

Whitmore High School, Barry

Transport Assessment

Vale of Glamorgan Council

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Quality information

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Table of Contents

1.	Introduction	5
2.	Existing Situation and Site Accessibility	7
3.	Development Proposals	17
4.	Planning Policy Review	21
5.	Trip Generation and Distribution	26
6.	Traffic Impact Assessment	32
7.	Transport Implementation Strategy	36
8.	Conclusions	39

Figures

Figure 1.1	Site Location Plan
Figure 2.1	Traffic Surveys Plan
Figure 2.2	Traffic Flows – 2018 Base Year: Weekday AM Peak Hour (08:00-09:00)
Figure 2.3	Traffic Flows – 2018 Base Year: Weekday PM Peak Hour (14:30-15:30)
Figure 2.4	Personal Injury Collision Data Plot
Figure 2.5	Local Facilities Plan
Figure 5.1	Traffic Flows – Proposed Development: Weekday AM Peak Hour (08:00-09:00)
Figure 5.2	Traffic Flows – Proposed Development: Weekday PM Peak Hour (14:30-15:30)
Figure 6.1	Traffic Flows – 2021 Without Development: Weekday AM Peak Hour (08:30-09:00)
Figure 6.2	Traffic Flows – 2021 Without Development: Weekday PM Peak Hour (14:30-15:30)
Figure 6.3	Traffic Flows – 2021 With Development: Weekday AM Peak Hour (08:00-09:00)
Figure 6.4	Traffic Flows – 2021 With Development: Weekday PM Peak Hour (14:30-15:30)

Appendices

Appendix 1.1	Transport Assessment Scoping Note
Appendix 3.1	Masterplan
Appendix 3.2	Ysgol Gymraeg Bro Morgannwg Masterplan
Appendix 3.3	Swept Path Analysis

1. Introduction

1.1 Introduction

- 1.1.1 AECOM has been appointed through the design and assessment stages of the school project providing advice on the overall scheme through to RIBA Stage 2; this includes scoping discussions and baseline desk studies. An assessment of the current highway network has been undertaken, along with the commissioning of traffic surveys across the network.
- 1.1.2 Furthermore, AECOM has been commissioned by the Vale of Glamorgan (VoG) to provide transport planning and highways advice to inform a planning application for the proposed new development of Whitmore High School (WHS).
- 1.1.3 AECOM liaised with the VoG, in their role as the Local Highway Authority (LHA), during a scoping exercise for the Transport Assessment (TA). A Scoping Note was prepared and sent to the LHA to gain an understanding of the level of assessment required for the TA. The LHA provided a response and some further recommendations, where the suggested additions or changes in approach were taken on board, wherever possible. A copy of the final agreed scoping report is included at **Appendix 1.1**, together with the exchange that took place informing the final document

1.2 Site Location and Existing Usage

- 1.2.1 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 Ysgol 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**.
- 1.2.2 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
- 1.2.3 Pencoedtre High School (PHS), located to the northeast, and YGBM are both preparing planning applications for refurbishment works.

1.3 Proposed Development

- 1.3.1 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. Additional proposals include:
- Facilities for the sixth form pupils;
 - Specially Resourced SEN Provision; and
 - A sports hall that will be considered for community use.
- 1.3.2 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.
- 1.3.3 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.
- 1.3.4 This TA will address the transport planning inputs required to inform the planning application and has been informed by meetings and discussions with the Local Education Authority (LEA).

1.4 Report Structure

1.4.1 The TA examines the existing transport and highway issues relating to the proposed development. It considers the expected travel demand and also investigates methods of limiting car based travel to produce a sustainable development in line with national and local planning guidance.

1.4.2 The TA is structured as follows:

- Section 2 – Existing Situation and Site Accessibility: Examines the local transport conditions in the vicinity of the site and the accessibility of the site to non-car modes of travel;
- Section 3 – Development Proposals: Provides a detailed description of the development proposals, including the proposed means of access and parking provision;
- Section 4 – Planning Policy Review: Considers the development in the context of relevant national and local planning and transport policies;
- Section 5 – Trip Generation and Distribution: Sets out the existing/forecast trip generation for all modes of travel and method of trip distribution for the proposed development;
- Section 6 – Traffic Impact Assessment: Examines the impact of the development proposals on the highway network during the weekday AM and PM peak hours;
- Section 7 – Transport Implementation Strategy: Details the key measures to mitigate the impact of the proposed development;
- Section 8 – Conclusions: Summarises the key findings and conclusions of the TA.

2. Existing Situation and Site Accessibility

2.1 Introduction

- 2.1.1 This section of the TA provides a description of the site location and its existing usage, the local highway network, current safety and traffic conditions, 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 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 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 Highway Operational Conditions

- 2.4.1 A number of traffic surveys have been undertaken to establish the operational conditions on the local highway network. These have included locations directly related to the highway network in the immediate vicinity of the site. Data from other locations surveyed as part of wider work in the area has also been included.
- 2.4.2 An independent survey company was commissioned to undertake Junction Turning Count (JTC) surveys. These were undertaken between the hours of 07:00-10:00hrs and 14:00-18:00hrs on Wednesday 27th June 2018. The locations of surveyed junctions are shown on **Figure 2.1** and are as follows:
- A4050/MDR signal-controlled junction;
 - MDR/PHS access priority junction;
 - A4050/A4426 roundabout;
 - A4050/access road serving Barry Hospital and YGBM signal-controlled junction;
 - Access road serving Barry Hospital/access road serving YGBM priority junction;
 - A4050/Barry Road mini-roundabout junction;
 - A4226/entrance to WHS/Barry Fire Station crossroads junction; and
 - A4226/exit from WHS/Stirling Road signal-controlled junction.
- 2.4.3 From analysis of traffic movements to/from the site access, it was identified that the weekday AM and PM peak hours are 08:00-09:00hrs and 14:30-15:30hrs respectively; this corresponds with the morning drop-off/afternoon pick-up periods. The observed traffic flows on the surveyed network during these time periods are shown on **Figures 2.2 and 2.3**. The traffic flows on the key highway links in the vicinity of the site are summarised in **Table 2.1**.

Table 2.1: Summary Weekday Traffic Flow Information

Link No. and Description	Direction	AM Peak Hour (07:45-08:45)		PM Peak Hour (14:45-15:45)	
		Total Vehicles	HGV%	Total Vehicles	HGV%
1 A4226, east of A4226/exit from WHS junction	EB	688	6%	638	5%
	WB	514	10%	575	6%
	Two-Way	1,202	8%	1,213	6%
2 Exit from WHS	NB	101	2%	99	3%
3 A4226, west of A4226/exit from WHS junction	EB	665	6%	603	5%
	WB	613	9%	667	6%
	Two-Way	1,278	7%	1,270	5%
4 Stirling Road, north of A4226/exit from WHS junction	NB	129	2%	213	1%
	SB	150	3%	241	1%
	Two-Way	279	3%	454	1%
5 A4226, east of A4226/entrance to WHS junction	EB	687	6%	637	5%
	WB	655	8%	624	6%
	Two-Way	1,342	7%	1,261	6%
6 Entrance to WHS	SB	154	1%	62	5%
7 A4050, east of A4050/A4226 roundabout junction	EB	873	7%	944	5%
	WB	829	7%	886	4%
	Two-Way	1,702	7%	1,830	4%
8 A4050, south of A4050/A4226 roundabout junction	NB	502	7%	618	4%
	SB	555	4%	590	2%
	Two-Way	1,057	5%	1,208	3%
9 A4226, west of A4050/A4226 roundabout junction	EB	874	5%	823	4%
	WB	777	7%	793	5%
	Two-Way	1,651	6%	1,616	4%

2.4.4 **Table 2.1** shows that the A4050 and A4226 carry the highest volumes of traffic of the examined highway links during the AM and PM peak hours. The WHS entrance/exit carries around 250 vehicles during the AM peak hour and 150 vehicles during the PM peak hour; a higher level of traffic during the AM peak hour is not unusual given pupil and staff arrivals are likely to occur concurrently during this period, whereas staff departures typically occur following pupil departures during the PM peak hour. The differences also suggest that pupils dropped off by car during the AM peak hour use other modes during the PM peak hour.

2.5 Road Safety

2.5.1 A review of Personal Injury Collision (PIC) data has been undertaken to determine whether there are any locations on the local highway network which could be considered to exhibit a poor collision record. The data was obtained from the WG for the period from 1st January 2013 to 30th June 2018 (a 5½ year period, the most recent for which data was available). A plan showing the location and severity of the PICs recorded is provided on **Figure 2.4**. The data supplied was in a raw format, containing full details of the recorded PICs. For data protection reasons, this data cannot be reproduced in this report.

2.5.2 A total of 21 PICs were recorded in study area over the study period, of which 19 were 'slight'. The remaining two PICs were 'serious'. No 'fatal' PICs were recorded in the study area. For ease of analysis the PICs have been separated into those occurring at junctions and on highway links in the study area. The following account of the events which led to a PIC was taken from the records provided.

PICs Recorded at Junctions

- 2.5.3 Two 'slight' PICs were recorded at the A4226/exit from WHS/Stirling Road signal-controlled junction. One involved a car turning right from Stirling Road contravening a red signal and colliding with a car travelling northeast-bound on the A4226. The other PIC involved an emergency vehicle on response travelling northeast-bound on the A4226 contravening a red signal and colliding with a car turning right into Stirling Road.
- 2.5.4 One 'slight' PIC was recorded at the A4226/Liscum Way priority junction. This involved a motorcycle turning right into Liscum Way losing control, causing the rider to dismount.
- 2.5.5 Four PICs were recorded at the A4050/Winston Road/Highfield Road staggered crossroads junction, of which one was 'serious' and three were 'slight'. Three of the PICs involved cyclist casualties. The 'serious' PIC involved a car turning right into Winston Road colliding with a cyclist travelling southbound on the A4050. Of the remaining PICs involving injury to cyclists, one involved a collision between a car and cyclist travelling northbound on the A4050, and one involved a car overtaking a cyclist travelling southbound on the A4050 and then immediately making a left turn into Winston Road, resulting in a collision. The remaining PIC at this location involved a stolen car turning right from Winston Road colliding with a car travelling southbound on the A4050.
- 2.5.6 Two 'slight' PICs were recorded at the A4050/Whitewell Road priority junction. These both involved a car exiting from Whitewell Road and colliding with a car/cyclist travelling southbound on the A4050.
- 2.5.7 One 'slight' PIC was recorded at the A4050/access road serving Barry Hospital and YGBM signal-controlled junction. This involved a rear-end shunt between two cars travelling southbound on the A4050. This occurred as the lead vehicle braked suddenly due to a pedestrian entering the carriageway.

PICs Recorded on Highway Links

- 2.5.8 One 'slight' PIC was recorded on the A4226, between the WHS entrance and Liscum Way. This involved a rear-end shunt between a car and agricultural vehicle travelling northeast-bound.
- 2.5.9 One 'slight' PIC occurred on Liscum Way. This involved a pedestrian entering the carriageway from between parked cars and was struck by car travelling southeast-bound.
- 2.5.10 Two 'slight' PICs were recorded on the A4226, between Highlight Lane and the A4050. Both involved a car travelling southwest-bound exiting the upstream roundabout being dazzled by the sun, colliding with bollards/traffic islands and overturning.
- 2.5.11 Two PICs were recorded on the A4226 northeast of the A4050, of which one was 'serious' and one was 'slight'. The 'serious' PIC involved a car travelling southwest-bound exiting the carriageway and colliding with a bus stop. The 'serious' PIC involved a collision between cars travelling northeast-bound and southwest-bound. The reports state that a driver in each PIC suffered a medical episode.
- 2.5.12 Three 'slight' PICs were recorded on the A4050, between Whitewell Road and the A4050/access road serving Barry Hospital and YGBM signal-controlled junction. These involved a rear-end shunt between two cars travelling southbound, a car exiting a driveway colliding with a car travelling southbound, and a car travelling northbound on the A4050 colliding with a parked car.
- 2.5.13 Two 'slight' PICs were recorded on the A4050, between the A4050/access road serving Barry Hospital and YGBM signal-controlled junction and Greenbanks Drive. One involved a pedestrian entering the carriageway being struck by a car travelling southbound. The remaining PIC involved a collision between two motorcycles travelling southbound; a motorcycle was undertaking another motorcycle and the offside motorcycle pulled in for a police vehicle to pass, resulting in a collision.

Summary

- 2.5.14 It is on the basis of this analysis that it can be concluded that there are no existing highway safety issues in the study area that would be exacerbated by the proposed development. The type, causation, dates and location of PICs does not suggest a particular pattern or correlation that would draw attention to any existing safety issues within the local study area.

2.6 Walking and Cycling

- 2.6.1 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.
- 2.6.2 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.
- 2.6.3 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).
- 2.6.4 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.

2.7 Local Facilities

- 2.7.1 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.
- 2.7.2 **Figure 2.5** 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.
- 2.7.3 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 2.3** and the locations of the facilities shown on **Figure 2.5**. This shows there is a range of retail and health facilities within active travel distances of the site.

Table 2.3: Accessibility to Local Facilities

Local Facilities	Walking Accessibility		Cycling Accessibility	
	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.

2.8 Public Transport

Introduction

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

Bus Services

- 2.8.2 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.
- 2.8.3 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.
- 2.8.4 **Table 2.4** provides a summary of all bus services accessed from these bus stops.

Table 2.4: Bus Service Information

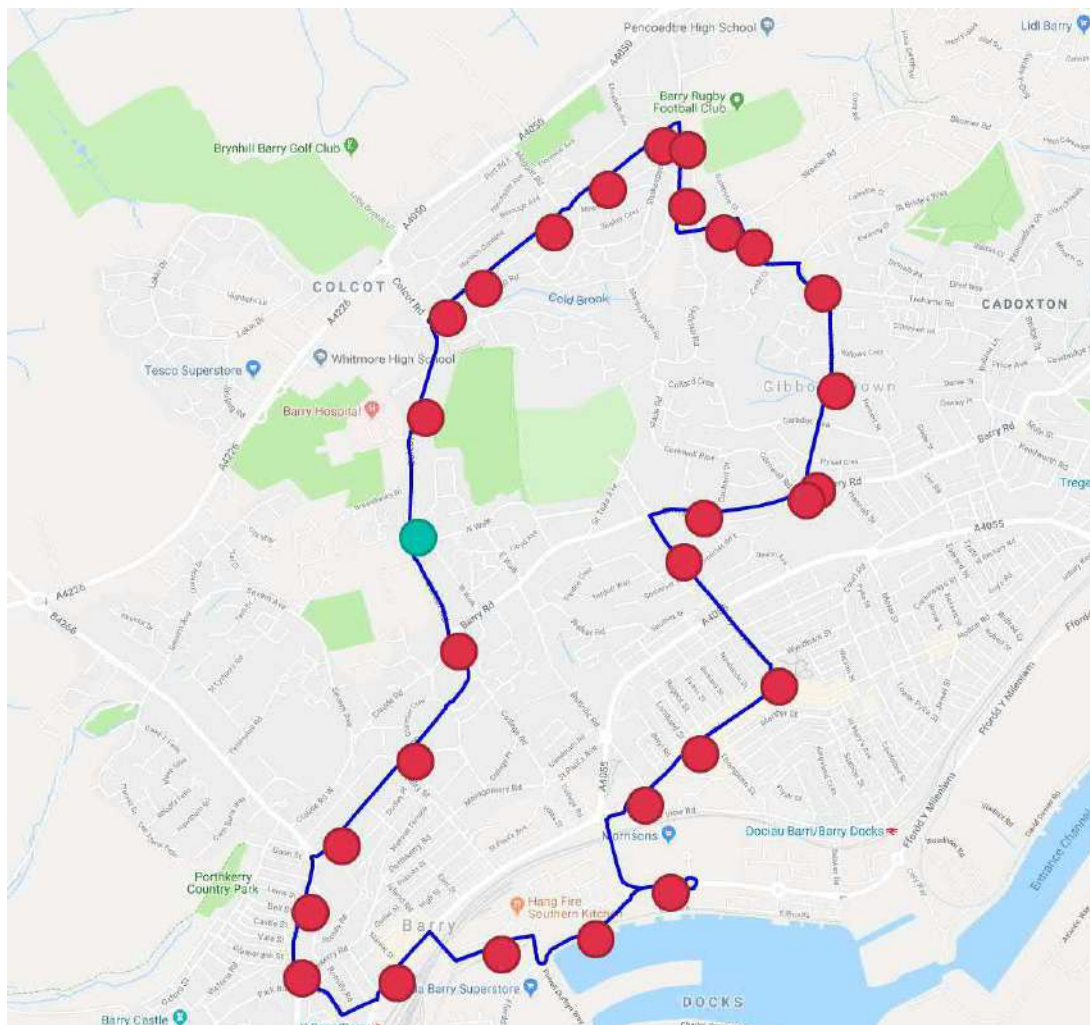
Service	Route	Direction	Days	First Service	Last Service	Approximate Frequency
96/96A	Cardiff – Barry	Towards Barry	Mon-Fri	08:25	23:14	30 minutes
			Sat	08:14	23:14	30 minutes
			Sun	09:50	23:10	60 minutes
		Towards Cardiff	Mon-Fri	07:00	22:58	30 minutes
			Sat	07:00	22:58	30 minutes
			Sun	10:03	23:58	60 minutes
97/97A	Barry – Barry	Clockwise	Mon-Fri	08:09	16:49	30 minutes
			Sat	09:39	16:09	30 minutes
		Anticlockwise	Mon-Fri	07:41	16:51	30 minutes
			Sat	09:11	15:41	30 minutes
100	Merthyr Dyfan – Highlight Park (via Barry)	Towards Highlight Park	Sun	12:34	23:39	60 minutes
		Towards Merthyr Dyfan	Sun	11:34	22:34	60 minutes
303	Bridgend – Barry	Towards Barry	Mon-Sat	07:30	01:00	60 minutes
			Sun	07:47	00:27	120 minutes
		Towards Bridgend	Mon-Sat	07:31	00:01	60 minutes
			Sun	07:04	23:30	120 minutes
T9	Cardiff – Cardiff Airport	Towards Cardiff Airport	Mon-Sat	04:32	23:02	30 minutes
			Sun	05:32	23:02	30 minutes
		Towards Cardiff	Mon-Sat	05:05	00:05	30 minutes
			Sun	06:05	00:05	30 minutes
X91	Cardiff – Llantwit Major (via Leckwith)	Towards Llantwit Major	Mon-Fri	06:30	18:15	2 services
			Sat	08:57	16:47	2 services
		Towards Cardiff	Mon-Fri	07:41	19:30	2 services
			Sat	10:08	18:08	2 services

Notes:

1. Information obtained from Tralveline 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.

2.8.5 **Table 2.4** 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)



2.8.6 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).

Rail Services

2.8.7 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.

2.8.8 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 2.5** shows that regular services to key destinations are accessible from Barry railway station.

Table 2.5: Railway Service Information

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

- 2.8.9 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.

2.9 Summary

- 2.9.1 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.
- 2.9.2 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.
- 2.9.3 The local highway network to the site includes the WHS access road, the A4226, Stirling Road and the A4050. Traffic surveys have been undertaken to identify existing operational conditions and to inform the traffic impact assessment. These have identified the two-way traffic flows on the key links in the study area during the weekday AM and PM peak hours as follows:
- WHS access: 150-250 vehicles per peak hour;
 - A4226: 1,200-1,650 vehicles per peak hour;
 - Stirling Road: 300-450 vehicles per peak hour;
 - A4050 (east of the A4226): 1,700-1,850 vehicles per peak hour; and
 - A4050 (south of the A4226): 1,050-1,200 vehicles per peak hour.
- 2.9.4 A review of PIC data has been undertaken and it can be concluded that there are no existing highway safety issues within the study area that would be exacerbated by the proposed development. The type, causation, dates and location of PICs does not suggest a particular pattern or correlation that would draw attention to any existing safety issues within the local study area.

- 2.9.5 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.
- 2.9.6 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.
- 2.9.7 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 YGBM 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 Swept Path Analysis (SPA) has been undertaken of the masterplan for the following vehicles and uses, as shown in **Appendix 3.3**:
- A refuse truck entering the car park, turning and exiting in a forward manoeuvre;
 - Four luxury coaches to fit in the bus layby fronting the site; and
 - YGBM school transport proposals.
- 3.4.7 SPA has identified that the refuse vehicle can enter the site, turn and leave in a forward facing movement. It can also manoeuvre around the car park, should the bin store be located to the south of the car park.
- 3.4.8 The SPA for the bus layby serving WHS has been undertaken using a luxury coach. This has identified that there is insufficient capacity to accommodate four buses. However, as two of the buses are shared with YGBM, they will park within the new coach park along with the other YGBM buses. Safe pedestrian routes will be provided for those pupils to the school building. The remaining two buses serving only WHS will use this layby for dropping off and picking up pupils. Therefore, the current layby design is considered to be sufficient.
- 3.4.9 SPA has been undertaken of the proposed bus bay pick-up/drop-off point, accessed via WHS off the A4226, as shown in **Appendix 3.3**. Based on information provided by the Client, a mix of coaches and mini-buses will serve YGBM; therefore, SPA was undertaken using a 15m coach. Bus bays are provided to accommodate 11 coaches and 3 mini-buses. The SPA indicates that the current design adequately accommodates the manoeuvring of a 15m coach and the parking of the 14 buses required in total.
- 3.4.10 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

- 3.4.11 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.
- 3.4.12 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.

- 3.4.13 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
Education	Secondary Schools & Colleges of Further Education	Short Stay	1 stand per 100 students	11
		Long Stay	1 stand per 5 staff	18
			1 stand per 6 students of age 17	34
			Total	

- 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 Construction Traffic

- 3.7 Managing the construction effects will form part of the Construction Traffic Management Plan (CTMP) or similar document, to be secured by a planning condition. The management measures will be intended to protect the environment, amenity and safety of local residents, businesses, the general public and the surroundings in the vicinity of the proposed development.
- 3.8 As part of the CTMP, a construction vehicle routing regime for access to the construction site will be identified and agreed with the LHA to ensure that drivers of construction related vehicles do not use inappropriate routes which are unsuitable by virtue of their width, alignment or character. The CTMP will also consider measures to discourage deliveries during peak traffic periods on the highway network. There will ongoing monitoring of the CTMP during the construction phase to establish the effectiveness of the measures.

3.9 Summary

- 3.9.1 This chapter has provided a description of the development proposals, including the site access strategy.
- 3.9.2 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.
- 3.9.3 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.
- 3.9.4 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 YGBM 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.
- 3.9.5 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.
- 3.9.6 The existing car park is immediately southwest of the existing school site and comprises 102 staff parking spaces, 7 visitor spaces, 2 disabled spaces and 4 mini-bus spaces.
- 3.9.7 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. Planning Policy Review

4.1 Introduction

- 4.1.1 This section of the report provides a review of existing planning and transport policies at a national and local level considered relevant to the proposed development.

4.2 National Policy

Planning Policy Wales Edition 10, December 2018

- 4.2.1 Edition 10 of *Planning Policy Wales* (PPW) was published in December 2018 and sets out the land use planning policies of the Welsh Government (WG). It is supported by a number of Technical Advice Notes (TANs), which provide detailed planning advice on subjects contained within PPW. *TAN 18: Transport* is considered of particular relevance to the proposed development and is included in this policy review. An overarching theme within PPW is the commitment of the WG to sustainability.
- 4.2.2 Planning policy in Wales is plan-led, with up to date LDPs forming a fundamental part of the system. PPW states that planning applications *“must be determined in accordance with the adopted plan unless material considerations indicate otherwise”*. This section provides a review of the VoG LDP to demonstrate that the proposed development accords with policy.
- 4.2.3 PPW outlines the vision for development of a more effective and efficient transport system, the promotion of more sustainable and healthy forms of travel, as well as minimising the need to travel. PPW indicates that this will be achieved through integration:
- *“within and between different types of transport;*
 - *between transport measures and land use planning;*
 - *between transport measures and policies to protect and improve the environment; and*
 - *between transport measures and policies for education, health, social inclusion and wealth creation.”*
- 4.2.4 Paragraph 4.1.8 states that the WG is committed to reducing reliance on the private car and supporting a modal shift to walking, cycling and public transport. Delivering this objective will make an important contribution to decarbonisation, improving air quality, increasing physical activity, improving the health of the nation and realising the goals of the *Wellbeing of Future Generations (Wales) Act 2015*.
- 4.2.5 Therefore, the WG outlines a support for a transport hierarchy in relation to the accessibility of new development that prioritises walking and cycling in the first instance, followed by public transport, and finally private motor vehicles. This TA provides a number of measures to encourage sustainable travel with the view to reduce single occupancy car travel. These measures are set out in the Transport Implementation Strategy (TIS) at **Section 7**.
- 4.2.6 Paragraph 4.1.10 states:
- “Development proposals must seek to maximise accessibility by walking, cycling and public transport, by prioritising the provision of appropriate on-site infrastructure and, where necessary, mitigating transport impacts through the provision of off-site measures, such as the development of active travel routes, bus priority infrastructure and financial support for public transport services.”*
- 4.2.7 Paragraph 4.1.50 states that car parking provision has a major influence on both mode choice and development patterns, and that *“minimum parking standards are no longer appropriate”*.
- 4.2.8 Paragraphs 4.1.56 to 4.1.57 identify the requirements for development proposals to be accompanied by a TA. It directs professionals to the TAN 18 for guidance on the preparation and content of TAs.

Technical Advice Note (TAN) 18: Transport (2007)

- 4.2.9 TAN 18 describes how to integrate land use and transport planning, and explains how transport impacts should be assessed and mitigated. It supports, and should be read in conjunction with, PPW.
- 4.2.10 The integration of land use and transport planning forms part of an overall sustainable development approach by the WG towards strategy and policy objectives. This is predominantly through maximising the accessibility of developments by sustainable modes of transport. This also includes reducing the need to travel and encouraging multi-purpose trips. Accessibility is defined in TAN 18 as *“the relative ability to take up services, markets or facilities”* (p.8).
- 4.2.11 The proposed development demonstrates a clear link between land use and transport planning, and is accessible by a range of sustainable transport modes. It provides opportunities to improve the walking and cycling infrastructure to the site, enhancing the potential for active travel.
- 4.2.12 Paragraph 4.6 states that parking standards for new development should be determined on an evidence basis which includes accessibility to other modes of transport.
- 4.2.13 While the proposed provision of 116 car parking spaces exceed the standards, this is of a similar level to the existing provision and will encourage parents to use the car park to drop-off and pick-up and not on the A4226.
- 4.2.14 Section 5 requires all new development to be designed in a way that is inclusive for all. The design of the development also plays an important role in providing genuine alternatives to car travel. This will include sufficient cycle parking in close proximity to the school access. The existing walking and cycling infrastructure surrounding the school is an acceptable standard to encourage alternative modes of travel. A total of 64 cycle parking spaces will be provided, in accordance with standards, to be located near the main entrance.
- 4.2.15 Section 7 considers the role that public transport can play in offering an alternative to car travel, giving emphasis to the provision of new services and facilities, as well as facilitating interchange, as methods of encouraging uptake. The development proposals include school bus transport, with a total of four school buses serving the school.

The Wales Transport Strategy (2008)

- 4.2.16 The *Wales Transport Strategy* (WTS) sets out the WG's main aims in improving transport:
- *“Reducing greenhouse gas emissions and other environmental impacts;*
 - *Improving public transport and better integration between modes;*
 - *Improving links and access between key settlements and sites across Wales and strategically important all-Wales links; and*
 - *Increasing safety and security.”*
- 4.2.17 As discussed in previous sections, the proposed development will improve integration between modes, facilitate use of existing public transport availability, enhance sustainable travel, and improve connectivity. It is therefore considered to be aligned with the WTS.

National Transport Finance Plan (2015)

- 4.2.18 The purpose of the National Transport Finance Plan (NTFP) is to:
- Provide the timescale for financing schemes undertaken by the WG;
 - Provide the timescale for delivering these schemes and detail the estimated expenditure required to deliver the scheme; and
 - Identify the likely source of financing to allow delivery to take place.
- 4.2.19 The NTFP is not a policy document nor does it seek to prioritise schemes to be taken forward. It brings together projects already being delivered. Some of these are already under construction. Others are already under development, but are not yet being built.

Active Travel (Wales) Act 2013

- 4.2.20 The *Active Travel (Wales) Act* became law in Wales in November 2013. The Act makes it a legal requirement for local authorities in Wales to map and plan for suitable routes for active travel, and to build and improve their infrastructure for walking and cycling every year. It also requires both the WG and local authorities to promote walking and cycling as a mode of transport.
- 4.2.21 The purpose of this Act is to require local authorities to continuously improve facilities and routes for pedestrians and cyclists and to prepare maps identifying current and potential future routes for their use. The Act also requires new road schemes (including road improvement schemes) to consider the needs of pedestrians and cyclists at design stage.
- 4.2.22 The Act is accompanied by a statutory design guidance document, published in December 2014, which provides advice on the planning, design, construction and maintenance of active travel networks and infrastructure, and is to be used at all stages of the process. Reference has been made to this guidance in the planning and design of the proposed development.
- 4.2.23 When carrying out its duties under the *Active Travel (Wales) Act 2013*, the VoG will seek to address the transport issues in areas of inactivity within the Communities First cluster area in Barry, as well as other centres of population. This will be achieved by promoting transport schemes to improve sustainable transport infrastructure thereby enabling safe and affordable access to employment sites. Safe Routes in Communities schemes will be promoted to provide effective and affordable transport services to enable the best opportunities to encourage active and safe travel.

Wellbeing and Future Generations Act 2015

- 4.2.24 The *Wellbeing of Future Generations (Wales) Act 2015* has resulted in the WG outlining seven goals in a 'wellbeing statement' (published in 2017) that contribute to sustainable development and details the aims to improve economic, social, environmental and cultural wellbeing of Wales for future generations. The Act places a duty on Local Authorities to set wellbeing objectives and contribute to achieving the seven well-being goals, which are:
- A prosperous Wales;
 - A resilient Wales;
 - A healthier Wales;
 - A more equal Wales;
 - A Wales of cohesive communities;
 - A Wales of vibrant culture and thriving Welsh language; and
 - A globally responsible Wales.
- 4.2.25 The seven goals form the basis for twelve objectives, also detailed in the wellbeing statement. Several of these are directly relevant to this proposed scheme:
- Drive sustainable growth and combat climate change;
 - Promote good health and well-being for everyone;
 - Build healthier communities and better environments; and
 - Deliver modern and connected infrastructure.
- 4.2.26 By improving sustainable transport infrastructure within the area surrounding the school, a mode shift away from car to walking, cycling and bus use will be encouraged. Sustainable transport will become more accessible and efficient allowing better connections between areas of leisure, employment and education whilst also encouraging growth. By creating an area that supports active travel the communities that use, the area will be healthier and have an improved environment to live and work and be educated in.

4.3 Local Policy

- 4.3.1 Planning legislation states that applications must be determined in accordance with the Development Plan unless material considerations indicate otherwise.

The Vale of Glamorgan Local Development Plan

- 4.3.2 *The Vale of Glamorgan Local Development Plan (LDP) 2011-2026* was updated in June 2017. The vision for the VoG is a place:

“That is safe, clean and attractive, where individuals and communities have sustainable opportunities to improve their health, learning and skills, prosperity and wellbeing; and

Where there is a strong sense of community in which local groups and individuals have the capacity and incentive to make an effective contribution to the future sustainability of the area.”

- 4.3.3 In support of the social, economic and sustainable themes intrinsic to the LDP and Community Strategy Vision, ten key strategic objectives have been developed that set the context of the LDP Strategy. The strategic objective most appropriate to this scheme is:

- **Objective 3:** To reduce the need for VoG residents to travel to meet their daily needs and enabling them greater access to sustainable forms of transport.

- 4.3.4 The LDP further develops ‘Strategic Policies’ to underpin the LDP Strategy and further develops policies specifically relating to ‘Managing Growth’, ‘Managing Development’ in the VoG.

- 4.3.5 Strategic Policy SP7 (Transportation) states:

“Sustainable transport improvements that serve the economic, social and environmental needs of the Vale of Glamorgan and promote the objectives of the South East Wales Regional Transport Plan and the Local Transport Plan will be favoured”, and

“Priority will be given to schemes that improve highway safety and accessibility, public transport, walking and cycling. All new developments that have a direct impact on the strategic transportation infrastructure will be required to deliver appropriate improvements to the network”.

- 4.3.6 The proposed development will provide mitigation to improve pedestrian safety within the site, such as zebra crossings at key locations.

- 4.3.7 Policy MG6 (provision of Education Facilities) for Managing Growth in the VoG provides details of land allocations for specific school sites, however, it goes on to state that *“existing schools will be extended or improved to meet demand for school places during the plan period.”*

- 4.3.8 Policy MG16 (Transport Proposals) for Managing Growth has been designed to safeguard a number of transport schemes. In addition to this, it maintains a commitment to encouraging walking and cycling. It states:

“An essential element in encouraging an increase in walking and cycling is the provision of a network of high quality dedicated routes that link communities and provide access to local retail, employment and recreation opportunities. The LDP will seek to encourage and give priority to those proposals that enhance opportunities for walking and cycling”.

- 4.3.9 The proposed development will encourage the increase of walking and cycling to the school safe internal access arrangements for pedestrians and cyclists. Furthermore, the introduction of a Travel Plan (TP) will further encourage sustainable travel to the school. More details on the proposed targets for mode change are contained in **Section 7**.

- 4.3.10 Policy MD2 (Design of New Development) states that development proposals should:

- *Provide a safe and accessible environment for all users, giving priority to pedestrians, cyclists and public transport users; and*
- *Have no unacceptable impact on highway safety nor cause or exacerbate existing traffic congestion to an unacceptable degree.*

4.3.11 In respect of this, the LDP states:

“All new development should be highly accessible. Walking and cycling have an important role to play in the management of movement across the area, particularly reducing the number of short trips taken by car. Developers will be required to ensure that new developments encourage walking and cycling by giving careful consideration to location, design, access arrangements, travel ‘desire lines’ through a development, and integration with existing and potential off-site links. Providing safe and convenient walking and cycling environments will help tackle health problems associated with physical inactivity and social exclusion factors arising from car dependency, poor access to services and public transport facilities.”

The Vale of Glamorgan Local Transport Plan 2015-2030

4.3.12 The Local Transport Plan (LTP) seeks to identify the sustainable transport measures required to ensure the VoG adheres to current requirements and good practices to allow for a sustainable transport environment for the period 2015 to 2020 as well as looking forward to 2030. It therefore seeks ways to secure better conditions for pedestrians, cyclists and public transport users and to encourage a change in travel choices away from the single occupancy car.

4.3.13 As most journeys by car, particularly for shopping and school travel, are relatively short, better conditions for pedestrians and cyclists can lead to a reduction in car use. A reduction in car use can promote good health and well-being, reduce the negative impacts on the environment that car travel can bring, offer better access to services and facilities, which in turn can offer improved economic opportunities and reduce the potential for traffic accidents. Sustainable transport infrastructure and services are therefore an important feature of modern day life.

The Vale of Glamorgan Parking Standards 2015

4.3.14 The *Vale of Glamorgan Parking Standards 2015* have been prepared in the context of *Planning Policy Wales Edition 7 (July 2014)* as SPG for the (now superseded) *Vale of Glamorgan Adopted Unitary Development Plan 1996-2011 (UDP)* and the (then) emerging *Vale of Glamorgan Local Development Plan 2011- 2026*. It sets out the VoG’s parking standards and explains the planning policy for parking requirements for new developments or changes of use.

4.3.15 The 2015 parking standards have been adopted as SPG. The parking standards seek to promote and ensure transparent and consistent approaches to the provision of parking. In addition to this it helps to inform developers and designers what is expected of them in terms of sustainability considerations and travel planning.

4.3.16 The SPG provides additional design guidance in regard to parking which has been referenced in the design of the proposed development and has been used to determine the number of maximum car parking spaces and cycle parking at the school; details of which are provided in **Section 3.5**.

4.4 Summary

4.4.1 This section of the report has provided a review of existing planning and transport policies at a national and local level that are considered relevant to the proposed development.

4.4.2 Planning law requires that applications for planning permission must be determined in accordance with the current LDP. The proposed development is considered to align with the objectives of the LDP.

4.4.3 The proposed development will facilitate opportunities for sustainable travel through the implementation of a TP, which will be sought as a planning condition, and is both a requirement of the national and local policy.

4.4.4 The proposed development will comply with the national and local policy and guidance, with access to the site being safe and suitable for all users and improved over the existing situation.

4.4.5 Furthermore, it has been demonstrated that the site is accessible via a range of sustainable modes including walking, cycling and public transport. In summary, the proposals comply with national and local policies.

5. Trip Generation and Distribution

5.1 Introduction

- 5.1.1 This section of the TA sets out the method for calculating the mode share for the existing school population, and the trip generation and distribution associated with the additional pupil population as part of the development proposals.

5.2 Existing School

- 5.2.1 The existing school population comprises 905 pupils (796 secondary and 109 sixth form) and 89 staff. It has consent for up to 1,423 pupils.
- 5.2.2 The school does not currently have a TP; this document would typically contain data on the existing mode share of the pupil and staff population, established through travel surveys. A TP will be developed, to be secured by planning condition.
- 5.2.3 In the absence of a TP, the TA has utilised a combination of data sources to establish the existing mode share of the pupil and staff population. This includes traffic survey data at the school access, data on school bus use held by the VoG, and data recorded from the 2011 Census. This is considered a reasonable method for establishing an interim mode share, and will be reviewed as part of the development of the TP.

Stage 1: School Access Traffic Generation

- 5.2.4 The starting point for the assessments has involved analysis of the traffic survey data collected at the school access. For the purposes of this exercise, the analysis has focused on the data collected during the morning period, specifically between 07:00 and 09:00. This is considered a reasonable period to provide a snapshot of pupil and staff travel behaviour; school days commence at 08:40 and therefore it is expected that most/all pupils and staff will be on-site by 09:00, taking account of any late pupil arrivals and differences in staff working hours.
- 5.2.5 **Table 5.1** summarises the movements to/from the site during this period. These include cars/LGVs and cycles, while movements associated with school buses have been excluded; pupils arriving by this mode are captured in data supplied by the VoG.

Table 5.1: Car/LGV and Cycle Movements (Staff and Pupils) – AM Period (07:00-09:00)

Mode	Arrivals	Departures
Car/LGV	194	109
Cycles	0	1
Total	194	110

- 5.2.6 The next stage of the process has been to identify which trips are associated with pupils and staff. The following assumptions have been made:
- Trips associated with staff are 'arrivals' only;
 - Trips associated with sixth form pupils are 'arrivals' only; and
 - Trips associated with secondary pupils are escorted and therefore involve an 'arrival' and a 'departure'.

Stage 2: Staff Mode Share

- 5.2.7 The number of staff arriving by car/LGV has been identified based on a mode share derived through analysis of the 2011 Census 'Journey to Work' data. This has been undertaken for employment trips to the 'Vale of Glamorgan 010' Middle Super Output Area (MSOA); this area contains the existing school and is the most detailed/smallest geographical area available for analysis of method of travel to work. The mode share has been applied to the staff population total of 89; the mode share and resulting number of staff using each mode is set out in **Table 5.2**.

Table 5.2: Staff Mode Share

Mode	Mode Share	No. of Staff
Walk	11%	10
Cycle	2%	1
Public Transport	5%	4
Car	83%	74
Total	100%	89

Note: Summation errors due to rounding.

- 5.2.8 **Table 5.2** shows that 83% of staff (74 in total) travel by car. Walking is the next most popular mode for staff, with a mode share of 11% (10 in total).

Stage 3: All Pupils

- 5.2.9 The next stage has been to identify the movements to/from the site associated with secondary and sixth form pupils. This has been derived by deducting the 'arrivals' associated with staff in **Table 5.2** from the 'arrivals' in **Table 5.1**, as shown in **Table 5.3**.

Table 5.3: Car/LGV and Cycle Movements (Secondary and Sixth Form Pupils) – AM Period (07:00-09:00)

Mode	Arrivals	Departures
Car/LGV	120	109
Cycles	0	1
Total	120	110

Stage 4: Sixth Form Pupil Mode Share

- 5.2.10 The vehicular movements associated with sixth form pupils have then been identified by deducting 'departures' from 'arrivals' in **Table 5.3**. The resulting movements to/from the site associated with sixth form pupils are set out in **Table 5.4**.

Table 5.4: Car/LGV and Cycle Movements (Sixth Form Pupils) – AM Period (07:00-09:00)

Mode	Arrivals
Car/LGV	11
Cycles	0
Total	11

- 5.2.11 For robustness, it is assumed that car/LGV movements associated with sixth form pupils have an occupancy level of one pupil per car; this therefore equates to 11 sixth form pupils travelling by car. The VoG has supplied data on school bus use by sixth form pupils; this shows that 15 pupils travel by school bus. In summary, it is identified that, of the 109 sixth form pupils at the existing school, 11 travel by car, 15 by school bus, and none cycle (as none were recorded in the traffic survey). The remaining 83 pupils are assumed to walk. This information and the resulting mode share are shown in **Table 5.5**.

Table 5.5: Mode Share – Sixth Form Pupils

Mode	No. of Pupils	Mode Share
Walk	83	76%
Cycle	0	0%
School Bus	15	13%
Car	11	10%
Total	109	100%

Note: Summation errors due to rounding.

Stage 5: Secondary Pupil Mode Share

- 5.2.12 The vehicular movements associated with secondary pupils are considered to be those remaining following deduction of staff 'arrivals' and sixth form pupil 'arrivals' from **Table 5.1**. The resulting movements to/from the site associated with secondary pupils are set out in **Table 5.6**.

Table 5.6: Car/LGV and Cycle Movements (Secondary Pupils) – AM Period (07:00-09:00)

Mode	Arrivals	Departures
Car/LGV	109	109
Cycles	0	1
Total	109	110

- 5.2.13 It is assumed that some car/LGV trips transport more than one pupil, for example when siblings or friends travel together in the same vehicle. To account for this, a factor of 1.4 pupils per vehicle, based on analysis of TRICS for this specific land use category, has been applied; this therefore equates to a total of 153 secondary pupils travelling by car. The VoG has supplied data on school bus use by secondary pupils; this shows that 81 pupils travel by school bus. In summary, it is identified that of the 796 secondary pupils at the existing school, 153 travel by car, 81 by school bus, and none cycle (as none were recorded in the traffic survey). The remaining 563 pupils are assumed to walk. This information and the resulting mode share are shown in **Table 5.7**.

Table 5.7: Mode Share – Secondary Pupils

Mode	No. of Pupils	Mode Share
Walk	563	71%
Cycle	0	0%
School Bus	81	10%
Car	153	19%
Total	796	100%

Note: Summation errors due to rounding.

Stage 6: Summary Pupil Mode Share of Existing School

- 5.2.14 The values in **Tables 5.5** and **5.7** have been combined to derive the mode share for all pupils at the existing school, as shown in **Table 5.8**.

Table 5.8: Mode Share – All Pupils

Mode	No. of Pupils	Mode Share
Walk	646	71%
Cycle	0	0%
School Bus	95	11%
Car	164	18%
Total	905	100%

- 5.2.15 **Table 5.8** shows that 71% of pupils (646 in total) walk to school. Car is next most popular mode for pupils, with a mode share of 18% (164 in total), followed by school bus, with a mode share of 11% (95 in total).

5.3 Proposed School

- 5.3.1 The proposed development will result in an additional 104 secondary pupils and an additional 91 sixth form pupils. This will result in a total of 1,100 pupils; this is well within what is consented on site (1,423 pupils). Staffing numbers are expected to remain at the level of the existing school.
- 5.3.2 For the additional secondary and sixth form pupils, it is envisaged that these will travel according to the respective mode shares of the existing school.

Sixth Form Pupils

- 5.3.3 It is envisaged that the additional 91 sixth form pupils will travel according to the mode share of existing sixth form pupils shown in **Table 5.5**. The resulting number of pupils travelling by each mode is shown in **Table 5.9**.

Table 5.9: Mode Share – Additional Sixth Form Pupils

Mode	No. of Pupils
Walk	70
Cycle	0
School Bus	12
Car	9
Total	91

- 5.3.4 As per the existing school, it is assumed that sixth form pupils travelling by car will do so at an occupancy level of one pupil per car; this therefore equates to an additional nine 'arrivals' during the AM period and nine vehicle 'departures' during the PM period; for robustness, these are assumed to occur during the AM and PM peak hours.

Secondary Pupils

- 5.3.5 It is envisaged that the additional 104 secondary pupils will travel according to the mode share of existing secondary pupils in **Table 5.7**. The resulting number of pupils travelling by each mode is shown in **Table 5.10**.

Table 5.10: Mode Share – Additional Secondary Pupils

Mode	No. of Pupils
Walk	74
Cycle	0
School Bus	11
Car	20
Total	104

Note: Summation errors due to rounding.

- 5.3.6 As per the existing school, it is assumed that secondary pupils travelling by car will be do so at an occupancy level of 1.4 pupils per car and be escorted; this therefore equates to an additional 52 vehicle 'arrivals' and 52 vehicle 'departures' during the AM and PM periods; for robustness, these are assumed to occur during the AM and PM peak hours.

Summary Pupil Mode Share

- 5.3.7 The values in **Tables 5.9** and **5.10** have been combined to derive the mode share for the additional pupils at the school, as shown in **Table 5.11**.

Table 5.11: Mode Share – Additional Pupils

Mode	No. of Pupils	Mode Share
Walk	143	73%
Cycle	0	0%
School Bus	23	12%
Car	29	15%
Total	195	100%

- 5.3.8 The values in **Tables 5.8** and **5.11** have been combined to derive the mode share for the existing and additional pupils at the school, as shown in **Table 5.12**. These should form an initial baseline for setting of TP targets, prior to school travel surveys being undertaken.

Table 5.12: Mode Share – Existing + Additional Pupils

Mode	No. of Pupils	Mode Share
Walk	789	72%
Cycle	0	0%
School Bus	118	11%
Car	193	18%
Total	1,100	100%

Note: Summation errors due to rounding.

Summary Traffic Generation and Distribution

- 5.3.9 **Table 5.13** sets out the traffic generation associated with the additional pupils during the AM and PM peak hours.

Table 5.13: Traffic Generation – Additional Pupils

Time Period	Arrivals	Departures	Total
AM Peak Hour (08:00-09:00)	24	14	38
PM Peak Hour (14:30-15:30)	14	24	38

- 5.3.10 In terms of distribution, it is assumed that the additional traffic will generally follow that of existing movements on the surveyed network. As such, the traffic has been distributed based on observed turning proportions at the surveyed junctions; where appropriate, movements to/from certain junction arms have not been allowed due to only non-residential land uses being served.
- 5.3.11 The resulting distribution of traffic associated with the additional pupils during the AM and PM peak hours is shown on **Figures 5.1** and **5.2** respectively.
- 5.3.12 The proposals for YGBM will result in an additional 12 buses using the WHS access. This equates to an additional 24 vehicle movements during the AM and PM peak hours.

5.4 Summary

- 5.4.1 The TA has utilised a combination of data sources to establish the existing mode share of the pupil and staff population. This includes traffic survey data at the school access, data on school bus use held by the VoG, and data recorded from the 2011 Census. This is considered a reasonable method for establishing an interim mode share, and will be reviewed as part of the development of the TP.
- 5.4.2 For the existing school, it is identified that 83% of staff travel by car. Walking is the next most popular mode for staff, with a mode share of 11%. For pupils, 18% travel by car, 11% by school bus and 71% walk. No pupils were identified as cycling; however, these may have not been captured in the survey of traffic movements at the school access, for example, due to pupils dismounting prior to the school access, or using separate pedestrian/cycle accesses.

- 5.4.3 The additional pupils are envisaged to travel according to the identified mode shares of the existing pupil population. The resulting mode share of the existing and additional pupils combined shows that 18% will travel by car, 11% by school bus and 72% walk. These should form an initial baseline for setting of TP targets, prior to school travel surveys being undertaken.
- 5.4.4 The additional pupils at the school will generate an additional 38 vehicle movements during the AM and PM peak hours. These have been distributed onto the surveyed network based on observed turning proportions, taking account of appropriate origins/destinations.
- 5.4.5 The proposals for YGBM will result in an additional 12 buses using the WHS access. This equates to an additional 24 vehicle movements during the AM and PM peak hours.
- 5.4.6 It should be noted that, whilst the proposed development will result in an increase in the existing school population, this is still well within what is consented on the site. The increases in trip generation are therefore already considered to be consented, but have been provided for information purposes

6. Traffic Impact Assessment

6.1 Assessment Scenarios

- 6.1.1 The planning application is to be submitted in 2019. The impact of the proposed development on the local highway network has been assessed in a future year of 2021; this is expected to be the opening year of the proposed development.
- 6.1.2 The assessment scenarios for the weekday AM peak hour (08:00-09:00hrs) and weekday PM peak hour (14:30-15:30hrs) are as follows:
- Scenario 1 – 2018 Base Year;
 - Scenario 2 – 2021 Without Development; and
 - Scenario 3 – 2021 With Development.
- 6.1.3 In order to estimate future growth in traffic flows, traffic growth factors have been obtained from TEMPro (NTEM Dataset 7.0). The TEMPro program is based on the National Trip End Model (NTEM) and takes into account changes in car ownership and local planning forecasts regarding housing and employment.
- 6.1.4 The forecast has been based on an 'Urban, Principal' road. The surveyed network comprises numerous MSOAs; these are 'The Vale of Glamorgan 007', 'The Vale of Glamorgan 010' and 'The Vale of Glamorgan 013'. An average has been calculated from the derived factors and has been used for assessment, which is considered reasonable. The derived factors and the calculated average are set out in **Table 6.1**.

Table 6.1: TEMPro Growth Factors

Time Period	MSOA	Growth Factor
AM Peak Period (07:00-10:00)	The Vale of Glamorgan 007	1.041
	The Vale of Glamorgan 010	1.027
	The Vale of Glamorgan 013	1.040
	Average	1.036
Interpeak Period (10:00-16:00)	The Vale of Glamorgan 007	1.048
	The Vale of Glamorgan 010	1.036
	The Vale of Glamorgan 013	1.048
	Average	1.044

- 6.1.5 It should be noted that, whilst the proposed development will result in an increase in the existing school population, this is still well within what is consented on the site. The increases in trip generation are therefore already considered to be consented; this impact assessment is therefore intended for information purposes only.

6.2 Spreadsheet Model

- 6.2.1 A spreadsheet model has been developed for the assessment scenarios for each of the time periods. The traffic flows and relevant figures are referenced in **Table 6.2**.

Table 6.2: Spreadsheet Model Figures

Figure No.	Description
2.2	Traffic Flows – 2018 Base Year: Weekday AM Peak Hour (08:00-09:00)
2.3	Traffic Flows – 2018 Base Year: Weekday PM Peak Hour (14:30-15:30)
6.1	Traffic Flows – 2021 Without Development: Weekday AM Peak Hour (08:00-09:00)
6.2	Traffic Flows – 2021 Without Development: Weekday PM Peak Hour (14:30-15:30)
5.1	Traffic Flows – Proposed Development: Weekday AM Peak Hour (08:00-09:00)
5.2	Traffic Flows – Proposed Development: Weekday PM Peak Hour (14:30-15:30)
6.3	Traffic Flows – 2021 With Development: Weekday AM Peak Hour (08:00-09:00)
6.4	Traffic Flows – 2021 With Development: Weekday PM Peak Hour (14:30-15:30)

- 6.2.2 The starting point for the spreadsheet model is 2018 Base Year (Scenario 1), based on the observed traffic flows derived from the traffic counts undertaken in 2018. TEMPro traffic growth factors have been applied to derive traffic flows for 2021 without the proposed development (Scenario 2). Traffic associated with the proposed development has then been added to traffic flows for Scenario 2 to derive traffic flows for 2021 with the proposed development (Scenario 3).

6.3 Changes in Traffic Flows

- 6.3.1 The assessment has examined the impact of the proposed development in terms of the changes in traffic flows at the surveyed junctions in the network. **Tables 6.3** and **6.4** set out the total traffic entering each junction in the 2021 scenarios, the difference and percentage change during the AM and PM peak hours respectively.

Table 6.3: 2021 Junction Inflow Comparison – AM Peak Hour

Junction	2021 Without Development	2021 With Development	Difference	Percentage Change
MDR/PHS access priority junction	682	684	+1	+0%
A4050/MDR roundabout junction	1,867	1,875	+8	+0%
A4050/A4226 roundabout junction	2,285	2,311	+26	+1%
A4050/Barry Hospital and YGBM access signal-controlled junction	1,709	1,727	+18	+1%
Barry Hospital/YGBM priority junction	622	622	+0	+0%
A4050/Barry Road mini-roundabout junction	2,426	2,443	+18	+1%
A4226/entrance to WHS/Barry Fire Station crossroads junction	1,399	1,431	+32	+2%
A4226/exit from WHS/Stirling Road signal-controlled junction	1,478	1,494	+16	+1%

Note: Summation errors due to rounding.

Table 6.4: 2021 Junction Inflow Comparison – PM Peak Hour

Junction	2021 Without Development	2021 With Development	Difference	Percentage Change
MDR/PHS access priority junction	475	477	+1	+0%
A4050/MDR roundabout junction	2,032	2,042	+10	+1%
A4050/A4226 roundabout junction	2,429	2,452	+23	+1%
A4050/Barry Hospital and YGBM access signal-controlled junction	1,639	1,651	+13	+1%
Barry Hospital/YGBM priority junction	363	363	+0	+0%
A4050/Barry Road mini-roundabout junction	2,398	2,411	+13	+1%
A4226/entrance to WHS/Barry Fire Station crossroads junction	1,320	1,348	+27	+2%
A4226/exit from WHS/Stirling Road signal-controlled junction	1,580	1,605	+25	+2%

Note: Summation errors due to rounding.

- 6.3.2 **Tables 6.3 and 6.4** shows that the proposed development will result in increases in traffic flows entering the junctions in the network of no more than 2%. These increases are not considered to be material and should also be viewed in the context of the proposed number of pupils (1,100 pupils) being well within what is consented (1,423 pupils) on the site.
- 6.3.3 The proposals for YGBM will result in an additional 12 buses using the WHS access. This equates to an additional 24 vehicle movements during the AM and PM peak hours. These movements will already be on the network, but will reassign to the WHS access; this will result in an additional 12 movements at the entrance and an additional 12 movements at the exit during the AM and PM peak hours. When added to the values in **Tables 6.3 and 6.4**, the proposed development will result in increases in traffic flows entering the A4226/entrance to WHS/Barry Fire Station crossroads junction to 3% during the AM and PM peak hour, an increases in traffic flows entering the A4226/exit from WHS/Stirling Road signal-controlled junction to 2% during the AM and PM peak hours.

6.4 Summary

- 6.4.1 The traffic impact assessment has considered three assessment scenarios; 2018 Base Year, 2021 Without Development and 2021 With Development; 2021 is expected to be the opening year of the proposed development. The future year forecasts include traffic growth.
- 6.4.2 An assessment has been undertaken of the impact of the proposed development in terms of the changes in traffic flows at the surveyed junctions in the network. This has identified that the proposed development will result in increases in traffic of no more than 3%. These increases are not considered to be material and should also be viewed in the context of the proposed number of pupils being well within what is consented on the site.
- 6.4.3 It should be noted that this work is being carried out in combination with other schools proposals in the immediate local area (PHS and YGBM). Whilst each application will be made separately and will not depend on each other's outcome, consideration has been given to the overall changes in pupil numbers as a result of these proposals coming forward. **Table 6.5** provides a comparison of the existing permitted capacity at the schools concerned, and the proposed pupil numbers.

Table 6.5: Comparison of Consented and Proposed Pupil Numbers

School	Consented	Proposed	Difference
PHS	1,331	1,100	-231
WHS	1,423	1,100	-323
YGBM	1,361	1,660	+299
Total	4,115	3,860	-255

- 6.4.4 **Table 6.5** shows that both PHS and WHS will experience a net reduction in pupil population from what is currently consented on site, while YGBM will experience a net increase. Overall, there will be a net reduction in pupil population when compared with what the total consent across all the sites.

7. Transport Implementation Strategy

7.1 Introduction

- 7.1.1 TAN 18 requires any TA document to provide the information necessary to assess the suitability of an application in travel demand and traffic impact terms. It recommends that a TIS should be included within the TA. The TIS is intended to set objectives and targets in managing travel demand, whilst detailing the infrastructure and measures necessary to achieve them. The TIS should also set up a framework for monitoring the targets including modal travel choice.
- 7.1.2 A TIS shares many of the same goals as a TP; therefore, the modal information, targets and measures set out in this section will inform the TP, which is not required as part of the planning application but will be secured as a planning condition. The implementation of the TP and associated monitoring and reporting of performance will be undertaken by a Travel Plan Co-ordinator (TPC).

7.2 Mode Share and Targets

- 7.2.1 Mode share targets are used to evaluate the success of the TIS 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.
- 7.2.2 **Section 5** of the TA sets out the forecast mode share of the school with the development proposals. The staff and pupil mode share which has been calculated as part of the assessments is summarised in **Table 7.1**.

Table 7.1: Forecast Mode Share

Mode	Mode Share	
	Staff	Pupils
Walk	11%	72%
Cycle	2%	0%
Public Transport/School Bus	5%	11%
Car	83%	18%
Total	100%	100%

- 7.2.3 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.

7.3 Monitoring and Evaluation

- 7.3.1 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.
- 7.3.2 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.

- 7.3.3 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.
- 7.3.4 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.
- 7.3.5 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.

7.4 Measures and Interventions

- 7.4.1 In order to achieve the reduction in single occupancy car use and encourage a modal shift to more sustainable forms of travel, a number of measures will be implemented. These will include a combination of physical infrastructure in the design of the development and also TP measures.

Physical Infrastructure

- 7.4.2 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.
- 7.4.3 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.
- 7.4.4 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.
- 7.4.5 A total of 64 cycle parking spaces are proposed, in accordance with the adopted VoG parking standards, to be located near the main entrance.

Travel Plan Measures

- 7.4.6 A TP will be prepared and a TPC will be appointed who will be responsible in ensuring the success of the TP and its targets and objectives. The TP will contain a range of measures additional to those that will be provided as part of the development to enhance the attractiveness of sustainable travel and to encourage the use of the walking, cycling and public transport infrastructure. Such additional measures could include:
- Newsletters;
 - Noticeboards advertising sustainable transport information; and
 - Promotion of national sustainable transport initiatives such as national walk to school day and bike to school week, etc.

7.5 Summary

- 7.5.1 Targets have been set for the reduction of private car use and a commitment to a TP and monitoring programme has been made.
- 7.5.2 The TIS has set out the measures that will be implemented as part of the development proposals to help to achieve the targets and objectives set. The TP measures will add another layer of interventions which will continue to promote and encourage the range of facilities available and improve awareness or provision wherever possible.

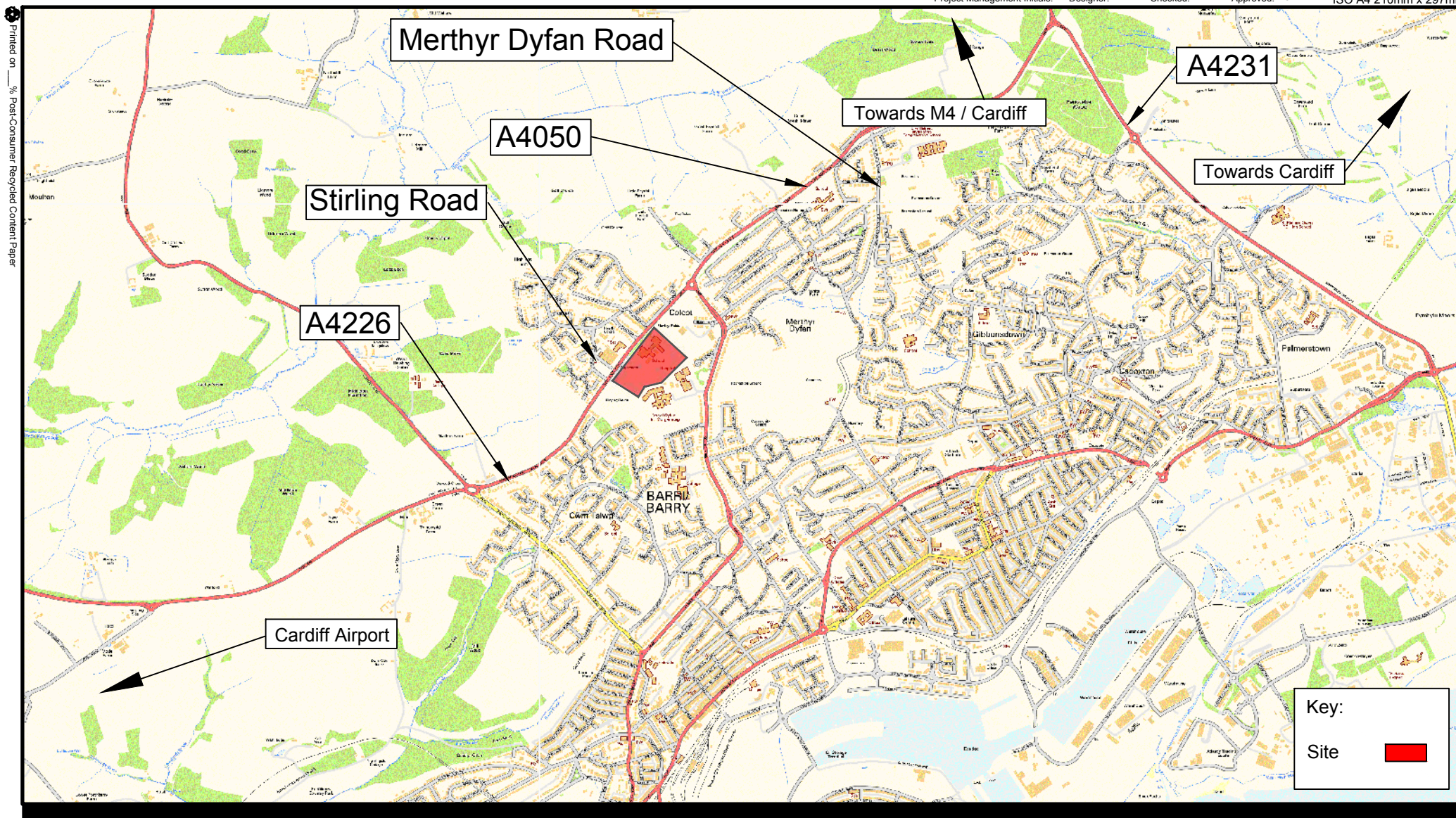
8. Conclusions

- 8.1 This TA has been prepared by AECOM on behalf of the VoG to provide transport planning and highways advice to inform a planning application for a new school on the existing WHS site. It has been prepared with regard to pre-application discussions with the VoG, in its role as LHA and LEA.
- 8.1.1 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.
- 8.1.2 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.
- 8.1.3 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. 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.
- 8.1.4 A review of PIC data has been undertaken and it can be concluded that there are no existing highway safety issues within the study area that would be exacerbated by the proposed development. The type, causation, dates and location of PICs does not suggest a particular pattern or correlation that would draw attention to any existing safety issues within the local area considered.
- 8.1.5 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.
- 8.1.6 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.
- 8.1.7 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.

- 8.1.8 The development proposals align with existing and emerging planning and transport policy at both a national and local level. The proposals will facilitate sustainable travel through a number of measures including the implementation of a TP, which will be secured through a planning condition.
- 8.1.9 The TA has utilised a combination of data sources to establish the existing mode share of the pupil and staff population and the forecast mode share of the proposed development. This will be used to inform initial mode share targets in the TP.
- 8.1.10 The additional pupils at the school (on what are currently on site) will generate an additional 38 vehicle movements during the AM and PM peak hours. An assessment has been undertaken of the impact of this increase on surveyed junctions in the study area in 2021, the expected opening year of the development. This has identified that the proposed development will generally result in increases in traffic of no more than 3%. These increases are not considered to be material and should also be viewed in the context of the proposed number of pupils being well within what is consented on the site.
- 8.1.11 This TA has been carried out in combination with other schools proposals in the immediate local area (PHS and YGBM). Whilst each application will be made separately and will not depend on each other's outcome, consideration has been given to the overall changes in pupil numbers as a result of these proposals coming forward. Overall, there will be a net reduction in pupil population when compared with what the total consent across all the sites.
- 8.1.12 Further to the findings of this TA, it can be concluded that there are no transport reasons why the proposed development should not be granted planning permission.



Figures

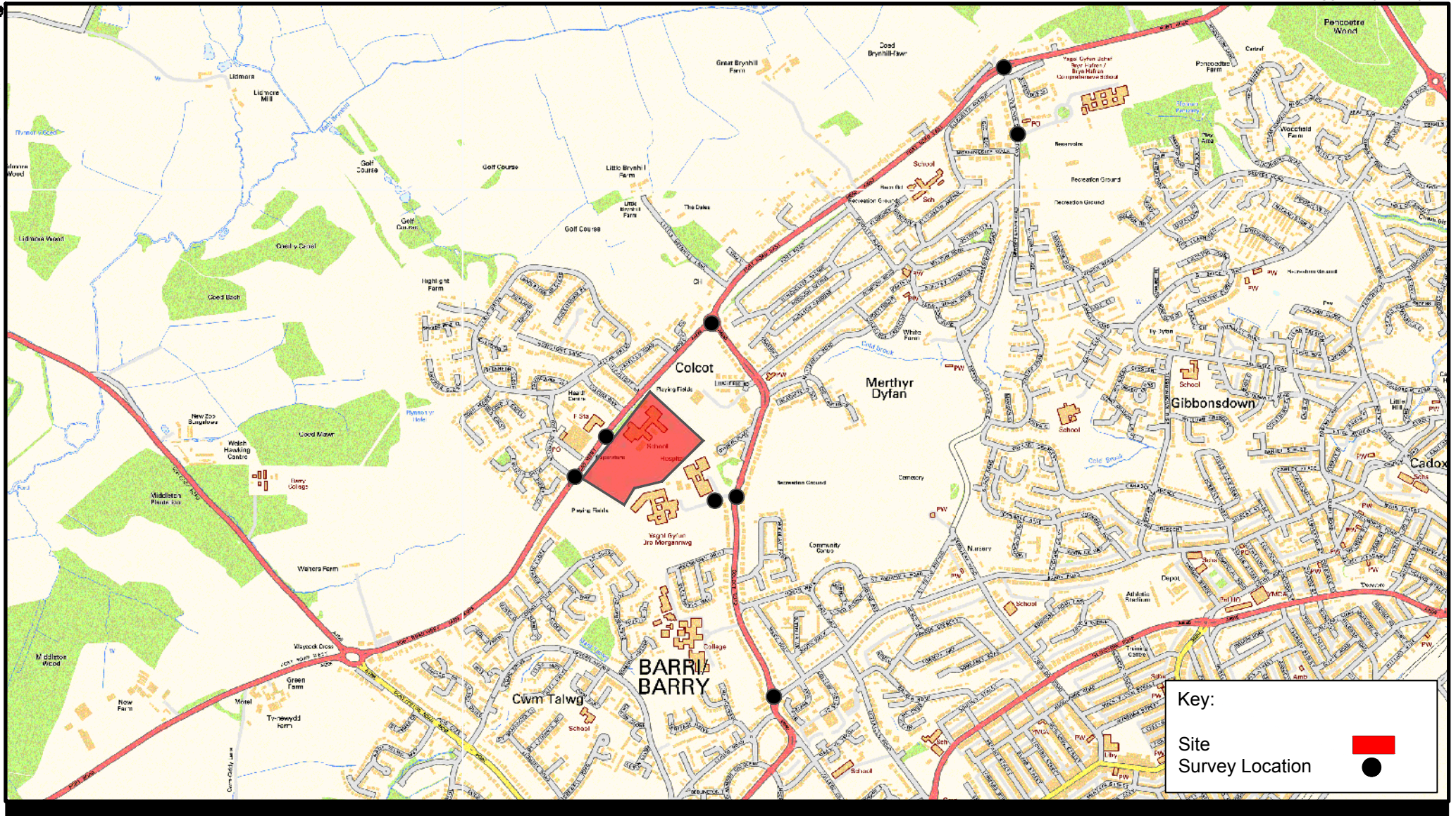


Whitmore High School, Barry

Transport Assessment

Figure 1.1: Site Location Plan

AECOM
 60571313



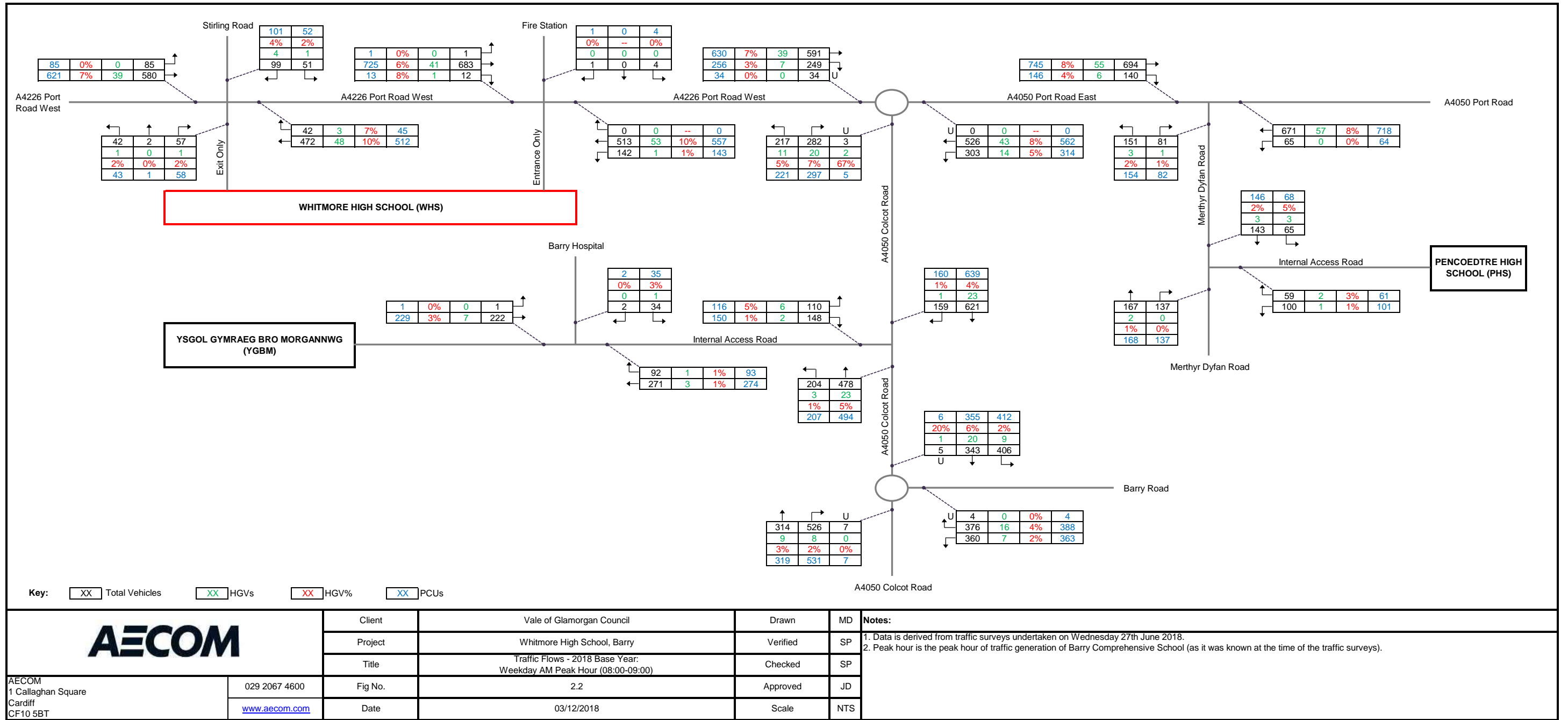
Whitmore High School, Barry

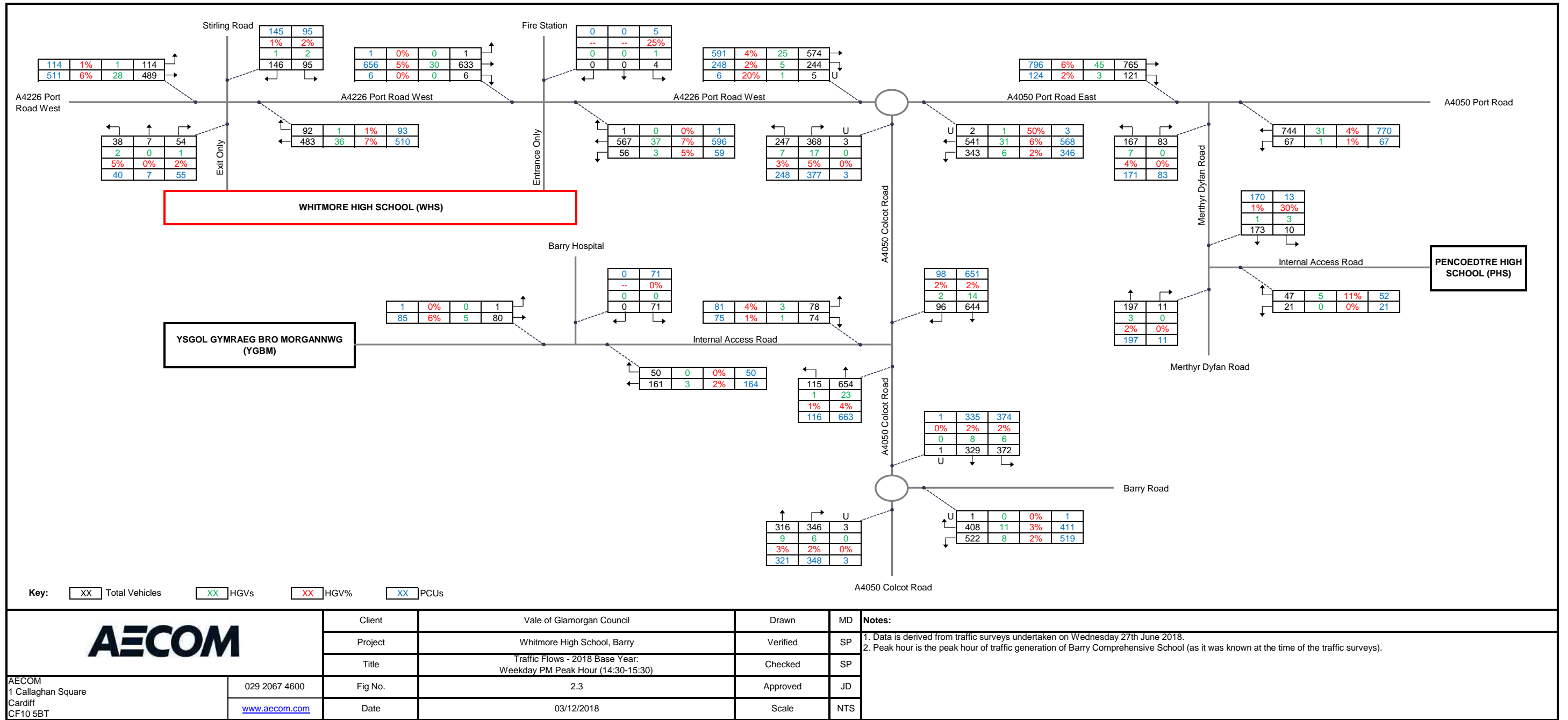
Transport Assessment

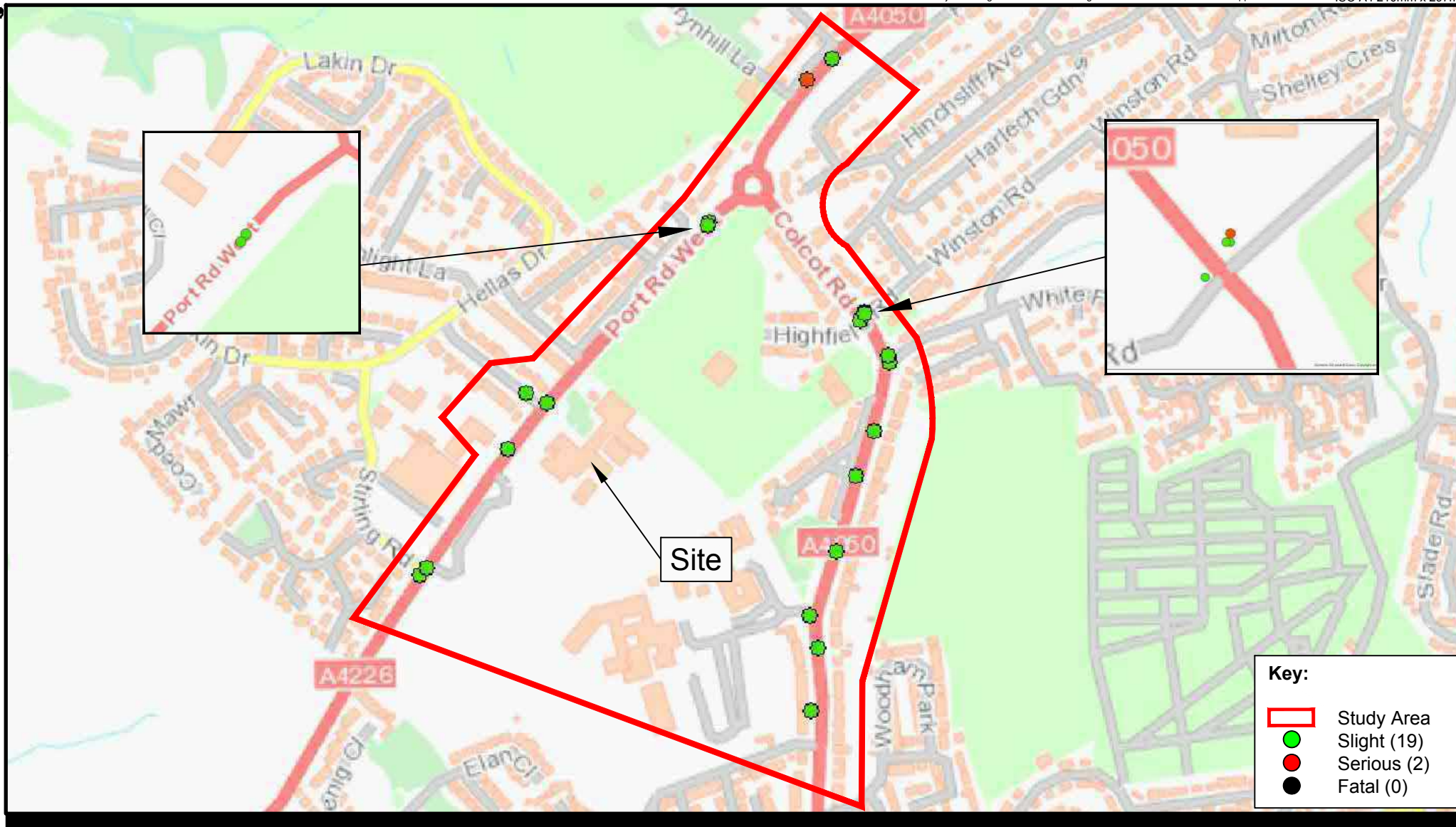
Figure 2.1: Traffic Surveys Plan

AECOM

60571313







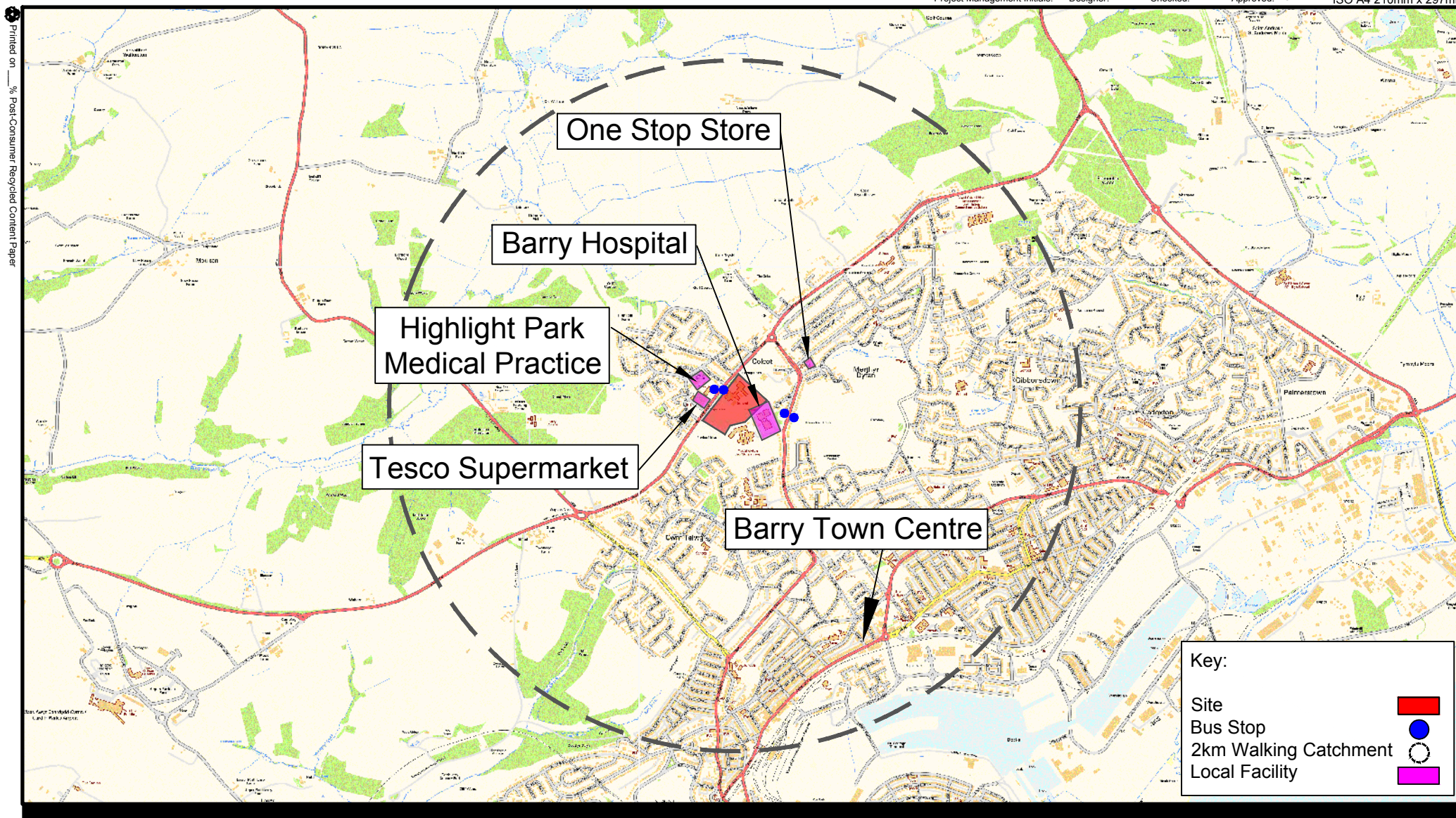
Whitmore High School, Barry

Transport Assessment

Figure 2.4: Personal Injury Collision Data Plot

AECOM

60571313



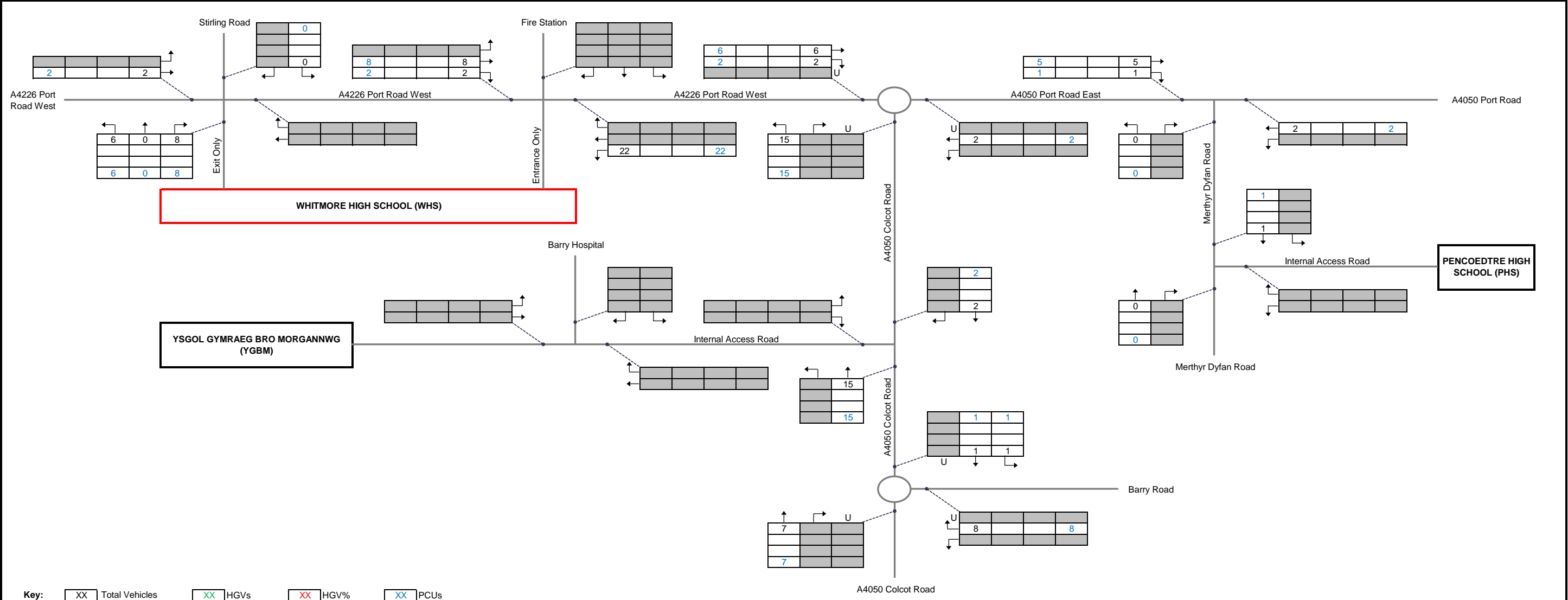
Whitmore High School, Barry

Transport Assessment

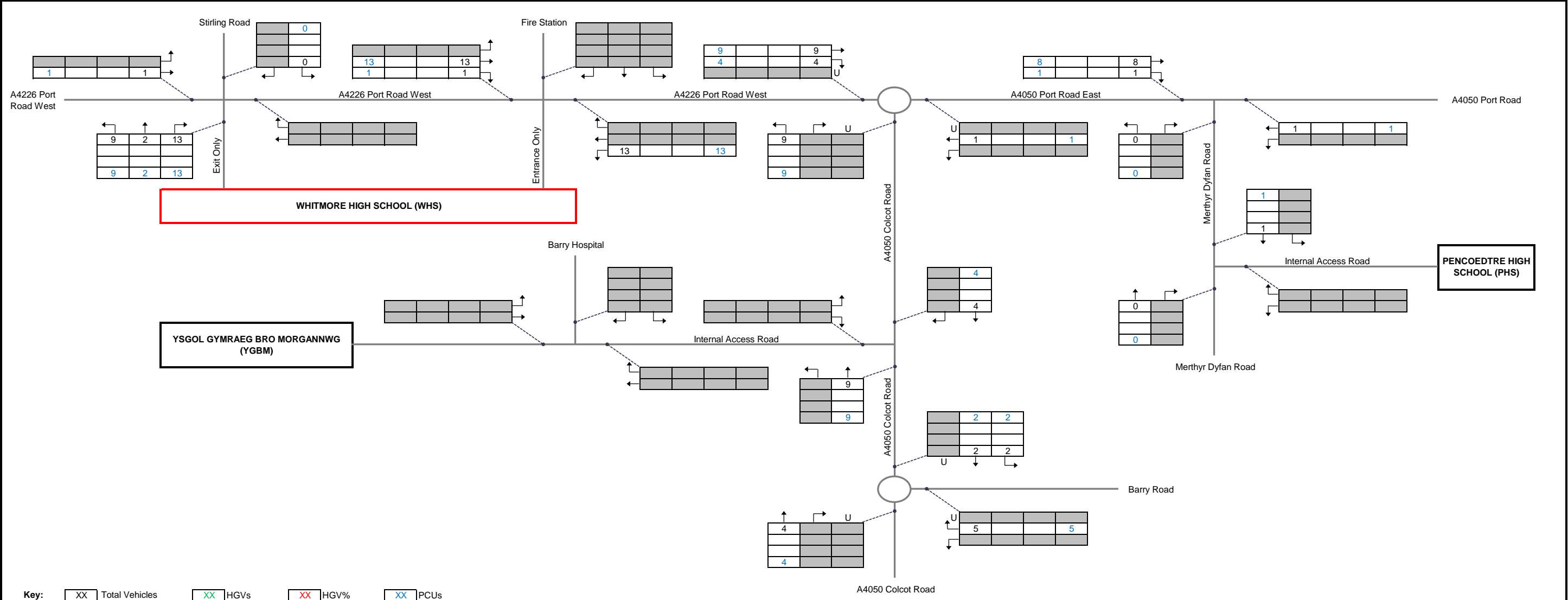
Figure 2.5: Local Facilities Plan

AECOM

60571313

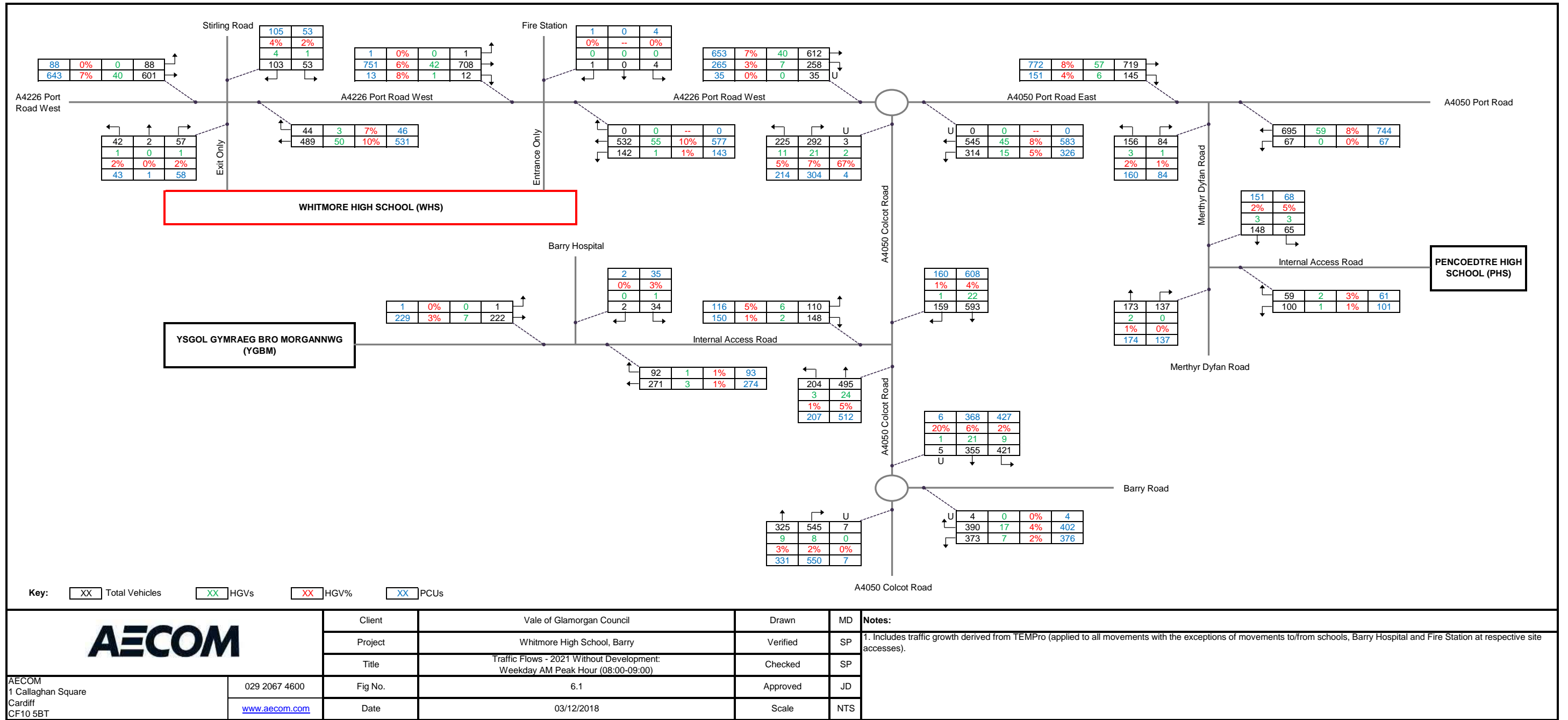


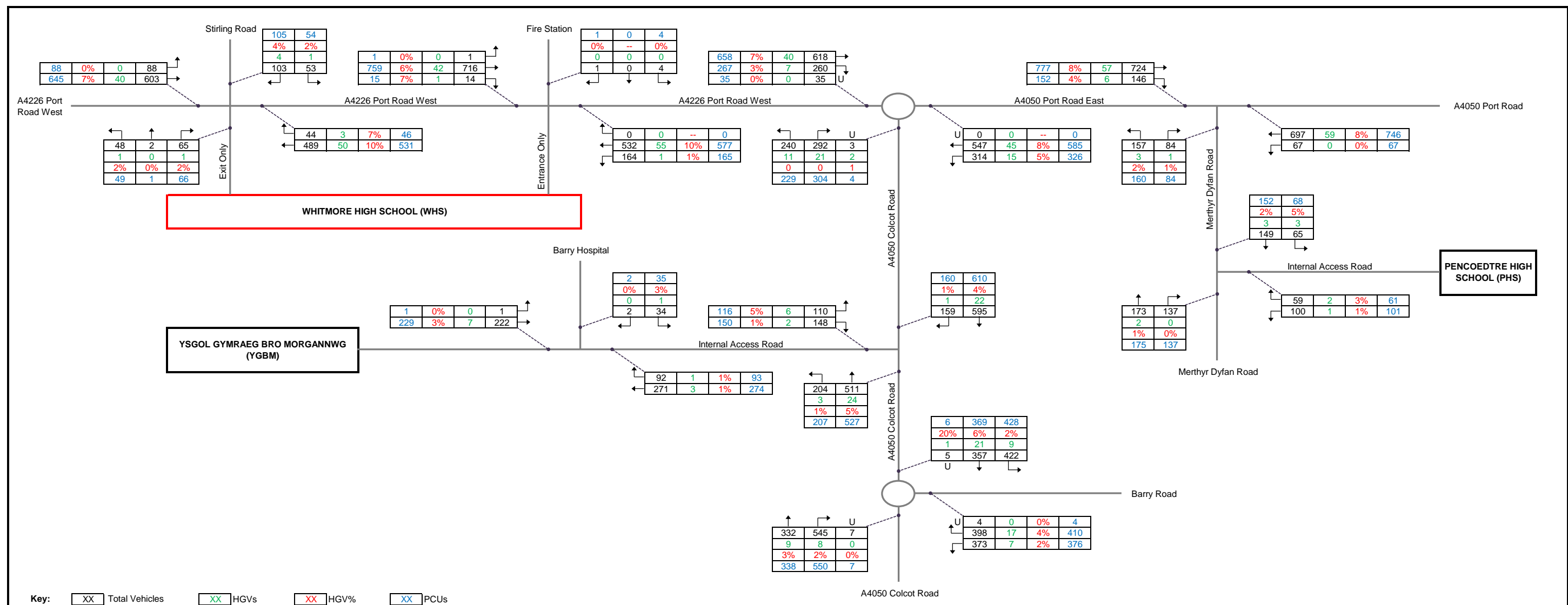
<div><div>AECOM</div><div>AECOM 1 Callaghan Square Cardiff CF10 5BT</div></div>		Client	Vale of Glamorgan Council	Drawn	MD	Notes: 1. Traffic associated with additional school population. 2. Cells highlighted in grey are not considered to be appropriate turning movements for origin/destination.
		Project	Whitmore High School, Barry	Verified	SP	
		Title	Traffic Flows - Proposed Development: Weekday AM Peak Hour (08:00-09:00)	Checked	SP	
		Fig No.	5.1	Approved	JD	
		Date	03/12/2018	Scale	NTS	



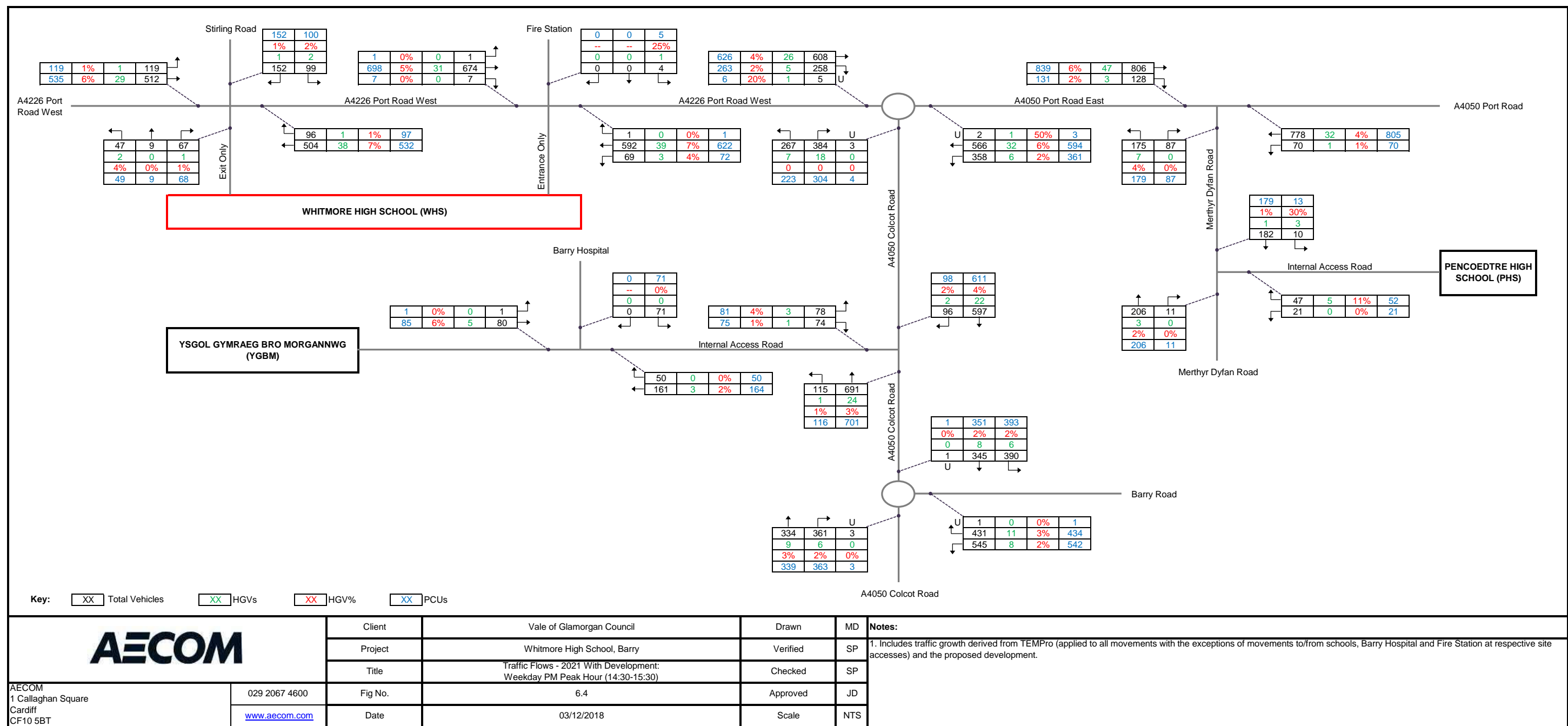
Key: XX Total Vehicles XX HGVs XX HGV% XX PCUs

<div><div><div>AECOM</div><div>1 Callaghan Square Cardiff CF10 5BT</div></div><div>029 2067 4600 www.aecom.com</div></div>		Client	Vale of Glamorgan Council	Drawn	MD	Notes: 1. Traffic associated with additional school population. 2. Cells highlighted in grey are not considered to be appropriate turning movements for origin/destination.
		Project	Whitmore High School, Barry	Verified	SP	
		Title	Traffic Flows - Proposed Development: Weekday PM Peak Hour (14:30-15:30)	Checked	SP	
		Fig No.	5.2	Approved	JD	
		Date	03/12/2018	Scale	NTS	





<div><div><div>AECOM</div><div>1 Callaghan Square Cardiff CF10 5BT</div></div><div>029 2067 4600 www.aecom.com</div></div>		<div>Client</div> Vale of Glamorgan Council	<div>Drawn</div>	<div>MD</div>	<div>Notes:</div> <div>1. Includes traffic growth derived from TEMPro (applied to all movements with the exceptions of movements to/from schools, Barry Hospital and Fire Station at respective site accesses) and the proposed development.</div>
		<div>Project</div> Whitmore High School, Barry	<div>Verified</div>	<div>SP</div>	
		<div>Title</div> Traffic Flows - 2021 With Development: Weekday AM Peak Hour (08:00-09:00)	<div>Checked</div>	<div>SP</div>	
		<div>Fig No.</div> 6.3	<div>Approved</div>	<div>JD</div>	
		<div>Date</div> 03/12/2018	<div>Scale</div>	<div>NTS</div>	



<div><div><div>AECOM</div></div><div><div>1 Callaghan Square</div><div>Cardiff</div><div>CF10 5BT</div></div></div>		Client	Vale of Glamorgan Council	Drawn	MD	Notes: 1. Includes traffic growth derived from TEMPro (applied to all movements with the exceptions of movements to/from schools, Barry Hospital and Fire Station at respective site accesses) and the proposed development.
		Project	Whitmore High School, Barry	Verified	SP	
		Title	Traffic Flows - 2021 With Development: Weekday PM Peak Hour (14:30-15:30)	Checked	SP	
<div><div>029 2067 4600</div><div>www.aecom.com</div></div>		Fig No.	6.4	Approved	JD	
		Date	03/12/2018	Scale	NTS	



Appendix 1.1

Transport Assessment Scoping Note

Project:	Whitmore High School, Barry	Job No:	60571313
Subject:	Transport Assessment Scoping Note		
Prepared by:	Kirsty Cox (Principal Consultant)	Date:	21/11/2018
Checked by:	Spiro Panagi (Associate Director)	Date:	21/11/2018
Approved by:	Spiro Panagi (Associate Director)	Date:	21/11/2018

Scoping Note Revision A following Local Highway Authority Requested Additions 21/11/2018

The following Table sets out the proposed scope of a Transport Assessment (TA) in respect of the proposed redevelopment of Whitmore High School in Barry, Wales.

1	Site Location and Existing Land Use	<p>Whitmore High School is one of three schools within close proximity of each other seeking planning permission for redevelopment, albeit all on different scales. The other two schools are Ysgol Gymraeg Bro Morgannwg (YGBM) and Pencoedre High School. A plan indicating the locations of all three schools is attached in Appendix A.</p> <p>Whitmore High School (previously known as Barry Comprehensive School, an all-boys school) is a co-educational school with a consolidated sixth form with Pencoedre High School (previously known as Bryn Hafren Comprehensive School, an all-girls school) located to the northeast. Whitmore High School is located south of, and accessed from, the A4226 Port Road West, which connects Barry to Cardiff International Airport (CWL) via A4226 Port Road West and Cardiff City Centre via A4226 Port Road East. The site is approximately 10 miles from Cardiff, to the northeast, and approximately 13 miles to Cowbridge in the west. The site of YGBM is immediately south/southeast of the Whitmore High School site.</p>
2	Planning History	<p>The development site is located in Barry, in the Vale of Glamorgan and takes the form of a new school on the site of the existing school, which is proposed to be demolished.</p> <p>AECOM has been providing advice on this scheme up to RIBA Stage 2; this includes scoping discussions and baseline desk studies. We have assessed the current highway network and have also commissioned traffic surveys across the network for three local school proposals.</p>
3	Development Proposal	<p>The new school site is proposed to enrol 1,100 pupils, 200 of which are Sixth Form. Additional proposals include:</p> <ul style="list-style-type: none"> ▪ Facilities for the sixth form pupils; ▪ Specially Resourced SEN Provision and the additional Centre for Behavioural Excellence (CBE) ; and ▪ A sports hall that will be considered for community use. <p>YGBM, the neighbouring site, is also undergoing development in line with 21st Century Schools. There is potential for these bodies (Sports Centre and School) to merge links and possibly utilise facilities around a timetabled agreement. This could result in a sharing of knowledge and land - expansion could occur in other directions other than solely towards the sport centre.</p>

		<p>Further details will be provided in the TA.</p> <p>The TA will include the following:</p> <ul style="list-style-type: none"> ▪ details of the access arrangements; ▪ internal transport layout for the site (including consideration of the potential for bus stops, layovers and circulation; parents drop off points and pedestrian circulation), consideration will be given to the Risk Assessment undertaken by officer of the Vale Council (November 2015); ▪ Cycle and car parking provision (staff and visitor); and ▪ Swept Path Analysis (SPA) to demonstrate that larger vehicles (school buses, refuse, delivery and emergency) can be accommodated.
4	Planning Policy Review	<p>The context of the development proposals will be considered in relation to the following policy and guidance:</p> <ul style="list-style-type: none"> ▪ Planning Policy Wales (PPW); ▪ Technical Advice Note (TAN) 18: Transport, published in March 2007; ▪ The Wales Transport Strategy, published in April 2008; ▪ National Transport Finance Plan, published in September 2015; ▪ Active Travel (Wales) Act 2013; ▪ Wellbeing of Future Generations (Wales) Act 2015; Vale of Glamorgan Local Development Plan (LDP) 2011-2026 [adopted June 2017]; ▪ Vale of Glamorgan Local Transport Plan (LTP) 2015-2030; and ▪ Supplementary Planning Guidance (SPG) to the LDP, including LDP 5 – Parking Standards. <p>▪ The TA will clearly demonstrate the development's compliance to the above policies and corresponding objectives. This is will be demonstrated within the policy chapter (following the setting out of the development proposals), linking specific development proposals to the the policies and their objectives. A summary will be provided within the TA conclusions.</p>
5	Existing Situation and Site Accessibility	<p>The TA will include the following:</p> <ul style="list-style-type: none"> ▪ Description of the site location and existing usage; ▪ Description of the local highway network, including carriageway widths, speed limits, street lighting, etc; ▪ Description of the existing highway operational conditions with reference to traffic survey data, along with queuing conditions at key junctions; ▪ Analysis of Personal Injury Collision (PIC) data; ▪ Description of existing walking/cycling facilities; ▪ Description of public transport services; and ▪ Identification of key local facilities and their accessibility by sustainable modes.
6	Data Collection	<p>Personal Injury Collision data will be obtained from the Welsh Government for the latest five year period, covering an appropriate study area.</p> <p>Traffic surveys have been undertaken on the local highway network surrounding the development to identify the existing traffic generation of the school and highway operational conditions. At the time of the traffic surveys the school was operating as Barry Comprehensive School and had 953 pupils enrolled and therefore, for the purposes of the TA, this will form the</p>

		<p>base scenario (existing situation).</p> <p>The traffic surveys included manual classified counts of extended weekday peak hour traffic (07:00-10:00hrs and 14:00-18:00hrs), to ensure that school start and finish times were captured. The locations of the surveys are shown on the plan at Appendix B. These locations are specifically:</p> <ol style="list-style-type: none"> 1. A4050 Port Road E / Merthyr Dyfan Road (signal-controlled junction); 2. Merthyr Dyfan Road / Ysgol Gyfun Bryn Hafren School (priority junction with ghost island right-turn lane); 3. A4050 Port Road E / A4226 Port Road W / A4050 Colcot Road (roundabout junction); 4. A4226 Port Road W / Barry Comprehensive School access in only (priority junction); 5. A4226 Port Road W / Barry Comprehensive School exit / Sterling Road (signal-controlled junction); 6. Internal access road serving Hospital / Internal access road serving Ysgol Gymraeg Bro Morgannwg (priority junction); 7. A4050 Colcot Road / Access road to school and hospital (signal-controlled junction); and 8. A4050 Colcot Road / Barry Road (roundabout junction). <p>The traffic surveys were commissioned and undertaken on Wednesday 27th June 2018 which is confirmed, by national guidelines, as a neutral day and month. AECOM has performed checks to ensure that the data is complete and with no obvious errors. The junction traffic data has been used to develop a network study area; this will be used to assess and forecast traffic impact of the proposals and to inform junction capacity assessments.</p>
7	Trip Generation	<p>The traffic surveys will be used to establish the traffic generation of the existing school. From this information, it will then be possible to apply pro rata growth to forecast the traffic generation of the proposed school.</p>
8	Trip Distribution	<p>The distribution of school development traffic will be based on the existing school traffic distributions derived from the traffic surveys.</p>
9	Traffic Impact Assessment	<p>Assessment Scenarios:</p> <ul style="list-style-type: none"> ▪ The TA will assess the impact of the development proposals for the school opening year, (2021) both without and with the development proposals. ▪ The 'without development' scenario will include traffic growth (based on growth factors derived from TEMPro), the existing school situation with associated traffic patterns and traffic from neighbouring committed development. This is considered the future baseline. ▪ The 'with development' scenario will be as the 'without development', but with the existing Barry Comprehensive School traffic replaced by the proposed Whitmore High School traffic. These flows will be factored up by applying a factor to the flows based on the growth in pupil numbers and the resulting impact on the network will be assessed. ▪ The morning and evening weekday drop-off/pick-up hours will be considered. The peak hours for development traffic generation will be consistent with the peak hours selected for assessment. ▪ Traffic growth factors derived from TEMPro (Version 7.2) will be applied to the traffic data to establish traffic flows in the opening and forecast years. <p>Impact Assessment:</p> <ul style="list-style-type: none"> ▪ The assessment will identify the percentage impact of the proposed

		<p>development in terms of traffic flows at the principal access junctions identified in Section 6.</p> <ul style="list-style-type: none"> Should the increase in traffic at these junctions be considered to warrant capacity assessment, this will be undertaken using the industry-standard TRL software program 'Junctions 9' (for priority and roundabout junctions) and JCT Consultancy software program 'LinSig'.
10	Transport Implementation Strategy (TIS)	<p>The TA will include a TIS, which will consider potential measures, and appraise those already being implemented by the wider site, to increase the mode share of sustainable travel modes by staff and pupils at the school. In particular, the following will be considered:</p> <ul style="list-style-type: none"> Feasibility of walking and cycling routes in the surrounding areas including consideration for potential improvements; Cycle parking within the school grounds; Bus drop off points and circulation within the site; <p>Determine if a Travel Plan exists for the current site, the outcome of this will be considered in the production of a draft travel plan for the proposed site with appropriate recommendations and actions.</p>
11	Construction Traffic	<p>The TA will include discussion of potential routing arrangements and estimates of construction traffic.</p>

Appendix A - Location Plans

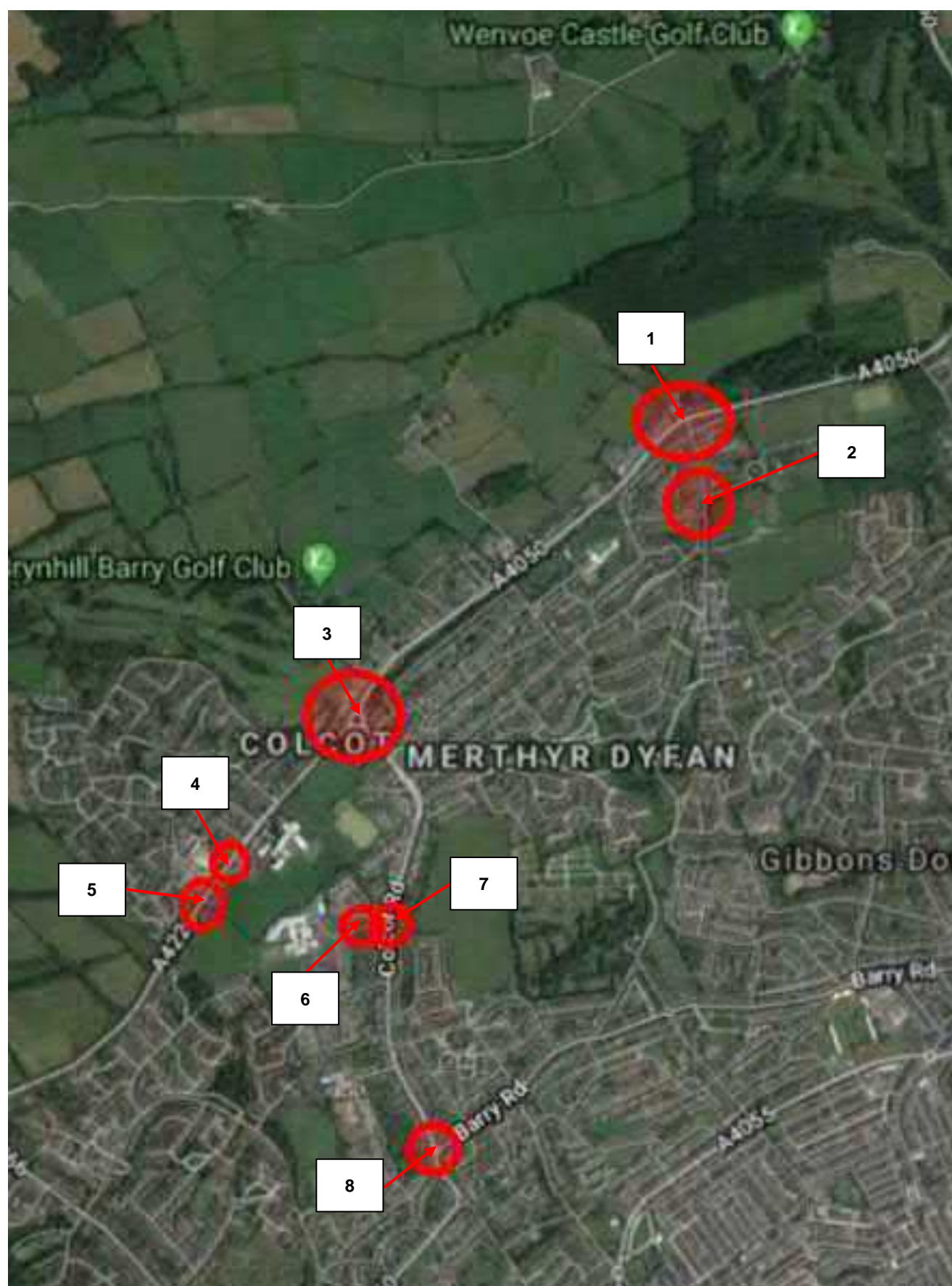






Appendix B – Traffic Surveys

Location Plan – Barry, Vale of Glamorgan



Junction Turning Count and Queue Length Surveys – Survey Specification

Locations:

1. A4050 Port Road E / Merthyr Dyfan Road (signal-controlled junction)
2. Merthyr Dyfan Road / Ysgol Gyfun Bryn Hafren School (priority junction with ghost island right-turn lane)
3. A4050 Port Road E / A4226 Port Road W / A4050 Colcot Road (roundabout junction)
4. A4226 Port Road W / Barry Comprehensive School access in only (priority junction)
5. A4226 Port Road W / Barry Comprehensive School exit / Sterling Road (signal-controlled junction)
6. Internal access road serving Hospital / Internal access road serving Ysgol Gymraeg Bro Morgannwg (priority junction)
7. A4050 Colcot Road / Access road to school and hospital (signal-controlled junction)
8. A4050 Colcot Road / Barry Road (roundabout junction)

Date: Undertaken on Wednesday 27th June 2018.

Duration: 07:00–10:00 and 14:00–18:00.

Data to be recorded:

- Classified turning counts, with data split into 15 minute intervals (including a breakdown for vehicle types).
- Queue lengths, recorded during 5 minute intervals (the maximum queue during each interval).

Good afternoon [REDACTED],

Thank you for providing us with your observations and requests for additional input to our TA scoping report.

We apologise for not replying sooner, in the time which has passed since our exchange the projects have progressed through business case and contractor tender process, we are now preparing the TA document for submission. We have reviewed the input and can confirm that overall we have covered, or have now adjusted our approach to meet with your requests.

We have attached updated scoping reports to which consider the points raised, for ease of reference we have also responded directly to the points you raised in your email (see the red text entries below).

I trust that this meets with your approval and we look forward to speaking with you again soon.

Many Thanks,

[REDACTED]

[REDACTED]

[REDACTED]

From: [REDACTED]
Sent: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]
Subject: FW: Vale of Glamorgan Schools Scoping Notes - AE Response

Morning [REDACTED]. I have been asked to have a quick look at the attached TA scoping notes that you have proposed and would make the following comments in conjunction with my Passenger Transport Manager which we feel should be included.

1 No mention of how active travel measures / routes will be incorporated into the school and surrounding areas to encourage to walk / cycle to school rather than be brought by car (part of the Active Travel Act 2013 and Well-being of Future Generations (Wales) Act 2015 and probably in the new PPW10

The Wellbeing of Future Generations (Wales) Act 2015 has now been added to the list of policy documents in the scoping notes. All policies will be reviewed with regards to sustainable travel and the incorporation of active travel measures to encourage those modes of travel to school, with a focus on how the development complies with such policies and objectives.

2 No mention of cycle parking within the school

Cycle parking is a standard item inherent within a TA, however, for reassurance a sentence has been added into the scoping note to be clear that parking will be addressed as part of the TA.

3 No mention of home to school transport usage and possible layover areas and turning facilities for busses

We would assume from this relates to school bus services? This will be considered for all schools. In the case of Pencoedtre, it is noted that the Vale undertook a risk assessment (Nov 2015) and produced a proposed bus layby design for the existing Pencoedtre HS and recommends the restriction of parents dropping off pupils due to congestion and safety issues. We will ensure that this is addressed with the TA and it will lead to further discussions with the LHA to ensure concerns are ameliorated, resulting in agreed measures that are realistic and appropriate for the school.

4 No mention of staff parking facilities

As with cycle parking, this is a standard inherent TA item and will be addressed as part of the TA. To provide further comfort the Scoping note has been updated to reflect this.

5 No mention of dropping off points for parents and how this will affect the surrounding streets / roads and if there is a need for Traffic Regulation Orders

There will be a full walkover site audit carried out and the findings will be included as part of the TA. This will include the consideration for drop off points for parents and existing TROs (and whether more will be required as part of the proposals)

6 Is speeding an issue within the vicinity which would discourage walking and cycling

Site observations will be undertaken as part of the TA with findings reported.

7 No mention of risk assessments when walking to school in accordance with the Learner
Travel Statutory Provision and Operational Guidance June 2014 where authorities Chapter 5 where
Local authorities are under a legal duty to assess the travel needs of learner who walk to school

This appears to be specifically related to the Local Authority although it can be picked up with the education department, but it is currently outside of our brief.

8 Any offsite improvements needed to facilitate walking and cycling to school to facilitate the above

This will be included as standard within the Transport Implementation Strategy (TIS) chapter of the TA (this has been updated in the scoping documents for clarity).

9 If there are existing Travel Plans in each of the schools then they should be reviewed for
future use (if appropriate) or development and adoption (i.e. if no existing plan is in place).

This will be confirmed with the education department for each school, the outcome of this will be considered in the production of the TA and appropriate action recommended. The scoping note has been updated to reflect this to be provided reassurance.

114

[REDACTED]

From: [REDACTED]
Sent: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]
Subject: FW: Vale of Glamorgan Schools Scoping Notes

Hi [REDACTED]

As per my previous email, please see attached Transport Assessment Scoping Notes for Whitmore High School, Ysgol Gymraeg Bro Morgannwg and Pencoedtre High School.

If you have any queries or would like to discuss further, please do not hesitate to contact either myself or [REDACTED].

Kind Regards,

[REDACTED]

[REDACTED]

[REDACTED]

From: [REDACTED]
Sent: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]
Subject: Vale of Glamorgan Schools Scoping Notes

Good morning [REDACTED],

Further to your recent discussions with my colleague [REDACTED], we are preparing scoping notes for your review for the three school proposals (Whitmore, Bro Morgannwg and Pencoedtre). [REDACTED] is away on annual leave and we are progressing this work in his absence and thought it would be useful to circulate our email addresses.

As agreed we will prepare a robust scope for each site which will hopefully reduce the consultation time required and minimise the amount of officer input needed.

I aim to get the scoping notes to you within the next couple of days. I hope you find this satisfactory.

Kind Regards,

[REDACTED]

[REDACTED]

[REDACTED]

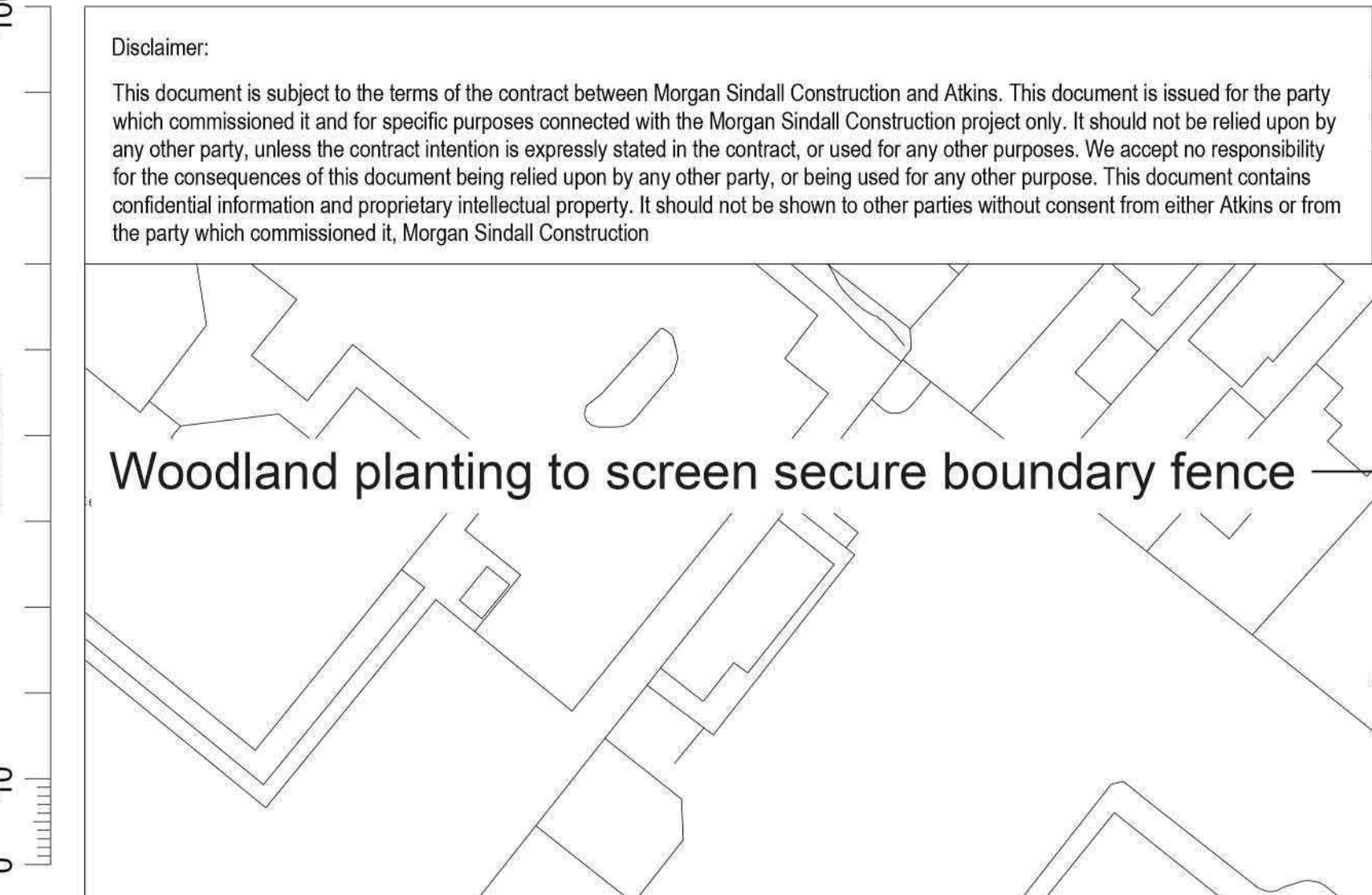
[REDACTED]



Appendix 3.1

Masterplan

Disclaimer:
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Woodland planting to screen secure boundary fence

Tree removal

Shaded Seating Area

Vehicular entrance to site

New pedestrian pathway with pedestrian priority crossing

Cycle Storage 64 spaces with adjacent sub-station

SUDs planting between proposed paving

SUDs bio-retention / Rain garden amphitheatre with seating

Coach / Bus drop-off

New pedestrian access with zebra crossings

Car Park including;
6x Disabled parking bays
2x Electric charging point
6x Motorcycle Spaces
116 x Car Parking Spaces

Bin Store / Sprinkler Tank and Cold Water Storage Tank

Allotment and combined sensory memorial garden

Habitat Area



DO NOT SCALE

Notes:
1. Drawing only to be used for the purpose for which it was created.
2. All dimensions are in millimetres unless otherwise specified.

GENERAL ARRANGEMENT KEY

Site Boundary

Trees to be retained

Trees to be removed

Pedestrian Hardscape

Vehicular Hardscape

Grass Crete

3m Ball stop fence with matching double gates

2.4m Weld mesh fence with matching double gates

Post and rail fence with matching double gates

1.8m close boarded fence

Playground Shading

Seating

Seating

Proposed Trees

Proposed Specimen Shrubs

Proposed Hedgerow

Proposed Woodland Planting

Ornamental planting

Swale Planting

Amenity sports grass

Species Rich Grassland

Bulb Planting

Tree roots & trunks retained from removed vegetation for use in habitat area

PLANNING PAC

S2

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Client: **MORGAN SINDALL**

Project: **26W006**

Whitmore High School
Port Road West, Barry. CF62 8ZJ

LANDSCAPE COLOUR MASTERPLAN

Scale	Designed	Drawn	Checked	Authorised
1 : 500	RL	RL	EM	WR
Original Size	Date	Date	Date	Date
A0	03/12/18	03/12/18	14/12/18	14/12/18
Drawing Number	26W006-ATK-0-XX-DR-L-X-9105			Revision
				P01