

**Land off York Close,
Market Bosworth**

TRANSPORT ASSESSMENT

Report prepared for
Gladman Developments Ltd

August 2024

Report Reference 1764/8/B



ASHLEY HELME
ASSOCIATES



Transport Assessment

Land off York Close, Market Bosworth

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Ashley Helme Associates Ltd

76 Washway Road
SALE, Manchester
M33 7RE

Telephone
0161 972 0552

aha@ashleyhelme.co.uk
www.ashleyhelme.co.uk

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Transport Assessment

Land off York Close, Market Bosworth

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1764/17/B
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1764/SP/09-11
1764/02-08 & 18

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1 Introduction

- 1.1 Ashley Helme Associates Limited (AHA) are appointed by Gladman Developments Ltd (GDL) to prepare a Transport Assessment (TA) report to support the planning application for residential development on land off **York Close, Market Bosworth** (henceforth referred to as the Site). The location of the Site is indicated on Figure 1.1, in the context of the local highway network.

1.2 Proposed Development

- 1.2.1 The Site is presently agricultural/ field land. The proposed development comprises a residential development of up to **105 dwellings**. All matters are reserved, except access.

1.3 Relevant Planning History: Land West of Shenton Lane

- 1.3.1 The current application Site is identical to a previous application referred to as '**land west of Shenton Lane**'. The only difference is that access for the previous scheme was to be taken from Shenton Lane, whereas the current proposal takes access from York Close.

- 1.3.2 GDL submitted a planning application (LPA ref **22/00167/OUT**) to **Hinckley & Bosworth Borough Council** (HBBC) for a residential scheme of 125 dwellings on land west of Shenton Lane, which was validated by the Council in June 2022. AHA prepared the following documents that accompanied the planning application:

- (i) Transport Assessment: ref 1764/1/B (March 2020), and
- (ii) Travel Plan: ref 1694/3 (March 2020).

- 1.3.3 Leicestershire County Council (LCC) is the highway authority responsible for all of the roads and junctions in Market Bosworth. Prior to and post submission of the application, there were extensive discussions with LCC highways officers which culminated in agreement to many TA parameters.

- 1.3.4 GDL submitted an appeal for non-determination of the planning application. HBBC subsequently set out 5no reasons for refusal (RfR) that they would have applied if it had been determined. There is a single highways/transport RfR which states:

"1. The applicant has failed to demonstrate that a safe and suitable access route to the site for all highway users can be achieved to/from the site along Shenton Lane, and from Warwick Lane, contrary to paragraph 110 of the National Planning Policy Framework (2021) and contrary to the requirements of Policy DM17 of the Site Allocations and Development Management Policies Development Plan Document."



- 1.3.5 A public inquiry (ref APP/K2420/W/23/3317090) was held between 25 July and 2 August 2023. To assist the inquiry, AHA and LCC prepared a Statement of Common Ground. This sets out the areas of agreement. This is considered further in Chapter 2.
- 1.3.6 Where relevant, parameters agreed with LCC highways officers for the TA report for the residential development on land west of Shenton Lane are adopted in this TA report. Consequently, there is a high degree of consistency between the TA reports for the two residential schemes.

1.4 Scope of the Report

- 1.4.1 Given the past history of the application Site, there is a high degree of agreement to the TA parameters between the applicant and LCC highways officers. This is set out in Chapter 2.
- 1.4.2 The transport policy context for the proposed development is outlined in Chapter 3. The principles of the access strategy adopted for the proposed development are also discussed in Chapter 3, and this provides the means to achieve transport policy objectives. It is fundamental to the approach of the applicant, as represented in this TA, that a holistic view is taken of the consideration of access to the proposed development by all modes of transport.
- 1.4.3 The issues addressed within the TA fall broadly into the following areas:
- (i) Accessibility by non-car modes, and
 - (ii) The vehicular traffic impact on the operational performance of the local highway network, assessed quantitatively for the TA defined study network.
- 1.4.4 The local highway network is described in Chapter 3. The proposed Site access arrangements are outlined in Chapter 4.
- 1.4.5 The transport sustainability of the proposed development is a key issue, as set out in the National Planning Policy Framework (NPPF, December 2023), and also Planning Practice Guidance (PPG, March 2014). Accessibility issues are identified in Chapter 3, and an accessibility appraisal of the Site by non-car modes is presented in Chapters 6 (Walk & Cycle) and 7 (Public Transport), using an accessibility mapping methodology.
- 1.4.6 The planning application is supported by the Travel Plan (TP) report. Chapter 8 outlines the principles of the TP. A summary indication is included in Chapter 8 of the Action Plan for the Travel Plan. This includes measures that are to be implemented prior to first occupation of the development, as well as subsequent and on-going measures/initiatives. A separate Travel Plan document is submitted as part of the planning application, and is complementary to the TA report.



- 1.4.7 The estimation of the development generated traffic and associated With Development traffic flows is presented in Chapter 9. Modelling of the impact of development traffic on the highway network is described in Chapter 10.
- 1.4.8 For the previous planning application on land west of Shenton Lane (ref 22/00167/OUT) there was extensive discussion about development impacts on Shenton Lane and Warwick Lane. This is discussed in Chapter 11 in the context of the current proposal.
- 1.4.9 The conclusions of the TA are presented in Chapter 12.



2 Planning History

2.1 Except for access and scale of development, the current application is similar to a previous application referred to as 'land west of Shenton Lane' (LPA ref 22/00167/OUT), which was appealed for non-determination. To assist the public inquiry held in July/August 2023 (ref APP/K2420/W/23/3317090), AHA and LCC prepared a Statement of Common Ground (SoCG). This sets out the following areas of agreement:

- (i) The TA study junctions;
- (ii) The description and drawings of the TA study junctions;
- (iii) No pattern of accidents; at the TA study junctions that would give rise for concern or the need for any accident remediation;
- (iv) The worst-case combinations of existing network traffic and development generated traffic are the midweek AM and PM peak hours;
- (v) Parking surveys on Shenton Lane and Warwick Lane represent typical conditions;
- (vi) The Bus services and bus stop infrastructure in Market Bosworth;
- (vii) Proposed access arrangements on Shenton Lane;
- (viii) All development generated traffic would need to travel along Shenton Lane to gain access to the development;
- (ix) The range and location of local amenities that are within 800m of the Site;
- (x) Existing footway provision along Shenton Lane and Warwick Lane;
- (xi) The Public Rights of Way network near the Site;
- (xii) The Dixie Grammar School, The Market Bosworth School and St Peter's CE Primary School are all within walking distance of the Site;
- (xiii) Funding for the Travel Plan for period of 5 years after first occupation;
- (xiv) Future assessment year 5 years after planning application submission;



- (xv) Traffic growth factors from the National Trip End Model to estimate the future year assessment traffic flows from the traffic count data;
- (xvi) Residential trip rates and estimates of AM and PM peak hour development generated traffic;
- (xvii) Traffic distribution based on the 2011 Census Journey to Work data for Hinckley & Bosworth 0004 Middle Super Output Area 004;
- (xviii) Junction modelling and the conclusion that the assessed junctions have spare capacity to accommodate traffic generated by the proposed development;
- (xvix) Measures to be delivered through a S278 agreement;
- (xx) Measures to be delivered by a financial contribution secured through a S106 agreement.

2.2 The current planning application seeks access from York Close rather than Shenton Lane. Therefore, the SoCG agreed points (vii) and (viii) are not relevant to the proposed scheme. However, where relevant, parameters agreed with LCC highways officers for the TA report for the residential development on land west of Shenton Lane are adopted in this TA report. Consequently, there is a high degree of consistency between the TA reports for the two residential schemes.



3 Policies & Principles of Access Strategy

3.1 A holistic approach is adopted for the desired access strategy. Due cognisance is taken of a range of relevant policy documents and considerations that represent current national and local policies. These include:

- National Planning Policy Framework (NPPF), December 2023,
- Planning Practice Guidance (PPG), March 2014,
- Hinckley and Bosworth Local Plan (Core Strategy), Adopted December 2009,
- Leicestershire County Council (LCC) Local Transport Plan (LTP).

3.2 A general thrust of current national and local policies is to promote and deliver sustainable transport objectives, and this is a key factor in defining the access strategy for the proposed development.

3.3 There are a range of documents that provide advice and guidance identifying that the historic approach of adopting rigid highway design standards and considering this in isolation is not appropriate or desirable in today's world. This includes, for example, Manual for Streets (MfS) and the associated Manual for Streets 2 (MfS2).

3.4 NPPF: Achieving Sustainable Transport

3.4.1 The National Planning Policy Framework (NPPF) sets out the Government's planning policies for England and how these should be applied.

3.4.2 Paragraph 7 of NPPF sets out that:

"The purpose of the planning system is to contribute to the achievement of sustainable development, including the provision of homes, commercial development, and supporting infrastructure in a sustainable manner. At a very high level, the objective of sustainable development can be summarised as meeting the needs of the present without compromising the ability of future generations to meet their own needs. At a similarly high level, members of the United Nations – including the United Kingdom – have agreed to pursue the 17 Global Goals for Sustainable Development in the period to 2030. These address social progress, economic well-being and environmental protection"

3.4.3 In paragraph 10, NPPF makes it clear that:

*"So that sustainable development is pursued in a positive way, at the heart of the Framework is a **presumption in favour of sustainable development.**"*



3.5 NPPF: Promoting Sustainable Transport

3.5.1 The Government's commitment to sustainable development is emphasised in NPPF. Paragraph 108 advises development promoters to consider transport issues from the earliest stages of plan-making and development proposals, so that:

- a) *the potential impacts of development on transport networks can be addressed;*
- b) *opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;*
- c) *opportunities to promote walking, cycling and public transport use are identified and pursued;*
- d) *the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and*
- e) *patterns of movement, streets, parking and other transport considerations are integral to design of schemes, and contribute to making high quality places.'*

3.5.2 This is expanded in paragraph 109, which states:

"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."

The proposed development respects and reflects this NPPF transport sustainability related objective.

3.5.3 NPPF states in paragraph 114 that:

"In assessing sites that may be allocated for development in 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; and*
- 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."*

3.5.4 NPPF makes it clear in paragraph 115 that:

*"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**."* (AHA emphasis).

3.5.5 NPPF offers specific transport advice with respect to development proposals. In paragraph 116, NPPF sets out that 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 reduced 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."*



3.6 PPG

3.6.1 The Department for Communities and Local Government (DCLG) launched the Planning Practice Guidance (PPG) web-based resource on 6 March 2014. The PPG includes advice on when transport assessments and transport statements are required, and what they should contain.

3.6.2 The PPG states that:

"Travel Plans, Transport Assessments and Statements can positively contribute to:

- encouraging sustainable travel;*
- lessening traffic generation and its detrimental impacts;*
- reducing carbon emissions and climate impacts;*
- creating accessible, connected, inclusive communities;*
- improving health outcomes and quality of life;*
- improving road safety; and*
- reducing the need for new development to increase existing road capacity or provide new roads."*

3.6.3 With respect to Transport Assessments and Statements, PPG sets out that:

"The key issues to consider at the start of preparing a Transport Assessment or Statement may include:

- the planning context of the development proposal;*
- appropriate study parameters (i.e. area, scope and duration of study);*
- assessment of public transport capacity, walking/ cycling capacity and road network capacity;*
- road trip generation and trip distribution methodologies and/or assumptions about the development proposal;*
- measures to promote sustainable travel;*
- safety implications of development; and*
- mitigation measures (where applicable) – including scope and implementation strategy."*

3.6.4 With respect to Travel Plans, PPG sets out that:

"Travel Plans should set explicit outcomes rather than just identify processes to be followed (such as encouraging active travel or supporting the use of low emission vehicles). They should address all journeys resulting from a proposed development by anyone who may need to visit or stay and they should seek to fit in with wider strategies for transport in the area."



They should evaluate and consider:

- benchmark travel data including trip generation databases;
- information concerning the nature of the proposed development and the forecast level of trips by all modes of transport likely to be associated with the development;
- relevant information about existing travel habits in the surrounding area;
- proposals to reduce the need for travel to and from the site via all modes of transport; and
- provision of improved public transport services."

3.7 Hinckley and Bosworth Local Plan (2009)

- 3.7.1 At the time of preparing this TA report, Hinckley and Bosworth Borough Council are consulting on a new Local Plan. Until the emerging Local Plan is adopted, relevant 'Saved' policies in the Hinckley and Bosworth Borough Council: Core Strategy (adopted December 2009) are a consideration in planning applications.

3.8 Hinckley and Bosworth Borough Council: Core Strategy (December 2009)

- 3.8.1 The Hinckley and Bosworth Borough Council: Core Strategy is a development plan document, in the Hinckley and Bosworth Local Plan 2006 to 2026.

- 3.8.2 The Hinckley and Bosworth Borough Council: Core Strategy, forms part of the Local Development Framework and sets out the vision and spatial strategy for the borough up to 2026.

- 3.8.3 Spatial Objective 3: Strong and Vibrant Rural Communities of the Core Strategy states:

"To ensure rural communities have access to a range of shops, education, community, leisure facilities and employment opportunities in the Key Rural Centres to support, enhance and improve the sustainability, vibrancy and vitality of our rural areas."

- 3.8.4 Spatial Objective 6: Infrastructure Provision identifies enhancements to infrastructure coinciding with new development:

"To ensure that development contributes to the necessary infrastructure required by new development, through provision of new, or where appropriate, enhancement of existing infrastructure (for example through appropriate developer contributions)."

- 3.8.5 Policy 14 outlines strategy regarding transport in rural areas of the borough:



"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...*
- Support the provision of accessible transport services for mobility impaired and rurally isolated residents*
- Support further development of quality and reach of accessible transport services,...*
- Support the continuation of the Leicestershire hourly services network (this network provides access within 800 metres to a service of at least hourly daytime frequency for 95% of Leicestershire people) and improving access at other times of the day...*
- ...deliver safe cycle paths...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."

3.9 Leicestershire Local Transport Plan (LTP)

3.9.1 Leicestershire County Council is the local highway authority, and has responsibility for the development and delivery of the Local Transport Plan (LTP). LTP3 covers the period 2011-2026, and the third LTP was published in April 2011.

3.9.2 The Leicestershire TP3 sets out a number of goals for transport in Leicestershire. LTP3 sets out that the Leicestershire transport system should:

- Support a prosperous economy and respond to population growth,
- Offer efficient, resilient and sustainable travel that is well managed and maintained,
- Reduce the carbon footprint of Leicestershire,
- Provide an accessible and integrated system that offers equal opportunity for all its residents,
- Improve health and safety for residents,
- Improve the quality of life for Leicestershire residents and make the County a more attractive place to live, work and visit.



- 3.9.3 The underlying theme of the LTP is to promote policies and measures to foster and achieve improved opportunities for travel choices by non-car modes. This provides the context for specific local measures to be considered, promoted and introduced.

3.10 Principles of the Access Strategy

- 3.10.1 The access strategy for the development provides the means to achieve the identified policy objectives by optimising the opportunity for access to/from the Site by non-car modes. This is in accordance with all local and national policies.
- 3.10.2 The accessibility of the Site for those travelling on foot and cycle is reviewed in Chapter 5, and takes account of the existing and proposed facilities. The current accessibility of the Site by public transport is outlined in Chapter 6 herein, together with the development proposals for public transport. The proposed development takes account of the needs of the mobility impaired.
- 3.10.3 The Access Strategy for the development is cohesive, reflecting the need to appropriately consider and enable provision for the movement of people and goods. This is in accordance with the aims and spirit of NPPF. This includes considering, inter alia:
- Permeability of the Site from/connection to the surrounding locality, for all modes of transport, motorised and non-motorised,
 - Internal access arrangements, all to be the subject of reserved matters application(s), should minimise distance travelled by all modes (where appropriate),
 - Emergency access requirements must be met.
- 3.10.4 The development proposals adopt an integrated approach to managing travel demand, offering safe and sustainable access for all by a choice of sustainable transport alternatives, between homes and employment and a range of services and facilities, such as retail, health, education, and leisure.

3.11 Summary

- 3.11.1 In summary, the development proposal respects and promotes the principles of transport sustainability, and is consistent with national and local transport policy objectives.



4 Highway Network

4.1 The location of the Site is indicated on Figure 1.1 in the context of the local highway network.

4.2 The Site has frontage on York Close Shenton Lane, which are public highways.

4.3 York Close

4.3.1 York Close is a residential cul-de-sac serving 42 properties. All of the existing properties are detached and benefit from off-road parking. Site observation indicates that residential parking is generally accommodated within the driveways with little parking on carriageway.

4.3.2 York Close has a carriageway width of 5.5m. There is downhill gradient along York Close from Tudor Close towards the Site. The lowest section of York Close is relatively level.

4.3.3 There are continuous footways along both sides of the road, which are generally at least 2.0m wide and benefit from lighting. There is a sealed surface footpath that forms a walking connection between York Close and Stanley Road. Public footpath S72 offers an informal walking route to the west and forms a connection with York Close between properties Nos 39 and 46.

4.4 Study Network

4.4.1 Traffic generated by the Site will pass through the following junctions that comprise the TA study network of junctions:

REF	JUNCTION	CONTROL
SJ1	Weston Drive/Station Road	priority control
SJ2	Shenton Lane/ Market Place	priority control
SJ3	Station Road/ Back Lane/ Main Street/ Market Place	priority control
SJ4	Main Street/ Park Street	priority control
SJ5	Park Street/ The Park/ Rectory Lane	priority control
SJ6	Rectory Lane/ Sutton Lane/ Market Place	priority control
SJ7	Warwick Lane/Shenton Lane	priority control
SJ8	Southfield Way/Station Road/Back Lane	priority control
SJ9	Bosworth Road/A444/Bosworth Lane	priority control.

4.4.2 The TA study junction network is shown on Figure 4.1. The local highway authority, LCC, is responsible for all of the TA study junctions. SJ2-SJ9 were **agreed** with LCC for the residential scheme on land to the west of Shenton Lane (ref 22/00167/OUT). The only new junction is



Weston Drive/Station Road (SJ1) and has been added to reflect the revised access strategy (ie York Close) for the Site.

4.5 Existing Junction Geometry

4.5.1 The existing study network junctions are presented on the following drawings:

REF	JUNCTION	DRAWING
SJ1	Weston Drive/Station Road	1764/18
SJ2	Shenton Lane/ Market Place	1764/02
SJ3	Station Road/ Back Lane/ Main Street/ Market Place	1764/03
SJ4	Main Street/ Park Street	1764/04
SJ5	Park Street/ The Park/ Rectory Lane	1764/05
SJ6	Rectory Lane/ Sutton Lane/ Market Place	1764/02
SJ7	Warwick Lane/Shenton Lane	1764/06
SJ8	Southfield Way/Station Road/Back Lane	1764/07
SJ9	Bosworth Road/A447/Bosworth Lane	1764/08.

The existing junction layouts shown on Drg Nos 1764/02-08 are **agreed** with LCC.

4.5.2 SJ1: Weston Drive/Station Road

4.5.2.1 SJ1 is a priority-controlled 'T' junction and is located to the north of the Site. The existing junction arrangements are presented on Drg No 1764/18.

4.5.2.2 Weston Drive forms the minor arm of the junction, giving way to traffic on Station Road. There is existing footway on all sides of the junction.

4.5.2.3 The junction is subject to a 30mph speed limit and the junction benefits from street lighting.

4.5.3 SJ2: Shenton Lane/ Market Place

4.5.3.1 SJ2 is a priority-controlled 'T' junction and is located to the north-east of the Site. The existing junction arrangements are presented on Drg No 1764/02.

4.5.3.2 Shenton Lane forms the minor arm of the junction, giving way to traffic on Market Place. There is existing footway on:

- (i) West side of Shenton Lane,
- (ii) East side of Market Place,
- (iii) West side of Market Place (north of Shenton Lane).



- 4.5.3.3 There are 'no waiting' restrictions (double yellow lines) on Shenton Lane and Market Place (S). There are 'no waiting' restrictions for a short distance on Market Place (N). The junction is subject to a 30mph speed limit and the junction benefits from street lighting.

4.5.4 SJ3: Station Road/ Back Lane/ Main Street/ Market Place

- 4.5.4.1 SJ3 is located circa 95m north-west of SJ2. The existing junction arrangements are presented on Drg No 1764/03.
- 4.5.4.2 Market Place forms the minor arm of the junction and gives way to traffic on Station Road/ Main Street. Back Lane also forms a minor arm of the junction and operates in a northbound one-way direction (ie away from the junction). There is a bus stop accommodating northbound services on Market Place located circa 30m south of SJ3.
- 4.5.4.3 The junction is subject to a 30mph speed limit. There are 'no waiting' restrictions (double yellow lines) on all arms of the junction with the exception of the east side of Market Place. There is existing footway on all arms of the junction with the exception of Back Lane.

4.5.5 SJ4: Main Street/ Park Street

- 4.5.5.1 SJ4 comprises a priority-controlled junction located circa 60m north-east of SJ3. The existing junction arrangements are presented on Drg No 1764/04.
- 4.5.5.2 Main Street (N) is the minor arm of the junction and gives way to traffic on Main Street (S)/ Park Street. Park Street operates one-way in a south-east direction (ie away from SJ4) towards SJ5.
- 4.5.5.3 There is existing footway on both sides of all arms of the junction. However, there is pedestrian guardrail on the west side of Main Street (S) and the north side of Park Street, which directs pedestrians to cross away from the junction. The junction benefits from street lighting.
- 4.5.5.4 All of the junction is covered by 'no waiting' restrictions (double yellow lines). The junction is subject to a 30mph speed limit.

4.5.6 SJ5: Park Street/ The Park/ Rectory Lane

- 4.5.6.1 SJ5 comprises a priority-controlled junction located circa 275m south-east of SJ4. SJ5 is a priority-controlled junction formed by the intersection of Park Street and The Park/ Rectory Lane. The existing junction arrangements are presented on Drg No 1764/05.
- 4.5.6.2 Park Street forms the minor arm of the junction. Park Street operates in a one-way south-east direction at the junction and forms a two-lane entry at SJ5, comprising:



- (i) Unopposed through lane for traffic turning into The Park,
- (ii) Right turn lane which forms a 'T' junction with Rectory Lane.

Rectory Lane operates in a one-way direction westbound (ie away from the junction).

4.5.6.3 The junction is subject to a 30mph speed limit and benefits from street lighting. There is existing footway on:

- (i) Both sides of Park Street,
- (ii) the north side of The Park,
- (iii) the south side of Rectory Lane.

4.5.7 SJ6: Rectory Lane/ Sutton Lane/ Market Place

4.5.7.1 SJ6 comprises a 'T' junction located circa 15m south of SJ2 and circa 235m west of SJ5. Rectory Lane forms the minor arm and is controlled by a stop line at the junction with Sutton Lane. The existing junction arrangements are presented on Drg No 1764/02.

4.5.7.2 Rectory Lane operates one-way towards the junction and is marked with two lanes for left and right turn movements. There are no waiting restrictions (double yellow lines) on both sides of Rectory Lane and Market Place. There is existing footway provision on:

- (i) North side of Rectory Lane,
- (ii) East side of Market Place.

4.5.7.3 The junction is subject to a 30mph speed limit and the junction benefits from street lighting.

4.5.8 SJ7: Warwick Lane/Shenton Lane

4.5.8.1 SJ7 comprises a 'T' junction located about 300m east of the Site. Warwick Lane forms the minor arm of the junction. The existing junction arrangements are presented on Drg No 1764/06.

4.5.8.2 The junction is located with a 30mph speed limit and benefits from street lighting. There is existing footway on the south side of Shenton Lane at the junction. There is currently no footway on Warwick Lane for a distance of about 60m from Shenton Lane.



4.5.9 SJ8: Southfield Way/Station Road/Back Lane

- 4.5.9.1 SJ8 is a priority-controlled crossroads junction located to the north of SJ7. The existing junction arrangements are shown on Drg No 1764/07. Southfield Way and Back Lane form the minor arms of the junction.
- 4.5.9.2 There is footway around all of the junction. There is a zebra crossing on Station Road about 15m east of the junction. There are dropped kerbs on Southfield Way and dropped kerbs and tactile paving on Back Lane. The junction benefits from lighting.

4.5.10 SJ9: Bosworth Road/A447/Bosworth Lane

- 4.5.10.1 SJ9 comprises a staggered crossroads junction and is located about 5km east of the Market Bosworth. The existing junction arrangements are shown on Drg No 1764/08.
- 4.5.10.2 Bosworth Road and Bosworth Lane form the minor arms of the junction and are configured in a right-left stagger. The stagger distance is about 90m. Bosworth Road and Bosworth Lane comprise single lane approaches that flare to accommodate two turning streams at the junction. Both minor arms include merge and diverge tapers on the A447.
- 4.5.10.3 The A447 is aligned in a north-south orientation at the junction. There are marked right turn lanes, formed by ghost island hatching, on the A447 to assist right turn movements into both side arms. There are no overtaking restrictions on the A447 at SJ9.
- 4.5.10.4 The junction is located with a 50mph speed limit. However, both Bosworth Road and Bosworth Lane are subject to de-restricted (ie 60mph) speed limits immediately beyond the junction.

4.6 Personal Injury Collisions

- 4.6.1 The five-year personal injury collisions (PICs) records for the TA study junctions have been purchased from LCC. The data is the most recently available and covers the period 1 January 2019 to 18 April 2024. A plan of the reported PICs is included in Appendix A.

4.6.2 Distribution

- 4.6.2.1 A summary of the LCC PIC data is set out below:

	2019	2020	2021	2022	2023	2024	TOTAL
SJ1	-	-	-	-	-	-	0
SJ2	-	-	-	-	-	-	0
SJ3	-	-	-	-	-	-	0
SJ4	-	-	-	-	-	-	0
SJ5	-	-	-	-	-	-	0



SJ6	-	-	-	-	-	-	0
SJ7	-	-	-	-	-	-	0
SJ8	-	-	-	-	-	-	0
SJ9	1	-	1	-	1	-	3
TOTAL	1	0	1	0	1	0	3

4.6.3 Severity

4.6.3.1 The severity of the recorded PICs is set out below:

	Slight	Serious	Fatal	TOTAL
SJ1	-	-	-	0
SJ2	-	-	-	0
SJ3	-	-	-	0
SJ4	-	-	-	0
SJ5	-	-	-	0
SJ6	-	-	-	0
SJ7	-	-	-	0
SJ8	-	-	-	0
SJ9	3	-	-	3
TOTAL	3	0	0	3

4.6.4 Summary

4.6.4.1 A review of the accident data shows there are **only three** recorded accidents at the TA study junctions in the 5-year selection period. Whilst all accidents are regrettable, there is **no** accident pattern that raises concern or that gives rise to the need for accident remediation measures.



5 Proposed Site Access Arrangements

5.1 Design Philosophy

5.1.1 It is accepted that the way a new residential scheme relates to its surrounding area is key to its success. Guidance on the design of residential developments is set out in documents such as Manual for Streets (MfS). This advocates that residential design should:

- Be based on a hierarchical design process placing pedestrians at the top.
- Recognise that streets fulfil a community function with spaces for social interaction.
- Create an inclusive environment that recognises the needs of all ages and abilities.
- Focus on pedestrian desire lines.
- Create a permeable network of streets with strong connectivity to a range of routes.

5.1.2 The starting point of a new residential scheme is to first identify the existing places/amenities near to the site and their relative importance. Then, from this, form an understanding of how an area works to enable proposed points of connection and linkage to be identified, both within and outside the site, so that important desire lines are achieved. MfS recognises that:

- A permeable and well-connected movement network can positively affect how much people walk or cycle or use public transport which helps to achieve a sustainable environment and good quality of life for its community,
- A good range of local amenities within easy access of residents can help to create a walkable neighbourhood, and
- Walking and cycling are important modes of travel, offering a more sustainable alternative to the car, making a positive contribution to the overall character of the place, public health and to tackle climate change through carbon emissions reductions.

5.1.3 MfS advocates residential design that creates walkable neighbourhoods. MfS sets out in para 4.4.1 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. However, this is not an upper limit and PPG13 states that walking offers the greatest potential to replace short car trips, particularly those under 2km. MfS encourages a reduction in the need to travel by car through the creation of mixed-use neighbourhoods with interconnected street patterns, where daily needs are within walking distance of most residents.”



- 5.1.4 A holistic approach to the Site access arrangements is at the core of the development Site access strategy. Thus, there is a cohesive 'package' of development access arrangements for differing modes of travel, comprising, walk, cycle, bus and motor vehicles. Further information about walk and cycle modes is presented in Chapter 6, and about public transport in Chapter 7.

5.2 Site Access Strategy

- 5.2.1 The planning application seeks outline consent with all matters reserved, except access. The proposed Site access strategy for the Site is:

- (i) Vehicles: York Close,
- (ii) Pedestrians: York Close and Shenton Lane,
- (iii) Cyclists: York Close and Shenton Lane, and
- (iv) Emergency access: Shenton Lane (if required by LCC).

5.3 Design Considerations

5.3.1 Design Guidance

- 5.3.1.1 The design guidance considered includes Manual for Streets 1 (MfS1), MfS2 and the LCC Highways Design Guide (HGD).

- 5.3.1.2 MfS2 states that:

*"...most MfS advice can be applied to a highway regardless of speed limit. **It is therefore recommended that as a starting point for any scheme affecting non-trunk roads, designers should start with MfS.**" (para 1.3.2)*

York Close and Shenton Lane are not trunk roads.

- 5.3.1.3 MfS continues in para 1.3.3:

*"Where designers do refer to DMRB for detailed technical guidance on specific aspects, for example on strategic inter-urban and non-trunk roads, it is recommended that they **bear in mind the key principles of MfS**, and apply DMRB in a way that **respects local context**. It is further recommended that DMRB or other standards and guidance is **only used** when the guidance contained in MfS is not sufficient or where particular evidence leads a designer to conclude that MfS is not applicable."*

5.4 Proposed Site Access Arrangements



5.4.1 The key features of the proposed **Drg No 1764/17/B** Site Access/York Close arrangements, and associated highway works, include:

- (i) Introduce new Site Access, forming a 'T' junction with York Close;
- (ii) Junction to operate under priority control;
- (iii) Property **No 35 York Place** to be demolished to form the Site access;
- (iv) Site access road to be 5.5m wide;
- (v) Introduce continuous 2.0m footway on the east side of the access road;
- (vi) Introduce 1.0m wide service stirp along the west side of the access road that becomes a 2.0m wide footway after about 35m from York Close.
- (vii) Introduce dropped kerbs and tactile paving at the western footway termination point;
- (viii) Provide 2.4m x 23m visibility splay to the left, for vehicles emerging from the Site Access;
- (ix) Provide 2.4m x 37m visibility splay to the right, for vehicles emerging from the Site Access.

5.4.2 LCC Highway Design Guide (HDG) and Topography

5.4.2.1 The LCC HDG specifies for residential access roads that the longitudinal gradient should be:

- (i) 1:30 (maximum) for the first 10m of the access road, and
- (ii) 1:20 (maximum) thereafter.

5.4.2.2 The applicant commissioned a topographical survey of York Close, the plot of property No 35 and the Site. This confirms that there is about a 2m fall from York Close to the northern boundary of the Site over a distance of about 30m.

5.4.2.3 The applicant has commissioned Jackson Purdue Lever (JPL) to examine the Site access road connection between York Close and the Site in the context of topography, neighboring properties and LCC HDG standards. JPL Drg No 002810-JPL-ZZ-ZZ-DR-D-2001-S2 Rev C03 shows that the longitudinal section meets LCC HDG standards for gradients. The JPL drawing also shows 6no cross sections along the access road to show how the road can be accommodated within the boundary of No 35 York Close.

5.4.3 Speed and Visibility Requirements

5.4.3.1 The residential roads surrounding the application Site are subject to a 30mph speed limit. However, actual vehicle speeds are likely to be lower than this along York Close and in the vicinity of the proposed access given the right-angled bend about 25m east to the east of the proposed Site access and the cul-de-sac termination about 20m west of the Site access.



- 5.4.3.2 Drg No 1764/17/B shows the available visibility for a driver emerging from the Site access. This demonstrates that a driver has an unobstructed view of the full width of York Close in both left and right directions.

5.4.4 Pedestrian Provision

- 5.4.4.1 The primary pedestrian access to the development is from York Close. This is to comprise a sealed surface footway on the east side of the access road that connects with existing footway on York Close
- 5.4.4.2 Given the location of the application Site and local amenities in Market Bosworth (refer Figure 6.1), it is highly likely that the majority of development generated walk movements will be to the north and east of the Site and via York Close. The proposed access on York Close is suitably orientated to accommodate these movements.
- 5.4.4.3 The masterplan layout for the scheme shows a pedestrian connection with Shenton Lane. It is evident from Site observations that Shenton Lane is popular with leisure users, such as dog walking. The proposed Site connection to Shenton Lane will allow residents of the proposed development easy access to Shenton Lane. The scheme will also create a good quality walk route through the Site that forms a new connection between York Close and Shenton Lane. This creates a new high quality walk route for existing residents living around the Site. The new route would offer an alternative to Warwick Lane, which is currently the only connection with Shenton Lane and which does not have footway for about 60m north of Shenton Lane.

5.4.5 Swept Path Analysis

- 5.4.5.1 Swept path analysis of the proposed Site Access junction has been undertaken to examine if the proposed junction can accommodate the tracking movements of larger vehicles. For this exercise, vehicles are adopted that might be generated by the proposed development, albeit on an occasional basis. The results for the Site Access are set out on the following drawings:

(ii)	10.14m Large Refuse Vehicle (3 axle)	1764/SP/09,
(ii)	9.57m Pantechnicon	1764/SP/10,
(iii)	7.7m Fire Appliance	1764/SP/11.

- 5.4.5.2 The swept path analysis shown on Drg Nos 1764/SP/09, 10 and 11 confirms that all of the 'test' vehicles can complete all turns at the Site access/York Close junction.



5.4.6 Stage 1 Road Safety Audit

- 5.4.6.1 A Stage 1 Road safety Audit (RSA) has been commissioned of the proposed Site access arrangements. This is available, together with a Designer's Response report, under a separate cover.

5.7 Emergency Access

- 5.7.1 Table DG1 of the LCC HDG specifies the following residential road criteria:

(i) Major Residential Access Road:	Normally no more than 400 dwellings from a single point of access, Carriageway width of 6.75m,
(ii) Residential Access Road:	Normally no more than 150 dwellings from a single point of access, Carriageway width of 4.8m (up to 50 dwellings), Carriageway width of 5.5m (up to 400 dwellings),
(iii) Residential Access Way:	Normally no more than 25 dwellings from a single point of access, Overall corridor width of 7.5m.

- 5.7.2 Based on the above, York Close most closely resembles the characteristics of a **Residential Access Road**. York Close currently serves 42 properties. The proposed development will result in the demolition of No 35 York Close and the construction of up to 105 new dwellings. This could mean that York Close serves up to 146 dwellings. This would be slightly under the LCC HDG threshold of 150 dwellings from a residential access road. In the event that LCC require an emergency access then this can be provided from Shenton Lane. The emergency access would also function as a pedestrian/cycle connection between the proposed development and Shenton Lane. The access would include suitable measures, such as knock down bollards, to prevent vehicular misuse. The applicant would welcome discussions with LCC highway officers regarding the provision of an emergency access on Shenton Lane.

5.8 Internal Roads

- 5.8.1 The internal road layout for the outline application is to be the subject of reserved matters.
- 5.8.2 On-Site parking provision is to be determined through a Reserved Matters application. It is expected that the final scheme will comply with the LCC current parking standards.



- 5.8.3 Similarly, cycle parking provision will be determined through reserved matters. It is expected that the final scheme will comply with the LCC current cycle parking standards.

5.9 Mobility Impaired

- 5.9.1 The needs of those with mobility impairment are an important component of the detailed design of the development. This is advocated in NPPF. The detailed design of the internal layout of the development, which must be the subject of reserved matters approval, will describe the facilities to be provided on Site to assist the mobility impaired, taking account of guidance and standards together with good practice and local/national policies.

5.10 Summary

- 5.10.1 The planning application seeks the determination of access.
- 5.10.2 The scheme is to be served by one access point formed on York Close This is presented on Drg No 1764/17/B. Additionally, a pedestrian/cycle access is proposed on Shenton Lane. This could also function as an emergency access if required by LCC.
- 5.10.3 It is demonstrated that the proposed access point:
- (i) Satisfies geometric and visibility requirements;
 - (ii) Offers appropriate provision for all users, including those with mobility impairment;
 - (iii) Can accommodate the tracking movements of a range of vehicles.
- 5.10.4 It is considered that the proposed access strategy is in accordance with guidance at both local and national level.



6 Walk & Cycle

6.1 Walk

6.1.1 It is established and acknowledged that walking is the most important mode of travel at the local level, and offers the greatest potential to replace short car trips, particularly under 2km.

6.1.2 National Travel Survey (2022)

6.1.2.1 The National Travel Survey of 2022 (NTS 2022) confirms that **31%** of all trips are undertaken on foot. For trips up to **1 mile** (1.6km), **83%** of journeys are carried out on foot.

6.1.2.2 The NTS also sets out that, on average, people:

- (i) undertake 267 walk trips per year,
- (ii) walk a total of 221 miles per year,
- (iii) spend 18 minutes walking per trip.

Based on the total walk distance of 221 miles and 267 trips per year, this means that the average walk trip is about 0.8 miles (circa 1.3km).

6.1.2.3 The NTS establishes that:

- (i) 83% of all trips under 1 mile (1.6km) are made by foot,
- (ii) Nearly all walks recorded in the NTS were under 5 miles (99.8%),
- (iii) Walking accounts for 31% of all trips and 4% of distance travelled,
- (iv) 53% of trips to and from school were made by walking, by children aged 5-10 and 41% of trips to and from school were by foot for children aged 11-16,
- (v) Most trips to/from school for a trip length of under 1 mile were made by walking (86% for children aged 5-10 and 90% for children aged 11-16).

6.1.3 National Planning Policy Framework (NPPF)

6.1.3.1 NPPF defines sustainable transport modes as:

*"Any efficient, safe and accessible means of transport with overall low impact on the environment, including **walking** and cycling, ultra low and zero emission vehicles, car sharing and public transport."* (AHA emphasis).



6.1.4 The National Design Guide

6.1.4.1 The National Design Guide sets out in paragraph 82 that:

*"Priority is given to **pedestrian** and cycle movements, subject to location and the potential to create connections. **Prioritising pedestrians** and cyclists mean creating routes that are **safe, direct, convenient and accessible for people of all abilities**. These are designed as part of attractive spaces with good sightlines, and well chosen junctions and crossings, so that people want to use them. Public rights of way are protected, enhanced and well-linked into the wider network of pedestrian and cycle routes."* (AHA emphasis).

6.1.4.2 This expanded further in paragraph 83, which states:

*"In well-designed places, people should not need to rely on the car for everyday journeys, including getting to workplaces, shops, schools and other facilities, open spaces or the natural environment. Safe and direct routes with visible destinations or clear signposting encourage **people to walk** and cycle."* (AHA emphasis).

6.1.5 Manual for Streets

6.1.5.1 The 'walkable neighbourhood' concept is set out in MfS1 and endorsed in MfS2. MfS1 explains that:

*"Walkable neighbourhoods are typically characterised by having a range of facilities within 10 minutes' (up to about 800 m) walking distance of residential areas which residents may access comfortably on foot. However, this is **not an upper limit** and PPG13 states that walking offers the greatest potential to replace short car trips, particularly those under 2 km."* (MfS para 4.4.1, AHA emphasis).

6.1.6 CIHT Planning for Walking

6.1.6.1 The CIHT document 'Planning for Walking' (2015) sets out the following key points:

- "• Patterns of land use and, in particular, residential densities and mixed uses are the primary determinants of how much people walk. As towns and cities spread out, people make fewer short journeys. The current trend to higher density for new residential developments should encourage walking, if linked to provision of local destinations.*
- Most short journeys are still made wholly on foot.*



- *Walking is also part of longer journeys. Very few trips by car or public transport are completed without some walking.*
- *Pedestrian "footfall" determines the viability of shops."*

6.1.6.2 The document also stresses:

- “• *Walking contributes to physical and mental health.*
- *All streets in urban areas need to be designed to accommodate people who walk wherever they wish to go*
- *People travelling on foot want routes that are direct, as level as possible, enjoyable and have destinations in sight. Safe road crossings are an essential element of routes.*
- *"Walking" is best thought of as a nonvehicle movement including all forms of assistance, such as sticks, wheelchairs, baby buggies and pavement vehicles. Good provision for users requiring such forms of assistance helps everybody.*
- *Walking and cycling are often regarded as compatible. In reality, they are very different modes that will often require separate provision. Both benefit from reduced traffic speeds and reduced motor vehicle traffic flow.*
- *The issue of pedestrians and pedal cyclists sharing space is contentious. There are perceived risks associated with cyclists sharing space with pedestrians, and it is not always realised that cyclists seriously injure several hundred pedestrians each year.*
- *Planners and traffic managers should appreciate that to encourage walking, motor vehicle traffic rather than pedestrians should, as far as possible, be required to avoid conflicts by diverting from direct routes and by changing elevation. Pedestrians wish to follow direct routes on a constant level."*

6.1.7 CIHT Providing for Journeys on Foot

6.1.7.1 The CIHT document 'Providing for Journeys on Foot (2000)' does not provide a definitive view of distances, but does suggest a preferred maximum distance of 800m for journeys to town centres and 2000m for walk commuting trips.



6.1.8 Existing Infrastructure

6.1.8.1 There is continuous footway along both sides of York Close, which benefit from street lighting. This is continued within the wider residential area immediately adjacent to the application Site.

6.1.8.2 Public Footpath S72 is aligned to the north of the application Site. This provides a good leisure walk route to the west of York Close. To the east of the proposed Site access, there is a sealed surface footpath connection between York Close and Stanley Road and this is likely to be popular with Site residents as it offers a direct route between the Site and local amenities.

6.1.9 Public Rights of Way

6.1.9.1 Figure 6.2 presents the existing Public Rights of Way (PROW) near to the Site. Footpath No S72 is aligned to the west of the Site and forms a connection with the western end of York Close. Footpath No S55 runs near to the Site and offers a walk route between Shenton Lane and Sutton Lane.

6.1.9.2 Figure 6.2 shows that there is an extensive network of footpaths in/near Market Bosworth, providing good opportunity for leisure walking in the vicinity of the Site.

6.1.10 Walk Isochrones and Local Amenities

6.1.10.1 The CIHT provides guidance about journeys on foot. It does not provide a definitive view of distances, but does suggest a preferred maximum distance of 2000m for walk commuting trips. A 400m distance corresponds to a walk time of 5 minutes, based upon a typical normal walking speed. Figure 6.1 presents the development 400m, 800m, 1200m, 1600m and 2000m walk isochrones, (ie reflecting 5, 10, 15, 20 and 25-minute walk journeys), and taking account of the pedestrian infrastructure.

6.1.10.2 The walk isochrones presented in Figure 6.1 are created using Basemap TRACC software, a digital mapping and transport data program. The TRACC software enables installation of maps to create a road network. Amendments have been made to the road network to allow for the inclusion of public rights of way and pedestrian access points.

6.1.10.3 The TRACC software adopts the Department for Transport speeds and hence, a walk speed of 4.8km/h is automatically assumed across the road network. However, it is possible to alter the walk speed on all roads to reflect for example, changes in gradient or no accessibility by footway. The walk isochrones presented in Figure 6.1 take into account the absence of footway on certain roads and the walk speed on these routes has been adjusted to 0km/h.



6.1.10.4 Indicated on Figure 6.1 are examples of local facilities near to the Site. Figure 6.1 shows that the following amenities are located within, or very slightly beyond, an 800m walk of the Site:

- Travel: Bus Stops
- Education: Independent School
- Community: Library
- Health: Pharmacy
Dentist
- Shopping: Supermarket
Convenience Store
Butchers
Bank/ ATM
- Leisure: Food Outlets
Public Houses
Salon
Sports Ground/ Sports Club.

6.1.10.5 There are additional amenities that are just beyond an 800m walk.

6.1.10.6 It is demonstrated that there is a good range of amenities within walking distance of the proposed development.

6.1.11 Pedestrian Trip Generation

6.1.11.1 The proposed development will generate pedestrian trips.

6.1.11.2 Based on multi-modal TRICS trip rates (refer Appendix C), it is estimated that the proposed development could generate the following pedestrian trips in the AM & PM peak hours:

- | | | | |
|--------------------|--------------|-----------------|------------|
| (i) AM peak hour: | Arrivals = 4 | Departures = 12 | 2-Way = 16 |
| (ii) PM peak hour: | Arrivals = 7 | Departures = 2 | 2-Way = 9. |

6.1.11.3 Between 0700-1900 (12-hours), which is usually taken to be the 'working day', the proposed development is estimated to generate the following walk trips:

- | | | | |
|----------------------|---------------|-----------------|-------------|
| (i) 0700-1900 hours: | Arrivals = 45 | Departures = 45 | 2-Way = 90. |
|----------------------|---------------|-----------------|-------------|



- 6.1.11.4 Given that there is an extensive network of illuminated sealed surface footways on York Close and the wider surrounding residential area, it is highly likely that residents will elect to use these for trips to/from local amenities.

6.1.12 Pedestrian Access to the Site

- 6.1.12.1 Pedestrian access to the application Site is available via:

- (i) York Close: Footways alongside main Site access road,
- (ii) Shenton Lane: Pedestrian connection.

- 6.1.12.2 The Development Framework plan also shows a pedestrian/cycle route within the development that will form a connection between Shenton Lane and York Close. This will create an alternative walk route to Warwick Lane, which does not benefit from footways,

- 6.1.12.3 It is proposed Site access on York Close is to provide:

- (i) Continuous 2.0m footway on the east side of the access road,
- (ii) 1.0m wide service strip along the west side of the access road that becomes a 2.0m wide footway after about 35m from York Close,
- (iii) Dropped kerbs and tactile paving at the mouth of the Site access junction with York Close,
- (iv) Dropped kerbs and tactile paving at the western footway termination point.

6.1.13 Walk Route to Town Centre

- 6.1.13.1 The walk distance between the centre of the Site and the town centre (assumed in this TA to approximate to the Market Place/Station Road junction) is about 900m. The most direct walk route is:

York Close – Footpath – Stanley Road – Haven Road – Southfield Way – Station Road.

- 6.1.13.2 All of the existing walk route between the Site and the town centre is along sealed surface footways with lighting. The majority of the route is within a residential area with roads that carry relatively low levels of traffic and are subject to a 30mph speed limit. There is a zebra crossing on Station Road, near to The Dixie School, to assist with crossing movements of Station Road.

6.1.14 Walk Routes to Schools

- 6.1.14.1 The nearest schools to the Site are:



- (i) The Market Bosworth School: 810m, and
- (ii) The Dixie Grammar School: 850m,
- (iii) St Peter's CE Primary School: 1125m.

6.1.14.2 The most direct walk route between the Site and **The Market Bosworth School** is:

York Close – Footpath – Stanley Road – Haven Road – Southfield Way - Station Road.

6.1.14.3 All of the existing walk route between the Site and The Market Bosworth School is along sealed surface footways with lighting. The majority all of the route is within a residential area where frontage properties offer neighbourhood surveillance. The residential roads have relatively low levels of traffic and are subject to a 30mph speed limit.

6.1.14.4 The most direct walk route between the Site and **The Dixie School** is:

York Close – Footpath – Stanley Road – Haven Road – Southfield Way - Station Road.

6.1.14.5 All of the existing walk route between the Site and The Dixie School is along sealed surface footways with lighting. The majority of the route is within a residential area where frontage properties offer neighbourhood surveillance. The residential roads have relatively low levels of traffic and are subject to a 30mph speed limit. There is a zebra crossing on Station Road near to The Dixie School.

6.1.14.6 The National Travel Survey (NTS) sets out that 46% of children aged 5-10 years walk to school. For journeys of under 1 mile (1.6km) 80% of children (5-10 years) walk to school.

6.1.14.7 The nearest primary school to the Site is the **St Peter's CE Primary School** on Station Road. The walk distance between the centre of the Site and this entrance is about 1,125m, which is well below the distance quoted in NTS. Consequently, there is a reasonable expectation that children at the application Site, and based at St Peter's CE Primary School, will walk to school.

6.1.14.8 The most direct walk route between the Site and St Peter's CE Primary School is:

York Close – Footpath – Stanley Road – Weston Drive - Station Road.

6.1.14.9 All of the existing walk route between the Site and St Peter's CE Primary School is along sealed surface footways with lighting. The majority of the route (about 60%) is within a residential area where frontage properties offer neighbourhood surveillance. The residential roads have



relatively low levels of traffic and are subject to a 30mph speed limit. There is signage on Station Road at the school entrance advising motorists to drive no more than 20mph when lights are flashing.

- 6.1.14.10 It is **agreed** with LCC that all of these schools are within walking distance of the Site and this is confirmed in the Statement of Common Ground that was prepared for the public inquiry in July/August 2023.

6.1.15 Measures to encourage Walking

- 6.1.15.1 The proposed development will create a new walking route between York Close and Shenton Lane. This is particularly useful for leisure walkers.
- 6.1.15.2 Although the final residential layout is to be determined through a reserved matters application, the layout will include a comprehensive network of sealed surface footways with lighting. The network will be designed with impaired mobility users in mind. Signage will be introduced to direct pedestrians.
- 6.1.15.3 On-site signage will be provided during the construction phase to advise residents of suitable and safe walking routes. The signage will be complemented by travel information notice boards during construction.
- 6.1.15.4 Promotional events and literature will be arranged through the Travel Plan, to encourage walking, and emphasising the health benefits.
- 6.1.15.5 Residents will be provided with maps showing safe local walking routes.

6.2 Cycle

6.2.1 National Travel Survey (2022)

- 6.2.2.1 The NTS 2022 sets out that, on average, people:

- (i) undertake 15 cycle trips per year,
- (ii) cycle a total of 57 miles per year,
- (iii) spend 24 minutes cycling per trip.

Based on the total cycle distance of 57 miles and 15 trips per year, this means that the average cycle trip is 3.8 miles, which is just over 6km.



6.2.3 National Planning Policy Framework (NPPF)

6.2.3.1 NPPF defines sustainable transport modes as:

*"Any efficient, safe and accessible means of transport with overall low impact on the environment, including walking and **cycling**, ultra low and zero emission vehicles, car sharing and public transport."* (AHA emphasis).

6.2.4 The National Design Guide

6.2.4.1 The National Design Guide sets out in paragraph 82 that:

*"Priority is given to pedestrian and **cycle movements**, subject to location and the potential to create connections. **Prioritising** pedestrians and **cyclists** mean creating routes that are **safe, direct, convenient and accessible for people of all abilities**. These are designed as part of attractive spaces with good sightlines, and well chosen junctions and crossings, so that people want to use them. Public rights of way are protected, enhanced and well-linked into the wider network of pedestrian and **cycle routes**."* (AHA emphasis).

6.2.4.2 This expanded further in paragraph 83, which states:

*"In well-designed places, people should not need to rely on the car for everyday journeys, including getting to workplaces, shops, schools and other facilities, open spaces or the natural environment. Safe and direct routes with visible destinations or clear signposting encourage **people to walk and cycle**."* (AHA emphasis).

6.2.5 Gear Change, A Bold Vision for Cycling and Walking (DfT, 2020)

6.2.5.1 Gear Change, A Bold Vision for Cycling and Walking states:

"58% of car journeys in 2018 were under 5 miles. And in urban areas, more than 40% of journeys were under 2 miles in 2017-18. For many people, these journeys are perfectly suited to cycling and walking." (Page 11)

6.2.6 Traffic Flows

6.2.6.1 There are three points of connection between the residential area surrounding the application Site and the wider local highway network. These are:

- (i) Weston Drive,



- (ii) Southfield Way, and
- (iii) Warwick Lane.

6.2.6.2 Figure B1, Appendix B presents the recorded AM & PM peak hour traffic flows (2-way) along these roads, being

(i) Weston Drive:	AM = 124 vehicles (2-way)	PM = 74 vehicles (2-way),
(ii) Southfield Way:	AM = 124 vehicles (2-way)	PM = 78 vehicles (2-way),
(iii) Warwick Lane:	AM = 101 vehicles (2-way)	PM = 30 vehicles (2-way).

6.2.6.3 This confirms that there are low levels of vehicular traffic using the main entry/departure points for the wider residential area. This means that traffic flows on other roads within the residential area, eg York Close, Stanley Road etc, are likely to carry even lower levels of traffic. The low flows, together with the 30mph speed limit, create a good environment for cycling.

6.2.7 Cycle Isochrones and Local Amenities

6.2.7.1 The cycle isochrones presented in Figure 6.3 were created using Basemap TRACC software. The cycle isochrones presented in Figure 6.3 discounts footpaths which do not permit cyclists.

6.2.7.2 Figure 6.3 indicates the 2km and 5km cycle isochrones for the Site. Review of Figure 6.3 highlights that Market Bosworth is within a 2km cycle ride of the Site. Figure 6.3 also shows that Shenton and Barlestone are within a 5km cycle ride of the Site.

6.2.8 Cycle Access to the Site

6.2.8.1 Cycle access to the Site is available via the proposed Site Access on York Close. Additionally, the masterplan shows the formation of a connection to Shenton Lane.

6.2.9 Measures to encourage Cycling

6.2.9.1 The proposed development will create a new cycle route between York Close and Shenton Lane. This is particularly useful for leisure cyclists.

6.2.9.2 The proposed development will provide appropriate levels of cycle parking within each residential plot that meets Council cycle parking standards.

6.2.9.3 Awareness of cycling as a travel choice, for essential (eg work) as well as other journey purposes (eg leisure) is to be promoted to residents through the Travel Plan.

6.2.9.4 The Travel Plan will promote cycling events. This includes, for example but not exclusively:



- Promotion of National Bike Week,
- Bike buddy scheme, for those not confident about cycling.

6.2.9.4 Promotional events and literature will be arranged through the Travel Plan, to encourage cycling and emphasise the health benefits.

6.3 Summary

6.3.1 Transport sustainability is a principle underlying the proposed development. Encouraging walk and cycle journeys is recognised as important. The location of the Site provides a good context for journeys of residents to be undertaken on foot and by cycle. There is good walk and cycle infrastructure between the Site and nearby amenities, thereby offering opportunity to foster a sustainable community, in accordance with the aims of local policies and national policy in NPPF.



7 Public Transport

- 7.1 The proposed development affords opportunity for development generated public transport journeys to be made by bus.

7.2 Bus

7.2.1 Existing Bus Stops

- 7.2.1.1 Figure 6.1 identifies the location of the existing nearest bus stop in the vicinity of the Site, which is located on Market Place. There are also east- and westbound bus stops on Station Road either side of St Catherines Avenue.

- 7.2.1.2 The bus stop on Market Place comprises flag and pole with timetable information as well as a shelter with seating and low floor access. The bus stops on Station Road both comprise a flag and pole.

7.2.2 Bus Services & Frequencies

- 7.2.2.1 **Service No 153** operates near to the Site at an hourly frequency in both directions, Monday-Saturday. Service No 153 also operates Monday-Saturday evenings.

- 7.2.2.2 Service No 153 offers travel to destinations including, among others, Leicester. The first and last journeys **to** Leicester are:

DAY	TO LEICESTER	
	FIRST	LAST
Monday to Friday	0717	1940
Saturday	0725	1805.

- 7.2.2.3 The first and last journeys **from** Leicester are:

DAY	FROM LEICESTER	
	FIRST	LAST
Monday to Friday	0625	1950
Saturday	0700	1845.

- 7.2.2.4 The typical approximate journey times to destinations in Leicester are:

LOCATION	JOURNEY TIME (MINS)
Leicester Forest East, Braunstone Crossroads	45



Leicester, St Margaret's Bus Station

67.

- 7.2.2.5 Service No 153 coincides with typical workplace start and finish times for journeys to/from Leicester. This means that residents of the Site have good opportunity to complete commuting journeys to/from Leicester by bus.
- 7.2.2.6 Service No 153 also operates on Saturdays. This means residents of the Site have opportunity to complete retail and leisure trips to/from Leicester using this service.
- 7.2.2.7 **Service No 7** (Witherley to Measham) operates near to the Site. The No 7 service offers a single outbound trip from Market Bosworth to Measham in the morning and a single return trip in the afternoon.

7.2.3 Measures to Encourage Bus Use

- 7.2.3.1 The applicant is to provide two six-month bus passes (£360 per pass) per dwelling to encourage new residents to use bus services. The measure is aimed at establishing changes in travel behaviour from first occupation and promote usage of sustainable travel modes other than the car. The total cost for the bus passes is **£360 x final number of dwellings**.
- 7.2.3.2 The financial contribution outlined above offers positive encouragement to residents to access bus services, which is in accordance with both local and national policies.

7.3 Summary

- 7.3.1 There are existing public transport opportunities near to the application Site.
- 7.3.2 Site residents have the option of frequent travel by bus to/from key centres such as Leicester. Services operate weekdays and weekends. It is demonstrated that the Site has good public transport accessibility and this is in accordance with the aims and objectives of current national and local policies.
- 7.3.3 To encourage travel by bus, each dwelling is to receive two bus passes. This is aimed at encouraging residents to travel by bus. The bus passes will be available at first occupation.



8 Travel Plan

- 8.1 The TP for the proposed development is prepared in accordance with best practice and experience, and the 2014 PPG. The outcomes approach is adopted for the development TP.
- 8.2 The key objectives of the TP are to:
- Contribute to traffic reduction and other sustainable transport objectives set out in national, regional and local policies,
 - Improve accessibility of the Site by sustainable modes of transport and address traffic and parking issues,
 - Widen choice of travel mode for all those travelling to/from the Site.
- 8.3 Specific outcomes sought from the TP are to:
- Achieve the minimum number of additional single occupancy car traffic movements to/from the development,
 - Address the access needs of site users, by supporting walking, cycling and public transport,
 - Reduce the need for travel to/from the Site.
- 8.4 The TP explicitly considers accessibility by the sustainable travel modes and the proposed measures to encourage their use. These are summarised below:
- Walk & Cycle: Improved pedestrian infrastructure,
 - Public Transport: Improved links to existing infrastructure,
 - Electric vehicles: Provision of a 32Amp single phase electrical supply to allow for the future inclusion of an individual electric car charging point for each property,
 - Car Share: To be promoted by the TPC,
 - Work at home: Provision of infrastructure for high speed broadband service to be delivered to the new houses,
 - Behavioural strategies: To be promoted by the TPC.
- 8.5 The TP target is set as: **maximum peak hour 2-way vehicle trip rate of 0.560 vehicles/hour/dwelling**. The objective is for the TP target to be achieved within 5 years from first occupation.
- 8.6 The TP is to operate for a period of 5 years after first occupation of the development.
- 8.7 The developer will appoint a Travel Plan Coordinator (TPC), to introduce, manage, operate and monitor the TP. As part of the ongoing management of the TP, the TPC will maintain a dialogue



with the Council, and monitor emerging best practice information, to provide the most efficient platform for maximising the effectiveness of the TP.

8.8 The developer is required to finance the TP. A sufficient revenue budget will be identified to employ the TPC for a period of 5 years post-occupation of the first dwelling, on a sufficient basis to introduce and manage the TP initiatives, and thereafter as required to:

- Manage the initiatives,
- Finance the measures identified in this and subsequent TP Monitoring and Review reports and as agreed with the Council, and
- Enable the TPC postholder to carry out the duties identified above.

8.9 The TP Action Plan is set out in Chapter 10 of the TP. The TP Table 3 summarises identified measures that are proposed, and indicates the timing for the measures and funding information. This illustrates the holistic approach adopted for the TP, aimed at encouraging from the outset a positive sustainable transport awareness and culture for the development. The TP measures will be reviewed and amended as appropriate, in consultation with and requiring the agreement of the local authority, as part of the ongoing dynamic monitoring and review process for the TP.

8.10 Travel Plan Measures

8.10.1 The following TP measures are **agreed** with LCC and are to be delivered through the TP:

- (i) Travel Packs; to inform new residents from first occupation what sustainable travel choices are in the surrounding area (can be supplied by LCC at £52.85 per pack per plot). This would be **£52.85 x final number of dwellings** in total. If not supplied by LCC, a sample Travel Pack shall be submitted to and approved in writing by LCC which will involve an administration charge of £500.
- (ii) Six-month bus passes, two per dwelling (two application forms to be included in Travel Packs and funded by the developer); to encourage new residents to use bus services, to establish changes in travel behaviour from first occupation and promote usage of sustainable travel modes other than the car (can be supplied through LCC at an average of £360.00 per pass). The total cost for the bus passes is **£360 x final number of dwellings**.
- (iii) Sustainable Travel Accreditation and Recognition Scheme (STARS) monitoring fee (Travel Plan fee). The agreed cost is **£6,000**.



9 Traffic Flows

9.1 Planning History

9.1.1 Land East of Shenton Lane: (LPA ref 22/00167/OUT)

9.1.1.1 With the single exception of access, the current application is identical to a previous application referred to as 'land west of Shenton Lane' (LPA ref 22/00167/OUT), which was appealed for non-determination. To assist the public inquiry held in July/August 2023 (ref APP/K2420/W/23/3317090), AHA and LCC prepared a Statement of Common Ground (SoCG). With respect to traffic flows, the following is agreed:

- (i) The TA study junctions;
- (ii) The worst-case combinations of existing network traffic and development generated traffic are the midweek AM and PM peak hours;
- (iii) Future assessment year 5 years after planning application submission;
- (iv) Traffic growth factors from the National Trip End Model to estimate the future year assessment traffic flows from the traffic count data;
- (v) Residential trip rates and estimates of AM and PM peak hour development generated traffic;
- (vi) Traffic distribution based on the 2011 Census Journey to Work data for Hinckley & Bosworth 0004 Middle Super Output Area 004.

9.2 Peak Periods

9.2.1 The times when the combination is greatest, of traffic generated by the proposed residential development and the existing highway network traffic, are the weekday AM & PM peak hours. The TA includes quantitative analysis of the traffic impact of the proposed development for these periods.

9.3 Traffic Counts

9.3.1 AHA commissioned the collection of traffic data for the TA study network. Classified turning counts were undertaken on 21 May 2024.



9.3.2 Analysis of the traffic count data identifies the peak hours for traffic flows at the study junctions as:

- AM: 0745-0845, and
- PM: 1645-1745.

Quantitative analysis is undertaken for these peak hours.

9.3.3 **Figure B1, Appendix B**, presents the 2024 AM & PM peak hour traffic count flows at the study junctions. The flows are presented in vehicles.

9.4 Traffic Growth

9.4.1 For the purposes of quantitative testing of the local highway network, it is assumed that the development will be fully constructed and operational by year **2029**.

9.4.2 The National Trip End Model (NTEM) is used as a basis for deriving local growth factors. The NTEM growth factors adopted to estimate year 2029 traffic flows, from the 2024 count data, are set out in **Technical File Note 1B, Appendix D**.

9.4.3 Factored Counts

9.4.3.1 **Figure B2, Appendix B** presents the 'growthed' 2029 AM & PM peak hour traffic flows at all of the study network junctions.

9.5 Committed Developments

9.5.1 AHA is aware of two permitted developments in Market Bosworth, being:

- (i) Station Road, Market Bosworth (21/00379/FUL), and
- (ii) Kings Golf Club Development, Station Road, Market Bosworth (19/01437/FUL).

9.5.2 Station Road, Market Bosworth (21/00379/FUL)

9.5.2.1 The residential scheme at Station Road (21/00379/FUL) comprises 73no dwellings. HBBC granted planning consent on 19 October 2021, subject to the signing of a S106 agreement. The scheme, known as King Richard's Wharf, is currently under construction by Owl Homes. At the time of preparing this TA report, the Owl Homes website states that over 60% of the properties are sold. The traffic generated by the occupied properties has been recorded in the traffic surveys. Consequently, only traffic generated by the 40% of the properties that remain to be built/occupied is included in the assessment.



9.5.2.2 AHA has reviewed the Travis Baker Transport Statement (TS) that accompanied the planning application. The Travis Baker report only includes assessment of the Site access junction on Station Road. No other junctions in Market Bosworth have been considered. LCC have requested that consideration be given to this permitted scheme in this TA report. As the Travis Baker TS reports contain little traffic information, the approach adopted is to:

- (i) Derive estimates of generated traffic for the scheme directly from the Travis Baker TS report,
- (ii) Apply a factor of 0.4 to reflect that 60% of the properties have been built/occupied at the time of the May 2024 traffic surveys,
- (iii) Use the directional split at the Site/Station Road junctions for the scheme presented in the Travis Baker TS report.
- (iv) Distribute the Station Road residential development traffic to/from the east (ie through Market Bosworth) on the same basis as the distribution for the proposed GDL scheme,
- (v) Include traffic at TA study junctions **only** where the permitted scheme is predicted to add 30 or more vehicles.

9.5.2.3 Based on the approach set out above, the maximum level of development generated traffic is at SJ1. The remaining 40% of properties to be built at the King Richard's Wharf development are estimated to add only 12 vehicles to SJ1 in the AM peak hour. In the PM peak hour, the increase is only 11 vehicles. Consequently, the traffic impact of the remaining development at King Richard's Wharf is not material at the TA study junctions and no further assessment of this scheme is included in this TA report.

9.5.3 **Kyngs Golf Club Development, Station Road, Market Bosworth (24/00019/FUL)**

9.5.3.1 The Kyngs Golf Club permitted development (24/00019/FUL) comprises a 50-room golf and leisure accommodation with associated works. HBBC granted planning consent in April 2024. AHA has reviewed an Ardent Consulting Engineers (ACE) letter (dated 1 March 2024) that accompanied the Kyngs Golf Club planning application.

9.5.3.2 The ACE letter only includes an assessment of the Site access junction on Station Road. No other junctions in Market Bosworth have been considered. LCC have requested that consideration be given to the Kyngs Golf Club scheme in this TA report. As the ACE letter contains little traffic information, the approach adopted is to:

- (i) Derive estimates of generated traffic for each scheme directly from the ACE letter,
- (ii) Use the directional split at the Kyng's Golf Club access/Station Road junction presented in the ACE letter,
- (iv) Distribute the Kyngs Golf Club generated traffic at the TA study junctions based on the pattern of recorded movements in the traffic count (refer Figure B1, Appendix B),



- (v) Include traffic at TA study junctions **only** where the permitted scheme is predicted to add 30 or more vehicles.

9.5.3.3 Figure 1 of the ACE letter shows that the development is estimated to generate 40 vehicles (AM peak hour) and 48 vehicles (PM peak hour) to the east of the Kyngs Golf Club site and through the center of Market Bosworth. **Figure B3, Appendix B** presents the estimated Kyngs Golf Club Development, traffic at SJ1, SJ3 and SJ8.

9.6 Other Development Proposals in Market Bosworth

9.6.1 The previous TA report considered the following development proposals in Market Bosworth which were pending:

- (i) Land east of Shenton Lane (ref 20/00345/OUT),
- (ii) Land at Station Road, Market Bosworth (20/01021/OUT), and
- (iii) Land South of The Stables, Wharf Farm, Station Road, Market Bosworth (21/00970/OUT).

9.6.2 Land East of Shenton Lane (ref 20/00345/OUT)

9.6.2.1 This residential scheme for 90 dwellings was refused by HBBC in March 2023. The applicant has not submitted an appeal. Consequently, this scheme is not considered further in this TA report.

9.6.3 Land at Station Road, Market Bosworth (20/01021/OUT)

9.6.3.1 This residential scheme for 63 dwellings was refused by HBBC in June 2021. The applicant appealed the decision. However, the appeal was dismissed in February 2022. Consequently, this scheme is not considered further in this TA report.

9.6.4 Land South of The Stables, Wharf Farm, Station Road, Market Bosworth (21/00970/OUT)

9.6.4.1 This application was withdrawn. Consequently, this scheme is not considered further in this TA report.

9.7 Base

9.7.1 The 'Base' situation represents the traffic flows on the TA study network with the implementation of the consented developments. This provides the proper context in which to assess the traffic impact of the proposed development.

9.7.2 The estimated 2029 Base AM & PM peak hour traffic flows at the TA study network junctions are presented on **Figure B4, Appendix B**.



9.8 Distribution of Development Generated Traffic

- 9.8.1 It is necessary to estimate the % distribution of the proposed development generated traffic.
- 9.8.2 The distribution of development generated traffic is based on an interrogation of the 2011 Census Data, which is summarised in Table 9.1.
- 9.8.3 The distribution of development generated traffic has been **agreed** with LCC and this is confirmed in the Statement of Common Ground that was prepared for the public inquiry in July/August 2023.
- 9.8.4 Where possible, the agreed distribution is adopted in this TA report. However, in contrast to the previous application, vehicular access is now from York Close. This means that there must be some adjustment to the assignment of development traffic on roads and at study junctions in the vicinity of the application Site.
- 9.8.5 The main destinations for development generated traffic remain unchanged to the previous TA report, namely:

(i) Station Road (W):	27.2%
(ii) Main Street:	6.0%
(iii) A447 Ashby Road/B585 Bosworth Lane:	51.4%
(iv) Shenton Lane (W):	15.4%
Total	100.0%

- 9.8.6 The changes result from the revised access strategy, ie access was previously proposed from Shenton Lane and is now from York Close. The revised %distribution of development traffic is:
- | | |
|---|--|
| (i) Station Road (W): | Assume all traffic uses Weston Drive and SJ1, |
| (ii) Main Street: | Assume a split of traffic at SJ1, SJ7 and SJ8, |
| (iii) A447 Ashby Road/B585 Bosworth Lane: | Assume a split of traffic at SJ1, SJ7 and SJ8, |
| (iv) Shenton Lane (W): | Assume all traffic uses Warwick Lane and SJ7. |
- 9.8.7 The application Site is located adjacent to an established residential area. The residential area is connected to the wider highway network via Weston Drive (at SJ1), Warwick Lane (at SJ7) and Southfield Way (at SJ8). A traffic survey undertaken on 21 May 2024 recorded the movements into and out of Weston Drive, Warwick Lane and Southfield Way. The pattern of recorded movements provides a very good indication of the likely split of development generated traffic that is travelling to/from the east of the application Site (ie Main Street and



A447). This approach is adopted in this TA report. For example, considering the AM peak hour development generated departures to the east of the Site, the recorded movements at SJ1, SJ7 and SJ8 (refer Figure B1, Appendix B) are:

- (i) SJ1: Right turn from Weston Drive to Station Road: 24 vehicles
- (ii) SJ7: Left turn from Warwick Lane to Shenton Lane: 11 vehicles, and
- (iii) SJ8: Right turn from Southfield Way to Station Road: 30 vehicles.

9.8.8 In this case, the split between the three departure routes is:

- (i) Weston Drive: $24 / 65 \times 100 = 37\%$,
- (ii) Warwick Lane: $11 / 65 \times 100 = 17\%$,
- (iii) Southfield Way: $30 / 65 \times 100 = 46\%$,

The development generated traffic travelling to the east (ie Main Street and A447) is distributed to these three routes in the above proportions. The same approach is adopted for PM peak hour departures using the recorded PM peak hour turning proportions.

9.8.9 For AM and PM peak hour development traffic arrivals, the distribution is based on the following pattern of recorded movements:

- (i) SJ1: Left turn from Station Road to Weston Drive,
- (ii) SJ7: Right turn from Shenton Lane to Warwick Lane, and
- (iii) SJ8: Left turn from Station Road to Southfield Way.

9.8.10 The distribution of traffic generated at the study junctions by the proposed residential development that is adopted for the purpose of the TA quantitative analysis is presented on **Figure B5, Appendix B.**

9.9 Generated Traffic

9.9.1 The residential trip rates adopted in this TA report are:

PEAK	ARR	DEP	2-WAY
AM	0.178	0.444	0.622
PM	0.278	0.256	0.534.

9.9.2 The trip rates are **agreed** with LCC and are also included in the Statement of Common Ground that was prepared for the public inquiry for the previous application that was held in July/August 2023.



- 9.9.3 Based on the residential trip rates agreed with LCC, the consequent estimate of traffic (in vehicles) generated by the proposed development of up to **105 dwellings** in the AM and PM peak hours is:

PEAK	ARR	DEP	2-WAY
AM	19	46	65
PM	29	27	56.

- 9.9.4 **Figure B6, Appendix B** presents the traffic generated by the proposed development in the AM and PM peak hours at the study junctions, based on the % distribution on Figure B5, Appendix B.

9.10 Traffic Impact

- 9.10.1 At the time of preparing this TA report, there is no document that provides clear guidance on traffic impact and the need for detailed junction modelling.
- 9.10.2 In the absence of alternative guidance, the test adopted to determine if a more detailed junction assessment is required is if the proposed development is predicted to generate an increase in traffic at a study junction of **30** vehicles or more. Junction modelling is undertaken of the TA Study Junctions where the traffic impact of the development exceeds **30** vehicles. This materiality threshold was **agreed** with LCC for the previous scheme (LPA ref 22/00167/OUT).
- 9.10.3 The traffic impact of the proposed development at the TA study network of junctions in the AM and PM peak hours is summarised below:

STUDY JUNCTION	AM	PM
SJ1	+30	+26
SJ2	+14	+15
SJ3	+30	+30
SJ4	+28	+18
SJ5	+34	+29
SJ6	+10	+15
SJ7	+19	+10
SJ8	+28	+31
SJ9	+33	+29.

A review of the above summary shows that the proposed development is estimated to have a traffic impact in excess of 30 vehicles at SJ1, SJ3, SJ5, SJ8 and SJ9. The traffic impact at SJ4 is only very slightly under the 30-vehicle threshold in the AM peak hour. To be robust, junction modelling of SJ4 is also undertaken.



9.10.5 Consequently, junction modelling of SJ1, SJ3-SJ5, SJ8 and SJ9 is undertaken and the results are presented and discussed in Chapter 10.

9.11 With Development

9.11.1 The estimated 2029 AM and PM peak hour With Development traffic flows at the TA study junctions are presented on **Figure B7, Appendix B**.



10 Operational Performance of the Highway Network

10.1 The computer program PICADY (within Junctions 10) is used to model the performance of a priority (give-way) control junction. PICADY predicts the ratio of flow to capacity (RFC) and associated queue for the minor (give-way) entry to the junction and for the major road. PICADY is used to model the operational performance of:

- (i) SJ1: Weston Drive/Station Road,
- (ii) SJ3: Station Road/ Back Lane/ Main Street/ Market Place,
- (iii) SJ4: Main Street/ Park Street,
- (iv) SJ5: Park Street/ The Park/ Rectory Lane,
- (v) SJ8: Southfield Way/Station Road/Back Lane,
- (vi) SJ9: Bosworth Road/A444/Bosworth Lane.

10.2 Queue Surveys and Model Validation

10.2.1 Queue Survey

10.2.1.1 Queues were recorded on all external approach arms at the study junctions. Data was collected at the same time as the AM & PM peak period traffic count surveys.

10.2.1.2 The survey recorded queues in 5-minute intervals. The survey recorded the queue on each arm at the 5-minute mark (eg at 0800, 0805, 0810 etc). The survey also recorded the maximum queue during the 5-minute interval.

10.2.2 Model Validation

10.2.2.1 The process of model validation involves:

- (i) Construct PICADY model for the junction;
- (ii) Use 2024 recorded traffic count data;
- (iii) Compare model output queues to recorded queues;
- (iv) If necessary, make small adjustments to model slope/intercept values to provide 'best match' between model and recorded queues.

10.3 SJ1: Weston Drive/Station Road (AHA Drg No 1764/18)

10.3.1 Table 10.1 presents the average recorded spot queues during the AM & PM peak hours at SJ1. The queue survey confirms that negligible queues were recorded on the 5-minute interval marks.



The survey results provide clear evidence that SJ1 is presently operating in an acceptable manner.

10.3.2 A PICADY model is constructed for the 2024 AM & PM peak hour Count situation. The results are also presented in Table 10.1. A review of Table 10.1 shows that the PICADY model queues provide a close match to the recorded queues. It is concluded that the PICADY model is suitable to test the traffic impact of the proposed development in year 2029.

10.3.3 Table 10.2 presents the results of the PICADY modelling of the Weston Drive/Station Road junction. A review of Table 10.2 shows that the junction currently operates with a very high degree of spare capacity and negligible queues/delays. Table 10.2 also shows that the priority-controlled junction is predicted to continue to operate with negligible change to performance in the year 2029 AM & PM peak hour Base and With Development situations.

10.4 SJ3: Station Road/ Back Lane/ Main Street/ Market Place (AHA Drg No 1764/03)

10.4.1 Table 10.3 presents the average recorded spot queues during the AM & PM peak hours at SJ3. The queue survey confirms that negligible-small queues were recorded on the 5-minute interval marks. The survey results provide clear evidence that SJ3 is presently operating in an acceptable manner.

10.4.2 A PICADY model is constructed for the 2024 AM & PM peak hour Count situation. The results are also presented in Table 10.3. A review of Table 10.3 shows that the PICADY model queues generally provide a reasonable match to the recorded queues. It is concluded that the PICADY model is suitable to test the traffic impact of the proposed development in year 2029.

10.4.3 Table 10.4 presents the results of the PICADY modelling of the Station Road/Back Lane/Main Street/Market Place junction. A review of Table 10.4 shows that the junction currently operates with a high degree of spare capacity and small queues/delays. Table 10.4 also shows that the priority-controlled junction is predicted to continue to operate with negligible change to performance in the year 2029 AM & PM peak hour Base and With Development situations.

10.5 SJ4: Main Street/ Park Street (AHA Drg No 1764/04)

10.5.1 Table 10.5 presents the average recorded spot queues during the AM & PM peak hours at SJ4. The queue survey confirms that negligible queues were recorded on the 5-minute interval marks.



The survey results provide clear evidence that SJ4 is presently operating in an acceptable manner.

10.5.2 A PICADY model is constructed for the 2024 AM & PM peak hour Count situation. The results are also presented in Table 10.5. A review of Table 10.5 shows that the PICADY model queues provide a reasonable match to the recorded queues. It is concluded that the PICADY model is suitable to test the traffic impact of the proposed development in year 2029.

10.5.3 Table 10.6 presents the results of the PICADY modelling of the Main Street/Park Street junction. A review of Table 10.6 shows that the junction currently operates with a high degree of spare capacity and small queues/delays. Table 10.8 also shows that the priority-controlled junction is predicted to operate with a high degree of spare capacity and negligible queues/delays in the year 2029 AM & PM peak hour Base and With Development situations.

10.6 SJ5: Park Street/The Park/Rectory Lane (AHA Drg No 1764/05)

10.6.1 Table 10.7 presents the average recorded spot queues during the AM & PM peak hours at SJ5. The queue survey confirms that negligible queues were recorded on the 5-minute interval marks. The survey results provide clear evidence that SJ5 is presently operating in an acceptable manner.

10.6.2 A PICADY model is constructed for the 2021 AM & PM peak hour Count situation. The results are also presented in Table 10.7. A review of Table 10.7 shows that the PICADY model queues provide a close match to the recorded queues. It is concluded that the PICADY model is suitable to test the traffic impact of the proposed development in year 2029.

10.6.3 Table 10.8 presents the results of the PICADY modelling of the Park Street/The Park/Rectory Lane junction. A review of Table 10.10 shows that the junction currently operates with a very high degree of spare capacity and negligible queues/delays. Table 10.8 also shows that the priority-controlled junction is predicted to operate with a high degree of spare capacity and negligible queues/delays in the year 2029 AM & PM peak hour Base and With Development situations.

10.7 SJ8: Southfield Way/Station Road/Back Lane (AHA Drg No 1764/07)

10.7.1 Table 10.9 presents the average recorded spot queues during the AM & PM peak hours at SJ8. The queue survey confirms that negligible queues were recorded on the 5-minute interval marks. The survey results provide clear evidence that SJ8 is presently operating in an acceptable manner.



10.7.2 A PICADY model is constructed for the 2024 AM & PM peak hour Count situation. The results are also presented in Table 10.9. A review of Table 10.9 shows that the PICADY model output queues of SJ8 provide a close match to the recorded queues. It is concluded that the PICADY model validates well with existing operating conditions and is suitable to test the traffic impact of the proposed development at SJ8 in year 2029.

10.7.3 Table 10.10 presents the results of the PICADY modelling of the SJ8 junction. Review of Table 10.10 shows that the junction currently operates with a high degree of spare capacity and negligible to small queues/delays. Table 10.10 also shows the priority-controlled junction is predicted to operate in an acceptable manner in the year 2029 AM & PM peak hour Base situation. The PICADY modelling confirms that the addition of traffic generated by the proposed development results in very little change in performance.

10.8 SJ9: Bosworth Road/A447/Bosworth Lane (AHA Drg No 1764/08)

10.8.1 Table 10.11 presents the average recorded spot queues during the AM & PM peak hours at SJ9. The queue survey confirms that small queues were recorded on the 5-minute interval marks. The survey results provide clear evidence that SJ9 is presently operating in an acceptable manner.

10.8.2 A PICADY model is constructed for the 2024 AM & PM peak hour Count situation. The results are also presented in Table 10.11. A review of Table 10.11 shows that the PICADY model output queues of SJ9 provide a reasonable match to the recorded queues. It is concluded that the PICADY model validates well with existing operating conditions and is suitable to test the traffic impact of the proposed development at SJ9 in year 2029.

10.8.3 Table 10.12 presents the results of the PICADY modelling of the Bosworth Road/A447/Bosworth Lane junction for year 2029. Review of Table 10.12 shows that the junction currently operates with spare capacity and negligible to small queues/delays. Table 10.12 also shows the priority-controlled junction is predicted to operate in an acceptable manner in the year 2029 AM & PM peak hour Base situation. The PICADY modelling confirms that the addition of traffic generated by the proposed development does not materially alter the performance of the junction.

10.8.4 It is concluded that traffic generated by the proposed development can be accommodated by the existing SJ9 arrangements.



10.9 Summary

- 10.9.1 Comprehensive junction analysis and modelling is undertaken for the year 2024 for the AM & PM peak hour Count situation and the year 2029 for the AM & PM peak hour Base and With Development situations. It is concluded that the proposed residential developments **do not** have a detrimental impact on the operational performance of the TA highway network.



11 Warwick Lane and Shenton Lane

- 11.1 Figure B6, Appendix B presents the estimates of development generated traffic. This shows that the proposed development will add traffic to Warwick Lane and Shenton Lane. Both of these routes were extensively discussed with LCC for the previous application (LPA ref 22/00167/OUT) and at the subsequent public inquiry (ref APP/K2420/W/23/3317090). Consequently, consideration is given in this TA to the potential traffic impact of the proposed development on Warwick Lane and Shenton Lane and how the impacts compare to the previous scheme.
- 11.2 Figure B6, Appendix B shows that the proposed development is estimated to increase traffic on Shenton Lane, to the west of Warwick Lane (SJ7), by only **10 vehicles** (2-way) in AM peak hour and **8 vehicles** (2-way) in the PM peak hour. This represents 1 additional vehicle every 6-7 minutes on average. This section of Shenton Lane is wide enough for two-way working and is generally free from parked vehicles. This very small level of additional traffic will have an almost imperceptible effect on the operation of Shenton Lane, west of SJ7. Consequently, there is no further consideration of this section of Shenton Lane in this TA. This chapter focuses on the section of Shenton Lane between Warwick Lane and Market Place, where parking does occur.

11.3 Warwick Lane

11.3.1 Carriageway Widths

- 11.3.1.1 As part of the previous planning application (land to the west of Shenton Lane, 22/00167/OUT), GDL commissioned a topographical survey, which includes the section Warwick Lane between Shenton Lane and Warwick Close. This section of Shenton Lane is about 80m long. The topographical survey provides an accurate representation of the existing geometry of Warwick Lane.
- 11.3.1.2 Based on the carriageway measurements taken every 5m, the following is established:
- (i) Minimum carriageway width: 3.9m
 - (ii) Maximum carriageway width: 4.3m, and
 - (iii) Average carriageway width: 4.0m.
- 11.3.1.3 Manual for Streets confirms that two cars can pass in a width of 4.2m. This means that there is opportunity for two opposing cars to pass in the event that they meet.



11.3.2 Footway Provision

- 11.3.2.1 There is currently no footway provision along Warwick Lane for distance of 60m north of Shenton Lane. In the vicinity of Warwick Close, Warwick Lane forms a right-angled bend and, westwards of Warwick Close, there is footway on the north and south sides of Warwick Lane. For the previous planning application (land to the west of Shenton Lane, LPA ref 22/00167/OUT), the main concern of LCC highways officers was the section of Warwick Lane between Shenton Lane and Warwick Close, being where there is an absence of footway.

11.3.3 Existing Vehicular Traffic Flows

- 11.3.3.1 Traffic surveys were undertaken on 21 May 2024. Traffic data is available for the junction of Warwick Lane/Shenton Lane (SJ7).

- 11.3.3.2 A review of Figure B1, Appendix B shows that the AM and PM peak hour traffic flows along Warwick Lane are:

- | | | | | |
|------|-----|--------------------------|--------------------------|-----------------------------|
| (i) | AM: | Northbound = 67 vehicles | Southbound = 34 vehicles | 2-Way = 101 vehicles |
| (ii) | PM: | Northbound = 20 vehicles | Southbound = 10 vehicles | 2-Way = 30 vehicles. |

- 11.3.3.3 This confirms that current traffic levels along Warwick Lane are light being less than 2 vehicles per minute (on average) in the AM peak hour and only 1 vehicle every 2 minutes (on average) in the PM peak hour.

11.3.4 Existing Pedestrian Movements

- 11.3.4.1 As part of the previous planning application (land to the west of Shenton Lane, 22/00167/OUT), GDL commissioned a pedestrian survey of Warwick Lane on 30 June 2021. The **AM and PM peak hour** pedestrian trips along Warwick Lane are:

- | | | | | |
|------|-----|----------------------|---------------------|------------------------|
| (i) | AM: | Northbound = 12 peds | Southbound = 3 peds | 2-Way = 15 peds |
| (ii) | PM: | Northbound = 7 peds | Southbound = 7 peds | 2-Way = 14 peds |

- 11.3.4.2 The surveys confirm that there are low levels of pedestrian movement during the AM and PM peak hours. The pedestrian survey data has not been disputed by LCC highways officers nor did they provide alternative data to the public inquiry for the scheme at land west of Shenton Lane (LPA ref 22/000167/OUT). Consequently, it is considered that the recorded movements set out above are reasonable.



11.3.5 Existing Parking Practices

11.3.5.1 As part of the previous planning application (land to the west of Shenton Lane, 22/00167/OUT), parking surveys were commissioned along Warwick Lane between Shenton Lane and Southfield Way.

11.3.5.2 The surveys were undertaken as follows:

- (i) Wednesday 30 June 2021: 0530-1030 and 1430-1930,
- (ii) Thursday 1 July 2021: 0530-1030 and 1430-1930, and,
- (iii) Saturday 3 July 2021: 0530-1930, (ie 14 hours continuous survey),

11.3.5.3 The surveys recorded the number of parked vehicles in the survey sections in 15-minute time intervals. The surveys have not been disputed by LCC highways officers nor did they provide alternative data to the public inquiry for the scheme at land west of Shenton Lane (LPA ref 22/000167/OUT).

11.3.5.4 The survey results confirm that almost no parking occurs on the first 60m of Warwick Lane from Shenton Lane to Warwick Close. The weekday surveys recorded only a single vehicle parked on the east side of Warwick Lane between Shenton Lane and Warwick Close. Similarly, a single vehicle was recorded on the west side of Warwick Lane for a short period of time on the Saturday survey. Most of the parking was recorded on Warwick Lane between Warwick Close and the junction of Southfield Way. This is coincident with a section of Warwick Lane that benefits from footways on both sides of the road.

11.3.6 Accident History

11.3.6.1 The LCC accident data (refer Appendix A) confirms that there have been no recorded accidents on Warwick Lane, in the 5-year selection window.

11.3.6.2 The CrashMap website includes accident data extending back to 1999. This confirms that there have been no recorded accidents along Warwick Lane extending as far back as year 1999.

11.3.7 Generated Vehicular Traffic: Land West of Shenton Lane (LPA ref 22/00167/OUT)

11.3.7.1 Figure B8, Appendix B (AHA TA report ref 1764/1/B) presents the estimates of development generated traffic on Warwick Lane for the previous application (land to the west of Shenton Lane, 22/00167/OUT), being:

- (i) AM: Northbound = 15 vehicles Southbound = 6 vehicles **2-Way = 21 vehicles**



(ii) PM: Northbound = 10 vehicles Southbound = 9 vehicles **2-Way = 19 vehicles.**

These estimates are agreed with LCC highways officers.

11.3.8 Generated Vehicular Traffic: Proposed Development (Land at York Close)

11.3.8.1 Figure B6, Appendix B presents the estimates of development generated traffic on Warwick Lane for the current scheme, being:

(i) AM: Northbound = 7 vehicles Southbound = 12 vehicles **2-Way = 19 vehicles**

(ii) PM: Northbound = 6 vehicles Southbound = 4 vehicles **2-Way = 10 vehicles.**

11.3.8.2 This shows that the proposed development will generate 2 fewer vehicles on Warwick Lane compared to the previous application in the AM peak hour. In the PM peak hour, the proposed development will add only about half of the vehicles to Warwick Lane compared to the previous scheme.

11.3.8.3 It is estimated that the proposed development will add an additional vehicle to Warwick Lane about every 3 minutes (on average) in the AM peak hour. In the PM peak hour, the increase is about 1 additional vehicle every 6 minutes (on average). In the context of the current low levels of pedestrian movements on Warwick Lane and the lack of recorded accidents extending back over 25 years, it is highly unlikely that the proposed development will affect the current safe functioning of Warwick Lane.

11.3.9 Generated Pedestrian Traffic: Proposed Development (Land at York Close)

11.3.9.1 As part of the previous planning application (land to the west of Shenton Lane, 22/00167/OUT), it was estimated that the development may generate **10** two-way pedestrian journeys along Warwick Lane in the **AM peak hour**. This would represent 1 pedestrian trip every 6 minutes on average. In the **PM peak hour**, the previous application could add **6** pedestrian trips to Warwick Lane, being about 1 additional trip every 10 minutes on average.

11.3.9.2 The proposed development is unlikely to significantly increase pedestrian movements along Warwick Lane as it does not form an obvious desire line between the Site and the local amenities. To the contrary, the proposed development may actually reduce walking movements along Warwick Lane as the development will create a new high-quality walking route between York Close/Public Footpath S72 and Shenton Lane.



11.3.10 Conclusion

- 11.3.10.1 Taking into account all of the above, there is no identifiable need for any scheme of mitigation on Warwick Lane.

11.4 Shenton Lane

11.4.1 Carriageway Widths

- 11.4.1.1 As part of the previous planning application (land to the west of Shenton Lane, 22/00167/OUT), GDL commissioned a topographical survey, which includes the section of Shenton Lane between Warwick Lane and Market Place. This section of Shenton Lane is about 135m long. The topographical survey provides an accurate representation of the existing geometry of Shenton Lane.

- 11.4.1.2 Based on the topographical survey, it is established that:

- (i) Minimum carriageway width: 4.6m
- (ii) Maximum carriageway width: 5.9m, and
- (iii) Average carriageway width: 5.2m

- 11.4.1.3 This confirms that two-way passing is available along Shenton Lane in locations where cars are not parked.

11.4.2 Existing Vehicular Traffic Flows

- 11.4.2.1 Traffic surveys were undertaken on 21 May 2024. Traffic data is available for:

- (i) SJ2: Shenton Lane/ Market Place, and
- (ii) SJ7 Warwick Lane/Shenton Lane.

These junctions are located at either end of the section of Shenton Lane under consideration in this chapter. The recorded flows are presented on Figure B1, Appendix B.

- 11.4.2.2 A review of Figure B1, Appendix B shows that the AM and PM peak hour traffic flows along Shenton Lane are:

- | | | | |
|-------------|----|-------------------------|--------------------------|
| (i) At SJ2: | AM | Eastbound = 44 vehicles | Westbound = 76 vehicles |
| | PM | Eastbound = 44 vehicles | Westbound = 23 vehicles, |



(ii) At SJ7	AM	Eastbound = 44 vehicles	Westbound = 72 vehicles
	PM	Eastbound = 41 vehicles	Westbound = 22 vehicles

There is a high level of consistency between the two sets of data.

11.4.3 Existing Parking Practices

11.4.3.1 As part of the previous planning application (land to the west of Shenton Lane, 22/00167/OUT), parking surveys were commissioned along Shenton Lane between Warwick Lane and Market Place.

11.4.3.2 The surveys were undertaken as follows:

- (i) Wednesday 30 June 2021: 0530-1030 and 1430-1930,
- (ii) Thursday 1 July 2021: 0530-1030 and 1430-1930, and,
- (iii) Saturday 3 July 2021: 0530-1930, (ie 14 hours continuous survey),

11.4.3.3 The surveys recorded the number of parked vehicles in the survey sections in 15-minute time intervals. The surveys have not been disputed by LCC highways officers nor did they provide alternative data to the public inquiry for the scheme at land west of Shenton Lane (LPA ref 22/000167/OUT).

11.4.3.4 It is clear from the survey results that very little parking occurs on the north side of Shenton Lane. Virtually all parking occurs on the south side of Shenton Lane.

11.4.3.5 The parking survey undertaken on the two mid-week days confirms that, during the AM peak hour, no more than 50% of the available parking capacity is utilised. This means that there are a number of gaps which the westbound vehicle can use to allow the eastbound vehicle to pass.

11.4.3.6 In the afternoon, parking demand starts to reduce around 1600 hours. Again, this suggests that the parking is town centre generated and not residents living along Shenton Lane.

11.4.3.7 There are four locations where there are private driveways on the south side of Shenton Lane. Motorists would not normally park so as to block the entry or exit of a frontage resident. This means that there are at least four locations which will be free of parked cars even in the event that there is a high degree of parking along Shenton Lane. The four locations are fairly evenly distributed along Shenton Lane. This means that a passing opportunity is available in close



proximity to where opposing vehicles meet. This helps to simplify the process of passing and keep delays to a minimum.

11.4.4 Accident History

11.4.4.1 The LCC accident data (refer Appendix A) confirms that there have been no recorded accidents on Shenton Lane, in the 5-year selection window.

11.4.4.2 The CrashMap website includes accident data extending back to 1999. This confirms that there have been no recorded accidents along Shenton Lane extending as far back as year 1999.

11.4.5 Generated Vehicular Traffic: Land West of Shenton Lane (LPA ref 22/00167/OUT)

11.4.5.1 Figure B8, Appendix B (AHA TA report ref 1764/1/B) presents the estimates of development generated traffic on Shenton Lane, between Warwick Lane and Market Place, being:

- | | | | | |
|------|-----|-------------------------|-------------------------|-----------------------------|
| (i) | AM: | Eastbound = 32 vehicles | Westbound = 12 vehicles | 2-Way = 44 vehicles |
| (ii) | PM: | Eastbound = 18 vehicles | Westbound = 20 vehicles | 2-Way = 38 vehicles. |

These estimates are agreed with LCC highways officers.

11.4.6 Generated Traffic: Proposed Development (Land at York Close)

11.4.6.1 Figure B6, Appendix B presents the estimates of development generated traffic on Shenton Lane, between Warwick Lane and Market Place, being:

- | | | | | |
|------|-----|------------------------|------------------------|----------------------------|
| (i) | AM: | Eastbound = 5 vehicles | Westbound = 4 vehicles | 2-Way = 9 vehicles |
| (ii) | PM: | Eastbound = 0 vehicles | Westbound = 2 vehicles | 2-Way = 2 vehicles. |

11.4.6.2 This confirms that the current development proposals will generate significantly fewer traffic movements along Shenton Lane, between Warwick Lane and Market Place, compared to the previous application. In the AM peak hour, the current development will generate an additional vehicle on Shenton Lane about every 6-7 minutes (on average). In the PM peak hour, the proposed development will generate 1 vehicle every 30 minutes (on average). It is highly unlikely that this very small increase in traffic will materially alter the functioning or safety of Shenton Lane.



11.4.7 Conclusion

- 11.4.7.1** Taking into account all of the above, there is no identifiable need for any scheme of mitigation on Shenton Lane.

11.5 Summary

11.5.1 Warwick Lane

11.5.1.1 It is concluded that:

- (i) The existing carriageway width is sufficient for two cars to pass,
- (ii) Current traffic levels are light being less than 2 vehicles per minute (on average) in the AM peak hour and only 1 vehicle every 2 minutes (on average) in the PM peak hour.
- (iii) There is no footway provision along a 60m section of Warwick Lane,
- (iv) Current pedestrian movements are low being about 1 pedestrian movement every 4 minutes on average.
- (v) A parking surveys shows almost no parking on Warwick Lane along the section that doesn't include a footway,
- (vi) There have been no recorded accidents on Warwick Lane extending back as far as 1999,
- (vii) The proposed development will add an only 1 additional vehicle to Warwick Lane about every 3 minutes (on average) in the AM peak hour. In the PM peak hour, the increase is about 1 additional vehicle every 6 minutes (on average).
- (viii) It is unlikely that the proposed development will significantly increase walking movements along Warwick Lane as the more natural desire line to the local amenities would be via York Close,
- (ix) The proposed development will create a new walking route between York Close and Shenton Lane. This will be a new alternative walk route to Warwick Lane and may reduce existing pedestrian trips along Warwick Lane.

- 11.5.1.2** In the context of the current low levels of vehicular and pedestrian movements on Warwick Lane and the lack of recorded accidents extending back over 25 years, it is highly unlikely that the proposed development will affect the current safe functioning of Warwick Lane. Consequently, there is no identifiable need for any scheme of mitigation.

11.5.2 Shenton Lane

11.5.2.1 It is concluded that:



- (i) The existing carriageway width is sufficient for two cars to pass, where parking is not occurring,
- (ii) Current traffic levels are light being about 2 vehicles per minute (on average) in the AM peak hour and only 1 vehicle every minute (on average) in the PM peak hour.
- (iii) A parking surveys shows that no parking occurs on the north side of Shenton Lane. The survey also confirms that, although parking occurs on the south side, there are several passing opportunities available,
- (iv) There have been no recorded accidents on Shenton Lane extending back as far as 1999,
- (v) The proposed development will add an only 1 additional vehicle to Shenton Lane about every 6-7 minutes (on average) in the AM peak hour. In the PM peak hour, the increase is about 1 additional vehicle every 30 minutes (on average).

11.5.2.2 In the context of the current low levels of vehicular traffic on Shenton Lane, the passing opportunities that are available and the lack of recorded accidents extending back over 25 years, it is highly unlikely that the very small traffic increase generated by the proposed development will affect the current safe functioning of Shenton Lane. Consequently, there is no identifiable need for any scheme of mitigation on Shenton Lane.



12 Summary & Conclusions

- 12.1 Ashley Helme Associates Limited are appointed by Gladman Developments Ltd to prepare a Transport Assessment report to support the planning application for residential development on land off York Close, Market Bosworth. The Site is presently agricultural land. The proposed development comprises a residential development of up to 105 dwellings.

12.2 Planning History

- 12.2.1 With the single exception of access, the current application is identical to a previous application referred to as 'land west of Shenton Lane' (LPA ref 22/00167/OUT), which was appealed for non-determination. Many of the TA parameters adopted in this report have been comprehensively reviewed by LCC highways officers and the inspector for the planning inquiry for the previous scheme.

12.3 Access Strategy

- 12.3.1 The planning application seeks outline consent with all matters reserved, except access. The proposed Site access strategy for the Site is:
- (i) Vehicles: York Close,
 - (ii) Pedestrians: York Close and Shenton Lane,
 - (iii) Cyclists: York Close and Shenton Lane, and
 - (iv) Emergency access: Shenton Lane (if required by LCC).
- 12.3.2 The proposed access arrangements are shown on Drg No 1764/01/B and JPL Drg No 002810-JPL-ZZ-ZZ-DR-D-2001-S2 Rev C03. It is demonstrated that the proposed access point:
- (i) Satisfies geometric and visibility requirements,
 - (ii) Satisfies LCC HDG for longitudinal gradients,
 - (iii) Offers appropriate provision for all users, and
 - (iv) Can accommodate the tracking movements of a range of vehicles.

12.4 Walk and Cycle

- 12.4.1 The principle of transport sustainability underlies the masterplan development. The location of the Site provides a good context for journeys to be undertaken on foot and by cycle, and the masterplan access strategy reflects this with the provision of good permeability and connectivity for pedestrians and cyclists.



12.4.2 The location of the Site and nearby local amenities, offer a good opportunity for fostering a sustainable community. This is in accordance with the aims of local policies and national policy in NPPF.

12.4.3 The proposed development will create a new walking/cycling route between York Close and Shenton Lane. This will be a new alternative route to Warwick Lane and may reduce pedestrian and cycle trips along Warwick Lane.

12.5 Public Transport

12.5.1 Encouraging public transport journeys is an important component of the development access strategy. There are existing bus services operating in the vicinity of the Site.

12.5.2 Existing bus services, that offer frequent travel to Leicester are accessible within a short walk of the Site. The services offer opportunity to complete work, education, shopping and leisure trips by bus.

12.5.3 It is demonstrated that the Site has good public transport accessibility, with opportunities for frequent travel by bus, including weekdays and weekends. This is in accordance with the aims and objectives of current national and local policies.

12.6 Traffic Impact

12.6.1 A TA study network of junctions is identified and comprises:

REF	JUNCTION	CONTROL
SJ1	Weston Drive/Station Road	priority control
SJ2	Shenton Lane/ Market Place	priority control
SJ3	Station Road/ Back Lane/ Main Street/ Market Place	priority control
SJ4	Main Street/ Park Street	priority control
SJ5	Park Street/ The Park/ Rectory Lane	priority control
SJ6	Rectory Lane/ Sutton Lane/ Market Place	priority control
SJ7	Warwick Lane/Shenton Lane	priority control
SJ8	Southfield Way/Station Road/Back Lane	priority control
SJ9	Bosworth Road/A444/Bosworth Lane	priority control.

12.6.2 AHA has completed a review of schemes in the wider Market Bosworth area. AHA has concluded that only one committed scheme will have a material impact on the TA study network. Traffic generated by the Kyngs Golf Club scheme has been taken into account in the traffic impact testing of the TA study junctions.



- 12.6.3 Comprehensive junction analysis and modelling is undertaken for the year 2024 for the AM & PM peak hour Count situation and the year 2029 for the AM & PM peak hour Base and With Development situations. It is concluded that the proposed residential development **does not** have a detrimental impact on the operational performance of the TA highway network.

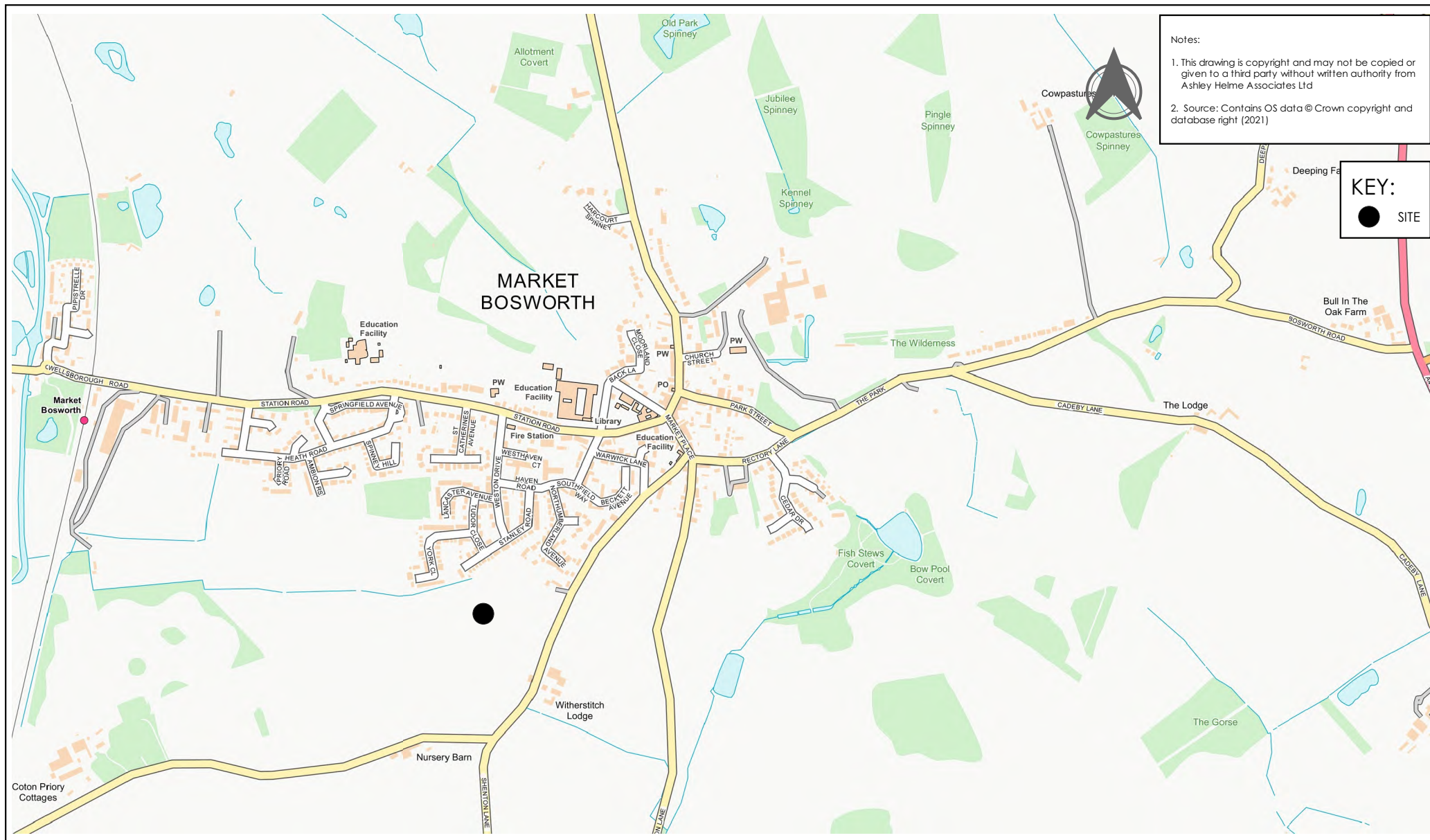
12.7 Warwick Lane and Shenton Lane

- 12.7.1 In the context of the current low levels of vehicular and pedestrian movements on Warwick Lane and the lack of recorded accidents extending back over 25 years, it is concluded that the proposed development will **not affect** the current safe functioning of Warwick Lane. Consequently, there is no identifiable need for any scheme of mitigation.
- 12.7.2 In the context of the current low levels of vehicular traffic on Shenton Lane, the passing opportunities that are available and the lack of recorded accidents extending back over 25 years, it is concluded that the very small traffic increase generated by the proposed development will **not affect** the current safe functioning of Shenton Lane. Consequently, there is no identifiable need for any scheme of mitigation on Shenton Lane.

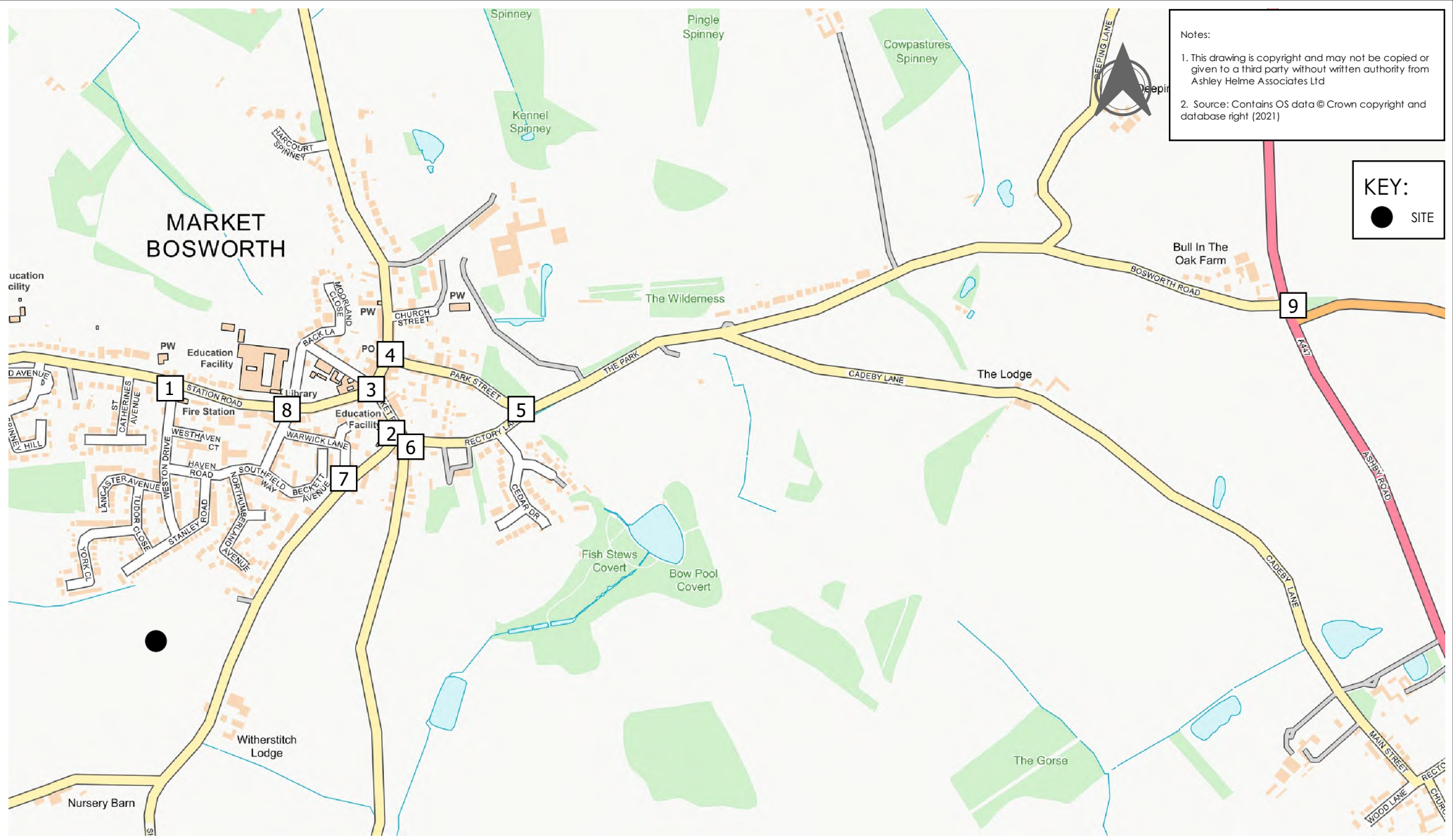
12.8 Summary

- 12.8.1 It is concluded that the proposed development is in accordance with national and local transport policies, and that there are no transport/highways reasons for refusal of planning permission.

Figures



Project: YORK CLOSE, MARKET BOSWORTH	Title: LOCATION PLAN	FIGURE 1.1		
Client: GLADMAN DEVELOPMENTS		Date: JUNE 2024	Scale: NTS	



Project:
YORK CLOSE, MARKET BOSWORTH

Client:
GLADMAN DEVELOPMENTS

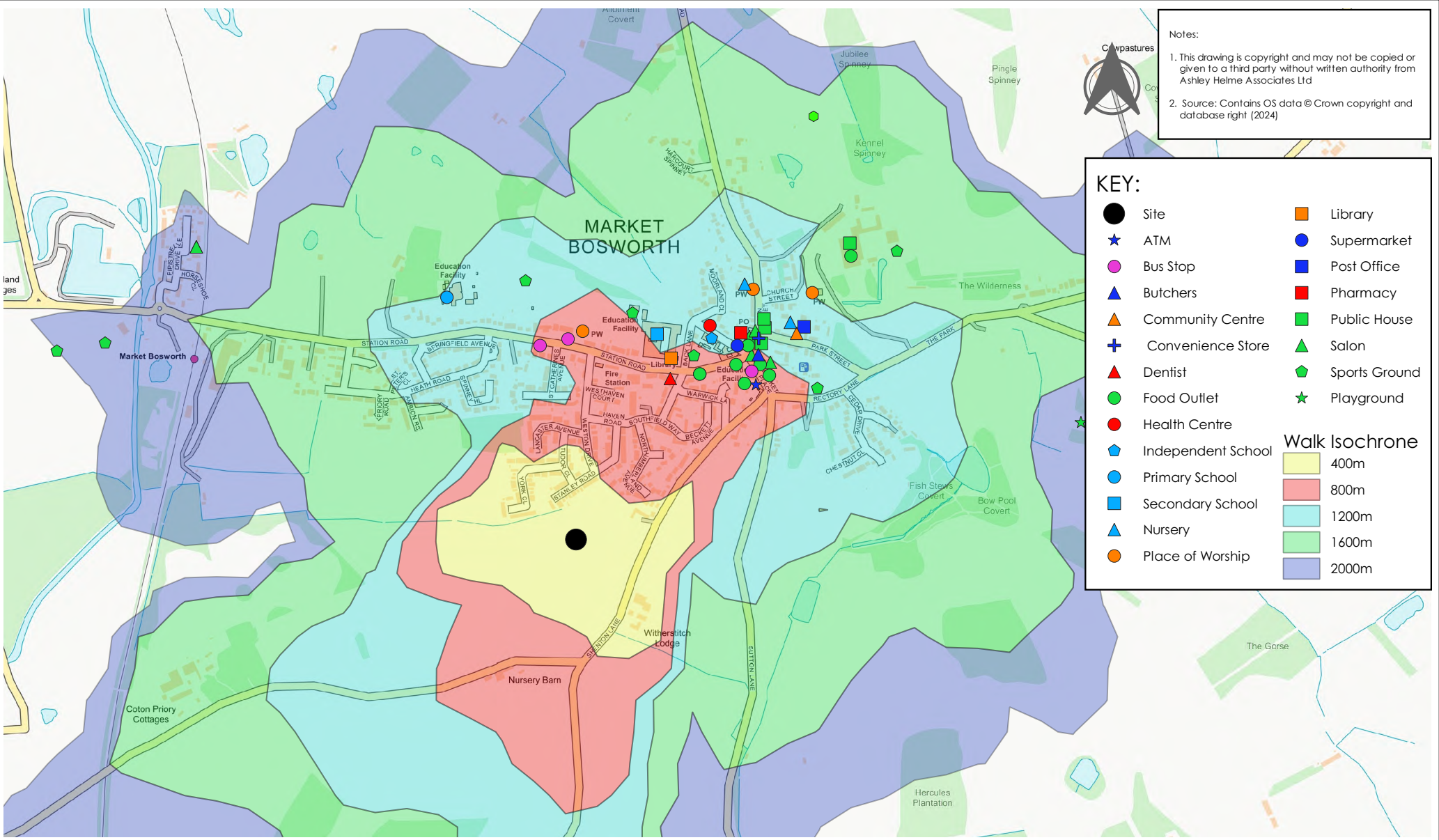
Title:
STUDY JUNCTIONS

FIGURE 4.1

Date:
JUNE 2024

Scale:
NTS





Project:
YORK CLOSE, MARKET BOSWORTH

Client:
GLADMAN DEVELOPMENTS

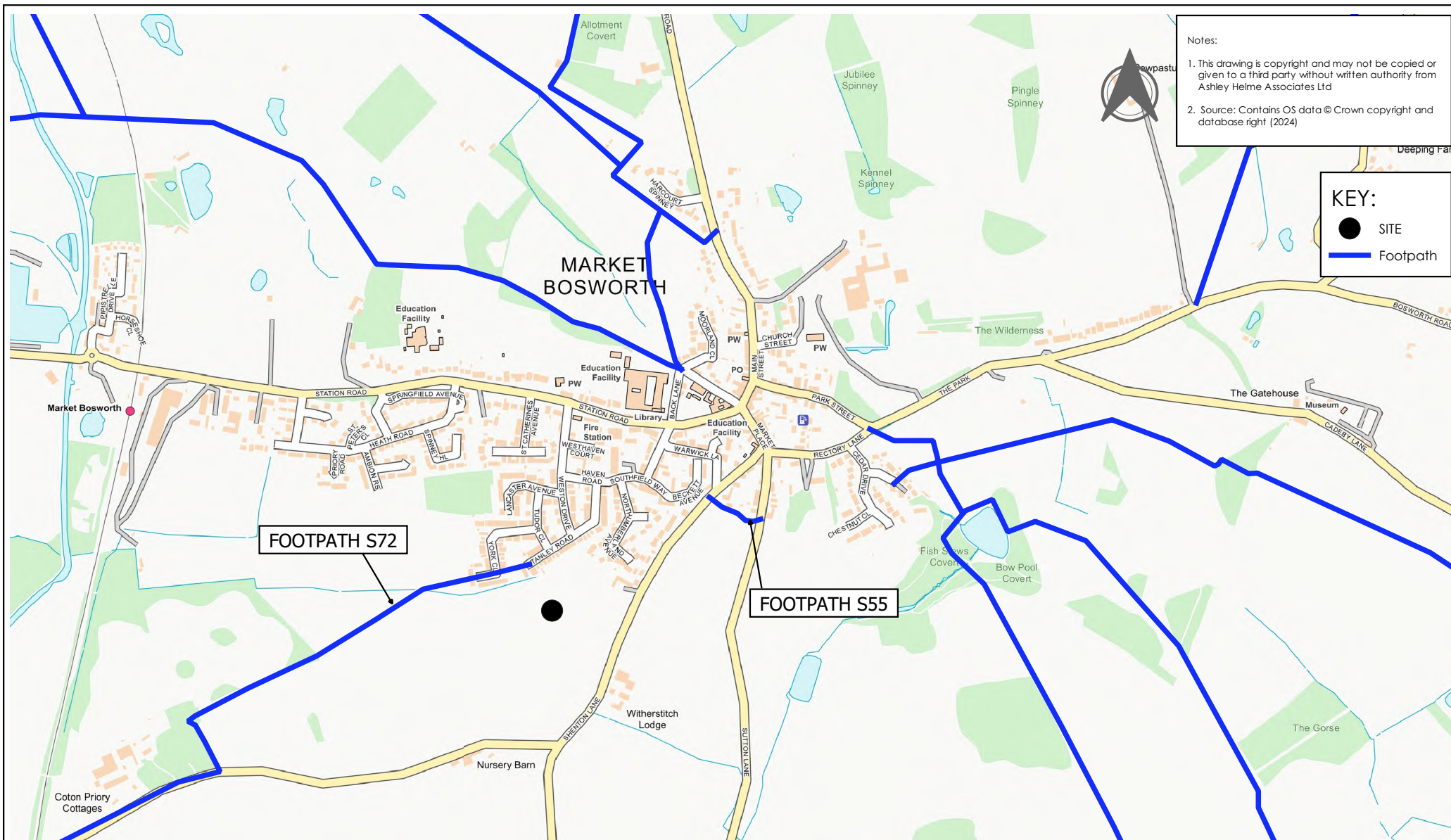
Title:
WALK ISOCHRONES AND AMENITIES

FIGURE 6.1

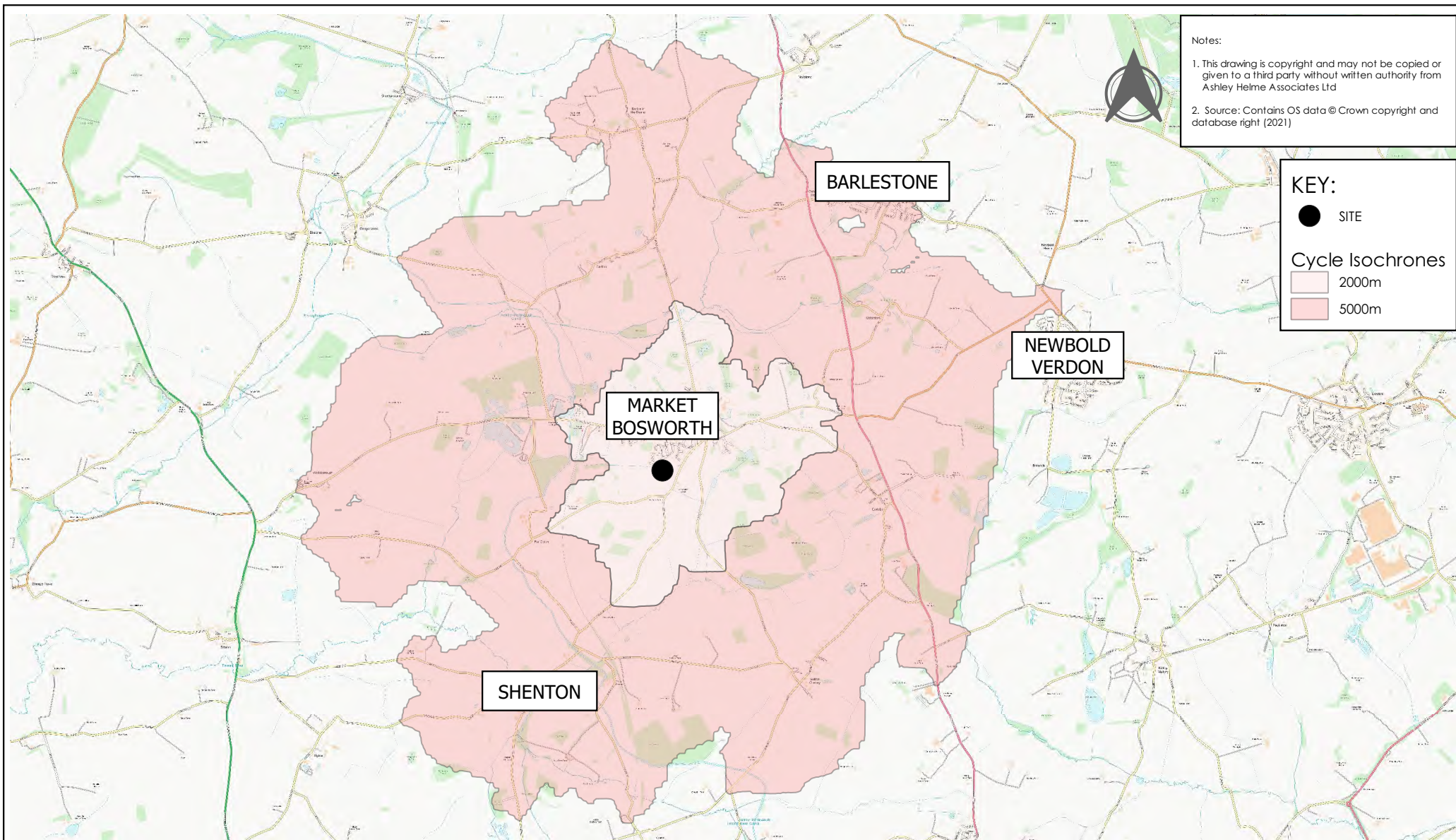
Date:
JUNE 2024

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NTS





Project: YORK CLOSE, MARKET BOSWORTH	Title: PUBLIC RIGHTS OF WAY (PROW)	FIGURE 6.2		 ASHLEY HELME ASSOCIATES
Client: GLADMAN DEVELOPMENTS		Date: JUNE 2024	Scale: NTS	



Notes:

1. This drawing is copyright and may not be copied or given to a third party without written authority from Ashley Helme Associates Ltd
2. Source: Contains OS data © Crown copyright and database right (2021)

KEY:

● SITE

Cycle Isochrones

2000m

5000m

Project: YORK CLOSE, MARKET BOSWORTH	Title: CYCLE ISOCHRONES	FIGURE 6.3		 ASHLEY HELME ASSOCIATES
Client: GLADMAN DEVELOPMENTS		Date: JUNE 2024	Scale: NTS	

Tables

	ROUTE ASSIGNMENT					
AREA OF WORKPLACE RESIDENT POPULATION	MAIN STREET (N)	A447 ASHBY ROAD (N)	A447 ASHBY ROAD (S)	B585 BOSWORTH LANE (E)	STATION ROAD (W)	SHENTON LANE (S)

LOCAL
AUTHORITY/COUNTY/REGION

							TOTAL	%
Derby	6	6					12	0.4
Leicester				300			300	11.2
Nottingham	9	9					18	0.7
Rutland				5			5	0.2
Amber Valley	5						5	0.2
Erewash	4						4	0.1
South Derbyshire	11				11		22	0.8
Blaby			105	106			211	7.8
Charnwood		51		51			102	3.8
Harborough			34	33			67	2.5
Melton		8		7			15	0.6
North West Leicestershire	98	98			99		295	11.0
Oadby and Wigston				34			34	1.3
South Kesteven				3			3	0.1
Daventry						7	7	0.3
Kettering				4			4	0.1
Northampton				4		4	8	0.3
South Northamptonshire			4				4	0.1
Wellingborough			3				3	0.1
Ashfield		5					5	0.2
Broxtowe		3					3	0.1
Rushcliffe		4		4			8	0.3
Shropshire					12		12	0.4
Telford and Wrekin					3		3	0.1
Cannock Chase					9		9	0.3
East Staffordshire	9				10		19	0.7
Lichfield					22		22	0.8
Staffordshire Moorlands					2		2	0.1
Tamworth					52		52	1.9
North Warwickshire					73	72	145	5.4
Nuneaton and Bedworth					76	76	152	5.7
Rugby			17			18	35	1.3
Stratford-on-Avon						7	7	0.3
Warwick					15	16	31	1.2
Birmingham					79		79	2.9
Coventry					42	43	85	3.2
Dudley					4		4	0.1
Sandwell					5		5	0.2
Solihull					12	12	24	0.9
Walsall					9		9	0.3
Bromsgrove					3		3	0.1
Redditch					4		4	0.1
Worcester					2		2	0.1
Central Bedfordshire				2			2	0.1
Peterborough				6			6	0.2
Huntingdonshire				2			2	0.1
Milton Keynes				2			2	0.1
Cherwell						3	3	0.1

MIDDLE SUPER OUTPUT AREA

							TOTAL	%
Hinckley and Bosworth 001	20			19			39	1.5
Hinckley and Bosworth 002				11			11	0.4
Hinckley and Bosworth 003				13			13	0.5
Hinckley and Bosworth 004		150			151		301	11.2
Hinckley and Bosworth 005				104			104	3.9
Hinckley and Bosworth 006			24				24	0.9
Hinckley and Bosworth 007			30				30	1.1
Hinckley and Bosworth 008					36	35	71	2.6
Hinckley and Bosworth 009			16			15	31	1.2
Hinckley and Bosworth 010			43			43	86	3.2
Hinckley and Bosworth 011			30			30	60	2.2
Hinckley and Bosworth 012			12			12	24	0.9
Hinckley and Bosworth 013			3			3	6	0.2
Hinckley and Bosworth 014			18			17	35	1.3
TOTAL	162	334	339	710	731	413	2689	100.0
%	6.0	12.4	12.6	26.4	27.2	15.4	100.0	

Table 9.1 2011 Census Distribution
Place of Work
Residents in Hinckley and Bosworth 004 Middle Super Output Area

MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
	OBSERVED	MODELLED	OBSERVED	MODELLED

Weston Drive	0.0	0.2	0.0	0.1
Station Road	0.3	0.1	0.0	0.1

- Notes:
1. AHA queue survey 21.05.24
 2. Average spot queue observed over peak hour period
 3. Refer Figure B1, Appendix B for 2024 traffic count flows.

Table 10.1 PICADY VALIDATION SJ1 Weston Drive/Station Road

MOVEMENT	AM PEAK HOUR			PM PEAK HOUR		
	RFC	QUEUE (veh)	DELAY (mins/veh)	RFC	QUEUE (veh)	DELAY (mins/veh)

2024 Count, Existing Junction Geometry						
Weston Drive	0.19	0.2	0.15	0.08	0.1	0.15
Station Road (W)	0.06	0.1	0.08	0.05	0.1	0.09

2029 Base, Existing Junction Geometry						
Weston Drive	0.22	0.3	0.16	0.09	0.1	0.15
Station Road (W)	0.07	0.1	0.08	0.06	0.1	0.08

2029 With Development, Existing Junction Geometry						
Weston Drive	0.298	0.4	0.18	0.12	0.1	0.16
Station Road (W)	0.08	0.2	0.08	0.08	0.1	0.09

- Notes:
1. Refer Drg No 1764/18 for existing junction geometry.
 2. Refer Figure B1, Appendix B for 2024 count traffic flows.
 3. Refer Figure B4, Appendix B for 2029 Base traffic flows.
 4. Refer Figure B7, Appendix B for 2029 With Development traffic flows.

Table 10.2 PICADY RESULTS SJ1 Weston Drive/Station Road

MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
	OBSERVED	MODELLED	OBSERVED	MODELLED

Market Place Left	1.2	1.5	0.0	0.7
Market Place Right	3.0	0.6	0.4	0.4
Main Street	0.2	0.2	0.0	0.0
Station Road	0.6	0.1	0.0	0.1

Notes:

1. AHA queue survey 21.05.24
2. Average spot queue observed over peak hour period
3. Refer Figure B1, Appendix B for 2024 traffic count flows.

Table 10.3 PICADY VALIDATION SJ3 Station Road/Back Lane/Main Street/Market Place

MOVEMENT	AM PEAK HOUR			PM PEAK HOUR		
	RFC	QUEUE (veh)	DELAY (mins/veh)	RFC	QUEUE (veh)	DELAY (mins/veh)

2024 Count, Existing Junction Geometry						
Market Place Left	0.60	1.5	0.28	0.41	0.7	0.16
Market Place Right	0.39	0.6	0.27	0.28	0.4	0.21
Main Street	0.10	0.2	0.11	0.01	0.0	0.11
Station Road	0.06	0.1	0.08	0.06	0.1	0.08

2029 Base, Existing Junction Geometry						
Market Place Left	0.68	2.0	0.34	0.47	0.9	0.18
Market Place Right	0.43	0.7	0.30	0.30	0.4	0.22
Main Street	0.11	0.2	0.11	0.01	0.0	0.11
Station Road	0.07	0.1	0.08	0.07	0.1	0.08

2029 With Development, Existing Junction Geometry						
Market Place Left	0.69	2.2	0.36	0.49	0.9	0.18
Market Place Right	0.44	0.8	0.31	0.31	0.4	0.23
Main Street	0.11	0.2	0.12	0.01	0.0	0.11
Station Road	0.07	0.1	0.08	0.07	0.1	0.08

Notes:

1. Refer Drg No 1764/03 for existing junction geometry.
2. Refer Figure B1, Appendix B for 2024 count traffic flows.
3. Refer Figure B4, Appendix B for 2029 Base traffic flows.
4. Refer Figure B7, Appendix B for 2029 With Development traffic flows.

Table 10.4 PICADY RESULTS SJ3 Station Road/Back Lane/Main Street/Market Place

MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
	OBSERVED	MODELLED	OBSERVED	MODELLED
Main Street (N)	0.2	1.2	0.3	0.2

- Notes:
- AHA queue survey 21.05.24
 - Average spot queue observed over peak hour period
 - Refer Figure B1, Appendix B for 2024 traffic count flows.

Table 10.5 PICADY VALIDATION SJ4 Main Street/Park Street

MOVEMENT	AM PEAK HOUR			PM PEAK HOUR		
	RFC	QUEUE (veh)	DELAY (mins/veh)	RFC	QUEUE (veh)	DELAY (mins/veh)
2024 Count, Existing Junction Geometry						
Main Street (N)	0.55	1.2	0.32	0.20	0.2	0.16
2029 Base, Existing Junction Geometry						
Main Street (N)	0.58	1.4	0.35	0.21	0.3	0.16
2029 With Development, Existing Junction Geometry						
Main Street (N)	0.60	1.4	0.37	0.22	0.3	0.17

- Notes:
- Refer Drg No 1764/04 for existing junction geometry.
 - Refer Figure B1, Appendix B for 2024 count traffic flows.
 - Refer Figure B4, Appendix B for 2029 Base traffic flows.
 - Refer Figure B7, Appendix B for 2029 With Development traffic flows.

Table 10.6 PICADY RESULTS SJ4 Main Street/Park Street

MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
	OBSERVED	MODELLED	OBSERVED	MODELLED
Park Street	0.0	0.1	0.0	0.1

Notes:

1. AHA queue survey 21.05.24
2. Average spot queue observed over peak hour period
3. Refer Figure B1, Appendix B for 2024 traffic count flows.

Table 10.7 PICADY VALIDATION SJ5 Park Street/The Park/Rectory Lane

MOVEMENT	AM PEAK HOUR			PM PEAK HOUR		
	RFC	QUEUE (veh)	DELAY (mins/veh)	RFC	QUEUE (veh)	DELAY (mins/veh)
2024 Count, Existing Junction Geometry						
Park Street	0.07	0.1	0.15	0.06	0.1	0.14
2029 Base, Existing Junction Geometry						
Park Street	0.07	0.1	0.15	0.06	0.1	0.14
2029 With Development, Existing Junction Geometry						
Park Street	0.07	0.1	0.15	0.06	0.1	0.14

Notes:

1. Refer Drg No 1764/05 for existing junction geometry.
4. Refer Figure B1, Appendix B for 2024 count traffic flows.
3. Refer Figure B4, Appendix B for 2029 Base traffic flows.
4. Refer Figure B7, Appendix B for 2029 With Development traffic flows.

Table 10.8 PICADY RESULTS SJ5 Park Street/The Park/Rectory Lane

MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
	OBSERVED	MODELLED	OBSERVED	MODELLED

Southfield Way	0.1	0.2	0.0	0.1
Station Road (E)	0.0	0.7	0.0	0.4
Station Road (W)	1.5	0.5	0.0	0.3
Back Lane	0.2	0.1	0.0	0.0

- Notes:
- 1. AHA queue survey 21.05.24
 - 2. Average spot queue observed over peak hour period
 - 3. Refer Figure B1, Appendix B for 2024 traffic count flows.

Table 10.9 PICADY VALIDATION SJ8 Southfield Way/Station Road/Back Lane

MOVEMENT	AM PEAK HOUR			PM PEAK HOUR		
	RFC	QUEUE (veh)	DELAY (mins/veh)	RFC	QUEUE (veh)	DELAY (mins/veh)

2024 Count, Existing Junction Geometry						
Southfield Way	0.18	0.2	0.20	0.11	0.1	0.17
Station Road (E) Left/Straight	0.26	0.6	0.11	0.17	0.4	0.08
Station Road (E) Right	0.30	0.1	0.11	0.18	0.0	0.08
Station Road (W)	0.34	0.5	0.22	0.25	0.3	0.17
Back Lane	0.07	0.1	0.09	0.02	0.0	0.08

2029 Base, Existing Junction Geometry						
Southfield Way	0.20	0.3	0.21	0.12	0.1	0.18
Station Road (E) Left/Straight	0.28	0.7	0.11	0.19	0.5	0.08
Station Road (E) Right	0.32	0.1	0.11	0.20	0.0	0.08
Station Road (W)	0.37	0.6	0.24	0.27	0.4	0.18
Back Lane	0.08	0.1	0.09	0.03	0.0	0.08

2029 With Development, Existing Junction Geometry						
Southfield Way	0.25	0.3	0.24	0.15	0.2	0.19
Station Road (E) Left/Straight	0.29	0.7	0.11	0.21	0.5	0.09
Station Road (E) Right	0.33	0.1	0.11	0.22	0.0	0.09
Station Road (W)	0.37	0.6	0.24	0.27	0.4	0.18
Back Lane	0.08	0.1	0.08	0.03	0.0	0.08

Notes:

1. Refer Drg No 1764/07 for existing junction geometry.
5. Refer Figure B1, Appendix B for 2024 count traffic flows.
3. Refer Figure B4, Appendix B for 2029 Base traffic flows.
4. Refer Figure B7, Appendix B for 2029 With Development traffic flows.

Table 10.10 PICADY RESULTS SJ8 Southfield Way/Station Road/Back Lane

MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
	OBSERVED	MODELLED	OBSERVED	MODELLED

A447 (N)	0.0	0.1	0.0	0.1
Bosworth Lane	5.0	2.2	1.6	1.4
A447 (S)	0.1	0.4	0.1	0.4
Bosworth Road	4.9	3.1	1.2	2.4

- Notes:
1. AHA queue survey 21.05.24
 2. Average spot queue observed over peak hour period
 3. Refer Figure B1, Appendix B for 2024 traffic count flows.

Table 10.11 PICADY VALIDATION SJ9 Bosworth Road/A447/Bosworth Lane

MOVEMENT	AM PEAK HOUR			PM PEAK HOUR		
	RFC	QUEUE (veh)	DELAY (mins/veh)	RFC	QUEUE (veh)	DELAY (mins/veh)

2024 Count, Existing Junction Geometry						
Bosworth Lane left	0.34	0.5	0.25	0.26	0.4	0.16
Bosworth Lane Ahead & Right	0.63	1.7	0.63	0.50	1.0	0.43
A447 (N)	0.11	0.1	0.12	0.10	0.1	0.13
Bosworth Road Left	0.16	0.2	0.25	0.20	0.3	0.21
Bosworth Road Ahead & Right	0.75	2.9	0.60	0.68	2.1	0.46
A447 (S)	0.25	0.4	0.18	0.29	0.4	0.16

2029 Base, Existing Junction Geometry						
Bosworth Lane left	0.43	0.8	0.36	0.29	0.4	0.18
Bosworth Lane Ahead & Right	0.74	2.6	1.01	0.56	1.3	0.53
A447 (N)	0.12	0.1	0.13	0.11	0.1	0.13
Bosworth Road Left	0.24	0.3	0.39	0.26	0.4	0.28
Bosworth Road Ahead & Right	0.83	4.4	0.87	0.75	2.8	0.61
A447 (S)	0.27	0.4	0.19	0.31	0.5	0.17

2029 With Development, Existing Junction Geometry						
Bosworth Lane left	0.49	1.0	0.44	0.30	0.4	0.19
Bosworth Lane Ahead & Right	0.78	3.1	1.18	0.60	1.5	0.59
A447 (N)	0.12	0.1	0.13	0.12	0.1	0.13
Bosworth Road Left	0.41	0.7	0.78	0.31	0.5	0.34
Bosworth Road Ahead & Right	0.88	6.1	1.16	0.79	3.4	0.72
A447 (S)	0.28	0.4	0.20	0.31	0.5	0.17

Notes:

1. Refer Drg No 1764/08 for existing junction geometry.
6. Refer Figure B1, Appendix B for 2024 count traffic flows.
3. Refer Figure B4, Appendix B for 2029 Base traffic flows.
4. Refer Figure B7, Appendix B for 2029 With Development traffic flows.

Table 10.12 PICADY RESULTS SJ9 Bosworth Road/A447/Bosworth Lane

A LCC Accident Records



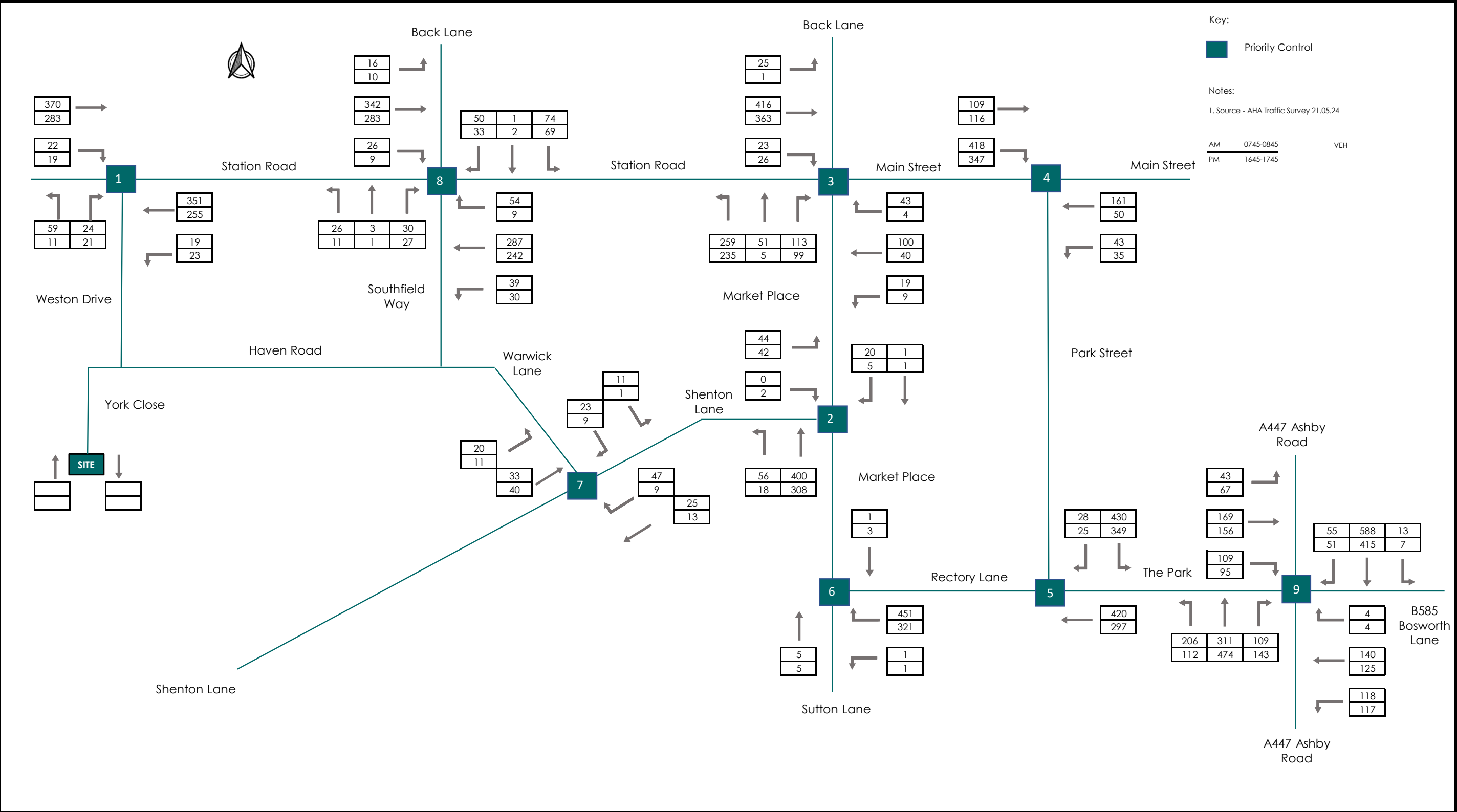
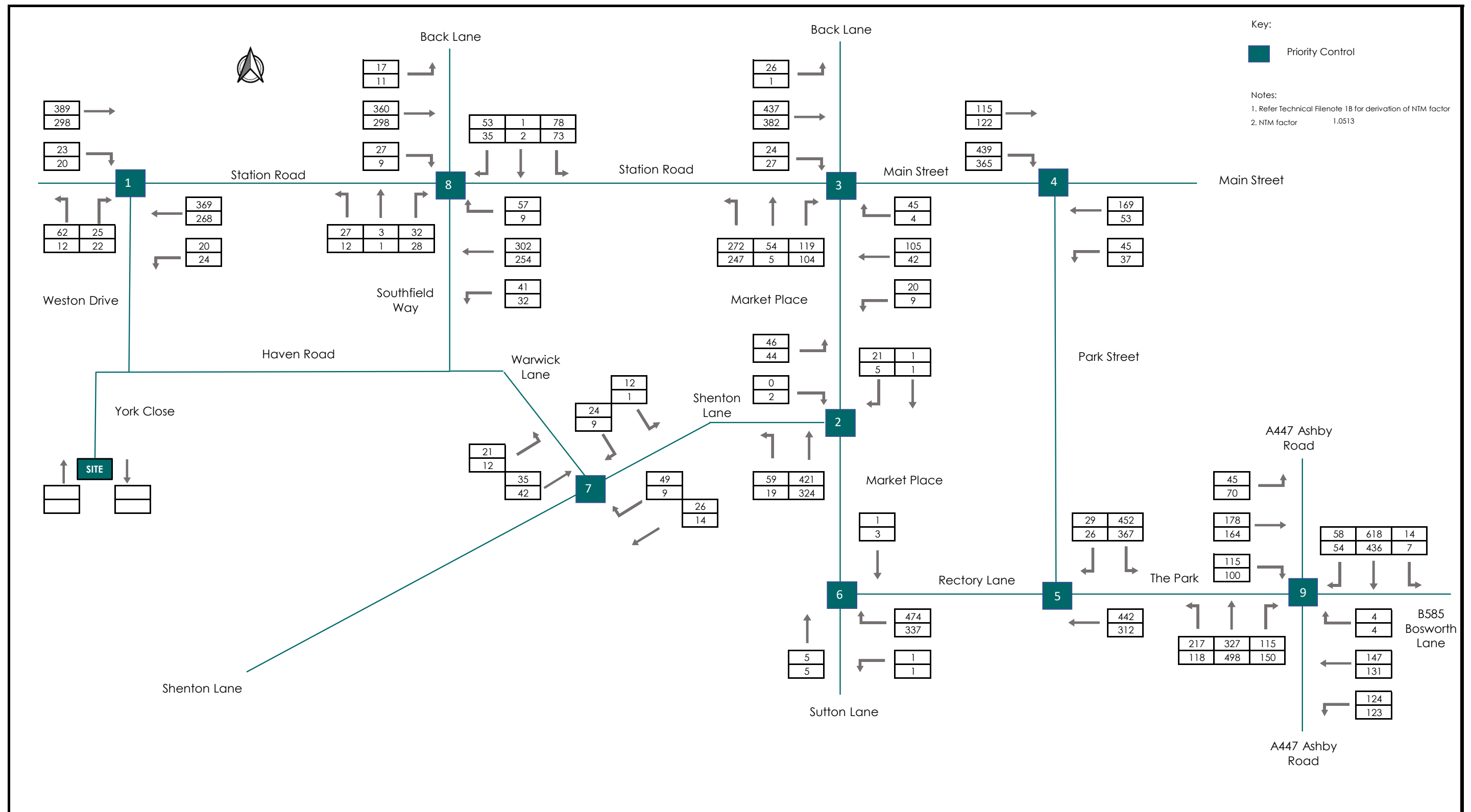


FIGURE B1 **TRAFFIC COUNT: 2024**
AM & PM PEAK HOURS



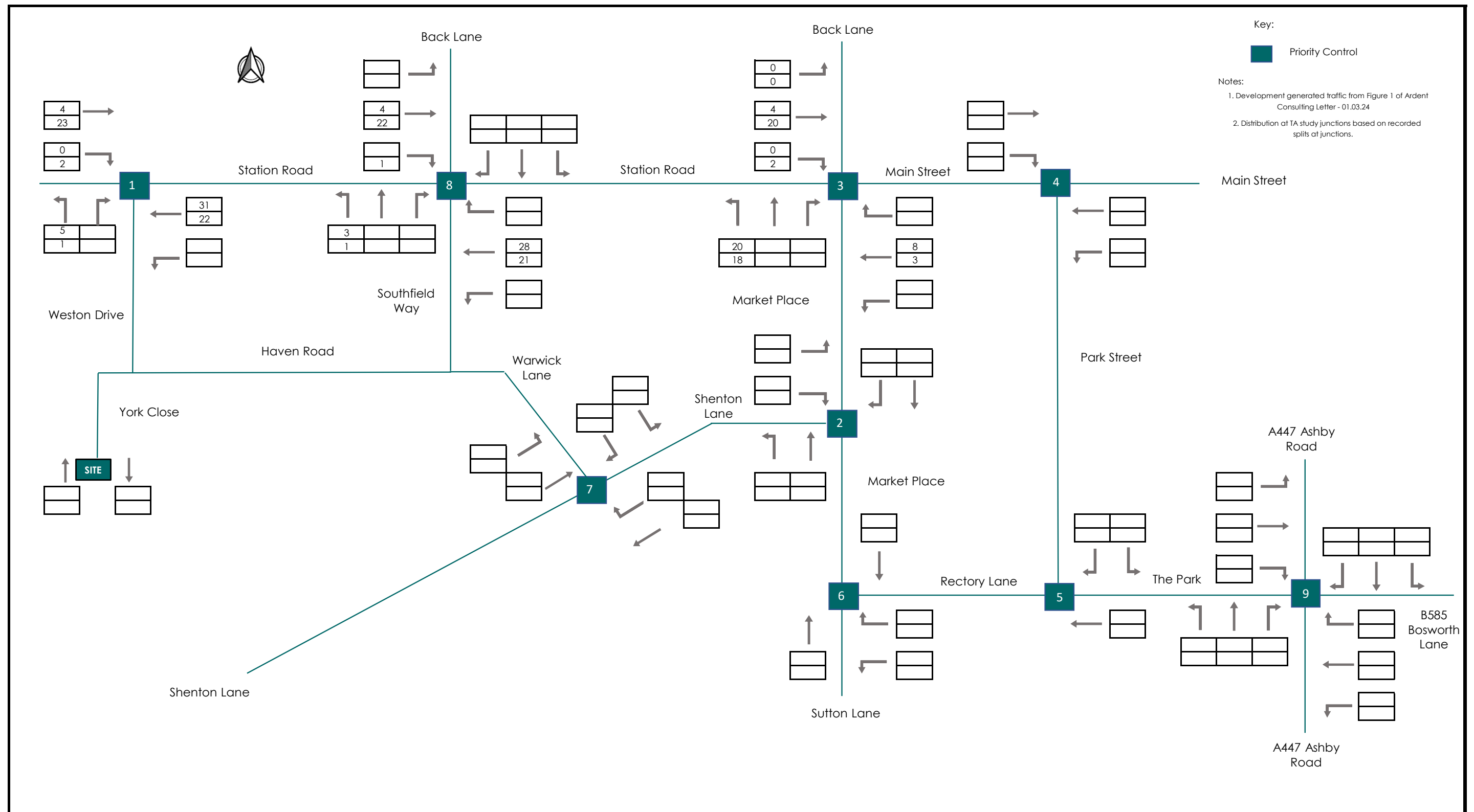


FIGURE B3

**COMMITTED DEVELOPMENT
KYNGS GOLF CLUB, STATION ROAD (24/00019/FUL)
AM & PM PEAK HOURS**

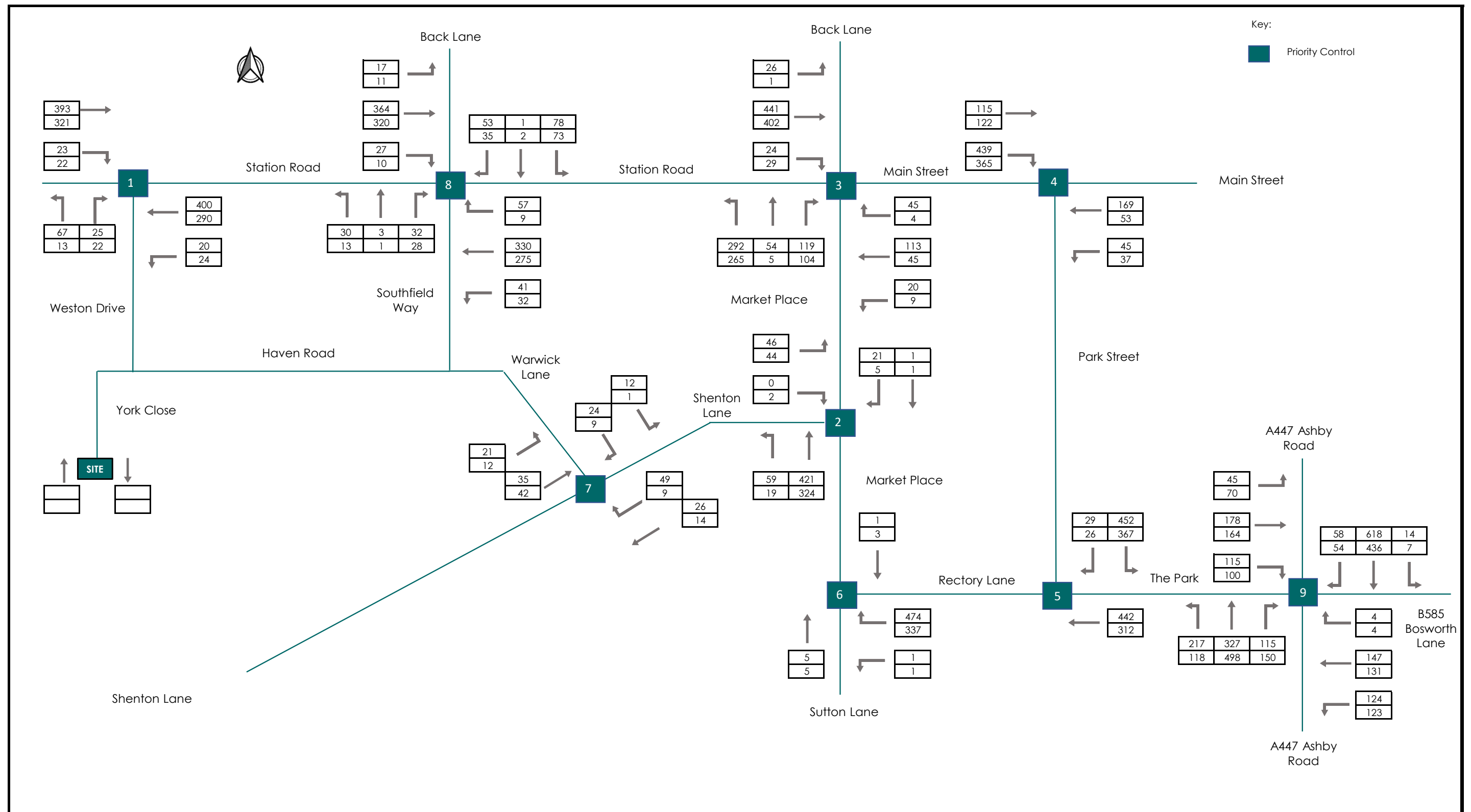


FIGURE B4

**BASE 2029
B2 + B3
AM & PM PEAK HOURS**

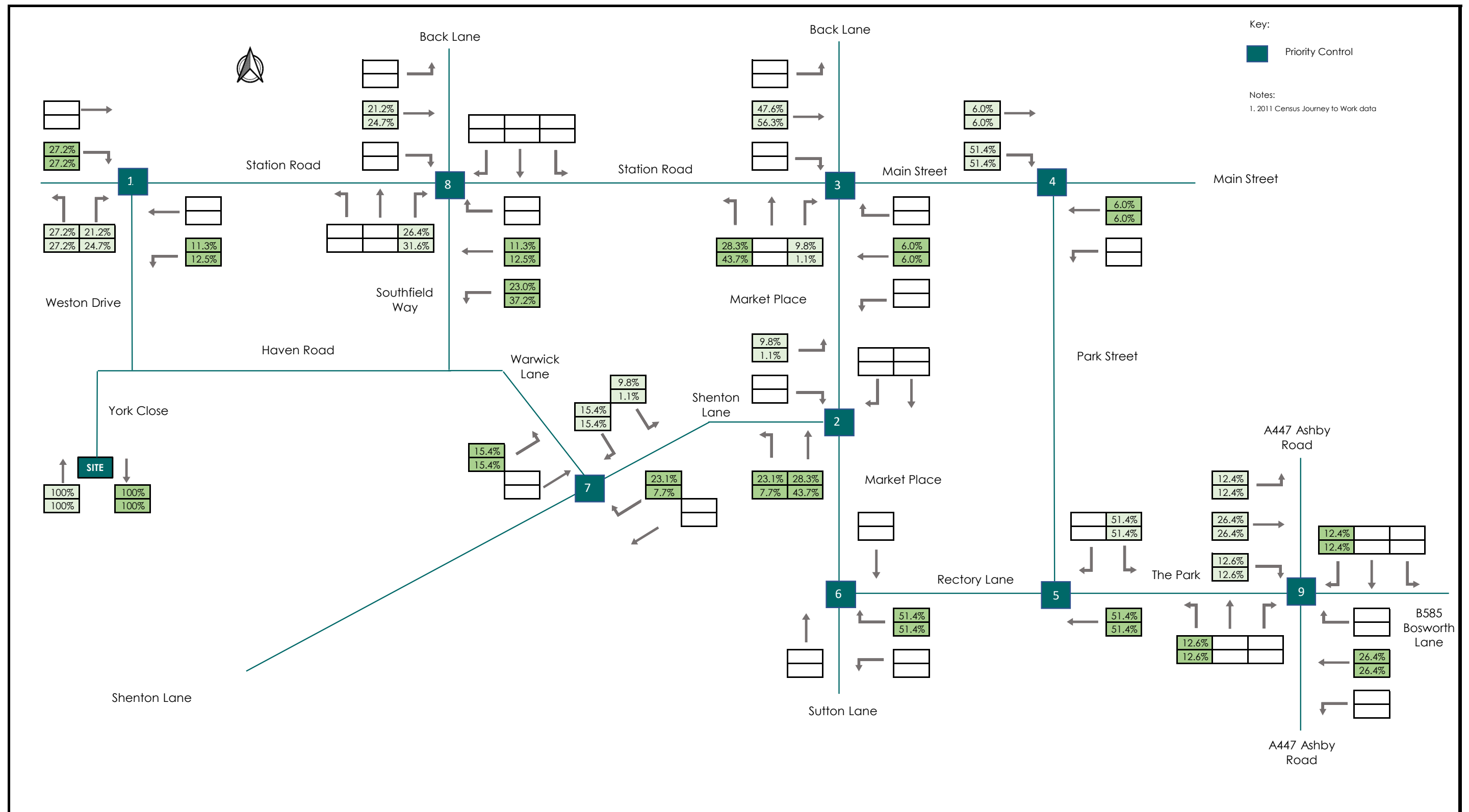


FIGURE B5

**% DISTRIBUTION
AM & PM PEAK HOURS**

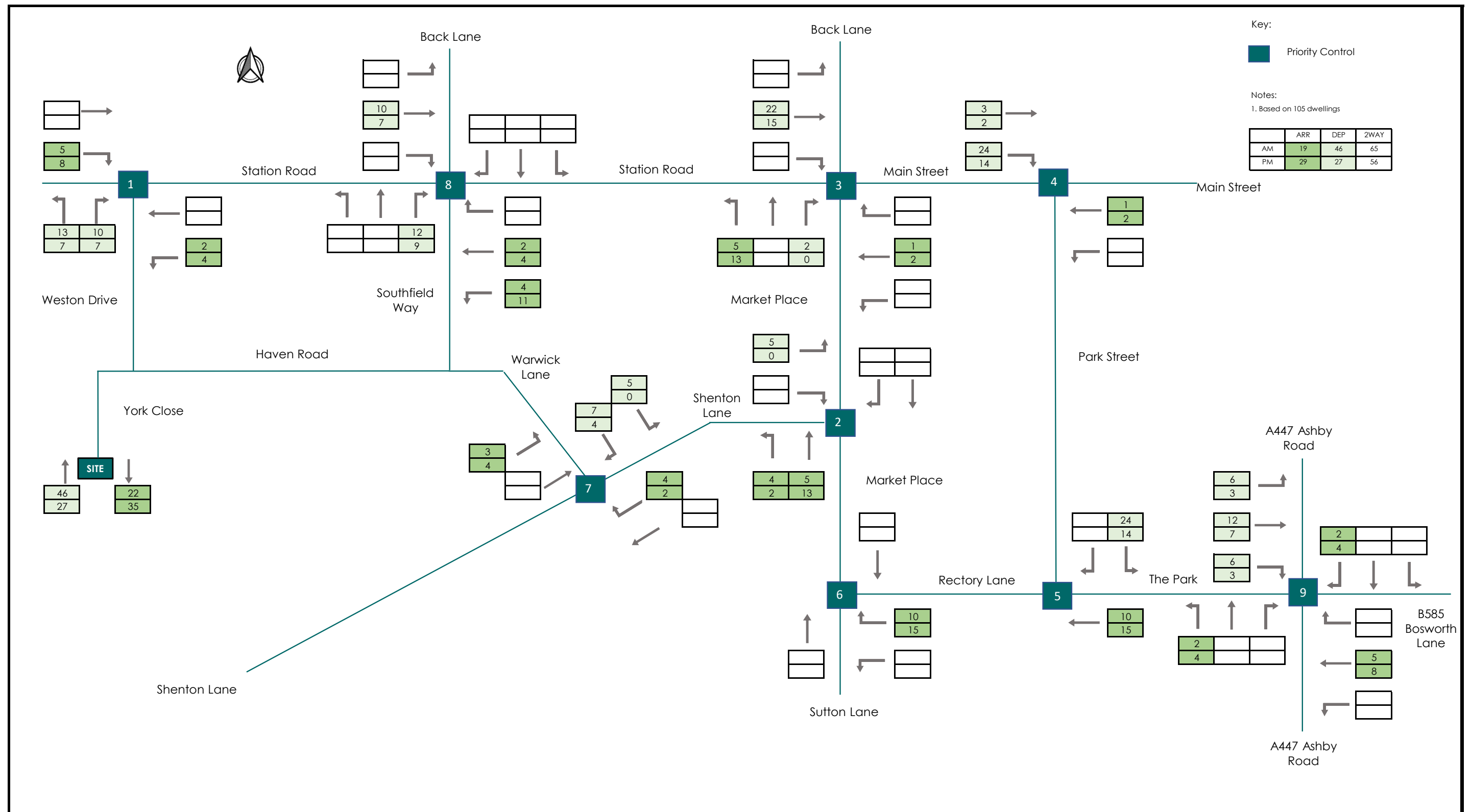


FIGURE B6

**GENERATED TRAFFIC: PROPOSED DEVELOPMENT
AM & PM PEAK HOURS**

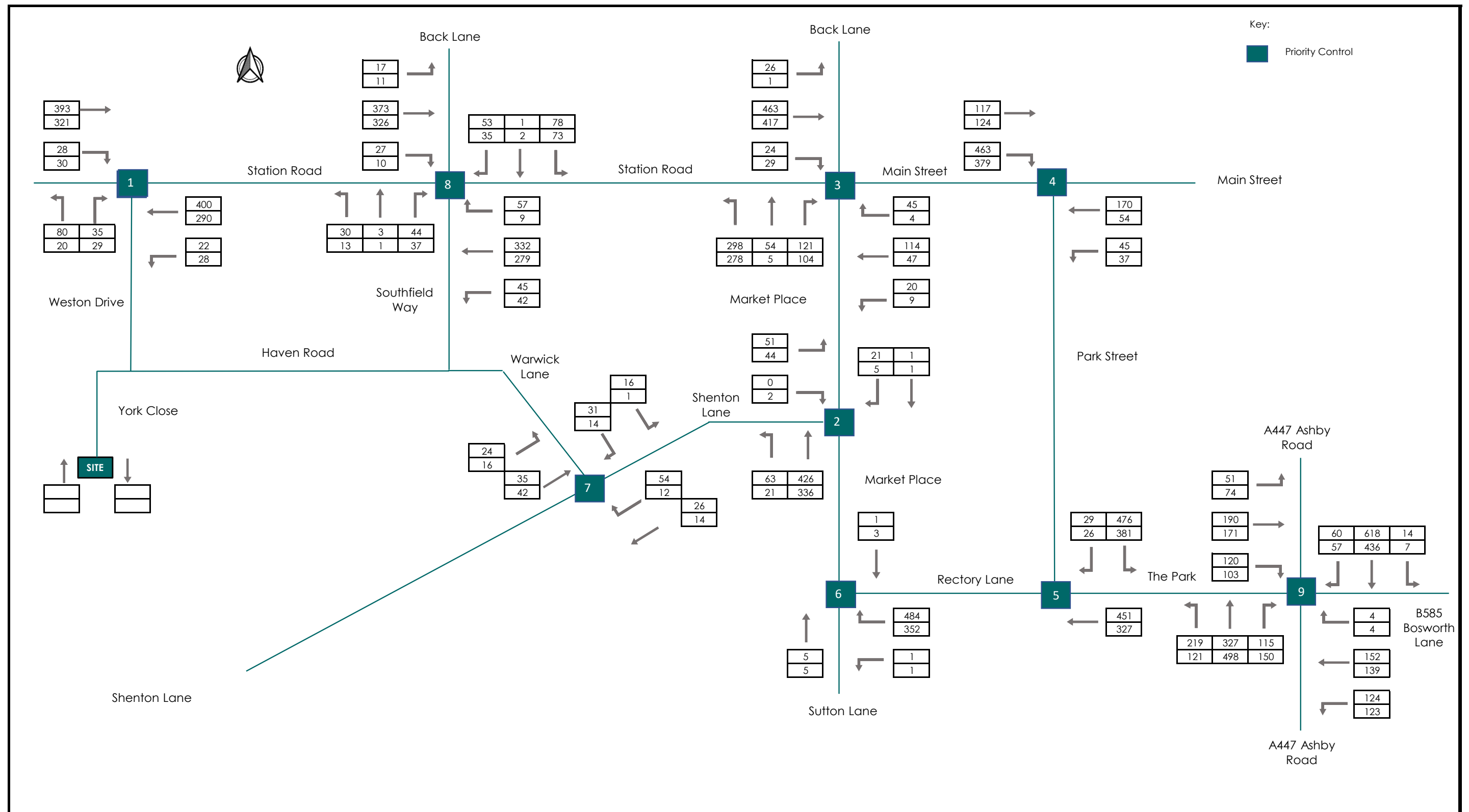


FIGURE B7

**WITH DEVELOPMENT: 2029
 B4 + B6
 AM & PM PEAK HOURS**

Calculation Reference: AUDIT-733101-210715-0723

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : A - HOUSES PRIVATELY OWNED
MULTI-MODAL PEDESTRIANS

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	1 days
	SC SURREY	1 days
	WS WEST SUSSEX	1 days
03	SOUTH WEST	
	DV DEVON	1 days
04	EAST ANGLIA	
	NF NORFOLK	1 days
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	LE LEICESTERSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	1 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: 70 to 99 (units:)
 Range Selected by User: 70 to 100 (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: 01/01/13 to 18/09/19

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	1 days
Tuesday	1 days
Wednesday	3 days
Thursday	3 days

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

Selected survey types:

Manual count	8 days
Directional ATC Count	0 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 undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	5
Neighbourhood Centre (PPS6 Local Centre)	1

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	6
Village	1
No Sub Category	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,

Secondary Filtering selection:

Use Class:

C3 8 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

5,001 to 10,000	3 days
10,001 to 15,000	2 days
15,001 to 20,000	2 days
25,001 to 50,000	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	1 days
25,001 to 50,000	1 days
50,001 to 75,000	1 days
75,001 to 100,000	2 days
100,001 to 125,000	1 days
125,001 to 250,000	2 days

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

Car ownership within 5 miles:

1.1 to 1.5 8 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	3 days
No	5 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 8 days

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

LIST OF SITES relevant to selection parameters

1	DV-03-A-03 LOWER BRAND LANE HONITON	TERRACED & SEMI DETACHED	DEVON
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 70 Survey date: MONDAY 28/09/15		Survey Type: MANUAL
2	ES-03-A-05 RATTLE ROAD NEAR EASTBOURNE STONE CROSS Edge of Town Residential Zone Total No of Dwellings: 99 Survey date: WEDNESDAY 05/06/19	MIXED HOUSES & FLATS	EAST SUSSEX Survey Type: MANUAL
3	LE-03-A-02 MELBOURNE ROAD IBSTOCK	DETACHED & OTHERS	LEICESTERSHIRE
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 85 Survey date: THURSDAY 28/06/18		Survey Type: MANUAL
4	NF-03-A-04 NORTH WALSHAM ROAD NORTH WALSHAM	MIXED HOUSES	NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 70 Survey date: WEDNESDAY 18/09/19		Survey Type: MANUAL
5	NY-03-A-10 BOROUGHBRIDGE ROAD RIPON	HOUSES AND FLATS	NORTH YORKSHIRE
	Edge of Town No Sub Category Total No of Dwellings: 71 Survey date: TUESDAY 17/09/13		Survey Type: MANUAL
6	SC-03-A-04 HIGH ROAD BYFLEET	DETACHED & TERRACED	SURREY
	Edge of Town Residential Zone Total No of Dwellings: 71 Survey date: THURSDAY 23/01/14		Survey Type: MANUAL
7	SF-03-A-07 FOXHALL ROAD IPSWICH	MIXED HOUSES	SUFFOLK
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 73 Survey date: THURSDAY 09/05/19		Survey Type: MANUAL
8	WS-03-A-10 TODDINGTON LANE LITTLEHAMPTON WICK Edge of Town Residential Zone Total No of Dwellings: 79 Survey date: WEDNESDAY 07/11/18	MIXED HOUSES	WEST SUSSEX Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

ASHLEY HELME ASSOCIATES 76 WSHWAY ROAD SALE

Licence No: 733101

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL PEDESTRIANS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	8	77	0.010	8	77	0.053	8	77	0.063
08:00 - 09:00	8	77	0.036	8	77	0.117	8	77	0.153
09:00 - 10:00	8	77	0.040	8	77	0.040	8	77	0.080
10:00 - 11:00	8	77	0.019	8	77	0.029	8	77	0.048
11:00 - 12:00	8	77	0.023	8	77	0.015	8	77	0.038
12:00 - 13:00	8	77	0.032	8	77	0.026	8	77	0.058
13:00 - 14:00	8	77	0.028	8	77	0.021	8	77	0.049
14:00 - 15:00	8	77	0.021	8	77	0.011	8	77	0.032
15:00 - 16:00	8	77	0.091	8	77	0.034	8	77	0.125
16:00 - 17:00	8	77	0.039	8	77	0.028	8	77	0.067
17:00 - 18:00	8	77	0.065	8	77	0.024	8	77	0.089
18:00 - 19:00	8	77	0.021	8	77	0.032	8	77	0.053
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:		0.425			0.430			0.855	

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.

TECHNICAL FILE NOTE 1B						
Project	Land off York Close, Market Bosworth			Project No	1764	
Contact		Originator	PL	Date	05.06.24	

Traffic Growth: Tempro 8.1

Methodology

Methodology for growing background traffic from count year (2024) to Development Year of Opening (2029) is to use the Tempro 8.1 methodology, using the following criteria:

- Hinckley and Bosworth 004 geographical area,
- All purpose car driver trips,
- Area type: All
- Road type: All

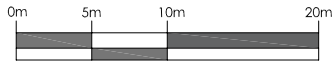
2024 to 2029 <Year of Opening>

AM peak period: 1.0504

PM peak period: 1.0521

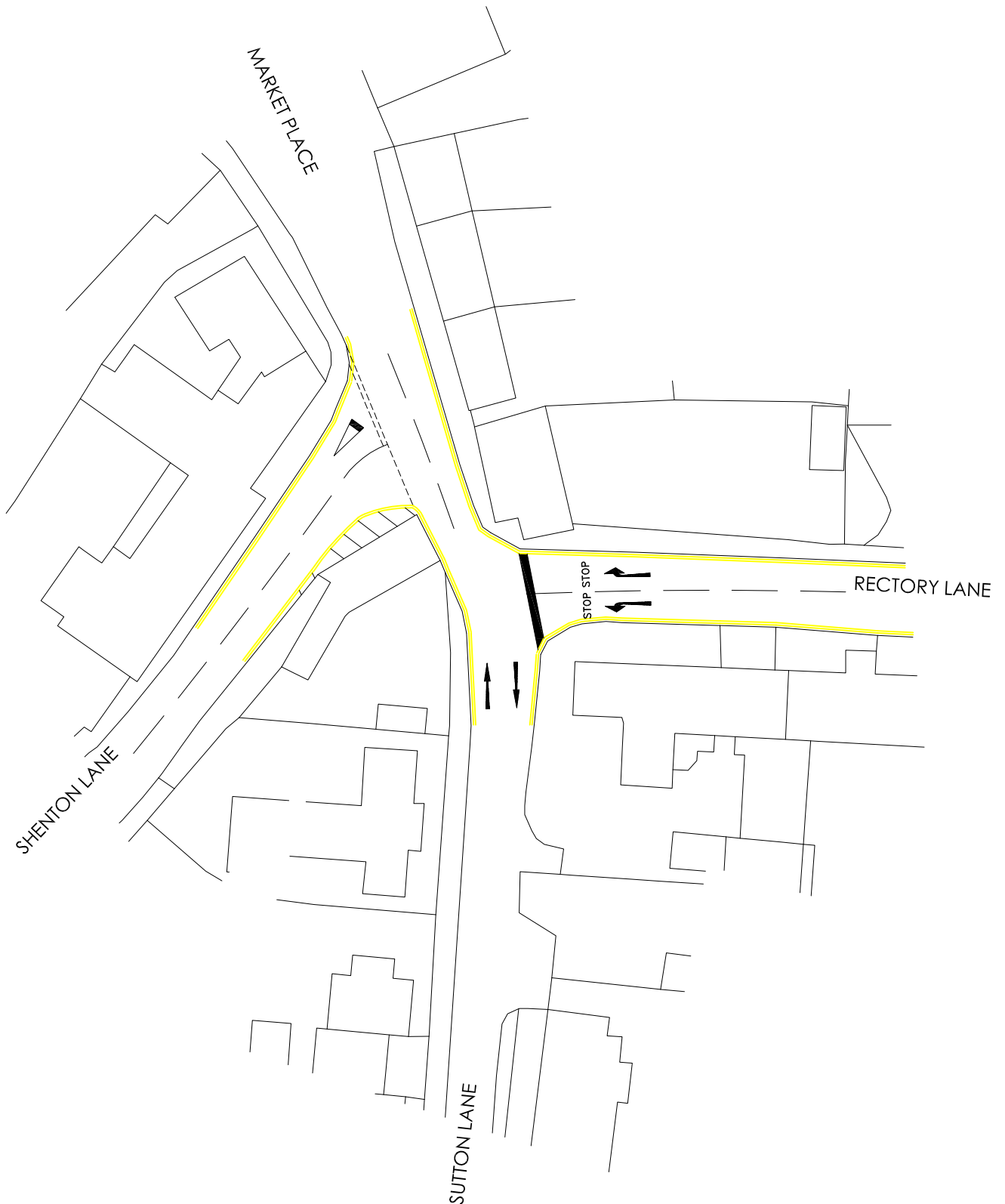
Average of AM and PM peak period: 1.0513

Drawings



Notes:

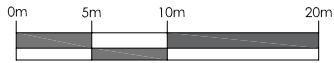
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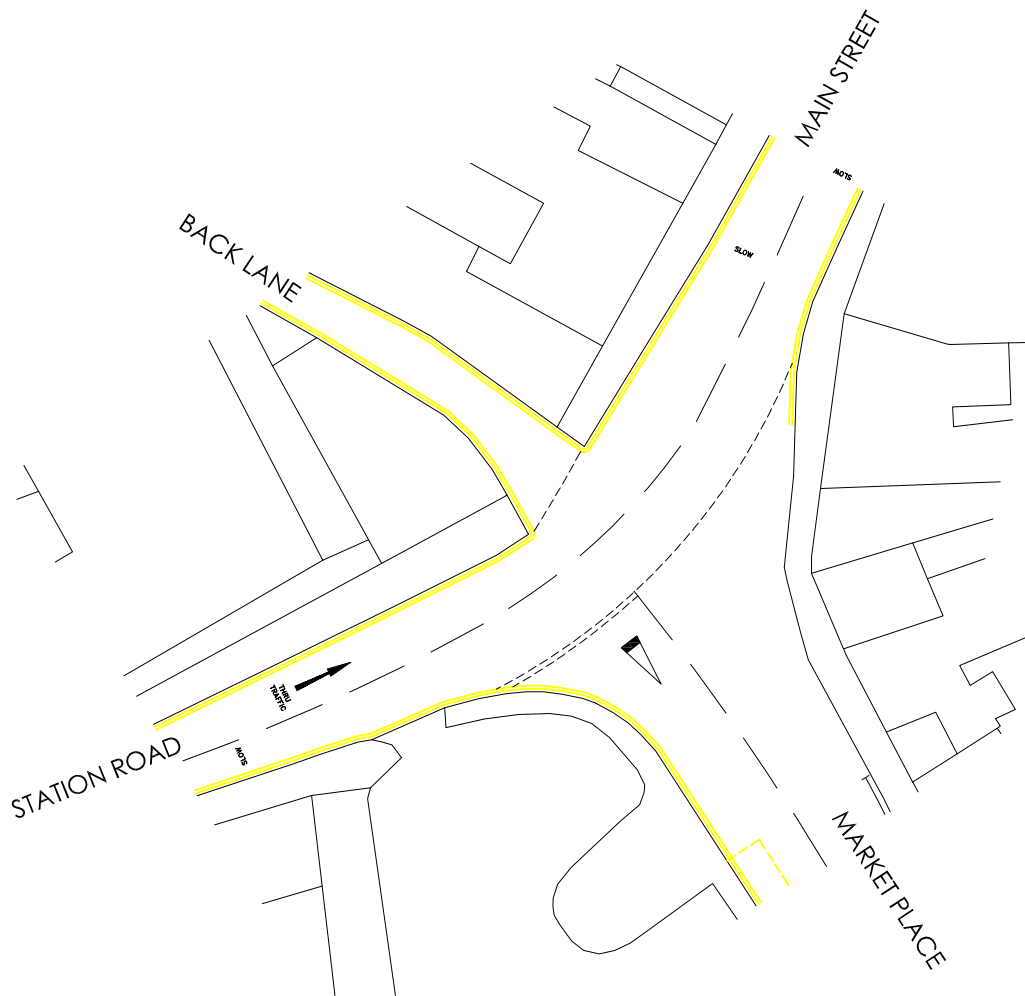
Project	YORK CLOSE, MARKET BOSWORTH	Client	GLADMAN DEVELOPMENTS	Drawing No	1764/02	Rev	
Title	EXISTING JUNCTION ARRANGEMENTS: STUDY JUNCTIONS 2 & 6			Date	JUNE 2024	Scale	1:500@A4





Notes:

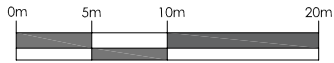
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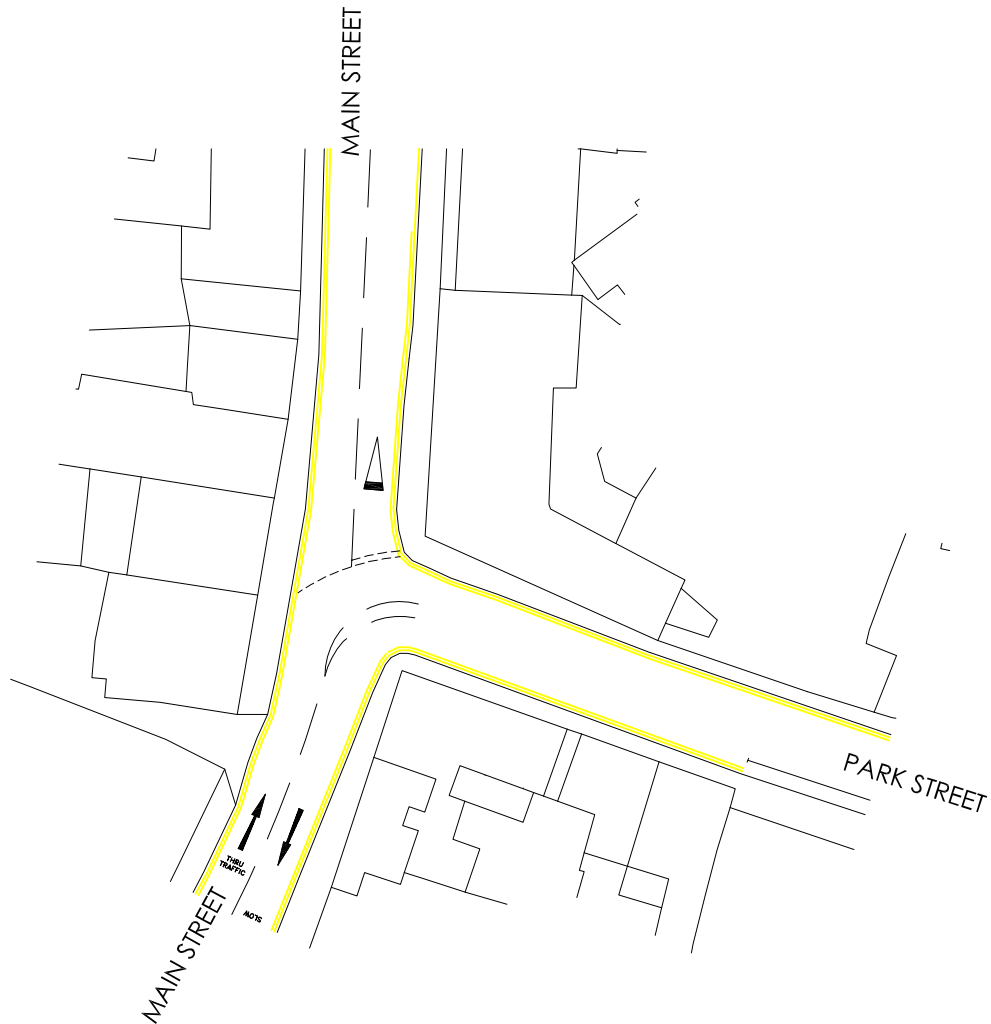
Project	YORK CLOSE, MARKET BOSWORTH	Client	GLADMAN DEVELOPMENTS	Drawing No	1764/03	Rev	
Title	EXISTING JUNCTION ARRANGEMENTS: STUDY JUNCTION 3			Date	JUNE 2024	Scale	1:500@A4





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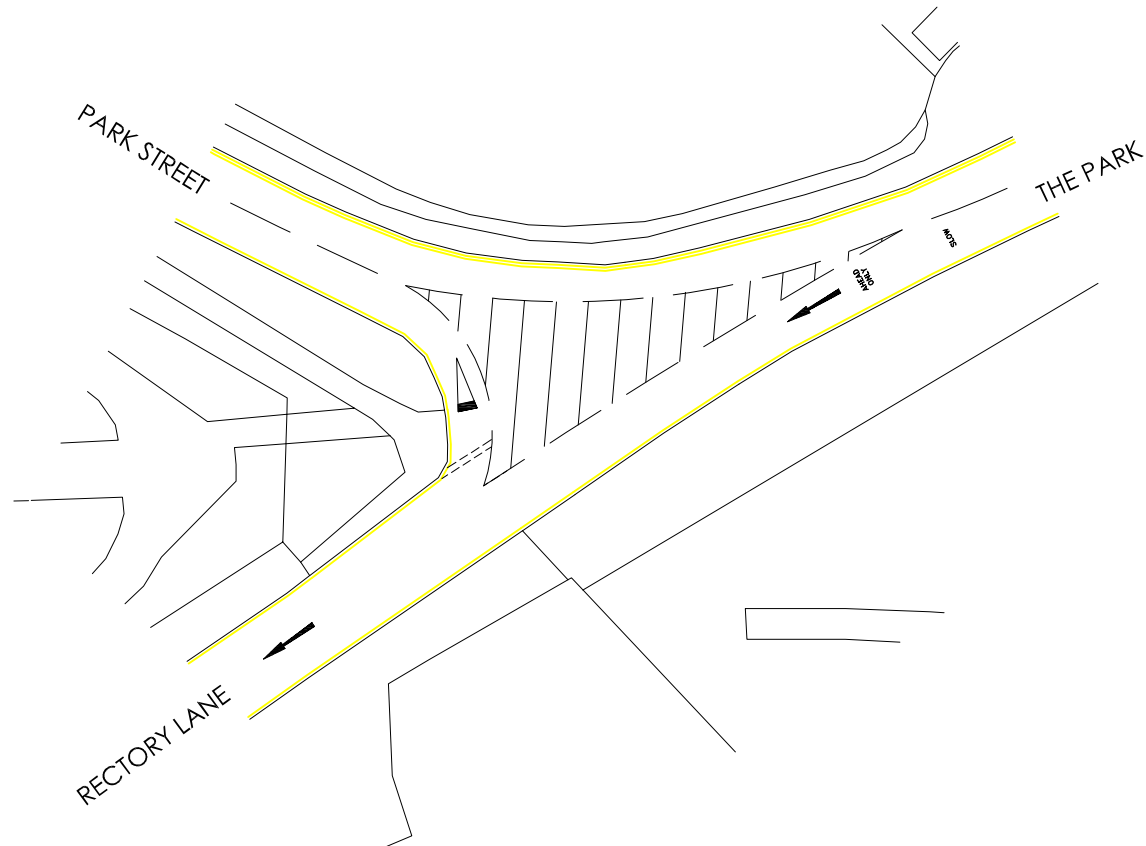
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Project	YORK CLOSE, MARKET BOSWORTH	Client	GLADMAN DEVELOPMENTS	Drawing No	1764/04	Rev	
Title	EXISTING JUNCTION ARRANGEMENTS: STUDY JUNCTION 4			Date	JUNE 2024	Scale	1:500@A4





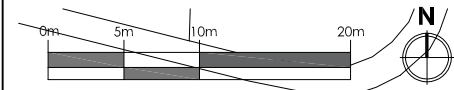
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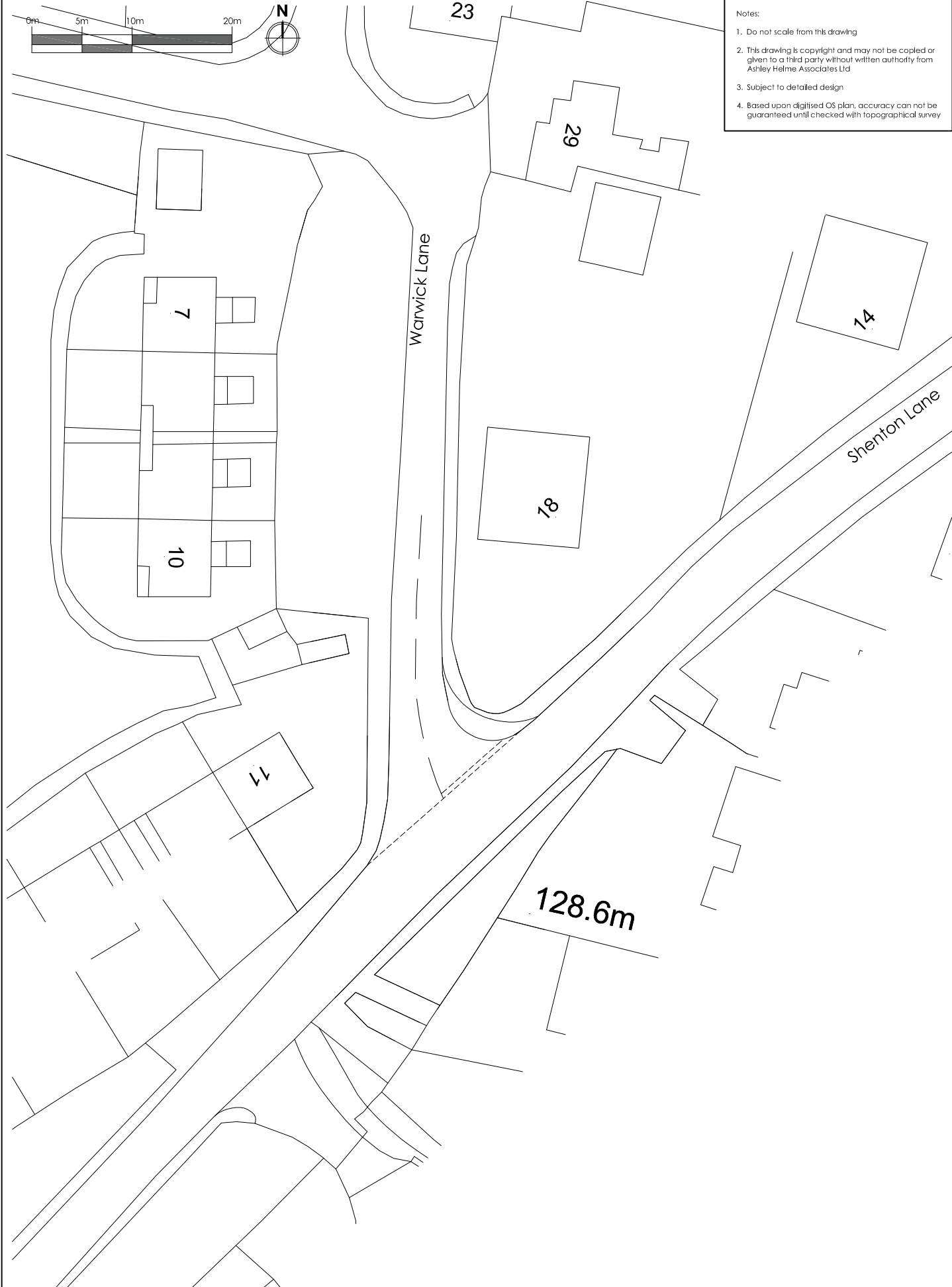
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Project	YORK CLOSE, MARKET BOSWORTH	Title EXISTING JUNCTION ARRANGMENTS: STUDY JUNCTION 5	Drawing No 1764/05	Rev
Client	GLADMAN DEVELOPMENTS		Date JUNE 2024	Scale 1:500@A4





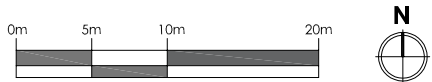
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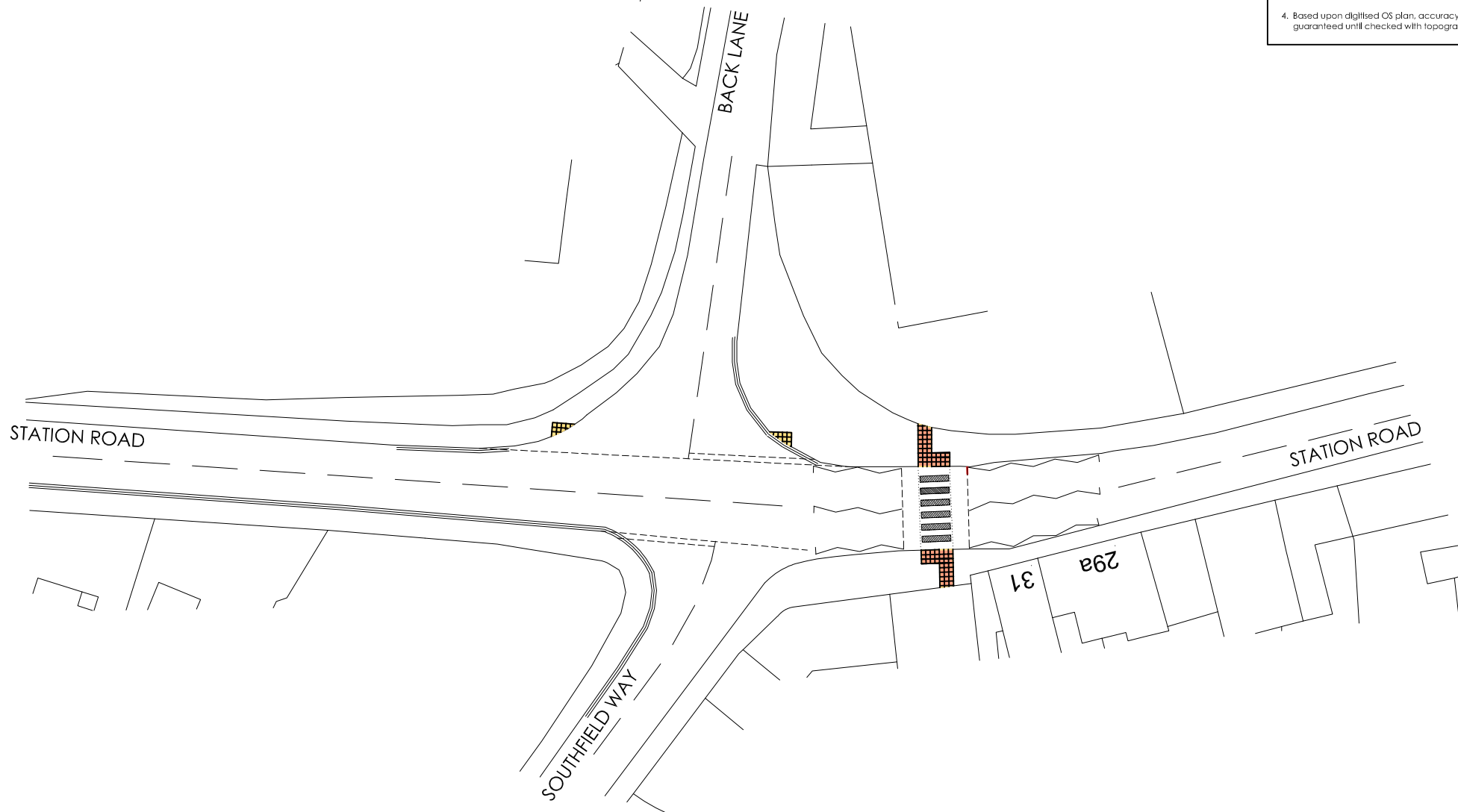
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Project	YORK CLOSE, MARKET BOSWORTH	Client	GLADMAN DEVELOPMENTS	Drawing No	1764/06	Rev	
Title	EXISTING JUNCTION ARRANGEMENTS: STUDY JUNCTION 7			Date	JUNE 2024	Scale	1:500 @ A4



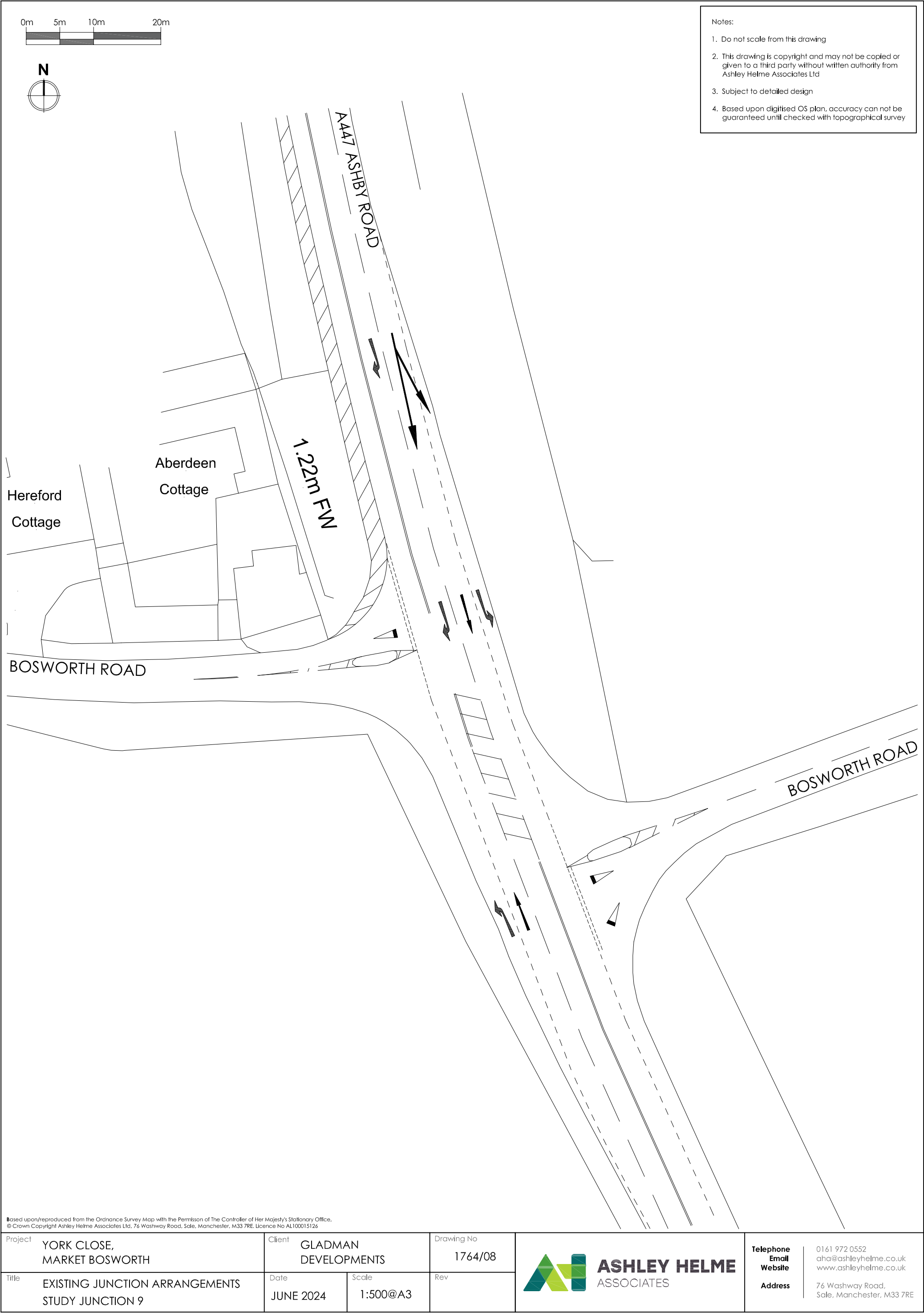


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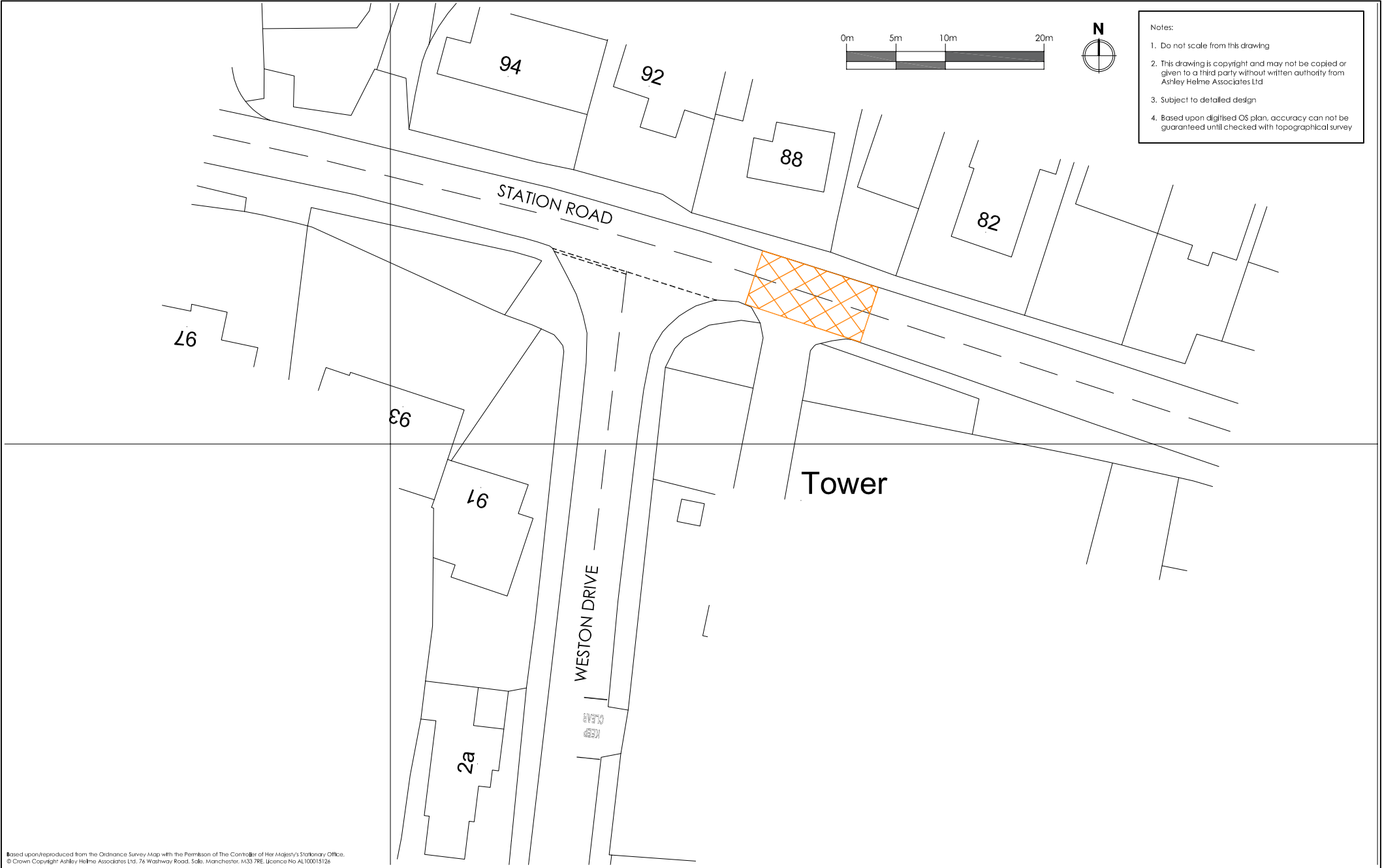


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Project SHENTON LANE MARKET BOSWORTH	Title EXISTING JUNCTION ARRANGEMENTS STUDY JUNCTION 8	Drawing No 1764/07	Rev	 ASHLEY HELME ASSOCIATES
Client GLADMAN DEVELOPMENTS		Date AUGUST 2021	Scale 1:500@A4	



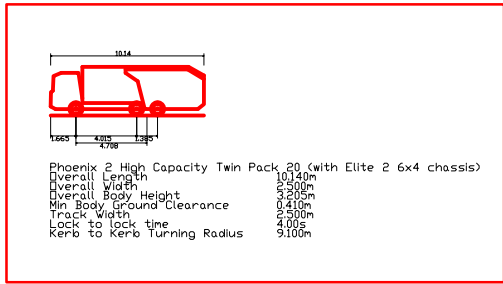
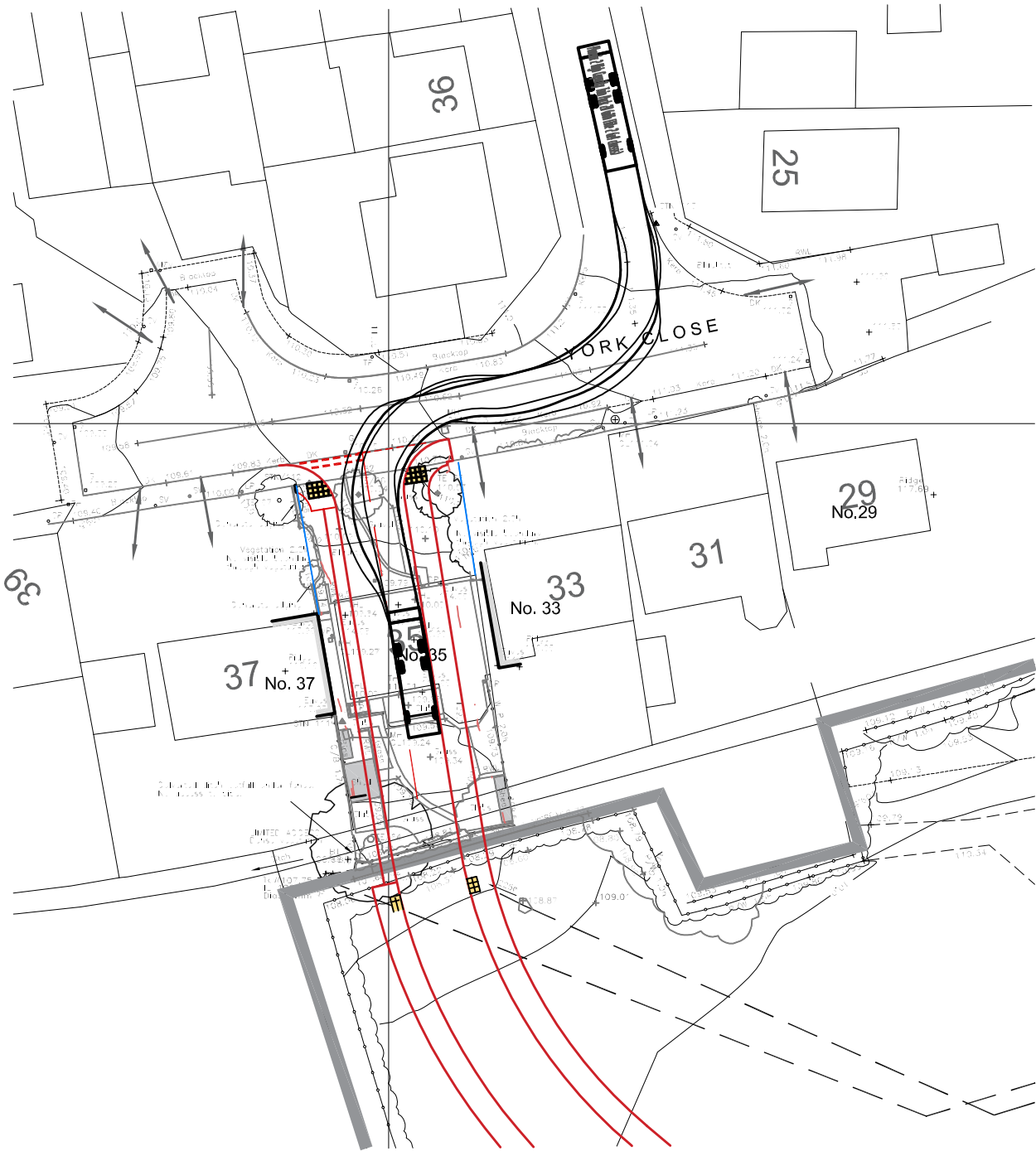
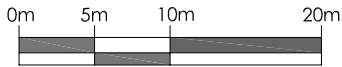




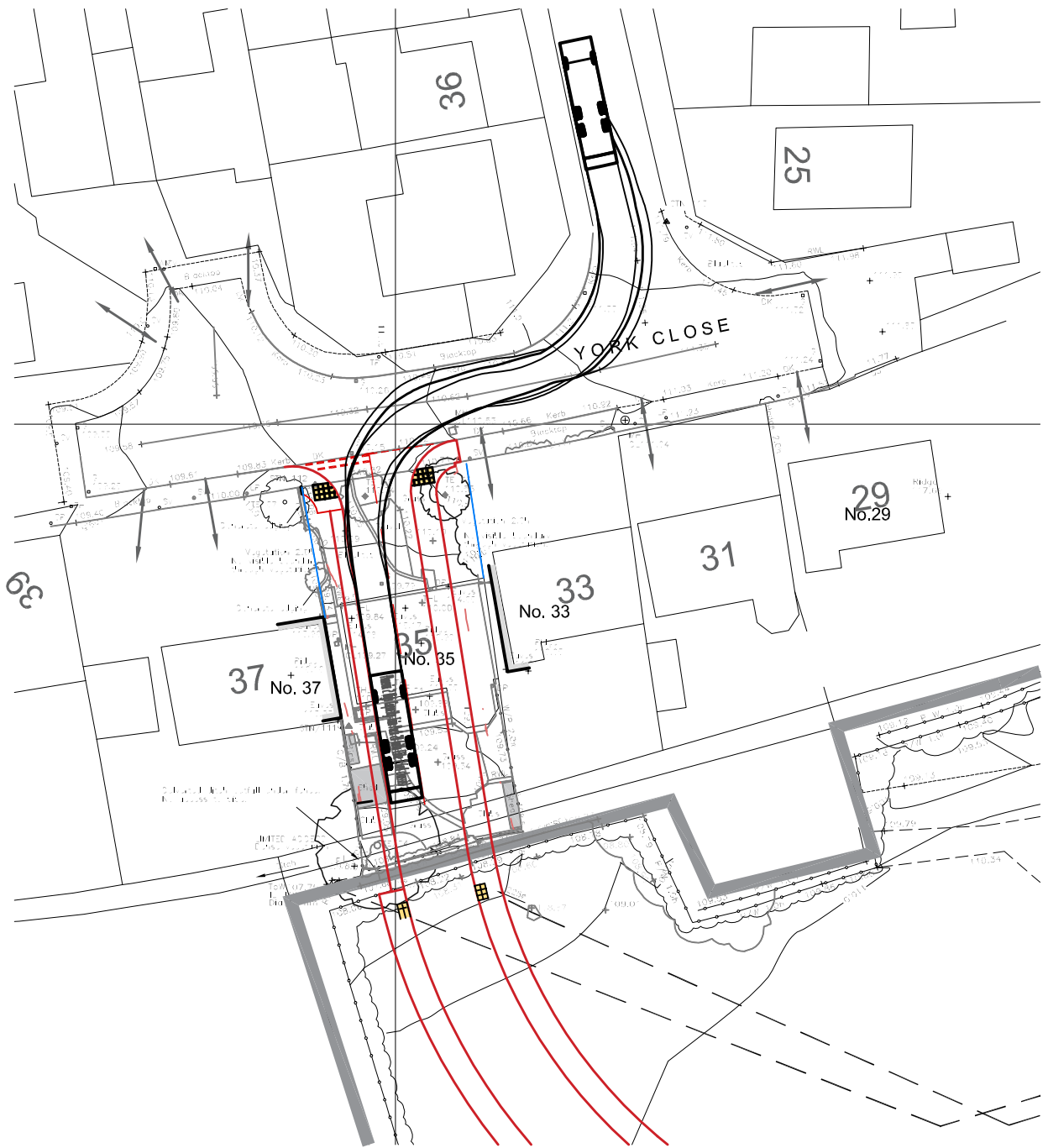
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Project	SHENTON LANE, MARKET BOSWORTH	Title	EXISTING JUNCTION ARRANGEMENTS: STUDY JUNCTION 1	Drawing No	1764/18	Rev	
Client	GLADMAN DEVELOPMENTS			Date	JUNE 2024	Scale	1:500 @ A4



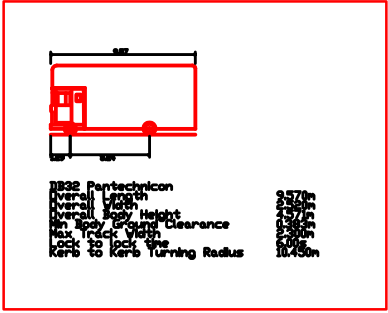
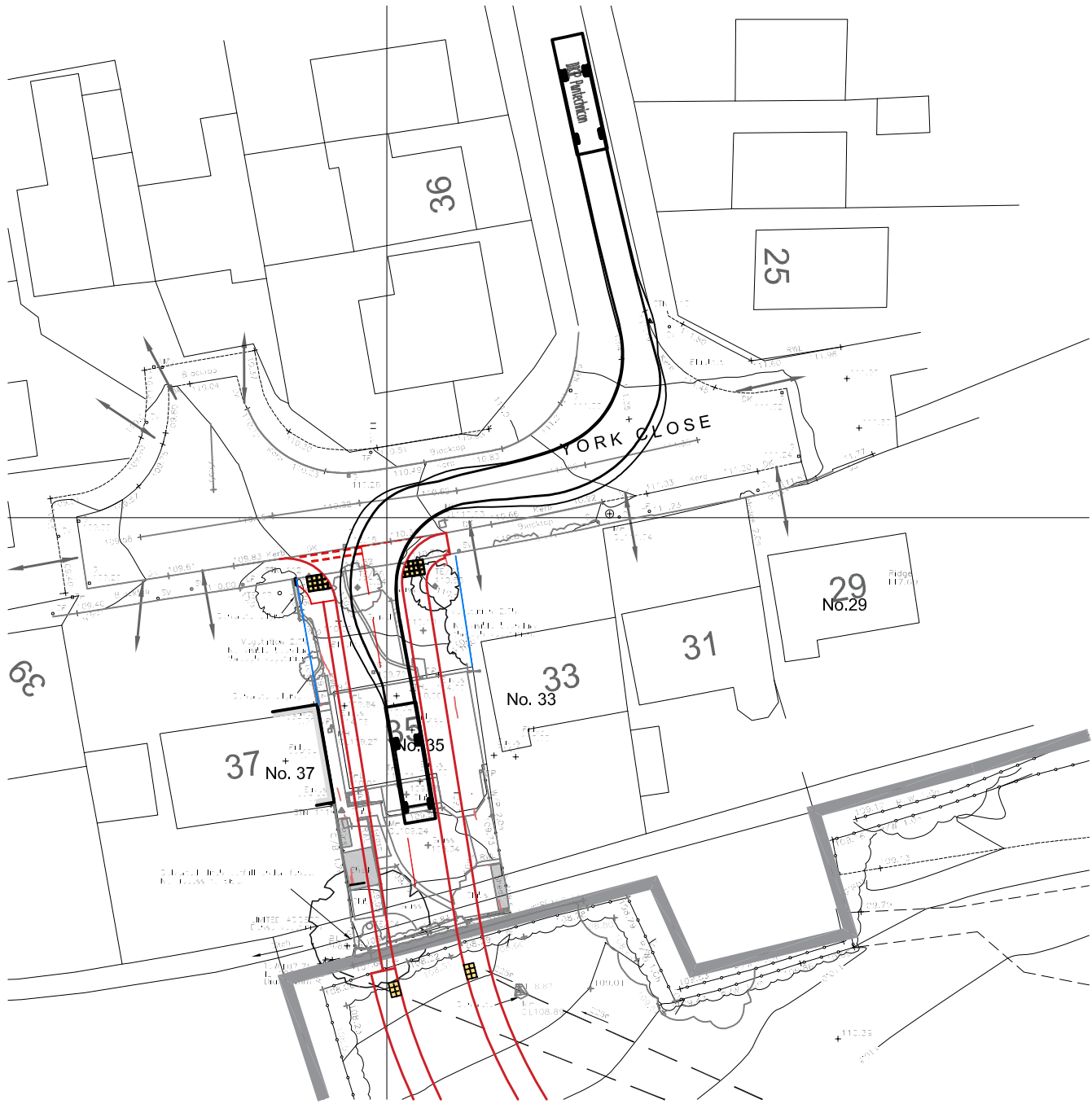
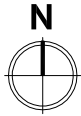
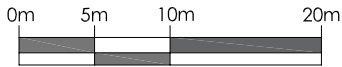


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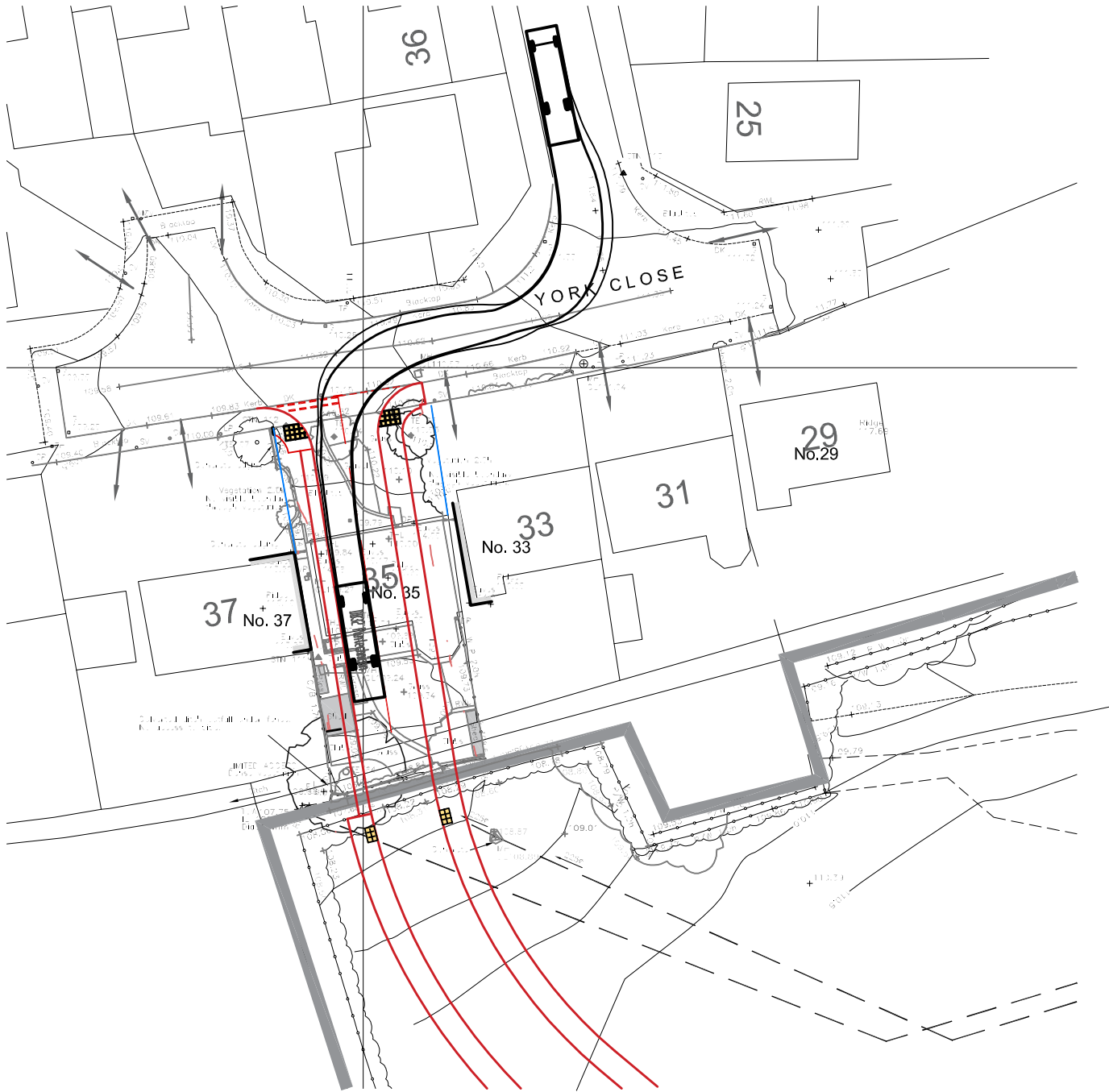


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Project	YORK CLOSE, MARKET BOSWORTH	Title	SWEPT PATH ANALYSIS: REFUSE VEHICLE	Drawing No	1764/SP/09	Rev	 ASHLEY HELME ASSOCIATES	Telephone Email Website	0161 972 0552 aha@ashleyhelme.co.uk www.ashleyhelme.co.uk
Client	GLADMAN DEVELOPMENTS			Date	JUNE 2024	Scale			

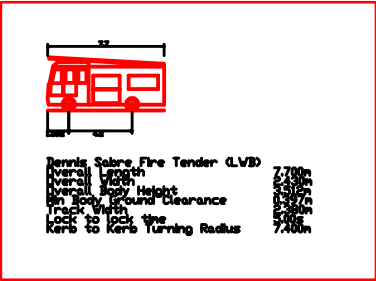
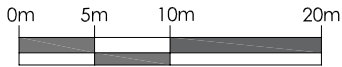


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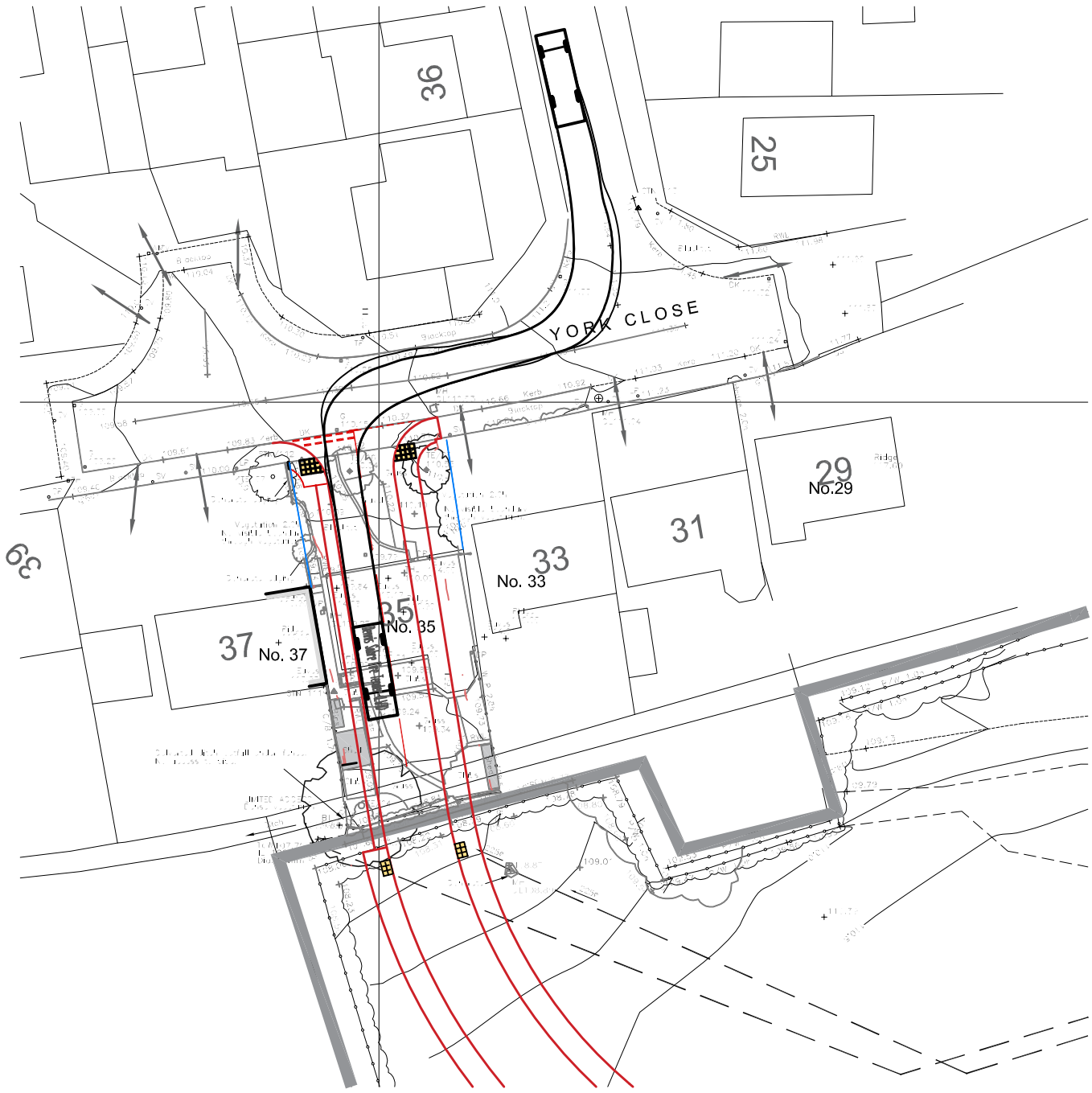


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Project	YORK CLOSE, MARKET BOSWORTH	Title	SWEPT PATH ANALYSIS: PANTECHNICON	Drawing No	1764/SP/10	Rev	 ASHLEY HELME ASSOCIATES	Telephone Email Website	0161 972 0552 aha@ashleyhelme.co.uk www.ashleyhelme.co.uk
Client	GLADMAN DEVELOPMENTS			Date	JUNE 2024	Scale			

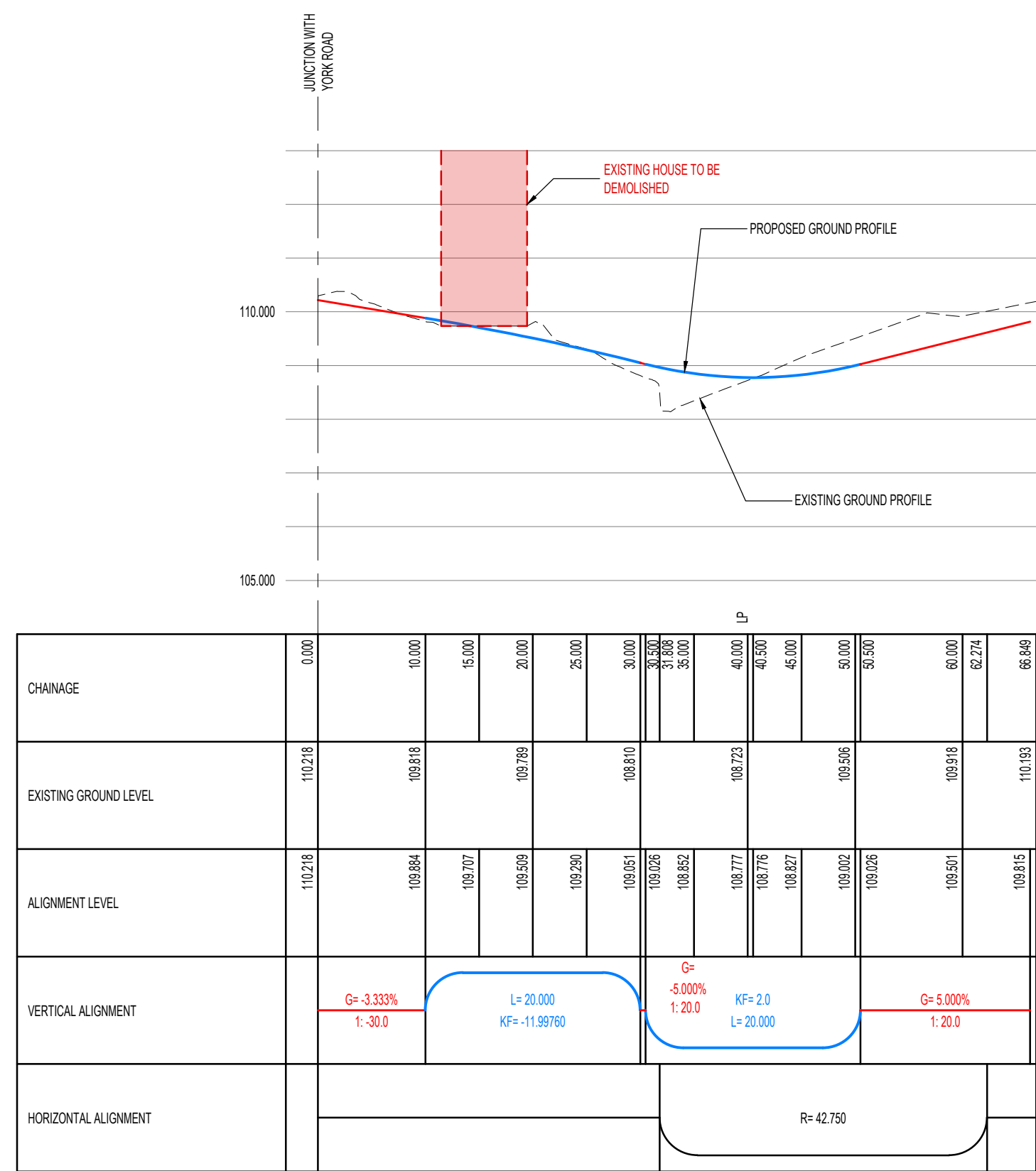
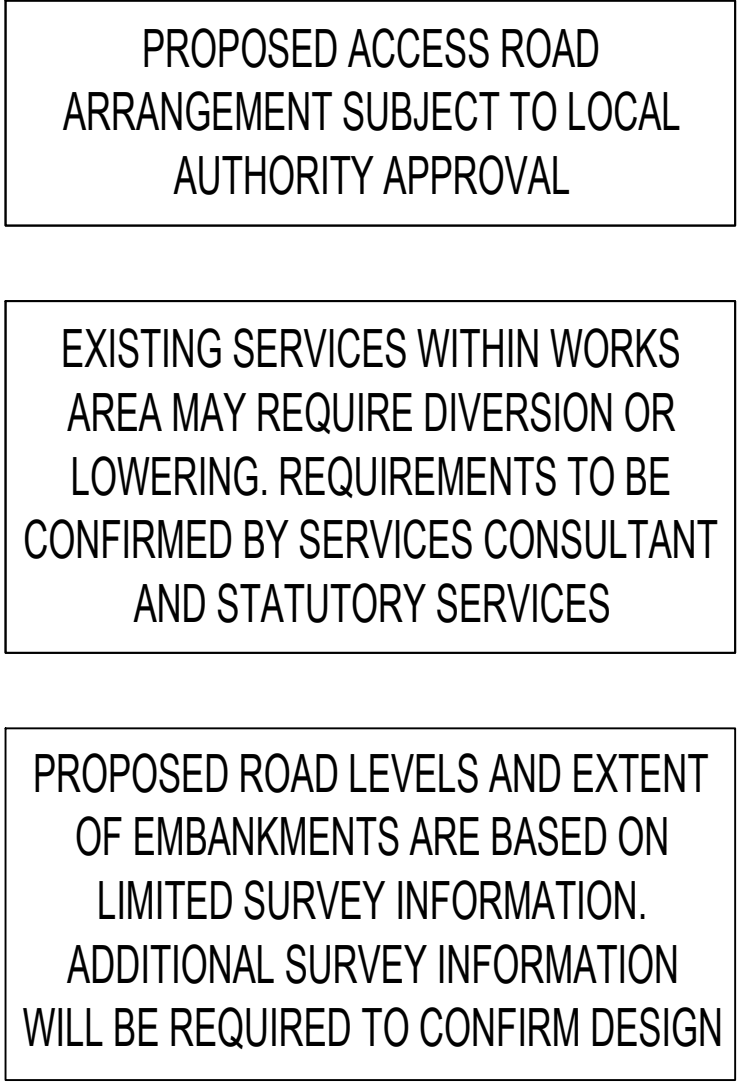


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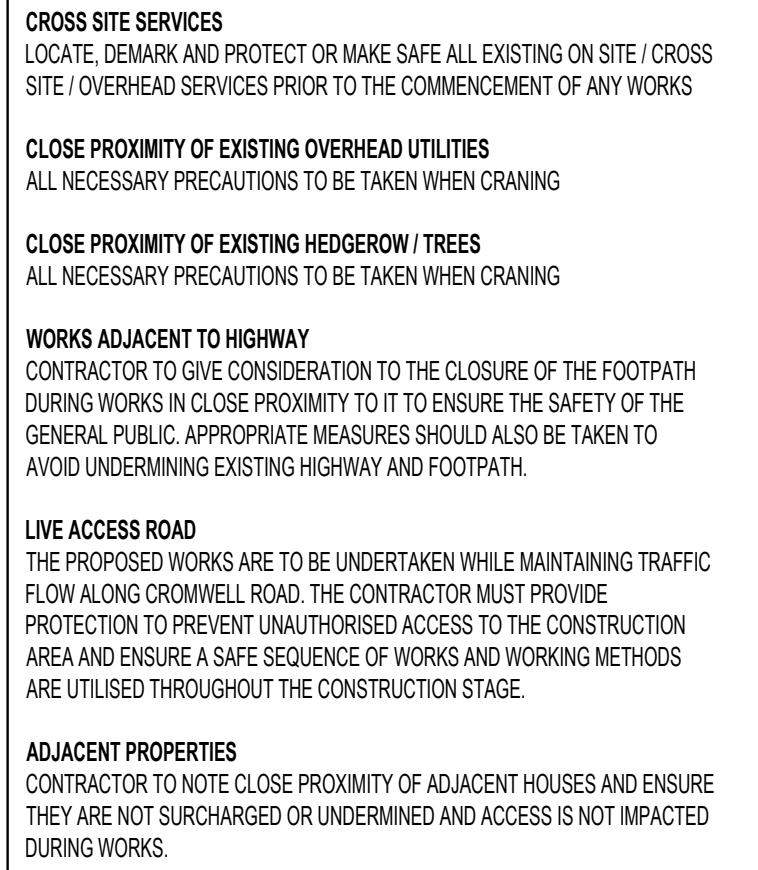
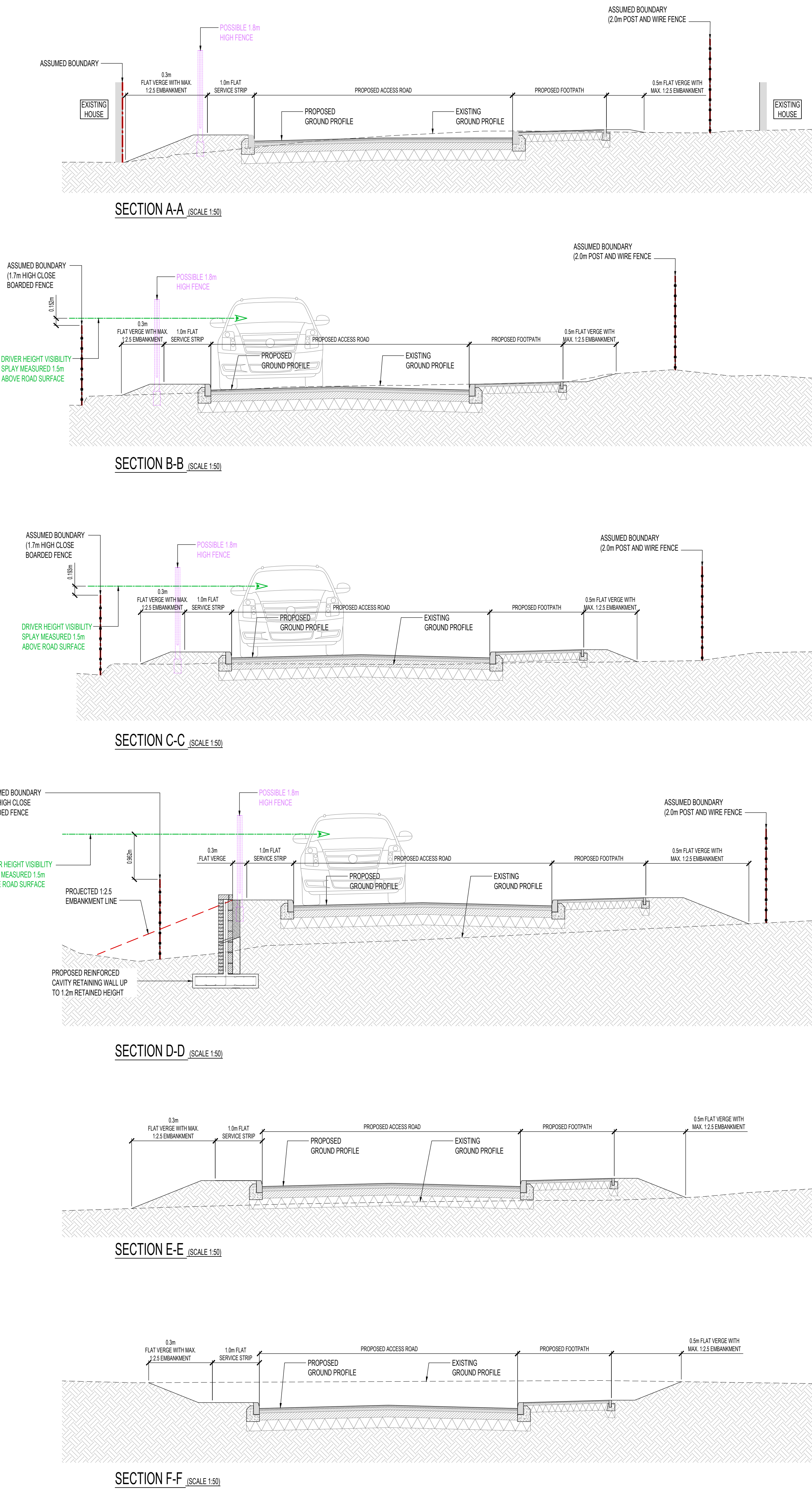


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Project	YORK CLOSE, MARKET BOSWORTH	Title	SWEPT PATH ANALYSIS: FIRE APPLIANCE	Drawing No	1764/SP/11	Rev	 ASHLEY HELME ASSOCIATES	Telephone Email Website Address	0161 972 0552 aha@ashleyhelme.co.uk www.ashleyhelme.co.uk 76 Washway Road, Sale, Manchester, M33 7RE
Client	GLADMAN DEVELOPMENTS			Date	JUNE 2024	Scale			



ACCESS ROAD LONG SECTION (HORIZONTAL SCALE 1:500, VERTICAL SCALE 1:100)



SQ-03	16.11.23	FENCE ADDED TO WESTERN BOUNDARY	MWh	MPW
SQ-02	13.11.23	ADDITIONAL SECTIONS ADDED	MWh	MPW
SQ-01	09.11.23	ISSUED FOR INFORMATION	MWh	MPW
Rev.	Date	Revision Description	Drawn	Audit'd
Client _____				

GLADMAN DEVELOPMENTS

Project Title

YORK ROAD,
MARKET BOSWORTH

Description	
	PRELIMINARY ACCESS ROAD GENERAL ARRANGEMENT AND DETAILS

Stage 2 - Concept Design

JPL Ref. - GLD02810			Scale - 1:200 @ A0				Date - NOV 2023	
Project	Orig.	Vol.	Level	Type	Role	Number	Status	Revision
002810	JPL	ZZ	ZZ	DR	D	2001	S2	C03

