

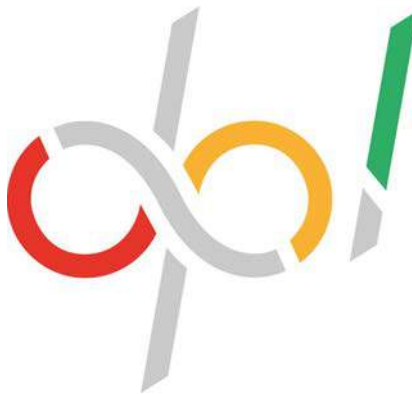


TRANSPORT STATEMENT

**NINE ACRES SCHOOL
WREXHAM COUNTY BOROUGH
COUNCIL**

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

- 1.1.1 Development Planning Limited have been commissioned by Wrexham County Borough Council to provide a Transport Statement for the proposed development of a new primary school at Nine Acres.
- 1.1.2 The proposed development is for a new 315 pupil primary school, with nursery and reception. The proposed number of pupils at the school would be 315 primary school age and 45 pre-school age, a total of 360. The pre-school pupils would be part-time.
- 1.1.3 The development proposals would replace the existing St Mary's Catholic School, which is located around 1.2km to the south on Lea Road (south of Brook Street).
- 1.1.4 The new school would be opened to all year groups simultaneously, transferring the existing pupils from St Mary's Catholic School to the new site.

1.2 HIGHWAY SAFETY

- 1.2.1 A review of the five-year accident data for the area around the school has been undertaken. The review suggests that there are no existing accident issues relating to school children, pedestrians or cyclists.

1.3 SUSTAINABLE ACCESS

- 1.3.1 A hands-up travel survey has been undertaken of pupils at the existing school. Of these, 34% travel to school by sustainable travel modes.
- 1.3.2 Whilst there are no existing accident issues relating to pupils, pedestrians or cyclists, the provision of a new school will increase pedestrian flows within the local area, particularly during school drop-off and pick-up. The pedestrian and cycle access proposals are summarised below.
- 20mph proposal along Rhosnesni Lane;
 - 20mph proposals along Westminster Drive;
 - Supporting traffic calming measures to both 20mph proposals;
 - School 'Keep Clear' markings along the site frontages;
 - New raised pedestrian crossing outside the school across Rhosnesni Lane;
 - New raised pedestrian crossing outside the school across Westminster Drive;
 - New footway proposal to the southwest corner of the Chester Road/ Westminster Drive/ Foster Road Junction;
 - New dropped kerb crossing of Chester Road (south of Westminster Drive);
 - Additional footway widening on Chester Road/ Westminster Drive to 2.0m on the southeastern corner of the junction; and
 - New footway proposals linking Rhosnesni Lane to The Beeches and the residential areas to the north.
- 1.3.3 The proposals are considered to be suitable to provide a Safe Route to School environment.
- 1.3.4 To encourage the use of sustainable travel modes, a Travel Plan would be adopted by the school. The Travel Plan forms a separate document within the planning application package.

1.4 HIGHWAY ACCESS

- 1.4.1 The residual 66% of pupils are forecast to travel by car. For those pupils, the hands up survey results in a forecast of cars at 55% of the number of children by that mode. The

percentage of pupils by private car could be overstated as there are more pupils arriving by coach than stated in the survey and the private hire mini-buses and cars were not incorporated in the survey.

- 1.4.2 Separate parking areas are proposed for coaches, staff and for pick-up and drop-off. The size of each area is proposed based upon the assessed needs of the school, following discussions with the existing school's management team.
- 1.4.3 The pick-up/ drop-off car park incorporates oversize spaces and parking aisle for ease of use by parents. The oversize spaces allow for the opening/ closing of car doors and access to child seat buckles.
- 1.4.4 Regardless of the size of the on-site provision of drop-off/ pick-up spaces, it is likely that some parents would choose to drop-off/ pick-up on-street. To accommodate this, waiting time restrictions are proposed along Westminster Drive.
- 1.4.5 A Car Park Management Plan would be adopted by the school and forms a separate document within the planning application package.
- 1.4.6 The access proposals are considered to be suitable for the assessed need of the school.

1.5 WESTMINSTER DRIVE

- 1.5.1 The car parking proposals for the school include revised parking restrictions on Westminster Drive.
- 1.5.2 A car parking beat survey was undertaken on the 2nd March 2021. The parking beat survey shows that around 15% of local legal on-street car parking spaces were utilised during school pick-up and drop-off (a maximum of around 93 cars parked in 632 legal spaces). Whilst the survey was undertaken during travel restrictions, it suggests that there is suitable alternative locations of the relocated car parking to occur without detriment to nearby residents.
- 1.5.3 The details of the time-limiting would be agreed with the highway authority, however initially are suggested to be:
 - 20 minute parking limit from 7am to 9:30am; and
 - 20 minute parking limit from 2:30pm to 4pm.
- 1.5.4 Traffic analysis has been undertaken for the access points to the site. The analysis forecast that the proposed access points to the site are suitable to accommodate the development-generated traffic.

1.6 CONCLUSION

- 1.6.1 The development proposals for a new primary school at Nine Acres has been considered in terms of transport accessibility by all appropriate modes of transport.
- 1.6.2 A suite of measures have been proposed to provide Safe Routes to School and adequate on-site car parking and local parking restrictions to meet with the forecast demand. Additional offsite works are proposed to Rhosnesni Lane, Westminster Drive and at the junction of Chester Road/ Westminster Drive to support the delivery of the school.
- 1.6.3 There are considered to be no highway reasons for refusal of the planning application.

2. INTRODUCTION

2.1 BACKGROUND

- 2.1.1 Development Planning Limited have been commissioned by Wrexham County Borough Council to provide a Transport Statement for the proposed development of a new primary school at Nine Acres.
- 2.1.2 This Transport Statement assesses access to the development site by appropriate modes of transport and considers the implications on the wider transport networks.
- 2.1.3 This Transport Statement has been prepared for submission as part of a planning application package and should be read in conjunction with the documents and plans which have been submitted as part of that package.
- 2.1.4 This Transport Statement has been prepared in accordance with the principles set out within Planning Policy Wales (December 2018).
- 2.1.5 The conclusions and recommendations contained herein have been drawn based on information available and obtained in advance of any planning submission.

2.2 CORONAVIRUS

- 2.2.1 At the time of writing this report the UK Government has enforced forms of lockdown/ travel restrictions due to the risk to public health of transmission of the Covid-19 disease. As such, travel patterns are highly unusual with traffic levels suppressed and some information on regular public transport routes not being available.
- 2.2.2 The Welsh Government have released their guidance to keep schools open, where possible. Even so, the 'new normal' may not be realised until some time after this. The return to normality is not currently envisaged until summer, or beyond.
- 2.2.3 The 'new normal' cannot be quantified at the current time and could include significant changes in travel patterns, including increased use of more sustainable transport modes, increased flexibility in daily working patterns, including home working and travel time choices being made to reduce travel during peak times.
- 2.2.4 Best endeavours have been taken to provide accurate information within this report based upon historic and currently available information, where available. As the Government are taking all steps that they can to help to secure the economy, it is considered necessary that planning applications continue to be determined based upon the best information that is currently available to allow development and investment to continue.

2.3 SITE LOCATION

- 2.3.1 The site location is on Rhosnesni Lane, Wrexham. The site location is shown in Figure 2.1, Appendix A.
- 2.3.2 The site is bound to the north by Rhosnesni Lane, to the west by proposed open space and, immediately to the west of this, Chester Road, to the south by Westminster Drive and to the east by residential development fronting onto Rhosnesni Lane, Lawson Road and Westminster Drive.

2.4 DEVELOPMENT PROPOSAL

- 2.4.1 The proposed development is for a new 315 pupil primary school, with nursery and reception. The proposed number of pupils at the school would be 315 primary school age and 45 pre-school age, a total of 360. The pre-school pupils would be part-time.

- 2.4.2 The development proposals would replace the existing St Mary's Catholic School, which is located around 1.2km to the south on Lea Road (south of Brook Street).
- 2.4.3 The new school would be opened to all year groups simultaneously, transferring the existing pupils from St Mary's Catholic School to the new site.

3. THE CHANGING FACE OF TRANSPORT

3.1 INTRODUCTION

- 3.1.1 The way we travel and impact upon the world is now seen as the Government's highest priority by many and features high on the political agenda.
- 3.1.2 The way we travel can significantly impact on the environment and respecting the transport hierarchies is an essential part of helping towards reducing the impact of development and helping to foster a more environmentally responsible culture.
- 3.1.3 This chapter considers the changing face of transport to allow consideration of the way in which travel is forecast to change in the short to medium term and, as such, allow consideration of emerging technologies to be given, when interpreting future traffic forecasts.

3.2 THE IMPACT OF TRAVEL

- 3.2.1 With regard to transport, the changing use of vehicles began decades ago with government interventions including the implementation of Travel Plans for all major new development from the early 2000's and a significant policy shift to reducing car emissions, beginning in major UK cities such as London through their congestion charge from 2003 onwards.
- 3.2.2 Currently, Cardiff are considering a congestion charging scheme with wider consideration being given by the Welsh Government who have announced an independent review on whether road users across Wales should be charged.
- 3.2.3 In recent years, there has been a significant focus on reducing the emissions of road-going vehicles through reduced tax tariffs on those that pollute the least and the increasing standards of vehicle emissions through the Euro emission standards which has seen allowable emissions dropping significantly since first implemented in 1992.
- 3.2.4 Government policies have been the start of the reduction of emissions, due to the global environmental movement and environmental standards across the world being continually reviewed and made more stringent.
- 3.2.5 On the 29th April 2019, the Welsh government declared a climate emergency and stated:

...The declaration sends a clear signal the Welsh Government will not allow the process of leaving the EU to distract us from the challenge of climate change, which threatens our health, economy, infrastructure and our natural environment.

The announcement draws attention to the magnitude and significance of the latest evidence from the Intergovernmental Panel on Climate Change and highlights the recent climate protests across the UK...
- 3.2.6 In response to evolving Governmental commitments, it now appears to be industry who are using their research and development budgets to come up with more and more innovative ways of reducing the impacts of travel, whether it be electric buses, hybrid or zero-emission technologies or through the delivery of computer-based communication and work platforms.
- 3.2.7 Through education, information and encouragement a more connected world with a more sustainable travel culture can be created.

3.3 HISTORY OF CLIMATE CHANGE EMERGENCY

- 3.3.1 On the 1st May 2019 the UK Parliament passed a national declaration of an Environment and Climate Emergency, following independent declarations on the 28th and 29th April by Scotland and Wales, respectively. The UK Parliament was the first to do so in the world.
- 3.3.2 There are now over 1,000 declarations across the world and the climate change agenda is quickly resulting in new and emerging policies to help the world work towards a zero carbon position within the coming decades.
- 3.3.3 Quickly following the UK declaration, the UK Government became the first major economy in the world to pass laws to end its contribution to global warming by 2050 (Climate Change Act 2008 (2050 Target Amendment) Order 2019), which is significantly more stringent than its previous commitments to reduce greenhouse gas emissions by 80% (compared to 1990 levels).
- 3.3.4 The Climate Change Emergency was pre-ceded by the Government's 'The Road to Zero Strategy' that sees the end of conventional fossil fuel vehicles by 2040, with the Committee on Climate Change seeking only pure battery electric vehicles and long range plug in hybrids to be sold by 2035.
- 3.3.5 Current planning policy clearly supports sustainable development and the sustainable transport hierarchy and should be read and considered against the ever-changing political background surrounding the environment.
- 3.3.6 We are entering a new period of change in transport and should ensure that the policies which are applied are relevant and deliverable.

3.4 ACCESS BY ULTRA LOW AND ZERO EMISSION VEHICLE

- 3.4.1 Everyone who can drive a car can also drive an ultra-low or zero emission vehicle. Ultra-low and zero emission vehicles have all the benefits of personalised transportation, whilst significantly reducing the overall impact of travel.
- 3.4.2 HM Government have set out their emissions strategy in the July 2018 report 'The Road to Zero'. The policies set out the long-term ambitions of Government as:

Our mission is to put the UK at the forefront of the design and manufacturing of zero emission vehicles, and for all new cars and vans to be effectively zero emission by 2040. As set out in the NO2 plan, we will end the sale of new conventional petrol and diesel cars and vans by 2040. By then, we expect the majority of new cars and vans sold to be 100% zero emission and all new cars and vans to have significant zero emission capability. By 2050 we want almost every car and van to be zero emission.

We want to see at least 50%, and as many as 70%, of new car sales and up to 40% of new van sales being ultra low emission by 2030.

We expect this transition to be industry and consumer led, supported in the coming years by the measures set out in this strategy. We will review progress towards our ambitions by 2025. Against a rapidly evolving international context, we will seek to maintain the UK's leadership position and meet our ambitions, and will consider what interventions are required if not enough progress is being made.

- 3.4.3 Even more stringently, the Committee on Climate Change, who advise government and other bodies, sought only pure battery electric vehicles and long-range plug-in hybrids to be sold by 2035. The Government have revised their policy to ban the sale of all petrol, diesel and hybrid cars by 2035, or before.
- 3.4.4 In response to these policies and similar national policies around the world, all major vehicle manufacturers either already sell, or are developing, ultra-low emission vehicles. The most notable commitment at the time of writing is from Honda who have stated:

Honda is the world's largest engine manufacturer, and from what we have announced today we are committing to ending all mainstream non-electrified petrol and diesel production for Europe by the end of 2022.

- 3.4.5 With vehicle manufacturing being a highly competitive market, it is almost certain that all major vehicle manufacturers will be following suit over the coming years, with research and development budgets being focussed on these technologies.
- 3.4.6 As such, within the lifetime of this development, it is expected that all cars and vans will, ultimately, be zero emission.
- 3.4.7 The technologies to arrive at a 100% zero emission road network are not currently in place and are likely to alter over time and become standardised, as such it is unlikely that the same technologies which are available today will be the ones which achieve this significant shift in the type of vehicles we drive.
- 3.4.8 One example of the new technologies which are being tested and are becoming increasingly successful is Battery Swapping Stations. These act in a similar way to a petrol filling station, however swap used and part-used batteries for full ones.
- 3.4.9 The operational time for the current units is around three minutes, which is quicker than filling a fossil fuel vehicle. At the forefront of the technology is the G4 Expressway in China, which has 18 such stations promoted by the company NIO, founded in November 2014.
- 3.4.10 Also in China, company BJEV is working on the construction of 3,000 battery swapping stations and aims to supply half a million electric vehicles by 2022.
- 3.4.11 In Europe, the technology is being heavily invested in by Shell, Repsol and others through the company Ample, whose aim is for 'Electric Cars for Everyone'. Battery Swapping Stations is one of the technologies that is expected to result from their research.
- 3.4.12 In terms of purchasing a car, manufacturers are now bringing in options to rent the battery pack, as oppose to buy them. This can reduce purchase prices and a monthly payment is made for battery rental, depending upon the mileage driven. Some packages include free recharging within the rental price.
- 3.4.13 It is clear that these technologies will result in a major change to the way electric vehicles are seen and purchased by the public and that current research and development will significantly impact the way in which private vehicles are used in the future.

3.5 EMERGING IN-VEHICLE TECHNOLOGIES

- 3.5.1 All new cars sold in the UK and Europe from 2022 are to be fitted with devices to automatically stop drivers exceeding the speed limit under planned changes to vehicle safety rules that the EU has provisionally agreed.
- 3.5.2 Although Wales will no longer be part of the EU when the rules come into effect, the UK regulator, the Vehicle Certification Agency, has said it will mirror safety standards for vehicles in the UK.
- 3.5.3 The speed limiter is one of a range of safety features to be made mandatory from 2022, along with automated emergency braking, electronic data recorders and improved visibility built into lorries for drivers to see vulnerable cyclists and pedestrians around the vehicle.
- 3.5.4 The mandatory data recorders will help investigate vehicle crashes and assist research into increased safety. Another feature already standard in many new cars, a lane departure warning system, will become obligatory.

- 3.5.5 In 2015 UK government established the Centre for Connected and Autonomous Vehicles (C-CAV), a joint policy and strategy unit. C-CAV provides a single point of contact for industry and academia for CAV technologies and will coordinate and enhance government activity in the sector.
- 3.5.6 Testing of driverless cars is already taking place on British roads, with Bristol, Milton Keynes and South-East London selected as test cities. The Bristol Venturer consortium aims to investigate whether driverless cars can reduce congestion, while the GATEway scheme in Greenwich is testing automated passenger shuttles and valet parking and Milton Keynes tests its LUTZ Pathfinder Pods in pedestrianised areas.
- 3.5.7 In February 2016, £17 million of funding was awarded to eight collaborative research and development projects as well as additional funding for 14 feasibility studies. The projects will stimulate development in key areas of autonomous vehicles and connected transport systems including.
- 3.5.8 Beyond connected and autonomous vehicles, Intelligent Transport Systems is a wider cross sector area of development.
- 3.5.9 Intelligent Transport Systems allow communication not just between vehicles themselves, but also vehicles and infrastructure. Utilising these communication systems will help to reduce road accidents, relieve congestion and reduce emissions.
- 3.5.10 Intelligent Transport Systems are already in use on UK roads – for example urban and motorway traffic management and control systems, electronic toll collection and route navigation systems. Another safety technology in development is Intelligent Speed Adaptation. Intelligent Speed Adaptation systems inform the driver of the speed limit for the road they are travelling on, automatically reducing the speed of the vehicle if necessary.
- 3.5.11 Within the lifetime of the development, it is highly likely that Connected and Autonomous Vehicles, as well as Intelligent Transport Systems will be increasingly used on UK road networks and, as such, the way in which traffic interacts could be increasingly managed automatically. As a result, future traffic flow forecasts using traditional techniques could overstate the potential impacts of development.

3.6 SUMMARY

- 3.6.1 The way we travel and impact upon the world is now seen as high on the Government's priority and features at the top of the political agenda on a regular basis.
- 3.6.2 Government policies have been the start of the reduction of emissions, due to the global environmental movement and environmental standards across the world being continually reviewed and made more stringent.
- 3.6.3 In response to this, it now appears to be industry who are using their research and development budgets to come up with more and more innovative ways of reducing the impacts of travel.
- 3.6.4 These changes include investment in Battery Swapping Stations and electric vehicle battery rental, both of which help to overcome two of the current barriers to electric vehicle ownership of battery range and initial purchase cost.
- 3.6.5 The way we travel can significantly impact on the environment and respecting the transport hierarchies is an essential part of helping towards reducing the impact of the development and helping to foster a more environmentally responsible culture.
- 3.6.6 Current planning policy clearly supports sustainable development and the sustainable transport hierarchy and should be read and considered against the ever-changing political background surrounded the environment.

- 3.6.7 Within the lifetime of the development, it is highly likely that Connected and Autonomous Vehicles, as well as Intelligent Transport Systems will be increasingly be used on UK road networks and, as such, the way in which traffic interacts could be increasingly managed automatically. As a result, future traffic flow forecasts using traditional techniques could overstate the potential impacts of development.
- 3.6.8 We are entering a new period of change in transport and should ensure that the policies which are applied are relevant and deliverable.

4. PLANNING POLICY

4.1 INTRODUCTION

- 4.1.1 Taking into account the information provided in Chapter 3, a review of pertinent current local and national planning policy has been undertaken to provide the context within which the proposals should be assessed. The review is summarised below.

4.2 PLANNING POLICY WALES

- 4.2.1 Planning Policy Wales (December 2018) states in the foreword that:

PPW will help to ensure that the planning decisions taken in Wales, no matter how big, or how small, are going to improve the lives of both our current and future generations. It will support changing the way we live and work, and the buildings and environment of Wales, today, building a better environment to accommodate current and future needs.

- 4.2.2 Within the Paragraph 3.6 of the Strategic and Spatial Choices chapter, Planning Policy Wales states:

...Good design must also involve the provision of measures that help to reduce the inequality of access to essential services, education and employment experienced by people without access to a car. Design measures and features should enable easy access to services by walking, cycling and public transport.

- 4.2.3 Paragraph 3.12 goes on to state that:

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

- 4.2.4 And in Paragraph 3.13 that

Existing infrastructure must be utilised and maximised, wherever possible. Where new infrastructure is necessary to mitigate transport impacts of a development and to maximise accessibility by sustainable non-car modes, it should be integrated within the development layout and beyond the boundary, as appropriate...

- 4.2.5 Section 4.1 specifically sets out the requirements for transport. Paragraph 4.1.6 provides guidance to planning authorities, stating that they must set out an integrated planning and transport strategy, which should:

- *integrate and co-ordinate sustainable transport and land use planning;*
- *facilitate and promote accessibility for all;*
- *reduce the need to travel;*
- *reduce dependency on private vehicles;*
- *prioritise and support walking, cycling and use of public transport;*
- *support the uptake of Ultra Low Emission Vehicles;*
- *reduce transport related airborne pollution; and*
- *facilitate the provision of transport infrastructure and necessary sustainable transport improvements and development.*

- 4.2.6 Specifically regarding sustainable travel, Paragraph 4.18 states that :

The Welsh Government is committed to reducing reliance on the private car and supporting a modal shift to walking, cycling and public transport. Delivering

this objective will make an important contribution to decarbonisation, improving air quality, increasing physical activity, improving the health of the nation and realising the goals of the Well-being of Future Generations Act.

4.2.7 And goes on to state in Paragraph 4.1.10 that:

Development proposals must seek to maximise accessibility by walking, cycling and public transport, by prioritising the provision of appropriate on-site infrastructure and, where necessary, mitigating transport impacts through the provision of off-site measures, such as the development of active travel routes, bus priority infrastructure and financial support for public transport services.

4.2.8 The sustainable transport hierarchy is set out in Figure 8, as below:



4.2.9 It is clear from Planning Policy Wales that the transport user hierarchy is a key consideration in the determination of planning applications, with the key focus being on the encouragement of active travel.

4.2.10 With regard to electric vehicle charging points, Paragraph 4.1.39 states:

To encourage the use of Ultra Low Emission Vehicles (ULEVs), the planning system should encourage and support the provision of ULEV charging points as part of new development.

Where car parking is provided for new non-residential development, planning authorities should seek a minimum of 10% of car parking spaces to have ULEV charging points...

4.2.11 The required provision is clarified in Paragraph 4.1.40 as:

It may be appropriate for some of the provision to be 'passive', with the necessary underlying infrastructure provided to enable installation and activation in the future.

4.2.12 With regard to car parking, Paragraph 4.1.50 states:

Car parking provision is a major influence on how people choose to travel and the pattern of development. Where and how cars are parked can in turn be a major factor in the quality of a place.

4.2.13 With Paragraph 4.1.51 stating:

design-led approach to the provision of car parking should be taken, which ensures an appropriate level of car parking is integrated in a way which does not dominate the development. Parking provision should be informed by the local context, including public

transport accessibility, urban design principles and the objective of reducing reliance on the private car and supporting a modal shift to walking, cycling and public transport. Planning authorities must support schemes which keep parking levels down, especially off-street parking, when well designed. The needs of disabled people must be recognised and adequate parking provided for them.

- 4.2.14 A Car Park Management Plan has been produced to accompany the planning application to set out the proposals for delivering a car parking scheme for the site which meets with the end-user requirements and reduces the potential impact of the development on local roads.

- 4.2.15 Technical Advice Note 18:Transport sets out further details on the requirements for transport relating to development. Technical Advice Note 18 sets out that:

All new schools should be subject to TA. The level of analysis should provide the decision maker with suitable data regarding the accessibility of the site by all modes and the impacts on movement patterns likely to occur. The level of detail should be proportionate to the scale of the development. The objectives of the TIS should as a minimum include the creation or improvement of safe cycling and walking routes, restricting car access around schools, providing adequate cycle storage, and a framework for future school travel planning activity.

- 4.2.16 A Travel Plan forms part of the planning application package. The Travel Plan is a document which has been designed for use by the school to help to encourage active travel and reduced traffic impacts, in line with national requirements and best practice.

4.3 DEVELOPMENT PLAN

- 4.3.1 The Council Plan (2019 to 2022) was first approved in 2017 and sets out 14 objectives across the four themes of :

- Economy;
- People;
- Place; and
- Organisation.

- 4.3.2 Within Policy Pe1, the long-term vision is set out as:

for our children and young people to be able to access a quality learning experience locally, to achieve their potential and gain the qualifications which will enable a transition into further and higher education, employment or training.

- 4.3.3 Policy P12 sets out the policy for 'Pride In Our Environment', with a long-term vision to:

be recognised as a low carbon, low waste, environmentally responsible organisation that supports local people to play their part.

- 4.3.4 This high-level policy has clear implications on the carbon emissions relating to development, which includes the use of the fossil fuels which power many current motor vehicles.

- 4.3.5 Policy P14 sets out the strategy for 'Well-Connected and Sustainable Communities', with a long term vision to:

have an accessible, efficient transport network which allows people a choice between transport options which are convenient and sustainable.

- 4.3.6 At a more strategic level, the Wrexham Unitary Development Plan (1996 to 2011, adopted February 2005). The Plan comprises two parts:

Part 1 -The Strategy which outlines the Council's broad intention for development in the area and provides a framework for the more specific policies and proposals...

Part 2 - Specific Policies accompanied by reasoned justifications, which expand on the strategic vision for the County Borough and provide detailed guidance for the development and other use of land...

- 4.3.7 The council are in the process of preparing their Local Development Plan (LDP), which will replace the currently adopted Unitary Development Plan. The Deposit Plan (April 2019) is a working document, however sets out the vision and strategies which are supported by the council.

- 4.3.8 The vision for the Local Development Plan is that:

By 2028, Wrexham will be an attractive, distinctive and accessible place where people will want to live, visit and invest. Our economy will be strong, resilient and responsive to our gateway location within Wales. Wrexham County Borough will be a sustainable place where everyone feels safe and included and a place that enhances the quality and distinctiveness of our natural, built heritage and unique culture.

- 4.3.9 Policy SP12 sets out the requirements for transport and accessibility as follows:

Wrexham's transport network will be developed in a safe, efficient and sustainable manner through the following measures:

i. Restricting development that would have an unacceptable impact on the safe and efficient operation of the transport network,

ii. Implement key transport projects identified in the Joint North Wales Local Transport Plan and supporting the development and delivery of key strategic road and rail transport improvement projects promoted by the North Wales region and Welsh Government (policy T4 and T6),

iii. Enhance the overall reliance of the network and take steps to adapt the transport network to the effects of climate change,

iv. Improve the coverage, service frequency, integration and priority of public transport services to provide a sustainable and viable alternative travel choice to the private car,

v. Improved integration of modes through the development of existing and new transport interchanges ensuring infrastructure provisions is accessible to all,

vi. Ensure adequate levels of car parking taking into consideration the location and accessibility of new developments to existing public transport facilities and walking and cycling network,

vii. Develop the coverage of the Active Travel Network across Wrexham to promote increased use of walking and cycling as safe, viable and sustainable alternatives to the car,

viii. Deliver capacity and safety enhancements to the local highway network where considered

- 4.3.10 For health and wellbeing, Policy SP14 states that:

All development should seek to reduce health inequalities and provide opportunities for healthy lifestyles and improving health and well-being...

- 4.3.11 It is clear from the Local Development Plan that issues including respecting the transport hierarchies, encouraging active and low carbon travel and reducing inequalities are key issues, which all align with Planning Policy Wales.

4.4 LOCAL GUIDANCE NOTES

- 4.4.1 Wrexham County Borough Council set out their guidance on planning through the Development Plan policy and a suite of Local Planning Guidance Notes.
- 4.4.2 The Local Planning Guidance Notes which are most pertinent to transport are Note 15 : Cycling and Note 16 : Parking Standards.
- 4.4.3 The cycle parking standards are for four cycle parking spaces per classroom for a primary school. For stays of less than eight hours, the requirement is for cycle parking to be provided in the form of Sheffield-style stands.
- 4.4.4 For cycle parking in excess of eight hours the requirement is for cycle parking to be provided within a more secure parking facility in the form of cycle cages or lockable cycle shelters.
- 4.4.5 The car parking standards are for two car parking spaces plus one space per 25sqm of floor area. The cycle parking is stated in Note 16 as being one space per 250sqm of floor space.

4.5 SUMMARY

- 4.5.1 The Council Plan (2019 to 2022) was first approved in 2017. Within Policy Pe1, the long-term vision is set out as:

for our children and young people to be able to access a quality learning experience locally, to achieve their potential and gain the qualifications which will enable a transition into further and higher education, employment or training.

- 4.5.2 Technical Advice Note 18:Transport sets out further details on the requirements for transport relating to development. Technical Advice Note 18 sets out that:

All new schools should be subject to TA. The level of analysis should provide the decision maker with suitable data regarding the accessibility of the site by all modes and the impacts on movement patterns likely to occur. The level of detail should be proportionate to the scale of the development. The objectives of the TIS should as a minimum include the creation or improvement of safe cycling and walking routes, restricting car access around schools, providing adequate cycle storage, and a framework for future school travel planning activity.

- 4.5.3 Policy P14 sets out the strategy for 'Well-Connected and Sustainable Communities', with a long term vision to:

have an accessible, efficient transport network which allows people a choice between transport options which are convenient and sustainable.

- 4.5.4 For health and wellbeing, Policy SP14 states that:

All development should seek to reduce health inequalities and provide opportunities for healthy lifestyles and improving health and well-being...

- 4.5.5 This Transport Statement sets out the proposed access by active modes of travel, which will be encouraged through the delivery of a Travel Plan.

- 4.5.6 For those who do drive to the site, a Car Park Management Plan will also be implemented to encourage car sharing to reduce the parking issues around the site.

5. EXISTING TRAVEL

5.1 INTRODUCTION

- 5.1.1 Studies show that transportation accounts for one third of CO2 emissions in major cities and is the fastest growing source of greenhouse gases. Whilst this is being tackled through initiatives including C40 Cities, the transport hierarchy remains that active and low carbon travel modes are to be encouraged.
- 5.1.2 This chapter reviews the existing travel patterns to the site.
- 5.1.3 Changing technologies are likely to reflect the ways in which people travel and, as such, consideration should be given to how these may affect the way that education is delivered into the future.

5.2 ST MARY'S TRAVEL PATTERNS - PUPILS

- 5.2.1 Discussions with the management at St Mary's RC School show that there are around 71 sets of siblings at the existing school. When equated to the 315 primary school age pupils, this equates to around 100 sole pupil attendees and 165 pupils with one or more siblings.
- 5.2.2 The existing proportions of sole and multiple pupil households are considered to be a reasonable forecast for the future attendance mix at the proposed school.
- 5.2.3 The school opening times include a morning drop-off time of 8:45am and an afternoon pick-up time of 3:15pm.
- 5.2.4 Wraparound care extends from 7am until school opening, with around 10% of children attending these sessions. A similar proportion are understood to attend the afterschool club.
- 5.2.5 In addition to the afterschool club, afterschool sports occur on two to three afternoons per week (3pm to 4:15pm). Around 16% of pupils attend the afterschool sports for each session.
- 5.2.6 For pupils from the wider area, there are currently:
- Six full-size coaches;
 - One midi-coach;
 - Two to three mini-buses; and
 - Two to three private-hire vehicles.
- 5.2.7 It is understood that around 38 pupils travel to the school utilising the coaches. The coaches are understood to depart at 3:25pm. There appears to be potential for the coach services accessing the school to be rationalised in the future, thereby reducing the number of these vehicle types.

5.3 EXISTING MODE SHARE - PUPILS

- 5.3.1 A hands up survey has been undertaken at the existing school. The hands up survey provides the existing mode share of pupils, as follows:
- Total respondents – 355 pupils;
 - By car – 236 pupils – 66%;
 - Walking – 85 pupils – 24%;
 - Bus – 28 pupils – 8%; and
 - Cycling – 6 pupils – 2%.

- 5.3.2 The existing mode share is considered to be robust in terms of access by car as the number of pupils responding that they access by bus/ coach is below the number provided by the school.
- 5.3.3 Based upon the number of pupils attending by coach, the mode share by bus could be around 11%, rather than the 8% discussed above. Consequently, the mode share by car could be overstated.
- 5.3.4 In addition, there are two to three mini-buses and two to three private hire vehicles which are utilised by pupils. These were not separately noted in the survey and could reduce the proportion of pupils dropped off by parents.
- 5.3.5 With regard to pedestrian access, Figure 5.1 in Appendix A shows the walk in catchments to the existing and proposed school site. It can be seen from Figure 5.1 that the proposed Nine Acres school is more centrally located with a high residential density within both the 800m and 1,600m (10 and 20-minute walk) isochrones.
- 5.3.6 Consequently, it would be reasonable to conclude that there is potential for the percentage of pupils walking to school to increase, once relocated.
- 5.3.7 The hands up survey also collated the number of pupils who travel by car with other pupils (including siblings), as follows:
- Total respondents – 189 pupils;
 - Single child in car – 40 pupils;
 - Two children in car – 88 pupils; and
 - Three or more children in car – 61 pupils.
- 5.3.8 For those that travel by car, the hands up survey results in a forecast of cars at 55% of the number of children by that mode.
- 5.3.9 The number of pupils attending during the core opening hours of the school is around 338 for the morning session and 337 in the afternoon session (using a 50/50 split of the part-time pupils across the morning and afternoon).
- 5.3.10 Based upon 10% of pupils attending wraparound care, the peak student arrival and departures are 304 for school opening and 303 at school closing.
- 5.3.11 For the school drop-off, parents typically arrive across a range of times approaching school opening. As such, the peak pupil flows are not all simultaneous.
- 5.3.12 For the school pick-up, the number of pupils leaving at school closing reduces by around 54 (16% of pupils) for two to three days per week, with 249 leaving at the typical school closing time on these days.
- 5.3.13 The peak pupils arriving equate to 304 (315 primary plus 23 part-time, less 34 in wrap-around care). Of the 304, 66% could travel by car, which results in a peak drop-off forecast of 112 cars (at a 55% cars to pupil ratio).

5.4 EXISTING TRAVEL PATTERNS – STAFF

- 5.4.1 There are currently around 40 staff employed at the school, of whom 33 staff are understood to be full-time.
- 5.4.2 The full-time staff generally arrive before the typical school day starts and leave after the typical school day finishes.

5.5 SUMMARY

- 5.5.1 A hands-up travel survey has been undertaken of pupils at the existing school. Of these, 34% travel to school by sustainable travel modes. The residual 66% travel by car. For those that travel by car, the hands up survey results in a forecast of cars at 55% of the number of children by that mode.
- 5.5.2 The percentage of pupils by private car could be overstated as there are more pupils arriving by coach than stated in the survey and the private hire mini-buses and cars were not incorporated in the survey.

6. ACCESS PROPOSALS

6.1 INTRODUCTION

6.1.1 This chapter discusses the site layout of the development proposals in terms of access for all appropriate modes of transport.

6.1.2 The site layout masterplan forms part of the planning application package.

6.2 PEDESTRIAN ACCESS

6.2.1 Two main pedestrian access points are proposed for the school, the first is via Rhosnesni Lane (to the north) and the second via Westminster Drive (to the south).

6.2.2 Both access points would be provided with 'School Keep Clear' markings to cover the main entrance points, including at least 10m either side (whilst also taking into account junctions opposite and proposed school entrances). The final extent of 'School Keep Clear' markings would be agreed with the highway authority, with the expected minimum extent shown in Figure DPL SK006, Appendix A.

6.2.3 The main pedestrian access point from Rhosnesni Lane consists of a 3.0m wide pedestrian route connecting the existing footway on Rhosnesni Lane to the school buildings. The 3.0m wide pedestrian route would be supplemented by a new raised pedestrian crossing point over Rhosnesni Lane and localised footway widening to 3.5m on the southern side of the crossing to allow for pedestrian waiting space.

6.2.4 Once within the school, the main pedestrian route from the north would be traffic-free.

6.2.5 Two further pedestrian routes into the school are provided around 25m to the east and west of the main pedestrian access route with a 2.0 and 2.5m footway provided, respectively.

6.2.6 To the north of the crossing point, there are existing northern footways provided on Rhosnesni Lane. The pedestrian access proposals incorporate the widening of the footway immediately opposite the pedestrian entrance to 3.0m, with a further 3.0m wide footway connecting to The Beeches (The Beeches acts as a service road to Rhosnesni Lane for residential access).

6.2.7 It is proposed to reduce the speed limit along the school frontage to 20mph, in line with best practice. This would incorporate both 20mph signage and a suite of traffic calming measures between Chester Road and the northeastern corner of the school site.

6.2.8 The main pedestrian access from Westminster Drive is proposed in the form of a 3.0m footway to the east of the vehicular access, connecting to the existing Westminster Drive footways. Once within the school, the main pedestrian route from the south would be traffic-free.

6.2.9 A second pedestrian footway is provided to the west of the vehicular access.

6.2.10 The existing footways adjacent to the Westminster Drive pedestrian access are currently around 3.0m wide and no widening is proposed.

6.2.11 A raised pedestrian crossing point is proposed to link the southern footway of Westminster Drive to the southern pedestrian access route.

6.2.12 As with Rhosnesni Lane, a 20mph speed limit along the school frontage, complemented by a suite of traffic calming measures between Chester Road and the southeastern corner of the site.

- 6.2.13 When approaching the site from the southwest, there are existing narrow footways around the junction of Chester Road/ Westminster Drive/ Foster Road. The proposals incorporate a new widening of the southwestern corner of this junction to provide a suitable waiting point for pupils waiting to cross Chester Road.
- 6.2.14 Minor footway widening around the southeastern corner of the Chester Road/ Westminster Drive/ Foster Road junction is also proposed so that a minimum 2.0m footway is available to pedestrians.
- 6.2.15 A dropped-kerb crossing is proposed over the southern arm of Chester Road, adjacent to this junction.
- 6.2.16 The pedestrian access proposals are considered to provide a suitable environment for access to, and within, the school.

6.3 CYCLE ACCESS

- 6.3.1 As discussed in Chapter 5, around six pupils stated that they cycle to school. The competency of pupils of primary school age to cycle to school is a decision that should be taken by the parent/ guardians.
- 6.3.2 The 20mph speed limits on Rhosnesni Lane and Westminster Drive, combined with the traffic calming proposals would increase safety for cyclists close to the school grounds.
- 6.3.3 For those who do cycle to the school, their journey within the school grounds would need to be undertaken on foot. The proposed raised crossing points on Rhosnesni Lane and Westminster Drive would aid cyclists to push their cycle across these roads and onwards into the school grounds.
- 6.3.4 For staff cyclists, cycle access could be via the vehicular access points, or similarly pushing their cycle within the school grounds.
- 6.3.5 Cycle parking will be provided for the school in line with the council's cycle parking standards. The cycle parking requirement and location would be determined by the final layout of the school and determined at Reserved Matters stage.
- 6.3.6 The cycle proposals are considered to provide a suitable environment for pupils with suitable competence to access the site by cycle.

ACCESS BY BUS

- 6.3.7 The nearest bus stops to the site are located on Chester Road, around 150m from either the Rhosnesni Lane or Westminster Drive pedestrian access points.
- 6.3.8 The bus stops on Chester Road are served by bus routes 1, 1S, 34 and 35. There are around five buses per hour in each direction served by the bus stops.
- 6.3.9 For the Chester Road bus stops immediately to the west of the site, the final length of the journey would be undertaken on foot to either of the two main pedestrian entrances. Southbound bus passengers utilising this stop would have access to the school with the crossing of only one school access point.
- 6.3.10 Northbound bus passengers could continue one stop further north to the bus stop immediately north of Rhosnesni Lane. The walk route from that bus stop would be via the existing pedestrian and cycle crossing point of Chester Road and via the new raised crossing over Rhosnesni Lane to the northern pedestrian access point to the site.
- 6.3.11 The existing bus stops on Chester Road provide access to high frequency services to/ from Wrexham (and out towards Chester) with appropriate footway provision for the final stage of their journey on foot.

6.4 ACCESS BY COACH

- 6.4.1 As discussed in Chapter 5, there are currently six full-size and one midi-size coach which serve the school. There is potential for the number of coaches to be rationalised over time to accommodate the 38 pupils who currently utilise these services.
- 6.4.2 Even so, the development proposals incorporate appropriate coach waiting provision within the school grounds to accommodate the current number of coaches.
- 6.4.3 The proposed coach drop-off and pick-up area would be within the proposed MUGA, fronting onto Rhosnesni Lane. The approximate area of the MUGA is 49mx43m (measured at the widest points). Discussions are being undertaken with the coach operators with regard to their proposed management regime for the pick-up and drop-off.
- 6.4.4 There are two access/ egress points provided to the coach waiting area. The first is a coach-only access/ egress point to the northeast of the MUGA. Only coaches would utilise this access/ egress.
- 6.4.5 The second access/ egress point would be shared with the access to the staff car parking area.
- 6.4.6 It is intended that coaches would operate in either a clockwise or anti-clockwise direction, both entering and exiting in a forward gear. There should be no requirement for the reversing of coaches within the school grounds.
- 6.4.7 Discussions have been held with the Road Safety Officer who has confirmed that the layout is acceptable to them.
- 6.4.8 The final management regime would be discussed in detail between the school and coach operators. The provision for coaches is considered to be appropriate for the assessed needs of the school.

6.5 ACCESS BY MINI-BUS

- 6.5.1 There are two to three mini-buses which serve the school. Provision for three mini-bus sized parking spaces has been made within the staff car park for these vehicles. The spaces are 2.5mx7.5m to accommodate these larger vehicles.
- 6.5.2 Each space is provided with a 1.2m accessible strip down both sides of the parking spaces, as well as a 3.0m hatched zone to the rear of the spaces for use with the tail lifts which could be utilised by these vehicles.
- 6.5.3 The provision for mini-buses is considered to be appropriate for the assessed needs of the school.

6.6 ACCESS BY PRIVATE HIRE VEHICLE

- 6.6.1 There are two to three private hire vehicles which serve pupils of the existing school. Three accessible disabled bay sized spaces are to be provided within the staff car park for use by these vehicles.
- 6.6.2 A 1.2m accessible strip is to be provided to both sides of each of these spaces, as it is expected that pupils could be expected in both the offside or nearside of the vehicle.
- 6.6.3 The provision for private hire vehicles is considered to be appropriate for the assessed needs of the school.

6.7 DISABLED PARKING PROVISION

- 6.7.1 Three disabled car parking bays are proposed within the staff car park. This is equivalent to around 10% of full-time staff members, or 7.5% of the total staff car parking provision.

- 6.7.2 The staff car parking provision is in addition to the mini-bus and private hire vehicle/ disabled spaces discussed above.

6.8 ELECTRIC VEHICLE CHARGING

- 6.8.1 The three disabled parking bays within the staff car park are to be provided with electrical vehicle charging points. These spaces would be for disabled staff and visitors, whilst provided the shared-use for electric vehicle charging.
- 6.8.2 The electric vehicle charging provision is equivalent to around 10% of full-time staff members.

6.9 STAFF CAR PARKING PROVISION

- 6.9.1 The proposed number of staff car parking spaces is 40, which includes 37 standard and three disabled parking spaces.
- 6.9.2 The standard car parking spaces provide the equivalent of one space per full-time member of staff, 1 space per 3 members of part-time staff, plus 2 additional spaces to accommodate future need. The disabled spaces are in addition to this.
- 6.9.3 The staff car park shares an access with the coaches.
- 6.9.4 This provision of staff car parking is considered to be appropriate for the assessed needs of the school.

PARENT DROP-OFF AND PICK-UP CAR PARK

- 6.9.5 A total of 78 parent drop-off and pick-up spaces are proposed on site. The spaces are split between a northern area of 36 spaces and a southern area of 42 spaces. The two car parking areas are to be segregated by a 3.5m footway which runs from the western side of the car parking spaces to the main school entrance.
- 6.9.6 At its western end, the 3.5m footway connects to a 2.5m footway which runs north/ south to the west of the drop-off/ pick-up car parking spaces.
- 6.9.7 The final part of the journey to school for those travelling by a parental car would be via the internal footway routes, with the 3.5m footway providing the final link to the school entrance.
- 6.9.8 The 3.5m footway would form a pedestrian priority route through the car park, whilst also linking the northern and southern sections of the car parking area. The vehicle route would be in the form of a dropped kerb across the 3.5m footway, supplemented by bollards to prevent overrunning.
- 6.9.9 The link between the northern and southern car parking areas would allow the car parks to act as one car park or two discrete car parking areas. Circulation could be north/south, south/ north or via the separate access points onto Rhosnesni Lane and Westminster Drive.
- 6.9.10 The final management of the car park would be a decision for the school and allows flexibility of the layout to meet with changing demands over time.
- 6.9.11 The drop-off/ pick-up car parking area has been designed for the ease of use by parents to encourage its use. The car parking spaces have been designed to be oversized at 2.7mx5.0m. These spaces are 300mm wider and 200mm longer than a standard space. The additional width, in particular, is proposed to aid parents with opening of car doors and account for parents needing access to child seat buckles.
- 6.9.12 The car park aisle width has similarly been designed for ease of manoeuvring. The proposed aisle width is 8.3m, which is 2.3m in excess of a standard car parking aisle. The

additional aisle width is designed to ensure that spaces can be easily accessed and egressed, without vehicles manoeuvring too close to each other.

- 6.9.13 With the proposed extra-size spaces and aisle, the proposed drop-off/ pick-up car park has been designed with the users in mind, to encourage the use of the car park for those who wish to do so.
- 6.9.14 The provision of 78 car parking spaces for parents is considered to be suitable for the location, whilst acknowledging that some parents would wish to drop-off and pick-up on the street.
- 6.9.15 Based upon the assessment in Chapter 5, the peak demand of parents could equate to around 112 cars relating to pupils. However, this does not appear to account for the pupils arriving by mini-bus and by private hire. As such, the actual number of pupil-related cars could be lower than this, at around 100.
- 6.9.16 Of these 100 vehicles, it is likely that the 78 space car park could accommodate the full demand in the morning drop-off as parents will drop-off over an extended period of time in the morning. Many of the spaces in the drop-off/ pick-up car park could reasonably be utilised more than once during drop-off.
- 6.9.17 For the pick-up, the afterschool sports clubs account for 2 to 3 days a week where the pick-up demand is reduced. This is around half of the pick-ups during a week.
- 6.9.18 For days with an afterschool sports club, the peak pick-up demand could be around 90 pupil-related cars. For other days the peak demand could be around 112 pupil-related cars. Both of these are before the mini-bus and private hire vehicles are accounted for, therefore these could be an overestimate (as discussed in Paragraph 6.9.15 above).
- 6.9.19 Consequently, there is forecast to be a residual demand for on-street car parking as a result of the development proposals. It is expected that this demand would occur regardless of the size of the drop-off/ pick-up car park as some parents will not wish to enter the school grounds, preferring to drop-off/ pick-up on street. This provision is proposed on Westminster Drive and is discussed further in Chapter 7.

6.10 SERVIVING AND DELIVERIES

- 6.10.1 The proposed drop-off/ pick-up car park allows access between the northern and southern parking areas. This allows servicing and deliveries to occur during the day from within the area without the need for the reversing of larger vehicles within the school grounds.
- 6.10.2 The proposals for servicing and deliveries are considered to be appropriate for the assessed needs of the school.

6.11 SCHOOL TRIPS

- 6.11.1 For some school trips coaches may be utilised. The MUGA/ coach area could be utilised by these coaches outside of periods where the MUGA is in use.
- 6.11.2 Alternatively, before, during or after the school day the drop-off/ pick-up car park could also be utilised.
- 6.11.3 For both scenarios, there would be no requirement for reversing of these larger vehicles within the school.

6.12 SUMMARY

- 6.12.1 The access proposals incorporate two new pedestrian access points, from Rhosnesni Lane (to the north) and Westminster Drive (to the south). Both access points are

proposed to incorporate a raised pedestrian crossing point, 'School Keep Clear' markings, a 20mph speed limit and complementary traffic calming.

- 6.12.2 In addition, offsite footway widening is proposed adjacent to the Rhosnesni Lane pedestrian access, including a new footway link to The Beeches.
- 6.12.3 For access from the south, footway widening works and a new dropped-kerb crossing are proposed at the junction of Chester Road/ Westminster Drive.
- 6.12.4 Separate parking areas are proposed for coaches, staff and for pick-up and drop-off. The size of each area is proposed based upon the assessed needs of the school, following discussions with the existing school's management team.
- 6.12.5 The pick-up/ drop-off car park incorporates oversize spaces and parking aisle for ease of use by parents. The oversize spaces allow for the opening/ closing of car doors and access to child seat buckles.
- 6.12.6 Regardless of the size of the on-site provision of drop-off/ pick-up spaces, it is likely that some parents would choose to drop-off/ pick-up on-street. To accommodate this, waiting time restrictions are proposed along Westminster Drive.
- 6.12.7 The access proposals are considered to be suitable for the assessed need of the school.

7. WESTMINSTER DRIVE

7.1 INTRODUCTION

- 7.1.1 The car parking proposals for the school include revised parking restrictions on Westminster Drive. This chapter discusses those proposals.

7.2 EXISTING CAR PARKING

- 7.2.1 There is currently around 200m of unrestricted car parking available along the northern edge of the Westminster Drive carriageway between Chester Road and the southeastern corner of the site. This is equivalent to around 40 unrestricted car parking spaces.
- 7.2.2 On the southern side, around 7 spaces are provided in the form of on-street time-limited parking restrictions and the residual length does not have parking restrictions.
- 7.2.3 A car parking beat survey was undertaken on the 2nd March 2021 which showed that the on-street parking spaces increased from 7 at 08:00 to 15 at 09:00. This survey also showed that 18 cars were parked at 15:30, reducing to 14 by 16:00.
- 7.2.4 There were no cars observed to be parked in the time-limited on-street parking spaces.
- 7.2.5 This suggests that the majority of car parking on Westminster Drive relates to long-stay cars parked for the duration of a typical working day.

7.3 PROPOSED CAR PARKING

- 7.3.1 In order to free-up spaces at school drop-off and pick-up, time-limited parking is proposed along the northern side of Westminster Drive. The details of the time-limiting would be agreed with the highway authority, however initially are suggested to be:
- 20 minute parking limit from 7am to 9:30am; and
 - 20 minute parking limit from 2:30pm to 4pm.
- 7.3.2 In addition, a 2 hour limit could be imposed during the day (Monday to Friday) to align with the existing time limits on the southern side of Westminster Drive.

7.4 RELOCATION OF EXISTING CAR PARKING

- 7.4.1 With the proposed on-street provision to supplement the on-site car parking, the school pick-up and drop-off times are considered to be catered for.
- 7.4.2 It is acknowledged that these proposals would result in a number of drivers who currently park on street on Westminster Drive being relocated elsewhere. As such, the parking study extended to cover Westminster Drive, Maesydre Road and areas to the north of the school including Cilcen Grove and The Oaks.
- 7.4.3 The parking beat survey shows that around 15% of local legal on-street car parking spaces were utilised during school pick-up and drop-off (a maximum of around 93 cars parked in 632 legal spaces). Whilst the survey was undertaken during travel restrictions, it suggests that there is suitable alternative locations of the relocated car parking to occur without detriment to nearby residents.

7.5 SUMMARY

- 7.5.1 The car parking proposals for the school include revised parking restrictions on Westminster Drive.

- 7.5.2 A car parking beat survey was undertaken on the 2nd March 2021. The parking beat survey shows that around 15% of local legal on-street car parking spaces were utilised during school pick-up and drop-off (a maximum of around 93 cars parked in 632 legal spaces). Whilst the survey was undertaken during travel restrictions, it suggests that there is suitable alternative locations of the relocated car parking to occur without detriment to nearby residents.
- 7.5.3 The details of the time-limiting would be agreed with the highway authority, however initially are suggested to be:
- 20 minute parking limit from 7am to 9:30am; and
 - 20 minute parking limit from 2:30pm to 4pm.

8. TRAVEL PLAN

8.1 INTRODUCTION

- 8.1.1 A Travel Plan for the school has been submitted as a separate document within the overall planning application package. This chapter provides a summary of the commitments which will be contained within the Travel Plan, which are pertinent to the consideration of this Transport Statement.

8.2 MEASURES DURING CONSTRUCTION

- 8.2.1 There are no existing accident issues relating to pupils, pedestrians or cyclists, however the provision of a new school will increase pedestrian flows within the local area, particularly during school drop-off and pick-up. The pedestrian and cycle access proposals are summarised below.

- 20mph proposal along Rhosnesni Lane;
- 20mph proposals along Westminster Drive;
- Supporting traffic calming measures to both 20mph proposals;
- New raised pedestrian crossing outside the school across Rhosnesni Lane;
- New raised pedestrian crossing outside the school across Westminster Drive;
- New footway proposal to the southwest corner of the Chester Road/ Westminster Drive/ Foster Road Junction;
- New dropped kerb crossing of Chester Road (south of Westminster Drive);
- Additional footway widening on Chester Road/ Westminster Drive to 2.0m on the southeastern corner of the junction; and
- New footway proposals linking Rhosnesni Lane to The Beeches and the residential areas to the north.

- 8.2.2 The overall Safe Routes to School package would be delivered prior to the school opening.

8.3 MEASURES DURING OPERATION

- 8.3.1 The following measures are to be assessed by the head teacher and Travel Plan Co-ordinator, for consideration at the site:

- Cycle parking –covered and secure cycle parking to be provided on-site as part of the school extension;
- Car sharing (Staff) – provision of staff car sharing spaces within the site, giving priority to car sharers;
- Car sharing (Parents) – provide information on the cost and time benefits of car sharing to parents to encourage a reduction in vehicle use to and from the site;
- Electric vehicle charging – review the requirement for electric vehicle charging at the site and provide charging spaces, where required;
- Cycle proficiency – discuss options for this with the Healthy Schools Advisor;
- Road Safety Training – engage with council Road Safety Officers to undertake annual Kerb Craft Campaign training at the school;
- Active Travel – engage with Health Promotion Service and Sports Officers to provide information and training on health issues and physical exercise;
- Active Travel – Promote the Wrexham active travel map <https://www.sustrans.org.uk/media/3004/wrexham-web-2014.pdf>;
- Walking bus – engage with parents on the potential uptake of a walking bus. Plan a walking bus route based upon pupil's home addresses within 800m of the site and undertake trials as part of the national Walk to School Weeks in October and May. Consider how to implement this in the longer term; and
- Promote the use of the Green Cross Code, which can be accessed online at <https://www.roadwise.co.uk/schools/using-the-road/green-cross-code/>.

9. SAFE ROUTES TO SCHOOL REVIEW

9.1 INTRODUCTION

- 9.1.1 In June 2014 the Welsh Government issued statutory guidance entitled 'Learner Travel Statutory Provision and Operational Guidance'.
- 9.1.2 This chapter considers highway safety and available routes for active travel to the school.

9.2 STUDY AREA

- 9.2.1 The study area for assessment of road traffic accidents has been taken as Chester Road to the West, Powell Road to the south, Park Avenue to the east and Oak Drive to the north. The study area includes the key walk routes to the site from all directions and incorporates the key routes of Rhosesni Lane, Chester Road and Park Avenue.
- 9.2.2 The size of the study area is around 750m by 500m. Outside of the study area, pedestrian flows relating to the school are considered to be relatively light and outside of the scope of assessment.
- 9.2.3 The accident data has been sourced from Crashmap. The study period is five-years.

9.3 HIGHWAY LINKS

RHOSNESNI LANE

- 9.3.1 No accidents at all were recorded between the junction of Chester Road and Park Avenue.

WESTMINSTER DRIVE

- 9.3.2 No accidents at all were recorded on Westminster Drive.

PANYMAES AVENUE

- 9.3.3 No accidents at all were recorded on Penymaes Avenue.

LAWSON ROAD AND LAWSON CLOSE

- 9.3.4 No accidents at all were recorded on Lawson Road or Lawson Close.

PARK AVENUE

- 9.3.5 No accidents at all were recorded on Park Avenue between the junctions of Powel Road and Rhosnesni Lane.

THE BEECHES, OAK DRIVE AND SIDE STREETS

- 9.3.6 No accidents at all were recorded on The Beeches, Oak Drive or the associated side streets.

9.4 HIGHWAY JUNCTIONS

CHESTER ROAD/ RHOSNESNI LANE

- 9.4.1 A number of slight accidents were recorded at or approaching the junction of Chester Road/ Rhosnesni Lane. Of the accidents, three were recorded in 2016, one in 2017, one in 2018 and one in 2019. No accidents at all were recorded in 2020.

- 9.4.2 Of the accidents, none involved children of school age.
- 9.4.3 One accident occurred which involved a pedestrian. The accident occurred at 02:30am with a pedestrian walking in the road with their back to traffic. This situation is not reflective of the school drop-off or pick up.
- 9.4.4 There are considered to be no highway safety issues relating to pedestrians at this junction.
- 9.4.5 One accident occurred which involved a cyclist. The accident occurred as car was slowing to a stop and a cyclist collided with the offside of the vehicle.
- 9.4.6 This was the only cycle-related accident at this location during the five-year study period and there are considered to be no highway safety issues relating to cyclists at this junction.

9.5 OAK DRIVE/ CHESTNUT AVENUE

- 9.5.1 One slight accident was recorded at this junction in 2018. There were no other accidents recorded within the five-year study period. The accident did not involve a pedestrian, cyclist or child of school age.
- 9.5.2 There are considered to be no highway safety issues relating to pedestrians or cyclists at this junction.

9.6 RHOSNESNI LANE/ PARK AVENUE

- 9.6.1 Four slight accidents were recorded at this junction in the five-year study period. Of the accidents, one occurred in 2016, one in 2017 and one in 2018. No accidents at all were recorded in 2019 or 2020.
- 9.6.2 None of the accidents involved a pedestrian or child of school age.
- 9.6.3 Two of the accidents involved cyclists. Both of the accidents involved either the cyclist striking the side of a car or a car striking the side of a cyclist as the other pulled off. Both cycle accidents occurred in 2018, with no other cycle-related accidents occurring within the five-year study period.
- 9.6.4 There are considered to be no highway safety issues relating to pedestrians or cyclists at this junction.

9.7 CHESTER ROAD/ POWELL ROAD

- 9.7.1 Two accidents were recorded at this junction in the five-year study period. Of the accidents, a serious accident was recorded in 2019 and a slight accident in 2020.
- 9.7.2 The serious accident involved a single car leaving the carriageway as part of a commute to work.
- 9.7.3 The slight accident does not have information available as the result is provisional. Whilst the results are provisional, the accident is the sole slight accident in the five-year study period and does not form a pattern of accidents.
- 9.7.4 There are considered to be no highway safety issues relating to pedestrians or cyclists at this junction.

9.8 ACCIDENT SUMMARY

- 9.8.1 A review of the most recent five-year road traffic accident data shows no patterns of accidents on the local highway network relating to pedestrians, cyclists or children of school age.

- 9.8.2 There are considered to be no highway safety issues highlighted by the accident data in the study area.

9.9 DEVELOPMENT PROPOSALS

- 9.9.1 Whilst there are no existing accident issues relating to pupils, pedestrians or cyclists, the provision of a new school will increase pedestrian flows within the local area, particularly during school drop-off and pick-up. The pedestrian and cycle access proposals are discussed in Chapter 6, however are also summarised below for completeness.

- 20mph proposal along Rhosnesni Lane;
- 20mph proposals along Westminster Drive;
- Supporting traffic calming measures to both 20mph proposals;
- New raised pedestrian crossing outside the school across Rhosnesni Lane;
- New raised pedestrian crossing outside the school across Westminster Drive;
- New footway proposal to the southwest corner of the Chester Road/ Westminster Drive/ Foster Road Junction;
- New dropped kerb crossing of Chester Road (south of Westminster Drive);
- Additional footway widening on Chester Road/ Westminster Drive to 2.0m on the southeastern corner of the junction; and
- New footway proposals linking Rhosnesni Lane to The Beeches and the residential areas to the north.

- 9.9.2 The overall Safe Routes to School package is summarised in Figure DPL SK006, attached at Appendix A. The resultant pedestrian routing is shown in DPL SK007, Appendix A.

- 9.9.3 With the existing and proposed footways and crossing points, Safe Routes to School are considered to be available from the local residential areas, which provide routes from the wider catchment area.

9.10 SUMMARY

- 9.10.1 A review of the five-year accident data for the area around the school has been undertaken. The review suggests that there are no existing accident issues relating to school children, pedestrians or cyclists.

- 9.10.2 Whilst there are no existing accident issues relating to pupils, pedestrians or cyclists, the provision of a new school will increase pedestrian flows within the local area, particularly during school drop-off and pick-up. The pedestrian and cycle access proposals are also summarised below.

- 20mph proposal along Rhosnesni Lane;
- 20mph proposals along Westminster Drive;
- Supporting traffic calming measures to both 20mph proposals;
- New raised pedestrian crossing outside the school across Rhosnesni Lane;
- New raised pedestrian crossing outside the school across Westminster Drive;
- New footway proposal to the southwest corner of the Chester Road/ Westminster Drive/ Foster Road Junction;
- New dropped kerb crossing of Chester Road (south of Westminster Drive);
- Additional footway widening on Chester Road/ Westminster Drive to 2.0m on the southeastern corner of the junction; and
- New footway proposals linking Rhosnesni Lane to The Beeches and the residential areas to the north.

- 9.10.3 The proposals are considered to be suitable to provide a Safe Route to School environment.

10. HIGHWAY ASSESSMENT

10.1 INTRODUCTION

- 10.1.1 Due to the Covid pandemic it is not possible to obtain traffic flow data for 'normal' operating conditions.
- 10.1.2 Even so, to inform this Transport Statement traffic counts have been undertaken on Rhosnesni Lane and Westminster Drive. The traffic counts were undertaken on the 2nd March 2021. This chapter discusses the highway assessment of the development proposals.

10.2 TRAFFIC FLOW FACTOR TO ASSESS 'NORMAL' CONDITIONS

- 10.2.1 Traffic counts were undertaken at the Chester Road/ Rhosnesni Lane roundabout junction. The traffic flows show that there were 576 two-way AM peak hour vehicle movements on Chester Road (north of the junction) during the period 08:00 to 09:00.
- 10.2.2 The nearest Department for Transport traffic count location to the site is located around 500m north of this junction close to Box Lane. The annual average daily traffic flows in that location for 2020 are estimated as 10,796 two-way vehicle movements.
- 10.2.3 A reasonable assumption for peak hour traffic flows is around one tenth of the annual average daily traffic flows, which suggests that the two-way peak hour traffic flows under 'normal' operating conditions could be around 1,080 vehicles. As such, it is estimated that the observed traffic flows from the count are around half of those under 'normal' operating conditions.
- 10.2.4 In order to assess the forecast operation of the site access junctions, the observed traffic flows from the count have been doubled.

10.3 DEVELOPMENT-GENERATED TRAFFIC

- 10.3.1 The forecast development-generated traffic relating to staff is 33 inbound movements in the AM peak hour and 33 outbound movements in the PM peak hour. These traffic flows assume that all full-time staff drive to the school and arrive within a single hour. The assumption is considered to be robust.
- 10.3.2 For the coaches, minibuses and private hire vehicle the forecast development-generated traffic is 7 coaches, 3 minibuses and 3 private hire vehicles in each direction in each peak hour. This is equivalent to 22 inbound and 22 outbound PCU vehicle movements in each peak hour.
- 10.3.3 For the parent pick-up and drop-off, Paragraph 6.9.15 sets out a forecast of 100 parent vehicles at pick-up and drop-off, of which 100 would be inbound and 100 outbound vehicle movements in the peak hour.
- 10.3.4 It is important to consider the timing of the vehicles arriving and departing, as staff would typically arrive before the peak drop-off and depart after the peak pick-up. As such, the access points to the site are expected to be utilised at different times during the morning and afternoon period. The interaction between access points is likely to be minimal and, as such, each access can reasonably be considered in isolation.
- 10.3.5 The staff, coaches, minibuses and private hire vehicles have separate vehicular access arrangements to the parental pick-up and drop-off, as such the worst-case assessment relates to the parent pick-up and drop-off access and egress points.

- 10.3.6 As Rhosnesni Lane carries more traffic than Westminster Drive, that access has been assessed with all development-generated pick-up and drop-off movements, for robustness (i.e. as if it is the only access point).
- 10.3.7 In reality, there are a number of routing options within the car park, with either a north/south one-way, south/north one-way or two separate car parks with two-way access. Any of these options would materially reduce the forecast traffic impact at either access, as such, the robust scenario is considered suitable for determining the appropriateness of the access points to the site.

10.4 ASSUMED TRAFFIC DISTRIBUTION

- 10.4.1 In order to assess the proposed Rhosnesni Lane access a number of scenarios have been considered. These are based upon the background traffic flows discussed in Section 10.2 and 100% of the development-generated pick-up and drop-off movements assigned to this single access. A number of sensitivity tests for the access, as follows:

- 50% to/ from east and 50% to/from west;
- 70% to/from east and 30% to/from west; and
- 30% to/ from east and 70% to/from east.

- 10.4.2 The traffic count data is attached at Appendix B, the DfT count data at Appendix C and the detailed analysis attached at Appendix D.

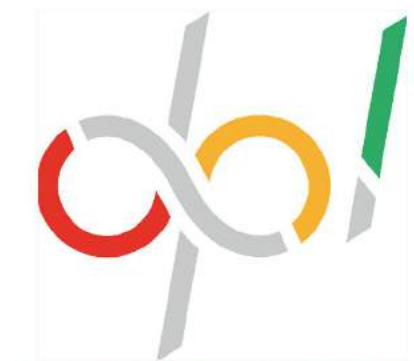
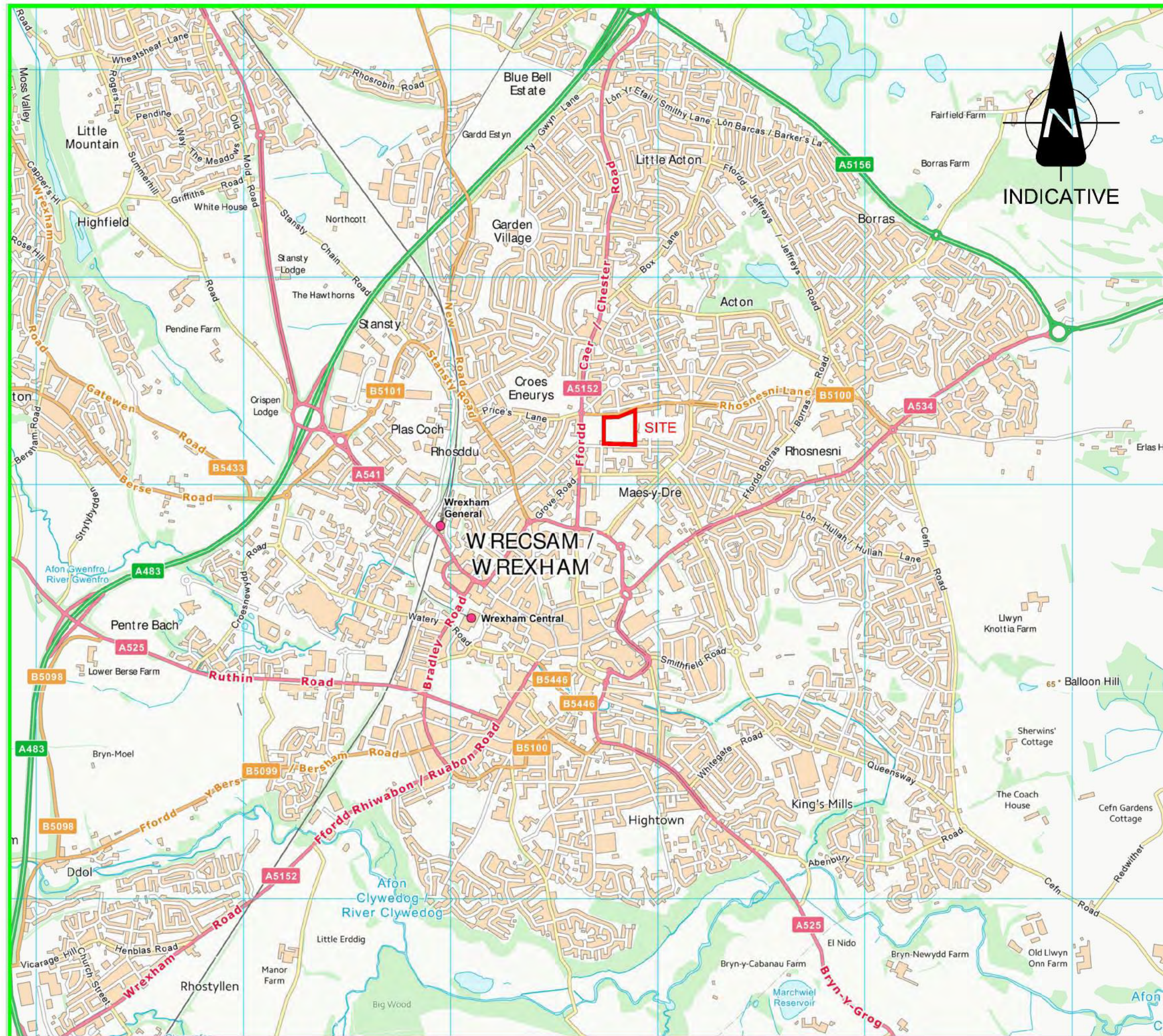
10.5 JUNCTIONS 10 TRAFFIC MODEL FORECAST

- 10.5.1 The forecast maximum Ratio of Flow to Capacity is 0.29 based upon hourly traffic flow analysis. The forecast Ratio of Flow to Capacity is significantly below the threshold of 0.85 where queuing and delays are typically forecast to begin occurring.
- 10.5.2 It is acknowledged that the peak pick-up traffic flows are likely to be intensified over a 15 to 30-minute period, which is shorter than the assessed hour. As such, two access points (Rhosnesni Lane and Westminster Drive) are proposed to spread the load during the most intense period.
- 10.5.3 Whilst a number of assumptions have been made, the analysis is considered to be robust and the traffic modelling forecasts that the access points to the site are suitable to accommodate the development-generated traffic.

10.6 SUMMARY

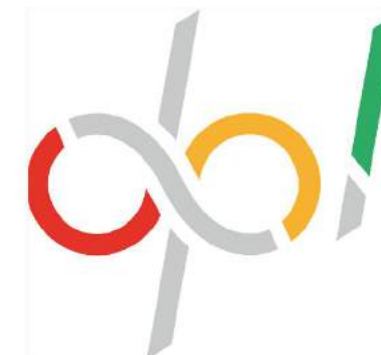
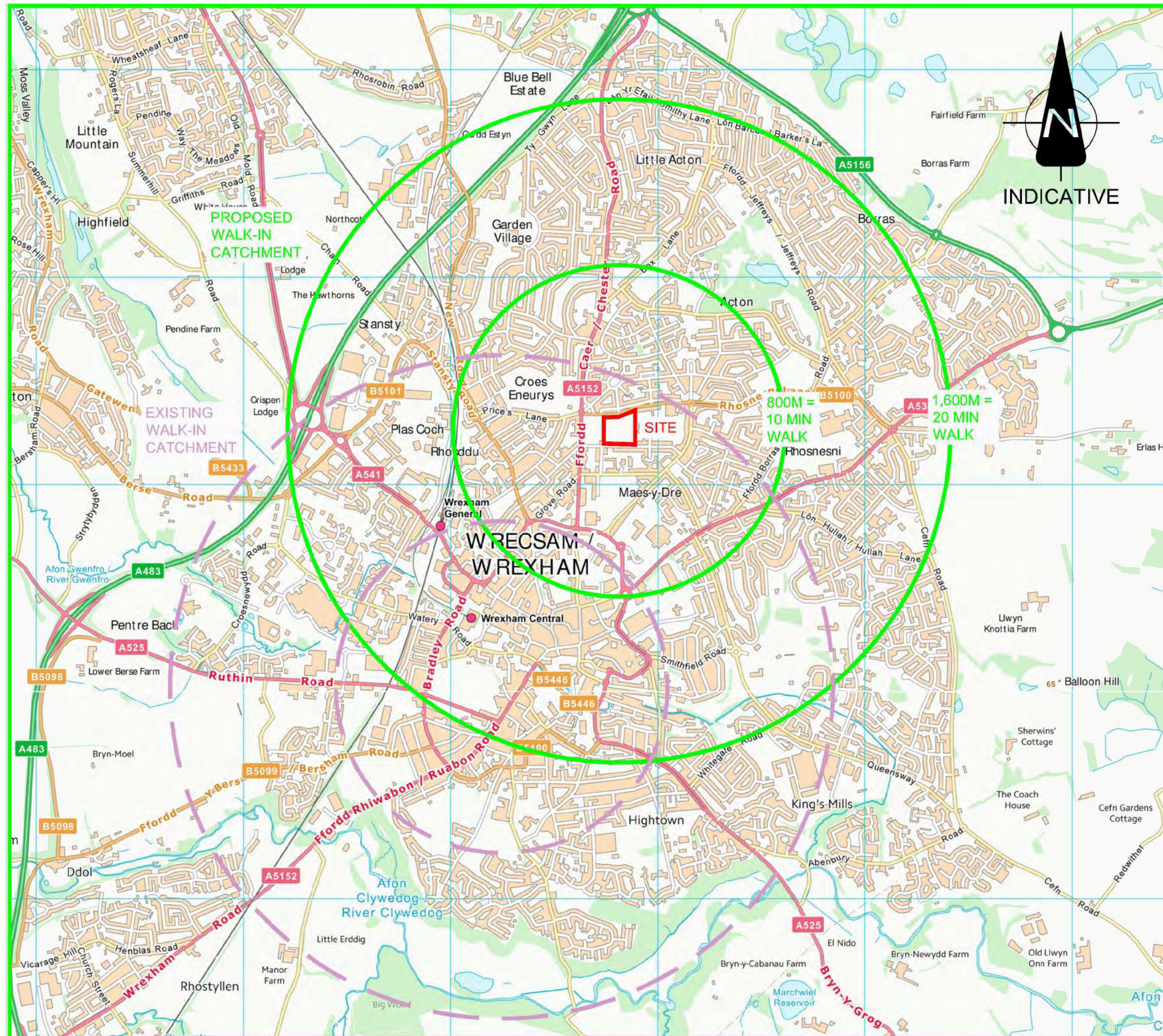
- 10.6.1 Traffic analysis has been undertaken for the access points to the site. The analysis forecast that the proposed access points to the site are suitable to accommodate the development-generated traffic.

APPENDIX A



Tel : 01924 684 000 Email : info@devplanning.co.uk
<http://www.devplanning.co.uk>

CLIENT:			WREXHAM COUNTY BOROUGH COUNCIL		
PROJECT:			NINE ACRES SCHOOL		
TITLE:			SITE LOCATION PLAN		
SCALE @ A3:	NTS	APPROVED:	DRS	DATE:	29/03/2021
PROJECT No:	2020211	DRAWING No:	Figure 2.1	REV:	-
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<http://www.devplanning.co.uk>

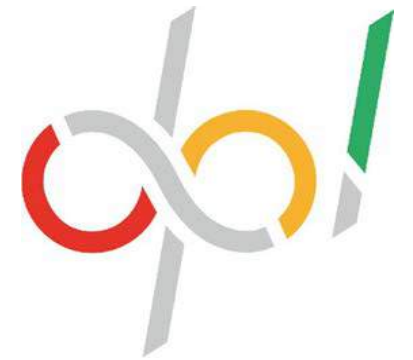
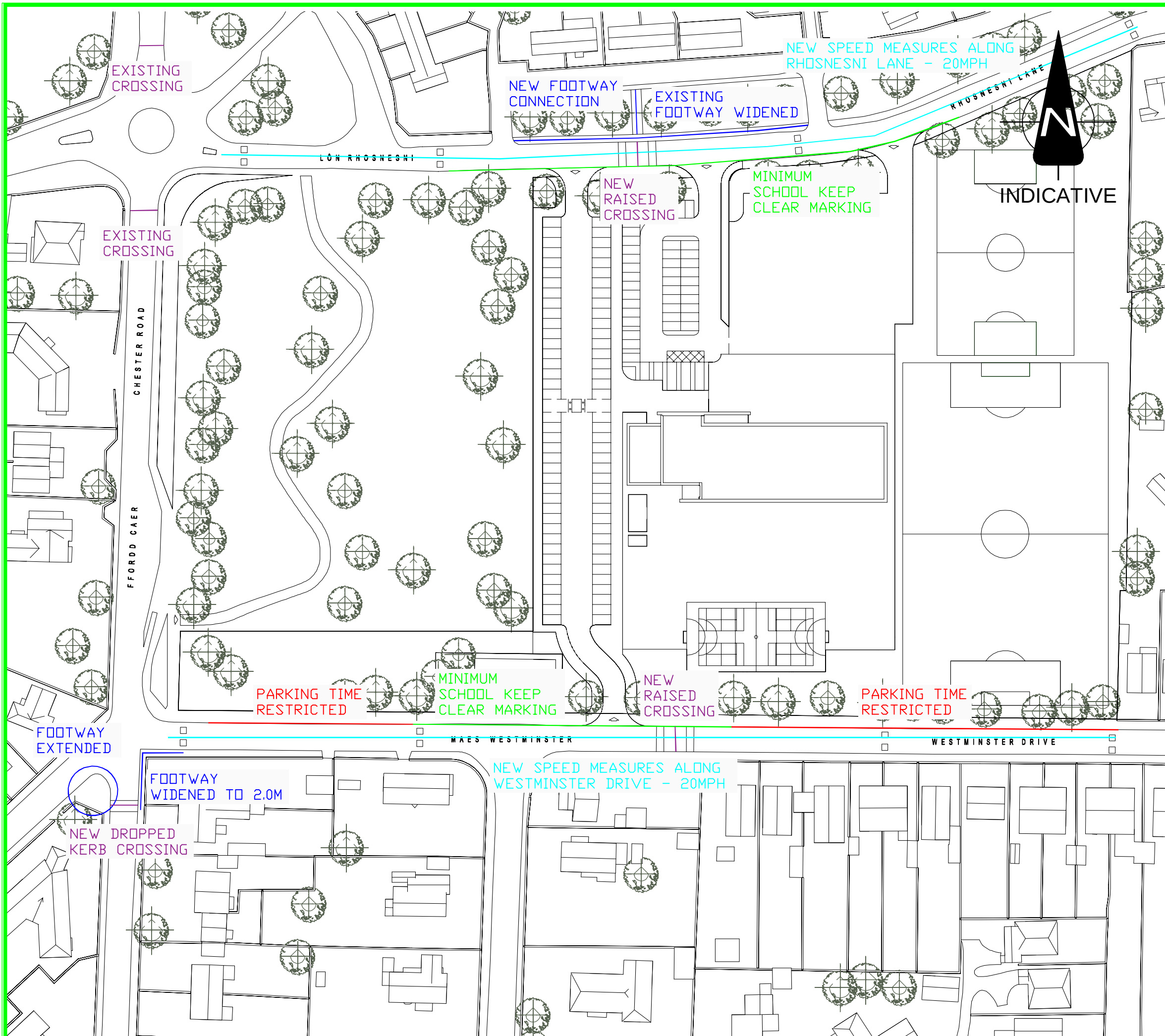
CLIENT:
WREXHAM COUNTY BOROUGH COUNCIL

PROJECT:
NINE ACRES SCHOOL

TITLE:
**EXISTING AND PROPOSED
 WALK-IN ISOCHRONES**

SCALE @ A3: NTS	APPROVED: DRS	DATE: 29/03/2021
PROJECT No: 2020211	DRAWING No: Figure 5.1	REV: -

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CLIENT:
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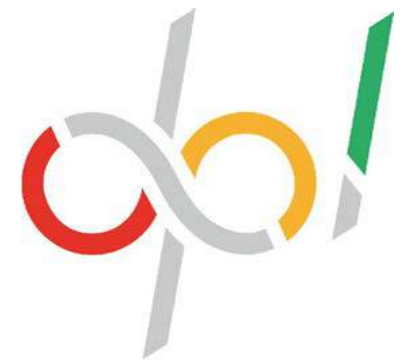
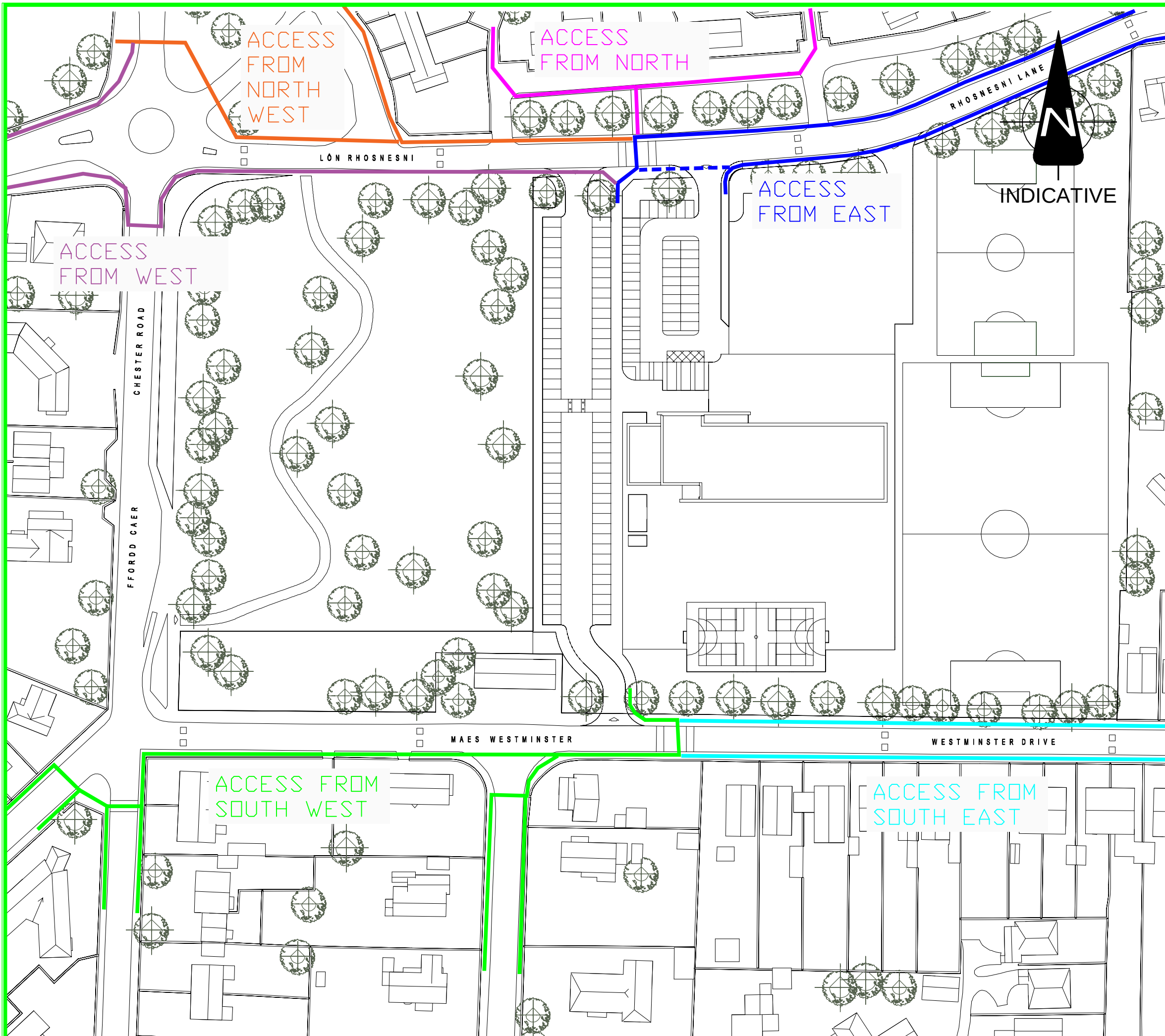
PROJECT:
NINE ACRES SCHOOL

TITLE:
**PROPOSED
 SAFE ROUTE TO SCHOOL
 MEASURES**

SCALE @ A3: NTS	APPROVED: DRS	DATE: 24/03/2021
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PROJECT No: 2020211	DRAWING No: DPL SK006	REV: -
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CLIENT:
WREXHAM COUNTY BOROUGH COUNCIL

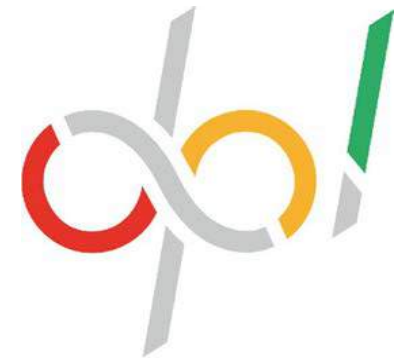
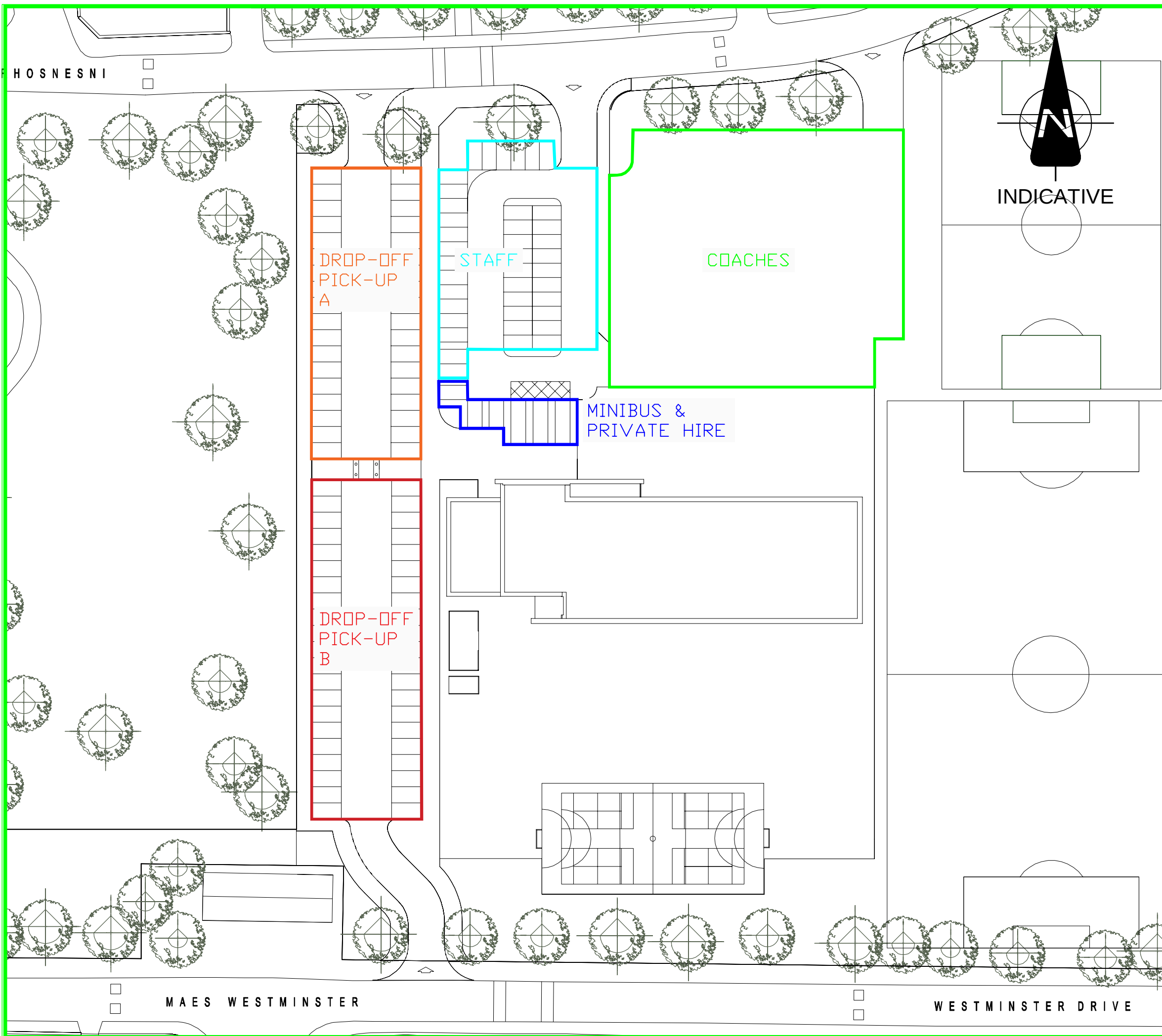
PROJECT:
NINE ACRES SCHOOL

TITLE:
**PROPOSED
 SAFE ROUTE TO SCHOOL
 MEASURES**

SCALE @ A3: NTS	APPROVED: DRS	DATE: 24/03/2021
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PROJECT No: 2020211	DRAWING No: DPL SK007	REV: -
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CLIENT: WREXHAM COUNTY BOROUGH COUNCIL

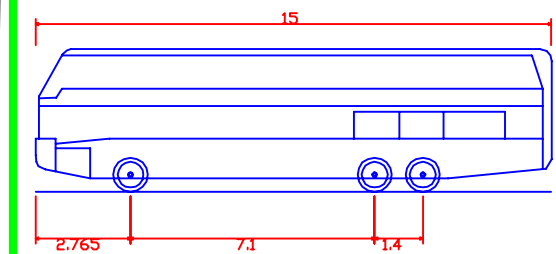
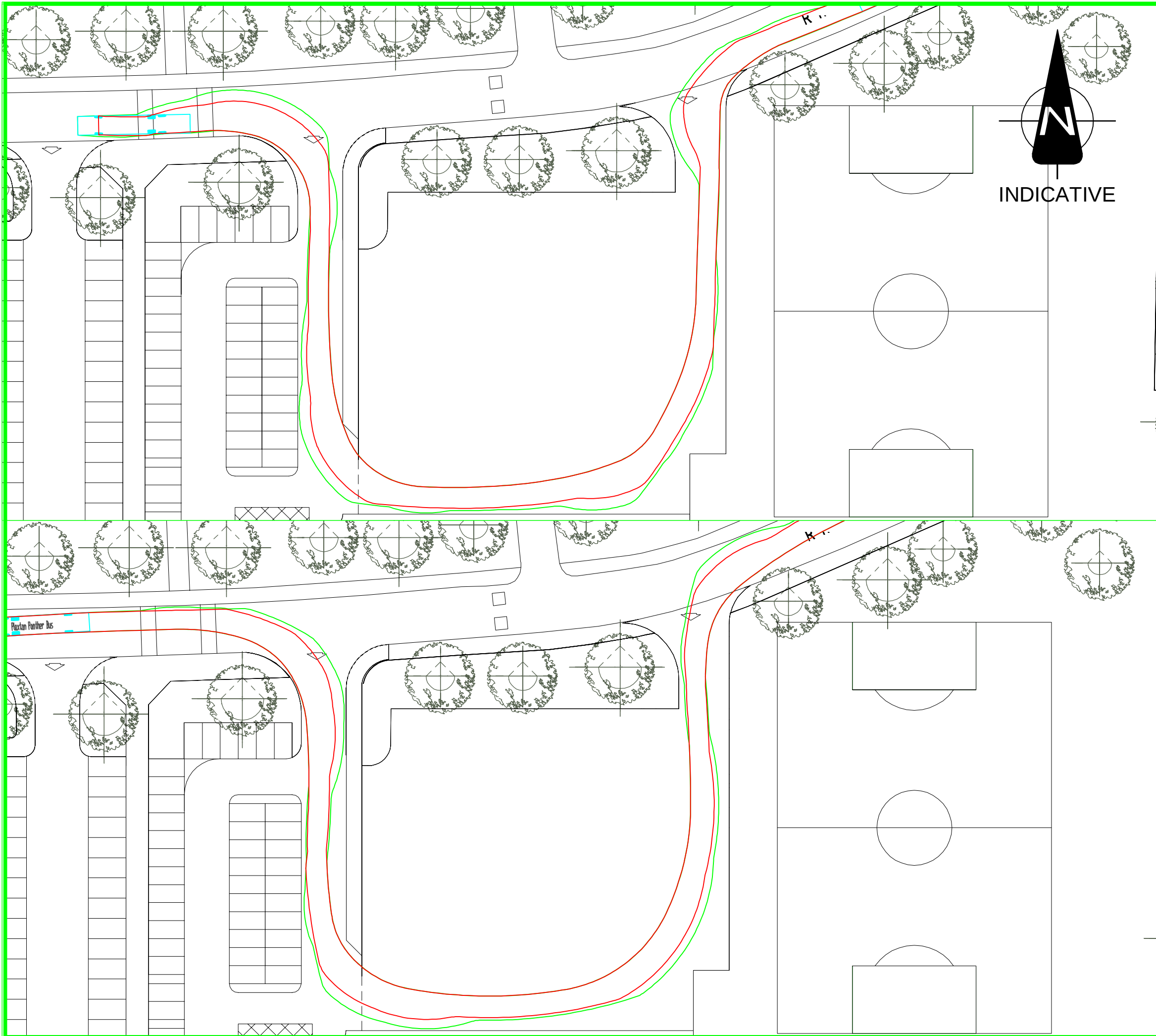
PROJECT: NINE ACRES SCHOOL

TITLE: CAR PARK MANAGEMENT PLAN AREAS

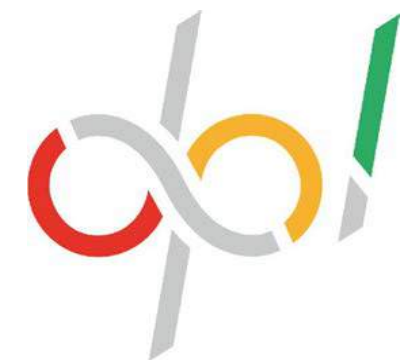
SCALE @ A3: NTS APPROVED: DRS DATE: 26/03/2021

PROJECT No: 2020211 DRAWING No: DPL SK008 REV: -

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Plaxton Panther Bus
Overall Length 15.000m
Overall Width 2.500m
Overall Body Height 4.157m
Min Body Ground Clearance 0.397m
Track Width 2.500m
Lock-to-lock time 5.00s
Wall to Wall Turning Radius 12.500m



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CLIENT:			WREXHAM COUNTY BOROUGH COUNCIL		
PROJECT:			NINE ACRES SCHOOL		
TITLE:			SWEPT PATH ANALYSIS COACH ANTI-CLOCKWISE & CLOCKWISE		
SCALE @ A3:		APPROVED:		DATE:	
NTS		DRS		24/03/2021	
PROJECT No:		DRAWING No:			REV:
2020211		DPL SK006			-
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APPENDIX B



TOTAL TRAFFIC
SURVEYS LTD
DATA COLLECTION

Job Title: Westminster Drive, Wrexham

Job Number: TTS-1235-Mar

Client: Development Planning Ltd

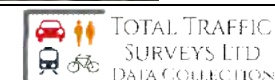
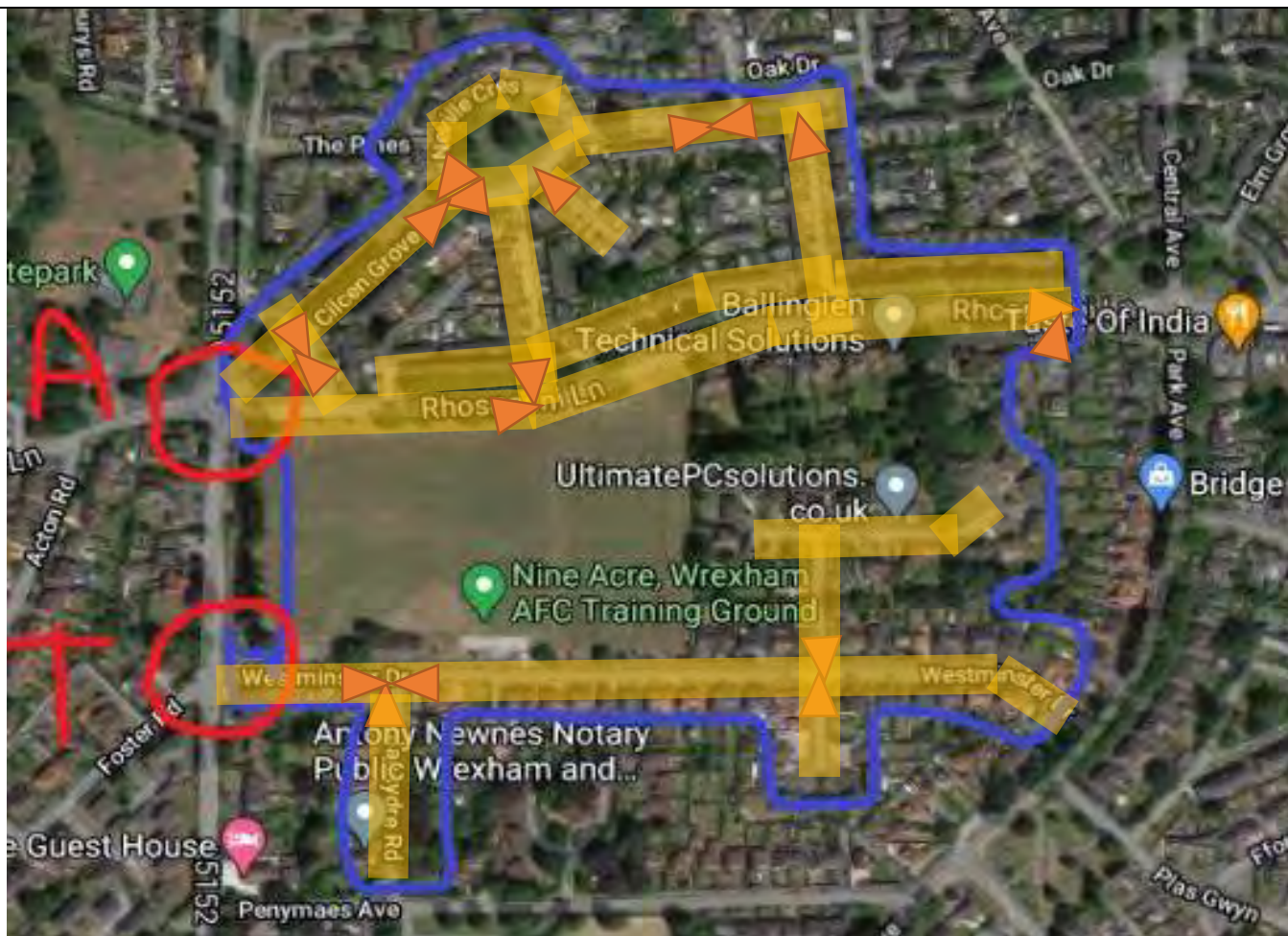
Survey Date: Tuesday 2nd March 2021

Survey Period: 08:00-09:15 & 14:30-16:00

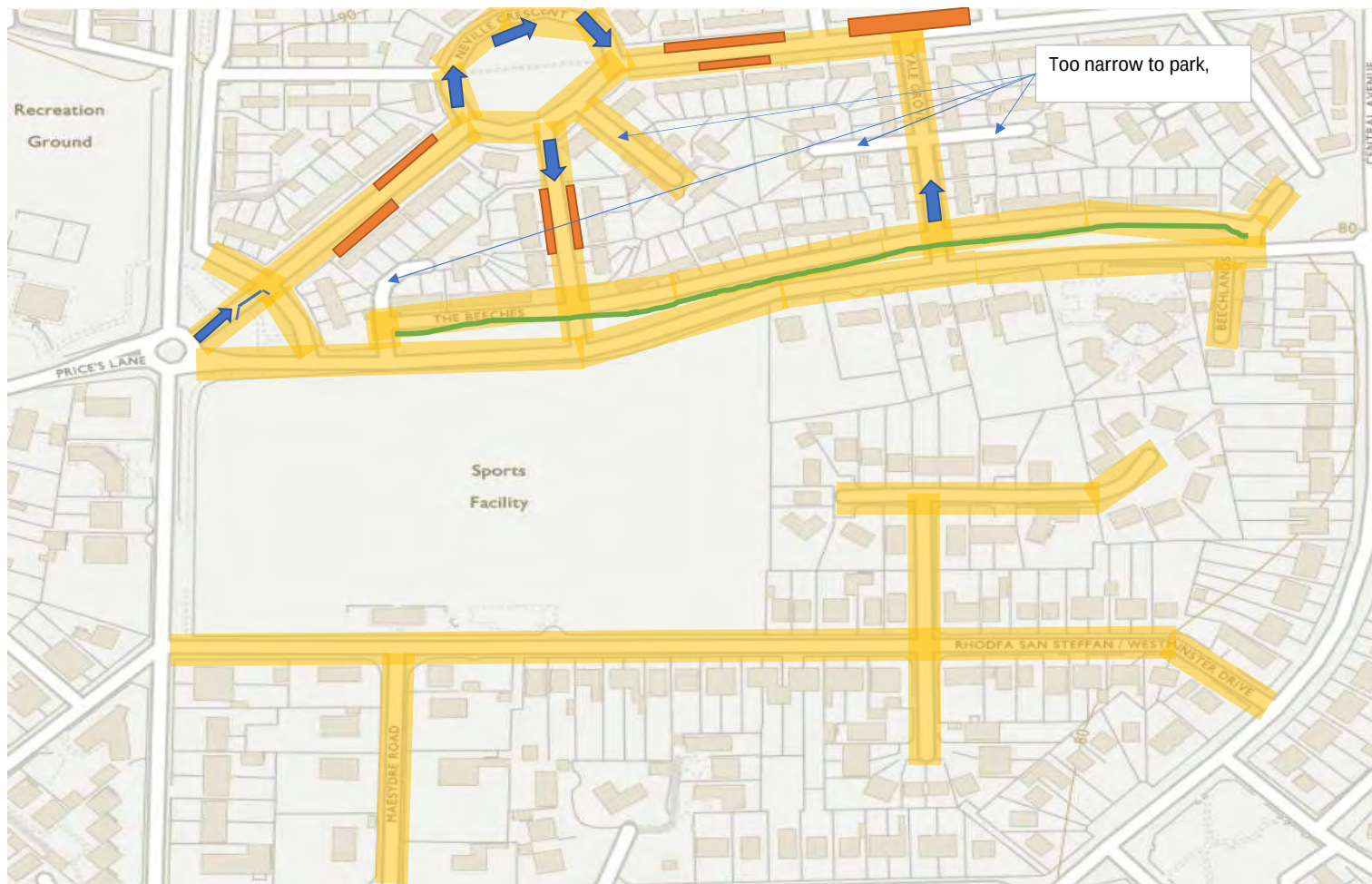
Survey Type: 15 min Parking Beat Surveys

Comments & Weather: Dry & Fine





SITE / LOCATION:	Westminster Drive, Wrexham	JOB NO:	TTS-1235	DWG NO:	TTS-1235-001	DRAWN:	SES
SURVEY DATE:	Tuesday 2nd March 2021	DWG TITLE:	Location Plan				
SURVEY TIMES:	0800-0915 & 1430-1630	JOB TITLE:	Westminster Drive, Wrexham				



- ➡ One Way
- Layby
- Beat Areas
- Cycle path

Total Traffic Surveys Ltd



Client: Development Planning Ltd
 Project Number: TTS-1235-Mar
 Date of Survey: Tuesday 2nd March 2020
 Survey Type: 15 min Parking Beat 0

Total Parked Vehicles

	Legal	Parking Beat															
Road Name	Spaces	08:00	08:15	08:30	08:45	09:00	09:15	14:30	14:45	15:00	15:15	15:30	15:45	16:00	AVG	Max	Min
Westminster Drive	187	7	11	13	14	15	15	18	18	18	18	18	17	14	15	18	7
Maesydre Road	70	0	0	0	0	0	0	0	1	0	0	3	2	1	1	1	0
Westminster Close	15	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Lawson Road	40	4	4	4	5	5	5	5	5	6	6	5	5	5	5	6	4
Beechlands	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
The Beeches	175	15	14	13	14	13	13	18	17	16	17	18	18	18	16	18	13
Cilcen Grove (S)	11	6	5	5	5	5	5	5	6	5	5	5	5	6	5	6	5
Cilcen Grove (N)	34	9	11	11	11	11	9	11	10	10	11	11	11	11	11	11	9
Neiville Crescent	28	11	11	11	12	12	12	11	12	10	12	10	11	12	11	12	10
The Willows	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0
Broomfield Grove	10	5	5	5	5	5	4	4	4	5	5	5	5	7	5	5	4
Yale Grove	30	7	7	6	6	6	6	7	7	5	5	7	8	8	7	7	5
Oak Drive	27	9	11	9	10	10	9	9	8	8	11	10	7	7	9	11	8
Rhosnesni Lane	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	632	75	81	79	83	83	79	89	89	84	91	93	90	90	85	93	93

Total Parking Stress

	Legal Spaces	Parking Stress													
Road Name		08:00	08:15	08:30	08:45	09:00	09:15	14:30	14:45	15:00	15:15	15:30	15:45	16:00	Max
Westminster Drive	187	4%	6%	7%	7%	8%	8%	10%	10%	10%	10%	10%	9%	7%	10%
Maesydre Road	70	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	4%	3%	1%	1%
Westminster Close	15	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%
Lawson Road	40	10%	10%	10%	13%	13%	13%	13%	13%	15%	15%	13%	13%	13%	15%
Beechlands	5	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
The Beeches	175	9%	8%	7%	8%	7%	7%	10%	10%	9%	10%	10%	10%	10%	10%
Cilcen Grove (S)	11	55%	45%	45%	45%	45%	45%	45%	55%	45%	45%	45%	45%	55%	55%
Cilcen Grove (N)	34	26%	32%	32%	32%	32%	26%	32%	29%	29%	32%	32%	32%	32%	32%
Neiville Crescent	28	39%	39%	39%	43%	43%	43%	39%	43%	36%	43%	36%	39%	43%	43%
The Willows	0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Broomfield Grove	10	50%	50%	50%	50%	50%	40%	40%	40%	50%	50%	50%	50%	70%	50%
Yale Grove	30	23%	23%	20%	20%	20%	20%	23%	23%	17%	17%	23%	27%	27%	23%
Oak Drive	27	33%	41%	33%	37%	37%	33%	33%	30%	30%	41%	37%	26%	26%	41%
Rhosnesni Lane	180	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Total	632	12%	13%	13%	13%	13%	13%	14%	14%	13%	14%	15%	14%	14%	15%

Total Traffic Surveys Ltd

Client: Development Planning Ltd
 Project Number: TTS-1235-Mar
 Date of Survey: Tuesday 2nd March 2021
 Survey Type: 15 min Parking Beat Surveys
 Road Name: Westminster Drive



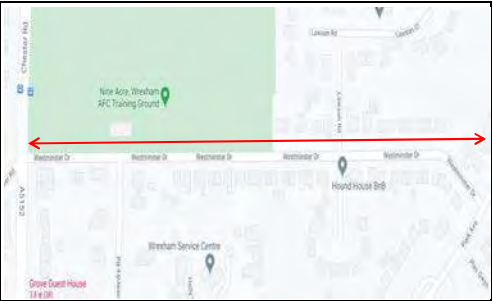
Parking Restrictions:

Parking Layby	No
Pay and Display	N/A
Shared Users	N/A
Loading Bays	N/A
Double Yellow	Yes
Cycle / Bus Lane	No
Bus Stops	No

Notes (reasons for any overstress and details of 'Other' parking types):

2hr parking bays on south side of road (West of Maesydre Rd), remainder is wide and unrestricted

Aerial View:



Street Views:



Parking Inventory

Parking Type	Legal Parking Areas											Illegal Parking Areas						
	Un-restricted	Parking Bays	Permit Holder Bays	Pay and Display Bays	Shared User Bays	Disabled Bays	Loading Bays	M/C Bays	Doctor Bays	Car Club Bays	Single Yellow Line	Other (Layby)	Driveway / Drop Kerb	Single Yellow Line	Double Yellow Line	Single Red Line	Double Red Line	Keep Clear / Zig zag
Number of Spaces	130	12	0	0	0	0	0	0	0	0	45	0	50	50	55	0	0	0
Total Legal Spaces												187	Total Illegal Spaces					155

Parking Beat Data

Time	Legal Parking Areas											Illegal Parking Areas							Legally Parked Vehicles	Legal Parking Stress	Total Parked Vehicles	Total Parking Stress
	Un-restricted	Parking Bays	Permit Holder Bays	Pay and Display Bays	Shared User Bays	Disabled Bays	Loading Bays	M/C Bays	Doctor Bays	Car Club Bays	Single Yellow Line	Other (Specify)	Driveway / Drop Kerb	Single Yellow Line	Double Yellow Line	Single Red Line	Double Red Line	Keep Clear / Zig zag				
08:00	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	4%	7	4%
08:15	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	6%	11	6%
08:30	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	7%	13	7%
08:45	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	7%	14	7%
09:00	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	8%	15	8%
09:15	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	8%	15	8%
14:30	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	10%	18	10%
14:45	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	10%	18	10%
15:00	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	10%	18	10%
15:15	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	10%	18	10%
15:30	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	10%	18	10%
15:45	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	9%	17	9%
16:00	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	7%	14	7%

Total Traffic Surveys Ltd



Client: Development Planning Ltd
Project Number: TTS-1235-Mar
Date of Survey: Tuesday 2nd March 2021
Survey Type: 15 min Parking Beat Surveys
Road Name: Maesydre Road

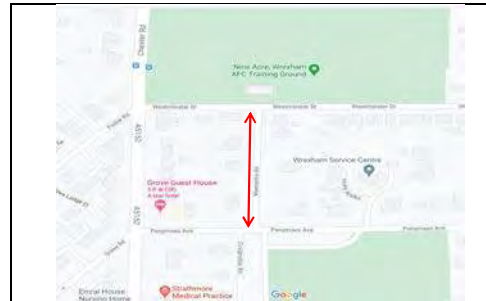
Parking Restrictions:

Parking Layby	No
Pay and Display	N/A
Shared Users	N/A
Loading Bays	N/A
Double Yellow	Yes
Cycle / Bus Lane	No
Bus Stops	No

Notes (reasons for any overstress and details of 'Other' parking types):

2hr parking bays on East side of road, remainder is Single yellow 8am -6pm

Aerial View:



Street Views:



Parking Inventory

Parking Type	Legal Parking Areas												Illegal Parking Areas										
	Un-restricted	Parking Bays	Permit Holder Bays	Pay and Display Bays	Shared User Bays	Disabled Bays	Loading Bays	M/C Bays	Doctor Bays	Car Club Bays	Single Yellow Line	Other (Layby)	Driveway / Drop Kerb	Single Yellow Line	Double Yellow Line	Single Red Line	Double Red Line	Keep Clear / Zig zag	Cycle Lane / Bus Lane	Bus Stop			
	Number of Spaces	25	20	0	0	0	0	0	0	0	25	0	10	25	20	0	0	0	0	0			
Total Legal Spaces												70		Total Illegal Spaces								55	

Parking Beat Data

	Legal Parking Areas												Illegal Parking Areas										Legally Parked Vehicles	Legal Parking Stress	Total Parked Vehicles	Total Parking Stress
Time	Un-restricted	Parking Bays	Permit Holder Bays	Pay and Display Bays	Shared User Bays	Disabled Bays	Loading Bays	M/C Bays	Doctor Bays	Car Club Bays	Single Yellow Line	Other (Specify)	Driveway / Drop Kerb	Single Yellow Line	Double Yellow Line	Single Red Line	Double Red Line	Keep Clear / Zigzag	Cycle Lane / Bus Lane	Bus Stop						
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	0	0%	
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	0	0%	
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	0	0%	
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	0	0%	
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	0	0%	
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	0	0%	
14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	0	0%	
14:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1%	1	1%	
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	0	0%	
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	0	0%	
15:30	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4%	3	4%	
15:45	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3%	2	3%	
16:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1%	1	1%	



Total Traffic Surveys Ltd



Client: Development Planning Ltd
 Project Number: TTS-1235-Mar
 Date of Survey: Tuesday 2nd March 2021
 Survey Type: 15 min Parking Beat Surveys
 Road Name: Westminster Close

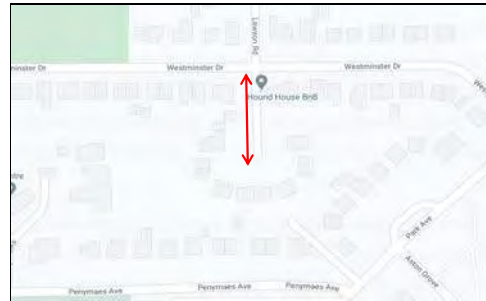
Parking Restrictions:

Parking Layby	No
Pay and Display:	N/A
Shared Users:	N/A
Loading Bays:	N/A
Double Yellow:	No
Cycle / Bus Lane:	No
Bus Stops:	No

Notes (reasons for any overstress and details of 'Other' parking types):

Unrestricted - Footway parking, as shown in picture

Aerial View:



Street Views:



Parking Inventory

Parking Type	Legal Parking Areas												Illegal Parking Areas										
	Un-restricted	Parking Bays	Permit Holder Bays	Pay and Display Bays	Shared User Bays	Disabled Bays	Loading Bays	M/C Bays	Doctor Bays	Car Club Bays	Single Yellow Line	Other (Layby)	Driveway / Drop Kerb	Single Yellow Line	Double Yellow Line	Single Red Line	Double Red Line	Keep Clear / Zig zag	Cycle Lane / Bus Lane	Bus Stop			
	Number of Spaces	15	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0		
Total Legal Spaces												15		Total Illegal Spaces								5	

Parking Beat Data

	Legal Parking Areas												Illegal Parking Areas										Legally Parked Vehicles	Legal Parking Stress	Total Parked Vehicles	Total Parking Stress
Time	Un-restricted	Parking Bays	Permit Holder Bays	Pay and Display Bays	Shared User Bays	Disabled Bays	Loading Bays	M/C Bays	Doctor Bays	Car Club Bays	Single Yellow Line	Other (Specify)	Driveway / Drop Kerb	Single Yellow Line	Double Yellow Line	Single Red Line	Double Red Line	Keep Clear / Zigzag	Cycle Lane / Bus Lane	Bus Stop						
08:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7%	1	7%	
08:15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7%	1	7%	
08:30	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7%	1	7%	
08:45	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7%	1	7%	
09:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7%	1	7%	
09:15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7%	1	7%	
14:30	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7%	1	7%	
14:45	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7%	1	7%	
15:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7%	1	7%	
15:15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7%	1	7%	
15:30	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7%	1	7%	
15:45	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7%	1	7%	
16:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7%	1	7%	

Total Traffic Surveys Ltd



Client: Development Planning Ltd
 Project Number: TTS-1235-Mar
 Date of Survey: Tuesday 2nd March 2021
 Survey Type: 15 min Parking Beat Surveys
 Road Name: Lawson Road

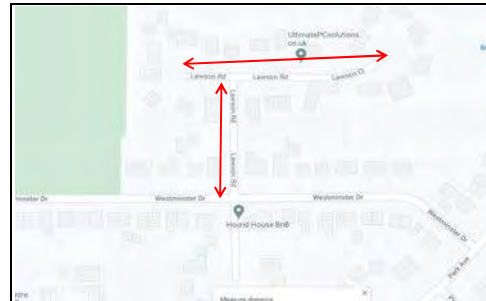
Parking Restrictions:

Parking Layby	No
Pay and Display:	N/A
Shared Users:	N/A
Loading Bays:	N/A
Double Yellow:	No
Cycle / Bus Lane:	No
Bus Stops:	No

Notes (reasons for any overstress and details of 'Other' parking types):

Unrestricted - Footway Parking

Aerial View:



Street Views:



Parking Inventory

Parking Type	Legal Parking Areas												Illegal Parking Areas							
	Un-restricted	Parking Bays	Permit Holder Bays	Pay and Display Bays	Shared User Bays	Disabled Bays	Loading Bays	M/C Bays	Doctor Bays	Car Club Bays	Single Yellow Line	Other (Layby)	Driveway / Drop Kerb	Single Yellow Line	Double Yellow Line	Single Red Line	Double Red Line	Keep Clear / Zig zag	Cycle Lane / Bus Lane	Bus Stop
Number of Spaces	40	0	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0	0	0	0
Total Legal Spaces												40	Total Illegal Spaces							25

Parking Beat Data

Time	Legal Parking Areas												Illegal Parking Areas								Legally Parked Vehicles	Legal Parking Stress	Total Parked Vehicles	Total Parking Stress
	Un-restricted	Parking Bays	Permit Holder Bays	Pay and Display Bays	Shared User Bays	Disabled Bays	Loading Bays	M/C Bays	Doctor Bays	Car Club Bays	Single Yellow Line	Other (Specify)	Driveway / Drop Kerb	Single Yellow Line	Double Yellow Line	Single Red Line	Double Red Line	Keep Clear / Zig zag	Cycle Lane / Bus Lane	Bus Stop				
08:00	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	10%	4	10%
08:15	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	10%	4	10%
08:30	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	10%	4	10%
08:45	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	13%	5	13%
09:00	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	13%	5	13%
09:15	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	13%	5	13%
14:30	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	13%	5	13%
14:45	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	13%	5	13%
15:00	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	15%	6	15%
15:15	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	15%	6	15%
15:30	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	13%	5	13%
15:45	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	13%	5	13%
16:00	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	13%	5	13%

Total Traffic Surveys Ltd



Client: Development Planning Ltd
 Project Number: TTS-1235-Mar
 Date of Survey: Tuesday 2nd March 2021
 Survey Type: 15 min Parking Beat Surveys
 Road Name: Beechlands

Parking Restrictions:

Parking Layby	No
Pay and Display:	N/A
Shared Users:	N/A
Loading Bays:	N/A
Double Yellow:	No
Cycle / Bus Lane:	No
Bus Stops:	No

Notes (reasons for any overstress and details of 'Other' parking types):

Unrestricted

Aerial View:



Street Views:



Parking Inventory

	Legal Parking Areas												Illegal Parking Areas										
Parking Type	Un-restricted	Parking Bays	Permit Holder Bays	Pay and Display Bays	Shared User Bays	Disabled Bays	Loading Bays	M/C Bays	Doctor Bays	Car Club Bays	Single Yellow Line	Other (Layby)	Driveway / Drop Kerb	Single Yellow Line	Double Yellow Line	Single Red Line	Double Red Line	Keep Clear / Zig zag	Cycle Lane / Bus Lane	Bus Stop			
Number of Spaces	5	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0			
Total Legal Spaces												5		Total Illegal Spaces								4	

Parking Beat Data

	Legal Parking Areas												Illegal Parking Areas										Legally Parked Vehicles	Legal Parking Stress	Total Parked Vehicles	Total Parking Stress
Time	Un-restricted	Parking Bays	Permit Holder Bays	Pay and Display Bays	Shared User Bays	Disabled Bays	Loading Bays	M/C Bays	Doctor Bays	Car Club Bays	Single Yellow Line	Other (Specify)	Driveway / Drop Kerb	Single Yellow Line	Double Yellow Line	Single Red Line	Double Red Line	Keep Clear / Zigzag	Cycle Lane / Bus Lane	Bus Stop						
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	0	0%	
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	0	0%	
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	0	0%	
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	0	0%	
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	0	0%	
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	0	0%	
14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	0	0%	
14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	0	0%	
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	0	0%	
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	0	0%	
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	0	0%	
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	0	0%	
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	0	0%	

Total Traffic Surveys Ltd



Client: Development Planning Ltd
 Project Number: TTS-1235-Mar
 Date of Survey: Tuesday 2nd March 2021
 Survey Type: 15 min Parking Beat Surveys
 Road Name: The Beeches

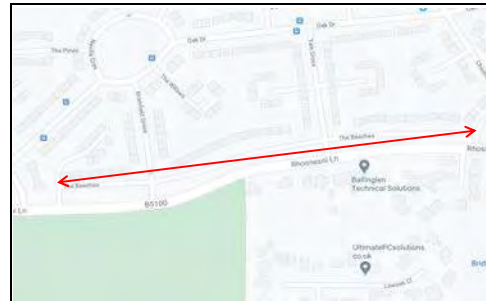
Parking Restrictions:

Parking Layby	No
Pay and Display	N/A
Shared Users	N/A
Loading Bays	N/A
Double Yellow	No
Cycle / Bus Lane	Yes
Bus Stops	No

Notes (reasons for any overstress and details of 'Other' parking types):

Unrestricted - North side, Cycle lane - Southside

Aerial View:



Street Views:



Parking Inventory

	Legal Parking Areas												Illegal Parking Areas										
Parking Type	Un-restricted	Parking Bays	Permit Holder Bays	Pay and Display Bays	Shared User Bays	Disabled Bays	Loading Bays	M/C Bays	Doctor Bays	Car Club Bays	Single Yellow Line	Other (Layby)	Driveway / Drop Kerb	Single Yellow Line	Double Yellow Line	Single Red Line	Double Red Line	Keep Clear / Zig zag	Cycle Lane / Bus Lane	Bus Stop			
Number of Spaces	175	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	78	0			
Total Legal Spaces												175		Total Illegal Spaces								93	

Parking Beat Data

	Legal Parking Areas												Illegal Parking Areas										Legally Parked Vehicles	Legal Parking Stress	Total Parked Vehicles	Total Parking Stress
Time	Un-restricted	Parking Bays	Permit Holder Bays	Pay and Display Bays	Shared User Bays	Disabled Bays	Loading Bays	M/C Bays	Doctor Bays	Car Club Bays	Single Yellow Line	Other (Specify)	Driveway / Drop Kerb	Single Yellow Line	Double Yellow Line	Single Red Line	Double Red Line	Keep Clear / Zig zag	Cycle Lane / Bus Lane	Bus Stop						
08:00	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	9%	15	9%		
08:15	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	8%	14	8%		
08:30	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	7%	13	7%		
08:45	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	8%	14	8%		
09:00	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	7%	13	7%		
09:15	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	7%	13	7%		
14:30	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	10%	18	10%		
14:45	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	10%	17	10%		
15:00	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	9%	16	9%		
15:15	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	10%	17	10%		
15:30	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	10%	18	10%		
15:45	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	10%	18	10%		
16:00	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	10%	18	10%		

Total Traffic Surveys Ltd



TOTAL TRAFFIC
SURVEYS LTD
DATA COLLECTION

Client: Development Planning Ltd
Project Number: TTS-1235-Mar
Date of Survey: Tuesday 2nd March 2021
Survey Type: 15 min Parking Beat Surveys
Road Name: Cilcen Grove (S)

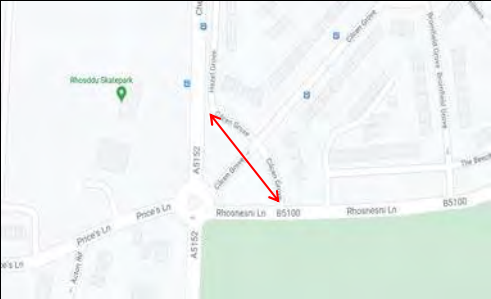
Parking Restrictions:

Parking Layby	No
Pay and Display:	N/A
Shared Users:	N/A
Loading Bays:	N/A
Double Yellow:	No
Cycle / Bus Lane:	No
Bus Stops:	No

Notes (reasons for any overstress and details of 'Other' parking types):

Unrestricted

Aerial View:



Street Views:



Parking Inventory

	Legal Parking Areas												Illegal Parking Areas									
Parking Type	Un-restricted	Parking Bays	Permit Holder Bays	Pay and Display Bays	Shared User Bays	Disabled Bays	Loading Bays	M/C Bays	Doctor Bays	Car Club Bays	Single Yellow Line	Other (Grass)	Driveway / Drop Kerb	Single Yellow Line	Double Yellow Line	Single Red Line	Double Red Line	Keep Clear / Zig zag	Cycle Lane / Bus Lane	Bus Stop		
Number of Spaces	10	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0		
Total Legal Spaces												11		Total Illegal Spaces								0

Parking Beat Data

	Legal Parking Areas											Illegal Parking Areas												
Time	Un-restricted	Parking Bays	Permit Holder Bays	Pay and Display Bays	Shared User Bays	Disabled Bays	Loading Bays	M/C Bays	Doctor Bays	Car Club Bays	Single Yellow Line	Other (Grass)	Driveway / Drop Kerb	Single Yellow Line	Double Yellow Line	Single Red Line	Double Red Line	Keep Clear / Zig-zag	Cycle Lane / Bus Lane	Bus Stop	Legally Parked Vehicles	Legal Parking Stress	Total Parked Vehicles	Total Parking Stress
08:00	5	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	6	55%	6	55%
08:15	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	5	45%	5	45%
08:30	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	5	45%	5	45%
08:45	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	5	45%	5	45%
09:00	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	5	45%	5	45%
09:15	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	5	45%	5	45%
14:30	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	5	45%	5	45%
14:45	5	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	6	55%	6	55%
15:00	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	5	45%	5	45%
15:15	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	5	45%	5	45%
15:30	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	5	45%	5	45%
15:45	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	5	45%	5	45%
16:00	5	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	6	55%	6	55%

Total Traffic Surveys Ltd



Client: Development Planning Ltd
Project Number: TTS-1235-Mar
Date of Survey: Tuesday 2nd March 2021
Survey Type: 15 min Parking Beat Surveys
Road Name: Cilcen Grove (N)

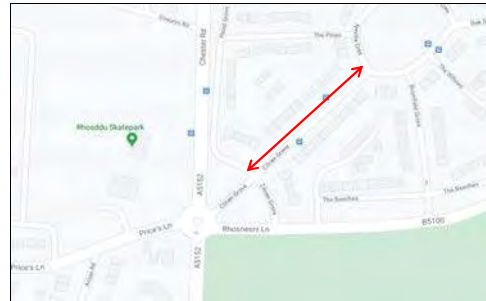
Parking Restrictions:

Parking Layby	Yes x 2
Pay and Display:	N/A
Shared Users:	N/A
Loading Bays:	N/A
Double Yellow:	No
Cycle / Bus Lane:	No
Bus Stops:	Yes

Notes (reasons for any overstress and details of 'Other' parking types):

Unrestricted - with 2 x layby's

Aerial View:



Street Views:



Parking Inventory

	Legal Parking Areas												Illegal Parking Areas									
Parking Type	Un-restricted	Parking Bays	Permit Holder Bays	Pay and Display Bays	Shared User Bays	Disabled Bays	Loading Bays	M/C Bays	Doctor Bays	Car Club Bays	Single Yellow Line	Other (Layby)	Driveway / Drop Kerb	Single Yellow Line	Double Yellow Line	Single Red Line	Double Red Line	Keep Clear / Zig zag	Cycle Lane / Bus Lane	Bus Stop		
Number of Spaces	24	10	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	2		
Total Legal Spaces												34		Total Illegal Spaces							6	

Parking Beat Data

	Legal Parking Areas												Illegal Parking Areas								Legally Parked Vehicles	Legal Parking Stress	Total Parked Vehicles	Total Parking Stress
Time	Un-restricted	Parking Bays	Permit Holder Bays	Pay and Display Bays	Shared User Bays	Disabled Bays	Loading Bays	M/C Bays	Doctor Bays	Car Club Bays	Single Yellow Line	Other (Specify)	Driveway / Drop Kerb	Single Yellow Line	Double Yellow Line	Single Red Line	Double Red Line	Keep Clear / Zig zag	Cycle Lane / Bus Lane	Bus Stop				
08:00	3	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	26%	9	26%
08:15	5	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	32%	11	32%
08:30	5	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	32%	11	32%
08:45	6	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	32%	11	32%
09:00	6	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	32%	11	32%
09:15	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	26%	9	26%
14:30	4	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	32%	11	32%
14:45	4	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	29%	10	29%
15:00	4	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	29%	10	29%
15:15	4	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	32%	11	32%
15:30	4	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	32%	11	32%
15:45	3	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	32%	11	32%
16:00	3	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	32%	11	32%

Total Traffic Surveys Ltd



Client: Development Planning Ltd
 Project Number: TTS-1235-Mar
 Date of Survey: Tuesday 2nd March 2021
 Survey Type: 15 min Parking Beat Surveys
 Road Name: Neville Crescent

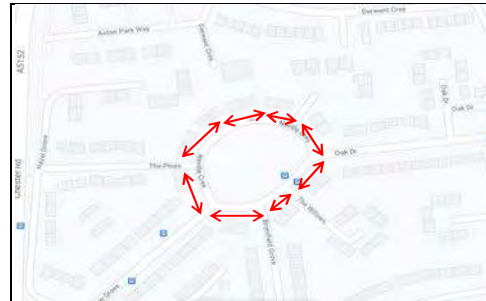
Parking Restrictions:

Parking Layby	No
Pay and Display:	N/A
Shared Users:	N/A
Loading Bays:	N/A
Double Yellow:	No
Cycle / Bus Lane:	No
Bus Stops:	Yes

Notes (reasons for any overstress and details of 'Other' parking types):

Unrestricted

Aerial View:



Street Views:



Parking Inventory

Parking Type	Legal Parking Areas												Illegal Parking Areas										
	Un-restricted	Parking Bays	Permit Holder Bays	Pay and Display Bays	Shared User Bays	Disabled Bays	Loading Bays	M/C Bays	Doctor Bays	Car Club Bays	Single Yellow Line	Other (Grass)	Driveway / Drop Kerb	Single Yellow Line	Double Yellow Line	Single Red Line	Double Red Line	Keep Clear / Zig zag	Cycle Lane / Bus Lane	Bus Stop			
	Number of Spaces	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2			
Total Legal Spaces												28		Total Illegal Spaces								2	

Parking Beat Data

	Legal Parking Areas												Illegal Parking Areas								Legally Parked Vehicles	Legal Parking Stress	Total Parked Vehicles	Total Parking Stress
Time	Un-restricted	Parking Bays	Permit Holder Bays	Pay and Display Bays	Shared User Bays	Disabled Bays	Loading Bays	M/C Bays	Doctor Bays	Car Club Bays	Single Yellow Line	Other (Grass)	Driveway / Drop Kerb	Single Yellow Line	Double Yellow Line	Single Red Line	Double Red Line	Keep Clear / Zig-zag	Cycle Lane / Bus Lane	Bus Stop				
08:00	10	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	11	39%	11	39%
08:15	10	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	11	39%	11	39%
08:30	10	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	11	39%	11	39%
08:45	11	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	12	43%	12	43%
09:00	11	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	12	43%	12	43%
09:15	11	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	12	43%	12	43%
14:30	10	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	11	39%	11	39%
14:45	11	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	12	43%	12	43%
15:00	9	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	10	36%	10	36%
15:15	11	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	12	43%	12	43%
15:30	9	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	10	36%	10	36%
15:45	10	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	11	39%	11	39%
16:00	11	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	12	43%	12	43%

Total Traffic Surveys Ltd



Client: Development Planning Ltd
 Project Number: TTS-1235-Mar
 Date of Survey: Tuesday 2nd March 2021
 Survey Type: 15 min Parking Beat Surveys
 Road Name: Willows

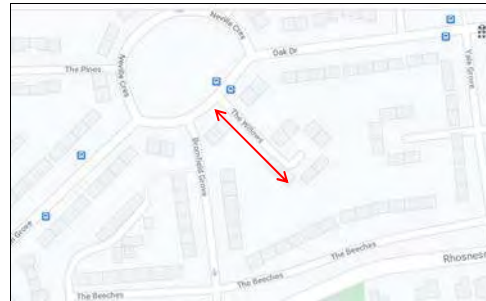
Parking Restrictions:

Parking Layby	Yes x 2
Pay and Display:	N/A
Shared Users:	N/A
Loading Bays:	N/A
Double Yellow:	No
Cycle / Bus Lane:	No
Bus Stops:	No

Notes (reasons for any overstress and details of 'Other' parking types):

Unrestricted - Narrow (2.5m wide)

Aerial View:



Street Views:



Parking Inventory

Parking Type	Legal Parking Areas												Illegal Parking Areas										
	Un-restricted	Parking Bays	Permit Holder Bays	Pay and Display Bays	Shared User Bays	Disabled Bays	Loading Bays	M/C Bays	Doctor Bays	Car Club Bays	Single Yellow Line	Other (turning circle)	Driveway / Drop Kerb	Single Yellow Line	Double Yellow Line	Single Red Line	Double Red Line	Keep Clear / Zig zag	Cycle Lane / Bus Lane	Bus Stop			
	Number of Spaces	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0			
Total Legal Spaces												0		Total Illegal Spaces								4	

Parking Beat Data

Time	Legal Parking Areas											Illegal Parking Areas							Legally Parked Vehicles	Legal Parking Stress	Total Parked Vehicles	Total Parking Stress
	Un-restricted	Parking Bays	Permit Holder Bays	Pay and Display Bays	Shared User Bays	Disabled Bays	Loading Bays	M/C Bays	Doctor Bays	Car Club Bays	Single Yellow Line	Other (Turning circle)	Driveway / Drop Kerb	Single Yellow Line	Double Yellow Line	Single Red Line	Double Red Line	Keep Clear / Zig zag	Cycle Lane / Bus Lane	Bus Stop		
08:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0%
08:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0%
08:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0%
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%

Total Traffic Surveys Ltd



Client: Development Planning Ltd
 Project Number: TTS-1235-Mar
 Date of Survey: Tuesday 2nd March 2021
 Survey Type: 15 min Parking Beat Surveys
 Road Name: Broomfield Grove

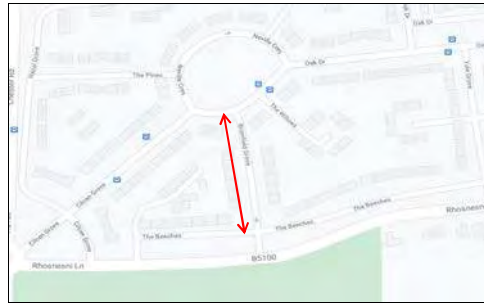
Parking Restrictions:

Parking Layby: Yes x 2
 Pay and Display: N/A
 Shared Users: N/A
 Loading Bays: N/A
 Double Yellow: No
 Cycle / Bus Lane: No
 Bus Stops: No

Notes (reasons for any overstress and details of 'Other' parking types):

Unrestricted - One way (S), Narrow entry/Exit, 2 x laybys

Aerial View:



Street Views:



Parking Inventory

	Legal Parking Areas												Illegal Parking Areas									
Parking Type	Un-restricted	Parking Bays	Permit Holder Bays	Pay and Display Bays	Shared User Bays	Disabled Bays	Loading Bays	M/C Bays	Doctor Bays	Car Club Bays	Single Yellow Line	Other (Grass)	Driveway / Drop Kerb	Single Yellow Line	Double Yellow Line	Single Red Line	Double Red Line	Keep Clear / Zig zag	Cycle Lane / Bus Lane	Bus Stop		
Number of Spaces	0	10	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	10		
Total Legal Spaces												10		Total Illegal Spaces							10	

Parking Beat Data

	Legal Parking Areas												Illegal Parking Areas								Legally Parked Vehicles	Legal Parking Stress	Total Parked Vehicles	Total Parking Stress
Time	Un-restricted	Parking Bays	Permit Holder Bays	Pay and Display Bays	Shared User Bays	Disabled Bays	Loading Bays	M/C Bays	Doctor Bays	Car Club Bays	Single Yellow Line	Other (Grass)	Driveway / Drop Kerb	Single Yellow Line	Double Yellow Line	Single Red Line	Double Red Line	Keep Clear / Zig zag	Cycle Lane / Bus Lane	Bus Stop				
08:00	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	5	50%	5	50%
08:15	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	5	50%	5	50%
08:30	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	5	50%	5	50%
08:45	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	5	50%	5	50%
09:00	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	5	50%	5	50%
09:15	0	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	4	40%	4	40%
14:30	0	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	4	40%	4	40%
14:45	0	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	4	40%	4	40%
15:00	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	5	50%	5	50%
15:15	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	5	50%	5	50%
15:30	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	5	50%	5	50%
15:45	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	5	50%	5	50%
16:00	0	6	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	7	70%	7	70%

Total Traffic Surveys Ltd



Client: Development Planning Ltd
Project Number: TTS-1235-Mar
Date of Survey: Tuesday 2nd March 2021
Survey Type: 15 min Parking Beat Surveys
Road Name: Yale Grove

Parking Restrictions:

Parking Layby	No
Pay and Display:	N/A
Shared Users:	N/A
Loading Bays:	N/A
Double Yellow:	No
Cycle / Bus Lane:	No
Bus Stops:	No

Notes (reasons for any overstress and details of 'Other' parking types):

Unrestricted

Aerial View:



Street Views:



Parking Inventory

	Legal Parking Areas												Illegal Parking Areas										
Parking Type	Un-restricted	Parking Bays	Permit Holder Bays	Pay and Display Bays	Shared User Bays	Disabled Bays	Loading Bays	M/C Bays	Doctor Bays	Car Club Bays	Single Yellow Line	Other (turning circle)	Driveway / Drop Kerb	Single Yellow Line	Double Yellow Line	Single Red Line	Double Red Line	Keep Clear / Zig zag	Cycle Lane / Bus Lane	Bus Stop			
Number of Spaces	30	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	10			
Total Legal Spaces												30		Total Illegal Spaces								10	

Parking Beat Data

	Legal Parking Areas												Illegal Parking Areas								Legally Parked Vehicles	Legal Parking Stress	Total Parked Vehicles	Total Parking Stress
Time	Un-restricted	Parking Bays	Permit Holder Bays	Pay and Display Bays	Shared User Bays	Disabled Bays	Loading Bays	M/C Bays	Doctor Bays	Car Club Bays	Single Yellow Line	Other (Turning circle)	Driveway / Drop Kerb	Single Yellow Line	Double Yellow Line	Single Red Line	Double Red Line	Keep Clear / Zig zag	Cycle Lane / Bus Lane	Bus Stop				
08:00	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	23%	7	23%
08:15	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	23%	7	23%
08:30	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	20%	6	20%
08:45	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	20%	6	20%
09:00	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	20%	6	20%
09:15	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	20%	6	20%
14:30	6	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	6	20%	7	23%
14:45	6	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	6	20%	7	23%
15:00	4	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4	13%	5	17%
15:15	4	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4	13%	5	17%
15:30	6	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	6	20%	7	23%
15:45	7	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	7	23%	8	27%
16:00	7	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	7	23%	8	27%

Total Traffic Surveys Ltd



Client: Development Planning Ltd
Project Number: TTS-1235-Mar
Date of Survey: Tuesday 2nd March 2021
Survey Type: 15 min Parking Beat Surveys
Road Name: Oak Drive

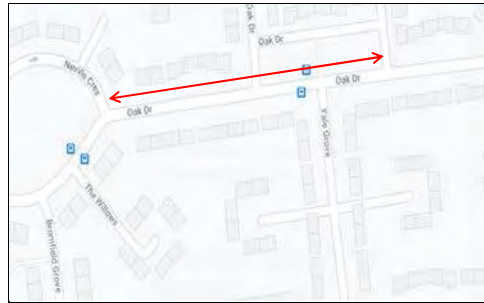
Parking Restrictions:

Parking Layby: Yes x 3
Pay and Display: N/A
Shared Users: N/A
Loading Bays: N/A
Double Yellow: No
Cycle / Bus Lane: No
Bus Stops: Yes x 2

Notes (reasons for any overstress and details of 'Other' parking types):

Unrestricted - 3 x laybys

Aerial View:



Street Views:



Parking Inventory

	Legal Parking Areas												Illegal Parking Areas										
Parking Type	Un-restricted	Parking Bays	Permit Holder Bays	Pay and Display Bays	Shared User Bays	Disabled Bays	Loading Bays	M/C Bays	Doctor Bays	Car Club Bays	Single Yellow Line	Other (Grass)	Driveway / Drop Kerb	Single Yellow Line	Double Yellow Line	Single Red Line	Double Red Line	Keep Clear / Zig zag	Cycle Lane / Bus Lane	Bus Stop			
Number of Spaces	0	27	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0	0	0	2			
Total Legal Spaces												27		Total Illegal Spaces								27	

Parking Beat Data

	Legal Parking Areas											Illegal Parking Areas									Legally Parked Vehicles	Legal Parking Stress	Total Parked Vehicles	Total Parking Stress
Time	Un-restricted	Parking Bays	Permit Holder Bays	Pay and Display Bays	Shared User Bays	Disabled Bays	Loading Bays	M/C Bays	Doctor Bays	Car Club Bays	Single Yellow Line	Other (Grass)	Driveway / Drop Kerb	Single Yellow Line	Double Yellow Line	Single Red Line	Double Red Line	Keep Clear / Zig-zag	Cycle Lane / Bus Lane	Bus Stop				
08:00	0	7	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	8	30%	9	33%
08:15	0	8	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	9	33%	11	41%
08:30	0	7	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	8	30%	9	33%
08:45	0	8	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	9	33%	10	37%
09:00	0	8	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	9	33%	10	37%
09:15	0	7	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	8	30%	9	33%
14:30	0	6	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	7	26%	9	33%
14:45	0	5	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	6	22%	8	30%
15:00	0	5	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	6	22%	8	30%
15:15	1	7	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	9	33%	11	41%
15:30	0	7	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	8	30%	10	37%
15:45	0	4	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	5	19%	7	26%
16:00	0	4	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	5	19%	7	26%

Total Traffic Surveys Ltd



TOTAL TRAFFIC
SURVEYS LTD
DATA COLLECTION

Client: Development Planning Ltd
Project Number: TTS-1235-Mar
Date of Survey: Tuesday 2nd March 2021
Survey Type: 15 min Parking Beat Surveys
Road Name: Rhosnesni Lane

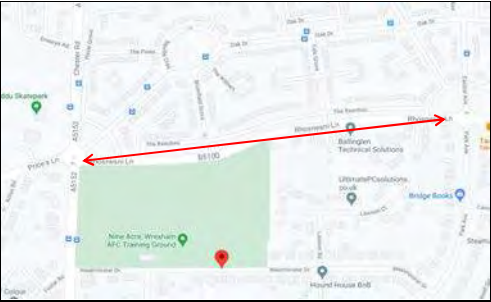
Parking Restrictions:

Parking Layby: No
Pay and Display: N/A
Shared Users: N/A
Loading Bays: N/A
Double Yellow: No
Cycle / Bus Lane: No
Bus Stops: No

Notes (reasons for any overstress and details of 'Other' parking types):

Unrestricted

Aerial View:



Street Views:



Parking Inventory

Parking Type	Legal Parking Areas												Illegal Parking Areas										
	Un-restricted	Parking Bays	Permit Holder Bays	Pay and Display Bays	Shared User Bays	Disabled Bays	Loading Bays	M/C Bays	Doctor Bays	Car Club Bays	Single Yellow Line	Other (Layby)	Driveway / Drop Kerb	Single Yellow Line	Double Yellow Line	Single Red Line	Double Red Line	Keep Clear / Zigzag	Cycle Lane / Bus Lane	Bus Stop			
Number of Spaces	180	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0			
Total Legal Spaces												180		Total Illegal Spaces								15	

Parking Beat Data

Time	Legal Parking Areas											Illegal Parking Areas							Legally Parked Vehicles	Legal Parking Stress	Total Parked Vehicles	Total Parking Stress
	Un-restricted	Parking Bays	Permit Holder Bays	Pay and Display Bays	Shared User Bays	Disabled Bays	Loading Bays	M/C Bays	Doctor Bays	Car Club Bays	Single Yellow Line	Other (Specify)	Driveway / Drop Kerb	Single Yellow Line	Double Yellow Line	Single Red Line	Double Red Line	Keep Clear / Zig zag	Cycle Lane / Bus Lane	Bus Stop		
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%



TOTAL TRAFFIC
SURVEYS LTD
DATA COLLECTION

Job Title: Westminster Drive, Wrexham

Job Number: TTS-1235-Mar

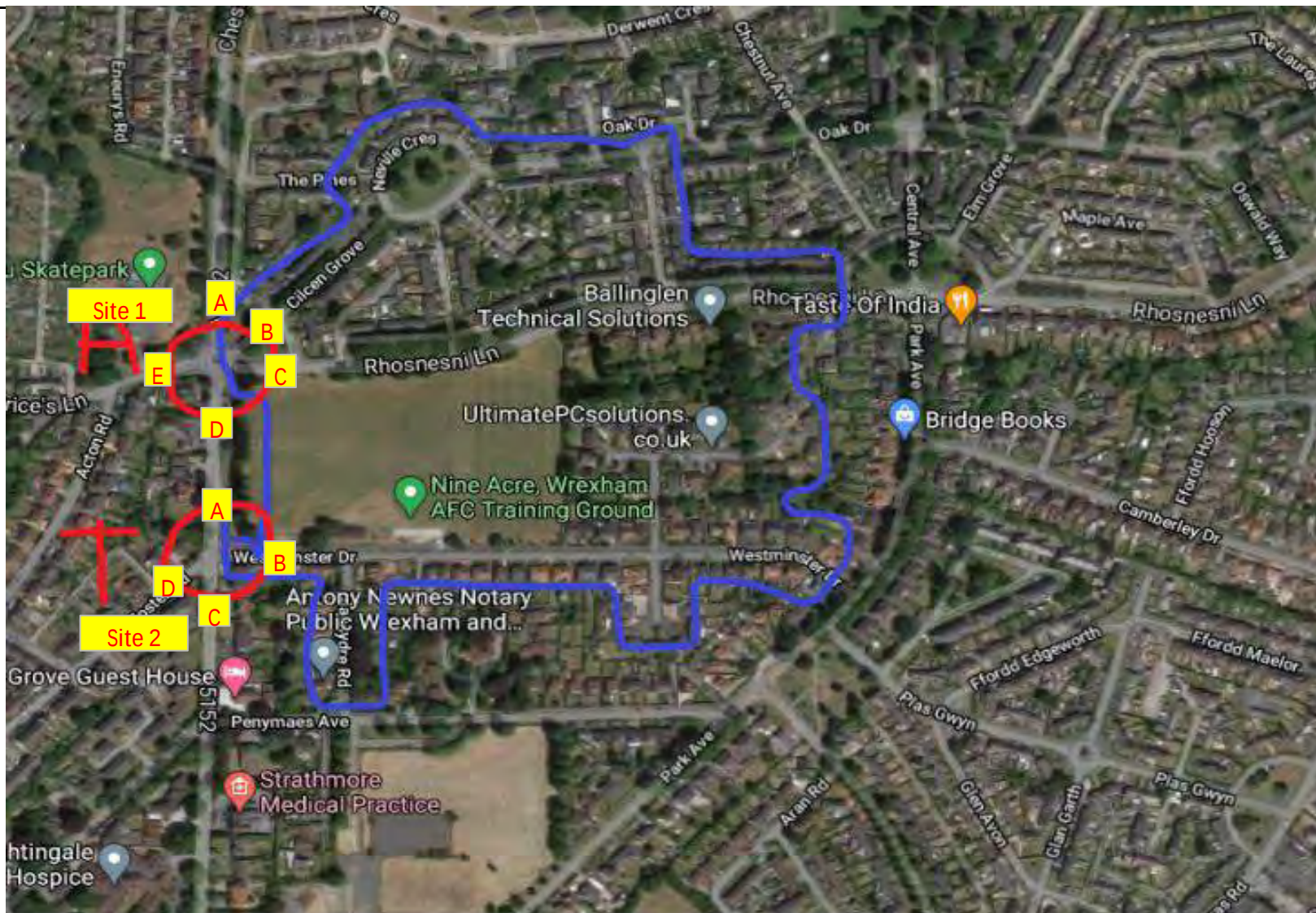
Client: Development Planning Ltd

Survey Date: Tuesday 2nd March 2021

Survey Period: 0800-0900 & 1430-1630

Survey Type: Manual Classified Counts

Comments: There were no incidents likely to affect the outcome of the surveys. Weather - Dry & Fine



TOTAL TRAFFIC
SURVEYS LTD
DATA COLLECTION

SITE / LOCATION:	Westminster Drive - Sites 1 & 2	JOB NO:	TTS-1235-Mar	DWG NO:	1235-001	DRAWN:	SES
SURVEY DATE:	Tuesday 2nd March 2020	DWG TITLE:	Location Plan and Observed Movements				
SURVEY TIMES:	0800-0900 & 1430-1630	JOB TITLE:	Westminster Drive, Wrexham				

Site: 1

Date: Tuesday 2nd March 2021

Location: A5152 Chester Road, Cilcen Grove, Rhosnesni Lane & Prices Lane (5 arm R'bout)

TIME	A - B							TOT	A - C							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
08:00	0	0	1	0	0	0	0	1	0	0	3	2	0	0	0	5
08:15	0	0	2	0	0	0	0	2	0	0	4	0	0	0	0	4
08:30	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	5
08:45	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	7
H/TOT	0	0	3	0	0	0	0	3	0	0	17	3	1	0	0	21
P/TOT	0	0	3	0	0	0	0	3	0	0	17	3	1	0	0	21

TIME	A - B							TOT	A - C							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
14:30	0	0	0	0	0	0	0	0	0	0	6	2	0	0	0	8
14:45	0	0	2	0	0	0	0	2	0	0	2	0	1	0	0	3
Hh/TOT	0	0	2	0	0	0	0	2	0	0	8	2	1	0	0	11
15:00	0	0	1	0	1	0	0	2	0	0	16	1	0	0	0	17
15:15	0	0	3	0	0	0	0	3	0	0	5	2	0	0	0	7
15:30	0	0	1	0	0	0	0	1	0	0	6	2	0	0	0	8
15:45	0	0	4	1	0	0	0	5	0	0	6	1	0	0	0	7
H/TOT	0	0	9	1	1	0	0	11	0	0	33	6	0	0	0	39
P/TOT	0	0	11	1	1	0	0	13	0	0	41	8	1	0	0	50

Site: 1

Date: Tuesday 2nd March 2021

Location: A5152 Chester Road, Cilcen Grove, Rhosnesni Lane & Prices Lane (5 arm R'bout)

TIME	A - D							TOT	A - E							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
08:00	0	0	56	12	0	0	1	69	0	0	7	2	0	0	0	9
08:15	2	0	55	11	0	0	0	68	0	0	5	1	0	0	0	6
08:30	0	0	66	9	1	1	1	78	0	0	6	1	0	0	0	7
08:45	0	0	73	12	3	0	0	88	0	0	17	0	1	0	0	18
H/TOT	2	0	250	44	4	1	2	303	0	0	35	4	1	0	0	40
P/TOT	2	0	250	44	4	1	2	303	0	0	35	4	1	0	0	40

TIME	A - D							TOT	A - E							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
14:30	0	0	41	7	0	0	0	48	0	1	6	0	0	0	0	7
14:45	1	0	51	6	0	0	0	58	0	0	5	1	0	0	0	6
H/TOT	1	0	92	13	0	0	0	106	0	1	11	1	0	0	0	13
15:00	1	1	44	3	0	1	1	51	0	0	8	3	0	0	0	11
15:15	0	1	42	3	1	0	0	47	0	0	8	2	0	0	0	10
15:30	0	0	38	12	0	0	0	50	0	0	2	1	0	0	0	3
15:45	0	1	41	5	0	0	0	47	0	0	12	1	0	0	0	13
H/TOT	1	3	165	23	1	1	1	195	0	0	30	7	0	0	0	37
P/TOT	2	3	257	36	1	1	1	301	0	1	41	8	0	0	0	50

Site: 1

Date: Tuesday 2nd March 2021

Location: A5152 Chester Road, Cilcen Grove, Rhosnesni Lane & Prices Lane (5 arm R'bout)

	A - A								B - C							
TIME	PC	MC	CAR	LGV	OGV1	OGV2	PSV	TOT	PC	MC	CAR	LGV	OGV1	OGV2	PSV	TOT
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TIME	A - A							TOT	B - C							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
14:30	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0

Site: 1

Date: Tuesday 2nd March 2021

Location: A5152 Chester Road, Cilcen Grove, Rhosnesni Lane & Prices Lane (5 arm R'bout)

TIME	B - D							TOT	B - E							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TIME	B - D							TOT	B - E							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Site: 1

Date: Tuesday 2nd March 2021

Location: A5152 Chester Road, Cilcen Grove, Rhosnesni Lane & Prices Lane (5 arm R'bout)

TIME	B - A							TOT	B - B							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TIME	B - A							TOT	B - B							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Site: 1

Date: Tuesday 2nd March 2021

Location: A5152 Chester Road, Cilcen Grove, Rhosnesni Lane & Prices Lane (5 arm R'bout)

TIME	C - D							TOT	C - E							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
08:00	0	0	15	1	1	0	1	18	0	0	17	6	0	0	0	23
08:15	0	0	12	2	0	0	0	14	0	0	20	3	0	0	0	23
08:30	0	0	12	1	0	0	0	13	0	0	31	3	0	0	0	34
08:45	0	0	8	2	0	0	0	10	0	0	24	2	0	0	0	26
H/TOT	0	0	47	6	1	0	1	55	0	0	92	14	0	0	0	106
P/TOT	0	0	47	6	1	0	1	55	0	0	92	14	0	0	0	106

TIME	C - D							TOT	C - E							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
14:30	0	0	7	0	0	0	0	7	2	0	16	2	0	0	0	20
14:45	0	0	13	2	0	0	0	15	1	0	28	3	0	0	0	32
H/TOT	0	0	20	2	0	0	0	22	3	0	44	5	0	0	0	52
15:00	0	0	13	0	1	0	1	15	1	0	33	3	0	0	0	37
15:15	0	0	16	3	1	0	1	21	1	0	25	4	0	0	0	30
15:30	0	0	7	2	0	0	0	9	0	1	19	6	0	0	0	26
15:45	1	0	8	2	0	0	0	11	1	0	10	3	0	0	0	14
H/TOT	1	0	44	7	2	0	2	56	3	1	87	16	0	0	0	107
P/TOT	1	0	64	9	2	0	2	78	6	1	131	21	0	0	0	159

Site: 1

Date: Tuesday 2nd March 2021

Location: A5152 Chester Road, Cilcen Grove, Rhosnesni Lane & Prices Lane (5 arm R'bout)

TIME	C - A							TOT	C - B							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
08:00	0	0	8	1	0	0	0	9	0	0	0	0	0	0	0	0
08:15	0	0	10	1	1	0	0	12	0	0	0	0	0	0	0	0
08:30	0	0	11	5	0	0	0	16	0	0	0	0	0	0	0	0
08:45	0	0	11	3	1	0	0	15	0	0	0	0	0	0	0	0
H/TOT	0	0	40	10	2	0	0	52	0	0	0	0	0	0	0	0
P/TOT	0	0	40	10	2	0	0	52	0	0	0	0	0	0	0	0

TIME	C - A							TOT	C - B							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
14:30	0	0	11	6	0	0	0	17	0	0	0	0	0	0	0	0
14:45	0	0	17	1	0	0	0	18	0	0	0	0	0	0	0	0
H/TOT	0	0	28	7	0	0	0	35	0	0	0	0	0	0	0	0
15:00	0	0	20	3	0	0	0	23	0	0	0	0	0	0	0	0
15:15	1	0	7	0	1	0	0	9	0	0	0	0	0	0	0	0
15:30	0	0	11	1	0	0	0	12	0	0	0	0	0	0	0	0
15:45	0	0	11	3	0	0	0	14	0	0	0	0	0	0	0	0
H/TOT	1	0	49	7	1	0	0	58	0	0	0	0	0	0	0	0
P/TOT	1	0	77	14	1	0	0	93	0	0	0	0	0	0	0	0

Site: 1

Date: Tuesday 2nd March 2021

Location: A5152 Chester Road, Cilcen Grove, Rhosnesni Lane & Prices Lane (5 arm R'bout)

TIME	C - C							TOT	D - E							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
08:00	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3
08:15	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	5
08:30	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	5
08:45	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4
H/TOT	0	0	0	0	0	0	0	0	0	0	11	6	0	0	0	17
P/TOT	0	0	0	0	0	0	0	0	0	0	11	6	0	0	0	17

TIME	C - C							TOT	D - E							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
14:30	0	0	0	0	0	0	0	0	0	0	7	1	0	0	0	8
14:45	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4
H/TOT	0	0	0	0	0	0	0	0	0	0	10	2	0	0	0	12
15:00	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	6
15:15	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9
15:30	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4
15:45	0	0	0	0	0	0	0	0	0	0	13	2	0	0	0	15
H/TOT	0	0	0	0	0	0	0	0	0	0	31	3	0	0	0	34
P/TOT	0	0	0	0	0	0	0	0	0	0	41	5	0	0	0	46

Site: 1

Date: Tuesday 2nd March 2021

Location: A5152 Chester Road, Cilcen Grove, Rhosnesni Lane & Prices Lane (5 arm R'bout)

TIME	D - A							TOT	D - B							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
08:00	1	0	29	7	1	0	0	38	0	0	1	1	1	0	0	3
08:15	0	0	23	5	0	1	0	29	0	0	1	0	0	0	0	1
08:30	0	0	37	4	1	0	0	42	0	0	3	0	0	0	0	3
08:45	0	0	20	6	0	0	1	27	0	0	1	1	0	0	1	3
H/TOT	1	0	109	22	2	1	1	136	0	0	6	2	1	0	1	10
P/TOT	1	0	109	22	2	1	1	136	0	0	6	2	1	0	1	10

TIME	D - A							TOT	D - B							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
14:30	0	0	50	7	1	0	0	58	0	0	7	0	0	0	0	7
14:45	0	0	52	11	3	0	1	67	0	0	8	0	0	0	1	9
H/TOT	0	0	102	18	4	0	1	125	0	0	15	0	0	0	1	16
15:00	0	0	58	6	1	0	0	65	0	0	9	1	0	0	0	10
15:15	0	0	51	10	0	0	1	62	0	0	3	0	0	0	0	3
15:30	0	0	42	6	1	0	0	49	1	0	6	1	0	0	0	8
15:45	0	0	57	10	1	0	1	69	0	0	7	1	0	0	1	9
H/TOT	0	0	208	32	3	0	2	245	1	0	25	3	0	0	1	30
P/TOT	0	0	310	50	7	0	3	370	1	0	40	3	0	0	2	46

Site: 1

Date: Tuesday 2nd March 2021

Location: A5152 Chester Road, Cilcen Grove, Rhosnesni Lane & Prices Lane (5 arm R'bout)

TIME	D - C							TOT	D - D							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
08:00	0	0	2	2	0	0	0	4	0	0	0	0	0	0	0	0
08:15	0	0	3	0	0	0	1	4	0	0	0	0	0	0	0	0
08:30	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0
08:45	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0
H/TOT	0	0	10	2	0	0	1	13	0	0	0	0	0	0	0	0
P/TOT	0	0	10	2	0	0	1	13	0	0	0	0	0	0	0	0

TIME	D - C							TOT	D - D							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
14:30	0	0	3	0	0	0	0	3	0	0	1	0	0	0	0	1
14:45	0	0	12	1	0	0	0	13	0	0	0	0	0	0	0	0
H/TOT	0	0	15	1	0	0	0	16	0	0	1	0	0	0	0	1
15:00	0	0	12	1	0	0	0	13	0	0	0	0	0	0	0	0
15:15	0	0	6	1	0	0	0	7	0	0	0	0	0	0	0	0
15:30	0	0	12	1	0	0	0	13	0	0	1	0	0	0	0	1
15:45	0	0	12	0	0	0	0	12	0	0	0	0	0	0	0	0
H/TOT	0	0	42	3	0	0	0	45	0	0	1	0	0	0	0	1
P/TOT	0	0	57	4	0	0	0	61	0	0	2	0	0	0	0	2

Site: 1

Date: Tuesday 2nd March 2021

Location: A5152 Chester Road, Cilcen Grove, Rhosnesni Lane & Prices Lane (5 arm R'bout)

TIME	E - A							TOT	E - B							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
08:00	0	0	6	2	0	0	0	8	0	0	2	0	1	0	0	3
08:15	0	0	3	0	0	0	0	3	0	0	5	1	0	0	0	6
08:30	0	0	3	3	0	0	0	6	0	0	2	1	0	0	0	3
08:45	0	0	5	2	0	0	0	7	0	0	4	1	0	0	0	5
H/TOT	0	0	17	7	0	0	0	24	0	0	13	3	1	0	0	17
P/TOT	0	0	17	7	0	0	0	24	0	0	13	3	1	0	0	17

TIME	E - A							TOT	E - B							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
14:30	0	2	13	4	0	0	0	19	0	0	8	0	0	0	0	8
14:45	0	0	10	0	0	0	0	10	0	0	5	0	0	0	0	5
H/TOT	0	2	23	4	0	0	0	29	0	0	13	0	0	0	0	13
15:00	0	0	7	0	0	0	0	7	0	0	13	0	0	0	0	13
15:15	0	0	11	2	0	0	0	13	0	0	13	0	0	0	0	13
15:30	0	0	13	2	0	0	0	15	0	0	9	1	0	0	0	10
15:45	1	1	7	1	0	0	0	10	0	0	6	1	0	0	0	7
H/TOT	1	1	38	5	0	0	0	45	0	0	41	2	0	0	0	43
P/TOT	1	3	61	9	0	0	0	74	0	0	54	2	0	0	0	56

Site: 1

Date: Tuesday 2nd March 2021

Location: A5152 Chester Road, Cilcen Grove, Rhosnesni Lane & Prices Lane (5 arm R'bout)

TIME	E - C							TOT	E - D							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
08:00	0	0	15	1	0	0	0	16	0	0	3	0	0	0	0	3
08:15	1	0	11	5	0	0	0	17	0	0	6	0	0	0	0	6
08:30	0	0	18	1	0	0	0	19	0	0	3	1	0	0	0	4
08:45	0	0	13	1	0	0	0	14	0	0	11	0	0	0	0	11
H/TOT	1	0	57	8	0	0	0	66	0	0	23	1	0	0	0	24
P/TOT	1	0	57	8	0	0	0	66	0	0	23	1	0	0	0	24

TIME	E - C							TOT	E - D							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
14:30	0	0	15	1	0	0	0	16	0	0	2	1	0	0	0	3
14:45	0	0	17	5	0	0	0	22	0	0	6	0	0	0	0	6
H/TOT	0	0	32	6	0	0	0	38	0	0	8	1	0	0	0	9
15:00	1	0	15	7	0	0	0	23	0	0	6	1	0	0	0	7
15:15	0	0	31	0	0	0	0	31	0	0	8	1	0	0	0	9
15:30	0	0	21	4	0	0	0	25	0	0	6	1	0	0	0	7
15:45	0	0	18	3	0	0	0	21	0	0	1	0	0	0	0	1
H/TOT	1	0	85	14	0	0	0	100	0	0	21	3	0	0	0	24
P/TOT	1	0	117	20	0	0	0	138	0	0	29	4	0	0	0	33

Site: 1

Date: Tuesday 2nd March 2021

LocaticA5152 Chester Road, Cilcen Grove, Rhosnesni Lane & Prices Lane (5 arm R'bout)

TIME	E - E							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV	
08:00	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0
08:30	0	0	0	1	0	0	0	1
08:45	0	0	0	1	0	0	0	1
H/TOT	0	0	0	2	0	0	0	2
P/TOT	0	0	0	2	0	0	0	2

TIME	E - E							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV	
14:30	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
15:00	0	0	1	1	0	0	0	2
15:15	0	0	1	0	0	0	0	1
15:30	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0
H/TOT	0	0	2	1	0	0	0	3
P/TOT	0	0	2	1	0	0	0	3

Site: 1

Date: Tuesday 2nd March 2021

Location: A5152 Chester Road, Cilcen Grove, Rhosnesni Lane & Prices Lane (5 arm R'bout)

TIME	FROM ARM A							TOT	TO ARM A							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
08:00	0	0	67	16	0	0	1	83	1	0	43	10	1	0	0	55
08:15	2	0	66	12	0	0	0	80	0	0	36	6	1	1	0	44
08:30	0	0	76	10	2	1	1	89	0	0	51	12	1	0	0	64
08:45	0	0	96	13	4	0	0	113	0	0	36	11	1	0	1	48
H/TOT	2	0	305	51	6	1	2	365	1	0	166	39	4	1	1	211
P/TOT	2	0	305	51	6	1	2	365	1	0	166	39	4	1	1	211

TIME	FROM ARM A							TOT	TO ARM A							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
14:30	0	1	53	10	0	0	0	64	0	2	74	18	1	0	0	95
14:45	1	0	60	7	1	0	0	69	0	0	79	12	3	0	1	94
H/TOT	1	1	113	17	1	0	0	133	0	2	153	30	4	0	1	189
15:00	1	1	69	7	1	1	1	80	0	0	85	9	1	0	0	95
15:15	0	1	58	7	1	0	0	67	1	0	69	12	1	0	1	83
15:30	0	0	47	15	0	0	0	62	0	0	66	9	1	0	0	76
15:45	0	1	63	8	0	0	0	72	1	1	75	14	1	0	1	92
H/TOT	1	3	237	37	2	1	1	281	2	1	295	44	4	0	2	346
P/TOT	2	4	350	54	3	1	1	414	2	3	448	74	8	0	3	535

Site: 1

Date: Tuesday 2nd March 2021

Location: A5152 Chester Road, Cilcen Grove, Rhosnesni Lane & Prices Lane (5 arm R'bout)

TIME	FROM ARM B							TOT	TO ARM B							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
08:00	0	0	0	0	0	0	0	0	0	0	4	1	2	0	0	7
08:15	0	0	0	0	0	0	0	0	0	0	8	1	0	0	0	9
08:30	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	6
08:45	0	0	0	0	0	0	0	0	0	0	5	2	0	0	1	7
H/TOT	0	0	0	0	0	0	0	0	0	0	22	5	2	0	1	29
P/TOT	0	0	0	0	0	0	0	0	0	0	22	5	2	0	1	29

TIME	FROM ARM B							TOT	TO ARM B							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
14:30	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	15
14:45	0	0	0	0	0	0	0	0	0	0	15	0	0	0	1	15
H/TOT	0	0	0	0	0	0	0	0	0	0	30	0	0	0	1	30
15:00	0	0	0	0	0	0	0	0	0	0	23	1	1	0	0	25
15:15	0	0	0	0	0	0	0	0	0	0	19	0	0	0	0	19
15:30	0	0	0	0	0	0	0	0	1	0	16	2	0	0	0	19
15:45	0	0	0	0	0	0	0	0	0	0	17	3	0	0	1	20
H/TOT	0	0	0	0	0	0	0	0	1	0	75	6	1	0	1	83
P/TOT	0	0	0	0	0	0	0	0	1	0	105	6	1	0	2	113

Site: 1

Date: Tuesday 2nd March 2021

Location: A5152 Chester Road, Cilcen Grove, Rhosnesni Lane & Prices Lane (5 arm R'bout)

TIME	FROM ARM D							TOT	TO ARM D							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
08:00	1	0	34	11	2	0	0	48	0	0	74	13	1	0	2	88
08:15	0	0	30	7	0	1	1	38	2	0	73	13	0	0	0	88
08:30	0	0	46	6	1	0	0	53	0	0	81	11	1	1	1	94
08:45	0	0	26	8	0	0	2	34	0	0	92	14	3	0	0	109
H/TOT	1	0	136	32	3	1	3	173	2	0	320	51	5	1	3	379
P/TOT	1	0	136	32	3	1	3	173	2	0	320	51	5	1	3	379

TIME	FROM ARM D							TOT	TO ARM D							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
14:30	0	0	68	8	1	0	0	77	0	0	51	8	0	0	0	59
14:45	0	0	75	13	3	0	2	91	1	0	70	8	0	0	0	79
H/TOT	0	0	143	21	4	0	2	168	1	0	121	16	0	0	0	138
15:00	0	0	84	9	1	0	0	94	1	1	63	4	1	1	2	71
15:15	0	0	69	11	0	0	1	80	0	1	66	7	2	0	1	76
15:30	1	0	65	8	1	0	0	75	0	0	52	15	0	0	0	67
15:45	0	0	89	13	1	0	2	103	1	1	50	7	0	0	0	59
H/TOT	1	0	307	41	3	0	3	352	2	3	231	33	3	1	3	273
P/TOT	1	0	450	62	7	0	5	520	3	3	352	49	3	1	3	411

Site: 1

Date: Tuesday 2nd March 2021

Location: A5152 Chester Road, Cilcen Grove, Rhosnesni Lane & Prices Lane (5 arm R'bout)

TIME	FROM ARM E							TOT	TO ARM E							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
08:00	0	0	26	3	1	0	0	30	0	0	26	9	0	0	0	35
08:15	1	0	25	6	0	0	0	32	0	0	28	6	0	0	0	34
08:30	0	0	26	7	0	0	0	33	0	0	40	7	0	0	0	47
08:45	0	0	33	5	0	0	0	38	0	0	44	4	1	0	0	49
H/TOT	1	0	110	21	1	0	0	133	0	0	138	26	1	0	0	165
P/TOT	1	0	110	21	1	0	0	133	0	0	138	26	1	0	0	165

TIME	FROM ARM E							TOT	TO ARM E							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
14:30	0	2	38	6	0	0	0	46	2	1	29	3	0	0	0	35
14:45	0	0	38	5	0	0	0	43	1	0	36	5	0	0	0	42
H/TOT	0	2	76	11	0	0	0	89	3	1	65	8	0	0	0	77
15:00	1	0	42	9	0	0	0	52	1	0	47	8	0	0	0	56
15:15	0	0	64	3	0	0	0	67	1	0	43	6	0	0	0	50
15:30	0	0	49	8	0	0	0	57	0	1	25	7	0	0	0	33
15:45	1	1	32	5	0	0	0	39	1	0	35	6	0	0	0	42
H/TOT	2	1	187	25	0	0	0	215	3	1	150	27	0	0	0	181
P/TOT	2	3	263	36	0	0	0	304	6	2	215	35	0	0	0	258

Site: 2

Location: A5152 Chester Road, Westminster Dr & Foster Road (4 arm X'rds)

TIME	A - B							TOT	A - D							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
08:00	0	0	3	0	0	0	0	3	0	0	2	0	0	0	0	2
08:15	0	0	2	1	0	0	0	3	0	0	2	0	0	0	0	2
08:30	0	0	3	1	0	0	0	4	1	0	2	0	0	0	0	3
08:45	0	0	5	2	0	0	0	7	0	0	2	1	0	0	0	3
H/TOT	0	0	13	4	0	0	0	17	1	0	8	1	0	0	0	10
P/TOT	0	0	13	4	0	0	0	17	1	0	8	1	0	0	0	10

TIME	A - B							TOT	A - D							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
14:30	0	0	4	1	0	0	0	5	0	0	2	0	0	0	0	2
14:45	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0
Hh/TOT	0	0	6	1	0	0	0	7	0	0	2	0	0	0	0	2
15:00	0	0	5	0	0	0	0	5	0	0	1	0	0	0	0	1
15:15	0	0	3	1	0	0	1	5	0	0	0	0	0	0	0	0
15:30	0	0	6	1	0	0	0	7	0	0	1	1	0	0	0	2
15:45	0	0	3	0	0	0	0	3	1	0	1	0	0	0	0	2
H/TOT	0	0	17	2	0	0	1	20	1	0	3	1	0	0	0	5
P/TOT	0	0	23	3	0	0	1	27	1	0	5	1	0	0	0	7

Site: 2

Location: A5152 Chester Road, Westminster Dr & Foster Road (4 arm X'roads)

TIME	B - C							TOT	B - A							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
08:00	0	0	2	0	0	0	0	2	0	0	4	0	0	0	0	4
08:15	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3
08:45	0	0	2	0	0	0	0	2	0	0	4	0	0	0	0	4
H/TOT	0	0	6	0	0	0	0	6	0	0	11	0	0	0	0	11
P/TOT	0	0	6	0	0	0	0	6	0	0	11	0	0	0	0	11

TIME	B - C							TOT	B - A							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
14:30	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0
14:45	0	0	2	0	0	0	0	2	0	0	2	0	0	0	0	2
H/TOT	0	0	5	0	0	0	0	5	0	0	2	0	0	0	0	2
15:00	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4
15:15	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
15:30	0	0	1	1	0	0	0	2	0	0	0	0	0	0	0	0
15:45	0	0	1	0	0	0	0	1	0	0	4	0	0	0	0	4
H/TOT	0	0	2	1	0	0	0	3	0	0	9	1	0	0	0	10
P/TOT	0	0	7	1	0	0	0	8	0	0	11	1	0	0	0	12

Site: 2

Location: A5152 Chester Road, Westminster Dr & Foster Road (4 arm X'rds)

TIME	B - D							TOT	C - B							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
08:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
08:15	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2
08:30	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
08:45	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
H/TOT	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5
P/TOT	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5

TIME	B - D							TOT	C - B							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
14:30	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	1
14:45	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
H/TOT	0	0	1	0	0	0	0	1	0	0	3	0	0	0	0	3
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
15:45	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4
H/TOT	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5
P/TOT	0	0	1	0	0	0	0	1	0	0	8	0	0	0	0	8

Site: 2

Location: A5152 Chester Road, Westminster Dr & Foster Road (4 arm X'rds)

TIME	C - D							TOT	D - C							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
08:00	0	0	0	1	0	0	0	1	0	0	1	0	0	0	0	1
08:15	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	2	0	0	0	0	2	0	0	1	0	0	0	0	1
H/TOT	0	0	3	1	0	0	0	4	0	0	2	0	0	0	0	2
P/TOT	0	0	3	1	0	0	0	4	0	0	2	0	0	0	0	2

TIME	C - D							TOT	D - C							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
14:30	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
14:45	0	0	1	0	0	0	0	1	0	0	2	0	0	0	0	2
H/TOT	0	0	1	0	0	0	0	1	0	0	3	0	0	0	0	3
15:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
15:45	0	0	1	1	0	0	0	2	0	0	1	1	0	0	0	2
H/TOT	0	0	1	1	0	0	0	2	0	0	4	1	0	0	0	5
P/TOT	0	0	2	1	0	0	0	3	0	0	7	1	0	0	0	8

Site: 2

Location: A5152 Chester Road, Westminster Dr & Foster Road (4 arm X'roads)

TIME	D - A							TOT	D - B							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
08:00	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
08:15	0	0	4	1	0	0	0	5	0	0	0	0	0	0	0	0
08:30	0	0	5	0	0	0	0	5	0	0	1	0	0	0	0	1
08:45	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
H/TOT	0	0	10	2	0	0	0	12	0	0	1	0	0	0	0	1
P/TOT	0	0	10	2	0	0	0	12	0	0	1	0	0	0	0	1

TIME	D - A							TOT	D - B							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
14:30	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0
14:45	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0
H/TOT	0	0	5	0	0	0	0	5	0	0	0	0	0	0	0	0
15:00	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
15:30	1	0	3	2	0	0	0	6	0	0	0	0	0	0	0	0
15:45	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0
H/TOT	1	0	9	3	0	0	0	13	0	0	1	0	0	0	0	1
P/TOT	1	0	14	3	0	0	0	18	0	0	1	0	0	0	0	1

Site: 2

Location: A5152 Chester Road, Westminster Dr & Foster Road (4 arm X'rds)

TIME	TO ARM A							TOT	FROM ARM A							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
08:00	0	0	4	1	0	0	0	5	0	0	5	0	0	0	0	5
08:15	0	0	4	1	0	0	0	5	0	0	4	1	0	0	0	5
08:30	0	0	8	0	0	0	0	8	1	0	5	1	0	0	0	7
08:45	0	0	5	0	0	0	0	5	0	0	7	3	0	0	0	10
H/TOT	0	0	21	2	0	0	0	23	1	0	21	5	0	0	0	27
P/TOT	0	0	21	2	0	0	0	23	1	0	21	5	0	0	0	27

TIME	TO ARM A							TOT	FROM ARM A							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
14:30	0	0	2	0	0	0	0	2	0	0	6	1	0	0	0	7
14:45	0	0	5	0	0	0	0	5	0	0	2	0	0	0	0	2
H/TOT	0	0	7	0	0	0	0	7	0	0	8	1	0	0	0	9
15:00	0	0	5	2	0	0	0	7	0	0	6	0	0	0	0	6
15:15	0	0	2	0	0	0	0	2	0	0	3	1	0	0	1	5
15:30	1	0	3	2	0	0	0	6	0	0	7	2	0	0	0	9
15:45	0	0	8	0	0	0	0	8	1	0	4	0	0	0	0	5
H/TOT	1	0	18	4	0	0	0	23	1	0	20	3	0	0	1	25
P/TOT	1	0	25	4	0	0	0	30	1	0	28	4	0	0	1	34

Site: 2

Location: A5152 Chester Road, Westminster Dr & Foster Road (4 arm X'rds)

TIME	TO ARM B							TOT	FROM ARM B							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
08:00	0	0	4	0	0	0	0	4	0	0	6	0	0	0	0	6
08:15	0	0	3	2	0	0	0	5	0	0	2	0	0	0	0	2
08:30	0	0	5	1	0	0	0	6	0	0	3	0	0	0	0	3
08:45	0	0	6	2	0	0	0	8	0	0	6	0	0	0	0	6
H/TOT	0	0	18	5	0	0	0	23	0	0	17	0	0	0	0	17
P/TOT	0	0	18	5	0	0	0	23	0	0	17	0	0	0	0	17

TIME	TO ARM B							TOT	FROM ARM B							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
14:30	0	0	5	1	0	0	0	6	0	0	4	0	0	0	0	4
14:45	0	0	4	0	0	0	0	4	0	0	4	0	0	0	0	4
H/TOT	0	0	9	1	0	0	0	10	0	0	8	0	0	0	0	8
15:00	0	0	5	0	0	0	0	5	0	0	3	1	0	0	0	4
15:15	0	0	4	1	0	0	1	6	0	0	2	0	0	0	0	2
15:30	0	0	7	1	0	0	0	8	0	0	1	1	0	0	0	2
15:45	0	0	7	0	0	0	0	7	0	0	5	0	0	0	0	5
H/TOT	0	0	23	2	0	0	1	26	0	0	11	2	0	0	0	13
P/TOT	0	0	32	3	0	0	1	36	0	0	19	2	0	0	0	21

Site: 2

Location: A5152 Chester Road, Westminster Dr & Foster Road (4 arm X'rds)

TIME	TO ARM C							TOT	FROM ARM C							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
08:00	0	0	3	0	0	0	0	3	0	0	1	1	0	0	0	2
08:15	0	0	2	0	0	0	0	2	0	0	2	1	0	0	0	3
08:30	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
08:45	0	0	3	0	0	0	0	3	0	0	3	0	0	0	0	3
H/TOT	0	0	8	0	0	0	0	8	0	0	7	2	0	0	0	9
P/TOT	0	0	8	0	0	0	0	8	0	0	7	2	0	0	0	9

TIME	TO ARM C							TOT	FROM ARM C							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
14:30	0	0	4	0	0	0	0	4	0	0	1	0	0	0	0	1
14:45	0	0	4	0	0	0	0	4	0	0	3	0	0	0	0	3
H/TOT	0	0	8	0	0	0	0	8	0	0	4	0	0	0	0	4
15:00	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	3	1	0	0	0	4	0	0	1	0	0	0	0	1
15:45	0	0	2	1	0	0	0	3	0	0	5	1	0	0	0	6
H/TOT	0	0	6	2	0	0	0	8	0	0	6	1	0	0	0	7
P/TOT	0	0	14	2	0	0	0	16	0	0	10	1	0	0	0	11

Site: 2

Location: A5152 Chester Road, Westminster Dr & Foster Road (4 arm X'roads)

TIME	TO ARM D							TOT	FROM ARM D							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
08:00	0	0	2	1	0	0	0	3	0	0	1	1	0	0	0	2
08:15	0	0	3	0	0	0	0	3	0	0	4	1	0	0	0	5
08:30	1	0	2	0	0	0	0	3	0	0	6	0	0	0	0	6
08:45	0	0	4	1	0	0	0	5	0	0	2	0	0	0	0	2
H/TOT	1	0	11	2	0	0	0	14	0	0	13	2	0	0	0	15
P/TOT	1	0	11	2	0	0	0	14	0	0	13	2	0	0	0	15

TIME	TO ARM D							TOT	FROM ARM D							TOT
	PC	MC	CAR	LGV	OGV1	OGV2	PSV		PC	MC	CAR	LGV	OGV1	OGV2	PSV	
14:30	0	0	3	0	0	0	0	3	0	0	3	0	0	0	0	3
14:45	0	0	1	0	0	0	0	1	0	0	5	0	0	0	0	5
H/TOT	0	0	4	0	0	0	0	4	0	0	8	0	0	0	0	8
15:00	0	0	1	0	0	0	0	1	0	0	3	1	0	0	0	4
15:15	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
15:30	0	0	1	1	0	0	0	2	1	0	5	2	0	0	0	8
15:45	1	0	2	1	0	0	0	4	0	0	5	1	0	0	0	6
H/TOT	1	0	4	2	0	0	0	7	1	0	14	4	0	0	0	19
P/TOT	1	0	8	2	0	0	0	11	1	0	22	4	0	0	0	27

APPENDIX C

count_poir	year	region_id	region_nar	local_auth	local_auth	road_name	road_type	start_junct	end_junct	easting	northing	latitude	longitude	link_length	link_length	estimation	estimation	pedal_cycl	two_wheel	cars_and_t	buses_and	lgvs	hgvs_2_rig	hgvs_3_rig	hgvs_4_or	hgvs_3_or	hgvs_5_ar	hgvs_6_ar	all_hgvs	all_motor	Estimated Peak Hour
40667	2000	4	Wales	26	Wrexham	A5152	Major	Chester Rd A483 / A51	333730	351894	53.06017	-2.99029	2.6	1.62	Estimated	Estimated		34	114	10375	0	1139	212	25	7	15	12	10	281	11909	1191
40667	2001	4	Wales	26	Wrexham	A5152	Major	Chester Rd A483 / A51	333730	351894	53.06017	-2.99029	2.6	1.62	Counted	Manual cor		82	49	8924	171	740	111	7	5	15	15	3	156	10040	1004
40667	2002	4	Wales	26	Wrexham	A5152	Major	Chester Rd A483 / A51	333730	351894	53.06017	-2.99029	2.6	1.62	Estimated	Estimated		85	51	9067	173	793	105	7	5	13	13	3	146	10230	1023
40667	2003	4	Wales	26	Wrexham	A5152	Major	Chester Rd A483 / A51	333730	351894	53.06017	-2.99029	2.6	1.62	Estimated	Estimated		76	72	8731	169	861	101	7	5	13	11	3	140	9973	997
40667	2004	4	Wales	26	Wrexham	A5152	Major	Chester Rd A483 / A51	333730	351894	53.06017	-2.99029	2.6	1.62	Counted	Manual cor		44	87	11752	230	1148	109	11	5	12	21	20	178	13395	1340
40667	2005	4	Wales	26	Wrexham	A5152	Major	Chester Rd A483 / A51	333730	351894	53.06017	-2.99029	2.6	1.62	Estimated	Estimated		37	71	11211	217	1224	118	12	6	10	17	20	183	12906	1291
40667	2006	4	Wales	26	Wrexham	A5152	Major	Chester Rd A483 / A51	333730	351894	53.06017	-2.99029	2.6	1.62	Estimated	Estimated		58	62	10999	201	1242	114	11	6	8	14	18	171	12675	1268
40667	2007	4	Wales	26	Wrexham	A5152	Major	Chester Rd A483 / A51	333730	351894	53.06017	-2.99029	2.6	1.62	Estimated	Estimated		36	59	10823	183	1308	106	10	6	7	12	18	159	12532	1253
40667	2008	4	Wales	26	Wrexham	A5152	Major	Chester Rd A483 / A51	333730	351894	53.06017	-2.99029	2.6	1.62	Estimated	Estimated		41	56	10584	159	1336	106	12	6	5	10	18	157	12292	1229
40667	2009	4	Wales	26	Wrexham	A5152	Major	Chester Rd A483 / A51	333730	351894	53.06017	-2.99029	2.6	1.62	Estimated	Estimated		41	63	10817	157	1356	96	12	6	5	8	18	145	12538	1254
40667	2010	4	Wales	26	Wrexham	A5152	Major	Chester Rd A483 / A51	333730	351894	53.06017	-2.99029	2.6	1.62	Estimated	Estimated		41	60	10752	178	1448	103	12	6	6	8	18	153	12591	1259
40667	2011	4	Wales	26	Wrexham	A5152	Major	Chester Rd A483 / A51	333730	351894	53.06017	-2.99029	2.6	1.62	Estimated	Estimated		45	51	10719	168	1616	105	13	7	5	8	20	158	12712	1271
40667	2012	4	Wales	26	Wrexham	A5152	Major	Chester Ro A483 / A51	333730	351894	53.06017	-2.99029	2.6	1.62	Counted	Manual cor		55	44	8918	161	869	64	9	2	9	7	7	99	10090	1009
40667	2013	4	Wales	26	Wrexham	A5152	Major	Chester Ro A483 / A51	333730	351894	53.06017	-2.99029	2.6	1.62	Estimated	Estimated		54	49	8840	168	903	64	10	2	7	7	8	98	10057	1006
40667	2014	4	Wales	26	Wrexham	A5152	Major	Chester Ro A483 / A51	333730	351894	53.06017	-2.99029	2.6	1.62	Estimated	Estimated		53	47	9079	162	965	66	11	2	6	6	7	98	10352	1035
40667	2015	4	Wales	26	Wrexham	A5152	Major	Chester Ro A483 / A51	333730	351894	53.06017	-2.99029	2.6	1.62	Estimated	Estimated		49	41	9259	174	1012	62	12	2	7	6	7	95	10583	1058
40667	2016	4	Wales	26	Wrexham	A5152	Major	Chester Ro A483 / A51	333730	351894	53.06017	-2.99029	2.6	1.62	Estimated	Estimated		46	40	9404	161	1106	63	11	2	7	5	7	96	10808	1081
40667	2017	4	Wales	26	Wrexham	A5152	Major	Chester Ro A483 / A51	333730	351894	53.06017	-2.99029	2.6	1.62	Estimated	Estimated		44	41	9334	151	1164	63	12	3	8	5	7	96	10787	1079
40667	2018	4	Wales	26	Wrexham	A5152	Major	Chester Ro A483 / A51	333730	351894	53.06017	-2.99029	2.6	1.62	Estimated	Estimated		48	40	9232	137	1186	63	12	2	8	5	7	97	10692	1069
40667	2019	4	Wales	26	Wrexham	A5152	Major	Chester Ro A483 / A51	333730	351894	53.06017	-2.99029	2.6	1.62	Estimated	Estimated		53	38	9347	138	1176	62	12	2	8	5	7	97	10796	1080

(Two-way)



APPENDIX D

Junctions 10											
PICADY 10 - Priority Intersection Module											
Version: 10.0.0.1499 © Copyright TRL Software Limited, 2021											
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Filename: 210325 Rhosnesni Lane Pick up - Drop Off.j10

Path: C:\Users\DavidSagstad\Dropbox\Working Back Up\Projects\2021217 Nine Acres School\Analysis

Report generation date: 25/03/2021 11:37:47

»2021 AM 50/50, AM

»2021 AM 70/30, AM

»2021 AM 30/70, AM

»2021 PM 50/50, PM

»2021 PM 70/30, PM

»2021 PM 30/70, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	2021 AM 50/50											
Stream B-AC	D11	0.4	12.06	0.27	B	74 %						
Stream C-AB		0.2	6.44	0.13	A	[Stream B-AC]						
	2021 AM 70/30											
Stream B-AC	D12	0.3	10.76	0.25	B	88 %						
Stream C-AB		0.3	6.79	0.18	A	[Stream B-AC]						
	2021 AM 30/70											
Stream B-AC	D13	0.4	13.30	0.29	B	65 %						
Stream C-AB		0.1	6.12	0.08	A	[Stream B-AC]						
	2021 PM 50/50											
Stream B-AC							D14	0.4	13.10	0.29	B	58 %
Stream C-AB								0.3	5.51	0.15	A	[Stream B-AC]
	2021 PM 70/30											
Stream B-AC							D15	0.3	11.39	0.26	B	72 %
Stream C-AB								0.5	5.82	0.21	A	[Stream B-AC]
	2021 PM 30/70											
Stream B-AC							D16	0.4	14.76	0.31	B	49 %
Stream C-AB								0.2	5.33	0.09	A	[Stream B-AC]

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

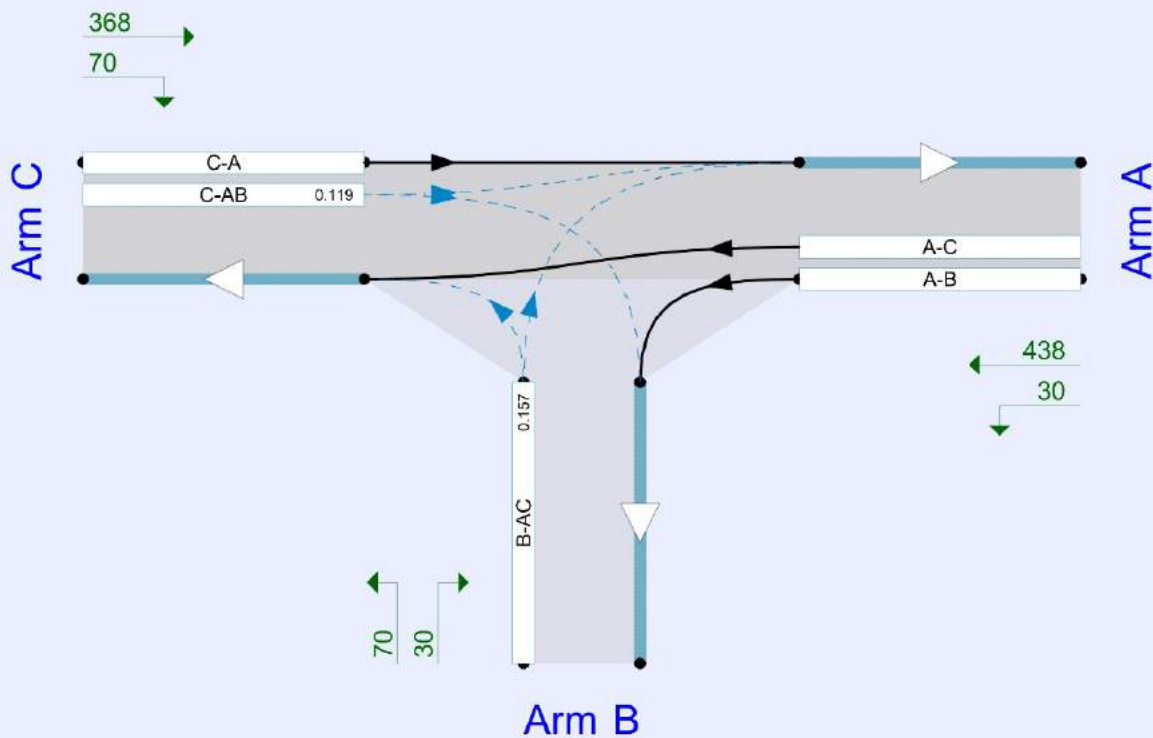
File summary

File Description

Title	
Location	
Site number	
Date	25/03/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AzureAD\DavidSagstad
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin



Flows show original traffic demand (PCU/hr).
Streams (downstream end) show RFC (l)

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75					✓	Delay	0.85	36.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2021	AM	Base	ONE HOUR	08:00	09:30	15			
D2	2021	PM	Base	ONE HOUR	15:00	16:30	15			
D3	2021 [D3]	AM	Doubled	ONE HOUR	08:00	09:30	15			
D4	2021 [D4]	PM	Doubled	ONE HOUR	15:00	16:30	15			
D5	2021 [D5]	AM	100% 50/50	ONE HOUR	08:00	09:30	15			
D6	2021 [D6]	PM	100% 50/50	ONE HOUR	15:00	16:30	15			
D7	2021 [D7]	AM	100% 70/30	ONE HOUR	08:00	09:30	15			
D8	2021 [D8]	PM	100% 70/30	ONE HOUR	15:00	16:30	15			
D9	2021 [D9]	AM	100% 30/70	ONE HOUR	08:00	09:30	15			
D10	2021 [D10]	PM	100% 30/70	ONE HOUR	15:00	16:30	15			
D11	2021 AM 50/50	AM	AM 50/50	ONE HOUR	08:00	09:30	15	✓	Simple	D3+D5
D12	2021 AM 70/30	AM	AM 70/30	ONE HOUR	08:00	09:30	15	✓	Simple	D3+D7
D13	2021 AM 30/70	AM	AM 30/70	ONE HOUR	08:00	09:30	15	✓	Simple	D3+D9
D14	2021 PM 50/50	PM	PM 50/50	ONE HOUR	15:00	16:30	15	✓	Simple	D4+D6
D15	2021 PM 70/30	PM	PM 70/30	ONE HOUR	15:00	16:30	15	✓	Simple	D4+D8
D16	2021 PM 30/70	PM	PM 30/70	ONE HOUR	15:00	16:30	15	✓	Simple	D4+D10

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2021 AM 50/50, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D11 - 2021 AM 50/50, AM	Demand Set 11: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	Demand Sets	D12 - 2021 AM 70/30, AM	Demand Set 12: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	Demand Sets	D13 - 2021 AM 30/70, AM	Demand Set 13: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	Demand Sets	D14 - 2021 PM 50/50, PM	Demand Set 14: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	Demand Sets	D15 - 2021 PM 70/30, PM	Demand Set 15: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	Demand Sets	D16 - 2021 PM 30/70, PM	Demand Set 16: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.02	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	74	Stream B-AC	2.02	A

Arms

Arms

Arm	Name	Description	Arm type
A	Rhosnesni Lane E		Major
B	Site Access		Minor
C	Rosnesni Lane W		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.50			50.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.00	20	20

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	494	0.088	0.222	0.140	0.318
B-C	637	0.095	0.241	-	-
C-B	603	0.229	0.229	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D11	2021 AM 50/50	AM	AM 50/50	ONE HOUR	08:00	09:30	15	✓	Simple	D3+D5

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	474	100.000
B		ONE HOUR	✓	100	100.000
C		ONE HOUR	✓	248	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	From A	0	50	424
	From B	50	0	50
	From C	198	50	0

Proportions

	To			
		A	B	C
	From A	0.00	0.11	0.89
	From B	0.50	0.00	0.50
	From C	0.80	0.20	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	From A	0	0	0
	From B	0	0	0
	From C	0	0	0

Average PCU Per Veh

	To			
		A	B	C
	From A	1.000	1.000	1.000
	From B	1.000	1.000	1.000
	From C	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A	357	357
	B	75	75
	C	187	187
08:15-08:30	A	426	426
	B	90	90
	C	223	223
08:30-08:45	A	522	522
	B	110	110
	C	273	273
08:45-09:00	A	522	522
	B	110	110
	C	273	273
09:00-09:15	A	426	426
	B	90	90
	C	223	223
09:15-09:30	A	357	357
	B	75	75
	C	187	187

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.27	12.06	0.4	B	92	138
C-AB	0.13	6.44	0.2	A	65	98
C-A					162	244
A-B					46	69
A-C					389	584

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	75	19	456	0.165	75	0.0	0.2	9.414	A
C-AB	49	12	627	0.079	49	0.0	0.1	6.224	A
C-A	137	34			137				
A-B	38	9			38				
A-C	319	80			319				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	90	22	436	0.206	90	0.2	0.3	10.378	B
C-AB	63	16	634	0.099	62	0.1	0.2	6.307	A
C-A	160	40			160				
A-B	45	11			45				
A-C	381	95			381				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	110	28	409	0.269	110	0.3	0.4	12.027	B
C-AB	84	21	643	0.130	83	0.2	0.2	6.432	A
C-A	190	47			190				
A-B	55	14			55				
A-C	467	117			467				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	110	28	409	0.270	110	0.4	0.4	12.061	B
C-AB	84	21	643	0.130	84	0.2	0.2	6.440	A
C-A	189	47			189				
A-B	55	14			55				
A-C	467	117			467				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	90	22	436	0.206	90	0.4	0.3	10.419	B
C-AB	63	16	634	0.099	63	0.2	0.2	6.316	A
C-A	160	40			160				
A-B	45	11			45				
A-C	381	95			381				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	75	19	456	0.165	76	0.3	0.2	9.468	A
C-AB	50	12	627	0.079	50	0.2	0.1	6.235	A
C-A	137	34			137				
A-B	38	9			38				
A-C	319	80			319				

2021 AM 70/30, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D11 - 2021 AM 50/50, AM	Demand Set 11: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	Demand Sets	D12 - 2021 AM 70/30, AM	Demand Set 12: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	Demand Sets	D13 - 2021 AM 30/70, AM	Demand Set 13: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	Demand Sets	D14 - 2021 PM 50/50, PM	Demand Set 14: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	Demand Sets	D15 - 2021 PM 70/30, PM	Demand Set 15: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	Demand Sets	D16 - 2021 PM 30/70, PM	Demand Set 16: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.13	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	88	Stream B-AC	2.13	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D12	2021 AM 70/30	AM	AM 70/30	ONE HOUR	08:00	09:30	15	✓	Simple	D3+D7

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	454	100.000
B		ONE HOUR	✓	100	100.000
C		ONE HOUR	✓	268	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	30	424
	B	30	0	70
From	C	198	70	0

Proportions

	To			
		A	B	C
	A	0.00	0.07	0.93
	B	0.30	0.00	0.70
From	C	0.74	0.26	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	
	0	0	0	
	0	0	0	

Average PCU Per Veh

From	To			
	A	B	C	
	1.000	1.000	1.000	
	1.000	1.000	1.000	

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A	342	342
	B	75	75
	C	202	202
08:15-08:30	A	408	408
	B	90	90
	C	241	241
08:30-08:45	A	500	500
	B	110	110
	C	295	295
08:45-09:00	A	500	500
	B	110	110
	C	295	295
09:00-09:15	A	408	408
	B	90	90
	C	241	241
09:15-09:30	A	342	342
	B	75	75
	C	202	202

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.25	10.76	0.3	B	92	138
C-AB	0.18	6.79	0.3	A	91	137
C-A					155	232
A-B					28	41
A-C					389	584

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	75	19	491	0.153	75	0.0	0.2	8.640	A
C-AB	69	17	630	0.109	68	0.0	0.2	6.401	A
C-A	133	33			133				
A-B	23	6			23				
A-C	319	80			319				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	90	22	471	0.191	90	0.2	0.2	9.424	A
C-AB	88	22	637	0.137	87	0.2	0.2	6.549	A
C-A	153	38			153				
A-B	27	7			27				
A-C	381	95			381				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	110	28	445	0.248	110	0.2	0.3	10.731	B
C-AB	117	29	648	0.180	116	0.2	0.3	6.776	A
C-A	179	45			179				
A-B	33	8			33				
A-C	467	117			467				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	110	28	445	0.248	110	0.3	0.3	10.755	B
C-AB	117	29	648	0.180	117	0.3	0.3	6.785	A
C-A	178	45			178				
A-B	33	8			33				
A-C	467	117			467				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	90	22	471	0.191	90	0.3	0.2	9.453	A
C-AB	88	22	638	0.137	88	0.3	0.2	6.560	A
C-A	153	38			153				
A-B	27	7			27				
A-C	381	95			381				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	75	19	490	0.154	76	0.2	0.2	8.680	A
C-AB	69	17	631	0.110	69	0.2	0.2	6.421	A
C-A	133	33			133				
A-B	23	6			23				
A-C	319	80			319				

2021 AM 30/70, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D11 - 2021 AM 50/50, AM	Demand Set 11: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	Demand Sets	D12 - 2021 AM 70/30, AM	Demand Set 12: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	Demand Sets	D13 - 2021 AM 30/70, AM	Demand Set 13: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	Demand Sets	D14 - 2021 PM 50/50, PM	Demand Set 14: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	Demand Sets	D15 - 2021 PM 70/30, PM	Demand Set 15: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	Demand Sets	D16 - 2021 PM 30/70, PM	Demand Set 16: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.94	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	65	Stream B-AC	1.94	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D13	2021 AM 30/70	AM	AM 30/70	ONE HOUR	08:00	09:30	15	✓	Simple	D3+D9

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	494	100.000
B		ONE HOUR	✓	100	100.000
C		ONE HOUR	✓	228	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
From	A	0	70	424
	B	70	0	30
	C	198	30	0

Proportions

	To			
		A	B	C
From	A	0.00	0.14	0.86
	B	0.70	0.00	0.30
	C	0.87	0.13	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	0
	B	0	0	0
	C	0	0	0

Average PCU Per Veh

	To			
		A	B	C
	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	A	372	372
	B	75	75
	C	172	172
08:15-08:30	A	444	444
	B	90	90
	C	205	205
08:30-08:45	A	544	544
	B	110	110
	C	251	251
08:45-09:00	A	544	544
	B	110	110
	C	251	251
09:00-09:15	A	444	444
	B	90	90
	C	205	205
09:15-09:30	A	372	372
	B	75	75
	C	172	172

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.29	13.30	0.4	B	92	138
C-AB	0.08	6.12	0.1	A	39	59
C-A					170	255
A-B					64	96
A-C					389	584

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	75	19	428	0.176	74	0.0	0.2	10.158	B
C-AB	30	7	624	0.048	29	0.0	0.1	6.053	A
C-A	142	35			142				
A-B	53	13			53				
A-C	319	80			319				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	90	22	408	0.220	90	0.2	0.3	11.285	B
C-AB	38	9	630	0.060	38	0.1	0.1	6.081	A
C-A	167	42			167				
A-B	63	16			63				
A-C	381	95			381				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	110	28	381	0.289	110	0.3	0.4	13.254	B
C-AB	50	13	639	0.079	50	0.1	0.1	6.120	A
C-A	201	50			201				
A-B	77	19			77				
A-C	467	117			467				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	110	28	381	0.289	110	0.4	0.4	13.299	B
C-AB	50	13	639	0.079	50	0.1	0.1	6.121	A
C-A	201	50			201				
A-B	77	19			77				
A-C	467	117			467				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	90	22	408	0.220	90	0.4	0.3	11.338	B
C-AB	38	9	630	0.060	38	0.1	0.1	6.086	A
C-A	167	42			167				
A-B	63	16			63				
A-C	381	95			381				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	75	19	428	0.176	76	0.3	0.2	10.216	B
C-AB	30	7	624	0.048	30	0.1	0.1	6.061	A
C-A	142	35			142				
A-B	53	13			53				
A-C	319	80			319				

2021 PM 50/50, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D11 - 2021 AM 50/50, AM	Demand Set 11: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	Demand Sets	D12 - 2021 AM 70/30, AM	Demand Set 12: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	Demand Sets	D13 - 2021 AM 30/70, AM	Demand Set 13: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	Demand Sets	D14 - 2021 PM 50/50, PM	Demand Set 14: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	Demand Sets	D15 - 2021 PM 70/30, PM	Demand Set 15: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	Demand Sets	D16 - 2021 PM 30/70, PM	Demand Set 16: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.82	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	58	Stream B-AC	1.82	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D14	2021 PM 50/50	PM	PM 50/50	ONE HOUR	15:00	16:30	15	✓	Simple	D4+D6

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	488	100.000
B		ONE HOUR	✓	100	100.000
C		ONE HOUR	✓	418	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	50	438
	B	50	0	50
From	C	368	50	0

Proportions

	To			
		A	B	C
	A	0.00	0.10	0.90
	B	0.50	0.00	0.50
From	C	0.88	0.12	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	0
	B	0	0	0
	C	0	0	0

Average PCU Per Veh

	To			
		A	B	C
	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
15:00-15:15	A	367	367
	B	75	75
	C	315	315
15:15-15:30	A	439	439
	B	90	90
	C	376	376
15:30-15:45	A	537	537
	B	110	110
	C	460	460
15:45-16:00	A	537	537
	B	110	110
	C	460	460
16:00-16:15	A	439	439
	B	90	90
	C	376	376
16:15-16:30	A	367	367
	B	75	75
	C	315	315

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.29	13.10	0.4	B	92	138
C-AB	0.15	5.51	0.3	A	86	129
C-A					297	446
A-B					46	69
A-C					402	603

Main Results for each time segment

15:00 - 15:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	75	19	441	0.171	74	0.0	0.2	9.801	A
C-AB	61	15	716	0.086	61	0.0	0.2	5.493	A
C-A	253	63			253				
A-B	38	9			38				
A-C	330	82			330				

15:15 - 15:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	90	22	418	0.215	90	0.2	0.3	10.965	B
C-AB	82	20	741	0.110	81	0.2	0.2	5.458	A
C-A	294	74			294				
A-B	45	11			45				
A-C	394	98			394				

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	110	28	385	0.286	110	0.3	0.4	13.050	B
C-AB	116	29	778	0.149	115	0.2	0.3	5.440	A
C-A	345	86			345				
A-B	55	14			55				
A-C	482	121			482				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	110	28	385	0.286	110	0.4	0.4	13.096	B
C-AB	116	29	778	0.149	116	0.3	0.3	5.448	A
C-A	344	86			344				
A-B	55	14			55				
A-C	482	121			482				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	90	22	418	0.215	90	0.4	0.3	11.020	B
C-AB	82	20	742	0.110	82	0.3	0.2	5.469	A
C-A	294	74			294				
A-B	45	11			45				
A-C	394	98			394				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	75	19	441	0.171	76	0.3	0.2	9.863	A
C-AB	62	15	716	0.086	62	0.2	0.2	5.507	A
C-A	253	63			253				
A-B	38	9			38				
A-C	330	82			330				

2021 PM 70/30, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D11 - 2021 AM 50/50, AM	Demand Set 11: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	Demand Sets	D12 - 2021 AM 70/30, AM	Demand Set 12: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	Demand Sets	D13 - 2021 AM 30/70, AM	Demand Set 13: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	Demand Sets	D14 - 2021 PM 50/50, PM	Demand Set 14: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	Demand Sets	D15 - 2021 PM 70/30, PM	Demand Set 15: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	Demand Sets	D16 - 2021 PM 30/70, PM	Demand Set 16: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.89	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	72	Stream B-AC	1.89	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D15	2021 PM 70/30	PM	PM 70/30	ONE HOUR	15:00	16:30	15	✓	Simple	D4+D8

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	468	100.000
B		ONE HOUR	✓	100	100.000
C		ONE HOUR	✓	438	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	30	438
	B	30	0	70
	C	368	70	0

Proportions

	To			
		A	B	C
	A	0.00	0.06	0.94
	B	0.30	0.00	0.70
	C	0.84	0.16	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	0
	B	0	0	0
	C	0	0	0

Average PCU Per Veh

	To			
		A	B	C
	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
15:00-15:15	A	352	352
	B	75	75
	C	330	330
15:15-15:30	A	421	421
	B	90	90
	C	394	394
15:30-15:45	A	515	515
	B	110	110
	C	482	482
15:45-16:00	A	515	515
	B	110	110
	C	482	482
16:00-16:15	A	421	421
	B	90	90
	C	394	394
16:15-16:30	A	352	352
	B	75	75
	C	330	330

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.26	11.39	0.3	B	92	138
C-AB	0.21	5.82	0.5	A	120	180
C-A					282	422
A-B					28	41
A-C					402	603

Main Results for each time segment

15:00 - 15:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	75	19	479	0.157	75	0.0	0.2	8.886	A
C-AB	86	21	719	0.119	85	0.0	0.2	5.674	A
C-A	244	61			244				
A-B	23	6			23				
A-C	330	82			330				

15:15 - 15:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	90	22	457	0.197	90	0.2	0.2	9.792	A
C-AB	114	28	745	0.153	113	0.2	0.3	5.709	A
C-A	280	70			280				
A-B	27	7			27				
A-C	394	98			394				

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	110	28	426	0.258	110	0.2	0.3	11.359	B
C-AB	161	40	782	0.206	160	0.3	0.5	5.803	A
C-A	321	80			321				
A-B	33	8			33				
A-C	482	121			482				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	110	28	426	0.258	110	0.3	0.3	11.391	B
C-AB	161	40	782	0.206	161	0.5	0.5	5.817	A
C-A	321	80			321				
A-B	33	8			33				
A-C	482	121			482				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	90	22	457	0.197	90	0.3	0.2	9.830	A
C-AB	114	29	745	0.153	115	0.5	0.3	5.726	A
C-A	280	70			280				
A-B	27	7			27				
A-C	394	98			394				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	75	19	479	0.157	76	0.2	0.2	8.934	A
C-AB	86	22	719	0.120	87	0.3	0.2	5.699	A
C-A	244	61			244				
A-B	23	6			23				
A-C	330	82			330				

2021 PM 30/70, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D11 - 2021 AM 50/50, AM	Demand Set 11: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	Demand Sets	D12 - 2021 AM 70/30, AM	Demand Set 12: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	Demand Sets	D13 - 2021 AM 30/70, AM	Demand Set 13: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	Demand Sets	D14 - 2021 PM 50/50, PM	Demand Set 14: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	Demand Sets	D15 - 2021 PM 70/30, PM	Demand Set 15: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	Demand Sets	D16 - 2021 PM 30/70, PM	Demand Set 16: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.77	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	49	Stream B-AC	1.77	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D16	2021 PM 30/70	PM	PM 30/70	ONE HOUR	15:00	16:30	15	✓	Simple	D4+D10

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	508	100.000
B		ONE HOUR	✓	100	100.000
C		ONE HOUR	✓	398	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	70	438
	B	70	0	30
From	C	368	30	0

Proportions

	To			
		A	B	C
	A	0.00	0.14	0.86
	B	0.70	0.00	0.30
From	C	0.92	0.08	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	0
	B	0	0	0
	C	0	0	0

Average PCU Per Veh

	To			
		A	B	C
	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
15:00-15:15	A	382	382
	B	75	75
	C	300	300
15:15-15:30	A	457	457
	B	90	90
	C	358	358
15:30-15:45	A	559	559
	B	110	110
	C	438	438
15:45-16:00	A	559	559
	B	110	110
	C	438	438
16:00-16:15	A	457	457
	B	90	90
	C	358	358
16:15-16:30	A	382	382
	B	75	75
	C	300	300

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.31	14.76	0.4	B	92	138
C-AB	0.09	5.33	0.2	A	52	78
C-A					313	470
A-B					64	96
A-C					402	603

Main Results for each time segment

15:00 - 15:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	75	19	411	0.183	74	0.0	0.2	10.681	B
C-AB	37	9	713	0.052	37	0.0	0.1	5.320	A
C-A	263	66			263				
A-B	53	13			53				
A-C	330	82			330				

15:15 - 15:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	90	22	387	0.232	90	0.2	0.3	12.093	B
C-AB	49	12	738	0.066	49	0.1	0.1	5.226	A
C-A	309	77			309				
A-B	63	16			63				
A-C	394	98			394				

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	110	28	354	0.311	110	0.3	0.4	14.687	B
C-AB	70	17	773	0.090	69	0.1	0.2	5.115	A
C-A	369	92			369				
A-B	77	19			77				
A-C	482	121			482				

15:45 - 16:00

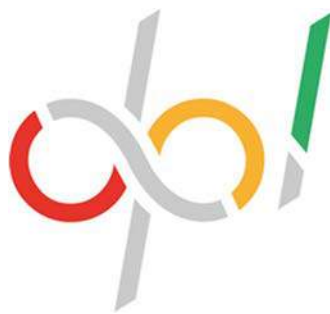
Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	110	28	354	0.311	110	0.4	0.4	14.756	B
C-AB	70	17	774	0.090	70	0.2	0.2	5.118	A
C-A	368	92			368				
A-B	77	19			77				
A-C	482	121			482				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	90	22	387	0.232	90	0.4	0.3	12.168	B
C-AB	49	12	738	0.067	49	0.2	0.1	5.234	A
C-A	309	77			309				
A-B	63	16			63				
A-C	394	98			394				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	75	19	411	0.183	76	0.3	0.2	10.759	B
C-AB	37	9	713	0.052	37	0.1	0.1	5.326	A
C-A	263	66			263				
A-B	53	13			53				
A-C	330	82			330				



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