SCP

Transportation Planning : Infrastructure Design

Transport Statement

Proposed Residential Development

Hawthorne Farm, Clitheroe

Persimmon Homes (Lancashire)

October 2018

Doc Ref: MC/18446/TS/01

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Document Revision Control

Revision	Date	Status	Prepared By	Approved By
01	31.10.18	Planning	MC	MD

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APPENDICES

1.0 INTRODUCTION

Overview

1.1 SCP have been appointed by Persimmon Homes (Lancashire) to provide transport planning consultancy services to support a planning application for a proposed residential development on Hawthorne Farm, Clitheroe.

1.2 The development proposals involve the creation of a new residential estate comprising of 64 dwellings. Further details of the development proposals are provided in Chapter 3 of this report.

1.3 This Transport Statement (TS) has been prepared to support the planning application and has been developed in accordance with the now superseded Department for Transports (DfT's) March 2007 "Guidance on Transport Assessment" document and the National Planning Practice Guidance (NPPG). In addition, the specific scope of the TS has been discussed and agreed with Lancashire County Council (LCC), as highway authority, through pre-application scoping discussions.

1.4 A site visit was undertaken on Wednesday 10th October 2018 to observe the prevailing transport conditions and measure highway dimensions.

Structure of Report

1.5 The structure of the TS is set out as follows:-

- Chapter 2 - describes in detail the site location and existing uses, surrounding area, local highway network, existing traffic conditions and road safety record;
- Chapter 3 – defines the development proposals including the proposed access, servicing and car parking arrangements;
- Chapter 4 – summarises the national, regional and local transport policies;
- Chapter 5 – considers the location of the site with regard to the local sustainable transport infrastructure;
- Chapter 6 – estimates the number of multimodal trips generated by the development
- Chapter 7 – provides summary and conclusions to this TS derived from the analysis presented in the above Chapters.

2.0 EXISTING CONDITIONS

Overview

2.1 This Chapter provides a detailed description of the location of the site and its composition, the local highway network, existing traffic conditions and road safety record.

The Site and Surrounding Area

2.2 The site is situated in Clitheroe, approximately 560m northwest of Clitheroe town centre.

2.3 The application site is undeveloped land located immediately to the north of the residential estate served by Hawthorne Place.

2.4 The application site boundaries can be summarised loosely as follows:

North: A Field

East: Rear of properties on Park Avenue

South: Hawthorne Place

West: Rear of properties on Ribblesdale Avenue

2.5 The location of the site in relation to the wider highway network is shown on **Figure 2.1** overleaf.

Figure 2.1 – Site Location – Wider Highway Network

Source: Google Maps

Local Highway Network

Hawthorne Place

2.6 Hawthorne Place is a residential access road serving the housing estate to the south of the site. Hawthorne Place has a carriageway width varying approximately 5.5 m – 6.7 m with footways on both sides.

2.7 Dropped kerbs are provided on Hawthorne Place at the junction with the B4678 Waddington Road, and other junctions in the vicinity of the site.

B6478 Waddington Road

2.8 Hawthorne Place forms the minor arm of a major / minor priority junction with the B4678 Waddington Road approximately 250m south of the application site. In the vicinity of the junction with Hawthorne Place, the B4678 Waddington Road has a carriageway width of between 7.5 m and 8.5 m with footways to either side.

2.9 It is subject to a speed limit of 20mph with street lighting columns provided, however, the speed limit increases to 30mph approximately 100m to the west of the junction with the B4678 Waddington Road.

2.10 The B4678 Waddington Road passes under a railway bridge approximately 90 m east of the junction with Hawthorne Place. The footways are maintained along both sides but narrow at this pinch point, whilst the carriageway also narrows to approximately 5.6 m under the bridge.

2.11 The western arm of the B4678 Waddington Road forms the minor arm of a simple priority junction immediately to the east of a simple priority junction immediately to the east of the railway bridge. The minor arm is on the outside of a bend of the mainline flow, and visibility from this approach is good.

Personal Injury Accident Records

2.12 The NPPG 'Transport evidence bases in plan making and decision taking' document states that, "Critical locations on the road network with poor accident records should be identified. This is to determine if the proposed development will exacerbate existing problems or, if proposed, whether highway mitigation works or traffic management measures will help to alleviate the problems".

2.13 In order to identify the accident record on the local highway network, the personal injury accident data has been obtained from crashmap.co.uk for the most recently available five year period. The location and severity of the accidents are shown on **Figure 2.2** overleaf:-

Figure 2.2 – Road Safety Plan

Source: Google Maps

2.14 It can be seen in **Figure 2.2** above that there have be no recorded personal injury accidents on Hawthorne Place or at the junction with the B6478 Waddington Road. One incident has occurred on B4678 Waddington Road to the north of Brungerley Avenue which resulted in a slight severity injury.

2.15 The existing record in the vicinity of the site does not give rise to any concerns in the context of the context of site application proposals.

2.16 Having regards to the low number of accidents which have occurred over the five year study period the existing accident record does not represent a material concern in the context of the proposed development.

3.0 PROPOSED DEVELOPMENT

Overview

3.1 The proposed development comprises 64 residential dwellings and the proposals are shown on the site layout plan presented in **Appendix B**.

Proposed Access Arrangements

3.2 Access to the development is proposed via an extension of Hawthorne Place, with a 5.5m carriageway width and 2m wide footways along both sides.

3.3 Visibility splays of 2.4m x 25m are appropriate for the 20mph speed limit on Waddington Road and are shown from Hawthorne Place on drawing SCP/18448/F01 in **Appendix C**.

Car Parking

3.4 Car parking standards for a residential development are presented in Lancashire County Council 'Joint Lancashire Structure Plan' (2005) and are summarised below:

- Single bed house – 1 car spaces per unit
- 2 bedroom house – 2 car spaces per unit;
- 3 bedroom house – 2 car spaces per unit and;
- 3+ bedroom house – 3 car spaces per unit.

3.5 The proposed car parking provision will be in line with these standards.

Servicing

3.6 The development will be served by the Council's refuse vehicle and swept paths will be undertaken to show that it is able to adequately access the proposed site layout once available.

4.0 PLANNING POLICY CONTEXT

Introduction

4.1 This chapter provides a summary of relevant national, regional and local transport policies and provides a brief analysis of how the proposed development will contribute towards their aims and objectives.

National Planning Policy Framework (NPPF)

4.2 Travel plans are secured through a policy framework that extends from national through to local level when dealing with new development proposals.

4.3 The National Planning Policy Framework (NPPF) was revised in July 2018 and sets out the Government's planning policies for England and how these are expected to be applied.

4.4 At the heart of the National Planning Policy Framework is a presumption in favour of sustainable development which for decision-taking means:

- *"approving development proposals that accord with an up-to-date development plan without delay; or*
- *where the there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date, granting permission unless:*
    - *the application of policies in the Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed; or*
    - *any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole."*

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

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

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

c) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.

4.6 Importantly, NPPF states that:

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

'Within this context, applications for development should:

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

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

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

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

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

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 assessment so that the likely impacts of the proposal can be assessed. PPG Travel Plans, Transport Assessments and Statements set out the requirements for these documents.

Local Policy – Lancashire County Council Local Transport Plan (LTP) 2011 to 2021

4.7 The Local Transport Plan (LTP) presents LCC's transport priorities for ten years, and aims to support economic growth and access to employment, making the county's roads safer for children and young people, and look after the transport infrastructure.

4.8 The LTP Goals are identified as:

- To help to secure a strong economic future by making transport and travel into and between our major economic centres more effective and efficient and by improving links to neighbouring major economic areas and beyond.
- To provide all sections of the community with safe and convenient access to the services, jobs, health, leisure and educational opportunities that they need.
- To improve the accessibility, availability and affordability of transport as a contribution to the development of strong and cohesive communities.
- To create more attractive neighbourhoods by reducing the impact of transport on our quality of life and by improving our public realm.
- To reduce the carbon impact of Lancashire's transport requirements, whilst delivering sustainable value for money transport options to those who need them.
- To make walking and cycling more safe, convenient and attractive, particularly in the more disadvantaged areas of Lancashire, bringing improvements in the health of Lancashire's residents.
- In all that we do, to provide value for money by prioritising the maintenance and improvement of Lancashire's existing transport infrastructure where it can help to deliver our transport goals

4.9 From these goals, LCC has drawn up seven transport priorities informed by national transport policies, consultation feedback, as well as specially commissioned local research. These priorities are:

- Improving access into areas of economic growth and regeneration
- Providing better access to education and employment
- Improving people's quality of life and well-being
- Improving safety of our streets for our most vulnerable residents
- Providing safe, reliable, convenient and affordable transport alternatives to the car
- Maintaining our assets
- Reducing carbon emissions and its effects

Local Policy – Ribble Valley Borough Districtwide Council Local Plan 1998 (Superseded by the Core Strategy, however with retained polices)

4.10 The objectives of the Ribble Valley Borough Districtwide Local Plan that have a bearing on Transport and Mobility are:

- *to direct development in a way that minimises the use of private car transport;*

- *to ensure adequate and safe transport infrastructure for industry;*
- *to ensure all residents have good access to the countryside, sports and entertainment facilities, shops, health care and all other facilities;*
- *to protect residents from nuisance of all sports particularly traffic noise, pollution and the impact of nearby development;*
- *to enhance safe mobility for all the community.*
- *to encourage and promote the use of public transport, cycling and walking*

5.0 SUSTAINABLE TRANSPORT APPRAISAL

General

5.1 This Chapter presents a review of the accessibility of the site by walking, cycling and public transport modes. Policies to encourage travel by sustainable modes are developed further within the Interim Travel Plan for the development that accompanies this application.

Pedestrians

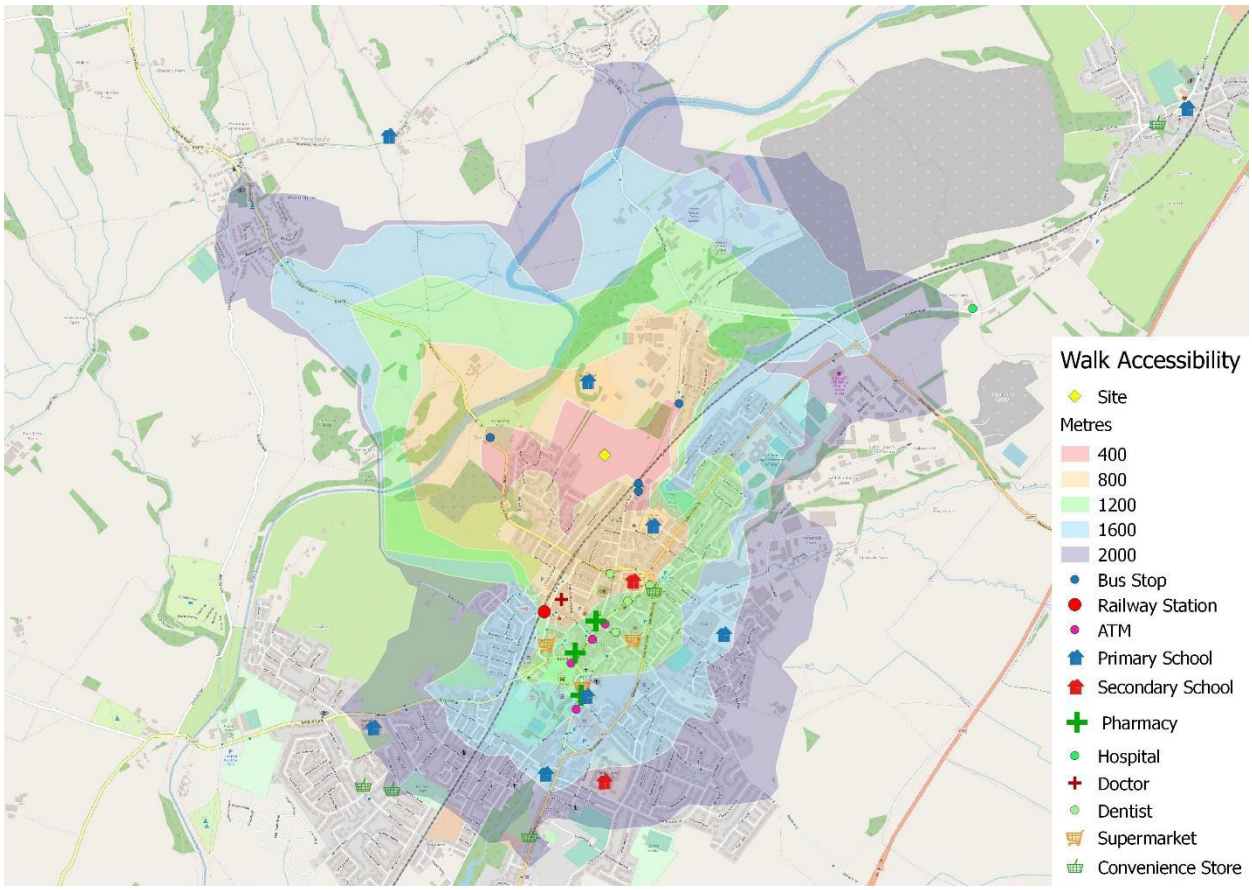
5.2 Pedestrian / cycle access to the site will be provided from the same location as the vehicular access.

5.3 Generally, the topography of the area is conducive to walking with well surfaced and street-lit footways provided along Hawthorne Place and the B4678 Waddington Road and generally on the surrounding routes. These routes also benefit from natural surveillance by virtue of the residential properties that abut the routes.

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

5.5 The pedestrian accessibility of the development has been modelled using Geographical Information System (GIS) software to produce isochrones mapping. The purpose of the isochrones is to demonstrate the areas within an acceptable walk distance of the site, as shown on **Figure 5.1** overleaf:-

Figure 5.1 – 2km Walking Accessibility Isochrones



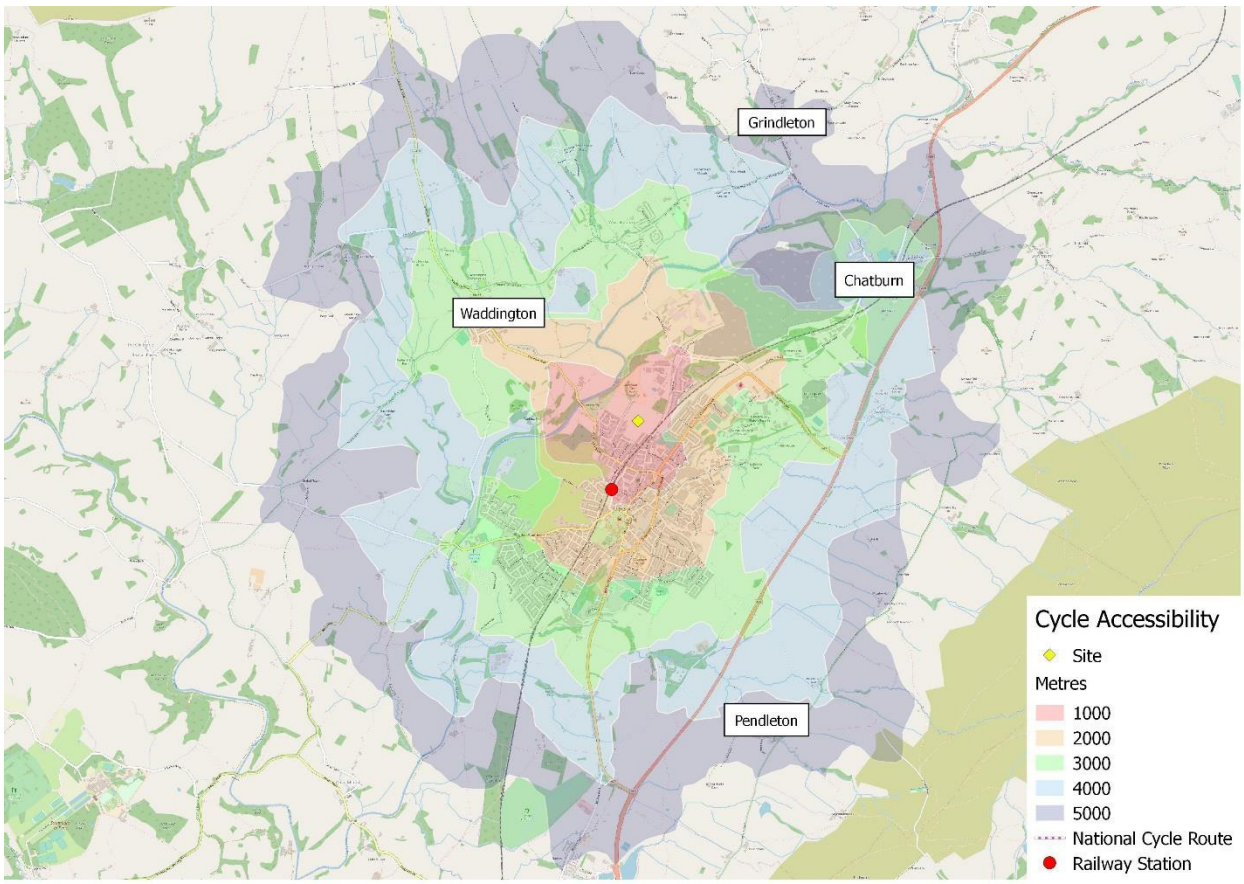
5.6 The above demonstrates that the site is within acceptable walking distance of Clitheroe town centre. The site is also within a 10 minute walking distance (approximately 0.4 km) of Clitheroe Interchange Railway Station.

Cyclists

5.7 Transport policy identifies that cycling represents a realistic and healthy option to use of the private car for making journeys up to 5km as a whole journey or as part of a longer journey by public transport.

5.8 GIS software has been used to assess the accessibility of the development by bicycle from the site, as shown **Figure 5.2** overleaf which illustrates the 5km cycle catchment area around the site, which is roughly equivalent to a 25 minute cycle time.

Figure 5.2 – 5km Cycling Accessibility Isochrones



5.9 The above plan demonstrates that Pendleton, Waddington, Grindleton and Chatburn, amongst others, are all located within 5km of the development.

Public Transport

5.10 The nearest bus stops to the site are located on Waddington Road approximately 250m from the site.

5.11 Details of the bus services and frequencies which use these stops are provided in **Table 5.1** overleaf:-

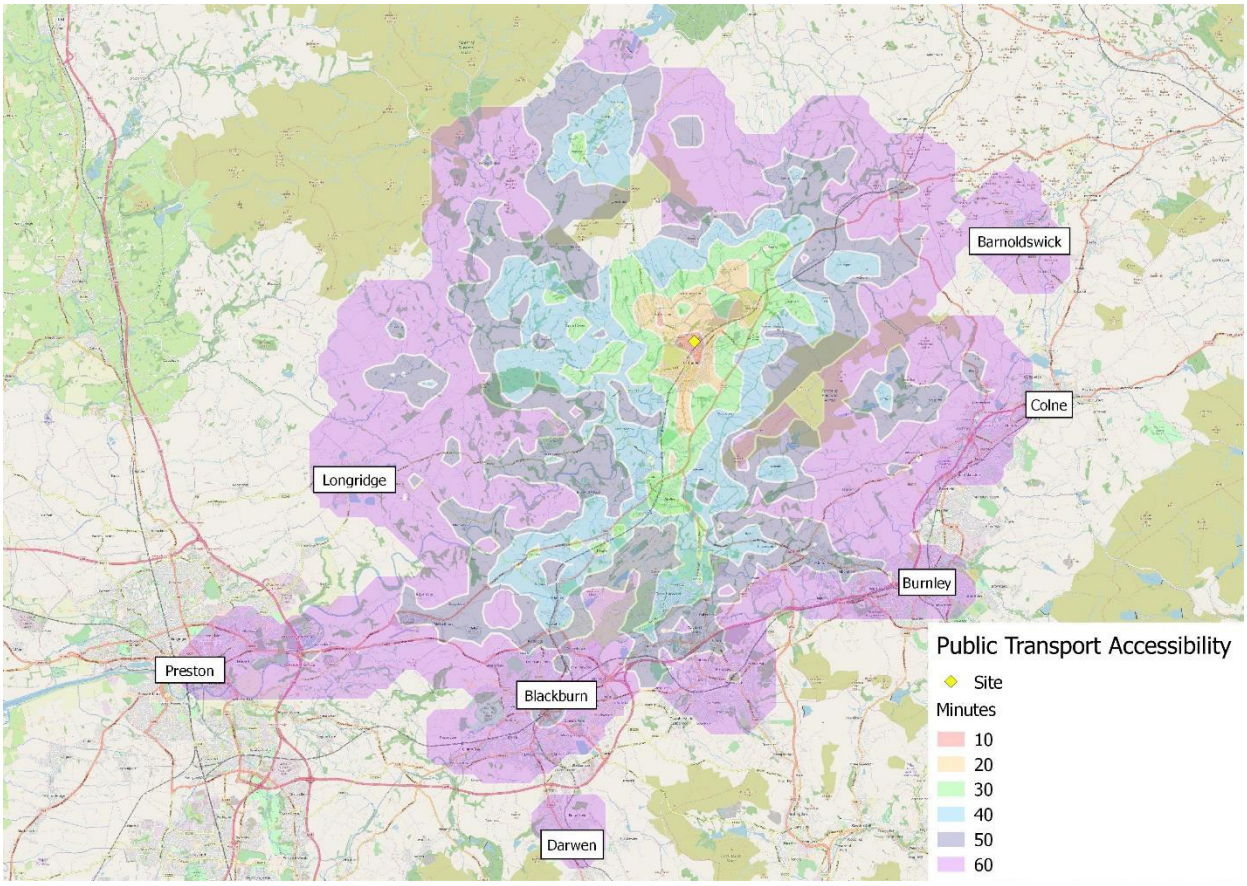
Table 5.1 – Bus Service Summary

Service Number	Route	Average Service Headway (mins) each Direction of Travel		
		Mon-Fri	Sat	Sun
66	Clitheroe - Nelson	120 (until 12:37)	120 (until 16:02)	-
67	Clitheroe - Nelson	120	120	-

5.12 The above table demonstrates that prospective residents of the site will have access to bus services which provide access to a range of destinations including Grindleton, Chatburn, Downham and Nelson.

5.13 **Figure 5.3** overleaf indicates a 60 minute public transport journey from the site. The time includes the walk to the bus stops and railway station, demonstrating that it is possible to reach areas such as Preston, Blackburn and Burnley, amongst others, within an acceptable commute time.

Figure 5.3 – 60 Minute Public Transport Accessibility Isochrones



5.14 As mentioned earlier, the site is within a 10 minute walk distance (approximately 0.4 km) of Clitheroe Interchange Railway Station. This station provides regular links to a number of local stations along with major destinations such as Manchester and Salford.

5.15 Details of the rail services and frequencies which use these stops are provided in **Table 5.2** below:-

Table 5.2 – Rail Service Summary

Route	Average Service Frequency (mins) each Direction of Travel		
	Mon-Fri	Sat	Sun
Clitheroe – Blackburn – Bolton – Salford Central – Manchester Victoria	60	60	60
Manchester Victoria – Salford Central – Bolton – Blackburn - Clitheroe	60	60	60

5.16 As illustrated in **Table 5.2** above, Clitheroe Interchange railway station provides a frequent rail service between Clitheroe and Manchester. Trains run hourly from Clitheroe Interchange and Manchester Victoria with additional services being provided in peak hours. Clitheroe Interchange also services different towns and cites in the north west such as, Blackburn, Bolton, Salford and Carlisle. Hourly services are provided on Sundays from Clitheroe Interchange; however, they start slightly later and finish slightly earlier.

5.17 Hourly services are provided on Sundays from Manchester Victoria; starting slightly later and finishing slightly earlier than on weekdays.

5.18 Clitheroe Interchange railway station provides Bicycle parking via lockers and the bus interchange is located adjacent to the station front.

Accessibility Summary

5.19 Overall, this Chapter demonstrates that the site is accessible by the main non-car modes of transport.

6.0 TRIP GENERATION

Introduction

6.1 This chapter provides an estimate of the number of trips generated by the proposed use of the site, along with the distribution and assignment of vehicular traffic for each use on the local highway network.

Multi-Modal Trip Generation – Proposed Use

6.2 To estimate the trip generating potential of the proposed residential use of the site, the TRICS 7.5.3. Database has been interrogated for surveys of residential developments similar to that proposed.

6.3 The TRICS outputs are presented in **Appendix D** with the trip rate summarised in **Table 6.1** below:-

Table 6.1 – Residential Use Trip Rates (Trip Rate per Dwelling)

Mode	Weekday AM Peak Hour		Weekday PM Peak Hour	
	Arrivals	Departures	Arrivals	Departures
Vehicles	0.140	0.394	0.332	0.150
Cyclists	0.003	0.010	0.013	0.008
Pedestrians	0.029	0.101	0.111	0.053
Public Transport	0.000	0.023	0.018	0.007

6.4 The above trip rates have been applied to the proposed 64 dwellings to determine the multi-modal trip generation for the development, as summarised in **Table 6.2** below.

Table 6.2 – Proposed Residential Use Trip Generation

Mode	Weekday AM Peak Hour		Weekday PM Peak Hour	
	Arrivals	Departures	Arrivals	Departures
Vehicles	9	25	21	10
Cyclists	0	1	1	1
Pedestrians	2	6	7	3
Public Transport	0	1	1	0

6.5 It has therefore been calculated that the proposed development would generate approximately 30 vehicle trips in the network peak hours; this equates to a vehicle trip every two minutes and it is therefore clear that this would not have a material impact on the operation of Hawthorne Place or the wider local highway network.

7.0 SUMMARY AND CONCLUSIONS

7.1 SCP have been appointed by Persimmon Homes (Lancashire) to provide transport planning consultancy services to support a planning application for a proposed residential development on land to the north of Hawthorne Place, Clitheroe.

7.2 The application proposals comprise 64 dwellings accessed via an extension of Hawthorne Place.

7.3 The site is accessible by non-car modes of transport.

7.4 No accidents have been recorded on Hawthorne Place including the junction with the B4678 Waddington Road and personal injury accident data for the most recently available five year period does not identify any material concerns in the context of the proposed development in the vicinity of the site.

7.5 The proposed development would generate approximately 30 vehicle trips in the network peak hours two-way; this equates to a vehicle trip every two minutes and it is therefore clear that this would not have a material impact on the operation of Hawthorne Place or the wider local highway network.

7.6 Therefore there would not be an unacceptable impact on highway safety and the residual cumulative impact of the development cannot be considered ‘severe’ As such, in accordance with paragraph 109 of the NPPF, there is no reason to prevent or refuse this planning application on transport grounds.

7.7 The proposed development is therefore considered acceptable with regard to transport.

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APPENDIX A

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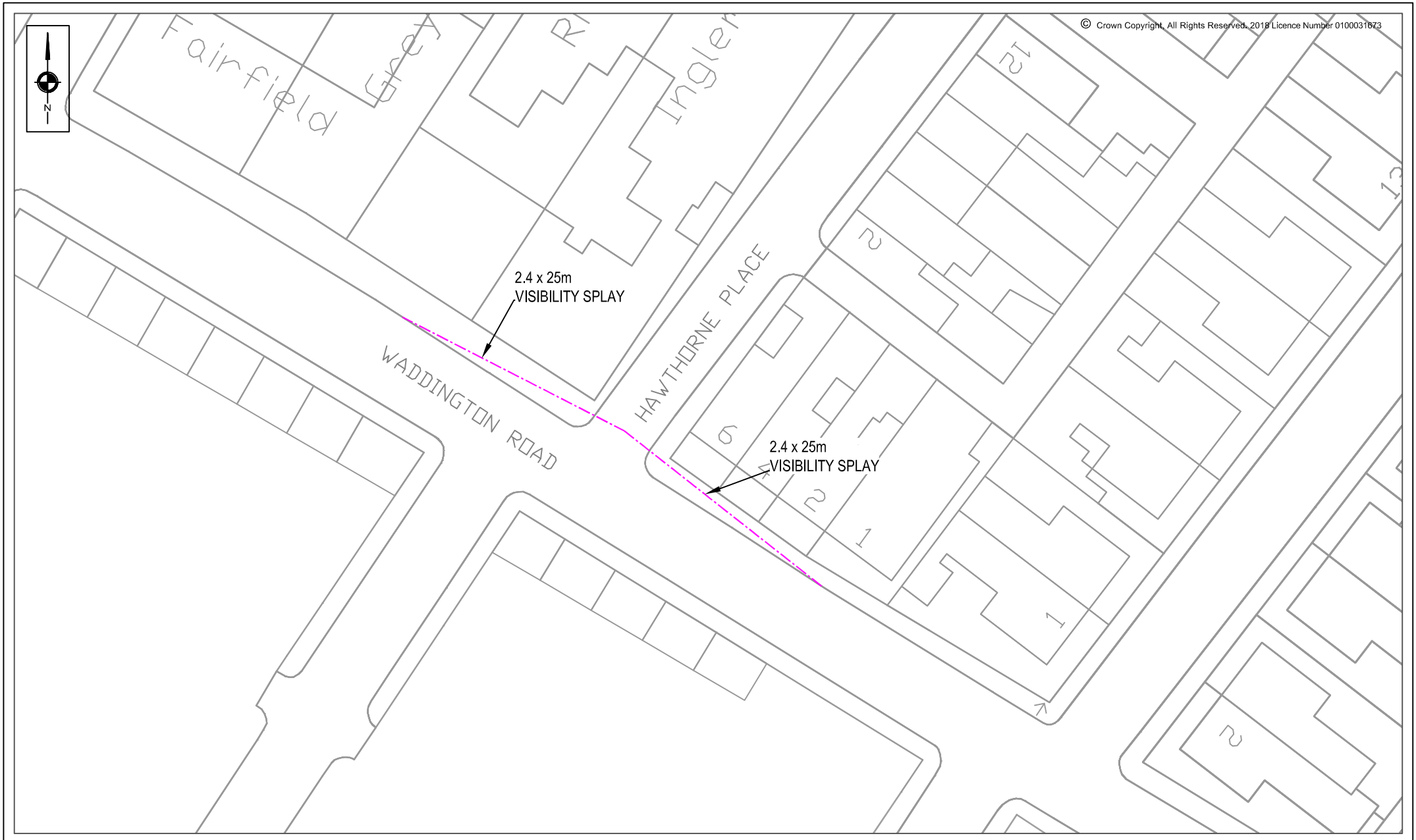
APPENDIX B



SCP

Transportation Planning : Infrastructure Design

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Project Title	PERSIMMON HOMES (LANCASHIRE) HAWTHORNE FARM, CLITHEROE
Drawing Title	VISIBILITY SPLAYS WADDINGTON ROAD / HAWTHORNE PLACE JUNCTION
Scale	1:500 @ A4
By	WD
Date	15.10.2018
Checked	MD
Approved/ Unapproved	-
Status	PLANNING

Rev	Description	Date	By
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Drawing No.	SCP/18448/F01
Revision	-

S|C|P

APPENDIX C

Calculation Reference: AUDIT-726001-181016-1045

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

MULTI-MODAL VEHICLES

Selected regions and areas:

02	**SOUTH EAST**		
	ES	EAST SUSSEX	3 days
	KC	KENT	2 days
	SC	SURREY	1 days
	WS	WEST SUSSEX	3 days
03	**SOUTH WEST**		
	DC	DORSET	1 days
	SM	SOMERSET	1 days
04	**EAST ANGLIA**		
	NF	NORFOLK	1 days
	SF	SUFFOLK	1 days
06	**WEST MIDLANDS**		
	SH	SHROPSHIRE	2 days
	ST	STAFFORDSHIRE	1 days
	WK	WARWICKSHIRE	1 days
07	**YORKSHIRE & NORTH LINCOLNSHIRE**		
	NE	NORTH EAST LINCOLNSHIRE	1 days
	NY	NORTH YORKSHIRE	2 days
08	**NORTH WEST**		
	CH	CHESHIRE	1 days
	GM	GREATER MANCHESTER	1 days
10	**WALES**		
	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: 10 to 805 (units:)
Range Selected by User: 32 to 128 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/10 to 19/04/18

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	5 days
Tuesday	1 days
Wednesday	6 days
Thursday	8 days
Friday	3 days

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

Selected survey types:

Manual count	23 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 undertaking using machines.

Selected Locations:

Edge of Town	23

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	21
No Sub Category	2

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village,

Secondary Filtering selection:

Use Class:

C1	1 days
C3	22 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:

1,000 or Less	1 days
1,001 to 5,000	2 days
5,001 to 10,000	5 days
10,001 to 15,000	10 days
15,001 to 20,000	3 days
20,001 to 25,000	1 days
25,001 to 50,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	2 days
25,001 to 50,000	2 days
50,001 to 75,000	4 days
75,001 to 100,000	7 days
100,001 to 125,000	1 days
125,001 to 250,000	4 days
250,001 to 500,000	2 days
500,001 or More	1 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	5 days
1.1 to 1.5	18 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	4 days
No	19 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	23 days

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

LIST OF SITES relevant to selection parameters

1 **CH-03-A-09** **TERRACED HOUSES** **CHESHIRE**
GREYSTOKE ROAD
MACCLESFIELD
HURDSFIELD
Edge of Town
Residential Zone
Total Number of dwellings: 24
Survey date: MONDAY *24/11/14* *Survey Type: MANUAL*

2 **DC-03-A-08** **BUNGALOWS** **DORSET**
HURSTDENE ROAD
BOURNEMOUTH
CASTLE LANE WEST
Edge of Town
Residential Zone
Total Number of dwellings: 28
Survey date: MONDAY *24/03/14* *Survey Type: MANUAL*

3 **ES-03-A-02** **PRIVATE HOUSING** **EAST SUSSEX**
SOUTH COAST ROAD
PEACEHAVEN

Edge of Town
Residential Zone
Total Number of dwellings: 37
Survey date: FRIDAY *18/11/11* *Survey Type: MANUAL*

4 **ES-03-A-03** **MIXED HOUSES & FLATS** **EAST SUSSEX**
SHEPHAM LANE
POLEGATE

Edge of Town
Residential Zone
Total Number of dwellings: 212
Survey date: MONDAY *11/07/16* *Survey Type: MANUAL*

5 **ES-03-A-04** **MIXED HOUSES & FLATS** **EAST SUSSEX**
NEW LYDD ROAD
CAMBER

Edge of Town
Residential Zone
Total Number of dwellings: 134
Survey date: FRIDAY *15/07/16* *Survey Type: MANUAL*

6 **GM-03-A-10** **DETACHED/SEMI** **GREATER MANCHESTER**
BUTT HILL DRIVE
MANCHESTER
PRESTWICH
Edge of Town
Residential Zone
Total Number of dwellings: 29
Survey date: WEDNESDAY *12/10/11* *Survey Type: MANUAL*

7 **KC-03-A-04** **SEMI-DETACHED & TERRACED** **KENT**
KILN BARN ROAD
AYLESFORD
DITTON
Edge of Town
Residential Zone
Total Number of dwellings: 110
Survey date: FRIDAY *22/09/17* *Survey Type: MANUAL*

8 **KC-03-A-07** **MIXED HOUSES** **KENT**
RECULVER ROAD
HERNE BAY

Edge of Town
Residential Zone
Total Number of dwellings: 288
Survey date: WEDNESDAY *27/09/17* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

9 **NE-03-A-02** **SEMI DETACHED & DETACHED** **NORTH EAST LINCOLNSHIRE**
HANOVER WALK
SCUNTHORPE

Edge of Town
No Sub Category
Total Number of dwellings: 432
Survey date: MONDAY *12/05/14* *Survey Type: MANUAL*

10 **NF-03-A-03** **DETACHED HOUSES** **NORFOLK**
HALING WAY
THETFORD

Edge of Town
Residential Zone
Total Number of dwellings: 10
Survey date: WEDNESDAY *16/09/15* *Survey Type: MANUAL*

11 **NY-03-A-10** **HOUSES AND FLATS** **NORTH YORKSHIRE**
BOROUGHBRIDGE ROAD
RIPON

Edge of Town
No Sub Category
Total Number of dwellings: 71
Survey date: TUESDAY *17/09/13* *Survey Type: MANUAL*

12 **NY-03-A-11** **PRIVATE HOUSING** **NORTH YORKSHIRE**
HORSEFAIR
BOROUGHBRIDGE

Edge of Town
Residential Zone
Total Number of dwellings: 23
Survey date: WEDNESDAY *18/09/13* *Survey Type: MANUAL*

13 **SC-03-A-04** **DETACHED & TERRACED** **SURREY**
HIGH ROAD
BYFLEET

Edge of Town
Residential Zone
Total Number of dwellings: 71
Survey date: THURSDAY *23/01/14* *Survey Type: MANUAL*

14 **SF-03-A-05** **DETACHED HOUSES** **SUFFOLK**
VALE LANE
BURY ST EDMUNDS

Edge of Town
Residential Zone
Total Number of dwellings: 18
Survey date: WEDNESDAY *09/09/15* *Survey Type: MANUAL*

15 **SH-03-A-05** **SEMI-DETACHED/TERRACED** **SHROPSHIRE**
SANDCROFT
TELFORD
SUTTON HILL
Edge of Town
Residential Zone
Total Number of dwellings: 54
Survey date: THURSDAY *24/10/13* *Survey Type: MANUAL*

16 **SH-03-A-06** **BUNGALOWS** **SHROPSHIRE**
ELLESMERE ROAD
SHREWSBURY

Edge of Town
Residential Zone
Total Number of dwellings: 16
Survey date: THURSDAY *22/05/14* *Survey Type: MANUAL*

17 **SM-03-A-01** **DETACHED & SEMI** **SOMERSET**
WEMBDON ROAD
BRIDGWATER
NORTHFIELD
Edge of Town
Residential Zone
Total Number of dwellings: 33
Survey date: THURSDAY *24/09/15* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

18 **ST-03-A-07** **DETACHED & SEMI-DETACHED** **STAFFORDSHIRE**
BEACONSIDE
STAFFORD
MARSTON GATE
Edge of Town
Residential Zone
Total Number of dwellings: 248
Survey date: WEDNESDAY *22/11/17* *Survey Type: MANUAL*

19 **VG-03-A-01** **SEMI-DETACHED & TERRACED** **VALE OF GLAMORGAN**
ARTHUR STREET
BARRY

Edge of Town
Residential Zone
Total Number of dwellings: 12
Survey date: MONDAY *08/05/17* *Survey Type: MANUAL*

20 **WK-03-A-02** **BUNGALOWS** **WARWICKSHIRE**
NARBERTH WAY
COVENTRY
POTTERS GREEN
Edge of Town
Residential Zone
Total Number of dwellings: 17
Survey date: THURSDAY *17/10/13* *Survey Type: MANUAL*

21 **WS-03-A-04** **MIXED HOUSES** **WEST SUSSEX**
HILLS FARM LANE
HORSHAM
BROADBRIDGE HEATH
Edge of Town
Residential Zone
Total Number of dwellings: 151
Survey date: THURSDAY *11/12/14* *Survey Type: MANUAL*

22 **WS-03-A-06** **MIXED HOUSES** **WEST SUSSEX**
ELLIS ROAD
WEST HORSHAM
S BROADBRIDGE HEATH
Edge of Town
Residential Zone
Total Number of dwellings: 805
Survey date: THURSDAY *02/03/17* *Survey Type: MANUAL*

23 **WS-03-A-08** **MIXED HOUSES** **WEST SUSSEX**
ROUNDSTONE LANE
ANGMERING

Edge of Town
Residential Zone
Total Number of dwellings: 180
Survey date: THURSDAY *19/04/18* *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 VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	23	131	0.086	23	131	0.293	23	131	0.379
08:00 - 09:00	23	131	0.140	**23**	**131**	**0.394**	**23**	**131**	**0.534**
09:00 - 10:00	23	131	0.146	23	131	0.171	23	131	0.317
10:00 - 11:00	23	131	0.128	23	131	0.152	23	131	0.280
11:00 - 12:00	23	131	0.141	23	131	0.162	23	131	0.303
12:00 - 13:00	23	131	0.153	23	131	0.152	23	131	0.305
13:00 - 14:00	23	131	0.163	23	131	0.158	23	131	0.321
14:00 - 15:00	23	131	0.169	23	131	0.182	23	131	0.351
15:00 - 16:00	23	131	0.267	23	131	0.184	23	131	0.451
16:00 - 17:00	23	131	0.273	23	131	0.169	23	131	0.442
17:00 - 18:00	**23**	**131**	**0.332**	23	131	0.150	23	131	0.482
18:00 - 19:00	23	131	0.297	23	131	0.176	23	131	0.473
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.295			2.343			4.638

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.*

Parameter summary

Trip rate parameter range selected:	10 - 805 (units:)
Survey date date range:	01/01/10 - 19/04/18
Number of weekdays (Monday-Friday):	23
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 show. 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 CYCLISTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	23	131	0.005	23	131	0.009	23	131	0.014
08:00 - 09:00	23	131	0.003	**23**	**131**	**0.010**	23	131	0.013
09:00 - 10:00	23	131	0.000	23	131	0.002	23	131	0.002
10:00 - 11:00	23	131	0.001	23	131	0.005	23	131	0.006
11:00 - 12:00	23	131	0.003	23	131	0.003	23	131	0.006
12:00 - 13:00	23	131	0.003	23	131	0.003	23	131	0.006
13:00 - 14:00	23	131	0.004	23	131	0.004	23	131	0.008
14:00 - 15:00	23	131	0.003	23	131	0.002	23	131	0.005
15:00 - 16:00	23	131	0.005	23	131	0.005	23	131	0.010
16:00 - 17:00	23	131	0.008	23	131	0.008	23	131	0.016
17:00 - 18:00	**23**	**131**	**0.013**	23	131	0.008	**23**	**131**	**0.021**
18:00 - 19:00	23	131	0.007	23	131	0.005	23	131	0.012
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.055			0.064			0.119

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.*

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

MULTI-MODAL PEDESTRIANS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	23	131	0.015	23	131	0.029	23	131	0.044
08:00 - 09:00	23	131	0.029	**23**	**131**	**0.101**	23	131	0.130
09:00 - 10:00	23	131	0.039	23	131	0.041	23	131	0.080
10:00 - 11:00	23	131	0.038	23	131	0.041	23	131	0.079
11:00 - 12:00	23	131	0.027	23	131	0.028	23	131	0.055
12:00 - 13:00	23	131	0.030	23	131	0.032	23	131	0.062
13:00 - 14:00	23	131	0.033	23	131	0.026	23	131	0.059
14:00 - 15:00	23	131	0.037	23	131	0.044	23	131	0.081
15:00 - 16:00	**23**	**131**	**0.111**	23	131	0.053	**23**	**131**	**0.164**
16:00 - 17:00	23	131	0.068	23	131	0.039	23	131	0.107
17:00 - 18:00	23	131	0.061	23	131	0.039	23	131	0.100
18:00 - 19:00	23	131	0.042	23	131	0.043	23	131	0.085
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.530			0.516			1.046

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	23	131	0.001	23	131	0.013	23	131	0.014
08:00 - 09:00	23	131	0.000	**23**	**131**	**0.023**	23	131	0.023
09:00 - 10:00	23	131	0.001	23	131	0.010	23	131	0.011
10:00 - 11:00	23	131	0.002	23	131	0.005	23	131	0.007
11:00 - 12:00	23	131	0.001	23	131	0.004	23	131	0.005
12:00 - 13:00	23	131	0.003	23	131	0.005	23	131	0.008
13:00 - 14:00	23	131	0.004	23	131	0.004	23	131	0.008
14:00 - 15:00	23	131	0.004	23	131	0.002	23	131	0.006
15:00 - 16:00	**23**	**131**	**0.018**	23	131	0.007	**23**	**131**	**0.025**
16:00 - 17:00	23	131	0.016	23	131	0.005	23	131	0.021
17:00 - 18:00	23	131	0.013	23	131	0.002	23	131	0.015
18:00 - 19:00	23	131	0.016	23	131	0.005	23	131	0.021
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.079			0.085			0.164

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.*