

Stackbourne Limited

## **Smallford Works**

Transport Assessment Report

102940

22/11/2019

## Document Information

Prepared for	Stackbourne Limited
Project Name	Smallford Works
File Reference	102940 Smallford Works - TA
Project Number	102199
Publication Date	22/11/2019

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## Document Control

Version	Date	Prepared by	Reviewed by	Approved by
1	29/10/2019	Rob Davies	Paul Cranley	Paul Cranley
<b>Description:</b>	Draft for Client / Project Team review and comment			
2	05/11/2019	Rob Davies	Paul Cranley	Paul Cranley
<b>Description:</b>	Draft for Client / Project Team review and comment			
3	22/11/2019	Rob Davies	Paul Cranley	Paul Cranley
<b>Description:</b>	Final Document			

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## Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
	General	1
	Site Location and Description	1
	Report Scope	1
	Report Structure	2
<b>2</b>	<b>Policy Review</b>	<b>3</b>
	Introduction	3
	National Policy	3
	Regional Policy	4
	Local Policy	5
	Summary	8
<b>3</b>	<b>Baseline Conditions</b>	<b>9</b>
	Introduction	9
	Site Location and Description	9
	Public Transport Accessibility	10
	Walking and Cycling Accessibility	10
	Accessibility to Local Services and Facilities	12
	Highway Network	13
<b>4</b>	<b>Development Proposals</b>	<b>16</b>
	Introduction	16
	Development Description	16
	Access and Servicing Arrangements	17
	Parking	18
<b>5</b>	<b>Multi-Modal Trip Generation &amp; Distribution Assessment</b>	<b>19</b>
	Introduction	19
	Methodology	19
	Existing Industrial Land Uses	19
	Proposed Development	19
	Net Change in Vehicle Trips	21
<b>6</b>	<b>Summary and Conclusion</b>	<b>22</b>
	Summary	22
	Conclusion	23

## Tables

Table 2.1	St Albans City and District Council Draft Local Plan Parking Standards	8
Table 3.1	Automatic Traffic Count Survey Inter-Peak Analysis	15
Table 4.1	Proposed Schedule of Accommodation	17
Table 4.2	St Albans City and District Council Draft Local Plan Parking Standards	18
Table 5.1	Peak Hour and Daily Traffic Generation of Existing Land Use	19
Table 5.2	Total People (All Mode) Trip Rates and Trip Generation of Residential Units	20

Table 5.3	Multi-Modal Trip Generation Assessment	20
Table 5.4	Net Change in Vehicle Trips – Existing and Proposed Land Uses	21

## Figures

Figure 1.1	Site Location Plan	1
Figure 2.1	Themes, Objectives and Principles of Hertfordshire LTP	5
Figure 3.1	Detailed Site Location Plan	9
Figure 3.2	Access to Alban Way	11
Figure 3.3	Local Public Right of Way Network	12
Figure 3.4	Personal Injury Accident Plot	14
Figure 4.1	Proposed Illustrative Masterplan	16
Figure 4.2	Proposed Site Access Arrangements	17

## Appendices

Appendix A	Scoping Correspondence
Appendix B	Personal Injury Accident Collision Data
Appendix C	Proposed Illustrative Masterplan
Appendix D	Proposed Site Access Drawings
Appendix E	Swept Path Assessment Drawings
Appendix F	Existing Site Access Survey
Appendix G	Residential TRICS Output Report

# 1 Introduction

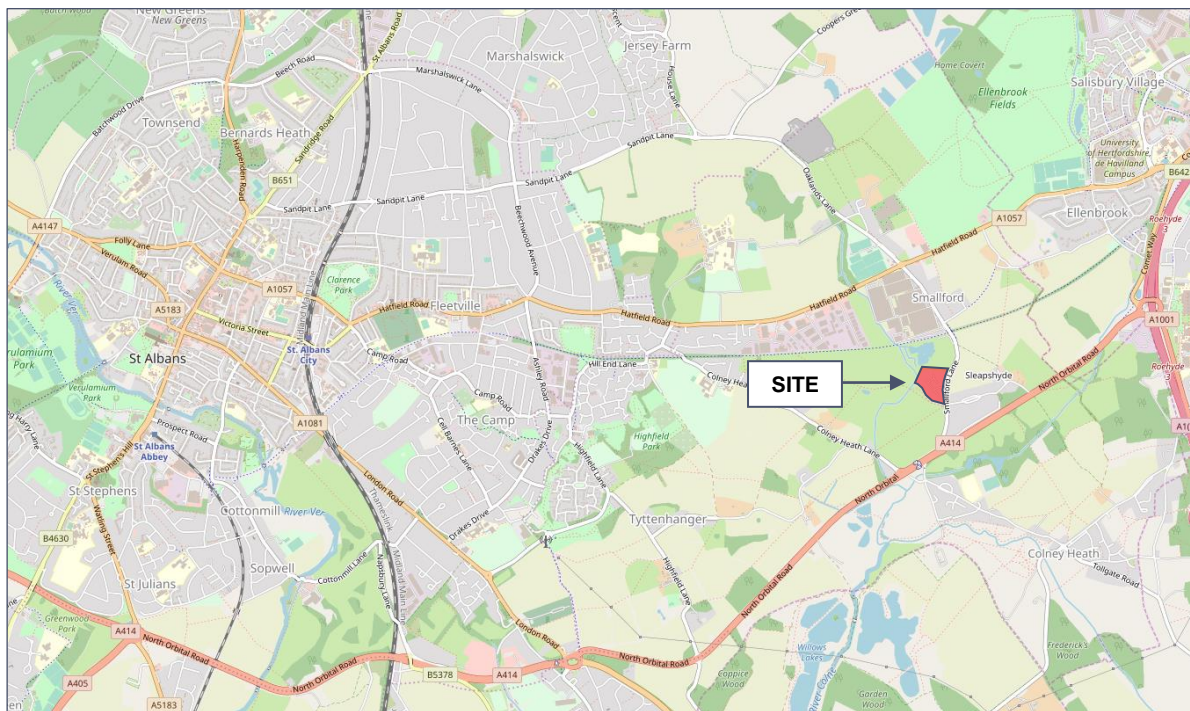
## General

- 1.1 Pell Frischmann (PF) is commissioned by Stackbourne Limited (the 'Applicant') to provide transport planning and highways consultancy services, and to prepare this Transport Assessment (TA) report, in connection with the proposed redevelopment of Smallford Works, Smallford Lane, St Albans, Hertfordshire (the 'site'). The Local Planning Authority (LPA) is St Albans City and District Council (SACDC), and the Local Highways Authority (LHA) is Hertfordshire County Council (HCC).
- 1.2 This TA will report on the highways and transport related matters for the proposed residential development at the site. It is proposed to provide up to 100 residential units (use class: C3) at the site, alongside appropriate access and infrastructure. Vehicular access to the site is proposed via Smallford Lane.

## Site Location and Description

- 1.3 The site is located at Smallford Lane, to the east of St Albans and to the west of Hertford. The site is located to the immediate west of the village of Sleepshyde and approximately 800m north of Colney Heath. A site location plan, showing the location and indicative outline of the site is provided in **Figure 1.1**.

**Figure 1.1 Site Location Plan**



Source: Openstreetmap (2019) with Pell Frischmann annotations

- 1.4 The site is located to the immediate west of Smallford Lane and is surrounded on all other sides by arable or unused land. The site is currently occupied by a number of individual light-industrial units and land uses.

## Report Scope

- 1.5 The scope and contents of this report has been informed by a series of scoping discussions undertaken between PF and HCC Highways officers. PF submitted a Transport Assessment Scoping Report to

HCC, which outlined the proposed scope of the TA for agreement with HCC Highways. The scoping report also summarised the site access arrangements, the trip and traffic generation and scope of potential highways assessments to be included within a future TA. The scoping report and relevant correspondence is included at **Appendix A** for information purposes.

- 1.6 The contents and scope of this TA have therefore been prepared in accordance with the discussions held with HCC Highways particularly in relation to trip generation, proposed access arrangements and the scope of highway impact assessments. During pre-application discussions it was also agreed that no junction capacity assessments would be required within the TA, on the basis that the proposed development will present a net reduction in vehicle trips in comparison with the existing land use.

## Report Structure

- 1.7 Following this introductory chapter, the remainder of this TA is structured as follows:
- **Chapter 2: Policy Review** – provides a review and national and local development and transport policy relevant to the location, scale and type of the proposal;
  - **Chapter 3: Baseline Conditions** – provides an outline review of the existing transport conditions prevailing at the development site and in the immediate surrounding area;
  - **Chapter 4: Development Proposals** – provides a summary of the development proposals, including existing and proposed land uses, access arrangements and parking provision;
  - **Chapter 5: Multi-Modal Trip Generation and Distribution Assessment** – presents the results of a trip generation assessment of the proposed development, and presents the likely distribution of resident trips through local highway network junctions using relevant census data;
  - **Chapter 6: Highway Impact Assessment** – presents capacity testing of highway junction models in close vicinity of the site and whether they have sufficient capacity with the additional development traffic flows;
  - **Chapter 7: Summary and Conclusions** – provides a summary of the report and concludes by highlighting the key points raised within the report.
- 1.8 All technical Appendices are included at the end of this TA for information purposes.

## 2 Policy Review

### Introduction

- 2.1 This chapter of the TA examines the context of the site and how this relates to relevant planning policies and guidelines. It provides an overall spatial and planning context for the development proposal.
- 2.2 The current agenda regarding transport and development is moving away from one of providing significant new highway capacity, through 'predict and provide' schemes. Instead, policies have been adopted in planning guidance that seek to encourage more sustainable modes of travel, and a planning system which places more emphasis on the link between transport and land use planning policies.
- 2.3 The following national and regional planning documents have been reviewed:

#### **National Policy**

- The National Planning Policy Framework (NPPF) (2019);

#### **Regional Policy**

- Hertfordshire County Council Local Transport Plan (2018);

#### **Local Policy**

- St Albans City and District Council Local Plan Review (1994); and
- St Albans City and District Council Draft Local Plan 2020-2036 (2018).

### National Policy

#### **The National Planning Policy Framework (NPPF) (2019)**

- 2.4 The Government's National Planning Policy Framework (NPPF) was adopted in 2019 and sets out the government's planning policies for England and how these should be applied. The new NPPF replaces the previous edition, which itself replaced the majority of the Planning Policy Statement (PPS) and Planning Policy Guidance Note (PPG) documents on 27<sup>th</sup> March 2012.
- 2.5 It is meant as high level guidance for local councils to use when defining their own personal local and neighbourhood plans. This approach allows the planning system to be customised to reflect the needs and priorities of individual communities.
- 2.6 At the heart of the NPPF is a presumption in favour of sustainable development, and the NPPF notes that *'the purpose of the planning system is to contribute to the achievement of sustainable development'*. 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'*.
- 2.7 The NPPF defines the delivery of sustainable development through three roles:
- *an economic objective;*
  - *a social objective; and*
  - *an environmental objective.*
- 2.8 Chapter 9 of the NPPF relates to the promotion of sustainable development. Paragraph 102 states that:
- 'Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:*
- *the potential impacts of development on transport networks can be addressed;*



- *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;*
- *opportunities to promote walking, cycling and public transport use are identified and pursued;*
- *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*
- *patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places.'*

2.9 Paragraph 108 states that:

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

- *appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;*
- *safe and suitable access to the site can be achieved for all users; and*
- *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.'*

2.10 Paragraph 109 notes 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'.*

2.11 Within this context, paragraph 110 notes that *'applications for development should:*

- *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;*
- *address the needs of people with disabilities and reduced mobility in relation to all modes of transport;*
- *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;*
- *allow for the efficient delivery of goods, and access by service and emergency vehicles; and*
- *be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.'*

## Regional Policy

### Hertfordshire County Council Local Transport Plan (2018)

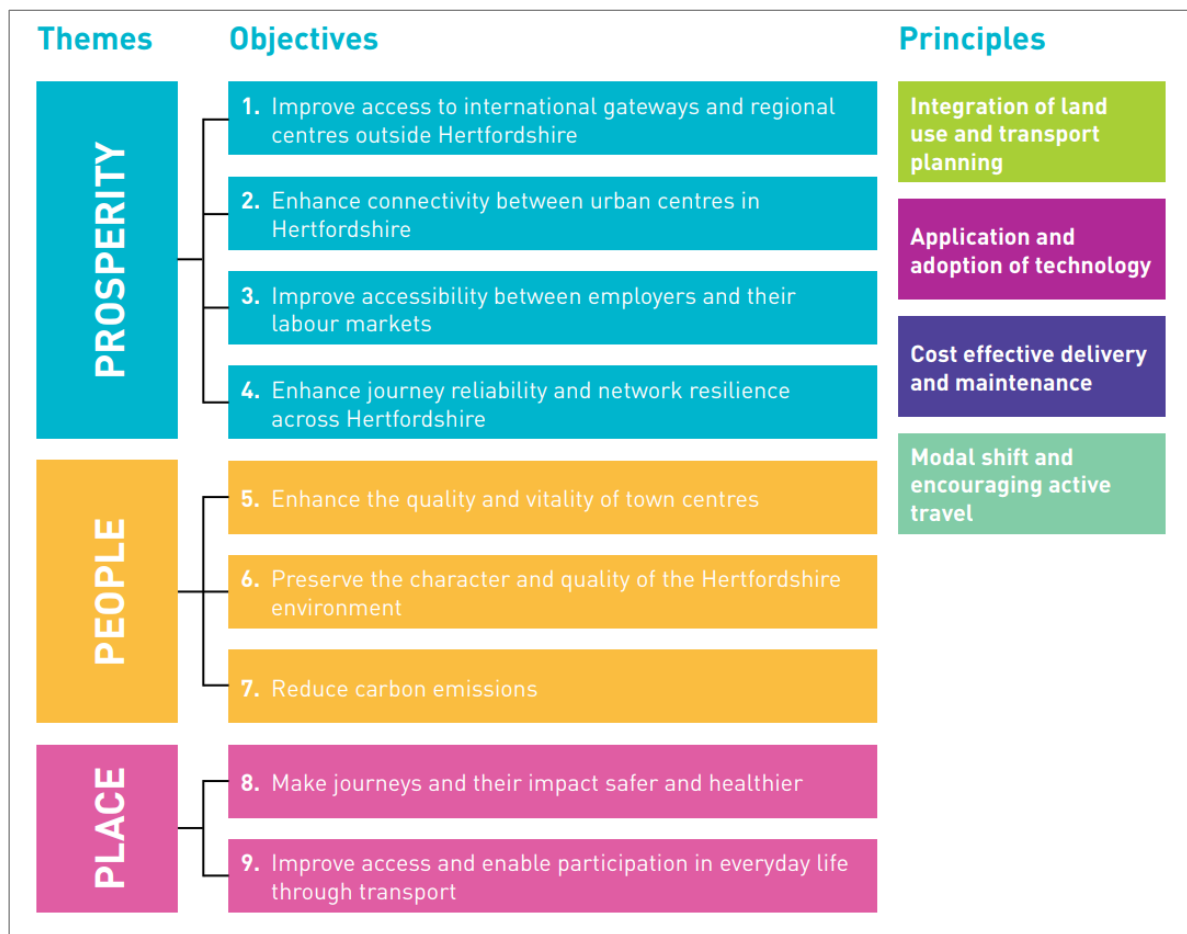
2.12 The Hertfordshire Local Transport Plan (LTP), which was adopted in May 2018, sets out *'how transport can help deliver a positive future vision of Hertfordshire, focussed around the themes of people, place and prosperity'.* It seeks to deliver an approach to improvements in highways, passenger transport, walking and cycling, while seeking to manage a transition away from a focus on highway capacity improvements.

2.13 The LTP covers the period up to 2031, which is the timescale for most of the housing proposals being set out in the ten district Local Plans. However, it also considers how future planning decisions and emerging technology might affect the way that transport needs to be provided in the longer term.



2.14 The themes, objectives and principles of the LTP are illustrated in **Figure 2.1**.

**Figure 2.1 Themes, Objectives and Principles of Hertfordshire LTP**



Source: Hertfordshire County Council (2018)

- 2.15 The LTP provides a high-level strategy for how a change in travel behaviour in Hertfordshire can be achieved so that people choose to travel by other modes for journeys that don't necessarily need to be made by car. The LTP identifies how health, local environments and urban centres will be vastly improved if people can be encouraged to walk, cycle or use passenger transport.
- 2.16 The LTP accelerates the transition from a previous transport strategy that was largely car based to a more balanced approach, which caters for all forms of transport and seeks to encourage a switch from the private car to sustainable transport (e.g. walking, cycling or passenger transport) wherever possible.

## Local Policy

### St Albans City and District Council Local Plan Review (1994)

- 2.17 The currently adopted Local Plan is the District Local Plan Review, which was adopted in November 1994. In 2007, specific policies of the Local Plan Review 1994 were saved, and still form part of the development plan for St Albans, subject to the adoption of the emerging Draft Local Plan. A number of saved policies are relevant to the proposed development in terms of highways and transportation.
- 2.18 Policy 34 relates to highways considerations in development control. It states that '*development likely to generate a significant amount of traffic, or which involved the creation or improvement of an access onto the public highway, will not normally be permitted unless acceptable in terms of the following highway considerations:*

1. *Road safety; particular requirements are adequate visibility, turning radii and provision for pedestrians and cyclists and other disadvantaged people;*
2. *Environmental impact of traffic, especially in residential areas;*
3. *Road capacity, including present and predicted future year assessments;*
4. *Road hierarchy; new roads shall be of design appropriate to their position in the hierarchy. New accesses to primary roads and main distributor roads will normally be resisted, but where access is permitted a high standard of provision will be required;*
5. *Car parking provision;*
6. *St Albans City Centre restraint on development;*
7. *Local rural roads; particular regard will be had to increases in:*
  - *The risk of accidents, especially to pedestrians and cyclists;*
  - *The use of roads that are poor in terms of width, alignment or structural condition; and*
  - *Adverse impact on the local environment, either to the rural character of the road or residential properties alongside it.'*

2.19 Policy 35 relates to highway improvements in association with development, and states the following:  
*'In order to mitigate the highway effects of development proposals the District Council, in conjunction with the County Council where appropriate, will seek highway improvements or contributions to highway improvements and / or improvements to the public transport system from developers whose proposals would otherwise result in detrimental highway conditions.'*

2.20 Policy 40 of the adopted Local Plan provides residential development parking standards, which are the current adopted standards as included in the saved policies. The adopted standards are provided in

**Table 2.1 St Albans City and District Council Adopted Local Plan Parking Standards**

Dwelling Size		Number of Spaces Required Per Dwelling		
		Allocated	Unallocated	Total
1 bedroom dwellings	<i>either</i>	0	1.5	1.5
	<i>or</i>	1	0.5	1.5
2 bedroom dwellings	<i>either</i>	0	2	2
	<i>or</i>	1	1	2
	<i>or</i>	2	0.5	2.5
3 bedroom dwellings		2	0.5	2.5
4+ bedroom dwellings		3	0.5	3.5

Source: St Albans City and District Council (1994)

### **St Albans City and District Council Draft Local Plan 2020-2036 (2018)**

- 2.21 The St Albans City and District Council (SACDC) Draft Local Plan sets out the emerging planning policies and proposals for the future development of the City and District of St Albans from 2020 to 2036.
- 2.22 The vision for the District, as stated in the Draft Local Plan, is of *'a thriving community, which is a great place to live and work and has a vibrant economy'*. To deliver this vision, the Local Plan provides a series of objectives, which are as follows:
8. *An overall strategy that sets out the pattern and scale of development;*
  9. *Sufficient homes, workplaces and more affordable housing, of the types needed locally, in the right locations;*

10. *Appropriate retail, leisure and other commercial development;*
11. *Infrastructure and Community Facilities to support and enhance the lives of communities; and*
12. *Design, Conservation and Enhancement of the natural, built and historic environment.*

2.23 A number of policies within the Draft Local Plan relate to highways and transportation. Policy L18 outlines the overall transport strategy of the Local Plan, and states that *'particular consideration will be given to planning for:*

- *location of development in close proximity to main public transport interchanges/nodes;*
- *higher densities of residential development in locations with the best public transport access;*
- *provision of appropriate amenities and community facilities easily accessible on foot to major new development sites;*
- *provision and management of parking to encourage reduced car usage, particularly at the most sustainable locations for development (i.e. near public transport interchanges);*
- *infrastructure for sustainable travel within new developments, and linking new development to key destinations including providing for improvements of existing infrastructure and networks;*
- *needs and opportunities to improve public transport options to existing employment areas from local communities and addressing 'transport poverty' issues;*
- *bus priority measures;*
- *cycle parking in new developments and key journey destinations (stations, major employers, town and local centres);*
- *more efficient and sustainable travel through technology, such as intelligent transport systems, electric vehicles, shared mobility etc;*
- *interventions to encourage behaviour change, such as travel planning and promotion;*
- *planning for superfast broadband infrastructure to facilitate viable home working, business creation and economic growth;*
- *reductions in transport-related emissions and improvement to air quality. This should include measures to improve air quality along major roads, including enabling the removal of Air Quality Management Area (AQMA) designations; and*
- *measures to support reductions in car journeys to education sites and school journey planning initiatives.*

2.24 Regarding walking and cycling, the policy notes that *'proposals and promotions to increase the proportion of utility and leisure trips made through walking, cycling and horse-riding are supported. This includes implementation of Rights of Way Improvement Plans and new off-road cycle, walking routes and horse-riding routes, including alongside primary roads. Particular attention should be given to improving accessibility of schools by these modes.'*

2.25 Policy L19 of the Local Plan relates to Highways / Access Considerations for New Development. It notes that *'development likely to generate a significant amount of traffic, or which involves the creation or improvement of a significant access onto the public highway, must address the following fundamental highway considerations:*

- **Road safety** – *The safety of all road users will need to be taken into account. Consideration must be given to visibility, turning radii and provision for pedestrians, cyclists, horse-riders and other non-motorised users, and for disabled and other disadvantaged people;*
- **Road hierarchy** – *New roads should be of a design appropriate to their position in the hierarchy. On primary roads, direct access for new or existing development will not be permitted except where special circumstances can be demonstrated. This should include an assessment of all alternative options and their cost. Where access is permitted on to primary and main distributor roads a high standard of provision will be required; and*

- Detailed advice contained in relevant documents prepared at a national level and by the Highway Authority, including its Roads in Hertfordshire – Highway Design Guide (latest edition).

2.26 Policy L20 of the Local Plan provides car and cycle parking standards for new developments across the City and District. It includes recommended car and cycle parking standards for residential units of varying sizes, and these standards are set out in **Table 2.2**.

**Table 2.2 St Albans City and District Council Draft Local Plan Parking Standards**

Use Class		Car Parking Standards	Cycle Parking Standards
C3 Residential	1 bedroom dwellings	1.5 spaces (either 1.5 unallocated, or 1 allocated and 0.5 unallocated)	1 l/t space per unit if no garage or shed provided. 1 s/t space per 3 units plus 1 l/t space per 5 units
	2 bedroom dwellings	either 2 spaces (either 2 unallocated or 1 allocated and 1 unallocated) or 2.5 spaces (2 allocated and 0.5 unallocated)	
	3 bedroom dwellings	2.5 spaces (2 allocated and 0.5 unallocated)	
	4 bedroom dwellings	3.5 spaces (3 allocated and 0.5 unallocated)	

Source: St Albans City and District Council (2018)

2.27 It should be noted that the standards provided in Table 2.2 and the Draft Local Plan are the same as the currently adopted standards as noted in the Saved Policies in terms of the number of spaces required per dwelling.

## Summary

- 2.28 Key policy guidance at all levels has been identified within this chapter of the report, ensuring that the development proposals meet this guidance with regards to transport. The site lies in an accessible location that lends itself to sustainable travel, and the development proposals will seek to encourage travel by sustainable modes. Car parking at the proposed development will be provided in accordance with the vehicle parking standards outlined.
- 2.29 Given the datedness of the current adopted Local Plan, it is considered appropriate for the emerging policy to be considered as the most up-to-date evidence for the purpose of decision making. However, the proposed development is considered to be compliant with both the emerging and currently adopted policy guidance.

### 3 Baseline Conditions

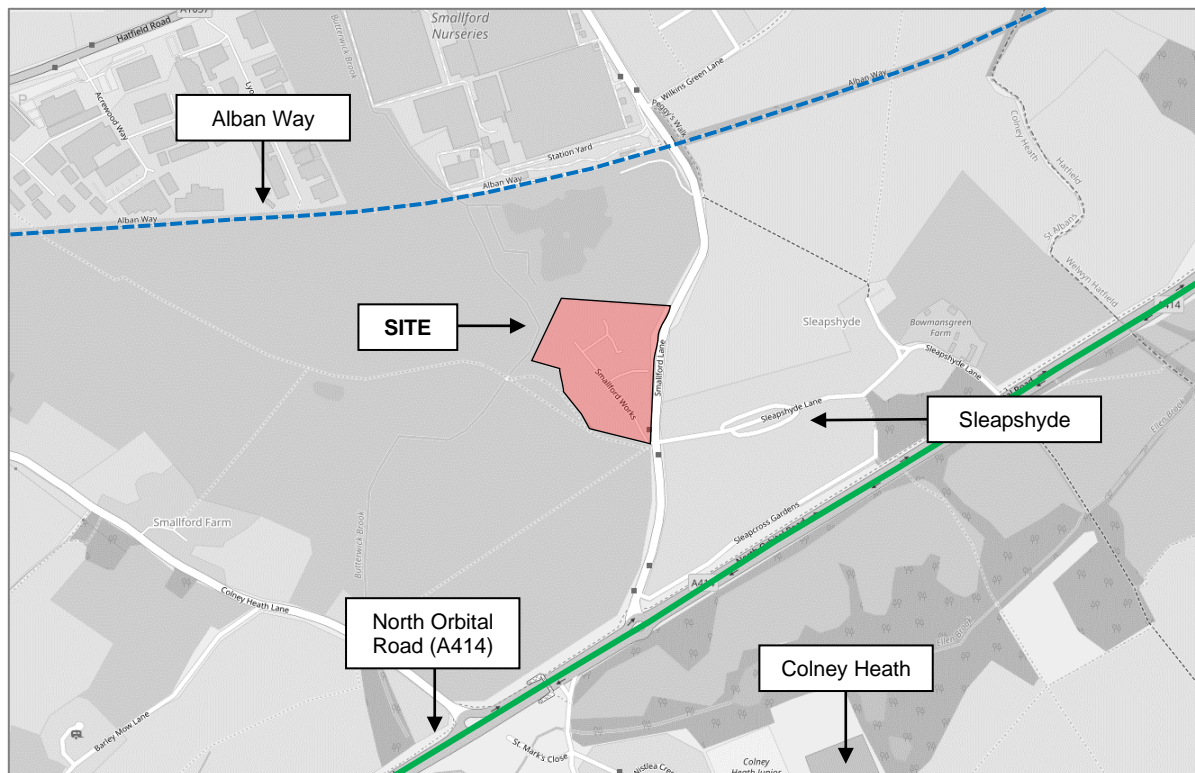
#### Introduction

- 3.1 This chapter details the existing, or baseline, transport conditions considered, including public transport, walking, cycling, highways and traffic conditions. A review of road safety along links and key junctions near the site has been undertaken and is included further within this chapter.
- 3.2 It is important that baseline conditions are accurately established so that the context of any potential future development at the site, and its potential impact on the surrounding transport and highway networks, can be fully understood.
- 3.3 This baseline study has been informed by site visits undertaken throughout 2019 and supplemented by desktop based research.

#### Site Location and Description

- 3.4 The site is located at Smallford Lane, to the east of St Albans and to the west of Hertford. The site is located to the immediate west of the village of Sleepshyde and approximately 800m north of Colney Heath. The site is bound by Smallford Lane to the east, and arable or unused land to the south, west and north. The site is located approximately 300m north of the North Orbital Road (A414), and 350m south of the Alban Way cycle route.
- 3.5 A detailed site location plan, showing the location and approximate outline of the site in relation to the immediate highway and transport network, is provided in **Figure 3.1**.

**Figure 3.1 Detailed Site Location Plan**



Source: Openstreetmap (2019) with Pell Frischmann annotations

- 3.6 The site is well connected to existing public and sustainable transport networks, with opportunities for non-car based travel to and from the site. A number of key local services and amenities are also accessible from the site via sustainable travel modes.



## Public Transport Accessibility

### Local Bus Services

- 3.7 The nearest bus stops to the site are located to the immediate southeast of the site on Smallford Lane. These stops are served by north and southbound services of the 305 bus route, which operates between Potters Bar / Colney Heath to the south and St Albans / Sandridge to the north. Four services every weekday operate in each direction on this route, reducing to three services a day on Saturdays.
- 3.8 There are additional bus stops located on Hatfield Road, approximately 1km (approximately 12 minutes walking / three minutes cycling distance) north of the site. These bus stops are served by the 300, 301, 601 AlbanWay, 602 and 653 Tigermoth bus routes, which provide frequent services to Welwyn Garden City, Hatfield and Stevenage to the east, and St Albans, Hemel Hempstead, Watford and Borehamwood to the west.
- 3.9 The 305 bus route provide a direct connection between the site and St Albans City Station. Frequent services to both St Albans City Station and Hatfield Station are also provided via the 300, 301 and 602 bus routes serving Hatfield Road to the north.

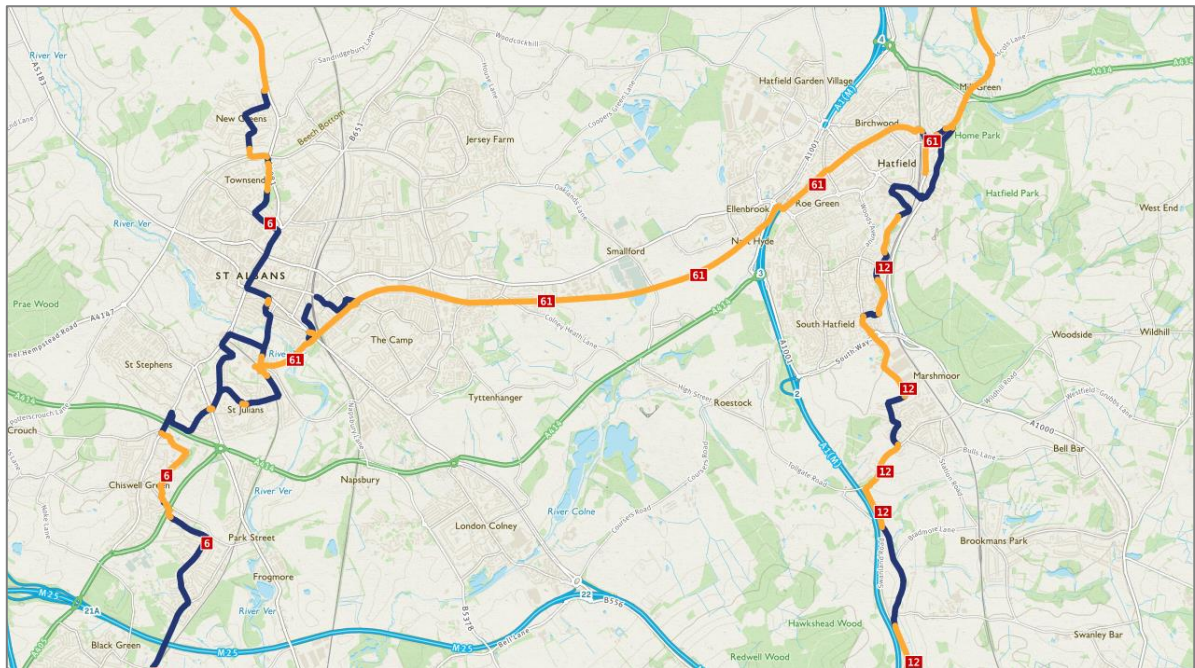
### National Rail Services

- 3.10 The site is located approximately 5km (approximately 18 minutes cycle distance) of both St Albans City Station and Hatfield Station, which are located to the west and east of the site respectively. Both stations are accessible via the Alban Way segregated cycle route which runs in an east-west direction to the north of the site.
- 3.11 St Albans City is served by Thameslink, which operate frequent services to Central London (London St Pancras International, London Blackfriars and London Bridge), Luton, Luton Airport Parkway, Gatwick Airport and Brighton. Facilities at St Albans City include a car park and cycle parking for up to 1,150 cycles.
- 3.12 Hatfield Station is served by Great Northern services to London Kings Cross, Cambridge, Moorgate and Welwyn Garden City. Cycle parking facilities are also provided at Hatfield Station.

## Walking and Cycling Accessibility

- 3.13 The Alban Way segregated foot and cycle path, which forms part of National Cycle Network (NCN) route 61, runs in an east-west direction approximately 350m north of the site and is accessible from the site via Smallford Lane. The Alban Way foot / cycleway runs between the centres of St Albans and Hatfield, including both railway stations. The Alban Way route, and connections to other cycle routes, is illustrated in an extract from the Sustrans NCN route map provided in **Figure 3.2**.

**Figure 3.2 Local Cycle Network**



Source: Sustrans (2019)

- 3.14 The Alban Way is accessible from the site via the existing footway on the eastern side of Smallford Lane, which provides continuous and ramped access between Smallford Lane and the Alban Way as illustrated in **Figure 3.3**.

**Figure 3.3 Access to Alban Way**

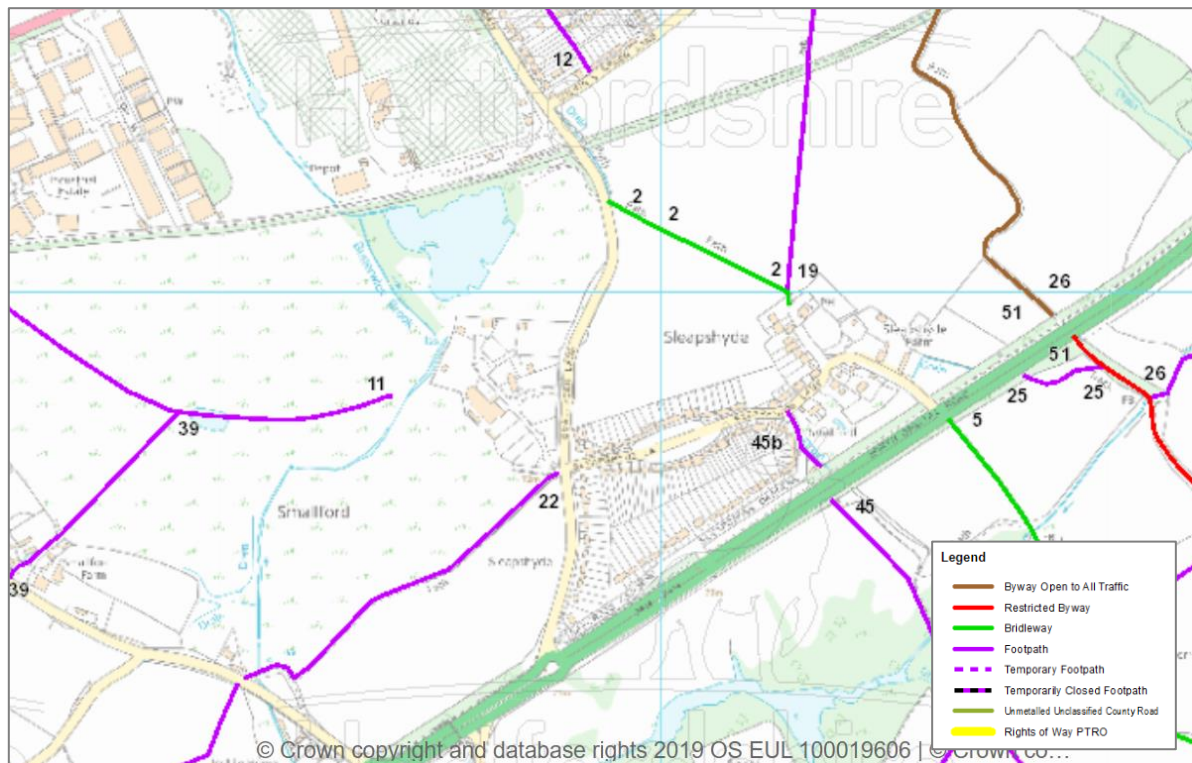


Source: Pell Frischmann (2019)



- 3.15 Additionally, a shared foot / cycleway runs along the northern side of the North Orbital Road (A414), which provides an alternative route to the centre of Hatfield. This foot / cycle way also connects with a bridge, which in turn provides access to Colney Heath.
- 3.16 A series of Public Rights of Way (PRoW) are also located within the vicinity of the site, including Colney Heath 2 and 22, which are provided in the form of a bridleway and footpath respectively. The Local PROW network map, produced by HCC, is illustrated in **Figure 3.4**. It should be noted that the HCC PROW map excludes the Alban Way, although this would be considered to effectively form part of the PROW network.

**Figure 3.4 Local Public Right of Way Network**



Source: Hertfordshire County Council (2019)

## Accessibility to Local Services and Facilities

- 3.17 There are a number of services and amenities located within walking / cycling distance of the site. These include The Plough public house, which is approximately 650m (approximately eight minutes walking / two minutes cycling distance), and local bus stops.
- 3.18 The nearest primary school to the site is Colney Heath infant and Junior School, which is located approximately 950m (approximately 12 minutes walking / four minutes cycling distance) south of the site. The nearest secondary school to the site is Nicholas Breakspear Catholic School, which is located approximately 2.1km (approximately 26 minutes walking / eight minutes cycling distance) to the east. This school is also accessible from the site via the 305 bus route which serves the bus stops on Smallford Lane.
- 3.19 A number of services are located along Colney Heath High Street, including Colney Heath Village Hall, a Post Office, and several public houses and restaurants, all of which are located within 1.6km (approximately 20 minutes walking / six minutes cycling distance) of the site. As noted, Colney Heath is accessible from the site via the shared foot / cycle way and bridge along and over the A414.
- 3.20 As previously noted, the centres of both Hatfield and St Albans are accessible from the site via the Alban Way, as well as local bus services. Both St Albans and Hatfield provide numerous additional

services and facilities as well as employment opportunities, and present opportunities for non-car based travel to and from the site.

## Highway Network

### Access

- 3.21 Vehicle access to the site is currently made from Smallford Lane in the south-eastern corner of the site, in for the form of a priority junction. There is currently no footway provision adjacent to the site access, and no other point of pedestrian / cycle access into the site.
- 3.22 The existing land use is known to generate a number of Heavy Goods Vehicle (HGV) movements throughout the day, given the light-industrial and industrial nature of some of the existing land uses across the site. The achievable visibility splays from existing site access are understood to be below the standard typically required for a 40mph road, therefore presenting a potential road safety concern with the existing site access junction.

### Local Highway Network

- 3.23 Smallford Lane is a two-way single carriageway, which operates with a speed limit of 40mph. Smallford Lane connects with the North Orbital Road (A414) to the south and Hatfield Road (A1057) to the north via Station Road. The A414 connects the site and Sleafshyde with junction 3 of the A1(M) at Hatfield to the east, and junction 8 of the M1 at Hemel Hempstead to the west, and also serves Hatfield, London Colney, and St Albans.
- 3.24 The site is therefore considered to be very well connected to the local, regional and strategic highway network.

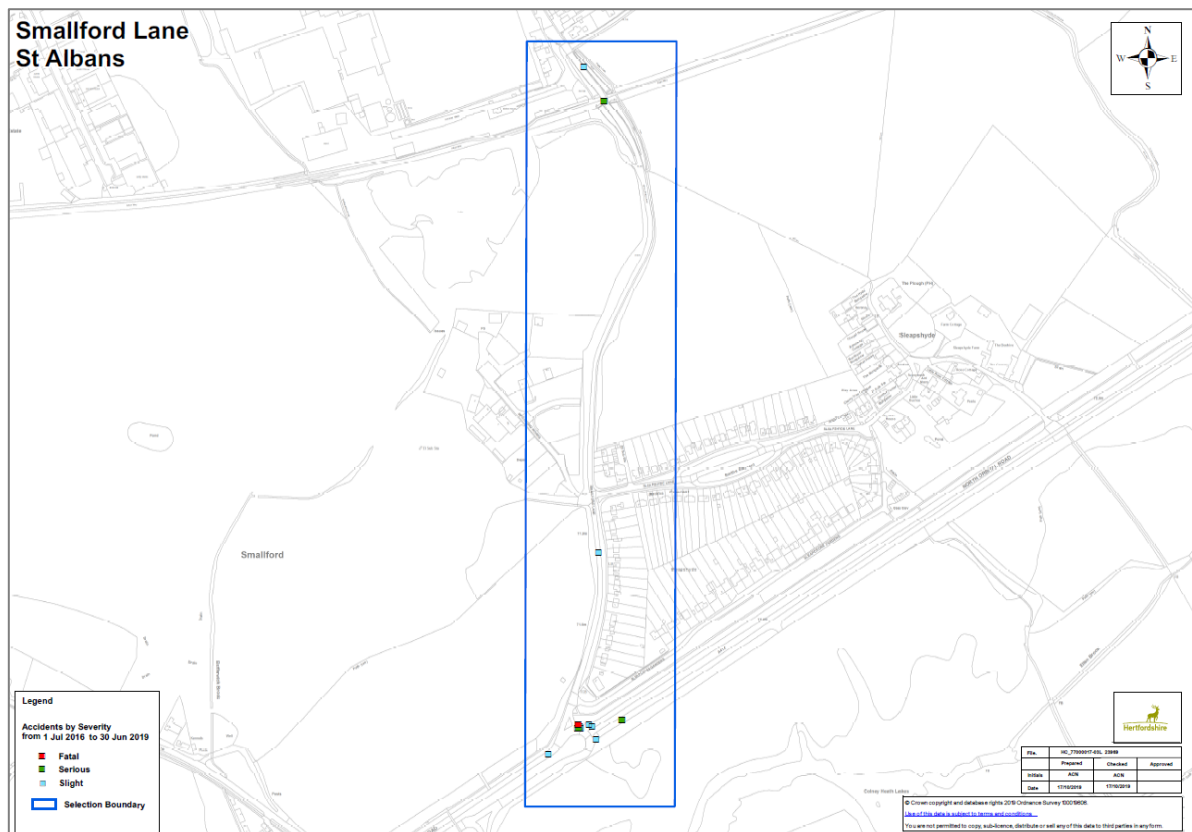
### Draft A414 Corridor Strategy

- 3.25 HCC have prepared a Draft A414 Corridor Strategy (December 2018) which outlines current and future growth and transport challenges and identifies the proposed set of intervention packages along the corridor.
- 3.26 Package 11 of the draft strategy outlines a series of improvements of the A414 south of St Albans, including the Colney Heath longabout section to the south of Smallford and the site. The draft strategy outlines the following relating to the longabout:  
*'A safety and capacity related improvement to the existing longabout junction which includes introducing a signal-controlled right turn 'cut-through' for traffic exiting from High Street towards A414 East.'*
- 3.27 Improvements to the longabout, as well as to the wider A414 corridor, would be expected to present a significant improvement in capacity terms to the local highway network neighbouring the site, and would improve access to and across the A414.
- 3.28 At the time of writing, consultation on the draft document has closed and HCC are understood to be preparing the final version of the strategy document.

### Road Safety Review

- 3.29 A review of Personal Injury Accident (PIA) data, obtained from WSCC, has been undertaken for the most recently available three year period (36 months up to 30<sup>th</sup> June 2019). The full collision data report is included at **Appendix B**.
- 3.30 The extent of the road safety review study area includes the stretch of Smallford Lane between the A414 junction to the south and the bridge over the Alban Way to the north. The collision data plot, showing the location and severity of individual collisions over the study period, is provided in

**Figure 3.5 Personal Injury Accident Plot**



Source: Hertfordshire County Council (2019)

- 3.31 A total of 13 collisions were recorded in the study area of the three-year study period, of which nine were categorised as 'slight', three were categorised as 'serious', and one collision resulted in a fatality. None of the collisions recorded involved pedestrians or cyclists.
- 3.32 HCC have requested that contributory factors for individual collisions are not detailed in this report. However, a review of the contributory factors has been undertaken, which indicate that each of the four serious and fatal collisions recorded occurred as a result of driver error, with contributory factors including speeding, reckless driving and use of a mobile phone while driving. None of these collisions were attributed to the road layout or configuration.
- 3.33 A small cluster of collisions were recorded on the A414, adjacent to the junction with Smallford Lane, although the number of collisions recorded is not considered excessive given the very high traffic flows along this link.

### Automatic Traffic Count Survey

- 3.34 An Automatic Traffic Count (ATC) survey was undertaken by a specialist independent survey company (MHC) on Smallford Lane within the vicinity of the existing site access for one week commencing Thursday 27<sup>th</sup> June 2019, which was during term time and outside of school holidays. The purpose of the ATC was to identify the speeds and volume of existing traffic along Smallford Lane. The average weekday inter-peak speeds have been calculated and identified, and a summary of the results are included in **Table 3.1**.

**Table 3.1 Automatic Traffic Count Survey Inter-Peak Analysis**

Time Period	Speed (mph)					
	Northbound		Southbound		Two-Way Average	
	85th Percentile	Average	85th Percentile	Average	85th Percentile	Average
10:00-11:00	40.3	34.2	38.7	33.2	39.5	33.7
11:00-12:00	41.6	35.4	38.9	33.3	40.2	34.4
14:00-15:00	41.5	35.7	38.8	33.5	40.2	34.6
15:00-16:00	41.7	35.4	38.2	32.2	40.0	33.8
Average Inter Peak	41.3	35.2	38.7	33.1	40.0	34.1

Source: MHC (2019) and Pell Frischmann calculations

- 3.35 As shown in Table 3.1, the average two-way 85<sup>th</sup> percentile inter-peak speed recorded on Smallford Lane was 40mph. However, the average two-way speed was 34.1mph. The results of the ATC survey indicate that the vast majority of vehicles travelling along Smallford Lane do so within the enforced 40mph speed limit.

### **Classified Turning Count Surveys**

- 3.36 A series of classified turning count surveys were also undertaken on Thursday 27<sup>th</sup> June 2019 at the following junctions:
- Existing Site Access / Smallford Lane / Sleafshyde Lane – crossroads;
  - Hatfield Road / Oaklands Lane / Station Road – four arm roundabout; and
  - Smallford Lane / North Orbital – priority junction.
- 3.37 With the exception of the site access junction, survey periods covered the typical AM and PM network peak periods of 07:00-10:00 and 16:00-19:00 respectively. In order to quantify the daily trip generation of the existing land use, the Site Access / Smallford Lane / Sleafshyde Lane was surveyed for the full daily 12-hour (07:00-19:00) period.



## 4 Development Proposals

### Introduction

- 4.1 This section of the TA introduces and outlines the development proposals for the site. It includes a summary of the description of the proposed land use, schedule of accommodation, and proposed access arrangements by all transport modes.

### Development Description

- 4.2 As previously noted, it is proposed to provide a total of 100 residential units (use class: C3) at the site, comprising a mix of private and affordable dwellings.
- 4.3 The illustrative masterplan is included at **Appendix C**, and a screenshot is provided in **Figure 4.1**. The indicative schedule of accommodation is provided in **Table 4.1**.

**Figure 4.1 Proposed Illustrative Masterplan**



Source: Turner (2019)

**Table 4.1 Indicative Schedule of Accommodation**

Unit Type	Number of Units
1 bedroom	8
2 bedrooms	26
3 bedrooms	56
4 bedrooms	10
<b>Total</b>	<b>100</b>

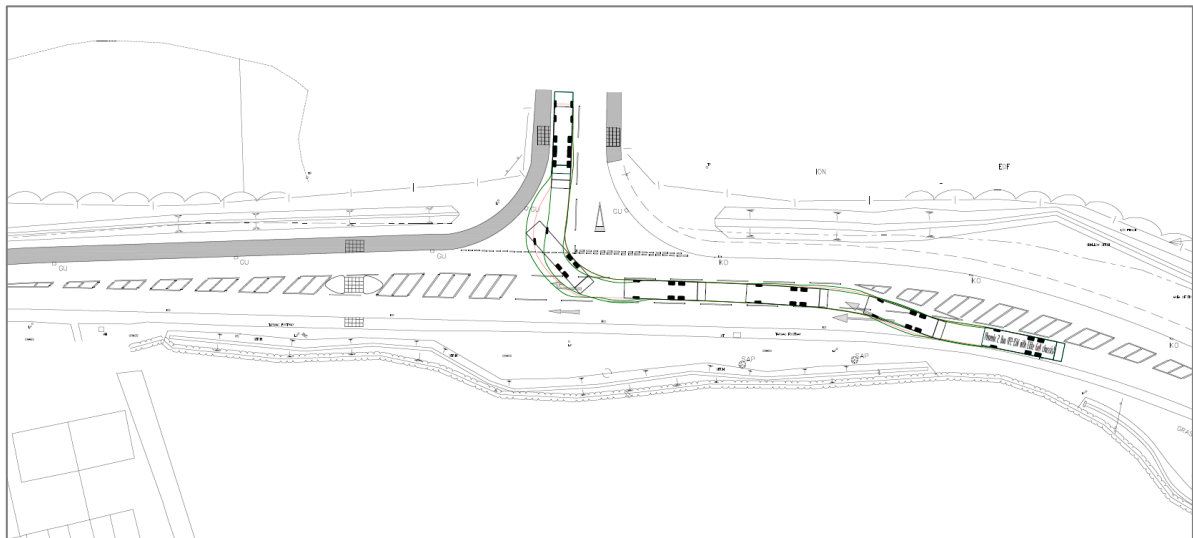
Source: Turner (2019)

## Access and Servicing Arrangements

### Vehicular Access

- 4.4 Vehicular access to the site is proposed from Smallford Lane, approximately 100m north of the existing site access. It is proposed to provide access in the form of a priority junction with a ghost-island right turn lane into the site. The site access junction is subject to a separate S278 planning application and has planning consent on this basis. It is understood at the time of writing that the access is currently being built out.
- 4.5 It is also proposed to incorporate an informal pedestrian crossing into the design of the consented site access, with tactile paving and dropped kerbs provided as appropriate. A screenshot of the consented site access junction, with the proposed crossing facility, is provided in **Figure 4.2**. The full resolution site access drawing is included at **Appendix D**.
- 4.6 Visibility splays will be provided from the site access junction in accordance with DMRB standards, which denote that a visibility splay of 2.4m x 120m either side of the site access should be provided as Smallford Lane is subject to a 40mph speed limit. As indicated in Table 3.1 of this report, average 85<sup>th</sup> percentile two-way speeds along Smallford Lane were recorded as 40mph.
- 4.7 This is considered to provide a robust improvement on the existing site access arrangements, which does not provide appropriate visibility in accordance with the design speed of Smallford Lane. The change of use at the site would also be expected to result in a significant decrease in HGV movements generated by the site, which would provide a benefit in terms of the capacity of the site access junction and nearby off-site junctions, as well as in road safety terms.

**Figure 4.2 Proposed Site Access Arrangements**



Source: Pell Frischmann (2019)

- 4.8 A swept path assessment has been undertaken of both the proposed site access and the internal layout of the development to ensure that the site can be accessed by an appropriately sized refuse vehicle. Swept path drawings are included at **Appendix E**.

### **Pedestrian / Cycle Access**

- 4.9 Access for pedestrians and cyclists will be incorporated into the proposed site access junction, as illustrated in Figure 4.2. An informal pedestrian crossing is proposed, which would connect the site with the existing footway network on the eastern side of Smallford Lane. A footway is also proposed between the site access junction and the existing bus stop at the south-eastern corner of the site on the western side of Smallford Lane.
- 4.10 A segregated pedestrian / cycle only access is proposed at the location of the existing site access in the southwestern corner of the site, which will also connect with the proposed footway along the site's frontage south of the proposed site access.

## **Parking**

### **Car and Cycle Parking**

- 4.11 Car and cycle parking for the proposed development will be provided in accordance with the standards provided in the Draft Local Plan, which are outlined in **Table 4.2**. It should be noted that these standards are the same as those provided in the current adopted Local Plan, which was adopted in 1994.

**Table 4.2 St Albans City and District Council Draft Local Plan Parking Standards**

Use Class		Car Parking Standards	Cycle Parking Standards
C3 Residential	1 bedroom dwellings	1.5 spaces (either 1.5 unallocated, or 1 allocated and 0.5 unallocated)	1 l/t space per unit if no garage or shed provided. 1 s/t space per 3 units plus 1 l/t space per 5 units
	2 bedroom dwellings	either 2 spaces (either 2 unallocated or 1 allocated and 1 unallocated) or 2.5 spaces (2 allocated and 0.5 unallocated)	
	3 bedroom dwellings	2.5 spaces (2 allocated and 0.5 unallocated)	
	4 bedroom dwellings	3.5 spaces (3 allocated and 0.5 unallocated)	

Source: St Albans City and District Council (2018)

- 4.12 A total of 239 car parking spaces are proposed across the site, which includes allocated and unallocated spaces, in accordance with the standards provided in both the current adopted and draft Local Plans.



## 5 Multi-Modal Trip Generation & Distribution Assessment

### Introduction

- 5.1 This chapter sets out the methodology and results of a multi-modal trip generation assessment, which has been undertaken to assess the potential impact of the proposed development, particularly in terms of vehicle trips generated, in comparison with the existing land use at the site.

### Methodology

- 5.2 The traffic generation of the current land use at the site has been quantified using first principle survey data. A fully classified turning count survey was undertaken at the existing site access junction on a term-time weekday to calculate the number and types of vehicles travelling in and out of the site throughout the day.
- 5.3 The trip generation for the proposed residential development has been calculated using trip rates derived from the industry standard TRICS (v7.6.1) trip rate database and local census data. Survey sites have been identified and selected which share similar characteristics to the site in terms of size, location and accessibility. In order to provide an accurate representation of the potential modal split of the development, in accordance with local travel characteristics, local census data has also been utilised.
- 5.4 The methodology presented in this chapter, along with the resulting trip generation assessment, was presented to HCC Highways in the scoping submission and was subsequently agreed as appropriate during pre-application meetings held with HCC Highways officers.

### Existing Industrial Land Uses

- 5.5 As noted, a fully classified turning count survey was undertaken at the existing site access on a term time weekday (Thursday 27<sup>th</sup> June 2019) between the hours of 07:00 and 19:00 to quantify the peak hour and daily traffic generation of the existing land uses at the site.
- 5.6 The surveyed peak hour and daily trip generation of the existing land use is provided in Table 5.1. The full survey data is included at **Appendix F**.

**Table 5.1 Peak Hour and Daily Traffic Generation of Existing Land Use**

Time Period	Number of Vehicles Generated		
	In	Out	Total
AM Peak Hour (07:00-08:00)	32	29	61
PM Peak Hour (16:15-17:15)	21	40	61
Daily (07:00-19:00)	231	256	487

Source: MHC Traffic Surveys (2019)

### Proposed Development

#### Total People

- 5.7 The following site selection criteria have been used within TRICS to identify appropriate survey sites for the residential element of the proposed development:
- Residential – Houses Privately Owned (C3);
  - Sites in England and Wales (excluding Greater London) only;
  - Developments of 50-150 units;
  - Suburban Area, Edge of Town and Neighbourhood Centre only;

- Weekday surveys only; and
- Surveys undertaken within the last 10 years.

5.8 A total of 19 survey sites were identified using the above criteria. The resulting peak hour and daily total people (all mode) trip rates and trip generation for the proposed residential development are provided in **Table 5.2**, and the full TRICS output report is included at **Appendix G**.

**Table 5.2 Total People (All Mode) Trip Rates and Trip Generation of Residential Units**

Time Period	Trip Rate (per 1 unit)			Trip Generation (100 units)		
	In	Out	Total	In	Out	Total
AM Peak Hour (08:00-09:00)	0.184	0.629	0.813	18	63	81
PM Peak Hour (17:00-18:00)	0.474	0.288	0.762	47	29	76
Daily (07:00-19:00)	3.468	3.542	7.010	347	354	701

Source: TRICS (v7.6.1) (2019) and Pell Frischmann calculations. Note: Numbers may not sum due to rounding.

### Multi-Modal Trip Generation

- 5.9 In order to provide an accurate representation of the potential modal split of the proposed residential development, local census data has been utilised. The site is located within the St Albans 015D Lower Super Output Area (LSOA), which includes the areas to the immediate east and north of the site, which are considered to present an accurate representation of the potential travel patterns of the proposed development. The modal split is therefore considered to provide an accurate and robust assessment of the potential vehicular modal split of the site.
- 5.10 The modal split of the LSOA has been applied to the peak hour and daily total people trip generation of the proposed development to provide the multi-modal trip generation. The modal split of the St Albans 015D LSOA, and the resulting peak hour multi-modal trip generation of the proposed development, is presented in **Table 5.3**.

**Table 5.3 Multi-Modal Trip Generation Assessment**

Method of Travel	Modal Split	Trip Generation								
		AM Peak Hour			PM Peak Hour			Daily		
		In	Out	Total	In	Out	Total	In	Out	Total
Underground / Light Rail	1%	0	0	1	0	0	1	2	2	5
Train	14%	3	9	11	6	4	10	47	48	95
Bus / Coach	2%	0	1	2	1	1	2	8	8	15
Taxi	0%	0	0	0	0	0	0	1	1	2
Motorcycle / Scooter	0%	0	0	0	0	0	0	1	1	2
<b>Driving a Car / Van</b>	<b>64%</b>	<b>12</b>	<b>40</b>	<b>52</b>	<b>30</b>	<b>19</b>	<b>49</b>	<b>222</b>	<b>227</b>	<b>449</b>
Passenger in Car / Van	3%	1	2	3	2	1	2	11	11	22
Bicycle	3%	0	2	2	1	1	2	9	10	19
On Foot	12%	2	8	10	6	3	9	41	42	84
Other	1%	0	1	1	0	0	1	3	4	7
<b>Total</b>	<b>100%</b>	<b>18</b>	<b>63</b>	<b>81</b>	<b>47</b>	<b>29</b>	<b>76</b>	<b>347</b>	<b>354</b>	<b>701</b>

Source: Census (2011), TRICS (v7.6.1) (2019) and Pell Frischmann calculations. Note: Numbers may not sum due to rounding.

## Net Change in Vehicle Trips

- 5.11 A net change comparison has been undertaken between the surveyed existing and proposed residential traffic flows. The peak hour and daily vehicle trip generation profiles of the existing and proposed land uses, and the net change between the two land uses, is provided in **Table 5.4**.

**Table 5.4 Net Change in Vehicle Trips – Existing and Proposed Land Uses**

Land Use	Number of Vehicles								
	AM Peak Hour			PM Peak Hour			Daily		
	In	Out	Total	In	Out	Total	In	Out	Total
Existing Industrial Land Use	32	29	61	21	40	61	231	256	487
Proposed Residential Development	12	40	52	30	19	49	222	227	449
<b>Net Change</b>	<b>-20</b>	<b>+11</b>	<b>-9</b>	<b>+9</b>	<b>-21</b>	<b>-12</b>	<b>-9</b>	<b>-29</b>	<b>-38</b>

Source: MHC Traffic Surveys (2019), Census (2011), TRICS (v7.6.1) (2019) and Pell Frischmann calculations.

- 5.12 As shown in Table 5.4, the proposed development would be expected to result in a decrease in vehicle trips in comparison with the proposed development during both AM and PM peak hours and across the day.
- 5.13 The proposed change of use from an industrial to a residential led development would also result in a significant decrease in the number of Heavy Goods Vehicles (HGVs) generated by the site. This would provide benefits in terms of highway capacity, including the operation of local junctions, and in road safety terms.
- 5.14 The trip generation of both the existing and proposed land uses has been reviewed and accepted by HCC highways officers. It was agreed during pre-application discussions that the proposed development would be expected to result in a net decrease in vehicle trips, and as a result no junction capacity modelling would be required.

## 6 Summary and Conclusion

### Summary

- 6.1 Pell Frischmann (PF) is commissioned by Stackbourne Limited (the 'Applicant') to provide transport planning and highways consultancy services, and to prepare this Transport Assessment (TA) report, in connection with the proposed redevelopment of Smallford Works, Smallford Lane, St Albans, Hertfordshire (the 'site'). The Local Planning Authority (LPA) is St Albans City and District Council (SACDC), and the Local Highways Authority (LHA) is Hertfordshire County Council (HCC).
- 6.2 The scope and contents of this report has been informed by a series of scoping discussions undertaken between PF and HCC Highways officers. PF submitted a Transport Assessment Scoping Report to HCC, which outlined the proposed scope of the TA for agreement with HCC Highways. The scoping report also summarised the site access arrangements, the trip and traffic generation and scope of potential highways assessments to be included within a future TA.
- 6.3 The contents and scope of this TA have therefore been prepared in accordance with the discussions held with HCC Highways particularly in relation to trip generation, proposed access arrangements and the scope of highway impact assessments. During pre-application discussions it was also agreed that no junction capacity assessments would be required within the TA, on the basis that the proposed development will present a net reduction in vehicle trips in comparison with the existing land use.
- 6.4 The site is located at Smallford Lane, to the east of St Albans and to the west of Hertford. The site is located to the immediate west of the village of Sleapshyde and approximately 800m north of Colney Heath. The site is bound by Smallford Lane to the east, and arable or unused land to the south, west and north. The site is located approximately 300m north of the North Orbital Road (A414), and 350m south of the Alban Way cycle route.
- 6.5 The site is well connected to existing public and sustainable transport networks, with opportunities for non-car based travel to and from the site. A number of bus stops are located within 1km of the site, providing frequent services to the centres of St Albans and Hatfield, including National Rail stations. A number of key local services and amenities are also accessible from the site via sustainable travel modes, including the local catchment primary school.
- 6.6 The Alban Way segregated foot and cycle path, which forms part of National Cycle Network (NCN) route 61, runs in an east-west direction approximately 350m north of the site and is accessible from the site via Smallford Lane. The Alban Way foot / cycleway runs between the centres of St Albans and Hatfield, including both railway stations. The Alban Way is accessible from the site via the existing footway on the eastern side of Smallford Lane, which provides continuous and ramped access between Smallford Lane and the Alban Way.
- 6.7 Vehicular access to the site is proposed from Smallford Lane, approximately 100m north of the existing site access. It is proposed to provide access in the form of a priority junction with a ghost-island right turn lane into the site. The site access junction is subject to a separate S278 planning application and has planning consent on this basis. Car and cycle parking for the proposed development will be provided in accordance with the standards provided in the Draft Local Plan.
- 6.8 It is also proposed to incorporate an informal pedestrian crossing into the design of the consented site access, with tactile paving and dropped kerbs provided as appropriate to connect with the existing footway network and the Alban Way. A footway is also proposed between the site access junction and the existing bus stop at the south-eastern corner of the site on the western side of Smallford Lane.
- 6.9 The proposed site access junction is considered to present a significant improvement in comparison with the existing site access junction in terms of both highway capacity and road safety terms. The proposed junction will provide improved visibility, and the provision of a right-turn lane would also reduce the likelihood of rear end shunts occurring on Smallford Lane.

- 6.10 A multi-modal trip generation assessment has been undertaken to assess the potential impact of the proposed development in comparison with the existing land use. The vehicle trip generation of the existing site has been calculated using a first principles traffic survey at the site access. It has been demonstrated that the proposed development would result in a decrease in peak hour and daily vehicle trips. The methodology and results of trip generation assessments have been agreed with HCC during pre-application discussions.
- 6.11 It is also noted that the proposed residential development would be expected to result in a significant decrease in HGV vehicle movements in comparison with the existing light-industrial land uses at the site. This would be expected to present an improvement in highway capacity terms on the local highway network and key junctions, as well as presenting a net improvement in road safety and reducing the likelihood of collisions along Smallford Lane.

## Conclusion

- 6.12 The site is well connected to local facilities including access to public transport and existing cycle routes, which provide connections to the centres of Hatfield and St Albans and National Rail stations. Accessibility to the site by walking and cycling has been incorporated into the design of the site and site access, and connections to the existing footway network has been considered and provided.
- 6.13 It has been demonstrated that the proposed development would result in a decrease in peak hour and daily vehicle trips. The methodology and results of trip generation assessments have been agreed with HCC during pre-application discussions.
- 6.14 It has therefore been demonstrated that the proposed development at Smallford Works is consistent with sustainable objectives of national, regional and local transport planning policy guidance.