

CEFN HENGOED LEISURE CENTRE

Transport Statement

NOVEMBER 2019



Cefn Hengoed Leisure Centre

Transport Statement

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1 INTRODUCTION

1.1 Overview

- 1.1.1 Arcadis Consulting (UK) Limited ('Arcadis') has been appointed by Swansea Council to prepare a Transport Statement to accompany the planning application in support of the proposed redevelopment of Cefn Hengoed Leisure Centre, at Cefn Hengoed School in Bonymaen.

1.2 Development Proposals

- 1.2.1 The proposal is for the provision of a covered sports pitch constructed on the site of the existing hard surface playing pitches, with an associated car parking area for 66 cars and two coaches to the north on the existing 'redgra' area and new access directly off Cefn Hengoed Road. Minor extensions are proposed to the existing leisure centre buildings together with an internal reconfiguration to allow for the provision of improved gym and changing facilities, a community room, reception and café area.
- 1.2.2 The proposed Development will improve and enhance the existing sports and community facilities at Cefn Hengoed Leisure Centre to benefit Cefn Hengoed School and the surrounding local community.
- 1.2.3 Further details on the development proposals are provided in **Chapter 6**.

1.3 Site Location

- 1.3.1 The proposed site is situated within the grounds of the Cefn Hengoed Community School, which is located at Caldicot Road in Bonymaen, see Figure 1.
- 1.3.2 The school forms part of a larger complex, which it shares with the existing Cefn Hengoed Leisure Centre. The residential communities of Bonymaen, Winch Wen and Cefn Hengoed surround the proposed site, situated in East Swansea circa 4.6 km north east of Swansea City Centre. To the east lies Bonymaen Rugby Club and its playing fields, Cwm Glas Primary School lies to the north and residential areas of Bonymaen to the west and south.

Figure 1: Site Location



1.4 Pre-Application Consultation

- 1.4.1 Engagement with Swansea Council as local planning / highway authority and other key stakeholders including Freedom Leisure, has been undertaken to inform the preparation of this Transport Statement.
- 1.4.2 The Transport Statement will address the access, parking and highway safety comments raised by Highways Officers within the pre-application consultation response (Application No: 2019/1561/PRE), dated 12th August 2019.
- 1.4.3 The response identified that the site may be suitable for the proposed Development subject to the following:
- LDP Policy T5, amongst other things, requires that new developments provide suitable facilities and a safe, attractive environments for pedestrians, cyclists and other non-motorised modes of transport;
 - LDP Policy T6 requires that adequate parking provision must be provided in accordance with adopted standards; and
 - The Highways officer has advised that the development will require a Transport Statement.
- 1.4.4 In summary the response stated:
- “In principle, the Highways officer has advised that the site may be suitable for the proposed development subject to the pedestrian access improvements and comments/actions above, however, further information in the form of a Transport Statement will need to be submitted in order to demonstrate that the development can comply with LDP Policies T5 and T6”.*

1.5 Assessment Methodology

- 1.5.1 This Transport Statement is based on the findings of a site visit, desk-based analysis, discussions with key stakeholders, consultation with Swansea Council together with consideration of current guidance and policy.
- 1.5.2 This Transport Statement has subsequently been prepared in accordance with the Department for Communities and Local Government Planning Practice Guidance on Travel plans, Transport Assessments and Statements in Decision Taking, and Welsh Government’s Technical Advice Note 18 (TAN 18): Transport (March 2007).
- 1.5.3 To set a robust benchmark from which future occupiers of the site can establish sustainable travel patterns at their point of occupation, the Transport Statement has been accompanied by a Travel Plan as contained in **Appendix A**.

1.6 Report Structure

- 1.6.1 The remaining chapters of this Transport Statement are comprised as follows:
- **Chapter 2** – sets out the relevant transport legislation, policy and guidance;
 - **Chapter 3** – provides an overview of the baseline conditions for sustainable travel as well as highlighting planned improvement works;
 - **Chapter 4** – established the baseline conditions for the highway network (including accident analysis);
 - **Chapter 5** – provides an overview of the existing Cefn Hengoed Leisure Centre;
 - **Chapter 6** – provides an overview of the development proposals;
 - **Chapter 7** – a review of accessibility by sustainable modes of travel;
 - **Chapter 8** – outlines the forecast traffic generation of the proposed Development;
 - **Chapter 7** – sets out the Transport Implementation Strategy; and
 - **Chapter 8** – brings together earlier chapters of the report to provide an overall conclusion.

2 LEGISLATION, POLICY AND GUIDANCE FRAMEWORK

2.1 Overview

- 2.1.1 This chapter provides a review of relevant legislation, policy and guidance documents that have been considered within this assessment.
- 2.1.2 The documents which have been reviewed in this chapter are as follows:
- Well-being of Future Generations (Wales) Act (Welsh Government, 2015);
 - Active Travel (Wales) Act (Welsh Government, 2013);
 - Design Guidance Active Travel (Wales) Act (Welsh Government, 2013);
 - Planning Policy Wales (PPW) Edition 10 (Welsh Government, 2018);
 - Technical Advice Note (TAN) 18: Transport (Welsh Government, 2007);
 - Wales Transport Strategy (WTS) (Welsh Government, 2008);
 - Joint Transport Plan (JTP) for South West Wales 2015-2020 (2015);
 - Swansea Council Local Development Plan 2010-2025 (Swansea Council, 2019);
 - Supplementary Planning Guidance (SPG): Swansea Council Car Parking Standards (Swansea Council, 2012); and
 - Travel Plans, Transport Assessments and Statements (Ministry of Housing, Communities and Local Government, 2014).

2.2 National Legislation

Well-being of Future Generations (Wales) Act

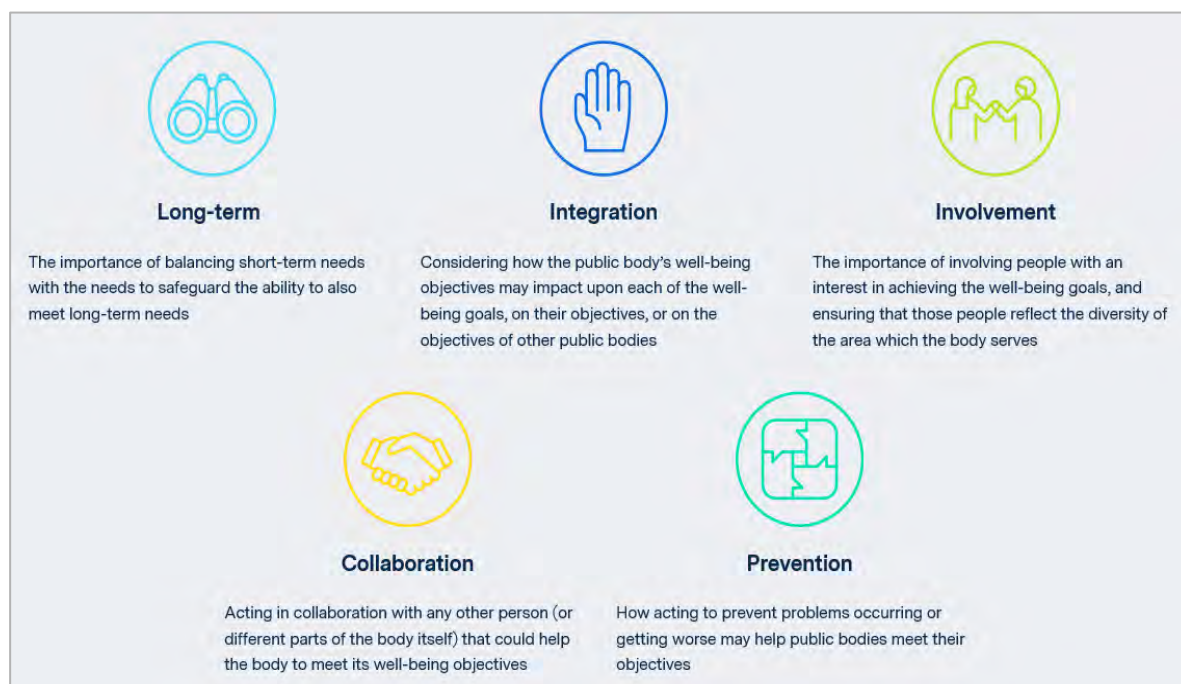
- 2.2.1 The Well-being of Future Generations (Wales) Act (Welsh Government, 2015) strives to improve the social, economic, environmental and cultural well-being of Wales. The vision is that *‘in 2050, Wales will be the best place to live, learn, work and do business’*.
- 2.2.2 The Act makes the public bodies listed in the Act consider the longer-term perspective, engage with people and communities and each other, prevent problems, and deliver a joined-up approach. The goals to represent what the long-term economic, social and environmental well-being of Wales are shown in Figure 2 and the five ways of working as set out within the Act are shown in Figure 3.

Figure 2: Well-being of Future Generations (Wales) Act – Well-being Goals¹



¹ <https://gov.wales/docs/dsjlg/publications/150623-guide-to-the-fg-act-en.pdf>

Figure 3: Well-being of Future Generations (Wales) Act – Five Ways of Working²



Active Travel (Wales) Act

- 2.2.3 The Active Travel (Wales) Bill 2013 makes provision for the mapping of active travel routes and related facilities. The Act was passed by the National Assembly of Wales and seeks to secure new and enhanced active travel routes and facilities to improve provision for walkers and cyclists. The purpose of the Bill is for local authorities to continuously improve their facilities and routes for pedestrians and cyclists (e.g. through provision of shelter, resting and/ or storage facilities). The Act further requires Welsh Ministers to publish public annual reports regarding the extent to which walkers and cyclists make active travel journeys in Wales.

2.3 National Policy

Planning Policy Wales Edition 10

- 2.3.1 Planning Policy Wales (PPW) (2018) aims to deliver the vision for Wales set out in the Well-being of Future Generations Act (2015) and provides the context for land use planning in Wales. The planning policies are supplemented with a series of Technical Advice Notes (TANs) and policy clarification letters, which together comprise national planning policy.
- 2.3.2 Welsh Government advises that when determining a planning application for development that has transport implications, local authorities should take the following into account:
- The impacts of the proposed Development on travel demand;
 - The level and nature of public transport provision;
 - Accessibility by a range of different transport modes;
 - The opportunities to promote active travel journeys, and secure new and improved active travel routes and related facilities, in accordance with the provisions of the Active Travel (Wales) Act 2013;
 - The willingness of a developer to promote travel by public transport, walking or cycling, or to provide infrastructure or measures to manage traffic, to overcome transport objections to the

² <http://futuregenerations.wales/about-us/future-generations-act/>

proposed Development (payment for such measures will not, however, justify granting planning permission to a development for which it would not otherwise be granted);

- The environmental impact of both transport infrastructure and the traffic generated (with a particular emphasis on minimising the causes of climate change associated with transport); and
- The effects on the safety and convenience of other users of the transport network.

2.3.3 PPW additionally, sets out Welsh Government objectives, strategies and policies related to land use. PPW Edition 10 has been shaped around the policy themes of the well-being goals and updated to reflect the most recent Welsh Government strategies and priorities. PPW Edition 10 includes four key themes: Placemaking, Active and Social Places, Productive and Enterprising Places and lastly Distinctive and Natural Places.

2.3.4 PPW advises that Transport Assessments are an important mechanism for setting out the scale of anticipated impacts a proposed Development is likely to have. They assist in helping to anticipate the impacts of development so that they can be understood and catered for. PPW lists the categories of development that the Welsh Government expects to be accompanied by a Transport Assessment.

Technical Advice Note 18: Transport

2.3.5 Technical Advice Note (TAN) 18: Transport (2007) describes how to integrate land use and transport planning and aims to achieve the Welsh Government sustainable transport policy objectives. It states that the integration of land use and transport planning can help Welsh Government achieve their environmental outcomes. The transport impacts of new development should be assessed and mitigated to achieve a more sustainable pattern of development. Paragraph 2.4 outlines: 'It is necessary to understand the interactions and linkages between land use and transport and devise integrated strategies.' TAN 18 states that developers are required by local authorities to submit Transport Assessment's to accompanying planning applications for developments that are likely to result in significant trip generation.

Wales Transport Strategy

2.3.6 The Wales Transport Strategy (WTS) (2008) sets out the Welsh Government's main aims in improving transport. The goal is to promote sustainable transport networks that safeguard the environment while strengthening economic and social life. In order to achieve this, the strategy identifies a series of high-level outcomes and sets out the steps to their delivery. Within Chapter One of the WTS a series of sustainable transport themes are set out which state: *'New developments should, wherever possible, be located at sites already well served by walking, cycling and public transport links.'*

- The WTS addresses the current trends in transport by concentrating on the following themes:
- To achieve a more effective and efficient transport system;
- To achieve greater use of the more sustainable and healthy forms of travel; and
- To minimise the need to travel.

2.4 Regional and Local Policy

Joint Local Transport Plan for South West Wales 2015-2020

2.4.1 The Joint Transport Plan (JTP) (2015) for South West Wales was published in January 2015 and was formally approved by the Welsh Minister in May 2015. It is a joint plan published by four local authorities including Swansea Council, Carmarthenshire County Council, Neath Port Talbot County Borough Council and Pembrokeshire County Council. The JTP provides the framework for improving connectivity to, from and within the region for the period 2015 to 2020. The plan sets out the importance of the travel planning in Policy E3 which aims to *'encourage the take up and development of travel planning to reduce single occupancy car commuting'*.

Swansea Local Development Plan 2010-2025

2.4.2 The Swansea Local Development Plan (LDP) was adopted in February 2019 and sets out the Council's vision, objectives, policies and proposals for the sustainable development and use of land in Swansea

for the 15-year period 2010 to 2025 in accordance with National Planning Policy and Guidance. The vision of the LDP is that Swansea will be a desirable, sought after place to live, work and visit. Section 2.12 Transport, Movement and Connectivity outlines the transport requirements for development proposals:

- Developments must be designed to provide safe and efficient access to the transport network, which includes the Active Travel and public transport networks;
- Reduce reliance on car use by maximising the potential of movement to / from the development by public transport, including ensuring developments within the urban area are located a walkable distance to a public transport access point on a route with a high frequency service;
- Ensure all new transport measures are designed as integral elements of a scheme by means of a Placemaking approach;
- Deliver the new transport infrastructure and improvement measures that are required to mitigate the impact of the development; and
- Ensure developments are served by appropriate parking provision and circulation areas, including adequate road widths to allow access for service vehicles.

Supplementary Planning Guidance: Swansea Council Car Parking Standards

- 2.4.3 The parking standards (2012) seek to ensure a transparent and consistent approach to the provision of parking that informs developers, designers and builders what is expected of them and from them at an early stage of the development process.
- 2.4.4 The guidance divides Swansea into six zones which are shown on a plan, with differing standards for each land use applicable in each zone. The application of the standards relates to the floorspace proposed as part of the development, the number of units, the number of bed spaces or the number of staff dependent on the applicable land use. These standards will be applied to the development proposals to ascertain the maximum provision of parking applicable to the proposed Development.
- 2.4.5 The proposed leisure development is situated in Zone 4 – Suburban or Near Urban and the standards relating to this zone have been applied as part of this development. A reduction in the standards can be applied in relation to sustainability criteria based on the accessibility of the proposed Development by sustainable modes of travel. The relevant maximum parking provision is outlined in Table 1.

Table 1: Swansea Council Car Parking Standards

Community Establishment	Non – Operation Vehicle Parking	Operational Vehicle Parking
Public Leisure Centres	1 space per 2 facility users and 1 space per 3 spectators	1 commercial vehicle space

- 2.4.6 Cycle Parking Provision should be located in a safe, secure and convenient location. Care should also be taken to ensure that cycle parking facilities are not located where they may obstruct pedestrians, disabled people and particularly people with visual impairment. The minimum requirements for cycle parking are demonstrated in Table 2.

Table 2: Swansea Council Cycle Parking Standards

Community Establishment	Cycle Parking Provision
Public Leisure Centres (Leisure Centre)	<ul style="list-style-type: none"> • Short Stay – 1 stand per 50m² of public floor space. • Long Stay – 1 stand per 10 staff.
Leisure Clubs and Sports Clubs (Indoor Sports Pitch)	<ul style="list-style-type: none"> • Short Stay – 1 stand per 10 facility users. • Long Stay – 1 stand per 10 staff.

- 2.4.7 Swansea Council Parking Standards also state that ‘*consideration must be given to the provision of a coach parking area where appropriate*’ with regard to community establishments.

2.5 Other Relevant Guidance

Travel Plans, Transport Assessments and Statements

- 2.5.1 These guidelines, produced by the Ministry of Housing, Communities & Local Government, provide a common approach which are aimed at ensuring that all relevant issues have been addressed within an assessment. This Transport Statement adopts the national guidelines and approaches where possible, taking account of the specific nature of the development.

Design Guidance Active Travel (Wales) Act

The Design Guidance Active Travel (Wales) Act 2013 is statutory guidance and is published by the Welsh Government under powers granted to Welsh Ministers under the Active Travel (Wales) Act 2013³. The guidance provides advice on the planning, design, construction and maintenance of active travel networks and infrastructure, and is to be used at all stages of the process.

2.6 Summary

- 2.6.1 The legislation, policies and guidance in place seek an emphasis on development in locations where sustainable travel modes can be encouraged and of facilitating access by all modes, together with good design where the car is not dominant.
- 2.6.2 The leisure redevelopment proposals and location are well placed to take advantage of the existing transport connections detailed in **Chapters 3** and **4**, whilst further information regarding the leisure proposals including off-site walking and cycling improvements are described in **Chapter 6**.

³ The Active Travel (Wales) Act 2013 became law in Wales in November 2013. The Act requires new roads to consider the needs of pedestrians and cyclists at the design stage.

3 BASELINE CONDITIONS FOR SUSTAINABLE TRAVEL

3.1 Overview

- 3.1.1 This chapter explores the existing walking, cycling and public transport conditions within the vicinity of the proposed development site. This chapter has been informed by a site visit undertaken 28th October 2019 and desk-based analysis.

3.2 Walking and Cycling Environment

- 3.2.1 Currently pedestrians are able to access the leisure facilities from Caldicot Road (main school entrance), and can also access the school grounds from Cefn Hengoed Road.
- 3.2.2 A separate public footpath also connects Cefn Hengoed Road to Chirk Gardens leading to Caldicot Road (Photographs 1 and 2), providing an off-site connection between the front and rear of Cefn Hengoed School.

Photographs 1 and 2: Footpath connecting Cefn Hengoed Road Chirk Gardens / Caldicot Close and Colwyn Avenue



- 3.2.3 The residential streets approaching the main entrance at the top of Caldicot Road have footways on both sides of the carriageway, with the provision of informal pedestrian crossings.
- 3.2.4 To the rear of the school, within the vicinity of the proposed shared access on Cefn Hengoed Road, there are currently no footways provided on approach to Cefn Road (Photograph 3) and along one side of the road at the junction (Photograph 4). There are also limited crossing facilities within the vicinity of the site, providing pedestrians with the opportunity to safely cross Cefn Hengoed Road and Cefn Road. As previously discussed, this gap in the existing footway network has been identified with Swansea Council's Pre-application response:

"Cefn Hengoed Road however has an incomplete footway and as such would not be an attractive walking route for users living to the south and east of the site".

- 3.2.5 The subsequent proposed package of off-site pedestrian access improvements is described in **Chapter 6**.

Photograph 3: No footway provided on approach to Cefn Road



Photograph 4: Footway present on one side of carriageway



3.3 Cycle Routes

- 3.3.1 A recommended bicycle friendly road is located circa 115 metres north of the existing site which connects Cefn Hengoed Road to Colwyn Avenue, whilst National Cycle Network Route 43 is located 1.4km north-west of the site which connects to the Celtic Trail.

3.4 Active Travel Routes

- 3.4.1 The Active Travel (Wales) Act 2013 required Swansea Council to develop an Integrated Network Map (INM) which was approved by Welsh Government in February 2018. The INM shows the routes which the Council intends to deliver over the next 15 years.
- 3.4.2 The following schemes are proposed within the vicinity of the site:
- SWA-AS0050 (Winch Wen / Trallwn) – Shared use route along Cefn Hengoed Road connecting Bonymaen and Carmel Rd to back entrance of school. Route from St Thomas to school (aspirational corridor); and
 - SWA-MT0021 (Trallwyn / Winch Wen) – Proposed shared use path connecting Trallwn and Winch Wen.

3.5 Public Transport

Bus Infrastructure and Services

- 3.5.1 The location of bus stops situated nearest to the proposed site accesses (Caldicot Road and Cefn Hengoed Road), are presented on the walking accessibility plan in **Appendix B**. The Cefn Hengoed School Bus Stops are closest to the site situated on Caernarvon Way (approximately 160m from the site), comprising a flagged pole, timetable information and raised kerbing (Photographs 5 and 6). An unmarked bus stop is situated on Cefn Road, close proximity to the junction with Cefn Hengoed Road (approximately 100m from the site).
- 3.5.2 Table 3 summarises the local bus services operating within the vicinity of the site. Bus services 31, 32, 33 and 592 operate from the Cefn Hengoed School Stops. They provide frequent services into the city centre, whilst service 592 is a dedicated school bus twice a day, operating between Cefn Hengoed School and Grenfell Park.
- 3.5.3 Bus service 45 serves the Cefn Road Bus Stop and provides connections into the city centre and Morriston.

Photograph 5: Cefn Hengoed School Bus Stop (NB), Caernarvon Way



Photograph 6: Cefn Hengoed School Bus Stop (SB), Caernarvon Way



Table 3: Summary of Local Bus Services⁴

Bus Number	Route	Approximate Service Frequency (One-way)		
		Weekday	Saturday	Sunday
31	Swansea Bus Station to Morriston Hospital	1 per hour	1 per hour	2 per hour
32	Swansea Bus Station to Birchgrove	1 per hour	1 per hour	-
33	Swansea Bus Station to Morriston Police Station	2 per hour	2 per hour	-
45	Swansea Bus Station to Morriston	1 every 2 hours	1 every 2 hours	-
592	Cefn Hengoed School to Grenfell Park	School Service		

Rail Services

- 3.5.4 The closest railway stations to the proposed development are Llansamlet, situated circa 2.3km north and Swansea Railway Station, which is located circa 3.3 km south. These stations are not considered to be located within a reasonable distance to make rail travel to the site a feasible option.

⁴ <https://www.traveline.cymru/>

4 BASELINE HIGHWAY CONDITIONS

4.1 Overview

- 4.1.1 This chapter focuses on the baseline conditions in the area surrounding the proposed development site. This chapter has been informed by a site visit undertaken 28th October 2019 and desk-based analysis.

4.2 Local Highway Network

- 4.2.1 A summary of the key highway links within the immediate area of the proposed Development are described below.

Caldicot Road

- 4.2.2 Caldicot Road connects Mansel Road to Cefn Hengoed School and Leisure Centre via a gated access situated at the top of the hill (Photograph 7). The junction with Mansel Road is a marked priority junction. Vehicles are permitted to park along both sides of the carriageway. The road is subject to a 20mph speed limit with pedestrian footways both sides of the carriageway, demonstrated in Photograph 8.

Photograph 7: Caldicot Road – Egressing Cefn Hengoed Community School / Leisure Centre



Photograph 8: Caldicot Road toward Cefn Hengoed School / Leisure Centre



Mansel Road

- 4.2.3 Mansel Road connects Carmel Road to Bonymaen Road / Ty-draw Road. The junction with Carmel Road comprises a roundabout, with a pedestrian crossing point comprising dropped kerb and tactile paving. Mansel Road is subject to a 20mph speed limit adjacent to Caldicot Road and Cwm Glas Primary School, including the provision of traffic calming measures comprising speed humps and signage. There are parking restrictions adjacent to the Cwm Glas Primary School access road.

Caernarvon Way

- 4.2.4 Caernarvon Way is a local residential street connecting Caldicot Road to Cefn Road and is subject to a 20mph speed limit (Photograph 9). The junction of Caldicot Road and Caernarvon Way comprises a marked, priority junction. The nearest bus stop to the proposed Development is located on Caernarvon Way (Photograph 10).

Photograph 9: Footpath provision along Caernarvon Way SB



Photograph 10: Cefn Hengoed School Bus Stop situated on Caernarvon Way NB



Cefn Hengoed Road

- 4.2.5 Cefn Hengoed Road connects Cefn Road to Crymlyn Road and currently provides access to Bonymaen Rugby Club and a gated access serving Cefn Hengoed School (Photographs 11 and 12). The single carriageway road is subject to a 30mph speed limit. It is proposed that the only vehicular access / egress serving the proposed Development will be situated on Cefn Hengoed Road, whilst access for pedestrians and cyclists will remain through the school.

Photograph 11: Cefn Hengoed Road – Access to Bonymaen Rugby Club



Photograph 12: Gated Vehicle Access serving Cefn Hengoed School



Cefn Road

- 4.2.6 Cefn Road links Cefn Hengoed Road to Mansel Road and is subject to a 20mph speed limit. The street is bounded by residential properties predominantly along its southern extent and vehicles are permitted to park on-road and within designated off-road parking bays.
- 4.2.7 The junction with Mansel Road comprises a priority junction and informal crossing with refuge island.

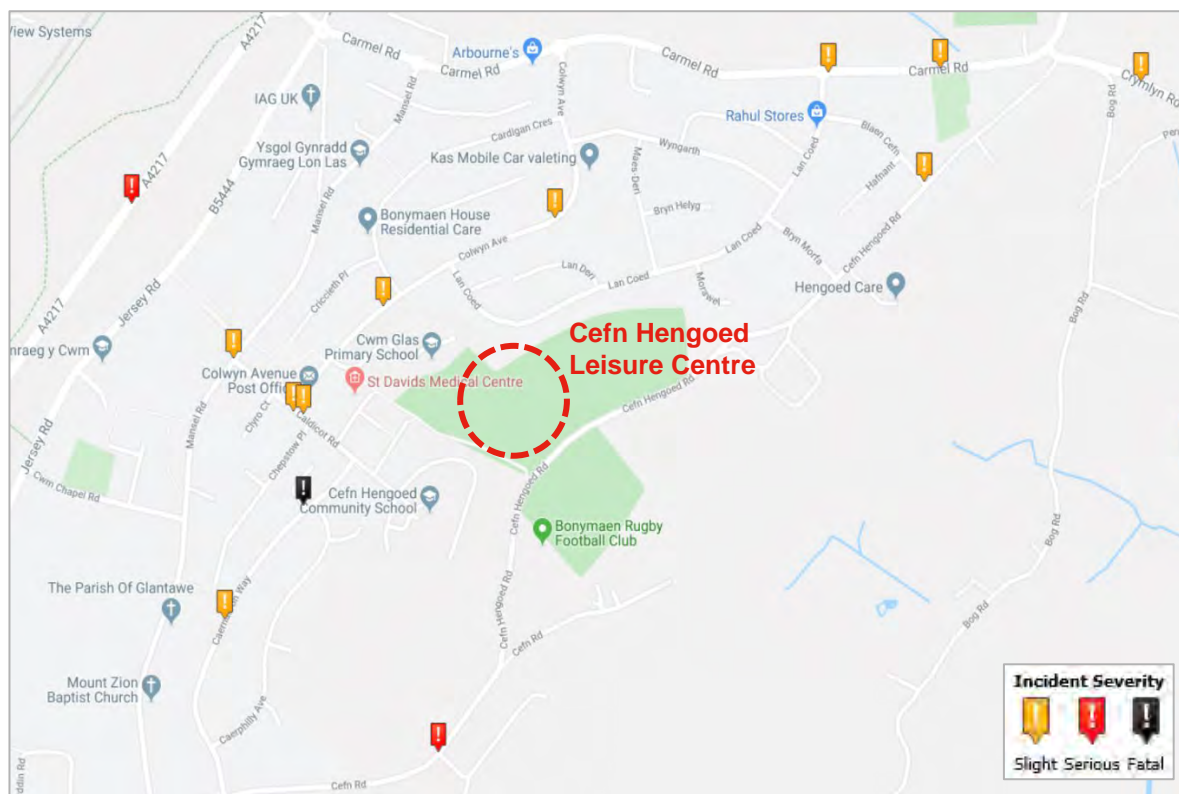
4.3 Collision Data

- 4.3.1 Collision data obtained from Crashmap⁵ for the most recent five years (2014 to 2018) within the area surrounding the site is summarised by severity and available information on involvement in Table 3, with the location of collisions presented in Figure 4. The data shows there was one fatal collision, two serious collisions and ten slight collisions within the vicinity of the site. It is not anticipated that the proposed development will establish an adverse impact upon existing road safety conditions, with a proposed new access off Cefn Hengoed Road and implementation of active travel improvements as described in **Chapter 6**.

Table 4: Recorded Collisions by Severity (2014 to 2018)

Road Link	Slight	Serious	Fatal	Total	Involvement
Caldicot Road	2	0	0	2	Collision opposite Colwyn Avenue involved a motorcyclist.
Caernarvon Way	1	0	1	2	Both collisions involved a pedestrian casualty.
Cefn Hengoed Road	1	0	0	1	Collision involved a young driver.
Cefn Road	0	1	0	1	Collision involved a young driver and pedestrian casualty.
Mansel Road	1	0	0	1	Involved a motorcyclist.
Total	5	1	1	7	

Figure 4: Location of Recorded Collisions (2014 to 2018)



⁵ <http://www.crashmap.co.uk/Search>

5 EXISTING CEFN HENGOED LEISURE CENTRE

5.1 Overview

- 5.1.1 This chapter provides a description and summary of the existing Cefn Hengoed Leisure Centre, providing context of the facilities, access and parking arrangements as well as the operational characteristics.

5.2 Existing Leisure Facilities

- 5.2.1 Cefn Hengoed Leisure Centre is managed by Freedom Leisure in partnership with Swansea Council. The leisure facilities comprise a multipurpose sports hall which it shares with the school (668.86 m²) and gym (111.10m²).

- 5.2.2 The multipurpose sports hall is used for the following activities:

- 5 a side Football;
- Badminton;
- Cricket;
- Netball;
- Basketball;
- Roller Hockey;
- Tag Rugby;
- Roller Party;
- Gymnastics;
- Bouncy Castle Parties;
- Badminton;
- Multi-sports;
- Fitness Classes;
- Bar area (Room Hire & Fitness Classes);
- 4 Netball Courts; and
- Football Pitch.

5.3 Access and Parking

- 5.3.1 The leisure centre is accessed from Caldicot Road, via an open barrier shared with Cefn Hengoed School (Photograph 13). The main visitor entrance is shown in Photograph 14.
- 5.3.2 The existing car park accommodates approximately 50 designated spaces which are shared with Cefn Hengoed School. It is observed that during school pick-up and drop-off times this car park becomes congested with traffic. There appeared to be no cycle parking facilities provided.

Photograph 13: Cefn Hengoed Leisure Centre Existing Access (Caldicot Road)



Photograph 14: Cefn Hengoed Leisure Centre – Main Entrance



5.4 Operational Characteristics

Hours of Operation

5.4.1 The current operational hours for Cefn Hengoed Leisure Centre are:

- Monday to Friday – 3pm to 9pm; and
- Weekends – 10am to 3pm.

The typical exercise class programme at the leisure centre is shown in Table 5.

Table 5: Exercise Class Programme at Cefn Hengoed Leisure Centre

Day	Class	Time
Monday	Indoor Cycling	18.30 to 19.15
Tuesday	Circuits	18.30 to 19.30
	Boxercise	19.30 to 20.30
Wednesday	Indoor Cycling	18.30 to 19.15
	Yoga	19.30 to 20.30
Thursday	Legs, Bums & Tums	18.30 to 19.30
Friday	Boxercise	19.20 to 20.30
Saturday	Indoor Cycling	10.00 to 10.45

Staff Numbers

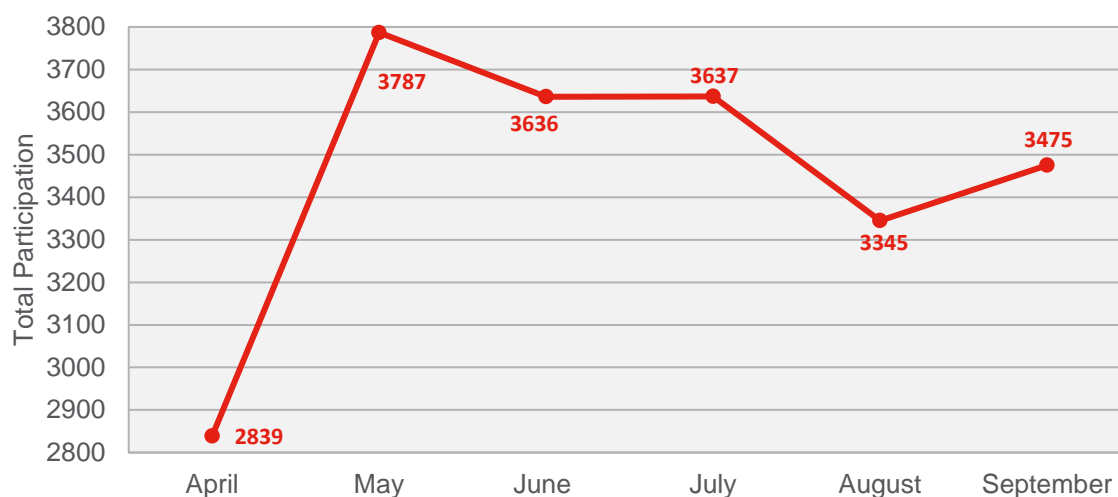
5.4.2 Freedom Leisure employ 15 staff at Cefn Hengoed Leisure Centre, some operate from their other leisure facilities across Swansea, with around 3 to 5 staff based on site at any one time.

Visitor Numbers

5.4.3 Cefn Hengoed Leisure Centre currently has 228 visitor members recorded on their database, during August 2019. Spatial analysis of the available home postcode data of each member demonstrates that the majority reside within close proximity of the leisure centre as shown in [Appendix B](#).

5.4.4 Figure 5 presents the monthly profile of total visitors at the leisure centre between April and September 2019.

Figure 5: Monthly Visitor Participation (April to September 2019) – Cefn Hengoed Leisure Centre



6 DEVELOPMENT PROPOSALS

6.1 Overview

- 6.1.1 This chapter provides a description of the proposed development together with a description of the site access and parking arrangements as well as operational characteristics.

6.2 Project Purpose and Objectives

- 6.2.1 The project proposals present an ideal opportunity to develop the sports and community facilities to benefit the school population and local community, with the potential to bring together a range of services and facilities. The project objectives are:

- To improve access and increase participation in sport in Swansea East by November 2021;
- To improve access to and participation in other community facilities and activities such as the library, parenting groups etc by November 2021; and
- To improve the existing sporting and physical education facilities at Cefn Hengoed School to support the curriculum and health and well-being aims by November 2020.

6.3 Development Proposals

- 6.3.1 The proposals include the following key elements:

- A new indoor sports pitch which would occupy an area of approximately 2,397m²;
- Minor extensions are proposed to the existing leisure centre buildings together with an internal reconfiguration to allow for the provision of improved gym and changing facilities, a community room, reception and café area (combined total 543 m²);
- Repurposed existing fitness studio to enable beneficial use by the school;
- New MUGA on old courts to the side; and
- Interconnecting pedestrian routes between the school and leisure areas and existing external connections surrounding the site.

The total gross floor area of the proposed Development is approximately 2,939m².

Parking Arrangements and Access

- 6.3.2 A new car park will accommodate 66 designated spaces, including four disabled and the potential for three electric vehicle charging enabled spaces, as well as two coach parking spaces.
- 6.3.3 A new access is proposed directly off Cefn Hengoed Road which would serve the leisure facilities only. The access will be gated and will remain open during hours of operation. The general arrangement of the car park and access is illustrated within the package of drawings submitted in support of the planning application.

Offsite Pedestrian Access Improvements

- 6.3.4 To address the pedestrian accessibility issues outlined within the pre-application response and detailed in **Chapter 3** a package of access improvement measures has been developed.
- 6.3.5 The proposals include the provision of a new three metre wide continuous footway along the southern extent of Cefn Hengoed Road / Cefn Road and provision of a raised zebra crossing facility which adjoins the existing footway network.
- 6.3.6 The accessibility improvements will provide users of the school and leisure facilities as well as the local community with a continuous footway network. It is important to note their implementation will be subject to a Section 278 agreement with Swansea Council.
- 6.3.7 The outline design of the improvements is contained within the package of drawings submitted in support of the planning application.

6.4 Operational Characteristics

- 6.4.1 The following section details the key operational characteristics that have been identified for the proposed development. Any assumptions at this early stage are worse case to ensure a robust assessment has been considered.

Opening Hours

- 6.4.2 Opening hours will be extended beyond that currently provided, with the suggested opening from 6.30am to 22.30pm on a weekday and 8.00am to 16.00pm during the weekend.

Staff and Visitor Numbers

- 6.4.3 The number of staff will increase beyond the existing total of 15, however exact numbers are unknown at this stage. The number of staff working at one time is currently three to five individuals, which is expected to slightly increase following the inclusion of the indoor sports pitch.
- 6.4.4 Once operational it is anticipated that visitor numbers will double to approximately 500 members.

Cefn Hengoed School

- 6.4.5 The purpose of the project is to enhance the existing physical education facilities and subsequently not adversely impact the school's provision for the delivery of the curriculum.
- 6.4.6 It is anticipated that Cefn Hengoed School will require usage of the following leisure facilities:
- Sports Hall (one class);
 - New MUGA on old courts to the side (one class). To be completed before the main works commence in order to mitigate loss of physical education spaces;
 - New 3G indoor barn (one class);
 - Gym with new repurposed equipment (half class); and
 - Possible timetabled class use for older physical education classes of new gym (half class).

7 ACCESSIBILITY ANALYSIS

7.1 Overview

- 7.1.1 A key element of national, regional and local policy is to ensure that new developments are located in areas where alternative modes of travel are available. This supports the aims of integrating planning and transport, providing more sustainable transport choices, and reducing overall travel and car use. The pre-application response states:

LDP Policy SI2 is considered to be more relevant and states that new community facilities must be accessible by Active Travel and public transport, and be conveniently located in relation to other facilities and services wherever possible.

- 7.1.2 This chapter presents the accessibility of the proposed Development in relation to the following modes of travel:

- Walking accessibility;
- Cycle accessibility; and
- Car drive time accessibility.

7.2 TRACC Analysis

- 7.2.1 Accessibility of the site has been undertaken using the TRACC Software. TRACC is the leading multimodal transport accessibility tool which was developed in conjunction with the Department for Transport (DfT), local authorities and transport planners.
- 7.2.2 TRACC analysis has been undertaken to establish the pedestrian, cycle and private car accessibility of the leisure facility and demonstrates the connectivity of the site to adjacent areas utilising the transport network.
- 7.2.3 A journey time of up to 15 minutes is considered appropriate to access leisure facilities via active travel modes, for the purpose of this analysis. For completeness a five-minute drive time catchment has been derived to illustrate the catchment area of the local community.
- 7.2.4 Furthermore, demographic data has been used to determine the number of residents within different travel time catchment areas surrounding the leisure facility.

7.3 Walking Accessibility

- 7.3.1 The journey time catchments from the site on foot are presented in **Appendix B**. It can be seen that much of the residential areas of Bonymaen and Winch Wen are accessible within a 15-minute journey. In addition to Cefn Hengoed School a number of key local facilities such as local bus stops (located on Caernarvon Way and Cefn Road), Bonymaen Rugby Club and Cwm Glas Primary School are situated within a five-minute walk.

7.4 Cycling Accessibility

- 7.4.1 The journey time catchments from the site on bicycle are shown in **Appendix B**. It can be seen that Llansamlet to north, Skewen to the east, Port Tennant the south and Morfa Retail Park to the west are all accessible within a 15-minute journey.
- 7.4.2 A five-minute cycle catchment would encompass much of Bonymaen, Winch Wen and Cefn Hengoed. It is important to note that the site is situated at the top of a hill and the topography is not considered favourable to cyclists. However, the local streets in the vicinity are subject to 20mph speed limit and appear low trafficked.

7.5 Car Accessibility

- 7.5.1 Although not a sustainable mode, car travel represents the dominant mode, subsequently a five-minute drive time catchment from the site is contained in **Appendix B**. The resultant catchment is similar to that derived for a 15-minute journey by bicycle.

7.6 Demographic Analysis

- 7.6.1 Table 6 presents the results of the demographic analysis using 2011 Census population data, giving the population within the travel time catchment⁶. More than 15,000 people are accessible within a 15 minutes journey time by sustainable modes of travel.

Table 6: Population by Travel Time Catchment by Mode

Mode of Travel	Population Residing Within Travel Time Catchment		
	5 minutes	10 minutes	15 minutes
Walking	458	1,897	3,546
Cycling	3,242	8,845	15,080
Driving a car	9,906	-	-

- 7.6.2 Table 6 above in addition to the accessibility drawings contained in **Appendix B**, conclude that the proposed development is well located within the local community and active travel modes offer a viable sustainable alternative to the private car.

⁶ All categories: Sex Number Persons (KS101UKDATA), population excludes residents ages less than 16.

8 TRIP GENERATION

8.1 Overview

- 8.1.1 This chapter sets out the forecast trips by all modes anticipated to be generated by the proposed development.

8.2 Methodology

- 8.2.1 To estimate trip attraction for the proposed leisure facilities, the TRICS application (a national database of surveyed development sites) has been used. The database has been interrogated to obtain 85th percentile arrival and departure trip generation rates for the specified land uses from sites across the United Kingdom. TRICS (Version 7.5.1 Update 1) has been used having specified that only the most recent surveys are utilised and that all survey sites in Northern Ireland, Republic of Ireland and Greater London have been removed.
- 8.2.2 As a worst-case scenario, and in order to associate the scheme with an appropriate land use category within the TRICS database, the proposed leisure centre and indoor sports pitch have been separated. For the purpose of this assessment, it has been assumed that the indoor sports pitch would operate as 5-a-side sports pitch facility outside of school hours. It is notable that Cefn Hengoed School is located adjacent to the proposed development and will have use of the proposed leisure facilities.

8.3 Leisure Centre Forecast Trip Generation

- 8.3.1 Table 7 shows the TRICS database filters applied for the leisure centre element.

Table 7: TRICS Database Filter Selection – Leisure Centre

Filter Heading	Description
Land Use	Leisure
Calculation Option	Multi-modal trip rates
Sub Land Uses	Leisure Centre
Date Range	Last eight years only
Location Type	Edge of Town, Suburban Area and Edge of Town Centre

- 8.3.2 The number of vehicle trips forecast to be generated by the leisure centre has been calculated by applying the typical AM Peak Hour (08:00-09:00), PM Peak Hour (17:00-18:00) and daily total trip rates per 100m² GFA against the circa 542m² GFA of the proposed leisure centre.
- 8.3.3 Table 8 presents the forecast trip rate that can be expected from the leisure centre. The full TRICS outputs are presented in **Appendix C**.

Table 8: Forecast Peak and Daily Total Trips – Leisure Centre

Land Use		AM Peak			PM Peak			Total Daily		
		Arrive	Depart	Total	Arrive	Depart	Total	Arrive	Depart	Total
07/C – Leisure Centre	Trip Rate	0.862	0.431	1.293	1.764	1.94	3.704	14.583	13.861	30.122
	Vehicle Trips	4	2	6	9	10	19	73	69	142

8.4 Indoor Sports Pitch Forecast Trip Generation

8.4.1 Table 9 shows the TRICS database filters applied for the indoor sports pitch.

Table 9: TRICS Database Filter Selection – Indoor Sports Pitch

Filter Heading	Description
Land Use	Leisure
Calculation Option	Multi-modal trip rates
Sub Land Uses	5-a-side pitch
Date Range	Last eleven years only
Location Type	Suburban Area

8.4.2 The number of vehicle trips forecast to be generated by the leisure centre has been calculated by applying the typical AM Peak Hour (08:00-09:00), PM Peak Hour (17:00-18:00) and daily total trip rates per one hectare against the circa 0.24 hectare area of the proposed indoor sports pitch.

8.4.3 Table 10 presents the trip rate that can be expected from the indoor sports pitch. The full TRICS outputs are presented in **Appendix C**.

Table 10: Forecast Peak and Total Daily Vehicle Trips – Indoor Sports Pitch

Land Use		AM Peak			PM Peak			Total Daily		
		Arrive	Depart	Total	Arrive	Depart	Total	Arrive	Depart	Total
07/L – Football (5-a-side)	Trip Rate	11.111	5.983	17.094	19.658	6.838	26.496	155.555	157.266	312.821
	Vehicle Trips	2	1	3	4	1	5	31	31	61

8.5 Proposed Development Forecast Trip Generation

8.5.1 The proposed development is forecast to generate a total of 204 daily trips, nine in the AM peak and 24 in the PM peak. Table 11 presents the combined trip generation for the leisure centre and indoor sports pitch combined.

Table 11: Forecast Peak and Total Daily Vehicle Trips – Combined Total

Weekday	AM Peak			PM Peak			Total Daily		
	Arrive	Depart	Total	Arrive	Depart	Total	Arrive	Depart	Total
Vehicle Trips	6	3	9	13	11	24	104	100	204

8.5.2 The peak operating times of both the leisure centre and the indoor sports pitch will take place outside of the traditional highway network peak operating periods. The proposal would generate only nine vehicle movements in the AM Peak Hour (08:00-09:00) and 24 vehicle movements in the PM Peak Hour (17:00-18:00).

8.5.3 TRICS analysis shows that the actual peak periods for the proposed development are 18:00-19:00 for the leisure centre, with 23 total vehicle movements generated and 19:00-20:00 for the indoor sports pitch, with 12 total vehicle movements generated.

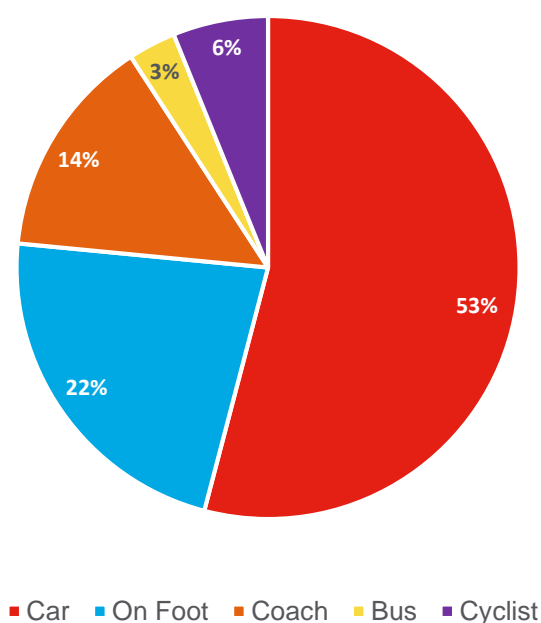
- 8.5.4 Given the hours of operation for the existing leisure facilities, it is considered that any additional traffic which may be generated by the redevelopment of the leisure centre would be low impact and would not result in any severe adverse impact on the surrounding highway network during the AM and PM peak periods.
- 8.5.5 The impact of any additional traffic during the school peak period would also be negligible.
- 8.5.6 Further consideration of trip generation will be required as assessment of the development progresses, primarily to check that the proposed land use reasonably aligns with forecast trips outlined. A ‘first principles’ calculation using assumed operational parameters (once the development is open) may be needed to accurately forecast vehicle trips to and from the proposed Development.
- 8.5.7 Furthermore, it is expected that the measures and initiatives presented in the Travel Plan, would help reduce the forecast development trip generation and increase participation in sustainable methods of travel.

8.6 Forecast Trip Generation and Mode Share

Mode Share

- 8.6.1 The TRICS database was also used to calculate the estimated mode share for the proposed development, as illustrated in Figure 6. The majority of leisure centre users are expected to arrive by car (53%), on foot (22%) and by private coach (14%).

Figure 6: Forecast Mode Share



8.7 Establishing Actual Travel Patterns

- 8.7.1 The collection of actual baseline data will confirm if the interim baseline data accurately reflect the travel patterns of the proposed development and will establish a new baseline for the site based on recorded information. The baseline data will be collected at six months from first occupation.
- 8.7.2 The collection of baseline data will be discussed and agreed with Swansea Council prior to the commencement of the surveys. The Travel Plan Co-ordinator will be responsible for distributing, collecting and analysing the data. The data will be analysed to determine whether the objectives set out in this Travel Plan are achievable and amended as appropriate, as well as establishing Travel Plan targets in consultation with Swansea Council.

9 TRANSPORT IMPLEMENTATION STUDY

9.1 Overview

- 9.1.1 This chapter comprises a Transport Implementation Strategy for the proposed Development and construction phase. In line with the guidance in TAN 18, it includes a review of the proposed movement and access strategy encompassing operational access and vehicles, parking, servicing and deliveries. In addition, a review of the construction phase has been presented which includes proposed mitigation to alleviate the potential for adverse impacts.

9.2 Operational

Site Access and Vehicles

- 9.2.1 Vehicle access to the proposed Development will be via a new gated access off Cefn Hengoed Road for the following types of vehicles:

- Car and light vans;
- Coaches; and
- Delivery vehicles.

- 9.2.2 The proposed access layout and car park have been supported by swept path analysis demonstrating that a coach in particular can access / egress the site in forward gear. The swept path drawings are included as part of the package of documents accompanying this planning application.

Vehicle Parking

- 9.2.3 The proposed development comprises a new car park accessed from Cefn Hengoed Road, which will only be used by staff and visitors of the proposed development. The car park will provide 66 spaces in total which is considered to be robust provision. The daily number of visitors required to apply the parking standards for public leisure centres (Table 1) are currently unknown, however based on the forecast peak trip generation the proposed allocation is considered sufficient. The car park provision is inclusive of four disabled spaces which equate to 6% of the total provision in compliance with Swansea Council's parking standards. Provision for two coach parking bays will be provided at the western extent of the car park, with a pedestrian footway connecting to the indoor sports pitch and leisure centre. The car park will be gated and locked outside of operating hours. The existing car park of approximately 50 marked bays, will no longer serve the leisure centre and will be used solely by Cefn Hengoed School.
- 9.2.4 The proposed car park layout designs are contained within the package of drawings submitted as part of this planning application. It is important to note that parking spaces are dimensioned at 2.6m by 4.8m.

Cycle Parking

- 9.2.5 The proposed development will comprise 18 Sheffield Stands, providing 36 cycle parking spaces in total for both staff and visitors. This provision is considered appropriate in relation to the standards set out in Table 2, through the application of Public Leisure Centre standards for the proposed leisure centre use and Leisure Clubs and Sports Clubs standards for the proposed indoor sports pitch use.
- 9.2.6 These stands will be located centrally between the new indoor sports pitch and the leisure centre and the arrangement of cycle parking is illustrated within the package of drawings submitted in support of the planning application.

Deliveries and Servicing

- 9.2.7 The delivery and servicing schedule are to be confirmed once the leisure centre becomes operational. However, no significant changes to the existing schedule are planned. The proposed development will retain suitable operational parking and turning areas to ensure vehicles are able to arrive and depart from the site in forward gear.

9.3 Pedestrian and Cycle Access

- 9.3.1 New walking routes and pedestrianised areas associated with the proposed development will be fully integrated with existing Cefn Hengoed School facilities, as well as connections to the local highway network. The proposed development will retain a pedestrianised area to the front of the buildings main entrance, and subsequently allow for robust integration with the adjacent school teaching facilities.
- 9.3.2 Pedestrian and cycle access for visitors and staff will be gained from Cefn Hengoed Road and via a new connection from an existing footpath situated along the northern boundary of the school providing access to Caldicot Road.
- 9.3.3 The existing public footway along Cefn Hengoed Road will be retained, with a footpath comprising stepped access connecting to the car park and subsequent footpath leading to the indoor sports pitch and leisure centre. Step free access will be gained via a new footpath adjacent to the new vehicular access on Cefn Hengoed Road. This footpath will also lead directly to the leisure centre and sports pitch, providing access to the cycle parking facilities.
- 9.3.4 Once operational the internal footpath network will connect and integrate the leisure facilities with Cefn Hengoed School, providing direct and safe access to the sports facilities for school pupils. It is important to note that the school are key stakeholder and will require regular access to the adjoining leisure facilities.
- 9.3.5 In order to address the lack of pedestrian connections from Cefn Hengoed Road, the proposals include a package of off-site improvements comprising a new three metre wide continuous footway along the southern extent of Cefn Hengoed Road / Cefn Road and provision of a raised zebra crossing facility which adjoins the existing footway network. This will improve safety for both pedestrians and cyclists and encourage active travel to the proposed Development. The outline design of the improvements is contained within the package of drawings submitted in support of the planning application.
- 9.3.6 The off-site accessibility improvements will benefit users of the school and leisure facilities as well as the local community and aim to encourage the participation of active travel modes. It is important to note their implementation is subject to a Section 278 agreement with Swansea Council.

9.4 Public Transport

- 9.4.1 The development will make use of the existing public transport facilities located near to the site, and as detailed in **Chapter 3**. All existing public facilities are considered viable and suitable to meet the demands of the proposed development.

9.5 Travel Plan

- 9.5.1 A Travel Plan has been produced to support the proposed planning application. The aim of the Travel Plan is to promote sustainable modes of transport in order to reduce car use, improve health and reduce local congestion and the demand for parking.
- 9.5.2 The importance of reducing reliance on vehicle-based travel to and from the development site is therefore recognised from the outset, to help ensure that all users of the development are aware of the range of alternative travel opportunities that will serve the proposed development.
- 9.5.3 Key benefits in relation to the full implementation of travel plans include:
- Provide staff and visitors with a range of options for travel and reducing the demand for car parking;
 - Ensuring the site is accessible for all; and
 - Minimising the impact of travel on the local environment and the local community.
- 9.5.4 The following summarises the key elements of the Travel Plan and what the document provides:
- A method for establishing data on baseline travel patterns;

- Objectives of what the Travel Plan is seeking to achieve in line with policy and guidance, together with a strategy for developing SMART (specific, measurable, achievable, realistic and time-bound) targets;
- A strategy for the implementation and management of the Travel Plan;
- Measures proposed to encourage sustainable travel, reduce car dependence and achieve the Travel Plan objectives, alongside an action plan outlining the implementation programme for the proposed measures; and
- Information on when and how the Travel Plan will be monitored and reviewed.

9.5.5 A copy of the Cefn Hengoed Leisure Centre Travel Plan is provided in **Appendix A**.

9.6 Construction Traffic

9.6.1 There is no requirement to provide a formal Construction Traffic Management Plan (CTMP) as part of the associated planning application, however the developer will incorporate a package of traffic measures to mitigate the transport impacts of the development's construction.

10 SUMMARY AND CONCLUSIONS

10.1 Summary

- 10.1.1 Arcadis Consulting (UK) Limited ('Arcadis') has been appointed by Swansea Council to prepare a Transport Statement to accompany the planning application in support of the proposed redevelopment of Cefn Hengoed Leisure Centre, within the grounds of Cefn Hengoed School in Bonymaen.
- 10.1.2 The Transport Statement will address the access, parking and highway safety comments raised by Highways Officers within the prep-application consultation response (Application No: 2019/1561/PRE), dated 12th August 2019.
- 10.1.3 The site is considered to be sustainably located and it has been demonstrated the proposed development can be accessed by a choice of travel modes including walking, cycling and public transport.
- 10.1.4 The development proposals include a new indoor pitch, and fitness suite / studio, cafe and flexible spaces, with mixed usage by Cefn Hengoed School, Leisure Centre and the local community.
- 10.1.5 A new shared access is proposed on Cefn Hengoed Road, solely serving the proposed development.
- 10.1.6 A new car park will accommodate 66 designated spaces, inclusive of four disabled parking spaces and additionally two coach parking spaces. The car park will serve the leisure facilities only and is located adjacent to a new shared site access off Cefn Hengoed Road. The access will be gated and will only remain open during hours of operation. The existing car park of circa 50 marked bays will no longer service the leisure centre and will be reinstated to serve Cefn Hengoed School. In addition, the proposed development will also provide 18 cycle stands.
- 10.1.7 Internally a network of pedestrian and cycle routes are proposed to connect the leisure centre and indoor sports pitch with Cefn Hengoed School and local highway, through a series of new footpaths which offer direct and safe access to visitors, staff and school pupils.
- 10.1.8 The proposals also include off-site improvements to the pedestrian provision along Cefn Hengoed Road, including a three-metre footpath and a new crossing point on Cefn Road. The accessibility improvements will provide users of the school and leisure facilities as well as the local community with a continuous footway network and safe crossing opportunity.
- 10.1.9 The trip generation calculations for the proposed development has identified that 204 two-way trips are expected per day, with nine trips generated in the AM peak hour and 24 trips generated in the PM peak hour. Given the hours of operation of the existing facilities on site it is considered that any additional traffic which may be generated would have a low impact and not be expected to adversely affect the local highway network. The impact of any additional traffic would also be negligible during the school peak period. A 'first principles' calculation using assumed operational parameters (once the development is open) may be needed to accurately forecast vehicle trips to and from the proposed Development.
- 10.1.10 The Transport Statement has informed an accompanying Travel Plan, which is provided to also support the proposed planning application. The Travel Plan aims to encourage travel by sustainable modes for both visitors and staff travelling to and from the proposed Development.

10.2 Conclusions

- 10.2.1 The Transport Statement concludes that the proposed development will generate no significant residual transport related impacts on the local highway network and surrounding area, supported by the implementation of integral design mitigation to facilitate and enhance existing transport related movements. It is therefore considered that the development proposals as described in this report are sustainable in terms of transport at this location.

APPENDIX A

Cefn Hengoed Leisure Centre Travel Plan

TRAVEL PLAN

Cefn Hengoed Leisure Centre

NOVEMBER 2019



Travel Plan

Cefn Hengoed Leisure Centre

Author	CC
Checker	LN
Approver	JH
Report No	10036633-ARC-XX-XX-RP-TP-0002
Date	NOVEMBER 2019

VERSION CONTROL

Version	Date	Author	Changes
V01	11/11/2019	CC/OL	First draft for client review.
V02	25/11/2019	CC	Final submission.

This report dated 25 November 2019 has been prepared for **Swansea Council**(the “Client”) in accordance with the terms and conditions of appointment (the “Appointment”) between the Client and **Arcadis Consulting (UK) Limited** (“Arcadis”) for the purposes specified in the Appointment. For avoidance of doubt, no other person(s) may use or rely upon this report or its contents, and Arcadis accepts no responsibility for any such use or reliance thereon by any other third party.

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APPENDICES

APPENDIX A

Annex of Supporting Figures

1 INTRODUCTION

1.1 Overview

- 1.1.1 Arcadis Consulting (UK) Limited ('Arcadis') has been appointed by Swansea Council to produce a Travel Plan in support of the proposed Cefn Hengoed Leisure Centre redevelopment. The application site comprises Cefn Hengoed School, which is located at Caldicot Road, Bonymaen. The school forms part of a larger complex, with the leisure centre to the south, and sports area / pitches to the north.
- 1.1.2 The site is located entirely within the urban area of Bonymaen and the existing leisure facility managed by Freedom Leisure serves the local community.

1.2 What is a Travel Plan?

- 1.2.1 This Travel Plan is a live document which sets out a strategy and package of measures designed to manage access by sustainable transport modes to the proposed development. The purpose of the Travel Plan is to reduce the dependency on the private car, promote sustainable accessibility and promote healthy lifestyles. The initiatives covered in this document may be amended or changed to suit future patterns / issues affecting the leisure development. Travel Plans are now required through the planning process for a wide range of land-uses including leisure, residential, employment, education and health.

1.3 Why Prepare a Travel Plan?

- 1.3.1 There is a growing body of evidence, which indicates that travel planning initiatives, when implemented as part of an integrated transport strategy and in the right circumstances, are an effective means of reducing car use, together with improving staff and visitor health, reducing demand for parking and reducing congestion. A summary of the key national, regional and local policy documents is set out subsequently in **Chapter 2**.

1.4 Benefits of a Travel Plan

- 1.4.1 The development and successful implementation of the Cefn Hengoed Leisure Centre Travel Plan has the potential to deliver wide reaching benefits to staff, visitors, the local community and local environment. In summary the benefits of the Travel Plan are, but not limited, to the following:
- Provide staff and visitors with a range of travel options for travel to / from the Leisure Centre;
 - Providing opportunities for active travel, thus encouraging healthy lifestyles;
 - Ensuring that the leisure facility is accessible for all;
 - Reducing the demand for car parking;
 - Developing strong working relationships with partners, such as Cefn Hengoed School;
 - Minimising the impact of travel associated with the leisure facility on the local environment and the local community;
 - Reducing congestion and making best use of the existing highway capacity; and
- Positive contribution to Swansea Council's environmental and sustainable policies and ambitions.

1.5 Travel Plan Structure

- 1.5.1 The plan is divided into eight further chapters:
- **Chapter 2:** Policy and good practice guidance;
 - **Chapter 3:** Site context and existing accessibility;
 - **Chapter 4:** Cefn Hengoed Leisure Centre proposals;
 - **Chapter 5:** Travel Plan aim, objectives and targets;
 - **Chapter 6:** Management strategy;

- **Chapter 7:** Travel Plan measures;
- **Chapter 8:** Monitoring and review; and
- **Chapter 9:** Action plan and funding.

1.5.2 The supporting figures are contained in **Appendix A**.

1.5.3 This Travel Plan represents a commitment by Freedom Leisure in partnership with Swansea Council to create a development that minimises travel demand particularly by single occupancy vehicles and supports travel to and from (and within) the site via sustainable modes.

2 POLICY AND LEGISLATIVE CONTEXT

2.1 Overview

- 2.1.1 This chapter provides a summary of the key national, regional and local policy documents which impact upon the proposed leisure development.

2.2 Legislation

Active Travel (Wales) Act

- 2.2.1 The Active Travel (Wales) Bill 2013 makes provision for the mapping of active travel routes and related facilities. The Act was passed by the National Assembly of Wales and seeks to secure new and enhanced active travel routes and facilities to improve provision for walkers and cyclists. The purpose of the Bill is for local authorities to continuously improve their facilities and routes for pedestrians and cyclists (e.g. through provision of shelter, resting and/ or storage facilities). The Act further requires Welsh Ministers to publish public annual reports regarding the extent to which walkers and cyclists make active travel journeys in Wales.

Well-being of Future Generations (Wales) Act

- 2.2.2 The Well-being of Future Generations (Wales) Act 2015 strives to improve the social, economic, environmental and cultural well-being of Wales. The vision is '*in 2050, Wales will be the best place to live, learn, work and do business*'. The Act requires the public bodies listed to consider the longer-term perspective; engage with people and communities and each other; prevent problems; and to deliver a joined-up approach. The well-being goals to represent what the long-term economic, social and environmental well-being of Wales would look like are shown in Figure 1.

Figure 1: Well-being of Future Generations (Wales) Act – Well-being Goals¹



2.3 National Policy

Planning Policy Wales; Edition 10

- 2.3.1 Planning Policy Wales (PPW) (2018) aims to deliver the vision for Wales set out in the Well-being of Future Generations Act (2015) and provides the context for land use planning in Wales. The planning policies are supplemented with a series of Technical Advice Notes (TANs) and policy clarification letters, which together comprise national planning policy.
- 2.3.2 Welsh Government advises that when determining a planning application for development that has transport implications, local authorities should take the following into account:
- The impacts of the proposed Development on travel demand;

¹ <https://gov.wales/docs/dsjlg/publications/150623-guide-to-the-fg-act-en.pdf>

- The level and nature of public transport provision;
- Accessibility by a range of different transport modes;
- The opportunities to promote active travel journeys, and secure new and improved active travel routes and related facilities, in accordance with the provisions of the Active Travel (Wales) Act 2013;
- The willingness of a developer to promote travel by public transport, walking or cycling, or to provide infrastructure or measures to manage traffic, to overcome transport objections to the proposed development (payment for such measures will not, however, justify granting planning permission to a development for which it would not otherwise be granted);
- The environmental impact of both transport infrastructure and the traffic generated (with emphasis on minimising the causes of climate change associated with transport); and
- The effects on the safety and convenience of other users of the transport network.

Technical Advice Note 18: Transport

- 2.3.3 Technical Advice Note 18: Transport (TAN) (2007) describes how to integrate land-use and transport planning and aims to achieve the Welsh Government sustainable transport policy objectives. It states that the integration of land-use and transport planning can help Welsh Government achieve their environmental outcomes. The transport impacts of new development should be assessed and mitigated to achieve a more sustainable pattern of development. TAN 18 states that a Travel Plan should illustrate the promotion of sustainable travel activity at the Leisure Centre redevelopment.

2.4 Regional and Local Policy

Joint Local Transport Plan for South West Wales

- 2.4.1 The Joint Transport Plan (JTP) (2015) for South West Wales was published in January 2015 and was formally approved by the Welsh Minister in May 2015. It is a joint plan published by four local authorities including Swansea Council, Carmarthenshire County Council, Neath Port Talbot County Borough Council and Pembrokeshire County Council. The JTP provides the framework for improving connectivity to, from and within the region for the period 2015 to 2020. The plan sets out the importance of the travel planning in Policy E3 which aims to 'encourage the take up and development of travel planning to reduce single occupancy car commuting'.

Swansea Local Development Plan 2010-2025

- 2.4.2 The Swansea Local Development Plan (LDP) was adopted in February 2019 and sets out the Council's vision, objectives, policies and proposals for the sustainable development and use of land in Swansea for the 15-year period 2010 to 2025 in accordance with National Planning Policy and Guidance. The vision of the LDP is that Swansea will be a desirable, sought after place to live, work and visit.
- 2.4.3 Section 2.12 (Transport, Movement and Connectivity), outlines the transport requirements for development proposals:
- Developments must be designed to provide safe and efficient access to the transport network, which includes Active Travel and public transport networks;
 - Reduce reliance on the private car use by maximising the potential of movement to/from the development by public transport, including ensuring developments within the urban area are located a walkable distance to a public transport access point on a route with a high frequency service;
 - Ensure all new transport measures are designed as integral elements of a scheme by means of a Placemaking approach;
 - Deliver the new transport infrastructure and improvement measures that are required to mitigate the impact of the development; and

- Ensure developments are served by appropriate parking provision and circulation areas, including adequate road widths to allow access for service vehicles.

Supplementary Planning Guidance: Swansea Council Car Parking Standards

- 2.4.4 The parking standards (2012) seek to ensure a transparent and consistent approach to the provision of parking that informs developers, designers and builders what is expected of them and from them at an early stage of the development process.
- 2.4.5 The guidance divides Swansea into six zones which are shown on a plan, with differing standards for each land use applicable in each zone. The application of the standards relates to the floorspace proposed as part of the development, the number of units, the number of bed spaces or the number of staff dependent on the applicable land use. These standards will be applied to the development proposals to ascertain the maximum provision of parking applicable to the proposed Development.
- 2.4.6 The proposed development is situated in Zone 4 – Suburban or Near Urban and the standards relating to this zone have been applied as part of this development. A reduction in the standards can be applied in relation to sustainability criteria based on the accessibility of the proposed Development by sustainable modes of travel.

3 SITE CONTEXT AND ACCESSIBILITY

3.1 Overview

- 3.1.1 This chapter focuses upon the existing transport conditions within the vicinity of the proposed development site. The chapter has been informed by desk top analysis, stakeholder engagement and by a site visit undertaken 28th October 2019.

3.2 Site Location

- 3.2.1 The proposed site is situated within the grounds of the Cefn Hengoed Community School, which is located at Caldicot Road in Bonymaen. The school forms part of a larger complex, which it shares with the existing Cefn Hengoed Leisure Centre. The residential communities of Bonymaen, Winch Wen and Cefn Hengoed surround the proposed site, situated in East Swansea circa 4.6 km north east of Swansea city centre. To the east lies Bonymaen Rugby Club and their playing fields, Cwm Glas Primary School to the north and residential areas of Bonymaen to west and south.

3.3 Local Pedestrian Network

- 3.3.1 Currently pedestrians are able to access the leisure facilities from Caldicot Road (main school entrance), and can also access the school grounds from Cefn Hengoed Road. A separate public footpath also connects Cefn Hengoed Road to Chirk Gardens leading to Caldicot Road (Photographs 1 and 2), providing an off-site connection between the front and rear of Cefn Hengoed School.

Photographs 1 and 2: Footpath connecting Cefn Hengoed Road Chirk Gardens / Caldicot Close and Colwyn Avenue



- 3.3.2 The residential streets approaching the main entrance on Caldicot Road have footways on both sides of the carriageway, with the provision of informal pedestrian crossings.
- 3.3.3 To the rear of the school, within the vicinity of the proposed shared access on Cefn Hengoed Road, there are currently no footways provided on approach to Cefn Road (Photograph 3) and along one side of the road at the junction (Photograph 4). There are also limited crossing facilities within the vicinity of the site, providing pedestrians with the opportunity to safely cross Cefn Hengoed Road and Cefn Road. As previously discussed, this gap in the existing footway network has been identified with Swansea Council's Pre-application response:

"Cefn Hengoed Road however has an incomplete footway and as such would not be an attractive walking route for users living to the south and east of the site".

- 3.3.4 The subsequent proposed package of off-site pedestrian access improvements is described in **Chapter 4**.

Photograph 3: No footway provided on approach to Cefn Road



Photograph 4: Footway present on one side of carriageway



3.4 Designated Cycle Routes

- 3.4.1 A bicycle friendly road is located circa 115 metres north of the existing site which connects Cefn Hengoed Road to Colwyn Avenue, providing a traffic free route, whilst National Cycle Network Route 43 is located 1.4km north-west of the site which connects to the Celtic Trail.

3.5 Public Transport

Bus Infrastructure and Services

- 3.5.1 The location of bus stops situated nearest to the proposed site accesses (Caldicot Road and Cefn Hengoed Road), are presented on the walking accessibility plan in **Appendix A**. The Cefn Hengoed School Bus Stops are closest to the site situated on Caernarvon Way (approximately 160m from the site), comprising a flagged pole, timetable information and raised kerbing (Photographs 5 and 6). A bus stop is situated on Cefn Road, close proximity to the junction with Cefn Hengoed Road (approximately 100m from the site).
- 3.5.2 Table 1 summarised the local bus services operating within the vicinity of the site. Bus services 31, 32, 33 and 592 operate from the Cefn Hengoed School Stops. They provide frequent services into the city centre, whilst service 592 is a dedicated school bus twice a day, operating between Cefn Hengoed School and Grenfell Park. Bus service 45 serves the Cefn Road Bus Stop and provides connections into the city centre and Morriston.

Table 1: Summary of Local Bus Services²

Bus Number	Route	Approximate Service Frequency (One-way)		
		Weekday	Saturday	Sunday
31	Swansea Bus Station to Morriston Hospital	1 per hour	1 per hour	2 per hour
32	Swansea Bus Station to Birchgrove	1 per hour	1 per hour	-
33	Swansea Bus Station to Morriston Police Station	2 per hour	2 per hour	-
45	Swansea Bus Station to Morriston	1 every 2 hours	1 every 2 hours	-

² <https://www.traveline.cymru/>

Bus Number	Route	Approximate Service Frequency (One-way)		
		Weekday	Saturday	Sunday
592	Cefn Hengoed School to Grenfell Park	School Service		

Photograph 5: Cefn Hengoed School Bus Stop (NB), Caernarvon Way



Photograph 6: Cefn Hengoed School Bus Stop (SB), Caernarvon Way



Rail Services

- 3.5.3 The closest railway stations to the proposed development are Llansamlet, situated circa 2.3km north and Swansea Railway Station, which is located circa 3.3 km south. These stations are not considered to be located within a reasonable distance to make rail travel to the site a feasible option.

3.6 Existing Visitor Numbers

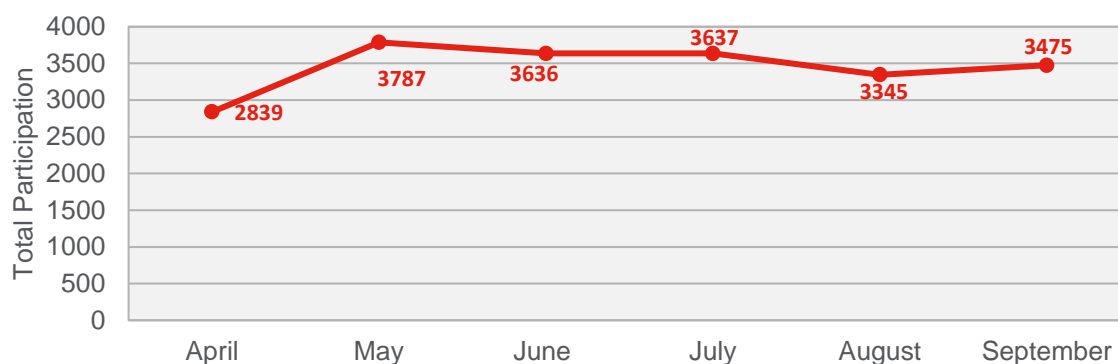
Spatial Analysis

- 3.6.1 Cefn Hengoed Leisure Centre currently has 228 visitor members recorded on their database, during August 2019. Spatial analysis of the available home postcode data of each member demonstrates that the majority reside within the immediate vicinity of the leisure centre as shown in **Appendix A**.

Visitor Profile

- 3.6.2 Figure 2 presents the monthly profile of total visitor at the leisure centre between April and September 2019.

Figure 2: Monthly Visitor Participation (April to September 2019) – Cefn Hengoed Leisure Centre



4 THE PROPOSED DEVELOPMENT

4.1 Overview

4.1.1 This chapter outlines the development proposals, together with a description of the site access and parking arrangements as well as operational characteristics.

4.2 Development Proposals

4.2.1 The proposals include the following key elements:

- A new indoor sports pitch would occupy an area of approximately 2,397m²;
- Minor extensions are proposed to the existing leisure centre buildings together with an internal reconfiguration to allow for the provision of improved gym and changing facilities, a community room, reception and café area (combined total 543 m²);
- Repurposed existing fitness studio to enable beneficial use by the school;
- New MUGA on existing courts to the side; and
- Interconnecting pedestrian routes between the school and leisure areas and existing external connections surrounding the site.

4.2.2 The total gross floor area of the proposed Development is approximately 2,939m².

4.3 Operational Characteristics

4.3.1 The following section details the key operational characteristics that have been identified for the proposed development. Any assumptions at this early stage are worse case to ensure a robust assessment has been considered.

Opening Hours

4.3.2 Opening hours will be extended beyond that currently provided, with the suggested opening from 6.30am to 22.30pm on a weekday and 8.00am to 16.00pm during the weekend.

Staff and Visitor Numbers

4.3.3 The numbers of staff will increase beyond the existing total of 15, however exact numbers are unknown at this stage. The number of staff working at one time is currently three to five individuals, which is expected to a minimal increase in staff following the inclusion of the indoor sports pitch.

4.3.4 Once operational it is desired that visitor numbers will double to approximately 500 members.

Cefn Hengoed School

4.3.5 The purpose of the project is to enhance the existing physical education facilities and subsequently not adversely impact the school's provision for the delivery of the curriculum.

4.3.6 It is anticipated that Cefn Hengoed School will require usage of the following leisure facilities:

- Sports Hall (one class);
- New MUGA on existing courts to the side (one class). To be completed before the main works commence in order to mitigate loss of physical education spaces;
- New 3G indoor barn (one class);
- Gym with new repurposed equipment (half class); and
- Possible timetabled class use for older physical education classes of new gym (half class).

4.4 Freedom Leisure

4.4.1 The proposed development will remain managed by Freedom Leisure trust in partnership with Swansea Council.

- 4.4.2 Freedom Leisure currently operate from the existing Cefn Hengoed Leisure Centre as well as a number of other leisure and sports centres located across the city. Their core vision to ‘improving lives through leisure’ is presented in Figure 3.

Figure 3: Freedom Leisure – Purpose and Objectives



- 4.4.3 The trust objectives and purpose focus around the following values:

- Increasing participation;
- Improving services;
- Delivering quality services and experiences for our customers;
- Supporting “Active Communities”;
- Reducing negative environmental impact;
- Delivering for clients and customers; and
- Developing and rewarding our people.

4.5 Parking Arrangements and Access

- 4.5.1 A new car park will accommodate 66 designated spaces, including four disabled and possibly three electric vehicle charging enabled spaces, as well as two coach parking spaces.
- 4.5.2 A new access is proposed directly off Cefn Hengoed Road which would drop down into the site and serve the leisure facilities only. The access will be gated and will remain open during hours of operation. The general arrangement of the car park and access is illustrated within the package of drawings submitted in support of the planning application.

4.6 Sustainable Access Improvements

Internal Pedestrian Network and Accessibility Improvements

- 4.6.1 New walking routes and pedestrianised areas associated with the proposed development will be fully integrated with existing Cefn Hengoed School facilities, as well as connections to the local highway network. The proposed development will retain a pedestrianised area to the front of the buildings main entrance, and subsequently allow for robust integration with the adjacent school teaching facilities.

- 4.6.2 Pedestrian and cycle access for visitors and staff will be gained from Cefn Hengoed Road and via a new connection from an existing footpath situated along the northern boundary of the school providing access to Caldicot Road.
- 4.6.3 The existing public footway along Cefn Hengoed Road will be retained, with a footpath comprising stepped access connecting to the car park and subsequent footpath leading to the indoor sports pitch and leisure centre. Step free access will be gained via a new footpath adjacent to the new vehicular access on Cefn Hengoed Road. This footpath will also lead directly to the leisure centre and sports pitch, providing access to the cycle parking facilities.
- 4.6.4 Once operational the internal footpath network will connect and integrate the leisure facilities with Cefn Hengoed School, providing direct and safe access to the sports facilities for school pupils. It is important to note that the school are key stakeholder and will require regular access to the adjoining leisure facilities.
- 4.6.5 In order to address the lack of pedestrian connections from Cefn Hengoed Road, the proposals include a package of off-site improvements comprising a new three metre wide continuous footway along the southern extent of Cefn Hengoed Road / Cefn Road and provision of a raised zebra crossing facility which adjoins the existing footway network. This will improve safety for both pedestrians and cyclists and encourage active travel to the proposed Development. The outline design of the improvements is contained within the package of drawings submitted in support of the planning application.
- 4.6.6 The off-site accessibility improvements will benefit users of the school and leisure facilities as well as the local community and aim to encourage the participation of active travel modes. It is important to note their implementation is subject to a Section 278 agreement with Swansea Council.

Cycle Parking

- 4.6.7 The proposed development will comprise 18 Sheffield Stands, providing 36 cycle parking spaces in total for both staff and visitors. It is hoped that this provision will incentivise higher levels of cycling to / from the site. These stands will be located centrally between the new indoor sports pitch and the leisure centre and the arrangement of cycle parking is illustrated within the package of drawings submitted in support of the planning application.

Changing Facilities, Showers and Lockers

- 4.6.8 Staff and visitors will also be permitted to use the proposed on-site facilities including changing rooms, showers and lockers in order to support travel via active modes.

Public Transport

- 4.6.9 The development will make use of the existing public transport facilities located near to the site, and as detailed in **Chapter 3**. All existing public facilities are considered viable and suitable to meet the demands of the proposed development.

4.7 Walking and Cycling Accessibility

- 4.7.1 Accessibility of the site including the provision of a new access at Cefn Hengoed Road has been undertaken using the TRACC Software. TRACC is the leading multimodal transport accessibility tool which was developed in conjunction with the Department for Transport (DfT), local authorities and transport planners. A journey time of up to 15 minutes is considered appropriate to access leisure facilities via active travel modes, for the purpose of this analysis.
- 4.7.2 Furthermore, demographic data has been used to determine the number of residents within different travel time catchment areas surrounding the leisure facility, see Table 2.
- 4.7.3 The results use 2011 Census population and demonstrate that a high number of the local community are accessible within relatively low journey time, particularly by sustainable modes of travel.

Table 2: Population by Travel Time Catchment by Mode³

Mode of Travel	Population Residing Within Travel Time Catchment		
	5 minutes	10 minutes	15 minutes
Walking	458	1,897	3,546
Cycling	3,242	8,845	15,080

Walking

- 4.7.4 The journey time catchments from the site on foot are presented in **Appendix A**. It can be seen that much of the residential areas of Bonymaen and Winch Wen are accessible within a 15-minute journey. In addition to Cefn Hengoed School a number of key local facilities such as local bus stops (located on Caernarvon Way and Cefn Road), Bonymaen Rugby Club and Cwm Glas Primary School are situated within a five-minute walk.

Cycling

- 4.7.5 The journey time catchments from the site on bicycle are shown in **Appendix A**. It can be seen that Llansamlet to north, Skewen to the east, Port Tennant the south and Morfa Retail Park to the west are all accessible within a 15-minute journey.
- 4.7.6 A five-minute cycle catchment would encompass much of Bonymaen, Winch Wen and Cefn Hengoed. It is important to note that the site is situated at the top of a hill and the topography is not considered favourable to all cyclists. However, the local streets in the vicinity are subject to 20mph speed limit and appear low trafficked.
- 4.7.7 In summary, the accessibility analysis, demonstrates that the proposed development is well located within the local community and active travel modes offer a viable sustainable alternative to the private car.

³ All categories: Sex Number Persons (KS101UKDATA), population excludes residents ages less than 16.

5 AIM, OBJECTIVES AND TARGETS

5.1 Overview

- 5.1.1 The aims and objectives of the Travel Plan have been outlined herewith, setting out what the Travel Plan seeks to achieve. It is recognised that there is a need to minimise the reliance on vehicle-based travel to and from the proposed development from the outset and ensure that all staff and visitors are aware of the full range of alternative travel facilities serving the development.
- 5.1.2 The aim and objectives of the Travel Plan have been developed in reference to, and in accordance with, current planning policy and guidance.

5.2 Aim

- 5.2.1 An overall aim has been set for the Travel Plan, to encourage sustainable travel and reduce the level of single occupancy vehicle use, which is:
- “To create a sustainable and healthy community which promotes a range of lifestyle and travel choices and reduces reliance on the private car.”*
- 5.2.2 This accords with the aims of the Welsh Government and Swansea Council.

5.3 Objectives

- 5.3.1 A series of objectives have been set which express the outcomes sought to be achieved by the Travel Plan. The objectives of this Travel Plan are to:
- Minimise the number of single occupancy vehicles generated by staff and visitors travelling to / from the Leisure Centre;
 - Maximise opportunities for travel by sustainable transport to / from the Leisure Centre by the provision and promotion of attractive alternatives to the private car, with an emphasis on walking and cycling, where practicable;
 - Develop strong and effective working relationships with partners such as Cefn Hengoed School, Bonymaen RFC and other external organisations;
 - Monitor and review the success of the Travel Plan regularly; and
 - Develop an effective car parking management strategy that incentivises car sharing for staff and visitors.

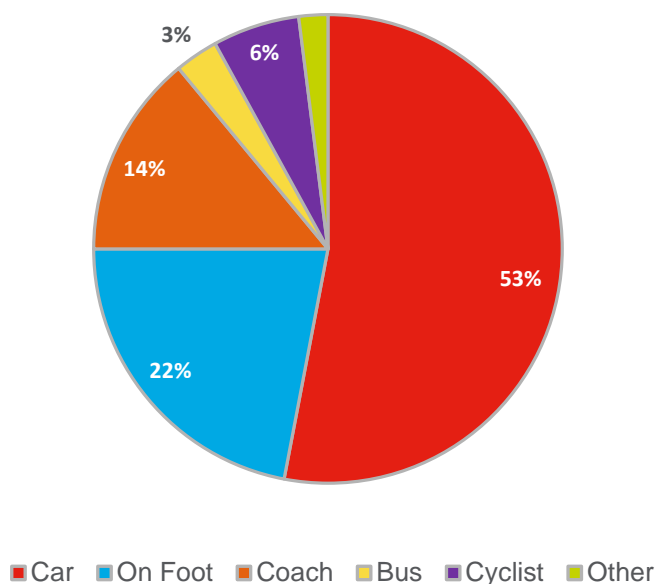
5.4 Target Setting

Overview

- 5.4.1 Targets are measurable goals by which the progress of the Travel Plan will be assessed. Targets are essential for monitoring the progress and success of the Travel Plan. Targets in the Travel Plan are ‘SMART’ (specific, measurable, achievable, realistic and time-bound).
- 5.4.2 The Travel Plan sets out an overarching target to be achieved for the leisure development in terms of mode share of all trips by sustainable modes to and from the development. Sustainable modes for the Travel Plan are defined as walking, cycling, public transport or car sharing.
- 5.4.3 In the absence of available mode share data for the existing Cefn Hengoed Leisure Centre, the TRICS database was used to forecast the daily mode share for the proposed Development, illustrated in Figure 4. These have been derived from the analysis of trip generation and mode share as presented in Chapter 8 of the accompanying Transport Statement. The majority of leisure centre users are expected to arrive by car (53%) with active travel modes accounting for 26% and public transport just 3%.

- 5.4.4 It is important to note that these mode share forecasts only take account of infrastructure provision and other land use parameters as well as operational characteristics, but not of travel planning measures outlined in **Chapter 7**.

Figure 4: Forecast Daily Mode Share



Interim Mode Share Targets

- 5.4.5 In the absence of actual mode share data, the mode share set out in Figure 1 will form a reasonable benchmark for the monitoring of the Travel Plan at this stage and will be reviewed following the completion of the first residential survey. Final targets will then be agreed with Swansea Council using the survey results and the identification of a true base modal split for the proposed development.

6 MANAGEMENT STRATEGY

6.1 Overview

- 6.1.1 This chapter outlines the strategy for implementing the Travel Plan. To ensure the success of the Travel Plan, clear roles and responsibilities have been defined as a means of ensuring the Travel Plan is effectively managed and delivered, therefore successfully achieving a change in travel behaviour.

6.2 Travel Plan Co-ordination and Delivery

- 6.2.1 The Travel Plan co-ordination will be the responsibility of the Freedom Leisure Operations Team who will assume responsibility for the management and monitoring of the Travel Plan, together with co-ordination of the delivery of the proposed measures and initiatives. The establishment of an effective Travel Plan delivery team will be key to the success of the Travel Plan and to ensure it achieves its objectives.
- 6.2.2 The contact details for a member of the team will be passed to the Swansea Council Travel Plan Officer in due course and will be the contact for the local authority. Swansea Council will be able to offer advice and support on the on-going development of the Travel Plan. The implementation of an effective Travel Plan will require close working with Swansea Council, bus / rail operators and Travel Plan Co-ordinator's in the area. Establishing constructive dialogue will provide a responsive mechanism for problem identification and resolution to the benefit of all parties with an interest in the success of the Travel Plan.
- 6.2.3 A summary of the responsibilities of co-ordinating a Travel Plan are likely to include:
- Promote and guide the development of the Travel Plan;
 - To promote schemes and events which encourage walking, cycling and the use of public transport along with the reduction of the use of the private car;
 - To build and nurture the necessary partnerships such as Cefn Hengoed School and other community stakeholders, required for the successful ongoing implementation of the Travel Plan;
 - Determine, and implement if practical, flexible employee working hours to co-ordinate with public transport service schedules;
 - To regularly review and evaluate the Travel Plan and to provide feedback to the planning and the Local Highway Authority via meetings and/ or other channels;
 - To prepare progress reports, action plans and budgets for the Travel Plan aimed at best meeting its objectives and targets;
 - Encourage all staff and visitors living near (2km) to walk to / from the Leisure Centre;
 - Monitor usage of on-site car and cycle parking in order to understanding its usage and parking demand;
 - Promote the Travel Plan initiatives and benefits that apply to employees;
 - Liaise with Cefn Hengoed School to pool resources to maximise the success of Travel Plan initiatives;
 - Mobilise travel surveys; and
 - Regularly liaise with Swansea Council.

6.3 Governance Arrangement

- 6.3.1 The day-to-day delivery of the Travel Plan will be responsibility of the designated Travel Plan Co-ordinator within the Freedom Leisure Operations Team. The interim contact details are:

Nic Beggs

nic.beggs@freedom-leisure.co.uk

6.4 Partnership Working

- 6.4.1 The Operations Team in the delivery of the Travel Plan, will develop a strong working relationship with partners, such as Cefn Hengoed Community School Swansea Council, local public transport operators, and transport organisations (e.g. Sustrans and Traveline Cymru).

7 IMPLEMENTATION OF MEASURES

7.1 Overview

- 7.1.1 The following chapter sets out the measures that will be implemented as part of the Travel Plan to encourage sustainable travel and reduce car dependence with the ultimate goal of achieving the stated objectives and targets of the Travel Plan.
- 7.1.2 These suggested soft measures are not exhaustive but represent the measures which at this stage are critical to ensuring the leisure development is accessible by sustainable transport from the outset and will supplement the hard measures focussing on the provision of infrastructure and off-site mitigation measures detailed in **Chapter 4**.
- 7.1.3 A detailed action plan of the measures to be implemented, which identifies responsibilities and timescales for implementation is presented in **Chapter 9**.

7.2 Marketing and Promotion

Travel Information

- 7.2.1 Due to the importance of ensuring travel information is readily available, as well as promoting sustainable travel on a frequent basis, a Travel Information and Marketing Strategy is being prepared setting out the approach for providing travel information to new and existing visitors, as well as to staff.
- 7.2.2 The strategy will cover the range of media to be used (leaflets, website, social media and on-site information), the frequency of promotional events, staff inductions and responsibility for delivering the strategy.
- 7.2.3 In order to ensure innovative and accurate provision of travel information is delivered it will be essential that a close working relationship with partners, namely Traveline Cymru, Sustrans, First Cymru, Swansea Council amongst others is established.

Website

- 7.2.4 A link to the Travel Plan, information on cycle parking, car sharing information, walking and cycling maps, details of public transport operators and services, details of car parking including car sharing spaces and any other relevant information which will be useful for encouraging travel via sustainable modes will be provided on the Freedom Leisure website.
- 7.2.5 The use of social media in promoting travel information and informing staff and visitors of potential travel options will also be explored further.

Awareness Events

- 7.2.6 The feasibility of the leisure facility participating in events, such as Bike Week and World Car Free Day are being explored. These events will be actively promoted within the leisure facility. These events would actively encourage sustainable travel, provide staff and visitors with further information and promote the Travel Plan.

Personalised Journey Plans

- 7.2.7 The potential of Traveline Cymru providing personalised journey plans for staff and visitors are being explored, this will remove a barrier to the use of public transport by providing personalised information for travel from home to the leisure development at Bonymaen.

7.3 Walking and Cycling

- 7.3.1 To provide a high quality, attractive and direct pedestrian and cycle environment around the development and encourage people to walk and cycle, the TPC will consider implementing the following improvements and travel initiatives.

Active Travel Ethos

- 7.3.2 Given its location within the community, there is a huge potential for a high proportion of journeys to be made on foot or by bicycle, thus it is essential that active travel has a high profile within the day-to-day operation of the leisure facility.

Cycle to Work Salary Sacrifice Lease Scheme

- 7.3.3 Freedom Leisure already provide staff with the opportunity of signing up to a tax incentive scheme for cycle purchase such as with Cycle Scheme⁴ (other providers are available), which enables staff to reduce the costs of purchasing a bicycle as well as spreading the costs over a defined period.

7.4 Car Sharing

- 7.4.1 Car sharing provides a good opportunity to reduce the number of single occupancy car trips made by staff and visitors. It is also a measure that will be promoted to visitors travelling to the proposed development.
- 7.4.2 Staff and visitors will be informed of the Wales wide car sharing website (<https://liftshare.com/wales>) which will help those who are interested find other like-minded staff and visitors to car share with. The potential for setting up a dedicated car sharing website for the leisure facility will also be investigated.

7.5 Public Transport

Information Provision

- 7.5.1 Public transport services will continue to be promoted to staff and visitors through a wide range of sources, such as leaflets, notice boards and the website / intranet, as well as exploring use of real time information boards, introduction of a travel information point and exploiting the advantages of social media. Staff and visitors will be informed of the Traveline Cymru web-based initiative www.traveline.cymru providing public transport information in the area.

⁴ <http://www.cyclescheme.co.uk>

8 MONITORING AND REVIEW

8.1 Overview

- 8.1.1 This Travel Plan is a live document and will evolve over time. Travel Plan monitoring is essential to gain an understanding of the effectiveness of the initiatives in achieving the objectives and targets for the proposed development. Monitoring a Travel Plan will measure progress made so far, to identify areas for improvement and to anticipate emerging threats and opportunities as a basis for an informed review of methods and targets for the next period of the Travel Plan.
- 8.1.2 It will be necessary to review staff and visitor travel patterns following occupation of the development to enable the Travel Plan initiatives to be adapted (if necessary) and to ensure that the Travel Plan maintains focus and purpose.
- 8.1.3 Although the Travel Plan may be reviewed informally on a day-to-day basis, it is essential that it is formally reviewed on a periodic basis and monitored in relation to the baseline travel patterns recorded. The review of the Travel Plan will ensure the plan stays relevant and effective. It will form part of an iterative process that will take account of evolving circumstances to ensure progress towards the agreed targets is achieved.

8.2 Monitoring Programme

- 8.2.1 The Travel Plan monitoring programme, including collection of data will be discussed and agreed with Swansea Council prior to commencement.
- 8.2.2 The TPC will be responsible for undertaking both the day-to-day monitoring of the Travel Plan.

8.3 Monitoring (Performance) Review Report

- 8.3.1 The Travel Plan Monitoring and Performance Review programme will be agreed with Swansea Council prior to occupation. The Travel Plan itself will be treated as a 'live' and an evolving document to reflect the changing needs of staff and visitors and potential changes which may impact on sustainable travel.

8.4 Remedial Strategy

- 8.4.1 Following the review of the Travel Plan and the preparation of the Monitoring and Performance Review Report, if the report reveals that the Travel Plan is not achieving the agreed targets then appropriate remedies will be employed to reverse the observed trend.
- 8.4.2 The potential remedies required will obviously depend on the nature and scale of the targets being missed. The remedial strategy will be focused on the targets that have not been achieved, but it is expected that a programme of promotional activity about sustainable transport modes will form a key element of a potential strategy. In the development of the remedial strategy consultation will be undertaken with Swansea Council to discuss the outcomes of the Travel Plan monitoring and subsequent review, together with the proposed action plan of measures to be taken forward.

9 ACTION PLAN

9.1 Overview

- 9.1.1 The chapter sets out an action plan for implementation of the Travel Plan measures and initiatives that have been identified to achieve the set of objectives and targets, as well as address existing travel issues. The action plan includes the timescales and responsibilities for implementation.

9.2 Action Plan of Measures

- 9.2.1 The action plan for the proposed leisure development is presented in Table 3 to Table 9 and identifies specific measures relating to the Travel Plan objectives and key areas of focus. It is recognised that whilst it might not be possible to implement each of the suggested action plan measures immediately, the TPC part of Freedom Leisure's Operations Team, with assistance from Swansea Council, will both prioritise and subsequently implement appropriate measures going forward. The action plan has been subdivided into mode specific actions for ease of implementation and review.

Table 3: Action Type Site Facilities

Ref ID	Action	Target Date	Responsibility	Outcome
SF1	The provision of car parking within the development for staff and visitors, will be agreed with the Local Planning Authority. Including visitor, disabled and provision of electric vehicle spaces	During construction	Project Delivery Team	Action delivered
SF2	Cycle parking to be provided and will be agreed with the Local Planning Authority.	During construction	Project Delivery Team	Action delivered
SF3	Dedicated showers and changing facilities will be provided as part of the development.	During construction	Project Delivery Team	Action delivered
SF4	Enhanced pedestrian environment to integrate with Cefn Hengoed School and the local community.	During construction	Project Delivery Team	Action delivered

Table 4: Action Type Travel Information and Marketing

Ref ID	Action	Target Date	Responsibility	Outcome
IN1	Taking part in national events, such as Bike Week (usually in June) Maximise use of social media and the internet.	Prior to occupation	TPC	Travel information for all modes is accessible, easy to understand and promoted regularly.
IN2	Working with partners to maximise promotion, such as Sustrans, Traveline Cymru, First Cymru, Swansea Council.	Prior to occupation	TPC	Travel information for all modes is accessible, easy to understand and

Ref ID	Action	Target Date	Responsibility	Outcome
	Promote use of https://www.traveline.cymru journey planner and explore potential of Traveline Cymru providing personalised journey plans for staff.			promoted regularly.
IN3	Provide travel information on access to the leisure development to existing staff and members.	Prior to occupation	TPC	Travel information distributed.
IN4	Travel information would be included on the Freedom Leisure website in a prominent location, to be read by staff and visitors.	At occupation	TPC	Website developed.

Table 5: Action Type Walking and Cycling

Ref ID	Action	Target Date	Responsibility	Outcome
WC1	Investigate opportunities to secure discounts at local bike shops and offer Dr Bike sessions to staff and visitors.	Within 12 months of first occupation	TPC	Distribute information on discounts and completion of events.
WC2	Provide staff details on the cycle to work salary sacrifice scheme will be made available.	At first occupation	TPC	Information distributed.
WC3	The Walkit (www.walkit.com) online route planner will be promoted to staff and visitors	At occupation	TPC	Encourage staff and visitors to cycle.

Table 6: Action Type Care Share

Ref ID	Action	Target Date	Responsibility	Outcome
CS1	Encourage staff visitors to car share through promoting https://liftshare.com/wales/ .	Prior to occupation	TPC	Completion of events.
CS2	Contact Swansea Council for promotional materials relating to car sharing and promote to staff and visitors on noticeboards.	Prior to occupation	TPC	Increased awareness.

Table 7: Action Type Management

Ref ID	Action	Target Date	Responsibility	Outcome
MM1	The day-to-day delivery of the Travel Plan will be the	Prior to occupation	TPC	Ensure sustainable transport remains

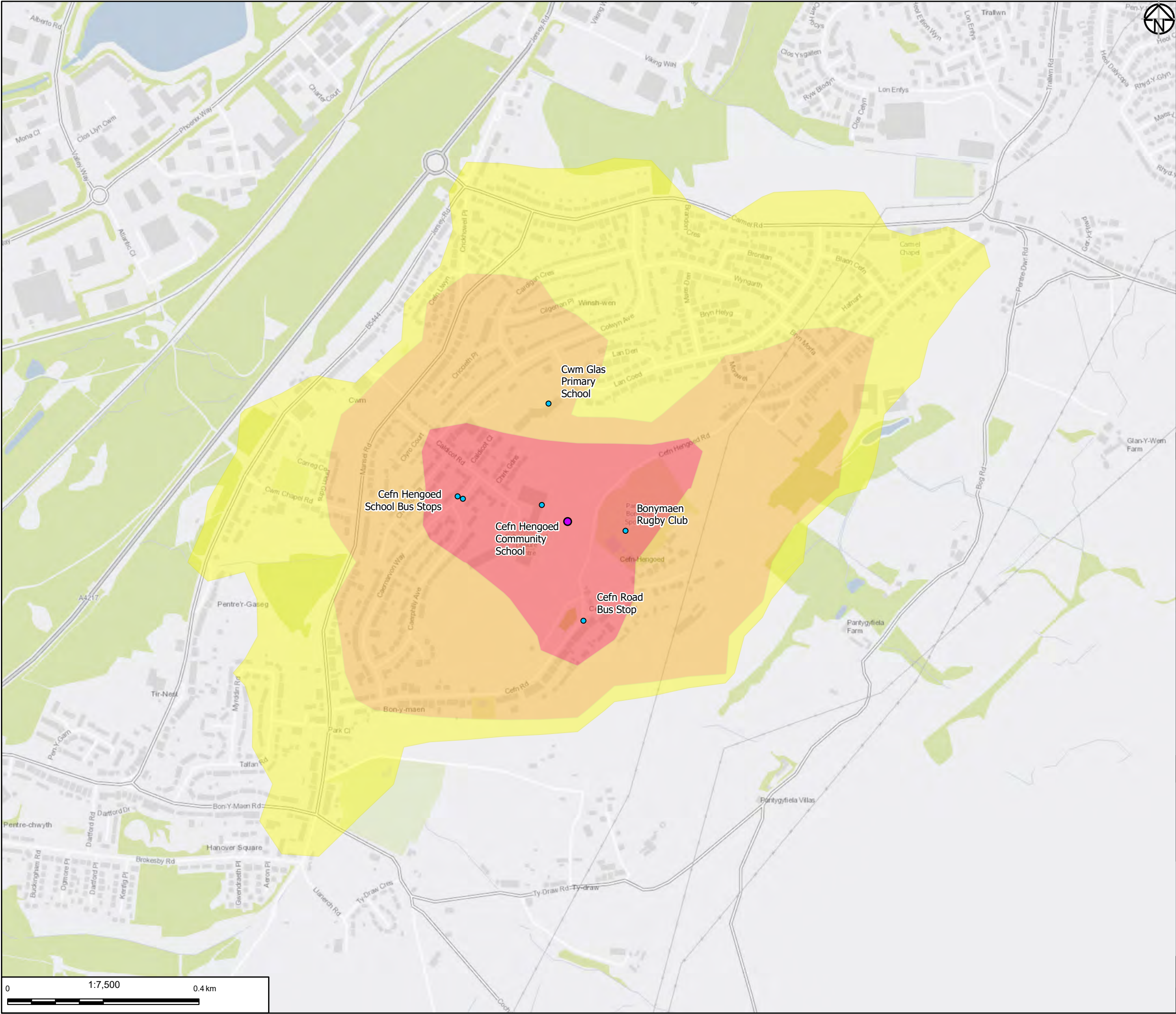
Ref ID	Action	Target Date	Responsibility	Outcome
	responsibility of Freedom Leisure as operator.			high on the agenda.
MM2	Establish close working practices with staff from Cefn Hengoed School	On-going	TPC	Ensure sustainable transport remains high on the agenda.
MM3	Liaise with Swansea Council for support and advice on delivering the Travel Plan, to ensure momentum in travel planning initiatives is achieved.	On-going	TPC	Ensure the Travel Plan maximises sustainable access.
MM4	Develop the Travel Plan in partnership with Swansea Council, as well as with other organisations such as Cefn Hengoed School, First Cymru and Sustrans.	On-going	TPC	Ensure the Travel Plan maximises sustainable access.

Table 8: Action Type Monitoring

Ref ID	Action	Target Date	Responsibility	Outcome
M01	Agree a monitoring and review programme with Swansea Council.	Prior to occupation	TPC	An appropriate monitoring programme determined.

APPENDIX A

Annex of Supporting Figures



NOTES:
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- Legend:
- Cefn Hengoed Leisure Centre
 - Key Local Facility

Walking Journey Time :

- 5 Minutes
- 10 Minutes
- 15 Minutes

01	05/11/19	First Issue	JM	CC	MF
Rev	Date	Description	Drawn	Check	Approv

Client

Swansea Council



Cyngor Abertawe Swansea Council

PROJECT:

Cefn Hengoed Leisure Centre Redevelopment

Site

Cefn Coed

Client

Civic Centre
Oystermouth Road
Swansea
SA1 3SN



Design & Consultancy for natural and built assets

Registered office:

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34 York Way,
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Coordinating office:

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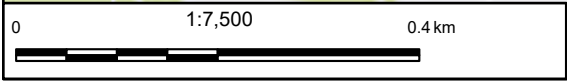
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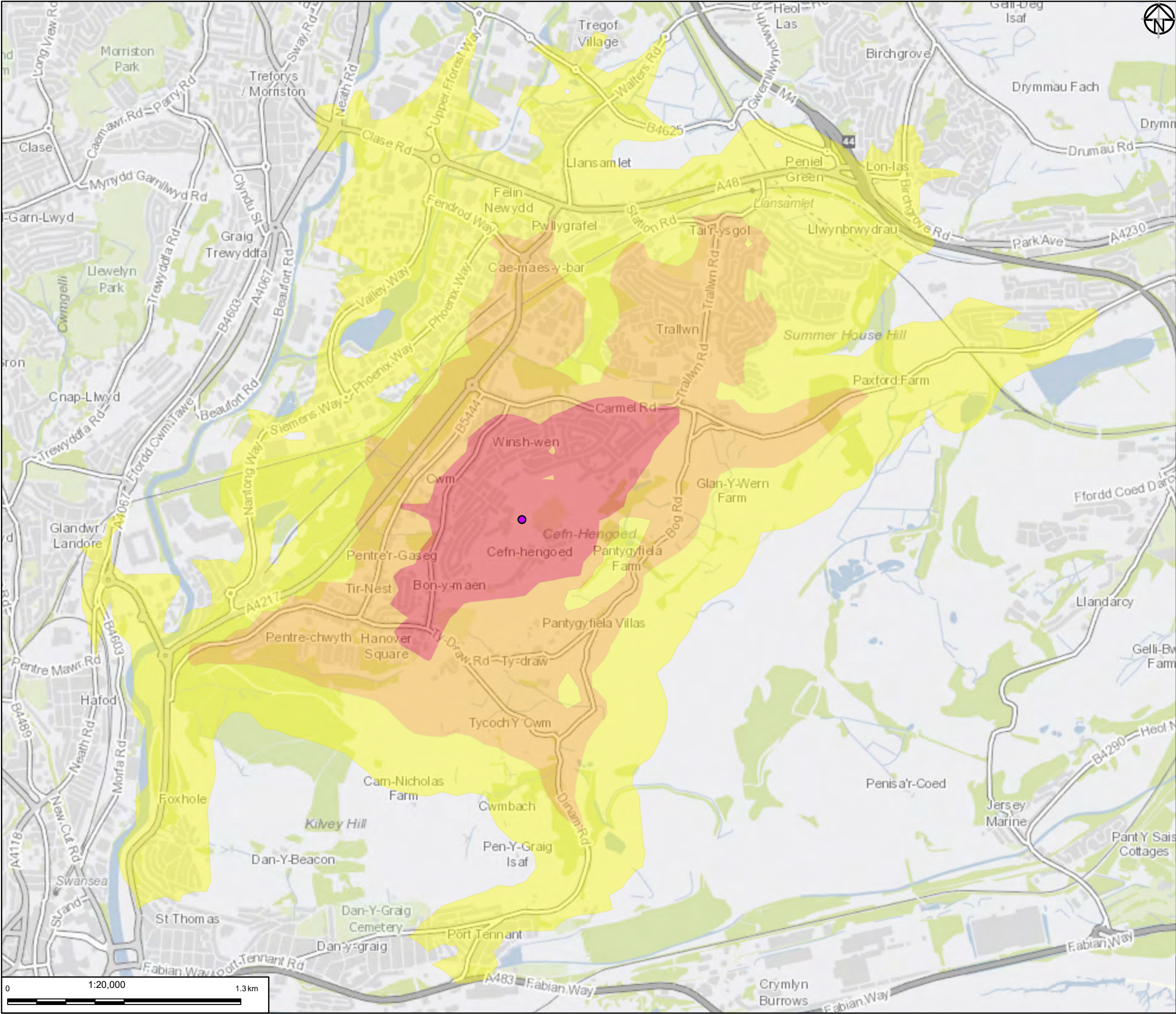
Walking Accessibility Isochrones

Drawn	J. Murray	Date	05NOV19	Signed	
Checked	C. Collins	Date	05NOV19	Signed	
Approved	M. Fry	Date	05NOV19	Signed	
Scale:	1:7,500	Datum:	AOD		
Original Size:	A3	Grid:	OS		
Suitability Code:	S2	Project Number:	10036633		

Issued for information

Drawing Number:	Revision:
10036633-ARC -XX-XX-DR-EA-0001-	01





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Legend:

Cefn Hengoed Leisure Centre

Cycling Journey Time

5 Minutes

10 Minutes

15 Minutes

01	04/11/19	First Issue	JM	CC	MF
Rev	Date	Description	Drawn	Check	Approv

Client

Swansea Council



PROJECT:
Cefn Hengoed Leisure Centre Redevelopment

Site

Cefn Coed

Client

Civic Centre
Oystermouth Road
Swansea
SA1 3SN



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TITLE:

Cycle Time Accessibility Isochrones

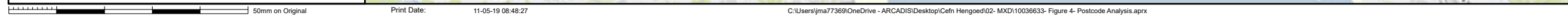
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Checked	C. Collins	Date	04NOV19	Signed	
Approved	M. Fry	Date	04NOV19	Signed	
Scale:	1:20,000	Datum:	AOD		
Original Size:	A3	Grid:	OS		
Suitability Code:	S2	Project Number:	10036633		
Suitability Description:					
Issued for information					

Drawing Number:

10036633-ARC -XX-XX-DR-EA-0002-






Revision:

01



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● Cefn Hengoed Leisure Centre

-  ≤ 2
-  ≤ 5
-  ≤ 14
-  ≤ 63
-  ≤ 117

Client _____

 PROJECT:
Cefn Hengoed
Leisure Centre
Redevelopment



1. *Journal of Management Education*, 30(1), 10-20.

Postcode Analysis of Existing Members (August 2019)

Suitability Description:	
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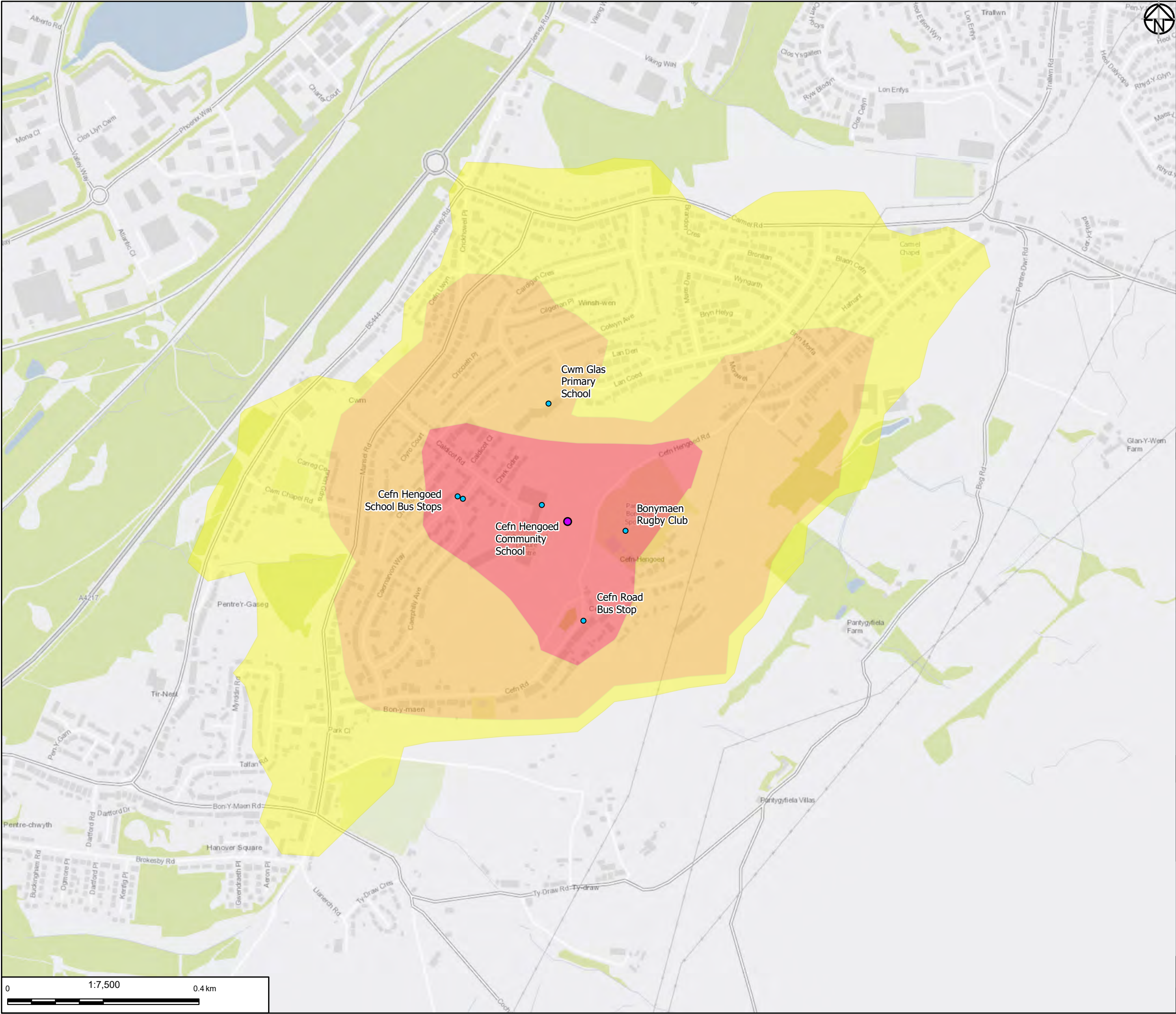
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APPENDIX B

Annex of Figures



NOTES:
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Legend:

- Cefn Hengoed Leisure Centre
- Key Local Facility

Walking Journey Time :

- 5 Minutes
- 10 Minutes
- 15 Minutes

01	05/11/19	First Issue	JM	CC	MF
Rev	Date	Description	Drawn	Check	Approv

Client
Swansea Council

PROJECT:
Cefn Hengoed Leisure Centre Redevelopment

Site
Cefn Coed

Client
Civic Centre
Oystermouth Road
Swansea
SA1 3SN

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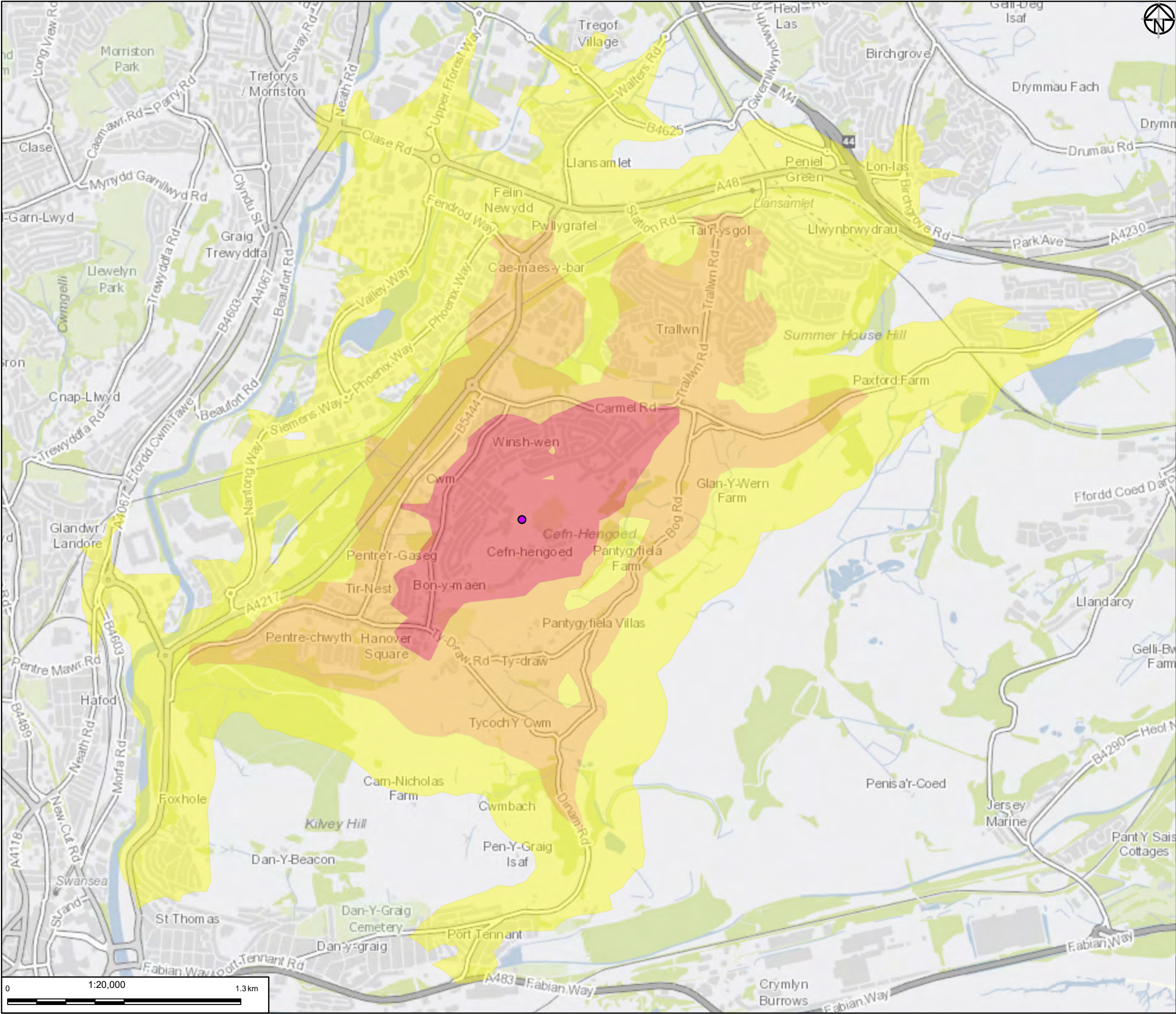
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401 Faraday Street,
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WA3 6GA

TITLE:

Walking Accessibility Isochrones

Drawn	J. Murray	Date	05NOV19	Signed	
Checked	C. Collins	Date	05NOV19	Signed	
Approved	M. Fry	Date	05NOV19	Signed	
Scale:	1:7,500	Datum:	AOD		
Original Size:	A3	Grid:	OS		
Suitability Code:	S2	Project Number:	10036633		
Suitability Description:					
Issued for information					
Drawing Number:					Revision:
10036633-ARC -XX-XX-DR-EA-0001-					01



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Legend:

Cefn Hengoed Leisure Centre

Cycling Journey Time

5 Minutes

10 Minutes

15 Minutes

01	04/11/19	First Issue	JM	CC	MF
Rev	Date	Description	Drawn	Check	Approv

Cyngor Abertawe Swansea Council

Client
Swansea Council

PROJECT:
Cefn Hengoed Leisure Centre Redevelopment

Site
Cefn Coed

Client
Civic Centre
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Swansea
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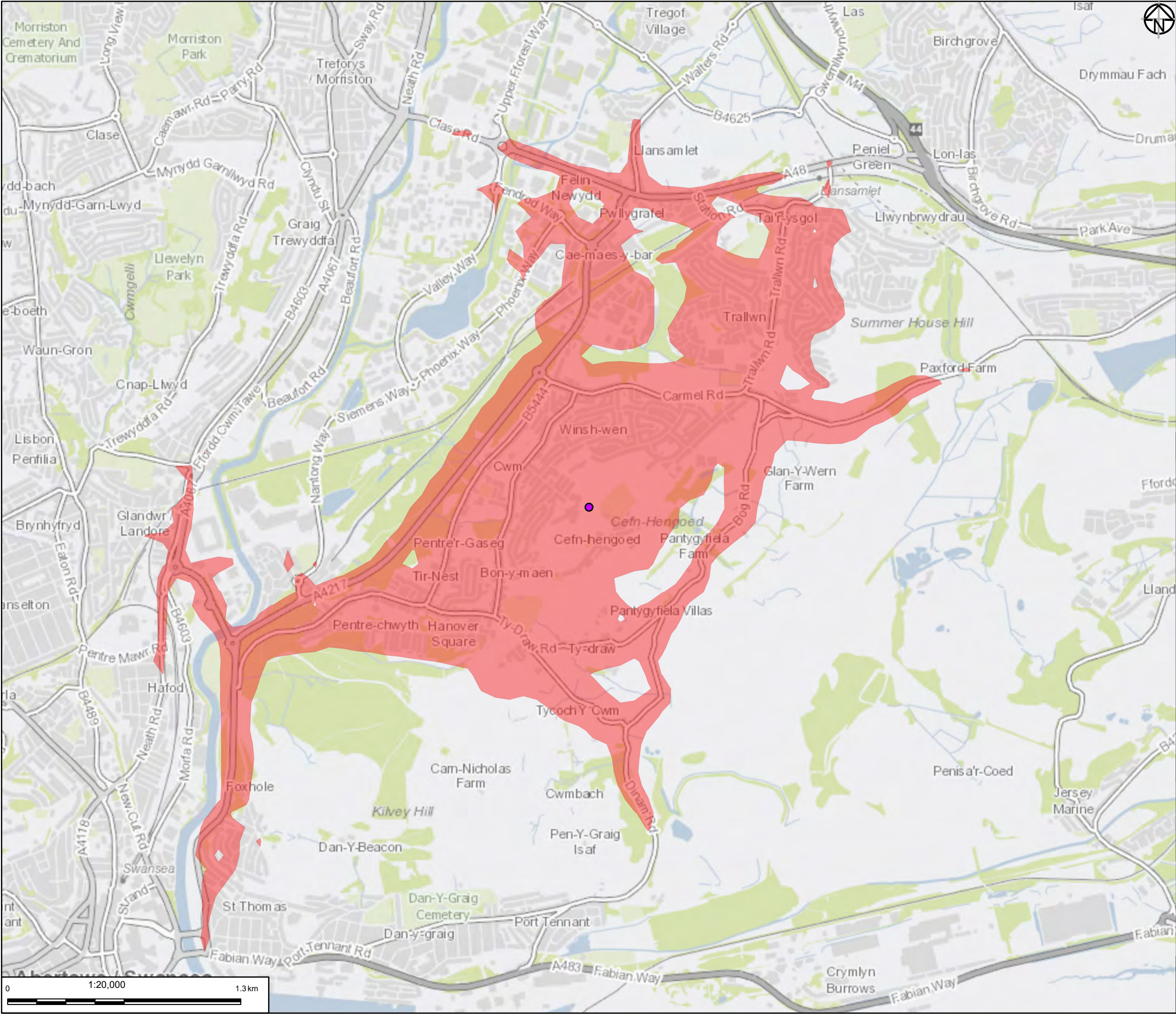
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TITLE:

Cycle Time Accessibility Isochrones

Drawn	J. Murray	Date	04NOV19	Signed	
Checked	C. Collins	Date	04NOV19	Signed	
Approved	M. Fry	Date	04NOV19	Signed	
Scale:	1:20,000	Datum:	AOD		
Original Size:	A3	Grid:	OS		
Suitability Code:	S2	Project Number:	10036633		
Suitability Description:					
Issued for information					
Drawing Number:					Revision:
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NOTES:
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Legend:

- Cefn Hengoed Leisure Centre
- 5 Minute Drive Time

Rev	Date	Description	Drawn	Check	Approv
01	04/11/19	First Issue	JM	CC	MF

Client

Swansea Council

PROJECT:

Cefn Hengoed Leisure Centre Redevelopment

Site

Cefn Coed

Client

Civic Centre
Oystermouth Road
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Drive Time Accessibility Isochrones

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Checked	C. Collins	Date	04NOV19	Signed	
Approved	M. Fry	Date	04NOV19	Signed	
Scale:	1:20,000	Datum:	AOD		
Original Size:	A3	Grid:	OS		
Suitability Code:	S2	Project Number:	10036633		
Issued for information					
Drawing Number:	10036633-ARC -XX-XX-DR-EA-0003-				Revision: 01

APPENDIX C

TRICS Outputs

Calculation Reference: AUDIT-111301-191106-1143

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 07 - LEISURE
 Category : C - LEISURE CENTRE
 MULTI-MODAL VEHICLES

Selected regions and areas:

03	SOUTH WEST	
	DV DEVON	1 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
10	WALES	
	CF CARDIFF	1 days

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

Secondary Filtering selection:

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

Parameter: Gross floor area
 Actual Range: 1450 to 2150 (units: sqm)
 Range Selected by User: 360 to 2500 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/11 to 07/06/18

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Wednesday	2 days
Thursday	1 days

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

Selected survey types:

Manual count	3 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	1
Suburban Area (PPS6 Out of Centre)	1
Edge of Town	1

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	2
Built-Up Zone	1

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

Secondary Filtering selection:

Use Class:

D2	3 days
----	--------

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

Secondary Filtering selection (Cont.):

Population within 1 mile:

5,001 to 10,000	1 days
15,001 to 20,000	1 days
25,001 to 50,000	1 days

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

Population within 5 miles:

25,001 to 50,000	1 days
125,001 to 250,000	1 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	1 days
1.1 to 1.5	2 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	3 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	3 days
-----------------	--------

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

LIST OF SITES relevant to selection parameters

- | | | | |
|---|---|----------------|----------------|
| 1 | CA-07-C-02
BACK LANE
CAMBOURNE | LEISURE CENTRE | CAMBRIDGESHIRE |
| | Edge of Town
Residential Zone
Total Gross floor area: 1502 sqm
<i>Survey date: THURSDAY 07/06/18</i> <i>Survey Type: MANUAL</i> | | |
| 2 | CF-07-C-01
JIM DRISCOLL WAY
CARDIFF
WINDSOR QUAY | LEISURE CENTRE | CARDIFF |
| | Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 2150 sqm
<i>Survey date: WEDNESDAY 18/07/12</i> <i>Survey Type: MANUAL</i> | | |
| 3 | DV-07-C-02
HEAVITREE ROAD
EXETER | LEISURE CENTRE | DEVON |
| | Edge of Town Centre
Built-Up Zone
Total Gross floor area: 1450 sqm
<i>Survey date: WEDNESDAY 05/07/17</i> <i>Survey Type: MANUAL</i> | | |

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
CB-07-C-03	pool
NY-07-C-01	pool

TRIP RATE for Land Use 07 - LEISURE/C - LEISURE CENTRE
 MULTI-MODAL VEHICLES
 Calculation factor: 100 sqm
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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	1	1450	1.103	1	1450	0.207	1	1450	1.310
07:00 - 08:00	2	1476	0.847	2	1476	0.745	2	1476	1.592
08:00 - 09:00	3	1701	0.862	3	1701	0.431	3	1701	1.293
09:00 - 10:00	3	1701	1.098	3	1701	0.627	3	1701	1.725
10:00 - 11:00	3	1701	0.823	3	1701	0.902	3	1701	1.725
11:00 - 12:00	3	1701	0.608	3	1701	0.804	3	1701	1.412
12:00 - 13:00	3	1701	0.608	3	1701	0.862	3	1701	1.470
13:00 - 14:00	3	1701	0.608	3	1701	0.353	3	1701	0.961
14:00 - 15:00	3	1701	0.412	3	1701	0.412	3	1701	0.824
15:00 - 16:00	3	1701	0.608	3	1701	0.392	3	1701	1.000
16:00 - 17:00	3	1701	1.490	3	1701	0.882	3	1701	2.372
17:00 - 18:00	3	1701	1.764	3	1701	1.940	3	1701	3.704
18:00 - 19:00	3	1701	2.136	3	1701	2.509	3	1701	4.645
19:00 - 20:00	3	1701	0.941	3	1701	1.058	3	1701	1.999
20:00 - 21:00	3	1701	0.647	3	1701	1.098	3	1701	1.745
21:00 - 22:00	2	1800	0.028	2	1800	0.639	2	1800	0.667
22:00 - 23:00	1	1450	0.000	1	1450	0.000	1	1450	0.000
23:00 - 24:00									
Total Rates:			14.583			13.861			28.444

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

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Parameter summary

Trip rate parameter range selected:	1450 - 2150 (units: sqm)
Survey date range:	01/01/11 - 07/06/18
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	2

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

Calculation Reference: AUDIT-111301-191106-1159

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 07 - LEISURE
 Category : L - FOOTBALL (5-a-side)
 MULTI-MODAL VEHICLES

Selected regions and areas:

03 SOUTH WEST
 DV DEVON 1 days

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

Secondary Filtering selection:

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

Parameter: Site area
 Actual Range: 1.17 to 1.17 (units: hect)
 Range Selected by User: 1.10 to 1.50 (units: hect)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/08 to 18/07/12

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:

Wednesday 1 days

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

Selected survey types:

Manual count 1 days
 Directional ATC Count 0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre) 1

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 1

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

Secondary Filtering selection:

Use Class:

D2 1 days

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

Population within 1 mile:

25,001 to 50,000 1 days

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

Secondary Filtering selection (Cont.):

Population within 5 miles:

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:

1.1 to 1.5

1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No

1 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

1 days

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

LIST OF SITES relevant to selection parameters

1	DV-07-L-01	GOALS	DEVON
	OUTLAND ROAD		
	PLYMOUTH		
	CENTRAL PARK		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Site area:	1.17 hect	
	Survey date: WEDNESDAY	18/07/12	Survey Type: MANUAL

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

TRIP RATE for Land Use 07 - LEISURE/L - FOOTBALL (5-a-side)

MULTI-MODAL VEHICLES

Calculation factor: 1 hect

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. AREA	Trip Rate	No. Days	Ave. AREA	Trip Rate	No. Days	Ave. AREA	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									
08:00 - 09:00	1	1.17	11.111	1	1.17	5.983	1	1.17	17.094
09:00 - 10:00	1	1.17	7.692	1	1.17	5.128	1	1.17	12.820
10:00 - 11:00	1	1.17	1.709	1	1.17	0.000	1	1.17	1.709
11:00 - 12:00	1	1.17	3.419	1	1.17	4.274	1	1.17	7.693
12:00 - 13:00	1	1.17	2.564	1	1.17	1.709	1	1.17	4.273
13:00 - 14:00	1	1.17	5.128	1	1.17	5.983	1	1.17	11.111
14:00 - 15:00	1	1.17	11.966	1	1.17	8.547	1	1.17	20.513
15:00 - 16:00	1	1.17	5.128	1	1.17	11.111	1	1.17	16.239
16:00 - 17:00	1	1.17	2.564	1	1.17	1.709	1	1.17	4.273
17:00 - 18:00	1	1.17	19.658	1	1.17	6.838	1	1.17	26.496
18:00 - 19:00	1	1.17	32.479	1	1.17	8.547	1	1.17	41.026
19:00 - 20:00	1	1.17	35.043	1	1.17	24.786	1	1.17	59.829
20:00 - 21:00	1	1.17	13.675	1	1.17	29.915	1	1.17	43.590
21:00 - 22:00	1	1.17	3.419	1	1.17	38.462	1	1.17	41.881
22:00 - 23:00	1	1.17	0.000	1	1.17	4.274	1	1.17	4.274
23:00 - 24:00	1	1.17	0.000	1	1.17	0.000	1	1.17	0.000
Total Rates:			155.555			157.266			312.821

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.

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Parameter summary

Trip rate parameter range selected:	1.17 to 1.17 (units: hect)
Survey date range:	01/01/08 - 18/07/12
Number of weekdays (Monday-Friday):	1
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

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