- Second goal is for the transport system to enhance social inclusion and health, thereby ensuring that Transport improvements are necessary to provide good access to medical, social and community services.
- Third goal is to reduce the emissions from vehicles by means of creating a culture whereby people are happy to make sustainable travel choices and where economic prosperity goes hand-in-hand with carbon efficiency, and also promote sustainability by establishing an integrated approach to transport and land use planning.
- The fourth goal is to make transport increasingly safe and secure, especially to those who are currently at a higher risk.

These goals are set to be supported by a set of 26 policies which would form a complete framework to guide all decision-making process concerning SCR's transport system.

It is considered that the proposals set out in this report will actively contribute towards the promotion of walking and cycling trips, along with trips by public transport.

4 Development Proposals

4.1 On-Site Development Proposal

4.1.1 Development Layout

The outline development will incorporate a 372sq.m retail unit at the front of the site, with nine residential dwellings to the rear. The retail unit will comprise two stores and a storage area. The larger unit, will measure approximately 237sq.m, the smaller unit will measure approximately 93sq.m and the Storage Unit will measure approximately 42sq.m.

12 car parking bays are proposed outside the retail unit, with a further two staff car parking bays to the east. The layout plan also illustrates how the site is accessible for delivery vehicles.

Nine residential dwellings are proposed to the rear of the retail unit. These will be accessed from an internal road which runs along the western boundary of the site. Each property will have its own access driveway and will offer off street parking.

The layout of the proposed development is illustrated in Figure 8.

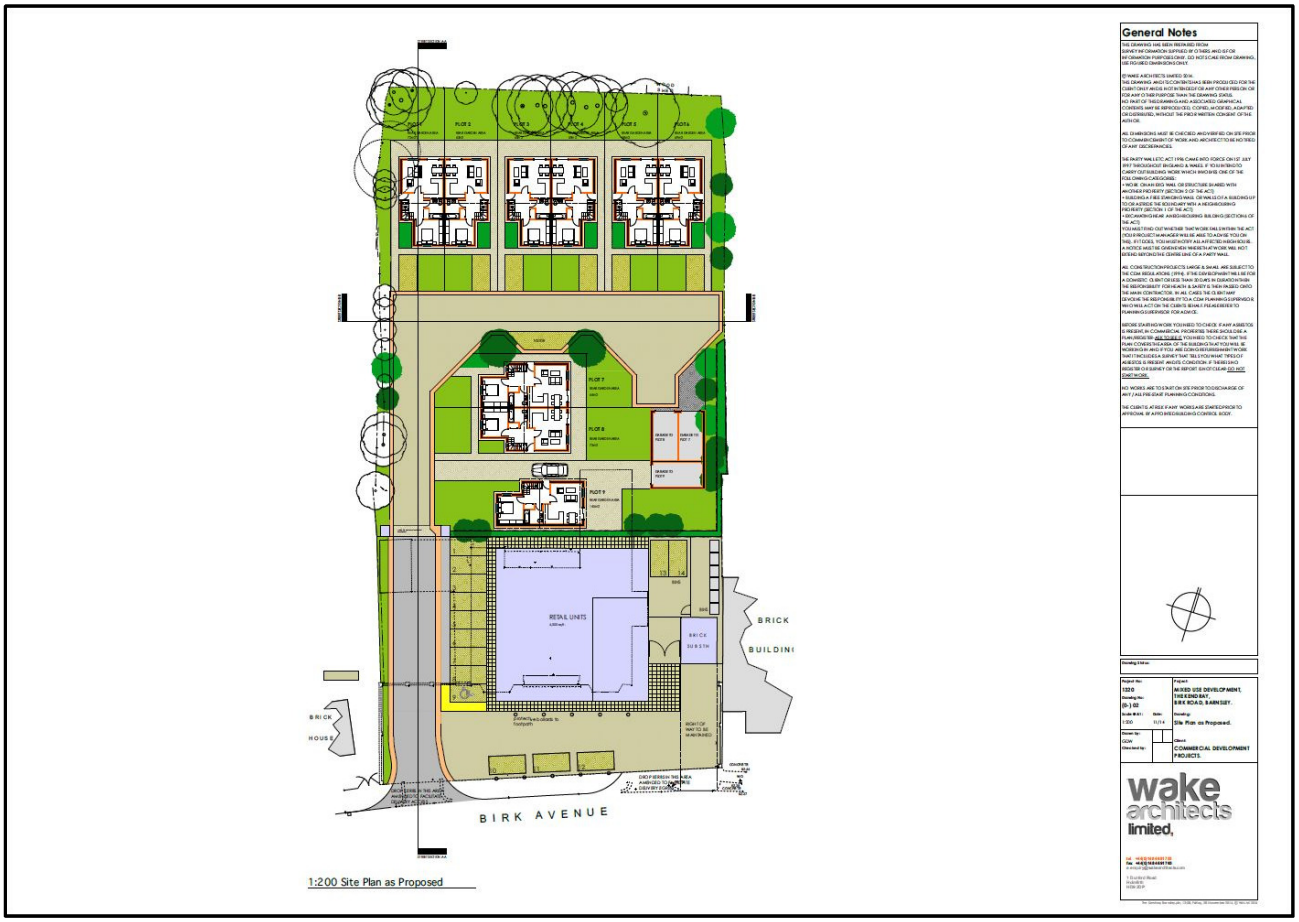


Figure 8: Proposed Development Layout

4.1.2 Swept Path Analysis

Swept path analysis of a refuse vehicle has been undertaken throughout the proposed development. The swept path drawings can be seen in Appendix B.

As clearly seen in the swept path analysis, the refuse vehicle is able to navigate easily around the proposed access within the proposed development.

4.2 Proposed Vehicular Site Access

Vehicular access to the site will be gained via Birk Avenue, as shown in Figure 8.

4.2.1 Vehicular Access

The main vehicular access into the site will be via a road which runs along the western boundary of the site off Birk Avenue. This access will also be used as a point of entry for delivery vehicles serving the retail unit at the front of site.

The location of the proposed access points are illustrated on the development masterplan presented in Appendix C whilst the proposed access arrangements are illustrated in Figure 9.

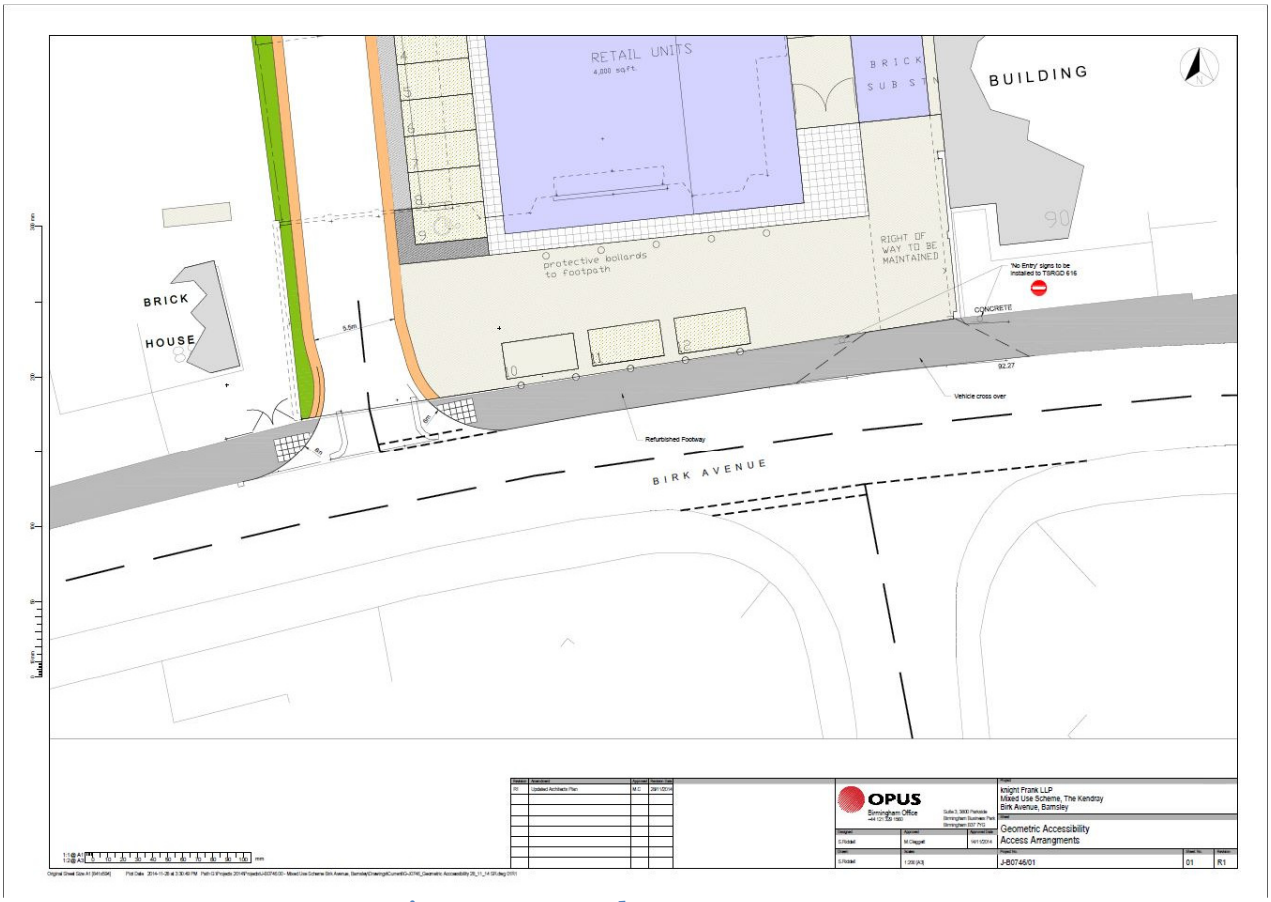


Figure 9: Proposed Access Arrangements

4.2.2 Visibility Splays

The access is proposed to be located on the western boundary of the site.

The visibility criteria based in this report has been considered based on the guidance specified in the Manual for Streets guidance document.

Birk Avenue is in the vicinity of the site and carries a speed limit of 30mph. As stated in the Manual for Streets guidance, under section 7.7, the required visibility splay would achieve an x distance of 2.4m and a y distance of 43m along the edge of the nearside carriageway kerbline.

A feasibility layout of the site access is presented in Figure 10.

Figure 10: Visibility Splays

It is noted that the visibility splay requirements are easily achieved and a safe visibility splay can be obtained.

4.3 Proposed Pedestrian & Cycle Access

Pedestrian and cycle facilities will be provided at the point of the main vehicular access onto Birk Avenue. This will include the provision of a pedestrian footway on the eastern side of the access road where it forms a junction with Birk Avenue Road.

The existing footways along Birk Avenue are approximately 3m in width. These footways will link into the development site's footway infrastructure.

4.4 Proposed Car Parking Provision

The proposed layout presented in Appendix C presents the on-site parking provision.

The Barnsley Metropolitan Borough Council Car Parking standards shown within the "Supplementary Planning Document: Parking", provides advice on how to calculate the parking allocation for a new development. The guidance shows the *maximum* parking standards for residential, retail and storage land uses.

The maximum car parking threshold shown within the "Supplementary Planning Document: Parking", are as follows:

- 1 bedroom unit = 1.0 spaces per unit.
- 2-3 bedroom units = 2.0 spaces per unit with 3 or more bedrooms
- Storage and Distribution = 1 space per 3 staff or 1 space per 60 m^2 gross floor area up to 300 m^2, then 1 space per 100 m^2 up to 1000 m^2 and 1 space per 150 m^2 thereafter.
- Food retail = 1 space per 14-25 m^2

The guidance also states that developments will be expected to meet the standards for parking design set out in the South Yorkshire Residential Design Guide considering parking as an integral part of the design of residential development. Particular attention should be given to sections S2.5 On-street parking and B1.6 Off-street parking. Developments will also be expected to meet the technical requirements set out in annex 4B Street and parking geometry.

Based on the applicable standards, the maximum parking provision (assuming all dwellings have two to three bedrooms) should be:

- Residential: Maximum of 16 parking spaces;
- Retail: 13 Parking spaces; and,
- Storage Unit: 1 Parking space.

The development proposes to supply 10 residential and 12 retail / storage land use parking spaces which conforms to the policy guidance.