

Land North of Toddington Lane Littlehampton

Transport Statement



Land North of Toddington Lane Littlehampton

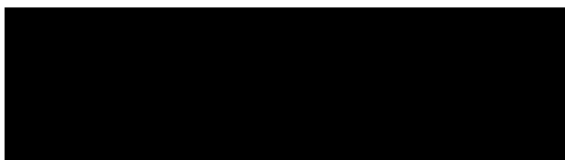
Transport Statement

2nd December 2021
SKP/BP/23104-01 Transport Statement

Prepared by:

David Tucker Associates

Forester House, Doctors Lane
Henley-in-Arden
Warwickshire
B95 5AW



Prepared For:

T&L Crawley No.2 LLP

© **David Tucker Associates**

No part of this publication may be reproduced by any means without the prior permission of David Tucker Associates



TABLE OF CONTENTS

	Page
1.0 INTRODUCTION.....	1
2.0 POLICY.....	3
3.0 EXISTING CONDITIONS.....	5
4.0 DEVELOPMENT PROPOSALS.....	9
5.0 TRAFFIC GENERATION AND IMPACTS.....	11
6.0 SUMMARY AND CONCLUSIONS.....	11

Drawings

23104-01	Site Accesses
23104-01-2	Site Access Refuse Vehicle Tracking

Appendices

Appendix A	Site Location plan
Appendix B	Highway Infrastructure
Appendix C	Local Facilities Plan
Appendix D	Indicative Masterplan
Appendix E	Previous TA Trip rates
Appendix F	TRICS output



1.0 INTRODUCTION

- 1.1 David Tucker Associates (DTA) have been commissioned by T & L Crawley No.2 LLP to provide highways and transport advice to support an outline planning application for up to 71 dwellings at land off Toddington Lane, Littlehampton, West Sussex.
- 1.2 The site location plan is attached at **Appendix A**.
- 1.3 The site falls within an outline consent (LU/47/11) secured for North Littlehampton Strategic Development Area, comprising mixed use development including up to 1260 dwellings; up to 13,000sqm of B1 employment floorspace; up to 3,500sqm of Class A local facilities; a 100 bed hotel; 60 bed care home; 2 form entry primary school; and a range of associated infrastructure and facilities. Primary vehicular access was established from a new access from the A259 by bridging over the railway line with additional access from Mill Lane and Toddington Lane, and subject of a separate consent (LU/63/11).
- 1.4 The LU/47/11 application was the subject of a Transport Assessment (TA) report prepared by Mayer Brown in 2011.
- 1.5 The current application comprises two parcels, north and south of a local access road. The design of the vehicular accesses has been fixed into each parcel by the previous consent and hence access has already been agreed. Similarly, vehicular access to the wider network via a new 4 arm roundabout has been established. The roundabout and parcel accesses are shown in **Appendix B**.
- 1.6 Within the consented indicative masterplan for the strategic development area, the two parcels comprised of B1 floorspace.
- 1.7 Given that the sustainable credentials of the site and the access arrangements have been confirmed by the previous consent, those elements are only covered briefly in this transport statement (TS).



1.8 This TS has been prepared in accordance with the National Planning Policy Framework (NPPF) July 2021. The NPPF document states that all developments that generate significant amounts of movements should be supported by a Transport Statement or Transport Assessment.

1.9 This Transport Assessment includes the following headings:

- Chapter 1: Introduction
- Chapter 2: National and Local Policy
- Chapter 3: Existing Conditions
- Chapter 4: Development Proposals
- Chapter 5: Traffic Generation and Impacts
- Chapter 6: Summary and Conclusions



2.0 POLICY

2.1 National Policy

Revised National Planning Policy Framework (July 2021)

2.1.1 The revised National Planning Policy Framework (NPPF) was published in July 2021 and sets out the government's planning policies for England and how these are expected to be applied.

2.1.2 Paragraph 111 of the NPPF is clear 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".

2.1.3 Within this context, the NPPF identifies in Paragraph 112 that applications for development should:

"a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;

b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;

c) create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;

d) allow for the efficient delivery of goods, and access by service and emergency vehicles;

e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations."

2.1.4 Paragraph 113 of the NPPF goes on to state that:

"All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport



assessment so that the likely impacts of the proposal can be assessed".

- 2.1.5 In reinforcing the principle of supporting sustainable development, paragraph 10 stipulates that at the heart of the Framework is "...a presumption in favour of sustainable development".

2.2 Local Policy

Arun District Council Local Plan 2011 – 2031 (July 2018)

- 2.2.1 The Local Plan provides a strategy for the delivery of new infrastructure, homes and jobs for 2031 and beyond. Key transport policies specified for the proposed site include:

"Reduce the need to travel and promote sustainable forms of transport"

- 2.2.2 The West Sussex Transport Plan 2011-2026 identifies key transport issues in the district including;

"Road congestion during peak hours which causes disruption and air pollution"

- 2.2.3 Policy T SP1 Transport and development states the council will support transport and development which;

"Is designed to reduce the need to travel by car by identifying opportunities to improve access to public transport services and passenger transport services whilst making provision for safe access to the highway network through the improvements to the existing road network and the promotion of vehicles which use low-carbon energy"

"incorporates appropriate level of parking in line with West Sussex County Council guidance on parking provision and the Arun Design Guide taking into consideration the impact of development upon on-street parking".



3.0 EXISTING CONDITIONS

3.1 Site Location

- 3.1.1 The site is located to the north of Littlehampton which lies 15km west of Worthing and approximately 20km east of Chichester. It is bound by newly developed residential properties to the south and west.

3.2 Surrounding Highway Network

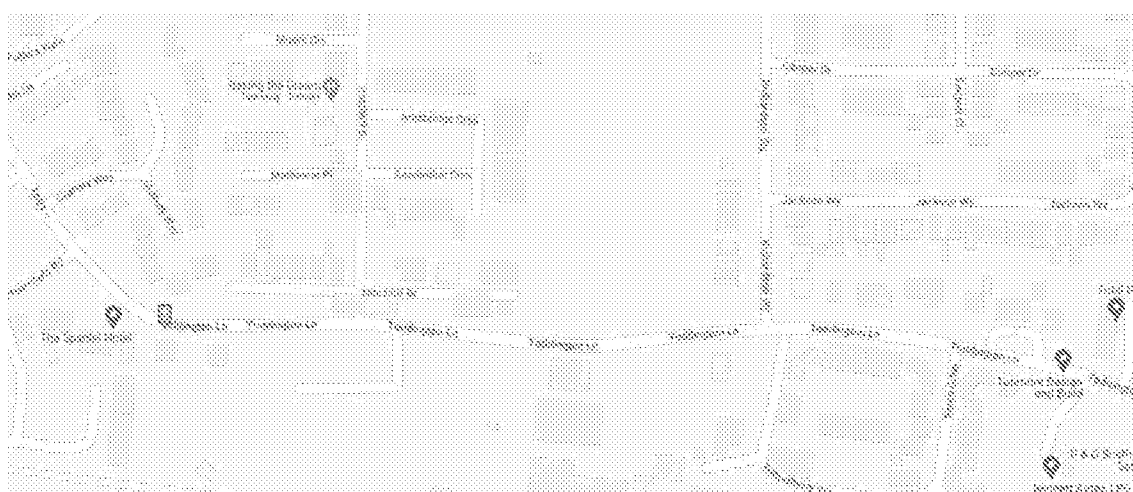
- 3.2.1 Toddington Lane is a single carriageway road and runs in a northwest-south direction. The road is approximately 6m in width and subject to a 30mph speed limit commencing from existing properties along the eastern side. It connects the A259 to the south to the A284 to the northwest. The surrounding area is predominantly residential in nature.
- 3.2.2 The A259 runs from west to east and connects Bognor Regis to Goring by Sea. Both areas then join the A27 which provides links to Portsmouth, Brighton and Eastbourne.
- 3.2.3 The Lyminster southern bypass has been constructed to the new 4 arm roundabout to wearing course level. The subsequent phase to the north is under construction.



3.3 Personal Injury Collision Data

- 3.3.1 Personal injury collision data has been reviewed from www.crashmap.co.uk for the latest five-year period from 2017-2021. There has been 1 recorded accident on Toddington Lane approximately 200m to the west of the site. The accident involved two vehicles that collided at low speed. Figure 1 below shows the area of Toddington Lane that was surveyed. The accident record does not indicate any highway safety concerns.

Figure 1 – Personal Injury Collision Data



3.4 Walking and Cycling

- 3.4.1 To the immediate south of the site boundary is the Hinchliff Drive housing development, and along this frontage of Toddington Lane there is a newly created 3.0m footway cycleway running along the northern edge. Whilst Toddington Lane does not have further cycling provisions the road does lend itself to cycling as does the wider area within Littlehampton.

3.5 Public Transport – Bus

- 3.5.1 The nearest bus stops are currently located on the A284 approximately 915m north from the site. These bus stops are served by bus route No. 9.
- 3.5.2 A summary of the local bus services are provided in **Table 3.1**



Table 3.1 – Bus Service Provision

Service	Route	Frequency		
		Monday – Friday	Saturday	Sunday
9	Shoreham – Lancing – Worthing – Angmering – Littlehampton – Arundel	Hourly	Hourly	No services
700	Littlehampton – Bognor Regis – Chichester – Emsworth – Havant – Portsmouth	30 minutes	Hourly	Hourly

3.6 Public Transport - Rail

- 3.6.1 Littlehampton Train Station is located 2.0km to the south of the site and is operated by Southern Rail and Thameslink. The station has a car park for 38 spaces with 3 disabled spaces, ticket office and machines, customer help points, toilets and waiting rooms.
- 3.6.2 A summary of the railway services and frequencies are summarised in **Table 3.2** below.

Table 3.2 – Train service provision – Littlehampton Train Station

Destination	Approx. Journey Time
Portsmouth & Southsea	Hourly
London Victoria via Worthing & Hove	30 minutes
Bognor Regis	Hourly

3.7 Local Facilities

- 3.7.1 It is generally considered that for distances under 2km, walking offers the greatest potential to replace short car trips. For distances under 5km, cycling also has the potential to substitute for short car trips.
- 3.7.2 The nearest primary school is Lyminster located around 1.1km south of the site and



accessed via the A284 and Toddington Lane.

3.7.3 East Street Dental Practice is located 2.9km south of the site.

3.7.4 The local medical practice is Fitzalan Medical Group located 2.0km south of the site.

3.7.5 The nearest convenience store is a Premier local (870m from the site).

3.7.6 As can be seen, there are a number of local facilities within reasonable walking and cycling distance of the site. An overview of these local facilities is included as **Appendix C**.

3.7.7 The outline consent for the strategic development area includes a primary school and local (A class) facilities.



4.0 DEVELOPMENT PROPOSALS

4.1 Overview

- 4.1.1 The indicative masterplan is shown at **Appendix D**. The layout compromises 71 dwellings.

4.2 Site Access

- 4.2.1 The development will be accessed via Spur Road which is the western arm of the new roundabout. It is 7.3m in width, with two 2.0m footways on each side, and runs from east to west, terminating to the west of the site boundary.
- 4.2.2 The site is accessed via two priority junctions one to the north of Spur Road and one to the south. Both site accesses are 6.0m in width with 6.0m radii's. **DTA Drawing 23104-01** shows the access locations and the visibility splays based on the requirements of Manual for Streets.
- 4.2.3 **Drawing 23374-01-1** shows refuse vehicle tracking of the site accessed based on a large refuse vehicle of 11.0m. The drawing shows that the vehicle can enter and exit in a forward gear with suitable turning heads located within in the site on the indicative masterplan.
- 4.2.4 The indicative masterplan demonstrates the provision of a footpath connection to the south of the southern parcel.

4.3 Car and Cycle Parking Provision

- 4.3.1 Car parking will be provided in line with the current car parking standards set out in Arun District Council's Guidance on Parking Standards Supplementary Planning Document (January 2020). The site lies within Zone 2 as outlined in the document and therefore the (minimum no. of spaces) standards for car parking for the site is;
- 1 bedroom (1 to 3 habitable rooms) – 2 spaces
 - 2 bedrooms (4 habitable rooms) – 2 spaces



- 3 bedrooms (5 to 6 habitable rooms) – 2 spaces
- 4+ bedrooms (7 or more habitable rooms) – 3 spaces

4.3.2 A further 20% visitor parking spaces are also required and will be provided.

4.3.3 Cycle parking provisions will also be provided in line with Arun District Council's Parking Standards in Sustainable Communities SPD September 2014. The (long stay) standards for cycle parking states:

- Houses up to 4 rooms (1 & 2 bed) – 1 space
- Houses 5+ rooms (3 bed) – 2 spaces
- Flats up to 3 rooms (1 & 2 bed) – 1 space (if communal storage otherwise the same as 1 & 2 bed house)
- Flats 4+ rooms (3+ bed) – 1 space

4.4 **Travel Plan**

4.4.1 The proposed development will be supported by a Residential Travel Plan. A Framework TP is provided under separate cover.



5.0 TRAFFIC GENERATION AND IMPACTS

5.1 Trip Generation

- 5.1.1 The site already benefits from an outline consent. The parcels were formerly included as the B1 employment consent of the area-wide outline consent. The TA prepared for the outline identified a series of trip rates and forecast traffic levels. Table 5.16 of the TA is reproduced at **Appendix E**. This shows that the parcels were forecast to generate 189 AM peak and 162 PM peak two-way vehicle trips respectively to/from beyond the strategic development area.
- 5.1.2 The vehicular trip rates identified for residential development were identified via Table 5.16 as 0.36 and 0.31 vehicle trips per dwelling in the AM and PM peaks respectively.
- 5.1.3 In order to provide a robust appraisal of the proposed trip generation, the TRICS database has been interrogated. Vehicle surveys 'Land Use – 03 Residential/ A – Houses Privately Owned' were interrogated, with sites in Greater London, Wales, Scotland and Ireland manually excluded. The trip generation rates are summarised in **Table 5.1** with the outputs being attached at **Appendix F**.

Table 5.1 – Vehicle trip rates and generation

	Trip Rate			Trip Generation (71 dwellings)		
	Arrival	Departures	Total	Arrival	Departures	Total
08:00-09:00	0.128	0.373	0.501	9	26	36
17:00-18:00	0.333	0.156	0.489	24	11	35
Daily (07:00-19:00)	2.185	2.246	4.431	155	159	315

- 5.1.4 These peak hour rates are significantly higher than the consented outline TA, and are used in this appraisal as a robust assessment.
- 5.1.5 The proposed development is predicted to generate up to 36 two-way vehicle movements in the AM peak and 35 in the PM peak. The daily vehicle generation equates to around 315 two-way movements per day.
- 5.1.6 The peak hour comparison between consented commercial development on the parcels and the worst-case residential forecast illustrates that the residential trips would be significantly lower than allowed for by the outline. The forecast site AM peak is 153



vehicles lower and the PM peak is 127 lower. It is evident that the daily movements would also be significantly lower.

5.1.7 The site traffic generation is therefore significantly less than the outline. The off-site traffic impact will therefore be comfortably within the forecast envisaged within the outline.

5.1.8 The traffic implications of the proposals are therefore considered to be acceptable.

6.0 SUMMARY AND CONCLUSIONS

6.1 This Transport Statement has reviewed the highways and transport implications of providing up to 71 residential dwellings on land at Toddington Lane, Littlehampton.

6.2 The proposed site is within walking distance of local facilities and is sustainably located as established by the strategic development outline consent.

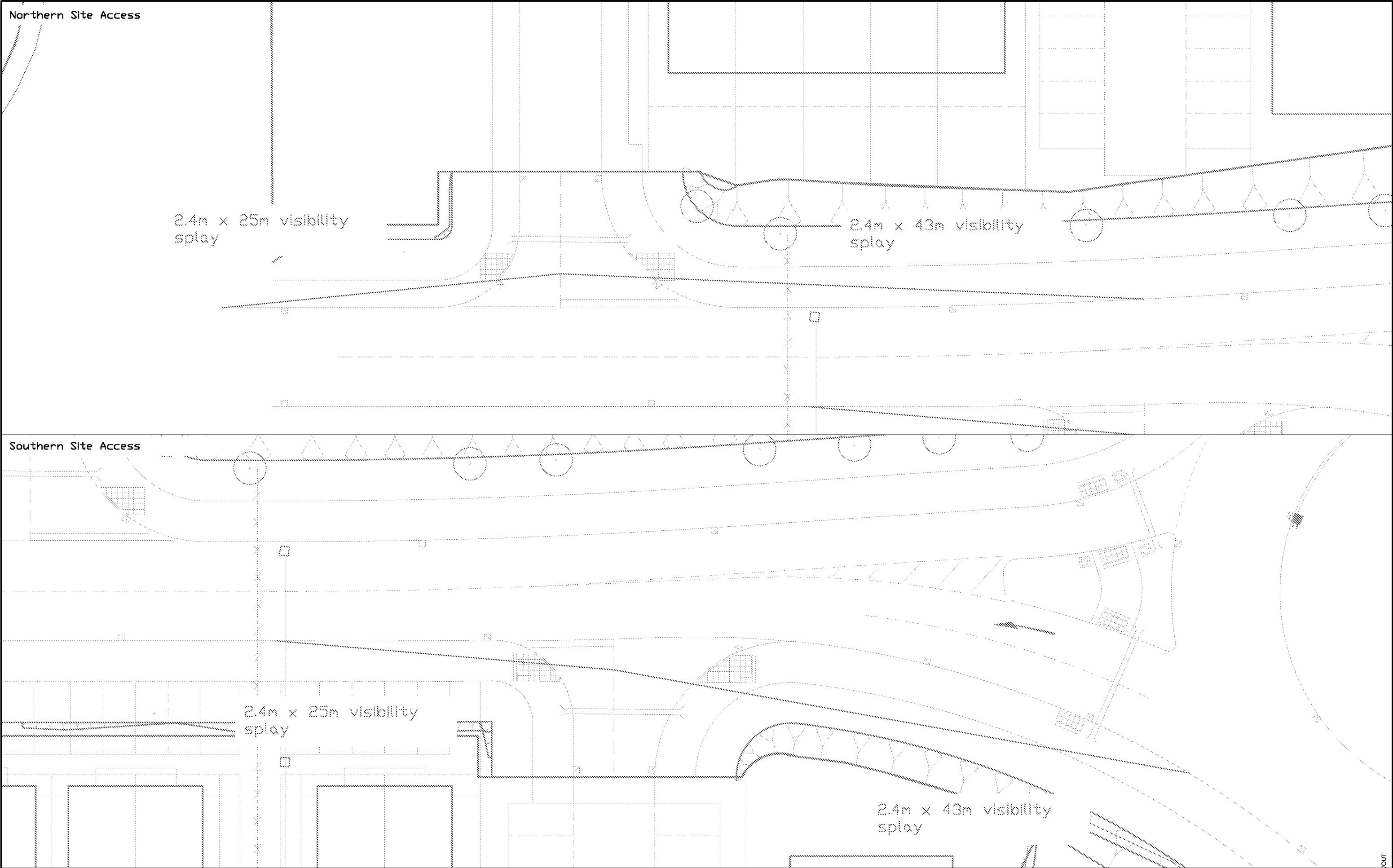
6.3 The traffic generation has been estimated using sites within the TRICS databases and shows a significant reduction in the forecast level of traffic generated by the development compared with the outline consented use.

6.4 The proposals include the use of two new simple priority junctions with connecting footways onto Spur Road and Toddington Lane, in accordance with relevant national and local design guidance.

6.5 Parking provision on site will be provided in accordance with parking standards set by the Local Authority.

6.6 Overall, safe and suitable access can be achieved for all travel modes and the impact on the local and wider highway will not be severe in accordance with NPPF paragraph 111.

Drawings



Based upon the ORDNANCE SURVEY MAPS with the permission of THE CONTROLLER OF HER MAJESTY'S STATIONERY OFFICE
© Crown Copyright AL 100030412
© David Tucker Associates

REV	DESCRIPTION	DRAWN	INITIALS	DATE

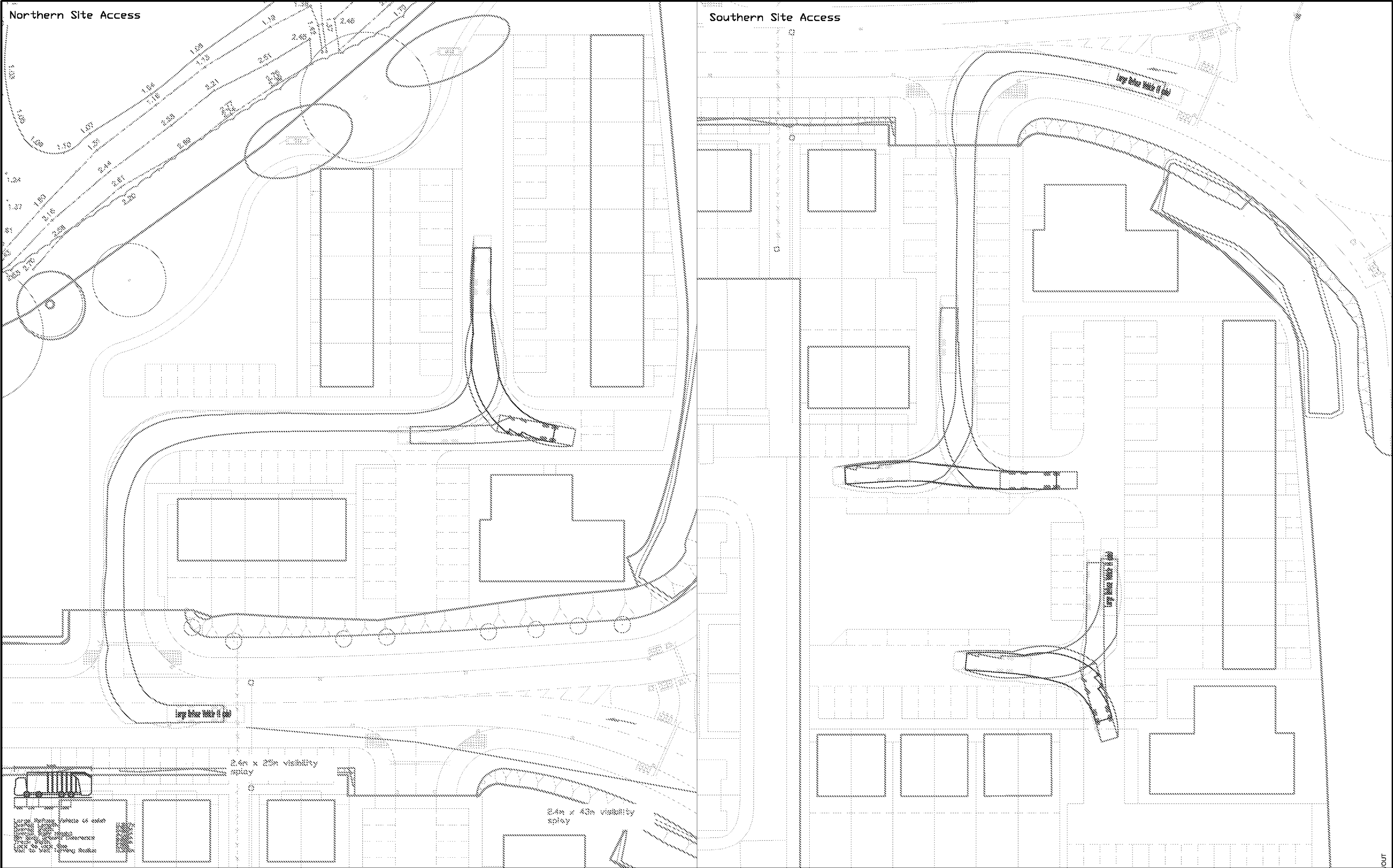


DTA
Transport Planning Consultants

Forester House, Doctors Lane,
Henley in Arden,
Warwickshire B95 5AW
Tel: +44(0)1564 793598
Fax: +44(0)1564 793983
www.dtatransportation.co.uk

JOB TITLE		CLIENT	
Toddington Lane, Littlehampton		T & L Crawley No.2 LLP	
DRAWING TITLE			
Site Access Visibility Splays			
SCALE	DRAWN BY	DATE	DRAWING No
1/2500A3	BP	Oct21	23104-01
REVISION			

ARUN DISTRICT COUNCIL LU/4172/OUT



Based upon the ORDNANCE SURVEY MAPS with the permission of THE CONTROLLER OF HER MAJESTY'S STATIONERY OFFICE
© Crown Copyright AL 100030412
© David Tucker Associates

REV	DESCRIPTION	DRAWN	INITIALS	DATE



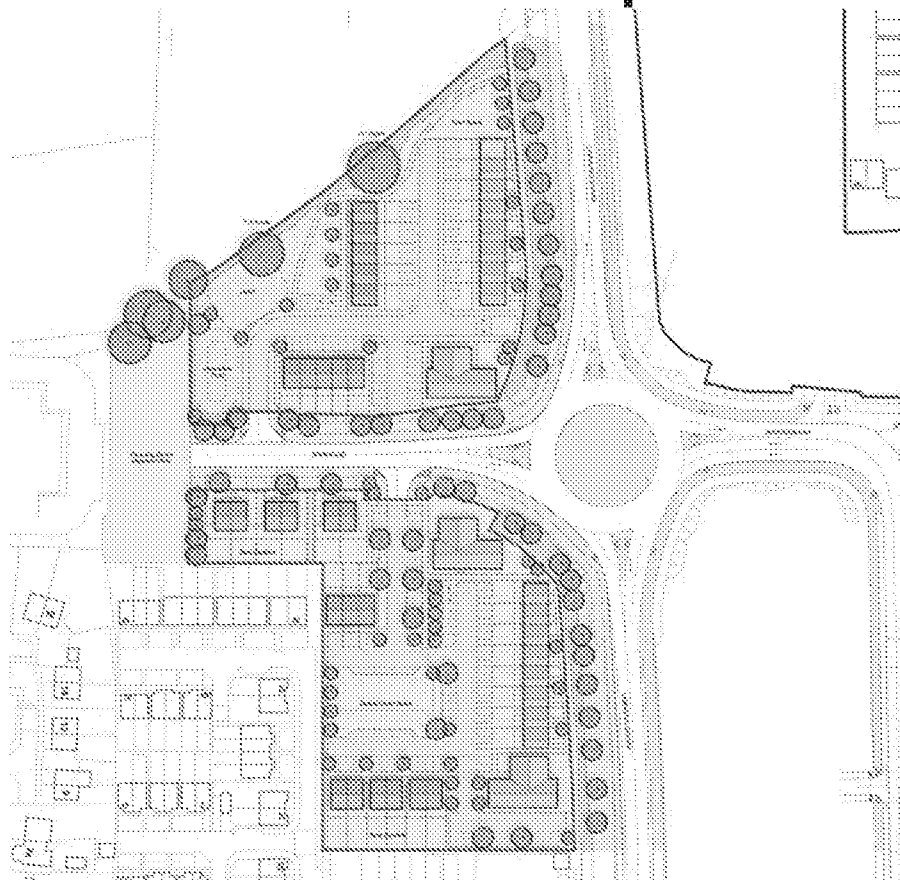
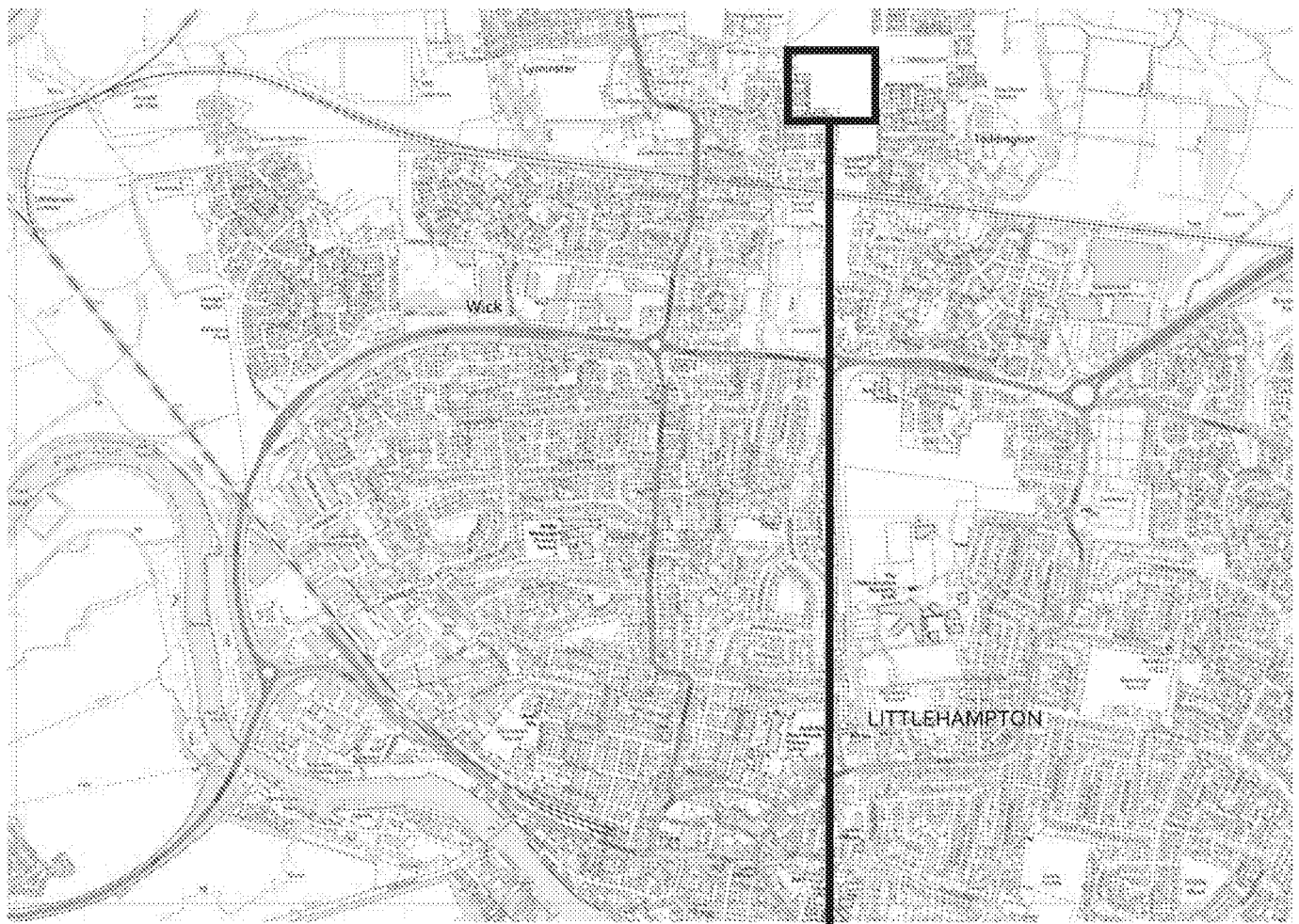
DTA
Transport Planning Consultants

Forester House, Doctors Lane,
Henley in Arden,
Warwickshire B95 5AW
Tel: +44(0)1564 793598
Fax: +44(0)1564 793983
www.dta-transportation.co.uk

JOB TITLE		CLIENT	
Toddington Lane, Littlehampton		T & L Crawley No.2 LLP	
DRAWING TITLE			
Site Access Refuse Tracking			
SCALE	DRAWN BY	DATE	DRAWING No
1/500	BP	Oct21	23104-01-2
REVISION			

ARUN DISTRICT COUNCIL LU/4172/OUT

Appendix A
Site Location Plan



DTA

Transport Planning Consultants

Forester House, Doctors Lane,
Henley-in-Arden, Warwickshire,
B95 5AW

Tel: +44(0) 1564 793598

Fax: +44(0) 1564 793983

www.dtatransportation.co.uk

Figure 1

Drawing Title

Job Title

Client

Site Location Plan

Toddington Lane, Littlehampton

Luken Beck

Scale : NTS

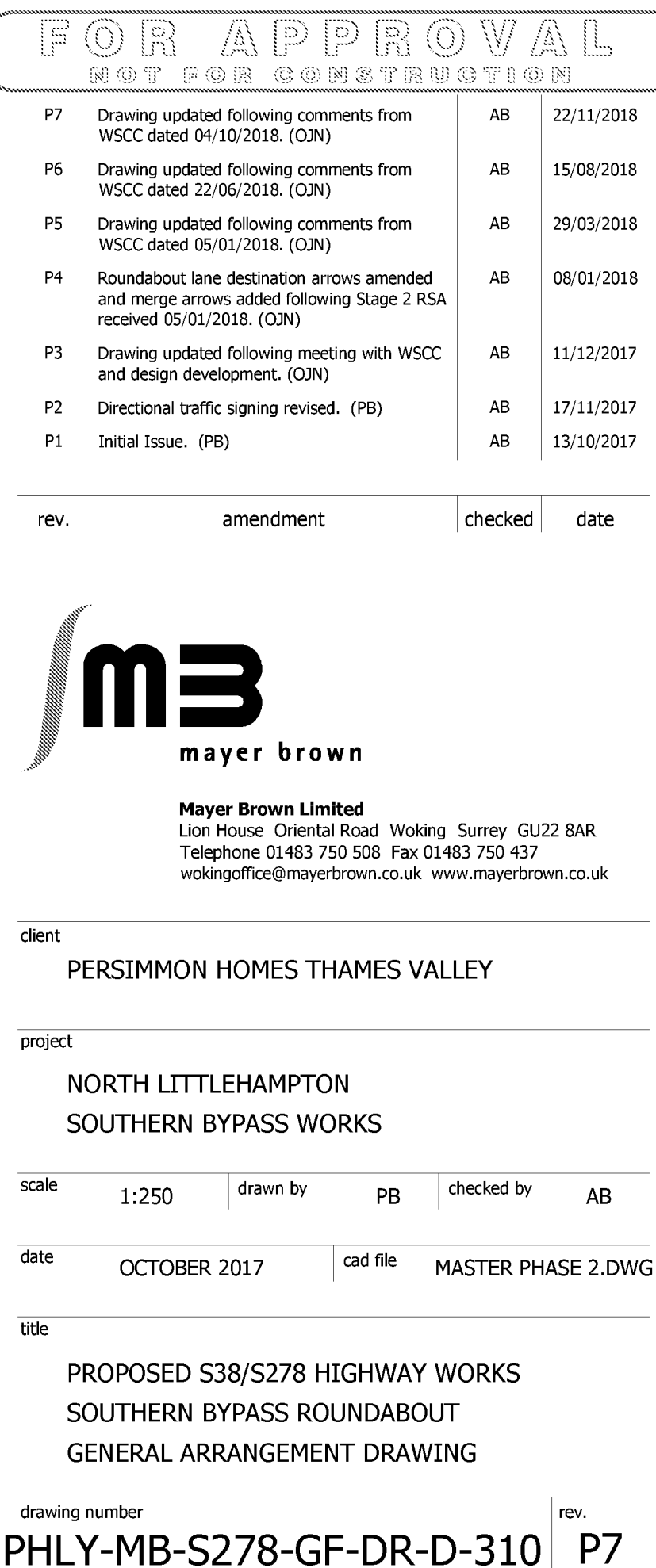


© Crown Copyright and Database Right 2010 - AL 1000304 12

Appendix B

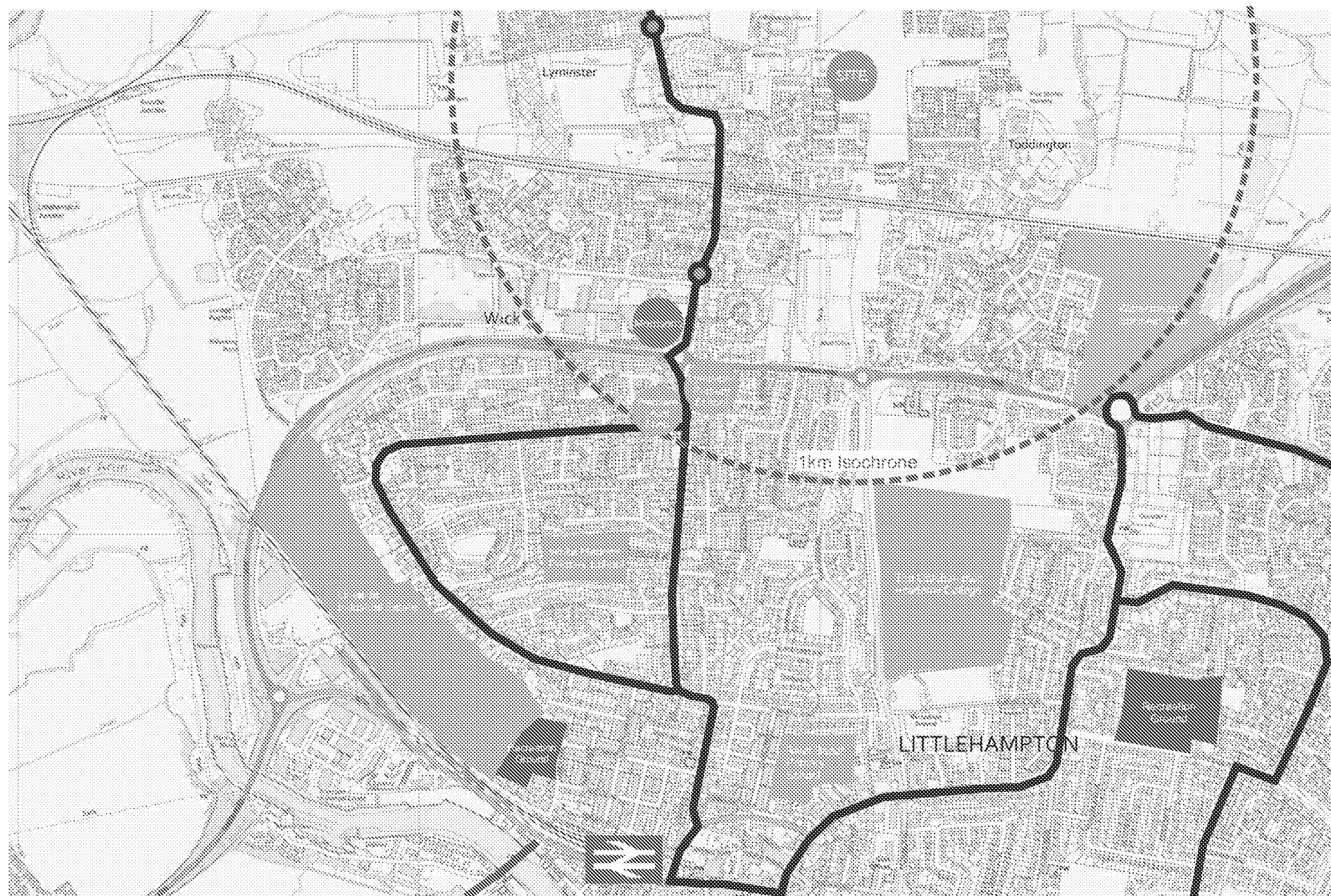
Highway Infrastructure

Notes	1 It is the Contractor's responsibility to check, on site, that the sign dimensions given in the signing schedule provide the required lateral and vertical clearances prior to the order and manufacture of the signs. 2 The Contractor must confirm with the Engineer that no further amendments are to be made to the sign face details before ordering the manufacture of signs. 3 The pre-calculation of signs are to be confirmed on site by the Engineer prior to installation. 4 Sign manufacturer must be a member of ARTSM. 5 Materials NRI = Non-reflective, RA2= Glass Bead, R3B = Micro-prismatic, R3B + High Performance Microprismatic. (BS EN 12999-1:2007 w/ its corrigendum October 2011) 6 Temporary Traffic Signs such as 'New Road Layout Ahead Signs' (TMPT) shall be removed 3 months after completion of new road build. 7 All signs are to be CE marked. 8 Sign faces shall be manufactured of Aluminium Composite Material (ACM). The back of sign shall be grey. 9 Posts shall be galvanneal if made in a ferrous material, or the natural metal finish if non-ferrous. 10 Posts for signs TS301 & 304 need to be positioned to accommodate future signs to provide minimum 500mm clearance from channel to future sign face			
Rev				
	<i>Prepared by</i>	<i>Date</i>	<i>Checked by</i>	<i>Revision Comment</i>
P1	PB	18/11/2017	AB	First issue
P2	PB	17/10/2017	AB	Directional signing amended.
P3	OJN	11/12/2017	AB	Signs TS305 to TS312 and TS314 - TS326 amended. BCL311 removed
P4	OJN	28/03/2018	AB	Amended BCL311 amended following comments from WSSC dated 22/06/2018
P5	OJN	10/07/2018	AB	Signs updated following comments from WSSC dated 22/06/2018
P6	OJN	21/11/2018	AB	Signs updated following comments from WSSC dated 04/10/2018



Appendix C

Local Facilities Plan



Transport Planning Consultants

Forester House, Doctors Lane,
Henley-in-Arden, Warwickshire,
B95 5AW
Tel: +44(0) 1564 793598
Fax: +44(0) 1564 793983
www.dtatransportation.co.uk

- Notes:
- Bus Routes
 - Bus Stops
 - On Road Cycle Route
 - Off Road Cycle Route

Figure 2
Drawing Title
Job Title
Client

Local Facilities Plan
Toddington Lane, Littlehampton
Luken Beck

Scale : NTS



Appendix D

Indicative Masterplan

Rev	Amendments	By	Chld	Date

Drawing is based on the following information:

- OS Plan, received 13/09/19.
- Survey undertaken by Encompass Surveys dated 18 June 2021.
- SLB1 Rev. E - Landscape Proposals (Sheet 1 of 2) dated 06/03/18 from application LU/278/17/RES



Scale Bar 1:500@A1

Project	
Land North of Toddington Lane Littlehampton	

Drawn by	Checked by	HNW Project No.	Date Created
GP	DS	21023	09/04/21

Scale

A1- 1 : 500

 ISO 9001 Quality Management
ISO 14001 Environmental Management

Drawing Title

Indicative Site layout

Drawing status	Revision
Preliminary	

Drawing Name
21023-HNW-ZZ-00-DR-A-2001

61 North Street, Chichester, West Sussex, PO19 1NB

anw architects

Appendix E

Previous TA Trip rates

Overall Development Traffic Attraction

5.86 The peak hour vehicle trip estimates are summarised in the following table:

Land Use	Size	Gross					
		AM Peak			PM Peak		
		Arrivals	Departures	Total	Arrivals	Departures	Total
Residential	1460 units	104	420	523	311	141	451
Commercial	13000 sqm	179	30	210	25	155	180
Amenity Site	0.51 ha	9	8	17	11	22	33
School	420 pupils	131	93	224	8	16	24
Community Use	1.36 ha	16	11	27	38	25	62
Hotel	100 beds	16	24	40	19	12	31
Care Home	60 beds	5	4	10	4	8	12
Local Shops	3500 sqm	200	192	392	265	266	531
Health Club	1500 sqm	13	17	30	49	27	76
Total		679	802	1481	730	671	1401

Table 5.15: Predicted Traffic Attraction Proposed Development

5.87 The above table sets out the full trips associated with the development. However, as set out at the start of this section, a significant proportion of the trips would not be primary trips or would have their origins within the site. This is accounted for in the following table:

Land Use	Size	Gross					
		AM Peak			PM Peak		
		Arrivals	Departures	Total	Arrivals	Departures	Total
Residential	1460 units	104	420	523	311	141	451
Commercial	13000 sqm	161	27	189	23	139	162
Amenity Site	0.51 ha	4	4	7	1	1	2
School	420 pupils	0	0	0	0	0	0
Community Use	1.36 ha	66	46	112	4	8	12
Hotel	100 beds	7	4	11	15	10	25
Care Home	60 beds	16	24	40	19	12	31
Local Shops	3500 sqm	3	2	5	2	4	6
Health Club	1500 sqm	80	77	157	106	106	212
Total		447	613	1060	504	434	939

Table 5.16: Predicted Primary or Off-Site Traffic Attraction Proposed Development

5.88 The traffic flows set out in Table 5.16 have been incorporated into the highway modelling carried out for the application. No allowances have been made for the operation of a Travel Plan at the site.

Appendix F

TRICS output

Calculation Reference: AUDIT-623801-201007-1018

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	3 days
	KC KENT	4 days
	SC SURREY	1 days
03	SOUTH WEST	
	DC DORSET	1 days
	DV DEVON	3 days
	SM SOMERSET	1 days
	WL WILTSHIRE	1 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
	NF NORFOLK	3 days
	SF SUFFOLK	2 days
05	EAST MIDLANDS	
	DS DERBYSHIRE	1 days
	LN LINCOLNSHIRE	2 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	2 days
	ST STAFFORDSHIRE	2 days
	WK WARWICKSHIRE	2 days
	WM WEST MIDLANDS	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NE NORTH EAST LINCOLNSHIRE	2 days
	NY NORTH YORKSHIRE	6 days
	SY SOUTH YORKSHIRE	1 days
08	NORTH WEST	
	CH CHESHIRE	2 days
	LC LANCASHIRE	1 days
	MS MERSEYSIDE	1 days
09	NORTH	
	CB CUMBRIA	1 days
	DH DURHAM	2 days
	TW TYNE & WEAR	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
 Actual Range: 7 to 432 (units:)
 Range Selected by User: 6 to 1817 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 19/11/19

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	12 days
Tuesday	10 days
Wednesday	10 days
Thursday	7 days
Friday	8 days

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

Selected survey types:

Manual count	47 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	7
Suburban Area (PPS6 Out of Centre)	19
Edge of Town	21

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	44
No Sub Category	3

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	47 days
----	---------

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

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	3 days
5,001 to 10,000	10 days
10,001 to 15,000	16 days
15,001 to 20,000	6 days
20,001 to 25,000	4 days
25,001 to 50,000	7 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	7 days
25,001 to 50,000	2 days
50,001 to 75,000	7 days
75,001 to 100,000	9 days
100,001 to 125,000	2 days
125,001 to 250,000	11 days
250,001 to 500,000	9 days

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

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	17 days
1.1 to 1.5	29 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:

No	47 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	47 days
-----------------	---------

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

LIST OF SITES relevant to selection parameters

1	CA-03-A-05	DETACHED HOUSES	CAMBRIDGESHIRE
	EASTFIELD ROAD		
	PETERBOROUGH		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	28	
	Survey date: MONDAY	17/10/16	Survey Type: MANUAL
2	CB-03-A-05	DETACHED/ TERRACED HOUSING	CUMBRIA
	MACADAM WAY		
	PENRITH		
	Edge of Town Centre		
	Residential Zone		
	Total No of Dwellings:	50	
	Survey date: TUESDAY	21/06/16	Survey Type: MANUAL
3	CH-03-A-08	DETACHED	CHESHIRE
	WHITCHURCH ROAD		
	CHESTER		
	BOUGHTON HEATH		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	11	
	Survey date: TUESDAY	22/05/12	Survey Type: MANUAL
4	CH-03-A-09	TERRACED HOUSES	CHESHIRE
	GREYSTOKE ROAD		
	MACCLESFIELD		
	HURDSFIELD		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	24	
	Survey date: MONDAY	24/11/14	Survey Type: MANUAL
5	DC-03-A-08	BUNGALOWS	DORSET
	HURSTDENE ROAD		
	BOURNEMOUTH		
	CASTLE LANE WEST		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	28	
	Survey date: MONDAY	24/03/14	Survey Type: MANUAL
6	DH-03-A-01	SEMI DETACHED	DURHAM
	GREENFIELDS ROAD		
	BISHOP AUCKLAND		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	50	
	Survey date: TUESDAY	28/03/17	Survey Type: MANUAL
7	DH-03-A-03	SEMI-DETACHED & TERRACED	DURHAM
	PILGRIMS WAY		
	DURHAM		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	57	
	Survey date: FRIDAY	19/10/18	Survey Type: MANUAL
8	DS-03-A-02	MIXED HOUSES	DERBYSHIRE
	RADBOURNE LANE		
	DERBY		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	371	
	Survey date: TUESDAY	10/07/18	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	DV-03-A-01	TERRACED HOUSES	DEVON
	BRONSHILL ROAD TORQUAY		
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 37 Survey date: WEDNESDAY 30/09/15		Survey Type: MANUAL
10	DV-03-A-02	HOUSES & BUNGALOWS	DEVON
	MILLHEAD ROAD HONITON		
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 116 Survey date: FRIDAY 25/09/15		Survey Type: MANUAL
11	DV-03-A-03	TERRACED & SEMI DETACHED	DEVON
	LOWER BRAND LANE HONITON		
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 70 Survey date: MONDAY 28/09/15		Survey Type: MANUAL
12	ES-03-A-03	MIXED HOUSES & FLATS	EAST SUSSEX
	SHEPHAM LANE POLEGATE		
	Edge of Town Residential Zone Total No of Dwellings: 212 Survey date: MONDAY 11/07/16		Survey Type: MANUAL
13	ES-03-A-04	MIXED HOUSES & FLATS	EAST SUSSEX
	NEW LYDD ROAD CAMBER		
	Edge of Town Residential Zone Total No of Dwellings: 134 Survey date: FRIDAY 15/07/16		Survey Type: MANUAL
14	ES-03-A-05	MIXED HOUSES & FLATS	EAST SUSSEX
	RATTLE ROAD NEAR EASTBOURNE STONE CROSS		
	Edge of Town Residential Zone Total No of Dwellings: 99 Survey date: WEDNESDAY 05/06/19		Survey Type: MANUAL
15	KC-03-A-03	MIXED HOUSES & FLATS	KENT
	HYTHE ROAD ASHFORD WILLESBOROUGH		
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 51 Survey date: THURSDAY 14/07/16		Survey Type: MANUAL
16	KC-03-A-04	SEMI-DETACHED & TERRACED	KENT
	KILN BARN ROAD AYLESFORD DITTON		
	Edge of Town Residential Zone Total No of Dwellings: 110 Survey date: FRIDAY 22/09/17		Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

17	KC-03-A-06	MIXED HOUSES & FLATS	KENT
	MARGATE ROAD HERNE BAY		
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings:	363	
	Survey date: WEDNESDAY	27/09/17	Survey Type: MANUAL
18	KC-03-A-07	MIXED HOUSES	KENT
	RECVLVER ROAD HERNE BAY		
	Edge of Town Residential Zone Total No of Dwellings:	288	
	Survey date: WEDNESDAY	27/09/17	Survey Type: MANUAL
19	LC-03-A-30	SEMI - DETACHED	LANCASHIRE
	WATSON ROAD BLACKPOOL		
	Edge of Town Centre Residential Zone Total No of Dwellings:	24	
	Survey date: FRIDAY	14/06/13	Survey Type: MANUAL
20	LN-03-A-03	SEMI DETACHED	LINCOLNSHIRE
	ROOKERY LANE LINCOLN BOULTHAM Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings:	22	
	Survey date: TUESDAY	18/09/12	Survey Type: MANUAL
21	LN-03-A-04	DETACHED & SEMI-DETACHED	LINCOLNSHIRE
	EGERTON ROAD LINCOLN		
	Edge of Town Centre Residential Zone Total No of Dwellings:	30	
	Survey date: MONDAY	29/06/15	Survey Type: MANUAL
22	MS-03-A-03	DETACHED	MERSEYSIDE
	BEMPTON ROAD LIVERPOOL OTTERSPOOL Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings:	15	
	Survey date: FRIDAY	21/06/13	Survey Type: MANUAL
23	NE-03-A-02	SEMI DETACHED & DETACHED	NORTH EAST LINCOLNSHIRE
	HANOVER WALK SCUNTHORPE		
	Edge of Town No Sub Category Total No of Dwellings:	432	
	Survey date: MONDAY	12/05/14	Survey Type: MANUAL
24	NE-03-A-03	PRIVATE HOUSES	NORTH EAST LINCOLNSHIRE
	STATION ROAD SCUNTHORPE		
	Edge of Town Centre Residential Zone Total No of Dwellings:	180	
	Survey date: TUESDAY	20/05/14	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

25	NF-03-A-01	SEMI DET. & BUNGALOWS	NORFOLK
	YARMOUTH ROAD CAISTER-ON-SEA		
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings:	27	
	Survey date: TUESDAY	16/10/12	Survey Type: MANUAL
26	NF-03-A-02	HOUSES & FLATS	NORFOLK
	DEREHAM ROAD NORWICH		
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings:	98	
	Survey date: MONDAY	22/10/12	Survey Type: MANUAL
27	NF-03-A-03	DETACHED HOUSES	NORFOLK
	HALING WAY THETFORD		
	Edge of Town Residential Zone Total No of Dwellings:	10	
	Survey date: WEDNESDAY	16/09/15	Survey Type: MANUAL
28	NY-03-A-08	TERRACED HOUSES	NORTH YORKSHIRE
	NICHOLAS STREET YORK		
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings:	21	
	Survey date: MONDAY	16/09/13	Survey Type: MANUAL
29	NY-03-A-09	MIXED HOUSING	NORTH YORKSHIRE
	GRAMMAR SCHOOL LANE NORTHALLERTON		
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings:	52	
	Survey date: MONDAY	16/09/13	Survey Type: MANUAL
30	NY-03-A-10	HOUSES AND FLATS	NORTH YORKSHIRE
	BOROUGHBRIDGE ROAD RIPON		
	Edge of Town No Sub Category Total No of Dwellings:	71	
	Survey date: TUESDAY	17/09/13	Survey Type: MANUAL
31	NY-03-A-11	PRIVATE HOUSING	NORTH YORKSHIRE
	HORSEFAIR BOROUGHBRIDGE		
	Edge of Town Residential Zone Total No of Dwellings:	23	
	Survey date: WEDNESDAY	18/09/13	Survey Type: MANUAL
32	NY-03-A-12	TOWN HOUSES	NORTH YORKSHIRE
	RACECOURSE LANE NORTHALLERTON		
	Edge of Town Centre Residential Zone Total No of Dwellings:	47	
	Survey date: TUESDAY	27/09/16	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

33	NY-03-A-13	TERRACED HOUSES	NORTH YORKSHIRE
	CATTERICK ROAD		
	CATTERICK GARRISON		
	OLD HOSPITAL COMPOUND		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	10	
	Survey date: WEDNESDAY	10/05/17	Survey Type: MANUAL
34	SC-03-A-04	DETACHED & TERRACED	SURREY
	HIGH ROAD		
	BYFLEET		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	71	
	Survey date: THURSDAY	23/01/14	Survey Type: MANUAL
35	SF-03-A-04	DETACHED & BUNGALOWS	SUFFOLK
	NORMANSTON DRIVE		
	LOWESTOFT		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	7	
	Survey date: TUESDAY	23/10/12	Survey Type: MANUAL
36	SF-03-A-05	DETACHED HOUSES	SUFFOLK
	VALE LANE		
	BURY ST EDMUNDS		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	18	
	Survey date: WEDNESDAY	09/09/15	Survey Type: MANUAL
37	SH-03-A-05	SEMI-DETACHED/ TERRACED	SHROPSHIRE
	SANDCROFT		
	TELFORD		
	SUTTON HILL		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	54	
	Survey date: THURSDAY	24/10/13	Survey Type: MANUAL
38	SH-03-A-06	BUNGALOWS	SHROPSHIRE
	ELLESMERE ROAD		
	SHREWSBURY		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	16	
	Survey date: THURSDAY	22/05/14	Survey Type: MANUAL
39	SM-03-A-01	DETACHED & SEMI	SOMERSET
	WEMBDON ROAD		
	BRIDGWATER		
	NORTHFIELD		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	33	
	Survey date: THURSDAY	24/09/15	Survey Type: MANUAL
40	ST-03-A-06	SEMI-DET. & TERRACED	STAFFORDSHIRE
	STANFORD ROAD		
	WOLVERHAMPTON		
	BLAKENHALL		
	Edge of Town Centre		
	No Sub Category		
	Total No of Dwellings:	17	
	Survey date: FRIDAY	09/05/14	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

41	ST-03-A-07	DETACHED & SEMI-DETACHED	STAFFORDSHIRE
	BEACONSIDE		
	STAFFORD		
	MARSTON GATE		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	248	
	Survey date: WEDNESDAY	22/11/17	Survey Type: MANUAL
42	SY-03-A-01	SEMI DETACHED HOUSES	SOUTH YORKSHIRE
	A19 BENTLEY ROAD		
	DONCASTER		
	BENTLEY RISE		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	54	
	Survey date: WEDNESDAY	18/09/13	Survey Type: MANUAL
43	TW-03-A-02	SEMI-DETACHED	TYNE & WEAR
	WEST PARK ROAD		
	GATESHEAD		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	16	
	Survey date: MONDAY	07/10/13	Survey Type: MANUAL
44	WK-03-A-02	BUNGALOWS	WARWICKSHIRE
	NARBERTH WAY		
	COVENTRY		
	POTTERS GREEN		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	17	
	Survey date: THURSDAY	17/10/13	Survey Type: MANUAL
45	WK-03-A-04	DETACHED HOUSES	WARWICKSHIRE
	DALEHOUSE LANE		
	KENILWORTH		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	49	
	Survey date: FRIDAY	27/09/19	Survey Type: MANUAL
46	WL-03-A-02	SEMI DETACHED	WILTSHIRE
	HEADLANDS GROVE		
	SWINDON		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	27	
	Survey date: THURSDAY	22/09/16	Survey Type: MANUAL
47	WM-03-A-05	TERRACED & DETACHED	WEST MIDLANDS
	COUNDON ROAD		
	COVENTRY		
	Edge of Town Centre		
	Residential Zone		
	Total No of Dwellings:	89	
	Survey date: MONDAY	21/11/16	Survey Type: MANUAL

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

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

MULTI-MODAL TOTAL 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	47	82	0.075	47	82	0.283	47	82	0.358
08:00 - 09:00	47	82	0.128	47	82	0.373	47	82	0.501
09:00 - 10:00	47	82	0.134	47	82	0.152	47	82	0.286
10:00 - 11:00	47	82	0.123	47	82	0.150	47	82	0.273
11:00 - 12:00	47	82	0.134	47	82	0.141	47	82	0.275
12:00 - 13:00	47	82	0.155	47	82	0.151	47	82	0.306
13:00 - 14:00	47	82	0.155	47	82	0.152	47	82	0.307
14:00 - 15:00	47	82	0.163	47	82	0.169	47	82	0.332
15:00 - 16:00	47	82	0.247	47	82	0.174	47	82	0.421
16:00 - 17:00	47	82	0.272	47	82	0.176	47	82	0.448
17:00 - 18:00	47	82	0.333	47	82	0.156	47	82	0.489
18:00 - 19:00	47	82	0.266	47	82	0.169	47	82	0.435
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:		2.185			2.246			4.431	

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: 7 - 432 (units:)
 Survey date range: 01/01/12 - 19/11/19
 Number of weekdays (Monday-Friday): 47
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 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.

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

MULTI-MODAL TOTAL PEOPLE

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	47	82	0.112	47	82	0.487	47	82	0.599
08:00 - 09:00	47	82	0.202	47	82	0.774	47	82	0.976
09:00 - 10:00	47	82	0.212	47	82	0.280	47	82	0.492
10:00 - 11:00	47	82	0.204	47	82	0.269	47	82	0.473
11:00 - 12:00	47	82	0.224	47	82	0.255	47	82	0.479
12:00 - 13:00	47	82	0.259	47	82	0.250	47	82	0.509
13:00 - 14:00	47	82	0.259	47	82	0.263	47	82	0.522
14:00 - 15:00	47	82	0.275	47	82	0.290	47	82	0.565
15:00 - 16:00	47	82	0.534	47	82	0.320	47	82	0.854
16:00 - 17:00	47	82	0.554	47	82	0.311	47	82	0.865
17:00 - 18:00	47	82	0.617	47	82	0.270	47	82	0.887
18:00 - 19:00	47	82	0.465	47	82	0.308	47	82	0.773
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.917			4.077			7.994

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.

Forester House
Doctor's Lane
Henley-in-Arden
Warwickshire
B95 5AW