
Foxhole Lane, Bolney: Sustainable Accessibility

Ref: ITB16634-009F
Date: 12 July 2023

SECTION 1 Introduction

1.1 Background

1.1.1 Mid Sussex District Council (MSDC) has recently undertaken Regulation 18 consultation on its proposed Local Plan housing allocations. A number of comments have been received from consultees in response to the consultation. In respect of transport matters in relation to draft site allocation DPH18 Land at Foxhole Farm, Bolney, these comments include the accessibility of the site by sustainable modes of transport and can be summarised as follows:

- 1 Where people will travel to
- 2 Access to public transport services
- 3 Pedestrian and cycle connectivity

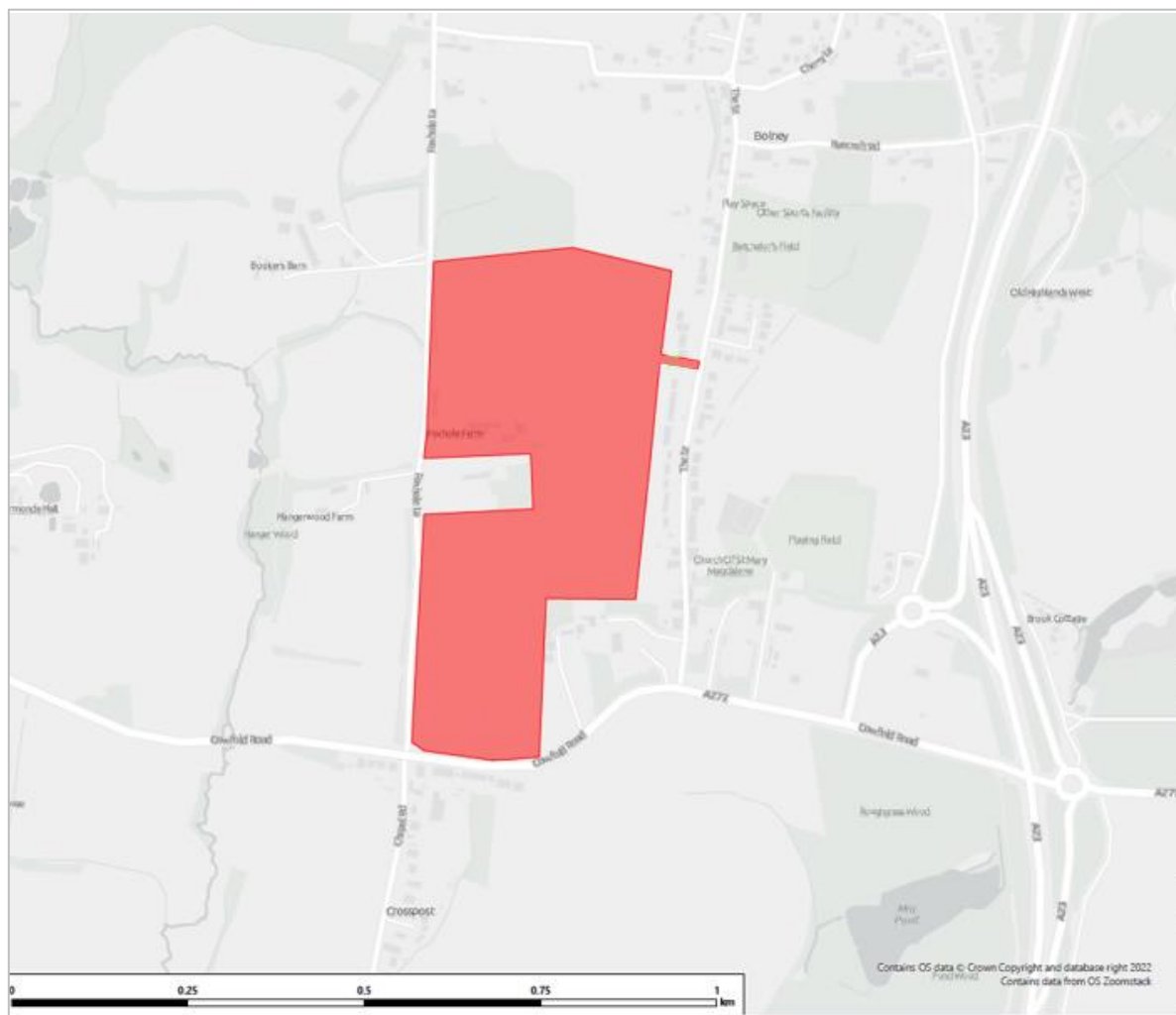
1.1.2 Wates Developments, as the Site Promoter, has engaged MSDC in respect of its ongoing Mid Sussex Transport Study (MSTS) work and has received pre-application advice from West Sussex County Council in order to develop the transport strategy for the site.

1.1.3 This Technical Note (TN) provides a comprehensive sustainability appraisal for draft allocation Site DPH18, Land at Foxhole Farm, Bolney. The remainder of this note provides an overview of the existing walking, cycling and public transport opportunities as well as a 'mobility strategy' that sets out how these existing opportunities can be improved in the context of the proposed site.

1.2 The Site

- 1.2.1 The site is located just west of the village of Bolney with the A272 to the south (site frontage), Foxhole Lane to the west, woodland and pasture/farmland to the north and existing residential properties fronting The Street to the east. The location of the site in the context of the surrounding area is shown in **Image 1.1**.

Image 1.1: Site Location



- 1.2.2 The site has been identified in the Draft Mid Sussex District Plan (2021-2039) as being suitable for development and is expected to deliver/provide the infrastructure, contributions and off-site provisions detailed in **Table 1.1**.

Table 1.1: Site DPH18 Infrastructure

Type	Detail
On-Site Provision	200 Residential Dwellings (including 30% affordable)
	Country Park
	Community Allotments
	Community Facility
	Educational Facility
Financial Contributions	Playspace
	Sports Facilities
	Community Buildings
	Education
	Sustainable Transport
	Healthcare
	Emergency Services
Off-Site Provision	Sustainable Transport Measures
	Highway Works

Source: Draft Mid Sussex District Plan (2021-2039)

- 1.2.3** The existing site is currently used for pasture/farming purposes. Provision of the infrastructure and contributions outlined above will enhance the site and allow for a greater number of opportunities for both future and existing residents of Bolney. The contributions to the delivery of sustainable improvements by WSCC and the delivery of off-site works by the Developer will bring with it a more comprehensive and improved local network focussed on prioritising walking and cycling trips consistent with the objectives of the National Planning Policy Framework.

SECTION 2 Existing Opportunities

- 2.1 This section of the TN sets out details of existing walking, cycling and public transport opportunities that will be available to future residents.

2.2 Walking and Cycling

Walking

- 2.2.1 The following headings provide a detailed assessment of the existing infrastructure in place to accommodate pedestrian trips. This infrastructure is shown in the context of the proposed site on **Image 2.1**.

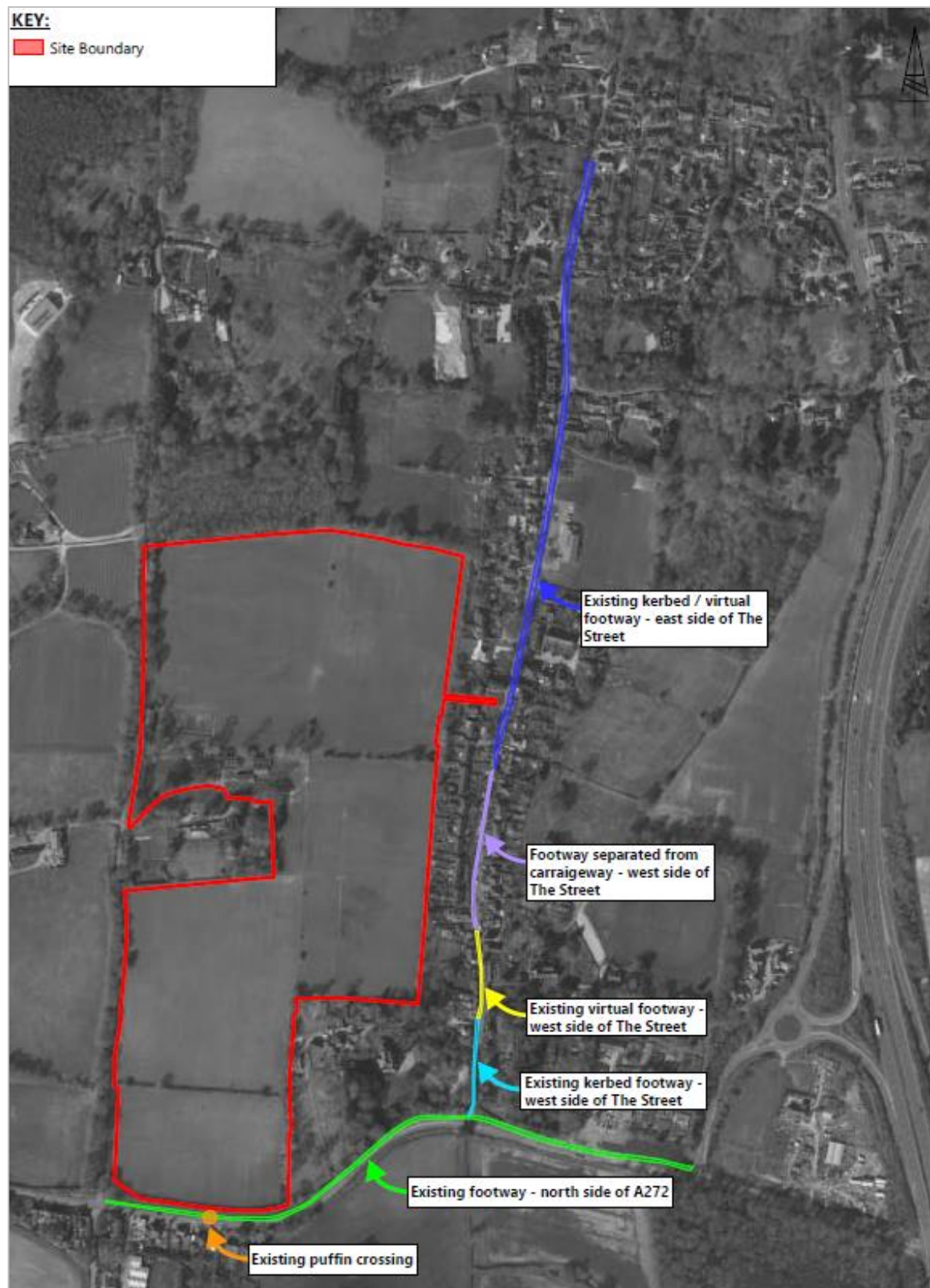
A272

- 2.2.2 The A272 spans the entire frontage of the site with footways provided on both sides of the carriageway. The footway on the northern side measures approximately 1.2m wide with a circa 5.0-6.0m grass verge separating the footway from the carriageway. This footway remains unbroken to the east and ties in with the existing footway on the west side of The Street. The footway continues east, providing access to Bolney Nursery and the existing employment area. A puffin crossing is also provided circa 65m east of the service station access along the site frontage.

The Street

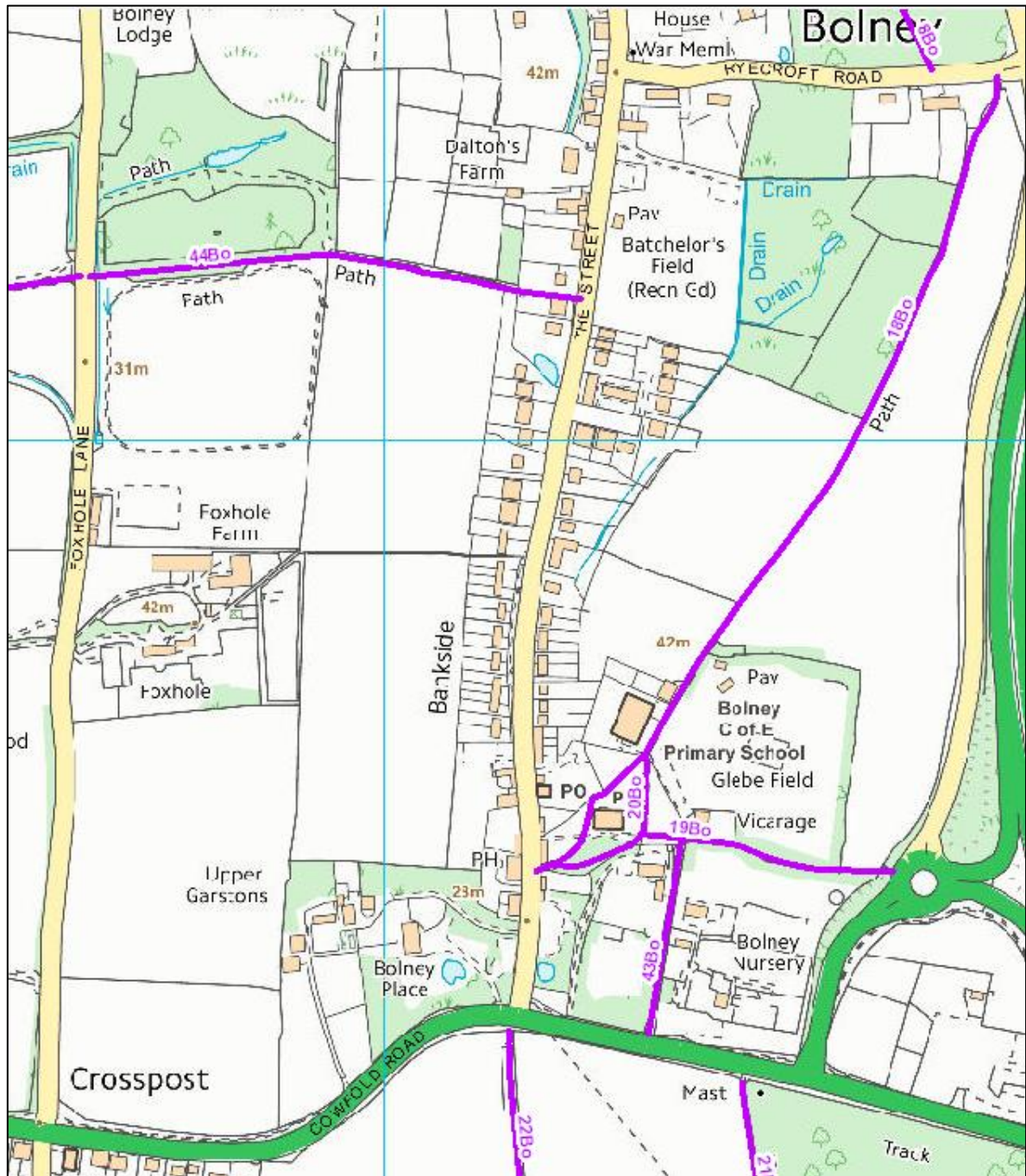
- 2.2.3 Routing north from the junction with the A272, a circa 1.2m wide footway is provided on the west side of The Street. The footway takes the form of a kerbed footway for c.90m north of the A272 before becoming a virtual footway, demarcated by red colouration and a solid white line, from the access to The Eight Bells public house.
- 2.2.4 Approximately 220m north of the junction with the A272, the footway on the west side of The Street moves away from the carriageway, up a gradient where it remains separated from the carriageway by a steep 7.0m-wide grass bank.
- 2.2.5 A footway is introduced on the east side of The Street just north of Number 29. This takes the form of a circa 1.2-2.0m wide kerbed footway serving the existing properties along the route. The footway then takes the form of a virtual footway between 'Oakside' and 'West Meadow' before continuing north towards the village centre as a kerbed footway.

Image 2.1: Existing Walking Infrastructure



2.2.6 In addition to the above, public footpaths no. 18BO, 19BO and 20BO run to the east of the village, whilst public footpath no. 44Bo runs to the north of the site. The location and routing of these public footpaths is shown on **Image 2.2**.

Image 2.2: Public Rights of Way (PRoW) Plan



2.2.7 Collectively, these existing PRoW will provide a useful network of alternative walking routes for residents of the proposed development.

Cycling

- 2.2.8 A traffic free cycle route is provided to the east of the site, connecting London Road with the A2300 to the south of the site, where on carriageway cycle lanes are provided along both sides of the A2300.
- 2.2.9 London Road is described as '***generally lightly trafficked and wide enough to allow cyclists to share the carriageway in reasonable safety and to access local facilities or for recreational purposes.***' in the WSCC Highways response to a consented local development of up to 30 dwellings (ref: DM/17/4392).
- 2.2.10 The existing cycle infrastructure is illustrated in **Image 2.3**, and the TA that accompanies the development proposals will explore how connectivity to the route may be enhanced.

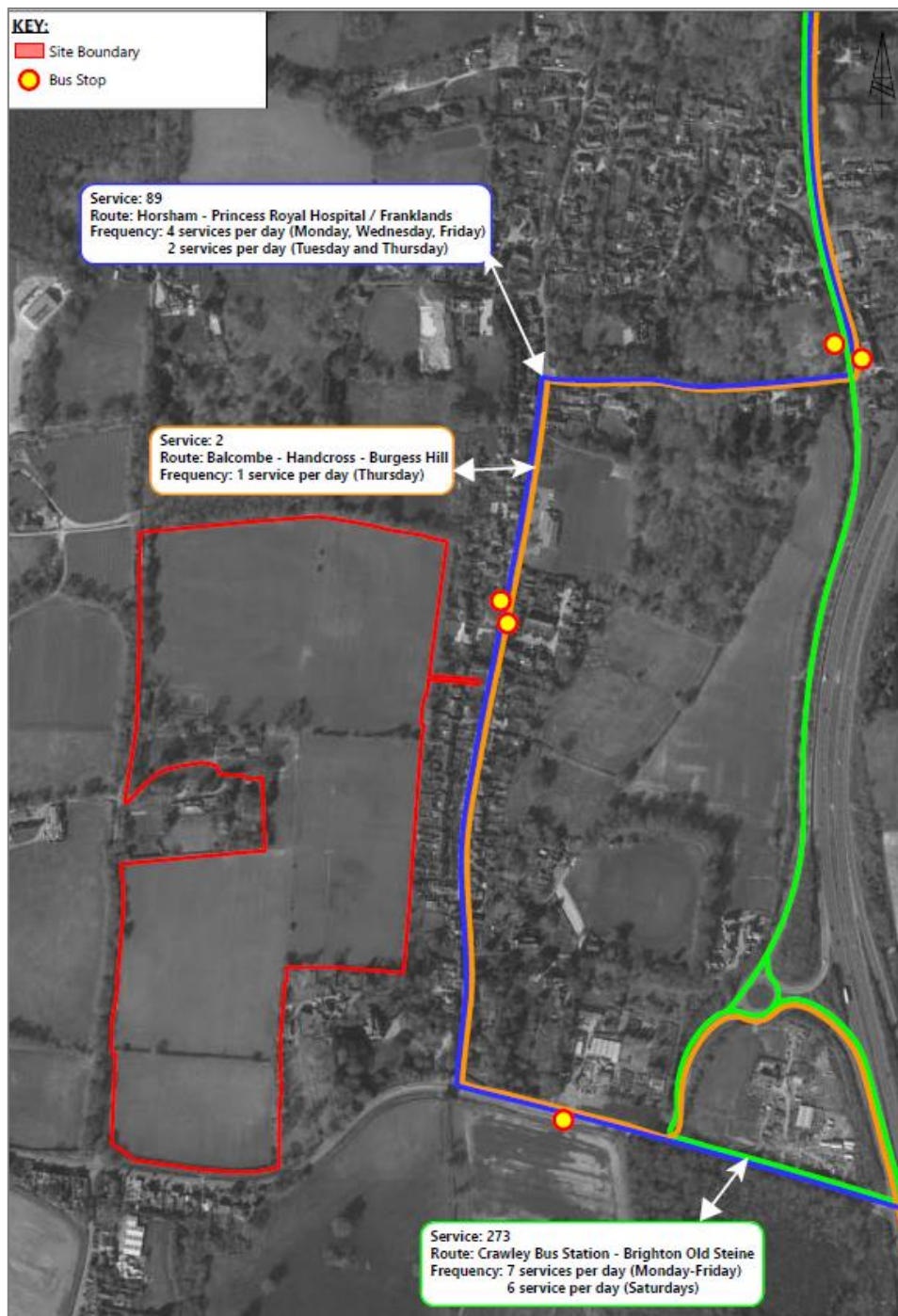
Image 2.3: Existing Cycle Infrastructure



2.3 Public Transport

2.3.1 The nearest bus stops to the site are located on The Street just south of the property names 'Agates' and are served by the number 2 and 89 services. In addition to these services, the number 273 bus operates from London Road to the east of the site, providing direct access between Crawley and Brighton, and an additional stop, also served by the number 89 bus, is available circa 400m east of the existing puffin crossing on the A272.

Image 2.4: Local Bus Services



2.3.2 Financial contributions secured from the development towards transport improvements could be used by the Council to improve bus service provision, if deemed to be a local priority. The Travel Plan will also explore means of encouraging the uptake of public transport, for example, by the provision of travel vouchers and taster tickets as well as the provision of timetable and service information through a Residents Travel Pack.

2.4 Local Highway Network

2.4.1 The impact of the proposed development on the local highway network will be assessed through the Mid Sussex District Council (MSDC) Transport Study. Any 'severe' local impacts identified as part of the model will be mitigated first through the implementation of sustainable travel improvements i.e. walking, cycling and public transport improvements, and any remaining impacts deemed to be severe will be addressed through junction improvements. The Site Promoter is engaging with MSDC in this process who are in turn engaging with WSCC and National Highways (NH).

2.4.2 In respect of The Street, the development will provide a direct pedestrian and cyclists connection to The Street to minimise journey distance and thus make walking and cycling a more attractive option than using the private car for journeys into the village centre.

2.4.3 Notwithstanding the ongoing work through the MSDC Transport Study, initial traffic impact assessment work has been completed as part of the pre-application engagement with WSCC, to agree the parameters of the trip generation and traffic distribution. The traffic generated by the development is forecast to be distributed as shown in **Table 2.1**.

Table 2.1: Traffic Distribution

Route	% of Traffic	Morning Peak (08:00 – 09:00)			Afternoon Peak (17:00 – 18:00)		
		Arrivals	Departures	2-Way	Arrivals	Departures	2-Way
A272 West	18%	6	15	21	14	7	20
The Street	3%	1	2	3	2	1	3
A23 North	36%	11	30	41	27	13	40
A23 South	19%	6	16	22	14	7	21
Bolney Road	23%	7	19	26	17	8	25
London Road	1%	0	1	1	0	0	1

2.4.4 The forecast reflects that the impact of the development on The Street will be imperceptible.

2.5 Existing Conditions Summary

- 2.5.1 The site is located in Bolney, a village and civil parish in the Mid Sussex district of West Sussex. There is an existing network of dedicated walking routes in the vicinity of the site that allows for unhindered pedestrian movement between the site and Bolney village centre. There are also a number of existing PRow close to the site that provide alternate off-carriageway routes to the village centre.
- 2.5.2 Existing cycle routes are also accessible close to the site which provide off-carriageway routes between London Road and the A2300.
- 2.5.3 For journeys further afield, there are opportunities to utilise public transport for direct or combined journeys, to access locations such as Crawley, Brighton, Horsham, Burgess Hill and Handcross.

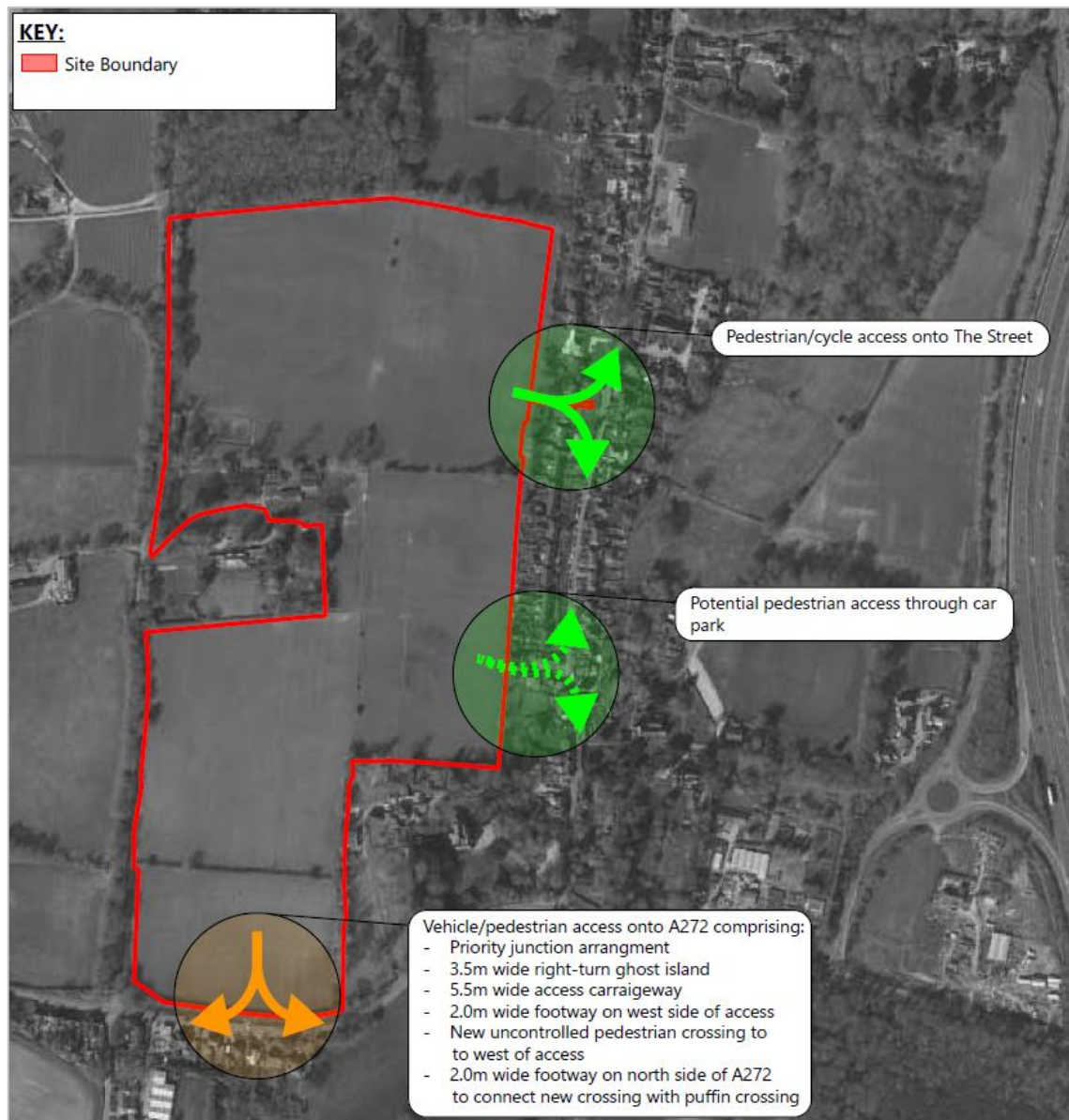
SECTION 3 Accessibility

3.1.1 This section of the TN provides details of the proposed vehicle/pedestrian site accesses and Mobility Strategy.

3.2 Access

3.2.1 The access strategy for the site is shown in **Image 3.1** and will comprise a vehicle/pedestrian access onto the A272 and a separate pedestrian/cycle access onto The Street from the northeast frontage. Details of the site access are presented in a dedicated site access note (*i-Transport ref: ITB16634-010*) which has been developed following pre-application discussions with WSCC. This includes the results of a Stage 1 Road Safety Audit (RSA).

Image 3.1: Access Strategy



- 3.2.2 As shown on Image 3.1, the proposed pedestrian/cycle access will provide a connection to the existing pedestrian infrastructure along The Street (made up of virtual and kerbed footways) and connect with the facilities and services within central and northern Bolney. This will also provide a more direct route for existing residents of Bolney to access the Bolney Cross Village Store to the south of the A272 and will provide an alternative route to the Street.
- 3.2.3 An additional potential pedestrian connection is also identified through the existing car park on the eastern boundary of the site. This could create a second connection to The Street.

3.3 Services and Facilities

- 3.3.1 Bolney is placed in category 3 out of 5 categories in MSDC's settlement hierarchy, defined as:

'Medium sized villages providing essential services for the needs of their own residents and immediate surrounding communities.'

- 3.3.2 Based on a typical distance of 2km, there is a good range of key facilities and services within a 2km reasonable walking distance of the site and additional services within a 5km cycle distance as shown in **Table 3.1**.

Table 3.1: Local Services and Facilities

Service/Facility	Within 2km Walking Distance	Within 5km Cycle Distance
Bolney C of E Primary School	✓	✓
Under 5s Pre-School	✓	✓
Bolney Nursery (Garden Centre)	✓	✓
Marylands Nursery (B8 Employment Site)	✓	✓
Village Hall (Rawson Hall) and Playing Fields	✓	✓
Community Cafe (Rawson Hall)	✓	✓
Bolney Post Office (Rawson Hall)	✓	✓
St Mary Magdalene Church	✓	✓
Bolney Cross Village Stores and Service Station	✓	✓
Bolney Cricket Club	✓	✓
Bolney Wine Estate	✓	✓
The Eight Bells Public House	✓	✓
The Bolney Stage Public House	✓	✓
Cowfold Surgery	-	✓
St Peters C of E Primary School	-	✓

Service/Facility	Within 2km Walking Distance	Within 5km Cycle Distance
Twineham C of E School	-	✓
The Complete Barber Shop	-	✓
The Co-Op Food – Cowfold	-	✓
Londis / Esso – Jeremy's Corner	✓	✓
Fitz Gym	-	✓

3.4 Future Travel Patterns

3.4.1 Journey to work data from the 2011 census has been obtained for the Mid Sussex 007 Middle Super Output Area (MSOA) to determine the likely travel patterns of future residents of the site. The data includes travel by all modes, a summary of the destinations is provided in Table 3.2, below.

Table 3.2: 2011 Census Journey To Work Summary (Mid Sussex 007) – All Modes

Destination	Proportion	Accessible Via Direct Public Transport?	Accessible Via Combined Public Transport?
Haywards Heath	11%	✓	
Rest of Mid Sussex	22%		
Horsham	7%	✓	
Crawley	19%	✓	
Greater London	17%		✓
Brighton	4%	✓	
Reigate and Barnstead	5%		✓
Other	14%		

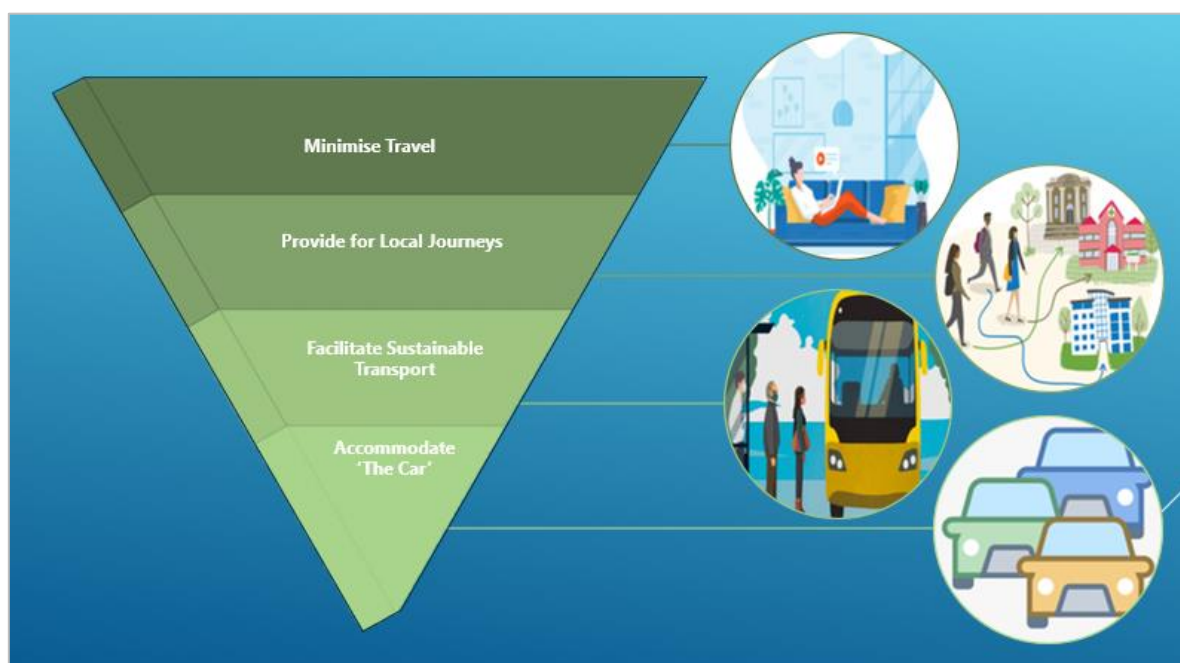
3.4.2 The table demonstrates that 37% of the likely workplaces of future residents of the site are accessible via a direct bus service from the site. In addition to this c.17% of workplaces are likely to be in Greater London which can be accessed from the train stations at Crawley and Haywards Heath, both of which are accessible via direct bus services from the site.

3.4.3 C.33% of trips to work are likely to be contained within Mid Sussex 11% of which are to the Mid Sussex 007 MSOA, all of which is within an achievable cycle distance from the site. A smaller proportion (4%) of trips to work will be to Brighton and Hove which can be accessed via the 273-bus service or from Haywards Heath train station.

3.5 Mobility Strategy

- 3.5.1 To achieve the overarching objective of sustainable development, a clear and targeted strategy is required. The Mobility Strategy will seek to take a 'Reduce, Contain and Facilitate Alternatives' approach to travel demands – only after these steps have been taken should the strategy allow for the mitigation of vehicular impacts.

Image 3.2: Mobility Strategy



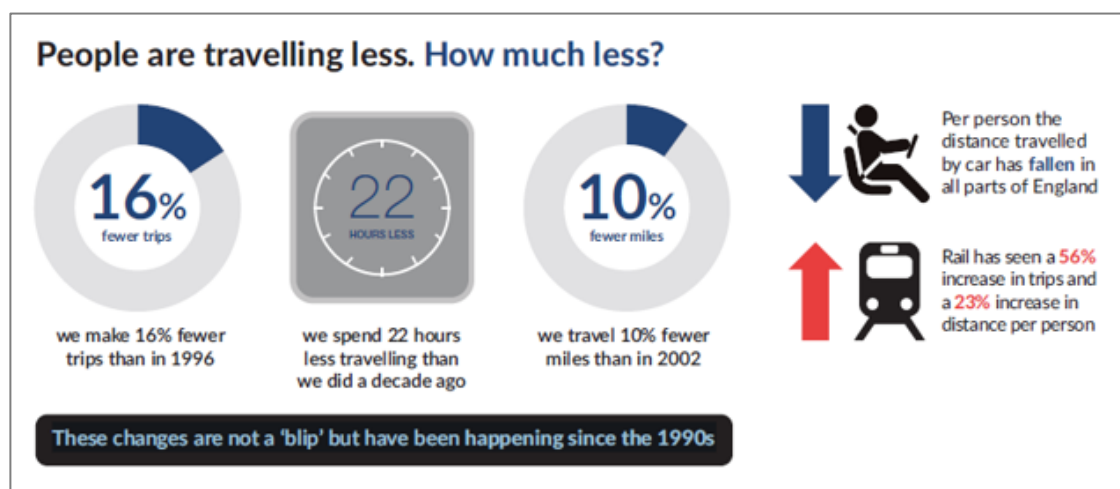
Reduce

- 3.5.2 The first step of the strategy will be to seek to minimise the need for travel. One of the biggest contributors to travel demand during peak periods, as identified by NTS 2019, is that attributed to commuting journeys.
- 3.5.3 The national response to Covid has resulted in a significant shift in the working culture. More and more employees are able to work either from home or remotely, with less time spent in offices as a result of hybrid working approaches. As a result, the design of residential dwellings has become a key focus, with many homebuyers now seeking space within properties to enable home working, and travel demand can be reduced by providing dwellings that reflect these requirements.

3.5.4 While residents of the development will seek to own their own vehicles, the provision of comprehensive on-plot electric vehicle charging will enable residents to reduce the reliance upon traditional combustion engine vehicles, and own private vehicles that have a lessened impact on the environment, while overcoming one of the major obstacles to electric car ownership in providing dedicated facilities to enable charging. EV charging will be provided in line with the Building Regulations Approved Document S. This aims to future proof the site and ensures that the development contributes to the targets established in the Government's Net Zero Strategy. The strategy sets out policies and proposals for decarbonising all sectors of the UK economy to meet the net zero target by 2050, including the sale of new combustion engine vehicles from 2030.

3.5.5 There is an identified decrease in car ownership and use in society; we travel substantially less today, per head of population, than we did one or two decades ago. According to research by the Commission on Travel Demand we make 16% fewer trips than we did in 1996, travel 10% fewer miles than we did in 2002 and spend 22 hours less travelling than we did a decade ago.

Image 3.3: Statistics Published by the Commission on Travel Demand



3.5.6 These reductions in travel demand have occurred as a result of a combination of longer-term societal shifts including:

- How we work and how we shop and the role of new technology – with more people working at home and shopping online;
- Changing demographics and attitudes to car ownership and use – with more young people only owning a car later in life or not owning a car; and
- Urbanisation – an increasing focus on increasing population density in urban areas and close to transport hubs so that people don't need to use a car.

3.5.7 In terms of the decline in car ownership and use for young people, 17 – 29 year olds are now making between 26% - 44% fewer trips than they did in 1992/94 and the number of 17-20 year olds with a driving license has fallen by 19% whilst the number of 21-29 year olds with a driving license has fallen by 12%.

3.5.8 These societal trends lend themselves to the car club business model which offers user a car 'on demand' – but without the need to maintain a car. The Site Promoter will explore the opportunity for Car Club provision to be incorporated into the site with specialist operators.

Contain

3.5.9 Key to encouraging local journeys will be to provide for a layout that has 'walkable neighbourhoods', characterised as having a range of facilities within 10 minutes walking distance (around 800 metres). However, the propensity to walk or cycle is not only influenced by distance but also the quality of the experience; people may be willing to walk or cycle further where their surroundings are more attractive, safe and stimulating and the design of the site will strive to achieve this through good design and prioritising journeys on foot and by bicycle.

3.5.10 Of course, simply providing appropriate infrastructure within the site will not, by itself, contain travel. On-site facilities will be provided as a destination for these journeys, including education and community facilities. These facilities will be provided at the heart of walkable neighbourhoods so that the use of sustainable modes of travel is quicker, easier and cheaper than the use of private car, as advocated in the Chartered Institute of Highways and Transportation guidance "Better Planning, Better Transport, Better Places" (CIHT, 2019).

Facilitate Sustainable Travel

3.5.11 While the reduce and contain aspects of the strategy will minimise the need and distances travelled, there will still be a travel demand arising from the site. Analysis of travel patterns enables targeted investment in sustainable transport infrastructure to encourage the uptake of sustainable modes of transport to accommodate these journeys, and the opportunity exists to embrace new and innovative methods to capture these trips.

3.5.12 A comprehensive Transport Assessment (TA) and Travel Plan (TP) will be developed alongside the proposals. The TA will review the local network and identify where there are opportunities to enhance local sustainable travel opportunities, enabling the targeting of any transport related financial contributions towards infrastructure improvements that encourage the uptake of sustainable modes of travel. The TP will build upon the work within the TA to identify a strategy for encouraging the uptake of sustainable travel modes, including the promotion of travel initiatives, provision of travel vouchers and car sharing as well as outlining a structure for monitoring and auditing modal shift.

SECTION 4 **Summary and Conclusions**

4.1.1 Mid Sussex District Council (MSDC) has recently undertaken Regulation 18 consultation on its proposed Local Plan housing allocations. A number of comments have been received from consultees in response to the consultation. In respect of transport matters in relation to draft site allocation DPH18 Land at Foxhole Farm, Bolney, these comments include the accessibility of the site by sustainable modes of transport and can be summarised as follows:

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4.1.2 Wates Developments, as the Site Promoter, has engaged MSDC in respect of its ongoing Mid Sussex Transport Study (MSTS) work and has received pre-application advice from West Sussex County Council in order to develop the transport strategy for the site. This Technical Note (TN) provides a comprehensive sustainability appraisal for draft allocation Site DPH18, Land at Foxhole Farm, Bolney.

4.1.3 The site is located just west of the village of Bolney with the A272 to the south (site frontage), Foxhole Lane to the west, woodland and pasture/farmland to the north and existing residential properties fronting The Street to the east. There is an existing network of dedicated walking routes in the vicinity of the site that allows for unhindered pedestrian movement between the site and Bolney village centre. There are also a number of existing PRoW close to the site that provide alternate off-carriageway routes to the village centre.

4.1.4 Existing cycle routes are also accessible close to the site which provide off-carriageway routes between London Road and the A2300. For journeys further afield, there are opportunities to utilise public transport for direct or combined journeys, to access locations such as Crawley, Brighton, Horsham, Burgess Hill and Handcross.

4.1.5 A Mobility Strategy is being developed in order to take up the opportunities to encourage sustainable travel in accordance with the objectives of the National Planning Policy Framework. The Mobility Strategy will take a 'reduce, contain, facilitate' approach seeking, in the first instance, to reduce the demand for travel and then reduce off-site travel by the provision of facilities and services within the site.

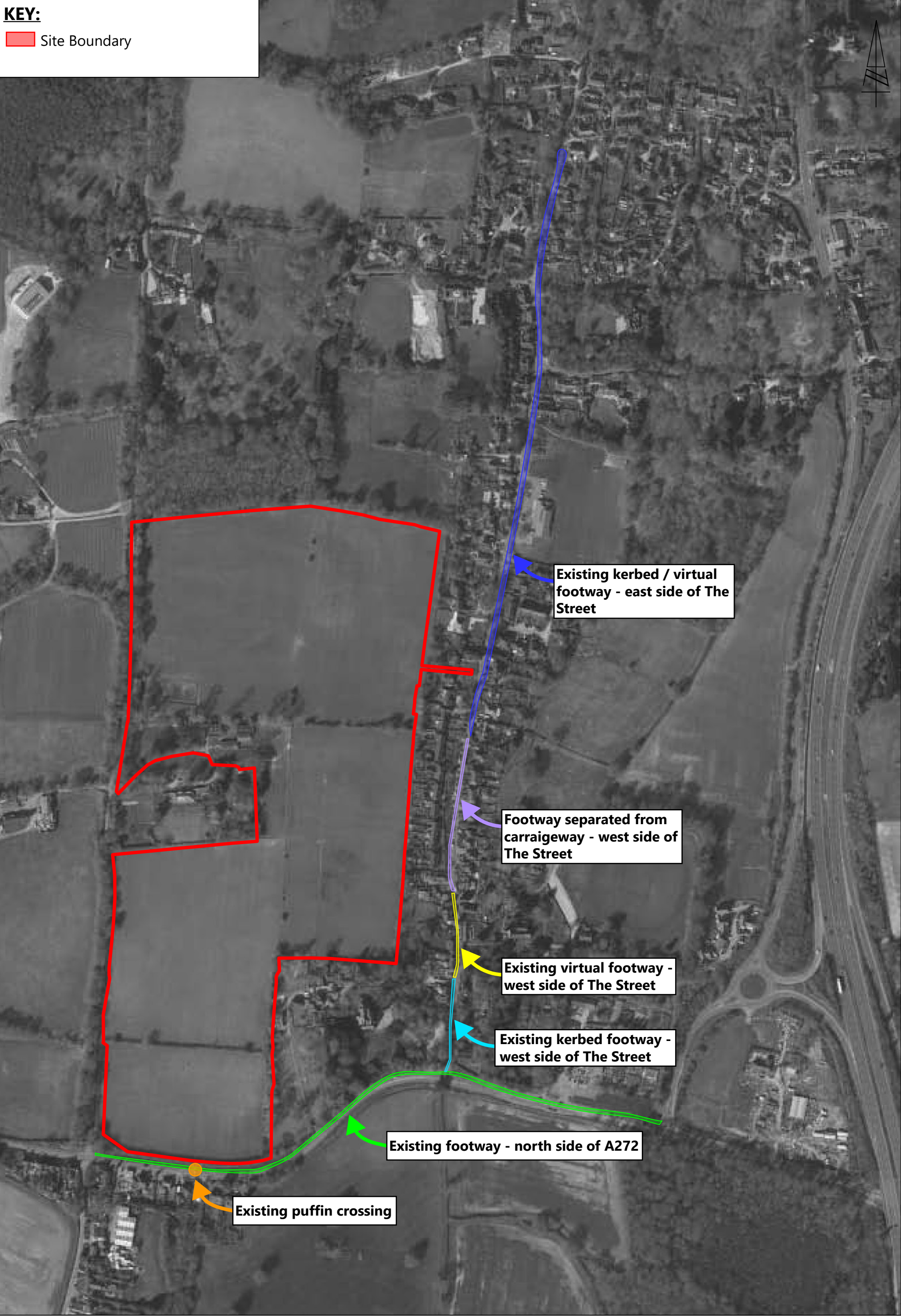
- 4.1.6 The Transport Assessment accompanying the development proposals will review the local network and identify where there are opportunities to enhance local sustainable travel opportunities, enabling the targeting of any transport related financial contributions towards infrastructure improvements that encourage the uptake of sustainable modes of travel.
- 4.1.7 A Travel Plan will build upon the work within the TA to identify a strategy for encouraging the uptake of sustainable travel modes, including the promotion of travel initiatives, provision of travel vouchers and car sharing as well as outlining a structure for monitoring and auditing modal shift.

FIGURES


FIGURES


KEY:

Site Boundary



KEY:

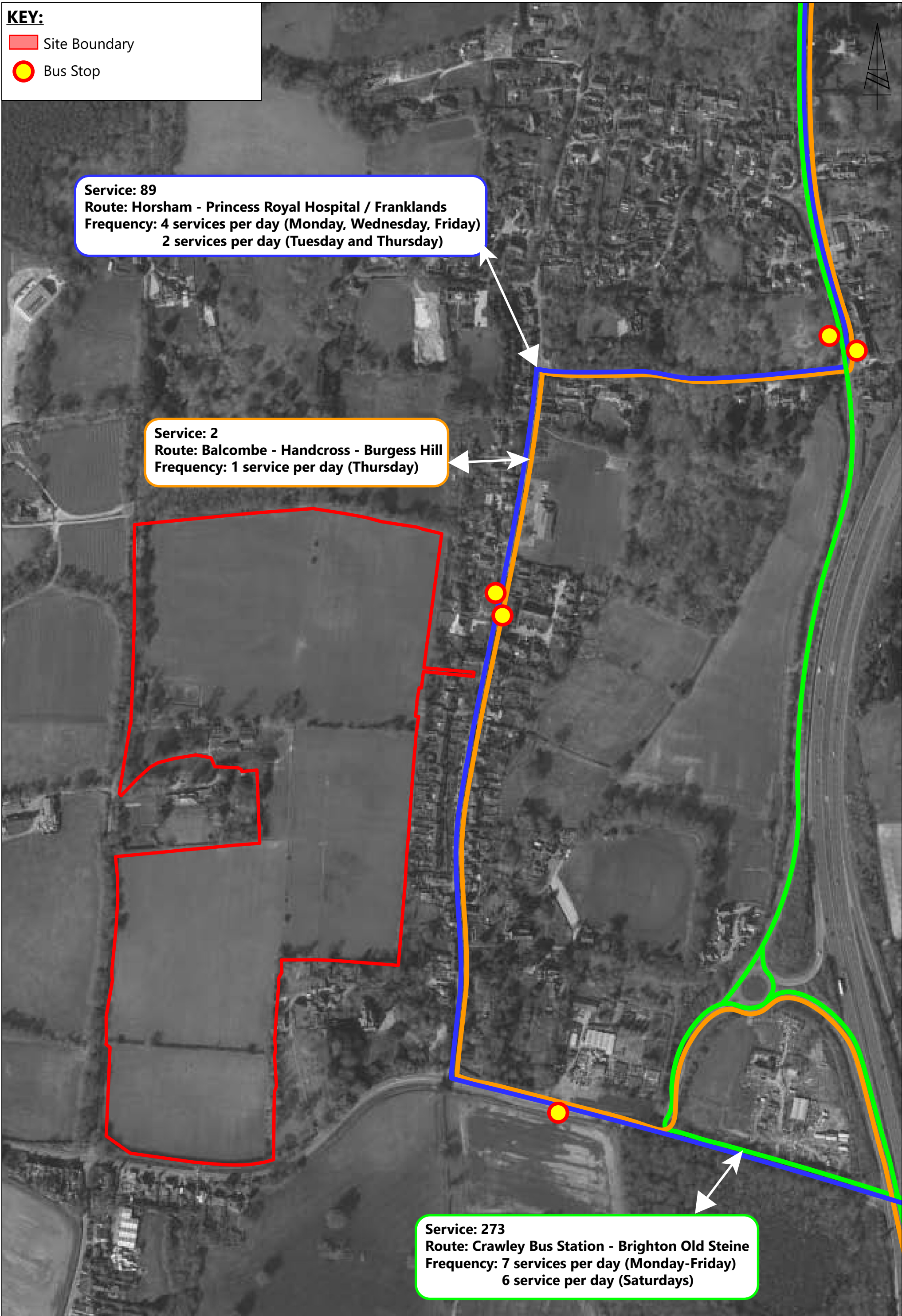
 Site Boundary

 Bus Stop

Service: 89
Route: Horsham - Princess Royal Hospital / Franklands
Frequency: 4 services per day (Monday, Wednesday, Friday)
2 services per day (Tuesday and Thursday)

Service: 2
Route: Balcombe - Handcross - Burgess Hill
Frequency: 1 service per day (Thursday)

Service: 273
Route: Crawley Bus Station - Brighton Old Steine
Frequency: 7 services per day (Monday-Friday)
6 service per day (Saturdays)



KEY:

Site Boundary



Existing shared footway /
cycleway between A272
and Bolney High Street

Cycleway route towards
Hickstead and Brighton



KEY:

 Site Boundary

Pedestrian/cycle access onto The Street

Potential pedestrian access through car park

Vehicle/pedestrian access onto A272 comprising:

- Priority junction arrangement
- 3.5m wide right-turn ghost island
- 5.5m wide access carriageway
- 2.0m wide footway on west side of access
- New uncontrolled pedestrian crossing to west of access
- 2.0m wide footway on north side of A272 to connect new crossing with puffin crossing