



Pickstock Homes Ltd

St Mary's Avenue, Overton, Wrexham

Transport Statement

March 2023



Pickstock Homes Ltd

St Mary's Avenue, Overton, Wrexham

Transport Statement

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APPENDIX B Traffic Survey Data

APPENDIX C Proposed Site Layout Drawing

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APPENDIX F Swept Path Analysis - 11.2m Refuse Collection Vehicle

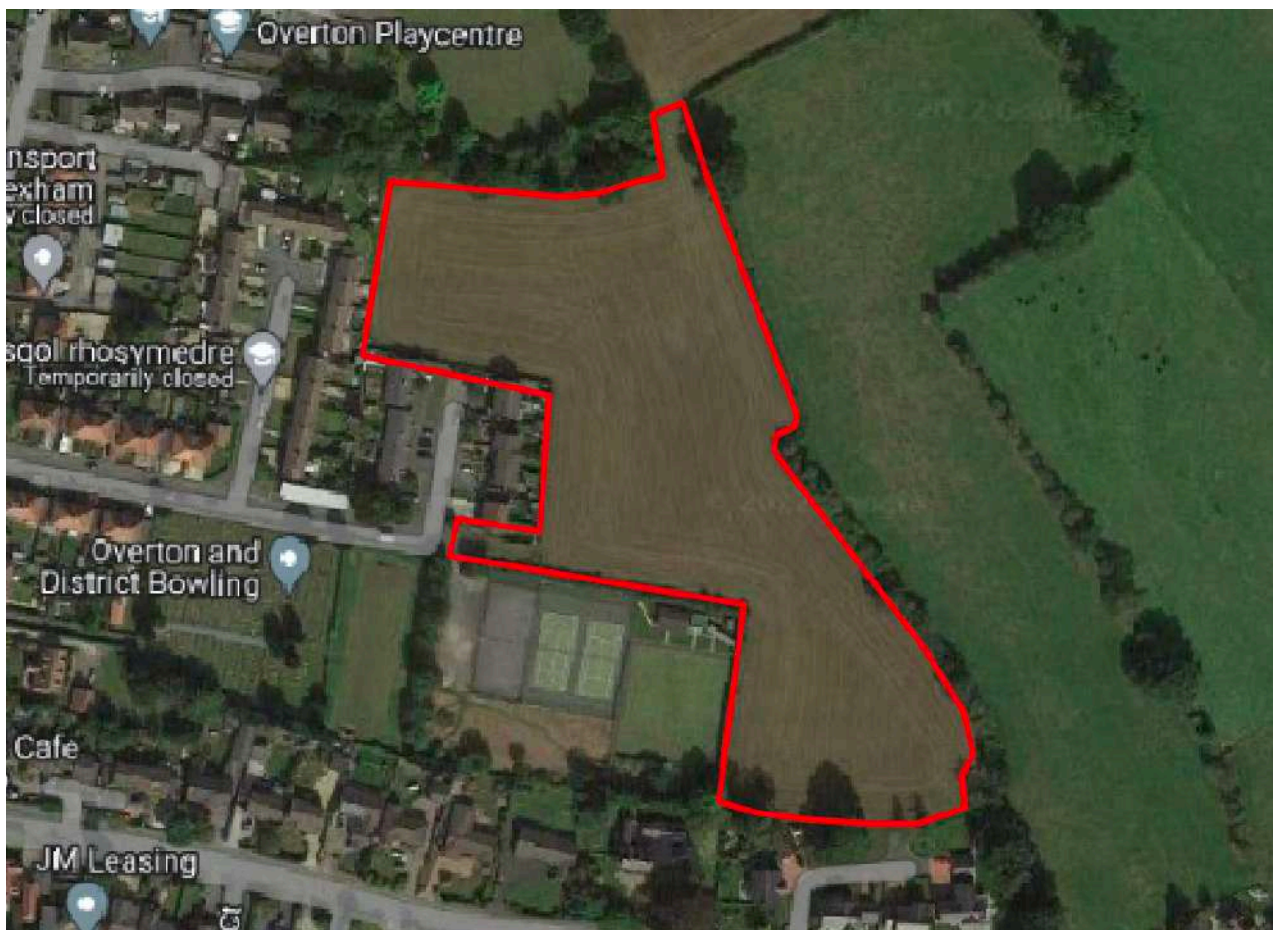
APPENDIX G Local Bus Timetables

1. Introduction

1.1 Preamble

- 1.1.1 Mode Transport Planning ('Mode') has been appointed by Pickstock Homes Ltd (the 'Applicant') to provide transport planning and highways advice to support a full planning application for a residential development on land off St Mary's Avenue in Overton, Wrexham.
- 1.1.2 The development site will comprise 45 residential dwellings, including 30% affordable dwellings, parking and public open space. Vehicular and pedestrian access is proposed via St Mary's Avenue.
- 1.1.3 The indicative site boundary is shown in [Figure 1.1](#).

Figure 1.1 : Indicative Site Boundary (image source : Google)



- 1.1.4 This Transport Statement (TS) has been prepared to assess the development proposals, with consideration to expected trip generation and traffic impact, accessibility by sustainable modes of travel, accessibility for refuse vehicles and car parking provision.

1.2 Methodology

- 1.2.1 The methodology for the TS adopts the guidance set out in the Welsh Government's '*Technical Advice Note 18: Transport*'. The scope of the TS is based on the pre-application consultation response and a further scoping correspondence with Wrexham County Borough Council (WCBC) Highways.
- 1.2.2 WCBC Highways' pre-application consultation response and scoping correspondence is attached in [Appendix A](#).

1.3 Report Structure

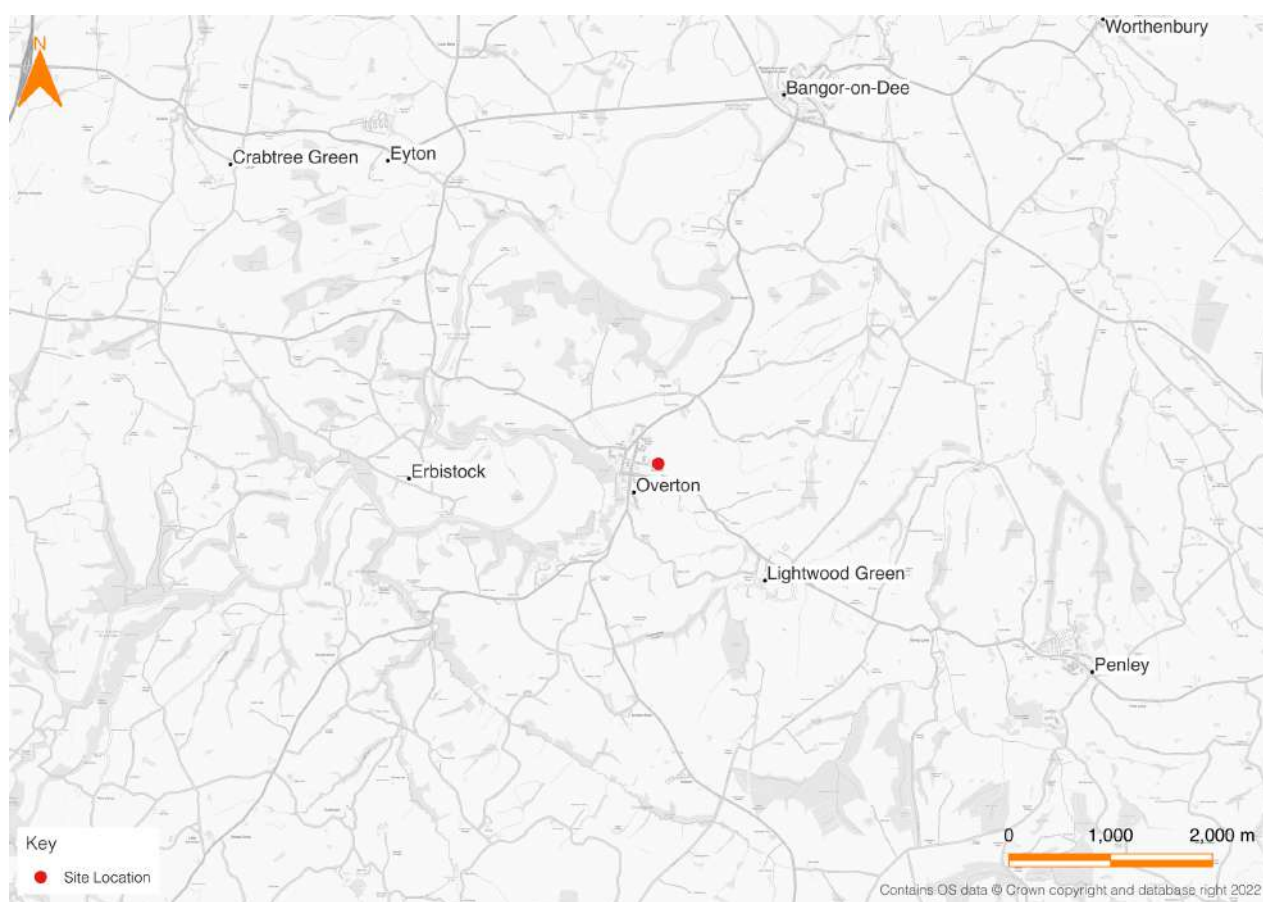
- 1.3.1 Following this introductory chapter, the TS has been structured as follows:
- [Chapter 2](#) describes the site location, local highway network and collision data;
 - [Chapter 3](#) outlines the development proposals, vehicular access, servicing and parking;
 - [Chapter 4](#) details accessibility by non-car modes, including public transport, cycle and on foot;
 - [Chapter 5](#) details the expected trip generation; and
 - [Chapter 6](#) summarises and concludes the findings of the report.

2. Existing Conditions

2.1 Site Location

- 2.1.1 The development site is located in the village of Overton in Wrexham, c.1.5km northwest of Lightwood Green, c.2.0km east of Erbistock and c.4.0km south of Bangor-on-Dee.
- 2.1.2 The strategic site location is shown in [Figure 2.1](#).

Figure 2.1 : Strategic Site Location



2.2 Local Highway Network

- 2.2.1 The development site is bound to the west and south by existing residential properties and a bowling/ tennis club. To the north and east, the development site is bound by a school playing field and agricultural land.
- 2.2.2 [Figure 2.2](#) shows the location of the site in the context of the local highway network.

Figure 2.2 : Local Highway Network



St Mary's Avenue

- 2.2.3 St Mary's Avenue is a two-way single carriageway following a broadly east-to-west alignment between the development site boundary and Church Road / School Lane, c.175m to the west. St Mary's Avenue is subject to a 30mph speed limit and benefits from a network of street-lighting columns.
- 2.2.4 St Mary's Avenue comprises a c.5.5 to 6.0m wide carriageway. The road includes a c.1.8m wide footway on the northern side, and c.1.8m to 0.9m wide footway on the southern side, as shown in [Photograph 2.1](#) and [Photograph 2.2](#).
- 2.2.5 On the approach to the development site boundary, adjacent to No.2 Clerc-Y-Mendy, the existing carriageway is c.5.5m wide, with a 1.8m wide footway along the northern side, as shown in [Photograph 2.3](#). To the west, St Mary's Avenue forms a minor arm of a priority junction with Church Road / School Lane.

Photograph 2.1 : St Mary's Avenue (towards School Lane / Church Road)



Photograph 2.2 : St Mary's Avenue (westbound)



Photograph 2.3 : St Mary's Avenue (towards development site access)



Photograph 2.4 : St Mary's Avenue / Plas Madoc (westbound)



2.2.6 As shown in [Photograph 2.4](#), there are existing garages that front onto the footway on the northern side of St Mary's Avenue, between Plas Madoc and Clerc-Y-Mendy. This section of footway fronting the garages is not kerbed and forms a short ramp between the carriageway and garage entrances.

2.2.7 St Mary's Avenue provides vehicular and pedestrian access to existing residential properties on St Mary's Avenue, Plas Madoc, Clerc-Y-Mendy and a bowling/ tennis club. The majority of residential properties on these roads have off-street car parking provision, as summarised below:

Table 2.1 : Existing Off-Street Parking Provision

Road Name	Dwellings with Off-Street Parking	Dwellings without Off-Street Parking	Total Dwellings
St. Mary's Avenue	10	4	14
Plas Madoc	12	7	19
Clerc-Y-Mendy	12	1	13
Total Dwellings	34	12	46

2.2.8 As shown in [Table 2.1](#), of the 46no. existing dwellings on St. Mary's Avenue, Plas Madoc and Clerc-Y-Mendy, 34no. dwellings (74% of dwellings) have access to off-street car parking provision.

2.2.9 In addition, there are 9no. garages and 1no. off-street parking space located on St. Mary's Avenue. It is not clear which dwellings the garages and parking space are allocated to, but if used for parking, these would provide a further 10 off-street car parking spaces.

2.2.10 The bowling/ tennis club, accessed via St Mary's Avenue, is served by a dedicated on-site car park. The spaces within the car park are not demarcated, although it is estimated to have capacity for around 20 vehicles.

2.2.11 As shown in [Photograph 2.1 – 2.4](#), on-street parking was observed on St Mary's Avenue, with vehicles parked on the northern side of the road between dwelling No. 2 to No. 16, and on the southern side of St Mary's Avenue to the east of dwelling No. 9 where the road abuts St Mary's cemetery.

2.2.12 The on-street parking observed on St Mary's Avenue did not prevent traffic movement along St Mary's Avenue or access to Plas Madoc and Clerc-Y_Mendy. The on-street parking also did not block private driveways or garages on St Mary's Avenue.

2.2.13 Occasionally, opposing vehicle movements were observed on St Mary's Avenue where there was parking on one-side of the road. In this scenario, vehicles slowed and gave-way to each other in a safe manner and with delay of a few seconds to drivers.

2.2.14 From observations, St Mary's Avenue operates as a typical residential road, with on-street parking not significant enough to impede vehicle movements other than slowing vehicles down, which for a residential road is an acceptable arrangement, to the benefit of other road users such as pedestrians and cyclists.

School Lane / Church Road

2.2.15 As shown in [Photograph 2.6](#), St. Mary's Avenue forms a minor arm of a priority junction with School Lane, Church Road and Dark Lane. The junction includes footway provision on St Mary's Avenue, School Lane and Church Road.

Photograph 2.6 : St Mary's Avenue – Priority Junction



Photograph 2.7 : School Lane (northbound)



2.2.16 As shown in Photograph 2.8, Church Road extends to the south, comprising a c.7.5m carriageway with footway provision continuing on the western side of the road to Pen-Y-Llan Street. Church Road is subject to 30mph speed limit.

Photograph 2.8 : Church Road (southbound)



2.2.17 Approximately 220m to the north, School Lane forms a priority junction with Turning Street (B5069), and approximately 110m to the south, Church Road form a priority junction with Station Road (A539).

2.3 Existing Traffic Flow

2.3.1 To record the existing traffic flow along St Mary's Avenue a video survey was undertaken at the St Mary's Avenue / Church Road / School Lane / Dark Lane priority junction. The survey was undertaken on Wednesday 16th November 2022, between 07:00 and 19:00.

2.3.2 The purpose of the survey was to quantify existing traffic flow along St Mary's Avenue and provide representative trip rates that can be applied to the proposed development to estimate trip generation, as agreed with WCBC Highways during scoping discussions. The trip generation at the proposed development is detailed in [Chapter 7](#).

2.3.3 [Table 2.2](#) summarises the traffic survey data recorded along St Mary's Avenue during the AM and PM peak hours, with the full survey data included in [Appendix B](#).

Table 2.2 : Traffic Flows – St Mary's Avenue

Peak Hour	Arrivals	Departures	Total Flows
AM Peak Hour	6	15	21
PM Peak Hour	19	16	35

2.3.4 As summarised in [Table 2.2](#) shows that 6 vehicles arrived and 15 departed from St Mary's Avenue during the AM peak hour (**21** two-way flow per hour). During the PM peak hour, 19 vehicles arrived and 16 departed (**35** two-way flow per hour).

2.3.5 The video footage also shows traffic behaviour and parking on St Mary's Avenue (between No.1 and No.11) and Church Road, as shown in [Figure 2.3](#) and [Figure 2.4](#). The video survey footage can be made available to WCBC Highways to review.

Figure 2.3 : Video Survey – St Mary's Avenue and Church Road (07:00)



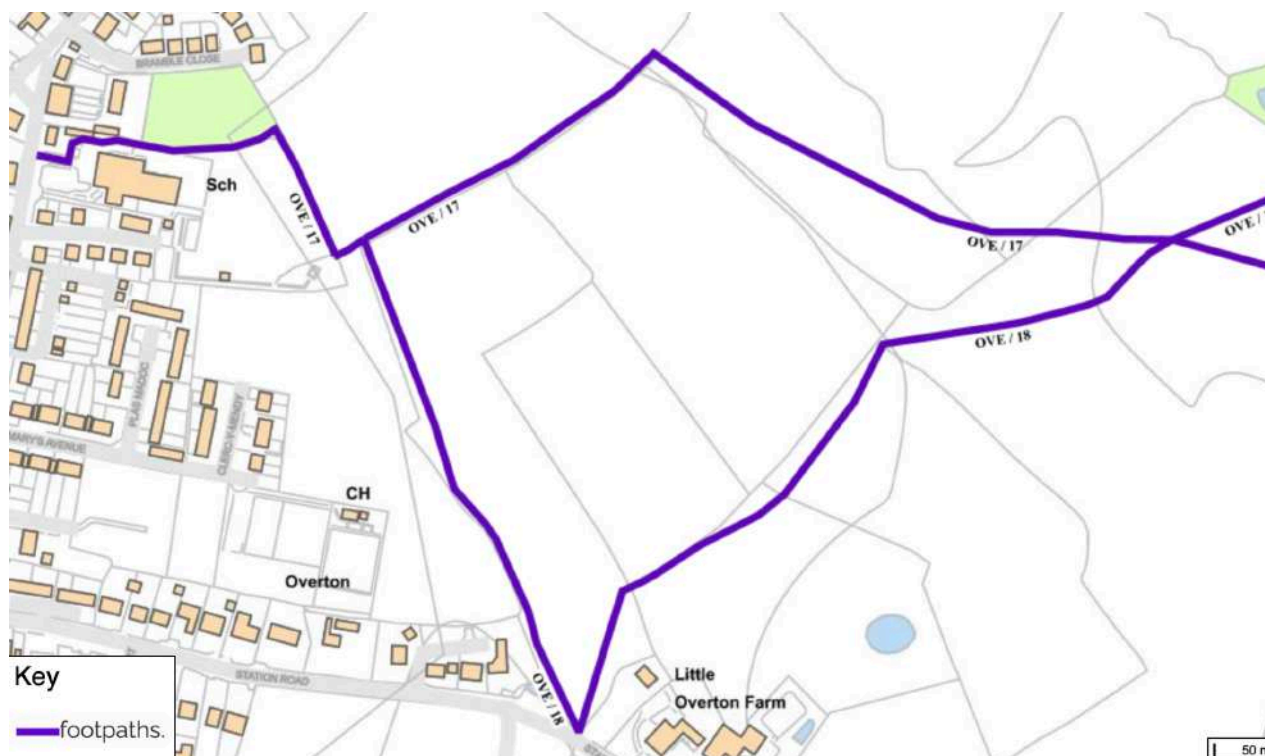
Figure 2.4 : Video Survey – St Mary's Avenue and Church Road (13:00)



2.4 Public Rights of Way

- 2.4.1 According to WCBC's interactive online mapping, there are no Public Right of Way (PRoW) within the site boundary.
- 2.4.2 There are PRoWs in the vicinity of the site, including along the development site's eastern boundary, as shown in in [Figure 2.5](#).

Figure 2.5 : Public Rights of Way Map (source: WCBC Online Interactive Mapping)



2.4.3 As shown in Figure 2.3, PRoW OVE/18 abuts the eastern boundary of the site, and PRoW OVE/17 connects with PRoW OVE/18 at the northeast corner of the development site.

2.5 Road Safety

2.5.1 Personal Injury Collision (PIC) data has been obtained from the CrashMap database (crashmap.co.uk) for the local highway network in the vicinity of the site for the most recent 5-year period from 2017 to 2021.

2.5.2 Figure 2.6 shows the PIC data recorded and Table 2.1 gives details on the road safety data.

Figure 2.6 : Personal Injury Collision (PIC) Data

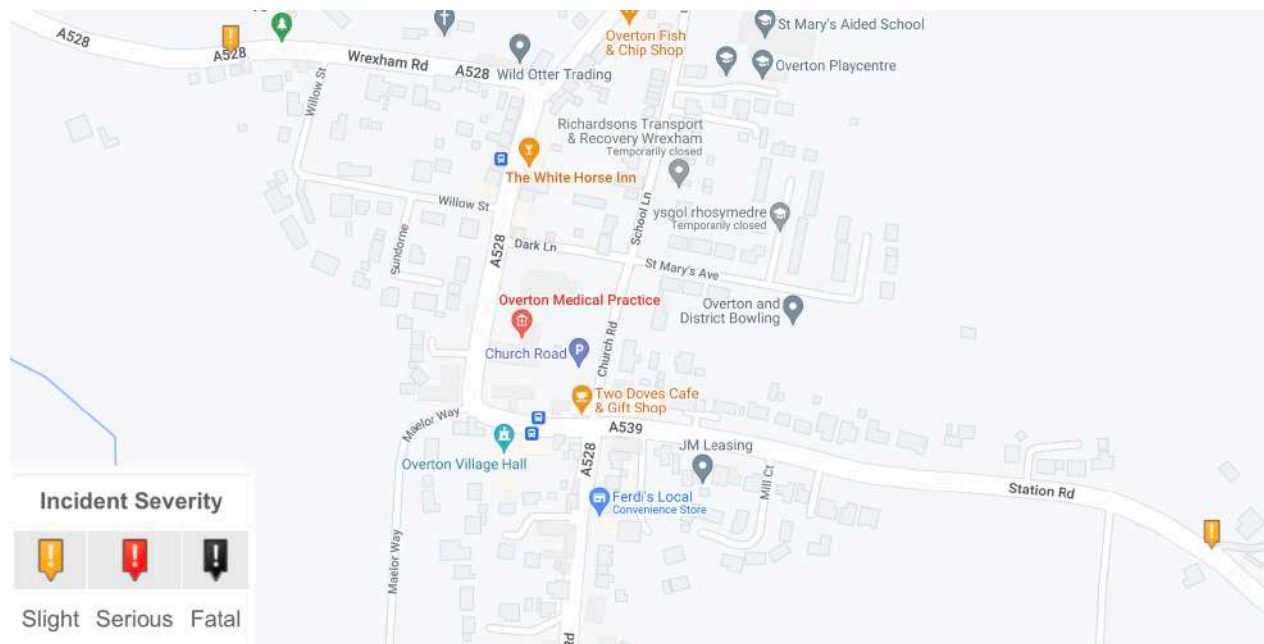


Table 2.3 : Road Safety Analysis

Date	Location	Severity	Vehicles Involved					
			Car	HGV	Bus	Motorcycle	Cyclist	Pedestrian
2020	A528 (Wrexham Road)	Slight	3	0	0	0	0	0
2017	A539 (Station Road)	Slight	1	0	0	0	0	0

2.5.3 As shown in Figure 2.6, 2no. PICs were recorded on the local highway network between 2017 and 2021, with neither occurring on St Mary's Avenue, School Lane or Church Road.

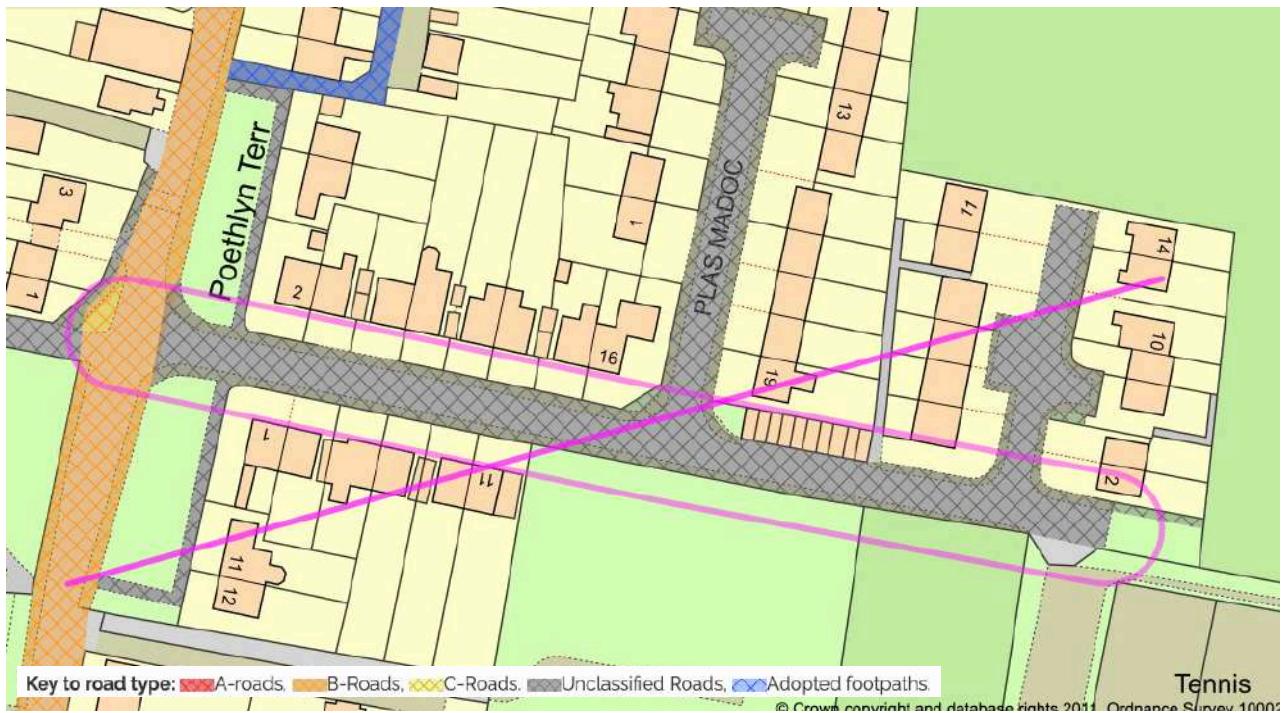
2.5.4 Analysis of the PIC data demonstrates that there are no collision clusters within proximity of the site. Based on the frequency and location of collisions recorded, there is no evidence to suggest that the highway layout, design or condition are significant factors in PIC records on the local highway network.

2.5.5 There is also no evidence to suggest that the proposed development would increase risks of PICs in the surrounding area or have a detrimental impact on road safety.

2.6 Adopted Highway Network

2.6.1 The extent of the adopted highway along St Mary's Avenue is shown in Figure 2.7.

Figure 2.7 : Extent of Adopted Highway (source: WCBC Online Interactive Mapping)



2.6.2 As shown in Figure 2.7, the adopted highway abuts the development site boundary adjacent to No.2 Clerc-Y-Mendy.

3. Development Proposals

3.1 Proposed Use

3.1.1 The proposed development will comprise 45 residential dwellings, including 30% affordable housing provision. The proposed site layout plan is shown in [Figure 3.1](#) and is attached in [Appendix C](#).

Figure 3.1 : Proposed Site Layout (source: Pickstock Homes Ltd)



3.1.2 A breakdown of the proposed development is shown in [Table 3.1](#).

Table 3.1 : Proposed Development

Housing Type	Private Dwellings	Affordable Dwellings
2-bedroom	2	7
3-bedroom	14	7
4-bedroom	15	0
Total	31	14

3.2 Proposed Access Arrangement

- 3.2.1 Vehicular and pedestrian access is proposed via an extension to St Mary's Avenue, adjacent to No.2 Clerc-Y-Mendy.
- 3.2.2 At the entrance to the development site the proposed access road includes a 5.5m wide carriageway, with a 2m wide footway on the northern side and 1.2m wide footway on the southern side, as shown in **Drawing No. J32-7090-PS-001** attached in [Appendix D](#).
- 3.2.3 Within the development site, the main access road comprises a 5.5m wide carriageway, with 2m wide footway provision on both sides of the road throughout the majority of the site, except where the road is not fronted by dwellings, at the turning-heads and at the shared-space cul-de-sacs.
- 3.2.4 Forward visibility of 25m can be achieved at the bends on the access road adjacent to Plot 2 and Plot 8, and a visibility splay of 2.4m x 25m can be achieved at the junction adjacent to Plot 6, in accordance with Manual for Streets (MfS) for a 20mph Design Speed. The forward visibility and visibility splays within the development site are shown in **Drawing No. J32-7090-002** attached in [Appendix E](#).
- 3.2.5 Plots 43 to Plot 45 are served by a 59m long shared-space cul-de-sac, comprising 4.8m wide carriageway and turning head. Plots 11 to Plot 17 are served by a 19m long, shared-space cul-de-sac, comprising 6m wide carriageway.
- 3.2.6 As requested by WCBC Highways during the pre-application consultation, the development proposals include a pedestrian link to the existing public footpath (PRoW OVE/17), where it abuts the northern boundary of the site. This route will provide convenient access to the network of adjacent PRoW and also provide a traffic-free route to the local primary school.
- 3.2.7 As also requested by WCBC Highways, the development proposals include improvements to the footway fronting the existing garages on St Mary's Road, between Plas Madoc and Clerc-Y-Mendy. The details of the footway improvements will be agreed with WCBC Highway as part of the S278 agreement.

3.3 Servicing Arrangements

- 3.3.1 As requested by WCBC Highways, swept path analysis has been undertaken which demonstrates that an 11.2m long refuse collection vehicle can safely turn within the turning heads, as shown in Figure 3.2, with the full drawing (Drawing No. 32-7090-PS-003) attached in Appendix F.

Figure 3.2 : Swept Path Analysis – 11.2m Refuse Collection Vehicle



- 3.3.2 The analysis shows that a refuse collection vehicle can access each dwelling, in accordance with the standards set out in MfS and BS:5906. At Plots 43 to 45, there will be a requirement to provide a bin collection point approximately mid-way along the cul-de-sac.

3.4 Parking Provision

- 3.4.1 WCBC's car and cycle parking standards for residential development are set out in 'Local Planning Guidance Note : No. 16', as summarised in Table 3.2.

Table 3.2 : WCBC Parking Standards : Use Class C3 – Dwellings

Type of Dwelling	Car Parking (maximum)	Cycle Parking (minimum)
1 bedroom	1.5 spaces / dwelling	2 secure spaces / dwelling
2 bedrooms	2 spaces / dwelling	
3 / 4 bedrooms	3 spaces / dwelling	
5+ bedrooms	4 spaces / dwelling	

- 3.4.2 The proposed car parking provision at the development site complies with WCBC's maximum car parking standards.
- 3.4.3 The proposed development provides the maximum level of car parking provision at 37 dwellings, with all dwellings provided with at least 2no. off-street car parking spaces.
- 3.4.4 8no. 3-bedroom dwellings are provided with 2no. car parking spaces, which is just one space below the maximum standard. 5no. of these dwellings will be affordable (Plot 10, 11, 19 – 21) where car ownership is expected to be lower, and only 3no. private 3-bedroom dwellings (Plot 5, 6 and 8) will have 2no. car parking spaces.
- 3.4.5 Given the high level of parking provision provided across the development site and compliance with WCBC's maximum standard at 37no. dwellings, it is expected that the proposed development will satisfactorily accommodate parking demand and not result in any significant on-street parking, particularly on St Mary's Avenue.
- 3.4.6 In accordance with WCBC's minimum cycle parking standards, 2no. cycle parking spaces will be provided at each dwelling, located within the garage or secure store in the garden where a garage is not provided.

4. Sustainable Accessibility

4.1 Introduction

- 4.1.1 Current Government policy and guidance places significant emphasis on the promotion of sustainable transport modes for all new developments. This forms part of a long-term strategy to reduce the reliance on private car trips.
- 4.1.2 This includes the *Active Travel (Wales) Act 2013* which requires local authorities, including WCBC, 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 cyclist at the design stage.
- 4.1.3 Through the *Active Travel (Wales) Act 2013*, statutory design guidance has been published by the Welsh Government which provides advice on the planning, design, construction and maintenance of active travel networks and infrastructure.
- 4.1.4 This chapter considers accessibility via sustainable modes of transport to the proposed development site, including access by public transport, cycle and on foot.

4.2 Pedestrian Accessibility

- 4.2.1 Guideline walking distances provided in the Chartered Institution of Highways and Transportation (CIHT) document '*Guidelines for Providing for Journeys on Foot (2000)*', are shown in [Table 4.1](#).

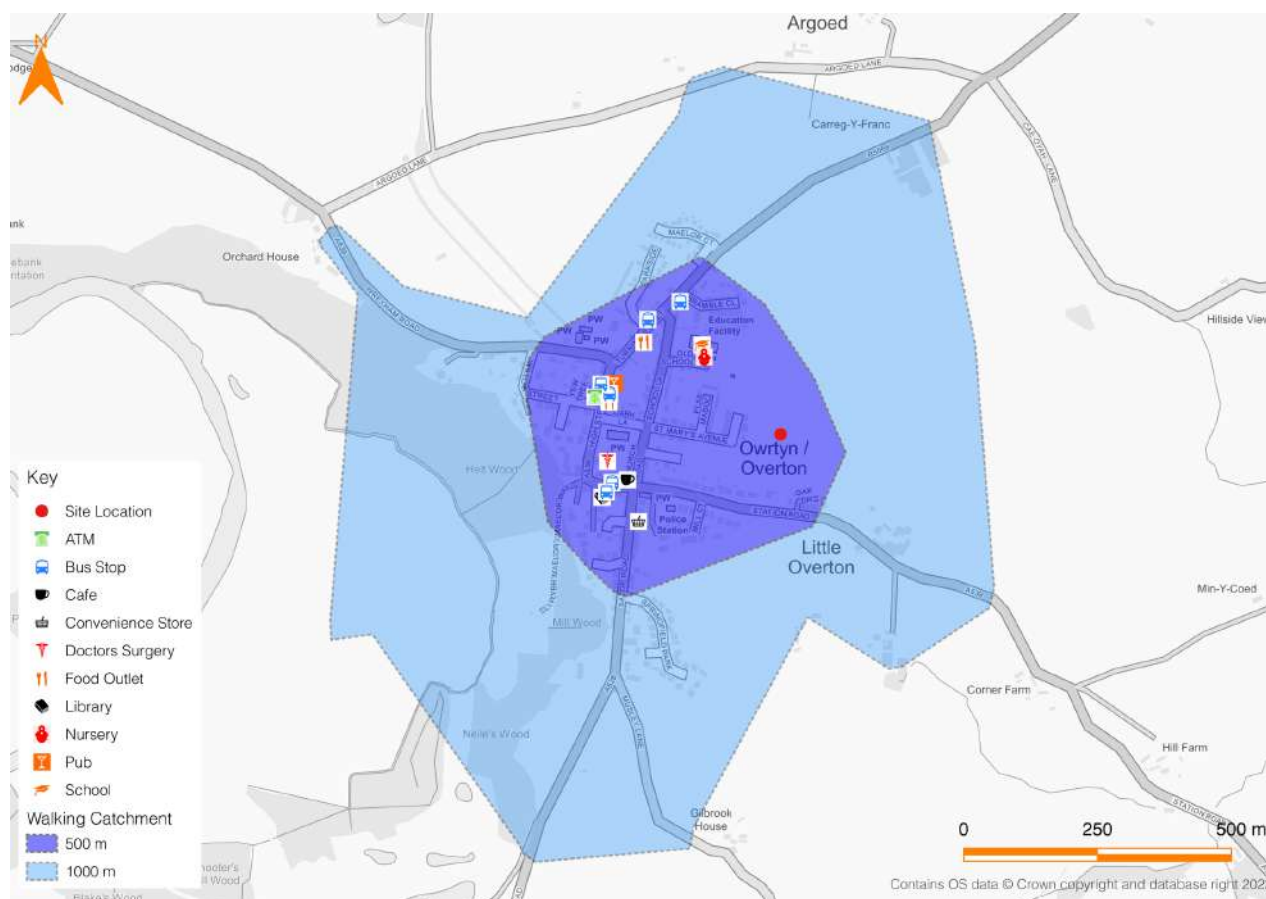
Table 4.1 : CIHT Acceptable Walking Distances

Criteria	Town Centre	Commuting	Elsewhere
Desirable	200m	500m	400m
Acceptable	400m	1,000m	800m
Preferred Maximum	800m	2,000m	1,200m

- 4.2.2 The CIHT guidelines shown in [Table 4.1](#) suggest that for commuting purposes up to 500m is a desirable walking distance, up to 1,000m is considered an acceptable walking distance and 2,000m is the preferred maximum walking distance.
- 4.2.3 Appropriate walking distances are dependent upon the location of the specific development; more remote locations will see people being prepared to walk further to their end destination. Similarly, appropriate walking distances are also dependent upon the standard of existing pedestrian infrastructure provision, with further walking distances achievable in locations with extensive and high-quality pedestrian footways, crossings and pedestrianised areas.

- 4.2.4 As described previously, a network of existing footways is provided on the local highway network providing dedicated pedestrian access to nearby amenities.
- 4.2.5 Figure 4.1 presents the local amenities and 500m and 1,000m walking catchments from the site, as specified in CIHT guidance for commuting purposes. A 2,000m walking catchment was not included due to the rural nature of Overton Village.

Figure 4.1 : Walking Catchment Area with Local Amenities



- 4.2.6 As shown in Figure 4.1, the development site is located within a 500m walking catchment of a range of amenities within Overton Village. This includes bus stops on Station Road and Turning Street. Other amenities within the 500m walking catchment include educational facilities, an ATM, food outlets and a convenience store.
- 4.2.7 Table 4.2 provides an indication of the distances and approximate walking times to local bus stops and local amenities. The distances have been measured from the centre of the site and the times are based on an average walking speed of 1.4 metres per second and do not allow for waiting time to cross junctions.

Table 4.2 : Local Amenities – Distances and Walking Times

Amenity	Distance	Average Walking Time
St. Mary's Aided School	300m	4 minutes
Overton Pre-School	325m	4 minutes
Two Doves Café	370m	5 minutes
Convenience store on High Street	380m	5 minutes
The White Horse Inn Restaurant & Pub	400m	5 minutes
Bus Stops on High Street	400m	5 minutes
Overton Library	400m	5 minutes
Bus Stop on Pen-Y-Llan Street	400m	5 minutes
Butchers on High Street	450m	5 minutes
Overton Medical Practice & Rowlands Pharmacy	450m	5 minutes
Overton Post Office	450m	5 minutes
Overton Village Hall	450m	5 minutes

4.2.8 Table 4.2 shows that there are a range of amenities within a 450m walking catchment from the site, including bus stops are available within c.400m (5-minute walk) on both High Street and Pen-Y-Llan Street.

4.2.9 Various food outlets are available within Overton Village, including Two Doves Café within c.370m and The White Horse Inn within c.400m, both within a 5-minute walk. Key public facilities are also available within Overton Village, including St Mary's Aided School within c.300m (4-minute walk), Overton Pre-School within c.325 (4-minute walk) and Overton Medical Practice and Rowlands Pharmacy within 450m (5-minute walk).

4.2.10 As described previously, the local highway network benefits from a network of footways and the site is well situated in terms of accessibility to local bus services and local amenities within Overton. It has therefore been demonstrated that the site is well-placed in terms of pedestrian connectivity, with walking representing a realistic alternative to local car trips.

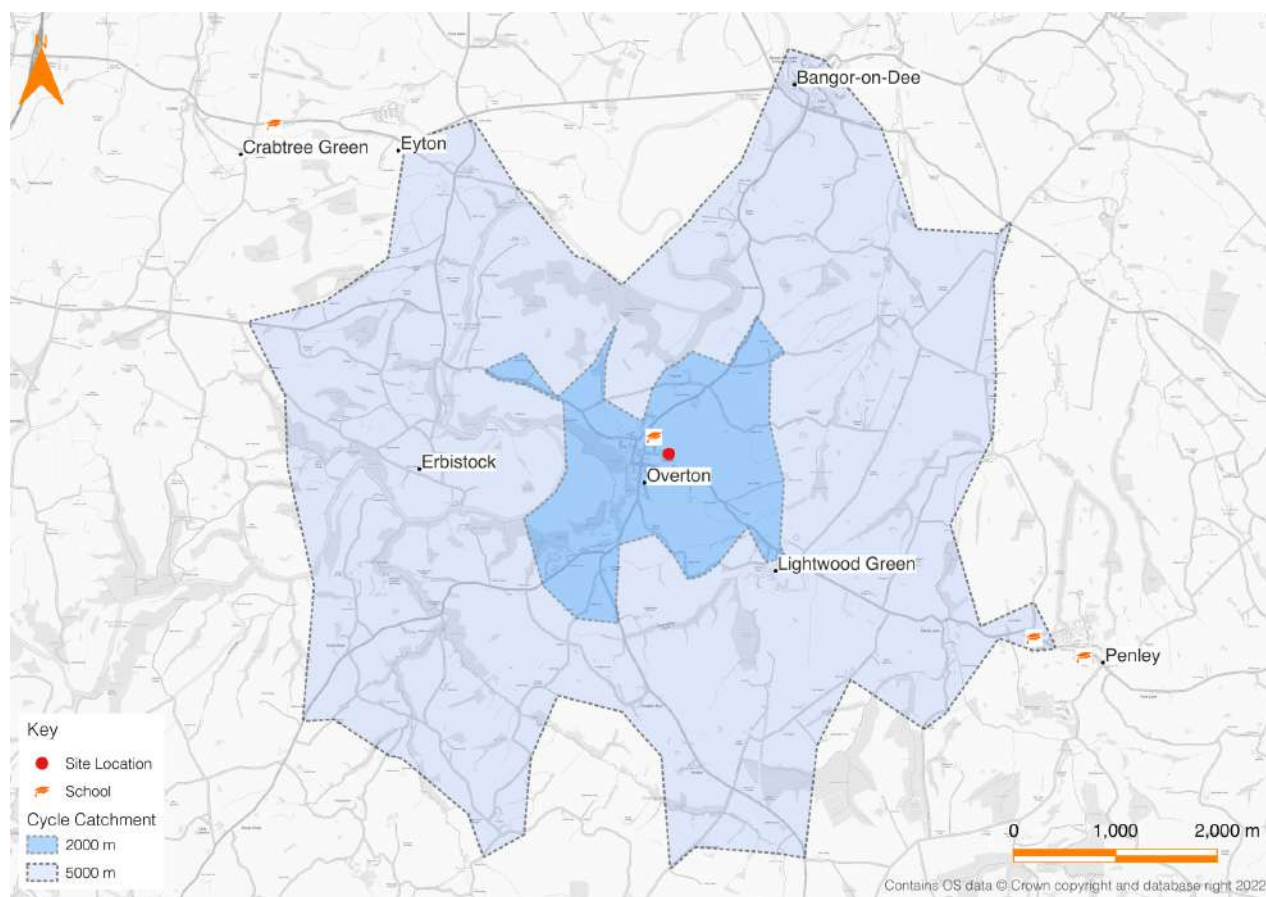
4.3 Cycle Accessibility

4.3.1 As with pedestrian accessibility, the level of a site's cycle accessibility depends upon a combination of the distance from local amenities and the standard of existing cycle infrastructure. It should, however, be noted that that cycle infrastructure can include facilities shared with vehicles and pedestrians as well as dedicated cycle infrastructure.

4.3.2 In respect of acceptable cycle distances, 'Local Transport Note 1/20: Cycle Infrastructure Design', published by the Department for Transport (DfT), states that *'two out of every three personal trips are less than five miles in length - which is an achievable distance to cycle for most people'*.

4.3.3 Figure 4.2 indicates the cycling catchment area around the proposed development site for 2km and 5km.

Figure 4.2 : Cycle Catchment Plan



4.3.4 As shown in Figure 4.2, Overton Village centre is located within a 2km cycle catchment, with the villages of Bangor-on-Dee, Lightwood Green and Erbistock located within a 5km cycle catchment.

4.4 Public Transport Services

Local Bus Services

- 4.4.1 Bus stops providing are available from High Street and Pen-Y-Llan Street within c.400m (5-minute walk) of the site, accessible via existing footway provision.
- 4.4.2 Table 4.3 provides a summary of routes and times of local bus services accessible from these bus stops. Full timetables are attached in Appendix G.

Table 4.3 : Local Bus Services – High Street and Pen-Y-Llan Street

Service No.	Route	Approx. Two-Way Frequency (buses / hour)				
		AM	Off-Peak	PM	Sat	Sun
146	Wrexham – Overton - Whitchurch	<1	<1	<1	<1	No service

4.4.3 As shown in Table 4.3, a bus service is available throughout the week and on Saturdays, providing access to Wrexham Town Centre and Whitchurch.

4.4.4 Whilst it is acknowledged that the maximum frequency is less than 1 bus service per hour (1 in each direction), Overton is a rural village and lower frequency bus services are expected in this type of setting. That said, the bus service operates throughout the week with multiple services available in the morning, afternoon and evenings, and therefore does offer a viable option for commuting, particularly for residents of Overton without access to a car.

4.5 Summary

4.5.1 In summary, it has been shown that the site can be accessed via sustainable modes of travel, including walking, cycling and public transport – thereby offering an alternative to single occupancy car trips. This includes the following:

- Existing footways on the local highway network providing walking routes to local amenities and public transport provision;
- Overton and surround villages are accessible within a 2km cycle catchment;
- Bus stops are located within a short walking distance from the site and are accessible via dedicated pedestrian routes; and
- A bus service provides access to areas such as Wrexham Town Centre and Whitchurch during the week and on Saturdays.

4.5.2 Overall, it has been demonstrated that alternatives to single-occupancy car trips are available within the local area, including walking routes and public transport services, in accordance with local and national policy.

5. Trip Generation

5.1 Trip Generation – Traffic Survey

- 5.1.1 To estimate the expected trip generation of the proposed development, a 12-hour (07:00-19:00) survey was undertaken at the St Mary's Avenue / School Lane / Church Road / Dark Lane priority junction. The survey was undertaken on Wednesday 16th November 2022, which represents an average midweek day. This methodology to estimate the trip generation at the proposed development was accepted by WCBC during scoping discussions.
- 5.1.2 St Mary's Avenue currently serves 46no. dwellings, with the proposed development comprising 45no. additional dwellings. Peak hour trip rates have been calculated based on the trips generated by the existing dwellings served via St Mary's Avenue (Table 2.2), and then applied to the 45no. dwellings proposed at the development site.
- 5.1.3 This methodology provides an accurate estimation of the trip generation at the proposed development as it is based on a site-specific data set that considers the site's location in Overton.
- 5.1.4 Table 5.1 summarises the peak hour trip rates per dwelling and estimated trip generation for 45no. proposed dwellings at the development site.

Table 5.1 : Trip Generation

	AM Peak Hour			PM Peak Hour		
	Arrive	Depart	Total	Arrive	Depart	Total
Trip Rate (per dwelling)	0.130	0.326	0.456	0.413	0.347	0.761
Proposed Development (45no. dwellings)	6	15	21	18	16	34

- 5.1.5 As shown in Table 5.1, the proposed residential development is expected to generate **21** two-way trips during the AM peak hour and **34** two-way trips during the PM peak hour.
- 5.1.6 It should be noted that 2no. tennis courts and a bowling green are also accessible via St Mary's Avenue. This may have increased the trip rate but would only provide a more robust estimate of the trip generation at the proposed development.

5.2 Summary

- 5.2.1 The proposed residential development is expected to generate **21** two-way trips during the AM peak hour and **34** two-way trips during the PM peak hour. This equates to approximately one trip every 3 minutes in the AM peak and one trip every 2 minutes in the PM peak, when averaged over the peak hours.

5.2.2 Based on the estimated trip generation, it can be concluded that the proposed residential development will have a low impact the local highway network, and will not result in any significant queuing or capacity issues on St Mary's Avenue or at the junction with School Lane / Church Road.

6. Summary and Conclusion

6.1 Summary

- 6.1.1 Mode Transport Planning has been appointed by Pickstock Homes Ltd to provide transport planning and highways advice to support a full planning application for a residential development on land off St Mary's Avenue in Overton, Wrexham.
- 6.1.2 The development site will comprise 45 residential dwellings, including 30% affordable dwellings, parking and public open space. Vehicular and pedestrian access is proposed via St Mary's Avenue.
- 6.1.3 The analysis in this report has been carried out in accordance with current policy, guidance, and best practice. The results demonstrate that:
- The internal site layout has been designed in accordance with Manual for Streets, including a 5.5m wide access road and footway provision throughout the development site;
 - The proposed car parking provision complies with WCBC's maximum residential parking standards, providing the maximum level of parking spaces at 37 dwellings;
 - Based on the high levels of car parking provision and compliance with WMBC's maximum standards, it is not expected that the proposed development will increase on-street parking demand on St Mary's Avenue;
 - Swept path analysis demonstrates that a 11.2m waste collection vehicle can manoeuvre safely within the site, in accordance with MfS standards and BS:5906;
 - In accordance with local and national policy, the site is accessible by a range of sustainable modes of transport, including walking, cycling and public transport services. These travel options provide a realistic alternative to single occupancy car travel;
 - Following a review of PIC records, there is no evidence to show that the proposed development will have a detrimental impact on highway safety;
 - The proposed development is expected to generate **21** two-way trips during the AM peak period and **34** two-way trips during the PM peak period. This equates to approximately 1 trip every 3 minutes during the AM peak and 1 trip every 3 minutes during the PM peak; and
 - Based on the low trip generation and proposed parking provision, it is concluded that St Mary's Avenue will provide safe and suitable access to the development site, with no significant impact on the operation of the local highway network.

6.2 Conclusion

- 6.2.1 In conclusion, based on the evidence and analysis within this report, there should be no highways or transport planning reasons that prevent this planning application from being approved.

APPENDICES

APPENDIX A

Pre-application Correspondence with WCBC

Highways

MEMORANDUM

From:	Chief Officer, Environment & Technical	To:	Chief Officer Planning & Regulatory
		FAO:	Mared Rees-Jones
Our Ref:	ET/DC/P/Pre/2019/036	Your Ref:	
Date:	16 th September 2019		

**Land to the rear of The Old Orchard, School Lane, Overton, Wrexham.
Proposed Residential Development (up to 45 dwellings).**

Further to your email / consultation dated 09/09/2019 in respect of the above, I comment as follows:-

The proposed development site is located off St Mary's Avenue which is an unclassified, residential road subject to a 300mph speed limit

St. Mary's Avenue is accessed off Church Road which is subject to a 30mph speed limit. However, I would estimate typical speeds along this section at being around 25mph given the existing traffic calming measures in place and the change in speed limit to 20mph just north of the junction.

Based on the above speeds, any proposed / existing junctions along this section would normally require visibility splays of 2.4 x 33m in both directions measured to the nearside edge of the adjoining highway. Visibility at the St Mary's Avenue / Church Road junction is adequate providing splays in excess of 2.4 x 33m in both directions.

St. Mary's Avenue ranges in width between 6m and 5.5m and is considered adequate to serve the additional proposed 45 dwellings off the eastern end of the site alongside no. 2 Clerc y Mendy. The existing carriageway in this location is 5.5m wide. There is an existing 1.8m footway running along the northern side of this section with scope to provide a 1.4m wide footway on the southern side leading into the development site.

Existing footway widths along both sides of St. Mary's Avenue vary in width from 1.8m to 0.9m. Although this is less than our normal 2.0m standard, it is considered adequate to serve the proposed additional development. Improvements to the footway fronting the existing garages between Clerc y Mendy and Plas Madoc could be included in the interests of pedestrian safety.

Any proposed development will need to consider providing footpath links to the existing public footpath links (PROW Nos. 17 & 18 – Overton). The applicant will need to liaise with our Public Rights of Way Section on this matter.

Adequate parking provision will need to be provided in accordance with LPGN16.

Any proposed development site would need to be constructed to adoptable standards and designed in accordance with Manual for Streets. In principle, I have no objections to the proposed development on highway grounds.

John D. M. W. A. T. E.

MA Chief Officer, Environment & Technical

Subject: RE: Land off St Mary's Avenue, Overton - Video Survey
Date: Thursday, 15 December 2022 at 09:59:38 Greenwich Mean Time
From: Malcolm Matheson
To: Rebecca Woollin
CC: Margaret Henderson, Michael Anthony
Attachments: image001.png, image002.png, image003.png, image004.png, image005.png, image006.png, image007.gif, image008.png, image009.png, image010.png, image011.png, image012.png, image013.png, image014.png, image016.png, image017.jpg, image018.jpg, image019.jpg, image020.png, image021.png, image022.png, image023.png, image024.png, image025.png, image026.png, image028.png, image029.png, image030.png, image031.png, image032.png, image033.png, image034.png

Rebecca,

Reviewing your trip generation – this seems acceptable.

Thanks,

Malcolm

Malcolm Matheson
Senior Transport Planner
D 0131 221 2384

From: Rebecca Woollin <rebeccawoollin@modetransport.co.uk>
Sent: 13 December 2022 15:47
To: Malcolm Matheson <Malcolm.Matheson@mottmac.com>
Cc: Margaret Henderson <Margaret.Henderson@mottmac.com>; Michael Anthony <michaelanthony@modetransport.co.uk>
Subject: Re: Land off St Mary's Avenue, Overton - Video Survey

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Hi Malcolm,

Have you had chance to review the email below regarding trip rates for the proposed residential development on St Mary's Avenue in Overton? We are keen to get our report finalised this week and would be grateful if you could confirm that the trip rates are acceptable.

Thank you.

Kind regards

Rebecca

Rebecca Woollin BA (Hons)
Graduate Transport Planner

☐ 0161 464 9495

☐ rebeccawoollin@modetransport.co.uk
www.modetransport.co.uk

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Mode Transport Planning (Manchester) Limited | Registered in England number 10228306

From: Rebecca Woollin <rebeccawoollin@modetransport.co.uk>

Date: Wednesday, 7 December 2022 at 13:32

To: Malcolm Matheson <Malcolm.Matheson@mottmac.com>

Cc: Margaret Henderson <Margaret.Henderson@mottmac.com>, Michael Anthony <michaelanthony@modetransport.co.uk>

Subject: Re: Land off St Mary's Avenue, Overton - Video Survey

Hi Malcolm,

Hope you are well.

We have undertaken video surveys on St Mary's Avenue for the 46 dwellings that are currently served. To calculate the expected trip generation of the proposed 44 dwelling development, this trip generation has been scaled down to represent 44 dwellings. Please see below, with the raw data attached:

	Current 46no. Dwellings			Proposed 44no. Dwellings		
	Arrivals	Departures	Total	Arrivals	Departures	Trip Gen
07:00-08:00	3	13	16	3	12	15
08:00-09:00	6	15	21	6	14	20
09:00-10:00	4	7	11	4	7	11
10:00-11:00	6	2	8	6	2	8
11:00-12:00	5	9	14	5	9	13
12:00-13:00	7	14	21	7	13	20
13:00-14:00	11	5	16	11	5	15
14:00-15:00	13	8	21	12	8	20
15:00-16:00	9	7	16	9	7	15
16:00-17:00	19	12	31	18	11	30
17:00-18:00	19	16	35	18	15	33
18:00-19:00	19	8	27	18	8	26
Total	121	116	237	116	111	227

We would be grateful if you could confirm that this trip generation calculation is acceptable.

We also have the video footage that can be provided. It appears that on-street parking is uncommon, especially on the south side.

Hope to hear from you soon.

Kind regards

Rebecca

Rebecca Woollin BA Hons
Graduate Transport Planner

📞 0161 464 9495

✉ rebeccawoollin@modetransport.co.uk

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Mode Transport Planning (Manchester) Limited | Registered in England number 10228306

From: Malcolm Matheson <Malcolm.Matheson@mottmac.com>

Date: Tuesday, 8 November 2022 at 12:41

To: Rebecca Woollin <rebeccawoollin@modetransport.co.uk>

Cc: Margaret Henderson <Margaret.Henderson@mottmac.com>, Phil Palmer <Phil.Palmer@wrexham.gov.uk>, Michael Anthony <michaelanthony@modetransport.co.uk>

Subject: RE: Land off St Mary's Avenue, Overton - Video Survey

Rebecca,

I've reviewed email chain and your proposal is acceptable in principle.

Thanks,

Malcolm

Malcolm Matheson
Senior Transport Planner

From: Rebecca Woollin <rebeccawoollin@modetransport.co.uk>
Sent: 07 November 2022 09:44
To: Malcolm Matheson <Malcolm.Matheson@mottmac.com>
Cc: Margaret Henderson <Margaret.Henderson@mottmac.com>; Phil Palmer <Phil.Palmer@wrexham.gov.uk>; Michael Anthony <michaelanthony@modetransport.co.uk>
Subject: Re: Land off St Mary's Avenue, Overton - Video Survey

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Good morning Malcolm,

Sorry to chase, but have you had the chance to review my previous email?

Hope to hear from you soon.

Kind regards

Rebecca

Rebecca Woollin
Graduate Transport Planner

☐ 0161 464 9495

☐ rebeccawoollin@modetransport.co.uk
www.modetransport.co.uk

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From: Rebecca Woollin <rebeccawoollin@modetransport.co.uk>
Date: Thursday, 3 November 2022 at 12:26
To: Malcolm.Matheson@mottmac.com <Malcolm.Matheson@mottmac.com>
Cc: Margaret.Henderson@mottmac.com <Margaret.Henderson@mottmac.com>, phil.palmer@wrexham.gov.uk <Phil.Palmer@wrexham.gov.uk>, Michael Anthony <michaelanthony@modetransport.co.uk>
Subject: Land off St Mary's Avenue, Overton - Video Survey

Good afternoon Malcolm,

I hope you are well.

Please see below our recent conversation with Phil Palmer from Wrexham Highways. We would appreciate if you could confirm if our proposed video survey at St Mary's Avenue is acceptable in your opinion.

Please get in touch if you have any questions.

Kind regards

Rebecca

Rebecca Woollin
Graduate Transport Planner

 0161 464 9495

 rebeccawoollin@modetransport.co.uk

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From: Phil Palmer <Phil.Palmer@wrexham.gov.uk>

Date: Thursday, 3 November 2022 at 12:15

To: Rebecca Woollin <rebeccawoollin@modetransport.co.uk>

Cc: jamesellis@pickstockhomes.com <jamesellis@pickstockhomes.com>

Subject: RE: Land off St Mary's Avenue, Overton - TS Scope

Hi Rebecca

Sounds a reasonable proposal. Please check with our Traffic Section on location of any survey equipment.

Just to let you know, I have passed the DMO enquiry for this site to Mott Macdonald to respond on our behalf so you should ask them if such a survey is ok in their opinion.

Contact details for MM:-

Malcolm Matheson: Malcolm.Matheson@mottmac.com

Margaret Henderson: Margaret.Henderson@mottmac.com

Regards, Phil

Phil Palmer

Peiriannydd (Rheoli Datblygiad)
Gwasanaethau Amgylchedd a Thechnegol

Engineer (Development Control)
Environment and Technical Services



01978 729688

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From: Rebecca Woollin <rebeccawoollin@modetransport.co.uk>

Sent: 02 November 2022 12:36

To: Phil Palmer <Phil.Palmer@wrexham.gov.uk>

Cc: Jamie Edge <Jamie.Edge@wrexham.gov.uk>; Graham Lloyd <Graham.Lloyd@wrexham.gov.uk>;
Michael Anthony <michaelanthony@modetransport.co.uk>

Subject: Re: Land off St Mary's Avenue, Overton - TS Scope

Hi Phil,

Hope you are well.

As requested, we have been looking at comparable sites to undertake an ATC survey which can then be used to calculate trip rates for the proposed development. As an alternative option, would you accept survey data collected on St Mary's Avenue? There are approximately 40 dwellings which are currently served by St Mary's Avenue, with the majority having off-street parking provision and also on-street parking available – as such this could provide a site-specific trip rate, rather than basing it on a site located elsewhere.

Would it therefore be acceptable to undertake a video survey on the St Mary's Avenue / School Lane / Church Road junction to record the current vehicle movements at the junction as shown below, and also allow a trip rate per dwelling to be estimated? We would suggest that a 12-hour survey is undertaken from 07:00 until 19:00 on a suitable mid weekday avoiding school holidays. As per your last email, consent will be requested from your Traffic Section before any survey was to be requested. Due to on-street parking and its proximity to the junction, we don't think it would be possible to put down ATC tubes.



If you could please advise on the above it would be greatly appreciated.

Kind regards

Rebecca

Rebecca Woollin
Graduate Transport Planner

0161 464 9495

rebeccawoollin@modetransport.co.uk



From: Phil Palmer <Phil.Palmer@wrexham.gov.uk>

Date: Tuesday, 1 November 2022 at 07:31

To: Rebecca Woollin <rebeccawoollin@modetransport.co.uk>

Cc: Jamie Edge <Jamie.Edge@wrexham.gov.uk>, Graham Lloyd <Graham.Lloyd@wrexham.gov.uk>

Subject: RE: Land off St Mary's Avenue, Overton - TS Scope

Hi Rebecca

Could you please contact our Traffic Section (contact: Jamie Edge) to request consent to place any traffic measuring equipment in or close to the highway for any proposed survey sites.

Thanks, Phil

Phil Palmer

*Peiriannydd (Rheoli Datblygiad)
Gwasanaethau Amgylchedd a Thechnegol*

*Engineer (Development Control)
Environment and Technical Services*



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From: Rebecca Woollin <rebeccawoollin@modetransport.co.uk>

Sent: 31 October 2022 15:10

To: Phil Palmer <Phil.Palmer@wrexham.gov.uk>

Cc: Graham Lloyd <Graham.Lloyd@wrexham.gov.uk>; Michael Anthony <michaelanthony@modetransport.co.uk>

Subject: Re: Land off St Mary's Avenue, Overton - TS Scope

Hi Phil,

Thank you for your email.

Is there a particular site/s that you would like an ATC to be done at? We have had a brief look and noticed some small new build developments that look to have been constructed fairly recently in Penley.

If there is a particular site that you think is appropriate, please could you advise.

Kind regards

Rebecca

Rebecca Woollin
Graduate Transport Planner



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rebeccawoollin@modetransport.co.uk

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From: Phil Palmer <Phil.Palmer@wrexham.gov.uk>
Date: Thursday, 27 October 2022 at 12:37
To: Rebecca Woollin <rebeccawoollin@modetransport.co.uk>
Cc: Graham Lloyd <Graham.Lloyd@wrexham.gov.uk>
Subject: RE: Land off St Mary's Avenue, Overton - TS Scope

Hi Rebecca

I would suggest that you carry out some traffic surveys on similar sites (eg/ in Bangor on Dee or Penley) to obtain more realistic data as discussed with your colleague this morning.

Regards, Phil

Phil Palmer

*Peiriannydd (Rheoli Datblygiad)
Gwasanaethau Amgylchedd a Thechnegol*

*Engineer (Development Control)
Environment and Technical Services*



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From: Rebecca Woollin <rebeccawoollin@modetransport.co.uk>
Sent: 27 October 2022 12:13
To: Phil Palmer <Phil.Palmer@wrexham.gov.uk>
Cc: Michael Anthony <michaelanthony@modetransport.co.uk>
Subject: Re: Land off St Mary's Avenue, Overton - TS Scope

Hi Phil,

Thank you for your call this morning.

Ideally, we don't want to use an ATC due to the associated costs and time constraints.

I've had another look at the TRICS outputs and have reproduced the data – please see attached. The 'freestanding' and 'edge of town' land uses were selected, as done previously. However, I also selected the sub-categories of 'out of town' and 'village' to further the filtering process and make the data more applicable to the site. This resulted in a total of 6 sites.

This has produced an AM peak trip rate of **0.607** which I understand is closer to what you were expecting to see for the site.

I would appreciate if you could comment on the acceptability of the new TRICS outputs based on the additional filters applied.

Kind regards

Rebecca

Rebecca Woollin
Graduate Transport Planner

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From: Rebecca Woollin <rebeccawoollin@modetransport.co.uk>
Date: Friday, 21 October 2022 at 15:51
To: phil.palmer@wrexham.gov.uk <phil.palmer@wrexham.gov.uk>
Cc: Michael Anthony <michaelanthony@modetransport.co.uk>
Subject: Re: Land off St Mary's Avenue, Overton - TS Scope

Hi Phil,

Thank you for the feedback.

Regarding the TRICS outputs, I have taken on your advice and reproduced the data using the 'freestanding' location category. Selecting the 'freestanding' category resulted in only 1 survey, so 'edge of town' locations were also selected - please see attached. The AM and PM peak rates have increased but only by a small margin.

I would appreciate if you could advise on whether the revised TRICS outputs are acceptable.

Kind regards

Rebecca

Rebecca Woollin
Graduate Transport Planner

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rebeccawoollin@modetransport.co.uk

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From: Phil Palmer <Phil.Palmer@wrexham.gov.uk>

Date: Friday, 21 October 2022 at 15:01

To: Michael Anthony <michaelanthony@modetransport.co.uk>

Subject: RE: Land off St Mary's Avenue, Overton - TS Scope

Hi Michael

The TS scope seems acceptable in principle :-

I would recommend that you include footway improvements along St Mary's Ave as indicated in my preliminary response.

Please look at swept paths for an 11.2m long refuse vehicle (see attached turning head details).

In respect of parking, I would recommend maximum LPGN 16 stds ie/ 3 spaces each for 3 / 4 bed dwellings.

TRICs data – Overton is a village so I would have thought that the “freestanding” location category would

be more applicable in this instance than suburban area or edge of town.
Total daily movements of 4.8 per dwelling seems very low for family style houses in this location.

Hope this is of assistance.

Regards, Phil

Phil Palmer

*Peiriannydd (Rheoli Datblygiad)
Gwasanaethau Amgylchedd a Thechnegol*

*Engineer (Development Control)
Environment and Technical Services*



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From: Michael Anthony <michaelanthony@modetransport.co.uk>

Sent: 20 October 2022 16:43

To: Phil Palmer <Phil.Palmer@wrexham.gov.uk>

Subject: Land off St Mary's Avenue, Overton - TS Scope

Hi Phil,

Mode Transport Planning have been appointed by Pickstock Homes to provide transport planning and highways

advice in relation to a planning application for a residential development on land off St Mary's Avenue in Overton, Wrexham.

The proposed development comprises 44 dwellings, with vehicular access taken from St Mary's Avenue. The proposed site layout is attached for reference – please note that this is still subject to change.

It is intended to produce a Transport Statement (TS) to accompany the application. The purpose of this email is to set out the scope of the TS for your approval. With consideration to pre-application comments that have already been received from Wrexham County Borough Council (WMBC)(attached), the proposed structure of the TS is as follows:

- **Existing conditions** – review the existing site layout and local highway network, including personal injury collision data for the most recent 5-year period;
- **Sustainable accessibility** – review the existing accessibility options via public transport, cycle and on-foot, including the production of walking and cycling plans;
- **Site Layout** – describe the proposed site layout, including access arrangement and internal road network, with consideration to Manual for Streets;
- **Waste collection** – review of waste collection arrangements, with reference to BS:5906 and Manual for Streets, including swept path analysis;
- **Trip generation** – estimate trip generation during the AM and PM peak hours based on trip rates derived from the TRICS database using the 'Residential – Houses Privately Owned' category (attached);
- **Parking** – review the proposed parking provision, in accordance with WCBC's adopted standards set out in LPGN16;

In terms of car parking provision, it is noted that WCBC's standards state a maximum of 3 spaces for 3&4 bedroom dwellings. The intention is currently to provide 3 spaces at all 4 bedroom dwellings and 2 spaces at 3 bedroom dwellings. Is 2 spaces at 3 bedroom acceptable at this site?

We intend to track a refuse collection vehicle within the site – is there a specific size / spec of vehicle that WCBC Highways want to see tracked?

I would be grateful if you could confirm that the proposed TS scope is acceptable, and respond to the queries on waste collection and parking provision.

Kind regards,

Michael.

Michael Anthony MCIHT
Associate Director

☎ 0161 464 9495

☎ 07841 572 743

✉ michaelanthony@modetransport.co.uk

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APPENDIX B Traffic Survey Data

Wrexham
Classified Junction Count

Site 1 of 1
School Lane
St Mary's Avenue
Church Road
Dark Lane

Lat/Long
lat 52.970249° lon -2.933732°

Date
Wednesday 16 November 2022

Weather
Cloudy
Temp: 11°C

0700 - 1900 (Weekday 12H Session)

Movement 1.1: Left from School Lane to St Mary's Avenue									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	0	0	0	0	0	0	0	0.00
0715 - 0730	0	0	2	0	0	0	0	0	2	2.00
0730 - 0745	0	0	0	0	0	0	0	0	0	0.00
0745 - 0800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
0800 - 0815	0	0	0	0	0	0	0	0	0	0.00
0815 - 0830	0	0	0	0	0	0	0	0	0	0.00
0830 - 0845	0	0	1	0	0	0	0	0	1	1.00
0845 - 0900	0	0	2	0	0	0	0	0	2	2.00
Hourly Total	0	0	3	0	0	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0.75
0900 - 0915	0	0	2	0	0	0	0	0	2	2.00
0915 - 0930	0	0	1	0	0	0	0	0	1	1.00
0930 - 0945	0	0	0	0	0	0	0	0	0	0.00
0945 - 1000	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	3	0	0	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0.75
1000 - 1015	0	0	0	0	0	0	0	0	0	0.00
1015 - 1030	0	0	0	0	0	0	0	0	0	0.00
1030 - 1045	0	0	0	0	0	0	0	0	0	0.00
1045 - 1100	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1100 - 1115	0	0	0	0	0	0	0	0	0	0.00
1115 - 1130	0	0	1	0	0	0	0	0	1	1.00
1130 - 1145	0	0	1	0	0	0	0	0	1	1.00
1145 - 1200	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	3	0	0	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0.75
1200 - 1215	0	0	0	0	1	0	0	0	1	1.00
1215 - 1230	0	0	1	0	0	0	0	0	1	1.00
1230 - 1245	0	0	0	0	0	0	0	0	0	0.00
1245 - 1300	0	0	0	0	1	0	0	0	1	1.00
Hourly Total	0	0	1	0	2	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.25	0.00	0.50	0.00	0.00	0.00	0.75	0.75
1300 - 1315	0	0	0	0	0	0	0	0	0	0.00
1315 - 1330	0	0	1	0	0	0	0	0	1	1.00
1330 - 1345	0	0	1	0	0	0	0	0	1	1.00
1345 - 1400	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	3	0	0	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0.75
1400 - 1415	0	0	1	0	0	0	0	0	1	1.00
1415 - 1430	0	0	1	0	0	0	0	0	1	1.00
1430 - 1445	0	0	1	0	0	0	0	0	1	1.00
1445 - 1500	0	0	0	0	1	0	0	0	1	1.00
Hourly Total	0	0	3	0	1	0	0	0	4	4.00
Hourly Average	0.00	0.00	0.75	0.00	0.25	0.00	0.00	0.00	1.00	1.00
1500 - 1515	0	0	0	0	0	0	0	0	0	0.00
1515 - 1530	0	0	1	0	0	0	0	0	1	1.00
1530 - 1545	0	0	0	0	0	0	0	0	0	0.00
1545 - 1600	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	1	0	0	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25	0.25
1600 - 1615	0	0	1	0	0	0	0	0	1	1.00
1615 - 1630	0	0	1	0	1	0	0	0	2	2.00
1630 - 1645	0	0	1	0	0	0	0	0	1	1.00
1645 - 1700	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	4	0	1	0	0	0	5	5.00
Hourly Average	0.00	0.00	1.00	0.00	0.25	0.00	0.00	0.00	1.25	1.25
1700 - 1715	0	0	1	0	0	0	0	0	1	1.00
1715 - 1730	0	0	0	0	0	0	0	0	0	0.00
1730 - 1745	0	0	3	0	0	0	0	0	3	3.00
1745 - 1800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	4	0	0	0	0	0	4	4.00
Hourly Average	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
1800 - 1815	0	0	1	0	0	0	0	0	1	1.00
1815 - 1830	0	0	1	0	0	0	0	0	1	1.00
1830 - 1845	0	0	0	0	0	0	0	0	0	0.00
1845 - 1900	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
Session Total	0	0	29	0	4	0	0	0	33	33.00
Session Average	0.00	0.00	0.60	0.00	0.08	0.00	0.00	0.00	0.69	0.69

Wrexham
Classified Junction Count

Site 1 of 1
School Lane
St Mary's Avenue
Church Road
Dark Lane

Lat/Long
lat 52.970249° lon -2.933732°

Date
Wednesday 16 November 2022

Weather
Cloudy
Temp: 11°C

0700 - 1900 (Weekday 12H Session)

Movement 1.2: Southbound from School Lane to Church Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	3	0	2	0	0	0	5	5.00
0715 - 0730	0	0	0	0	1	0	0	0	1	1.00
0730 - 0745	0	0	3	0	0	0	0	0	3	3.00
0745 - 0800	0	0	6	0	0	1	0	0	7	7.50
Hourly Total	0	0	12	0	3	1	0	0	16	16.50
Hourly Average	0.00	0.00	3.00	0.00	0.75	0.25	0.00	0.00	4.00	4.13
0800 - 0815	0	0	6	0	0	0	0	0	6	6.00
0815 - 0830	0	0	5	0	0	0	0	0	5	5.00
0830 - 0845	0	0	1	0	2	0	0	1	4	5.00
0845 - 0900	0	0	5	0	2	0	0	0	7	7.00
Hourly Total	0	0	17	0	4	0	0	1	22	23.00
Hourly Average	0.00	0.00	4.25	0.00	1.00	0.00	0.00	0.25	5.50	5.75
0900 - 0915	0	0	3	0	1	0	0	0	4	4.00
0915 - 0930	0	0	3	0	0	0	0	0	3	3.00
0930 - 0945	0	0	6	0	1	0	0	0	7	7.00
0945 - 1000	0	0	3	0	0	0	0	0	3	3.00
Hourly Total	0	0	15	0	2	0	0	0	17	17.00
Hourly Average	0.00	0.00	3.75	0.00	0.50	0.00	0.00	0.00	4.25	4.25
1000 - 1015	0	0	0	0	0	0	0	0	0	0.00
1015 - 1030	0	0	5	0	0	0	0	0	5	5.00
1030 - 1045	0	0	5	0	0	0	0	0	5	5.00
1045 - 1100	0	0	3	0	0	0	0	0	3	3.00
Hourly Total	0	0	13	0	0	0	0	0	13	13.00
Hourly Average	0.00	0.00	3.25	0.00	0.00	0.00	0.00	0.00	3.25	3.25
1100 - 1115	0	0	3	0	2	0	0	0	5	5.00
1115 - 1130	0	0	3	0	0	0	0	0	3	3.00
1130 - 1145	0	0	3	0	0	0	0	0	3	3.00
1145 - 1200	0	0	2	0	0	0	0	0	2	2.00
Hourly Total	0	0	11	0	2	0	0	0	13	13.00
Hourly Average	0.00	0.00	2.75	0.00	0.50	0.00	0.00	0.00	3.25	3.25
1200 - 1215	0	0	3	0	1	0	0	0	4	4.00
1215 - 1230	0	0	4	0	0	0	0	0	4	4.00
1230 - 1245	0	0	2	0	4	0	0	0	6	6.00
1245 - 1300	0	0	3	0	2	0	0	0	5	5.00
Hourly Total	0	0	12	0	7	0	0	0	19	19.00
Hourly Average	0.00	0.00	3.00	0.00	1.75	0.00	0.00	0.00	4.75	4.75
1300 - 1315	0	0	2	0	1	0	0	0	3	3.00
1315 - 1330	1	0	3	0	0	0	0	0	4	3.20
1330 - 1345	0	0	1	0	2	0	0	0	3	3.00
1345 - 1400	0	0	3	0	1	1	0	0	5	5.50
Hourly Total	1	0	9	0	4	1	0	0	15	14.70
Hourly Average	0.25	0.00	2.25	0.00	1.00	0.25	0.00	0.00	3.75	3.68
1400 - 1415	0	0	2	0	1	0	0	0	3	3.00
1415 - 1430	0	0	4	0	0	0	0	0	4	4.00
1430 - 1445	0	0	4	0	1	0	0	0	5	5.00
1445 - 1500	0	0	4	0	1	0	0	0	5	5.00
Hourly Total	0	0	14	0	3	0	0	0	17	17.00
Hourly Average	0.00	0.00	3.50	0.00	0.75	0.00	0.00	0.00	4.25	4.25
1500 - 1515	0	0	2	0	1	0	0	0	3	3.00
1515 - 1530	0	0	15	0	1	0	0	0	16	16.00
1530 - 1545	0	0	3	0	1	0	0	0	4	4.00
1545 - 1600	0	0	4	0	2	0	0	0	6	6.00
Hourly Total	0	0	24	0	5	0	0	0	29	29.00
Hourly Average	0.00	0.00	6.00	0.00	1.25	0.00	0.00	0.00	7.25	7.25
1600 - 1615	0	0	4	0	1	0	0	0	5	5.00
1615 - 1630	0	0	3	0	1	0	0	0	4	4.00
1630 - 1645	0	0	6	0	2	0	0	0	8	8.00
1645 - 1700	0	0	4	0	1	0	0	0	5	5.00
Hourly Total	0	0	17	0	5	0	0	0	22	22.00
Hourly Average	0.00	0.00	4.25	0.00	1.25	0.00	0.00	0.00	5.50	5.50
1700 - 1715	0	0	10	0	2	0	0	0	12	12.00
1715 - 1730	0	0	3	0	2	0	0	0	5	5.00
1730 - 1745	0	0	8	0	2	0	1	0	11	12.30
1745 - 1800	0	0	7	0	1	0	0	0	8	8.00
Hourly Total	0	0	28	0	7	0	1	0	36	37.30
Hourly Average	0.00	0.00	7.00	0.00	1.75	0.00	0.25	0.00	9.00	9.33
1800 - 1815	0	0	3	0	0	0	0	0	3	3.00
1815 - 1830	0	0	1	0	0	0	0	0	1	1.00
1830 - 1845	0	0	2	0	1	0	1	0	4	5.30
1845 - 1900	0	0	3	0	0	0	0	0	3	3.00
Hourly Total	0	0	9	0	1	0	1	0	11	12.30
Hourly Average	0.00	0.00	2.25	0.00	0.25	0.00	0.25	0.00	2.75	3.08
Session Total	1	0	181	0	43	2	2	1	230	233.80
Session Average	0.02	0.00	3.77	0.00	0.90	0.04	0.04	0.02	4.79	4.87

Wrexham
Classified Junction Count

Site 1 of 1
School Lane
St Mary's Avenue
Church Road
Dark Lane

Lat/Long
lat 52.970249° lon -2.933732°

Date
Wednesday 16 November 2022

Weather
Cloudy
Temp: 11°C

0700 - 1900 (Weekday 12H Session)

Movement 1.3: Right from School Lane to Dark Lane									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	0	0	0	0	0	0	0	0.00
0715 - 0730	0	0	1	0	0	0	0	0	1	1.00
0730 - 0745	0	0	1	0	0	0	0	0	1	1.00
0745 - 0800	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	3	0	0	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0.75
0800 - 0815	0	0	1	0	0	0	0	0	1	1.00
0815 - 0830	0	0	1	0	0	0	0	0	1	1.00
0830 - 0845	0	0	0	0	0	0	0	0	0	0.00
0845 - 0900	0	0	3	0	1	0	0	0	4	4.00
Hourly Total	0	0	5	0	1	0	0	0	6	6.00
Hourly Average	0.00	0.00	1.25	0.00	0.25	0.00	0.00	0.00	1.50	1.50
0900 - 0915	0	0	0	0	0	0	0	0	0	0.00
0915 - 0930	0	0	0	0	0	0	0	0	0	0.00
0930 - 0945	0	0	0	0	0	0	0	0	0	0.00
0945 - 1000	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000 - 1015	0	0	1	0	0	0	0	0	1	1.00
1015 - 1030	0	0	1	0	0	0	0	0	1	1.00
1030 - 1045	0	0	1	0	0	0	0	0	1	1.00
1045 - 1100	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	3	0	0	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0.75
1100 - 1115	0	0	0	0	0	0	0	0	0	0.00
1115 - 1130	0	0	0	0	0	0	0	0	0	0.00
1130 - 1145	0	0	0	0	0	0	0	0	0	0.00
1145 - 1200	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	1	0	0	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25	0.25
1200 - 1215	0	0	0	0	0	0	0	0	0	0.00
1215 - 1230	0	0	0	0	0	0	0	0	0	0.00
1230 - 1245	0	0	1	0	0	0	0	0	1	1.00
1245 - 1300	0	0	2	0	0	0	0	0	2	2.00
Hourly Total	0	0	3	0	0	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0.75
1300 - 1315	0	0	1	0	0	0	0	0	1	1.00
1315 - 1330	0	0	0	0	0	0	0	0	0	0.00
1330 - 1345	0	0	0	0	0	0	0	0	0	0.00
1345 - 1400	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	1	0	0	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25	0.25
1400 - 1415	0	0	0	0	0	0	0	0	0	0.00
1415 - 1430	0	0	1	0	0	0	0	0	1	1.00
1430 - 1445	0	0	1	0	0	0	0	0	1	1.00
1445 - 1500	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
1500 - 1515	0	0	0	0	0	0	0	0	0	0.00
1515 - 1530	0	0	5	0	0	0	0	0	5	5.00
1530 - 1545	0	0	0	0	0	0	0	0	0	0.00
1545 - 1600	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	5	0	0	0	0	0	5	5.00
Hourly Average	0.00	0.00	1.25	0.00	0.00	0.00	0.00	0.00	1.25	1.25
1600 - 1615	0	0	1	0	0	0	0	0	1	1.00
1615 - 1630	0	0	0	0	0	0	0	0	0	0.00
1630 - 1645	0	0	0	0	0	0	0	0	0	0.00
1645 - 1700	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	1	0	0	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25	0.25
1700 - 1715	0	0	0	0	0	0	0	0	0	0.00
1715 - 1730	0	0	2	0	0	0	0	0	2	2.00
1730 - 1745	0	0	0	0	0	0	0	0	0	0.00
1745 - 1800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
1800 - 1815	0	0	0	0	0	0	0	0	0	0.00
1815 - 1830	0	0	0	0	0	0	0	0	0	0.00
1830 - 1845	0	0	0	0	0	0	0	0	0	0.00
1845 - 1900	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Session Total	0	0	26	0	1	0	0	0	27	27.00
Session Average	0.00	0.00	0.54	0.00	0.02	0.00	0.00	0.00	0.56	0.56

Wrexham
Classified Junction Count

Site 1 of 1
School Lane
St Mary's Avenue
Church Road
Dark Lane

Lat/Long
lat 52.970249° lon -2.933732°

Date
Wednesday 16 November 2022

Weather
Cloudy
Temp: 11°C

0700 - 1900 (Weekday 12H Session)

Movement 1.4: Left from St Mary's Avenue to Church Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	0	0	0	0	0	0	0	0.00
0715 - 0730	0	0	1	0	0	0	0	0	1	1.00
0730 - 0745	0	0	1	0	0	0	0	0	1	1.00
0745 - 0800	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	3	0	0	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0.75
0800 - 0815	0	0	0	0	1	0	0	0	1	1.00
0815 - 0830	0	0	2	0	0	0	0	0	2	2.00
0830 - 0845	0	0	0	0	0	0	0	0	0	0.00
0845 - 0900	0	0	2	0	0	0	0	0	2	2.00
Hourly Total	0	0	4	0	1	0	0	0	5	5.00
Hourly Average	0.00	0.00	1.00	0.00	0.25	0.00	0.00	0.00	1.25	1.25
0900 - 0915	0	0	0	0	0	0	0	0	0	0.00
0915 - 0930	0	0	0	0	0	0	0	0	0	0.00
0930 - 0945	0	0	0	0	0	0	0	0	0	0.00
0945 - 1000	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000 - 1015	0	0	0	0	0	0	0	0	0	0.00
1015 - 1030	0	0	0	0	0	0	0	0	0	0.00
1030 - 1045	0	0	0	0	0	0	0	0	0	0.00
1045 - 1100	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1100 - 1115	0	0	0	0	0	0	0	0	0	0.00
1115 - 1130	0	0	1	0	0	0	0	0	1	1.00
1130 - 1145	0	0	1	0	0	0	0	0	1	1.00
1145 - 1200	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	3	0	0	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0.75
1200 - 1215	0	0	4	0	0	0	0	0	4	4.00
1215 - 1230	0	0	0	0	0	0	0	0	0	0.00
1230 - 1245	0	0	1	0	1	0	0	0	2	2.00
1245 - 1300	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	5	0	1	0	0	0	6	6.00
Hourly Average	0.00	0.00	1.25	0.00	0.25	0.00	0.00	0.00	1.50	1.50
1300 - 1315	0	0	0	0	0	0	0	0	0	0.00
1315 - 1330	0	0	0	0	0	0	0	0	0	0.00
1330 - 1345	0	0	0	0	0	0	0	0	0	0.00
1345 - 1400	0	0	1	0	1	0	0	0	2	2.00
Hourly Total	0	0	1	0	1	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.25	0.00	0.25	0.00	0.00	0.00	0.50	0.50
1400 - 1415	0	0	1	0	0	0	0	0	1	1.00
1415 - 1430	0	0	1	0	0	0	0	0	1	1.00
1430 - 1445	0	0	0	0	0	0	0	0	0	0.00
1445 - 1500	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	3	0	0	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0.75
1500 - 1515	0	0	0	0	0	0	0	0	0	0.00
1515 - 1530	0	0	1	0	0	0	0	0	1	1.00
1530 - 1545	0	0	0	0	0	0	0	0	0	0.00
1545 - 1600	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
1600 - 1615	0	0	2	0	0	0	0	0	2	2.00
1615 - 1630	0	0	2	0	1	0	0	0	3	3.00
1630 - 1645	0	0	1	0	0	0	0	0	1	1.00
1645 - 1700	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	6	0	1	0	0	0	7	7.00
Hourly Average	0.00	0.00	1.50	0.00	0.25	0.00	0.00	0.00	1.75	1.75
1700 - 1715	0	0	1	0	0	0	0	0	1	1.00
1715 - 1730	0	0	4	0	0	0	0	0	4	4.00
1730 - 1745	0	0	1	0	0	0	0	0	1	1.00
1745 - 1800	0	0	2	0	0	0	0	0	2	2.00
Hourly Total	0	0	8	0	0	0	0	0	8	8.00
Hourly Average	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
1800 - 1815	0	0	2	0	0	0	0	0	2	2.00
1815 - 1830	0	0	0	0	0	0	0	0	0	0.00
1830 - 1845	0	0	0	0	0	0	0	0	0	0.00
1845 - 1900	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
Session Total	0	0	37	0	4	0	0	0	41	41.00
Session Average	0.00	0.00	0.77	0.00	0.08	0.00	0.00	0.00	0.85	0.85

Wrexham
Classified Junction Count

Site 1 of 1
School Lane
St Mary's Avenue
Church Road
Dark Lane

Lat/Long
lat 52.970249° lon -2.933732°

Date
Wednesday 16 November 2022

Weather
Cloudy
Temp: 11°C

0700 - 1900 (Weekday 12H Session)

Movement 1.5: Westbound from St Mary's Avenue to Dark Lane									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	0	0	0	0	0	0	0	0.00
0715 - 0730	0	0	2	0	0	0	0	0	2	2.00
0730 - 0745	0	0	1	0	0	0	0	0	1	1.00
0745 - 0800	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	4	0	0	0	0	0	4	4.00
Hourly Average	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
0800 - 0815	0	0	2	0	0	0	0	0	2	2.00
0815 - 0830	0	0	1	0	0	0	0	0	1	1.00
0830 - 0845	0	0	0	0	1	0	0	0	1	1.00
0845 - 0900	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	3	0	1	0	0	0	4	4.00
Hourly Average	0.00	0.00	0.75	0.00	0.25	0.00	0.00	0.00	1.00	1.00
0900 - 0915	0	0	0	0	0	0	0	0	0	0.00
0915 - 0930	0	0	2	0	0	0	0	0	2	2.00
0930 - 0945	0	0	1	0	0	0	0	0	1	1.00
0945 - 1000	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	3	0	0	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0.75
1000 - 1015	0	0	0	0	0	0	0	0	0	0.00
1015 - 1030	0	0	0	0	0	0	0	0	0	0.00
1030 - 1045	0	0	0	0	0	0	0	0	0	0.00
1045 - 1100	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1100 - 1115	0	0	0	0	0	0	0	0	0	0.00
1115 - 1130	0	0	0	0	0	0	0	0	0	0.00
1130 - 1145	0	0	4	0	0	0	0	0	4	4.00
1145 - 1200	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	5	0	0	0	0	0	5	5.00
Hourly Average	0.00	0.00	1.25	0.00	0.00	0.00	0.00	0.00	1.25	1.25
1200 - 1215	0	0	2	0	1	0	0	0	3	3.00
1215 - 1230	0	0	0	0	0	0	0	0	0	0.00
1230 - 1245	0	0	0	0	0	0	0	0	0	0.00
1245 - 1300	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	2	0	1	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.50	0.00	0.25	0.00	0.00	0.00	0.75	0.75
1300 - 1315	0	0	0	0	0	0	0	0	0	0.00
1315 - 1330	0	0	1	0	0	0	0	0	1	1.00
1330 - 1345	0	0	1	0	0	0	0	0	1	1.00
1345 - 1400	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
1400 - 1415	0	0	2	0	0	0	0	0	2	2.00
1415 - 1430	0	0	0	0	0	0	0	0	0	0.00
1430 - 1445	0	0	0	0	0	0	0	0	0	0.00
1445 - 1500	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	3	0	0	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0.75
1500 - 1515	0	0	0	0	0	0	0	0	0	0.00
1515 - 1530	0	0	2	0	0	0	0	0	2	2.00
1530 - 1545	0	0	1	0	0	0	0	0	1	1.00
1545 - 1600	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	3	0	0	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0.75
1600 - 1615	0	0	1	0	0	0	0	0	1	1.00
1615 - 1630	0	0	1	0	0	0	0	0	1	1.00
1630 - 1645	0	0	0	0	1	0	0	0	1	1.00
1645 - 1700	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	2	0	1	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.50	0.00	0.25	0.00	0.00	0.00	0.75	0.75
1700 - 1715	0	0	1	0	0	0	0	0	1	1.00
1715 - 1730	0	0	2	0	0	0	0	0	2	2.00
1730 - 1745	0	0	2	0	1	0	0	0	3	3.00
1745 - 1800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	5	0	1	0	0	0	6	6.00
Hourly Average	0.00	0.00	1.25	0.00	0.25	0.00	0.00	0.00	1.50	1.50
1800 - 1815	0	0	1	0	0	0	0	0	1	1.00
1815 - 1830	0	0	2	0	0	0	0	0	2	2.00
1830 - 1845	0	0	2	0	0	0	0	0	2	2.00
1845 - 1900	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	6	0	0	0	0	0	6	6.00
Hourly Average	0.00	0.00	1.50	0.00	0.00	0.00	0.00	0.00	1.50	1.50
Session Total	0	0	38	0	4	0	0	0	42	42.00
Session Average	0.00	0.00	0.79	0.00	0.08	0.00	0.00	0.00	0.88	0.88

Wrexham
Classified Junction Count

Site 1 of 1
School Lane
St Mary's Avenue
Church Road
Dark Lane

Lat/Long
lat 52.970249° lon -2.933732°

Date
Wednesday 16 November 2022

Weather
Cloudy
Temp: 11°C

0700 - 1900 (Weekday 12H Session)

Movement 1.6: Right from St Mary's Avenue to School Lane									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	1	0	0	0	0	0	1	1.00
0715 - 0730	0	0	1	0	0	0	0	0	1	1.00
0730 - 0745	0	0	0	0	1	0	0	0	1	1.00
0745 - 0800	0	0	2	0	1	0	0	0	3	3.00
Hourly Total	0	0	4	0	2	0	0	0	6	6.00
Hourly Average	0.00	0.00	1.00	0.00	0.50	0.00	0.00	0.00	1.50	1.50
0800 - 0815	0	0	2	0	0	0	0	0	2	2.00
0815 - 0830	0	0	0	0	0	0	0	0	0	0.00
0830 - 0845	0	0	2	0	0	0	0	0	2	2.00
0845 - 0900	0	0	2	0	0	0	0	0	2	2.00
Hourly Total	0	0	6	0	0	0	0	0	6	6.00
Hourly Average	0.00	0.00	1.50	0.00	0.00	0.00	0.00	0.00	1.50	1.50
0900 - 0915	0	0	4	0	0	0	0	0	4	4.00
0915 - 0930	0	0	0	0	0	0	0	0	0	0.00
0930 - 0945	0	0	0	0	0	0	0	0	0	0.00
0945 - 1000	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	4	0	0	0	0	0	4	4.00
Hourly Average	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
1000 - 1015	0	0	0	0	0	0	0	0	0	0.00
1015 - 1030	0	0	1	0	0	0	0	0	1	1.00
1030 - 1045	0	0	1	0	0	0	0	0	1	1.00
1045 - 1100	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
1100 - 1115	0	0	0	0	0	0	0	0	0	0.00
1115 - 1130	0	0	0	0	0	0	0	0	0	0.00
1130 - 1145	0	0	0	0	0	0	0	0	0	0.00
1145 - 1200	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	1	0	0	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25	0.25
1200 - 1215	0	0	0	0	0	0	0	0	0	0.00
1215 - 1230	0	0	1	0	0	0	0	0	1	1.00
1230 - 1245	0	0	1	0	1	0	0	0	2	2.00
1245 - 1300	0	0	0	0	2	0	0	0	2	2.00
Hourly Total	0	0	2	0	3	0	0	0	5	5.00
Hourly Average	0.00	0.00	0.50	0.00	0.75	0.00	0.00	0.00	1.25	1.25
1300 - 1315	0	0	0	0	1	0	0	0	1	1.00
1315 - 1330	0	0	0	0	0	0	0	0	0	0.00
1330 - 1345	0	0	0	0	0	0	0	0	0	0.00
1345 - 1400	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	1	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.25	0.25
1400 - 1415	0	0	0	0	0	0	0	0	0	0.00
1415 - 1430	0	0	0	0	0	0	0	0	0	0.00
1430 - 1445	0	0	1	0	0	0	0	0	1	1.00
1445 - 1500	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
1500 - 1515	0	0	0	0	0	0	0	0	0	0.00
1515 - 1530	0	0	0	0	1	0	0	0	1	1.00
1530 - 1545	0	0	0	0	0	0	0	0	0	0.00
1545 - 1600	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	1	0	1	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.25	0.00	0.25	0.00	0.00	0.00	0.50	0.50
1600 - 1615	0	0	0	0	0	0	0	0	0	0.00
1615 - 1630	0	0	2	0	0	0	0	0	2	2.00
1630 - 1645	0	0	0	0	0	0	0	0	0	0.00
1645 - 1700	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
1700 - 1715	0	0	1	0	0	0	0	0	1	1.00
1715 - 1730	0	0	1	0	0	0	0	0	1	1.00
1730 - 1745	0	0	0	0	0	0	0	0	0	0.00
1745 - 1800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
1800 - 1815	0	0	0	0	0	0	0	0	0	0.00
1815 - 1830	0	0	0	0	0	0	0	0	0	0.00
1830 - 1845	0	0	0	0	0	0	0	0	0	0.00
1845 - 1900	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Session Total	0	0	26	0	7	0	0	0	33	33.00
Session Average	0.00	0.00	0.54	0.00	0.15	0.00	0.00	0.00	0.69	0.69

Wrexham
Classified Junction Count

Site 1 of 1
School Lane
St Mary's Avenue
Church Road
Dark Lane

Lat/Long
lat 52.970249° lon -2.933732°

Date
Wednesday 16 November 2022

Weather
Cloudy
Temp: 11°C

0700 - 1900 (Weekday 12H Session)

Movement 1.7: Left from Church Road to Dark Lane									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	0	0	0	0	0	0	0	0.00
0715 - 0730	1	0	0	0	0	0	0	0	1	0.20
0730 - 0745	0	0	0	0	0	0	0	0	0	0.00
0745 - 0800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	1	0	0	0	0	0	0	0	1	0.20
Hourly Average	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.05
0800 - 0815	0	0	0	0	0	0	0	0	0	0.00
0815 - 0830	0	0	0	0	0	0	0	0	0	0.00
0830 - 0845	0	0	1	0	0	0	0	0	1	1.00
0845 - 0900	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
0900 - 0915	0	0	5	0	0	0	0	0	5	5.00
0915 - 0930	0	0	0	0	0	0	0	0	0	0.00
0930 - 0945	0	0	1	0	0	0	0	0	1	1.00
0945 - 1000	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	7	0	0	0	0	0	7	7.00
Hourly Average	0.00	0.00	1.75	0.00	0.00	0.00	0.00	0.00	1.75	1.75
1000 - 1015	0	0	0	0	0	0	0	0	0	0.00
1015 - 1030	0	0	1	0	0	0	0	0	1	1.00
1030 - 1045	0	0	2	0	0	0	0	0	2	2.00
1045 - 1100	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	4	0	0	0	0	0	4	4.00
Hourly Average	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
1100 - 1115	0	0	1	0	0	0	0	0	1	1.00
1115 - 1130	0	0	0	0	1	0	0	0	1	1.00
1130 - 1145	0	0	0	0	0	0	0	0	0	0.00
1145 - 1200	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	2	0	1	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.50	0.00	0.25	0.00	0.00	0.00	0.75	0.75
1200 - 1215	0	0	2	0	0	0	0	0	2	2.00
1215 - 1230	0	0	1	0	0	0	0	0	1	1.00
1230 - 1245	0	0	2	0	0	0	0	0	2	2.00
1245 - 1300	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	5	0	0	0	0	0	5	5.00
Hourly Average	0.00	0.00	1.25	0.00	0.00	0.00	0.00	0.00	1.25	1.25
1300 - 1315	0	0	1	0	0	0	0	0	1	1.00
1315 - 1330	0	0	1	0	0	0	0	0	1	1.00
1330 - 1345	0	0	0	0	0	0	0	0	0	0.00
1345 - 1400	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	3	0	0	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0.75
1400 - 1415	0	0	2	0	0	0	0	0	2	2.00
1415 - 1430	0	0	0	0	0	0	0	0	0	0.00
1430 - 1445	0	0	3	0	0	0	0	0	3	3.00
1445 - 1500	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	5	0	0	0	0	0	5	5.00
Hourly Average	0.00	0.00	1.25	0.00	0.00	0.00	0.00	0.00	1.25	1.25
1500 - 1515	0	0	1	0	0	0	0	0	1	1.00
1515 - 1530	0	0	2	0	0	0	0	0	2	2.00
1530 - 1545	0	0	2	0	0	0	0	0	2	2.00
1545 - 1600	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	5	0	0	0	0	0	5	5.00
Hourly Average	0.00	0.00	1.25	0.00	0.00	0.00	0.00	0.00	1.25	1.25
1600 - 1615	0	0	1	0	0	0	0	0	1	1.00
1615 - 1630	0	0	1	0	0	0	0	0	1	1.00
1630 - 1645	0	0	0	0	0	0	0	0	0	0.00
1645 - 1700	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
1700 - 1715	0	0	1	0	0	0	0	0	1	1.00
1715 - 1730	0	0	1	0	0	0	0	0	1	1.00
1730 - 1745	0	0	0	0	0	0	0	0	0	0.00
1745 - 1800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
1800 - 1815	0	0	0	0	0	0	0	0	0	0.00
1815 - 1830	0	0	1	0	0	0	0	0	1	1.00
1830 - 1845	0	0	2	0	0	0	0	0	2	2.00
1845 - 1900	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	3	0	0	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0.75
Session Total	1	0	40	0	1	0	0	0	42	41.20
Session Average	0.02	0.00	0.83	0.00	0.02	0.00	0.00	0.00	0.88	0.86

Wrexham
Classified Junction Count

Site 1 of 1
School Lane
St Mary's Avenue
Church Road
Dark Lane

Lat/Long
lat 52.970249° lon -2.933732°

Date
Wednesday 16 November 2022

Weather
Cloudy
Temp: 11°C

0700 - 1900 (Weekday 12H Session)

Movement 1.8: Northbound from Church Road to School Lane									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	6	0	0	0	0	0	6	6.00
0715 - 0730	0	0	4	0	1	0	0	0	5	5.00
0730 - 0745	0	0	8	0	1	0	0	0	9	9.00
0745 - 0800	0	0	5	0	1	1	0	0	7	7.50
Hourly Total	0	0	23	0	3	1	0	0	27	27.50
Hourly Average	0.00	0.00	5.75	0.00	0.75	0.25	0.00	0.00	6.75	6.88
0800 - 0815	0	0	11	0	1	0	0	0	12	12.00
0815 - 0830	0	0	8	0	1	0	0	0	9	9.00
0830 - 0845	0	0	15	0	0	0	0	0	15	15.00
0845 - 0900	0	0	10	0	1	0	0	0	11	11.00
Hourly Total	0	0	44	0	3	0	0	0	47	47.00
Hourly Average	0.00	0.00	11.00	0.00	0.75	0.00	0.00	0.00	11.75	11.75
0900 - 0915	0	0	8	0	2	0	0	0	10	10.00
0915 - 0930	0	0	5	0	0	1	0	0	6	6.50
0930 - 0945	0	0	4	0	2	0	0	0	6	6.00
0945 - 1000	0	0	6	0	0	1	0	0	7	7.50
Hourly Total	0	0	23	0	4	2	0	0	29	30.00
Hourly Average	0.00	0.00	5.75	0.00	1.00	0.50	0.00	0.00	7.25	7.50
1000 - 1015	0	0	4	0	1	1	1	0	7	8.80
1015 - 1030	0	0	5	0	0	0	0	0	5	5.00
1030 - 1045	0	0	5	0	0	0	0	0	5	5.00
1045 - 1100	0	0	5	0	3	0	0	0	8	8.00
Hourly Total	0	0	19	0	4	1	1	0	25	26.80
Hourly Average	0.00	0.00	4.75	0.00	1.00	0.25	0.25	0.00	6.25	6.70
1100 - 1115	1	0	8	0	0	0	0	0	9	8.20
1115 - 1130	0	0	9	0	1	1	0	0	11	11.50
1130 - 1145	1	0	8	0	1	0	0	0	10	9.20
1145 - 1200	0	0	1	0	1	2	0	0	4	5.00
Hourly Total	2	0	26	0	3	3	0	0	34	33.90
Hourly Average	0.50	0.00	6.50	0.00	0.75	0.75	0.00	0.00	8.50	8.48
1200 - 1215	0	0	7	0	0	0	0	0	7	7.00
1215 - 1230	0	0	6	0	1	0	0	0	7	7.00
1230 - 1245	0	0	13	0	0	0	0	0	13	13.00
1245 - 1300	0	0	9	0	2	0	0	0	11	11.00
Hourly Total	0	0	35	0	3	0	0	0	38	38.00
Hourly Average	0.00	0.00	8.75	0.00	0.75	0.00	0.00	0.00	9.50	9.50
1300 - 1315	0	0	7	0	2	0	1	0	10	11.30
1315 - 1330	0	0	2	0	1	1	0	0	4	4.50
1330 - 1345	0	0	2	0	1	0	0	0	3	3.00
1345 - 1400	0	0	3	0	0	0	0	0	3	3.00
Hourly Total	0	0	14	0	4	1	1	0	20	21.80
Hourly Average	0.00	0.00	3.50	0.00	1.00	0.25	0.25	0.00	5.00	5.45
1400 - 1415	0	0	3	0	0	1	0	0	4	4.50
1415 - 1430	0	0	5	0	1	0	0	0	6	6.00
1430 - 1445	0	0	6	0	0	0	0	0	6	6.00
1445 - 1500	0	0	7	0	1	1	0	0	9	9.50
Hourly Total	0	0	21	0	2	2	0	0	25	26.00
Hourly Average	0.00	0.00	5.25	0.00	0.50	0.50	0.00	0.00	6.25	6.50
1500 - 1515	0	0	12	0	3	0	0	0	15	15.00
1515 - 1530	0	0	5	0	1	0	0	0	6	6.00
1530 - 1545	0	0	11	0	1	0	0	0	12	12.00
1545 - 1600	0	0	4	0	0	0	0	1	5	6.00
Hourly Total	0	0	32	0	5	0	0	1	38	39.00
Hourly Average	0.00	0.00	8.00	0.00	1.25	0.00	0.00	0.25	9.50	9.75
1600 - 1615	0	0	13	0	2	0	0	0	15	15.00
1615 - 1630	0	0	9	0	1	0	0	0	10	10.00
1630 - 1645	0	0	10	0	0	0	0	0	10	10.00
1645 - 1700	0	0	10	0	0	0	0	0	10	10.00
Hourly Total	0	0	42	0	3	0	0	0	45	45.00
Hourly Average	0.00	0.00	10.50	0.00	0.75	0.00	0.00	0.00	11.25	11.25
1700 - 1715	0	0	9	0	0	0	0	0	9	9.00
1715 - 1730	0	0	11	0	0	0	0	0	11	11.00
1730 - 1745	0	0	14	0	1	1	0	0	16	16.50
1745 - 1800	0	0	8	0	0	0	0	0	8	8.00
Hourly Total	0	0	42	0	1	1	0	0	44	44.50
Hourly Average	0.00	0.00	10.50	0.00	0.25	0.25	0.00	0.00	11.00	11.13
1800 - 1815	0	0	7	0	1	1	0	0	9	9.50
1815 - 1830	0	0	6	0	0	0	0	0	6	6.00
1830 - 1845	0	0	9	0	0	0	0	0	9	9.00
1845 - 1900	0	0	2	0	0	0	0	0	2	2.00
Hourly Total	0	0	24	0	1	1	0	0	26	26.50
Hourly Average	0.00	0.00	6.00	0.00	0.25	0.25	0.00	0.00	6.50	6.63
Session Total	2	0	345	0	36	12	2	1	398	406.00
Session Average	0.04	0.00	7.19	0.00	0.75	0.25	0.04	0.02	8.29	8.46

Wrexham
Classified Junction Count

Site 1 of 1
School Lane
St Mary's Avenue
Church Road
Dark Lane

Lat/Long
lat 52.970249° lon -2.933732°

Date
Wednesday 16 November 2022

Weather
Cloudy
Temp: 11°C

0700 - 1900 (Weekday 12H Session)

Movement 1.9: Right from Church Road to St Mary's Avenue									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	0	0	0	0	0	0	0	0.00
0715 - 0730	0	0	0	0	0	0	0	0	0	0.00
0730 - 0745	0	0	0	0	0	0	0	0	0	0.00
0745 - 0800	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	1	0	0	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25	0.25
0800 - 0815	0	0	1	0	0	0	0	0	1	1.00
0815 - 0830	0	0	0	0	0	0	0	0	0	0.00
0830 - 0845	0	0	1	0	0	0	0	0	1	1.00
0845 - 0900	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	3	0	0	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0.75
0900 - 0915	0	0	0	0	0	0	0	0	0	0.00
0915 - 0930	0	0	0	0	0	0	0	0	0	0.00
0930 - 0945	0	0	0	0	0	0	0	0	0	0.00
0945 - 1000	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000 - 1015	0	0	1	0	0	0	0	0	1	1.00
1015 - 1030	0	0	1	0	0	0	0	0	1	1.00
1030 - 1045	0	0	2	0	0	0	0	0	2	2.00
1045 - 1100	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	4	0	0	0	0	0	4	4.00
Hourly Average	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
1100 - 1115	0	0	0	0	0	0	0	0	0	0.00
1115 - 1130	0	0	1	0	0	0	0	0	1	1.00
1130 - 1145	0	0	0	0	0	0	0	0	0	0.00
1145 - 1200	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	1	0	0	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25	0.25
1200 - 1215	0	0	0	0	0	0	0	0	0	0.00
1215 - 1230	0	0	0	0	1	0	0	0	1	1.00
1230 - 1245	0	0	0	0	1	0	0	0	1	1.00
1245 - 1300	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	2	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.50	0.50
1300 - 1315	0	0	1	0	2	0	0	0	3	3.00
1315 - 1330	0	0	0	0	0	0	0	0	0	0.00
1330 - 1345	0	0	0	0	0	0	0	0	0	0.00
1345 - 1400	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	1	0	2	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.25	0.00	0.50	0.00	0.00	0.00	0.75	0.75
1400 - 1415	0	0	2	0	0	0	0	0	2	2.00
1415 - 1430	0	0	1	0	0	0	0	0	1	1.00
1430 - 1445	0	0	0	0	0	0	0	0	0	0.00
1445 - 1500	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	4	0	0	0	0	0	4	4.00
Hourly Average	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
1500 - 1515	0	0	0	0	0	0	0	0	0	0.00
1515 - 1530	0	0	0	0	1	0	0	0	1	1.00
1530 - 1545	0	0	3	0	0	0	0	0	3	3.00
1545 - 1600	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	3	0	1	0	0	0	4	4.00
Hourly Average	0.00	0.00	0.75	0.00	0.25	0.00	0.00	0.00	1.00	1.00
1600 - 1615	0	0	6	0	0	0	0	0	6	6.00
1615 - 1630	0	0	0	0	2	0	0	0	2	2.00
1630 - 1645	0	0	1	0	1	0	0	0	2	2.00
1645 - 1700	0	0	2	0	0	0	0	0	2	2.00
Hourly Total	0	0	9	0	3	0	0	0	12	12.00
Hourly Average	0.00	0.00	2.25	0.00	0.75	0.00	0.00	0.00	3.00	3.00
1700 - 1715	0	0	4	0	0	0	0	0	4	4.00
1715 - 1730	0	0	3	0	0	0	0	0	3	3.00
1730 - 1745	0	0	0	0	0	0	0	0	0	0.00
1745 - 1800	0	0	2	0	0	0	0	0	2	2.00
Hourly Total	0	0	9	0	0	0	0	0	9	9.00
Hourly Average	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00	2.25	2.25
1800 - 1815	0	0	5	0	0	0	0	0	5	5.00
1815 - 1830	0	0	3	0	0	0	0	0	3	3.00
1830 - 1845	0	0	2	0	0	0	0	0	2	2.00
1845 - 1900	1	0	1	0	0	0	0	0	2	1.20
Hourly Total	1	0	11	0	0	0	0	0	12	11.20
Hourly Average	0.25	0.00	2.75	0.00	0.00	0.00	0.00	0.00	3.00	2.80
Session Total	1	0	46	0	8	0	0	0	55	54.20
Session Average	0.02	0.00	0.96	0.00	0.17	0.00	0.00	0.00	1.15	1.13

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Site 1 of 1
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Dark Lane

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Date
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Weather
Cloudy
Temp: 11°C

0700 - 1900 (Weekday 12H Session)

Movement 1.10: Left from Dark Lane to School Lane									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	0	0	0	0	0	0	0	0.00
0715 - 0730	0	0	1	0	0	0	0	0	1	1.00
0730 - 0745	0	0	0	0	1	0	0	0	1	1.00
0745 - 0800	0	0	0	0	1	0	0	0	1	1.00
Hourly Total	0	0	1	0	2	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.25	0.00	0.50	0.00	0.00	0.00	0.75	0.75
0800 - 0815	0	0	0	0	0	0	0	0	0	0.00
0815 - 0830	0	0	0	0	0	0	0	0	0	0.00
0830 - 0845	0	0	0	0	1	0	0	0	1	1.00
0845 - 0900	0	0	3	0	0	0	0	0	3	3.00
Hourly Total	0	0	3	0	1	0	0	0	4	4.00
Hourly Average	0.00	0.00	0.75	0.00	0.25	0.00	0.00	0.00	1.00	1.00
0900 - 0915	0	0	0	0	0	0	0	0	0	0.00
0915 - 0930	0	0	2	0	0	0	0	0	2	2.00
0930 - 0945	0	0	0	0	0	0	0	0	0	0.00
0945 - 1000	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
1000 - 1015	0	0	0	0	0	0	0	0	0	0.00
1015 - 1030	0	0	0	0	0	0	0	0	0	0.00
1030 - 1045	0	0	2	0	0	0	0	0	2	2.00
1045 - 1100	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
1100 - 1115	0	0	2	0	1	0	0	0	3	3.00
1115 - 1130	0	0	1	0	0	0	0	0	1	1.00
1130 - 1145	0	0	0	0	0	0	0	0	0	0.00
1145 - 1200	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	3	0	1	0	0	0	4	4.00
Hourly Average	0.00	0.00	0.75	0.00	0.25	0.00	0.00	0.00	1.00	1.00
1200 - 1215	0	0	0	0	0	0	0	0	0	0.00
1215 - 1230	0	0	0	0	0	0	0	0	0	0.00
1230 - 1245	0	0	3	0	0	0	0	0	3	3.00
1245 - 1300	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	3	0	0	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0.75
1300 - 1315	0	0	0	0	0	0	0	0	0	0.00
1315 - 1330	0	0	0	0	0	0	0	0	0	0.00
1330 - 1345	0	0	0	0	0	0	0	0	0	0.00
1345 - 1400	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1400 - 1415	0	0	2	0	0	0	0	0	2	2.00
1415 - 1430	0	0	0	0	0	0	0	0	0	0.00
1430 - 1445	0	0	2	0	0	0	0	0	2	2.00
1445 - 1500	0	0	2	0	0	0	0	0	2	2.00
Hourly Total	0	0	6	0	0	0	0	0	6	6.00
Hourly Average	0.00	0.00	1.50	0.00	0.00	0.00	0.00	0.00	1.50	1.50
1500 - 1515	0	0	0	0	0	0	0	0	0	0.00
1515 - 1530	0	0	3	0	0	0	0	0	3	3.00
1530 - 1545	0	0	3	0	0	0	0	0	3	3.00
1545 - 1600	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	7	0	0	0	0	0	7	7.00
Hourly Average	0.00	0.00	1.75	0.00	0.00	0.00	0.00	0.00	1.75	1.75
1600 - 1615	0	0	1	0	0	0	0	0	1	1.00
1615 - 1630	0	0	0	0	0	0	0	0	0	0.00
1630 - 1645	0	0	4	0	0	0	0	0	4	4.00
1645 - 1700	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	5	0	0	0	0	0	5	5.00
Hourly Average	0.00	0.00	1.25	0.00	0.00	0.00	0.00	0.00	1.25	1.25
1700 - 1715	0	0	0	0	0	0	0	0	0	0.00
1715 - 1730	0	0	2	0	0	0	0	0	2	2.00
1730 - 1745	0	0	2	0	0	0	0	0	2	2.00
1745 - 1800	0	0	2	0	0	0	0	0	2	2.00
Hourly Total	0	0	6	0	0	0	0	0	6	6.00
Hourly Average	0.00	0.00	1.50	0.00	0.00	0.00	0.00	0.00	1.50	1.50
1800 - 1815	0	0	2	0	0	0	0	0	2	2.00
1815 - 1830	0	0	0	0	0	0	0	0	0	0.00
1830 - 1845	0	0	0	0	0	0	0	0	0	0.00
1845 - 1900	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
Session Total	0	0	40	0	4	0	0	0	44	44.00
Session Average	0.00	0.00	0.83	0.00	0.08	0.00	0.00	0.00	0.92	0.92

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Date
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Weather
Cloudy
Temp: 11°C

0700 - 1900 (Weekday 12H Session)

Movement 1.11: Eastbound from Dark Lane to St Mary's Avenue									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	0	0	0	0	0	0	0	0.00
0715 - 0730	0	0	0	0	0	0	0	0	0	0.00
0730 - 0745	0	0	0	0	0	0	0	0	0	0.00
0745 - 0800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0800 - 0815	0	0	0	0	0	0	0	0	0	0.00
0815 - 0830	0	0	0	0	0	0	0	0	0	0.00
0830 - 0845	0	0	0	0	0	0	0	0	0	0.00
0845 - 0900	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0900 - 0915	0	0	1	0	0	0	0	0	1	1.00
0915 - 0930	0	0	0	0	0	0	0	0	0	0.00
0930 - 0945	0	0	0	0	0	0	0	0	0	0.00
0945 - 1000	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	1	0	0	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25	0.25
1000 - 1015	0	0	1	0	0	0	0	0	1	1.00
1015 - 1030	0	0	0	0	0	0	0	0	0	0.00
1030 - 1045	0	0	1	0	0	0	0	0	1	1.00
1045 - 1100	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
1100 - 1115	0	0	0	0	1	0	0	0	1	1.00
1115 - 1130	0	0	0	0	0	0	0	0	0	0.00
1130 - 1145	0	0	0	0	0	0	0	0	0	0.00
1145 - 1200	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	1	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.25	0.25
1200 - 1215	0	0	0	0	0	0	0	0	0	0.00
1215 - 1230	0	0	0	0	0	0	0	0	0	0.00
1230 - 1245	0	0	1	0	0	0	0	0	1	1.00
1245 - 1300	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
1300 - 1315	0	0	2	0	0	0	0	0	2	2.00
1315 - 1330	0	0	2	0	0	0	0	0	2	2.00
1330 - 1345	0	0	1	0	0	0	0	0	1	1.00
1345 - 1400	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	5	0	0	0	0	0	5	5.00
Hourly Average	0.00	0.00	1.25	0.00	0.00	0.00	0.00	0.00	1.25	1.25
1400 - 1415	0	0	0	0	0	0	0	0	0	0.00
1415 - 1430	0	1	3	0	0	0	0	0	4	3.40
1430 - 1445	0	0	1	0	0	0	0	0	1	1.00
1445 - 1500	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	1	4	0	0	0	0	0	5	4.40
Hourly Average	0.00	0.25	1.00	0.00	0.00	0.00	0.00	0.00	1.25	1.10
1500 - 1515	0	0	1	0	0	0	0	0	1	1.00
1515 - 1530	0	0	1	0	0	0	0	0	1	1.00
1530 - 1545	0	0	1	0	0	0	0	0	1	1.00
1545 - 1600	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	4	0	0	0	0	0	4	4.00
Hourly Average	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
1600 - 1615	0	0	0	0	0	0	0	0	0	0.00
1615 - 1630	0	0	0	0	1	0	0	0	1	1.00
1630 - 1645	0	0	1	0	0	0	0	0	1	1.00
1645 - 1700	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	1	0	1	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.25	0.00	0.25	0.00	0.00	0.00	0.50	0.50
1700 - 1715	0	0	0	0	0	0	0	0	0	0.00
1715 - 1730	0	0	3	0	0	0	0	0	3	3.00
1730 - 1745	0	0	0	0	1	0	0	0	1	1.00
1745 - 1800	0	0	2	0	0	0	0	0	2	2.00
Hourly Total	0	0	5	0	1	0	0	0	6	6.00
Hourly Average	0.00	0.00	1.25	0.00	0.25	0.00	0.00	0.00	1.50	1.50
1800 - 1815	0	0	1	0	0	0	0	0	1	1.00
1815 - 1830	0	0	3	0	0	0	0	0	3	3.00
1830 - 1845	0	0	0	0	0	0	0	0	0	0.00
1845 - 1900	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	5	0	0	0	0	0	5	5.00
Hourly Average	0.00	0.00	1.25	0.00	0.00	0.00	0.00	0.00	1.25	1.25
Session Total	0	1	29	0	3	0	0	0	33	32.40
Session Average	0.00	0.02	0.60	0.00	0.06	0.00	0.00	0.00	0.69	0.68

Wrexham
Classified Junction Count

Site 1 of 1
School Lane
St Mary's Avenue
Church Road
Dark Lane

Lat/Long
lat 52.970249° lon -2.933732°

Date
Wednesday 16 November 2022

Weather
Cloudy
Temp: 11°C

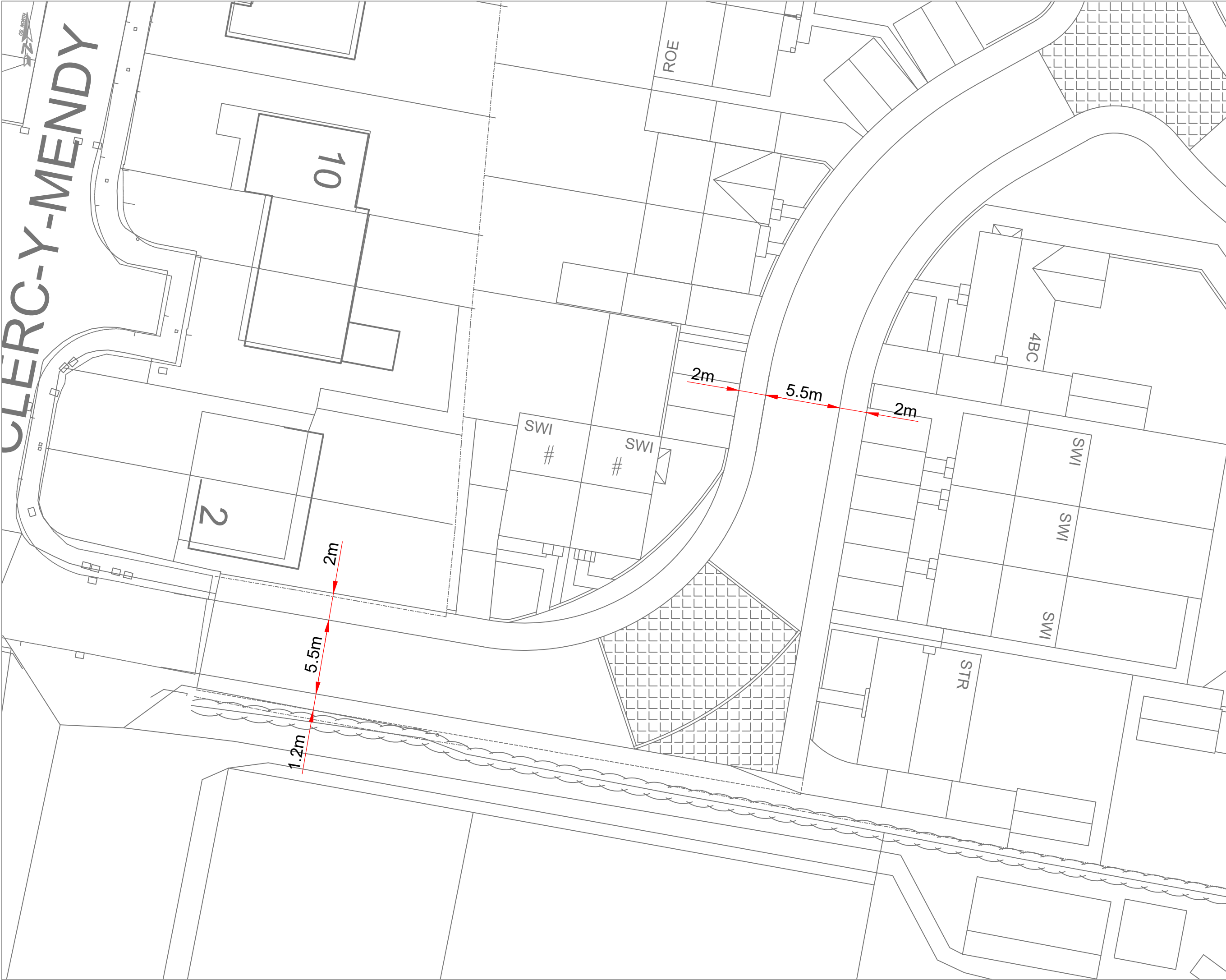
0700 - 1900 (Weekday 12H Session)

Movement 1.12: Right from Dark Lane to Church Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	0	0	0	0	0	0	0	0.00
0715 - 0730	0	0	0	0	0	0	0	0	0	0.00
0730 - 0745	0	0	0	0	0	0	0	0	0	0.00
0745 - 0800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0800 - 0815	0	0	1	0	0	0	0	0	1	1.00
0815 - 0830	0	0	3	0	0	0	0	0	3	3.00
0830 - 0845	0	0	0	0	0	0	0	0	0	0.00
0845 - 0900	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	4	0	0	0	0	0	4	4.00
Hourly Average	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
0900 - 0915	0	0	1	0	0	0	0	0	1	1.00
0915 - 0930	0	0	0	0	0	0	0	0	0	0.00
0930 - 0945	0	0	1	0	0	0	0	0	1	1.00
0945 - 1000	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
1000 - 1015	0	0	0	0	0	0	0	0	0	0.00
1015 - 1030	0	0	1	0	0	0	0	0	1	1.00
1030 - 1045	0	0	0	0	0	0	0	0	0	0.00
1045 - 1100	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	1	0	0	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25	0.25
1100 - 1115	0	0	0	0	1	0	0	0	1	1.00
1115 - 1130	0	0	0	0	0	0	0	0	0	0.00
1130 - 1145	0	0	1	0	0	0	0	0	1	1.00
1145 - 1200	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	1	0	1	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.25	0.00	0.25	0.00	0.00	0.00	0.50	0.50
1200 - 1215	0	0	0	0	2	0	0	0	2	2.00
1215 - 1230	0	0	1	0	0	0	0	0	1	1.00
1230 - 1245	0	0	0	0	0	0	0	0	0	0.00
1245 - 1300	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	2	0	2	0	0	0	4	4.00
Hourly Average	0.00	0.00	0.50	0.00	0.50	0.00	0.00	0.00	1.00	1.00
1300 - 1315	0	0	3	0	0	0	0	0	3	3.00
1315 - 1330	0	0	1	0	0	0	0	0	1	1.00
1330 - 1345	0	0	0	0	0	0	0	0	0	0.00
1345 - 1400	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	4	0	0	0	0	0	4	4.00
Hourly Average	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
1400 - 1415	0	0	0	0	0	0	0	0	0	0.00
1415 - 1430	0	0	3	0	0	0	0	0	3	3.00
1430 - 1445	0	0	0	0	0	0	0	0	0	0.00
1445 - 1500	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	3	0	0	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0.75
1500 - 1515	0	0	0	0	0	0	0	0	0	0.00
1515 - 1530	0	0	1	0	0	0	0	0	1	1.00
1530 - 1545	0	0	2	0	0	0	0	0	2	2.00
1545 - 1600	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	4	0	0	0	0	0	4	4.00
Hourly Average	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
1600 - 1615	0	0	0	0	0	0	0	0	0	0.00
1615 - 1630	0	0	0	0	0	0	0	0	0	0.00
1630 - 1645	0	0	2	0	1	0	0	0	3	3.00
1645 - 1700	0	0	3	0	0	0	0	0	3	3.00
Hourly Total	0	0	5	0	1	0	0	0	6	6.00
Hourly Average	0.00	0.00	1.25	0.00	0.25	0.00	0.00	0.00	1.50	1.50
1700 - 1715	0	0	1	0	0	0	0	0	1	1.00
1715 - 1730	0	0	0	0	0	0	0	0	0	0.00
1730 - 1745	0	0	0	0	0	0	0	0	0	0.00
1745 - 1800	0	0	1	0	1	0	0	0	2	2.00
Hourly Total	0	0	2	0	1	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.50	0.00	0.25	0.00	0.00	0.00	0.75	0.75
1800 - 1815	0	0	0	0	0	0	0	0	0	0.00
1815 - 1830	0	0	0	0	0	0	0	0	0	0.00
1830 - 1845	0	0	0	0	0	0	0	0	0	0.00
1845 - 1900	1	0	0	0	0	0	0	0	1	0.20
Hourly Total	1	0	0	0	0	0	0	0	1	0.20
Hourly Average	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.05
Session Total	1	0	28	0	5	0	0	0	34	33.20
Session Average	0.02	0.00	0.58	0.00	0.10	0.00	0.00	0.00	0.71	0.69

APPENDIX C

Proposed Site Layout Drawing

APPENDIX D Proposed Access Drawing



transport planning

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e info@modetransport.co.uk
w www.modetransport.co.uk

- notes:
1. this drawing is to be read in conjunction with all other relevant drawings, any discrepancies, errors or omissions to be brought to the attention of overseeing organisation.
 2. all dimensions to be checked before commencement of work on site.
 3. all dimensions in metres unless otherwise stated.
 4. the design is subject to approval of wrexham county borough council.
 5. drawing based on topographical survey.

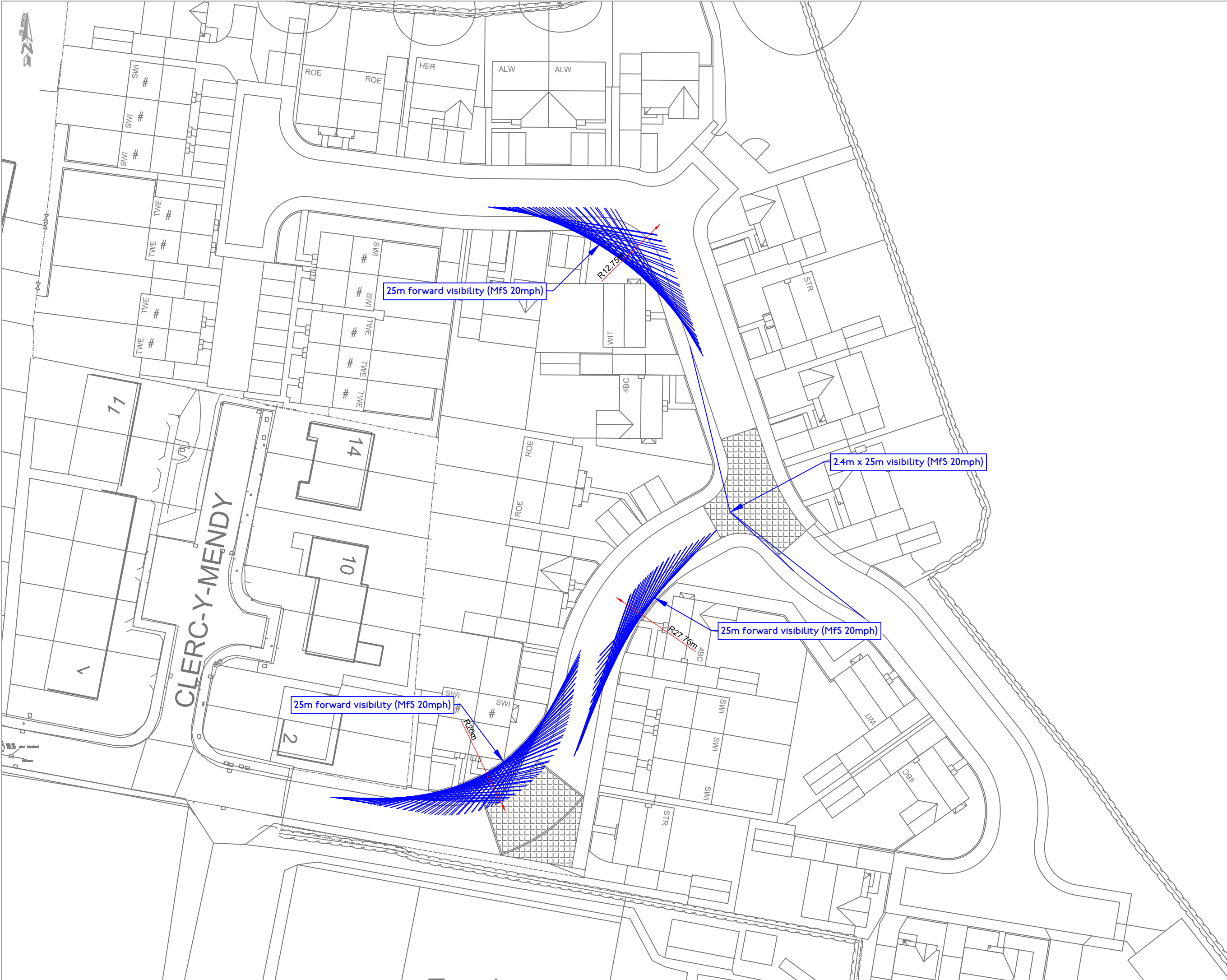
issue/revision		
A	10/03/2023	issued
-	16/12/2022	issued
l/r	date	description

client: pickstock homes ltd
project: st mary's avenue, overton, wrexham
project number: J327090
scale: 1:250@A3
drawing title:
indicative access dimensions
drawing number:
J32-7090-PS-001

APPENDIX E Forward Visibility Drawing

File name: Y:\MODE DROPBOX\PROJECT\MANCHESTER\2. PROJECTS\J327090_OVERTON-ON-DEE, WREXHAM\5. GRAPHICS\2. CAD\2. SHEETS\J32-7090-PS-001 REV A.DWG
Last saved by: LUKE WHEELER Last plotted: 2023-03-10

Project Management Initials: Designer: LCW Checked: MA Approved: ME ISO A3 297mm x 420mm



transport planning

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- notes:
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 2. all dimensions to be checked before commencement of work on site.
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 5. drawing based on topographical survey.

issue/revision			
A	10/03/2023	issued	
-	16/12/2022	issued	
l/r	date	description	

client: pickstock homes ltd
project: st mary's avenue, overton, wrexham
project number: J327090
scale: 1:500@A3
drawing title:
forward visibility and centre line radius
drawing number:
J32-7090-PS-002

APPENDIX F

Swept Path Analysis - 11.2m Refuse Collection

Vehicle

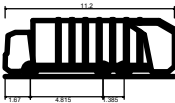
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Last saved by: LUKE WHEELER Last Plotted: 2023-03-10

Project Management Initials: Designer: LCW Checked: MA Approved: ME ISO A3 297mm x 420mm



transport planning

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Phoenix 2 Duo (P2-15W with Elite 6x4 chassis)	
Overall Length	11.200m
Overall Width	2.530m
Overall Body Height	3.751m
Min Body Ground Clearance	0.504m
Track Width	2.500m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	9.500m

- notes:
1. this drawing is to be read in conjunction with all other relevant drawings, any discrepancies, errors or omissions to be brought to the attention of overseeing organisation.
 2. all dimensions to be checked before commencement of work on site.
 3. all dimensions in metres unless otherwise stated.
 4. the design is subject to approval of wrexham county borough council.
 5. drawing based on topographical survey.

issue/revision			
A	10/03/2023	issued	
-	16/12/2022	issued	
l/r	date	description	

client: pickstock homes ltd
project: st mary's avenue, overton, wrexham
project number: J327090
scale: 1:250@A3
drawing title: swept path analysis
drawing number: J32-7090-PS-003

APPENDIX G Local Bus Timetables

146 Wreccsam/Wrexham - Marchwiel - Penley - Whitchurch**X46 Wreccsam/Wrexham - Marchwiel - Whitchurch****Llun i Sadwrn henblaw Gwyliau Cyhoeddus : Monday to Saturday except Bank Holidays**

PATS COACHES

Service No. / Rhif Gwasanaeth:	X46	146	146	146	146	146
Days / Dyddiau:		SDO	SSH			
Wrexham, Bus Station [2]	0640	0825	0825	1125	1400	1700
Marchwiel, Piercy Avenue	0650	0835	0835	1135	1410	1714
Cross Lanes	0652	....	0841	1141	1416	1720
Bangor-on-Dee	....	....	0845	1145	1420	1723
Overton	....	0845	0853	1153	1428	1728
Penley	....	0850	0904	1204	1433	1733
Hanmer	....	0856	0910	1210	1439	1739
Bronington	....	0905	0920	1220	1449	1749
Whitchurch Aldi	0712	0912	0927	1227	1457	1757
Whitchurch	0715	0915	0930	1230	1500	1800

SDO: Dyddiau ysgol un unig / School days only.

SSH: Sadwrn a gwyliau Ysgol / Saturday and school holiday.

146 Whitchurch - Penley - Marchwiel - Wreccsam/Wrexham**PC6 Penley-Wreccsam/Wrexham, Diwrnod Ysgol yn Unig/School Days Only****Llun i Sadwrn henblaw Gwyliau Cyhoeddus : Monday to Saturday except Bank Holidays**

Service No. / Rhif Gwasanaeth:	146	PC6	146	146	146	146	146
Days / Dyddiau:			SDO	SSH			
Whitchurch	0720	....	0920	0940	1240	1505	1800
Whitchurch Aldi	0723	....	0923	0943	1243	1508	1803
Bronington	0730	....	0930	0950	1250	1515	1815
Hanmer	0738	....	0938	0958	1258	1523	1825
Penley, Dymock Place	0745	....	0945	1005	1305	1535	1831
Penley, Maelor School	....	0855	....	....	....	....	....
Overton	0751	0902	0951	1011	1311	1545	1835
Bangor-on-Dee	0800	0912	1000	1020	1320	1554	1845
Cross Lanes	0805	0914	1005	1025	1325	1559	1850
Marchwiel, Piercy Avenue	0810	0916	1010	1030	1330	1604	1854
Wrexham, Bus Station	0825	0930	1025	1040	1345	1620	1900



keep up with mode:



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London
☎ 020 7293 0217

Manchester
☎ 0161 464 9495

Reading
☎ 0118 206 2945

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