LAND AT STATION HILL
BOTLEY, HAMPSHIRE

ACCESS AND TRANSPORT REPORT

PREPARED FOR

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NOTICE

This document and its contents have been prepared for and are intended solely for information and use of Foreman Homes Ltd in relation to an application for a proposed residential development on land at Station Hill in Botley, Hampshire.

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1 INTRODUCTION

Background

1.1 Condon Transport Ltd. have been appointed by Foreman Homes Ltd. (the Client) to prepare an access and transport report for the promotion of a proposed residential development, of circa 177 dwellings, on land to the east of the Station Hill in Botley near Hedge End, Hampshire.

1.2 The site is located to the east of the town of Botley, on land to the east of the A334 Station Hill and north of the A3051 Botley Road as shown in **Figure 1.1** below:

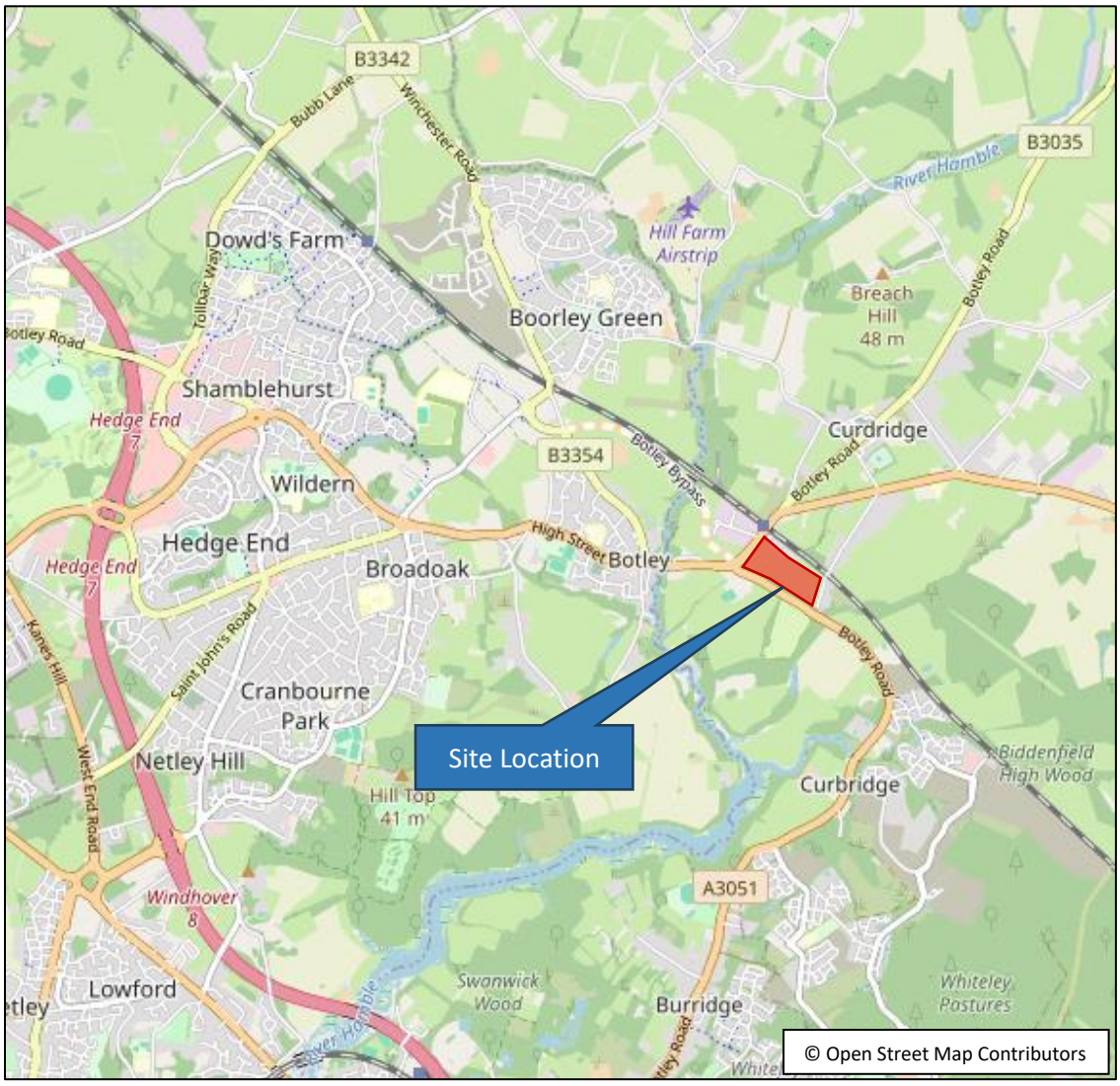


Figure 1.1: Site Location

1.3 This Access and Transport Report (ATR) has been prepared as a feasibility assessment to determine access opportunities and constraints for access to the site and considers the initial accessibility of the site by sustainable modes of travel.

1.4 This ATR has been prepared without any discussions with Hampshire County Council (HCC) as the local highway authority (LHA). It has been prepared without reference to existing up-to-date traffic survey data nor detailed topographical survey.

1.5 The structure of this report is summarised below:

- Section 2: Describes the existing conditions on the transportation network surrounding the development site;
- Section 3: Provides a summary of proposed highway improvements being implemented adjacent to the site by HCC;
- Section 4: Considers access options and a strategy to serve the site;
- Section 5: Calculates initial trip generation for the proposed development;
- Section 6 Identifies possible off-site improvements that could be provided by the site to facilitate access and movement by sustainable modes of travel;
- Section 7: Presents a summary of the report and identifies the main conclusions that can be drawn from the Transport Statement.

2 EXISTING CONDITIONS

Site Location

2.1 The location of the site in relation to the local transport network is described in this section. The site location in its local context is shown in **Figure 2.1** below:

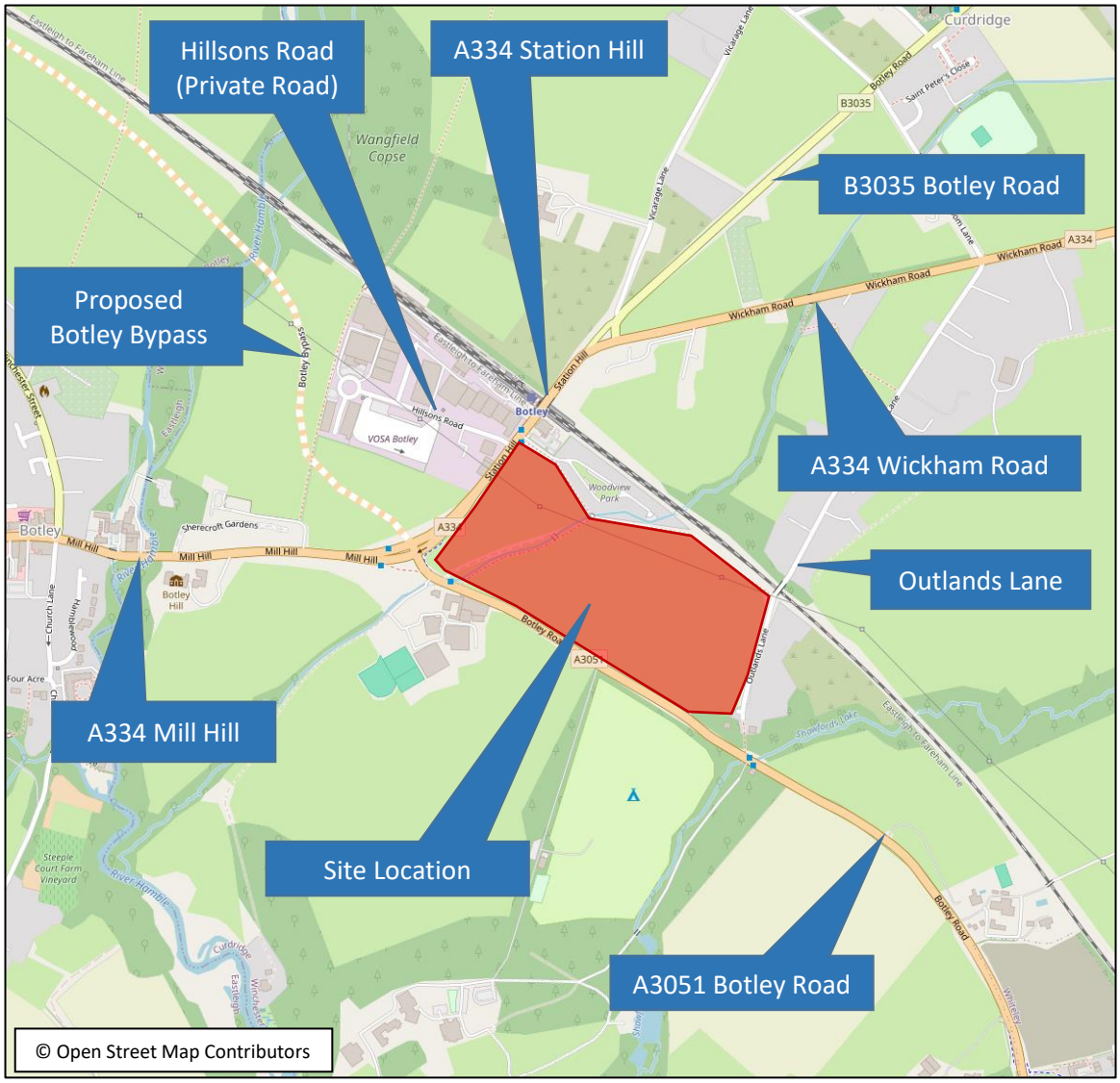


Figure 2.1: Site Location in Local Context

Local Highway Network

2.2 The A334 is a major A-road providing a vital connection through Hampshire. It connects with Junction 7 of the M27 to the west of Hedge End to the A32 to the east of Wickham.

2.3 In the vicinity of the site, Station Hill is a single carriageway road and is subject to a 40mph speed limit. It benefits from street lighting along the site frontage.

2.4 There is a shared footway/cycleway running along the western side of the road but there is no footway provision on the eastern side along the site frontage. To the west of its junction with the A3051 Botley Road, a footway is provided only on the northern side of the carriageway into Botley.

2.5 On the western side of the road are a number of accesses to various businesses included a petrol filling station (PFS) with convenience store. These crossings are typically vehicle crossovers.

2.6 Also on the western side of Station Hill is Hillsons Road which is a private road which serves the Bottings Industrial Estate.

2.7 **Figure 2.2** below shows the typical view along Station Hill looking north:

Figure 2.2: A334 Station Hill (Looking North)

2.8 To the south of the site is the A3051 Botley Road, which is another significant A-road catering for both local and through traffic. It links Botley with the towns of Swanwick and Locks Heath to the south of the site.

2.9 Similar to Station Hill, Botley Road is a single carriageway road subject to a 40mph speed limit. There are a number a commercial uses on the southern side of the road which take access from Botley Hill. These accesses are typically vehicle crossovers.

2.10 Whilst the main carriageway does not benefit from street lighting, there is a segregated footway/cycleway running along part of the site frontage, for circa 200m from the junction with Station Hill. This segregated footway/cycleway does benefit from its own street lighting.

2.11 The footway/cycleway transitions to the southern side of Botley Road via an uncontrolled crossing. The shared facility continues eastwards along the southern side of the road as far as Whitley Way in Curbridge around 1.0km south east of the site.

2.12 There is also a narrow footway on the southern side of Botley Road.

2.13 A typical view of Botley Road looking west is shown in **Figure 2.3** below:

Figure 2.3: A3051 Botley Road (Looking West)

2.14 The existing junction between the A334 Station Hill and the A3051 Botley Road is a part-dualled priority T-junction arrangement as shown in **Figure 2.4** below:

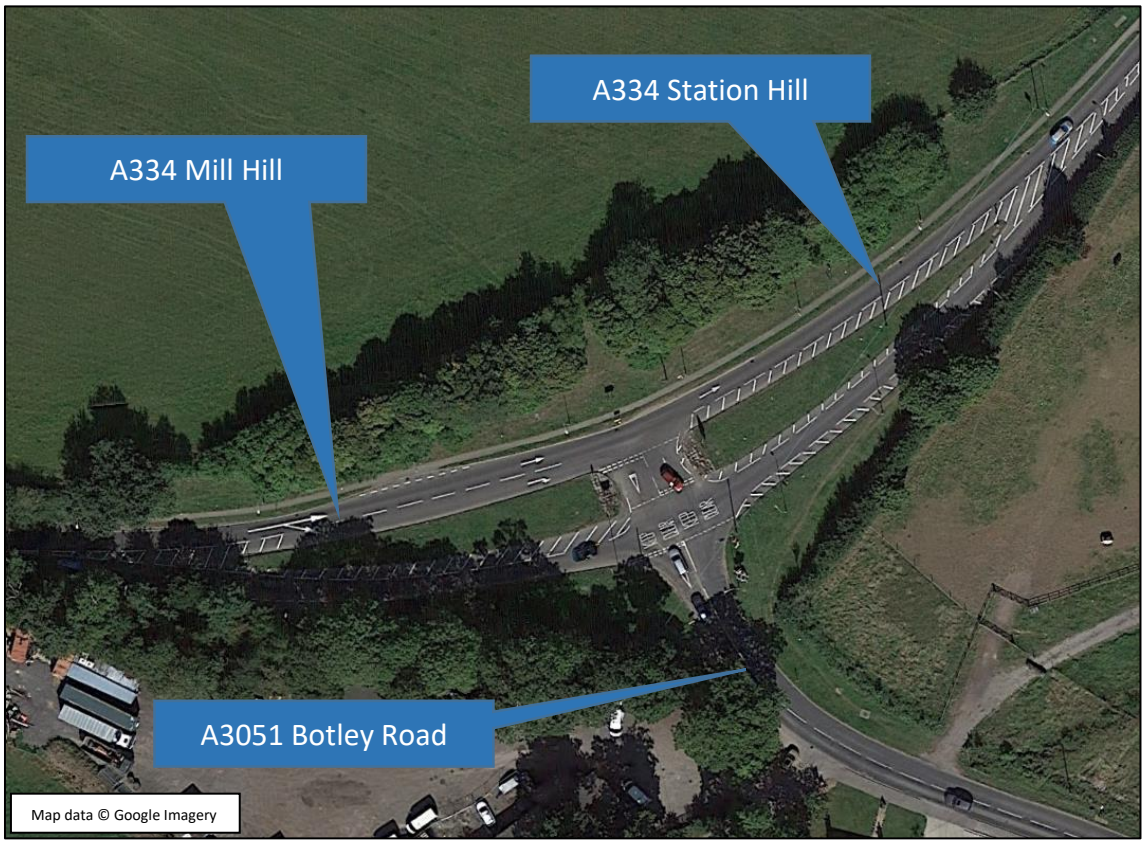


Figure 2.4: Aerial View of A334 and A3051 Junction.

2.15 The junction arrangement provides a right-turn lane from Mill Hill into Botley Road. The dualling arrangement also allows vehicles a central area to wait, thus only traversing one lane of traffic at a time whilst turning. On-site observations noted vehicles queuing to exit Botley Road onto the A344. These were off-peak traffic conditions so it is anticipated that greater queues and delays would be experienced at peak times.

2.16 To the west of the junction, the A334 become Mill Hill and continues westwards through Botley town centre and on to Hedge End.

Extents of Adopted Highway

2.17 Both the A334 and the A3051 are Highway Maintainable at Public Expense (HMPE), otherwise known as Adopted Highway. Plans showing the extent of the adopted highway have been obtained from HCC and are included in **Appendix A**.

Base Traffic Flows

2.18 There are no up-to-date traffic surveys available at the time of writing. However, a review of Road Traffic Statistics website (Click Here) shows one Census Point on Station Hill (ID: 16890). Traffic data for this Census Point covers the years 2000 to 2017. The Annual Average Daily Traffic (AADT) flows for this time period are show in **Figure 2.5** below:

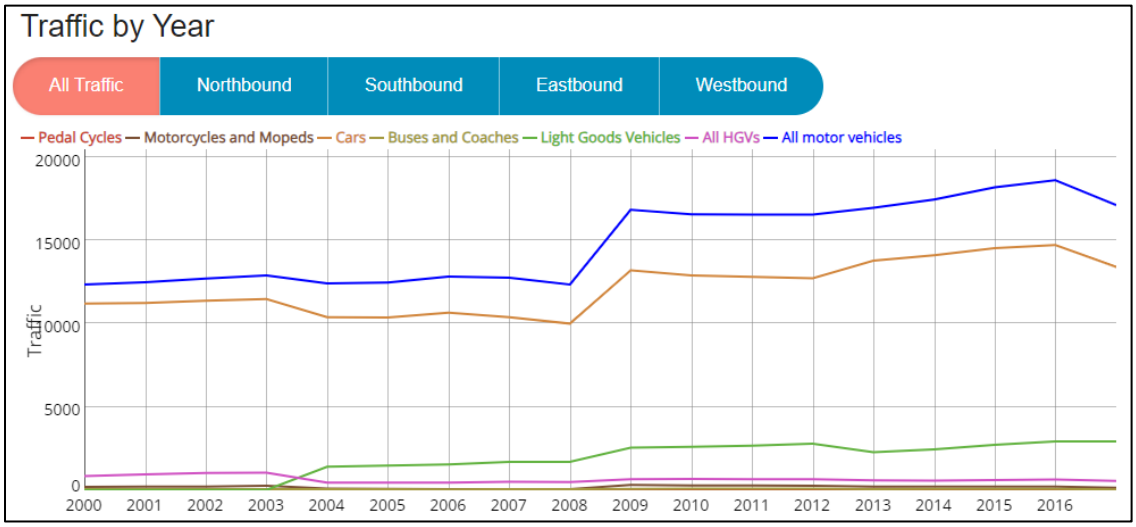


Figure 2.5: 2000 to 2017 AADT for the A334 Botley Hill

2.19 **Figure 2.5** shows that from 2015, AADTs along the Station Hill is the region of between 16,000 and 18,000 vehicles per day.

2.20 The nearest Census Point (ID: 27629)on the A3051 is located around 3.0km south of the site within Swanwick. The AADTs from 2000 to 2017 are shown in **Figure 2.6** below:

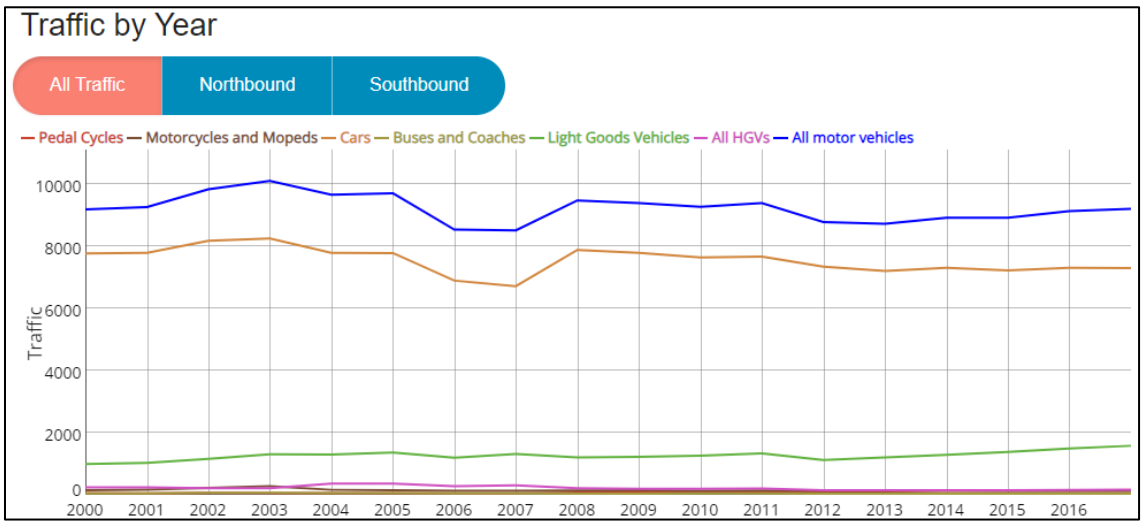


Figure 2.6: 2000 to 2017 AADT for the A3051

2.21 The AADTs in **Figure 2.6** show that there is in the region of between 9,000 and 10,000 vehicles per day using the A3051.

2.22 Whilst the above traffic data is useful and gives an indication of existing traffic volumes surrounding the site, it is somewhat dated, and in relation to the A3051, is also quite remote from the site. It is therefore suggested that up-to-date traffic data is either obtained from HCC or site-specific traffic surveys undertaken on the local roads as part of any future assessments.

Public Rights of Way

2.23 There are three Public Rights of Way (PRoW) which cross the site as show in **Figure 2.7** below:

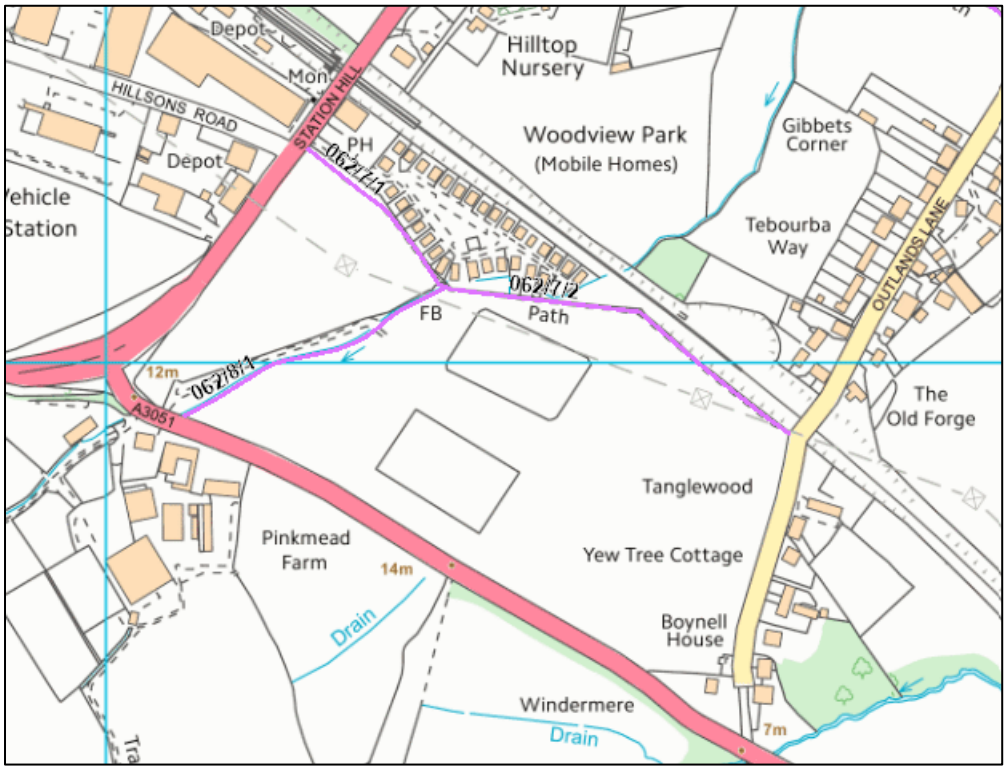


Figure 2.7: Existing Public Rights of Way

2.24 These PRoW are all public footpaths, route numbers: 062/7/1, 062/7/2, and 062/8/1. PRoW 062/7/1 & 2 provide a link from Station Hill to Outlands Lane along the northern boundary of the site. PRoW 062/8/1 provides a link from Botley Road to the other PRoW along the northern boundary.

2.25 These PRoW will have to be retained as part of any development proposals.

3 PROPOSED BOTLEY BYPASS PHASE 3

3.1 The Botley Bypass is a proposed infrastructure project designed to alleviate traffic congestion in the village of Botley. The primary objective of the bypass is to provide a more direct route for traffic, reducing the volume of vehicles passing through the village centre, thereby improving safety, reducing noise and air pollution, and enhancing the quality of life for local residents.

3.2 Phase 3 links Winchester Street to the A334 as shown in **Figure 3.1** below:

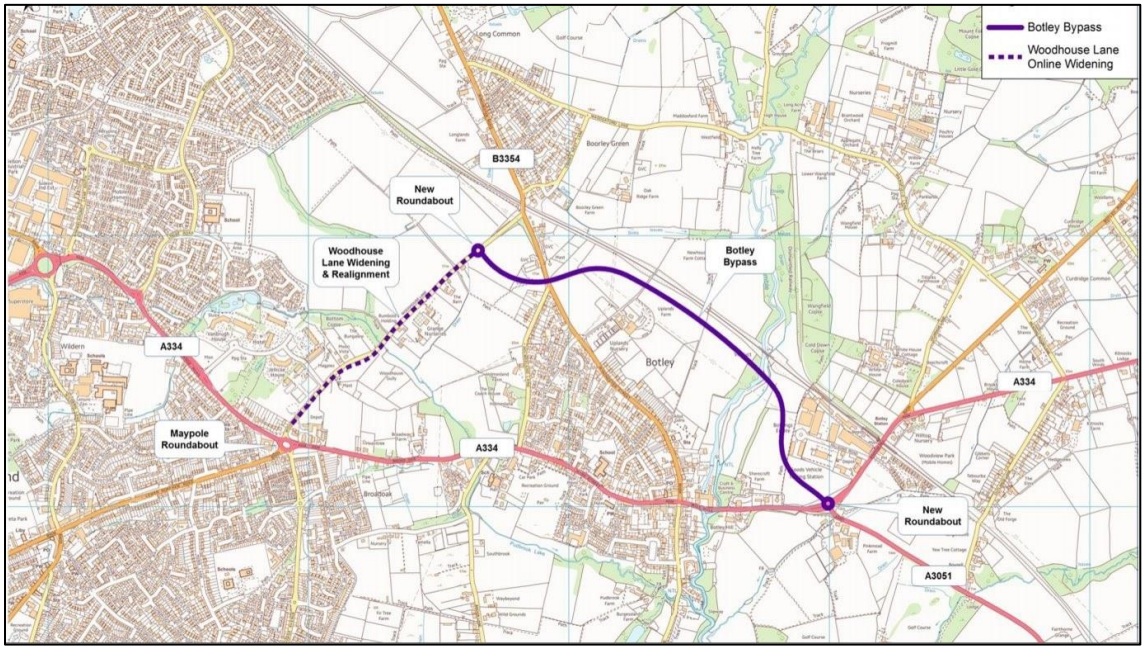


Figure3.1: Route of Botley Bypass

3.3 The scheme includes a proposed roundabout at the junction between the A334 Station Hill and the A3051 Botley Road. The full plans are included in **Appendix B** with an extract included in **Figure 3.2** overleaf.

3.4 The latest update from the HCC website (click here), dated May 2024 note:

"The design for the eastern section of the Botley Bypass is progressing well, but there are a number of technical challenges that have emerged during the very detailed site/ground investigation phase, particularly with regard to the design of the foundations for the new bridge that will span across the River Hamble. We are continuing to work closely with specialist engineers, other agencies and key

stakeholders to address these, but this extra work has caused an unavoidable delay to the delivery of this final phase of the scheme.

Milestone Infrastructure Ltd have been awarded the contract for the bypass and they are currently developing a target-cost (price) which reflects the required design solution to overcome the engineering difficulties. Progression into construction will be subject to the County Council's agreement of the contract price and a full assessment of affordability. A final decision is expected during the Summer and, if approved, it is anticipated that work on the bypass will start in Spring 2025."

3.5 Based on the latest update from HCC, the detailed design of the bypass has not been finalised. Although this is due to be completed soon and works commence in 2025.

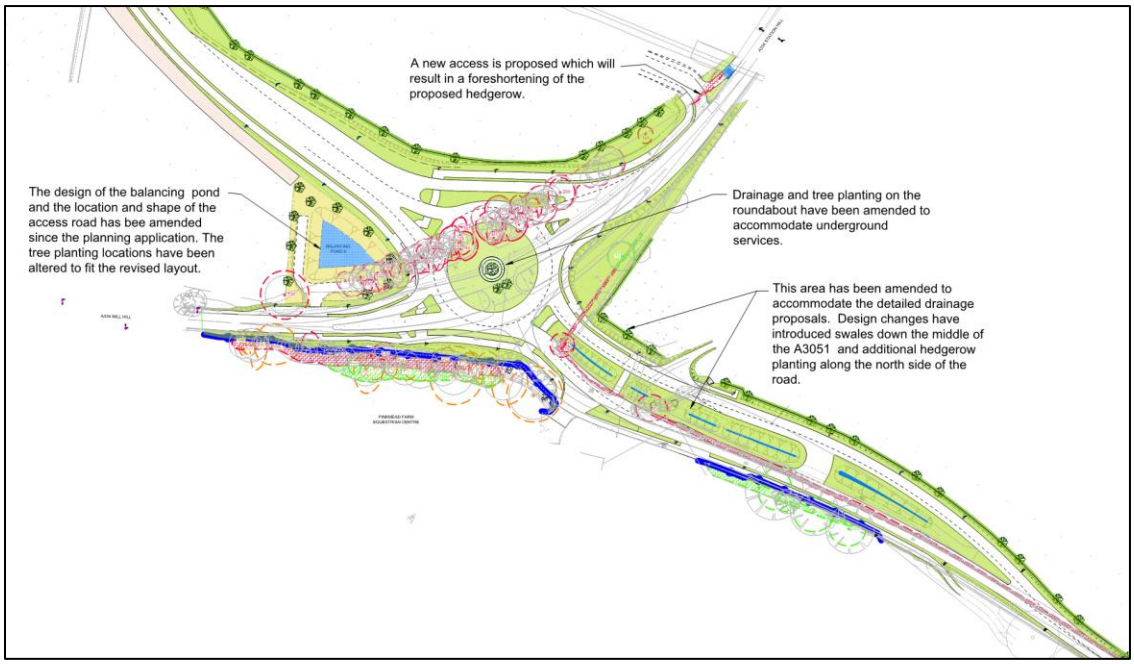


Figure 3.2: Proposed A334/A3051 Roundabout

3.6 **Figure 3.2** shows a proposed four-arm standard roundabout at the junction between Station Hill and Botley Road.

3.7 It is noted that the Botley Road approach is dualled, with a proposed drainage scheme located within the central reservation. To accommodate access to the existing commercial properties on the

southern side of Botley Hill, it appears as though a right-turn/U-turn lane is being provided within the central reservation.

3.8 The proposed scheme would result in the loss of the existing footway/cycleway on the northern side of Botley Road along the site frontage. This will be replaced on the southern side of Botley Road, providing a continuous off-road walking and cycling link from the A334 to Curbridge.

4 PROPOSED DEVELOPMENT AND ACCESS STRATEGY

Proposed Development

4.1 Plans for the proposed development are at a very early stage. However, given the size of the development site, it is envisaged that the site could yield up to circa 177 dwellings.

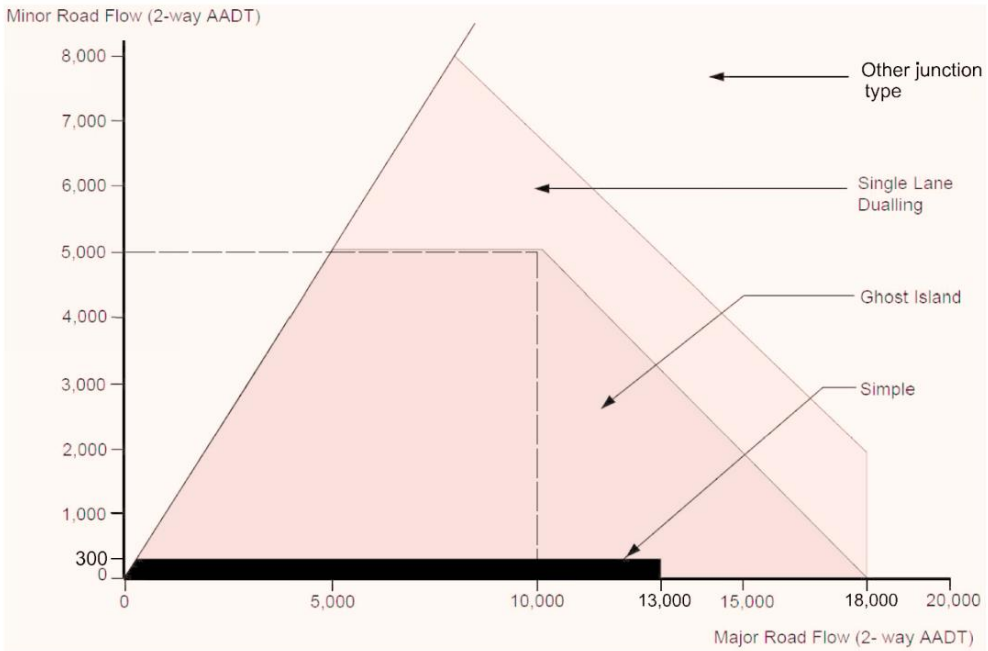
Proposed Access Strategy

4.2 Prior to Manual for Streets (MfS), developments of up to 300 dwellings could be served from a single point of access, however, an internal road loop would be required to prevent a system of long culs-de-sac being designed and constructed.

4.3 Conversely, MfS is less prescriptive than its predecessors in that it does not provide an upper limit of the quantum of development from a single point of access. However, it does recognise that each development should be assessed based on its own merits with consideration given to emergency access and response times from the emergency services.

4.4 HCC have prepared a number of Technical Guidance Notes (TGs) to aid designers with the design of roads within Hampshire. For higher trafficked roads, HCC makes reference to Figure 2.3.1 of CD123 of the Design Manual for Roads and Bridges, which is shown below:

Figure 2.3.1 Approximate priority junction provision on single carriageway roads based on flows only



Type of Junction for A334 Station Hill

4.5 As noted in Section 2, as of 2017, the AADTs on Station Hill are in the region 17,000 vehicles per day. Regardless of the number of trips exiting the site at an access on Station Hill, a ghost island T-junction (i.e. a junction with right turn lane from Station Hill) is the minimum junction requirement to access the site in this location.

4.6 Given the number of commercial accesses on the opposite side of Station Hill, the provision of a right turn lane would result in vehicle conflict between right-turning vehicle into the proposed development site, and vehicles wanting to turn right into the existing commercial accesses. This would be an unacceptable highway safety risk.

4.7 What is more, the provision of a ghost island junction would require the carriageway to be widened to circa 10m width. There would also be requirements for footways/cycleways which would require additional width. This widening would result in the loss of the majority of the existing hedgerow along the western boundary of the site.

4.8 For these reasons a full vehicular access from Station Hill is not considered any further.

Type of Junction for A3051 Botley Road

4.9 Taking a similar approach to a Station Hill access, the AADT along Botley Road is in the region of 10,000 vehicles per day. As a full vehicular access from Station Hill does not seem feasible, all development trips are likely to use the proposed main access from Botley Road. For a development of up to 280 dwellings, this could be in the region of 1,200 to 1,300 vehicles per day (Refer to Section 5). Based on Figure 2.3.1 of CD123, as a minimum, a ghost island T-junction would be required to serve the site.

Other Access Potential Options

4.10 In addition to the main access from Botley Road, other potential secondary accesses, with turning restrictions, may be provide elsewhere to serve the site. These would be limited to left-in and left-out arrangements to avoid right-turn conflicts on the main roads. One could be located on the Station Hill, although the visibility splay requirements could result in the loss of a significant section of hedgerow which may outweigh the benefits of the access.

4.11 The other access could be located on Botley Road on the proposed dualled section of carriageway. This access could benefit from the proposed U-turn lane being provided to serve the existing commercial properties on the southern side of Botley Hill.

4.12 Pedestrian and potentially cycle accesses can be provided to coincide with the existing PRoW access points through the site. This will increase permeability of the site by walking and cycling.

4.13 However, the access to 062/7/1 will need consideration to provide a safe access and crossing point on Botley Road. At present, the PRoW terminates at the junction between Station Hill and Woodview Park private road as shown in **Figure 4.1** below:

Figure 4.1: Public Footpath 062/7/1 Access Point from Station Hill

Access Strategy

4.14 Based on the above information a proposed access strategy is show in **Figure 4.2** :

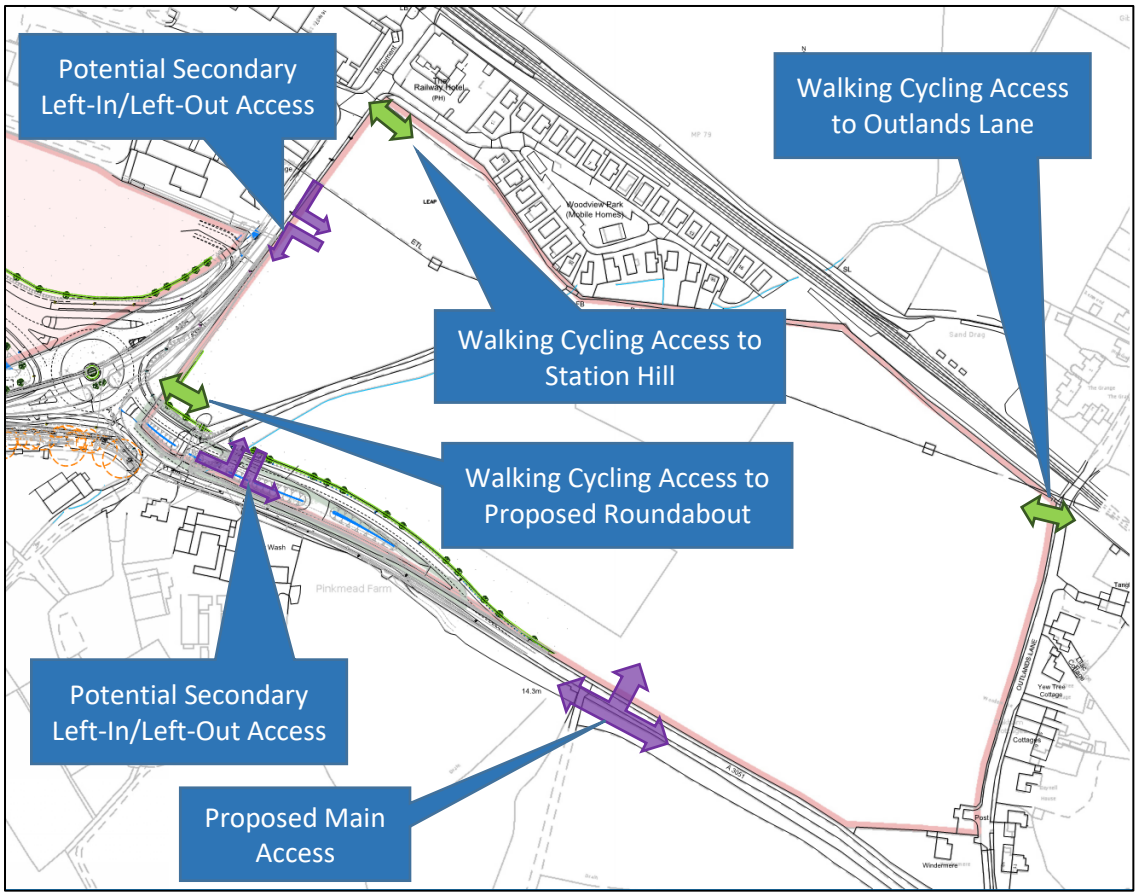


Figure 4.2: Preliminary Access Strategy

4.15 The potential secondary accesses are subject to requirements. Any left-in/left-out access from Station Hill cannot operate in isolation and will require a full vehicular internal link to the proposed main access on Botley Road.

4.16 A potential secondary access from Botley Road near the proposed roundabout is not essential but may help distribute development trips across two access points.

4.17 A preliminary main site access arrangement is shown in Drawing 24012-001 included in **Appendix C** with an extract included in **Figure 4.3**

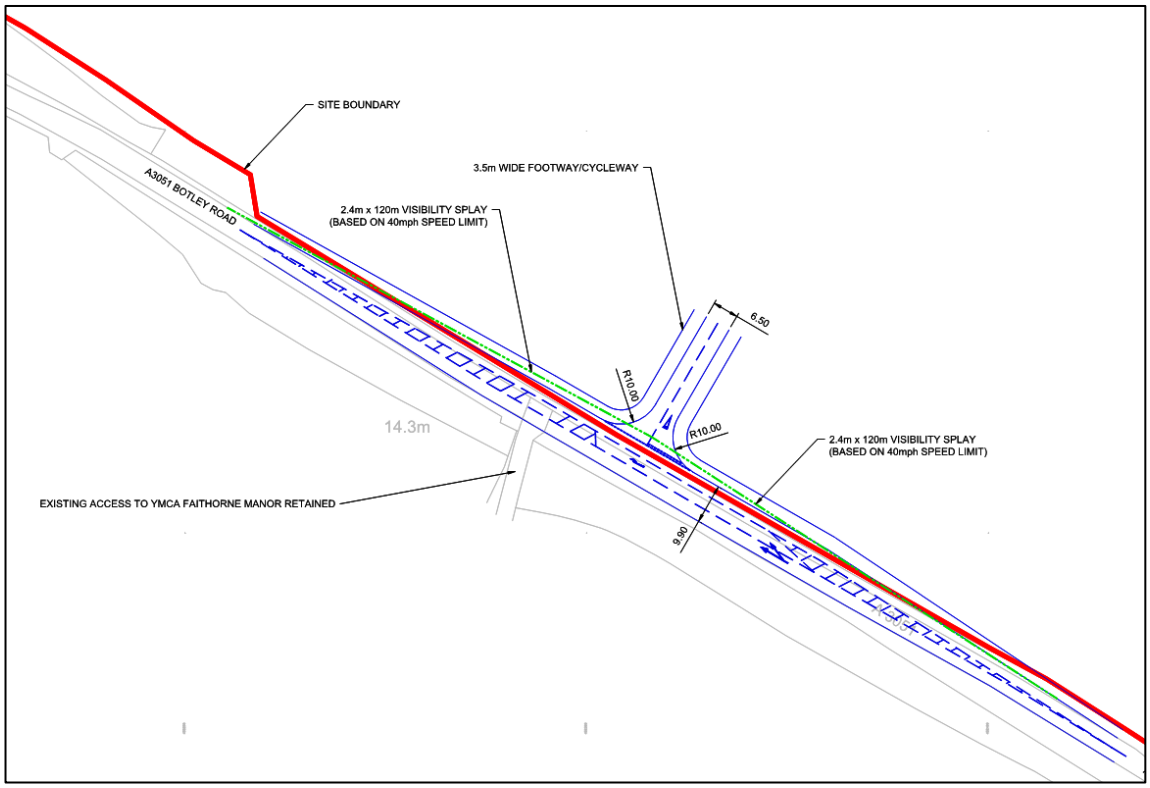


Figure 4.3: Preliminary Site Access (NTS)

4.18 The main design points are listed below:

- Design Speed: 70kph;
- Major Carriageway Width: 9.9m (3 x 3.3m wide lanes)
- Minor Carriageway Width: 6.5m
- Junction Radii: 10m
- Visibility Splays: 2.4m x 120m (based on 40mph speed limit)

4.19 Based on the information available, a proposed ghost island T-junction arrangement should be able to serve the development, however, this will need to be confirmed through further junction modelling assessments with up-to-date traffic data.

4.20 Alternative arrangements could include either a standard roundabout arrangement or a signalised junction. These would also be subject to further junction modelling assessment with up-to-date traffic data.

5 TRIP GENERATION

5.1 The TRICS database was examined for privately owned residential sites within Great Britain, but excluding Greater London and Ireland, with the number of units ranging from 150 to 400 units. The location types of the sites were limited to Edge of Town. The date range was set to only include weekday surveys post 2016 for sites with an active Travel Plan. The residential population within a one-mile radius was restricted to less than 20,000 and within a five-mile radius to less than 100,000. These principles would replicate similar site locations while retaining sufficient survey sites to provide representative average trip values.

5.2 The TRICS assessment identified 29 sites which are believed to be an appropriate equivalent to the Botley development proposals and have therefore been used in assessing the likely post development traffic flows.

5.3 The average trip rates generated from the above are identified in **Table 5.1** below with the TRICS output being attached as **Appendix D**.

	Morning Peak Hour (08:00 – 09:00)		Evening Peak Hour (17:00 – 18:00)		Daily
	Arrivals	Deps	Arrivals	Deps	Two-Way
Trip Rate per Dwelling	0.136	0.369	0.326	0.163	4.41
177 Dwellings	24	65	58	28	780

Table 5.1: Vehicle Trip Rates and Generation

5.4 The above Table demonstrates that the proposed residential dwellings will generate approximately 89 two-way vehicle movements in the AM peak hour, 86 two-way vehicle movements in the PM peak hour and 780 two-way vehicle movements across a 12-hour day.

5.5 Clearly the number of vehicle movements associated with the development proposals are significant and would result in wider impact assessments on the wider highway network. The extent of this assessment would be agreed with HCC as part of any pre-application discussions and presented as part of a formal Transport Assessment (TA) to support any future planning application.

6 ACCESSIBILITY OF THE SITE

Introduction

6.1 The National Planning Policy Framework (NPPF) sets out the government's planning policies for England and how these are expected to be applied. It emphasises the importance of sustainable development, including the promotion of sustainable transport. Key points include:

- **Promoting Sustainable Transport**: Plans should provide for high-quality walking and cycling networks and supporting facilities such as secure cycle parking.
- **Reducing the Need to Travel**: Developments should be located and designed to reduce the need to travel, particularly by car, and to encourage sustainable transport modes.

6.2 These broad policies filter down to local policies, such as Local Transport Plans and Local Development Plans.

6.3 Typically, all major developments need to demonstrate the promotion of sustainable transport and also reducing the need to travel by car. A development of the scale proposed at Station Hill would need to be supported by a full TA which will include a full assessment of accessibility by sustainable modes of travel. Nevertheless, a brief review of sustainable travel options is provided in the remainder of this section.

Chartered Institution of Highways and Transportation Pedestrian Accessibility

6.4 Acceptable walking distances will vary considerably depending on various factors such as fitness and land topography. Guidelines by the Chartered Institution of Highways and Transportation (CIHT) state the acceptability of distances in metres to various attractions is as follows:

Destination	Desirable	Acceptable	Preferred Maximum
Commuting / School / Sight-seeing (m)	500m (6 minutes)	1,000m (12 minutes)	2,000m (25 minutes)
Elsewhere (m)	400m (5 minutes)	800m (10 minutes)	1,200m (15 minutes)

Table 6.1: Suggested Acceptable Walking Distance

6.5 As shown in **Figure 6.1**, and based on a walking speed of 1.4 m/sec or just over 5.0 km/h, the following facilities, and the town centre, shown in **Table 6.2** below are within a 20-minute walk from the centre of the site, which is well within the acceptable walking distance:

Service / Facility	Walking Distance (Walking Time)
Station Hill Bus Stop	350m (5 minutes)
Botley Railway Station	450m (7 minutes)
The Railway Inn	450m (7 minutes)
High Street (Town Centre)	1,000m (13 minutes)
Botley CoE Primary School	1200m (17 minutes)
Botley Health Care Centre	1300m (18 minutes)

Table 6.2: Walking Distances to and from the Proposed Development Site

Figure 6.1: Local Facilities Plan

6.6 The town centre contains many key day-to-day services such as banks, post office, health centre, pharmacies, and other non-food retail.

6.7 There are bus stops within a reasonable walk of the site that provide regular bus services to other nearby towns and cities such as Hedge End and Fareham.

6.8 The walking routes to the Town Centre and Botley CoE Primary School would be Mill Hill and High Street.

6.9 A barrier to walking is crossing the A334, either at Station Hill or Mill Hill. Consideration should be given to the provision of a controlled pedestrian crossings, such as a puffin or toucan crossing, on either or both of these roads, to enable safe crossing for future residents.

7 SUMMARY AND CONCLUSION

7.1 In summary, this report has demonstrated the following:

- The site is located on the eastern side of Botley to the east of the A334 Station Hill and north of the A3051 Botley Road.
- Both the A334 and A3051 a significant roads within Hampshire carrying a mixture of through and local traffic.
- The roads surrounding the site have a footway on at least one side of the road, are subject to a 40mph speed limit, and benefit from street lighting.
- The existing junction between Station Hill and Botley Road is a dualled T-junction.
- As part of the proposed Botley Bypass, the existing junction will be converted to a four-arm roundabout.
- The proposed development comprises up to 177 dwellings.
- Given traffic volumes along Station Hill and Botley Road, a ghost island T-junction arrangement would be required as a minimum junction type.
- Due to the number of existing accesses and junctions on the opposite side of Station Hill, it is not possible to provide a safe 'all movement' vehicular access to the site from this location. However, there may be potential to provide a left-in/left-out access junction arrangement subject to further investigation.
- A proposed ghost island T-junction can be provided on Botley Road to the east of the YMCA Fairthorne Manor access. This junction would require further capacity assessments.
- There is potential to provide other left-in/left-out accesses at either Station Hill or the western end Botley Road. Any access at the western end of Botley Road would have to tie into the proposed Botley Bypass works.
- A left-in/left-out access from Station Hill would require an internal road link to the main Botley Road access.

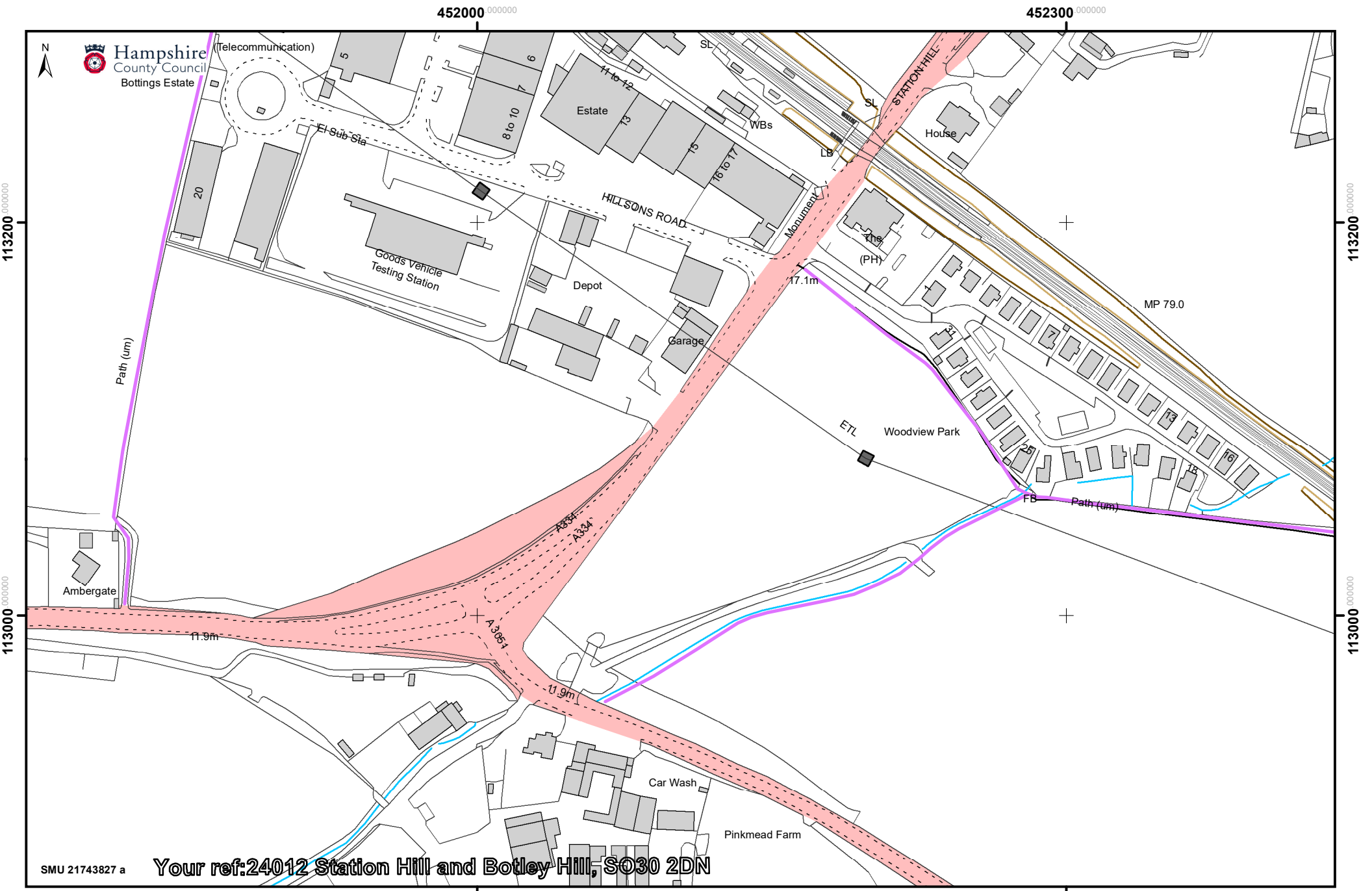
- Additional walking and cycling accesses can be provided onto Outlands Lane and Station Hill.
- The proposed development could generate in the region of 89 and 86 two-way vehicle trips for the morning and evening peak hours respectively and 780 two-way trips over a day.
- The proposed development would need to be supported by a full Transport Assessment.
- The site has excellent accessibility by sustainable modes as it is within an easy walking distance of nearby bus stops (with frequent bus services), railway station, schools, convenience shops, and Botley town centre with all its day-to-day services.

7.2 To conclude, the site is suitable for a residential development subject to a further Transport Assessment and Travel Plan.

APPENDICES

APPENDIX A

Highway Land Plans

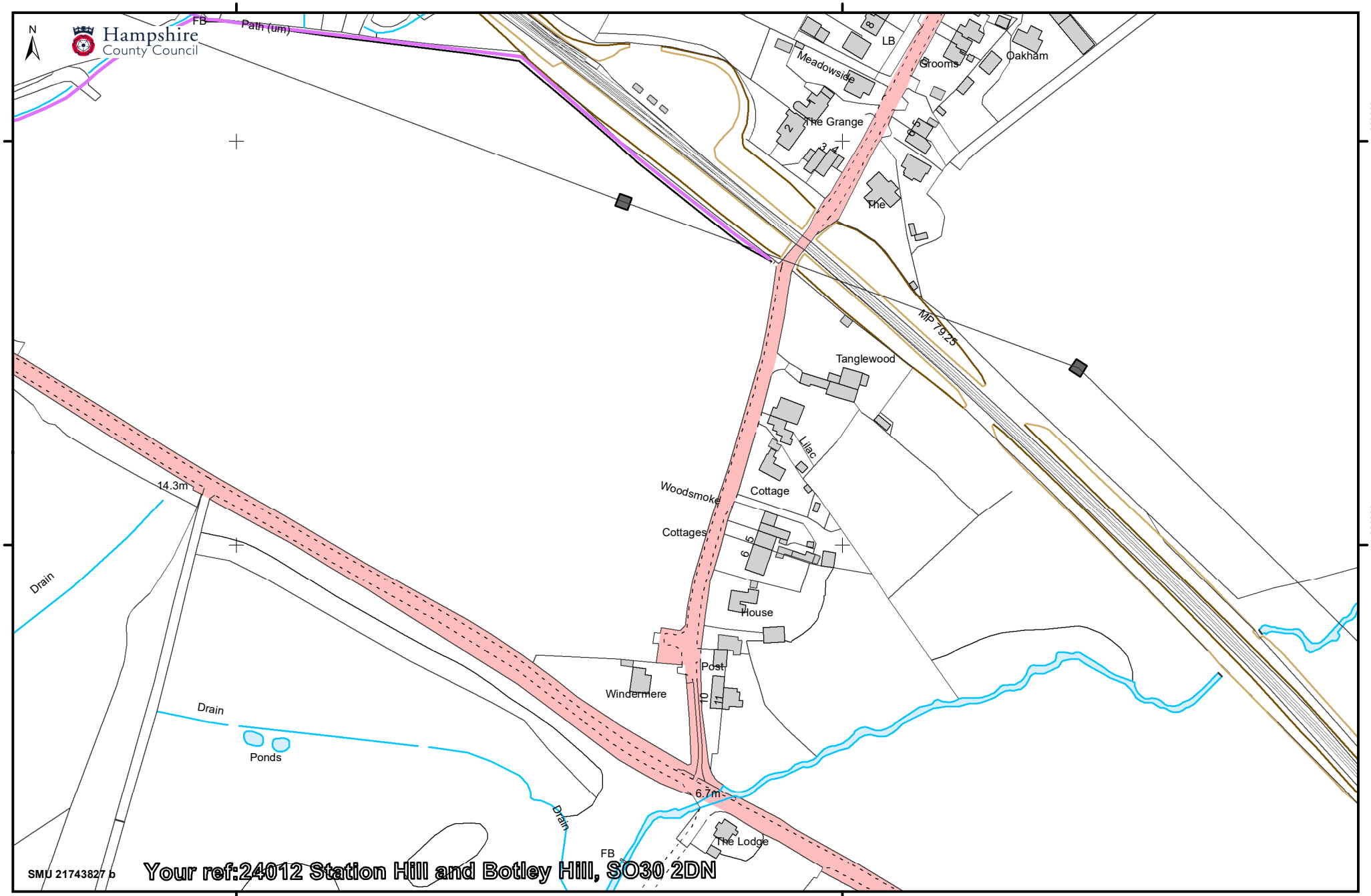


The extent of the highway provided is specific to the property enquired upon and shall not be applicable to any other property.

Ordnance Survey maps are topographic maps and show a representation of the physical features on the ground at the time of survey, which are drawn according to specified tolerances, by the Ordnance Survey. For further information on Ordnance Survey mapping please see: http://www.ordnancesurvey.co.uk/support/property-boundaries.html

For questions about the responsibility for ditches please refer to Hampshire County Council's website at: https://www.hants.gov.uk/landplanningandenvironment/environment/flooding/floodprevention

This plan is made on the basis of information at present available to the County Council and is made on the distinct understanding that, in the absence of negligence, neither the County Council nor I as an officer of the Council is to be held responsible should you rely on this statement and consequently suffer damage.



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APPENDIX B

Proposed Station Hill/Botley Road Roundabout

Botley Station

Bottings Estate

Goods Vehicle Testing Station

Depot

Garage

HILLSONS ROAD

Monument

The Railway Hotel (PH)

17.1m

LEAP

MP 79

Woodview Park (Mobile Homes)

ETL

SL

FB

Path (um)

Sand Drag

A334

A3051

Ambergate

Car Wash

Pinkmead Farm

14.3m

OUTLANDS LANE

Lilac Cottage

Yew Tree Cottage

Cottages

Baynell House

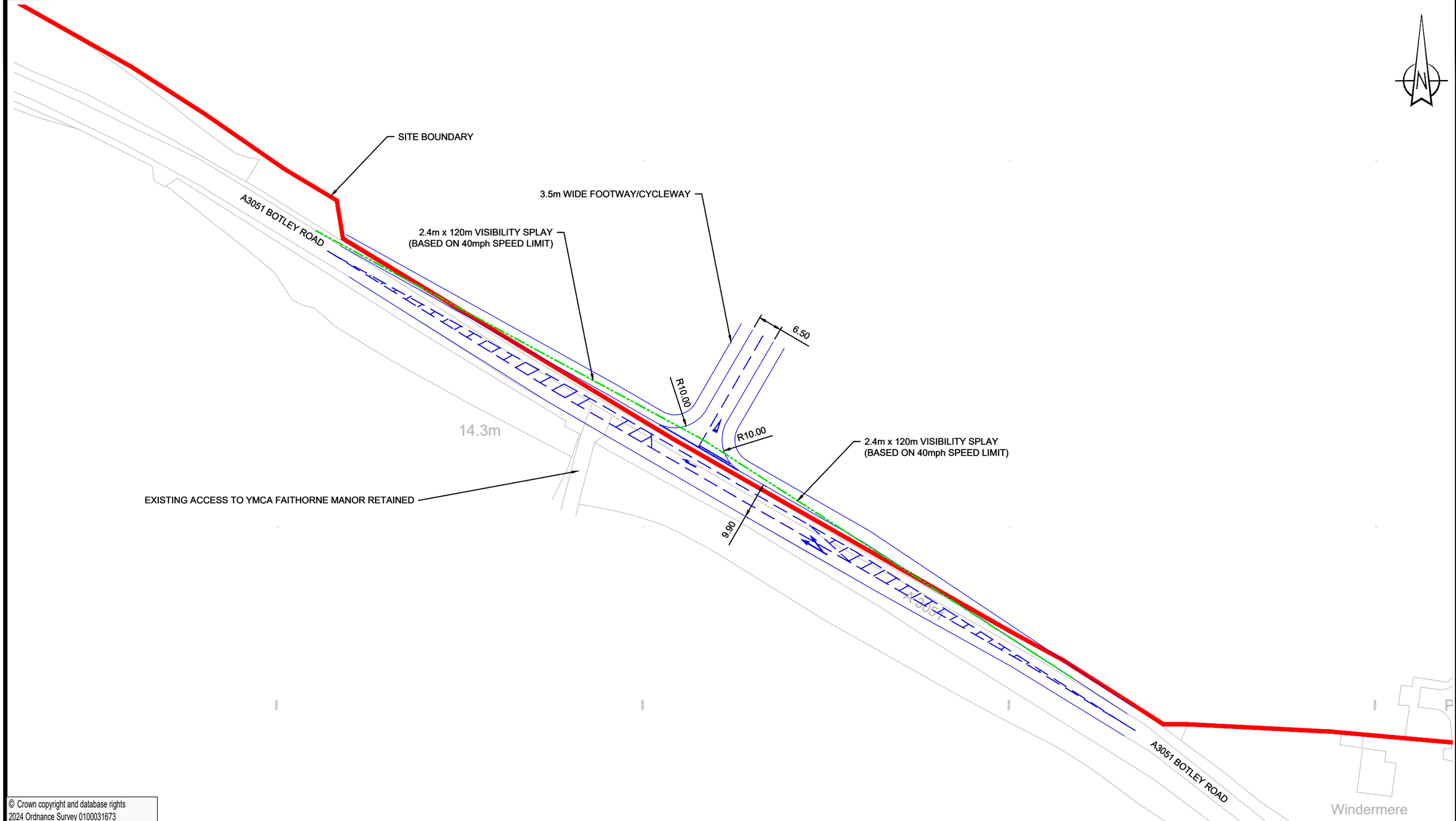
Post

Windermere

21.061.04 Station Hill, Botley
Site Plan 1:1000 at A1

APPENDIX C

Proposed Preliminary Site Access Arrangement



REV	DETAILS	DRAWN	CHECKED	DATE

NOTES:

1. Do not scale from this drawing.
2. This drawing is for illustrative purposes only and not for construction.
3. This drawing is to be read and printed in colour.
4. All dimensions are shown in metres, unless specified otherwise.

PROJECT: Land at Station Hill, Botley

CLIENT: Foreman Homes Ltd

DRAWING TITLE: Preliminary Main Site Access Arrangement

Condon Transport

DRAWN:	CHECKED:	DATE:	SCALES:	SHEET SIZE:	DRAWING NUMBER:	REVISION:
BJC	MM	30.05.2024	1:1,000	A3	24012-001	-

APPENDIX D

TRICS Outputs

Condon Drew Associates Ltd 10 Victoria Street Bristol Licence No: 761001

Filtering Summary

Land Use	03/A	RESIDENTIAL/HOUSES PRIVATELY OWNED
Selected Trip Rate Calculation Parameter Range	150-400 DWELLS	
Actual Trip Rate Calculation Parameter Range	152-321 DWELLS	
Date Range	Minimum: 01/01/16	Maximum: 14/11/23
Parking Spaces Range	All Surveys Included	
Parking Spaces Per Dwelling Range:	All Surveys Included	
Bedrooms Per Dwelling Range:	All Surveys Included	
Percentage of dwellings privately owned:	All Surveys Included	
Days of the week selected	Monday	2
	Tuesday	2
	Wednesday	3
	Thursday	1
	Friday	1
Main Location Types selected	Edge of Town	9
Inclusion of Servicing Vehicles Counts	Servicing vehicles Included	8 - Selected
	Servicing vehicles Excluded	34 - Selected
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	1,001 to 5,000	2
	5,001 to 10,000	4
	10,001 to 15,000	2
	15,001 to 20,000	1
Population <5 Mile ranges selected	5,001 to 25,000	5
	25,001 to 50,000	1
	50,001 to 75,000	1
	75,001 to 100,000	2
Car Ownership <5 Mile ranges selected	0.6 to 1.0	3
	1.1 to 1.5	5
	1.6 to 2.0	1
PTAL Rating	No PTAL Present	9

Calculation Reference: AUDIT-761001-240530-0502

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	HC	HAMPSHIRE	1 days
	HF	HERTFORDSHIRE	1 days
	WS	WEST SUSSEX	1 days
04	EAST ANGLIA		
	NF	NORFOLK	6 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: No of Dwellings
Actual Range: 152 to 321 (units:)
Range Selected by User: 150 to 400 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/16 to 14/11/23

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	2 days
Tuesday	2 days
Wednesday	3 days
Thursday	1 days
Friday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	5 days
Directional ATC Count	4 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Edge of Town	9

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	7
Village	1
Out of Town	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	8 days - Selected
Servicing vehicles Excluded	34 days - Selected

Secondary Filtering selection:

Use Class:

C3	9 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	2 days
5,001 to 10,000	4 days
10,001 to 15,000	2 days
15,001 to 20,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	5 days
25,001 to 50,000	1 days
50,001 to 75,000	1 days
75,001 to 100,000	2 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	5 days
1.6 to 2.0	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	9 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	9 days

This data displays the number of selected surveys with PTAL Ratings.

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions

LIST OF SITES relevant to selection parameters

Site(1):	HC-03-A-33	Site area:	6.20 hect
Development Name:	MIXED HOUSES & FLATS	No of Dwellings:	195
Location:	RINGWOOD	Housing density:	39
Postcode:	BH24 3FJ	Total Bedrooms:	514
Main Location Type:	Edge of Town	Survey Date:	04/07/23
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	493
Site(2):	HF-03-A-03	Site area:	5.67 hect
Development Name:	MIXED HOUSES	No of Dwellings:	160
Location:	BUNTINGFORD	Housing density:	32
Postcode:	SG9 9FX	Total Bedrooms:	510
Main Location Type:	Edge of Town	Survey Date:	08/07/19
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	632
Site(3):	NF-03-A-06	Site area:	9.27 hect
Development Name:	MIXED HOUSES	No of Dwellings:	275
Location:	GREAT YARMOUTH	Housing density:	32
Postcode:	NR31 9FT	Total Bedrooms:	767
Main Location Type:	Edge of Town	Survey Date:	23/09/19
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	586
Site(4):	NF-03-A-07	Site area:	12.25 hect
Development Name:	MIXED HOUSES & FLATS	No of Dwellings:	297
Location:	WYMONDHAM	Housing density:	33
Postcode:	NR18 9FP	Total Bedrooms:	927
Main Location Type:	Edge of Town	Survey Date:	20/09/19
Sub-Location Type:	Out of Town	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	765
Site(5):	NF-03-A-31	Site area:	16.20 hect
Development Name:	MIXED HOUSES	No of Dwellings:	321
Location:	SWAFFHAM	Housing density:	24
Postcode:	PE37 8JE	Total Bedrooms:	883
Main Location Type:	Edge of Town	Survey Date:	22/09/22
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	919
Site(6):	NF-03-A-32	Site area:	7.30 hect
Development Name:	MIXED HOUSES & FLATS	No of Dwellings:	164
Location:	HUNSTANTON	Housing density:	28
Postcode:	PE36 5PS	Total Bedrooms:	461
Main Location Type:	Edge of Town	Survey Date:	21/09/22
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	396
Site(7):	NF-03-A-39	Site area:	7.84 hect
Development Name:	MIXED HOUSES	No of Dwellings:	212
Location:	HOLT	Housing density:	32
Postcode:	NR25 6GA	Total Bedrooms:	570
Main Location Type:	Edge of Town	Survey Date:	27/09/22
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	490
Site(8):	NF-03-A-47	Site area:	13.05 hect
Development Name:	MIXED HOUSES & FLATS	No of Dwellings:	300
Location:	AYLSHAM	Housing density:	28
Postcode:	NR11 6FN	Total Bedrooms:	956
Main Location Type:	Edge of Town	Survey Date:	21/09/22
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	723
Site(9):	WS-03-A-12	Site area:	7.28 hect
Development Name:	MIXED HOUSES	No of Dwellings:	152
Location:	CHICHESTER	Housing density:	26
Postcode:	PO18 0GD	Total Bedrooms:	443
Main Location Type:	Edge of Town	Survey Date:	16/06/21
Sub-Location Type:	Village	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	131

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	231	0.076	9	231	0.279	9	231	0.355
08:00 - 09:00	9	231	0.136	9	231	0.369	9	231	0.505
09:00 - 10:00	9	231	0.142	9	231	0.169	9	231	0.311
10:00 - 11:00	9	231	0.122	9	231	0.142	9	231	0.264
11:00 - 12:00	9	231	0.140	9	231	0.135	9	231	0.275
12:00 - 13:00	9	231	0.139	9	231	0.141	9	231	0.280
13:00 - 14:00	9	231	0.155	9	231	0.140	9	231	0.295
14:00 - 15:00	9	231	0.143	9	231	0.194	9	231	0.337
15:00 - 16:00	9	231	0.281	9	231	0.163	9	231	0.444
16:00 - 17:00	9	231	0.272	9	231	0.158	9	231	0.430
17:00 - 18:00	9	231	0.326	9	231	0.163	9	231	0.489
18:00 - 19:00	9	231	0.262	9	231	0.163	9	231	0.425
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.194			2.216			4.410

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Parameter summary

Trip rate parameter range selected:	152 - 321 (units:)
Survey date date range:	01/01/16 - 14/11/23
Number of weekdays (Monday-Friday):	13
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	16
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.