

# Road Safety Audit Response Report

## Project details

<b>Report title:</b>	Lye Lane, Bricket Wood, Stage 1 RSA Response
<b>Date:</b>	27/09/22
<b>Document reference and revision:</b>	P2584 Stage 1 RSA Response v1
<b>Prepared by:</b>	Paul Mew Associates
<b>On behalf of:</b>	MRP Planning / JD Rudkin (Builders) Ltd

## Authorisation sheet

<b>Project:</b>	P2584
<b>Report title:</b>	Lye Lane, Bricket Wood, Stage 1 RSA Response
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Organisation:	
Date:	

## Introduction

The proposed development will 109 mixed (private and affordable) dwellings on land to the north of Bricket Wood, St Albans, Herts with a new site access junction and internal road layout. It will also provide a new pedestrian footway link south of the site to Bricket Wood village

This response document relates to a Stage 1 RSA carried out in respect of the proposals dated 19/09/22 with a site visit carried out on 01/09/22. The Stage 1 RSA was prepared by Allen Transport Consultancy Ltd. The Stage 1 RSA Report document has the reference ATC/780/PMA/1 Rev 1.

## Key personnel

<b>Overseeing Organisation:</b>	Hertfordshire County Council County Hall Pegs Lane Hertford SG13 8DQ
<b>RSA team:</b>	Lisa Allen / Adriano Cappella Allen Transport Consultancy Ltd Minerva House 139 Chatham Road Maidstone Kent ME14 2NB
<b>Design organisation:</b>	John Ross Paul Mew Associates Unit 1, Plym House 21 Enterprise Way London

## Road safety audit decision log

A copy of the Stage 1 RSA is attached at Appendix A of this report. The following table presents the Road safety audit decision log.

## Road safety audit decision log

RSA problem	RSA recommendation	Design organisation response	Overseeing Organisation response	Agreed RSA action
<p>Location: A – Lye Lane, development site access junction.            Summary: Potential restricted visibility for motorists seeking to emerge from the development site access junction onto Lye Lane could result in a potential increased risk of side impact collisions occurring, whereby vehicle occupants could sustain personal injury.</p> <p>The scheme drawing indicates the provision of a new access junction on the eastern side of Lye Lane, located to the north of the existing vehicular access for the paintball centre. The existing vehicular access is to be stopped up. The site visit has established that the posted speed limit on Lye Lane was 30mph, as indicated by repeater signs on posts.</p> <p>The recorded 85th percentile speeds on Lye Lane were 31.2mph for northbound vehicular traffic and 32.2mph for southbound vehicular traffic.</p> <p>It is evident from the scheme drawing that the 2.4m x 43m visibility splay to the north of the proposed development site access junction crosses the development site frontage denoted in green.</p> <p>Concern arises that potential landscaping / fencing fronting the proposed development site could restrict visibility for motorists emerging from the development site access junction onto Lye Lane. The situation could be exacerbated as the 85th percentile speeds are slightly higher than the posted 30mph speed limit and the provision of 43m visibility splays. As a result, restricted visibility could lead to a potential increased risk of side impact collisions occurring, between vehicular traffic emerging from the development site and vehicular traffic on Lye Lane, whereby vehicle occupants could sustain personal injury</p>	<p>It is recommended that the northern visibility splay should be kept clear of any impediments that may restrict visibility at this location.</p> <p>Additionally, it is recommended that the proposed visibility splays should be commensurate with the 85th percentile speeds on Lye Lane.</p>	<p>The northern visibility splay will be kept clear of any impediments (planting / vegetation, fencing) over 0.6m above ground level that may restrict visibility at this location. Sightlines have been amended to show requirements based on 85<sup>th</sup> %ile recorded speeds of 31.2mph NB – sightline requirement of 45m and 32.2mph SB – sightline requirement of 47m. Revised drawings are shown in Appendix B.</p>		
<p>Location: B – Lye Lane, development site access junction.            Summary: Swept path requirements of larger vehicles negotiating the proposed development site access junction</p>	<p>It is recommended that the junction geometry should be modified in</p>	<p>Junction geometry has been amended and swept path analysis for the refuse vehicle and other large vehicle carried out. Revised drawings are shown in Appendix B.</p>		

<p>could result in a potential increased risk of head on or side swipe type collisions occurring, whereby vehicle occupants could sustain personal injury.</p> <p>The scheme drawing indicates the swept path requirements of a Refuse Vehicle accessing and egressing the proposed development site access junction on the eastern side of Lye Lane.</p> <p>It is evident from the scheme drawing that the Refuse Vehicle encroaches the centre lines within the proposed development site access junction and main carriageway of Lye Lane.</p> <p>In addition to refuse vehicles, other larger vehicles such as Supermarket delivery or long wheel base panel vans (i.e. Amazon, DPD) undertaking deliveries for various companies on a more frequent basis than refuse vehicles could also impact upon the required junction geometry to accommodate such vehicles.</p> <p>Concern arises that large vehicles including those mentioned above encroaching the centre lines within the development site access junction and Lye Lane when accessing and egressing the development site, could lead to a potential increased risk of head on or side swipe type collisions occurring with opposing flows of vehicular traffic, whereby vehicle occupants could sustain personal injury.</p>	<p>order to mitigate the above described potential collision scenario.</p> <p>Additionally, it is recommended that swept path analysis exercises of other large vehicles (i.e. Supermarket delivery and long wheel base panel vans) should be undertaken, in order to assist with the development site junction geometry requirements.</p>			
<p>Locations: C, D and E – Development site access junction.</p> <p>Summary: Lack of dropped kerbs could result in a potential increased risk of pedestrian trips and falls occurring on the assumed full height kerb upstands, whereby pedestrians could sustain personal injury, especially those who are blind, visually or mobility impaired.</p> <p>The scheme drawing indicates the provision of a new access junction on the eastern side of Lye Lane. The scheme drawing also indicates the provision of footways leading from the proposed development site onto the new footway provision on the eastern side of Lye Lane.</p> <p>Within the proposed development site, the scheme drawing indicates that the proposed footways either side of the development site access road end, resulting in pedestrians either crossing to the opposite footway or</p>	<p>It is recommended that dropped kerbs and tactile paving should be provided across the development site access junction, in order to mitigate the above described potential injury scenario.</p> <p>Additionally, it is recommended that uncontrolled pedestrian crossing facilities should be provided within the proposed development</p>	<p>Dropped kerbs / tactile paving / uncontrolled pedestrian crossing facilities have been introduced at various locations within the proposed development site. Revised drawings are shown in Appendix B</p>		

<p>continuing their journey within the carriageway. Concern arises that pedestrians negotiating the assumed full height kerb upstands when crossing the proposed access junction from north to south and vice-versa could lead to a potential increased risk of pedestrian trips and falls occurring, whereby pedestrians could sustain personal injury, especially those who may be blind, visually or mobility impaired.</p> <p>Additionally, concern arises that pedestrians seeking to cross the internal development site roads where the footways end to access the opposite footway and vice-versa could lead to a potential increased risk of pedestrian trips and falls occurring on the assumed full height kerb upstands, whereby pedestrians could sustain personal injury, especially those who may be blind, visually or mobility impaired</p>	<p>site where the footways end, in order to mitigate the above described potential injury scenario.</p>			
<p>Location: F – Footway to the north of the development site access junction.</p> <p>Summary: Lack of dropped kerbs could result in a potential increased risk of pedestrian trips and falls occurring on the assumed full height kerb upstands, whereby pedestrians could sustain personal injury, especially those who are blind, visually or mobility impaired.</p> <p>The scheme drawing indicates the provision of a new access junction on the eastern side of Lye Lane. The scheme drawing also indicates the provision of footways leading from the proposed development site onto the new footway provision on the eastern side of Lye Lane.</p> <p>Concern arises that pedestrians negotiating the assumed full height kerb upstands when transitioning between the footway and carriageway to the north of the proposed development site access junction, could lead to a potential increased risk of pedestrian trips and falls occurring, whereby pedestrians could sustain personal injury, especially those who may be blind, visually or mobility impaired.</p>	<p>It is recommended that a length of dropped kerbs should be provided at this location, in order to mitigate the above described potential injury scenario.</p>	<p>A dropped kerb with tactile paving will be provided at this location. Revised drawings are shown in Appendix B</p>		
<p>Location: G – Footway to the north of the development site access junction.</p> <p>Summary: Potential restricted inter-visibility for</p>	<p>It is recommended that the inter-visibility should be accurately measured</p>	<p>Intervisibility splay will be kept clear of any impediments (planting / vegetation, fencing) over 0.6m above ground level that may restrict visibility at this location.</p>		

<p>pedestrians transitioning from the footway to the carriageway could result in a potential increased risk of vehicle and pedestrian collisions occurring, whereby pedestrians could sustain personal injury. The scheme drawing indicates the provision of a new access junction on the eastern side of Lye Lane. The scheme drawing also indicates the provision of footways leading from the proposed development site onto the new footway provision on the eastern side of Lye Lane.</p> <p>It is evident from the scheme drawing that the proposed footway to the north of the development site access junction ends adjacent to the development site frontage denoted in green.</p> <p>Concern arises that potential landscaping / fencing fronting the proposed development site could restrict inter-visibility between pedestrians transitioning between the footway and carriageway when walking northbound on Lye Lane and southbound vehicular traffic. As a result, this situation could lead to a potential increased risk of vehicular and pedestrian collisions occurring, whereby pedestrians could sustain personal injury.</p>	<p>and kept clear of any impediments that may restrict inter-visibility at this location, in order to mitigate the above described potential collision scenario.</p>	<p>Pedestrian – vehicle intervisibilities of 65m (in line with 85<sup>th</sup> %ile speeds) can be achieved and are shown in the Revised drawings in Appendix B.</p>		
<p>Locations: H, I, J, K and L – Crossing provisions south of the proposed development site.</p> <p>Summary: Restricted inter-visibility at the proposed crossing facilities could result in a potential increased risk of vehicular and pedestrian collisions occurring, whereby pedestrians could sustain personal injury.</p> <p>The scheme drawing indicates the provision of new footways on Lye Lane between the proposed development site access junction and the junction of West Riding to the south of the proposed development site. The scheme drawing also indicates a number of uncontrolled pedestrian crossing facilities along this section of Lye Lane. The site visit has established there is a notable amount of trees and vegetation either side of Lye Lane between the proposed development site and the junction of West Riding.</p> <p>The site visit has also established the presence of a boundary wall / fence and gate on the northern side of an</p>	<p>It is recommended that the inter-visibility at these locations should be accurately measured and kept clear of any impediments that may restrict inter-visibility. This may necessitate cutting back existing trees, branches and other vegetation on Lye Lane, as well as modifying the crossing provision at the existing access junction on the western side of Lye Lane.</p>	<p>Intervisibility splays will be kept clear of any impediments (planting / vegetation, fencing) over 0.6m above ground level that may restrict visibility at these locations. Pedestrian – vehicle intervisibilities of 65m (in line with 85<sup>th</sup> %ile speeds) can be achieved and are shown in the Revised drawings in Appendix B.</p>		

<p>existing access junction on the western side of Lye Lane, (see Location I within Appendix B), which impacted upon the inter-visibility.</p> <p>Due to the existing vegetation either side of Lye Lane, concern arises that restricted inter-visibility between pedestrians crossing Lye Lane at these locations and northbound and southbound vehicular traffic could lead to a potential increased risk of vehicular and pedestrian collisions occurring, whereby pedestrians could sustain personal injury.</p> <p>Additionally, due to the presence of the boundary wall / fence and gate on the northern side of the access junction on the western side of Lye Lane, concern arises that restricted inter-visibility could lead to a potential increased risk of vehicular and pedestrian collisions occurring, whereby pedestrians could sustain personal injury.</p>				
<p>Location: M, N and O – Lye Lane, existing access junction and vehicular crossovers.</p> <p>Summary: Potential swept path requirements of vehicles accessing and egressing the existing access junction and vehicular crossovers on Lye Lane could result in a potential increased risk of vehicular and pedestrian collisions occurring, whereby pedestrians could sustain personal injury.</p> <p>The scheme drawing indicates the provision of new footways on Lye Lane between the proposed development site access junction and the junction of West Riding to the south of the proposed development site. The scheme drawing also indicates a number of uncontrolled pedestrian crossing facilities along this section of Lye Lane. In the event that vehicles overrun the existing verges when accessing or egressing the existing access junction and vehicular crossovers on Lye Lane, concern arises that with the provision of new the footways on Lye Lane this situation could lead to vehicular and pedestrian conflicts occurring.</p> <p>The potential swept path requirements of vehicular traffic accessing and egressing the access junction and vehicular crossovers could result in vehicular traffic overrunning the</p>	<p>It is recommended that swept path analysis exercises should be undertaken for all the expected types and sizes of vehicles using the access junction and vehicular crossovers.</p> <p>Should overrunning of the footways occur, it is recommended that the kerb lines should be modified in order to mitigate the above described potential collision scenario.</p>	<p>Swept path analysis has be undertaken as shown in Appendix B for vehicles turning in / out of the accesses on Lye Lane and demonstrates that they do not over run the proposed footway. It should be noted that swept path analysis has not been carried out for Location N as no vehicle access is provided at this location, rather the location shows a local footpath crossing Lye Lane.</p>		

<p>proposed footway areas. As a result, this situation could lead to a potential increased risk of vehicular and pedestrian collisions occurring, whereby pedestrians could sustain personal injury.</p>				
<p>Location: P – Lye Lane, reduced footway width.  Summary: The proposed narrowed section of footway on the eastern side of Lye Lane could result in a potential increased risk of vehicular and pedestrian collisions occurring, whereby pedestrians could sustain personal injury.  The scheme drawing indicates the provision of new 2m wide footways on Lye Lane between the proposed development site access junction and the junction of West Riding to the south of the proposed development site, which include a number of uncontrolled pedestrian crossing facilities. The scheme drawing also indicates a length of footway south of the M25 over-bridge narrows down to 1m before widening out to 2m on the eastern side of Lye Lane.  The site visit has established that there is a vehicle restraint barrier located on the eastern side of Lye Lane south of the M25 over-bridge. Concern arises that the pedestrians who choose to continue walking on the eastern footway may encounter pedestrians walking towards them on the proposed narrow section of footway, which could result in pedestrians stepping into the mainline carriageway in order to pass one another.  The presence of the existing vehicle restraint barrier exacerbates the situation, as the barrier is likely to restrict pedestrians from manoeuvring further east when seeking to pass an opposing pedestrian on this section of footway. As a result, this situation could result in a potential increased risk of vehicular and pedestrian collisions occurring, whereby pedestrians could sustain personal injury.</p>	<p>It is recommended that the proposed footway should end to the south of the northern most uncontrolled pedestrian crossing facility, in order to mitigate the above described potential collision scenario.</p>	<p>The proposed footway has been terminated south of the northernmost uncontrolled pedestrian crossing facility as shown in Appendix B.</p>		
<p>Location: General, throughout the extents of footway provision – Lye Lane, existing ditches.  Summary: Location of existing ditches in proximity to the proposed new footways on Lye Lane could result in a</p>	<p>It is recommended that measures to preclude pedestrians from slipping and falling into the</p>	<p>Measures will be provided to preclude pedestrians from slipping and falling into the ditches. These could include the provision of culverts along Lye Lane or other suitable forms of containment fencing.</p>		

<p>potential increased risk of pedestrian slips and falls occurring when walking adjacent to existing ditches along Lye Lane, whereby pedestrians could sustain personal injury.</p> <p>The scheme drawing indicates the provision of new footways on Lye Lane between the proposed development site access junction and the junction of West Riding to the south of the proposed development site.</p> <p>The site visit has established the presence of verge ditches running both sides of Lye Lane.</p> <p>With the provision of the proposed footways on Lye Lane that would be positioned adjacent to existing verge ditches, concern arises that this situation could lead to a potential increased risk of pedestrian slips and falls occurring into the ditches, especially during the hours of darkness, as Lye Lane is unlit, whereby pedestrians could sustain personal injury.</p>	<p>ditches should be provided in order to mitigate the above described potential injury scenario.</p> <p>Measures could include the provision of culverts along Lye Lane or a suitable form of containment fencing to preclude pedestrians from slipping and falling into the ditches</p>			
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## Design organisation and Overseeing Organisation statements

Include the following statements to be signed by the design organisation and the Overseeing Organisation.

### Design organisation statement

<b>On behalf of the design organisation I certify that:</b>	
<b>1) the RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with the Overseeing Organisation.</b>	
Name:	
Signed	
Position:	
Organisation:	
Date:	

### Overseeing Organisation statement

<b>On behalf of the Overseeing Organisation I certify that:</b>	
<b>1) the RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with the design organisation; and</b>	
<b>2) the agreed RSA actions will be progressed.</b>	
Name:	
Signed:	
Position:	
Organisation:	
Date:	

Appendix A  
Stage I Road Safety Audit Report



**Allen Transport Consultancy Ltd**

**Lye Lane, Bricket Wood, Hertfordshire**

**Proposed S278 Highway Works**

**Stage 1 Road Safety Audit**

**Date: September 2022**

**Report produced for: Paul Mew Associates**

**Report produced by: Allen Transport Consultancy**



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## DOCUMENT CONTROL SHEET

This report was produced by Allen Transport Consultancy in accordance with the instructions from Paul Mew Associates, for the specific purpose of undertaking the Stage 1 Road Safety Audit. Allen Transport Consultancy shall not be liable for the use of any information contained herein for any purpose other than the sole and specific use for which it was prepared.

### Project Details:

<b>Report title</b>	Lye Lane, Bricket Wood, Hertfordshire Proposed S278 Highway Works Stage 1 Road Safety Audit
<b>Date</b>	19 <sup>th</sup> September 2022
<b>Document reference and revision</b>	ATC/780/PMA/1 Rev 1
<b>Prepared by</b>	Allen Transport Consultancy Ltd
<b>On behalf of</b>	Paul Mew Associates

### Record of Issue:

Issue	Status	Author	Date	Checked	Date	Authorised	Date
1	Final	LA	08/09/22	ABC	18/09/22	LA	19/09/22

### Distribution:

Organisation	Contact	Copies
Paul Mew Associates	John Ross	-

## 1 INTRODUCTION

- 1.1 This report has been produced as a result of a Stage 1 Road Safety Audit carried out on the proposed S278 highway works in Lye Lane, Bricket Wood in Hertfordshire. The proposed development is to comprise of 109 dwellings.
- 1.2 The Road Safety Audit was undertaken at the request of the Overseeing Organisation, Hertfordshire County Council, County Hall, Pegs Lane, Hertford, Hertfordshire, SG13 8DQ. The Design Organisation is Paul Mew Associates, Unit 1, Plym House, 21 Enterprise Way, London, SW18 1FZ. The Third Party Organisation is JK Rudkin (Builders) Ltd.
- 1.3 In summary, the works considered as part of this Stage 1 Road Safety Audit are as follows:
- Stopping up an existing vehicular access on Lye Lane and providing a new site access junction on Lye Lane, which is to be located north of the existing vehicular access for the paintball centre;
  - Provision of new footways on Lye Lane, between the development site access junction and the junction of West Riding to the south of the proposed development site. The footways include a number of uncontrolled pedestrian crossing facilities, which incorporate dropped kerbs and tactile paving.
- 1.4 The Audit Team membership approved by Hertfordshire County Council was as follows:
- Lisa Allen - BEng (Hons), MSc, MCIHT, MSoRSA, HA RSA Cert Comp - Audit Team Leader
  - Adriano B. Cappella - IEng, FIHE, MSoRSA, MCIHT, HA RSA Cert Comp - Audit Team Member
- 1.5 The Audit was undertaken in accordance with the Audit Brief supplied by Paul Mew Associates dated 5<sup>th</sup> August 2022. The Road Safety Audit comprised an examination of the drawings and documents provided, as listed in Appendix A.
- 1.6 The Audit took place at the Maidstone office of Allen Transport Consultancy during September 2022. The Audit Team members visited the site, together, on 1<sup>st</sup> September 2022 between 13:00 and 14:25 hours. During the site visit, the weather was warm, sunny and the existing road surface was dry. Vehicular traffic conditions at the time of the site visit were low on Lye Lane. One pedestrian and no pedal cyclists were observed during the site visit.
- 1.7 The terms of reference of the Audit are as described in DMRB GG 119 Road Safety Audit. The Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria. The Road Safety Audit does not perform any "Technical Check" function on these proposals. It is assumed that the Design Organisation is satisfied that such a "Technical Check" has been successfully completed prior to requesting this Road Safety Audit.
- 1.8 No Departures from Design Standards have been reported by the Design Organisation.

- 1.9 Plans showing the locations of Problems raised in this report are included in Appendix B.
- 1.10 Issues identified and observations made during this Stage 1 Road Safety Audit and site inspection which the Terms of Reference exclude from this report, but which the Audit Team wishes to draw to the attention of the Overseeing Organisation, Hertfordshire County Council, will be set out in a separate letter. These issues could include maintenance items and operational issues. The Audit Team has not identified any issues during this Stage 1 Road Safety Audit and site inspection that are considered to be outside the Terms of Reference.

## **2 ITEMS RAISED AT THIS STAGE 1 ROAD SAFETY AUDIT**

### **2.1 LOCAL ALIGNMENT**

2.1.1 No Problems identified in this category at this Stage 1 Road Safety Audit.

### **2.2 GENERAL**

2.2.1 No Problems identified in this category at this Stage 1 Road Safety Audit.

### **2.3 JUNCTIONS**

#### **2.3.1 PROBLEM**

**Location:** A – Lye Lane, development site access junction.

**Summary:** Potential restricted visibility for motorists seeking to emerge from the development site access junction onto Lye Lane could result in a potential increased risk of side impact collisions occurring, whereby vehicle occupants could sustain personal injury.

The scheme drawing indicates the provision of a new access junction on the eastern side of Lye Lane, located to the north of the existing vehicular access for the paintball centre. The existing vehicular access is to be stopped up.

The site visit has established that the posted speed limit on Lye Lane was 30mph, as indicated by repeater signs on posts.

The recorded 85<sup>th</sup> percentile speeds on Lye Lane were 31.2mph for northbound vehicular traffic and 32.2mph for southbound vehicular traffic.

It is evident from the scheme drawing that the 2.4m x 43m visibility splay to the north of the proposed development site access junction crosses the development site frontage denoted in green.

Concern arises that potential landscaping / fencing fronting the proposed development site could restrict visibility for motorists emerging from the development site access junction onto Lye Lane. The situation could be exacerbated as the 85<sup>th</sup> percentile speeds are slightly higher than the posted 30mph speed limit and the provision of 43m visibility splays. As a result, restricted visibility could lead to a potential increased risk of side impact collisions occurring, between vehicular traffic emerging from the development site and vehicular traffic on Lye Lane, whereby vehicle occupants could sustain personal injury.

#### **RECOMMENDATION**

It is recommended that the northern visibility splay should be kept clear of any impediments that may restrict visibility at this location.

Additionally, it is recommended that the proposed visibility splays should be commensurate with the 85<sup>th</sup> percentile speeds on Lye Lane.

## 2.3.2 PROBLEM

**Location: B** – Lye Lane, development site access junction.

**Summary:** Swept path requirements of larger vehicles negotiating the proposed development site access junction could result in a potential increased risk of head on or side swipe type collisions occurring, whereby vehicle occupants could sustain personal injury.

The scheme drawing indicates the swept path requirements of a Refuse Vehicle accessing and egressing the proposed development site access junction on the eastern side of Lye Lane.

It is evident from the scheme drawing that the Refuse Vehicle encroaches the centre lines within the proposed development site access junction and main carriageway of Lye Lane.

In addition to refuse vehicles, other larger vehicles such as Supermarket delivery or long wheel base panel vans (i.e. Amazon, DPD) undertaking deliveries for various companies on a more frequent basis than refuse vehicles could also impact upon the required junction geometry to accommodate such vehicles.

Concern arises that large vehicles including those mentioned above encroaching the centre lines within the development site access junction and Lye Lane when accessing and egressing the development site, could lead to a potential increased risk of head on or side swipe type collisions occurring with opposing flows of vehicular traffic, whereby vehicle occupants could sustain personal injury.

## RECOMMENDATION

It is recommended that the junction geometry should be modified in order to mitigate the above described potential collision scenario.

Additionally, it is recommended that swept path analysis exercises of other large vehicles (i.e. Supermarket delivery and long wheel base panel vans) should be undertaken, in order to assist with the development site junction geometry requirements.

## 2.4 WALKING, CYCLING AND HORSE RIDING

### 2.4.1 PROBLEM

**Locations: C, D and E** – Development site access junction.

**Summary:** Lack of dropped kerbs could result in a potential increased risk of pedestrian trips and falls occurring on the assumed full height kerb upstands, whereby pedestrians could sustain personal injury, especially those who are blind, visually or mobility impaired.

The scheme drawing indicates the provision of a new access junction on the eastern side of Lye Lane. The scheme drawing also indicates the provision of footways leading from the proposed development site onto the new footway provision on the eastern side of Lye Lane.

Within the proposed development site, the scheme drawing indicates that the proposed footways either side of the development site access road end, resulting in pedestrians either crossing to the opposite footway or continuing their journey within the carriageway.

Concern arises that pedestrians negotiating the assumed full height kerb upstands when crossing the proposed access junction from north to south and vice-versa could lead to a potential increased risk of pedestrian trips and falls occurring, whereby pedestrians could sustain personal injury, especially those who may be blind, visually or mobility impaired.

Additionally, concern arises that pedestrians seeking to cross the internal development site roads where the footways end to access the opposite footway and vice-versa could lead to a potential increased risk of pedestrian trips and falls occurring on the assumed full height kerb upstands, whereby pedestrians could sustain personal injury, especially those who may be blind, visually or mobility impaired

### **RECOMMENDATION**

It is recommended that dropped kerbs and tactile paving should be provided across the development site access junction, in order to mitigate the above described potential injury scenario.

Additionally, it is recommended that uncontrolled pedestrian crossing facilities should be provided within the proposed development site where the footways end, in order to mitigate the above described potential injury scenario.

#### **2.4.2 PROBLEM**

**Location: F** – Footway to the north of the development site access junction.

**Summary:** Lack of dropped kerbs could result in a potential increased risk of pedestrian trips and falls occurring on the assumed full height kerb upstands, whereby pedestrians could sustain personal injury, especially those who are blind, visually or mobility impaired.

The scheme drawing indicates the provision of a new access junction on the eastern side of Lye Lane. The scheme drawing also indicates the provision of footways leading from the proposed development site onto the new footway provision on the eastern side of Lye Lane.

Concern arises that pedestrians negotiating the assumed full height kerb upstands when transitioning between the footway and carriageway to the north of the proposed development site access junction, could lead to a potential increased risk of pedestrian trips and falls occurring, whereby pedestrians could sustain personal injury, especially those who may be blind, visually or mobility impaired.

### **RECOMMENDATION**

It is recommended that a length of dropped kerbs should be provided at this location, in order to mitigate the above described potential injury scenario.

#### **2.4.3 PROBLEM**

**Location: G** – Footway to the north of the development site access junction.

**Summary:** Potential restricted inter-visibility for pedestrians transitioning from the footway to the carriageway could result in a potential increased risk of vehicle and pedestrian collisions occurring, whereby pedestrians could sustain personal injury.

The scheme drawing indicates the provision of a new access junction on the eastern side of Lye Lane. The scheme drawing also indicates the provision of footways leading from the proposed development site onto the new footway provision on the eastern side of Lye Lane.

It is evident from the scheme drawing that the proposed footway to the north of the development site access junction ends adjacent to the development site frontage denoted in green.

Concern arises that potential landscaping / fencing fronting the proposed development site could restrict inter-visibility between pedestrians transitioning between the footway and carriageway when walking northbound on Lye Lane and southbound vehicular traffic. As a result, this situation could lead to a potential increased risk of vehicular and pedestrian collisions occurring, whereby pedestrians could sustain personal injury.

### **RECOMMENDATION**

It is recommended that the inter-visibility should be accurately measured and kept clear of any impediments that may restrict inter-visibility at this location, in order to mitigate the above described potential collision scenario.

#### **2.4.4 PROBLEM**

**Locations:** H, I, J, K and L – Crossing provisions south of the proposed development site.

**Summary:** Restricted inter-visibility at the proposed crossing facilities could result in a potential increased risk of vehicular and pedestrian collisions occurring, whereby pedestrians could sustain personal injury.

The scheme drawing indicates the provision of new footways on Lye Lane between the proposed development site access junction and the junction of West Riding to the south of the proposed development site. The scheme drawing also indicates a number of uncontrolled pedestrian crossing facilities along this section of Lye Lane.

The site visit has established there is a notable amount of trees and vegetation either side of Lye Lane between the proposed development site and the junction of West Riding.

The site visit has also established the presence of a boundary wall / fence and gate on the northern side of an existing access junction on the western side of Lye Lane, (see Location I within Appendix B), which impacted upon the inter-visibility.

Due to the existing vegetation either side of Lye Lane, concern arises that restricted inter-visibility between pedestrians crossing Lye Lane at these locations and northbound and southbound vehicular traffic could lead to a potential increased risk of vehicular and pedestrian collisions occurring, whereby pedestrians could sustain personal injury.

Additionally, due to the presence of the boundary wall / fence and gate on the northern side of the access junction on the western side of Lye Lane, concern arises that restricted inter-visibility could lead to a potential increased risk of vehicular and pedestrian collisions occurring, whereby pedestrians could sustain personal injury.

### **RECOMMENDATION**

It is recommended that the inter-visibility at these locations should be accurately measured and kept clear of any impediments that may restrict inter-visibility.

This may necessitate cutting back existing trees, branches and other vegetation on Lye Lane, as well as modifying the crossing provision at the existing access junction on the western side of Lye Lane.

#### 2.4.5 PROBLEM

**Location:** M, N and O – Lye Lane, existing access junction and vehicular crossovers.

**Summary:** Potential swept path requirements of vehicles accessing and egressing the existing access junction and vehicular crossovers on Lye Lane could result in a potential increased risk of vehicular and pedestrian collisions occurring, whereby pedestrians could sustain personal injury.

The scheme drawing indicates the provision of new footways on Lye Lane between the proposed development site access junction and the junction of West Riding to the south of the proposed development site. The scheme drawing also indicates a number of uncontrolled pedestrian crossing facilities along this section of Lye Lane.

In the event that vehicles overrun the existing verges when accessing or egressing the existing access junction and vehicular crossovers on Lye Lane, concern arises that with the provision of new the footways on Lye Lane this situation could lead to vehicular and pedestrian conflicts occurring.

The potential swept path requirements of vehicular traffic accessing and egressing the access junction and vehicular crossovers could result in vehicular traffic overrunning the proposed footway areas. As a result, this situation could lead to a potential increased risk of vehicular and pedestrian collisions occurring, whereby pedestrians could sustain personal injury.

#### RECOMMENDATION

It is recommended that swept path analysis exercises should be undertaken for all the expected types and sizes of vehicles using the access junction and vehicular crossovers.

Should overrunning of the footways occur, it is recommended that the kerb lines should be modified in order to mitigate the above described potential collision scenario.

#### 2.4.6 PROBLEM

**Location:** P – Lye Lane, reduced footway width.

**Summary:** The proposed narrowed section of footway on the eastern side of Lye Lane could result in a potential increased risk of vehicular and pedestrian collisions occurring, whereby pedestrians could sustain personal injury.

The scheme drawing indicates the provision of new 2m wide footways on Lye Lane between the proposed development site access junction and the junction of West Riding to the south of the proposed development site, which include a number of uncontrolled pedestrian crossing facilities. The scheme drawing also indicates a length of footway south of the M25 over-bridge narrows down to 1m before widening out to 2m on the eastern side of Lye Lane.

The site visit has established that there is a vehicle restraint barrier located on the eastern side of Lye Lane south of the M25 over-bridge.

Concern arises that the pedestrians who choose to continue walking on the eastern footway may encounter pedestrians walking towards them on the proposed narrow section of footway, which could result in pedestrians stepping into the mainline carriageway in order to pass one another.

The presence of the existing vehicle restraint barrier exacerbates the situation, as the barrier is likely to restrict pedestrians from manoeuvring further east when seeking to pass an opposing pedestrian on this section of footway.

As a result, this situation could result in a potential increased risk of vehicular and pedestrian collisions occurring, whereby pedestrians could sustain personal injury.

### **RECOMMENDATION**

It is recommended that the proposed footway should end to the south of the northern most uncontrolled pedestrian crossing facility, in order to mitigate the above described potential collision scenario.

## **2.4.7 PROBLEM**

**Location:** General, throughout the extents of footway provision – Lye Lane, existing ditches.

**Summary:** Location of existing ditches in proximity to the proposed new footways on Lye Lane could result in a potential increased risk of pedestrian slips and falls occurring when walking adjacent to existing ditches along Lye Lane, whereby pedestrians could sustain personal injury.

The scheme drawing indicates the provision of new footways on Lye Lane between the proposed development site access junction and the junction of West Riding to the south of the proposed development site.

The site visit has established the presence of verge ditches running both sides of Lye Lane.

With the provision of the proposed footways on Lye Lane that would be positioned adjacent to existing verge ditches, concern arises that this situation could lead to a potential increased risk of pedestrian slips and falls occurring into the ditches, especially during the hours of darkness, as Lye Lane is unlit, whereby pedestrians could sustain personal injury.

### **RECOMMENDATION**

It is recommended that measures to preclude pedestrians from slipping and falling into the ditches should be provided in order to mitigate the above described potential injury scenario. Measures could include the provision of culverts along Lye Lane or a suitable form of containment fencing to preclude pedestrians from slipping and falling into the ditches.

## **2.5 TRAFFIC SIGNS, CARRIAGEWAY MARKINGS AND LIGHTING**

2.5.1 No Problems identified in this category at this Stage 1 Road Safety Audit.

**END OF PROBLEMS IDENTIFIED AND RECOMMENDATIONS OFFERED IN THIS STAGE 1 ROAD SAFETY AUDIT**

### 3 AUDIT TEAM STATEMENT

We certify that this audit has been carried out in accordance with DMRB GG 119.

#### Road Safety Audit Team Leader

Lisa Allen, BEng (Hons), MSc, MCIHT, MSoRSA, HA RSA Cert Comp

Signed: 

Director  
Allen Transport Consultancy Ltd  
Minerva House  
139 Chatham Road  
Maidstone  
Kent ME14 2NB

**Date:** 19<sup>th</sup> September 2022

#### Road Safety Audit Team Member

Adriano B. Cappella, IEng, FIHE, MSoRSA, MCIHT, HA RSA Cert Comp

Signed: 

Road Safety Consultant  
Allen Transport Consultancy Ltd  
Minerva House  
139 Chatham Road  
Maidstone  
Kent ME14 2NB

**Date:** 19<sup>th</sup> September 2022

## **APPENDIX A**

List of drawings and documentation submitted for auditing:

### **Drawing Title**

P2584: Land North of Bricket Wood, Herts Proposed Site Access Junction Layout

P2584: Land North of Bricket Wood, Herts Refuse Vehicles Swept Path Analysis

P2584: Land North of Bricket Wood, Herts Proposed New Footway to South (Page 1 of 4)

P2584: Land North of Bricket Wood, Herts Proposed New Footway to South (Page 2 of 4)

P2584: Land North of Bricket Wood, Herts Proposed New Footway to South (Page 3 of 4)

P2584: Land North of Bricket Wood, Herts Proposed New Footway to South (Page 4 of 4)

P2584. Lye Lane, Bricket Wood, Hertfordshire, AL2 3TF Site Location

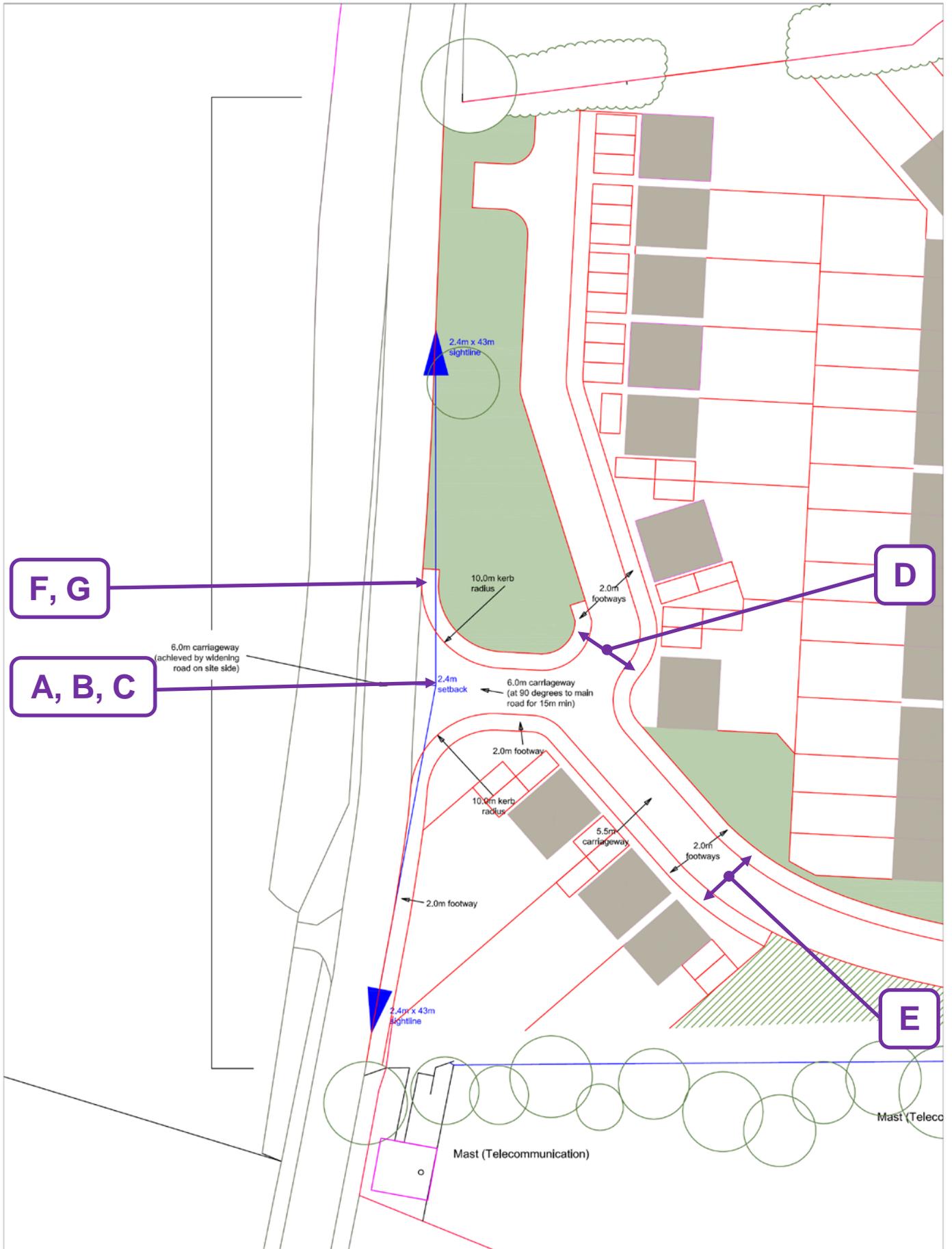
P2584. Lye Lane, Bricket Wood, Hertfordshire, AL2 3TF Site Context

### **Supporting Documentation:**

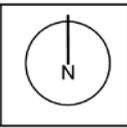
- Stage 1 Road Safety Audit Brief, Paul Mew Associates – 5<sup>th</sup> August 2022
- Proposed Residential Development at Former Bricket Wood Sport & Country Club / Paintball Site, Lye Lane, Bricket Wood, AL2 3TF, Transport Assessment, Paul Mew Associates – July 2022
- Bricket Wood ATC Survey Data, Total Traffic Flows – 25<sup>th</sup> April to 1<sup>st</sup> May 2022

## **APPENDIX B**

Problem location plans showing the location of the problems identified as part of this audit (location letters refer to paragraphs in the report).



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 Source: OS / AD Practice  
 Appendix D

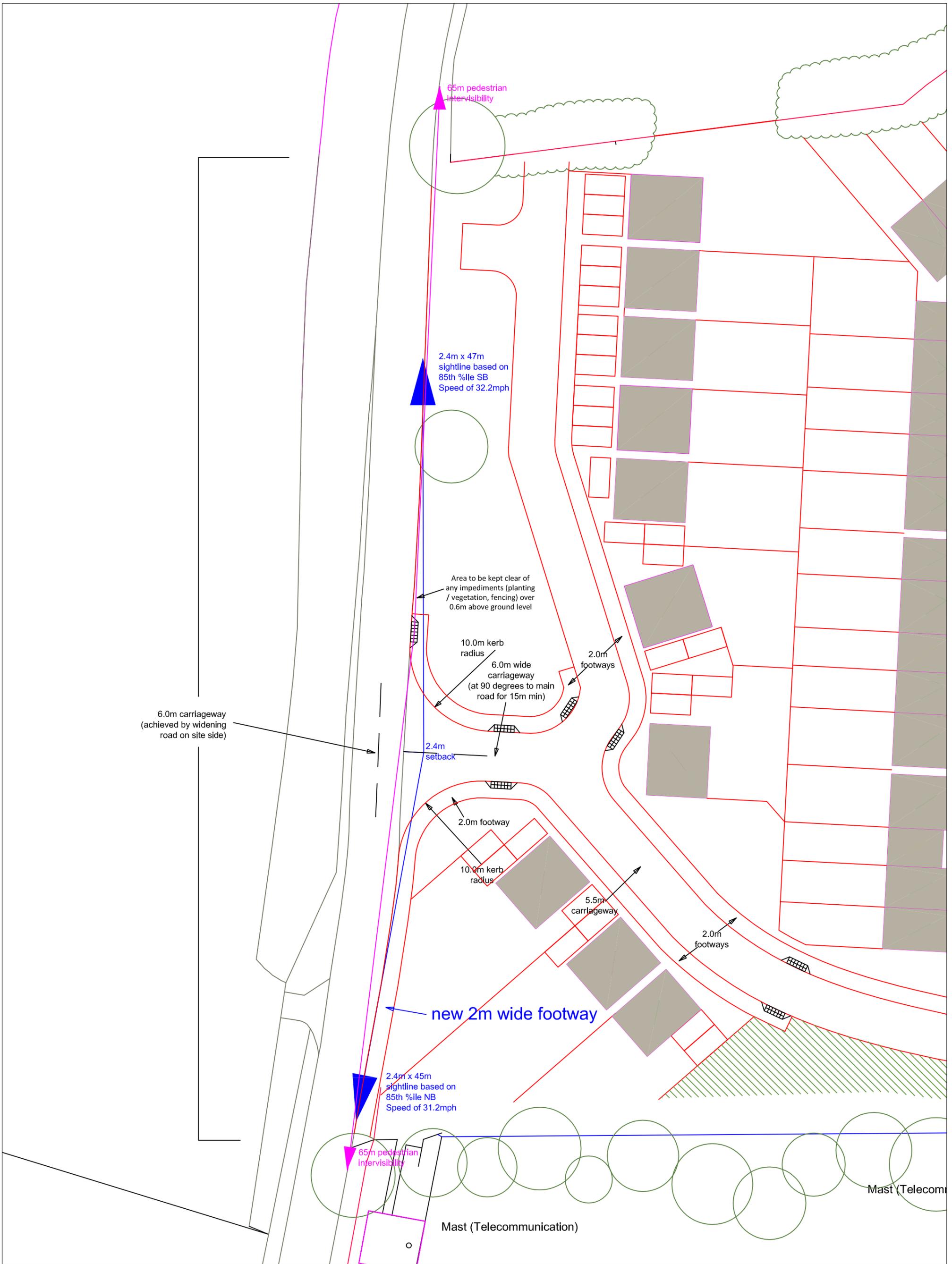


P2584: Land North of Bricket Wood, Herts  
 Proposed Site Access Junction Layout

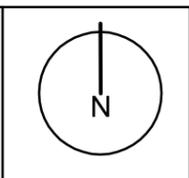
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Appendix B  
Stage I Road Safety Audit – Response Report & Log

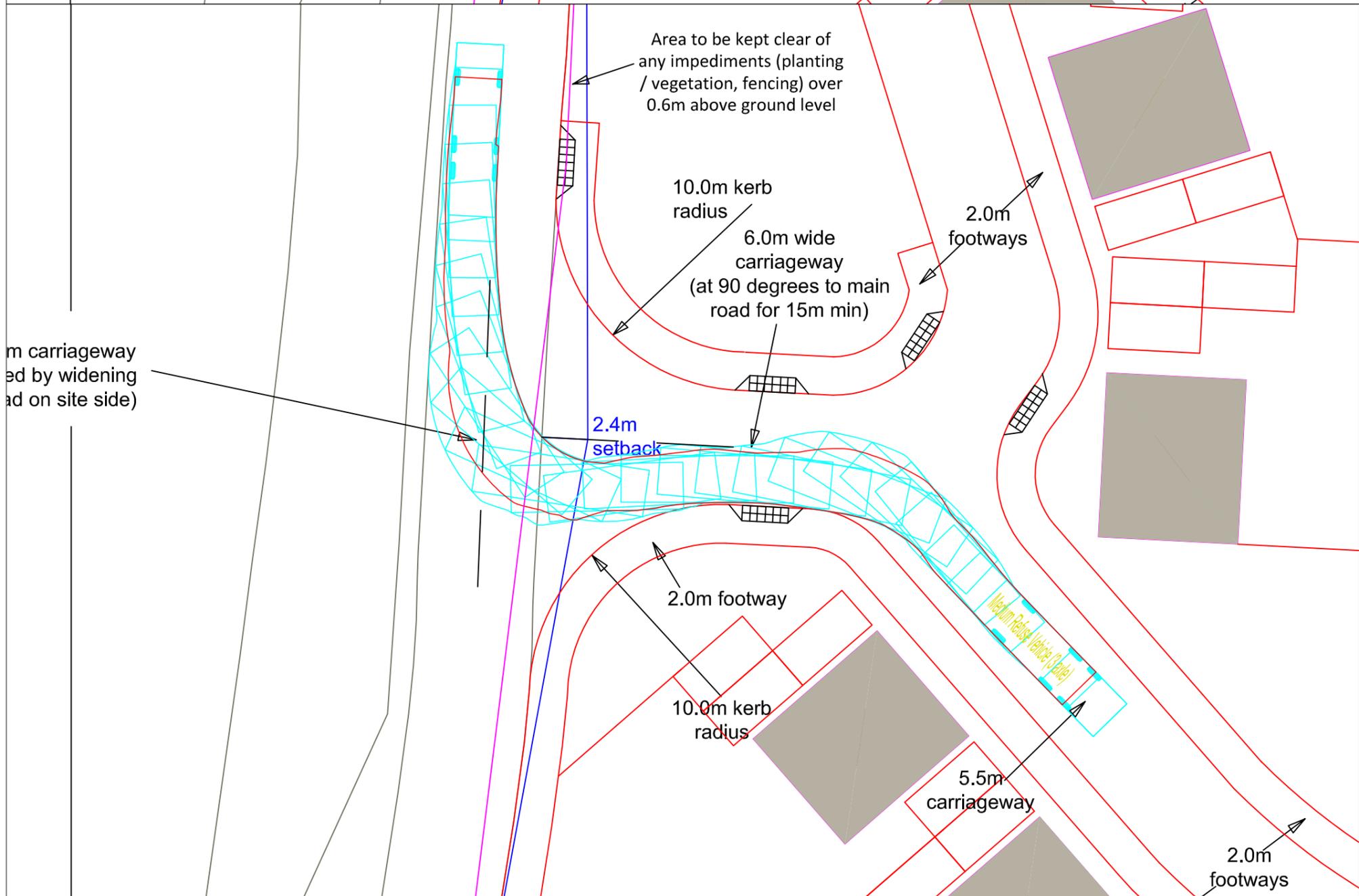
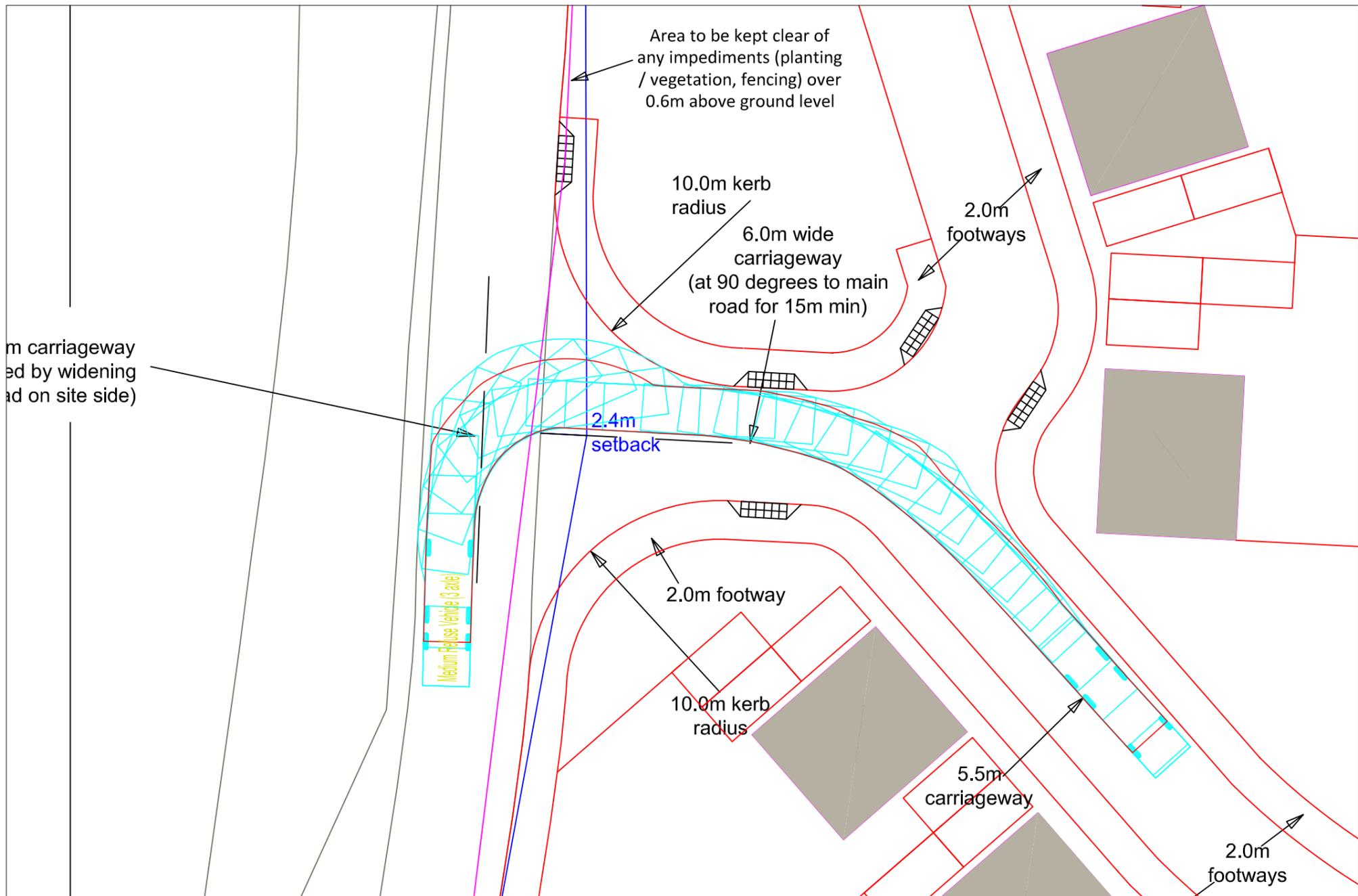


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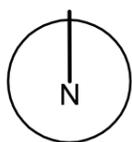


P2584: Land North of Bricket Wood, Herts  
 Proposed Site Access Junction Layout

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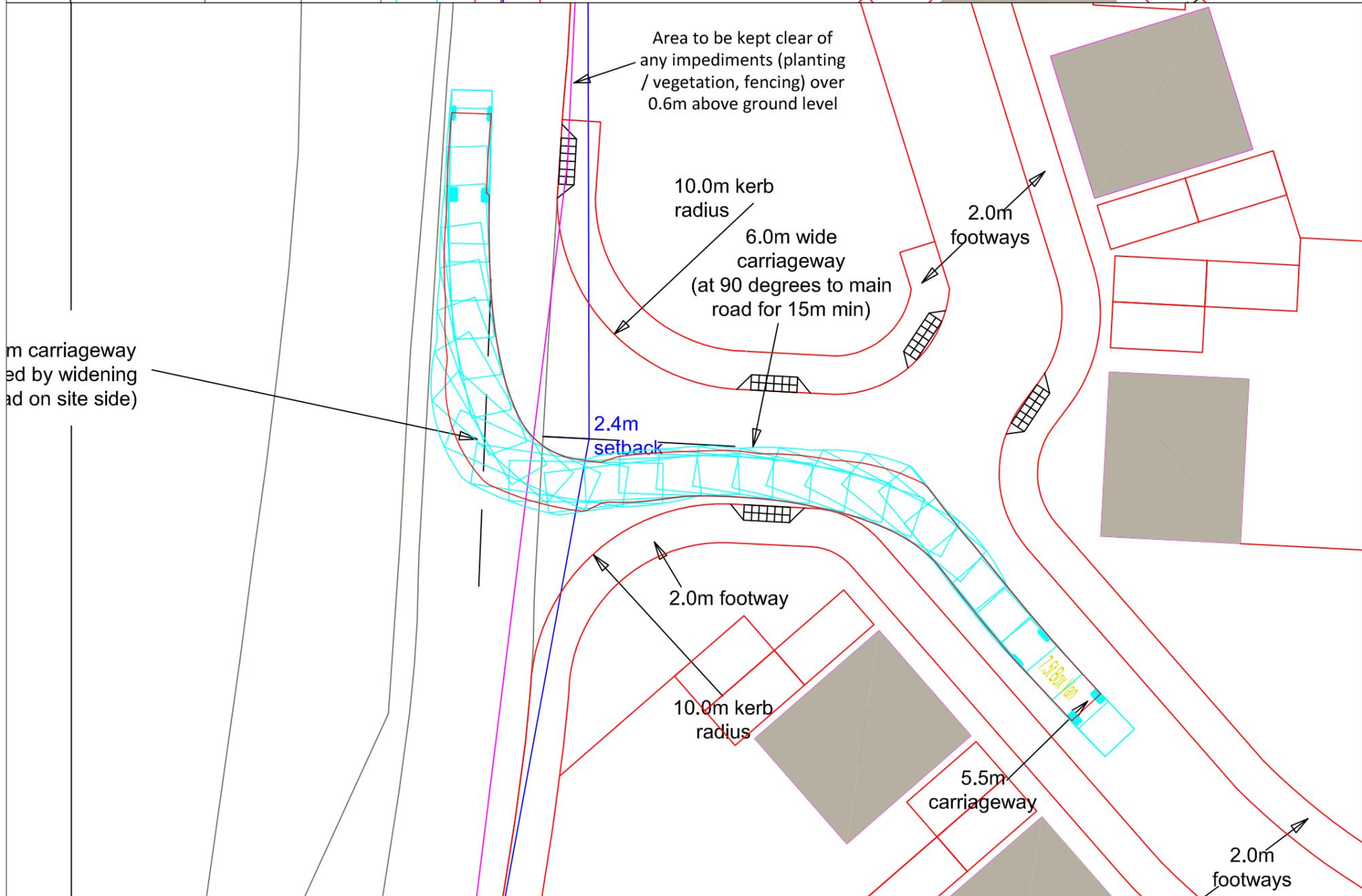
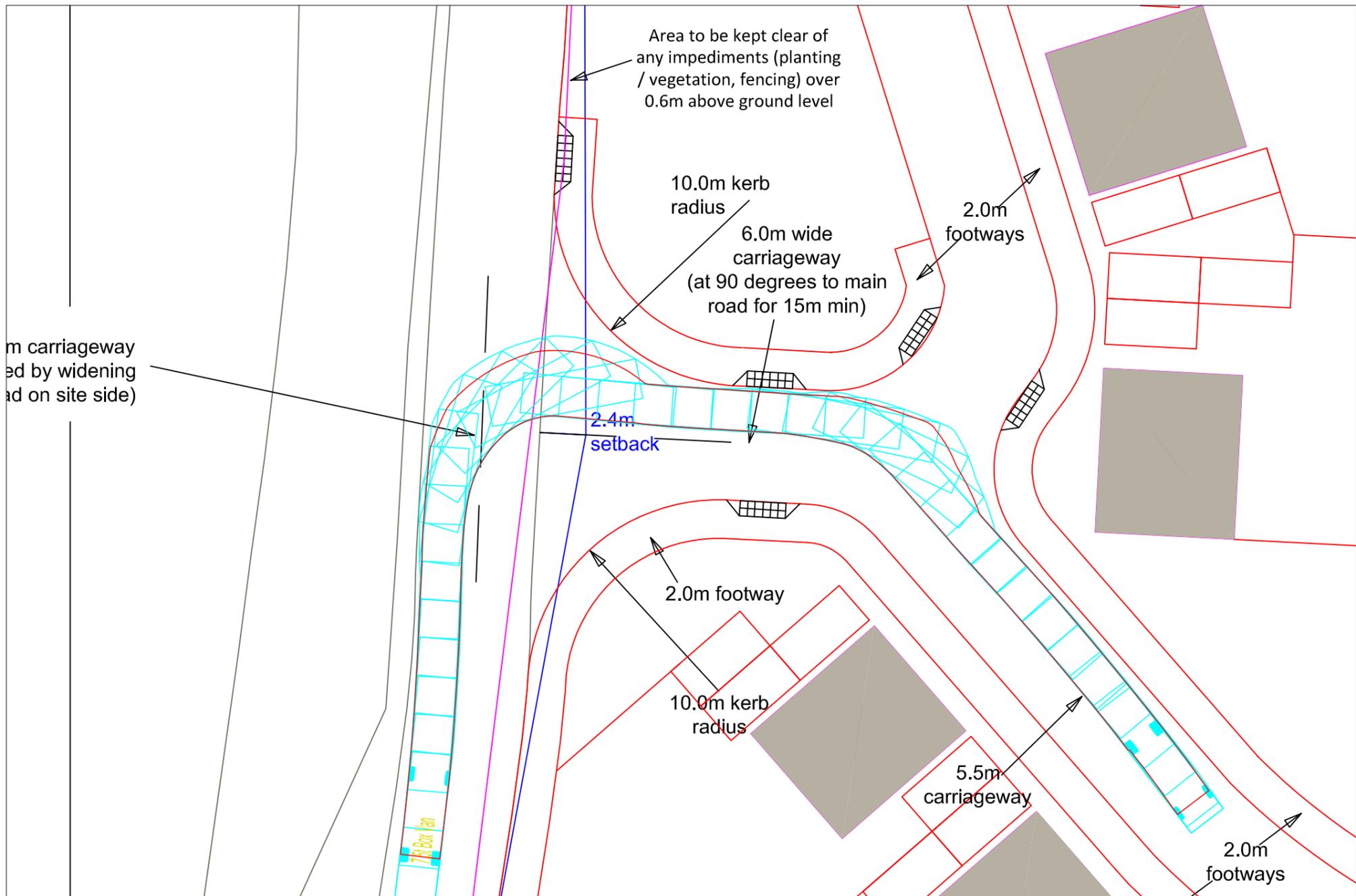


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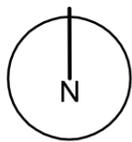


P2584: Land North of Bricket Wood, Herts  
 Refuse Vehicle Entering / Exiting Site

  
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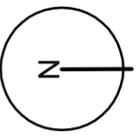


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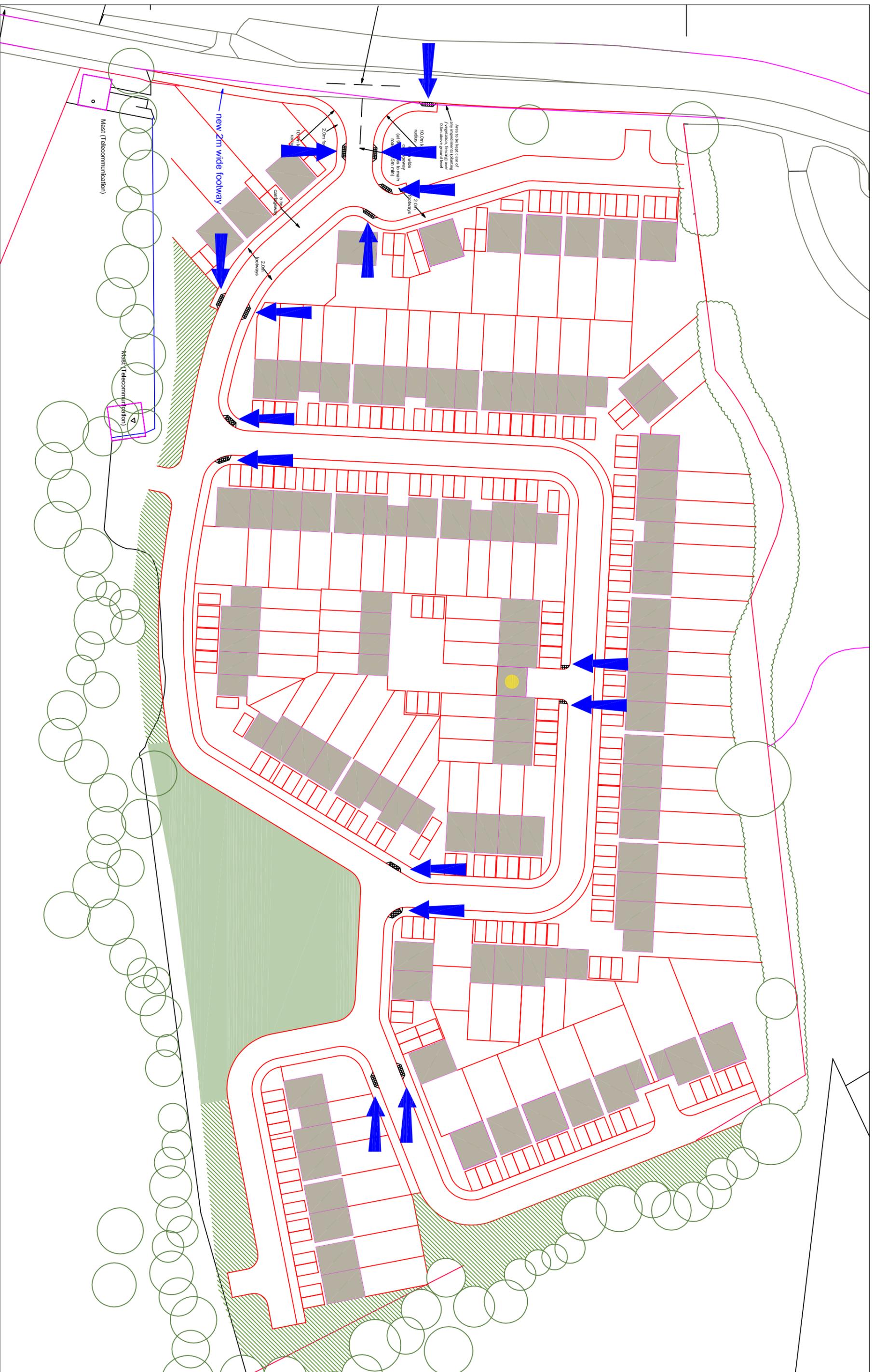


P2584: Land North of Bricket Wood, Herts  
 Large Van Entering / Exiting Site

  
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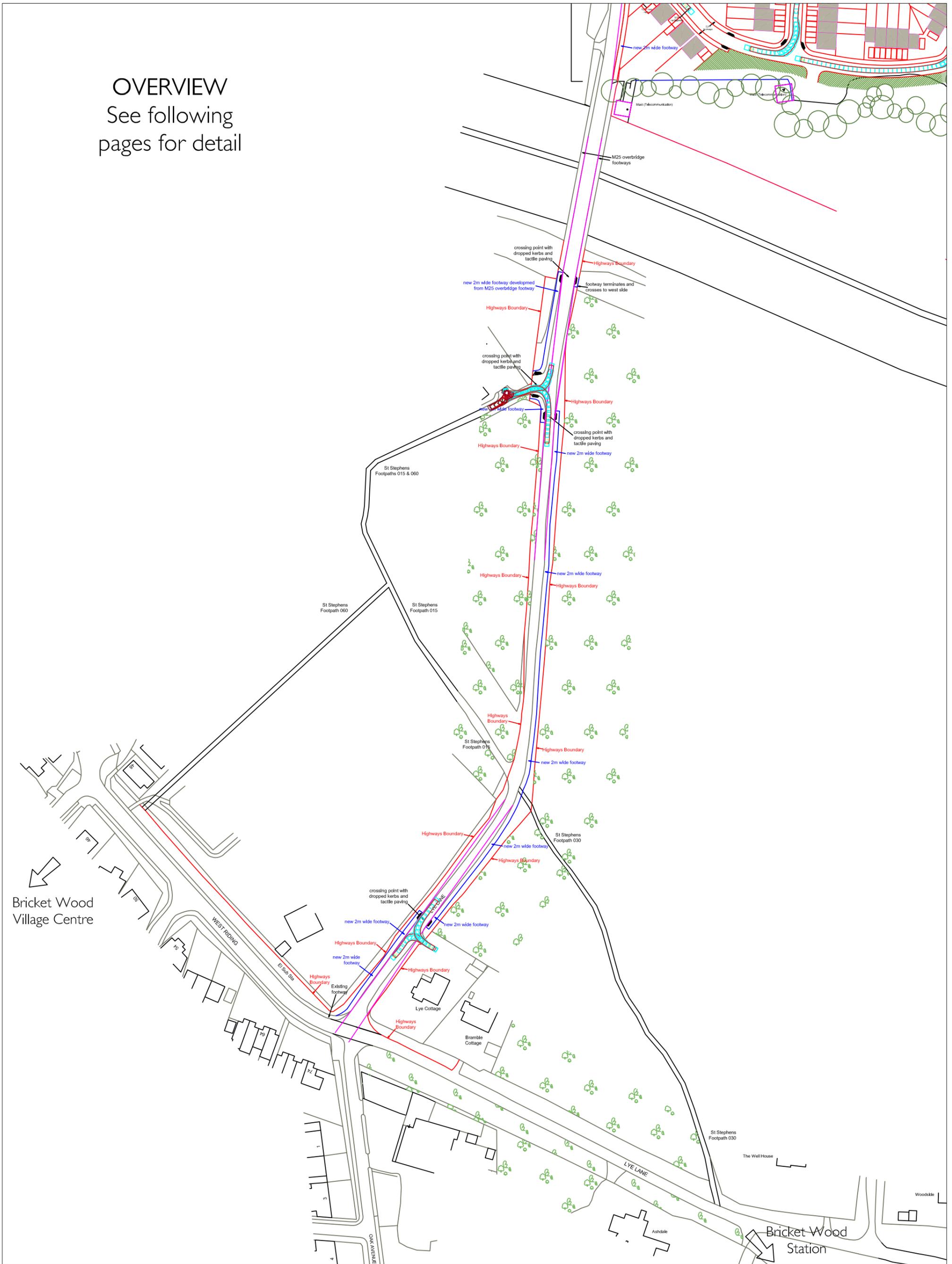


P2584: Land North of Bricket Wood, Herts  
Proposed Uncontrolled Pedestrian Crossing Points with Dropped Kerbs / Tactile Paving  
(Indicated by Blue Arrows)

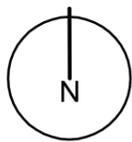


# OVERVIEW

See following pages for detail

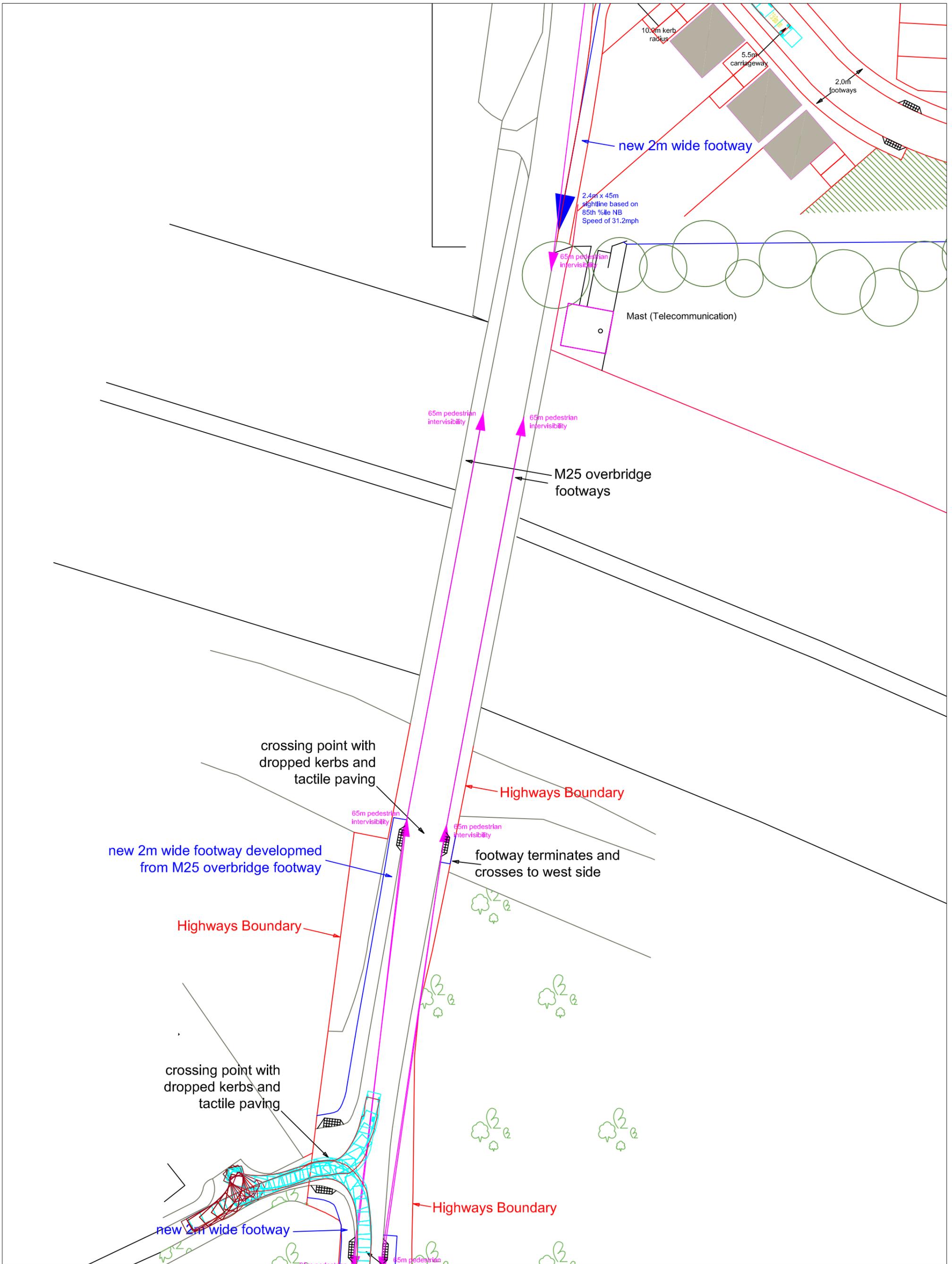


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Appendix F

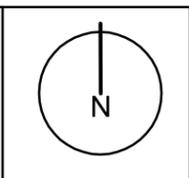


## P2584: Land North of Bricket Wood, Herts Proposed New Footway to South (Page 1 of 4)

  
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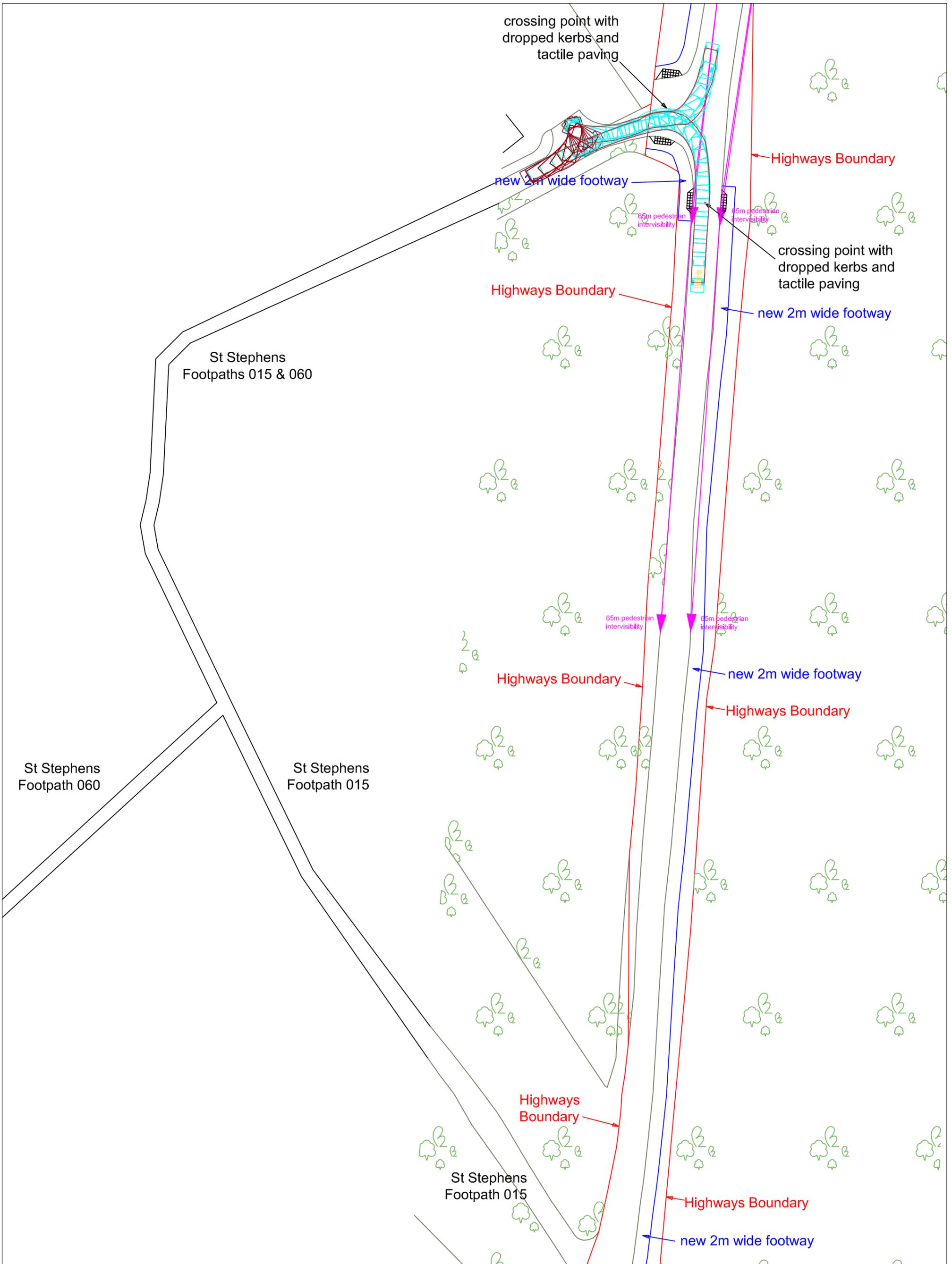


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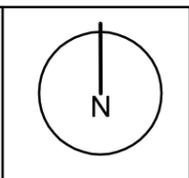


P2584: Land North of Bricket Wood, Herts  
 Proposed New Footway to South (Page 2 of 4)

  
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Date: 29/09/22  
 Scale: 1:750@A3  
 Source: OS / AD Practice  
 Appendix F



P2584: Land North of Bricket Wood, Herts  
 Proposed New Footway to South (Page 3 of 4)

  
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