



Land East of Lodge Road, Hurst

Transport Assessment

Client: Mactaggart and Mickel Strategic Land (Mac Mic)

i-Transport Ref: TW/BB/SG/ITB19328-005A

Date: 26 July 2024

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Quality Management

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SECTION 1 Introduction

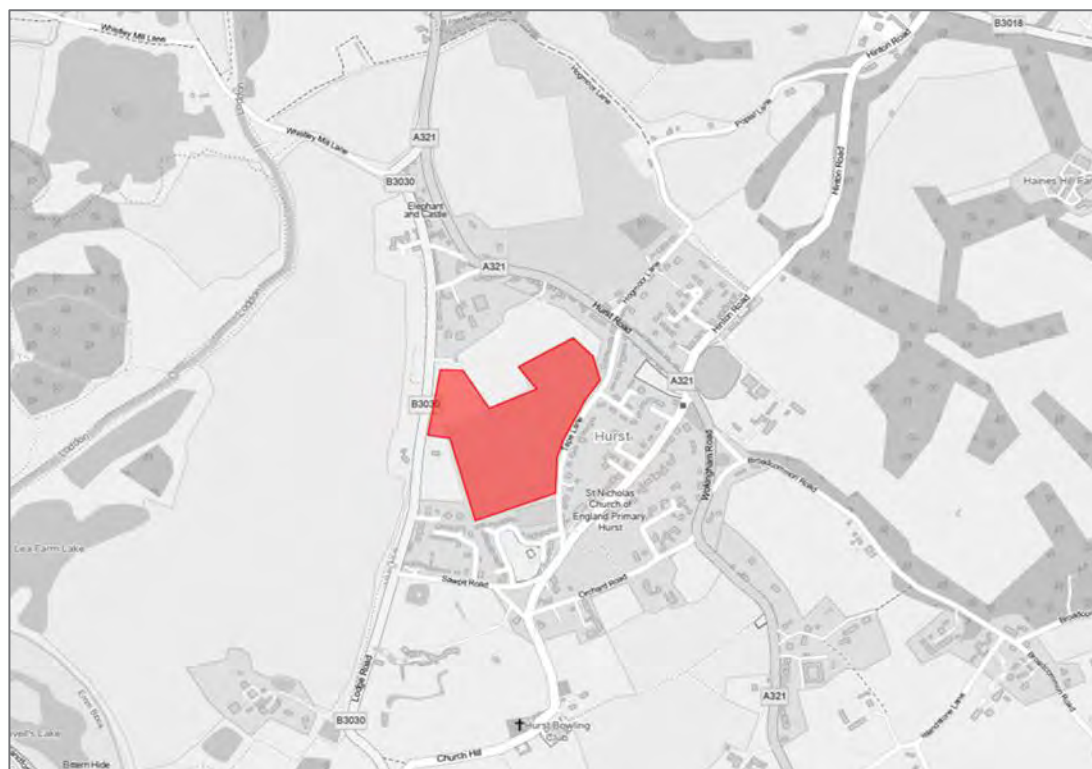
1.1 Overview

- 1.1.1 Mactaggart and Mickel Strategic Land (Mac Mic) is promoting residential development of land at Tape Lane in Hurst, Reading. A planning application has been prepared for up to 99 homes on the Site, located within the heart of the village and promoting a sustainable village extension.

1.2 Site Location

- 1.2.1 The site is situated centrally with Hurst village, with Twyford located to the north and Winnersh and Wokingham to the south. The location of the site in the context of the local highway network is presented in **Figure 1 (Image 1.1)**.
- 1.2.2 Lodge Road is to the west connecting Winnersh and Twyford, Tape Lane to the east connecting Broadwater Lane and School Road, and to the south is residential properties forming Martineau Close and the village allotments. North of the site is paddock and residential development.

Image 1.1: Site Location Plan



1.3 Existing Use

- 1.3.1 The site currently comprises open fields used for grazing. There is no public access to the Site and access to the land is taken from gated access to both Tape Lane and Lodge Road.

1.4 Planning History

- 1.4.1 A planning application of up to 200 homes was submitted in February 2022 (Ref: 220458). The application was refused planning permission by Wokingham Borough Council (WBC) on 22nd June 2022, and the reasons for refusal, relevant to transport matters, were:

“Refusal 5. The application site is within an unsustainable location that would not encourage modal shift towards sustainable modes of transport, by reason of the countryside location outside of settlement limits, distances to facilities and services, limited public transport links and poor quality of the walking/cycling environment ...”

“Refusal 8. The application fails to demonstrate that the proposed vehicle access, highway alterations and overall development would have an acceptable impact on highway safety ...”

- 1.4.2 The Decision was appealed, and an 8-day public inquiry was held from the 31 January 2023 to the 10 February 2023. Reason for refusal no. 8 was withdrawn by WBC prior to the inquiry, with agreement reached on all matters related to site access, highway safety and traffic impacts. Matters of accessibility remained in dispute and were considered at the Inquiry.

- 1.4.3 The appeal was ultimately dismissed on 9 March 2023 (**Appendix A**) for various reasons including in relation to transport sustainability matters. The Inspectors key conclusions were:

- The scale of the scheme proposed was too large for Hurst to accommodate sustainably and within the context of Policy requirements for rural areas.
- There were limitations in relation to bus / cycle connections to Twyford, and locally for pedestrians and cyclists in Hurst village, leading to a lack of genuine travel choices.
- The package of improvements was insufficient to overcome these limitations and ensure that reasonable sustainable travel opportunities are taken up.

- 1.4.4 In the context of the Appeal Decision, this revised proposals directly addresses the concerns that led to the earlier dismissal, particularly by:

- Promoting a significantly smaller scale of development (less than half).
- Retaining the agreed elements, i.e. the access, safety and traffic impact considerations
- Identifying and delivering a substantially improved package of pedestrian, cyclist and public transport to ensure a genuine choice of sustainable transport modes for travel to key destinations, with the package of enhanced improvements including:
 - Delivery of a strategic cycle route connection between Hurst Village and Twyford, providing a key priority scheme of the WBC LCWIP
 - Providing enhanced bus connectivity between Hurst and Twyford
 - Delivering substantial local enhancements to the walking and cycling infrastructure of the village
 - A travel plan which includes a car club, mobility hub and travel incentives.

1.5 Scope and Structure

1.5.1 This Transport Assessment (TA) has been prepared to consider the transport impacts that may arise from the proposed development, and to consider the proposal against key transport planning policy considerations. This demonstrates that in the context of the village location, the supporting transport interventions and the improved scheme proposals, that the application delivers appropriate and sustainable growth.

1.5.2 The remainder of this TA is structured as follows:

- **Section 2** – Policy Context
- **Section 3** – Existing Transport Conditions
- **Section 4** – Development Proposal
- **Section 5** – Traffic Impact
- **Section 6** – Promoting Sustainable Transport
- **Section 7** – Sustainable Transport Strategy
- **Section 8** – Summary and Conclusions

SECTION 2 Policy Context

2.1 National Policy

National Planning Policy Framework (December 2023)

- 2.1.1 The National Planning Policy Framework (NPPF), December 2023, sets out the Government's planning policies and how these are expected to be applied. The NPPF confirms that at the forefront of planning is the '*presumption in favour of sustainable development*' (paragraph 11). Section 9 of the NPPF covers promoting sustainable transport, with paragraph 114 providing the key tests that development proposals will need to consider:

"In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

- (a) Appropriate opportunities to promote sustainable transport modes can be- or have been- taken up, given the type of development and its location;***
- (b) Safe and suitable access to the site can be achieved for all users;***
- (c) 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***
- (d) 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."***

- 2.1.2 Paragraph 117 confirms 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 impact of the proposal can be assessed."

- 2.1.3 On this basis, the scheme is supported by a TA and a comprehensive Travel Plan.

- 2.1.4 The NPPF promotes sustainable development, and encouraging sustainable transport modes is one critical component of achieving that goal. In encouraging sustainable transport modes, the NPPF is explicit in that opportunities for sustainable travel:

- Will vary from one location to another, particularly that opportunities for sustainable travel in more rural areas will be different to those in urban areas (NPPF Para 109).
- Will be specific to the opportunities available in each location. The NPPF does not require all sites to be accessible to all local facilities by all travel modes. Instead, it requires that the appropriate opportunities for sustainable travel modes are identified and taken up, relative to the location (NPPF Para 114(a)).

- 2.1.5 The NPPF (Paragraph 83) supports the sustainable growth of rural areas and specifically acknowledges that it is not always possible for rural areas to provide for the full needs of its community, and in such cases, nearby villages will be likely to support each other.

83. To promote sustainable development in rural areas, housing should be located where it will enhance or maintain the vitality of rural communities. Planning policies should identify opportunities for villages to grow and thrive, especially where this will support local services. Where there are groups of smaller settlements, development in one village may support services in a village nearby.

- 2.1.6 In promoting sustainable development, the NPPF applies a broad definition of what comprises sustainable transport modes, including active and public transport, but also low carbon travel and car sharing initiatives. It is this basket of modes and measures that is to be considered:

"Sustainable transport modes

Any efficient, safe and accessible means of transport with overall low impact on the environment, including walking and cycling, ultra low and zero emission vehicles, car sharing and public transport."

- 2.1.7 The NPPF (paragraph 115) sets a deliberately 'high-bar' test for conditions when development should be resisted on transport grounds; the impacts of a scheme must be 'very significant'.

"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."

National Planning Practice Guidance (NPPG) March 2014

- 2.1.8 The National Planning Practice Guidance (NPPG) replaced DfT's Guidance on Transport Assessment in 2014 and brings together planning guidance for England across all disciplines. The NPPG discusses the role of travel plans and transport assessments / statements and how they relate to each other and provides guidance on how TAs should be developed.

2.2 Local Policy

Wokingham Borough Council Adopted Core Strategy Development Plan 2014

- 2.2.1 WBC's Core Strategy provides the current Development Plan policy for the Wokingham Borough and covers the period up to 2026. The document sets out how the borough intends to develop during this period and sets out the approaches it intends to take in doing so.
- 2.2.2 Core Policy CP1 relates to Sustainable development. The policy identifies that new developments should be well integrated with existing or proposed transport infrastructure, including pedestrian, cycle, and public transport networks, to ensure that a development is accessible by a variety of transportation modes.

2.2.3 Policy CP1 requires that development proposals demonstrate how they support opportunities for reducing the need to travel, particularly by car. This is broadly consistent with the NPPF Para 114 which requires the reasonable opportunities to be identified and taken to promote sustainable travel, but it is implicit that these opportunities will vary by location (NPPF para 109).

2.2.4 Core Policy CP6 is the primary transport policy for 'managing travel demand' and states that travel choice should be provided to new development:

"Planning permission will be granted for schemes that:

- ***Provide for sustainable forms of transport to allow choice;***
- ***Are located where there are or will be at the time of development choices in the mode of transport available and which minimise the distance people need to travel;***
- ***Improve the existing infrastructure network, including road, rail and public transport, enhance facilities for pedestrians and cyclists, including provision for those with reduced mobility, and other users;***
- ***Provide appropriate vehicular parking, having regard to car ownership;***
- ***Mitigate any adverse effects upon the local and strategic transport network that arise from the development proposed;***
- ***Enhance road safety; and***
- ***Do not cause highway problems or lead to traffic related environmental problems."***

2.2.5 Policy CP9 relating to the scale and location of development proposals states that:

"The scale of development proposals in Wokingham borough must reflect the existing or proposed levels of facilities and services at or in the location, together with their accessibility."

2.2.6 Overall, the policy requirements and tests for accessibility to be applied are:

- i Whether the available opportunities for sustainable travel have been identified and taken up, relative to the location and the opportunities available to a Site.
- ii Whether there are choices in travel mode available to users of the development and whether the proposal supports these choices.

Wokingham Borough Local Transport Plan (LTP3) 2011-2026

2.2.7 WBC's LTP 3 aims to improve transport and accessibility across the borough over fifteen years. The overarching vision for the Local Transport Plan (LTP) is:

"To provide a cost-effective, inclusive transport network that enhances the economic, social and environmental prospects of the Borough whilst promoting the safety, health and well-being of those that use it."

2.2.8 To achieve this vision the LTP identifies five goals listed below:

- **Highways Goal:** "To have a resilient, safe highway network that balances capacity for all users, enhances the economic prospects of the Borough, and promotes sustainable travel."
- **Active Travel Goal:** "To work with partners to promote walking and cycling as a health-enhancing physical activity for all of our residents through providing:
 - *Connected, convenient, safe and signed pedestrian networks across the Borough to enhance existing networks;*
 - *New cycleways integrated with the existing cycle network; and*
 - *Improved cycle parking at stations, businesses and schools."*
- **Public Transport Goal:** "To promote an integrated and inclusive public transport network that provides a convenient, acceptable, reliable and affordable alternative to car travel."
- **Smarter Choices and Demand Management Goal:** "To enable people who live, visit and work in the Borough to make informed, safe and sustainable travel decisions from a range of transport options."
- **Strategic Projects Goal:** "To manage the demand for travel in order to ensure that people have a high level of access to different destinations, with sufficient choice, whilst minimising the adverse effects of congestion."

Wokingham Borough Council Emerging Local Transport Plan (LTP4) – December 2023

2.2.9 WBC are in the process of drafting their LTP4. The vision for the LTP4 has three key themes supported by associated objectives:

- 1 **Create Healthy and Safe Places** - Seeking to provide safer streets for all, 50% active travel in Towns by 2030 and thriving villages and rural centres.
- 2 **Develop the Economy** – Protecting and enhancing strategic connectivity, delivering a well-maintained transport network and supporting sustainable development.
- 3 **Reduce Environmental Impacts** – Providing high quality travel corridors, delivering net zero carbon emissions and providing clean air.

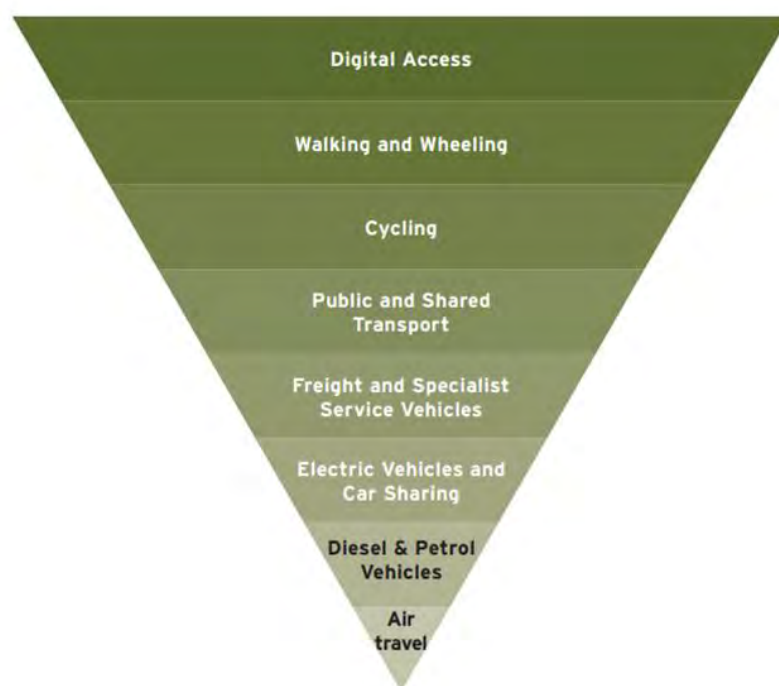
2.2.10 An LTP Action Plan has been prepared to identify some of the actions proposed to deliver the objectives of the plan. Pertinent to the proposed development at the application site are the following proposed actions:

- i Providing high quality walking, cycling and wheeling routes consistent with the LCWIP.
- ii Provide a range of secure cycle parking options at local destinations.
- iii Improve walking, cycling and wheeling for all at interchange facilities and stations
- iv Provide high quality bus stop infrastructure to serve new developments.
- v Half hourly bus frequency between Wokingham and Twyford.

2.2.10.2 The LTP4 is currently undergoing local consultation and WBC aims to adopt the plan in Summer 2024. It sets out a proposed Transport Hierarchy:

“At the top is Digital Access, which contributes to reducing the need to travel, for example to work and shopping (however, we recognise that this can also have a negative impact on the economy). Next is walking and wheeling, which is the term used for wheelchairs, scooters and pushchairs. Although private cars are shown to be our lowest priority, we know that many of us will continue to rely on the private car and simply could not (due to ability or other circumstances) switch to more sustainable modes even if there was appropriate infrastructure and services.”

Image 2.1 – WBC Draft LTP4 - Hierarchy of Transport



WBC Parking Standards Study Report Consultation Document 2011

- 2.2.11 WBC published the Parking Standards Study Report Consultation Document in 2011 which sets out the parking standards for the Borough.
- 2.2.12 The parking requirements vary based on accessibility and the character of the area, with four key categories identified: Urban, Town and Fringe and Village. The application site in Hurst falls within a village location. A parking demand calculator accompanies the Parking Standards Study Report and should be utilised to calculate the required level of parking provision for application sites within the Borough.
- 2.2.13 The application is submitted in Outline and therefore parking is a reserved matter. The proposed level of car and cycle parking will therefore be provided at the appropriate time, although it can be confirmed that these will be in accordance with the prevailing WBC standards.

SECTION 3 Existing Transport Conditions

3.1 Walking and Cycling

Walking Facilities

- 3.1.1 There are currently no footways present along Lodge Road as it passes the site frontage. Approximately 150m to the north of the site, a footway commences on the eastern side of the carriageway which is circa 1.5m in width and provides direct access to residential properties that front onto the eastern side of the carriageway and the facilities at Whistley Green. Further to the north, footways on either side of Lodge Road form a continuous walking route to the nearby Elephant & Castle public house.
- 3.1.2 Tape Lane runs along the eastern site boundary and routes between School Road to the south and Broadwater Lane to the north. The lane is characteristic of a quiet rural lane and is very lightly trafficked¹, providing access to only a small number of residential properties and an area of allotments. These characteristics serve to make Tape Lane appropriate for shared use by pedestrians, cyclists, horse riders and vehicles as a Quiet Lane, in accordance with Paragraph 7 of the Department for Transport's *Quiet Lanes and Home Zones (England) Regulations 2006*.
- 3.1.3 As the footway routes past the north-eastern boundary of the site, Tape Lane widens to comprise a more traditional village street and accommodates a footway on the eastern side of the carriageway. To the north, the footway continues and meets the footway provided on the southern side of Broadwater Lane at the Tape Lane / Broadwater Lane priority junction.
- 3.1.4 To the south of the site, a footway is provided on the western side of School Road that provides access to Hurst Village Hall and Hurst Pre-School. The footway is some 1.5m in width and is in good condition. A footway is also present on the eastern side of the carriageway, although due to overgrown vegetation and proximity to residential properties, the effective width of some sections of the footway are reduced. This is to be improved by committed local development.
- 3.1.5 To the southeast of the Tape Lane / Broadwater Lane junction, footways are provided on either side of Broadwater Lane that provide a continuous route towards some nearby local facilities and services, including Hurst Bakery and the village shop / Post Office. Along the route, the footway widths along Broadwater Lane are periodically constrained by residential frontages and there are no formal pedestrian crossing facilities provided.

¹ With two-way traffic flows significantly lower than 1,000 vehicles per day. Ref: Table 3.4 of this TA.

- 3.1.6 To the northwest of the Tape Lane / Broadwater Lane junction, a footway is provided on the southern side of the carriageway. The footway forms part of a continuous walking route through the village and beyond towards Twyford Railway Station and the adjacent residential areas.
- 3.1.7 In recognition of some of the constraints on the local pedestrian network, as well as the Inspector's views on the previous application at the site, the revised development proposals will deliver a comprehensive pedestrian improvement scheme to provide a significant betterment to the existing sustainable transport conditions in Hurst. Details of this proposed provision is set out in Section 7 of this report.

Public Rights of Way (PRoW)

- 3.1.8 In addition to the footways available within Hurst village, there is a Public Rights of Way network within the vicinity of the site that offers a range of leisure / longer distance routes. The local Public Rights of Way network is shown in **Image 3.1** with an additional permissive path provided to the west of Lodge Road routing through woodland.

Image 3.1: Public Rights of Way



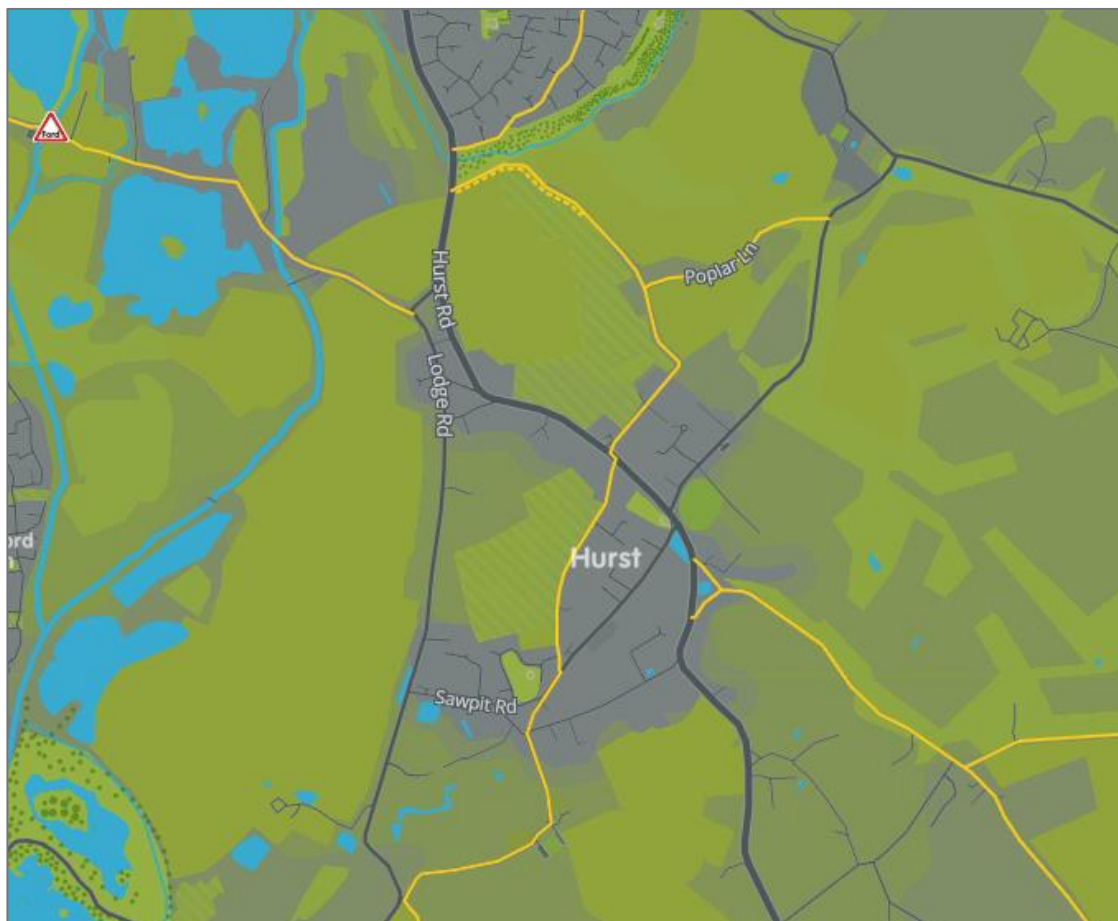
Source: Wokingham Borough Council

- 3.1.9 Public Footpath STNH30 runs adjacent to the River Loddon commencing at the Whistley Bridge House south to Lavells Lake. There are various other public footpaths between Wokingham Road to Church Hill and Old Police Cottages. To the north of Whistley Green, Public Footpath STNH5 meets Bridleway 4a (in blue). This is significant as the development proposals include the implementation of a new crossing over Hurst Road to connect the footway and bridleway. Details of this improvement are set out in Section 7 of this report.

Cycling Opportunities

- 3.1.10 Several of the local village streets within Hurst are designated as 'Quiet Links' suitable for cycling by Wokingham Borough Council's 'My Journey' campaign including Tape Lane, Broadcommon Road and Church Hill (**Image 3.2**).

Image 3.2: Wokingham Promoted Cycle Routes (Hurst)



Source: WBC's "My Journey" Campaign

- 3.1.11 To the south of the site, these streets connect with a network of other 'Quiet Links', including Lines Road, Dunt Avenue, Dunt Lane and Little Hill Road to form a route towards the nearby settlement of Winnersh. To the north are opportunities to use designated quieter links to route towards Twyford and its local facilities and services.
- 3.1.12 Lodge Road and Broadwater Lane (as it routes alongside Hurst Bakery and Hurst Village shop) accommodate less than 5,000 AADT and are therefore broadly suitable for on-carriageway cycling in rural areas, with no specific need for segregated provision².

² Ref: Paragraph 7.1.4 of LTN 1/20

3.1.13 The site therefore provides access to the Council’s promoted cycle network which collectively provides designated links to Reading, Winnersh, Wokingham and Twyford.

3.1.14 Notwithstanding this, in recognition of the reasons for dismissal of the recent Appeal, the development proposals at the application site will deliver a comprehensive cycle improvement scheme to provide a significant betterment to the existing sustainable transport conditions in Hurst and connect to Twyford. Details are set out in Section 7 of this report.

3.2 Public Transport

Bus Provision

3.2.1 The nearest bus stops are located on either side of Broadwater Lane circa 330m from the site. These bus stops are served by the 128/129 bus service (operated by Thames Valley Buses) which routes between Reading and Wokingham via Hurst. **Table 3.1** summarises these services.

Table 3.1: Summary of Bus Services and Frequency

Route	Destination	Service Frequency		
		Weekday	Saturdays	Sundays
128 / 129	Wokingham – Winnersh – Hurst – Twyford – Woodley – Reading	First service at 07:23 then every 65 minutes between 09:32 and 14:59	Hourly service between 08:41 and 09:38, then circa every two hours until 17:21	No service
	Reading – Woodley – Twyford – Hurst – Winnersh – Wokingham	Service every hour between 09:09 until 19:27	Service every two hours between 10:08 and 18:25	No service

Source: Bustimes.org

3.2.2 The 128/129 bus service operates hourly Monday-Saturday and provides a useful connection to key destinations such as Wokingham, Winnersh, Sonning and Reading as well as several local secondary schools in Winnersh. The service also stops at Twyford railway station, and therefore can be utilised as part of a journey to onward destinations such as London and Reading.

3.2.3 In recognition of the reasons for the dismissal of the Appeal at the site, the existing operation of this service has been considered carefully through discussions with Thames Valley Buses (who operate the service under tender) and a strategy to improve the existing public transport accessibility for existing and future residents of Hurst is set out in Section 7 of this report.

Rail

- 3.2.4 The nearest railway station to the site is Twyford station, circa 2.4km to the north of the site (a c. 10-minute cycle) and therefore falls well within a 'reasonable' cycling distance, 8km in accordance with *'The DfTs Gear Change: A bold vision for cycling and walking (2020)* and is also accessible via the no. 128/129 bus service.
- 3.2.5 The station provides approximately 109 cycle parking spaces with CCTV provided. **Table 3.2** summarises the key services accessible from Twyford railway station.

Table 3.2: Summary of Rail Services and Frequency

Station	Destination	Frequency		Average Journey Duration
		Peak	Off-Peak	
Twyford	London Paddington	6	5-6	30-45 minutes
	Oxford	3	4	44 minutes
	Reading	6	4	9 minutes
	Southampton Central	2	2	1 hours 20 minutes
	Basingstoke	3	3	41 minutes

Source: Trainline

- 3.2.6 Twyford station is a critical local service hub and provides rail services to key destinations including London, Oxford, Reading, Southampton Central and Basingstoke. Following the implementation of Crossrail (the Elizabeth Line) the station now operates over 5 services per hour to both London and Reading.
- 3.2.7 Bus service 128/129 provides a direct connection to Twyford Railway Station and stops immediately outside of the station. The first bus to depart Hurst for Twyford Station is at 07:22 and has a 12-minute journey time, arriving at 07:34 at Twyford Station. This enables residents of Hurst to access destinations further afield such as Reading, Maidenhead, Slough, and London Paddington for employment journeys (including utilising the now open Elizabeth Line). Train services to London depart at 07:50, 07:55 and 07:59. These services arrive in London Paddington between 08:21 and 08:43 providing reasonable opportunities for residents to access their destination before the start of the typical working day. Train Services to Reading depart at 07:39 and 07:47, with a 7–10-minute rail journey. There are similar return opportunities that enable access to London and Reading by train and bus connections.
- 3.2.8 Twyford railway station therefore offers future residents of the site genuine opportunities to travel to key employment centres via sustainable modes, with journey times to London ranging between 30-45 minutes and journeys to Reading averaging less than 10 minutes.

3.2.9 However, it is recognised that the station frontage onto Hurst Road lacks high-quality cycle parking (with most cycle parking spaces located within the station) and currently offers limited facilities for public transport users and pedestrians/cyclists originating from Hurst. The standard of these existing facilities reduces the attractiveness of travelling to the station by sustainable modes of transport. As part of a strategy to deliver a significant betterment to the existing sustainable transport opportunities within Hurst, the development proposals will therefore deliver an improvement scheme at Twyford Railway Station frontage to provide a better interchange between modes as well as promoting strategic cycling connections and bus improvements. The details of this scheme are set out in Section 7 of this report.

3.3 Local Highway Network

3.3.1 The B3030 Lodge Road, located to the west of the site, is a single carriageway inter-urban road subject to a 40mph speed limit. The speed limit reduces to 30mph approximately 150m to the north of the site, where residential properties front onto the eastern side of the carriageway. Lodge Road continues north and connects to the A321 Broadwater Lane, which forms the primary route north out of Hurst to Twyford.

3.3.2 To the south of the site, Lodge Road transitions to the national speed limit following the junction with Sawpit Road before providing a connection to Winnersh to the south of Hurst.

3.3.3 Tape Lane runs north-south along the eastern boundary of the site and is subject to a 30mph speed limit. At the northern extent of the Tape Lane, the carriageway is c. 6.5m wide and provides a footway on the eastern side of the carriageway. As it routes southwest along the site boundary, the width of Tape Lane narrows and the route becomes characteristic of a quiet rural lane³.

3.3.4 The A321 Broadwater Lane is to the north of the site and forms the main route through Hurst. The road is subject to a 30mph speed limit and forms the principal route south to Wokingham via Wokingham Road.

3.3.5 Access to the strategic road network (A329(M) and M4) is achievable to the southwest of the site in Winnersh via Lodge Road and The Bader Way. The A329 routes to Bracknell to the east, whilst the M4 offers a wider strategic connection for long distance journeys.

³ With two-way traffic flows significantly lower than 1,000 vehicles per day. Ref: Table 3.4 of this TA.

3.4 Baseline Traffic Conditions

3.4.1 To establish the baseline traffic conditions on the local highway network, a series of traffic surveys were commissioned in November 2023. The surveys included:

- Automatic Traffic Counter (ATC) surveys at:
 - Lodge Road (to the north and south of the proposed site access location)
 - Tape Lane (at the northern and southern extents of the lane respectively).
 - Broadwater Lane – near the existing Hurst village shop.
 - Broadwater Lane – adjacent to the Brookside.
 - Hurst Road – north of Hurst village.
 - Hurst Road – adjacent to Twyford Railway Station.
- Manual Classified Count (MCC) survey at:
 - Lodge Road / Broadwater Lane priority junction.

3.4.2 The full survey results are contained at **Appendix B**.

Existing Traffic Conditions – Broadwater Lane / Lodge Road Junction

3.4.3 A summary of the results of the MCC survey at the Lodge Road / Broadwater Lane junction is presented in **Table 3.3**. The data establishes the number of cars and cyclists that used the junction during the traditional morning and evening peak periods.

Table 3.3: Existing Car / Cycle Use (two-way)- A321 Broadwater Lane / B3030 Lodge Road

Movement	AM Peak Hour (0800 – 0900)		PM Peak Hour (1700 – 1800)	
	Cars	Cyclists	Cars	Cyclists
Broadwater Lane North (to Lodge Road)	151	1	216	1
Broadwater Lane North (to Broadwater Lane South)	124	1	141	1
Lodge Road (to Broadwater Lane North)	180	3	116	0
Lodge Road (to Broadwater Lane South)	3	0	0	0
Broadwater Lane South (to Lodge Road)	4	0	2	0
Broadwater Lane South (to Broadwater Lane North)	120	3	111	2
Total	582	8	586	4

Source: Traffic Survey Data, November 2023

3.4.4 The junction was observed to accommodate some 585 vehicles and 8 cyclists during the morning and evening peak hours respectively. This is a relatively moderate volume of traffic.

Existing Traffic Conditions – Wider Local Highway Network

3.4.5 A summary of the existing traffic volumes recorded at the eight ATC locations on the local highway network is provided in **Table 3.4**, for the morning and evening peak hours respectively.

Table 3.4: Average Weekday Traffic Flows

Location	Weekday Traffic Volumes (Two-way)		
	AM Peak (0800-0900)	PM Peak (1700-1800)	24-Hour (AAWT)
Lodge Road (North of site access)	105	98	4,249
Lodge Road (South of site access)	108	102	4,727
Tape Lane (Northern extent)	6	6	298
Tape Lane (Southern extent)	5	5	226
Hurst Road (adjacent to Twyford station)	120	127	6,352
Hurst Road (north of Hurst)	182	177	8,238
Broadwater Lane (opposite The Brookside)	170	162	7,912
Broadwater Lane (near Hurst shop)	78	70	3,695

Source: Traffic Survey Data, November 2023

3.4.6 Within the village of Hurst, Lodge Road and Broadwater Lane are low to moderately trafficked, with vehicle flows not exceeding c. 5,000 movements per day⁴. The characteristics and traffic volumes along Tape Lane serve to make it function well as a Quiet Lane, with vehicle flows significantly below the 1,000 vehicles per day threshold (being some 300 movements⁵. **Table 3.5** summarises the 85th percentile vehicle speeds on the local highway network.

Table 3.5: Recorded 85th Percentiles Speeds

Location	85th Percentiles (mph)	
	Southbound / Eastbound	Northbound / Westbound
Lodge Road (North)	41.8	40.6
Lodge Road (South)	44.9	43.7
Tape Lane (North)	22.7	22.2
Tape Lane (South)	24.8	24.4
Hurst Road (adjacent to Twyford station)	28.9	31.5
Hurst Road (North of Hurst)	35.1	36.4
Broadwater Lane (opposite The Brookside)	40.2	39.5
Broadwater Lane (near Hurst Post Office)	34.1	31.5

⁴ Ref: Page 181 of LTN 1/20

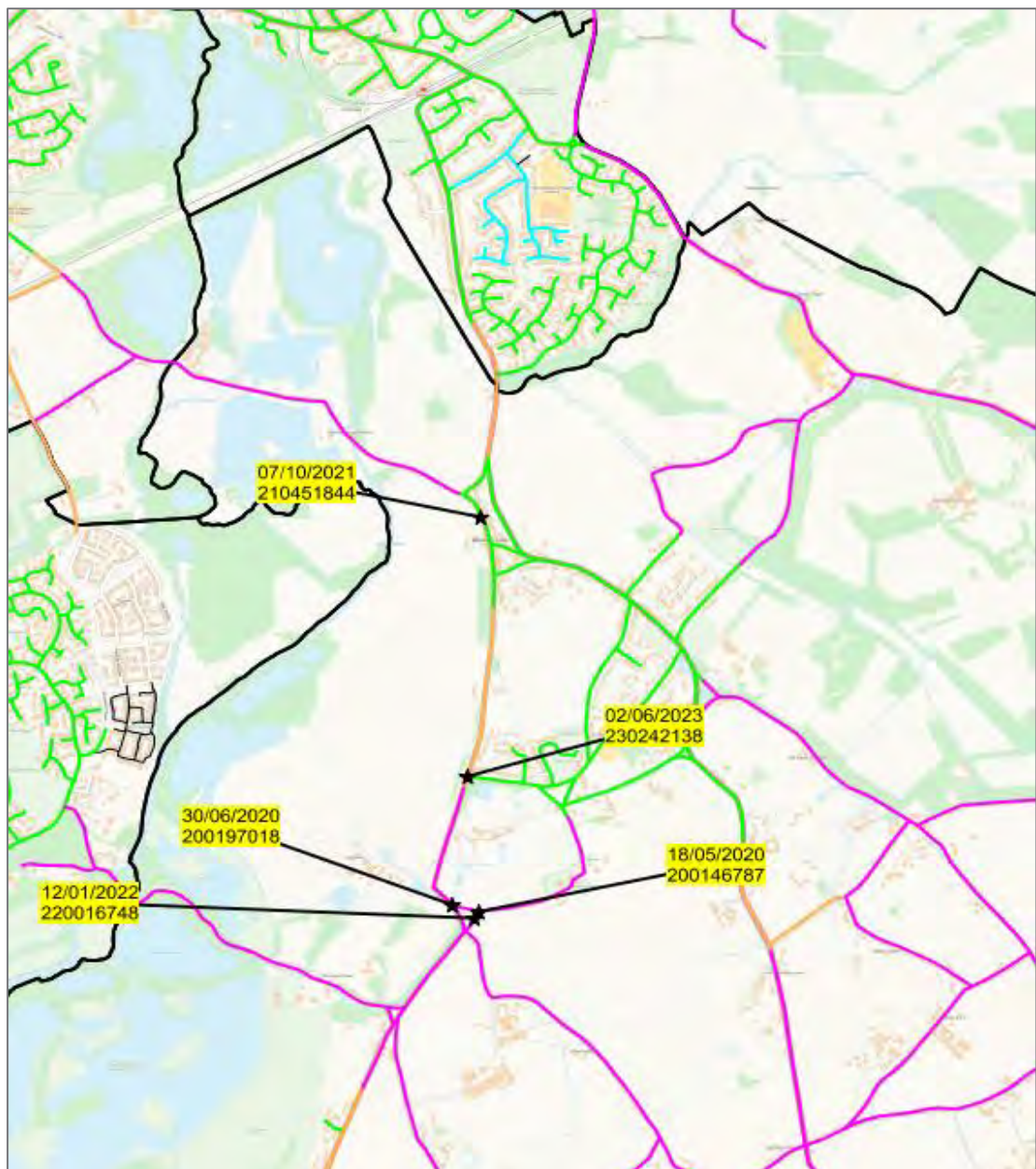
⁵ Ref: Department for Transport's Explanatory Memorandum to the Quiet Lanes and Home Zones (England) Regulations 2006

3.4.7 Prevailing vehicle speeds along Lodge Road, Broadwater Lane and Hurst Road are in broad accordance with the sign-posted speed limits. Vehicle speeds along Tape Lane are significantly below the sign-posted speed limit which, given its existing form and character, is to be expected.

3.5 Personal Injury Accident Data

3.5.1 Personal Injury Accident (PIA) data has been obtained (in February 2024) for the most recently available five-year period (1st August 2018 to 31st July 2023) in the surrounding area of the site (**Appendix C**). Only five recorded incidents occurred. **Image 3.3** illustrates the location of the accidents.

Image 3.3: PIA Data



Source: Wokingham Borough Council

B3030 Lodge Road

- 3.5.2 A serious incident occurred along Lodge Road adjacent to Sawpit Road, when a motorcycle tried to overtake a car whilst the car was turning right. This caused a collision and serious injury to the driver of the motorcycle. The weather conditions were dry without high winds and the causation factor was cited as the driver of the motorcycle failing to look properly.
- 3.5.3 A slight incident occurred when a car travelling north along Lodge Road, adjacent to Church Hill, collided with a car travelling south. The weather conditions were dry without high winds and the causation factor was cited as reckless driving and travelling too fast for the conditions.
- 3.5.4 A slight incident occurred when a car was travelling north on Lodge Road near Whistley Green and crashed into a wall on the opposite side of the carriageway. The weather conditions were dry without high winds and the causation factor was cited as nervous and uncertain driving.

Church Hill

- 3.5.5 A serious incident occurred when a motorcycle was approaching Church Hill from the B3030 Davis Street on the wrong side of the carriageway, causing it to collide head on with a car. This caused serious damage and injury to both vehicles and the causation factor was cited as careless/reckless driving in a hurry.
- 3.5.6 A slight incident occurred when a car was travelling on Church Hill and collided with the kerb causing the vehicle to skid and overturn. The causation factor was cited as reckless driving, and the weather conditions were wet.

Accident Assessment Summary

- 3.5.7 Whilst any accident is regrettable, the incidents that have occurred within the latest five-year period do not indicate a pattern that is likely to be exacerbated by the proposed development at the application site.

SECTION 4 Development Proposal

4.1 Development Schedule

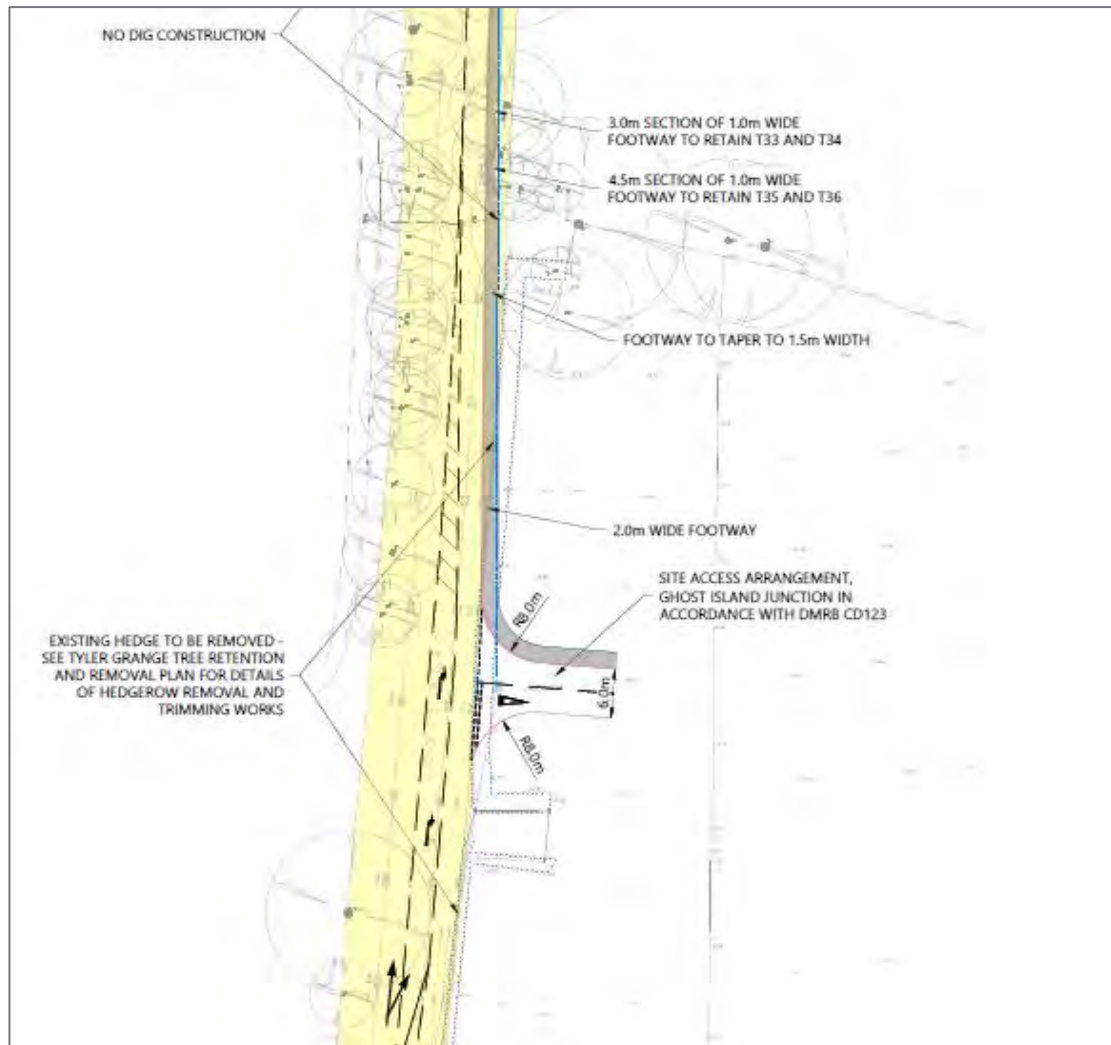
- 4.1.1 It is proposed to provide a residential development at the site, comprising up to 99 homes. At this stage Outline planning consent is sought (with means of access to be determined) and the finalised mix of housing will be confirmed at the Reserved Matters stage.

4.2 Proposed Site Access Arrangement

Vehicular Access

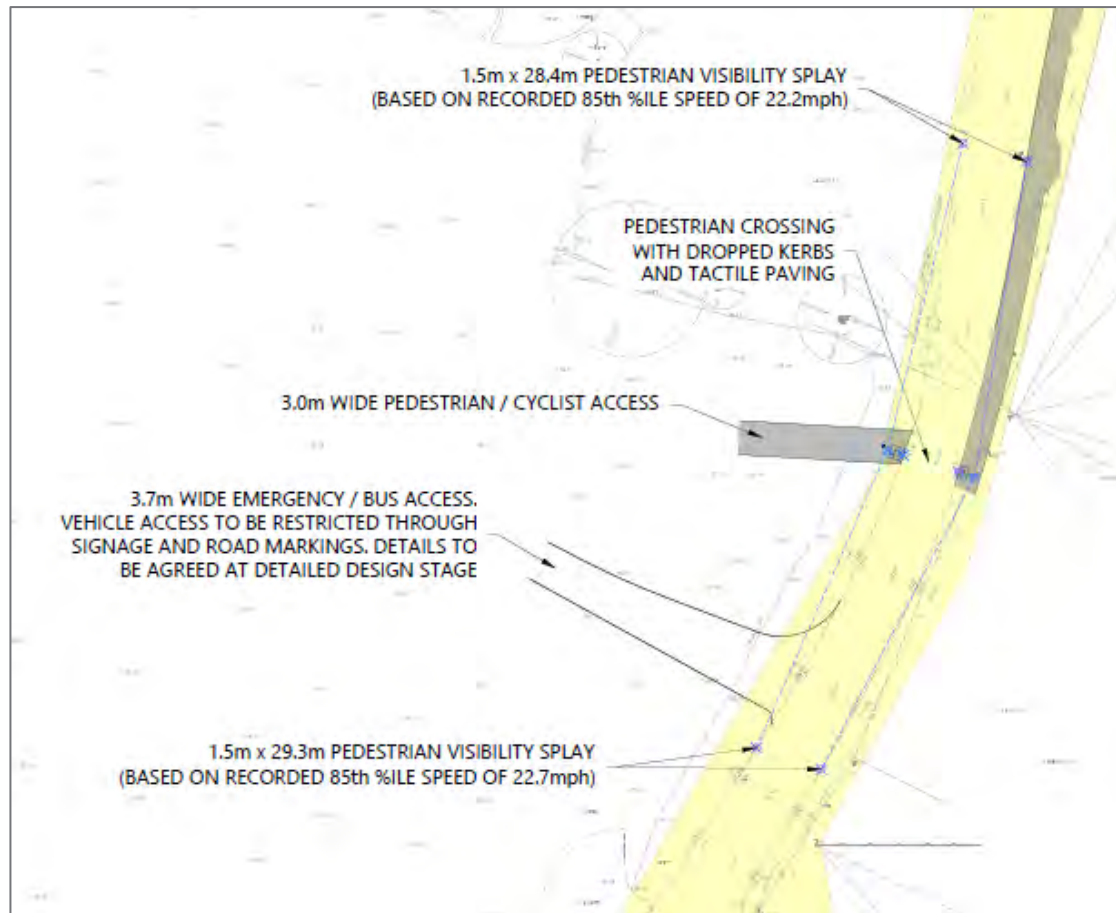
- 4.2.1 Vehicular access will be provided onto Lodge Road and will take the form of a new priority-controlled ghost island right-turn lane junction, designed in accordance with DMRB CD123.
- 4.2.2 The access arrangements mirror those presented as part of the earlier Appeal scheme, which were considered acceptable to WBC and were not a matter on which the Appeal scheme was dismissed. Despite the smaller quantum of development now proposed, the same agreed access arrangements have been retained and continue to be appropriate to serve the Site.
- 4.2.3 The proposed access arrangements will comprise:
- A 6.0m wide access road, with 8m kerb radii.
 - 3.0m wide running lanes on Lodge Road and a 3.0m wide right-turning lane.
 - Visibility splays of 2.4m x 106m to the north and 2.4m x 125m to the south along Lodge Road respectively, in line with the observed 85th percentile speeds on Lodge Road.
 - The amendment to the existing TRO to extend the 30mph speed limit to north of the site on Lodge Road past the proposed site access junction. Whilst this is not necessary for safety reasons, or to meet design standards which are based on observed speeds, this will benefit the area by encouraging slower speeds on Lodge Road.
- 4.2.4 The proposed access arrangements are shown on i-Transport drawing no. **ITB19328-GA-001**, an extract of which is presented as **Image 4.1**. The visibility splays are commensurate with the 85th percentile vehicle speed data captured in November 2023, as summarised in **Table 3.5**.
- 4.2.5 The form of the proposed access arrangements remain as previously agreed with WBC in conjunction with the previous application at the site. It was confirmed through pre-application discussions with WBC that this access strategy remains acceptable for the revised development proposals at the application site.

Image 4.1: Proposed Site Access (Lodge Road)



- 4.2.6 A 3.7m wide emergency vehicle / bus only access is also proposed onto Tape Lane at the north-eastern extent of the site. The proposed emergency access arrangements are shown on i-Transport drawing no. **ITB19328-GA-003**, an extract of which is presented as **Image 4.2**.

Image 4.2: Proposed Emergency / Bus Vehicle Access (Tape Lane)



Pedestrian Access

- 4.2.7 Pedestrian access is proposed onto Lodge Road, through the delivery of the proposed site access junction which comprises a new footway that will tie into the existing provision along the eastern side of Lodge Road. The footway has been carefully designed with consideration to expert Arboricultural advice and will be 2.0m wide, with short sections of narrowing of the footway being required within close vicinity of trees on the eastern side of Lodge Road. The principles of the footway improvements along Lodge Road were agreed with WBC as part of the previous application at the site and have been discussed at pre-application discussions.
- 4.2.8 In addition, two points of pedestrian/cycle access onto Tape Lane are proposed at the north-eastern and south-eastern boundaries respectively, which will provide the more primary desire lines for movement to the key village facilities. These are detailed on i-Transport drawing nos. **ITB19328-GA-003** and **ITB19328-GA-131** respectively. The existing pedestrian provision on Tape Lane, Broadwater Lane and School Road is to be improved to enhance routes to existing facilities for residents of the site and Hurst, detailed in Section 7 of this report.

4.3 Site Layout, Servicing and Parking

- 4.3.1 An illustrative site layout has been prepared by Mosaic to accompany the planning application, a copy of which is contained at **Appendix D (Image 4.3)**.

Image 4.3: Illustrative Site Layout



- 4.3.2 The internal site layout is not for determination at this stage and the future Reserved Matters application will detail and demonstrate the suitability of the proposed site layout, including providing evidence on street geometry, surface treatment, visibility, service vehicle access, refuse arrangements and emergency vehicle access.
- 4.3.3 However, the internal roads will be designed in accordance with the principles of MfS, WBC's 'Living Streets' guidance and to adoptable standards. A network of shared footways/cycleways will be provided across the site ensuring permeability between Lodge Road and Tape Lane at the western and eastern site boundaries respectively.

Emergency Vehicle / Bus Corridor

- 4.3.4 The illustrative site layout includes the provision of an emergency/bus corridor connecting to the proposed emergency/bus access onto Tape Lane. Car based access for the residential development will be restricted along this corridor, with access only permitted for emergency vehicles and buses respectively.
- 4.3.5 Access restrictions are commonly used across developments in both the public realm and on private land and the many systems and methods used to enforce these access restrictions are tried and tested, i.e. at railway stations, car parks and housing estates. Whilst specific details will be provided at the Reserved Matters stage, set out below is a summary of some of these systems and how these could be applied at the proposed development:

Design Based Deterrence

- 4.3.6 A self-enforcing access restriction can be achieved through good design. This is the most desirable solution (and should be considered first) and includes measures such as:
- i Physical narrowing – to reduce the function and attractiveness of a route.
 - ii Signing and lining – to clearly identify permitted users.
 - iii Natural surveillance – to discourage restricted movements from occurring.
 - iv Surface treatments – to change the character and highlight this clearly to users.
 - v Traffic regulation order (TRO) – to legally prohibit certain users.

Camera Enforcements

- 4.3.7 Should a design-led approach need strengthening, legal enforcement measures (such as cameras) can be delivered. Moving traffic offences (such as the contravention of a TRO) are enforceable by local highway authorities under the Traffic Management Act, with fines able to be issued to deter violations.

Physical Restriction

- 4.3.8 Whilst considered unlikely, should a design-led solution not be appropriate, there are a range of physical restriction systems that are regularly used to restrict certain traffic movements:
- i Rising arm barriers.
 - ii Rising bollards.
 - iii Combined restrictions – i.e. rising barriers and bollards.
 - iv Traffic signal operation.

4.4 Car Parking

- 4.4.1 The details on car parking will be provided within a future Reserved Matters planning application. However, car parking will be provided in accordance with the prevailing WBC Parking Standards, as set out in Section 2 of this TA.

4.5 Refuse Vehicle Access and Turning

- 4.5.1 To ensure ease of use, swept path analysis of a refuse vehicle entering and exiting the proposed site access onto Lodge Road has been undertaken. The swept path analysis is presented as i-Transport drawing no. **ITB19328-GA-005**. The swept path analysis demonstrates that a refuse vehicle can safely access and egress the site onto Lodge Road.

4.6 Emergency Vehicle Access and Turning

- 4.6.1 Swept path analysis has also been undertaken of an emergency vehicle entering and exiting the proposed emergency access onto Tape Lane, as well as for bus movements. The swept path analysis is presented as i-Transport drawing no. **ITB19328-GA-003 / 006** and demonstrates that an emergency vehicle and bus is able to safely access and egress the site onto Tape Lane.

4.7 Road Safety Audit

- 4.7.1 An independent Stage 1 Road Safety Audit of the proposed access arrangements has been undertaken and all matters raised through the Audit have been addressed. A Design Team response is provided in line with Appendix F format of DMRB GG119 and as **Appendix E**.
- 4.7.2 In response to the Audit, if necessary, parking restrictions in the form of signing and lining could be introduced on Tape Lane to prevent on-street parking within the vicinity of the proposed emergency / bus access. This can be considered at the detailed design stage.
- 4.7.3 The RSA does not raise any unresolved safety concerns. All matters are addressed in the final scheme proposals or are capable of being resolved at the detailed Section 278 design stage.

SECTION 5 Transport Impact

5.1 Transport Impact Assessment Methodology

5.1.1 Consistent with the previous scheme at the application site, the cumulative traffic impacts of the proposed development were assessed using modelling output files obtained from WBC's strategic transport model (WSTM4). The study area included the following nine junctions on the local highway network, covering the assessment years of 2026 and 2038 respectively.

- 1 Twyford Crossroads.
- 2 Broadwater Lane / Lodge Road.
- 3 Lodge Road / Sawpit Road.
- 4 Wokingham Road / Hinton Road.
- 5 Wokingham Road / Orchard Road.
- 6 Winnersh Crossroads.
- 7 Twyford Road / Forest Road.
- 8 Twyford Road / Bell Foundry Lane.
- 9 Warren House Road / Diamond Jubilee Way.

5.1.2 It was agreed with WBC as part of the previous application that the development proposals would not result in any significant cumulative traffic impacts on the local highway network that would require mitigation. The previous scheme at the application site assessed the cumulative traffic impacts of a development more than twice the size of that now proposed at the application site. The impacts of the current proposal are much lesser, and impacts will be insignificant.

5.1.3 The following approach to assessing the cumulative traffic impacts of the new proposals at the application site was therefore agreed with WBC during pre-application discussions:

- 1 The residential TRICS trip rates contained within the WSTM4 remain an acceptable proxy to estimate the likely development traffic generation.
- 2 In the context of the reduced quantum of development for the newly proposed scheme at the application site, it would not be necessary to undertake any further strategic transport modelling using the WSTM 4. Furthermore, WBC confirmed that the data already obtained from the WSTM 4 remains up-to-date and is a robust reflection of the forecast future year highway conditions on the local highway network.

- 3 The development traffic impacts on the local highway network can be determined on a 'pro-rata' basis through analysis of the previous strategic modelling results.
- 4 The extent of any detailed junction capacity assessments would remain as agreed for the previous scheme at the application site, and therefore would comprise:
 - (a) The proposed site access priority junction with Lodge Road.
 - (b) The Lodge Road / Broadwater Lane priority junction.
 - (c) The Lodge Road / Sawpit Road priority junction.

5.2 Trips Rates and Transport / Traffic Generation

5.2.1 The residential trip rates within the WSTM4 strategic transport model are shown in **Table 5.1**.

Table 5.1: Proposed Trip Rates (WSTM4)

Trip Rate	AM Peak (0800-0900)			PM Peak (1700-1800)			Daily (12-hour)		
	In	Out	Total	In	Out	Total	In	Out	Total
Houses	0.170	0.410	0.580	0.360	0.160	0.520	1.790	1.830	3.620
Flats	0.060	0.180	0.240	0.190	0.100	0.290	1.020	1.050	2.070
Vehicle Trips (99 Dwellings – Assuming all Private Houses)									
Development	17	41	57	36	16	51	177	181	358

Source: WSTM4

5.2.2 Whilst the proposed development mix will be detailed at the RM stage, assuming a robust scenario where all 99 dwellings are private houses, the development at the application site is likely to generate some 50-57 two-way vehicle movements during the busiest periods of the day. This broadly equates to less than one additional vehicle every minute, which is a modest volume of traffic and would not materially impact on the safety or operation of the network.

5.2.3 To quantify the potential volume of total trips (including non-car modes), a multi-modal trip rate has been obtained from the TRICS database (**Appendix F**) and is summarised in **Table 5.2**.

Table 5.2: Multi-modal Trip Rate and Demand

Trip Rate	AM Peak (0800-0900)			PM Peak (1700-1800)			Daily (12-hour)		
	In	Out	Total	In	Out	Total	In	Out	Total
Cyclists	0.005	0.024	0.029	0.015	0.003	0.018	0.076	0.078	0.154
Pedestrians	0.078	0.221	0.299	0.076	0.066	0.142	0.733	0.718	1.451
Public Transport	0.001	0.030	0.031	0.025	0.002	0.027	0.112	0.119	0.231
Total People	0.281	0.881	1.162	0.532	0.269	0.801	3.631	3.703	7.334
Travel Demand (99 Dwellings)									
Cyclists	0	2	3	1	0	2	8	8	15

Trip Rate	AM Peak (0800-0900)			PM Peak (1700-1800)			Daily (12-hour)		
	In	Out	Total	In	Out	Total	In	Out	Total
Pedestrians	8	22	30	8	7	14	73	71	144
Public Transport	0	3	3	2	0	3	11	12	23
Total People	28	87	115	53	27	79	359	367	726

5.2.4 The proposed development at the application site could generate up to:

- 2-3 two-way cycle movements in the peak periods respectively, and 15 daily trips.
- 14 two-way pedestrian movements in the morning peak period and 29 two-way pedestrian movements in the evening peak period and 150 trips daily.
- 3 two-way public transport movements in the morning and evening peak periods respectively and 23 trips daily.
- 115 two-way movements in the morning peak period and 79 two-way movements in the evening peak period across all modes.

5.2.5 The estimates for active and public transport rely on data from existing development sites and do not account for the sustainable transport measures proposed as part of the scheme. These are therefore likely to be conservative, with the Travel Plan and strategy committed to significantly increasing sustainable transport movement.

5.3 Assessment of Development Traffic Impacts

5.3.1 To quantify the level of development traffic forecast to pass through each of the junctions, a comparison has been undertaken between the future year 'do minimum' and 'do something' scenarios within the WSTM4. As set out in the agreed methodology, the forecast development traffic impacts for the proposed 99 home development have been calculated on a pro-rata basis. The results for the 2026 and 2038 scenarios are set out in **Table 5.3** and **Table 5.4** respectively.

Table 5.3: "Do Minimum" comparison to "Do Something" Scenario (2026)

Junction	2026 DM		2026 DS		Change in vehicles		Percentage change	
	AM	PM	AM	PM	AM	PM	AM	PM
Twyford Crossroads	846	1063	850	1065	4	2	0.4%	0.2%
Broadwater Ln / Lodge Rd	793	906	803	917	10	11	1.3%	1.2%
Lodge Rd / Sawpit Rd	1168	1289	1190	1311	22	22	1.8%	1.7%
Wokingham Rd / Hinton Rd	828	683	833	687	5	4	0.5%	0.6%
Wokingham Rd / Orchard Rd	981	880	988	890	7	10	0.7%	1.1%

Winnersh Crossroads	2,277	1,927	2,284	1,928	7	1	0.3%	0.1%
Twyford Rd / Forest Rd	2,045	2,030	2,051	2,037	6	7	0.3%	0.3%
Twyford Rd / Bell Foundry Ln	2,510	2,222	2,511	2,228	1	6	0.0%	0.3%
Warren Hs Rd/ Diamond Jubilee Way	1,937	1,651	1,939	1,652	2	1	0.1%	0.1%

Table 5.4: “Do Minimum” comparison to “Do Something” Scenario (2038)

Junction	2026 DM		2026 DS		Change in vehicles		Percentage change	
	AM	PM	AM	PM	AM	PM	AM	PM
Twyford Crossroads	852	1119	855	1123	3	4	0.3%	0.4%
Broadwater Ln / Lodge Rd	799	952	807	963	8	11	0.9%	1.1%
Lodge Rd / Sawpit Rd	1295	1431	1316	1448	21	17	1.6%	1.2%
Wokingham Rd / Hinton Rd	920	861	928	866	8	5	0.8%	0.6%
Wokingham Rd / Orchard Rd	1056	986	1064	989	8	3	0.7%	0.3%
Winnersh Crossroads	2376	1997	2378	1998	2	1	0.1%	0.0%
Twyford Rd / Forest Rd	2244	2222	2248	2227	4	5	0.2%	0.2%
Twyford Rd / Bell Foundry Ln	2768	2485	2770	2492	2	7	0.1%	0.3%
Warren Hs Rd/ Diamond Jubilee Way	2149	1895	2152	1898	3	3	0.1%	0.1%

5.3.2 The forecast development traffic is likely to generate only a very modest traffic flow increase in both the base year and future year scenarios, equating to generally less than 0.5% impact at junctions during the peak periods. For the most proximate junctions, those on Lodge Road, impacts are less than 2% which is immaterial and will be largely imperceptible.

5.3.3 In absolute terms, this equates to a maximum increase of some 20 two-way vehicle movement at any one junction which is broadly one additional vehicle every 3 minutes. This is a very modest increase in traffic that would not lead to any material, let alone ‘severe’ impact on the operation of the local highway network. The conclusions of the traffic impact assessment for the previous scheme therefore remain valid, i.e. there are no significant traffic impacts that require mitigation.

5.3.4 The link flow outputs from the WSTM4 are provided at **Appendix G** and demonstrate how traffic is forecast to route onto the network. However, it should be noted that these link flows outputs are provided for information only. This is due to the fact that the development traffic impacts that they show correspond to the previous scheme submitted at the application site, which was more than twice the scale from that which is now proposed⁶.

5.4 Junction Modelling

5.4.1 In line with the agreed traffic impact assessment methodology, the traffic impacts of the proposed development on the proposed site access junction, as well as the two junctions of Lodge Road with Sawpit Road and Lodge Road with Broadwater Lane have been modelled for the 2026 and 2038 future year scenarios of the WSTM4 model using Junctions 10.

5.4.2 This is notwithstanding the conclusions of the above development traffic impact assessment, which demonstrates clearly that the development traffic impacts associated with the proposed 99 home development at the site will be modest and will not exceed some 20 two-way vehicle movements at any one junction on the local highway network.

5.4.3 The scenarios have been modelled for the AM and PM peak hours, with and without development. The full modelled outputs are provided in **Appendix H** for reference.

Site Access Priority Junction

5.4.4 **Table 5.5** summarises the 2026 and 2038 peak period scenarios with development flows. The junction will operate well within its theoretical capacity, with no material queueing or delay.

5.4.5 An RFC of 1.0 represents theoretical capacity (0.85 applied regularly as 'design capacity'). The access junction operates with a maximum RFC of 0.09, far below any level of capacity concern.

Table 5.5: Junctions 10 Modelling – Site Access/Lodge Road Junction

Arm	AM Peak			PM Peak		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2026 'With Development'						
Lodge Road	0.0	5.6	0.01	0.0	5.9	0.03
Site Access	0.1	8.9	0.09	0.0	9.1	0.04
2038 'With Development'						
Lodge Road	0.0	5.6	0.01	0.0	6.0	0.04
Site Access	0.1	9.0	0.09	0.0	9.4	0.04

⁶ 200 homes compared to the new proposal for 99 homes

Source: Junctions 10

Lodge Road/Broadwater Lane Junction

5.4.6 **Table 5.6** shows the modelled 2026 and 2038 “do minimum” and “do something” scenarios for Lodge Road/Broadwater Lane Junction. The junction is forecast to operate well within capacity during both the 2026 and 2038 future year scenarios, with no material queueing or delay. The proposed development is forecast to have a limited impact on the operation of the junction, with a maximum increase in RFC of 2% forecast on Broadwater Lane in the 2026 scenario.

Table 5.6: Junctions 10 Modelling – Lodge Road/Broadwater Lane

Arm	AM Peak			PM Peak		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2026 Baseline						
Lodge Road	1.2	11.6	0.55	2.8	20.4	0.75
Broadwater Lane	1.2	11.5	0.54	1.7	15.2	0.63
2026 ‘With Development’						
Lodge Road	1.3	11.9	0.56	2.9	20.9	0.75
Broadwater Lane	1.3	11.6	0.54	1.8	15.7	0.65
2038 Baseline						
Lodge Road	1.1	11.2	0.54	3.2	22.2	0.77
Broadwater Lane	1.3	11.7	0.55	2.1	16.8	0.67
2038 ‘With Development’						
Lodge Road	1.2	11.4	0.54	3.3	23.3	0.78
Broadwater Lane	1.3	11.9	0.56	2.2	17.4	0.68

Source: Junctions 10

Lodge Road/Sawpit Road Junction

5.4.7 The 2026 and 2038 “do minimum” and “do something” scenarios have been modelled and are summarised in **Table 5.7**.

Table 5.7: Junctions 10 Modelling – Lodge Road/Sawpit Road

Arm	AM Peak			PM Peak		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2026 Baseline						
Lodge Road	2.8	12.3	0.66	2.3	9.4	0.59
Sawpit Road	0.3	8.6	0.25	0.6	10.2	0.36
2026 ‘With Development’						

Arm	AM Peak			PM Peak		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
Lodge Road	2.9	12.5	0.66	2.5	9.9	0.61
Sawpit Road	0.3	9.1	0.26	0.6	11.1	0.39
2038 Baseline						
Lodge Road	8.9	34.2	0.88	5.3	17.4	0.78
Sawpit Road	0.4	9.2	0.29	0.7	11.5	0.42
2038 'With Development'						
Lodge Road	9.5	34.5	0.89	5.4	17.3	0.78
Sawpit Road	0.4	9.8	0.30	0.8	12.5	0.45

Source: Junctions 10

- 5.4.8 The junction, as modelled using the outputs from the WSTM4, is forecast to operate under some stress in the 2038 future year scenario. Notwithstanding this, the junction is forecast to remain within its theoretical capacity and the impacts of the proposed development traffic are very modest, with an increase in RFC of no more than 3% forecast at the Sawpit Road arm.

Sensitivity Testing

- 5.4.9 Whilst the junction is forecast to remain within its theoretical capacity in the 2026 and 2038 future year scenarios, the modelling suggests that the junction will operate under some stress, with RFC values on the Lodge Road arm of the junction nearing 90%.
- 5.4.10 However, on-site observations suggest that the junction currently operates under free flow conditions and without any material operational constraint. The WSTM is a strategic model and therefore makes high-level estimates of traffic routing, which need to be applied to a local scale with caution and in this case, the WSTM4 model does not reflect well the local conditions. A sensitivity test has therefore been undertaken to consider conditions more locally.
- 5.4.11 The sensitivity test has been developed using the following methodology:
- Observed traffic flows have been obtained for the junction from the traffic flow diagrams presented within the Transport Assessment that was submitted alongside the Land at Orchard Road scheme (*planning ref: 230074*). The traffic surveys were undertaken in November 2022 and are presented in **Appendix I**.
 - Unadjusted TEMPro growth rates were obtained for the future years of 2026 and 2038, to adjust the traffic survey data to the future year scenarios within the WSTM4. The use of unadjusted growth rates ensures that all planned and cumulative development in the local area is accounted for. The growth rates are summarised in **Table 5.8**.

Table 5.8: TEMPro Growth Rates

Growth Scenario	AM	PM
Growth (2022-2026)	1.0221	1.0235
Growth (2022-2038)	1.104	1.1186

Source: TempPro v 8.1.1

- iii The unadjusted growth rates were then applied to the observed traffic flows obtained to produce a 2026 and 2038 future year 'without development' scenario.
- iv The forecast development traffic flows (produced on a pro-rata basis from the WSTM4 as set out above) were then added to the 'without development' flows to produce the 2026 and 2038 future year 'with development' scenarios.

5.4.12 The results of the sensitivity testing at the junction for the 2026 and 2036 'with' and 'without' development scenarios are shown below in **Table 5.9**. The full junctions 10 outputs are presented in **Appendix J**.

Table 5.9: Junctions 10 Modelling (Sensitivity Testing) – Lodge Road/Sawpit Road

Arm	AM Peak			PM Peak		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2026 'With Development'						
Lodge Road	0.1	8.00	0.06	0.0	7.13	0.04
Sawpit Road	0.0	4.90	0.03	0.1	5.30	0.05
2038 'With Development'						
Lodge Road	0.1	8.15	0.06	0.0	7.19	0.04
Sawpit Road	0.0	4.86	0.03	0.1	5.30	0.06

Source: Junctions 10

5.4.13 The results of the sensitivity testing show that the junction is forecast to operate well within capacity, with a maximum RFC significantly lower than that which was forecast using flows from the WSTM4 for both future year scenarios. Based upon on-site observations, as well as the results of the traffic surveys extracted from the Orchard Road scheme, the sensitivity modelling is considered to be a more accurate reflection of how the junction operates in reality.

5.5 Summary

- 5.5.1 The proposed development is forecast to generate only modest traffic flow increases in both the base year and future year scenarios, equating to no more than a 2% increase at any one junction on the local highway network during the busiest periods of the day. In absolute terms, this equates to a maximum increase of some 20 two-way vehicle movements at any one junction which is broadly equivalent to one additional vehicle every 3 minutes. This is a very modest increase in traffic that would not lead to any material, let alone 'severe' impact on the operation of the local highway network.
- 5.5.2 In line with the methodology agreed for the previous application at the site, detailed junction modelling has been undertaken at three junctions on the local highway network (including the proposed site access). The analysis confirms that the junctions will continue to operate well within capacity, with no material queueing or delay, and that the proposed development traffic impacts are limited. The conclusions of the traffic impact assessment for the previous scheme at the site therefore remain valid, i.e. there are no significant traffic impacts that require mitigation.

SECTION 6 Promoting Sustainable Travel

6.1.1 This section of the TA considers the existing accessibility of the site to local services and facilities available by walking and cycling and the public transport choices available to residents.

6.2 Site Context and Accessibility

6.2.1 It is recognised that the recent appeal at the site was dismissed partly in relation to sustainability matters, with the primary reasons being:

- The scale of the scheme proposed was considered too large for Hurst to accommodate sustainably and within the context of Policy requirements for rural areas.
- Inadequacy in bus / cycle connections to Winnersh / Twyford, and locally for pedestrians in Hurst village, leading to a lack of genuine travel choices.
- The package of improvements was insufficient to ensure opportunities are taken up.

6.2.2 When considering the accessibility of a site for a prospective development, there is a tendency to consider only the most proximate facilities and connections, to seek to apply a 'one-size-fits-all' approach to assessing sustainability. This does not consider the way that transport, accessibility and lifestyles are changing.

6.2.3 However, accessibility is more nuanced than simply appraising what facilities and services may be within a short walk of the scheme and instead must be considered in the round taking account of all relevant credentials and opportunities, and in the context of what the NPPF requires (as set out in Section 2 of this TA).

6.3 Changing Travel Patterns and the Impact on Access to Services

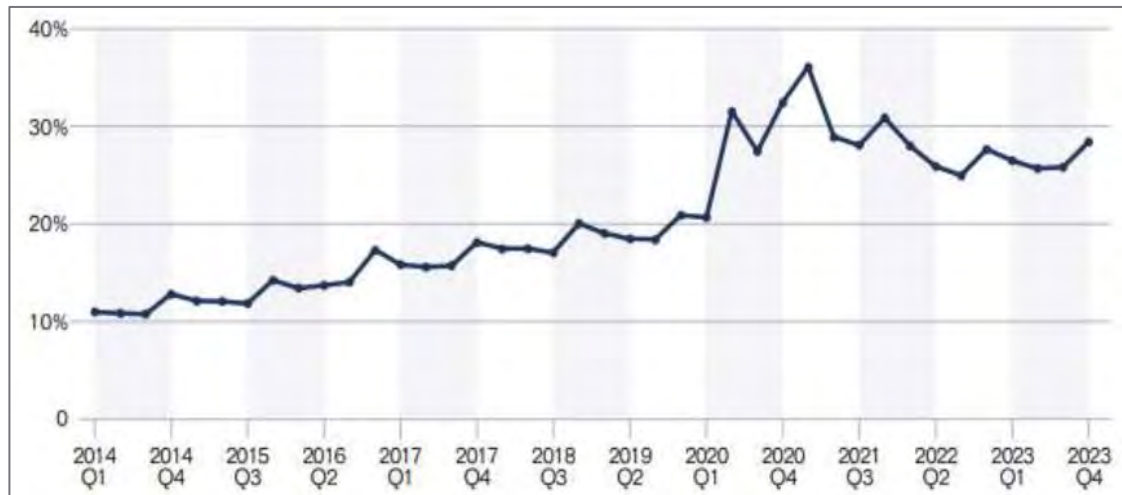
6.3.1 In promoting sustainable transport, it is important to consider how lifestyles are changing to ensure we plan for future behaviours rather than what has happened in the past. The ways people now live have recently shifted, particularly around how services are accessed and the reliance on physical accessibility to some services.

6.3.2 Research recently published by the Independent Transport Commission (ITC) in April 2024 provides evidence on these trends relating to:

- How people shop.
- How people work.
- How people access services.

- 6.3.3 Many people now more frequently access services and purchase goods online. ONS data shows that since 2014 internet sales as a percentage of total sales has increased very substantially from 10% to 25% - a trend that is likely to continue to grow, thereby reducing reliance on physical access to retail services.

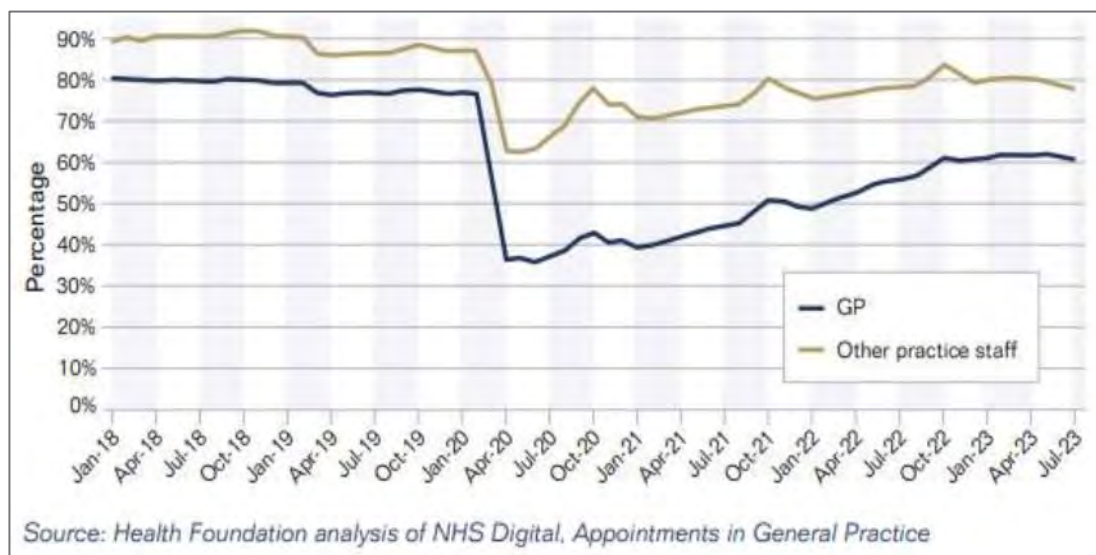
Image 6.1: Internet Sales as a Percentage of Total Retail Sales – 2014-2023



- 6.3.4 These changing patterns extend beyond accessing goods and employment, with a substantial increase in people using the internet occurring between 2002 (57%) and 2023 (98%). This means nearly all people can access all manner of services in increasing numbers without physically travelling, whether that is meeting with the bank, contacting public services, searching for a new house, or accessing healthcare.

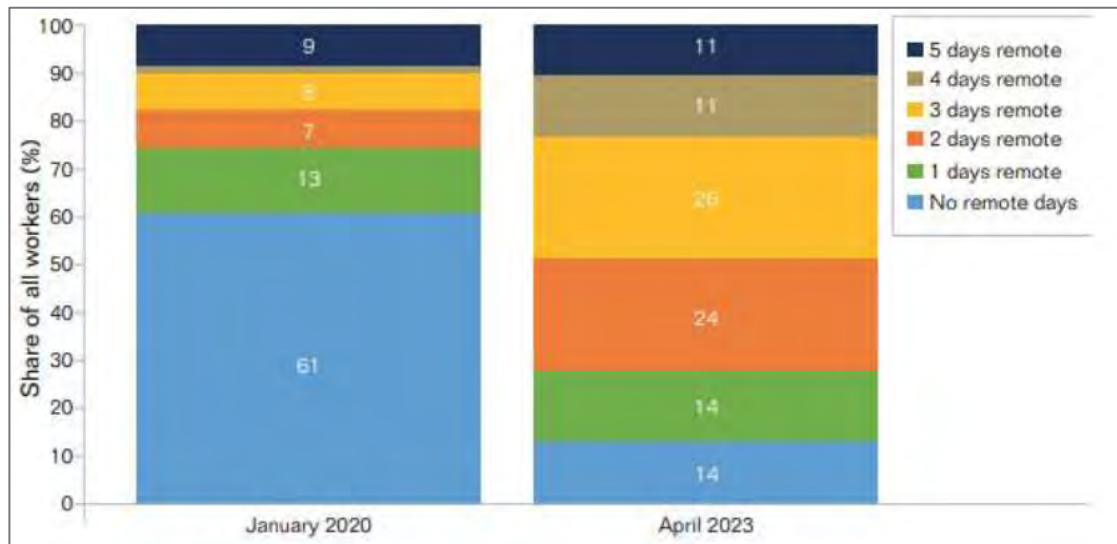
- 6.3.5 An example of this is the proportion of GP appointments now undertaken digitally increasing from 20% in 2018 to 40% in 2023 (**Image 6.2**).

Image 6.2: Percentage of all appointments with GPs / Practice Staff that were 'face to face'



6.3.6 People are also working very differently. Beyond the initial impacts of the pandemic, the ITC research demonstrates some 44% of working adults now either work remotely or within a hybrid arrangement (Image 6.3).

Image 6.3: Number of Home Working Days Preferred (percentage share of all workers)



6.3.7 This means less people need to regularly access commercial centres for employment, instead able to access employment at home or under hybrid arrangements. When journeys are made to employment bases, these are often far less frequent, and the role of commuting is reducing.

6.3.8 The increase in digital connectivity therefore reduces reliance on higher order services from the nearby centres of Twyford, Wokingham, Reading and Winnersh, with future residents able to access some services online via broadband infrastructure, which will be available to all.

6.3.9 Indeed, WBC identifies digital connectivity at the top of its movement hierarchy (Image 2.1) and recognises this as an important element of introducing sustainable travel behaviours by reducing the overall need to travel. WBC's draft LTP4 identifies that:

"At the top is Digital Access, which contributes to reducing the need to travel, for example to work and shopping (however, we recognise that this can also have a negative impact on the economy). Next is walking and wheeling, which is the term used for wheelchairs, scooters and pushchairs. Although private cars are shown to be our lowest priority, we know that many of us will continue to rely on the private car and simply could not (due to ability or other circumstances) switch to more sustainable modes even if there was appropriate infrastructure and services."

6.3.10 In terms of travel behaviours, this all means that people still have a travel demand but that travel demand is focussed on different purposes, with reducing need for physical access to employment and retail centres, and increased travel share for leisure purposes which can be achieved more locally. Assessment by TfL of travel patterns demonstrates this trend.

Image 6.4: Change in Journey Purpose (2019/2020 and 2022/2023)



6.3.11 There is also a notable shift to low emission vehicles, a ‘sustainable mode of travel’ identified by NPPF. Development can facilitate this shift by providing the right infrastructure and conditions to further the uptake of low emission vehicles, including EV charging facilities that will be provided for every dwelling on the Site. This means the harms of vehicle travel, where it occurs, becomes more limited, by reducing the negative environmental impacts of vehicle movement.

6.3.12 The Building Regulations now require each dwelling to be provided with access to fast EV charging facilities which will be provided as part of the development proposals (See Section 4), and the Government has committed to phasing out combustion engine vehicles by 2035.

6.4 How Accessibility should be Assessed at the Application Site

6.4.1 Considering the policy context and taking the above into account, accessibility at the application site should be assessed in the following manner:

- i** Firstly, is the location suitable for development and is there support for development in the area within the Development Plan?
- ii** Secondly, what is the scope of local facilities and services available, are these accessible by a choice of travel modes, and is this appropriate to the scale of development proposed?
- iii** Finally, how can the scheme ensure that the reasonable opportunities available to the specific site (as a whole) are taken up?

6.5 Hurst as a Suitable Location for Development

6.5.1 The WBC Core Strategy identifies Hurst as a 'Limited Development Location'. This definition is representative of a smaller village where the services and facilities, and public transport provision, are 'limited'. Hurst is a location for 'some' development to occur, not a 'no development' location. The Core Strategy considers this to be 'generally' 25 dwellings.

6.5.2 WBC published its Settlement Hierarchy Assessment in November 2018, which identifies Hurst as a Tier 3 settlement. These are described as:

"Settlement which have most of the key services but are less well-served by other services and by employment provision and which generally do not score highly on any of the other criteria. All have limited transport provision."

6.5.3 For Hurst specifically, the document identifies that the village provides:

"access to the majority of key services, but limited access to higher-order facilities. It has limited access to public transport".

6.5.4 With regards to *higher-order facilities*, the Core Strategy acknowledges that some higher-order facilities will be provided in other settlements. In the case of Hurst, this includes secondary schools, with all existing children in Hurst already travelling to nearby Twyford or Winnersh for secondary education. The Settlement Hierarchy supports this, noting ***"for many smaller settlements, higher-order facilities and opportunities are unlikely to be present, but it is the ease and ability to access such facilities elsewhere which is important in determining settlement sustainability"***. This position is consistent with paragraph 83 of the NPPF which acknowledges that, to promote sustainable rural development, services and facilities will be shared between smaller settlements.

6.5.5 On this basis, whilst the Core Strategy identifies Hurst as a 'Limited Development Location', more recent evidence base materials (i.e. the Settlement Hierarchy) recognise that most key services are available within Hurst and / or the local area.

6.5.6 Whilst the Core Strategy identifies that development in Limited Development Locations should generally be less than 25 dwellings, this is not a threshold over which development is not acceptable. Each proposal must be considered taking account current circumstances.

6.6 Access to Local Services and Facilities

6.6.1 To consider the individual circumstances, an assessment of the local facilities and services in Hurst has been carried out in order to identify opportunities for sustainable movement and travel choice, consistent with local and national planning requirements.

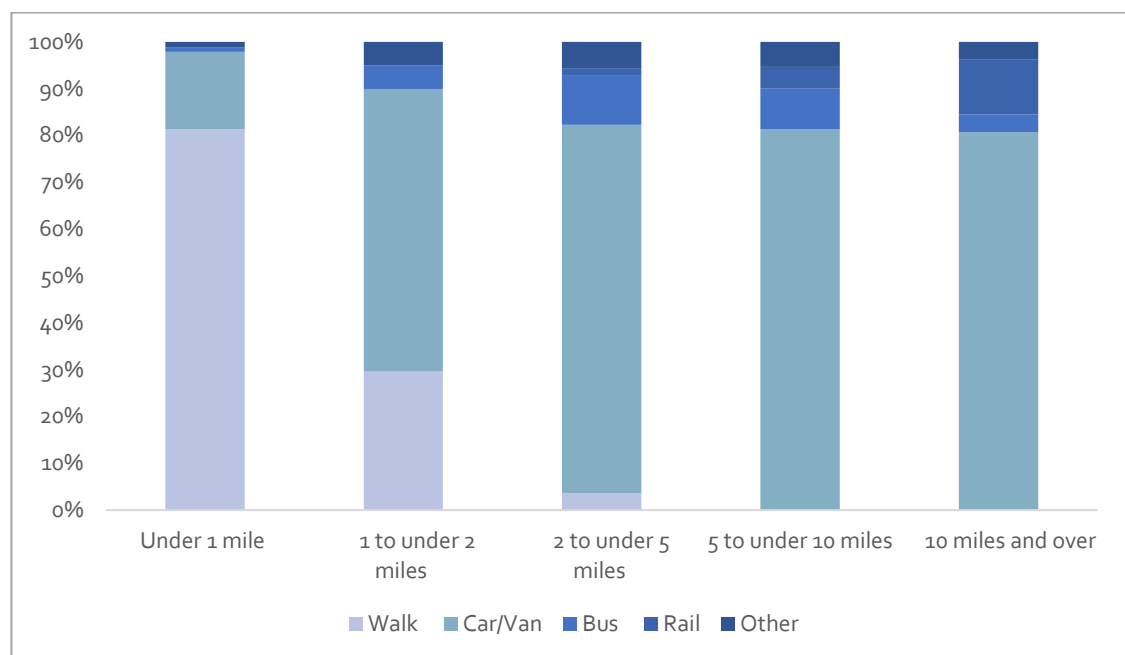
Walking Distances

6.6.2 Paragraph 4.4.1 of the Manual for Streets (MfS) states:

“Walkable neighbourhoods are typically characterised by having a range of facilities within 10 minutes’ (up to about 800m) walking distance of residential areas which residents may access comfortably on foot. However, this is not an upper limit and PPG13 states that walking offers the greatest potential to replace short car trips, particularly those under 2km. MfS encourages a reduction in the need to travel by car through the creation of mixed-use neighbourhoods with interconnected street patterns, where daily needs are within walking distance of most residents.”

6.6.3 The National Travel Survey (NTS) 2019 confirms that some 80% of all trips under 1 mile (circa 1.6km) are walking journeys (see **Image 6.5**), whilst walking accounts for some 31% of all trips between 1 and under 2 miles (circa 1.6km – 3.2km).

Image 6.5: Mode Share of Trips by Main Mode for Different Trip Lengths



Source: National Travel Survey: England 2019

6.6.4 Providing new homes within one mile (1.6km) of facilities and services will provide the greatest opportunity for a significant proportion of trips to be made by walking.

6.6.5 However, that is not to say that a mile is the maximum that people are prepared to walk, nor that development must be located within a mile of everything. The NTS data (**Image 6.5**) identifies that around 31% of all trips between one and two miles are undertaken on foot. Therefore, a significant proportion of people are prepared to walk for journeys of up to 2 miles (3.2km). This demonstrates that walking is a realistic and viable travel option for many people for such journeys.

6.6.6 Taking the above into consideration, the following walking distances have been used:

- Up to 800m – A comfortable walking distance
- Up to 1,600m – A distance where the majority of people (c. 80%) will walk;
- Up to 2,000m – A reasonable walking distance, i.e. the distance that “***offers the greatest potential to replace short car trips***”
- 3,200m – A maximum regular walking distance, i.e. the distance within which a significant proportion (c. one third) of journeys will be on foot.

Cycling Distances

6.6.7 Paragraph 2.2.2 of the DfT Document LTN 1/20 *Cycle Infrastructure Design* provides the most up-to-date comprehensive guidance on delivering cycle infrastructure. The document states that more people cycle for everyday journeys where acceptable conditions are provided, and that two out of every three personal trips are less than five miles (8km) in length, a distance which is considered achievable for most people.

6.6.8 DfT guidance on Local Cycling and Walking Improvement Plans (LCWIP's) identifies that in determining the geographical scope of the LCWIP, it is recommended that the assessment looks at the likely distance that would be travelled by bike in a single journey, which is up to about 10km (six miles) or around 30 minutes' cycling time.

6.6.9 A cycling distance of up to around 8km (5 miles) is therefore a 'reasonable' cycling distance, i.e. is an achievable distance to cycle for most people and offers potential to replace car trips. Cycling also frequently forms part of longer journeys in combination with public transport.

Available Local Services and Facilities

6.6.10 Taking the above walking and cycling distances into consideration, **Table 6.1** summarises the pedestrian and cycle accessibility of the site to local services and facilities. **Figure 2** provides a wider accessibility plan showing the locations of the identified facilities in the context of walking catchments for an 800m, 1,600m and 3,200m radius from the site respectively, whilst **Figure 3** provides an assessment of the local facilities and services within an 800m radius of the site.

Table 6.1: Local Services and Facilities

Purpose	Destination	Distance (metres)	Walk Time (mins)	Cycle Time (mins)
Employment	Orchard Nursery Business units	615	7	2
	Lea Farm Business Unit	1100	13	4
	Broadwater Lane Business units	810	10	3
	Beech Court Business Centre	1300	15	5
	Nelsons Lane	2600	31	10
	Twyford High Street	2700	332	10
	Winnersh Employment Area	3800	-	14
Education	St Nicholas Pre School	450	5	2
	St Nicholas CofE Primary School	450	5	2
	The Colleton Primary School	2100	25	8
	Forest School (Boys)	3600	-	14
	Emmbrook School	5500	-	21
	Holt School (Girls)	5500	-	21
	The Piggot Secondary School	4600	-	17
Retail	Waingells College	3900	-	15
	Hurst Post Office and Shop	400	5	2
	Waitrose and Partners	3000	36	11
Leisure	Tesco Express	2900	35	11
	Hurst Cricket Club	500	6	2
	The Green Man Public House	750	9	3
	Hurst Gospel Hall	650	8	2
	Hurst Village Hall	425	5	3
	Scout Hut	435	5	2
	Allotments	200	2	2
	Recreation Ground	400	5	2
	Dinton Activity Centre	2000	24	8
	Elephant and Castle Public House	850	10	3
	Twyford Library	3100	37	12
	Twyford Health Club	3000	36	11
Health	The Castle Inn	1025	12	4
	Newdays Pharmacy	2900	35	11
	Twyford Surgery	3400	-	13
Transport	Twyford Dental Centre	2900	35	11
	Wards Cross Bus Stop	330	4	1
	Twyford Railway Station	2400	29	9

Walk speed 1.4m/s (MfS) / Cycle speed of 15km p/hour (MfS2). Distances are actual distance from the centre of the site.

 Comfortable walking distance (800m)

	Reasonable walking distance (1.6km)
	Maximum walking distance (3.2km)

- 6.6.11 With reference to **Table 6.1**, **Table 6.2** considers access to these facilities and services against WBC's Living Streets '*Key Destinations and Levels of Accessibility*' guidance.

Table 6.2: Local Services and Facilities

Type of Facility	Distance (metres)	WBC Rating (Living Streets)
Bus Stop	330	Medium
GP Surgery	3400	Low
Community Facility	425	High
Local Shop	475	High
Post Office	400	High
Primary School	450	High
Pre-School / Nursery	450	High
Secondary School	3900	Low
Employment Area	1300	Medium
Twyford Railway Station	2400	Low

- 6.6.12 Other than for bus stops, which is addressed in the application proposals, all of the core facilities considered by WBC in its Living Streets guidance that are present in Hurst are in areas of 'High Accessibility' to the application site when considered against WBC's criteria.
- 6.6.13 In terms of cycling, all of the listed facilities and services (including the higher order services within Twyford) are within reasonable cycling distance. This provides the opportunity for future residents of the site to travel via an alternative, sustainable transport mode.
- 6.6.14 There is a primary school and nursery a 6-minute walk away from the site, which is suitable for families with young children, whilst a further primary school (Colleton Primary School) is also located within a reasonable walking distance of the site near Twyford. The Piggot CofE Secondary School is within a reasonable cycle distance from the site; however, the school will also be accessible by public transport following the delivery of the proposed development at the site (see Section 7).
- 6.6.15 Waingells College and other secondary education is also located within a reasonable cycle distance from the site and is readily accessible by the existing 128 bus service within Hurst. Future students living at the proposed development will therefore be provided with opportunities to cycle or get the bus to school/college.

6.6.16 The existing Hurst village shop supplies food essentials such as bread and milk. However, bulk food shops can be undertaken at either the Waitrose or Tesco supermarkets within Twyford which are accessible via the 128/129 bus service or within a c. 10-minute cycle journey. This is also the same case for Day Lewis pharmacy and Twyford Surgery.

6.7 Public Transport Accessibility

6.7.1 Reading is a regional service centre and major employment area. Access to Reading can be achieved using sustainable travel including by rail link (from Twyford and Winnersh) or directly by bus using the Service 128/129. **Table 6.3** demonstrates the numerous bus connections available to Reading which enable access for commuting / business purposes, as well as for general access to higher order services.

Table 6.3: Existing 128/129 Bus Service Connections to Reading

Outbound Journey		Return Journey	
Depart Hurst	Arrive Reading	Depart Reading	Arrive Hurst
07:22	08:15	09:15	10:00
09:31	10:16	10:20	11:05
10:38	11:21	11:25	12:10
11:43	12:26	12:30	13:15
12:48	13:31	13:35	14:20
13:53	14:36	14:40	15:25
14:58	15:41	15:45	16:33
15:51	16:45	16:50	17:44
17:20	18:06	18:10	19:00
17:55	18:41	18:45	19:29

6.7.2 Residents of the Site can commute to Reading and London by public transport, taking advantage of the high-quality rail services from Twyford Station.

Table 6.4: Connections to Reading and London (Outbound Journey)

Destination	Bus Depart Hurst	Bus Arrive Twyford	Train Times (Depart)	Train Times (Arrive)
Reading	07:22	07:34	07:39 07:47	07:47 07:55
Paddington			07:50 07:55 07:59	08:38 08:21 08:43

Table 6.5: Connections to Reading and London (Return Journey)

Origin	Train Depart	Train Arrive	Bus Depart Twyford Station	Bus Arrive Hurst
Reading	17:11 17:15	17:16 17:20	17:34	17:44
	18:28 18:33	18:34 18:38	18:50	19:00
Paddington	16:42	17:26	17:34	17:44
	17:50 18:08	18:35 18:27	18:50	19:00

Public Transport Connections to Schools

- 6.7.3 The village primary school (St Nicholas Hurst Primary School) is located within the village. This means all travel to primary education for residents of the Appeal Site will realistically be made using suitable travel modes, namely on foot.
- 6.7.4 Secondary education is available in both Twyford and Winnersh across various Wokingham schools. Parents have a choice of where their children attend schooling. **Table 6.6** identifies the available bus-based transport opportunities to various local secondary schools, demonstrating in each case that pupils can travel sustainably to school.

Table 6.6: Existing 128/129 Bus Service Connections to Local Secondary Schools

School	School Times		Outbound Bus Time (Arrival)	Inbound Bus Time (Arrival)	Walk from Bus Stop
	Start	Finish			
Forest School (Boys)	08:30	15:00	07:57 (08:04)	15:45 (15:51)	2 minutes (200m)
Emmbrook School	08:25	14:55	07:54 (08:12)	15:38 (15:51)	8 minutes (700m)
Holt School (Girls)	08:40	15:30	07:54 (08:14)	15:34 (15:51)	5 minutes (400m)

Source: Bustimes.org

- 6.7.5 In the context of a village location, the public transport opportunities provide viable, valuable, and realistic travel choices for existing and future residents. The application would promote these opportunities through travel planning measures and incentives to encourage use of public transport. Section 7 also considers the potential for bus service level enhancements.

6.8 Accessibility Summary

6.8.1 Overall, the site is located within the vicinity of a good range of local services and facilities giving future residents the opportunity to travel by sustainable transport modes. However, it is acknowledged from the outcomes of the recent Appeal for the previous scheme at the application site that an appropriate package of sustainable transport measures is necessary to ensure that these opportunities can be taken up. Therefore, Section 7 of this TA provides the details of a comprehensive sustainable transport package that will be delivered alongside the proposed development at the application site.

SECTION 7 Sustainable Transport Strategy

7.1 Overview

7.1.1 The analysis presented in Section 6 of this TA demonstrates that the site is located within the vicinity of a good range of facilities and services that can be accessed within a reasonable walking / cycling distance. These services include local schools, as well as connections to higher order services within the nearby service centre of Twyford.

7.1.2 However, it is acknowledged that the previous scheme at the application site was dismissed at appeal in relation to sustainability matters, with the primary reasons being:

- 1 The scale of the scheme proposed was too large for Hurst to accommodate sustainably and within the context of Policy requirements for rural areas.
- 2 limitations in bus / cycle connections to Twyford, and locally in Hurst village, leading to a lack of genuine travel choices.
- 3 The package of improvements was insufficient to ensure opportunities are taken up.

7.1.3 It has already been demonstrated within this TA that the scale of the revised development proposals at the application site equates to broadly half that which was submitted previously, with a revised development quantum of 99 homes proposed against a previous quantum of c. 200. This reduction in the proposed development quantum has the effect of significantly reducing the overall impacts of the development on the village of Hurst and the wider local highway network (Section 5).

7.1.4 In addition to this, the revised development proposals at the site directly respond to the remaining views of the Inspector (Points 2 and 3), through the delivery of a comprehensive and much enhanced sustainable transport offer. The details of this sustainable transport strategy are set out within this section of the TA.

7.2 Pedestrian Infrastructure Improvements within Hurst Village

7.2.1 A comprehensive suite of pedestrian infrastructure improvements is proposed to be delivered, to ensure there are improved opportunities for both existing and future residents of Hurst to access local facilities and services on foot. These proposals include:

- i Footway improvements along Lodge Road, leading north from the proposed site access.
- ii Footway improvements at the southern extent of Tape Lane and along School Road.
- iii Footway improvements along the northern extent of Tape Lane and along Broadwater Lane towards Hurst Shop and post office.

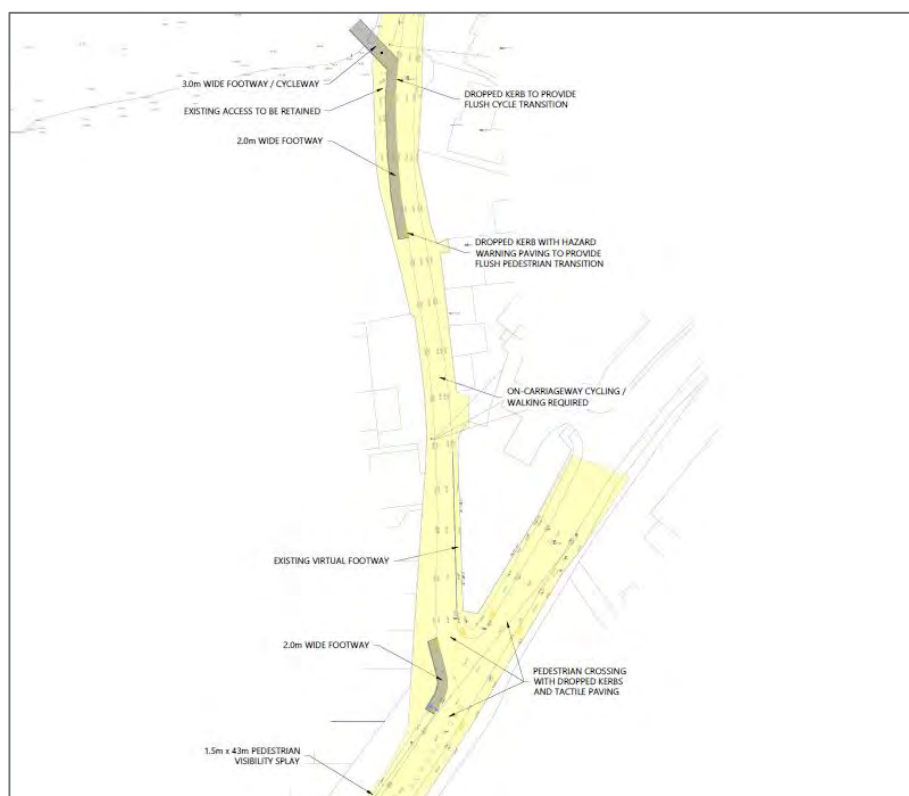
Lodge Road

- 7.2.2 There are currently no footways present along Lodge Road as it passes the site frontage. The development proposals will deliver a new length of 2.0m wide footway on the eastern side of Lodge Road leading north from the proposed site access. The footway will tie into the existing footway provision which commences c. 150m to the north of the site, providing a continuous walking route from the site to the existing residential area in Hurst and the nearby Elephant & Castle public house. The proposed footway provisions along Lodge Road are shown on i-Transport drawing no. **ITB19328-GA-001**.

Tape Lane and School Road

- 7.2.3 The development proposals will deliver a permeable network of internal footways/cycleways, as well as numerous pedestrian/cycle connections onto the local highway network to improve access for both existing and future residents of Hurst.
- 7.2.4 Footway improvements are proposed along the southern extent of Tape Lane and along School Road to facilitate improved pedestrian connections to the nearby schools of St Nicholas Pre-School and St Nicholas CofE Primary School and the Village Hall. These pedestrian infrastructure improvements are shown on drawing **ITB19328-GA-131** and comprise new lengths of 2.0m wide footway along Tape Lane, as well as tactile paving crossings over School Road (**Image 7.1**).

Image 7.1: Proposed Pedestrian Improvements – Tape Lane (south) and School Road



Tape Lane and Broadwater Lane

Tape Lane

- 7.2.5** A comprehensive package of pedestrian infrastructure improvements is proposed along the northern extent of Tape Lane and along Broadwater Lane to improve access to the existing Hurst village shop, recreation ground, cricket club and the wider village.
- 7.2.6** At the northern extent of Tape Lane, the carriageway is wide (in excess of 6.8m in places) and there is an existing footway on the eastern side of the carriageway that is c. 1.3m-1.5m in width. To facilitate improved opportunities for pedestrians, it is proposed to widen this existing footway to 2.0m by rationalising the existing carriageway width on Tape Lane to c. 6.0m-6.3m.
- 7.2.7** The widened footway will extend to the junction with Broadwater Lane to the north and will connect to the proposed development via a new pedestrian connection and associated crossing through the eastern boundary of the site onto Tape Lane. The pedestrian improvements along Tape Lane are shown on drawing no. **ITB19321-GA-121** (extract shown as **Image 7.2**).

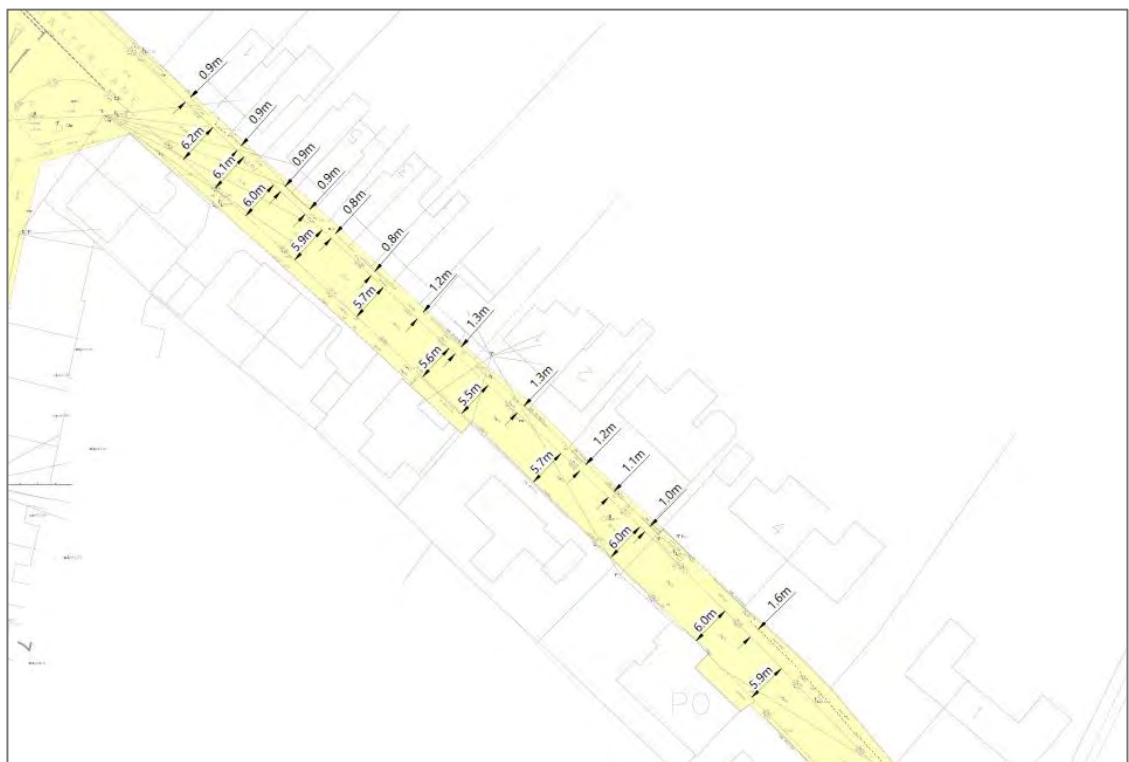
Image 7.2: Proposed Pedestrian Improvements – Tape Lane



Broadwater Lane

7.2.8 Whilst providing a useful connection to the Hurst Village Shop, the existing pedestrian route along Broadwater Lane lacks formal crossing opportunities and provides footways that vary significantly in width and quality. In multiple locations, the footway width on the northern side of Broadwater Lane varies between 0.8m-1.0m. At this width, the footway is suitable for only a single user and is broadly inaccessible for wheelchair users⁷. The existing widths of the footway along Broadwater Lane are demonstrated **Image 7.3**.

Image 7.3: Existing Footway Widths along Broadwater Lane



7.2.9 As part of the development proposals at the site, it is proposed to deliver a significantly improved route for pedestrians by:

- Widening the existing footway on the northern side of Broadwater Lane – by rationalising the width of the carriageway to 5.5m.
- Delivering two new uncontrolled pedestrian crossing points (formed as build-outs) – one adjacent to the junction with Tape Lane and one adjacent to Hurst Village Shop.
- Implementing a 20mph zone and associated gateway signage along Broadwater Lane within the vicinity of the Village Shop to improve the environment for users.

⁷ Ref: Figure 6.8 of Manual for Streets

Image 7.4: Proposed Pedestrian Improvements – Broadwater Lane

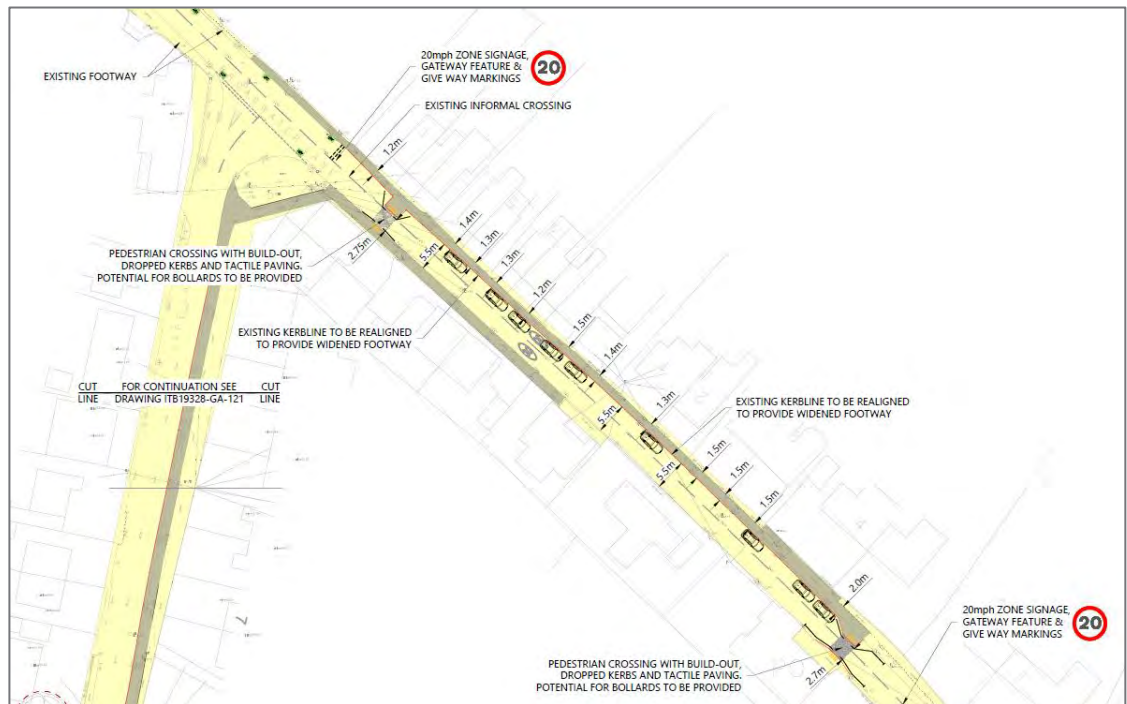
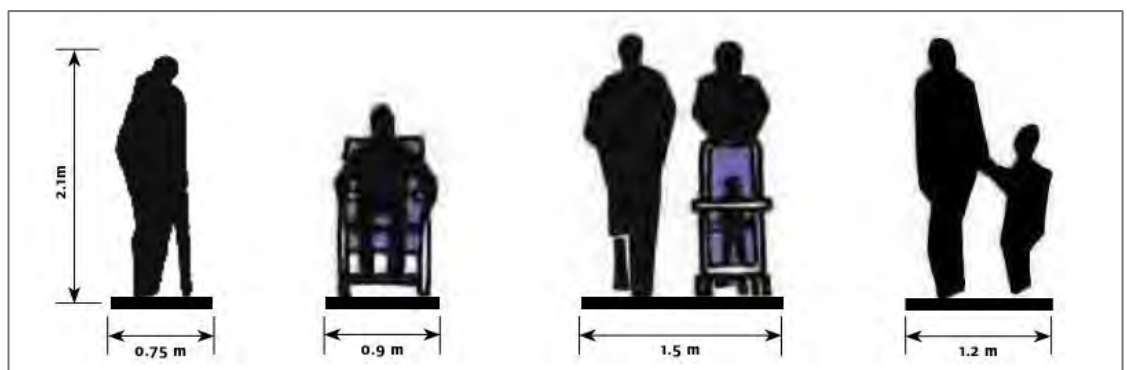


Image 7.5: Suitable Footway Widths for Users – Manual for Streets



7.2.12 The operation of Broadwater Lane will not be materially impacted by the proposals to limit the width of the carriageway to 5.5m within the vicinity of the Bakery and Village Shop. This is owing to the existing presence of on-street parking which effectively limits Broadwater Lane to one-way working for large periods of the day.

Road Safety Audit

7.2.13 An independent Stage 1 Road Safety Audit of the proposed pedestrian infrastructure improvements has been undertaken and all matters raised through the Audit have been addressed. A Design Team response is provided in accordance with Appendix F format of DMRB GG119 and as **Appendix E**. In response to the audit:

- Priority give-way road markings have been provided on approach to slow vehicle traffic.
- An additional pedestrian build-out has been provided at the northern uncontrolled crossing point.
- Edge of carriageway markings to visually narrow the carriageway on approach to the build-outs are provided, as well as white line shoulder markings to discourage on-street vehicle parking within the vicinity of the build-outs.
- Revised surface treatment at the proposed build-outs has been introduced to highlight to the presence of pedestrians to existing road users. The potential to include reflective bollards at the build-outs will also be explored at the detailed design stage.

7.2.14 On this basis, the RSA does not raise any unresolved safety concerns. The scheme of improvements would provide a significant betterment to existing provisions.

7.3 Cycle Improvement to Twyford Railway Station

7.3.1 WBC published its Local Cycling and Walking Infrastructure Plan (LCWIP) in March 2023. The document provides a strategy setting out what WBC want to achieve to encourage walking and cycling across the Borough, particularly amongst those that do not travel via these modes at present. Appendix E of the document provides a series of Infrastructure Improvement Plans for locations across the Borough that it is prioritising for improvement.

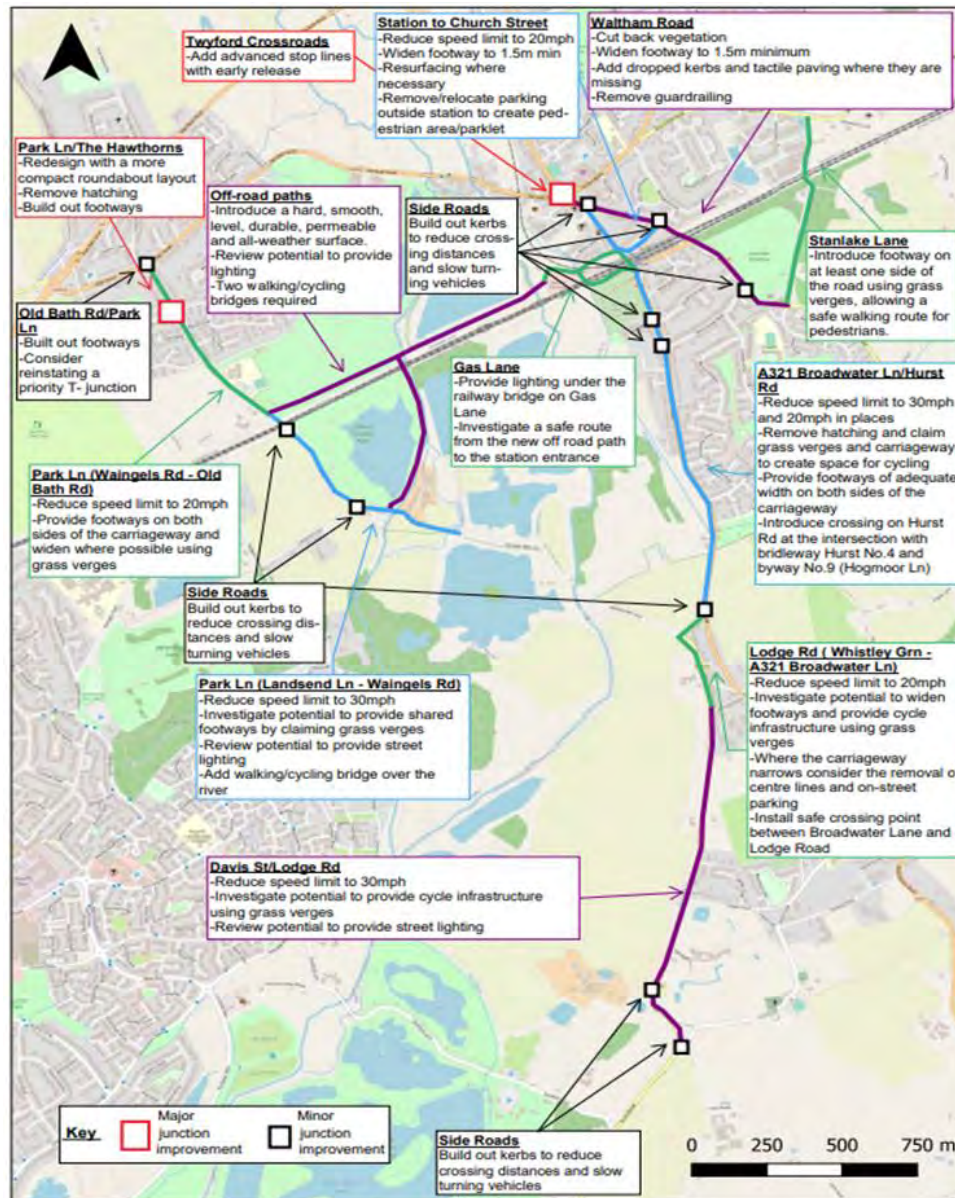
7.3.2 One such route identified in the strategy is the connection between Hurst and Twyford. The WBC LCWIP Strategy Plan is presented as **Image 7.6**. The delivery of a pedestrian and cycle improvement scheme between Hurst and Twyford is therefore an established long-term strategy aspiration of WBC which is unlikely to be delivered without development funding.

7.3.3 The LCWIP proposals for connecting Hurst and Twyford are conceived by WBC to include:

- i Reduction in speeds along Lodge Road and investigate the delivery of cycle infrastructure, whether through off-road provision if space permits, or through removal of the centreline.
- ii Deliver an improvement to the existing Lodge Road / Broadwater Lane junction to provide a crossing point for pedestrians and cyclists.

- iii Remove the central hatching along Broadwater Lane / Hurst Road to provide space to deliver cycle infrastructure, alongside speed reduction measures.
- iv Crossing improvements on Hurst Road at intersection with Bridleways at Hurst 4 / 9.
- v Build out kerbs at side roads along Hurst Road / Blackwater Road to reduce crossing distances for pedestrians and slow vehicles.

Image 7.6: WBC LCWIP Infrastructure Improvement Plan – Hurst to Twyford

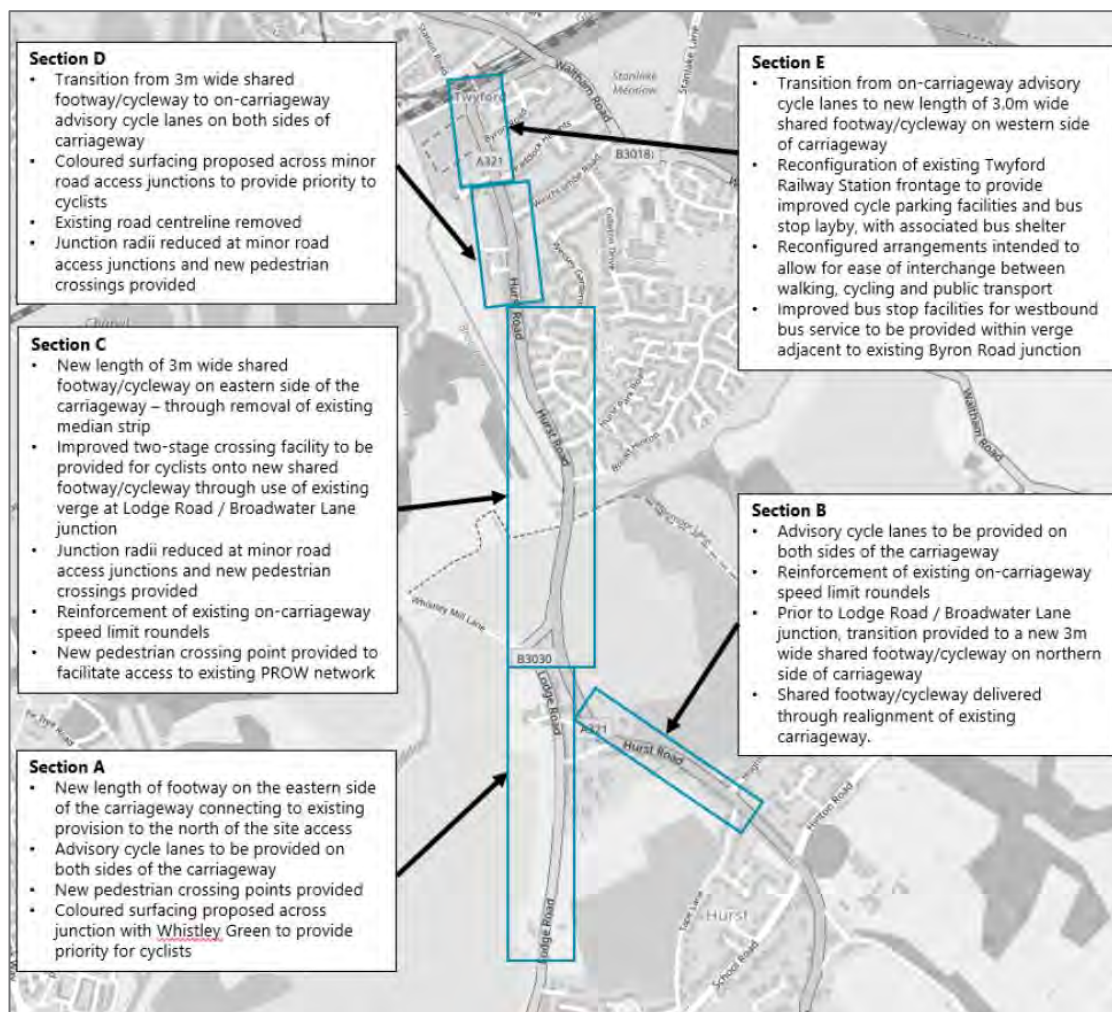


7.3.4 These long-term aspirations align with the key aims of WBC's emerging LTP4 which, among other matters, identifies:

- i An aspiration to improve active travel to, and interchange at, Twyford Station.
- ii Commitment to implementation of the LCWIP, including prioritisation of improvements in routes to Twyford.

7.3.5 In line with the aspirations of WBC's LCWIP and their LTP4, the development proposals will deliver a comprehensive cycle improvement scheme between Hurst and Twyford Railway Station. The route improvements will cover a c. 2km length of Lodge Road, Broadwater Lane and Hurst Road between the application site and Twyford Railway Station with the details summarised in **Image 7.7**.

Image 7.7: Summary of Proposed Cycle Improvement Scheme to Twyford Railway Station



7.3.6 The full design proposals are shown on the drawings no. **ITB19328-GA-102** to **ITB19328-GA-113**, which are included within this report. In addition to this, the specific design considerations and how these comply with prevailing national and local guidance (i.e. LTN 1/20) is presented in i-Transport report no. **ITB19328-003 TN**, which is contained as **Appendix K**.

7.3.7 In conjunction with the improvements to cycle infrastructure along Lodge Road, Broadwater Lane and Hurst Road, the scheme proposes substantial improvements to the existing cycle and bus infrastructure at Twyford Railway Station by:

- i Introducing improved covered cycle parking facilities within the vicinity of the station.
- ii Relocating the existing bus stop layby adjacent to the station and providing a bus shelter to create an improved interchange sustainable travel modes.
- iii Providing a new bus shelter for westbound services towards Hurst from Twyford.
- iv Providing an improved pedestrian interface at the station, through the delivery of footway improvements along the railway station frontage.

7.3.8 The delivery of the scheme will lead to a significant betterment in cycle connections between Hurst and Twyford and will ensure that there are genuine opportunities for future and existing residents of Hurst to travel to local facilities and services within Twyford, as well as part of longer onward journeys via rail, by bike.

7.3.9 During pre-application discussions, WBC confirmed that they support the principles of the cycle improvement strategy, given they align with the intentions of the LCWIP. Moreover, WBC agreed that the cycle improvement scheme to Twyford Railway Station is only likely to be delivered through funding from development, and that the application site at Lodge Road likely provides the only real opportunity to deliver the connection between Hurst and Twyford. A meeting note is presented at **Appendix L**.

Road Safety Audit

7.3.10 An independent Stage 1 Road Safety Audit of the proposed strategic cycle improvement scheme to Twyford Railway Station has been undertaken and all matters raised through the Audit have been addressed. A Design Team response is provided in accordance with Appendix F format of DMRB GG119 and as **Appendix E**. In response to the audit:

- The centreline road markings along Lodge Road and Broadwater Lane have been reinstated where necessary and the advisory on-carriageway cycle lanes have been replaced with advisory on-carriageway road markings. The road markings will be coloured to ensure that road users are made aware of the presence of cyclists.
- An edge of carriageway marking has been provided at the edge of the proposed shared footway/cycleway along Hurst Road. This ensures that appropriate intervisibility is achievable to cyclists from private driveways.
- It has been confirmed that the proposed tactile paving arrangements will be refined at the detailed design stage to ensure compliance with all necessary design guidance.

- It has been confirmed that the height of the bridge parapets over Twyford Brook along Hurst Road will be raised appropriately to safely accommodate cyclists. The details of this will be confirmed at the detailed design stage.

7.3.11 On this basis, the RSA does not raise any unresolved safety concerns that haven't been addressed either in the design or that can be addressed at the detailed design stage.

7.4 Public Transport Improvement

7.4.1 WBC's Bus Service Improvement Plan was updated in January 2023 and provides a long-term strategy for the transformation of the Boroughs' bus network.

7.4.2 The document sets out several key objectives, including:

- To grow passenger numbers to pre-pandemic levels and continue that growth.
- To improve bus journey times, reliability and punctuality.
- To improve bus integration with rail passengers, cyclists, pedestrians and car drivers.
- To improve accessibility to transport services and the local bus network for communities in more rural and low-density areas.

7.4.3 The document makes it clear that funding for all Council services is challenging, and that the delivery of the plan will be subject to suitable funding being secured.

7.4.4 The proposed development at the application site in Hurst therefore offers a significant opportunity to assist WBC in the delivery of their Bus Service Improvement Plan.

Existing Service

7.4.5 The village of Hurst is served by the existing 128/129 bus service, with the nearest bus stops located approximately 330m from the site on either side of Broadwater Lane. The route runs between Reading to the north and Wokingham to the south via Woodley, Twyford and Hurst. A summary of the existing service within Hurst is presented in **Table 7.1**.

Table 7.1: Summary of Bus Services and Frequency – Service 128/129

Destination	Service Frequency		
	Weekday	Saturdays	Sundays
Wokingham – Winnersh – Hurst – Twyford – Woodley – Reading	First service at 07:23 then every 65 minutes between 09:32 and 14:59	Hourly service between 08:41 and 09:38, then circa every two hours until 17:21	No service
Reading – Woodley – Twyford – Hurst – Winnersh – Wokingham	Service every hour between 09:09 until 19:27	Service every two hours between 10:08 and 18:25	No service

- 7.4.6 The service operates hourly Monday to Friday and once every 2 hours on a Saturday. The service is delivered under tender, with Thames Valley Buses (TVB) operating 2 vehicles (3 during the peaks) along the route to provide a roughly 70-minute headway. The service is timed to provide access to Wokingham Schools (operating larger buses at these times).
- 7.4.7 Whilst the service provides a useful and locally valuable connection to key destinations (and local schools) it is understood, following discussions held with TVB in August 2023 and January 2024 respectively, that the existing service faces various issues, including:
- i The service is not commercially viable and relies on significant subsidy from WBC. TVB suggest that this subsidy equates to approximately half of the overall operating costs.
 - ii The service faces various constraints / network issues which impact its reliability:
 - (a) Congestion in Reading / Sonning Bridge, and delays at the Twyford Crossroads.
 - (b) Ongoing roadworks along the route, at the Cemetery junction in Reading.
 - (c) Poor waiting facilities at Twyford Railway Station.
 - iii Patronage in Hurst is relatively low at approximately 2-3% and this number is supported by concessionary fare passengers. The introduction of Crossrail at Twyford has increased bus demand, as have the application of £2 fares, but patronage remains below the national average (c. 5%). TVB's view is that a wider demographic brought about by a mixed housing development could increase patronage in Hurst.
 - iv Despite these issues, the core 128/129 service is considered one of the better subsidised routes and TVB's view is that WBC are keen to maintain / improve the service.
- 7.4.8 The proposed development provides a significant opportunity to deliver a bus improvement scheme to strengthen bus provision and infrastructure within Hurst and secure a long-term sustainable solution. The opportunities to deliver such an improvement scheme have therefore been explored and are summarised in the following paragraphs.

Proposed Improvement Strategy

- 7.4.9 Fundamentally, as part of the improvement strategy for bus services and infrastructure within Hurst, the scheme will look to deliver improved connectivity to:
- 1 Rail Services at Twyford Railway Station – including infrastructure improvements to the existing bus waiting facilities.
 - 2 Local Schools.
 - 3 Local facilities and services within Twyford.

7.4.10 The options to deliver a comprehensive bus improvement strategy that delivers on these key aims is provided in i-Transport report no. **ITB19328-004**, which is contained as **Appendix M**. Of the options considered, the proposals to deliver a new bespoke private bus service from the application site offers the best solution to improving bus connectivity within Hurst, as well as assist WBC with the delivery of the key objectives in their Bus Improvement Plan.

Image 7.8: Potential New Bespoke Bus Service Route



7.4.11 The new bespoke service would operate:

- As a large mini-bus (16-seater) Monday to Saturday (07:00-10:00) and (15:00-19:00).
- Along a bespoke route between Hurst and Twyford, calling at Twyford Railway Station, Twyford town centre and the Piggott CE School (**Image 7.8**).

7.4.12 The tailored operational hours will allow for a twice per hour service being attainable between Hurst and Twyford (and its railway station) and the delivery of a sustainable connection to a local secondary school that is not well served by the existing 128/129 bus service. The new bespoke service would supplement the existing 128/129 service and would provide a significant betterment to the existing public transport connections to/from Hurst.

7.4.13 Initial engagement with TVB has identified that the cost to operate such a bespoke service would be c. £173k p.a. The funding for the service would be secured in the following manner:

- 1 **A developer bus fund** – this would comprise a c. £86.5k annual contribution to the service over a 10-year period (c. 50% of the annual cost) to be secured in the S106.
- 2 **Service charge contributions** – these would be on-going contributions provided by residents of the proposed development as part of their normal service charge. In total, this would contribute c. £76.5k to the service p.a. (c. 45% of the annual cost).
- 3 **Additional local revenue** – this would comprise revenue generated by the service from existing residents of Hurst. This would contribute remaining operational funds necessary (c. £10k p.a.). If this funding is not realised, the difference would be achieved through either the bus fund or services charges.

7.4.14 The service would be open for use by all residents of Hurst with residents of the proposed development riding free of charge and all other Hurst passengers riding for a nominal fee that aligns with that currently applied to the existing 128/129 bus service.

7.4.15 The new bespoke private service offers substantial benefits, including:

- i The service will be fully self-funded, with ongoing costs met in part by developer funding and in part by the levying of ongoing service charges to residents of the proposed development. The service therefore offers a sustainable long-term solution.
- ii By operating along a bespoke route, the service will be able to attain a twice hourly frequency during operational hours. This is a significant improvement over the existing hourly 128/129 service and will provide genuine additional opportunities for users to align bus journeys with onward rail services to key destinations, i.e. Reading and London.
- iii The service will call directly at Twyford town centre, enhancing connections to this important service centre.
- iv The service will also offer a direct connection to The Piggott CE School.

7.4.16 In addition to the introduction of a new service, the Site offers the opportunity to divert the existing 128/129 service through the Site without material impact to its routing or viability and bringing services closer to core patronage and potential revenue. TVB support the principle of this diversion which would be subject to further engagement with WBC.

7.4.17 In combination with the existing 128/129 bus service, the new bespoke service will be a significant betterment to the existing public transport offering in Hurst and will ensure that reliable bus service connections are achievable to a range of secondary schools that have catchment areas that encompass the application site.

7.5 Mobility Hub

7.5.1 In addition to the comprehensive infrastructure improvements set out above, the proposed development parameters plan includes the potential to deliver an on-site mobility hub within the development. Mobility Hubs are defined by CoMoUK as being:

“highly visible, safe and accessible spaces where public, shared and active travel modes are co-located alongside improvements to public realm and, where relevant, enhanced community facilities. The redesign and reallocation of space from the private car is intended to enhance the experience of travellers as well as benefitting local residents and businesses.”

Image 7.9: Mobility Hub Example



7.5.2 The on-site mobility hub would include a range of measures, including.:

- i Access to a local Car Club, including one capable of supporting an electric vehicle;
- ii A bus stop (for the proposed new bus service), including Real Time Passenger Information (RTPI) for the new service and existing 128/129 bus service within Hurst;
- iii Short-stay cycle parking for visitors of the proposed development;
- iv A bike repair / cycle maintenance area; and

- Parcel lockers, which will enable parcel drop-off and storage for local residents of the development and Hurst.

7.5.3 The mobility hub will bring together a range of sustainable travel measures so that they can be easily accessed by residents, and act as a 'one stop shop' for sustainable travel needs. In combination with the wider infrastructure improvement proposals detailed within this Section, the on-site mobility hub would actively increase the connectivity to nearby Twyford for new and existing residents of Hurst.

7.6 Electric Vehicle Car Club

7.6.1 To support car sharing and reduce the dependence on private car ownership, the proposals include the delivery of an Electric Vehicle Car Club.

7.6.2 A car club provides a shared vehicle which its members can hire. Members pay an annual fee, plus a rate per hour/mile when they hire a car and can book the car and collect the keys from a key safe. A car club gives members the flexibility of driving a car without the costs of ownership. The club covers the cost of insurance, tax, servicing and fuel from membership fees.

7.6.3 A car club provider would be engaged to provide a vehicle for use on the Site and by the wider population. This will be secured in the Section 106 agreement.

7.7 Sustainable Travel Vouchers Scheme

7.7.1 The scheme includes the delivery of a Sustainable Travel Voucher scheme which will provide a contribution to each resident that can be used to:

- Purchase public transport tickets (bus and rail); or
- Buy cycling equipment such as a bike, e-bike or protective equipment.

7.7.2 A £500 voucher will be provided to each dwelling which is sufficient to purchase an e-bike or an annual bus pass.

7.8 Travel Plan

7.8.1 To actively ensure that the sustainable transport opportunities available to the site / proposed at the site are taken up, a Framework Travel Plan has been provided to identify a package of measures and active travel strategies that will be implemented at the site.

7.8.2 The framework Travel Plan has been submitted a separate document alongside the planning application as i-Transport report no. **ITB19328-006**. This details the measures and approaches that will be applied to promote sustainable travel and a framework for its implementation. **Table 7.2** summarises the key measures and approaches for the travel plan.

Table 7.2: Framework for Implementation of the Travel Plan

Measure	Timescale	Responsibility
Appoint Travel Plan Co-ordinator	Three months prior to occupation	Developer
Installation of at least superfast Broadband infrastructure	On construction	Developer
Deliver parcel drop-off/pick-up facilities	On construction	Developer
Deliver EV Charging facilities for all	On construction	Developer
Deliver pedestrian, cyclist on/off-site infrastructure improvement measures	Phased with development	Developer
Deliver public transport improvements at Twyford Railway Station	Phased with development	Developer
Deliver new private bus service	Phased with development	Developer
Negotiate discounts and trials for public transport and cycling equipment	Prior to first occupation	Travel Plan Co-ordinator
Establish travel voucher scheme to assist with cycle / e-bike purchase	Prior to first occupation	Travel Plan Co-ordinator
Deliver Car Club	Prior to first occupation	Travel Plan Co-ordinator
Provide Welcome Pack	One month after occupation	Travel Plan Co-ordinator
Provide up to date travel information to social media page or website	One week prior to first occupation	Travel Plan Co-ordinator
Promotion of walking routes	Upon first occupation	Travel Plan Co-ordinator
Encourage use of public transport	Upon first occupation	Travel Plan Co-ordinator
Promote lift sharing	Upon first occupation	Travel Plan Co-ordinator
Monitoring and Review	Annually	Travel Plan Co-ordinator

Source: Adapted from Table 8.1 of the Travel Plan

7.9 Summary

7.9.1 The proposed development at the site is located within the vicinity of a good range of facilities and services than can be accessed within a reasonable walking / cycling distance. However, it is acknowledged that the previous scheme at the application site was dismissed at appeal in relation to sustainability matters, with one of the primary reasons being that the package of improvements was insufficient to ensure sustainable transport opportunities are taken up.

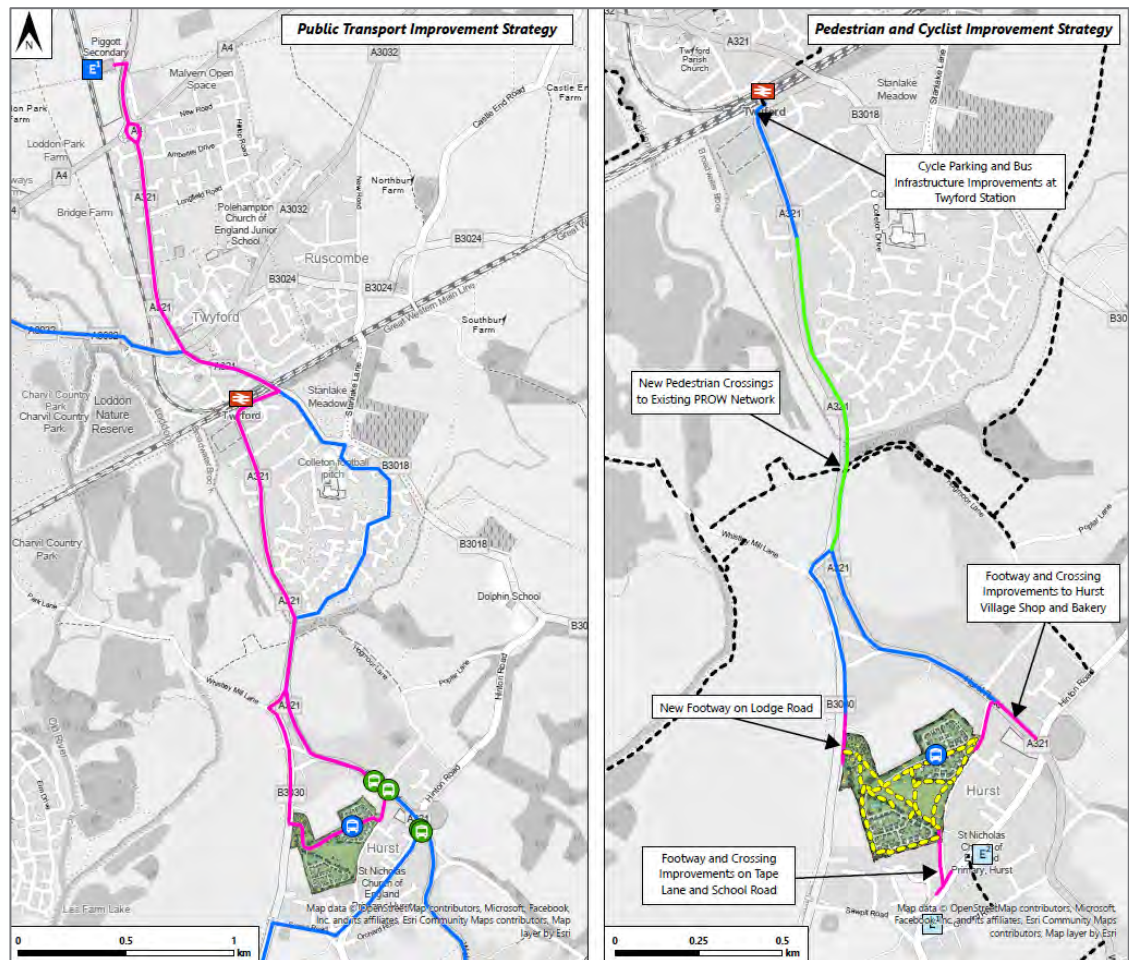
7.9.2 The revised development proposals at the site directly respond through the delivery of a comprehensive sustainable transport offer including:

- 1 A comprehensive suite of pedestrian infrastructure improvements for both existing and future residents of Hurst to access local facilities and services on foot, including:
 - (a) Footway improvements along Lodge Road, leading north from the Site.
 - (b) Footway improvements on Tape Lane and along School Road.
 - (c) Footway improvements along the northern extent of Tape Lane and along Broadwater Lane towards Hurst Shop.
- 2 The delivery of a comprehensive cycle improvement scheme towards Twyford Railway Station, in line with the aspirations of the LCWIP, including substantial improvements to the existing cycle and bus infrastructure at the Station. These improvements will lead to a significant betterment in cycle connections between Hurst and Twyford to travel to facilities and services, as well as part of longer onward journeys via rail, by bike.
- 3 The delivery of a new bespoke bus service operating from the site towards Twyford and the Piggott CE School. The service will operate at a half-hourly frequency and be fully self-funded, offering a sustainable long-term solution to public transport within Hurst.
- 4 A commitment to deliver an on-site mobility hub to bring together a range of sustainable transport measures so that they can be easily accessed by residents.
- 5 The implementation of a robust Travel Plan at the site to actively ensure that the sustainable transport opportunities available to the site / proposed at the site are taken up. This includes an electric car club and travel voucher scheme.

7.9.3 The sustainable transport strategy is shown visually on **Figure 4**, an extract of which is presented as **Image 7.10**.

7.9.4 Taken together, this forms a comprehensive sustainable transport package that actively addresses the Inspector's primary reasons for refusal of the previous application. The measures will actively enhance the sustainability credentials of Hurst for the benefit of both future, and existing, residents and will offer genuine opportunities for journeys to local facilities and services, as well as to the workplace, to be undertaken by sustainable transport modes.

Image 7.10: Sustainable Transport Strategy



Key

Public Transport Improvement Strategy

-  Twyford Rail Station
-  Local Bus Stops
-  Bus Stop and Mobility Hub
-  The Piggott CofE Secondary School
-  New Private Bus Service
-  128/129 Bus Service

Pedestrian and Cyclist Improvement Strategy

-  Twyford Rail Station
-  Bus Stop and Mobility Hub
-  Existing PROW Network
-  Pedestrian Infrastructure Improvements
-  On-Carriageway Cycle Improvements
-  New Shared Footway/Cycleway
-  Internal Movement Network
-  St Nicholas Pre School
-  St Nicholas CofE Primary School

SECTION 8 Summary and Conclusions

8.1 Summary

8.1.1 Mactaggart and Mickel Strategic Land (Mac Mic) has appointed i-Transport LLP to provide highways and transport advice in relation to an outline planning application for a residential development of up to 99 homes on land at Tape Lane in Hurst, Reading.

8.1.2 A planning application of up to 200 homes was submitted in February 2022 (Ref: 220458) at the development site. However, the application was refused, and a subsequent Appeal dismissed on 9th March 2023 in relation to sustainability matters, with the primary reasons being:

- The scale of the scheme proposed was too large for Hurst to accommodate sustainably and within the context of Policy requirements for rural areas.
- Inadequacy in bus / cycle connections to Twyford, and locally in Hurst village for pedestrians, leading to a lack of genuine travel choices.
- The package of improvements was insufficient to ensure opportunities are taken up.

8.1.3 Taking the above into consideration, this development proposal addresses these matters directly by promoting a smaller development and providing a comprehensive transport strategy.

Existing Conditions and Accessibility

8.1.4 The existing highway conditions within the vicinity of the site have been considered through the collection of traffic survey data, the results of which have been used to guide the design of the proposed sustainable transport improvements.

8.1.5 A review of the most up-to-date PIA data has been undertaken, which did not identify any specific road safety problems within the vicinity of the site that are likely to be exacerbated with the proposed development in place.

8.1.6 The site is located within the vicinity of a good range of local services and facilities giving future residents the opportunity to travel by sustainable transport modes. However, it is acknowledged from the outcomes of the recent Appeal for the previous scheme at the application site that an appropriate package of sustainable transport measures is necessary to ensure that these opportunities can be taken up. Therefore, Section 7 of this TA provides the details of a comprehensive sustainable transport package that will be delivered alongside the proposed development at the application site.

Proposed Site Access Arrangements

- 8.1.7 Vehicular access to the site is proposed from Lodge Road and will take the form of a new priority-controlled right-turn lane junction designed in accordance with prevailing design guidance (DMRB CD123). Visibility splays of 2.4m x 106m and 2.4m x 125m have been provided, commensurate with 85th percentile vehicle speed data captured in November 2023. A separate emergency vehicle/bus only access point is also proposed to the east of the site onto Tape Lane.
- 8.1.8 The principles of the access arrangements were agreed with WBC in conjunction with the previous application at the site and it was confirmed through pre-application discussions with WBC that the access strategy remains acceptable for the revised development proposals.

Traffic Impact

- 8.1.9 In line with the approach agreed as part of the previous application at the site, the traffic impacts of the proposed development have been assessed using output files from WBC's strategic transport model (WSTM4). An assessment of the development impacts at nine junctions on the local highway network have been assessed.
- 8.1.10 The forecast development traffic is likely to generate only modest traffic flow increases in both the base year and future year scenarios, equating to no more than a 2% increase at any one junction during the peak periods and generally less than 0.5%.
- 8.1.11 In absolute terms, this equates to a maximum increase of some 20 two-way vehicle movements at any junction which is broadly one additional vehicle every 3 minutes. This is a very modest increase in traffic that would not lead to any material, let alone 'severe' impact on the operation of the local highway network.
- 8.1.12 Operational assessments of the site access junction, the Lodge Road / Broadwater Lane priority junction and the Lodge Road / Sawpit Road junction indicate that the junctions are forecast to operate with ample spare capacity, with the proposed development traffic having a limited impact on the operation of the junctions.

Sustainable Transport Strategy

- 8.1.13 The proposed development is located within the vicinity of a good range of facilities and services than can be accessed within a reasonable walking / cycling distance. However, it is acknowledged that the previous scheme at the application site was dismissed at appeal in relation to sustainability matters, with one of the primary reasons being that the package of improvements was insufficient to ensure sustainable transport opportunities are taken up.

8.1.14 The revised development proposals at the site directly respond to this point made by the Inspector, through the delivery of a comprehensive sustainable transport offer including:

- 1 A comprehensive suite of pedestrian infrastructure improvements for both existing and future residents of Hurst to access local facilities and services on foot, including:
 - (a) Footway improvements along Lodge Road, leading north from the Site.
 - (b) Footway improvements on Tape Lane and along School Road.
 - (c) Footway improvements along the northern extent of Tape Lane and along Broadwater Lane towards Hurst Shop.
- 2 The delivery of a comprehensive cycle improvement scheme towards Twyford Railway Station, in line with the aspirations of the LCWIP, including substantial improvements to the existing cycle and bus infrastructure at the Station. These improvements will lead to a significant betterment in cycle connections between Hurst and Twyford to travel to facilities and services, as well as part of longer onward journeys via rail, by bike.
- 3 The delivery of a new bespoke bus service operating from the site towards Twyford and the Piggott CE School. The service will operate at a half-hourly frequency and be fully self-funded, offering a sustainable long-term solution to public transport within Hurst.
- 4 A commitment to deliver an on-site mobility hub to bring together a range of sustainable transport measures so that they can be easily accessed by residents.
- 5 The implementation of a robust Travel Plan at the site to actively ensure that the sustainable transport opportunities available to the site / proposed at the site are taken up. This includes an electric car club and travel voucher scheme.

8.1.15 Taken together, the above proposals form a comprehensive sustainable transport package that actively addresses the Inspector's primary reasons for refusal of the previous application. The measures will actively enhance the sustainability credentials of Hurst for the benefit of both future, and existing, residents and will offer genuine opportunities for journeys to local facilities and services, as well as to the workplace, to be undertaken by sustainable transport modes (including by active travel). On this basis, the proposals accord with relevant policy considerations, namely the NPPF and Development Plan Policies CP1 and CP6.

8.2 Conclusions

8.2.1 The revised development proposals at the application site actively address the primary reasons for refusal of the previous application, as set out by the Inspector in their Appeal Decision, by:

- 1 Providing a revised scheme of development that is of a significantly reduced scale to that which was previously proposed and one that can be accommodated sustainably by Hurst and within the context of Policy requirements for rural areas.
- 2 The implementation of a comprehensive sustainable transport package which delivers on the aspirations of WBC's LCWIP and Bus Improvement Plan and actively enhances the sustainability credentials of Hurst for existing and future residents. The implementation of the measures proposed will ensure that residents are offered genuine opportunities for journeys to be undertaken by sustainable modes (including by active travel).

8.2.2 It is therefore demonstrated that:

- There are genuine opportunities for travel to and from the site using sustainable modes, and that the proposals will ensure these opportunities are taken up.
- Safe and suitable access can be provided to the development for all users.
- The local highway network can accommodate the traffic generated by the development without leading to any significant (let alone 'severe') impact on operation or safety.

8.2.3 The proposals are therefore in accordance with national and local policy and are acceptable in highways and transport terms.

FIGURES



Key
 Site Boundary



**The Square, Basing View,
Basingstoke, Hampshire, RG21 4EB**

Tel: 01256 898 366

 www.i-transport.co.uk

Title:

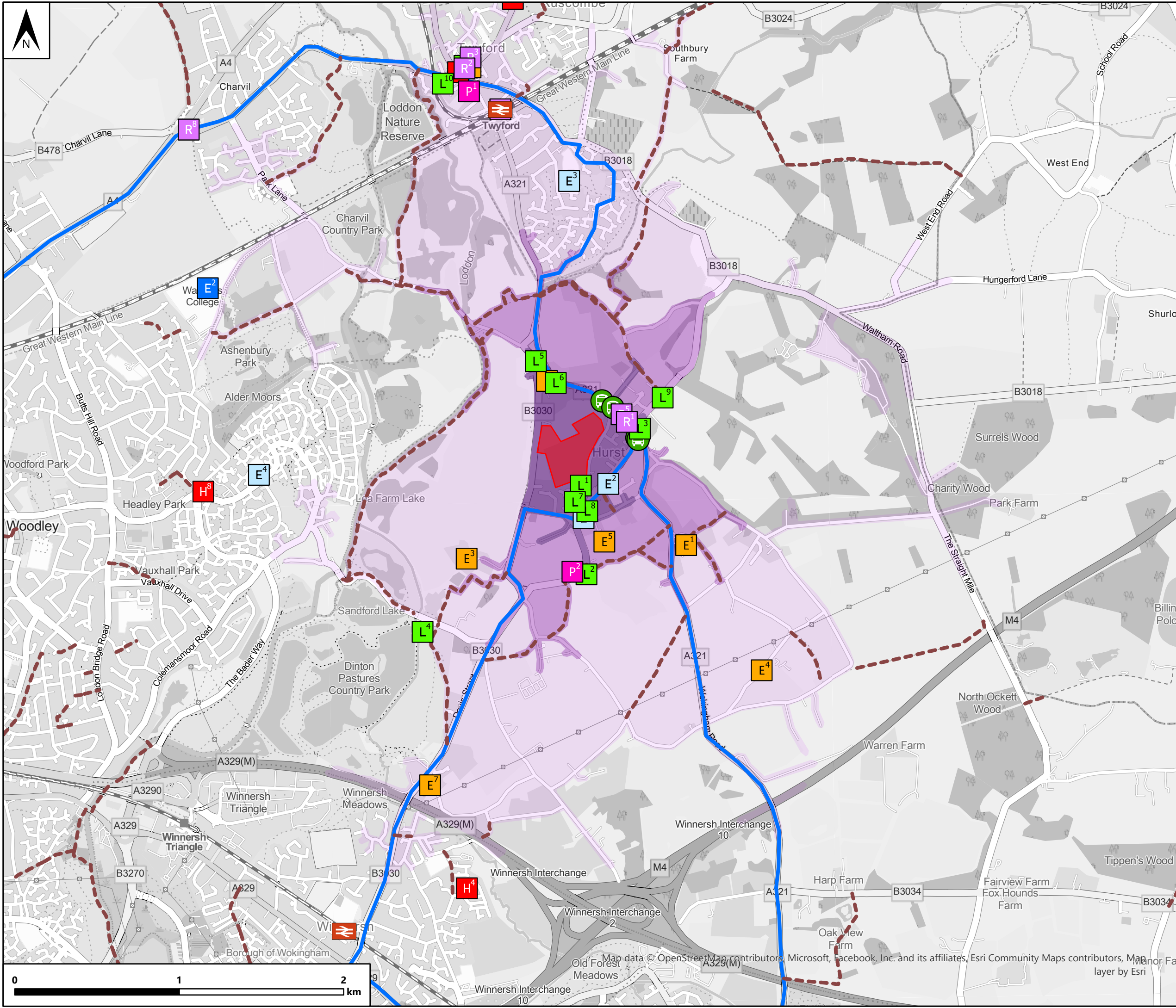
Site Location Plan

Project:

Land East of Lodge Road, Hurst

Project Number:	Figure Number:	Revision:
ITB19328	Figure 1	-

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Key

Site Boundary

Existing PROW Network

Local Bus Stops

128/129 Bus Service

800m Walking Catchment

1600m Walking Catchment

3200m Walking Catchment

Twyford Rail Station

Winnersh Rail Station

Hurst Post Office

Tesco Express

Waitrose and Partners

Texaco

The Co-operative

Whistle Stop

St James & St Mary Virgin Church

St Nicholas' Church

Hurst Allotments

Hurst Bowling Club

Hurst Cricket Club

Dinton Activity Centre

Elephant and Castle Public House

Hurst Gospel Hall

Hurst Recreation Ground

Hurst Village Hall

The Green Man Public House

Twyford Library

Puccino's

Twyford Health Club

Day Lewis Pharmacy

Twyford Surgery

D W Young Dental Laboratories

The Loddon Vale Practice

Beech Court Business Centre

Broadwater Lane Businesses

Lea Farm Business Unit

Nelsons Lane

Orchard Nursery Businesses

Twyford High Street

Andrew G Lajer Ltd

St Nicholas Pre School

St Nicholas CofE Primary School

Waingells College

The Colleton Primary School

Woodley C of E Primary School

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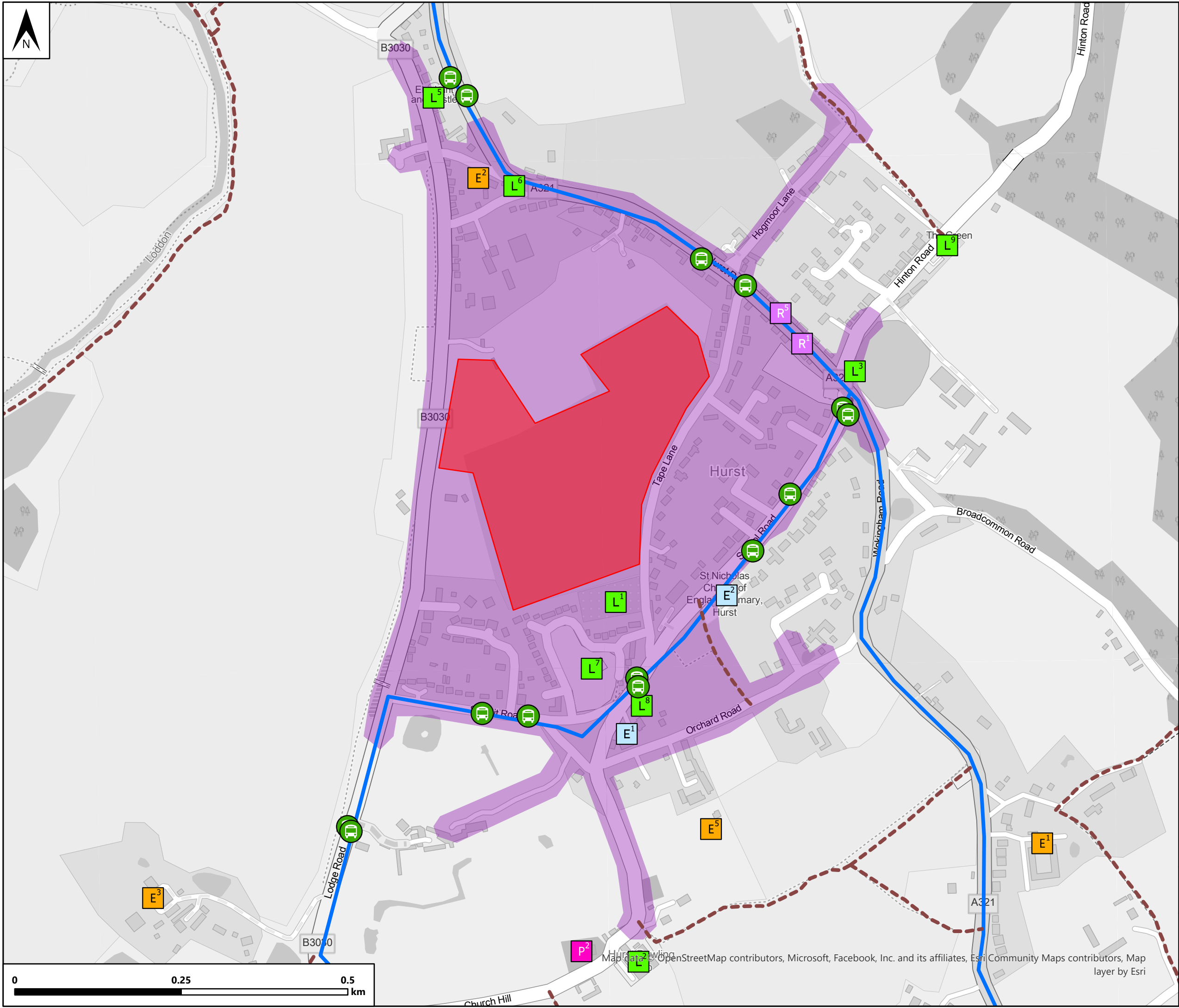
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Wider Facilities and Services

Project:

Land East of Lodge Road, Hurst

Project Number:	Figure Number:	Revision:
ITB19328	Figure 2	-



Key

- Site Boundary
- Existing PROW Network
- Local Bus Stops
- 128/129 Bus Service
- 800m Walking Catchment
- Hurst Post Office
- Hurst Provisions
- Hurst Allotments
- Hurst Bowling Club
- Hurst Cricket Club
- Elephant and Castle Public House
- Hurst Gospel Hall
- Hurst Recreation Ground
- Hurst Village Hall
- The Green Man Public House
- Beech Court Business Centre
- Broadwater Lane Businesses
- Lea Farm Business Unit
- Orchard Nursery Businesses
- St Nicholas Pre School
- St Nicholas CofE Primary School
- St Nicholas' Church

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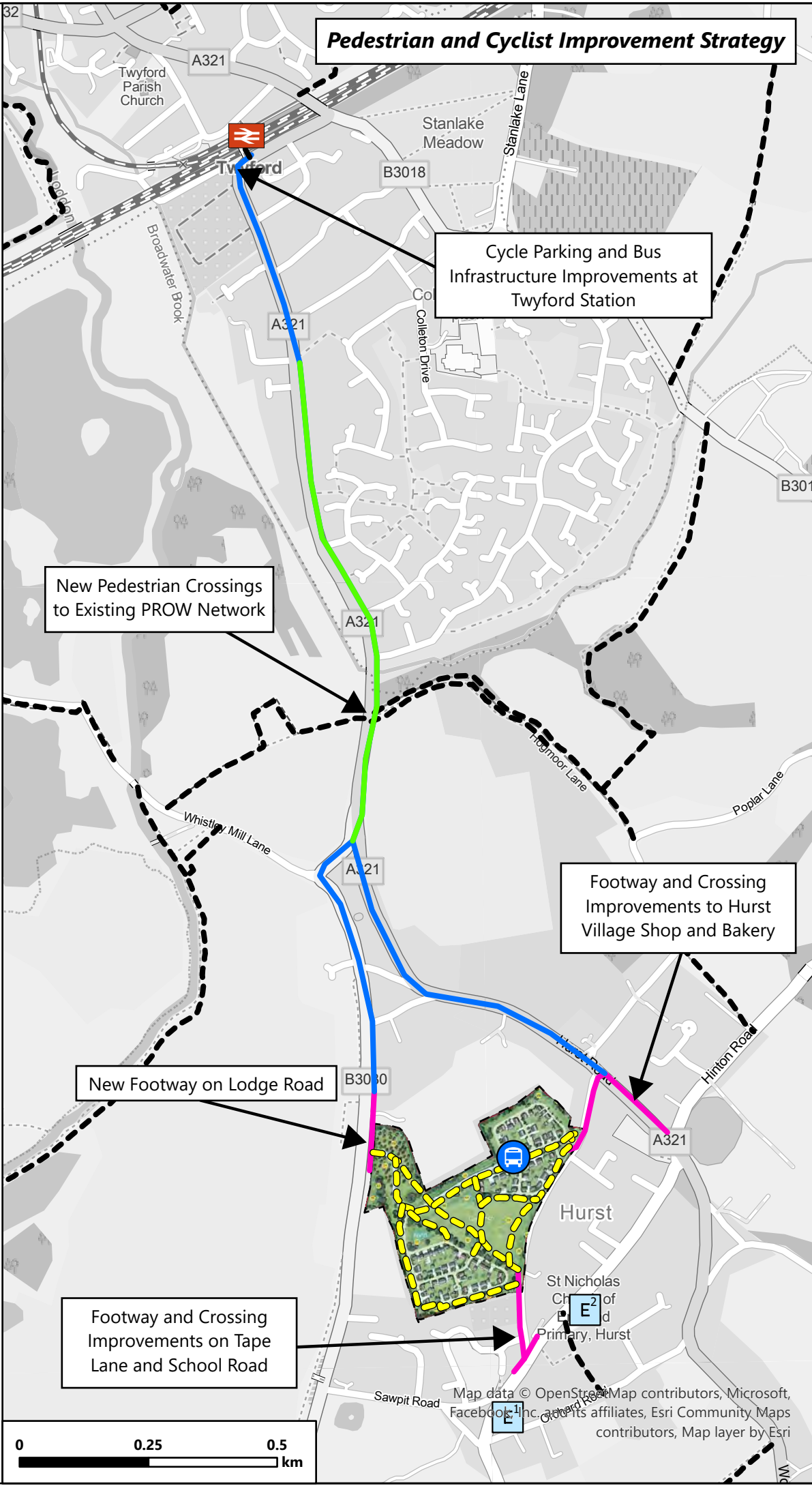
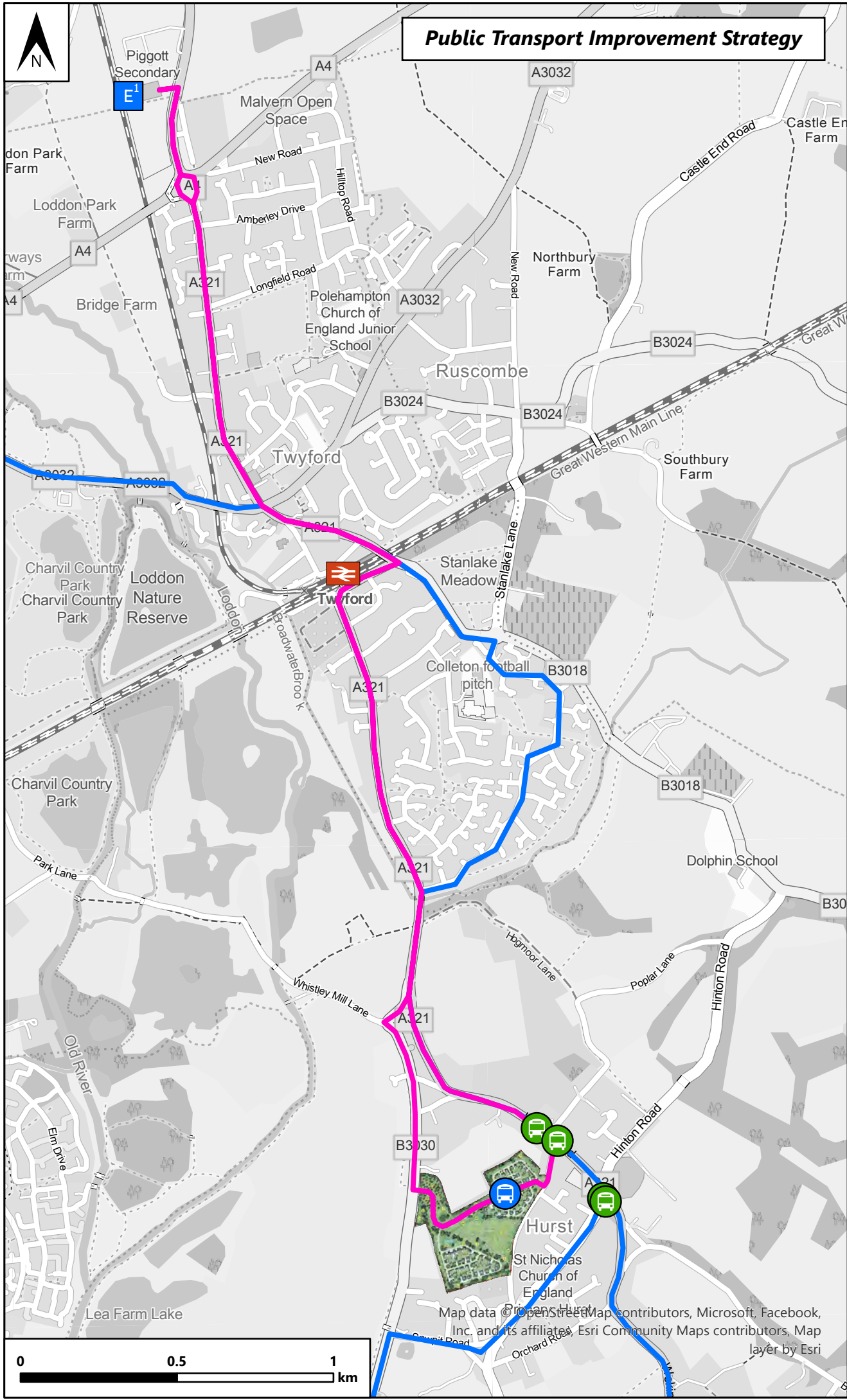
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Local Facilities and Services Plan

Project:

Land East of Lodge Road, Hurst

Project Number:	Figure Number:	Revision:
ITB19328	Figure 3	-



Public Transport Improvement Strategy

- Twyford Rail Station
- Local Bus Stops
- Bus Stop and Mobility Hub
- The Piggot CofE Secondary School
- New Private Bus Service
- 128/129 Bus Service

Pedestrian and Cyclist Improvement Strategy

- Twyford Rail Station
- Bus Stop and Mobility Hub
- Existing PROW Network
- Pedestrian Infrastructure Improvements
- On-Carriageway Cycle Improvements
- New Shared Footway/Cycleway
- Internal Movement Network
- St Nicholas Pre School
- St Nicholas CofE Primary School

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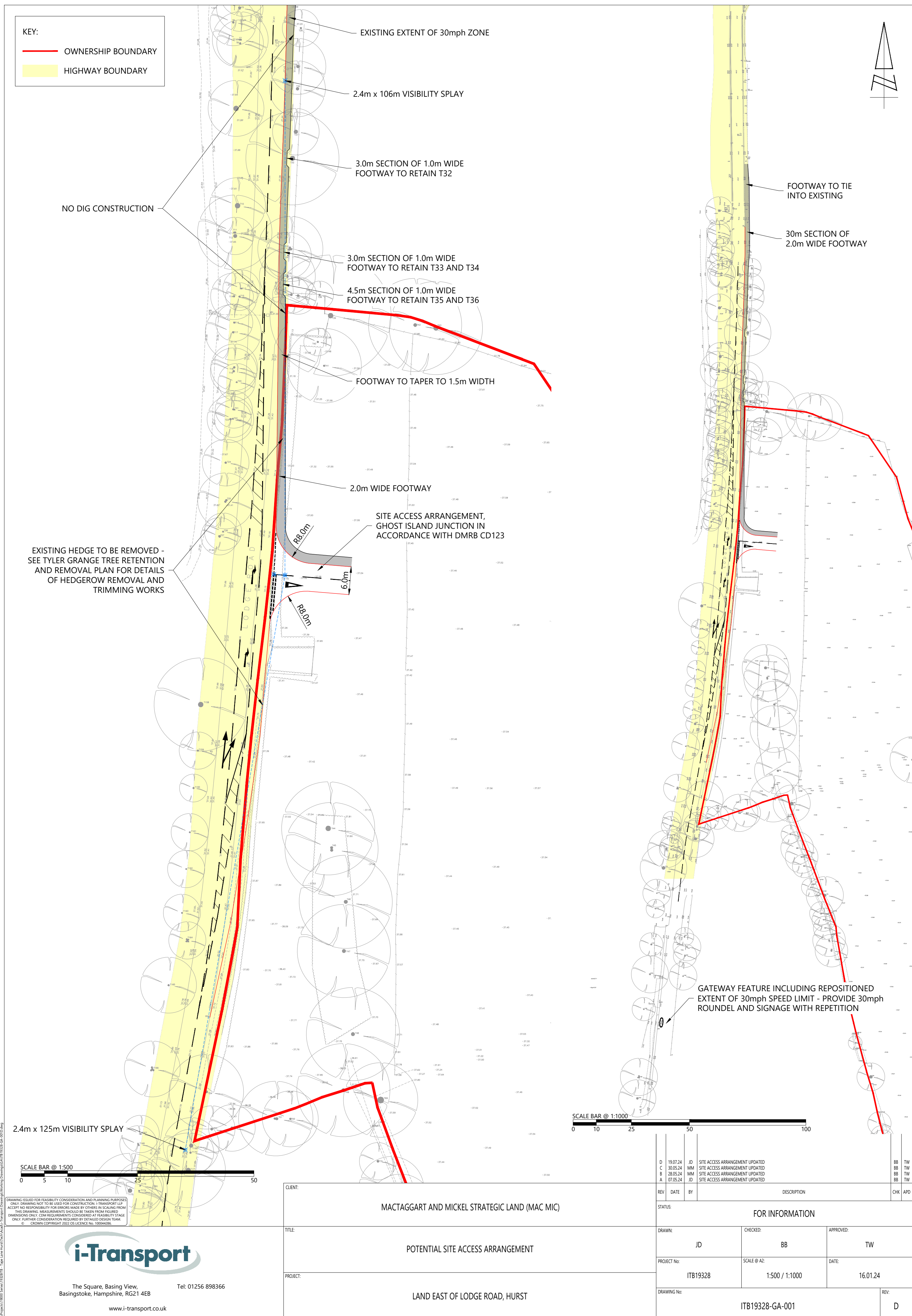
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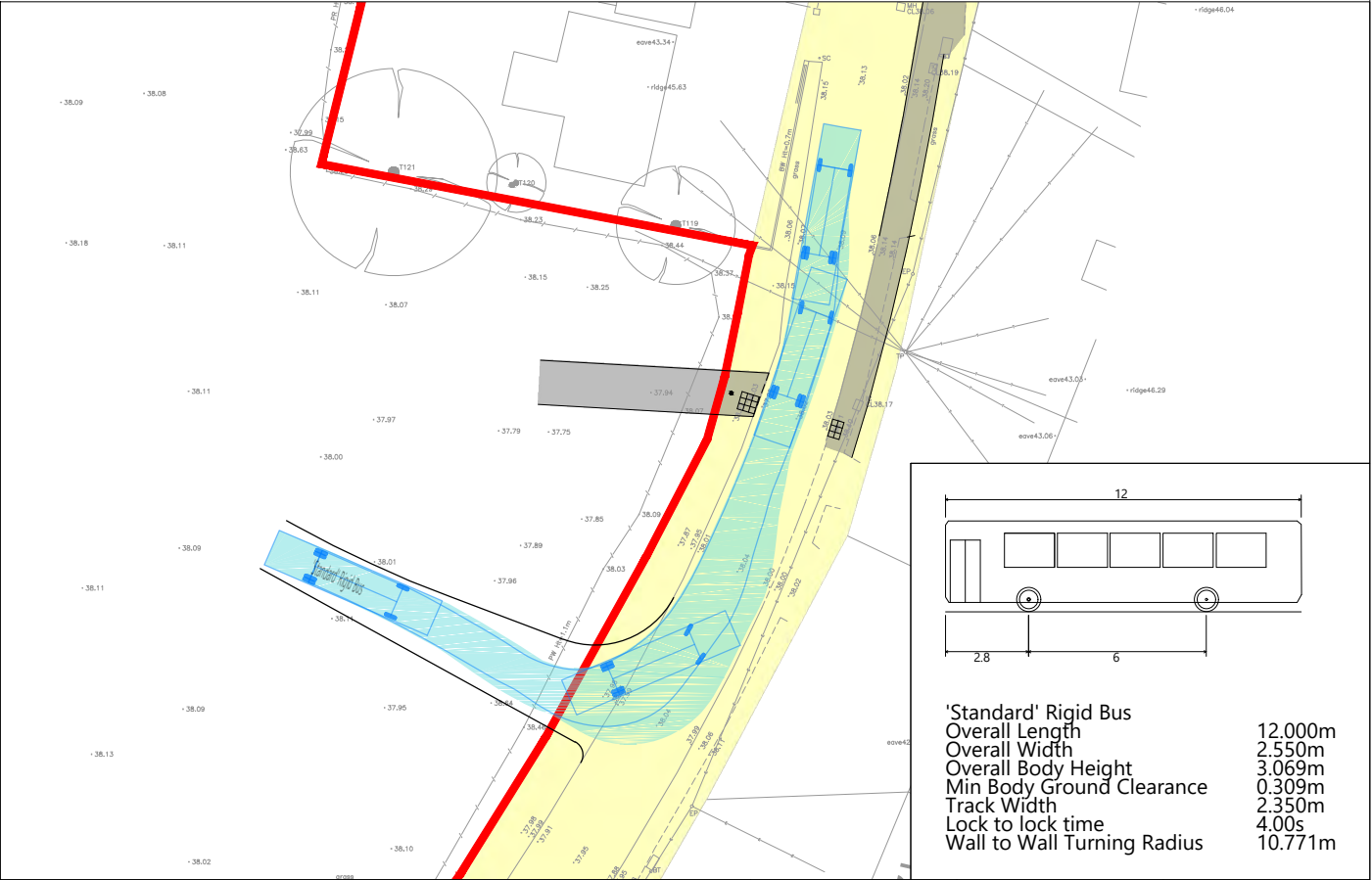
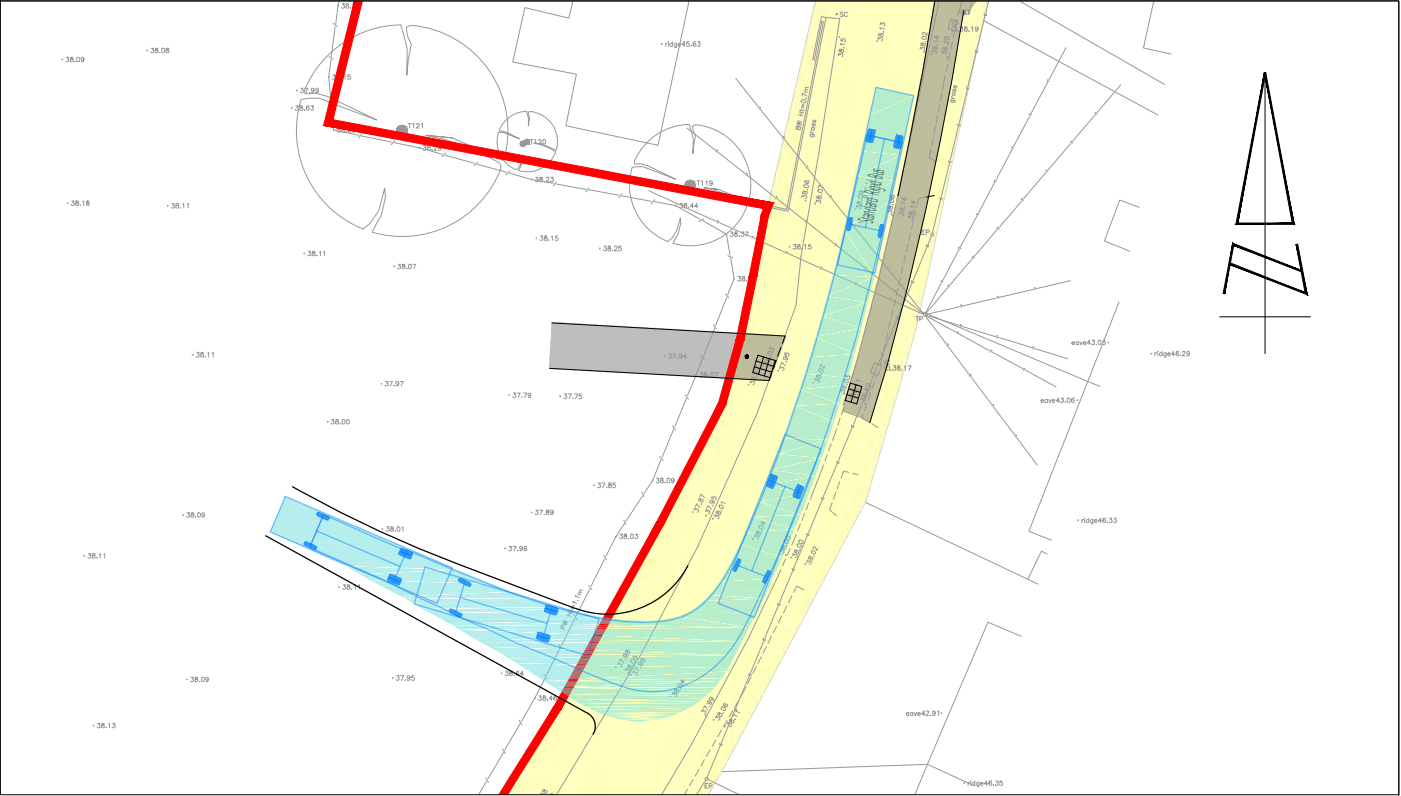
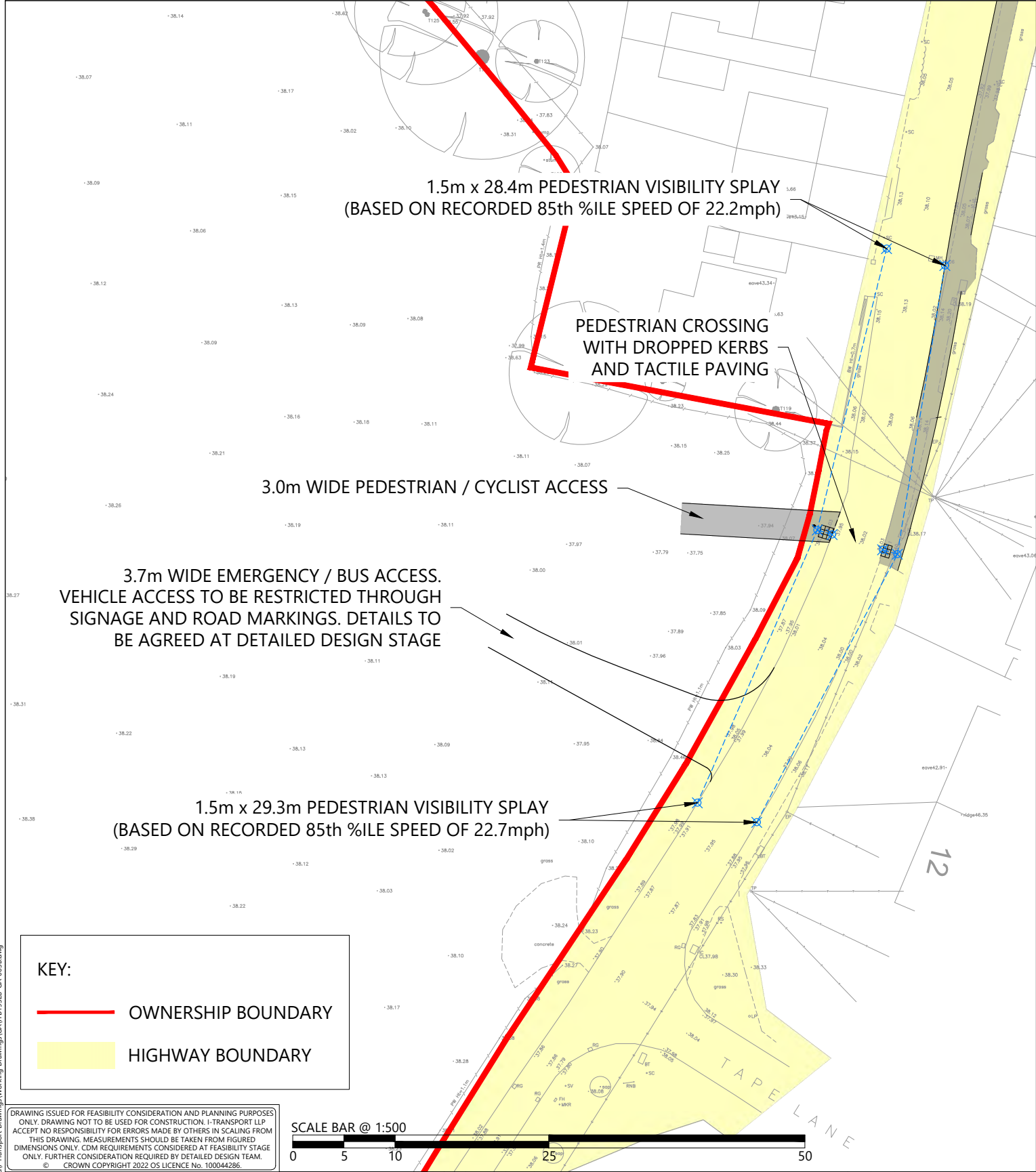
Title: **Sustainable Transport Strategy**

Project: **Land East of Lodge Road, Hurst**

Project Number: ITB19328	Figure Number: Figure 4	Revision: -
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DRAWINGS





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REV DATE BY DESCRIPTION

19.07.24 JD SWEPT PATH ANALYSIS UPDATED

28.05.24 MM SWEPT PATH ANALYSIS UPDATED

STATUS:

FOR INFORMATION

TITLE:

POTENTIAL EMERGENCY / BUS ACCESS ARRANGEMENT

PROJECT:

LAND EAST OF LODGE ROAD, HURST

CLIENT:

MACTAGGART AND MICKEL
STRATEGIC LAND (MAC MIC)

DRAWN:

JD

PROJECT No:

ITB19328

DRAWING No:

CHECKED:

BB

SCALE @ A3:

1:500

ITB19328-GA-003

APPROVED:

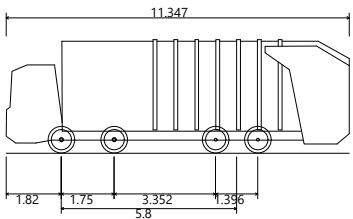
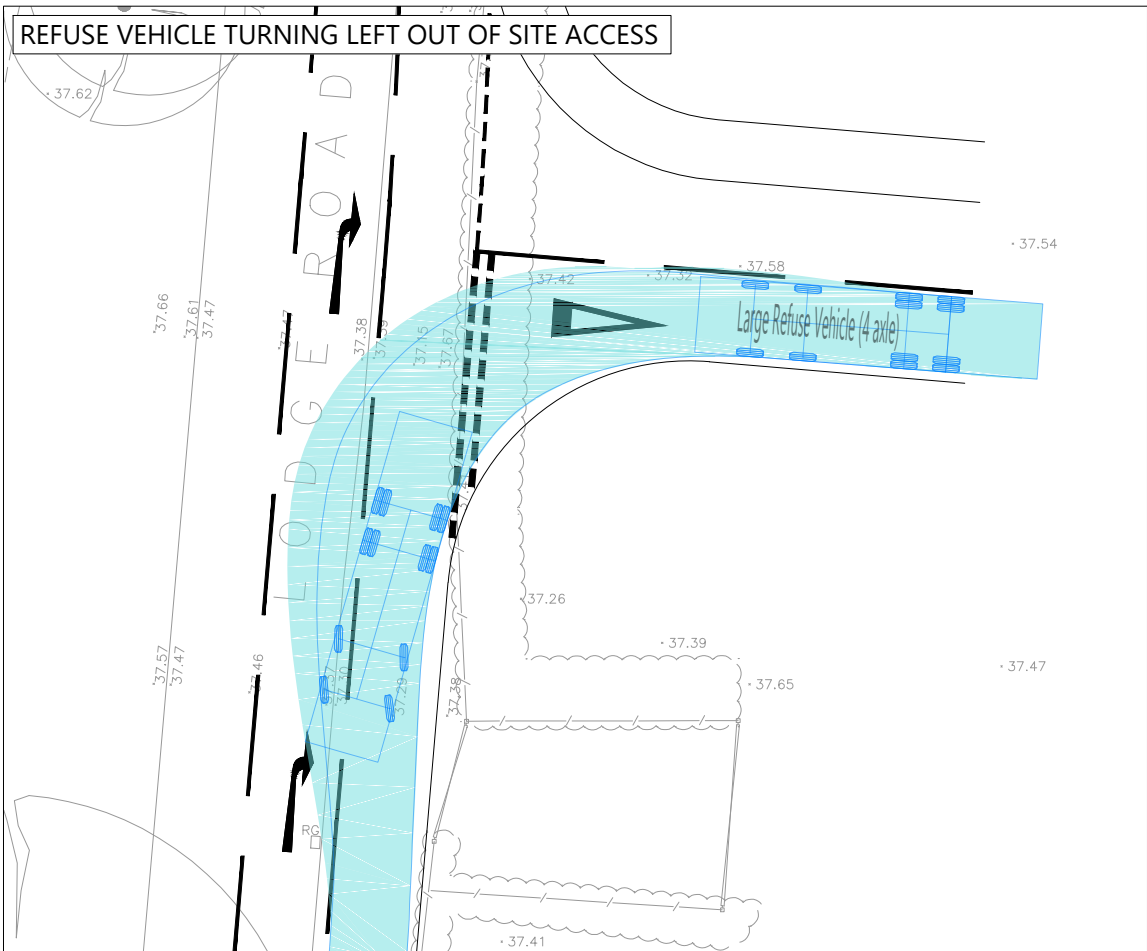
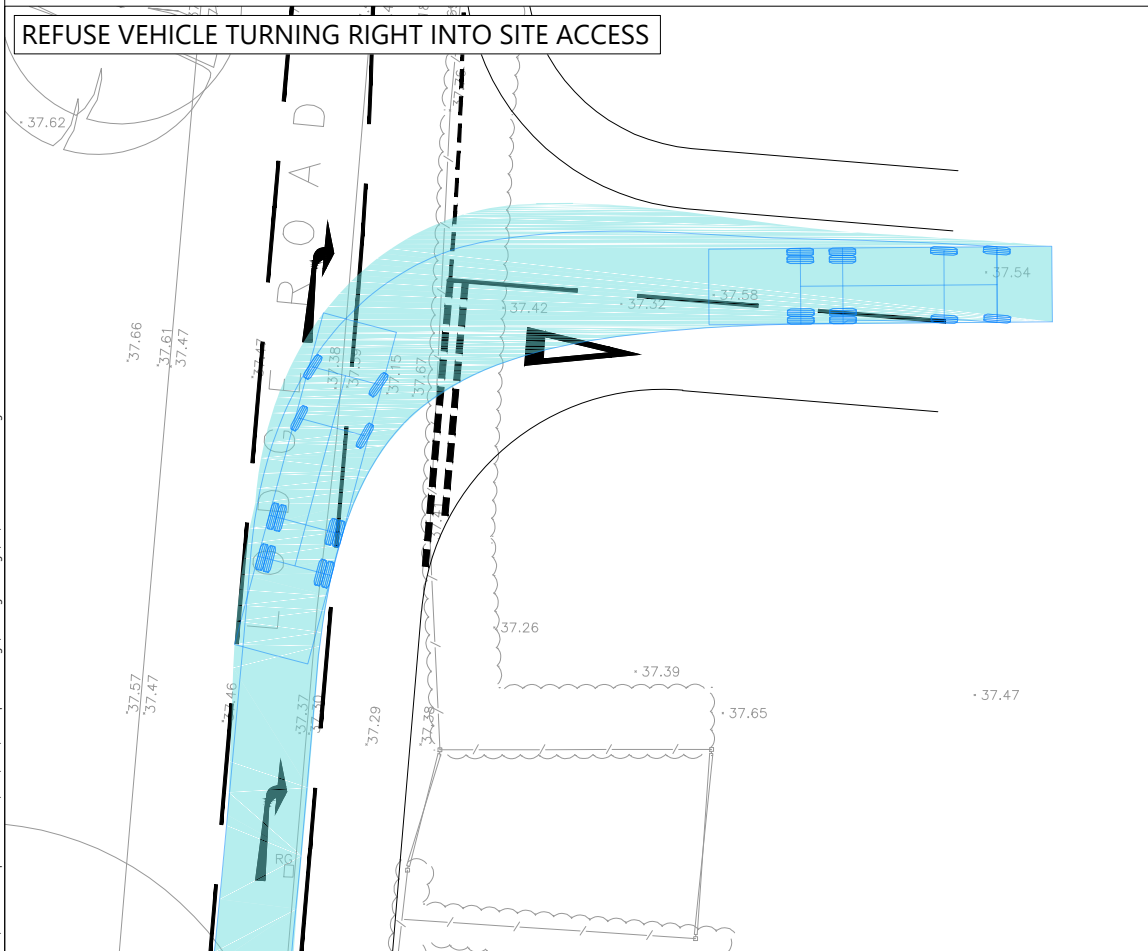
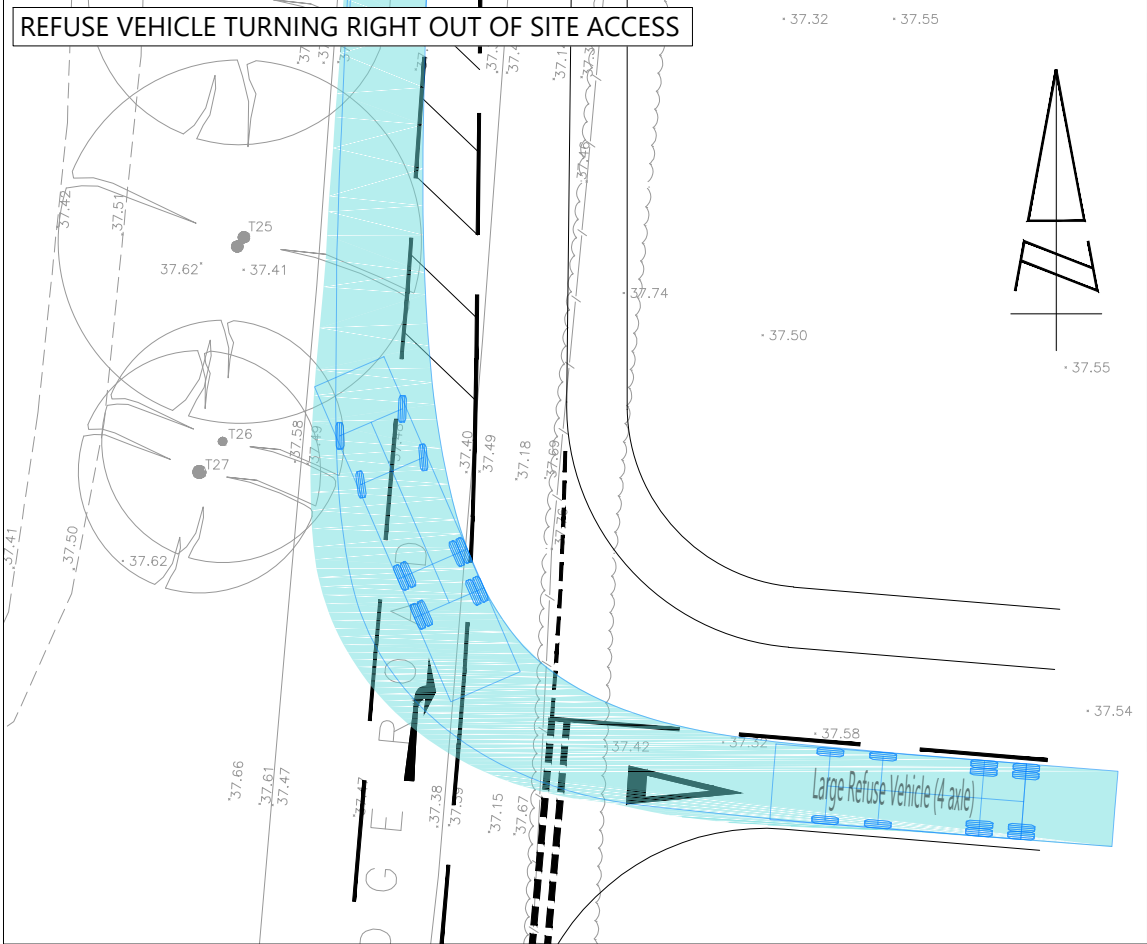
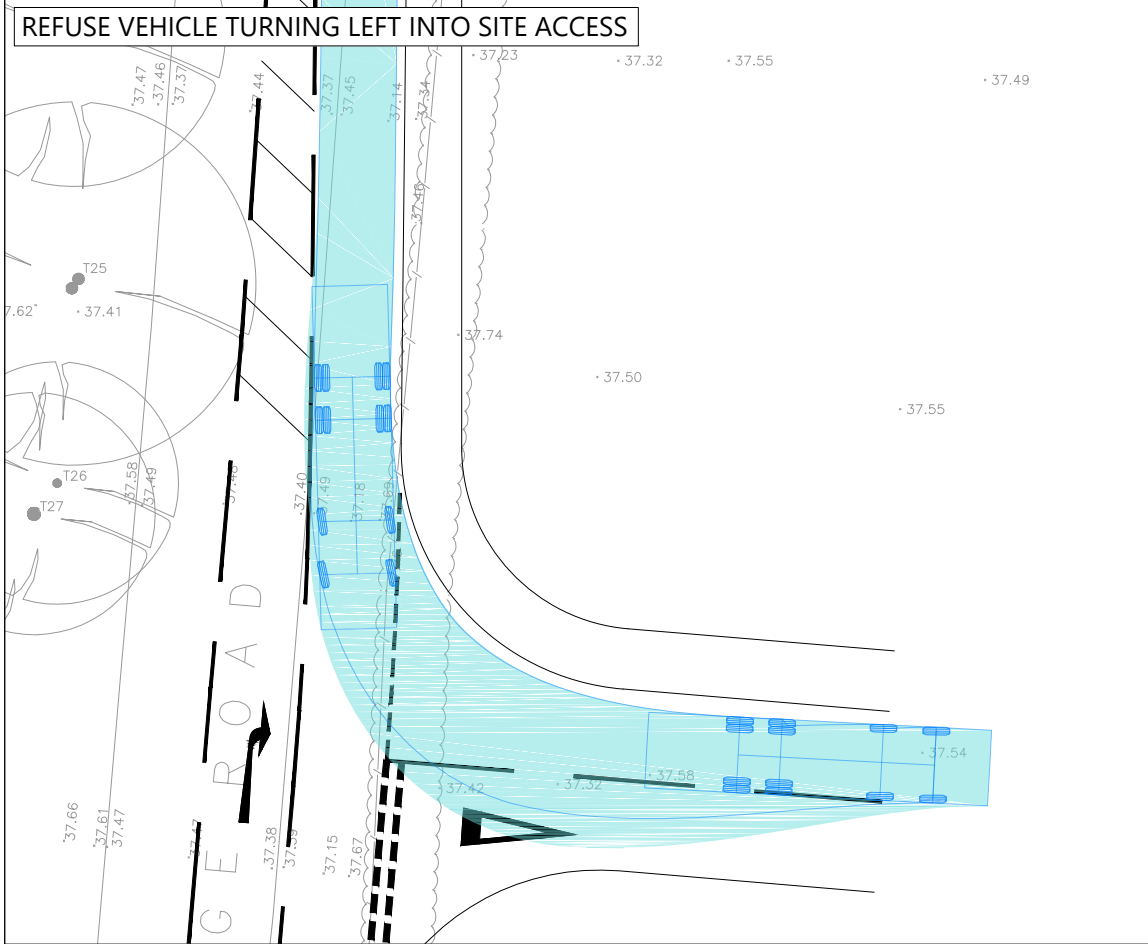
TW

DATE:

03.05.24

REV:

B



Large Refuse Vehicle (4 axle)
Overall Length 11.347m
Overall Width 2.500m
Overall Body Height 3.751m
Min Body Ground Clearance 0.304m
Track Width 2.500m
Lock to lock time 6.00s
Wall to Wall Turning Radius 11.330m

A	22.07.24	JD	RSA COMMENTS INCORPORATED	BB	TW
REV	DATE	BY	DESCRIPTION	CHK	APD

STATUS: FOR INFORMATION



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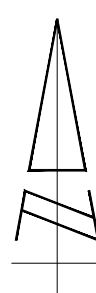
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PROJECT: LAND EAST OF LODGE ROAD, HURST

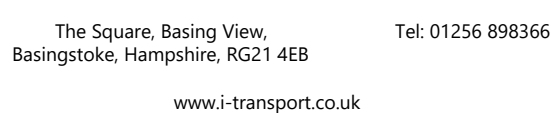
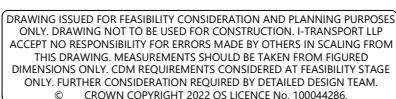
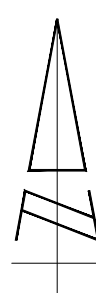
CLIENT: MACTAGGART AND MICKEL
STRATEGIC LAND (MAC MIC)

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PROJECT No: ITB19328	SCALE @ A3: 1:250	DATE: 28.05.24

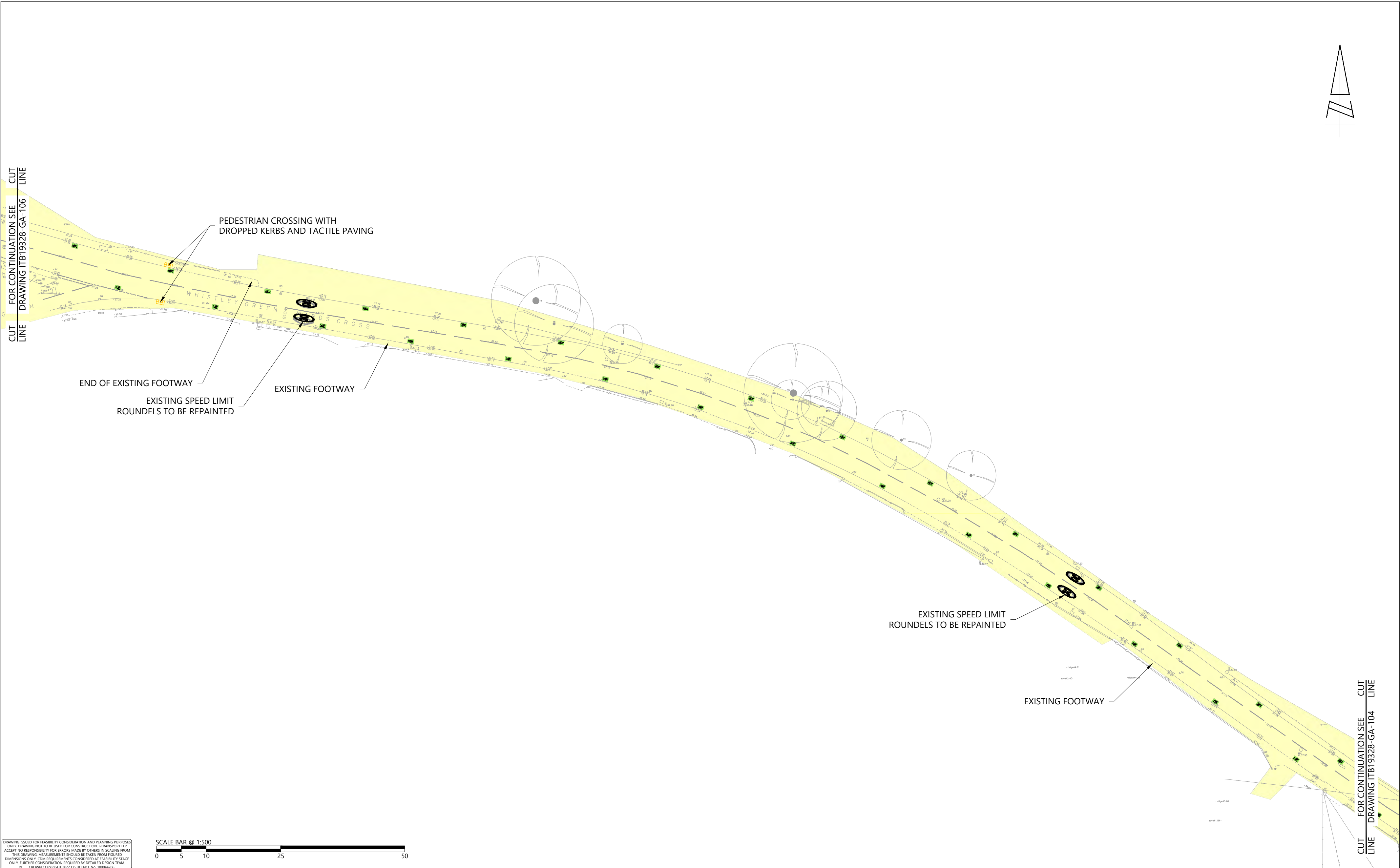
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REV: A



CLIENT:	MACTAGGART AND MICKEL STRATEGIC LAND (MAC MIC)	REV:	DATE:	BY:	DESCRIPTION:	CHK:	APP:
		STATUS: FOR INFORMATION					
TITLE:	POTENTIAL OFF-SITE PEDESTRIAN / CYCLIST IMPROVEMENT SCHEME SHEET 2	DRAWN: JD		CHECKED: BB		APPROVED: TW	
PROJECT:	LAND EAST OF LODGE ROAD, HURST	PROJECT No: ITB19328		SCALE @ A2: 1:500		DATE: 14.11.23	
		DRAWING No: ITB19328-GA-102					REV: A



CLIENT:	MACTAGGART AND MICKEL STRATEGIC LAND (MAC MIC)	A	15/07/24	JD	KSA COMMITMENT'S INCORPORATED		DB	TV
		REV	DATE	BY	DESCRIPTION		CHK	AP
TITLE:	POTENTIAL OFF-SITE PEDESTRIAN / CYCLIST IMPROVEMENT SCHEME SHEET 3	STATUS: FOR INFORMATION						
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PROJECT:	LAND EAST OF LODGE ROAD, HURST	PROJECT No: ITB19328		SCALE @ A2: 1:500		DATE: 14.11.23		
		DRAWING No: ITB19328-GA-103						REV: A



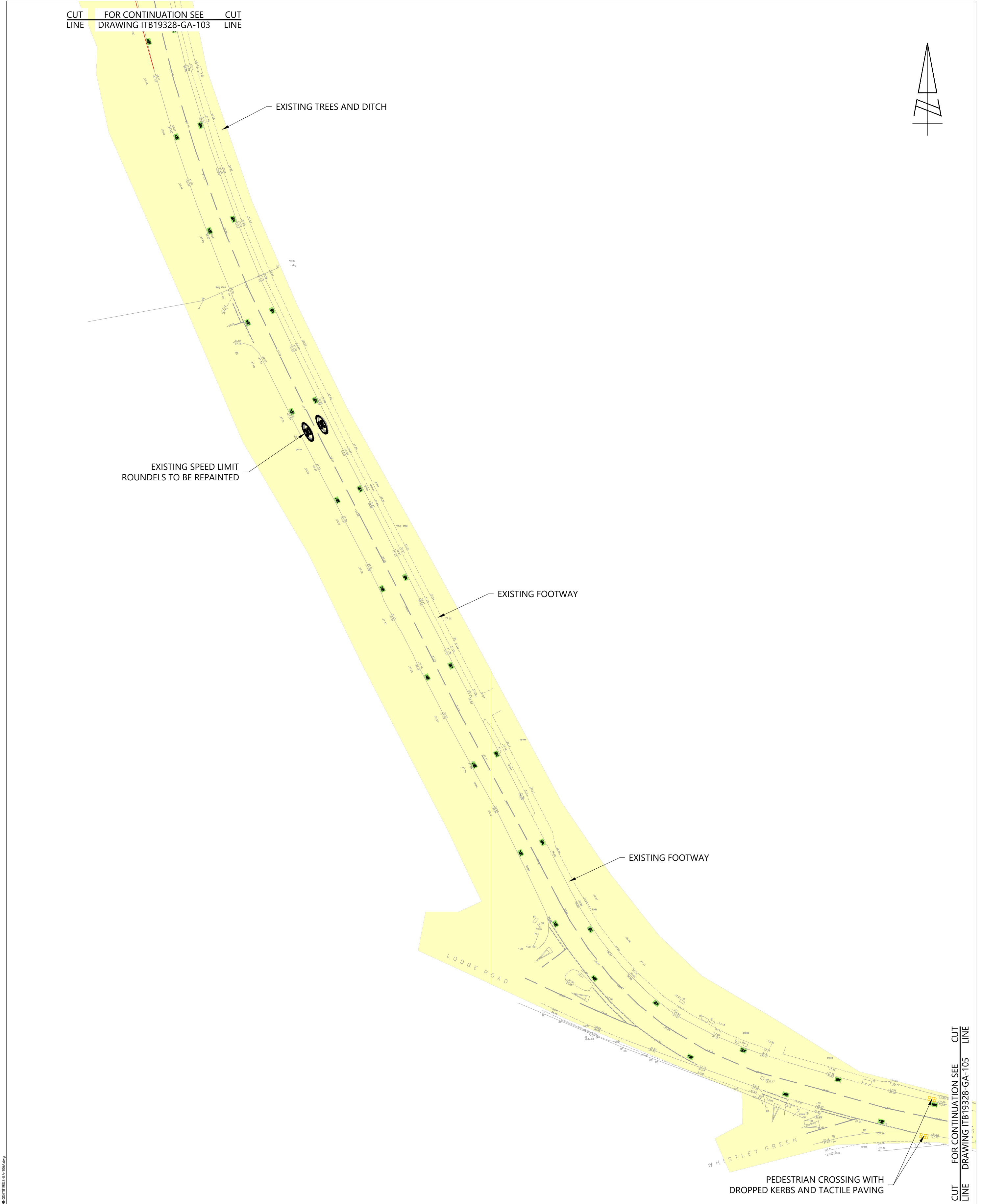
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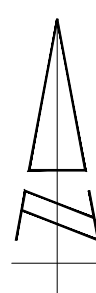
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REV	DATE	BY	DESCRIPTION	CHK	APD
A	16.07.24	JD	RSA COMMENTS INCORPORATED	BB	TW
STATUS: FOR INFORMATION					

TITLE: POTENTIAL OFF-SITE PEDESTRIAN / CYCLIST IMPROVEMENT SCHEME SHEET 5		DRAWN: JD	CHECKED: BB	APPROVED: TW
PROJECT: LAND EAST OF LODGE ROAD, HURST		PROJECT No: ITB19328	SCALE @ A2: 1:500	DATE: 14.11.23
CLIENT: MACTAGGART AND MICKEL STRATEGIC LAND (MAC MIC)		DRAWING No: ITB19328-GA-105		
				REV: A



CUT LINE FOR CONTINUATION SEE DRAWING ITB19328-GA-103 CUT LINE



EXISTING TREES AND DITCH

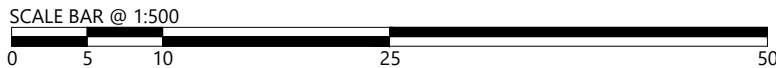
EXISTING SPEED LIMIT ROUNDELS TO BE REPAINTED

EXISTING FOOTWAY

EXISTING FOOTWAY

PEDESTRIAN CROSSING WITH DROPPED KERBS AND TACTILE PAVING

CUT LINE FOR CONTINUATION SEE DRAWING ITB19328-GA-105 CUT LINE



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CLIENT:

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TITLE:

POTENTIAL OFF-SITE PEDESTRIAN / CYCLIST IMPROVEMENT SCHEME
SHEET 6

PROJECT:

LAND EAST OF LODGE ROAD, HURST

A	16.07.24	JD	RSA COMMENTS INCORPORATED			BB	TW
REV	DATE	BY	DESCRIPTION			CHK	APD
STATUS:							
FOR INFORMATION							
DRAWN:			CHECKED:		APPROVED:		
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PROJECT No:			SCALE @ A2:		DATE:		
ITB19328			1:500		14.11.23		
DRAWING No:						REV:	
ITB19328-GA-106						A	

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TITLE:

POTENTIAL OFF-SITE PEDESTRIAN / CYCLIST IMPROVEMENT SCHEME
SHEET 7

PROJECT:

LAND EAST OF LODGE ROAD, HURST

CUT FOR CONTINUATION SEE CUT
LINE DRAWING ITB19328-GA-108 LINE

3.0m WIDE SHARED USE FOOTWAY / CYCLEWAY FORMED FROM
REMOVAL OF MEDIAN STRIP AND CARRIAGEWAY NARROWING

EXISTING SPEED LIMIT
ROUNDELS TO BE REPAINTED

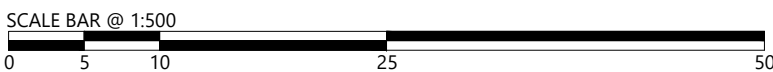
TRANSITION BETWEEN ON-CARRIAGEWAY ADVISORY
CYCLE LANES AND SHARED USE FOOTWAY / CYCLEWAY

CUT FOR CONTINUATION SEE CUT
LINE DRAWING ITB19328-GA-103 LINE

3.0m WIDE SHARED USE FOOTWAY / CYCLEWAY FORMED FROM
REMOVAL OF MEDIAN STRIP AND CARRIAGEWAY NARROWING

WESTERN KERBLINE OF BROADWATER
LANE TO BE REALIGNED TO PROVIDE
MINIMUM 6.0m WIDE CARRIAGEWAY

CUT FOR CONTINUATION SEE CUT
LINE DRAWING ITB19328-GA-106 LINE



A	16.07.24	JD	RSA COMMENTS INCORPORATED			BB	TW
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TITLE:

POTENTIAL OFF-SITE PEDESTRIAN / CYCLIST IMPROVEMENT SCHEME
SHEET 8

PROJECT:

LAND EAST OF LODGE ROAD, HURST

CUT FOR CONTINUATION SEE CUT
LINE DRAWING ITB19328-GA-107 LINE

COLOURED SURFACING AND GIVE WAY LINES SET BACK
TO PROVIDE PRIORITY TO CYCLISTS AND PEDESTRIANS

6.0m

EXISTING SPEED LIMIT
ROUNDELS TO BE REPAINTED

3.0m WIDE SHARED USE FOOTWAY / CYCLEWAY FORMED FROM
REMOVAL OF MEDIAN STRIP AND CARRIAGEWAY NARROWING

PEDESTRIAN CROSSING WITH BOLLARDS,
DROPPED KERBS AND TACTILE PAVING
TO PROVIDE ACCESS TO BRIDLEWAY

INDICATIVE ALIGNMENT
OF BRIDLEWAY

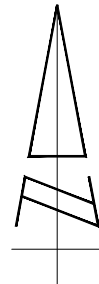
EXISTING SPEED LIMIT
ROUNDELS TO BE REPAINTED

SHARED USE FOOTWAY / CYCLEWAY SIGNAGE TO
BE PROVIDED CLOSE TO PEDESTRIAN CROSSING

3.0m WIDE SHARED USE FOOTWAY / CYCLEWAY FORMED FROM
REMOVAL OF MEDIAN STRIP AND CARRIAGEWAY NARROWING

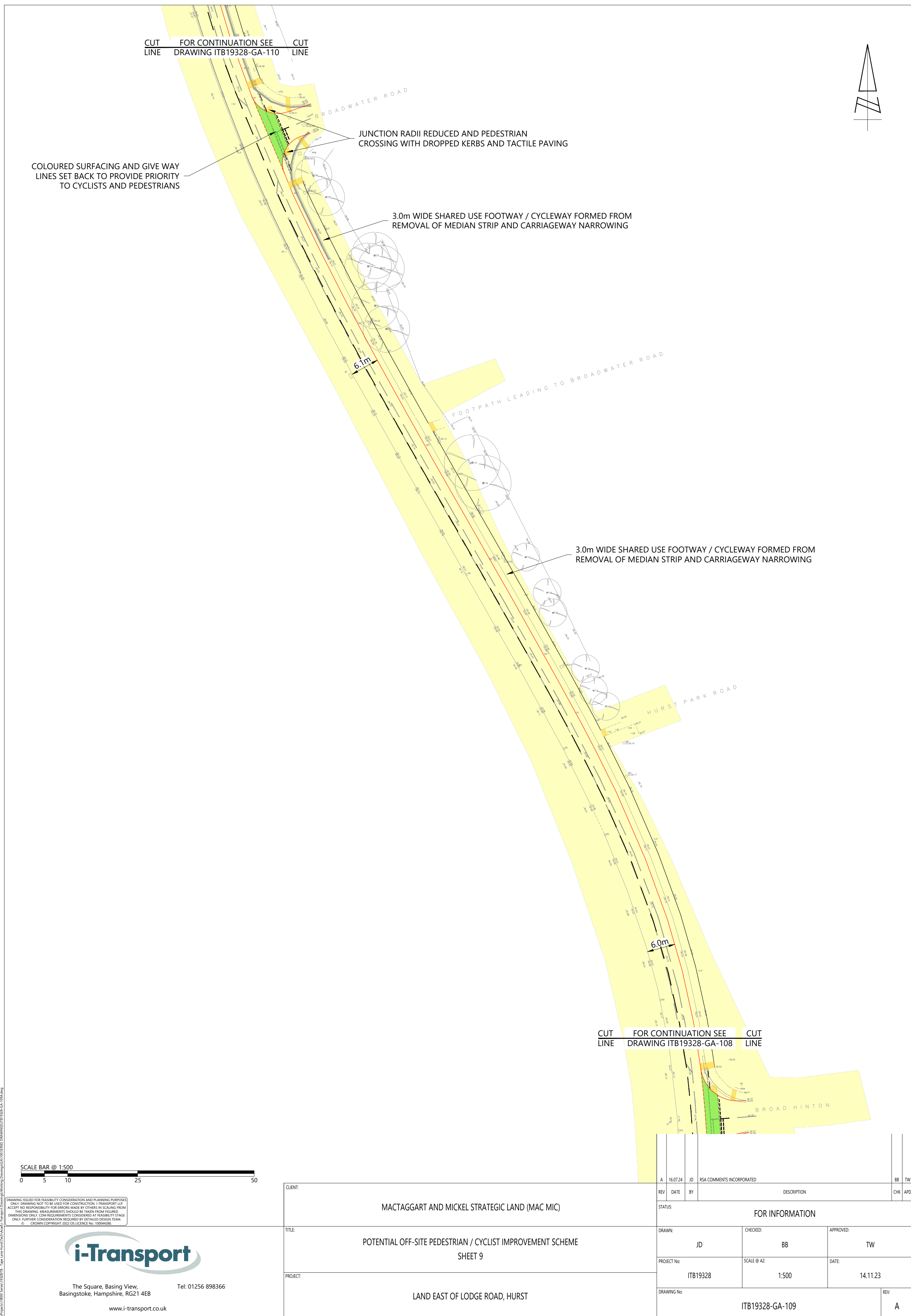
JUNCTION RADII REDUCED AND
PEDESTRIAN CROSSING WITH
DROPPED KERBS AND TACTILE PAVING

0.75m HIGH PARAPET WALL. HEIGHT OF
PARAPET TO BE RAISED - DETAILS TO BE
DETERMINED AT DETAILED DESIGN STAGE

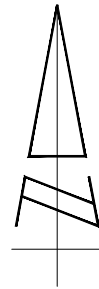


SCALE BAR @ 1:500
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PROJECT No: ITB19328			SCALE @ A2: 1:500	DATE: 14.11.23	
DRAWING No: ITB19328-GA-108					REV: A



CUT FOR CONTINUATION SEE CUT
LINE DRAWING ITB19328-GA-111 LINE



MARKING TO BE PROVIDED AT THE BACK EDGE OF FOOTWAY /
CYCLEWAY SO CYCLISTS TRAVEL AWAY FROM PROPERTIES

6.1m

3.0m WIDE SHARED USE FOOTWAY / CYCLEWAY FORMED FROM
REMOVAL OF MEDIAN STRIP AND CARRIAGEWAY NARROWING

FOOTPATH LEADING TO
BROADWATER ROAD

6.0m

JUNCTION RADII REDUCED AND PEDESTRIAN
CROSSING WITH DROPPED KERBS AND TACTILE PAVING

COLOURED SURFACING AND GIVE WAY
LINES SET BACK TO PROVIDE PRIORITY
TO CYCLISTS AND PEDESTRIANS

CUT FOR CONTINUATION SEE CUT
LINE DRAWING ITB19328-GA-109 LINE

SCALE BAR @ 1:500
0 5 10 25 50

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CLIENT:

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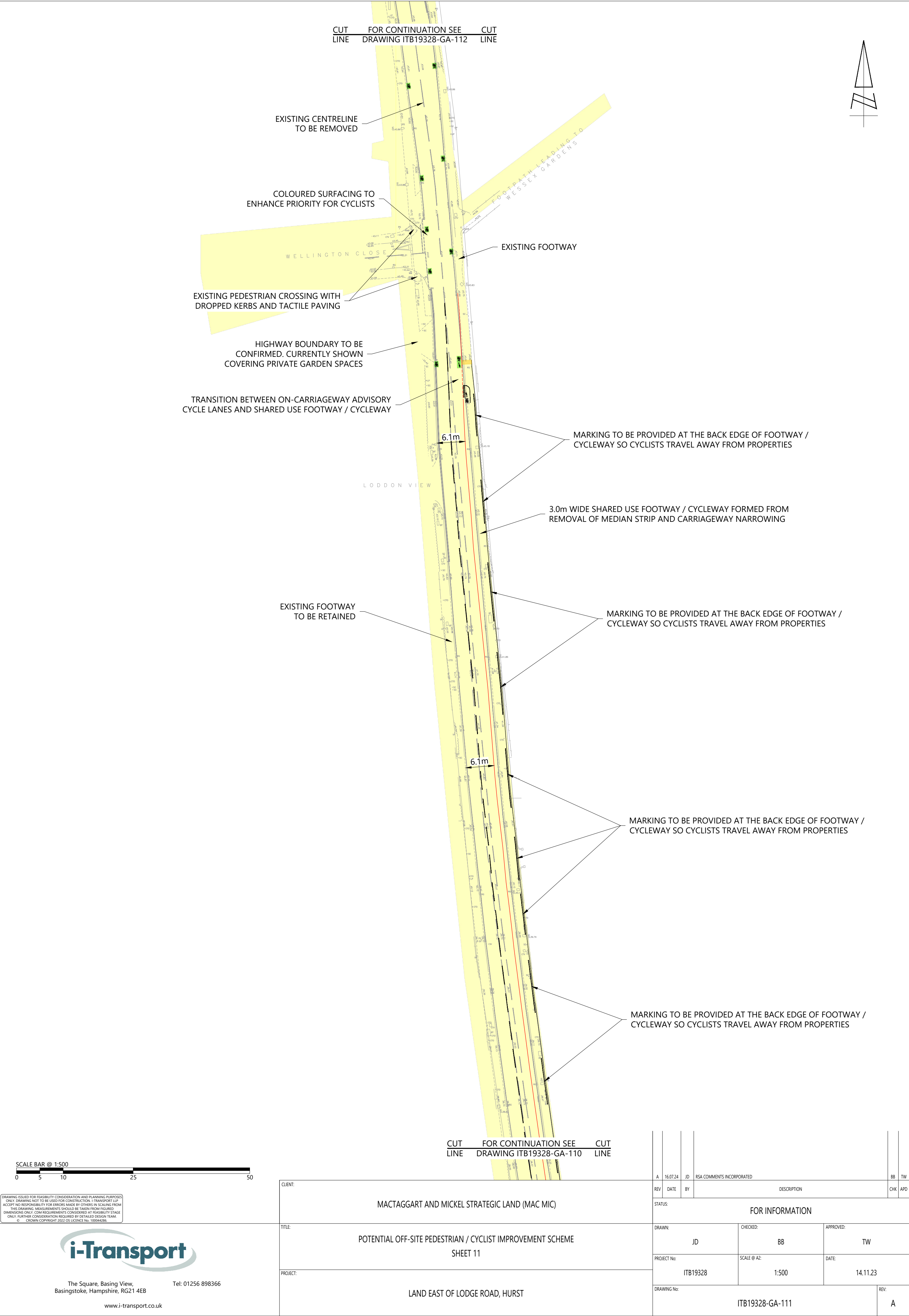
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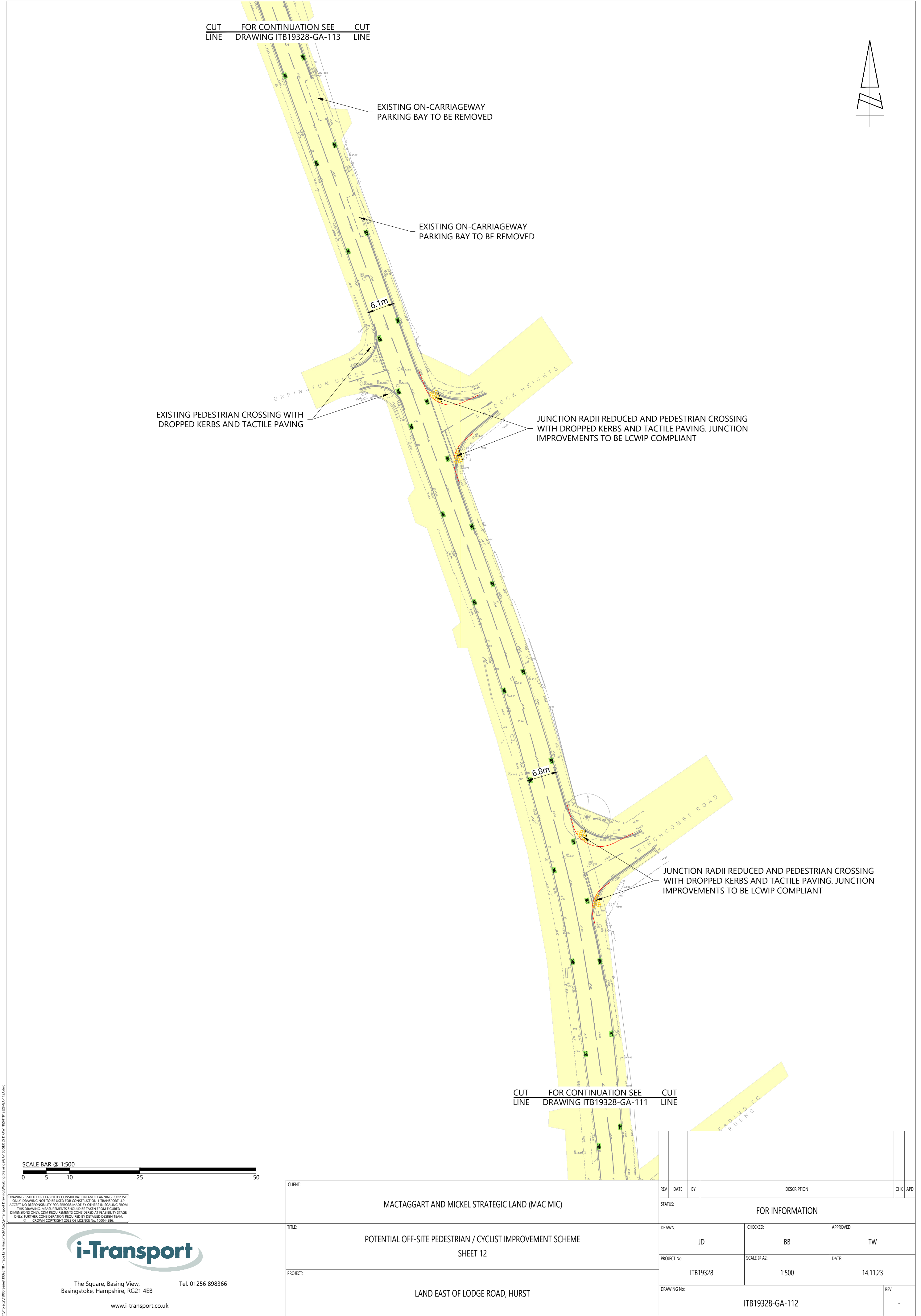
POTENTIAL OFF-SITE PEDESTRIAN / CYCLIST IMPROVEMENT SCHEME
SHEET 10

PROJECT:

LAND EAST OF LODGE ROAD, HURST

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REV	DATE	BY	DESCRIPTION			CHK	APP
STATUS: FOR INFORMATION							
DRAWN:		CHECKED:		APPROVED:			
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ITB19328-GA-110						A	



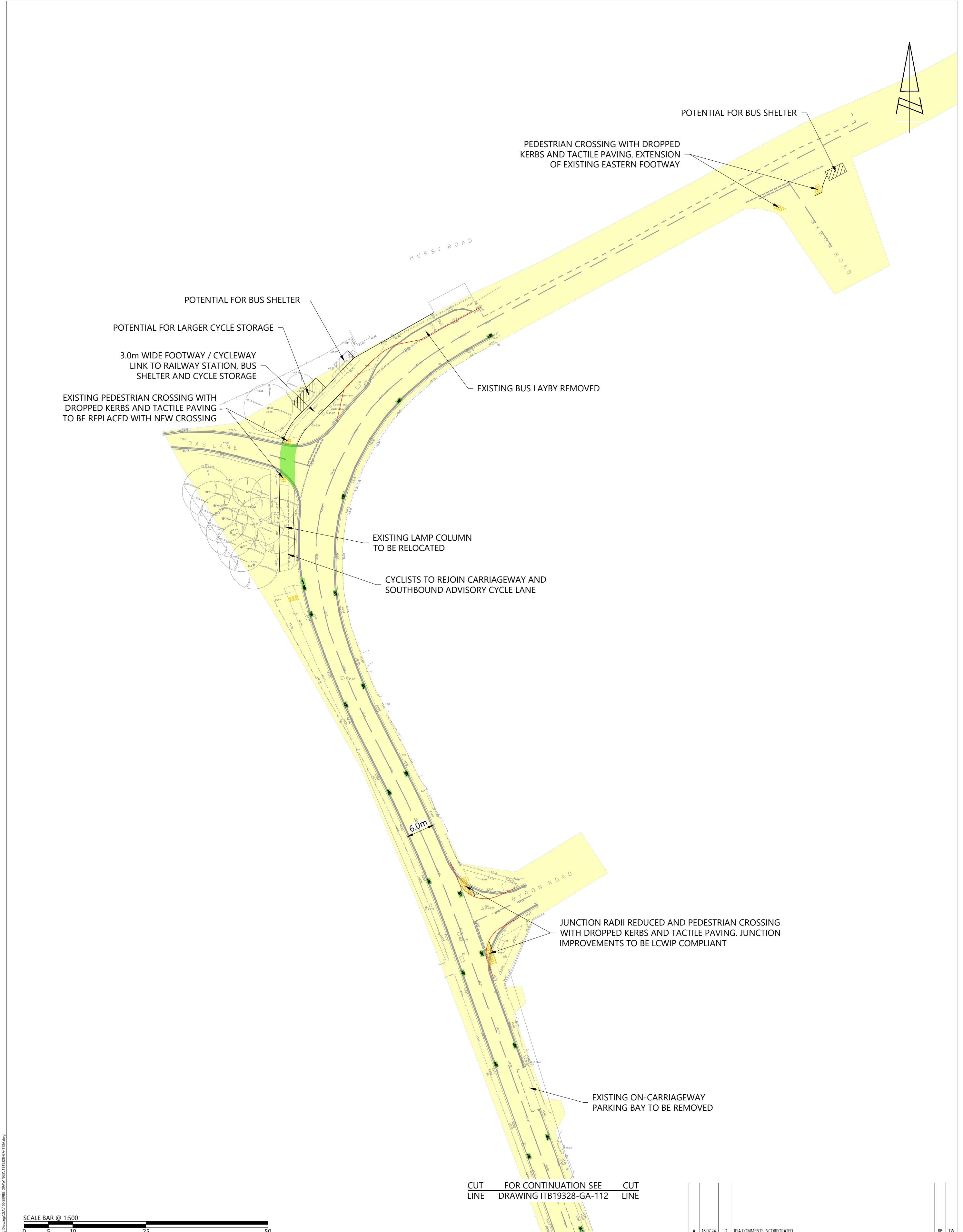


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		STATUS: FOR INFORMATION						
TITLE:	POTENTIAL OFF-SITE PEDESTRIAN / CYCLIST IMPROVEMENT SCHEME SHEET 12	DRAWN:		CHECKED:		APPROVED:		
		JD		BB		TW		
PROJECT:	LAND EAST OF LODGE ROAD, HURST	PROJECT No:		SCALE @ A2:		DATE:		
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		ITB19328-GA-112						-

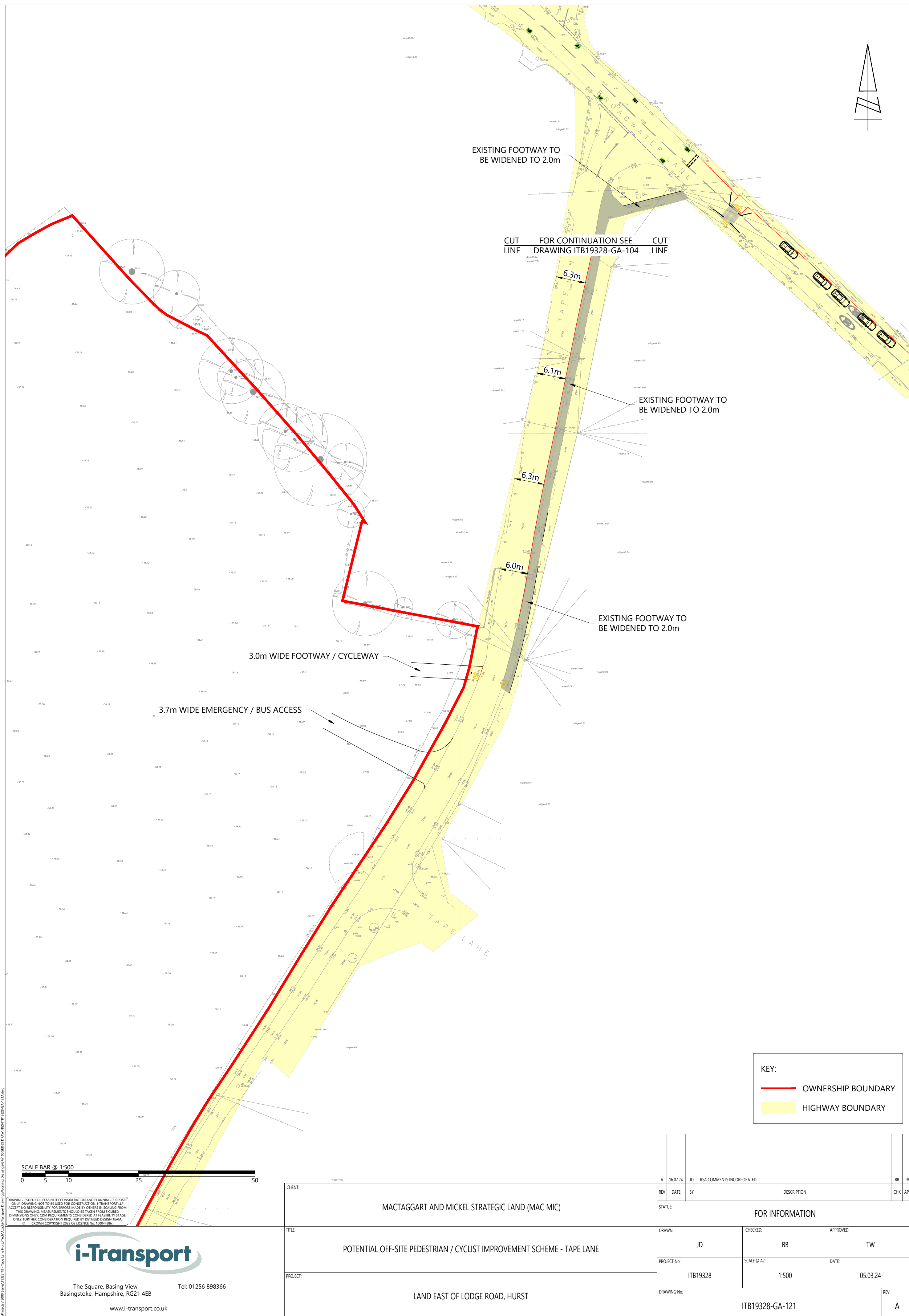


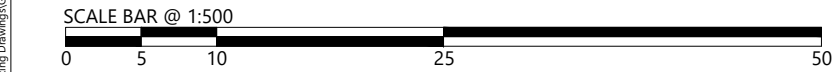
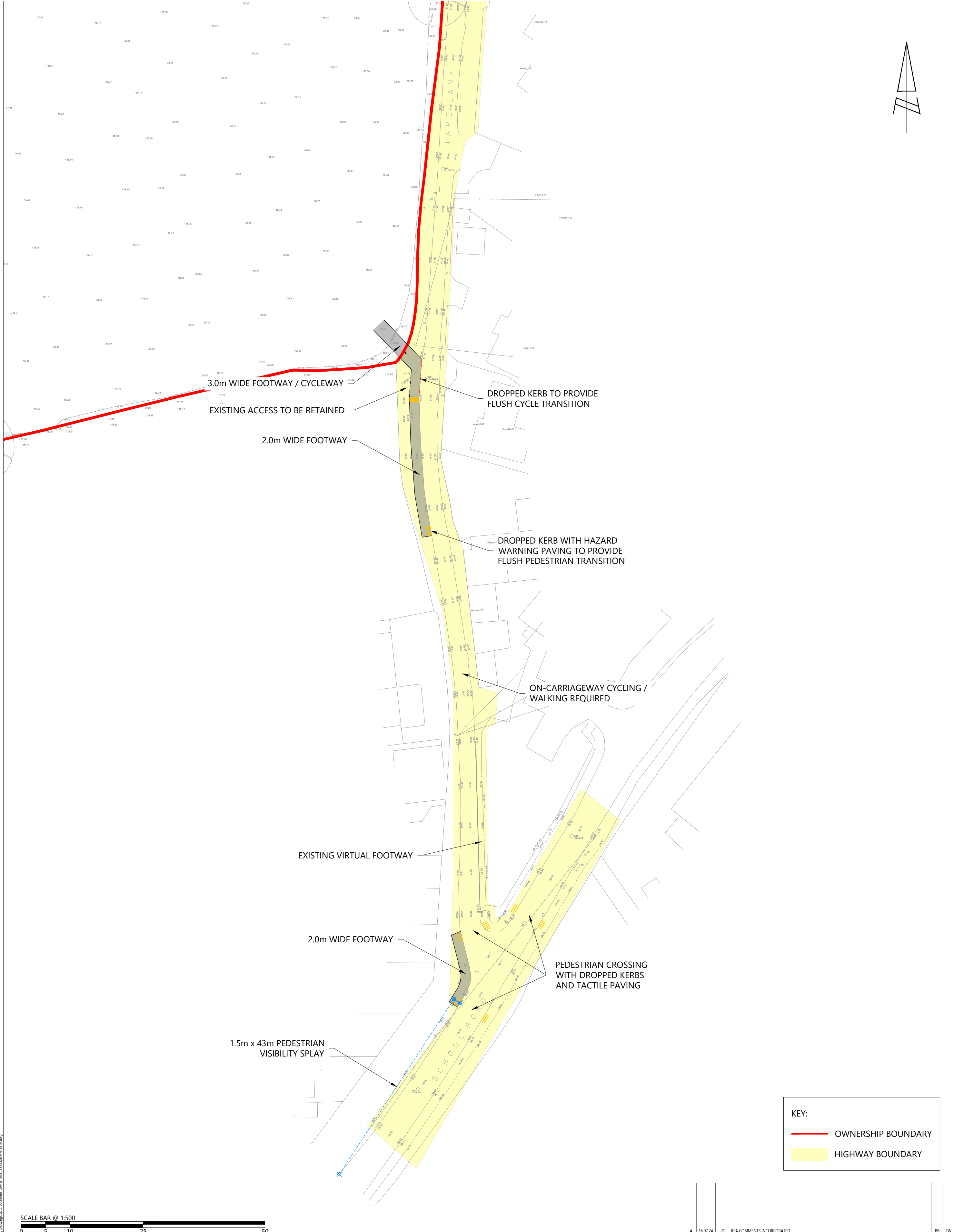
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	REV	DATE	BY	DESCRIPTION			CHK	APD
MACTAGGART AND MICKEL STRATEGIC LAND (MAC MIC)				FOR INFORMATION				
TITLE:	DRAWN:		CHECKED:		APPROVED:			
	JD		BB		TW			
PROJECT:	PROJECT No:		SCALE @ A2:		DATE:			
	ITB19328		1:500		14.11.23			
LAND EAST OF LODGE ROAD, HURST				DRAWING No:			REV:	
				ITB19328-GA-113			-	





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					STATUS: FOR INFORMATION					
TITLE:	POTENTIAL OFF-SITE PEDESTRIAN / CYCLIST IMPROVEMENT SCHEME - TAPE LANE				DRAWN: JD		CHECKED: BB		APPROVED: TW	
PROJECT:	LAND EAST OF LODGE ROAD, HURST				PROJECT No: ITB19328		SCALE @ A2: 1:500		DATE: 08.03.24	
					DRAWING No: ITB19328-GA-131					REV: A