

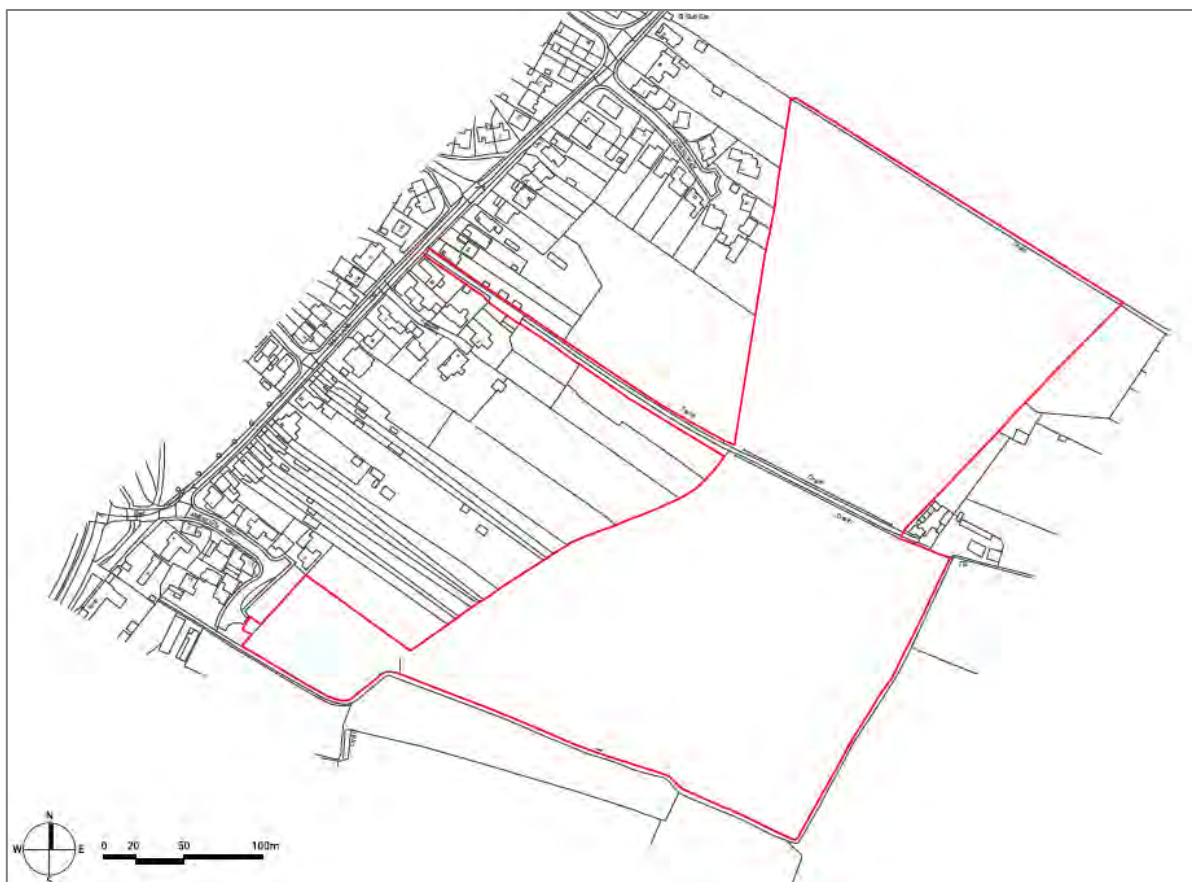
Technical Note

Project No: ITB14652
Project Title: Land Off Ambrose Way, Impington
Title: Overview Transport Strategy
Ref: ITB14652-001B
Date: 22 March 2019

SECTION 1 Introduction

1.1.1 Martin Grant Homes are promoting Land off Ambrose Way, Impington, for a residential development. The Site is located to the east of the Village of Histon and to the north-west of Impington. The site lies to the east of Mill Lane and Ambrose Way. The site location is shown below as **Image 1.1** and on **Figure 1**.

Image 1.1: Site Location



Source: Pegasus Design

1.1.2 The administrative districts of Cambridge and South Cambridgeshire are starting to prepare a new joint Greater Cambridge Local Plan, as set out in the adopted Greater Cambridge Local Development Scheme. As such the Local Planning Authorities are currently undertaking a 'Call for Sites' exercise to gain a better understanding of the land availability for development across Greater Cambridge, to ensure that the new Local Plan allocates enough land to meet identified needs and so that it can choose the right sites with regards to the suitability, availability and achievability of each site.

1.1.3 i-Transport has been appointed to provide highway and transport advice in relation to the development Site and specifically the impact of developing the site for circa 200 dwellings.

1.1.4 This Transport Overview Strategy has been prepared to provide early transport and access guidance and to demonstrate how the Site can be developed in a manner that can satisfy policy considerations, particularly the three key transport tests set out in paragraph 108 of the National Planning Policy Framework (NPPF), which require development proposals to ensure that:

- Safe and sustainable access is provided for all people;
- Opportunities for sustainable transport modes have been taken up; and
- There is no severe residual cumulative transport impact.

1.2 **Report Structure**

1.2.1 The remainder of this transport overview strategy is presented as follows:

- Section 2 - Policy Context;
- Section 3 – Site Access;
- Section 4 – Sustainable Transport Strategy Principles;
- Section 5 – Traffic Impacts; and
- Section 6 – Summary and Conclusions.

SECTION 2 Policy Overview

National Planning Policy Framework (Feb 2019)

1.1.1 The NPPF sets out the Government's planning policies and provides information on how these are expected to be applied.

1.1.2 The NPPF confirms that at the forefront of planning is the 'presumption in favour' of sustainable development:

"at the heart of the Framework is a presumption in favour of sustainable development (paragraph 11)."

1.1.3 Paragraph 108 requires that all developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. Paragraph 108 also outlines the primary transport tests for new development proposals, stating that plans and decisions should consider whether:

- ***"appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;***
- ***safe and suitable access to the site can be achieved for all users; and***
- ***any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree."***

2.1.1 Paragraph 109 states that proposals should only be refused on transport grounds if there would be an unacceptable impact on highway safety or the residual cumulative impacts on the road network would be severe.

Cambridgeshire Local Transport Plan 2011-2031 (LTP3)

2.1.2 Cambridgeshire County Council's third Local Transport Plan (LTP3) covers the period from 2011-2031 and sets out the overarching vision for the county:

"Creating communities where people want to live and work: now and in the future"

2.1.3 The LTP3, seeks to address existing transport challenges as well as setting out policies and strategies to ensure that planned large-scale development can take place in the county in a sustainable way.

2.1.4 Eight main transport challenges have been identified as part of the Local Transport Plan, these are as follows:

- ***“Improving the reliability of journey times by managing demand for road space, where appropriate and maximising the capacity and efficiency of the existing network;***
- ***Reducing the length of the commute and the need to travel by private car;***
- ***Making sustainable modes of transport a viable and attractive alternative to the private car;***
- ***Future-proofing our maintenance strategy and new transport infrastructure to cope with the effects of climate change;***
- ***Ensuring people – especially those at risk of social exclusion – can access the services they need within reasonable time, cost and effort wherever they live in the county;***
- ***Addressing the main causes of road accidents in Cambridgeshire;***
- ***Protecting and enhancing the natural environment by minimising the environmental impact of transport;***
- ***Influencing national and local decisions on land-use and transport planning that impact on routes through Cambridgeshire.”***

South Cambridgeshire Local Plan (2018)

2.1.5 The South Cambridgeshire Local Plan replaces the South Cambridgeshire Local Development Framework; the Local Plan’s policies and proposals cover the period from 2011-2031.

2.1.6 Policy S/1 of the Local Plan sets out the vision for the development across South Cambridgeshire, as follows:

“South Cambridgeshire will continue to be the best place to live, work and study in the country. Our district will demonstrate impressive and sustainable economic growth. Our residents will have a superb quality of life in an exceptionally beautiful, rural and green environment.”

2.1.7 In order to achieve this, a set of six objectives have been developed within the Local Plan, set out below:

- To support economic growth by supporting South Cambridgeshire's position as a world leader in research and technology based industries, research, and education; and supporting the rural economy;
- To protect the character of South Cambridgeshire, including its built and natural heritage, as well as protecting the Cambridge Green Belt. New development should enhance the area, and protect and enhance biodiversity;

- To provide land for housing in sustainable locations that meets local needs and aspirations, and gives choice about type, size, tenure and cost;
- To deliver new developments that are high quality and well-designed with distinctive character that reflects their location, and which responds robustly to the challenges of climate change;
- To ensure that all new development provides or has access to a range of services and facilities that support healthy lifestyles and well-being for everyone, including shops, schools, doctors, community buildings, cultural facilities, local open space, and green infrastructure; and
- To maximise potential for journeys to be undertaken by sustainable modes of transport including walking, cycling, bus and train.

2.1.8 Chapter 10 relates to promoting and delivering sustainable transport infrastructure. Policies TI/2: Planning for Sustainable Travel and TI/8: Infrastructure and New Developments are relevant to the potential development site.

2.1.9 Policy TI/2: Planning for Sustainable Travel states that:

- **1. Development must be located and designed to reduce the need to travel, particularly by car, and promote sustainable travel appropriate to its location.**
- **2. Planning permission will only be granted for development likely to give rise to increased travel demands, where the site has (or will attain) sufficient integration and accessibility by walking, cycling or public and community transport [...]**
- **3. Developers will be required to demonstrate they will make adequate provision to mitigate the likely impacts (including cumulative impacts) of their proposal [...]**
- **4. Developers of 'larger developments'¹ or where a proposal is likely to have 'significant transport implications'² will be required to demonstrate they have maximised opportunities for sustainable travel and will make adequate provision to mitigate the likely impacts through provision of a Transport Assessment and Travel Plan. [...].**

2.1.10 Policy TI/8: Infrastructure and New Developments states that:

- **1. Planning permission will only be granted for proposals that have made suitable arrangements for the improvement or provision of infrastructure necessary to make the scheme acceptable in planning terms. The nature, scale and phasing of any planning obligations and/or Community Infrastructure Levy (CIL) contributions sought will be related to the form of the development and its potential impact upon the surrounding area.**
- **2. Contributions may also be required towards the future maintenance and upkeep of facilities either in the form of initial support or in perpetuity in accordance with Government guidance.**

Greater Cambridge Local Development Scheme (Oct 2018)

- 2.1.11 The Local Development Scheme (LDS) was produced in line with the Planning and Compulsory Purchase Act (2004) and provides information on the documents that Councils intend to produce to form their planning policy framework. It also sets out a timetable for their production.
- 2.1.12 The LDS is prepared and agreed by both Cambridge City Council and South Cambridgeshire District Council and contains a list of Development Plan Documents (DPDs) to be produced by both Local Planning Authorities.

Transport Strategy for Cambridge and South Cambridgeshire (2014)

- 2.1.13 The Transport Strategy for Cambridge and South Cambridgeshire (TSCSC) focuses on the sustainable transport capacity and what needs to be provided in around the city and within the communities where people live and access services.
- 2.1.14 The purpose of the TSCSC is to:
- ***“provide a detailed policy framework and programme of schemes for the area, addressing current problems, and consistent with the policies of the LTP3;***
 - ***support the Cambridge and South Cambridgeshire Local Plans, taking into account the committed and predicted growth levels, detailing the transport infrastructure and services necessary to deliver this growth”.***
- 2.1.15 A series of eight objectives have been identified within the strategy, as follows:
- ***“To ensure that the transport network supports the economy and acts as a catalyst for sustainable growth.***
 - ***To enhance accessibility to, from and within Cambridge and South Cambridgeshire (and beyond the strategy area).***
 - ***To ensure good transport links between new and existing communities, and the jobs and services people wish to access.***
 - ***To prioritise sustainable alternatives to the private car in the strategy area, and reduce the impacts of congestion on sustainable modes of transport.***
 - ***To meet air quality objectives and carbon reduction targets, and preserve the natural environment.***
 - ***To ensure that changes to the transport network respect and conserve the distinctive character of the area and people’s quality of life.***

- *To ensure the strategy encourages healthy and active travel, supporting improved wellbeing.*
- *To manage the transport network effectively and efficiently.”*

2.1.16 These objectives are designed to mitigate the challenges set out in the strategy including accessibility, managing demand, safety, travel information, environment and sourcing funding to deliver transport improvements.

2.1.17 The most relevant policies in the TSCSC document are policies 7 and 12.

2.1.18 **Policy 7** (Supporting sustainable growth) states that the transport network shall be developed to provide capacity while still protecting the area’s distinctive character and environment. New developments will improve transport infrastructure and maximise access by walking, cycling, and public transport where appropriate.

2.1.19 **Policy 12** (encouraging cycling and walking) states that the capacity, quality and safety of walking and cycling networks should be increased to promote healthy travel. The highest possible standard of cycling and walking infrastructure will be pursued when appropriate. All new development must provide safe and convenient pedestrian and cyclist environments including cycle parking and ensuring integration with the wider network.

Transport Assessment Guidelines (June 2017)

2.1.20 The Transport Assessment Guidelines document has been produced by Cambridgeshire County Council and sets out the guidance to applicants, developers, their agents and local authority officers on when a Transport Assessment (TA) is required and what it should contain. Guidance is also included on what information should be provided for smaller applications that require a Transport Statement (TS).

2.1.21 The guidance regarding a residential development, land use C3, states that a Transport Assessment and Travel Plan are required for sites containing >80 dwellings.

SECTION 3 Site Access Strategy

3.1 Access Strategy

3.1.1 The site benefit from direct frontage onto:

- Ambrose Way; and
- Mill Lane.

3.1.2 Ambrose Way is a residential cul-de-sac serving around 12 dwellings with a circa 5.5m carriageway and footways on both sides. It is street lit and subject to a 30mph speed limit. Ambrose Way forms a priority junction with the B1049 Glebe Way to the north west which provides access to the wider highway network.

3.1.3 Mill Lane has a circa 4.8m carriageway (wide enough for a large vehicle to pass a car) and footways on at least one side of the road (mainly on the west side). It is street lit and subject to a 30mph speed limit. Its northern end runs into a private road accessing Mill Lane Farm. There is on-street parking at the southern end of Mill Lane reducing its effective width. Traffic accessing the wider highway network (Glebe Way and beyond) has the choice of the southern end of Mill Lane or Orchard Road.

3.1.4 In terms of acceptable road widths, the Manual for Streets (at Figure 7.1, and re-produced below) identifies that a carriageway width of 5.5m is required for two large vehicles to pass, while 4.1m allows for two cars to pass. A width of 4.8m allows for a car and large vehicle to pass.

Image 3.1 – Carriageway widths (Figure 7.1 Manual for Streets)



Figure 7.1 Illustrates what various carriageway widths can accommodate. They are not necessarily recommendations.

Source: MfS

3.2 Vehicular Access

3.2.1 It is proposed to take vehicular access from Ambrose Way. Two potential access arrangements to the site have been drawn up which are described below.

Option 1

3.2.2 Access can be achieved to the site from the eastern side of Ambrose Way in the vicinity of the turning head. The new access would form the minor arm of a simple priority junction with Ambrose Way. A 5m carriageway (wide enough for a large vehicle to pass a car) and at the very least a footway of around 1m to 1.5m (widen enough for a wheel chair user) can be delivered.

3.2.3 This potential site access arrangement is shown on drawing **ITB14652-GA-001** and is extracted as **Image 3.1**.

Image 3.1: Option 1 - Potential Access Arrangement from Ambrose Way



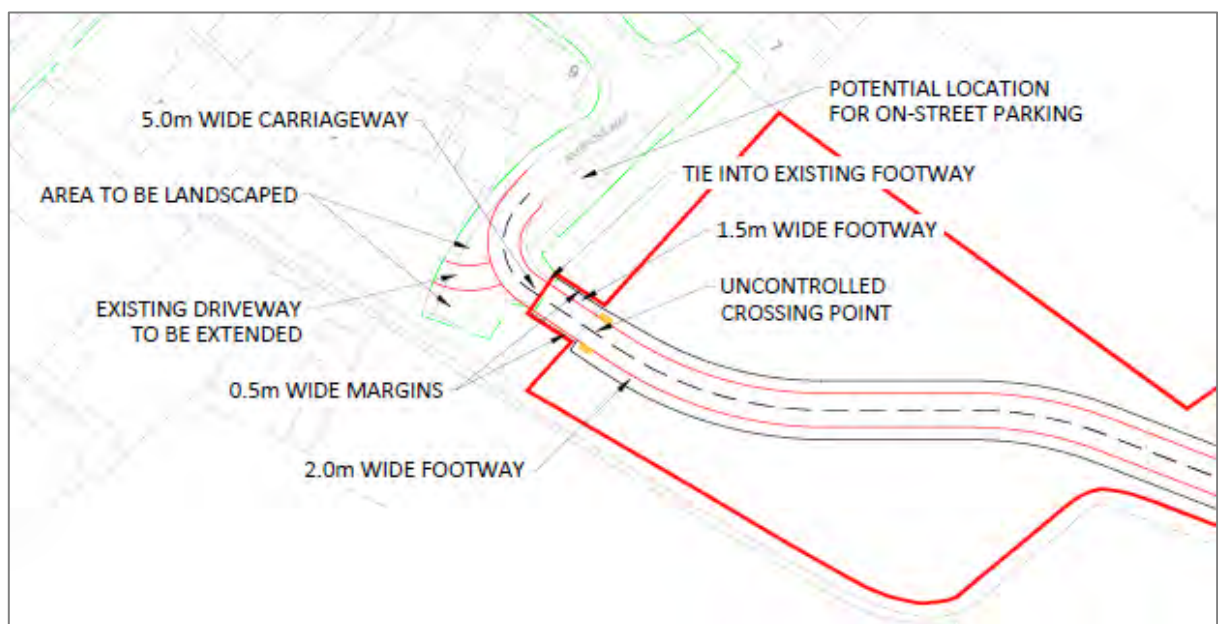
Source: i-Transport Drawing ITB14652-GA-001

Option 2

3.2.4 The proposed access would form a continuation of Ambrose Way. A minor access road from the new/realigned access road would provide access to the existing plots of 8 and 10 Ambrose Way. A 5m carriageway (wide enough for a large vehicle to pass a car) and a 1.5m wide footway (wide enough for a pedestrian to pass a wheel chair user) can be delivered.

3.2.5 This potential site access arrangement is shown on drawing **ITB14652-GA-002** and is extracted as **Image 3.2**.

Image 3.2: Option 2 - Potential Access Arrangement from Ambrose Way



Source: i-Transport Drawing ITB14652-GA-002

3.2.6 The potential access designs are in line with Cambridgeshire's design principles set out in 'Cambridgeshire Design Guide for Streets & Public Realm' (2007), which set out that:

- Carriageway widths for secondary and tertiary roads in rural areas typically measure 5.0m (range 4.5m-5.5m); and
- Footway widths for secondary and tertiary roads in rural areas typically measure between 1.5m - 2.0m.

3.3 Pedestrian and Cycle Access

3.3.1 To deliver a permeable, connected and integrated development, a number of pedestrian and cycle accesses are proposed as part of the strategy comprising:

- Pedestrian and cycle facilities at the proposed vehicular access off Ambrose Way; and
- A pedestrian / cycle access onto Mill Lane. This access could also be used as an emergency access if required.

3.4 Development Concept

3.4.1 The development concept is shown on **Image 3.4** and included at **Appendix A**.

Image 3.3: Site Access Strategy and Development Concept



Source: Pegasus Design

3.5 Summary

3.5.1 A summary of the of access strategy is shown in **Table 3.1**.

Table 3.1: Summary Table

Summary	
Vehicular Access	<p>The site has direct frontage onto Ambrose Way and Mill Lane. Vehicular access can be provided to Ambrose Way, with two options considered:</p> <ul style="list-style-type: none"> • A new 5.0m wide access road which forms the minor arm of a priority junction with Ambrose Way; or • A new 5.0m wide access road which forms a continuation of Ambrose Way, with access to the existing dwellings of plots 10-12 Ambrose Way realigned to form the minor arm of a priority junction with Ambrose Way. <p>Junction Capacity Assessments would be undertaken as part of the Transport Statement produced and submitted alongside a planning application to ensure that proposed accesses operate within capacity.</p>
Pedestrian and Cycle Access	<p>Pedestrian and cycle access is proposed alongside the vehicular access on Ambrose Way. A second pedestrian / cycle / emergency access to Mill Lane could also be provided.</p>
Conclusion	<p>The access strategy can deliver safe access for all users, including pedestrians and cyclists.</p>

SECTION 4 Sustainable Transport Strategy

4.1 Journey Purpose and Key Destinations

4.1.1 In promoting sustainable transport, it is important to consider the reasons why future residents of the proposed development will make journeys.

4.1.2 The Department for Transport’s (DfT) National Travel Survey identifies the reasons why people travel. The proportion of tall trips by purpose (by all modes) is summarised in **Table 5.1**.

Table 4.1: Proportion of Trips per Year by Journey Purpose (all modes)

Journey Purpose	Proportion of Trips
Leisure	26%
Shopping	19%
Commuting/Business	18%
Education/Escort Education	12%
Personal Business	9%
Other Escort	9%
Other	6%

Source: Table NTS0409 Average number of trips by purpose and main mode: England NTS – 2017 Edition

4.1.3 It is evident that travel demand is well spread between a number of journey purposes including leisure, shopping, commuting / business and education / escort education trips which account for around two thirds of all journeys.

4.2 Walking Distances

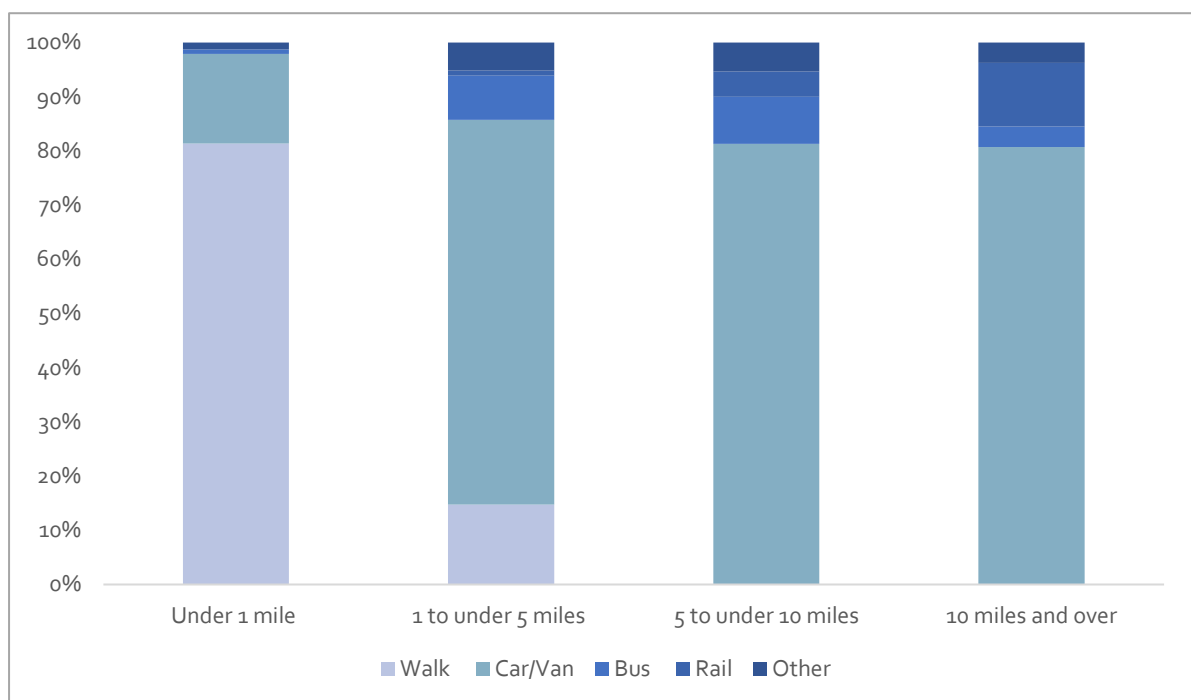
4.2.1 Paragraph 4.4.1 of the Manual for Streets identifies that ***“Walkable neighbourhoods are typically characterised by having a range of facilities within 10 minutes’ (up to about 800 m) walking distance of residential areas” and “this is not an upper limit and PPG13 states that walking offers the greatest potential to replace short car trips, particularly those under 2km.”***

4.2.2 It is important to note that 2km is not however a maximum walking distance. Paragraph 2.3 of the Design Manual for Roads and Bridges (DMRB) TD91/05 "Provision for Non-Motorised Users" states:

"Walking is used to access a wide variety of destinations including educational facilities, shops, and places of work, normally within a range of up to 2 miles. Walking and rambling can also be undertaken as a leisure activity, often over longer distances".

4.2.3 This is corroborated by the National Travel Survey (NTS) 2017 which identifies the mode share journeys of different lengths (Image 5.1) and confirms that the vast majority (80%) of trips of up to one mile (1.6km) are undertaken on foot.

Image 5.1: Mode Share of Trips by Main Mode for Different Trip Lengths



Source: National Travel Survey: England 2017

4.2.4 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.

4.2.5 That is not to say that a mile is the maximum that people are prepared to walk, or that development must be located within a mile of everything and the NTS data (Image 5.1) identifies that a significant proportion (around 31%) of journeys between one and two miles are undertaken on foot i.e 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.

4.2.6 Against this background, the following distances have been used for assessing the likelihood of walking journeys to and from the site:

- 800m – Comfortable walking distance;
- 2km – reasonable walking distance; and
- 3.2km – maximum walking distance.

4.2.7 As shown in Table 5.1, a large range of local services and facilities are within a reasonable walking distance of the centre of the site including education, employment, retail and leisure opportunities.

4.3 Cycle Distances

4.3.1 Paragraph 1.5.1 of the DfT Document LTN 02/08 Cycle Infrastructure Design discusses typical cycle trip distances and states that local highway networks are primarily for local journeys and many utility cycle journeys are under three miles (4.8km) although for commuter journeys a trip distance of 5 miles (8km) is not uncommon.

4.3.2 DMRB TA 91/05 “Provision for Non-Motorised Users” paragraph 2.11 states:

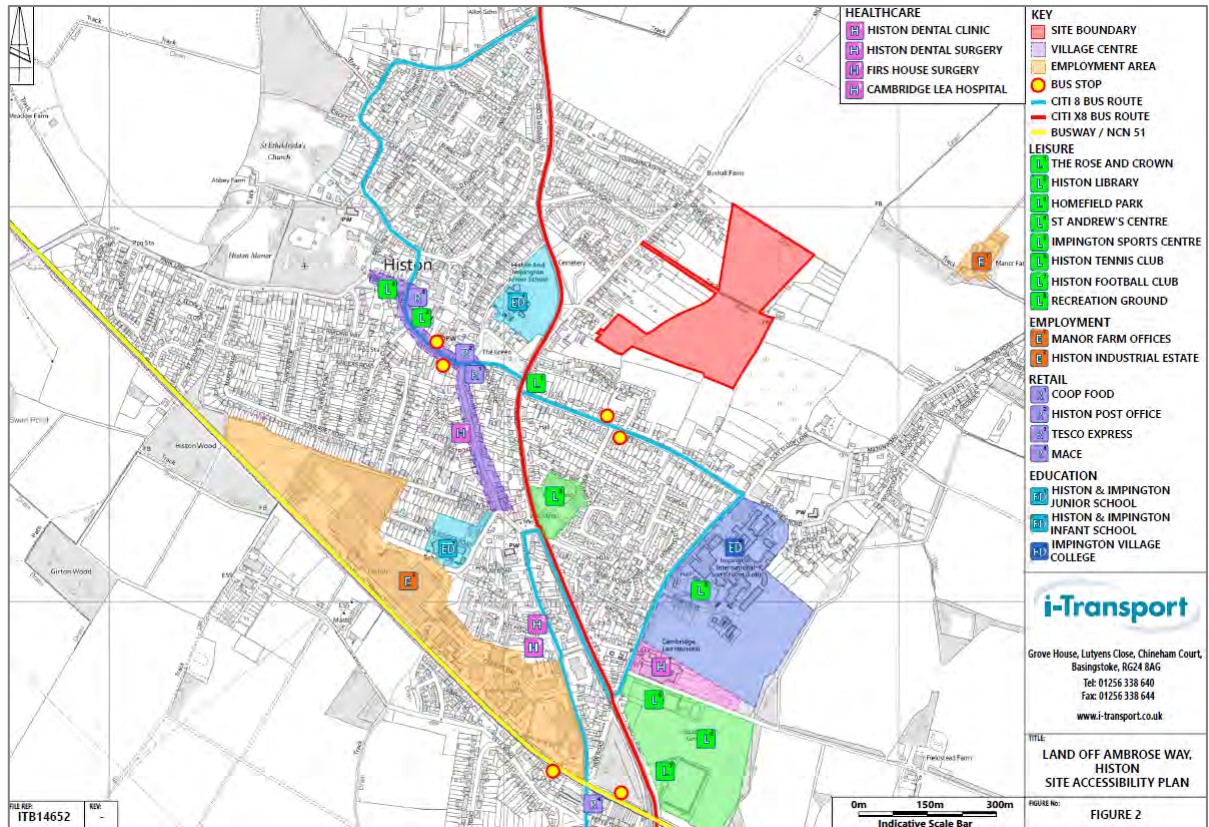
“Cycling is used for accessing a variety of different destinations, including educational facilities, shops and places of work, up to a range of around 5 miles. Cycling is also undertaken as a leisure activity, often over much longer distances. As well as being a mode of transport in its own right, cycling frequently forms part of a journey in combination with cars and public transport.”

4.3.3 A cycling distance of up to around 5km (3 miles) therefore offers the greatest potential to replace car trips and is therefore a “reasonable” cycling distance although a number of cycle journeys may be longer at 8km (5 miles). Cycling also frequently forms part of a longer journey in combination with public transport.

4.4 Proximity to Local Facilities and Services

4.4.1 The site would provide a sustainable north eastern extension to Impington and would be well located to a variety of everyday services and facilities. The location of these facilities is shown on **Figure 2** extracted as **Image 4.2**.

Image 4.1: Extract of Local Facilities and Services Plan



4.4.2 A preliminary review of the proximity of the site to local facilities has been carried out and is presented in **Table 4.1**. The assessment has considered the distance to each facility from the centre of the site as well as the estimated walking and cycling time.

Table 4.2: Local Services and Facilities

Essential facilities				
Type	Name	Distance to (m)	Walking time (mins)	Cycle time (mins)
Education	Histon & Impington Junior School	1,000	12	4
	Histon & Impington Infant School	1,400	17	5
	Impington Village College	1,500	18	6
Health	Histon Dental Clinic	1,100	13	4
	Histon Dental Surgery	1,400	17	5
	Firs House Surgery	1,500	18	6
	Cambridge Lea Hospital	1,800	21	7
Supermarkets / Food Stores	Coop Food	950	11	4
	Tesco Express	1,100	13	4
	Mace	1,900	23	7
Transport Link	Cambridgeshire Busway and NCN 51	1,900	23	7
Employment	Impington Industrial Estate	1,800	21	7
Leisure	The Rose and Crown	750	9	3
	Histon Library	1,100	13	4
	Homefield Park	1,100	13	4
	St Andrew's Centre	1,200	14	5
	Impington Sports Centre	1,600	19	6
	Histon Tennis Club	1,800	21	7
	Histon Football Club	1,900	23	7
	Histon Recreation Ground	1,900	23	7

Source: Consultant Estimates (measured from the centre of the site)

4.4.3 As shown in **Table 4.2**, the site is well located to a variety of leisure, retail, healthcare and education services with a large industrial estate providing employment opportunities located within both walking and cycling distances of the centre of the site.

4.4.4 Additional services and facilities are located in Cambridge approximately 6km to the south, accessible via local bus services, the Guided Busway and/or by bike on the NCN51.

4.5 Walking and Cycling Facilities

- 4.5.1 Ambrose Way is located at the southwestern extent of the site and currently serves as a residential cul-de-sac. Footways are provided on both sides of the carriageway and tie in to existing footways on Mill Lane and Glebe Way to the west. Street lighting is present throughout the local highway network in the vicinity of the site.
- 4.5.2 Mill Lane provides footways on both sides of the carriageway southbound towards the centre of Histon and Cambridge. Mill Lane also routes north, providing a connection to a number of residential streets via a single footway on the western side of the carriageway.
- 4.5.3 Glebe Way forms part of the main north-south link through Histon, becoming Cottenham Road to the north and Water Lane and Bridge Road to the south. The carriageway is approximately 7.8m in width with an on-road cycle lane situated on the northbound lane. Dropped kerbs and tactile paving are provided at the majority of the crossing points between Glebe Way and the residential streets it serves. Furthermore, there is a pedestrian refuge island on Ambrose Way at the junction with Glebe Way. To the south of the site, at the signalised junction between Glebe Way, The Green and Water Lane, pelican crossings are provided on all arms of the junction.
- 4.5.4 Footways and cycle lanes are provided on both sides of the carriageway southwards along Water Lane. A puffin crossing is provided just south of the priority junction between Water Lane, Station Road and Bridge Road. An additional crossing in the form of an uncontrolled pedestrian refuge island with dropped kerbs and tactile paving is accessible approximately just to the north of school lane. Continuing south, a pelican crossing is provided on Bridge Road at the signalised junction between Bridge Road and Chequers Road. Finally, a toucan crossing is available to the south of the New Road/Bridge Road junction which pedestrians and cyclists can use to access Histon Tennis Club, Football Club and Recreation Ground on the eastern side of Bridge Road and can access the Busway via New Road to the south west. Continuing along Bridge Road to the South, a single footway is provided on the western side of the carriageway, over the Busway and National Cycle Route (NCN) 51.
- 4.5.5 NCN 51 is accessible approximately 1.9km to the southwest of the site, just to the south of the junction between Station Road and New Road. The NCN 51 is a circa 209 mile cycle route that connects Oxford to Bedford and Huntingdon to Colchester via Felixstowe. Between St Ives and Cambridge the cycleway follows the Guided Busway and is blacktopped over its entire length and can be used by horse riders (St Ives to Milton Road, Cambridge only), pedestrians and cyclists. Furthermore, there are 40 covered, well-lit and CCTV monitored cycle parking spaces available at the Histon Busway stop, therefore linked trips by bike and bus could occur.

4.5.6 The cycle facilities in Histon and Impington are shown on the 'Histon and Girton' Cycle Map produced by Cambridgeshire County Council, an extract of which is shown below on **Image 4.2**.

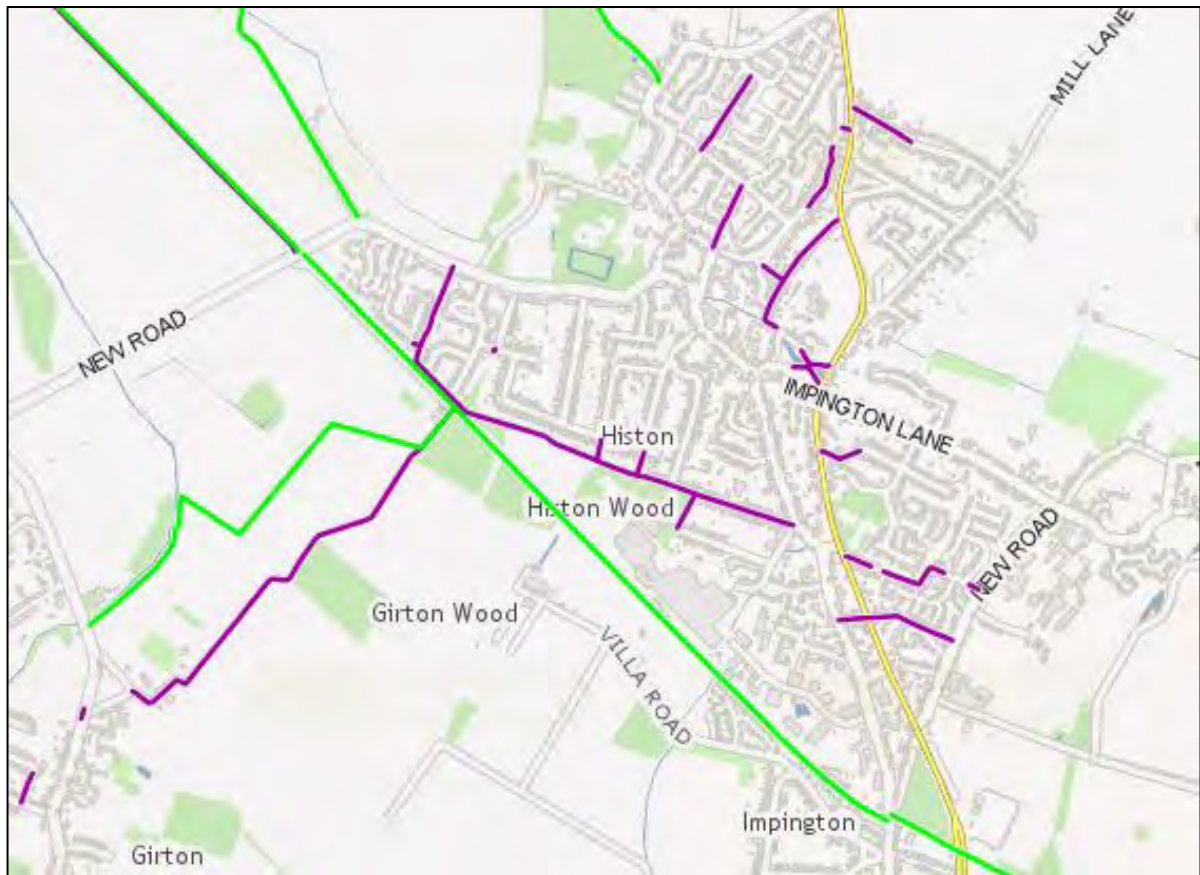
Image 4.2: Extract of Histon and Girton Cycle Map



Source: Cambridgeshire County Council

4.5.7 In addition to the local walking and cycling facilities outlined above, a number of public rights of way (PROW) are also available in the vicinity of the site as shown in **Image 4.3**.

Image 4.3: Local PROW Network



Source: Cambridgeshire County Council

4.5.8 Given the good pedestrian and cycle connectivity to and from the site, the internal layout can be designed to maximise walking and cycling opportunities and minimise journey distances. A permeable network of streets will be provided to promote use by sustainable modes of travel.

4.6 Access to Public Transport

4.6.1 The closest bus stop to the site is located circa 500m from the centre of the site on Glebe Way. This stop provides a direct morning service to the centre of Cambridge on Monday to Saturdays in time to reach Cambridge at start of the typical working day (9am).

4.6.2 The closest regular bus service to the site is located circa 1km from the centre of the site on Histon High Street. This stop is served by the Citi 8 bus service which connects Cambridge and Cottenham and has a service frequency of approximately 20 minutes throughout the day.

4.6.3 The Cambridge Busway is also accessible from the site. The stops are located approximately 1.9km south for westbound services and 2km to the south for eastbound services. The stops are served by routes A, B and D.

4.6.4 **Table 4.3** outlines the times and frequencies for the local bus services.

Table 4.3: Local Bus Service Details

Service	Route	Typical Frequency		
		Monday - Friday	Saturdays	Sundays
Citi 8	Cambridge - Histon - Cottenham	Every 20 minutes First service 07:15 Last service 23:37	Every 20 minutes between 07:55 and 18:40, half hourly between 18:40 and 20:37 and hourly between 20:37 and 23:37	Every 30 minutes First service 09:55 Last service 18:25
	Cottenham – Histon – Cambridge	Every 20 minutes First service 06:06 Last service 00:04	Every 20 minutes between 06:46 and 18:46, a service at 19:34 and then hourly between 20:04 and 00:4	Every 30 minutes First service 09:31 Last service 18:01
Citi X8	Cottenham – Histon – Cambridge	One Service per day 07:43	No Service	No Service
A, B, D the busway	Royston – Cambridge – St. Ives - Huntingdon - Peterborough	Every 5-10 minutes First service (B) 06:52 Last service (B) 23:42	Every 7-15 minutes First service (A) 07:37 Last service (B) 23:42	Every 15 minutes First service (B) 09:36 Last service (B) 18:06
	Peterborough – Huntingdon – St. Ives – Cambridge – Royston	Every 5-10 minutes First service (B) 06:06 Last service (B) 23:01	Every 7-15 minutes First service (A) 06:38 Last service (B) 23:01	Every 15 minutes First service (B) 09:00 Last service (B) 17:30

Source: Traveline

4.6.5 **Table 4.2** demonstrates there are a number of frequent bus services within a walkable distance from the site, proving access to central Cambridge to the south and destinations further afield such as Huntingdon and St. Ives to the north west. Future residents will therefore have a realistic opportunity to use sustainable modes of transport as a viable alternative to private vehicle use.

4.6.6 While the identified bus stops may be outside of the typical 400m walk distance it is evident that public transport users are likely to walk substantially further than 400m to access a frequent service, especially one which is at a ‘turn up and go’ frequency, as is provided from the Busway. This is confirmed by a recent paper on walking and cycling distances summarised in Local Transport Today, based on data extracted from the National Travel Survey which identifies that the mean walking distance to a bus stop is 580m while the 85th percentile walking distance to a bus stop is some 810m, both of which are notably longer than the much quoted CIHT guidance.

4.7 Sustainable Transport Strategies

- 4.7.1 The location of the site relevant to local facilities and benefiting from the good sustainable connections described in Sections 4.1 - 4.3, means that the development offers a significant opportunity to create a sustainable and integrated development that will not rely upon the private car.
- 4.7.2 To build on the site's excellent location relevant to local services, the development will be brought forward alongside a Sustainable Transport Strategy comprising a package of improvements to enhance access opportunities by all modes of travel.
- 4.7.3 The detail of the Sustainable Transport Strategy will be developed as the proposal progresses, **Table 4.4** identifies a series of strategy principles which will be applied.

Table 4.4: Sustainable Transport Strategy Principles

Principle	Measure
Facilitate home working	Ensure dwellings provide adequate space for home working, and that they are provided with appropriate infrastructure (i.e broadband).
Improved Footway / cycleway provision	Undertake a non-motorised user audit and identify gaps in pedestrian and cycle network, especially towards Histon and Impington Village centres and the guided busway.
Facilitate improvements to public rights of way	Provide sensitive and appropriate surfacing and access improvements to local footpaths and bridleways to facilitate access to the countryside, and Histon and Impington Centre.
Promote Smarter Choices	Promote a package of travel incentives, travel planning services and travel information to encourage sustainable travel.

4.8 Summary

4.8.1 A summary of the Site Accessibility is shown in **Table 4.5**.

Table 4.5: Summary Table

Summary	
Proximity to Local Facilities and Services	Good access to local facilities and services within walking cycling distance from the centre of the site.
Walking and Cycling Facilities	Existing provision along Ambrose Way and Glebe Way providing a walking route to the local facilities on The Green and High Street. Signalised pedestrian crossing points are provided on all arms of the Glebe Way / Impington Lane / Water Lane / The Green junction. A number of suitable cycling routes within close proximity to the site, including signed cycle routes along Glebe Way, Water Lane, and Bridge Road which provide a link to the National Cycle Network Route 51.
Access to Public Transport	A bus stop on Glebe Way in close proximity to the site, operated by services 430 and 435 providing a frequent service via circular routes to East Surrey Hospital, Redhill and Merstham. Reigate and Earlswood railway stations within a cycle distance of the site, provide the opportunity to travel to key destinations including, Gatwick Airport, Redhill, London Victoria, London Bridge and Horsham.
Sustainable Transport Strategy Principles	The development will be brought forward alongside a sustainable transport strategy comprising a package of improvements to enhance sustainable travel, including schemes identified within the IDP. Sustainable travel options will therefore be taken up.

SECTION 5 Traffic Impact Assessment

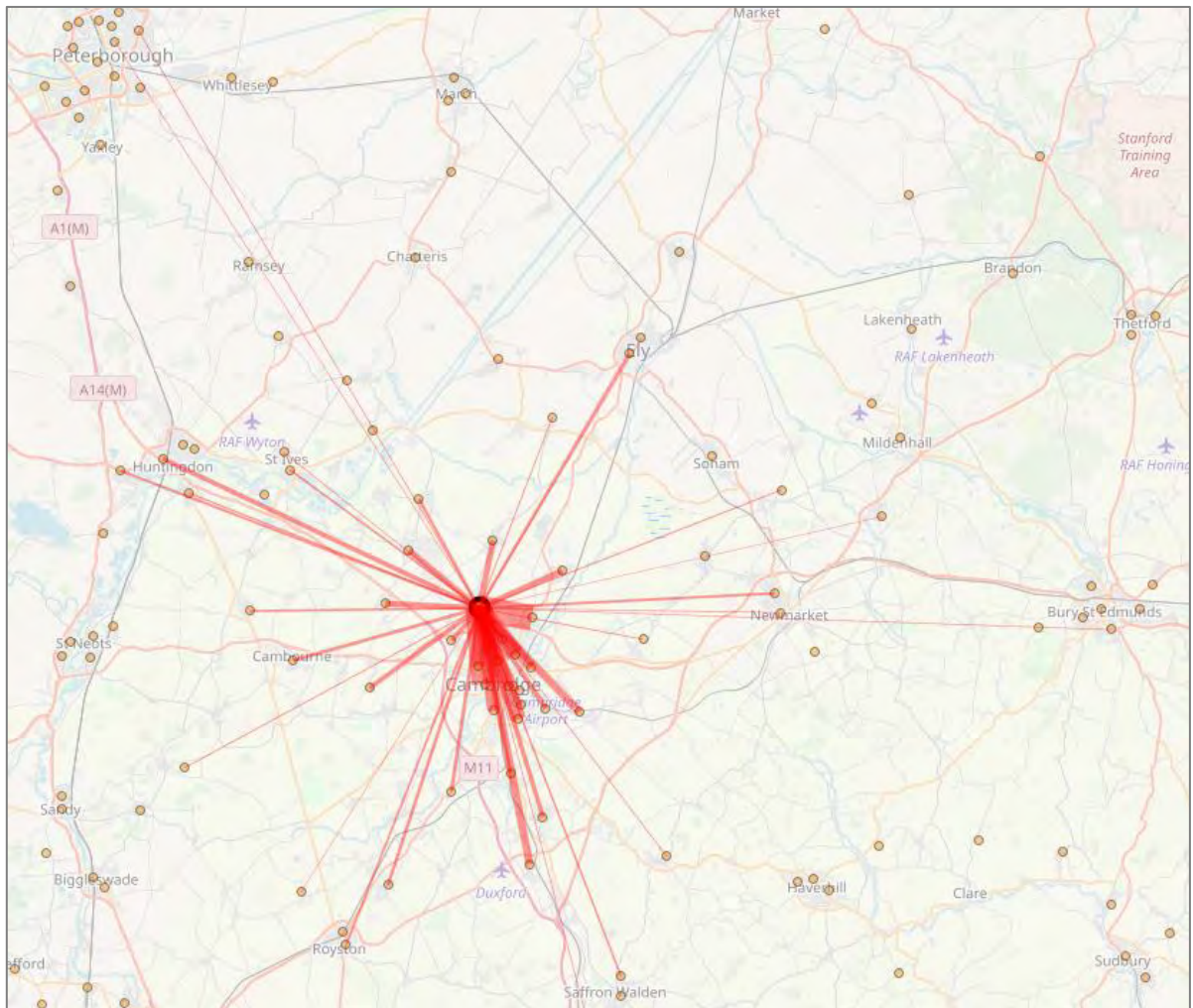
5.1 Overview

- 5.1.1 To consider the potential traffic impacts of the development of the Site, an initial and high-level appraisal has been carried out and is summarised in this section.
- 5.1.2 The assessment considers the delivery of up to 200 dwellings. The assessment concludes that the local highway network could adequately accommodate the additional traffic associated the proposed development.

5.2 Study Area

- 5.2.1 In view of the location of the site relative to local facilities and areas of employment, it is likely that the greatest impacts of development will be experienced to the south of the site.
- 5.2.2 A review of the Travel to Work Flows based on the 2011 census data for the South Cambridgeshire 006 Middle Super Output Area (which includes the proposed development site) has been undertaken, which shows that the majority of trips to/from the south of the site are to Cambridge. Other destinations identified include, Huntingdon, Peterborough, Ely, Newmarket, and Bury St Edmunds. The destinations for work trips are shown on **Figure 5.1**.

Figure 5.1: Census Travel to Work Data – South Cambridgeshire 006.



Source: <http://commute.datashine.org.uk/>

5.2.3 For this reason the initial traffic assessment has focussed on the A217 corridor, and particularly the following junctions:

- Ambrose Way / Glebe Way
- Glebe Way/ Impington Lane / Water Lane / The Green;
- Bridge Road / A14 / Cambridge Road.

5.3 Trip Generation

5.3.1 An initial assessment of the traffic impact on the local highway network has been undertaken using the TRICS database based upon a development of 200 dwellings.

5.3.2 Within the TRICS database is a residential development of 207 dwellings located in Bar Hill, South Cambridge, located less than 6km from the proposed development site. The site consists of 2-, 3- and

four-bedroom dwellings and was surveyed in September 2018. As such this site has been used to provide representative trip rates.

5.3.3 The results are summarised in **Table 5.1**.

Table 5.1: Weekday Vehicle Trip Rates and Generation – 200 Dwellings

Time	Morning Peak			Evening Peak		
	In	Out	Two-way	In	Out	Two-way
Private Dwellings Trip Rate (per dwelling)	0.184	0.401	0.585	0.348	0.140	0.488
Vehicle Movements (200 Dwellings)	37	80	117	70	28	98

Source: TRICS / Consultant's calculations based on TRICS data

5.3.4 A development of some 200 dwellings would generate around 117 two-way vehicle movements during the morning peak hour and 98 two-way vehicle movements during the evening peak hour, which equates to less than two vehicles every minute.

5.3.5 Based on the 2011 Census Travel to work data it has been assumed that 90% of traffic would travel to/from the south of the proposed development site. This equates to circa 105 two-way vehicle movements during the morning peak hour and 85 two-way vehicle movements during the evening peak hour on Glebe Way to the south of Ambrose Way.

5.4 Junction Capacity Assessments

Local Highway Network

5.4.1 Traffic surveys and junction capacity assessments have recently been undertaken in Histon and Impington to inform a Transport Assessment for a new 2 form-entry Primary School and 52-place Nursery at Buxhall Farm, Glebe Way, Histon prepared by MTC Engineering (Planning Reference: S/0101/18/CC).

5.4.2 As part of this application traffic count surveys were undertaken at the B1049 Glebe Way/Impington Lane/B1049 Water Lane/The Green signal junction, the B1049 Bridge Road/Chequers Road signal junction, and on the B1049 Glebe Way on Tuesday 12th June 2018 from 07:45 - 09:15 and 14:45 - 16:15. As this application is for a school, the evening peak hour used for the assessment is unlikely to be representative of peak hour on the local highway network. Nevertheless, the junction capacity assessments undertaken for the morning peak hour still provides useful information on how the local highway network is operating in the morning peak period (08:00-09:00).

5.4.3 The observed junction performance during the morning peak hour and the future assessment years (without development) for 2020 and 2025 (factored using TEMPRO growth rates) for the Glebe Way / The Green / Impington Lane / Water Lane signalised junction and the Bridge Road/Chequers Road signal junction are summarised in **Table 5.2** and **Table 5.3** below.

Table 5.2: Morning Peak Hour Linsig Results for the Glebe Way / The Green / Impington Lane / Water Lane Signalised Junction

Road / Link	2018		2020		2025	
	DOS	Queue	DOS	Queue	DOS	Queue
Glebe Way	80.3	22	82.4	23	87.0	26
The Green	79.8	10	81.8	10	86.5	11
Impington Lane	80.1	7	82.2	7	86.8	8
Water Lane	39.9	8	41	8	43.2	9

Source: LinSig 3 / MTC Engineering Transport Assessment for a New 2FE Primary School and Nursery at Buxhall Farm.

Table 5.3: Morning Peak Hour Linsig Results for the Bridge Road / Chequers Road Signalised Junction

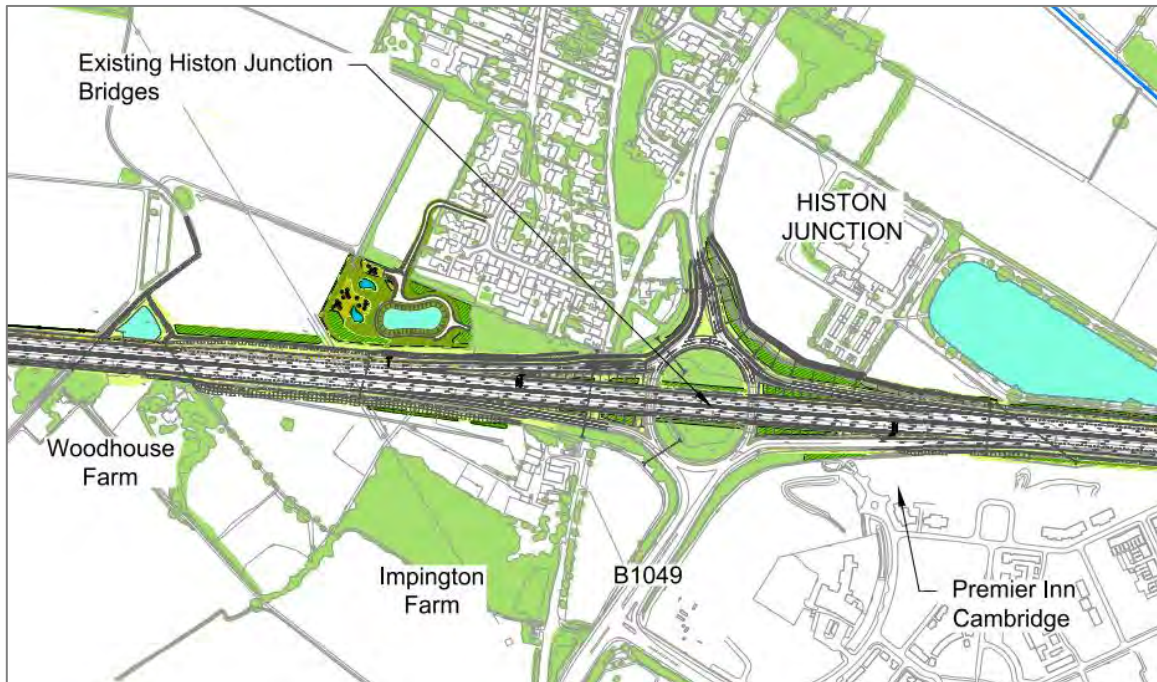
Road / Link	2018		2020		2025	
	DOS	Queue	DOS	Queue	DOS	Queue
Bridge Road (north)	52.2	8	53.5	8	56.6	9
Chequers Road	48.8	3	50.2	3	52.7	3
Bridge Road (south)	52.1	9	53.5	10	56.5	11

Source: LinSig 3 / MTC Engineering Transport Assessment for a New 2FE Primary School and Nursery at Buxhall Farm.

- 5.4.4 It can be seen from **Table 5.2** and **5.3** that the signalized junctions in Histon to the south of the proposed development are currently operating within capacity and are anticipated to do so in the future assessment years with the addition of background growth.
- 5.4.5 A Transport Assessment for the proposed development would be produced and submitted alongside any planning application. The TA would include junction capacity assessments and would include the impact of the proposed development traffic and any committed developments at the time of submission. It can be seen that there is currently spare capacity at the junctions within proximity to the site, however, should the addition of development traffic to the network cause the junctions to exceed capacity then suitable mitigation schemes would be explored.
- 5.4.6 Potential future mitigation for the B1049 Glebe Way/Impington Lane/B1049 Water Lane/The Green signal junction could comprise of upgrading signal equipment, localised widening and / or increasing the existing cycle time, therefore reducing the overall proportion of time 'wasted' between green phases when all lights are red to increase lane capacity on some of the arms.

Strategic Road Network

- 5.4.7 Significant improvements to the strategic road network are currently being undertaken on the A14 between Cambridge and Huntingdon.
- 5.4.8 At the Histon Junction (Junction 32), the proposed improvements are as follows:
- Widen the A14 to a three-lane dual carriageway standard between the Girton interchange and the 'west facing slip roads' at Histon Junction;
 - Widen the B1049 Bridge Road on its approach to Histon Junction to increase capacity;
 - Provide improved non-motorised user facilities at Histon Junction.
- 5.4.9 An extract of the proposed improvement scheme is provided as **Image 5.1**.

Image 5.1: Extract of A14 Junction 32 Improvement Scheme

- 5.4.10 A Transport Assessment was prepared by Jacobs, Arup and AECOM (December 2014) to assess the impacts of the proposed improvements.
- 5.4.11 The results presented in the TA show that as a result of the proposed improvements on the A14 between Cambridge and Huntingdon and the improvements at Junction 32 (Histon), flows on B1049 Histon Road (through Impington) are anticipated to decrease as a result of A14 improvement scheme in the future assessment year of 2035.
- 5.4.12 Furthermore, the operational assessments indicate that all arms of the Histon signalised junction (Junction 32 of the A14) are forecasted to operate within capacity, with the exception of the entry to the A14 Westbound off-slip and the entry to Cambridge Road in the PM peak hour. Whilst one arm of the junction is expected to operate over capacity, as a whole the junction operates significantly better than the 'do-minimum' scenario in both the future assessment years of 2020 and 2035.
- 5.4.13 Consequently, there are significant improvements currently being implemented in the vicinity of the site on the Strategic Road Network which are anticipated to decrease flows in the future assessment year.

SECTION 6 Summary and Conclusions

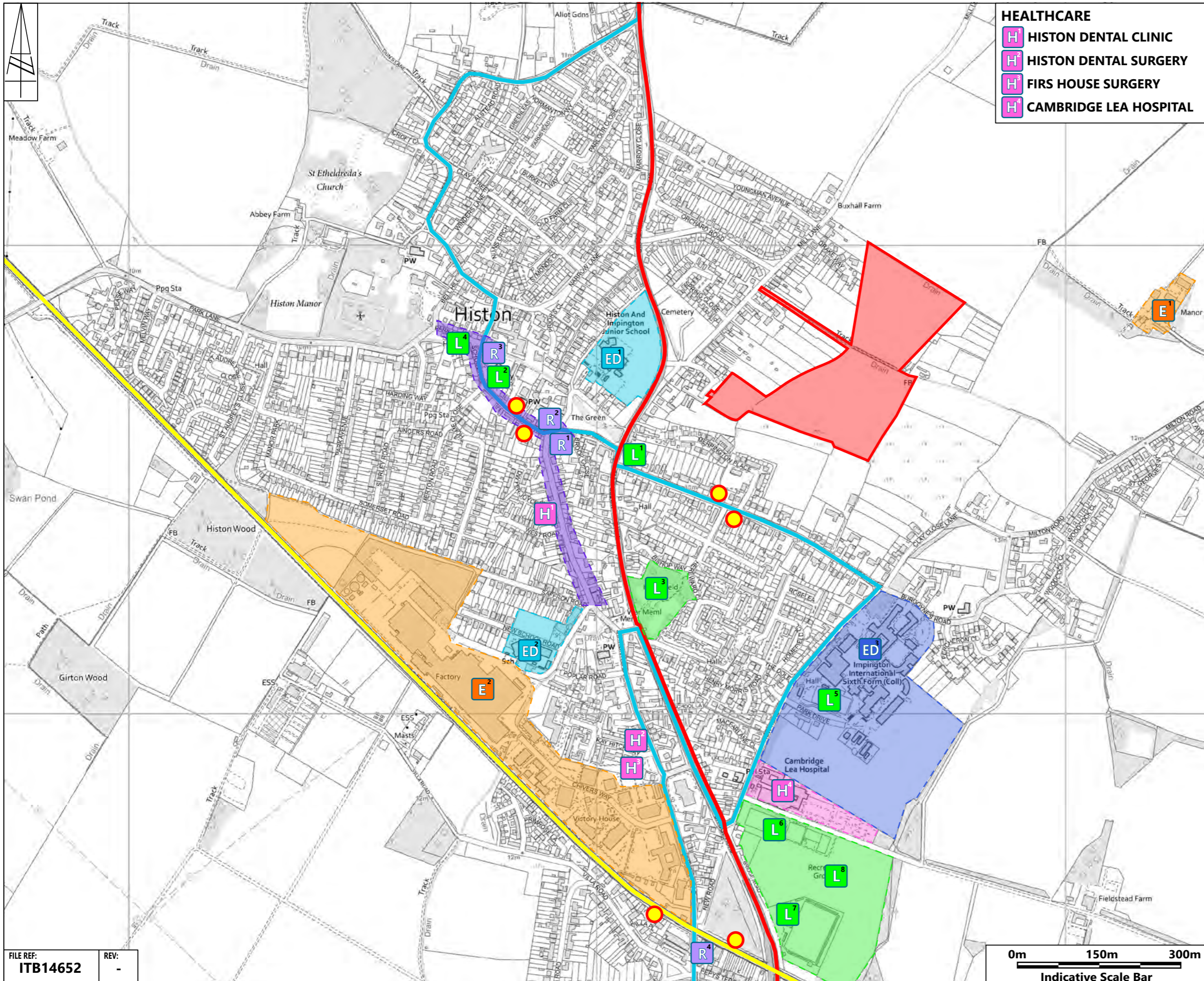
Summary

- 6.1.1 Martin Grant Homes are promoting Land off Ambrose Way, Histon for a residential development for circa 200 dwellings. This Overview Transport Strategy has been prepared to consider whether the development of the site can be brought forward in a manner which delivers sustainable development and complies with relevant policy.
- 6.1.2 An initial appraisal of site access opportunities has identified a Site Access Strategy which could provide a suitable vehicular access to serve the site from Ambrose Way. The accesses can be designed in accordance with relevant design standards and would deliver safe and suitable accesses to the proposed development.
- 6.1.3 Pedestrian and cycle access can also be delivered to Ambrose Way, with a potential secondary access to Mill Lane.
- 6.1.4 The site is well located to local services and facilities in the village of Histon and benefits from good existing sustainable transport connections. The site also benefits from good connections to the Guided Busway and NCN 51 for public transport and cycling opportunities to further afield. These will be improved through the delivery of a Sustainable Transport Strategy to ensure that opportunities for sustainable travel are taken up and promoted at the site.
- 6.1.5 A review of existing traffic conditions has been undertaken which shows that junctions on the local highway network are operating within capacity. Detailed junction assessments would be undertaken as part of a Transport Assessment submitted alongside a planning application. If the increase in vehicle movements arising from the proposed development results in junctions operating over capacity, then suitable mitigation would be investigated, and proportional contributions provided towards the delivery of the scheme.

6.2 Conclusion

- 6.2.1 Against this background, it is therefore concluded that the proposed development site can be delivered in a manner that satisfies the three key tests set out in paragraph 108 of the National Planning Policy Framework (NPPF) and there are no highway or transport reasons that the proposed development should not be allocated.

FIGURES



- HEALTHCARE**
- HISTON DENTAL CLINIC
 - HISTON DENTAL SURGERY
 - FIRS HOUSE SURGERY
 - CAMBRIDGE LEA HOSPITAL

- KEY**
- SITE BOUNDARY
 - VILLAGE CENTRE
 - EMPLOYMENT AREA
 - BUS STOP
 - CITI 8 BUS ROUTE
 - CITI X8 BUS ROUTE
 - BUSWAY / NCN 51

- LEISURE**
- THE ROSE AND CROWN
 - HISTON LIBRARY
 - HOMEFIELD PARK
 - ST ANDREW'S CENTRE
 - IMPINGTON SPORTS CENTRE
 - HISTON TENNIS CLUB
 - HISTON FOOTBALL CLUB
 - RECREATION GROUND

- EMPLOYMENT**
- MANOR FARM OFFICES
 - HISTON INDUSTRIAL ESTATE

- RETAIL**
- COOP FOOD
 - HISTON POST OFFICE
 - TESCO EXPRESS
 - MACE

- EDUCATION**
- HISTON & IMPINGTON JUNIOR SCHOOL
 - HISTON & IMPINGTON INFANT SCHOOL
 - IMPINGTON VILLAGE COLLEGE



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TITLE:
**LAND OFF AMBROSE WAY,
 HISTON
 SITE ACCESSIBILITY PLAN**

FILE REF:
ITB14652

REV:
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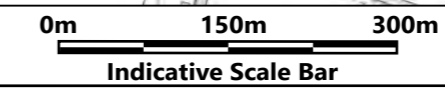
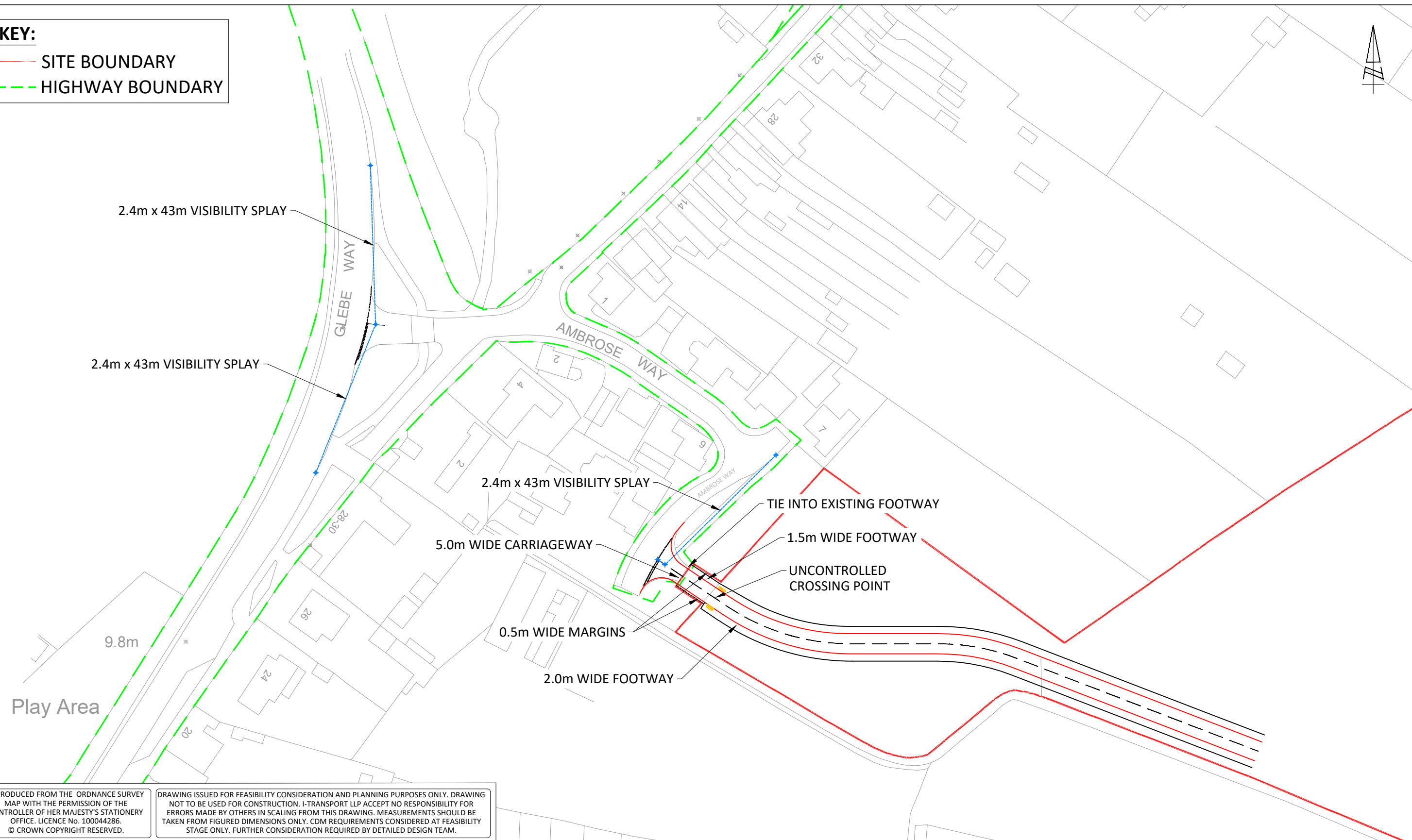


FIGURE No:
FIGURE 2

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DRAWINGS

KEY:
 — SITE BOUNDARY
 - - - HIGHWAY BOUNDARY



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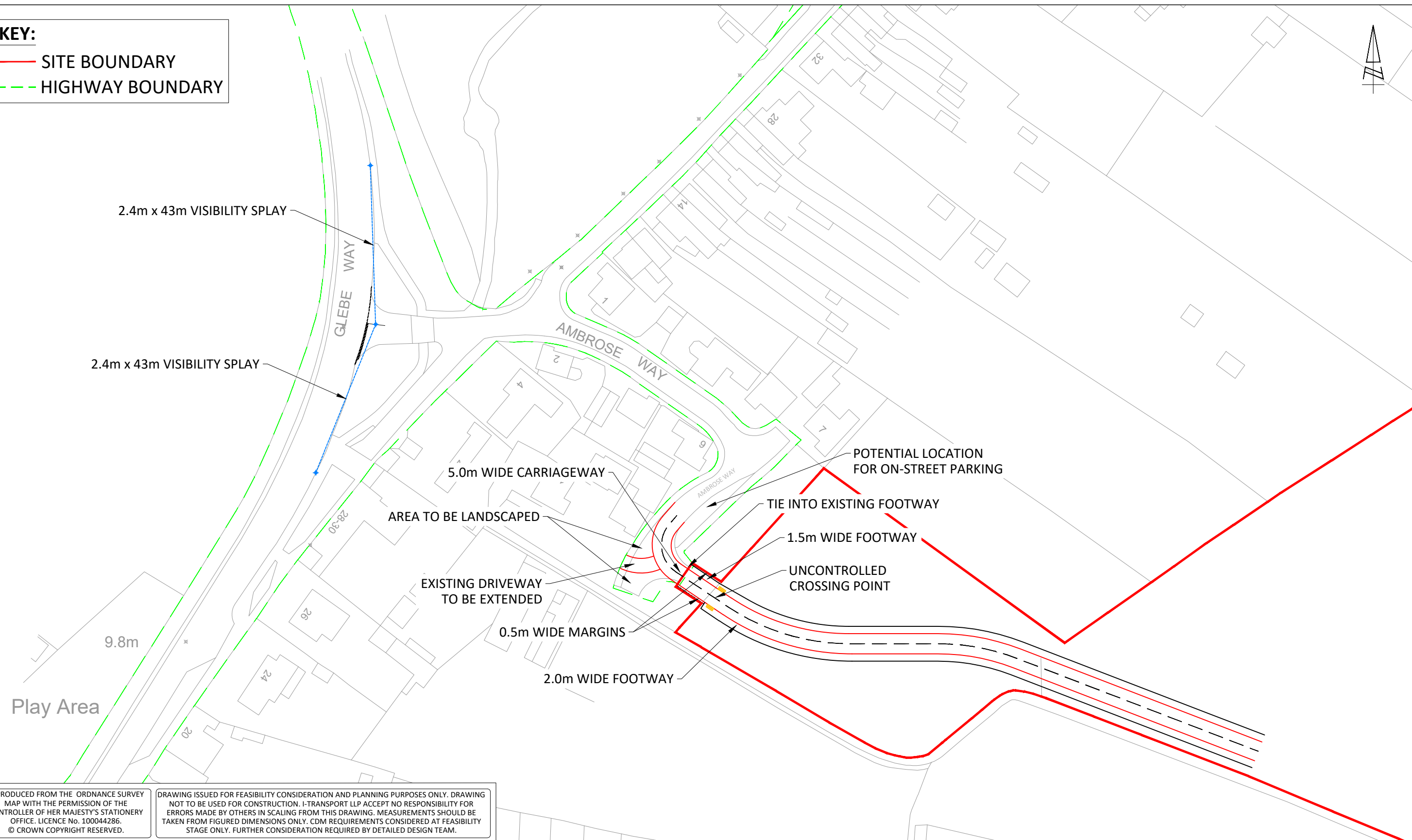
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STATUS: FOR INFORMATION					

TITLE: SITE ACCESS - OPTION 1 EXTENSION OF AMBROSE WAY INTO THE SITE	
PROJECT: AMBROSE WAY, HISTON	CLIENT: MILLER HOMES

SCALE @ A3: 1:1000	CHECKED: IN	APPROVED: MG
FILE REF: ITB14341	DRAWN: JD	DATE: 18.03.19
DRAWING No: ITB14652-GA-001		
PROJECT No: ITB14652	REV: -	

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KEY:
 — SITE BOUNDARY
 - - - HIGHWAY BOUNDARY



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PROJECT: AMBROSE WAY, HISTON	CLIENT: MILLER HOMES

SCALE @ A3: 1:1000	CHECKED: GM	APPROVED: MG
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DRAWING No: ITB14652-GA-002		
PROJECT No: ITB14652		REV:

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APPENDIX A – DEVELOPMENT CONCEPT PLAN

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KEY			
	SITE LOCATION (8.72HA)		CURRENT FLOOD ZONE CONSTRAINTS (FLOOD ZONE TO BE REDEFINED THROUGH ONGOING TECHNICAL DRAINAGE WORK)
	INDICATIVE RESIDENTIAL PARCELS (USING INDICATIVE PERIMETER BLOCKS - APPROX 200 DWELLINGS)		POTENTIAL KEY FRONTAGES TO NODAL BUILDINGS (SUBJECT TO DETAILED DESIGN)
	PUBLIC OPEN SPACE (PROVISION TO INCLUDE ATTENUATION AREA & LEAP)		EXISTING VEGETATION TO BE RETAINED AND REINFORCED WITH NEW PLANTING (SUBJECT TO TREE SURVEY)
	INDICATIVE VEHICULAR ACCESS (SUBJECT TO DETAILED DESIGN)		PROPOSED DEFENSIBLE LANDSCAPE BOUNDARY (SUBJECT TO LANDSCAPE PROPOSALS)
	PROPOSED LOCATION OF PEDESTRIAN & CYCLE LINK / EMERGENCY ACCESS (SUBJECT TO DETAILED DESIGN)		INDICATIVE LOCATION FOR ATTENUATION AREA (SUBJECT TO DETAILED DESIGN)
	POTENTIAL RADIAL PEDESTRIAN FOOTPATH THROUGH OPEN SPACE (SUBJECT TO DETAILED DESIGN)		INDICATIVE LOCATION FOR 'LEAP' PLAY AREA (400SQM WITH 20M OFFSET) (SUBJECT TO DETAILED DESIGN)

AMBROSE WAY, IMPINGTON - FRAMEWORK PLAN

Pegasus
Design