



B R I G H T P L A N

**WINGS NURSERY, LIDSEY ROAD,
WOODGATE, WEST SUSSEX.**

RESIDENTIAL DEVELOPMENT

Travel Plan

Prepared on Behalf of

Thakeham Client Ltd

6115

January 2021



DOCUMENT CONTROL

Project: Wings Nursery, Lidsey Road, Woodgate, West Sussex.
Residential Development

Document: Travel Plan

Client: Thakeham Client Ltd

Reference: 6115

Document Checking:

Author:	ALB		Date:	24/02/2020
Checked by:	PMR		Date:	25/02/2020
Approved by:	PMR		Date:	28/04/2020

Status:

Issue	Date	Status	Issued by
1.	09/03/20	Draft	ALB
2.	28/04/20	Final	ALB
3.	11/06/2020	Final 02	ALB
4.	24/07/2020	Final 03	ALB
5.	22/01/2021	Draft 02	EJD
6.	26/01/2021	Final 04	EJD

© Copyright Bright Plan Limited 2021

No part of this publication may be reproduced by any means without the prior permission of Bright Plan Limited.



CONTENTS

1	INTRODUCTION	5
1.2	Planning Context	5
1.3	What is a Travel Plan?	5
1.4	The “Life Cycle” of a Travel Plan	6
2	SITE ACCESSIBILITY CREDENTIALS	7
2.1	Overview	7
2.1	Accessibility Credentials	7
2.2	Pedestrian Accessibility	8
2.3	Cycle Accessibility	8
2.4	Accessibility by Bus	8
2.5	Accessibility by Train	9
3	DEVELOPMENT SITE	10
3.1	Overview	10
3.2	Anticipated Vehicle Trips	10
4	AIMS, OBJECTIVES AND TARGETS	12
4.1	Aims and Objectives	12
4.2	Targets	12
4.3	Trip Rate Reduction Targets	13
5	MEASURES AND INITIATIVES	14
5.1	Introduction	14
5.2	Measures and Initiatives	14
	Travel Welcome Pack	14
	Walking and Cycling	14
	Public Transport	15
	Car Sharing	15
	Car Club	15
5.3	Committed Travel Plan Measures	16
5.4	Remedial Measures	17
5.5	Effectiveness of Travel Plan Measures	17
6	MANAGEMENT, MONITORING AND REVIEW	18
6.1	Introduction	18
6.2	Management	18
	Travel Plan Co-ordinator	18
6.3	Monitoring and Review	18
6.4	Action Plan	19



PLANS

Plan 01 Accessibility Plan

APPENDICES

Appendix A WSCC Pre-Application Comments

Appendix B Site Overview

Appendix C TRICS Data

Appendix D Census Data



1 INTRODUCTION

1.1.1 This Travel Plan (TP) has been commissioned by Thakeham Client Limited on behalf of Southern Housing Group Limited in association with a residential development at Wings Nursery Lidsey Road, Woodgate. This TP provides a 5-year strategy to mitigate the long-term traffic impact associated with the site and to encourage residents to use sustainable travel methods as an alternative to private car use.

1.1.1 The site encompasses an area of approximately 2.4ha, comprised of a large open field and former agricultural nursery. The proposed development would involve the demolition of the nursery to be replaced by 71 residential dwellings.

1.2 Planning Context

1.2.1 The application site has been subject to two recent planning applications as follows:

- i. AL/32/19/OUT – Outline planning application for 55 residential dwellings which was permitted in October 2019. Many of this project's highway principles have been addressed and accepted as part of the approved site's highway assessment.
- ii. AL/46/20/PL – Application for 81 residential dwellings which was withdrawn in August 2020.

1.2.2 This Travel Plan has been prepared in accordance with WSCC's preapplication comments which are attached at **Appendix A** and West Sussex County Council Development Plan Travel Plan Policy.

1.3 What is a Travel Plan?

1.3.1 A Travel Plan is a package of measures aimed at promoting sustainable travel choices by reducing reliance on the use of the private car. The implementation of such measures can enable individuals to reduce the impact of travel and transport on the environment, whilst providing a range of benefits to individuals and the local community.

1.3.2 The event of moving into a new home represents an ideal opportunity for residents to evaluate their travel behaviour and change existing habits .

1.3.3 For residents, a TP can:

- i. improve access to essential services and employment opportunities;
- ii. help provide less stressful options for travel, particularly in relation to regular commuter journeys;
- iii. present opportunities to incorporate physical exercise into daily routines;
- iv. reduce journey times to local destinations;
- v. reduce the cost of travel, or eliminate the need to buy a car; and
- vi. provide a more vibrant community to live in.

1.3.4 For the local community, a TP can:

- i. make local streets less congested, less dangerous, less noisy and less polluted;
- ii. enhance public transport services and associated infrastructure;



- iii. improve the environment and the routes available for cycling and walking; and
- iv. help create a place which is better to live in, work in and visit and which attracts investment.

1.3.5 For developers, a TP can:

- i. satisfy the requirements of local planning and highway authorities, permitting development; and
- ii. enhance an establishment's image ('green credentials' and 'social corporate responsibility').

1.4 The “Life Cycle” of a Travel Plan

1.4.1 A Travel Plan is an evolving strategy and process, which requires continuous input and monitoring, as well as commitment from residents. **Figure 1.1** below illustrates the “life-cycle” of the Travel Plan from its inception, through to the implementation and monitoring stages.

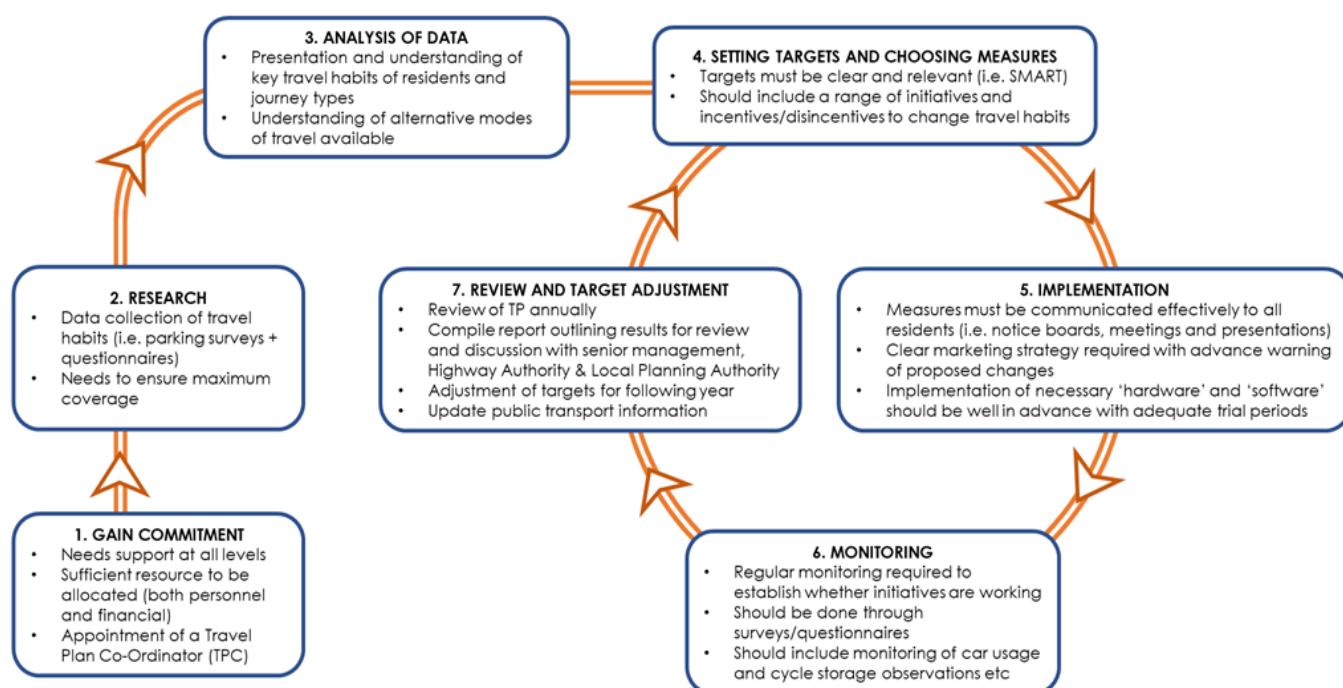


Figure 1.1: Travel Plan ‘Life Cycle’

1.4.2 As demonstrated in **Figure 1.1**, there are 7 principal stages required to effectively implement a Travel Plan. These are discussed in greater detail within the relevant sections of this document.

2 SITE ACCESSIBILITY CREDENTIALS

2.1 Overview

- 2.1.1 This section reviews the existing provision of pedestrian, cyclist and public transport infrastructure, in the vicinity of the site. The site's location is shown in **Figure 2.1**.

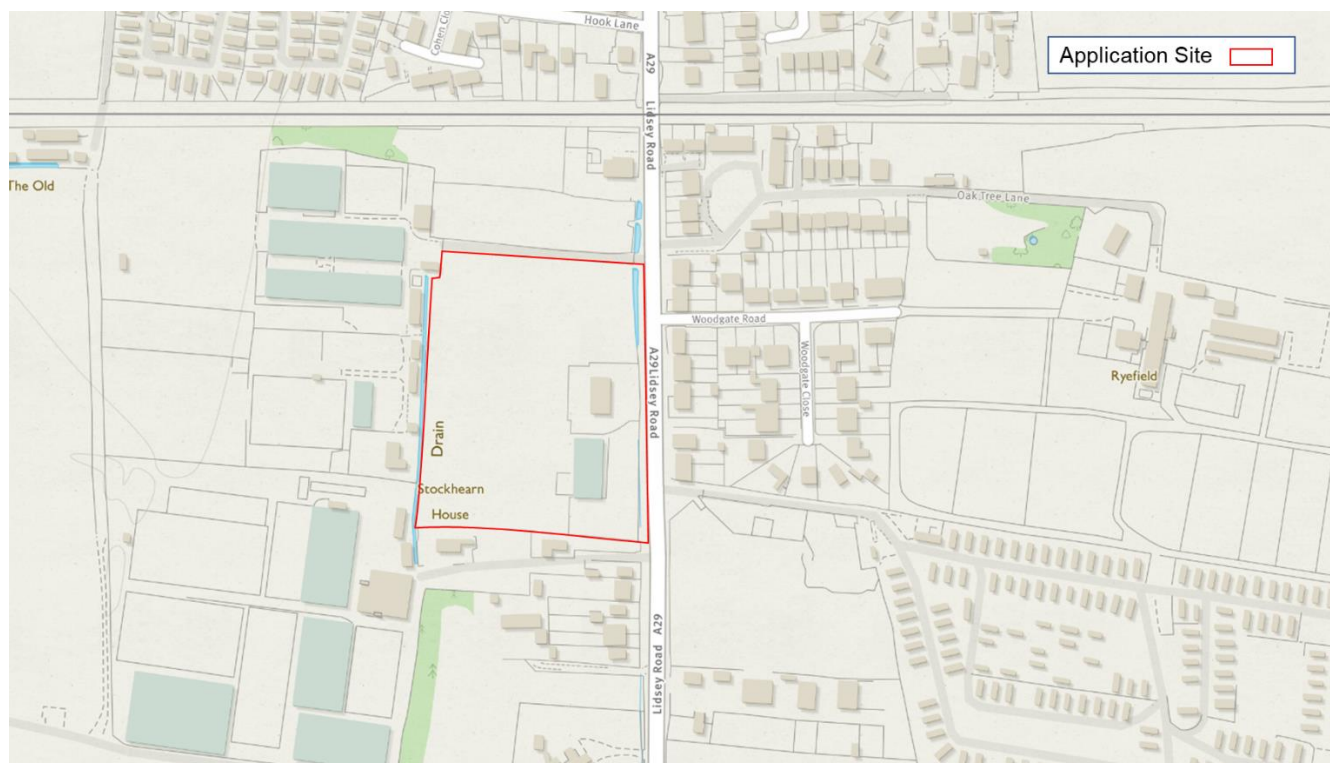


Figure 2.1: Site Location

2.1 Accessibility Credentials

- 2.1.1 The application site is located approximately 260m to the south of Woodgate village centre (equating to a 2-minute walk), and c.1km to the south of Westergate and its associated facilities and amenities (12-minute walk). All walking times are based on the Chartered Institute for Highways and Transport (CIHT) guidance 'Providing for Journeys on Foot'.
- 2.1.2 The CIHT guidance states that facilities situated within 2km and 8km are accessible to pedestrians and cyclists respectively. The proximity of public transport, shopping services and other local amenities are demonstrated in **Plan 01** and **Figure 2.2**.



Destination	Distance from Site	Walk / Cycle Time
Convenience Shop	0.27 km	3mins walk
Post Office	0.27 km	3mins walk
GP	2.24 km	7mins cycle
Public House	0.17 km	2mins walk
Bus Stop	0.03 km	<1min walk
Train Station	3.84 km	12mins cycle
ATM	0.27 km	3mins walk
Bus Stop (with services to Chichester)	1.56 km	19mins walk
Nearest Primary School	0.50 km	6mins walk
Nearest Secondary School	1.65 km	20mins walk

Figure 2.2: Site Proximity to Services & Amenities

2.2 Pedestrian Accessibility

- 2.2.1 Lidsey Road is supported by lit footways along either side of the carriageway. These provide access to local bus stops, day-to-day amenities and residential areas of Woodgate, Westergate and Eastergate to the north and north-east. To the south of the site, the footway extends to a distance of approximately 100 metres.
- 2.2.2 The Chartered Institute of Highways and Transportation (CIHT) publication 'Providing for Journeys on Foot' (2000) states that the average length of a journey on foot is 1 kilometre. It further recommends a preferred maximum walking distance of 2 kilometres for commuting journeys. As shown on the attached **Plan 01**, the local bus stops and convenience shopping facilities are within 1km of the site.

2.3 Cycle Accessibility

- 2.3.1 There is limited provision of dedicated on / off-street cycleway infrastructure within the vicinity of the site. The CIHT's publication 'Cycle Friendly Infrastructure' (1996), suggests that reasonably fit individuals can comfortably cycle a distance of 8 kilometres to workplace destinations. The surrounding villages of Fontwell, Walberton and Barnham, including Barnham railway station are therefore accessible by bicycle.

2.4 Accessibility by Bus

- 2.4.1 The Willows Caravan Park bus stop is located in the immediate vicinity of the site. The stop is served by No.66A and 66C (Compass Travel), which operate on a frequent basis Monday to Saturday, providing access to local destinations including Bognor Regis, Westergate and Yapton.
- 2.4.2 The bus services provide opportunities for interchange with local and national rail services at both Bognor Regis and Barnham railway stations. A summary of available bus services is provided in **Figure 2.3**.



Service No.	Route Summary	Typical Daytime Frequency	Operating Hours
66A	Bognor Regis – Yapton – Bognor Regis	Mon-Sat: every 3-4 hours	Mon-Fri: 07:23-17:52 Sat: 07:27-18:13
66C	Bognor Regis – Yapton – Bognor Regis	Mon-Sat: every 4 hours	Mon-Sat: 08:27-16:47

Figure 2.3: Bus Services Available from Willows Caravan Park Bus Stops

2.5 Accessibility by Train

2.5.1 Barnham rail station is located approximately 4km to the east of the site. The station provides access to regular rail services, operated by Southern to a host of local and regional destinations as shown in **Figure 2.4**.

Destination	Route Summary	Typical Journey Time	Typical Frequency
Bognor Regis	Barnham – Bognor Regis	6 – 8 min	4 every hour
Littlehampton	Barnham – Ford – Littlehampton	9 – 11 min	2 every hour
Portsmouth	Barnham – Chichester – Havant – Portsmouth	31 – 44 min	3 every hour
Brighton	Barnham – Worthing – Shoreham-by-sea – Hove – Brighton	40 – 46 min	2 every hour
Southampton	Barnham – Chichester – Havant – Fareham – Southampton	1hr 5min – 1hr 7min	2 every hour
London Victoria	Barnham – Horsham – Crawley – Gatwick Airport – Clapham Junction – London Victoria	1 hr 22min – 1 hr 37min	4 every hour

Figure 2.4: Rail Services Available from Barnham Railway Station



3 DEVELOPMENT SITE

3.1 Overview

- 3.1.1 The proposed development would involve the construction of 71 residential dwellings. The site would be served from two accesses adjoining the western side of the A29 Lidsey Road - a priority T-junction serving the main body of the site, and a vehicle crossover serving 9 dwellings. The site and associated access arrangements are shown in **Appendix B**.
- 3.1.2 Pedestrian access to the site would be served from 2.0m wide footways flanking either side of the site's access road, connecting with the existing footways on the A29 Lidsey Road. Crossing facilities in the form of dropped kerbs and tactile paving would be provided to facilitate pedestrian movements across the primary access. The secondary access would provide pedestrian access via a shared surface arrangement.
- 3.1.3 Sustainable infrastructure improvements would be provided to enhance the site and wider local area's accessibility credentials. The improvements include the provision of multiple crossing points and footway improvements on Lidsey Road; enhancement of existing bus stops providing new shelters and increased hardstanding areas; and, new cycle parking facilities adjacent to the convenience shop north of the site. An overview of the proposed infrastructure improvements is provided in **Appendix B**.

3.2 Anticipated Vehicle Trips

- 3.2.1 WSCC's pre-application response has identified that the trip rates used in WSP's A29 Realignment Transport Business Case should be applied to derive the vehicular trip generation in the interests of consistency with other forthcoming developments in the locale. The approved vehicular trip rates are summarised in **Figure 3.1**.

TRICS Trip Rate per Dwelling			
Time Period	Arrivals	Departures	Two-way Total
AM Peak Hour	0.124	0.324	0.448
PM Peak Hour	0.312	0.161	0.473
TRICS Vehicle Trip Generation – 71 Dwellings			
AM Peak Hour	9	23	32
PM Peak Hour	22	11	34

Figure 3.1: WSP Trip Generation Assessment

- 3.2.2 WSP's Assessment does not however provide a daily trip rate which is required when setting trip reduction targets within a Travel Plan. A TRICS Assessment comparable to the WSP trip assessment has therefore been undertaken to provide robust daily trip generation figure as shown in **Figure 3.2**. The TRICS output is attached at **Appendix C**.



TRICS Trip Rate per Dwelling			
	Arrivals	Departures	Two-way Total
AM Peak Hour	0.128	0.368	0.496
PM Peak Hour	0.331	0.154	0.485
Total	2.286	2.375	4.661
TRICS Vehicle Trip Generation – 71 Dwellings			
AM Peak Hour	9	26	35
PM Peak Hour	24	11	34
Total	162	169	331

Figure 3.2: Anticipated Trip Generation

- 3.2.3 The TRICS trip generation robustly identifies that the proposed development would generate 331 daily vehicle trips, with 35 vehicle trips occurring during the AM peak period (08:00 – 09:00) and 34 vehicle trips during the PM peak period (17:00 – 18:00).



4 AIMS, OBJECTIVES AND TARGETS

4.1 Aims and Objectives

- 4.1.1 The aim of this Travel Plan is to reduce the long-term reliance upon the private car by effecting a change in attitude to travel and increasing awareness of alternative modes and the associated benefits of sustainable transport.
- 4.1.2 The objectives of this TP can therefore be summarised as follows:
- To minimise the number of residents travelling as single occupancy car drivers for various journey purposes to and from the site;
 - To identify a range of 'hard' and 'soft' measures that would facilitate a reduction in the generation of private vehicle trips and increase the uptake of sustainable travel modes;
 - To promote the financial, environmental and personal health benefits associated with the 'active' travel modes of walking and cycling;
 - To promote the TP and encourage participation amongst residents within national travel awareness events such as 'Bike, Walk and Liftshare' week.

4.2 Targets

- 4.2.1 The DfT's 'Making Residential Travel Plans Work: Guidelines for New Development' (2007) document, states that targets are required as they provide the TP with a clear and measurable direction over the initial 5-year lifecycle.
- 4.2.2 Site specific targets have been based on the DfT's "SMART" criteria so that the outcomes can be quantified and an assessment of what the Travel Plan has or will achieve can be made. SMART targets should be:

Specific

Measurable

Achievable

Realistic

Time-bound

- 4.2.3 The principal target for this TP will be:

To achieve a 10% reduction in vehicle trips to the site

- 4.2.4 The development site is anticipated to generate a total of 331 daily 2-way vehicle movements (see **Section 3.6**). This TP would therefore seek to reduce the number of daily trips to the site by 33 2-way movements (10%).



4.3 Trip Rate Reduction Targets

- 4.3.1 It is expected that the 33-vehicle trip reduction would be redistributed to other modes of travel. The likely modal split has been estimated using 2011 Census data 'Method of Travel to Work' based on existing travel patterns within the Barnham Ward attached at **Appendix D**. The anticipated modal split for the redistributed trips is shown in **Figure 4.2** and informs the scheme's TP trip reduction targets at years 3 and 5.

Mode of Transport	Change in Trips	
	3 rd Year	5 th Year
Car Driver	-17	-33
Train	+6	+13
On foot	+5	+9
Passenger in a car or van	+3	+7
Bicycle	+2	+3
Bus, minibus or coach	0	+1

Figure 4.2: Trip Reduction Target & Anticipated Modal Split for the Redistributed Vehicle Trips



5 MEASURES AND INITIATIVES

5.1 Introduction

- 5.1.1 To assist in achieving the proposed targets, this section considers the Travel Plan initiatives that will be implemented and refined during the 5-year life of the TP. The selected measures are appropriate to the site's location, and surrounding transport infrastructure/ services.
- 5.1.2 The initiatives include 'Hard' infrastructural measures (the provision of on-site and off-site facilities to support sustainable travel behaviour) as well as 'Soft' measures generally involving distribution of travel information and incentives.

5.2 Measures and Initiatives

Travel Welcome Pack

- 5.2.1 Modal shift away from single occupancy vehicles to more sustainable forms is more effective when targeting regular journeys, which are short in length. Furthermore, the lifetime event of moving into a new home represents a change in the situational context, providing a 'window of opportunity' for enabling previous habitual travel behaviour (i.e. private car use) to be reconsidered.
- 5.2.2 In order to raise awareness of the TP and associated measures, information pertaining to all modes of transport a Travel Welcome Pack (TWP), distributed to all residents. The following information would be included: -
- An outline of the main aims / objectives of the TP, the reasons for implementing the TP, and the role of individuals in achieving the aspirations of the TP;
 - Details of the financial, environmental and personal health benefits associated with the 'active' travel modes of walking and cycling;
 - Public transport fares and maps showing the location of the nearest bus stops / rail station and up-to-date bus and rail service timetables;
 - Contact details of the appointed Travel Plan Co-ordinator.

Walking and Cycling

- 5.2.3 Where convenient and safe links are available there is significant opportunity to reduce the need for short journeys (i.e. less than 2 kilometres in length) by car, thereby reducing the level of traffic on the surrounding highway network.
- 5.2.4 Proposed offsite infrastructure improvements include the provision of several new and upgrading pedestrian crossing points on Lidsey Road and across adjoining side roads. Footways leading from the site to the north and south would also be improved. The pedestrian infrastructure improvements are demonstrated in **Appendix B**.
- 5.2.5 To encourage travel on-foot and by cycle, information on local walking/cycle routes, including approximate journey times, will be provided within the TWP. Information would also be provided for apps and website's such as Strava, Endomondo, MapMyWalk and West Sussex Cycle Journey Planner.



- 5.2.6 Each property would be provided with a £150 cycle voucher funded by the developer. The Vouchers would be arranged with local cycle retailers by the travel plan co-ordinator. Based on the location and context of the site, cycling is considered to be the most suitable mode of transport to apply financial incentives to.

Public Transport

- 5.2.7 To promote the use of existing public transport services, up-to-date and relevant timetable / route map information would be gathered by the appointed TPC and presented as part of the travel information packs.
- 5.2.8 Proposed offsite infrastructure improvements include the relocation and enhancement of existing bus stops through the provision of bus shelters and increased waiting area. The bus stop infrastructure improvements are demonstrated in **Appendix B**.
- 5.2.9 Service information for local public transport links would be provided listing available destinations, typical journey times and frequencies, as well as links to real time service information within the TWP. Information would be provided detailing public transport fares including a cost comparison with car travel.

Car Sharing

- 5.2.10 Car sharing involves two or more people travelling together for all or part of a journey. It represents a relatively convenient, flexible and cost-effective mode of travel car sharers living and working in similar locations.
- 5.2.11 As part of the Travel Plan, the West Sussex car sharing website, part of www.liftshare.com (the UK's largest car share database) will be promoted. This service is free to sign up to and aims to facilitate car sharing on a regular basis by enabling users to contact others who they could potentially share with.
- 5.2.12 The Liftshare website provides a 'savings calculator' to enable members to work out the cost savings of car sharing as part of a regular journey. It is noteworthy that for journeys comprised of 10 miles, an individual can save in the order of £464 per annum when sharing with one other person, and £928 per annum when sharing with two others.

Car Club

- 5.2.13 Car clubs allow residents to rent a car on a short-term basis as and when they need to. This allows residents who do not typically require a use of a private car to use vehicles without private ownership, encouraging use of more sustainable modes for other journeys.
- 5.2.14 A car club would be promoted for use by residents of the site as well as residences of the surrounding area. The car club would be promoted within the Travel Welcome Pack.



5.3 Committed Travel Plan Measures

5.3.1 The committed measures to be included in the TP are summarised in **Figure 5.1**.

Mode	Measure	Delivery
Walking	Proposed offsite infrastructure improvements, including: -	
	i) the provision of several new and upgrading pedestrian crossing points on Lidsey Road and across adjoining side roads;	Delivery via S106
	ii) Footways leading from the site to the north and south would be improved;	
	iii) A new section of footway, linking the extant footway network and Lee's Yard	
	To encourage travel on-foot, information on local walking routes, including approximate journey times, will be provided.	To be included within TWP
	Information would be provided for apps and website's such as Strava, Endomondo and MapMyWalk.	
Cycling	To encourage travel on bike, information on local cycle routes, including approximate journey times, will be provided within the TWP.	To be included within TWP
	Information would be provided for apps and website's such as Strava, Endomondo, MapMyWalk and West Sussex Cycle Journey Planner.	
	Each property would be provided with a £150 cycle voucher funded by the developer.	Vouchers agreed with between Travel Plan Coordinator and local cycle retailers and funded by developer.
Bus	Proposed offsite infrastructure improvements, including:-	
	i) The relocation and enhancement of existing bus stops through the provision of bus shelters and increased waiting area.	Delivery via S106
	ii) Improved crossing facilities to access the new bus stops.	
	Details will be provided regarding the financial, environmental and personal health benefits associated with the 'active' travel modes of walking and cycling.	To be included within TWP
	Provision of public transport fares and maps showing the location of the nearest bus stops and up-to-date bus service timetables.	
Train	Details will be provided regarding the financial, environmental and personal health benefits associated with the 'active' travel modes of walking and cycling.	To be included within TWP
	Provision of public transport fares and maps showing the location of the nearest bus stops and up-to-date rail service timetables.	
Vehicle Sharing	The West Sussex car sharing website, part of www.liftshare.com (the UK's largest car share database) will be promoted.	To be included within TWP

5.1: Committed Travel Plan Measures



5.4 Remedial Measures

- 5.4.1 In the event that the Travel Plan's year 3 target (reduction of 17 daily 2-way vehicle trips) has not been achieved after the 3rd year of Travel Plan implementation, the TPC will initiate the following remedial measures:
- i. Provide additional bus/rail season ticket discounts;
 - ii. Provision of Car Club for residents;
 - iii. Grocery home delivery services will be incentivised, and a voucher included in the TWP;
 - iv. Creation of a Bicycle User Group (BUG). The BUG would be made up of residents who are interested in cycling and would raise awareness of 'Cycle-to-Work' schemes;

5.5 Effectiveness of Travel Plan Measures

- 5.5.1 The measures and initiatives detailed above would reduce the level of car use associated with the site, consequently increasing the use of sustainable modes and achieving the target set. However, the list is not exhaustive and the appointed TPC is encouraged to investigate other potential initiatives.



6 MANAGEMENT, MONITORING AND REVIEW

6.1 Introduction

6.1.1 This section of the report sets out a strategy for managing the implementation of the outlined measures, as well as a framework for monitoring and reviewing the TP.

6.2 Management

Travel Plan Co-ordinator

6.2.1 The TPC is responsible for implementing and promoting the Travel Plan throughout the 5-year operation of the site. This includes carrying out biennial (i.e. end of Years 1, 3) residents travel surveys, ensuring up to date travel information is displayed and communicating with WSCC's Travel Plan Officer.

6.2.2 The Travel Plan Co-ordinator would be responsible for undertaking the following key tasks:

- i. On-going promotion / marketing of the TP and associated measures including the preparation of travel information to be presented to residents;
- ii. Organising the implementation of travel surveys to be undertaken on a biennial basis, following the establishment of baseline travel patterns and behaviour;
- iii. Preparing biennial TP Monitoring reports highlighting the main results of each survey; and summary of measures enacted over previous year and resources expended on the Travel Plan;
- iv. Acting as the main point of contact for residents, WSCC's Travel Plan Officer, and other relevant stakeholders.

6.2.3 To ensure effective communication between residents and other internal / external stakeholders, the contact details of the Travel Plan Co-ordinator including telephone number and e-mail address will be provided within Travel Welcome Packs.

6.3 Monitoring and Review

6.3.1 The Travel Plan will be monitored using TRICS UK Standard Assessment Methodology (TRICS SAM) in accordance with WSCC Development Travel Plan Policy. Data gathered from the surveys will be used to track to progress of the Travel Plan and to inform future mode share targets. Prior to the implementation of the TRICS SAM assessment a simple Travel Audit would be commissioned to establish how new residents are traveling to and from the site. The survey schedule is demonstrated in **Figure 6.1**.

Survey	Survey Date
Travel Audit	Within 3 months of 50% Occupation
Year 1 TRICS SAM	Within 6 months of Full Occupation
Year 3 TRICS SAM	On 2 nd anniversary of year 1 survey
Year 5 TRICS SAM	On 4 th anniversary of year 1 survey

Figure 6.1: TRICS SAM Survey Schedule

6.3.2 The Travel Audit will comprise a number of questions relating to travel patterns (i.e. travel modes, distance and journey times). Respondents to the survey will also be requested to provide their comments on exiting TP measures as well as suggest potential improvements.



- 6.3.3 To ensure a reasonable level of response, a paper version of the travel questionnaire will be distributed to households as well as a link posted on a community website. The TPC would require a minimum response rate of 30% of residents to ensure the results of the surveys can be considered statistically significant.
- 6.3.4 TPC will prepare Monitoring Report's within 3 months of each survey. The reports will outline the results of the surveys and incorporate the findings of on-going monitoring undertaken through the proceeding period. A copy of the report will be issued to WSCC's Travel Plan Officer for comment and discussion as well as being filed for records.
- 6.3.5 To maintain the emphasis of the TP it is suggested that the results of the monitoring / review process are communicated to residents. This could be done through a site newsletter or by displaying data on a community website.
- 6.3.6 In the event that the Travel Plans' year 5 target (10% reduction in daily vehicle trips) has not be achieved after the 5th year of the Travel Plan implementation, monitoring of the Travel Plan will continue to year 9.

6.4 Action Plan

- 6.4.1 An action plan is presented below in **Figure 6.2**, highlighting relevant measures, timescales and the individuals responsible for ensuring the co-ordination / implementation of the TP.

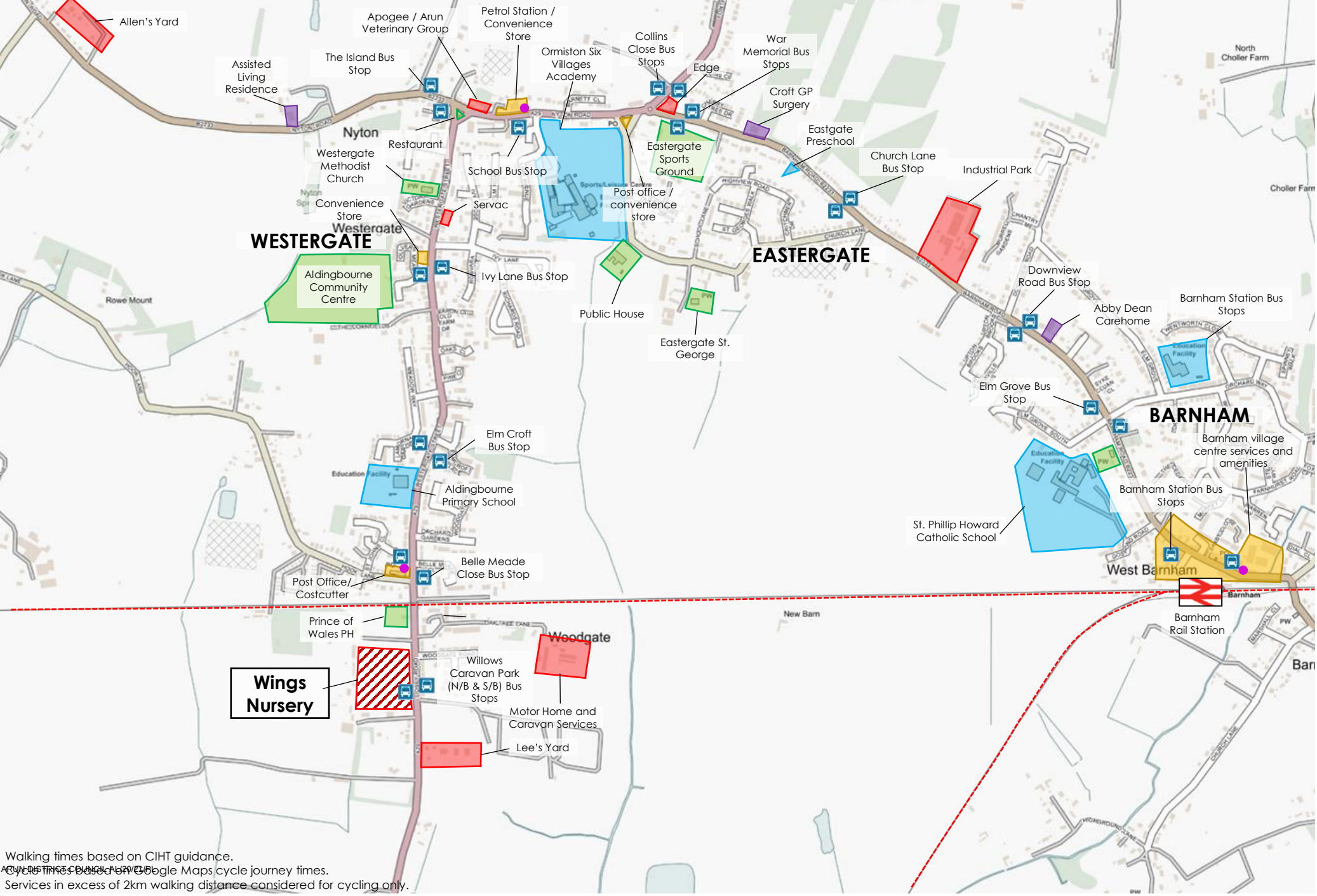
Measure	Timescale	Responsibility
Installation of Pedestrian Crossing, Footway, Bus Stop and cycle storage infrastructure improvements.	Prior to initial occupation	Developer
Appoint Travel Plan Co-ordinator to oversee the implementation of sustainable travel measures	Upon acceptance of Travel Plan	Site Management Company
Submit contact details of appointed TPC to WSCC	Within 3 months of 50% occupation	TPC
Commission Baseline Travel Audit	Within 3 months of 50% occupation	TPC
Prepare and disseminate travel information packs	Within the first 3 months of occupation	TPC
Conduct Year 1 travel survey	6 months of 100% occupation	TPC
Prepare Monitoring Report and submit to WSCC Travel Plan Officer	Within 3 months of undertaking the year 1 survey	TPC
Conduct Year 3 travel survey	On 2 nd anniversary of year 1 survey	TPC
Prepare Monitoring Report and submit to WSCC Travel Plan Officer	Within 3 months of undertaking the year 3 survey	TPC
Conduct Year 5 travel survey	On 4 th anniversary of year 1 survey	TPC
Prepare Monitoring Report and submit to WSCC Travel Plan Officer	Within 3 months of undertaking the year 5 survey	TPC
Initiate remedial measures	After year 3 (if year 3 target is not achieved)	TPC

Figure 6.2: Action Plan



PLANS

Plan 01 Accessibility Plan



LEGEND

- SITE LOCATIONS
- RAIL STATION
- RAILWAY
- BUS STOPS
- CYCLE ROUTES
- NATIONAL CYCLE ROUTE
- 2KM WALK ISOCHRONE
- RETAIL
- EDUCATION
- LEISURE
- HEALTH CARE
- EMPLOYMENT

Distances to Amenities		
Destination	Wings Nursery	
	Distance from Site	Walk / Cycle Time
Convenience Shop	0.27 km	3mins walk
Post Office	0.27 km	3mins walk
GP	2.24 km	7mins cycle
Public House	0.17 km	2mins walk
Bus Stop	0.03 km	<1min walk
Train Station	3.84 km	12mins cycle
ATM	0.27 km	3mins walk
Bus Stop with services to Chichester	1.56 km	19mins walk
Nearest Primary School	0.50 km	6mins walk
Nearest Secondary School	1.65 km	20mins walk

Walking times based on CIHT guidance.
Cycle times based on Google Maps cycle journey times.
Services in excess of 2km walking distance considered for cycling only.



APPENDICES



Appendix A WSCC Pre-Application Comments

**WEST SUSSEX COUNTY COUNCIL
PRE APPLICATION CONSULTATION**

TO:	Organisation: Bright Plan Transport Planning and Civil Engineering Consultants FAO: Sam O'Halloran and Alex Budd
FROM:	WSCC - Highways Authority: Tim Townsend
DATE:	3rd February 2020
LOCATION:	Wings Nursery, Lidsey Road Woodgate Chichester PO20 3SU
SUBJECT:	Internal Reference: PRE-03-2020 75 residential dwellings.
DATE OF SITE VISIT:	n/a for purposes of this pre-app. Site was visited when previous planning applications at the site were considered.
RECOMMENDATION:	Advice
S106 CONTRIBUTION TOTAL:	Yes – but amount TBA at time of planning submission

The Highways Authority has been consulted for pre-application advice in regard to the proposed development at:

Wings Nursery,
Lidsey Road,
Woodgate,
Chichester,
West Sussex,
PO20 3SU.

The advice provided below has been prepared by means of a desktop study and site visits, using the information and plans submitted with this request, in conjunction with other available WSCC map information.

Standard WSCC Highway Information.

The Highway Authority would require the following documents to be submitted as part of any future application:

- A site location plan scale (1:1250) with site boundary indicated.
- Schedule of existing uses including planning history with reference numbers.
- Description, including site layout plans, of the proposed development and schedule of uses.

- Summary of reasons supporting the site access/highways works proposals, including plan (scale 1:250 or similar) with achievable visibility splays indicated.
- Design Audit of any proposed highway works, including plan identified departures from standards.
- Final Stage 1 Road Safety Audit of site access and any proposed highway works, with designer's response and including amended plans.
- A Transport Statement, including location plan of key services, availability of sustainable modes of transport and existing/future vehicular generation.
- Reference to supporting national, regional, and local planning documents and policies.
- Parking strategy, including provision of parking for all modes of transport
- Relevant data collected to date.
- Proposed trip rates supported with TRICS outputs and site selection methodology.
- Junction capacity assessment in accordance with the WSCC Transport Assessment Methodology.

Also provided, is some standard guidance relating to road design and current standards:

There are two sets of guidance which govern road design: Manual for Streets (MfS) for lightly trafficked residential streets; and Design Manual for Roads and Bridges (DMRB) for all other roads, including rural roads. I have included links to both below.

WSCC supports the approach set out in MFS, which has been adopted guidance for residential street design since its introduction in 2007. Within this document there are some very useful references to visibility splays, turning circles and car parking layouts. The document does not however provide specific measurements for visibility splays, so:

"X "Distances from the (kerb back) are typically:

- 2.0 metres -domestic single accesses
- 2.4 metres- for shared or busy crossovers
- 4.5 metres- for busy junctions
- 9.0 metres-major junctions

"Y "Distances are based on vehicle speed, and for lightly trafficked residential streets MFS would be applied:

- 20 mph- 25 metres
- 25 mph- 33 metres
- 30 mph- 43 metres

For a road where the 85th percentile speed is in excess of 37 mph and for roads where MFS does not apply, TD/93 distances from DMRB would be applied:

- 40 mph-120 metres
- 50 mph-160 metres
- 60 mph-215 metres

A link is found below providing access to our Local Design Guide which provides further advice on how MfS is to be interpreted and applied within West Sussex.

The 'Additional Information' section of the WSCC Pre-application advice for roads and transport webpage provides a range of additional advice and guidance which you may find useful in preparing your application. Please click the link below and navigate to the 'Additional Information' section.

<https://www.westsussex.gov.uk/roads-and-travel/information-for-developers/pre-application-advice-for-roads-and-transport>

Here you will be able to access our Local Design Guide which provides further advice on how MfS is to be interpreted and applied within West Sussex.

The page also includes a link to our latest parking standards which we adopted in August 2019 as Supplementary Planning Guidance (SPG) that sets out parking standards for development in West Sussex. Within you will find recommended levels for cycle parking and also guidance on levels of Electric Vehicle charging points for new developments.

Manual for Streets:

<http://www2.dft.gov.uk/pgr/sustainable/manforstreets/pdfmanforstreets.pdf>

DMRB supplementary documents TD/93:

<http://www.dft.gov.uk/ha/standards/dmr/vol6/section1/td993.pdf>

Further site-specific observations for consideration in any final layout following review of 'Site Overview' Drawing No. 2019-6115-000:

- It is not clear how plots C3H4.1 and C4H2 (facing Lidsey Road) will be accessed (the southern-most ones adjacent to the private drive fronting Lidsey Road).
- Please demonstrate Fire and Rescue and Refuse access along private driveway to front of site (including, where required, on-site turning) – same for plots C2H3 in south-eastern corner of site.
- On-curtilage parking provision is possibly overly generous for a high number of plots throughout the layout – this should be re-visited in an attempt to improve take-up of sustainable transport modes (albeit being mindful of the

revised WSCC Parking Guidance which now states that garages are counted as 0.5 spaces whereas previously they were counted as 1).

- Visitor parking is lacking in northern-part of the site layout and close to the initial part of the main access road where it leaves Lidsey Road.
- Lack of service margins in places.
- Plots immediately to the north of the main access road into the site would be better designed with on-curtilage parking off the access road instead of relying on access to/from the rear as this will lead to on-street parking along the initial part of the main access road.
- Parking for plots C3H4.1 (the pair between the main access and the access serving the plots in the south-eastern corner) would benefit from having access shown beside them instead of to the rear (again to minimise parking on the road in front).
- Access to gardens for some of the mid-terrace properties not shown.
- Access driveways in south-eastern and south-western corners should be extended to provide better turning opportunities for occupiers.
- Please state dimensions of the private driveway serving the plots 'fronting' Lidsey Road to the north-eastern part of the site (to demonstrate that vehicles will have sufficient space to enter and leave their driveways). Visitor spaces need to be shown in this location too.
- No cycle storage shown.
- The provision of a foot/cycle connection from the main part of the site to the north-eastern corner of the site should be investigated to maximise opportunities to travel sustainably between the site and local facilities (PH, shops, school etc.).

Additional info. and/or requirements:

- A new Stage 1 Road Safety Audit undertaken in accordance with GG119 should be provided.
- Given that the previous 55 home proposal was recently considered, a Transport Statement will suffice for this current proposal. However, please reference the previous scheme and TA in it. Please ensure that the additional traffic impact at the access points, Lidsey Road and nearby railway crossing is clearly documented and shown in tabular form showing comparisons between the approved and now proposed (larger) scheme.
- A financial contribution towards the BEW Strategic Development site will be required (to be secured by S106 Agreement).
- Other off-site highways infrastructure will also need to be provided and secured - again using S106 Agreement.
- Financial contributions towards non-highways infrastructure will also be required (to be secured by S106 Agreement).*
- A new or updated Travel Plan will be required to reflect the additional number of dwellings.
- Please confirm whether roads are to be kept private or offered for adoption.

(*Arun District Council proposes to implement CIL from April 2020. This might change how some of the contributions are secured. Full details of the proposals can be found on the Arun DC Planning website).

Comments in response to Technical Note Ref: THAH/19/6115 (January 2020) prepared by Bright Plan Ltd.

- *Proposed bus infrastructure* – Comments about bus shelters set-out in paragraph 4.3.1 (page 13) are noted. Specifically concerning bus shelters, it is WSCC's preference that shelters be provided. However, this is dependent on the local Parish Council accepting maintenance of said structures. In the event they refuse to maintain them, then the bus provision requirement – while still remaining – would revert to new stops and poles (alongside any extended footways, crossing points etc). Any S106 Agreement should be written to cover both eventualities.
- *Railway crossing and associated impact* – With regard to that stated in paragraph's 5.3.4-5.3.6, depending on when the Wings site is developed (which I am sure is likely before 2031), then there will be traffic impact at the crossing for a number of years. Of course, the impact will change over time as the A29 and associated Strategic Location is built-out. However, there will be actual impact for some time which cannot be simply classed as *theoretical* as the Technical Note states. Please also note comments below about trip rates as these should be used in any assessment of the queues at the railway crossing.
- *Proposed cycle infrastructure* – Comments contained in paragraph 4.4.1 (page 13) are noted. However, similar to the bus shelters, if it is not feasible to provide these on the land shown, then the S106 should cover that too in the same way as was done for the previous 55-home proposal.
- *Trip rates* – The trip rates set-out in the Technical Note vary from those used for the previous 55 home proposal submitted in 2019 under planning reference AL/32/19/PL – with some trip rates being slightly higher and others slightly lower. However, WSCC is now of the view that the trip rates used to support the recent A29 Business Case application be used for consistency with other forthcoming developments nearby.

They are as follows:

AM arr (08:00-09:00) - **0.124**; dep - **0.324**

PM arr (17:00-18:00) - **0.312**; dep - **0.161**

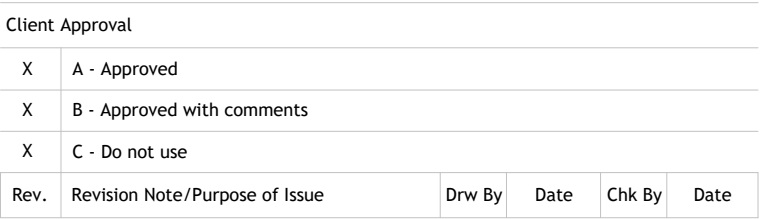
Other than the PM departures, the rates are all slightly lower than the ones you set-out in your Technical Note. Applying them to the 75 homes proposed, shows that they don't appear to make too much difference with the only increase being the PM departure (12 departures instead of 9).

I trust you appreciate that any advice given by council officers for pre-application enquiries does not constitute a formal response or decision of the council with regard to the granting of planning permission in the future. Any views or opinions expressed are given in good faith, and to the best of ability, without prejudice to the formal consideration of any application, which will be the subject of public consultation and ultimately decided by the Local Planning Authority.

Tim Townsend
Highways, Transport and Planning



Appendix B Site Overview





Appendix C TRICS Data

Calculation Reference: AUDIT-305901-200224-0202

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

VEHICLESSelected regions and areas:

02 SOUTH EAST		
ES	EAST SUSSEX	2 days
HC	HAMPSHIRE	3 days
KC	KENT	1 days
SC	SURREY	1 days
WS	WEST SUSSEX	2 days
03 SOUTH WEST		
DV	DEVON	2 days
SM	SOMERSET	1 days
WL	WILTSHIRE	1 days
04 EAST ANGLIA		
CA	CAMBRIDGESHIRE	2 days
NF	NORFOLK	5 days
SF	SUFFOLK	3 days
05 EAST MIDLANDS		
LN	LINCOLNSHIRE	1 days
06 WEST MIDLANDS		
SH	SHROPSHIRE	2 days
ST	STAFFORDSHIRE	1 days
WK	WARWICKSHIRE	1 days
07 YORKSHIRE & NORTH LINCOLNSHIRE		
NY	NORTH YORKSHIRE	4 days
08 NORTH WEST		
CH	CHESHIRE	4 days
LC	LANCASHIRE	1 days
09 NORTH		
DH	DURHAM	2 days
10 WALES		
PS	POWYS	1 days
VG	VALE OF GLAMORGAN	1 days

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

Secondary 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: Number of dwellings
 Actual Range: 6 to 99 (units:)
 Range Selected by User: 6 to 100 (units:)

Parking Spaces 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: 01/01/11 to 25/09/19

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	8 days
Tuesday	9 days
Wednesday	11 days
Thursday	9 days
Friday	4 days

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

Selected survey types:

Manual count	41 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.

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 41

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

Secondary Filtering selection:

Use Class:

C3 41 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 1 mile:

1,001 to 5,000	5 days
5,001 to 10,000	9 days
10,001 to 15,000	9 days
15,001 to 20,000	9 days
20,001 to 25,000	5 days
25,001 to 50,000	4 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	4 days
25,001 to 50,000	4 days
50,001 to 75,000	6 days
75,001 to 100,000	10 days
100,001 to 125,000	2 days
125,001 to 250,000	15 days

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

Car ownership within 5 miles:

0.6 to 1.0	10 days
1.1 to 1.5	31 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	11 days
No	30 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	41 days
-----------------	---------

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

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

VEHICLES**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	41	39	0.081	41	39	0.324	41	39	0.405
08:00 - 09:00	41	39	0.128	41	39	0.368	41	39	0.496
09:00 - 10:00	41	39	0.154	41	39	0.185	41	39	0.339
10:00 - 11:00	41	39	0.132	41	39	0.161	41	39	0.293
11:00 - 12:00	41	39	0.159	41	39	0.159	41	39	0.318
12:00 - 13:00	41	39	0.159	41	39	0.161	41	39	0.320
13:00 - 14:00	41	39	0.168	41	39	0.173	41	39	0.341
14:00 - 15:00	41	39	0.157	41	39	0.192	41	39	0.349
15:00 - 16:00	41	39	0.266	41	39	0.187	41	39	0.453
16:00 - 17:00	41	39	0.298	41	39	0.168	41	39	0.466
17:00 - 18:00	41	39	0.331	41	39	0.154	41	39	0.485
18:00 - 19:00	41	39	0.253	41	39	0.143	41	39	0.396
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.286			2.375			4.661

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.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

Trip rate parameter range selected:	6 - 99 (units:)
Survey date range:	01/01/11 - 25/09/19
Number of weekdays (Monday-Friday):	41
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	3
Surveys manually removed from selection:	0

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



Appendix D Census Data

QS701EW - Method of travel to work

ONS Crown Copyright Reserved [from Nomis on 20 January 2021]

population	All usual residents aged 16 to 74
units	Persons
area type	2011 wards
area name	E05007580 : Barnham
rural urban	Total

Method of Travel to Work	2011
All categories: Method of travel to work	6,199
Train	357
Bus, minibus or coach	22
Driving a car or van	3,028
Passenger in a car or van	189
Bicycle	94
On foot	251

In order to protect against disclosure of personal information, records have been swapped between different geographic areas. Some counts will be affected, particularly small counts at the lowest geographies.