Transport Assessment

Land at Tremont Parc, Llandrindod Wells

Prepared by:

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Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
V1	14 November 2024	JRH	DR	DR
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Basis of Report

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1.0 Introduction

Overview

1.1 SLR Consulting Limited is appointed by R and P Knill (‘The Client') to provide transport and highways advice in relation to an outline planning application (with access provided in detail) for development of 122 dwellings split between two separate parcels of land in Llandrindod Wells, Powys. The northern parcel comprises 48 dwellings and the southern parcel comprises 74 dwellings.

1.2 The indicative site layout is provided at **Appendix A**.

1.3 The site is located within administrative boundary of Powys County Council (PCC) which is a Unitary Authority. Access to the development will be from Tremont Park, a residential estate which ultimately connects onto the Tremont Park / A483 roundabout. The A483 is managed by the Welsh Government (WG).

Pre-App Discussions

1.4 A Scoping Note dated December 2023 was issued PCC to set out transport and highway matters associated with the scheme. It detailed the proposed assessment methodology for the forthcoming planning application, as well as information regarding the site accesses, development proposals and trip generation. A pre-app letter was received in response (**Appendix B**), dated 20th March 2024, from the Local Highway Authority (LHA).

1.5 Further discussion via email was held with the LHA in regard to the pre-app response, and the main points are set out below:

- the LHA is satisfied, that the existing approach road, is in accordance with design standards and does retain adequate capacity to serve a development of this nature and scale;
- A full suite of highways drawings is not required on the basis that all matters will be reserved with the exception of the access junction to the development itself. Swept path analysis (SPA) and other relevant drawings will be provided for the indicative layout;
- The site access will be in detail with a 3D design and the appropriate details provided as part of this document;
- The suggested provision of 2m wide internal footways and a shared link to the existing of the site is welcomed by the LHA. Any future submission will need to demonstrate full compliance with the provisions of the AT Act;
- The inclusion of an Active Travel link onto Trefonen Lane (U1660) is noted and welcomed;
- The Scoping Note requested clarity on whether the A483 roundabout would require capacity analysis and junction modelling as a part of this planning application. Information has been provided to the North Mid Wales Trunk Road Agent (NMWTRA) and no response has been received as of 07/11/2024.

Report Structure

1.6 The Scoping note is structured as follows:

- **Section 2** – Existing Conditions;
- **Section 3** – Policy Review;
- **Section 4** – Development Proposals;
- **Section 5** – Trip Generation; and
- **Section 6** – Summary and Next Steps

2.0 Existing Conditions

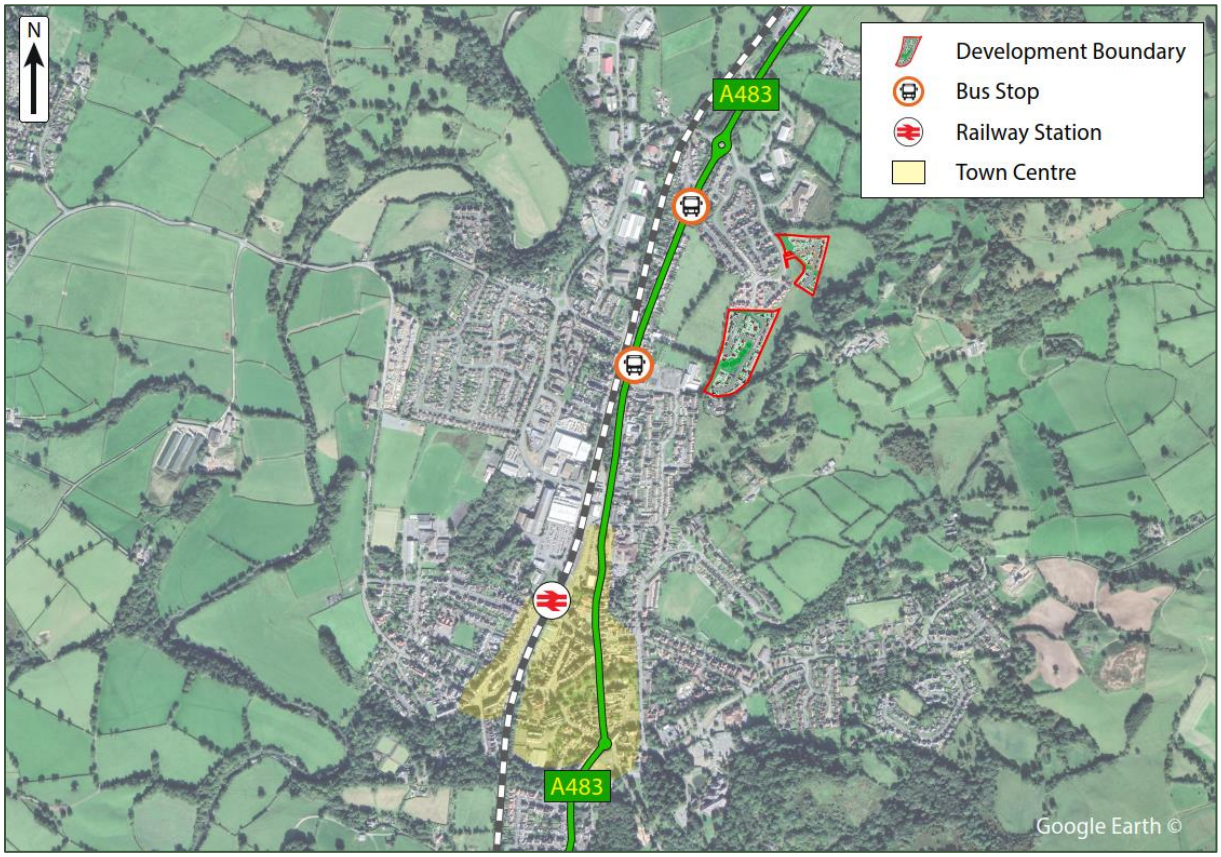
Overview

2.1 This section sets out the existing conditions associated with the site and as well as setting out the existing accessibility of the site by sustainable modes of travel, and a review of Personal Injury Collision (PIC) data for the local highway network.

Site Location

2.2 The site is located on the north east fringe of Llandrindod Wells as shown in **Figure 2.1**.

Figure 2.1 – Site Location



2.3 Llandrindod Wells benefits from a good number of local facilities and amenities including retail, employment, leisure, education and access to public transport as set out within this chapter in more detail.

2.4 The site is split into two parcels; the 'Southern Parcel' to the south of Afon Way and the 'Northern Parcel' to the east of Tremont Park to the east of the built development ('Tremont Park').

2.5 The two parcels are adjacent to the existing residential properties at Tremont Parc, accessible from the A483 / Tremont Park / Ddole Road Enterprise Park roundabout.

Site Access

2.6 There are no existing points of access for either site. The primary vehicle access for the Southern Parcel will be an extension of Afon Way, whilst the Northern Parcel will be accessed via a new priority junction connecting directly onto Tremont Park.

2.7 The proposed site access locations are illustrated in **Figure 2.2**. This provides context for discussions within this chapter regarding walking and cycling routes / distances.

Figure 2.2 – Proposed Access Locations

Local Facilities

2.8 **Table 2.1** provides a summary of key services and facilities withing walking and cycling distances from the site. This is not a comprehensive list but identifies the key services and amenities. Distances are calculated from the access to both the northern and southern parcels.

Table 2.1: Local Facilities

From centre of: Southern Parcel			
Local Facility	**Distance (m)**	**Walking Time (mins)**	**Cycling Time (mins)**
Ysgol Trefonen	300	4	1
Swiss Villa Bus Stops	450	6	2

From centre of: Southern Parcel			
Tremont Road Bus Stops	450	6	2
Tremont Road Post Office	550	7	2
Llandrindod Wells Hospital	850	11	4
ALDI	950	13	4
Llandrindod Railway Station	1,000	14	5
Tesco	1,000	14	5
Town Centre (including health facilities)	1,200	16	5
Llandrindod High School	1,700	23	6

From centre of: Northern Parcel			
Local Facility	**Distance (m)**	**Walking Time (mins)**	**Cycling Time (mins)**
Ysgol Trefonen	650	8	2
Swiss Villa Bus Stops	450	6	2
Tremont Road Bus Stops	800	10	3
Tremont Road Post Office	900	12	4
Llandrindod Wells Hospital	1,200	16	5
ALDI	1,250	17	5
Llandrindod Railway Station	1,350	18	5
Tesco	1,350	19	6
Town Centre (including health facilities)	1,550	20	6
Llandrindod High School	2,000	26	7

2.9 It is evident from the tables that there are a number of key facilities accessible by foot within a 15 minute walk of both the northern and southern parcels. This aligns with national and local policy in that active travel trips can be promoted above trips by private vehicle due to the highly accessible location of the site.

Active Travel

Walking

2.10 There is a good level of existing active travel infrastructure for pedestrians in the vicinity of the site.

2.11 Tremont Park is the main street running through the existing built development adjacent to the sites and provides a pedestrian route from both parcels towards the A483. Tremont Park

benefits from footways along both sides of the street and is well lit. There are dropped kerbs and tactile paving where appropriate, i.e., at the junction with Clywedog Drive. The road is subject to a 20mph speed limit, and benefits from speed calming features which take the form of the alignment of the road with bends and a raised table at the Tremont Park / Hernog Close junction.

2.12 The A483 runs in a north-south direction through Llandrindod Wells. There are footways along both sides of the A483 which lead towards the centre of Llandrindod Wells. The A483 benefits from street lighting, footways and various controlled and uncontrolled crossings enabling a direct link for pedestrians between the site and the town centre.

2.13 The Active Travel (Wales) Act 2013 requires local authorities in Wales to produce maps of walking and cycling networks in their local area, known as ATNMs. These maps are designed to show two main things:

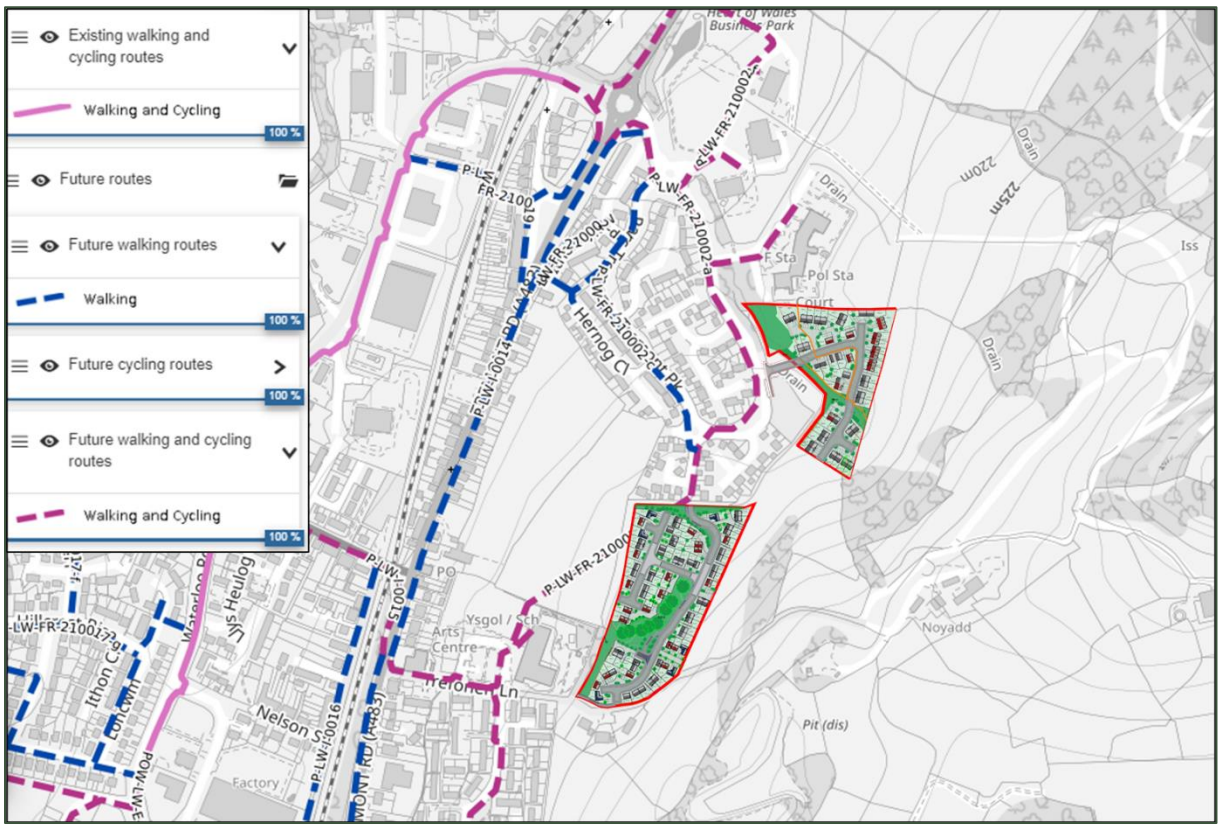
- Existing routes – those current walking and cycling routes that already meet Welsh Government active travel standards, meaning they can be readily used for everyday journeys, and
- Future routes – new routes that the local authority proposes to create in the future, as well as current routes that are planned for improvement to bring them up to the standards.

2.14 In the vicinity of the site, these ATNMs include the potential future walking and cycling route ‘P-LW-FR-210003’ which connect the Southern Parcel to Trefonen Lane, adjacent to Ysgol Trefonen. Whilst the status of this route is a ‘potential future’ route, the proposed development can aid in the delivery of this, realigned through the site. There are several designated Active Travel routes in the area as per the DataMapWales Active Travel Network Maps (ATNMs). Notwithstanding the above, the development provides an active travel link connecting Tremont Park with Trefonen Lane.

2.15 Route ‘P-LW-FR-210003’ has been incorporated within the site layout, thought slightly diverted from what is shown on the ATNM. As stated, it connects to Trefonen Lane which in turn connects to the A483. A short 3m cycleway will be provided along the site frontage onto Trefonen Way. The existing provision along Trefonen Way comprises footways and street lighting, as well as a zebra crossing allowing access to the school.

2.16 Via Trefonen Way, Llandrindod railway station is just 1.1km or a 15 minute walk from the Southern parcel. This route also provides a much shorter connection towards the town centre and all facilities there.

Figure 2.3 – Active Travel Network Map Routes



Cycling

2.17 There is little formal cycling infrastructure in the vicinity of the site, however, this is balanced by the excellent levels of pedestrian provision. National Cycle Route (NCN) 825 runs in an east-west direction approximately 1km to the south of the site.

2.18 Despite this, the local roads are conducive to cycling due to low speed limits, wide carriageways to enable cars to pass cyclist safely and generally good visibility.

Public Transport

Bus

2.19 There are two sets of bus stops along the A483 which can be easily accessed from both parcels of the site. These are the ‘Swiss Villa’ and the ‘Tremont Road’ bus stops. Both bus stops are 450m from the centre of the southern site parcel. From the northern parcel, Swiss Villa is 450m and Tremont Road is 800m.

2.20 The Swiss Villa bus stops benefit from 1-2 services per hour in each direction, plus additional services during the typical AM and PM peak hours. They are equipped with a lay-by and marked bus cage, Kassel kerbs, a shelter with a bench, a flagpole and timetabling information.

2.21 The ‘Tremont Road’ bus stops are located on the A483, and will be accessible vie Trefonen Lane as the proposals include a new active travel connection. These bus stops are equipped

with a lay-by and marked bus cage, Kassel kerbs, a shelter (northbound), a flagpole and timetabling information. There is also a zebra crossing to allow access for pedestrian across the carriageway.

2.22 The bus services from the Tremont Park bus stops are set out in **Table 2.2**. The Tremont

Table 2.2: Bus Services

#	Route	First Bus	Last Bus	Ave. Frequency (mins)			Operator
				M-F	S	S	
From "Tremont Road"							
48	Llandrindod Wells - Builth Wells - Llanwrtyd Wells	08:13	14:00	Four Daily	Three Daily	N/A	Celtic Travel
	Llanwrtyd Wells - Builth Wells - Llandrindod Wells	09:57	13:57	Three Daily	Three Daily	N/A	
461	Hereford – Llandrindod Wells	06:30	18:45	60	60	N/A	Sargeants Brothers
	Llandrindod Wells - Hereford	06:38	18:50	60	60	N/A	
T4	Newtown – Cardiff (via Llandrindod)	06:38	21:30	120	120	Four Daily	Stagecoach South Wales
	Cardiff – Newtown (via Llandrindod)	07:32	21:07	120	120	Four Daily	
X47	Llandrindod Wells - Aberystwyth	07:18	18:11	120	120	N/A	Celtic Travel
	Aberystwyth - Llandrindod Wells	07:12	17:42	120	120	N/A	

2.23 Bus service 58 run by Celtic Travel operates once daily from Monday to Friday. Bus service 462 run by Sargeants Brothers operates once daily from Monday to Friday

2.24 There are a good number of bus services which run Monday to Saturday which would benefit future residents of the proposed development. When combined, the bus services offer multiple routes/services per hour to a variety of destinations including the town centre, Builth Wells, Llanwrtyd Wells, Newton, and further destinations such as Cardiff and Aberystwyth.

Rail

2.25 Llandrindod railway station is an approximate 20 mins / 1600m walk from the two site accesses. Managed by Transport for Wales, the station facilitates travel to several key destinations, making it an important asset for both commuters and leisure travellers. It is served by five trains each way on Mondays to Saturdays, two each way on Sundays.

2.26 Destinations accessible from Llandrindod railway station include Shrewsbury (90 mins), Llanwrtyd (34 mins), Llandovery (50 mins), Ammanford (95 mins) and Swansea (147 mins).

2.27 The station features step-free access from the entrance to the platform, accommodating passengers with mobility challenges. It also offers seating areas, ticket vending machines, and real-time information displays, ensuring that all travellers can navigate the station easily. Tactile paving enhances accessibility for visually impaired passengers, and secure bike

storage promotes sustainable transport options. Additionally, nearby parking facilities further support multimodal travel.

Local Highway Network

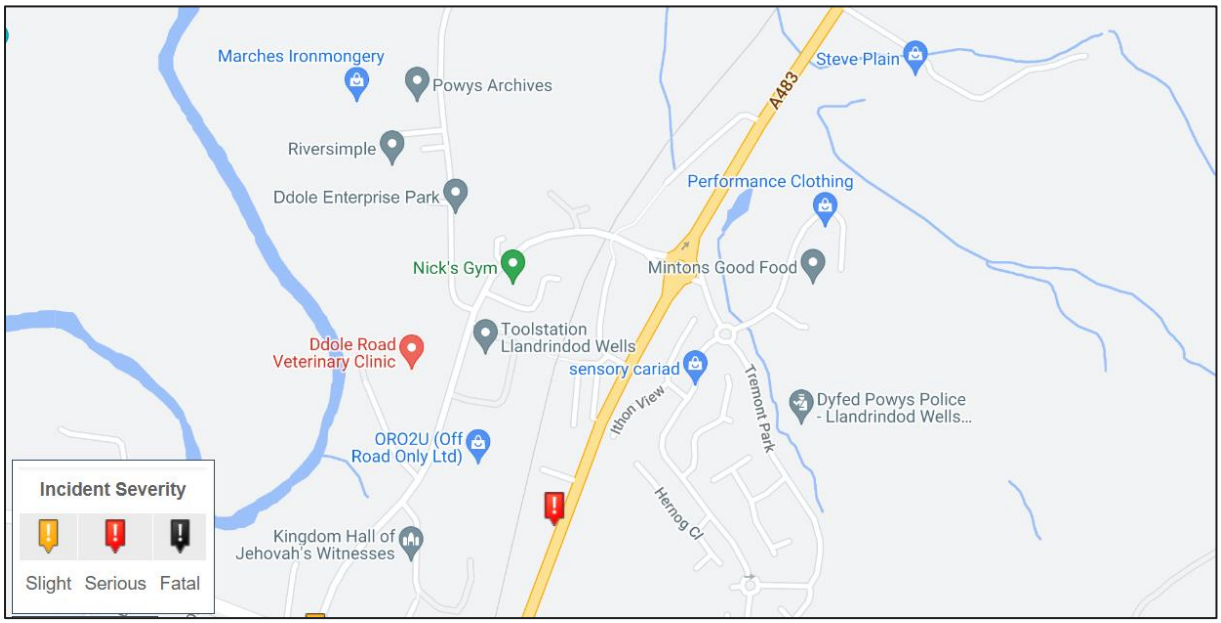
Collision Analysis

2.28 The online Crashmap data has been investigated to assess the collisions on the local highway network for the most recent five-year period (2018-2022). Crashmap uses official data published by the Department for Transport which is based on records submitted to them by police forces. The Crashmap data is updated annually each summer for the preceding year.

Table 2.3: PIC Collision Summary

Year	Slight	Serious	Fatal	Total
2018	0	1	0	1
2019	0	0	0	0
2020	0	0	0	0
2021	0	0	0	0
2022	0	0	0	0
Total	0	1	0	**1**

Figure 2.4 – Collision Locations



2.29 The collision data shows only 1 recorded collision within the study area, which occurred on the A483 in 2018. This collision occurred when the speed limit along the A483 in this location was 30mph; it has since reduced to 20mph. There are no clusters of collisions, and there are no collisions located within the residential estate where access (x2) to the site is to be

gained from. It can be concluded that there is no inherent highway safety concern within the vicinity of the site.

Accessibility Summary

2.30 The site is split into two parcels; the ‘Southern Parcel’ to the south of Afon Way and the ‘Northern Parcel’ to the east of Tremont Park to the east of the built development (‘Tremont Park’).

2.31 There are a number of key facilities accessible by foot and by bike from both parcels of the site within a 15 minute walk. Moreover, the town centre is easily accessible and has a plethora of facilities and services including education, employment, health, retail and leisure. There are also a good number of bus services which run Monday to Saturday which would benefit future residents of the proposed development. When combined, the bus services offer a good level of provision and a viable alternative to travel by private vehicle.

2.32 There is a good level of infrastructure for pedestrians in the vicinity of the site. Route P-LW-FR-210003’ as defined by Wales’s ATNMs will be incorporated into the site and will provide a connection to Trefonen Lane. There are a number of footways and crossing points providing access to local destinations.

2.33 In summary, the site is at a sustainable location which can promote active travel and sustainable modes, with good access to health, retail, leisure and education facilities.

3.0 Planning Policy Context

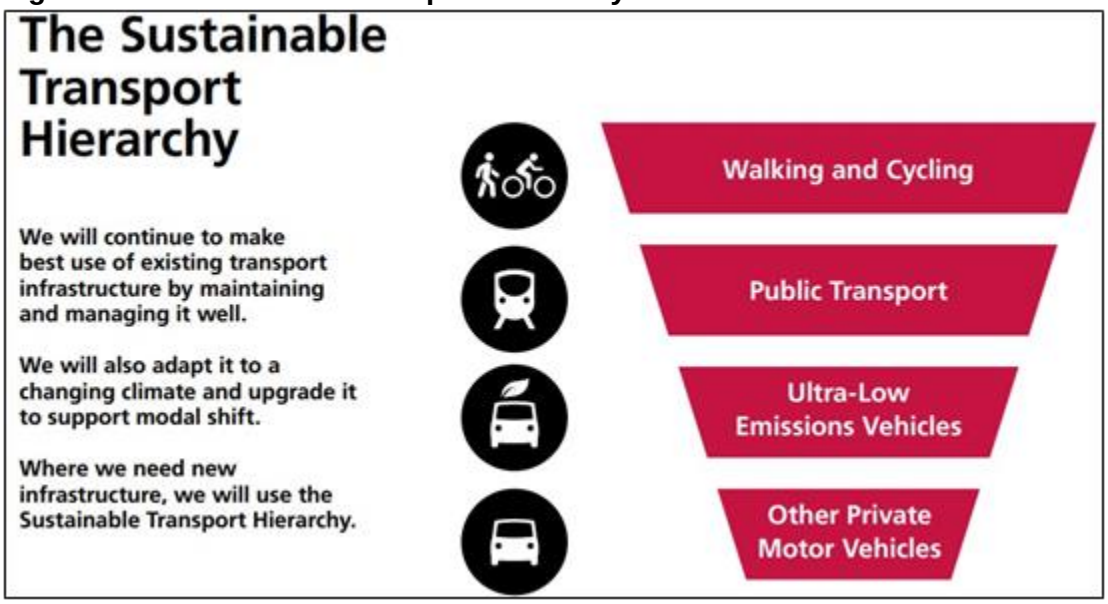
Overview

Overview

Introduction

3.1 This section of the report outlines the relevant policies for development and transport in Wales, which are cognisant of one another and follow a common theme; moving towards carbon reduction in the promotion of communities, virtual and active mobility, followed by public transport with private vehicles at the bottom of the hierarchy. This is shown in **Figure 3.1.**

Figure 3.1 – Sustainable Transport Hierarchy



National Policy

Planning Policy Wales (Edition 12) February 2024

3.1 Planning Policy Wales (Edition 12) (PPW12) outlines the land use planning policies of the Welsh Government with a presumption in favour of sustainable development. The primary objective of PPW12 is to:

"Ensure that the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural well-being of Wales."

3.2 PPW12 sets out a transport hierarchy favouring active travel movements. This hierarchy is supported by a requirement for development proposals to maximise accessibility by active travel and public transport.

3.3 Section 3 of PPW highlights the significant of the planning system in decarbonisation and reducing the impacts of climate change.

3.4 Regarding movement, and specifically accessibility, PPW states that:

"Good design is about avoiding the creation of car-based developments. It contributes to minimising the need to travel and reliance on the car, whilst maximising opportunities for people to make sustainable and healthy travel choices for their daily journeys".

3.5 Section 4 of PPW concerns Active and Social places. It asserts that Active and Social Places are those which provide well-connected cohesive communities. It further states that a 'Resilient Wales' is supported by promoting well-connected infrastructure.

3.6 Development proposals must seek to maximise accessibility by walking, cycling and public transport, by prioritising the provision of appropriate on-site infrastructure and, where necessary, mitigating transport impacts through the provision of off-site measures, such as the development of active travel routes, bus priority infrastructure and financial support for public transport services. Importantly, sustainable transport infrastructure and services should be prioritised and put in place from the outset, before people have moved in and travel patterns have been established.

Technical Advice Note:18 - Transport

3.7 TAN18: Transport describes how to integrate land use and transport planning and explains how transport impacts should be assessed and mitigated. The document states that a sustainable development approach includes:

- Integration of transport and land use planning;
- Integration between different types of transport; and
- Integration of transport policy with policies for the environment, education, social justice, health, economic development, and wealth creation.

3.8 In relation to parking, TAN states that:

"Maximum car parking should be used at regional and local level as a form of demand management and that for new development, regard should be given to alternative transport modes, economic objectives, public and shared parking arrangements".

3.9 TAN 18 states that the integration of land use planning and development of transport infrastructure can help Welsh Government achieve its wider sustainable development policy objectives through managing parking provision and ensuring that new developments include appropriate provision for pedestrians (including the users with special access and mobility requirements), cycling, public transport, and traffic management and parking/servicing.

Placemaking Wales – Placemaking Guide 2020

3.10 The Placemaking Guide outlines the importance of the following principles in placemaking:

- **People and Community** - The local community are involved in the development of proposals. The needs, aspirations, health, and well-being of all people are considered at the outset. Proposals are shaped to help to meet these needs as well as create, integrate, protect and/or enhance a sense of community and promote equality.

- **Location** - Places grow and develop in a way that uses land efficiently, supports and enhances existing places and is well connected. The location of housing, employment, leisure, and other facilities are planned to help reduce the need to travel.
- **Movement** - Walking, cycling and public transport are prioritised to provide a choice of transport modes and avoid dependence on private vehicles. Well designed and safe active travel routes connect to the wider active travel and public transport network, and public transport stations and stops are positively integrated.
- **Mix of Uses** - Places have a range of purposes which provide opportunities for community development, local business growth and access to jobs, services, and facilities via walking, cycling or public transport. Development density and a mix of uses and tenures helps to support a diverse community and vibrant public realm.
- **Public Realm** – streets and public spaces are well defined, welcoming, safe, and inclusive with a distinct identity. They are designed to be robust and adaptable with landscape, green infrastructure, and sustainable drainage well integrated. They are well connected to existing places and promote opportunities for social interaction and a range of activities for all people.
- **Identity** - the positive, distinctive qualities of existing places are valued and respected. The unique features and opportunities of a location, including heritage, culture, language, built and natural physical attributes, are identified and responded to.

Future Wales: The National Plan 2040 (February 2021)

3.11 This document is a National Development Framework for Wales. It influences all levels of the planning system in Wales and will help to shape Strategic and Local Development Plans prepared by councils and national park authorities.

3.12 The document highlights the importance of reducing emissions to protect well-being and to demonstrate global responsibility. The planning system needs to focus on delivering a decarbonised and resilient Wales through the places that are created, the energy generated and the natural resources and materials that are used and how people live and travel.

3.13 The document recognises that there has been a significant change in the way people live and travel as a result of the COVID-19 pandemic. The pandemic has highlighted the quality and accessibility of people's local areas as being important for people's health and well-being during the pandemic.

3.14 The Welsh Government will work with Transport for Wales, local authorities, operators, and partners to deliver the following:

- Active Travel – Prioritising walking and cycling for all local travel;
- Bus – improve the legislative framework for how local bus services are planned and delivered. Invest in the development of integrated regional and local bus networks to increase modal share of bus travel and improve access by bus to a wider range of trip destinations;
- Metro – Develop the Southeast Metro, Southwest Metro and North Wales Metro and create new integrated transport systems that provide faster, more frequent and joined up services using trains, buses, and light rail; and

- Ultra-low Emission Vehicles – Support the roll-out of suitable fuelling infrastructure to facilitate the adoption of ultra-low emission vehicles, particularly in rural areas.

Wales Transport Strategy (Connecting the Nation)

3.15 The wider agenda of this document is to ensure that transport features strongly in the Welsh Assembly Government's policy spectrum:

- 'Getting the most out of our existing transport system;
- Making greater use of more sustainable modes of travel; and
- Reducing demands on the transport system'.

3.16 This is a sustainable, permeable, well-connected site and hence it is compliant with the Wales Transport Strategy.

Active Travel Wales Act 2013

3.17 The Welsh Government seeks to enable more people to walk, cycle and generally travel by more active methods, so that:

- More people can experience the health benefits of active travel;
- We reduce our greenhouse gas emissions;
- We help address poverty and disadvantage; and
- We help our economy to grow by unlocking sustainable economic growth.

Local Planning Policy

Powys Adopted Local Development Plan (2011-2026)

3.18 The Powys Local Development Plan (2011-2026) was adopted by Powys County Council on the 17th of April 2018. The adopted LDP supersedes and replaces the earlier Powys Unitary Development Plan (2001-2016).

3.19 Both the Northern and Southern Parcels are included within the LDP as P28 HA2, and allocated for residential development. The southern site is described as follows:

"This site, an extension to and accessed via the 'Tremont Park' housing development, was considered by the Inspector at the Unitary Development Plan Inquiry who found the site would be an undesirable encroachment into the open countryside in the absence of an identified shortfall of housing to meet needs. It is considered that this land is now needed to meet the housing apportioned, by the LDP strategy, to the town over the plan period. The site extends from the existing Tremont Park housing development, south to Trefonen Lane, access via the roundabout serving Tremont Park. The Town Council have commented that they would wish to see open leisure and play spaces in any development and that pedestrian facilities to the school should be provided. The public sewer is some distance away."

3.20 The northern site is described as follows:

"This site, to the east of Tremont Park and to the south of the new Police buildings, is flat and although does not have immediate defensible boundaries, sits in a natural bowl with rising land and a mature tree line as a near backdrop. Access would be via the existing estate road which serves Tremont Park. The site, if developed, would extend the built form over an area considered important for minerals safeguarding. A right of way crosses the site, and the public sewer is some distance away. The Town Council have commented that they would wish to see open leisure and play spaces in any development."

3.21 Despite some constraints, the sites are considered appropriate for residential development and provide opportunities to enhance the accessibility of the local area in terms of active travel.

Summary

3.22 The proposed development accords with national and local policy, and by encouraging sustainable travel to and from home and ensuring future improvements for this. The provision of active travel links as a part of the site's transport strategy, as well as the site's proximity to local facilities, will encourage active travel and help reduce dependence on the private car use.

3.23 Overall, the principles of the proposed development of this site comply with the transport related planning policies highlighted within this chapter, locally and nationally. The site will seek to encourage travel by non-car modes, with the opportunity to travel via the foot/cycleway route directly accessing the site. The proposals encourage and comply with electric vehicle charging spaces, by providing the appropriate amount to ensure the growth of electric vehicles are provided.

4.0 Development Proposals

Overview

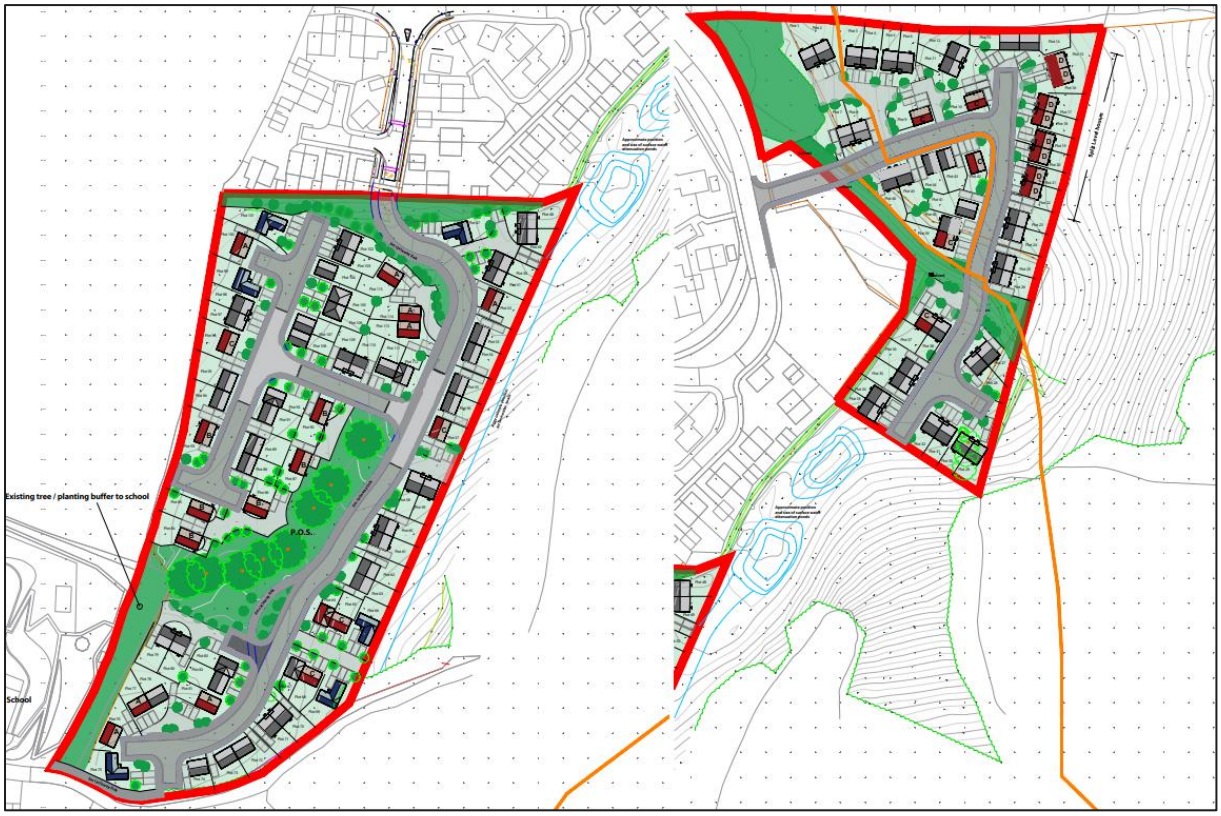
4.1 The development comprises a total of 122 dwellings split between two separate parcels of land. The northern parcel comprises 48 dwellings and the southern parcel comprises 74 dwellings. A schedule of accommodation is provided at **Table 4.1**.

Table 4-1: Development Schedule

Beds	Units	Car Parking
2	63	126
3	53	159
4	6	24
Total	**122**	**309**

4.2 An illustrative layout is set out in **Figure 4.1** and also provided at **Appendix A**.

Figure 4.1 – Illustrative Site Layout



Access

4.3 The detailed access drawings are contained in **Appendix C.** It is noted that PCC are not currently providing the lateral extents of adopted highway, and therefore this cannot be shown on the plans.

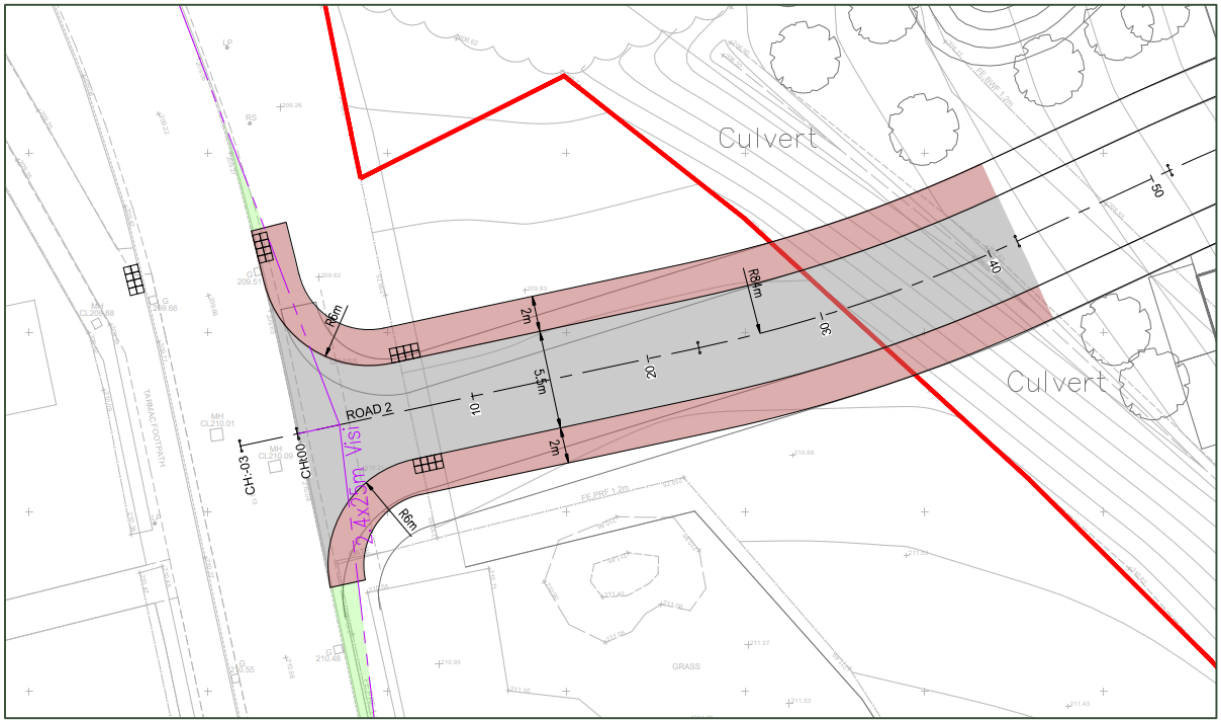
Northern Parcel

4.4 Access to the northern parcel is via a simple priority-controlled junction which connects directly into Tremont Park. Visibility splays of 2.4m by 25m are achievable, and are in line with the requirements of Manual for Streets for a 20mph road.

4.5 The access road measures 5.5m wide and benefits from 2m wide footpaths on either side of the road. The access includes a footpath which extends to the south along Tremont Park which connects into existing footpath provision.

4.6 An extract of the detailed drawing is shown in **Figure 4.2**.

Figure 4.2 – Northern Parcel Access

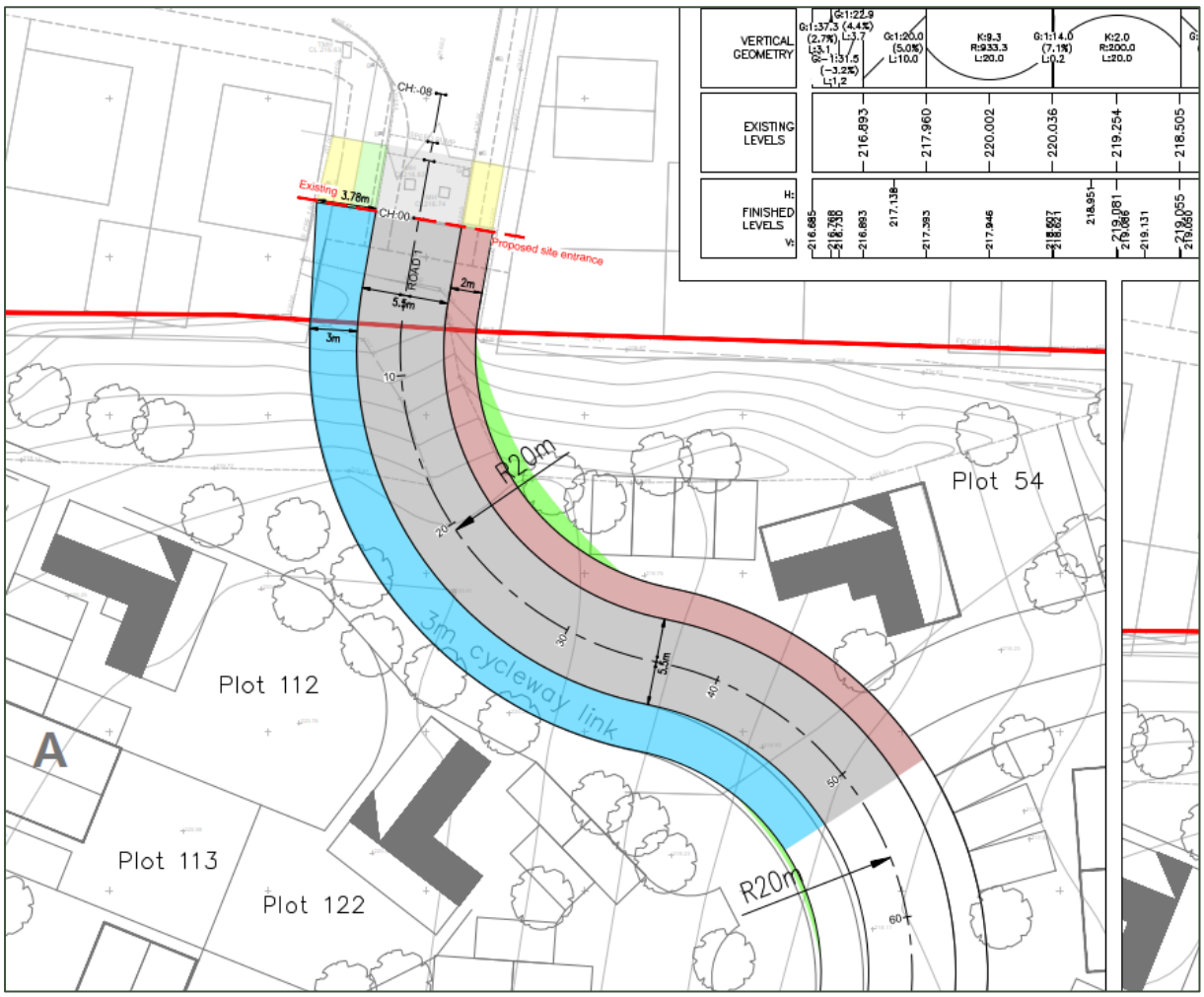


Southern Parcel

4.7 Access to the site is through the continuation of Afon Way into the site. The access road measures 5.5m wide and benefits from a 2m wide footpath on one side of the development spine road and a 3m wide shared use path on the other side of the road. The shared use path connects Tremont Park with Trefonen Lane which enhances active travel connections to Ysgol Trefonen.

4.8 An extract of the detailed access design is shown in **Figure 4.3**.

Figure 4.3 – Southern Parcel Access



Car Parking

4.9 The illustrative layout provides car parking in line with *CCS Wales Parking Standards (2008).* For the purpose of applying the parking standard, the proposed development site is located in Zone 4.

4.10 The parking standards requires 1 space per bedroom for residents and a further space per 5 units for visitors. **Table 4.2** provides a summary of the proposed parking provision.

Table 4-2: Parking Provision

Beds	Units	Space per Unit	Car Parking Proposed
2	63	2	126
3	53	3	159
4	6	4	24
TOTAL	**122**		**309**

4.11 The development proposals includes 309 car parking spaces for residents which is in line with the CSS standards.

4.12 CSS requires 8 visitor parking spaces at the northern parcel and 15 visitor spaces at the southern parcel. We welcome discussions with PCC with regards to the provision of visitor spaces.

Cycle Parking

4.13 CSS Wales states that:

" residential developments must be accessible by cycles and cycle storage must be a factor of dwelling design. In appropriate circumstances, convenient communal facilities may be provided. Guidance on this subject is available within Manual for Streets".

4.14 Cycle parking will be provided in line with these standards.

Active Travel Link

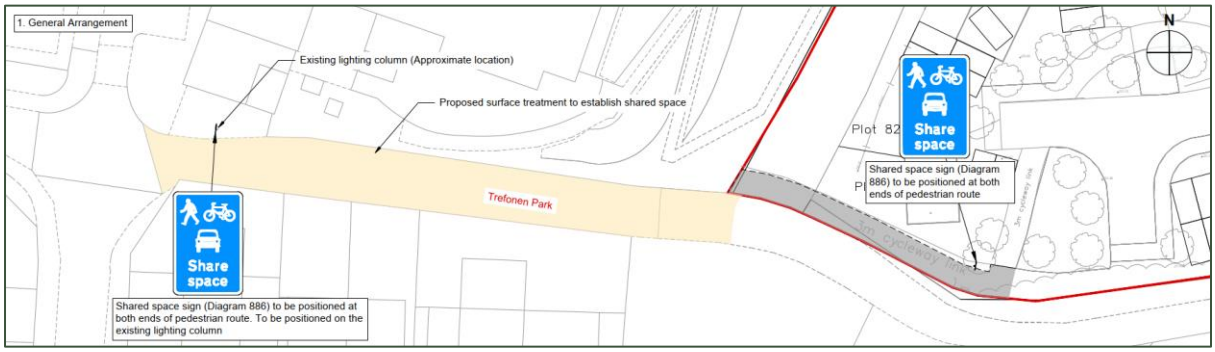
4.15 The development proposals includes a proposed active travel link from the southern border of the site along Trefonen Lane as requested by PCC. This is a route which not only connects the proposed development to Trefonen Lane but also the existing residential dwellings at Tremont Park. It incorporates the aspirational future route 'P-LW-FR-210003', thought slightly diverted from what is shown on the ATNM.

4.16 Adopted Highway data was requested from PCC in order to inform the design of a formal active travel link along Trefonen Lane. Trefonen Lane is constrained in terms of width, and as such the highway boundary data was requested in order to determine if a footway, separated from the carriageway, is feasible. The data was not provided. The response received from the land charges officer stated:

"Highways have informed us that unfortunately, due to resource issues and other work pressures, they have had to make the decision to suspend with immediate effect the service of providing lateral extent searches until further notice."

4.17 A such we are limited with the information that is available to develop an active travel link., Therefore, a shared-space type arrangement has been proposed, as set out in **Figure 4.**, which we consider to be appropriate given that traffic flows are likely to be very low. We are unable to widen into the verge as the extend of adopted highway is unknown.

Figure 4.4 – Proposed Trefonen Lane Active Travel Improvements



4.18 The proposals comprise signage indicating that the route is to be shared space, with surface treatment along the carriageway for approximately 75m indicating this arrangement. The intention is to create an environment in which all active travel users feel comfortable on the carriageway, and that vehicle drivers will expect to see active travel users and that they will drive accordingly.

Masterplanning

4.19 Tracking of the site layout has been undertaken which confirms that a refuse vehicle can access and egress the site in forward gear. The Swept Path Analysis (SPA) for both parcels are included in the figures below and in **Appendix D**.

Figure 4.5 – Southern Parcel Swept Path Analysis (416.065726.00001_PD01 _AT01 - SPA Refuse - Site Servicing)

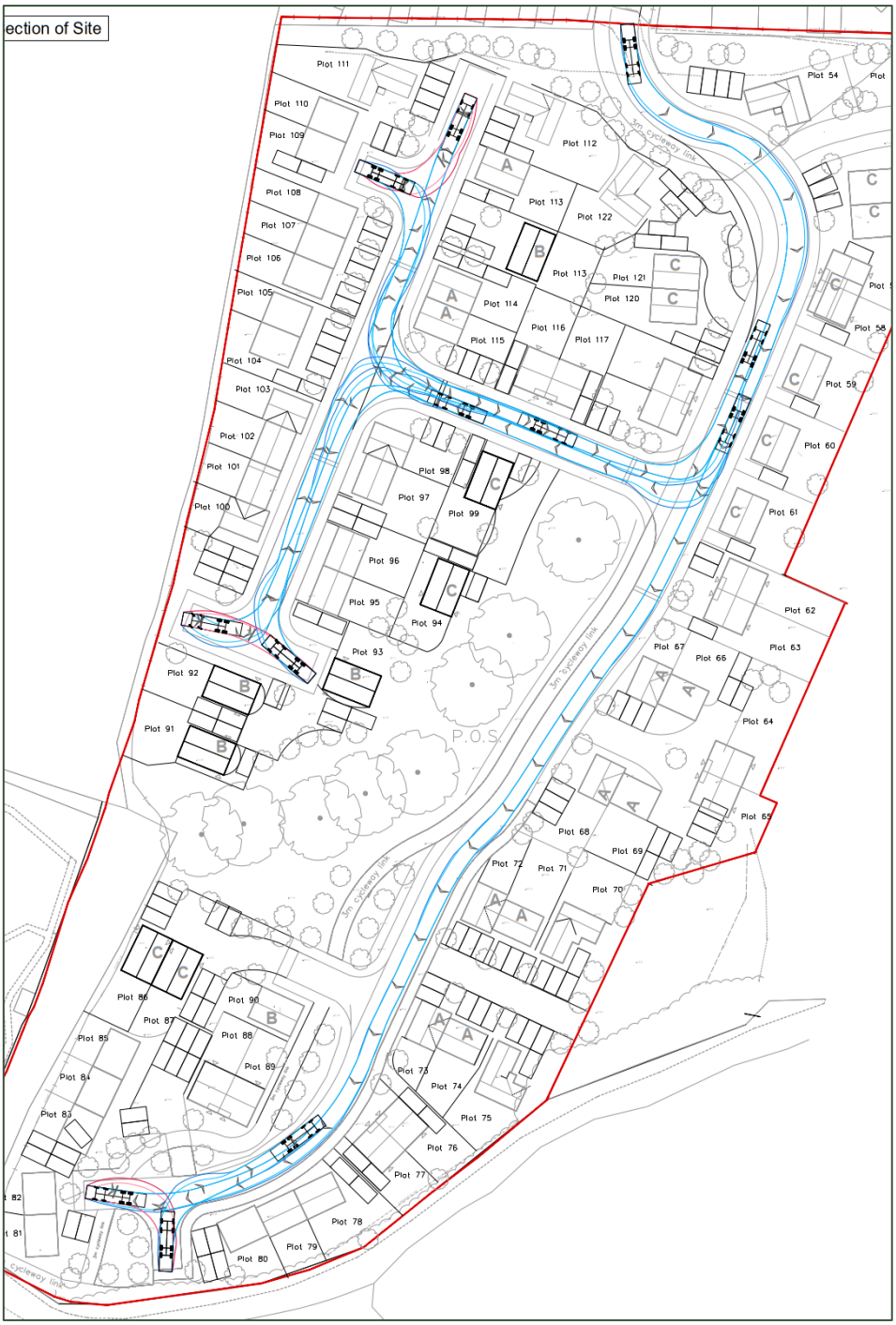
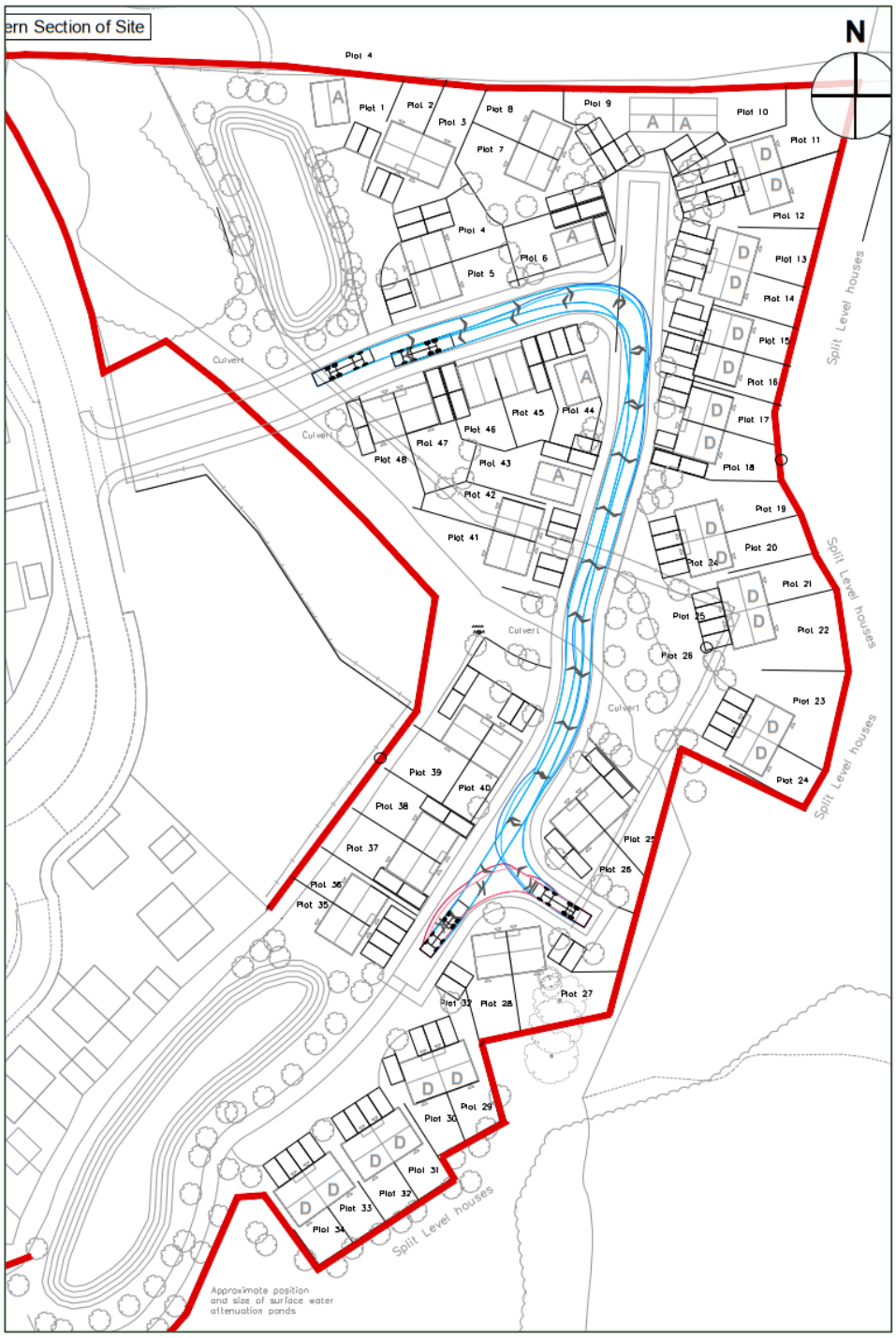


Figure 4.6 – Northern Parcel Swept Path Analysis (416.065726.00001_PD01 _AT01 - SPA Refuse - Site Servicing)



5.0 Trip Generation

Forecast Vehicle Trip Generation

5.1 The proposed development is for up to 122 residential units comprising a mix of tenures. The trip rates set out below were including in the Scoping Note, and no objection was raised by PCC. Therefore, the rates can be considered agreed.

5.2 Assessment has been undertaken using TRICS to forecast the number of total people trips projected to be generated by the proposed development. Once established, further analysis of these trips by trip purpose and mode has been undertaken.

5.3 TRICS is a database of trip generation for a wide variety of land uses (retail, employment, leisure etc) across the UK. Surveys are carried out to measure how many people travel to a site, by what mode and what time of day. The purpose of the database is to provide an estimate of likely trip generation to/from a land use, by comparing it with trip generation from existing comparative sites of the same land use.

5.4 To assess the proposed development, sites have been selected from the TRICS database using the following criteria;

- Type: Multi-Modal
- Land Use: Residential;
- Calculation Options: Houses Privately Owned;
- Area: Suburban / Edge of Town
- Location: UK (excluding Northern Ireland and London);
- Range: 50 - 200 units; and
- Day of week: Weekday only

5.5 The full TRICS output report is attached at **Appendix E**, whilst the total vehicle trip rates are summarised in **Table 5.1**.

Table 5-1: Total Vehicle Trip Rate

Time	Arrivals	Departures	Two-Way
07:00-08:00	0.076	0.284	0.36
08:00-09:00	0.139	0.358	0.497
09:00-10:00	0.139	0.164	0.303
10:00-11:00	0.134	0.166	0.3
11:00-12:00	0.145	0.145	0.29
12:00-13:00	0.163	0.155	0.318
13:00-14:00	0.171	0.167	0.338
14:00-15:00	0.164	0.196	0.36
15:00-16:00	0.261	0.168	0.429
16:00-17:00	0.259	0.158	0.417
17:00-18:00	0.324	0.161	0.485

18:00-19:00	0.263	0.145	0.408
Total	2.238	2.267	4.505

5.6 The total proposed number of dwellings i.e., 122 has been applied to the trip rates in **Table 5.**1. The subsequent forecast vehicle trips are displayed in **Table 5.2**.

Table 5-2: Total Vehicle Trip Generation (122 dwellings)

Time	Arrivals	Departures	Two-Way
07:00-08:00	9	35	44
08:00-09:00	17	44	61
09:00-10:00	17	20	37
10:00-11:00	16	20	37
11:00-12:00	18	18	35
12:00-13:00	20	19	39
13:00-14:00	21	20	41
14:00-15:00	20	24	44
15:00-16:00	32	20	52
16:00-17:00	32	19	51
17:00-18:00	40	20	59
18:00-19:00	32	18	50
Total	273	277	550

5.7 As set out in **Table 5.2**, the proposed development is forecast to generate up to 61 two-way vehicle trips during the typical AM peak hour of 08:00-09:00 and up to 59 two-way vehicle trips during the typical PM peak hour of 17:00-18:00.

5.8 This equates to just approximately 1 vehicle trip per minute during the typical AM and PM peak hours.

5.9 The level of additional vehicle trips associated with the development is unlikely to impact on the operation of the adjacent road network. All trips would be distributed onto the A483 junction, however wea are not aware of any capacity issues in this location.

Multi-Modal Trips

5.10 The surveys obtained from the TRICS database included multi-modal surveys, and this data has been used to forecast the multi-modal trips associated with the site. This is in line with the recent Welsh policy and guidance, which recommends assessing the trip generation of a site by all modes.

5.11 These forecast multi-modal trip rates and total trips for the proposed development of up to 122 dwellings are set out in **Table 5.3**. The typical peak hours of 08:00-09:00 and 17:00-18:00 have been assessed.

Table 5-3: Multi-Modal Trip rates

	AM (0800-0900)		PM (1700-1800)		12hr (0700-1900)	
	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
Walking	0.056	0.142	0.063	0.034	0.612	0.599
Cycling	0.007	0.019	0.009	0.006	0.082	0.082
Public Transport	0.003	0.049	0.026	0.001	0.145	0.15

5.12 When applied to the total number of proposed dwellings, i.e., 122, the forecast multi-modal trips are as set out in **Table 5.4**.

Table 5-4: Multi-Modal Forecast Trips

	AM (0800-0900)		PM (1700-1800)		12hr (0700-1900)	
	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
Walking	7	17	8	4	75	73
Cycling	1	2	1	1	10	10
Public Transport	0	6	3	0	18	18

5.13 As demonstrated, the proposed residential development is forecast to generate trips primarily by foot and by private car. The daily two-way trips amount to 36 trips by public transport, 148 by foot and 20 by bike.

Distribution

5.14 The 2011 Census Data has been used to distribute the forecast vehicle trips onto the local highway network. This has been undertaken using the “WF02EW - Location of usual residence and place of work (with outside UK collapsed) (OA/WPZ level)” dataset. The 2011 Census Data has been used due to ongoing concerns over the validity of the 2021 Census Daya due to the Covid-19 Pandemic.

5.15 Three routes have been assigned to the forecast vehicle trips associated with the site:

- A483 North (vehicles travelling northbound from the Tremont Park / A483 roundabout)
- A483 South (vehicles travelling southbound from the Tremont Park / A483 roundabout and continuing to the town centre)
- A4081 West (vehicles travelling southbound from the Tremont Park / A483 roundabout and turning west onto the A4081)

5.16 The distribution is set out in **Table 5.5**.

Table 5-5: Forecast Vehicle Distribution Percentages

Route	Route ID	Percentage
A483 North	1	18%
A483 South	2	74%
A4081 West	3	8%

Total	-	100%

5.17 When applying the forecast trip demand, the forecast vehicle trip distribution associated with the site is as set out in **Table 5.6**.

Table 5-6: Forecast Vehicle Distribution in the AM and PM peaks

Route	Route ID	08:00-09:00	17:00-18:00
A483 North	1	10	10
A483 South	2	43	42
A4081 West	3	5	4
Total	-	57	56

5.18 In terms of the overall vehicle movements in the AM and PM peaks at the main A483 / Tremont Park / Ddole Road Enterprise Park roundabout junction, this is set out in **Table 5.7** and **Table 5.8**.

Table 5-7: A498 Roundabout Origin / Destination (AM Peak)

AM Distribution	A483 North	Tremont Park	A483 South	Ddole Road ind. est.	TOTAL
A483 North	0	3	0	0	3
Tremont Park	8	0	23	13	44
A483 South	0	9	0	0	9
Ddole Road ind. est.	0	5	0	0	5

Table 5-8: A498 Roundabout Origin / Destination (PM Peak)

PM Distribution	A483 North	Tremont Park	A483 South	Ddole Road ind. est.	TOTAL
A483 North	0	7	0	0	7
Tremont Park	3	0	10	6	13
A483 South	0	21	0	0	21
Ddole Road ind. est.	0	12	0	0	12

5.19 The Scoping Note requested clarity on whether the A483 roundabout would require capacity analysis and junction modelling as a part of this planning application. Information has been provided to the North Mid Wales Trunk Road Agent (NMWTRA) and no response has been received as of 07/11/2024.

5.20 At this stage there are no obvious capacity issues at this junction, which appears to be free flowing. There is a minimal impact in the peak periods from the proposed development, with little impact on the A483 arms.

Summary

5.21 The trip generation exercise demonstrates that, as well as the forecast vehicle trip generation, the proposed development will generate a number of trips by foot by bike and by

public transport. This is reflective of the accessible nature of the site and its proximity to local facilities and services including health, education, retail and leisure.

5.22 The proposed development will generate trips by vehicle also, thought amount to approximately additional vehicle per minute on the local highway network during the typical AM and PM peak periods.

5.23 The multi-modal impact has been considered, which demonstrates trips will be undertaken by foot, bike and public transport. The impact of the proposed development on the local high network is not significant and no modelling is required.

6.0 Summary

Conclusion

6.1 SLR is appointed by R and P Knill to provide transport and highways advice in relation to the proposed residential development of up to 122 dwellings at Tremont Park, Llandrindod Wells.

6.2 The site is split into two parcels; the 'Southern Parcel' to the south of Afon Way and the 'Northern Parcel' to the east of Tremont Park.

6.3 There is a good level of infrastructure for pedestrians in the vicinity of the site. Route P-LW-FR-210003' as defined by Wales's ATNMs will be incorporated into the site and will provide a connection to Trefonen Lane.

6.4 There are a number of key facilities accessible from both parcels of the site within a 15 minute walk. Particularly from the southern site, facilities accessible within 15 minutes include Ysgol Trefonen, Bus Stops, Tremont Road Post Office, Llandrindod Wells Hospital, ALDI and more. There are a good number of bus services which run Monday to Saturday providing links to the town centre, Builth Wels, Newtown and further afield to Cardiff and Aberystwyth, which would benefit future residents of the proposed development. When combined, the bus services offer multiple routes/services per hour to a variety of destinations.

6.5 The focus of transport and land use planning policy is on the development of sustainable travel measures and the encouragement of development proposals which widen the accessibility to sustainable travel. The proposed development aims to align with this focus.

6.6 Access to the northern parcel is via a simple priority-controlled junction which connects directly into Tremont Park. Visibility splays of 2.4m by 25m are achievable, and are in line with the requirements of Manual for Streets for a 20 mph road.

6.7 Access to the southern parcel is through the continuation of Afon Way into the site. The access road measures 5.5m wide and benefits from a 2m wide footpath on one side of the development spine road and a 3m wide shared use path on the other side of the road. The shared use path connects Tremont Park with Trefonen Lane which enhances active travel connections to Ysgol Trefonen. This is a net benefit in terms of active travel and also incorporates the aspirational ATMN route in this area.

6.8 The development proposals includes 309 car parking spaces for residents which is in line with the CSS standards.

6.9 The proposed development is forecast to produce up to 61 two-way vehicle trips during the typical AM peak of 08:00-09:00 and up to 59 two-way vehicle trips during the typical PM peak or 17:00-18:00. This is approximately one additional vehicle per minute on the local highway network during the typical AM and PM peaks.

6.10 In terms of multi-modal trips, the proposed residential development is forecast to generate trips primarily by foot and by private car. The daily two-way trips amount to 34 trips by public transport, 139 by foot and 18 by bike.

6.11 On this basis it is also concluded that no junction modelling is necessary as the proposed development will not worsen the operation of any junction on the local network.

Conclusion

6.12 The site is accessible by sustainable modes. There are a number of amenities within a 15 minute walk including access to public transport, schools and shops. The site is well placed to promote active travel by virtue of its location and proposed access points.

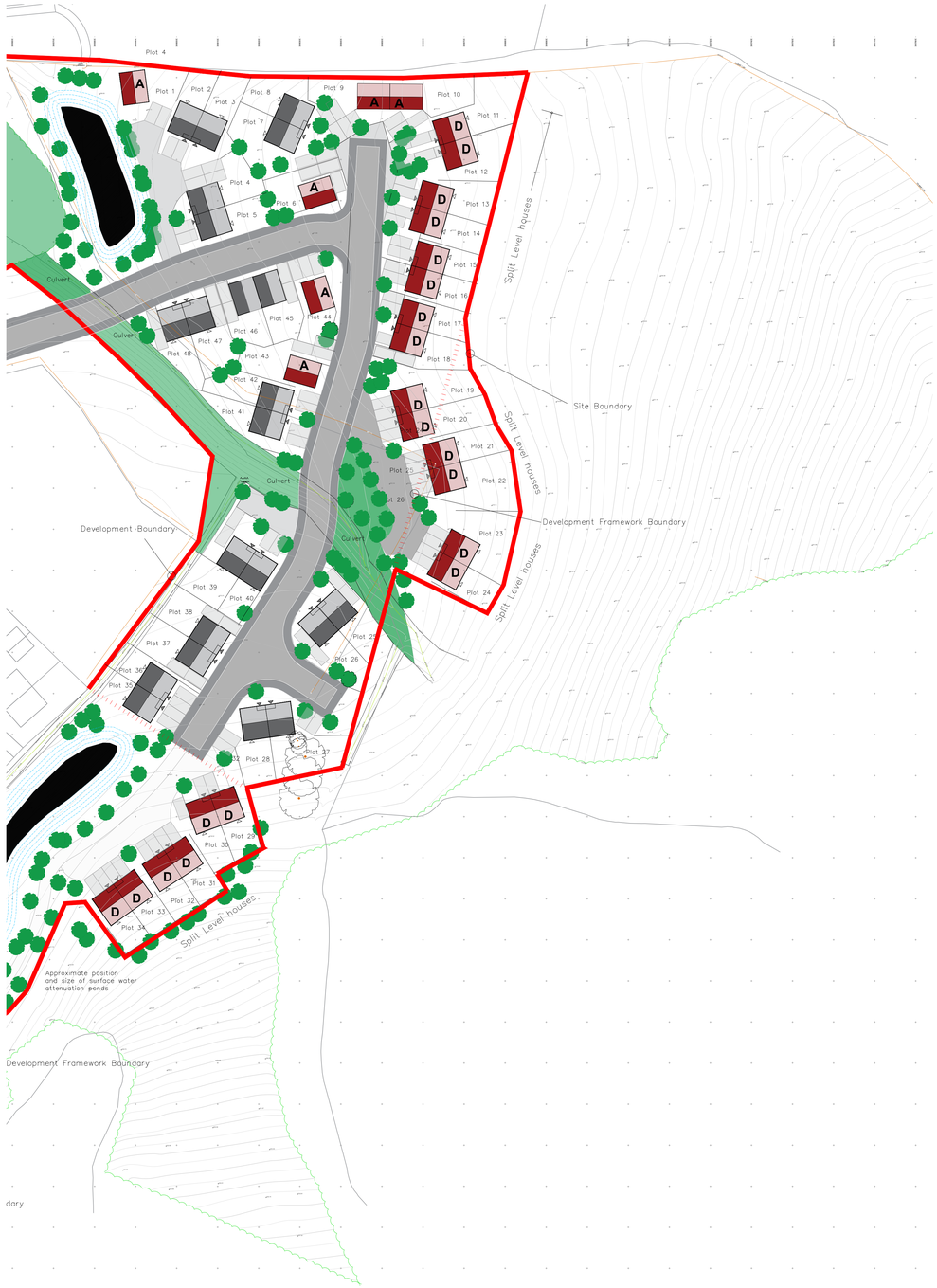
Appendix A Site Layout

Transport Assessment

Land at Tremont Parc, Llandrindod Wells

SLR Project No.: 407.064515.00001

14 November 2024



HOUSING SCHEDULE - TOTAL 80

House	House Type	GIAs	Dwellings
	4 Person, 2 Bedroom Semi Detached House (3 no. Detached)	83m²	63
	6 Person, 3 Bedroom Semi Detached / Detached House	A - 92m²	16
		B - 98m²	6
		C - 99m² Room in roof	11
	6 Person, 3 Bedroom Semi Detached Split Level	D - 103m² Room in roof	20
	8 Person, 4 Bedroom Semi Detached House	113m²	6
		Total	122 UNITS
			INCLUDING 41 AFFORDABLE UNITS

CAR PARKING SCHEDULE

House Type	Bedrooms	Spaces
2 Bed	126	126
3 Bed	159	159
4 Bed	24	24
Total		309

Parking (CSS Zone 4 Suburban)	Spaces
Dwelling Units 122	309

Note - possible visitors spaces to be agreed with LA

HUGHES ARCHITECTS

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Rev B - Car Parking P54 updated - OO - 31.10.24
Rev A - Attenuation amended - GD - 30.09.24

Project :- **New Residential Development at Land at Tremont Parc, Llandrindod, Wells, LD1 5AF**

Drawing Status :- **Stage 3a**

Drawing Title :- **Sketch Site Layout Plan 2**

Scale :- **1:500@A0** Date :- **11.09.24**
Drawn by :- **GD** Checked :- **DH**

Drawing No :- **Y042.3a.1.002** Rev :- **B**

Appendix B Scoping Note Response from PCC

Transport Assessment

Land at Tremont Parc, Llandrindod Wells

SLR Project No.: 407.064515.00001

14 November 2024

Gwilym Davies
Head of Property, Planning and Public Protection

County Hall
Spa Road East
Llandrindod Wells
LD1 5LG

Doug Hughes
Hughes Architects & Designers
Newtown
29 Broad Street
Newtown
Powys
SY16 2BQ

Our Ref: 24/0014/PRE
Date: 20 March 2024
Telephone: 01597 82 7527
Email: lorraine.jenkin@powys.gov.uk

Dear Doug,

Reference: 24/0014/PRE
Proposal: Pre-planning application enquiry in relation to residential development plus new access and highways infrastructure
Site Address: Land At Tremont Parc, Llandrindod Wells, Powys, LD1 5AF

Thank you for the above enquiry. You have sought pre-application advice on Having now had an opportunity to consider the proposed development, I write to offer the following comments:

Principal Planning Constraints

Ancient Woodland	Ancient Woodland Site of Unkno
Minerals Safeguarding Igneous Cat 2	
LDP Development Boundaries	Llandrindod Wells/ Llandrindod
LDP Residential Allocations	Tremont Park extension, Lland
LDP Residential Allocations	Tremont Park extension, Lland
Powys Open Space Assessment	Tremont Park Amenity Greenspac

Right of Way	110/30/1
Mineral Safeguarding WLS Coal Resources	

:

Principal Planning Policies

Policy	Policy Description	Year	Local Plan
NATPLA	Future Wales - The National Plan 2040		National Policy
PPW	Planning Policy Wales (Edition 12, February 2024)		National Policy
TAN12	Design		National Policy
TAN5	Nature Conservation and Planning		National Policy
TAN1	Joint Housing Land Availability Studies		National Policy
TAN11	Noise		National Policy
TAN18	Transport		National Policy
SPGAH	Affordable Housing SPG (2018)		Local Development Plan 2011-2026
SPGBIO	Biodiversity and Geodiversity SPG (2018)		Local Development Plan 2011-2026
SPGLAN	Landscape SPG		Local Development Plan 2011-2026
SP1	Housing Growth		Local Development Plan 2011-2026
SP3	Affordable Housing Target		Local Development Plan 2011-2026
SP6	Distribution of Growth		Local Development

	across the Settlement Hierarchy	Plan 2011-2026
DM10	Contaminated and Unstable Land	Local Development Plan 2011-2026
DM2	The Natural Environment	Local Development Plan 2011-2026
DM3	Public Open Space	Local Development Plan 2011-2026
DM4	Landscape	Local Development Plan 2011-2026
DM7	Dark Skies and External Lighting	Local Development Plan 2011-2026
DM13	Design and Resources	Local Development Plan 2011-2026
DM15	Waste Within Developments	Local Development Plan 2011-2026
DM14	Air Quality Management	Local Development Plan 2011-2026
H1	Housing Development Proposals	Local Development Plan 2011-2026
H2	Housing Sites	Local Development Plan 2011-2026
H3	Housing Delivery	Local Development Plan 2011-2026
H4	Housing Density	Local Development Plan 2011-2026
H5	Affordable Housing Contributions	Local Development Plan 2011-2026
T1	Travel, Traffic and Transport Infrastructure	Local Development Plan 2011-2026

Other Legislative Considerations

Crime and Disorder Act 1998

Equality Act 2010

Planning (Wales) Act 2015 (Welsh language)

Wellbeing of Future Generations (Wales) Act 2015

Marine and Coastal Access Act 2009

Information on the LDP

Information on the LDP, its policies and supplementary planning guidance can be found here: https://en.powys.gov.uk/LDP

Planning History

None in that specific area.

Principle of development

The site is considered to be within the development limits of Llandrindod Wells, which is considered to be a Town as per the requirements of the LDP.

The site is allocated housing site, P28 HA2 and therefore the principle of development is already considered to be acceptable. This site will be Phase III of the Tremont Parc development.

You are indicating that the site will hold 115 dwellings across the 4.5ha and that it will be a mix of dwelling types and size (2,3 and 4 bed, semi-detached and detached).

The LDP states of this site:

*New allocation. Ecological / Botanical Survey advised to inform enhancement. Off-site works to connect with public sewer would be required and could be provided through the sewer requisition scheme under Sections 98-101 of the Water Industry Act 1991*Project level HRA screening required – River Wye SAC*

Design and External Appearance

Details of design and external appearance haven't been submitted, and you have stated that you will relate the design to the wider town and also the existing Tremont Parc estate. I would expect this to be the case, however, it is noted that physically the site will link in a greater form to the newer existing buildings on Tremont Parc estate, plus those existing at Trefonnen. and therefore the greater link should, in my opinion, be to those areas, rather than the red brick tall town houses of the original town. However, detailing and reference to the old town would be welcomed.

Layout

You have given an indicative layout of the site. This would seem to be acceptable and a natural progression of the site.

Amenity

Your proposal is obviously an extension of an existing site and I appreciate that you are intending to make the most of solar energy and how you skew the dwellings will impact upon this. Please also be aware of the need to maintain privacy between the proposed and the existing dwellings, and also that you will not be over-shadowing as per the requirements in the SPG Residential Design. Having looked at the layout of the site, I would suggest that this is not likely, but please be aware of it.

Density

LDP policy H4 deals with housing density and requires 27 dwelling units per hectare. You have suggested just over 25 units per hectare. You will have to justify why there is the shortfall, particularly on ground in such a town centre location and will such gentle topography.

You have suggested that the site can be extended to bring in that greater number – however, this will then obviously increase the area of the site and so the required numbers will rise again – not actually impacting upon the density. Regardless of the red line boundary, the density should remain at 27 per hectare, or you should provide a robust justification as to why that hasn't been met – this would be expected to be land issues, not market issues.

You have a mix of semi-detached and detached, but no terraces. I therefore would suggest that there is capacity to gain some additional numbers.

The additional site area will be dealt with below.

Potential Extension of site

You have suggested that there is the potential to extend the site to accommodate the additional houses. If it were for open market houses, this would obviously be a Departure from the LDP and would have to be advertised as such. You would obviously have to provide strong justification as to why this would be acceptable – however, the principle of development would be against this.

If you were considering this for affordable housing, this could be acceptable but it would have to be in addition to that required for the remainder of the allocated site – not simply putting that allocation outside of the allocated site. Please see the Affordable Housing SPG, plus LDP policy H5 and H6 for details.

You have mentioned that this extension would be to have additional land for biodiversity and ecological benefits? I am not sure in what way having additional land would be for this instance – unless it was to be fenced off and left as an ecological haven? I do not consider that to have an extension to the site that had additional houses in it could ever be for environmental purposes.

I can see the purpose of having a SUDs solution outside of the red line boundary, and this has happened on other sites.

In conclusion, I feel that additional land for open market housing would be resisted unless it could be justified as to why that is in the public interest.

Public Open Space

The link for the Public Open Space (POS) document is: Open Space Assessment 2018 - Powys County Council
Builth_Wells__Knighton__Llandrindod_Wells__Llanfair_Caereinion__Llanfyllin (3).pdf

The Open Space Assessment shows that the site is not within any of the radii of existing POS – although it is acknowledged that this is out of date as there are some sites on the existing Tremont Parc estate that I would suggest are NEAPs for the purposes of the Open Space Assessment. Therefore any submission should be accompanied by an assessment of what is currently available and how any provision you intend to make would relate to it.

You have mentioned that there is scope to extend the red line and have a wider area of public open space, particularly in relation to incorporating parts of the woodland. Whilst any additional POS is welcomed, there would be an element of requiring a management plan of any formal spaces and having them accessible to all etc. Incorporating an area of woodland would obviously encourage people to use it, but then there would be an additional liability of maintenance – regular tree surveys etc that would have to be either taken on by the Council or dealt with by commuted sum for long term maintenance or a community group.

I would therefore suggest that any offer of an extended red line to give more POS is accompanied by a long-term maintenance proposal.

Affordable Housing

The development would be expected to have an affordable housing ratio of 30%, equating to some 34.5 units, and a 30% proportion of the additional units should additional site areas be included within the red line. The 0.5 element of the unit total could be provided either as an additional single unit or a 0.5 proportionate contribution provided as a commuted sum. This would require a Section 106 agreement.

Affordable housing would come with an occupancy condition to ensure that the benefits of affordable housing are enjoyed by generations to come. Any dwelling granted consent under these terms would have a condition to ensure this. The details of who would be considered an acceptable occupant for affordable housing is set out in the Affordable Housing SPG: Affordable_Housing_SPG_Adopted_October_2018 (5).pdf .

To ensure that the dwelling remains affordable for people who are entitled to buy / occupy in future years, it is important that an affordable dwelling is not "improved" to be out of the range of people. Permitted development rights would be removed from the dwelling to ensure that it cannot be extended beyond that price-bracket.

A submission should include a statement of how the affordable housing element will be dealt with and how they will be managed and retained for perpetuity. This will need to be signed off as acceptable by the LPA – either at the consent stage or as a condition to be discharged afterwards. It would both help the officers and speed up your application if your statement was taken and adapted as required from the statement available in the SPG. This would save checking that "the wheel has been reinvented correctly" if the document is based on one that has already been approved. Those statements are included within the SPG and different types are available to accommodate all tenures.

For your housing types for those with affordable status, I have consulted the Affordable Housing Officer and his response is below:

Below are the affordable housing need figures for Llandrindod. Ideally we would like to see social rented 1 and 2 bedroom homes.

Social housing providers with existing stock in Llandrindod Wells that may be interested in purchasing the affordable homes, are:

- *Powys council*
- *Barcud*
- *Wales & West*
- *Newydd*

Powys Common Housing Register for Social Housing and Tai Teg
Llandrindod Wells | Llandrindod
May 2024

1. Summary

households in band 1-3 with 1st preference:	136
households in band 1-3 with 2nd or subsequent preference:	59
households with a local connection:	280

2. Housing Need and Demand

Band 1, 2 and 3: Households that are in housing need.
Band 4: Households that are not in housing need, but would like to move.
Band 5: Households with and without housing need, but not ready to move.

Number of bedrooms is average of minimum and maximum number of bedrooms required as registered on the CHR. Totals may differ due to rounding.

Households registered with first preference.

1st choice	1-bed	2-bed	3-bed	4-bed	≥5-bed	Total
Band 1,2,3	15	19	3	1	0	37
Band 4,5	35	19	6	2	0	61
Total	50	38	9	3	0	98

Households registered with second or subsequent preference.

2nd choice	1-bed	2-bed	3-bed	4-bed	≥5-bed	Total
Band 1,2,3	36	16	4	4	1	61
Band 4,5	45	22	16	5	1	88
Total	81	38	20	9	2	149

Households registered with any preference (both tables above combined).

1st or sub choice	1-bed	2-bed	3-bed	4-bed	≥5-bed	Total
Band 1,2,3	51	35	7	5	1	98
Band 4,5	80	41	21	7	1	149
Total	131	75	28	12	2	247

Tai Teg Register for Affordable Housing, but not Social Housing
Approved households with a preference for the Community or Town Council area or adjoining areas.

	1-bed	2-bed	3-bed	≥4-bed	Total
interm rent			2		2
both	1	1	1		3
purchase		2	3		5
Total	1	3	6	0	10

Purchase can include Self Build, Shared Ownership/Equity or Discounted S106 Properties
intermediate rent is up to 80% of market rent, but is capped at Local Housing Allowance.
Many households in need of affordable housing will not register with Tai Teg until a home becomes potentially available to them.

Public Rights of Way

The site has a public footpath transecting the site (Public Right of Way 110/30/1). Any proposal must take this into account and ideally incorporate the route and presence of the right of way or if this is absolutely not possible, the right of way should be legally moved prior to development taking place. A public right of way should not be obstructed at any time.

Active Travel

Active Travel has been acknowledged within the Highways section, but also to state that its inclusion – particularly the links to the primary school – are welcome and will be an important link not just from the proposed dwellings, but also from the existing dwellings on the site.

Built Heritage

You have correctly noted that there is only one listed building in the vicinity – Noyadd, some 200m to the SE of the site. I agree with your conclusion that there is no connectivity between LB and the site.

Foul Water Drainage and Phosphates

As you have stated in your pre-app submission, mains drainage is available. Llandindod Wells WTW has been upgraded to include Phosphate screening, and therefore you should be able to have a connection to the TW without needing an HRA. You would be advised to include within your submission details of that clarification from Dwr Cymru that there is capacity for that connection.

Highways

The County Council as Highway Authority for the County Unclassified Highway, U1645

Wish the following recommendations/Observations be applied

Recommendations/Observations

> *Thank you for consulting the Highway Authority (HA) on this pre-planning enquiry at land at Tremont Parc, Llandrindod Wells, Powys, LD1 5AF. The proposal seeks residential development of 115 dwellings.*

(Please note that the information provided is based on a desk top study of the site using satellite mapping imagery and planning records only; no site visit has been undertaken).

The Site

The site as defined on submitted drawing Y047.1.2.002 Rev B forms part of land identified as candidate site 1043 and 1044 which was considered as part of the Candidate Site Selection process during the preparatory stages of the LDP and then shown on Inset Map 28 of the adopted LDP. Policy H2 identifies the site P28 HA2 as housing allocation for 122 units over 4.5ha of land. The applicant states that this would be a logical further extension of the Tremont Parc development.

Highway Access

Tremont Parc housing estate is served from the adjoining A483 Trunk Road, via a standard roundabout which is managed by the Welsh Government (WG). The suitability or otherwise, of the existing access off this roundabout to serve an additional residential development of this scale, is therefore a matter for WG to determine. The applicant is therefore advised to seek advice from the WG at the earliest opportunity.

Tremont Parc is a relatively large residential estate, incorporating circa 160 properties, which is served by a typical residential "approach road", that was adopted by PCC, in 2009. The estate road was designed and constructed to limit vehicular speeds to 20mph, which is appropriate in a residential setting, and incorporates traffic calming features, double sided footway provision and a 5.5m carriageway; adequate levels of forward visibility, in accordance with design speeds of 20mph, are also available.

In consideration of the above, the Highway Authority is satisfied, that the existing approach road, is in accordance with "Approach Road" design standards and does retain adequate capacity to serve a development of this nature and scale.

A full Transport Assessment will need to accompany any future planning submission, in line with the requirements of TAN 18.

Internal Layout

Whilst the indicative layout shown on the accompanying drawings, does suggest that a suitable highway layout can be provided to serve the site, the Highway Authority also notes the accompanying Scoping Note – Transport and Highways Matters prepared by SLR Consulting Ltd. Any subsequent planning application would therefore need to clearly demonstrate that a suitable highway alignments

and gradients can be provided. Further, internal access visibility, traffic calming and turning provision will all need to be fully considered and detailed.

Parking provision

Whilst the supporting statement states that off street parking will be provided in accordance with the adopted CSS Parking Standards, any future planning submission shall need to include a suitable parking schedule demonstrating compliance.

Active Travel (AT)

Whilst the suggested provision of 2m wide internal footways and a shared link to the existing of the site is welcomed, any future submission will need to demonstrate full compliance with the provisions of the AT Act.

The inclusion of an Active Travel link onto Trefonnen Lane (U1660) is noted and welcomed, the applicant is reminded to ensure that a suitable footway link along Trefonnen Lane from the proposed development site to the existing footway provision outside Ysgol Trefonnen is provided.

General Comments

Should a future formal planning submission be made on this site, the applicant shall need to provide a full suite of highway drawings, including long and cross-sectional drawings, in accordance with guidance contained within the recently published WG Advice Note, Highways Adoption in Wales. (e) Highways Adoption Advice Note March 2023 Final (gov.wales)

Reference Material

Manual for Streets 1 & 2

TAN 18

CSS Wales Parking Standards 2014

WG Advice Note, Highways Adoption in Wales.

CSS Common Standards Document.

All Wales Common Design Standards (June 2020)

The Powys Local Development Plan (2011-2026) Policy T1 & DM13

Contaminated Land

As part of the pre-app process, Land Contamination was consulted. Their response was as follows:

The subject site is not identified as potential contaminated land. However, adjacent to the site are significant areas of unknown filled ground, quarrying etc that may affect the development site. Therefore, it is recommended that a phase 1 desk study with preliminary risk assessment is presented with the application.

Environmental Protection

As part of the pre-app process, Environmental Protection was consulted. Their response was as follows:

Foul Drainage

At the planning application stage Environmental Protection will require the detail relating to the foul drainage arrangements for the development.

If they are utilising any current system we will require information relating to the capacity and condition of the tank and drainage field with confirmation that it is of suitable size to accommodate any additional foul effluent from the new development.

Any new system must comply with document H2 of the Building Regulations relating to design and installation of the foul drainage system.

Foul drainage should be connected to a public foul or combined sewer wherever this is reasonably practicable.

Construction-phase noise control

Due to the residential nature of the setting, Environmental Protection will require that measures are in place to control the level of noise disturbance to neighbouring properties during the construction phase of the development.

This department would recommend that the construction period working hours and delivery times be restricted as follows:

"All works and ancillary operations which are audible at the site boundary shall be carried out only between the following hours:

- *0800-1800 hrs Monday to Friday*
- *0800-1300 hrs Saturday*
- *At no time on Sundays and Bank Holidays*

Deliveries to and removal of plant, equipment, machinery and waste from the site must also only take place within the permitted hours detailed above."

Ecology

The site is currently agriculture, and has the backdrop of an area of ancient woodland to the east, plus a connected (corner to corner) section to the south-east. Although there is not believed to be any threat from the site to the eastern area of AW, that to the SE must be protected from root damage etc. It is advised that a Tree Protection Plan – including how trees / hedges are to be protected during the construction period - be submitted with any application. That plan should also acknowledges trees that might not be within the site boundary.

The site has a number of mature trees and these would be expected to be incorporated into the layout and protected – particularly during construction.

I note that you have included a PEA, and this is welcomed. Please be aware that PEAs only have a "shelf life" of two years.

It is important to note that further surveys following National Guidelines at the appropriate time of year will be required for any species that are found or have potential to be present. These surveys will need to be carried out and results and any mitigation measures proposed submitted to the LPA prior to determination of the planning application. Mitigation and compensation strategies will be required for any impacts upon protected species and loss of habitat.

Ecological reports submitted to support a planning application should include the required information identified in Table 4 of the Biodiversity and Geodiversity Supplementary Planning Guidance (Adopted October 2018, the full document can be found at https://customer.powys.gov.uk/article/4907/LDP-Supplementary-Planning-Guidance-SPG.

There is a SSSI some 170m south of the site within the quarry. You are aware of this site and due to topography and distance, it is not considered that there is connectivity between the sites.

External Lighting

Careful consideration will need to be given to any external lighting design provided through the proposed development, measures will need to be identified to minimise impacts to nocturnal wildlife commuting and foraging in the local area. This is particularly important considering the close proximity of the ancient woodland.

A Wildlife Sensitive Lighting Plan could be secured through worded planning condition, however if any details of any external lighting proposed are provided as part of the application then this would avoid the potential need for a pre-commencement planning condition.

Any external lighting proposed will need to demonstrate compliance with the recommendations outlined in the BCT and ILP Guidance Note 8 Bats and Artificial Lighting (12th September 2018) full details can be found at https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/.

Biodiversity Enhancements

In accordance with Part 1 Section 6 of the Environment (Wales) Act 2016 Local Authorities are required to Maintain and Enhance biodiversity through all of its functions – this includes the planning process. It will therefore need to be demonstrated as to how the proposed development will incorporate biodiversity enhancements to ensure net biodiversity benefits through the proposed development.

For a site of this size and considering it to be new-build, we would expect to see a variety of enhancements that relate to the actual site. We would ideally want to see enhancements that would be integral to the design and therefore more likely to be retained – for example, bat access roof slates rather than boxes attached to the dwellings etc.

Other measures could include:

•Provision of bird and bat boxes – **the strong preference is for integral** - including the details of the number, type and location of these boxes;

•A wildlife buffer strip (plus a scheme of appropriate management of these areas)

- Hedgerows should be retained within buffer strips and should be unlit or lighting to be directed away from the hedgerows to create dark movement corridors for nocturnal wildlife through the site;
- •Provision of wildlife friendly landscape planting.
- A pile of logs for amphibians

- A pond
- Additional native tree planting *on top of* what is required to make the proposal acceptable in terms of landscaping.

Details of any proposed biodiversity enhancements will need to be included with any submitted application, the features proposed will need to be specific (i.e. details regarding locations, dimensions and numbers will need to be provided) and achievable.

Further details regarding biodiversity and requirements associated with planning applications can be found in the Powys Local Development Plan (2011 to 2026) Supplementary Planning Guidance Biodiversity and Geodiversity (Adopted October 2018) which can be found at https://en.powys.gov.uk/article/4907/LDP-Supplementary-Planning-Guidance-SPG

Tree and Hedgerow Compensation Scheme

Whilst it is to be avoided where possible, if any trees or hedgerows will be required to be removed or impacted to accommodate the proposed developments or access to the site regard should be paid to policy DM2.

Where impacts to hedgerows are identified and cannot be avoided, an appropriate compensation strategy will be required. Where possible, translocation of the existing hedgerow should be considered. Replacement hedgerow planting will need to be identified for any locations where this is not possible.

Where it is necessary to remove any trees or hedgerows a Tree or Hedgerow Compensation Planting Scheme will need to be secured through an appropriately worded planning condition. This plan will need to identify appropriate compensation planting for the loss of any trees or hedgerow. Details of the tree and/or hedgerow location(s), hedgerow length(s), and tree and/or hedgerow species composition, as well as an appropriate aftercare scheme, will need to be provided. Where translocation is proposed a translocation plan should include details of the timing of work, preparation works to the new site and of the existing hedgerow, translocation methodology and aftercare measures. The chosen species will need to be native and reflect the trees and hedgerows present in the local area.

A Tree and/or Hedgerow Compensation Planting Scheme or Hedgerow Translocation Plan could be secured through a planning condition. However, the provision of sufficient details submitted with a planning application would avoid the need for a pre-commencement condition requiring this information. Any removal/works to existing

trees/hedgerows should also be covered under an ecological survey to consider potential impacts to priority/protected species.

These details will need to be tied in with the Green Infrastructure Plan.

I note that you will include a Construction Waste Management Plan within the submission.

Landscaping

Whilst the principle of development has been already agreed in this location, it is important to ensure that the site is integrated well within the wider landscape, as well as within the site.

You have the backdrop from the town aspect of the woodland, and this is useful. You also have some mature trees on site that you have stated will be protected.

In terms of the practical issues, your attention is drawn to the Landscape Supplementary Planning Guidance (SPG - 2019) that states that all schemes need to be appropriate and sensitive in terms of integration, siting, scale and design to the characteristics and qualities of the Powys landscape. The SPG outlines all the considerations and requirements that should be taken into account prior to submitting a planning application.

The site would need to be provided for in terms of its setting within the localised basis. A landscaping plan would be expected to include indications of all existing trees (including spread and species) and hedgerows on the land, identify those to be retained and set out measures for their protection throughout the course of development. We would also expect to see more site-specific landscaping to soften the development within the locality. It is recommended that details of any landscaping proposed are submitted in a detailed Landscape Planting Scheme including proposed (native) species mixes, planting and aftercare schedules. This information could be secured through a planning condition, however the submission of a Landscaping Scheme with a planning application would avoid the need for a pre-commencement condition requiring this information.

We would expect any landscaping plans to include a scaled plan, numbers and type of species, timescales of planting – typically to be carried out in the first seeding and planting season following the first occupation of the building, and also details of how failed plants would be dealt with / replaced. This does link into the section on Green Infrastructure Statements below.

Green Infrastructure Statement

Any future planning application would need to be supported by a Green Infrastructure Statement outlining how green infrastructure has been incorporated into the development. This statement should be proportionate to the scale and nature of the development being proposed. The statement should confirm how the step-wise approach, detailed within the PPW Annexe: Update to Chapter 6 of Planning Policy Wales, has been applied. This can be read using the following link:

Addressing the nature emergency through the planning system: update to Chapter 6 of Planning Policy Wales | GOV.WALES

Flooding

There are small pockets of the site that are shown to be affected by the "Surface Water and Small Water Courses Floodzones". However, I am content that these can be accommodated within your scheme.

I can see that you have submitted Land Drainage details. I have consulted PCC Land Drainage, but have not received their comments yet. I shall forward to you once I have them.

Loss of Agricultural Land

This element has already been dealt with in allocating the site within the LDP.

Sustainable Drainage

It should be noted that in addition to planning approval the proposed development will require approval from the Sustainable Drainage System Approval Body (SAB) prior to any construction works commencing onsite – i.e. new developments of more than 1 house or the area of the Project proposals with drainage implications is likely to exceed 100m2 (including access tracks, areas of hard standing etc.). Standard 5 of the SAB seeks to ensure that, wherever possible the identified SUDs scheme makes the best use of the site to maximise benefits for biodiversity (as well as for amenity, water quantity and water quality). Further information on the requirements of SAB can be found at: https://en.powys.gov.uk/article/5578/Sustainable-Drainage-Approval-Body-SAB

Planning submission for a Major application

The proposal is for 115-122 dwelling units and therefore would be considered a Major application. This has additional requirements in terms of statutory pre-application consultation.

This guidance can be found planning-major-developments-guidance-on-pre-application-consultation.pdf (gov.wales).

Conclusion

Having carefully considered the proposed development, it is considered that the principle of a housing development and associated works on this site does comply with policy and is therefore, likely to be supported by Development Management should an application be submitted, subject to the comments above.

Yours faithfully,

Lorraine Jenkin
Confirmed: RE 22/05/2024

Informatives

Building Regulations

As part of the construction process, a Building Regulations application would be required.

The Documents and Evidence required for a subsequent planning application to be made valid

- The completed application form
- The correct fee – this will vary according to the type of application submitted. Please see https://en.powys.gov.uk/article/6040/Planning-permission-fees
- Location plan – 1:1250 or 1:2500, standard red and blue outlining the site and land in the applicant's ownership, respectively. The direction of north must also be shown.
- Block plan – 1:500 or 1:200
- Appropriate detailed drawings to accurately show the proposed development.
- Any additional documents/information to support the application – e.g.ecological and landscape information, tree information etc.
- Green Infrastructure Statement.
- Biodiversity Enhancements

The local planning authority will not be able to process your application unless the mandatory supporting documentation has been provided. You can also attach any other relevant documentation which you think will help the local authority determine the application – external lighting plan etc. This will save you having to discharge the conditions at a later stage.

The relevant forms and guidance for submitting a full application are given below;

https://ecab.planningportal.co.uk/uploads/appPDF/T6850Form001_wales_en.pdf

https://ecab.planningportal.co.uk/uploads/appPDF/Help001_wales_en.pdf

Croeso i chi gysylltu â ni yn Gymraeg. Byddwn yn ymateb yn Gymraeg, heb oedi.

You are welcome to contact us in Welsh. We will respond in Welsh, without delay.

Pa mor dda ydyn ni'n neud? Rydym yn croesawu eich adborth, defnyddiwch y ddolen yma.
How are we doing? We welcome your feedback, please use the following link.

Data Protection and Privacy / Diogelu Data a Chyfrinachedd

In order to deliver the Planning Service (applications, complaints and appeals etc.) it is necessary for the council to process personal data, in accordance with relevant planning legislation, as listed on the Welsh Governments planning website (https://gov.wales/topics/planning/?lang=en. If you wish to know more about how Powys County Council processes your personal data then please visit Planning and Public Protection Privacy Statement - Powys County Council and / or https://en.powys.gov.uk/privacy.

Er mwyn darparu Gwasanaeth Cynllunio (ceisiadau, cwynion ac apeliadau ac ati) mae'n angenrheidiol i'r cyngor brosesu data personol, yn unol â deddfwriaeth gynllunio berthnasol, fel y rhestrir ar wefan gynllunio Llywodraeth Cymru

(https://llyw.cymru/adeiladu-a-chynllunio). Os hoffech wybod mwy am sut mae Cyngor Sir Powys yn prosesu eich data personol, ewch i https://cy.powys.gov.uk/article/7085/Datganiad-Preifatrwydd-Cynllunio-a-Gwarchod-y-Cyhoedd a / neu https://cy.powys.gov.uk/preifatrwydd

Appendix C Detailed Access Drawings

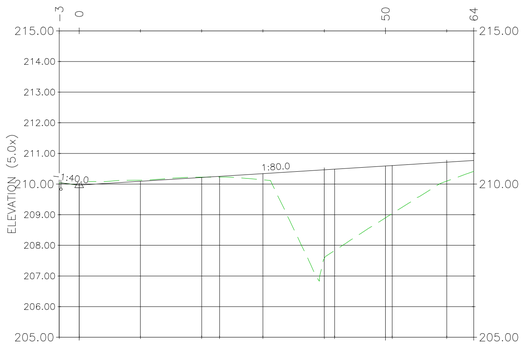
Transport Assessment

Land at Tremont Parc, Llandrindod Wells

SLR Project No.: 407.064515.00001

14 November 2024

LONG SECTION: Road 2
SCALE: H:500, V:100
DATUM: 205.00



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VERTICAL GEOMETRY	G:-1:40.0 (-2.5%) L:3.0	G:1:80.0 (1.2%) L:64.4						
EXISTING LEVELS	209.964	210.124	210.223	210.139	207.563	208.897	210.096	
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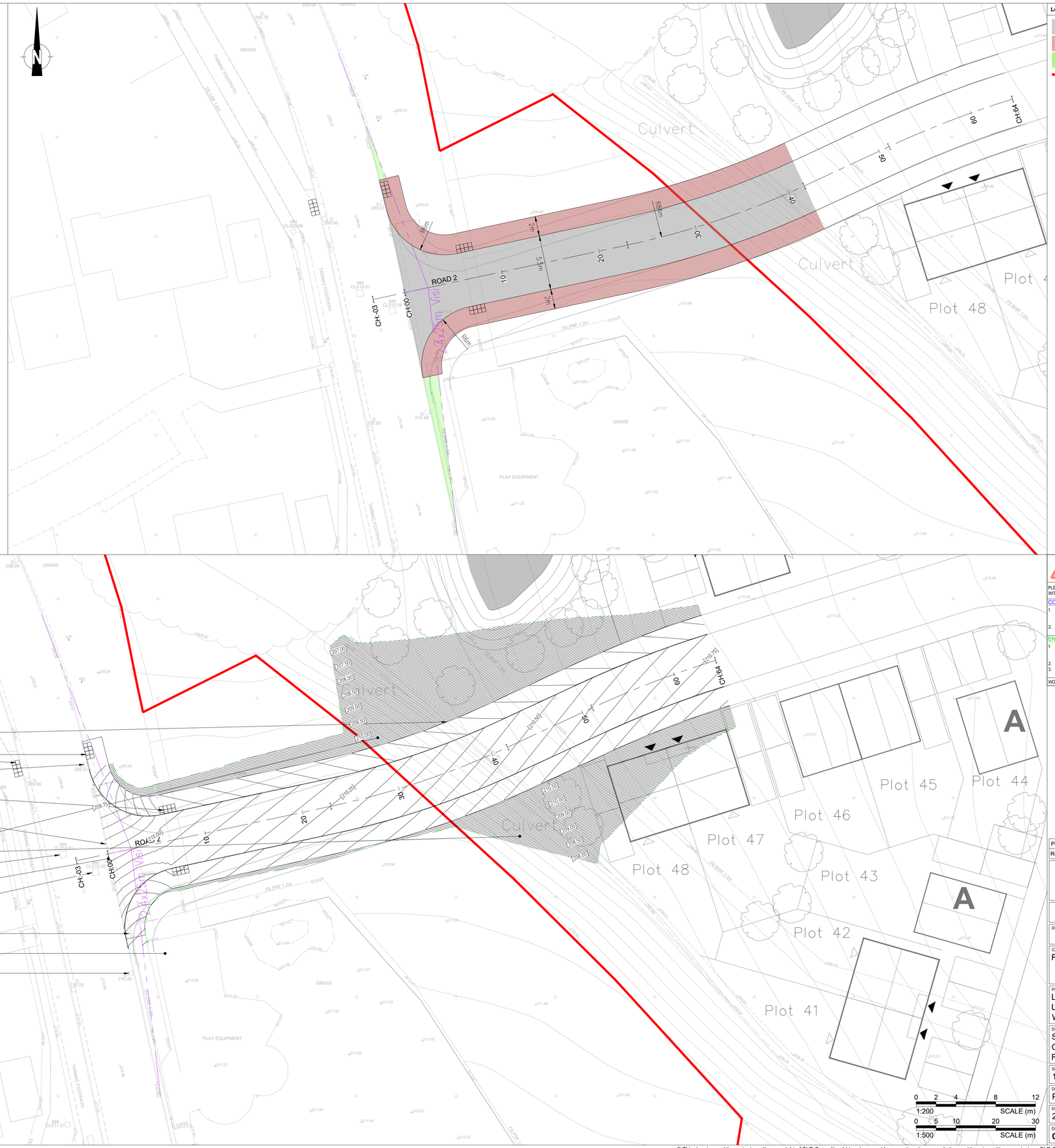

Legend:

- Major Access Road – Bituminous
- Footway – Bituminous
- Verge
- Site boundary

AWAITING TECHNICAL APPROVAL

This drawing has NOT been technically approved by Local Authority and/or Water Authority.
All works subject to change through technical review process with relevant approving authorities.

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

PLEASE REFER TO THE HEALTH AND SAFETY FILE FOR A FULL LIST OF THE HAZARDS ASSOCIATED WITH THIS WORK - THE FOLLOWING ARE THE MOST SIGNIFICANT ITEMS TO BE AWARE OF.

CONSTRUCTION

1. OPERATIVES TO TAKE PRECAUTIONS WHEN WORKING ADJACENT TO OR WITHIN DEEP EXCAVATIONS. METHOD STATEMENT TO BE PRODUCED BY CONTRACTOR PRIOR TO WORKS COMMENCING.
2. ATTENTION IS DRAWN TO THE EXISTENCE OF BOTH EXISTING UNDERGROUND AND OVERHEAD UTILITIES.

ENVIRONMENTAL

1. EXISTING WATERCOURSES IN CLOSE PROXIMITY TO WORKS. A POLLUTION PREVENTION STRATEGY AND WORKING METHOD STATEMENTS TO BE PRODUCED BY THE CONTRACTOR FOR ALL WORKS.
2. CONSIDERATION GIVEN TO NOISE LEVELS GIVEN PROXIMITY TO EXISTING PROPERTIES.
3. CONSIDERATION GIVEN TO GROUND CONDITIONS. CONTRACTOR TO REVIEW GEOTECHNICAL REPORT PRIOR TO UNDERTAKEN EXCAVATION WORKS.

WORK CAN ONLY BE CARRIED OUT BY SUITABLY TRAINED AND BRIEFED PERSONNEL.

Rev	Amendments	Date	By	Chk	Auth
P01	First issue	28.10.24	PB	JAK	JAK

SLR

www.slrconsulting.com

Drawing Status & Suitability Code: FOR INFORMATION S2

Client: REG KNILL

Project: LAND AT TREMONT PARK
LLANDRINDOD
WELLS

Drawing Title: SITE ACCESS PLAN
GENERAL ARRANGEMENT
ROAD 2

Scale		SLR Project No.
1:200	@ A1	416.065167.00000

Designed	Drawn	Checked	Authorised
PB	PB	JAK	JAK
Date	Date	Date	Date
28.10.2024	28.10.2024	28.10.2024	28.10.2024

Drawing Number: **065167-SLR-XXX-XXX-DR-CH-0020** Rev. **P01**

0 2 4 8 12
1:200 SCALE (m)
0 5 10 20 30
1:500 SCALE (m)

28/10/2024

I:\JOBS\2023\SLR\416.065167.00001 Land at Tremont Park, Llandrindod Wells\2. DESIGN\CAD\065167-SLR-XXX-XXX-DR-CH-0020 GA Site Access - Road 2.dwg

LONG SECTION: Road 1
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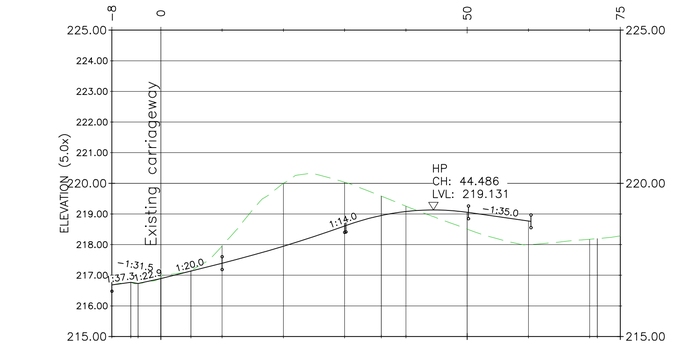
DATUM: 215.00



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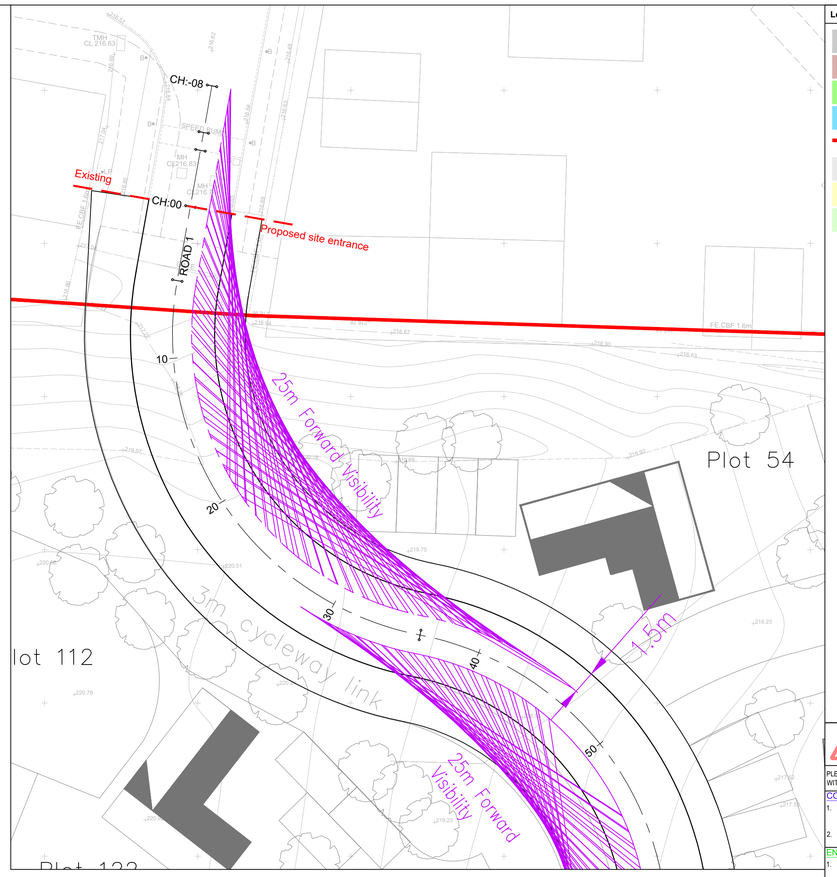
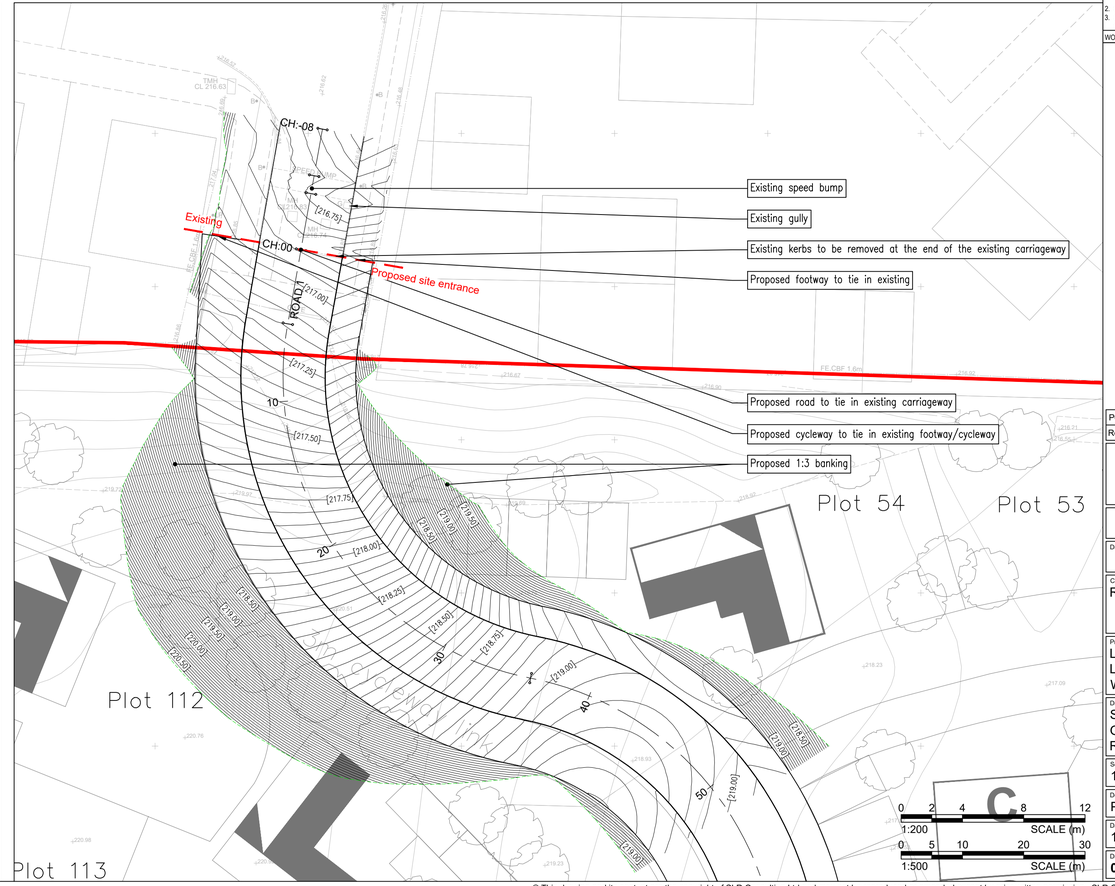
VERTICAL GEOMETRY		G:1:22.9 G:-1:37.3 (4.4%) (2.7%) L:3.1 G:-1:31.5 (-3.2%) L:1.2	L:3.7	G:1:20.0 (5.0%) L:10.0	K:9.3 R:933.3 L:20.0	G:1:14.0 (7.1%) L:0.2	K:2.0 R:200.0 L:20.0	G:-1:35.0 (-2.9%) L:10.2	
EXISTING LEVELS		216.893	217.960	220.002	220.036	219.254	218.505	218.000	218.175
H: FINISHED LEVELS V:	216.685	216.788 216.788	216.893	217.138	217.393	217.946	218.627 218.627	218.951	219.081 219.086	219.131	219.055 219.055	218.770 218.758





Legend:

- Major Access Road – Bituminous
- Footway – Bituminous
- Verge
- Shared cycleway
- Site boundary
- Existing road
- Existing Footway / cycleway
- Existing verge

AWAITING TECHNICAL APPROVAL

This drawing has NOT been technically approved by Local Authority and/or Water Authority. All works subject to change through technical review process with relevant approving authorities.

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

PLEASE REFER TO THE HEALTH AND SAFETY FILE FOR A FULL LIST OF THE HAZARDS ASSOCIATED WITH THIS WORK - THE FOLLOWING ARE THE MOST SIGNIFICANT ITEMS TO BE AWARE OF.

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WORK CAN ONLY BE CARRIED OUT BY SUITABLY TRAINED AND BRIEFED PERSONNEL.

Rev	Amendments	Date	By	Chk	Auth
P01	First issue	11.10.24	PB	JAK	JAK

SLR
www.slrconsulting.com

Drawing Status & Suitability Code: FOR INFORMATION S2

Client: REG KNILL

Project: LAND AT TREMONT PARK
LLANDRINDOD
WELLS

Drawing Title: SITE ACCESS PLAN
GENERAL ARRANGEMENT
ROAD 1

Scale		SLR Project No.
1:200	@ A1	416.065167.00000

Designed	Drawn	Checked	Authorised
PB	PB	JAK	JAK
Date	Date	Date	Date
11.10.2024	11.10.2024	11.10.2024	11.10.2024

Drawing Number: 065167-SLR-XXX-XXX-DR-CH-0010 Rev: P01

1:200 0 2 4 8 12 SCALE (m)
1:500 0 5 10 20 30 SCALE (m)

11/10/2024

I:\JOBS\20231\SLR\416.065167.00001 Land at Tremont Park, Llandrindod Wells\2. DESIGN\CAD\065167-SLR-XXX-XXX-DR-CH-0010 GA Site Access.dwg

Appendix D Swept Path Analysis and Internal Site Review

Transport Assessment

Land at Tremont Parc, Llandrindod Wells

SLR Project No.: 407.064515.00001

14 November 2024

1. Northern Section of Site

2. Southern Section of Site

Forward visibility, based upon a design speed of 20mph (25m SSD)

2.4 x 25m Visibility Splays

2.4 x 25m Visibility Splays

2.4 x 25m Visibility Splays

Forward visibility
The anticipated design speed vehicles traveling through the bend is 20mph (25m SSD)

Forward visibility
Based upon the kerb radii of 6m, the anticipated design speed for vehicles traveling through the bend is 11mph (13m SSD)

Split Level houses

Approximate position and size of surface water attenuation ponds

Development Boundary

Culvert

3m cycleway link

P.O.S.

N

0 5 10 15 20 25 30 35 40 45 50m

Scale 1:500

07/11/2024

P:\Projects\23000\23739?_-_Land at Tremont Park, Llandrindod Wells\Technical\A_-_Transport_Assessment\Drawings\Autocad\416.065167.00001_PD01 & AT Series_-_Site Review.dwg

SLR

www.slrconsulting.com

Client: Reg Knill

Project: Land at Tremont Park, Llandrindod Wells

Drawing Status & Suitability Code:

Designed	Drawn	Checked	Authorised
LJ	LJ	SCJ	JH
Date	Date	Date	Date
10.10.24	10.10.24	10.10.24	10.10.24

Drawing Title: Proposed Site - Visibility Assessment

Drawing Number: 416.065167.00001_PD01

Rev.:

Scale: 1:500 @ A1

SLR Project No.:

Rev	Amendments	Date	By	Chk	Auth

Rev	Amendments	Date	By	Chk	Auth

Notes:

1.

Legend:

1. Northern Section of Site

2. Southern Section of Site

N

Split Level houses

3m cycleway link

Culvert

Development Boundary

Approximate position and size of surface water attenuation ponds

P.O.S.

0 5 10 15 20 25 30 35 40 45 50m

Scale 1:500

07/11/2024

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www.slrconsulting.com

Client: Reg Knill

Project: Land at Tremont Park, Llandrindod Wells

Drawing Status & Suitability Code:

Designed	Drawn	Checked	Authorised
LJ	LJ	SCJ	JH
Date 10.10.24	Date 10.10.24	Date 10.10.24	Date 10.10.24

Drawing Title: Swept Path Analysis - Refuse Vehicle Site Servicing

Drawing Number: 416.065167.00001_PD01_AT01

Rev.:

Scale: 1:500 @ A1

SLR Project No.:

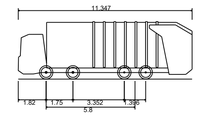
Rev	Amendments	Date	By	Chk	Auth

Rev	Amendments	Date	By	Chk	Auth

Notes:

1.

Legend:



Large Refuse Vehicle (4 axle)

Overall Length	11.347m
Overall Width	2.500m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	6.00s
Wall to Wall Turning Radius	11.330m

1. Northern Section of Site

2. Southern Section of Site

N

Scale 1:500

0 5 10 15 20 25 30 35 40 45 50m

Notes:

1.

Legend:

Standard Design Vehicle (SDV)

Overall Length	4.800m
Overall Width	2.000m
Overall Body Height	1.950m
Min Body Ground Clearance	0.100m
Track Width	2.000m
Lock to lock time	4.00s
Wall to Wall Turning Radius	6.000m

3.5t Panel Van

Overall Length	5.339m
Overall Width	1.986m
Overall Body Height	2.565m
Min Body Ground Clearance	0.338m
Track Width	1.986m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	6.400m

SLR

www.slrconsulting.com

Client: Reg Knill

Project: Land at Tremont Park, Llandrindod Wells

Drawing Status & Suitability Code:

Designed	Drawn	Checked	Authorised
LJ	LJ	SCJ	JH
Date	Date	Date	Date
10.10.24	10.10.24	10.10.24	10.10.24

Drawing Title: Swept Path Analysis - Panel Van & SDV
Site Servicing

Drawing Number: 416.065167.00001_PD01_AT02

Rev.:

Scale: 1:500 @ A1

SLR Project No.:

Rev	Amendments	Date	By	Chk	Auth

Rev	Amendments	Date	By	Chk	Auth

07/11/2024

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SLR	Client: Reg Knill		
www.slrconsulting.com	Project: Land at Tremont Park, Llandrindod Wells		
Drawing Status & Suitability Code			
Designed: LJ / Drawn: LJ / Checked: JH / Authorised: JH	Drawing Title: Proposed Shared Space Route Trefonen Lane General Arrangement		
Date: 01.11.24 / 01.11.24 / 01.11.24 / 01.11.24			
Drawing Number: PD02 / Rev.	Scale: 1:250 @ A2 / SLR Project No.: 416.065167.00001		

Rev	Amendments	Date	By	Chk	Auth

Rev	Amendments	Date	By	Chk	Auth

Notes:

1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.

Legend:

- Application boundary
- Proposed carriageway
- Proposed edging
- Proposed dropped kerb
- Proposed shared route
- Proposed surface treatment

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Appendix E TRICS Outputs

Transport Assessment

Land at Tremont Parc, Llandrindod Wells

SLR Project No.: 407.064515.00001

14 November 2024

SLR Consulting Helmont House Cardiff Licence No: 529506

Calculation Reference: AUDIT-529506-241114-1123

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
	EX	ESSEX	1 days
	HC	HAMPSHIRE	4 days
	HF	HERTFORDSHIRE	1 days
	KC	KENT	3 days
	WB	WEST BERKSHIRE	1 days
	WS	WEST SUSSEX	6 days
03	SOUTH WEST		
	DC	DORSET	1 days
	DV	DEVON	2 days
04	EAST ANGLIA		
	NF	NORFOLK	5 days
	SF	SUFFOLK	2 days
09	NORTH		
	DH	DURHAM	2 days
11	SCOTLAND		
	AS	ABERDEENSHIRE	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: 50 to 197 (units:)
Range Selected by User: 50 to 197 (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: 01/01/15 to 29/06/23

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	7 days
Wednesday	8 days
Thursday	7 days
Friday	5 days

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

Selected survey types:

Manual count	32 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:

Suburban Area (PPS6 Out of Centre)	6
Edge of Town	26

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	28
Village	1
Out of Town	1
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, Out of Town, High Street and No Sub Category.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	11 days - Selected
Servicing vehicles Excluded	28 days - Selected

Secondary Filtering selection:

Use Class:

C3	32 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 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:

1,001 to 5,000	3 days
5,001 to 10,000	8 days
10,001 to 15,000	10 days
15,001 to 20,000	4 days
20,001 to 25,000	6 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	6 days
25,001 to 50,000	4 days
50,001 to 75,000	4 days
75,001 to 100,000	5 days
100,001 to 125,000	1 days
125,001 to 250,000	11 days
250,001 to 500,000	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	6 days
1.1 to 1.5	23 days
1.6 to 2.0	3 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	21 days
No	11 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	32 days

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

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions

LIST OF SITES relevant to selection parameters

1 AS-03-A-02 MIXED HOUSES ABERDEENSHIRE
FARROCHIE ROAD
STONEHAVEN

Edge of Town
Residential Zone
Total No of Dwellings: 131
Survey date: WEDNESDAY *20/04/22* *Survey Type: MANUAL*

2 DC-03-A-09 MIXED HOUSES DORSET
A350
SHAFTESBURY

Edge of Town
No Sub Category
Total No of Dwellings: 50
Survey date: FRIDAY *19/11/21* *Survey Type: MANUAL*

3 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*

4 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*

5 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*

6 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*

7 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*

8 ES-03-A-07 MIXED HOUSES & FLATS EAST SUSSEX
NEW ROAD
HAILSHAM
HELLINGLY
Edge of Town
Residential Zone
Total No of Dwellings: 91
Survey date: THURSDAY *07/11/19* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

9 ES-03-A-08 MIXED HOUSES & FLATS EAST SUSSEX
WRESTWOOD ROAD
BEXHILL

Edge of Town
Residential Zone
Total No of Dwellings: 110
Survey date: WEDNESDAY *12/10/22* *Survey Type: MANUAL*

10 EX-03-A-03 MIXED HOUSES ESSEX
KESTREL GROVE
RAYLEIGH

Edge of Town
Residential Zone
Total No of Dwellings: 123
Survey date: MONDAY *27/09/21* *Survey Type: MANUAL*

11 HC-03-A-23 HOUSES & FLATS HAMPSHIRE
CANADA WAY
LIPHOOK

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 62
Survey date: TUESDAY *19/11/19* *Survey Type: MANUAL*

12 HC-03-A-27 MIXED HOUSES HAMPSHIRE
DAIRY ROAD
ANDOVER

Edge of Town
Residential Zone
Total No of Dwellings: 73
Survey date: TUESDAY *16/11/21* *Survey Type: MANUAL*

13 HC-03-A-28 MIXED HOUSES & FLATS HAMPSHIRE
EAGLE AVENUE
WATERLOOVILLE
LOVEDEAN
Edge of Town
Residential Zone
Total No of Dwellings: 125
Survey date: MONDAY *08/11/21* *Survey Type: MANUAL*

14 HC-03-A-29 MIXED HOUSES & FLATS HAMPSHIRE
CROW LANE
RINGWOOD
CROW
Edge of Town
Residential Zone
Total No of Dwellings: 195
Survey date: THURSDAY *30/06/22* *Survey Type: MANUAL*

15 HF-03-A-03 MIXED HOUSES HERTFORDSHIRE
HARE STREET ROAD
BUNTINGFORD

Edge of Town
Residential Zone
Total No of Dwellings: 160
Survey date: MONDAY *08/07/19* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

16 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*

17 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*

18 KC-03-A-10 MIXED HOUSES KENT
HEADCORN ROAD
STAPLEHURST

Edge of Town
Residential Zone
Total No of Dwellings: 106
Survey date: TUESDAY *09/05/23* *Survey Type: MANUAL*

19 NF-03-A-25 MIXED HOUSES & FLATS NORFOLK
WOODFARM LANE
GORLESTON-ON-SEA

Edge of Town
Residential Zone
Total No of Dwellings: 55
Survey date: TUESDAY *21/09/21* *Survey Type: MANUAL*

20 NF-03-A-33 MIXED HOUSES NORFOLK
LONDON ROAD
ATTLEBOROUGH

Edge of Town
Residential Zone
Total No of Dwellings: 143
Survey date: THURSDAY *29/09/22* *Survey Type: MANUAL*

21 NF-03-A-34 MIXED HOUSES NORFOLK
NORWICH ROAD
SWAFFHAM

Edge of Town
Out of Town
Total No of Dwellings: 80
Survey date: TUESDAY *27/09/22* *Survey Type: MANUAL*

22 NF-03-A-35 MIXED HOUSES & FLATS NORFOLK
REPTON AVENUE
NORWICH

Edge of Town
Residential Zone
Total No of Dwellings: 116
Survey date: WEDNESDAY *28/09/22* *Survey Type: MANUAL*

23 NF-03-A-36 MIXED HOUSES NORFOLK
LONDON ROAD
WYMONDHAM

Edge of Town
No Sub Category
Total No of Dwellings: 75
Survey date: THURSDAY *29/09/22* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

24 SF-03-A-09 MIXED HOUSES & FLATS SUFFOLK
FOXHALL ROAD
IPSWICH

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 179
Survey date: THURSDAY *24/06/21* *Survey Type: MANUAL*

25 SF-03-A-10 TERRACED & SEMI-DETACHED SUFFOLK
LOVETOFTS DRIVE
IPSWICH
WHITEHOUSE
Edge of Town
Residential Zone
Total No of Dwellings: 149
Survey date: TUESDAY *22/06/21* *Survey Type: MANUAL*

26 WB-03-A-03 MIXED HOUSES WEST BERKSHIRE
DORKING WAY
READING
CALCOT
Edge of Town
Residential Zone
Total No of Dwellings: 108
Survey date: FRIDAY *09/09/22* *Survey Type: MANUAL*

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

Edge of Town
Residential Zone
Total No of Dwellings: 180
Survey date: THURSDAY *19/04/18* *Survey Type: MANUAL*

28 WS-03-A-12 MIXED HOUSES WEST SUSSEX
MADGWICK LANE
CHICHESTER
WESTHAMPNETT
Edge of Town
Village
Total No of Dwellings: 152
Survey date: WEDNESDAY *16/06/21* *Survey Type: MANUAL*

29 WS-03-A-13 MIXED HOUSES & FLATS WEST SUSSEX
LITTLEHAMPTON ROAD
WORTHING
WEST DURRINGTON
Edge of Town
Residential Zone
Total No of Dwellings: 197
Survey date: WEDNESDAY *23/06/21* *Survey Type: MANUAL*

30 WS-03-A-14 MIXED HOUSES WEST SUSSEX
TODDINGTON LANE
LITTLEHAMPTON
WICK
Edge of Town
Residential Zone
Total No of Dwellings: 117
Survey date: WEDNESDAY *20/10/21* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

31 WS-03-A-17 MIXED HOUSES & FLATS WEST SUSSEX
SHOPWHYKE ROAD
CHICHESTER

Edge of Town
Residential Zone
Total No of Dwellings: 86
Survey date: WEDNESDAY 01/03/23 Survey Type: MANUAL

32 WS-03-A-19 MIXED HOUSES & FLATS WEST SUSSEX
TURNERS HILL ROAD
EAST GRINSTEAD

Edge of Town
Residential Zone
Total No of Dwellings: 92
Survey date: MONDAY 15/05/23 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.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
CT-03-A-03	na

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
Total People to Total Vehicles ratio (all time periods and directions): 1.74

	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	32	110	0.076	32	110	0.284	32	110	0.360
08:00 - 09:00	32	110	0.139	32	110	0.358	32	110	0.497
09:00 - 10:00	32	110	0.139	32	110	0.164	32	110	0.303
10:00 - 11:00	32	110	0.134	32	110	0.166	32	110	0.300
11:00 - 12:00	32	110	0.145	32	110	0.145	32	110	0.290
12:00 - 13:00	32	110	0.163	32	110	0.155	32	110	0.318
13:00 - 14:00	32	110	0.171	32	110	0.167	32	110	0.338
14:00 - 15:00	32	110	0.164	32	110	0.196	32	110	0.360
15:00 - 16:00	32	110	0.261	32	110	0.168	32	110	0.429
16:00 - 17:00	32	110	0.259	32	110	0.158	32	110	0.417
17:00 - 18:00	32	110	0.324	32	110	0.161	32	110	0.485
18:00 - 19:00	32	110	0.263	32	110	0.145	32	110	0.408
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.238			2.267			4.505

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:	50 - 197 (units:)
Survey date date range:	01/01/15 - 29/06/23
Number of weekdays (Monday-Friday):	32
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	6
Surveys manually removed from selection:	1

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 TAXIS
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	32	110	0.002	32	110	0.003	32	110	0.005
08:00 - 09:00	32	110	0.005	32	110	0.005	32	110	0.010
09:00 - 10:00	32	110	0.003	32	110	0.003	32	110	0.006
10:00 - 11:00	32	110	0.004	32	110	0.005	32	110	0.009
11:00 - 12:00	32	110	0.003	32	110	0.003	32	110	0.006
12:00 - 13:00	32	110	0.003	32	110	0.003	32	110	0.006
13:00 - 14:00	32	110	0.003	32	110	0.003	32	110	0.006
14:00 - 15:00	32	110	0.002	32	110	0.003	32	110	0.005
15:00 - 16:00	32	110	0.006	32	110	0.006	32	110	0.012
16:00 - 17:00	32	110	0.003	32	110	0.003	32	110	0.006
17:00 - 18:00	32	110	0.003	32	110	0.003	32	110	0.006
18:00 - 19:00	32	110	0.002	32	110	0.001	32	110	0.003
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.039			0.041			0.080

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 OGVS
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	32	110	0.003	32	110	0.003	32	110	0.006
08:00 - 09:00	32	110	0.002	32	110	0.002	32	110	0.004
09:00 - 10:00	32	110	0.003	32	110	0.002	32	110	0.005
10:00 - 11:00	32	110	0.003	32	110	0.003	32	110	0.006
11:00 - 12:00	32	110	0.003	32	110	0.003	32	110	0.006
12:00 - 13:00	32	110	0.001	32	110	0.001	32	110	0.002
13:00 - 14:00	32	110	0.002	32	110	0.002	32	110	0.004
14:00 - 15:00	32	110	0.002	32	110	0.002	32	110	0.004
15:00 - 16:00	32	110	0.002	32	110	0.002	32	110	0.004
16:00 - 17:00	32	110	0.001	32	110	0.002	32	110	0.003
17:00 - 18:00	32	110	0.001	32	110	0.001	32	110	0.002
18:00 - 19:00	32	110	0.001	32	110	0.001	32	110	0.002
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.024			0.024			0.048

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 PSVS
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	32	110	0.001	32	110	0.000	32	110	0.001
08:00 - 09:00	32	110	0.001	32	110	0.001	32	110	0.002
09:00 - 10:00	32	110	0.000	32	110	0.000	32	110	0.000
10:00 - 11:00	32	110	0.000	32	110	0.000	32	110	0.000
11:00 - 12:00	32	110	0.000	32	110	0.000	32	110	0.000
12:00 - 13:00	32	110	0.000	32	110	0.000	32	110	0.000
13:00 - 14:00	32	110	0.000	32	110	0.000	32	110	0.000
14:00 - 15:00	32	110	0.000	32	110	0.000	32	110	0.000
15:00 - 16:00	32	110	0.001	32	110	0.001	32	110	0.002
16:00 - 17:00	32	110	0.001	32	110	0.001	32	110	0.002
17:00 - 18:00	32	110	0.001	32	110	0.000	32	110	0.001
18:00 - 19:00	32	110	0.000	32	110	0.000	32	110	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.005			0.003			0.008

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 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	32	110	0.004	32	110	0.011	32	110	0.015
08:00 - 09:00	32	110	0.007	32	110	0.019	32	110	0.026
09:00 - 10:00	32	110	0.002	32	110	0.004	32	110	0.006
10:00 - 11:00	32	110	0.004	32	110	0.005	32	110	0.009
11:00 - 12:00	32	110	0.004	32	110	0.004	32	110	0.008
12:00 - 13:00	32	110	0.005	32	110	0.004	32	110	0.009
13:00 - 14:00	32	110	0.004	32	110	0.003	32	110	0.007
14:00 - 15:00	32	110	0.005	32	110	0.004	32	110	0.009
15:00 - 16:00	32	110	0.016	32	110	0.009	32	110	0.025
16:00 - 17:00	32	110	0.013	32	110	0.009	32	110	0.022
17:00 - 18:00	32	110	0.009	32	110	0.006	32	110	0.015
18:00 - 19:00	32	110	0.009	32	110	0.004	32	110	0.013
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.082			0.082			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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL VEHICLE OCCUPANTS
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	32	110	0.084	32	110	0.383	32	110	0.467
08:00 - 09:00	32	110	0.157	32	110	0.577	32	110	0.734
09:00 - 10:00	32	110	0.163	32	110	0.223	32	110	0.386
10:00 - 11:00	32	110	0.164	32	110	0.216	32	110	0.380
11:00 - 12:00	32	110	0.183	32	110	0.188	32	110	0.371
12:00 - 13:00	32	110	0.209	32	110	0.198	32	110	0.407
13:00 - 14:00	32	110	0.229	32	110	0.214	32	110	0.443
14:00 - 15:00	32	110	0.219	32	110	0.261	32	110	0.480
15:00 - 16:00	32	110	0.436	32	110	0.219	32	110	0.655
16:00 - 17:00	32	110	0.394	32	110	0.219	32	110	0.613
17:00 - 18:00	32	110	0.441	32	110	0.223	32	110	0.664
18:00 - 19:00	32	110	0.365	32	110	0.195	32	110	0.560
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.044			3.116			6.160

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	32	110	0.021	32	110	0.048	32	110	0.069
08:00 - 09:00	32	110	0.056	32	110	0.142	32	110	0.198
09:00 - 10:00	32	110	0.049	32	110	0.045	32	110	0.094
10:00 - 11:00	32	110	0.026	32	110	0.039	32	110	0.065
11:00 - 12:00	32	110	0.047	32	110	0.044	32	110	0.091
12:00 - 13:00	32	110	0.039	32	110	0.038	32	110	0.077
13:00 - 14:00	32	110	0.032	32	110	0.033	32	110	0.065
14:00 - 15:00	32	110	0.040	32	110	0.040	32	110	0.080
15:00 - 16:00	32	110	0.123	32	110	0.061	32	110	0.184
16:00 - 17:00	32	110	0.075	32	110	0.043	32	110	0.118
17:00 - 18:00	32	110	0.063	32	110	0.034	32	110	0.097
18:00 - 19:00	32	110	0.041	32	110	0.032	32	110	0.073
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.612			0.599			1.211

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 BUS/TRAM PASSENGERS
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	32	110	0.000	32	110	0.018	32	110	0.018
08:00 - 09:00	32	110	0.003	32	110	0.034	32	110	0.037
09:00 - 10:00	32	110	0.003	32	110	0.012	32	110	0.015
10:00 - 11:00	32	110	0.006	32	110	0.006	32	110	0.012
11:00 - 12:00	32	110	0.005	32	110	0.006	32	110	0.011
12:00 - 13:00	32	110	0.007	32	110	0.007	32	110	0.014
13:00 - 14:00	32	110	0.005	32	110	0.004	32	110	0.009
14:00 - 15:00	32	110	0.009	32	110	0.007	32	110	0.016
15:00 - 16:00	32	110	0.026	32	110	0.008	32	110	0.034
16:00 - 17:00	32	110	0.015	32	110	0.005	32	110	0.020
17:00 - 18:00	32	110	0.014	32	110	0.001	32	110	0.015
18:00 - 19:00	32	110	0.010	32	110	0.001	32	110	0.011
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.103			0.109			0.212

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 TOTAL RAIL PASSENGERS
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	32	110	0.001	32	110	0.017	32	110	0.018
08:00 - 09:00	32	110	0.000	32	110	0.014	32	110	0.014
09:00 - 10:00	32	110	0.000	32	110	0.002	32	110	0.002
10:00 - 11:00	32	110	0.000	32	110	0.001	32	110	0.001
11:00 - 12:00	32	110	0.000	32	110	0.000	32	110	0.000
12:00 - 13:00	32	110	0.001	32	110	0.002	32	110	0.003
13:00 - 14:00	32	110	0.001	32	110	0.001	32	110	0.002
14:00 - 15:00	32	110	0.002	32	110	0.001	32	110	0.003
15:00 - 16:00	32	110	0.001	32	110	0.000	32	110	0.001
16:00 - 17:00	32	110	0.006	32	110	0.000	32	110	0.006
17:00 - 18:00	32	110	0.011	32	110	0.000	32	110	0.011
18:00 - 19:00	32	110	0.014	32	110	0.000	32	110	0.014
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.037			0.038			0.075

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 COACH PASSENGERS
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	32	110	0.000	32	110	0.000	32	110	0.000
08:00 - 09:00	32	110	0.000	32	110	0.001	32	110	0.001
09:00 - 10:00	32	110	0.000	32	110	0.000	32	110	0.000
10:00 - 11:00	32	110	0.000	32	110	0.000	32	110	0.000
11:00 - 12:00	32	110	0.000	32	110	0.000	32	110	0.000
12:00 - 13:00	32	110	0.000	32	110	0.000	32	110	0.000
13:00 - 14:00	32	110	0.000	32	110	0.000	32	110	0.000
14:00 - 15:00	32	110	0.000	32	110	0.000	32	110	0.000
15:00 - 16:00	32	110	0.001	32	110	0.000	32	110	0.001
16:00 - 17:00	32	110	0.001	32	110	0.000	32	110	0.001
17:00 - 18:00	32	110	0.000	32	110	0.000	32	110	0.000
18:00 - 19:00	32	110	0.000	32	110	0.000	32	110	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.002			0.001			0.003

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	32	110	0.002	32	110	0.036	32	110	0.038
08:00 - 09:00	32	110	0.003	32	110	0.049	32	110	0.052
09:00 - 10:00	32	110	0.003	32	110	0.014	32	110	0.017
10:00 - 11:00	32	110	0.006	32	110	0.007	32	110	0.013
11:00 - 12:00	32	110	0.006	32	110	0.007	32	110	0.013
12:00 - 13:00	32	110	0.007	32	110	0.009	32	110	0.016
13:00 - 14:00	32	110	0.006	32	110	0.005	32	110	0.011
14:00 - 15:00	32	110	0.011	32	110	0.008	32	110	0.019
15:00 - 16:00	32	110	0.029	32	110	0.008	32	110	0.037
16:00 - 17:00	32	110	0.022	32	110	0.005	32	110	0.027
17:00 - 18:00	32	110	0.026	32	110	0.001	32	110	0.027
18:00 - 19:00	32	110	0.024	32	110	0.001	32	110	0.025
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.145			0.150			0.295

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 TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.74

	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	32	110	0.111	32	110	0.478	32	110	0.589
08:00 - 09:00	32	110	0.223	32	110	0.787	32	110	1.010
09:00 - 10:00	32	110	0.218	32	110	0.285	32	110	0.503
10:00 - 11:00	32	110	0.200	32	110	0.267	32	110	0.467
11:00 - 12:00	32	110	0.239	32	110	0.243	32	110	0.482
12:00 - 13:00	32	110	0.261	32	110	0.249	32	110	0.510
13:00 - 14:00	32	110	0.271	32	110	0.255	32	110	0.526
14:00 - 15:00	32	110	0.274	32	110	0.313	32	110	0.587
15:00 - 16:00	32	110	0.603	32	110	0.297	32	110	0.900
16:00 - 17:00	32	110	0.505	32	110	0.275	32	110	0.780
17:00 - 18:00	32	110	0.539	32	110	0.264	32	110	0.803
18:00 - 19:00	32	110	0.438	32	110	0.232	32	110	0.670
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.882			3.945			7.827

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 CARS
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	32	110	0.059	32	110	0.245	32	110	0.304
08:00 - 09:00	32	110	0.118	32	110	0.322	32	110	0.440
09:00 - 10:00	32	110	0.111	32	110	0.142	32	110	0.253
10:00 - 11:00	32	110	0.101	32	110	0.130	32	110	0.231
11:00 - 12:00	32	110	0.117	32	110	0.115	32	110	0.232
12:00 - 13:00	32	110	0.135	32	110	0.125	32	110	0.260
13:00 - 14:00	32	110	0.135	32	110	0.133	32	110	0.268
14:00 - 15:00	32	110	0.141	32	110	0.167	32	110	0.308
15:00 - 16:00	32	110	0.227	32	110	0.141	32	110	0.368
16:00 - 17:00	32	110	0.231	32	110	0.136	32	110	0.367
17:00 - 18:00	32	110	0.280	32	110	0.140	32	110	0.420
18:00 - 19:00	32	110	0.239	32	110	0.131	32	110	0.370
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.894			1.927			3.821

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 LGVS
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	32	110	0.011	32	110	0.032	32	110	0.043
08:00 - 09:00	32	110	0.013	32	110	0.027	32	110	0.040
09:00 - 10:00	32	110	0.020	32	110	0.017	32	110	0.037
10:00 - 11:00	32	110	0.025	32	110	0.027	32	110	0.052
11:00 - 12:00	32	110	0.022	32	110	0.022	32	110	0.044
12:00 - 13:00	32	110	0.023	32	110	0.024	32	110	0.047
13:00 - 14:00	32	110	0.029	32	110	0.028	32	110	0.057
14:00 - 15:00	32	110	0.018	32	110	0.023	32	110	0.041
15:00 - 16:00	32	110	0.023	32	110	0.017	32	110	0.040
16:00 - 17:00	32	110	0.022	32	110	0.015	32	110	0.037
17:00 - 18:00	32	110	0.037	32	110	0.015	32	110	0.052
18:00 - 19:00	32	110	0.021	32	110	0.011	32	110	0.032
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.264			0.258			0.522

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.

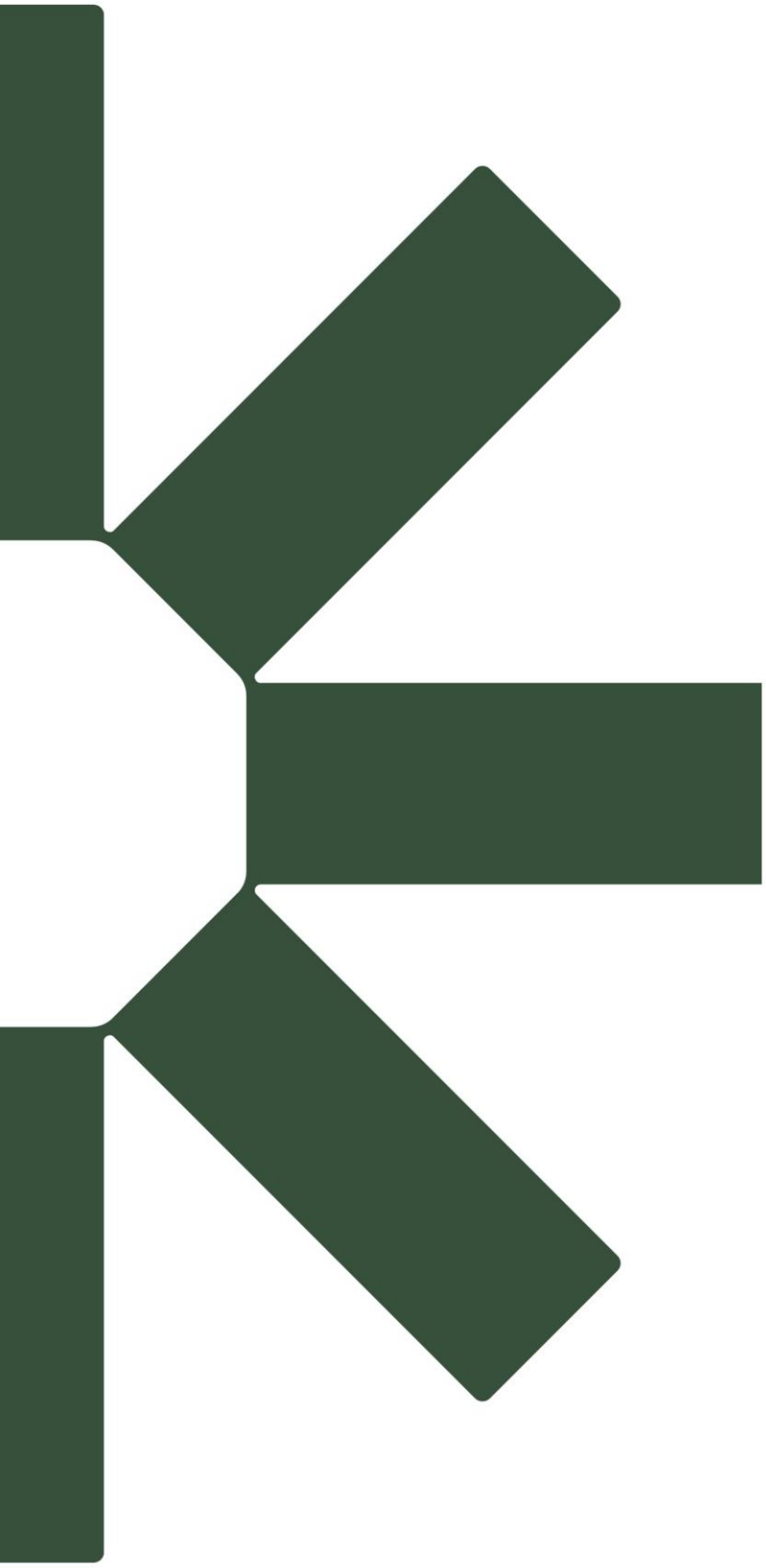
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected 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 MOTOR CYCLES
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	32	110	0.000	32	110	0.001	32	110	0.001
08:00 - 09:00	32	110	0.000	32	110	0.002	32	110	0.002
09:00 - 10:00	32	110	0.001	32	110	0.001	32	110	0.002
10:00 - 11:00	32	110	0.001	32	110	0.001	32	110	0.002
11:00 - 12:00	32	110	0.001	32	110	0.001	32	110	0.002
12:00 - 13:00	32	110	0.002	32	110	0.003	32	110	0.005
13:00 - 14:00	32	110	0.001	32	110	0.001	32	110	0.002
14:00 - 15:00	32	110	0.001	32	110	0.002	32	110	0.003
15:00 - 16:00	32	110	0.002	32	110	0.001	32	110	0.003
16:00 - 17:00	32	110	0.002	32	110	0.001	32	110	0.003
17:00 - 18:00	32	110	0.002	32	110	0.002	32	110	0.004
18:00 - 19:00	32	110	0.001	32	110	0.001	32	110	0.002
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.014			0.017			0.031

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.*



Making Sustainability Happen