



Travel Plan

Site 5 Wrexham Industrial Estate,
Wrexham, Clwyd

Client: FI Real Estate Management



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APPENDICES AVAILABLE IN TRANSPORT ASSESSMENT

1 INTRODUCTION

1.1 Purpose of Report

- 1.1.1 This Framework Travel Plan (TP) has been prepared to accompany the planning application by FI Real Estate Management ('FIREM') for the development of a circa 152,000 sq/ft B8 warehouse scheme and its associated 140 parking spaces on land to the east of Clywedog Road South on Wrexham Industrial Estate (WIE). This site is also known as Site 5 and is the site that benefits from outline planning approval for B1 light industrial units and B2/B8 industrial unit obtained under application P/2018/1087.
- 1.1.2 Wrexham County Borough Council (WCBC) is the Local Highway Authority (LHA) and the Local Planning Authority (LPA). Prime Transport Planning ('Prime') has produced this TP on behalf of the applicant.
- 1.1.3 The document has been prepared in accordance with *Planning Policy Wales* and *Technical Advice Note 18: Transport* as well as a number of local policy documents.
- 1.1.4 This report should not be considered as a definitive document but as the first stage of the TP process, which will continue and evolve over time with input from the developer, future occupiers and WCBC. The focus of this TP is therefore towards ensuring that opportunities to promote and encourage the use of sustainable modes of travel for future staff and visitors are actively in place prior to occupation of the development, and beyond.
- 1.1.5 This document has been prepared alongside a Transport Assessment (TA) for the development proposal. As many highway and transportation details are pertinent to both documents, there is some repetition between the two and several of the TA Appendices are referenced in this document.
- 1.1.6 A draft of this document has been available for comment as part of the pre-application consultation process with no comments having been received from the highway's officers at WMBC. It has therefore been assumed that the highway's at WMBC are comfortable with the contents and findings of this TP.
- 1.1.7 The suggestions and recommendations contained herein have been drawn based on information available and obtained in advance of the planning submission to which this report relates.
- 1.1.8 Reasonable checks have been carried out on any third-party information used in the preparation of this report but, nonetheless, Prime Transport Planning accepts no liability for the accuracy or otherwise of this data.
- 1.1.9 Third-party rights are excluded for the use of information contained within this report.

1.2 Scope of Report

1.2.1 Following this introduction, the remainder of this report is structured as follows:

- Section 2 describes the relevant local and national TP policy and guidance and presents the objectives of this TP;
- Section 3 describes the existing situation in terms of the site and local highway network;
- Section 4 details the development proposals;
- Section 5 details access to the site by sustainable modes of transport which includes walking, cycling and public transport;
- Section 6 is a Transport Implementation Plan (TIS), which describes the measures to be employed to promote the sustainability of the site, discusses TP management and describes how TPs should be monitored and reviewed.

2 TRANSPORT POLICY AND GUIDANCE

2.1 Introduction

- 2.1.1 It is important that any new developments conform to and complement national and local planning policy. This section details the policies that are relevant to this development.

2.2 Planning Policy Wales

- 2.2.1 The document *Planning Policy Wales* (PPW) sets out the land use planning policies of the Welsh Government and is supported by a series of Technical Advice Notes (TANs). The most recent version of PPW is Edition 11, published in February 2021.

- 2.2.2 Transport is considered in Chapter 3, Chapter 4 and Chapter 5 of PPW. The document sets out a primary objective, *‘to ensure that the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural well-being of Wales’*.

- 2.2.3 Chapter 3 outlines the importance of strategic placemaking, with early decisions having the greatest impact on contributing towards a sustainable development. The chapter continues to state:

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

- 2.2.4 The chapter addresses place-making within rural areas, with it being acknowledged that for rural areas, *‘opportunities for reducing car use and increasing walking, cycling and use of public transport are more limited than in urban areas’*.

- 2.2.5 Chapter 4 highlights the importance of cohesive communities, with such considerations through placemaking contributing towards a *‘prosperous’, ‘resilient’* and *‘healthier’* Wales. The chapter discusses transport in detail, with the need for the people to access jobs and services through *‘shorter, more efficient and sustainable journeys, by walking, cycling and public transport’*.

- 2.2.6 Chapter 4 also addresses the following:

- Integrated planning and transport strategies;
- Sustainable transport and reduction in private car reliance;
- Active/social streets designed to be publicly orientated;
- Active travel and the encouragement of walking/cycling;
- Public transport and its availability;
- The encouragement of ultra-low emission vehicles;
- Traffic management and improved forecasting;
- The availability of car parking; and

- Transport Assessments as an important mechanism for considering traffic impact.

2.2.7 Chapter 5 discusses the economic components of placemaking and the creation of ‘*productive and enterprising places*’. The chapter continues to state that such enterprising places are ‘*designed and sited to promote healthy lifestyles*’ with this being done by making them ‘*easy to walk and cycle to and around*’, and easy to access by public transport.

2.2.8 Transport infrastructure is discussed in detail, with the importance of such infrastructure towards sustainable development stated below:

‘The provision of sustainable transport infrastructure is essential in order to build prosperity, tackle the climate emergency, reduce airborne pollution and to improve the social, economic, environmental and cultural well-being of Wales. The planning system should facilitate the delivery, decarbonisation and improvement of transport infrastructure in a way which reduces the need to travel, particularly by private vehicles, and facilitates and increases the use of active and sustainable transport.’

2.2.9 Accordingly, this TP has been structured to include an assessment of accessibility by sustainable modes including walking, cycling and public transport, road safety and the impacts of the development on the local highway network.

2.3 Technical Advice Note 18: Transport

2.3.1 TAN 18 (2007) outlines the need for, and the required content of TAs, for some classifications and scales of development in Wales. The document outlines the following aims to be considered when producing a TA:

- Understand the transport impacts of the development;
- Clearly communicate the impacts to assist the decision-making process;
- Demonstrate the development is sited in a location that will produce a desired and predicted output (for example in terms of target modal split);
- Mitigate negative transport impacts through the design process and secure through planning conditions or obligations; and
- Maximise the accessibility of the development by non-car mode

2.3.2 TAN 18 provides detailed guidance on visibility standards, and essentially provides for visibility to be based upon the standards in the *Design Manual for Roads and Bridges* (DMRB) for roads where actual road speeds are unknown or where the speed limit is >60kph (37mph), and the standards in *Manual for Streets* (MfS) where speeds are known and are <60kph (37mph).

2.3.3 In relation to accessibility, TAN 18 emphasises the utility of using ‘*accessibility profiles*’, which consider whether a site has the potential to minimise travel by the private car. In accordance with this, GIS software has been utilised to generate accessibility isochrones for walking and cycling trips, while the

site's accessibility by public transport has been considered in the context of timetabled services in the area.

- 2.3.4 TAN 18 goes on to outline the requirement for a 'Transport Implementation Strategy' (TIS) to be produced as an output of the TP. The document summarises the requirements of the TIS as follows:

'[The TIS] should set objectives and targets relating to managing travel demand for the development and set out the infrastructure, demand management measures and financial contributions necessary to achieve them. The TIS should set a framework for monitoring the objectives and targets, including the future modal split of transport to development sites.'

- 2.3.5 In relation to how a TIS interfaces with the production of a TA and TP, the guidance states that:

'TISs resulting from the TA process are intended to incorporate all the components of a travel plan and ensure these are integrated with design elements of the new development.'

- 2.3.6 In the light of the above, a TIS is included within the contents of the Framework TP which has been produced to accompany this TA, and draws upon the findings and conclusions of this TA, in addition to the potential sustainable travel measures described within the TP.

2.4 North Wales Joint Local Transport Plan 2015

- 2.4.1 The North Wales Joint Local Transport Plan (LTP) was prepared by the North Wales Local Authorities in response to the Welsh Government requirement for LTPs to be submitted by the end of January 2015. The LTP's stated 'vision' is to 'remove barriers by delivering safe, sustainable, affordable and effective transport networks'.

- 2.4.2 The LTP aims to address the following key issues for North Wales:

- The ability of the strategic road and rail corridors to provide the necessary good connectivity, for people and freight, within North Wales, to the ports and to the rest of the UK to support the economy and jobs, including tourism;
- The lack of resilience of the road and rail networks to planned and unplanned events including extreme weather;
- The need for good access to and between the three Enterprise Zones in North Wales;
- The lack of viable and affordable alternatives to the car to access key employment sites and other services; and
- The need for good road links to / from the trunk road network into the rural areas to help retain the viability of local businesses and support the Welsh language and culture.

- 2.4.3 This Plan therefore provides the strategic baseline for considering developments that have a transportation element within the wider area. In terms of the proposed/refurbished industrial and retail units within this application, consideration will be made of the wider integration within the highways network and access by sustainable modes.

2.5 Wrexham Unitary Development Plan (1996-2011)

- 2.5.1 The Unitary Development Plan (UDP) 1996 - 2011 was adopted by WCBC in February 2005. The document reflects the council's corporate vision for the County Borough's future based on:

- Aspiring city status, with Wrexham centre as its civic hub;
- Rural revitalised distinct towns and villages and attractive viable hinterland;
- Modern robust economy across all sectors;
- Improve quality of life for residents with an emphasis on supporting access to a variety of education and employment opportunities; and
- Institutions of growing stature: for example, the Council itself.

- 2.5.2 Part 1 of the strategic policies within this document outlines policies PS1, PS2, PS3, PS4. These policies outline the broad locations of where developments should be sought as follows:

- **Policy PS1:** New development for housing, employment, and community services will be directed to within defined settlement limits/employment areas;
- **Policy PS2:** Development must not materially detrimentally affect countryside, landscape/townscape character, open space, or the quality of the natural environment;
- **Policy PS3:** Development should use previously developed brownfield land comprising vacant, derelict or underused land in preference to the use of greenfield land, wherever possible, particularly so where greenfield land is of ecological, landscape or amenity value, or comprises agricultural land of grades 1, 2 or 3a quality; and
- **Policy PS4:** Development should maintain the existing settlement pattern and character and be integrated with the existing transport network to help reduce the overall need to travel and encourage the use of alternatives to the car.

- 2.5.3 In addition to these, Policy PS8 outlines the development targets for transportation:

- **Policy PS8:** The transport network will be developed by providing an integrated range of travel options to and from principal residential, commercial, employment and education centres by making the best use of the existing road and rail network, including, where necessary, the provision of facilities for both passenger and freight interchange and by the encouragement of public transport, cycling and walking.

- 2.5.4 It is noted that the Unitary Development Plan (1996-2011) is currently outdated, however, the Wrexham Local Development Plan 2 (2013-2028) is still undergoing consultation and is yet to be

released. As such, the Unitary Development Plan (1996-2011), as the only document available, shall be used for reference when completing this TA.

2.6 Wrexham Local Development Plan 2 (2013-2028)

2.6.1 WCBC is preparing the Local Development Plan (LDP) which will replace the current adopted Unitary Development Plan. The LDP will be a long-term land use and development strategy focused on achieving sustainable development and will:

- Guide development for housing, employment, retail and other uses;
- Set out policies that will be used to decide planning applications; and
- Safeguard areas of land requiring protection or enhancement.

2.7 Local Planning Guidance Note 16 - Parking Standards

2.7.1 This guidance note explains the parking standards the Council applies to new development. It amplifies Unitary Development Plan (UDP 1996-2011) policies and will be a material consideration in the determination of planning applications. This guidance note was revised by the Council in July 2011, subject to external consultation in September 2011 and was formally adopted for use by the Executive Board in November 2011.

2.7.2 Through a review of this document, the parking standards required for the B1 (now use class 'E'), B2 and B8 land uses proposed for the development are noted. Given that this application is for outline planning permission and the final mix of development is not known and subject to future submissions, meaning that calculations relating to parking provision are liable to change.

2.7.3 Reserved Matters applications will be expected to provide sufficient parking to comply with the relevant standards at the time of submission. These standards can be seen below within Table 2.1 The expected final mix of parking provision is further discussed within Section 4 of this report and is also included with any site plans submitted for this application.

Table 2.1 Parking Standards

Type of Development	Parking Standard	Cycle Parking Standard
B1 Business and light industry	1 car space per 30m ² gross floor space	1 cycle space per 300m ² gross floor space
B2 General Industry	1 car space per 50m ² gross floor space	1 cycle space per 500m ² gross floor space
B8 Storage and Distribution	1 car space per 100m ² gross floor space	1 cycle space per 1000m ² gross floor space
An area suitable for HGVs to load/unload and turn within the site will normally be required for B2 and B8 uses, particularly for sites accessed from a classified road. Any extensions to industrial or warehouse premises should not result in the loss of HGV loading/unloading/turning spaces unless an adequate alternative can be provided within the site.		

2.8 Wrexham Connected: Our Sustainable Urban Mobility Plan 2016

2.8.1 The *Wrexham Connected* document sets a clear vision for the future of transport for the area. It brings together the Council's overall direction of transport planning.

2.8.2 The document outlines the importance of the council's *Sustainable Urban Mobility Plan* (SUMP). This is discussed in specific reference to WIE, and the Council's concern for the public's ability to connect in and around the town centre, as well as corridors outside of the town.

2.8.3 Stated within the document are the *Wrexham Connected* objectives, which are set to maximise how the Council can contribute to the national well-being goals contained within the *Future Generations Act*, being that they support a cohesive Wales and more resilient Wales. The objectives are as follows:

- **Safer Places** – working with partners to create safer environments for people to live, work and play;
- **Sustainable Places** – will embrace a 'sustainable', transport-first approach to new development;
- **Healthy Places** – reduce the impacts of air and noise pollution;
- **Affordable Places** – stimulate inward investment and regeneration that leads to job creation; and
- **Well Connected Places** – enhance connectivity to, from and within Wrexham to improve the attractiveness and quality of the area.

2.9 Summary

2.9.1 This section has outlined national and local transport policies and guidance which are applicable to the development site. The production of this TP is consistent with the requirement for TPs set out in PPW, TAN 18 and the UDP for Wrexham. How the site conforms to and complements the other policies and guidance described above is discussed in the following sections of this report, where relevant.

3 EXISTING SITUATION

3.1 Site Description

- 3.1.1 The application site is currently an undeveloped plot of land, situated off Clywedog Road South. The site is bounded to the east by dense vegetation including a number of mature trees which separate the site from the residential area that can be found further to the east. To the north the site is again bounded by a line of mature trees, beyond which can be found a number of additional commercial buildings, to the south lies undeveloped land with Clywedod Road South forming the western boundary. The sites frontage to Clywedog Road South is circa 380m in length.
- 3.1.2 Wrexham Industrial Estate is circa 3.5km east of Wrexham town centre, circa 4km north of Bangor-on-Dee and approximately 6km south-west of Farndon. The location of the site in the context of WIE and the local highway network is illustrated in Image 3.1.

Image 3.1: Site Location Plan



3.2 Local Highway Network

Clywedog Road South

- 3.2.1 As mentioned above Clywedog Road South forms the western boundary of the south. It is a single carriageway road, running in a general north to south direction for circa 1200m. The northern section of Clywedog Road South meets with Clywedog Road North, and to the south the road meets with Bridge Road South at a 3-arm roundabout. Clywedog Road East meets at a priority junction with

Clywedog Road South, 250m south from the junction with Clywedog Road North. The road is circa 8m in width, subject to a 40mph speed limit with street lighting being provided.

- 3.2.2 The site is proposed to take access circa 300m north from the southern 3-arm roundabout to serve the car park located on the southern section of the development site, with a secondary access to serve the commercial vehicles located approximately a further 300m to the north of the first access.
- 3.2.3 A continuous footway begins circa 400m north from the southern section of Clywedog Road South, running through to the junction with Clywedog Road North. The footway is circa 2m in width, and alternates between the eastern and western verges.
- 3.2.4 Numerous industrial buildings take access from Clywedog Road South, with a small business park also taking access from this road. No bus stops exist along this road, with the nearest being found along Bridge Road South.

Clywedog Road East

- 3.2.5 Clywedog Road East connects Bridge Road South with Clywedog Road South, running in a general north west to south east direction, this being circa 580m in length. To the north a priority junction connects to Clywedog Road South and to the south a 3-arm roundabout connects to Bridge Road South/Bridge Road. Clywedog Road North connects into Clywedog Road East circa 250m to the south of the junction with Clywedog Road South. The road is single carriageway circa 8m in width, subject to a 40mph speed limit, with street lighting being provided.
- 3.2.6 Footways are provided along Clywedog Road East from its junction with Clywedog Road South to its junction with Clywedog Road North. Several industrial buildings take access from the road, north from the junction with Clywedog Road North.

Clywedog Road North

- 3.2.7 Clywedog Road North runs in an 'S' shape alignment, connecting to Clywedog Road East to the south, Coed Aben Road to the north, and meeting with Clywedog Road South at a priority junction midway along its length. Street lighting is provided.
- 3.2.8 Footway exists along the southern verge of the carriageway and runs continuously from the Clywedog Road East junction through to Erlas Lane, with northern verge footway beginning approximately 300m north from Clywedog Road East and running through the Abenbury Way/Coed Aben Road junction. Both footways are circa 2m in width, with the footway in the northern verge being separated from the main carriageway by a 1.5m wide grass verge. No bus stops exist along this road, with the nearest being Bridge Road South.

Bridge Road

- 3.2.9 Bridge Road has a single carriageway, running in a generally north east to south west alignment, with a circa 12m width. The road is subject to a 40mph speed limit with two 3-arm roundabouts being found in the vicinity of the site. One roundabout can be found at the junction of Clywedog Road East/Bridge Road South, the other located circa 100m south of Coed Aben Road, providing access to Spectrum Business Park.
- 3.2.10 Bridge Road is circa 530m in length, with an approximate 2m wide footway along its southern verge. A similar width footway exists along the north verge, separated from the carriageway by a section of grass verge, approximately 3m in width. Street lighting is provided on Bridge Road.
- 3.2.11 Five bus stops exist along the length of Bridge Road. A north and southbound stop exist to the south of Coed Aben Road, circa 60m from the junction. The third stop is northbound and exists circa 140m to the south of the Bridge Road/Spectrum Business Park roundabout, with the 4th and 5th existing circa 50m north from the Clywedog Road South/Bridge Road/Bridge Road South roundabout, both north and southbound.
- 3.2.12 A pelican crossing exists slightly to the south of the 3rd bus stop, with double yellow lines along both the north bound and south bound verge to prevent on street parking. Dropped kerbs and tactile paving exist along the road and at the roundabouts to aid in pedestrian movements.

Bridge Road South

- 3.2.13 Bridge Road South is a continuation from Bridge Road and extends for approximately 800m southwards towards Cefn Road. Two 3-arm roundabouts exist along this stretch of road, with the first being circa 670m south from the Bridge Road roundabout, providing a continuation of Bridge Road South and a connection to Clywedog Road South. The second 3-arm roundabout exists circa 140m further south from the above-mentioned roundabout, connecting to Cefn Road and Sesswick Way. Cefn Road provides a route through to Wrexham town centre and Sesswick Way through to the A525.
- 3.2.14 The road is single carriageway, approximately 8m in width and the majority is subject to a 30mph speed limit. Street lighting is provided and a share foot/cycleway exists along the northern verge of road, circa 3m in width, with the southern verge of footway ceasing from the southern roundabout of Bridge Road. Similarly to Bridge Road, double yellow lines exist along both the northbound and southbound verge to prevent on street parking.
- 3.2.15 The Maes Brenin/Pilgrim Way residential development takes two access points from Bridge Road South along its northern verge, with industrial units taking two access points from the southern verge. A northbound and southbound bus stop exist approximately 250m south of the roundabout with Bridge Road, called 'Pentre Maelor'.

Coed Aben Road/Abenbury Way

- 3.2.16 Coed Aben Road passes through the centre of WIE. The road is approximately 670m in length and provides a connection between Bridge Road in the south and Clywedog Road North in the north. The road is circa 9m in width, has circa 2m wide footways in both verges, the road is subject to a 40mph speed limit and street lighting is provided.
- 3.2.17 Abenbury Way is the extension westwards of Coed Aben Road. This is circa 7m in width, has a footway in the southern verge only and is subject to a 40mph speed limit.

4 DEVELOPMENT PROPOSAL

4.1 Development Description

- 4.1.1 As mentioned above, a planning application is to be submitted to deliver circa 152,000 sq/ft of B8 Warehouse usage in one building on land to the east of Clywedog Road South. The scheme will also include 14 HGV docking bays and 140 parking spaces for employee/visitor parking.
- 4.1.2 It is proposed that a minimum 15m landscape buffer is to be maintained between the proposed development site and the existing residential units which can be found to the east.

4.2 Site Access

- 4.2.1 Stated previously, the site is proposed to take access directly from Clywedog Road South, along the site's western frontage, in the form of two priority-controlled junctions. The northern entry point will be for commercial vehicles and will facilitate access to the docking bays; the southern entry point will facilitate access into the employee and visitor car park. Both access points can also be used by pedestrians and cyclists to access the site.

Northern Access Point

- 4.2.2 As previously agreed with the highway officers at WCBC, the northern access will comprise of a 7.3m wide carriageway with 15m kerb radii. These geometric parameters being robust enough to accommodate the largest vehicles which could utilise this access i.e. 16.5m long articulated HGVs. Visibility splay of 2.4m x 120m are also to be provided in accordance with the wishes of the highway officers at WCBC and agreed as part of the approved scheme on this site, these also being TAN18/DMRB compliant for the prevailing 40mph speed limit on the adjacent highway network. The site access will further incorporate 2m wide footways, either side of the carriageway, connecting to existing footway along Clywedog Road South. The proposed access arrangements are depicted in Drawing P21065-001 contained with Appendix B of the TA.

Southern Access Point

- 4.2.3 The southern access will comprise a 5.5m wide carriageway with 6m kerb radii. These geometric parameters being robust enough to accommodate the largest vehicles which could utilise this access i.e. a large van. The geometric parameters for this access have been revised from those approved as part of the consented scheme for the site due to the fact that there will not be a need for 16.5m long articulated vehicles to utilise this access. Visibility splays for this southern access of 2.4m x 120m are also to be provided in accordance with the wishes of the highway officers at WCBC and agreed as part of the approved scheme on this site, these also being TAN18/DMRB compliant for the prevailing 40mph speed limit on the adjacent highway network. The site access will further incorporate 2m wide

footways, to provide connection to existing footway across from this access. The proposed access arrangements are depicted in Drawing P21065-002 contained with Appendix B of the TA.

Proposed Pedestrian/Cycle Access

- 4.2.4 The pedestrian access to the site will be complimented by the provision of a direct pedestrian/cycle only access onto Clywedog Road South. This will avoid the need for pedestrians/cyclist wishing to access the office element of the scheme having to walk/cycle through a service yard or car park.

4.3 Parking Provision

- 4.3.1 Table 2.1 shows an extract of WCBC parking standards. This shows that for B8 warehouse the standards for car parking is 1 space per 100sqm and cycle parking is 1 space per 1000sqm. Based on a Gross Floor Area (GFA) of 152,000 sq/ft (14,121sqm), 141 car parking spaces should be provided together with 15 cycle parking spaces.
- 4.3.2 The proposed scheme comprises 140 car parking spaces, this being generally in line with WCBC's standards. Safe and secure cycle parking facilities are provided near to the main pedestrian access into the building, these facilities accommodating 16 spaces this also being generally in line with WCBC standards.

4.4 Summary

- 4.4.1 The development is proposed to be served by two access points. It has been demonstrated that the site is able to accommodate all likely vehicle types which will regularly access the development.
- 4.4.2 The car parking provision to be delivered as part of the scheme has been shown to be generally in line with WCBC's parking requirements and is considered appropriate for the size and layout of the proposed development. The cycle parking provision also accords with WCBC's standards.

5 ACCESS BY SUSTAINABLE MODES

5.1 Introduction

- 5.1.1 National and local transport planning policy centres on the importance of sustainable development, meaning that new developments should be located in areas where there is access to sustainable modes of travel, or where sustainable modes of travel can be introduced. The *National Design Guide* (2021) defines sustainable transport modes as:

‘Any efficient, safe and accessible means of transport with overall low impact on the environment, including walking and cycling, low and ultra low emission vehicles, car sharing and public transport.’

- 5.1.2 Walking, cycling and public transport are commonly regarded to be the most sustainable modes of transportation. This section of the report will describe how the site can be accessed by these modes.

5.2 Access by Foot

- 5.2.1 As described in Section 3 above, the site is proposed to take access from an existing point on Clywedog Road South with a second access proposed circa 300m south from the first. The site is currently undeveloped open land. Footway provision and street lighting exist along the carriageway opposite the site. A separate pedestrian/cycle access is also to be provided onto Clywedog Road South to supplement the facilities provided at both of the main access points highlighted above.
- 5.2.2 Research has indicated that acceptable walking distances depend on several factors, including the quality of the street environment, the type of amenity offered, the surrounding area, and other local facilities. The Chartered Institution of Highways and Transportation (CIHT) document entitled *Providing for Journeys on Foot* (2000) suggests walking distances which are relevant to this application. These distances are shown in Table 5.1.

Table 5.1: Suggested Acceptable Walking Distances

Criteria	Commuting (m)	Local Services (m)
Desirable	500	400
Acceptable	1000	800
Preferred Maximum	2000	1200

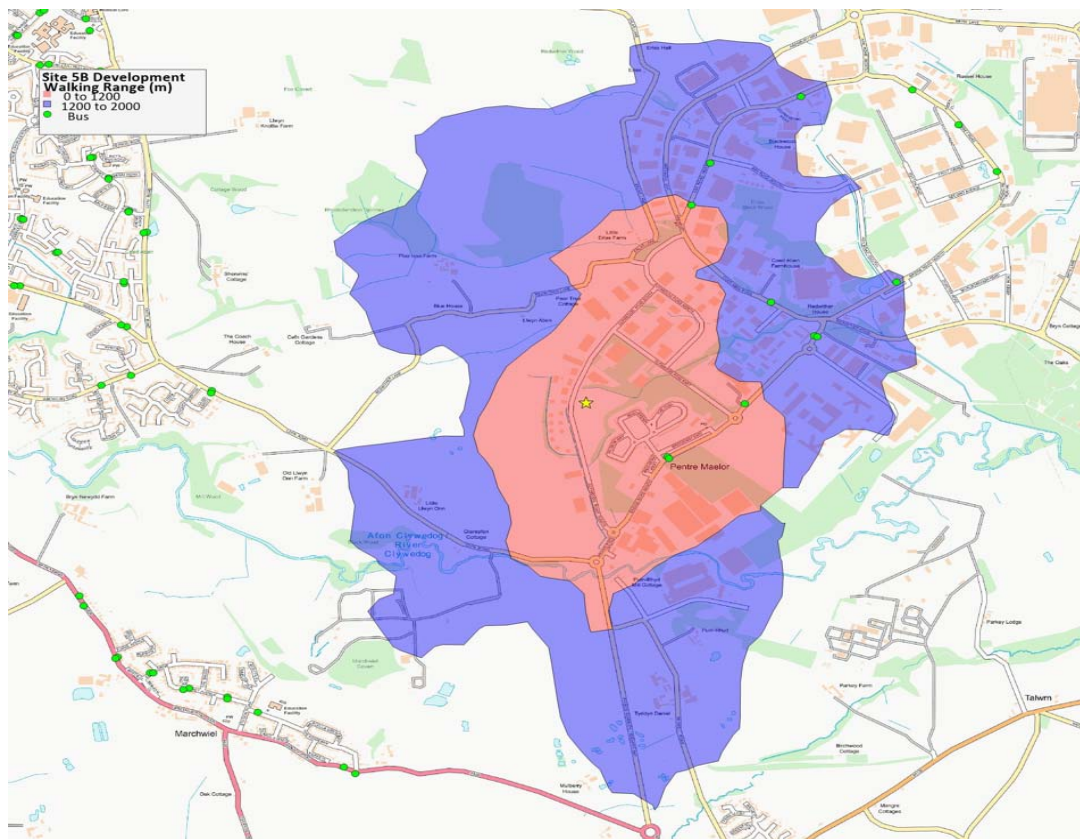
Source: CIHT Document ‘Providing for Journeys on Foot’ (2000)

- 5.2.3 Whilst Table 5.1 provides useful guidance on walking distances, Manual for Streets provides a context for interpreting them. Manual for Streets states that:

‘The propensity to walk is influenced not only by distance, but also by the quality of the walking experience. A 20-minute walk alongside a busy highway can seem endless, yet in a rich and stimulating street... it can pass without noticing.’

- 5.2.4 The accessibility for pedestrians to and from the site, in relation to WIE, has been considered in the above context. In order to highlight the site’s accessibility on foot, an indicative walking isochrone has been produced using the Geographic Information System (GIS) software Visography TRACC. Figure 5.1 represents the site’s walking catchment with the CIHT’s ‘Preferred Maximum’ distances of 1200m and 2000m for local service and commuting trips respectively illustrated.

Figure 5.1: Walking Isochrone – 1200m and 2000m ranges

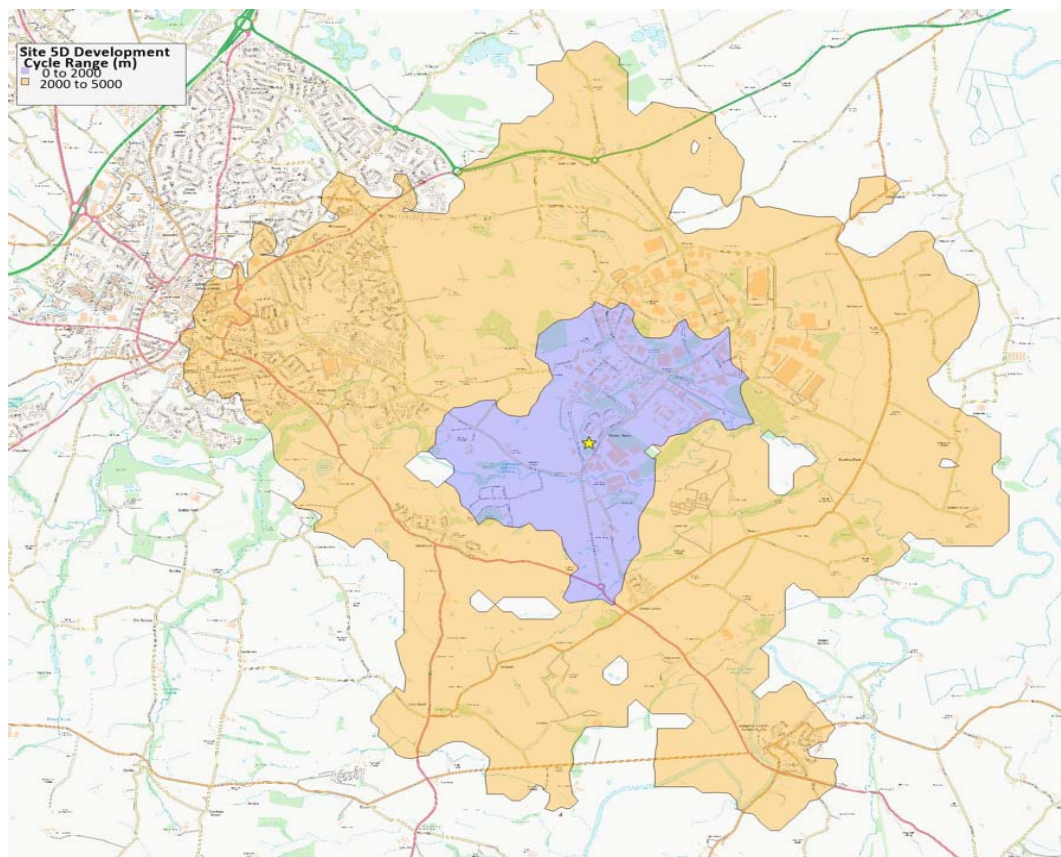


- 5.2.5 Seen within Figure 5.1, the site is accessible by the vast majority of WIE, with only a handful of units falling outside of the 2000m walking range, this being the preferred CIHT maximum distance. This includes the proposed and refurbished retail units on the Site 1 which are particularly important in serving the wider estate. Having such local amenities reduces the trip numbers and distances for ancillary retail use, such as lunchtime meals, tea/coffee breaks and convenience shopping, leading to higher levels of trip containment within the site, which is more sustainable than staff and visitors having to travel further distances, particularly by car, for such trip types.

- 5.2.6 The local bus stops are highlighted within Figure 5.1, with the nearest pairs of stops located on Bridge Road adjacent to the Clywedog Road East circa 800m walk from the site. The services provided by these bus stops are further detailed in Section 5.4 below.
- 5.2.7 All footways, as seen within Section 3, are of reasonable width and quality. Pedestrian dropped kerbs exist at the majority of junctions to aid in pedestrian movements.
- 5.2.8 Given the evidence presented above, walking can be considered a realistic method of travel to/from the site to access the surrounding area of WIE and vice versa.

5.3 Access by Cycle

- 5.3.1 It is widely recognised that cycling can offer an attractive alternative to short car trips, particularly those under 5km, but also as part of longer journeys by public transport.
- 5.3.2 The CIHT document Cycle Friendly Infrastructure (2004) states in paragraph 2.3 that:
- ‘Three quarters of journeys by all modes of travel are less than five miles (8km) and half under two miles (3.2km) (DoT 1993, table 2a). These are distances that can be cycled comfortably by a reasonably fit person.’*
- 5.3.3 Local Transport Note 1/20 Cycle Infrastructure Design states similar, that *‘Two out of every three personal trips are less than five miles [8km] in length – an achievable distance to cycle for most people’*.
- 5.3.4 It is noted that although no physical cycling infrastructure exists around WIE, the roads are wide, with the majority being a minimum 8m in width.
- 5.3.5 A cycling isochrone showing the site’s catchment has also been produced using TRACC and is shown as Figure 5.2. The figure illustrates 2000m and 5000m catchment ranges, which equate to 10-minute and 25-minute journey times respectively which are based on the somewhat conservative cycle speed of 12kph. Commuting cyclists are in fact more typically considered to travel at speeds between 15-20kph so a greater catchment may be more realistic.

Figure 5.2: Cycling Isochrone – 2000m and 5000m ranges

5.3.6 It is clear that the whole of WIE, eastern parts of Wrexham, Marchwiel and smaller residential areas such as Nant Clwyd Park are within the 5000m catchment. Whilst parts of Wrexham are outside of the 5000m distance, the site may still be within a reasonable cycling distances for many staff who live there given the CIHT and DfT advice.

5.3.7 It is considered that commuting to the site via cycling is a viable option for future employees. Appropriate levels of cycle parking will be provided in line with local standards.

5.4 Access by Public Transport

5.4.1 The nearest bus stops are known as the 'Bridge Road' stops and provide services both northbound and southbound towards Wrexham and around the industrial estate. They are located on Bridge Road adjacent to the Clywedog Road East circa 800m walk from the site.

5.4.2 The southbound stop provides a shelter, seating and timetable information, with the northbound stop being a bus stop 'flag'. A raised boarding area is provided at both stops which aid access for the mobility impaired.

5.4.3 A summary of the bus service available from these stops is provided in Table 5.2 with a copy of the timetable referenced at the time of writing provided in Appendix C of the TA.

Table 5.2: Summary of Bus Services from ‘Barclays Bank’ stop

Bus Service	Route	Weekday Period	Weekend
			Saturday
41a	Redwither Tower - Wrexham	06:06 – 18:12 Approx. 1 service/hr	06:06 – 18:12 Approx. 1 service/hr
	Wrexham – Redwither Tower	05:46 – 17:57 Approx. 1 service/hr	05:46 – 17:42 Approx. 1 service/hr

- 5.4.4 The 41a bus route shown in Table 5.2 above provides services to and from Wrexham with a frequent service of approximately one every hour on both weekdays and Saturdays and would be a viable option for commuters and visitors. Wrexham town centre can be reached in circa 20 minutes from the ‘Bridge Road’ stop, with a similar journey time from the town to Wrexham Industrial Estate.
- 5.4.5 In light of existing service times and frequencies, it is considered that existing bus services provide a realistic travel option for staff at the proposed development to travel to work during typical weekday working hours and also on a Saturday if it’s a requirement for the continual operation.
- 5.4.6 In respect of rail travel, Wrexham General train station can be reached via the abovementioned services with a short, circa 7-minute, walk from Wrexham bus station. The train station provides access to a wider range of locations, with Cardiff Central, Holyhead, Bidston, Birmingham International, Shrewsbury, Chester and Manchester all having services from this station. The station provides 20 bicycle storage spaces with 68 car parking spaces also provided¹.
- 5.4.7 The North Wales Metro project intends to enhance rail service frequencies across North Wales, with significant improvements to Wrexham’s stations being part of the plans, which should further encourage travel by rail in the area.
- 5.4.8 In summary, both bus and rail services, combined with walking/cycling as part of a multimodal commute are likely to provide a realistic travel options for commuters and visitors to the site at peak times and throughout the day.

5.5 Summary

- 5.5.1 This section of the report has demonstrated that the site is in a reasonably sustainable location where access to public transport is available and where local amenities fall within reasonable walking and cycling distances. The vast majority of WIE falls within a reasonable walking distance, indicating that the proposed amenities for this site will be accessible by the majority of workers on the estate rather than having to travel further afield by car for hot/cold food and convenience shopping.
- 5.5.2 The site is accessible via bicycle from the wider WIE and surrounding residential areas including Wrexham and Marchwiell.

¹ <https://www.nationalrail.co.uk/stations/WRX/details.html> accessed 10/09/21

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- 5.5.3 The local bus service provide connections both locally around the site and towards Wrexham town centre at traditional working times and throughout the day, making bus travel a viable option to and from the proposed development. As such, the development proposals accord with the context and thinking as outlined in *Wrexham Connected: Our Sustainable Urban Mobility Plan* (2016) and the *Wrexham Unitary Development Plan* (1996-2011)
- 5.5.4 In light of the location of the site and the existing walking, cycling and public transport infrastructure, it is considered that there are opportunities to access to the site by sustainable modes of travel.

6 TRANSPORT IMPLEMENTATION PLAN

6.1 Introduction

- 6.1.1 It is important that TP measures are appropriate for the developments and have realistic potential to influence the increased uptake of sustainable modes of transportation. It is also important that they can influence people in the short, medium and long term.
- 6.1.2 Not only should measures be realistic but it is important that resources are made available to help deliver them. Therefore, the roles and responsibilities of all parties involved, particularly WCBC Highways and the eventual Travel Plan Co-ordinator for the site, should be presented, discussed and agreed at the earliest opportunity.
- 6.1.3 This section presents potential measures to help maximise the accessibility of the site by sustainable model of travel. Some of these measures are collective and apply to all modes of sustainable transport while others are specific to each mode.

6.2 Welcome Packs

- 6.2.1 Welcome Packs will be provided for all staff upon first occupation of the developments. These will be produced by FIREM (or their consultant) with input from the WCBC Sustainable Travel team. Such packs will be essential to educating and informing future staff of both the sustainable transport modes available to them and the benefits they can have for them and their families including time and cost savings, supporting a healthy lifestyle and minimising their carbon footprint. They are therefore essential to the promotion of what this Framework TP aims to achieve.
- 6.2.2 Typically, the content a Welcome Pack would include:
- Introduction to the TP concept dealing with objectives and benefits;
 - Educational literature on the health benefits of walking and cycling and the environmental benefits of sustainable modes of transport;
 - Maps highlighting local walking and cycling routes and catchment plans indicating typical walking and cycling times to key destinations;
 - Public transport route maps and timetables; and
 - Details of the appropriate TP Co-ordinator.

6.3 Other Methods of Awareness Raising and Marketing

- 6.3.1 Aside from Welcome Packs, there are other effective ways to raise the awareness of and market the benefits of sustainable travel including:
- Personalised travel planning for individuals/staff, often arranged by a TP Co-ordinator;

- Establishment of local sustainable transport forums or groups where issues can be shared and solutions discussed. This could be at physical meeting or by using social media with website such as Twitter, Facebook and Streetlife having mass appeal and membership, yet having localised content and discussion groups;
- Set-up of travel notice boards in communal areas displaying information such as lists of sustainable travel websites, local taxi services and car clubs; and
- Promotion of events such as National Bike Week and Living Street's series of walking events including Walk to Work Week and Walk to School Week.

6.4 Measures to Encourage Walking

6.4.1 Walking is considered to be the most sustainable and accessible mode of travel. It also has the benefit of zero carbon emissions and significant health benefits, with doctors recommending 150 minutes of activity per week to keep your body healthy and prevent illness including heart disease, cancer and diabetes (<https://www.nhs.uk/live-well/exercise/>). The 150 minutes could be achieved by walking leisurely for 30 minutes per day, five days a week, or briskly for 10 minutes per day (<https://www.nhs.uk/live-well/exercise/walking-for-health/>). Furthermore, recent research from the University of Cambridge has discovered that just a brisk 20-minute walk each day, burning between 90 and 110 calories, could reduce the risk of premature death by between 16-30% for inactive individuals (<http://www.cam.ac.uk/research/news/lack-of-exercise-responsible-for-twice-as-many-deaths-as-obesity>).

6.4.2 Potential measures to encourage walking include the following:

- Raise awareness of the health benefits of walking for all ages of people of fair health, emphasising how it is a cost-effective alternative to other exercise methods such as gym membership and does not involve a considerable change to people's day-to-day lifestyles;
- Promote the local walking routes available (through Welcome Packs and notice boards) including off-road public rights of way;
- Ensure the clear signage of pedestrian routes within and adjacent to the site;
- Provision of discount vouchers for redemption at local outdoor wear retailers; and
- Promotion of a 'walking buddy' scheme (through Welcome Packs, notice boards and social media).

6.5 Measures to Promote Cycling

6.5.1 Like walking, cycling is sustainable and accessible. It has the benefits of zero carbon emissions and has significant health benefits.

6.5.2 The NHS website (<https://www.nhs.uk/live-well/exercise/cycling-for-beginners/>) outlines the health benefits of cycling stating that, 'For health benefits, adults and older adults should do at least 2 hours

and 30 minutes (150 minutes) of moderate-intensity activity each week...A 30-minute ride will count towards your recommended weekly activity target’.

6.5.3 The website also makes the pertinent point that cycling has broad appeal with young and old, the able-bodied and people with disabilities who can all enjoy cycling with the right equipment.

6.5.4 Potential measures to encourage cycling include the following:

- Raise awareness of the health benefits of cycling for all ages of people with fair health, again emphasising how it is a cost-effective alternative to other exercise methods and promoting the ‘fun’ element of cycling;
- Promote the local cycling routes available and cycle storage facilities at key destinations such as in district centres (through Welcome Packs and notice boards);
- Promotion of events such as National Bike Week (www.bikeweek.org.uk);
- Promotion of a Bicycle User Group (BUG) (through Welcome Packs, notice boards and social media) which could include cycle proficiency courses; and
- Discounts on cycles and cycle accessories.

6.6 Measures to Encourage Public Transport

6.6.1 Public transport use and accessibility is an important element of TPs. Public transport can often be effective options for many trip types, particularly mid to long distance journeys. Section 5 of this report has demonstrated that bus travel should be a suitable and convenient mode of transport for visitors/staff travelling to/from the site. Rail, in conjunction with another mode may also be convenient for some longer distance staff and visitor trips particularly following the completion of the North Wales Metro project.

6.6.2 The key measure to promote bus and rail use will be through the provision of route and timetable information in Welcome Packs, on notice boards and at the stops themselves. Discount tickets or other fare incentives, as mentioned above, could be provided in Welcome Packs for a period of time.

6.7 Measures to Reduce Single Occupancy Car Trips

6.7.1 Car/lift sharing can be an effective way to reduce single occupancy car trips. These trips can often be arranged between friends and neighbours or by using lift sharing websites including the following:

- Liftshare (<https://liftshare.com/uk>); and
- GoCarShare (<http://gocarshare.com>).

6.7.2 The Liftshare websites enable users to register and search for lifts in their area. Users typically have to be over 18 years of age but do not always have to have driving licences (as passengers). Websites such as these can be promoted through Welcome Packs, notice boards and social media.

- 6.7.3 Staff could also manage their own lift sharing as many staff are likely to travel to and from destinations within close proximity of each other. There is potential for the TP Co-ordinator to co-ordinate this through the provision of a database containing staff address details, mode of travel to work, and their willingness to car share, collected for all existing staff and new joiners.

6.8 Reducing the Need and Distance to Travel

- 6.8.1 Section 5 of this TP has described how the site is well-located in terms of being within walking and cycling distance to existing residential areas. It also demonstrated how public transport services may provide a viable and convenient mode of travel.

6.9 Management

- 6.9.1 The overall responsibility for TP implementation will lie with future occupant of the site, who would appoint a member of staff to take on the role of TP Co-ordinator. The appointment and role of a TP Co-ordinator is covered more in Section 6.10. The TP Co-ordinator will take ownership of the Travel Plan, ensuring the measures and initiative outlined herein are implemented and staff encouraged/incentivised to travel by alternative modes of transport to the private car.
- 6.9.2 The TP co-ordinator of the site will be expected to be the point of contact with the local planning/highway authority who together will ensure the continual progression of the TP.

6.10 Appointment of a Travel Plan Co-ordinator

- 6.10.1 It is envisaged that the future occupant of the site will appoint a Travel Plan Co-ordinator (TPC) prior to opening of the initial phase of the development. It is likely that the individual appointed to undertake the role would be a member of the company's management team as they will be a key decision maker on day-to-day matters of the TP implementation. The management level status of the TPC will also ensure that credibility is given to the adoption of measures that are implemented to encourage use of non-car modes.
- 6.10.2 The role of the TPC is likely to include but not be exclusive to the following:-
- To promote and encourage the use of travel modes other than the car, including the distribution of publicity material;
 - To provide a point of contact and travel information for staff;
 - To ensure that all relevant information is provided to all new members of staff and that up to date information is clearly displayed on the Travel Plan boards;
 - To ensure that relevant information is made available to customers via the customer travel notice board (if applicable) and updated as necessary;
 - To co-ordinate any lift-sharing scheme, bicycle user group and walking buddy scheme;
 - To arrange for travel surveys to be undertaken where necessary; and

- To provide a point of contact with transport operators and officers of the council.

6.10.3 It is difficult to estimate the resource requirement for the TPC and what proportion of their working time will be required for the management of the TP, as much of the input will be required on an intermittent basis. Therefore, for the first year of the plan's operation it is proposed that the TPC will review and programme necessary TP work in conjunction with their other responsibilities on a monthly basis. The success of this approach will be evaluated as part of the first annual review of the plan.

6.11 Monitoring and Review

6.11.1 It is important that TP implementation is monitored at regular intervals to assess success and help to evolve TP measures. It is envisaged that the TPC of the site will monitor the TP at regular intervals over a period of time and will most likely be post 100% occupation. Following the agreed 'trigger point' described above, this should be undertaken on an ongoing basis by the TPC.

6.11.2 The most effective form of review will be the undertaking of staff travel surveys which would not only ask how individuals travel to work at that time but also if they have considered the use of other modes previously or would consider them in the future. The main purpose of the surveys is to gain an understanding of the numbers travelling by the various modes of transport but also to ascertain what barriers exist to using more sustainable modes of travel. Understanding the barriers is helpful in determining if there are solutions to those barriers being removed.

6.11.3 The TP will need to be reviewed at regular intervals after monitoring is complete, looking at the take-up of each measure and progress against modal share targets. The review should entail the removal of any unsuccessful incentives and replace them with measures that will help to achieve the TP targets. If a TP is shown to be underachieving, a remedial strategy will need to be outlined which should consider measures to address any failing aspects of the TP. Any changes to a TP will need to be made in agreement with WCBC.

6.12 Interim Action Plan

6.12.1 We have produced an interim action plan of actions likely to be undertaken prior to and following the occupation of the site. It should however be noted that this is only indicative at this stage as the future occupant of the site should produce a Full Travel Plan following occupation, which should provide more detailed information on the TP actions and measures.

Table 6.1: Interim Action Plan

Stage	Action
3 months prior to occupation	Appoint Travel Plan Coordinator (TPC) and inform WCBC of contact details
	Prepare Welcome Packs and arrange printing
Occupation of unit	Arrange for Welcome Packs to be presented to new owners with keys to units
	Provide sustainable travel vouchers on request and collate information on feedback forms
3 months after occupation	Undertake travel surveys and collate and report results to WCBC
Annually for five years	Repeat travel surveys and if targets not met provide further sustainable travel vouchers and personal travel planning advice