

Land east of Oxhey Lane, Carpenders Park: Sustainable Transport Improvements

Ref: PH/RW/ITL200107-009B TN
Date: 7 November 2025

SECTION 1 **Introduction**

- 1.1 Burlington Property Group proposes to develop Land east of Oxhey Lane, Carpenders Park to provide a residential development of 256 homes, housing with care and a children's home. A planning application was submitted to Three Rivers District Council (TRDC) for the proposal in July 2025 (*TRDC application reference: 25/1020/OUT*).
- 1.2 Hertfordshire County Council (HCC) as the local highway authority provided a response to the application dated 6 August 2025. i-Transport LLP subsequently provided a technical note (*report reference: ITL200107-006 TN*) addressing the matters raised which was submitted on 9 September 2025. HCC has since provided a response (to the technical note) dated 1 October 2025. Subsequently, there was a meeting between the Applicant, HCC and TRDC to discuss sustainable transport improvements on 20 October 2025.
- 1.3 This technical note clarifies the package of sustainable transport improvements that are proposed as part of the planning application, including elements that are proposed to be delivered by the Applicant (secured by Condition) and proposed contributions (secured through a s106 agreement). Specifically, it covers the improvements pedestrian and cycle facilities along with public transport improvements. It has been prepared to inform further discussions with HCC including its public transport officers.

SECTION 2 Sustainable Travel Opportunities

- 2.1 To provide context when assessing what are appropriate improvements and contributions a further review of how and where future residents of the site may travel has been undertaken. As set out in the Transport Assessment (Image 5.1) the most popular journey purpose is shopping which accounts for 27% of all journeys. There are numerous shopping opportunities within walking and cycling distance of the site in Carpenders Park and South Oxhey as demonstrated in the TA. There are also leisure, education and healthcare facilities located within walking and cycling distance (Table 3.3 of the TA) which account for up to 35% of journey purposes. Thus, active travel offers a genuine opportunity for up to 62% of journeys and improvements to existing connections would provide a substantial contribution to delivering the transport vision for the site. Further details on active travel improvements are set out in Section 3.
- 2.2 In addition, a wider range and higher order retail and leisure facilities are available in nearby Watford which is accessible by public transport. With a bus or rail journey taking around 20 minutes (See Table 2.1 below).
- 2.3 The second most popular journey purpose is commuting/business which accounts for 21% of journeys. To inform where sustainable travel improvements would be best focussed for employment journeys, a more detailed appraisal of the accessibility of the likely workplace destinations by sustainable modes for residents of Carpenders Park using 2011 Census Journey to Work has been undertaken.
- 2.4 Table 2.1 provides a summary of the proportion of journeys possible by each mode and journey times to each workplace destination.

Table 2.1: Likely Workplace Destinations (Three Rivers 010 MSOA)

Destination	Existing Employment Trips %	Journey Time			
		Accessible via walking	Accessible via cycling	Accessible by Overground ¹	Accessible by Bus ²
Greater London (excl. areas below)	18.4%	-	-	45-60 mins	-
Watford Central	12.5%	-	18 mins	19 mins	21 mins via 346
Harrow	11.0%	-	-	22 mins	-
Wembley	6.2%	-	-	31 mins	-
Ruislip	5.8%	-	-	60 mins (inc. one change)	-
Carpenders Park	4.8%	14 mins	6 mins	-	-
Bushey / Oxhey	4.7%	-	7 mins	17 mins	12 mins via 346
Watford West	4.5%	-	16 mins	-	-

Destination	Existing Employment Trips %	Journey Time			
		Accessible via walking	Accessible via cycling	Accessible by Overground ¹	Accessible by Bus ²
Rickmansworth	4.2%	-	-	1 hour (inc. one change)	-
South Oxhey	3.8%	16 mins	7 mins	-	-
Hendon	3.3%	-	-	65 mins (inc. one change)	-
Other East	3.1%	-	-	-	-
Hemel Hempstead	2.8%	-	-	42 mins (inc. one change)	-
Other West	2.5%	-	-	-	-
St Albans	2.4%	-	-	64 mins (inc. one change)	-
Other North	2.3%	-	-	-	-
Other South	2.2%	-	-	-	-
Watford North	2.2%	-	-	33 mins	-
Borehamwood	1.7%	-	-	-	-
Kings Langley	1.6%	-	-	40 mins (inc. one change)	-
Total	100%	9%	26%	76%	9%

Source: Consultant. Notes:

¹ Includes 14 minute walk to Carpenders Park Overground Station

² Includes 8 minute walk to Upper Hitch (By The Wood) Bus Stop

2.4.1 Table 2.1 shows that of the likely workplace destinations for existing and future residents of Carpenders Park, 76% of existing employment destinations are accessible using London Overground services from Carpenders Park. Around 9% of workplace destinations are accessible using bus services from Carpenders Park, all of which are also accessible by London Overground services.

2.4.2 Clearly, the majority of future trips from the site by public transport will therefore be made by London Overground.

2.4.3 In summary:

- 62% of journeys could be undertaken by active travel;
- 76% of employment destinations are accessible by London Overground Services;
- Necessary improvements to need to be considered in this context.

2.5 Bus Strategy

2.5.1 The HCC response (1 October 2025) identified potential improvements to bus services which may be required by way of Section 106 contributions. The HCC response states:

'HCC's public transport team propose a new service - to complement Service 328 - from South Oxhey to Watford, and extending it to the new site. This new service would operate from the site via A4008 and B4542 down to Prestwick Road, then via a variation of the current 328 route into Watford. There would be the option of extending this up to Watford Junction. An hourly service should be achievable with two vehicles, at an estimated annual cost of £350k.

HCC is therefore seeking an index-linked Strand 1 financial contribution of £350k per annum for a period of five years totalling £1,750k. This would need to be secured by a Section 106 agreement.'

2.5.2 At the subsequent meeting alternative options for bus service improvements were discussed and it was agreed that further details would be provided by the Applicant with a clear proposal being provided to HCC. It was agreed that any contribution would need to be commensurate with the scale of the development. Subsequently, HCC (via email dated 4 November 2025) have provided some further clarity on their suggested new service as follows:

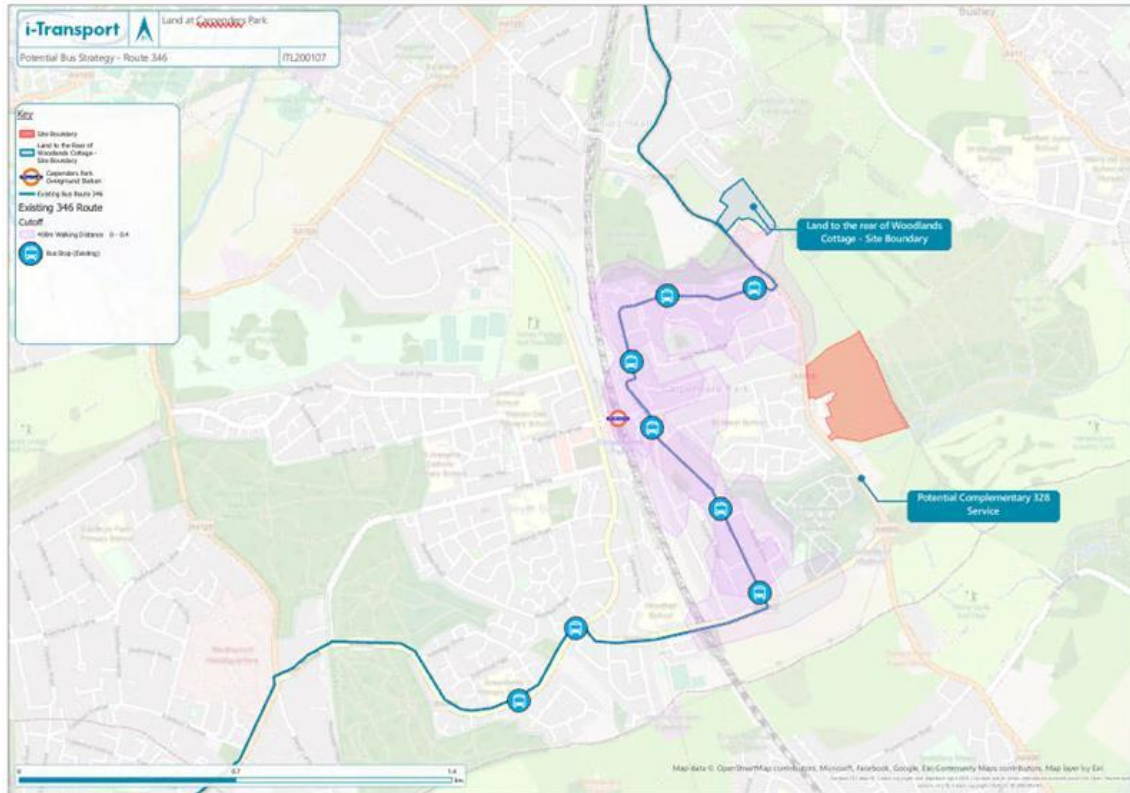
- The new service (328a) is envisaged to operate on a loop around Carpenders Park passing the site on Oxhey Lane;
- Details of a new timetable and hours of operation; and
- Refined contribution calculation allowing for revenue of £1,520,832.40.

2.5.3 Accordingly, alternative options are set out below with details on suitable contribution provided in Section 3.

Existing Bus Service

2.5.4 The existing 346 operates hourly throughout the day Monday to Saturday (07.00 to 18.00) with no evening or Sunday service. Figure 1 shows 400m bus catchment of existing 346 bus route, with circa 1,500 properties within Carpenders Park this walk distance of existing bus stops (estimated using Census 2021 output areas).

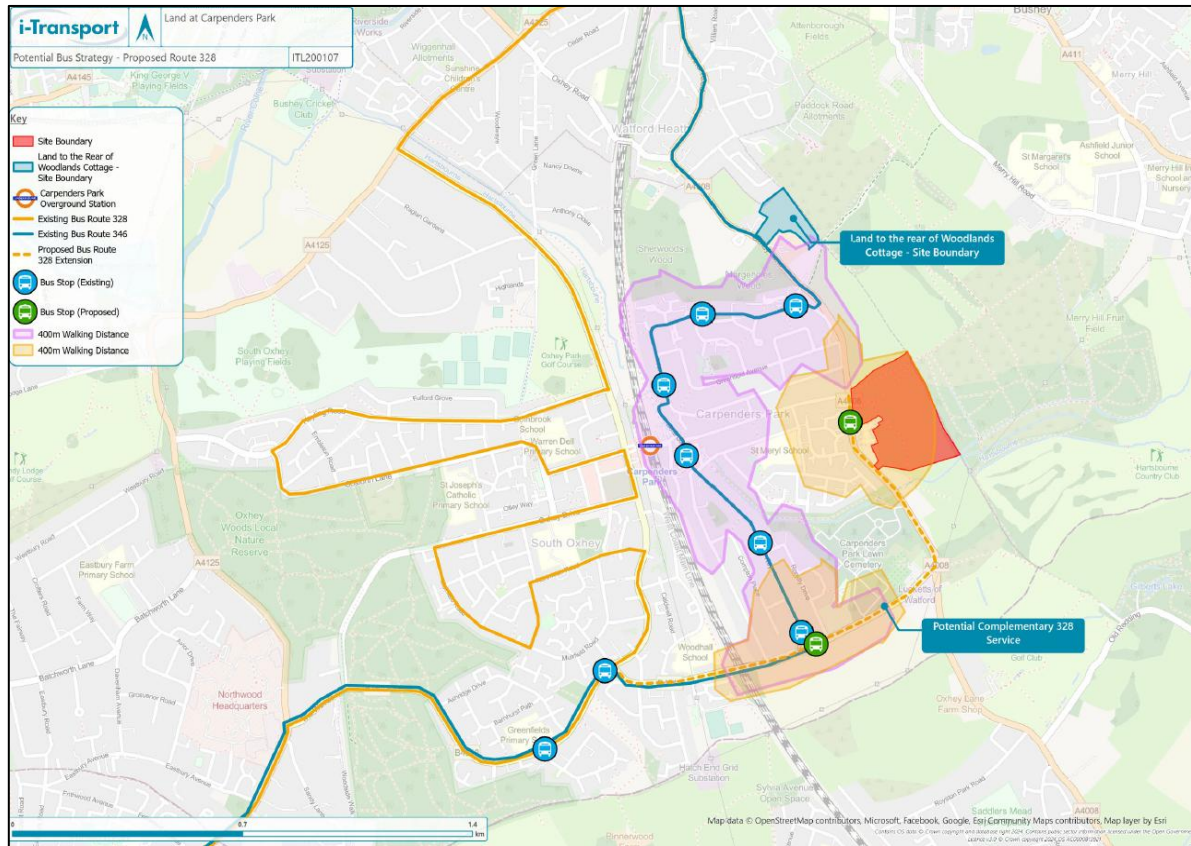
Figure 1: Existing 346 service (bus stop catchment)



Option A - 328 Service Improvements

- 2.5.5 The 328 service routes between Watford Junction and Watford High Street to Northwood, via South Oxhey. It currently operates an hourly service in both directions (06.00-20.00 Monday to Friday; 07.00-18.00 Saturday; 09.00-17.00 Sunday).
- 2.5.6 The HCC proposal would provide a new service to complement the 328 from South Oxhey to Watford, and extending it to the Site. This new service would operate on a loop through Carpenders Park past the site via A4008 and B4542 down to Prestwick Road, then via a variation of the current 328 route into Watford. It would complement the existing 328 timetable operating throughout into the early evening Monday to Friday with a reduced number of services on Saturdays, with no service on Sundays. Combined with the existing 328 it would therefore offer a half hourly service along much of its route to the benefit of existing residents of South Oxhey and Northwood.
- 2.5.7 The potential route in the vicinity of the site is shown in **Figure 2**, an extract of which is provided below. It shows a 400m bus catchment of additional 328 service (suggested by HCC). Within the Carpenders Park area (east of the railway line) the existing 346 and proposed 328 routes would serve circa 2,000 households (based on Census 2021) including 256 homes at the proposed development.

Figure 2: Potential complementary 328 service – (bus stop catchment)



2.5.8 This route would offer some benefit to existing and future residents of the Site for journeys to South Oxhey, although the majority of services in South Oxhey are within a ‘reasonable’ walking or cycling distance. Bus journey times to Watford High Street are likely to be around 35-40 minutes due to the indirect route through South Oxhey (this compares with a journey time of 21 minutes using the 346 service or 19 minutes via the Overground).

2.5.9 This option would require two new bus stops on Oxhey Lane.

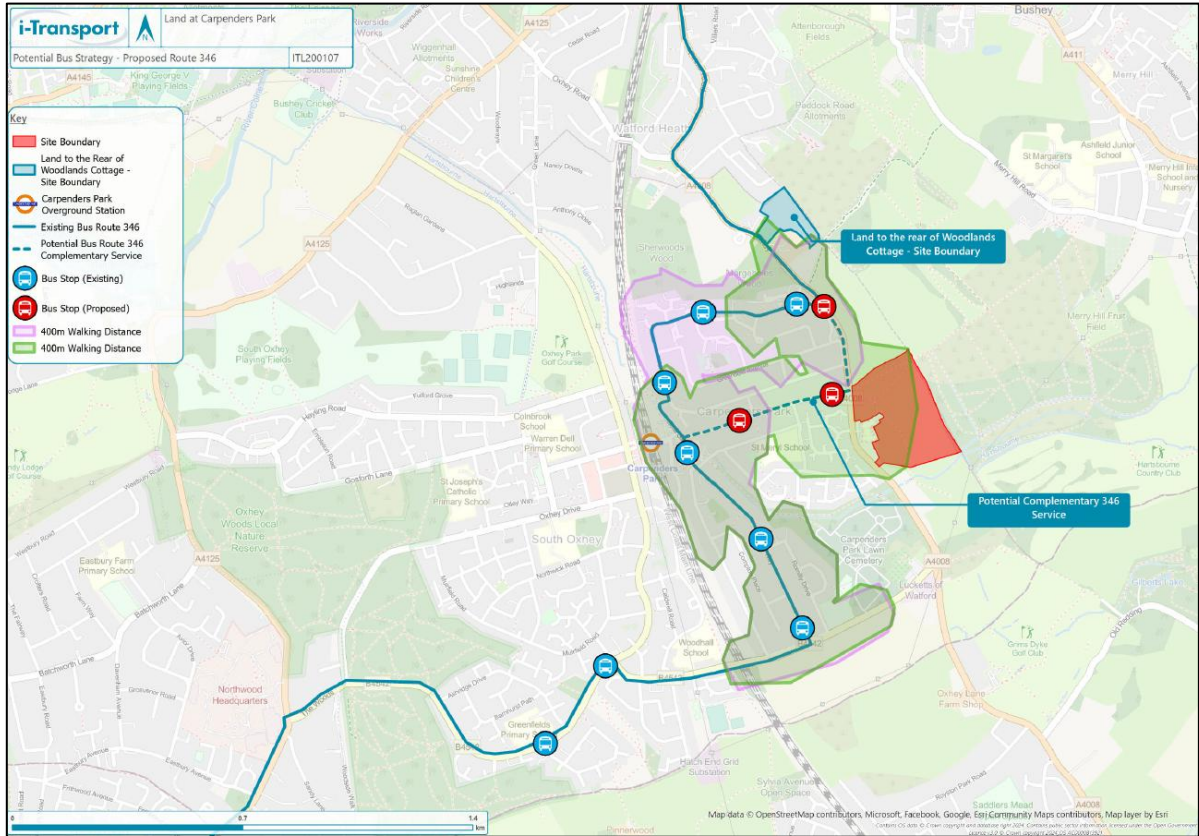
Option B (Alternative Option) - Revised 346 service

2.5.10 An alternative solution could therefore be to provide a revised 346 service. The 346 service currently routes between Watford High Street and Northwood routing through Carpenders Park via By The Wood, Delta Gain and Harrow Way.

2.5.11 A revised 346 service could route via Carpenders Avenue and the Site on Oxhey Lane, providing improved provision for Carpenders Park itself and future residents of the Site. It could provide an uplifted level of service extending services into the early evening Monday to Saturday and operating on Sundays, which would be of benefit to all residents along the route.

2.5.12 Figure 3 shows 400m bus catchment of potential revised 346 service (suggested by Applicant). This would cover around 2,136 households (estimated using Census 2021 output areas) including 256 homes at the proposed development.

Figure 3: Potential complementary 346 service (bus stop catchment)



2.5.13 Carpenders Avenue is wide (circa 7.3m) and generally straight and has direct access to the A4008, and should therefore be well suited to support a bus route. It also serves a large number of existing housing and would improve the bus catchment area compared to the existing route.

2.5.14 Three additional bus stops would be required to cater for this service change.

Option B (Variation) – 346 Service

2.5.15 A variation (similar to the 328 option) would be for an additional loop service running alongside the current 346 service. In this option, the 346 service at present would remain. This would be supplemented by additional hourly service between Watford and Carpenders Park, operating as a loop through Carpenders Park routing along Oxhey Lane past the site. This service could extend operations into the evenings and Sundays too.

Land to the Rear of Woodlands Cottage, Oxhey Lane

- 2.5.16 It is noted that a planning application has been submitted for 96 residential units at Land to the Rear of Woodlands Cottage (*TRDC ref: 25/1055/FUL*), located circa 1.0km north of the Site. This Site is also proposed to be accessed via Oxhey Lane, and is within 480m of southbound bus stops and 700m of a northbound bus stops for the 346 bus service (it is circa 1.7km walk from Carpenders Park Overground).
- 2.5.17 An extended 346 service would provide benefits for future residents of land to the rear of Woodlands Cottage and could therefore reasonably be supported by contributions from this development too.

Summary

- 2.5.18 The table below provides a summary comparison of the bus service options. The 328 would increase the catchment but does not offer an attractive alternative to the Overground and does not offer evening or Sunday services. The revised 346 Service would be more attractive to users and offer benefits to existing residents with evening and Sunday services, whilst offering a similar improvement to catchment.

Service	Catchment (households)	Journey Time to Watford (mins)		Evening Services	Sunday Services	New Bus Stops
		Bus	Overground			
346 Existing	1,500	21	19			0
328 Complementary	2,000	40	19			1
346 Revised/Extended	2,100	21	19			3
346 Variation	2,100	21	16			1

- 2.5.19 Further comment is set out in the following section.

SECTION 3 Improvements and Contributions

3.1 **Walking Improvements**

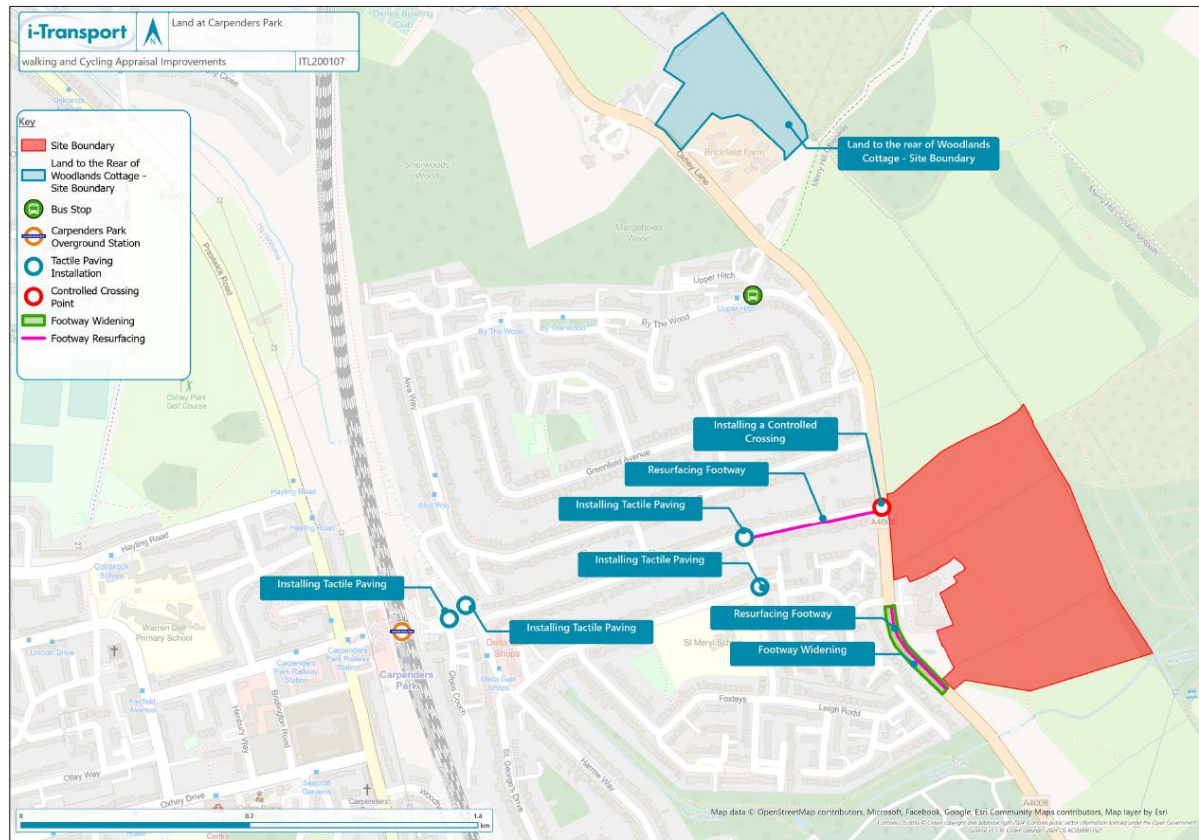
3.1.1 The first technical response note to HCC (*report reference: ITL200107-006*) included a walking and cycling appraisal which identified areas for improved provision across several routes that future users would utilise.

3.1.2 The Applicant is willing to deliver the following improvements to the walking and cycling network, if agreed by HCC.:

- Resurfacing and footway widening on Oxhey Lane south of the existing care home
- Installation of a controlled signalised crossing (to be delivered as part of the site access works) at Oxhey Lane / Carpenders Avenue. This may in turn support the provision of a future secondary school that may be allocated to the north of the site.
- Resurfacing of footway on Carpenders Avenue
- Installation of tactile paving at:
 - Carpenders Avenue / Foxleys junction
 - Foxleys / The Mead junction
 - Delta Gain / Gibbs Couch junction
 - Gibbs Couch near Carpenders Park Overground station

3.1.3 The location of these improvements are shown on Figure 4, an extract of which is provided overleaf.

Figure 4: Walking and Cycling Improvements



3.1.4 These improvements could be secured by an appropriately worded condition.

3.2 Cycling Improvements

Cycle Parking at Carpenders Park station

3.2.1 Walking times to Carpenders Park station from the site will be circa 14 minutes. Cycle times to the station would be around 6 minutes. At Carpenders Park station there is cycle parking provided on the South Oxhey side of the railway line in the form of a small shelter providing four Sheffield stands, and several unsheltered stands located in the public realm at South Oxhey local centre. There is however no cycle parking provided on the Carpenders Park side of the railway line. Therefore there is an opportunity to provide a cycle parking shelter on the Carpenders Park side of the station to further encourage cycling.

3.2.2 The station is accessed from the east side of the railway line from Gibbs Couch. There is currently unrestricted on-street parking on and around the station approach on Gibbs Couch. An island of hardstanding (encircled red on **Image 3.1** and shown in **Image 3.2**) in the middle of Gibbs Couch turning area is used for unrestricted car parking, although this is clearly not its original function.

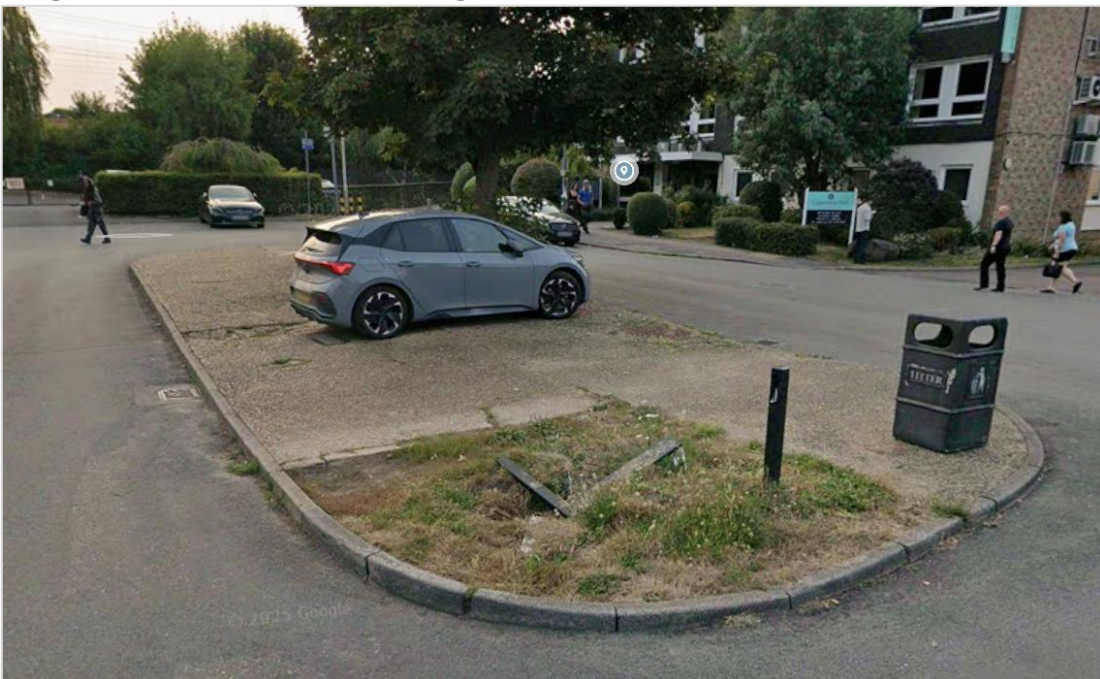
3.2.3 The island is circa 18m in length and 6m in width. A cycle parking shelter equipped with 5 Sheffield stands (10 spaces) could be provided on the hardstanding, alongside a dropped kerb for cyclists to manoeuvre. This would help prioritise active travel in this location and provide existing and future residents with a visible, overlooked and sheltered opportunity to park bicycles.

Image 3.1: Gibbs Couch car parking



Source: Google Maps

Image 3.2: Gibbs Couch hardstanding



Source: Google Maps

3.2.4 The Applicant is willing to deliver a cycle parking shelter in this location, secured by a suitably worded Condition.

Beryl Bike Contribution

3.2.5 A recent TRDC Committee Report recommends that the Beryl Bike scheme within Watford is expanded to South Oxhey / Carpenders Park, Rickmansworth and Leavesden. The total cost of the proposals are estimated at £138,000.

3.2.6 A CIL bid seeking £138,000 of Strategic CIL funding to provide 36 additional e-bikes and 13 new bays across these three areas has been submitted by TRDC / WBC / Beryl and is currently being assessed by Officers to be approved by the Committee.

3.2.7 A suitable location would be in Carpenders Park along the Delta Gain parade where shops and services are located along with the nearby station. This scheme would benefit all existing residents of Carpenders Park and South Oxhey which total around 7,500 households. A reasonable contribution towards this scheme would be £4,600 which based on the proportionate increase in the number of households.

3.2.8 Alongside this the Applicant is willing to provide a dedicated area within the site for up to 5 new bays. This could be secured by Condition.

3.3 Bus Contributions

Bus Services

3.3.1 HCC have suggested that a complementary 328 bus service would have an estimated annual cost of £350k and are seeking this for a period of five years totalling £1,750,000. This was subsequently refined to £1,520,832.40

3.3.2 Paragraph 58 of the National Planning Policy Framework (NPPF) states that:

'Planning obligations must only be sought where they meet all the following tests:

a) Necessary to make the development acceptable in planning terms'

b) Directly related to the development; and

c) Fairly and reasonably related in scale and kind to the development.

3.3.3 Contributions to any new bus services required to make the development acceptable in planning terms should therefore be proportionate to the scale of the proposed development.

- 3.3.4 The request for a contribution of £1.5m is unlikely to meet the above tests, particularly when the suggested complementary 328 service offers limited benefit to future residents of the site. With reference to the review of service improvements in Section 2 the main beneficiary would be existing residents of South Oxhey (3,223 households) and Northwood (4,757 households). Should this option be taken forward then a proportionate and reasonable contribution would be £48,000 or 3%¹ of the £1.5m required to fund the service.
- 3.3.5 A revised 346 service (as set out above) would offer more benefit to future residents of Land East of Oxhey Lane as well as those on Land to the rear of Woodlands Cottage. It would operate on a more direct route to Bushey and Watford with the benefit of an extended service. In addition there could be benefits for existing residents. The cost of a revised route and extended route would need to be confirmed with HCC's public transport officers but based on experience elsewhere it is estimated that to fund the changes an annual cost would be £160,000.
- 3.3.6 The 346 variation would have a similar cost of some £130,000 per year.
- 3.3.7 The development comprises a total of 256 homes of which 50% would be affordable. Any new or extended service would reasonably only commence once there is a suitable level of occupation to generate new demand. The expected build out of the development is around 3 years. Thus, a service which commenced 12 months following first occupation would provide the right balance between offering a service early in the development phase to encourage use and to generate a reasonable level of new demand. A contribution for 3 years would therefore provide a full 12 months of subsidy following full occupation. An agreement could be framed such that any revenue received during the the 3 years of subsidy is re-invested as an ongoing subsidy for the service. Thus, extending the funding.
- 3.3.8 Thus, suitable level of contribution would be between £390,000 and £480,000. This could be supplemented by contributions from other developments and/or HCC's Bus Service Improvement Plan funding. If further funding is not forthcoming it would be sufficient to fund the improvement for over three years (assuming no revenue clawback).

Bus Stop provision

- 3.3.9 The HCC response also states:

¹ 256 new homes equates to broadly 3% of existing 7980 households in South Oxhey and Northwood

'In addition, provision would be required for new bus stop infrastructure. HCC's public transport team has identified a need for a pair of new stops outside the site to support the potential new service and future proof the site. These would serve both new residents and the nearby care home. They suggest a location between the islands along Oxhey Lane to facilitate safe crossing. It would be useful if the applicant could look at their potential placement by way of a plan.'

3.3.10 The suggested locations for both the 328 and 346 service improvements are indicated on Figure 2 and 3. There would be the need for 2 sets of bus stops for the 328 and 1 set for the 346. The applicant is willing to accept a suitably worded Condition to secure the delivery of at least one set of appropriately specified bus stops. The specification set out in the HCC response requires further discussion particularly need for RTI screens when bus operators use QR codes and Apps to provide such information to passengers.

Bus stop improvements

3.3.11 The HCC response note set out that they would want the improvement of bus stops located on By The Wood which are served by the 328 bus service secured by Condition. Such improvements are not necessary with either bus service improvement option.

3.4 Summary of Package of Improvements

3.4.1 The Applicant is willing to help support and deliver the following package of improvements:







- 1 The works to walking and cycle infrastructure, including:
 - Resurfacing and footway widening on Oxhey Lane south of the existing care home
 - Installation of a controlled signalised crossing (to be delivered as part of the site access works) at Oxhey Lane / Carpenders Avenue (which may in turn support the provision of a future secondary school that may be allocated to the north of the site)
 - Resurfacing of footway on Carpenders Avenue
 - Installation of tactile paving at four junctions
- 2 Provision of a new cycle shelter and cycle parking near Carpenders Park Overground station;
- 3 Contribution (£4,600) towards the introduction of Beryl Bikes in the Carpenders Park / South Oxhey area and a dedicated parking bay in the development site;
- 4 Contributions towards a bus services of a proportionate scale with a choice of:
 - 328 complementary service - £48,000; or
 - 346 Revised Service - £390,000 – 480,000

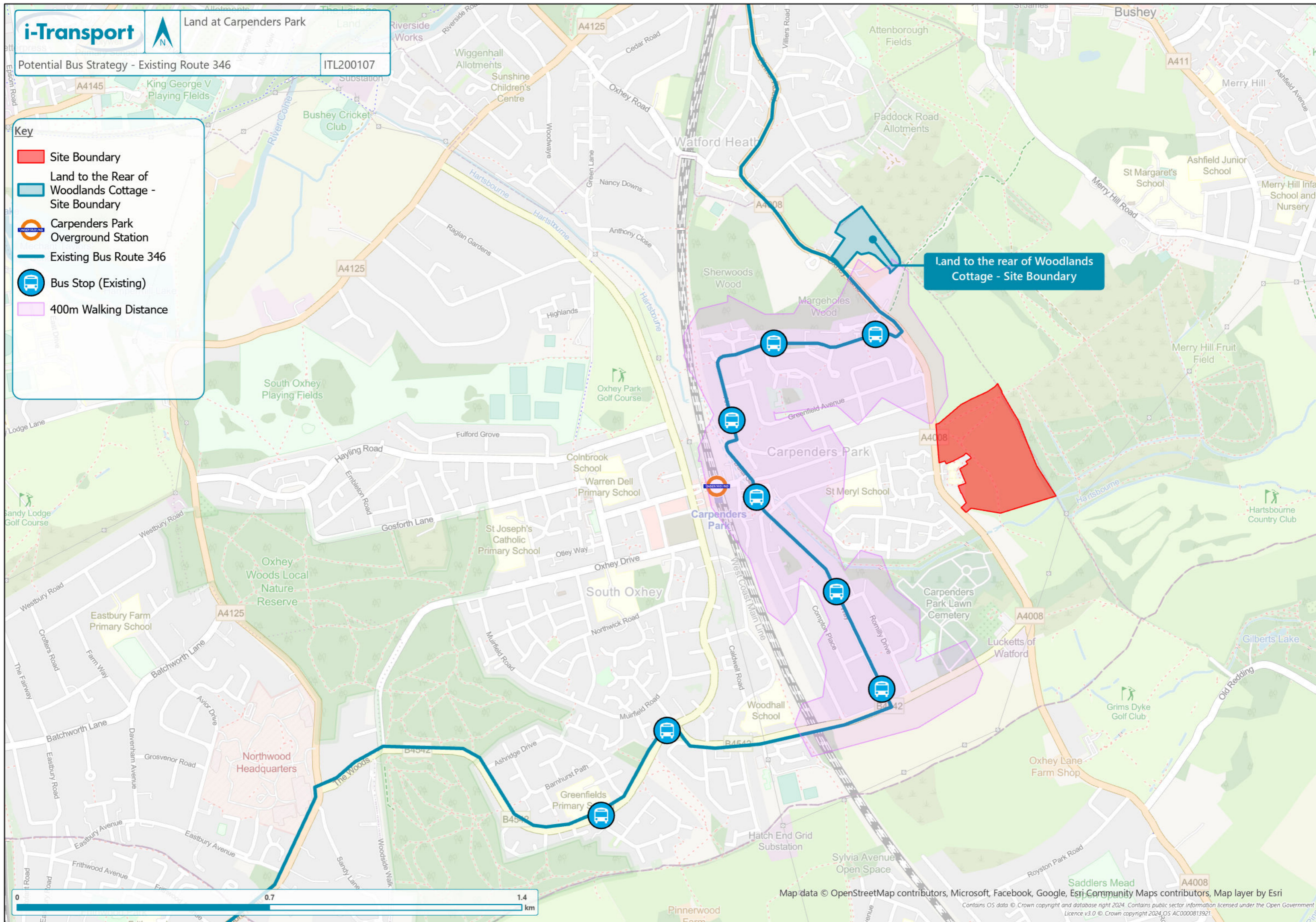
- 3.4.2 Secure the delivery of one set of new bus stops on Carpenders Avenue or Oxhey Lane.
- 3.4.3 Such a comprehensive package of improvements would substantially improve the accessibility of the site location prioritising sustainable modes of transport.

FIGURES



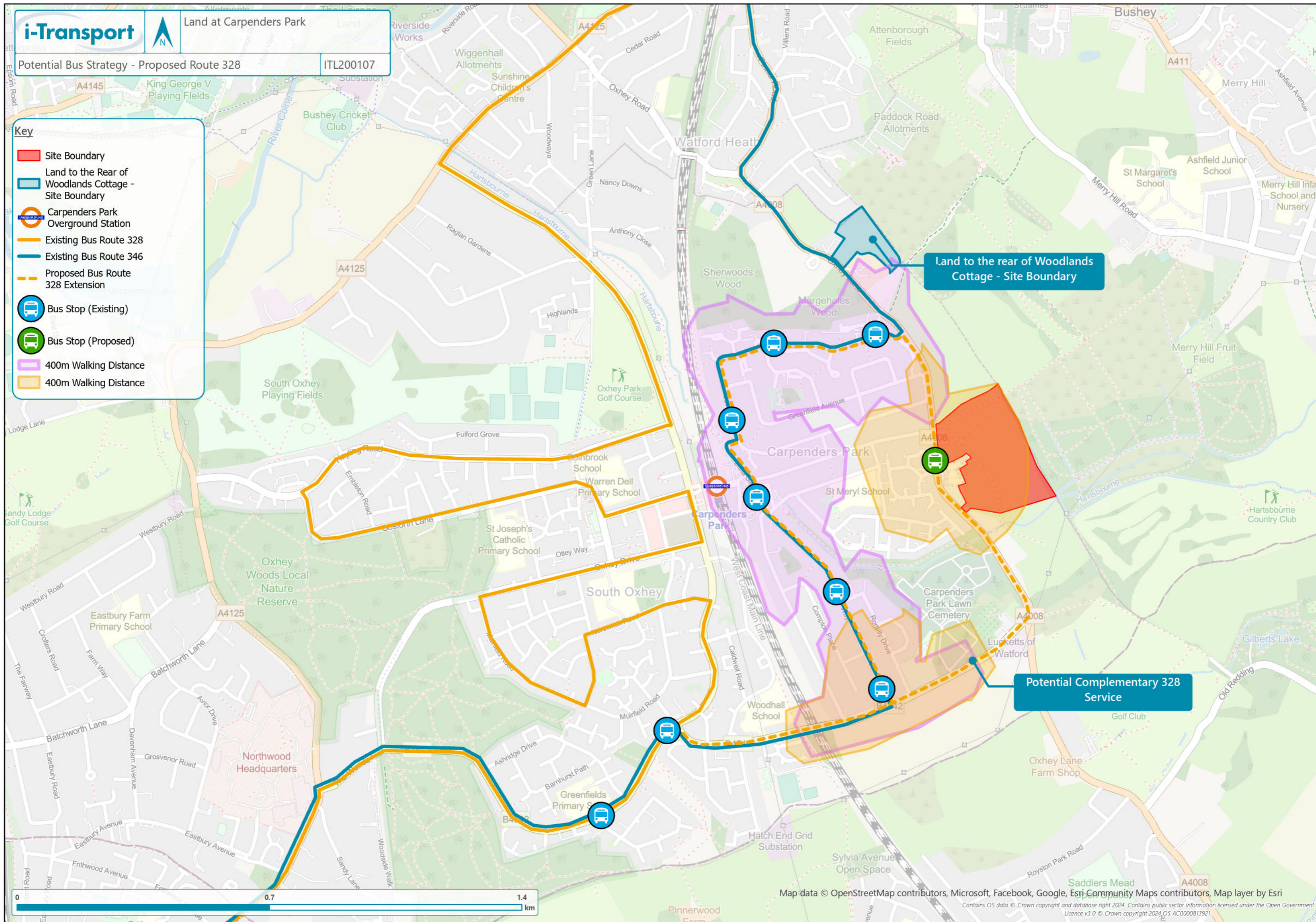
Key

-  Site Boundary
-  Land to the Rear of Woodlands Cottage - Site Boundary
-  Carpenders Park Overground Station
-  Existing Bus Route 346
-  Bus Stop (Existing)
-  400m Walking Distance



Key

- Site Boundary
- Land to the Rear of Woodlands Cottage - Site Boundary
- Carpenders Park Overground Station
- Existing Bus Route 328
- Existing Bus Route 346
- - - Proposed Bus Route 328 Extension
- Bus Stop (Existing)
- Bus Stop (Proposed)
- 400m Walking Distance
- 400m Walking Distance



Land to the rear of Woodlands Cottage - Site Boundary

Potential Complementary 328 Service

