

REPORT

Tai Tarian Ltd & Jones Brothers Ltd

Meadow Road

01/04/2021

Neath Port Talbot Council

Transport Statement

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1 Introduction

- 1.1 Vectos is commissioned by Tai Tarian Ltd & Jones Brothers Ltd to provide transport and highways advice in relation to the proposed residential development to the east of Meadow Road, Neath, in the form of a Transport Statement (TS).
- 1.2 The site is allocated within the Local Development Plan (LDP) for some 50 units and is a predominantly greenfield site which is located at the eastern edge of Melincryddan. The LDP allocation notes opportunities and constraints of the site, which include the potential for off-site highways improvements along with Traffic Regulation Orders (TROs). This is further explored within this report.
- 1.3 The proposed residential development comprises 52 affordable homes and will be accessed from Meadow Road via a new access, thus providing a natural extension to the existing built up area.

Planning History

- 1.4 The online planning portal for Neath Port Talbot has been investigated and shows that the site has been subject to several historic applications.
- 1.5 An initial application was approved in March 2009 for a residential development of up to 50 dwellings. In February 2012, an application for the variation of Condition 3 of this planning permission to extend the period of the submission of reserved matters for three years was received. This was approved with the decision issued in July 2016.
- 1.6 In July 2019 a further application was received for the variation of condition 3 and 4 of planning permission P2012/0151 approved on 15/07/2016 to extend the period to submit the reserved matters for 3 years and to extend the time limit for the commencement of development for a further 5 years. This is still awaiting decision as per the Neath Port Talbot online planning portal.

Report Structure

- 1.7 This TS contains a review of the current accessibility of the site, a review of national and local policy and sets out the forecast multi modal trip characteristics in order to undertake an assessment of the likely effects of developing this site.
- 1.8 The report is structured as follows:
 - i) **Section 2** – Reviews the current accessibility of the site by all modes of travel, and to local services and facilities;
 - ii) **Section 3** – Provides a review of the relevant local and national policy;
 - iii) **Section 4** – Describes the development proposals for the site;
 - iv) **Section 5** – Assesses the expected trip characteristics for vehicles;
 - v) **Section 6** – Analyses the effect of the forecast trip generation on the local highway network; and,
 - vi) **Section 7** – Summaries and Concludes.

2 Accessibility

- 2.1 This section of the report provides the context of the site in relation to its general surrounding, and the movement characteristics of the surrounding area.

Site Location

- 2.2 The site is located within the town of Neath, which is some 8km north of Port Talbot and some 14km north east of Swansea.
- 2.3 The site access is proposed from Meadow Road, which binds the site to the south and south west. The site is bound by Eaglebush Valley to the north east and vacant greenfield land beyond the properties on The Avenue to the south east.
- 2.4 **Figure 2.1** indicates the site location in its local context.

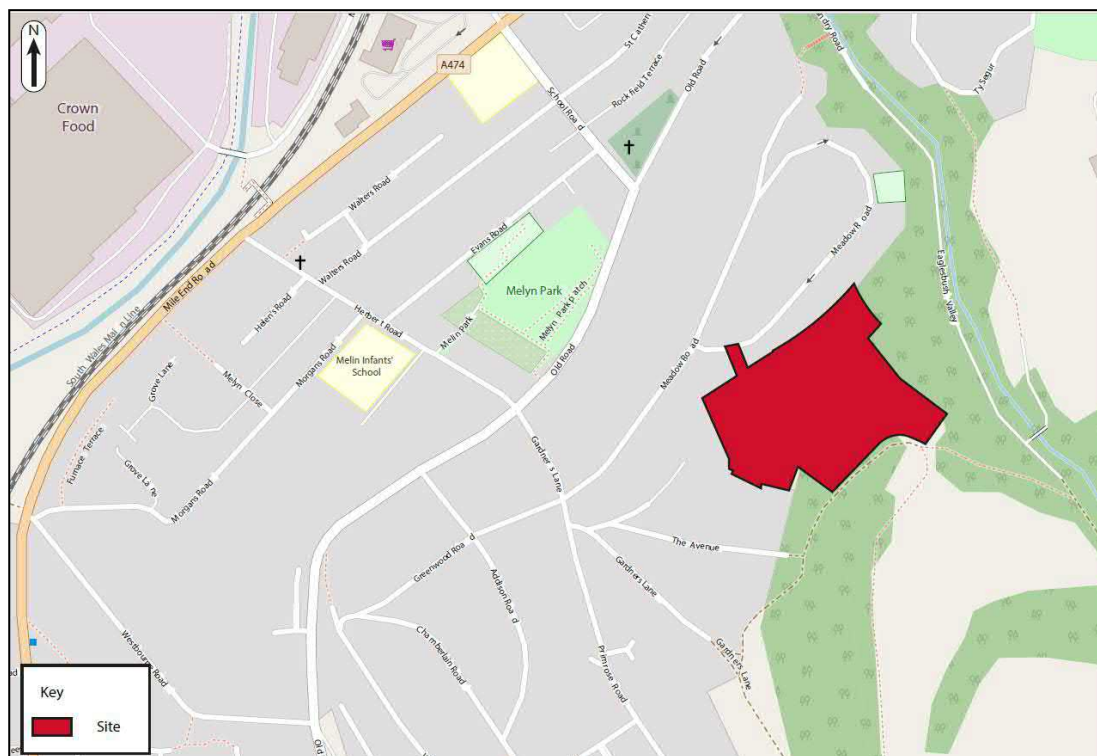


Figure 2.1 – Site Location

Local Facilities

- 2.5 The site is suitably placed to access the nearby local facilities and services within the vicinity of the site. Local facilities available within a close walking distance include an infant and junior school, a supermarket and other local shops, sports and leisure facilities, restaurants, and public transport provision. The local facilities are illustrated in **Figure 2.2** and set out further in **Table 2.1**.

Table 2.1 – Local Facilities

Local Facility	Distance from the site access (meters)	Walking Time (minutes)	Cycling Time (minutes)
Public Transport			
Meadow Road Bus Stop	50	2	1
Gardeners Lane Bus Stop	110	2	1
Neath Railway Station	1900	23	8
Educational Facilities			
Melin Infants School	500	6	2
Melin Junior School	750	9	2
St Joseph's R C Primary School	1300	17	6
Gnoll Primary School	1300	17	7
Local Shops			
Lidl	900	11	4
Poundstretcher	900	11	4
Kumar Stores - Premier Stores	800	9	2
Medical Centres			
The Health Dispensary	900	11	5
Pharmacy	900	11	5
St James Veterinary Group	850	11	4
Pub/ Restaurants / Food			
Shun Da Chinese Takeaway	800	9	3
Hikary's Fish Bar	800	9	3
Shillingford Traditional Fish & Chips	850	10	3
Dragon House Chinese Takeaway	850	10	3
Highlander Thai Restaurant and Takeaway	950	11	4
Noble Balti House Takeaway	1200	14	4
Leisure / Sports Facilities			
Vitality Health and Fitness	900	11	4
Melyncryddan Community Centre	550	6	3
Melyn Park Parc Melin	450	5	2
Mount Pleasant Park	1200	16	5
Neath Afan Gymnastics Club	1100	13	4

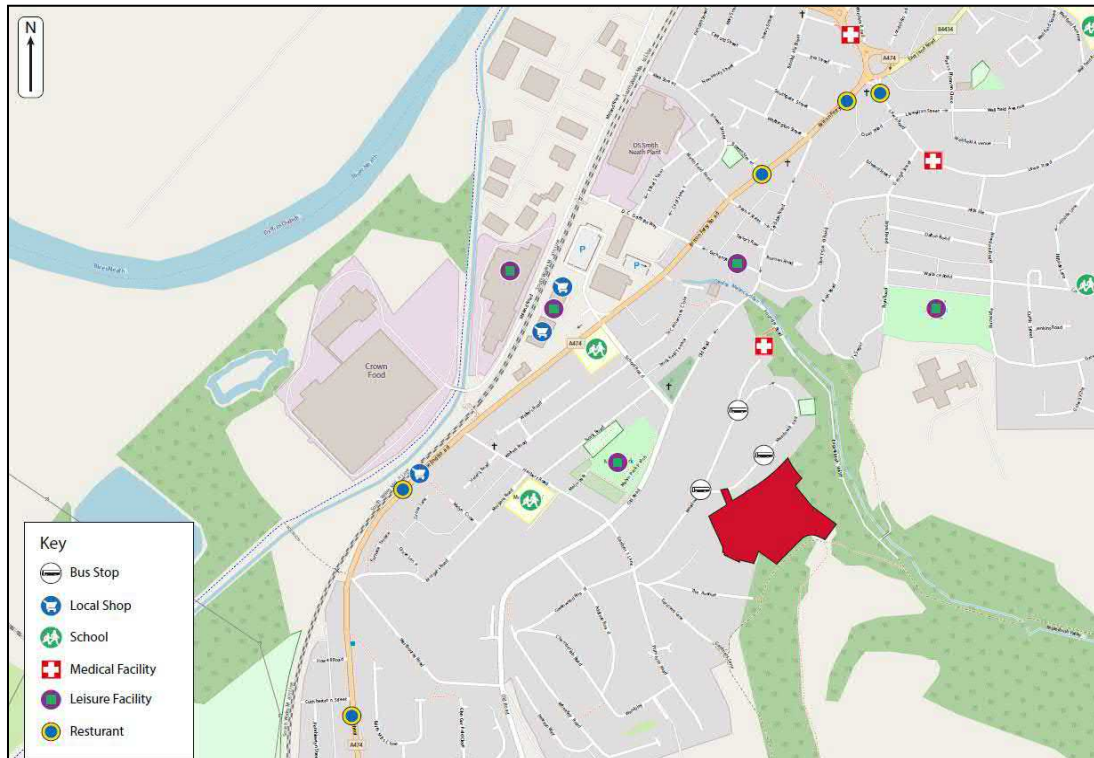


Figure 2.2 – Local Facilities

Access via Active Travel

- 2.6 New residents at the proposed development will be encouraged to undertake shorter journeys by foot or bicycle when appropriate. The location of the site is suited for the promotion of active travel journeys to local facilities and services.
- 2.7 Furthermore, the COVID-19 pandemic has seen people travelling shorter distances for essential journeys, often within the local community rather than further afield. There has also been a big take-up of active travel modes for both short purpose driven trips, as well as leisure trips.
- 2.8 The propensity for people to walk or cycle depends on individual preferences and circumstances. These circumstances might include, for instance, the purpose of the journey, the attractiveness of, and activity along, the route, the weather, and the cost of alternatives.
- 2.9 The thrust of transport policy is to promote and encourage the choice of walking and cycling above all else where travel needs to occur. Therefore, it is both reasonable to assume that walking is a viable and growing means of travel, and that new development, such as this one, should be designed to promote and encourage it.
- 2.10 In practice, the distance that any individual is likely to choose to walk depends on that individual and the circumstances, but it is fair to assume that over time, given current policies to encourage community, the propensity for individuals to walk, and to walk further, will increase.

Walking

- 2.11 Well-lit pedestrian footways are present on both sides along Meadow Road, Gardeners Lane and Old Road which provide a link for pedestrians from the site to local facilities such as the local schools and park. All footways are in a good state of repair and vary in width, typical of a residential setting.
- 2.12 There are several public rights of ways in the vicinity of the area, they are illustrated, along with the footways that link the site to the local facilities in **Figure 2.3**.

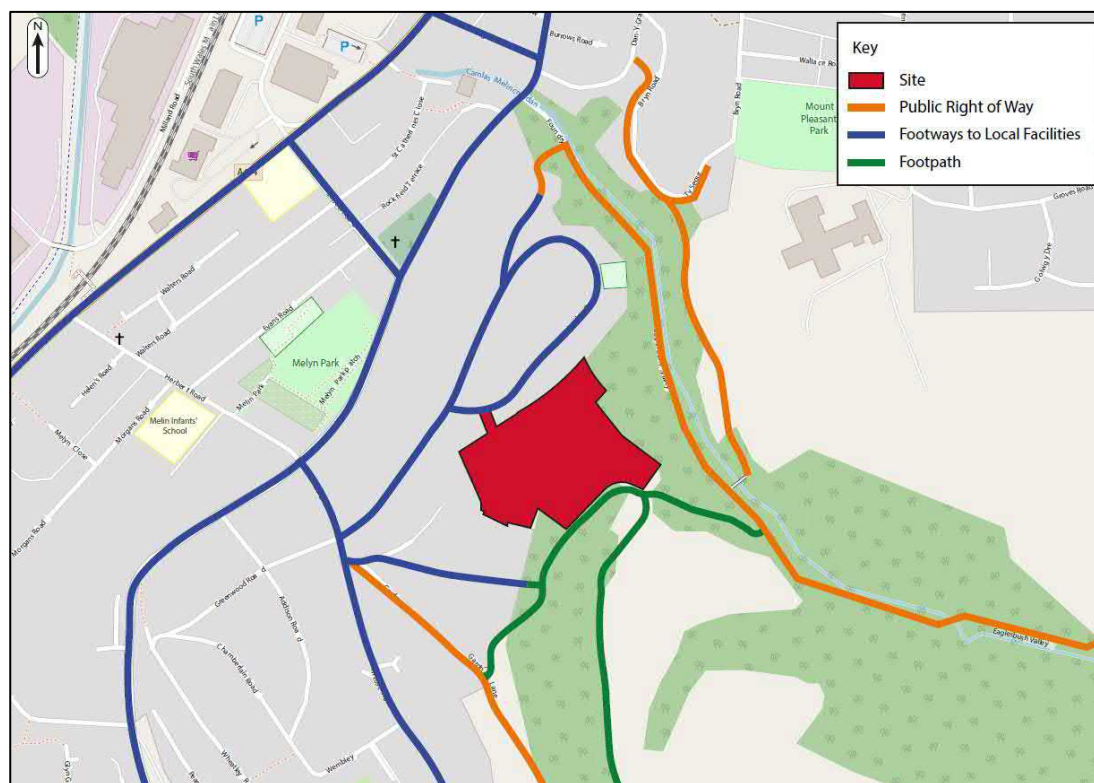


Figure 2.3 – Public Rights of Way and Footways to local facilities within the vicinity of the site

- 2.13 There is a PRoW along the north east of the site which is accessible via Meadow Road. The easiest way to access this PRoW from the site is to turn west at the access then immediately turn north along Meadow Road. Where the road forks, pedestrians and cyclists may take the western road which leads to a staircase. This staircase leads down onto foundry Road and provides access to multiple facilities to the north of the site towards the centre of Neath.

Cycling

- 2.14 In practice, the distance that any individual is likely to choose to cycle, depends on that individual and their circumstances, but it is fair to assume that over time, given policies to encourage community wellbeing health and active travel, the propensity for individuals to cycle, and to cycle further will increase.
- 2.15 The area within the immediate vicinity of the site is majority residential and subject to a 30mph speed limit. Some areas near the local schools are subject to a 20mph limit at peak times, therefore the local roads lend themselves to cycling. This is conducive to cycling short distances to access the local facilities.

- 2.16 National Cycle Route 47 can be accessed from the site via Gardeners Lane and Herbert Road in under 10 minutes by bicycle. National Cycle Route 47 is a long distance route that runs from Newport to Fishguard.
- 2.17 The presence of National Cycle Route 47 is illustrated in **Figure 2.4**.

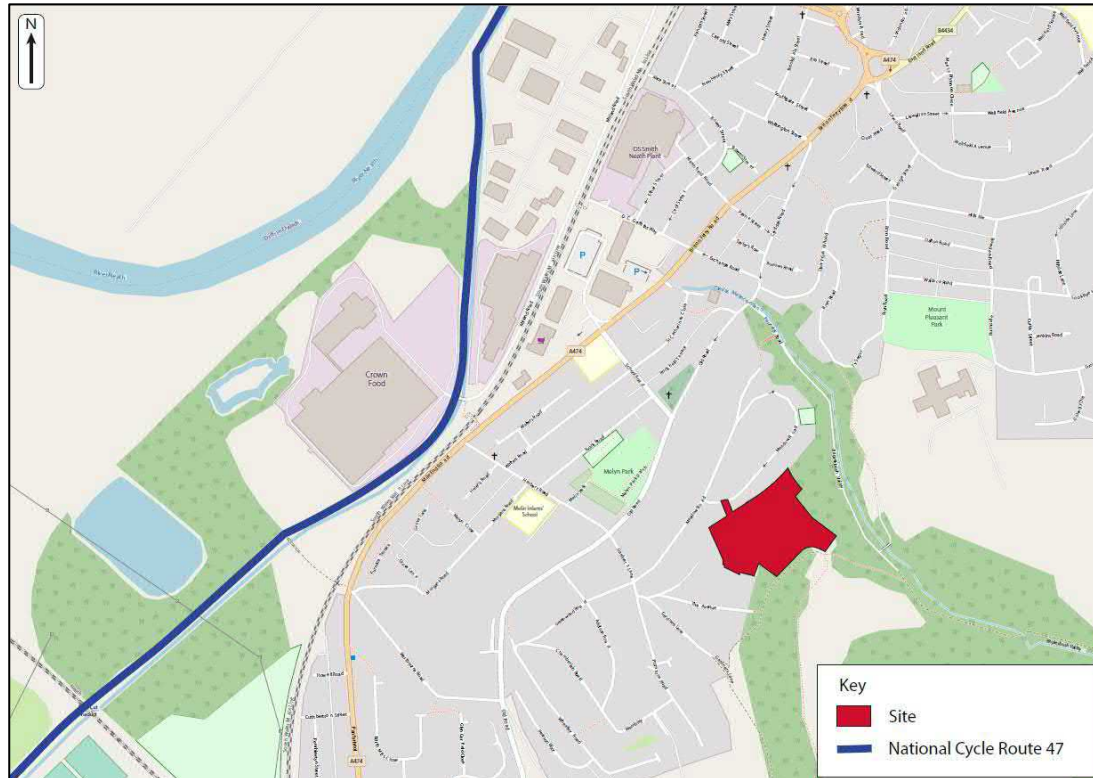


Figure 2.4 – National Cycle Route in the vicinity of the site

Access via Public Transport

Bus

- 2.18 The nearest bus stops are located on Meadow Road. The 'Meadow Road' Bus Stop is located just 50m from the site access and can be reached in under 1 minute. The Primrose Road Bus Stop on Gardners Lane is 110 meters from the site access and can be accessed in 2 minutes on foot.
- 2.19 There is one bus route that serves these bus stops; service number 4 operates Monday to Friday and connects the site to the villages of Skewen and Pencaerau. It is operated by Select Coaches .
- 2.20 Additional bus services can also be accessed within the vicinity of the site. The number 202 bus serves the Herbert Road bus stop on Old Road, which can be accessed from the site in just 6 minutes on foot or 3 minutes by bicycle.

- 2.21 Further bus services can be accessed at the Metal Box bus stop on the A474 some 10 minutes by foot from the site, or in 5 minutes by bicycle. The number 87, 900, 901 and 902 connect the site to Port Talbot and Neath.
- 2.22 The quality, frequency and affordability of bus services are important factors which people evaluate as part of their selection process for mode of travel for day to day activities and clearly there is travel choice for residents in Neath. The local bus stops and services are illustrated in **Figure 2.5** and **Table 2.2**.

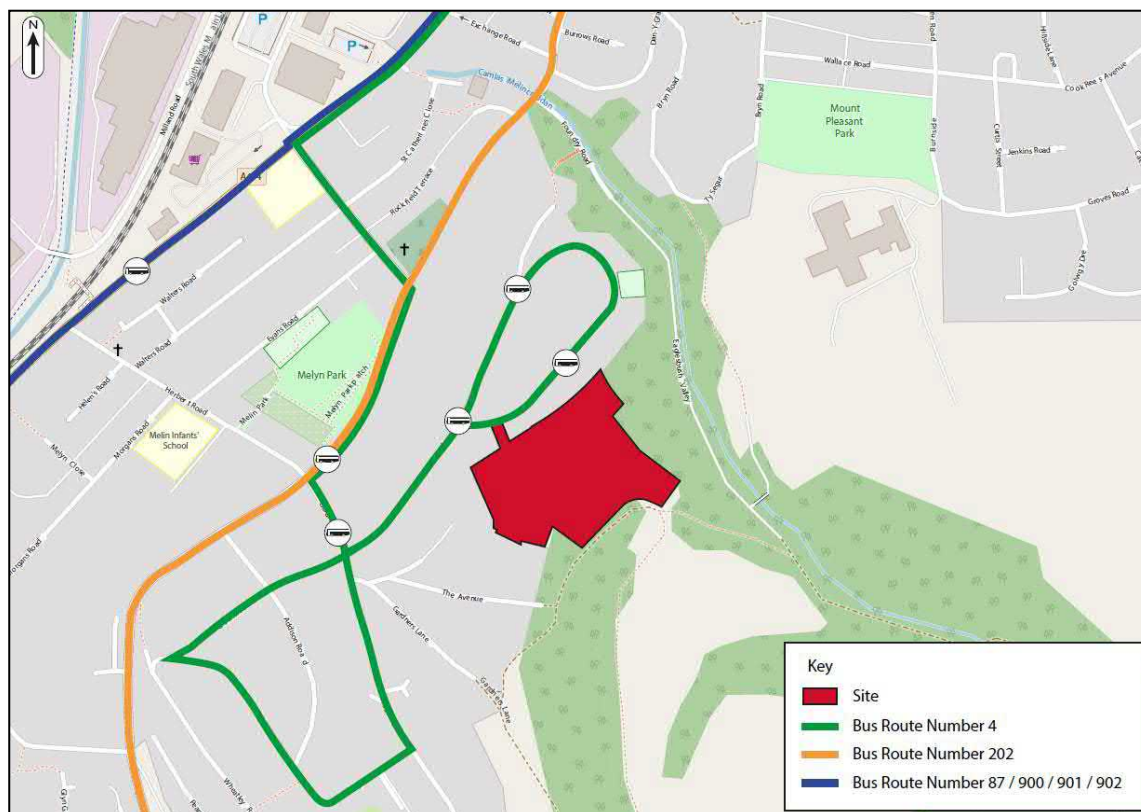


Figure 2.5 – Bus Stops and Services

Table 2.2 – Bus Timetable

Number	Route	First Bus	Last Bus	Average Frequency			Provider
				M-F	Sat	Sun	
Meador Road Bus Stop							
4	Skewen - Skewen via Longford, Neath Victoria Gardens, Pencaerau	08:55	15:55	120	N/A	N/A	Select Coaches
Primrose Road Bus Stop on Gardeners Lane							
202	Neath - Heol Morfa via Castle Bingo, Old Road, Lodge Cross	09:48	16:48	60	60	N/A	South Wales Transport
Metal Box Bus Stop							
87	Neath - Port Talbot	09:01	18:01	N/A	N/A	60	First South and West Wales
900	Margam - Neath College	08:31	N/A	AM Peak only	N/A	N/A	First South and West Wales
901	Margam - Neath College	08:31	N/A		N/A	N/A	
902	Cwmavon - Neath College	08:30	N/A		N/A	N/A	

Rail

- 2.23 The nearest rail stations are Neath and Briton Ferry.
- 2.24 Neath railway station is 1.9 km to the north of the site and can be accessed on foot in 26 minutes or in 11 minutes by bicycle. Neath has 11 bicycle storage spaces at the station, covered by CCTV, this enables multimodal journeys, especially as part of a regular commute. The station also has 65 car parking spaces. Neath offers direct services to cities such as London, Manchester, Cardiff and Swansea, as well as more local services.
- 2.25 Briton Ferry is 1.9km south of the site and can be accessed in a similar amount of time as Neath, 26 minutes by foot and 12 minutes on a bicycle. It also offers services to Manchester, Swansea and Cardiff.
- 2.26 **Table 2.3** summarises the major destinations accessible directly from Neath and Briton Ferry Railway Stations.

Table 2.3 – Rail connections

Station	Destination	Journey Time (minutes)	Frequency (minutes)
Neath	Cardiff	40	30
	Swansea	12	20
	Manchester	240	60
	London	180	60
Briton Ferry	Swansea	20	60
	Manchester	240	Twice per day
	Cardiff	45	60

- 2.27 The ongoing Coronavirus Pandemic has impacted rail travel and as a result, the current timetables are not necessarily representative of the true extent of connections or frequencies that are offered at Neath or Briton Ferry Stations.

Local Highway Network

Meadow Road

- 2.28 Meadow Road is a residential road within the Neath neighbourhood of Melyn. It begins, off Gardeners Lane as a two-way single carriageway before forming a one way loop that loops back onto itself just north west of the site. Traffic calming measures such as speed humps are present for the first 600 metres. There is also the presence of on-street car parking which currently restricts traffic speeds.
- 2.29 Meadow Road benefits from footways on both sides of the road for the most part, and street lighting is present. It is subject to a 30mph speed limit.

Herbert Road

- 2.30 Herbert Road can be accessed from the site to the north Gardeners Lane and provides a link to the A474. Herbert Road is a two-way single carriageway that has footpaths on other side.
- 2.31 Melin Infants School is on Herbert Road and therefore it is subject to a 20mph speed limit and susceptible to congestion at peak drop off and pick-up times.

A474

- 2.32 The A474 is a two way single carriageway which connects Neath to other South Wales settlements such as Rhyddings, Rhos and Ammanford. It has on street parking, bus stops and crossings along it and there are footpaths on both sides of the road for the most part. The majority of the road is subject to a 30mph speed limit; however, this is reduced to 20mph around more residential areas or schools.

Old Road

- 2.33 Old road connects the site to Briton Ferry in the South and the A474 in the North. Old Road is a residential two-way single carriageway for the most part but in its northern section is one way, whereby traffic can only travel southbound. In this section, the road is subject to a 20mph speed limit and has traffic calming measures such as speed cushions. On other parts of the road, the speed limit increases to 30mph and traffic calming measures are still occasionally present in areas close to schools. It has footways on both sides of the road and is mostly residential in nature.

Collision Analysis

- 2.34 As requested by the local highway authority during the PAC process, collision data has been obtained for the most recent five year period for the roads surrounding the site. The data obtained from NPTCBC is shown in **Figure 2.6**.
- 2.35 The data shows one 'slight' collision at the Gardners Lane / Meadow Road / Primrose Road / Greenwood Road junction, and a further two collisions at the Gardners Lane / Old Road / Herbert Road junction. This data has been further validated by using the online Crashmap database, which shows the same recorded collisions.
- 2.36 Analysis of the data shows that the one slight collision at the Gardners Lane / Meadow Road / Primrose Road / Greenwood Road junction occurred in 2019. It involved two vehicles and one casualty, with the noted causation factor indicating driver error.
- 2.37 The first of the two slight collisions at the Gardners Lane / Old Road / Herbert Road junction occurred in 2016. It involved two vehicles and one casualty. The collision reports indicate driver error as a cause. The second slight collision occurred in 2018 and involved a car and a pedal cycle. There was no point of impact which indicates that the recorded left turn manoeuvre from the car caused the pedal cycle to crash. This collision is attributed to driver error.
- 2.38 There is no information recorded from the three collisions to suggest that there is any intrinsic default in relation to highway safety with the layout of the local highway network.

2.39 The full collision data is shown in **Appendix A**.



Figure 2.6 – Collision Data

Existing Travel Behaviour

2.40 Using 2011 Census data, a review of the current travel behaviours within the local area has been undertaken ,through the “Method of Travel to Work” dataset. The proposed development site sits within the Middle Super Output Area, “Neath Port-Talbot 012”. The existing mode split share for this area is summarised in **Table 2.4**.

Table 2.4 – Existing Method of Travel to Work Mode Split

Mode of Travel	Percentage
Work mainly at or from home	0%
Underground, metro, light rail or tram	0%
Train	3%
Bus, minibus or coach	4%
Taxi	0%
Motorcycle, scooter or moped	1%
Driving a car or van	69%
Passenger in a car or van	9%
Bicycle	1%
On foot	13%
Other method of travel to work	0%
All categories: Method of travel to work (2001 specification)	100%

- 2.41 **Table 2.3** shows that at present, 69% of people within the area drive to work, with 7% utilising public transport. 13% walk to work and 1% travel to work on a bicycle. The proposal will seek to encourage more journeys to be made by sustainable means and active travel.
- 2.42 In light of the Coronavirus Pandemic, it is noted that methods of working have changed to reflect government advice. As of April 2020, 46.6% of people in employment did some work from home, and 86% of those did so as a result of the COVID-19 pandemic. Therefore, it is realistic to presume that the mode split of 'working from home' set out in **Table 2.4** is likely to be higher in reality.

2020 Traffic Surveys

- 2.43 In order to obtain an indication of traffic movements in the local area, Manual classified count (MCC) surveys were undertaken on 25/11/2020 at the Meadow Road / Gardners Lane / Primrose Road / Greenwood Road crossroads junction (Crossroad). These were undertaken for the typical network peak hours of 08:00-09:00 and 17:00-18:00.
- 2.44 An additional 12 hour survey was undertaken from 07:00-19:00 at the junction where the one-way section of Meadow Road doubles back on itself.
- 2.45 The two surveys show that from 08:00-09:00 a total of 27 vehicles exit Meadow Road onto the crossroads. From 17:00-18:00 37 vehicles leave Meadow Road at this location.
- 2.46 The full survey data is shown in **Appendix B**. This data is further explored in Section 5 of this report.

3 Policy Context

- 3.1 This section reviews relevant national and local policies in relation to the proposed development.

National Policy

Planning Policy Wales (Edition 11, February 2021)

- 3.2 Planning Policy Wales Edition 11 (PPW) sets out the land use planning policies of the Welsh Government.
- 3.3 With regards to sustainable transport, PPW advises that, in the context of active and social places, developments should encourage modal shift and be easily accessible by walking, cycling and public transport, by virtue of their location, design and provision of on and off site sustainable transport infrastructure.
- 3.4 Furthermore, the 'active and social' theme within PPW aims to ensure new development is located and designed in a way which minimises the need to travel, reduces dependency on the private car and enables sustainable access to employment, local services and community facilities.
- 3.5 A key theme throughout PPW is the aim of reducing reliance on travel by private car, and the adverse impacts of motorised transport on the environment and people's health, by prioritising and increasing active travel and public transport. Additionally, it states 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.
- 3.6 These themes of emphasis on sustainable transport and active travel are supported by the 'Sustainable Transport Hierarchy for Planning' included within PPW.



Technical Advice Note:18

- 3.7 Tan18: Transport described how to integrate land use and transport planning and explains how transport impacts should be assessed and mitigated. The document states that a sustainable development approach includes:
- Integration of transport and land use planning;
 - Integration between different types of transport; and
 - Integration of transport policy with policies for the environment, education, social justice, health, economic development and wealth creation.
- 3.8 In relation to parking, the TAN states that:
- “Maximum car parking should be used at regional and local level as a form of demand management and that for new development, regard should be given to alternative transport modes, economic objectives, public and shared parking arrangements”.
- 3.9 TAN 18 states that the integration of land use planning and development of transport infrastructure can help Welsh Government achieve its wider sustainable development policy objectives through managing parking provision and ensuring that new developments include appropriate provision for pedestrians (including the users with special access and mobility requirements), cycling, public transport, and traffic management and parking/servicing.

Manual for Streets

- 3.10 Manual for Streets supports reducing people’s reliance on the private car;
- “By creating linkages between new housing and local facilities and community infrastructure, the public transport network and established walking and cycling routes are fundamental to achieve more sustainable patterns of movements and to reducing people’s reliance on the car.”
- 3.11 The site is ideally placed to encourage more sustainable patterns of movements.

Wales Transport Strategy (Connecting the Nation)

- 3.12 The wider agenda of this document is to ensure that transport features strongly in the Welsh Assembly Government’s policy spectrum:
- ‘Getting the most out of our existing transport system;
 - Making greater use of more sustainable modes of travel; and
 - Reducing demands on the transport system’.

Active Travel Wales Act 2013

- 3.13 The Welsh Government seeks to enable more people to walk, cycle and generally travel by more active methods, so that:
- “More people can experience the health benefits of active travel;
 - We reduce our greenhouse gas emissions;
 - We help address poverty and disadvantage; and
 - We help our economy to grow by unlocking sustainable economic growth”.

Local Policy

Neath Port Talbot County Borough Council Adopted Local Development Plan (LDP) (2011-2026)

- 3.14 The Neath Port Talbot LDP sets out a transport strategy which seeks to improve connectivity within and around the country borough through means of promoting active travel, improving bus and rail services and ultimately reducing the reliance on use of a private car.
- 3.15 The Plan identifies that the urban town of Neath is one of the country’s most sustainable settlements because there is the greatest potential for reducing the need to travel due to colocation of houses, jobs, shops, facilities and public Transport.
- 3.16 The LDP sets out its transport-based objectives, which are:
- Increase accessibility, promote active travel and encourage a shift to more sustainable modes of transport for people.
 - Reduce impacts of traffic growth and congestion and promote the efficient and effective use of the transport network.
- 3.17 Development proposals will only be permitted where all of the following criteria, where relevant, are satisfied:
- The development does not compromise the safe, effective and efficient use of the highway network and does not have an adverse impact on highway safety or create unacceptable levels of traffic generation;
 - Appropriate levels of parking and cycling facilities are provided and the access arrangements for the site allow for the safe manoeuvring of any service vehicles associated with the planned use;
 - The development is accessible by a range of travel means, including public transport and safe cycle and pedestrian routes;
 - Transport Assessments and Travel Plans are provided for developments that are likely to create significant traffic generation.
- 3.18 Walking, cycling, and public transport play an important role in reducing the number of shorter journeys taken by car and contribute towards the Plan’s aim to provide a sustainable and more integrated transport network. Where appropriate, new developments will be required to demonstrate how they connect to existing, adjacent settlements.

3.19 The site is identified for development in the LDP with the opportunities and constraints listed as follows:

- Highways - a maximum of 50 dwellings on site; of-site highway improvement works required along with Traffic Regulation Orders.
- Affordable Housing Provision - requirement.
- Open Space Provision - financial contribution required.

3.20 Despite the allocation in the LDP for 50 dwellings, it is proposed that the economical internal layout of the site and the lack of impact on the local highway network lends itself to supporting the additional two homes proposed within the masterplan layout.

Joint Local Transport Plan 2015-2020

3.21 The Regional Transport Plan is the result of joint working between four local authorities South West Wales: Carmarthenshire, Neath Port Talbot, Swansea and Pembrokeshire. It replaces the individual local transport plans previously adopted by the 4 councils and sets out a vision that;

“By 2030 South West Wales will be a confident, ambitious and connected City Region recognised internationally for its emerging knowledge and innovation economy”.

3.22 This will be achieved through 6 main objectives:

- i) To improve the efficiency and reliability of the movement of people and freight within and beyond South West Wales to support economic growth in the City Region.
- ii) To improve access for all to a wide range of services and facilities including employment and business, education and training, health care, tourism, and leisure activities
- iii) To improve the sustainability of transport by improving the range and quality of, and awareness about, transport options, including those which improve health and wellbeing.
- iv) To improve integration between policies, service provision and modes of transport in South West Wales
- v) To implement measures which will protect and enhance the natural and built environment and reduce the adverse impact of transport on health and climate change.

3.23 The Local Transport Plan outlines that the current modal split for public transport is only 6%, it is therefore the aim of the Plan to increase this to 9%. Similarly, it is expected that the modal split for pedestrians will increase from 15% at current to 20% with the completion of the above targets.

4 Development Proposals

Development Overview

- 4.1 The proposed development comprises 52 affordable homes, accessed via a newly proposed priority junction from Mead Road. The overall makeup of the 52 affordable homes is as follows:
- 14 x 1 Bed Walk Up
 - 5 x 2 Bed Bungalow
 - 2 x 2 Bed Walk Up
 - 22 x 2 Bed
 - 6 x 3 Bed
 - 3 x 4 Bed
- 4.2 The overarching concept is to create an extension to the existing residential area which surround the site and to provide affordable housing in line with the aims of the LDP, in which this site is allocated.
- 4.3 The site masterplan is shown in **Figure 4.1** and in full in **Appendix C**.



Figure 4.1 – Site Masterplan

Access

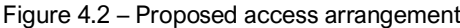
- 4.4 Pedestrian, vehicular and servicing access for the site has all been considered as shown in the masterplan and within **Appendix C**. The aim is to prioritise for active travel, with a focus on connecting the active travel infrastructure within the site with the wider area.

Pedestrian and Cycle Access

- 4.5 The site has been designed to ensure that it is highly accessible for pedestrians and cyclists.
- 4.6 The footways within the proposed development will link to the existing footways along Meadow Road via the newly proposed access. This provides a connection to facilities to the north and west. There are existing uncontrolled crossing points along Meadow Road to accommodate pedestrian movement.
- 4.7 Cycle parking will be provided in line with the Neath Port Talbot County Borough Council Parking Standards SPG (2016). Access will be via the same vehicular and pedestrian access.

Vehicular Access

- 4.8 Vehicular Access to the site will be via a newly proposed priority access along Meadow Road. Meadow Road is currently a one-way road for the most part, forming a clockwise one-way loop. The site access is proposed to be from near the finish of this loop where Meadow Road connects back onto itself in the form of a priority junction.
- 4.9 Consideration has been given to the proposed access in the context of the development proposals comprising 52 dwellings rather than the 50 dwellings as indicated by the LDP.
- 4.10 Rather than add traffic from a further 52 units around the existing clockwise loop of Meadow Road back to the site entrance, approximately a 500m stretch of carriageway, it is proposed to make the final section of the one way loop a two-way carriageway, but for access to this development only. This would be only for where access is gained to the site itself. Beyond the access to the site there will be a no entry for anticlockwise movements and appropriate signing for existing southbound movements.
- 4.11 The benefit of this will be seen in the shortening of the journey of residents to the site along Meadow Road and reducing the vehicular movements along the existing clockwise loops of approximately 500m. The key aim is to reduce excess traffic along an already compact residential road with on-street parking.
- 4.12 In addition, and in order to ensure the free flow of traffic on Meadow Road, parking for existing residents will be provided off the spine road within the proposed development.
- 4.13 The proposed access arrangement is shown in **Figure 4.2** and in full in **Appendix D**, which also contains the swept path analysis for the proposed layout.



- 4.14 The pre-application advice indicates that the current Highway Design Guide requires developments of 50-100 dwellings to include a loop arrangement. It is noted that the Highways Design Guide SPG is not available online. In the context of the proposed site at Meadow Road, the proposed number of 52 dwellings is only marginally over the minimum parameter of 50 dwellings for a loop arrangement to be incorporated within the site's design.
- 4.15 The proposed design without an internal loop is deemed appropriate for this development given that there are no traffic capacity concerns, and that a single road is better from a placemaking perspective as it does not provide excess road space which is against the grain of placemaking and accessibility objectives. It is considered that the proposed design does not pose a risk to the safety of pedestrians or road users. Moreover, it is established that new development should place pedestrian movement at the heart of the design process and facilitate this over travel by less sustainable modes.

4.16 Delivery and Servicing for the site will be via the proposed vehicular access from Meadow Road. All properties will be accessible from the main internal site road, and a turning head will be provided at the end of this road to accommodate reverse manoeuvres.

4.17 The site has been designed to accommodate delivery and servicing vehicles as well as refuse vehicles and the relevant swept path analysis is shown in **Figure 4.3** and **Appendix D**. Forward visibility splays have been shown at 23m, included at **Figure 4.4**, which is in keeping with the overall internal design of the site, which has been designed to accommodate people movement as a priority over vehicular movement. As such, internal vehicle speeds are expected to be lower than the maximum 20mph.

4.18 A fire tender is also included within **Appendix D**.

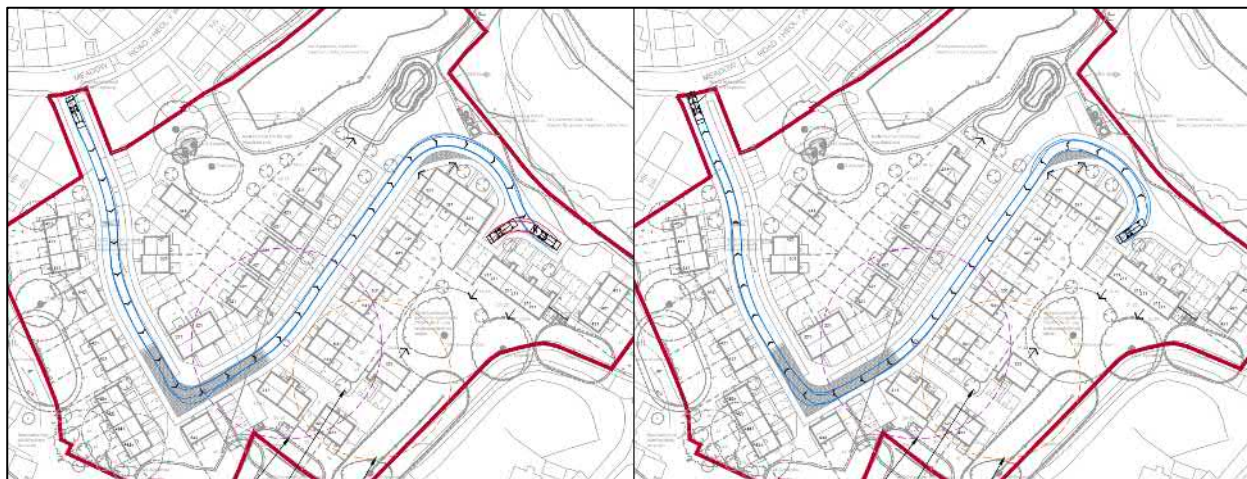


Figure 4.3 – Swept Path Analysis (shown in full in **Appendix D**)



Figure 4.4 – Forward Visibility (shown in full in **Appendix D**)

5 Trip Generation

- 5.1 The forecast trip demand (all modes) from this development of 52 dwellings is set out below.

Existing Travel Behaviour

- 5.2 The 'method of travel to work' Census 2011 data has been investigated for the residents of 'Neath Port Talbot' Mid Layer Super Output Area (MSOA) 'Neath Port Talbot 012'. This data is useful in providing an understanding of the existing travel behaviour of residents in this specific area of Neath as the site lies within this area.
- 5.3 As such, the Neath Port Talbot 012 MSOA is considered the most appropriate representation of people movements for the potential development at the site.
- 5.4 **Table 5.1** shows the mode split from this area, taken from the 2011 census data for Neath Port Talbot MSOA 012.

Table 5.1 – Method of Travel to Work (Neath Port Talbot 012 - 2011 Census)

Mode Share	Neath Port Talbot 012 (MSOA)
Train	3%
Bus, minibus or coach	3%
Taxi	1%
Motorcycle, scooter or moped	1%
Driving a car or van	69%
Passenger in a car or van	9%
Bicycle	1%
On foot	12%
Other Method of Travel to Work	1%
Total	100%

- 5.5 The data summarised in **Table 5.1** illustrates that 69% of existing residents in the area currently travel to work by driving a car or van. It shows that 6% of residents travel by public transport and 12% travel by foot. A Further 1% travel by bike with the remainder travelling via other modes including as passengers, by taxi or by motorcycle noting that this may no longer be a representative mode share following COVID 19.

Forecast Trip Generation

- 5.6 TRICS is a database of trip generation from a wide variety of land uses (retail, employment, leisure etc.) across the UK. Traffic surveys are carried out to measure how many people travel to a site, by mode and what time of day. The purpose of the database is to provide an estimate of likely trip generation to/from a land use, by comparing it with trip generation from existing comparative sites of the same land use.
- 5.7 The residential development is proposed to accommodate 52 dwellings and, in this context, a trip generation assessment for 52 affordable / local authority houses has been undertaken to provide a robust indication of the potential multi-modal trips the site could generate.

- 5.8 The full TRICS dataset is included in **Appendix E**.
- 5.9 The trip generation for a residential development has been forecast by combining the method of travel to work data shown in **Table 5.1** with the unfettered multi-modal trip rates taken from the TRICS database. Using census data provides a most robust indication of modal splits within the local area and highlights what can be expected for the proposed development at this site.
- 5.10 When selecting the most appropriate trip rates for a residential development in this area, the following parameters were used:
- **Land Use** – 03 Residential;
 - **Sub Land Use Category** – B Affordable/Local Authority Houses;
 - **Location** – UK (excluding Northern Ireland and London); and
 - **Location type** – Suburban / Edge of Town
 - **Dwelling numbers** – 16 to 280
 - **Parameter used** – 1 dwelling.
- 5.11 The forecast unfettered total people trip rates are shown in **Table 5.2**. The typical weekday highway network peaks of 07:00-10:00 and 16:00-17:00 have been used in order to show the impact of development on the wider highway network at its busiest times.

Table 5.2 – Forecast Total People Trip Rates (per dwelling)

Time	Arrivals	Departures	Two-Way
07:00-08:00	0.078	0.241	0.319
08:00-09:00	0.202	0.665	0.867
09:00-10:00	0.265	0.285	0.550
16:00-17:00	0.346	0.311	0.657
17:00-18:00	0.467	0.374	0.841
18:00-19:00	0.304	0.217	0.521

- 5.12 From the total people trip rates per dwelling shown in **Table 5.2**, the derived two-way people trip generation for 52 dwellings is set out in **Table 5.3**.

Table 5.3 – Forecast Total People Trips (52 dwellings)

Time	Arrivals	Departures	Two-Way
07:00-08:00	4	13	17
08:00-09:00	11	35	45
09:00-10:00	14	15	29
16:00-17:00	18	16	34
17:00-18:00	24	19	44
18:00-19:00	16	11	27

- 5.13 As demonstrated in **Table 5.3**, the forecast peak hours for total people movements are reflective of the typical peak hours of 08:00-09:00 and 17:00-18:00. During the AM peak a total of 45 two-way people movements are forecast, and in the PM peak the forecast two-way people movements is 44.
- 5.14 The two-way movements shown in **Table 5.3** have been applied to the modal split taken from the 2011 census shown in **Table 5.1**. The results show an indication of the expected trips to made by different modes during the AM and PM peaks. This is show in **Table 5.4**.

Table 5.4 – Forecast Multi-Modal Trip Rates (52 dwellings)

Mode	AM 0800-0900		PM 1700-1800	
	Arrivals	Departures	Arrivals	Departures
Train	0	1	1	1
Bus, minibus or coach	0	1	1	1
Taxi	0	0	0	0
Motorcycle, scooter or moped	0	0	0	0
Driving a car or van	7	24	17	13
Passenger in a car or van	1	3	2	2
Bicycle	0	0	0	0
On foot	1	4	3	2
Other method of travel to work	0	0	0	0
Total	11	35	24	19

- 5.15 As shown in **Table 5.4**, the majority of trips in both the AM and PM peaks are expected to be made by private vehicle. However, it is important to consider the good level of pedestrian infrastructure in the vicinity of the site which is reflected by the second highest number of trips being made by foot. It will be important to promote active travel as a part of the site design in order to encourage users to journey via public transport and active travel modes.
- 5.16 The mode split shown in **Table 5.1** is for travel to work, and as such does not account for trips related to education. It is suggested therefore that, with a large proportion of education related trips being made by sustainable modes, that the actual mode split of the site may include more trips by walking and cycling. However, in order to be robust, the forecast level of vehicular trips can be considered appropriate for the distribution and subsequent junction impact exercise.

Trip Distribution

- 5.17 A traffic distribution exercise has been undertaken for the development traffic by using the observed flows from the traffic surveys undertaken on 25/11/2020. These observed flows are shown in **Table 5.5** (AM) and **Table 5.6** (PM).

Table 5.5 – Existing Traffic Flows (Staggered Junction AM)

To / From (AM)	Meadow Road	Primrose Road	Greenwood Road	Gardners Lane	Total
Meadow Road	-	0	2	25	27
Primrose Road	0	-	0	50	50
Greenwood Road	0	1	-	21	22
Gardners Lane	21	29	20	-	70
Total	21	30	22	96	169

Table 5.6 – Existing Traffic Flows (Crossroads Junction PM)

To / From (AM)	Meadow Road	Primrose Road	Greenwood Road	Gardners Lane	Total
Meadow Road	-	4	0	33	37
Primrose Road	3	-	1	18	22
Greenwood Road	1	1	-	10	12
Gardners Lane	36	31	20	-	87
Total	40	36	21	61	158

- 5.18 When considering the distribution of the proposed development traffic onto the local highway network, the existing flows shown in **Table 5.5** and **Table 5.6** have been used to determine the likely vehicle movements forecast to be made by development traffic. This is shown below in **Table 5.7**.

Table 5.7 – Forecast Vehicle Distribution

AM		
	Departing To	Arriving From
Gardners Lane	93%	100%
Greenwood Road	7%	0%
Primrose Road	0%	0%
PM		
	Departing To	Arriving From
Gardners Lane	89%	90%
Greenwood Road	0%	3%
Primrose Road	11%	8%

- 5.19 The distribution shown in **Table 5.7** reinforces the assumption that the majority of arrivals and departures from the site will travel via Gardners Lane.

Summary

- 5.20 The proposed development is forecast to generate 32 two-way vehicle movements in the AM peak and 31 two-way vehicle movements in the PM peak. This equates to an extra 18% of traffic at the Meadow Road / Gardners Lane / Primrose Road / Greenwood Road junction in both the AM peak and 19% in the PM peak. However, in absolute terms, this only equates to one additional car on the highway network every 2 minutes. This additional traffic will not give rise to any adverse traffic capacity or highway safety issues and the effect will be imperceptible.

6 Highway Network Assessment

- 6.1 This section evaluates the impact of the proposed vehicular trip generation of the site on the nearby junction of Gardners Lane / Meadow Road / Primrose Road / Greenwood Road. This junction has been considered since the entirety of the forecast vehicular traffic will be distributed via this junction onto the wider highway network.

Junction Impact Assessment

- 6.2 The forecast vehicle distribution to the base traffic flows have been applied to the vehicle turning count surveys (25/11/2020) in order to obtain the percentage impact of the development on this junction. The percentage impact for the crossroads junction for both the AM and PM is shown in **Table 5.8**.

Table 6.1 – Junction Impact Assessment

AM			
Total Flows:	Base Flow	Development Flow	Impact %
Total Junction	169	31	18%
Gardners Lane	166	29	18%
Meadow Road	48	31	65%
Primrose Road	80	0	0%
Greenwood Road	44	2	4%
PM			
Total Flows:	Base Flow	Development Flow	Impact %
Total Junction	158	30	19%
Gardners Lane	148	27	18%
Meadow Road	77	30	39%
Primrose Road	58	1	2%
Greenwood Road	33	2	6%

- 6.3 As demonstrated in **Table 6.1**, the overall impact of the development on the crossroads junction indicates a relatively high percentage impact. However, the total level of forecast traffic equates to approximately one car every two minutes and given the scale of the site and the current level of total traffic at the junction, the impact on the local highway network will be negligible and imperceptible to existing users of the network.

ATC Surveys

- 6.4 During the PAC process, the Local Highway Authority requested additional surveys be undertaken in the form of an ATC on each arm of the junction. These surveys were undertaken from 07/01/2020 – 13/01/2020.
- 6.5 The purpose of obtaining the additional data from the ATCs was to support the data previously obtained from the MCC. The comparison in total vehicle flows between the initial MCC and the subsequent ATCs are explained in a Technical Note included in **Appendix F**. The full survey data is included in **Appendix A** of the Technical Note.

- 6.6 The surveys demonstrated that none of the AM peaks recorded by the ATC were higher than the AM peak from the MCC, but that the Friday PM peak recorded by the ATC was notably higher than that recorded from the MCC. Subsequently, the PICADY assessment in this section has been undertaken for a 'worst-case', with the base flows used for the highest AM and PM peak from the MCC and ATCs respectively.
- 6.7 The traffic distribution exercise has been undertaken for the development traffic by using the observed flows from the Manual Count traffic surveys undertaken on 25/11/2020, as this survey illustrate turning proportions rather than the ATC surveys which simply show volumes of traffic per link.

Traffic Growth

- 6.8 In the context of traffic growth and for a robust assessment, TEMPro growth has been applied to the highest observed base flows to growth them to 2035. The factors are presented without any adjustment and are considered to be high given the changing traffic patterns and future trends accelerated by the Covid-19 pandemic. They are therefore overly robust.
- 6.9 The TEMPro growth factors are shown in **Table 6.2**.

Table 6.2 – TEMPro Growth Factors

Time Period	Level	Area	2035 Local Growth Figure
AM	W02000210	Neath Port Talbot 012	1.131750647
PM	W02000210	Neath Port Talbot 012	1.12910115

- 6.10 TEMPro includes all strategic development growth in the local area, and therefore associated traffic growth predictions. As such this has been used as the basis on which impacts assessments associated with committed developments have been based to avoid double counting.
- 6.11 **Table 6.1** demonstrates that even before traffic growth there is a forecast 18% and 19% impact on the junction in the AM and PM peaks respectively. As such, more detailed junction assessments have been undertaken for this junction using the industry standard junction modelling software PICADY within the Junctions 9 programme.

Highway Network Assessment

- 6.12 In order to be robust, the Gardners Lane / Meadow Road / Primrose Road / Greenwood Road junction has been modelled in PICADY for the following scenarios:

AM:

- 2020 Base (2020 observed counts);
- 2020 Base + Development (2020 observed counts + Development);
- 2035 Base (2020 observed counts + TEMPro growth to 2035); and
- 2035 + Development (2020 observed counts + TEMPro growth to 2035 + Development);

PM:

- 2021 Base (2020 observed counts);
- 2021 Base + Development (2021 observed counts + Development);
- 2035 Base (2021 observed counts + TEMPro growth to 2035); and
- 2035 + Development (2021 observed counts + TEMPro growth to 2035 + Development).

Gardners Lane / Meadow Road / Primrose Road / Greenwood Road

6.13 The results for the existing staggered crossroad junction at Gardners Lane / Meadow Road / Primrose Road / Greenwood Road are presented in **Table 6.3** and the full PICADY output is contained in **Appendix G**.

Table 6.3 – Staggered Junction PICADY Outputs

	AM			PM		
	Q (Veh)	Delay (s)	RFC	Q (Veh)	Delay (s)	RFC
	2020			2021		
From Meadow Road	1.0	7.21	0.06	1.0	7.32	0.09
From Gardners Lane / Mead Road	0.0	5.60	0.04	0.0	5.50	0.04
From Greenwood Road	0.0	5.57	0.04	0.0	5.61	0.03
From Greenwood Road / Primrose Road	0.0	0.00	0.00	0.0	5.80	0.01
	2020 + Dev			2021 + Dev		
From Meadow Road	1.0	7.45	0.10	1	7.51	0.11
From Gardners Lane / Mead Road	0.0	5.62	0.04	0.0	5.51	0.04
From Greenwood Road	0.0	5.57	0.04	0.0	5.62	0.03
From Greenwood Road / Primrose Road	0.0	0.00	0.10	0.0	5.84	0.02
	2035			2035		
From Meadow Road	1.0	7.36	0.06	1	7.46	0.13
From Gardners Lane / Mead Road	1.0	5.72	0.06	1	5.51	0.05
From Greenwood Road	0.0	5.61	0.04	0.0	5.63	0.03
From Greenwood Road / Primrose Road	0.0	0.00	0.00	0.0	5.80	0.02
	2035 + Dev			2035 + Dev		
From Meadow Road	1.0	7.57	0.11	1	7.67	0.13
From Gardners Lane / Mead Road	1.0	5.64	0.05	1	5.52	0.05
From Greenwood Road	0.0	5.60	0.04	0.0	5.63	0.04
From Greenwood Road / Primrose Road	0.0	0.00	0.00	0.0	6.86	0.02

6.14 **Table 6.3** shows that the junction will operate well within its theoretical capacity, with no queuing of note, and a maximum RFC of 0.13 in the 2035 Future Year + Development modelling scenario (PM).

Summary

- 6.15 The impact of the proposed development on the local highway is demonstrated to be minimal, with imperceptible increases to delay and queuing on existing junctions.

7 Summary

- 7.1 Vectos is commissioned by Tai Tarian Ltd & Jones Brothers Ltd to provide transport and highways advice in relation to the proposed development of 52 residential dwellings at Meadow Road, Neath.
- 7.2 This location is suitable for such a development with convenient connections to nearby local facilities and services, with access achievable by active modes of travel as well as by public transport.
- 7.3 Vehicular access to the site will be from Meadow Road via a newly proposed priority junction, with a slight alteration to the existing one-way system in order to allow users of the site to perform a right-turn manoeuvre into the site access. This avoids some 500m of circuitous routing around the existing clockwise one way system. The key aim of this is to reduce excess traffic along an already compact residential road with on-street parking.
- 7.4 The proposed design without an internal loop is deemed appropriate for this development given that there are no traffic capacity concerns, and that a single road is better from a placemaking perspective as it does not provide excess road space which is against the grain of placemaking and accessibility objectives.
- 7.5 The traffic effect for 52 dwellings at this location is forecast to be 32 two-way vehicular trips in the AM peak and 31 two-way vehicular trips in the PM peak for a residential use. This equates to approximately one additional vehicle every two minutes in the AM and the PM peaks compared to existing demand and will not adversely affect highway capacity or highway safety.
- 7.6 On this basis, junction modelling has been undertaken and has demonstrated that there are no capacity issues the existing Gardners Lane / Meadow Road / Primrose Road / Greenwood Road staggered crossroads junction.

Conclusion

- 7.7 This is a well-located and sustainable site which, in transport terms, is policy compliant and hence should be acceptable from a transport and highways perspective.

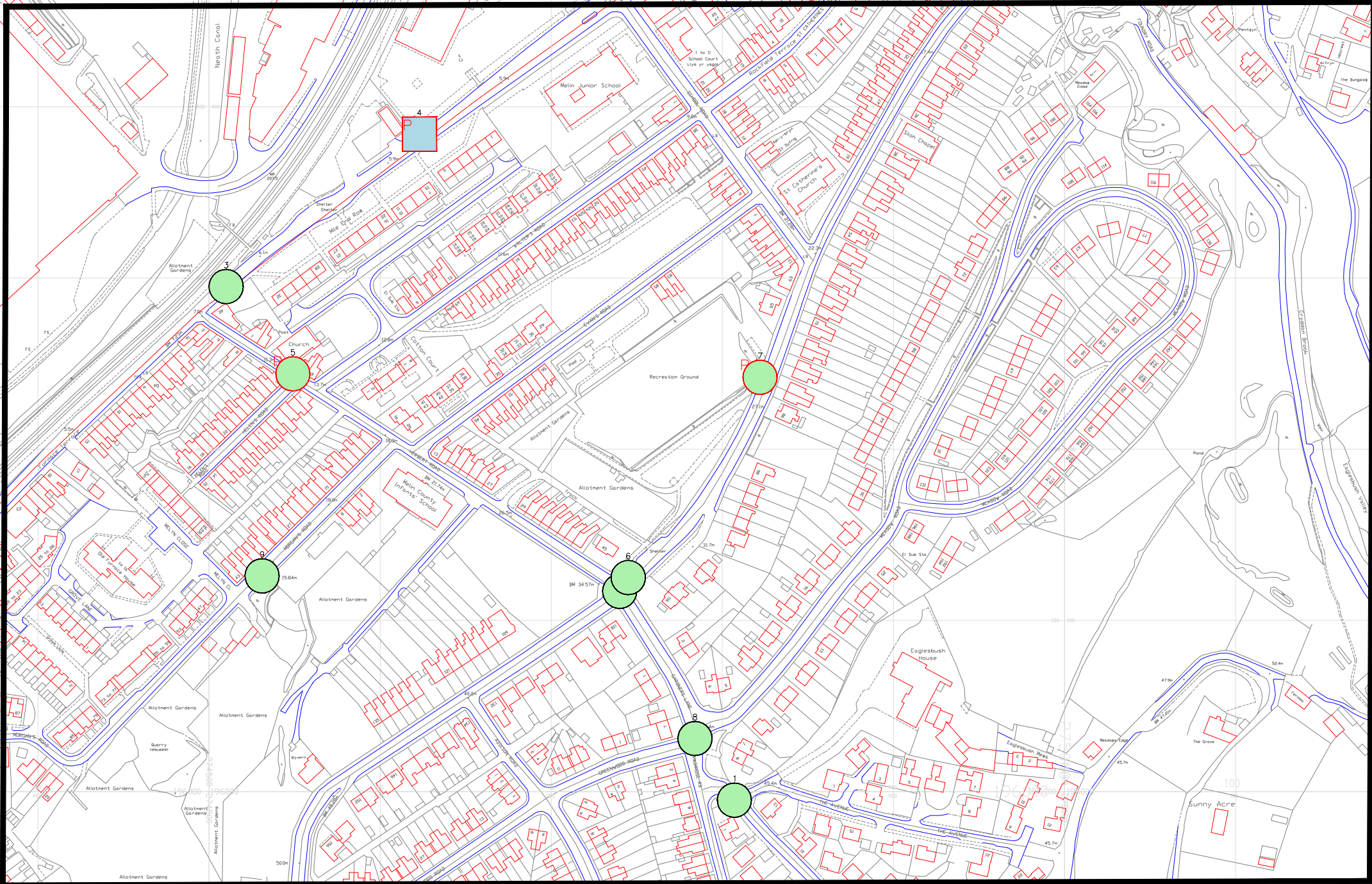
Appendix A

Collision Data

Dwg. No.

Job Title

S:\MISCELLANEOUS\Martin's work\Accident stats\accident data 2019.dwg



NOTES

1. All dimensions are in millimetres unless otherwise stated.

Accident Severity

- Slight 8
- Serious 1
- Fatal 0

Casualty Severity

- Slight 9
- Serious 1
- Fatal 0

Casualty Class

- Driver 5
- P.Riders 1
- Pass. 1
- Ped. 3

Accident Data BETWEEN 21-Dec-2014 AND 26-Dec-2015

Accident	No.	%	Category	No.	%	Category	No.	%	Category
Accident	1	100	Accident	1	100	Accident	1	100	Accident
Category	1	100	Category	1	100	Category	1	100	Category
Category	1	100	Category	1	100	Category	1	100	Category
Category	1	100	Category	1	100	Category	1	100	Category
Category	1	100	Category	1	100	Category	1	100	Category
Category	1	100	Category	1	100	Category	1	100	Category
Category	1	100	Category	1	100	Category	1	100	Category
Category	1	100	Category	1	100	Category	1	100	Category
Category	1	100	Category	1	100	Category	1	100	Category

Rev	Details	Dr	Ch	Ap	Date

Client



ENGINEERING AND TRANSPORT

NICOLA PEARCE BSC (Hons), Dip TP, MRTPI
DIRECTOR OF ENVIRONMENT AND REGENERATION
THE QUAYS, BRUNEL WAY
BAGLAN ENERGY PARK
NEATH SA11 2GG

Job Title

File No.	Financial Code No.
Drawn JJD	Checked ☐ Approved ☐
Date FEB-21	Date ☐ Date ☐
Scales NTS	Status 00000000
Drawing No.	



No

Crash Date: Sunday, November 13, 2016 **Time of Crash:** 4:11:00 PM **Crash Reference:** 2016621601891

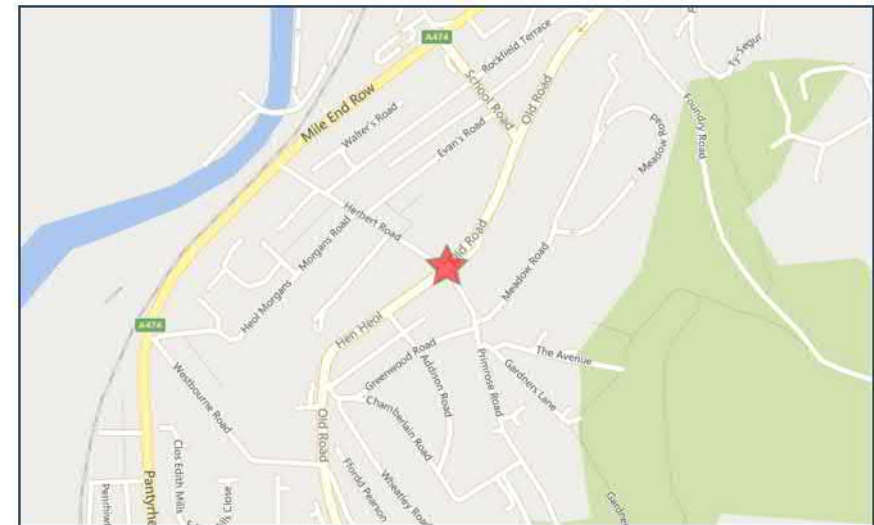
Highest Injury Severity: Slight
Highway Authority: Neath Port Talbot
Local Authority: Neath Port Talbot County Borough
Weather Description: Fine without high winds
Road Surface Description: Dry
Speed Limit: 30
Light Conditions: Darkness: street lights present and lit
Carriageway Hazards: None
Junction Detail: Crossroads
Junction Pedestrian Crossing: No physical crossing facility within 50 metres
Road Type: Single carriageway
Junction Control: Give way or uncontrolled

Road Number: U0

Number of Casualties: 1

Number of Vehicles: 2

OS Grid Reference: 274740 196117



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No

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Manoeuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)		1 Male	46 - 55	Vehicle is in the act of turning right	Front	Other	None	None
2	Car (excluding private hire)		8 Male	46 - 55	Vehicle proceeding normally along the carriageway, not on a bend	Offside	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	2	Slight	Driver or rider	Male	46 - 55	Unknown or other	Unknown or other

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No

Crash Date: Saturday, August 18, 2018 **Time of Crash:** 4:17:00 PM **Crash Reference:** 2018621801239

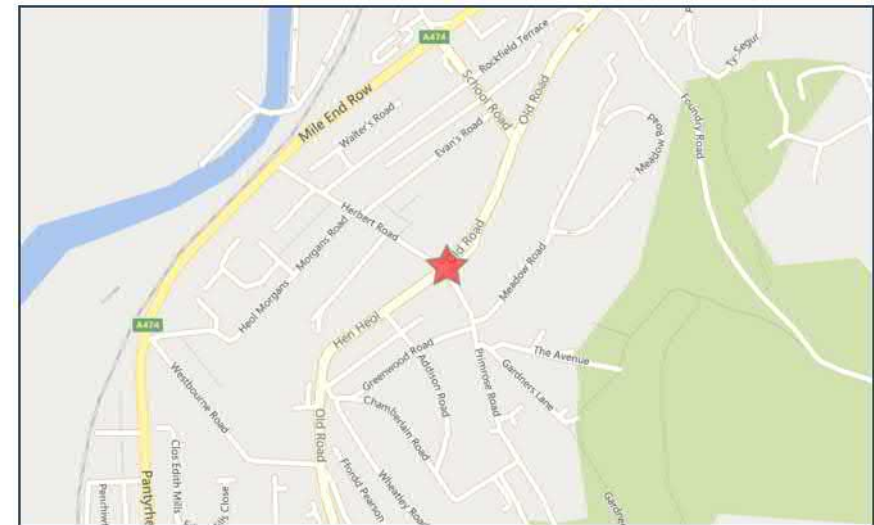
Highest Injury Severity: Slight
Highway Authority: Neath Port Talbot
Local Authority: Neath Port Talbot County Borough
Weather Description: Raining without high winds
Road Surface Description: Wet or Damp
Speed Limit: 30
Light Conditions: Daylight: regardless of presence of streetlights
Carriageway Hazards: None
Junction Detail: T or staggered junction
Junction Pedestrian Crossing: No physical crossing facility within 50 metres
Road Type: Single carriageway
Junction Control: Give way or uncontrolled

Road Number: U0

Number of Casualties: 1

Number of Vehicles: 2

OS Grid Reference: 274745 196125



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No

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Manoeuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	-1	Unknown	Unknown	Vehicle is in the act of turning left	Did not impact	Other	None	None
2	Pedal cycle	-1	Female	26 - 35	Vehicle proceeding normally along the carriageway, not on a bend	Did not impact	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Female	26 - 35	Unknown or other	Unknown or other

For more information about the data please visit: www.crashmap.co.uk/home/Faq

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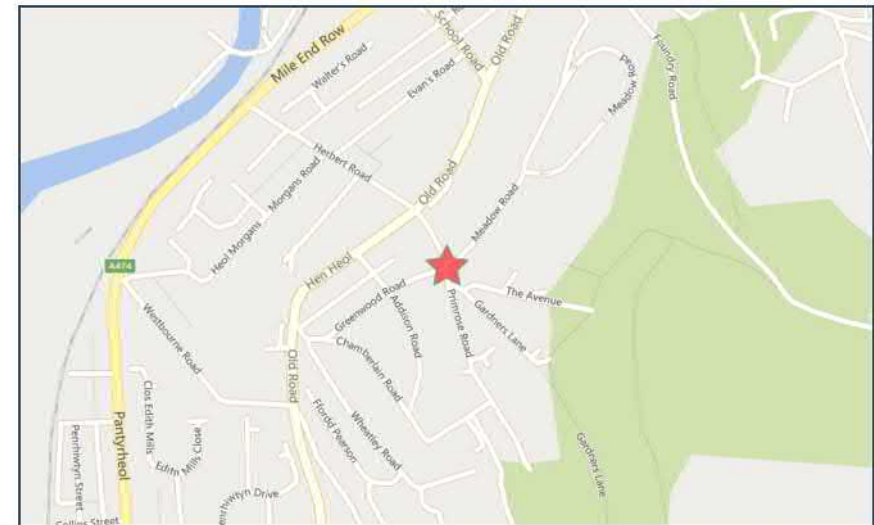


crashmap.co.uk

No

Crash Date: Saturday, March 02, 2019 **Time of Crash:** 10:23:00 AM **Crash Reference:** 2019621900305

Highest Injury Severity:	Slight	Road Number:	U0	Number of Casualties:	1
Highway Authority:	Neath Port Talbot	Number of Vehicles:	2	OS Grid Reference:	274784 196031
Local Authority:	Neath Port Talbot County Borough				
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Other junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: www.crashmap.co.uk/home/Faq
To subscribe to unlimited reports using CrashMap Pro visit www.crashmap.co.uk/Home/Premium_Services



No

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Manoeuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	15	Male	26 - 35	Vehicle is moving off	Nearside	Other	None	None
2	Car (excluding private hire)	11	Male	46 - 55	Vehicle proceeding normally along the carriageway, not on a bend	Front	Journey as part of work	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	2	Slight	Driver or rider	Male	46 - 55	Unknown or other	Unknown or other

For more information about the data please visit: www.crashmap.co.uk/home/Faq

To subscribe to unlimited reports using CrashMap Pro visit www.crashmap.co.uk/Home/Premium_Services

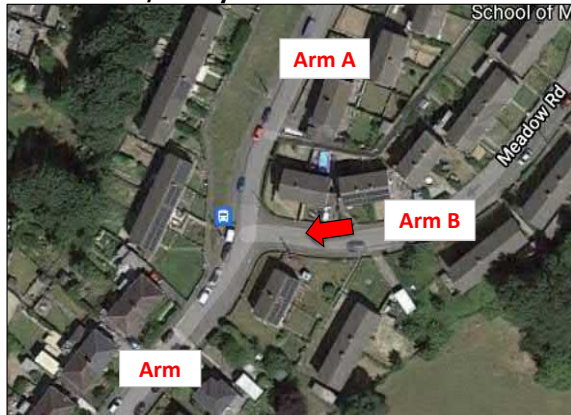
Appendix B

Traffic Surveys

Client Vectos
Project Name: Meadow Road, Neath
Junction Ref: Meadow Road/Meadow Road
Project Number: GS913
Survey Date: Wednesday 25th November 2020
Survey Type: VCC
Time Periods: 07:00 - 19:00



Site Location/Survey Reference



Camera View Point



Camera Location and view point

Junction Reference

Ref	Name
A	Maedow Road (N)
B	Maedow Road (E)
C	Maedow Road (S)

Classification Categories



Notes/Observations

Although go-surveys Ltd make every reasonable effort to ensure the accuracy and validity of the information provided, go-surveys Ltd and its clients accept no liability or responsibility for any errors or omissions in the content of this document.



Project Name: Meadow Road, Neath
Junction Ref: Meadow Road/Meadow Road

Motorcycles	Meadow Road (N)	Meadow Road (E)		Meadow Road (S)
Start Time	Ahead	Right	Left	Ahead
07:00	0	0	0	0
07:15	0	0	0	0
07:30	0	0	0	0
07:45	0	0	0	0
08:00	0	0	0	0
08:15	0	0	0	0
08:30	0	0	0	0
08:45	0	0	0	0
09:00	0	0	0	1
09:15	0	0	0	0
09:30	1	0	0	0
09:45	0	0	0	0
10:00	0	0	0	0
10:15	0	0	0	0
10:30	0	0	0	0
10:45	0	0	0	0
11:00	0	0	0	0
11:15	0	0	0	0
11:30	0	0	0	0
11:45	0	0	0	0
12:00	0	0	1	0
12:15	0	0	0	0
12:30	0	0	0	0
12:45	0	0	0	0
13:00	0	0	0	0
13:15	0	0	0	0
13:30	0	0	0	0
13:45	0	0	0	0
14:00	0	0	1	0
14:15	0	0	0	0
14:30	0	0	1	0
14:45	0	0	0	0
15:00	0	0	0	1
15:15	0	0	0	0
15:30	0	0	0	0
15:45	0	0	0	0
16:00	0	0	0	0
16:15	0	0	0	0
16:30	0	0	0	0
16:45	0	0	0	0

17:00	0	0	0	0
17:15	0	0	0	0
17:30	0	0	0	0
17:45	0	0	0	0
18:00	0	0	0	0
18:15	0	0	0	0
18:30	1	0	0	0
18:45	0	0	0	0

Cars & Light Goods	Meadow Road (N)	Meadow Road (E)		Meadow Road (S)
Start Time	Ahead	Right	Left	Ahead
07:00	3	0	2	1
07:15	2	0	0	1
07:30	1	0	2	1
07:45	0	0	3	2
08:00	2	1	2	3
08:15	5	0	5	1
08:30	0	0	4	1
08:45	1	0	0	9
09:00	3	1	4	3
09:15	0	0	5	3
09:30	0	0	1	0
09:45	0	0	2	3
10:00	0	0	1	1
10:15	0	0	1	2
10:30	1	0	4	5
10:45	0	0	4	5
11:00	1	1	5	9
11:15	1	0	2	0
11:30	0	0	6	8
11:45	4	0	9	6
12:00	0	1	4	8
12:15	2	0	8	7
12:30	5	0	3	6
12:45	1	0	2	4
13:00	0	0	3	5
13:15	1	0	3	2
13:30	2	0	3	3
13:45	2	0	5	4
14:00	0	0	1	2
14:15	3	1	5	9
14:30	3	0	5	10
14:45	2	1	7	9
15:00	2	0	10	8
15:15	3	0	4	11
15:30	4	0	4	15
15:45	1	0	5	8
16:00	2	1	4	10
16:15	0	0	5	5

16:30	0	0	8	14
16:45	3	0	5	8
17:00	2	2	8	10
17:15	1	0	0	9
17:30	1	0	3	8
17:45	2	0	11	5
18:00	0	0	3	3
18:15	1	0	6	4
18:30	4	0	0	11
18:45	2	0	3	6

Buses	Meadow Road (N)	Meadow Road (E)		Meadow Road (S)
Start Time	Ahead	Right	Left	Ahead
07:00	0	0	0	0
07:15	0	0	0	0
07:30	0	0	0	0
07:45	0	0	0	0
08:00	0	0	0	0
08:15	0	0	0	0
08:30	0	0	0	0
08:45	0	0	0	1
09:00	0	0	1	0
09:15	0	0	0	0
09:30	0	0	0	0
09:45	0	0	1	1
10:00	0	0	0	0
10:15	0	0	0	0
10:30	0	0	0	0
10:45	0	0	1	1
11:00	0	0	0	0
11:15	0	0	0	0
11:30	0	0	0	0
11:45	0	0	1	1
12:00	0	0	0	0
12:15	0	0	0	0
12:30	0	0	0	0
12:45	0	0	0	0
13:00	0	0	0	0
13:15	0	0	0	0
13:30	0	0	0	0
13:45	0	0	1	1
14:00	0	0	0	0
14:15	0	0	0	0
14:30	0	0	0	0
14:45	0	0	1	1
15:00	0	0	0	0
15:15	0	0	0	0
15:30	0	0	0	0
15:45	0	0	1	1
16:00	0	0	0	0
16:15	0	0	0	0
16:30	0	0	0	0
16:45	0	0	0	0
17:00	0	0	0	0
17:15	0	0	0	0
17:30	0	0	0	0
17:45	0	0	0	0
18:00	0	0	0	0
18:15	0	0	0	0

18:30	0	0	0	0
18:45	0	0	0	0

Single-Unit Trucks	Meadow Road (N)	Meadow Road (E)		Meadow Road (S)
Start Time	Ahead	Right	Left	Ahead
07:00	0	0	0	0
07:15	0	0	0	0
07:30	0	0	0	0
07:45	0	0	0	0
08:00	0	0	0	0
08:15	0	0	0	0
08:30	0	0	0	0
08:45	0	0	0	0
09:00	0	0	0	0
09:15	0	0	0	0
09:30	0	0	0	0
09:45	0	0	0	0
10:00	0	0	0	0
10:15	0	0	0	0
10:30	0	0	0	0
10:45	0	0	0	1
11:00	0	0	0	0
11:15	0	0	0	0
11:30	0	0	0	0
11:45	0	0	0	0
12:00	0	0	0	0
12:15	0	0	0	0
12:30	0	0	0	0
12:45	0	0	0	0
13:00	0	0	0	0
13:15	0	0	0	0
13:30	0	0	0	0
13:45	0	0	0	0
14:00	0	0	0	0
14:15	0	0	0	0
14:30	0	0	0	0
14:45	0	0	0	0
15:00	0	0	0	0
15:15	0	0	0	0
15:30	0	0	0	0
15:45	0	0	0	0
16:00	0	0	0	0
16:15	0	0	0	0
16:30	0	0	0	0
16:45	0	0	0	0
17:00	0	0	0	1
17:15	1	0	0	0
17:30	0	0	0	1
17:45	0	0	0	0

18:00	0	0	0	0
18:15	0	0	0	0
18:30	0	0	0	0
18:45	0	0	0	0

Articulated Trucks	Meadow Road (N)	Meadow Road (E)		Meadow Road (S)
Start Time	Ahead	Right	Left	Ahead
07:00	0	0	0	0
07:15	0	0	0	0
07:30	0	0	0	0
07:45	0	0	0	0
08:00	0	0	0	0
08:15	0	0	0	0
08:30	0	0	0	0
08:45	0	0	0	0
09:00	0	0	0	0
09:15	0	0	0	0
09:30	0	0	0	0
09:45	0	0	0	0
10:00	0	0	0	0
10:15	0	0	0	0
10:30	0	0	0	0
10:45	0	0	0	0
11:00	0	0	0	0
11:15	0	0	0	0
11:30	0	0	0	0
11:45	0	0	0	0
12:00	0	0	0	0
12:15	0	0	0	0
12:30	0	0	0	0
12:45	0	0	0	0
13:00	0	0	0	0
13:15	0	0	0	0
13:30	0	0	0	0
13:45	0	0	0	0
14:00	0	0	0	0
14:15	0	0	1	0
14:30	0	0	0	0
14:45	0	0	0	0
15:00	0	0	0	0
15:15	0	0	0	0
15:30	0	0	0	0
15:45	0	0	0	0
16:00	0	0	0	0
16:15	0	0	0	0
16:30	0	0	0	0
16:45	0	0	0	0
17:00	0	0	0	0
17:15	0	0	0	0
17:30	0	0	0	0
17:45	0	0	0	0
18:00	0	0	0	0
18:15	0	0	0	0

18:30	0	0	0	0
18:45	0	0	0	0

Rolling Hour

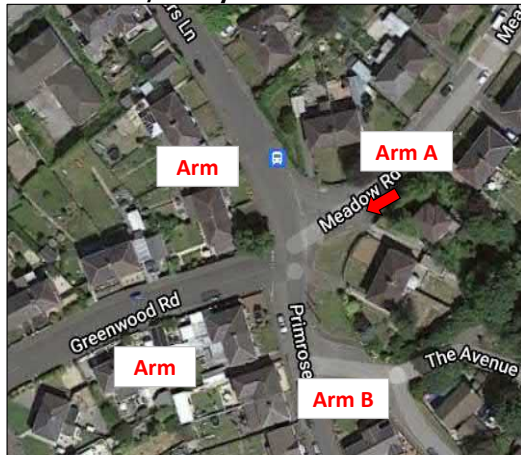
Car/LGV	Meadow Road (N)	Meadow Road (E)		Meadow Road (S)
Start Time	Ahead	Right	Left	Ahead
07:00	6	0	7	5
07:15	5	1	7	7
07:30	8	1	12	7
07:45	7	1	14	7
08:00	8	1	11	14
08:15	9	1	13	15
08:30	4	1	13	17
08:45	5	1	10	16
09:00	4	1	12	10
09:15	1	0	9	7
09:30	1	0	5	6
09:45	1	0	8	11
10:00	1	0	10	13
10:15	2	1	14	21
10:30	3	1	15	19
10:45	2	1	17	22
11:00	6	1	22	23
11:15	5	1	22	22
11:30	6	1	28	29
11:45	11	1	25	27
12:00	8	1	18	25
12:15	8	0	16	22
12:30	7	0	11	17
12:45	4	0	11	14
13:00	5	0	14	14
13:15	5	0	13	11
13:30	7	1	15	18
13:45	8	1	18	25
14:00	8	2	20	30
14:15	10	2	28	37
14:30	10	1	27	39
14:45	11	1	25	44
15:00	10	0	23	43
15:15	10	1	17	44
15:30	7	1	18	38
15:45	3	1	22	37
16:00	5	1	22	37
16:15	5	2	26	37
16:30	6	2	21	41
16:45	7	2	16	35
17:00	6	2	22	32
17:15	4	0	17	25
17:30	4	0	23	20
17:45	8	0	20	23
18:00	8	0	12	24

HGV/Bus	Meadow Road (N)	Meadow Road (N)		Meadow Road (S)
Start Time	Ahead	Right	Left	Ahead
07:00	0	0	0	0
07:15	0	0	0	0
07:30	0	0	0	0
07:45	0	0	0	0
08:00	0	0	0	1
08:15	0	0	1	1
08:30	0	0	1	1
08:45	0	0	1	1
09:00	0	0	2	1
09:15	0	0	1	1
09:30	0	0	1	1
09:45	0	0	1	1
10:00	0	0	1	2
10:15	0	0	1	2
10:30	0	0	1	2
10:45	0	0	1	2
11:00	0	0	1	1
11:15	0	0	1	1
11:30	0	0	1	1
11:45	0	0	1	1
12:00	0	0	0	0
12:15	0	0	0	0
12:30	0	0	0	0
12:45	0	0	0	0
13:00	0	0	1	1
13:15	0	0	1	1
13:30	0	0	2	1
13:45	0	0	2	1
14:00	0	0	2	1
14:15	0	0	2	1
14:30	0	0	1	1
14:45	0	0	1	1
15:00	0	0	1	1
15:15	0	0	1	1
15:30	0	0	1	1
15:45	0	0	1	1
16:00	0	0	0	0
16:15	0	0	0	1
16:30	1	0	0	1
16:45	1	0	0	2
17:00	1	0	0	2
17:15	1	0	0	1
17:30	0	0	0	1
17:45	0	0	0	0
18:00	0	0	0	0

Client: Vectos
Project Name: Meadow Road, Neath
Junction Ref: Meadow Road/Primrose Road/Greenwood Road
Project Number: GS913
Survey Date: Wednesday 25th November 2020
Survey Type: VCC
Time Periods: 08:00-09:00 - 17:00-18:00



Site Location/Survey Reference



Camera View Point



Camera Location and view point

Junction Reference

Ref	Name
A	Meadow Road
B	Primrose Road
C	Greenwood Road
D	Gardeners Lane

Classification Categories
Motorcycles Cars Light Goods Vehicles Buses Single-Unit Trucks Articulated Trucks
All Vehicles

Notes/Observations

Although go-surveys Ltd make every reasonable effort to ensure the accuracy and validity of the information provided, go-surveys Ltd and its clients accept no liability or responsibility for any errors or omissions in the content of this data or for damages as a result of relying on the information provided.

GO-SURVEYS

Project Name: Meadow Road, Neath

Junction Ref: Meadow Road/Primrose Road/Greenwood Road

1	2	3	4	5	6	7	8	9	10	11	12	13
Motorcycles	Gardeners Lane			Meadow Road			Primrose Road (S)			Greenwood Road		
Start Time	Right	Ahead	Left	Right	Ahead	Left	Right	Ahead	Left	Right	Ahead	Left
08:00	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
08:30	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
17:00	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0

Cars & Light Good	Gardeners Lane			Meadow Road			Primrose Road (S)			Greenwood Road		
Start Time	Right	Ahead	Left	Right	Ahead	Left	Right	Ahead	Left	Right	Ahead	Left
08:00	7	5	6	6	1	0	0	13	0	0	0	5
08:15	7	5	1	10	0	0	0	10	0	0	0	8
08:30	4	7	3	5	1	0	0	14	0	1	0	1
08:45	2	11	9	3	0	0	0	13	0	0	0	7
17:00	3	5	13	10	0	2	0	4	0	0	0	4
17:15	5	6	9	2	0	0	2	3	1	1	0	1
17:30	7	10	8	7	0	0	1	8	0	0	1	3
17:45	5	10	5	13	0	2	0	3	0	0	0	2

Buses	Gardeners Lane			Meadow Road			Primrose Road (S)			Greenwood Road		
Start Time	Right	Ahead	Left	Right	Ahead	Left	Right	Ahead	Left	Right	Ahead	Left
08:00	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
08:30	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	1	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0

Single-Unit Trucks	Gardeners Lane			Meadow Road			Primrose Road (S)			Greenwood Road		
Start Time	Right	Ahead	Left	Right	Ahead	Left	Right	Ahead	Left	Right	Ahead	Left
08:00	0	0	1	1	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	1	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	1	0	0	0	0	0	0	0	0	0
17:15	0	0	0	1	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0

Articulated Trucks	Gardeners Lane			Meadow Road			Primrose Road (S)			Greenwood Road		
Start Time	Right	Ahead	Left	Right	Ahead	Left	Right	Ahead	Left	Right	Ahead	Left
08:00	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
08:30	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
17:00	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0

Rolling Hour

Car/LGV	Gardeners Lane			Gardeners Lane			Primrose Road (S)			Gardeners Lane		
Start Time	Right	Ahead	Left	Right	Ahead	Left	Right	Ahead	Left	Right	Ahead	Left
08:00	20	28	19	24	2	0	0	50	0	1	0	21
17:00	20	31	35	32	0	4	3	18	1	1	1	10

HGV/Bus	Gardeners Lane			Gardeners Lane			Primrose Road (S)			Gardeners Lane		
Start Time	Right	Ahead	Left	Right	Ahead	Left	Right	Ahead	Left	Right	Ahead	Left
08:00	0	1	2	1	0	0	0	0	0	0	0	0
17:00	0	0	1	1	0	0	0	0	0	0	0	0

Survey Date: Wednesday 25th November 2020
Project Number GS913

OD Tables

08:00 Rolling Hour

Car/LGV

Arm Ref	A	B	C	D	Total
A	-	0	2	24	26
B	0	-	0	50	50
C	0	1	-	21	22
D	19	28	20	-	67
Total	19	29	22	95	165

HGV/Bus

Arm Ref	A	B	C	D	Total
A	-	0	0	1	1
B	0	-	0	0	0
C	0	0	-	0	0
D	2	1	0	-	3
Total	2	1	0	1	4

Total Veh

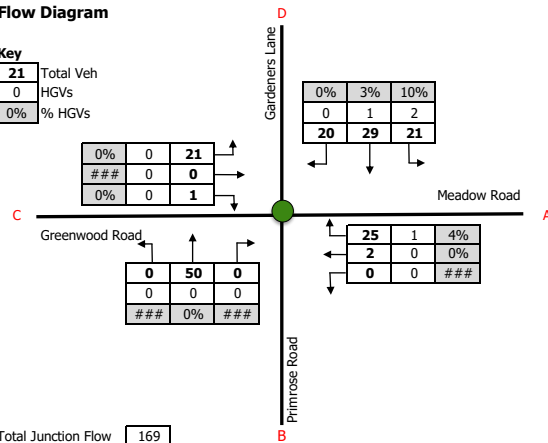
Arm Ref	A	B	C	D	Total
A	-	0	2	25	27
B	0	-	0	50	50
C	0	1	-	21	22
D	21	29	20	-	70
Total	21	30	22	96	169

% HGVS

Arm Ref	A	B	C	D	Total
A	-	0%	0%	4%	4%
B	0%	-	0%	0%	0%
C	0%	0%	-	0%	0%
D	10%	3%	0%	-	4%
Total	10%	3%	0%	4%	2%

Flow Diagram**Key**

21	Total Veh
0	HGVs
0%	% HGVS



Appendix C

Masterplan



Affordable

Ref	Description	M²	No.
211	1 Bed Walk Up	53	14 No.
321	2 Bed(Bungalow)	58	5 No.
322	2 Bed Walk up	68	2 No.
421	2 Bed	83	22 No.
531	3 Bed	93	6 No.
641	4 Bed	110	1 No.
642	4 Bed	110	2 No.
		Total	52 No.

- Site Boundary
- 1.8 m High close boarded timber fence
- 1.8m High brick screen wall with brick piers
- Indicates Areas of brick paviments
- Indicates potential locations for mature tree planting
- Indicates trees for Removal
- SW Culvert
- Areas available for soft landscaping. See Landscape consultant's plan for planting proposal details
- Dual aspect buildings

Notes: Design is based on Survey data only, a full tree survey is required. Location & Depth of all below ground utilities to be confirmed.

Tree Key

- Crown Spread.
Measured in North, South, East and West side of tree.
- Tree number.
(T - Individual Tree, G - Group, A - Tree area, W - Woodland, H - Hedgerow)

Root Protection Area (RPA)
A layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority.

Please refer to Tree Survey and
report by Stephen Lucocq
ArbTs - and their dwg: 21.08.20

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rev	date	description	by
A	29.10.20	Layout updated to clients comments	CC
B	30.10.20	Layout updated to clients comments	CC
C	22.10.20	Shared surface amended	CC
D	18.11.20	Plots 22-24 amended	CC
E	26.10.20	Redline amended	CC
F	19.11.20	Background image omitted	CC
G	10.12.20	Layout updated to clients comments	CC
H	15.12.20	Drawing references updated	CC
I	07.01.21	211 HT amended	CC
J	18.02.21	Plots 16-18 amended	CC
K	24.02.21	Plots 4-7, 12-15 & 38-42 amended	CC
L	11.03.21	Junction adjacent to Plots 4-7 amended	CC
M	30.03.21	Redline amended	CC

Drawn: CC

Checked: CW

Date: August 2020

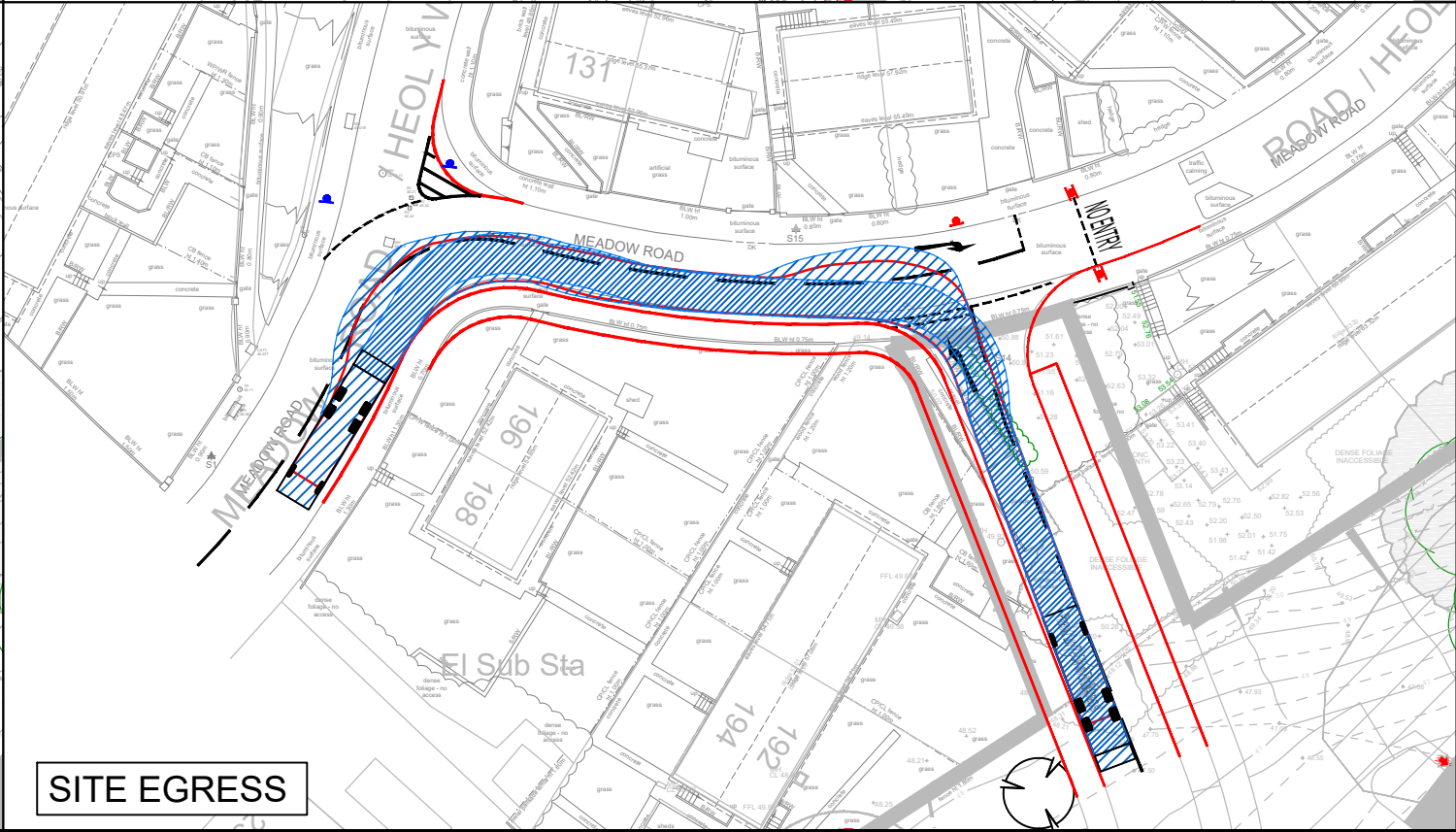
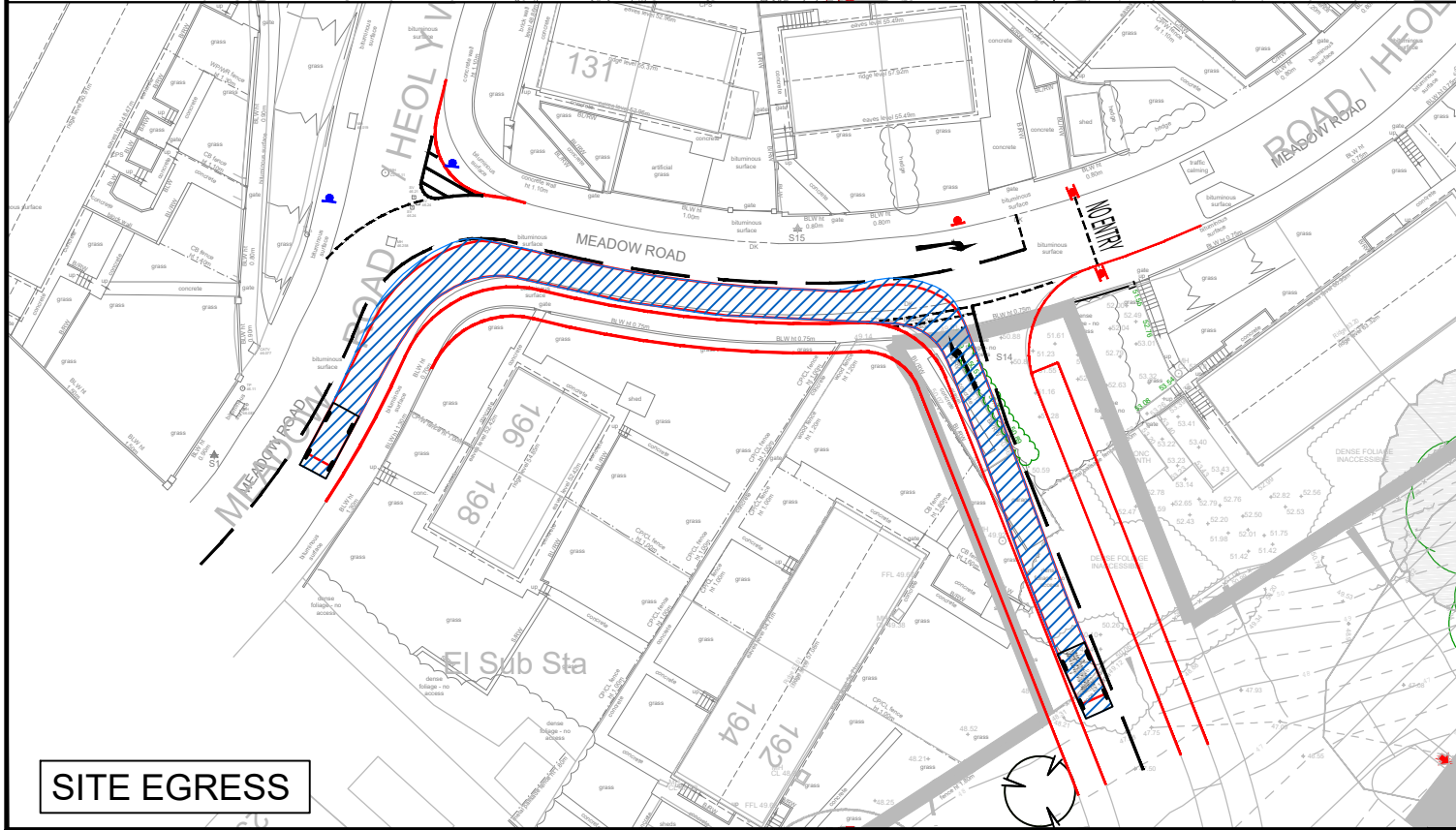
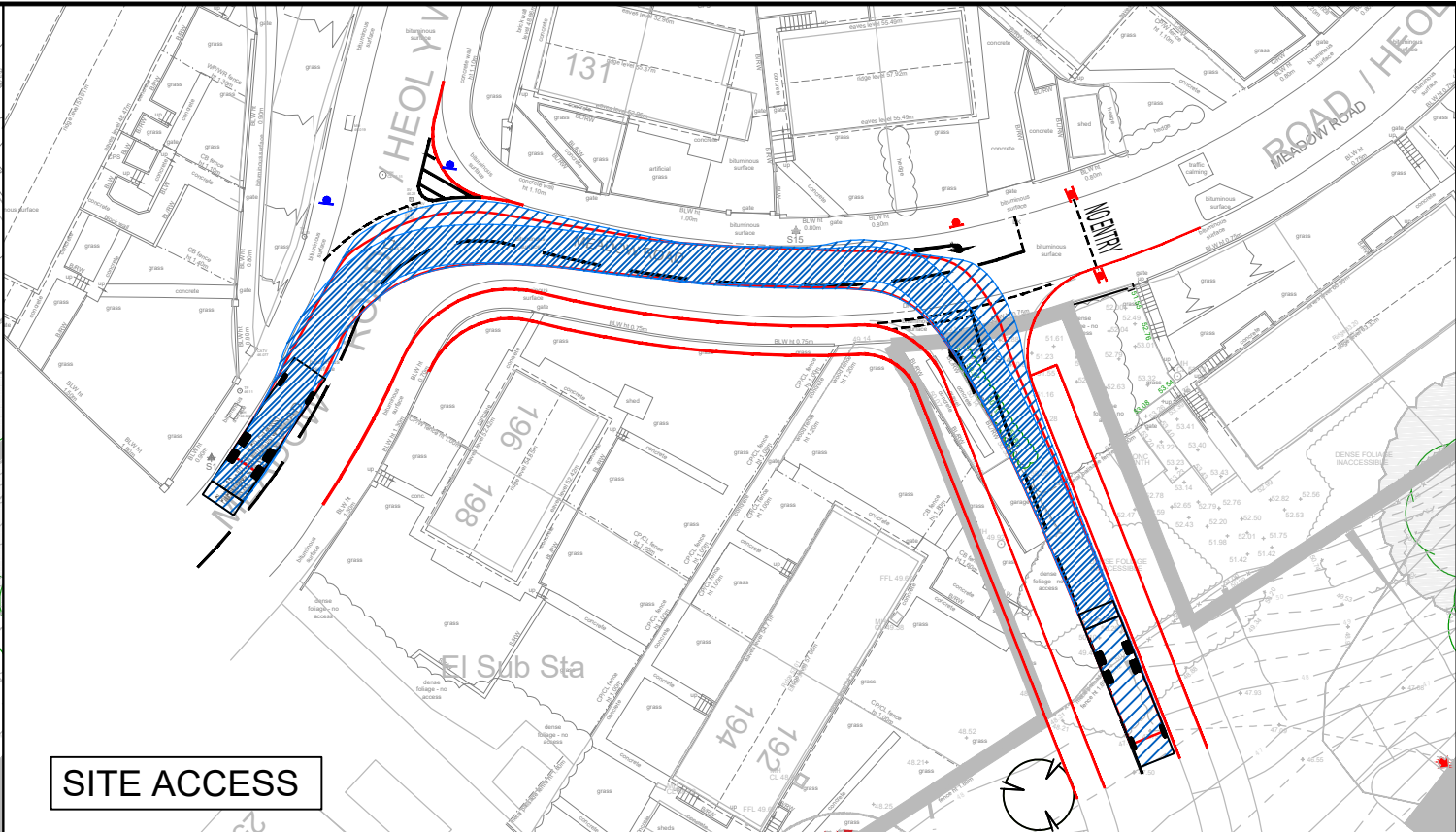
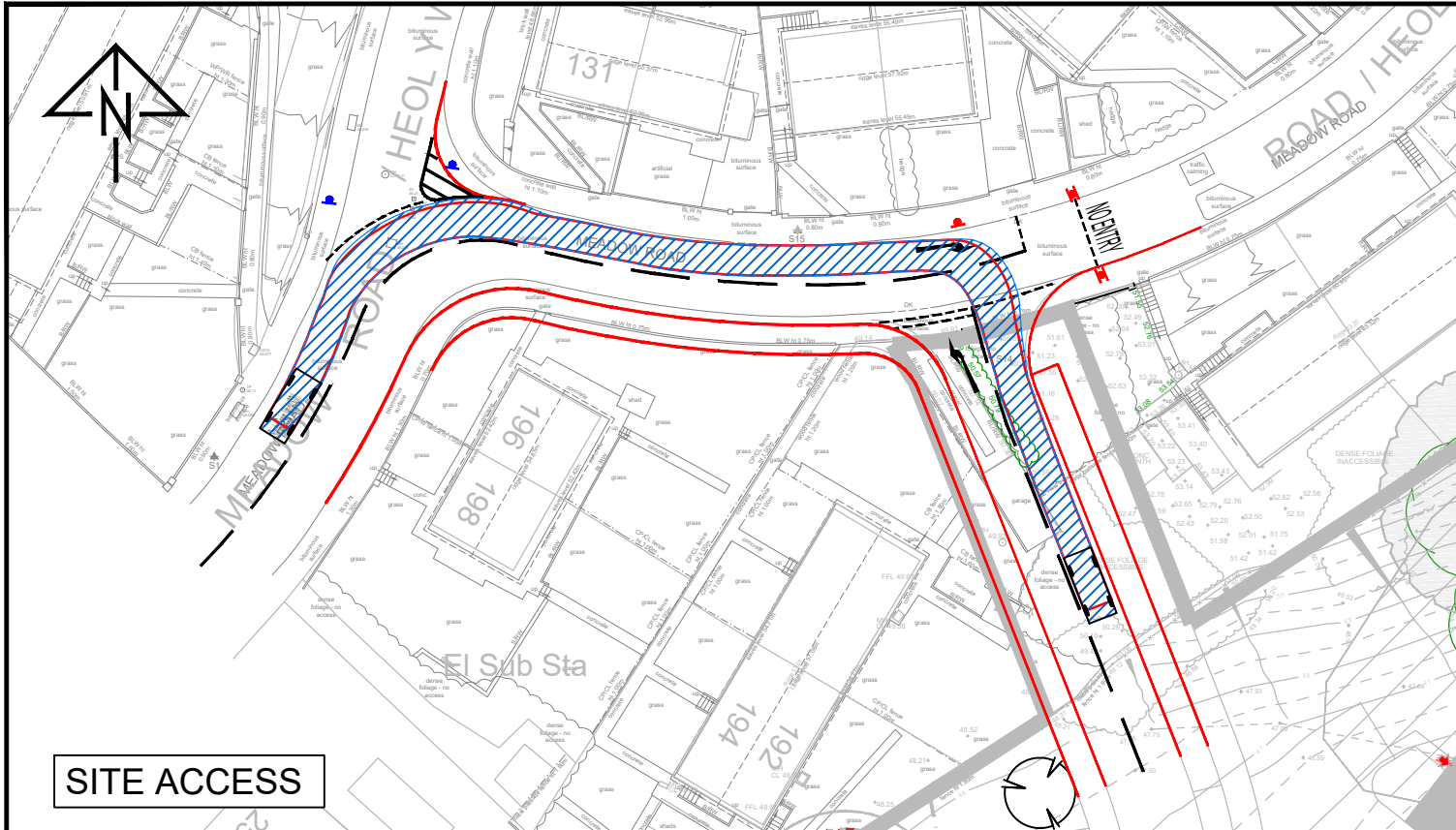
Scale: 1:500 @ A1 & 1:1000 @ A3

Client: Jones Brothers & Tai Tarian
Project: Meadow Road
Title: Site Layout
Ref: 2330-00(02)100

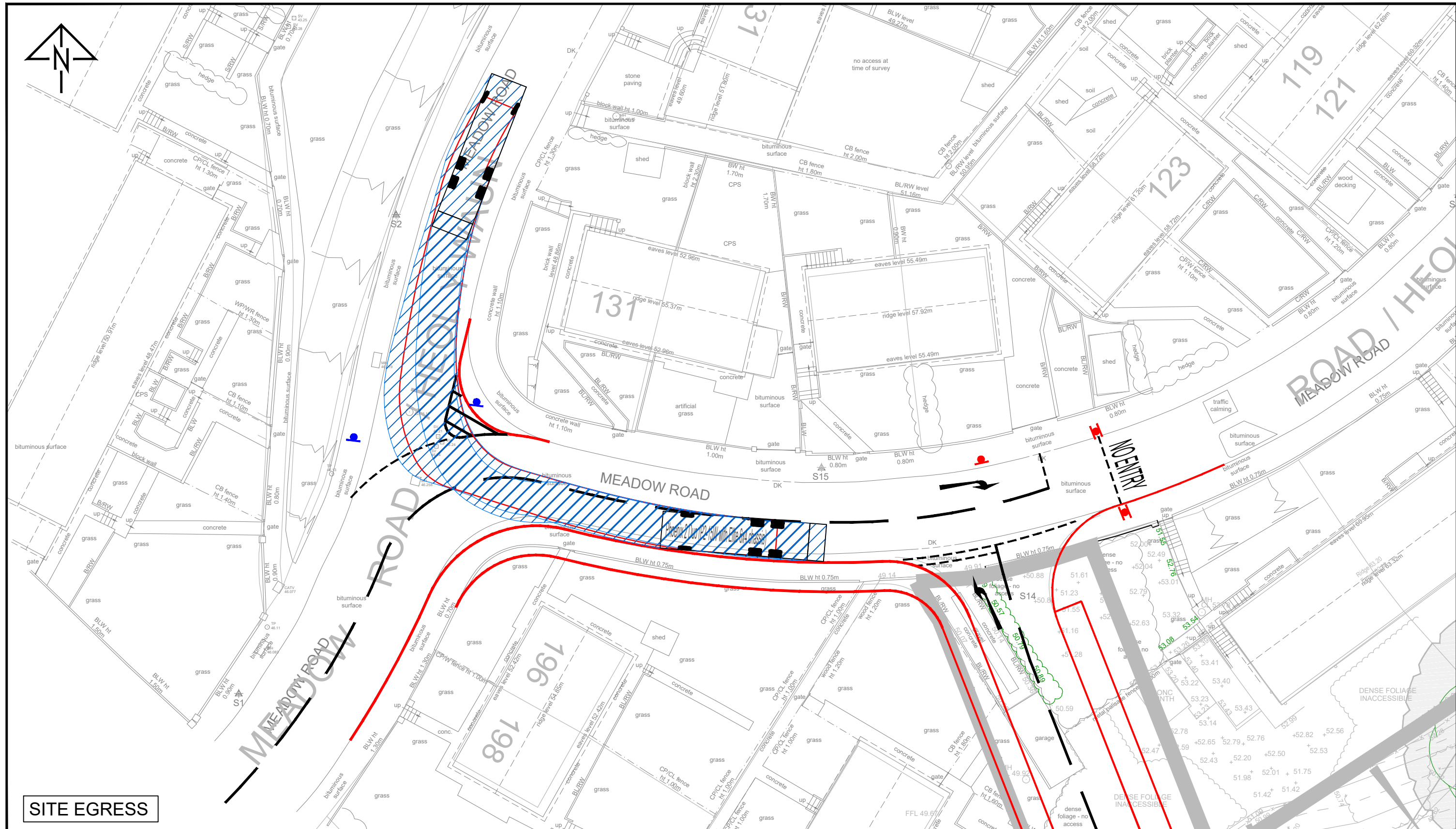
Rev: N

Appendix D

Vectos Drawings



REV.	DETAILS	DRAWN	CHECKED	DATE	Notes:	MEADOW ROAD, NEATH				TAI TARIAN LTD & JONES BROS LTD	
A	LAYOUT AMENDED ADDITIONAL TRACKING ADDED	AP	MT	13.12.20	1. This is not a construction drawing and is intended for illustrative purposes only. 2. White lining is indicative only. Standard Design Vehicle (SDV) Overall Length4.800m Overall Width2.000m Overall Body Height1.950m Min Body Ground Clearance0.100m Track Width2.000m Lock to lock time4.00s Wall to Wall Turning Radius6.000m Phoenix 2 Duo (P2-15W with Elite 6x4 chassis) Overall Length11.200m Overall Width2.530m Overall Body Height3.751m Min Body Ground Clearance0.304m Track Width2.500m Lock to lock time4.00s Kerb to Kerb Turning Radius9.500m PROPOSED SITE ACCESS OPTION 3 11.2m REFUSE VEHICLE SWEPT PATH ANALYSIS DRAWN: AP CHECKED: MT DATE: 07.12.2020 SCALES: 1:500 at A3 DRAWING NUMBER: 205496A_AT03c REVISION: A						



REV.	DETAILS	DRAWN	CHECKED	DATE

Notes:

- This is not a construction drawing and is intended for illustrative purposes only.
- White lining is indicative only.

Phoenix 2 Duo (P2-15W with Elite 6x4 chassis)

Overall Length 11.200m
Overall Width 2.530m
Overall Body Height 3.751m
Min Body Ground Clearance 0.304m
Track Width 2.500m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 9.500m

MEADOW ROAD, NEATH

PROPOSED ONE WAY OPTION 3
11.2m REFUSE VEHICLE SWEEP PATH
ANALYSIS

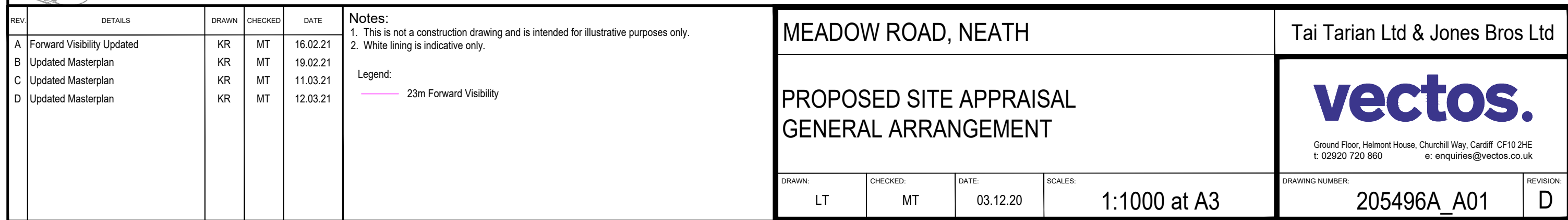
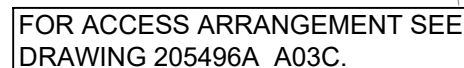
DRAWN: AP
CHECKED: MT
DATE: 13.12.2020
SCALES: 1:250 at A3

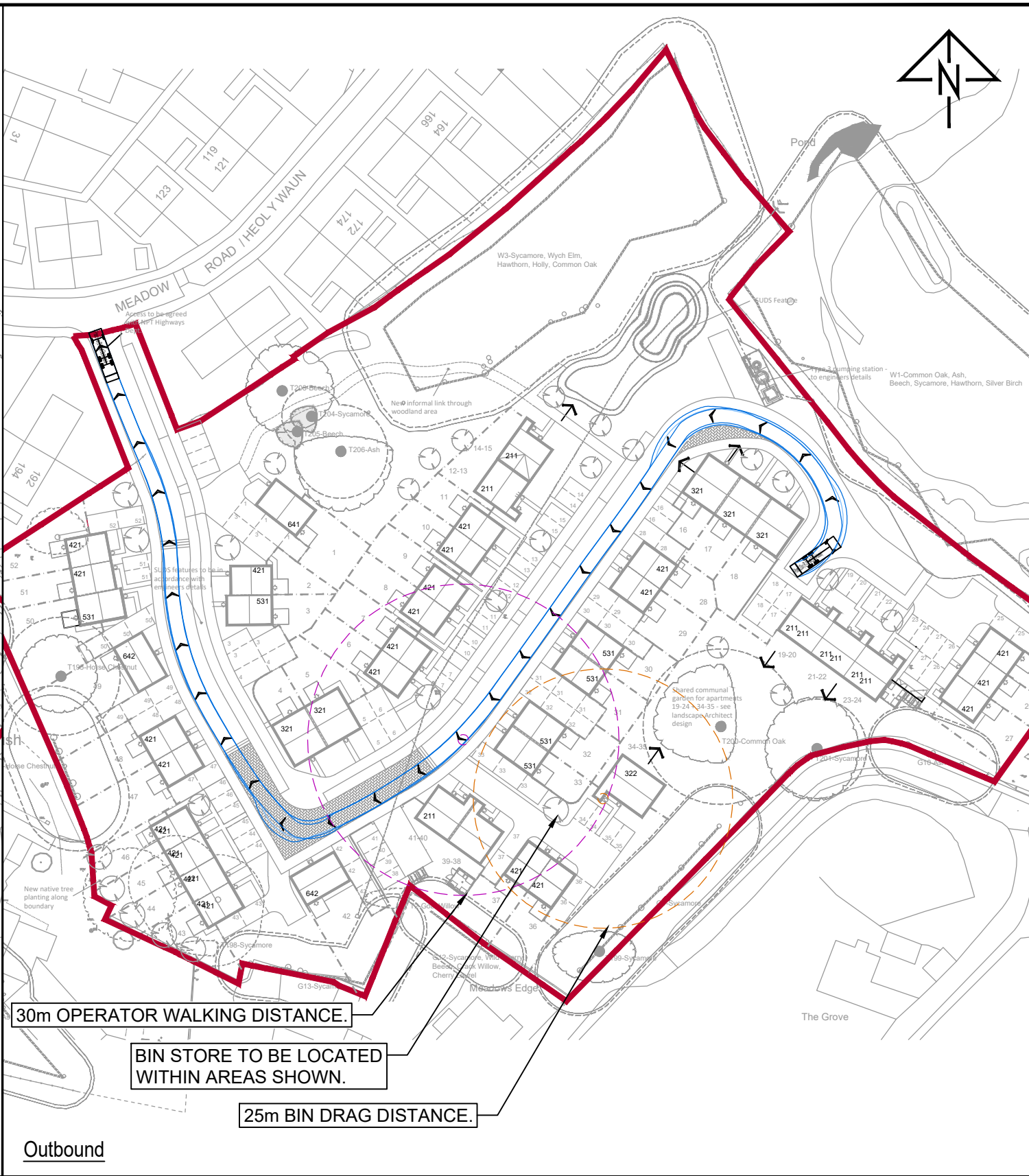
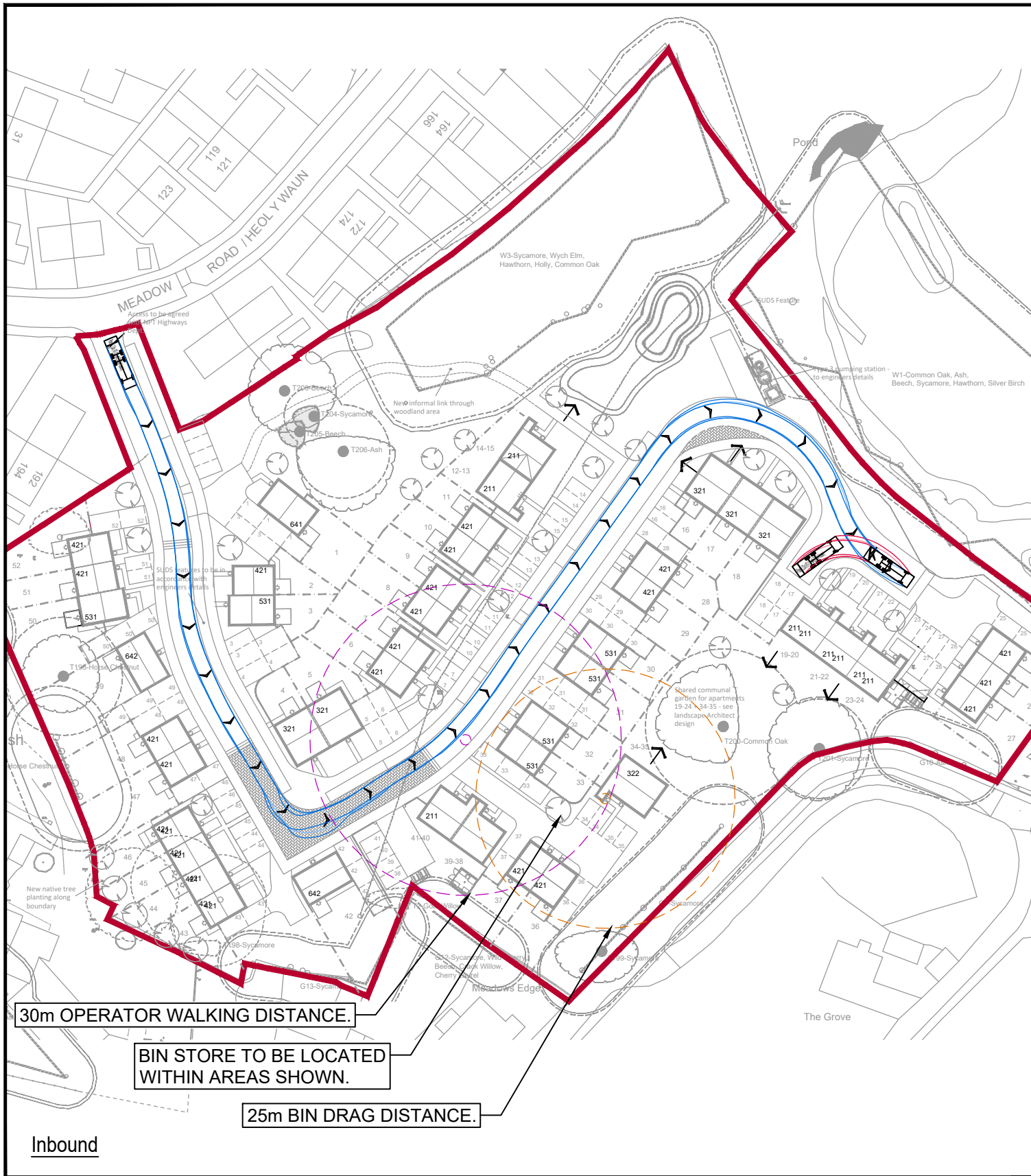
TAI TARIAN LTD & JONES BROS LTD

vectos.

Ground Floor, Helmont House, Churchill Way, Cardiff CF10 2HE
t: 02920 720 860 e: enquiries@vectos.co.uk

DRAWING NUMBER: 205496A_AT03d
REVISION: .





REV.	DETAILS	DRAWN	CHECKED	DATE
A	UPDATED MASTERPLAN	KR	MT	19.02.21
B	UPDATED MASTERPLAN	KR	MT	11.03.21
C	UPDATED MASTERPLAN	KR	MT	12.03.21

Notes:
1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.

Phoenix 2 Duo (P2-12W with Elite 6x4 chassis)

Overall Length 10.200m
Overall Width 2.530m
Overall Body Height 3.751m
Min Body Ground Clearance 0.304m
Track Width 2.500m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 7.800m

MEADOW ROAD, NEATH

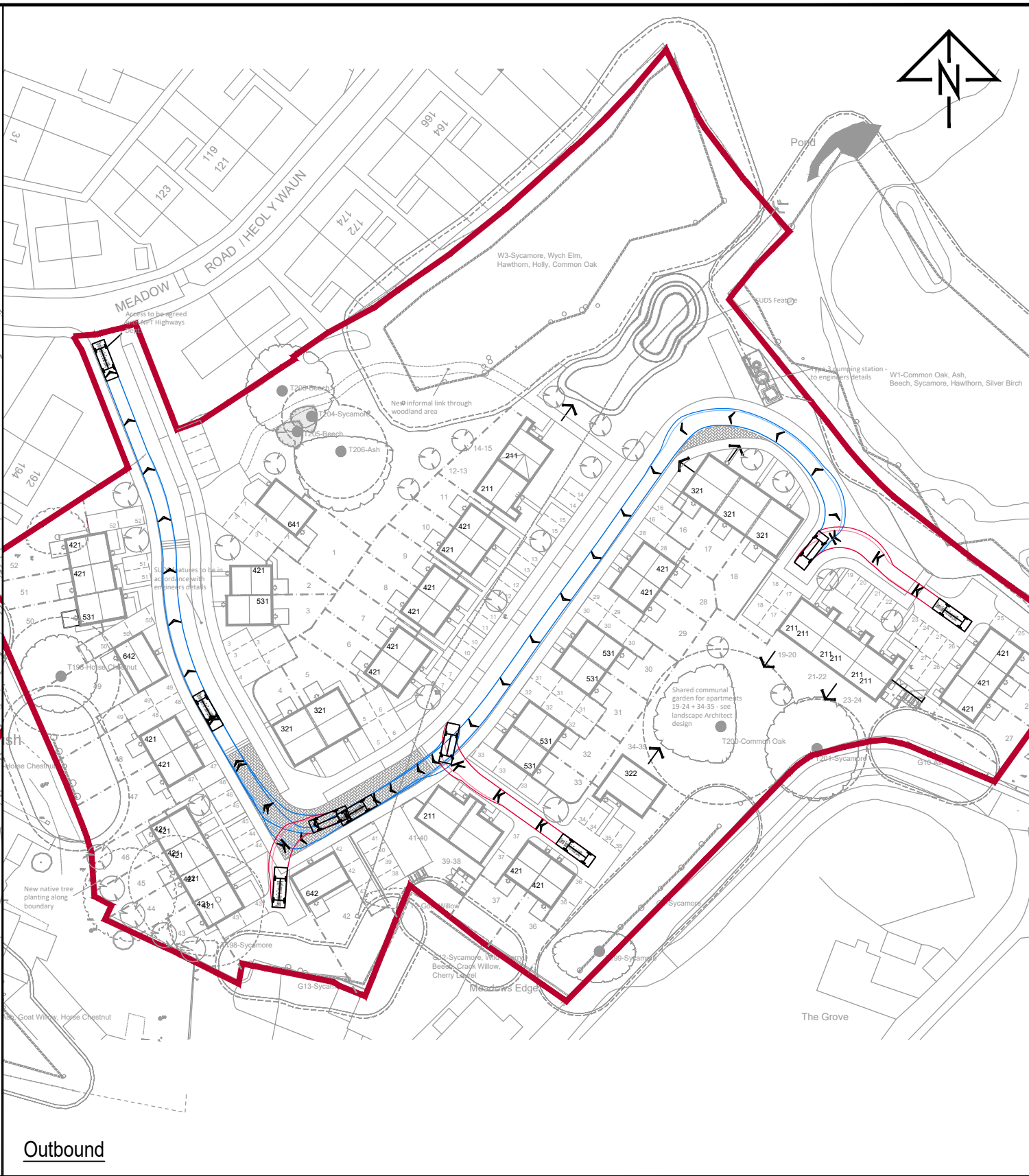
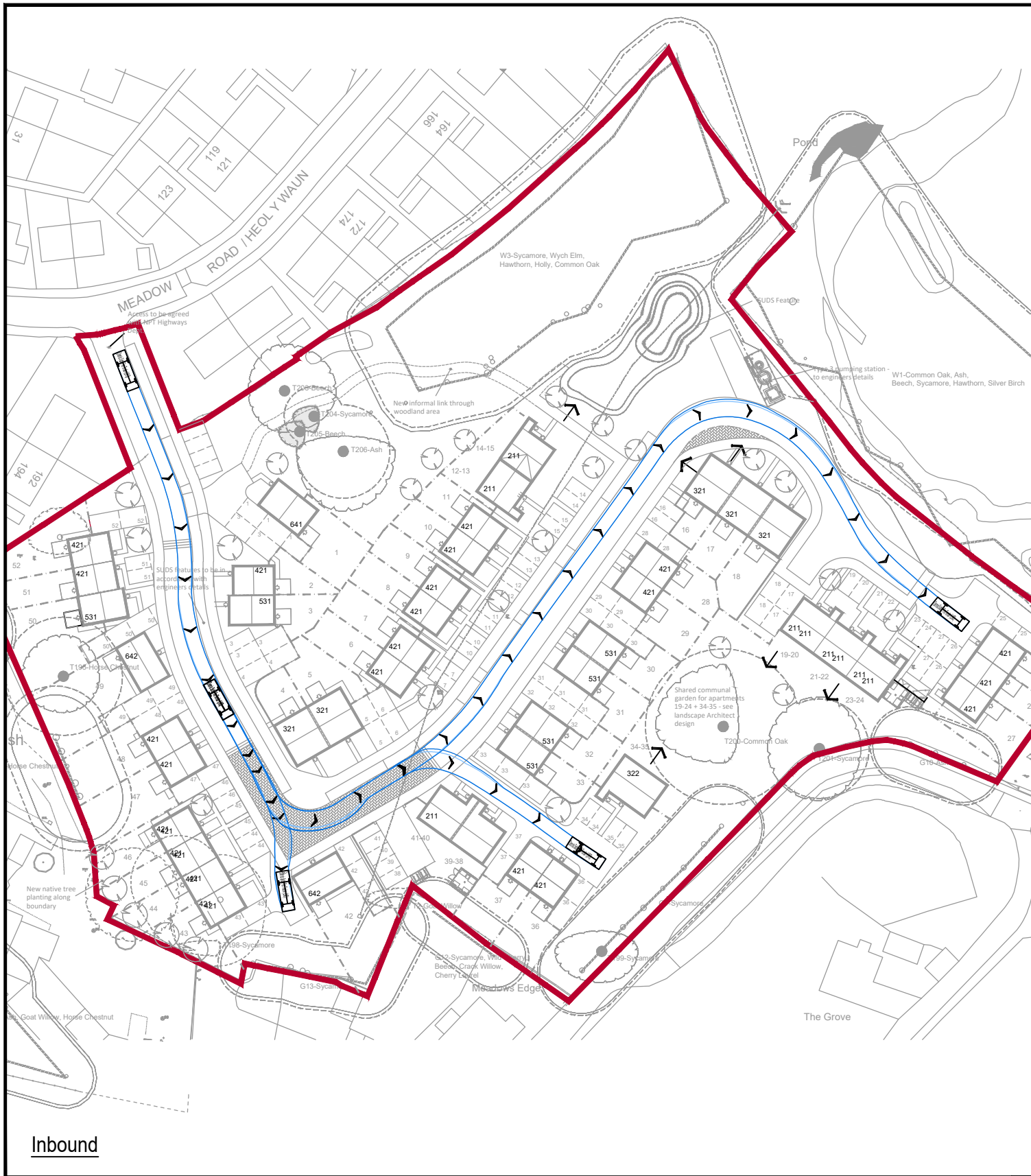
SWEPT PATH ANALYSIS
REFUSE COLLECTION

DRAWN: PP
CHECKED: MT
DATE: 10.12.20
SCALES: 1:1000 at A3

Tai Tarian Ltd & Jones Bros Ltd

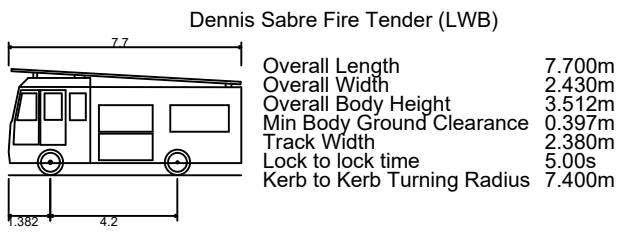
vectos.
Ground Floor, Helmont House, Churchill Way, Cardiff CF10 2HE
t: 02920 720 860 e: enquiries@vectos.co.uk

DRAWING NUMBER: 205496A/AT/B01
REVISION: C



REV.	DETAILS	DRAWN	CHECKED	DATE
A	UPDATED MASTERPLAN	KR	MT	11.03.21
B	UPDATED MASTERPLAN	KR	MT	12.03.21

Notes:
1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.



MEADOW ROAD, NEATH

SWEPT PATH ANALYSIS FIRE TENDER

DRAWN:	CHECKED:	DATE:
PP	MT	10.12.20

SCALES:
1:1000 at A3

Tai Tarian Ltd & Jones Bros Ltd

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DRAWING NUMBER:	REVISION:
205496A/AT/B02	B

Appendix E

TRICS Outputs

Calculation Reference: AUDIT-152302-201123-1158

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : B - AFFORDABLE/LOCAL AUTHORITY HOUSES
 MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

03	SOUTH WEST	
	DV DEVON	1 days
04	EAST ANGLIA	
	SF SUFFOLK	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	1 days
	WY WEST YORKSHIRE	2 days
08	NORTH WEST	
	MS MERSEYSIDE	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: No of Dwellings
 Actual Range: 16 to 280 (units:)
 Range Selected by User: 14 to 280 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/05 to 19/09/13

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Tuesday	3 days
Wednesday	1 days
Thursday	2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	6 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	4
Edge of Town	2

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	3
Built-Up Zone	1
No Sub Category	2

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

C3

6 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000

2 days

10,001 to 15,000

2 days

15,001 to 20,000

1 days

25,001 to 50,000

1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000

2 days

75,001 to 100,000

3 days

250,001 to 500,000

1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0

4 days

1.1 to 1.5

2 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No

6 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present

6 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	DV-03-B-01	TERRACED		DEVON
	HAM DRIVE			
	PLYMOUTH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:	35		
	Survey date: WEDNESDAY	06/07/05	Survey Type: MANUAL	
2	MS-03-B-01	TERRACED		MERSEYSIDE
	TARBOCK ROAD			
	LIVERPOOL			
	SPEKE			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	16		
	Survey date: TUESDAY	18/06/13	Survey Type: MANUAL	
3	NY-03-B-01	TERRACED HOUSING		NORTH YORKSHIRE
	NORTHALLERTON ROAD			
	THIRSK			
	NORBY			
	Suburban Area (PPS6 Out of Centre)			
	No Sub Category			
	Total No of Dwellings:	280		
	Survey date: THURSDAY	20/09/07	Survey Type: MANUAL	
4	SF-03-B-01	SEMI D./TERRACED		SUFFOLK
	A1144 ST PETERS STREET			
	LOWESTOFT			
	Suburban Area (PPS6 Out of Centre)			
	No Sub Category			
	Total No of Dwellings:	46		
	Survey date: TUESDAY	20/09/05	Survey Type: MANUAL	
5	WY-03-B-02	MIXED HOUSES		WEST YORKSHIRE
	WHITEACRE STREET			
	HUDDERSFIELD			
	DEIGHTON			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	54		
	Survey date: TUESDAY	17/09/13	Survey Type: MANUAL	
6	WY-03-B-03	TERRACED HOUSES		WEST YORKSHIRE
	LINCOLN GREEN ROAD			
	LEEDS			
	Suburban Area (PPS6 Out of Centre)			
	Built-Up Zone			
	Total No of Dwellings:	29		
	Survey date: THURSDAY	19/09/13	Survey Type: MANUAL	

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES
 MULTI-MODAL TOTAL VEHICLES
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	77	0.050	6	77	0.143	6	77	0.193
08:00 - 09:00	6	77	0.109	6	77	0.207	6	77	0.316
09:00 - 10:00	6	77	0.130	6	77	0.130	6	77	0.260
10:00 - 11:00	6	77	0.111	6	77	0.122	6	77	0.233
11:00 - 12:00	6	77	0.130	6	77	0.104	6	77	0.234
12:00 - 13:00	6	77	0.117	6	77	0.120	6	77	0.237
13:00 - 14:00	6	77	0.135	6	77	0.096	6	77	0.231
14:00 - 15:00	6	77	0.113	6	77	0.143	6	77	0.256
15:00 - 16:00	6	77	0.163	6	77	0.120	6	77	0.283
16:00 - 17:00	6	77	0.135	6	77	0.141	6	77	0.276
17:00 - 18:00	6	77	0.215	6	77	0.157	6	77	0.372
18:00 - 19:00	6	77	0.128	6	77	0.087	6	77	0.215
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.536			1.570			3.106

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

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Parameter summary

Trip rate parameter range selected: 16 - 280 (units:)
 Survey date range: 01/01/05 - 19/09/13
 Number of weekdays (Monday-Friday): 6
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 1
 Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

MULTI-MODAL OGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	77	0.000	6	77	0.000	6	77	0.000
08:00 - 09:00	6	77	0.002	6	77	0.000	6	77	0.002
09:00 - 10:00	6	77	0.004	6	77	0.000	6	77	0.004
10:00 - 11:00	6	77	0.000	6	77	0.007	6	77	0.007
11:00 - 12:00	6	77	0.000	6	77	0.000	6	77	0.000
12:00 - 13:00	6	77	0.000	6	77	0.000	6	77	0.000
13:00 - 14:00	6	77	0.000	6	77	0.000	6	77	0.000
14:00 - 15:00	6	77	0.000	6	77	0.000	6	77	0.000
15:00 - 16:00	6	77	0.000	6	77	0.000	6	77	0.000
16:00 - 17:00	6	77	0.000	6	77	0.000	6	77	0.000
17:00 - 18:00	6	77	0.000	6	77	0.000	6	77	0.000
18:00 - 19:00	6	77	0.000	6	77	0.000	6	77	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.006			0.007			0.013

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

MULTI-MODAL PSVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	77	0.000	6	77	0.000	6	77	0.000
08:00 - 09:00	6	77	0.000	6	77	0.000	6	77	0.000
09:00 - 10:00	6	77	0.002	6	77	0.002	6	77	0.004
10:00 - 11:00	6	77	0.000	6	77	0.000	6	77	0.000
11:00 - 12:00	6	77	0.002	6	77	0.002	6	77	0.004
12:00 - 13:00	6	77	0.000	6	77	0.000	6	77	0.000
13:00 - 14:00	6	77	0.002	6	77	0.002	6	77	0.004
14:00 - 15:00	6	77	0.000	6	77	0.000	6	77	0.000
15:00 - 16:00	6	77	0.000	6	77	0.000	6	77	0.000
16:00 - 17:00	6	77	0.000	6	77	0.000	6	77	0.000
17:00 - 18:00	6	77	0.000	6	77	0.000	6	77	0.000
18:00 - 19:00	6	77	0.000	6	77	0.000	6	77	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.006			0.006			0.012

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

MULTI-MODAL CYCLISTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	77	0.009	6	77	0.004	6	77	0.013
08:00 - 09:00	6	77	0.002	6	77	0.009	6	77	0.011
09:00 - 10:00	6	77	0.004	6	77	0.011	6	77	0.015
10:00 - 11:00	6	77	0.007	6	77	0.000	6	77	0.007
11:00 - 12:00	6	77	0.004	6	77	0.004	6	77	0.008
12:00 - 13:00	6	77	0.007	6	77	0.002	6	77	0.009
13:00 - 14:00	6	77	0.004	6	77	0.004	6	77	0.008
14:00 - 15:00	6	77	0.000	6	77	0.002	6	77	0.002
15:00 - 16:00	6	77	0.020	6	77	0.004	6	77	0.024
16:00 - 17:00	6	77	0.011	6	77	0.017	6	77	0.028
17:00 - 18:00	6	77	0.013	6	77	0.011	6	77	0.024
18:00 - 19:00	6	77	0.015	6	77	0.017	6	77	0.032
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.096			0.085			0.181

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES
 MULTI-MODAL VEHICLE OCCUPANTS
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	77	0.050	6	77	0.191	6	77	0.241
08:00 - 09:00	6	77	0.150	6	77	0.370	6	77	0.520
09:00 - 10:00	6	77	0.152	6	77	0.174	6	77	0.326
10:00 - 11:00	6	77	0.152	6	77	0.172	6	77	0.324
11:00 - 12:00	6	77	0.161	6	77	0.130	6	77	0.291
12:00 - 13:00	6	77	0.152	6	77	0.150	6	77	0.302
13:00 - 14:00	6	77	0.172	6	77	0.109	6	77	0.281
14:00 - 15:00	6	77	0.154	6	77	0.183	6	77	0.337
15:00 - 16:00	6	77	0.276	6	77	0.157	6	77	0.433
16:00 - 17:00	6	77	0.213	6	77	0.224	6	77	0.437
17:00 - 18:00	6	77	0.287	6	77	0.235	6	77	0.522
18:00 - 19:00	6	77	0.207	6	77	0.126	6	77	0.333
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:		2.126			2.221			4.347	

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

MULTI-MODAL PEDESTRIANS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	77	0.020	6	77	0.043	6	77	0.063
08:00 - 09:00	6	77	0.050	6	77	0.267	6	77	0.317
09:00 - 10:00	6	77	0.104	6	77	0.087	6	77	0.191
10:00 - 11:00	6	77	0.067	6	77	0.107	6	77	0.174
11:00 - 12:00	6	77	0.065	6	77	0.072	6	77	0.137
12:00 - 13:00	6	77	0.107	6	77	0.076	6	77	0.183
13:00 - 14:00	6	77	0.050	6	77	0.048	6	77	0.098
14:00 - 15:00	6	77	0.070	6	77	0.078	6	77	0.148
15:00 - 16:00	6	77	0.211	6	77	0.126	6	77	0.337
16:00 - 17:00	6	77	0.122	6	77	0.065	6	77	0.187
17:00 - 18:00	6	77	0.157	6	77	0.128	6	77	0.285
18:00 - 19:00	6	77	0.080	6	77	0.074	6	77	0.154
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:		1.103			1.171			2.274	

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES
 MULTI-MODAL PUBLIC TRANSPORT USERS
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	77	0.000	6	77	0.002	6	77	0.002
08:00 - 09:00	6	77	0.000	6	77	0.020	6	77	0.020
09:00 - 10:00	6	77	0.004	6	77	0.013	6	77	0.017
10:00 - 11:00	6	77	0.002	6	77	0.000	6	77	0.002
11:00 - 12:00	6	77	0.004	6	77	0.011	6	77	0.015
12:00 - 13:00	6	77	0.007	6	77	0.002	6	77	0.009
13:00 - 14:00	6	77	0.026	6	77	0.007	6	77	0.033
14:00 - 15:00	6	77	0.007	6	77	0.002	6	77	0.009
15:00 - 16:00	6	77	0.013	6	77	0.002	6	77	0.015
16:00 - 17:00	6	77	0.000	6	77	0.004	6	77	0.004
17:00 - 18:00	6	77	0.011	6	77	0.000	6	77	0.011
18:00 - 19:00	6	77	0.002	6	77	0.000	6	77	0.002
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.076			0.063			0.139

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	77	0.078	6	77	0.241	6	77	0.319
08:00 - 09:00	6	77	0.202	6	77	0.665	6	77	0.867
09:00 - 10:00	6	77	0.265	6	77	0.285	6	77	0.550
10:00 - 11:00	6	77	0.228	6	77	0.278	6	77	0.506
11:00 - 12:00	6	77	0.235	6	77	0.217	6	77	0.452
12:00 - 13:00	6	77	0.272	6	77	0.230	6	77	0.502
13:00 - 14:00	6	77	0.252	6	77	0.167	6	77	0.419
14:00 - 15:00	6	77	0.230	6	77	0.265	6	77	0.495
15:00 - 16:00	6	77	0.520	6	77	0.289	6	77	0.809
16:00 - 17:00	6	77	0.346	6	77	0.311	6	77	0.657
17:00 - 18:00	6	77	0.467	6	77	0.374	6	77	0.841
18:00 - 19:00	6	77	0.304	6	77	0.217	6	77	0.521
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.399			3.539			6.938

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

Appendix F

Technical Note

Meadow Road, Neath

Technical Note

205496/N01

22/01/2021

Introduction

1. This Technical Note (TN) is in relation to the proposed residential development of 52 affordable homes to the east of Meadow Road, Neath, and specifically the associated Transport Statement (TS) dated 17/12/2020 submitted as part of the PAC.
2. This follows feedback received from Neath Port Talbot Highways (NPTCBC) in respect of providing a comprehensive review of traffic flows at the junction of Gardners Lane / Greenwood Road / Meadow Road / Primrose junction.
3. The TS submitted at PAC included a junction capacity (PICADY) assessment for the Gardners Lane / Greenwood Road / Meadow Road / Primrose Road junction, slightly to the south of the site. The PICADY assessment was based on typical traffic flow data collected from an MCC survey originally undertaken from 0800-0900 and 1700-1800 on Wednesday 25th November 2020.
4. In order to support the MCC traffic survey data used in the PICADY assessment, further surveys were commissioned in the form of an ATC on each arm of the junction in order to corroborate the original MCC data. This was undertaken at the request of NPTCBC. The ATCs were in place from 07/01/2021 to 13/01/2021.
5. This TN compares the two sets of survey data (MCC and ATC) in order to justify that the MCC data used for the PICADY assessment / capacity analysis is robust. All MCC and ATC survey data is shown in **Appendix A**.

Survey Comparison

MCC Survey

6. The original MCC survey was undertaken on Wednesday 25th November 2020 for the 0800-0900 and 1700-1800 peak hours.
7. The total flows are shown below in **Table 1** for the AM and **Table 2** for the PM. The arm references are:
 - A – Meadow Road
 - B – Primrose Road
 - C – Greenwood Road
 - D – Gardners Lane

Table 1 – MCC Flows AM

Arm Ref	A	B	C	D	Total
A	-	0	2	25	27
B	0	-	0	50	50
C	0	1	-	21	22
D	21	29	20	-	70
Total	21	30	22	96	169

Table 2 – MCC Flows PM

Arm Ref	A	B	C	D	Total
A	-	4	0	33	37
B	3	-	1	18	22
C	1	1	-	10	12
D	36	31	20	-	87
Total	40	36	21	61	158

8. The data shows a total of 169 total vehicular movements at the junction from 0800-0900 and 158 total vehicular movements at the junction from 1700-1800. These are considered to be peak times for a neutral day.

ATC Surveys

9. An ATC survey was undertaken at the request of NPTCBC on each arm of the junction from 07/01/2021 to 13/01/2021.
10. The total junction movements abstracted from the ATC for the equivalent AM (0800-0900) and PM (1700-1800) peaks as the MCC are shown in **Table 3**. The data is for Wednesday (the same weekday day as the MCC), Friday (the busiest 12-hour period) as well as the average five-day flows.

Table 3 – ATC Total Junction Flows

Total Junction Vehicle Movements		ATC
Wednesday (Same as MCC)	0800-0900	89
	1700-1800	137
Friday (Busiest 12hr Period)	0800-0900	73
	1700-1800	193
Five-Day Average	0800-0900	88
	1700-1800	154

11. The ATC surveys show that at this junction, the total five-day average vehicular movements for the AM and PM peak periods are 88 and 154 respectively.

Comparison

12. The MCC data shown in **Table 1** and **Table 2** has been compared with the ATC data shown in **Table 3**, with the total increase / decrease in trips shown in **Table 4**.

Table 4 – Total Vehicle increase / decrease from MCC to ATC.

Total Junction Vehicle Movements		Increase / Decrease from MCC to ATC
Wednesday (Same as MCC)	0800-0900	-80
	1700-1800	-21
Friday (Busiest 12hr Period)	0800-0900	-96
	1700-1800	+35
Five-Day Average	0800-0900	-81
	1700-1800	-4

13. It is evident that the overall trend between MCC surveys in November 2020 and ATC surveys in January 2021 is a significant drop in vehicle movements from the MCC to the ATC during the AM peak,

and a slight drop in vehicle movements during the PM peak when considering the five-day average. The drop in background traffic may be attributable to additional CV19 lockdowns but it does demonstrate that the November 2020 flows are representative and fit for purpose to underpin capacity assessments at this junction submitted at PAC.

14. The comparison does show one anomaly in the trend between MCC and ATC i.e., a Friday PM peak and this increase in vehicle movements for the Friday peak within the ATC has been further investigated as shown in **Table 5**.

Table 5 – Vehicle Movement comparison between MCC/ATC by arm – Friday peak

	Gardners Lane		Greenwood Road		Meadow Road		Primrose Road	
	From	To	From	To	From	To	From	To
MCC Wed PM	87	61	12	21	37	40	22	36
ATC Fri PM	100	78	18	24	42	41	33	48
Difference	+13	+17	+6	+3	+5	+1	+11	+12
% Increase	15%	28%	50%	14%	14%	3%	50%	33%

15. It is clear that the increase in recorded vehicle movements is spread across each arm within the junction, with no discernible trend other than the arms with a greater number of vehicle movements recorded by the MCC having a greater increase in total vehicles recorded by the ATC (Gardners Lane and Primrose Road). Notably, the comparison of flows on Meadow Road providing access to the proposed development are consistent between the MCC and ATC.

Summary

16. Based on the evidence provided and the nature of the two traffic surveys, it is evident clear the original MCC peak hour traffic data used within the TS to inform the PICADY assessment is robust and provides an accurate representation of the typical overall capacity of the Gardners Lane / Greenwood Road / Meadow Road / Primrose Road junction.
17. Given this, the conclusion within the TS (17/12/2020) remains the same i.e., that traffic from 52 new residential units at Meadow Road can be accommodated within the existing highway network and without any mitigation measures relating to junction capacity.

APPENDIX A
Survey Data

Neath ATC, Meadow Road

Direction: Eastbound

Hour Beginning	Thu Jan 07	Fri Jan 08	Sat Jan 09	Sun Jan 10	Mon Jan 11	Tue Jan 12	Wed Jan 13	5-Day Ave.	7-Day Ave.
00:00	0	3	7	0	0	1	0	1	2
01:00	1	1	1	5	1	1	1	1	2
02:00	0	3	1	2	0	1	0	1	1
03:00	1	1	0	1	0	0	0	0	0
04:00	1	1	2	1	0	0	0	0	1
05:00	3	1	0	3	1	3	1	2	2
06:00	8	5	2	0	3	5	2	5	4
07:00	4	3	9	2	5	6	6	5	5
08:00	13	8	8	2	13	12	13	12	10
09:00	9	10	5	7	19	11	14	13	11
10:00	18	14	9	16	15	27	15	18	16
11:00	16	26	19	18	25	21	23	22	21
12:00	20	29	24	22	20	23	22	23	23
13:00	26	37	32	29	28	25	28	29	29
14:00	32	41	23	28	35	30	32	34	32
15:00	40	42	36	30	35	35	32	37	36
16:00	52	41	35	25	42	37	40	42	39
17:00	25	41	48	27	27	36	26	31	33
18:00	31	42	32	22	28	32	28	32	31
19:00	20	27	20	19	24	19	22	22	22
20:00	16	22	13	17	14	9	15	15	15
21:00	16	15	7	12	11	9	12	13	12
22:00	10	13	6	6	11	4	10	10	9
23:00	3	7	8	1	1	6	3	4	4
Total									
12H(7-19)	286	334	280	228	292	295	279	297	285
16H(6-22)	346	403	322	276	344	337	330	352	337
18H(6-24)	359	423	336	283	356	347	343	366	350
24H(0-24)	365	433	347	295	358	353	345	371	357
AM Peak	10:00 18	11:00 26	11:00 19	11:00 18	11:00 25	10:00 27	11:00 23	11:00 22	11:00 21
PM Peak	16:00 52	15:00 42	17:00 48	15:00 30	16:00 42	16:00 37	16:00 40	16:00 42	16:00 39

Direction: Westbound

Hour Beginning	Thu Jan 07	Fri Jan 08	Sat Jan 09	Sun Jan 10	Mon Jan 11	Tue Jan 12	Wed Jan 13	5-Day Ave.	7-Day Ave.
00:00	0	3	5	1	0	0	0	1	1
01:00	0	2	1	4	1	1	1	1	1
02:00	0	3	1	2	0	1	0	1	1
03:00	1	1	0	4	0	0	0	0	1
04:00	3	4	6	2	2	4	4	3	4
05:00	9	8	3	8	7	9	10	9	8
06:00	17	13	8	2	11	12	7	12	10
07:00	23	17	8	8	19	22	20	20	17
08:00	19	9	11	5	22	18	24	18	15
09:00	13	17	12	12	27	18	10	17	16
10:00	24	15	19	32	22	30	24	23	24
11:00	28	25	17	30	32	23	19	25	25
12:00	26	39	34	37	22	25	18	26	29
13:00	22	38	21	30	15	35	24	27	26
14:00	30	34	24	26	32	18	29	29	28
15:00	31	33	36	26	21	35	26	29	30
16:00	37	39	49	26	23	25	31	31	33
17:00	21	42	54	25	28	27	23	28	31
18:00	25	29	29	21	23	30	26	27	26
19:00	17	33	22	16	16	14	20	20	20
20:00	13	14	20	12	13	13	13	13	14
21:00	15	19	9	13	12	6	9	12	12
22:00	7	17	5	5	10	5	8	9	8
23:00	1	5	7	0	2	3	1	2	3
Total									
12H(7-19)	299	337	314	278	286	306	274	300	299
16H(6-22)	361	416	373	321	338	351	323	358	355
18H(6-24)	369	438	385	326	350	359	332	370	366
24H(0-24)	382	459	401	347	360	374	347	384	381
AM Peak	11:00 28	11:00 25	10:00 19	10:00 32	11:00 32	10:00 30	08:00 24	11:00 25	11:00 25
PM Peak	16:00 37	17:00 42	17:00 54	12:00 37	14:00 32	13:00 35	16:00 31	16:00 31	16:00 33



Direction: Total Flow

Hour Beginning	Thu Jan 07	Fri Jan 08	Sat Jan 09	Sun Jan 10	Mon Jan 11	Tue Jan 12	Wed Jan 13	5-Day Ave.	7-Day Ave.
00:00	0	6	12	1	0	1	0	1	3
01:00	1	3	2	9	2	2	2	2	3
02:00	0	6	2	4	0	2	0	2	2
03:00	2	2	0	5	0	0	0	1	1
04:00	4	5	8	3	2	4	4	4	4
05:00	12	9	3	11	8	12	11	10	9
06:00	25	18	10	2	14	17	9	17	14
07:00	27	20	17	10	24	28	26	25	22
08:00	32	17	19	7	35	30	37	30	25
09:00	22	27	17	19	46	29	24	30	26
10:00	42	29	28	48	37	57	39	41	40
11:00	44	51	36	48	57	44	42	48	46
12:00	46	68	58	59	42	48	40	49	52
13:00	48	75	53	59	43	60	52	56	56
14:00	62	75	47	54	67	48	61	63	59
15:00	71	75	72	56	56	70	58	66	65
16:00	89	80	84	51	65	62	71	73	72
17:00	46	83	102	52	55	63	49	59	64
18:00	56	71	61	43	51	62	54	59	57
19:00	37	60	42	35	40	33	42	42	41
20:00	29	36	33	29	27	22	28	28	29
21:00	31	34	16	25	23	15	21	25	24
22:00	17	30	11	11	21	9	18	19	17
23:00	4	12	15	1	3	9	4	6	7
Total									
12H(7-19)	585	671	594	506	578	601	553	598	584
16H(6-22)	707	819	695	597	682	688	653	710	692
18H(6-24)	728	861	721	609	706	706	675	735	715
24H(0-24)	747	892	748	642	718	727	692	755	738
AM Peak	11:00 44	11:00 51	11:00 36	10:00 48	11:00 57	10:00 57	11:00 42	11:00 48	11:00 46
PM Peak	16:00 89	17:00 83	17:00 102	12:00 59	14:00 67	15:00 70	16:00 71	16:00 73	16:00 72

Neath ATC, Primrose Road

Direction: Southbound

Hour Beginning	Thu Jan 07	Fri Jan 08	Sat Jan 09	Sun Jan 10	Mon Jan 11	Tue Jan 12	Wed Jan 13	5-Day Ave.	7-Day Ave.
00:00	1	0	1	2	1	0	0	0	1
01:00	0	0	1	0	0	0	0	0	0
02:00	1	0	1	0	0	0	0	0	0
03:00	1	0	0	0	1	0	0	0	0
04:00	2	2	0	0	2	0	2	2	1
05:00	3	3	3	0	2	3	3	3	2
06:00	3	1	2	0	3	5	3	3	2
07:00	11	8	4	5	11	11	8	10	8
08:00	12	13	6	4	8	8	8	10	8
09:00	19	16	14	8	11	18	19	17	15
10:00	22	17	17	19	26	14	15	19	19
11:00	27	38	25	28	25	32	25	29	29
12:00	31	24	28	28	26	24	39	29	29
13:00	24	35	33	31	32	28	27	29	30
14:00	33	43	31	27	34	29	27	33	32
15:00	36	48	28	31	37	38	39	40	37
16:00	36	38	32	24	45	38	37	39	36
17:00	37	48	19	23	31	34	35	37	32
18:00	34	36	26	16	30	31	28	32	29
19:00	11	22	13	11	10	13	16	14	14
20:00	15	8	10	7	11	10	13	11	11
21:00	8	12	12	8	3	8	5	7	8
22:00	5	4	4	6	6	2	3	4	4
23:00	4	3	4	0	0	2	1	2	2
Total									
12H(7-19)	322	364	263	244	316	305	307	323	303
16H(6-22)	359	407	300	270	343	341	344	359	338
18H(6-24)	368	414	308	276	349	345	348	365	344
24H(0-24)	376	419	314	278	355	348	353	370	349
AM Peak	11:00 27	11:00 38	11:00 25	11:00 28	10:00 26	11:00 32	11:00 25	11:00 29	11:00 29
PM Peak	17:00 37	15:00 48	13:00 33	13:00 31	16:00 45	15:00 38	12:00 39	15:00 40	15:00 37

Direction: Northbound

Hour Beginning	Thu Jan 07	Fri Jan 08	Sat Jan 09	Sun Jan 10	Mon Jan 11	Tue Jan 12	Wed Jan 13	5-Day Ave.	7-Day Ave.
00:00	1	0	0	1	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	1	0	0	0	0
04:00	1	1	1	1	3	1	1	1	1
05:00	7	5	7	0	4	6	4	5	5
06:00	6	7	3	3	5	12	5	7	6
07:00	17	15	4	1	13	24	26	19	14
08:00	30	29	9	8	34	33	31	31	25
09:00	25	20	18	8	25	19	27	23	20
10:00	33	30	27	26	26	34	29	30	29
11:00	37	25	32	40	33	34	27	31	33
12:00	27	40	37	26	22	24	36	30	30
13:00	39	26	28	29	34	33	30	32	31
14:00	32	47	42	23	34	45	31	38	36
15:00	37	39	27	25	49	34	47	41	37
16:00	28	43	35	32	45	32	41	38	37
17:00	27	33	18	18	31	27	33	30	27
18:00	16	30	30	22	18	22	24	22	23
19:00	12	32	9	13	14	18	16	18	16
20:00	9	3	13	7	11	5	8	7	8
21:00	3	8	5	7	5	4	5	5	5
22:00	4	2	1	4	3	3	5	3	3
23:00	2	2	1	0	2	0	4	2	2
Total									
12H(7-19)	348	377	307	258	364	361	382	366	342
16H(6-22)	378	427	337	288	399	400	416	404	378
18H(6-24)	384	431	339	292	404	403	425	409	383
24H(0-24)	393	437	347	294	412	410	430	416	389
AM Peak	11:00 37	10:00 30	11:00 32	11:00 40	08:00 34	10:00 34	08:00 31	08:00 31	11:00 33
PM Peak	13:00 39	14:00 47	14:00 42	16:00 32	15:00 49	14:00 45	15:00 47	15:00 41	15:00 37



Direction: Total Flow

Hour Beginning	Thu Jan 07	Fri Jan 08	Sat Jan 09	Sun Jan 10	Mon Jan 11	Tue Jan 12	Wed Jan 13	5-Day Ave.	7-Day Ave.
00:00	2	0	1	3	1	0	0	1	1
01:00	0	0	1	0	0	0	0	0	0
02:00	1	0	1	0	0	0	0	0	0
03:00	1	0	0	0	2	0	0	1	0
04:00	3	3	1	1	5	1	3	3	2
05:00	10	8	10	0	6	9	7	8	7
06:00	9	8	5	3	8	17	8	10	8
07:00	28	23	8	6	24	35	34	29	23
08:00	42	42	15	12	42	41	39	41	33
09:00	44	36	32	16	36	37	46	40	35
10:00	55	47	44	45	52	48	44	49	48
11:00	64	63	57	68	58	66	52	61	61
12:00	58	64	65	54	48	48	75	59	59
13:00	63	61	61	60	66	61	57	62	61
14:00	65	90	73	50	68	74	58	71	68
15:00	73	87	55	56	86	72	86	81	74
16:00	64	81	67	56	90	70	78	77	72
17:00	64	81	37	41	62	61	68	67	59
18:00	50	66	56	38	48	53	52	54	52
19:00	23	54	22	24	24	31	32	33	30
20:00	24	11	23	14	22	15	21	19	19
21:00	11	20	17	15	8	12	10	12	13
22:00	9	6	5	10	9	5	8	7	7
23:00	6	5	5	0	2	2	5	4	4
Total									
12H(7-19)	670	741	570	502	680	666	689	689	645
16H(6-22)	737	834	637	558	742	741	760	763	716
18H(6-24)	752	845	647	568	753	748	773	774	727
24H(0-24)	769	856	661	572	767	758	783	787	738
AM Peak	11:00 64	11:00 63	11:00 57	11:00 68	11:00 58	11:00 66	11:00 52	11:00 61	11:00 61
PM Peak	15:00 73	14:00 90	14:00 73	13:00 60	16:00 90	14:00 74	15:00 86	15:00 81	15:00 74

Neath ATC, Gardners Lane

Direction: Southbound

Hour Beginning	Thu Jan 07	Fri Jan 08	Sat Jan 09	Sun Jan 10	Mon Jan 11	Tue Jan 12	Wed Jan 13	5-Day Ave.	7-Day Ave.
00:00	3	4	8	3	1	1	0	2	3
01:00	2	1	3	3	1	1	1	1	2
02:00	1	3	2	2	1	3	0	2	2
03:00	2	1	0	1	1	0	0	1	1
04:00	3	3	2	1	2	0	2	2	2
05:00	7	6	3	3	3	7	6	6	5
06:00	13	8	9	1	6	9	6	8	7
07:00	18	15	9	7	17	19	20	18	15
08:00	35	30	17	11	32	31	29	31	26
09:00	28	31	25	20	40	37	43	36	32
10:00	45	32	37	43	47	45	41	42	41
11:00	56	75	71	49	57	62	60	62	61
12:00	68	71	65	58	58	64	69	66	65
13:00	67	97	82	71	74	62	72	74	75
14:00	80	114	74	78	83	72	68	83	81
15:00	98	112	86	79	86	93	86	95	91
16:00	107	107	82	64	116	105	98	107	97
17:00	82	100	89	58	78	85	74	84	81
18:00	74	96	76	45	64	76	72	76	72
19:00	39	60	39	32	44	40	49	46	43
20:00	30	36	33	27	31	26	29	30	30
21:00	29	35	29	19	14	22	19	24	24
22:00	16	24	12	14	19	8	13	16	15
23:00	9	11	9	1	4	9	5	8	7
Total									
12H(7-19)	758	880	713	583	752	751	732	775	738
16H(6-22)	869	1019	823	662	847	848	835	884	843
18H(6-24)	894	1054	844	677	870	865	853	907	865
24H(0-24)	912	1072	862	690	879	877	862	920	879
AM Peak	11:00 56	11:00 75	11:00 71	11:00 49	11:00 57	11:00 62	11:00 60	11:00 62	11:00 61
PM Peak	16:00 107	14:00 114	17:00 89	15:00 79	16:00 116	16:00 105	16:00 98	16:00 107	16:00 97

Direction: Northbound

Hour Beginning	Thu Jan 07	Fri Jan 08	Sat Jan 09	Sun Jan 10	Mon Jan 11	Tue Jan 12	Wed Jan 13	5-Day Ave.	7-Day Ave.
00:00	2	2	4	2	0	0	0	1	1
01:00	1	0	0	3	1	1	1	1	1
02:00	0	4	1	1	1	3	1	2	2
03:00	1	1	0	2	2	0	0	1	1
04:00	4	5	6	2	5	6	6	5	5
05:00	18	15	9	7	13	17	15	16	13
06:00	25	22	14	6	18	24	15	21	18
07:00	42	42	14	9	36	47	49	43	34
08:00	58	43	25	13	53	54	55	53	43
09:00	44	38	34	21	50	42	35	42	38
10:00	51	48	52	50	41	51	54	49	50
11:00	57	53	54	60	63	57	52	56	57
12:00	56	77	75	53	42	52	50	55	58
13:00	64	65	55	54	54	65	50	60	58
14:00	65	72	72	55	66	57	62	64	64
15:00	59	71	54	57	64	73	68	67	64
16:00	66	73	67	53	73	64	68	69	66
17:00	53	78	62	43	62	51	49	59	57
18:00	47	66	54	40	40	55	52	52	51
19:00	30	60	22	28	24	35	37	37	34
20:00	24	22	30	18	23	24	23	23	23
21:00	19	25	12	17	13	10	15	16	16
22:00	9	18	5	10	13	7	10	11	10
23:00	3	8	5	2	5	3	4	5	4
Total									
12H(7-19)	662	726	618	508	644	668	644	669	639
16H(6-22)	760	855	696	577	722	761	734	766	729
18H(6-24)	772	881	706	589	740	771	748	782	744
24H(0-24)	798	908	726	606	762	798	771	807	767
AM Peak	08:00 58	11:00 53	11:00 54	11:00 60	11:00 63	11:00 57	08:00 55	11:00 56	11:00 57
PM Peak	16:00 66	17:00 78	12:00 75	15:00 57	16:00 73	15:00 73	15:00 68	16:00 69	16:00 66

Direction: Total Flow



Hour Beginning	Thu Jan 07	Fri Jan 08	Sat Jan 09	Sun Jan 10	Mon Jan 11	Tue Jan 12	Wed Jan 13	5-Day Ave.	7-Day Ave.
00:00	5	6	12	5	1	1	0	3	4
01:00	3	1	3	6	2	2	2	2	3
02:00	1	7	3	3	2	6	1	3	3
03:00	3	2	0	3	3	0	0	2	2
04:00	7	8	8	3	7	6	8	7	7
05:00	25	21	12	10	16	24	21	21	18
06:00	38	30	23	7	24	33	21	29	25
07:00	60	57	23	16	53	66	69	61	49
08:00	93	73	42	24	85	85	84	84	69
09:00	72	69	59	41	90	79	78	78	70
10:00	96	80	89	93	88	96	95	91	91
11:00	113	128	125	109	120	119	112	118	118
12:00	124	148	140	111	100	116	119	121	123
13:00	131	162	137	125	128	127	122	134	133
14:00	145	186	146	133	149	129	130	148	145
15:00	157	183	140	136	150	166	154	162	155
16:00	173	180	149	117	189	169	166	175	163
17:00	135	178	151	101	140	136	123	142	138
18:00	121	162	130	85	104	131	124	128	122
19:00	69	120	61	60	68	75	86	84	77
20:00	54	58	63	45	54	50	52	54	54
21:00	48	60	41	36	27	32	34	40	40
22:00	25	42	17	24	32	15	23	27	25
23:00	12	19	14	3	9	12	9	12	11
Total									
12H(7-19)	1420	1606	1331	1091	1396	1419	1376	1443	1377
16H(6-22)	1629	1874	1519	1239	1569	1609	1569	1650	1573
18H(6-24)	1666	1935	1550	1266	1610	1636	1601	1690	1609
24H(0-24)	1710	1980	1588	1296	1641	1675	1633	1728	1646
AM Peak	11:00 113	11:00 128	11:00 125	11:00 109	11:00 120	11:00 119	11:00 112	11:00 118	11:00 118
PM Peak	16:00 173	14:00 186	17:00 151	15:00 136	16:00 189	16:00 169	16:00 166	16:00 175	16:00 163

Neath ATC, Greenwood Road

Direction: Eastbound

Hour Beginning	Thu Jan 07	Fri Jan 08	Sat Jan 09	Sun Jan 10	Mon Jan 11	Tue Jan 12	Wed Jan 13	5-Day Ave.	7-Day Ave.
00:00	1	0	0	0	0	0	0	0	0
01:00	1	0	0	0	0	0	0	0	0
02:00	0	1	1	0	1	2	1	1	1
03:00	0	0	0	0	1	0	0	0	0
04:00	1	0	0	0	0	1	1	1	0
05:00	1	3	2	2	2	3	3	2	2
06:00	5	4	2	1	3	5	5	4	4
07:00	7	11	4	2	6	10	11	9	7
08:00	12	5	5	2	6	8	5	7	6
09:00	12	9	7	3	4	10	8	9	8
10:00	12	14	9	9	7	8	11	10	10
11:00	15	11	13	3	10	9	17	12	11
12:00	8	13	15	12	9	13	12	11	12
13:00	10	13	13	12	16	16	11	13	13
14:00	11	13	11	15	12	11	11	12	12
15:00	7	13	9	11	14	14	8	11	11
16:00	11	10	9	10	16	16	11	13	12
17:00	13	18	7	6	13	7	7	12	10
18:00	10	14	10	3	6	9	13	10	9
19:00	7	9	5	3	2	9	6	7	6
20:00	6	3	5	4	2	6	2	4	4
21:00	4	1	1	3	1	1	3	2	2
22:00	1	6	0	1	0	0	1	2	1
23:00	0	1	1	2	2	0	1	1	1
Total									
12H(7-19)	128	144	112	88	119	131	125	129	121
16H(6-22)	150	161	125	99	127	152	141	146	136
18H(6-24)	151	168	126	102	129	152	143	149	139
24H(0-24)	155	172	129	104	133	158	148	153	143
AM Peak	11:00 15	10:00 14	11:00 13	10:00 9	11:00 10	07:00 10	11:00 17	11:00 12	11:00 11
PM Peak	17:00 13	17:00 18	12:00 15	14:00 15	13:00 16	13:00 16	18:00 13	13:00 13	13:00 13

Direction: Westbound

Hour Beginning	Thu Jan 07	Fri Jan 08	Sat Jan 09	Sun Jan 10	Mon Jan 11	Tue Jan 12	Wed Jan 13	5-Day Ave.	7-Day Ave.
00:00	1	0	0	1	0	0	0	0	0
01:00	0	1	2	0	0	0	0	0	0
02:00	0	0	0	0	1	1	0	0	0
03:00	1	0	0	0	0	0	0	0	0
04:00	1	0	0	1	0	0	0	0	0
05:00	0	1	0	0	0	0	0	0	0
06:00	2	3	3	1	0	0	1	1	1
07:00	5	3	0	0	3	3	10	5	3
08:00	11	9	2	4	11	8	5	9	7
09:00	6	8	8	4	10	11	15	10	9
10:00	12	5	10	7	11	10	12	10	10
11:00	23	19	19	14	18	14	18	18	18
12:00	17	22	20	14	15	24	14	18	18
13:00	19	24	17	12	18	16	17	19	18
14:00	18	35	19	19	20	18	18	22	21
15:00	23	26	23	17	21	23	22	23	22
16:00	21	30	19	18	35	28	24	28	25
17:00	24	24	20	13	17	16	11	18	18
18:00	16	13	17	10	10	16	15	14	14
19:00	10	14	7	4	11	12	11	12	10
20:00	4	10	6	5	8	8	4	7	6
21:00	7	7	11	2	2	3	2	4	5
22:00	4	6	2	1	2	3	3	4	3
23:00	2	0	0	0	3	2	1	2	1
Total									
12H(7-19)	195	218	174	132	189	187	181	194	182
16H(6-22)	218	252	201	144	210	210	199	218	205
18H(6-24)	224	258	203	145	215	215	203	223	209
24H(0-24)	227	260	205	147	216	216	203	224	211
AM Peak	11:00 23	11:00 19	11:00 19	11:00 14	11:00 18	11:00 14	11:00 18	11:00 18	11:00 18
PM Peak	17:00 24	14:00 35	15:00 23	14:00 19	16:00 35	16:00 28	16:00 24	16:00 28	16:00 25



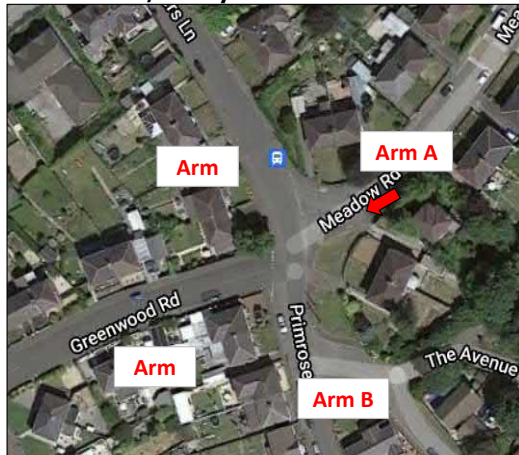
Direction: Total Flow

Hour Beginning	Thu Jan 07	Fri Jan 08	Sat Jan 09	Sun Jan 10	Mon Jan 11	Tue Jan 12	Wed Jan 13	5-Day Ave.	7-Day Ave.
00:00	2	0	0	1	0	0	0	0	0
01:00	1	1	2	0	0	0	0	0	1
02:00	0	1	1	0	2	3	1	1	1
03:00	1	0	0	0	1	0	0	0	0
04:00	2	0	0	1	0	1	1	1	1
05:00	1	4	2	2	2	3	3	3	2
06:00	7	7	5	2	3	5	6	6	5
07:00	12	14	4	2	9	13	21	14	11
08:00	23	14	7	6	17	16	10	16	13
09:00	18	17	15	7	14	21	23	19	16
10:00	24	19	19	16	18	18	23	20	20
11:00	38	30	32	17	28	23	35	31	29
12:00	25	35	35	26	24	37	26	29	30
13:00	29	37	30	24	34	32	28	32	31
14:00	29	48	30	34	32	29	29	33	33
15:00	30	39	32	28	35	37	30	34	33
16:00	32	40	28	28	51	44	35	40	37
17:00	37	42	27	19	30	23	18	30	28
18:00	26	27	27	13	16	25	28	24	23
19:00	17	23	12	7	13	21	17	18	16
20:00	10	13	11	9	10	14	6	11	10
21:00	11	8	12	5	3	4	5	6	7
22:00	5	12	2	2	2	3	4	5	4
23:00	2	1	1	2	5	2	2	2	2
Total									
12H(7-19)	323	362	286	220	308	318	306	323	303
16H(6-22)	368	413	326	243	337	362	340	364	341
18H(6-24)	375	426	329	247	344	367	346	372	348
24H(0-24)	382	432	334	251	349	374	351	378	353
AM Peak	11:00 38	11:00 30	11:00 32	11:00 17	11:00 28	11:00 23	11:00 35	11:00 31	11:00 29
PM Peak	17:00 37	14:00 48	12:00 35	14:00 34	16:00 51	16:00 44	16:00 35	16:00 40	16:00 37

Client: Vectos
Project Name: Meadow Road, Neath
Junction Ref: Meadow Road/Primrose Road/Greenwood Road
Project Number: GS913
Survey Date: Wednesday 25th November 2020
Survey Type: VCC
Time Periods: 08:00-09:00 - 17:00-18:00



Site Location/Survey Reference



Camera View Point



Camera Location and view point

Junction Reference

Ref	Name
A	Meadow Road
B	Primrose Road
C	Greenwood Road
D	Gardeners Lane

Classification Categories
Motorcycles Cars Light Goods Vehicles Buses Single-Unit Trucks Articulated Trucks Lightes Mediums All Vehicles

Notes/Observations

Although go-surveys Ltd make every reasonable effort to ensure the accuracy and validity of the information provided, go-surveys Ltd and its clients accept no liability or responsibility for any errors or omissions in the content of this data or for damages as a result of relying on the information provided.

GO-SURVEYS

Project Name: Meadow Road, Neath

Junction Ref: Meadow Road/Primrose Road/Greenwood Road

1	2	3	4	5	6	7	8	9	10	11	12	13
Motorcycles	Gardeners Lane			Meadow Road			Primrose Road (S)			Greenwood Road		
Start Time	Right	Ahead	Left	Right	Ahead	Left	Right	Ahead	Left	Right	Ahead	Left
08:00	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
08:30	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
17:00	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0

Cars & Light Good	Gardeners Lane			Meadow Road			Primrose Road (S)			Greenwood Road		
Start Time	Right	Ahead	Left	Right	Ahead	Left	Right	Ahead	Left	Right	Ahead	Left
08:00	7	5	6	6	1	0	0	13	0	0	0	5
08:15	7	5	1	10	0	0	0	10	0	0	0	8
08:30	4	7	3	5	1	0	0	14	0	1	0	1
08:45	2	11	9	3	0	0	0	13	0	0	0	7
17:00	3	5	13	10	0	2	0	4	0	0	0	4
17:15	5	6	9	2	0	0	2	3	1	1	0	1
17:30	7	10	8	7	0	0	1	8	0	0	1	3
17:45	5	10	5	13	0	2	0	3	0	0	0	2

Buses	Gardeners Lane			Meadow Road			Primrose Road (S)			Greenwood Road		
Start Time	Right	Ahead	Left	Right	Ahead	Left	Right	Ahead	Left	Right	Ahead	Left
08:00	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
08:30	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	1	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0

Single-Unit Trucks	Gardeners Lane			Meadow Road			Primrose Road (S)			Greenwood Road		
Start Time	Right	Ahead	Left	Right	Ahead	Left	Right	Ahead	Left	Right	Ahead	Left
08:00	0	0	1	1	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	1	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	1	0	0	0	0	0	0	0	0	0
17:15	0	0	0	1	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0

Articulated Trucks	Gardeners Lane			Meadow Road			Primrose Road (S)			Greenwood Road		
Start Time	Right	Ahead	Left	Right	Ahead	Left	Right	Ahead	Left	Right	Ahead	Left
08:00	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
08:30	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
17:00	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0

Rolling Hour

Car/LGV	Gardeners Lane			Gardeners Lane			Primrose Road (S)			Gardeners Lane		
Start Time	Right	Ahead	Left	Right	Ahead	Left	Right	Ahead	Left	Right	Ahead	Left
08:00	20	28	19	24	2	0	0	50	0	1	0	21
17:00	20	31	35	32	0	4	3	18	1	1	1	10

HGV/Bus	Gardeners Lane			Gardeners Lane			Primrose Road (S)			Gardeners Lane		
Start Time	Right	Ahead	Left	Right	Ahead	Left	Right	Ahead	Left	Right	Ahead	Left
08:00	0	1	2	1	0	0	0	0	0	0	0	0
17:00	0	0	1	1	0	0	0	0	0	0	0	0

Survey Date: Wednesday 25th November 2020
Project Number GS913

OD Tables

08:00 Rolling Hour

Car/LGV

Arm Ref	A	B	C	D	Total
A	-	0	2	24	26
B	0	-	0	50	50
C	0	1	-	21	22
D	19	28	20	-	67
Total	19	29	22	95	165

HGV/Bus

Arm Ref	A	B	C	D	Total
A	-	0	0	1	1
B	0	-	0	0	0
C	0	0	-	0	0
D	2	1	0	-	3
Total	2	1	0	1	4

Total Veh

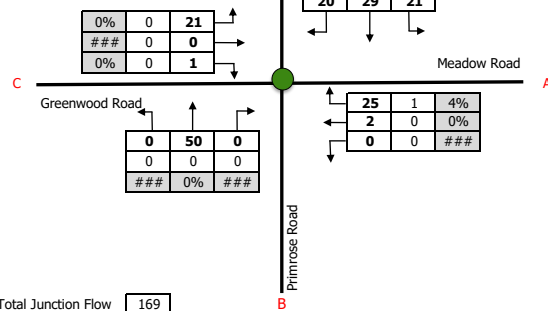
Arm Ref	A	B	C	D	Total
A	-	0	2	25	27
B	0	-	0	50	50
C	0	1	-	21	22
D	21	29	20	-	70
Total	21	30	22	96	169

% HGVs

Arm Ref	A	B	C	D	Total
A	-	0%	0%	4%	4%
B	0%	-	0%	0%	0%
C	0%	0%	-	0%	0%
D	10%	3%	0%	-	4%
Total	10%	3%	0%	4%	2%

Flow Diagram**Key**

21	Total Veh
0	HGVs
0%	% HGVs



Appendix G

PICADY Outputs

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Filename: 205496A - Gardners Lane_Meadow Road - V2.j9

Path: C:\Users\ellen.axon\Documents\Ben Stone Modelling

Report generation date: 05/02/2021 10:32:47

»2020, AM
»2020 + Dev, AM
»2021, PM
»2021 + Dev, PM
»2035, AM
»2035, PM
»2035 + Dev, AM
»2035 + Dev, PM

Summary of junction performance

	AM			PM		
	Q (Veh)	Delay (s)	RFC	Q (Veh)	Delay (s)	RFC
2020						
Stream B-ACD	0.1	7.21	0.06			
Stream AB-CD	0.0	5.60	0.04			
Stream D-ABC	0.0	5.57	0.04			
Stream CD-AB	0.0	0.00	0.00			
2020 + Dev						
Stream B-ACD	0.1	7.45	0.10			
Stream AB-CD	0.0	5.62	0.04			
Stream D-ABC	0.0	5.57	0.04			
Stream CD-AB	0.0	0.00	0.00			
2021						
Stream B-ACD				0.1	7.32	0.09
Stream AB-CD				0.0	5.50	0.04
Stream D-ABC				0.0	5.61	0.03
Stream CD-AB				0.0	5.80	0.01
2021 + Dev						
Stream B-ACD				0.1	7.51	0.11
Stream AB-CD				0.0	5.51	0.04
Stream D-ABC				0.0	5.62	0.03
Stream CD-AB				0.0	5.84	0.02

	2035					
Stream B-ACD	0.1	7.36	0.06	0.1	7.46	0.10
Stream AB-CD	0.1	5.72	0.06	0.1	5.51	0.05
Stream D-ABC	0.0	5.61	0.04	0.0	5.63	0.03
Stream CD-AB	0.0	0.00	0.00	0.0	5.80	0.02
	2035 + Dev					
Stream B-ACD	0.1	7.57	0.11	0.1	7.67	0.13
Stream AB-CD	0.1	5.64	0.05	0.1	5.52	0.05
Stream D-ABC	0.0	5.60	0.04	0.0	5.63	0.04
Stream CD-AB	0.0	0.00	0.00	0.0	5.86	0.02

Values shown are the highest values encountered over all time segments. Delay is the maximum value of Av. delay per arriving vehicle.

File summary

File Description

Title	
Location	
Site number	
Date	15/12/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	VECTOSlellen.hill
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Av. delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2020	AM	ONE HOUR	07:45	09:15	15	✓
D2	2020 + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D3	2021	PM	ONE HOUR	16:45	18:15	15	✓
D4	2021 + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D5	2035	AM	ONE HOUR	07:45	09:15	15	✓
D6	2035	PM	ONE HOUR	16:45	18:15	15	✓
D7	2035 + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D8	2035 + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2020, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way		1.53	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Gardners Lane (N)		Major
B	Meadow Road (E)		Minor
C	Primrose Road (S)		Major
D	Greenwood Road (W)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Gardners Lane (N)	9.22			150.0	✓	0.00
C - Primrose Road (S)	8.70			85.0	✓	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 - Meadow Road (E)	One lane	4.20	53	22
D - Greenwood Road (W)	One lane	4.00	14	10

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
AB-D	661	-	-	-	-	-	0.220	0.220	0.220	-	-
B-A	566	0.091	0.230	0.230	-	-	0.145	0.329	-	0.145	0.329
B-CD	714	0.097	0.244	0.244	-	-	-	-	-	-	-
CD-B	623	0.213	0.213	0.213	-	-	-	-	-	-	-
D-AB	693	-	-	-	-	-	0.231	0.231	0.091	-	-

D-C	536	-	0.133	0.303	0.133	0.303	0.212	0.212	0.084	-	-
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The slopes and intercepts shown above do NOT include any corrections or adjustments.
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	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2020	AM	ONE HOUR	07:45	09:15	15	✓

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	Av. Demand (Veh/hr)	Scaling Factor (%)
A - Gardners Lane (N)		ONE HOUR	✓	70	100.000
B - Meadow Road (E)		ONE HOUR	✓	27	100.000
C - Primrose Road (S)		ONE HOUR	✓	50	100.000
D - Greenwood Road (W)		ONE HOUR	✓	22	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A - Gardners Lane (N)	B - Meadow Road (E)	C - Primrose Road (S)	D - Greenwood Road (W)
From	A - Gardners Lane (N)	0	21	29	20
	B - Meadow Road (E)	25	0	0	2
	C - Primrose Road (S)	50	0	0	0
	D - Greenwood Road (W)	21	0	1	0

Vehicle Mix

HV %s

	To				
		A - Gardners Lane (N)	B - Meadow Road (E)	C - Primrose Road (S)	D - Greenwood Road (W)
From	A - Gardners Lane (N)	0	10	3	0
	B - Meadow Road (E)	4	0	0	0
	C - Primrose Road (S)	0	0	0	0
	D - Greenwood Road (W)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (Veh)	Max LOS	Av. Demand	Total Junction
--------	---------	---------------	-------------	---------	------------	----------------

					(Veh/hr)	Arrivals (Veh)
B-ACD	0.06	7.21	0.1	A	25	37
A-B					19	29
A-C					27	40
A-D					18	28
AB-CD	0.04	5.60	0.0	A	21	32
AB-C					26	39
D-ABC	0.04	5.57	0.0	A	20	30
C-D					0	0
C-A					46	69
C-B					0	0
CD-AB	0.00	0.00	0.0	A	0	0
CD-A					65	98

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	20	5	537	0.038	20	0.0	0.0	6.961	A
A-B	16	4			16				
A-C	22	5			22				
A-D	15	4			15				
AB-CD	17	4	666	0.026	17	0.0	0.0	5.545	A
AB-C	21	5			21				
D-ABC	17	4	675	0.025	16	0.0	0.0	5.467	A
C-D	0	0			0				
C-A	38	9			38				
C-B	0	0			0				
CD-AB	0	0	611	0.000	0	0.0	0.0	0.000	A
CD-A	53	13			53				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	24	6	534	0.045	24	0.0	0.0	7.063	A
A-B	19	5			19				
A-C	26	7			26				
A-D	18	4			18				
AB-CD	21	5	667	0.031	21	0.0	0.0	5.565	A
AB-C	25	6			25				
D-ABC	20	5	673	0.029	20	0.0	0.0	5.509	A
C-D	0	0			0				
C-A	45	11			45				
C-B	0	0			0				
CD-AB	0	0	609	0.000	0	0.0	0.0	0.000	A
CD-A	64	16			64				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	30	7	529	0.056	30	0.0	0.1	7.205	A
A-B	23	6			23				
A-C	32	8			32				
A-D	22	6			22				
AB-CD	25	6	669	0.038	25	0.0	0.0	5.594	A
AB-C	31	8			31				
D-ABC	24	6	671	0.036	24	0.0	0.0	5.568	A
C-D	0	0			0				
C-A	55	14			55				
C-B	0	0			0				
CD-AB	0	0	606	0.000	0	0.0	0.0	0.000	A
CD-A	78	20			78				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	30	7	529	0.056	30	0.1	0.1	7.205	A
A-B	23	6			23				
A-C	32	8			32				
A-D	22	6			22				
AB-CD	25	6	669	0.038	25	0.0	0.0	5.597	A
AB-C	31	8			31				
D-ABC	24	6	671	0.036	24	0.0	0.0	5.568	A
C-D	0	0			0				
C-A	55	14			55				
C-B	0	0			0				
CD-AB	0	0	606	0.000	0	0.0	0.0	0.000	A
CD-A	78	20			78				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	24	6	534	0.045	24	0.1	0.0	7.064	A
A-B	19	5			19				
A-C	26	7			26				
A-D	18	4			18				
AB-CD	21	5	667	0.031	21	0.0	0.0	5.569	A
AB-C	25	6			25				
D-ABC	20	5	673	0.029	20	0.0	0.0	5.510	A
C-D	0	0			0				
C-A	45	11			45				
C-B	0	0			0				
CD-AB	0	0	609	0.000	0	0.0	0.0	0.000	A
CD-A	64	16			64				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	20	5	537	0.038	20	0.0	0.0	6.968	A
A-B	16	4			16				

A-C	22	5			22				
A-D	15	4			15				
AB-CD	17	4	666	0.026	17	0.0	0.0	5.548	A
AB-C	21	5			21				
D-ABC	17	4	675	0.025	17	0.0	0.0	5.470	A
C-D	0	0			0				
C-A	38	9			38				
C-B	0	0			0				
CD-AB	0	0	611	0.000	0	0.0	0.0	0.000	A
CD-A	53	13			53				

2020 + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way		1.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2020 + Dev	AM	ONE HOUR	07:45	09:15	15	✓

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	Av. Demand (Veh/hr)	Scaling Factor (%)
A - Gardners Lane (N)		ONE HOUR	✓	77	100.000
B - Meadow Road (E)		ONE HOUR	✓	51	100.000
C - Primrose Road (S)		ONE HOUR	✓	50	100.000
D - Greenwood Road (W)		ONE HOUR	✓	22	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A - Gardners Lane (N)	B - Meadow Road (E)	C - Primrose Road (S)	D - Greenwood Road (W)
From	A - Gardners Lane (N)	0	28	29	20
	B - Meadow Road (E)	47	0	0	4
	C - Primrose Road (S)	50	0	0	0
	D - Greenwood Road (W)	21	0	1	0

Vehicle Mix

HV %s

	To				
		A - Gardners Lane (N)	B - Meadow Road (E)	C - Primrose Road (S)	D - Greenwood Road (W)
From	A - Gardners Lane (N)	0	7	3	0
	B - Meadow Road (E)	2	0	0	0
	C - Primrose Road (S)	0	0	0	0
	D - Greenwood Road (W)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (Veh)	Max LOS	Av. Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.10	7.45	0.1	A	47	70
A-B					26	39
A-C					27	40
A-D					18	28
AB-CD	0.04	5.62	0.0	A	23	34
AB-C					26	39
D-ABC	0.04	5.57	0.0	A	20	30
C-D					0	0
C-A					46	69
C-B					0	0
CD-AB	0.00	0.00	0.0	A	0	0
CD-A					65	98

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	38	10	547	0.070	38	0.0	0.1	7.068	A
A-B	21	5			21				

A-C	22	5			22				
A-D	15	4			15				
AB-CD	19	5	666	0.028	19	0.0	0.0	5.558	A
AB-C	21	5			21				
D-ABC	17	4	675	0.025	16	0.0	0.0	5.467	A
C-D	0	0			0				
C-A	38	9			38				
C-B	0	0			0				
CD-AB	0	0	610	0.000	0	0.0	0.0	0.000	A
CD-A	53	13			53				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	46	11	544	0.084	46	0.1	0.1	7.229	A
A-B	25	6			25				
A-C	26	7			26				
A-D	18	4			18				
AB-CD	22	6	667	0.034	22	0.0	0.0	5.581	A
AB-C	25	6			25				
D-ABC	20	5	673	0.029	20	0.0	0.0	5.510	A
C-D	0	0			0				
C-A	45	11			45				
C-B	0	0			0				
CD-AB	0	0	608	0.000	0	0.0	0.0	0.000	A
CD-A	64	16			64				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	56	14	539	0.104	56	0.1	0.1	7.452	A
A-B	31	8			31				
A-C	32	8			32				
A-D	22	6			22				
AB-CD	28	7	669	0.041	28	0.0	0.0	5.614	A
AB-C	31	8			31				
D-ABC	24	6	671	0.036	24	0.0	0.0	5.569	A
C-D	0	0			0				
C-A	55	14			55				
C-B	0	0			0				
CD-AB	0	0	604	0.000	0	0.0	0.0	0.000	A
CD-A	78	20			78				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	56	14	539	0.104	56	0.1	0.1	7.455	A
A-B	31	8			31				
A-C	32	8			32				
A-D	22	6			22				
AB-CD	28	7	669	0.042	28	0.0	0.0	5.615	A
AB-C	31	8			31				

D-ABC	24	6	671	0.036	24	0.0	0.0	5.569	A
C-D	0	0			0				
C-A	55	14			55				
C-B	0	0			0				
CD-AB	0	0	604	0.000	0	0.0	0.0	0.000	A
CD-A	78	20			78				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	46	11	544	0.084	46	0.1	0.1	7.232	A
A-B	25	6			25				
A-C	26	7			26				
A-D	18	4			18				
AB-CD	22	6	667	0.034	23	0.0	0.0	5.583	A
AB-C	25	6			25				
D-ABC	20	5	673	0.029	20	0.0	0.0	5.512	A
C-D	0	0			0				
C-A	45	11			45				
C-B	0	0			0				
CD-AB	0	0	608	0.000	0	0.0	0.0	0.000	A
CD-A	64	16			64				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	38	10	547	0.070	38	0.1	0.1	7.076	A
A-B	21	5			21				
A-C	22	5			22				
A-D	15	4			15				
AB-CD	19	5	666	0.028	19	0.0	0.0	5.562	A
AB-C	21	5			21				
D-ABC	17	4	675	0.025	17	0.0	0.0	5.468	A
C-D	0	0			0				
C-A	38	9			38				
C-B	0	0			0				
CD-AB	0	0	610	0.000	0	0.0	0.0	0.000	A
CD-A	53	13			53				

2021, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way		1.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2021	PM	ONE HOUR	16:45	18:15	15	✓

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	Av. Demand (Veh/hr)	Scaling Factor (%)
A - Gardners Lane (N)		ONE HOUR	✓	100	100.000
B - Meadow Road (E)		ONE HOUR	✓	42	100.000
C - Primrose Road (S)		ONE HOUR	✓	33	100.000
D - Greenwood Road (W)		ONE HOUR	✓	19	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Gardners Lane (N)	B - Meadow Road (E)	C - Primrose Road (S)	D - Greenwood Road (W)
	A - Gardners Lane (N)	0	41	36	23
	B - Meadow Road (E)	37	0	5	0
	C - Primrose Road (S)	26	5	0	2
	D - Greenwood Road (W)	15	2	2	0

Vehicle Mix

HV %s

	To				
From		A - Gardners Lane (N)	B - Meadow Road (E)	C - Primrose Road (S)	D - Greenwood Road (W)
	A - Gardners Lane (N)	0	3	0	0
	B - Meadow Road (E)	3	0	0	0
	C - Primrose Road (S)	0	0	0	0
	D - Greenwood Road (W)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (Veh)	Max LOS	Av. Demand (Veh/hr)	Total Junction Arrivals (Veh)
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B-ACD	0.09	7.32	0.1	A	39	58
A-B					38	56
A-C					33	50
A-D					21	32
AB-CD	0.04	5.50	0.0	A	22	34
AB-C					36	55
D-ABC	0.03	5.61	0.0	A	17	26
C-D					2	3
C-A					24	36
C-B					5	7
CD-AB	0.01	5.80	0.0	A	7	10
CD-A					37	56

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	32	8	547	0.058	31	0.0	0.1	6.981	A
A-B	31	8			31				
A-C	27	7			27				
A-D	17	4			17				
AB-CD	18	5	675	0.027	18	0.0	0.0	5.480	A
AB-C	30	8			30				
D-ABC	14	4	665	0.022	14	0.0	0.0	5.528	A
C-D	2	0.38			2				
C-A	20	5			20				
C-B	4	0.94			4				
CD-AB	6	1	627	0.009	5	0.0	0.0	5.788	A
CD-A	31	8			31				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	38	9	543	0.070	38	0.1	0.1	7.122	A
A-B	37	9			37				
A-C	32	8			32				
A-D	21	5			21				
AB-CD	22	5	678	0.032	22	0.0	0.0	5.488	A
AB-C	36	9			36				
D-ABC	17	4	664	0.026	17	0.0	0.0	5.563	A
C-D	2	0.45			2				
C-A	23	6			23				
C-B	4	1			4				
CD-AB	7	2	628	0.011	7	0.0	0.0	5.790	A
CD-A	36	9			36				

17:15 - 17:30

Stream	Total	Junction	Capacity	RFC	Throughput	Start	End queue	Delay (s)	Unsignalised
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	Demand (Veh/hr)	Arrivals (Veh)	(Veh/hr)		(Veh/hr)	queue (Veh)	(Veh)		level of service
B-ACD	46	12	538	0.086	46	0.1	0.1	7.317	A
A-B	45	11			45				
A-C	40	10			40				
A-D	25	6			25				
AB-CD	27	7	682	0.040	27	0.0	0.0	5.500	A
AB-C	43	11			43				
D-ABC	21	5	662	0.032	21	0.0	0.0	5.613	A
C-D	2	0.55			2				
C-A	29	7			29				
C-B	6	1			6				
CD-AB	8	2	630	0.013	8	0.0	0.0	5.794	A
CD-A	45	11			45				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	46	12	538	0.086	46	0.1	0.1	7.317	A
A-B	45	11			45				
A-C	40	10			40				
A-D	25	6			25				
AB-CD	27	7	682	0.040	27	0.0	0.0	5.500	A
AB-C	43	11			43				
D-ABC	21	5	662	0.032	21	0.0	0.0	5.613	A
C-D	2	0.55			2				
C-A	29	7			29				
C-B	6	1			6				
CD-AB	8	2	630	0.013	8	0.0	0.0	5.796	A
CD-A	45	11			45				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	38	9	543	0.070	38	0.1	0.1	7.124	A
A-B	37	9			37				
A-C	32	8			32				
A-D	21	5			21				
AB-CD	22	5	678	0.032	22	0.0	0.0	5.488	A
AB-C	36	9			36				
D-ABC	17	4	664	0.026	17	0.0	0.0	5.566	A
C-D	2	0.45			2				
C-A	23	6			23				
C-B	4	1			4				
CD-AB	7	2	628	0.011	7	0.0	0.0	5.793	A
CD-A	36	9			36				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	32	8	547	0.058	32	0.1	0.1	6.989	A
A-B	31	8			31				

A-C	27	7			27				
A-D	17	4			17				
AB-CD	18	5	675	0.027	18	0.0	0.0	5.482	A
AB-C	30	8			30				
D-ABC	14	4	665	0.022	14	0.0	0.0	5.530	A
C-D	2	0.38			2				
C-A	20	5			20				
C-B	4	0.94			4				
CD-AB	6	1	627	0.009	6	0.0	0.0	5.788	A
CD-A	31	8			31				

2021 + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way		2.12	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2021 + Dev	PM	ONE HOUR	16:45	18:15	15	✓

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	Av. Demand (Veh/hr)	Scaling Factor (%)
A - Gardners Lane (N)		ONE HOUR	✓	115	100.000
B - Meadow Road (E)		ONE HOUR	✓	55	100.000
C - Primrose Road (S)		ONE HOUR	✓	34	100.000
D - Greenwood Road (W)		ONE HOUR	✓	19	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A - Gardners Lane (N)	B - Meadow Road (E)	C - Primrose Road (S)	D - Greenwood Road (W)
From	A - Gardners Lane (N)	0	56	36	23
	B - Meadow Road (E)	49	0	5	1
	C - Primrose Road (S)	26	6	0	2
	D - Greenwood Road (W)	15	2	2	0

Vehicle Mix

HV %s

	To				
		A - Gardners Lane (N)	B - Meadow Road (E)	C - Primrose Road (S)	D - Greenwood Road (W)
From	A - Gardners Lane (N)	0	2	0	0
	B - Meadow Road (E)	2	0	0	0
	C - Primrose Road (S)	0	0	0	0
	D - Greenwood Road (W)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (Veh)	Max LOS	Av. Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.11	7.51	0.1	A	50	76
A-B					51	77
A-C					33	50
A-D					21	32
AB-CD	0.04	5.51	0.0	A	23	35
AB-C					36	54
D-ABC	0.03	5.62	0.0	A	17	26
C-D					2	3
C-A					24	36
C-B					6	8
CD-AB	0.02	5.84	0.0	A	8	12
CD-A					37	56

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	41	10	549	0.075	41	0.0	0.1	7.082	A
A-B	42	11			42				

A-C	27	7			27				
A-D	17	4			17				
AB-CD	19	5	675	0.028	19	0.0	0.0	5.488	A
AB-C	30	7			30				
D-ABC	14	4	665	0.022	14	0.0	0.0	5.529	A
C-D	2	0.38			2				
C-A	20	5			20				
C-B	5	1			5				
CD-AB	6	2	625	0.010	6	0.0	0.0	5.818	A
CD-A	30	8			30				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	49	12	545	0.091	49	0.1	0.1	7.261	A
A-B	50	13			50				
A-C	32	8			32				
A-D	21	5			21				
AB-CD	23	6	678	0.034	23	0.0	0.0	5.497	A
AB-C	36	9			36				
D-ABC	17	4	664	0.026	17	0.0	0.0	5.565	A
C-D	2	0.45			2				
C-A	23	6			23				
C-B	5	1			5				
CD-AB	8	2	625	0.012	8	0.0	0.0	5.826	A
CD-A	36	9			36				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	61	15	540	0.112	60	0.1	0.1	7.507	A
A-B	62	15			62				
A-C	40	10			40				
A-D	25	6			25				
AB-CD	28	7	681	0.042	28	0.0	0.0	5.511	A
AB-C	43	11			43				
D-ABC	21	5	662	0.032	21	0.0	0.0	5.616	A
C-D	2	0.55			2				
C-A	29	7			29				
C-B	7	2			7				
CD-AB	9	2	626	0.015	9	0.0	0.0	5.837	A
CD-A	44	11			44				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	61	15	540	0.112	61	0.1	0.1	7.510	A
A-B	62	15			62				
A-C	40	10			40				
A-D	25	6			25				
AB-CD	28	7	681	0.042	28	0.0	0.0	5.514	A
AB-C	43	11			43				

D-ABC	21	5	662	0.032	21	0.0	0.0	5.616	A
C-D	2	0.55			2				
C-A	29	7			29				
C-B	7	2			7				
CD-AB	9	2	626	0.015	9	0.0	0.0	5.837	A
CD-A	44	11			44				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	49	12	545	0.091	50	0.1	0.1	7.267	A
A-B	50	13			50				
A-C	32	8			32				
A-D	21	5			21				
AB-CD	23	6	678	0.034	23	0.0	0.0	5.500	A
AB-C	36	9			36				
D-ABC	17	4	664	0.026	17	0.0	0.0	5.566	A
C-D	2	0.45			2				
C-A	23	6			23				
C-B	5	1			5				
CD-AB	8	2	626	0.012	8	0.0	0.0	5.828	A
CD-A	36	9			36				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	41	10	549	0.075	41	0.1	0.1	7.095	A
A-B	42	11			42				
A-C	27	7			27				
A-D	17	4			17				
AB-CD	19	5	675	0.028	19	0.0	0.0	5.490	A
AB-C	30	8			30				
D-ABC	14	4	665	0.022	14	0.0	0.0	5.530	A
C-D	2	0.38			2				
C-A	20	5			20				
C-B	5	1			5				
CD-AB	6	2	625	0.010	6	0.0	0.0	5.818	A
CD-A	31	8			31				

2035, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way		1.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2035	AM	ONE HOUR	07:45	09:15	15	✓

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	Av. Demand (Veh/hr)	Scaling Factor (%)
A - Gardners Lane (N)		ONE HOUR	✓	90	100.000
B - Meadow Road (E)		ONE HOUR	✓	30	100.000
C - Primrose Road (S)		ONE HOUR	✓	57	100.000
D - Greenwood Road (W)		ONE HOUR	✓	25	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To				
		A - Gardners Lane (N)	B - Meadow Road (E)	C - Primrose Road (S)	D - Greenwood Road (W)
	A - Gardners Lane (N)	0	24	33	33
	B - Meadow Road (E)	28	0	0	2
	C - Primrose Road (S)	57	0	0	0
	D - Greenwood Road (W)	24	0	1	0

Vehicle Mix

HV %s

From	To				
		A - Gardners Lane (N)	B - Meadow Road (E)	C - Primrose Road (S)	D - Greenwood Road (W)
	A - Gardners Lane (N)	0	10	3	0
	B - Meadow Road (E)	4	0	0	0
	C - Primrose Road (S)	0	0	0	0
	D - Greenwood Road (W)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (Veh)	Max LOS	Av. Demand (Veh/hr)	Total Junction Arrivals (Veh)
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B-ACD	0.06	7.36	0.1	A	28	41
A-B					22	33
A-C					30	45
A-D					30	45
AB-CD	0.06	5.72	0.1	A	34	51
AB-C					29	43
D-ABC	0.04	5.61	0.0	A	23	34
C-D					0	0
C-A					52	78
C-B					0	0
CD-AB	0.00	0.00	0.0	A	0	0
CD-A					74	111

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	23	6	532	0.042	22	0.0	0.0	7.062	A
A-B	18	5			18				
A-C	25	6			25				
A-D	25	6			25				
AB-CD	27	7	667	0.041	27	0.0	0.0	5.625	A
AB-C	24	6			24				
D-ABC	19	5	675	0.028	19	0.0	0.0	5.488	A
C-D	0	0			0				
C-A	43	11			43				
C-B	0	0			0				
CD-AB	0	0	608	0.000	0	0.0	0.0	0.000	A
CD-A	61	15			61				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	27	7	528	0.051	27	0.0	0.1	7.185	A
A-B	22	5			22				
A-C	30	7			30				
A-D	30	7			30				
AB-CD	33	8	668	0.049	33	0.0	0.1	5.665	A
AB-C	28	7			28				
D-ABC	22	6	673	0.033	22	0.0	0.0	5.537	A
C-D	0	0			0				
C-A	51	13			51				
C-B	0	0			0				
CD-AB	0	0	605	0.000	0	0.0	0.0	0.000	A
CD-A	73	18			73				

08:15 - 08:30

Stream	Total	Junction	Capacity	RFC	Throughput	Start	End queue	Delay (s)	Unsignalised
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	Demand (Veh/hr)	Arrivals (Veh)	(Veh/hr)		(Veh/hr)	queue (Veh)	(Veh)		level of service
B-ACD	33	8	522	0.063	33	0.1	0.1	7.357	A
A-B	26	7			26				
A-C	36	9			36				
A-D	36	9			36				
AB-CD	41	10	670	0.061	41	0.1	0.1	5.720	A
AB-C	34	9			34				
D-ABC	28	7	670	0.041	27	0.0	0.0	5.605	A
C-D	0	0			0				
C-A	63	16			63				
C-B	0	0			0				
CD-AB	0	0	601	0.000	0	0.0	0.0	0.000	A
CD-A	89	22			89				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	33	8	522	0.063	33	0.1	0.1	7.357	A
A-B	26	7			26				
A-C	36	9			36				
A-D	36	9			36				
AB-CD	41	10	670	0.061	41	0.1	0.1	5.724	A
AB-C	34	9			34				
D-ABC	28	7	670	0.041	28	0.0	0.0	5.605	A
C-D	0	0			0				
C-A	63	16			63				
C-B	0	0			0				
CD-AB	0	0	601	0.000	0	0.0	0.0	0.000	A
CD-A	89	22			89				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	27	7	528	0.051	27	0.1	0.1	7.189	A
A-B	22	5			22				
A-C	30	7			30				
A-D	30	7			30				
AB-CD	33	8	668	0.049	33	0.1	0.1	5.668	A
AB-C	28	7			28				
D-ABC	22	6	673	0.033	23	0.0	0.0	5.540	A
C-D	0	0			0				
C-A	51	13			51				
C-B	0	0			0				
CD-AB	0	0	605	0.000	0	0.0	0.0	0.000	A
CD-A	73	18			73				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	23	6	532	0.042	23	0.1	0.0	7.069	A
A-B	18	5			18				

A-C	25	6			25				
A-D	25	6			25				
AB-CD	27	7	667	0.041	27	0.1	0.0	5.629	A
AB-C	24	6			24				
D-ABC	19	5	675	0.028	19	0.0	0.0	5.489	A
C-D	0	0			0				
C-A	43	11			43				
C-B	0	0			0				
CD-AB	0	0	608	0.000	0	0.0	0.0	0.000	A
CD-A	61	15			61				

2035, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way		1.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2035	PM	ONE HOUR	16:45	18:15	15	✓

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	Av. Demand (Veh/hr)	Scaling Factor (%)
A - Gardners Lane (N)		ONE HOUR	✓	113	100.000
B - Meadow Road (E)		ONE HOUR	✓	48	100.000
C - Primrose Road (S)		ONE HOUR	✓	37	100.000
D - Greenwood Road (W)		ONE HOUR	✓	21	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A - Gardners Lane (N)	B - Meadow Road (E)	C - Primrose Road (S)	D - Greenwood Road (W)
From	A - Gardners Lane (N)	0	46	41	26
	B - Meadow Road (E)	42	0	6	0
	C - Primrose Road (S)	29	6	0	2
	D - Greenwood Road (W)	17	2	2	0

Vehicle Mix

HV %s

	To				
		A - Gardners Lane (N)	B - Meadow Road (E)	C - Primrose Road (S)	D - Greenwood Road (W)
From	A - Gardners Lane (N)	0	3	0	0
	B - Meadow Road (E)	3	0	0	0
	C - Primrose Road (S)	0	0	0	0
	D - Greenwood Road (W)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (Veh)	Max LOS	Av. Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.10	7.46	0.1	A	44	66
A-B					42	63
A-C					38	56
A-D					24	36
AB-CD	0.05	5.51	0.1	A	26	38
AB-C					41	62
D-ABC	0.03	5.63	0.0	A	19	29
C-D					2	3
C-A					27	40
C-B					6	8
CD-AB	0.02	5.80	0.0	A	8	12
CD-A					42	62

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	36	9	545	0.066	36	0.0	0.1	7.066	A
A-B	35	9			35				

A-C	31	8			31				
A-D	20	5			20				
AB-CD	21	5	677	0.031	21	0.0	0.0	5.482	A
AB-C	34	9			34				
D-ABC	16	4	667	0.024	16	0.0	0.0	5.530	A
C-D	2	0.38			2				
C-A	22	5			22				
C-B	5	1			5				
CD-AB	6	2	628	0.010	6	0.0	0.0	5.792	A
CD-A	34	9			34				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	43	11	541	0.080	43	0.1	0.1	7.229	A
A-B	41	10			41				
A-C	37	9			37				
A-D	23	6			23				
AB-CD	25	6	680	0.037	25	0.0	0.0	5.491	A
AB-C	41	10			41				
D-ABC	19	5	665	0.028	19	0.0	0.0	5.570	A
C-D	2	0.45			2				
C-A	26	7			26				
C-B	5	1			5				
CD-AB	8	2	629	0.012	8	0.0	0.0	5.795	A
CD-A	41	10			41				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	53	13	535	0.099	53	0.1	0.1	7.458	A
A-B	51	13			51				
A-C	45	11			45				
A-D	29	7			29				
AB-CD	31	8	685	0.045	31	0.0	0.1	5.504	A
AB-C	49	12			49				
D-ABC	23	6	663	0.035	23	0.0	0.0	5.625	A
C-D	2	0.55			2				
C-A	32	8			32				
C-B	7	2			7				
CD-AB	10	2	630	0.015	10	0.0	0.0	5.799	A
CD-A	50	12			50				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	53	13	535	0.099	53	0.1	0.1	7.459	A
A-B	51	13			51				
A-C	45	11			45				
A-D	29	7			29				
AB-CD	31	8	685	0.045	31	0.1	0.1	5.507	A
AB-C	49	12			49				

D-ABC	23	6	663	0.035	23	0.0	0.0	5.625	A
C-D	2	0.55			2				
C-A	32	8			32				
C-B	7	2			7				
CD-AB	10	2	630	0.015	10	0.0	0.0	5.802	A
CD-A	50	12			50				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	43	11	541	0.080	43	0.1	0.1	7.232	A
A-B	41	10			41				
A-C	37	9			37				
A-D	23	6			23				
AB-CD	25	6	680	0.037	25	0.1	0.0	5.494	A
AB-C	41	10			41				
D-ABC	19	5	665	0.028	19	0.0	0.0	5.573	A
C-D	2	0.45			2				
C-A	26	7			26				
C-B	5	1			5				
CD-AB	8	2	629	0.012	8	0.0	0.0	5.795	A
CD-A	41	10			41				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	36	9	545	0.066	36	0.1	0.1	7.076	A
A-B	35	9			35				
A-C	31	8			31				
A-D	20	5			20				
AB-CD	21	5	677	0.031	21	0.0	0.0	5.485	A
AB-C	34	9			34				
D-ABC	16	4	667	0.024	16	0.0	0.0	5.531	A
C-D	2	0.38			2				
C-A	22	5			22				
C-B	5	1			5				
CD-AB	6	2	628	0.010	6	0.0	0.0	5.792	A
CD-A	34	9			34				

2035 + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way		1.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2035 + Dev	AM	ONE HOUR	07:45	09:15	15	✓

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	Av. Demand (Veh/hr)	Scaling Factor (%)
A - Gardners Lane (N)		ONE HOUR	✓	87	100.000
B - Meadow Road (E)		ONE HOUR	✓	54	100.000
C - Primrose Road (S)		ONE HOUR	✓	57	100.000
D - Greenwood Road (W)		ONE HOUR	✓	25	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To				
		A - Gardners Lane (N)	B - Meadow Road (E)	C - Primrose Road (S)	D - Greenwood Road (W)
	A - Gardners Lane (N)	0	31	33	23
	B - Meadow Road (E)	50	0	0	4
	C - Primrose Road (S)	57	0	0	0
	D - Greenwood Road (W)	24	0	1	0

Vehicle Mix

HV %s

From	To				
		A - Gardners Lane (N)	B - Meadow Road (E)	C - Primrose Road (S)	D - Greenwood Road (W)
	A - Gardners Lane (N)	0	7	3	0
	B - Meadow Road (E)	2	0	0	0
	C - Primrose Road (S)	0	0	0	0
	D - Greenwood Road (W)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (Veh)	Max LOS	Av. Demand (Veh/hr)	Total Junction Arrivals (Veh)
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B-ACD	0.11	7.57	0.1	A	50	74
A-B					28	43
A-C					30	45
A-D					21	32
AB-CD	0.05	5.64	0.1	A	26	39
AB-C					29	44
D-ABC	0.04	5.60	0.0	A	23	34
C-D					0	0
C-A					52	78
C-B					0	0
CD-AB	0.00	0.00	0.0	A	0	0
CD-A					74	111

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	41	10	544	0.075	40	0.0	0.1	7.140	A
A-B	23	6			23				
A-C	25	6			25				
A-D	17	4			17				
AB-CD	21	5	667	0.032	21	0.0	0.0	5.571	A
AB-C	24	6			24				
D-ABC	19	5	675	0.028	19	0.0	0.0	5.487	A
C-D	0	0			0				
C-A	43	11			43				
C-B	0	0			0				
CD-AB	0	0	609	0.000	0	0.0	0.0	0.000	A
CD-A	61	15			61				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	49	12	540	0.090	48	0.1	0.1	7.320	A
A-B	28	7			28				
A-C	30	7			30				
A-D	21	5			21				
AB-CD	25	6	668	0.038	25	0.0	0.0	5.599	A
AB-C	29	7			29				
D-ABC	22	6	673	0.033	22	0.0	0.0	5.536	A
C-D	0	0			0				
C-A	51	13			51				
C-B	0	0			0				
CD-AB	0	0	606	0.000	0	0.0	0.0	0.000	A
CD-A	73	18			73				

08:15 - 08:30

Stream	Total	Junction	Capacity	RFC	Throughput	Start	End queue	Delay (s)	Unsignalised
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	Demand (Veh/hr)	Arrivals (Veh)	(Veh/hr)		(Veh/hr)	queue (Veh)	(Veh)		level of service
B-ACD	59	15	535	0.111	59	0.1	0.1	7.569	A
A-B	34	9			34				
A-C	36	9			36				
A-D	25	6			25				
AB-CD	31	8	670	0.047	31	0.0	0.1	5.637	A
AB-C	35	9			35				
D-ABC	28	7	670	0.041	27	0.0	0.0	5.603	A
C-D	0	0			0				
C-A	63	16			63				
C-B	0	0			0				
CD-AB	0	0	602	0.000	0	0.0	0.0	0.000	A
CD-A	89	22			89				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	59	15	535	0.111	59	0.1	0.1	7.572	A
A-B	34	9			34				
A-C	36	9			36				
A-D	25	6			25				
AB-CD	31	8	670	0.047	31	0.1	0.1	5.640	A
AB-C	35	9			35				
D-ABC	28	7	670	0.041	28	0.0	0.0	5.603	A
C-D	0	0			0				
C-A	63	16			63				
C-B	0	0			0				
CD-AB	0	0	602	0.000	0	0.0	0.0	0.000	A
CD-A	89	22			89				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	49	12	540	0.090	49	0.1	0.1	7.323	A
A-B	28	7			28				
A-C	30	7			30				
A-D	21	5			21				
AB-CD	25	6	668	0.038	25	0.1	0.0	5.604	A
AB-C	29	7			29				
D-ABC	22	6	673	0.033	23	0.0	0.0	5.538	A
C-D	0	0			0				
C-A	51	13			51				
C-B	0	0			0				
CD-AB	0	0	606	0.000	0	0.0	0.0	0.000	A
CD-A	73	18			73				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	41	10	544	0.075	41	0.1	0.1	7.153	A
A-B	23	6			23				

A-C	25	6			25				
A-D	17	4			17				
AB-CD	21	5	667	0.032	21	0.0	0.0	5.574	A
AB-C	24	6			24				
D-ABC	19	5	675	0.028	19	0.0	0.0	5.490	A
C-D	0	0			0				
C-A	43	11			43				
C-B	0	0			0				
CD-AB	0	0	609	0.000	0	0.0	0.0	0.000	A
CD-A	61	15			61				

2035 + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way		2.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2035 + Dev	PM	ONE HOUR	16:45	18:15	15	✓

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	Av. Demand (Veh/hr)	Scaling Factor (%)
A - Gardners Lane (N)		ONE HOUR	✓	128	100.000
B - Meadow Road (E)		ONE HOUR	✓	61	100.000
C - Primrose Road (S)		ONE HOUR	✓	38	100.000
D - Greenwood Road (W)		ONE HOUR	✓	22	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A - Gardners Lane (N)	B - Meadow Road (E)	C - Primrose Road (S)	D - Greenwood Road (W)
From	A - Gardners Lane (N)	0	61	41	26
	B - Meadow Road (E)	54	0	6	1
	C - Primrose Road (S)	29	7	0	2
	D - Greenwood Road (W)	17	3	2	0

Vehicle Mix

HV %s

	To				
		A - Gardners Lane (N)	B - Meadow Road (E)	C - Primrose Road (S)	D - Greenwood Road (W)
From	A - Gardners Lane (N)	0	2	0	0
	B - Meadow Road (E)	2	0	0	0
	C - Primrose Road (S)	0	0	0	0
	D - Greenwood Road (W)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (Veh)	Max LOS	Av. Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.13	7.67	0.1	A	56	84
A-B					56	84
A-C					38	56
A-D					24	36
AB-CD	0.05	5.52	0.1	A	27	40
AB-C					41	62
D-ABC	0.04	5.63	0.0	A	20	30
C-D					2	3
C-A					27	40
C-B					6	10
CD-AB	0.02	5.86	0.0	A	10	15
CD-A					42	62

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	46	11	547	0.084	46	0.0	0.1	7.173	A
A-B	46	11			46				

A-C	31	8			31				
A-D	20	5			20				
AB-CD	21	5	677	0.032	21	0.0	0.0	5.488	A
AB-C	34	9			34				
D-ABC	17	4	667	0.025	16	0.0	0.0	5.531	A
C-D	2	0.38			2				
C-A	22	5			22				
C-B	5	1			5				
CD-AB	8	2	625	0.013	8	0.0	0.0	5.829	A
CD-A	34	9			34				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	55	14	543	0.101	55	0.1	0.1	7.377	A
A-B	55	14			55				
A-C	37	9			37				
A-D	23	6			23				
AB-CD	26	6	680	0.038	26	0.0	0.0	5.501	A
AB-C	41	10			41				
D-ABC	20	5	666	0.030	20	0.0	0.0	5.572	A
C-D	2	0.45			2				
C-A	26	7			26				
C-B	6	2			6				
CD-AB	10	2	626	0.015	10	0.0	0.0	5.839	A
CD-A	41	10			41				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	67	17	537	0.125	67	0.1	0.1	7.664	A
A-B	67	17			67				
A-C	45	11			45				
A-D	29	7			29				
AB-CD	32	8	685	0.047	32	0.0	0.1	5.516	A
AB-C	49	12			49				
D-ABC	24	6	664	0.037	24	0.0	0.0	5.629	A
C-D	2	0.55			2				
C-A	32	8			32				
C-B	8	2			8				
CD-AB	12	3	627	0.019	12	0.0	0.0	5.854	A
CD-A	50	12			50				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	67	17	537	0.125	67	0.1	0.1	7.667	A
A-B	67	17			67				
A-C	45	11			45				
A-D	29	7			29				
AB-CD	32	8	685	0.047	32	0.1	0.1	5.517	A
AB-C	49	12			49				

D-ABC	24	6	664	0.037	24	0.0	0.0	5.629	A
C-D	2	0.55			2				
C-A	32	8			32				
C-B	8	2			8				
CD-AB	12	3	627	0.019	12	0.0	0.0	5.856	A
CD-A	50	12			50				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	55	14	543	0.101	55	0.1	0.1	7.381	A
A-B	55	14			55				
A-C	37	9			37				
A-D	23	6			23				
AB-CD	26	6	680	0.038	26	0.1	0.0	5.502	A
AB-C	41	10			41				
D-ABC	20	5	666	0.030	20	0.0	0.0	5.572	A
C-D	2	0.45			2				
C-A	26	7			26				
C-B	6	2			6				
CD-AB	10	2	626	0.015	10	0.0	0.0	5.842	A
CD-A	41	10			41				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	46	11	547	0.084	46	0.1	0.1	7.187	A
A-B	46	11			46				
A-C	31	8			31				
A-D	20	5			20				
AB-CD	21	5	677	0.032	21	0.0	0.0	5.491	A
AB-C	34	9			34				
D-ABC	17	4	667	0.025	17	0.0	0.0	5.534	A
C-D	2	0.38			2				
C-A	22	5			22				
C-B	5	1			5				
CD-AB	8	2	626	0.013	8	0.0	0.0	5.831	A
CD-A	34	9			34				

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