

Client:
Richborough Estates

Project:
**Brascote Lane
Newbold Verdon**

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T20517
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Transport Assessment

Prepared by:
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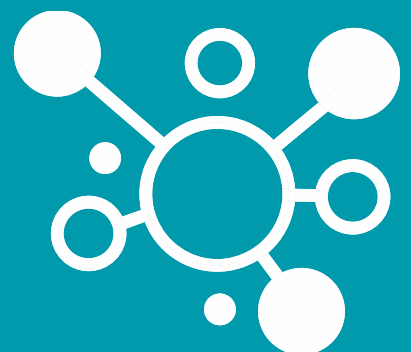


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1.0 Introduction

Background

- 1.1 Hub Transport Planning Ltd has been commissioned by Richborough Estates Ltd to provide transport advice for a proposed residential development off Brascote Lane, Newbold Verdon.
- 1.2 The illustrative layout indicates 239 dwellings and this Transport Assessment robustly assesses up to 260 dwellings; the site location is shown on **Figure 1.1**.

Structure of the Report

- 1.3 This report considers the relevant highway issues and indicate potential solutions, with reference to the impact of the proposed development site off Brascote Lane, Newbold Verdon.
- 1.4 A Scoping Report has been submitted to Leicestershire County Council (LCC) as the Local Highway Authority (LHA) for comment. This TA reflects the technical and geographical scope agreed during pre-application discussions with the authority.
- 1.5 Following this introduction, the report is set out as follows:
 - Section 2.0 – Policy Review;
 - Section 3.0 – Background Information and Sustainability;
 - Section 4.0 – Development Proposals;
 - Section 5.0 – Trip Generation, Distribution and Assignment;
 - Section 6.0 – Traffic Impact and Analysis;
 - Section 7.0 – Summary and Conclusion.

Limitations of the Report

- 1.6 This report has been undertaken at the request of Richborough Estates Ltd, thus should not be entrusted to any third party without written permission from Hub Transport Planning Ltd. However, should any information contained within this report be used by any unauthorised third party, it is done so entirely at their own risk and shall not be the responsibility of Hub Transport Planning Ltd.
- 1.7 This report has been compiled using data from several external sources (such as TRICS, traffic count data and public transport information); these sources are considered trustworthy and therefore the data provided is considered accurate and relevant at the time of preparing this report.

2.0 Policy Review

Introduction

2.1 This section summarises the relevant transport policy documents against which the development proposals are considered at a national, regional, and local level. The most relevant policy documents relating to this study are detailed below:

- National Planning Policy Framework (July 2021)
- Leicestershire County Council Local Transport Plan 3 (2011-2026)
- Hinckley & Bosworth Local Plan 2006 to 2026: Core Strategy (December 2009)

National Policy

2.2 The latest National Planning Policy Framework (NPPF) was published in July 2021 and sets out the Government's planning policies and how these are expected to be applied.

2.3 In relation to transport, the NPPF states at paragraph 105 that:

'The planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making.'

2.4 When considering the effects the development may have on the local transport network, the NPPF states that:

'In assessing sites that may be allocated for development plans, or specific applications for development, it should be ensured that:

a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;

b) safe and suitable access to the site can be achieved for all users;

c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and

d) 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.

Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.'

2.5 The NPPF further advises that:

'Within this context, applications for development should:

- a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;*
- b) address the needs of people with disabilities and reduces mobility in relation to all modes of transport;*
- c) create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;*
- d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and*
- e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.'*

2.6 In relation to parking policy the NPPF states that:

'If setting local parking standards for residential and non-residential development, policies should take into account:

- a) the accessibility of the development;*
- b) the type, mix and use of development;*
- c) the availability of and opportunities for public transport;*
- d) local car ownership levels; and*
- e) the need to ensure an adequate provision of spaces for charging plug-in and other ultra-low emission vehicles.'*

Leicestershire Local Transport Plan

2.7 Leicestershire County Council (LCC) have produced their Local Transport Plan (LTP) outlining the strategic transport goals for the county:

- *'A transport system that supports a prosperous economy and provides successfully for population growth.*
- *An efficient, resilient, and sustainable transport system that is well managed and maintained.*
- *A transport system that helps to reduce the carbon footprint of Leicestershire.*
- *An accessible and integrated transport system that helps promote equality of opportunity for all our residents.*
- *A transport system that improves the safety, health, and security of our residents.*
- *A transport system that helps to improve the quality of life for our residents and makes Leicestershire a more attractive place to live, work, and visit.'*

- 2.8 In terms of new developments, the LTP3 sets out a range of objectives that aim to ensure that new developments are sustainable and help to facilitate the above goals:
- *‘Encourage more people to walk, cycle and use public transport will help to reduce congestion and achieve a transport system that provides for the effective and efficient movement of people, materials, and goods.*
 - *Continuing to support bus services/alternative forms of public transport and seeking to ensure that new developments can access a range of facilities by means other than the private car, should help to promote equality of opportunity.*
 - *Efforts to improve information about existing sustainable transport services and facilities should help to improve satisfaction with our transport system.’*

Hinckley & Bosworth Borough Council’s Policy

- 2.9 Hinckley & Bosworth Borough Council’s Core Strategy for the Local Plan sets out the overarching strategy and policies to guide the future development of the borough up to 2026. It builds on policy at a national and regional level.

- 2.10 The Core Strategy identifies Newbold Verdon as a Key Rural Centre. Policy 7 focuses on Rural Centres and their services:

“To support Key Rural Centres and ensure they can provide key services to their rural hinterland, the council will:

- *Support housing development within settlement boundaries that provide a mix of housing types and tenures as detailed in Policy 15 and Policy 16.’*
- *Support development under Policy 17: Local Needs.*
- *Require transport improvements in line with Policy 14.”*

- 2.11 Policy 14 addresses the transport infrastructure and specifically that of rural areas:

“To support accessibility within the rural areas, the council will:

- *Support the delivery of a viable, high quality public transport network between the Key Rural Centres and their nearest urban centre and between the Rural Villages and their nearest Key Rural Centre of urban centre.*
- *Support the provision of accessible transport services for mobility impaired and rurally isolated residents.*
- *Deliver safe cycle paths as detailed in the Hinckley & Bosworth Council’s Rural Parishes Cycle Network Plan. This will deliver safe routes to school, to residential and employment areas, Key Rural Centres/urban areas, community and leisure facilities and into the countryside.*

Developers will be required to contribute towards these initiatives through developer contributions and/or land where they meet the tests set out in national guidance. New development that would prejudice their implementation will not be permitted.”

- 2.12 With regards to new development proposals, Local Plan Policy DM17 within the Site Allocations and Development Management Policies DPD states:

“Development proposals will be supported where they:

- a) Seek to make the best use of existing public transport services and, where appropriate, provide opportunities for improving and sustaining the viability of those services;*
- b) Seek to ensure that there is a convenient and safe access for walking and cycling to services and facilities;*
- c) Demonstrate that there is not a significant adverse impact upon highway safety; and in the case of development that generates significant movement;*
- d) That the development is located where the need to travel will be minimised and the use of sustainable transport modes can be maximised;*
- e) Where it can be demonstrated that the residual cumulative impacts of development on the transport network are not severe.*

Where appropriate, improvements will be required to be undertaken to the highways and transportation network to limit any significant impacts arising from the development (taking into account cost effectiveness).

All proposals for new development and changes of use should reflect the highway design standards that are set out in the most up to date guidance adopted by the relevant highways authority.”

- 2.13 With regards to developments that generate significant movement, Policy DM17, paragraph 14.69 states:

“In the case of proposals for development that generate significant movement, applications should be supported by a Transport Statement or Transport Assessment. In addition, such schemes should provide a Travel Plan to exploit opportunities for the use of sustainable transport modes. Applicants will be required to demonstrate that the Transport Statement or Assessment has informed the design of the proposed development and the accompanying Travel Plan. Leicestershire County Council (as Local Highway Authority) provides advice [sic] through the 6Cs Design Guide on the development thresholds for the submission of Transport Assessments, Transport Statements, Travel Plans and their scope.”

3.0 Background Information and Sustainability

Site Location and Highway Network

- 3.1 The proposed development is located to the south of Newbold Verdon, beyond the existing allotments off Brascote Lane. The site is currently in agricultural use.
- 3.2 The carriageway of Brascote Lane is some 6.0m-6.2m wide along the site frontage and is subject to the national speed limit (60mph for cars) with a 30mph limit just to the north of the allotments. Although Brascote Lane is subject to the national speed limit along the site frontage, streetlights are present.
- 3.3 A footway is present running along the eastern side of the Brascote Lane carriageway. This footway measures c.2.0m in width and provides continuous access along the site frontage from The Windmill Inn north into Newbold Verdon.
- 3.4 The highway network throughout the village is two-lane single carriageway, is lit and has footways on either side of the carriageway apart from short sections of Dragon Lane and Main Street where a footway is present on only one side of the carriageway.
- 3.5 The village accesses the B582 and wider highway network via priority junctions at; Dragon Lane, Mill Lane, and Main Street. The B582 is subject to a 40mph speed limit through Newbold Verdon.

Traffic Conditions

- 3.6 Some minor queues were noted at the B582/B585 junction on the arm giving way, the B585 Bosworth Lane arm, during the AM peak hour of the site visit. The access junctions to the village were observed to operate with minimal queues and delays during the morning peak hour of the site visit.
- 3.7 Traffic flows around the village were observed to be modest and no capacity issues were noted. Brascote Lane, from which access would be taken, is very lightly trafficked.

Traffic Data Collection

- 3.8 To provide a comprehensive assessment of the potential traffic impact of the proposed development peak hour turning counts have been undertaken at the following junctions;
 - B582/B585,
 - B585/Bagworth Road,
 - B582/Dragon Lane,
 - B582/Mill Lane,
 - B582/Main Street, and
 - Main Street/Brascote Lane.
- 3.9 As requested by the LHA, three further turning counts have been carried out at the following junctions:
 - B582/Kirkby Lane,

- Kirkby Lane/Newbold Road/Brascote Lane, and
 - Newbold Road/Bosworth Road
- 3.10 These three counts have been used for reference only and are not included within the traffic flow diagrams. Subsequent traffic analysis in **Chapter 4.0** suggests no more than 30 two-way trips impact these junctions, apart from along the B582.
- 3.11 The development proposal is adding no turning traffic at the B582/Kirkby Lane junction. Base traffic turning to and from the Kirkby Lane is far lower than at the other junctions with the B582 that are modelled and reported on. It is clear, therefore, that if the other B582 junctions are shown to operate within capacity then, by inference, the B582/Kirkby Lane junction will also operate within capacity.
- 3.12 In addition, speed and vehicle classification data has been collected via an ATC on Brascote Lane both at the western frontage where the two site accesses are to be situated. This data has been collected to inform design and visibility requirements for the vehicular access to the development.
- 3.13 In accordance with the LCC guidance on conducting traffic volume surveys at this time, Covid Uplift factors supplied by LCC have been applied to all MCC and ATC volume data to produce a proxy 2021 Base. The Uplift factors indicate how the current traffic flows compare to those pre Covid-19. The following percentages have been used:
- 08:00 – 09:00 = 90%
 - 17:00 – 18:00 = 69%
- 3.14 Analysis of the turning count data for the B582 junctions was found to show fewer movements than the counts conducted for the Land South of Bosworth Lane development (ref: 20/00143/FUL) in 2018/2019. As such, the 2018 count at the B582/B585 junction and the 2019 count at the B582/Dragon Lane junction have been used and extrapolated to provide flows along the B582 and B585.
- 3.15 These counts have had TEMPro growth factors applied to give a 2021 base to work from. These factors are as follows:
- 2018 to 2021 AM – 1.0283
 - 2018 to 2021 PM – 1.0278
 - 2019 to 2021 AM – 1.0173
 - 2019 to 2021 PM – 1.0170
- 3.16 The MCC data for all junctions and the ATC data for Brascote Lane, as well as LCCs Covid Uplift factors and historic counts used, can be found in **Appendix A**.
- 3.17 Traffic flow diagrams showing the calculated 2021 Base PCU flows across the network can be found in **Figures 3.1 and 3.2**.

Highway Safety

- 3.18 To establish road safety conditions on the highway network in the vicinity of the site, Personal Injury Accident (PIA) data has been obtained from LCC and is included as **Appendix B**. The search area incorporates the village of Newbold Verdon.

- 3.19 In the latest five-year period available (01/01/2016 – 30/04/2021) a total of eighteen PIAs have occurred in the search area. Twelve of these occurring on the B582/B585 corridor, and six on minor roads within the area. A summary of the accident data for the search area is included in **Table 1**.

Table 1 – Newbold Verdon PIAs

Location	Severity				Ped/Cyclist Involved	
	Slight	Serious	Fatal	Total	Pedestrian	Cyclist
Junctions						
B582/Dragon Ln	4	1	-	5	1	-
B582/B585 Bosworth Ln	-	1	-	1	-	-
B582/B585 Bagworth Rd	1	-	-	1	-	-
B582/Mill Ln	1	-	-	1	-	-
B582/Main St	-	1	-	1	-	-
Mill Ln/Enston St	-	1	-	1	-	-
Links (Not at a Junction)						
B582	2	1	-	3	-	-
B585	-	-	-	-	-	-
Main St	1	-	1	2	-	-
Dragon Ln	1	-	-	1	-	-
Bosworth Ln (Kirkby Mallory)	2	-	-	2	-	-
Total	12	5	1	18	1	0

- 3.20 The above shows that twelve of the eighteen PIAs have occurred along the B582/B585 corridor, with five of these occurring at the Dragon Lane junction.
- 3.21 It is highly regrettable that a fatal incident occurred on Main Street in 2016; the incident involved an OAP on a mobility scooter with no other vehicle involved. Whilst regrettable this unusual incident does not give rise to a general highway safety concern.
- 3.22 Overall, the analysis does not identify any specific accident patterns in vicinity of the site and the volume of accidents recorded do not give rise to any undue cause for concern.
- 3.23 Whilst all PIAs are regrettable, the quantity and severity of the PIAs recorded in the vicinity of the site does not give any undue cause for concern.
- 3.24 Furthermore, **Section 4.0** of this report demonstrates that the proposed development will not generate significant additional vehicle trips across the local highway network.

Sustainable Transport

- 3.25 It is understood that walking and cycling provide important alternatives to the private car and should also be encouraged to form part of longer journeys via public transport. Indeed, it is noteworthy that the Institute of Highways and Transportation (IHT) has prepared several guidance documents that provide advice with respect to the provision of sustainable travel in conjunction with new developments. The suggested acceptable walking distances to common facilities are presented in **Table 2** below.

Table 2– Suggested Walking Distances (IHT Guidelines)

	Town Centre (m)	Commuting/Schools/ Sightseeing (m)	Elsewhere
Desirable	200	500	400
Acceptable	400	1000	800
Preferred Maximum	800	2000	1200

- 3.26 There is the potential for short car trips to be substituted for cycle trips, and for longer trips to be substituted by a combination of cycle and public transport trips. Guidance suggests that 5km is a useful benchmark for a commutable distance by cycle.
- 3.27 The National Travel Survey 2020, highlights that the average cycle trip for 2019 was 6.1km (assuming a 16kph average cycle speed).
- 3.28 With regards to walking, Manual for Streets (MfS) states that 'walkable neighbourhoods' are typically characterised by having a range of facilities within 10 minutes (up to about 800m) walking distance of residential areas which residents may access comfortably on foot.
- 3.29 MfS also states that the 800m walking distance is not an upper limit and references the former PPG13 guidance in respect of walking replacing short car trips, particularly those under 2km.
- 3.30 In addition to the above, it is pertinent to note that the National Travel Survey (published in August 2020), which provides a summary of results of travel survey data for 2019, reports that the average walk trip distance is 1.36km.
- 3.31 As such, it is reasonable to assume that the average person will walk between 800m and 2.0km to a defined destination (such as local facilities), but also being mindful of 1.36km average walk distance.
- 3.32 The following sections consider the opportunities for sustainable travel that are available in the vicinity of the site.

Pedestrian Accessibility

- 3.33 Pedestrian access to the site will be provided via 2.0m footways on either side of the site accesses off Brascote Lane, connecting to the existing provision on the eastern side of Brascote Lane.
- 3.34 Most streets within the village are residential in nature and well-lit and, as such, routes to local facilities and services are considered appropriate for pedestrian use.
- 3.35 The proposed development site is located within walking distance of several local facilities on Main Street and around the village. The key local facilities in the vicinity of the site are listed in **Table 3** and can be identified in **Figure 3.3**.

Table 3 – Local Facilities

Facility	Distance (Approx.)
The Windmill Inn	250m
Newbold Verdon Methodist Church	800m
Church of St. James	800m
Newbold Verdon Baptist Church	850m
Main Street Facilities (Incl. Convenience Stores, Cafés, Hairdressers, Public House, and Takeaways)	850m–1.00km
Newbold Verdon Primary School	900m
Newbold Verdon Cricket Club	1.00km
Heathbrook Pharmacy	1.05km
The Co-Op Food	1.10km
Newbold Verdon Library	1.15km
Kareem's Balti	1.20km
Lotus House	1.25km
Newbold Verdon Medical Practice	1.35km
Newbold Verdon Equestrian Centre	1.50km

- 3.36 Most of the facilities listed above are located within the NTS 2020 average walking distance of 1.36km and all are comfortably within the MfS suggested upper limit, referenced in the former PPG13 guidance, of 2km.
- 3.37 The site benefits from being near the local primary school and medical centre, as well as places of worship, leisure, and retail facilities.
- 3.38 A plan of the local area showing 800m, 1.2km, and 2.0km walk distances from the site can be seen in **Figure 3.4**. These are the walk distances set out in the IHT guidance.
- 3.39 It is considered the site is appropriately located for accessing a range of local facilities on foot. A wider range of facilities can be accessed within the neighbouring larger urban areas using bus services, which are outlined below.

Cycling Accessibility

- 3.40 Brascote Lane north of the northern site access is subject to a 30mph speed limit, as are all the roads within Newbold Verdon, and these roads can be considered suitable for use by cyclists.
- 3.41 South of the northern access, Brascote Lane is subject to the National Speed Limit. However, it is a lightly trafficked rural lane that is suitable for cycling that continues into the surrounding countryside. It is proposed that the 30mph speed limit is extended southwards along the extent of the site frontage.
- 3.42 National Cycle Network (NCN) Route 52 and Route 63 can be accessed from near Market Bosworth and Bagworth, respectively. These are both more than 5.0km from the site but may be used as part of long-distance leisure trips.
- 3.43 A plan of the local area showing the 5.0km cycling distance around the site can be seen in **Figure 3.5**.

Bus Accessibility

- 3.44 The nearest bus stops to the site are located on Main Street at the junction with Brascote Lane c.700m north of the site. The eastbound stop provides a small shelter, whilst the westbound stop takes the form of flagpole stops both of which are served by the number 153 and 159 bus services.
- 3.45 A summary of the frequency and destinations is provided in **Table 4** below. The bus times included below were sourced during the Covid-19 pandemic and services could therefore be running to altered timetables at the time of drafting this report. Up-to-date timetables can be found at the Traveline website (traveline.info).

Table 4 – Local Bus Services

Service No.	Route	Frequency (approx.)		
		Mon - Fri	Sat	Sun
152/153	Market Bosworth – Newbold Verdon – Desford – Leicester	Every 60 mins (06:13–20:00)	Every 60-120 mins (07:50–18:30)	N/A
159	Hinckley – Market Bosworth – Newbold Verdon – Ibstock – Coalville	Every 90 mins (07:55–19:15)	Every 90 mins (07:55–18:15)	N/A

- 3.46 **Table 4** demonstrates that there is a regular bus services during the day for those residents travelling to the larger urban centres of Coalville and Leicester.
- 3.47 Morning services to Leicester depart from Main Street at 06:13 and 07:35, arriving at Leicester Savoy Street at 06:49 and 08:28; whilst morning services to Coalville depart from Main Street at 07:56, arriving at Hinckley at 08:25. Late afternoon services return from Leicester and Coalville at 17:43 and 17:40, respectively, and additional later services are available.
- 3.48 These services allow for residents to travel to these major centres for education, employment, and leisure purposes via sustainable means.

Rail Accessibility

Hinckley Rail Station

- 3.49 Hinckley Rail Station is located c.14km to the south of the site and can be accessed by bus (c.45-minute journey), or by car (c.20 to 25-minute journey).
- The station benefits from 16 cycle parking spaces and 70 car parking spaces.
 - Services from this station run to:
 - Birmingham New Street (via Nuneaton, Coleshill Parkway, and Water Orton);
 - Cambridge (via Narborough, Leicester, Melton Mowbray, Oakham, Stamford, Peterborough, March, and Ely).

Leicester Rail Station

- 3.50 Leicester Rail Station is located c.18km to the southwest of the site and can be accessed by bus (c.45-minute journey), or by car (c.30 to 35-minute journey).
- The station benefits from 515 car parking spaces with 15 accessible spaces available.

- Services from this station run to:
 - London St Pancras (via Market Harborough and Kettering);
 - Sheffield (via Derby and Chesterfield);
 - Birmingham New Street (via Nuneaton and Coleshill Parkway);
 - Nottingham (Via Loughborough, East Midlands Parkway, and Beeston); and
 - Cambridge and Stanstead Airport (via Melton Mowbray, Oakham, Stamford, Peterborough, March, and Ely).

3.51 It can be considered that there is a realistic option for residents to travel by a combination of bus/train, or car/train to destinations further afield such as London and Birmingham. This can be achieved using either Hinckley Rail Station or Leicester Rail Station.

Summary

3.52 The above review demonstrates that the site is readily accessible by a variety of modes of transport that have the potential to reduce reliance upon the private car.

3.53 It is therefore considered that residents will have a real choice about how they travel and that the proposals therefore accord with the guiding principles of the NPPF.

4.0 Development Proposals

Proposed Development

- 4.1 The illustrative layout indicates 239 dwellings. For the purposes of providing a robust capacity assessment of the proposal this TA tests up to 260 residential dwellings. Vehicular and pedestrian access is proposed from Brascote Lane to the west via two separate access junctions c.145m from one another.
- 4.2 The masterplan includes a parking area for the existing allotments north of the development land, a water meadow and wildlife area in the centre of the site, and a country park.
- 4.3 The access arrangements have been designed where possible to meet the requirements set out in the Leicestershire Highway Design Guide (LHDG). The measured speeds from the ATC data suggest that the required visibility splays should be 2.4m x 160m according to Table DG4 in the LHDG.
- 4.4 Visibility splays of 2.4m x 160m can be achieved to the north of the northern site access and to the south of the southern site access.
- 4.5 The vertical alignment along Brascote Lane does constrain visibility to some extent. At the northern access, visibility to the south can be achieved based on recorded speeds and the MfS calculations. However, the southern access requires 2.4m x 143m visibility splay to the north but only 133m can be achieved due to the vertical constraints. The access junctions do not interfere with the visibility splays between the two.
- 4.6 However, the proposal is to reduce the speed limit down to 30mph and provide a new gateway feature. The development will also provide a more urban feel to the road which will also help reduce speeds. As the visibility is only marginally short of the calculated visibility requirement, it is still considered acceptable. The junction arrangements and visibility are set out in **Drawing T20517.001 Rev A**. The speed measurements and visibility calculations are provided in **Appendix C**.
- 4.7 The proposed access roads have been designed to be 5.5m wide with 2.0m wide footways on either side of the carriageway. The proposals include footway connections which link the site access junctions to the existing footway provision along the frontage.
- 4.8 The swept path analysis for the junctions is provided in **Drawing T20517.003**.

Internal Road Layout

- 4.9 The internal road layout will be designed in line with Leicestershire's Highway Design Guide and the principles set out in Manual for Streets.
- 4.10 An illustrative site layout is included as **Appendix D**.

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Committed Development Traffic

Land South of Bosworth Lane (Ref: 20/00143/FUL)

- 4.11 This residential development of 116 dwellings was granted planning permission in January 2021. This is Phase 2 of the Bloor Homes development off Dragon Lane (ref: 11/00489/FUL), gaining access off Bosworth Lane via a new priority T-junction.
- 4.12 This committed development will result in traffic impacts at the Bosworth Lane/Barlestone Road junction as well as the Dragon Lane/Barlestone Road junction. These have been included as part of the cumulative impact assessment, with the traffic flow diagrams for the committed development show in **Figures 4.1** and **4.2**.

5.0 Trip Generation, Distribution and Assignment

Traffic Generation

- 5.1 The traffic generation for the proposed development has been derived using the trip rates that were used to produce the Bosworth Lane Phase 2 application (ref: 20/00143/FUL), as advised by the LHA.
- 5.2 The trip rates are presented in **Table 5**.

Table 5 – Trip Rates and Vehicle Trips (as per application ref: 20/00143/FUL)

Peak Period	Trip Rate		Trips (260 Dwellings)		Total
	In	Out	In	Out	
AM	0.074	0.606	19	158	177
PM	0.521	0.170	135	44	179

NB: AM peak is 08:00-09:00, PM peak is 17:00-18:00; trips have been rounded.

- 5.3 The forecast traffic generation detailed in **Table 5** above indicates that the proposed development would result in 177 two-way vehicle trips in the AM peak period and 179 two-way vehicle trips in the PM peak period.
- 5.4 This generation equates to approximately three additional vehicles on the highway network every minute during each peak period.

Traffic Distribution and Assignment

- 5.5 To distribute traffic to and from the site, 2011 Census Travel to Work Origin Destination data has been used. The MSOA Hinckley & Bosworth 005 area has been used as the origin for the proposed development. The analysis of this data is included in **Appendix E**.
- 5.6 Traffic has been assigned to the network using an appropriate online route mapping tool and knowledge of the existing area.
- 5.7 The analysis indicates that approximately 83.5% of traffic would head north from the site access and 16.5% would head south. The analysis predicts that 59.2% of traffic would travel along Main Street and to/from the east on the B582 and 24.3% of traffic would travel via Dragon Lane and west via its junction with the B582.
- 5.8 Traffic flow diagrams showing the development assignment and forecast PCU flows across the network are provided in **Figures 5.1 to 5.4**.

6.0 Traffic Impact and Analysis

Introduction

- 6.1 The geographic scope of the assessment is described by the following junctions;
- Site Access /Brascote Lane,
 - Main Street/Brascote Lane,
 - Barlestone Road (B582)/Main Street,
 - Barlestone Road (B582)/Dragon Lane,
 - Barlestone Road (B582)/Bosworth Lane (B585), and
 - Barlestone Road (B585)/Bagworth Road.
- 6.2 The B582/Mill Lane junction is forecast to have no development traffic impacting upon it and, therefore, it is not proposed to provide capacity analysis at that junction.
- 6.3 For the purposes of robustness, a single site access junction has been assessed with all development traffic using it; clearly if a single site access operates satisfactorily with all traffic assigned to it then with two such junctions sharing the traffic they will also work within capacity.
- 6.4 Formal capacity testing has not been undertaken for junctions to the south of the development as the development is forecast to generate less than 30 two-way trips through these junctions in any peak hour.

Traffic Growth

- 6.5 The highway network in the vicinity of the site will be assessed during the AM and PM peak periods for the following scenarios:
- 2021 Base;
 - 2026 Base;
 - 2026 Base + Committed;
 - 2026 Base + Committed + Development; and
 - 2036 Base + Committed + Development.
- 6.6 The future assessment years are 2026 which is the end of the current local plan period and 2036 which will be the end of the revised plan period. The traffic growth factors used to forecast future years (2026 and 2036) base traffic are derived from local TEMPRO growth factors (adjusted by NTM) for the MSOA Hinckley & Bosworth 005 and are as follows:
- 2021 to 2026 AM – 1.0415
 - 2021 to 2026 PM – 1.0412
 - 2021 to 2036 AM – 1.1186
 - 2021 to 2036 PM – 1.1193

- 6.7 Traffic flow diagrams showing all future year scenarios with committed development and the proposed development traffic are in **Figures 6.1 to 6.8**.

Junction Analysis

- 6.8 The analysis of all priority junctions has been conducted using Junctions 10 (PICADY Module) software.
- 6.9 The Barlestone Road (B582)/Dragon Lane and the Barlestone Road (B585)/Bagworth Road junctions take the form of split priority give-way junctions, with specific movements using separate give-way lines. Given the unorthodox layout, and for the purposes of a robust capacity assessment, the junctions have been modelled as simple priority T-junctions with two-lane approaches on the minor arm.
- 6.10 These junctions were modelled as three separate give-way junctions within each junction as part of an investigative process. These assessments suggested that the junctions all operate well within capacity and with minimal queueing, as such, the two-lane assessment has been included within this report as it is considered the more robust approach, considering all traffic flows.
- 6.11 The Barlestone Road/Bosworth Lane junction is to be signalised as part of the Bosworth Lane Phase 2 development. Analysis of the junction has been conducted using the LinSig 3 junction software, replicating the inputs used in the Bosworth Lane Phase 2 application.

Proposed Site Access Junction – Capacity Assessment

- 6.12 The site access junction off Brascote Lane has been modelled as a priority T-junction. The full output file for the junction, showing geometry and capacity calculations, are shown in **Appendix F**.
- 6.13 **Table 6** summarises the operation of the proposed site access junction for the future year scenarios, with the proposed development traffic added to the network.

Table 6 – Site Access (Brascote Lane) Capacity Assessment

Approach	AM Peak 08:00-09:00			PM Peak 17:00-18:00		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
2026 + Committed + Development						
Site Access	0.34	1	11	0.10	0	8
Brascote Lane	0.01	0	5	0.04	0	5
2036 + Committed + Development						
Site Access	0.34	1	11	0.10	0	8
Brascote Lane	0.01	0	5	0.04	0	5

Notes: RFC is Ratio of Flow to Capacity. Queues are measured in vehicles and Delay in seconds per PCU.

- 6.14 The analysis indicates that the proposed site access would operate well within capacity at the future assessment years with all development traffic using a single point of access.
- 6.15 Given that there will be a second point of access sharing the development traffic, both access points will operate even better than indicated in **Table 6**; i.e. the access junctions will operate well within capacity.

Main Street/Brascote Lane Junction – Capacity Assessment

- 6.16 The Main Street/Brascote Lane junction to the north of the site, through which most of the development traffic is forecast to travel, has been modelled as a priority T-junction. The full output file for the junction, showing geometry and capacity calculations, are shown in **Appendix G**.
- 6.17 **Table 7** summarises the operation of the Main Street/Brascote Lane junction for the existing and future year scenarios.

Table 7 – Main Street/Brascote Lane Capacity Assessment

Approach	AM Peak 08:00-09:00			PM Peak 17:00-18:00		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
2021 Base						
Brascote Lane	0.15	0	7	0.28	0	9
Main Street	0.07	0	6	0.14	0	7
2026 Base						
Brascote Lane	0.16	0	7	0.29	0	9
Main Street	0.08	0	6	0.14	0	7
2026 + Committed						
Brascote Lane	0.16	0	7	0.29	0	9
Main Street	0.08	0	6	0.14	0	7
2026 + Committed + Development						
Brascote Lane	0.44	1	12	0.38	1	11
Main Street	0.09	0	7	0.22	0	8
2036 + Committed + Development						
Brascote Lane	0.45	1	12	0.33	1	10
Main Street	0.09	0	7	0.23	0	8

- 6.18 The analysis indicates that the proposed site access would operate well within capacity at future assessment years and the addition of development traffic has minimal impact on forecast vehicle delays which remain low.

Barlestone Road (B582)/Main Street Junction – Capacity Assessment

- 6.19 The Barlestone Road (B582)/Main Street junction to the northeast of the village has been modelled as a priority T-junction. The full output file for the junction, showing geometry and capacity calculations, is included in **Appendix H**.
- 6.20 **Table 8** summarises the operation of the Barlestone Road (B582)/Main Street junction for the existing and future year scenarios.

Table 8 – Barlestone Road (B582)/Main Street Junction Capacity Assessment

Approach	AM Peak 08:00-09:00			PM Peak 17:00-18:00		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
2021 Base						
Main Street	0.31	1	13	0.29	0	14
B582	0.02	0	5	0.06	0	5
2026 Base						
Main Street	0.32	1	14	0.31	1	15
B582	0.02	0	5	0.07	0	5
2026 + Committed						
Main Street	0.33	1	14	0.32	1	15
B582	0.02	0	5	0.07	0	5
2026 + Committed + Development						
Main Street	0.61	2	25	0.42	1	18
B582	0.02	0	5	0.07	0	5
2036 + Committed + Development						
Main Street	0.65	2	29	0.46	1	21
B582	0.02	0	5	0.08	0	5

- 6.21 The analysis indicates that the proposed site access would operate well within capacity at future assessment years and the addition of development traffic has minimal impact on forecast vehicle delays which remain low.

Barlestone Road (B582)/Dragon Lane Junction – Capacity Assessment

- 6.22 The Barlestone Road (B582)/Dragon Lane junction is one of the two junctions that has an unorthodox arrangement and is separated into three distinct give-way junctions. As stated previously, this has been modelled as a two-lane priority T-junction, a robust assessment incorporated all traffic interactions. The full output file for the junction, showing geometry and capacity calculations, is included in **Appendix I**.
- 6.23 **Table 9** summarises the operation of the Barlestone Road (B582)/Dragon Lane junction for the existing and future year scenarios.

Table 9 – Barlestone Road (B582)/Dragon Lane Junction Capacity Assessment

Approach	AM Peak 08:00-09:00			PM Peak 17:00-18:00		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
2021 Base						
Dragon Lane (LT)	0.27	0	9	0.20	0	9
Dragon Lane (RT)	0.15	0	15	0.08	0	15
Barlestone Road	0.26	1	5	0.37	1	7
2026 Base						
Dragon Lane (LT)	0.28	0	10	0.21	0	9
Dragon Lane (RT)	0.16	0	15	0.09	0	16
Barlestone Road	0.27	1	5	0.39	1	7
2026 + Committed						
Dragon Lane (LT)	0.29	0	10	0.23	0	9
Dragon Lane (RT)	0.17	0	15	0.09	0	16
Barlestone Road	0.30	1	5	0.41	1	7
2026 + Committed + Development						
Dragon Lane (LT)	0.37	1	11	0.25	0	10
Dragon Lane (RT)	0.17	0	15	0.10	0	17
Barlestone Road	0.31	1	6	0.50	2	9
2036 + Committed + Development						
Dragon Lane (LT)	0.40	1	12	0.27	0	10
Dragon Lane (RT)	0.19	0	17	0.11	0	19
Barlestone Road	0.35	1	6	0.56	2	10

- 6.24 The analysis indicates that the proposed site access would operate well within capacity at future assessment years and the addition of development traffic has minimal impact on forecast vehicle delays which remain low.

Barlestone Road (B585)/Bagworth Road Junction – Capacity Assessment

- 6.25 The Barlestone Road (B585)/Bagworth Road junction is the other of the two junctions that has an unorthodox arrangement and is separated into three distinct give-way junctions. As stated previously, this has been modelled as a two-lane priority T-junction, a robust assessment incorporated all traffic interactions. The full output file for the junction, showing geometry and capacity calculations, is included in **Appendix J**.
- 6.26 **Table 10** summarises the operation of the Barlestone Road (B585)/Bagworth Road junction for the existing and future year scenarios.

Table 10 – Barlestone Road (B585)/Bagworth Road Junction Capacity Assessment

Approach	AM Peak 08:00-09:00			PM Peak 17:00-18:00		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
2021 Base						
Bagworth Road (LT)	0.40	1	10	0.41	1	10
Bagworth Road (RT)	0.04	0	10	0.08	0	10
Barlestone Road	0.40	1	8	0.44	1	8
2026 Base						
Bagworth Road (LT)	0.42	1	10	0.43	1	10
Bagworth Road (RT)	0.04	0	10	0.09	0	11
Barlestone Road	0.42	1	9	0.46	1	8
2026 + Committed						
Bagworth Road (LT)	0.42	1	10	0.43	1	10
Bagworth Road (RT)	0.04	0	10	0.09	0	11
Barlestone Road	0.42	1	9	0.46	1	8
2026 + Committed + Development						
Bagworth Road (LT)	0.42	1	10	0.47	1	11
Bagworth Road (RT)	0.04	0	10	0.09	0	11
Barlestone Road	0.47	1	10	0.48	1	9
2036 + Committed + Development						
Bagworth Road (LT)	0.46	1	11	0.50	1	11
Bagworth Road (RT)	0.05	0	11	0.10	0	11
Barlestone Road	0.51	1	10	0.52	1	9

- 6.27 The analysis indicates that the proposed site access would operate well within capacity at future assessment years and the addition of development traffic has minimal impact on forecast vehicle delays which remain low.

Barlestone Road (B582)/Bosworth Lane (B585) Signalised Junction – Capacity Assessment

- 6.28 The Barlestone Road (B582)/Bosworth Lane (B585) junction will be upgraded to a fully signalised junction as part of the Bosworth Lane Phase 2 development. As such, it has been modelled as a signalised junction in LinSig using the parameters set out within the Bosworth Lane application.
- 6.29 **Table 11** summarises the operation of the Barlestone Road (B582)/Bosworth Lane (B585) junction for the future year scenarios. The LinSig output is provided as **Appendix K**.

Table 11 – Barlestone Road (B582)/Bosworth Lane (B585) Signals Scheme – LinSig Summary Results

Approach	AM Peak 08:00-09:00			PM Peak 17:00-18:00		
	Sat (%)	Queue	Delay (s)	Sat (%)	Queue	Delay (s)
2026 + Committed						
Barlestone Road (NW)	47.6	7	20	33.0	4	18
Barlestone Road (SE)	65.1	11	27	77.7	17	28
Bosworth Lane	64.1	9	35	78.4	11	47
Cycle Time (s)	90			90		
PRC (%)	38.4			14.7		
Delay (PCU/Hr)	10.29			12.43		
2026 + Committed + Development						
Barlestone Road (NW)	47.9	1	21	35.4	4	18
Barlestone Road (SE)	70.4	13	29	79.1	17	29
Bosworth Lane	64.6	9	35	81.1	11	20
Cycle Time (s)	90			90		
PRC (%)	27.9			10.9		
Delay (PCU/Hr)	11.00			13.26		
2036 + Committed + Development						
Barlestone Road (NW)	51.5	8	22	37.9	5	19
Barlestone Road (SE)	75.2	14	31	84.4	20	33
Bosworth Lane	68.7	10	36	86.7	13	57
Cycle Time (s)	90			90		
PRC (%)	19.7			3.8		
Delay (PCU/Hr)	12.40			15.98		

6.30 **Table 11** demonstrates that the signal arrangement of the junction would result it in operating within capacity during the AM and PM peak hours with the development traffic and into the sensitivity assessment year of 2036.

6.31 The results indicate that the development traffic would have a negligible impact on the forecast operations of the new junction arrangement.

Newbold Rd/Bosworth Rd/Main St/Stapleton Lane

6.32 It is forecast that a total of 29 two-way vehicle movements will travel south of the site access in either peak hour; less than one vehicle movement every two minutes. Even if all 29 vehicles were to pass through the Newbold Rd/Bosworth Rd/Main St/Stapleton Lane junction that is less than the LCC threshold of 30 vehicles per hour that triggers a formal assessment.

6.33 No formal capacity assessment is required at this location.

Analysis Summary

- 6.34 The analysis summarised above demonstrates that the proposed site access junctions will operate within capacity in the future year scenarios of 2026 and 2036.
- 6.35 All off-site junctions assessed also currently operate with minimal queuing and delay during peak hours. These will continue to do so during the future year scenarios with the addition of committed development traffic and the proposed development traffic.
- 6.36 The signalisation of the Barlestone Road (B582)/Bosworth Lane (B585) junction will be implemented before any development comes forward. The assessment of this junction suggests that it will operate within capacity during the future year scenarios with the additional development traffic.
- 6.37 The proposed development will have a negligible impact on the operation of the local highway network within Newbold Verdon as well as the B582/B585 corridor.

7.0 Summary and Conclusion

Summary

- 7.1 Hub Transport Planning Ltd has been commissioned by Richborough Estates Ltd to provide transport advice for a proposed residential development off Brascote Lane, Newbold Verdon. This report considers the potential transport and highway impacts of 239 dwellings with a robust assessment of up to 260 dwellings.
- 7.2 On-site observations have indicated that the existing highway network in the vicinity of the site is operating within capacity, with minimal queues and delays on the network.
- 7.3 This site is in a suitable location in transport terms, with local facilities within comfortable walking distance and sustainable transport infrastructure and services present; the proposed development will deliver 2.0m wide footways tying into the existing footway along Brascote Lane.
- 7.4 The site benefits from being near bus stops, with Main Street served by a good bus service for the surrounding urban areas of Leicester, Hinckley, and Coalville. Hinckley Rail Station and Leicester Rail Station are accessible from the site, allowing multi-modal (bus/rail and car/rail) connections to be made to regional and national destinations.
- 7.5 A review of PIA data obtained from LCC indicated that 18 PIAs have occurred within the Newbold Verdon area including twelve occurring along the B582/B585 corridor. The volume and pattern of accidents recorded in the area does not give any undue cause for concern.
- 7.6 Safe and suitable access to the site will be provided via two priority T-junction with Brascote Lane.
- 7.7 It is estimated that the development proposal has the potential to generate a maximum of 180 two-way vehicle trips during any peak hour period. This equates to three additional vehicles on the local highway network every minute, which is demonstrated to have a negligible traffic impact when assigned to the network.
- 7.8 Capacity assessments have indicated that the development proposals would not have a material impact at any off-site junctions, which are forecast to continue to operate with limited queuing and delays at the 2026 and 2036 future assessment years.
- 7.9 These assessments included the planned signalisation of the Barlestone Road (B582)/Bosworth Lane (B585) junction. This junction is demonstrated to operate within capacity for the future year scenarios with development traffic added.
- 7.10 Car and cycle parking at the site will be in line with the guidance set out in the LHDG.

Conclusion

- 7.11 The National Planning Policy Framework (NPPF) states that opportunities to promote sustainable transport modes should be taken up and that safe and suitable access to the site is achievable for all users.
- 7.12 The development is located to make use of existing infrastructure and services and is suitable in transport terms. The development will promote the use of sustainable modes to transport, and the site provides safe and suitable access for all users.
- 7.13 Bearing the above in mind, the NPPF states that:

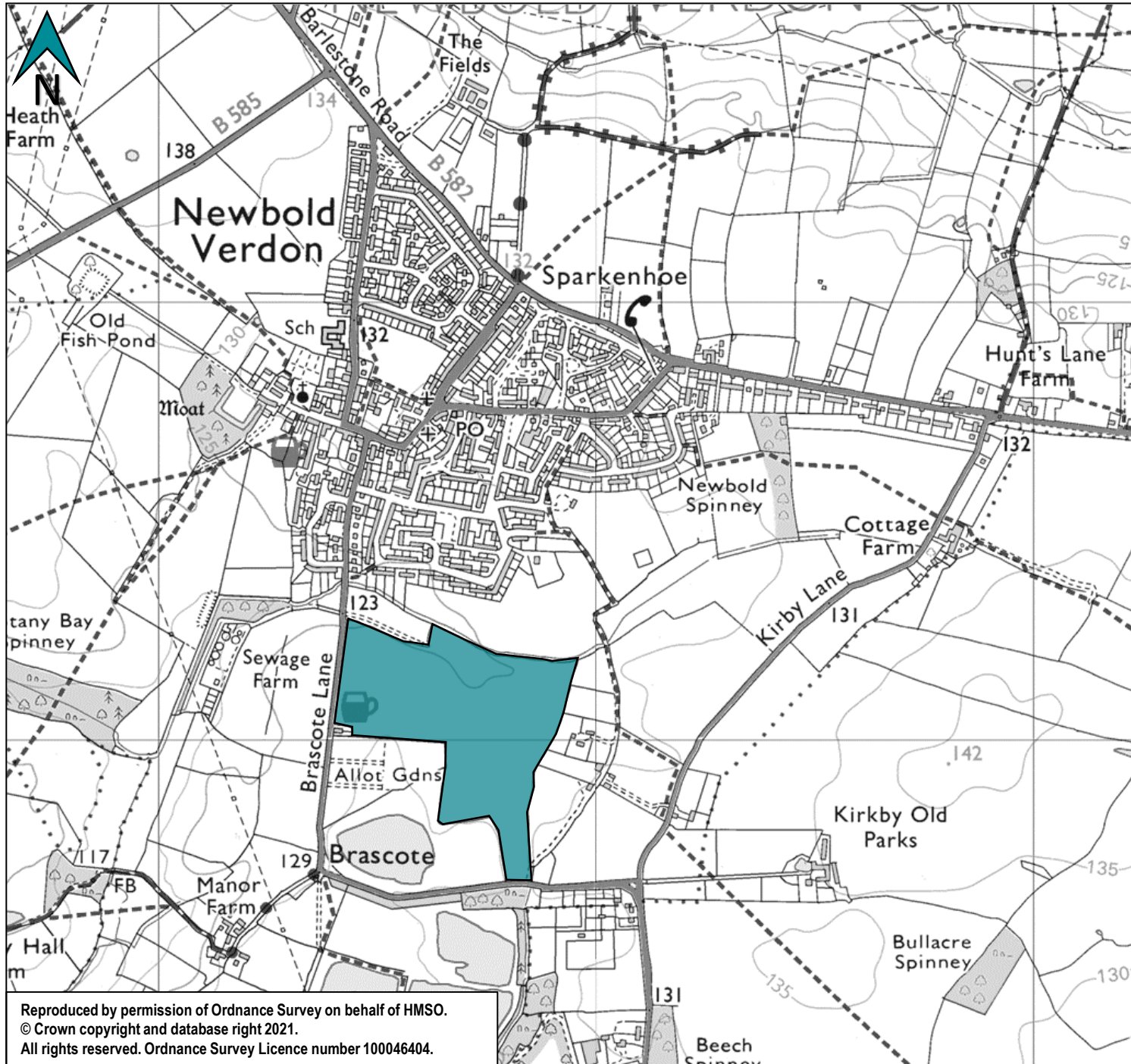
'Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual impact on the road network would be severe.'

- 7.14 The assessment work undertaken and detailed in this report demonstrates that, in NPPF terms, the development will not have a severe impact on the operation of the local highway network nor any unacceptable impact on highway safety.
- 7.15 It is therefore concluded that the proposals accord with national, regional, and local transport related policies and, as such, it is considered there are no reasons why the proposals should be resisted on traffic or transportation grounds.

T20517
Brascote Lane, Newbold Verdon



Figures



Legend



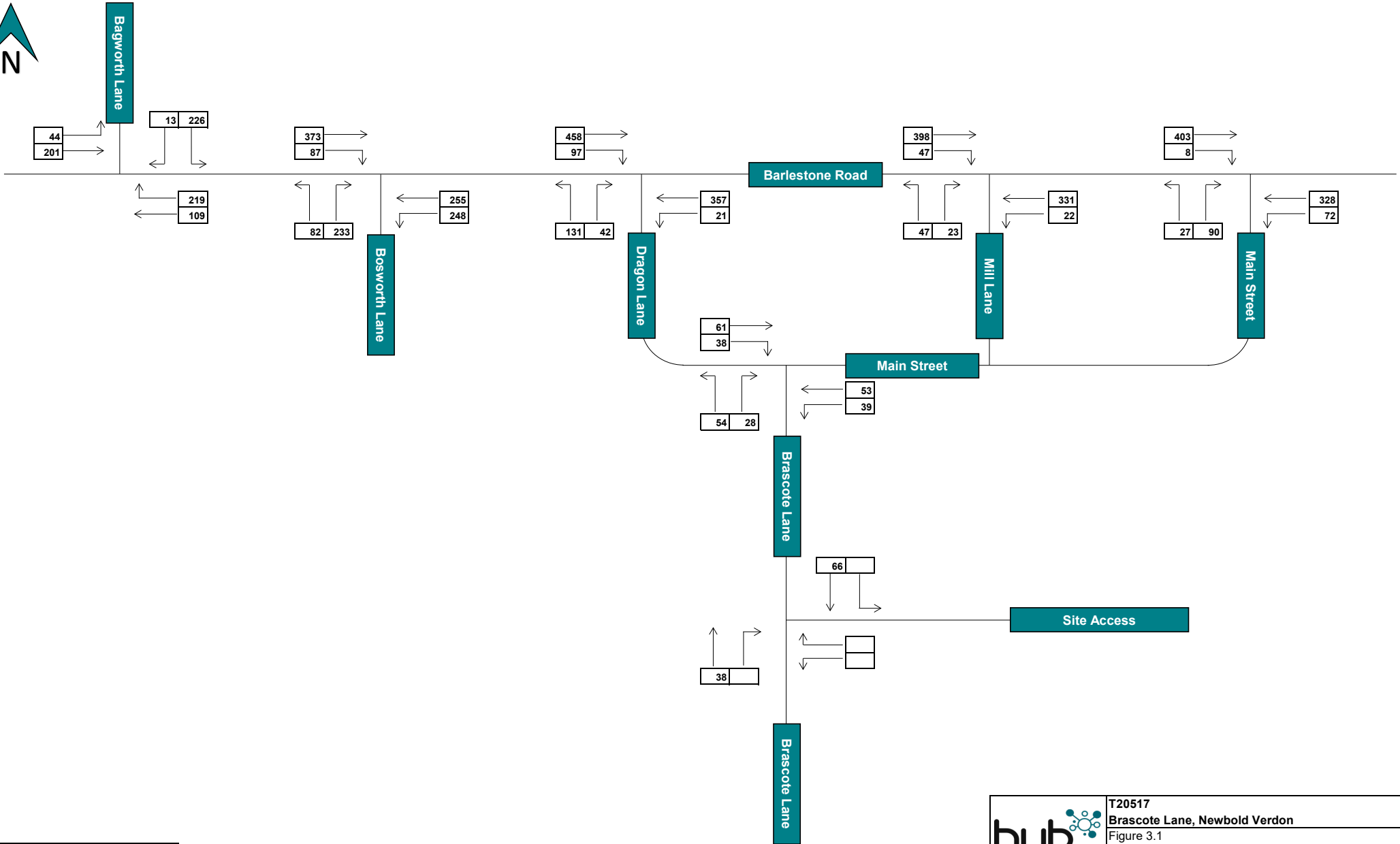
Not to Scale

Brascote Lane

Newbold Verdon

Figure 1.1 – Site Location

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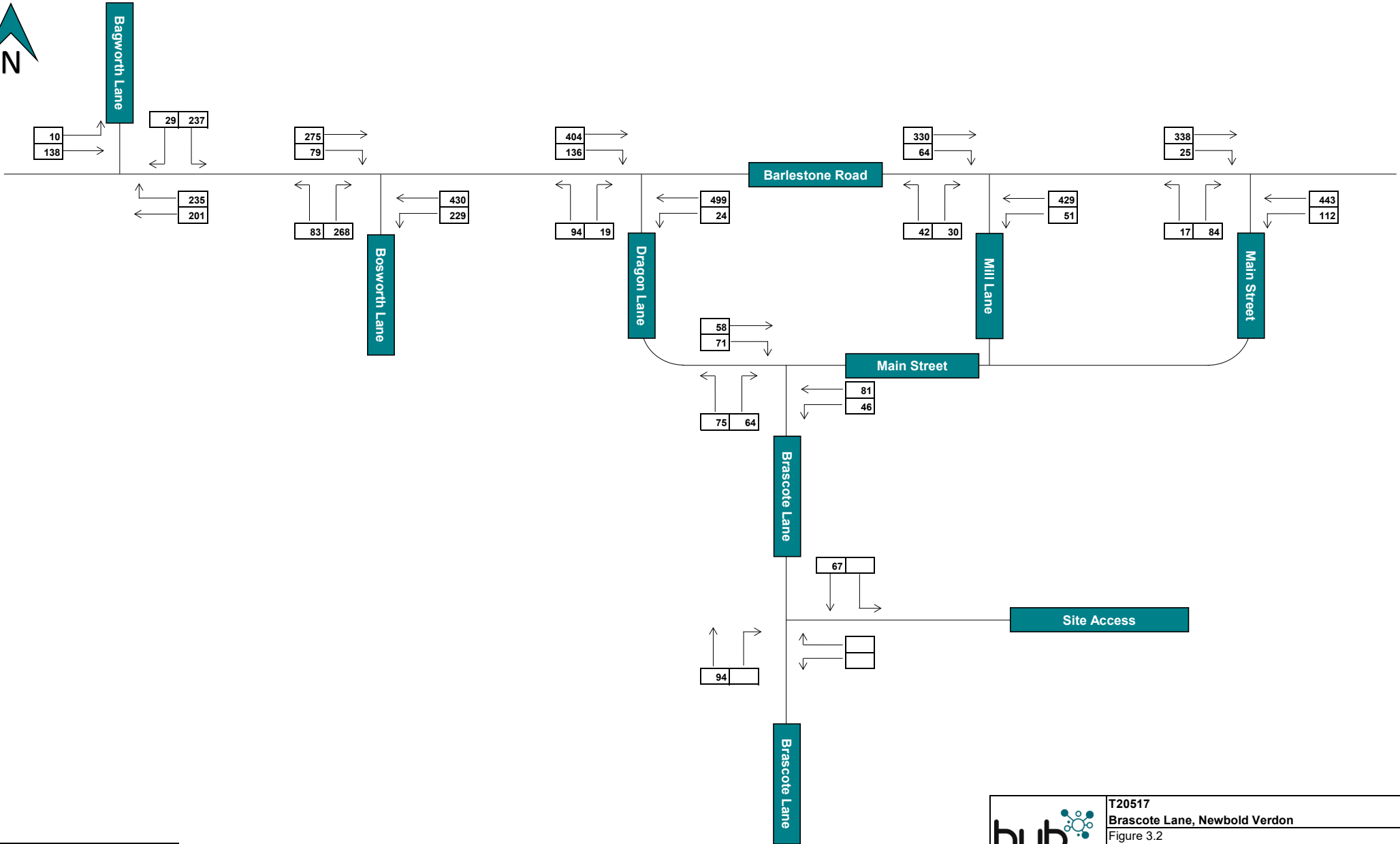


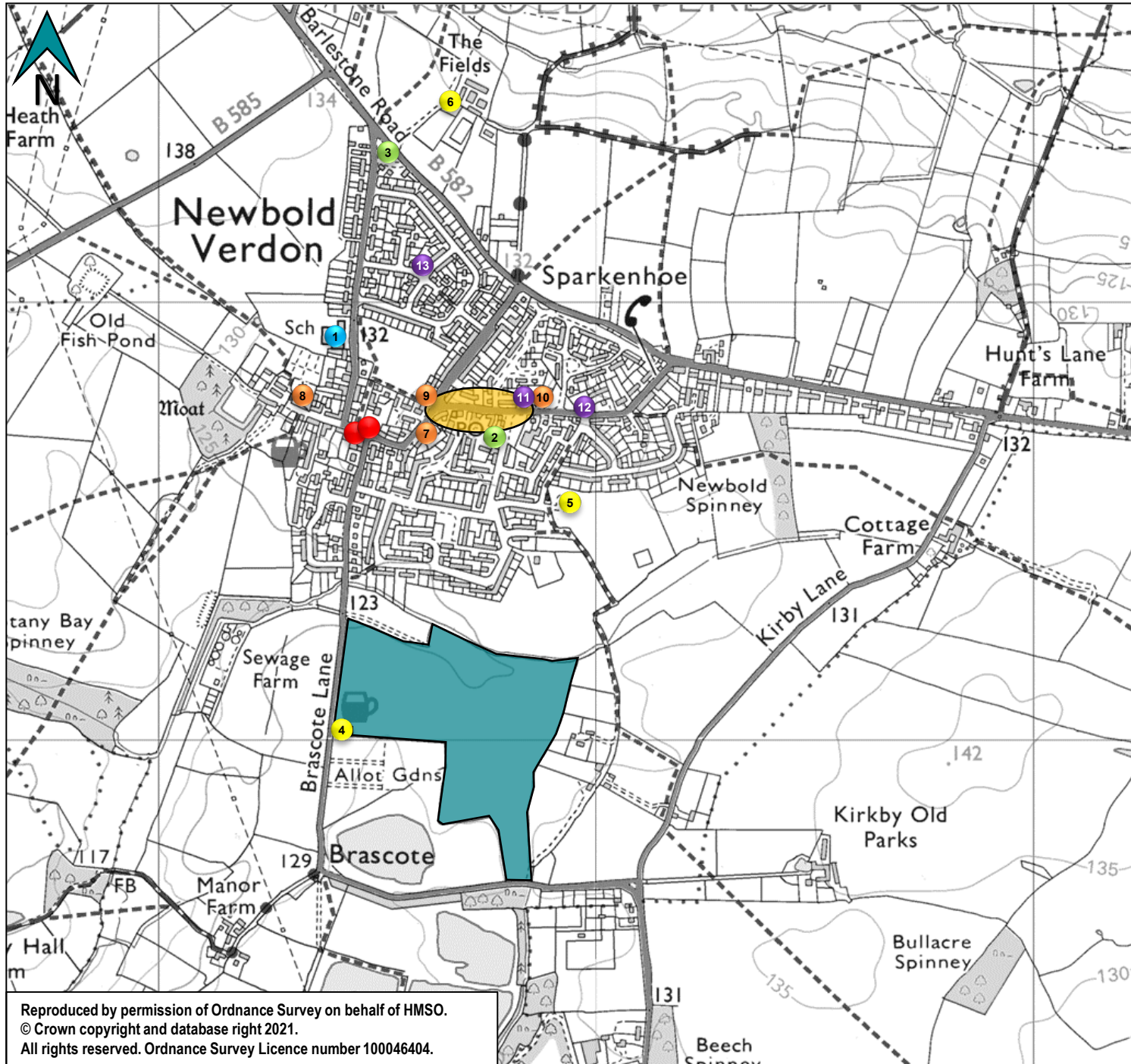
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PCUs



T20517
Brascote Lane, Newbold Verdon
Figure 3.1
2021 PCUs - Combined Proxy
AM Peak Hour: 08:00 - 09:00





Legend

-  Site
-  Bus Stops
-  Newbold Verdon Primary School
-  Heathbrook Pharmacy
-  Newbold Verdon Medical Practice
-  The Windmill Inn
-  Newbold Verdon Cricket Club
-  Newbold Verdon Equestrian Centre
-  Newbold Verdon Methodist Church
-  Church of St. James
-  Newbold Verdon Baptist Church
-  Newbold Verdon Library
-  The Co-Op Food
-  Kareem's Balti
-  Lotus House
-  Main Street Facilities (Incl. Convenience Stores, Cafés, Hairdressers, Public House, and Takeaways)

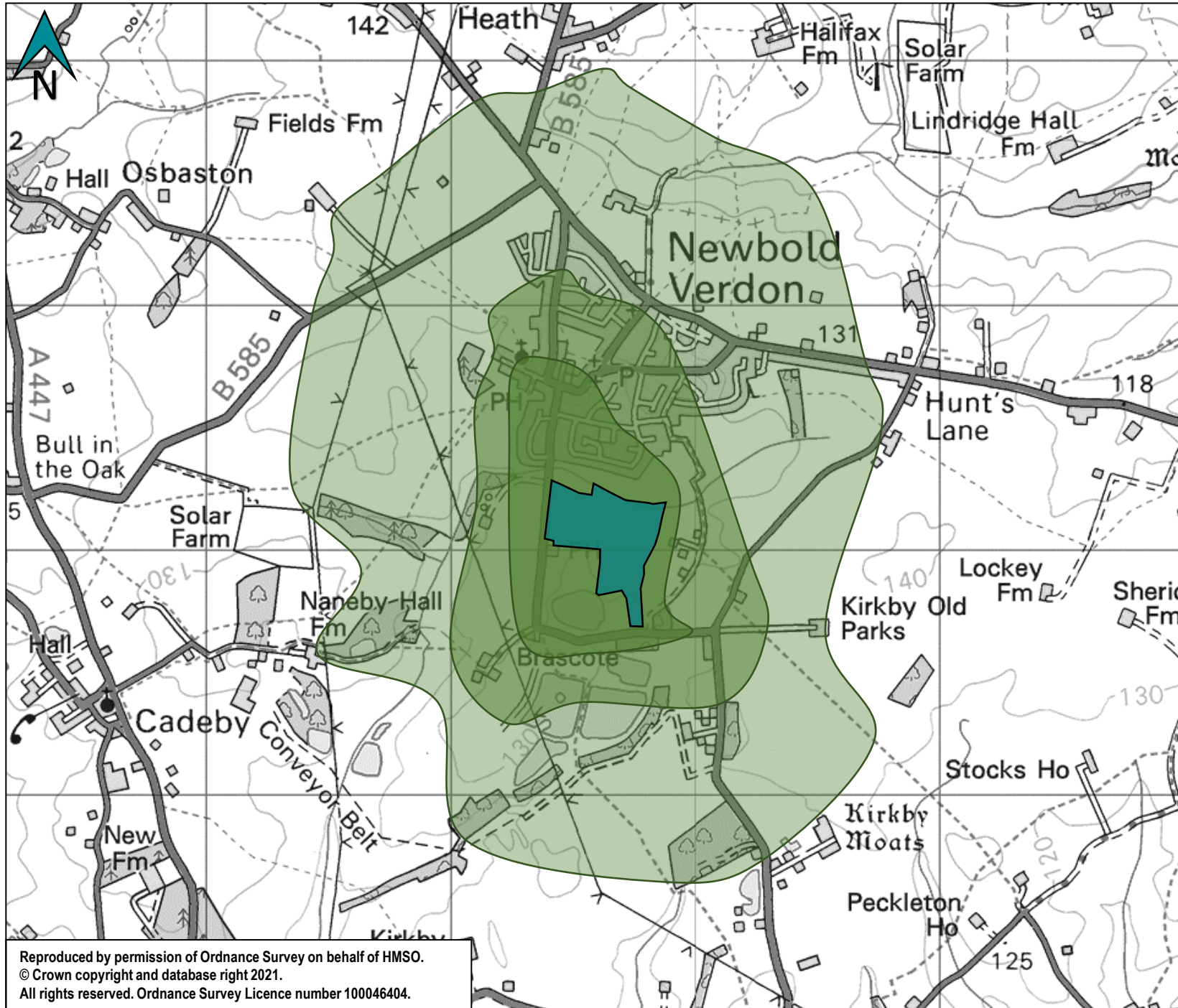


Not to Scale

Brascote Lane

Newbold Verdon

Figure 3.3 – Local Facilities



Legend

-  Site
-  800 Walk Distance
-  1.20km Walk Distance
-  2.0km Walk Distance

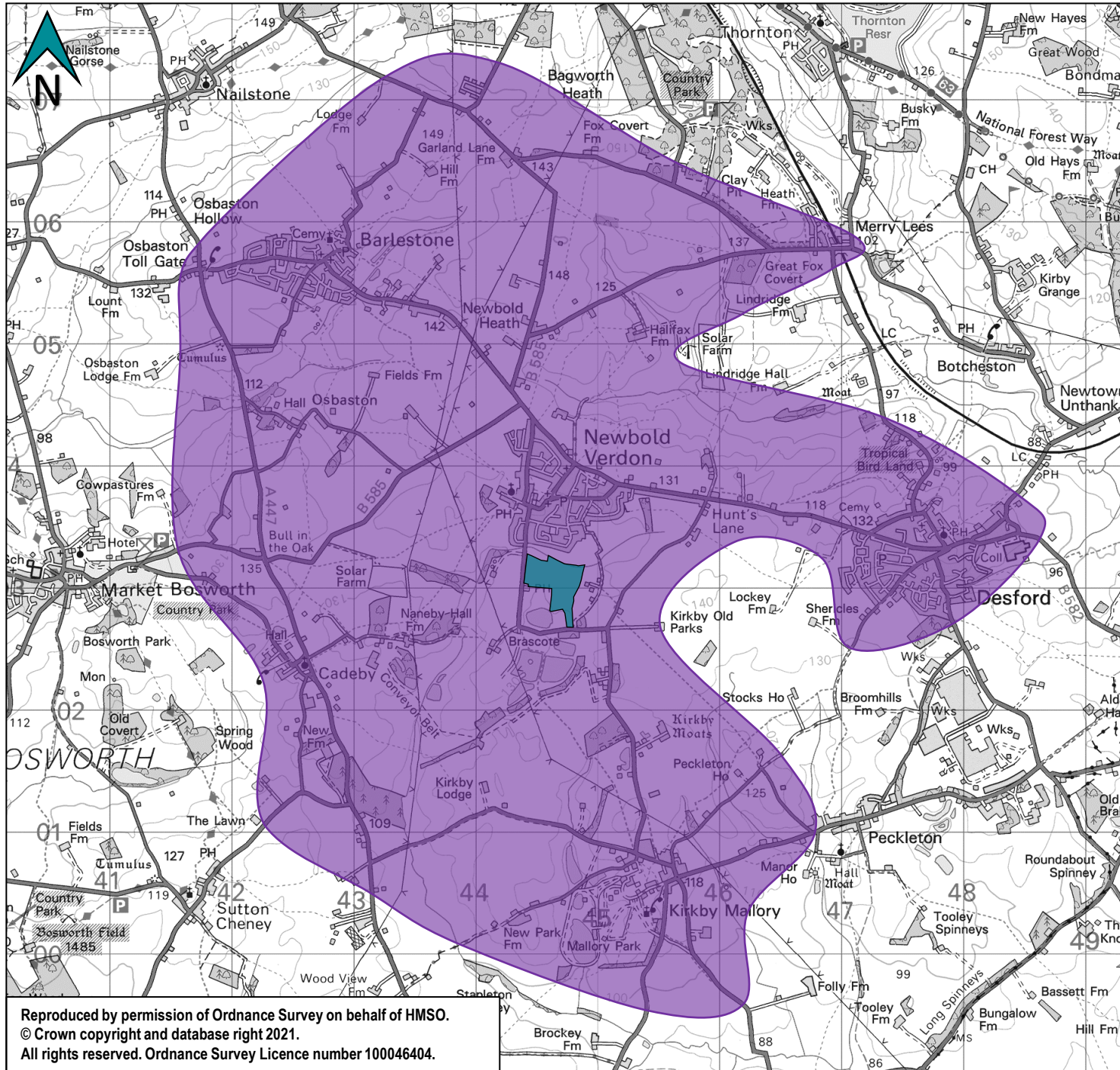


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Brascote Lane

Newbold Verdon

Figure 3.4 – Walk Distances



Legend



Site



5.0km Cycle Distance



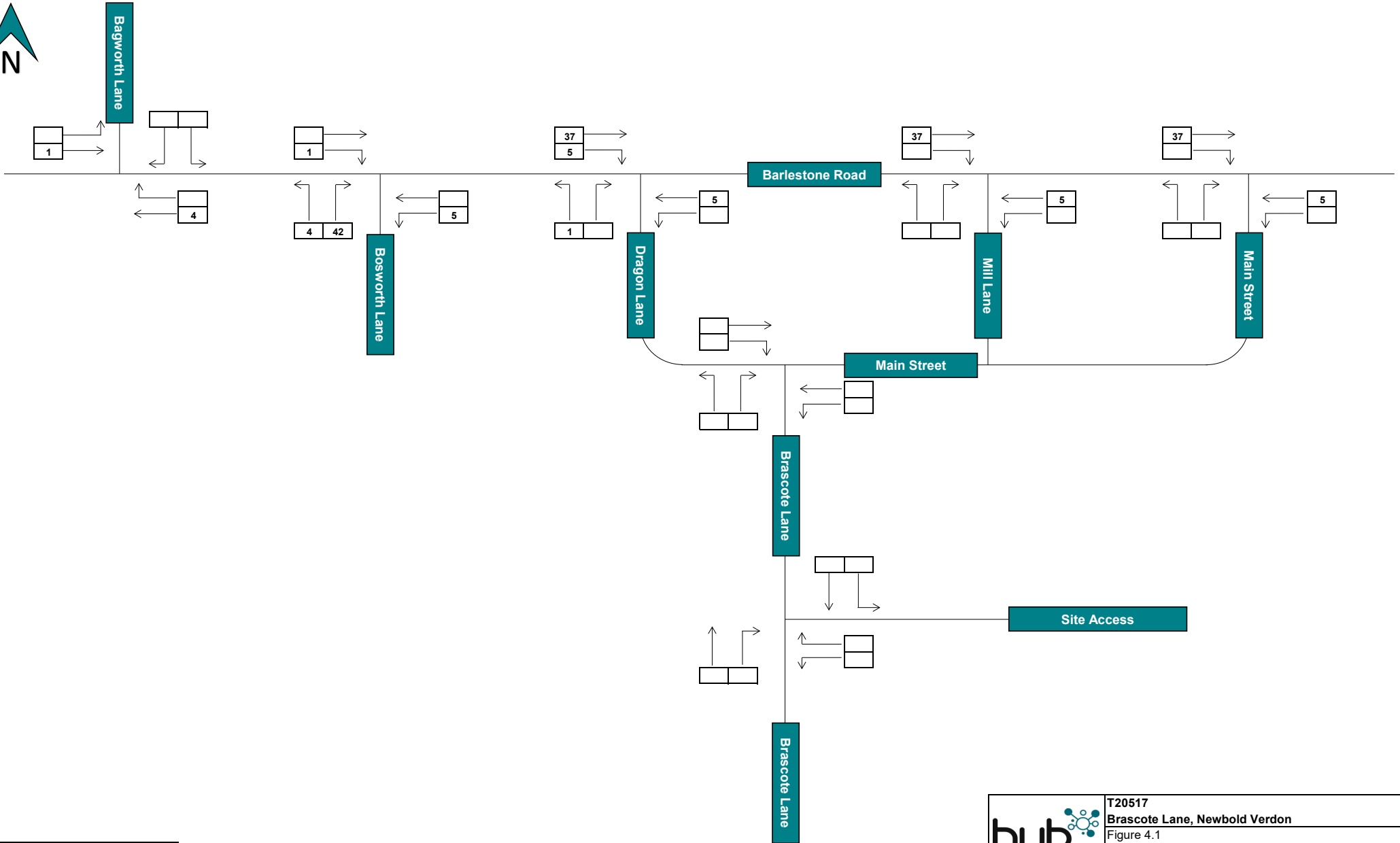
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Brascote Lane

Newbold Verdon

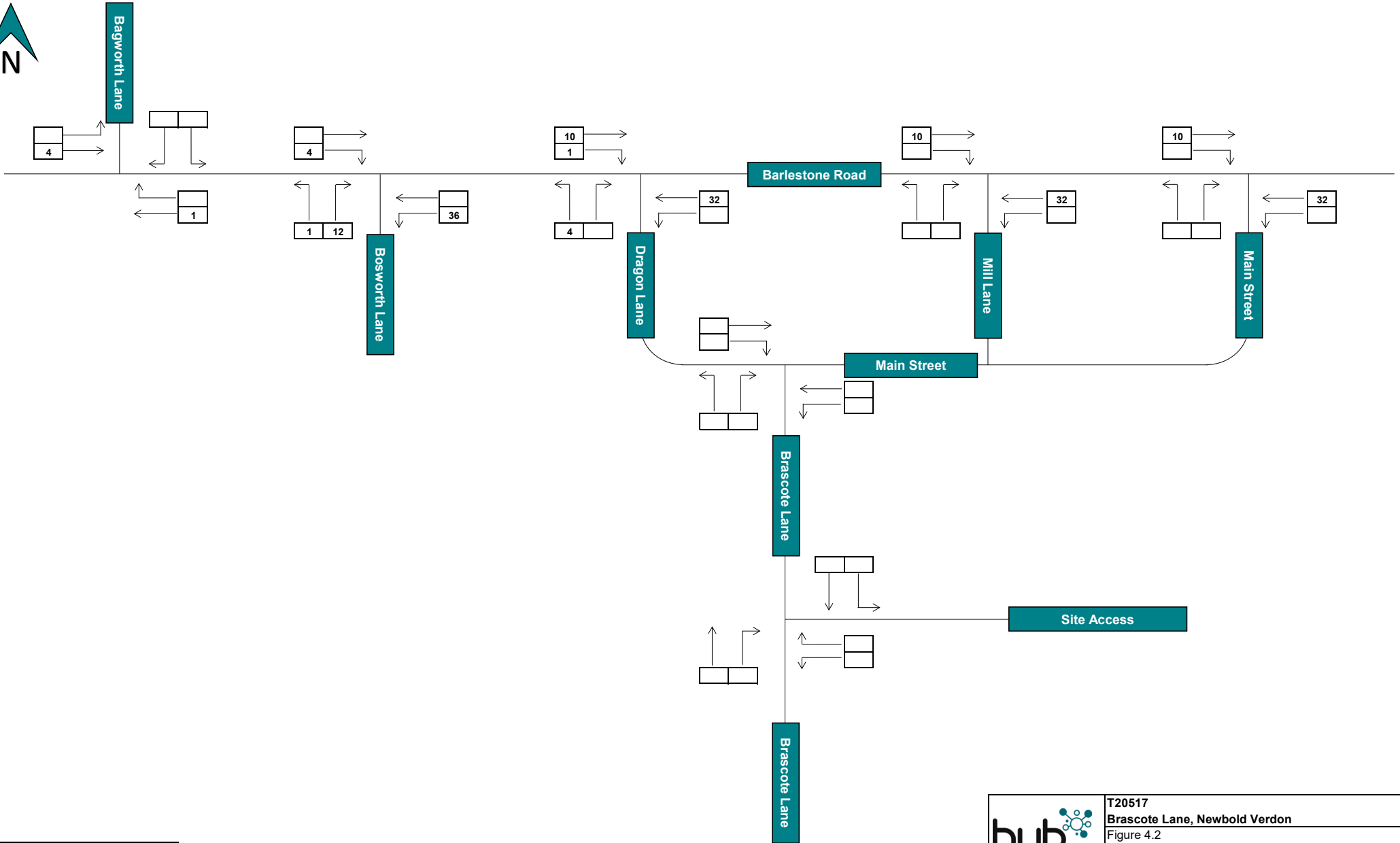
Figure 3.5 – Cycle Distances

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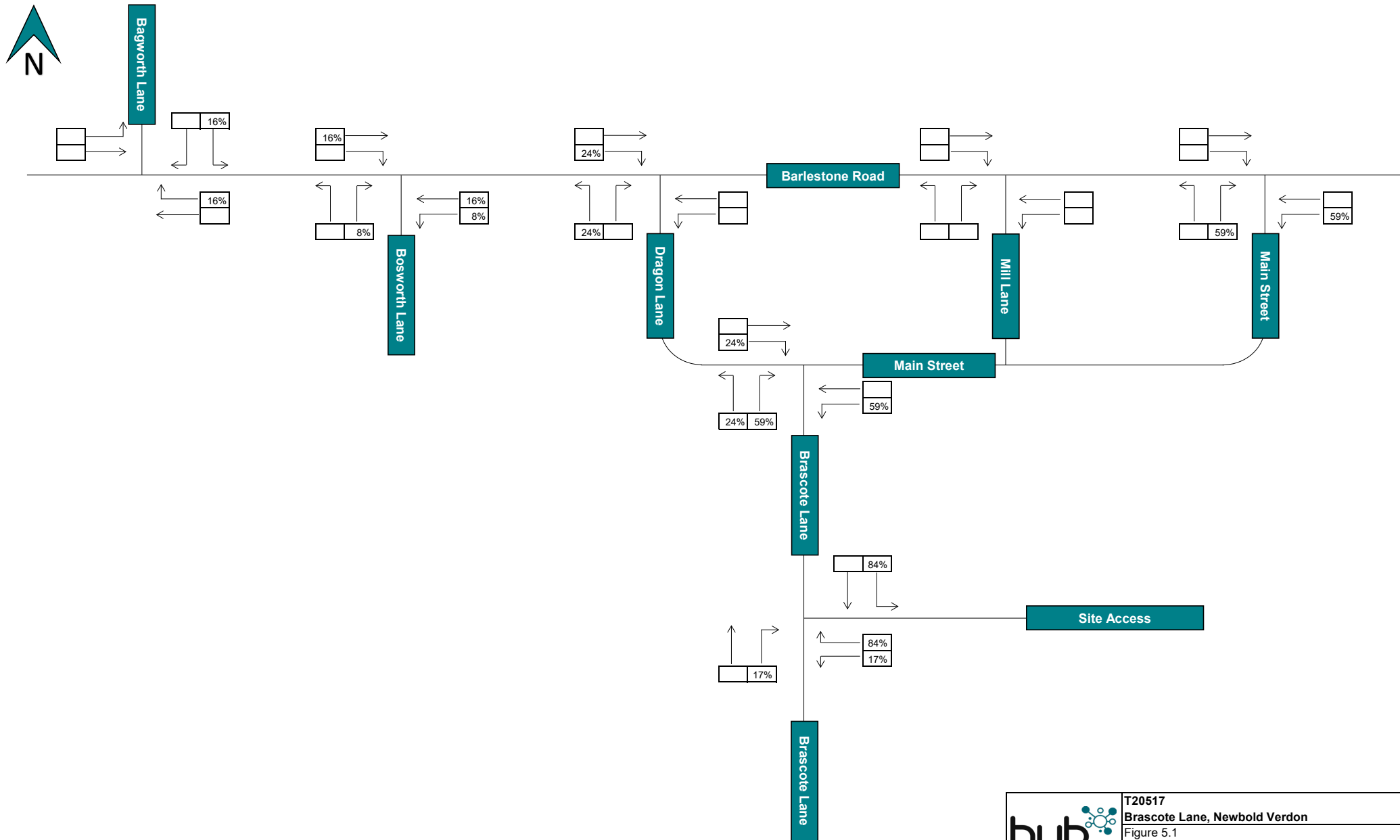
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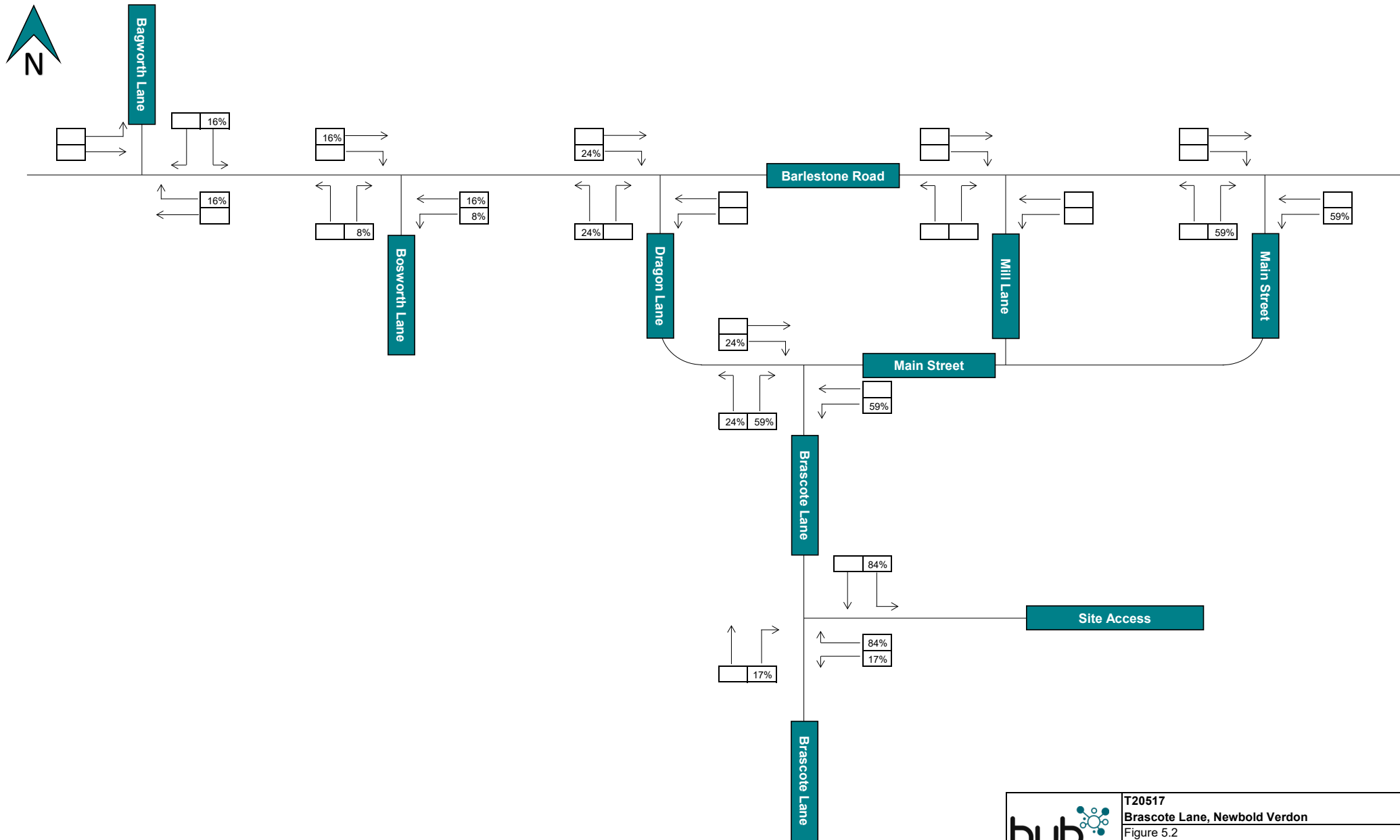


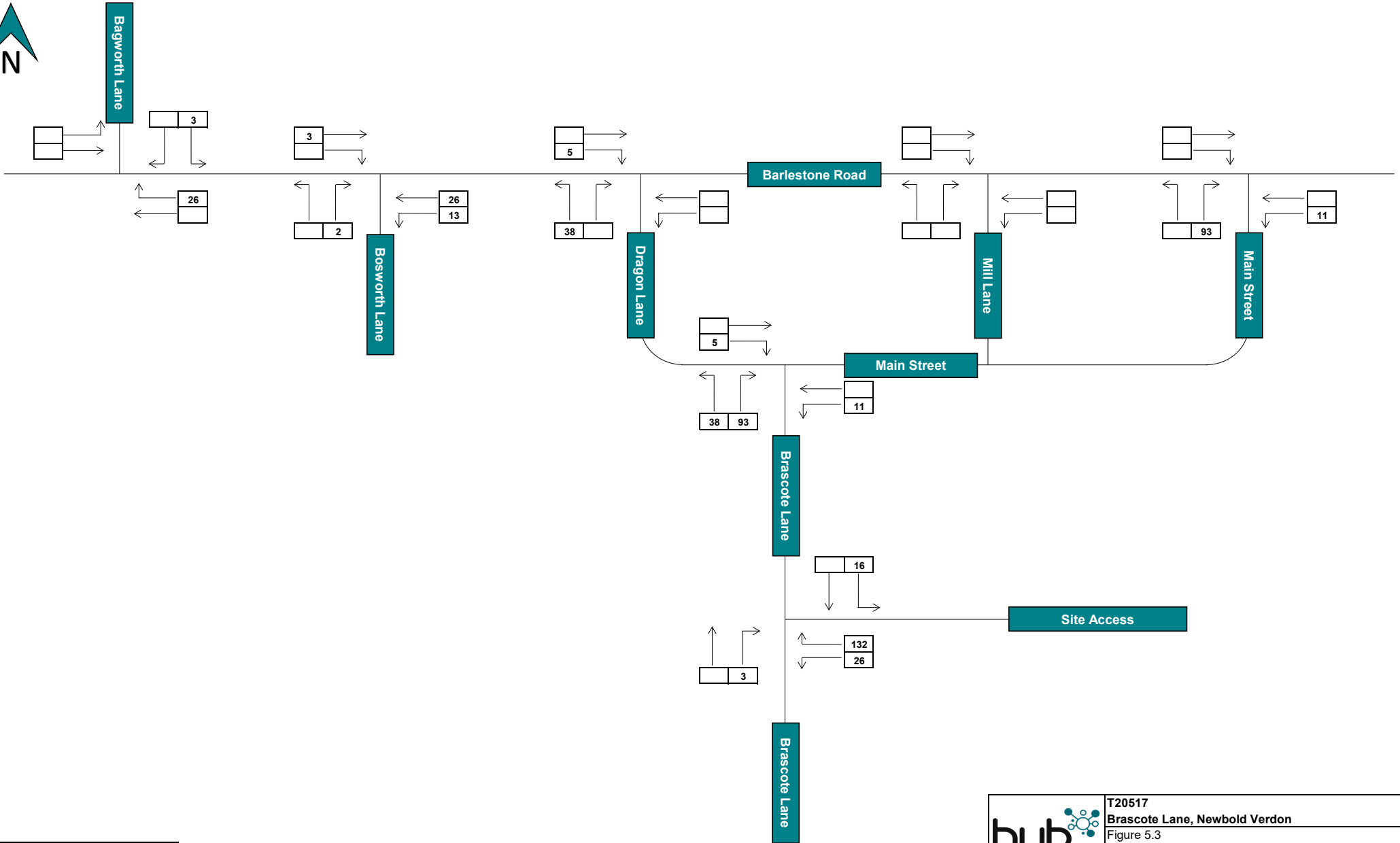
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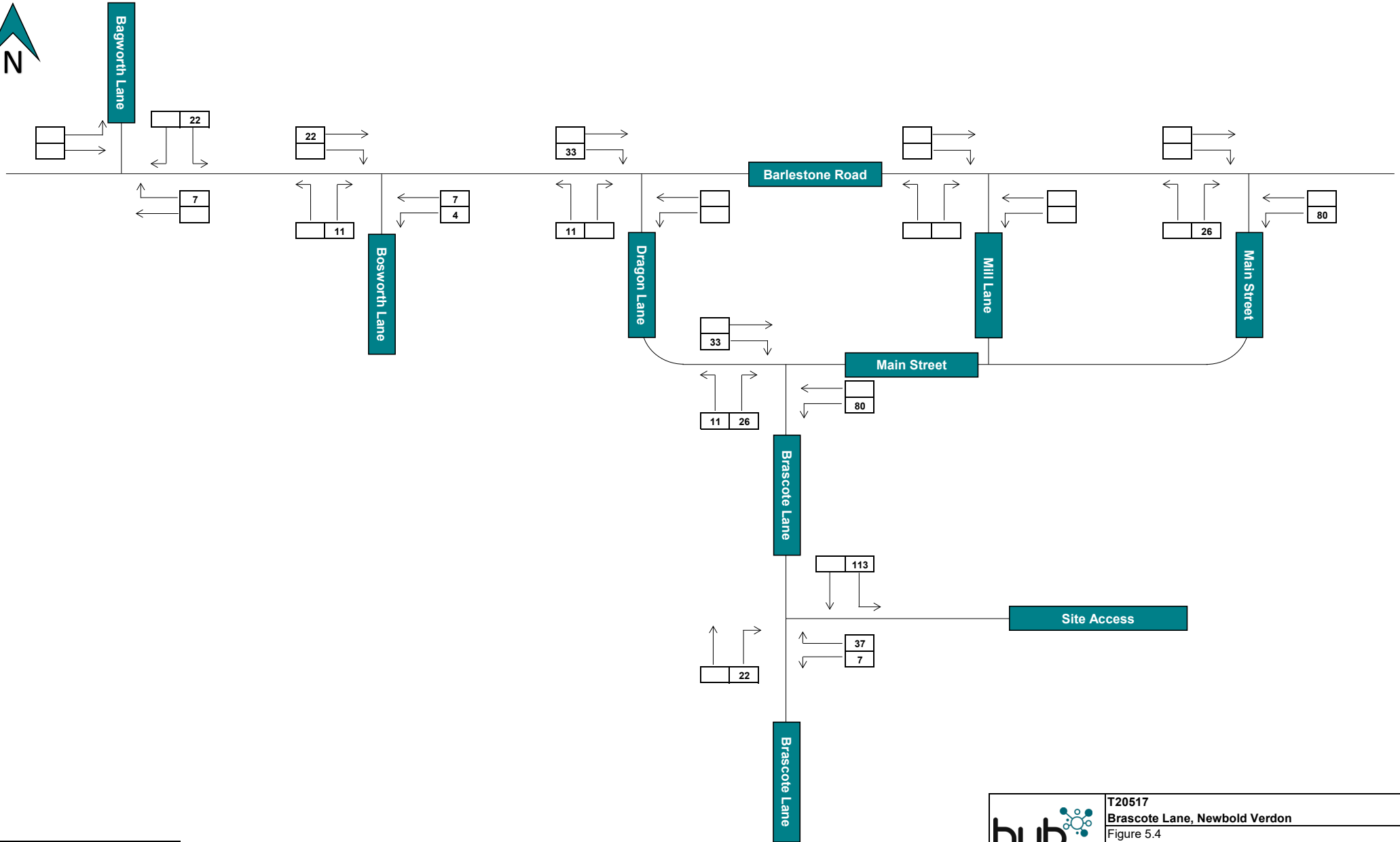


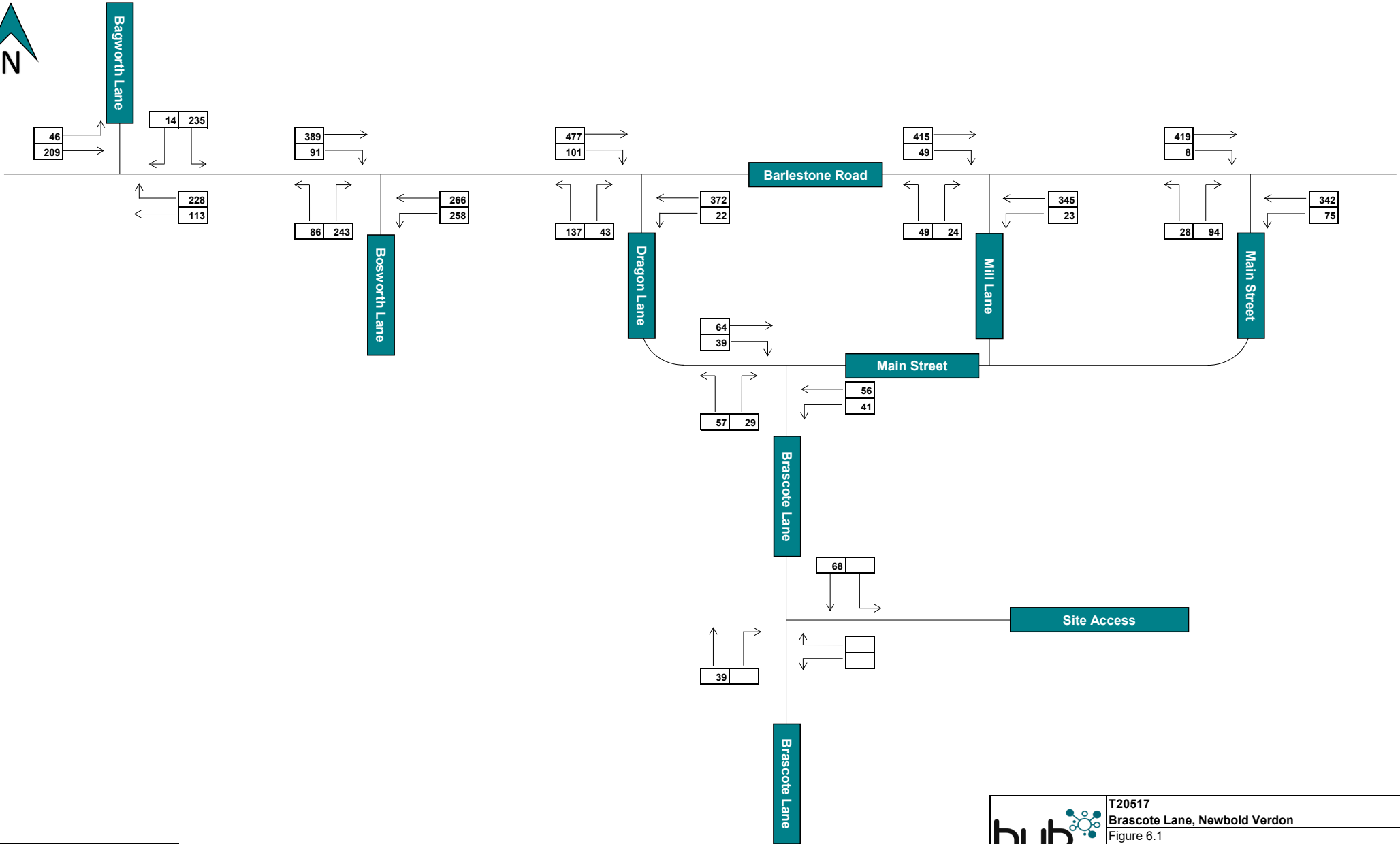
T20517 Brascote Lane, Newbold Verdon
Figure 4.2 Committed Development Flows - Bosworth Lane PM Peak Hour: 17:00 - 18:00







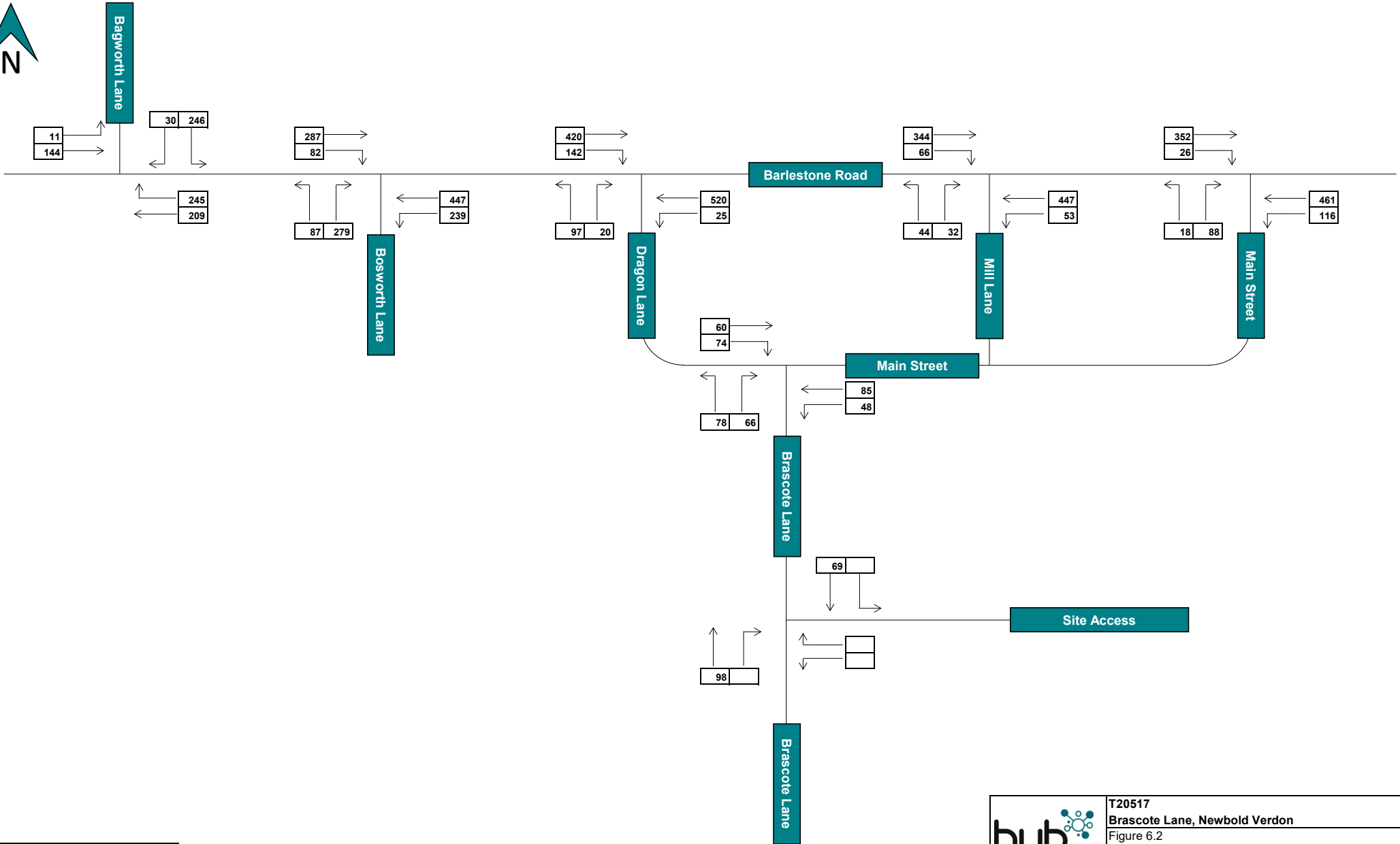




123	PCUs
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T20517 Brascote Lane, Newbold Verdon
Figure 6.1 2026 Base AM Peak Hour: 08:00 - 09:00



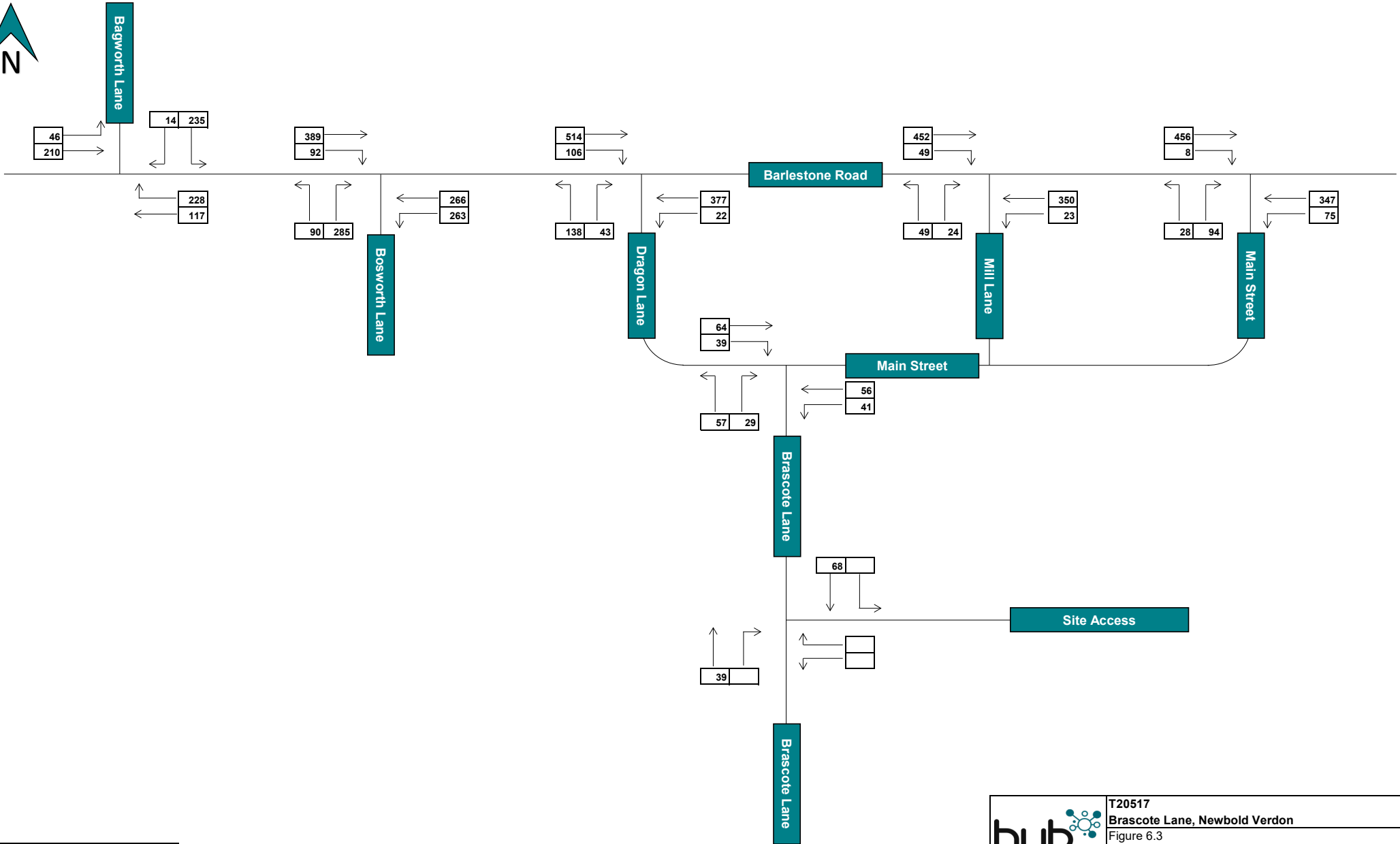
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PCUs



T20517
Brascote Lane, Newbold Verdon

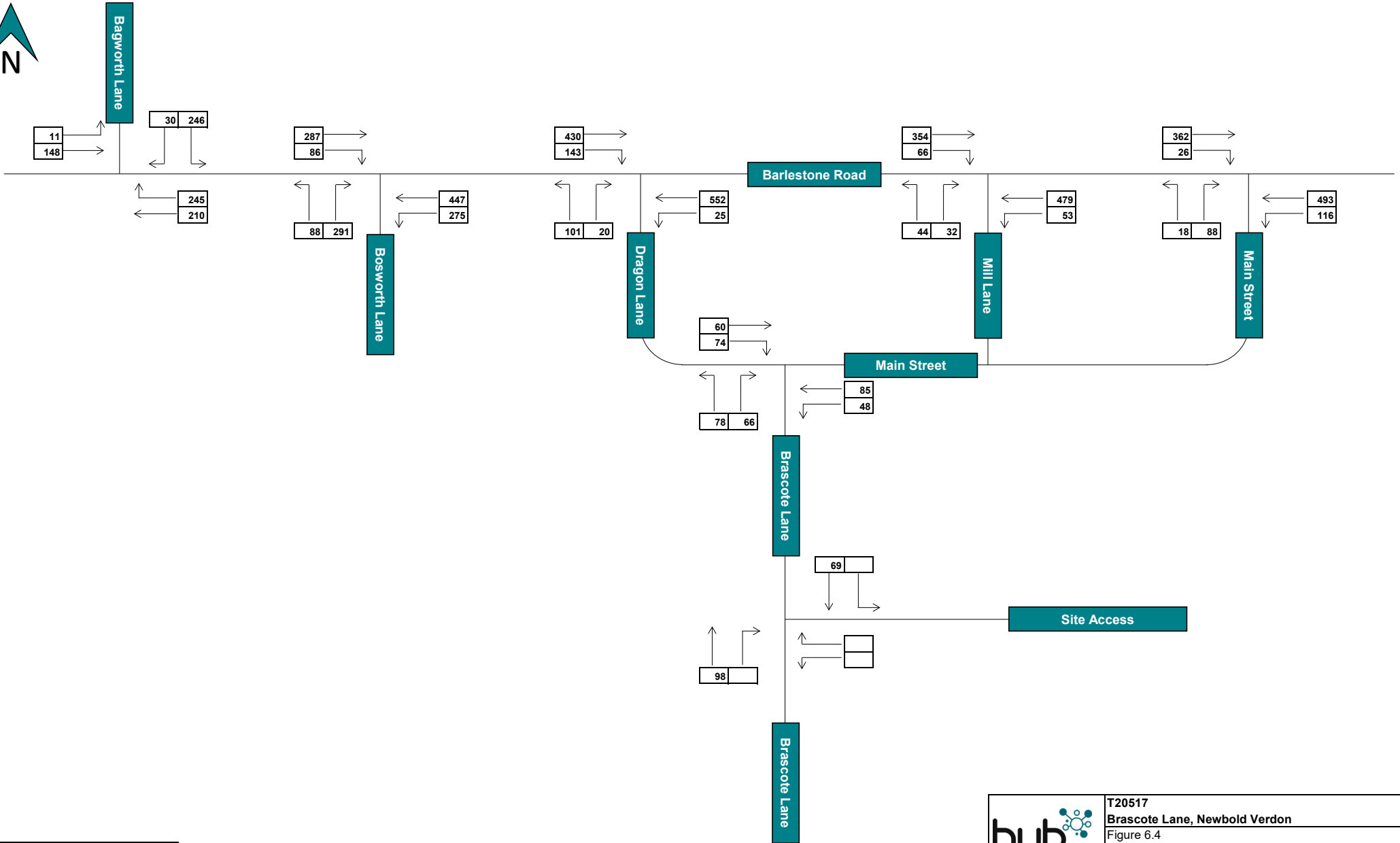
Figure 6.2
2026 Base
PM Peak Hour: 17:00 - 18:00



123	PCUs
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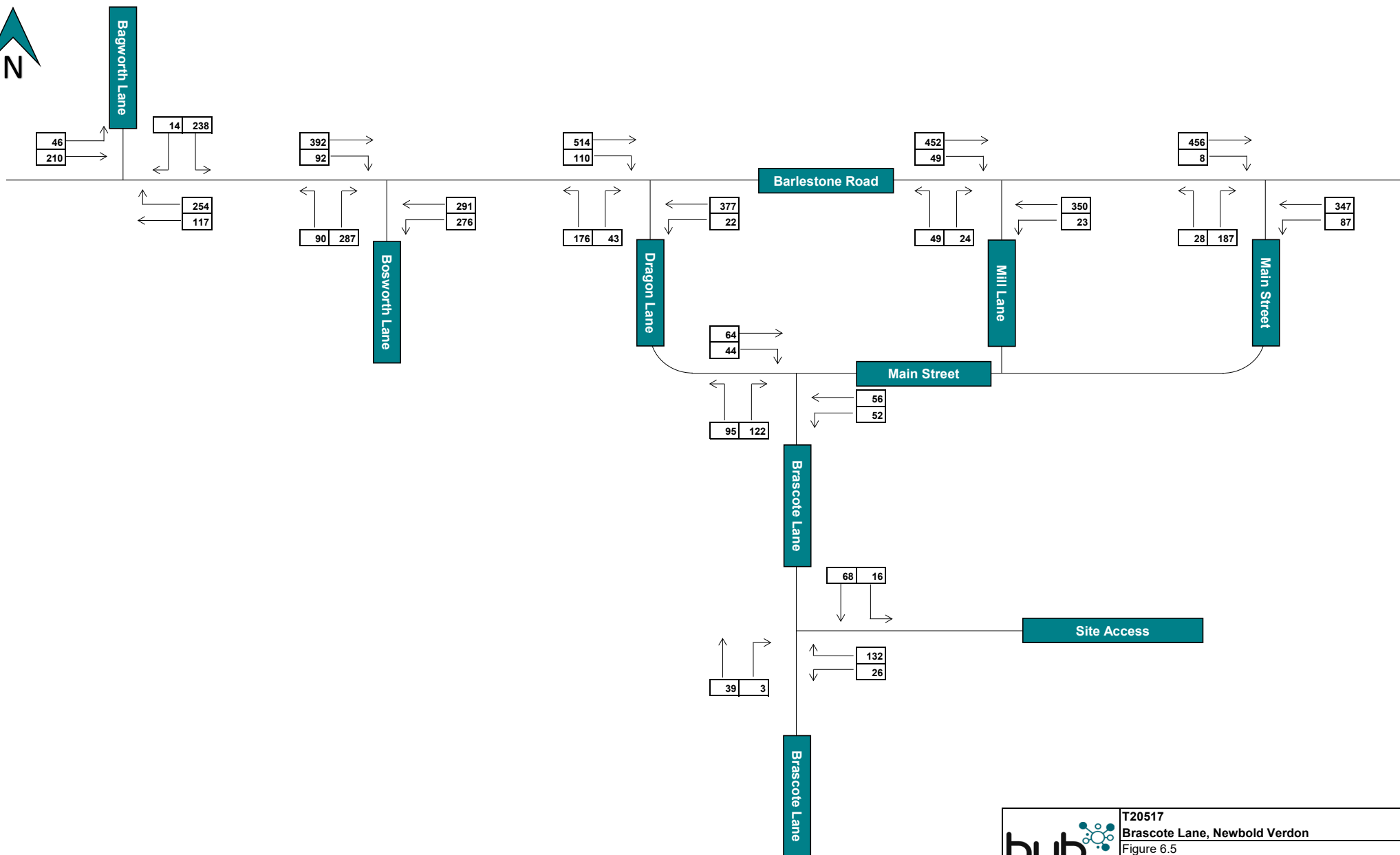


T20517
Brascote Lane, Newbold Verdon
Figure 6.3
2026 Base + Committed Development
AM Peak Hour: 08:00 - 09:00



123	PCUs
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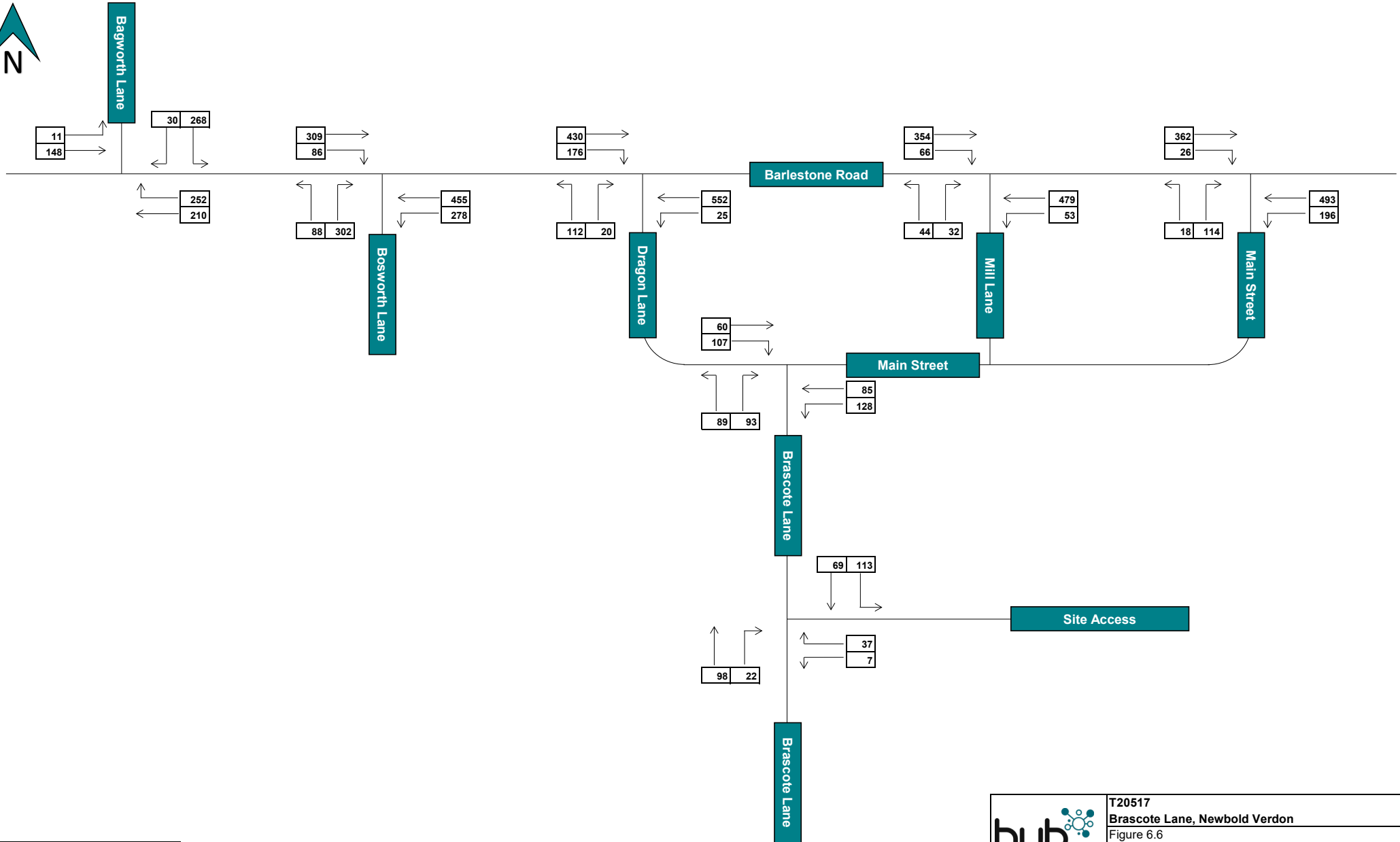
 TRANSPORT PLANNING LTD	T20517
	Brascote Lane, Newbold Verdon
	Figure 6.4
	2026 Base + Committed Development PM Peak Hour: 17:00 - 18:00



123	PCUs
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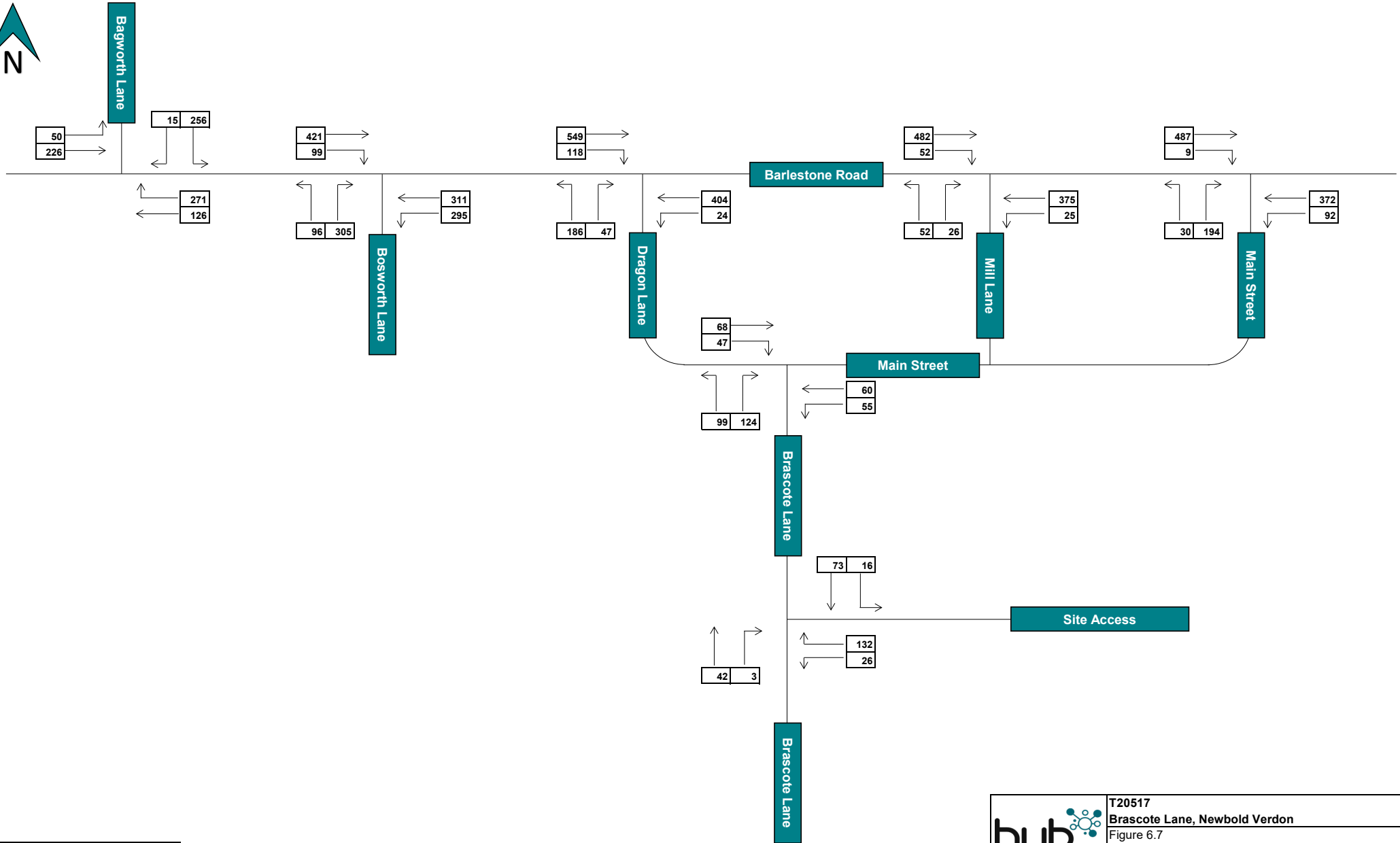
T20517 Brascote Lane, Newbold Verdon
Figure 6.5 2026 Base + Committed + Development Traffic AM Peak Hour: 08:00 - 09:00



123	PCUs
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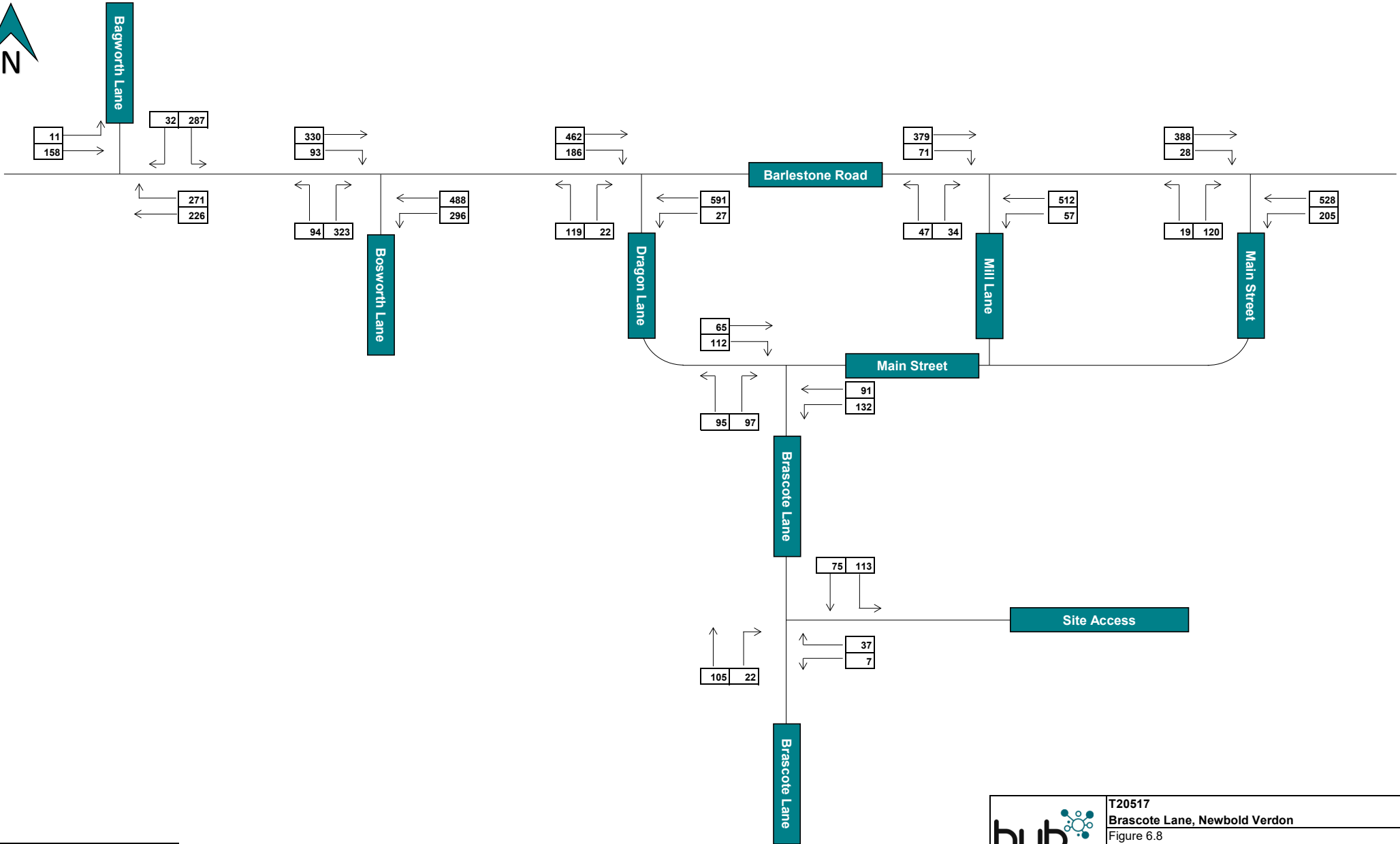
T20517 Brascote Lane, Newbold Verdon
Figure 6.6 2026 Base + Committed + Development Traffic PM Peak Hour: 17:00 - 18:00



123	PCUs
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T20517 Brascote Lane, Newbold Verdon
Figure 6.7 2036 Base + Committed + Development Traffic AM Peak Hour: 08:00 - 09:00



123	PCUs
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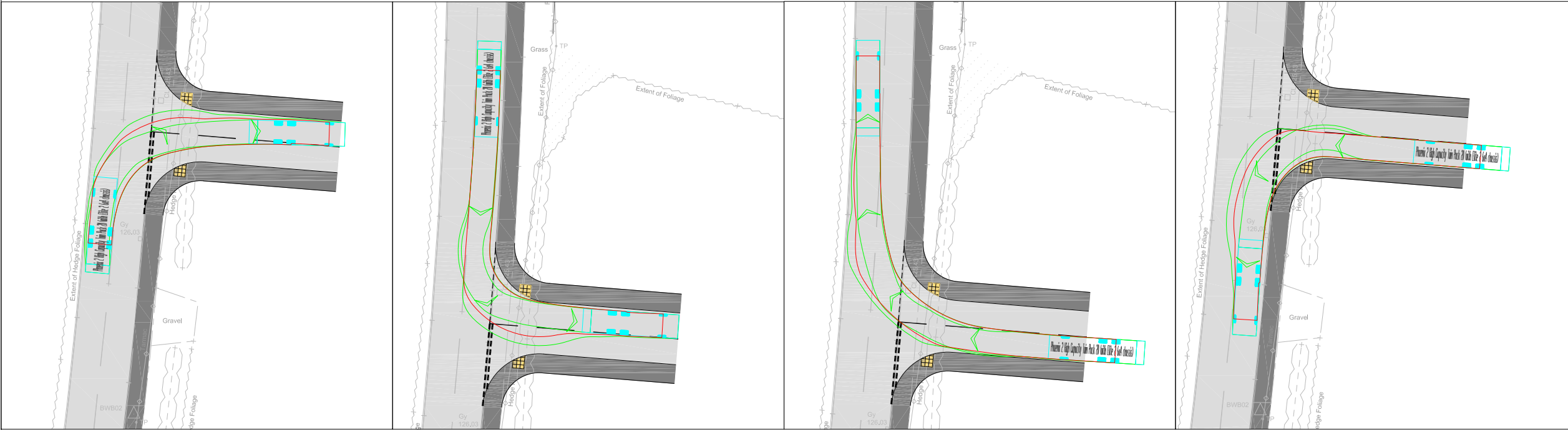
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	Brascote Lane, Newbold Verdon
	Figure 6.8 2036 Base + Committed + Development Traffic PM Peak Hour: 17:00 - 18:00

T20517
Brascote Lane, Newbold Verdon

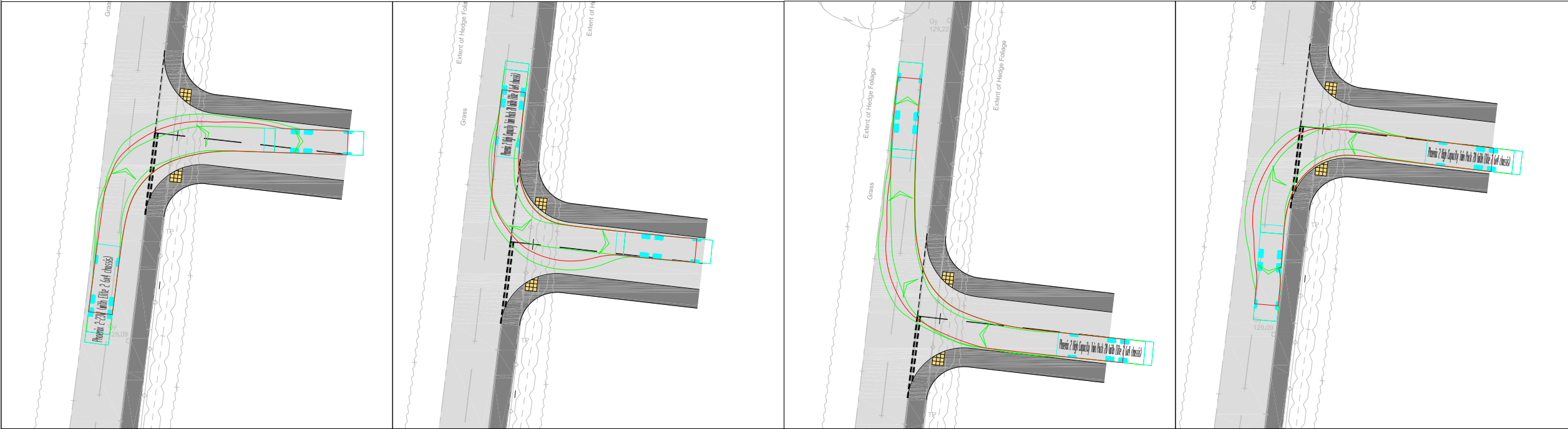


Drawings

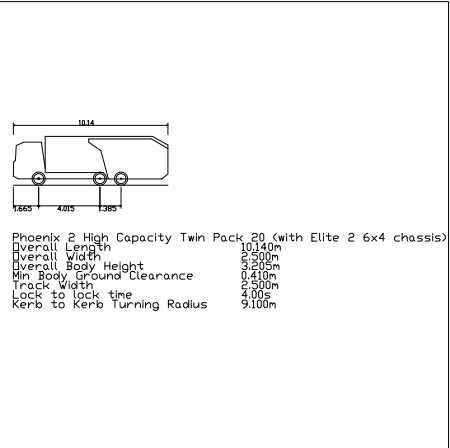
NORTHERN SITE ACCESS



SOUTHERN SITE ACCESS



1. THIS DRAWING IS NOT TO BE SCALED FOR CONSTRUCTION PURPOSES.
2. THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AND LEVELS ON SITE.



REV	DESCRIPTION	DATE	BY	AUTH
-----	-------------	------	----	------



Hub Transport Planning Ltd
Radclyffe House
66/68 Hagley Road
Edgbaston
Birmingham
West Midlands
B16 8PF
T : 0121 454 5530

CLIENT
RICHBOROUGH ESTATES

PROJECT
LAND OFF BRASOTE LANE,
NEWBOLD VERDON

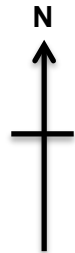
TITLE
PROPOSED SITE ACCESS LAYOUT
SWEEP PATH ANALYSIS

DRAWN JC	AUTHORISED GM	SCALE 1:500	SHEET SIZE A3	DATE 15.02.22
PROJECT NO. T20517		DRAWING NO. 003		REV -

Appendix A

Traffic Count Data

SITE: 1		DATE: 29TH JUNE 2021
LOCATION: BARLESTONE RD / DRAGON LN		DAY: TUESDAY



JOB TITLE: NEWBOLD VERDON	JOB NUMBER:10494
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QUEUE LENGTHS

JOB REF: 10494

JOB NAME: NEWBOLD VERDON

SITE: 1

LOCATION: BARLESTONE RD (E) / DRAGON LN / BARLESTONE RD (W)

NOTE: Queue Lengths recorded by the number of vehicles queuing at each 5-minute interval, by lane



DATE: 29/06/2021

DAY: TUESDAY

TIME	ARM A BARLESTONE RD (E)	ARM B DRAGON LN		ARM C BARLESTONE RD (W)
	LANE 1	LANE 1	LANE 2	LANE 1
07:00	1	0	1	0
07:05	0	1	1	0
07:10	0	1	1	0
07:15	0	1	1	0
07:20	5	1	1	4
07:25	0	0	1	0
07:30	6	1	1	2
07:35	7	3	2	0
07:40	2	1	2	0
07:45	9	2	0	0
07:50	10	2	1	0
07:55	5	1	1	0
08:00	6	3	0	0
08:05	6	3	1	0
08:10	7	1	1	1
08:15	7	2	1	0
08:20	7	1	1	3
08:25	7	1	1	0
08:30	9	1	0	0
08:35	12	3	0	0
08:40	7	1	0	0
08:45	3	0	1	2
08:50	3	2	1	1
08:55	2	4	1	0
09:00	4	6	0	0
09:05	2	2	1	5
09:10	2	0	0	3
09:15	2	1	1	0
09:20	1	1	0	0
09:25	2	1	0	0
09:30	1	0	1	2
09:35	6	1	0	0
09:40	1	0	0	2
09:45	2	2	1	0
09:50	4	1	0	0
09:55	2	1	0	0

TIME	ARM A BARLESTONE RD (E)	ARM B DRAGON LN		ARM C BARLESTONE RD (W)
	LANE 1	LANE 1	LANE 2	LANE 1
15:00	7	4	1	3
15:05	6	1	0	0
15:10	13	3	1	0
15:15	19	3	1	0
15:20	25	4	2	5
15:25	9	4	1	3
15:30	5	0	0	0
15:35	9	4	1	0
15:40	12	2	1	8
15:45	12	1	0	0
15:50	7	3	1	4
15:55	17	1	1	0
16:00	22	3	0	5
16:05	10	6	1	0
16:10	14	3	1	5
16:15	14	4	2	0
16:20	23	1	1	4
16:25	6	3	0	1
16:30	6	1	1	1
16:35	15	6	1	0
16:40	15	1	0	0
16:45	6	1	1	0
16:50	5	2	1	7
16:55	3	1	0	0
17:00	4	0	0	0
17:05	10	2	1	0
17:10	5	3	1	0
17:15	1	1	1	3
17:20	1	2	1	1
17:25	2	1	2	2
17:30	0	2	1	0
17:35	2	1	1	0
17:40	0	1	1	3
17:45	1	0	0	3
17:50	0	1	0	0
17:55	3	0	0	0
18:00	0	0	0	1
18:05	0	0	0	0
18:10	0	1	0	0
18:15	0	0	1	0
18:20	0	1	0	2
18:25	0	0	1	0
18:30	0	0	1	0
18:35	0	1	1	0
18:40	0	0	1	0
18:45	0	1	0	1
18:50	0	1	0	0
18:55	0	0	1	3

MANUAL CLASSIFIED COUNTS

JOB REF: 10494

JOB NAME: NEWBOLD VERDON

SITE: 1

LOCATION: BARLESTONE RD (E) / DRAGON LN / BARLESTONE RD (W)



DATE: 29/06/2021

DAY: TUESDAY

TIME	A TO B FROM BARLESTONE RD (E) TO DRAGON LN							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	1	0	0	0	0	0	0	1
07:15	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0
07:45	4	0	0	0	0	0	0	4
H/TOT	5	0	0	0	0	0	0	5
08:00	6	0	0	0	0	0	0	6
08:15	8	0	0	0	0	0	0	8
08:30	2	0	0	0	0	0	0	2
08:45	7	0	0	0	0	0	0	7
H/TOT	23	0	0	0	0	0	0	23
09:00	1	0	0	0	0	0	0	1
09:15	2	0	0	0	0	0	0	2
09:30	4	0	0	0	0	0	0	4
09:45	6	0	2	0	0	0	0	8
H/TOT	13	0	2	0	0	0	0	15
P/TOT	41	0	2	0	0	0	0	43

A TO C FROM BARLESTONE RD (E) TO BARLESTONE RD (W)							
CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
30	5	0	0	1	1	0	37
41	9	2	0	0	2	0	54
49	10	2	0	0	0	0	61
59	20	3	2	1	0	0	85
H/TOT	179	44	7	2	2	3	237
63	8	1	3	1	0	0	76
46	6	5	1	1	1	0	60
45	18	3	1	0	0	0	67
35	5	1	0	1	0	0	42
H/TOT	189	37	10	5	3	1	245
42	5	2	0	1	0	0	50
27	12	1	0	1	0	0	41
35	10	0	1	0	0	0	46
45	9	2	1	0	0	0	57
H/TOT	149	36	5	2	2	0	194
P/TOT	517	117	22	9	7	4	676

MANUAL CLASSIFIED COUNTS

JOB REF: 10494

JOB NAME: NEWBOLD VERDON

SITE: 1

LOCATION: BARLESTONE RD (E) / DRAGON LN / BARLESTONE RD (W)



DATE: 29/06/2021

DAY: TUESDAY

TIME	A TO B FROM BARLESTONE RD (E) TO DRAGON LN							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
15:00	10	0	0	0	0	0	0	10
15:15	10	0	0	0	0	0	0	10
15:30	1	0	0	0	0	0	0	1
15:45	5	0	0	0	0	0	0	5
H/TOT	26	0	0	0	0	0	0	26
16:00	4	0	0	0	0	0	0	4
16:15	7	0	0	0	0	0	0	7
16:30	1	1	0	0	0	0	2	4
16:45	3	2	0	0	0	0	0	5
H/TOT	15	3	0	0	0	0	2	20
17:00	4	1	0	0	0	0	0	5
17:15	3	1	0	0	0	0	0	4
17:30	4	0	0	0	0	0	0	4
17:45	6	0	0	0	0	0	1	7
H/TOT	17	2	0	0	0	0	1	20
18:00	5	1	0	0	0	0	0	6
18:15	3	0	0	0	0	0	0	3
18:30	2	0	0	0	0	0	0	2
18:45	1	1	0	0	0	0	0	2
H/TOT	11	2	0	0	0	0	0	13
P/TOT	69	7	0	0	0	0	3	79

A TO C FROM BARLESTONE RD (E) TO BARLESTONE RD (W)							
CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
60	9	4	0	0	1	0	74
65	8	2	0	0	2	0	77
57	7	2	0	0	0	0	66
85	9	4	0	0	1	2	101
267	33	12	0	0	4	2	318
83	17	0	0	1	0	0	101
65	8	4	0	0	0	1	78
69	13	2	0	0	0	0	84
62	4	0	0	0	0	1	67
279	42	6	0	1	0	2	330
62	6	0	0	1	0	0	69
51	4	1	0	0	0	0	56
40	4	0	0	0	0	0	44
40	3	1	0	0	0	0	44
193	17	2	0	1	0	0	213
31	7	2	0	1	1	0	42
25	1	1	0	0	1	0	28
17	4	1	0	0	0	1	23
23	7	1	0	0	1	0	32
96	19	5	0	1	3	1	125
835	111	25	0	3	7	5	986

MANUAL CLASSIFIED COUNTS

JOB REF: 10494

JOB NAME: NEWBOLD VERDON

SITE: 1

LOCATION: BARLESTONE RD (E) / DRAGON LN / BARLESTONE RD (W)



DATE: 29/06/2021

DAY: TUESDAY

MANUAL CLASSIFIED COUNTS

JOB REF: 10494

JOB NAME: NEWBOLD VERDON

SITE: 1

LOCATION: BARLESTONE RD (E) / DRAGON LN / BARLESTONE RD (W)



DATE: 29/06/2021

DAY: TUESDAY

TIME	B TO A							
	FROM DRAGON LN TO BARLESTONE RD (E)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	5	3	0	0	0	0	0	8
07:15	6	0	0	0	0	0	0	6
07:30	10	1	0	0	0	0	0	11
07:45	7	0	0	0	0	0	0	7
H/TOT	28	4	0	0	0	0	0	32
08:00	6	0	0	0	0	0	0	6
08:15	4	1	0	0	0	0	0	5
08:30	0	0	0	0	0	0	0	0
08:45	8	2	0	0	0	0	0	10
H/TOT	18	3	0	0	0	0	0	21
09:00	3	0	0	0	0	0	0	3
09:15	2	0	0	0	0	0	0	2
09:30	2	0	0	0	0	0	0	2
09:45	5	0	0	0	0	0	0	5
H/TOT	12	0	0	0	0	0	0	12
P/TOT	58	7	0	0	0	0	0	65

	B TO C							
	FROM DRAGON LN TO BARLESTONE RD (W)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
11	4	0	0	0	1	0	0	16
15	2	0	0	0	0	0	0	17
16	5	0	0	0	1	0	0	22
20	2	0	0	0	0	1	0	23
62	13	0	0	2	1	0	0	78
22	4	1	0	4	0	0	0	31
27	2	0	0	1	0	0	0	30
19	6	0	0	0	0	0	0	25
29	1	0	0	1	0	0	0	31
97	13	1	0	6	0	0	0	117
25	2	0	0	1	0	1	0	29
10	2	1	0	1	0	0	0	14
12	1	1	0	0	0	0	0	14
12	0	1	0	0	0	0	0	13
59	5	3	0	2	0	1	0	70
218	31	4	0	10	1	1	0	265