

Devonshire Property (MM) Ltd
Mastin Moor
Travel Plan

Issue | 8 October 2020

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

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

Job number 276927-00

Ove Arup & Partners Ltd
Admiral House Rose Wharf
78 East Street
Leeds LS9 8EE
United Kingdom
www.arup.com

ARUP

Contents

	Page
1 Introduction	1
1.1 Purpose	1
1.2 Development Proposal	1
1.3 Travel Plans	1
1.4 Structure of the Report	2
1.5 Other Reports	2
1.6 Author	3
2 Context	4
2.1 Applicant	4
2.2 The Site	4
2.3 Design Process	6
2.4 Development Proposal	7
2.5 Planning Policy	8
2.6 Planning Assessment	10
3 Policy Context	11
3.1 National Planning Policy	11
3.2 Local Policy	12
4 Development Proposals	13
4.1 Development Proposals	13
4.2 Highway and Access Proposals	13
4.3 Parking	16
4.4 Public Transport Access	17
4.5 Pedestrians and Cyclists	18
5 Approach to Travel Planning	19
5.1 Travel Plan Aims	19
5.2 Travel Plan Objectives	19
5.3 Roles and Responsibilities	19
5.4 Travel Plan Funding	21
6 Site Assessment and Transport Audit	22
6.1 Introduction	22
6.2 Site Information	22
6.3 Site Location and Access	22
6.4 Strategic Road Network	23
6.5 Local Highway Network	23
6.6 Public Transport Provision	26

6.7	Pedestrian and Cycling Facilities	29
7	Travel Plan Measures	32
7.1	Introduction	32
7.2	Initiatives to Support Walking	32
7.3	Initiatives to Support Cycling	33
7.4	Initiatives to Support Public Transport Use	34
7.5	Reducing Car Travel	34
7.6	Other Measures	35
8	Communication Strategy	37
8.1	Introduction	37
8.2	Residents Welcome Pack	37
8.3	Other Measures	37
9	Targets, Monitoring and Review	38
9.1	Introduction	38
9.2	Mode Share Target	38
9.3	Monitoring Framework	39
9.4	Travel Plan Review	41
10	Implementation	42

Figures

- Figure 1 Site Location and Strategic Road Network
- Figure 2 Site Location and Local Highway Network
- Figure 3 Public Transport Network
- Figure 4 Bus Stop Accessibility
- Figure 5 Walking and Cycling Infrastructure
- Figure 6 Cycling Catchment
- Figure 7 Walking Catchment

Drawings

- Drawing 1 276927-SK-200
- Drawing 2 276927-SK-100
- Drawing 3 276927-SK-101
- Drawing 4 276927-SK-102

Appendices

Appendix A

Indicative Masterplan

1 Introduction

1.1 Purpose

The purpose of this Travel Plan is to support an outline planning application for residential development of land at Mastin Moor (Chesterfield) as submitted to Chesterfield Borough Council (CBC) as the local planning authority (LPA) concerned. It outlines the context within which the application is made and provides detail of a travel planning strategy and measures to encourage sustainable travel options to the development.

1.2 Development Proposal

The proposals at Mastin Moor comprise the provision of up to 650 dwellings with additional community facilities including a residential care facility with extra care, a Local Centre (including local retail, health facilities, leisure facilities, other local facilities and services, offices), open space, community garden extension, community building, parking and associated infrastructure and earthworks.

The scheme includes the provision of new highway access junctions from the A619 Worksop Road, B6419 Bolsover Road and Woodthorpe Road as well as a network of pedestrian and cycle routes to tie into existing local provision.

1.3 Travel Plans

A Travel Plan is a general term for a long term management strategy that seeks to minimise single-occupancy car trips. It includes a package of measures tailored to meet the needs of individual sites and which aims to promote greener, cleaner travel choices and reduce reliance on the car. It involves the development of a set of mechanisms, initiatives and targets that together can enable a development to reduce the impact of travel and transport on the environment, whilst also bringing a number of other benefits to the development, and the wider community.

Community wide benefits include:

- Reducing congestion and peak time conflicts.
- Reducing energy use and harmful transport emissions.
- Facilitating improved public transport through economies of scale and transport efficiency.
- Tackling social exclusion and improving accessibility.

This document forms the Residential Travel Plan framework and sets out the means by which alternatives to single-occupancy car journeys to and from the site can be encouraged, ensuring that future residents have access to, and a choice of, a range of travel options and minimising the environmental impact of the development.

The Travel Plan will be developed in more detail as the scheme progresses.

For additional detail regarding policy context and the transport impacts of the development, reference should be made to the Transport Assessment which has been prepared alongside this Residential Travel Plan framework.

1.4 Structure of the Report

The structure of the report is as follows:

- Chapter 2 provides context and background to the development;
- Chapter 3 summarises the local transport planning policy context in relation to Travel Plans;
- Chapter 4 provides details of the development proposals;
- Chapter 5 sets out the approach to travel planning at the site;
- Chapter 6 provides the site assessment and transport audit;
- Chapter 7 sets out a range of travel plan measures;
- Chapter 8 provides the communication strategy;
- Chapter 9 identifies targets, monitoring and review proposals;
- Chapter 10 provides an implementation plan for the travel plan.

1.5 Other Reports

The proposal has been informed by a range of technical evidence. As such, the planning application comprises a suite of information which includes:

- Supporting Planning Statement
- Design and Access Statement
- Landscape and Visual Appraisal
- Transport Assessment
- Flood Risk Assessment
- Ecology Surveys
- Archaeological Assessment
- Geo-Environmental Assessment
- Noise and Vibration Assessment
- Air Quality Assessment
- Topographical Survey

1.6 Author

This report has been prepared by Ove Arup and Partners Ltd (Arup). Arup are an independent firm of designers, planners, engineers, consultants and technical specialists offering a broad range of professional services, with significant transport planning experience. Our contact details are as follows:

Ove Arup & Partners Ltd
Admiral House, Rose Wharf
78 East Street
Leeds LS9 8EE
Tel no.: 0113 2428498
Email address: susanna.bathe@arup.com

2 Context

2.1 Applicant

The land subject of this application is owned and managed by Devonshire Property (MM) Limited (DPMML). DPMML is part of the Devonshire Group.

The Devonshire Group, known technically as the Chatsworth Settlement Trustees (CST), owns the land and estates of the Dukedom of Devonshire. Its main estates are in the vicinity of Chatsworth in Derbyshire and Bolton Abbey in North Yorkshire. It also runs visitor and other businesses on these estates, including hotels; retail and catering outlets; forestry; livestock and arable farming. It employs over 600 full time employees. It is committed to quality in all its activities and takes a responsible approach to development; as such, it measures performance in social and environmental as well as financial terms.

Together with the Chatsworth House Trust (registered charity no.1511149), CST's Derbyshire Estate provides over 450 full time equivalent jobs and contributes c.£50m of enabled Gross Value Added to the local economy each year (Source: New Economics Foundation 2014). Its income funds socio-economic facilities (e.g. village shop/post office) and environmental management activities (e.g. architectural conservation) without grant support. CST thereby provides benefits far beyond "just the estate".

CST has a range of interests in the Borough of Chesterfield including: agricultural land supporting modern farming; commercial properties supporting local employment; farmsteads supporting smaller scale rural enterprises; and the majority of the former Staveley Works site (including both the Clocktower Business Centre (leased to CBC and providing flexible term offices and workspaces) and the Devonshire Building (home to a gym and other enterprises)).

Whilst maintaining a long-term perspective, CST manages a diverse range of landholdings to achieve corporate and wider social and environmental objectives. It has thereby identified that the best long-term use for the land subject to this application would be for residential development. This will help deliver its own objective to deliver 1,000 new homes over the next ten years, and also meet the needs and aspirations of the local community and wider Borough, subject to securing a planning permission that is both attractive to the development market and commercially viable.

2.2 The Site

This section provides a summary of key features of the site. The site is more fully described within the Design and Access Statement submitted as part of the application.

The site is located at Mastin Moor, to the south of Worksop Road (A619) to both the east and west of Bolsover Road, with part of the site extending southwards to Woodthorpe Road. It encompasses some 46.2 ha of mainly agricultural land. The overall site forms a shallow valley sloping from the ridge lines along Worksop

Road and Woodthorpe Road towards a watercourse that runs in a westerly direction through the site. The highest part of the site is around 119m AOD in the north-east with the lowest part in the south-west at around 56m AOD.

The site is primarily comprised of undulating arable fields with limited features. The main features of note include:

- An unnamed watercourse which flows in a westerly direction through the site
- Bolsover Road which runs through the site on a north-south axis
- Pumphouse Farm (dwelling and curtilage) which is surrounded by the development proposal but does not form part of it
- Field boundaries which are a mixture of hedgerows, stone walls and woodland
- Isolated trees

The main part of the settlement of Mastin Moor is located to the north of the site, on the northern side of Worksop Road. The settlement of Woodthorpe is located generally to the west of the site. The site abuts a limited number of residential properties, as well as the Mastin Moor Community Garden.

Photograph 1: View over site from South-Eastern corner (adjacent Woodthorpe Road) looking towards Woodthorpe



Photograph 2: View over site from Bolsover Road (close to Community Garden) looking towards Woodthorpe



Photograph 3: Photo 3: View over site from Bolsover Road looking North West towards Worksop Road



Photograph 4: Photo 4: View over site from near North Eastern boundary adjacent to Worksop Road looking towards Bolsover Road and Woodthorpe



2.3 Design Process

CST first considered residential development options for its land at Mastin Moor in 2011 when it was identified in the Strategic Housing Land Availability Assessment by Chesterfield Borough Council. This formed part of the evidence base for what was at the time the emerging Local Plan: Core Strategy. CST appointed planning and masterplan specialists to explore these options. Outputs from that process formed part of CST's response to consultation on the Local Plan: Core Strategy.

Following adoption of the Local Plan: Core Strategy in 2013 which confirmed Mastin Moor as a focus for regeneration and growth, CST appointed an expanded team of specialists. Resulting technical surveys and reports contributed to a detailed appreciation of the development opportunity and potential constraints. These informed a masterplan-led approach that fully explored design options. The process had regard to the wider setting of the site and existing development in the locality.

Draft proposals were subject to extensive consultation with Chesterfield Borough Council, Derbyshire County Council and Staveley Town Council. Meetings were held with groups representing local residents and interest groups including Friends of Mastin Moor, the Woodthorpe Village Community Group and Mastin Moor Gardens and Allotments (formerly Mastin Moor Allotments Association). The

resulting proposals were presented at two community consultation events in July 2016, held at the Eventide Rest Room (Mastin Moor) and the Albert Inn (Woodthorpe), and were available to view at the same time on a website.

An outline planning application for 650 dwellings and other development was subsequently submitted to Chesterfield Borough Council (ref. CHE/17/00469/OUT) in June 2017. Contrary to the unequivocal recommendation of the Officer's report, and despite no objections being received from any statutory consultees, the application was refused by the Council's Planning Committee in October 2019. At the time of writing, an appeal against that refusal remains extant.

Feedback received during the course of the determination of the above application has informed the current proposals. The design process that has led to the proposals for which planning permission is now sought is more fully described within the Design and Access Statement.

2.4 Development Proposal

The proposed development seeks outline planning permission for residential development of up to 650 dwellings, a residential care facility with extra care, a Local Centre (including local retail, health facilities, leisure facilities, other local facilities and services, offices), open space, community garden extension, community building, parking and associated infrastructure and earthworks with all matters reserved except access. Details of scale, layout and landscaping are reserved for future consideration.

For illustrative purposes, an indicative layout has been prepared to show how the site could be developed. Further explanation of the design principles that have been incorporated into the proposals, and how the design has been informed and influenced by the comprehensive suite of technical information and analysis, is set out in the Design and Access Statement.

Key aspects of the proposal include:

- Up to 650 dwellings located on land to the south of Worksop Road (east and west of Bolsover Road) extending to Woodthorpe Road;
- A residential care facility with extra care;
- A Local Centre (including local retail, health facilities, leisure facilities, other local facilities and services, offices) located adjacent to Worksop Road;
- A new signal-controlled junction on Worksop Road providing access to the new Local Centre and residential areas, incorporating pedestrian and cyclist crossing facilities;
- New priority-controlled junctions on Bolsover Road and Woodthorpe Road;
- An extension to the Community Garden (approximately doubling its existing size), including provision for a new community building and associated car park;
- Significant new areas of parkland, play areas and other open space;

- Retention of existing hedgerows and trees wherever possible;
- Additional landscape planting and ecological enhancements;
- New walking and cycling connections;
- New drainage infrastructure including surface water storage ponds;
- Financial contributions to allow the expansion of existing local services including Norbriggs Primary School.

The proposal therefore comprises a high quality development scheme designed to: address multiple deprivation issues at Mastin Moor; help regenerate the area in line with key related Local Plan policy; respect but integrate with the distinct communities of Woodthorpe and Mastin Moor; acknowledge and address the specific physical challenges and constraints of the site (e.g. topography, drainage).

2.5 Planning Policy

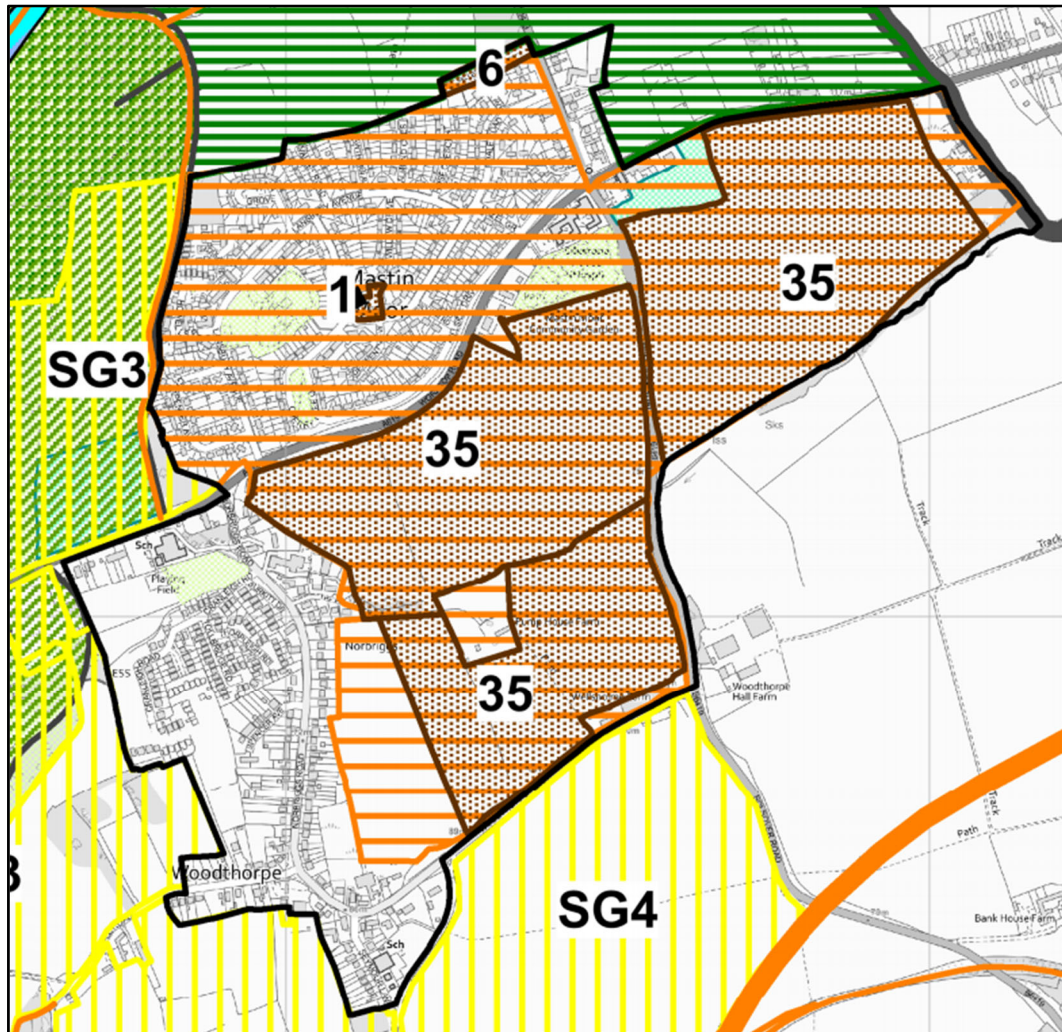
Section 38 (6) of the Planning and Compulsory Purchase Act 2004 requires that the determination of planning applications is undertaken in accordance with the development plan, unless material considerations indicate otherwise. The relevant document for this application is the Chesterfield Local Plan (2020) (the Local Plan).

The Local Plan allocates the site for development by way of Policy CLP3 Flexibility in Delivery of Housing. Table 4 within the Local Plan references the site as H35 (Land South of Worksop Road, and East and West of Bolsover Road, Mastin Moor), having a capacity of 650 dwellings, the extent of which is shown on the Local Plan Policies Map. Policy RP1 Regeneration Priority Areas sets out further specific requirements for any development within site H35.

Other relevant policies of the Local Plan include: CLP1 Spatial Strategy, CLP2 Principles for Location of Development, CLP4 Range of Housing, CLP6 Economic Growth, CLP8 Vitality and Viability of Centres, CLP9 Retail, CLP10 Social Infrastructure, CLP11 Infrastructure Delivery, CLP13 Managing the Water Cycle, CLP14 A Healthy Environment, CLP15 Green Infrastructure, CLP16 Biodiversity, Geodiversity and the Ecological Network, CLP17 Open Space, Play Provision, Sports Facilities and Allotments, CLP20 Design, CLP21 Historic Environment, CLP22 Influencing the Demand for Travel.

An extract from the Local Plan Policies Map showing the extent of the allocation and the wider Mastin Moor Regeneration Priority Area is shown below.

Picture 1: Local Plan Policies Map (extract)



The National Planning Policy Framework (NPPF) ‘sets out the Government’s planning policies for England and how these are expected to be applied’. Paragraph 10 of the NPPF sets out that ‘at the heart of the [NPPF] is a presumption in favour of sustainable development’. Paragraph 11 states that ‘For decision-taking this means:

c) approving development proposals that accord with an up-to-date development plan without delay; or

d) where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date, granting permission unless:

i. the application of policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed; or

ii. any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole.’

2.6 Planning Assessment

The proposal performs well against relevant Local Plan policies. In particular, it will deliver development in accordance with Policies CLP1 Spatial Strategy, CLP2 Principles for Location of Development, Policies CLP3 Flexibility in Delivery of Housing and Policy RP1 Regeneration Priority Areas.

It is also considered that there are no material considerations that indicate anything other than the fact that the LPA should determine the application in line with the extant plan as outlined above.

In addition, key benefits of the proposal would include:

- Provision of new, high quality housing;
- New development in an area with acknowledged regeneration needs;
- Greater variety of housing type and tenure (including Affordable Housing) to meet the diverse needs of the local community (including housing to buy and rent);
- Extension of the Community Garden (approximately doubling its existing size) including provision for a new community building and parking area;
- Improved local services and facilities (including provision for retail, health and other local and community services within a new Local Centre);
- Significant new areas of parkland, play areas and other open greenspace available to existing and new residents;
- New housing in a location where future residents will have a realistic choice of walking, cycling or using public transport, in preference to using private motor vehicles;
- Additional capacity at local schools;
- Opportunities for skills and learning through training programmes during construction and operational phases of the development;
- New employment opportunities during construction and operational phases of the development;
- Additional landscape planting and ecological enhancements;
- New traffic signal-controlled junction on Worksop Road to include pedestrian and cyclist crossing facilities;
- On-site water storage to help reduce existing off-site flood risk.

The proposal will therefore provide opportunities and benefits for all sections of the local community, including existing and future residents. Benefits will accrue in the short and longer term. It will help to overcome issues that can lead to deprivation and will contribute to regeneration in line with Local Plan objectives.

3 Policy Context

Local and national planning and transport policies advocate the preparation and implementation of Travel Plans for new developments that generate significant numbers of trips. Hence, the objectives and scope of the Travel Plan need to be set within the context of the local and national policy frameworks.

Central Government has stated that trends such as rising pollution levels, increased road congestion, inadequate public transport and social exclusion are detrimental to the social well-being and national competitiveness of the UK. They have recognised the contribution of effective public transport and a reduction in car dependence in addressing these trends.

3.1 National Planning Policy

The revised NPPF was published in February 2019. It sets out the overarching planning policies and principles for England and provides high level guidance upon the application of transport policy in the context of development schemes.

Under *Considering Development Proposal* in Chapter 9 of NPPF discusses how development should promote sustainable transport. It states that “*All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed*”.

The NPPF states that developments should be located and designed to:

- *give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to 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*

The Mastin Moor proposals will help to manage the movement of vehicles in and around the site and promote sustainable transport modes of travel. The site is located close to urban areas and is served by a number of bus services. The scheme has been designed to promote pedestrian and cycle movements between local facilities and the site. This Travel Plan Framework has been prepared and

submitted with the planning application to encourage access by sustainable modes of travel.

3.2 Local Policy

A new Chesterfield Borough Local Plan was adopted on 15 July 2020. It sets out the strategy for development across the Borough until 2035.

In the new Local Plan, the Council's vision for the Borough comprises:

- *A thriving Borough, where everyone has access to the jobs, training and support they need;*
- *A clean, green and attractive Borough, where our open spaces and built heritage are valued;*
- *A healthy and safe Borough, where the community is free from the fear of crime;*
- *A place where everyone has fair access to a decent and affordable home;*
- *An inclusive Borough, where everyone feels valued and has equal and fair access to local services.*

Derbyshire County Council (DCC) refers to Nottinghamshire County Council (NCC) published Guidance for the Preparation of Travel Plans In Support Of Planning Applications (September 2010). This document supports the national policy, encouraging travel plan adoption within the East Midlands. In this guidance it is set out that there should be six core components which should be in every Travel Plan. These are:

1. A commitment from the developer to minimise Single Occupancy Vehicle (SOV) use by promoting and supporting alternative modes;
2. The identification of a Travel Plan Co-ordinator to manage travel to and from the site;
3. The setting of Targets with respect to the number of vehicles using a site;
4. The adoption of measures to reduce SOV travel in line with the Targets set;
5. The adoption of a monitoring regime to report achievement against targets to the Council;
6. The commitment to review and update the Travel Plan in response to monitoring against Targets, which may include for the provision of fallback measures.

This Travel Plan will aim to adhere to the guidance provided by Derbyshire and Nottinghamshire County Councils.

4 Development Proposals

Mastin Moor is located to the north east of Chesterfield, approximately 2km east of Staveley and 8km from Chesterfield. The A619 runs through Mastin Moor, connecting with Staveley to the west and the M1 Junction 30 to the east. The site location is shown at Figure 1.

The proposals at Mastin Moor comprise the provision of up to 650 dwellings with additional community facilities, including:

- Residential Care facility;
- Local Centre (including local retail, health facilities, leisure facilities, other local facilities and services, offices),
- open space, community garden extension, community building;
- parking and associated infrastructure and earthworks.

The scheme includes the provision of new access junctions from the A619 Worksop Road, B6419 Bolsover Road and Woodthorpe Road. An Indicative Masterplan is attached at Appendix A, although it is noted that the internal scheme layout is not fixed and will be confirmed through Reserved Matters applications. Further detail of the development and indicative proposals is provided below.

4.1 Development Proposals

The proposed site covers an approximate area of 46.21ha. This is broadly split in to three parcels of development:

- Central / Western parcel – located immediately south of A619 Worksop Road and west of B6419 Bolsover Road. Development in this parcel comprises provision of up to 150 dwellings including houses and apartments, as well as the community facilities including the Care Home, local retail and health facilities and gardens / open space;
- Eastern parcel – located immediately south of A619 Worksop Road and east of B6419 Bolsover Road. Development in this parcel comprises provision of up to 325 dwellings, predominantly houses, and open space;
- Southern parcel – located immediately north of Woodthorpe Road and west of B6419 Bolsover Road. Development in this parcel comprises provision of up to 175 dwellings, predominantly houses, and open space.

4.2 Highway and Access Proposals

The internal highway network has been developed with the footpath and cycle routes to provide a clear hierarchy which will aid navigation and encourages permeability. A road hierarchy has been developed as set out within the Design and Access Statement and summarised below.

A new road is proposed through the central / western parcel of development, linking A619 Worksop Road and B6419 Bolsover Road. A new access road will provide access to the eastern parcel. The access road will be a cul-de-sac providing internal loops and turning heads to access the proposed residential dwellings. Similarly, a new cul-de-sac access, loop roads and turning heads provide access to residential dwellings in the southern parcel of development.

The proposed development includes provision of four new access junctions. These comprise:

- Access 1 - traffic signal control junction with A619 Worksop Road (West) providing access to the western parcel and connecting as a through route to B6419 Bolsover Road (at Access 2);
- Access 2 - priority junction with B6419 Bolsover Road (Central), providing access to the western parcel and connecting as a through route to A619 Worksop Road (at Access 1);
- Access 3 - priority junction with Woodthorpe Road (South), providing access to the southern parcel only.
- Access 4 - priority junction with B6419 Bolsover Road (East), providing access to the eastern parcel only.

Drawing Ref 276927-SK-200 shows the location of the proposed access junctions.

4.2.1 Site Access 1

Site Access 1 provides the northern / western access to the site via the A619 Worksop Road. The proposed junction takes the form of a signalised arrangement, with pedestrian and cycle crossing facilities. Drawing Ref 276927-SK-100 provides a general arrangement layout. The proposed junction incorporates the following:

- Dedicated left-turn lane along the A619 Worksop Road (East);
- Dedicated right-turn lane along the A619 Worksop Road (West);
- Single lane plus flare at the site exit;
- Pedestrian crossings, including cycle crossing facilities, at each approach to connect with existing pedestrian provision on A619 and in Mastin Moor as well as new multi user paths within the development;
- Relocation / replacement of the existing bus stop on the A619 Worksop Road (East) approach.

4.2.2 Site Access 2

Site Access 2 provides access from B6419 Bolsover Road to the western / central parcel of development to the west of Bolsover Road. The proposed access takes the form of a priority controlled T-junction. The minor arm (site access) comprises a single lane access with minor flaring at the entry to the junction to accommodate development traffic. Widening is proposed along the B6419 to

provide a right turn lane for traffic movements into the site and to provide pedestrian / cycle crossing locations to the south of the junction.

The existing hedge located to the west of the B6419 Bolsover Road will be removed to provide suitable junction visibility. A new 4.5m wide verge and 2.5m wide footway will be provided on the western side of B6419 Bolsover Road for pedestrian / cycle connections into the site. Drawing Ref 276927-SK-101 provides a layout for the proposed access junction.

4.2.3 Site Access 3

Site Access 3 provides access to the southern parcel of development via Woodthorpe Road. The proposed junction, located along the southern boundary of the site, takes the form of a priority controlled T-junction. The minor arm (site access) will require a single lane access with minor flaring at the entry to the junction to accommodate development traffic. No widening is proposed along Woodthorpe Road to accommodate turning movements into the site. Drawing Ref 276927-SK-102 provides a layout for the proposed access junction.

4.2.4 Site Access 4

Site Access 4 provides access to the eastern parcel of development from the B6419 Bolsover Road. The proposed access takes the form of a priority controlled T-junction, located to the north of site Access 2 to stagger the two junctions proposed on Bolsover Road. The minor arm (site access) comprises a single lane access with minor flaring at the entry to the junction to accommodate development traffic. No widening is proposed along the B6419 Bolsover Road in the immediate vicinity of the junction to accommodate traffic movements into the site, although widening is proposed south of the access to provide pedestrian/cycle crossing facilities. A short section of hedge on the eastern side of the B6419 Bolsover Road will be removed immediately south of the junction to provide suitable junction visibility.

Pedestrian footways are provided at the junction and dropped kerb provision made across the site access and B6419 southern approach. Drawing Ref 276927-SK-101 provides a layout for the proposed access junction.

4.2.5 Bolsover Road

The Mastin Moor development includes residential development fronting Bolsover Road as well as new verges and footways on the western side of the carriageway and street lighting. In addition, two new access junctions and a number of pedestrian crossing points are located at various locations along Bolsover Road. As a result of the development proposals, the character of the road will change from an open rural road to a developed urban road. It is anticipated that the change in character will reduce vehicle speeds in the vicinity of the site. DCC will consider reducing the speed limit where actual vehicle speed reductions are observed.

4.2.6 Road Hierarchy

The indicative scheme layout has been developed based on a road hierarchy and in accordance with the Delivering Streets and Places design guide. Further details of the road hierarchy and specifications are provided within the Design and Access Statement. The indicative scheme layout is set out on the Masterplan at Appendix A:

- Main Street / Avenue = 6m width plus 2m footways;
- Secondary Road = 6m on a potential bus route and 5m on other routes plus 2m footways;
- Peripheral Road / Park-edge Road = 5m plus footway or 7.5m overall width;
- Private Drive = shared surface 7.5m corridor width.

All routes will be designed to achieve a 20mph design speed across the site. Details of the internal site layout and street specifications will be confirmed during Reserved Matters applications.

4.3 Parking

The CBC Local Plan does not provide parking standards for new developments. The Delivering Streets and Place design guidance refers to provision based on the Department for Communities and Local Government methodology to determine appropriate levels of car parking.

The detail of type of dwelling and internal site layout are not confirmed at this stage and will be developed as part of Reserved Matters. The detailed layout of residential dwellings and numbers of parking spaces is therefore not confirmed. The parking proposals will be developed in line with the required parking standards and in discussion with CBC and DCC.

The broad car parking principles comprise:

- Car parking provided within curtilages for residential houses - garages and driveways;
- Some on street parking for visitors;
- Car parking plots will be provided close to the local centre for residents of and visitors to the residential apartments;
- Communal parking area for users of the local centre retail and health / community facilities.

Electric vehicle charging points will be located within the local centre parking area and dwellings designed to include or be adaptable to allow vehicle charging.

4.3.1 Cycle Parking

The Manual for Streets outlines the provision of high quality, well lit, safe and secure cycle parking is an important factor in promoting cycling as a mode of transport.

The CBC Local Plan states *“The level of vehicle and cycle parking provision appropriate to any individual proposal will take into account the circumstances of the particular scheme”*. No minimum cycle parking standards are referred to, although a walking and cycling SPD will be prepared

Delivering Streets and Places references cycle parking requirements *“For residential developments with common facilities such as flats, one space per five dwellings (to be secure and undercover and with step-free access) shall be used only in the absence of specific guidance from the relevant LHA. For other residential developments, one space per dwelling, with garages counting towards cycle parking provision if they meet the 'Preferred' standard in the Garages and Gated Accesses to Parking Spaces DES”*.

The cycle parking proposals will be developed in line with the required parking standards and in discussion with CBC and DCC. Cycle parking provision for residential houses will be within each plot. A secure cycle parking area will be provided for residential apartments. Short stay Sheffield stand cycle parking will be provided in close proximity of the local centre. All cycle parking will be located in public, well lit areas close to the amenities.

4.4 Public Transport Access

The Mastin Moor scheme is well located for access to existing bus services. The indicative scheme proposals therefore comprise the use of existing bus infrastructure provision. The scheme has been designed to facilitate pedestrian access to existing bus stops on Worksop Road and in Mastin Moor and Woodthorpe. A network of high quality, safe and attractive routes are proposed through the site linking to the local highway network and directly linking to bus stops within a good walking distance, on A619 Worksop Road and Woodthorpe Road.

The existing westbound bus stop on A619 Worksop Road opposite Rowan Road will be relocated approx. 30m to the northeast to enable provision of the site access junction. Raised kerbs and new shelter with seating and timetable information will be provided at this relocated/new bus stop.

Improvements to other existing local bus stops will be undertaken where this will encourage greater patronage, comfort and / or safety of passengers, details of which will be agreed with DCC.

At this stage it is not proposed to divert bus services into the Mastin Moor site. However, it is acknowledged that permeability of bus services through the site will encourage greater bus patronage. Further to discussions with DCC and local bus operators it may be appropriate to divert some services into the site (such as route 81 and/or alternate route 74A / 77). The indicative layout has been developed to accommodate potential bus movements in the future if required. In line with the Delivering Streets and Places Design Guide, the access road through the central / western parcel will be 6m minimum width and space would be available for the provision of bus stops. In the eastern and southern parcels routes are identified as potential bus loops with 6m access roads suitable to accommodate bus movements.

4.5 Pedestrians and Cyclists

Cycling and walking provision form a key part of the Masterplan and the Mastin Moor proposals include the provision of a network of pedestrian and multi user paths through the site. These will provide high quality, safe and well lit routes through the site. A range of routes will connect with the local highway network, the existing Mastin Moor and Woodthorpe areas and towards the Seymour Link Road for connections towards Markham Vale. Routes follow key desire lines to amenities including bus stops, local schools, existing retail provision and employment opportunities.

A network of footpaths provide access for pedestrians through the site. These will be 2m wide, surfaced and well lit. The multi user paths will provide access for pedestrians and cyclists through the site. These follow core routes east west through the site and connect to the local highway network. The design specifications will be agreed as part of detailed design / reserved matters. Based on recent design guidance the multi user paths should segregate pedestrians (2m width) and cyclists (2.5m width) and be surfaced and well lit.

Roads through the site will have 2m footways on both sides of the carriageway with dropped kerb crossing provision. Cycle provision is proposed on the carriageways through the site, in accordance with Delivering Streets and Places guidance for lightly trafficked routes. Routes follow existing contours where feasible to limit gradients and provide easier access for pedestrians and cyclists.

Off site pedestrian and cycle proposals comprise:

- Toucan crossings at the new access road junction with the A619 Worksop Road;
- Two new pedestrian refuges for crossing over B6419 Bolsover Road;
- New footway on the western side of Bolsover Road;
- Multi user link along Woodthorpe Road to Seymour Link Road for connections to Markham Vale – detailed proposals to be agreed with CBC / DCC.

Following public consultation feedback and as a result of the potential increased footfall towards Norbriggs Primary School, options for a new pedestrian crossing on Norbriggs Road were previously considered. DCC Highways advised that a zebra crossing is not appropriate as the pedestrian movements would be limited to school start and finish times. Outside these times, demand would be limited so drivers would not be expecting to stop which could provide a safety risk. An alternative option would be to provide a school crossing patrol at the school start and finish times.

As part of the internal pedestrian and cycle network, circular walks and trip trails will be incorporated to promote healthy lifestyles.

5 Approach to Travel Planning

5.1 Travel Plan Aims

The purpose of this Residential Travel Plan is to minimise single-occupancy car trips by promoting and supporting alt

ernative modes. The travel plan aims to promote sustainable travel, minimise development-related congestion of the highway network and reduce the impact on car parking. It principally covers journeys to work made by residents of the development site but will also seek to influence journeys for other purposes.

This document is an Interim Travel Plan to accompany the outline planning application for the proposed development at Mastin Moor. The Travel Plan is a dynamic working document that will grow and develop with time and in accordance with the changing circumstances of the development. It is not a one-off piece of work to be undertaken and put on a shelf. It is the start of a new and better way of living. It is a continuous improvement process for all the travel-related activities of residents and visitors at the development.

5.2 Travel Plan Objectives

The overall objectives of the Residential Travel Plan are as follow:

- Reduce travel by the private car, particularly single occupancy car journeys;
- Encourage a reduction in car dependency;
- Encourage multi-occupancy car usage;
- Increase resident awareness of the environmental and health implications of different travel choices;
- Encourage sustainable travel choices among residents of the site;
- Maximise accessibility for walking, cycling and public transport as sustainable transport modes;
- Maximise transport choice through innovative measures.

5.3 Roles and Responsibilities

To be successful, the Travel Plan should involve everyone at the development. To encourage residents to think about, and change their travel behaviour, it is important that they feel a sense of ‘ownership’ of the Residential Travel Plan, rather than something that has been imposed upon them. The earlier everyone is involved in it, the more successful it is likely to be.

Section 5.3.1 identifies the role of the site Travel Plan Coordinator and section 5.3.2 describes how residents can get involved.

5.3.1 Travel Plan Coordinator

Prior to the site occupation, and also before the marketing of the development commences, a Travel Plan Co-ordinator will be appointed by the site developer. The Travel Plan Co-ordinator will effectively be responsible for overall delivery of the travel plan targets and agreeing appropriate mitigation measures where necessary.

In particular, the responsibilities of the Travel Plan Co-ordinator will be as follows:

- Communicate the travel plan across the site, including promotion of the benefits of travel planning, acting as a point of contact for residents of the site. This will include development and distribution of information and development of a website to promote the Travel Plan;
- Undertake monitoring consistent with the agreed framework and ensure that the results are communicated. This will include evaluation of the monitoring against the targets and review of targets where appropriate (for instance, if the targets are consistently achieved);
- Periodically review the Travel Plan, updating the documents as necessary. For example, this would include updating the document in response to local transport initiatives and campaigns and possible changes to the site audit when necessary;
- Liaise with third parties, such as public transport operators and the Council on Travel Plan issues.

The Travel Plan Co-ordinator will be the liaison between the development and the planning and highway authorities. He/she will be appointed by the developer such that the role will be in place when completed units are first advertised, ensuring that sustainable travel information is available from the outset.

The developer-appointed Travel Plan Co-ordinator will remain in place throughout the construction of the development and for five years following completion of construction of the development. The role may not necessarily be a full-time position and, as such, the role could be undertaken as part of a wider management function. Alternatively, the role could be contracted to an appropriate external body such as a consultancy or other organisation.

Key Action:	Appoint Travel Plan Co-ordinator
To be completed by:	6 months prior to occupation
Responsibility of:	Site developer

5.3.2 Residents' Management Group

The Travel Plan Co-ordinator will invite residents to form a Residents' Management Group upon approximately 50% occupation. The Residents' Management Group will represent residents and effectively continue the role of Travel Plan Co-ordinator after the developer-funded Travel Plan Co-ordinator role expires.

Key Action:	Set up Residents' Management Group
To be completed by:	Upon 50% occupation
Responsibility of:	Travel Plan Co-ordinator

5.4 Travel Plan Funding

Chatsworth Settlement Trustees are committed to the continued provision of the Travel Plan and will commit to funding the Travel Plan Coordinator (TPC) role and Travel Plan measures in the short, medium and long term.

An annual budget will be agreed with DCC for funding the TPC role, Travel Plan promotional material, the implementation of Travel Plan measures / events as needed and the ongoing monitoring and review of the Travel Plan.

Any necessary improvements to local bus stop infrastructure will be agreed with DCC.

6 Site Assessment and Transport Audit

6.1 Introduction

The site assessment provides a “point in time” overview of the transport links serving the site and the on-site transport facilities available, for example, cycle parking and car parking controls. It develops a view of the realistic alternatives available so that recommendations can be made to users of the site about the way they travel. It also identifies possible areas where improvements could encourage use of environmentally-friendly modes, for example, improvements to bus stop waiting facilities or provision of more direct walking routes.

As advised in NCC Travel Plan Guidance the site audit assumes that the development is in place. A summary of existing transport provision is provided and an overview of the transport proposals for the development also set out. It is noted that the transport proposals are relatively high level as the scheme is outline with the internal site layout to be confirmed during reserved matters. The Travel Plan and site audit will be updated as further detail is known.

Key Action:	Update the site audit
To be completed by:	On completion of construction of initial phases of the development (to be confirmed by the developer as part of detailed planning applications for reserved matters).
Responsibility of:	Travel Plan Co-ordinator

6.2 Site Information

Mastin Moor is located approximately 8km to the north east of Chesterfield, approximately 2km east of Staveley. The A619 runs through Mastin Moor, connecting with Staveley to the west and the M1 Junction 30 to the east. The site location is shown at Figure 1.

6.3 Site Location and Access

The site at Mastin Moor extends along the southern boundary of the A619 Worksop Road, and is dissected by the B6419 Bolsover Road in a north-south direction as shown in Figure 2. The parcel of land to the west is largely bounded by A619 Worksop Road to the north, B6419 Bolsover Road to the east, Woodthorpe Road to the south and the residential area of Woodthorpe to the west. The parcel of land to the east of the B6419 is bound by the A619 Worksop Road to the north, Castle View to the east, agricultural land to the south and the B6419 Bolsover Road to the west.

The site is agricultural in nature with no formal means of vehicular access. An existing access through The Paddocks runs from Norbriggs Road in Woodthorpe to Pumphouse Farm, a privately owned property located within the confines of the site.

6.4 Strategic Road Network

The M1 is a major national route providing north south connections through the country. The site is located close to the M1 providing access north towards Sheffield, Doncaster (via M1/M18) and Leeds, and south towards Nottingham, the East Midlands and on towards London. Junction 30 is located approximately 3km to the east of the site and junction 29A is located approximately 5km to the south of the site.

The A619 provides an approximate east west route between Chesterfield and Worksop. From the site, the A619 provides a connection to the M1 Junction 30 to the north east and to Staveley and Chesterfield to the south west.

The strategic transport links are presented in Figure 1.

6.5 Local Highway Network

The site location and local highway network are presented in Figure 2 and summarised below.

6.5.1 Key Links

A619 Worksop Road

The A619 Worksop Road provides the northern boundary of the site, running in an approximate east west direction. It provides connections between Chesterfield and Staveley to the south west and the M1 and Worksop to the north east.

Throughout its length the A619 is generally a wide single carriageway with a single lane operating in each direction. Local widening and turning lanes are provided at some junctions along the route.

In the vicinity of the site the speed limit of the A619 Worksop Road is 40mph with street lighting provided along its length. Speed cameras are provided on Worksop Road to the east of the junction with Bolsover Road and west of the junction with Norbriggs Road. Footways are generally provided along Worksop Road. To the east of the junction with Bolsover Road narrow footways are provided on both sides of the carriageway. To the west of Bolsover Road footways are provided on both sides approaching the junction with a footway provided on the northern side only beyond the bus stops. Footways are also provided on both sides of the carriageway approaching the Worksop Road junction with Norbriggs Road. A pedestrian refuge is located close to the bus stops opposite Rowan Road.

The A619 is a busy route and experiences congestion, particularly in the morning and evening peak periods.

B6419 Bolsover Road

B6419 Bolsover Road runs in a north south direction through the site, connecting the A619 Worksop Road and Bolsover town. It is a wide single carriageway with

a single lane in both directions. The speed limit of the B6419 Bolsover Road in the vicinity of the site is 50mph, reducing to 40mph as Bolsover Road approaches A619 Worksop Road.

The B6419 Bolsover Road is rural in nature with no street lighting or footways provided, except at the approach to the junction with A619 Worksop Road.

Norbriggs Road

Norbriggs Road runs in a north south direction providing a link between the A619 Worksop Road and Woodthorpe Road through Woodthorpe. It is a single carriageway road with a single lane in each direction. The road is largely bound by detached and semi-detached houses characterised by local access road junctions, driveways fronting the highway and on street parking.

The speed limit on Norbriggs Road is 30mph with a 20mph 'School Safety Zone' signed adjacent to Norbriggs Primary School and Woodthorpe Primary School. There are footways and street lighting provided along the length of Norbriggs Road. A 7.5t restriction 'Except for Access' is signed through Woodthorpe.

Woodthorpe Road

Woodthorpe Road runs in an east west direction and connects the B6419 Bolsover Road and Norbriggs Road to the south of the site. It is a single carriageway road with a single lane in each direction.

The majority of the highway is through farmland and is rural in nature with no street lighting and a footway on the north side of the carriageway only. The speed limit of Woodthorpe Road is 50mph beyond the built up area of Woodthorpe.

B6419 Renishaw Road

B6419 Renishaw Road runs in a north south direction, connecting the A619 Worksop Road and Mastin Moor with Renishaw and areas to the south of Sheffield. It is a single carriageway road with a single lane in both directions. The speed limit of the B6419 Renishaw Road in Mastin Moor is 40mph, increasing to the national speed limit beyond the built up area of Mastin Moor.

Through Mastin Moor the B6419 Renishaw Road is characterised by local access roads, driveways and on street parking. Street lighting and footways are provided on both sides of the carriageway. Beyond Mastin Moor Renishaw Road is rural in nature with no street lighting provided and a narrow footway in poor condition provide on the western side of the carriageway only.

The Paddocks

An existing access through The Paddocks runs to Pumphouse Farm, a privately owned property located within the confines of the site. The Paddocks is a narrow two way road with street lighting and narrow footways on both sides of the carriageway provided. The Paddocks forms a priority junction with Norbriggs Road to the west of the site.

6.5.2 Key Junctions

A619 Worksop Road / B6419 Bolsover Road / Renishaw Road

The junction of the A619 Worksop Road with B6419 Bolsover Road and Renishaw Road is a 4 arm traffic signal controlled junction with all turning movements provided for. There is a single lane approach on 3 arms with 2 lanes provided on the A619 Worksop eastbound approach. Space is provided within the junction for right turning traffic from Worksop Road in both directions. Pedestrian crossings are provided across all arms of the junction.

A619 Worksop Road / Norbriggs Road

The junction of the A619 Worksop Road with Norbriggs Road is a 3 arm traffic signal controlled junction with all turning movements provided for. There is a single lane approach on all arms with space provided for right turning traffic from Worksop Road to queue without blocking the mainline flows. Pedestrian crossings are provided across all arms of the junction.

B6419 Bolsover Road / Woodthorpe Road

The junction of B6419 Bolsover Road with Woodthorpe Road is a 3 arm priority controlled junction with Woodthorpe Road the minor arm giving way to traffic on B6419 Bolsover Road. A short flare is provided on approach to the junction. No pedestrian crossing facilities are provided at the junction.

6.5.3 New Highway and Access Proposals

A new highway link is proposed through the central / western parcel of development, linking A619 Worksop Road and B6419 Bolsover Road. A new access road will provide access to the eastern parcel. The access road will be a cul-de-sac providing internal loops to access the proposed residential dwellings. Similarly, a new access cul-de-sac and loop roads provide access to residential dwellings in the southern parcel of development.

The proposed development includes provision of four new access junctions. These comprise:

- Access 1 - traffic signal control junction with A619 Worksop Road (West) providing access to the western parcel and connecting as a through route to B6419 Bolsover Road (at Access 2). Toucan crossing provision is made across all arms of the junction;
- Access 2 - priority junction with B6419 Bolsover Road (Central), providing access to the western parcel and connecting as a through route to A619 Worksop Road (at Access 1). Dropped kerbs and refuge on Bolsover Road are provided for pedestrians;
- Access 3 - priority junction with Woodthorpe Road (South), providing access to the southern parcel only. Dropped kerbs are provided for pedestrians;

- Access 4 - priority junction with B6419 Bolsover Road (East), providing access to the eastern parcel only. Dropped kerbs are provided for pedestrians.

Car parking will be provided in accordance with the Local Plan guidelines.

6.6 Public Transport Provision

The public transport networks servicing the site are presented in Figure 3.

6.6.1 Bus Services

In the vicinity of the site, bus stops are located on the A619 Worksop Road, Norbriggs Road and Woodthorpe Road. Shelters are provided at the bus stops on A619 Worksop Road but generally poles only on Norbriggs Road and Woodthorpe Road. Bus stops are also provided at a number of locations within Mastin Moor. The bus stops in the vicinity of the site are described below.

- Worksop Road west of Norbriggs Road (WR1/WR2) – eastbound and westbound bus stops are located in laybys, have shelters, limited seating and timetable information.
- Worksop Road outside the former community centre (WR3/WR4) – eastbound at WR3 is in a layby, has a shelter and timetable information. Westbound at WR4 is on the carriageway with a shelter only.
- Worksop Road at the crossroads with Bolsover Road (WR5/WR6) – eastbound at WR5 is on the carriageway and has a pole with timetable information attached. WR6 is westbound and is on the carriageway with a shelter, seating and a timetable.
- Worksop Road opposite Providence Place (WR7/WR8) – eastbound at WR7 is a pole with a timetable attached. Westbound at WR8 is on the carriageway with a shelter and a timetable.
- Woodthorpe Road (WD) adjacent to Wellsholme Farm – eastbound is on the carriageway, with a pole on the pavement. Westbound is on the carriageway, with a pole on the grass verge.
- Norbriggs Road (NR1/NR2) at the junction with Bridle Road – South-eastbound is on the carriageway, with a pole on the pavement. Northbound is on the carriageway with a shelter, seating and a timetable.
- Norbriggs Road (NR3/NR4) adjacent to Spencer Avenue – Southbound is on the carriageway, with a pole on the pavement. Northbound is on the carriageway, with a pole on the pavement.
- Norbriggs Road (NR5/NR6) near The Willows – Southbound is on the carriageway, with a pole on the pavement. Northbound is on the carriageway outside the school but not marked.
- Renishaw Road (RR) near junction with A619 – Both southbound and northbound are on the carriageway, with a pole on the pavement with timetable information attached.

- Edale Road (ER1/ER2) near the junction with Renishaw Road – eastbound on the carriageway with a pole on the pavement. Westbound is on the carriageway with a shelter.
- Edale Road (ER3) near the junction with Rowan Road – northbound on the carriageway with a pole.
- Blunt Avenue (BA) near the junction with Lansbury Avenue – southbound on the carriageway with a pole.
- Lansbury Avenue (LA1) near the junction with Edale Road – westbound on the carriageway with a shelter.
- Lansbury Avenue (LA2/LA3) near the junction with Blunt Avenue – both on the carriageway. Eastbound with a pole only and westbound with a shelter.
- Lansbury Avenue (LA4/LA5) near the junctions with Carpenter Avenue – both on the carriageway. Northbound and southbound with a pole only.

There are a number of bus services currently servicing Mastin Moor and Woodthorpe in the vicinity of the site. The table below shows a summary of the local bus services showing destinations and approx. frequencies. Figure 3 shows the bus routes and bus stops around the area of the site. It is noted that due to Covid-19 there may be temporary alterations to timetables, however the table below sets out the longer term bus operations where information is available.

Table 1: Local Bus Services

Service No.	Operator	Route	Closest Stop(s) Location	Frequency (mins)	
				Daytime M-Sat	Evening / Sun
74A	Stagecoach	Mastin Moor - Staveley – Inkersall – Brimington – Chesterfield – Brimington – Inkersall – Staveley – Mastin Moor	ER2, LA1, LA5, WR1/2, WR3, RR1	60	-
77	Stagecoach	Worksop – Creswell – Clowne - Barlborough – Mastin Moor – Staveley -Brimington - Chesterfield	WR3/4, WR1/2, WR5/6/7/8	30	-
77A	Stagecoach	Workshop – Creswell – Clowne - Barlborough – Mastin Moor – Staveley -Brimington - Chesterfield	RR, ER1/2, LA1/2/3/4/5, WR1/2	-	60
80	Stagecoach	Chesterfield – Staveley – Mastin Moor – Killamarsh – Sheffield Centre	ER1/2, LA1/2/3/4/5, WR1/2	60	-
80A	Stagecoach	Chesterfield – Staveley – Mastin Moor – Killamarsh – Sheffield Centre	WR7/8, WR1/2, NR1/2/3/4/5/6 WD	-	60
81	TM Travel	Bolsover – Mastin Moor – Staveley – Markham Vale	WR1/2, NR1/2/3/4/5/6 WD	60	-

508	TM Travel	Mastin Moor – Woodthorpe – Staveley – Barrow Hill – Middlecroft - Barrow Hill Staveley – Woodthorpe – Mastin Moor	LA4, LA2, ER1, RR2, NR6, NR4, NR2, WR1/2	School Service	-
-----	-----------	--	---	-------------------	---

6.6.2 Proposals and Accessibility

The Mastin Moor scheme is well located for access to existing bus services, with good accessibility to existing bus stops.

The indicative scheme proposals therefore comprise the use of existing bus infrastructure provision. While it is not proposed to divert existing services through the site at this stage, the internal highway network is designed to accommodate buses if this becomes a requirement in the future, and in discussion with DCC and local bus operators.

The scheme has been designed to facilitate pedestrian access to existing bus stops on Worksop Road and in Mastin Moor and Woodthorpe. A network of high quality, safe and attractive routes are proposed through the site linking to the local highway network and directly linking to bus stops on A619 Worksop Road and Woodthorpe Road.

The existing westbound bus stop on A619 Worksop Road opposite Rowan Road will be relocated approx. 30m to the northeast to enable provision of the site access junction. Raised kerbs and new shelter with seating and timetable information will be provided at this relocated/new bus stop.

A review of existing bus stop provision identifies a number of local bus stops where upgraded facilities could be provided, such as on Woodthorpe Road where only poles are currently provided and on A619 Worksop Road fronting the north east parcel of development where the quality of infrastructure is poor. Improvements to these or other existing local bus stops will be undertaken where this will encourage greater patronage, comfort and / or safety of passengers, details of which will be agreed with DCC.

Within the site, walking distances to existing bus provision are dependent on the location within the proposed development itself. Figure 4 shows bus stop locations and 400m walking distance from key bus stops surrounding the site, based on the network of footpaths and multi user routes set out on the indicative site masterplan.

The vast majority of the site is located within 400m walking distance of existing bus stops. In addition, the majority of the site has access to at least two buses per hour serving a range of destinations.

6.6.3 Rail Services

Chesterfield station lies approximately 8km from the site. Chesterfield rail station is served by a variety of national and regional services. Services to Sheffield operate approximately every 30 minutes during peak periods, London St Pancras approximately every 30 minutes and hourly services to Plymouth, Liverpool Lime

Street and Nottingham. There are also alternate hourly services to Edinburgh and Glasgow.

Other local rail stations include Creswell, located approximately 8km east of the site. Whitwell and Langwith-Whaley Thorns train stations are located within 12km of the site to the north east. These stations are located on the same line, operated by an hourly local stopping service from Worksop to Nottingham.

On the basis of the above assessment, access to / from the site via rail is unlikely to be a viable option.

6.7 Pedestrian and Cycling Facilities

6.7.1 Cycle Facilities

There are no dedicated cycling facilities in the immediate vicinity of the site. The nearest cycle route is National Route 67 which runs through Staveley towards Chesterfield to the south-west and towards Renishaw, Killamarsh and Rother Valley Country Park to the north. This is part of the stretch between Chesterfield and Leeds which forms part of the Trans Pennine Trail. The Trans Pennine Trail is traffic free between Chesterfield and Rother Valley Country Park. DCC are currently working on improving the cycling infrastructure with a range of short, medium and long-term measures identified to connect routes through Mastin Moor, Woodthorpe, Staveley and Markham Vale, as shown on Figure 5.

6.7.2 Pedestrian Facilities

Existing pedestrian facilities adjacent to the site are mixed in quality and provision. Figure 5 shows the pedestrian provision in the vicinity of the site.

The A619 Worksop Road adjacent to the western parcel of the site has footway provision on the northern side of the carriageway. On the southern side of the carriageway are wide grass verges. Street lighting is provided and a refuge crossing is located for access to local bus stops. To the north of the eastern parcel of land narrow footways are provided on both sides of A619 Worksop Road. Approaching the junction with Bolsover Road from both the east and the west the A619 Worksop Road has footways on both sides of the road, connecting local bus stops with residential areas. Pedestrian crossings are provided on all approaches to the junction of A619 Worksop Road / Bolsover Road. Approaching the junction with Norbriggs Road from both the east and west, A619 Worksop Road has footways on both sides of the road. Pedestrian crossing facilities are provided on all approaches to the junction of A619 Worksop Road / Norbriggs Road. Street lighting is provided.

B6419 Bolsover Road does not have pedestrian facilities adjacent to the site however, includes grass verges on both sides. There is no street lighting.

Woodthorpe Road has a grass verge and footway on the northern side of the carriageway and a grass verge only on the southern side. There is no street lighting.

Renishaw Road has footways on both sides between A619 and Edale Road, however, further to the north there is limited footpath provision with a narrow footway of poor quality on the western side of the carriageway and grass verges on the eastern site beyond the built up area.

The residential areas of Mastin Moor and Woodthorpe have good pedestrian facilities with footways on both sides of roads and street lighting. Pedestrian footways have regular dropped kerbs across local access roads. Some vehicle parking on pedestrian footways is evident which can cause obstruction for footway users. Pedestrian links are provided to connect A619 Worksop Road with the residential areas of Mastin Moor.

In addition, off road pedestrian routes are provided through the local rural area as part of CBC's strategic walking route. These include routes through the site, connecting A619 Worksop Road and Mastin Moor with The Paddocks and Norbriggs Road and a link between The Paddocks and Woodthorpe Road. Further walking routes are provided to the south of Woodthorpe connecting to Markham Vale and west of Mastin Moor, connecting with Staveley and open spaces including Netherthorpe Nature Reserve and Pools Brook Country Park, as shown on Figure 5.

6.7.3 Proposals

Cycling and walking provision form a key part of the Masterplan and the Mastin Moor proposals include the provision of a network of pedestrian and multi user paths through the site. These will provide high quality, safe and well lit routes through the site. A range of routes will connect with the local highway network as well as the existing Mastin Moor and Woodthorpe. Routes follow key desire lines to amenities including bus stops, local schools and existing retail provision.

A network of footpaths provide access for pedestrians through the site. These will be 2m wide, surfaced and well lit. Roads through the site will have 2m footways on both sides of the carriageway with dropped kerb crossing provision.

The multi user paths will provide access for pedestrians and cyclists through the site. These follow core routes east west through the site and connect to the local highway network. The design specifications will be agreed as part of detailed design / reserved matters. Based on recent design guidance the multi user paths should segregate pedestrians (2m width) and cyclists (2.5m width) and be surfaced and well lit

Cycle provision is proposed on the carriageways through the site, in accordance with MfS2. Routes follow existing contours where feasible to limit gradients and provide easier access for pedestrians and cyclists.

Off site pedestrian and cycle proposals comprise:

- Toucan crossings at the new access road junction with the A619 Worksop Road;
- Two new pedestrian / cycle refuges for crossing over B6419 Bolsover Road;
- New footway on the western side of Bolsover Road;

- Multi user link on Woodthorpe Road to Seymour Link Road for connections to Markham Vale

Cycle parking will be provided in accordance with Local Plan guidelines and discussion with CBC and DCC. Cycle parking provision for residential houses will be within each plot. A secure cycle parking area will be provided for the residential apartments. Short stay Sheffield stand cycle parking will be provided in close proximity of the local centre. All cycle parking will be located in public, well lit areas close to the amenities.

6.7.4 Catchments

Figure 6 identifies both a 3.2km and 8km cycling catchment from the approximate centre of the development site. Staveley is within a good cycling distance of the proposed development at Mastin Moor. Within the 3.2km catchment Renishaw and parts of Balborough and Duckmanton are also potentially accessible by cycle.

A range of destinations are within the wider cycling catchment, including parts of Chesterfield, Brimington, Bolsover, Clowne and Duckmanton / Markham Vale giving residents access to a range of employment opportunities and services.

Figure 7 identifies a 2km catchment from the approx. centre of the site as well as 0.8km walking catchments from the approximate centre of the central / western, eastern and southern parcels of development.

Within the 2km walking catchment the entirety of the proposed development is accessible as well as the existing residential areas of Mastin Moor and Woodthorpe. The eastern side of Staveley and Netherthorpe are also within the potential 2km walking catchment. A number of amenities, including local shops and businesses, two primary schools and Netherthorpe School Science College are within walking distance of the development.

Within the 0.8km walking catchment:

- residents of the central / western parcel are within walking distance of Mastin Moor and the northern parts of Woodthorpe, for access to local convenience stores and Norbriggs Primary School;
- residents of the eastern parcel are within walking distance of the eastern side of Mastin Moor for access to local retail provision;
- residents of the southern parcel are within walking distance of the majority of Woodthorpe for access to local amenities including Norbriggs and Woodthorpe Primary Schools.

In addition to housing, there are plans for local shops, health centre, allotments/community garden and other greenspace, all of which are within walking distance for new residents and existing residents in Mastin Moor and Woodthorpe.

7 Travel Plan Measures

7.1 Introduction

The following sections present a number of Travel Plan measures that will be provided at the development. The measures are aimed primarily at residents, although some would also be applicable to visitors at the site.

Key Action:	Confirm Travel Plan measures to suit the needs of the development
To be completed by:	After the initial Resident Travel Survey
Responsibility of:	Travel Plan Co-ordinator

7.2 Initiatives to Support Walking

Walking is an attractive mode for short journeys and is the cleanest mode of transport available. The most effective way to increase walking is to provide adequate infrastructure (footpaths and crossing facilities).

The development proposals will encourage walking by providing enhanced permeability through the site and improved pedestrian linkages to and around the site. Key measures to be provided are set out in the table below.

Table 2: Travel Plan Measures to Support Walking

Measure	Responsibility	Implementation
High quality public realm with a network of traffic free footpaths and multi user paths within the site. Pedestrian connections to all parts of the development as well as linking to external pedestrian routes connecting the site with Mastin Moor and Woodthorpe as well as local bus stops. <i>The internal layout of the site will be determined as part of detailed planning applications for reserved matters.</i>	Developer	Construction
Formation of new public open spaces.	Developer	Construction
Pedestrian footways to be provided along both sides of the access roads within the site. New pedestrian footway on B6419 Bolsover Road	Developer	Construction
Provision of pedestrian crossing facilities on A619 Worksop Road and B6419 Bolsover Road.	Developer	Construction
Provision of lighting to cover key walking areas within the site.	Developer	Construction
Preparation of a map showing pedestrian routes serving the site and local amenities: this will be useful for residents and visitors. <i>This would be provided as part of the 'Residents Welcome Pack' to be distributed to new residents.</i>	TPC	On occupation and ongoing thereafter
Promoting the health benefits of walking.	TPC	On occupation and ongoing thereafter

<i>Walking regularly can help to contribute towards a healthy lifestyle. Emphasising the health benefits of walking may encourage residents to walk.</i>		
Advice on personal safety and preferred routes. <i>The provision of information detailing well-lit preferred routes from local transport drop-offs, general personal safety advice, free basic self defence lessons may improve the confidence of lone walkers and encourage more residents to walk in a safer environment. Free attack alarms may also encourage walking.</i>	TPC	On occupation and ongoing thereafter
Liaise with local schools to encourage walking, including walking bus initiatives and school crossing patrol as well as promoting schemes to schools / residents.	TPC	Ongoing

7.3 Initiatives to Support Cycling

Improving cycle facilities can be an effective tool to encourage modal shift towards cycling. The design of the development proposals will encourage cycling through the measures set out in the table below.

Table 3: Travel Plan Measures to Support Cycling

Measure	Responsibility	Implementation
The provision of adequate cycle parking, including covered secure parking within residential units and short stay parking for community / retail use. Secure cycle stands will be provided in well-lit areas. <i>Use of cycle parking would be monitored, with additional spaces provided by the developer at a later date if demand indicates this is necessary.</i>	Developer	Construction and on-going if required
Provision of new cycle routes within the development site, through multi user paths. <i>The internal layout of the site will be determined as part of detailed planning applications for reserved matters.</i>	Developer	Construction
Provision of cycle crossing facilities at A619 Worksop Road site access to connect to Mastin Moor.	Developer	Construction
A map showing cycle routes serving the site will be provided to residents, highlighting routes to key destinations such as Staveley town centre, local schools etc and leisure routes. <i>This would be provided as part of the 'Residents Welcome Pack' to be distributed to new residents.</i>	TPC	On occupation and ongoing thereafter
Establish a Bicycle User Group to provide a regular form of discussion and feedback for bike users.	TPC	On occupation and ongoing
Promotional events to encourage cycling, particularly emphasising the health benefits. <i>Consider provision of cycle training events, cycle security initiatives, offering discounts on cycle equipment/repairs at a local retailer.</i>	TPC	Ongoing
Liaise with local schools to identify cycling initiatives and promote to schools / residents.	TPC	Ongoing

The main builder should assess the cycle safety measures fitted to lorries visiting the site and should seek some improvement in the standards.	Contractor	Construction
---	------------	--------------

7.4 Initiatives to Support Public Transport Use

It is anticipated that the majority of residents will work in the local urban area (including Staveley and Chesterfield) therefore travelling to work by public transport would be a realistic option.

At this stage the initiatives to support public transport use have not been confirmed. It is anticipated that existing bus services and routes will serve the site, however routes through the site will be designed to accommodate bus movements to enable service diversions if required in the future. It is considered that enhancements to bus infrastructure will be required to ensure that bus is an attractive mode of transport for users of the site.

Table 4: Travel Plan Measures to Encourage Use of Public Transport

Measure	Responsibility	Implementation
Routes through the site designed to appropriate standards to accommodate bus movements if required in the future.	Developer	Construction
High quality walking routes to existing bus stops provided throughout the site. <i>Bus stops provided to enable the majority of dwellings to be within 400m walking distance.</i>	Developer	Construction
Improvements to existing bus stops to include shelters, seating, timetable information and lighting. <i>Bus stops to be improved to be agreed with DCC.</i>	Developer	Construction
Provision of passenger information to residents prior to occupation to maximise awareness of travel options and encourage modal shift. <i>Such information would be provided as part of the 'Residents Welcome Pack', and detail all services passing close to the site with routes and near-by bus stop locations.</i> <i>Passenger information would also be made available to visitors and prospective residents on sales literature associated with marketing of the development.</i>	TPC, liaising with DCC	On-going
Consultation with local bus operators to seek to improve bus connections to the site. This could include the provision of additional services or ticketing initiatives.	TPC	On-going as appropriate
Investigate bus services schools may offer and inform residents.	TPC	On-going

7.5 Reducing Car Travel

A key objective of the Travel Plan is to reduce single occupancy car use. In particular, the Travel Plan aims to incentivise car sharing as a means of achieving

this objective. The table below sets out measures to be implemented as part of the development.

Table 5: Travel Plan Measures in Relation to Car Travel

Measure	Responsibility	Implementation
Promotion of a car share scheme. <i>The car-share scheme could adopt the use of the existing car share scheme operated by DCC at https://derbyshire.liftshare.com information could be provided as part of the 'Residents Welcome Pack'.</i>	TPC	On occupation and on-going thereafter

7.6 Other Measures

The table below sets out a series of other measures that could be implemented as part of the Travel Plan.

Table 6: Other Travel Plan Measures

Measure	Responsibility	Implementation
Personalised travel planning <i>Each resident will be offered personalised travel plan information to cover their individual journeys. They will also be offered travel advice to encourage using modes other than the private car – identifying how to access place of work, school, shops etc in a sustainable manner. The travel plan co-ordinator should show each resident when they move in.</i> <i>Welcome pack to be provided to the residents to provide information on personalised travel planning.</i>	TPC	On occupation and ongoing thereafter
Promotion of the following sources of information: <ul style="list-style-type: none"> Free public transport journey planner; www.travelinemidlands.co.uk Cycle maps; https://www.derbyshire.gov.uk/leisure/countryside/access/cycling/bicycles Cycle to work scheme; https://www.bike2workscheme.co.uk/ Derbyshire car sharing scheme: https://derbyshire.liftshare.com Public Transport information: bus and train timetables and ticketing information: https://www.derbyshire.gov.uk/transport-roads/public-transport/public-transport <i>This information would be provided as part of the 'Residents Welcome Pack'.</i>	TPC	On occupation and ongoing thereafter
Electric vehicle charging points to be provided within the development.	Developer	Construction
The developer will provide the Travel Plan to contractors working on the site during construction. <i>In this way, the number of car journeys by single occupants to the site during construction can be minimised.</i>	TPC	During construction

TPC to liaise with TPCs from other major developments, such as the Markham Vale scheme, in order to provide a consistent approach to encourage sustainable travel to work.	TPC	Prior to occupation and ongoing
--	-----	---------------------------------

8 Communication Strategy

8.1 Introduction

The effective communication of the Travel Plan, including the promotion and marketing of Travel Plan measures, will be a key element to the success of the plan. This section sets out how the Travel Plan will be communicated to residents.

8.2 Residents Welcome Pack

A 'welcome pack' for new residents will be produced prior to first occupation. The welcome pack will be introduced during sale of each particular plot. The welcome pack will draw attention to the travel plan measures and include up-to-date travel information, including public transport timetables, maps of walking and cycling routes, details of car share schemes and school travel initiatives.

Key Action:	Assemble inputs to 'welcome pack' for new residents.
To be completed by:	Prior to first occupation.
Responsibility of:	Travel Plan Co-ordinator, liaising with the developer of the site and DCC.

8.3 Other Measures

Other measures for the promotion, marketing and communication of the Travel Plan will include the measures set out in Table 7.

Table 7: Travel Plan Communication Strategy – Other Measures

Measure	Responsibility	Implementation
Details of travel plan measures to be included in marketing material (e.g. sales/rental details, notice-boards, leaflet drops, online etc.).	TPC	Prior to first occupation of site and on-going
Sustainable travel information should appear on any promotional material for the development, demonstrating how the development is accessed without needing a car. Car parking information should appear below information on access by sustainable modes.	TPC	On-going
Distribution of leaflets to residents to summarise the site specific sustainable transport options	TPC	On-going
Development of a website to promote the Travel Plan for the site	TPC	On-going

Key Action:	Identify other strategies for the communication of the Travel Plan.
To be completed by:	Prior to occupation and beyond.
Responsibility of:	Travel Plan Co-ordinator liaising with DCC.

9 Targets, Monitoring and Review

9.1 Introduction

The main aim of this Travel Plan is to minimise single-occupancy car trips by promoting and supporting alternative modes. The setting of targets is essential to understanding whether the Travel Plan has been effective in achieving this aim. Targets should be ‘SMART’, that is:

- Specific;
- Measurable;
- Achievable;
- Realistic;
- Time-bound.

9.2 Mode Share Target

It is acknowledged that NCC Travel Plan Guidance states that mode share targets are not normally accepted and should be based on trip generation values. However, the nature of the proposed development means that surveys of development trip values alone would not be possible. Therefore, an initial target mode share for travel to work by residents of the site has been identified based on the mode share set out within the Transport Assessment to accompany the planning application.

The mode shares are derived from Journey to Work data from the 2011 Census representing the Rural Chesterfield area. Table 8 illustrates the mode share targets.

Table 8: Initial Mode Share Targets

Mode		Target Mode Share for Journeys to Work % of Journeys
Private Modes	Car Driver	62.9%
	Car Passenger	10.6%
	Sub-total	73.5%
Sustainable Modes	Walk	8.9%
	Cycle	1.0%
	Bus	15.3%
	Rail	0%
	Sub-total	25.2%
Other (taxi/motorcycle)		1.3%
Total		100%

The car driver target represents the maximum proportion of journeys to be made by this mode. The targets represent the principal mode of travel of residents of the site for journeys to work and should be met within two years of occupation of the site. A mode shift target to reduce the car driver mode share by 3% to 60% is also identified and should be met within five years of occupation of the site.

Once these initial targets have been achieved, the Travel Plan Co-ordinator will agree an appropriate reduction in the target through liaison with DCC. Potential further secondary targets will be discussed and agreed with DCC.

Agreed targets will not change without prior consultation and agreement with the DCC.

9.3 Monitoring Framework

Monitoring of the Travel Plan will indicate how well it is performing at meeting the target mode shares and any other targets that are set throughout the life of the plan. Monitoring will also assist in refining Travel Plan measures and establishing new targets, as appropriate.

The Travel Plan is a continuous and on-going process of monitoring and review, rather than a one-off event. The Travel Plan Co-ordinator will be responsible for encouraging participation in the monitoring process by residents, as well as co-ordinating the monitoring strategy. The Travel Plan Co-ordinator will also be responsible for reporting the results to DCC on an annual basis. The Monitoring Framework for the Travel Plan will include the mechanisms set out in the following sections.

9.3.1 Residential Travel Survey

Prior to the production of the first 'working' residential Travel Plan, it is necessary for a resident travel survey to be undertaken. The site assessment and transport audit, as detailed in Section 6, assists in informing the contents needed in this survey. Travel surveys should be kept relatively straightforward and aim to identify where residents are travelling to, how and when they are travelling and what alternative sustainable modes of transport they would consider. This will include journeys for work, education, shopping and leisure purposes. The surveys should ask which schools children are attending and how they travel to school.

Since the Resident Travel Survey is a key aspect of developing this Travel Plan, a method of ensuring all residents provide information on their methods of travel should be made. Although not all residents will want to take part in any Travel Plan measures, obtaining the base information is fundamental for setting and reviewing targets. To ensure the response rate is sufficiently high that the results are considered robust, the response rate of surveys undertaken will be identified for inclusion in the Annual Monitoring Report for review and agreement with DCC.

It is considered that dwelling occupation within the development is going to be spread over a period of time and therefore the initial Resident Travel Survey will be undertaken once 50% of dwellings are occupied. The Residents Travel Survey

will subsequently be undertaken annually to assist in monitoring the success of the Travel Plan and setting new targets.

Key Action:	Undertake an initial Resident Travel Survey
To be completed by:	When 50% of the dwellings are occupied or within 6 months of first occupation, whichever is the sooner, and annually thereafter
Responsibility of:	Travel Plan Co-ordinator

The Resident Travel Survey will be repeated as required, with questions targeted to the aspects of the travel plan that require focus. The survey will be carried out by the Travel Plan Coordinator and would become part of the overall monitoring strategy for the site.

9.3.2 Snap-shot Survey

The Travel Survey is a valuable tool but can be resource intensive to repeat the exercise on a yearly basis for monitoring purposes. In the case of this development, a quicker, less resource intensive monitoring mechanism may be to carry out annual snapshot surveys, which simply asks residents how they travel on a particular day. The snapshot will enable the Travel Plan to be monitored as it develops, against the baseline information collected from the initial Resident Travel Survey. More detailed Residents Travel Surveys could then be undertaken on a less frequent basis.

9.3.3 Travel Diaries

Residents could be asked to keep travel diaries where they record all of their journeys over a set period of time; for example, for one week. This method would give detailed information regarding travel habits, although many residents may not be willing to participate in the scheme.

9.3.4 Annual Monitoring Report

An Annual Monitoring Report will be prepared by the Travel Plan Co-ordinator and provided to DCC. The Annual Monitoring Report will present monitoring information and will compare this against the targets set out in the Travel Plan. The Annual Monitoring Report will be submitted within one month of the completion of the monitoring surveys undertaken as part of the monitoring framework.

If the Annual Monitoring Report indicates that the Travel Plan targets are not being met, it would be the responsibility of the Travel Plan Co-ordinator to identify an Action Plan for the following 12 months. The Action Plan would contain a programme of measures and tasks such that the travel plan targets are achieved, alongside the person(s) responsible and timescale for delivery.

The Action Plan will be submitted to DCC with the Annual Monitoring Report. Monitoring of the agreed measures would be undertaken as part of the monitoring framework for the following 12 months.

Key Action:	Prepare and submit Annual Monitoring Report and Action Plan
To be completed by:	Within one month of completion of monitoring surveys and annually thereafter
Responsibility of:	Travel Plan Co-ordinator

9.4 Travel Plan Review

The Travel Plan is a dynamic working document that will develop with time and in accordance with the changing circumstances of the development. As such, it will be regularly reviewed by the Travel Plan Co-ordinator in liaison with the site developer and DCC, as may be appropriate.

10 Implementation

A number of Key Actions have been identified throughout this document, which have been formed into an indicative Action Plan for the development of this Travel Plan. A summary of the Key Actions is presented in Table 9.

Table 9: Key Actions for the Development of the Travel Plan

Key Action	To be Completed By	Responsibility of
Key Actions Prior to Occupation		
Appoint Travel Plan Co-ordinator	6 months prior to occupation	Site developer
Assemble inputs to 'welcome pack' for new residents	Prior to first occupation	Travel Plan Co-ordinator, liaising with the developer of the site
Identify other strategies for the communication of the Travel Plan	Prior to occupation and beyond	Travel Plan Co-ordinator
Key Actions Ongoing		
Update the site audit	On completion of construction of initial phases the development (tbc) and regularly thereafter	Travel Plan Co-ordinator
Establish Residents Management group	Upon 50% occupation of residential units	Travel Plan Co-ordinator
Undertake an initial Resident Travel Survey / Snapshot Surveys	When 50% of the dwellings are occupied or within 6 months of first occupation, whichever is the sooner, and annually thereafter	Travel Plan Co-ordinator
Confirm Travel Plan measures to suit the needs of the development	Following the initial Resident Travel Survey	Travel Plan Co-ordinator
Prepare and submit Annual Monitoring Report and Action Plan	Within one month of completion of monitoring surveys and annually thereafter	Travel Plan Co-ordinator

Figures

Figure 1 Site Location and Strategic Road Network

Figure 2 Site Location and Local Highway Network

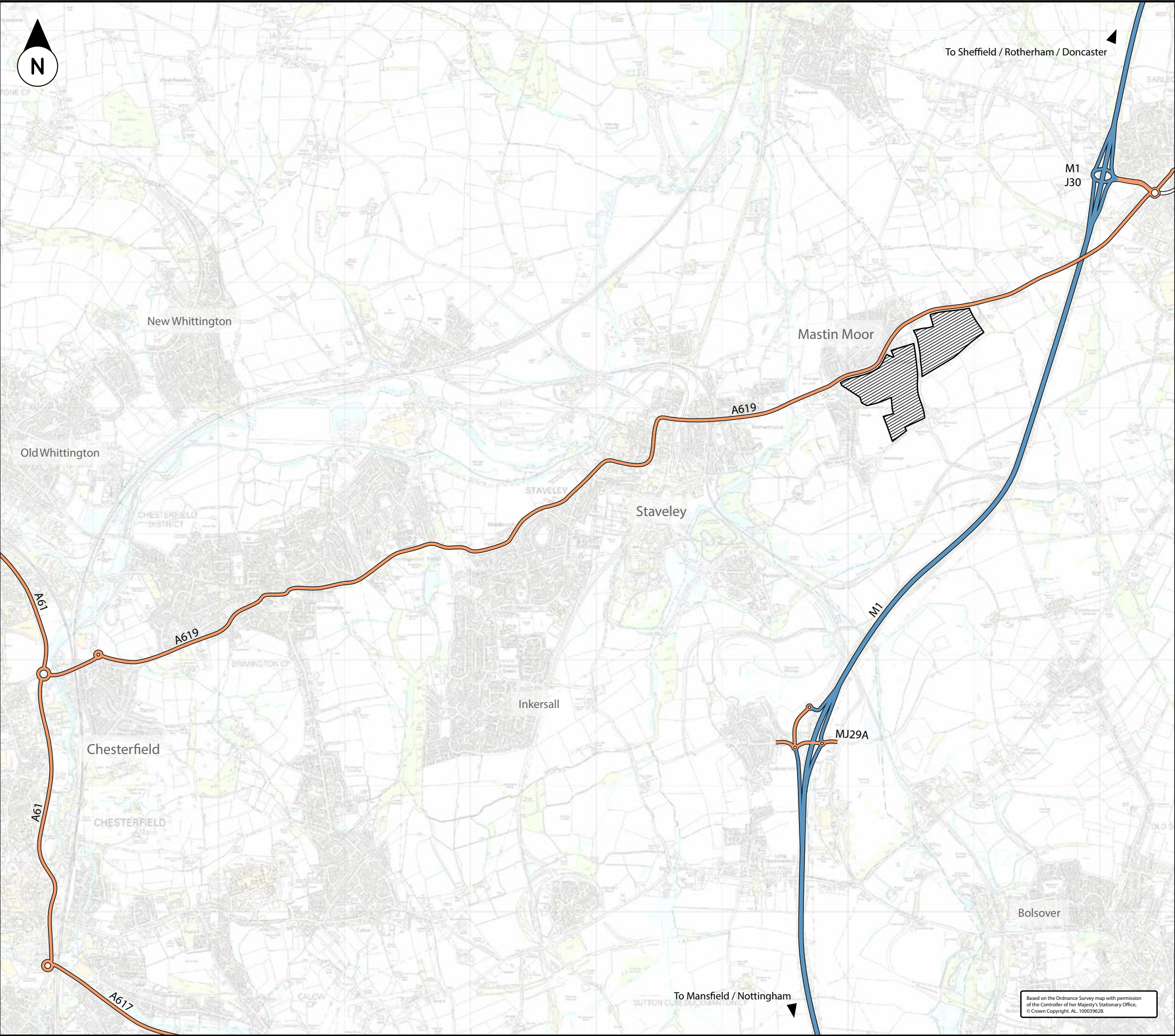
Figure 3 Public Transport Network

Figure 4 Bus Stop Accessibility

Figure 5 Walking and Cycling Infrastructure

Figure 6 Cycling Catchment

Figure 7 Walking Catchment



ARUP

Admiral House, Rose Wharf
78 East Street, Leeds, LS9 8EE
Tel: +44 (0)113 2428498 Fax: +44 (0)113 2428573
www.arup.com

Key:
Site Boundary



Issue:	Date:	Originator:	Checked:	Approved:
--------	-------	-------------	----------	-----------

D1	08.10..20	SM	SB	AG
----	-----------	----	----	----

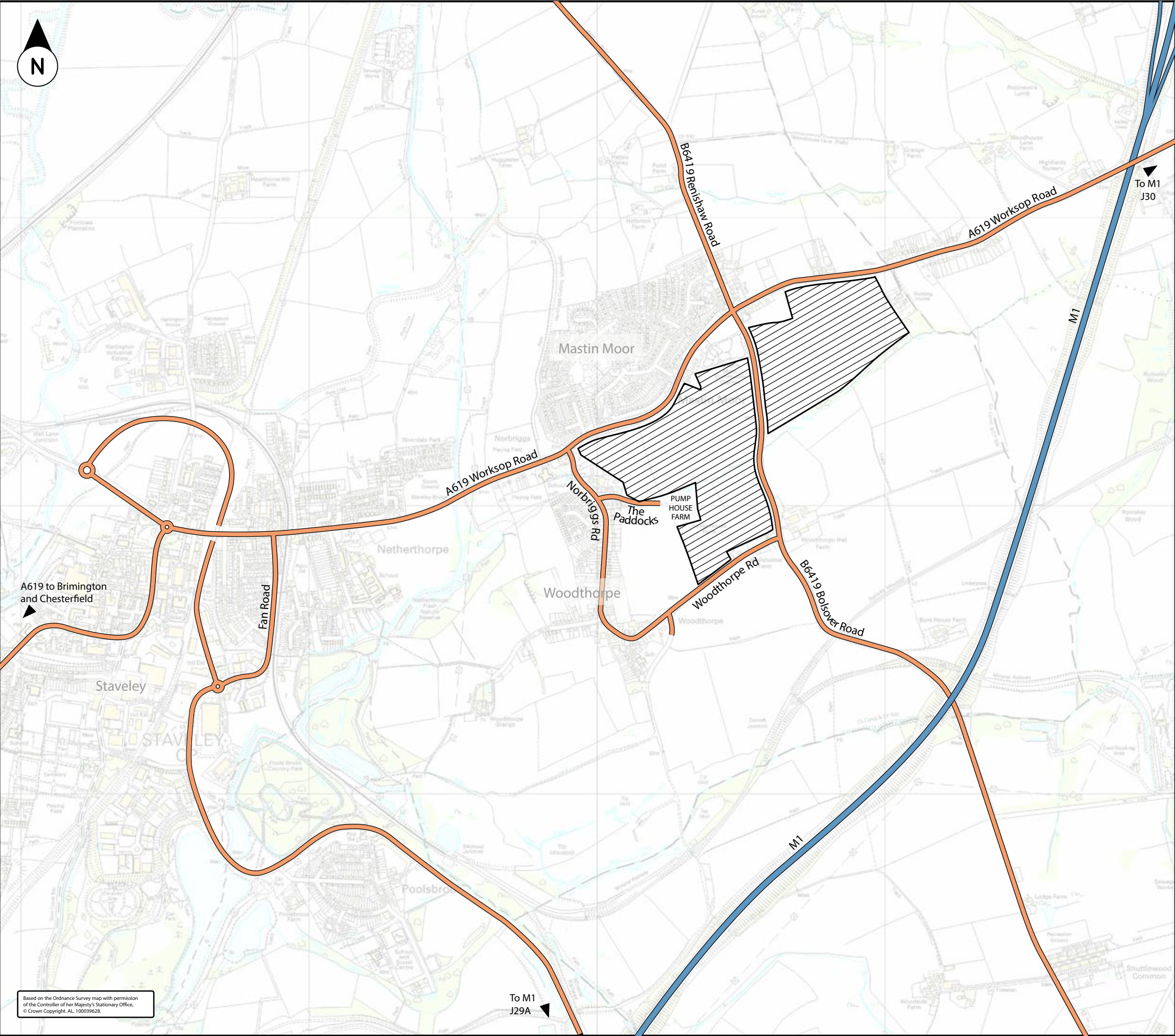
Devonshire Property (MM) Ltd
MASTIN MOOR
Site location and Strategic Road Network

Scale @ A3:
Not to Scale

Drawing Status:
For Planning

Job Number:
276927-00

Drawing Number:
Figure 01



Based on the Ordnance Survey map with permission of the Controller of her Majesty's Stationary Office, © Crown Copyright. AL 100039628.

ARUP

Admiral House, Rose Wharf
78 East Street, Leeds, LS9 8EE
Tel: +44 (0)113 2428498 Fax: +44 (0)113 2428573
www.arup.com

Key:
Site Boundary

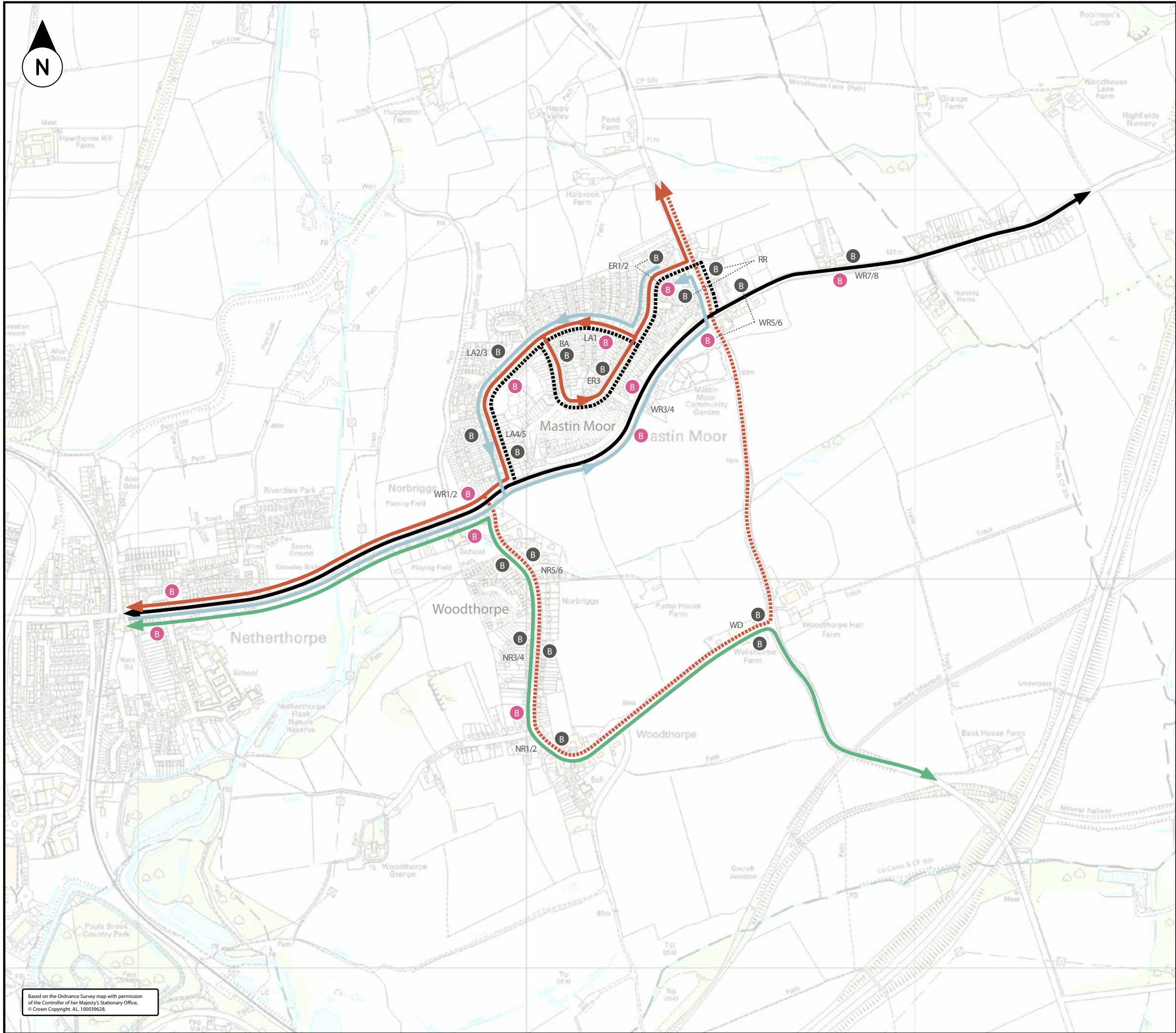


Issue:	Date:	Originator:	Checked:	Approved:
D1	08.10.20	SM	SB	AG
Devonshire Property (MM) Ltd MASTIN MOOR Site Location and Local Highway Network				
Scale @ A3: Not to Scale				
Drawing Status: For Planning				
Job Number: 276927-00		Drawing Number: Figure 02		



ARUP

Admiral House, Rose Wharf
78 East Street, Leeds, LS9 8EE
Tel: +44 (0)113 2428498 Fax: +44 (0)113 2428573
www.arup.com



Based on the Ordnance Survey map with permission
of the Controller of her Majesty's Stationary Office,
© Crown Copyright. AL 10039628.

Key:

Bus Route 74A

Bus Route 77

Bus Route 77A (evening only)

Bus Route 80

Bus Route 80A (evening only)

Bus Route 81

Bus Stop (pole only)

Bus Stop (shelter)



Issue:	Date:	Originator:	Checked:	Approved:
--------	-------	-------------	----------	-----------

D1	08.10.20	SM	SB	AG
----	----------	----	----	----

Devonshire Property (MM) Ltd
MASTIN MOOR
Bus Stops

Scale @ A3:
Not to Scale

Drawing Status:
For Planning

Job Number:
276927-00

Drawing Number:
Figure 03



Mastin Moor

Woodthorpe

Based on the Ordnance Survey map with permission of the Controller of her Majesty's Stationary Office, © Crown Copyright. AL 100039628.

ARUP

Admiral House, Rose Wharf
78 East Street, Leeds, LS9 8EE
Tel: +44 (0)113 2428498 Fax: +44 (0)113 2428573
www.arup.com

Key:

Bus Stop

B

400m walking catchment



Issue:	Date:	Originator:	Checked:	Approved:
P1	08.10.20	SM	SB	AG
D1	25/05/17	EC	SB	AG

Devonshire Property (MM) Ltd
MASTIN MOOR
Bus Stop Accessibility

Scale @ A3:
Not to Scale

Drawing Status:
For Planning

Job Number:
276927-00

Drawing Number:
Figure 04



ARUP

Admiral House, Rose Wharf
78 East Street, Leeds, LS9 8EE
Tel: +44 (0)113 2428498 Fax: +44 (0)113 2428573
www.arup.com

- Key:
- Footway
 - CBC Strategic Walking Network
 - Cycle Network
 - Proposed Cycle Network
 - Pedestrian Refuge
 - Traffic Signal Controlled Crossing

Issue:	Date:	Originator:	Checked:	Approved:
D1	08.10.20	SM	SB	AG

Devonshire Property (MM) Ltd
MASTIN MOOR
Cycle and Pedestrian Facilities

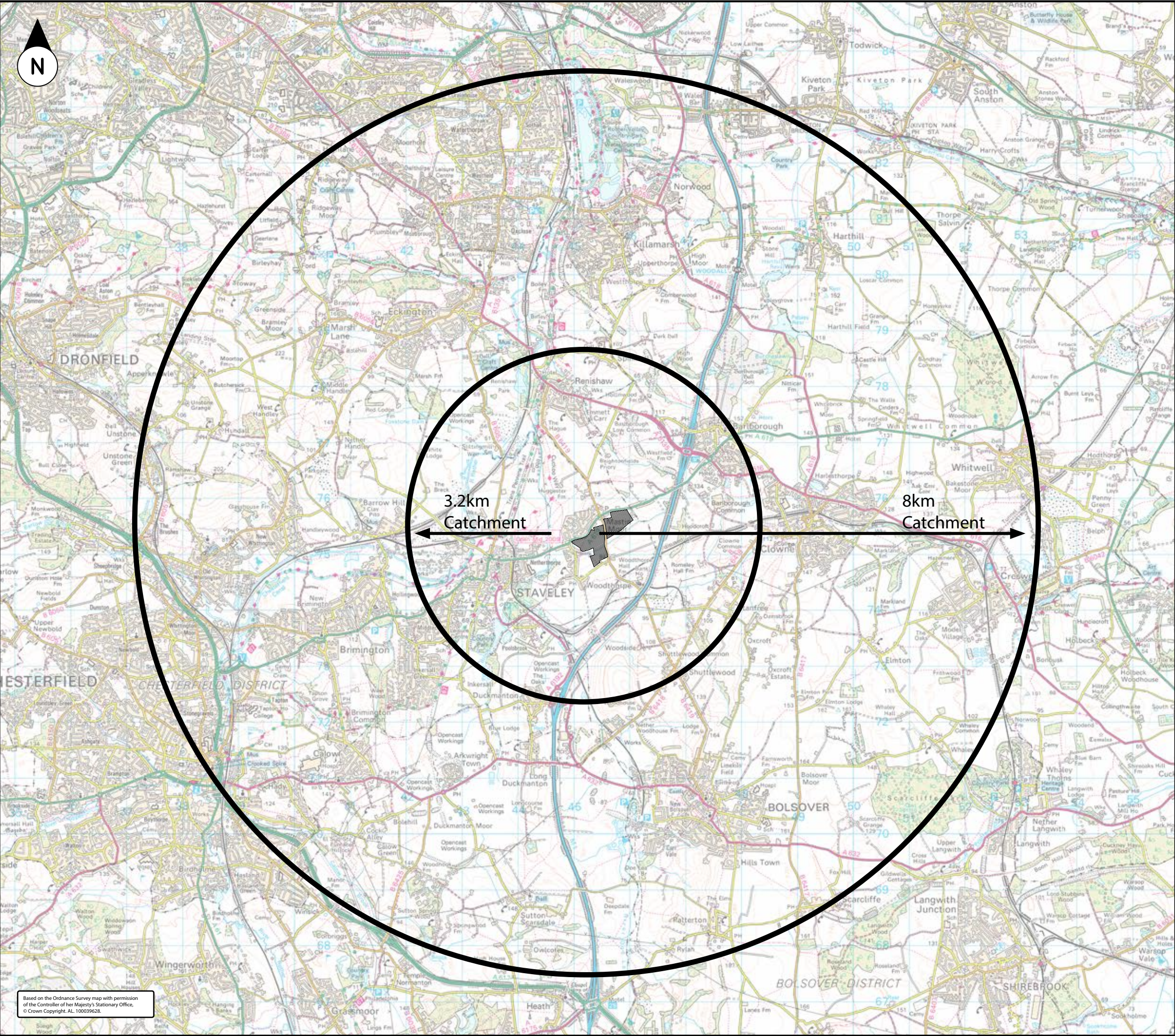
Scale @ A3:
Not to Scale

Drawing Status:
Draft

Job Number:
276927-00

Drawing Number:
Figure 05

Based on the Ordnance Survey map with permission
of the Controller of her Majesty's Stationary Office,
© Crown Copyright. AL 100039628.



ARUP

Admiral House, Rose Wharf
78 East Street, Leeds, LS9 8EE
Tel: +44 (0)113 2428498 Fax: +44 (0)113 2428573
www.arup.com

Key:
Site location



Issue:	Date:	Originator:	Checked:	Approved:
P1	08.10.20	SM	SB	AG

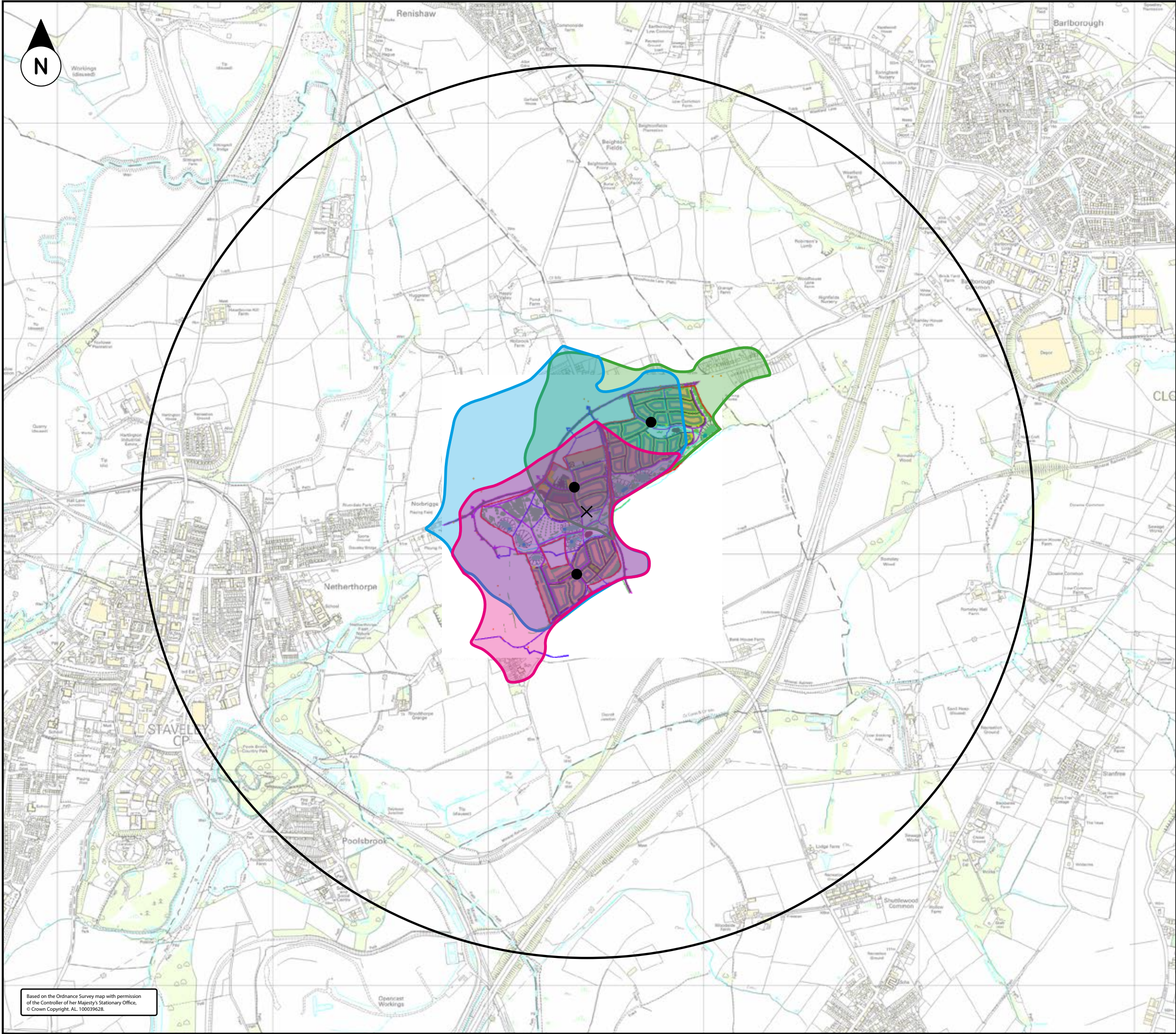
Devonshire Property (MM) Ltd
Mastin Moor
3.2km and 8km Cycling Catchment

Scale @ A3:
Not to Scale

Drawing Status:
For Planning

Job Number:
276927-00

Drawing Number:
Figure 06



Based on the Ordnance Survey map with permission
of the Controller of her Majesty's Stationary Office,
© Crown Copyright. AL 100039628.

ARUP

Admiral House, Rose Wharf
78 East Street, Leeds, LS9 8EE
Tel: +44 (0)113 2428498 Fax: +44 (0)113 2428573
www.arup.com

Key:
800m Walking Catchment:
-Eastern Parcel
-Southern Parcel
-Western Parcel
2km Catchment



Issue:	Date:	Originator:	Checked:	Approved:
P1	08.10.20	SM	SB	AG

Devonshire Property (MM) Ltd
Mastin Moor
800m & 2km walking catchment

Scale @ A3:
Not to Scale

Drawing Status:
For Planning

Job Number:
276927-00

Drawing Number:
Figure 07

Drawings

Drawing 1 276927-SK-200

Drawing 2 276927-SK-100

Drawing 3 276927-SK-101

Drawing 4 276927-SK-102



Key:

Existing layout

Proposed layout

01	08/10/20	SM	SB	AG
Draft				
Issue	Date	By	Chkd	Appd

ARUP

Admiral House, Rose Wharf,
78 East Street, Leeds, LS9 8EE
Tel +44(0)113 242 5498 Fax +44(0)113 242 8573
www.arup.com

Client
Devonshire Property (MM) Ltd

Project Title
Mastin Moor

Drawing Title
Site Wide

Scale at A1 1:1250

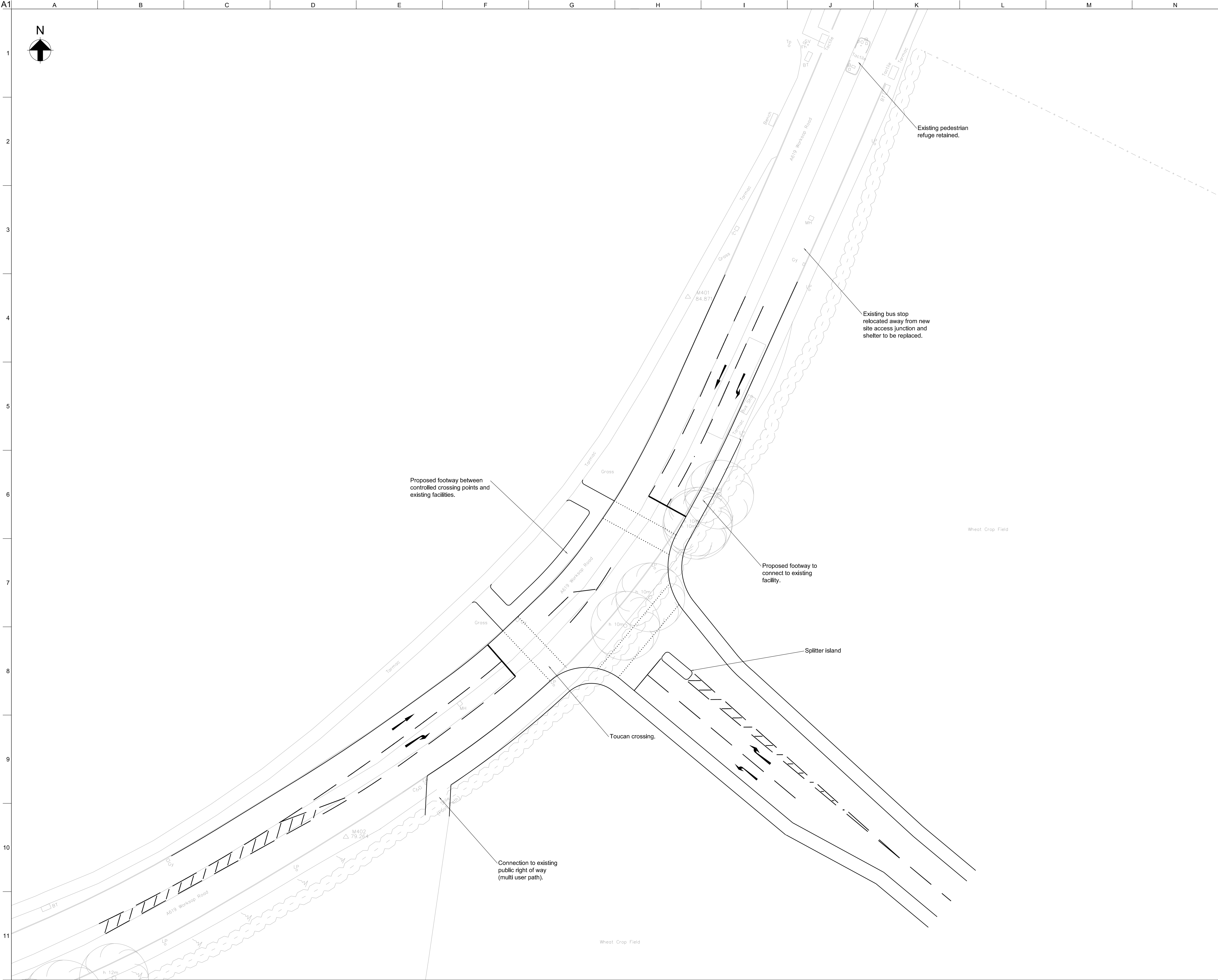
Role Civil

Suitability - For Planning

Arup Job No
276927-00

Rev
01

Name
SK-200



Key:

Existing layout

Proposed layout

01	08/10/20	SM	SB	AG
----	----------	----	----	----

Rev	Date	By	Chkd	Appd
-----	------	----	------	------

ARUP

Admiral House, Rose Wharf,
78 East Street, Leeds, LS9 8EE
Tel +44(0)113 242 8498 Fax +44(0)113 242 8573
www.arup.com

Client

Chatsworth Settlement Trustees

Project Title

Mastin Moor

Drawing Title

Potential Site Access onto Bolsover Road

Scale at A1

1:250

Role

Civil

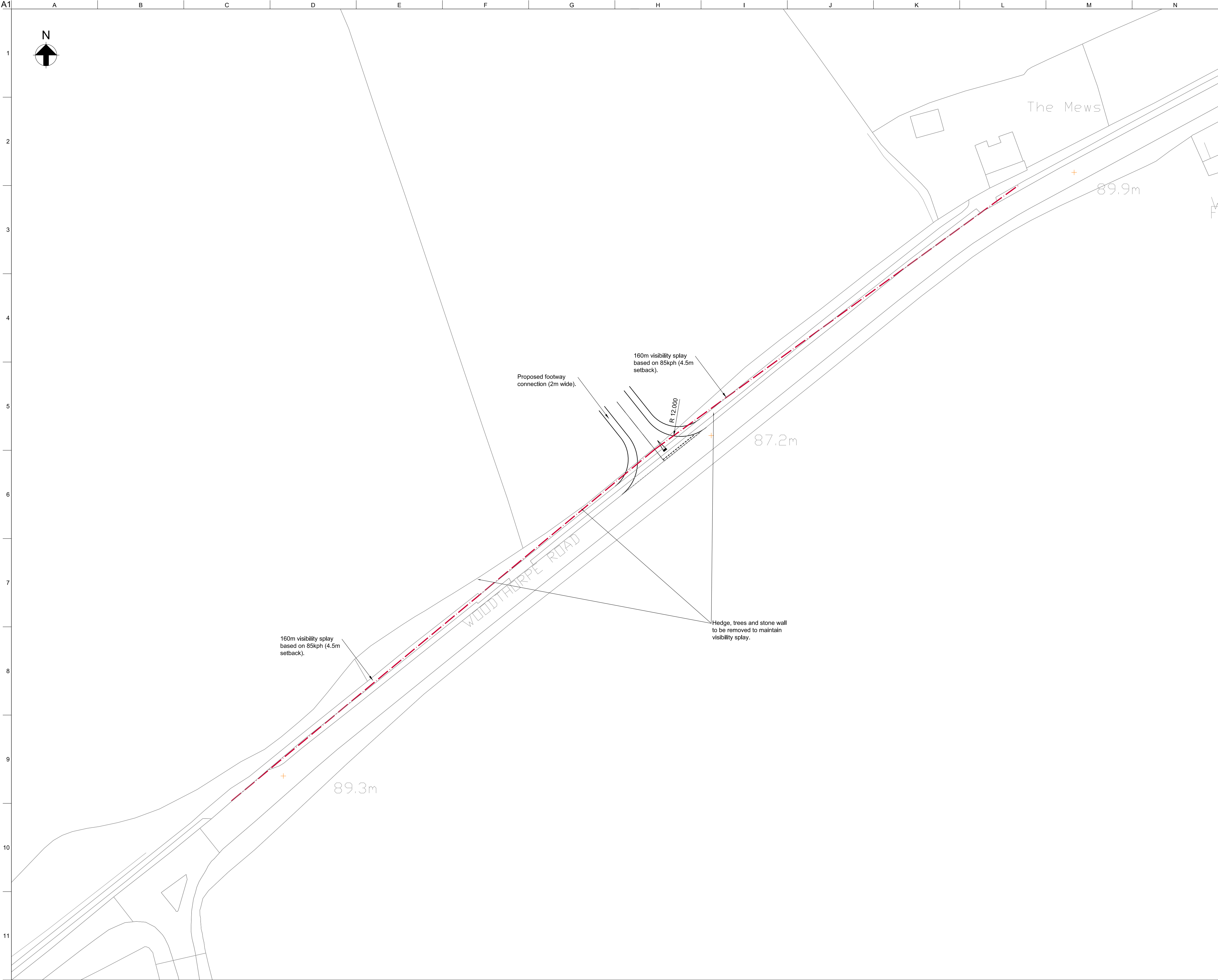
Suitability

- For Planning

Arup Job No	Rev
276927-00	01

Name

SK-100



Do not scale

- Key:
- Existing layout
 - Proposed layout
 - 4.5m x 160m visibility display

01	08/10/20	SM	SB	AG
Draft				

Rev	Date	By	Chkd	Appd
-----	------	----	------	------

ARUP

Admiral House, Rose Wharf,
78 East Street, Leeds, LS9 8EE
Tel +44(0)113 242 8498 Fax +44(0)113 242 8573
www.arup.com

Client
Devonshire Property (MM) Ltd

Project Title
Mastin Moor

Drawing Title
Potential Site Access onto
Woodthorpe Road
(Site Access 3)

Scale at A1 1:500	
Role Civil	
Suitability - For Planning	
Arup Job No 276927-00	Rev 01
Name SK-102	

Appendix A

Indicative Masterplan



rev	details	by	date
00	FIRST ISSUE FOR COMMENT	SK	06.08.20
01	Footpath update	MC	14.08.20
02	Seymour link updated to multi user path	MC	02.10.20

rev	details	by	date

Notes

1. Do not scale from drawing, use figured dimensions only.

2. All dimensions to be checked onsite.

3. This drawing to be read in conjunction with all other Gillespies drawings and specifications.

North Arrow

0

Ordinance Information shown is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown Copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. License No: 1000 17362

Project title

MASTIN MOOR

Drawing title

INDICATIVE MASTERPLAN

Drawing number

P20181-00-001-100

Drawing Status

PLANNING

Date

06.08.20

Scale

1:2500 @ A1

Revision

02

Drawn

SK

Checked

MC

CST

GILLESPIES

Client

© copyright GILLESPIES LLP, all rights reserved

Minton Chambers, 12 Healds Court, Leeds LS1 4LJ

P: 0113 247 0550 F: 0113 247 0660 E: design.leeds@gillespies.co.uk