Pell Frischmann

Land West of Ratby

Transport Assessment

109003

Report Ref.	**106232-PEF-ZZ-XX-RP-TS-000002**
File Path	**P:\Data\109003 - Ratby Phases 3 & 4 Outline\01 - WIP\Documents\Transport Planning\109003-PEF-ZZ-XX-RP-TP-000002_S2_P3 Transport Assessment.docx**

Suit	Rev	Description	Date	Originator	Checker	Approver
S2	P1	Draft Report	28/05/24	JH	LT	CH
S2	P2	Revised Issue	05/07/24	JH	LT	CH
S2	P3	Updated Issue following drawing updates	06/09/24	JH	LT	CH

Ref. reference. Rev revision. Suit suitability.

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1 Introduction

1.1 Instruction

1.1.1 Pell Frischmann (PF) has been instructed by Lagan Homes (the Client) to provide highways and transport advice and prepare a Transport Assessment (TA) report to support an outline planning application (with all matters reserved apart from access) for a phased, mixed-use development comprising about 470 dwellings (Use Class C3) or, in the alternative, up to about 450 dwellings and care home (Use Class C2). Provision of land for community hub (Use Class F2); provision of land for 1FE primary school (Use Class F1); and associated operations and infrastructure including but not limited to site re-profiling works, sustainable urban drainage system, public open space, landscaping, habitat creation, internal roads/routes, and upgrades to the public highway.

1.1.2 A copy of the concept masterplan is included within **Appendix A**.

1.1.3 This TA considers the potential transport and highways impact of the proposals including the impact of the development generated person trips, the safety of the surrounding road network and the implications for public transport, pedestrian and cyclist movements.

1.2 Scoping

1.2.1 Initial scoping discussions were made with Leicestershire County Council (LCC) as part of the pre-application process and initial phase of development. LCC provided a formal response on June 2022 which covered elements including (but not limited to) access, trip generation and operational impact assessments.

1.2.2 Following submission of the TA, LCC provided initial post-application comments in November 2022 (and subsequent comments following this) which primarily related to additional information regarding the site access as well as traffic data/modelling queries. These have also been considered within this TA for this phase of development.

1.2.3 Further discussion were subsequently made with LCC on this phase of development to agree the scope and details of the Pan Regional Transport Model (PRTM) to be utilised within this assessment as well as confirm the methodologies of the original phase of development being relevant as appropriate. These details are set out and discussed later within this report as applicable.

1.3 Report Structure

1.3.1 This Transport Statement is structured as follows:

- **Section 2: Policy Context** – Summarises the key national and local planning policies relating to transport within the context of the scale and location of the proposed development;
- **Section 3: Existing Conditions** – Describes the local highway network and the existing sustainable travel facilities;
- **Section 4: Proposed Development** – Provides details of the proposed development, access arrangements, parking provision and how the site will be serviced;
- **Section 5: Trip Generation, Distribution Assignment & Impact** – Quantifies the estimated multi-modal trip generation, distribution, assignment of the development proposals as well as setting out how the highway impact of the proposals is being assessed;
- **Section 6: Summary and Conclusions** – Summarises the findings of the report and offers conclusions in relation to the proposed development impact.

2 Policy Context

2.1 Introduction

2.1.1 This section of the TA examines the context of the site and how this relates to the relevant transport and development planning policies and guidelines. It provides an overall spatial and planning context for the proposed development.

2.1.2 Policies have been adopted in national guidelines that seek to encourage more sustainable modes than the car and a planning system which places greater emphasis on the link between transport and land use planning policies to encourage transport decisions at a local level that are compatible with environmental and community goals and best reflect local circumstances and requirements.

2.1.3 The following national and local planning documents have been reviewed:

- The National Planning Policy Framework (NPPF);
- Planning Practice Guidance (PPG);
- Framework Document: Active Travel England;
- Gear Change (2020);
- Cycling Infrastructure Design: Local Transport Note 1/20 (2020)
- Leicestershire Local Transport Plan 3;
- Hinckley & Bosworth Borough Council Core Strategy (2009 – 2026);
- Hinckley & Bosworth Borough Council Site Allocations and Development Management Policies DPD (2006 – 2029); and
- Leicestershire County Council: Cycling and Walking Strategy.

2.2 National Planning Policy

National Planning Policy Framework (NPPF)

2.2.1 The Government's National Planning Policy Framework (NPPF) replaced the majority of previous Planning Policy Statements (PPS) and Planning Policy Guidance Notes (PPG) documents on 27 March 2012, and was last updated in December 2023. It sets out the Government's expectations and requirements from the planning system. It provides local councils with guidance when defining their own local and neighbourhood plans. This allows the planning system to be customised to reflect the needs and priorities of individual communities.

2.2.2 The NPPF defines the delivery of sustainable development through three roles:

- an economic objective;
- a social objective; and
- an environmental objective.

2.2.3 These objectives should be delivered through the preparation and implementation of plans and the application of the policies in this Framework; they are not criteria against which every decision can or should be judged. Planning policies and decisions should play an active role in guiding development towards sustainable solutions, but in doing so should take local circumstances into account, to reflect the character, needs and opportunities of each area.

2.2.4 The NPPF states that "Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:

- The potential impacts of development on transport networks can be addressed;

- Opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;
- Opportunities to promote walking, cycling and public transport use are identified and pursued;
- The environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and
- Patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places."

2.2.5 Paragraph 109 states that, "Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making."

2.2.6 The NPPF requires planning policies to:

- "Support an appropriate mix of uses across an area, and within larger scale sites, to minimise the number and length of journeys needed for employment, shopping, leisure, education and other activities;
- Be prepared with the active involvement of local highways authorities, other transport infrastructure providers and operators and neighbouring councils, so that strategies and investments for supporting sustainable transport and development patterns are aligned;
- Identify and protect, where there is robust evidence, sites and routes which could be critical in developing infrastructure to widen transport choice and realise opportunities for large scale development;
- Provide for attractive and well-designed walking and cycling networks with supporting facilities such as secure cycle parking (drawing on Local Cycling and Walking Infrastructure Plans); and
- Provide for any large scale transport facilities that need to be located in the area, and the infrastructure and wider development required to support their operation, expansion and contribution to the wider economy. In doing so they should take into account whether such development is likely to be a nationally significant infrastructure project and any relevant national policy statements".

2.2.7 In assessing sites that may be allocated for development in plans, or specific applications for development, NPPF paragraph 114 states that it should be ensured that:

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

2.2.8 Paragraph 115 of the NPPF goes on to state that Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.

2.2.9 Within the context of the NPPF, paragraph 116 sets out that development should:

- "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."

2.2.10 Paragraph 117 seeks to ensure 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."

Planning Practice Guidance (PPG): Travel Plans, Transport Assessments and Statements in Decision Making

2.2.11 Guidance on Transport Assessments (GTA) was published in March 2007 but as of October 2014, has been achieved and replaced with Planning Practice Guidance (PPG).

2.2.12 PPG sets out when Travel Plans, Transport Assessments and Statements for developments are required and was published in March 2014. PPG was produced to assist stakeholders in determining whether an assessment may be required and, if so, what the level and scope of that assessment should be. It provides guidance on the content and preparation of Transport Assessments and Transport Statements and the promotion of smarter choices via Travel Plans.

2.2.13 Planning Practice Guidance (PPG) suggests that the Transport assessment should be:

- "Proportionate to the size and scope of the proposed development to which they relate and build on existing information wherever possible;
- Established at the earliest practicable possible stage of a development proposal;
- Tailored to particular local circumstances (other locally-determined factors and information beyond those which are set out in this guidance may need to be considered in these studies provided there is robust evidence for doing so locally); and
- Be brought forward through collaborative ongoing working between the local planning authority/transport authority, transport operators, rail network operators, Highways Agency where there may be implications for the strategic road network and other relevant bodies."

2.2.14 In determining whether a Travel Plan will be needed for a proposed development, PPG states that local planning authorities should take into account the following considerations:

- "The Travel Plan policies (if any) of the Local Plan;
- The scale of the proposed development and its potential for additional trip generation (smaller applications with limited impacts may not need a Travel Plan);
- Existing intensity of transport use and the availability of public transport;
- Proximity to nearby environmental designations or sensitive areas;
- Impact on other priorities/ strategies (such as promoting walking and cycling);
- The cumulative impacts of multiple developments within a particular area;
- Whether there are particular types of impacts around which to focus the Travel Plan (e.g. minimising traffic generated at peak times); and
- Relevant national policies".

Framework Document: Active Travel England

2.2.15 Active Travel England (ATE) is now an established executive agency of the Department for Transport (DfT). Its overarching objective is to help Gear Change achieve its vision, which is for half of all journeys in towns and cities to be cycled and walked by 2030.

2.2.16 The purpose of the Framework Document sets out the broad governance within which ATE and DfT operate so everyone is aware of their core responsibilities, accountability and roles that explain how the day-to-day relationships works in practice between the two. This helps form more cohesive strategic aims that all contribute to the vision above:

- Create better streets and networks for cycling and walking that are built to the 'key design principles' as set out in Gear Change and Local Transport Note 1/20;
- Ensuring walking and cycling is at the heart of transport, place-making and health policy so travelling without a car is easy and accessible;
- Empowering and encouraging local authorities who manage their roads to incorporate active travel improvements into all aspect of their functions;
- Enabling people to cycle and protecting them when they do by reducing road danger through the creation of safe infrastructure based on the key design principles and working with the department and relevant bodies to ensure that the rules of the road work to protect people travelling actively

Gear Change

2.2.17 Gear Change is the Government's vision for cycling and walking to be the natural first choice for many journeys with half of all journeys in towns and cities being cycled or walked by 2030. Responsibilities for walking extend to 'wheeling', such as the use of wheelchairs (self-propelled or powered) and mobility scooters.

2.2.18 Gear Change has several key design principles that set the expectations for future cycling infrastructure and includes:

- Routes must join together to avoid low value isolated stretches of provision;
- Routes must feel direct, logical and understandable;
- Routes and schemes must take account of how users actually behave;
- Cosmetic alterations should be avoided;
- Barriers should be avoided; and
- Routes should be designed by only those who have experienced the road on a cycle.

2.2.19 These principles are underpinned by cycling becoming mass transit in some areas and already a form of mass transit in others. Therefore, routes must be designed for a larger amount of users of all abilities and disabilities.

Cycling Infrastructure Design: Local Transport Note 1/20

2.2.20 Local Transport Note (LTN 1/20) provides guidance and good practice for the design of cycle infrastructure, in support of the Cycling and Walking Investment Strategy (CWIS). CWIS has an ambition to make cycling and walking the natural choice for short journeys or as part of a longer journey with supporting objectives to increase cycling and walking levels.

2.2.21 Inclusive cycling is the underlying theme so that people of all ages and abilities are considered, which leads to five core design principles in order to ensure there is equal access for all users:

- Coherent – cycle networks should be planned and designed to allow people to reach their day-to-day destinations easily along connected routes that are simple to navigate;

- Direct – cycle routes should be at least as direct, and preferably more direct than those available for private motor vehicles;
- Safe – cycle infrastructure should be safe as well as being perceived as safe so that more people feel able to cycle;
- Comfortable – cycle routes should be well-maintained, have smooth surfaces, adequate width for the volume of users, minimal stopping and starting and avoid steep gradients to make conditions for cyclists as comfortable as possible; and
- Attractive – cycle infrastructure should help to deliver public spaces thar are well designed and finished in attractive materials to help be places people want to spend time using.

2.2.22 These summary principles form an integral part of guidance in order to create a national default position where high quality cycle infrastructure is provided as a matter of course in local highway schemes.

2.3 Local Planning Policy

Leicestershire Local Transport Plan 3

2.3.1 Leicestershire's 3rd Local Transport Plan (LTP3) covers the years from 2011 to 2026 and builds on from strategies and policies used in the previous two Local Transport Plans.

2.3.2 The introduction to the LTP3 has a long-term vision that envisions *"Leicestershire to be recognised as a place that has, with the help of its residents and businesses, a first class transport system that enables economic and social travel in ways that improve people's health, safety and prosperity, as well as their environment and their quality of life"*.

2.3.3 The main goals of the LTP3 are as follows:

- Providing a transport system that supports a prosperous economy and a successful growing population
- Managing and maintaining an efficient and resilient sustainable transport system
- A transport system that reduces Leicestershire's carbon footprint
- An accessible and integrated transport system that promotes equality
- A transport system that improves the health, safety and security of Leicestershire's residents
- Promoting quality of life for residents and make Leicestershire a more attractive place

2.3.4 The proposed development will directly address a number of these goals, in addition to introducing more public green spaces on the site.

Hinckley & Bosworth Borough Council Core Strategy (2009 – 2026)

2.3.5 The Core Strategy sets out the overarching strategy and core policies to guide the future development of the borough up to 2026. The Core Strategy is just one of four documents that make up the Local Development Framework for Hinckley & Bosworth.

2.3.6 Hinckley & Bosworth's vision is focusing on keeping and improving what is currently in the area rather than wholesale changes, by "*embracing the positive things that development can bring, helping the entire borough's communities shar in the good quality of life it offers*", by targeting both urban and rural areas in which planning can make a difference. This vision will be achieved through 13 objectives split across three categories:

- The Economy:
- The Community:
  - Providing developments with the necessary infrastructure provision
- The Environment:

- Reduce the high reliance on car and the need to travel

Hinckley & Bosworth Borough Council Site Allocations and Development Management Policies DPD (2006 – 2029) – Adopted 2016

2.3.7 The Site Allocations and Development Management Policies Document (DPD) was adopted in 2016 to allocate land across the Hinckley & Bosworth area to deliver the development requirements. The document includes management policies which are used when determining land allocations and planning applications. *"The Site Allocations and Development Management Policies DPD is in conformity with the strategic policies in the Core Strategy and the NPPF"*. The following development management policies are relevant to the proposals:

- DM17 Highways and Transportation – proposals will be supported where they make the best use of existing public transport services; ensure convenient and safe access for walking and cycling; show there is not a significant impact upon the highways; show that development is located where travel is minimised and the use of sustainable travel modes is maximised.
- DM18 Vehicle Parking Standards – new development proposals are required to provide an appropriate level of parking provision justified by an assessment of the proposals.

Leicestershire County Council: Cycling and Walking Strategy

2.3.8 LCC has created there Cycling and Walking Strategy to increase the county's walking and cycling levels as they are lower than the national average. Their vision is for Leicestershire to become a safe place to walk and cycle whilst being accessible and the obvious choice for short journeys and a natural part of longer journeys. This vision is supported by three core objectives:

- "To enhance the infrastructure that support cycling and walking in Leicestershire;
- To enable people to cycle and walk in Leicestershire; and
- To inspire a step change in cycling and walking in Leicestershire.

2.3.9 These core objectives are underpinned by the following policies that also "support the wider objectives and goals of the authority's key strategies and plans, including our Local Transport Plan." The relevant policies associated with the development are as follows:

- Policy 2 – to influence planning approvals that ensure new residential developments are built in line with current walking and cycling guidance;
- Policy 3 – to improve existing and deliver new infrastructure to support cycling and walking, including the provision of segregated cycle routes and prioritisation of active modes in accordance with Gear Change and LTN 1/20;
- Policy 4 – To maximise opportunities for people to undertake cycling and walking as part of journeys linking with passenger transport; and
- Policy 5 – To work towards replacing a significant number of everyday local car journeys with cycling and walking journeys.

3 Existing Conditions

3.1 Introduction

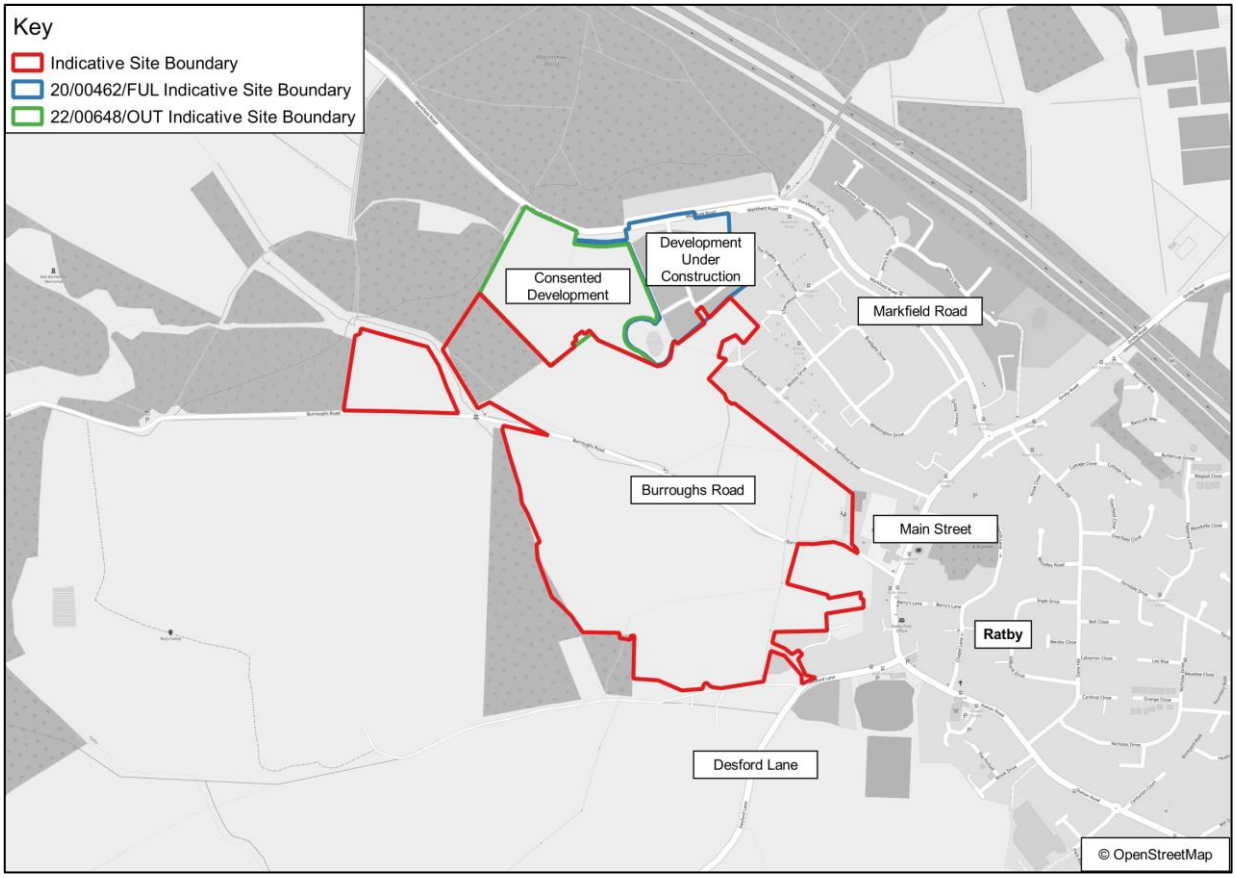
3.1.1 This chapter details the existing, or baseline, transport conditions including public transport, walking, cycling, highways and traffic conditions. A review of road safety within the vicinity of the site has also been undertaken and is included further within this chapter.

3.1.2 It is important that baseline conditions are accurately established so that the context of any potential future development at the site, and its potential impact on the surrounding transport and highway networks, can be fully understood.

3.2 Site Location

3.2.1 The proposed site is located on the western edge of Ratby and forms several agricultural fields with access via a gated farm access via Desford Lane at the southern side of the site. Burroughs Road runs through the centre of the site. The northern end of the proposed development abuts the southern end of the consented development. **Figure 1** below displays the indicative location of the proposed development.

Figure 1. Site Location



3.3 Local Planning Approval

3.3.1 An outline planning application (22/00648/OUT) was approved in September 2023 for 75 dwellings. This site is located along the northern boundary of the site., The proposed development site will use this development's access road to the off Markfield Road to access the site from the north. At the time of writing, no dwellings have been constructed.

3.3.2 Adjacent to the north-eastern boundary of the site, planning application 20/00462/FUL for 90 dwellings was approved (subject to conditions) in May 2020. Access to the site is to be made via a new priority junction with ghost island right turn lane off Markfield Road. At the time of writing, construction has commenced with a number of dwellings being occupied.

3.3.3 Approximately 500m to the east of the proposed development site, planning application 19/00680/OUT for approximately 168 dwellings was approved subject to conditions in June 2019. Access to the scheme is taken via a priority access between 76-82 Markfield Road. At the time of writing, the site appeared to be approaching completion.

3.3.4 Planning Application 21/01295/OUT, on Desford Lane, approximately 1km southeast of the proposed development site, was granted outline planning permission in February 2024 after going through an appeal for the construction of up to 225 dwellings.

3.4 Local Highway Network

3.4.1 Burroughs Road is a rural lane that serves farmland access to Burroughs Wood to the west. Then to the east, Burroughs Road is restricted to 30mph and is street lit up to the Plough Inn. Immediately after the access to Ratby Primary school, there is a warning signage for pedestrians in the carriageway. In the vicinity of the Main Street/Burroughs Road junction, it is lightly trafficked with a small park and short section of parking next to The Bulls Head. There is also a vehicles access to the playing fields adjacent to a PROW.

3.4.2 Markfield Road provides a link north towards Markfield and south into Ratby. In the vicinity of the site, Markfield Road measures approximately 6m wide and is de-restricted. Approximately 70m east of the consented access, Markfield Road is restricted to 30mph.

3.4.3 Desford Lane forms a link north-east to Ratby and south-west towards Desford. In the vicinity of the site access, Desford Lane is approximately 6.5m wide with street lighting and is de-restricted. Approximately 35m to the east of the site access, Desford Lane is subject to a 30mph speed limit where a raised table access is located. As part of planning application 20/00786/FUL, the existing 30mph signage is to be re-located to the west of its existing position. It is anticipated this will be located to tie in with the proposals as part of Planning Application 21/01295/OUT.

3.4.4 At its southern end, Markfield Road forms a mini-roundabout with Groby Road/Main Street, while a simple priority-controlled T-junction is present at its northern end with Thornton Lane.

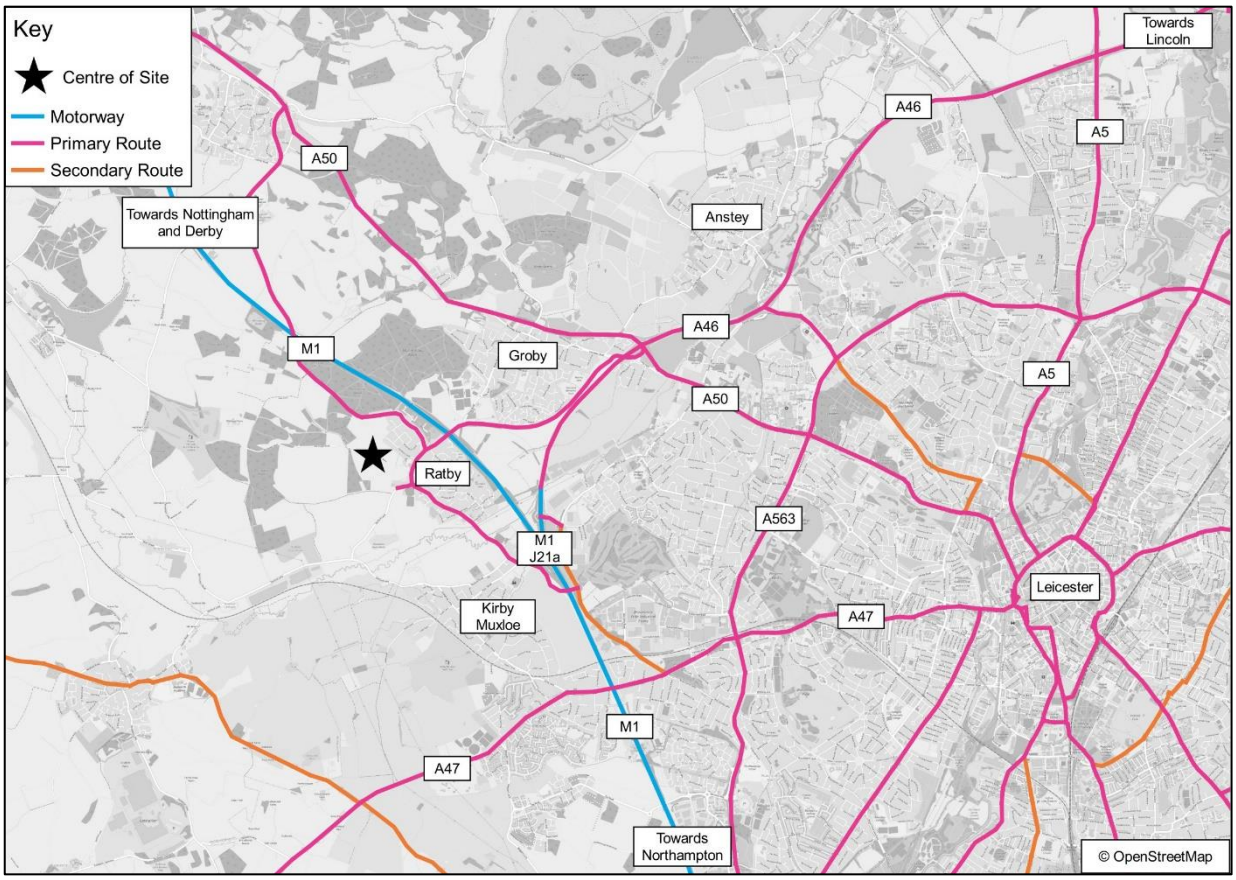
3.4.5 At the northern end of Desford Lane is a simple priority junction with Main Street/Station Road. There is also a simple priority junction at the southern end of Desford Lane, with Desford Lane continuing east towards Kirby Muxloe and west to Desford.

3.4.6 Main Street/Groby Road is a local distributor route providing access north-east via Groby towards Leicester (A50) and the Leicester Western Bypass. To the south-east, Main Street routes towards southern Leicester and the M1 Motorway. Main Street/Groby Road is subject to a 30mph speed limit within Ratby, changing to 40mph east of the bridge over the M1.

3.4.7 The M1 Motorway can be accessed southeast of the site at Junction 21a and Junction 22 to the north-west of the site at Markfield via the A50. The M1 forms a strategic link north/south in the direction of Sheffield and London, respectively.

3.4.8 The site is therefore considered to be very well connected to the local and regional highway network. A detailed plan of the local highway network is shown in **Figure 2**.

Figure 2. Local Highway Network



3.5 Local Facilities and Sustainable Travel

Local Facilities

3.5.1 The majority of trips that will be made by sustainable modes are for the purpose of commuting, short shopping trips, access to leisure facilities, trips to school and other destinations. Of particular interest are the levels of facilities and services that can be accessed locally.

3.5.2 The site is located approximately a 450m walk from the centre of the village north of Main Street where the majority of local facilities are located. Using Burroughs Road, there are alternative routes that can be taken to reach the centre of Ratby, these involve various PROWs routing off Burroughs Road. Facilities within the centre of Ratby include education, retail, employment and leisure facilities.

3.5.3 **Table 1** displays a sample of key facilities near the site.

Table 1. Local Amenities

Amenity Type	Amenity	Approximate Walking Distance (metres)	Approximate Walking Time	Approximate Cycle Time
Recreation	Burroughs Wood	330	4 minutes	1 minute
Retail	Main Street Retail Units	450	5 1/2 minutes	1 ½ minutes
Education	Ratby Library	450	5 1/2 minutes	1 ½ minutes
Education	Ratby Primary School	450	5 1/2 minutes	1 ½ minutes
Retail	Ratby Post Office	450	5 1/2 minutes	1 ½ minutes
Recreation	Ratby Town Cricket Club	965	11 1/2 minutes	3 minutes
Retail	Co-op Supermarket	965	11 1/2 minutes	3 minutes
Employment	Pear Tree Office Park	1,125	13 1/2 minutes	3 1/2 minutes
Health	Surgery	1,290	15 1/2 minutes	4 minutes
Employment	Park Road Employment	1,450	17 1/2 minutes	4 1/2 minutes
Recreation	Ferndale Recreation Ground	1,450	17 1/2 minutes	4 1/2 minutes

3.5.4 **Table 1** shows that a range of amenities are within a short walking/cycle distance of the site.

3.5.5 All of the amenities that are within an approximate distance of 1km, effectively form Ratby village.

3.5.6 It is worth noting that a primary school and community hub will also be provided as part of this development.

Walking / Cycling

3.5.7 The Guidelines for Providing for Journeys on Foot document describes the 'maximum', 'acceptable' and 'desirable' walking distances. It suggests that in terms of commuting, walking to school and recreational journeys; walk distances up to 2,000 metres can be considered, with the 'desirable' and 'acceptable' distances being 500 and 1,000 metres respectively.

3.5.8 For non-commuter journeys, the guidance suggests that a walk distance of up to 1,200 metres can be considered, with the 'desirable' and 'acceptable' distances being 400 metres and 800 metres respectively.

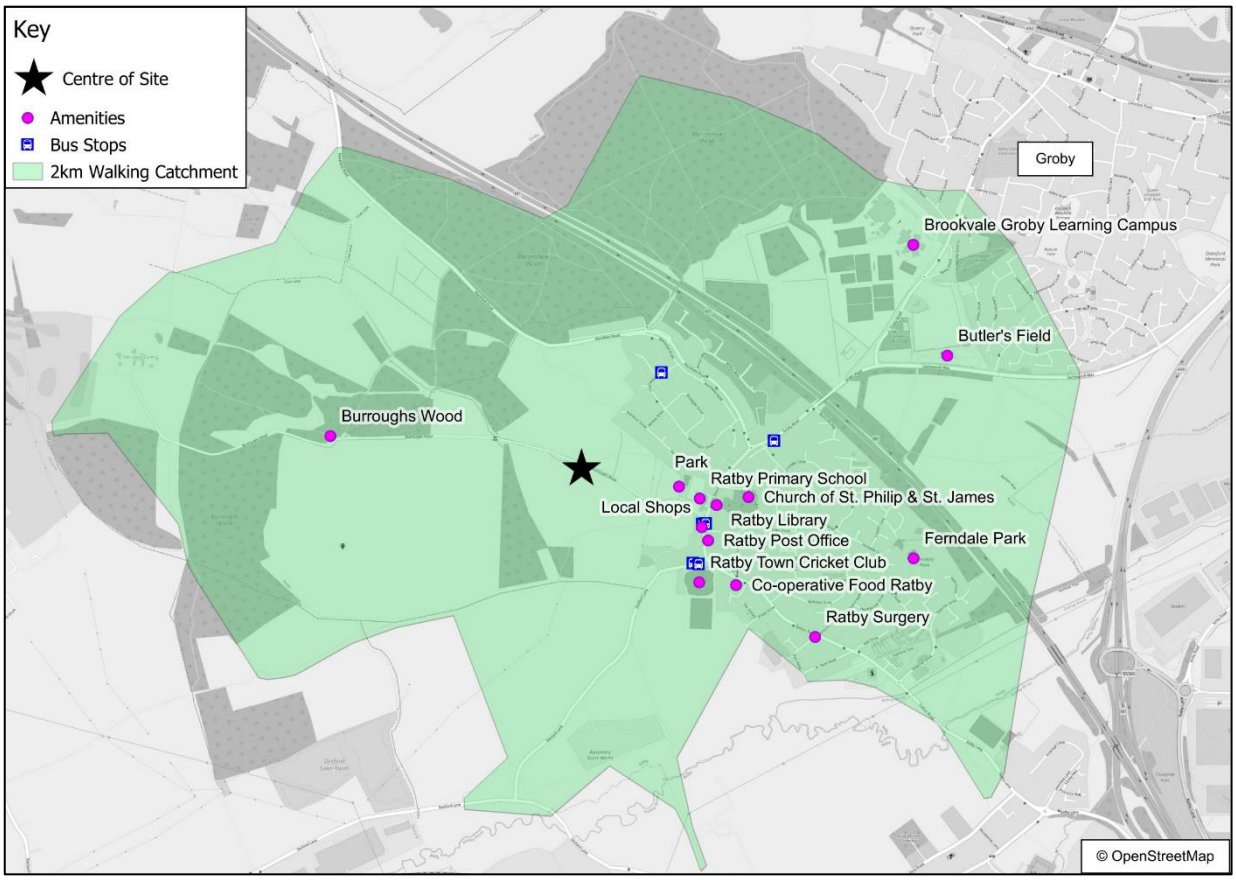
3.5.9 **Table 2** summarises the broad walking journey times that can fall under each category.

Table 2. Acceptable Walking Distances Guidance Table

Journey Purpose	Suggested Acceptable Walking Distance (Meters)		
	Town Centres	Commuting/School/Sight -Seeing	Elsewhere
Desirable	200	500	400
Acceptable	400	1,000	800
Maximum	800	2,000	1,200

3.5.10 **Figure 3** identifies a 2km catchment and the associated locations of various local facilities.

Figure 3. 2km Pedestrian Catchment



3.5.11 **Figure 3** shows that the entirety of Ratby is within a 2km walk of the site.

3.5.12 Throughout the main urban area of Ratby, most roads are restricted to 30 mph and benefit from footways on both sides of the road with street lighting and dropped kerb crossing points across side roads to facilitate pedestrian travel.

3.5.13 A street lit footway is proposed on Markfield Road immediately adjacent to the site access off Markfield Road as part of application 22/00648/OUT. This footway will link with existing infrastructure constructed as part of as part of planning approval 20/00462/FUL. Footways are then available on both sides of Markfield Road to connect with footways running along Main Street, providing a route to Ratby village centre as well as Brookvale Learning Campus and Groby.

3.5.14 A street lit footway is available on the northern side of Desford lane which extends from Main Street to the site access up into Pear Tree Business Park. As part of planning application 21/01295/OUT, a 3m shared footway/cycleway on the southern side of Desford Lane, extending up to the Ratby Medical Centre raised table access. There is also a proposed toucan crossing immediately to the west of the Desford Lane access to Pear Tree Office Park as well as a 3m wide shared footway/cycleway from west of the access. Cyclists will then be discharged into the carriageway by Ratby Medical Centre.

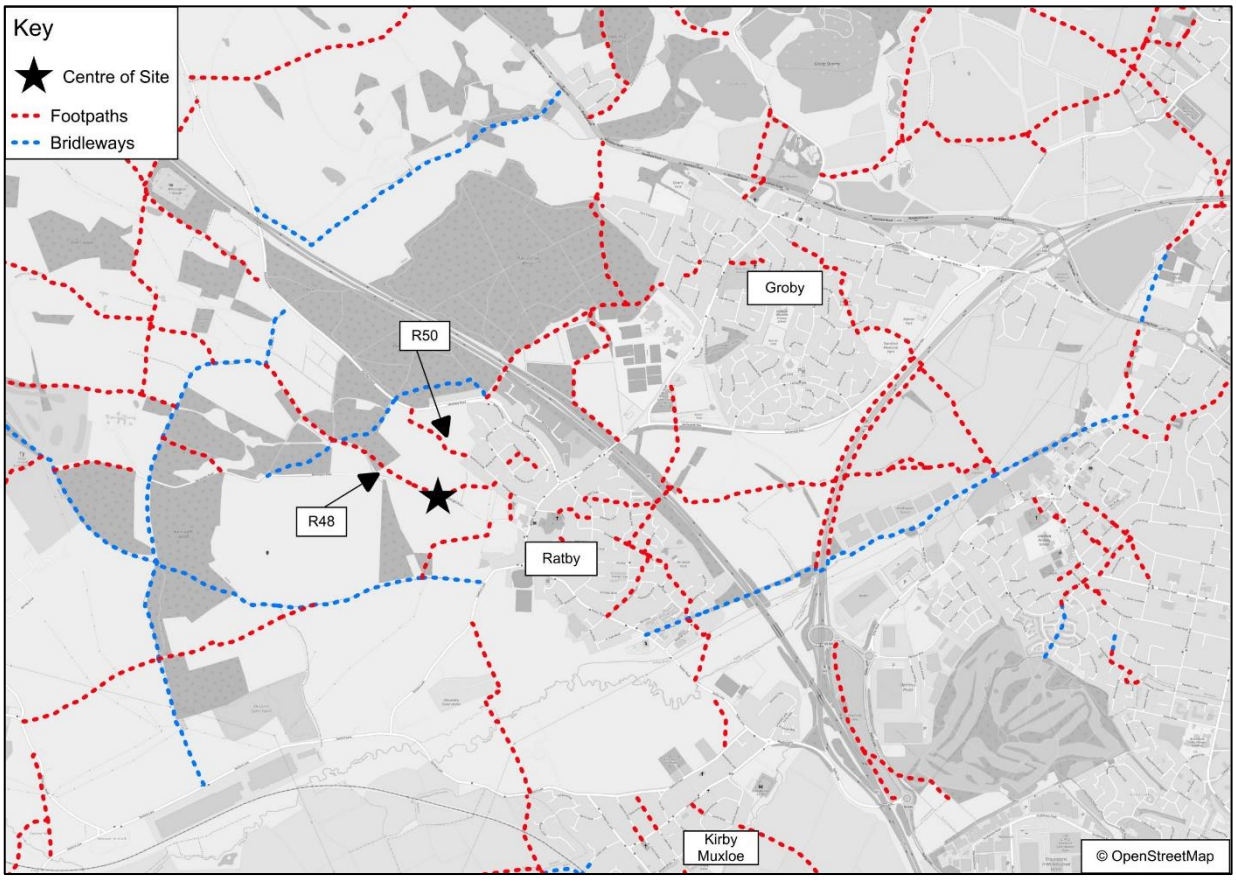
3.5.15 Uncontrolled pedestrian crossing points are incorporated into each arm of the Markfield Road/Groby Road mini roundabout to enhance pedestrian accessibility at the location. Each of the uncontrolled crossing points provide dropped kerbs, tactile paving, and a central pedestrian refuge. A further crossing facility, in the form of a zebra crossing, is provided along Main Street, directly adjacent to Ratby Primary School. The zebra crossing includes dropped kerbs, tactile paving, and guard railings.

3.5.16 Furthermore, a number of Public Right of Way (PROW) routes are present across the village. These include PROW Footpath R50 which provides a connection between the site and Stamford Street. To the west of the existing site access, an informal walking route can be seen routing west between PROW R50

and NCN 63. Stamford Street benefits from footways on both sides of the road and provides a more direct connection to Main Street in central Ratby. Burrows Road, which in part forms PROW R48, also routes a short distance from the southern boundary of the site, providing further access to Main Street.

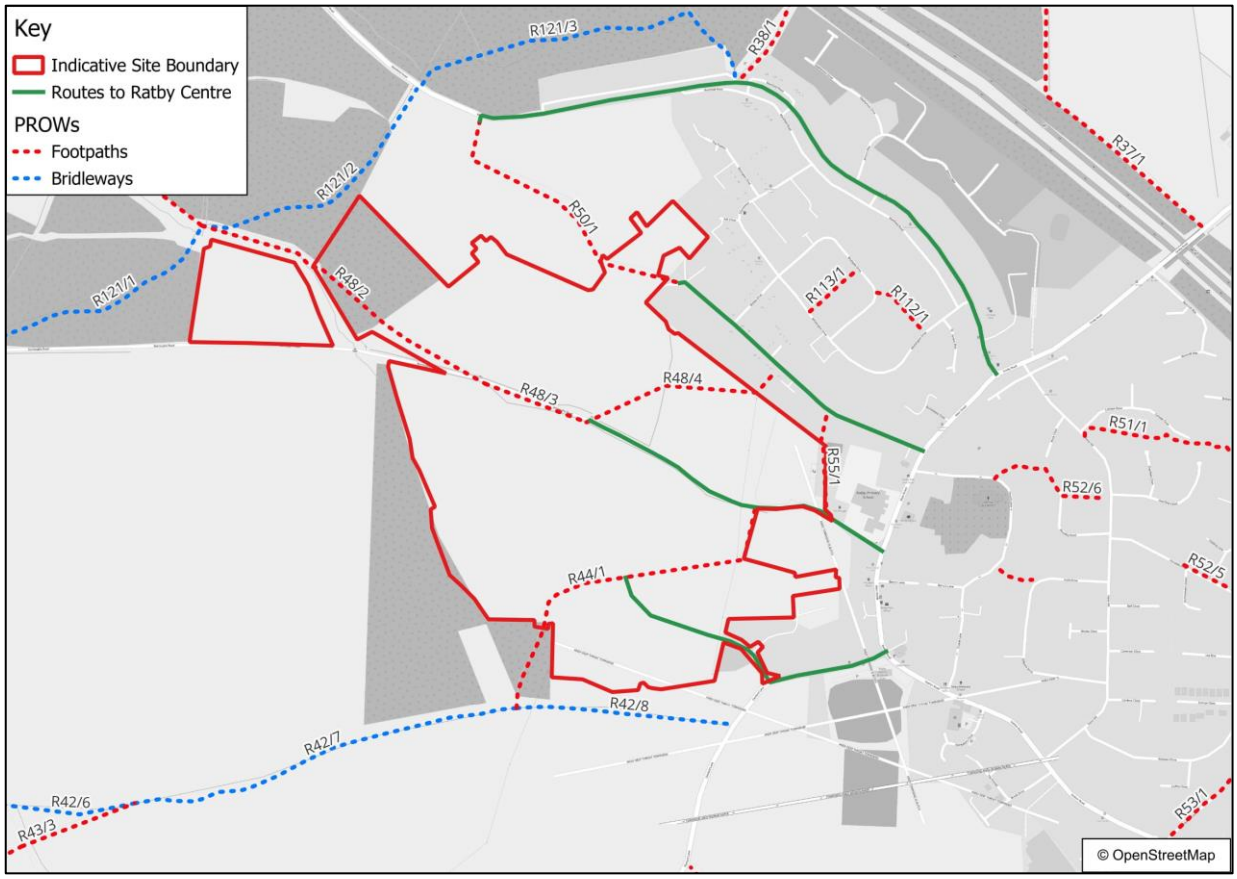
3.5.17 **Figure 4** shows the local PROW routes within the vicinity of the proposed development site.

Figure 4. Local PROW Routes



3.5.18 **Figure 5** shows the location of these labelled PROWs within the site along with routes leading from them to reach the centre of Ratby. There are four main routes into the centre of Ratby that continue from the PROWs. These routes are distributed across the entire length of the site that collectively make use of PROW R44, R48 and R50.

Figure 5. Routes from Site to Ratby Centre



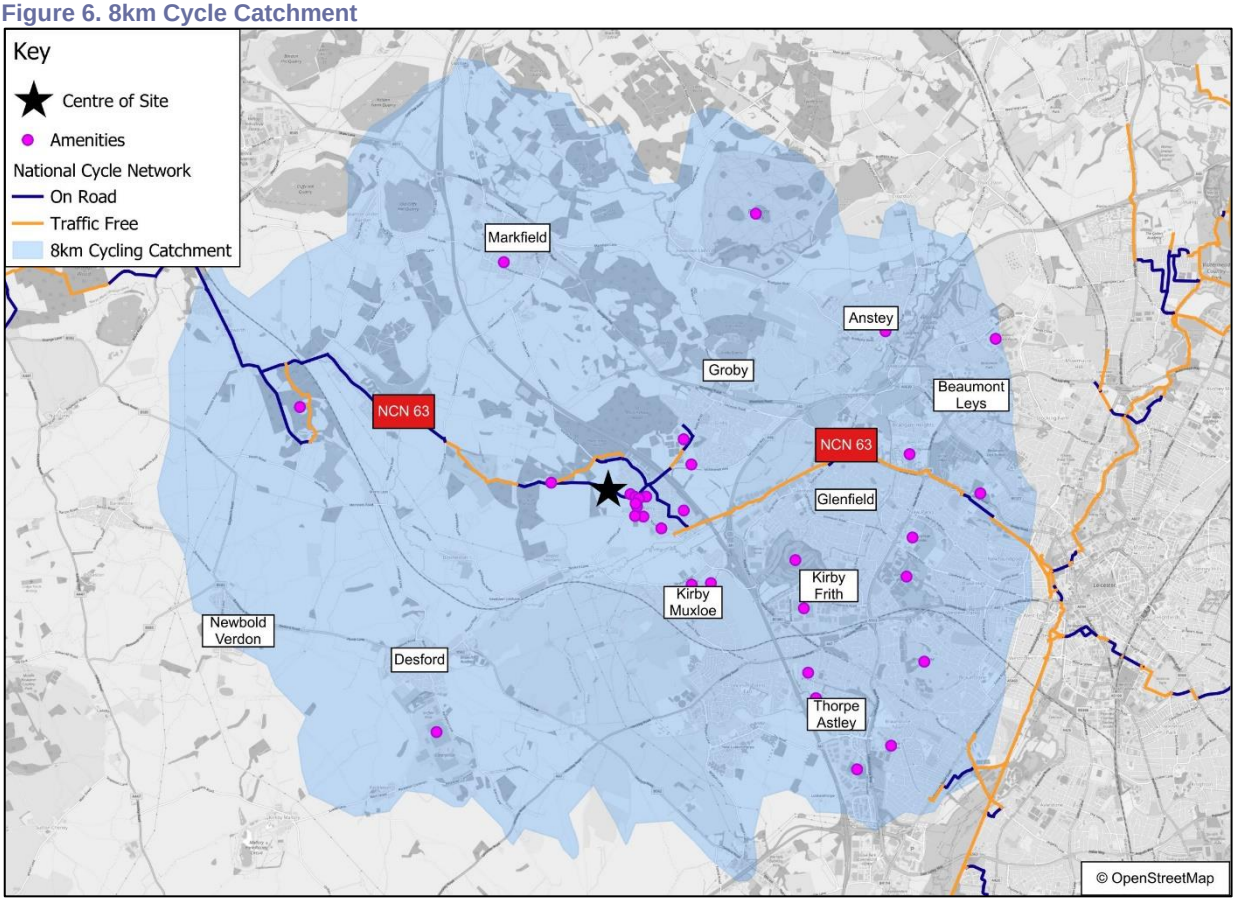
3.5.19 Local Transport Note (LTN) 1/04 states that there are limits to the distances generally considered acceptable for cycling. The mean average length for cycling is 4km (2.4 miles), although journeys of up to three times this distance are not uncommon for regular commuters. It is widely considered that cycling has the potential to substitute for short car trips, particularly those under 5km, and form part of a longer multi modal journey by public transport.

3.5.20 LTN 1/20 states *"Recent growth of cycling recorded in central London and other towns and cities following programmes of investment have illustrated that there is significant potential for change in travel behaviour and that more people cycle for everyday journeys where acceptable conditions are provided. Two out of every three personal trips are less than five miles in length – an achievable distance to cycle for most people, with many shorter journeys also suitable for walking. For schoolchildren the opportunities are even greater: three quarters of children live within a 15-minute cycle ride of a secondary school, while more than 90% live within a 15-minute walk of a primary school"*. Cycling is therefore an important journey to work mode that has the potential to substitute for short car journeys.

3.5.21 **Figure 6** presents the 8km cycle catchment from the site. It shows that all of Ratby, western Leicester are within a reasonable cycle distance of the site. **Figure 6** also shows local cycle infrastructure in the area. This includes National Cycle Network (NCN) Route 63 which route along the western border of the site through to Markfield Road and Ratby before continuing in the direction of Leicester. This also shows that an off-road cycle route is present adjacent to Groby Road/Ratby Road from Bancroft Way to Brookvale Groby Learning Campus.

3.5.22 The cycle infrastructure within the vicinity of Ratby allows for cyclists to reach important employment centres, such as Mill Lane Industrial Estate and Braunstone Frith Industrial Estate. Using NCN63/Ivanhoe Trail off Station Road, cyclists can travel to both employment sites. Between the two sites, cyclists use a mixture of shared and segregated footway/cycleways almost all of the route, except for Ratby Lane, south of Kirby Lane where cyclists are forced to join the carriageway.

Figure 6. 8km Cycle Catchment



3.5.23 The above demonstrates that the development is within a convenient walking/cycle distance of key destinations including retail, education and employment opportunities.

Public Transport Services

3.5.24 The nearest bus stop to the proposed development is located approximately a 650-700m walk south/east of the centre of the site on Markfield Road, Charnwood Road and Main Street. Each named bus stop below are provided with a flagpole and timetable information.

3.5.25 **Table 3** sets out the typical weekday and weekend frequent bus services near the site.

Table 3. Summary of Bus Services (Approx.)

Service Number and Route	Weekday			Saturday			Sunday		
	First Service	Last Service	Approx. Freq	First Service	Last Service	Approx. Freq	First Service	Last Service	Approx. Freq
27: Ratby - Leicester	10:04	16:09	60 Minutes	10:04	16:04	60 Minutes	09:20	17:25	60 Minutes
28: Leicester - Coalville	06:32	18:45	60 Minutes	08:32	17:32	60 Minutes	-	-	-

Note: Timetable information updated September 2024. First/last service based on time service arrives/leaves the nearest bus stop to the development site.

3.5.26 The nearest station is Leicester Railway Station, approximately 9km east of the site. The station is managed by East Midlands Railway, which provides direct and frequent services to Nottingham, Birmingham New Street, Sheffield, and London St. Pancras. The station is accessible directly via the 27 and 28 bus services, which provides people with the opportunity to continue their multi-modal journey.

3.5.27 Parking facilities at the station include 222 secure, sheltered cycle spaces in a selection of compounds and stands. There are also 488 spaces at the station's main car park and 10 spaces in a short-stay car park.

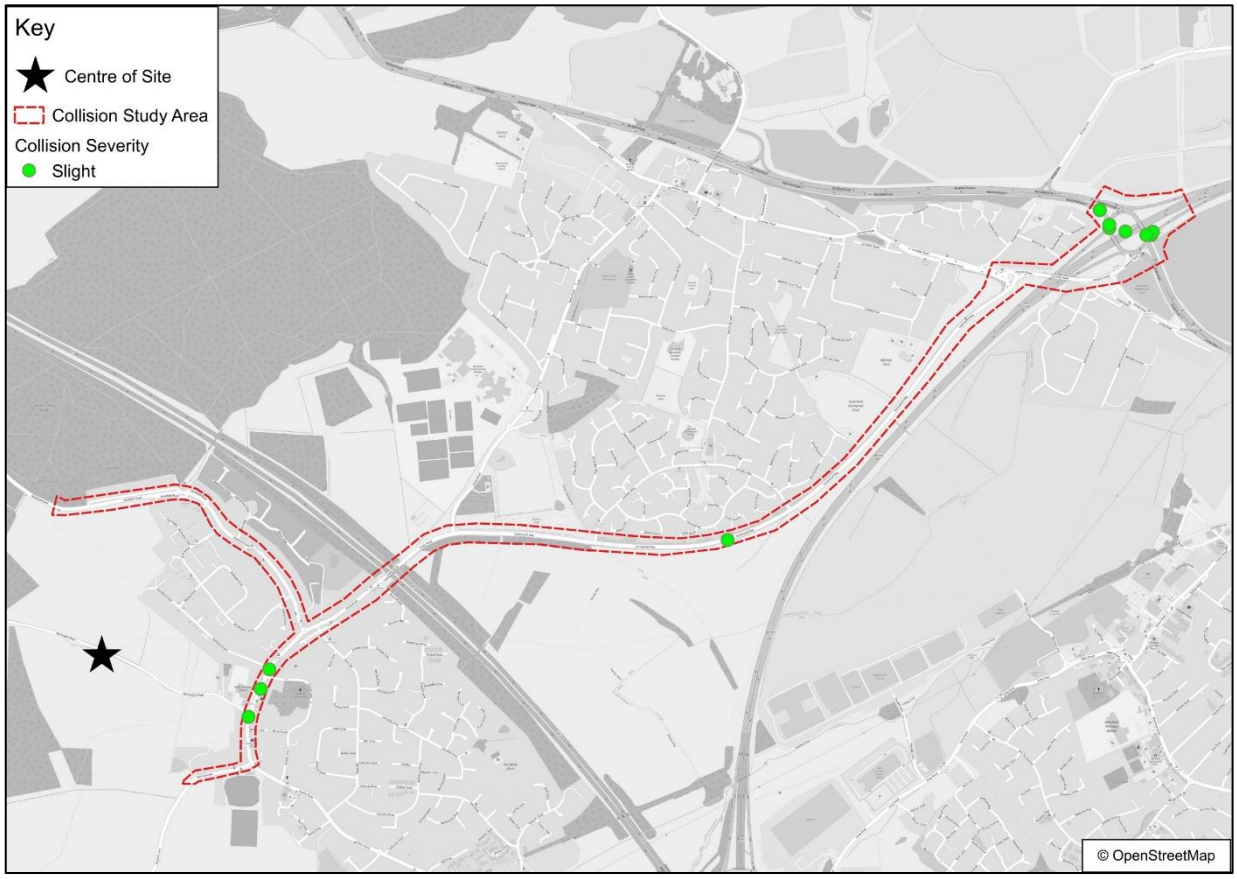
3.5.28 Overall, there are frequent buses servicing the village and routing to key local destinations in Leicester, where a variety of further employment opportunities (and additional facilities) are located, as well as rail services that can be used as part of a sustainable multi-modal journey.

3.6 Personal Injury Collisions

3.6.1 Initial Personal Injury Collision data (PIC) has been reviewed for the most recent 5-year period within the immediate vicinity of the site (2018-2022) as well as the first half of 2023 of the proposed development site. The data will be updated once the PRTM modelling and study area (as discussed later within this report) has been defined, using detailed PIC data to be obtained from LCC.

3.6.2 In summary, a total of 11 PICs were recorded across the study area. The study area is shown in **Figure 7**.

Figure 7. Collision Study Area



3.6.3 The study area is not uniform as it is made up of 30mph and 40mph residential roads in Markfield Road and Sacheverell Way as well as the A50/A46 roundabout (The Brantings Roundabout) which connects to several A Roads that act as a link between the residential roads and the A roads. The focus is on the most severe collisions within the study area and their proximity to the site boundary. It should be noted that highway safety is a matter of ongoing duty, focus and review by all local highway authorities. It is not anticipated that the proposed development would have any specific impacts with regard to highway safety.

3.6.4 Across the study area, there were 11 collisions, in which all 11 were classed as slight collisions. **Table 4** provides a summary of these slight collisions.

Table 4. Collision Summary

Collision Severity	Year						
	2018	2019	2020	2021	2022	2023	Total
Slight	4	3	2	1	1	0	**11**
Total	**4**	**3**	**2**	**1**	**1**	**0**	**11**

3.6.5 There were two collisions involving vulnerable road users which were recorded across the study area during the assessment period. One collision involved a cyclist and the other involved a pedestrian.

3.6.6 The following sections provide further details on the recorded collisions.

Main Street

3.6.7 Main Street has three recorded collisions to the east of the site. **Figure 8** shows the location of these three collisions.

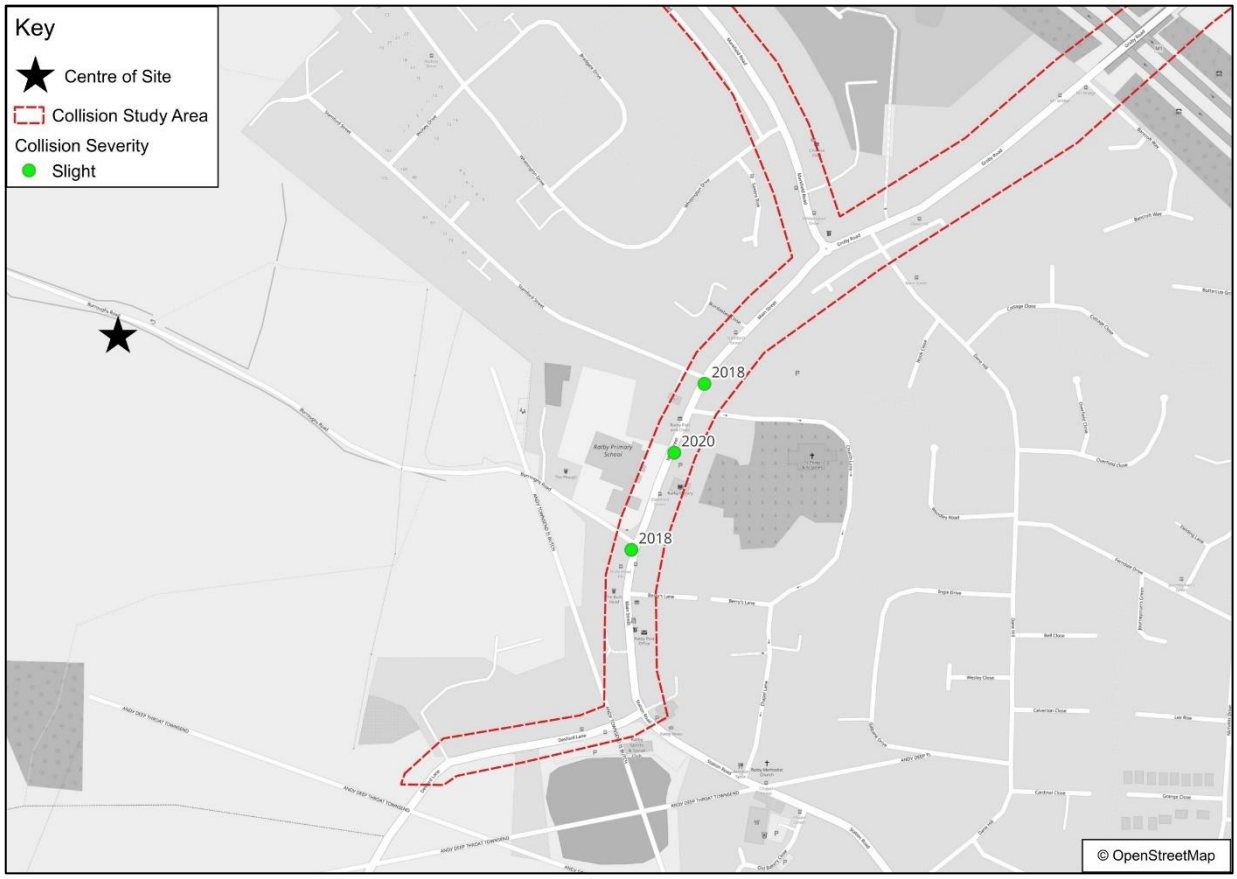
3.6.8 The first of two collisions to occur in 2018 on Main Street took place when three cars collided in the middle of the Main Street/Stamford Street junction. The collision occurred in the day when the road was covered by snow which led to two of the three drivers sustaining slight injuries.

3.6.9 The other collision that happened in 2018 when a car was turning right onto Burroughs Road when it collided with a cyclist. The weather was fine and dry with no high winds. The cyclist was left with slight injuries.

3.6.10 The final collision on Main Street occurred in 2020 when a van or goods vehicle (under 3.5 tonnes) skidded whilst travelling north on Main Street and hit a pedestrian at a zebra crossing. The pedestrian was crossing from the drivers nearside but was masked by a stationary vehicle. The collision took place in the rain leaving the road surface wet or damp. The pedestrian received slight injuries.

3.6.11 There is no indication that the are common factors linking the collision which are due to the road or junction geometry.

Figure 8. Collisions on Main Street



Brantings Roundabout

3.6.12 There are seven recorded collisions that have occurred within the vicinity of the Brantings Roundabout, with one of these seven collisions occurring on the A46 below. **Figure 9** shows the location of these collisions.

3.6.13 The first collision to take place at this roundabout was in 2018 when a car leaving the roundabout to the northwest onto the A50 skidded and hit the offside of a goods vehicle (7.5 tonnes and over) who was also leaving the roundabout at the same exit. The weather at the time of the collision was clear and dry with no high winds. This left the driver of the car with slight injuries.

3.6.14 Two collisions occurred on the A46 westbound off-slip road approaching the roundabout. The collisions took place at an automated traffic signal. Both collisions involved two cars which left two drivers and a car passenger all with slight injuries.

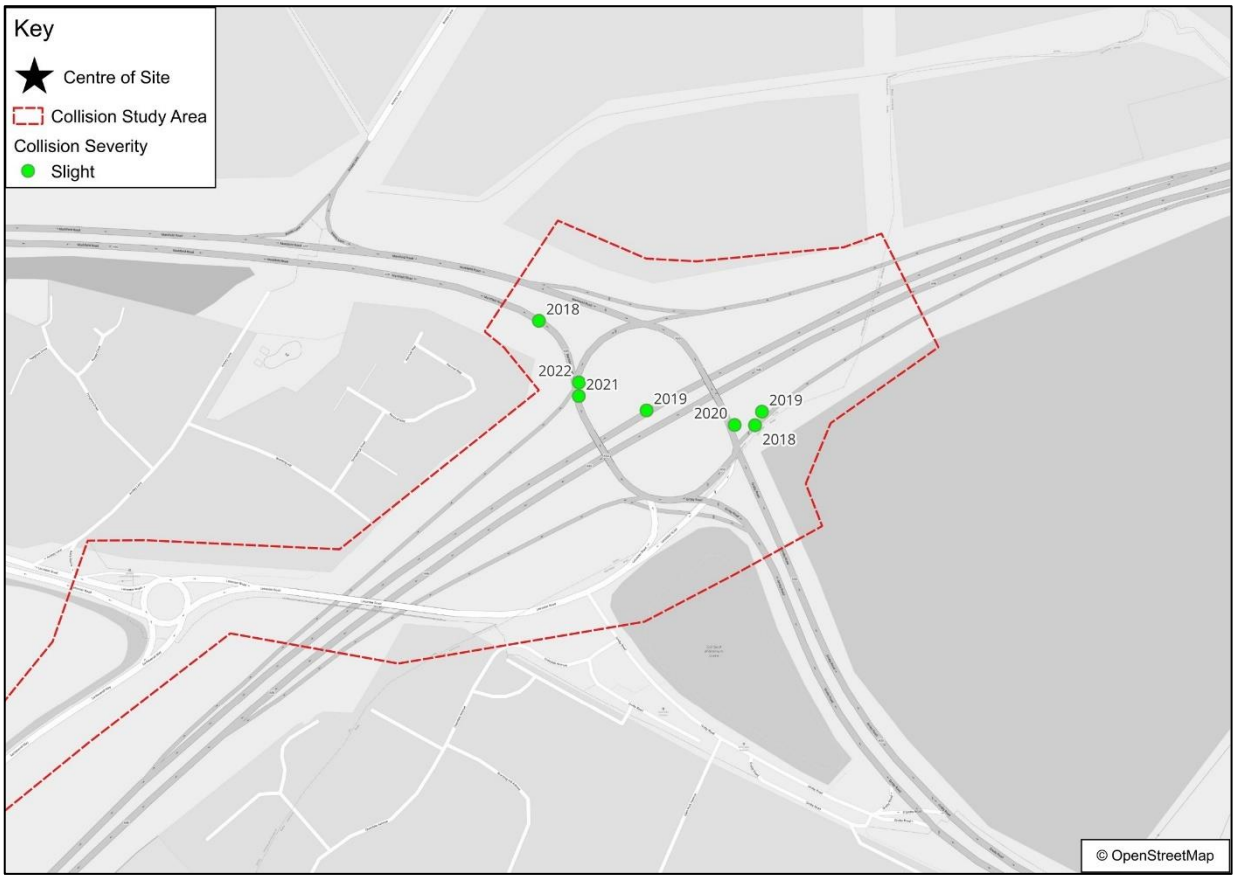
3.6.15 On the off-slip road from the A46 eastbound, there were two recorded collisions. Both collisions occurred as vehicles were entering the roundabout. The first collision occurred when a goods hit the nearside of a car who was already in the middle of the roundabout leaving the driver and three passengers with slight injuries. The other collision was between two goods vehicles when the vehicle leaving the roundabout skidded into the vehicle which was entering the roundabout. This left the driver of the vehicle leaving the roundabout with slight injuries.

3.6.16 A further collision occurred on the roundabout at automated traffic signals in the middle of the junction when a car was moving off from the junction and collided with another car who was entering the roundabout. This left the driver and two passengers of the car already in the middle of the junction with slight injuries. The weather was fine and dry.

3.6.17 The final collision took place in 2019 on the A46 eastbound in wet/damp road conditions when it was dark, but street lit when a car collided with the rear of two cars that were held up in traffic waiting to go. This left the driver and two passengers of the car who hit the rear of the other two cars as well as the driver of one of the stationary vehicles with slight injuries.

3.6.18 There were no clusters of three or more collisions recorded and therefore no indication that the collisions at this junction occurred due to common factors with the road or junction geometry.

Figure 9. Collisions at Brantings Roundabout



PIC Summary

3.6.19 A review of the recorded traffic collisions resulting in personal injury has been undertaken for the most recently available five full years (2018 – 2022) as well as the first half of 2023. The study area consists of residential roads as well as two roundabouts, one that connects the A50 and A46 to residential areas.

3.6.20 There were 11 recorded collisions in total, all of which were 11 slight collisions. The analysis of the record does not show any clear common trends hence the existing highway layout is not considered to form any safety concerns likely to be exacerbated as a result of the development proposals.

3.7 Summary

3.7.1 The above demonstrates that the site is in a sustainable location within walking and cycling distance of the local services and amenities given its close proximity to central Ratby (Main Street). The site also benefits from nearby bus services with frequent services to Leicester where the majority of trip demand outside of Ratby is located.

4 Development and Access Proposals

4.1.1 The development is understood to form an outline planning application (with all matters reserved apart from access) for a phased, mixed-use development comprising about 470 dwellings (Use Class C3) or, in the alternative, up to about 450 dwellings and care home (Use Class C2). Provision of land for community hub (Use Class F2); provision of land for 1FE primary school (Use Class F1); and associated operations and infrastructure including but not limited to site re-profiling works, sustainable urban drainage system, public open space, landscaping, habitat creation, internal roads/routes, and upgrades to the public highway.

4.1.2 It is proposed that there will be three points of vehicle access to the site. The primary site accesses will be made via simple priority junctions off of Markfield Road and Desford Lane, with a third access via an extension from Phase 1 into parcel D.

4.2 Markfield Road Access (Phase 2 Access)

4.2.1 It is proposed that vehicle access to the site would be achieved through Phase 2 via an extension to the spine road accessed from the proposed simple priority junction off Markfield Road, which forms part of approved Outline Planning Application 22/00648/OUT. The access off Markfield Road has been designed with a 5.5m wide access and 6m radii. However, this access will widen to 6.75m within the Phase 2 land. **Drawing 109003-PEF-ZZ-XX-DR-TP-00009-S2-P01** shows the proposed access leading from the Phase 2 development area.

4.2.2 A 2m wide footway will also be implemented along the southern side of Markfield Road to link with existing infrastructure proposed as part of as part of planning approval 20/00462/FUL, which is currently being built out. Planning approval site 22/00648/OUT will also link into the proposed shared footpath/cycle-path as part of planning approval 20/00462/FUL.

4.2.3 The site access design and speed measures at Markfield Road have been subject to an independent Stage 1 (S1) Road Safety Audit (RSA) which was approved as part of application 22/00648/OUT. This can be seen in **Appendix B**. It is understood that a Stage 2 RSA has since been submitted and is subject to design approval.

4.2.4 Planning approval site 22/00648/OUT will also link into the proposed shared footpath/cycle-path as part of planning approval 20/00462/FUL (extract shown in **Figure 10**).

Figure 10. Adjacent Approval Western Footpath Route (Extract)

4.2.5 A new 3m wide shared footpath/cycle-path will also be provided as part of planning approval 22/00648/OUT, formalising the existing informal east/west link from PROW R50 towards National Cycle Route 63.

4.2.6 It should be noted that be noted that while there will be an intensification of use of this access, based on the development proposals and size of development with additional access points including the main spine road continuing to Desford Road, the existing proposals for the Phase 2 access spine road are considered sufficient.

4.3 Desford Road Access

4.3.1 It is proposed that there will be a second vehicle access to the south of the site, via an extension to the existing access from Desford Lane adjacent to Pear Tree Office Park.

4.3.2 The existing 6.75m wide access forms a simple priority junction onto Desford Lane, in line with Residential Access Road specification within LCC Highway Design Guide as shown in **Drawing 109003-PEF-ZZ-XX-DR-TP-00001**.

4.3.3 The existing 2m wide footway on the eastern side of the access will be widened to 3m to form a shared footway/cycleway and will also link in with the proposed infrastructure as part of approved planning application 21/01295/OUT.

4.4 Phase 1 Access

4.4.1 It is proposed that there will be an additional vehicle access into Parcel D north-east of the site, via an extension to the existing access from the Phase 1 development as part of approved planning application 20/00462/FUL currently being built out.

4.4.2 The existing 5.5m wide access forms a priority junction with ghost island arrangement off Markfield Road, with the proposals forming an extension to the southern end into the site as shown in **Drawing 109003-PEF-ZZ-XX-DR-TP-00008.**

4.5 Internal Spine Road (Including Phase 2 Access), Active Travel & Phasing

4.5.1 The internal spine road will form a 5.5m road from the northern access off Markfield Road and a 6.75m wide road from the southern access. At an appropriate position, likely within the Phase 2 development, a transition will be implemented. This spine road should result in a betterment in terms of traffic volumes along Main Street through central Ratby swell as other local roads in the area. However, this will be confirmed as part of the subsequent PRTM/modelling exercise.

4.5.2 Burroughs Road will form the primary active travel corridor into the proposed development site from central Ratby (Main Street) where most of the facilities and amenities are located. It is proposed that immediately to the west of the playing fields access on the southern side of the road near the Plough Inn, a new turning head is implemented and the remaining section is stopped up to motor traffic as shown in **Drawing 109003-PEF-ZZ-XX-DR-TP-00007**.

4.5.3 To the west of the Plough Inn and Playing Fields and adjacent parking (access to be maintained), Burroughs Road will form a shared footway/cycleway which will be overlooked with light spillage from adjacent development (it is proposed to maintain the existing form of Burroughs Road). Where Burroughs Road adjoins to the proposed spine road, a new junction will be formed with access to Burroughs Road west being maintained towards the existing farm and woodland. The This is shown indicatively in **Drawing 109003-PEF-ZZ-XX-DR-TP-00002**.

4.5.4 Pedestrian and cyclist trips will disburse across the site from the spine road which benefits from a 3m wide shared footway cycleway extending from the southern access from Desford Lane north past Burroughs Road and the proposed School. Onward connections are then available to individual parcels through the site.

4.5.5 It is proposed that a testing scenario for phasing is made before the full spine road is built out with development concentrated primarily in the south of the site of Desford Lane first with some development off Markfield Lane. This is discussed further later within this report.

4.5.6 It has also been agreed with LCC that as the Markfield Road accesses form approved applications which have been/are subject to the RSA process, and the Desford Lane access forming an existing access, no RSA is required of the accesses as part of this outline application.

4.6 Parking Provision

4.6.1 The proposed development is within the Hinckley and Bosworth Local Authority area. Hinckley and Bosworth Bough Council's (HBBC) good design guide published in February 2020 and local plan sets out that parking standards should follow in line with those set out within LCC's Highway Design Guide sets out the parking guidance for the county.

4.6.2 The relevant parking guidance is subsequently set out in **Table 5**.

Table 5. Parking Guidance (Minimum)

Bedrooms	LCC Highway Design Guide (Spaces)	NWLDC Good Design (Spaces)
4+	3	3
3 or less	2	2

4.6.3 The design guidance also strongly encourages developers to provide additional unallocated parking for visitors and overflow.

4.6.4 It is anticipated that on-site parking will be provided in line with local standards to ensure there is no overspill onto the local public highway network. Cycle parking can also be provided within the curtilage of dwellings in secure covered areas (i.e. sheds/garages etc.).

4.6.5 The exact level of parking will be considered as part of future reserved matters applications.

4.7 Servicing

4.7.1 Refuse vehicle will enter the site via an extension to the existing Desford access and approved phase 2 access from Markfield Road. It should be noted that refuse vehicle movements will be infrequent in nature and likely undertaken outside of peak highway periods.

4.7.2 Appropriate turning heads will be provided within the site to ensure a refuse vehicle can successfully and safely manoeuvre within the site.

4.8 Sustainable Travel Measures

4.8.1 In order to promote and encourage sustainable travel to/from the site, one Travel Pack per dwelling at an assumed cost of £52.85 each, along with two six-month bus passes at an assumed average cost of £360 per pass will be offered and available for new residents. The assumed costs are based on the agreed S106 costs for the approved Phase 2.

4.8.2 There may also be the potential to improve the nearby bus stops to the development, as well as upgrading connecting PROW routes where practical.

5 Trip Generation, Distribution and Assignment

5.1 Introduction

5.1.1 To quantify the impact of the proposed development on the local transport system, the number of person trips for all modes of transport that are likely to be generated by the development should be calculated.

5.1.2 The development proposals for the site is for approximately 450 dwellings with a care home or 470 dwellings without and 1FE primary school, which has been agreed with the Local Education Authority. However, for the purpose of the following assessment which will be used in the subsequent PRTM assessment once undertaken as agreed with LCC. As a robust assessment, the trip generation analysis is based off a total of up to 509 dwellings and a 2FE primary school.

5.2 Residential Vehicle Trip Generation

5.2.1 Following discussions with LCC, it was agreed that the trip rates used within the 21/01295/OUT would be used for the purposes of this assessment. These trip rates are higher than the adjacent (20/00462/FUL) and other nearby (20/01283/FUL) approved sites off Markfield Road and therefore, represent a robust worst-case assessment.

5.2.2 **Table 6** shows the approved residential trip rates and subsequent trip generation for the proposed development.

Table 6. Residential Trip Rates and Generation

Time Period	Vehicle Trip Rates (Per Dwelling)			Traffic generation (509 Dwellings)		
	Arrival	Departure	Two-way	Arrival	Departure	Two-way
AM Peak (08:00 – 09:00)	0.175	0.455	0.630	89	232	321
PM Peak (17:00 – 18:00)	0.440	0.218	0.658	224	111	335

5.2.3 As shown in **Table 6**, the proposed development could be expected to generate up to a total of 321 two-way vehicle trips during the AM highway peak and 335 two-way vehicle trips in the PM peak hour.

5.3 Modal Split

5.3.1 To provide a more accurate representation of the existing and forecast modal split anticipated at the development site, the Census Journey to Work data for people traveling to work within the 'Hinckley and Bosworth 003' Middle Super Output Area has been analysed.

5.3.2 The method of travel data to work for the 2011 Census has been examined and modal splits calculated, the results are summarised below in **Table 7**.

Table 7. Method of Travel to Work

Method of Travel to Work	Modal Split
Car Driver	73%
Walking	8%
Bus	8%
Car Passenger	7%
Cycle	3%
Motorbike	1%
Total	**100%**

5.3.3 **Table 7** indicated that currently 8% of trips from the site could be made using public transport and 11% by walking and cycling.

5.4 Person Trip Generation

5.4.1 The modal splits outlined in **Table 7** have been combined with the vehicle trip generation in **Table 6** to calculate the two-way person trip associated with the proposed development, shown in **Table 8**.

Table 8. Multi-modal Trip Generation

Time Period	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)		
	Arrival	Departure	Two-way	Arrival	Departure	Two-way
Car Driver (Residential)	89	232	321	224	111	335
Car Driver (School)	79	67	146	3	5	8
Walking	10	25	35	25	12	37
Bus	10	25	35	25	12	37
Car Passenger	9	22	31	21	11	32
Cycle	4	10	14	9	5	14
Motorbike	1	3	4	3	2	5
Total	**123**	**317**	**440**	**307**	**153**	**460**

5.4.2 Overall, it is anticipated that there could be approximately 105 additional two-way sustainable trips (walking/cycle/public transport/car passengers) during the AM peak and 111 in the PM highway peak periods.

5.4.3 Subsequently, the existing nearby infrastructure and facilities are considered sufficient to accommodate the anticipated increased level of users. The site is also located in close proximity to a range of key services and amenities to enable walking/cycle journeys.

5.5 Off-Site Primary School Vehicle Trip Generation

5.5.1 **Table 9** shows the primary school trip rates and subsequent trip generation for the proposed primary school. It is assumed that one form is to serve the proposed site, all of which will be served by sustainable trips internally or as part of an onward (residential arrival/departure related). The other form of the school is to serve the wider area which is shown below.

Table 9. Primary School Trip Rates and Generation

Time Period	Vehicle Trip Rates (Per Pupil)			Traffic generation (210 off-site Students)		
	Arrival	Departure	Two-way	Arrival	Departure	Two-way
AM Peak (08:00 – 09:00)	0.375	0.319	0.694	79	67	146
PM Peak (17:00 – 18:00)	0.013	0.024	0.037	3	5	8

5.5.2 As shown in **Table 9**, the proposed primary school could be expected to generate up to a total of 146 two-way vehicle trips during the AM highway peak and 8 two-way vehicle trips in the PM peak hour.

5.6 Total Off-Site Vehicle Trip Generation

5.6.1 The residential trip generation for car drivers shown in **Table 8** has been combined with the vehicle trips associated with the primary school in **Table 9** to calculate the total off-site vehicle trip generation from the proposed development, shown in **Table 10**.

Table 10. Total Off-Site Vehicle Trip Generation

Time Period	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)		
	Arrival	Departure	Two-way	Arrival	Departure	Two-way
Car Driver	168	299	467	227	116	343

5.6.2 As shown in **Table 10**, the proposed development could expect to generate up to 467 two-way car driver trips in the AM peak and 343 two-way car driver trips in the PM peak.

5.7 Traffic Impact

5.7.1 As part of the traffic impact assessment of the development, discussions were undertaken with LCC and Leicestershire's NDI team to utilise the Pan-Regional Transport Model (PRTM) to forecast the anticipated traffic volumes on the road network. Its outputs need to be converted to a format that can be applied to understanding the traffic impacts at a local level. The methodology / inputs for the PRTM were agreed with LCC as part of the PRTM process.

5.7.2 The following modelling runs and scenarios were agreed:

- 2024 Base
- 2028 Base
- 2028 Base + Development (interim scenario)
- 2031 Future Year
- 2031 Future + Development (full build out including spine road)

5.7.3 The interim 2028 scenario is to form 250 dwellings (with 50 to be accessed north from the Phase 2 development and 200 south off the Desford Lane access). It is assumed that the spine road (and new school) is not required in this scenario and therefore, subject to successful, will demonstrate that this build out can be occupied prior to any requirement for the spine road.

5.7.4 Once the PRTM modelling has been completed, the study area will be defined and then subsequently the assessment scenarios and the junctions to undertake detailed assessments of local junctions which will then be undertaken.

5.7.5 The PRTM modelling is in progress and an addendum report will be prepared to detail the assessment work and associated highway impacts and any necessary mitigation.

6 Summary and Conclusions

6.1.1 Pell Frischmann (PF) has been instructed by Lagan Homes (the Client) to provide highways and transport advice and prepare a Transport Assessment (TA) report to support an outline planning application (with all matters reserved apart from access) for a phased, mixed-use development comprising about 470 dwellings (Use Class C3) or, in the alternative, up to about 450 dwellings and care home (Use Class C2). Provision of land for community hub (Use Class F2); provision of land for 1FE primary school (Use Class F1); and associated operations and infrastructure including but not limited to site re-profiling works, sustainable urban drainage system, public open space, landscaping, habitat creation, internal roads/routes, and upgrades to the public highway.

6.1.2 The development is located in a sustainable location in close proximity to central Ratby, with good levels of walking, cycling and public transport provision. The site also benefits from nearby bus services with frequent services to Leicester where the majority of trip demand outside of Ratby is located. Consequently, under the guidelines set out in the National Planning Policy Framework, the proposals represent sustainable development.

6.1.3 The collision analysis indicates that the existing highway layout that surrounds the proposed development is acceptable. Hence, no highway safety specific mitigation measures should be required to any off-site junctions to accommodate the additional demand of the traffic generated by the site. Once the PRTM study area has been defined, the PIC data will be reviewed in further detail.

6.1.4 It is proposed that vehicle access to the site would be achieved through Phase 2 via an extension to the spine road accessed from the proposed simple priority junction off Markfield Road, which forms part of approved Outline Planning Application 22/00648/OUT. The access off Markfield Road has been designed with a 5.5m wide access and 6m radii. However, this access will widen to 6.75m within the Phase 2 land. A 2m wide footway will also be implemented along the southern side of Markfield Road to link with existing infrastructure proposed as part of as part of planning approval 20/00462/FUL, which is currently being built out. Planning approval site 22/00648/OUT will also link into the proposed shared footpath/cycle-path as part of planning approval 20/00462/FUL.

6.1.5 It is proposed that there will be a second vehicle access to the south of the site, via an extension to the existing 6.75m access from Desford Lane adjacent to Pear Tree Office Park. The existing access forms a simple priority junction onto Desford Lane. The existing 2m wide footway on the eastern side of the access will be widened to 3m to form a shared footway/cycleway and will also link in with the proposed infrastructure as part of approved planning application 21/01295/OUT. It is proposed that there will be an additional vehicle access into Parcel D north-east of the site, via an extension to the existing access from the Phase 1 development as part of approved planning application 20/00462/FUL currently being built out.

6.1.6 Burroughs Road will form the primary active travel corridor into the proposed development site from central Ratby (Main Street) where most of the facilities and amenities are located. It is proposed that immediately to the west of the playing fields access on the southern side of the road near the Plough Inn, a new turning head is implemented and the remaining section is restricted to non-motorised traffic. Within the site access will be maintained to the west for the remaining section of Burroughs Road off the spine Road.

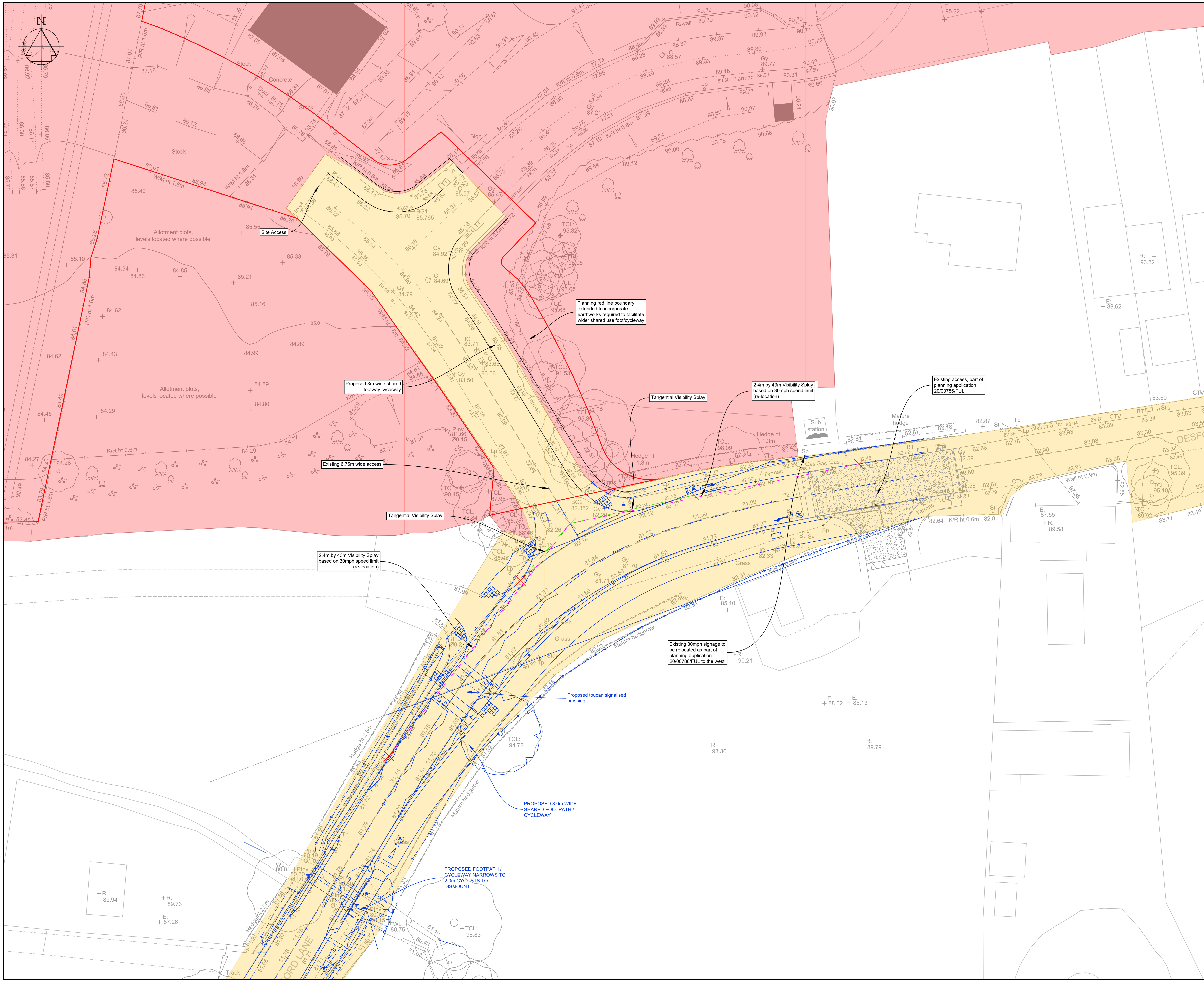
6.1.7 Pedestrian and cyclist trips will disburse across the site from the spine road which benefits from a 3m wide shared footway cycleway extending from the southern access from Desford Lane north past Burroughs Road and the proposed School. Onward connections are then available to individual parcels through the site.

6.1.8 It is anticipated that on-site parking will be provided in line with local standards to ensure there is no overspill onto the local public highway network. Cycle parking can also be provided within the curtilage

of dwellings in secure covered areas (i.e. sheds/garages etc.). However, the exact level of parking will be considered as part of future reserved matters applications.

6.1.9 A Traffic Impact Assessment is being undertaken using LCC's Pan-Regional Transport Model (PRTM) to understand the traffic impacts at a local level. Once complete, the PRTM will identify the study area, the assessment scenarios and the junctions to undertake detailed assessments of local junctions. The PRTM modelling is in progress and an addendum report will be prepared to detail the assessment work and associated highway impacts and any necessary mitigation.

Drawings



GENERAL NOTES

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Key:
- Highway Boundary
- Land Ownership
- Planning Application 21/01295/OUT
- Red Line Application Boundary

REV	DESCRIPTION	DRN	CHK	APP	DATE
P03	UPDATED SITE BOUNDARY	SP	LT	CH	28.05.24
P02	PLANNING REDLINE BOUNDARY ADDED	JN	LDH	LDH	15.04.24
P01	FIRST ISSUE	SP	LT	LT	08.03.24

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Architect/Client/Contractor
LAGAN HOMES

Project
RATBY PHASES 3 & 4 OUTLINE

Drawing Title
DESFORD LANE SITE ACCESS DRAWING

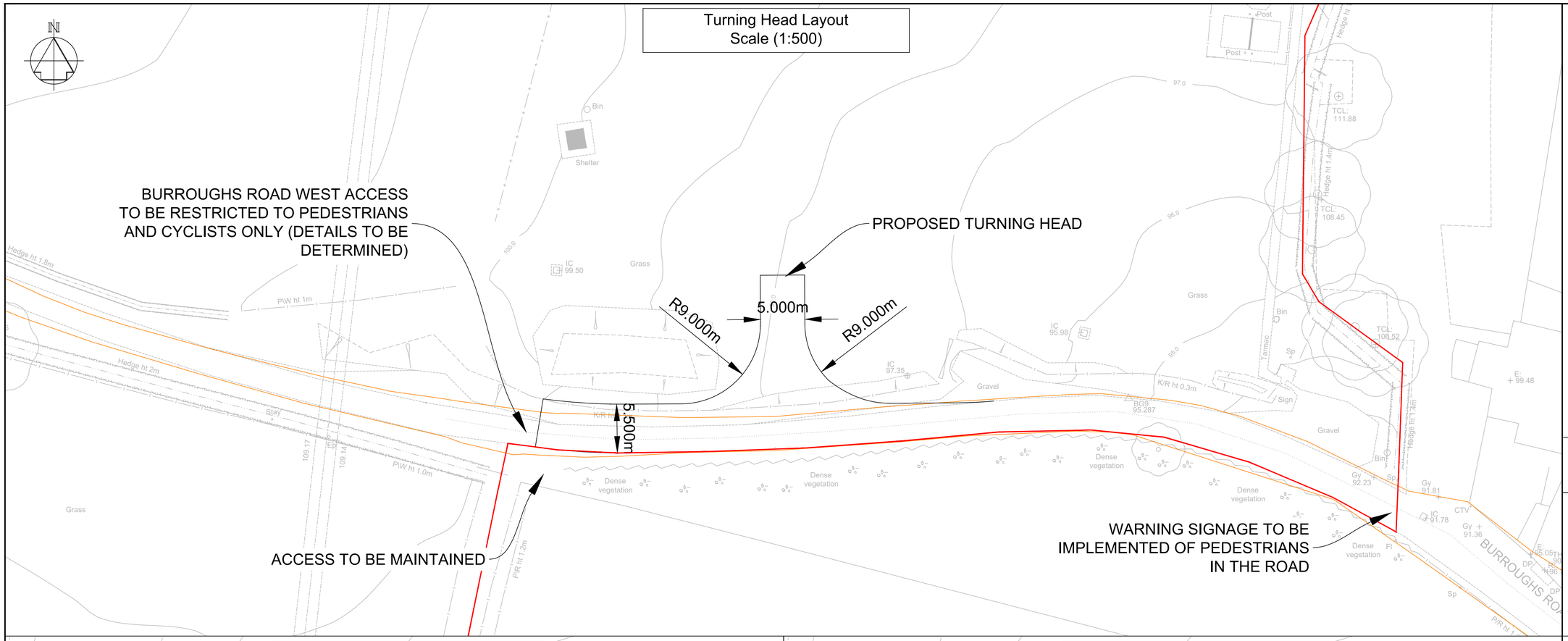
Drawing Status
PRELIMINARY

	Name	Date
Drawn	S.PAOLI	08.03.24
Designed	S.PAOLI	08.03.24
Eng Chk	L.THOMAS	08.03.24
Approved	L.THOMAS	08.03.24

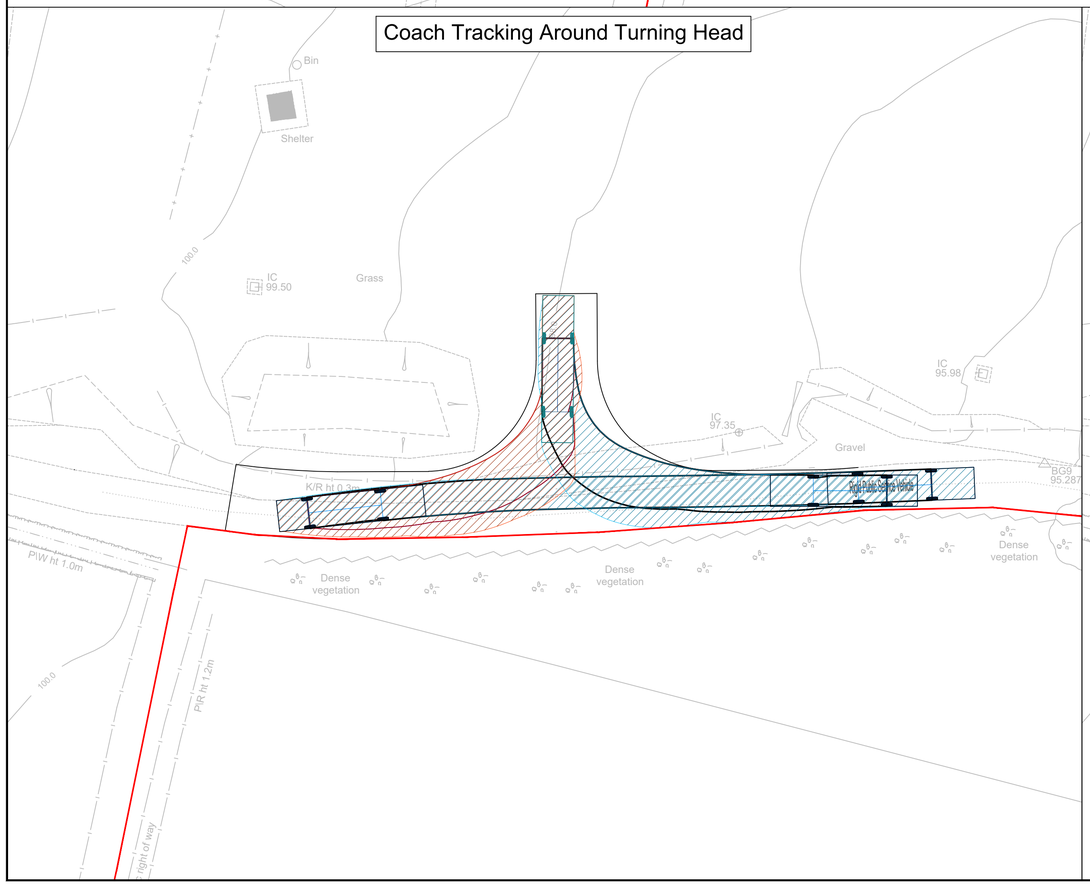
Status Code: S2
Scale: 1:250
Revision: P03

Drawing No.
109003 - PEF - ZZ - XX - DR - TP - 00001

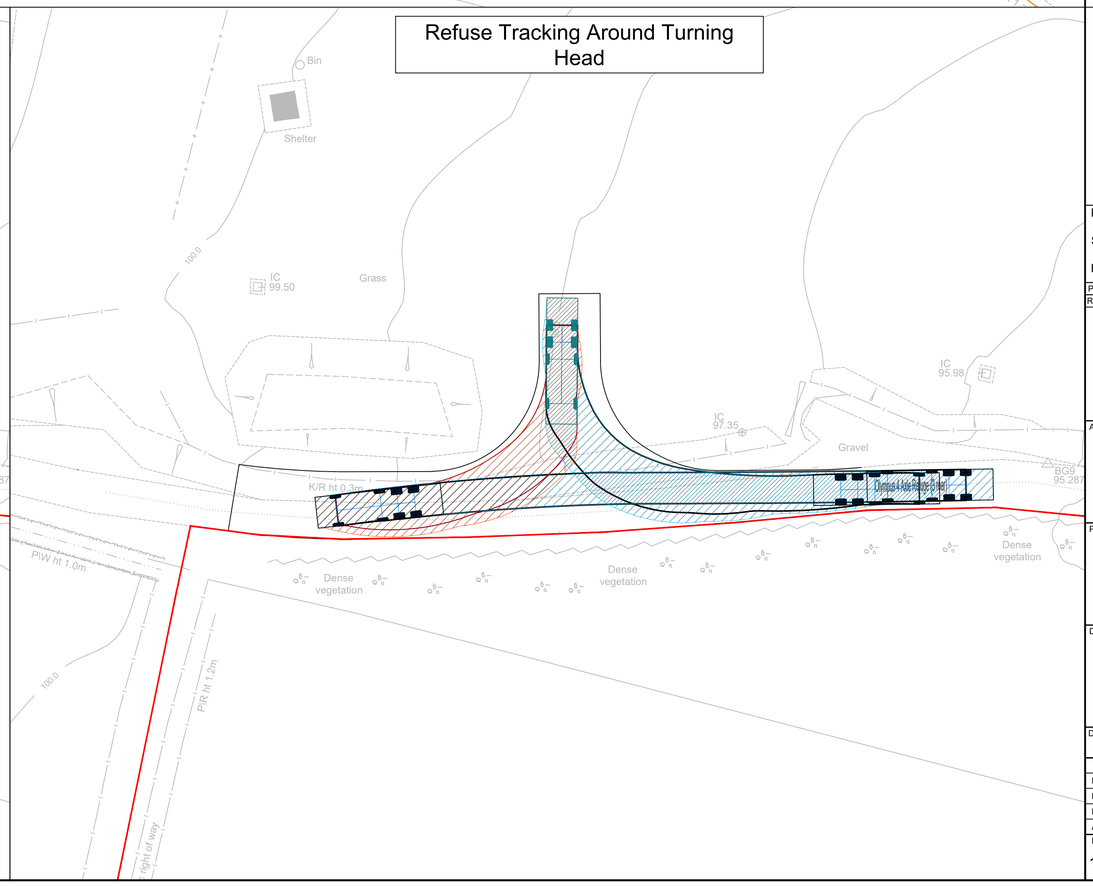
Turning Head Layout
Scale (1:500)



Coach Tracking Around Turning Head



Refuse Tracking Around Turning Head



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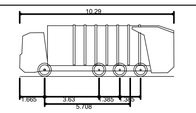
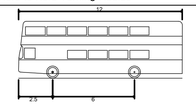
KEY:

SITE BOUNDARY

HIGHWAY BOUNDARY



Olympus 4 Axle Refuge (3 rear)	
Overall Length	10.290m
Overall Width	2.530m
Overall Body Height	3.450m
Min Body Ground Clearance	0.250m
Track Width	2.530m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	11.200m



Rigid Public Service Vehicle	
Overall Length	12.000m
Overall Width	2.550m
Overall Body Height	4.173m
Min Body Ground Clearance	0.344m
Track Width	2.550m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	10.500m

KEY:

SITE BOUNDARY

HIGHWAY BOUNDARY

REV	DESCRIPTION	DRN	CHK	APP	DATE
P01	FIRST ISSUE	SP	LT	CH	28.05.24

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Architect/Client/Contractor

LAGAN HOMES

Project

RATBY PHASE
3 & 4
OUTLINE

Drawing Title

PROPOSED TURNING HEAD WITH ASSOCIATED TRACKING

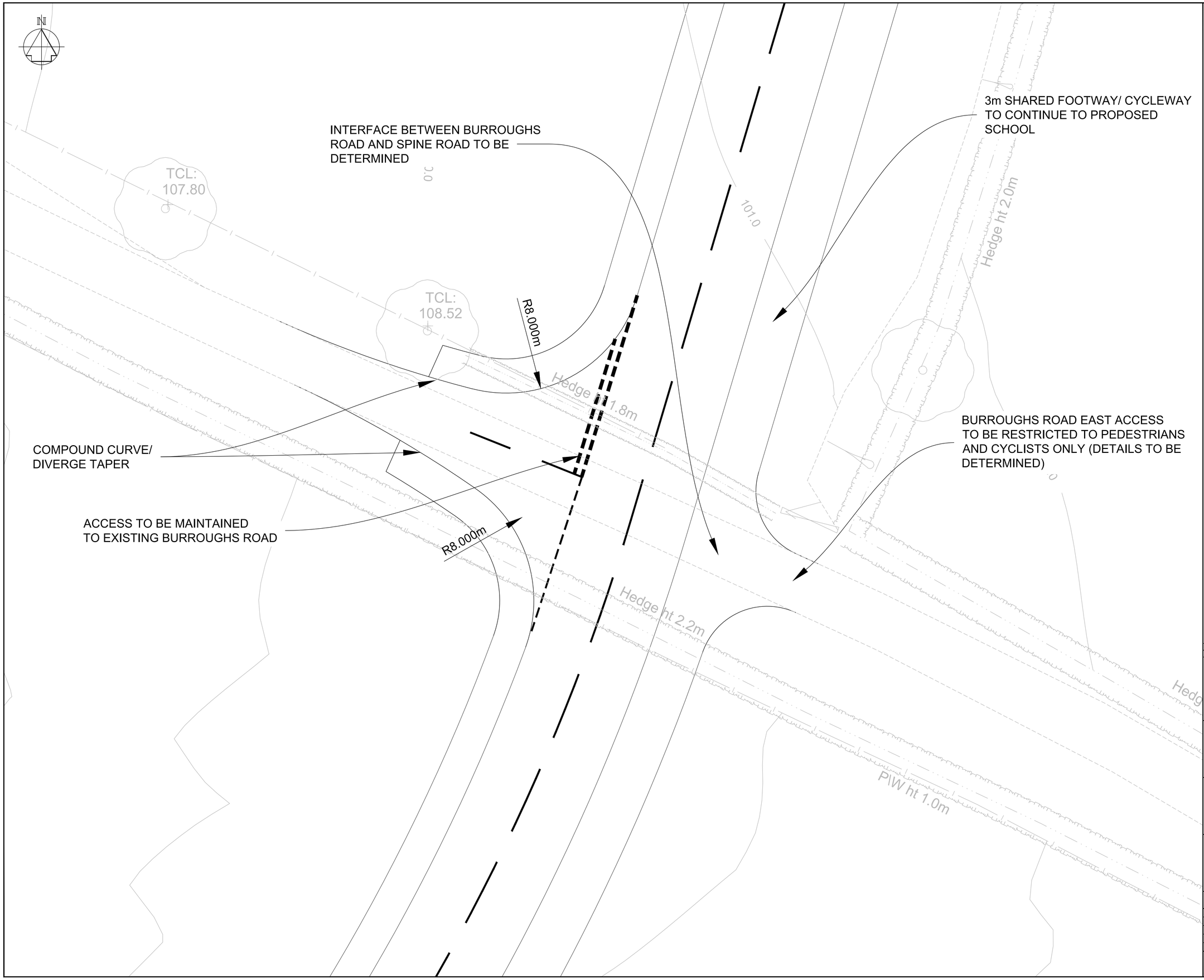
Drawing Status

PRELIMINARY

	Name	Date	
Drawn	S. PAOLI	28.05.24	Status Code S2
Designed	S. PAOLI	28.05.24	Scale AS SHOWN
Eng Chk	J.FARRELL	28.05.24	Revision P01
Approved	C. HOLLOWAY	28.05.24	

Drawing No.

109003 - PEF - ZZ - XX - DR - TP - 00007



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REV	DESCRIPTION	DRN	CHK	APP	DATE
P01	FIRST ISSUE	SP	LT	CH	02.05.24

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Architect/Client/Contractor

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RATBY PHASE 3 & 4 OUTLINE

Drawing Title

BURROUGHS ROAD INTERNAL ACCESS DESIGN

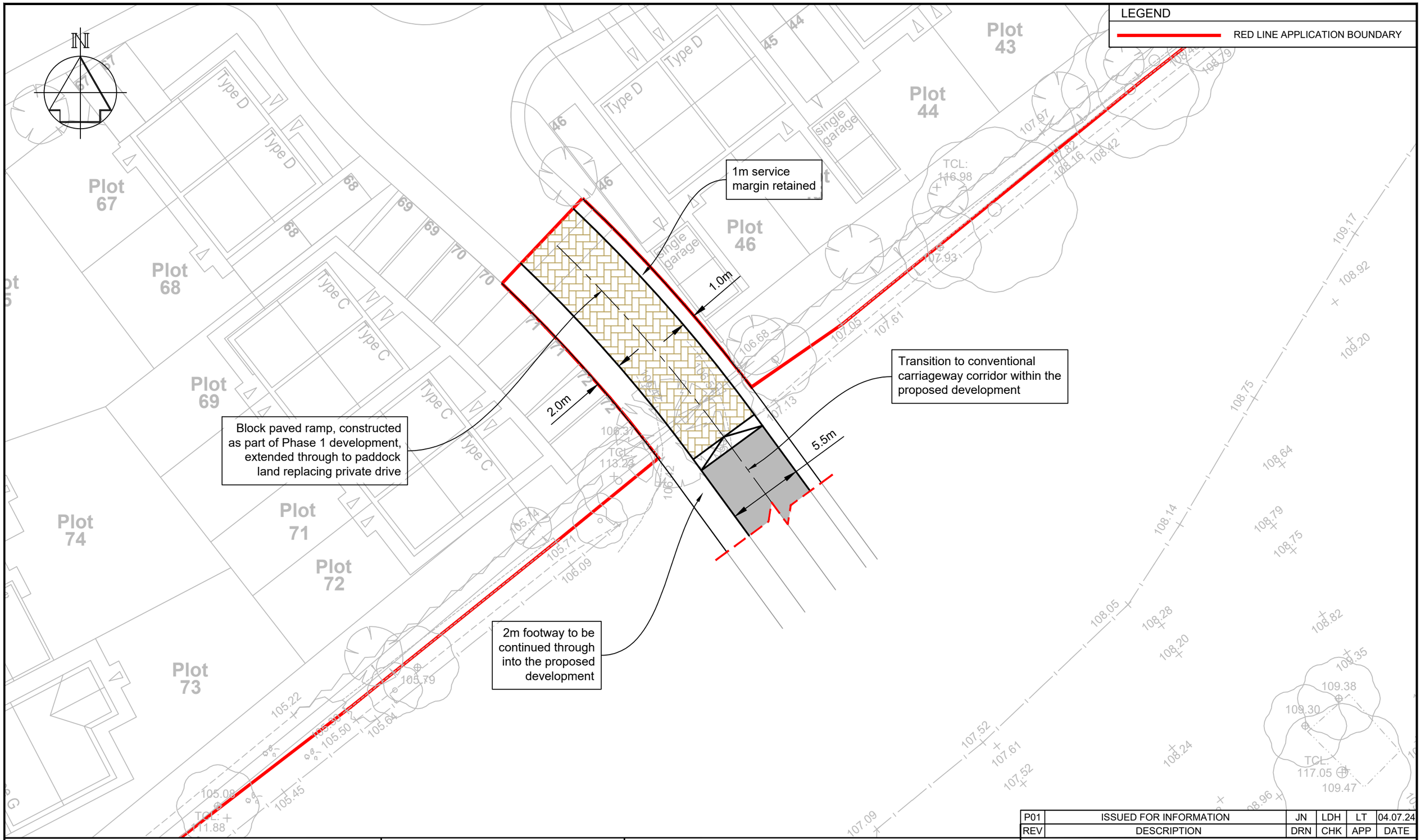
Drawing Status

PRELIMINARY

	Name	Date	Status Code
Drawn	S. PAOLI	02.05.24	S2
Designed	S. PAOLI	02.05.24	Scale 1:100
Eng Chk	L. THOMAS	02.05.24	Revision P01
Approved	C. HOLLOWAY	02.05.24	

Drawing No.

109003 - PEF - ZZ - XX - DR - TP - 00002



REV	DESCRIPTION	DRN	CHK	APP	DATE
P01	ISSUED FOR INFORMATION	JN	LDH	LT	04.07.24

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LAGAN HOMES

Project

RATBY PHASES
3 & 4 OUTLINE

Drawing Title

PHASE 1
SITE ACCESS DRAWING
(FUTURE PHASE)

Drawing Status

FOR INFORMATION

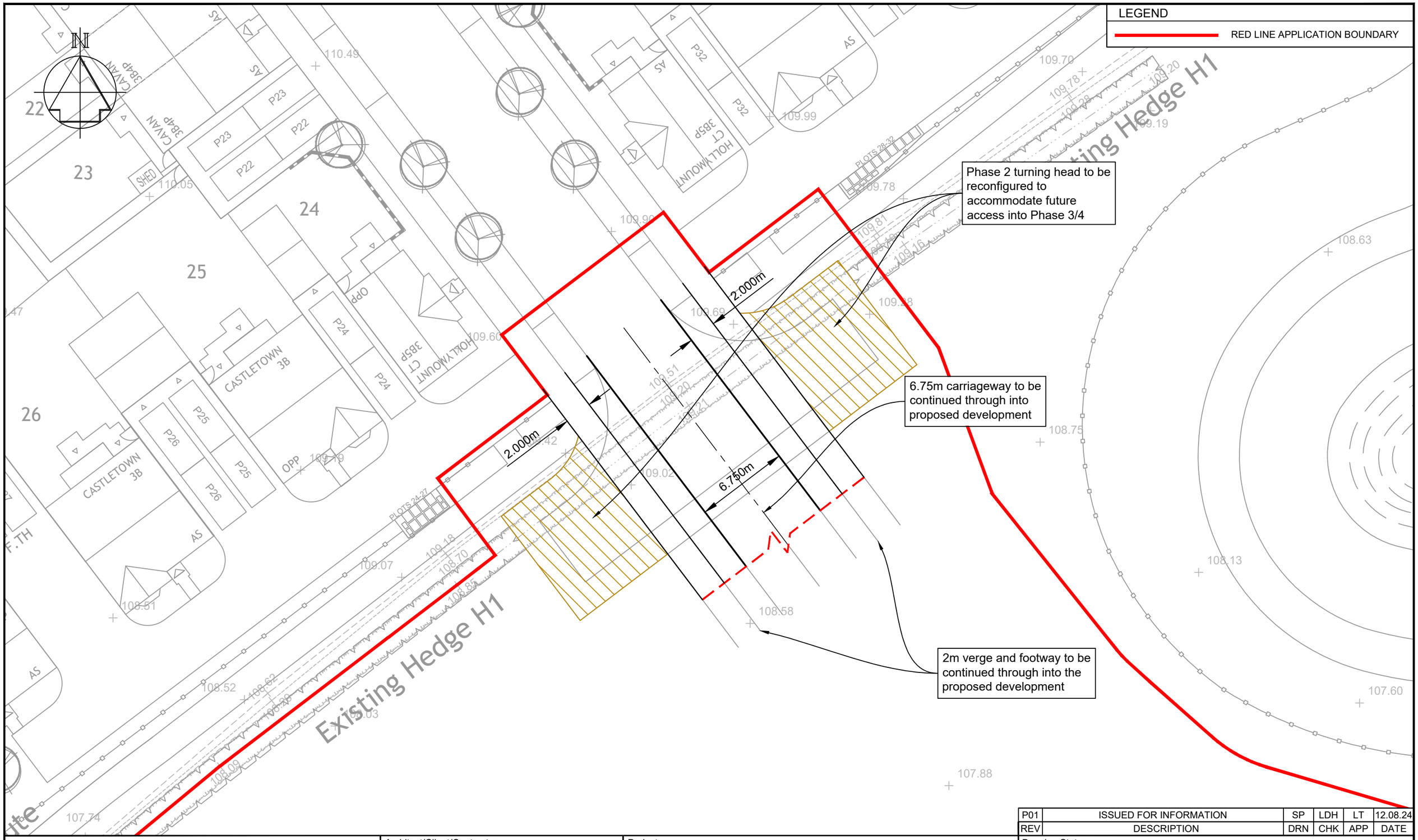
	Name	Date
Drawn	J.NICHOLSON	JULY 24
Designed	J.NICHOLSON	JULY 24
Eng Chk	L.HULKA	JULY 24
Approved	L.THOMAS	JULY 24

Status Code: S2

Scale: 1:250

Revision: P01

Drawing No.
1090003 - PEF - ZZ - XX - DR - TP - 00008



REV	DESCRIPTION	DRN	CHK	APP	DATE
P01	ISSUED FOR INFORMATION	SP	LDH	LT	12.08.24

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Architect/Client/Contractor

LAGAN HOMES

Project

RATBY PHASES
3 & 4 OUTLINE

Drawing Title

PHASE 2
SITE ACCESS DRAWING
(FUTURE PHASE)

Drawing Status

FOR INFORMATION

	Name	Date
Drawn	S. PAOLI	12.08.24
Designed	S. PAOLI	12.08.24
Eng Chk	L.HULKA	12.08.24
Approved	L.THOMAS	12.08.24

Status Code: S2

Scale: 1:250

Revision: P01

Drawing No.
1090003 - PEF - ZZ - XX - DR - TP - 00009

Appendix A: Concept Masterplan

MARTINSHAW WOOD
MARKFIELD ROAD
HOUSING UNDER CONSTRUCTION (20/00462/FUL)
PEARTREE WOOD
OUTLINE PLANNING CONSENT (HOUSING) REF 22/00648/OUT
STAMFORD STREET
RATBY
BURROUGHS ROAD
COMMUNITY HUB
EXTRA CARE/ CARE HOME
PRIMARY SCHOOL
RATBY PRIMARY SCHOOL
EXISTING SCHOOL LAND
PEAR TREE BUSINESS PARK
WIRLYBONES WOOD
ALLOTMENTS
RATBY MEDICAL CENTRE

Scale: 1:1250 @ A1
0 25 50 75 100 125m

- Site Boundary
- Existing Context Buildings
- Residential
- Primary School
- Community Hub
- Extra Care/Care Home
- Section of Burrough's Road for Pedestrian/Cycle Access Only
- Green Infrastructure
  Includes: Retained hedgerows, trees and watercourses, new woodland,hedgerows, tree planting, play, grassland, drainage basins and recreational routes.
- Existing Vegetation
- New Planting & Green Space
- Play Areas
- Drainage Basins
- Additional Pond
- Recreation Routes
  [Indicative Locations]
- Existing Public Rights of Way

NOTES

The Illustrative Masterplan demonstates how the detailed layout of development blocks, streets, buildings and green space could come forward based upon the land use areas defined Development Framework Plan. Rather than identifying individual plots for 450-470 houses - which is a matter for the detailed reserved matters stage - the masterplan represents the design approaches envisaged to include the general arrangement of buildings and building frontages.

N

\\FPCR-FS-01\Projects2\10700\10783\LANDS\Drawings\Illustrative Masterplan\10783-FPCR-XX-XX-DR-L-0013-P04-Illustrative Masterplan.indd

Lagan Homes Ltd
(Burrough Field) Land West of Ratby
Leicestershire

ILLUSTRATIVE MASTERPLAN

1:1250 @ A1
10 July 2024 SJL / BC
10783-FPCR-XX-XX-DR-L-13 rev. P04

masterplanning
environmental assessment
landscape design
urban design
ecology
architecture
arboriculture

FPCR Environment and Design Ltd
Lockington Hall
Lockington
Derby DE74 2RH

t: 01509 672772
e: mail@fpcr.co.uk
w: www.fpcr.co.uk

Appendix B: Stage 1 Road Safety Audit & Design Response

safer roads for everyone

Markfield Road, Ratby, Leicestershire

Road Safety Audit Stage 1
Revised

on behalf of Pell Frischmann

TMS reference no: 17530

Date: 18th January 2023

THE CHARTERED INSTITUTION OF HIGHWAYS & TRANSPORTATION

INSTITUTE OF HIGHWAY ENGINEERS

QMS ISO 9001 REGISTERED

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Coventry, CV3 2TX

Tel: +44 (0)24 7669 0900
Email: info@tmsconsultancy.co.uk
Web: www.tmsconsultancy.co.uk

Markfield Road, Ratby, Leicestershire

Revised Road Safety Audit Stage 1

1. Introduction

1.1 This report describes a Revised Stage 1 Road Safety Audit carried out on a proposed new residential development access, with footway link, off of Markfield Road, Ratby, Leicestershire, on behalf of Pell Frischmann. The audit was carried out on Tuesday 17th January 2023 in the offices of TMS Consultancy.

1.2 The audit team members were as follows:

Audit Team Leader

Richard Marriott – CertEd, FCIHT, MSoRSA
Highways England Approved RSA Certificate of Competency
Road Safety Engineer, TMS Consultancy

Audit Team Member

Neal Roderick – BEng (Hons), MCIHT
Highways England Approved RSA Certificate of Competency
Engineer, TMS Consultancy

1.3 The audit comprised an examination of the documents listed in **Appendix A**. The Road Safety Audit was undertaken in accordance with the Brief provided by Lewis Thomas of Pell Frischmann.

1.4 The site was visited by the Audit Team on Thursday 13th October 2022 at 1pm. The weather was clear. Traffic flows were very low. Pedestrian and cycle flows were not observed.

1.5 The terms of reference of the Road Safety Audit are as described in GG 119. The team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the design to any other criteria.

1.6 All of the problems described in this report are considered by the audit team to require action in order to improve the safety of the scheme and minimise collision occurrence.

1.7 A scheme drawing is included in **Appendix B**, where the locations of specific problems are referenced. A location plan of the scheme is also included in this Appendix.

1.8 The scheme consists of a proposed new residential development access off Markfield Road to replace existing farm / construction access, complete with 2m wide footway link to tie into adjacent application. The proposed development access on Markfield Road is subject to a 60MPH speed limit, the remainder of Markfield Road has a speed limit of 30MPH which is identified by a system of street lighting spaced not more than 183 metres apart as per Section 82(1)(a) of the Road Traffic Regulation Act 1984 (RTRA 1984).

1.9 **Road Safety Audit Response Report**

Following the completion of the road safety audit, the design team should prepare a road safety audit response report in collaboration with the Overseeing Organisation.

The response report should incorporate the following:

- **Decision Log** spreadsheet, where each Problem and Recommendation in the Safety Audit report is reiterated
- In the Decision Log, a response should be provided by the Design Team and Overseeing Organisation for each problem raised in the RSA report, together with an agreed action

Further information is provided in **GG 119 Sections 4.11 to 4.19** and **Appendix F** (where a road safety audit response report template is available).

The response report should be produced and finalised within *one month* of the issue of the RSA report. A copy of the response report should be issued to the Safety Audit Team for information.

2. Items resulting from this Stage 1 Audit

2.1 PROBLEM

Location – Left hand visibility splay east of proposed access

Summary: Increased risk of pull-out type collisions

The left-hand visibility splay at the junction for drivers waiting at the give-way line is likely to be obstructed by existing vegetation and street furniture. This could result in pull-out type collisions if road users fail to see approaching vehicles in time.

Left hand visibility splay obstructed by hedge and signs

RECOMMENDATION

The hedge should be cut back, and the signage relocated so that an unobstructed junction visibility splay, that is appropriate for the speed of approaching vehicles, can be achieved.

2.2 PROBLEM

Location – Proposed development access

Summary: Increased risk of collisions due to inappropriate speeds

The new drawing sheet 06232 PEF ZZ XX DR TP 000004 provided shows the proposed installation of physical / raised traffic calming measures with various spacing ranging from 90m to 150m between each measure. These distances may increase road users speed significantly with road users on approach to the measure having to brake suddenly / harshly possibly contributing to rear end shunt type collisions.

RECOMMENDATION

As per the current guidance for the installation of physical traffic calming measures within a 30MPH speed limit, LTN 1/07 recommends 60-90m spacing between each hump / cushion.

OBSERVATION

At detailed design stage the installation of additional street lighting columns and relevant signage to warn road users of raised traffic calming measures should be included.

3. Audit Team Statement

We certify that the terms of reference of the road safety audit are as described in GG 119.

Audit Team Leader

Richard Marriott – CertEd, FCIHT, MSoRSA
Highways England Approved RSA Certificate of Competency
Road Safety Engineer, TMS Consultancy

Signed 

Date 18th January 2023

Audit Team Member

Neal Roderick – BEng (Hons), MCIHT
Highways England Approved RSA Certificate of Competency
Engineer, TMS Consultancy

Signed 

Date 18th January 2023

TMS Consultancy
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Appendix A

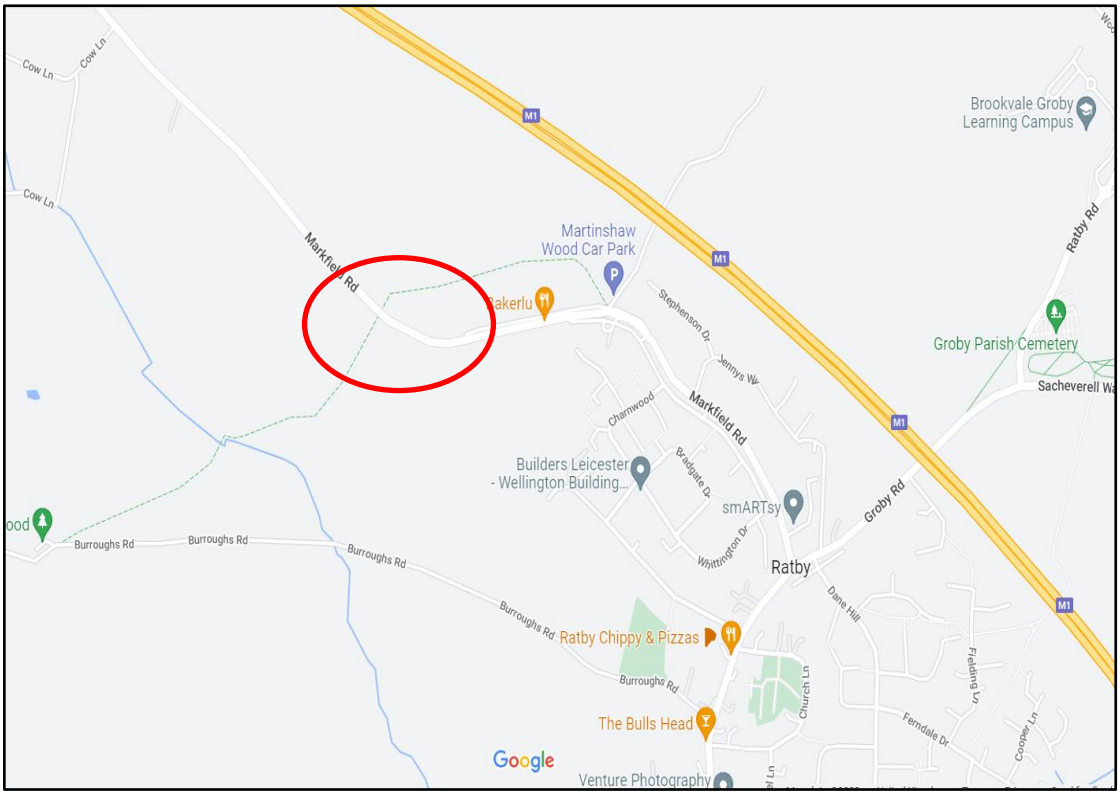
Documents Examined:

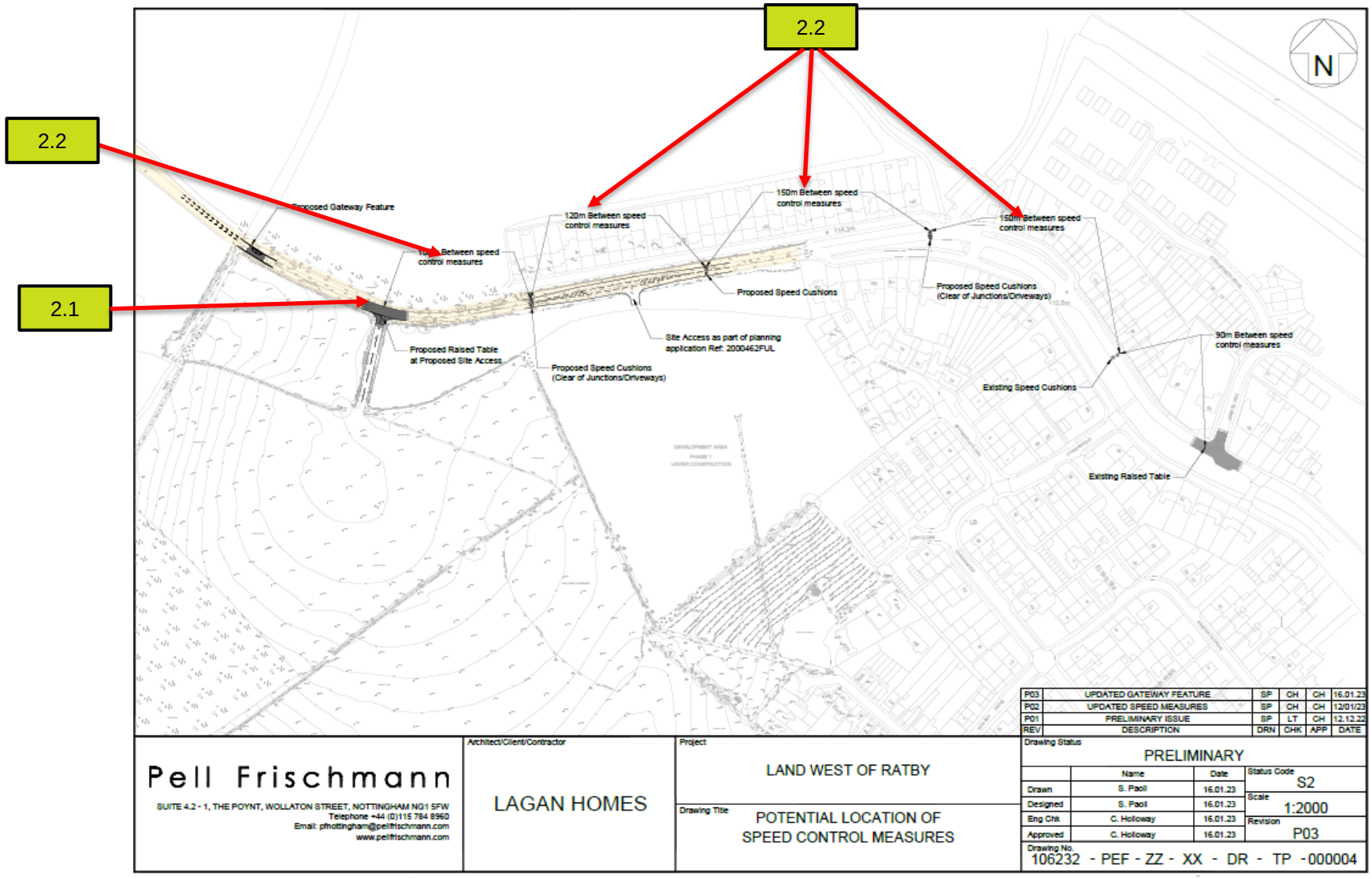
- 106232-PEF-ZZ-XX-DR-TP-000004_S2_P03 -Potential Location Of Speed Control Measures
- Markfield Road, Ratby, Leicestershire, RSA1 Report
- RSA1 - Checklist of Information Required1

Appendix B

Please refer to the following page for a plan illustrating the locations of the problems identified as part of this audit (location numbers refer to paragraph numbers in the report).

The location of the scheme is shown below:




2.2
2.2
2.1
N
Proposed Gateway Feature
120m Between speed control measures
150m Between speed control measures
150m Between speed control measures
Between speed control measures
Proposed Speed Cushions
Proposed Speed Cushions (Clear of Junctions/Driveways)
Site Access as part of planning application Ref: 2000462FUL
Proposed Raised Table at Proposed Site Access
Proposed Speed Cushions (Clear of Junctions/Driveways)
90m Between speed control measures
Existing Speed Cushions
Existing Raised Table
P03 UPDATED GATEWAY FEATURE SP CH CH 16.01.23
P02 UPDATED SPEED MEASURES SP CH CH 12/01/23
P01 PRELIMINARY ISSUE SP LT CH 12.12.22
REV DESCRIPTION DRN CHK APP DATE
Pell Frischmann
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Telephone +44 (0)115 784 8960
Email: pfnottingham@pellfrischmann.com
www.pellfrischmann.com
Architect/Client/Contractor
LAGAN HOMES
Project
LAND WEST OF RATBY
Drawing Title
POTENTIAL LOCATION OF SPEED CONTROL MEASURES
Drawing Status
PRELIMINARY
Name Date
Drawn S. Paoli 16.01.23
Designed S. Paoli 16.01.23
Eng Chk C. Holloway 16.01.23
Approved C. Holloway 16.01.23
Status Code S2
Scale 1:2000
Revision P03
Drawing No. 106232 - PEF - ZZ - XX - DR - TP - 000004

Pell Frischmann

Ratby, Leicestershire

Road Safety Audit Stage 1 – Designers Response

106232

Pell Frischmann

Project	Ratby, Leicestershire
Document Title or Subject	Road Safety Audit Stage 1 – Designers Response
Document Reference	106232-PEF-ZZ-XX-RP-TN-000004_S2
Revision Reference	P2
Date	18/01/2023

1 Introduction

1.1.1 A Stage 1 Road Safety Audit (RSA) has been undertaken regarding the highway works associated with the proposed residential development located off Markfield Road, Ratby, Leicestershire. Following a Stage 1 Road Safety Audit (S1 RSA) of the site access proposals shown in Drawings **106232-PEF-ZZ-XX-DR-TP-000002_S2_P07** and **106232-PEF-ZZ-XX-DR-TP-000003_S2_P05**, Drawing **106232-PEF-ZZ-XX-DR-TP-000004_S2_P01** has been produced and audited as part of this S1 RSA, setting out the potential location of speed control measures requested within the original RSA.

1.1.2 This designer's response seeks to address the 'problems' raised in the revised S1 RSA audit dated 18th January 2023.

2 Road Safety Comments

2.1 Problem 2.1

2.1.1 Location: Left hand visibility splay east of proposed access.

2.1.2 Summary: Increased risk of pull-out type collisions.

2.1.3 The left-hand visibility splay at the junction for drivers waiting at the give way line is likely to be obstructed by existing vegetation and street furniture. This could result in pull-out type collisions if road users fail to see approaching vehicles in time.

2.1.4 Recommendation

2.1.5 The hedge should be cut back, and the signage relocated so that an unobstructed junction visibility splay, that is appropriate for the speed of approaching vehicles, can be achieved.

Design Team Response

Agree with Audit Recommendation: Yes

2.1.6 The hedge will be cut back, and the signage relocated so that an unobstructed junction visibility splay can be achieved.

2.2 Problem 2.2

2.2.1 Location: Proposed development access.

2.2.2 Summary: Increased risk of collisions due to inappropriate speeds

2.2.3 The new drawing sheet 06232 PEF ZZ XX DR TP 000004 provided shows the proposed installation of physical / raised traffic calming measures with various spacing ranging from 90m to 150m between each measure. These distances may increase road users speed significantly with road users on approach to the measure having to brake suddenly / harshly possibly contributing to rear end shunt type collisions.

2.2.4 Recommendation

2.2.5 As per the current guidance for the installation of physical traffic calming measures within a 30MPH speed limit, LTN 1/07 recommends 60-90m spacing between each hump / cushion.

Design Team Response

Agree with Audit Recommendation: Yes

2.2.6 The physical traffic calming measures will be spaced within 60-90m.

Ratby, Leicestershire
Road Safety Audit Stage 1 – Designers Response

Technical Note

Report Ref.	**106232-Pef-Zz-Xx-Rp-Tp-000004_S2_P2 - Rsa Designers Response**
File Path	\\RSBGUKFS01\NOTEngineering\Data\106232 - Ratby\01 - WIP\Documents\Transport Planning\106232-PEF-ZZ-XX-RP-TP-000004_S2_P2 - RSA Designers Response.docx

Rev	Suit	Description	Date	Originator	Checker	Approver
P1	S2	Initial Issue	18/10/22	Jordan Farrell	Lewis Thomas	Chris Holloway
P1	S2	Revised Issue	18/01/23	Jordan Farrell	Lewis Thomas	Chris Holloway

Ref. reference. Rev revision. Suit suitability.