



TRANSPORT STATEMENT

August 2018

Land off Colonel Road Betws Carmarthenshire

acstro

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Revision History

Issue 1	15 th August 2018	
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1190 Colonel Rd Transport Statement.docx

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Acstro Ltd., Ty Penbryn, Salem, Llandeilo, SA19 7LT
www.acstro.com

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1 Introduction

- 1.1 Acstro has been appointed to prepare a Transport Statement to support the promotion of land to the west of Colonel Road, Betws as a candidate site for inclusion, as suitable for residential development, in Carmarthenshire County Council's Revised Local Development Plan 2018 – 2033.
- 1.2 The candidate site's location is shown in [Appendix 1](#).

Appendix 1 Location Plan
- 1.3 The site is currently undeveloped. It is considered that the candidate site has the potential to deliver some 50 dwellings and will be accessed from Colonel Road.
- 1.4 This document considers the transport implications of the candidate site and follows the general guidance of Carmarthenshire's 'Site Assessment Methodology – February 2018'. In particular, this Transport Statement demonstrates that the candidate site is in a sustainable location that is closely related to existing facilities and services and is accessible to pedestrians, cyclists and public transport users. It is also demonstrated that safe vehicular access to the site can be provided.
- 1.5 The structure of the Transport Statement is as follows:
 - Section 2 describes the relevant planning policy context that is relevant in terms of transport issues;
 - Section 3 describes the site's location, its proximity to services and facilities and its accessibility by all forms of transport.
 - Section 4 describes the proposed development and its access arrangements. An estimate of the likely trip generation of the proposed development of the land is also provided.
 - Section 5 provides a summary and conclusion.

2 Policy Context

Planning Policy Wales

- 2.1 Planning Policy Wales (PPW) sets out the land use planning policies of the Welsh Government.
- 2.2 In terms of transport related policies it places the sustainability of development at the heart of the decision making process (pp 4.7.4) and requires that new development proposals minimize the need to travel and increase accessibility by modes other than the private car. It requires that major generators of travel demand be located within existing urban areas that are well served by public transport, or can be reached by walking or cycling.
- 2.3 The principles discussed above are repeated again in PPW's Chapter 8, which deals specifically with Transport issues. In 8.1.4 it reinforces the Welsh Government's objectives for transport through:
- reducing the need to travel, especially by private car, by locating development where there is good access by public transport, walking and cycling;
 - locating development near other related uses to encourage multi-purpose trips and reduce the length of journeys;
 - improving accessibility by walking, cycling and public transport;
 - ensuring that transport is accessible to all, taking into account the needs of disabled and other less mobile people;
 - promoting walking and cycling;
 - supporting the provision of high quality public transport;
 - supporting traffic management measures;
 - promoting sustainable transport options for freight and commerce;
 - supporting sustainable travel options in rural areas;
 - supporting necessary infrastructure improvements; and
 - ensuring that, as far as possible, transport infrastructure does not contribute to land take, urban sprawl or neighbourhood severance.
- 2.4 In terms of plan making and development control it advises (8.7.1) that the following issues should be taken into account:
- the impacts of the proposed development on travel demand;
 - the level and nature of public transport provision;
 - accessibility by a range of different transport modes;
 - the willingness of a developer to promote travel by public transport, walking or cycling, or to provide infrastructure or measures to manage traffic
 - the environmental impact of both transport infrastructure and the traffic generated; and
 - the effects on the safety and convenience of other users.

- 2.5 PPW also requires that the proposed access to a development should reflect the likely travel patterns involved. It should ensure that people can reach the development, as far as practicable, by walking, cycling and public transport, as well as by car (pp 8.7.3).

[TAN18 Transportation](#)

- 2.6 Planning Policy Wales Technical Advice Note 18 (TAN18) details the Welsh Government's policies in terms of transportation and repeats the general principles advocated in PPW i.e. that development is encouraged in sustainable, accessible, locations that will reduce the need to travel by car. Its aim is to promote an efficient and sustainable transport system and to counter the negative impacts associated with road traffic growth, for example increased air pollution, green house gases and congestion (2.1). It sees the integration of transport and land use planning as key (2.3) in achieving the Welsh Government's sustainable development policy objectives by:
- promoting travel efficient settlement patterns;
 - ensuring new development is located where there is good access by public transport, walking and cycling thereby minimizing the need for travel and fostering social inclusion;
 - managing parking provision;
 - ensuring that new development includes appropriate provision for pedestrians, cycling, public transport, and traffic management and parking/servicing;
 - encouraging the location of development near other related uses to encourage multi-purpose trips; and
 - ensuring that transport infrastructure necessary to serve new development allows existing transport networks to continue to perform their identified functions.
- 2.7 The needs of walkers and cyclists must be taken into consideration and the use of these most sustainable forms of transport encouraged in all developments (TAN18 Chapter 6). Similarly, all development should be accessible by public transport (Chapter 7).

[The Active Travel \(Wales\) Act 2013](#)

- 2.8 The Active Travel (Wales) Act 2013 is Welsh Government legislation aimed to support an increase in the level of walking and cycling in Wales; to encourage a shift in travel behaviour to active travel modes, and to facilitate the building of walking and cycling infrastructure.
- 2.9 The Active Travel (Wales) Act 2013 makes it a legal requirement for local authorities in Wales to map and plan for suitable routes for active travel, and to build and improve infrastructure for walking and cycling every year. It creates new duties to consider the needs of walkers and cyclists and make better provision for them. It also requires the consideration of walking and cycling as a mode of transport and the Act focuses on the promotion of walking and cycling for purposeful journeys, rather than as a purely recreational activity.
- 2.10 The Act is supported by the Active Travel Action Plan Wales (2014), and many of the actions of the Active Travel Action Plan Wales document also benefit recreational or competitive walking and cycling. 'Walking' in the Active Travel Action Plan for Wales includes the use of wheelchairs and mobility scooters and 'cycling' includes the use of electric bikes, but not motorcycles.

Carmarthenshire Local Development Plan 2006 -2021

- 2.11 The LDP seeks to promote sustainable development. Policy GP1 requires that development, amongst other things, has an appropriate and safe access and does not give rise to parking or highway safety concerns and that it promotes ease of access by pedestrians, cyclists and public transport users.
- 2.12 Policy SP3 sets out the settlement framework for the County. Betws is part of the Ammanford / Cross Hands Growth Area.
- 2.13 The site is located adjacent to Betws' current settlement limits (policy GP2) and adjacent to existing housing in the current LDP. The candidate site is therefore closely related to the existing settlement.
- 2.14 Policy TR3 relates to the design of highways in developments and requires that developments provide:
- An integrated network of convenient and safe pedestrian and cycle routes (within and from the site) which promotes the interests of pedestrians, cyclists and public transport;
 - Suitable provision for access by public transport;
 - Appropriate parking and where applicable, servicing space in accordance with required standards;
 - Infrastructure and spaces allowing safe and easy access for those with mobility difficulties;
 - Required access standards reflective of the relevant Class of road and speed restrictions including visibility splays and design features and calming measures necessary to ensure highway safety and the ease of movement is maintained, and where required enhanced;
 - Provision for Sustainable Urban Drainage Systems to allow for the disposal of surface water run off from the highway.
- 2.15 Proposals that do not generate unacceptable levels of traffic on the surrounding road network and would not be detrimental to highway safety or cause significant harm to the amenity of residents will be permitted.
- 2.16 Proposals that will not result in offsite congestion in terms of parking or service provision or where the capacity of the network is sufficient to serve the development will be permitted. Developers may be required to facilitate appropriate works as part of the granting of any permission.

3 Location & Accessibility

Location

- 3.1 The site is shown in the context of nearby facilities and the surrounding transport network in [Appendix 2](#).

Appendix 2 Site Context

- 3.2 The site is located to the west of Colonel Road in Betws. It is located some 1.2km from the town centre of Ammanford, which benefits from a good range of high street services with a variety of retail outlets and is well served by public transport. There are also facilities in Betws, including a primary school, two public houses, a rugby football club and playing field, a play park and recreation park land. Walk distances to these facilities from the candidate site are provided in the table below.

Facility	Walk Distance from Site	Walk Time
Bus Stop	100m	2 minutes
Play Park	600m	7 minutes
Rugby Football Club/Playing Field	650m	7 minutes
Betws Primary School	900m	10 minutes
Public House	900m	10 minutes
Ammanford Town Centre	1.2km	14 minutes
Tesco Superstore	1.3km	15 minutes
Lidl Supermarket	1.3km	15 minutes
Ammanford Bus Station	1.5km	20 minutes

Table 1 Walk Distances and Time from the Site to Local Facilities

- 3.3 The walk distances quoted above are measured from the proposed site entrance and assume a route along the public highway network.
- 3.4 In summary, the candidate site is in an appropriate location with public transport and a range of services and facilities within walking distance, facilitating sustainable travel choices, such as active travel or public transport.

Active Travel

- 3.5 The Chartered Institution of Highways and Transportation's (CIHT) 'Planning for Walking' (2015) states that "Across Britain about 80 per cent of journeys shorter than 1 mile (1.6km) are made wholly on foot – something that has changed little in thirty years. In 2012 walkers accounted for 79 per cent of all journeys shorter than 1 mile, but beyond that distance cars are the dominant mode (DfT, annual)". It is considered that 2km, a distance that can be walked in around 25 to 30 minutes, represents a reasonable distance to expect that walking can be a viable option.
- 3.6 As described previously there is a good range of services and facilities within the 2km walking distance to the candidate site.
- 3.7 The site is to be accessed from Colonel Road and as part of the access works, the existing narrow footway on Colonel Road will be widened to approximately 2m in order to provide an appropriate facility for pedestrians. The footways on Colonel Road benefit from street lighting and link with the wider pedestrian network providing a continuous facility for pedestrians walking between the site and the facilities available locally.

- 3.8 The Chartered Institution of Highways and Transportation's 'Planning for Cycling' (2014) states that 'cycle use is more seasonal than for other modes, with up to twice as many cyclists in summer compared with winter. The majority of cycling trips are for short distances, with 80% being less than five miles (8km) and with 40% being less than two miles (3km). However, the majority of trips by all modes are also short distances (67% are less than five miles, and 38% are less than two miles); therefore, the bicycle is a potential mode for many of these trips (National Travel Survey, 2013, Department for Transport).'
- 3.9 Whilst there are currently no segregated cycle routes in the immediate area of the site, Ammanford town centre is within reasonable cycling distance to the proposed site being approximately 1.3km to the north.

Public Transport

- 3.10 Access to public transport from the proposed development are available from within 100m of the site. Access to the wider bus network is available from Ammanford's bus station, approximately 1.5km from the site, with connections by bus from the stops closest to the site.
- 3.11 The nearest bus stops to the site are located conveniently to the east and west of the site access, the stop to the east is located where Colonel Road becomes Waen Gron Road and benefits from a brick bus shelter. This stop is approximately 100m east of the proposed site entrance and no more than 300m from any part of the site.

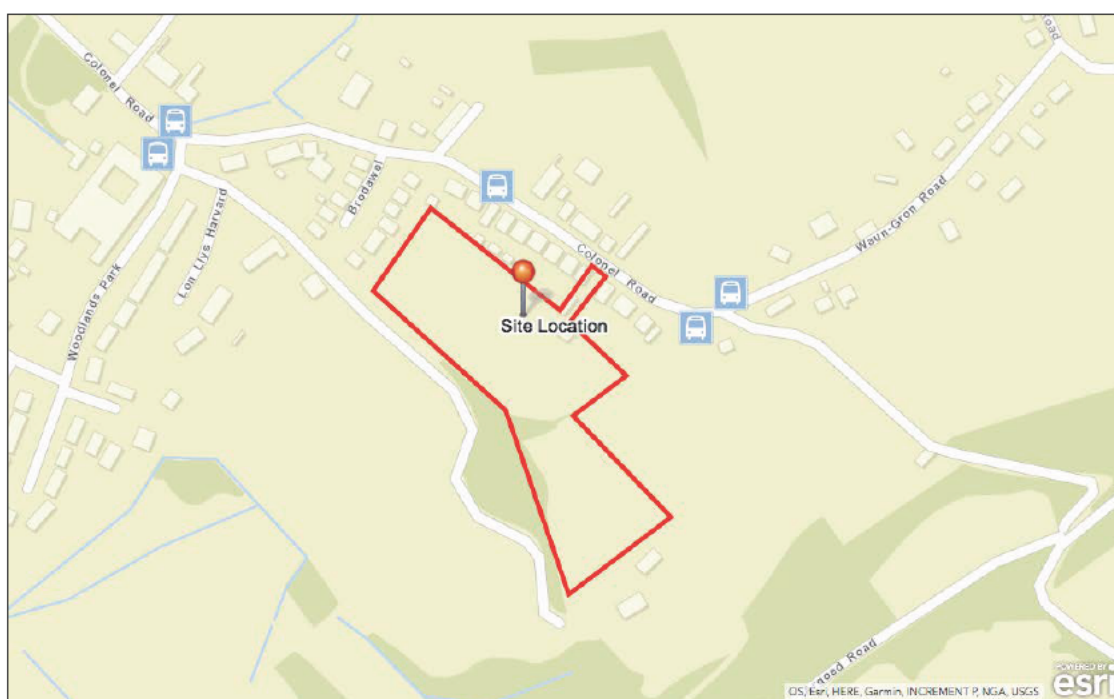


Figure 1. Proximity of Site to Public Transport

- 3.12 The closest stops are illustrated in Figure 1. These stops provide access to the 127 bus service which has 5 daily services on the circular route to and from Ammanford Bus Station via Betws.
- 3.13 Ammanford Bus Station is located approximately a 20 minute walk from the candidate site and is connected by 5 daily services from the stops that are within 100m of the site access.

- 3.14 The stops within 100m of the site provide connections to public transport services to (and from) to Ammanford, Garnswllt, Glanamman and Ammanford Bus Station where connections to destinations including Brynamman, Cross Hands, Drefach, Llandeilo, Carmarthen, Llanelli and Swansea are available.
- 3.15 Table 2 shows the services that are connected by public transport via the 127 bus service from within 100m of the site and from Ammanford Bus Station.

Service	Route	Details
124	Ammanford - Brynamman	15 Daily Return Services
129	Ammanford - Carmarthen	8 Daily Return Services
128	Ammanford – Llanelli (via Cross Hands)	6 Daily Return Services
X13	Swansea - Ammanford - Llandeilo	6 Daily Return Services
126	Ammanford Circular via Cwmgwilli	5 Daily Return Services
127	Ammanford Circular via Garnswllt	5 Daily Return Services
146	Ammanford Circular via Glanamman	3 Daily Return Services
145	Ammanford Circular via Glanamman/Garnant	3 Daily Return Services
103	Llandeilo - Ammanford	3 Daily Return Services
165	Ammanford - Cross Hands	2 Daily Return Services
64	Ammanford - Ystradgynlais	2 Daily Return Services
164	Pontyberem-Drefach-Cross Hands-Ammanford	1 Daily Return Services
276	Llandeilo - Carmarthen	1 Daily Return Services
284	Llandeilo – Ammanfors vis Crugybar	1 Daily Return Services
G14	Tycroes – Ysgol Maes-yr-Yrfa	School Service

Table 2 Local Bus Services

- 3.16 The 124, 128 and 129 bus services also provide regular and frequent daily connections to Ammanford railway station, which is located approximately 2.3km to the north of the site. The station provides access to the Heart of Wales line services. There are four trains a day to Shrewsbury northbound from Monday to Saturday (plus a fifth to Llandovery) and five southbound to Llanelli and Swansea; facilitating access to the national rail network.

Highway Network

- 3.17 The site is located to the south west of Colonel Road and is estimated, at this stage, to be capable of accommodating around 50 dwellings. Access to the proposed development will be taken through the curtilage of No. 111 Colonel Road.
- 3.18 All roads within the immediate area are subject to a 30 mph speed limit. Colonel Road has footways on both sides and these link to the wider pedestrian footway network.
- 3.19 Colonel Road is approximately 7.3m wide in the vicinity of the site. It links Waun Gron Road at its southern end to Betws' centre at its northern end. It caters for local traffic only. To the south of the proposed site access point Colonel Road rises towards Waun Gron Road. On-street parking is a characteristic of Colonel Road in the evenings. However, during the working day the number of cars parked on-street is modest.

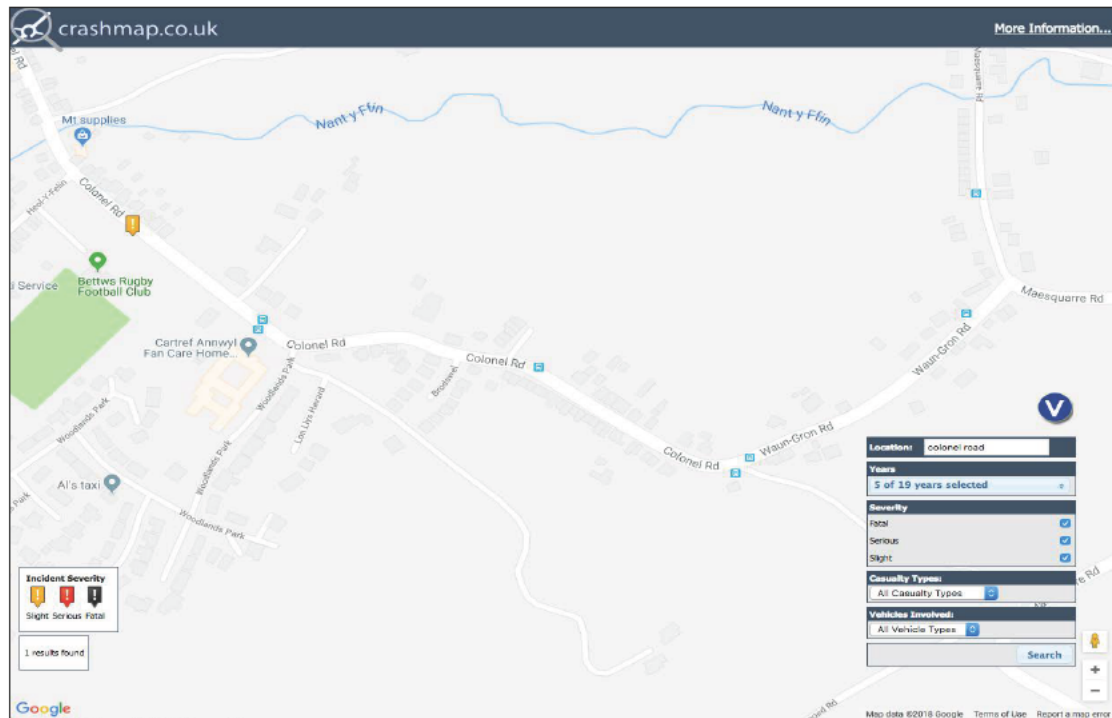


Figure 2 Injury Accident Locations & Severity (2013 - 2017)

- 3.20 A review of the safety record of the highway network in the vicinity of the proposed site has been undertaken, and the results are provided in Figure 2.
- 3.21 Over the latest five-year period (2013 to 2017 inclusive) there have been no recorded injury accidents, in the vicinity of the site on Colonel Road or at its connection with Waun Gron Road. There is one, slight severity, injury accident recorded on Colonel Road and the absence of clusters of accidents or accidents of greater severity indicates that the local highway network is operating with an acceptable level of safety.

4 Proposed Development

Development Composition & Access

- 1.1 It is considered that the proposed development has the ability to accommodate up to 50 dwellings.

Access

- 1.2 The development will be served by a single access that will be located within the curtilage of the existing No.111 Colonel Road. The access will require the demolition of the existing dwelling. The proposed access is shown in [Appendix 3](#).

Appendix 3 Access Arrangement

- 1.3 As part of the access works, the existing narrow footway on Colonel Road will be widened to approximately 2m in order to provide an appropriate facility for pedestrians. The widening of the footway narrows the available carriageway width from the current 7.3m to a minimum of some 6m. This dimension is more appropriate for a residential street than the existing and will be effective in slowing passing traffic. As such, the proposed access works will benefit all users of Colonel Road.
- 1.4 Visibility splays of at least 2.4 x 43m are available in both directions from the proposed access point and this accords with Manual for Streets visibility requirements for 30mph speed limit areas.
- 1.5 It is suggested that a parking courtyard be provided to the rear of, and for the use of, Nos. 103 to 109 Colonel Road (inclusive). The provision of off-street parking for these 4 properties will ensure that visibility from the proposed access is not obscured by on-street parking. Appropriate parking control can be provided at the frontage of these properties to ensure that the highway is kept free of parked cars in this location e.g. double yellow lines. It is not considered necessary to provide a similar arrangement for properties on the southern side of the access as the alignment of Colonel Road provides easier visibility to and from the proposed access.

Trip Generation

- 4.1 The potential trip generation of the proposed development of the site has been estimated by reference to the TRICS trip rate database, a database of over 7,100 traffic surveys of various types of development throughout the UK and Ireland.

Time Range	Trip Rate per House			Trip Generation (50 Houses)		
	Arrivals	Departures	Total	Arrivals	Departures	Total
am peak Hour 08:00-09:00	0.177	0.383	0.56	9	19	28
pm Peak Hour 16:00-17:00	0.32	0.159	0.479	16	8	24
Daily	2.315	2.327	4.642	116	116	232

Table 3 Vehicle Trip Rates & Proposed Development Trip Generation

- 4.2 From the TRICS database evidence of the trip rates of developments of privately owned houses (development of up to 100 units) in urban locations (but not town/city centres) in mainland Britain (excluding Greater London) have been analysed. Full details are provided as [Appendix 4](#) and summarised in Table 3.

Appendix 4 TRICS Trip Rate Data

- 4.3 The TRICS data suggests that the proposed development will generate some 24 to 28 peak hour vehicle movements.
- 4.4 This represents an increase of less than one additional movement every two minutes. It is unlikely that this level of traffic will cause any significant traffic issues on the surrounding highway network.

5 Summary & Conclusion

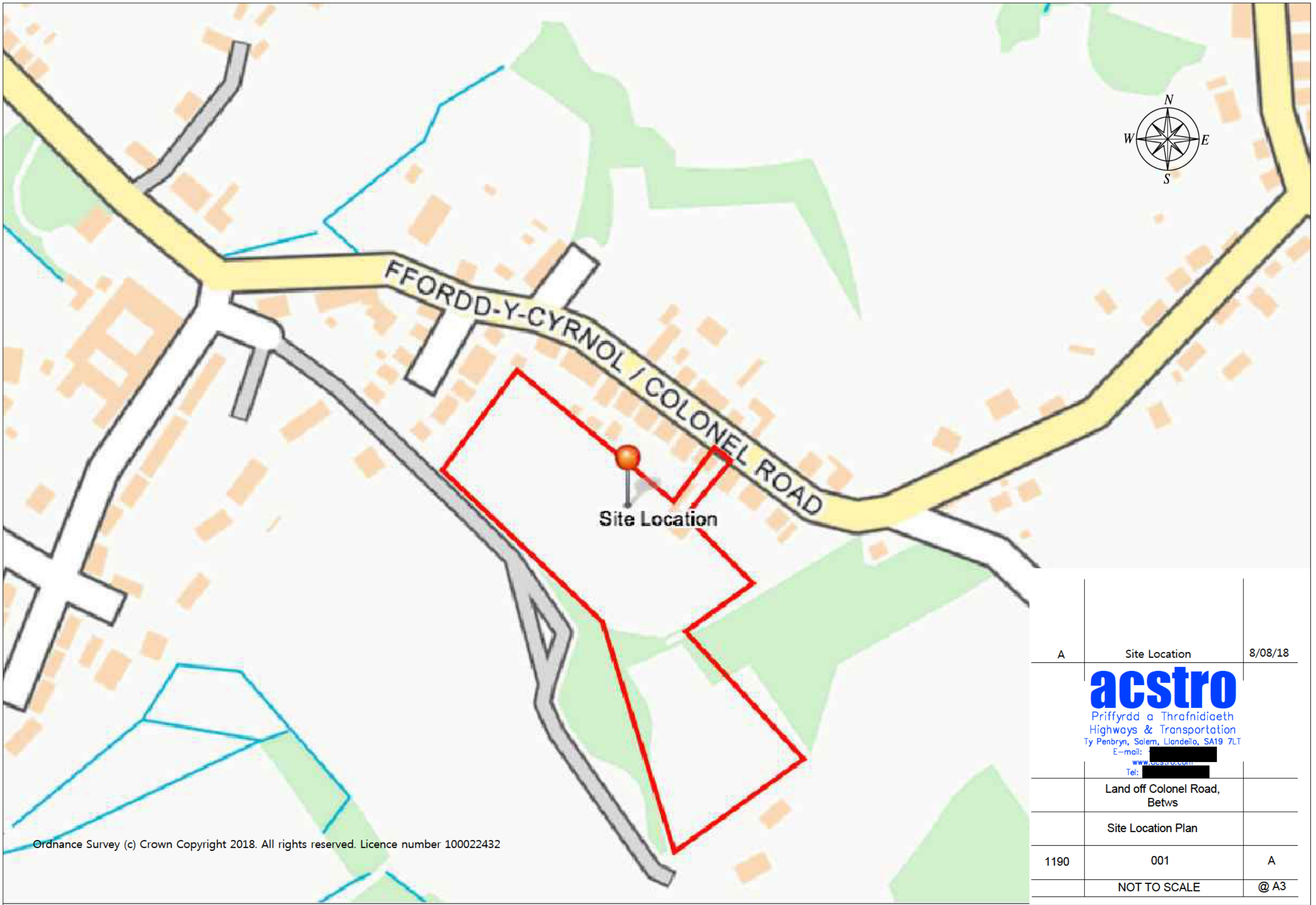
5.1 In summary this Transport Statement has demonstrated that:

- The candidate site's location is closely related to Betws' existing settlement and the facilities that it provides;
- There are a good range of services and facilities near to the site offering education, shopping, employment, leisure and social opportunities. These can be accessed from the site by walking, cycling or by public transport.
- The site is accessible to pedestrians and is connected to the existing footway network.
- A safe and appropriate access, that meets current design standards, can be provided to the site from Colonel Road.
- The estimated traffic generation of the proposed development is unlikely to cause significant detrimental impact to the safe operation of the surrounding highway network.

5.2 As such it is considered that the candidate site meets planning policy requirements in terms of being in an appropriate location that is safely accessible by all forms of transport and that the impacts of the development on the continued operation and safety of the surrounding highway network would be acceptable.

5.3 It is concluded therefore that there are no transport related issues that should prevent the inclusion of this candidate site in Carmarthenshire County Council's Revised Local Development Plan 2018 – 2033.

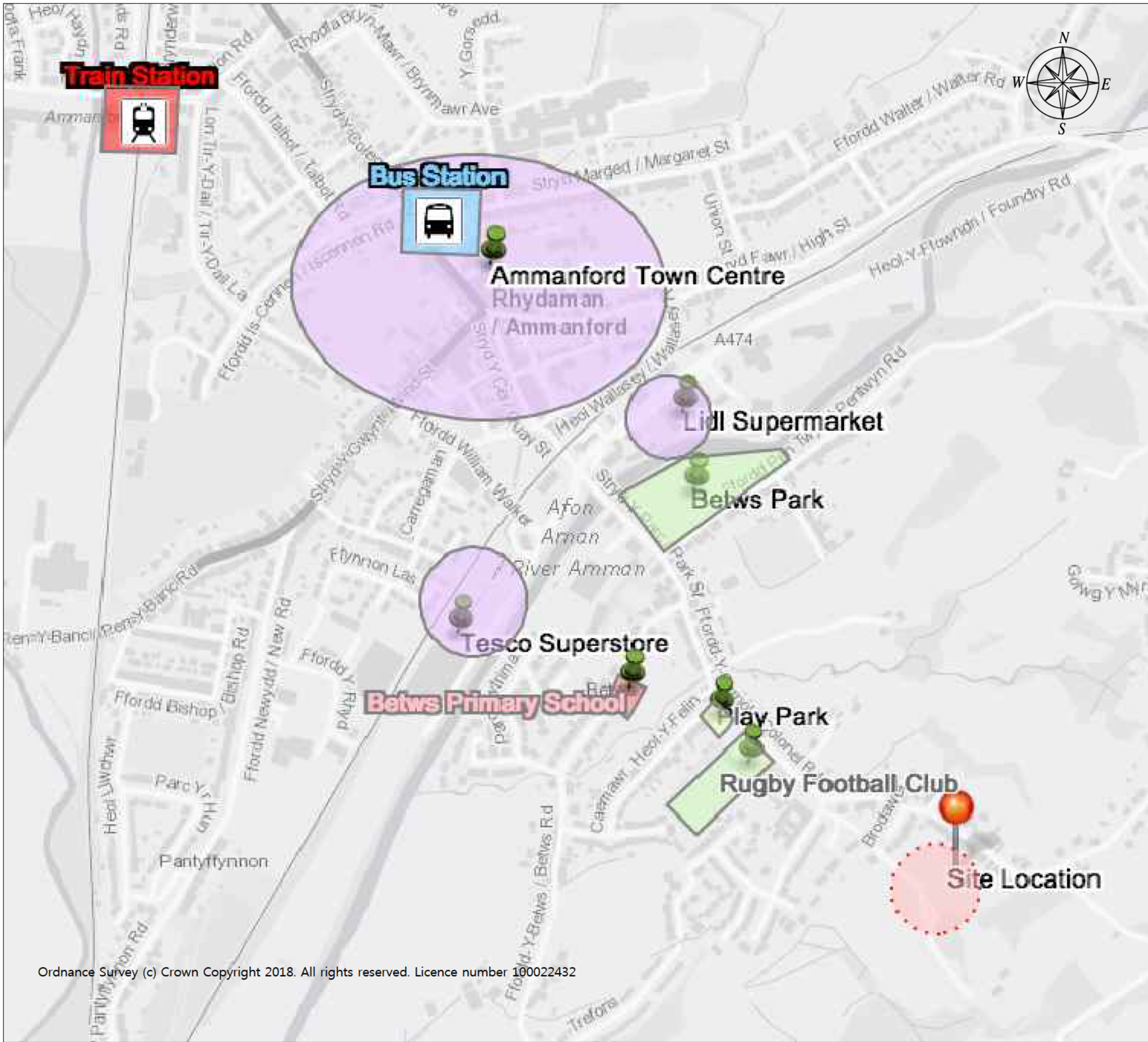
Appendix 1 Location Plan



Ordnance Survey (c) Crown Copyright 2018. All rights reserved. Licence number 100022432

A	Site Location	8/08/18
 Priffyrdd a Thrafnidiaeth Highways & Transportation Ty Penbryn, Salem, Llandeilo, SA19 7LT E-mail: [redacted] www.acstro.com Tel: [redacted]		
	Land off Colonel Road, Betws	
	Site Location Plan	
1190	001	A
	NOT TO SCALE	@ A3

Appendix 2 Site Context




A	Site Context	8/08/18
 Prifffyrdd a Thrafnidiaeth Highways & Transportation Ty Penbryn, Salem, Llandeilo, SA19 7LT E-mail: info@acstro.com www.acstro.com Tel: [REDACTED]		
	Land off Colonel Road, Betws	
	Site Context	
1190	002	A
	NOT TO SCALE	@ A3

Appendix 3 Access Arrangement



Potential Parking Area as Replacement for Colonel Road Parking Lost by the Creation of the Site Access

A	First Issue	04/07/18
 Prifffyrdd a Thrafnidiaeth Highways & Transportation Ty Penbryn, Salem, Llandeilo, SA19 7LT E-mail: [redacted] www.acstro.com Tel: [redacted]		
COLONEL ROAD		
PROPOSED ACCESS		
1190	020	A
	1:500	@ A3

Appendix 4 TRICS Trip Rate Data

Calculation Reference: AUDIT-648801-180426-0401

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST		
	HC HAMPSHIRE		1 days
	WS WEST SUSSEX		1 days
03	SOUTH WEST		
	DV DEVON		1 days
	SM SOMERSET		1 days
04	EAST ANGLIA		
	NF NORFOLK		2 days
	SF SUFFOLK		2 days
06	WEST MIDLANDS		
	SH SHROPSHIRE		1 days
	WK WARWICKSHIRE		1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY NORTH YORKSHIRE		3 days
10	WALES		
	PS POWYS		1 days
11	SCOTLAND		
	AG ANGUS		1 days
	HI HIGHLAND		1 days
	PK PERTH & KINROSS		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: 7 to 70 (units:)
 Range Selected by User: 5 to 100 (units:)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/10 to 27/11/17

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	3 days
Tuesday	3 days
Wednesday	6 days
Thursday	4 days
Friday	1 days

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

Selected survey types:

Manual count	17 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	8
Edge of Town	7
Neighbourhood Centre (PPS6 Local Centre)	2

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	14
Village	2
No Sub Category	1

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

Secondary Filtering selection:

Use Class:

C3	17 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	3 days
5,001 to 10,000	5 days
10,001 to 15,000	3 days
15,001 to 20,000	4 days
20,001 to 25,000	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	4 days
25,001 to 50,000	8 days
50,001 to 75,000	5 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	11 days
1.6 to 2.0	1 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	1 days
No	16 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	17 days
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This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	AG-03-A-01 KEPTIE ROAD	BUNGALOWS/DET.	ANGUS
	ARBROATH Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 7 <i>Survey date: TUESDAY 22/05/12</i>		
2	DV-03-A-03 LOWER BRAND LANE	TERRACED & SEMI DETACHED	DEVON
	HONITON Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 70 <i>Survey date: MONDAY 28/09/15</i>		
3	HC-03-A-19 CANADA WAY	HOUSES & FLATS	HAMPSHIRE
	LIPHOOK Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 62 <i>Survey date: MONDAY 27/11/17</i>		
4	HI-03-A-14 KING BRUDE ROAD	SEMI -DETACHED & TERRACED	HIGHLAND
	SCORGUIE INVERNESS Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 40 <i>Survey date: WEDNESDAY 23/03/16</i>		
5	NF-03-A-01 YARMOUTH ROAD	SEMI DET. & BUNGALOWS	NORFOLK
	CAISTER-ON-SEA Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 27 <i>Survey date: TUESDAY 16/10/12</i>		
6	NF-03-A-03 HALING WAY	DETACHED HOUSES	NORFOLK
	THETFORD Edge of Town Residential Zone Total Number of dwellings: 10 <i>Survey date: WEDNESDAY 16/09/15</i>		
7	NY-03-A-07 CRAVEN WAY	DETACHED & SEMI DET.	NORTH YORKSHIRE
	BOROUGHBRIDGE Edge of Town No Sub Category Total Number of dwellings: 23 <i>Survey date: TUESDAY 18/10/11</i>		
8	NY-03-A-11 HORSEFAIR	PRIVATE HOUSING	NORTH YORKSHIRE
	BOROUGHBRIDGE Edge of Town Residential Zone Total Number of dwellings: 23 <i>Survey date: WEDNESDAY 18/09/13</i>		

LIST OF SITES relevant to selection parameters (Cont.)

9	NY-03-A-13	TERRACED HOUSES	NORTH YORKSHIRE
	CATTERICK ROAD OLD HOSPITAL COMPOUND CATTERICK GARRISON Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 10 <i>Survey date: WEDNESDAY 10/05/17</i>		<i>Survey Type: MANUAL</i>
10	PK-03-A-01	DETAC. & BUNGALOWS	PERTH & KINROSS
	TULLYLUMB TERRACE GORNHILL PERTH Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 36 <i>Survey date: WEDNESDAY 11/05/11</i>		<i>Survey Type: MANUAL</i>
11	PS-03-A-02	DETACHED/SEMI-DETACHED	POWYS
	GUNROG ROAD WELSHPOOL Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 28 <i>Survey date: MONDAY 11/05/15</i>		<i>Survey Type: MANUAL</i>
12	SF-03-A-05	DETACHED HOUSES	SUFFOLK
	VALE LANE BURY ST EDMUNDS Edge of Town Residential Zone Total Number of dwellings: 18 <i>Survey date: WEDNESDAY 09/09/15</i>		<i>Survey Type: MANUAL</i>
13	SF-03-A-06	DETACHED & SEMI-DETACHED	SUFFOLK
	BURY ROAD KENTFORD Neighbourhood Centre (PPS6 Local Centre) Village Total Number of dwellings: 38 <i>Survey date: FRIDAY 22/09/17</i>		<i>Survey Type: MANUAL</i>
14	SH-03-A-05	SEMI-DETACHED/TERRACED	SHROPSHIRE
	SANDCROFT SUTTON HILL TELFORD Edge of Town Residential Zone Total Number of dwellings: 54 <i>Survey date: THURSDAY 24/10/13</i>		<i>Survey Type: MANUAL</i>
15	SM-03-A-01	DETACHED & SEMI	SOMERSET
	WEMBDON ROAD NORTHFIELD BRIDGWATER Edge of Town Residential Zone Total Number of dwellings: 33 <i>Survey date: THURSDAY 24/09/15</i>		<i>Survey Type: MANUAL</i>
16	WK-03-A-02	BUNGALOWS	WARWICKSHIRE
	NARBERTH WAY POTTERS GREEN COVENTRY Edge of Town Residential Zone Total Number of dwellings: 17 <i>Survey date: THURSDAY 17/10/13</i>		<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

17	WS-03-A-07	BUNGALOWS	WEST SUSSEX
	EMMS LANE		
	BROOKS GREEN		
	NEAR HORSHAM		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total Number of dwellings:	57	
	Survey date: THURSDAY	19/10/17	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
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	17	33	0.092	17	33	0.286	17	33	0.378
08:00 - 09:00	17	33	0.177	17	33	0.383	17	33	0.560
09:00 - 10:00	17	33	0.161	17	33	0.174	17	33	0.335
10:00 - 11:00	17	33	0.136	17	33	0.136	17	33	0.272
11:00 - 12:00	17	33	0.130	17	33	0.161	17	33	0.291
12:00 - 13:00	17	33	0.168	17	33	0.165	17	33	0.333
13:00 - 14:00	17	33	0.148	17	33	0.150	17	33	0.298
14:00 - 15:00	17	33	0.186	17	33	0.213	17	33	0.399
15:00 - 16:00	17	33	0.237	17	33	0.184	17	33	0.421
16:00 - 17:00	17	33	0.307	17	33	0.177	17	33	0.484
17:00 - 18:00	17	33	0.320	17	33	0.159	17	33	0.479
18:00 - 19:00	17	33	0.253	17	33	0.139	17	33	0.392
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.315			2.327			4.642

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.*

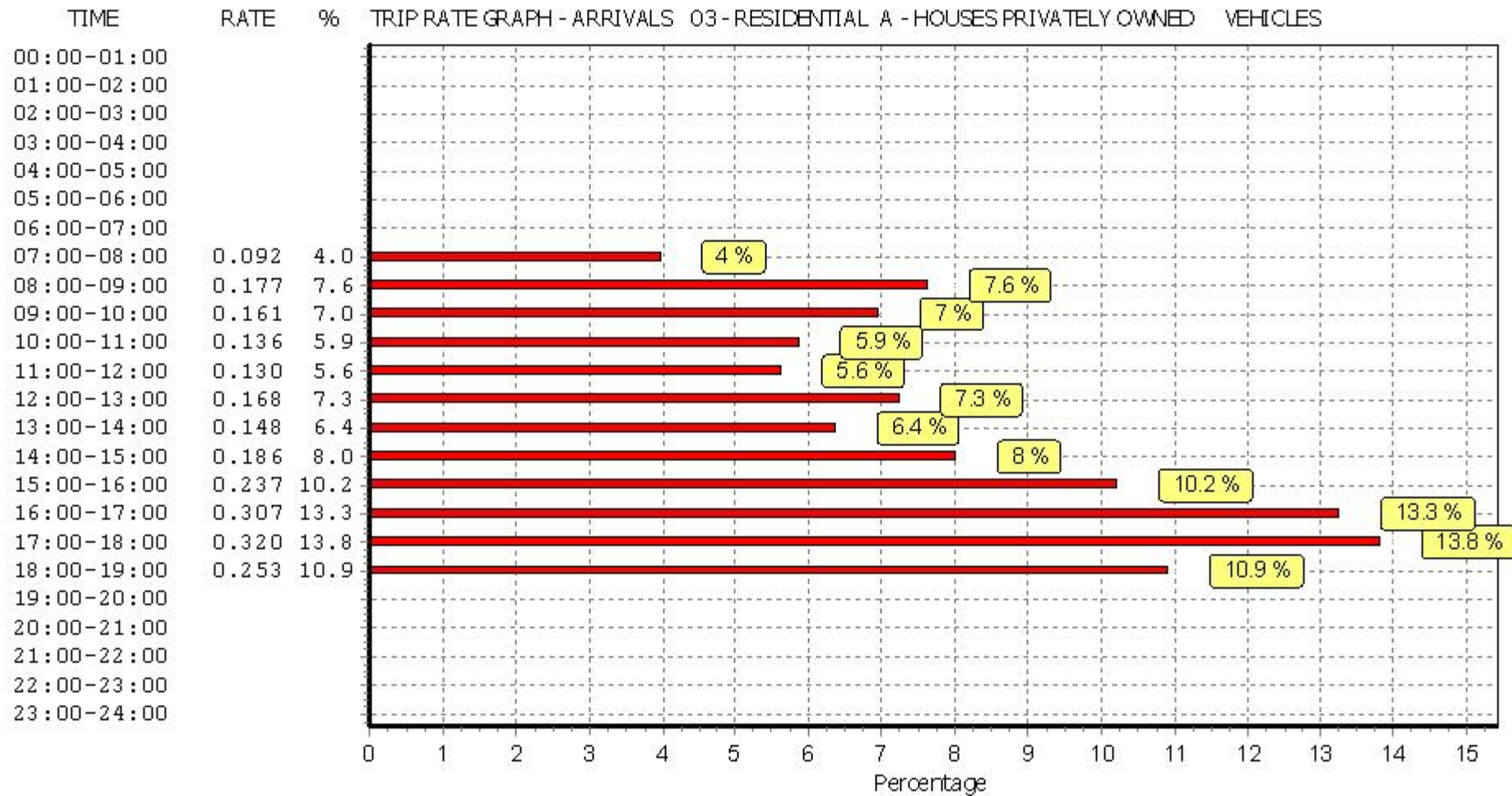
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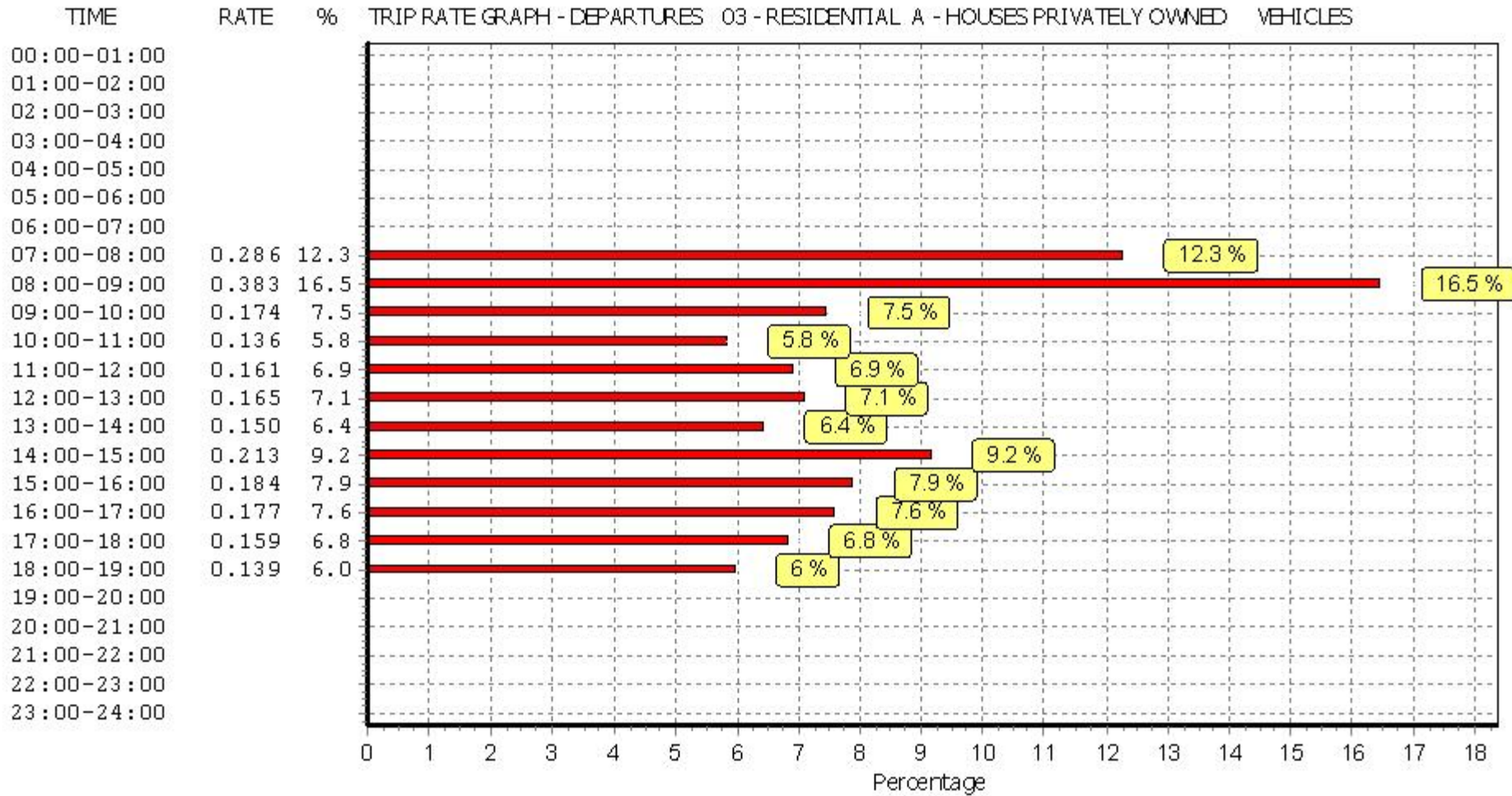
Parameter summary

Trip rate parameter range selected:	7 - 70 (units:)
Survey date date range:	01/01/10 - 27/11/17
Number of weekdays (Monday-Friday):	17
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	2
Surveys manually removed from selection:	0

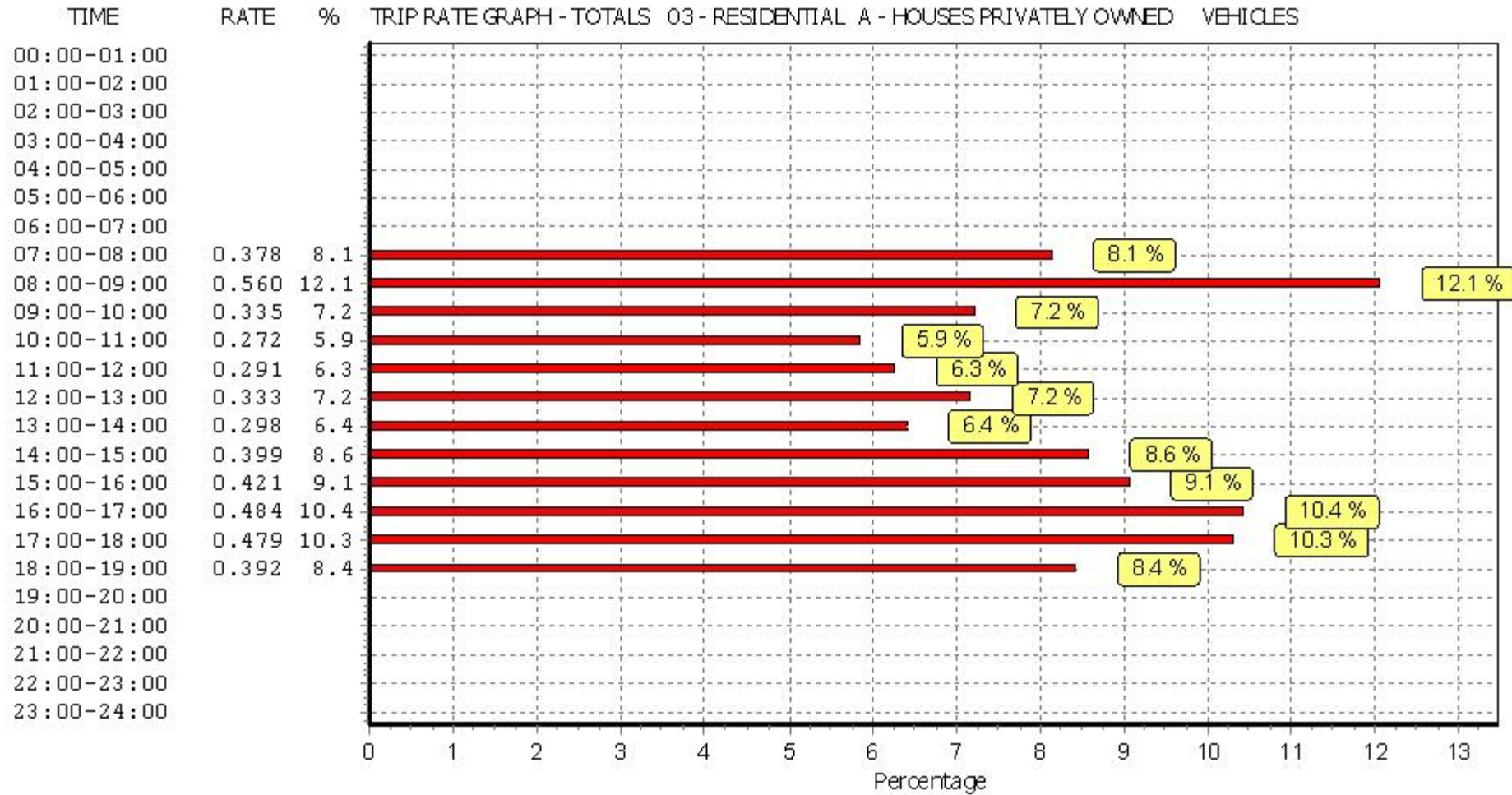
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected 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.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



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Acstro Limited
Ty Penbryn
Salem
Llandeilo
Carmarthenshire
SA19 7LT

W. www.acstro.com

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