

Whitmore High School, Barry

Travel Plan

Vale of Glamorgan Council

Project number: 60571313

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1. Introduction

1.1 Introduction

- 1.1.1 AECOM was commissioned by the Vale of Glamorgan (VoG) Council to provide transport planning and highways advice to inform a planning application for application for the proposed new development of Whitmore High School (WHS). The location of the site is shown on **Figure 1.1**.
- 1.1.2 This document provides a Travel Plan (TP) aimed at facilitating and encouraging sustainable transport and the reduction of single occupancy vehicle use for staff, parents, pupils and visitors to the School.
- 1.1.3 This is an interim document which sets out the scope and initial objectives, measures and targets of the TP prior to the opening year of the refurbished development. Upon opening, the content of this document will be updated and tailored to the specific requirements of the development to form a Full TP.

1.2 What is a Travel Plan?

- 1.2.1 TPs are a way of promoting sustainable travel behaviour through a range of mechanisms, initiatives and targets that when combined can help to reduce unnecessary travel and encourage journeys to be undertaken in a more environmentally sustainable way.
- 1.2.2 For new and refurbished developments, it is important that sustainable travel measures are in place prior to opening of a new development as travel habits in favour of walking, cycling and public transport are more readily established from the outset.
- 1.2.3 It should be noted that a TP is a document that will evolve over time as additional information becomes available and the travel habits of staff/parents/pupils change.

1.3 Benefits of Travel Planning

- 1.3.1 Benefits of implementing a TP can include:
 - Increased travel choice: TPs can increase personal travel choice by promoting existing and providing additional sustainable travel options;
 - Health benefits: Many alternative forms of travel involve an element of physical activity that can help improve the physical health and mental wellbeing of users of a development. For employers, this can also reduce the number of days lost to staff illness;
 - Public/environmental responsibility: A decrease in the number of vehicle trips results in cleaner air and eases congestion both in the development and on the local highway network. As a result of the reduced number of car movements, the site may also become more attractive for pedestrians and cyclists;
 - Positive publicity: TPs can generate positive publicity and improve the environmental image of an
 organisation, an area or a development. It demonstrates to residents living in the surrounding
 areas that the organisation/developer is committed to limiting single occupancy car trips and
 promoting sustainable travel options; and
 - Financial savings: Users of a development can make savings by switching to or encouraging travel by non-car modes. For staff employed on a site, this is primarily related to reduced fuel consumption and vehicle depreciation.

1.4 Policy Context

1.4.1 This document has been prepared in accordance with *Technical Advice Note (TAN) 18: Transport*, published by the Welsh Government (WG). TAN 18 sets out technical guidance for the transport related elements of development and also confirms the WG's commitment to sustainable travel via the implementation of TPs for new developments.

1.4.2 TAN 18 states that the WG "wishes to promote the widespread adoption of travel plans by businesses, schools, hospitals, tourist attractions and other significant travel-generating uses".

1.5 Report Structure

- 1.5.1 The TP is structured as follows:
 - Section 2 Existing Situation and Site Accessibility: Examines the local transport conditions in the vicinity of the site and makes an assessment on the accessibility of the site to non-car modes of travel;
 - Section 3 Development Proposals: Provides a description of the development proposals, including the proposed means of access by all travel modes and parking provision;
 - Section 4 Scope, Objectives and Implementation: Sets out the scope and objectives for the implementation of the TP;
 - Section 5 Measures: Outlines the measures proposed in order for the TP to meet the objectives detailed in Section 4; and
 - Section 6 Targets and Monitoring: Sets out the initial mode share targets for the monitoring period, against which the success of the TP will be measured, and associated procedures for monitoring and evaluation.

2. Existing Situation and Site Accessibility

2.1 Introduction

2.1.1 This section of the TP provides a description of the site location and its existing usage, the local highway network and accessibility to non-car modes of travel.

2.2 Site Location and Existing Usage

- 2.2.1 The site is situated in Barry, within the VoG. It lies to the south of the A4226 and west of the A4050, around 2km to the north of Barry Town Centre. Cardiff and Cowbridge lie approximately 16km and 21km to the northeast and west respectively. Residential areas are located to the east, south and west. Barry Hospital and Yysgol Gymraeg Bro Morgannwg (YGBM), a Welsh Medium Primary and Secondary school site, are located immediately to the south of the site. The location of the site and the surrounding area is shown on **Figure 1.1**.
- 2.2.2 The site is occupied by the existing WHS (formerly known as Barry Comprehensive School, an all-boys school) and associated playing fields and sports pitches. WHS is now a co-educational school with a consolidated sixth form with PHS (previously known as Bryn Hafren Comprehensive School, an all-girls school) located to the northeast.

2.3 Local Highway Network

- 2.3.1 The local highway network is shown on **Figure 1.1**. The site is accessed from the A4226; the access comprises separate entrance-only and exit-only junctions with the A4226, which are connected via an internal road approximately 180m in length. The internal road provides access to the school car park. The internal road has a carriageway width of 5.5m. There is a footway on the south side of the carriageway which connects the school car park with a coach waiting area. It is subject to a 5mph speed limit and street lighting is provided.
- 2.3.2 The WHS entrance forms a priority-controlled crossroads junction with the A4226 and access to Barry Fire Station. The A4226 forms the north-eastern and south-western arms, the WHS entrance forms the south-eastern arm, and the access to Barry Fire Station forms the north-western arm. There is a dropped kerb crossing across the WHS junction bell-mouth entrance.
- 2.3.3 The internal site layout consists of a bus drop-off point at the school entrance, shortly after entering the site. This currently facilitates three school buses. The existing car park is immediately southwest of the existing school site and currently comprises the following provision:
 - 102 staff parking spaces;
 - 7 visitor spaces;
 - 2 disabled spaces; and
 - 4 mini-bus spaces.
- 2.3.4 The WHS exit forms a signal-controlled crossroads junction with the A4226 and Stirling Road. The A4226 forms the north-eastern and south-western arms, the WHS exit forms the south-eastern arm, and Stirling Road forms the north-western arm. Stirling Road serves residential areas, retail (e.g. Tesco Supermarket) and health (e.g. Highlight Park Medical Practice) land uses. There is a dropped kerb crossing with tactile paving across the WHS bell-mouth exit.

- 2.3.5 The A4226 is a single carriageway road subject to a 40mph speed limit. It has a minimum carriageway width of 9m where it passes the site, but this includes hatching, such that the typical effective carriageway width is around 6m. There is a continuous footway on the north side of the carriageway of 2m minimum width. There is a shared footway/cycleway on the south side of the carriageway. Crossing facilities in the vicinity of the WHS entrance/exit include an uncontrolled crossing, located around 20m southwest of the WHS entrance; this comprises dropped kerbs, tactile paving and a central island, allowing for crossing movements to be undertaken in two stages. A signal-controlled crossing is located around 140m northeast of the WHS entrance. There are no parking restrictions on the A4226 or on the residential streets in close proximity to the school. Due to the speeds on the A4226, these residential streets provide temporary safe pick-up/drop-off locations for parents.
- 2.3.6 The A4226 is one of the key highway links in the wider area. To the southwest, it serves Cardiff Airport and also provides a connection to the A48. To the northeast, it connects to the A4050; this provides a connection between the A48 and A4232 at Culverhouse Cross (Cardiff) to the north, and connects with the A4231 to the east, which provides access to industrial land to the southeast.
- 2.3.7 The A4050/A4226 corridor within Barry is a single carriageway road subject to a 40mph speed limit, enforced through speed cameras. There is a shared footway/cycleway on the south side of carriageway, with crossing facilities provided on side roads. There is also footway on the north side of the carriageway along most of the corridor, with non-provision generally limited to a section east of Merthyr Dyfan Road (MDR). Other key junctions along the corridor and not already referenced in the preceding paragraphs include the A4050/A4231, A4050/A4226 and A4226/B4266 roundabouts junctions, and the A4050/MDR signal-controlled junction.

2.4 Walking and Cycling

- 2.4.1 As identified in **Section 2.3**, the local area to the site provides a network of footways and cycleways and pedestrian/cycle infrastructure which facilitate active travel for users of the site. A site visit was undertaken on Tuesday 20th November 2018 to establish the quality of the walking and cycling routes surrounding and facilitating WHS.
- 2.4.2 There is a footway and shared footway/cycleway on the north and south sides of the A4226 respectively. Crossing movements are facilitated through the provision of both controlled and uncontrolled crossing facilities. The surrounding residential areas generally have footways on both sides of the carriageway, in good condition and street lighting is provided.
- 2.4.3 There is a pedestrian/cyclist access to the site from the A4226, located around 120m northeast of the A4226/entrance to WHS junction, with an additional access via an off-road shared footway/cycleway link between the A4226 and A4050 (connecting to the A4050 at the A4050/access road serving Barry Hospital and YGBM signal-controlled junction). This provides a more direct link than car modes for trips to/from the south and is designated as a Public Right of Way (PRoW) (Reference: B1/25/1).
- 2.4.4 Another access to the school is via a footpath via the residential development to the southwest of the site. This can be accessed via Elan Close and continues north until it reaches the school playing fields. The footpath continues northwest along the boundary of the school playing fields, separated by a metal fence. It then continues northeast and runs parallel to the A4226 until it accesses the school grounds at the vehicular exit.

2.5 Local Facilities

- 2.5.1 The Institution for Highways and Transportation's (IHT's) *Guidelines for Providing for Journeys on Foot*, published in 2000, identifies that 2km is the preferred maximum distance that people will walk for commuting and education purposes. Cycling has been identified as having the potential to replace car trips of up to 5km. 5km equates to approximately a 20 minute journey by bicycle.
- 2.5.2 **Figure 2.1** shows a 2km walking catchment from the site. From a pupil and staff perspective, this is primarily related to the distance travelled from their place of residence. This shows that there is a significant level of residential development within walking distance. Areas beyond this located in Barry are within cycling distance.

2.5.3 It is also important for other day-to-day facilities such as retail and health facilities to be within walking and cycling distance. The distance and indicative walking/cycling times to these facility types are set out in **Table 2.1** and the locations of the facilities shown on **Figure 2.1**. This shows there is a range of retail and health facilities within active travel distances of the site.

Table 2.1: Accessibility to Local Facilities

	Local Facilities	Walking A	ccessibility	Cycling Accessibility		
	Local Facilities	Distance (m)	Time (Minutes)	Distance (m)	Time (Minutes)	
1	Highlight Park Medical Practice (Stirling Road)	350m	4 minutes	350m	1 minute	
2	Tesco Supermarket (Stirling Road)	500m	6 minutes	500m	1½ minutes	
3	Barry Hospital	600m	7 minutes	600m	2 minutes	
4	One Stop Convenience Store (Winston Road)	650m	7½ minutes	650m	2 minutes	
5	Barry Town Centre	2,600m	31 minutes	2,700m	8 minutes	

Note: Distances are approximate and measured from the centre of the site and along existing footways and cycleways.

2.6 Public Transport

Introduction

2.6.1 Existing public transport services operating in the vicinity of the site have been identified with reference to current timetable and routeing information.

Bus Services

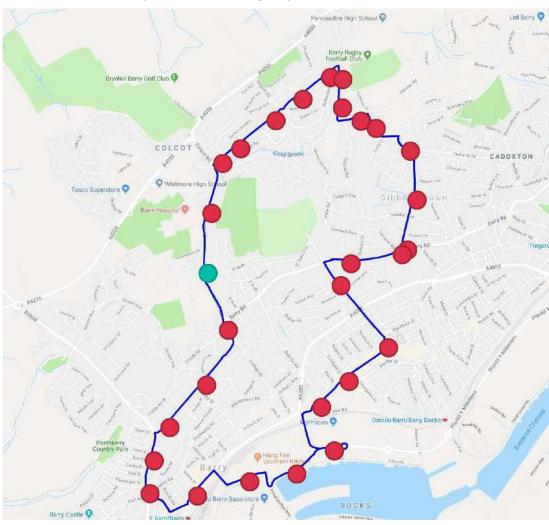
- 2.6.2 The nearest bus stops to the site are the 'Highlight Park' bus stops on the A4226, located within 100m north of the site, equating to a one minute walk. The bus stops comprise bus shelters and off-line bus laybys. Services can also be accessed from the 'Hospital' bus stops on the A4050, located around 550m southeast of the site, equating to a 6½ minute walk.
- 2.6.3 The IHT's *Guidelines for Providing for Public Transport in Developments*, published in 1999, suggests 400m as the acceptable walking distance to a bus stop. The 'Highlight Park' bus stops are therefore considered to be well within acceptable walking distance from the site. The 'Hospital' bus stops are located just beyond the suggested acceptable distance; however, the guidelines state that this does not need to be slavishly adhered to, rather it is more important to provide services that are easy to understand and attractive to use.
- 2.6.4 **Table 2.2** provides a summary of all bus services accessed from these bus stops.

Table 2.2: Bus Service Information

Service	Route	Direction	Days	First Service	Last Service	Approximate Frequency
		- Towards Barry	Mon-Fri	08:25	23:14	30 minutes
			Sat	08:14	23:14	30 minutes
96/96A	Cardiff – Barry		Sun	09:50	23:10	60 minutes
90/90A	Cardin – Barry		Mon-Fri	07:00	22:58	30 minutes
		Towards Cardiff	Sat	07:00	22:58	30 minutes
			Sun	10:03	23:58	60 minutes
		Clockwise	Mon-Fri	08:09	16:49	30 minutes
97/97A	Porne Porne	Ciockwise	Sat	09:39	16:09	30 minutes
91/91A	Barry – Barry	Anticlockwise	Mon-Fri	07:41	16:51	30 minutes
		Anticiockwise	Sat	09:11	15:41	30 minutes
400	Merthyr Dyfan –	Towards Highlight Park	Sun	12:34	23:39	60 minutes
100	Highlight Park (via Barry)	Towards Merthyr Dyfan	Sun	11:34	22:34	60 minutes
	Bridgend – Barry	Towards Barry	Mon-Sat	07:30	01:00	60 minutes
303			Sun	07:47	00:27	120 minutes
303		Towards Bridgend	Mon-Sat	07:31	00:01	60 minutes
			Sun	07:04	23:30	120 minutes
			Mon-Sat	04:32	23:02	30 minutes
Т9	Cardiff – Cardiff	Towards Cardiff Airport	Sun	05:32	23:02	30 minutes
19	Airport	Towarda Cardiff	Mon-Sat	05:05	00:05	30 minutes
		Towards Cardiff	Sun	06:05	00:05	30 minutes
		Towards Llantwit Major	Mon-Fri	06:30	18:15	2 services
X91	Cardiff – Llantwit Major (via	Towards Llantwit Major	Sat	08:57	16:47	2 services
\31	Leckwith)	Towards Cardiff -	Mon-Fri	07:41	19:30	2 services
			Sat	10:08	18:08	2 services

Notes

- 1. Information obtained from Traveline Cymru (November 2018).
- 2. Times for first/last service on Services 96/96A and 97/97A are the arrival/departure times at/from the 'Hospital' bus stops on the A4050.
- 3. Times for first/last service on Services 100, 303, T9 and X91 are the arrival/departure times at/from the 'Highlight Park' bus stops on the A4226.
- 4. Services 96/96A, 97/97A and 100 are operated by Cardiff Bus. Services 303 and T9 are operated by New Adventure Travel. Service X91 is operated by Capital Links/Cardiff Bus.
- 2.6.5 **Table 2.2** shows that the 96/96A, 97/97A and T9 services offer frequent weekday services. This includes regular services to Cardiff. Hourly services are also available to/from Bridgend. The 97/97A is one of the key services within Barry; it takes a circular route that serves numerous residential areas and key destinations within Barry, including the town centre and railway stations. The route is shown on the extract below.



Route of Service 97/97A (Source: Traveline Cymru)

- 2.6.6 In addition to these services, there are numerous school transport services that provide specifically for pupil travel to/from the site. These are as follows:
 - S2 From Barry Island (also serves YGBM);
 - S10 From Holton Road via Barry (also serves PHS and YGBM);
 - S11 From East Aberthaw and Rhoose; and
 - S14 From Broad Street, Barry (also serves PHS).
- 2.6.7 This assessment of bus service provision within walking distance of the site shows that there are opportunities to replace car trips from the surrounding area. An assessment of the accessibility of the site to these bus services has been undertaken using the 'Accessibility Index' (AI) calculator and associated methodology contained within the BREEAM guidance (a scheme for assessing the sustainability credentials for the built environment). This involves establishing the average number of services per hour from compliant transport nodes during a site's operating hours. For schools, a five-hour operating period is specified (from 07:30-10:00hrs and 15:00-17:30hrs). Compliant bus stops are those within 650m of a site. Where bus services are duplicated across bus stops, they should be included only once. For bi-directional services, average frequency should be calculated for one direction only.
- 2.6.8 The AI calculations are contained in **Appendix 2.1**. The average number of services per hour for services 303 and T9 has been based on the 'Highlight Park' bus stops, within 100m of the site; this is identified as 'Node 1'. The average number of services per hour for services 96/96A and 97/97A has been based on the 'Hospital' bus stops, located 550m from the site; this identified as 'Node 2'. The input of the frequencies at these nodes results in an **AI** of **3.35**.

Rail Services

- 2.6.9 There are four railway stations serving Barry; these are Barry, Barry Island, Barry Docks and Cadoxton. All stations are located on the Barry Branch line between Cardiff Central and Barry Island. Barry is also the junction at the start of the VoG line which serves Rhoose and Llantwit Major and terminates at Bridgend.
- 2.6.10 The nearest station to the site is Barry; this is located approximately 2.6km walk (equating to 31 minutes) or 2.7km cycle (equating to 8 minutes) to the southeast of the site. The station can also be accessed via the 97/97A bus service. The station is managed by Transport for Wales. **Table 2.3** shows that regular services to key destinations are accessible from Barry railway station.

Table 2.3: Railway Service Information

Direction	Days	First Service	Last Service	Approximate Frequency
	Mon-Fri	05:44	23:54	15 minutes
Cardiff Central – Barry	Sat	05:44	23:53	15 minutes
	Sun	08:49	22:49	15-30 minutes
	Mon-Fri	05:19	23:15	15 minutes
Barry – Cardiff Central	Sat	05:19	23:15	15 minutes
	Sun	09:00	23:00	15-30 minutes
	Mon-Fri	06:04	23:06	60 minutes
Barry – Bridgend	Sat	06:05	22:05	60 minutes
	Sun	09:05	21:05	120 minutes
	Mon-Fri	06:15	23:15	60 minutes
Bridgend – Barry	Sat	06:15	23:15	60 minutes
	Sun	10:15	22:15	120 minutes

Notes:

- 1. Information obtained from National Rail timetable (November 2018).
- 2. Services times are arrival/departure times at/from Barry.
- 2.6.11 The site is considered to have a good accessibility via railway services. The provision of direct services is a considerable benefit to encouraging sustainable travel for site users and an alternative to travelling by vehicle.

2.7 Summary

- 2.7.1 The site is situated in Barry, within the VoG. It lies to the south of the A4226 and west of the A4050, around 2km to the north of Barry Town Centre. Cardiff and Cowbridge lie approximately 16km and 21km to the northeast and west respectively. Residential areas are located to the east, south and west. Barry Hospital and YGBM, a Welsh Medium Primary and Secondary school site, are located immediately to the south of the site.
- 2.7.2 The site is occupied by the existing WHS (formerly known as Barry Comprehensive School, an all-boys school) and associated playing fields and sports pitches. WHS is now a co-educational school with a consolidated sixth form with PHS (previously known as Bryn Hafren Comprehensive School, an all-girls school) located to the northeast.
- 2.7.3 The local highway network to the site includes the WHS access road, the A4226, Stirling Road and the A4050.
- 2.7.4 The site benefits from existing provision for pedestrians and cyclists in the locality; this includes footways on both sides of the majority of roads surrounding the site, with some allowing for shared use. Local facilities are located within walking and cycling distance of the site.

- 2.7.5 Bus services are accessible from bus stops located on the A4226, which are within the IHT's suggested 'acceptable' walking distance. Other services are accessible from bus stops located on the A4050; while these are slightly beyond the suggested 'acceptable' walking distance, it is considered that site users would be willing to walk the additional distance given the frequency of services. Both bus stops provide access to frequent weekday services, including those to Cardiff and local routes that serve numerous residential areas and key destinations within Barry, including the town centre and railway stations. There are also numerous school transport services that provide specifically for pupil travel to/from the site.
- 2.7.6 Rail services are available from numerous railway stations in Barry, the nearest being Barry. This provides accesses to high frequency services to/from Cardiff Central (every 15 minutes on weekdays) and reasonable frequency services to/from Bridgend (every hour on weekdays). Overall, the site is considered accessible by sustainable modes.

3. Development Proposals

3.1 Introduction

3.1.1 This section of the report provides a description of the development proposals, including the site access strategy.

3.2 Overview of Proposals

- 3.2.1 The proposed development takes the form of a new school on the site of the existing WHS, which is proposed to be demolished. The masterplan is shown at **Appendix 3.1**. Additional proposals include:
 - Facilities for the sixth form pupils;
 - Specially Resourced SEN Provision; and
 - A sports hall that will be considered for community use.
- 3.2.2 The existing school, rebranded as WHS, currently has 905 pupils enrolled with a permitted capacity of 1,423 pupils. The new school site is proposed to enrol 1,100 pupils, of which 200 are sixth form. The proposed total staff numbers are 89, 56 of which are teaching staff.
- 3.2.3 The SEN provision will be housed within the main body of the school; the Specially Resourced Provision for pupils with additional needs due to autism, will be part of the mainstream school but may need access to additional space such as small groups and 1:1 rooms and quiet areas.
- 3.2.4 The site is situated southwest of a large green space; Colcot Sports Centre. There is potential for these bodies (Sports Centre and School) to merge links and potentially utilise facilities around a timetabled agreement.
- 3.2.5 YGBM, the neighbouring site, is also undergoing development in line with 21st Century Schools. This could result in a sharing of knowledge and land expansion could occur in other directions other than solely towards the sport centre.

3.3 Phases

3.3.1 The school is proposed to be built in a number of phases, this is required in order to ensure the existing school can continue to operate while the new school building and associated facilities are being constructed.

3.4 Access Strategy

Vehicle Access

- 3.4.1 The existing site access comprises separate entrance-only and exit-only junctions with the A4226, which are connected via an internal road approximately 180m in length; the existing coach drop-off takes place along the western entry road. The access strategy for the new school is proposed to remain broadly the same as the existing arrangements with internal modifications for general parking, bus parking and circulation.
- 3.4.2 An observation of network operation confirms that there are currently no issues of congestion occurring on the A4226 due to this access arrangement.

- 3.4.3 It is proposed to develop shared school bus drop-off facilities with the neighbouring YGBM; this will be located immediately southwest of the WHS, just outside of the site boundary. This is being progressed in anticipation that the YBGM proposals will follow a similar application timeline and be of benefit to the wider highway network by removing large PSV movements from the shared hospital and YGBM access. The additional 14 buses which will be provided for on WHS for YGBM will arrive using the same vehicular access; two of these buses already access WHS in the existing situation. The proposed internal circulation changes will facilitate YGBM buses to continue along the WHS access road to a new layout of bus drop-off/pick-up area, situated immediately southwest of the car park. The proposals for this arrangement can be seen on the masterplan for YGBM, contained in **Appendix 3.2**.
- 3.4.4 The topography of the site is fairly flat, so access is easy for all for transfer from school transport; any areas of ascension will have a ramp provided for those that are mobility impaired.
- 3.4.5 Bollards and gates will be used at entrance points in combination with perimeter fencing to create a consistent and secure boundary whilst not creating an oppressive atmosphere. Where possible, boundaries will be softened using landscaping techniques and planting. Natural surveillance from surrounding walkways and windows will be used where possible to create a sense of supervision and safety. This will be balanced against the need for more enclosed areas that provide an element of privacy for study/relaxation/reflection.
- 3.4.6 All pick-up/drop-off points provide areas for boarding/alighting buses, with safe pedestrian access to/from the WHS school building and YGBM.

Pedestrian and Cycle Access

- 3.4.7 It is proposed that people of all abilities shall be able to easily enter into and move through the landscape and each space within it via level or ramped entry points where necessary. Existing footpaths may be re-aligned to suit new desire lines and entry points.
- 3.4.8 The masterplan includes a safe and convenient network of footways into the school. Pedestrian access will be via the existing main pedestrian access off the A4226 to the northeast, with a new internal pathway providing a connection to the new school building. A new pedestrian access will be provided from the southwest, located approximately 50m northwest of the A4226/exit from WHS/Stirling Road signal-controlled junction. Zebra crossings will be introduced across the school access road to facilitate pedestrian movements to/from this access point.
- 3.4.9 There are footpaths within the site, generally surrounding the building. The school buses will drop-off pupils at the front of the school, providing direct access to the school entrance.

3.5 Parking Provision

Car Parking

- 3.5.1 The existing car park is immediately southwest of the existing school site and currently comprises 102 staff parking spaces, 7 visitor spaces, 2 disabled spaces and 4 mini-bus spaces.
- 3.5.2 The proposals for the school are for a new school building, with the existing being demolished. Additional facilities include; facilities for SEN, sixth form and a sports hall considered for community use. It is proposed that 116 car parking spaces are provided at the school, to be located southwest of the new school building. This provision is comparable to the existing school and would be used for staff parking along with parents dropping off and picking up within the school grounds rather than on the A4226. The sports facilities are proposed to be used for community use and therefore it would be necessary to provide parking facilities to support this use.
- 3.5.3 The VoG Parking Standards 2015 have been used to assess disabled parking at the proposed school. Parking provision advice for disabled blue badge holders does not specifically mention the school planning land use class. Instead, the requirement is set out as 5% for employment parking and one space (minimum) plus 6% for parking open to the general public. On this basis, the requirement for 5% would be most appropriate for these proposals, which equates to six spaces. The proposals allow for this level of provision, with these spaces proposed to be the most conveniently located in terms of proximity the school entrance. Two spaces are also designated for use by electric vehicles for charging.

3.5.4 The standards also state that there be one parking space allocated for a commercial vehicle, three spaces allocated for visitors with motorcycle parking to be provided at a level of 5% of the car parking provision, which equates to six spaces. Whilst there is no specific provision for commercial vehicles, it is considered reasonable that these vehicles use the bus layby serving WHS; movements associated with commercial vehicles will generally occur outside of the drop-off/pick-up periods and therefore demand from these vehicles is unlikely to coincide with that from buses. Visitor spaces are allowed for in the total car parking provision. An area sufficient for six motorcycles to park will be provided; this will be located between the disabled and electric vehicle spaces.

Cycle Parking

- 3.5.5 The VoG Parking Standards 2015 have also been used to assess the cycle parking at the new school. The standards state that cycle parking should be located in a safe, secure and convenient location and for reasons of security, cycle parking facilities should be located in areas that are visible and therefore allow for informal surveillance.
- 3.5.6 **Table 3.2** summarises the level of cycle parking provision required for the proposed development based on the standards.

Table 3.2: Cycle Parking Standards

Development Type	Sub-Category	Cycle Parking Type	Standard	Provision Required
	Secondary Schools &	Short Stay	1 stand per 100 students	11
Education	Colleges of Further	Lana Ctav	1 stand per 5 staff	18
	Education	Long Stay	1 stand per 6 students of age 17	34
			Total	63

3.5.7 The parking standards require provision for 63 cycle spaces. It is proposed to provide 64 spaces, to be located near the main entrance.

3.6 Summary

- 3.6.1 This chapter has provided a description of the development proposals, including the site access strategy.
- 3.6.2 The proposed development takes the form of a new school on the site of the existing school, which is proposed to be demolished, with additional proposals including:
 - Facilities for the sixth form pupils;
 - Specially Resourced SEN Provision; and
 - A sports hall that will be considered for community use.
- 3.6.3 The new school proposes to enrol 1,100 pupils (of which 200 are sixth form), which is within what is consented on the site (1,423 pupils). The proposed total staff numbers are 89, of which 56 are teaching staff.
- 3.6.4 The school is accessed off the A4226, where there are currently no observed issues of congestion pertaining to this access arrangement. As part of the WHS site masterplan, it is proposed to develop shared school bus drop-off facilities with the neighbouring YGBM. This is being progressed in anticipation that the YBGM proposals will follow a similar application timeline and be of benefit to the wider highway network by removing large PSV movements from the shared hospital and YGBM access. The additional 14 buses for YGBM (of which two already access WHS in the existing situation) will arrive using the same vehicular access and continue to a proposed bus drop-off/pick-up location, situated immediately southwest of the car park.

- 3.6.5 The masterplan includes a safe and convenient network of footways into the school. Pedestrian access will be via the existing main pedestrian access off the A4226 to the northeast, with a new internal pathway providing a connection to the new school building. A new pedestrian access will be provided from the southwest, located approximately 50m northwest of the A4226/exit from WHS/Stirling Road signal-controlled junction. Zebra crossings will be introduced across the school access road to facilitate pedestrian movements to/from this access point.
- 3.6.6 The existing car park is immediately southwest of the existing school site and currently comprises 102 staff parking spaces, 7 visitor spaces, 2 disabled spaces and 4 mini-bus spaces.
- 3.6.7 Parking will be located to the southwest of the new school building, with 116 total spaces to be provided, based on the existing provision and on the basis that parents will use the car park to drop-off and pick-up and not on the A4226. The proposed sports facilities will also be used for community use and sufficient parking provision will be required to ensure this is successful. Six spaces will be designated for disabled parking, in accordance with standards, and two spaces will be designated for electric vehicle charging. Visitor parking spaces are taken account of within the total car parking provision. An area sufficient for six motorcycles to park will be provided, in accordance with standards. Whilst there is no specific provision for commercial vehicles, it is considered reasonable that these vehicles use the bus layby serving WHS; movements associated with commercial vehicles will generally occur outside of the drop-off/pick-up periods and therefore demand from these vehicles is unlikely to coincide with that from buses. A total of 64 cycle parking spaces will be provided, in accordance with standards.

4. Scope, Objectives and Implementation

4.1 Introduction

4.1.1 This section of the report outlines the scope and objectives of this TP, including a strategy for its implementation.

4.2 Scope

- 4.2.1 This TP is aimed at facilitating and encouraging sustainable transport and the reduction of single occupancy vehicle use by staff, parents, pupils and visitors of the school.
- 4.2.2 It is an interim document, meaning that the scope of this TP is to outline the initial objectives, measures and targets prior to opening and full occupation of the proposed development. Upon opening, the content of this document will be updated and tailored to the specific requirements of the development to form a Full TP.

4.3 Objectives

- 4.3.1 The primary objectives of this TP are as follows:
 - To encourage staff, parents, pupils and visitors to use more sustainable modes of transport to travel to and from the site;
 - To improve awareness of transport issues and reduce the impact of traffic on the local environment;
 - To minimise the proportion of single occupancy car trips made by staff, parents and visitors to and from the site;
 - To develop a change in travel behaviour of individuals towards sustainable modes of travel and then maintain that change.

4.4 Implementation

- 4.4.1 A Travel Plan Coordinator (TPC) will be appointed to oversee the implementation and management of the TP. The TPC will be 'hands-on', actively implementing and monitoring the TP.
- 4.4.2 The TPC will be appointed a minimum of six months prior to opening of the newly refurbished comprehensive school. It will be the responsibility of the Local Education Authority (LEA) to appoint the TPC. This role will typically be undertaken by a member of the school community, e.g. Headteacher, other senior member of staff, governor, etc.
- 4.4.3 The responsibilities of the TPC will include:
 - Acting as the point of contact for the TP;
 - Marketing and promoting the TP;
 - Providing sustainable travel information to the school community;
 - Monitoring and reviewing the TP;
 - Liaison with the VoG Council, transport operators and specialist groups; and
 - Arranging for travel surveys to be undertaken of the school community.

5. Measures

5.1 Introduction

5.1.1 This section of the TP sets out the measures that are proposed in order to achieve the objectives set out in **Section 4**.

5.2 Measures and Initiatives

Travel Information

- 5.2.1 Travel information will be distributed to the school community, the intention of which will be to encourage engagement in sustainable modes of transport. The travel information will include:
 - Maps and information on local walking and cycling routes:
 - Public transport information including bus and rail services;
 - Details of public transport discounted fares/season tickets;
 - Details of the 'Cycle 2 Work' scheme;
 - Information on marketing and promotional events at a national and local level; and
 - Reasons for using sustainable modes of transport.
- 5.2.2 The travel information will be communicated through a number of channels including the school prospectus, school website, new starter packs and the school notice board.

Walking and Cycling Measures

- 5.2.3 It is proposed that people of all abilities shall be able to easily enter into and move through the landscape and each space within it via level or ramped entry points where necessary. Existing footpaths may be re-aligned to suit new desire lines and entry points.
- 5.2.4 The masterplan includes a safe and convenient network of footways into the school. Pedestrian access will be via the existing main pedestrian access off the A4226 to the northeast, with a new internal pathway providing a connection to the new school building. A new pedestrian access will be provided from the southwest, located approximately 50m northwest of the A4226/exit from WHS/Stirling Road signal-controlled junction. Zebra crossings will be introduced across the school access road to facilitate pedestrian movements to/from this access point.
- 5.2.5 There are footpaths within the site, generally surrounding the building. The school buses will drop-off pupils at the front of the school, providing direct access to the school entrance.
- 5.2.6 Cycle parking will be provided near the main entrance. The proposed level of provision of 64 spaces is in accordance with the VoG adopted parking standards. It may be considered to provide further cycle parking as demand increases; this could be provided as part of ongoing TP measures.
- 5.2.7 The general walking and cycling measures that will be implemented are as follows:
 - Promotion of the 'Cycle to Work' scheme;
 - Promotion of walking and cycling events such as 'Walk to School Week' and 'Bike Week':
 - Promotion of walking and cycling in travel information distributed to the school community and in classroom sessions; and
 - Provision of lockers and changing/shower facilities for pupils and staff.
- 5.2.8 In addition, the TPC will investigate the potential for the following walking and cycling measures:
 - Junior Road Safety Officers (JRSOs) Scheme this scheme seeks to empower children to take the lead in promoting road safety within their school. Participating schools elect JRSOs who will

be responsible for tasks such as maintaining a road safety notice board and promotion of road safety topics through class or school presentations;

- Cycle Training Bikeability cycle training is available through BikeAbility Wales; and
- Liaison with local walking and cycling shops to establish if discounts on cycles/equipment or outdoor clothing can be agreed.

Public Transport Measures

5.2.9 Public transport measures will generally be promoted through the travel information distributed to the school community and in classroom sessions.

Car Sharing

5.2.10 Car sharing databases will be set up for both pupils and staff. This will allow those wishing to car share to identify potential matches in journeys. An indication of the financial savings which can be made through car sharing will be provided with the travel information. Staff will also be offered a free ride home in an emergency.

Visitor Information

- 5.2.11 Visitors to WHS will be encouraged to travel to the site by means other than the car. This will be facilitated through the provision of travel information, including local walking/cycling maps and bus timetables, in a prominent position within the school. The TPC will be responsible for the production and publication of visitor travel information.
- 5.2.12 Pre-planned visitors to the site will be provided with travel information prior to their visit in order to allow them to make well-informed travel plans, with an awareness of the sustainable travel options available to them.

6. Targets and Monitoring

6.1 Introduction

6.1.1 This section of the TP sets out initial mode share targets for the monitoring period and associated procedures for monitoring and evaluation.

6.2 Mode Share and Targets

- 6.2.1 Mode share targets are used to evaluate the success of the TP and to identify areas on which further measures should be focused in order to help to drive travel behaviour change. To enable the setting of valid and realistic targets, a valid baseline first needs to be established.
- 6.2.2 Section 5 of the Transport Assessment (TA) prepared for the planning application set out the forecast mode share of the school with the development proposals, as well as the calculation method and assumptions. For the pupil population, this involved the use of postcode data of the existing pupil population, and details of mode share by travel distance from the National Travel Survey (NTS). For the staff population, this was involved the use of data from the 2011 Census.
- 6.2.3 The staff and pupil mode share which has been calculated as part of the assessments for both the existing and new school is summarised in **Table 6.1**.

Mada	Existing School		New School	
Mode -	Staff	Pupils	Staff	Pupils
Walk	11%	71%	11%	72%
Cycle	2%	0%	2%	0%
Public Transport/School Bus	5%	11%	5%	11%
Car	83%	18%	83%	18%
Total	100%	100%	100%	100%

Table 6.1: Forecast Mode Share

- 6.2.4 The target will be to reduce the 'car' mode share by 6% (from 18% to 12% for pupils, from 83% to 77% for staff) over five years, consistent with Smarter Choices' report *Changing the way we travel* (2004). Following the baseline travel survey this target can be confirmed or adjusted as appropriate, following discussion between the VoG and the TPC.
- 6.2.5 The target for a reduction in single occupancy vehicle use encompasses both staff and parent/pupil travel to the development. This is likely to provide a suitable sample size from which performance against the target can be reliably measured.

6.3 Monitoring and Evaluation

- 6.3.1 The point at which baseline travel surveys are required will be subject to agreement with the VoG. A minimum response rate to the travel surveys will be required to be set and agreed to ensure that the data is representative.
- 6.3.2 The format of the baseline and monitoring surveys will need to be agreed with the VoG. In general, these will seek to establish the actual travel patterns, the reasons for travel choice and potential measures to encourage consideration of alternatives. For staff, it is envisaged that the surveys will be primarily online-based, but paper copies will also be made available to staff should they prefer. For pupils and staff at the schools, a combination of survey methods could be utilised, and is likely to include the following:
 - Hands-up surveys of pupils;
 - Manual counts at school drop-off/pick-up periods; and
 - Pupil/parent and staff questionnaires.

- 6.3.3 The results of the baseline travel surveys will be analysed and the factors influencing travel behaviour will be investigated. It will then be necessary for the TPC to review and update the respective TP to include additional details and the need for any other measures not already included that require further investigation. Specific objectives and targets will need to be identified, separated into short/medium/long term targets, and will need to be SMART (Specific, Measurable, Achievable, Realistic, and Timed). Specific actions and measures to encourage sustainable modes of travel will be identified. For the on-going management of the TP to be successful and to deliver the desired outcomes, it is important that the parties involved in the delivery of the TP, which means the TPC, and the VoG, work effectively in partnership to achieve the desired results.
- 6.3.4 Monitoring of the TP will be required for a five year period from the date of the baseline travel surveys. They will be undertaken at one, three and five years after the date (or close to the date) of the baseline travel surveys. The TPC will aim to coordinate the baseline travel surveys and subsequent monitoring surveys to ensure consistency between the collection of data for the TP. Surveys will avoid sustained periods of inclement weather or when there is significant disruption to the local road or public transport network.
- 6.3.5 A monitoring report will be prepared by the TPC for each monitoring survey. These will identify the results of the surveys and success of the measures implemented in achieving the targets. The reports will be submitted to the VoG for comment. If the targets are not met, then it will be necessary to review what remedial measures need to be implemented to mitigate the impact of any under achievement.
- 6.3.6 At the end of the formal monitoring period (five years), if the target for reduction in single occupancy vehicle use has not been achieved, the TPC will liaise with VoG to extend the period of monitoring or agree that the actual level of reduction achieved is satisfactory.
- 6.3.7 A TP is a living document, and as such it is expected that it evolves over the five year monitoring period to fit the changing requirements of the hub. By instilling a sustainability "ethos" at the school from the outset, it is more likely that engagement with sustainable travel will continue after the end of the formal monitoring period.

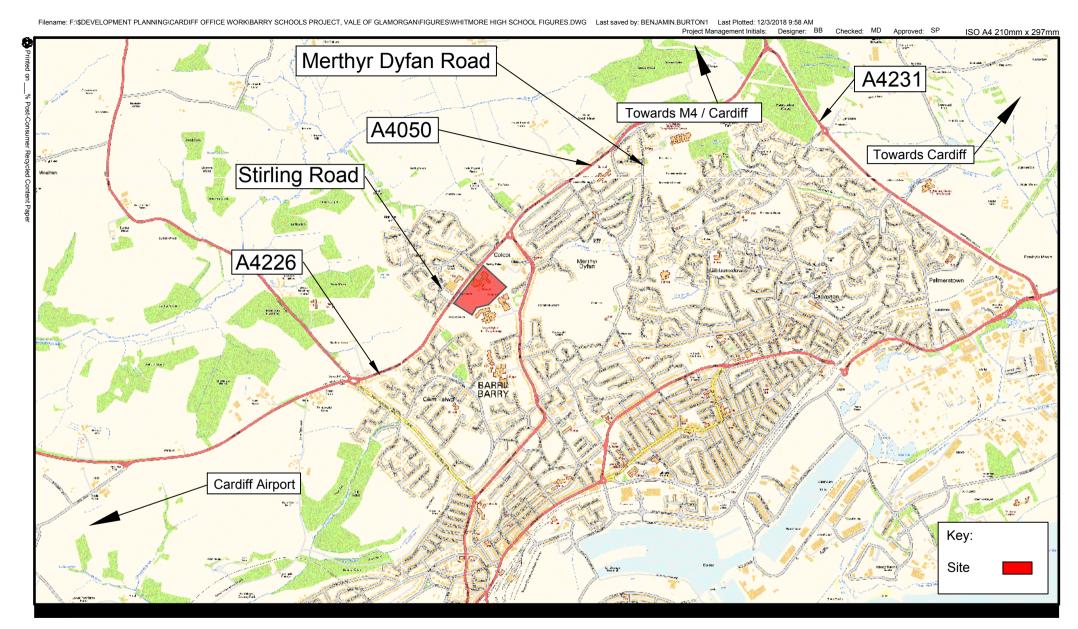
7. Summary

- 7.1.1 AECOM was commissioned by the VoG to provide transport planning and highways advice to inform a planning application for a new school on the existing WHS site.
- 7.1.2 The proposed development takes the form of a new school on the site of the existing school, which is proposed to be demolished, with additional proposals including:
 - Facilities for the sixth form pupils;
 - Specially Resourced SEN Provision; and
 - A sports hall that will be considered for community use.
- 7.1.3 The works are not expected to increase the number of pupils beyond the permitted capacity (1,423 pupils or increase the current level of school staff.
- 7.1.4 A detailed review of the existing highway network and baseline situation has been carried out. The site benefits from existing provision for pedestrians and cyclists in the locality, including footways on both sides of the majority of roads surrounding the site. Residential areas and a range of local facilities are located within walking and cycling distance of the site. Frequent weekday bus services to numerous residential areas and key destinations within Barry are accessible from bus stops within the IHT's suggested 'acceptable' walking distance. An assessment of the accessibility of the site to these bus services has been undertaken using the 'Accessibility Index' (AI) calculator and associated methodology contained within the BREEAM guidance (a scheme for assessing the sustainability credentials for the built environment); this has confirmed an AI of 3.35. Rail services are available from numerous railway stations in Barry, the nearest being Barry. This provides accesses to high/reasonable frequency services to/from Cardiff Central and Bridgend.
- 7.1.5 The school is accessed off the A4226, where there are currently no observed issues of congestion pertaining to this access arrangement. As part of the WHS site masterplan, it is proposed to develop shared school bus drop-off facilities with the neighbouring YGBM. This is being progressed in anticipation that the YBGM proposals will follow a similar application timeline and that it would be of benefit to the wider highway network by removing large PSV movements from the shared hospital and YGBM access. The additional 14 buses for YGBM (of which two already access WHS in the existing situation) will arrive using the same vehicular access and continue to a proposed bus drop-off/pick-up location, situated immediately southwest of the car park.
- 7.1.6 The masterplan includes a safe and convenient network of footways into the school. Pedestrian access will be via the existing main pedestrian access off the A4226 to the northeast, with a new internal pathway providing a connection to the new school building. A new pedestrian access will be provided from the southwest, located approximately 50m northwest of the A4226/Stirling Road junction Zebra crossings will be introduced across the school access road to facilitate pedestrian movements to/from this access point.
- Parking will continue to be provided in the same location to the south of the proposed main school building, with 116 total spaces, based on the existing provision and on the basis that parents will use the car park to drop-off and pick-up and not on the A4226. The sports facilities are proposed to be used for community use and sufficient parking provision will be required to ensure this is successful. Six spaces will be designated for disabled parking, in accordance with standards, and two spaces will be designated for use as electric vehicle charging points. Visitor spaces are allowed for the total car parking provision. An area sufficient for six motorcycles to park will be provided, in accordance with standards. Whilst there is no specific provision for commercial vehicles, it is considered reasonable that these vehicles use the bus layby serving WHS; movements associated with commercial vehicles will generally occur outside of the drop-off/pick-up periods and therefore demand from these vehicles is unlikely to coincide with that from buses. A total of 64 cycle parking spaces will be provided, in accordance with standards.
- 7.1.8 A TPC will be appointed to oversee the implementation and management of the TP. The TPC will be 'hands-on', actively implementing and monitoring the TP. The TPC will be appointed a minimum of six months prior to completion of the school expansion. It will be the responsibility of the LEA to appoint the TPC.

- 7.1.9 A range of potential sustainable travel measures to be implemented as part of the TP have been identified with reference to best practice. They form a starting point and the need for further measures to cater to the specific travel characteristics and demands of staff/parents/pupils/visitors will need to be considered when developing the TP.
- 7.1.10 Indicative targets for the TP have been established; these target a 6% reduction in car/van mode share. These will need to be reviewed following baseline travel surveys, along with the need for any specific TP measures. Monitoring of the TP will be required for a five year period from the date of the baseline travel survey. The monitoring survey will be undertaken at one, three and five years after the date (or close to the date) of the baseline travel survey. A monitoring report will be prepared by the TPC for each monitoring survey.
- 7.1.11 In summary, it is considered that the TP provides a solid foundation for the development of TP measures across the development. A package of measures has been identified with reference to best practice guidance, and these will complement the development proposals. A robust monitoring strategy has been set out, which will ensure effective monitoring and review to establish whether the TP is proving successful.



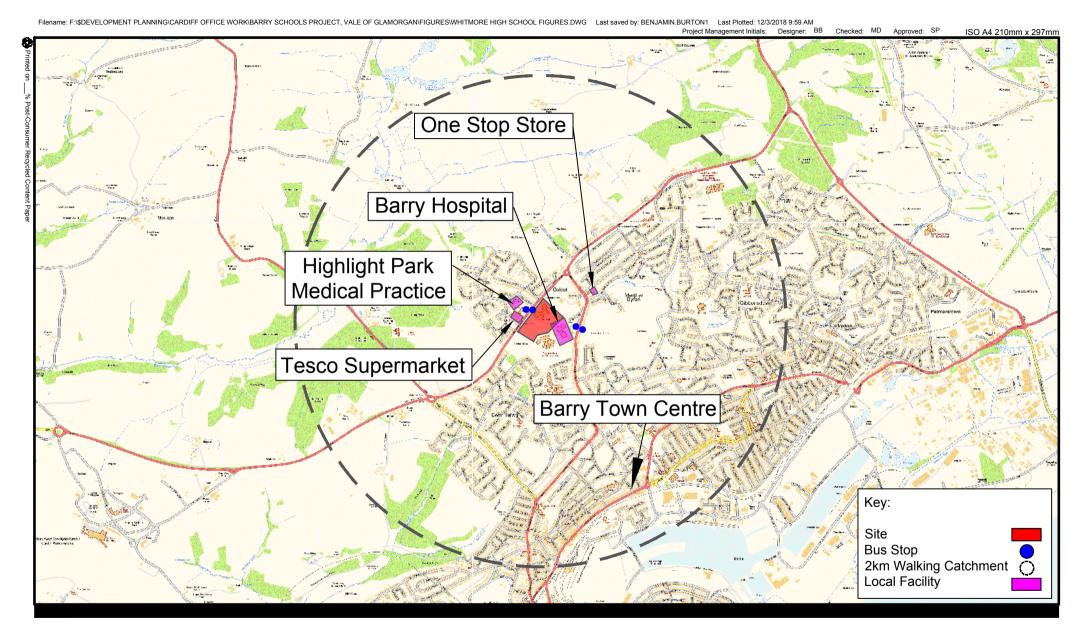
Figures



Whitmore High School, Barry

Travel Plan





Whitmore High School, Barry

Travel Plan

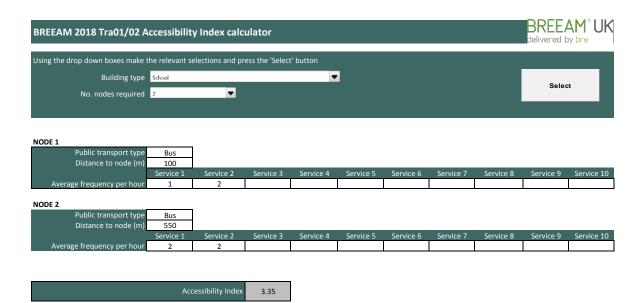
Figure 2.1: Local Facilities Plan





Appendix 2.1

Accessibility Index





Appendix 3.1

Masterplan





Appendix 3.2

Ysgol Gymraeg Bro Morgannwg Masterplan



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