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FAO: Mr Ian Kemp
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New Forest District Local Plan
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WR9 7TA

13th March 2019

Your ref: Matter 11b, re. SS6 – Land east of Lower Pennington Lane
Our ref: AB/3385

Dear Mr Kemp

Re: Final Written Submissions for the New Forest District Local Plan Examination – Matter 11b on behalf of SS6 – Cicero Estates – Representee Ref. 448

The following letter has been prepared in support of our final written submissions in advance of the New Forest District Local Plan Examination hearings in June and July 2019. The representation is made on behalf of Cicero Estates (448) in respect of the land within their control comprised in strategic allocation SS6 – Land to the east of Lower Pennington Lane, Lymington

Further work has been undertaken in respect of the aspects of the strategic policy identified below. The work undertaken supports the Council's position that this is an appropriate allocation and that the policy requirements can be appropriately met whilst addressing the technical constraints of the site.

The work undertaken relates to:

(1) An updated Masterplan Framework which responds to the technical constraints of the site in terms of; access, ecology, trees and drainage;
(2) A comprehensive Transport Assessment assessing in full the impacts upon the immediate and wider highway network and modelling of the improvements to junctions;

Appended alongside this written representation, and in support of the above points, are the following documents:

- AB1 Masterplan Framework prepared by BrightSpace Architects
- AB2 Transport Assessment prepared by RGP Transport Planning Consultants
- AB3 Preliminary Ecological Appraisal prepared by EcoSupport
- AB4 Flood Risk Assessment and Drainage Strategy prepared by Vectos
- AB5 Arboricultural Constraints Plan prepared by Barrell Tree Consultancy

The matters (1)-(3) are addressed in further detail within the ensuing paragraphs and the above documents should be referred to alongside these comments for completeness.

(1) Masterplan Framework – 11b.6

We have continued to develop the masterplan framework for this site following on from the preliminary meetings with the Council during the course of the preparation of the New Forest District Local Plan.

The intention being to determine the constraints of the site thorough technical reports which culminated in the production of a deliverable masterplan which addresses both the requirements of strategic site allocation SS6 and addresses these technical matters.

The Masterplan Framework which has been prepared by BrightSpace Architects is enclosed alongside this letter.

Oakhaven Hospice

A key concern which has been expressed by local representee parties in their written responses to the Regulation 19 Local Plan consultation, was the potential impact of any development proposed on this site upon Oakhaven Hospice.

Oakhaven Hospice is a specialist palliative care facility which is located immediately to the west of, and adjoins, strategic allocation SS6.

Proactive engagement has been had with Oakhaven Hospice Trust in order to provide some assurances and to discuss what it would consider appropriate mitigation for any impacts upon the hospice. One of the most important facets of the location of Oakhaven Hospice is the sense of tranquillity for both longer term and day residents.

In order to preserve this noted tranquillity, the Masterplan has been specifically amended to ensure a significant landscaped buffer is provided between the hospice and any residential development on the site; the existing treelines and landscaping features on site are to be maintained and further enhanced through new planting of appropriate native species. The landscaped buffer would then be provided to the hospice to be maintained in its ownership to ensure that the benefit of the additional screening is maintained in perpetuity. Facilitating this landscaped buffer has involved the removal of a number of dwellinghouses from this side of the site to reduce the extent of interface between the hospice and any residential uses.

Through engagement with the Oakhaven Hospice Trust it has been noted that there is a need for new parking provision. The hospice has plans for additional parking within its site, however this would be to the detriment of its landscaped gardens. In order to preserve this valued outdoor space, the proposed Masterplan has built in a new parking provision for the hospice which will meet both its current needs and help meet any additional needs going forwards.

It is very clear that a development in the manner which is proposed would provide net benefits to the operations of the hospice without and diminishment of the tranquil conditions for residents. These amendments to the masterplan strategy for the site should provide the necessary assurances for the Inspectors and indeed residents that any impacts upon Oakhaven Hospice have been carefully considered and appropriately remediated through a considered and effective Masterplanning response.

Ecological and Arboricultural Constraints

Detailed survey work has been undertaken by EcoSupport Ecological Consultants and Barrell Tree Consultancy in order to inform those parts of the site which required careful consideration and where existing landscape features needed to be preserved.

Technical documents prepared by both consultants are enclosed alongside this letter and should be referred to as applicable.

There are a number of high value trees on the site which are both important from a visual amenity standpoint in terms of the contribution they make to the site and immediate setting, but also in terms of their ecological value. The tree and hedgerow belts which run through the site are to be retained where possible, as is indicated on the submitted Masterplan Framework. There is no requirement for any substantive removals in order to facilitate the proposed development.

The Masterplan has sought to arrange the pattern of built development and open greenspace in a manner which best preserves these tree and hedgerow lined corridors which essentially form natural internal boundaries within the site and will aid to break up the development and positively integrate it in to its context.

There are no significant ecological constraints which have been identified by the survey work undertaken to date. As will be expected from a greenfield site; there are some species present, however their existing habitats can be effectively integrated in to the proposed development through the SANG framework which runs through the site. The land itself has been actively farmed for grazing and for the sowing of hay and haylage, the land is therefore maintained, and any biodiversity interest is concentrated to the native hedgerows and the treelines which are to be retained. There is no conflict in this respect between preserving the biodiversity interest of the site and achieving a housing development in accordance with the policy requirements of strategic allocation SS6.

Flood Risk and Drainage

There are no flood risk issues relating to strategic allocation SS6; the site is as a whole located within Flood Zone 1, that being at the lowest risk of fluvial flooding each calendar year. There is no need therefore for express consideration of whether or not the site is suitable for housing development; as a matter of principle highly vulnerable uses such as residential development are directed towards Flood Zone 1. Whilst this is the case, with any development of this scale it is necessary to undertake a flood risk assessment (FRA) in order to ensure that any existing and future risks are appropriately considered and, if required, addressed.

Vectos Infrastructure Consultants were instructed to undertake survey work and prepare a formal flood risk assessment (FRA) and drainage strategy (DS) to inform the Masterplan Framework for the site.

The assessment undertaken considered fluvial flood risk, but also whether or not there are flooding issues on site from surface water, groundwater or other artificial sources. The conclusion in all respects is that the site is not significantly at risk from any of these sources and falls wholesale within the low risk category.

There is evidence of an isolated area of surface water flood risk towards the middle of the site; this appears to be the result of an on-site drainage ditch. The site as a whole however is not at risk from surface water flooding and thus its overall risk is determined as low.

The existing network of drainage ditches on the site have not been maintained, these however can and will be improved as part of any development and these will feed in to the sustainable drainage strategy for the site. The Masterplan Framework includes provision for a surface water attenuation pond which will provide more than sufficient capacity, in the event of an extreme rainfall event, to deal with all surface water run-off from the development. The precise size of this attenuation pond will be established through further survey work; however, it has been located in an appropriate area of the SANG on site where surface water would naturally coalesce. The benefits of a surface water attenuation pond are that, when there ahs been limited rainfall, this area will remain usable open space.

The report prepared by Vectos includes the results of infiltration testing which has been undertaken on site and demonstrates that the ground conditions will permit the use of sustainable drainage solutions SuDs. Any detailed stage application would be subject of further investigation works in order to inform a detailed drainage strategy.

(2) Transport Assessment and Traffic Impacts – 11b.6

One of the principal concerns raised by representee parties in objection to strategic allocation SS6 has been the potential impact of the development of this site upon the wider highway network.

We are well aware of the established character of both Lower Pennington and Ridgeway Lanes. These are indeed noted by the Council to have a firm 'rural lanes character'. The supporting text to SS6 states specifically that a careful balance will need to be reached in providing safe access to the development site, but also maintaining the character of the rural lanes. The policy also states that visibility and safety will need to be specifically addresses for the access on to Ridgeway Lane.

Whilst a significant amount of other technical work undertaken in respect of this site, a particular focus has been placed on addressing and substantiating in detail that there are no issues or constraints to the development of this site in highways terms.

RGP Transport Planning Consultants were instructed in relation to this strategic site at the initial stage and have been advising throughout the allocation process. A fully detailed Transport Assessment is enclosed alongside this letter and submitted in support of the allocation in order to seek to resolve the concerns of representee parties.

There has been a lengthy and detailed engagement between RGP and Hampshire County Council Highways Authority (HCC) in respect of the strategy for this site. The engagement with HCC has been productive and there are only minor details in discussion at this time. The County Highways Authority has confirmed to RGP a broad agreement with the strategy proposed and that, as the Transport Assessment demonstrates, that there is sufficient capacity within the local highway network to accommodate the movements generated by the proposed development without any harm to highway safety or highways consequences which are severe.

Vehicular Access to the Site

Policy SS6 requires that two points of vehicular access are provided to the site; one from each of Lower Pennington Lane and Ridgeway Lane respectively. The access strategy proposed seeks to delivery precisely this approach.

It was formerly proposed to provide a secondary access in to the site from Lower Penning Lane at the north-west corner of the site, however tree constraints would prevent sufficient visibility from being achievable and as a result this access ahs been downgraded to solely a pedestrian and cycle access. there is no issue with this approach as the provision of two access points now complies precisely with the requirements of the Council's policy.

Full modelling has been undertaken of both of the accesses to ensure that a sufficient carriage way width and sufficient visibility can be achieved from both access in order to ensure safe entrance to an egress from the site.

It has been made clear during meetings had with the District Council that improvements to the access on to Ridgeway Lane and associated orientation of the Poles Lane junction will be delivered as part of the development to provide wider public benefit and enhance highway safety. The improvement works proposed to these junctions have been modelled in full with swept path analysis to prove that they will operate as intended and that they will have the desired effect of improving highway safety. The improvements will enable full distance visibility splays to be provided from the Poles Lane junction with Ridgeway Lane, providing a degree of visibility which complies fully with the deign guidance set out within Manual for Streets (MfS).

Whilst improvements are made to the Poles Lane/Ridgeway Lane junction, the modelling undertaken evidences that vehicular traffic would be unlikely to use Poles Lane as a route to the town centre as it is inefficient with longer journey times than utilising either Lower Pennington Lane or Ridgeway Lane. Full modelling of the prospective impacts has been undertaken and is cited within the Transport Assessment.

Both the Lower Pennington Lane access and Ridgeway Lane access demonstrate the required visibility splays in accordance with MfS and thus are fully compliant in highways terms.

There is no need to make substantial changes to the character of either of the rural lanes to facilitate safe access to the site, as discussed below, there is also no need to provide any significant upgrades to either Lower Pennington or Ridgeway Lane to cater for the additional movements, both operate well within capacity even when accounting for the trips which would arise from the development once completed.

Pedestrian Accessibility

Pedestrian improvements are to be delivered through the provision of a new length of footway; of appropriate design and detailing to link Forest Gate Gardens and Rookes Lane; in order to facilitate movements between the site and Lymington's wider footpath network.

The shared cycle/footway links already referred to at the north-western corner of the site will tie in with the existing approved on-road cycle route along Lower Pennington Lane and along the routing of public right of way ref. PROW 83. There is also potential for a new link to be provided from the site to Woodside Park, via an existing public footway which runs from internal to the site on to Ridgeway Lane. This would be subject to negotiation and agreement with the Town Council but would substantially improve local connectivity and permeability for both existing and new residents.

The development Will not result in the loss of any of the existing rights of way which exist over the site. These will be substantially enhanced and connect in to both the POS and SANG provision on site.

Impact upon the wider Road Network

RGP have undertaken a full capacity modelling assessment to determine the impacts of the proposed development upon the existing highway network and in particular the A337/North Street/Ridgeway Lane roundabout. The assessment undertaken indicates that in all but one circumstance there are no highways consequences which would result in an unacceptable queue length and delays. The exception to this is the AM peak flow on the western arm of the A337 Milford Road in the 2023 and onwards development scenario. In this case, the ration of flow to capacity (RFC) exceeds 0.85 which indicates that some improvements to this junction are necessary to ensure free flowing traffic is maintained. This is not a fundamental issue, but purely indicates that the development will need to deliver some improvements to this junction.

In determining that improvements are necessary to the A337 Milford Road (west) arm, RGP have fully modelled the proposed upgrades to this junction in order to alleviate both existing capacity issues and also to ensure that any traffic generated by the development can be accommodated in the future 2023 scenario. The alteration proposed, is set out in detail within the Transport Assessment, but essentially comprises the provision of a new 17.4m long and 3.2 wide flare to the roundabout which will facilitate the movement of left turning traffic to North Street.

With the improvements to its design the capacity assessment subsequently undertaken proves that the junction would thereafter operate fully within capacity, not exceeding and RFC of 0.71; well below the 0.85 threshold.

The minor redesign to the roundabout would also resolve the existing traffic congestion which is noted to occur on the A337 Milford Road (west) arm of the roundabout.

A full capacity assessment, as referred to above, has also been undertaken for both Lower Pennington Lane and Ridgeway Lane; considering both their existing capacity and flor rates and those which would arise as a result of the addition of the new trips which would be generated by the proposed allocation.

Full details of the PICADY assessment are set out within the Transport Assessment and confirm that in the 2023 and future scenario, both roads have la negligible flow restriction and queue lengths, providing highest values for the RPC of 0.05 in respect of Lower Pennington Lane and RFC of 0.62 for Ridgeway Lane, significantly below the RFC threshold of 0.85, above which improvement works would be required.

There is no need therefore for any significant changes or alterations to either of the rural lanes which would suburbanise or alter their character. The development can be achieved without detriment to their character as rural lanes and in compliance with the policy requirement of Policy SS6.

The result is that both Ridgeway Lane and Lower Pennington Lane would appropriately serve the increased vehicle traffic generated by the development with accesses of appropriate geometry, appropriate visibility and low occurrences of vehicles meeting at pinch points. The overall traffic flow is low in any event such that any vehicles meeting at a pinch point will not result in queueing.

Summary

If there are any queries in respect of the information provided above or appended to this response, please don't hesitate to get in contact with us.

A copy of this response and technical information will be issued to the Council for its information.

Yours sincerely

Adam Bennett BA (Hons)
Town Planning Consultant

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Encl.

- **AB1 -** Masterplan Framework prepared by BrightSpace Architects
- **AB2 -** Transport Assessment prepared by RGP Transport Planning Consultants
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- **AB5 -** Arboricultural Constraints Plan prepared by Barrell Tree Consultancy

SITE 1 (1.9 HA)= 20 UNITS
SITE 2 (6.0 HA)= 84 UNITS
TOTAL = 104 UNITS

0 10 20 30
Scale 1:1000

Rev.	Date	Details	Drawn	Checked
A	06/03/19	Revised layout to feedback	JT/AF	JT

Issued for:
INFORMATION

Project/Client: Land Adjoining Ridgeway Lane	Project No: 15060
	Dwg No: 001
	Rev: A
Drawing: Site Layout	Scale: 1:1000 @A1
	Drawn By: JT — Date: 04/07/2017
	Checked By: JT — Date: 04/07/2017

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LAND AT RIDGEWAY LANE & LOWER PENNINGTON LANE

Residential Development

Transport Assessment

Prepared on behalf of

Cicero Estates

CIES/18/4483s

December 2018

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DOCUMENT CONTROL

Project: **Land at Ridgeway Lane & Lower Pennington Lane Residential Development**

Document: **Transport Assessment**

Client: **Cicero Estates**

Reference: **CIES/18/4483s**

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4.			
5.			
6.			
7.			

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CONTENTS

PLANS

DRAWINGS

APPENDICES

1 INTRODUCTION

1.1.1 This Transport Assessment (TA) has been prepared by the Russell Giles Partnership Ltd (RGP) on behalf of Cicero Estates Ltd to support a land allocation for a residential development on land adjoining Ridgeway Lane and Lower Pennington Lane, Lymington. The site is allocated for at least 100 dwellings within New Forest District Council's Local Plan 2016 – 2036, under Policy SS6 *"Land to the east of Lower Pennington Lane, Lymington"*.

1.1.2 The site encompasses an area of 8ha between Ridgeway Lane and Lower Pennington Lane, circa 1.4km to the south-west of Lymington town centre. The site location is demonstrated in **Figure 1.1** and in **Plan 01**.

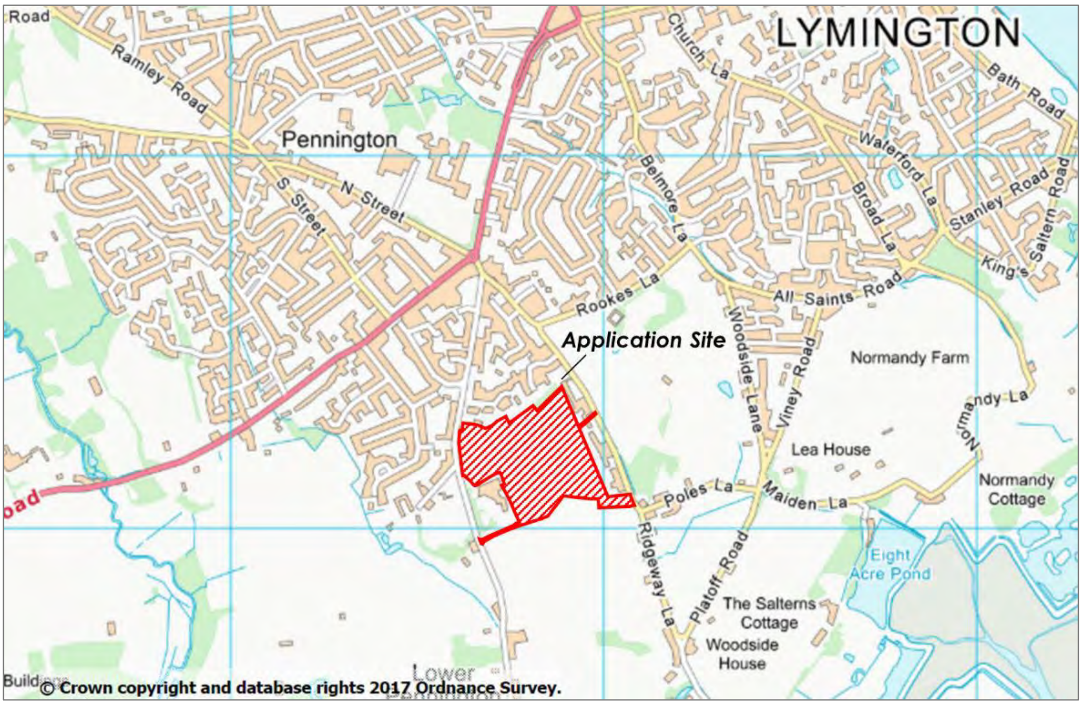


Figure 1.1: Site Location

1.1.3 The existing site is currently occupied by the Northfield Nursery (a horticultural nursery), a large area of agricultural land, open fields and horse paddocks. Development of the site would involve the demolition of the nursery and the construction of 115 new residential dwellings. The prospective site would also provide a new link road connecting Ridgeway Lane and Lower Pennington Lane.

1.1.4 This TA identifies the site's key highways and transport characteristics and assesses the site's impact on the local road network. The remainder of this report is comprised of the following:

(i) **Section 2** provides a review of the relevant national, regional, and local policies which the proposed development adheres to;

(ii) **Section 3** sets out the baseline transport conditions in the local area and highway network, and provides a review of highway safety;

(iii) **Section 4** provides an assessment of the proposed access arrangements and indicative internal layout considered design against relevant design guidance;

(iv) **Section 5** assesses the site's anticipated trip generation using the TRICS database and the anticipated traffic impact on the local highway network;

(v) **Section 6** provides a review of the suitability of Ridgeway Lane and Lower Pennington Lane.

(vi) **Section 7** provides a summary of the TA's conclusions.

2 POLICY REVIEW

2.1.1 This section summarises the key relevant national and local transport policies relevant to the prospective development site which the development would be required to adhere to.

2.2 National Planning Policy Framework (March 2012)

2.2.1 National Planning Policy Framework (NPPF) sets out the Government's planning policies for England and how these are expected to be applied. The NPPF assumes a presumption in favour of sustainable development and urges local planning authorities to support development that facilitates the use of sustainable modes of transport.

2.2.2 Paragraph 32 states that "all developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. Plans and decisions should take account of whether:

(i) the opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;

(ii) safe and suitable access to the site can be achieved for all people; and

(iii) improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe."

2.2.3 The NPPF is clear in that it confirms that developments should only be refused on transport grounds, including refusal based on sustainability credentials, where the residual cumulative impact of the development would be 'severe'. 'Severe' is defined as critical or dangerous, and should be considered in the context of the local area.

2.2.4 Paragraph 34 states "developments that generate significant movement are located where the need to travel will be minimised and the use of sustainable transport modes can be maximised. However, this needs to take account of policies set out elsewhere in this Framework, particularly in rural areas."

2.2.5 Furthermore, Paragraph 35 suggests "plans should protect and exploit opportunities for the use of sustainable transport modes for the movement of goods or people. Therefore, developments should be located and designed where practical to:

(i) Accommodate the efficient delivery of goods and supplies;

(ii) Give priority to pedestrian and cycle movements, and have access to high quality public transport facilities;

(iii) Create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, …"

2.3 New Forest District Council's Local Plan 2016 – 2036

2.3.1 New Forest District Council's (NFDC) Local Plan Core Strategy was adopted in October 2009 but is currently under review. The new Local Plan "*Part 1: Planning Strategy*" was subject to public consultation between 29th June – 12th August 2018. The document sets out the council's plan for the New Forest District outside the New Forest National Park and provides strategic policies, including strategic site allocations, and replaces the 2009 Core Strategy.

2.3.2 The application site is allocated within the new Local Plan under "*Strategic Site 6: Land to the east of Lower Pennington Lane, Lymington*." For at least 100 homes. A number of planning objectives are set out for the site as follows:

(i) "Create a well designed extension to the settlement of Lymington with a character and density reflecting the low density and rural edge character of the locality and surrounding properties.

(ii) Provide a central greenspace serving as a focal point for the development that also defines a new rural edge and softens the transition to the open countryside of the adjoining New Forest National Park.

(iii) Retain and enhance important tree belts, rights of way, hedge rows and incidental open spaces around the site boundaries as landscape features forming an important part of the character of the site and providing some screening for existing residential areas.

(iv) Integrate the site into the built-up area of Lymington connecting to its footpath networks to central Lymington, Woodside Park and to the countryside. Provide two points of vehicular access to the site from both Lower Pennington Lane and from Ridgeway Lane, connecting to provide a vehicular route through the site."

2.3.3 In relation to site access, the Local Plan states:

"*Vehicular access to the site is by rural lanes with a distinctive character requiring a careful balance between providing safe access and maintaining their character. Visibility and safety will need to be addressed for the site access onto Ridgeway Lane. The main pedestrian access towards the town centre should be provided via Woodside Lane and Forest Gate Gardens.*"

3 BASELINE CONDITIONS

3.1.1 The site covers an approximate area of 8ha located between Ridgeway Lane and Lower Pennington Lane, circa 1.4km to the south-west of Lymington town centre. As shown in **Plan 01**, there is a wide range of services and amenities within walking and cycling distance of the site.

3.1.2 The site is bordered by residential properties to the north and east, open fields to the south, and Oakhaven Hospice and Lower Pennington Lane to the west. The site context is demonstrated in **Figure 3.1**.

Figure 3.1: Aerial View of Site Location

3.1.3 Vehicle access to the site is currently served from a c.6m wide bellmouth junction adjoining the eastern side of Lower Pennington Lane. The access currently serves Northfield Nursery site as well as Oakhaven Hospice. The existing access adjoining Lower Pennington Lane is demonstrated in **Figure 3.2**.

Figure 3.2: Existing Access Adjoining Lower Pennington Lane

3.1.4 A secondary access is located on the western side of Ridgeway Lane. The access takes the form of an c.4m wide field access with a gate set back c.8m from the carriageway edge. The existing access adjoining Ridgeway Lane is demonstrated in **Figure 3.3**.

Figure 3.3: Existing Field Access Adjoining Ridgeway Lane

3.2 Local Highway Network

3.2.1 The site is situated between Ridgeway Lane and Lower Pennington Lane. Both roads serve as local distributor roads serving a number of residential areas, businesses and local amenities. Ridgeway Lane and Lower Pennington Lane are two-way single carriageways of variable width (c.5.0m in the vicinity of the site) and are subject to a 30mph speed limits.

3.2.2 Ridgeway Lane and Lower Pennington Lane are bordered by a mixture of thick vegetation, grass banks, shallow ditches, and driveways. Ridgeway Lane and Lower Pennington Lane's carriageway characteristics are demonstrated in **Figures 3.4** and **3.5**.

Figure 3.4: Ridgeway Lane in the Vicinity of the Site

Figure 3.5: Lower Pennington Lane in the Vicinity of the Site

3.3 Wider Highway Network

3.3.1 The A337 is located circa 400m to the north of the site and can be accessed via both Ridgeway Lane and Lower Pennington Lane. The A337 provides a route between Christchurch to the west and Lymington town centre to the north east. Further north of the site, the A337 meets the M35 which provides a link to Strategic Road Network at the A31 / M27. The A31 / M27 provides a route along the south coast, facilitating access to Bournemouth, Southampton, and Portsmouth. The sites wider highway context is demonstrated in **Figure 3.6**.

Figure 3.6: Wider Highway Network

3.4 Existing Accessibility Credentials

Pedestrian Accessibility

3.4.1 There is no existing pedestrian infrastructure on Ridgeway Lane or Lower Pennington Lane in the vicinity of the site however the low speed environment means walking in the carriageway is common place. To the north of the Rookes Lane junction, Ridgeway Lane is flanked by footways providing a connection with the wider footway network in Lymington.

3.4.2 There are a number of Public Rights of Way (PROW) footpaths in the surrounding area including 2 paths running through the site. PROW route numbers 82 and 83 provide a pedestrian link between Ridgeway Lane and Lower Pennington Lane. The PROW footpaths running through the site and in the surrounding area are demonstrated in **Plan 01**.

3.4.3 The Chartered Institute of Highways and Transportation's (CIHT) publication 'Providing for Journeys on Foot' (2000) states that the average length of a journey on foot is 1km. It further recommends a preferred maximum walking distance of 2km for commuting journeys. As shown on **Plan 01**, a wide range of local amenities are situated within 1km of the application site and are therefore accessible on foot.

Cycle Accessibility

3.4.4 Lower Pennington Lane and North Street are listed as an approved on-road route in The New Forest National Park cycle route map attached at **Appendix A**. On and off-street cycle lanes and crossing facilities are provided at the A337 / Ridgeway Lane / North Street Roundabout junction facilitating movements across the roundabout and along the A337 which is supported by cycle lanes through Lymington. The on-street cycle infrastructure on the A337 is demonstrated in **Plan 01** and is shown in **Figures 3.7** and **3.8**.

Figure 3.7: Lower Pennington Lane Cycle Signage

Figure 3.8: A337 / Ridgeway Lane / North Street Cycle Infrastructure

3.4.5 Additionally, the Lymington 'Sway Loop' cycle route is identified in the immediate vicinity of the development site as identified on the New Forests National Parks website. The route provides an attractive lightly trafficked route around Lymington. Whilst the route is predominantly a leisure route, parts of the route can be used for short journeys into Lymington.

3.4.6 The New Forest National Park Authority identifies that SANG's and other green open space can serve as a connection between neighbourhoods by sustainable transport modes and should be considered in the master planning process. To the east of the development site, Woodside Park provides an opportunity to connect the prospective development site and other strategic development's open space enhancing local cycle and pedestrian connectivity.

3.4.7 The topography of the local area is relatively flat making it suitable for cyclists to use the local road network to access the site. The CIHT's publication 'Cycle Friendly Infrastructure' (1996), suggests that reasonably fit individuals can comfortably cycle a distance of 8km to workplace destinations. The entirety of Lymington as well as the smaller settlements of Milford on Sea, Everton, and Hordle are therefore accessible by bicycle from the site.

Accessibility by Bus

3.4.8 The application site is within walking distance of multiple bus stops, the closest being Pennington Fox Pond circa 500m from the site. The stops provide hourly services to Bournemouth and New Milton, as well as providing a number of services to local schools and colleges. A summary of services available from local stops is provided in **Figure 3.8**.

Service	Route Summary	Typical Frequency	Operating Hours
X1	Lymington – Highcliffe – Christchurch – Bournemouth	Mon-Sat: 1 every hour Sun: 1 every 2 hours	Mon-Fri: 06:32 – 17:48 Sat: 06:38 – 17:48 Sun: 09:38 – 15:53
X2	Lymington – Bournemouth	Mon-Sat: 1 every hour	Mon-Fri: 06:03 – 16:44 Sat: 07:45 – 16:45
119	Lymington – Pennington – Everton – New Milton	Mon-Fri: 1 every hour	Mon-Fri: 09:14 – 14:14
780	Lymington – St Peters School Bournemouth	Mon-Fri: 1 per school day	Mon-Fri: 07:28 – 16:30
789	Lymington – Bournemouth Grammar Schools	Mon-Fri: 1 per school day	Mon-Fri: 06:56 – 16:44
Bluestar 6	Lymington – Southampton	Mon-Sat: 1 every hour Sun: 1 every 2 hours	Mon-Fri: 07:01 – 17:26 Sat: 08:45 – 17:25 Sun: 09:46 – 17:26
Brock Bus C8	Milford on Sea – Pennington – Lymington – Buckland – Brockenhurst College	Mon-Fri: 1 per school day	Mon-Fri: 08:24 – 16:50
Brock Bus C9	Keyhaven – Everton – Pennington – Upper Pennington – Brockenhurst College	Mon-Fri: 1 per school day	Mon-Fri: 08:21 – 16:50

Figure 3.7: Bus Services from Local Bus Stops

Accessibility by Rail

3.4.9 Lymington Town railway station is located circa 1.8km to the north of the site and is therefore accessible on foot or by cycle based on the aforementioned CIHT guidance. The station is served by South West Trains and provides routes to Lymington Pier and Brockenhurst where a wider range of destinations including London Waterloo are available. A summary of services from Lymington Town railway station is provided in **Figure 3.8**.

Destination	Route Summary	Typical Journey Time	Typical Frequency
Lymington Pier	Lymington Town – Lymington Pier	2 min	2 every hour
Farnborough Main (change at Brockenhurst)	Lymington Town – Brockenhurst – Southampton Central – Winchester – Farnborough Main	1hr 30min	2 every hour
Weymouth (change at Brockenhurst)	Lymington Town – Brockenhurst – Bournemouth – Poole – Weymouth	1hr 46min	2 every hour
London Waterloo (change at Brockenhurst)	Lymington Town – Brockenhurst – Southampton Central – Winchester – London Waterloo	1hr 51min	2 every hour

Figure 3.8: Services Available from Lymington Town Railway Station

3.4.10 Full details regarding these services including timetable information and route details are available online from www.nationalrail.co.uk.

3.5 Traffic Survey Data

3.5.1 To establish the speeds of vehicles in the vicinity of the site, RGP commissioned Modal Data to conduct a 7-day Automatic Traffic Count (ATC) surveys from 12th – 18th December 2017 on the surrounding road network. The surveys were undertaken on Lower Pennington Lane (north and south), Ridgeway Lane, and Poles Lane. The locations of the surveys are shown in **Figure 3.9** and the results of the surveys are summarised in **Figure 3.10.** The full ATC data output is attached at **Appendix B**.

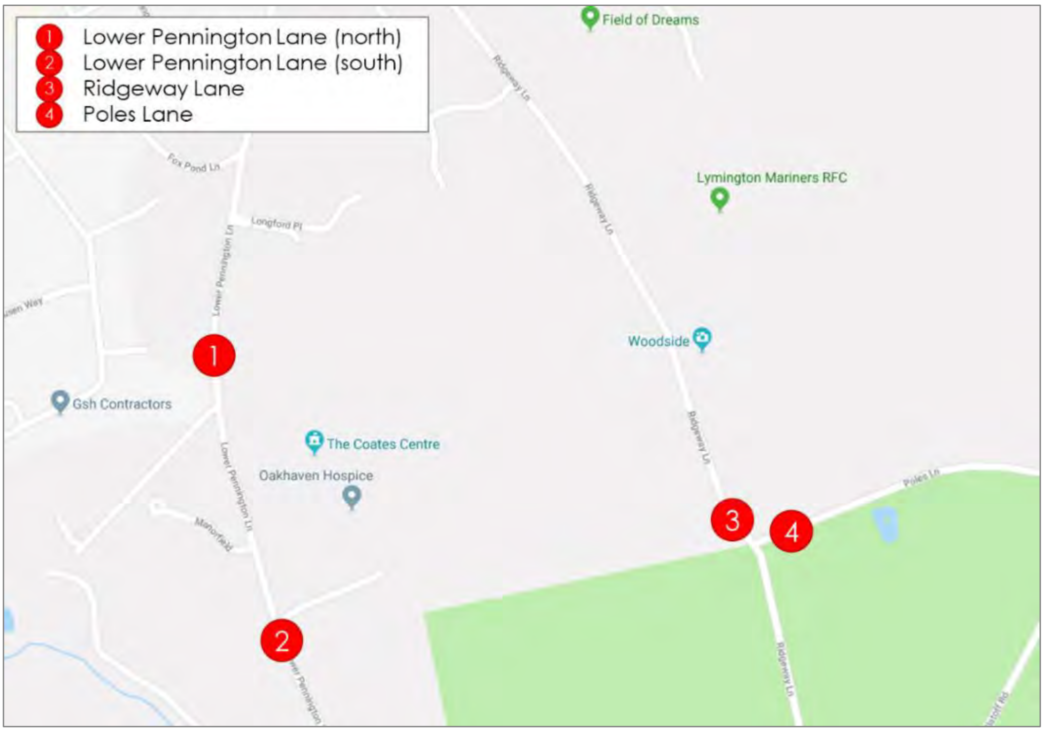


Figure 3.9: ATC Survey Locations

Direction	Average Speed	85th Percentile Design Speed
Lower Pennington Lane (North)		
Northbound	22.4mph	25.5mph
Southbound	23.6mph	27.1mph
Lower Pennington Lane (South)		
Northbound	24.9mph	29.5mph
Southbound	25.7mph	30.9mph
Ridgeway Lane		
Northbound	19.8mph	23.5mph
Southbound	20.2mph	23.9mph
Poles Lane		
Eastbound	19.3mph	23.9mph
Westbound	18.6mph	23.5mph

Figure 3.10: Summary of ATC Data

3.5.2 To establish the existing volumes and composition of traffic using Ridgeway Lane and Lower Pennington lane multi-modal traffic surveys were undertaken on Thursday the 27th of September. The survey location on Ridgeway Lane captures all movements south of the junction with Rookes Lane, and similarly the Pennington Lane survey location captures all movements south of the road junction with Ridgeway Lane. The survey locations and summary of the surveys results is provided in **Figure 3.11**.

Figure 3.11: Multimodal Survey Locations

3.5.3 Owing to Ridgeway Lane and Lower Pennington Lane's position within the local road network, the survey location provides robust baseline traffic flow numbers, which in reality would reduce in the vicinity of the site as many carriageway users turn off into side roads, properties and businesses. The multi-modal traffic movements on Ridgeway Lane and Lower Pennington Lane are summarised in **Figure 3.12** the full survey data output is attached **Appendix C**.

Multi Modal Traffic Surveys				
Location	**Mode**	**AM peak** (08:00 - 09:00)	**PM Peak** (17:00 -18:00)	**Daily Movements** (12 Hour 07:00 -19:00)
Ridgeway Lane	Vehicle	66	91	935
	Cyclist	1	10	33
	Pedestrian	9	5	48
Lower Pennington Lane	Vehicle	140	110	1680
	Cyclist	10	8	95
	Pedestrian	13	26	153

Figure 3.12: Multimodal Survey Summary

3.6 Accident Data

3.6.1 To determine highway safety on the road network in the vicinity of the site, an assessment of personal injury accident (PIA) data has been undertaken. To identify the need for further analysis, an initial study has been undertaken using the CrashMap online data portal for a five-year period between January 2012 and January 2018. PIAs are classified as 'slight', 'serious' and 'fatal' depending on the severity of the injuries sustained.

3.6.2 Patterns displayed in the PIA data can be assessed with regard to the proximity, frequency and severity to establish whether there are underlying highway design issues on the local road network that may require a more detailed investigation.

3.6.3 The study area considered includes Ridgeway Lane, Lower Pennington Lane and the A337 / Ridgeway Lane / North Street roundabout to the north of the site. A map demonstrating the extent of the study area and each recorded PIA is demonstrated in **Figure 3.11**.

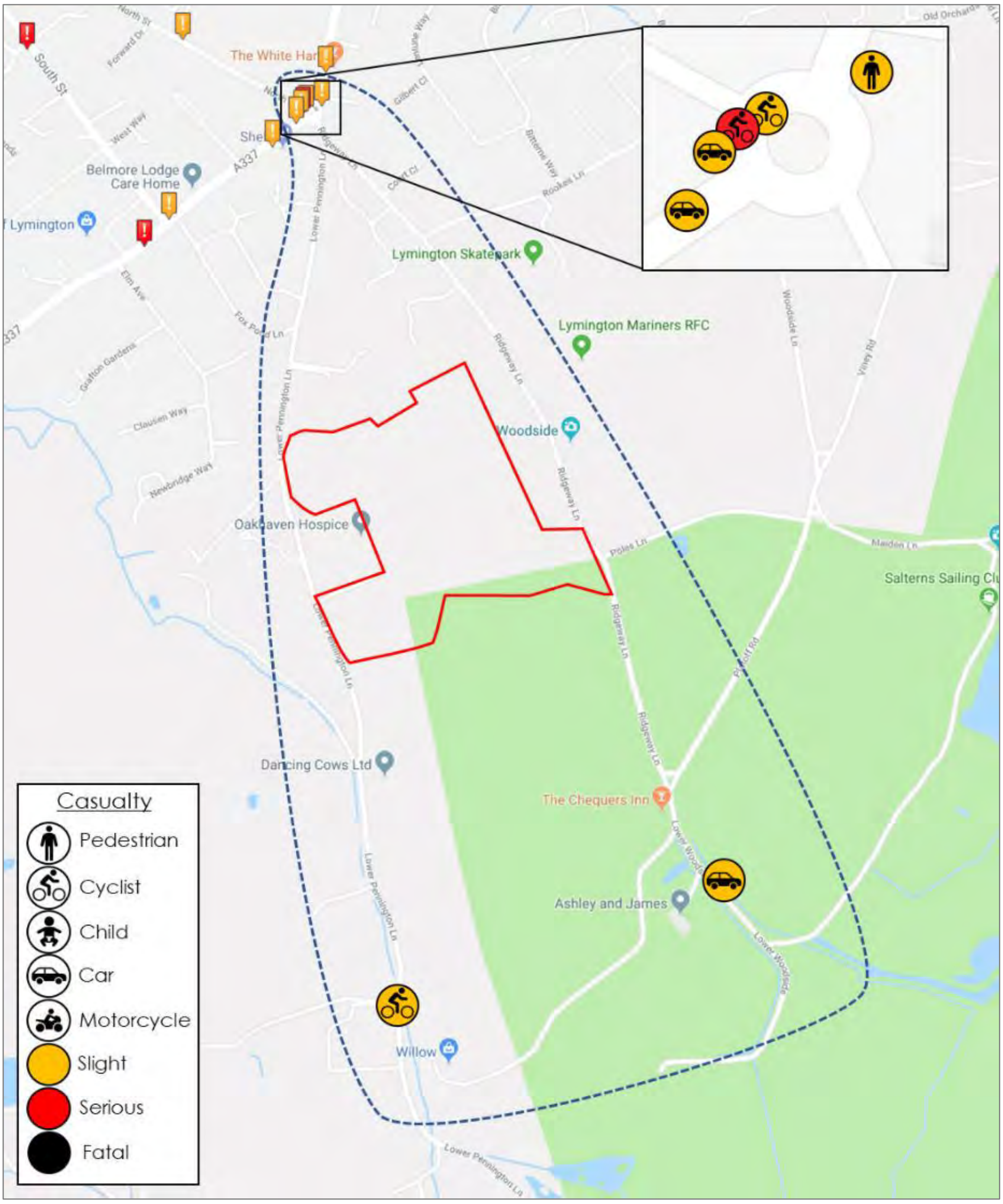


Figure 3.11: PIA Study Area

3.6.4 A total of 7 PIAs were recorded over the five-year study period, comprised of 6 'slight' incidents and 1 'serious' incident. 5 of the incidents occurred at the roundabout to the north of the site. The level of accidents is not considered atypical given the volume of traffic using the roundabout. The PIA casualty types do not reveal a statistically significant pattern, with 3 of the 6 incidents involving vehicles, 3 involving cyclists, and 1 involving a pedestrian.

3.6.5 The PIA data does not reveal any wider pattern in terms of frequency or distribution of incidents in the study area that would require a more detailed examination. It is concluded that there are no underlying incident patterns that could be exacerbated by the prospective development.

4 PROPOSED DEVELOPMENT

4.1 Overview

4.1.1 The site could serve up to 115 dwellings served by 2 vehicle access points. The site would also include a new pedestrian link and two dedicated cycle links. The internal carriageways would provide an east to west link road between Ridgeway Lane and Lower Pennington Lane. The proposed layout attached at **Appendix D**.

4.2 Access Arrangements

4.2.1 The site's accesses would be located in the proximity of the aforementioned existing access points to Lower Pennington Lane and Ridgeway Lane. The Lower Pennington Lane access would utilise the existing access serving Northfield Nursery and Oakhaven Hospice. The Ridgeway Lane access would be located in the position of the existing field access. The access points would be reformed to provide T-junctions with priority arrangements according with DMRB TD42/95 'Simple T-junction' layout.

4.2.2 The proposed accesses would take the form of 5.5m bell-mouths with 2.75m lane widths in accordance with 'Manual for Streets' (MfS) design guidance. The prospective bell-mouths would provide corner radii of 6.0m in accordance with the DMRB TD 42 / 95 section 7.17. The proposed accesses are demonstrated in **Drawing 2018/4483/001**.

4.2.3 The prospective access have been subject to a vehicle swept path analysis, demonstrating concurrent vehicle manoeuvres and large refuse freighter negotiation. The refuse vehicle used in the swept path analysis is larger and less manoeuvrable than a fire tender (the largest emergency service vehicle), thereby serving to demonstrate appropriate emergency access. The access vehicle swept path analysis are demonstrated in **Drawing 2018/4483/002.**

4.2.4 The DMRB TD 42 / 95 guidance identifies that right-turn lane facilities are typically required when the minor arm of a junction exceeds 300 AADT and the major arm exceeds 13,000 AADT. The threshold for a right turn lane facility as set out in the DMRB is not exceeded at either access point due to the AADT on Ridgeway Lane and Lower Pennington Lane, the number of vehicle movements generated by the proposed development and their distribution across the 2 access points (see **Section 5**).

4.3 Ridgeway Lane / Poles Lane Junction

4.3.1 The prospective development provides an opportunity to improve the carriageway alignment of Ridgeway Lane and the junction of Poles Lane / Ridgeway Lane. Ridgeway Lane currently deviates and narrows in the vicinity of Poles Lane. Visibility from Poles Lane offers less than 20m looking in the lead direction (looking north) falling well below the required 43.0m stopping site distance.

4.3.2 As part of the prospective development Ridgeway Lane would be straightened and the carriageway widened to 6.0m in the vicinity of the Poles Lane / Ridgeway Lane junction. The realignment of the carriageway would enable the Poles Lane / Ridgeway Junction to be repositioned such that visibility conditions from Poles Lane would achieve the required visibility splays of 2.4m x 43.0m in accordance with MfS design guidance for 30mph roads.

4.3.3 The realignment of the carriageway would additionally improve visibility conditions from the site's prospective access (although the site's access would not be dependent upon this improvement to provide appropriate visibility). The visibility requirements from the site's prospective access are addressed subsequently in **Section 4.4**. The improvements to Poles Lane / Ridgeway Lane junction are demonstrated in **Drawing 2018/4483/006** and **2018/4483/007**.

4.4 Visibility

4.4.1 Visibility requirements at the accesses have been based on the 85th percentile design speeds identified during the 7-day ATC surveys on Ridgeway Lane and Lower Pennington Lane (see **Figure 3.9**). Using the calculation coefficients set out in Manual for Streets (MfS) guidance, the following stopping site distances (adjusted for bonnet length) would be required: -

(i) **Lower Pennington Lane Southern Access**: - 44.7m lead direction (looking north), and 41.9m trailing direction (looking south)

(ii) **Ridgeway Lane Access**: - 34.9m trailing direction (looking north), and 30.7m lead direction (looking south). Due to the straightening of the carriageway in the vicinity of the Ridgeway Lane access vehicular speeds may increase. The speeds have therefore been considered to be in line with the posted speed limit at 30mph requiring a stopping site distance of 43.0m.

4.4.2 The necessary sight lines are achievable in both the lead and trailing directions from both access points. Visibility splays from the access points are demonstrated in **Drawing 2018/4483/001**. Forward visibility to right turning vehicles has also been demonstrated using the stopping site distances identified above. Forward visibility has been shown on **Drawing 2018/4483/001**.

4.5 Pedestrian & Cycle Access

4.5.1 The site's primary pedestrian access would be served from new section of footway linking existing footway infrastructure at Forest Gate Gardens and Rookes Lane. An internal footpath running through the site would adjoin the southern end of Forest Gate Gardens. The new footway would be c.80m long and 1.5m wide, running along the west side of Ridgeway Lane. The proposed pedestrian infrastructure is demonstrated in **Drawing 2018/4483/015**.

4.5.2 The pedestrian access strategy via Forest Gate Gardens would provide a direct route along the pedestrian desire line between the site and the nearest part of Lymingtons footway network at the Rookes Lane / Ridgeway Lane junction. The route would also be on the desire line to nearby Priestlands School and Pennington Junior School. The pedestrian access strategy is demonstrated in **Drawing 2018/4483/019**.

4.5.3 A dedicated shared cycle / foot link would be provided at the site's north west corner tying in with the existing approved on-road cycle route on Lower Pennington Lane. On-street cycle markings would also be provided along Lower Pennington Lane to enhance the route. The cycle markings would reflect those used on North Street and the A337. The shared cycle / foot access on to Lower Pennington Lane is demonstrated **Drawing 2018/4483/018**.

4.5.4 A second shared cycle / pedestrian link would be provided to the east of the site adjoining Ridgeway Lane providing a continuous cycle route between Ridgeway Lane and Lower Pennington Lane. The connection would be provided via a strip of land between the properties 'Brocklands Cottage' and the 'Buccaneer'. The shared cycle / foot access on to Ridgeway Lane is demonstrated **Drawing 2018/4483/018,** whilst the wider cycle strategy is demonstrated in **Drawing 2018/4483/019**

4.5.5 The link to Ridgeway Lane offers a connection between the site's green open space and Woodside Park compliant with the NFDC national park authority's policy which encourages the provision connective networks of mitigation space. The link to the Woodside Park would also have the potential to connect the site to other potential strategic development in the locale improving local connectivity and permeability for the wider public.

4.5.6 The site's link road would run through the site between the aforementioned vehicular access points on Ridgeway Lane and Lower Pennington Lane. The existing PROWs no. 82 and 83 would remain navigable (with some minor deviation), and in places tie in with the site's internal footways, thereby retaining the site's existing level of pedestrian permeability as demonstrated in **Drawing 2018/4483/019**.

4.5.7 The network of links would improve the site's permeability and the accessibility of the wider area. The proposed pedestrian and cycle strategy is demonstrated in **Drawing 2018/4483/019**.

4.6 Emergency Access

4.6.1 The prospective development would provide access within 45m of all areas of buildings, in accordance with Building Regulation requirements for emergency vehicles. A minimum carriageway width of 3.7m would be maintained throughout the site in accordance with Building Regulation requirements.

4.6.2 Additional emergency access points would not be proposed. Due to the multiple access points and site's permeability this is not considered necessary, although consultation would be made with emergency services to confirm this arrangement at planning stage.

4.7 Servicing Arrangements

4.7.1 The site's internal carriageway geometries would be such that large service vehicles can negotiate the internal roads and perform turning manoeuvres within the site, allowing service vehicles to safely enter and exit the site in a forward gear. A vehicle swept path analysis has been undertaken in **Drawing 2018/4483/003** demonstrating these manoeuvres on the indicative site layout.

4.7.2 Bin carry distances between properties and refuse collectors would be within the maximum thresholds set out in MfS from all properties (25m for collectors 30m for residents).

4.8 Internal Layout

4.8.1 The prospective site would provide a link road between Lower Pennington Lane and Ridgeway Lane as per NFDCs Local Plan Core Strategy 'Part 1: Planning Strategy' policy 'Strategic Site 6: Land to the east of Lower Pennington Lane, Lymington'. The proposed link road would also serve as the site's main spine road from which secondary routes would branch leading to a number of side roads and smaller cul-de-sacs serving dwellings. The indicative site layout is demonstrated in **Drawing 2018/4483/017**.

4.8.2 Within the site a dendritic network of internal footways would be provided to facilitate pedestrian movements around the site. An appropriate hierarchy of footways would be provided with; 3.0m widths along sections of unsegregated shared cycle / footway; 2.0m on the east – west link Road; 1.8m - 1.5m wide footways on secondary or lesser routes; and shared surface arrangements on sections of carriageway with low speeds, traffic flow, and no-through status.

4.8.3 The site's primary footways / footpaths would tie in with the primary pedestrian access points served from Forest Gate Gardens, the pedestrian / cycle access at the northwest corner of the site, and the secondary link between 'Brocklands Cottage' and 'Buccaneer'. The indicative internal footway network is demonstrated in **Drawing 2017/3345/019**.

4.8.4 The cul-de-sacs would likely use a shared surface arrangement in accordance with MfS design guidance which states that shared surfaces are appropriate for cul-de-sacs, where parking is controlled or takes place in designated arears and the vehicle flow is below 100 movements per hour. Secondary routes and cul-de-sacs would remain in private ownership.

4.8.5 A number of traffic calming features would be provided along the east west link to calm vehicle speeds and discourage use of the through route for rat-running (the potential for rat running along the east-west link road and the impact on local traffic movements is addressed subsequently in **Section 5.4** of this report). The traffic calming features would take the form of build outs and pinch points. The traffic calming features are demonstrated in **Drawing 2018/4483/017**.

4.9 Parking Provision

4.9.1 The development site would provide car and cycle parking in line with NFDC's residential parking standards. A summary of the vehicle and cycle parking standards is shown below in **Figures 4.1** and **4.2**.

Dwelling size (bedrooms)	Recommended Average Provision (Spaces per Dwelling)	
	Shared/Communal Parking	*On-plot parking*
1	*1.4*	*2*
2	*1.5*	*2*
3	*1.9*	*2.5*
4 or more	*2.1*	*3*

Figure 4.1: NFDC Residential Parking Standards

Dwelling size (bedrooms)	Cycle Standard (minimum)	
	Long stay	*Short stay*
1	*1 space per unit*	*1 loop/hoop per unit*
2	*2 spaces per unit*	*1 loop/hoop per unit*
3		
4 or more	*2 spaces per unit*	*1 loop/hoop per unit*

Figure 4.2 NFDC Cycle Parking Standards

5 TRIP GENERATION & TRAFFIC IMPACT

5.1 Trip Generation Assessment

5.1.1 The TRICS database (version 7.5.3) has been interrogated to anticipate the likely multi-modal trip generation associated with the prospective allocation site. The prospective allocation site would provide up to 115 residential dwellings.

5.1.2 As a result of the development, trips associated with Northfield Nursery would no longer be generated reducing the site's net trip generation. In the absence of horticultural nurseries trip data in the TRICS database, the site's existing trip generation cannot be quantified. All trips associated with the site are therefore considered to be new to the local road network making the assessment robust.

5.1.3 To establish the number of vehicle trips associated with the dwellings the following parameters have been used to filter the TRICS database: -

TRICS (Version 7.5.3)		
Filtering Parameter: -		Criteria Selected: -
i)	Land use	Houses Privately Owned
ii)	Regions	• England • Wales
iii)	Scale of development	50 – 300 (dwellings)
iv)	Date Range	01/01/10 to 19/04/18
v)	Count Type	Manual Count
vi)	Selected Days	Weekdays
vii)	Selected Locations	• Suburban Area • Edge of Town
viii)	Selected Location Sub Categories	Residential Zone

Figure 5.1: TRICS Database Filtering Parameters

5.1.4 A summary of the weekday peak hour and daily trips are displayed in **Figure 5.2**. The full results of the TRICS interrogation are provided in **Appendix E**.

TRICS Trip Rates per Dwelling (115 Dwellings)									
Mode	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)			Daily (07:00 – 19:00)		
	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total
All modes	*0.225*	*0.738*	*0.963*	*0.638*	*0.244*	*0.882*	*4.165*	*4.202*	*8.367*
Vehicles	*0.134*	*0.339*	*0.473*	*0.327*	*0.136*	*0.463*	*2.190*	*2.187*	*4.377*
Cycle	*0.002*	*0.009*	*0.011*	*0.009*	*0.005*	*0.014*	*0.050*	*0.051*	*0.101*
Pedestrian	*0.029*	*0.104*	*0.133*	*0.078*	*0.030*	*0.108*	*0.627*	*0.627*	*1.254*
Traffic Generation									
All modes	*26*	*85*	***111***	*73*	*28*	***101***	*479*	*483*	***962***
Vehicles	*15*	*39*	***54***	*38*	*16*	***53***	*252*	*252*	***503***
Cycle	*0*	*1*	***1***	*1*	*1*	***2***	*6*	*6*	***12***
Pedestrian	*3*	*12*	***15***	*9*	*3*	***12***	*72*	*72*	***144***

Figure 5.2: Anticipated Traffic Generation

5.1.5 The TRICS assessment suggests that the prospective development would generate an additional 503 daily vehicle trips, with an additional 54 and 53 trips in the networks AM and PM peak traffic hours respectively (08:00-09:00 and 17:00-18:00). The peak trip generation equates to 1 additional vehicle movement accessing/egressing the site every minute.

5.1.6 The assessment identifies that the site would generate an additional 144 daily pedestrian trips, with an additional 15 and 12 trips occurring in the networks AM and PM peak traffic hours respectively. The peak pedestrian trip generation equates to 1 additional pedestrian movement accessing/egressing the site every 4 minutes.

5.1.7 The assessment identifies that the site would generate an additional 12 daily cycle trips, with an additional 1 and 2 trips occurring in the networks AM and PM peak traffic hours respectively. The peak cycle trip generation equates to 1 additional cycle movement accessing/egressing the site every c.30 minutes.

5.2 Traffic Assignment Model

5.2.1 To assess the vehicular traffic impact of the prospective site, a traffic assignment model has been produced to determine the traffic distribution on the local road network. Through this assessment the impact at local junctions can be determined and the need for junction capacity modelling established. The traffic assignment model has been based on the local road networks weekday AM / PM peak hours when the greatest traffic impact would occur.

5.2.2 The peak hour traffic distribution has been determined using the 2011 census data 'Location of usual residence and place of work' which identifies commuting destinations for residents in a particular ward or lower output level. The work place destinations can then be assigned to a key traffic routes using a Geographic Information System (GIS) algorithm to determine the most likely traffic routing from the development, accounting for average weekday journey times in typical network AM / PM traffic flow conditions.

5.2.3 For this assessment data has been gathered from the 'New Forest 023 E super output lower layer'. The 2011 Census data is attached at **Appendix F** and the distribution of traffic is represented as a percentage in **Appendix G**. Based on the percentage distribution shown in **Appendix G** the site's AM and PM traffic generation has been assigned to determine the flows through local road junctions. The traffic assignment model is attached at **Appendix H**.

5.3 Impact on A337 Roundabout

5.3.1 The assignment model reveals that 99.6% (100% adjusted for rounding) of development traffic would travel north from the site through the A337 roundabout. This equates to an additional 54 and 53 vehicles travelling through the A337 roundabout to the north of the site during the AM and PM peak hours respectively.

Junction Capacity Modelling

5.3.2 The A337 / North Street / Ridgeway Lane roundabout has been subject to an ARCADY capacity modelling assessment to demonstrate the impact on the roundabouts operation. The ARCADY assessment considers peak weekday AM / PM traffic hours during a future year scenario of 2023. The baseline traffic data has been growthed using a TEMPRO growth factor to account for population growth and increased car ownership (**Appendix I**). The results of the preliminary ARCADY model are shown below in **Figure 5.3**.

	Max RFC	Max Queue (Veh)
AM 2018 Baseline	Arm 3 A337 Milford Rd (W) - 0.80	Arm 3 A337 Milford Rd (W) – 3.74
AM 2018 Baseline+ Development	Arm 3 A337 Milford Rd (W) – 0.81	Arm 3 A337 Milford Rd (W) – 4.18
AM 2023 Baseline + Development	Arm 3 A337 Milford Rd (W) – 0.88	Arm 3 A337 Milford Rd (W) – 6.43
PM 2018 Baseline	Arm 3 A337 Milford Rd (W) – 0.51	Arm 3 A337 Milford Rd (W) – 1.05
PM 2018 Baseline+ Development	Arm 3 A337 Milford Rd (W) – 0.53	Arm 3 A337 Milford Rd (W) – 1.12
PM 2023 Baseline + Development	Arm 3 A337 Milford Rd (W) – 0.57	Arm 3 A337 Milford Rd (W) – 1.29

Figure 5.3: Preliminary ARCADY Model Results Summary

5.3.3 The ARCADY assessment revealed Ratio Flow Capacity (RFC) values of 0.88, during the AM peak on the A337 Milford Road (west) arm for the 2023 + development scenario. Exceeding 0.85 RFC threshold signifies a point at which redesign should be considered. A maximum queue length of 6.43 PCUs would occur on the A337 Milford (west) arm during the AM Peak.

5.3.4 The PM peak hour capacity model did not reveal RFC values that exceeded the 0.85 threshold for any of the model scenarios (2018 Baseline, 2018 baseline + development, 2023 + development). The maximum queue length recorded during the PM peak period was on the A337 Milford Road (west) arm of the junction with a maximum queue of 1.29 PCUs. The ARCADY model reports and baseline turning counts are attached at **Appendix J**.

5.3.5 Based on the results of the ARCADY assessment design options have been explored to alleviate the existing capacity issues such that the developments traffic can be accommodated in the future 2023 year scenario. The redesign has required alteration of Arm 3 the A337 Milford Road arm of the roundabout through the provision of a 17.4m long 3.2m wide flare that facilitates the movement of left turning traffic to North Street.

5.3.6 The roundabout currently intercepts cycleways between Ridgeway Lane, North Street and the A337 north east bound. The existing markings would be re-provided circulating the roundabout between Ridgeway Lane and North Street. The existing crossing point on north street would be relocated to the north to accommodate the widened entry of the A337 Milford Road arm of the roundabout. The redesign of the roundabout is demonstrated **Drawings 2018/4483/013** and **2018/4483/014**

5.3.7 The redesigned roundabout has been subject to a second ARCADY assessment to demonstrate that the redesigned roundabout would operate within operational capacity. The revised ARCADY assessments output is attached at **Appendix K**. A summary of the ARCADY assessments results is provided below in **Figure 5.4**.

	Max RFC	Max Queue (Veh)
AM 2018 Baseline+ Development	Arm 3 A337 Milford Rd (W) - 0.66	Arm 3 A337 Milford Rd (W) – 1.92
AM 2023 Baseline + Development	Arm 3 A337 Milford Rd (W) – 0.71	Arm 3 A337 Milford Rd (W) – 2.41
PM 2018 Baseline+ Development	Arm 1 A337 Milford Rd (E) – 0.47	Arm 1 A337 Milford Rd (E) – 0.87
PM 2023 Baseline + Development	Arm 1 A337 Milford Rd (E) – 0.46	Arm 1 A337 Milford Rd (E) – 0.99

Figure 5.4: Redesigned Roundabout ARCADY Model Results Summary

5.3.8 The ARCADY assessment on the redesigned roundabout revealed flow restriction values below the 0.85 RFC threshold for all model scenarios during the AM and PM peak traffic hours. The maximum queue length recorded during the AM peak period was on the A337 Milford Road (west) arm of the junction with a maximum queue of 2.41 PCUs. The maximum queue length recorded during the PM peak period was on the A337 Milford Road (north) arm of the junction with a maximum queue of 0.99 PCUs.

5.3.9 The minor redesign of the roundabout would therefore resolve the existing traffic congestion on the A337 Milford Road (west) arm of the roundabout and would accommodate the proposed development traffic within the capacity of the roundabout junction.

5.4 Link Road Traffic Impact

5.4.1 The prospective link road between Ridgeway Lane and Lower Pennington Lane would allow the through flow of vehicle traffic thereby altering the existing traffic flow characteristics of the local road network. There are limited benefits to local traffic using the through route, however improved accessibility to Poles Lane located to the south east of the site would provide a potential opportunity for the site's future residents and local traffic to travel to/from Lymington town centre.

5.4.2 The Poles Lane route is inefficient and journey times suggest that traffic is unlikely to use this route, as shown in the original traffic assignment model attached at **Appendix H**. It is however, recognised that this route could be intensified, and as such, a theoretical traffic assignment model has been prepared to provide a robust assessment of the potential traffic intensification at the Poles Lane junction resulting from the link road's provision.

Method

5.4.3 The proportion of traffic from the site travelling to Lymington town centre has been calculated using the 2011 census data (see **Appendix F**). The data identifies that 19.9% of local residents in the 'New Forest 023 E super output lower layer' work in Lymington town centre. To provide a robust estimate of percentage of traffic that would use Poles Lane, it has been assumed that up to half of all traffic travelling to/from Lymington town centre from the site could use the Poles Lane route (c.10%).

5.4.4 This assumption is robust given that the GIS algorithm identified the A337 route to be more efficient route to/from Lymington town centre even when factoring in typical AM / PM congestion on the local road network. A second theoretical traffic distribution model adjusted for the potential rat running demonstrates the distribution as percentage in **Appendix L**. The corresponding traffic assignment model based on the distribution is attached at **Appendix M**.

5.4.5 In terms of the effects existing local traffic, the link road would provide a new alternative route for residences / businesses on Lower Pennington Lane only. The link road would not offer additional benefit to areas outside Lower Pennington Lane, as areas outside of Lower Pennington Lane are already able to efficiently access the Poles Lane rat-run via Ridgeway Lane. Therefore no additional local traffic movements would be generated at Poles Lane outside of residences / businesses on Lower Pennington Lane. The areas that could more expediently reach Poles Lane rat-run as a consequence of the link road are demonstrated in **Figure 5.5**.

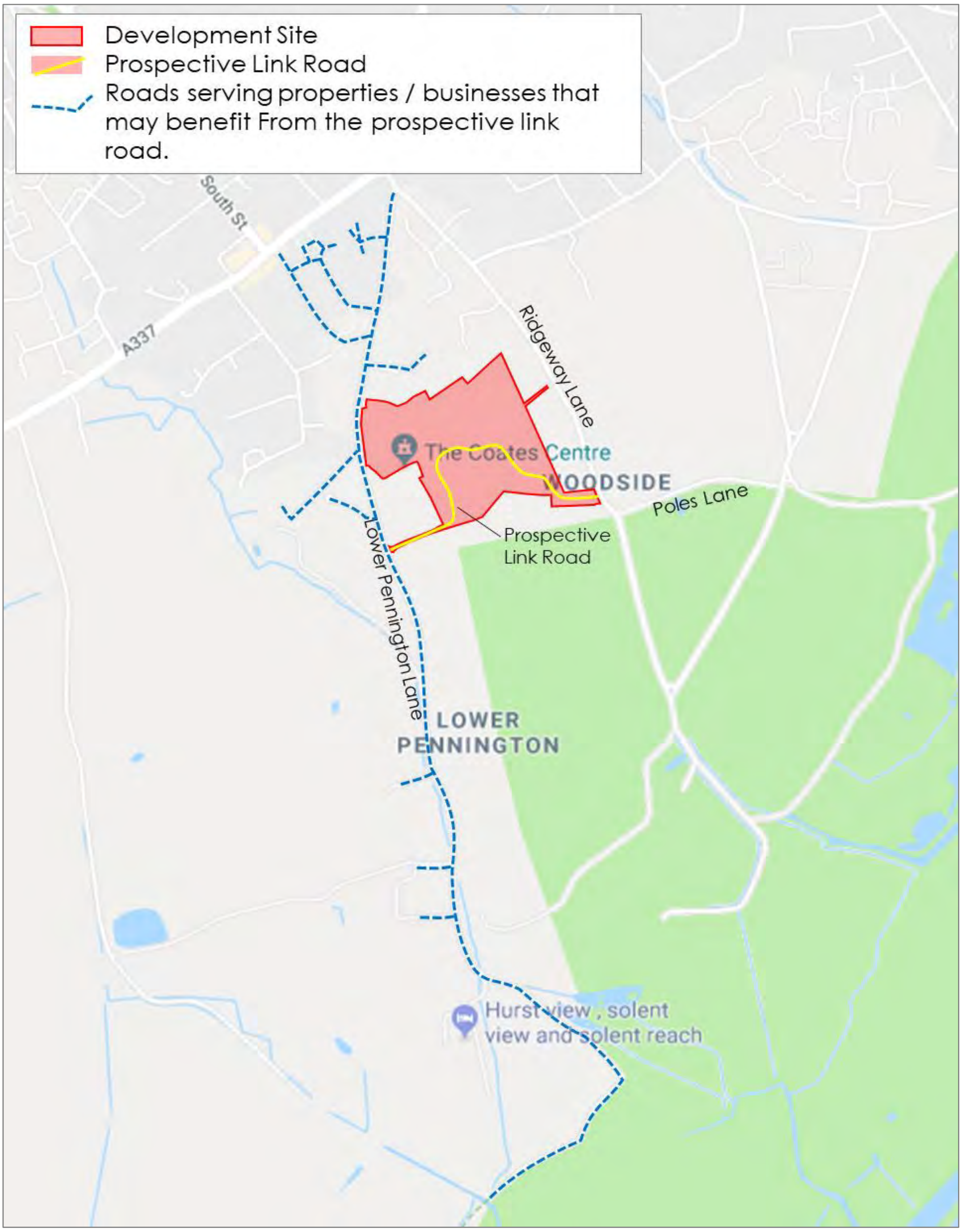


Figure 5.5: Areas with improved access to Poles Lane

5.4.6 To calculate the level of local traffic that could use the prospective link road and intensify the Poles Lane rat-run, the multi-modal traffic survey data of Lower Pennington Lane has been used. The multi-modal traffic survey captures all vehicular movements on Lower Pennington Lane as demonstrated in **Section 3.5**. To provide a robust estimate that is consistent with the assumptions made when distributing the site's traffic, half of the traffic travelling to/from Lymington (c.10%) has been considered to use the Poles Lane rat-run.

5.4.7 The AM / PM vehicle traffic from the multi-modal traffic survey and the site's TRICS trip assessment has been summed and 10% of the traffic broken out to determine the level of additional traffic that could use the Poles Lane rat-run. The estimated peak hour traffic that would travel on Poles Lane is shown in **Figure 5.6**.

Trip Origin	Total Peak Hour Trips		10% Peak Hour Trips Utilising Poles Lane Rat-Run	
	AM Peak	PM Peak	AM Peak	PM Peak
Development Traffic	54	53	5	5
Local Traffic (Lower Pennington Lane)	140	110	14	11
Total	**194**	**163**	**19**	**16**

Figure 5.6: Peak Hour Traffic Intensification Poles Lane Following Implementation of Link Road

5.4.8 It is robustly estimated that the prospective link road would result in a maximum of 19 2-way vehicle movements travelling through the Ridgeway Lane/Poles Lane junction during the PM peak hour. The anticipated volume of traffic would have a negligible impact on Poles Lane in terms of capacity and safety and falls below the threshold that would typically require junction capacity modelling.

5.4.9 In addition to this, the ATC surveys on Poles Lane (**Appendix B**) revealed low baseline flows with only 131 daily traffic movements passing through the junction further demonstrating that capacity assessment would not be warranted.

5.5 Junction Capacity Modelling – Site Accesses

5.5.1 The prospective accesses adjoining Ridgeway Lane and Lower Pennington Lane have been subject to a PICADY capacity modelling assessment to demonstrate that the access points would operate within capacity during the networks peak weekday AM / PM traffic hours.

5.5.2 To provide a robust assessment, the existing AM / PM traffic flows have been based on the theoretical traffic assignment model which has been adjusted to account for rat running traffic through the prospective link road (addressed in **Section 6.4**). The traffic assignment model is attached at **Appendix M**.

5.5.3 The PICADY assessment considers a future year scenario of 2023 to account for population growth and increased car ownership in the locale. The baseline traffic data has been growthed using TEMPRO data. The TEMPRO data output is attached at **Appendix I**. The following scenarios were modelled for the capacity assessment:

(i) 2018 AM / PM Baseline Traffic + Proposed Development Traffic Scenario

(ii) 2023 AM / PM Growthed Traffic + Proposed Development Traffic Scenario

5.5.4 The PICADY assessment identifies Ratio Flow Capacity (RFC), queue lengths and delay. RFC values above 0.85 indicate a point at which design alterations would need to be considered to increase the junction's capacity. RFC values in excess of 1.00 indicate a junction that has exceeded its operational capacity.

5.5.5 The site's access on to Lower Pennington Lane would also serve Oakhaven Hospice's rear car park. To determine the trip generation associated with the hospice, the TRICS database has been reviewed. The trip rate has been established based on the number of parking spaces, thereby allowing the hospice's rear car park trips to be established in isolation.

5.5.6 To establish the number of vehicle trips associated with the dwellings the following parameters shown in **Figure 5.7** have been used to filter the TRICS database: -

TRICS (Version 7.5.3)		
Filtering Parameter: -		Criteria Selected: -
i)	Land use	Hospice
ii)	Regions	• England • Wales
iii)	Scale of development	25 – 121 (parking spaces)
iv)	Date Range	13/10/00 to 21/10/11
v)	Count Type	Manual Count
vi)	Selected Days	Weekdays
vii)	Selected Locations	• Suburban Area • Edge of Town
viii)	Selected Location Sub Categories	• Residential Zone

Figure 5.7: TRICS Database Filtering Parameters

5.5.7 A summary of the weekday peak hour and daily trips are displayed in **Figure 5.8**. The full results of the TRICS interrogation are provided in **Appendix N**.

TRICS Trip Rate per Parking Space (27 Parking Spaces)			
	Arrivals	**Departures**	**Two-way Total**
AM Peak Hour	0.159	0.069	0.228
PM Peak Hour	0.108	0.190	0.298
Daily Traffic	1.473	1.431	2.904
AM Peak Hour	4	2	6
PM Peak Hour	3	5	8
Daily Traffic	40	39	78

Figure 5.8: TRICS Database Filtering Parameters

5.5.8 The trip generation identified above has accordingly been summed with the prospective developments trips which were distributed based on the assignment model at **Appendix M**. Owing to the proximity on the local road network it has been assumed that all traffic using the Hospice's rear car park would arrive and depart from the north reflecting the traffic assignment model (**Appendix M**). The results of the PICADY assessment for the Lower Pennington Lane Access are summarised in **Figure 5.9** whilst the full models are attached at **Appendix O**.

	Max RFC	Max Queue (Veh)
AM 2023 Baseline + Development	0.05 (Stream B-AC)	0.05 (Stream B-AC)
PM 2023 Baseline + Development	0.04 (Stream B-AC)	0.04 (Stream B-AC)

Figure 5.9: PICADY Capacity Assessment - Lower Pennington Lane

5.5.9 The maximum queue length identified was less than 1 PCUs at the Lower Pennington Lane / site access road junction in the PM peak 2023 model. These values are well below the 0.85 RFC threshold, which if exceeded, junction design alterations would need to be considered and below the junction's theoretical capacity RFC value of 1.00.

5.5.10 The site's access on to Ridgeway Lane is less complex as it would not be required to support any extant uses on the site. The model of the Ridgeway Lane access therefore simply models the prospective development site's arrival and departure flows based on the traffic assignment model at **Appendix M**. The results of the PICADY assessment for the Ridgeway Lane access are summarised in **Figure 5.10** whilst the full models are attached at **Appendix P**.

	Max RFC	Max Queue (Veh)
AM 2023 Baseline + Development	0.05 (Stream B-AC)	0.05 (Stream B-AC)
PM 2023 Baseline + Development	0.62 (Stream B-AC)	0.38 (Stream B-AC)

Figure 5.10: PICADY Capacity Assessment – Ridgeway Lane

5.5.11 The PICADY assessments revealed negligible flow restriction and queue lengths at both of the three of the site's prospective access points for all modelled scenarios. A maximum Ratio Flow Capacity (RFC) value of 0.05 on Stream B - AC occurred at the Lower Pennington Lane / site access road (south) junction in the AM peak 2023 model.

5.5.12 The maximum queue length identified was less than 1 PCUs at the Ridgeway Lane / site access road junction in the PM peak 2023 model. These values are well below the 0.85 RFC threshold, whereby junction design alterations would need to be considered and below the junction's theoretical capacity RFC value of 1.00.

6 RIDGEWAY LANE & LOWER PENNINGTON LANE IMPACT ASSESSMENT

6.1 Overview

6.1.1 During meetings between RGP and HCC highway officers, the need for an assessment of the prospective site's impact on Ridgeway Lane and Lower Pennington Lane was identified. An assessment has accordingly been undertaken which includes the following: -

(i) A **Design Assessment** of Ridgeway Lane and Lower Pennington Lane's identifying suitability of the lanes in design terms to accommodate additional traffic.

(ii) A **Trip Comparison** identifying the extant level of use and the proportional increase in traffic.

(iii) A **Vehicle Interaction Probability & Frequency Model** to demonstrate the increased potential for vehicle and NMU interaction at constrained sections of Ridgeway Lane and Lower Pennington Lane.

(iv) A **Traffic Delay and Vehicle Queue Assessment** which identifies the potential for vehicle queuing / delay at constrained sections of the carriageways.

6.2 Design Assessment

6.2.1 To establish the suitability of Ridgeway Lane and Lower Pennington Lane from a design perspective the following design parameters have been considered: -

(i) Carriageway geometries and the ability of the carriageway to accommodate two-way vehicular movements

(ii) Forward Visibility determining whether appropriate level of inter-visibility could be achieved between vehicles, cyclists and pedestrians.

Geometric Design

6.2.2 In order to accurately establish the suitability of the carriageway widths along Ridgeway Lane and Lower Pennington Lane both carriageways have been subject to a topographical surveys. This information has been used to determine where carriageway widths drop below 4.1m wide – a width which is identified in MfS as insufficient for two-way vehicle movements. These sections are therefore designated as pinch points.

6.2.3 The multimodal trip generation assessment at **Appendix E** identifies that a significant majority of vehicular movements associated with the proposal would be car sized vehicles. The multi-modal traffic surveys in **Section 3.5** similarly identified a low proportion of HGV movements on both Ridgeway Lane and Lower Pennington Lane at 1.5% and 0% respectively. The key design parameter used in this assessment is therefore the requirement for two-way passing manoeuvres between cars.

6.2.4 A vehicle swept path analysis has also been undertaken to verify the results of the geometric assessment demonstrating that two-way passing all sections of carriageway apart from those sections designated as pinch points. The geometric design assessment and vehicle swept path analysis is shown in **Drawings 2018/4483/008** and **2018/4483/009**.

6.2.5 The geometric design assessment demonstrated that there are no pinch points along Lower Pennington Lane, however there are 3 locations along Ridgeway Lane where there is insufficient width for two-way vehicle car movements. The implications of the pinch points are addressed subsequent in **Section 6.4**.

Visibility

6.2.6 An assessment of forward visibility along Ridgeway Lane and Lower Pennington Lane has been provided to demonstrate that vehicles would be able to see obstructions on the road including slow moving or stationary vehicles, pedestrians and cyclists.

6.2.7 MfS prescribes that the minimum forward visibility required is equal to the minimum stopping sight distance (43.0m), measuring between points on a curve along the centreline of the traffic lane. RGP's assessment of forward visibility has robustly been measured from a 1.0m offset from the carriageway edge, recognising that cyclists and pedestrians may be in close proximity to the carriageway edge. The forward visibility assessment is demonstrated in **Drawings 2018/4483/010** and **2018/4483/011**.

6.2.8 The assessment of forward visibility demonstrates that slow moving or stationary vehicles, pedestrians and cyclist would be visible to oncoming traffic for the entire length of both Ridgeway lane and Lower Pennington Lane in both northbound and southbound approach directions. Some maintenance of vegetation may be required to ensure the forward visibility is retained.

6.3 Traffic Intensification

6.3.1 To understand the existing level of multi-modal trips and the resultant level of trip intensification on Ridgeway Lane and Lower Pennington Lane, the multi-modal traffic count surveys and the site's multi-modal TRICS trip assessment were considered cumulatively. The survey locations are demonstrated in **Figure 3.11**. The Traffic survey results are attached at **Appendix C** and summarised in **Figure 3.12**.

6.3.2 The survey location on Ridgeway Lane captures all movements south of the junction with Rookes Lane, and similarly the Pennington Lane survey captures all movements south of the road junction with Ridgeway Lane. Owing to both carriageways' proximity on the local road network the survey locations provides robust baseline traffic flows which in reality would significantly reduce in the vicinity of the site toward the southern end of the lanes as carriageway users turn off into sides roads and accesses.

6.3.3 To account for future increases in population and car use, the multi-modal traffic surveys were growthed using TEMPRO for a development year of 2023. The TEMPRO output is attached at **Appendix I**. A comparative summary of existing and post development multi-modal traffic flows during weekday AM / PM peak hours (when the highest proportional impact would be exhibited) is summarised below in **Figures 6.1** and **6.2**.

Ridgeway Lane					
		2018 Existing Scenario	2023 Growthed Scenario	2023 Post Development Scenario	Net Increase
Vehicle Movements	AM Peak	66	71	98	+27
	PM Peak	91	97	124	+27
Cycle Movements	AM Peak	1	1	2	+1
	PM Peak	10	11	12	+1
Pedestrian Movements	AM Peak	9	9	18	+8
	PM Peak	5	5	11	+6

Figure 6.1 Ridgeway Lane Existing and Post Development Multi-Modal Traffic Comparison

Lower Pennington Lane					
		2018 Existing Scenario	2023 Post Development Scenario	2023 Post Development Scenario	Net Increase
Vehicle Movements	AM Peak	140	150	177	+27
	PM Peak	110	118	145	+27
Cycle Movements	AM Peak	10	11	12	+1
	PM Peak	8	9	10	+1
Pedestrian Movements	AM Peak	13	14	22	+8
	PM Peak	26	28	34	+6

Figure 6.2 Lower Pennington Lane Existing and Post Development Multi-Modal Traffic Comparison

6.3.4 The trip comparison demonstrates that both Ridgeway Lane and Lower Pennington Lane would continue to have relatively low baseline traffic flows in the AM / PM hours in post development scenario. Due to the lower baseline flows the proportional impact on Ridgeway Lane is greatest, increasing by nearly a third in the AM peak (27 vehicles). The highest number of movements occur on Lower Pennington Lane with 177 movements taking place during the AM Peak.

6.3.5 The highest proportional increase in pedestrian movements is anticipated along Ridgeway Lane, due to the relatively low existing flows. The numbers of pedestrian movements would remain low with a maximum 34 movements on Lower Pennington Lane in the PM peak hour. Cycle movements are negligible in both the existing and post development scenarios, with only 1 addition movement anticipated.

6.4 Vehicle Interaction - Probability & Frequency Modelling

6.4.1 During meetings between RGP and HCC, highway officers identified the need for an assessment of constrained sections of carriageway on Ridgeway Lane and Lower Pennington Lane and the implications of each carriageway's intensification post development. This probability assessment identifies the level of vehicle-vehicle and vehicle-NMU passing at designated pinch points identified in **Section 6.2**.

6.4.2 From this assessment the degree of hazard and requirement for mitigating design measures can be determined. The geometric design assessment in **Section 6.2**. identified three sections of carriageway that are designated as pinch points in **Drawing 2018/4483/009**. The following probability modelling scenarios have been modelled for each of the 3 pinch points: -

(i) The probability of Vehicle – Vehicle passing during the AM/PM peak hours

(ii) The probability of Vehicle – Cycle passing during the AM/PM peak hours

(iii) The probability of Vehicle – Pedestrian passing during the AM/PM peak hours

6.4.3 The increase in NMU traffic associated with the development would be accommodated by the proposed infrastructure, with pedestrian movements using the new footway infrastructure on Ridgeway Lane and cyclists using the site's internal cycle paths. However, as a point of robustness this assessment assumes that all NMU traffic would travel on-street to and from the site's vehicular access points.

6.4.4 A 'Monte Carlo' simulation model has been used to calculate the probability of the above passing manoeuvres along Ridgeway Lane and Lower Pennington Lane based on the geometric parameters of the carriageway and the recorded vehicle, cyclist and pedestrian flows. Based on the established probability, the resulting increase in frequency of such manoeuvres can be quantified and the existing and post development scenarios compared.

6.4.5 The simulation model runs multiple simulations using the geometry and traffic survey coefficients from which an average number of passing instances can be established. The simulation model's methodology and its raw data output is provided at **Appendix Q.**

6.4.6 The model is initially run to establish the baseline i.e. the existing probability and frequency of passing occurrences based on the survey data without the proposed developments increase in traffic. The model is subsequently run to derive the increased probability and frequency of the passing manoeuvres. A summary of the simulation results is summarised below in **Figures 6.3**, **6.4** and **6.5**.

Pinch Point 1					
Manoeuvre		Existing Scenario		Post Development Scenario	
		Occurrences	Frequency	Occurrences	Frequency
Vehicles Passing Vehicles	AM	1.91	31mins 25 secs	4.53	13mins 15 secs
	PM	3.94	15mins 14 secs	7.22	8mins 19 secs
Vehicles Passing Cyclists	AM	none	N/A	0.23	4hrs 20mins 52 secs
	PM	none	N/A	5.70	10mins 32 secs
Vehicles Passing Pedestrains	AM	none	N/A	0.87	1hr 8mins 58 secs
	PM	none	N/A	6.24	9mins 37 secs

Figure 6.3 Ridgeway Lane Pinch Point 1 – Vehicle / NMU Passing Summary

Pinch Point 2					
Manoeuvre		Existing Scenario		Post Development Scenario	
		Occurrences	Frequency	Occurrences	Frequency
Vehicles Passing Vehicles	AM	0.34	2hrs 56mins 28 secs	0.81	1hr 14mins 4secs
	PM	0.71	1hr 24mins 31 secs	1.3	46mins 9 secs
Vehicles Passing Cyclists	AM	none	N/A	0.04	25hours+
	PM	none	N/A	0.16	6hours 15mins
Vehicles Passing Pedestrains	AM	none	N/A	1.03	58mins 15seconds
	PM	none	N/A	1.14	52mins 38seconds

Figure 6.4 Ridgeway Lane Pinch Point 2 – Vehicle / NMU Passing Summary

Pinch Point 3					
Passing Manoeuvre		Existing Scenario		Post Development Scenario	
		Occurrences	Frequency	Occurrences	Frequency
Vehicles Passing Vehicles	AM	1.06	56mins 36seconds	2.5	24mins
	PM	2.18	27mins 31seconds	4.03	14mins 53seconds
Vehicles Passing Cyclists	AM	none	N/A	3.18	18mins 52seconds
	PM	none	N/A	0.48	2hrs 5mins
Vehicles Passing Pedestrains	AM	none	N/A	0.13	7hrs 41mins 32secs
	PM	none	N/A	3.49	17mins 11seconds

Figure 6.5 Ridgeway Lane Pinch Point 3 – Vehicle / NMU Passing Summary

6.4.7 The models demonstrate increases in passing manoeuvres at all pinch points, however the probability and resulting frequency of passing at these locations remains extremely low. The highest probability of passing at pinch points would occur between vehicles at Pinch Point 1 with an anticipated occurrence frequency of 8mins 19 seconds.

6.4.8 The potential for a vehicle to pass a pedestrian would have a maximum anticipated occurrence frequency of 9mins 37 seconds at Pinch Point 1 in the PM peak hour. It is however considered unlikely that pedestrians, and in particular those associated with the prospective development would walk in the carriageway given the new infrastructure provided. The occurrences of vehicle - pedestrian passing manoeuvres would therefore reduce in reality.

6.4.9 The potential for a vehicle to pass a cyclist would have a peak anticipated occurrence frequency of 10mins 32 seconds at Pinch Point 1 in the PM peak hour. As previously identified the carriageways provide sufficient forward visibility and width for passing enabling NMU's to be passed safely even at constrained section.

6.5 Flow Restriction

6.5.1 HCC's requested an assessment of potential flow restriction and queueing at the pinch points on Ridgeway Lane. As such, calculations have been undertaken based on the number of vehicles traversing Ridgeway Lane post development, the length of the pinch points, and the speeds of vehicles travelling through the pinch points. For robustness, the assessment anticipates the likelihood of queuing occurring assuming vehicles meet at the longest pinch point (Pinch Point 1).

Calculation Parameters

6.5.2 To anticipate the number of vehicles travelling on Ridgeway Lane post development, the peak hour movements recorded during the 7-day ATC survey have been growthed to a future year 2023 using TEMPRO (see **Appendix I**). The growthed flows have then been summed with the proposed development traffic on Ridgeway Lane established within the TRICS assessment and distributed within the traffic assignment model (**Appendix M**). A summary of the figures is shown in **Figure 6.6**.

	AM Peak Hour		PM Peak Hour	
	Northbound	Southbound	Northbound	Southbound
2023 Growthed Traffic	26	45	48	49
Development Traffic	20	8	19	8
Total	**45**	**53**	**67**	**57**

Figure 6.6: Vehicles on Ridgeway Lane

6.5.3 As shown in **Figure 6.6**, the PM peak hour period is anticipated to experience the highest volume of vehicle movements, equating to 1 northbound vehicle every 54 seconds, and 1 southbound vehicle every 63 seconds.

6.5.4 The longest pinch point on Ridgeway Lane measured 36m. Based on a robust assumption that vehicles would slow to 10mph when negotiating the narrow section of carriageway, it would take a vehicle approximately 8 seconds to travel the length of the pinch point. Therefore, a driver encountering an opposing vehicle at the pinch point would have to wait for approximately 8 seconds while the opposing vehicle clears the narrow section before continuing.

Results

6.5.5 As shown above, the frequency of vehicles during the busiest period equates to 1 northbound vehicle every 54 seconds and 1 southbound vehicle every 63 seconds, and drivers who encounter an opposing vehicle at the pinch point would be required to wait approximately 8 seconds for the opposing vehicle to clear the narrow sections of carriageway.

6.5.6 It is therefore anticipated that were opposing vehicles to meet at the pinch point, assuming an even flow distribution, the narrow section of carriageway would be cleared before another vehicle arrives at the pinch point and would not cause any queuing on Ridgeway Lane.

6.6 Summary

6.6.1 Ridgeway Lane and Lower Pennington Lane would appropriately serve the increase vehicle traffic with appropriate geometries, suitable forward visibility and low occurrences of vehicles meeting at pinch points. When vehicles are required to meet at pinch points the traffic flow is sufficiently low that no queuing is anticipated.

7 SUMMARY AND CONCLUSIONS

7.1.1 This Transport Feasibility Assessment has been prepared by RGP on behalf of Cicero Estates Ltd to support a land allocation for residential development on land at Ridgeway Lane and Lower Pennington Lane, Lymington. The prospective site would accommodate c.115 residential dwellings served from 2 accesses adjoining Ridgeway Lane and Lower Pennington Lane. The findings from this report are as follows: -

(i) The site is situated in an accessible location within walking and cycling distance of Lymington town centre providing convenient access to a range of services, amenities and public transport links.

(ii) A study of PIA incidents on the local road network showed no pattern in terms incident frequency or severity that could be exacerbated by the prospective development.

(iii) The site would be served from 2 existing access points on Ridgeway Lane and Lower Pennington Lane. The accesses would be reformed to provide T-junctions with a simple priority arrangement that accord to design standards.

(iv) A vehicle swept path analysis has been provided demonstrating the operation of the access arrangements to accommodate a range of vehicles and all direction turning manoeuvres.

(v) Visibility from the accesses achieves the necessary sight lines in the primary and secondary directions in accordance with the recorded 85th percentile design speeds using calculation coefficients set out in MfS.

(vi) Improvements would be made to the Poles Lane / Ridgeway Lane junction through the straightening and widening of Ridgeway Lane and the formalisation of the junction.

(vii) A new section of footway linking Forest Gate Gardens and Rookes Lane would be provided to facilitate movements between the site and Lymington's wider footway network.

(viii) The site's primary pedestrian access would be served from an internal footpath adjoining the southern end of Forest Gate Gardens. This would provide a continuous link to Lymington's footway network.

(ix) A shared cycle / foot link would be provided at the site's north west corner tying in with the existing approved on-road cycle route on Lower Pennington Lane. The Link would run along the route of PROW 83.

(x) A second shared cycle / pedestrian link would be provided via a strip of land to the east of the site between the properties 'Brocklands Cottage' and the 'Buccaneer' adjoining Ridgeway Lane.

(xi) Links to the Woodside Park would have the potential to connect the site to other potential strategic development in the locale improving local connectivity and permeability for the wider public in line with NFDC policy.

(xii) The prospective site would provide a link road between Lower Pennington Lane and Ridgeway Lane as per NFDC planning policy. The link road would serve as a spine road from which secondary routes would be served.

(xiii) Existing PROWs would remain navigable to pedestrians via the site's internal footways flanking the link road, thereby retaining the site's existing level of permeability.

(xiv) The site's internal carriageway geometries are such that large service vehicles can negotiate internal roads and perform turning manoeuvres within the site, allowing service vehicles to enter and exit the site in a forward gear.

(xv) The site would provide car and cycle parking in line with New Forest District Council's residential parking standards.

(xvi) The TRICS trip assessment suggests that the development will generate an additional 503 daily vehicle trips, with an additional 54 trips in the network AM peak hour, and 53 trips in the PM peak hour.

(xvii) A traffic assignment model using 2011 Census Data has been provided. The assessment has revealed 100% of traffic would use the A337 roundabout to the north of the site, with a maximum entry input of 54 vehicle movements.

(xviii) Based on an ARCADY capacity assessment, the A337 roundabout has been redesigned to alleviate capacity issues. A second ARCADY assessment identified RFC values within operational capacity during network peak hours.

(xix) To assess the impact of the link road and potential traffic intensification at Poles Lane, an assignment model adjusted for rat-running has been prepared. The model identifies that input flows to Poles Lane remain low.

(xx) The site accesses have been subject to a PICADY junction capacity modelling which identified that the site would generate negligible levels of flow restriction during peak hours.

(xxi) Ridgeway Lane and Lower Pennington Lane would appropriately serve the increase vehicle traffic with appropriate geometries, suitable forward visibility and low occurrences of vehicles meeting at pinch points.

(xxii) When vehicles are required to meet at pinch points the traffic flow is sufficiently low that no queuing is anticipated.

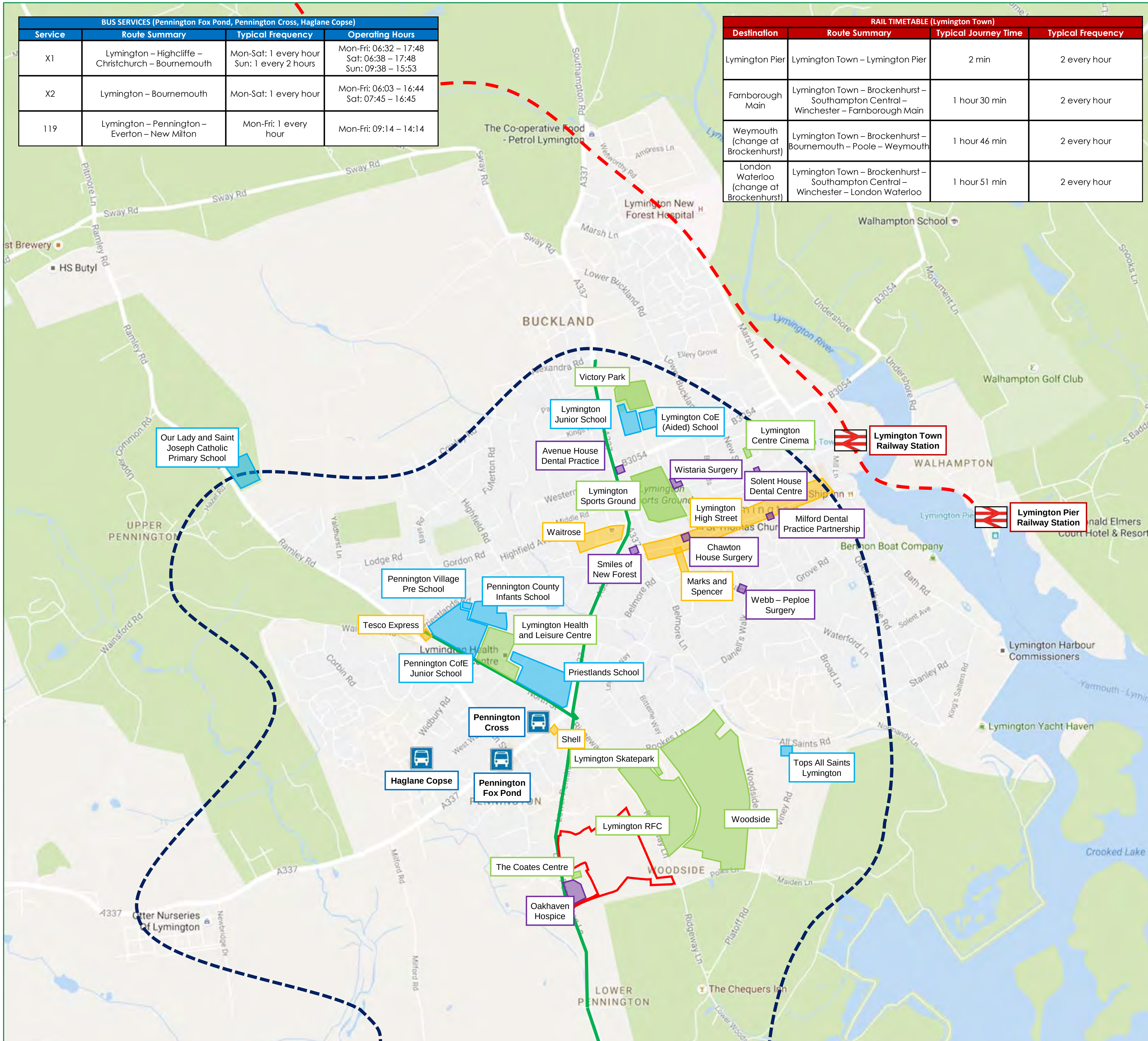
PLANS

BUS SERVICES (Pennington Fox Pond, Pennington Cross, Haglane Copse)

Service	Route Summary	Typical Frequency	Operating Hours
X1	Lymington – Highcliffe – Christchurch – Bournemouth	Mon-Sat: 1 every hour Sun: 1 every 2 hours	Mon-Fri: 06:32 – 17:48 Sat: 06:38 – 17:48 Sun: 09:38 – 15:53
X2	Lymington – Bournemouth	Mon-Sat: 1 every hour	Mon-Fri: 06:03 – 16:44 Sat: 07:45 – 16:45
119	Lymington – Pennington – Everton – New Milton	Mon-Fri: 1 every hour	Mon-Fri: 09:14 – 14:14

RAIL TIMETABLE (Lymington Town)

Destination	Route Summary	Typical Journey Time	Typical Frequency
Lymington Pier	Lymington Town – Lymington Pier	2 min	2 every hour
Farnborough Main	Lymington Town – Brockenhurst – Southampton Central – Winchester – Farnborough Main	1 hour 30 min	2 every hour
Weymouth (change at Brockenhurst)	Lymington Town – Brockenhurst – Bournemouth – Poole – Weymouth	1 hour 46 min	2 every hour
London Waterloo (change at Brockenhurst)	Lymington Town – Brockenhurst – Southampton Central – Winchester – London Waterloo	1 hour 51 min	2 every hour



LEGEND

- SITE LOCATION
- RAIL STATION
- RAILWAY
- BUS STOPS
- 2KM WALK ISOCHRONE
- RETAIL
- EDUCATION
- LEISURE
- HEALTH CARE

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Client: Cicero Estates Ltd

Project: Land Adjoining Ridgeway Lane, Lymington

Title: Site Location & Accessibility Plan

Plan No:	Job No:	Date:	Scale:
Plan 01	3345	June 17	NTS
Drawn By:	**Checked By:**	**Approved By:**	**Rev:**
EJD	ALB	PMR	-

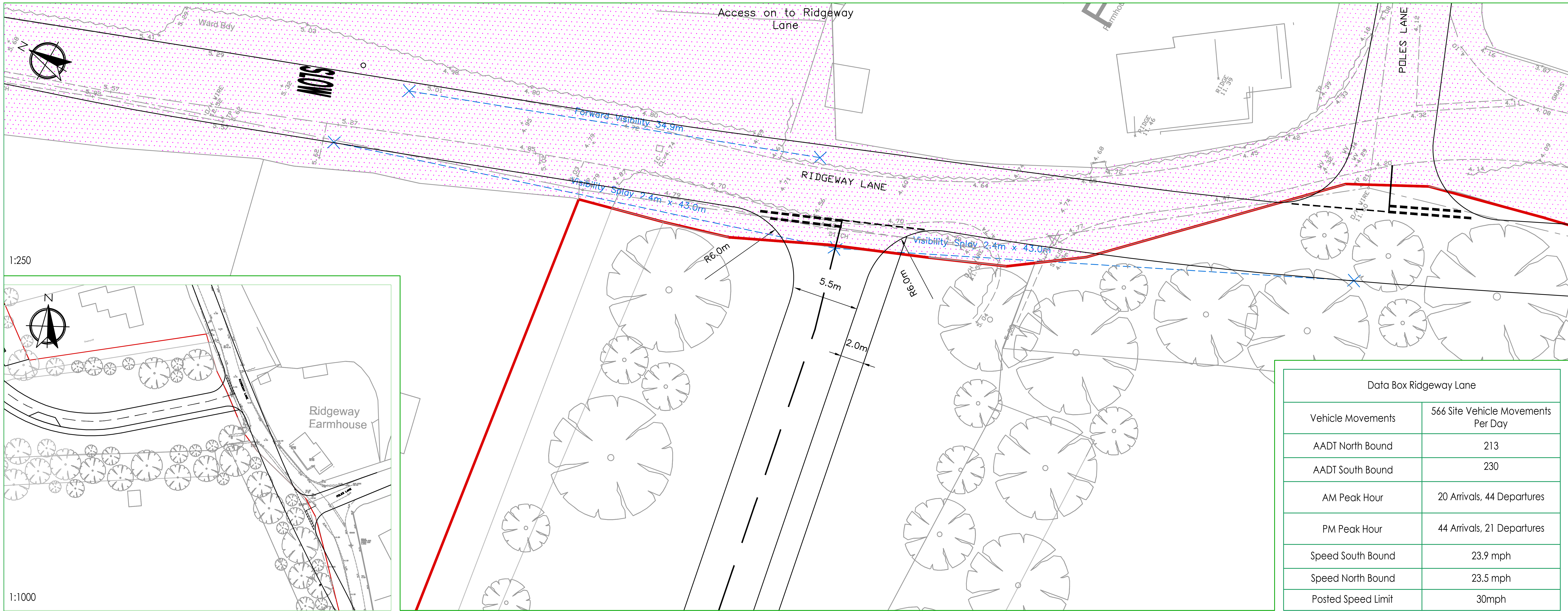
DRAWINGS

A2

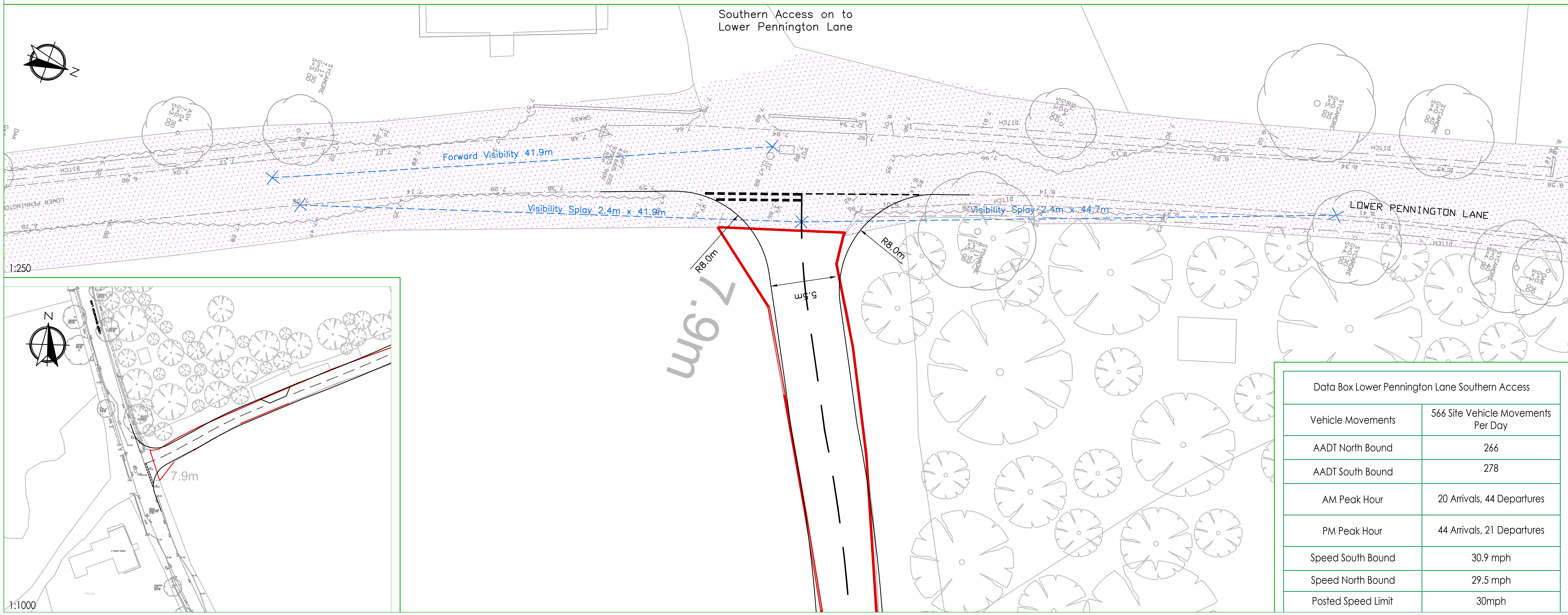
-LEGEND-

Visibility Splay

Highway Boundary



Data Box Ridgeway Lane	
Vehicle Movements	566 Site Vehicle Movements Per Day
AADT North Bound	213
AADT South Bound	230
AM Peak Hour	20 Arrivals, 44 Departures
PM Peak Hour	44 Arrivals, 21 Departures
Speed South Bound	23.9 mph
Speed North Bound	23.5 mph
Posted Speed Limit	30mph



Data Box Lower Pennington Lane Southern Access	
Vehicle Movements	566 Site Vehicle Movements Per Day
AADT North Bound	266
AADT South Bound	278
AM Peak Hour	20 Arrivals, 44 Departures
PM Peak Hour	44 Arrivals, 21 Departures
Speed South Bound	30.9 mph
Speed North Bound	29.5 mph
Posted Speed Limit	30mph

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Client
Cicero Estates Ltd

Project
Land at Ridgeway Lane and Lower Pennington Lane

Drawing Title
Visibility Splays

Scale	Drawn By	Checked By	Approved By
Varies @ A2	SMO	ALB	PMR

Date	Drawing No.	Rev.
December 2018	2018/4483/001	-

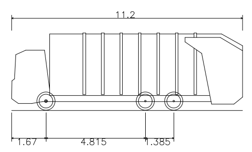
A2

-LEGEND-

Site Boundary

Existing Road Markings

Highway Boundary



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

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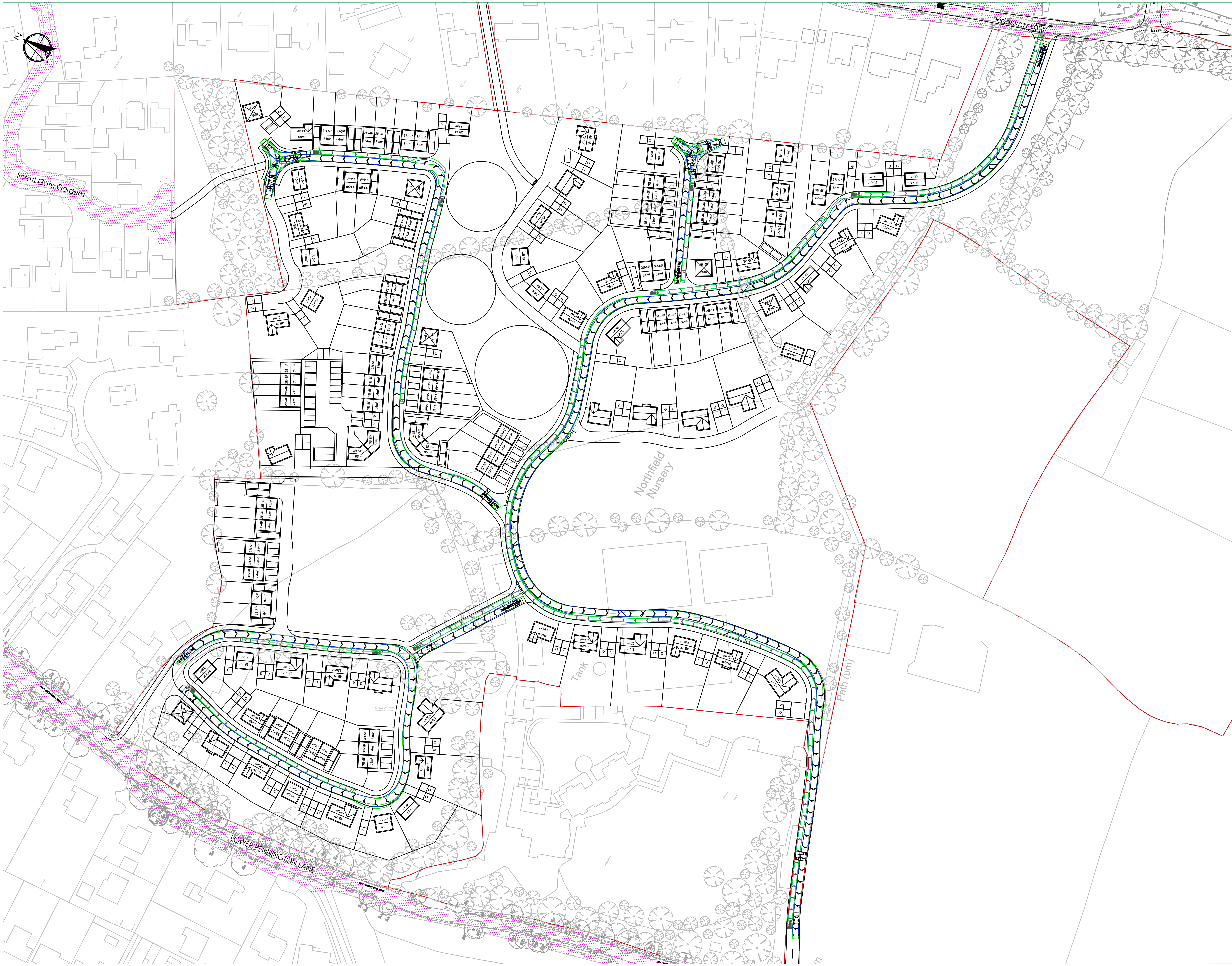
Client
Cicero Estates Ltd

Project
Land at Ridgeway Lane and Lower Pennington Lane

Drawing Title
Swept Path Analysis

Scale	Drawn By	Checked By	Approved By
1:250	SMO	ALB	PMR

Date	Drawing No.	Rev.
December 2018	2018/4483/002	-



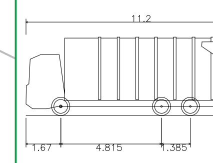
A2

-LEGEND-

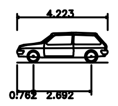
Site Boundary

Highway Boundary

Existing Road Markings



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



DB32 Private Car	
Overall Length	4.223m
Overall Width	1.715m
Overall Body Height	1.392m
Min Body Ground Clearance	0.233m
Max Track Width	1.629m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	5.780m

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Client
Cicero Estates

Project
Land at Ridgeway Lane and Lower Pennington Lane

Drawing Title
Swept Path Analysis
Refuse and Car Passing

Scale	Drawn By	Checked By	Approved By
1:1000	SMO	ALB	PMR

Date	Drawing No.	Rev.
December 2018	2018/4483/003	-

A2

-LEGEND-

Visibility Splay 2.4m x 25m

Visibility Splay 2.4m x Tangent

25m Forward Visibility Splay

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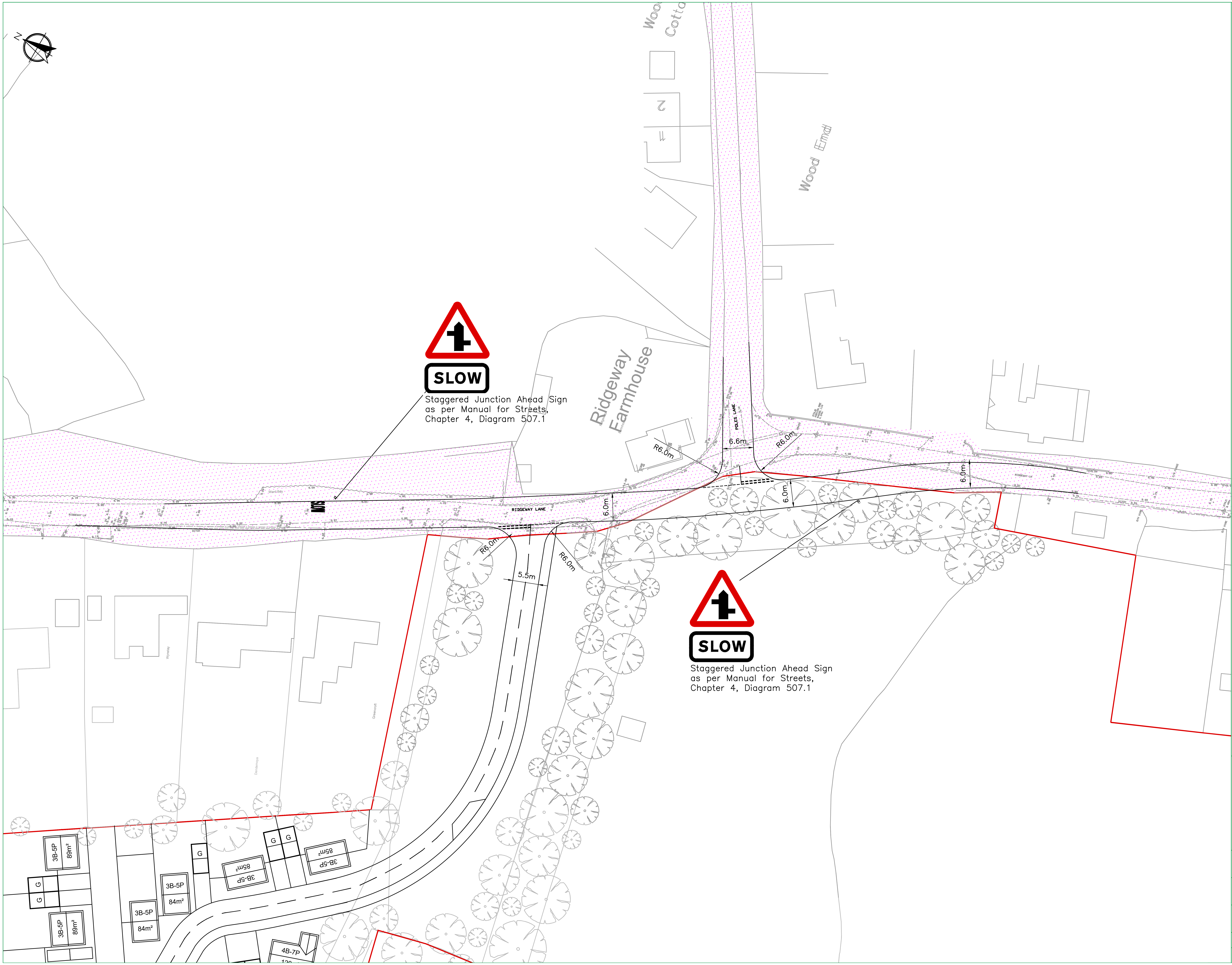
Client
Cicero Estates Ltd

Project
Land at Ridgeway Lane and Lower Pennington Lane

Drawing Title
Internal Visibility Splay

Scale	Drawn By	Checked By	Approved By
1:500	SMO	ALB	PMR

Date	Drawing No.	Rev.
December 2018	2018/4483/004	-



A2

-LEGEND-

Site Boundary

Highway Boundary

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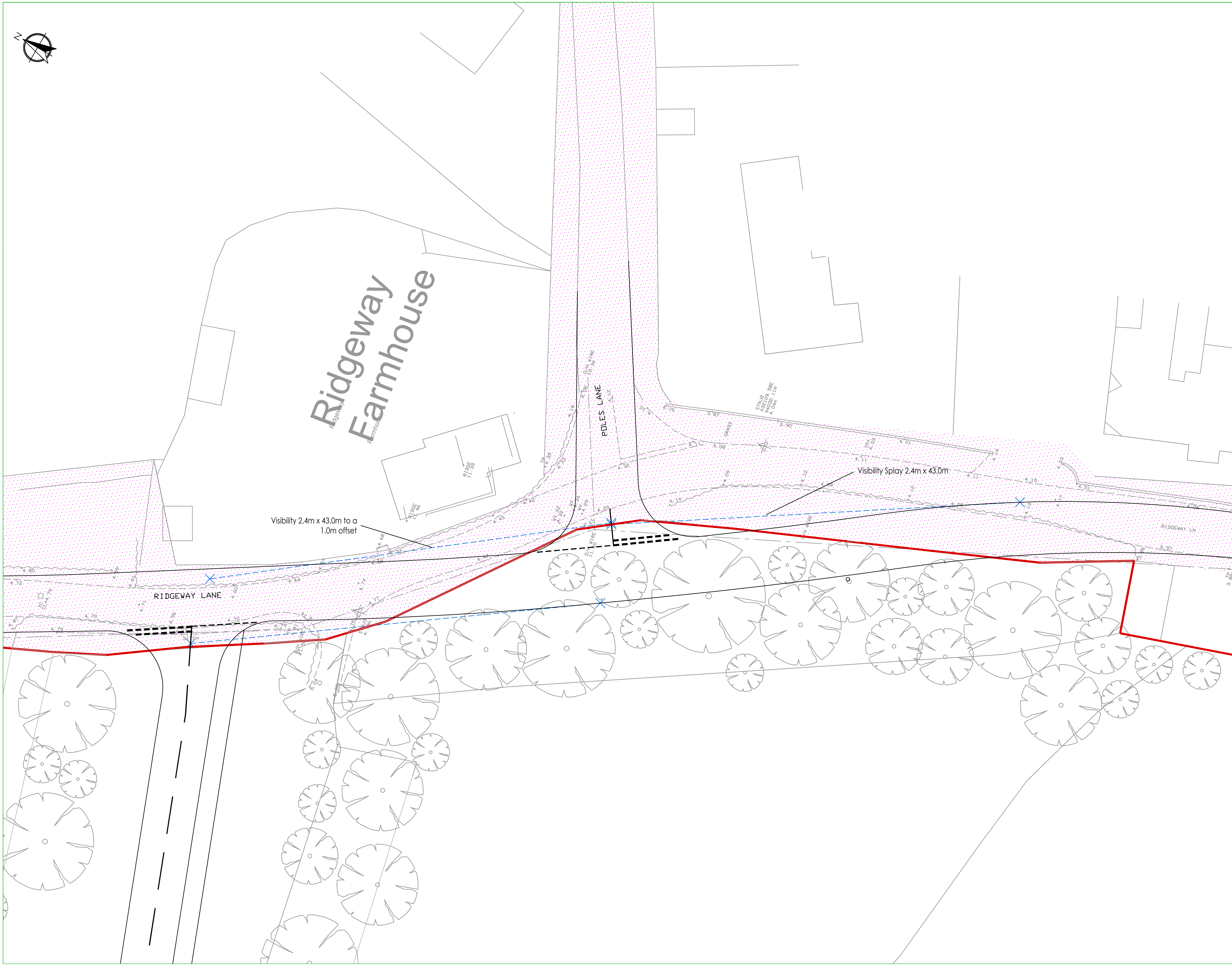
Client: Cicero Estates Ltd

Project: Land at Ridgeway Lane and Lower Pennington Lane

Drawing Title: Improvements to Ridgeway Lane and Poles Lane

Scale	Drawn By	Checked By	Approved By
1:500	SMO	ALB	PMR

Date	Drawing No.	Rev.
December 2018	2018/4483/006	-



A2

-LEGEND-

Site Boundary	
Highway Boundary	

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Client
Cicero Estates Ltd

Project
Land at Ridgeway Lane and Lower Pennington Lane

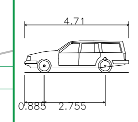
Drawing Title
Visibility Splays from Poles Lane

Scale	Drawn By	Checked By	Approved By
1:250	SMO	ALB	PMR
Date	Drawing No.		Rev.
December 2018	2018/4483/007		-

A2

-LEGEND-

Site Boundary



Estate Car (2006)	
Overall Length	4.710m
Overall Width	1.804m
Overall Body Height	1.442m
Min Body Ground Clearance	0.207m
Max Track Width	1.756m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	5.950m

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Client
Cicero Estates

Project
Land at Ridgeway Lane and Lower Pennington Lane

Drawing Title
Vehicles Passing Lower Pennington Lane

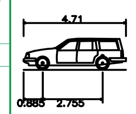
Scale	Drawn By	Checked By	Approved By
1:500	SMO	ALB	PMR

Date	Drawing No.	Rev.
December 2018	2018/4483/008	-

A2

-LEGEND-

Site Boundary	
Road is below 4.1m wide	



Estate Car (2006)	
Overall Length	4.710m
Overall Width	1.804m
Overall Body Height	1.442m
Min Body Ground Clearance	0.207m
Max Track Width	1.756m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	5.950m

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Client
Cicero Estates

Project
Land at Ridgeway Lane and Lower Pennington Lane

Drawing Title
Vehicles Passing Ridgeway Lane

Scale	Drawn By	Checked By	Approved By
1:500	SMO	ALB	PMR

Date	Drawing No.	Rev.
December 2018	2016/3345/009	-

A2

-LEGEND-

- Site Boundary
- Northbound forward Visibility of 43m to a 1m offset
- Southbound Forward Visibility of 43m to a 1m offset

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Client
Cicero Estates

Project
Land at Ridgeway Lane and Lower Pennington Lane

Drawing Title
Forward Visibility
Lower Pennington Lane

Scale	Drawn By	Checked By	Approved By
1:500	SMO	ALB	PMR

Date	Drawing No.	Rev.
December 2018	2018/4483/010	-

A2

-LEGEND-

Site Boundary

Northbound forward Visibility of 43m to a 1m offset

Southbound Forward Visibility of 43m to a 1m offset

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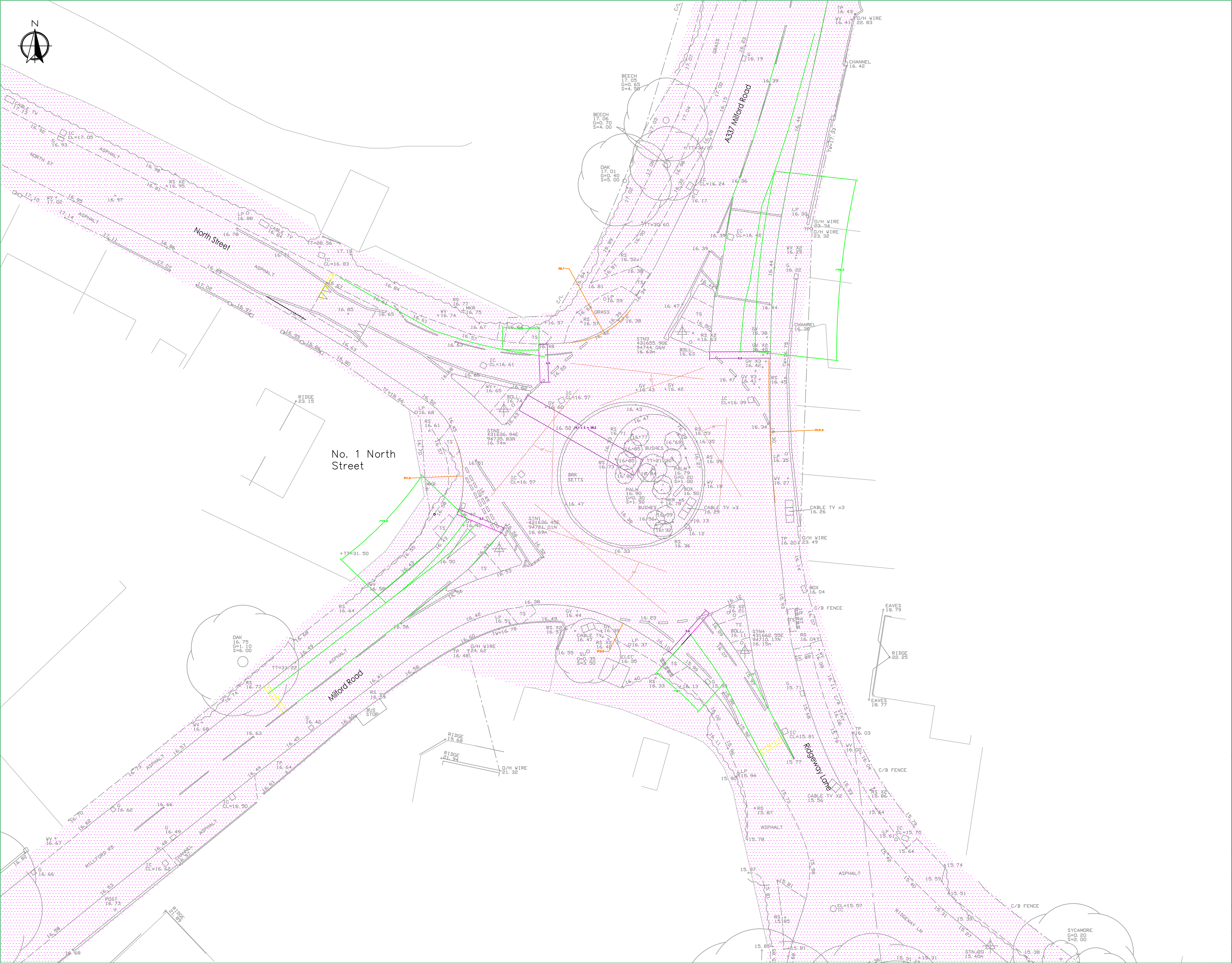
Client: Cicero Estates

Project: Land at Ridgeway Lane and Lower Pennington Lane

Drawing Title: Forward Visibility Ridgeway Lane

Scale	Drawn By	Checked By	Approved By
1:500	SMO	ALB	PMR

Date	Drawing No.	Rev.
December 2018	2018/4483/011	-



A2

-LEGEND-

Highway Boundary

Existing Road Markings

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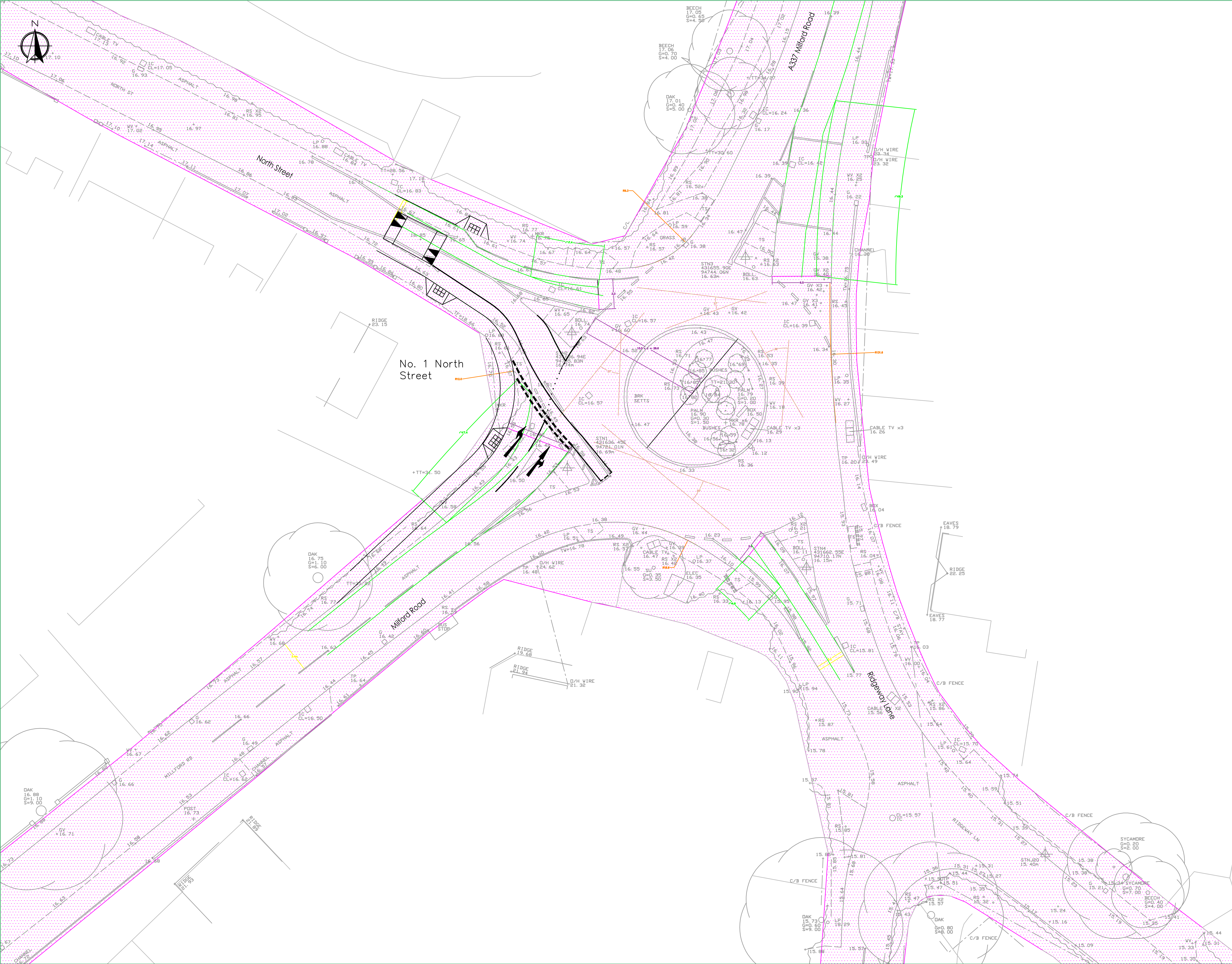
Client
Beaufield Developments

Project
Ridgeway and Pennington Roundabout Highway Boundary

Drawing Title
Current Roundabout ARCADY Geometries

Scale	Drawn By	Checked By	Approved By
1:250	SMO	ALB	PMR

Date	Drawing No.	Rev.
December 2018	2017-3345-012	-



A2

-LEGEND-

Highway Boundary

Existing Road Markings

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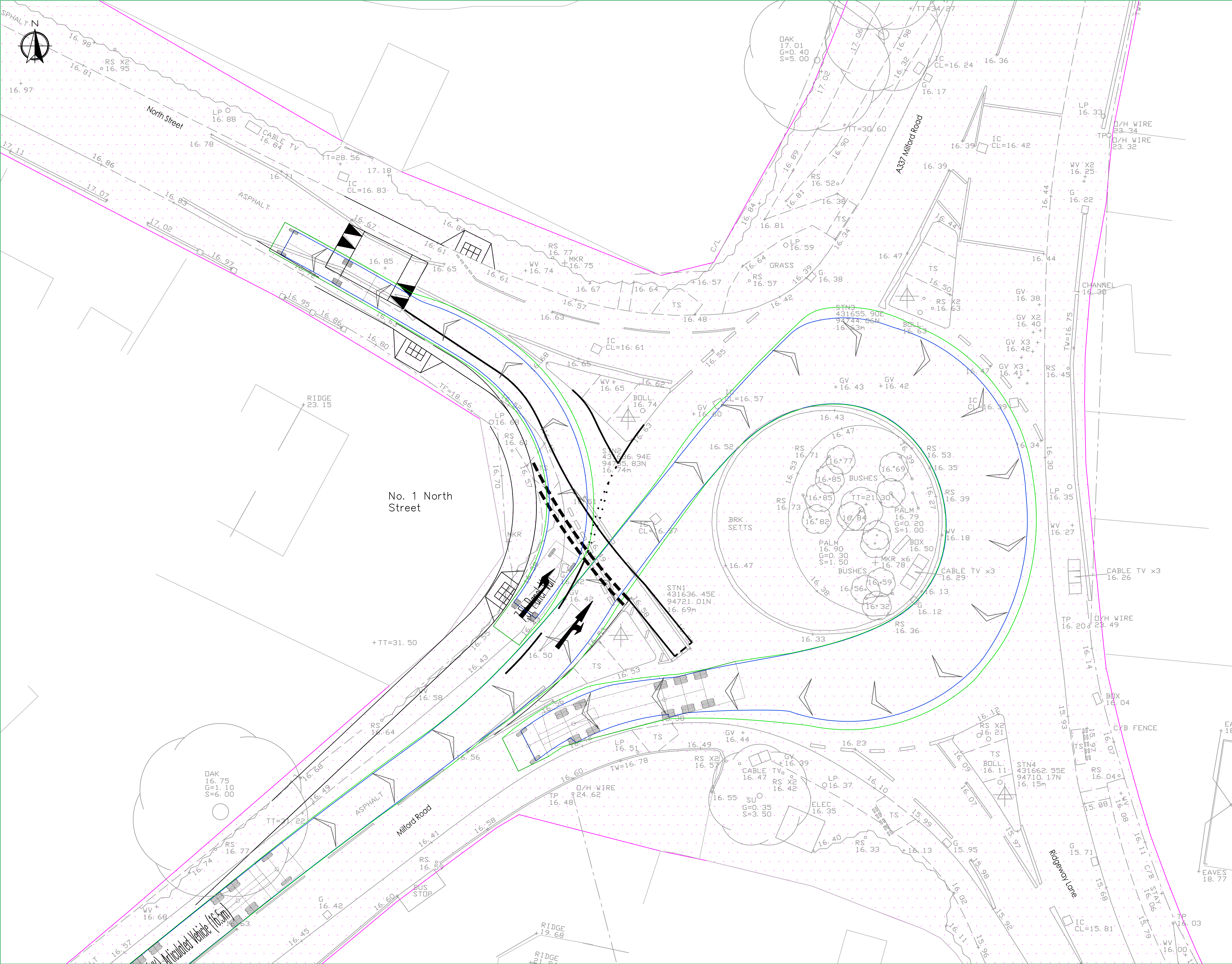
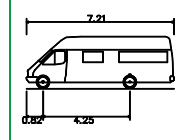
Client				
Cicero Estates Ltd				
Project				
Ridgeway and Pennington Roundabout Highway Boundary				
Drawing Title				
Proposed Roundabout Design ARCADY Geometries				
Scale	Drawn By	Checked By	Approved By	
1:250	SMO	ALB	PMR	
Date	Drawing No.			Rev.
December 2018	2018/4483/013			-



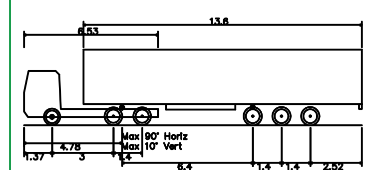
-LEGEND-

Highway Boundary

Existing Road Markings



7.5t Panel Van	
Overall Length	7.210m
Overall Width	2.192m
Overall Body Height	2.544m
Min Body Ground Clearance	0.316m
Track Width	1.865m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	7.400m



Max Legal Length (UK) Articulated Vehicle (16.5m)	
Overall Length	16.500m
Overall Width	2.550m
Overall Body Height	3.681m
Min Body Ground Clearance	0.411m
Max Track Width	2.500m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	6.530m

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Client
Cicero Estates Ltd

Project
Land at Ridgeway Lane and Lower Pennington Lane

Drawing Title
Proposed Roundabout Vehicle Swept Path Analysis

Scale	Drawn By	Checked By	Approved By
1:250	SMO	ALB	PMR

Date	Drawing No.	Rev.
December 2018	2018/4483/014	-

A1

-LEGEND-

Highway Boundary

Existing Road Markings

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Client
Cicero Estates Ltd

Project
Land at Ridgeway Lane and Lower Pennington Lane

Drawing Title
Proposed Pedestrian Footway Along Ridgeway Lane

Scale	Drawn By	Checked By	Approved By
1:200	SMO	ALB	PMR

Date	Drawing No.	Rev.
December 2018	2018/4483/015	-

A2

-LEGEND-

Site Boundary

Highway Boundary

Existing Road Markings

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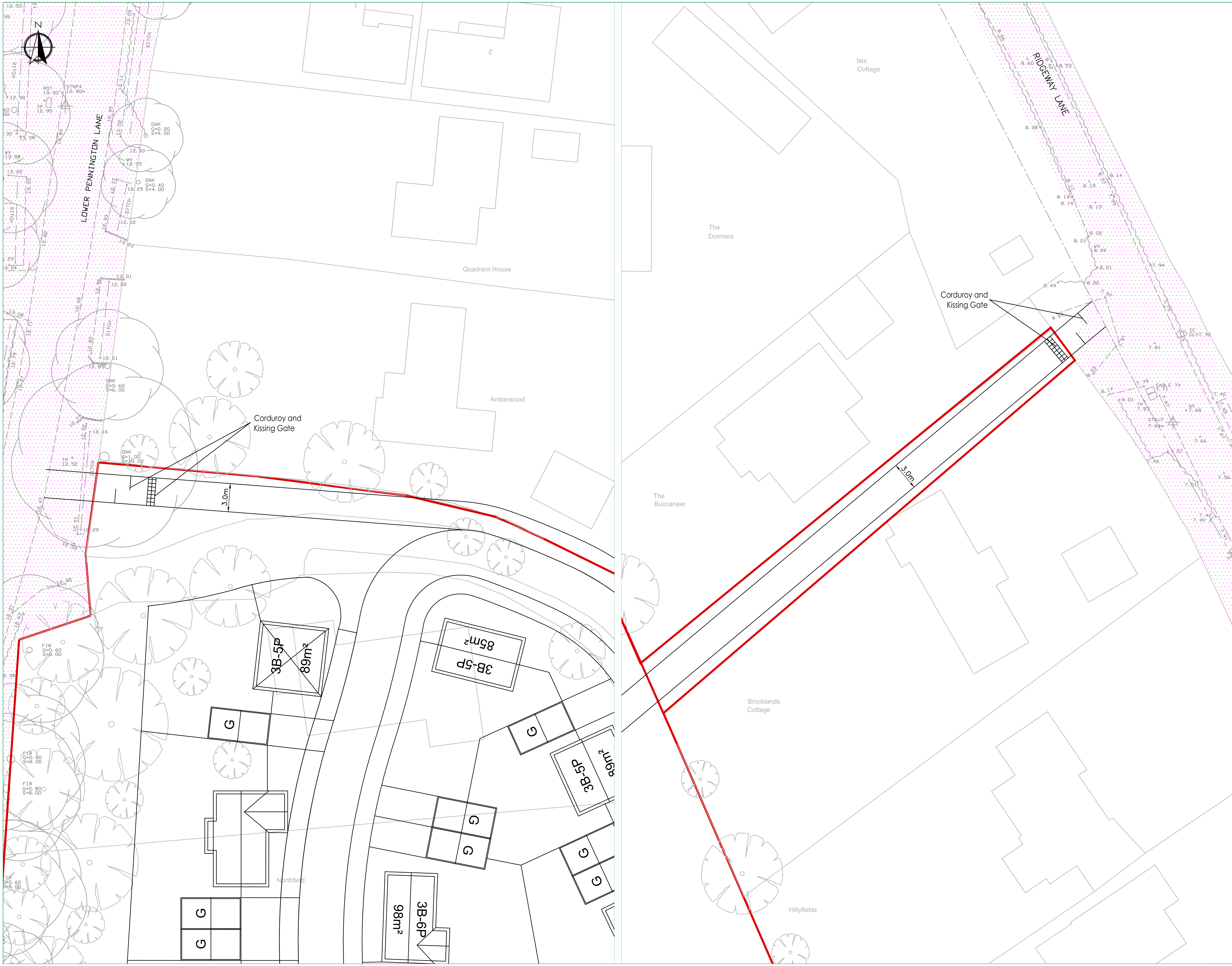
Client
Cicero Estates Ltd

Project
Land at Ridgeway Lane and Lower Pennington Lane

Drawing Title
Site Overview

Scale	Drawn By	Checked By	Approved By
1:1000	SMO	ALB	PMR

Date	Drawing No.	Rev.
December 2018	2018/4483/017	-



A2

-LEGEND-

Site Boundary

Highway Boundary

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Client
Cicero Estates

Project
Land at Ridgeway Lane and Lower Pennington Lane

Drawing Title
Proposed Cycle Link

Scale	Drawn By	Checked By	Approved By
1:250	SMO	ALB	PMR

Date	Drawing No.	Rev.
December 2018	2018/4483/018	-

A1

-LEGEND-

- Existing Road Markings
- Key Pedestrian Routing Existing
- Key Cycle Routing Existing
- Key Pedestrian Routing Proposed
- Key Cycle Routing Proposed
- Shared Cycle and Pedestrian Routing Proposed
- Site Boundary
- Existing Public Right of Way

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Client	Cicero Estates Ltd		
Project	Land at Ridgeway Lane and Lower Pennington Lane		
Drawing Title	Proposed Cycle and Pedestrian Routes		
Scale: 1:1000	Drawn By: SMO	Checked By: ALB	Approved By: PMR
Date: December 2018	Drawing No.: 2018/4483/019		Rev.: -

APPENDIX A

The New Forest National Park
Cycle Routes
Please remember to stay on the waymarked routes when cycling off-road on the New Forest Crown Lands
Village to trail access maps
BROCKENHURST
BURLEY
LYNDHURST
KEY
Cycling in the New Forest
Approved off road routes, usually gravel or asphalt
National Cycle Route off road
Approved on road routes
National Cycle Route on road
Other Routes; relatively quiet, unaudited routes on country lanes
Bridleways + Byways
Warning that route crosses a main road or other potential hazard. Take care
Ford that may be impassable after heavy rain
Cycle Hire
Steep hill or other more challenging conditions (IMBA classification)
Crown land tracks; no cycling
Numbered Waymarker Posts
Visitor Information
Travelling
The New Forest Tour Bus carries bikes free of charge
Parking
Pay and Display Parking
Station
Ferry Services
Local Information
Toilets
Food and Drink
Visitor Attraction
Castle
Camping in The Forest
Picnic Area
Land Use
City / Town / Village
Village / Hamlet
New Forest National Park
Mixed Woodland
Heathland
Roads
Cycling in the New Forest is permitted on most public highways. The usual rules of the road apply but please follow our Cycle Code to make your ride safer for yourself and other forest users.
These symbols identify the road types. Main roads are **not** recommended for cyclists.
M27 Motorway
A36 Main Road
B3054 Minor Road
DISCLAIMER
While every effort has been made to ensure the accuracy of this map, the publishers cannot accept any responsibility for any loss or damage caused as a result of its use.
The cycle routes and trails shown here were correct to the best of our knowledge at the time of publication. The publishers are in no way associated with any of the trail providers and cannot be held responsible for the condition or suitability of any routes. Nor do we endorse any of the products and services available from the cycle hire companies listed.
We encourage all bike users to cycle responsibly at all times.
For more detailed map information, useful for instance when following specific routes, we recommend that this map is used in conjunction with the Ordnance Survey 1:25,000 (Explorer) Sheet 22, or the 1:50,000 (Landranger) Sheet 196.
SCALE 1:70,000 (approx)
0 km 1 2 3 4 5 6
0 miles 1 2 3 4
N
© Forestry Commission. All Rights Reserved
SOUTHAMPTON
Lyndhurst
Brockenhurst
Ringwood
Fordingbridge
Burley
Beaulieu
Lymington
New Milton
Christchurch
BOURNEMOUTH
Hythe
Totton
Ashurst
Route continues to Yarmouth, Isle of Wight via passenger ferry
Note: Cycling on seafront has seasonal restrictions

APPENDIX B

Ridgeway Lane SOUTHBOUND

Globals

Report Id	CustomList-176
Descriptor	Modal Dir2_(modified)
Created by	MetroCount Traffic Executive
Creation Time (UTC)	2017-12-20T14:43:11
Legal	Copyright (c)1997 - 2014 MetroCount
Graphic	header.bmp
Language	English
Country	United Kingdom
Time	UTC + 0 min
Create Version	4.0.6.0
Metric	Part metric
Speed Unit	mph
Length Unit	metre
Mass Unit	tonne

Dataset

Site Name	Ridgeway Lane 3
Site Attribute	ATC 3
File Name	S:\RGPL-012 Modal Data Limited\MetroCount\MTE 4.06\Data\Ridgeway Lane 3 0 2017-12-20 1437.EC0
File Type	Plus
Algorithm	Factory default axle
Description	**Ridgeway Lane North**
Lane	0
Direction	7
Direction Text	7 - North bound A]B, South bound B]A.
Layout Text	Axle sensors - Paired (Class/Speed/Count)
Setup Time	2017-12-11T09:48:36
Start Time	2017-12-11T09:48:36
Finish Time	2017-12-20T14:36:36
Operator	RM
Configuration	00000000 80 00 14 6a 6a 00 00 00 00 00 , Standard

Profile

Name	Default Profile
Title	MetroCount Traffic Executive
Graphic Logo	
Header	
Footer	
Percentile 1	85
Percentile 2	95
Pace	10
Filter Start	2017-12-12T00:00:00
Filter End	2017-12-19T00:00:00
Class Scheme	ARX
Low Speed	0
High Speed	90
Posted Limit	**30**
Speed Limits	
Separation	0.000
Separation Type	Headway
Direction	BA
Encoded Direction	15

Ridgeway Lane — SOUTHBOUND

Report Id - CustomList-176
Site Name - Ridgeway Lane 3
Description - Ridgeway Lane North
Direction - BA

modaldata.com

12 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
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0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0700	0	13	0	2	0	0	0	0	0	0	0	0	15	0	0	0	5	9	1	0	0	0	0	0	0	0	0	0	0	0	0	21.9	24.6
0800	1	23	0	3	0	0	0	0	0	0	0	0	27	1	2	1	19	4	0	0	0	0	0	0	0	0	0	0	0	0	0	16.4	18.3
0900	0	18	0	2	0	0	0	0	0	0	0	0	20	0	0	5	12	3	0	0	0	0	0	0	0	0	0	0	0	0	0	16.9	19.7
1000	1	27	0	1	0	0	0	0	0	0	0	0	29	0	2	3	18	5	1	0	0	0	0	0	0	0	0	0	0	0	0	18	22.6
1100	0	22	1	3	0	0	0	0	0	0	0	0	26	0	0	3	12	10	1	0	0	0	0	0	0	0	0	0	0	0	0	19.4	21.7
1200	1	20	0	4	0	0	0	0	0	0	0	0	25	1	0	1	15	8	0	0	0	0	0	0	0	0	0	0	0	0	0	18.6	21
1300	0	19	0	6	0	0	0	0	0	0	0	0	25	0	0	1	9	13	2	0	0	0	0	0	0	0	0	0	0	0	0	20.5	23.9
1400	0	30	1	2	0	0	0	0	0	0	0	0	33	0	0	1	15	15	2	0	0	0	0	0	0	0	0	0	0	0	0	20.1	22.1
1500	0	13	0	3	0	0	0	0	0	0	0	0	16	0	0	2	5	8	1	0	0	0	0	0	0	0	0	0	0	0	0	19.8	22.4
1600	2	9	0	0	0	0	0	0	0	0	0	0	11	0	1	0	3	5	1	0	1	0	0	0	0	0	0	0	0	0	0	21.1	22.4
1700	0	9	0	0	0	0	0	0	0	0	0	0	9	0	0	0	4	3	2	0	0	0	0	0	0	0	0	0	0	0	0	21.6	-
1800	1	9	0	0	0	0	0	0	0	0	0	0	10	0	0	0	3	4	2	1	0	0	0	0	0	0	0	0	0	0	0	22.9	-
1900	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	0	1	1	3	0	0	0	0	0	0	0	0	0	0	0	0	22.9	-
2000	1	1	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	14.3	-
2100	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	24.8	-
2200	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	20.1	-
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
08-09	1	23	0	3	0	0	0	0	0	0	0	0	27	1	2	1	19	4	0	0	0	0	0	0	0	0	0	0	0	0	0	16.4	18.3
17-18	0	9	0	0	0	0	0	0	0	0	0	0	9	0	0	0	4	3	2	0	0	0	0	0	0	0	0	0	0	0	0	21.6	-
10-16	2	131	2	19	0	0	0	0	0	0	0	0	154	1	2	11	74	59	7	0	0	0	0	0	0	0	0	0	0	0	0	19.4	22.4
00-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
00-00	7	222	2	26	0	0	0	0	0	0	0	0	257	2	6	17	123	91	16	1	1	0	0	0	0	0	0	0	0	0	0	19.4	23

Ridgeway Lane SOUTHBOUND

Report Id - CustomList-176
Site Name - Ridgeway Lane 3
Description - Ridgeway Lane North
Direction - BA

MODAL
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13 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0700	1	14	0	2	1	0	0	0	0	0	0	0	18	0	1	2	1	13	1	0	0	0	0	0	0	0	0	0	0	0	0	20.9	23.7
0800	0	20	0	2	0	0	0	0	0	0	0	0	22	0	0	0	6	13	3	0	0	0	0	0	0	0	0	0	0	0	0	22	24.8
0900	0	24	0	3	0	0	0	0	0	0	0	0	27	0	1	1	8	14	3	0	0	0	0	0	0	0	0	0	0	0	0	20.8	23.7
1000	0	13	0	3	0	0	0	0	0	0	0	0	16	0	0	5	6	4	1	0	0	0	0	0	0	0	0	0	0	0	0	18.2	22.8
1100	1	18	0	2	1	0	0	0	0	0	0	0	22	0	1	4	10	7	0	0	0	0	0	0	0	0	0	0	0	0	0	17.5	20.4
1200	0	16	0	2	0	0	0	0	0	0	0	0	18	0	0	0	4	13	1	0	0	0	0	0	0	0	0	0	0	0	0	21.8	23.7
1300	0	17	0	2	0	0	0	0	0	0	0	0	19	0	0	0	10	8	1	0	0	0	0	0	0	0	0	0	0	0	0	20.1	22.1
1400	0	15	0	3	0	0	0	0	0	0	0	0	18	0	1	0	7	9	1	0	0	0	0	0	0	0	0	0	0	0	0	20.5	22.8
1500	1	16	0	1	0	0	0	0	0	0	0	0	18	0	0	4	9	5	0	0	0	0	0	0	0	0	0	0	0	0	0	18	21.3
1600	0	10	0	0	0	0	0	0	0	0	0	0	10	0	0	1	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	20	-
1700	0	10	0	0	0	0	0	0	0	0	0	0	10	0	0	1	3	5	1	0	0	0	0	0	0	0	0	0	0	0	0	20.4	-
1800	0	6	0	2	0	1	0	0	0	0	0	0	9	0	0	1	1	7	0	0	0	0	0	0	0	0	0	0	0	0	0	21.1	-
1900	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	20.6	-
2000	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	18.5	-
2100	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	20.4	-
2200	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	22.7	-
2300	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	-
08-09	0	20	0	2	0	0	0	0	0	0	0	0	22	0	0	0	6	13	3	0	0	0	0	0	0	0	0	0	0	0	0	22	24.8
17-18	0	10	0	0	0	0	0	0	0	0	0	0	10	0	0	1	3	5	1	0	0	0	0	0	0	0	0	0	0	0	0	20.4	-
10-16	2	95	0	13	1	0	0	0	0	0	0	0	111	0	2	13	46	46	4	0	0	0	0	0	0	0	0	0	0	0	0	19.3	22.8
00-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
00-00	3	193	0	22	2	1	0	0	0	0	0	0	221	0	4	19	76	110	12	0	0	0	0	0	0	0	0	0	0	0	0	20.1	23.5

Ridgeway Lane													SOUTHBOUND																				

Report Id - CustomList-176
Site Name - Ridgeway Lane 3
Description - Ridgeway Lane North
Direction - BA

MODAL
modaldata.com

14 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0700	0	18	0	3	0	0	0	0	0	0	0	0	21	0	1	2	5	11	2	0	0	0	0	0	0	0	0	0	0	0	0	20.4	24.2
0800	0	20	0	1	0	0	0	0	0	0	0	0	21	0	0	0	7	12	2	0	0	0	0	0	0	0	0	0	0	0	0	21.2	23.9
0900	0	23	0	5	0	0	0	0	0	0	0	0	28	0	1	1	8	17	1	0	0	0	0	0	0	0	0	0	0	0	0	20.1	23
1000	1	18	0	1	0	0	0	0	0	0	0	0	20	0	0	3	5	11	1	0	0	0	0	0	0	0	0	0	0	0	0	20.1	23.3
1100	0	10	0	0	0	0	0	0	0	0	0	0	10	0	0	0	5	4	1	0	0	0	0	0	0	0	0	0	0	0	0	20.3	-
1200	0	21	0	3	0	0	0	0	0	0	0	0	24	0	0	4	9	6	5	0	0	0	0	0	0	0	0	0	0	0	0	20.3	25.1
1300	0	23	0	4	0	0	0	0	0	0	0	0	27	0	0	1	5	17	4	0	0	0	0	0	0	0	0	0	0	0	0	21.9	24.2
1400	0	11	1	1	0	0	0	0	0	0	0	0	13	0	0	0	8	5	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	21.7
1500	1	14	0	1	0	0	0	0	0	0	0	0	16	0	0	2	2	10	2	0	0	0	0	0	0	0	0	0	0	0	0	21.2	23.7
1600	0	17	0	1	0	0	0	0	0	0	0	0	18	0	0	2	7	9	0	0	0	0	0	0	0	0	0	0	0	0	0	19.6	22.1
1700	0	9	0	0	0	0	0	0	0	0	0	0	9	0	0	0	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	18.4	-
1800	0	7	0	0	0	0	0	0	0	0	0	0	7	0	0	1	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	20.1	-
1900	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	0	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	21.1	-
2000	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	25.8	-
2100	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	20.3	-
2200	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	29.2	-
2300	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	22.5	-
08-09	0	20	0	1	0	0	0	0	0	0	0	0	21	0	0	0	7	12	2	0	0	0	0	0	0	0	0	0	0	0	0	21.2	23.9
17-18	0	9	0	0	0	0	0	0	0	0	0	0	9	0	0	0	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	18.4	-
10-16	2	97	1	10	0	0	0	0	0	0	0	0	110	0	0	10	34	53	13	0	0	0	0	0	0	0	0	0	0	0	0	20.7	24.2
00-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
00-00	2	202	1	20	0	0	0	0	0	0	0	0	225	0	2	16	73	113	21	0	0	0	0	0	0	0	0	0	0	0	0	20.5	23.9

Ridgeway Lane **SOUTHBOUND**

Report Id - CustomList-176
Site Name - Ridgeway Lane 3
Description - Ridgeway Lane North
Direction - BA

modaldata.com

15 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	22.3	-
0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0700	0	14	0	0	0	0	0	0	0	0	0	0	14	0	0	1	4	8	1	0	0	0	0	0	0	0	0	0	0	0	0	20.5	23
0800	0	20	0	1	0	0	0	0	0	0	0	0	21	0	0	0	7	12	2	0	0	0	0	0	0	0	0	0	0	0	0	21.2	23
0900	1	15	0	3	0	0	0	0	0	0	0	0	19	0	1	2	2	10	3	1	0	0	0	0	0	0	0	0	0	0	0	21	26.2
1000	3	20	0	5	0	0	0	0	0	0	0	0	28	0	2	3	10	10	3	0	0	0	0	0	0	0	0	0	0	0	0	18.6	23.3
1100	0	13	0	3	0	0	0	0	0	0	0	0	16	0	0	0	6	7	3	0	0	0	0	0	0	0	0	0	0	0	0	21.4	25.1
1200	2	28	0	1	0	0	0	0	0	0	0	0	31	1	0	1	14	11	4	0	0	0	0	0	0	0	0	0	0	0	0	19.9	24.2
1300	0	22	0	4	0	0	0	0	0	0	0	0	26	0	0	0	10	15	1	0	0	0	0	0	0	0	0	0	0	0	0	20.8	23.3
1400	2	20	1	3	0	0	0	0	0	0	0	0	26	0	1	1	9	14	1	0	0	0	0	0	0	0	0	0	0	0	0	19.7	22.4
1500	0	31	0	0	0	0	0	0	0	0	0	0	31	0	0	3	16	10	2	0	0	0	0	0	0	0	0	0	0	0	0	19.3	21.9
1600	0	14	0	1	0	0	0	0	0	0	0	0	15	0	0	2	5	7	1	0	0	0	0	0	0	0	0	0	0	0	0	20.3	24.2
1700	0	12	0	0	0	0	0	0	0	0	0	0	12	0	0	0	4	7	1	0	0	0	0	0	0	0	0	0	0	0	0	22.4	24.2
1800	0	12	0	0	0	0	0	0	0	0	0	0	12	0	0	0	4	7	1	0	0	0	0	0	0	0	0	0	0	0	0	22	23.5
1900	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	25.1	-
2000	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	22.6	-
2100	0	6	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	22.5	-
2200	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	22.4	-
2300	0	4	0	1	0	0	0	0	0	0	0	0	5	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	25.1	-
08-09	0	20	0	1	0	0	0	0	0	0	0	0	21	0	0	0	7	12	2	0	0	0	0	0	0	0	0	0	0	0	0	21.2	23
17-18	0	12	0	0	0	0	0	0	0	0	0	0	12	0	0	0	4	7	1	0	0	0	0	0	0	0	0	0	0	0	0	22.4	24.2
10-16	7	134	1	16	0	0	0	0	0	0	0	0	158	1	3	8	65	67	14	0	0	0	0	0	0	0	0	0	0	0	0	19.8	23
00-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
00-00	8	241	1	22	0	0	0	0	0	0	0	0	272	1	4	13	93	130	30	1	0	0	0	0	0	0	0	0	0	0	0	20.6	24.2

Ridgeway Lane SOUTHBOUND

Report Id - CustomList-176
Site Name - Ridgeway Lane 3
Description - Ridgeway Lane North
Direction - BA

modaldata.com

16 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	20.6	-
0100	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	25.8	-
0200	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.4	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0700	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	23.1	-
0800	0	13	0	1	0	0	0	0	0	0	0	0	14	0	0	2	3	7	2	0	0	0	0	0	0	0	0	0	0	0	0	20.6	24.8
0900	0	14	0	1	0	0	0	0	0	0	0	0	15	0	0	4	4	6	1	0	0	0	0	0	0	0	0	0	0	0	0	19	22.6
1000	1	14	0	2	0	0	0	0	0	0	0	0	17	0	2	0	6	7	2	0	0	0	0	0	0	0	0	0	0	0	0	20.2	23.9
1100	1	28	0	1	0	0	0	0	0	0	0	0	30	0	1	4	9	14	2	0	0	0	0	0	0	0	0	0	0	0	0	19.9	23.7
1200	1	33	0	0	0	0	0	0	0	0	0	0	34	0	0	4	7	17	5	1	0	0	0	0	0	0	0	0	0	0	0	21.5	24.8
1300	1	23	0	0	0	0	0	0	0	0	0	0	24	0	0	0	9	15	0	0	0	0	0	0	0	0	0	0	0	0	0	20.8	23
1400	4	29	0	1	0	0	0	0	0	0	0	0	34	0	1	7	11	14	1	0	0	0	0	0	0	0	0	0	0	0	0	18	21.9
1500	0	30	0	0	0	0	0	0	0	0	0	0	30	0	0	2	14	14	0	0	0	0	0	0	0	0	0	0	0	0	0	19.7	22.6
1600	0	16	0	1	0	0	0	0	0	0	0	0	17	0	0	3	4	5	5	0	0	0	0	0	0	0	0	0	0	0	0	21	25.7
1700	1	13	0	1	0	0	0	0	0	0	0	0	15	0	2	0	2	9	2	0	0	0	0	0	0	0	0	0	0	0	0	20.9	24.8
1800	0	6	0	0	0	0	0	0	0	0	0	0	6	0	0	0	1	4	1	0	0	0	0	0	0	0	0	0	0	0	0	22.3	-
1900	0	9	0	0	0	0	0	0	0	0	0	0	9	0	0	0	3	5	1	0	0	0	0	0	0	0	0	0	0	0	0	20.8	-
2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2100	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	30.1	-
2200	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	27.6	-
2300	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	25.9	-
08-09	0	13	0	1	0	0	0	0	0	0	0	0	14	0	0	2	3	7	2	0	0	0	0	0	0	0	0	0	0	0	0	20.6	24.8
17-18	1	13	0	1	0	0	0	0	0	0	0	0	15	0	2	0	2	9	2	0	0	0	0	0	0	0	0	0	0	0	0	20.9	24.8
10-16	8	157	0	4	0	0	0	0	0	0	0	0	169	0	4	17	56	81	10	1	0	0	0	0	0	0	0	0	0	0	0	19.9	23.5
00-05	1	5	0	0	0	0	0	0	0	0	0	0	6	0	1	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	19.6	-
00-00	10	241	0	8	0	0	0	0	0	0	0	0	259	0	7	26	75	123	25	3	0	0	0	0	0	0	0	0	0	0	0	20.3	24.2

Ridgeway Lane SOUTHBOUND

modaldata.com

Report Id - CustomList-176
Site Name - Ridgeway Lane 3
Description - Ridgeway Lane North
Direction - BA

17 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	25.5	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0700	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	21.5	-
0800	1	8	0	0	0	0	0	0	0	0	0	0	9	0	0	1	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	19.1	-
0900	1	13	0	0	0	0	0	0	0	0	0	0	14	0	1	1	2	8	1	1	0	0	0	0	0	0	0	0	0	0	0	20.5	23.5
1000	0	15	0	0	0	0	0	0	0	0	0	0	15	0	0	0	8	7	0	0	0	0	0	0	0	0	0	0	0	0	0	19.2	21.7
1100	1	11	0	0	0	0	0	0	0	0	0	0	12	0	0	3	3	6	0	0	0	0	0	0	0	0	0	0	0	0	0	19.1	22.1
1200	2	15	0	1	0	0	0	0	0	0	0	0	18	0	2	0	5	9	2	0	0	0	0	0	0	0	0	0	0	0	0	19.9	23.5
1300	1	22	0	1	0	0	0	0	0	0	0	0	24	0	0	3	8	9	3	1	0	0	0	0	0	0	0	0	0	0	0	20.4	24.2
1400	0	17	0	0	0	0	0	0	0	0	0	0	17	0	0	2	4	10	1	0	0	0	0	0	0	0	0	0	0	0	0	20.1	22.6
1500	0	17	0	0	0	0	0	0	0	0	0	0	17	0	1	0	10	5	1	0	0	0	0	0	0	0	0	0	0	0	0	19.2	21
1600	0	6	0	0	0	0	0	0	0	0	0	0	6	0	0	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	20.3	-
1700	1	6	0	1	0	0	0	0	0	0	0	0	8	0	2	0	0	5	0	1	0	0	0	0	0	0	0	0	0	0	0	19.4	-
1800	0	11	0	0	0	0	0	0	0	0	0	0	11	0	0	0	1	8	1	0	1	0	0	0	0	0	0	0	0	0	0	23.6	23
1900	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	21.3	-
2000	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	20	-
2100	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	26.1	-
2200	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	25.1	-
2300	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.7	-
08-09	1	8	0	0	0	0	0	0	0	0	0	0	9	0	0	1	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	19.1	-
17-18	1	6	0	1	0	0	0	0	0	0	0	0	8	0	2	0	0	5	0	1	0	0	0	0	0	0	0	0	0	0	0	19.4	-
10-16	4	97	0	2	0	0	0	0	0	0	0	0	103	0	3	8	38	46	7	1	0	0	0	0	0	0	0	0	0	0	0	19.7	23.3
00-05	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	25.5	-
00-00	7	153	0	3	0	0	0	0	0	0	0	0	163	0	6	10	51	79	13	3	1	0	0	0	0	0	0	0	0	0	0	20.2	23.5

Ridgeway Lane SOUTHBOUND

Report Id - CustomList-176
Site Name - Ridgeway Lane 3
Description - Ridgeway Lane North
Direction - BA

18 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	20	-
0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0700	1	13	0	2	0	0	0	0	0	0	0	0	16	0	1	0	5	8	2	0	0	0	0	0	0	0	0	0	0	0	0	20.6	24.6
0800	0	24	0	4	0	0	0	0	0	0	0	0	28	0	0	0	8	14	6	0	0	0	0	0	0	0	0	0	0	0	0	22.1	25.3
0900	0	9	0	0	0	0	0	0	0	0	0	0	9	0	0	0	3	5	1	0	0	0	0	0	0	0	0	0	0	0	0	20.8	-
1000	0	12	0	2	0	0	0	0	0	0	0	0	14	0	1	1	5	5	2	0	0	0	0	0	0	0	0	0	0	0	0	19.6	22.1
1100	3	26	0	4	0	0	0	0	0	0	0	0	33	0	3	4	7	14	5	0	0	0	0	0	0	0	0	0	0	0	0	19.6	24.8
1200	0	18	0	2	1	0	0	0	0	0	0	0	21	0	1	0	9	9	2	0	0	0	0	0	0	0	0	0	0	0	0	20.3	23.5
1300	1	15	0	1	0	0	0	0	0	0	0	0	17	0	0	1	5	10	1	0	0	0	0	0	0	0	0	0	0	0	0	20.1	22.8
1400	0	12	1	3	0	0	0	0	0	0	0	0	16	0	1	0	12	3	0	0	0	0	0	0	0	0	0	0	0	0	0	18.6	21.9
1500	1	14	0	2	0	0	0	0	0	0	0	0	17	0	0	3	7	6	1	0	0	0	0	0	0	0	0	0	0	0	0	19.5	24.2
1600	0	8	0	0	0	0	0	0	0	0	0	0	8	0	0	1	2	4	1	0	0	0	0	0	0	0	0	0	0	0	0	19.6	-
1700	0	19	0	0	0	1	0	0	0	0	0	0	20	0	0	2	4	10	4	0	0	0	0	0	0	0	0	0	0	0	0	21.3	25.3
1800	0	6	0	0	0	0	0	0	0	0	0	0	6	0	0	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	21.8	-
1900	1	4	0	0	0	0	0	0	0	0	0	0	5	0	0	0	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	20.8	-
2000	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	20.9	-
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2200	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	24.7	-
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
08-09	0	24	0	4	0	0	0	0	0	0	0	0	28	0	0	0	8	14	6	0	0	0	0	0	0	0	0	0	0	0	0	22.1	25.3
17-18	0	19	0	0	0	1	0	0	0	0	0	0	20	0	0	2	4	10	4	0	0	0	0	0	0	0	0	0	0	0	0	21.3	25.3
10-16	5	97	1	14	1	0	0	0	0	0	0	0	118	0	6	9	45	47	11	0	0	0	0	0	0	0	0	0	0	0	0	19.6	24.2
00-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
00-00	7	185	1	20	2	1	0	0	0	0	0	0	216	0	7	12	72	97	28	0	0	0	0	0	0	0	0	0	0	0	0	20.4	24.6

Ridgeway Lane SOUTHBOUND

Report Id - CustomList-176
Site Name - Ridgeway Lane 3
Description - Ridgeway Lane North
Direction - BA

modaldata.com

Grand Total

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
--	44	1437	5	121	4	2	0	0	0	0	0	0	1613	3	36	113	563	743	145	8	2	0	0	0	0	0	0	0	0	0	0	20.2	23.9

Ridgeway Lane	NORTHBOUND

Globals

Report Id	CustomList-176
Descriptor	Modal Dir2_(modified)
Created by	MetroCount Traffic Executive
Creation Time (UTC)	2017-12-20T14:40:19
Legal	Copyright (c)1997 - 2014 MetroCount
Graphic	header.bmp
Language	English
Country	United Kingdom
Time	UTC + 0 min
Create Version	4.0.6.0
Metric	Part metric
Speed Unit	mph
Length Unit	metre
Mass Unit	tonne

Dataset

Site Name	Ridgeway Lane 3
Site Attribute	ATC 3
File Name	S:\RGPL-012 Modal Data Limited\MetroCount\MTE 4.06\Data\Ridgeway Lane 3 0 2017-12-20 1437.EC0
File Type	Plus
Algorithm	Factory default axle
Description	**Ridgeway Lane North**
Lane	0
Direction	7
Direction Text	7 - North bound A]B, South bound B]A.
Layout Text	Axle sensors - Paired (Class/Speed/Count)
Setup Time	2017-12-11T09:48:36
Start Time	2017-12-11T09:48:36
Finish Time	2017-12-20T14:36:36
Operator	RM
Configuration	00000000 80 00 14 6a 6a 00 00 00 00 00 , Standard

Profile

Name	Default Profile
Title	MetroCount Traffic Executive
Graphic Logo	
Header	
Footer	
Percentile 1	85
Percentile 2	95
Pace	10
Filter Start	2017-12-12T00:00:00
Filter End	2017-12-19T00:00:00
Class Scheme	ARX
Low Speed	0
High Speed	90
Posted Limit	**30**
Speed Limits	
Separation	0.000
Separation Type	Headway
Direction	AB
Encoded Direction	15

modaldata.com

Ridgeway Lane NORTHBOUND

Report Id - CustomList-176
Site Name - Ridgeway Lane 3
Description - Ridgeway Lane North
Direction - AB

MODAL
modaldata.com

12 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0700	0	5	0	1	0	0	0	0	0	0	0	0	6	0	0	1	2	2	0	1	0	0	0	0	0	0	0	0	0	0	0	19.7	-
0800	0	13	0	0	1	0	0	0	0	0	0	0	14	0	0	2	8	4	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	20.4
0900	0	15	0	1	0	0	0	0	0	0	0	0	16	0	1	2	11	2	0	0	0	0	0	0	0	0	0	0	0	0	0	17.5	19.5
1000	0	15	0	0	0	0	0	0	0	0	0	0	15	0	0	3	7	5	0	0	0	0	0	0	0	0	0	0	0	0	0	18.5	22.1
1100	0	19	1	1	0	0	0	0	0	0	0	0	21	0	0	1	13	5	2	0	0	0	0	0	0	0	0	0	0	0	0	19.9	22.4
1200	0	20	0	1	0	0	0	0	0	0	0	0	21	1	1	3	9	6	1	0	0	0	0	0	0	0	0	0	0	0	0	16.9	21
1300	0	20	1	4	0	0	0	0	0	0	0	0	25	0	0	2	13	9	1	0	0	0	0	0	0	0	0	0	0	0	0	19.2	21.3
1400	1	27	0	2	0	0	0	0	0	0	0	0	30	0	0	2	16	11	1	0	0	0	0	0	0	0	0	0	0	0	0	19.1	22.8
1500	0	22	0	3	0	0	0	0	0	0	0	0	25	0	0	5	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	18.4	21.5
1600	0	26	0	4	0	0	0	0	0	0	0	0	30	0	0	0	11	18	1	0	0	0	0	0	0	0	0	0	0	0	0	20.9	23.5
1700	0	9	0	0	0	0	0	0	0	0	0	0	9	0	0	0	2	6	1	0	0	0	0	0	0	0	0	0	0	0	0	22.3	-
1800	1	5	0	0	0	0	0	0	0	0	0	0	6	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	19.7	-
1900	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	23.2	-
2000	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	21.6	-
2100	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	25.2	-
2200	0	6	0	0	0	0	0	0	0	0	0	0	6	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	22.4	-
2300	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18.7	-
08-09	0	13	0	0	1	0	0	0	0	0	0	0	14	0	0	2	8	4	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	20.4
17-18	0	9	0	0	0	0	0	0	0	0	0	0	9	0	0	0	2	6	1	0	0	0	0	0	0	0	0	0	0	0	0	22.3	-
10-16	1	123	2	11	0	0	0	0	0	0	0	0	137	1	1	16	68	46	5	0	0	0	0	0	0	0	0	0	0	0	0	18.7	22.1
00-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
00-00	2	211	2	17	1	0	0	0	0	0	0	0	233	1	2	21	110	86	12	1	0	0	0	0	0	0	0	0	0	0	0	19.3	22.8

Ridgeway Lane NORTHBOUND

MODAL

modaldata.com

Report Id - CustomList-176
Site Name - Ridgeway Lane 3
Description - Ridgeway Lane North
Direction - AB

13 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	27.9	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.6	-
0600	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	20.6	-
0700	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	24.6	-
0800	1	9	0	2	1	0	0	0	0	0	0	0	13	0	1	2	4	6	0	0	0	0	0	0	0	0	0	0	0	0	0	18.8	22.6
0900	0	10	0	2	0	0	0	0	0	0	0	0	12	0	1	3	2	4	2	0	0	0	0	0	0	0	0	0	0	0	0	18.5	21.5
1000	0	19	0	3	0	0	0	0	0	0	0	0	22	0	1	1	12	7	1	0	0	0	0	0	0	0	0	0	0	0	0	18.9	21.3
1100	0	12	0	1	0	0	0	0	0	0	0	0	13	0	0	0	7	6	0	0	0	0	0	0	0	0	0	0	0	0	0	19.9	22.1
1200	0	17	0	2	0	0	0	0	0	0	0	0	19	0	0	3	7	8	1	0	0	0	0	0	0	0	0	0	0	0	0	19	23.5
1300	0	14	0	1	0	0	0	0	0	0	0	0	15	0	0	0	6	6	3	0	0	0	0	0	0	0	0	0	0	0	0	21.4	24.8
1400	0	20	0	2	0	0	0	0	0	0	0	0	22	0	0	1	9	12	0	0	0	0	0	0	0	0	0	0	0	0	0	20	22.4
1500	0	24	0	2	0	0	0	0	0	0	0	0	26	0	0	1	12	12	1	0	0	0	0	0	0	0	0	0	0	0	0	20	22.6
1600	0	18	0	4	0	0	0	0	0	0	0	0	22	0	0	4	3	13	2	0	0	0	0	0	0	0	0	0	0	0	0	20.7	24.4
1700	0	8	0	0	0	0	0	0	0	0	0	0	8	0	0	1	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	21.3	-
1800	1	10	0	1	0	0	0	0	0	0	0	0	12	0	1	0	5	5	1	0	0	0	0	0	0	0	0	0	0	0	0	19.5	22.6
1900	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	21.5	-
2000	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.6	-
2100	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	22.6	-
2200	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	21.6	-
2300	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	21.3	-
08-09	1	9	0	2	1	0	0	0	0	0	0	0	13	0	1	2	4	6	0	0	0	0	0	0	0	0	0	0	0	0	0	18.8	22.6
17-18	0	8	0	0	0	0	0	0	0	0	0	0	8	0	0	1	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	21.3	-
10-16	0	106	0	11	0	0	0	0	0	0	0	0	117	0	1	6	53	51	6	0	0	0	0	0	0	0	0	0	0	0	0	19.8	22.8
00-05	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	27.9	-
00-00	2	173	0	21	1	0	0	0	0	0	0	0	197	0	4	16	70	94	13	0	0	0	0	0	0	0	0	0	0	0	0	20	23.5

Ridgeway Lane — NORTHBOUND

Report Id - CustomList-176
Site Name - Ridgeway Lane 3
Description - Ridgeway Lane North
Direction - AB

MODAL
modaldata.com

14 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0700	0	4	0	0	1	0	0	0	0	0	0	0	5	0	0	1	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	18	-
0800	0	8	0	2	0	0	0	0	0	0	0	0	10	0	0	1	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	19.2	-
0900	0	11	0	1	0	0	0	0	0	0	0	0	12	0	0	2	2	7	1	0	0	0	0	0	0	0	0	0	0	0	0	20.2	22.1
1000	1	9	0	1	0	0	0	0	0	0	0	0	11	0	1	1	6	2	1	0	0	0	0	0	0	0	0	0	0	0	0	18	20.1
1100	1	17	0	2	0	0	0	0	0	0	0	0	20	0	1	0	7	11	1	0	0	0	0	0	0	0	0	0	0	0	0	20.3	23
1200	0	21	0	2	0	0	0	0	0	0	0	0	23	0	0	3	7	11	2	0	0	0	0	0	0	0	0	0	0	0	0	20.1	23.7
1300	0	18	0	2	0	0	0	0	0	0	0	0	20	0	0	2	6	11	1	0	0	0	0	0	0	0	0	0	0	0	0	20.6	24.2
1400	0	27	1	1	0	0	0	0	0	0	0	0	29	0	0	1	8	17	3	0	0	0	0	0	0	0	0	0	0	0	0	20.9	23
1500	0	27	0	1	0	0	0	0	0	0	0	0	28	0	0	2	9	15	2	0	0	0	0	0	0	0	0	0	0	0	0	20.5	23.5
1600	0	22	0	2	0	0	0	0	0	0	0	0	24	0	0	3	7	14	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	22.8
1700	0	15	0	0	0	0	0	0	0	0	0	0	15	0	1	0	7	4	3	0	0	0	0	0	0	0	0	0	0	0	0	20.5	25.5
1800	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	22	-
1900	0	8	0	0	0	0	0	0	0	0	0	0	8	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	19.6	-
2000	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	18.4	-
2100	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	23.2	-
2200	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	25.4	-
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
08-09	0	8	0	2	0	0	0	0	0	0	0	0	10	0	0	1	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	19.2	-
17-18	0	15	0	0	0	0	0	0	0	0	0	0	15	0	1	0	7	4	3	0	0	0	0	0	0	0	0	0	0	0	0	20.5	25.5
10-16	2	119	1	9	0	0	0	0	0	0	0	0	131	0	2	9	43	67	10	0	0	0	0	0	0	0	0	0	0	0	0	20.3	23.5
00-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
00-00	2	201	1	14	1	0	0	0	0	0	0	0	219	0	3	16	73	109	18	0	0	0	0	0	0	0	0	0	0	0	0	20.2	23.3

Ridgeway Lane **NORTHBOUND**

Report Id - CustomList-176
Site Name - Ridgeway Lane 3
Description - Ridgeway Lane North
Direction - AB

15 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	23.6	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0700	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	21.7	-
0800	0	6	0	0	1	0	0	0	0	0	0	0	7	0	0	1	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	19.6	-
0900	0	13	0	1	0	0	0	0	0	0	0	0	14	0	1	1	9	3	0	0	0	0	0	0	0	0	0	0	0	0	0	17.2	20.6
1000	1	19	0	2	0	0	0	0	0	0	0	0	22	0	0	2	13	6	1	0	0	0	0	0	0	0	0	0	0	0	0	18.8	20.8
1100	0	13	1	4	0	0	0	0	0	0	0	0	18	0	0	0	13	3	2	0	0	0	0	0	0	0	0	0	0	0	0	19.6	21.9
1200	2	21	0	3	0	0	0	0	0	0	0	0	26	0	0	4	8	13	1	0	0	0	0	0	0	0	0	0	0	0	0	19.7	22.4
1300	0	19	1	4	0	0	0	0	0	0	0	0	24	0	0	4	11	9	0	0	0	0	0	0	0	0	0	0	0	0	0	18.3	21.3
1400	2	35	0	3	0	0	0	0	0	0	0	0	40	0	1	6	19	14	0	0	0	0	0	0	0	0	0	0	0	0	0	18.4	21.7
1500	1	22	0	0	0	0	0	0	0	0	0	0	23	0	0	2	13	7	1	0	0	0	0	0	0	0	0	0	0	0	0	19.1	22.1
1600	0	28	0	2	0	0	0	0	0	0	0	0	30	0	0	1	14	12	3	0	0	0	0	0	0	0	0	0	0	0	0	20	23.9
1700	0	10	0	0	0	0	0	0	0	0	0	0	10	0	0	1	2	6	1	0	0	0	0	0	0	0	0	0	0	0	0	21.5	-
1800	1	6	0	0	0	0	0	0	0	0	0	0	7	0	1	0	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	20.4	-
1900	0	7	0	0	0	0	0	0	0	0	0	0	7	0	0	0	2	3	2	0	0	0	0	0	0	0	0	0	0	0	0	23	-
2000	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	21.5	-
2100	0	8	0	0	0	0	0	0	0	0	0	0	8	0	0	1	1	5	1	0	0	0	0	0	0	0	0	0	0	0	0	21.3	-
2200	0	8	0	0	0	0	0	0	0	0	0	0	8	0	0	0	2	5	1	0	0	0	0	0	0	0	0	0	0	0	0	21.8	-
2300	0	2	0	1	0	0	0	0	0	0	0	0	3	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	28.3	-
08-09	0	6	0	0	1	0	0	0	0	0	0	0	7	0	0	1	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	19.6	-
17-18	0	10	0	0	0	0	0	0	0	0	0	0	10	0	0	1	2	6	1	0	0	0	0	0	0	0	0	0	0	0	0	21.5	-
10-16	6	129	2	16	0	0	0	0	0	0	0	0	153	0	1	18	77	52	5	0	0	0	0	0	0	0	0	0	0	0	0	18.9	22.1
00-05	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	23.6	-
00-00	7	223	2	21	1	0	0	0	0	0	0	0	254	0	3	23	115	95	17	1	0	0	0	0	0	0	0	0	0	0	0	19.6	23.3

Ridgeway Lane NORTHBOUND

Report Id - CustomList-176
Site Name - Ridgeway Lane 3
Description - Ridgeway Lane North
Direction - AB

MODAL
modaldata.com

16 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	20.8	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.7	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	21.3	-
0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0700	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	-
0800	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	19.9	-
0900	0	6	0	0	0	0	0	0	0	0	0	0	6	0	0	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	21.6	-
1000	0	10	0	0	0	0	0	0	0	0	0	0	10	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	20.2	-
1100	0	19	0	1	0	0	0	0	0	0	0	0	20	0	0	1	9	9	1	0	0	0	0	0	0	0	0	0	0	0	0	19.9	22.1
1200	1	20	0	1	0	0	0	0	0	0	0	0	22	0	0	4	11	4	3	0	0	0	0	0	0	0	0	0	0	0	0	19.3	24.6
1300	1	22	0	0	0	0	0	0	0	0	0	0	23	0	0	4	11	6	2	0	0	0	0	0	0	0	0	0	0	0	0	19.6	24.4
1400	0	38	0	0	0	0	0	0	0	0	0	0	38	0	2	3	12	19	2	0	0	0	0	0	0	0	0	0	0	0	0	19.5	22.8
1500	2	28	0	1	0	0	0	0	0	0	0	0	31	0	0	8	8	12	3	0	0	0	0	0	0	0	0	0	0	0	0	18.7	22.6
1600	0	22	0	1	0	0	0	0	0	0	0	0	23	0	0	2	7	9	5	0	0	0	0	0	0	0	0	0	0	0	0	20.4	25.3
1700	0	15	0	0	0	0	0	0	0	0	0	0	15	0	0	0	4	7	4	0	0	0	0	0	0	0	0	0	0	0	0	22.2	25.5
1800	0	6	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	23.2	-
1900	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	1	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	23.3	-
2000	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	23.7	-
2100	1	5	0	0	0	0	0	0	0	0	0	0	6	0	0	1	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	22.2	-
2200	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	0	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	22.1	-
2300	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	25.2	-
08-09	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	19.9	-
17-18	0	15	0	0	0	0	0	0	0	0	0	0	15	0	0	0	4	7	4	0	0	0	0	0	0	0	0	0	0	0	0	22.2	25.5
10-16	4	137	0	3	0	0	0	0	0	0	0	0	144	0	2	20	56	55	11	0	0	0	0	0	0	0	0	0	0	0	0	19.4	23.3
00-05	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	19.2	-
00-00	5	213	0	4	0	0	0	0	0	0	0	0	222	0	2	24	77	91	27	1	0	0	0	0	0	0	0	0	0	0	0	20.2	24.2

Ridgeway Lane NORTHBOUND

Report Id - CustomList-176
Site Name - Ridgeway Lane 3
Description - Ridgeway Lane North
Direction - AB

modaldata.com

17 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	25.4	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18.7	-
0700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0800	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	21.9	-
0900	1	7	0	0	0	0	0	0	0	0	0	0	8	0	1	0	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	18	-
1000	2	16	0	1	0	0	0	0	0	0	0	0	19	0	1	3	11	4	0	0	0	0	0	0	0	0	0	0	0	0	0	17.7	19.9
1100	0	12	0	0	0	0	0	0	0	0	0	0	12	0	0	0	5	6	1	0	0	0	0	0	0	0	0	0	0	0	0	20.2	21.9
1200	1	7	0	0	0	0	0	0	0	0	0	0	8	0	0	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.8	-
1300	0	13	0	1	0	0	0	0	0	0	0	0	14	0	0	0	5	9	0	0	0	0	0	0	0	0	0	0	0	0	0	20.6	23
1400	1	19	0	0	0	0	0	0	0	0	0	0	20	0	0	2	6	11	1	0	0	0	0	0	0	0	0	0	0	0	0	20.2	22.8
1500	2	29	0	0	0	0	0	0	0	0	0	0	31	0	1	5	9	12	4	0	0	0	0	0	0	0	0	0	0	0	0	19.9	22.6
1600	0	14	0	0	0	0	0	0	0	0	0	0	14	0	1	0	7	6	0	0	0	0	0	0	0	0	0	0	0	0	0	19.2	22.8
1700	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	-
1800	0	6	0	0	0	0	0	0	0	0	0	0	6	0	0	0	1	3	1	0	1	0	0	0	0	0	0	0	0	0	0	25.1	-
1900	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	24.8	-
2000	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	23.2	-
2100	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	25.2	-
2200	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	23.4	-
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
08-09	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	21.9	-
17-18	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	-
10-16	6	96	0	2	0	0	0	0	0	0	0	0	104	0	2	13	41	42	6	0	0	0	0	0	0	0	0	0	0	0	0	19.4	22.6
00-05	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	25.4	-
00-00	7	143	0	2	0	0	0	0	0	0	0	0	152	0	4	13	57	65	11	1	1	0	0	0	0	0	0	0	0	0	0	20	23

Ridgeway Lane NORTHBOUND

Report Id - CustomList-176
Site Name - Ridgeway Lane 3
Description - Ridgeway Lane North
Direction - AB

modaldata.com

18 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	1	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	27.6	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	0	1	0	0	1	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.6	-
0700	0	4	0	0	1	0	0	0	0	0	0	0	5	0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	18.8	-
0800	0	9	0	0	0	0	0	0	0	0	0	0	9	0	0	1	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	18.3	-
0900	0	18	0	0	0	0	0	0	0	0	0	0	18	0	1	4	8	5	0	0	0	0	0	0	0	0	0	0	0	0	0	17.5	21
1000	0	13	1	4	1	0	0	0	0	0	0	0	19	0	0	7	8	2	2	0	0	0	0	0	0	0	0	0	0	0	0	17.7	20.4
1100	3	23	0	1	0	0	0	0	0	0	0	0	27	0	4	4	9	9	1	0	0	0	0	0	0	0	0	0	0	0	0	17.3	22.1
1200	3	11	1	0	0	1	0	0	0	0	0	0	16	0	3	3	6	4	0	0	0	0	0	0	0	0	0	0	0	0	0	16.1	21.3
1300	0	13	0	3	0	0	0	0	0	0	0	0	16	0	0	2	8	6	0	0	0	0	0	0	0	0	0	0	0	0	0	19.2	23
1400	0	17	0	1	0	0	0	0	0	0	0	0	18	0	0	2	7	8	1	0	0	0	0	0	0	0	0	0	0	0	0	19.7	23.7
1500	0	26	0	2	0	0	0	0	0	0	0	0	28	0	0	1	12	13	2	0	0	0	0	0	0	0	0	0	0	0	0	20.4	23.7
1600	1	18	0	2	0	0	0	0	0	0	0	0	21	0	1	2	3	13	1	1	0	0	0	0	0	0	0	0	0	0	0	20.7	23.5
1700	0	9	0	0	0	0	0	0	0	0	0	0	9	0	0	1	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	22.3	-
1800	0	8	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	7	1	0	0	0	0	0	0	0	0	0	0	0	0	23	-
1900	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	20.4	-
2000	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	22.5	-
2100	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	25.4	-
2200	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	23.9	-
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
08-09	0	9	0	0	0	0	0	0	0	0	0	0	9	0	0	1	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	18.3	-
17-18	0	9	0	0	0	0	0	0	0	0	0	0	9	0	0	1	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	22.3	-
10-16	6	103	2	11	1	1	0	0	0	0	0	0	124	0	7	19	50	42	6	0	0	0	0	0	0	0	0	0	0	0	0	18.5	23.3
00-05	0	1	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	27.6	-
00-00	7	184	2	14	3	1	0	0	0	0	0	0	211	0	9	27	73	88	13	1	0	0	0	0	0	0	0	0	0	0	0	19.4	23.7

Ridgeway Lane NORTHBOUND

Report Id - CustomList-176
Site Name - Ridgeway Lane 3
Description - Ridgeway Lane North
Direction - AB

modaldata.com

Grand Total

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
--	32	1348	7	93	7	1	0	0	0	0	0	0	1488	1	27	140	575	628	111	5	1	0	0	0	0	0	0	0	0	0	0	19.8	23.5

Lower Pennington Lane - South — NORTHBOUND

modaldata.com

Globals

Report Id	CustomList-174
Descriptor	Modal Dir2_(modified)
Created by	MetroCount Traffic Executive
Creation Time (UTC)	2017-12-20T14:17:18
Legal	Copyright (c)1997 - 2014 MetroCount
Graphic	header.bmp
Language	English
Country	United Kingdom
Time	UTC + 0 min
Create Version	4.0.6.0
Metric	Part metric
Speed Unit	mph
Length Unit	metre
Mass Unit	tonne

Dataset

Site Name	Lower Pennington 2
Site Attribute	[+51.477222 +0.000000]
File Name	S:\RGPL-012 Modal Data Limited\MetroCount\MTE 4.06\Data\Lower Pennington 2 0 2017-12-20 1414.EC0
File Type	Plus
Algorithm	Factory default axle
Description	**Lower Pennington South**
Lane	0
Direction	7
Direction Text	7 - North bound A]B, South bound B]A.
Layout Text	Axle sensors - Paired (Class/Speed/Count)
Setup Time	2017-12-11T09:43:31
Start Time	2017-12-11T09:43:31
Finish Time	2017-12-20T14:13:31
Operator	RM
Configuration	00000000 80 00 14 6a 6a 00 00 00 00 00 , Standard

Profile

Name	Default Profile
Title	MetroCount Traffic Executive
Graphic Logo	
Header	
Footer	
Percentile 1	85
Percentile 2	95
Pace	10
Filter Start	2017-12-12T00:00:00
Filter End	2017-12-19T00:00:00
Class Scheme	ARX
Low Speed	0
High Speed	90
Posted Limit	**30**
Speed Limits	
Separation	0.000
Separation Type	Headway
Direction	AB
Encoded Direction	15

Lower Pennington Lane - South NORTHBOUND

MODAL

modaldata.com

Report Id - CustomList-174
Site Name - Lower Pennington 2
Description - Lower Pennington South
Direction - AB

12 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18.4	-
0500	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	24.6	-
0600	0	10	0	0	0	0	0	0	0	0	0	0	10	0	0	0	1	5	2	1	1	0	0	0	0	0	0	0	0	0	0	25.4	-
0700	0	14	0	1	0	0	0	0	0	0	0	0	15	0	0	1	1	6	7	0	0	0	0	0	0	0	0	0	0	0	0	23.7	27.5
0800	0	26	0	4	0	0	0	0	0	0	0	0	30	0	0	1	5	16	7	0	1	0	0	0	0	0	0	0	0	0	0	23.5	27.3
0900	0	18	0	4	0	1	0	0	0	0	0	0	23	0	0	2	5	9	7	0	0	0	0	0	0	0	0	0	0	0	0	22	28.2
1000	0	17	1	2	0	0	0	0	0	0	0	0	20	0	0	0	4	8	7	1	0	0	0	0	0	0	0	0	0	0	0	23.3	26.4
1100	0	16	0	1	0	0	0	0	0	0	0	0	17	0	0	1	2	12	1	1	0	0	0	0	0	0	0	0	0	0	0	22.4	24.4
1200	0	17	0	1	0	0	0	0	0	0	0	0	18	0	0	0	1	12	5	0	0	0	0	0	0	0	0	0	0	0	0	22.9	25.1
1300	0	17	0	3	0	0	0	0	0	0	0	0	20	0	0	1	1	12	5	1	0	0	0	0	0	0	0	0	0	0	0	23.9	27.1
1400	1	23	0	6	0	0	0	0	0	0	0	0	30	0	0	1	4	13	10	2	0	0	0	0	0	0	0	0	0	0	0	23.8	27.7
1500	0	22	1	7	0	0	0	0	0	0	0	0	30	0	0	1	2	13	14	0	0	0	0	0	0	0	0	0	0	0	0	24.4	28
1600	0	17	0	2	0	0	0	0	0	0	0	0	19	0	0	0	1	9	8	1	0	0	0	0	0	0	0	0	0	0	0	25	27.1
1700	2	13	0	1	0	0	0	0	0	0	0	0	16	0	1	1	1	5	8	0	0	0	0	0	0	0	0	0	0	0	0	23	27.1
1800	0	12	0	1	0	0	0	0	0	0	0	0	13	0	0	0	1	7	3	1	1	0	0	0	0	0	0	0	0	0	0	25.9	28.9
1900	0	4	0	1	0	0	0	0	0	0	0	0	5	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	25.9	-
2000	0	3	0	1	0	0	0	0	0	0	0	0	4	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	24.6	-
2100	0	6	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	1	2	1	1	0	0	0	1	0	0	0	0	0	0	34.4	-
2200	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	31.4	-
2300	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	45.2	-
08-09	0	26	0	4	0	0	0	0	0	0	0	0	30	0	0	1	5	16	7	0	1	0	0	0	0	0	0	0	0	0	0	23.5	27.3
17-18	2	13	0	1	0	0	0	0	0	0	0	0	16	0	1	1	1	5	8	0	0	0	0	0	0	0	0	0	0	0	0	23	27.1
10-16	1	112	2	20	0	0	0	0	0	0	0	0	135	0	0	4	14	70	42	5	0	0	0	0	0	0	0	0	0	0	0	23.6	27.5
00-05	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18.4	-
00-00	3	243	2	35	0	1	0	0	0	0	0	0	284	0	1	9	32	131	91	14	4	0	1	0	1	0	0	0	0	0	0	24.1	27.7

Lower Pennington Lane - South

NORTHBOUND

Report Id - CustomList-174
Site Name - Lower Pennington 2
Description - Lower Pennington South
Direction - AB

MODAL
modaldata.com

13 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	23.3	-
0500	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	29.8	-
0600	0	17	0	0	0	0	0	0	0	0	0	0	17	0	0	0	1	4	7	5	0	0	0	0	0	0	0	0	0	0	0	27.1	31.3
0700	0	11	0	0	0	0	0	0	0	0	0	0	11	0	0	0	3	3	3	1	0	1	0	0	0	0	0	0	0	0	0	25.4	29.5
0800	2	22	0	4	0	0	0	0	0	0	0	0	28	0	0	3	0	15	8	1	1	0	0	0	0	0	0	0	0	0	0	24.2	29.5
0900	0	21	0	1	0	0	0	0	0	0	0	0	22	0	0	0	3	9	9	1	0	0	0	0	0	0	0	0	0	0	0	24.7	29.3
1000	0	14	0	1	0	0	0	0	0	0	0	0	15	0	0	0	2	7	4	1	1	0	0	0	0	0	0	0	0	0	0	24.2	29.3
1100	0	11	0	4	0	0	0	0	0	0	0	0	15	0	0	2	2	4	6	0	1	0	0	0	0	0	0	0	0	0	0	23.2	28
1200	0	12	0	1	0	0	0	0	0	0	0	0	13	0	0	1	4	4	3	1	0	0	0	0	0	0	0	0	0	0	0	22.1	26.4
1300	0	11	0	4	0	0	0	0	0	0	0	0	15	0	0	0	1	4	8	1	1	0	0	0	0	0	0	0	0	0	0	26.1	28.4
1400	0	19	1	1	0	0	0	0	0	0	0	0	21	0	0	0	0	6	10	4	1	0	0	0	0	0	0	0	0	0	0	27.4	31.5
1500	0	21	0	3	0	0	0	0	0	0	0	0	24	0	1	2	4	9	6	1	1	0	0	0	0	0	0	0	0	0	0	22.8	29.1
1600	0	14	0	3	0	0	0	0	0	0	0	0	17	0	0	0	2	8	5	2	0	0	0	0	0	0	0	0	0	0	0	24.5	27.5
1700	1	11	0	3	0	0	0	0	0	0	0	0	15	0	1	1	1	4	6	2	0	0	0	0	0	0	0	0	0	0	0	24.1	29.5
1800	0	10	0	0	0	0	0	0	0	0	0	0	10	0	0	0	1	4	3	2	0	0	0	0	0	0	0	0	0	0	0	26.1	-
1900	1	4	0	0	0	0	0	0	0	0	0	0	5	0	0	1	0	1	2	0	1	0	0	0	0	0	0	0	0	0	0	25.9	-
2000	0	6	0	2	0	0	0	0	0	0	0	0	8	0	0	0	1	3	1	0	1	1	1	0	0	0	0	0	0	0	0	30.9	-
2100	0	1	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	27.6	-
2200	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	32	-
2300	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	21.4	-
08-09	2	22	0	4	0	0	0	0	0	0	0	0	28	0	0	3	0	15	8	1	1	0	0	0	0	0	0	0	0	0	0	24.2	29.5
17-18	1	11	0	3	0	0	0	0	0	0	0	0	15	0	1	1	1	4	6	2	0	0	0	0	0	0	0	0	0	0	0	24.1	29.5
10-16	0	88	1	14	0	0	0	0	0	0	0	0	103	0	1	5	13	34	37	8	5	0	0	0	0	0	0	0	0	0	0	24.4	29.3
00-05	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	23.3	-
00-00	4	212	1	28	0	0	0	0	0	0	0	0	245	0	2	10	26	89	82	24	8	3	1	0	0	0	0	0	0	0	0	25	29.8

Lower Pennington Lane - South							NORTHBOUND																										

Report Id - CustomList-174
Site Name - Lower Pennington 2
Description - Lower Pennington South
Direction - AB

MODAL

modaldata.com

14 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	24.3	-
0500	0	2	0	1	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	27	-
0600	0	9	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	6	2	1	0	0	0	0	0	0	0	0	0	0	29.3	-
0700	0	13	0	1	0	0	0	0	0	0	0	0	14	0	0	0	3	3	7	1	0	0	0	0	0	0	0	0	0	0	0	24.7	29.3
0800	0	25	0	1	0	0	0	0	0	0	0	0	26	0	0	0	5	5	13	3	0	0	0	0	0	0	0	0	0	0	0	25.3	29.3
0900	1	23	0	2	0	0	0	0	0	0	0	0	26	0	0	1	1	14	7	2	1	0	0	0	0	0	0	0	0	0	0	24.6	27.5
1000	1	20	0	5	0	0	0	0	0	0	0	0	26	0	1	1	2	12	8	2	0	0	0	0	0	0	0	0	0	0	0	22.9	28
1100	1	9	0	0	0	0	0	0	0	0	0	0	10	0	0	1	2	1	4	2	0	0	0	0	0	0	0	0	0	0	0	24.4	-
1200	1	15	0	2	0	0	0	0	0	0	0	0	18	0	1	0	2	6	8	1	0	0	0	0	0	0	0	0	0	0	0	24.5	28.4
1300	0	18	0	3	0	0	0	0	0	0	0	0	21	0	0	1	3	9	4	4	0	0	0	0	0	0	0	0	0	0	0	24.2	30
1400	0	19	0	2	0	0	0	0	0	0	0	0	21	0	0	1	3	7	6	4	0	0	0	0	0	0	0	0	0	0	0	24.7	30
1500	1	17	0	0	0	0	0	0	0	0	0	0	18	0	0	1	1	6	6	2	1	0	1	0	0	0	0	0	0	0	0	26.7	31.1
1600	0	15	0	4	0	0	0	0	0	0	0	0	19	0	0	2	2	5	9	1	0	0	0	0	0	0	0	0	0	0	0	23.9	28.2
1700	1	12	0	1	0	0	0	0	0	0	0	0	14	0	1	0	1	6	6	0	0	0	0	0	0	0	0	0	0	0	0	23.4	26.4
1800	1	10	0	0	0	0	0	0	0	0	0	0	11	0	0	1	0	4	5	1	0	0	0	0	0	0	0	0	0	0	0	24.8	28.2
1900	0	7	0	1	0	0	0	0	0	0	0	0	8	0	0	0	1	4	2	1	0	0	0	0	0	0	0	0	0	0	0	24.3	-
2000	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	26.6	-
2100	0	9	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	4	3	2	0	0	0	0	0	0	0	0	0	0	0	26.9	-
2200	0	7	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	2	5	0	0	0	0	0	0	0	0	0	0	0	0	27.5	-
2300	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	31.3	-
08-09	0	25	0	1	0	0	0	0	0	0	0	0	26	0	0	0	5	5	13	3	0	0	0	0	0	0	0	0	0	0	0	25.3	29.3
17-18	1	12	0	1	0	0	0	0	0	0	0	0	14	0	1	0	1	6	6	0	0	0	0	0	0	0	0	0	0	0	0	23.4	26.4
10-16	4	98	0	12	0	0	0	0	0	0	0	0	114	0	2	5	13	41	36	15	1	0	1	0	0	0	0	0	0	0	0	24.4	29.5
00-05	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	24.3	-
00-00	7	238	0	23	0	0	0	0	0	0	0	0	268	0	3	9	27	91	103	30	3	0	2	0	0	0	0	0	0	0	0	24.9	29.5

Lower Pennington Lane - South													NORTHBOUND																			

Report Id - CustomList-174
Site Name - Lower Pennington 2
Description - Lower Pennington South
Direction - AB

MODAL

modaldata.com

15 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	28.2	-
0500	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	29.9	-
0600	0	11	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	2	7	1	1	0	0	0	0	0	0	0	0	0	0	28.4	29.3
0700	1	18	0	2	0	0	0	0	0	0	0	0	21	0	1	0	0	7	9	2	2	0	0	0	0	0	0	0	0	0	0	26.2	30.2
0800	1	18	0	1	0	0	0	0	0	0	0	0	20	0	0	1	0	7	8	4	0	0	0	0	0	0	0	0	0	0	0	25.5	30.4
0900	1	22	0	4	0	0	0	0	0	0	0	0	27	0	1	0	3	8	13	2	0	0	0	0	0	0	0	0	0	0	0	24.3	27.1
1000	0	21	0	3	0	0	0	0	0	0	0	0	24	0	0	1	3	7	9	4	0	0	0	0	0	0	0	0	0	0	0	25.1	29.8
1100	0	16	1	3	0	0	0	0	0	0	0	0	20	0	0	0	5	9	6	0	0	0	0	0	0	0	0	0	0	0	0	23.2	26.6
1200	0	14	0	2	0	0	0	0	0	0	0	0	16	0	0	0	2	11	2	1	0	0	0	0	0	0	0	0	0	0	0	24	25.9
1300	0	18	1	2	0	0	0	0	0	0	0	0	21	0	1	0	2	8	8	2	0	0	0	0	0	0	0	0	0	0	0	24.2	28.4
1400	1	19	0	1	0	0	0	0	0	0	0	0	21	0	0	1	2	6	9	3	0	0	0	0	0	0	0	0	0	0	0	24.8	29.8
1500	0	26	0	3	0	0	0	0	0	0	0	0	29	0	0	1	1	13	8	5	1	0	0	0	0	0	0	0	0	0	0	25.9	31.3
1600	0	29	0	1	0	0	0	0	0	0	0	0	30	0	0	0	3	10	13	3	1	0	0	0	0	0	0	0	0	0	0	25.6	28.6
1700	1	11	0	1	0	0	0	0	0	0	0	0	13	0	1	0	0	4	8	0	0	0	0	0	0	0	0	0	0	0	0	24.5	27.3
1800	0	16	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	5	8	1	1	0	1	0	0	0	0	0	0	0	0	28.8	34
1900	0	11	0	1	0	0	0	0	0	0	0	0	12	0	0	0	1	4	3	3	1	0	0	0	0	0	0	0	0	0	0	27.7	34
2000	0	6	0	0	0	0	0	0	0	0	0	0	6	0	0	0	1	3	0	2	0	0	0	0	0	0	0	0	0	0	0	24.2	-
2100	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	27.5	-
2200	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	2	1	1	1	0	0	0	0	0	0	0	0	0	0	28.5	-
2300	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	1	3	0	0	1	0	0	0	0	0	0	0	0	0	29.1	-
08-09	1	18	0	1	0	0	0	0	0	0	0	0	20	0	0	1	0	7	8	4	0	0	0	0	0	0	0	0	0	0	0	25.5	30.4
17-18	1	11	0	1	0	0	0	0	0	0	0	0	13	0	1	0	0	4	8	0	0	0	0	0	0	0	0	0	0	0	0	24.5	27.3
10-16	1	114	2	14	0	0	0	0	0	0	0	0	131	0	1	3	15	54	42	15	1	0	0	0	0	0	0	0	0	0	0	24.6	28.9
00-05	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	28.2	-
00-00	5	274	2	24	0	0	0	0	0	0	0	0	305	0	4	4	23	108	120	36	8	1	1	0	0	0	0	0	0	0	0	25.5	29.8

Lower Pennington Lane - South NORTHBOUND

Report Id - CustomList-174
Site Name - Lower Pennington 2
Description - Lower Pennington South
Direction - AB

MODAL
modaldata.com

16 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	1	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	23.8	-
0100	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	3	1	0	1	0	0	0	0	0	0	0	0	0	0	26.4	-
0200	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	28.7	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	25.3	-
0600	0	4	0	2	0	1	0	0	0	0	0	0	7	0	0	1	0	1	4	0	0	1	0	0	0	0	0	0	0	0	0	26.4	-
0700	1	7	0	0	0	0	0	0	0	0	0	0	8	0	1	0	0	3	2	2	0	0	0	0	0	0	0	0	0	0	0	24.7	-
0800	0	15	0	2	0	0	0	0	0	0	0	0	17	0	0	0	0	7	7	3	0	0	0	0	0	0	0	0	0	0	0	25.9	29.5
0900	0	22	1	1	0	0	0	0	0	0	0	0	24	0	0	0	4	11	7	2	0	0	0	0	0	0	0	0	0	0	0	24.1	28
1000	2	28	0	3	0	0	0	0	0	0	0	0	33	0	0	4	6	12	8	3	0	0	0	0	0	0	0	0	0	0	0	22.7	27.7
1100	2	31	0	2	0	0	0	0	0	0	0	0	35	0	0	2	1	16	12	3	1	0	0	0	0	0	0	0	0	0	0	24.4	28.2
1200	1	16	0	1	0	0	0	0	0	0	0	0	18	0	0	1	1	10	2	4	0	0	0	0	0	0	0	0	0	0	0	24.2	30.2
1300	0	29	0	1	0	0	0	0	0	0	0	0	30	0	0	0	1	13	15	1	0	0	0	0	0	0	0	0	0	0	0	24.9	28
1400	0	28	0	0	0	0	0	0	0	0	0	0	28	0	0	1	3	13	9	2	0	0	0	0	0	0	0	0	0	0	0	24.1	28
1500	0	20	0	3	0	0	0	0	0	0	0	0	23	0	1	1	3	10	6	2	0	0	0	0	0	0	0	0	0	0	0	22.8	26.8
1600	1	11	0	0	0	0	0	0	0	0	0	0	12	0	1	0	1	2	4	4	0	0	0	0	0	0	0	0	0	0	0	25.4	30.4
1700	0	15	0	2	0	0	0	0	0	0	0	0	17	0	0	1	2	8	4	2	0	0	0	0	0	0	0	0	0	0	0	24.4	27.5
1800	0	8	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	2	3	2	1	0	0	0	0	0	0	0	0	0	0	29.7	-
1900	0	7	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	3	2	2	0	0	0	0	0	0	0	0	0	0	0	27.3	-
2000	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	29.2	-
2100	1	4	0	0	0	0	0	0	0	0	0	0	5	0	0	1	1	0	2	1	0	0	0	0	0	0	0	0	0	0	0	23.5	-
2200	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	25.1	-
2300	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	26.5	-
08-09	0	15	0	2	0	0	0	0	0	0	0	0	17	0	0	0	0	7	7	3	0	0	0	0	0	0	0	0	0	0	0	25.9	29.5
17-18	0	15	0	2	0	0	0	0	0	0	0	0	17	0	0	1	2	8	4	2	0	0	0	0	0	0	0	0	0	0	0	24.4	27.5
10-16	5	152	0	10	0	0	0	0	0	0	0	0	167	0	1	9	15	74	52	15	1	0	0	0	0	0	0	0	0	0	0	23.9	28
00-05	0	7	0	1	0	0	0	0	0	0	0	0	8	0	0	0	0	5	2	0	1	0	0	0	0	0	0	0	0	0	0	26	-
00-00	8	263	1	18	0	1	0	0	0	0	0	0	291	0	3	12	23	120	95	34	3	1	0	0	0	0	0	0	0	0	0	24.6	29.1

Lower Pennington Lane - South													NORTHBOUND																			

Report Id - CustomList-174
Site Name - Lower Pennington 2
Description - Lower Pennington South
Direction - AB

MODAL
modaldata.com

17 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	24.6	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	27.5	-
0400	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	22.1	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	0	4	0	1	0	0	0	0	0	0	0	0	5	0	0	0	1	0	1	2	1	0	0	0	0	0	0	0	0	0	0	29.2	-
0700	0	7	0	0	0	0	0	0	0	0	0	0	7	0	0	0	1	3	3	0	0	0	0	0	0	0	0	0	0	0	0	23.6	-
0800	0	8	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	3	5	0	0	0	0	0	0	0	0	0	0	0	0	25.8	-
0900	1	14	0	0	0	0	0	0	0	0	0	0	15	0	0	1	2	3	8	0	1	0	0	0	0	0	0	0	0	0	0	25.2	29.5
1000	4	26	0	0	0	0	0	0	0	0	0	0	30	0	1	3	3	8	12	3	0	0	0	0	0	0	0	0	0	0	0	23.6	28.9
1100	1	17	0	1	0	0	0	0	0	0	0	0	19	0	0	1	0	11	5	2	0	0	0	0	0	0	0	0	0	0	0	24.7	28
1200	0	22	0	1	0	0	0	0	0	0	0	0	23	0	0	2	5	10	5	1	0	0	0	0	0	0	0	0	0	0	0	21.8	26.8
1300	0	14	0	1	0	0	0	0	0	0	0	0	15	0	0	1	5	6	1	1	1	0	0	0	0	0	0	0	0	0	0	22.9	28.6
1400	1	13	0	0	0	0	0	0	0	0	0	0	14	0	0	1	0	4	7	1	1	0	0	0	0	0	0	0	0	0	0	25.7	28.6
1500	0	9	0	1	0	0	0	0	0	0	0	0	10	0	0	0	0	5	3	2	0	0	0	0	0	0	0	0	0	0	0	25.1	-
1600	1	11	0	1	0	0	0	0	0	0	0	0	13	0	1	1	3	5	3	0	0	0	0	0	0	0	0	0	0	0	0	21.1	25.1
1700	0	7	0	0	0	0	0	0	0	0	0	0	7	0	0	1	0	2	3	1	0	0	0	0	0	0	0	0	0	0	0	25.1	-
1800	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	30.4	-
1900	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	33.1	-
2000	0	1	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	33.2	-
2100	0	7	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	4	2	1	0	0	0	0	0	0	0	0	0	0	0	24.8	-
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2300	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	32.2	-
08-09	0	8	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	3	5	0	0	0	0	0	0	0	0	0	0	0	0	25.8	-
17-18	0	7	0	0	0	0	0	0	0	0	0	0	7	0	0	1	0	2	3	1	0	0	0	0	0	0	0	0	0	0	0	25.1	-
10-16	6	101	0	4	0	0	0	0	0	0	0	0	111	0	1	8	13	44	33	10	2	0	0	0	0	0	0	0	0	0	0	23.7	28.6
00-05	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	3	1	1	0	0	0	0	0	0	0	0	0	0	0	24.7	-
00-00	8	172	0	7	0	0	0	0	0	0	0	0	187	0	2	11	20	67	63	18	4	2	0	0	0	0	0	0	0	0	0	24.4	29.5

Lower Pennington Lane - South NORTHBOUND

MODAL
modaldata.com

Report Id - CustomList-174
Site Name - Lower Pennington 2
Description - Lower Pennington South
Direction - AB

18 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	26.9	-
0300	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	28.3	-
0400	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	33.8	-
0500	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	30.1	-
0600	0	8	0	2	1	0	0	0	0	0	0	0	11	0	0	1	0	3	5	1	1	0	0	0	0	0	0	0	0	0	0	26.7	28.9
0700	1	19	1	2	0	0	0	0	0	0	0	0	23	0	1	0	1	9	10	1	0	1	0	0	0	0	0	0	0	0	0	24.9	28.2
0800	1	12	0	2	0	0	0	0	0	0	0	0	15	0	0	2	1	1	6	5	0	0	0	0	0	0	0	0	0	0	0	26.3	31.5
0900	1	20	0	1	0	0	0	0	0	0	0	0	22	0	0	1	1	6	14	0	0	0	0	0	0	0	0	0	0	0	0	25.3	28.2
1000	0	11	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	4	4	2	0	1	0	0	0	0	0	0	0	0	0	27.8	30
1100	2	24	0	5	0	0	0	0	0	0	0	0	31	0	1	0	4	13	10	2	1	0	0	0	0	0	0	0	0	0	0	24.1	28.2
1200	2	22	0	1	0	0	0	0	0	0	0	0	25	0	1	1	6	9	6	2	0	0	0	0	0	0	0	0	0	0	0	22.4	27.3
1300	0	20	0	4	0	1	0	0	0	0	0	0	25	0	0	1	6	7	10	1	0	0	0	0	0	0	0	0	0	0	0	22.8	26.8
1400	0	22	0	3	0	0	0	0	0	0	0	0	25	0	0	0	2	11	9	3	0	0	0	0	0	0	0	0	0	0	0	25.2	28
1500	2	21	0	2	0	0	0	0	0	0	0	0	25	0	0	1	5	10	3	6	0	0	0	0	0	0	0	0	0	0	0	23.7	30.2
1600	1	25	1	3	0	0	0	0	0	0	0	0	30	0	1	1	2	3	17	5	1	0	0	0	0	0	0	0	0	0	0	26.2	31.3
1700	0	9	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	3	5	1	0	0	0	0	0	0	0	0	0	0	0	26.8	-
1800	1	7	0	0	0	0	0	0	0	0	0	0	8	0	0	1	1	1	5	0	0	0	0	0	0	0	0	0	0	0	0	23.4	-
1900	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	26.8	-
2000	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	1	3	1	0	0	0	0	0	0	0	0	0	0	31.6	-
2100	0	6	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	2	2	1	1	0	0	0	0	0	0	0	0	0	0	28.5	-
2200	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	34.7	-
2300	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	30.2	-
08-09	1	12	0	2	0	0	0	0	0	0	0	0	15	0	0	2	1	1	6	5	0	0	0	0	0	0	0	0	0	0	0	26.3	31.5
17-18	0	9	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	3	5	1	0	0	0	0	0	0	0	0	0	0	0	26.8	-
10-16	6	120	0	15	0	1	0	0	0	0	0	0	142	0	2	3	23	54	42	16	1	1	0	0	0	0	0	0	0	0	0	24	29.1
00-05	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	29.7	-
00-00	11	243	2	25	1	1	0	0	0	0	0	0	283	0	4	9	29	86	110	34	8	3	0	0	0	0	0	0	0	0	0	25.2	30

Lower Pennington Lane - South NORTHBOUND

Report Id - CustomList-174
Site Name - Lower Pennington 2
Description - Lower Pennington South
Direction - AB

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Grand Total

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
--	46	1645	8	160	1	3	0	0	0	0	0	0	1863	0	19	64	180	692	664	190	38	10	5	0	1	0	0	0	0	0	0	24.9	29.5

Lower Pennington Lane - South SOUTHBOUND

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Globals

Report Id	CustomList-174
Descriptor	Modal Dir2_(modified)
Created by	MetroCount Traffic Executive
Creation Time (UTC)	2017-12-20T14:19:34
Legal	Copyright (c)1997 - 2014 MetroCount
Graphic	header.bmp
Language	English
Country	United Kingdom
Time	UTC + 0 min
Create Version	4.0.6.0
Metric	Part metric
Speed Unit	mph
Length Unit	metre
Mass Unit	tonne

Dataset

Site Name	Lower Pennington 2
Site Attribute	[+51.477222 +0.000000]
File Name	S:\RGPL-012 Modal Data Limited\MetroCount\MTE 4.06\Data\Lower Pennington 2 0 2017-12-20 1414.EC0
File Type	Plus
Algorithm	Factory default axle
Description	**Lower Pennington South**
Lane	0
Direction	7
Direction Text	7 - North bound A]B, South bound B]A.
Layout Text	Axle sensors - Paired (Class/Speed/Count)
Setup Time	2017-12-11T09:43:31
Start Time	2017-12-11T09:43:31
Finish Time	2017-12-20T14:13:31
Operator	RM
Configuration	00000000 80 00 14 6a 6a 00 00 00 00 00 , Standard

Profile

Name	Default Profile
Title	MetroCount Traffic Executive
Graphic Logo	
Header	
Footer	
Percentile 1	85
Percentile 2	95
Pace	10
Filter Start	2017-12-12T00:00:00
Filter End	2017-12-19T00:00:00
Class Scheme	ARX
Low Speed	0
High Speed	90
Posted Limit	**30**
Speed Limits	
Separation	0.000
Separation Type	Headway
Direction	BA
Encoded Direction	15

Lower Pennington Lane - South													SOUTHBOUND																				
Report Id - CustomList-174																																	
Site Name - Lower Pennington 2																																	
Description - Lower Pennington South																																	
Direction - BA																																	
12 December 2017																																	
Time	**Cls 1**	**Cls 2**	**Cls 3**	**Cls 4**	**Cls 5**	**Cls 6**	**Cls 7**	**Cls 8**	**Cls 9**	**Cls 10**	**Cls 11**	**Cls 12**	**Total**	**Vbin 0 5**	**Vbin 5 10**	**Vbin 10 15**	**Vbin 15 20**	**Vbin 20 25**	**Vbin 25 30**	**Vbin 30 35**	**Vbin 35 40**	**Vbin 40 45**	**Vbin 45 50**	**Vbin 50 55**	**Vbin 55 60**	**Vbin 60 65**	**Vbin 65 70**	**Vbin 70 75**	**Vbin 75 80**	**Vbin 80 85**	**Vbin 85 90**	**Mean**	**Vpp 85**
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	30.2	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	24.1	-
0600	1	1	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	21.9	-
0700	0	6	0	4	0	0	0	0	0	0	0	0	10	0	0	0	1	5	1	2	1	0	0	0	0	0	0	0	0	0	0	25.9	-
0800	3	18	0	1	0	0	0	0	0	0	0	0	22	0	1	3	3	9	6	0	0	0	0	0	0	0	0	0	0	0	0	21.3	27.1
0900	0	20	0	2	0	1	0	0	0	0	0	0	23	0	0	1	1	12	6	3	0	0	0	0	0	0	0	0	0	0	0	24.6	29.5
1000	1	16	1	5	0	0	0	0	0	0	0	0	23	0	0	1	3	10	9	0	0	0	0	0	0	0	0	0	0	0	0	23.3	26.8
1100	0	18	0	1	0	0	0	0	0	0	0	0	19	0	0	0	2	7	10	0	0	0	0	0	0	0	0	0	0	0	0	24.8	27.3
1200	0	18	0	1	0	0	0	0	0	0	0	0	19	0	0	0	1	7	9	2	0	0	0	0	0	0	0	0	0	0	0	25.5	27.3
1300	1	20	0	4	0	0	0	0	0	0	0	0	25	0	1	3	2	6	11	2	0	0	0	0	0	0	0	0	0	0	0	23.3	28
1400	0	18	0	6	0	0	0	0	0	0	0	0	24	0	0	1	3	6	8	6	0	0	0	0	0	0	0	0	0	0	0	25.2	31.3
1500	0	20	1	7	0	0	0	0	0	0	0	0	28	0	0	1	2	9	14	2	0	0	0	0	0	0	0	0	0	0	0	24.9	28.9
1600	1	15	0	3	0	0	0	0	0	0	0	0	19	0	0	0	2	8	6	2	1	0	0	0	0	0	0	0	0	0	0	25.1	28.2
1700	1	23	0	2	0	0	0	0	0	0	0	0	26	0	1	1	2	8	9	4	1	0	0	0	0	0	0	0	0	0	0	25.5	30
1800	0	20	0	1	0	0	0	0	0	0	0	0	21	0	0	1	0	5	7	7	1	0	0	0	0	0	0	0	0	0	0	27.9	32.7
1900	1	8	0	1	0	0	0	0	0	0	0	0	10	0	1	0	0	3	4	2	0	0	0	0	0	0	0	0	0	0	0	25.8	-
2000	1	4	0	1	0	0	0	0	0	0	0	0	6	0	0	0	1	0	2	2	1	0	0	0	0	0	0	0	0	0	0	28.1	-
2100	0	10	0	0	0	0	0	0	0	0	0	0	10	0	0	0	1	4	3	1	0	0	0	0	1	0	0	0	0	0	0	28.5	-
2200	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	29.1	-
2300	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	34.2	-
08-09	3	18	0	1	0	0	0	0	0	0	0	0	22	0	1	3	3	9	6	0	0	0	0	0	0	0	0	0	0	0	0	21.3	27.1
17-18	1	23	0	2	0	0	0	0	0	0	0	0	26	0	1	1	2	8	9	4	1	0	0	0	0	0	0	0	0	0	0	25.5	30
10-16	2	110	2	24	0	0	0	0	0	0	0	0	138	0	1	6	13	45	61	12	0	0	0	0	0	0	0	0	0	0	0	24.5	28.4
00-05	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	30.2	-
00-00	10	246	2	39	0	1	0	0	0	0	0	0	298	0	4	13	24	100	109	40	7	0	0	0	1	0	0	0	0	0	0	25.1	30.2

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Lower Pennington Lane - South — SOUTHBOUND

Report Id - CustomList-174
Site Name - Lower Pennington 2
Description - Lower Pennington South
Direction - BA

modaldata.com

13 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	27.5	-
0500	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	26.8	-
0600	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	24.8	-
0700	0	8	0	3	0	0	0	0	0	0	0	0	11	0	0	0	2	2	5	2	0	0	0	0	0	0	0	0	0	0	0	25.8	28.6
0800	2	19	0	2	0	0	0	0	0	0	0	0	23	0	0	2	0	2	14	3	2	0	0	0	0	0	0	0	0	0	0	26.8	32.4
0900	0	12	0	2	0	0	0	0	0	0	0	0	14	0	0	0	2	5	3	4	0	0	0	0	0	0	0	0	0	0	0	25.2	31.1
1000	0	14	0	2	0	0	0	0	0	0	0	0	16	0	0	0	1	5	6	4	0	0	0	0	0	0	0	0	0	0	0	27.3	33.6
1100	1	15	0	3	0	0	0	0	0	0	0	0	19	0	0	2	1	5	10	0	0	1	0	0	0	0	0	0	0	0	0	25	28.2
1200	0	10	0	2	0	0	0	0	0	0	0	0	12	0	0	0	4	0	6	2	0	0	0	0	0	0	0	0	0	0	0	25.5	29.5
1300	0	12	0	2	0	0	0	0	0	0	0	0	14	0	0	0	0	4	5	4	1	0	0	0	0	0	0	0	0	0	0	27.5	32.9
1400	0	13	1	1	0	0	0	0	0	0	0	0	15	0	1	0	1	7	4	2	0	0	0	0	0	0	0	0	0	0	0	23.8	29.1
1500	1	22	0	4	0	0	0	0	0	0	0	0	27	0	0	0	4	7	12	4	0	0	0	0	0	0	0	0	0	0	0	25	29.5
1600	1	18	0	5	0	0	0	0	0	0	0	0	24	0	0	1	4	11	6	2	0	0	0	0	0	0	0	0	0	0	0	23.7	27.7
1700	2	20	0	1	0	0	0	0	0	0	0	0	23	0	0	1	2	6	9	5	0	0	0	0	0	0	0	0	0	0	0	25.8	30.2
1800	0	13	0	1	0	0	0	0	0	0	0	0	14	0	0	0	2	3	6	1	2	0	0	0	0	0	0	0	0	0	0	26.3	30
1900	0	8	0	1	0	0	0	0	0	0	0	0	9	0	0	0	0	3	6	0	0	0	0	0	0	0	0	0	0	0	0	26.3	-
2000	0	6	0	2	0	0	0	0	0	0	0	0	8	0	0	0	1	1	1	2	2	0	0	1	0	0	0	0	0	0	0	33.2	-
2100	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	27.5	-
2200	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	28.6	-
2300	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	26.5	-
08-09	2	19	0	2	0	0	0	0	0	0	0	0	23	0	0	2	0	2	14	3	2	0	0	0	0	0	0	0	0	0	0	26.8	32.4
17-18	2	20	0	1	0	0	0	0	0	0	0	0	23	0	0	1	2	6	9	5	0	0	0	0	0	0	0	0	0	0	0	25.8	30.2
10-16	2	86	1	14	0	0	0	0	0	0	0	0	103	0	1	2	11	28	43	16	1	1	0	0	0	0	0	0	0	0	0	25.6	30.4
00-05	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	27.5	-
00-00	7	206	1	31	0	0	0	0	0	0	0	0	245	0	1	6	26	64	100	39	7	1	0	1	0	0	0	0	0	0	0	25.9	30.4

Lower Pennington Lane - South **SOUTHBOUND**

Report Id - CustomList-174
Site Name - Lower Pennington 2
Description - Lower Pennington South
Direction - BA

MODAL
modaldata.com

14 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	40.6	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	25.4	-
0600	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	32.6	-
0700	0	8	0	2	0	0	0	0	0	0	0	0	10	0	0	0	0	3	4	3	0	0	0	0	0	0	0	0	0	0	0	27.9	-
0800	2	21	0	0	0	0	0	0	0	0	0	0	23	0	0	1	1	6	12	3	0	0	0	0	0	0	0	0	0	0	0	25.7	29.8
0900	1	19	0	1	0	0	0	0	0	0	0	0	21	0	0	1	1	8	10	1	0	0	0	0	0	0	0	0	0	0	0	24.6	28.4
1000	2	13	0	3	0	0	0	0	0	0	0	0	18	0	1	2	2	4	6	3	0	0	0	0	0	0	0	0	0	0	0	23.3	29.3
1100	0	18	0	3	0	0	0	0	0	0	0	0	21	0	0	1	2	4	10	4	0	0	0	0	0	0	0	0	0	0	0	25.8	30.9
1200	1	16	0	1	0	0	0	0	0	0	0	0	18	0	0	0	1	4	10	3	0	0	0	0	0	0	0	0	0	0	0	26.7	29.3
1300	0	13	0	3	0	0	0	0	0	0	0	0	16	0	0	0	3	5	7	1	0	0	0	0	0	0	0	0	0	0	0	24.7	28.4
1400	0	16	0	3	0	0	0	0	0	0	0	0	19	0	0	0	2	9	7	1	0	0	0	0	0	0	0	0	0	0	0	24.8	28.2
1500	2	15	0	0	0	0	0	0	0	0	0	0	17	0	0	1	2	5	6	1	1	1	0	0	0	0	0	0	0	0	0	25.8	29.8
1600	1	19	0	8	0	0	0	0	0	0	0	0	28	0	0	5	4	3	10	5	1	0	0	0	0	0	0	0	0	0	0	23.4	30.4
1700	2	19	0	3	0	0	0	0	0	0	0	0	24	0	1	2	1	9	5	5	1	0	0	0	0	0	0	0	0	0	0	24.6	30.6
1800	2	18	0	0	0	0	0	0	0	0	0	0	20	0	2	0	0	4	10	3	0	1	0	0	0	0	0	0	0	0	0	25.8	30
1900	0	7	0	2	0	0	0	0	0	0	0	0	9	0	0	0	1	3	2	2	0	0	0	1	0	0	0	0	0	0	0	28.4	-
2000	1	12	0	0	0	0	0	0	0	0	0	0	13	0	0	1	0	3	5	3	0	1	0	0	0	0	0	0	0	0	0	27.7	33.1
2100	0	11	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	4	4	3	0	0	0	0	0	0	0	0	0	0	31.7	35.1
2200	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	1	3	0	1	0	0	0	0	0	0	0	0	0	33.2	-
2300	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	31.5	-
08-09	2	21	0	0	0	0	0	0	0	0	0	0	23	0	0	1	1	6	12	3	0	0	0	0	0	0	0	0	0	0	0	25.7	29.8
17-18	2	19	0	3	0	0	0	0	0	0	0	0	24	0	1	2	1	9	5	5	1	0	0	0	0	0	0	0	0	0	0	24.6	30.6
10-16	5	91	0	13	0	0	0	0	0	0	0	0	109	0	1	4	12	31	46	13	1	1	0	0	0	0	0	0	0	0	0	25.2	29.3
00-05	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	40.6	-
00-00	14	235	0	29	0	0	0	0	0	0	0	0	278	0	4	14	20	71	110	46	6	6	0	1	0	0	0	0	0	0	0	25.8	31.5

Lower Pennington Lane - South **SOUTHBOUND**

MODAL
modaldata.com

Report Id - CustomList-174
Site Name - Lower Pennington 2
Description - Lower Pennington South
Direction - BA

15 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	32.1	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	28.7	-
0600	1	0	0	1	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	25.5	-
0700	0	11	0	3	0	0	0	0	0	0	0	0	14	0	0	0	1	4	6	3	0	0	0	0	0	0	0	0	0	0	0	26.9	32.4
0800	1	19	0	0	0	0	0	0	0	0	0	0	20	0	1	1	0	6	10	1	1	0	0	0	0	0	0	0	0	0	0	25.4	28.6
0900	0	25	0	3	0	0	0	0	0	0	0	0	28	0	0	1	2	10	8	7	0	0	0	0	0	0	0	0	0	0	0	25.2	30.6
1000	0	18	0	2	0	0	0	0	0	0	0	0	20	0	0	0	1	12	3	3	0	1	0	0	0	0	0	0	0	0	0	25.8	30.4
1100	7	17	0	3	0	0	0	0	0	0	0	0	27	0	1	4	4	4	12	2	0	0	0	0	0	0	0	0	0	0	0	22.7	28.4
1200	0	20	0	3	0	0	0	0	0	0	0	0	23	0	0	0	0	11	11	1	0	0	0	0	0	0	0	0	0	0	0	25.5	28.4
1300	0	19	0	1	0	0	0	0	0	0	0	0	20	0	0	0	0	6	9	5	0	0	0	0	0	0	0	0	0	0	0	27.3	30.9
1400	2	22	1	2	0	0	0	0	0	0	0	0	27	0	0	0	5	7	10	5	0	0	0	0	0	0	0	0	0	0	0	25.6	31.1
1500	1	28	0	4	0	0	0	0	0	0	0	0	33	0	0	1	2	4	10	16	0	0	0	0	0	0	0	0	0	0	0	28	31.8
1600	0	20	1	3	0	0	0	0	0	0	0	0	24	0	1	0	0	6	13	4	0	0	0	0	0	0	0	0	0	0	0	26.4	29.3
1700	3	22	0	2	0	0	0	0	0	0	0	0	27	0	0	1	3	9	8	5	1	0	0	0	0	0	0	0	0	0	0	25.6	31.1
1800	0	24	0	2	0	1	0	0	0	0	0	0	27	0	0	1	3	6	11	2	2	1	1	0	0	0	0	0	0	0	0	27.5	33.3
1900	0	8	0	1	0	0	0	0	0	0	0	0	9	0	0	0	0	0	6	2	1	0	0	0	0	0	0	0	0	0	0	29.2	-
2000	1	3	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	24.3	-
2100	0	4	0	2	0	0	0	0	0	0	0	0	6	0	0	0	1	1	4	0	0	0	0	0	0	0	0	0	0	0	0	26	-
2200	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	23.7	-
2300	0	8	0	2	0	0	0	0	0	0	0	0	10	0	0	0	1	1	5	2	0	1	0	0	0	0	0	0	0	0	0	27.8	-
08-09	1	19	0	0	0	0	0	0	0	0	0	0	20	0	1	1	0	6	10	1	1	0	0	0	0	0	0	0	0	0	0	25.4	28.6
17-18	3	22	0	2	0	0	0	0	0	0	0	0	27	0	0	1	3	9	8	5	1	0	0	0	0	0	0	0	0	0	0	25.6	31.1
10-16	10	124	1	15	0	0	0	0	0	0	0	0	150	0	1	5	12	44	55	32	0	1	0	0	0	0	0	0	0	0	0	25.9	31.1
00-05	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	32.1	-
00-00	16	275	2	34	0	1	0	0	0	0	0	0	328	0	4	10	23	92	129	59	7	3	1	0	0	0	0	0	0	0	0	26.1	31.1

Lower Pennington Lane - South SOUTHBOUND

Report Id - CustomList-174
Site Name - Lower Pennington 2
Description - Lower Pennington South
Direction - BA

MODAL
modaldata.com

16 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	24.9	-
0100	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	29.2	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	27.1	-
0600	1	1	0	2	0	0	0	0	0	0	0	0	4	0	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	18	-
0700	2	5	0	1	0	0	0	0	0	0	0	0	8	0	0	1	1	2	2	2	0	0	0	0	0	0	0	0	0	0	0	24.2	-
0800	1	19	0	0	0	0	0	0	0	0	0	0	20	0	0	0	1	6	9	4	0	0	0	0	0	0	0	0	0	0	0	26.7	30.6
0900	1	24	0	2	0	0	0	0	0	0	0	0	27	0	0	2	5	9	7	4	0	0	0	0	0	0	0	0	0	0	0	23.8	29.5
1000	3	23	0	3	0	0	0	0	0	0	0	0	29	0	1	2	6	6	10	3	1	0	0	0	0	0	0	0	0	0	0	23.4	29.8
1100	2	28	0	1	0	0	0	0	0	0	0	0	31	0	0	3	5	6	8	6	3	0	0	0	0	0	0	0	0	0	0	25.1	31.8
1200	2	20	0	2	0	1	0	0	0	0	0	0	25	0	0	1	3	6	11	4	0	0	0	0	0	0	0	0	0	0	0	25.2	29.5
1300	2	24	0	2	0	0	0	0	0	0	0	0	28	0	0	2	2	11	9	4	0	0	0	0	0	0	0	0	0	0	0	24.8	29.1
1400	5	27	0	0	0	0	0	0	0	0	0	0	32	0	1	5	3	9	13	0	1	0	0	0	0	0	0	0	0	0	0	22.3	27.3
1500	0	26	1	3	0	0	0	0	0	0	0	0	30	0	1	0	3	7	13	5	1	0	0	0	0	0	0	0	0	0	0	25.3	30.4
1600	0	16	0	1	0	0	0	0	0	0	0	0	17	0	0	0	1	5	3	7	1	0	0	0	0	0	0	0	0	0	0	27.8	31.1
1700	0	10	0	1	0	0	0	0	0	0	0	0	11	0	0	0	0	2	6	2	1	0	0	0	0	0	0	0	0	0	0	27.1	30.2
1800	0	13	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	5	5	3	0	0	0	0	0	0	0	0	0	0	0	27.2	32
1900	0	13	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	3	5	4	0	1	0	0	0	0	0	0	0	0	34	37.1
2000	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	35.2	-
2100	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	32.3	-
2200	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	29.3	-
2300	1	1	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	19.6	-
08-09	1	19	0	0	0	0	0	0	0	0	0	0	20	0	0	0	1	6	9	4	0	0	0	0	0	0	0	0	0	0	0	26.7	30.6
17-18	0	10	0	1	0	0	0	0	0	0	0	0	11	0	0	0	0	2	6	2	1	0	0	0	0	0	0	0	0	0	0	27.1	30.2
10-16	14	148	1	11	0	1	0	0	0	0	0	0	175	0	3	13	22	45	64	22	6	0	0	0	0	0	0	0	0	0	0	24.3	30
00-05	0	7	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	3	2	2	0	0	0	0	0	0	0	0	0	0	0	26.7	-
00-00	20	269	1	18	0	1	0	0	0	0	0	0	309	0	4	18	31	79	106	56	14	0	1	0	0	0	0	0	0	0	0	25.4	31.1

Lower Pennington Lane - South SOUTHBOUND

Report Id - CustomList-174
Site Name - Lower Pennington 2
Description - Lower Pennington South
Direction - BA

modaldata.com

17 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	25.5	-
0100	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	-
0200	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	24.9	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	29.2	-
0600	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	31.4	-
0700	1	11	0	0	0	0	0	0	0	0	0	0	12	0	0	1	1	3	5	2	0	0	0	0	0	0	0	0	0	0	0	25	28.2
0800	4	12	0	0	0	0	0	0	0	0	0	0	16	0	1	1	3	5	3	3	0	0	0	0	0	0	0	0	0	0	0	23.3	31.1
0900	2	9	0	0	0	0	0	0	0	0	0	0	11	0	0	1	1	8	1	0	0	0	0	0	0	0	0	0	0	0	0	21.4	24.6
1000	1	20	0	0	0	1	0	0	0	0	0	0	22	0	1	1	1	4	13	1	1	0	0	0	0	0	0	0	0	0	0	25.5	29.5
1100	0	20	0	1	0	0	0	0	0	0	0	0	21	0	0	0	1	9	9	2	0	0	0	0	0	0	0	0	0	0	0	25.3	28.9
1200	3	6	0	0	0	0	0	0	0	0	0	0	9	0	0	1	2	3	3	0	0	0	0	0	0	0	0	0	0	0	0	21.7	-
1300	0	14	0	2	0	0	0	0	0	0	0	0	16	0	0	0	2	6	8	0	0	0	0	0	0	0	0	0	0	0	0	24.6	28.2
1400	0	14	0	1	0	0	0	0	0	0	0	0	15	0	0	1	0	3	7	3	1	0	0	0	0	0	0	0	0	0	0	27.3	32.2
1500	2	13	0	1	0	0	0	0	0	0	0	0	16	0	0	1	1	1	9	3	1	0	0	0	0	0	0	0	0	0	0	26.8	30.9
1600	0	14	0	1	0	0	0	0	0	0	0	0	15	0	0	2	1	4	6	2	0	0	0	0	0	0	0	0	0	0	0	24.1	29.3
1700	0	7	0	1	0	0	0	0	0	0	0	0	8	0	0	0	0	4	3	0	1	0	0	0	0	0	0	0	0	0	0	26.1	-
1800	0	7	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	1	3	2	1	0	0	0	0	0	0	0	0	0	0	30.1	-
1900	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	32.9	-
2000	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	23.5	-
2100	0	9	0	0	0	0	0	0	0	0	0	0	9	0	0	0	3	2	3	1	0	0	0	0	0	0	0	0	0	0	0	24.5	-
2200	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	24.3	-
2300	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	35.8	-
08-09	4	12	0	0	0	0	0	0	0	0	0	0	16	0	1	1	3	5	3	3	0	0	0	0	0	0	0	0	0	0	0	23.3	31.1
17-18	0	7	0	1	0	0	0	0	0	0	0	0	8	0	0	0	0	4	3	0	1	0	0	0	0	0	0	0	0	0	0	26.1	-
10-16	6	87	0	5	0	1	0	0	0	0	0	0	99	0	1	4	7	26	49	9	3	0	0	0	0	0	0	0	0	0	0	25.5	29.5
00-05	1	5	0	0	0	0	0	0	0	0	0	0	6	0	0	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	23.9	-
00-00	14	171	0	8	0	1	0	0	0	0	0	0	194	0	2	9	17	57	80	20	6	3	0	0	0	0	0	0	0	0	0	25.3	29.8

Lower Pennington Lane - South SOUTHBOUND

Report Id - CustomList-174
Site Name - Lower Pennington 2
Description - Lower Pennington South
Direction - BA

modaldata.com

18 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	23.6	-
0100	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	26.2	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	31.1	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	28	-
0600	2	2	0	1	1	0	0	0	0	0	0	0	6	0	0	0	2	0	2	2	0	0	0	0	0	0	0	0	0	0	0	25.7	-
0700	0	8	1	0	0	0	0	0	0	0	0	0	9	0	0	1	1	1	3	3	0	0	0	0	0	0	0	0	0	0	0	26.3	-
0800	3	18	0	0	0	0	0	0	0	0	0	0	21	0	0	2	2	2	10	3	1	1	0	0	0	0	0	0	0	0	0	26.4	32.7
0900	2	15	0	0	0	0	0	0	0	0	0	0	17	0	0	3	1	2	9	2	0	0	0	0	0	0	0	0	0	0	0	24	27.7
1000	1	22	0	0	0	0	0	0	0	0	0	0	23	0	1	1	0	5	15	1	0	0	0	0	0	0	0	0	0	0	0	24.9	28.9
1100	1	13	0	6	0	1	0	0	0	0	0	0	21	0	0	0	2	5	11	3	0	0	0	0	0	0	0	0	0	0	0	26.5	29.8
1200	2	19	0	2	0	0	0	0	0	0	0	0	23	0	2	0	2	3	14	2	0	0	0	0	0	0	0	0	0	0	0	25.1	30
1300	1	18	0	7	0	0	0	0	0	0	0	0	26	0	0	1	3	8	9	4	1	0	0	0	0	0	0	0	0	0	0	25.3	30.6
1400	1	26	0	2	0	0	0	0	0	0	0	0	29	0	1	2	4	7	12	3	0	0	0	0	0	0	0	0	0	0	0	23.8	28.4
1500	4	24	0	4	0	0	0	0	0	0	0	0	32	0	0	1	3	7	14	5	2	0	0	0	0	0	0	0	0	0	0	26.4	31.5
1600	0	17	1	2	0	0	0	0	0	0	0	0	20	0	0	1	2	6	6	1	3	0	1	0	0	0	0	0	0	0	0	26.6	35.1
1700	1	22	0	1	0	0	0	0	0	0	0	0	24	0	0	0	1	6	11	6	0	0	0	0	0	0	0	0	0	0	0	27.5	32.2
1800	1	14	0	0	0	0	0	0	0	0	0	0	15	0	0	1	0	2	9	3	0	0	0	0	0	0	0	0	0	0	0	26.6	30.2
1900	0	6	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	1	4	0	0	1	0	0	0	0	0	0	0	0	0	29.1	-
2000	0	5	0	1	0	0	0	0	0	0	0	0	6	0	0	0	0	1	1	4	0	0	0	0	0	0	0	0	0	0	0	29.8	-
2100	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	38.3	-
2200	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	2	1	2	0	0	0	0	0	0	0	0	0	0	0	27.3	-
2300	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	29.8	-
08-09	3	18	0	0	0	0	0	0	0	0	0	0	21	0	0	2	2	2	10	3	1	1	0	0	0	0	0	0	0	0	0	26.4	32.7
17-18	1	22	0	1	0	0	0	0	0	0	0	0	24	0	0	0	1	6	11	6	0	0	0	0	0	0	0	0	0	0	0	27.5	32.2
10-16	10	122	0	21	0	1	0	0	0	0	0	0	154	0	4	5	14	35	75	18	3	0	0	0	0	0	0	0	0	0	0	25.3	29.8
00-05	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	26.9	-
00-00	19	243	2	26	1	1	0	0	0	0	0	0	292	0	4	13	23	60	134	45	8	3	2	0	0	0	0	0	0	0	0	26.1	31.5

Lower Pennington Lane - South   SOUTHBOUND

Report Id - CustomList-174
Site Name - Lower Pennington 2
Description - Lower Pennington South
Direction - BA

modaldata.com

Grand Total

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
--	100	1645	8	185	1	5	0	0	0	0	0	0	1944	0	23	83	164	523	768	305	55	16	4	2	1	0	0	0	0	0	0	25.7	30.9

Lower Pennington Lane - North NORTHBOUND

MODAL

modaldata.com

Globals

Report Id	CustomList-175
Descriptor	Modal Dir2_(modified)
Created by	MetroCount Traffic Executive
Creation Time (UTC)	2017-12-20T14:30:27
Legal	Copyright (c)1997 - 2014 MetroCount
Graphic	header.bmp
Language	English
Country	United Kingdom
Time	UTC + 0 min
Create Version	4.0.6.0
Metric	Part metric
Speed Unit	mph
Length Unit	metre
Mass Unit	tonne

Dataset

Site Name	1
Site Attribute	ATC 8
File Name	S:\RGPL-012 Modal Data Limited\MetroCount\MTE 4.06\Data\Lower Penn 1 1 0 2017-12-20 1425.EC0
File Type	Plus
Algorithm	Factory default axle
Description	**Lower Pennington Lane - North**
Lane	0
Direction	7
Direction Text	7 - North bound A]B, South bound B]A.
Layout Text	Axle sensors - Paired (Class/Speed/Count)
Setup Time	2017-12-11T09:41:35
Start Time	2017-12-11T09:41:35
Finish Time	2017-12-20T14:24:35
Operator	RM
Configuration	00000000 80 00 14 6a 6a 00 00 00 00 00 , Standard

Profile

Name	Default Profile
Title	MetroCount Traffic Executive
Graphic Logo	
Header	
Footer	
Percentile 1	85
Percentile 2	95
Pace	10
Filter Start	2017-12-12T00:00:00
Filter End	2017-12-19T00:00:00
Class Scheme	ARX
Low Speed	0
High Speed	90
Posted Limit	**30**
Speed Limits	
Separation	0.000
Separation Type	Headway
Direction	AB
Encoded Direction	15

Lower Pennington Lane - North — NORTHBOUND

Report Id - CustomList-175
Site Name - 1
Description - Lower Pennington Road - North
Direction - AB

MODAL
modaldata.com

12 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	21.6	-
0500	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	19.7	-
0600	0	9	0	0	2	0	0	0	0	0	0	0	11	0	0	0	2	7	2	0	0	0	0	0	0	0	0	0	0	0	0	22.2	23.5
0700	0	21	0	0	1	0	0	0	0	0	0	0	22	0	0	1	4	14	3	0	0	0	0	0	0	0	0	0	0	0	0	22.3	24.4
0800	1	35	0	4	4	0	0	0	0	0	0	0	44	0	1	4	13	17	8	1	0	0	0	0	0	0	0	0	0	0	0	20.6	24.8
0900	0	31	0	3	1	1	0	0	0	0	0	0	36	0	0	0	10	22	4	0	0	0	0	0	0	0	0	0	0	0	0	21.4	24.6
1000	0	37	0	5	1	0	0	0	0	0	0	0	43	0	1	5	7	25	4	1	0	0	0	0	0	0	0	0	0	0	0	21	23.3
1100	0	32	0	4	0	0	0	0	0	0	0	0	36	0	0	4	8	23	1	0	0	0	0	0	0	0	0	0	0	0	0	20.8	23.7
1200	0	35	0	4	3	0	0	0	0	0	0	0	42	0	0	1	10	24	7	0	0	0	0	0	0	0	0	0	0	0	0	22.1	24.8
1300	0	39	0	3	1	0	0	0	0	0	0	0	43	0	0	0	10	26	6	1	0	0	0	0	0	0	0	0	0	0	0	22.2	25.1
1400	1	48	0	3	0	0	0	0	0	0	0	0	52	0	1	0	10	36	4	1	0	0	0	0	0	0	0	0	0	0	0	21.7	24.4
1500	1	62	1	6	3	0	0	0	0	0	0	0	73	0	2	4	11	42	10	3	1	0	0	0	0	0	0	0	0	0	0	22.2	25.3
1600	0	47	0	1	0	0	0	0	0	0	0	0	48	0	0	2	10	29	6	1	0	0	0	0	0	0	0	0	0	0	0	22.1	24.6
1700	1	41	0	1	0	0	0	0	0	0	0	0	43	0	1	0	5	29	8	0	0	0	0	0	0	0	0	0	0	0	0	22.9	24.8
1800	0	17	0	0	2	0	0	0	0	0	0	0	19	0	0	0	4	8	4	3	0	0	0	0	0	0	0	0	0	0	0	24	27.1
1900	0	5	0	1	0	0	0	0	0	0	0	0	6	0	0	0	0	4	2	0	0	0	0	0	0	0	0	0	0	0	0	23.7	-
2000	0	5	0	1	1	0	0	0	0	0	0	0	7	0	0	0	0	4	2	1	0	0	0	0	0	0	0	0	0	0	0	25.4	-
2100	0	9	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	2	4	2	1	0	0	0	0	0	0	0	0	0	0	28.5	-
2200	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	0	2	1	0	0	0	0	0	0	0	0	0	0	0	26.2	-
2300	0	1	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	35.4	-
08-09	1	35	0	4	4	0	0	0	0	0	0	0	44	0	1	4	13	17	8	1	0	0	0	0	0	0	0	0	0	0	0	20.6	24.8
17-18	1	41	0	1	0	0	0	0	0	0	0	0	43	0	1	0	5	29	8	0	0	0	0	0	0	0	0	0	0	0	0	22.9	24.8
10-16	2	253	1	25	8	0	0	0	0	0	0	0	289	0	4	14	56	176	32	6	1	0	0	0	0	0	0	0	0	0	0	21.7	24.6
00-05	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	21.6	-
00-00	4	482	1	37	19	1	0	0	0	0	0	0	544	0	6	21	107	314	78	15	2	1	0	0	0	0	0	0	0	0	0	22.1	25.1

Lower Pennington Lane - North NORTHBOUND

Report Id - CustomList-175
Site Name - 1
Description - Lower Pennington Road - North
Direction - AB

modaldata.com

13 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	20.7	-
0500	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	30.4	-
0600	0	18	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	10	7	1	0	0	0	0	0	0	0	0	0	0	0	25.5	28.2
0700	0	18	0	0	1	0	0	0	0	0	0	0	19	0	0	0	4	9	5	1	0	0	0	0	0	0	0	0	0	0	0	23	25.7
0800	3	34	0	3	3	0	0	0	0	0	0	0	43	0	1	2	10	24	5	1	0	0	0	0	0	0	0	0	0	0	0	21.5	24.8
0900	0	36	0	2	0	0	0	0	0	0	0	0	38	0	0	1	6	26	4	1	0	0	0	0	0	0	0	0	0	0	0	22.3	23.9
1000	0	39	0	3	1	0	0	0	0	0	0	0	43	0	0	2	15	23	3	0	0	0	0	0	0	0	0	0	0	0	0	20.9	23.9
1100	0	29	0	6	1	0	0	0	0	0	0	0	36	0	1	1	6	23	4	1	0	0	0	0	0	0	0	0	0	0	0	21.8	24.8
1200	0	45	0	1	0	0	0	0	0	0	0	0	46	0	0	3	10	26	5	1	0	0	1	0	0	0	0	0	0	0	0	21.9	24.8
1300	0	60	0	4	0	0	0	0	0	0	0	0	64	0	1	2	30	27	3	1	0	0	0	0	0	0	0	0	0	0	0	19.9	23.5
1400	0	52	1	3	0	0	0	0	0	0	0	0	56	0	1	5	17	30	3	0	0	0	0	0	0	0	0	0	0	0	0	19.8	23.5
1500	0	58	0	3	1	0	0	0	0	0	0	0	62	0	0	1	12	38	10	0	1	0	0	0	0	0	0	0	0	0	0	22.3	25.9
1600	0	44	0	1	0	0	0	0	0	0	0	0	45	0	0	0	9	30	6	0	0	0	0	0	0	0	0	0	0	0	0	22.3	24.4
1700	0	29	0	3	1	0	0	0	0	0	0	0	33	0	0	2	10	17	4	0	0	0	0	0	0	0	0	0	0	0	0	20.9	23.7
1800	1	19	0	0	1	0	0	0	0	0	0	0	21	0	1	0	4	11	2	2	1	0	0	0	0	0	0	0	0	0	0	23	26.2
1900	1	7	0	0	0	0	0	0	0	0	0	0	8	0	0	1	3	0	1	2	1	0	0	0	0	0	0	0	0	0	0	24	-
2000	0	9	0	2	0	0	0	0	0	0	0	0	11	0	0	0	2	2	5	0	2	0	0	0	0	0	0	0	0	0	0	27.5	29.5
2100	0	10	0	1	0	0	0	0	0	0	0	0	11	0	0	0	3	6	2	0	0	0	0	0	0	0	0	0	0	0	0	22.5	23.9
2200	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	22.5	-
2300	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	21.8	-
08-09	3	34	0	3	3	0	0	0	0	0	0	0	43	0	1	2	10	24	5	1	0	0	0	0	0	0	0	0	0	0	0	21.5	24.8
17-18	0	29	0	3	1	0	0	0	0	0	0	0	33	0	0	2	10	17	4	0	0	0	0	0	0	0	0	0	0	0	0	20.9	23.7
10-16	0	283	1	20	3	0	0	0	0	0	0	0	307	0	3	14	90	167	28	3	1	0	1	0	0	0	0	0	0	0	0	21	24.2
00-05	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	20.7	-
00-00	5	519	1	32	9	0	0	0	0	0	0	0	566	0	5	20	143	310	70	12	5	0	1	0	0	0	0	0	0	0	0	21.8	25.1

Lower Pennington Lane - North NORTHBOUND

Report Id - CustomList-175
Site Name - 1
Description - Lower Pennington Road - North
Direction - AB

MODAL
modaldata.com

14 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	2	0	0	1	0	0	0	0	0	0	0	3	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	21	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	24.1	-
0500	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	23.1	-
0600	0	10	0	0	0	0	0	0	0	0	0	0	10	0	0	0	1	7	1	1	0	0	0	0	0	0	0	0	0	0	0	24.1	-
0700	0	14	0	2	2	0	0	0	0	0	0	0	18	0	0	0	3	8	6	1	0	0	0	0	0	0	0	0	0	0	0	23.4	25.3
0800	2	30	1	3	1	0	0	0	0	0	0	0	37	0	2	1	6	19	7	1	0	0	0	0	0	0	0	1	0	0	0	23.3	25.9
0900	1	39	0	3	2	0	0	0	0	0	0	0	45	0	0	2	5	27	9	2	0	0	0	0	0	0	0	0	0	0	0	22.6	25.5
1000	1	54	0	4	1	0	0	0	0	0	0	0	60	0	1	1	13	37	8	0	0	0	0	0	0	0	0	0	0	0	0	21.7	24.8
1100	1	40	0	3	1	0	0	0	0	0	0	0	45	0	1	2	9	23	9	1	0	0	0	0	0	0	0	0	0	0	0	22	25.1
1200	0	45	0	3	0	0	0	0	0	0	0	0	48	0	0	0	9	36	3	0	0	0	0	0	0	0	0	0	0	0	0	22.2	24.2
1300	0	51	0	4	3	0	0	0	0	0	0	0	58	0	0	2	14	33	8	1	0	0	0	0	0	0	0	0	0	0	0	22	24.6
1400	0	42	0	3	1	0	0	0	0	0	0	0	46	0	0	3	8	32	2	1	0	0	0	0	0	0	0	0	0	0	0	21.5	23.7
1500	0	51	0	0	1	0	0	0	0	0	0	0	52	0	0	1	8	32	7	3	1	0	0	0	0	0	0	0	0	0	0	23	26.6
1600	0	70	0	1	2	0	0	0	0	0	0	0	73	0	1	3	22	37	9	1	0	0	0	0	0	0	0	0	0	0	0	21.2	24.4
1700	1	36	0	1	0	0	0	0	0	0	0	0	38	0	2	2	20	10	4	0	0	0	0	0	0	0	0	0	0	0	0	19.5	23.3
1800	1	12	0	0	1	0	0	0	0	0	0	0	14	0	0	1	2	7	3	1	0	0	0	0	0	0	0	0	0	0	0	23.5	27.1
1900	0	10	0	1	0	0	0	0	0	0	0	0	11	0	0	0	1	7	1	1	1	0	0	0	0	0	0	0	0	0	0	24.3	27.1
2000	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	24.3	-
2100	0	13	0	0	0	0	0	0	0	0	0	0	13	0	0	0	1	12	0	0	0	0	0	0	0	0	0	0	0	0	0	23.2	23.9
2200	0	8	0	0	0	0	0	0	0	0	0	0	8	0	0	1	0	3	3	1	0	0	0	0	0	0	0	0	0	0	0	24.1	-
2300	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	26.7	-
08-09	2	30	1	3	1	0	0	0	0	0	0	0	37	0	2	1	6	19	7	1	0	0	0	0	0	0	0	1	0	0	0	23.3	25.9
17-18	1	36	0	1	0	0	0	0	0	0	0	0	38	0	2	2	20	10	4	0	0	0	0	0	0	0	0	0	0	0	0	19.5	23.3
10-16	2	283	0	17	7	0	0	0	0	0	0	0	309	0	2	9	61	193	37	6	1	0	0	0	0	0	0	0	0	0	0	22.1	24.8
00-05	0	3	0	0	1	0	0	0	0	0	0	0	4	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	21.8	-
00-00	7	540	1	28	16	0	0	0	0	0	0	0	592	0	7	19	124	340	83	15	2	1	0	0	0	0	0	1	0	0	0	22.2	25.1

Lower Pennington Lane - North **NORTHBOUND**

Report Id - CustomList-175
Site Name - 1
Description - Lower Pennington Road - North
Direction - AB

modaldata.com

15 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	34.2	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	32.8	-
0500	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	32.8	-
0600	0	11	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	1	5	5	0	0	0	0	0	0	0	0	0	0	0	29	31.1
0700	1	20	0	2	2	0	0	0	0	0	0	0	25	0	1	0	2	10	9	3	0	0	0	0	0	0	0	0	0	0	0	23.9	26.8
0800	0	34	0	1	1	0	0	0	0	0	0	0	36	0	0	2	6	23	3	2	0	0	0	0	0	0	0	0	0	0	0	22.3	24.8
0900	1	31	0	5	1	0	0	0	0	0	0	0	38	0	1	1	5	22	7	1	1	0	0	0	0	0	0	0	0	0	0	22.7	27.1
1000	0	38	0	3	0	0	0	0	0	0	0	0	41	0	0	0	4	24	11	2	0	0	0	0	0	0	0	0	0	0	0	23.3	25.9
1100	0	40	1	2	1	0	0	0	0	0	0	0	44	0	1	1	8	30	3	1	0	0	0	0	0	0	0	0	0	0	0	21.8	23.9
1200	0	40	0	1	2	0	0	0	0	0	0	0	43	0	0	0	10	24	4	3	0	0	0	2	0	0	0	0	0	0	0	24	27.3
1300	0	38	0	3	3	0	0	0	1	0	0	0	45	0	0	1	4	33	6	1	0	0	0	0	0	0	0	0	0	0	0	22.7	24.6
1400	1	40	0	0	2	0	0	0	0	0	0	0	43	0	0	2	12	23	6	0	0	0	0	0	0	0	0	0	0	0	0	21.6	24.6
1500	0	54	0	1	1	1	0	0	0	0	0	0	57	0	0	1	17	26	11	2	0	0	0	0	0	0	0	0	0	0	0	22.4	25.5
1600	0	62	0	1	2	1	0	0	0	0	0	0	66	0	2	1	22	30	8	0	1	2	0	0	0	0	0	0	0	0	0	21.9	25.1
1700	0	24	0	1	1	0	0	0	0	0	0	0	26	0	0	1	3	22	0	0	0	0	0	0	0	0	0	0	0	0	0	21.8	24.4
1800	0	25	0	0	0	0	0	0	0	0	0	0	25	0	0	1	1	14	7	1	1	0	0	0	0	0	0	0	0	0	0	24.1	26.2
1900	0	16	0	1	0	0	0	0	0	0	0	0	17	0	0	1	0	8	3	4	0	1	0	0	0	0	0	0	0	0	0	27.1	34.9
2000	0	31	0	0	0	0	0	0	0	0	0	0	31	0	0	1	11	16	1	2	0	0	0	0	0	0	0	0	0	0	0	20.8	23.5
2100	0	19	0	0	0	0	0	0	0	0	0	0	19	0	0	1	3	11	3	1	0	0	0	0	0	0	0	0	0	0	0	23.2	25.5
2200	0	7	0	0	0	0	0	0	0	0	0	0	7	0	0	1	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	23.1	-
2300	0	7	0	0	0	0	0	0	0	0	0	0	7	0	0	0	1	4	0	2	0	0	0	0	0	0	0	0	0	0	0	25.1	-
08-09	0	34	0	1	1	0	0	0	0	0	0	0	36	0	0	2	6	23	3	2	0	0	0	0	0	0	0	0	0	0	0	22.3	24.8
17-18	0	24	0	1	1	0	0	0	0	0	0	0	26	0	0	1	3	22	0	0	0	0	0	0	0	0	0	0	0	0	0	21.8	24.4
10-16	1	250	1	10	9	1	0	0	1	0	0	0	273	0	1	5	55	160	41	9	0	0	0	2	0	0	0	0	0	0	0	22.6	25.5
00-05	0	2	0	1	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	33.2	-
00-00	3	540	1	22	16	2	0	0	1	0	0	0	585	0	5	15	109	324	90	34	3	3	0	2	0	0	0	0	0	0	0	22.9	26.2

Lower Pennington Lane - North | **NORTHBOUND**

Report Id - CustomList-175
Site Name - 1
Description - Lower Pennington Road - North
Direction - AB

modaldata.com

16 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	1	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	20.7	-
0100	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	2	0	1	0	0	0	0	0	0	0	0	0	0	0	23.4	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	26.6	-
0600	0	5	0	3	0	0	0	0	0	0	0	0	8	0	0	0	2	3	2	0	1	0	0	0	0	0	0	0	0	0	0	24.5	-
0700	0	6	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	3	2	1	0	0	0	0	0	0	0	0	0	0	0	26.1	-
0800	0	23	0	1	1	0	0	0	0	0	0	0	25	0	1	0	2	16	3	1	0	0	1	0	1	0	0	0	0	0	0	25.3	28.4
0900	0	30	1	0	0	0	0	0	0	0	0	0	31	0	0	1	3	22	4	1	0	0	0	0	0	0	0	0	0	0	0	22.5	24.8
1000	0	36	0	2	1	0	0	0	0	0	0	0	39	0	0	1	11	14	10	3	0	0	0	0	0	0	0	0	0	0	0	22.9	26.2
1100	2	42	1	3	1	0	0	0	0	0	0	0	49	0	1	1	5	32	5	4	0	0	0	0	1	0	0	0	0	0	0	23.7	25.9
1200	1	24	0	1	0	0	0	0	0	0	0	0	26	0	0	2	4	16	3	1	0	0	0	0	0	0	0	0	0	0	0	21.7	23.7
1300	0	41	0	1	2	0	0	0	0	0	0	0	44	0	0	1	4	36	3	0	0	0	0	0	0	0	0	0	0	0	0	22.3	24.2
1400	0	37	0	0	1	0	0	0	0	0	0	0	38	0	0	1	8	22	6	1	0	0	0	0	0	0	0	0	0	0	0	22.2	25.1
1500	1	27	0	3	1	0	0	0	0	0	0	0	32	0	1	0	4	19	8	0	0	0	0	0	0	0	0	0	0	0	0	22.6	25.3
1600	1	18	0	0	0	0	0	0	0	0	0	0	19	0	1	0	5	7	5	1	0	0	0	0	0	0	0	0	0	0	0	22.2	25.3
1700	0	15	0	2	0	0	0	0	0	0	0	0	17	0	0	0	2	11	3	1	0	0	0	0	0	0	0	0	0	0	0	23	25.3
1800	0	17	0	0	0	0	0	0	0	0	0	0	17	0	0	1	1	12	2	1	0	0	0	0	0	0	0	0	0	0	0	23.1	24.2
1900	0	11	0	0	0	0	0	0	0	0	0	0	11	0	0	1	1	6	2	0	1	0	0	0	0	0	0	0	0	0	0	23.5	24.8
2000	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	27.2	-
2100	0	7	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	2	3	2	0	0	0	0	0	0	0	0	0	0	0	27.7	-
2200	0	8	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	7	1	0	0	0	0	0	0	0	0	0	0	0	0	22.5	-
2300	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	25.7	-
08-09	0	23	0	1	1	0	0	0	0	0	0	0	25	0	1	0	2	16	3	1	0	0	1	0	1	0	0	0	0	0	0	25.3	28.4
17-18	0	15	0	2	0	0	0	0	0	0	0	0	17	0	0	0	2	11	3	1	0	0	0	0	0	0	0	0	0	0	0	23	25.3
10-16	4	207	1	10	6	0	0	0	0	0	0	0	228	0	2	6	36	139	35	9	0	0	0	0	1	0	0	0	0	0	0	22.7	25.3
00-05	0	5	0	1	0	0	0	0	0	0	0	0	6	0	0	0	1	4	0	1	0	0	0	0	0	0	0	0	0	0	0	22.5	-
00-00	5	358	2	17	7	0	0	0	0	0	0	0	389	0	4	9	53	233	66	19	2	0	1	0	2	0	0	0	0	0	0	23.1	25.9

Lower Pennington Lane - North **NORTHBOUND**

Report Id - CustomList-175
Site Name - 1
Description - Lower Pennington Road - North
Direction - AB

MODAL

modaldata.com

17 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	26.5	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	27.8	-
0400	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	22.9	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	0	4	0	1	0	0	0	0	0	0	0	0	5	0	0	0	1	0	2	1	1	0	0	0	0	0	0	0	0	0	0	28.3	-
0700	0	9	0	0	0	0	0	0	0	0	0	0	9	0	0	0	1	8	0	0	0	0	0	0	0	0	0	0	0	0	0	21.7	-
0800	0	12	0	0	0	0	0	0	0	0	0	0	12	0	0	0	2	9	1	0	0	0	0	0	0	0	0	0	0	0	0	22.2	23.5
0900	0	13	0	0	1	0	0	0	0	0	0	0	14	0	0	0	2	8	3	1	0	0	0	0	0	0	0	0	0	0	0	23.7	26.4
1000	4	36	0	0	0	0	0	0	0	0	0	0	40	0	1	6	4	20	7	1	0	0	0	0	0	0	1	0	0	0	0	22.5	28
1100	3	24	0	1	1	0	0	0	0	0	0	0	29	0	1	6	6	13	2	1	0	0	0	0	0	0	0	0	0	0	0	19.1	23.9
1200	0	29	0	3	0	0	0	0	0	0	0	0	32	0	1	1	4	19	5	2	0	0	0	0	0	0	0	0	0	0	0	22.6	25.7
1300	0	20	0	1	1	0	0	0	0	0	0	0	22	0	0	1	2	11	7	1	0	0	0	0	0	0	0	0	0	0	0	23.7	27.7
1400	1	16	0	1	1	0	0	0	0	0	0	0	19	0	1	0	1	7	7	2	1	0	0	0	0	0	0	0	0	0	0	24.8	26.6
1500	1	15	0	1	1	0	0	0	0	0	0	0	18	0	0	1	3	13	1	0	0	0	0	0	0	0	0	0	0	0	0	21.6	24.4
1600	1	18	0	2	2	0	0	0	0	0	0	0	23	0	1	0	6	10	6	0	0	0	0	0	0	0	0	0	0	0	0	21.8	26.4
1700	0	8	0	1	0	0	0	0	0	0	0	0	9	0	0	0	5	3	0	1	0	0	0	0	0	0	0	0	0	0	0	20.9	-
1800	0	6	0	0	0	0	0	0	0	0	0	0	6	0	0	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	24.9	-
1900	0	6	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	2	2	1	0	1	0	0	0	0	0	0	0	0	0	29.3	-
2000	0	3	0	1	0	0	0	0	0	0	0	0	4	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	22.5	-
2100	0	9	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	6	3	0	0	0	0	0	0	0	0	0	0	0	0	23.6	-
2200	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	22.6	-
2300	0	1	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	34.4	-
08-09	0	12	0	0	0	0	0	0	0	0	0	0	12	0	0	0	2	9	1	0	0	0	0	0	0	0	0	0	0	0	0	22.2	23.5
17-18	0	8	0	1	0	0	0	0	0	0	0	0	9	0	0	0	5	3	0	1	0	0	0	0	0	0	0	0	0	0	0	20.9	-
10-16	9	140	0	7	4	0	0	0	0	0	0	0	160	0	4	15	20	83	29	7	1	0	0	0	0	0	1	0	0	0	0	22.2	26.4
00-05	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	3	1	1	0	0	0	0	0	0	0	0	0	0	0	26	-
00-00	10	235	0	13	7	0	0	0	0	0	0	0	265	0	5	15	40	135	52	14	2	1	0	0	0	0	1	0	0	0	0	22.8	26.6

Lower Pennington Lane - North NORTHBOUND

MODAL
modaldata.com

Report Id - CustomList-175
Site Name - 1
Description - Lower Pennington Road - North
Direction - AB

18 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	23.9	-
0300	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	27.9	-
0400	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	27.9	-
0500	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	23.3	-
0600	0	11	0	1	1	0	0	0	0	0	0	0	13	0	1	0	0	5	4	2	1	0	0	0	0	0	0	0	0	0	0	24.4	30.4
0700	1	27	1	1	1	0	0	0	0	0	0	0	31	0	1	3	6	15	5	0	1	0	0	0	0	0	0	0	0	0	0	21.3	25.5
0800	2	23	1	3	0	0	0	0	0	0	0	0	29	0	1	1	5	15	4	3	0	0	0	0	0	0	0	0	0	0	0	22.6	28
0900	1	31	0	4	1	0	0	0	0	0	0	0	37	0	0	1	10	22	4	0	0	0	0	0	0	0	0	0	0	0	0	21.8	23.7
1000	0	34	0	1	2	0	0	0	0	0	0	0	37	0	0	1	8	17	10	1	0	0	0	0	0	0	0	0	0	0	0	22.8	25.7
1100	1	36	0	5	4	0	0	0	0	0	0	0	46	0	0	2	3	30	10	1	0	0	0	0	0	0	0	0	0	0	0	23.1	25.5
1200	3	47	0	4	2	0	0	0	0	0	0	0	56	0	3	2	11	33	7	0	0	0	0	0	0	0	0	0	0	0	0	21.3	24.6
1300	0	41	0	5	0	1	0	0	0	0	0	0	47	0	0	5	12	26	4	0	0	0	0	0	0	0	0	0	0	0	0	20.7	23.7
1400	0	37	0	3	2	0	0	0	0	0	0	0	42	0	0	1	10	27	4	0	0	0	0	0	0	0	0	0	0	0	0	21.9	24.6
1500	3	64	0	2	0	0	0	0	0	0	0	0	69	0	1	4	23	35	5	1	0	0	0	0	0	0	0	0	0	0	0	20.7	23.5
1600	1	53	1	4	1	0	0	0	0	0	0	0	60	0	1	2	8	36	11	2	0	0	0	0	0	0	0	0	0	0	0	22.7	26.6
1700	0	26	0	1	1	0	0	0	0	0	0	0	28	0	0	1	5	18	3	1	0	0	0	0	0	0	0	0	0	0	0	22.3	24.8
1800	1	13	0	0	0	0	0	0	0	0	0	0	14	0	0	1	4	7	2	0	0	0	0	0	0	0	0	0	0	0	0	21.4	24.6
1900	0	7	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	5	2	0	0	0	0	0	0	0	0	0	0	0	0	23.7	-
2000	0	6	0	0	0	0	0	0	0	0	0	0	6	0	0	0	1	0	3	2	0	0	0	0	0	0	0	0	0	0	0	27.9	-
2100	0	7	0	0	0	0	0	0	0	0	0	0	7	0	0	0	1	3	2	1	0	0	0	0	0	0	0	0	0	0	0	24.8	-
2200	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	32.5	-
2300	0	6	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	4	2	0	0	0	0	0	0	0	0	0	0	0	0	24.8	-
08-09	2	23	1	3	0	0	0	0	0	0	0	0	29	0	1	1	5	15	4	3	0	0	0	0	0	0	0	0	0	0	0	22.6	28
17-18	0	26	0	1	1	0	0	0	0	0	0	0	28	0	0	1	5	18	3	1	0	0	0	0	0	0	0	0	0	0	0	22.3	24.8
10-16	7	259	0	20	10	1	0	0	0	0	0	0	297	0	4	15	67	168	40	3	0	0	0	0	0	0	0	0	0	0	0	21.6	24.8
00-05	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	26.6	-
00-00	13	478	3	34	15	1	0	0	0	0	0	0	544	0	8	24	107	303	84	15	2	1	0	0	0	0	0	0	0	0	0	22.2	25.5

Lower Pennington Lane - North NORTHBOUND

Report Id - CustomList-175
Site Name - 1
Description - Lower Pennington Road - North
Direction - AB

modaldata.com

Grand Total

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
--	47	3152	9	183	89	4	0	0	1	0	0	0	3485	0	40	123	683	1959	523	124	18	7	2	2	2	0	1	1	0	0	0	22.4	25.5

Lower Pennington Lane - North	SOUTHBOUND

modaldata.com

Globals

Report Id	CustomList-175
Descriptor	Modal Dir2_(modified)
Created by	MetroCount Traffic Executive
Creation Time (UTC)	2017-12-20T14:33:05
Legal	Copyright (c)1997 - 2014 MetroCount
Graphic	header.bmp
Language	English
Country	United Kingdom
Time	UTC + 0 min
Create Version	4.0.6.0
Metric	Part metric
Speed Unit	mph
Length Unit	metre
Mass Unit	tonne

Dataset

Site Name	1
Site Attribute	ATC 8
File Name	S:\RGPL-012 Modal Data Limited\MetroCount\MTE 4.06\Data\Lower Penn 1 1 0 2017-12-20 1425.EC0
File Type	Plus
Algorithm	Factory default axle
Description	**Lower Pennington Road - North**
Lane	0
Direction	7
Direction Text	7 - North bound A]B, South bound B]A.
Layout Text	Axle sensors - Paired (Class/Speed/Count)
Setup Time	2017-12-11T09:41:35
Start Time	2017-12-11T09:41:35
Finish Time	2017-12-20T14:24:35
Operator	RM
Configuration	00000000 80 00 14 6a 6a 00 00 00 00 00 , Standard

Profile

Name	Default Profile
Title	MetroCount Traffic Executive
Graphic Logo	
Header	
Footer	
Percentile 1	85
Percentile 2	95
Pace	10
Filter Start	2017-12-12T00:00:00
Filter End	2017-12-19T00:00:00
Class Scheme	ARX
Low Speed	0
High Speed	90
Posted Limit	**30**
Speed Limits	
Separation	0.000
Separation Type	Headway
Direction	BA
Encoded Direction	15

Lower Pennington Lane - North SOUTHBOUND

Report Id - CustomList-175
Site Name - 1
Description - Lower Pennington Road - North
Direction - BA

MODAL
modaldata.com

12 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	27	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	24.3	-
0600	0	6	0	0	0	0	0	0	0	0	0	0	6	0	0	0	1	4	1	0	0	0	0	0	0	0	0	0	0	0	0	22.8	-
0700	0	31	0	3	0	0	0	0	0	0	0	0	34	0	0	0	5	18	9	2	0	0	0	0	0	0	0	0	0	0	0	23.8	27.3
0800	1	69	0	2	0	0	0	0	0	0	0	0	72	0	0	2	13	37	20	0	0	0	0	0	0	0	0	0	0	0	0	22.6	25.7
0900	0	46	1	4	0	1	0	0	0	0	0	0	52	0	0	0	3	34	14	0	1	0	0	0	0	0	0	0	0	0	0	23.8	26.4
1000	2	53	1	6	0	0	0	0	0	0	0	0	62	0	0	2	11	34	14	1	0	0	0	0	0	0	0	0	0	0	0	22.3	25.7
1100	0	50	0	3	0	0	0	0	0	0	0	0	53	0	0	0	8	32	13	0	0	0	0	0	0	0	0	0	0	0	0	22.8	25.5
1200	1	45	0	3	0	0	0	0	0	0	0	0	49	0	1	1	10	18	18	1	0	0	0	0	0	0	0	0	0	0	0	23	27.5
1300	0	45	0	4	0	0	0	0	0	0	0	0	49	0	0	2	9	25	11	2	0	0	0	0	0	0	0	0	0	0	0	22.8	27.5
1400	1	40	0	5	0	0	0	0	0	0	0	0	46	0	0	2	11	19	9	5	0	0	0	0	0	0	0	0	0	0	0	22.8	26.6
1500	0	50	1	4	0	0	0	0	0	0	0	0	55	0	0	0	12	31	12	0	0	0	0	0	0	0	0	0	0	0	0	22.6	25.3
1600	1	34	0	2	0	0	0	0	0	0	0	0	37	0	0	1	4	19	12	1	0	0	0	0	0	0	0	0	0	0	0	23.5	26.4
1700	0	39	0	1	0	0	0	0	0	0	0	0	40	0	0	0	4	26	10	0	0	0	0	0	0	0	0	0	0	0	0	23.6	25.7
1800	0	25	0	1	0	0	0	0	0	0	0	0	26	0	0	0	1	12	12	1	0	0	0	0	0	0	0	0	0	0	0	24.8	28.4
1900	0	11	0	1	0	0	0	0	0	0	0	0	12	0	0	1	0	3	5	2	1	0	0	0	0	0	0	0	0	0	0	26.5	30
2000	0	8	0	1	0	0	0	0	0	0	0	0	9	0	0	0	0	3	5	1	0	0	0	0	0	0	0	0	0	0	0	26.9	-
2100	0	10	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	6	3	1	0	0	0	0	0	0	0	0	0	0	0	25.7	-
2200	0	7	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	26.7	-
2300	0	4	0	1	0	0	0	0	0	0	0	0	5	0	0	0	0	0	3	1	0	0	1	0	0	0	0	0	0	0	0	33.1	-
08-09	1	69	0	2	0	0	0	0	0	0	0	0	72	0	0	2	13	37	20	0	0	0	0	0	0	0	0	0	0	0	0	22.6	25.7
17-18	0	39	0	1	0	0	0	0	0	0	0	0	40	0	0	0	4	26	10	0	0	0	0	0	0	0	0	0	0	0	0	23.6	25.7
10-16	4	283	2	25	0	0	0	0	0	0	0	0	314	0	1	7	61	159	77	9	0	0	0	0	0	0	0	0	0	0	0	22.7	26.2
00-05	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	27	-
00-00	6	576	3	41	0	1	0	0	0	0	0	0	627	0	1	11	92	322	180	18	2	0	1	0	0	0	0	0	0	0	0	23.3	26.8

Lower Pennington Lane - North — SOUTHBOUND

Report Id - CustomList-175
Site Name - 1
Description - Lower Pennington Road - North
Direction - BA

modaldata.com

13 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	28.8	-
0500	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	23.1	-
0600	0	8	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	3	5	0	0	0	0	0	0	0	0	0	0	0	0	24.2	-
0700	0	31	0	2	0	0	0	0	0	0	0	0	33	0	0	1	4	17	9	2	0	0	0	0	0	0	0	0	0	0	0	23.5	26.8
0800	0	69	0	2	0	0	0	0	0	0	0	0	71	0	0	0	10	35	24	2	0	0	0	0	0	0	0	0	0	0	0	23.8	26.8
0900	0	42	0	4	0	0	0	0	0	0	0	0	46	0	0	1	11	23	9	2	0	0	0	0	0	0	0	0	0	0	0	22.5	26.6
1000	1	45	0	2	0	0	0	0	0	0	0	0	48	0	1	2	24	13	8	0	0	0	0	0	0	0	0	0	0	0	0	20.6	25.7
1100	1	51	0	2	0	0	0	0	0	0	0	0	54	0	2	3	11	21	15	1	1	0	0	0	0	0	0	0	0	0	0	22.5	26.6
1200	1	69	0	0	0	1	0	0	0	0	0	0	71	0	1	7	15	26	15	3	2	0	1	0	0	1	0	0	0	0	0	22.8	26.8
1300	1	29	0	2	0	0	0	0	0	0	0	0	32	0	3	1	18	8	2	0	0	0	0	0	0	0	0	0	0	0	0	18.5	22.4
1400	0	38	1	0	1	0	0	0	0	0	0	0	40	0	1	3	18	15	3	0	0	0	0	0	0	0	0	0	0	0	0	19.2	23
1500	1	40	0	3	0	0	0	0	0	0	0	0	44	0	0	0	10	24	8	1	1	0	0	0	0	0	0	0	0	0	0	23	25.5
1600	0	41	0	5	0	0	0	0	0	0	0	0	46	0	0	0	11	23	11	1	0	0	0	0	0	0	0	0	0	0	0	22.7	25.5
1700	1	32	0	0	0	0	0	0	0	0	0	0	33	0	0	2	2	12	16	1	0	0	0	0	0	0	0	0	0	0	0	23.9	26.8
1800	0	26	0	1	0	0	0	0	0	0	0	0	27	0	0	0	2	15	8	2	0	0	0	0	0	0	0	0	0	0	0	24.2	26.2
1900	0	12	0	1	0	0	0	0	0	0	0	0	13	0	0	1	2	5	5	0	0	0	0	0	0	0	0	0	0	0	0	22.5	26.6
2000	0	11	0	2	0	0	0	0	0	0	0	0	13	0	0	0	2	5	3	2	1	0	0	0	0	0	0	0	0	0	0	26.2	32.2
2100	0	8	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	24.5	-
2200	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	2	1	2	0	0	0	0	0	0	0	0	0	0	0	27.2	-
2300	0	6	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	4	2	0	0	0	0	0	0	0	0	0	0	0	0	24.2	-
08-09	0	69	0	2	0	0	0	0	0	0	0	0	71	0	0	0	10	35	24	2	0	0	0	0	0	0	0	0	0	0	0	23.8	26.8
17-18	1	32	0	0	0	0	0	0	0	0	0	0	33	0	0	2	2	12	16	1	0	0	0	0	0	0	0	0	0	0	0	23.9	26.8
10-16	5	272	1	9	1	1	0	0	0	0	0	0	289	0	8	16	96	107	51	5	4	0	1	0	0	1	0	0	0	0	0	21.4	25.9
00-05	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	28.8	-
00-00	6	567	1	26	1	1	0	0	0	0	0	0	602	0	8	21	140	257	148	21	5	0	1	0	0	1	0	0	0	0	0	22.6	26.6

Lower Pennington Lane - North SOUTHBOUND

Report Id - CustomList-175
Site Name - 1
Description - Lower Pennington Road - North
Direction - BA

MODAL
modaldata.com

14 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.5	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	36.6	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	25.7	-
0600	0	6	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	4	2	0	0	0	0	0	0	0	0	0	0	0	0	24.4	-
0700	0	30	0	1	0	0	0	0	0	0	0	0	31	0	0	0	1	12	15	3	0	0	0	0	0	0	0	0	0	0	0	25.5	28
0800	1	74	0	2	0	1	0	0	0	0	0	0	78	0	0	1	6	50	16	2	1	0	0	0	0	0	0	2	0	0	0	25	27.1
0900	1	67	0	4	0	0	0	0	0	0	0	0	72	0	0	2	6	46	15	3	0	0	0	0	0	0	0	0	0	0	0	23.6	26.4
1000	1	50	0	3	0	1	0	0	0	0	0	0	55	0	0	1	8	20	25	0	0	0	0	0	1	0	0	0	0	0	0	24.4	26.8
1100	0	54	0	2	0	0	0	0	0	0	0	0	56	0	0	0	9	34	12	1	0	0	0	0	0	0	0	0	0	0	0	23.4	26.8
1200	1	54	0	0	0	0	0	0	0	0	0	0	55	0	0	3	15	23	13	1	0	0	0	0	0	0	0	0	0	0	0	22.1	26.4
1300	0	42	0	6	0	0	0	0	0	0	0	0	48	0	0	2	9	24	11	2	0	0	0	0	0	0	0	0	0	0	0	22.6	26.2
1400	0	47	0	4	0	0	0	0	0	0	0	0	51	0	0	1	11	29	9	1	0	0	0	0	0	0	0	0	0	0	0	22.4	25.3
1500	2	38	0	0	0	0	0	0	0	0	0	0	40	0	0	5	7	19	6	3	0	0	0	0	0	0	0	0	0	0	0	22.4	25.9
1600	0	42	0	5	0	0	0	0	0	0	0	0	47	0	0	1	8	22	13	3	0	0	0	0	0	0	0	0	0	0	0	22.9	26.6
1700	0	31	0	1	0	0	0	0	0	0	0	0	32	0	0	2	4	15	10	1	0	0	0	0	0	0	0	0	0	0	0	23.1	27.1
1800	0	26	0	0	0	0	0	0	0	0	0	0	26	0	0	1	2	7	11	4	1	0	0	0	0	0	0	0	0	0	0	25.7	30.4
1900	0	12	0	2	0	0	0	0	0	0	0	0	14	0	0	0	0	7	6	0	1	0	0	0	0	0	0	0	0	0	0	25.5	27.1
2000	0	19	0	0	0	0	0	0	0	0	0	0	19	0	0	0	1	5	9	4	0	0	0	0	0	0	0	0	0	0	0	26.6	30
2100	0	16	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	1	10	4	1	0	0	0	0	0	0	0	0	0	0	28.7	30.9
2200	0	6	0	0	0	0	0	0	0	0	0	0	6	0	0	0	1	0	4	1	0	0	0	0	0	0	0	0	0	0	0	26.3	-
2300	0	2	0	1	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	28.4	-
08-09	1	74	0	2	0	1	0	0	0	0	0	0	78	0	0	1	6	50	16	2	1	0	0	0	0	0	0	2	0	0	0	25	27.1
17-18	0	31	0	1	0	0	0	0	0	0	0	0	32	0	0	2	4	15	10	1	0	0	0	0	0	0	0	0	0	0	0	23.1	27.1
10-16	4	285	0	15	0	1	0	0	0	0	0	0	305	0	0	12	59	149	76	8	0	0	0	0	1	0	0	0	0	0	0	22.9	26.4
00-05	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	24.5	-
00-00	6	621	0	31	0	2	0	0	0	0	0	0	660	0	0	20	88	320	189	35	5	0	0	0	1	0	0	2	0	0	0	23.9	27.1

Lower Pennington Lane - North														SOUTHBOUND																			

Report Id - CustomList-175
Site Name - 1
Description - Lower Pennington Road - North
Direction - BA

MODAL
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15 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.7	-
0100	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	27.5	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	24.9	-
0500	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	25.9	-
0600	1	8	0	0	0	0	0	0	0	0	0	0	9	0	0	1	5	1	2	0	0	0	0	0	0	0	0	0	0	0	0	19.7	-
0700	0	33	0	2	0	0	0	0	0	0	0	0	35	0	0	0	2	21	10	2	0	0	0	0	0	0	0	0	0	0	0	24.5	26.2
0800	1	65	0	1	0	0	0	0	0	0	0	0	67	0	0	1	4	32	27	3	0	0	0	0	0	0	0	0	0	0	0	24.3	26.8
0900	1	61	0	5	0	0	0	0	0	0	0	0	67	0	0	3	9	34	19	2	0	0	0	0	0	0	0	0	0	0	0	23.2	26.6
1000	0	44	0	2	0	0	0	0	0	0	0	0	46	0	0	0	15	22	8	1	0	0	0	0	0	0	0	0	0	0	0	22	26.4
1100	3	33	0	2	0	0	0	0	0	0	0	0	38	0	0	4	4	23	7	0	0	0	0	0	0	0	0	0	0	0	0	21.7	25.3
1200	0	56	0	3	0	0	0	0	0	0	0	0	59	0	0	0	5	34	16	1	0	0	0	3	0	0	0	0	0	0	0	25.4	27.1
1300	0	47	0	2	0	0	0	0	0	0	0	0	49	0	0	0	8	23	17	1	0	0	0	0	0	0	0	0	0	0	0	23.4	27.1
1400	2	43	1	2	0	0	0	0	0	0	0	0	48	0	0	1	7	21	18	1	0	0	0	0	0	0	0	0	0	0	0	23.6	27.7
1500	2	63	0	4	0	0	0	0	0	0	0	0	69	0	0	2	13	37	13	4	0	0	0	0	0	0	0	0	0	0	0	23	26.6
1600	0	40	1	4	0	0	0	0	0	0	0	0	45	0	0	1	4	29	9	0	0	2	0	0	0	0	0	0	0	0	0	24	26.4
1700	3	57	0	2	0	0	0	0	0	0	0	0	62	0	0	3	29	20	6	4	0	0	0	0	0	0	0	0	0	0	0	21.1	25.3
1800	1	36	0	2	0	0	0	0	0	0	0	0	39	0	1	3	11	11	10	2	0	1	0	0	0	0	0	0	0	0	0	22.6	27.5
1900	0	17	0	1	0	0	0	0	0	0	0	0	18	0	0	0	0	3	11	3	1	0	0	0	0	0	0	0	0	0	0	28	32
2000	0	10	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	4	4	2	0	0	0	0	0	0	0	0	0	0	0	25.8	-
2100	0	12	0	0	0	0	0	0	0	0	0	0	12	0	0	0	2	8	2	0	0	0	0	0	0	0	0	0	0	0	0	23.1	24.8
2200	0	8	0	0	0	1	0	0	0	0	0	0	9	0	0	1	2	4	0	1	0	0	0	1	0	0	0	0	0	0	0	25.7	-
2300	0	10	0	2	0	0	0	0	0	0	0	0	12	0	0	0	0	4	6	1	1	0	0	0	0	0	0	0	0	0	0	27.2	28.4
08-09	1	65	0	1	0	0	0	0	0	0	0	0	67	0	0	1	4	32	27	3	0	0	0	0	0	0	0	0	0	0	0	24.3	26.8
17-18	3	57	0	2	0	0	0	0	0	0	0	0	62	0	0	3	29	20	6	4	0	0	0	0	0	0	0	0	0	0	0	21.1	25.3
10-16	7	286	1	15	0	0	0	0	0	0	0	0	309	0	0	7	52	160	79	8	0	0	0	3	0	0	0	0	0	0	0	23.3	26.8
00-05	1	3	0	0	0	0	0	0	0	0	0	0	4	0	0	1	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	23	-
00-00	15	648	2	34	0	1	0	0	0	0	0	0	700	0	1	21	120	333	188	28	2	3	0	4	0	0	0	0	0	0	0	23.5	27.1

Lower Pennington Lane - North **SOUTHBOUND**

Report Id - CustomList-175
Site Name - 1
Description - Lower Pennington Road - North
Direction - BA

modaldata.com

16 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	22.1	-
0100	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	26.1	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	26.1	-
0600	1	2	0	2	0	0	0	0	0	0	0	0	5	0	0	1	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	22.6	-
0700	1	12	0	1	0	0	0	0	0	0	0	0	14	0	0	0	1	6	7	0	0	0	0	0	0	0	0	0	0	0	0	25.1	28.6
0800	1	30	0	0	0	0	0	0	0	0	0	0	31	0	1	0	3	13	9	2	1	0	0	0	2	0	0	0	0	0	0	26.4	28
0900	1	41	0	1	0	0	0	0	0	0	0	0	43	0	0	2	3	27	11	0	0	0	0	0	0	0	0	0	0	0	0	22.9	26.2
1000	2	34	0	4	0	0	0	0	0	0	0	0	40	0	0	3	8	17	11	1	0	0	0	0	0	0	0	0	0	0	0	22.6	26.6
1100	1	38	0	2	0	0	0	0	0	0	0	0	41	0	0	0	3	24	10	2	0	0	0	0	1	0	1	0	0	0	0	26.4	28.4
1200	2	38	0	2	0	0	0	0	0	0	0	0	42	0	0	3	8	20	10	1	0	0	0	0	0	0	0	0	0	0	0	22.2	26.6
1300	0	47	0	1	0	0	0	0	0	0	0	0	48	0	0	0	4	35	7	2	0	0	0	0	0	0	0	0	0	0	0	23.6	25.7
1400	3	46	0	0	0	0	0	0	0	0	0	0	49	0	1	3	4	31	8	2	0	0	0	0	0	0	0	0	0	0	0	22.5	25.1
1500	1	37	1	3	0	0	0	0	0	0	0	0	42	0	0	1	4	23	11	3	0	0	0	0	0	0	0	0	0	0	0	23.7	27.3
1600	0	32	0	0	0	0	0	0	0	0	0	0	32	0	0	0	4	17	9	2	0	0	0	0	0	0	0	0	0	0	0	24	26.4
1700	0	14	0	2	0	0	0	0	0	0	0	0	16	0	0	0	2	8	4	2	0	0	0	0	0	0	0	0	0	0	0	24.1	25.9
1800	0	24	0	0	0	0	0	0	0	0	0	0	24	0	0	0	3	13	6	2	0	0	0	0	0	0	0	0	0	0	0	23.9	26.4
1900	0	16	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	1	11	3	1	0	0	0	0	0	0	0	0	0	0	28.6	31.3
2000	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	2	2	1	0	0	0	0	0	0	0	0	0	0	0	26.5	-
2100	0	8	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	1	6	1	0	0	0	0	0	0	0	0	0	0	0	28.1	-
2200	0	6	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	4	2	0	0	0	0	0	0	0	0	0	0	0	0	25.4	-
2300	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	24.6	-
08-09	1	30	0	0	0	0	0	0	0	0	0	0	31	0	1	0	3	13	9	2	1	0	0	0	2	0	0	0	0	0	0	26.4	28
17-18	0	14	0	2	0	0	0	0	0	0	0	0	16	0	0	0	2	8	4	2	0	0	0	0	0	0	0	0	0	0	0	24.1	25.9
10-16	9	240	1	12	0	0	0	0	0	0	0	0	262	0	1	10	31	150	57	11	0	0	0	0	1	0	1	0	0	0	0	23.5	26.6
00-05	0	7	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	5	2	0	0	0	0	0	0	0	0	0	0	0	0	23.8	-
00-00	13	444	1	18	0	0	0	0	0	0	0	0	476	0	2	13	47	252	131	25	2	0	0	0	3	0	1	0	0	0	0	24.1	27.5

Lower Pennington Lane - North — SOUTHBOUND

Report Id - CustomList-175
Site Name - 1
Description - Lower Pennington Road - North
Direction - BA

17 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	22.7	-
0100	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	-
0200	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	21.6	-
0300	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	20.7	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	27	-
0600	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	26.5	-
0700	1	17	0	0	0	0	0	0	0	0	0	0	18	0	0	1	0	11	4	2	0	0	0	0	0	0	0	0	0	0	0	24.3	25.3
0800	4	21	0	0	0	0	0	0	0	0	0	0	25	0	1	1	5	12	5	1	0	0	0	0	0	0	0	0	0	0	0	22.2	25.3
0900	1	16	0	0	0	0	0	0	0	0	0	0	17	0	0	0	6	10	1	0	0	0	0	0	0	0	0	0	0	0	0	21.4	24.2
1000	0	31	0	0	0	1	0	0	0	0	0	0	32	0	0	1	2	12	9	4	0	1	0	0	1	0	2	0	0	0	0	28.5	30.9
1100	0	33	0	0	0	0	0	0	0	0	0	0	33	0	1	2	4	20	6	0	0	0	0	0	0	0	0	0	0	0	0	21.3	25.3
1200	1	19	0	0	0	0	0	0	0	0	0	0	20	0	0	0	4	8	7	1	0	0	0	0	0	0	0	0	0	0	0	22.8	25.3
1300	0	22	0	1	0	0	0	0	0	0	0	0	23	0	0	1	2	11	8	0	1	0	0	0	0	0	0	0	0	0	0	23.5	27.3
1400	0	25	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0	13	10	2	0	0	0	0	0	0	0	0	0	0	0	25.3	27.1
1500	1	21	0	2	0	0	0	0	0	0	0	0	24	0	0	1	2	13	7	1	0	0	0	0	0	0	0	0	0	0	0	23.8	27.5
1600	0	24	0	1	0	0	0	0	0	0	0	0	25	0	0	3	3	11	8	0	0	0	0	0	0	0	0	0	0	0	0	22.6	26.8
1700	0	15	0	1	0	0	0	0	0	0	0	0	16	0	0	0	2	8	5	1	0	0	0	0	0	0	0	0	0	0	0	23.9	28.9
1800	0	11	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	3	7	1	0	0	0	0	0	0	0	0	0	0	0	26.5	28.9
1900	0	10	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	3	3	2	2	0	0	0	0	0	0	0	0	0	0	28.2	-
2000	0	4	0	1	0	0	0	0	0	0	0	0	5	0	0	1	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	21.9	-
2100	0	10	0	0	0	0	0	0	0	0	0	0	10	0	1	0	0	6	1	2	0	0	0	0	0	0	0	0	0	0	0	23.9	-
2200	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	21.3	-
2300	0	2	0	1	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	27.9	-
08-09	4	21	0	0	0	0	0	0	0	0	0	0	25	0	1	1	5	12	5	1	0	0	0	0	0	0	0	0	0	0	0	22.2	25.3
17-18	0	15	0	1	0	0	0	0	0	0	0	0	16	0	0	0	2	8	5	1	0	0	0	0	0	0	0	0	0	0	0	23.9	28.9
10-16	2	151	0	3	0	1	0	0	0	0	0	0	157	0	1	5	14	77	47	8	1	1	0	0	1	0	2	0	0	0	0	24.3	27.3
00-05	1	6	0	0	0	0	0	0	0	0	0	0	7	0	0	0	1	5	1	0	0	0	0	0	0	0	0	0	0	0	0	21.6	-
00-00	9	291	0	7	0	1	0	0	0	0	0	0	308	0	3	11	31	151	87	18	3	1	0	0	1	0	2	0	0	0	0	24	27.3

Lower Pennington Lane - North SOUTHBOUND

Report Id - CustomList-175
Site Name - 1
Description - Lower Pennington Road - North
Direction - BA

modaldata.com

18 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	23.8	-
0100	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	26.6	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	24.1	-
0400	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	24.8	-
0500	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	24.1	-
0600	2	9	0	1	1	0	0	0	0	0	0	0	13	0	0	2	1	1	7	2	0	0	0	0	0	0	0	0	0	0	0	24	25.5
0700	0	36	2	0	0	0	0	0	0	0	0	0	38	0	0	1	3	19	12	3	0	0	0	0	0	0	0	0	0	0	0	24.4	28.2
0800	4	73	0	3	0	0	0	0	0	0	0	0	80	0	0	4	5	41	25	5	0	0	0	0	0	0	0	0	0	0	0	24	26.8
0900	0	49	0	3	0	0	0	0	0	0	0	0	52	0	0	0	2	31	18	1	0	0	0	0	0	0	0	0	0	0	0	24.2	26.4
1000	2	46	0	3	0	1	0	0	0	0	0	0	52	0	1	1	3	19	24	3	0	0	0	0	1	0	0	0	0	0	0	25	27.7
1100	1	29	0	8	0	2	0	0	0	0	0	0	40	0	0	2	6	17	12	2	0	0	0	0	0	0	0	1	0	0	0	24.8	28.6
1200	1	60	0	2	0	0	0	0	0	0	0	0	63	0	1	2	10	28	22	0	0	0	0	0	0	0	0	0	0	0	0	23	27.3
1300	1	44	0	9	0	0	0	0	0	0	0	0	54	0	1	2	15	22	11	3	0	0	0	0	0	0	0	0	0	0	0	22.1	26.4
1400	1	35	0	2	0	0	0	0	0	0	0	0	38	0	0	2	7	18	10	1	0	0	0	0	0	0	0	0	0	0	0	22.5	25.9
1500	5	57	0	3	0	0	0	0	0	0	0	0	65	0	1	3	8	34	15	3	1	0	0	0	0	0	0	0	0	0	0	22.9	27.1
1600	0	39	1	4	0	0	0	0	0	0	0	0	44	0	0	0	5	23	13	2	1	0	0	0	0	0	0	0	0	0	0	24.1	27.5
1700	1	28	0	1	0	1	0	0	0	0	0	0	31	0	0	0	3	15	12	0	0	0	1	0	0	0	0	0	0	0	0	25	27.5
1800	0	24	0	0	0	0	0	0	0	0	0	0	24	0	0	0	1	13	8	2	0	0	0	0	0	0	0	0	0	0	0	25.2	26.6
1900	0	9	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	3	4	1	1	0	0	0	0	0	0	0	0	0	0	26.9	-
2000	0	11	0	1	0	0	0	0	0	0	0	0	12	0	0	0	1	4	7	0	0	0	0	0	0	0	0	0	0	0	0	25.4	28
2100	0	8	0	0	0	0	0	0	0	0	0	0	8	0	0	0	2	4	0	0	0	2	0	0	0	0	0	0	0	0	0	26	-
2200	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	24.2	-
2300	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	26.8	-
08-09	4	73	0	3	0	0	0	0	0	0	0	0	80	0	0	4	5	41	25	5	0	0	0	0	0	0	0	0	0	0	0	24	26.8
17-18	1	28	0	1	0	1	0	0	0	0	0	0	31	0	0	0	3	15	12	0	0	0	1	0	0	0	0	0	0	0	0	25	27.5
10-16	11	271	0	27	0	3	0	0	0	0	0	0	312	0	4	12	49	138	94	12	1	0	0	0	1	0	0	1	0	0	0	23.3	27.3
00-05	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	24.7	-
00-00	18	574	3	40	1	4	0	0	0	0	0	0	640	0	4	19	73	301	206	29	3	2	1	0	1	0	0	1	0	0	0	23.9	27.5

Lower Pennington Lane - North SOUTHBOUND

Report Id - CustomList-175
Site Name - 1
Description - Lower Pennington Road - North
Direction - BA

modaldata.com

Grand Total

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
--	73	3721	10	197	2	10	0	0	0	0	0	0	4013	0	19	116	591	1936	1129	174	22	6	3	4	6	1	3	3	0	0	0	23.6	27.1

Poles Lane	EASTBOUND

Globals

Report Id	CustomList-177
Descriptor	Modal Dir2_(modified)
Created by	MetroCount Traffic Executive
Creation Time (UTC)	2017-12-20T14:51:05
Legal	Copyright (c)1997 - 2014 MetroCount
Graphic	header.bmp
Language	English
Country	United Kingdom
Time	UTC + 0 min
Create Version	4.0.6.0
Metric	Part metric
Speed Unit	mph
Length Unit	metre
Mass Unit	tonne

Dataset

Site Name	Poles Lane 4
Site Attribute	ATC 11
File Name	S:\RGPL-012 Modal Data Limited\MetroCount\MTE 4.06\Data\Poles Lane 4 0 2017-12-20 1446.EC0
File Type	Plus
Algorithm	Factory default axle
Description	**Poles Lane Eastbound**
Lane	0
Direction	6
Direction Text	6 - West bound A]B, East bound B]A.
Layout Text	Axle sensors - Paired (Class/Speed/Count)
Setup Time	2017-12-11T09:50:42
Start Time	2017-12-11T09:50:42
Finish Time	2017-12-20T14:45:42
Operator	RM
Configuration	00000000 80 00 14 6a 6a 00 00 00 00 00 , Standard

Profile

Name	Default Profile
Title	MetroCount Traffic Executive
Graphic Logo	
Header	
Footer	
Percentile 1	85
Percentile 2	95
Pace	10
Filter Start	2017-12-12T00:00:00
Filter End	2017-12-19T00:00:00
Class Scheme	ARX
Low Speed	0
High Speed	90
Posted Limit	
Speed Limits	**National**
Separation	0.000
Separation Type	Headway
Direction	BA
Encoded Direction	15

MODAL
modaldata.com

Poles Lane **EASTBOUND**

Report Id - CustomList-177
Site Name - Poles Lane 4
Description - Poles Lane Eastbound
Direction - BA

MODAL
modaldata.com

12 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0700	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	18.2	-
0800	0	6	0	0	0	0	0	0	0	0	0	0	6	0	2	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	15.4	-
0900	0	8	0	0	0	0	0	0	0	0	0	0	8	0	0	1	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	18.7	-
1000	0	4	0	0	0	0	0	0	0	0	0	0	4	0	1	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	17.5	-
1100	0	8	1	0	0	1	0	0	0	0	0	0	10	0	1	1	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	18	-
1200	0	6	0	0	0	0	0	0	0	0	0	0	6	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	20.2	-
1300	0	6	0	2	0	0	0	0	0	0	0	0	8	0	0	1	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	-
1400	0	9	1	1	0	0	0	0	0	0	0	0	11	0	0	0	4	6	1	0	0	0	0	0	0	0	0	0	0	0	0	21.3	23.9
1500	0	7	0	0	0	0	0	0	0	0	0	0	7	0	1	1	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	18.7	-
1600	1	6	0	0	0	0	0	0	0	0	0	0	7	0	0	0	3	1	2	1	0	0	0	0	0	0	0	0	0	0	0	22.3	-
1700	0	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.3	-
1800	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	22.8	-
1900	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.8	-
2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
08-09	0	6	0	0	0	0	0	0	0	0	0	0	6	0	2	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	15.4	-
17-18	0	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.3	-
10-16	0	40	2	3	0	1	0	0	0	0	0	0	46	0	3	3	15	22	3	0	0	0	0	0	0	0	0	0	0	0	0	19.4	23.9
00-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
00-00	1	68	2	3	0	1	0	0	0	0	0	0	75	0	6	6	27	28	7	1	0	0	0	0	0	0	0	0	0	0	0	19.2	24.2

Poles Lane EASTBOUND

Report Id - CustomList-177
Site Name - Poles Lane 4
Description - Poles Lane Eastbound
Direction - BA

MODAL modaldata.com

13 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0700	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	24.6	-
0800	0	7	0	0	0	0	0	0	0	0	0	0	7	0	1	1	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	16.7	-
0900	0	9	0	1	0	0	0	0	0	0	0	0	10	0	0	0	6	3	1	0	0	0	0	0	0	0	0	0	0	0	0	20.4	-
1000	0	7	0	1	0	0	0	0	0	0	0	0	8	0	2	1	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	17.2	-
1100	1	7	0	0	0	0	0	0	0	0	0	0	8	0	0	2	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	18	-
1200	0	5	1	0	0	0	0	0	0	0	0	0	6	0	0	1	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	20.7	-
1300	0	8	0	1	0	0	0	0	0	0	0	0	9	0	1	1	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	19.4	-
1400	0	5	0	0	0	0	0	0	0	0	0	0	5	0	2	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	-
1500	0	7	0	0	0	0	0	0	0	0	0	0	7	0	0	1	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	18.5	-
1600	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8.9	-
1700	0	4	0	0	0	0	0	0	0	0	0	0	4	0	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	14.8	-
1800	0	2	0	0	0	0	0	0	0	0	0	0	2	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.6	-
1900	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13.7	-
2000	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	17.5	-
2100	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.9	-
2200	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18.4	-
2300	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	21.6	-
08-09	0	7	0	0	0	0	0	0	0	0	0	0	7	0	1	1	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	16.7	-
17-18	0	4	0	0	0	0	0	0	0	0	0	0	4	0	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	14.8	-
10-16	1	39	1	2	0	0	0	0	0	0	0	0	43	0	5	6	11	19	2	0	0	0	0	0	0	0	0	0	0	0	0	18.2	22.6
00-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
00-00	1	73	1	4	0	0	0	0	0	0	0	0	79	0	10	12	23	31	3	0	0	0	0	0	0	0	0	0	0	0	0	17.9	23

Poles Lane — EASTBOUND

Report Id - CustomList-177
Site Name - Poles Lane 4
Description - Poles Lane Eastbound
Direction - BA

modaldata.com

14 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0700	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	-
0800	0	6	0	0	0	0	0	0	0	0	0	0	6	0	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	17.9	-
0900	0	14	0	0	0	0	0	0	0	0	0	0	14	0	0	0	6	7	1	0	0	0	0	0	0	0	0	0	0	0	0	21	24.6
1000	1	12	0	0	0	0	0	0	0	0	0	0	13	0	1	1	4	3	4	0	0	0	0	0	0	0	0	0	0	0	0	21.1	25.9
1100	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	-
1200	0	7	0	1	0	0	0	0	0	0	0	0	8	0	1	0	3	2	2	0	0	0	0	0	0	0	0	0	0	0	0	20	-
1300	0	10	0	1	0	0	0	0	0	0	0	0	11	0	0	1	2	5	1	2	0	0	0	0	0	0	0	0	0	0	0	22.4	26.8
1400	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	20.2	-
1500	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	20.6	-
1600	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	20.4	-
1700	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18.4	-
1800	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	24.9	-
1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2000	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	23.8	-
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2300	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	21.4	-
08-09	0	6	0	0	0	0	0	0	0	0	0	0	6	0	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	17.9	-
17-18	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18.4	-
10-16	1	40	0	2	0	0	0	0	0	0	0	0	43	0	2	2	14	16	7	2	0	0	0	0	0	0	0	0	0	0	0	21	25.9
00-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
00-00	1	69	0	2	0	0	0	0	0	0	0	0	72	0	3	4	24	30	9	2	0	0	0	0	0	0	0	0	0	0	0	20.7	24.8

Poles Lane — EASTBOUND

Report Id - CustomList-177
Site Name - Poles Lane 4
Description - Poles Lane Eastbound
Direction - BA

modaldata.com

15 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0700	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	16.9	-
0800	0	8	0	1	0	0	0	0	0	0	0	0	9	0	1	0	3	4	1	0	0	0	0	0	0	0	0	0	0	0	0	19.7	-
0900	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	-
1000	1	11	1	1	0	0	0	0	0	0	0	0	14	0	2	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	18.4	23.7
1100	0	5	0	1	0	0	0	0	0	0	0	0	6	0	0	0	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	20.6	-
1200	2	6	0	0	0	0	0	0	0	0	0	0	8	0	2	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	16.1	-
1300	0	3	0	2	0	0	0	0	0	0	0	0	5	0	1	1	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	19.9	-
1400	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.1	-
1500	0	9	0	0	0	0	0	0	0	0	0	0	9	0	0	1	3	4	1	0	0	0	0	0	0	0	0	0	0	0	0	20	-
1600	0	5	0	1	0	0	0	0	0	0	0	0	6	0	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	16.9	-
1700	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.7	-
1800	2	2	0	0	0	0	0	0	0	0	0	0	4	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13.1	-
1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2000	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	18.6	-
2100	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	19	-
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2300	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	24.9	-
08-09	0	8	0	1	0	0	0	0	0	0	0	0	9	0	1	0	3	4	1	0	0	0	0	0	0	0	0	0	0	0	0	19.7	-
17-18	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.7	-
10-16	3	37	1	4	0	0	0	0	0	0	0	0	45	0	5	5	15	16	3	1	0	0	0	0	0	0	0	0	0	0	0	18.5	24.2
00-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
00-00	5	68	1	6	0	0	0	0	0	0	0	0	80	0	7	17	21	30	4	1	0	0	0	0	0	0	0	0	0	0	0	18	23.7

Poles Lane EASTBOUND

Report Id - CustomList-177
Site Name - Poles Lane 4
Description - Poles Lane Eastbound
Direction - BA

modaldata.com

16 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	18.5	-
0100	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	24.8	-
0200	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13.1	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0800	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	20.3	-
0900	0	7	0	0	0	0	0	0	0	0	0	0	7	0	0	1	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	20.1	-
1000	0	8	0	0	0	0	0	0	0	0	0	0	8	0	0	1	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	20	-
1100	0	9	0	0	0	0	0	0	0	0	0	0	9	0	0	0	4	4	1	0	0	0	0	0	0	0	0	0	0	0	0	21.3	-
1200	2	10	0	0	0	0	0	0	0	0	0	0	12	0	1	2	3	4	1	1	0	0	0	0	0	0	0	0	0	0	0	19	22.8
1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
1400	1	8	0	0	0	0	0	0	0	0	0	0	9	0	0	2	5	1	1	0	0	0	0	0	0	0	0	0	0	0	0	17.4	-
1500	0	9	0	0	0	0	0	0	0	0	0	0	9	0	0	0	5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	19.3	-
1600	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.3	-
1700	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.2	-
1800	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	23.4	-
1900	0	2	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	-
2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2300	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	20.1	-
08-09	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	20.3	-
17-18	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.2	-
10-16	3	44	0	0	0	0	0	0	0	0	0	0	47	0	1	5	19	18	3	1	0	0	0	0	0	0	0	0	0	0	0	19.4	23.5
00-05	1	4	0	0	0	0	0	0	0	0	0	0	5	0	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	18.7	-
00-00	4	67	0	0	0	0	0	0	0	0	0	0	71	0	2	7	29	28	4	1	0	0	0	0	0	0	0	0	0	0	0	19.3	23.3

Poles Lane — EASTBOUND

Report Id - CustomList-177
Site Name - Poles Lane 4
Description - Poles Lane Eastbound
Direction - BA

MODAL
modaldata.com

17 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0700	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	21.1	-
0800	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	-
0900	0	7	0	0	0	0	0	0	0	0	0	0	7	0	0	0	1	5	1	0	0	0	0	0	0	0	0	0	0	0	0	22.7	-
1000	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	22.5	-
1100	0	7	0	0	0	0	0	0	0	0	0	0	7	0	0	0	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	21.2	-
1200	0	4	0	0	0	1	0	0	0	0	0	0	5	0	1	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	16.9	-
1300	1	2	0	0	0	0	0	0	0	0	0	0	3	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	19.1	-
1400	1	2	0	1	0	0	0	0	0	0	0	0	4	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	18	-
1500	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	21.2	-
1600	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.2	-
1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
1800	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	-
1900	0	2	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	16.4	-
2000	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	18.6	-
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
08-09	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	20.5	-
17-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
10-16	2	23	0	1	0	1	0	0	0	0	0	0	27	0	1	3	8	14	1	0	0	0	0	0	0	0	0	0	0	0	0	19.8	23.5
00-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
00-00	2	44	0	1	0	1	0	0	0	0	0	0	48	0	2	5	14	25	2	0	0	0	0	0	0	0	0	0	0	0	0	20.1	23.7

Poles Lane EASTBOUND

Report Id - CustomList-177
Site Name - Poles Lane 4
Description - Poles Lane Eastbound
Direction - BA

MODAL
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18 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.4	-
0700	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	21.8	-
0800	0	12	0	0	0	0	0	0	0	0	0	0	12	0	0	0	5	5	2	0	0	0	0	0	0	0	0	0	0	0	0	21	24.6
0900	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	24.4	-
1000	0	6	0	0	0	0	0	0	0	0	0	0	6	0	0	0	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	22.3	-
1100	0	9	0	1	0	0	0	0	0	0	0	0	10	0	0	0	4	5	1	0	0	0	0	0	0	0	0	0	0	0	0	20.4	-
1200	0	8	0	1	0	0	0	0	0	0	0	0	9	0	0	2	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	18.9	-
1300	1	7	0	0	0	0	0	0	0	0	0	0	8	0	0	2	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	20.3	-
1400	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	18.9	-
1500	0	6	0	0	0	0	0	0	0	0	0	0	6	0	0	0	1	4	1	0	0	0	0	0	0	0	0	0	0	0	0	22.4	-
1600	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	19	-
1700	0	7	0	0	0	0	0	0	0	0	0	0	7	0	0	1	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	18.4	-
1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
1900	0	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	-
2000	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	22.1	-
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
08-09	0	12	0	0	0	0	0	0	0	0	0	0	12	0	0	0	5	5	2	0	0	0	0	0	0	0	0	0	0	0	0	21	24.6
17-18	0	7	0	0	0	0	0	0	0	0	0	0	7	0	0	1	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	18.4	-
10-16	1	38	0	2	0	0	0	0	0	0	0	0	41	0	0	5	10	21	4	1	0	0	0	0	0	0	0	0	0	0	0	20.6	24.4
00-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
00-00	2	65	0	2	0	0	0	0	0	0	0	0	69	0	1	7	20	33	7	1	0	0	0	0	0	0	0	0	0	0	0	20.3	24.4

Poles Lane **EASTBOUND**

Report Id - CustomList-177
Site Name - Poles Lane 4
Description - Poles Lane Eastbound
Direction - BA

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Grand Total

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
--	16	454	4	18	0	2	0	0	0	0	0	0	494	0	31	58	158	205	36	6	0	0	0	0	0	0	0	0	0	0	0	19.3	23.9

Poles Lane	WESTBOUND

Globals

Report Id	CustomList-177
Descriptor	Modal Dir2_(modified)
Created by	MetroCount Traffic Executive
Creation Time (UTC)	2017-12-20T14:49:14
Legal	Copyright (c)1997 - 2014 MetroCount
Graphic	header.bmp
Language	English
Country	United Kingdom
Time	UTC + 0 min
Create Version	4.0.6.0
Metric	Part metric
Speed Unit	mph
Length Unit	metre
Mass Unit	tonne

Dataset

Site Name	Poles Lane 4
Site Attribute	ATC 11
File Name	S:\RGPL-012 Modal Data Limited\MetroCount\MTE 4.06\Data\Poles Lane 4 0 2017-12-20 1446.EC0
File Type	Plus
Algorithm	Factory default axle
Description	**Poles Lane Westbound**
Lane	0
Direction	6
Direction Text	6 - West bound A]B, East bound B]A.
Layout Text	Axle sensors - Paired (Class/Speed/Count)
Setup Time	2017-12-11T09:50:42
Start Time	2017-12-11T09:50:42
Finish Time	2017-12-20T14:45:42
Operator	RM
Configuration	00000000 80 00 14 6a 6a 00 00 00 00 00 , Standard

Profile

Name	Default Profile
Title	MetroCount Traffic Executive
Graphic Logo	
Header	
Footer	
Percentile 1	85
Percentile 2	95
Pace	10
Filter Start	2017-12-12T00:00:00
Filter End	2017-12-19T00:00:00
Class Scheme	ARX
Low Speed	0
High Speed	90
Posted Limit	
Speed Limits	**National**
Separation	0.000
Separation Type	Headway
Direction	AB
Encoded Direction	15

MODAL
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Poles Lane — WESTBOUND

MODAL
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Report Id - CustomList-177
Site Name - Poles Lane 4
Description - Poles Lane Westbound
Direction - AB

12 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0700	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.5	-
0800	0	3	0	0	1	0	0	0	0	0	0	0	4	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	18.2	-
0900	0	2	0	1	0	0	0	0	0	0	0	0	3	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	-
1000	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	20.7	-
1100	0	8	1	0	0	0	0	0	0	0	0	0	9	0	0	1	5	2	1	0	0	0	0	0	0	0	0	0	0	0	0	18.7	-
1200	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	19	-
1300	0	6	1	0	0	0	0	0	0	0	0	0	7	0	1	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	16.3	-
1400	1	3	0	1	0	0	0	0	0	0	0	0	5	0	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	18.3	-
1500	0	6	0	0	0	1	0	0	0	0	0	0	7	0	1	0	1	3	1	1	0	0	0	0	0	0	0	0	0	0	0	21.1	-
1600	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	19	-
1700	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	23.8	-
1800	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	1	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	22.5	-
1900	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	19.2	-
2000	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.6	-
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2300	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	23.5	-
08-09	0	3	0	0	1	0	0	0	0	0	0	0	4	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	18.2	-
17-18	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	23.8	-
10-16	1	27	2	1	0	1	0	0	0	0	0	0	32	0	2	4	13	10	2	1	0	0	0	0	0	0	0	0	0	0	0	18.7	22.1
00-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
00-00	1	47	2	3	1	1	0	0	0	0	0	0	55	0	2	8	21	20	3	1	0	0	0	0	0	0	0	0	0	0	0	19.1	23.7

Poles Lane — WESTBOUND

Report Id - CustomList-177
Site Name - Poles Lane 4
Description - Poles Lane Westbound
Direction - AB

MODAL
modaldata.com

13 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	22.6	-
0700	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	28.8	-
0800	0	4	0	1	0	0	0	0	0	0	0	0	5	0	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	18.1	-
0900	0	5	0	0	0	0	0	0	0	0	0	0	5	0	1	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	18.7	-
1000	0	8	0	0	0	0	0	0	0	0	0	0	8	0	0	2	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	19.1	-
1100	0	5	0	1	0	0	0	0	0	0	0	0	6	0	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	-
1200	0	7	0	0	0	0	0	0	0	0	0	0	7	0	0	2	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	17.9	-
1300	0	5	0	0	0	0	0	0	0	0	0	0	5	0	1	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	17.5	-
1400	0	8	0	1	0	0	0	0	0	0	0	0	9	0	0	1	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	19.6	-
1500	0	8	0	0	0	0	0	0	0	0	0	0	8	0	0	0	2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	20.4	-
1600	0	3	0	1	0	0	0	0	0	0	0	0	4	0	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	20.7	-
1700	0	2	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	15.4	-
1800	1	3	0	0	0	0	0	0	0	0	0	0	4	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13.2	-
1900	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.9	-
2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2100	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.2	-
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
08-09	0	4	0	1	0	0	0	0	0	0	0	0	5	0	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	18.1	-
17-18	0	2	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	15.4	-
10-16	0	41	0	2	0	0	0	0	0	0	0	0	43	0	1	6	16	19	1	0	0	0	0	0	0	0	0	0	0	0	0	19.1	22.8
00-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
00-00	1	63	0	4	0	0	0	0	0	0	0	0	68	0	3	13	21	27	3	1	0	0	0	0	0	0	0	0	0	0	0	18.9	23

Poles Lane — WESTBOUND

Report Id - CustomList-177
Site Name - Poles Lane 4
Description - Poles Lane Westbound
Direction - AB

MODAL
modaldata.com

14 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0700	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	24.2	-
0800	0	2	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	16.1	-
0900	0	2	0	1	0	0	0	0	0	0	0	0	3	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	17.7	-
1000	0	8	0	0	0	0	0	0	0	0	0	0	8	0	0	0	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	18.8	-
1100	1	11	0	0	0	0	0	0	0	0	0	0	12	0	2	1	3	4	2	0	0	0	0	0	0	0	0	0	0	0	0	19.4	23.9
1200	1	8	0	0	0	0	0	0	0	0	0	0	9	0	1	2	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	-
1300	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	18.1	-
1400	0	8	0	0	0	0	0	0	0	0	0	0	8	0	0	1	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	19.3	-
1500	0	6	0	0	0	0	0	0	0	0	0	0	6	0	0	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	19.9	-
1600	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	19.8	-
1700	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	17.7	-
1800	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	-
1900	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.9	-
2000	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.3	-
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
08-09	0	2	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	16.1	-
17-18	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	17.7	-
10-16	2	44	0	0	0	0	0	0	0	0	0	0	46	0	3	5	18	17	3	0	0	0	0	0	0	0	0	0	0	0	0	18.7	22.8
00-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
00-00	2	59	0	1	0	0	0	0	0	0	0	0	62	0	4	7	24	24	3	0	0	0	0	0	0	0	0	0	0	0	0	18.7	22.8

Poles Lane **WESTBOUND**

Report Id - CustomList-177
Site Name - Poles Lane 4
Description - Poles Lane Westbound
Direction - AB

MODAL
modaldata.com

15 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	29.3	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0700	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	30.4	-
0800	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	22.2	-
0900	0	7	0	0	0	0	0	0	0	0	0	0	7	0	0	0	2	3	2	0	0	0	0	0	0	0	0	0	0	0	0	22.9	-
1000	1	9	0	1	0	0	0	0	0	0	0	0	11	0	3	0	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	16	19.9
1100	0	6	0	1	0	0	0	0	0	0	0	0	7	0	1	2	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	18.4	-
1200	1	7	0	1	0	0	0	0	0	0	0	0	9	0	0	0	3	2	4	0	0	0	0	0	0	0	0	0	0	0	0	22.4	-
1300	0	5	0	2	0	0	0	0	0	0	0	0	7	0	0	2	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	18.5	-
1400	2	7	0	0	0	0	0	0	0	0	0	0	9	0	1	3	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	15.5	-
1500	0	6	0	0	0	0	0	0	0	0	0	0	6	0	0	0	1	4	1	0	0	0	0	0	0	0	0	0	0	0	0	22	-
1600	1	8	0	0	0	0	0	0	0	0	0	0	9	1	1	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13.4	-
1700	1	1	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	-
1800	1	2	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.5	-
1900	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	26.4	-
2000	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	18.6	-
2100	0	2	0	0	0	1	0	0	0	0	0	0	3	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	16.7	-
2200	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.6	-
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
08-09	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	22.2	-
17-18	1	1	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	-
10-16	4	40	0	5	0	0	0	0	0	0	0	0	49	0	5	7	16	15	6	0	0	0	0	0	0	0	0	0	0	0	0	18.5	23.7
00-05	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	29.3	-
00-00	7	69	0	6	0	1	0	0	0	0	0	0	83	1	6	16	25	24	9	2	0	0	0	0	0	0	0	0	0	0	0	18.6	24.2

Poles Lane — WESTBOUND

Report Id - CustomList-177
Site Name - Poles Lane 4
Description - Poles Lane Westbound
Direction - AB

MODAL
modaldata.com

16 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.5	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	28.4	-
0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
1000	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	0	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	21.7	-
1100	0	7	0	0	0	0	0	0	0	0	0	0	7	0	0	0	2	4	1	0	0	0	0	0	0	0	0	0	0	0	0	21	-
1200	0	3	0	1	0	0	0	0	0	0	0	0	4	0	1	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	16.9	-
1300	2	5	0	1	0	0	0	0	0	0	0	0	8	0	0	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	17	-
1400	0	7	0	0	0	0	0	0	0	0	0	0	7	0	1	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	17.6	-
1500	2	8	0	0	0	1	0	0	0	0	0	0	11	0	2	5	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	13.7	17.4
1600	0	5	0	0	0	0	0	0	0	0	0	0	5	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	20.4	-
1700	0	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.8	-
1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2100	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	28.5	-
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
08-09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
17-18	0	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.8	-
10-16	4	35	0	2	0	1	0	0	0	0	0	0	42	0	4	8	15	13	2	0	0	0	0	0	0	0	0	0	0	0	0	17.5	22.6
00-05	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.5	-
00-00	4	44	0	2	0	1	0	0	0	0	0	0	51	0	5	8	18	16	4	0	0	0	0	0	0	0	0	0	0	0	0	18	22.8

Poles Lane WESTBOUND

Report Id - CustomList-177
Site Name - Poles Lane 4
Description - Poles Lane Westbound
Direction - AB

MODAL

modaldata.com

17 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.9	-
0700	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.8	-
0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0900	1	3	0	0	0	0	0	0	0	0	0	0	4	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	17.9	-
1000	1	6	0	0	0	0	0	0	0	0	0	0	7	0	0	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	-
1100	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	20.5	-
1200	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	20.5	-
1300	0	2	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	17.8	-
1400	0	4	0	0	0	0	0	0	0	0	0	0	4	0	1	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	16.2	-
1500	2	2	0	0	0	0	0	0	0	0	0	0	4	0	1	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	13.2	-
1600	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18.5	-
1700	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	22.6	-
1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2000	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	25.4	-
2100	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13.6	-
2200	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.4	-
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
08-09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
17-18	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	22.6	-
10-16	3	21	0	0	0	0	0	0	0	0	0	0	24	0	3	5	8	5	3	0	0	0	0	0	0	0	0	0	0	0	0	17.2	21
00-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
00-00	4	31	0	1	0	0	0	0	0	0	0	0	36	0	3	8	13	8	4	0	0	0	0	0	0	0	0	0	0	0	0	17.7	22.4

Poles Lane													WESTBOUND																				

Report Id - CustomList-177
Site Name - Poles Lane 4
Description - Poles Lane Westbound
Direction - AB

MODAL

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18 December 2017

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	21.4	-
0700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0800	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	19.6	-
0900	0	9	0	0	0	0	0	0	0	0	0	0	9	0	2	0	2	4	1	0	0	0	0	0	0	0	0	0	0	0	0	18.4	-
1000	0	6	0	0	0	0	0	0	0	0	0	0	6	0	0	0	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	20.8	-
1100	0	4	0	1	0	0	0	0	0	0	0	0	5	0	0	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	22.7	-
1200	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.5	-
1300	0	9	0	0	0	0	0	0	0	0	0	0	9	0	0	1	4	2	2	0	0	0	0	0	0	0	0	0	0	0	0	20.1	-
1400	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	19.1	-
1500	0	7	0	0	0	0	0	0	0	0	0	0	7	0	0	0	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	19.4	-
1600	3	9	0	0	0	0	0	0	0	0	0	0	12	0	1	3	3	4	1	0	0	0	0	0	0	0	0	0	0	0	0	17.8	22.4
1700	1	1	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8.9	-
1800	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	23.9	-
1900	0	2	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	14	-
2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
08-09	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	19.6	-
17-18	1	1	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8.9	-
10-16	0	33	0	1	0	0	0	0	0	0	0	0	34	0	0	3	18	8	5	0	0	0	0	0	0	0	0	0	0	0	0	19.9	24.2
00-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
00-00	4	60	0	1	0	0	0	0	0	0	0	0	65	0	6	6	25	19	9	0	0	0	0	0	0	0	0	0	0	0	0	19	24.2

Poles Lane WESTBOUND

Report Id - CustomList-177
Site Name - Poles Lane 4
Description - Poles Lane Westbound
Direction - AB

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Grand Total

Time	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Total	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 85	Vbin 85 90	Mean	Vpp 85
--	23	373	2	18	1	3	0	0	0	0	0	0	420	1	29	66	147	138	35	4	0	0	0	0	0	0	0	0	0	0	0	18.6	23.5

APPENDIX C

LOWER PENNINGTON LANE

MODAL
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VEHICLE, PEDESTRIAN AND CYCLE COUNT

THURSDAY 27TH SEPTEMBER

Time Period	NORTHBOUND						SOUTHBOUND					
	CARS	LGV	HGV	CYCLE	MCYCLE	PEDS	CARS	LGV	HGV	CYCLE	MCYCLE	PEDS
07.00 - 07.15	6	1	0	0	0	0	6	1	0	0	0	0
07.15 - 07.30	2	1	0	0	1	1	5	2	0	0	0	2
07.30 - 07.45	9	1	0	0	0	1	7	2	0	0	0	1
07.45 - 08.00	17	3	0	0	0	0	12	5	0	0	0	0
08.00 - 08.15	12	3	0	2	0	2	12	5	0	1	0	0
08.15 - 08.30	13	4	0	2	0	2	16	3	0	0	0	3
08.30 - 08.45	7	4	0	0	0	3	13	9	0	0	0	1
08.45 - 09.00	11	4	0	3	0	0	20	4	0	2	0	2
09.00 - 09.15	15	4	0	0	1	1	21	4	0	0	0	0
09.15 - 09.30	11	4	0	3	0	0	16	7	0	2	0	2
09.30 - 09.45	17	3	0	1	0	1	10	0	0	0	0	0
09.45 - 10.00	21	9	0	1	0	3	15	3	0	0	0	2
10.00 - 10.15	13	2	0	1	0	0	12	4	0	1	0	0
10.15 - 10.30	10	7	0	0	0	0	7	3	0	0	0	4
10.30 - 10.45	8	3	0	0	0	1	11	4	0	1	0	1
10.45 - 11.00	18	6	0	1	1	3	28	4	0	1	0	1
11.00 - 11.15	15	1	0	0	0	0	14	3	0	0	0	0
11.15 - 11.30	11	5	0	0	0	1	9	5	0	0	0	2
11.30 - 11.45	13	4	0	1	0	0	10	2	0	1	0	0
11.45 - 12.00	15	5	0	0	0	1	15	4	0	0	0	1
12.00 - 12.15	18	3	0	1	0	0	14	3	0	1	0	1
12.15 - 12.30	13	2	0	2	0	2	18	4	1	1	0	0
12.30 - 12.45	16	4	0	0	0	1	12	3	0	1	0	3
12.45 - 13.00	11	4	1	3	0	0	10	4	0	2	0	1
13.00 - 13.15	14	2	0	0	0	0	21	5	0	0	0	1
13.15 - 13.30	23	4	1	1	0	0	18	4	0	2	0	1
13.30 - 13.45	19	4	0	0	0	4	17	3	0	0	0	1
13.45 - 14.00	14	3	0	1	0	0	21	5	0	1	0	1
14.00 - 14.15	16	7	0	3	0	1	11	5	0	1	0	0
14.15 - 14.30	10	3	0	1	0	2	13	2	0	0	0	4
14.30 - 14.45	14	3	0	1	0	0	12	2	0	2	0	3
14.45 - 15.00	14	4	0	1	0	3	16	3	0	2	0	2
15.00 - 15.15	19	2	0	3	0	1	19	2	0	0	0	1
15.15 - 15.30	18	3	0	0	0	0	13	3	0	1	0	11
15.30 - 15.45	26	1	0	1	0	1	15	3	1	4	0	2
15.45 - 16.00	19	5	0	1	0	2	16	4	0	0	1	1
16.00 - 16.15	22	5	0	2	0	2	18	2	0	4	0	3
16.15 - 16.30	19	5	0	3	0	2	21	2	0	0	0	7
16.30 - 16.45	25	4	0	1	0	0	13	4	0	1	0	2
16.45 - 17.00	15	5	0	1	0	3	9	0	0	6	0	1
17.00 - 17.15	12	7	0	0	0	1	10	1	0	1	0	5
17.15 - 17.30	18	0	0	4	0	2	14	1	0	1	0	5
17.30 - 17.45	15	1	0	0	0	4	15	1	0	0	0	4
17.45 - 18.00	7	1	0	1	0	2	6	1	0	1	0	3
18.00 - 18.15	9	3	0	2	0	2	13	2	0	3	0	0
18.15 - 18.30	13	0	0	0	0	2	17	1	0	1	0	1
18.30 - 18.45	9	5	0	1	0	2	13	0	0	0	0	5
18.45 - 19.00	16	4	0	1	0	0	14	4	0	0	0	3
TOTAL MOVEMENTS	**688**	**168**	**2**	**50**	**3**	**59**	**668**	**148**	**2**	**45**	**1**	**94**

TOTAL MOVEMENTS	**908**

RIDGEWAY LANE

MODAL
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VEHICLE, PEDESTRIAN AND CYCLE COUNT

THURSDAY 27TH SEPTEMBER

Time Period	NORTHBOUND						SOUTHBOUND					
	CARS	LGV	HGV	M/CYCLE	CYCLE	PEDS	CARS	LGV	HGV	M/CYCLE	CYCLE	PEDS
07.00 - 07.15	5	0	0	0	0	0	3	0	0	0	0	1
07.15 - 07.30	2	0	0	0	0	0	2	1	0	0	0	2
07.30 - 07.45	1	0	0	0	0	0	4	0	0	0	0	0
07.45 - 08.00	2	1	0	0	0	0	1	5	0	0	0	0
08.00 - 08.15	3	0	0	0	0	4	5	1	0	0	0	1
08.15 - 08.30	8	0	0	0	0	2	6	2	0	0	0	0
08.30 - 08.45	4	1	1	0	0	1	8	5	0	0	1	0
08.45 - 09.00	5	2	0	0	0	0	12	2	0	1	0	1
09.00 - 09.15	6	3	1	0	0	2	7	2	0	0	1	0
09.15 - 09.30	7	1	0	0	1	1	5	4	0	0	0	0
09.30 - 09.45	8	2	0	0	0	0	11	1	0	0	0	0
09.45 - 10.00	12	1	0	0	0	1	9	2	0	0	1	0
10.00 - 10.15	11	4	0	0	1	0	14	3	0	0	0	0
10.15 - 10.30	4	0	0	0	0	1	8	4	0	0	0	0
10.30 - 10.45	9	1	0	0	0	0	5	1	0	0	0	2
10.45 - 11.00	8	0	0	0	0	0	10	1	0	0	0	0
11.00 - 11.15	9	3	0	0	0	0	4	2	0	0	0	0
11.15 - 11.30	14	1	0	0	0	3	9	3	0	0	0	1
11.30 - 11.45	8	2	0	0	1	0	6	2	1	0	0	1
11.45 - 12.00	9	4	1	0	1	1	7	2	0	0	1	0
12.00 - 12.15	6	4	0	0	1	1	11	2	0	0	0	0
12.15 - 12.30	12	0	0	0	0	0	10	0	0	0	3	0
12.30 - 12.45	4	2	0	0	0	0	5	5	0	0	0	0
12.45 - 13.00	3	3	0	0	0	1	7	3	0	0	0	1
13.00 - 13.15	8	4	0	0	0	0	11	1	0	0	0	0
13.15 - 13.30	5	2	0	0	0	0	5	2	0	0	0	0
13.30 - 13.45	7	0	0	0	0	0	8	1	0	0	1	0
13.45 - 14.00	14	3	0	0	0	0	6	1	0	0	0	0
14.00 - 14.15	7	2	0	0	0	0	7	2	0	0	0	1
14.15 - 14.30	9	2	0	0	0	0	8	2	0	0	1	0
14.30 - 14.45	6	1	0	0	0	0	10	1	0	0	0	0
14.45 - 15.00	6	3	0	0	2	2	7	2	0	0	0	0
15.00 - 15.15	4	0	0	0	0	1	10	0	0	0	0	0
15.15 - 15.30	11	3	0	0	1	1	9	2	0	0	0	5
15.30 - 15.45	5	2	0	0	0	1	8	0	0	0	0	1
15.45 - 16.00	10	1	0	0	1	0	13	1	0	0	2	0
16.00 - 16.15	8	0	0	0	0	0	11	2	0	1	0	0
16.15 - 16.30	14	4	0	0	1	0	13	2	0	0	0	0
16.30 - 16.45	13	4	0	0	0	0	5	0	0	0	2	0
16.45 - 17.00	12	4	0	0	0	0	18	0	0	0	0	0
17.00 - 17.15	10	0	0	0	0	0	5	0	0	0	0	0
17.15 - 17.30	11	2	0	1	3	1	12	1	0	1	4	0
17.30 - 17.45	11	1	0	0	3	0	8	3	0	0	0	0
17.45 - 18.00	8	1	0	0	0	2	16	0	0	0	0	0
18.00 - 18.15	7	1	0	1	0	0	8	0	0	0	0	2
18.15 - 18.30	11	1	0	0	0	1	12	2	0	0	0	0
18.30 - 18.45	6	1	0	0	0	0	9	1	0	0	0	1
18.45 - 19.00	7	1	0	0	0	1	10	1	0	0	0	0
TOTAL MOVEMENTS	**370**	**78**	**3**	**2**	**16**	**28**	**398**	**80**	**1**	**3**	**17**	**20**

TOTAL MOVEMENTS	**1016**

APPENDIX D

APPENDIX E

Calculation Reference: AUDIT-728001-181031-1027

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED

MULTI-MODAL VEHICLES

Selected regions and areas:

02	**SOUTH EAST**		
	ES	EAST SUSSEX	1 days
	HC	HAMPSHIRE	1 days
	KC	KENT	1 days
	SC	SURREY	1 days
	WS	WEST SUSSEX	1 days
03	**SOUTH WEST**		
	DV	DEVON	2 days
06	**WEST MIDLANDS**		
	SH	SHROPSHIRE	1 days
	ST	STAFFORDSHIRE	1 days
07	**YORKSHIRE & NORTH LINCOLNSHIRE**		
	NY	NORTH YORKSHIRE	3 days
09	**NORTH**		
	DH	DURHAM	1 days

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

Secondary 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: Number of dwellings
Actual Range: 50 to 288 (units:)
Range Selected by User: 50 to 300 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/10 to 19/04/18

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:

Monday	3 days
Tuesday	2 days
Wednesday	2 days
Thursday	3 days
Friday	3 days

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

Selected survey types:

Manual count	13 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 undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	6
Edge of Town	7

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	12
No Sub Category	1

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	13 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 1 mile:

1,000 or Less	1 days
1,001 to 5,000	2 days
5,001 to 10,000	5 days
10,001 to 15,000	5 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	4 days
25,001 to 50,000	2 days
50,001 to 75,000	1 days
75,001 to 100,000	5 days
100,001 to 125,000	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	1 days
1.1 to 1.5	12 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:

Yes	2 days
No	11 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	13 days

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

LIST OF SITES relevant to selection parameters

1	**DH-03-A-01**	**SEMI DETACHED**		**DURHAM**
	GREENFIELDS ROAD BISHOP AUCKLAND			
	Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total Number of dwellings:		50	
		Survey date: TUESDAY	*28/03/17*	*Survey Type: MANUAL*
2	**DV-03-A-02**	**HOUSES & BUNGALOWS**		**DEVON**
	MILLHEAD ROAD HONITON			
	Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total Number of dwellings:		116	
		Survey date: FRIDAY	*25/09/15*	*Survey Type: MANUAL*
3	**DV-03-A-03**	**TERRACED & SEMI DETACHED**		**DEVON**
	LOWER BRAND LANE HONITON			
	Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total Number of dwellings:		70	
		Survey date: MONDAY	*28/09/15*	*Survey Type: MANUAL*
4	**ES-03-A-04**	**MIXED HOUSES & FLATS**		**EAST SUSSEX**
	NEW LYDD ROAD CAMBER			
	Edge of Town Residential Zone			
	Total Number of dwellings:		134	
		Survey date: FRIDAY	*15/07/16*	*Survey Type: MANUAL*
5	**HC-03-A-19**	**HOUSES & FLATS**		**HAMPSHIRE**
	CANADA WAY LIPHOOK			
	Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total Number of dwellings:		62	
		Survey date: MONDAY	*27/11/17*	*Survey Type: MANUAL*
6	**KC-03-A-07**	**MIXED HOUSES**		**KENT**
	RECULVER ROAD HERNE BAY			
	Edge of Town Residential Zone			
	Total Number of dwellings:		288	
		Survey date: WEDNESDAY	*27/09/17*	*Survey Type: MANUAL*
7	**NY-03-A-06**	**BUNGALOWS & SEMI DET.**		**NORTH YORKSHIRE**
	HORSEFAIR BOROUGHBRIDGE			
	Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total Number of dwellings:		115	
		Survey date: FRIDAY	*14/10/11*	*Survey Type: MANUAL*
8	**NY-03-A-09**	**MIXED HOUSING**		**NORTH YORKSHIRE**
	GRAMMAR SCHOOL LANE NORTHALLERTON			
	Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total Number of dwellings:		52	
		Survey date: MONDAY	*16/09/13*	*Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

9 **NY-03-A-10** **HOUSES AND FLATS** **NORTH YORKSHIRE**
BOROUGHBRIDGE ROAD
RIPON

Edge of Town
No Sub Category
Total Number of dwellings: 71
Survey date: TUESDAY 17/09/13 Survey Type: MANUAL

10 **SC-03-A-04** **DETACHED & TERRACED** **SURREY**
HIGH ROAD
BYFLEET

Edge of Town
Residential Zone
Total Number of dwellings: 71
Survey date: THURSDAY 23/01/14 Survey Type: MANUAL

11 **SH-03-A-05** **SEMI-DETACHED/TERRACED** **SHROPSHIRE**
SANDCROFT
TELFORD
SUTTON HILL
Edge of Town
Residential Zone
Total Number of dwellings: 54
Survey date: THURSDAY 24/10/13 Survey Type: MANUAL

12 **ST-03-A-07** **DETACHED & SEMI-DETACHED** **STAFFORDSHIRE**
BEACONSIDE
STAFFORD
MARSTON GATE
Edge of Town
Residential Zone
Total Number of dwellings: 248
Survey date: WEDNESDAY 22/11/17 Survey Type: MANUAL

13 **WS-03-A-04** **MIXED HOUSES** **WEST SUSSEX**
HILLS FARM LANE
HORSHAM
BROADBRIDGE HEATH
Edge of Town
Residential Zone
Total Number of dwellings: 151
Survey date: THURSDAY 11/12/14 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/A - HOUSES PRIVATELY OWNED
MULTI-MODAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	13	114	0.094	13	114	0.259	13	114	0.353
08:00 - 09:00	13	114	0.134	**13**	**114**	**0.339**	**13**	**114**	**0.473**
09:00 - 10:00	13	114	0.144	13	114	0.163	13	114	0.307
10:00 - 11:00	13	114	0.136	13	114	0.170	13	114	0.306
11:00 - 12:00	13	114	0.130	13	114	0.159	13	114	0.289
12:00 - 13:00	13	114	0.167	13	114	0.152	13	114	0.319
13:00 - 14:00	13	114	0.175	13	114	0.144	13	114	0.319
14:00 - 15:00	13	114	0.171	13	114	0.173	13	114	0.344
15:00 - 16:00	13	114	0.248	13	114	0.164	13	114	0.412
16:00 - 17:00	13	114	0.251	13	114	0.168	13	114	0.419
17:00 - 18:00	**13**	**114**	**0.327**	13	114	0.136	13	114	0.463
18:00 - 19:00	13	114	0.213	13	114	0.160	13	114	0.373
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.190			2.187			4.377

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:	50 - 288 (units:)
Survey date date range:	01/01/10 - 19/04/18
Number of weekdays (Monday-Friday):	13
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 show. 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/A - HOUSES PRIVATELY OWNED

MULTI-MODAL TAXIS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	13	114	0.003	13	114	0.003	13	114	0.006
08:00 - 09:00	13	114	0.003	13	114	0.003	13	114	0.006
09:00 - 10:00	13	114	0.003	13	114	0.002	13	114	0.005
10:00 - 11:00	13	114	0.001	13	114	0.001	13	114	0.002
11:00 - 12:00	13	114	0.001	13	114	0.001	13	114	0.002
12:00 - 13:00	13	114	0.001	13	114	0.001	13	114	0.002
13:00 - 14:00	13	114	0.001	13	114	0.001	13	114	0.002
14:00 - 15:00	13	114	0.001	13	114	0.001	13	114	0.002
15:00 - 16:00	**13**	**114**	**0.006**	**13**	**114**	**0.005**	**13**	**114**	**0.011**
16:00 - 17:00	13	114	0.000	13	114	0.001	13	114	0.001
17:00 - 18:00	13	114	0.001	13	114	0.001	13	114	0.002
18:00 - 19:00	13	114	0.001	13	114	0.001	13	114	0.002
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.022			0.021			0.043

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/A - HOUSES PRIVATELY OWNED
MULTI-MODAL OGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	13	114	0.001	13	114	0.001	13	114	0.002
08:00 - 09:00	13	114	0.001	13	114	0.001	13	114	0.002
09:00 - 10:00	**13**	**114**	**0.004**	13	114	0.002	**13**	**114**	**0.006**
10:00 - 11:00	13	114	0.003	13	114	0.001	13	114	0.004
11:00 - 12:00	13	114	0.001	13	114	0.002	13	114	0.003
12:00 - 13:00	13	114	0.002	13	114	0.003	13	114	0.005
13:00 - 14:00	13	114	0.003	13	114	0.001	13	114	0.004
14:00 - 15:00	13	114	0.001	**13**	**114**	**0.005**	13	114	0.006
15:00 - 16:00	13	114	0.003	13	114	0.002	13	114	0.005
16:00 - 17:00	13	114	0.001	13	114	0.003	13	114	0.004
17:00 - 18:00	13	114	0.001	13	114	0.000	13	114	0.001
18:00 - 19:00	13	114	0.000	13	114	0.000	13	114	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.021			0.021			0.042

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/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PSVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	13	114	0.000	13	114	0.000	13	114	0.000
08:00 - 09:00	13	114	0.000	13	114	0.000	13	114	0.000
09:00 - 10:00	13	114	0.000	13	114	0.000	13	114	0.000
10:00 - 11:00	13	114	0.000	13	114	0.000	13	114	0.000
11:00 - 12:00	**13**	**114**	**0.001**	**13**	**114**	**0.001**	**13**	**114**	**0.002**
12:00 - 13:00	13	114	0.000	13	114	0.000	13	114	0.000
13:00 - 14:00	13	114	0.000	13	114	0.000	13	114	0.000
14:00 - 15:00	13	114	0.000	13	114	0.000	13	114	0.000
15:00 - 16:00	13	114	0.000	13	114	0.000	13	114	0.000
16:00 - 17:00	13	114	0.000	13	114	0.000	13	114	0.000
17:00 - 18:00	13	114	0.000	13	114	0.000	13	114	0.000
18:00 - 19:00	13	114	0.000	13	114	0.000	13	114	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.001			0.001			0.002

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/A - HOUSES PRIVATELY OWNED
MULTI-MODAL CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	13	114	0.003	13	114	0.007	13	114	0.010
08:00 - 09:00	13	114	0.002	**13**	**114**	**0.009**	13	114	0.011
09:00 - 10:00	13	114	0.001	13	114	0.004	13	114	0.005
10:00 - 11:00	13	114	0.005	13	114	0.007	13	114	0.012
11:00 - 12:00	13	114	0.003	13	114	0.003	13	114	0.006
12:00 - 13:00	13	114	0.003	13	114	0.002	13	114	0.005
13:00 - 14:00	13	114	0.005	13	114	0.001	13	114	0.006
14:00 - 15:00	13	114	0.003	13	114	0.001	13	114	0.004
15:00 - 16:00	13	114	0.004	13	114	0.002	13	114	0.006
16:00 - 17:00	**13**	**114**	**0.009**	13	114	0.006	**13**	**114**	**0.015**
17:00 - 18:00	13	114	0.009	13	114	0.005	13	114	0.014
18:00 - 19:00	13	114	0.003	13	114	0.004	13	114	0.007
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.050			0.051			0.101

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/A - HOUSES PRIVATELY OWNED
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	13	114	0.121	13	114	0.405	13	114	0.526
08:00 - 09:00	13	114	0.194	**13**	**114**	**0.599**	**13**	**114**	**0.793**
09:00 - 10:00	13	114	0.194	13	114	0.247	13	114	0.441
10:00 - 11:00	13	114	0.187	13	114	0.254	13	114	0.441
11:00 - 12:00	13	114	0.185	13	114	0.244	13	114	0.429
12:00 - 13:00	13	114	0.241	13	114	0.216	13	114	0.457
13:00 - 14:00	13	114	0.267	13	114	0.215	13	114	0.482
14:00 - 15:00	13	114	0.256	13	114	0.254	13	114	0.510
15:00 - 16:00	13	114	0.441	13	114	0.246	13	114	0.687
16:00 - 17:00	13	114	0.428	13	114	0.269	13	114	0.697
17:00 - 18:00	**13**	**114**	**0.537**	13	114	0.205	13	114	0.742
18:00 - 19:00	13	114	0.362	13	114	0.275	13	114	0.637
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.413			3.429			6.842

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/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PEDESTRIANS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	13	114	0.016	13	114	0.043	13	114	0.059
08:00 - 09:00	13	114	0.029	**13**	**114**	**0.104**	13	114	0.133
09:00 - 10:00	13	114	0.047	13	114	0.060	13	114	0.107
10:00 - 11:00	13	114	0.062	13	114	0.063	13	114	0.125
11:00 - 12:00	13	114	0.035	13	114	0.034	13	114	0.069
12:00 - 13:00	13	114	0.051	13	114	0.043	13	114	0.094
13:00 - 14:00	13	114	0.038	13	114	0.036	13	114	0.074
14:00 - 15:00	13	114	0.041	13	114	0.046	13	114	0.087
15:00 - 16:00	**13**	**114**	**0.102**	13	114	0.065	**13**	**114**	**0.167**
16:00 - 17:00	13	114	0.087	13	114	0.052	13	114	0.139
17:00 - 18:00	13	114	0.078	13	114	0.030	13	114	0.108
18:00 - 19:00	13	114	0.041	13	114	0.051	13	114	0.092
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.627			0.627			1.254

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/A - HOUSES PRIVATELY OWNED
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	13	114	0.000	13	114	0.005	13	114	0.005
08:00 - 09:00	13	114	0.000	**13**	**114**	**0.016**	13	114	0.016
09:00 - 10:00	13	114	0.000	13	114	0.005	13	114	0.005
10:00 - 11:00	13	114	0.001	13	114	0.002	13	114	0.003
11:00 - 12:00	13	114	0.001	13	114	0.003	13	114	0.004
12:00 - 13:00	13	114	0.003	13	114	0.003	13	114	0.006
13:00 - 14:00	13	114	0.001	13	114	0.002	13	114	0.003
14:00 - 15:00	13	114	0.002	13	114	0.004	13	114	0.006
15:00 - 16:00	13	114	0.003	13	114	0.006	13	114	0.009
16:00 - 17:00	13	114	0.008	13	114	0.005	13	114	0.013
17:00 - 18:00	13	114	0.007	13	114	0.003	13	114	0.010
18:00 - 19:00	**13**	**114**	**0.023**	13	114	0.007	**13**	**114**	**0.030**
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.049			0.061			0.110

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/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	13	114	0.000	**13**	**114**	**0.014**	**13**	**114**	**0.014**
08:00 - 09:00	13	114	0.000	13	114	0.010	13	114	0.010
09:00 - 10:00	13	114	0.000	13	114	0.003	13	114	0.003
10:00 - 11:00	13	114	0.000	13	114	0.001	13	114	0.001
11:00 - 12:00	13	114	0.000	13	114	0.001	13	114	0.001
12:00 - 13:00	13	114	0.000	13	114	0.001	13	114	0.001
13:00 - 14:00	13	114	0.001	13	114	0.000	13	114	0.001
14:00 - 15:00	13	114	0.001	13	114	0.001	13	114	0.002
15:00 - 16:00	13	114	0.005	13	114	0.001	13	114	0.006
16:00 - 17:00	13	114	0.003	13	114	0.001	13	114	0.004
17:00 - 18:00	13	114	0.005	13	114	0.000	13	114	0.005
18:00 - 19:00	**13**	**114**	**0.006**	13	114	0.001	13	114	0.007
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.021			0.034			0.055

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/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	13	114	0.000	13	114	0.019	13	114	0.019
08:00 - 09:00	13	114	0.000	**13**	**114**	**0.026**	13	114	0.026
09:00 - 10:00	13	114	0.000	13	114	0.007	13	114	0.007
10:00 - 11:00	13	114	0.001	13	114	0.003	13	114	0.004
11:00 - 12:00	13	114	0.001	13	114	0.005	13	114	0.006
12:00 - 13:00	13	114	0.003	13	114	0.005	13	114	0.008
13:00 - 14:00	13	114	0.001	13	114	0.002	13	114	0.003
14:00 - 15:00	13	114	0.003	13	114	0.005	13	114	0.008
15:00 - 16:00	13	114	0.009	13	114	0.007	13	114	0.016
16:00 - 17:00	13	114	0.011	13	114	0.007	13	114	0.018
17:00 - 18:00	13	114	0.013	13	114	0.003	13	114	0.016
18:00 - 19:00	**13**	**114**	**0.029**	13	114	0.008	**13**	**114**	**0.037**
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.071			0.097			0.168

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/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	13	114	0.140	13	114	0.473	13	114	0.613
08:00 - 09:00	13	114	0.225	**13**	**114**	**0.738**	**13**	**114**	**0.963**
09:00 - 10:00	13	114	0.242	13	114	0.318	13	114	0.560
10:00 - 11:00	13	114	0.255	13	114	0.327	13	114	0.582
11:00 - 12:00	13	114	0.225	13	114	0.285	13	114	0.510
12:00 - 13:00	13	114	0.298	13	114	0.265	13	114	0.563
13:00 - 14:00	13	114	0.311	13	114	0.254	13	114	0.565
14:00 - 15:00	13	114	0.304	13	114	0.306	13	114	0.610
15:00 - 16:00	13	114	0.556	13	114	0.321	13	114	0.877
16:00 - 17:00	13	114	0.536	13	114	0.333	13	114	0.869
17:00 - 18:00	**13**	**114**	**0.638**	13	114	0.244	13	114	0.882
18:00 - 19:00	13	114	0.435	13	114	0.338	13	114	0.773
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.165			4.202			8.367

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/A - HOUSES PRIVATELY OWNED

MULTI-MODAL Servicing Vehicles

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	13	114	0.005	13	114	0.006	13	114	0.011
08:00 - 09:00	13	114	0.006	13	114	0.005	13	114	0.011
09:00 - 10:00	13	114	0.004	13	114	0.005	13	114	0.009
10:00 - 11:00	13	114	0.006	13	114	0.006	13	114	0.012
11:00 - 12:00	13	114	0.003	13	114	0.003	13	114	0.006
12:00 - 13:00	13	114	0.006	13	114	0.005	13	114	0.011
13:00 - 14:00	**13**	**114**	**0.011**	**13**	**114**	**0.009**	**13**	**114**	**0.020**
14:00 - 15:00	13	114	0.004	13	114	0.006	13	114	0.010
15:00 - 16:00	13	114	0.004	13	114	0.004	13	114	0.008
16:00 - 17:00	13	114	0.005	13	114	0.007	13	114	0.012
17:00 - 18:00	13	114	0.004	13	114	0.003	13	114	0.007
18:00 - 19:00	13	114	0.003	13	114	0.002	13	114	0.005
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.061			0.061			0.122

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

WF01BEW - Location of usual residence and place of work (OA level)

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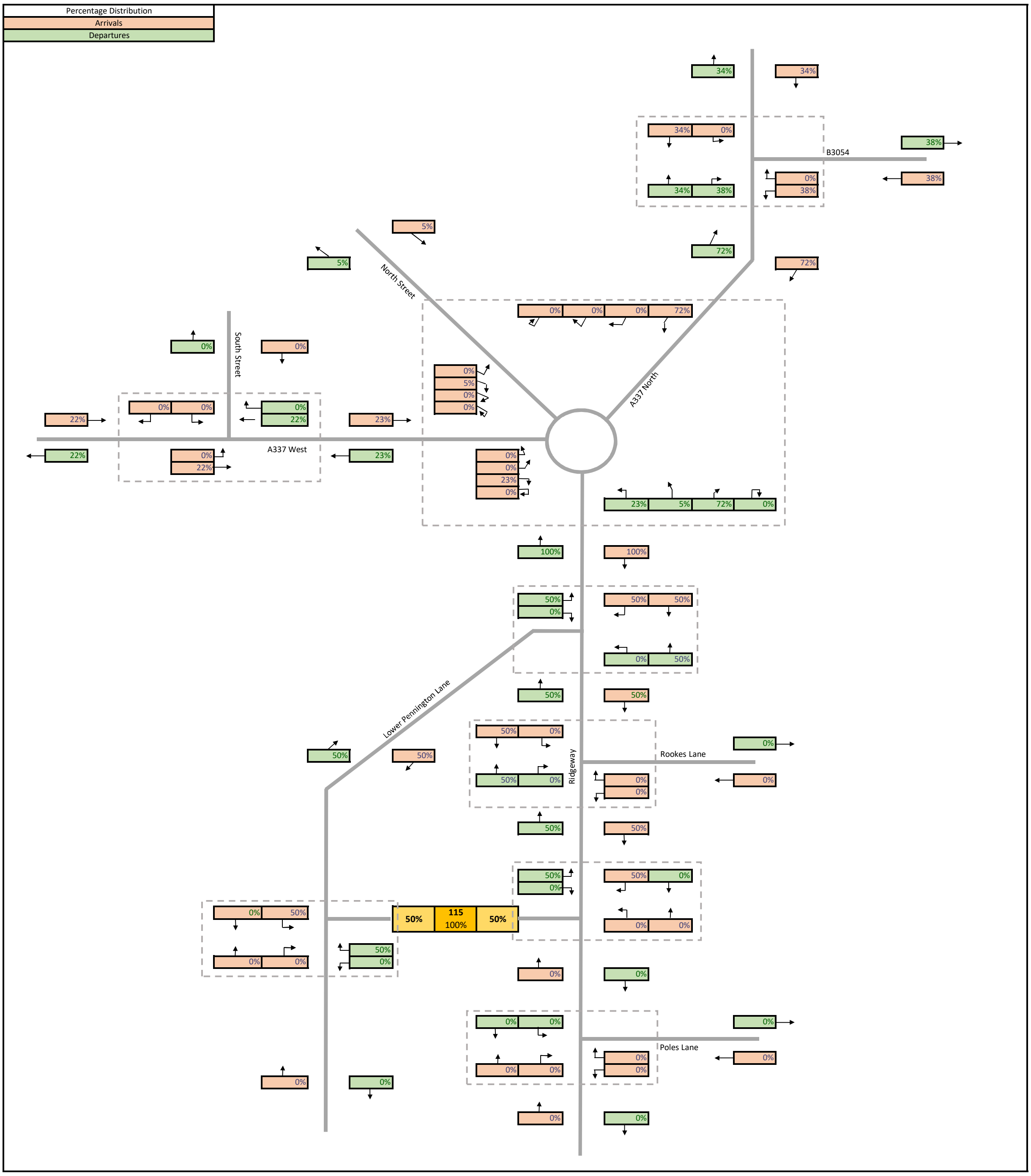
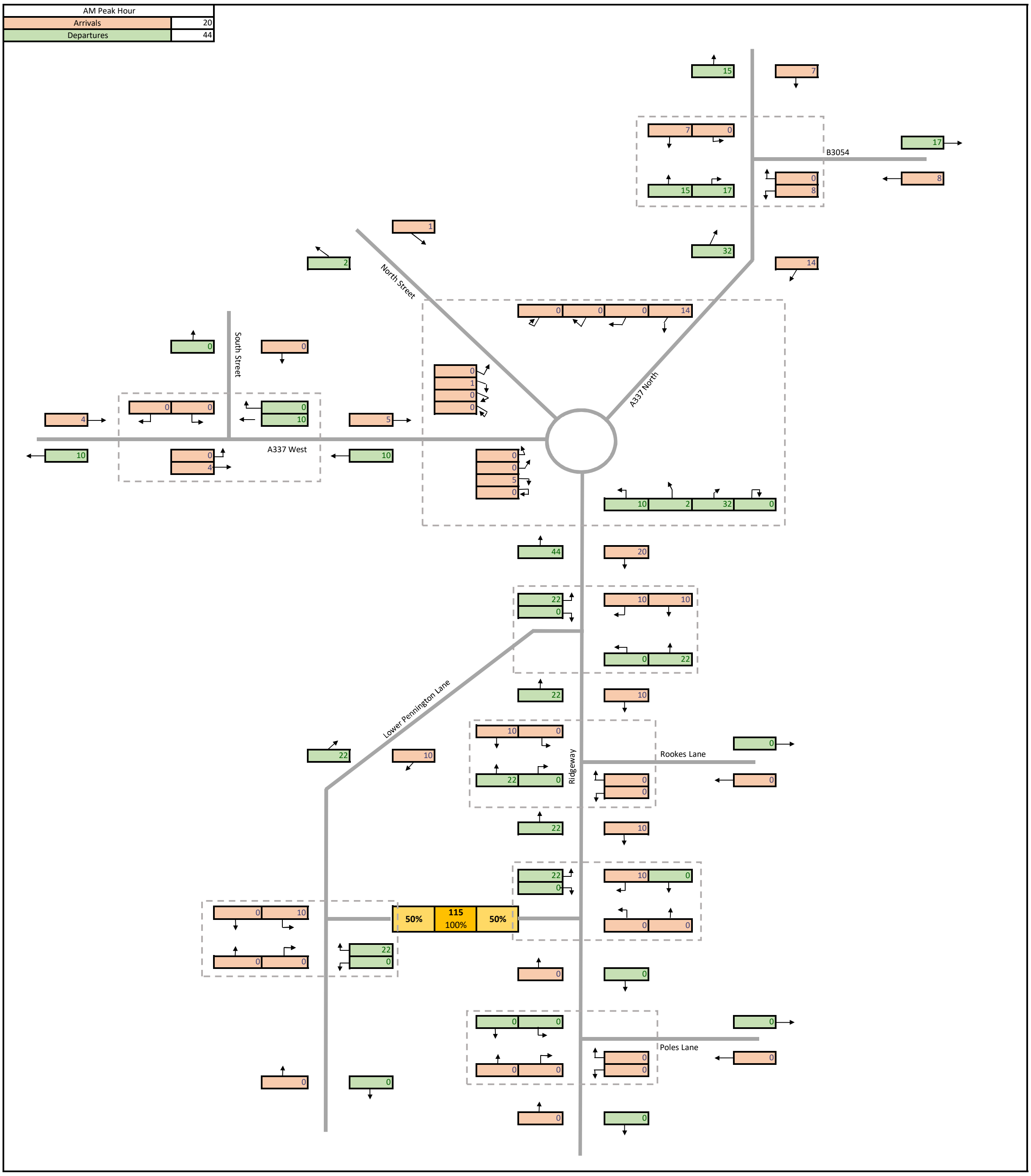
population	All usual residents ages 16 and over in employment the week before the census
units	Persons
date	2011

place of work	currently residing in E01023059 : New Forest 023E	%	B3054	A337 (north)	Lower Pennington Lane	A337 (west)	Poles Lane	South St	North St	B3054	A337 (north)	Lower Pennington Lane	A337 (west)	Poles Lane	South St	North St	
E01022990 : New Forest 017A	25	5.4%	1							5.4%							
E01022999 : New Forest 017B	6	1.3%	1							1.3%							
E01023041 : New Forest 017C	13	2.8%	1							2.8%							
E01023042 : New Forest 017D	78	16.7%	1							16.7%							
E01023043 : New Forest 017E	14	3.0%		1							3.0%						
E01023001 : New Forest 019A	0	0.0%		1													
E01023002 : New Forest 019B	35	7.5%	1							7.5%							
E01023058 : New Forest 019C	0	0.0%				1											
E01023060 : New Forest 019D	2	0.4%						1							0.4%		
E01023061 : New Forest 019E	22	4.7%							1							4.7%	
E01023044 : New Forest 023A	2	0.4%					1							0.4%			
E01023051 : New Forest 023B	4	0.9%				1							0.9%				
E01023052 : New Forest 023C	7	1.5%				1							1.5%				
E01023053 : New Forest 023D	3	0.6%				1							0.6%				
E01023059 : New Forest 023E	20	4.3%															
E02004779 : New Forest 001	3	0.6%		1							0.6%						
E02004780 : New Forest 002	3	0.6%		1							0.6%						
E02004781 : New Forest 003	0	0.0%		1													
E02004782 : New Forest 004	1	0.2%		1							0.2%						
E02004783 : New Forest 005	2	0.4%		1							0.4%						
E02004784 : New Forest 006	3	0.6%		1							0.6%						
E02004785 : New Forest 007	13	2.8%		1							2.8%						
E02004786 : New Forest 008	4	0.9%	1							0.9%							
E02004787 : New Forest 009	0	0.0%	1														
E02004788 : New Forest 010	2	0.4%		0.5		0.5					0.2%		0.2%				
E02004789 : New Forest 011	1	0.2%	1							0.2%							
E02004790 : New Forest 012	4	0.9%		0.5		0.5					0.4%		0.4%				
E02004791 : New Forest 013	0	0.0%	1														
E02004792 : New Forest 014	15	3.2%	1							3.2%							
E02004793 : New Forest 015	21	4.5%		1							4.5%						
E02004794 : New Forest 016	2	0.4%		0.5		0.5					0.2%		0.2%				
E02004796 : New Forest 018	11	2.4%				1							2.4%				
E02004798 : New Forest 020	22	4.7%				1							4.7%				
E02004799 : New Forest 021	17	3.6%				1							3.6%				
E02004800 : New Forest 022	5	1.1%				1							1.1%				
E02004795 : New Forest 017	136	29.1%															
E02004797 : New Forest 019	59	12.6%															
E02004801 : New Forest 023	36	7.7%															
New Forest	360	77.1%															
Southampton	36	7.7%		1							7.7%						
Christchurch	14	3.0%				1							3.0%				
Westminster,City of London	11	2.4%		1							2.4%						
Winchester	6	1.3%		1							1.3%						
Bournemouth	6	1.3%				1							1.3%				
Eastleigh	5	1.1%		1							1.1%						
Poole	5	1.1%				1							1.1%				
East Dorset	4	0.9%		0.5		0.5					0.4%		0.4%				
Purbeck	3	0.6%				1							0.6%				
Hillingdon	2	0.4%		1							0.4%						
Islington	2	0.4%		1							0.4%						
Kensington and Chelsea	2	0.4%		1							0.4%						
Richmond upon Thames	2	0.4%		1							0.4%						
Bracknell Forest	2	0.4%		1							0.4%						
Portsmouth	2	0.4%		1							0.4%						
Test Valley	2	0.4%		1							0.4%						
Wiltshire	2	0.4%		1							0.4%						
Darlington	1	0.2%		1							0.2%						
Gateshead	1	0.2%		1							0.2%						
Kingston upon Hull, City of	1	0.2%		1							0.2%						
Warwick	1	0.2%		1							0.2%						
St Albans	1	0.2%		1							0.2%						
Croydon	1	0.2%		1							0.2%						
Hounslow	1	0.2%		1							0.2%						
Waltham Forest	1	0.2%		1							0.2%						
Reading	1	0.2%		1							0.2%						
Wokingham	1	0.2%		1							0.2%						
Wealden	1	0.2%		1							0.2%						
Basingstoke and Deane	1	0.2%		1							0.2%						
Havant	1	0.2%		1							0.2%						
Rushmoor	1	0.2%		1							0.2%						
Maidstone	1	0.2%		1							0.2%						
Guildford	1	0.2%		1							0.2%						
Mole Valley	1	0.2%		1							0.2%						
Surrey Heath	1	0.2%		1							0.2%						
Plymouth	1	0.2%		0.5		0.5					0.1%		0.1%				
West Dorset	1	0.2%		0.5		0.5					0.1%		0.1%				
Taunton Deane	1	0.2%		0.5		0.5					0.1%		0.1%				
Total	467	100.0%								37.9%	34.2%	0.0%	22.4%	0.4%	0.4%	4.7%	100.0%

APPENDIX G

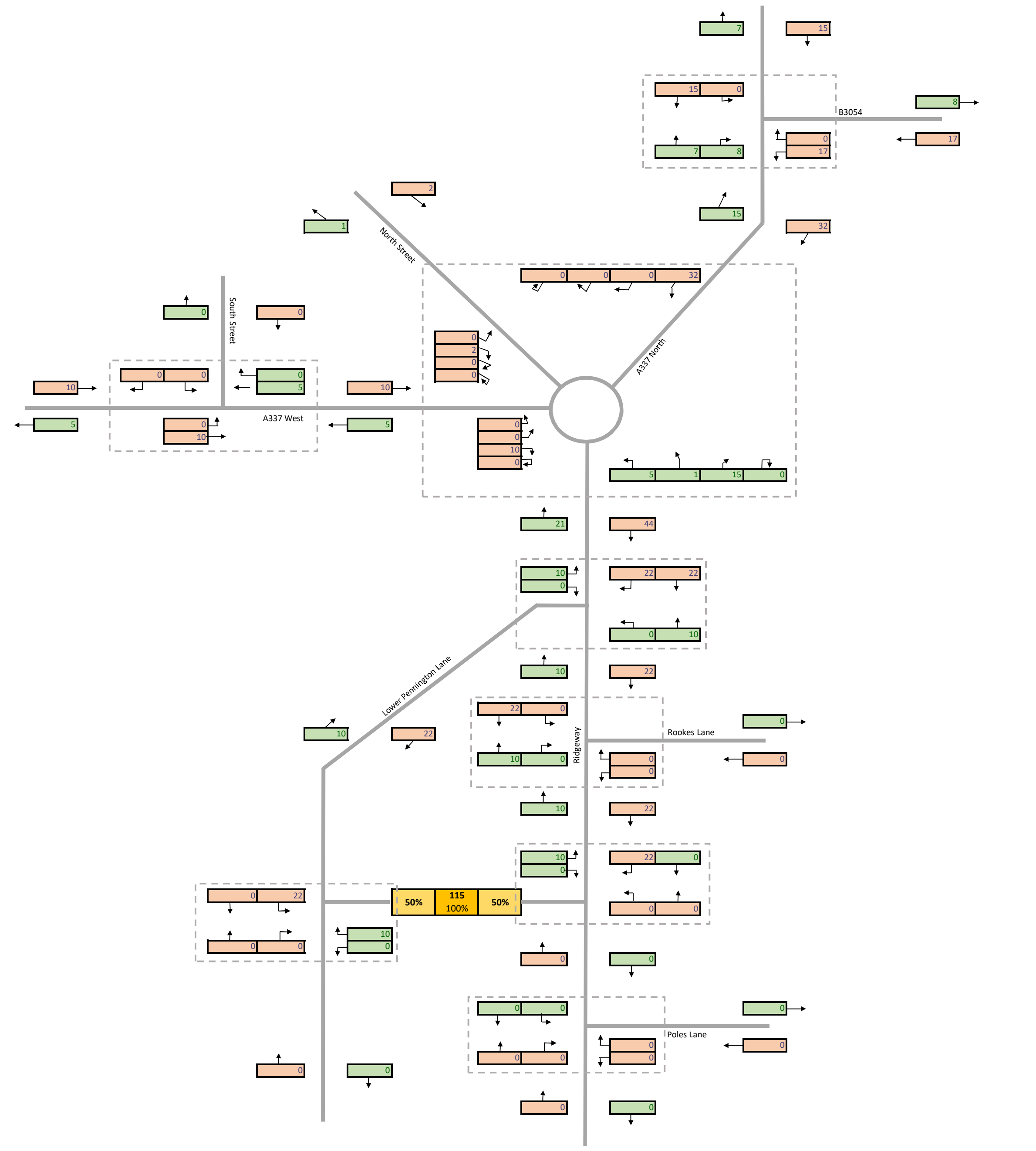

Percentage Distribution
Arrivals
Departures
B3054
North Street
South Street
A337 North
A337 West
Lower Pennington Lane
Ridgeway
Rookes Lane
Poles Lane
115
100%
50%
50%

APPENDIX H



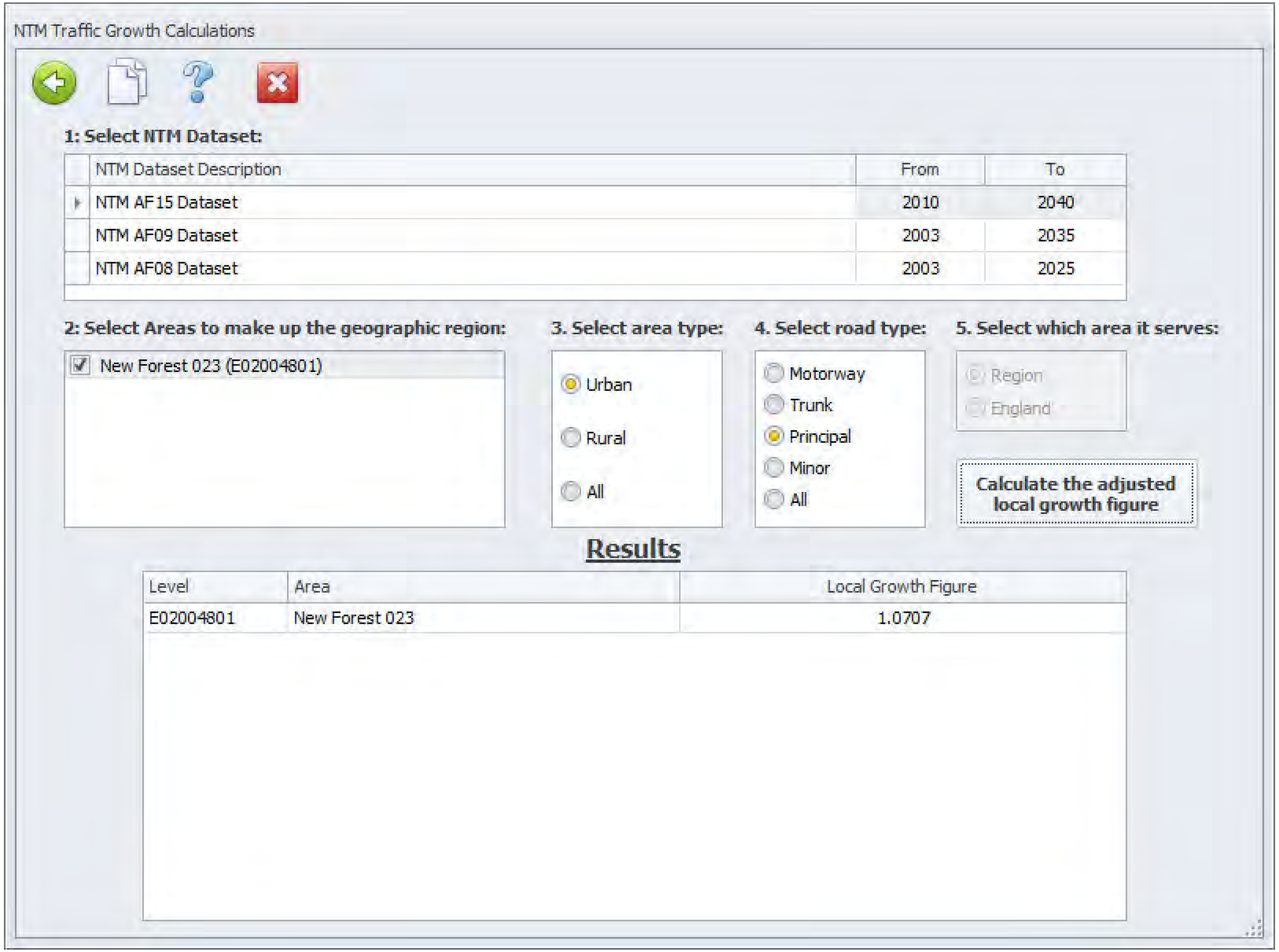
AM Peak Hour
Arrivals 20
Departures 44
B3054
North Street
South Street
A337 North
A337 West
Lower Pennington Lane
Ridgeway
Rookes Lane
Poles Lane
115
100%
50%
50%

PM Peak Hour	
Arrivals	44
Departures	21

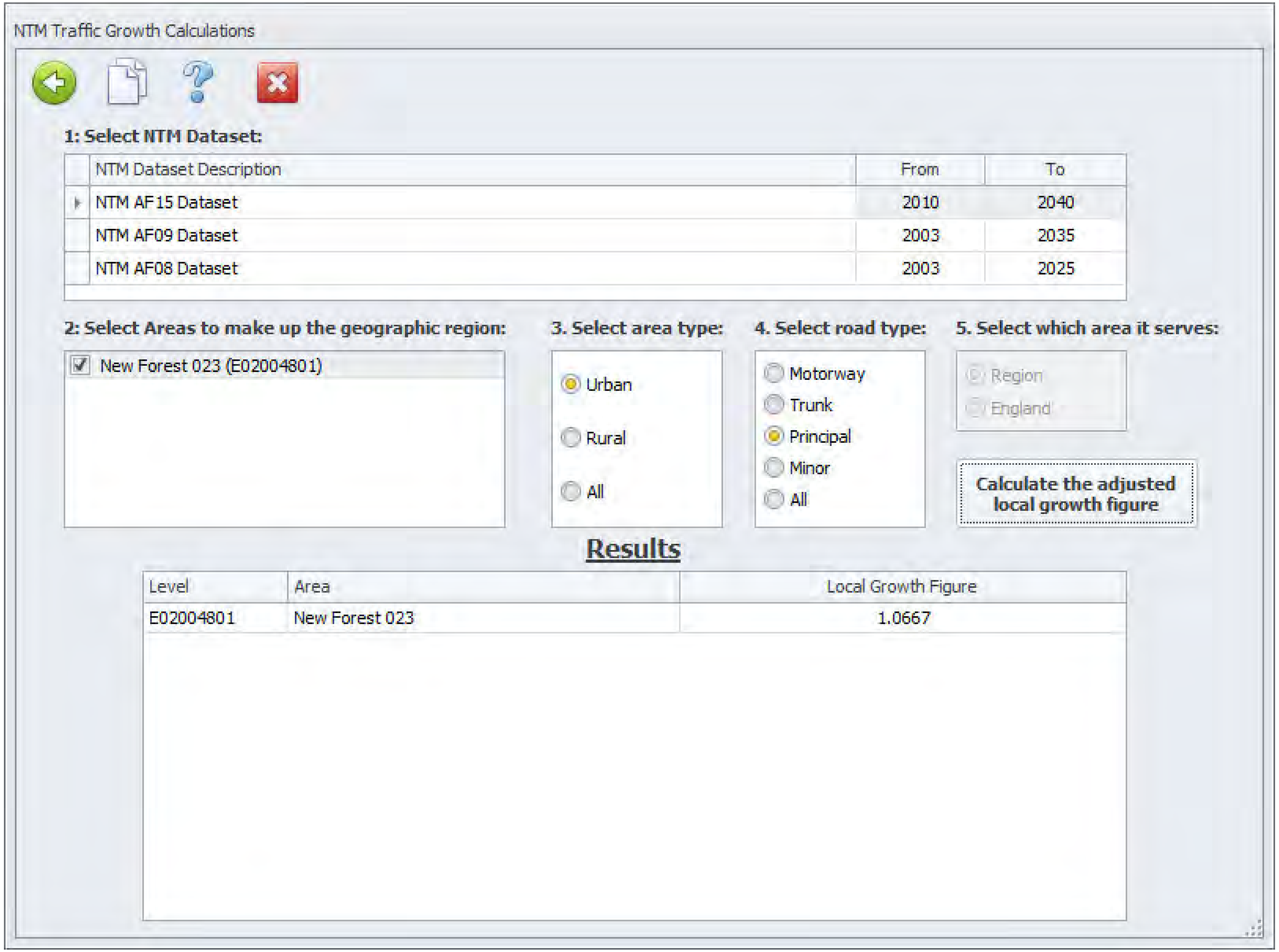


APPENDIX I

AM PEAK – CARS


NTM Traffic Growth Calculations
1: Select NTM Dataset:
NTM Dataset Description
From
To
NTM AF15 Dataset
2010
2040
NTM AF09 Dataset
2003
2035
NTM AF08 Dataset
2003
2025
2: Select Areas to make up the geographic region:
New Forest 023 (E02004801)
3. Select area type:
Urban
Rural
All
4. Select road type:
Motorway
Trunk
Principal
Minor
All
5. Select which area it serves:
Region
England
Calculate the adjusted local growth figure
Results
Level
Area
Local Growth Figure
E02004801
New Forest 023
1.0707

PM PEAK – CARS


NTM Traffic Growth Calculations
1: Select NTM Dataset:
NTM Dataset Description
From
To
NTM AF15 Dataset 2010 2040
NTM AF09 Dataset 2003 2035
NTM AF08 Dataset 2003 2025
2: Select Areas to make up the geographic region:
New Forest 023 (E02004801)
3. Select area type:
Urban
Rural
All
4. Select road type:
Motorway
Trunk
Principal
Minor
All
5. Select which area it serves:
Region
England
Calculate the adjusted local growth figure
Results
Level
Area
Local Growth Figure
E02004801 New Forest 023 1.0667

APPENDIX J

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: Ridgeway and Pennington Roundabout Assessment.arc8
Path: T:\RGP\2018 Projects (4401-4500)\4483 Ridgeway Land - Planning Stage\Technical Assessments\Junction Modelling\New
Report generation date: 28/11/2018 15:01:37

Summary of junction performance

	AM			
	Queue (Veh)	Delay (s)	RFC	LOS
	Ridgeway and Pennington Lane Roundabout - Ridgeway and Pennington Lane Roundabout 2018			
Arm 1	0.55	3.83	0.36	A
Arm 2	0.38	5.94	0.27	A
Arm 3	3.74	14.42	0.80	B
Arm 4	1.07	17.53	0.52	C

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

"D1 - Ridgeway and Pennington Lane Roundabout 2018, AM " model duration: 08:00 - 09:30
"D2 - Ridgeway and Pennington Lane Roundabout 2018, PM" model duration: 17:00 - 18:30
"D3 - Ridgeway and Pennington Lane Roundabout 2018 + Development Traffic, AM" model duration: 08:00 - 09:30
"D4 - Ridgeway and Pennington Lane Roundabout 2018 + Developemtn Traffic, PM" model duration: 17:00 - 18:30
"D5 - Ridgeway and Pennington Lane Roundabout 2023 + Development Traffic, AM" model duration: 08:00 - 09:30
"D6 - Ridgeway and Pennington Lane Roundabout 2023 + Developemtn Traffic, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.4.487 at 28/11/2018 15:01:36

File summary

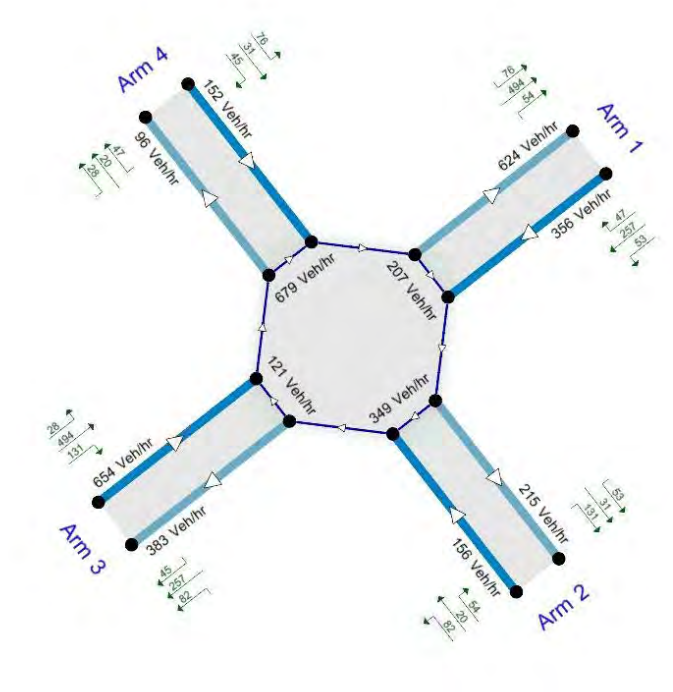
Title	Ridgeway and Pennington Junction Assessment
Location	
Site Number	
Date	30/01/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	remotechi
Description	

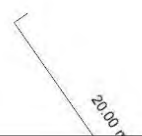
Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	s	-Min	perMin





[redacted]

The junction diagram reflects the last run of ARCADY.

Ridgeway and Pennington Lane Roundabout - Ridgeway and Pennington Lane Roundabout 2018, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Ridgeway and Pennington Lane Roundabout	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Ridgeway and Pennington Lane Roundabout 2018, AM	Ridgeway and Pennington Lane Roundabout 2018	AM		ONE HOUR	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			10.87	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A337 Northbound	
2	2	Ridgeway and Pennington Lane	
3	3	Milford Road	
4	4	North Street	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.70	6.50	19.30	131.60	26.60	36.00	
2	3.20	3.80	4.90	18.90	26.60	20.00	
3	3.50	5.20	12.50	11.60	26.60	37.00	
4	2.80	3.30	7.40	9.30	26.60	27.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.675	1735.623
2		(calculated)	(calculated)	0.555	1135.265
3		(calculated)	(calculated)	0.567	1334.666
4		(calculated)	(calculated)	0.488	928.355

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	475.00	100.000
2	ONE HOUR	✓	208.00	100.000
3	ONE HOUR	✓	874.00	100.000
4	ONE HOUR	✓	204.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	70.000	342.000	63.000
	2	72.000	0.000	109.000	27.000
	3	661.000	175.000	0.000	38.000
	4	102.000	42.000	60.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.15	0.72	0.13
	2	0.35	0.00	0.52	0.13
	3	0.76	0.20	0.00	0.04
	4	0.50	0.21	0.29	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.014	1.061	1.000
	2	1.000	1.000	1.009	1.000
	3	1.024	1.006	1.000	1.000
	4	1.010	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	1.4	6.1	0.0
	2	0.0	0.0	0.9	0.0
	3	2.4	0.6	0.0	0.0
	4	1.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.36	3.83	0.55	A
2	0.27	5.94	0.38	A
3	0.80	14.42	3.74	B
4	0.52	17.53	1.07	C

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	357.61	356.39	206.95	0.00	1525.35	0.234	0.30	3.077	A
2	156.59	155.79	348.62	0.00	928.82	0.169	0.20	4.652	A
3	657.99	653.55	121.42	0.00	1241.78	0.530	1.11	6.076	A
4	153.58	152.18	679.06	0.00	587.90	0.261	0.35	8.236	A

Main results: (08:15-08:30)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	427.02	426.65	248.15	0.00	1498.68	0.285	0.40	3.358	A
2	186.99	186.74	417.50	0.00	889.10	0.210	0.26	5.124	A
3	785.71	783.22	145.47	0.00	1228.40	0.640	1.73	8.041	A
4	183.39	182.66	813.80	0.00	521.26	0.352	0.53	10.608	B

Main results: (08:30-08:45)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	522.99	522.36	302.46	0.00	1463.52	0.357	0.55	3.823	A
2	229.01	228.57	510.85	0.00	835.24	0.274	0.37	5.930	A
3	962.29	954.75	178.07	0.00	1210.25	0.795	3.62	13.692	B
4	224.61	222.59	992.35	0.00	432.95	0.519	1.04	16.951	C

Main results: (08:45-09:00)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	522.99	522.98	304.82	0.00	1461.99	0.358	0.55	3.832	A
2	229.01	229.00	511.93	0.00	834.63	0.274	0.38	5.943	A
3	962.29	961.81	178.36	0.00	1210.09	0.795	3.74	14.422	B
4	224.61	224.48	999.26	0.00	429.54	0.523	1.07	17.530	C

Main results: (09:00-09:15)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	427.02	427.63	251.58	0.00	1496.46	0.285	0.40	3.369	A
2	186.99	187.42	419.15	0.00	888.16	0.211	0.27	5.140	A
3	785.71	793.40	145.92	0.00	1228.14	0.640	1.82	8.421	A
4	183.39	185.43	823.78	0.00	516.32	0.355	0.56	10.946	B

Main results: (09:15-09:30)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	357.61	357.98	209.48	0.00	1523.71	0.235	0.31	3.088	A
2	156.59	156.85	350.63	0.00	927.68	0.169	0.20	4.673	A
3	657.99	660.69	122.13	0.00	1241.38	0.530	1.14	6.227	A
4	153.58	154.38	686.26	0.00	584.33	0.263	0.36	8.388	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: Ridgeway and Pennington Roundabout Assessment.arc8
Path: T:\RGP\2018 Projects (4401-4500)\4483 Ridgeway Land - Planning Stage\Technical Assessments\Junction Modelling\New
Report generation date: 28/11/2018 15:03:17

Summary of junction performance

	PM			
	Queue (Veh)	Delay (s)	RFC	LOS
	Ridgeway and Pennington Lane Roundabout - Ridgeway and Pennington Lane Roundabout 2018			
Arm 1	0.65	3.69	0.39	A
Arm 2	0.42	6.46	0.30	A
Arm 3	1.05	5.83	0.51	A
Arm 4	0.23	7.58	0.19	A

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

"D1 - Ridgeway and Pennington Lane Roundabout 2018, AM" model duration: 08:00 - 09:30
"D2 - Ridgeway and Pennington Lane Roundabout 2018, PM " model duration: 17:00 - 18:30
"D3 - Ridgeway and Pennington Lane Roundabout 2018 + Development Traffic, AM" model duration: 08:00 - 09:30
"D4 - Ridgeway and Pennington Lane Roundabout 2018 + Developemtn Traffic, PM" model duration: 17:00 - 18:30
"D5 - Ridgeway and Pennington Lane Roundabout 2023 + Development Traffic, AM" model duration: 08:00 - 09:30
"D6 - Ridgeway and Pennington Lane Roundabout 2023 + Developemtn Traffic, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.4.487 at 28/11/2018 15:03:15

File summary

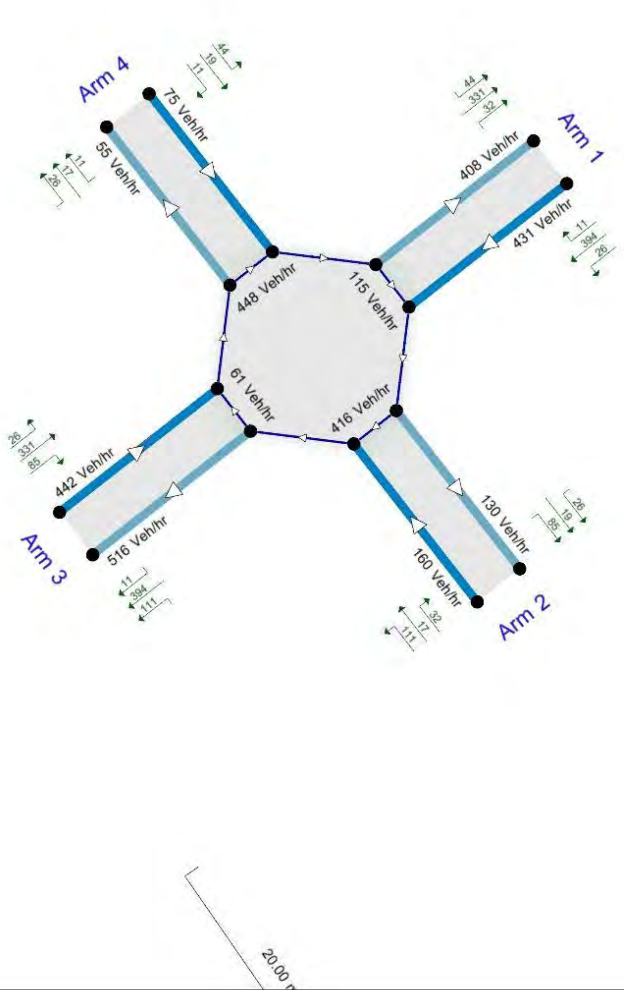
Title	Ridgeway and Pennington Junction Assessment
Location	
Site Number	
Date	30/01/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	remotechi
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	s	-Min	perMin



[redacted]

The junction diagram reflects the last run of ARCADY.

Ridgeway and Pennington Lane Roundabout - Ridgeway and Pennington Lane Roundabout 2018, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Ridgeway and Pennington Lane Roundabout	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Ridgeway and Pennington Lane Roundabout 2018, PM	Ridgeway and Pennington Lane Roundabout 2018	PM		ONE HOUR	17:00	18:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			5.21	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A337 Northbound	
2	2	Ridgeway and Pennington Lane	
3	3	Milford Road	
4	4	North Street	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.70	6.50	19.30	131.60	26.60	36.00	
2	3.20	3.80	4.90	18.90	26.60	20.00	
3	3.50	5.20	12.50	11.60	26.60	37.00	
4	2.80	3.30	7.40	9.30	26.60	27.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.675	1735.623
2		(calculated)	(calculated)	0.555	1135.265
3		(calculated)	(calculated)	0.567	1334.666
4		(calculated)	(calculated)	0.488	928.355

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	574.00	100.000
2	ONE HOUR	✓	214.00	100.000
3	ONE HOUR	✓	590.00	100.000
4	ONE HOUR	✓	100.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	34.000	525.000	15.000
	2	43.000	0.000	148.000	23.000
	3	442.000	113.000	0.000	35.000
	4	59.000	26.000	15.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.06	0.91	0.03
	2	0.20	0.00	0.69	0.11
	3	0.75	0.19	0.00	0.06
	4	0.59	0.26	0.15	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.008	1.000
	2	1.000	1.000	1.000	1.000
	3	1.018	1.000	1.000	1.000
	4	1.018	1.000	1.133	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.8	0.0
	2	0.0	0.0	0.0	0.0
	3	1.8	0.0	0.0	0.0
	4	1.8	0.0	13.3	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.39	3.69	0.65	A
2	0.30	6.46	0.42	A
3	0.51	5.83	1.05	A
4	0.19	7.58	0.23	A

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	432.14	430.72	115.34	0.00	1644.77	0.263	0.35	2.963	A
2	161.11	160.25	416.43	0.00	901.71	0.179	0.22	4.851	A
3	444.19	442.08	60.68	0.00	1282.96	0.346	0.53	4.271	A
4	75.29	74.80	448.06	0.00	685.85	0.110	0.12	5.886	A

Main results: (17:15-17:30)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	516.01	515.59	138.24	0.00	1629.23	0.317	0.46	3.233	A
2	192.38	192.09	498.51	0.00	855.67	0.225	0.29	5.422	A
3	530.40	529.68	72.72	0.00	1276.22	0.416	0.70	4.818	A
4	89.90	89.74	536.86	0.00	643.25	0.140	0.16	6.502	A

Main results: (17:30-17:45)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	631.98	631.26	169.19	0.00	1608.24	0.393	0.64	3.683	A
2	235.62	235.10	610.34	0.00	792.94	0.297	0.42	6.448	A
3	649.61	648.27	89.00	0.00	1267.11	0.513	1.04	5.804	A
4	110.10	109.83	657.05	0.00	585.58	0.188	0.23	7.564	A

Main results: (17:45-18:00)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	631.98	631.98	169.55	0.00	1607.99	0.393	0.65	3.687	A
2	235.62	235.61	611.06	0.00	792.54	0.297	0.42	6.463	A
3	649.61	649.58	89.18	0.00	1267.01	0.513	1.05	5.830	A
4	110.10	110.10	658.39	0.00	584.94	0.188	0.23	7.580	A

Main results: (18:00-18:15)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	516.01	516.73	138.80	0.00	1628.85	0.317	0.47	3.238	A
2	192.38	192.89	499.65	0.00	855.03	0.225	0.29	5.442	A
3	530.40	531.71	72.99	0.00	1276.07	0.416	0.72	4.844	A
4	89.90	90.16	538.93	0.00	642.25	0.140	0.16	6.523	A

Main results: (18:15-18:30)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	432.14	432.57	116.15	0.00	1644.22	0.263	0.36	2.973	A
2	161.11	161.40	418.26	0.00	900.67	0.179	0.22	4.871	A
3	444.19	444.92	61.08	0.00	1282.73	0.346	0.53	4.300	A
4	75.29	75.44	450.96	0.00	684.46	0.110	0.12	5.914	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: Ridgeway and Pennington Roundabout Assessment.arc8
Path: T:\RGP\2018 Projects (4401-4500)\4483 Ridgeway Land - Planning Stage\Technical Assessments\Junction Modelling\New
Report generation date: 28/11/2018 15:04:32

Summary of junction performance

	AM			
	Queue (Veh)	Delay (s)	RFC	LOS
	Ridgeway and Pennington Lane Roundabout - Ridgeway and Pennington Lane Roundabout 2018 + Development Traffic			
Arm 1	0.58	3.91	0.37	A
Arm 2	0.49	6.46	0.33	A
Arm 3	4.18	16.08	0.81	C
Arm 4	1.19	19.49	0.55	C

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

"D1 - Ridgeway and Pennington Lane Roundabout 2018, AM" model duration: 08:00 - 09:30
"D2 - Ridgeway and Pennington Lane Roundabout 2018, PM" model duration: 17:00 - 18:30
"D3 - Ridgeway and Pennington Lane Roundabout 2018 + Development Traffic, AM " model duration: 08:00 - 09:30
"D4 - Ridgeway and Pennington Lane Roundabout 2018 + Developemtn Traffic, PM" model duration: 17:00 - 18:30
"D5 - Ridgeway and Pennington Lane Roundabout 2023 + Development Traffic, AM" model duration: 08:00 - 09:30
"D6 - Ridgeway and Pennington Lane Roundabout 2023 + Developemtn Traffic, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.4.487 at 28/11/2018 15:04:30

File summary

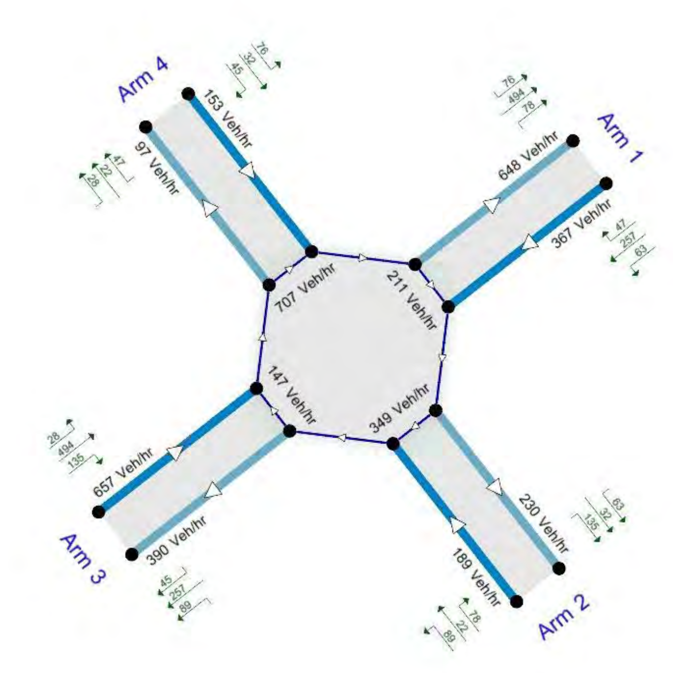
Title	Ridgeway and Pennington Junction Assessment
Location	
Site Number	
Date	30/01/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	remotechi
Description	

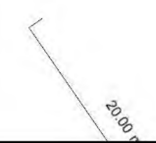
Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	s	-Min	perMin





[redacted]

The junction diagram reflects the last run of ARCADY.

Ridgeway and Pennington Lane Roundabout - Ridgeway and Pennington Lane Roundabout 2018 + Development Traffic, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Ridgeway and Pennington Lane Roundabout	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Ridgeway and Pennington Lane Roundabout 2018 + Development Traffic, AM	Ridgeway and Pennington Lane Roundabout 2018 + Development Traffic	AM		ONE HOUR	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			11.82	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A337 Northbound	
2	2	Ridgeway and Pennington Lane	
3	3	Milford Road	
4	4	North Street	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.70	6.50	19.30	131.60	26.60	36.00	
2	3.20	3.80	4.90	18.90	26.60	20.00	
3	3.50	5.20	12.50	11.60	26.60	37.00	
4	2.80	3.30	7.40	9.30	26.60	27.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.675	1735.623
2		(calculated)	(calculated)	0.555	1135.265
3		(calculated)	(calculated)	0.567	1334.666
4		(calculated)	(calculated)	0.488	928.355

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	489.00	100.000
2	ONE HOUR	✓	252.00	100.000
3	ONE HOUR	✓	879.00	100.000
4	ONE HOUR	✓	205.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	84.000	342.000	63.000
	2	104.000	0.000	119.000	29.000
	3	661.000	180.000	0.000	38.000
	4	102.000	43.000	60.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.17	0.70	0.13
	2	0.41	0.00	0.47	0.12
	3	0.75	0.20	0.00	0.04
	4	0.50	0.21	0.29	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.014	1.061	1.000
	2	1.000	1.000	1.009	1.000
	3	1.024	1.006	1.000	1.000
	4	1.010	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	1.4	6.1	0.0
	2	0.0	0.0	0.9	0.0
	3	2.4	0.6	0.0	0.0
	4	1.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.37	3.91	0.58	A
2	0.33	6.46	0.49	A
3	0.81	16.08	4.18	C
4	0.55	19.49	1.19	C

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	368.14	366.88	211.39	0.00	1523.80	0.242	0.32	3.109	A
2	189.72	188.70	348.60	0.00	929.27	0.204	0.25	4.855	A
3	661.75	657.15	146.86	0.00	1227.71	0.539	1.15	6.260	A
4	154.33	152.88	706.61	0.00	574.52	0.269	0.36	8.510	A

Main results: (08:15-08:30)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	439.60	439.21	253.45	0.00	1496.54	0.294	0.41	3.405	A
2	226.54	226.21	417.47	0.00	889.53	0.255	0.34	5.425	A
3	790.20	787.50	175.97	0.00	1211.51	0.652	1.83	8.436	A
4	184.29	183.49	846.81	0.00	505.23	0.365	0.56	11.161	B

Main results: (08:30-08:45)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	538.40	537.73	308.62	0.00	1460.80	0.369	0.58	3.898	A
2	277.46	276.85	510.74	0.00	835.69	0.332	0.49	6.435	A
3	967.79	959.05	215.39	0.00	1189.57	0.814	4.01	15.065	C
4	225.71	223.37	1031.84	0.00	413.78	0.545	1.15	18.685	C

Main results: (08:45-09:00)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	538.40	538.39	311.37	0.00	1459.02	0.369	0.58	3.910	A
2	277.46	277.45	511.91	0.00	835.03	0.332	0.49	6.455	A
3	967.79	967.15	215.79	0.00	1189.35	0.814	4.18	16.077	C
4	225.71	225.53	1039.84	0.00	409.83	0.551	1.19	19.492	C

Main results: (09:00-09:15)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	439.60	440.25	257.45	0.00	1493.95	0.294	0.42	3.417	A
2	226.54	227.14	419.26	0.00	888.51	0.255	0.34	5.447	A
3	790.20	799.20	176.60	0.00	1211.16	0.652	1.93	8.920	A
4	184.29	186.68	858.39	0.00	499.50	0.369	0.60	11.594	B

Main results: (09:15-09:30)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	368.14	368.54	214.11	0.00	1522.04	0.242	0.32	3.123	A
2	189.72	190.06	350.66	0.00	928.09	0.204	0.26	4.879	A
3	661.75	664.71	147.79	0.00	1227.19	0.539	1.19	6.432	A
4	154.33	155.22	714.41	0.00	570.66	0.270	0.38	8.684	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: Ridgeway and Pennington Roundabout Assessment.arc8
Path: T:\RGP\2018 Projects (4401-4500)\4483 Ridgeway Land - Planning Stage\Technical Assessments\Junction Modelling\New
Report generation date: 28/11/2018 15:05:20

Summary of junction performance

	PM			
	Queue (Veh)	Delay (s)	RFC	LOS
	Ridgeway and Pennington Lane Roundabout - Ridgeway and Pennington Lane Roundabout 2018 + Developemtn Traffic			
Arm 1	0.87	4.24	0.47	A
Arm 2	0.65	7.90	0.39	A
Arm 3	1.12	6.13	0.53	A
Arm 4	0.28	7.99	0.22	A

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

"D1 - Ridgeway and Pennington Lane Roundabout 2018, AM" model duration: 08:00 - 09:30
"D2 - Ridgeway and Pennington Lane Roundabout 2018, PM" model duration: 17:00 - 18:30
"D3 - Ridgeway and Pennington Lane Roundabout 2018 + Development Traffic, AM" model duration: 08:00 - 09:30
"D4 - Ridgeway and Pennington Lane Roundabout 2018 + Developemtn Traffic, PM " model duration: 17:00 - 18:30
"D5 - Ridgeway and Pennington Lane Roundabout 2023 + Development Traffic, AM" model duration: 08:00 - 09:30
"D6 - Ridgeway and Pennington Lane Roundabout 2023 + Developemtn Traffic, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.4.487 at 28/11/2018 15:05:18

File summary

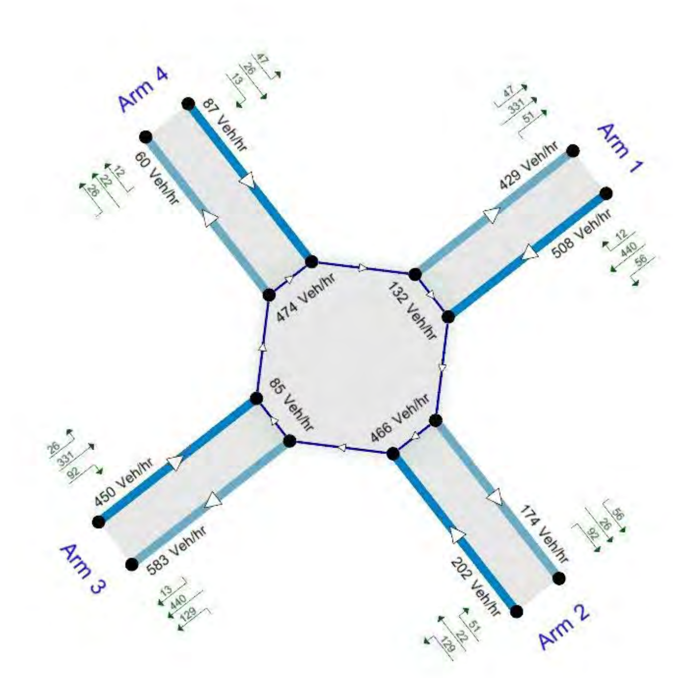
Title	Ridgeway and Pennington Junction Assessment
Location	
Site Number	
Date	30/01/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	remotechi
Description	

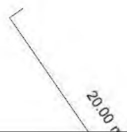
Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	s	-Min	perMin





[redacted]

The junction diagram reflects the last run of ARCADY.

Ridgeway and Pennington Lane Roundabout - Ridgeway and Pennington Lane Roundabout 2018 + Developemtn Traffic, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Ridgeway and Pennington Lane Roundabout	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Ridgeway and Pennington Lane Roundabout 2018 + Developemtn Traffic, PM	Ridgeway and Pennington Lane Roundabout 2018 + Developemtn Traffic	PM		ONE HOUR	17:00	18:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			5.78	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A337 Northbound	
2	2	Ridgeway and Pennington Lane	
3	3	Milford Road	
4	4	North Street	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.70	6.50	19.30	131.60	26.60	36.00	
2	3.20	3.80	4.90	18.90	26.60	20.00	
3	3.50	5.20	12.50	11.60	26.60	37.00	
4	2.80	3.30	7.40	9.30	26.60	27.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.675	1735.623
2		(calculated)	(calculated)	0.555	1135.265
3		(calculated)	(calculated)	0.567	1334.666
4		(calculated)	(calculated)	0.488	928.355

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	677.00	100.000
2	ONE HOUR	✓	270.00	100.000
3	ONE HOUR	✓	600.00	100.000
4	ONE HOUR	✓	116.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	74.000	587.000	16.000
	2	68.000	0.000	173.000	29.000
	3	442.000	123.000	0.000	35.000
	4	63.000	35.000	18.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.11	0.87	0.02
	2	0.25	0.00	0.64	0.11
	3	0.74	0.21	0.00	0.06
	4	0.54	0.30	0.16	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.008	1.000
	2	1.000	1.000	1.000	1.000
	3	1.018	1.000	1.000	1.000
	4	1.018	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.8	0.0
	2	0.0	0.0	0.0	0.0
	3	1.8	0.0	0.0	0.0
	4	1.8	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.47	4.24	0.87	A
2	0.39	7.90	0.65	A
3	0.53	6.13	1.12	A
4	0.22	7.99	0.28	A

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	509.68	507.88	131.79	0.00	1635.37	0.312	0.45	3.187	A
2	203.27	202.07	465.83	0.00	874.93	0.232	0.30	5.340	A
3	451.71	449.52	84.60	0.00	1269.85	0.356	0.55	4.377	A
4	87.33	86.75	474.19	0.00	687.34	0.127	0.14	5.989	A

Main results: (17:15-17:30)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	608.61	608.01	157.97	0.00	1617.83	0.376	0.60	3.563	A
2	242.72	242.27	557.71	0.00	823.58	0.295	0.41	6.187	A
3	539.39	538.62	101.41	0.00	1260.44	0.428	0.74	4.982	A
4	104.28	104.09	568.21	0.00	641.34	0.163	0.19	6.699	A

Main results: (17:30-17:45)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	745.39	744.30	193.32	0.00	1594.15	0.468	0.87	4.231	A
2	297.28	296.36	682.71	0.00	753.71	0.394	0.64	7.856	A
3	660.61	659.14	124.06	0.00	1247.76	0.529	1.11	6.101	A
4	127.72	127.37	695.33	0.00	579.14	0.221	0.28	7.956	A

Main results: (17:45-18:00)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	745.39	745.37	193.77	0.00	1593.85	0.468	0.87	4.242	A
2	297.28	297.26	683.72	0.00	753.15	0.395	0.65	7.896	A
3	660.61	660.58	124.41	0.00	1247.57	0.530	1.12	6.132	A
4	127.72	127.71	696.91	0.00	578.37	0.221	0.28	7.988	A

Main results: (18:00-18:15)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	608.61	609.68	158.67	0.00	1617.36	0.376	0.61	3.578	A
2	242.72	243.62	559.27	0.00	822.70	0.295	0.42	6.228	A
3	539.39	540.84	101.93	0.00	1260.14	0.428	0.76	5.014	A
4	104.28	104.62	570.64	0.00	640.15	0.163	0.20	6.725	A

Main results: (18:15-18:30)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	509.68	510.29	132.76	0.00	1634.72	0.312	0.46	3.205	A
2	203.27	203.74	468.09	0.00	873.66	0.233	0.31	5.379	A
3	451.71	452.51	85.25	0.00	1269.48	0.356	0.56	4.410	A
4	87.33	87.53	477.42	0.00	685.76	0.127	0.15	6.021	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: Ridgeway and Pennington Roundabout Assessment.arc8
Path: T:\RGP\2018 Projects (4401-4500)\4483 Ridgeway Land - Planning Stage\Technical Assessments\Junction Modelling\New
Report generation date: 28/11/2018 15:06:15

« Ridgeway and Pennington Lane Roundabout - Ridgeway and Pennington Lane Roundabout 2023 + Development Traffic, AM
» Junction Network
» Arms
» Traffic Flows
» Entry Flows
» Turning Proportions
» Vehicle Mix
» Results

Summary of junction performance

	AM			
	Queue (Veh)	Delay (s)	RFC	LOS
	Ridgeway and Pennington Lane Roundabout - Ridgeway and Pennington Lane Roundabout 2023 + Development Traffic			
Arm 1	0.66	4.13	0.40	A
Arm 2	0.56	6.91	0.36	A
Arm 3	6.43	23.57	0.88	C
Arm 4	1.71	26.52	0.64	D

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

"D1 - Ridgeway and Pennington Lane Roundabout 2018, AM" model duration: 08:00 - 09:30
"D2 - Ridgeway and Pennington Lane Roundabout 2018, PM" model duration: 17:00 - 18:30
"D3 - Ridgeway and Pennington Lane Roundabout 2018 + Development Traffic, AM" model duration: 08:00 - 09:30
"D4 - Ridgeway and Pennington Lane Roundabout 2018 + Developemtn Traffic, PM" model duration: 17:00 - 18:30
"D5 - Ridgeway and Pennington Lane Roundabout 2023 + Development Traffic, AM " model duration: 08:00 - 09:30
"D6 - Ridgeway and Pennington Lane Roundabout 2023 + Developemtn Traffic, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.4.487 at 28/11/2018 15:06:13

File summary

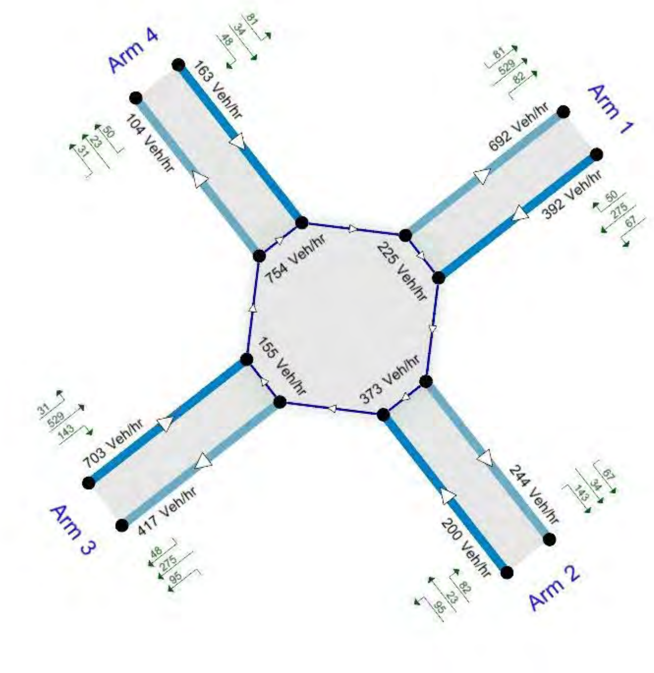
Title	Ridgeway and Pennington Junction Assessment
Location	
Site Number	
Date	30/01/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	remotechi
Description	

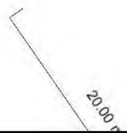
Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	s	-Min	perMin





[redacted]

The junction diagram reflects the last run of ARCADY.

Ridgeway and Pennington Lane Roundabout - Ridgeway and Pennington Lane Roundabout 2023 + Development Traffic, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Ridgeway and Pennington Lane Roundabout	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Ridgeway and Pennington Lane Roundabout 2023 + Development Traffic, AM	Ridgeway and Pennington Lane Roundabout 2023 + Development Traffic	AM		ONE HOUR	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			16.33	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A337 Northbound	
2	2	Ridgeway and Pennington Lane	
3	3	Milford Road	
4	4	North Street	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.70	6.50	19.30	131.60	26.60	36.00	
2	3.20	3.80	4.90	18.90	26.60	20.00	
3	3.50	5.20	12.50	11.60	26.60	37.00	
4	2.80	3.30	7.40	9.30	26.60	27.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.675	1735.623
2		(calculated)	(calculated)	0.555	1135.265
3		(calculated)	(calculated)	0.567	1334.666
4		(calculated)	(calculated)	0.488	928.355

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	522.00	100.000
2	ONE HOUR	✓	267.00	100.000
3	ONE HOUR	✓	941.00	100.000
4	ONE HOUR	✓	219.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	89.000	366.000	67.000
	2	109.000	0.000	127.000	31.000
	3	708.000	192.000	0.000	41.000
	4	109.000	46.000	64.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.17	0.70	0.13
	2	0.41	0.00	0.48	0.12
	3	0.75	0.20	0.00	0.04
	4	0.50	0.21	0.29	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.014	1.061	1.000
	2	1.000	1.000	1.009	1.000
	3	1.024	1.006	1.000	1.000
	4	1.010	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	1.4	6.1	0.0
	2	0.0	0.0	0.9	0.0
	3	2.4	0.6	0.0	0.0
	4	1.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.40	4.13	0.66	A
2	0.36	6.91	0.56	A
3	0.88	23.57	6.43	C
4	0.64	26.52	1.71	D

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	392.99	391.59	225.41	0.00	1514.58	0.259	0.35	3.201	A
2	201.01	199.89	372.52	0.00	915.43	0.220	0.28	5.024	A
3	708.44	703.03	155.08	0.00	1223.13	0.579	1.35	6.854	A
4	164.87	163.19	754.00	0.00	551.08	0.299	0.42	9.242	A

Main results: (08:15-08:30)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	469.27	468.82	270.21	0.00	1485.56	0.316	0.46	3.538	A
2	240.03	239.64	446.11	0.00	872.95	0.275	0.38	5.680	A
3	845.94	842.27	185.83	0.00	1206.02	0.701	2.27	9.796	A
4	196.88	195.81	903.40	0.00	477.24	0.413	0.69	12.744	B

Main results: (08:30-08:45)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	574.73	573.96	327.65	0.00	1448.34	0.397	0.65	4.114	A
2	293.97	293.25	545.50	0.00	815.58	0.360	0.56	6.882	A
3	1036.06	1021.26	227.43	0.00	1182.87	0.876	5.97	20.595	C
4	241.12	237.47	1096.48	0.00	381.82	0.632	1.60	24.347	C

Main results: (08:45-09:00)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	574.73	574.71	331.91	0.00	1445.58	0.398	0.66	4.133	A
2	293.97	293.96	547.07	0.00	814.70	0.361	0.56	6.912	A
3	1036.06	1034.23	227.90	0.00	1182.61	0.876	6.43	23.571	C
4	241.12	240.68	1109.17	0.00	375.54	0.642	1.71	26.520	D

Main results: (09:00-09:15)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	469.27	470.03	276.69	0.00	1481.36	0.317	0.47	3.561	A
2	240.03	240.74	448.55	0.00	871.58	0.275	0.38	5.712	A
3	845.94	861.91	186.56	0.00	1205.61	0.702	2.44	10.924	B
4	196.88	200.73	922.63	0.00	467.72	0.421	0.74	13.670	B

Main results: (09:15-09:30)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	392.99	393.44	228.82	0.00	1512.37	0.260	0.35	3.217	A
2	201.01	201.41	374.90	0.00	914.07	0.220	0.28	5.053	A
3	708.44	712.57	156.11	0.00	1222.56	0.579	1.40	7.114	A
4	164.87	166.10	763.75	0.00	546.26	0.302	0.44	9.499	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: Ridgeway and Pennington Roundabout Assessment.arc8
Path: T:\RGP\2018 Projects (4401-4500)\4483 Ridgeway Land - Planning Stage\Technical Assessments\Junction Modelling\New
Report generation date: 28/11/2018 15:07:11

Summary of junction performance

	PM			
	Queue (Veh)	Delay (s)	RFC	LOS
	Ridgeway and Pennington Lane Roundabout - Ridgeway and Pennington Lane Roundabout 2023 + Developemtn Traffic			
Arm 1	0.99	4.54	0.50	A
Arm 2	0.76	8.74	0.43	A
Arm 3	1.29	6.67	0.57	A
Arm 4	0.32	8.55	0.24	A

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

"D1 - Ridgeway and Pennington Lane Roundabout 2018, AM" model duration: 08:00 - 09:30
"D2 - Ridgeway and Pennington Lane Roundabout 2018, PM" model duration: 17:00 - 18:30
"D3 - Ridgeway and Pennington Lane Roundabout 2018 + Development Traffic, AM" model duration: 08:00 - 09:30
"D4 - Ridgeway and Pennington Lane Roundabout 2018 + Developemtn Traffic, PM" model duration: 17:00 - 18:30
"D5 - Ridgeway and Pennington Lane Roundabout 2023 + Development Traffic, AM" model duration: 08:00 - 09:30
"D6 - Ridgeway and Pennington Lane Roundabout 2023 + Developemtn Traffic, PM " model duration: 17:00 - 18:30

Run using Junctions 8.0.4.487 at 28/11/2018 15:07:09

File summary

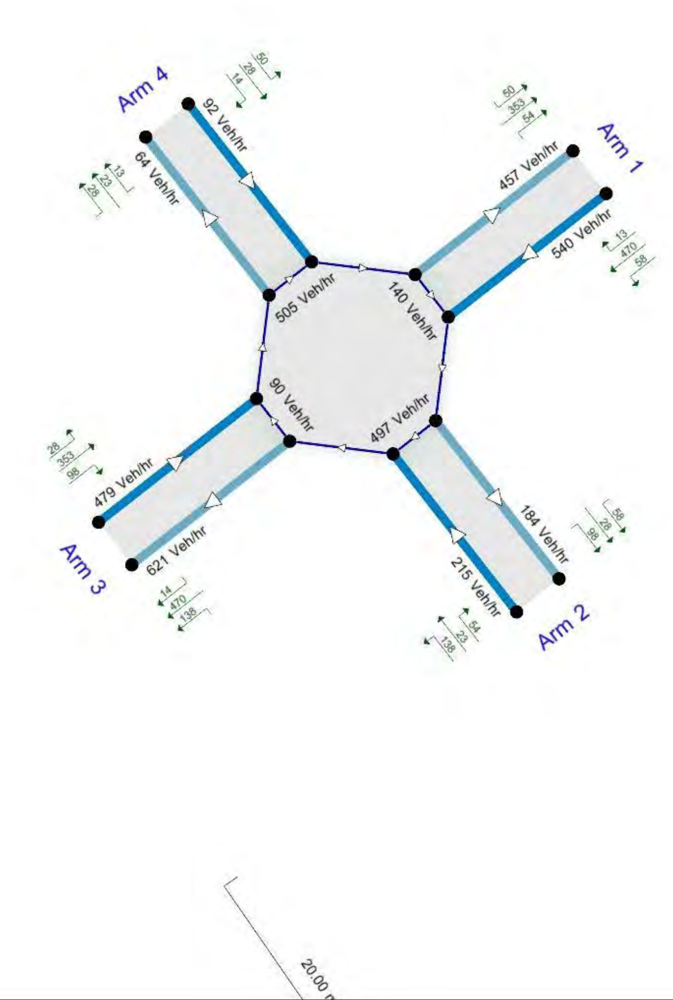
Title	Ridgeway and Pennington Junction Assessment
Location	
Site Number	
Date	30/01/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	remotechi
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	s	-Min	perMin



[redacted]

The junction diagram reflects the last run of ARCADY.

Ridgeway and Pennington Lane Roundabout - Ridgeway and Pennington Lane Roundabout 2023 + Developemtn Traffic, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Ridgeway and Pennington Lane Roundabout	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Ridgeway and Pennington Lane Roundabout 2023 + Developemtn Traffic, PM	Ridgeway and Pennington Lane Roundabout 2023 + Developemtn Traffic	PM		ONE HOUR	17:00	18:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			6.27	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A337 Northbound	
2	2	Ridgeway and Pennington Lane	
3	3	Milford Road	
4	4	North Street	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.70	6.50	19.30	131.60	26.60	36.00	
2	3.20	3.80	4.90	18.90	26.60	20.00	
3	3.50	5.20	12.50	11.60	26.60	37.00	
4	2.80	3.30	7.40	9.30	26.60	27.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.675	1735.623
2		(calculated)	(calculated)	0.555	1135.265
3		(calculated)	(calculated)	0.567	1334.666
4		(calculated)	(calculated)	0.488	928.355

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	720.00	100.000
2	ONE HOUR	✓	287.00	100.000
3	ONE HOUR	✓	639.00	100.000
4	ONE HOUR	✓	123.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	77.000	626.000	17.000
	2	72.000	0.000	184.000	31.000
	3	471.000	131.000	0.000	37.000
	4	67.000	37.000	19.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.11	0.87	0.02
	2	0.25	0.00	0.64	0.11
	3	0.74	0.21	0.00	0.06
	4	0.54	0.30	0.15	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.008	1.000
	2	1.000	1.000	1.000	1.000
	3	1.018	1.000	1.000	1.000
	4	1.018	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.8	0.0
	2	0.0	0.0	0.0	0.0
	3	1.8	0.0	0.0	0.0
	4	1.8	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.50	4.54	0.99	A
2	0.43	8.74	0.76	A
3	0.57	6.67	1.29	A
4	0.24	8.55	0.32	A

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	542.05	540.07	140.00	0.00	1629.84	0.333	0.50	3.298	A
2	216.07	214.73	496.52	0.00	857.77	0.252	0.33	5.587	A
3	481.07	478.64	89.82	0.00	1266.91	0.380	0.61	4.553	A
4	92.60	91.97	504.80	0.00	672.35	0.138	0.16	6.196	A

Main results: (17:15-17:30)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	647.26	646.58	167.82	0.00	1611.20	0.402	0.67	3.730	A
2	258.01	257.47	594.48	0.00	803.03	0.321	0.47	6.591	A
3	574.45	573.54	107.67	0.00	1256.92	0.457	0.83	5.262	A
4	110.58	110.35	604.93	0.00	623.36	0.177	0.21	7.014	A

Main results: (17:30-17:45)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	792.73	791.44	205.33	0.00	1586.07	0.500	0.99	4.523	A
2	315.99	314.85	727.66	0.00	728.59	0.434	0.75	8.677	A
3	703.55	701.75	131.68	0.00	1243.48	0.566	1.28	6.622	A
4	135.43	135.01	740.11	0.00	557.21	0.243	0.32	8.518	A

Main results: (17:45-18:00)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	792.73	792.71	205.88	0.00	1585.70	0.500	0.99	4.539	A
2	315.99	315.96	728.86	0.00	727.93	0.434	0.76	8.737	A
3	703.55	703.51	132.11	0.00	1243.24	0.566	1.29	6.669	A
4	135.43	135.42	742.04	0.00	556.27	0.243	0.32	8.553	A

Main results: (18:00-18:15)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	647.26	648.54	168.66	0.00	1610.64	0.402	0.68	3.745	A
2	258.01	259.13	596.33	0.00	801.99	0.322	0.48	6.646	A
3	574.45	576.21	108.31	0.00	1256.56	0.457	0.85	5.306	A
4	110.58	110.98	607.86	0.00	621.93	0.178	0.22	7.050	A

Main results: (18:15-18:30)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	542.05	542.75	141.08	0.00	1629.11	0.333	0.50	3.315	A
2	216.07	216.63	499.05	0.00	856.36	0.252	0.34	5.633	A
3	481.07	482.01	90.56	0.00	1266.50	0.380	0.62	4.595	A
4	92.60	92.83	508.44	0.00	670.57	0.138	0.16	6.235	A

APPENDIX K

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: Ridgeway and Pennington Proposed Roundabout Assessment.arc8
Path: P:\RGP\2016 Projects (3301-3400)\3345 Ridgeway Lane & Penning Lane, Lymington\Technical Assessments\Junction Modelling\New
Report generation date: 28/11/2018 15:18:24

Summary of junction performance

	AM			
	Queue (Veh)	Delay (s)	RFC	LOS
	Ridgeway and Pennington Lane Roundabout - Ridgeway and Pennington Lane Roundabout 2018			
Arm 1	0.56	3.83	0.36	A
Arm 2	0.38	5.94	0.27	A
Arm 3	1.81	6.83	0.65	A
Arm 4	1.07	17.55	0.52	C

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

"D1 - Ridgeway and Pennington Lane Roundabout 2018, AM " model duration: 08:00 - 09:30
"D2 - Ridgeway and Pennington Lane Roundabout 2018, PM" model duration: 17:00 - 18:30
"D3 - Ridgeway and Pennington Lane Roundabout 2018 + Development Traffic, AM" model duration: 08:00 - 09:30
"D4 - Ridgeway and Pennington Lane Roundabout 2018 + Developemtn Traffic, PM" model duration: 17:00 - 18:30
"D5 - Ridgeway and Pennington Lane Roundabout 2023 + Development Traffic, AM" model duration: 08:00 - 09:30
"D6 - Ridgeway and Pennington Lane Roundabout 2023 + Developemtn Traffic, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.4.487 at 28/11/2018 15:18:22

File summary

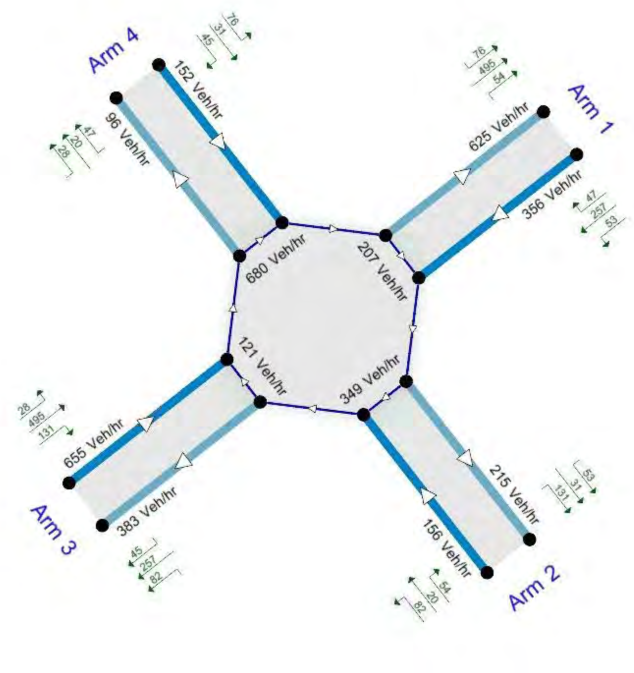
Title	Ridgeway and Pennington Junction Assessment
Location	
Site Number	
Date	30/01/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	remotechi
Description	

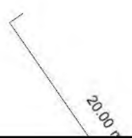
Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	s	-Min	perMin





[redacted]

The junction diagram reflects the last run of ARCADY.

Ridgeway and Pennington Lane Roundabout - Ridgeway and Pennington Lane Roundabout 2018, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Ridgeway and Pennington Lane Roundabout	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Ridgeway and Pennington Lane Roundabout 2018, AM	Ridgeway and Pennington Lane Roundabout 2018	AM		ONE HOUR	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			7.12	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A337 Northbound	
2	2	Ridgeway and Pennington Lane	
3	3	Milford Road	
4	4	North Street	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.70	6.50	19.30	131.60	26.60	36.00	
2	3.20	3.80	4.90	18.90	26.60	20.00	
3	3.40	7.40	17.40	12.00	26.60	37.00	
4	2.80	3.30	7.40	9.30	26.60	27.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.675	1735.623
2		(calculated)	(calculated)	0.555	1135.265
3		(calculated)	(calculated)	0.629	1630.170
4		(calculated)	(calculated)	0.488	928.355

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	475.00	100.000
2	ONE HOUR	✓	208.00	100.000
3	ONE HOUR	✓	874.00	100.000
4	ONE HOUR	✓	204.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	70.000	342.000	63.000
	2	72.000	0.000	109.000	27.000
	3	661.000	175.000	0.000	38.000
	4	102.000	42.000	60.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.15	0.72	0.13
	2	0.35	0.00	0.52	0.13
	3	0.76	0.20	0.00	0.04
	4	0.50	0.21	0.29	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.014	1.061	1.000
	2	1.000	1.000	1.009	1.000
	3	1.024	1.006	1.000	1.000
	4	1.010	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	1.4	6.1	0.0
	2	0.0	0.0	0.9	0.0
	3	2.4	0.6	0.0	0.0
	4	1.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.36	3.83	0.56	A
2	0.27	5.94	0.38	A
3	0.65	6.83	1.81	A
4	0.52	17.55	1.07	C

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	357.61	356.39	207.24	0.00	1525.16	0.234	0.30	3.077	A
2	156.59	155.79	348.62	0.00	928.82	0.169	0.20	4.652	A
3	657.99	654.98	121.42	0.00	1524.33	0.432	0.75	4.127	A
4	153.58	152.18	680.43	0.00	587.22	0.262	0.35	8.249	A

Main results: (08:15-08:30)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	427.02	426.65	248.39	0.00	1498.52	0.285	0.40	3.358	A
2	186.99	186.74	417.50	0.00	889.10	0.210	0.26	5.124	A
3	785.71	784.43	145.47	0.00	1509.50	0.521	1.07	4.955	A
4	183.39	182.65	814.96	0.00	520.68	0.352	0.53	10.626	B

Main results: (08:30-08:45)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	522.99	522.36	303.38	0.00	1462.92	0.357	0.55	3.826	A
2	229.01	228.57	510.84	0.00	835.25	0.274	0.37	5.930	A
3	962.29	959.43	178.07	0.00	1489.38	0.646	1.79	6.757	A
4	224.61	222.55	996.83	0.00	430.73	0.521	1.05	17.123	C

Main results: (08:45-09:00)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	522.99	522.98	304.92	0.00	1461.93	0.358	0.56	3.833	A
2	229.01	229.00	511.94	0.00	834.62	0.274	0.38	5.943	A
3	962.29	962.22	178.36	0.00	1489.21	0.646	1.81	6.828	A
4	224.61	224.51	999.65	0.00	429.34	0.523	1.07	17.554	C

Main results: (09:00-09:15)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	427.02	427.63	250.62	0.00	1497.08	0.285	0.40	3.367	A
2	186.99	187.42	419.16	0.00	888.16	0.211	0.27	5.142	A
3	785.71	788.55	145.92	0.00	1509.22	0.521	1.10	5.014	A
4	183.39	185.46	819.13	0.00	518.62	0.354	0.56	10.870	B

Main results: (09:15-09:30)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	357.61	357.98	209.20	0.00	1523.90	0.235	0.31	3.088	A
2	156.59	156.85	350.63	0.00	927.68	0.169	0.20	4.673	A
3	657.99	659.32	122.13	0.00	1523.89	0.432	0.77	4.170	A
4	153.58	154.37	684.95	0.00	584.98	0.263	0.36	8.375	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: Ridgeway and Pennington Proposed Roundabout Assessment.arc8
Path: P:\RGP\2016 Projects (3301-3400)\3345 Ridgeway Lane & Penning Lane, Lymington\Technical Assessments\Junction Modelling\New
Report generation date: 28/11/2018 15:19:03

« Ridgeway and Pennington Lane Roundabout - Ridgeway and Pennington Lane Roundabout 2018, PM
» Junction Network
» Arms
» Traffic Flows
» Entry Flows
» Turning Proportions
» Vehicle Mix
» Results

Summary of junction performance

	PM			
	Queue (Veh)	Delay (s)	RFC	LOS
	Ridgeway and Pennington Lane Roundabout - Ridgeway and Pennington Lane Roundabout 2018			
Arm 1	0.80	4.05	0.44	A
Arm 2	0.57	7.54	0.36	A
Arm 3	0.72	4.03	0.42	A
Arm 4	0.28	7.96	0.22	A

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

"D1 - Ridgeway and Pennington Lane Roundabout 2018, AM" model duration: 08:00 - 09:30
"D2 - Ridgeway and Pennington Lane Roundabout 2018, PM " model duration: 17:00 - 18:30
"D3 - Ridgeway and Pennington Lane Roundabout 2018 + Development Traffic, AM" model duration: 08:00 - 09:30
"D4 - Ridgeway and Pennington Lane Roundabout 2018 + Developemtn Traffic, PM" model duration: 17:00 - 18:30
"D5 - Ridgeway and Pennington Lane Roundabout 2023 + Development Traffic, AM" model duration: 08:00 - 09:30
"D6 - Ridgeway and Pennington Lane Roundabout 2023 + Developemtn Traffic, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.4.487 at 28/11/2018 15:19:01

File summary

Title	Ridgeway and Pennington Junction Assessment
Location	
Site Number	
Date	30/01/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	remotechi
Description	

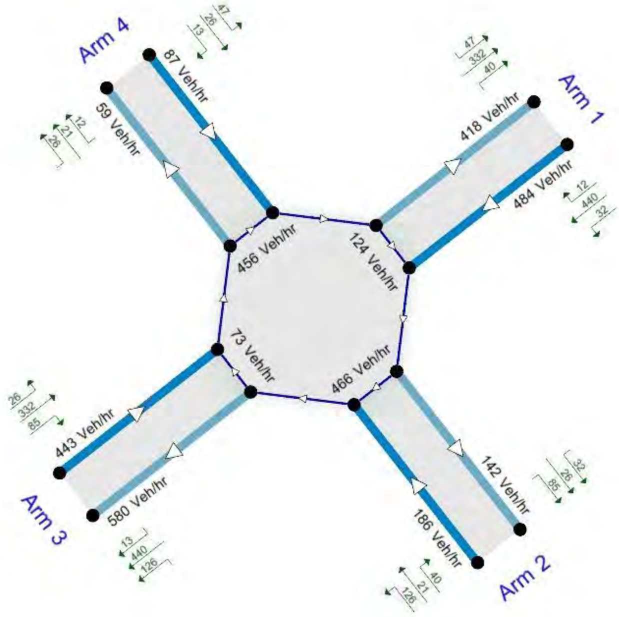
Analysis Options

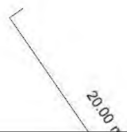
Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Generated on 28/11/2018 15:19:04 using Junctions 8 (8.0.4.487)





[redacted]

The junction diagram reflects the last run of ARCADY.

Ridgeway and Pennington Lane Roundabout - Ridgeway and Pennington Lane Roundabout 2018, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Ridgeway and Pennington Lane Roundabout	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Ridgeway and Pennington Lane Roundabout 2018, PM	Ridgeway and Pennington Lane Roundabout 2018	PM		ONE HOUR	17:00	18:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			4.87	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A337 Northbound	
2	2	Ridgeway and Pennington Lane	
3	3	Milford Road	
4	4	North Street	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.70	6.50	19.30	131.60	26.60	36.00	
2	3.20	3.80	4.90	18.90	26.60	20.00	
3	3.40	7.40	17.40	12.00	26.60	37.00	
4	2.80	3.30	7.40	9.30	26.60	27.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.675	1735.623
2		(calculated)	(calculated)	0.555	1135.265
3		(calculated)	(calculated)	0.629	1630.170
4		(calculated)	(calculated)	0.488	928.355

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	645.00	100.000
2	ONE HOUR	✓	249.00	100.000
3	ONE HOUR	✓	590.00	100.000
4	ONE HOUR	✓	116.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	42.000	587.000	16.000
	2	53.000	0.000	168.000	28.000
	3	442.000	113.000	0.000	35.000
	4	63.000	35.000	18.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.07	0.91	0.02
	2	0.21	0.00	0.67	0.11
	3	0.75	0.19	0.00	0.06
	4	0.54	0.30	0.16	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.008	1.000
	2	1.000	1.000	1.000	1.000
	3	1.018	1.000	1.000	1.000
	4	1.018	1.000	1.133	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.8	0.0
	2	0.0	0.0	0.0	0.0
	3	1.8	0.0	0.0	0.0
	4	1.8	0.0	13.3	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.44	4.05	0.80	A
2	0.36	7.54	0.57	A
3	0.42	4.03	0.72	A
4	0.22	7.96	0.28	A

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	485.59	483.91	124.40	0.00	1638.56	0.296	0.42	3.114	A
2	187.46	186.38	465.86	0.00	873.91	0.215	0.27	5.220	A
3	444.19	442.61	72.63	0.00	1563.43	0.284	0.39	3.208	A
4	87.33	86.75	456.02	0.00	682.18	0.128	0.15	6.041	A

Main results: (17:15-17:30)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	579.84	579.31	149.05	0.00	1621.82	0.358	0.55	3.451	A
2	223.85	223.45	557.74	0.00	822.37	0.272	0.37	6.007	A
3	530.40	529.92	87.06	0.00	1554.48	0.341	0.51	3.511	A
4	104.28	104.09	546.04	0.00	638.99	0.163	0.19	6.729	A

Main results: (17:30-17:45)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	710.16	709.20	182.45	0.00	1599.13	0.444	0.79	4.041	A
2	274.15	273.37	682.79	0.00	752.22	0.364	0.57	7.505	A
3	649.61	648.78	106.52	0.00	1542.40	0.421	0.72	4.025	A
4	127.72	127.38	668.47	0.00	580.26	0.220	0.28	7.943	A

Main results: (17:45-18:00)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	710.16	710.15	182.76	0.00	1598.91	0.444	0.80	4.050	A
2	274.15	274.14	683.72	0.00	751.69	0.365	0.57	7.537	A
3	649.61	649.59	106.79	0.00	1542.23	0.421	0.72	4.032	A
4	127.72	127.71	669.40	0.00	579.81	0.220	0.28	7.962	A

Main results: (18:00-18:15)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	579.84	580.79	149.54	0.00	1621.48	0.358	0.56	3.464	A
2	223.85	224.62	559.20	0.00	821.54	0.272	0.38	6.037	A
3	530.40	531.22	87.47	0.00	1554.22	0.341	0.52	3.523	A
4	104.28	104.62	547.51	0.00	638.29	0.163	0.20	6.751	A

Main results: (18:15-18:30)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	485.59	486.14	125.16	0.00	1638.05	0.296	0.42	3.128	A
2	187.46	187.87	468.06	0.00	872.68	0.215	0.28	5.261	A
3	444.19	444.67	73.17	0.00	1563.09	0.284	0.40	3.222	A
4	87.33	87.53	458.28	0.00	681.10	0.128	0.15	6.068	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: Ridgeway and Pennington Proposed Roundabout Assessment.arc8
Path: P:\RGP\2016 Projects (3301-3400)\3345 Ridgeway Lane & Penning Lane, Lymington\Technical Assessments\Junction Modelling\New
Report generation date: 28/11/2018 15:20:06

Summary of junction performance

	AM			
	Queue (Veh)	Delay (s)	RFC	LOS
	Ridgeway and Pennington Lane Roundabout - Ridgeway and Pennington Lane Roundabout 2018 + Development Traffic			
Arm 1	0.58	3.91	0.37	A
Arm 2	0.49	6.46	0.33	A
Arm 3	1.92	7.22	0.66	A
Arm 4	1.20	19.53	0.55	C

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

"D1 - Ridgeway and Pennington Lane Roundabout 2018, AM" model duration: 08:00 - 09:30
"D2 - Ridgeway and Pennington Lane Roundabout 2018, PM" model duration: 17:00 - 18:30
"D3 - Ridgeway and Pennington Lane Roundabout 2018 + Development Traffic, AM " model duration: 08:00 - 09:30
"D4 - Ridgeway and Pennington Lane Roundabout 2018 + Developemtn Traffic, PM" model duration: 17:00 - 18:30
"D5 - Ridgeway and Pennington Lane Roundabout 2023 + Development Traffic, AM" model duration: 08:00 - 09:30
"D6 - Ridgeway and Pennington Lane Roundabout 2023 + Developemtn Traffic, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.4.487 at 28/11/2018 15:20:04

File summary

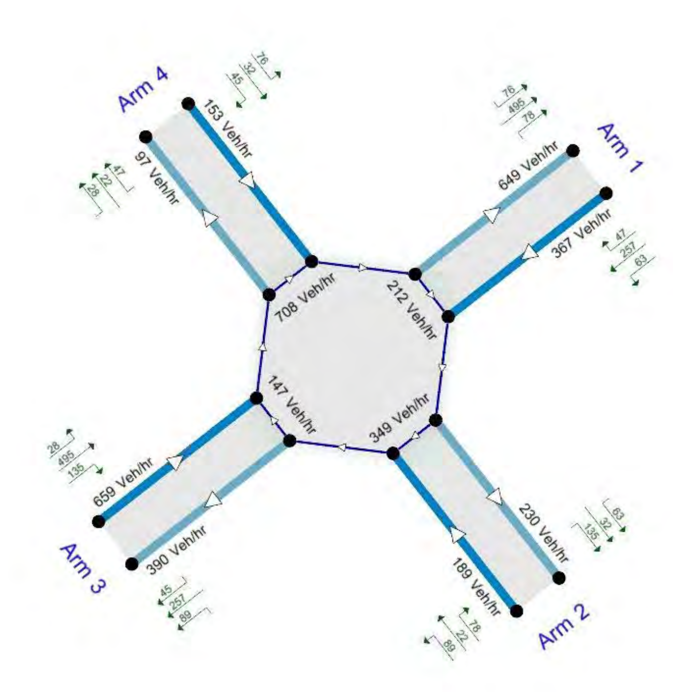
Title	Ridgeway and Pennington Junction Assessment
Location	
Site Number	
Date	30/01/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	remotechi
Description	

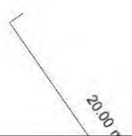
Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	s	-Min	perMin





[redacted]

The junction diagram reflects the last run of ARCADY.

Ridgeway and Pennington Lane Roundabout - Ridgeway and Pennington Lane Roundabout 2018 + Development Traffic, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Ridgeway and Pennington Lane Roundabout	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Ridgeway and Pennington Lane Roundabout 2018 + Development Traffic, AM	Ridgeway and Pennington Lane Roundabout 2018 + Development Traffic	AM		ONE HOUR	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			7.57	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A337 Northbound	
2	2	Ridgeway and Pennington Lane	
3	3	Milford Road	
4	4	North Street	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.70	6.50	19.30	131.60	26.60	36.00	
2	3.20	3.80	4.90	18.90	26.60	20.00	
3	3.40	7.40	17.40	12.00	26.60	37.00	
4	2.80	3.30	7.40	9.30	26.60	27.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.675	1735.623
2		(calculated)	(calculated)	0.555	1135.265
3		(calculated)	(calculated)	0.629	1630.170
4		(calculated)	(calculated)	0.488	928.355

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	489.00	100.000
2	ONE HOUR	✓	252.00	100.000
3	ONE HOUR	✓	879.00	100.000
4	ONE HOUR	✓	205.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	84.000	342.000	63.000
	2	104.000	0.000	119.000	29.000
	3	661.000	180.000	0.000	38.000
	4	102.000	43.000	60.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.17	0.70	0.13
	2	0.41	0.00	0.47	0.12
	3	0.75	0.20	0.00	0.04
	4	0.50	0.21	0.29	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.014	1.061	1.000
	2	1.000	1.000	1.009	1.000
	3	1.024	1.006	1.000	1.000
	4	1.010	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	1.4	6.1	0.0
	2	0.0	0.0	0.9	0.0
	3	2.4	0.6	0.0	0.0
	4	1.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.37	3.91	0.58	A
2	0.33	6.46	0.49	A
3	0.66	7.22	1.92	A
4	0.55	19.53	1.20	C

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	368.14	366.88	211.69	0.00	1523.60	0.242	0.32	3.110	A
2	189.72	188.70	348.60	0.00	929.27	0.204	0.25	4.855	A
3	661.75	658.66	146.86	0.00	1508.74	0.439	0.77	4.220	A
4	154.33	152.88	708.06	0.00	573.80	0.269	0.36	8.524	A

Main results: (08:15-08:30)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	439.60	439.21	253.73	0.00	1496.37	0.294	0.41	3.405	A
2	226.54	226.21	417.47	0.00	889.53	0.255	0.34	5.425	A
3	790.20	788.84	175.97	0.00	1490.78	0.530	1.11	5.118	A
4	184.29	183.48	848.10	0.00	504.59	0.365	0.56	11.184	B

Main results: (08:30-08:45)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	538.40	537.73	309.74	0.00	1460.07	0.369	0.58	3.901	A
2	277.46	276.85	510.72	0.00	835.70	0.332	0.49	6.435	A
3	967.79	964.66	215.39	0.00	1466.46	0.660	1.90	7.084	A
4	225.71	223.31	1037.21	0.00	411.12	0.549	1.16	18.927	C

Main results: (08:45-09:00)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	538.40	538.39	311.50	0.00	1458.93	0.369	0.58	3.910	A
2	277.46	277.45	511.93	0.00	835.02	0.332	0.49	6.455	A
3	967.79	967.71	215.79	0.00	1466.22	0.660	1.92	7.219	A
4	225.71	225.58	1040.38	0.00	409.56	0.551	1.20	19.532	C

Main results: (09:00-09:15)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	439.60	440.26	256.27	0.00	1494.72	0.294	0.42	3.418	A
2	226.54	227.14	419.28	0.00	888.51	0.255	0.34	5.447	A
3	790.20	793.31	176.60	0.00	1490.39	0.530	1.14	5.188	A
4	184.29	186.72	852.76	0.00	502.29	0.367	0.59	11.493	B

Main results: (09:15-09:30)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	368.14	368.54	213.78	0.00	1522.25	0.242	0.32	3.120	A
2	189.72	190.06	350.65	0.00	928.10	0.204	0.26	4.879	A
3	661.75	663.17	147.79	0.00	1508.17	0.439	0.79	4.267	A
4	154.33	155.20	712.94	0.00	571.39	0.270	0.37	8.668	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: Ridgeway and Pennington Proposed Roundabout Assessment.arc8
Path: P:\RGP\2016 Projects (3301-3400)\3345 Ridgeway Lane & Penning Lane, Lymington\Technical Assessments\Junction Modelling\New
Report generation date: 28/11/2018 15:20:43

Summary of junction performance

	PM			
	Queue (Veh)	Delay (s)	RFC	LOS
	Ridgeway and Pennington Lane Roundabout - Ridgeway and Pennington Lane Roundabout 2018 + Developemtn Traffic			
Arm 1	0.87	4.24	0.47	A
Arm 2	0.65	7.90	0.39	A
Arm 3	0.76	4.13	0.43	A
Arm 4	0.28	7.99	0.22	A

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

"D1 - Ridgeway and Pennington Lane Roundabout 2018, AM" model duration: 08:00 - 09:30
"D2 - Ridgeway and Pennington Lane Roundabout 2018, PM" model duration: 17:00 - 18:30
"D3 - Ridgeway and Pennington Lane Roundabout 2018 + Development Traffic, AM" model duration: 08:00 - 09:30
"D4 - Ridgeway and Pennington Lane Roundabout 2018 + Developemtn Traffic, PM " model duration: 17:00 - 18:30
"D5 - Ridgeway and Pennington Lane Roundabout 2023 + Development Traffic, AM" model duration: 08:00 - 09:30
"D6 - Ridgeway and Pennington Lane Roundabout 2023 + Developemtn Traffic, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.4.487 at 28/11/2018 15:20:41

File summary

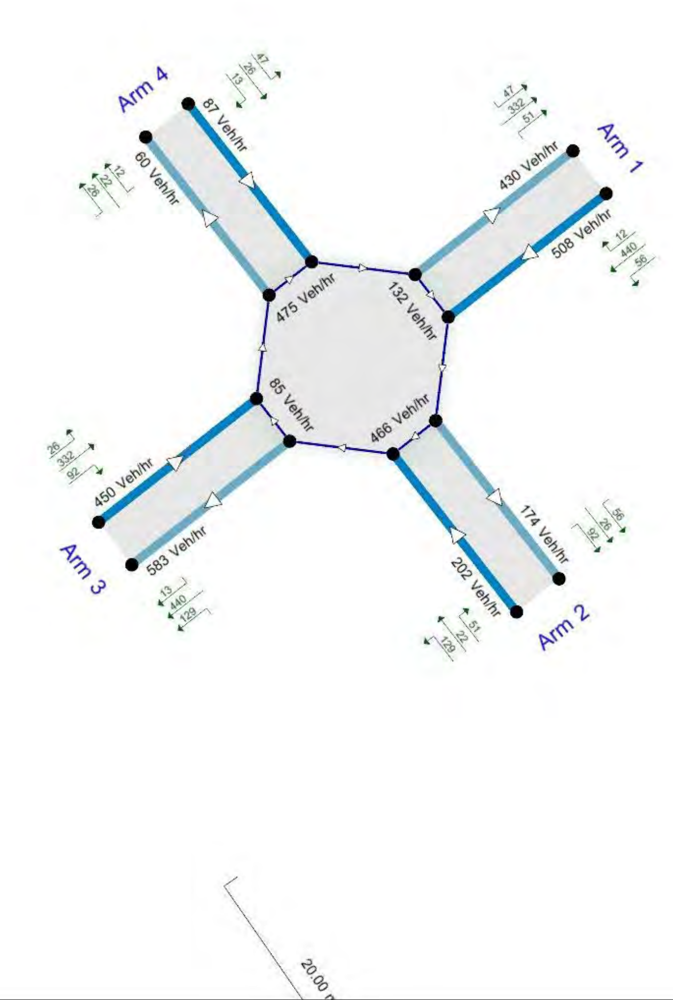
Title	Ridgeway and Pennington Junction Assessment
Location	
Site Number	
Date	30/01/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	remotechi
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	s	-Min	perMin



[redacted]

The junction diagram reflects the last run of ARCADY.

Ridgeway and Pennington Lane Roundabout - Ridgeway and Pennington Lane Roundabout 2018 + Developemtn Traffic, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Ridgeway and Pennington Lane Roundabout	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Ridgeway and Pennington Lane Roundabout 2018 + Developemtn Traffic, PM	Ridgeway and Pennington Lane Roundabout 2018 + Developemtn Traffic	PM		ONE HOUR	17:00	18:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			5.05	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A337 Northbound	
2	2	Ridgeway and Pennington Lane	
3	3	Milford Road	
4	4	North Street	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.70	6.50	19.30	131.60	26.60	36.00	
2	3.20	3.80	4.90	18.90	26.60	20.00	
3	3.40	7.40	17.40	12.00	26.60	37.00	
4	2.80	3.30	7.40	9.30	26.60	27.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.675	1735.623
2		(calculated)	(calculated)	0.555	1135.265
3		(calculated)	(calculated)	0.629	1630.170
4		(calculated)	(calculated)	0.488	928.355

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	677.00	100.000
2	ONE HOUR	✓	270.00	100.000
3	ONE HOUR	✓	600.00	100.000
4	ONE HOUR	✓	116.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	74.000	587.000	16.000
	2	68.000	0.000	173.000	29.000
	3	442.000	123.000	0.000	35.000
	4	63.000	35.000	18.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.11	0.87	0.02
	2	0.25	0.00	0.64	0.11
	3	0.74	0.21	0.00	0.06
	4	0.54	0.30	0.16	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.008	1.000
	2	1.000	1.000	1.000	1.000
	3	1.018	1.000	1.000	1.000
	4	1.018	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.8	0.0
	2	0.0	0.0	0.0	0.0
	3	1.8	0.0	0.0	0.0
	4	1.8	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.47	4.24	0.87	A
2	0.39	7.90	0.65	A
3	0.43	4.13	0.76	A
4	0.22	7.99	0.28	A

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	509.68	507.88	131.90	0.00	1635.29	0.312	0.45	3.187	A
2	203.27	202.07	465.83	0.00	874.93	0.232	0.30	5.340	A
3	451.71	450.08	84.60	0.00	1556.34	0.290	0.41	3.250	A
4	87.33	86.75	474.72	0.00	687.08	0.127	0.14	5.992	A

Main results: (17:15-17:30)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	608.61	608.01	158.03	0.00	1617.79	0.376	0.60	3.563	A
2	242.72	242.27	557.71	0.00	823.58	0.295	0.41	6.187	A
3	539.39	538.88	101.41	0.00	1545.91	0.349	0.53	3.572	A
4	104.28	104.09	568.47	0.00	641.21	0.163	0.19	6.701	A

Main results: (17:30-17:45)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	745.39	744.30	193.44	0.00	1594.07	0.468	0.87	4.231	A
2	297.28	296.36	682.71	0.00	753.71	0.394	0.64	7.856	A
3	660.61	659.73	124.06	0.00	1531.85	0.431	0.75	4.123	A
4	127.72	127.37	695.89	0.00	578.87	0.221	0.28	7.961	A

Main results: (17:45-18:00)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	745.39	745.37	193.77	0.00	1593.84	0.468	0.87	4.242	A
2	297.28	297.26	683.72	0.00	753.15	0.395	0.65	7.896	A
3	660.61	660.60	124.41	0.00	1531.64	0.431	0.76	4.132	A
4	127.72	127.71	696.93	0.00	578.36	0.221	0.28	7.988	A

Main results: (18:00-18:15)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	608.61	609.68	158.55	0.00	1617.44	0.376	0.61	3.575	A
2	242.72	243.62	559.27	0.00	822.70	0.295	0.42	6.228	A
3	539.39	540.25	101.93	0.00	1545.58	0.349	0.54	3.583	A
4	104.28	104.62	570.09	0.00	640.42	0.163	0.20	6.725	A

Main results: (18:15-18:30)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	509.68	510.29	132.70	0.00	1634.76	0.312	0.46	3.204	A
2	203.27	203.74	468.09	0.00	873.66	0.233	0.31	5.379	A
3	451.71	452.22	85.25	0.00	1555.93	0.290	0.41	3.265	A
4	87.33	87.53	477.15	0.00	685.89	0.127	0.15	6.017	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: Ridgeway and Pennington Proposed Roundabout Assessment.arc8
Path: P:\RGP\2016 Projects (3301-3400)\3345 Ridgeway Lane & Penning Lane, Lymington\Technical Assessments\Junction Modelling\New
Report generation date: 28/11/2018 15:21:32

Summary of junction performance

	AM			
	Queue (Veh)	Delay (s)	RFC	LOS
	Ridgeway and Pennington Lane Roundabout - Ridgeway and Pennington Lane Roundabout 2023 + Development Traffic			
Arm 1	0.66	4.13	0.40	A
Arm 2	0.56	6.91	0.36	A
Arm 3	2.41	8.51	0.71	A
Arm 4	1.73	26.73	0.64	D

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

"D1 - Ridgeway and Pennington Lane Roundabout 2018, AM" model duration: 08:00 - 09:30
"D2 - Ridgeway and Pennington Lane Roundabout 2018, PM" model duration: 17:00 - 18:30
"D3 - Ridgeway and Pennington Lane Roundabout 2018 + Development Traffic, AM" model duration: 08:00 - 09:30
"D4 - Ridgeway and Pennington Lane Roundabout 2018 + Developemtn Traffic, PM" model duration: 17:00 - 18:30
"D5 - Ridgeway and Pennington Lane Roundabout 2023 + Development Traffic, AM " model duration: 08:00 - 09:30
"D6 - Ridgeway and Pennington Lane Roundabout 2023 + Developemtn Traffic, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.4.487 at 28/11/2018 15:21:30

File summary

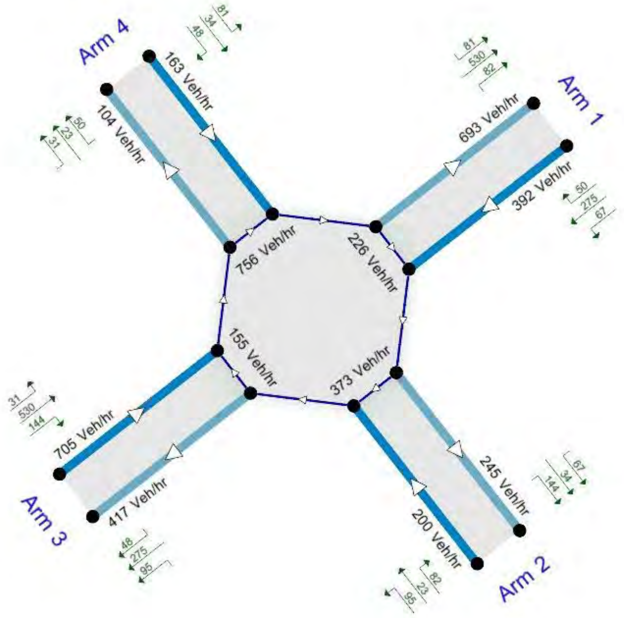
Title	Ridgeway and Pennington Junction Assessment
Location	
Site Number	
Date	30/01/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	remotechi
Description	

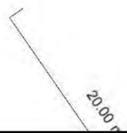
Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	s	-Min	perMin





[redacted]

The junction diagram reflects the last run of ARCADY.

Ridgeway and Pennington Lane Roundabout - Ridgeway and Pennington Lane Roundabout 2023 + Development Traffic, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Ridgeway and Pennington Lane Roundabout	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Ridgeway and Pennington Lane Roundabout 2023 + Development Traffic, AM	Ridgeway and Pennington Lane Roundabout 2023 + Development Traffic	AM		ONE HOUR	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			9.11	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A337 Northbound	
2	2	Ridgeway and Pennington Lane	
3	3	Milford Road	
4	4	North Street	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.70	6.50	19.30	131.60	26.60	36.00	
2	3.20	3.80	4.90	18.90	26.60	20.00	
3	3.40	7.40	17.40	12.00	26.60	37.00	
4	2.80	3.30	7.40	9.30	26.60	27.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.675	1735.623
2		(calculated)	(calculated)	0.555	1135.265
3		(calculated)	(calculated)	0.629	1630.170
4		(calculated)	(calculated)	0.488	928.355

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	522.00	100.000
2	ONE HOUR	✓	267.00	100.000
3	ONE HOUR	✓	941.00	100.000
4	ONE HOUR	✓	219.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	89.000	366.000	67.000
	2	109.000	0.000	127.000	31.000
	3	708.000	192.000	0.000	41.000
	4	109.000	46.000	64.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.17	0.70	0.13
	2	0.41	0.00	0.48	0.12
	3	0.75	0.20	0.00	0.04
	4	0.50	0.21	0.29	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.014	1.061	1.000
	2	1.000	1.000	1.009	1.000
	3	1.024	1.006	1.000	1.000
	4	1.010	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	1.4	6.1	0.0
	2	0.0	0.0	0.9	0.0
	3	2.4	0.6	0.0	0.0
	4	1.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.40	4.13	0.66	A
2	0.36	6.91	0.56	A
3	0.71	8.51	2.41	A
4	0.64	26.73	1.73	D

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	392.99	391.59	225.79	0.00	1514.33	0.260	0.35	3.202	A
2	201.01	199.89	372.52	0.00	915.43	0.220	0.28	5.024	A
3	708.44	704.91	155.08	0.00	1503.67	0.471	0.88	4.487	A
4	164.87	163.19	755.80	0.00	550.19	0.300	0.42	9.264	A

Main results: (08:15-08:30)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	469.27	468.82	270.61	0.00	1485.30	0.316	0.46	3.539	A
2	240.03	239.64	446.11	0.00	872.96	0.275	0.38	5.680	A
3	845.94	844.25	185.83	0.00	1484.70	0.570	1.31	5.606	A
4	196.88	195.81	905.29	0.00	476.30	0.413	0.69	12.784	B

Main results: (08:30-08:45)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	574.73	573.95	329.70	0.00	1447.01	0.397	0.65	4.120	A
2	293.97	293.25	545.43	0.00	815.62	0.360	0.56	6.881	A
3	1036.06	1031.78	227.43	0.00	1459.04	0.710	2.38	8.340	A
4	241.12	237.27	1106.54	0.00	376.83	0.640	1.65	25.132	D

Main results: (08:45-09:00)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	574.73	574.72	332.32	0.00	1445.31	0.398	0.66	4.134	A
2	293.97	293.96	547.11	0.00	814.68	0.361	0.56	6.912	A
3	1036.06	1035.91	227.90	0.00	1458.75	0.710	2.41	8.506	A
4	241.12	240.81	1110.78	0.00	374.74	0.643	1.73	26.734	D

Main results: (09:00-09:15)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	469.27	470.03	274.37	0.00	1482.87	0.316	0.47	3.558	A
2	240.03	240.74	448.60	0.00	871.56	0.275	0.38	5.712	A
3	845.94	850.21	186.56	0.00	1484.25	0.570	1.34	5.717	A
4	196.88	200.87	911.44	0.00	473.26	0.416	0.73	13.402	B

Main results: (09:15-09:30)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	392.99	393.44	228.31	0.00	1512.71	0.260	0.35	3.219	A
2	201.01	201.41	374.88	0.00	914.08	0.220	0.28	5.053	A
3	708.44	710.21	156.11	0.00	1503.04	0.471	0.90	4.552	A
4	164.87	166.04	761.49	0.00	547.38	0.301	0.44	9.470	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: Ridgeway and Pennington Proposed Roundabout Assessment.arc8
Path: P:\RGP\2016 Projects (3301-3400)\3345 Ridgeway Lane & Penning Lane, Lymington\Technical Assessments\Junction Modelling\New
Report generation date: 28/11/2018 15:22:31

Summary of junction performance

	PM			
	Queue (Veh)	Delay (s)	RFC	LOS
	Ridgeway and Pennington Lane Roundabout - Ridgeway and Pennington Lane Roundabout 2023 + Developemtn Traffic			
Arm 1	0.99	4.54	0.50	A
Arm 2	0.76	8.74	0.43	A
Arm 3	0.85	4.37	0.46	A
Arm 4	0.32	8.55	0.24	A

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

"D1 - Ridgeway and Pennington Lane Roundabout 2018, AM" model duration: 08:00 - 09:30
"D2 - Ridgeway and Pennington Lane Roundabout 2018, PM" model duration: 17:00 - 18:30
"D3 - Ridgeway and Pennington Lane Roundabout 2018 + Development Traffic, AM" model duration: 08:00 - 09:30
"D4 - Ridgeway and Pennington Lane Roundabout 2018 + Developemtn Traffic, PM" model duration: 17:00 - 18:30
"D5 - Ridgeway and Pennington Lane Roundabout 2023 + Development Traffic, AM" model duration: 08:00 - 09:30
"D6 - Ridgeway and Pennington Lane Roundabout 2023 + Developemtn Traffic, PM " model duration: 17:00 - 18:30

Run using Junctions 8.0.4.487 at 28/11/2018 15:22:29

File summary

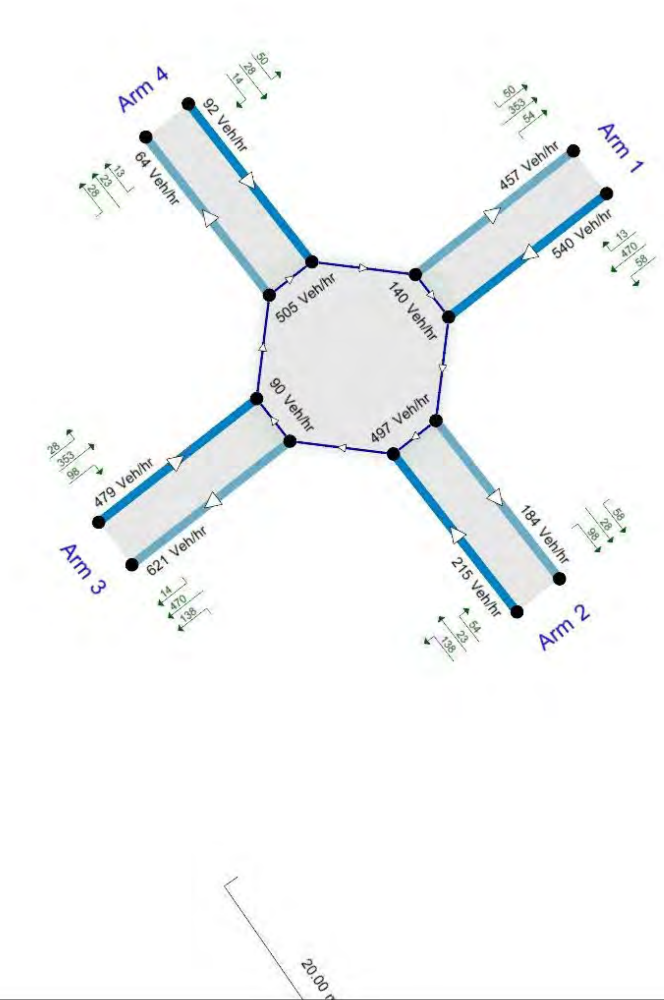
Title	Ridgeway and Pennington Junction Assessment
Location	
Site Number	
Date	30/01/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	remotechi
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	s	-Min	perMin



[redacted]

The junction diagram reflects the last run of ARCADY.

Ridgeway and Pennington Lane Roundabout - Ridgeway and Pennington Lane Roundabout 2023 + Developemtn Traffic, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Ridgeway and Pennington Lane Roundabout	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Ridgeway and Pennington Lane Roundabout 2023 + Developemtn Traffic, PM	Ridgeway and Pennington Lane Roundabout 2023 + Developemtn Traffic	PM		ONE HOUR	17:00	18:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			5.43	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A337 Northbound	
2	2	Ridgeway and Pennington Lane	
3	3	Milford Road	
4	4	North Street	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.70	6.50	19.30	131.60	26.60	36.00	
2	3.20	3.80	4.90	18.90	26.60	20.00	
3	3.40	7.40	17.40	12.00	26.60	37.00	
4	2.80	3.30	7.40	9.30	26.60	27.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.675	1735.623
2		(calculated)	(calculated)	0.555	1135.265
3		(calculated)	(calculated)	0.629	1630.170
4		(calculated)	(calculated)	0.488	928.355

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	720.00	100.000
2	ONE HOUR	✓	287.00	100.000
3	ONE HOUR	✓	639.00	100.000
4	ONE HOUR	✓	123.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	77.000	626.000	17.000
	2	72.000	0.000	184.000	31.000
	3	471.000	131.000	0.000	37.000
	4	67.000	37.000	19.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.11	0.87	0.02
	2	0.25	0.00	0.64	0.11
	3	0.74	0.21	0.00	0.06
	4	0.54	0.30	0.15	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.008	1.000
	2	1.000	1.000	1.000	1.000
	3	1.018	1.000	1.000	1.000
	4	1.018	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.8	0.0
	2	0.0	0.0	0.0	0.0
	3	1.8	0.0	0.0	0.0
	4	1.8	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.50	4.54	0.99	A
2	0.43	8.74	0.76	A
3	0.46	4.37	0.85	A
4	0.24	8.55	0.32	A

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	542.05	540.07	140.13	0.00	1629.75	0.333	0.50	3.298	A
2	216.07	214.73	496.52	0.00	857.77	0.252	0.33	5.587	A
3	481.07	479.29	89.82	0.00	1553.09	0.310	0.45	3.346	A
4	92.60	91.97	505.41	0.00	672.05	0.138	0.16	6.199	A

Main results: (17:15-17:30)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	647.26	646.58	167.89	0.00	1611.15	0.402	0.67	3.730	A
2	258.01	257.47	594.48	0.00	803.03	0.321	0.47	6.591	A
3	574.45	573.87	107.67	0.00	1542.01	0.373	0.59	3.716	A
4	110.58	110.35	605.24	0.00	623.21	0.177	0.21	7.016	A

Main results: (17:30-17:45)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	792.73	791.44	205.49	0.00	1585.96	0.500	0.99	4.523	A
2	315.99	314.85	727.66	0.00	728.59	0.434	0.75	8.677	A
3	703.55	702.52	131.68	0.00	1527.11	0.461	0.85	4.360	A
4	135.43	135.01	740.83	0.00	556.86	0.243	0.32	8.525	A

Main results: (17:45-18:00)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	792.73	792.71	205.88	0.00	1585.70	0.500	0.99	4.539	A
2	315.99	315.96	728.86	0.00	727.92	0.434	0.76	8.737	A
3	703.55	703.53	132.11	0.00	1526.84	0.461	0.85	4.372	A
4	135.43	135.42	742.07	0.00	556.26	0.243	0.32	8.554	A

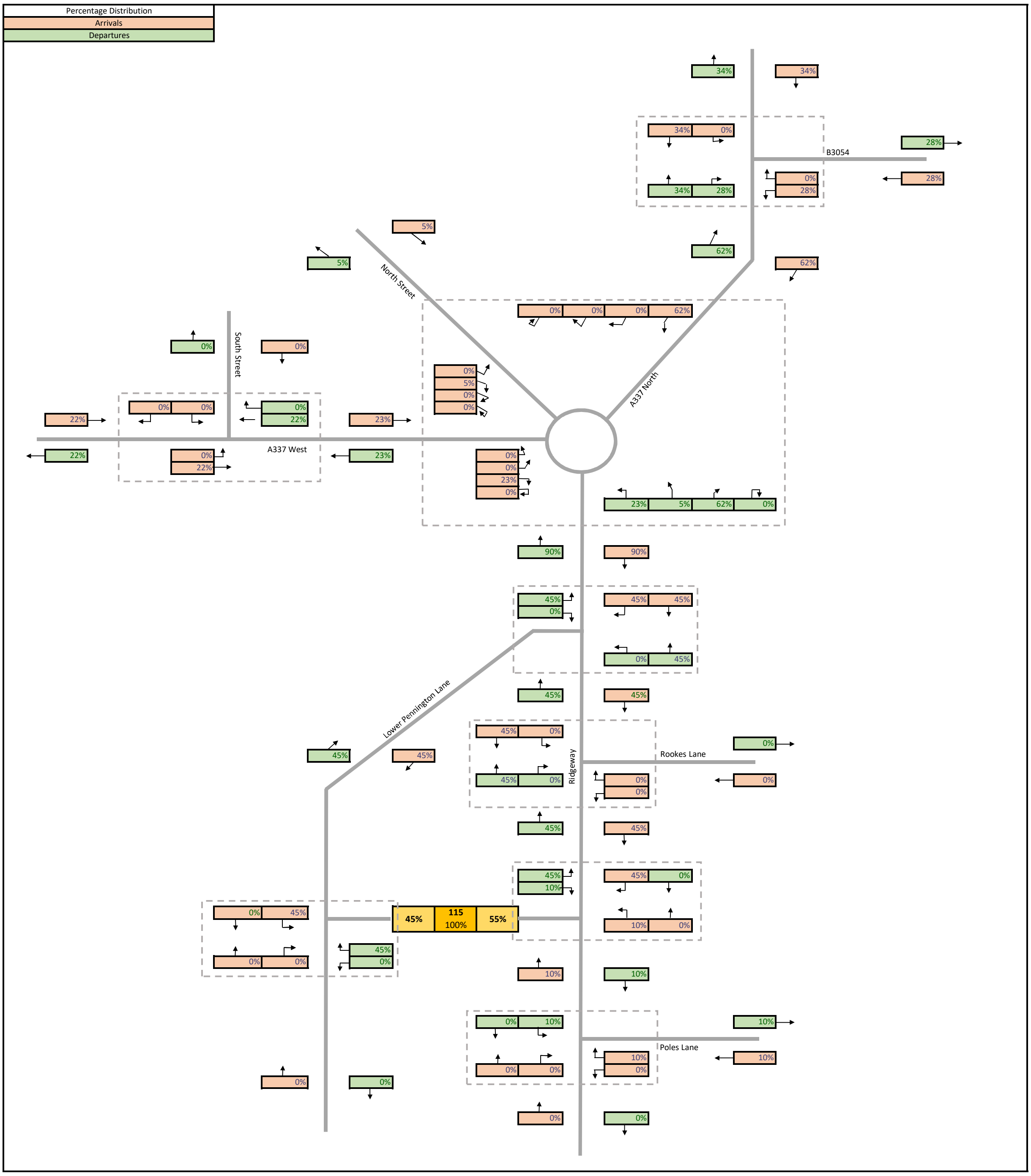
Main results: (18:00-18:15)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	647.26	648.54	168.50	0.00	1610.74	0.402	0.68	3.745	A
2	258.01	259.13	596.33	0.00	801.99	0.322	0.48	6.644	A
3	574.45	575.46	108.31	0.00	1541.61	0.373	0.60	3.729	A
4	110.58	110.98	607.14	0.00	622.27	0.178	0.22	7.045	A

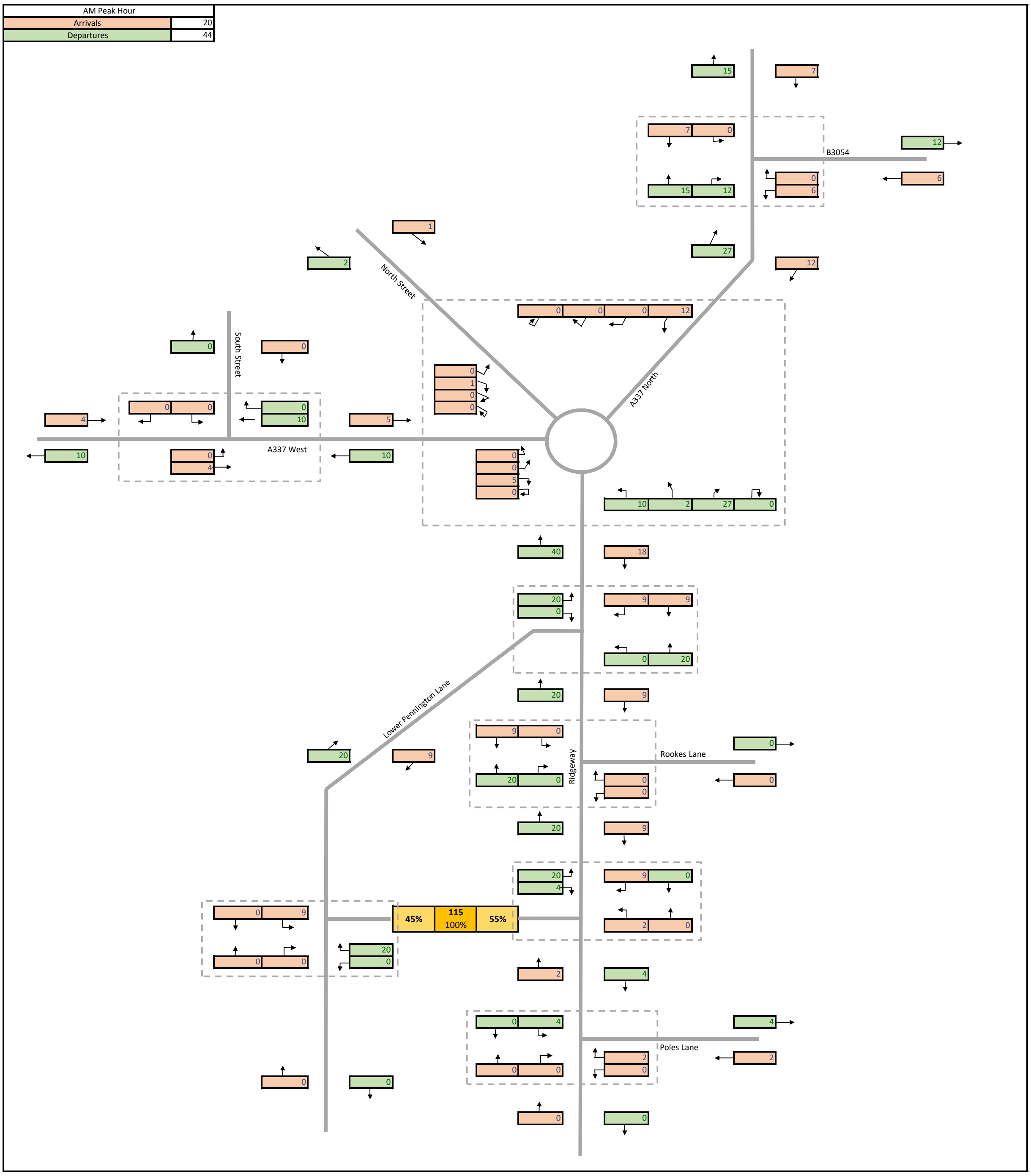
Main results: (18:15-18:30)

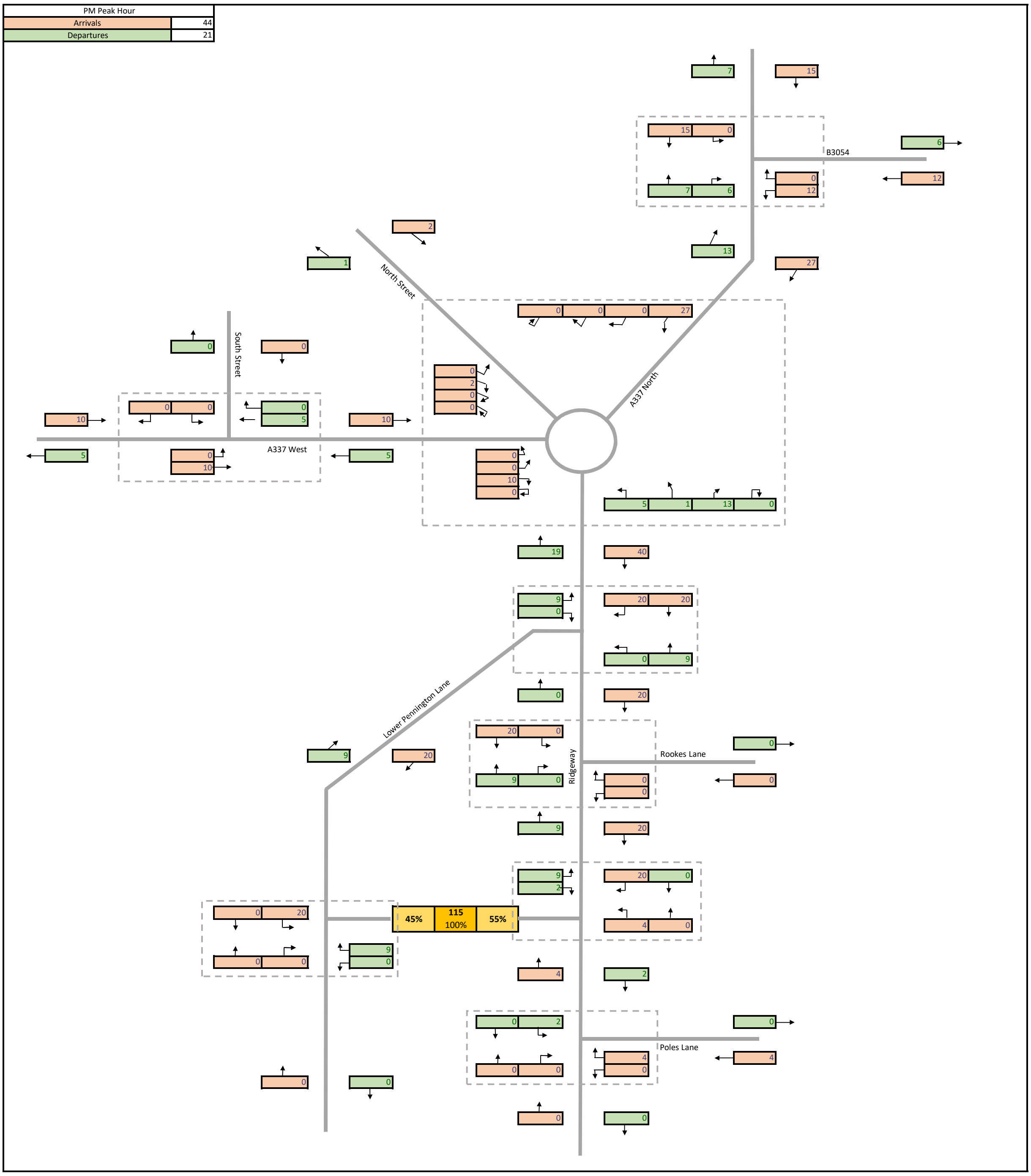
Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
1	542.05	542.75	141.01	0.00	1629.16	0.333	0.50	3.315	A
2	216.07	216.63	499.05	0.00	856.36	0.252	0.34	5.631	A
3	481.07	481.66	90.56	0.00	1552.63	0.310	0.45	3.362	A
4	92.60	92.83	508.11	0.00	670.73	0.138	0.16	6.231	A

APPENDIX L


Percentage Distribution
Arrivals
Departures
B3054
North Street
South Street
A337 North
A337 West
Lower Pennington Lane
Ridgeway
Rookes Lane
Poles Lane
45%
115
100%
55%

APPENDIX M


AM Peak Hour
Arrivals 20
Departures 44
B3054
North Street
South Street
A337 North
A337 West
Lower Pennington Lane
Ridgeway
Rookes Lane
Poles Lane
115
100%
45%
55%


PM Peak Hour
Arrivals 44
Departures 21
B3054
North Street
South Street
A337 North
A337 West
Lower Pennington Lane
Ridgeway
Rookes Lane
Poles Lane
45%
115
100%
55%

APPENDIX N

Calculation Reference: AUDIT-728001-181204-1225

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 05 - HEALTH
Category : H - HOSPICE

VEHICLES

Selected regions and areas:

04	**EAST ANGLIA**		
	CA	CAMBRIDGESHIRE	1 days
06	**WEST MIDLANDS**		
	WK	WARWICKSHIRE	1 days
09	**NORTH**		
	DH	DURHAM	1 days

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

Secondary 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: Parking spaces
Actual Range: 43 to 121 (units:)
Range Selected by User: 25 to 121 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/10 to 21/10/11

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:

Monday	1 days
Thursday	1 days
Friday	1 days

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

Selected survey types:

Manual count	3 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 undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	1
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

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:

C2	2 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®.

Secondary Filtering selection (Cont.):

Population within 1 mile:

5,001 to 10,000	1 days
15,001 to 20,000	2 days

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

Population within 5 miles:

125,001 to 250,000	1 days
250,001 to 500,000	2 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	2 days
1.1 to 1.5	1 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	3 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	3 days

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

TRIP RATE for Land Use 05 - HEALTH/H - HOSPICE
VEHICLES
Calculation factor: 1 PARKING SPACES
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PARKING	Trip Rate	No. Days	Ave. PARKING	Trip Rate	No. Days	Ave. PARKING	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	**3**	**77**	**0.194**	3	77	0.086	3	77	0.280
08:00 - 09:00	3	77	0.159	3	77	0.069	3	77	0.228
09:00 - 10:00	3	77	0.125	3	77	0.060	3	77	0.185
10:00 - 11:00	3	77	0.069	3	77	0.078	3	77	0.147
11:00 - 12:00	3	77	0.047	3	77	0.099	3	77	0.146
12:00 - 13:00	3	77	0.082	3	77	0.103	3	77	0.185
13:00 - 14:00	3	77	0.103	3	77	0.065	3	77	0.168
14:00 - 15:00	3	77	0.112	3	77	0.125	3	77	0.237
15:00 - 16:00	3	77	0.060	3	77	0.069	3	77	0.129
16:00 - 17:00	3	77	0.065	3	77	0.099	3	77	0.164
17:00 - 18:00	3	77	0.108	3	77	0.190	3	77	0.298
18:00 - 19:00	3	77	0.190	**3**	**77**	**0.207**	**3**	**77**	**0.397**
19:00 - 20:00	3	77	0.030	3	77	0.086	3	77	0.116
20:00 - 21:00	3	77	0.129	3	77	0.095	3	77	0.224
21:00 - 22:00	1	121	0.000	1	121	0.000	1	121	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.473			1.431			2.904

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:	43 - 121 (units:)
Survey date date range:	01/01/10 - 21/10/11
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

APPENDIX O

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: Lower Pennington Lane Junction Assessment.arc8
Path: T:\RGP\2018 Projects (4401-4500)\4483 Ridgeway Land - Planning Stage\Technical Assessments\Junction Modelling\New
Report generation date: 30/11/2018 10:10:23

Summary of junction performance

	AM			
	Queue (Veh)	Delay (s)	RFC	LOS
	Lower PEnnington Access - 2018 + Proposed Development Traffic			
Stream B-AC	0.05	6.21	0.05	A
Stream C-A	-	-	-	-
Stream C-B	0.00	0.00	0.00	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - 2018 + Proposed Development Traffic, AM " model duration: 08:00 - 09:30
"D2 - 2018 + Proposed Development Traffic, PM" model duration: 17:00 - 18:30
"D3 - 2023 + Proposed Development Traffic, AM" model duration: 08:00 - 09:30
"D4 - 2023 + Proposed Development Traffic, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.4.487 at 30/11/2018 10:10:20

File summary

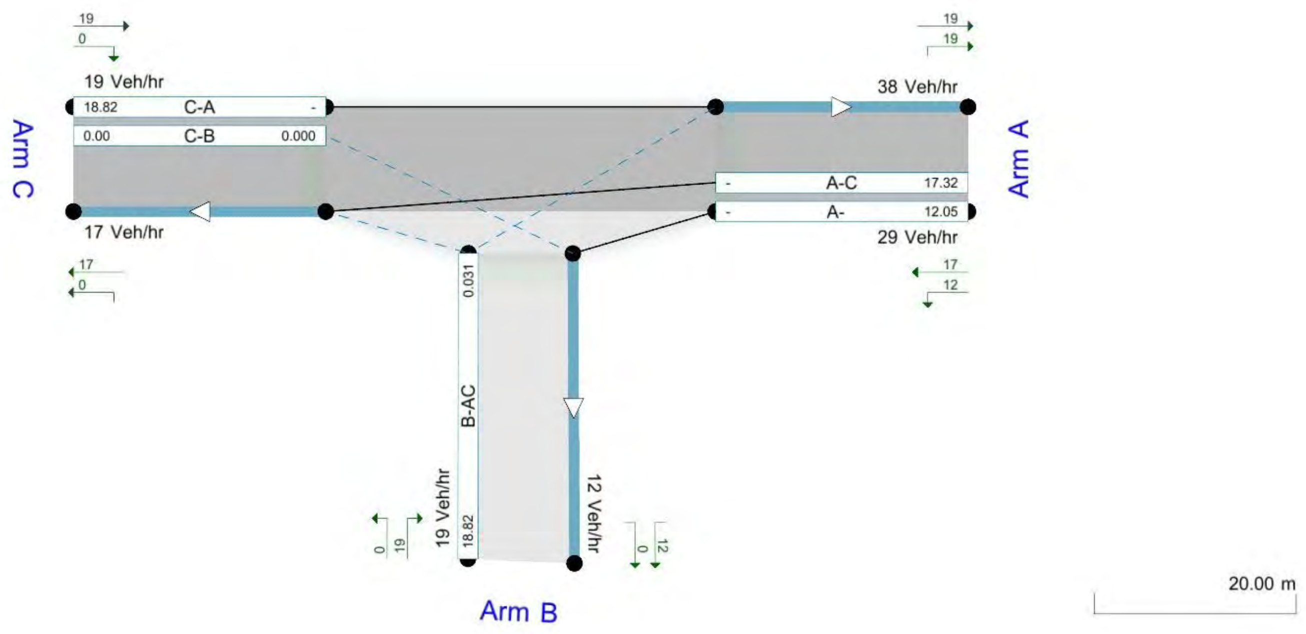
Title	Lower Pennington Lane South Access
Location	
Site Number	
Date	08/03/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	remotechi
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	s	-Min	perMin



[redacted]

The junction diagram reflects the last run of ARCADY.

Lower PEnnington Access - 2018 + Proposed Development Traffic, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Lower PEnnington Access	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2018 + Proposed Development Traffic, AM	2018 + Proposed Development Traffic	AM		ONE HOUR	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	6.21	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	250.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.26										18	250

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	621.249	0.113	0.286	0.180	0.409
1	B-C	801.658	0.123	0.311	-	-
1	C-B	718.741	0.278	0.278	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	39.00	100.000
B	ONE HOUR	✓	25.00	100.000
C	ONE HOUR	✓	25.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	16.000	23.000
	B	25.000	0.000	0.000
	C	25.000	0.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.41	0.59
	B	1.00	0.00	0.00
	C	1.00	0.00	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.05	6.21	0.05	A
C-A	-	-	-	-
C-B	0.00	0.00	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	18.82	18.70	0.00	611.55	0.031	0.03	6.070	A
C-A	18.82	18.82	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	710.56	0.000	0.00	0.000	A
A-B	12.05	12.05	0.00	-	-	-	-	-
A-C	17.32	17.32	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	22.47	22.45	0.00	609.66	0.037	0.04	6.130	A
C-A	22.47	22.47	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	708.98	0.000	0.00	0.000	A
A-B	14.38	14.38	0.00	-	-	-	-	-
A-C	20.68	20.68	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	27.53	27.49	0.00	607.06	0.045	0.05	6.211	A
C-A	27.53	27.53	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	706.78	0.000	0.00	0.000	A
A-B	17.62	17.62	0.00	-	-	-	-	-
A-C	25.32	25.32	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	27.53	27.52	0.00	607.06	0.045	0.05	6.211	A
C-A	27.53	27.53	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	706.78	0.000	0.00	0.000	A
A-B	17.62	17.62	0.00	-	-	-	-	-
A-C	25.32	25.32	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	22.47	22.51	0.00	609.66	0.037	0.04	6.130	A
C-A	22.47	22.47	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	708.98	0.000	0.00	0.000	A
A-B	14.38	14.38	0.00	-	-	-	-	-
A-C	20.68	20.68	0.00	-	-	-	-	-

Main results: (09:15-09:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	18.82	18.85	0.00	611.55	0.031	0.03	6.073	A
C-A	18.82	18.82	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	710.56	0.000	0.00	0.000	A
A-B	12.05	12.05	0.00	-	-	-	-	-
A-C	17.32	17.32	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: Lower Pennington Lane Junction Assessment.arc8
Path: T:\RGP\2018 Projects (4401-4500)\4483 Ridgeway Land - Planning Stage\Technical Assessments\Junction Modelling\New
Report generation date: 30/11/2018 10:00:31

« Lower PEnnington Access - 2018 + Proposed Development Traffic, PM
» Junction Network
» Arms
» Traffic Flows
» Entry Flows
» Turning Proportions
» Vehicle Mix
» Results

Summary of junction performance

	PM			
	Queue (Veh)	Delay (s)	RFC	LOS
	Lower PEnnington Access - 2018 + Proposed Development Traffic			
Stream B-AC	0.04	6.28	0.04	A
Stream C-A	-	-	-	-
Stream C-B	0.00	0.00	0.00	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - 2018 + Proposed Development Traffic, AM" model duration: 08:00 - 09:30
"D2 - 2018 + Proposed Development Traffic, PM " model duration: 17:00 - 18:30
"D3 - 2023 + Proposed Development Traffic, AM" model duration: 08:00 - 09:30
"D4 - 2023 + Proposed Development Traffic, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.4.487 at 30/11/2018 10:00:29

File summary

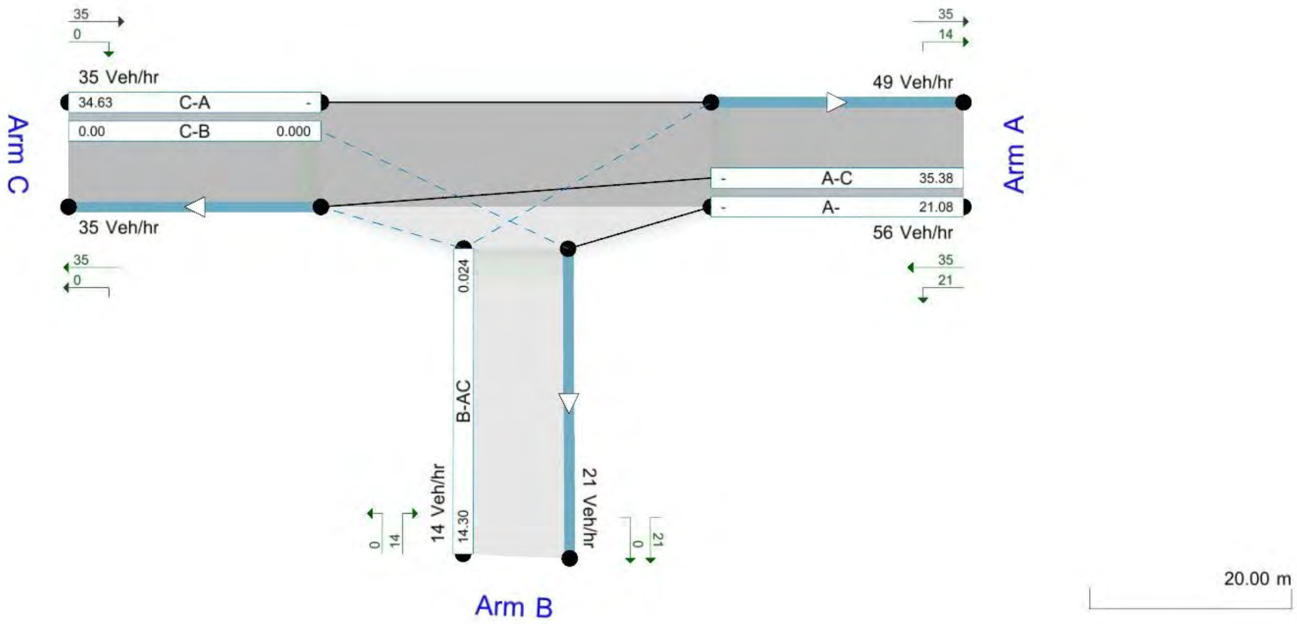
Title	Lower Pennington Lane South Access
Location	
Site Number	
Date	08/03/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	remotechi
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	s	-Min	perMin



[redacted]

The junction diagram reflects the last run of ARCADY.

Lower PEnnington Access - 2018 + Proposed Development Traffic, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Lower PEnnington Access	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2018 + Proposed Development Traffic, PM	2018 + Proposed Development Traffic	PM		ONE HOUR	17:00	18:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	6.28	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	250.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.26										18	250

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	621.249	0.113	0.286	0.180	0.409
1	B-C	801.658	0.123	0.311	-	-
1	C-B	718.741	0.278	0.278	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	75.00	100.000
B	ONE HOUR	✓	19.00	100.000
C	ONE HOUR	✓	46.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	28.000	47.000
	B	19.000	0.000	0.000
	C	46.000	0.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.37	0.63
	B	1.00	0.00	0.00
	C	1.00	0.00	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.04	6.28	0.04	A
C-A	-	-	-	-
C-B	0.00	0.00	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	14.30	14.21	0.00	602.51	0.024	0.02	6.119	A
C-A	34.63	34.63	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	703.02	0.000	0.00	0.000	A
A-B	21.08	21.08	0.00	-	-	-	-	-
A-C	35.38	35.38	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	17.08	17.06	0.00	598.88	0.029	0.03	6.187	A
C-A	41.35	41.35	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	699.96	0.000	0.00	0.000	A
A-B	25.17	25.17	0.00	-	-	-	-	-
A-C	42.25	42.25	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	20.92	20.89	0.00	593.85	0.035	0.04	6.282	A
C-A	50.65	50.65	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	695.75	0.000	0.00	0.000	A
A-B	30.83	30.83	0.00	-	-	-	-	-
A-C	51.75	51.75	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	20.92	20.92	0.00	593.85	0.035	0.04	6.282	A
C-A	50.65	50.65	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	695.75	0.000	0.00	0.000	A
A-B	30.83	30.83	0.00	-	-	-	-	-
A-C	51.75	51.75	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	17.08	17.11	0.00	598.88	0.029	0.03	6.187	A
C-A	41.35	41.35	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	699.96	0.000	0.00	0.000	A
A-B	25.17	25.17	0.00	-	-	-	-	-
A-C	42.25	42.25	0.00	-	-	-	-	-

Main results: (18:15-18:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	14.30	14.32	0.00	602.51	0.024	0.02	6.122	A
C-A	34.63	34.63	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	703.02	0.000	0.00	0.000	A
A-B	21.08	21.08	0.00	-	-	-	-	-
A-C	35.38	35.38	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: Lower Pennington Lane Junction Assessment.arc8
Path: T:\RGP\2018 Projects (4401-4500)\4483 Ridgeway Land - Planning Stage\Technical Assessments\Junction Modelling\New
Report generation date: 30/11/2018 10:11:34

« Lower PEnnington Access - 2023 + Proposed Development Traffic, AM
» Junction Network
» Arms
» Traffic Flows
» Entry Flows
» Turning Proportions
» Vehicle Mix
» Results

Summary of junction performance

	AM			
	Queue (Veh)	Delay (s)	RFC	LOS
	Lower PEnnington Access - 2023 + Proposed Development Traffic			
Stream B-AC	0.05	6.22	0.05	A
Stream C-A	-	-	-	-
Stream C-B	0.00	0.00	0.00	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - 2018 + Proposed Development Traffic, AM" model duration: 08:00 - 09:30
"D2 - 2018 + Proposed Development Traffic, PM" model duration: 17:00 - 18:30
"D3 - 2023 + Proposed Development Traffic, AM " model duration: 08:00 - 09:30
"D4 - 2023 + Proposed Development Traffic, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.4.487 at 30/11/2018 10:11:31

File summary

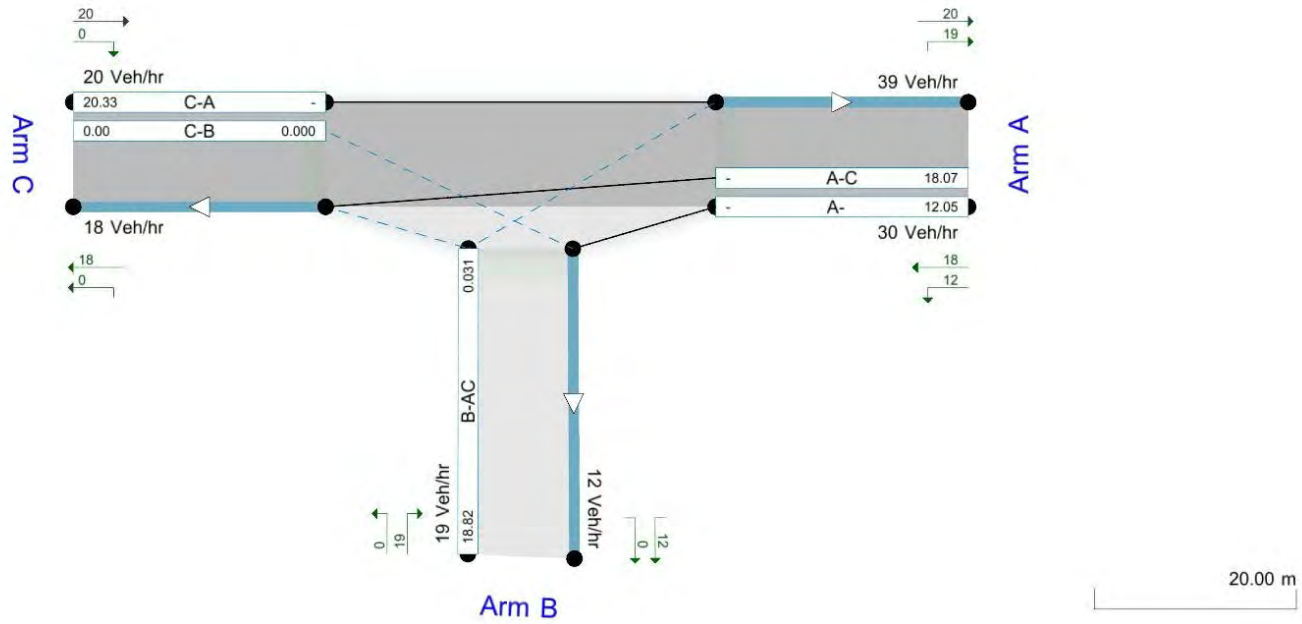
Title	Lower Pennington Lane South Access
Location	
Site Number	
Date	08/03/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	remotechi
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	s	-Min	perMin



[redacted]

The junction diagram reflects the last run of ARCADY.

Lower PEnnington Access - 2023 + Proposed Development Traffic, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Lower PEnnington Access	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 + Proposed Development Traffic, AM	2023 + Proposed Development Traffic	AM		ONE HOUR	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	6.22	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	250.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.26										18	250

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	621.249	0.113	0.286	0.180	0.409
1	B-C	801.658	0.123	0.311	-	-
1	C-B	718.741	0.278	0.278	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	40.00	100.000
B	ONE HOUR	✓	25.00	100.000
C	ONE HOUR	✓	27.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

		To		
From		A	B	C
	A	0.000	16.000	24.000
	B	25.000	0.000	0.000
	C	27.000	0.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
From		A	B	C
	A	0.00	0.40	0.60
	B	1.00	0.00	0.00
	C	1.00	0.00	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.05	6.22	0.05	A
C-A	-	-	-	-
C-B	0.00	0.00	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	18.82	18.70	0.00	611.06	0.031	0.03	6.075	A
C-A	20.33	20.33	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	710.35	0.000	0.00	0.000	A
A-B	12.05	12.05	0.00	-	-	-	-	-
A-C	18.07	18.07	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	22.47	22.45	0.00	609.08	0.037	0.04	6.136	A
C-A	24.27	24.27	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	708.73	0.000	0.00	0.000	A
A-B	14.38	14.38	0.00	-	-	-	-	-
A-C	21.58	21.58	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	27.53	27.49	0.00	606.35	0.045	0.05	6.218	A
C-A	29.73	29.73	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	706.48	0.000	0.00	0.000	A
A-B	17.62	17.62	0.00	-	-	-	-	-
A-C	26.42	26.42	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	27.53	27.52	0.00	606.35	0.045	0.05	6.218	A
C-A	29.73	29.73	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	706.48	0.000	0.00	0.000	A
A-B	17.62	17.62	0.00	-	-	-	-	-
A-C	26.42	26.42	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	22.47	22.51	0.00	609.08	0.037	0.04	6.137	A
C-A	24.27	24.27	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	708.73	0.000	0.00	0.000	A
A-B	14.38	14.38	0.00	-	-	-	-	-
A-C	21.58	21.58	0.00	-	-	-	-	-

Main results: (09:15-09:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	18.82	18.85	0.00	611.06	0.031	0.03	6.080	A
C-A	20.33	20.33	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	710.35	0.000	0.00	0.000	A
A-B	12.05	12.05	0.00	-	-	-	-	-
A-C	18.07	18.07	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: Lower Pennington Lane Junction Assessment.arc8
Path: T:\RGP\2018 Projects (4401-4500)\4483 Ridgeway Land - Planning Stage\Technical Assessments\Junction Modelling\New
Report generation date: 30/11/2018 10:12:37

Summary of junction performance

	PM			
	Queue (Veh)	Delay (s)	RFC	LOS
	Lower PEnnington Access - 2023 + Proposed Development Traffic			
Stream B-AC	0.04	6.31	0.04	A
Stream C-A	-	-	-	-
Stream C-B	0.00	0.00	0.00	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - 2018 + Proposed Development Traffic, AM" model duration: 08:00 - 09:30
"D2 - 2018 + Proposed Development Traffic, PM" model duration: 17:00 - 18:30
"D3 - 2023 + Proposed Development Traffic, AM" model duration: 08:00 - 09:30
"D4 - 2023 + Proposed Development Traffic, PM " model duration: 17:00 - 18:30

Run using Junctions 8.0.4.487 at 30/11/2018 10:12:34

File summary

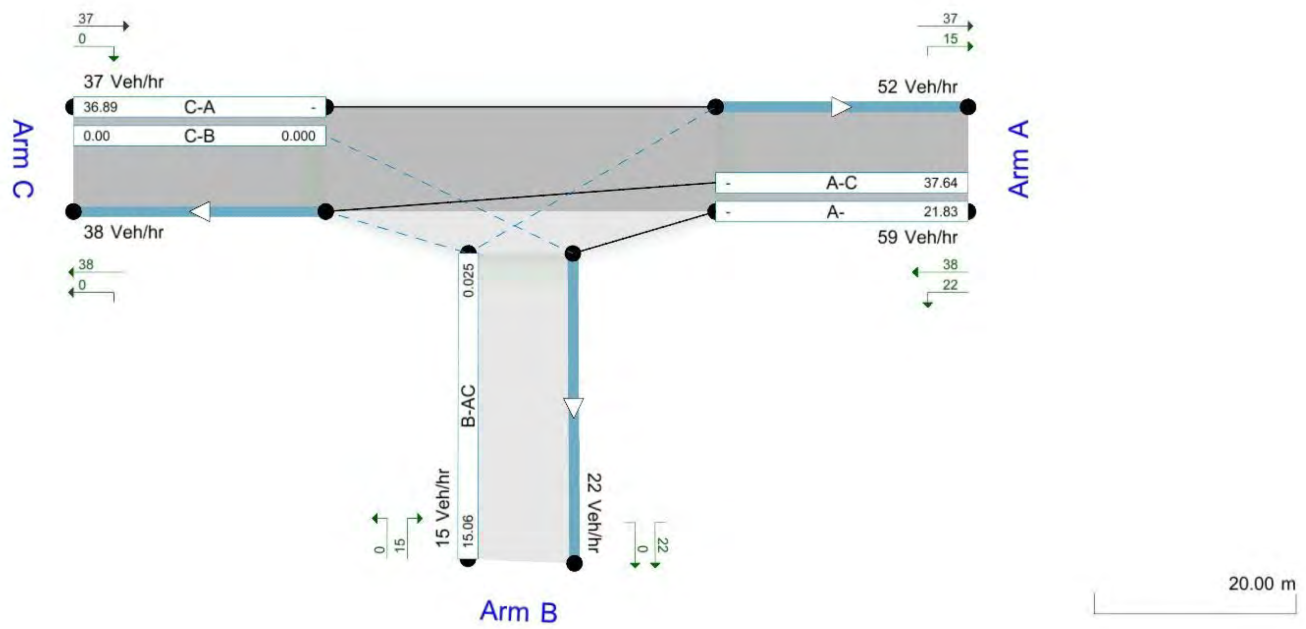
Title	Lower Pennington Lane South Access
Location	
Site Number	
Date	08/03/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	remotechi
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	s	-Min	perMin



[redacted]

The junction diagram reflects the last run of ARCADY.

Lower PEnnington Access - 2023 + Proposed Development Traffic, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Lower PEnnington Access	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 + Proposed Development Traffic, PM	2023 + Proposed Development Traffic	PM		ONE HOUR	17:00	18:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	6.31	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	250.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.26										18	250

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	621.249	0.113	0.286	0.180	0.409
1	B-C	801.658	0.123	0.311	-	-
1	C-B	718.741	0.278	0.278	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	79.00	100.000
B	ONE HOUR	✓	20.00	100.000
C	ONE HOUR	✓	49.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	29.000	50.000
	B	20.000	0.000	0.000
	C	49.000	0.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.37	0.63
	B	1.00	0.00	0.00
	C	1.00	0.00	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.04	6.31	0.04	A
C-A	-	-	-	-
C-B	0.00	0.00	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	15.06	14.96	0.00	601.38	0.025	0.03	6.139	A
C-A	36.89	36.89	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	702.18	0.000	0.00	0.000	A
A-B	21.83	21.83	0.00	-	-	-	-	-
A-C	37.64	37.64	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	17.98	17.96	0.00	597.52	0.030	0.03	6.211	A
C-A	44.05	44.05	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	698.96	0.000	0.00	0.000	A
A-B	26.07	26.07	0.00	-	-	-	-	-
A-C	44.95	44.95	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	22.02	21.99	0.00	592.18	0.037	0.04	6.313	A
C-A	53.95	53.95	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	694.52	0.000	0.00	0.000	A
A-B	31.93	31.93	0.00	-	-	-	-	-
A-C	55.05	55.05	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	22.02	22.02	0.00	592.18	0.037	0.04	6.313	A
C-A	53.95	53.95	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	694.52	0.000	0.00	0.000	A
A-B	31.93	31.93	0.00	-	-	-	-	-
A-C	55.05	55.05	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	17.98	18.01	0.00	597.52	0.030	0.03	6.211	A
C-A	44.05	44.05	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	698.96	0.000	0.00	0.000	A
A-B	26.07	26.07	0.00	-	-	-	-	-
A-C	44.95	44.95	0.00	-	-	-	-	-

Main results: (18:15-18:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	15.06	15.08	0.00	601.38	0.025	0.03	6.142	A
C-A	36.89	36.89	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	702.18	0.000	0.00	0.000	A
A-B	21.83	21.83	0.00	-	-	-	-	-
A-C	37.64	37.64	0.00	-	-	-	-	-

APPENDIX P

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: Ridgeway Lane Junction Assessment.arc8
Path: T:\RGP\2018 Projects (4401-4500)\4483 Ridgeway Land - Planning Stage\Technical Assessments\Junction Modelling\New
Report generation date: 28/11/2018 15:32:53

« Ridgeway Lane Junction - 2018 + Development Flows, AM
» Junction Network
» Arms
» Traffic Flows
» Entry Flows
» Turning Proportions
» Vehicle Mix
» Results

Summary of junction performance

	AM			
	Queue (Veh)	Delay (s)	RFC	LOS
	Ridgeway Lane Junction - 2018 + Development Flows			
Stream B-AC	0.05	5.80	0.05	A
Stream C-A	-	-	-	-
Stream C-B	0.02	5.75	0.02	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - 2018 + Development Flows, AM " model duration: 08:00 - 09:30
"D2 - 2018 + Development Flows, PM" model duration: 17:00 - 18:30
"D3 - 2023 + Development Flows, AM" model duration: 08:00 - 09:30
"D4 - 2023 + Development Flows, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.4.487 at 28/11/2018 15:32:50

File summary

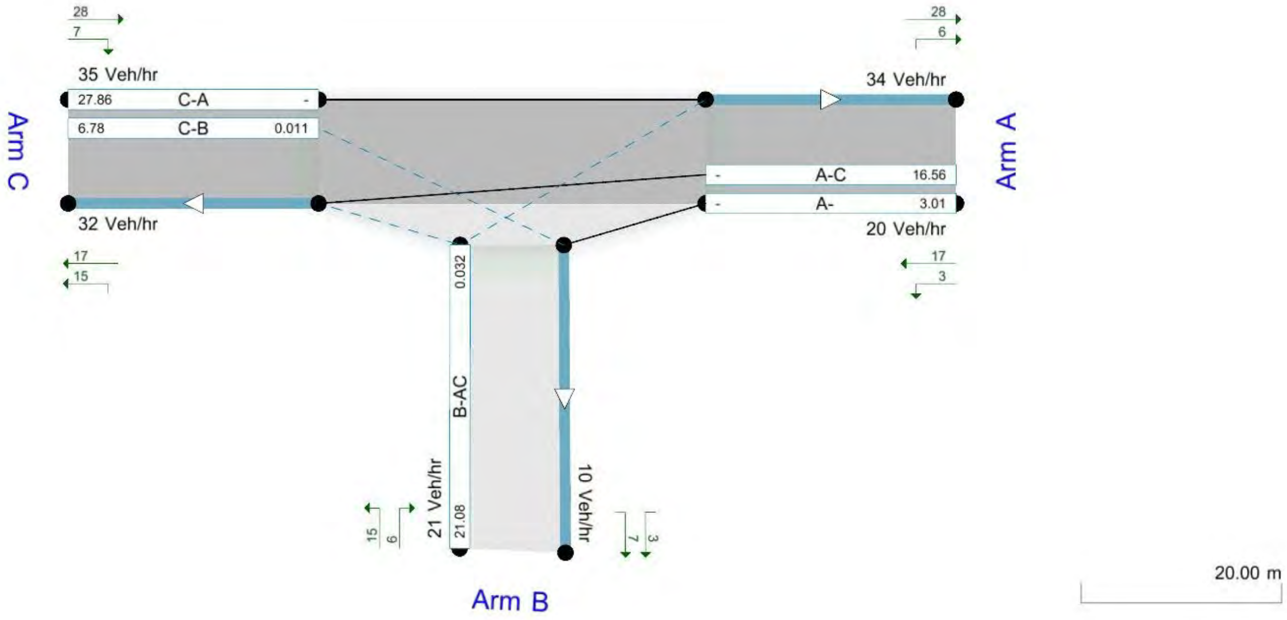
Title	Proposed Ridgeway Lane Access
Location	
Site Number	
Date	08/03/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	remotechi
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	s	-Min	perMin



[redacted]

The junction diagram reflects the last run of ARCADY.

Ridgeway Lane Junction - 2018 + Development Flows, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Ridgeway Lane Junction	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2018 + Development Flows, AM	2018 + Development Flows	AM		ONE HOUR	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	5.78	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	120.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.24										53	115

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	565.196	0.103	0.260	0.164	0.372
1	B-C	713.064	0.109	0.276	-	-
1	C-B	643.457	0.249	0.249	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	26.00	100.000
B	ONE HOUR	✓	28.00	100.000
C	ONE HOUR	✓	46.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	4.000	22.000
	B	8.000	0.000	20.000
	C	37.000	9.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.15	0.85
	B	0.29	0.00	0.71
	C	0.80	0.20	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.052
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	5.2
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.05	5.80	0.05	A
C-A	-	-	-	-
C-B	0.02	5.75	0.02	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	21.08	20.95	0.00	655.57	0.032	0.03	5.671	A
C-A	27.86	27.86	0.00	-	-	-	-	-
C-B	6.78	6.73	0.00	638.36	0.011	0.01	5.699	A
A-B	3.01	3.01	0.00	-	-	-	-	-
A-C	16.56	16.56	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	25.17	25.14	0.00	654.02	0.038	0.04	5.724	A
C-A	33.26	33.26	0.00	-	-	-	-	-
C-B	8.09	8.08	0.00	637.37	0.013	0.01	5.720	A
A-B	3.60	3.60	0.00	-	-	-	-	-
A-C	19.78	19.78	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	30.83	30.79	0.00	651.88	0.047	0.05	5.795	A
C-A	40.74	40.74	0.00	-	-	-	-	-
C-B	9.91	9.90	0.00	636.01	0.016	0.02	5.749	A
A-B	4.40	4.40	0.00	-	-	-	-	-
A-C	24.22	24.22	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	30.83	30.83	0.00	651.88	0.047	0.05	5.795	A
C-A	40.74	40.74	0.00	-	-	-	-	-
C-B	9.91	9.91	0.00	636.01	0.016	0.02	5.749	A
A-B	4.40	4.40	0.00	-	-	-	-	-
A-C	24.22	24.22	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	25.17	25.21	0.00	654.02	0.038	0.04	5.727	A
C-A	33.26	33.26	0.00	-	-	-	-	-
C-B	8.09	8.10	0.00	637.37	0.013	0.01	5.720	A
A-B	3.60	3.60	0.00	-	-	-	-	-
A-C	19.78	19.78	0.00	-	-	-	-	-

Main results: (09:15-09:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	21.08	21.11	0.00	655.56	0.032	0.03	5.673	A
C-A	27.86	27.86	0.00	-	-	-	-	-
C-B	6.78	6.78	0.00	638.36	0.011	0.01	5.701	A
A-B	3.01	3.01	0.00	-	-	-	-	-
A-C	16.56	16.56	0.00	-	-	-	-	-

Junctions 8
PICADY 8 - Priority Intersection Module
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Filename: Ridgeway Lane Junction Assessment.arc8
Path: T:\RGP\2018 Projects (4401-4500)\4483 Ridgeway Land - Planning Stage\Technical Assessments\Junction Modelling\New
Report generation date: 28/11/2018 15:36:04

« Ridgeway Lane Junction - 2018 + Development Flows, PM
» Junction Network
» Arms
» Traffic Flows
» Entry Flows
» Turning Proportions
» Vehicle Mix
» Results

Summary of junction performance

	PM			
	Queue (Veh)	Delay (s)	RFC	LOS
	Ridgeway Lane Junction - 2018 + Development Flows			
Stream B-AC	0.03	6.00	0.03	A
Stream C-A	-	-	-	-
Stream C-B	0.04	5.92	0.03	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - 2018 + Development Flows, AM" model duration: 08:00 - 09:30
"D2 - 2018 + Development Flows, PM " model duration: 17:00 - 18:30
"D3 - 2023 + Development Flows, AM" model duration: 08:00 - 09:30
"D4 - 2023 + Development Flows, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.4.487 at 28/11/2018 15:36:02

File summary

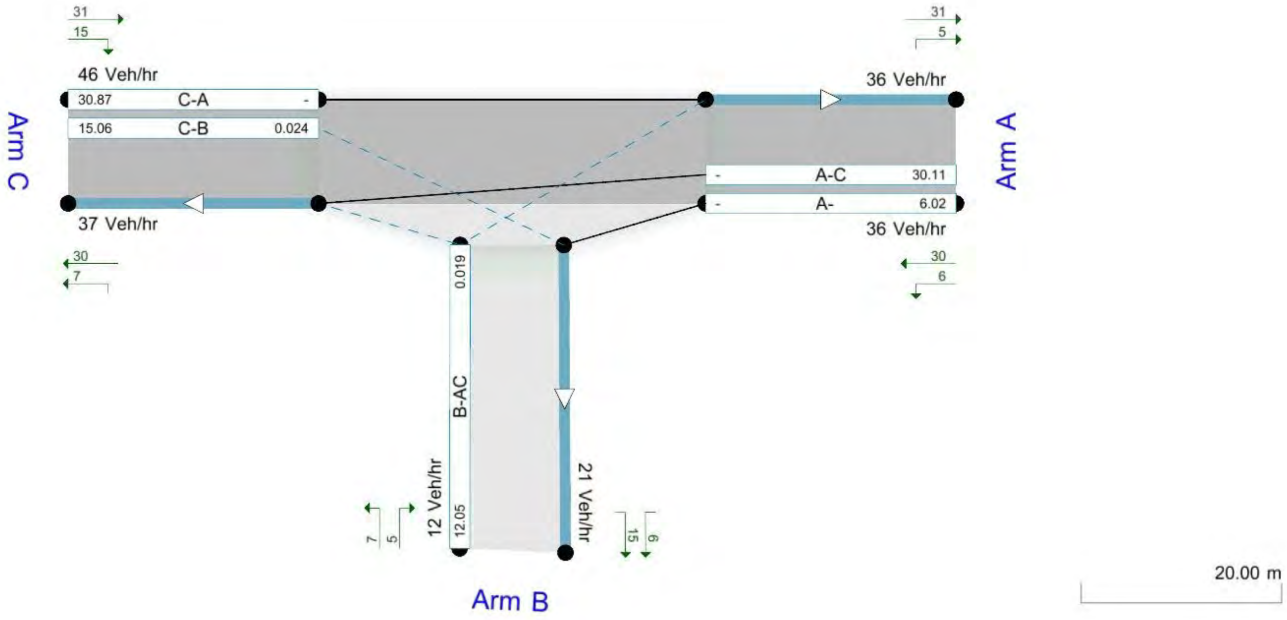
Title	Proposed Ridgeway Lane Access
Location	
Site Number	
Date	08/03/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	remotechi
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	s	-Min	perMin



[redacted]

The junction diagram reflects the last run of ARCADY.

Ridgeway Lane Junction - 2018 + Development Flows, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Ridgeway Lane Junction	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2018 + Development Flows, PM	2018 + Development Flows	PM		ONE HOUR	17:00	18:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	5.95	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	120.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.24										53	115

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	565.196	0.103	0.260	0.164	0.372
1	B-C	713.064	0.109	0.276	-	-
1	C-B	643.457	0.249	0.249	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	48.00	100.000
B	ONE HOUR	✓	16.00	100.000
C	ONE HOUR	✓	61.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	8.000	40.000
	B	7.000	0.000	9.000
	C	41.000	20.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.17	0.83
	B	0.44	0.00	0.56
	C	0.67	0.33	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.012	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	1.2	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.03	6.00	0.03	A
C-A	-	-	-	-
C-B	0.03	5.92	0.04	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	12.05	11.97	0.00	624.94	0.019	0.02	5.873	A
C-A	30.87	30.87	0.00	-	-	-	-	-
C-B	15.06	14.96	0.00	634.45	0.024	0.02	5.811	A
A-B	6.02	6.02	0.00	-	-	-	-	-
A-C	30.11	30.11	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	14.38	14.37	0.00	622.01	0.023	0.02	5.923	A
C-A	36.86	36.86	0.00	-	-	-	-	-
C-B	17.98	17.96	0.00	632.70	0.028	0.03	5.855	A
A-B	7.19	7.19	0.00	-	-	-	-	-
A-C	35.96	35.96	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	17.62	17.59	0.00	617.98	0.029	0.03	5.995	A
C-A	45.14	45.14	0.00	-	-	-	-	-
C-B	22.02	21.99	0.00	630.28	0.035	0.04	5.917	A
A-B	8.81	8.81	0.00	-	-	-	-	-
A-C	44.04	44.04	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	17.62	17.62	0.00	617.98	0.029	0.03	5.995	A
C-A	45.14	45.14	0.00	-	-	-	-	-
C-B	22.02	22.02	0.00	630.28	0.035	0.04	5.917	A
A-B	8.81	8.81	0.00	-	-	-	-	-
A-C	44.04	44.04	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	14.38	14.41	0.00	622.00	0.023	0.02	5.924	A
C-A	36.86	36.86	0.00	-	-	-	-	-
C-B	17.98	18.01	0.00	632.70	0.028	0.03	5.858	A
A-B	7.19	7.19	0.00	-	-	-	-	-
A-C	35.96	35.96	0.00	-	-	-	-	-

Main results: (18:15-18:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	12.05	12.06	0.00	624.92	0.019	0.02	5.875	A
C-A	30.87	30.87	0.00	-	-	-	-	-
C-B	15.06	15.08	0.00	634.45	0.024	0.02	5.811	A
A-B	6.02	6.02	0.00	-	-	-	-	-
A-C	30.11	30.11	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: Ridgeway Lane Junction Assessment.arc8
Path: T:\RGP\2018 Projects (4401-4500)\4483 Ridgeway Land - Planning Stage\Technical Assessments\Junction Modelling\New
Report generation date: 28/11/2018 15:35:07

Summary of junction performance

	AM			
	Queue (Veh)	Delay (s)	RFC	LOS
	Ridgeway Lane Junction - 2023 + Development Flows			
Stream B-AC	0.05	5.80	0.05	A
Stream C-A	-	-	-	-
Stream C-B	0.02	5.75	0.02	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - 2018 + Development Flows, AM" model duration: 08:00 - 09:30
"D2 - 2018 + Development Flows, PM" model duration: 17:00 - 18:30
"D3 - 2023 + Development Flows, AM " model duration: 08:00 - 09:30
"D4 - 2023 + Development Flows, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.4.487 at 28/11/2018 15:35:04

File summary

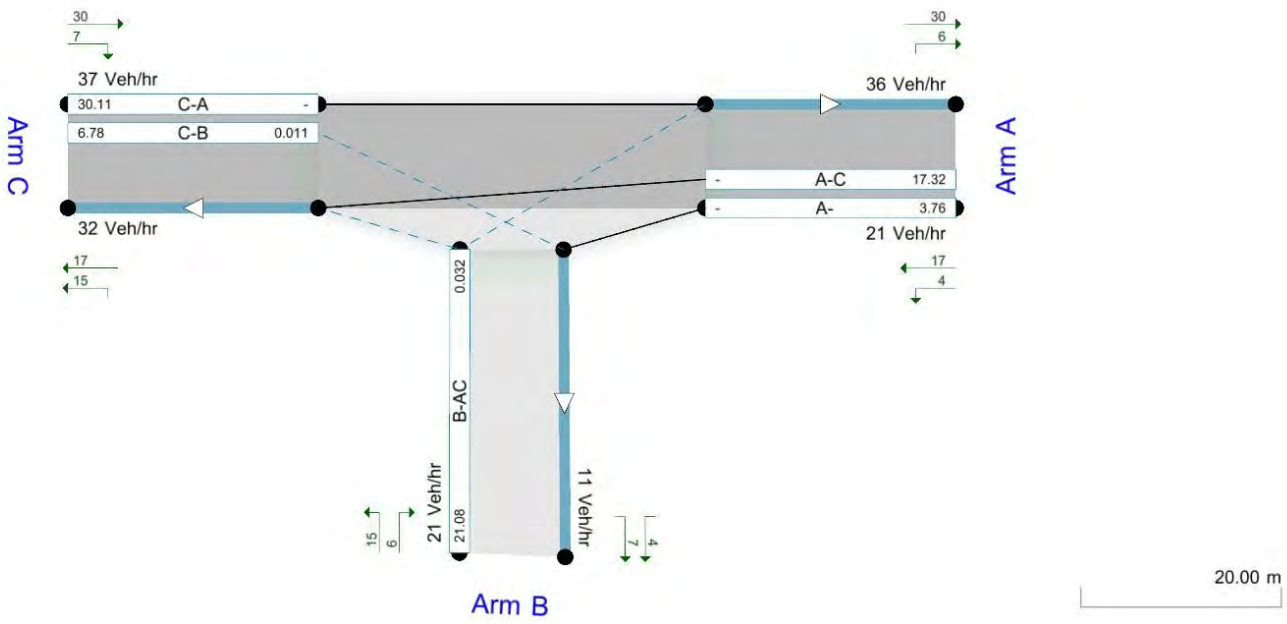
Title	Proposed Ridgeway Lane Access
Location	
Site Number	
Date	08/03/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	remotechi
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	s	-Min	perMin



[redacted]

The junction diagram reflects the last run of ARCADY.

Ridgeway Lane Junction - 2023 + Development Flows, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Ridgeway Lane Junction	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 + Development Flows, AM	2023 + Development Flows	AM		ONE HOUR	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	5.79	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	120.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.24										53	115

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	565.196	0.103	0.260	0.164	0.372
1	B-C	713.064	0.109	0.276	-	-
1	C-B	643.457	0.249	0.249	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	28.00	100.000
B	ONE HOUR	✓	28.00	100.000
C	ONE HOUR	✓	49.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	5.000	23.000
	B	8.000	0.000	20.000
	C	40.000	9.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.18	0.82
	B	0.29	0.00	0.71
	C	0.82	0.18	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.052
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	5.2
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.05	5.80	0.05	A
C-A	-	-	-	-
C-B	0.02	5.75	0.02	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	21.08	20.95	0.00	655.12	0.032	0.03	5.675	A
C-A	30.11	30.11	0.00	-	-	-	-	-
C-B	6.78	6.73	0.00	637.98	0.011	0.01	5.702	A
A-B	3.76	3.76	0.00	-	-	-	-	-
A-C	17.32	17.32	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	25.17	25.14	0.00	653.49	0.039	0.04	5.729	A
C-A	35.96	35.96	0.00	-	-	-	-	-
C-B	8.09	8.08	0.00	636.91	0.013	0.01	5.724	A
A-B	4.49	4.49	0.00	-	-	-	-	-
A-C	20.68	20.68	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	30.83	30.79	0.00	651.23	0.047	0.05	5.802	A
C-A	44.04	44.04	0.00	-	-	-	-	-
C-B	9.91	9.90	0.00	635.44	0.016	0.02	5.754	A
A-B	5.51	5.51	0.00	-	-	-	-	-
A-C	25.32	25.32	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	30.83	30.83	0.00	651.23	0.047	0.05	5.802	A
C-A	44.04	44.04	0.00	-	-	-	-	-
C-B	9.91	9.91	0.00	635.44	0.016	0.02	5.754	A
A-B	5.51	5.51	0.00	-	-	-	-	-
A-C	25.32	25.32	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	25.17	25.21	0.00	653.48	0.039	0.04	5.729	A
C-A	35.96	35.96	0.00	-	-	-	-	-
C-B	8.09	8.10	0.00	636.91	0.013	0.01	5.724	A
A-B	4.49	4.49	0.00	-	-	-	-	-
A-C	20.68	20.68	0.00	-	-	-	-	-

Main results: (09:15-09:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	21.08	21.11	0.00	655.11	0.032	0.03	5.680	A
C-A	30.11	30.11	0.00	-	-	-	-	-
C-B	6.78	6.78	0.00	637.98	0.011	0.01	5.705	A
A-B	3.76	3.76	0.00	-	-	-	-	-
A-C	17.32	17.32	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: Ridgeway Lane Junction Assessment.arc8
Path: T:\RGP\2018 Projects (4401-4500)\4483 Ridgeway Land - Planning Stage\Technical Assessments\Junction Modelling\New
Report generation date: 28/11/2018 15:37:04

Summary of junction performance

	PM			
	Queue (Veh)	Delay (s)	RFC	LOS
	Ridgeway Lane Junction - 2023 + Development Flows			
Stream B-AC	0.03	6.57	0.03	A
Stream C-A	-	-	-	-
Stream C-B	0.62	9.29	0.38	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - 2018 + Development Flows, AM" model duration: 08:00 - 09:30
"D2 - 2018 + Development Flows, PM" model duration: 17:00 - 18:30
"D3 - 2023 + Development Flows, AM" model duration: 08:00 - 09:30
"D4 - 2023 + Development Flows, PM " model duration: 17:00 - 18:30

Run using Junctions 8.0.4.487 at 28/11/2018 15:37:01

File summary

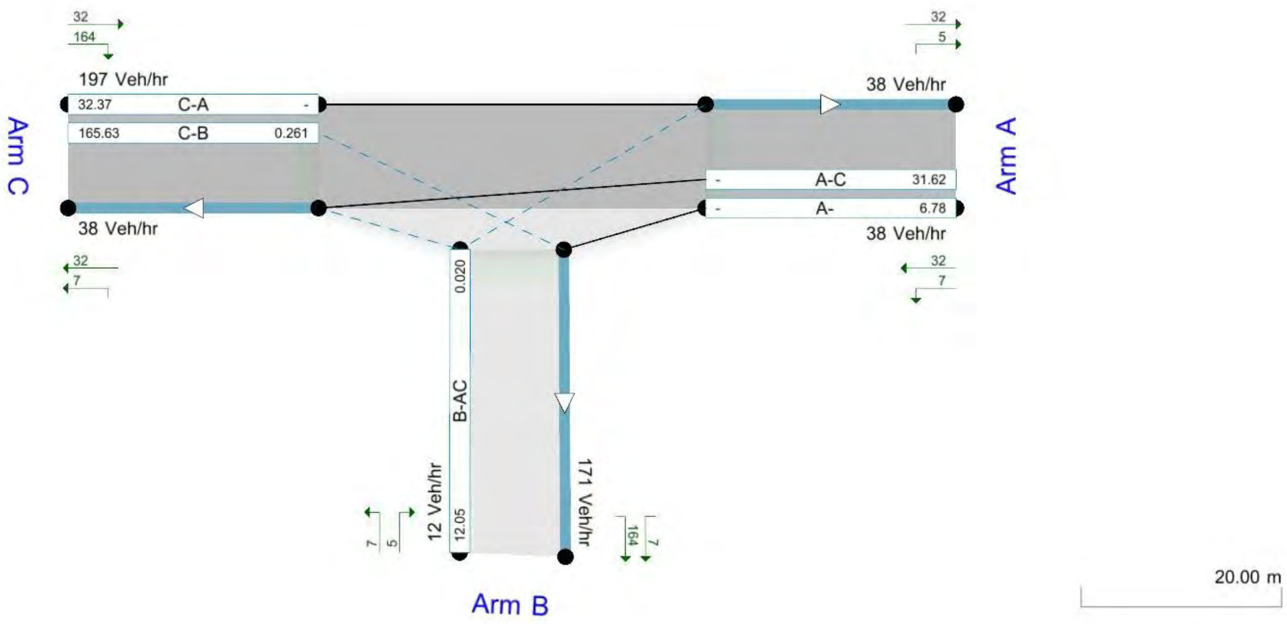
Title	Proposed Ridgeway Lane Access
Location	
Site Number	
Date	08/03/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	remotechi
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	s	-Min	perMin



[redacted]

The junction diagram reflects the last run of ARCADY.

Ridgeway Lane Junction - 2023 + Development Flows, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Ridgeway Lane Junction	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 + Development Flows, PM	2023 + Development Flows	PM		ONE HOUR	17:00	18:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	9.11	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	120.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.24										53	115

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	565.196	0.103	0.260	0.164	0.372
1	B-C	713.064	0.109	0.276	-	-
1	C-B	643.457	0.249	0.249	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	51.00	100.000
B	ONE HOUR	✓	16.00	100.000
C	ONE HOUR	✓	263.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	9.000	42.000
	B	7.000	0.000	9.000
	C	43.000	220.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.18	0.82
	B	0.44	0.00	0.56
	C	0.16	0.84	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.012	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	1.2	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.03	6.57	0.03	A
C-A	-	-	-	-
C-B	0.38	9.29	0.62	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	12.05	11.96	0.00	590.48	0.020	0.02	6.222	A
C-A	32.37	32.37	0.00	-	-	-	-	-
C-B	165.63	164.23	0.00	633.88	0.261	0.35	7.642	A
A-B	6.78	6.78	0.00	-	-	-	-	-
A-C	31.62	31.62	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	14.38	14.37	0.00	579.92	0.025	0.03	6.364	A
C-A	38.66	38.66	0.00	-	-	-	-	-
C-B	197.78	197.38	0.00	632.03	0.313	0.45	8.275	A
A-B	8.09	8.09	0.00	-	-	-	-	-
A-C	37.76	37.76	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	17.62	17.59	0.00	565.29	0.031	0.03	6.572	A
C-A	47.34	47.34	0.00	-	-	-	-	-
C-B	242.22	241.56	0.00	629.46	0.385	0.62	9.266	A
A-B	9.91	9.91	0.00	-	-	-	-	-
A-C	46.24	46.24	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	17.62	17.62	0.00	565.12	0.031	0.03	6.574	A
C-A	47.34	47.34	0.00	-	-	-	-	-
C-B	242.22	242.21	0.00	629.46	0.385	0.62	9.294	A
A-B	9.91	9.91	0.00	-	-	-	-	-
A-C	46.24	46.24	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	14.38	14.41	0.00	579.66	0.025	0.03	6.368	A
C-A	38.66	38.66	0.00	-	-	-	-	-
C-B	197.78	198.41	0.00	632.03	0.313	0.46	8.316	A
A-B	8.09	8.09	0.00	-	-	-	-	-
A-C	37.76	37.76	0.00	-	-	-	-	-

Main results: (18:15-18:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	12.05	12.06	0.00	590.04	0.020	0.02	6.230	A
C-A	32.37	32.37	0.00	-	-	-	-	-
C-B	165.63	166.04	0.00	633.88	0.261	0.36	7.701	A
A-B	6.78	6.78	0.00	-	-	-	-	-
A-C	31.62	31.62	0.00	-	-	-	-	-

APPENDIX Q

Lymington Traffic Simulations

Ridgeway Lane Pinch Points

30th November 2018

1 Lymington traffic simulations

This document details the workings and assumptions made for the code which simulates car-car, car-cyclist and car-pedestrian encounters at pinch-points on Ridgeway Lane.

1.1 Variable definitions

Number of cars northbound: $N_{car,n}$.
Number of cars southbound: $N_{car,s}$.
Number of cyclists northbound: $N_{cyc,n}$.
Number of cyclists southbound: $N_{cyc,s}$.
Number of pedestrians northbound: $N_{ped,n}$.
Number of pedestrians southbound: $N_{ped,s}$.
Number label for any of the above: N_i.

Mean speed of cars northbound: $u_{car,n}$.
Mean speed of cars southbound: $u_{car,s}$.
Mean speed of cyclists: u_{cyc}.
Mean speed of pedestrians: u_{ped}.
Mean speed label for any of the above: u_i.

Length of road/segment: L.

Time over which data is collected: T.

Random number between 0 and 1: R.

1.2 Simulation setup

Assumption: The recorded number of vehicles (and their mean speed) over time T is representative of the typical traffic during that time of day.

The probability that any vehicle N_i (where N_i is any of $N_{car,n}$, $N_{car,s}$, $N_{cyc,n}$, $N_{cyc,s}$, $N_{ped,n}$, $N_{ped,s}$) enters the road at any given time is given by

$$P_i = \frac{N_i}{T}. \tag{1}$$

Therefore, the number of vehicles that are likely to enter the road over some arbitrary time Δt is given by $P_i \Delta t$.

Assumption: For any vehicle type, a maximum of one of that vehicle can enter the road from a certain direction per second. *This assumptions stems from the recommended time-gap between cars of 2 seconds which, but cars may be closer in reality. We also apply this assumption to cyclists and pedestrians. This is reasonable assumption if the number of vehicles is much smaller than the number of seconds in the simulation.*

Given the above assumptions, $P_i \Delta t$ (where $\Delta t = 1$) is less than 1. Therefore, for each second of the simulation we can generate a new random number R (which is different for each vehicle and direction). If $R \leq P_i \Delta t$, then the vehicle is added to the simulation in the designated direction.

For each vehicle entering the road/segment, a start time (t_{start}) and end time (t_{end}) is assigned. The relation between these quantities is

$$t_i^{end} = t_i^{start} + \frac{L}{u_i}. \tag{2}$$

Assumption: Each vehicle is assumed to travel the whole length of the road/segment. *This may be an overestimation if the vehicles turn off into houses or other roads in reality.*

1.2.1 Car-car encounters

Based on the above assumptions, a car heading northbound with start time $t_{car,n}^{start}$ and end time $t_{car,n}^{end}$ will definitely encounter a southbound car if the southbound car enters the road/segment whilst the northbound car is on the road. I.E. if:

$$t_{car,n}^{start} \leq t_{car,s}^{start} \leq t_{car,n}^{end}. \tag{3}$$

The cars will also encounter each other if the northbound car enters the road once the southbound car is already on it. I.E if:

$$t_{car,s}^{start} \leq t_{car,n}^{start} \leq t_{car,s}^{end}. \tag{4}$$

1.2.2 Car-cyclist encounters

Assumption: The cyclists travel slower than the cars.
Assumption: The road is narrow enough such that encountering oncoming cyclists and overtaking cyclists are both issues.

Based on the above assumptions, the type of encounter described in section 1.2.1 is also valid for car-cyclist encounters. We therefore get car-cyclist encounters if

$$t_{car,n}^{start} \leq t_{cyc,s}^{start} \leq t_{car,n}^{end}, \tag{5}$$

or

$$t^{start}_{cyc,s} \leq t^{start}_{car,n} \leq t^{end}_{cyc,s}, \tag{6}$$

or

$$t^{start}_{car,s} \leq t^{start}_{cyc,n} \leq t^{end}_{car,s}, \tag{7}$$

or

$$t^{start}_{cyc,n} \leq t^{start}_{car,s} \leq t^{end}_{cyc,n}. \tag{8}$$

However, these conditions only consider cars and cyclists heading in opposite directions. As the cars travel faster than the cyclists, it is possible for cars to catch-up-to and overtake cyclists. This encounter happens if the car enters the road after the cyclist but reaches the end of the road before the cyclist:

$$t^{start}_{car,n} \geq t^{start}_{cyc,n} \text{ and } t^{end}_{car,n} \leq t^{end}_{cyc,n}, \tag{9}$$

$$t^{start}_{car,s} \geq t^{start}_{cyc,s} \text{ and } t^{end}_{car,s} \leq t^{end}_{cyc,s}. \tag{10}$$

1.2.3 Car-pedestrian encounters

Assumption: The pedestrians also travel slower than the cars.
Assumption: The road is narrow enough such that encountering oncoming pedestrians and overtaking pedestrians are both issues.

Based on the above assumptions, the types of encounters described in section 1.2.3 are also valid for car-pedestrian encounters. We therefore get car-pedestrian encounters if

$$t^{start}_{car,n} \leq t^{start}_{ped,s} \leq t^{end}_{car,n}, \tag{11}$$

or

$$t^{start}_{ped,s} \leq t^{start}_{car,n} \leq t^{end}_{ped,s}, \tag{12}$$

or

$$t^{start}_{car,s} \leq t^{start}_{ped,n} \leq t^{end}_{car,s}, \tag{13}$$

or

$$t^{start}_{ped,n} \leq t^{start}_{car,s} \leq t^{end}_{ped,n}. \tag{14}$$

or

$$t^{start}_{car,n} \geq t^{start}_{ped,n} \text{ and } t^{end}_{car,n} \leq t^{end}_{ped,n}, \tag{15}$$

or

$$t_{car,s}^{start} \geq t_{ped,s}^{start} \text{ and } t_{car,s}^{end} \leq t_{ped,s}^{end}. \quad (16)$$

1.3 Pinch points

Given the assumptions made in this simulation, there is nothing inherently special about pinch points on the road. The vehicle data is taken at the start of the road but we have assumed that each vehicle travels the entire length of the road, the same number of vehicles that enter the road also enter the pinch points. When modelling encounters in the pinch-point, we take the length of the road/segment (L) to be the length of the pinch point.

1.4 Simulation outputs

We want to output the number of car-car, car-cyclist and car-pedestrian encounters. We also output the number of cars, cyclists and pedestrians entering the road to ensure the simulations are consistent with the input data.

For each simulation, the number of encounters for each category is added up. However, any given simulation will have statistical fluctuations.

Assumption: We assume the simulation output obeys *The Law of Large Numbers* (see https://en.wikipedia.org/wiki/Law_of_large_numbers), whereby the mean of the output variables will converge to the actual quantities if averaged over a large enough number of simulations.

We therefore run multiple simulations and compute the mean of each encounter category.

It is also useful to show an uncertainty measure for each output statistic.

Assumption: We assume that the simulation output obeys *The Central Limit Theorem* (see https://en.wikipedia.org/wiki/Central_limit_theorem) whereby the variables, when summed, form a normal distribution with standard deviation σ. σ can be calculated by taking the square root of the variance of the output variable.

Assumption: The uncertainty of a simulation output variable is given by $U = \frac{\sigma}{\sqrt{N}}$ where N is the total number of simulations (see https://en.wikipedia.org/wiki/Monte_Carlo_method#Integration).

As an example, say we have an output variable (A) which we expect to have a value of E_A. Our simulation outputs the value as $M_A \pm U_A$, where M_A is the mean value of A in the simulations and U_A is the uncertainty of the mean value. According to the central limit theorem and the *68-95-99.7 rule* (see https://en.wikipedia.org/wiki/Standard_deviation), the expected value should satisfy:

- $M_A - U_A \leq E_A \leq M_A + U_A$ 68% of the time,
- $M_A - 2U_A \leq E_A \leq M_A + 2U_A$ 95% of the time,
- $M_A - 3U_A \leq E_A \leq M_A + 3U_A$ 99.7% of the time.

Generally, one should only be concerned by results more than $3U_A$ from the expected values as there is a low probability (0.3%) of this occuring.

Therefore, if we input the number of cars northbound as $N_{car,n} = 24$ and the simulation gives us $M_{car,n} \pm U_{car,n} = 23.98 \pm 0.03$, then the result is clearly consistent as the expected value lies directly within the uncertainty bounds of the simulated mean value. However, $M_{car,n} \pm U_{car,n} = 23.95 \pm 0.02$ is still statistically consistent (within 3-uncertainty), unless this type of result happens very frequently (more than $\sim 4\%$ of the time) which would be a sign of an inconsistency or bias in the simulation model.

1.5 Additional notes and assumptions

Assumption: We assume that the average speed of cyclists (in both directions) is 9.6mph (see https://en.wikipedia.org/wiki/Bicycle_performance).

Assumption: We assume that the average speed of pedestrians (in both directions) is 3.1mph (see https://en.wikipedia.org/wiki/Walking).

Note: Values of simulation results are shown to a precision of 2 or 3 decimal places. Therefore, if a result has an uncertaintly of ± 0.000, for example, this does not necessarily mean that the uncertainty is zero.

1.6 Simulation results

The following simulation results show the effects of post-development traffic after 100,000 simulations.

Ridgeway Lane, Pinch Point 1 - AM Peak Hour Traffic (08:00-09:00)

Road/segment length: 36m, Simulation time: 1 hour(s)

Vehicle speeds - Cars northbound: 23.5mph, Cars southbound: 23.9mph, Cyclists: 9.6mph, Pedestrians: 3.1mph

Number of simulations used for mean and uncertainty values: 100,000

	Pre-development	Post-development
Cars northbound	24	45
Cars southbound	42	53
Cyclists northbound	0	1
Cyclists southbound	0	0
Pedestrians northbound	0	6
Pedestrians southbound	0	2
Simulated mean cars northbound	24.00 ± 0.02	45.00 ± 0.02
Simulated mean cars southbound	42.03 ± 0.02	53.00 ± 0.02
Simulated mean cyclists northbound	0.00 ± 0.00	1.00 ± 0.00
Simulated mean cyclists southbound	0.00 ± 0.00	0.00 ± 0.00
Simulated mean pedestrians northbound	0.00 ± 0.00	6.01 ± 0.01
Simulated mean pedestrians southbound	0.00 ± 0.00	2.00 ± 0.00
Simulated mean car-car encounters	1.91 ± 0.00	4.53 ± 0.01
Simulated mean car-cyclist encounters	0.00 ± 0.00	0.23 ± 0.00
Simulated mean car-pedestrian encounters	0.00 ± 0.00	5.70 ± 0.01

Figure 1: Post-development morning traffic at pinch point 1 will produce approximately 2.6 more car-car encounters (to 2 significant figures). There will be an average of 0.23 more car-cyclist encounters and 5.7 more car-pedestrian encounters.

Ridgeway Lane, Pinch Point 1 - PM Peak Hour Traffic (17:00-18:00)

Road/segment length: 36m, Simulation time: 1 hour(s)

Vehicle speeds - Cars northbound: 23.5mph, Cars southbound: 23.9mph, Cyclists: 9.6mph, Pedestrians: 3.1mph

Number of simulations used for mean and uncertainty values: 100,000

	Pre-development	Post-development
Cars northbound	45	67
Cars southbound	46	57
Cyclists northbound	0	1
Cyclists southbound	0	2
Pedestrians northbound	0	5
Pedestrians southbound	0	2
Simulated mean cars northbound	44.98 ± 0.02	67.00 ± 0.03
Simulated mean cars southbound	46.05 ± 0.02	57.01 ± 0.02
Simulated mean cyclists northbound	0.00 ± 0.00	1.00 ± 0.00
Simulated mean cyclists southbound	0.00 ± 0.00	1.99 ± 0.00
Simulated mean pedestrians northbound	0.00 ± 0.00	5.02 ± 0.01
Simulated mean pedestrians southbound	0.00 ± 0.00	1.99 ± 0.00
Simulated mean car-car encounters	3.94 ± 0.01	7.22 ± 0.01
Simulated mean car-cyclist encounters	0.00 ± 0.00	0.87 ± 0.00
Simulated mean car-pedestrian encounters	0.00 ± 0.00	6.24 ± 0.01

Figure 2: Post-development evening traffic at pinch point 1 will produce approximately 3.3 more car-car encounters (to 2 significant figures). There will be an average of 0.87 more car-cyclist encounters and 6.2 more car-pedestrian encounters.

Ridgeway Lane, Pinch Point 2 - AM Peak Hour Traffic (08:00-09:00)

Road/segment length: 6.5m, Simulation time: 1 hour(s)

Vehicle speeds - Cars northbound: 23.5mph, Cars southbound: 23.9mph, Cyclists: 9.6mph, Pedestrians: 3.1mph

Number of simulations used for mean and uncertainty values: 100,000

	Pre-development	Post-development
Cars northbound	24	45
Cars southbound	42	53
Cyclists northbound	0	1
Cyclists southbound	0	0
Pedestrians northbound	0	6
Pedestrians southbound	0	2
Simulated mean cars northbound	24.00 ± 0.02	45.01 ± 0.02
Simulated mean cars southbound	42.05 ± 0.02	53.00 ± 0.02
Simulated mean cyclists northbound	0.00 ± 0.00	1.00 ± 0.00
Simulated mean cyclists southbound	0.00 ± 0.00	0.00 ± 0.00
Simulated mean pedestrians northbound	0.00 ± 0.00	6.01 ± 0.01
Simulated mean pedestrians southbound	0.00 ± 0.00	2.00 ± 0.00
Simulated mean car-car encounters	0.34 ± 0.00	0.81 ± 0.00
Simulated mean car-cyclist encounters	0.00 ± 0.00	0.04 ± 0.00
Simulated mean car-pedestrian encounters	0.00 ± 0.00	1.03 ± 0.00

Figure 3: Post-development morning traffic at pinch point 2 will produce approximately 0.5 more car-car encounters (to 2 significant figures). There will be an average of 0.04 more car-cyclist encounters and 1.0 more car-pedestrian encounters.

Ridgeway Lane, Pinch Point 2 - PM Peak Hour Traffic (17:00-18:00)

Road/segment length: 6.5m, Simulation time: 1 hour(s)

Vehicle speeds - Cars northbound: 23.5mph, Cars southbound: 23.9mph, Cyclists: 9.6mph, Pedestrians: 3.1mph

Number of simulations used for mean and uncertainty values: 100,000

	Pre-development	Post-development
Cars northbound	45	67
Cars southbound	46	57
Cyclists northbound	0	1
Cyclists southbound	0	2
Pedestrians northbound	0	5
Pedestrians southbound	0	2
Simulated mean cars northbound	44.98 ± 0.02	67.01 ± 0.03
Simulated mean cars southbound	46.02 ± 0.02	57.01 ± 0.02
Simulated mean cyclists northbound	0.00 ± 0.00	1.00 ± 0.00
Simulated mean cyclists southbound	0.00 ± 0.00	1.99 ± 0.00
Simulated mean pedestrians northbound	0.00 ± 0.00	5.01 ± 0.01
Simulated mean pedestrians southbound	0.00 ± 0.00	1.99 ± 0.00
Simulated mean car-car encounters	0.71 ± 0.00	1.30 ± 0.00
Simulated mean car-cyclist encounters	0.00 ± 0.00	0.16 ± 0.00
Simulated mean car-pedestrian encounters	0.00 ± 0.00	1.14 ± 0.00

Figure 4: Post-development evening traffic at pinch point 2 will produce approximately 0.6 more car-car encounters (to 2 significant figures). There will be an average of 0.16 more car-cyclist encounters and 1.1 more car-pedestrian encounters.

Ridgeway Lane, Pinch Point 3 - AM Peak Hour Traffic (08:00-09:00)

Road/segment length: 20m, Simulation time: 1 hour(s)

Vehicle speeds - Cars northbound: 23.5mph, Cars southbound: 23.9mph, Cyclists: 9.6mph, Pedestrians: 3.1mph

Number of simulations used for mean and uncertainty values: 100,000

	Pre-development	Post-development
Cars northbound	24	45
Cars southbound	42	53
Cyclists northbound	0	1
Cyclists southbound	0	0
Pedestrians northbound	0	6
Pedestrians southbound	0	2
Simulated mean cars northbound	23.99 ± 0.02	45.00 ± 0.02
Simulated mean cars southbound	42.06 ± 0.02	53.00 ± 0.02
Simulated mean cyclists northbound	0.00 ± 0.00	1.00 ± 0.00
Simulated mean cyclists southbound	0.00 ± 0.00	0.00 ± 0.00
Simulated mean pedestrians northbound	0.00 ± 0.00	6.01 ± 0.01
Simulated mean pedestrians southbound	0.00 ± 0.00	2.00 ± 0.00
Simulated mean car-car encounters	1.06 ± 0.00	2.50 ± 0.01
Simulated mean car-cyclist encounters	0.00 ± 0.00	0.13 ± 0.00
Simulated mean car-pedestrian encounters	0.00 ± 0.00	3.18 ± 0.01

Figure 5: Post-development morning traffic at pinch point 3 will produce approximately 1.4 more car-car encounters (to 2 significant figures). There will be an average of 0.13 more car-cyclist encounters and 3.2 more car-pedestrian encounters.

Ridgeway Lane, Pinch Point 3 - PM Peak Hour Traffic (17:00-18:00)

Road/segment length: 20m, Simulation time: 1 hour(s)

Vehicle speeds - Cars northbound: 23.5mph, Cars southbound: 23.9mph, Cyclists: 9.6mph, Pedestrians: 3.1mph

Number of simulations used for mean and uncertainty values: 100,000

	Pre-development	Post-development
Cars northbound	45	67
Cars southbound	46	57
Cyclists northbound	0	1
Cyclists southbound	0	2
Pedestrians northbound	0	5
Pedestrians southbound	0	2
Simulated mean cars northbound	44.98 ± 0.02	67.02 ± 0.03
Simulated mean cars southbound	46.05 ± 0.02	57.01 ± 0.02
Simulated mean cyclists northbound	0.00 ± 0.00	1.00 ± 0.00
Simulated mean cyclists southbound	0.00 ± 0.00	1.99 ± 0.00
Simulated mean pedestrians northbound	0.00 ± 0.00	5.01 ± 0.01
Simulated mean pedestrians southbound	0.00 ± 0.00	1.99 ± 0.00
Simulated mean car-car encounters	2.18 ± 0.00	4.03 ± 0.01
Simulated mean car-cyclist encounters	0.00 ± 0.00	0.48 ± 0.00
Simulated mean car-pedestrian encounters	0.00 ± 0.00	3.49 ± 0.01

Figure 6: Post-development evening traffic at pinch point 3 will produce approximately 1.9 more car-car encounters (to 2 significant figures). There will be an average of 0.48 more car-cyclist encounters and 3.5 more car-pedestrian encounters.

ecological support, management &

solutions

Land Adjoining Ridgeway Lane

Lymington

Preliminary Ecological Appraisal

Author: Adam Jessop MSc

Date: March 2019

Client: Cicero Estates

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Table of Contents

Executive Summary

A residential development is proposed at Land off Ridgeway Lane, Lyminton for which outline planning permission is sought (up to 115 dwellings).

Ecosupport Ltd was instructed by Cicero Estates to undertake a Preliminary Ecological Appraisal (PEA) of the site to identify any potentially important ecological features that may be affected by the proposed development. As part of this assessment, the following surveys were undertaken:

- Desktop survey submitted to the Hampshire Biological Records Centre (HBIC) 2018
- Extended phase I habitat survey (August 2018 and updated in March 2019)
- Preliminary roost assessment (buildings) (March 2019)
- Preliminary Roost Assessment (trees) (March 2019)

The following important ecological features were identified on site following the conclusion of the above survey work and may be subject to adverse impacts in the absence of suitable mitigation / compensation:

- Bat roost identified within Northfields bungalow located on site
- Potential for bats to be roosting within additional building / trees on site
- Subsidiary Badger sett located along south eastern corner
- Potential for reptiles to be present
- Water course with potential for Water Vole present
- Breeding and nesting birds
- Recreational pressure upon New Forest and Solent and Southampton Water SPAs

In the absence of any mitigation measures, the proposed development is anticipated to result in, certain adverse effects (significance level to be determined following additional survey work).

Suitable mitigation measures will be outlined within reports that will accompany this document following the conclusion of the additional survey work recommended.

1.0 INTRODUCTION

1.1 Brief

Ecosupport Ltd was commissioned by Cicero Estates to conduct a PEA of a series of land parcels and nursery south of Lymington. The purpose of this survey was to assess any ecological impacts that may arise as a result of the proposed development. The objectives of the survey were as follows:

- Assess the ecological value of the site
- Identify any signs of protected species and potential features that may support them
- Make recommendations for further survey work as appropriate.

NB If the development does not take place within 24 months of this report then the findings of this survey will no longer be considered valid and should be repeated.

1.2 Site Description & Location

The site comprises a series of land parcels (in various forms of management / use) and the Northfields nursery located between Lower Pennington Lane and Ridgeway Lane, Lymington, SO41 8ZZ (centered on OS grid reference SZ 31819 94222). The north of the site is bounded by residential dwellings, the east by residential dwellings and Ridgeway Lane, the south by agricultural fields and the west by Oakhaven Hospice, The Coates Centre and Lower Pennington Lane (**Fig 1**). The immediate surrounding environ is semi-rural, with the site residing on the southern outskirts of the town of Lymington.

Figure 1. Google aerial image of the site with approximate redline boundary.

1.3 Proposed Development

It is understood the development entails the building of a total of 115 dwellings with associated gardens, parking areas and garages. The development will also entail the creation of SANGs (Suitable Alternative Natural Greenspaces).

2.0 RELEVANT LEGISLATION AND POLICY

2.1 Legislation

2.1.1 The Conservation of Habitats and Species Regulations (2010)

This transposes the EU Habitats Directive (Council Directive 92/43/EEC) into UK domestic law. It provides protection for sites and species deemed to be of conservation importance across Europe. It is an offence to deliberately capture, kill or injure species listed in Schedule 2 or to damage or destroy their breeding sites or shelter. It is also illegal to deliberately disturb these species in such a way that is likely to significantly impact on the local distribution or abundance or affect their ability to survive, breed and rear or nurture their young.

2.1.2 The Wildlife and Countryside Act (1981) (as amended)

This is the primary piece of legislation by which biodiversity if protected within the UK. Protected fauna and flora are listed under Schedules 1, 5 and 8 of the Act. They include all species of bats, making it an offence to intentionally or recklessly disturb any bat whilst it is occupying a roost or to intentionally or recklessly obstruct access to a bat roost. Similarly, this Act makes it an offence to kill or injure any species of British reptiles and also makes it an offence to intentionally kill, injure or take any wild bird or to take, damage or destroy their eggs and nests (whilst in use or being built).

2.1.3 The Countryside and Rights of Way Act (2000)

This Act places a duty on Government Ministers and Departments to conserve biological diversity and provides police with stronger powers relating to wildlife crimes.

2.1.4 NERC Act

The Natural Environment and Rural Communities (NERC) Act 2006 requires that public bodies have due regard to the conservation of biodiversity. This means that Planning authorities must consider biodiversity when planning or undertaking activities. Section 41 of the Act lists species found in England which were identified as requiring action under the UK Biodiversity Action Plan and which continue to be regarded as conservation priorities under the *UK Post – 2010 Biodiversity Framework.*

2.1.5 Protection of Badgers Act

The Protection of Badgers Act (1992) relates to the welfare of Badgers (*Meles meles*) as opposed to nature conservation considerations. The Act prevents:

- The wilful killing, injury, ill treatment or taking of Badgers and / or
- Interference with a Badger sett
- Damaging or destroying all or part of a sett
- Causing a dog to enter a set and
- Disturbing a Badger while it is occupying a sett

Provisions are included within the Act to allow for the lawful licensing of certain activities that would otherwise constitute an offence under the Act.

2.2 Policy

2.2.1 National

The revised National Planning Policy Framework (NPPF) (Ministry of Housing, Communities and Local Government, 2018) outlines a number of more robust measures to ensure the impacts of development upon the Country's biodiversity interests are appropriately mitigated against whilst also seeking to achieve a 'net gain'. The key policy test relating to developments and biodiversity is outlined below.

Chapter 15. Conserving and Enhancing the Natural Environment

170. Planning policies and decisions should contribute to and enhance the natural and local environment by:

a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);

b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;

c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;

d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;

e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and

f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

171. Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.

172. Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty, which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas, and should be given great weight in National Parks and the Broads. The scale and extent of development within these designated areas should be limited. Planning permission should be refused for major development55 other than in exceptional circumstances, and where it can be demonstrated that the development is in the public interest. Consideration of such applications should include an assessment of:

a) the need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy;
b) the cost of, and scope for, developing outside the designated area, or meeting the need for it in some other way; and
c) any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.

173. Within areas defined as Heritage Coast (and that do not already fall within one of the designated areas mentioned in paragraph 172), planning policies and decisions should be consistent with the special character of the area and the importance of its conservation. Major development within a Heritage Coast is unlikely to be appropriate, unless it is compatible with its special character.

Habitats and Biodiversity

174. To protect and enhance biodiversity and geodiversity, plans should:
a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

175. When determining planning applications, local planning authorities should apply the following principles:
a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons58 and a suitable compensation strategy exists; and
d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.

176. The following should be given the same protection as habitats sites:

a) potential Special Protection Areas and possible Special Areas of Conservation;
b) listed or proposed Ramsar sites; and
c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

177. The presumption in favour of sustainable development does not apply where development requiring appropriate assessment because of its potential impact on a habitats site is being planned or determined.

2.2.2 Local

Planning Policy CS3 of New Forest District outside the National Park relates to biodiversity conservation and states:

"*Development proposals must protect and, where possible, enhance sites of recognised importance for nature and heritage conservation.*

Working with local communities, features of local heritage value which contribute to local distinctiveness will be identified. New development proposals should maintain local distinctiveness and where possible enhance the character of identified features.

Measures will be taken, working with other partners, to secure the enhancement, restoration and creation of biodiversity, including measures to adapt to the consequences of climate change, so as to assist in achieving national, county and local biodiversity targets as set out in the Hampshire and New Forest Biodiversity Action Plans.

The special characteristics of the Plan Area's natural and built environment will be protected and enhanced through:

1. *(a) applying relevant national and regional policies;*
2. *(b) ensuring that new development protects and enhances local distinctiveness (see Policy CS2);*
3. *(c) a review of Areas of Special Character and landscape features through subsequent Local Development Framework Documents;*
4. *(d) using the development management process to positively bring about development which enhances local character and identity and which retains, protects and enhances features of biological or geological interest, and provides for the appropriate management of these features;*
5. *(e) producing Conservation Area appraisals and management plans, including enhancements such as environmental improvements, traffic management etc.;*
6. *(f) supporting an ongoing programme of survey of habitats and species, and designation of Sites of Importance for Nature Conservation;*
7. *(g) encouraging and developing public understanding of biodiversity, e.g. through the New Forest Biodiversity Action Plan, and enabling public access to designated sites for the purpose of interpretation and understanding where feasible without harm to nature conservation interests;*

8. *(h) encouraging land management practices that restore or enhance sites of biodiversity value and which create new sites;*
9. *(i) working with landowners and developers to ensure land management practices protect and enhance valued landscapes, and to restore landscapes where valued features and habitats have been lost or degraded;*
10. *(j) protecting networks of natural habitats identified through the local Biodiversity Action Plan, where appropriate including them in access routes and areas of natural green space;*
11. *(k) extending specific protection to important trees and hedgerows including those not currently included within designated sites;*
12. *(l) ensuring development contributes, where possible, to biodiversity by designing in wildlife, and ensuring any unavoidable impacts are appropriately mitigated for (including on sensitive areas outside the Plan Area including the international nature conservation designations in the National Park); and*
13. *(m) retaining and enhancing the green infrastructure networks within settlements."*

3.0 METHODOLOGY

3.1 Desk Study

3.1.1 Data Request
A data request was submitted to Hampshire Biodiversity Information Centre (HBIC) to ascertain any records held of nature conservation designations and protected species within 2 km of the boundary of the site.

The data search covered:

- Statutory designated sites
- Non-statutory designations such as SINCs
- Records of protected and notable species.
- Records for waders and Brent Geese

3.2 Field Survey

3.2.1 Habitats
The field survey work which forms the basis of the findings of this report was carried out by Adam Jessop (the author), Ecology Director with Ecosupport (7 years post MSc graduation experience), with assistance from Lyndsey McBean BSc (Hons).

The Phase 1 Habitat survey (JNCC, 2010) methodology was adopted which is a method of classifying and mapping wildlife habitats in Great Britain. It was originally intended to provide "...*relatively rapidly, a record of semi-natural vegetation and wildlife habitat over large areas of the countryside*". The standard Phase 1 Habitat survey methodology has been 'extended' in this report to include the following:

- Floral species lists for each identified habitat;
- Descriptions of habitat structure, the evidence of management and a broad assessment of habitat condition;
- Mapping of additional habitat types (e.g. hardstanding);
- Identification of Priority Habitats under Section 41 of the NERC Act;
- Evidence of, or potential for, the presence of certain species/groups

3.2.2 Bats
An assessment was made of the suitability of the buildings and trees on site to support roosting bats based on the presence of any Potential Roost Features (PRFs) during March 2019. This involved the use of 8 x 42 close focus binoculars and a high-powered torch (where required) for a more detailed inspection of any features (including the loft space of the buildings on site). The survey conformed to current best practice guidance as described *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (Collins, 2016) and was carried out by Adam Jessop (2015 – 13366 – CLS – CLS).

3.2.3 Badger
The site was thoroughly searched for evidence of use by Badgers (*Meles meles*), with the

specific aim of identifying the presence and location of any setts. In accordance with the *Badgers and Development: A Guide to Best Practice and Licensing* (Natural England, 2011) guidance, the survey accounted for a 30m from the site's boundary (observed where possible i.e. does not conflict with private dwellings). Evidence of Badgers could include latrines, dung pits, feeding remains and foraging evidence, trails and setts.

Based on the identification of potential Badger setts on site, further monitoring was undertaken. This involved the deployment of two Spy Point HD 7 trail camera which were left *in stiu* adjacent to both of the suspected setts for a period of 21 days during January 2019. Two visits were made during this period to check on the cameras, change batteries and SD cards.

3.3 Assessment Methodology

3.3.1 Introduction

The methodology for the assessment of the likely ecological effects of the proposed development is based on CIEEM's *Guidelines for Ecological Assessment in the UK* (CIEEM 2018). Although this assessment does not constitute a formal Ecological/ Environmental Impact Assessment, the IEEM guidelines provide a useful framework for assessing ecological impacts at any level.

3.3.2 Valuation

Features of ecological interest are valued on a geographic scale. Value is assigned on the basis of legal protection, national and local biodiversity policy and cultural and/or social significance.

3.4 Limitations

There were not considered to be any significant limitations on the results of the walkover survey with all areas of the site accessible and the survey conducted at the appropriate time of year (when vascular plants are still in flower) and during good weather conditions (sunny, 27 ^{o}C with little wind). Similarly, during the roost assessment of the buildings and trees on site, all internal areas were accessible and external elevations / trunks observable.

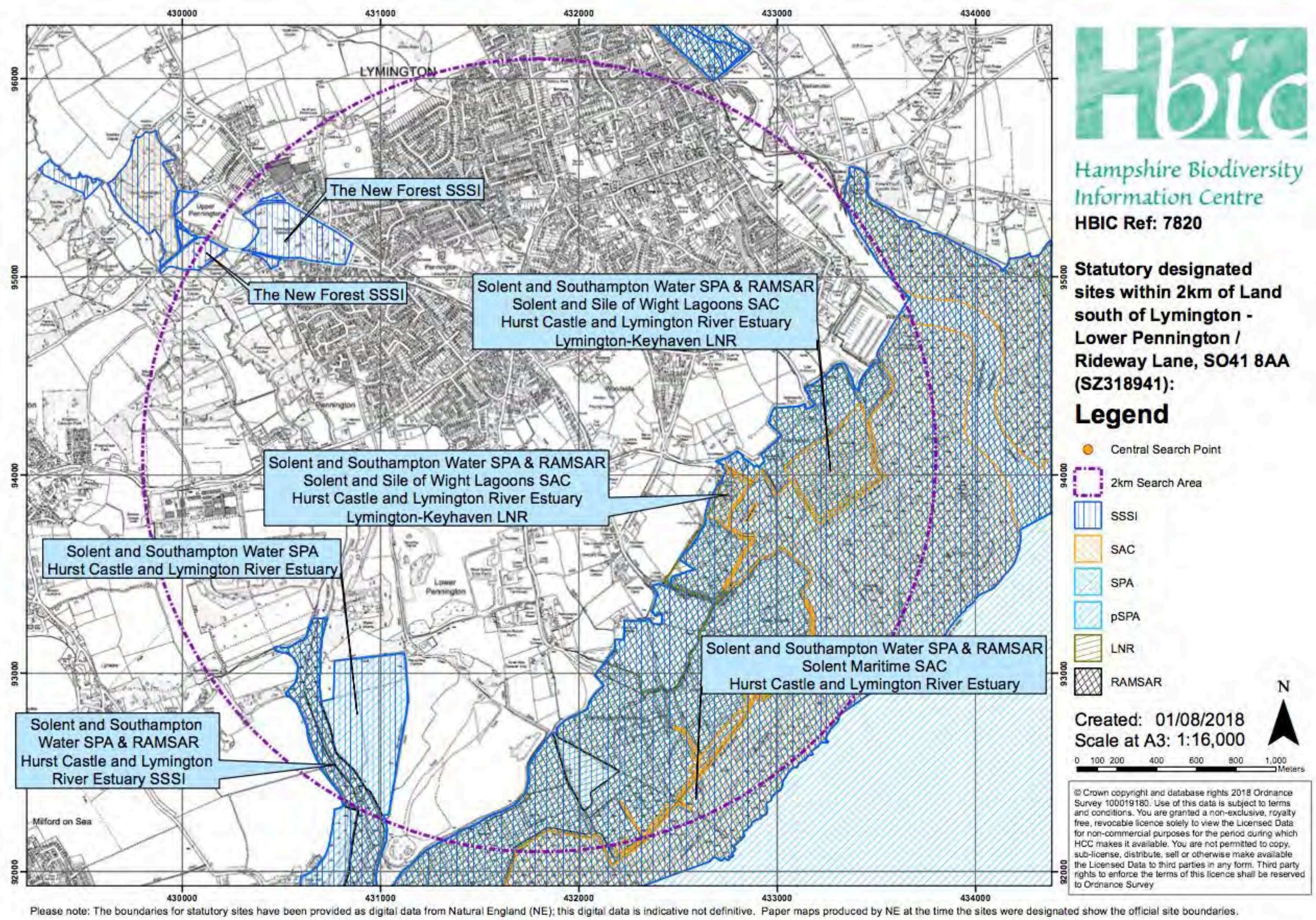
4.0 ECOLOGICAL BASELINE

4.1 Designated Sites

4.1.1 Statutory

Figs 2 below displays the map provided by HBIC with the statutory designated sites located within 2 km of the site. This has identified The New Forest SSSI, Solent Southampton SPA & RAMSAR, Solent and Isle of Wight Lagoons SAC, Hurst Castle and Lymington River Estuary SSSI Solent Maritime SAC, and Lymington-Keyhaven LNR.

Figure 2. Statutory designated sites located within 2km of the site as provided by HBIC.



4.1.2 Non-statutory

The non-statutory sites identified by HBIC are shown in **Fig 3** with a summary of these sites presented in **Table 1**.

Figure 3. Non-statutory designated sites located within 2km as provided by HBIC.

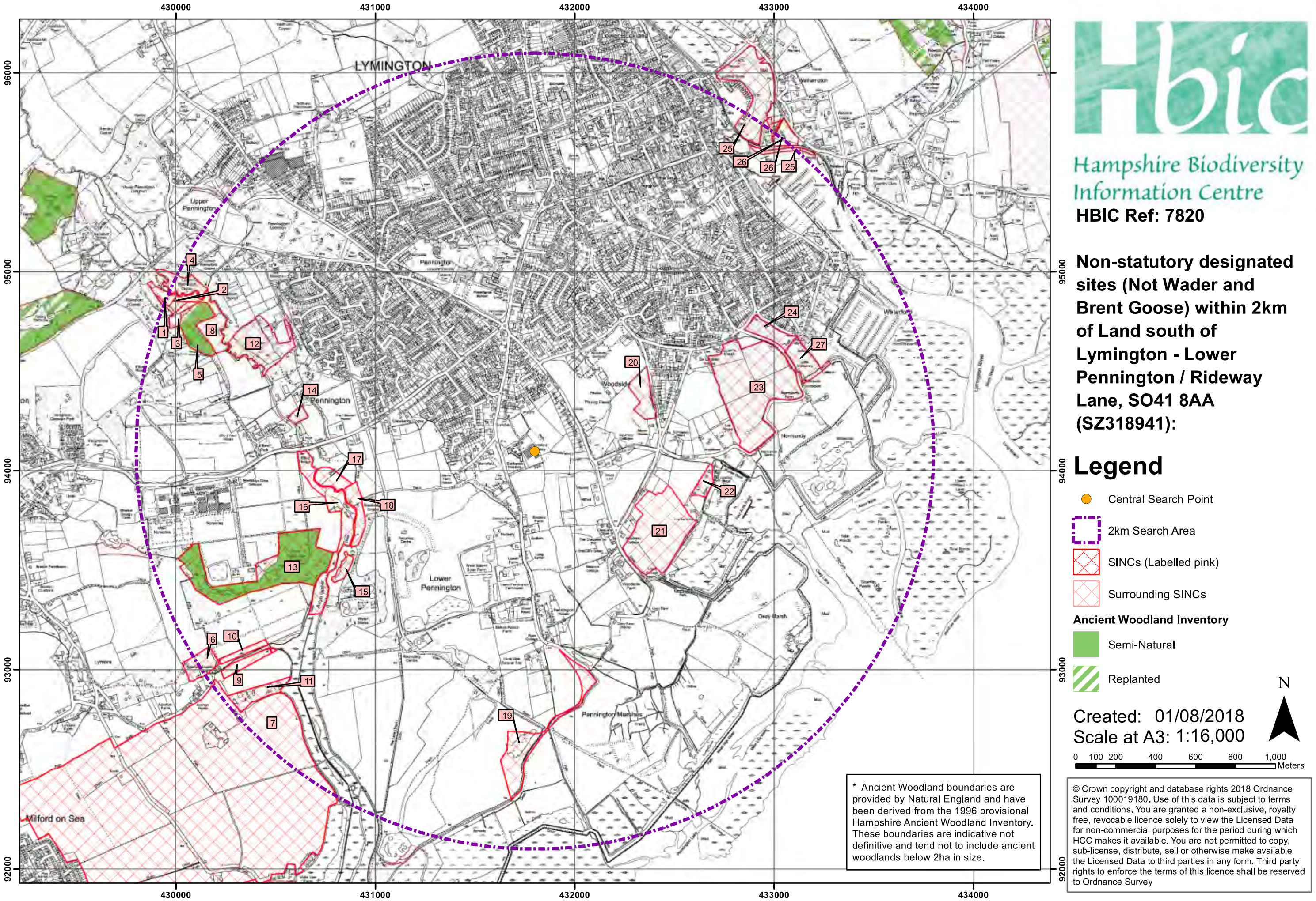


Table 1. Summary of SINC designations within 2 km of the site. The assessed potential impact takes PRoW into account where the information is available.

SINC Name	SINC Reference & Map Label	Distance / Direction	Designation Criteria	Potential Impact(s)
Wainsford Bridge Marsh	NP0284 (1)	1.99 km / NW	2B/5B	Considered unlikely
Wainsford Copse (East)	NP0285 (2)	1.93 km / NW	1B/6A	Considered unlikely
Wainsford Copse Meadow	NP0286 (3)	1.90 km / NW	2B/5B	Considered unlikely
Efford Avon Meadows	NP0287 (4)	1.93 km / NW	2D	Considered unlikely
Efford Wood	NP0288 (5)	1.78 km / NW	1A/6A	Considered unlikely
Agarton Copse	NF0186 (6)	1.9 km / SW	1B	Considered unlikely
Keyhaven Fields	NF0187 (7)	1.8 km / SW	6B	Potential increase in visitor numbers
Wainsford Bridge Meadows	NP0289 (8)	1.68 km / NW	2D	Considered unlikely
Pond Copse Meadow	NF0402 (9)	1.92 km / SW	2B/5B	Considered unlikely
Agarton Copse Meadow	NF0188 (10)	1.85 km / SW	2B	Considered unlikely
Pond Copse, Milford-on-Sea	NF0189 (11)	1.97 km / SW	1B/5A	Considered unlikely
Newlease Copse and Meadow, Lymington and Pennington	NP0293 (12)	1.46 km / NW	1A/2A/5B/6A	Potential increase in visitor numbers
Great Newbridge Copse	NF0190 (13)	1.51km / SW	1A	Potential increase in visitor numbers
Efford Area 1	NP0297 (14)	1.12km / W	1A	Considered unlikely
Waterworks Lake & Bank	NF0191 (15)	1.27km / SW	2B/5B	Potential increase in visitor numbers
Meadows south of Efford Bridge	NF0192 (16)	1.15km / SW	2B/5B	Potential increase in visitor numbers
Newbridge Copse Meadow	NF0193 (17)	1.05km / W	2B	Potential increase in visitor numbers
Newbridge Copse	NF0194 (18)	1.05km / SW	1A	Potential increase in visitor numbers
Keyhaven Marshes Extension	NF0195 (19)	1.64km / S	4A	Potential increase in visitor numbers

Woodside	NF0196 (20)	0.55km / NE	2A/6A	Likely increase in visitor numbers
Fields North-West of the Salterns	NP0306 (21)	0.79km / SE	6B	Likely increase in visitor numbers
Boat Club Paddock	NP0402 (22)	0.88km / SE	2B	Likely increase in visitor numbers
Fields North-West of Normandy Fields	NP0309 (23)	1.11km / E	6B	Likely increase in visitor numbers
Little Normandy Reedbed & Wood	NP0310 (24)	1.26km / NE	4A	Potential increase in visitor numbers
Lymington Mudflats	NF0197 (25)	1.81km / NE	4A	Considered unlikely
Walhampton Reedbeds	NF0198 (26)	1.91km / NE	4A	Considered unlikely
Little Normandy Field	NP0311 (27)	1.35km / E	2D/4A/5B/6A	Considered unlikely

4.2 Vegetation Survey Results

The vegetation within the site has been described below using the broad Phase I habitat classification terminology as described with JNCC (2010). The below species noted should not be considered an exhaustive list and instead refer to dominant, characteristic and other noteworthy species associated with each community within the survey area. The habitat types on site comprise:

- Poor semi-improved
- Improved grassland
- Arable
- Hedgerow / tree lines
- Tall ruderal
- Wet ditch
- Scattered trees
- Running water
- Hard standing
- Buildings

To further clarify the location of habitats on site, the fields present within the site are numbered in **Fig 4** below.

Figure 4. Map with numbered field labels for ease of description.

4.2.1 Poor-semi improved grassland

This was the dominant habitat type within fields 1, 2 and 6 with fields 3 and 4 also supporting an unmanaged strip of poor semi-improved grassland adjacent to the boundary hedgerows. Field 1 (**Fig 5**) is managed (cut) with a short sward height with fields 2 (**Fig 6**) and 6 left unmanaged at the time of the survey (possibly for use as hay meadows). Species noted within the sward (broadly similar across all fields where this habitat type was noted) included Thistle (*Cirsium spp*), Yorkshire Fog (*Holcus lanatus*), Cocks Foot (*Dactylis glomerate*), Dock (*Rumex spp*), Common Nettle (*Urtica dioica*), Timothy (*Phleum pretense*), Hogweed (*Heracleum sphondylium*), Bentgrass (*Agrostis spp*), Crested Dogs Tail (*Cynosurus cristatus*), False Oat-Grass (*Arrhenatherum elatius*), Bracken (*Pteridium spp*), Buttercup (*Ranunculus spp*), Hedge Bindweed (*Calystegia sepium*), Broadleave Plantain (*Plantago major*), and Cats Ear (*Hypochaeris radicata*). The most diverse field appeared to be 1 where locally dominant patches of Black Knapweed (*Centaura nigra*) were noted along with Birds Foot Trefoil (*Lotus Corniculatus*).

Figure 5. Field 1, a recently cut poor semi-improved hay meadow managed to a short sward height.

Figure 6. Field 2 with unmanaged poor semi-improved grassland.

4.2.2 Improved Grassland

Field 5 is dominated by improved grassland currently being managed as a horse paddock (**Fig 7**). The grassland consisted of common grassland species but was poached, with patches of bare earth, making the compiling of a detailed species list difficult.

Figure 7. Field 5 managed as a horse paddock.

Further areas of improved grassland were also noted within the grounds of Northfields Nursery and the garden area associated with Northfields bungalow (with both of these additional areas being well managed with a short sward height).

4.2.3 Arable

Fields 3 and 4 are being managed as monoculture arable fields and are currently being used to grow cereal crops (**Fig 8**). On all sides of both fields verges of approximately 2 m width have been left as unmanaged poor semi-improved grassland supporting a species composition broadly similar to that described in section *4.2.1* (with occasional Scentless Mayweed *Tripleurospermum inodorum*) also noted).

Figure 8. Arable fields currently used to grow cereal crops.

4.2.4 Hedgerow / tree lines

Mature, intact hedgerows / tree lines border all fields within the site (seen in **Figs 5 - 8**). All boundary features had a similar diverse species composition and structure, being a mix of native and non-native species. Species noted included False Acacia (*Robinia pseudoacacia*), Beech (*Fagus sylvatica*), Sweet Chestnut (*Castanea sativa*), Ash (*Fraxinus excelsior*), Laurel (*Lauraceae spp*), Dog Rose (*Rosa canina*), Sycamore (*Acer pseudoplatanus*), Elder (*Sambucus nigra*), Apple (*Malus spp*), Hawthorn (*Craetagus monogyna*), Elm (*Ulmus spp*), Alder (*Alnus glutinosa*), *Leylandii spp*, Hazel (*Corylus avellane*), Bramble (*Rubus fruticosus*), Oak (*Quercus spp*), Field Maple (*Acer campestre*), Blackthorn (*Prunus spinosa*), Common Lime (*Tilia x europaea*), Polplar (*Populus spp*), Scots Pine (*Pinus sylvestris*) and Horse Chestnut (*Aesculus hippocastanum*).

4.2.5 Tall ruderal

An area of tall ruderal habitat borders the south western side of field 2 with the species composition consisting of Common Nettle, Bracken, Dock, Bristly Ox Tongue (*Helminthotheca echioides*) Hogweed and Rosebay Willowherb (*Chamerion angustifolium*) (**Fig 9**).

Figure 9. Tall ruderal vegetation on the south western side of field 2.

4.2.6 Wet ditch

A ditch was noted along the southern boundary of field 5 which supported a very low water level (approximated at 5 – 10 cm) during the time of the walkover survey (seemingly man made and created for drainage purposes). Due to the heavy shading of the tree line / hedgerow the banks of the ditch supported limited amounts of vegetation with occasional Nettles and Harts Tongue Fern (*Asplenium scolopendrium*) noted.

4.2.7 Scattered trees

Scattered trees were noted throughout the site with the majority associated with the boundary features rather than located in isolation. Species noted included *Quercus* spp, *Poplus* spp, Scot's Pine (*Pinus slyvestris*), Leylandii, Holly (*Illex aquifolium*) and Sycamore (*Acer pseudoplantanus*).

4.2.8 Running water

A small stream supporting running water was noted along the eastern boundary of the nursery part of the site (and the south western boundary of field 3). Both sides of the banks of the stream were largely devoid of well-established vegetation with large areas of bare soil present (**Fig 10**). Where vegetation was present, the following species were noted; Stinging Nettle (*Urtica dioica*), Ivy, Soft Shield Fern (*Polystichum setiferum*), Red Dead Nettle (*Lamium purpureum*) and Common Cleaver (*Galium aparane*).

Figure 10. Stream located along eastern boundary of nursery part of the site.

4.2.9 Hard standing

Gravel and tarmac hard standing were noted around the polytunnels and forming a small car park area for Northfields Nursery. This habitat type was largely devoid of any well-established vegetation.

4.2.10 Buildings

The final habitat type on site was buildings with further descriptions of all buildings on site provided in **Table 2** below.

4.3 Bat Survey Results

4.3.1 Pre-existing data

The HBIC data request for within 2km of the site returned records for bats returned records for Barbastelle (*Barbastella barbastella*) (2 records), Noctule (*Ncylalus noctula*) (34 records), *Myotis* spp (62 records), Whiskered Bat (*Myotis mystacinus*) (4 records), Pipistrellus *spp* (34 records), Common Pipistrelle (*Pipistrellus pipistrellus*) (126 records), Soprano Pipistrelle (*Pipistrellus pygmaeus*), (90 records), Nathusius's Pipistrelle (*Pipistrellus nathusii*) (44 records), Serotine (*Eptesicus serotinus*) (32 records), Long Eared (*Plecotus* spp) (32 records), Brown Long Eared (*Plecotus* auritus) (12 records) and *Chiroptera spp* (14 records).

4.3.2 Buildings

The findings of the preliminary roost assessment of all buildings on site is outlined in **Table 2** below.

Table 2. Results of the preliminary roost assessment undertaken of all built structures proposed for demolition under the current scheme.

Building	Fig	Description of Construction	PRFs / Evidence of Occupation	Assessed Roost Potential
Northfields Bungalow	**Figure 11.** Southern elevation of the Northfields bungalow dwelling. 	1970's bungalow of redbrick wall construction with wooden fascia / soffits. Windows and doors are a mixture of single and double glazed with PVC and metal frames. Roof formed by corrugated interlocking concrete tiles with two chimneys present on the northern and southern roof pitches.	Roof generally well-sealed with a low number of suitably sized gaps present between tiles. Large area of mortar missing on eastern gable end creating gap directly into loft space and wooden soffit rotting in places creating further access points. Loft space was large (circa 2.5 m in height) with tiles underlined by bitumen felt with multiple rips. Approximately 20 droppings noted scattered throughout loft space with older (due to colouration and dryness) and fresher examples noted. Based on	***Known roost***

			dropping characteristics, considered most likely to be *Plecotus* spp (sample sent for DNA analysis to confirm exact species).	
Workshop	**Figure 12.** Workshop building associated with the nursery 	Workshop building the main part of which is constructed from single skin corrugated asbestos sheets with a lean-to wooden extension on southern elevation. Further wooden lean-to extension on eastern elevation which is partially open fronted.	Much of the building was open creating opportunities for direct access into internals with PRFs also noted between asbestos ridge sheets and timber frame. No evidence of bat occupation noted internally	***Low***

Polytunnels	**Figure 13.** One of the two polytunnel complexes present within the nursery. 	Polytunnels formed by plastic over metal frames still actively used as part of the nursery operations.	No PRFs noted	***Negligible***

Glass houses	**Figure 13.** One of two glass houses present on site used as part of the nursery operations. 	Glass houses constructed from metal frames and glass used as part of the nursery operations.	No PRFs noted.	***Negligible***

Shed	**Figure 14.** Shed associated with the nursery. 	Large shed used as break area / office. Constructed from tongue and grove wooden slating with shallow pitched felt lined roof.	No PRFs noted	***Negligible***

4.3.3 Trees
A number of trees were noted on site which supported PRFs. The locations of these trees is provided in **Map 1**.

4.3.3 Foraging and commuting habitat
The site supports a good mosaic of habitats including managed and unmanaged grassland, water bodies and mature tree lines / hedgerows (all of which will provide a varied food source for local invertebrates, a principal food source of bats). Furthermore, HBIC returned records for a number of different bat species including nationally rare Barbastelle and Nathusis Pipistrelle (Wray et al., 2010). Taking the above into account and direct linkages to further suitable habitats in the local area, the site is considered to be of ***High*** potential for foraging and commuting bats.

4.4 Badgers

4.4.1 Pre-existing information
HBIC do not hold any records for Badger (*Meles meles*) presence within 2km of the site.

4.4.2 Site survey
A suspected Badger sett was noted in the south eastern part (refer to **Map 2**) of the site during the walkover survey with 3 holes noted (two around the base of a base of a Hawthorn and one 3 m further out in the field) (**Fig 15**).

Figure 15. Soil from Badger sett excavations.

To ascertain if the sett was active, two SpyPoint trail cameras were placed in locations to monitor all three holes for a period of 21 days between the 10th and 31st January 2019. During the monitoring period weather conditions were generally considered to be good with a mean temp (night and day) of 4.3 ^{o}C (high of 8.7 and low of 0.5 ^{o}C). In total, 11 videos of Badger were recorded from both cameras during the 21 days with at least one video recorded showing a single Badger leaving the hole in the field (approximately 3 m north of those shown in **Fig 15**).

Based on the evidence recorded on site and during the remote monitoring, the sett is considered to be an example of a subsidiary sett. Subsidiary setts are described by Natural England as:

' Often these only have a few holes, are usually at least 50 m from a main sett, and do not have an obvious path connecting with another sett. They are not continuously active. '

This assessment is supported by the low number of holes present, lack of obvious trails leading from the sett and absence of a main sett on site.

4.5 Reptiles

4.5.1 Pre-existing information

HBIC hold 12 records for Slow Worm (*Anguis fragilis*), the closest being 1.23 km north east of the site; 14 records for Grass Snake (*Natrix natrix*) the closest being 0.52 km north east if the site; 20 records for Adder (*Vipera berus*) with the closest being 1.55 km south; and 25 records for Common Lizard (*Zootoca vivipara*) with the closest being 1.23 km north east.

4.5.2 On site habitat assessment

The unmanaged poor semi-improved grassland fields / boundaries support long sward heights with a high diversity of forb species and scrub banks and can be considered optimal habitat for reptiles. Considering the optimum habitat and records of reptile species close to the site, the habitat is considered to be of ***High*** potential to support reptile species.

4.6 Great Crested Newts

4.6.1 Pre-existing information

HBIC do not hold any records of Great Crested Newt (*Triturus cristatus*) presence within 2km of the site.

4.6.2 Water bodies within 500 m

In total 3 ponds were identified within 500m of the site along with 3 ditches (as per **Fig 16** below). A formal assessment of these ponds during the PEA was not undertaken due to access constraints.

Figure 16. Water bodies located within 500m of the site. Pond 2 is not shown on 1:250 OS maps however it can be seen on aerial images.

4.7 Hazel Dormouse

4.7.1 Pre existing information

HBIC do not hold any records of Dormouse (*Muscardinus avellanarius*) presence within 2km of the site.

4.7.2 Site assessment

The hedgerows surrounding the fields can be considered to provide suitable habitat for Dormouse as they are well established and formed by a variety of different native species of known benefit to Dormice (as per Bright et al., 2006). These features would provide a protracted source of food throughout the year and the site benefits from linkages into a wider network of hedgerows to the south (although contiguous woodland areas are limited to a small copse across Ridegway Lane). Based on the nature of the habitats on and adjacent to the site and taking the absence of any local records into consideration, the site is considered to be of Low – Moderate potential for Dormice.

4.8 Notable and Birds of Conservation Concern (BoCC)

4.8.1 Pre existing information

HBIC returned a high number of records of birds of conservation concern for within 2km of the site. **Table 3** shows an example of some bird species returned that are considered likely to use the site for breeding or foraging (based on habitat preferences).

Table 3. shows the HBIC list of notable bird records within 2km of the site.

Latin name	Common name	Number of Records Provided	Last year recorded
Acanthis cabaret	Lesser Redpoll	535	2017
Asio strepera	Short-Eared Owl	126	2017
Asio flammeus	Long Eared Owl	1	2013
Barnta bernicla	Dark-Bellied Brent Goose	2166	2017
Branta leucopsis	Barnacle Goose	261	2017
Branta ruficollis	Red-Breasted Goose	186	2013
Burhinus oedicnemus	Stone Curlew	2	2010
Calandrella brachydactyla	Short-Toed Lark	33	2017
Calcarius lapponicus	Lapland Bunting	158	2016
Calidris pugnax	Ruff	915	2017
Circus aeruginosus	Marsh Harrier	424	2017
Cettia cetti	Cetti's Warbler	2129	2017
Circus cyaneus	Hen Harrier	90	2017
Circus pygargus	Montagu's Harrier	12	2014
Coccothraustes coccothraustes	Hawfinch	13	2017
Coturnix coturnix	Quail	2	2005
Crex crex	Corncrake	2	2006
Cuculus canorus	Cuckoo	326	2017
Dendrocopos minor	Lesser Spotted Woodpecker	14	2010
Egretta garzetta	Little Egret	3545	2017

Emberiza citrinella	Yellowhammer	364	2017
Emberiza schoeniclus	Reed Bunting	1159	2017
Falco columbarius	Merlin	810	2017
Falco subbuteo	Hobby	350	2017
Ficedula hypoleuca	Pied Flycatcher	14	2015
Fringilla montifringilla	Brambling	112	2017
Jynx torquilla	Wryneck	46	2017
Lanius collurio	Red-Backed Shrike	39	2009
Linaria cannabina	Linnet	738	2017
Linaria flavirostris	Twite	31	2016
Locustella naevia	Grasshopper Warbler	80	2017
Lullula arboea	Woodlark	35	2016
Luscinia megarhynchos	Nightingale	20	2011
Milvus migrans	Black Kite	3	2013
Milvus milvus	Red Kite	30	2017
Motacilla cinerea	Grey Wagtail	509	2017
Motacilla flava	Yellow Wagtail	914	2017
Motacilla flava subsp. *flava*	Blue-Headed Wagtail	10	2013
Muscicapa striata	Spotted Flycatcher	57	2017
Numenius arquata	Curlew	2076	2017
Oenanthe oenanthe	Wheatear	1572	2017

4.8.2 Site assessment

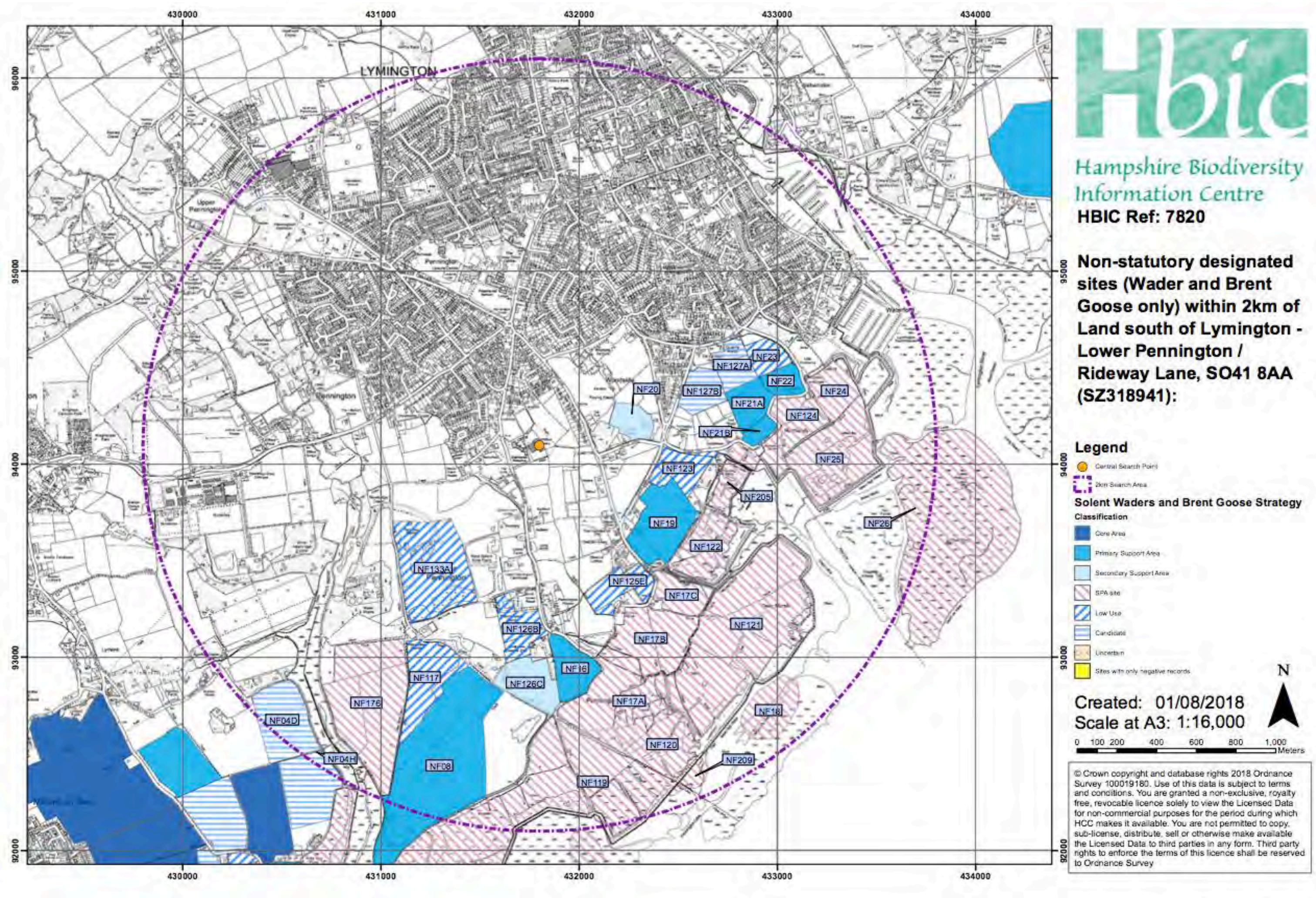
The hedgerows and grassland provide ideal nesting habitat for tree and ground nesting and foraging birds such as those listed in **Table 2**. The site is situated within a surrounding environ that provides an ideal mosaic of habitats, including arable land, protected coastal regions, hedgerows and a stream, providing ideal foraging habitat for any nesting or breeding birds using the site. Due to the large quantity of notable bird records and the ideal breeding and nesting bird habitat within and surrounding the site, the site is considered to be of ***High*** potential for nesting and breeding birds.

4.9 Overwintering Birds

4.9.1 Pre-existing information

With the site located within 0.8 km of the intertidal habitats associated with the Solent and Southampton water SPA, there are a number of land parcels designated under the Solent Wader and Brent Goose Strategy (as per **Fig 17**) located within 2 km.

Figure 17. Land parcels designated in the latest SW&BGS within 2 km of the site (indicated by orange dot).



The nearest of these sites is located 0.3 km to the east (parcel NF20) which is classified as being a Secondary Support Area with a maximum count of 120 SPA qualifying species. Other parcels nearby include NF123 (0.5 km SE) with a maximum count of 44 (qualifying as a low use site), NF 19 (0.6 km SE) with a maximum count of 280 (qualifying as a Primary Support Area) and NF133 A (0.6 km SW) with a maximum count of 2 (qualifying as a Low Use site)

4.9.2 Site assessment

The majority of the habitats onsite are not considered to provide optimal habitat for overwintering SPA species. For Brent Geese, in particular, the only area supporting a short enough grassland sward height (field 1) is 0.5 ha in size and entirely enclosed by mature tree lines on the boundaries (significantly reducing sight lines for any grazing Geese). The larger arable fields do benefit from a more open aspect although from discussions with the land owner, winter wheat crops have not been planted for a number of years meaning these are also considered unsuitable for Geese (**Fig 17**). The arable fields may however support localised areas of water logging during prolonged periods of rainfall and these are therefore considered to be of ***Low*** potential for wading species.

Figure 17. View of field 3 taken during March 2019 with no suitable winter wheat crops for Brent Geese.

4.10 Water Vole

4.10.1 Pre-existing information

HBIC did not return any records of Water Vole (*Arivicola amphibius*) presence within 2 km of the site although there are records within a 5 km radius available via freely accessible online resources.

4.10.2 Site assessment

The only potentially suitable habitat for Water Vole on site was the stretch of small stream that runs along the eastern boundary of the nursery area (as seen in **Fig 10**). The results of the habitat suitability assessment of this stretch of stream are outlined in **Table 4** below (based on Dean et al., 2016 & Woodroffe, 2000). Due to its small size (approximately 120 m in length) it was not considered necessary to divide the section into sub lengths for the purposes of this assessment.

Table 4. On site habitat suitability assessment for Water Vole.

Water Course Name	Length of Water Course	Water Depth (m)	Flow	Vegetation Suitability for Water Vole	Mink Present	Additional Notes
Nursery Stream (on site)	120 m	0.3 m on average	Slow	Low	Unknown	The western bank was considered more suitable than the eastern bank due to presence of improved grassland. This was however well managed which will reduce areas of shelter available for Water Vole. Anecdotal discussion suggest Mink are not present in local area. Burrows noted dug into eastern bank with 5 noted in total (broadly in similar area). Entrances approximately 9 – 12 cm in diameter).

Based on the nature of the on-site habitat, the stream was considered to be of ***Low*** potential to support Water Vole with further surveys required to ascertain if the burrows noted were from Water Vole or another species.

5.0 LIKELY ECOLOGICAL IMPACTS IN ABSENCE OF MITIGATION

5.1 Introduction

The CIEEM guidelines (CIEEM 2018) require that the potential impacts of the proposals should be considered in absence of mitigation. In order for a significant adverse effect to occur, the feature being affected must be at least of local value. However, in some cases, features of less than local value may be protected by legislation and/or policy and these are also considered within the assessment. Although significant effects may be identified at this stage of the assessment, it is often possible to provide appropriate mitigation.

A proposed layout for the site has been produced (see appended), and this is used as a basis for the impact assessment.

5.2 Site Preparation and Construction

5.2.1 Impacts to Habitats

The current proposals (although only outline) will involve the loss of mature trees, hedgerow, scrub and grassland areas (poor semi improved and improved). The trees and hedgerows are well established with potential to support roosting bats identified and the hedgerow supports Dormice with both of these habitats considered to be of Local value. Furthermore, development works will take place adjacent to the retained boundary hedgerows of local value and therefore the trees within the hedgerow could be damaged by machinery and particularly by root zone compaction. The loss of habitat and potential indirect effects would have a ***moderate adverse impact*** to habitat of local value.

The proposals for the development include the creation of a large area to be used as a SANG. This will create a new type of ecologically valuable habitat on the site which is suitable for a variety of species (as areas will be created as wildflower meadows), it will also enhance the value of the site for foraging bats. This would increase the biodiversity of the site and local area and would therefore have a ***moderate positive impact*** on ecology in the local area.

5.2.2 Impacts to Wildlife

Site clearance and subsequent construction would result in the loss of the subsidiary Badger sett and Badger foraging habitat. Badger territory sizes range from 30 - 180ha, depending on food availability within the area (Neal & Cheeseman 1996), although 50ha is a reasonable estimate for territory size in the habitats surrounding the site. The development will result in the loss of approximately 2.3 ha of foraging habitat (4.6% of a 50ha) habitat. This in itself would not be a significant loss of habitat, however, the field is relatively close to the sett and therefore may be disproportionately important. In addition, construction of houses and erection of fences may prevent Badgers from reaching other areas of foraging habitat. Therefore, an **adverse impact is likely**.

A bat roost has been identified within the Northfields bungalow dwelling on site although the status of the roost is currently not clear. The proposals will entail the demolition of this dwelling and subsequent loss of this roost. A full impact assessment will be made in the mitigation report following the results of the recommended bat surveys, however the loss of a roost would have an ***adverse impact***.

The removal of areas of hedgerow, scrub and scattered trees on site and the potential disturbance to other areas could result in the disturbance of nesting birds and damage to their nests. Therefore, an ***adverse impact is likely***.

A suitability for a variety of additional protected species has been identified on site and the presence of these species on site would lead to further potential impacts to wildlife (scale of the impact to be determined by species present, characteristics and spatial distribution).

Finally, the site falls within the zone of influence for both the New Forest SPA and Solent and Southampton Water SPA. Without any mitigation, the development of 115 new dwellings will have ***a certain adverse impact*** upon the integrity of these designated sites through an increase in recreational visitor pressure.

5.3 Site Operation

5.3.1 Impacts to Wildlife

The development will result in an increase in lighting within the general area from street lights and external lights on the new houses. This can affect the behaviour, particularly foraging, of nocturnal wildlife. Therefore, an ***adverse impact is likely*** on Badgers and bats and Dormice (should they be present on site).

Badgers are often better able to find food in the suburban areas (from bird tables, pet food and people feeding them) and consequently are often found at greater densities in towns and villages (Neal & Cheeseman 1996). Therefore, the new development may increase the amount of food available within their territory and therefore this would have a ***likely positive impact*** on food availability for Badgers. This is likely to offset the loss of foraging habitat caused by site clearance and construction and therefore there would be an ***overall likely neutral impact*** on food availability for Badgers.

The development would result in an increase in traffic along Ridgeway Lane and Lower Pennington Lane which may result in an increase in Badger traffic mortality. Habitat loss associated with construction may also cause Badgers to cross the road more frequently to reach other foraging areas. Therefore, an ***adverse impact is likely***.

There may be additional operational impacts to protected species not discussed here as additional survey work to ascertain presence or likely absence is being carried out.

6.0 RECOMMENDATIONS & OUTLINE MITIGATION PROPOSALS

6.1 Introduction

The below sections outlines a number of recommendations for further survey work required to fully assess the potential ecological impacts of the development and ensure and proposed mitigation and compensation appropriate and proportionate.

6.2 Bats

6.2.1 Emergence surveys

Based on the ***Known*** roost assessment of the Northfields bungalow dwelling two dusk emergence and one dawn re-entry survey will be required in line with the best practice guidance (**Table 5**) (Collins (ed) 2016) to characterise the roost present. A single dusk emergence survey will also be required covering the workshop building (timings outlined below).

Table 5. Best practice guidance of bat surveys for different roost suitability's (Collins (ed) 2016).

Low Roost Suitability	Moderate Roost Suitability	High Roost Suitability / Known Roost
One survey visit. One dusk emergence or dawn re-entry survey.	Two separate survey visits. One dusk emergence and a separate dawn re-entry survey*.	Three separate survey visits. At least one dusk emergence and a separate dawn re-entry survey. The third could be either dusk or dawn.
May – August	May – September with at least one of the surveys between May - August	May – September with at least two surveys between May and August

At this stage, it is not clear how many of trees identified as supporting PRFs (as per **Map 2**) will be directly impacted upon (i.e. felled). Once a more detailed site design has been formulated (following feedback from the LPA) further investigative survey work will likely be required which may include climbed inspections and or dusk emergence / dawn re-entry surveys.

6.2.2 Foraging and Commuting

Based on the high habitat suitability assessment for foraging and commuting bats, in accordance with the latest BCT guidelines (Collins (ed) 2016) (as shown in Table 8.3 from the guidelines) *'One survey visit per month will be required in appropriate weather conditions for bats. At least one of the surveys should comprise dusk and pre-dawn within one 24-hour period'.* In addition to this automated / static detector surveys are also required with '*two locations per transect, data to be collected on five consecutive nights per season*'. These surveys will cover August – October (2016) and then April – July (2017).

These surveys will then inform any proposed lighting and planting strategy.

6.3 Water Vole

The site will be revisited during the optimum survey period for Water Vole (Dean et al., 2016) between late April and June during which the stream on site (and streams linked within 200m where access can be granted) will be methodically walked searching for any signs of Water Vole whilst they are more active.

6.4 Reptiles

The unmanaged semi-improved grassland on site has been assessed as high potential to support reptiles. ***It is recommended that a suite of reptile presence/likely absence surveys be completed***. This would involve the laying of artificial refugia within areas of suitable habitat and checking the refugia on seven occasions between March and mid-October (optimal survey season April, May and September) in suitable weather conditions. Should reptiles be present it is recommended that suitable habitats are retained and protected during works, with exclusion fencing used if necessary to ensure reptiles cannot enter the construction area. Translocation of reptiles out of construction area may also be necessary.

6.5 Dormice

Given the presence of suitable mature hedgerows and bramble surrounding the site, a nesting tube survey will be set up following the methodology as described within Bright et al (2006). This survey will help to establish presence / absence on site and inform any required mitigation / compensation. Surveys would require the erection of a minimum of 50 nesting tubes in suitable habitats with these then checked from August – November 2018 and April - June 2019 (in order to achieve an adequate survey effort score as per Bright et al (2006)).

6.6 Nesting Birds

To determine the bird species assemblage on site, a breeding bird survey will be undertaken by an experienced ornithologist. This will likely involve taking a walked transect around the site with 4 visits between late March and early June (2019).

6.7 Overwintering Birds

Due to the considered low risk of SPA qualifying species present on site, a low intensity overwintering bird survey programme will be carried out. This will involve a single visit per month (in line with high tide times) during the overwintering period (November – March) based on the methods outlined within The Solent Waders & Brent Goose Strategy (King, 2010).

6.8 GCN

The three ponds identified as falling within the 500m buffer form the site will need to be subjected to a formal Habitat Suitability Index (HSI) test to identify any suitability for GCN (provided access can be granted by the relevant land owners). Following the outcome of these assessments, further surveys may be required to ascertain if any GCN are present (most likely to involve taking a water sample for eDNA analysis).

6.9 Badger

The current proposals (appended), will involve the loss of the existing subsidiary Badger sett and this will need to be done under a licence obtained by Natural England. Further efforts will be made to identify where the main sett in the local area is (if indeed there is one) which will inform the requirement for building a replacement sett within the SANG areas on site. A standalone Badger mitigation strategy will be prepared following additional survey work which will support the application.

NB All of the above recommended survey work has been commissioned by the client with a number of the surveys having been started in later summer 2018. It is anticipated that all work will be complete to fully inform the impact assessment by mid-summer 2019.

6.10 Impacts to New Forest SPA

The site is located approximately 3.3 km from the nearest point of the New Forest SPA and within 1.4 km of the New Forest SSSI and SAC. At present, no specific mention of this site is made within the discussed allocations within the New Forest District Council (NFDC) Mitigation Strategy for European Sites (2014). Notwithstanding this, in line with other large sites already allocated within the local plan, the current masterplan will provide for the direct provision of circa 3 ha of Suitable Alternative Natural Greenspace (SANG) on site. It is understood the amount provided has been agreed with NFDC and this area will help to provide alternative walking and recreation areas to alleviate the potential increase in visitor numbers upon the New Forest designated sites.

6.11 Solent & Southampton Water SPA

The below text is from the Bird Aware Solent website [1] regarding contributions towards offsetting impacts to the Solent and Southampton Water SPA.

'*Most visits to the Solent Special Protection Areas (SPAs) are made by people who live within 5.6 kilometres of them. Consequently, new homes built within that 5.6-kilometre zone are likely to lead to more people visiting the SPAs with a potential to have an impact on the birds. Legislation requires that measures must be implemented to mitigate that impact.*

Housebuilders can provide mitigation themselves. They will need to satisfy the local planning authority and Natural England that their proposed measures will fully mitigate the impact of the development.

In most cases, it is more straightforward for a builder to make a developer contribution towards implementing the Bird Aware Solent Strategy.

A developer contribution needs to be paid for every net additional dwelling. Until the end of March 2018, it will remain at the Interim Strategy level of £181 per dwelling. The Bird Aware Solent Strategy was endorsed in December 2017 and introduced a sliding scale of developer contributions based upon bedroom size. This is as follows:

£337 for 1-bedroom dwelling

£487 for 2-bedroom dwelling

£637 for 3-bedroom dwelling

[1] http://www.birdaware.org/article/28101/Developer-contributions

£749 for 4-bedroom dwelling

£880 for 5-bedroom dwelling

These new charges will come into effect from 1st April 2018 and will be updated each year in line with the Retail Price Index.'

6.12 Enhancements

Based on previous experience and the evolving nature of sites layouts through the planning process, it is considered the most appropriate means of securing ecological enhancements (such as bird and bat boxes and native species planting) would be through the provision of a suitable condition to the outline planning permission. Such a condition would seek to secure the provision of a detailed scheme / plan of all measures to enhance the biodiversity value of the site to be submitted with reserved matters (or similar).

7.0 REFERENCES

Bright., P, Morris, P., & Mitchell Jones, T (2006) The Dormouse Conservation Handbook, English Nature

CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK & Ireland

Collins (ed) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines 3rd Edition

Dean., M., Strachan, R., Gow, D. & Andrews, R., (2016) The Water Vole Mitigation Handbook

JNCC (2010) Handbook for Phase 1 Habitat Survey

King, D., (2010) Solent Waders & Brent Goose Strategy. Hampshire & Isle of Wight Wildlife Trust

Natural England & Forestry Commission England (2014) Standing Advice for Ancient Woodland and Veteran Trees.

NFDC (2014) Mitigation Strategy for European Sites. Recreational Pressure from Residential Developments.

Natural England, 2011 *Badgers and Development: A Guide to Best Practice and Licensing*

Woodroffe, G., (2000) The Water Vole, The Mammal Society

Map 1

Key

Trees assessed as being of ***Low*** roost potential

Trees assessed as being of ***Moderate*** roost potential

Tree assessed as being of ***High*** roost potential

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Job: Land Adjoining Ridgeway Lane, Lymington

Plan: Trees with Bat Roost Potential

Date: 6/3/2019	Client: Cicero Estates

Map 2

Key

Badger sett with two holes dug into base of Hawthorn. 1 hole considered active following remote monitoring.

Single hole approximately 3 m from other 2. Badger observed leaving this hole during remote monitoring.

Well used trails leading from sett entrances.

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Plan: Badger Survey Result's

Date: 7/3/2019	Client: Cicero Estates

Rev.	Date	Details	Drawn	Checked
A	27.11.17	10 units removed, layout replanned in north part of site.	JT	ES

Issued for:

INFORMATION

Project/Client: Land Adjoining Ridgeway Lane	Project No: 15060
	Dwg No: 001
	Rev: A
Drawing: Site Layout	Scale: 1:1000 @A1
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Cicero Estates

Lane South of Lymington – Ridgeway Lane & Lower Pennington Lane

Flood Risk Assessment & Drainage Strategy

VD18829

March 2019

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1	04.03.2019	Draft	AS
2			
3			
4			

CONTENTS

1 EXECUTIVE SUMMARY

1.1 Scheme Overview

1.1.1 This document is in support of a planning application for the proposed residential development of up to 120 units. The site is situated west of Ridgeway Lane, approximately 1.4km south west of the from the port town of Lymington.

1.1.2 This report has considered the flood risk posed to the proposed site from a variety of sources, as defined by the National Planning Policy Framework (NPPF). The entire development lies outside of any fluvial flood risk areas, holding a Flood Zone 1 (low risk) classification.

1.1.3 This assessment has found the site to be at low risk of flooding from tidal, surface water, sewer, groundwater and artificial sources.

2 INTRODUCTION

2.1 Introduction

2.1.1 This report has been commissioned to support a planning application and identify any flood related issues associated with the proposed development and any likely constraints that could be imposed. The below bullet points summarise the steps undertaken in this assessment, as well as National Planning Policy Framework guidance.

- Identify all available data relating to flood risk at the site.
- Determine whether the site is at risk of flooding from all sources including, but not exhaustive, from breach or overtopping of any existing flood defences, watercourse flooding, surface water flooding and/or groundwater flooding.
- If at risk from any source, devise appropriate measures to prevent flood risk whilst not compromising the flood risk elsewhere.
- Determine the current surface water drainage regime and assess any potential increase in surface water runoff, as a result of the proposed development.
- Consider Sustainable Drainage Systems (SuDS) as an option for reducing surface water flood risk (where appropriate).
- Assess flood risk mitigation measures and off-site impacts and define any residual risks.

3 DEVELOPMENT, DESCRIPTION AND LOCATION

3.1 Site Location

3.1.1 The site is referenced in **Table 1**, and a site location plan is provided in Figure 1.

Table 1: Site Referencing Information

Item	Brief Description
Site address & location	Land South of Lymington – Ridgeway Lane and Lower Pennington Lane
Council Area	Hampshire
Approximate Grid Reference	OS: 431820E, 094225N

3.2 Existing Site Description

Figure 1: Location Plan

3.3 Area

3.3.1 The site area is approximately 8.2 hectares.

3.4 Boundaries and Surrounding Land

3.4.1 The development site is classed as greenfield. The northern site boundary abuts residential properties. To the east of the sites lies more residential properties, and Ridgeway Lane. To the south of the site lies more greenfield land and residential properties. The western boundary of the site lies adjacent to Oakhaven Hospice and Lower Pennington Lane.

3.5 Existing Land Use and Access

3.5.1 Although the majority (approximately 94%) of the site is greenfield, there is an existing plant nursery (Northfield Nursery) located within the development boundary. Access to the nursery is via a private road off Lower Pennington Lane.

3.6 Elevation and Topography

3.6.1 A site-specific topographical survey has been undertaken and indicates that the site falls generally in a south-easterly direction, with the lowest part of the site being in the south east corner, where the site boundary abuts Ridgeway Lane. Refer to **Appendix A** for the full topographical survey.

3.7 Development Proposals

3.8 Outline

3.8.1 The proposed development for up to 120 residential dwellings, with associated road infrastructure and areas of public open space.

4 PLANNING POLICY AND CONSULTATION

4.1 National Planning Policy Framework (NPPF)

4.1.1 The flood maps provided by the Environment Agency (EA) locate the site within Flood Zone 1, i.e. land defined as having an annual probability of fluvial flooding of less than 1 in 1000 in any year (<0.1%). As a requirement of the NPPF, the proposed development should satisfy the requirements of the Sequential Test and, where applicable, the Exception Test.

4.2 Sequential Test

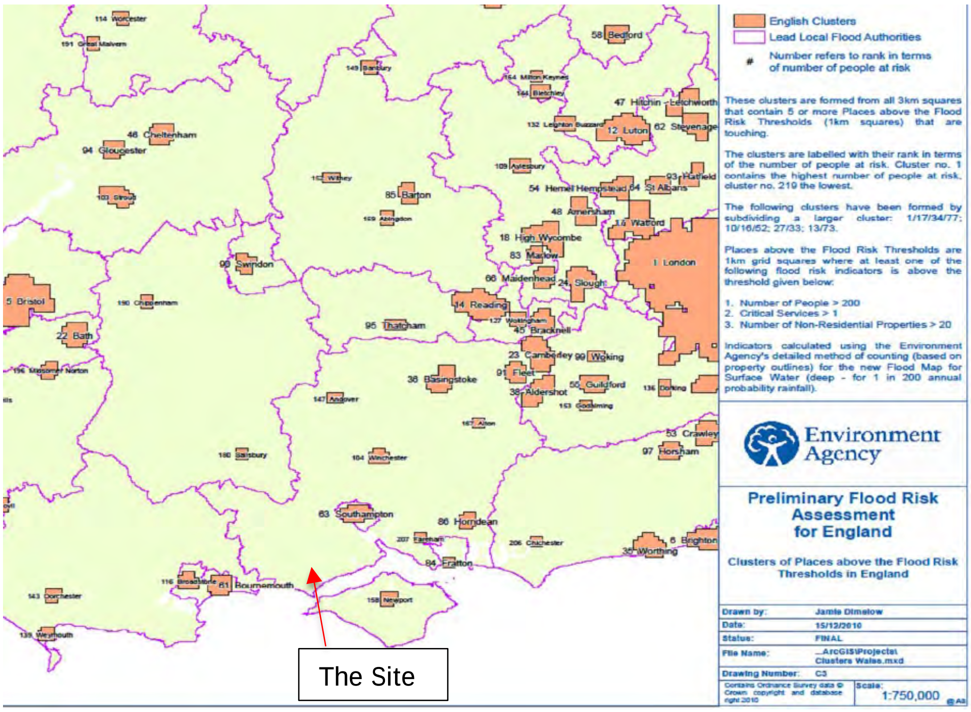
4.2.1 Under the NPPF (2018), Flood Zone 1 is defined as low probability flood risk. The proposal, in line with Table 2 of the technical guidance document is classified as 'Highly Vulnerable'. Thus, according to the criteria in Table 3 (Flood Risk Vulnerability and Flood Zone 'Compatibility') the 'Development is Appropriate'.

4.2.2 In light of this, the Exception test is not required. Table 2 and Table 3, referred to above, can be found in the Technical Guidance to the NPPF.

4.3 Strategic Flood Risk Assessment (SFRA)

4.3.1 SFRA's assess the risk associated with all types of flooding and provide the information required to identify the amount of development permitted in an area, how drainage systems in the area should function and how risks in vulnerable areas can be reduced and/or mitigated. The NPPF states that regional planning bodies (RPB's) or local planning authorities should prepare SFRA's in consultation with the EA. In 2011 Hampshire County Council produced a Preliminary Flood Risk Assessment (PFRA) report. This report covered the administrative boundary of Hampshire County Council, which is made up of 11 District and Borough Authorities including New Forest District Council, which covers the Lymington Area. The report identifies areas of significant historic and future flood risk.

Figure 2: Extract from The Environment Agency Map showing Clusters of Places above the Flood Risk Thresholds in England.



4.3.2 The above map has been taken from the PFRA, and forms part of an initial assessment carried out by the Environment Agency to identify areas that could be at risk of flooding to a depth in excess of 300mm. This map demonstrates the development site is not within an area that could be at risk of flooding to a depth in excess of 300mm. This is consistent with The Environment Agency online flood maps for planning, which show the site to be entirely located within Flood Zone 1 (low risk). Refer to **Section 5** for further details of The Environment Agency online flood maps for planning.

4.3.3 There is no evidence within the PFRA that would indicate there is significant flood risk at the site.

5 DEFINITION OF FLOOD HAZARD

Flood risk to the proposed development site is considered from all sources of flooding, as defined by the NPPF (2018).

5.1 Sources of information

5.1.1 THE NPPF (2018) requires the developer to consider the impact of runoff, generated by the proposed development, onto the downstream catchment, and to assess the risk of runoff from the surrounding district impacting on the developments' footprint. Further, the report is to consider flood risk from all other sources. The following section defines the flood risk receptors and anticipated flood risk.

Table 2: Sources of information used in the identification of flood risk

Source of Information	Details
Environment Agency	Flood Maps for Planning
Hampshire County Council PFRA	Preliminary Flood Risk Assessment
Redline Surveys	Topographical Survey
Southern Water	Public Sewer Records

5.2 Flooding from Rivers (Fluvial)

5.2.1 There are no rivers near the site. The nearest river is Avon Water, located approximately 1 kilometre west of the site. Fluvial flood risk is therefore deemed to be low.

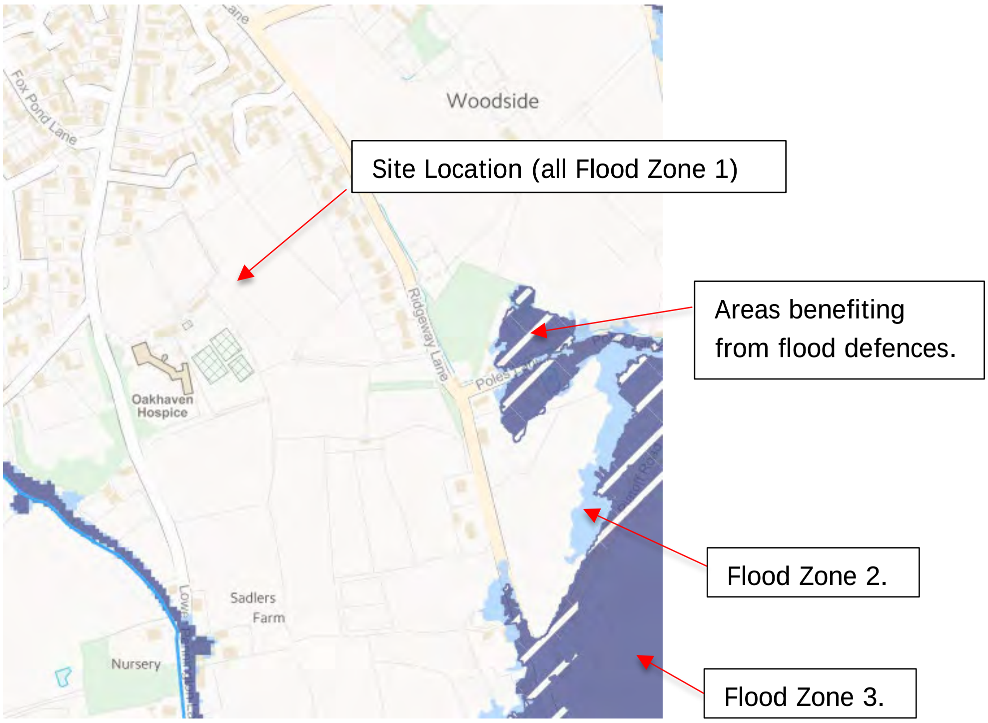
5.3 Coastal Flooding

5.3.1 The Solent is located approximately 1.2 kilometres east of the site. The Environment Agency (EA) Flood Map for Planning (see Figure 3) shows the site is not at risk from coastal flooding, with areas to the east of the site benefitting from flood defences. The risk of coastal flooding is therefore deemed to be low.

5.4 Environment Agency Flood Zones

5.4.1 **Figure 3** below locates the site on the Environment Agency's Flood Map for Planning and demonstrates that the site lies entirely within Flood Zone 1, i.e. probability of annual fluvial flooding of less than 1 in 1000 (<0.1%) in any one year.

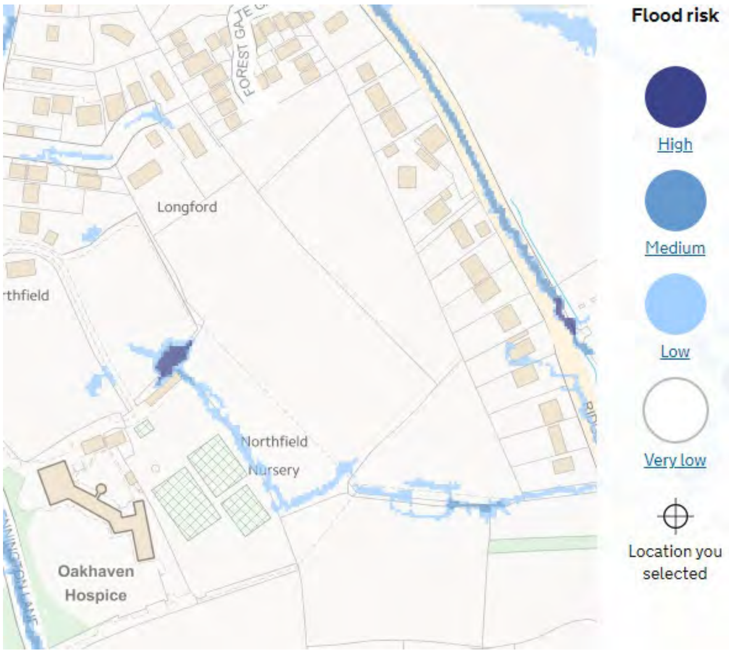
Figure 3: The Environment Agency's Flood Map for Planning



5.5 Flooding from the land (Surface Water)

5.5.1 The EA Flood Maps show an isolated area of medium/high surface water flood risk within the site. This areas can be seen in **Figure 4** below. Based on the existing drainage characteristics of the site (informed in part, by the topographical survey) this flooding may be caused by an onsite drainage ditch. The proposed development will include drainage infrastructure that will be designed to convey surface water runoff away from buildings and essential infrastructure.

Figure 4: The Environment Agency's Flood Map - Flood Risk from Surface Water



5.5.2 In light of this, the risk of flooding from the land/surface water is considered to be low. Furthermore, the development site will include new access and parking area laid to falls in line with best practice guidance.

5.6 Flooding from the Groundwater

5.6.1 The PFRA does not refer to any flood risk issues relating to groundwater at, or on the vicinity of the site. In light of these findings groundwater flood risk is considered low.

5.7 Flooding from Sewers

5.7.1 There are no public surface water sewers located within or in the proximity of the site. There is a public foul sewer located along the eastern boundary of the site, flowing in a southerly direction. The proposed sewers that will serve the site will be designed in accordance with Sewers for Adoption latest edition. Flood risk from sewer is therefore deemed to be low.

5.8 Flooding from Artificial Sources (including Canals)

5.8.1 There are no artificial sources including canals close to the development site. Flood risk from artificial sources is therefore considered to be low.

6 ASSESSMENT OF FLOOD RISK ON DEVELOPMENT SITE (PROBABILITY)

6.1 Summary

6.1.1 **Section 5** has defined the anticipated flood risks from all sources. **Table 3** considers each of the sources and defines in tabular format the probability of flood risk associated with each and the likely impacts.

Table 3: Flood Risk Summary

Source	Probability of Flood Risk	Impacts	Remarks / Mitigation measure
Tidal	Low	Low	Development site is not tidally influenced.
Fluvial	Low	Low	Site is located entirely within Flood Zone 1. Review of relevant Strategic Flood Risks Assessment reveals no evidence fluvial flooding at the site location.
Surface (Overland Flood Flow)	Low	Low	The Environment Agency surface water flood risk maps indicate high/medium risk flooding in one areas of the site. The proposed development of the site will mitigate this risk by considering flood flows and ponding when the drainage design is undertaken.
Sewers/Highway Drains	Low	Low	New sewers will be designed in line with best practice to reduce flood risk. The surrounding highways have existing gully drainage systems which will convey highway runoff away from the proposed building.
Groundwater	Low	Low	There is no evidence that groundwater flooding is an issue at the site (or surrounding area).
Artificial Sources	Low	Low	None.

7 DRAINAGE STRATEGY

7.1 Existing Surface Water Runoff

7.1.1 Based on on-site observations, and the topographical survey, surface water runoff generated on site flow in a south-easterly direction and is conveyed off the site via several drainage ditches located within the site boundary. Refer to **Appendix A** for more further details of the existing site and ditches.

7.2 Sustainable Drainage Systems

7.3 SuDS Objectives

7.3.1 Sustainable drainage developed in line with the ideals of sustainable development is collectively referred to as Sustainable Drainage Systems (SuDS). At a particular site these systems are designed to manage both the environmental risks resulting from the urban runoff and to contribute, wherever possible, to environmental enhancement. Therefore, SuDS objectives are to minimise the impacts from the development on the quantity and quality of the runoff (CIRIA C753, The SUDS Manual).

7.4 The SuDS Management Train

7.4.1 The 'Management Train Approach' should be central to the surface water drainage strategy of a proposed site. The main objective is treatment and control of runoff as near to source as possible, thus protecting downstream habitats and further enhancing the amenity value of the site. This concept uses a hierarchy of drainage techniques to incrementally reduce pollution, flow rates and volumes of storm water discharge from the site, and is as follows:

1. **Prevention** – The use of good site design and housekeeping measures to prevent runoff and pollution and includes rainwater reuse.
2. **Source Control** – Control of runoff at source or as close to source as possible (e.g. cellular storage, petrol interceptors, flow attenuation devices).

3. **Site Control** – Management of water in a local area and can include below ground storage/attenuation, detention basins, tanks, oversized pipes.
4. **Regional Control** – Management of water from a site or various sites and can include wetlands and balancing ponds.

7.4.2 The drainage techniques for this development will seek to include, where possible, prevention, source control and site control measures.

7.5 SuDS Site Constraints

7.5.1 SuDS techniques are not suitable for all sites; therefore, an assessment of the existing site is required so that SuDS limitations can be determined.

Site Characteristics – The use of infiltration is not deemed viable for this site, following on-site soakaway tests that were carried out in September 2018. Refer to Appendix A for a copy of the Soakaway Test Report.

7.6 SuDS Design Philosophy

The SuDS philosophy for a development site is the promotion of Prevention, Source Control and Site Control Techniques:

The following design philosophy is proposed:

- Surface water treatment using the 'Management Train' approach to remove and isolate contamination at all SuDS facilities prior to conveyance to the existing onsite ditch network.
- Surface water discharge to be attenuated to greenfield runoff rate (defined as Qbar).
- Prevention measures, for example the inclusion of water butts.
- Site Control features, in the form of above-ground attenuation storage, to accommodate the additional surface water runoff generated by the development site.
- Provision of suitable oil separators in line with Pollution Prevention Guidance 3 criteria (where applicable).

7.7 Surface Water Drainage Proposals

7.7.1 Surface water runoff from the roof and external areas will be directed to the below ground gravity network. This water is considered to be generally clean and with limited contamination, and may be discharged directly to the new drainage infrastructure. Silt is to be prevented from entering the drainage system using trapped gullies, channels with silt traps, infiltration trenches with silt traps or using sustainable drainage techniques. Pollution prevention measures (such as oil and petrol interceptors) will be included in the drainage design, if deemed a requirement. This requirement will be confirmed as part of the future detailed design of the drainage for the development.

7.7.2 A proposed finalised masterplan is currently pending. Once this is received by Vectos, a Drainage Schematic shall be added to this report and the report will be reissued, with further details provided on attenuation volumes and allowable flow rates.

7.7.3 In order to develop any surface water drainage proposals, further investigation is needed on the existing drainage ditches on site. During the site visit that occurred in September 2018 (as part of the soakaway tests) it was noted that the drainage ditches onsite where unmaintained and obscured by heavy vegetation. The extents, depths and ultimate discharge point of these ditches will need to be verified before the drainage strategy in this report can be developed further.

7.8 Foul Water Drainage Proposals

7.8.1 Liaison with Southern Water has confirmed there is adequate capacity in the existing foul sewer at/downstream of existing manhole reference SZ32940001. This is located next to Ridgeway Lane near the south-eastern corner of the site. Refer to Appendix A for a copy of this correspondence with Southern Water.

8 MANAGEMENT MEASURES, OFF SITE IMPACTS, RESIDUAL RISK, FURTHER WORK REQUIRED

8.1 Flood Risk Management Measures

8.1.1 The report has determined that the site is at low risk from all forms of flooding.

8.1.2 There will be a site management health and safety document prepared in respect of the final development. This will include the required maintenance regime for the on-site drains and drainage facilities such as the gullies, pipes and manholes.

8.1.3 Access and egress arrangements to and from the new development should exceedance flooding occur will be via Lower Pennington Lane.

8.2 Off Site Impacts

8.2.1 The report has justified that the risk of flooding to the new development layout is acceptable.

8.3 Residual Risk

8.3.1 Flood risk to people and property can be managed but it can never be completely removed; a residual risk remains after flood management or mitigation measures have been put in place. This relates to a rainfall event beyond what can be fully quantified. Should this occur then some out of chamber flooding could occur.

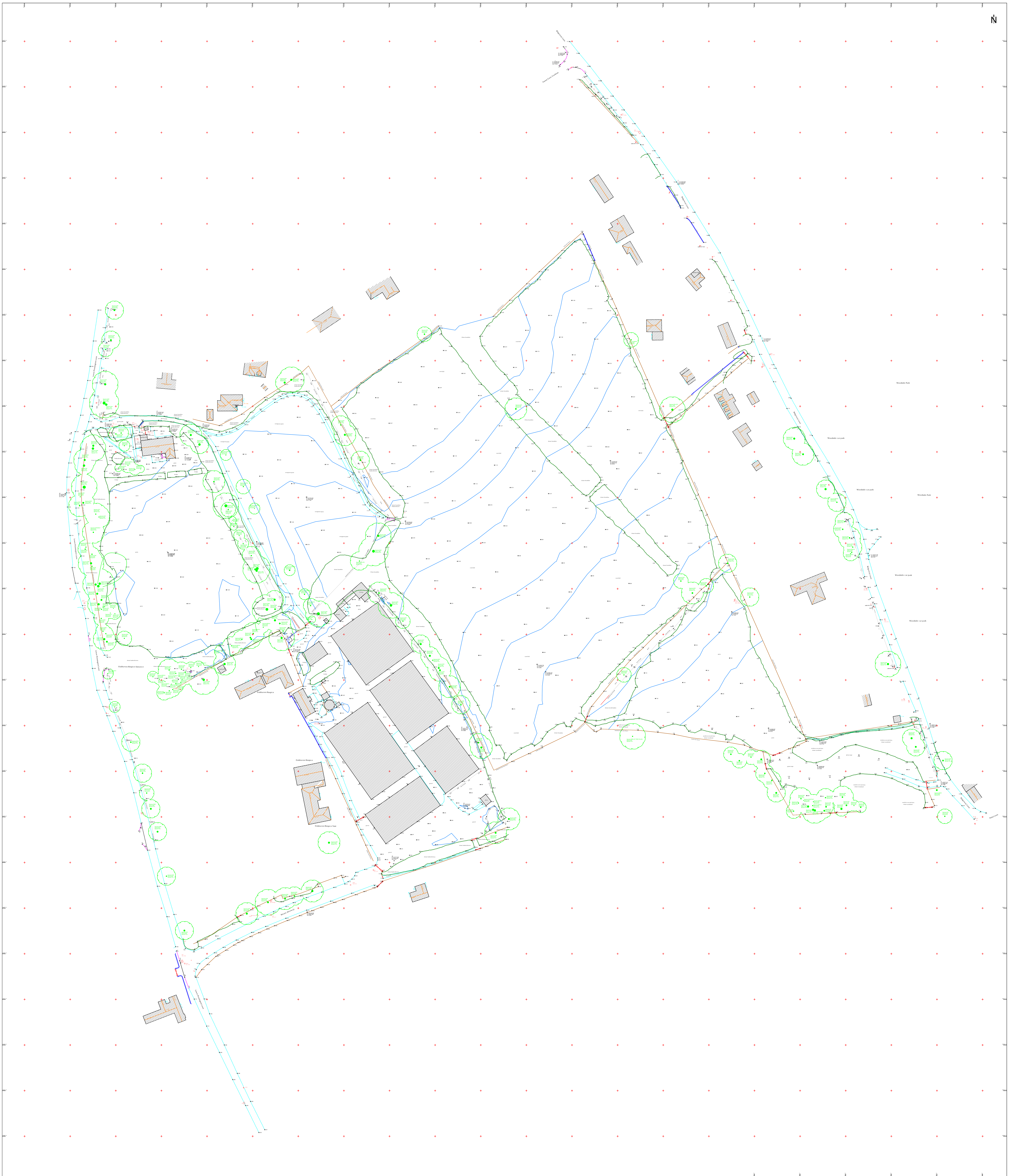
8.4 Further Work Required

8.4.1 It should be noted that in order to develop the drainage proposals for this site further investigations of the drainage ditches onsite will be required. Refer to paragraph 7.7.3 for further details of this requirement.

Appendix A

CONTENTS	
Identifier	**Name**
Redline Surveys	Topographical Survey
Vectos	Sketch showing existing drainage ditch locations
Ruddlesden	Soakaway Test Report
Southern Water	Confirmation of foul capacity in public sewers (to serve the site)

Appendix A. Topographical Survey.



0 10 20 30 40

Scale bar (meters)

Redline Surveys

1365 Christchurch Road, Bournemouth, BH7 6PS

callum@redlinesurveys.co.uk mobile: 07956 017 168

steve@redlinesurveys.co.uk mobile: 07557 332 421

info@redlinesurveys.co.uk www.redlinesurveys.co.uk

Client:
Mr Jason Lewis
Cicero Estates

Survey at:
land south of Lymington
Lower Pennington Lane
& Ridgeway Lane

Plot 1. 18- 84
Date: 20/08/2018
Scale 1 : 200
Desc: Topographical

Comp by: C. Booker
Surveyed by: S. Booker

All data has been recorded using a Trimble R10 GPS system

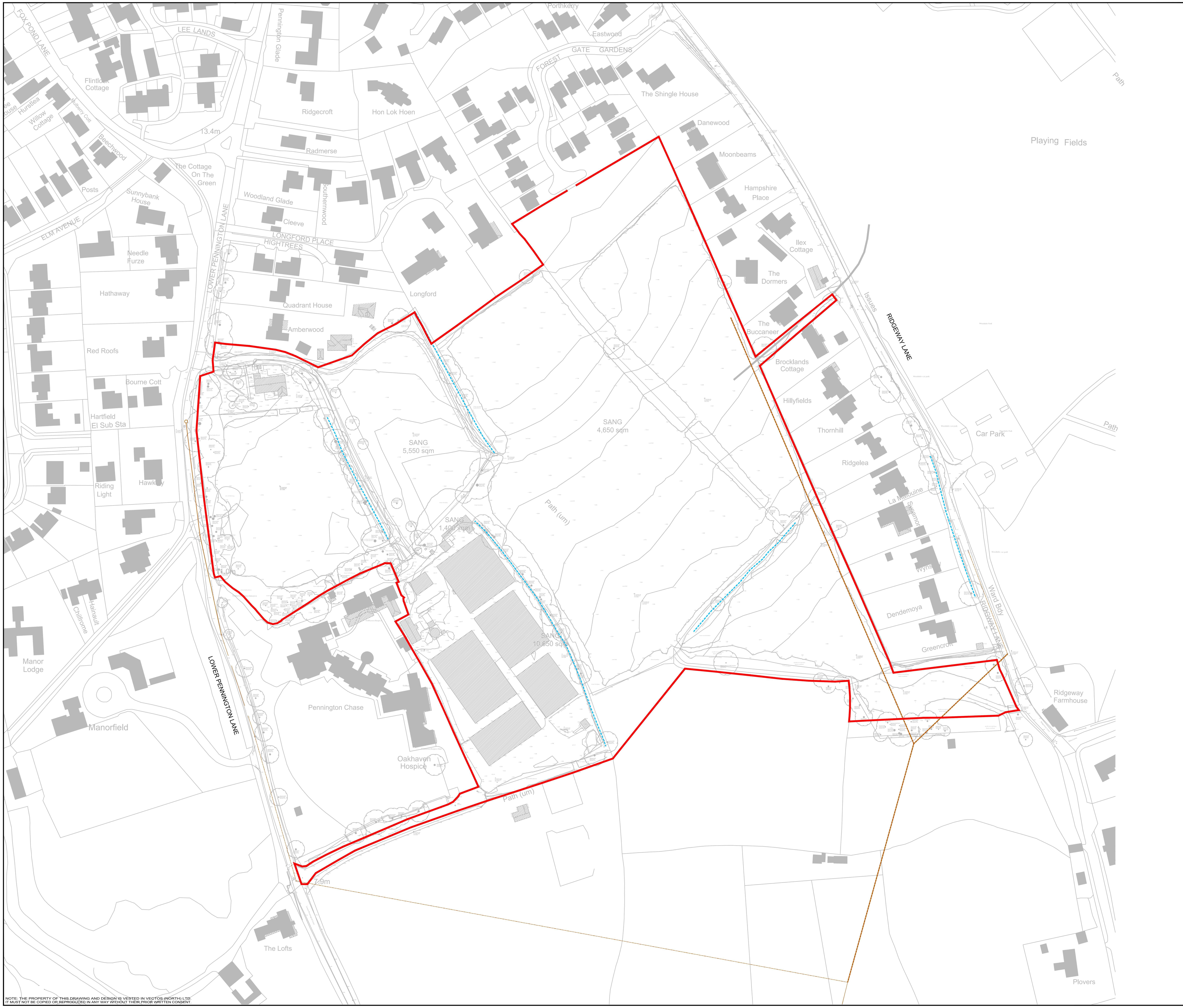
All levels relative to OSBM

the contents of this drawing are copyright

Symbols & Linetypes

Manhole types	Traverse Station	Building
Gully	Sign	Wall
Lamp post	Tree	Kerb
Telegraph Pole	Hedge	Drop Kerb
Electric Pole	Overhead Wire	Footpath
Gas Cover		Yellow Line
Water Cover		Ridge
Electric Cover		Step
British Telecom		Fence

Appendix A. Sketch of Existing Drainage Ditches.



Notes:

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

Key:

- EXISTING DRAINAGE DITCH
- EXISTING FOUL WATER PUBLIC SEWER
- APPLICATION BOUNDARY

REV.	DETAILS	DRAWN	CHECKED	DATE

CLIENT:

Cicero Estates

PROJECT:

Land South of Lymington, Lower Pennington / Ridgeway Lane

DRAWING TITLE:

Existing Drainage Ditch Locations

SCALES:

1:1000 at A1

DRAWN:	CHECKED:	DATE:
PB	SR	Feb 2019

vectos transport planning specialists

3rd Floor Oxford Place, 61 Oxford Street, Manchester, M1 6EQ
0161 228 1008 e: manchester@vectos.co.uk

DRAWING NUMBER:	REVISION:
VD18788-SK01	-

Appendix A. Soakaway Test Report.

Ruddlesden geotechnical

Soakaway Test Report

Ridgeway Lane, Lower Pennington, Lymington, Hampshire

Vectos

September 2018

CG/SR/18413/STR

REPORT CONTROL SHEET

Site Address	Ridgeway Lane, Lower Pennington, Lymington, Hampshire
Client	Vectos
Report Title	Soakaway Test Report
Issue Date	25 September 2018
Report No.	CG/SR/18413/STR
Issue No.	1

Prepared by	Catherine Greed
Signature	
Position	Engineering Geologist
Qualifications	MSci (Hons). FGS.

Checked by	Tim New
Signature	
Position	Senior Engineering Geologist
Qualifications	BSc (Hons). MSc. FGS.

Approved by	Simon Ruddlesden
Signature	
Position	Director
Qualifications	BSc (Hons). MSc. DIC. CGeol. FGS. EurGeol.

Ruddlesden geotechnical
The Stables, 65 Langaton Lane,
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CONTENTS

APPENDICES

1 INTRODUCTION

1.1 General

In September 2018, a soakaway test investigation was undertaken by Ruddlesden geotechnical on behalf of Vectos at Ridgeway Lane, Lymington, Hampshire.

The investigation was undertaken to determine the permeability of the ground, to assess the suitability of the ground for soakaway drainage and, where possible, to provide a soil infiltration rate for design. The investigation comprised the formation of four soakaway tests in accordance with BRE DG 365.

1.2 Development Proposals

It is understood that the site is to be developed for residential purposes with the construction of 115 houses with associated infrastructure. The proposed layout is enclosed within Appendix D of this report.

1.3 Scope of Investigation

The investigation covers aspects relating to soakaway drainage design. The brief was understood to comprise the following:

- undertake in-situ soakaway testing in accordance with BRE DG 365;
- use data to provide soil infiltration rates; and
- provide other relevant comments relating to soakaway drainage design.

1.4 Scope of Report

The report is presented as a description of the procedures employed and the data obtained. This is followed by a description of the ground conditions and soakaway test results. The final part of the report comprises a discussion of results together with recommendations for soakaway design.

2 THE SITE

2.1 Site Location

The site is located at Ridgeway Lane, Lymington, Hampshire. The British National Grid Reference of the site is 431814, 094145, and the postcode is SO41 8AA.

The site is located within a mixed rural and residential area, on the southwestern outskirts of Lymington, approximately 1.5km to the southwest of the town centre. The surrounding topography is generally flat. The seawall, between Lymington and Keyhaven Marshes Local Nature Reserve and The Solent, is approximately 1km to the southeast of the site.

Access to the site is gained through two fields, off Ridgeway Lane, to the southeast of the site.

2.2 Site Description

The site irregular in shape, measuring approximately 180m x 120m, and slopes very gently down to the southeast, falling from a level of approximately 10mAOD in the northwest of the site to a level of approximately 8mAOD in the southeast of the site.

The soakaway testing was undertaken over two fields.

At the time of the investigation, the northwestern field was slightly overgrown, generally with mixed grasses, and the southeastern field had been used for arable purposes.

A public footpath is present around the northern and eastern edges of the northwestern field and through the southeastern field, orientated west to southeast.

The field boundaries were generally mixed mature species trees and shrubs.

The site is bordered to the north by residential properties, to the east, southeast and northwest by fields and to the southwest by Northfield Nursery (plant nursery).

Photographs of the site are presented in Appendix B of this report.

2.3 Site Geology

The British Geological Survey (BGS) map of the area indicates the site to be underlain by Eocene Headon Beds and Osborne Beds (Undifferentiated).

The BGS describes the Headon Beds as ‘pale greenish grey clays, some of which contain freshwater shell, with sands and carbonaceous clays present toward the base’ and the Osborne Beds as ‘green, olive and red calcareous clays and lime-rich muds with discontinuous beds of concretionary limestone’.

Superficial Quaternary River Terrace Deposits (Undifferentiated) are shown to overlie the Headon Beds and Osborne Beds (Undifferentiated) in the centre of the site. These are described as ‘sand and gravel, locally with lenses of silt, clay or peat’. Historical BGS maps recorded the superficial deposits as ‘Plateau Gravel’ and ‘Angular Flint Gravel of the Downs’.

There are no published historical BGS borehole records within the vicinity of the site.

3 FIELDWORK

All fieldwork was undertaken on 06 and 07 September 2018.

Four soakaway tests were undertaken in general accordance with BRE DG 365: Soakaway Design. The siting of the soakaway tests was determined through discussion between Vectos, Consulting Engineers, and Ruddlesden geotechnical. The setting out of all the trial pits was the responsibility of Ruddlesden geotechnical.

Unless stated otherwise, the exploratory holes were located on-site using a hand-held GPS, typically accurate to 4m.

No soakaway testing was undertake in both SA01 and SA05 as groundwater was encountered.

The trial pit was excavated to a depth deemed sufficient to represent a section of the design soakaway. The vertical sides were trimmed square. A 2000-gallon water bowser was used to supply the large volumes of water required at a quick rate.

The pit was filled with water and allowed to drain. The fall in water level was recorded with time.

Where the rates of infiltration allowed, the test was carried out three times at each location to simulate the ground conditions once the soakaway becomes active.

Trial pit logs and photographs, showing the ground conditions encountered, are presented in Appendix A and Appendix B; the soakaway testing results with soil infiltration rate calculations are presented in Appendix C; and a plan showing the soakaway test locations is presented in Appendix D.

4 RESULTS OF THE INVESTIGATION

4.1 General

The following sections provide a summary of ground conditions encountered and soakaway testing results. Further details are provided in the appendices of this report.

4.2 Ground Conditions Encountered

4.2.1 Topsoil

Blackish brown slightly sandy slightly gravelly silty clay was typically encountered to depths of between 0.30m and 0.50m below existing ground levels.

4.2.2 Natural Geology

River Terrace Deposits

Beneath the topsoil in SA01 and SA02, (medium dense) dark brown sandy slightly silty clayey gravel was encountered to a depths of 0.60m and 0.90m.

Beneath the gravel in SA01 and SA02 and beneath the topsoil in SA03, (medium dense) brown and light grey very sandy silty gravel was encountered to depths of between 0.90m and 1.20m, underlain by (medium dense) brown and grey (very) sandy gravel, to a depths of between 1.20m (base of SA02) and 2.30m (base of SA01).

Beneath the topsoil in SA04, firm orangish brown slightly gravelly sandy silty clay was encountered to the base of the trial pit, to a depth of 2.50m.

Beneath the topsoil in SA05 and SA06, (medium dense) brown and grey sandy slightly silty clayey gravel was encountered to depths of approximately 0.90m, underlain by (medium dense) orangish brown and grey sandy very clayey gravel to depths of approximately 1.60m.

Headon Beds and Osborne Beds (Undifferentiated)

In SA05 and SA06, the gravel (River Terrace Deposits) was underlain by stiff bluish grey slightly gravelly silty clay, to depths of 1.90m and 2.50m (base of SA05), underlain in SA06 by stiff bluish grey silty clay with frequent fossil fragments, to a depth of 2.50m.

The density of the granular deposits was estimated from a visual assessment only, i.e. ease of excavation and stability of trial pit sides.

4.3 Groundwater

Groundwater was encountered at the following depths during the course of the investigation:

Table 4.1: Occurrence of Groundwater

Hole ID	Water Level (mBGL)	Rate of Inflow
SA01	2.00	Seepage
SA05	2.50	Very slight

4.4 Soakaway Test Results

Full details of the soakaway testing results are provided in Appendix C of this report and are summarised in the table below:

Table 4.2: Summary of Soakaway Test Results

Test No.	Depth of Soakaway Test (mBGL)	Total Recorded Fall of Water Level (m)	Duration of Test (minutes)	Soil Infiltration Rate (m/s)
SA02	1.20	0.54	187	1.82×10^{-5}
SA03 – Trial 1	1.40	0.58	372	n/a*
SA03 – Trial 2	1.50	0.34	263	n/a*
SA04	2.50	0.14	310	n/a*
SA06	2.50	0.03	125	n/a*

* Test failed to reach 75% of the effective depth. No soil infiltration rate calculation possible.

5 DISCUSSION OF RESULTS AND RECOMMENDATIONS

It is understood that soakaways are proposed as a means of surface water drainage for the residential development of land off Ridgeway Lane, Lymington, Hampshire. The proposed layout is included within Appendix D of this report.

Four in-situ soakaway tests were undertaken at the locations shown on the soakaway test location plan (included within Appendix D), in general accordance with BRE 365.

At the location and effective depth (base depth 1.20m) of SA02, a soil infiltration rate of 1.82 x 10^{-5}m/s was recorded, indicating the ground may be suitably permeable for the use of soakaways as a means of surface water drainage at this location and depth.

Due to time restrictions and the slow rate of infiltration recorded, the soakaway test at the location of SA03 was not completed within two days. However, based on the rates of infiltration recorded, a soil infiltration rate of 1 x 10^{-6}m/s is estimated and may be used for preliminary design purposes only at this location and depth. Further testing (three full trials) would be required to confirm a soil infiltration rate for detailed design at this location. This would likely take over six hours per trial; the trial pit would need to be left overnight, so full fencing would be required to do this.

At the location of SA04 and SA06, water level falls of 0.14m and 0.03m were recorded over the course of the day, respectively. These tests failed to reach 75% of the effective depth, indicating that ground conditions are unsuitable for soakaway drainage at these locations.

The presence of groundwater at the locations of SA01 and SA05 also makes these locations unsuitable for soakaway drainage.

The range of infiltration rates recorded is considered to be due to the variable clay content of the ground conditions encountered, which is a result of depositional environment of the superficial deposits (River Terrace Deposits) and underlying bedrock geology (Headon Beds and Osborne Beds (Undifferentiated)).

With the exception of SA02, these results indicate that the ground has a relatively low permeability and is not suitable for the adoption of soakaway drainage as any soakaways would necessarily be quite large and would probably not be able to fulfil the criteria to half-empty in a 24-hour period.

Off-site discharge, possibly combined with on-site attenuation, is considered likely to be the most suitable drainage solution at this site.

The preferable drainage solution at this site would appear to be to discharge into the sewer or suitable outfall. If necessary, an underground storage tank with a throttled outflow valve may be able to be installed to allow water to be discharged at an agreed rate so that during storm periods discharge is not increased from the present situation.

It is noted that as much soakaway testing as was practicable was undertaken in two days. If soakaway testing is undertaken in strict accordance with BRE 365, it should be carried out three times at each location. Although this is unlikely to affect the infiltration rate recommended for design, this may be required by a regulatory authority.

If soakaways are to be used for drainage of highways that are to be adopted, additional soakaway tests should be undertaken at the proposed location and depth of the soakaway drain, in strict accordance with BRE DG 365, i.e. carried out three times.

Given the variability of the soakaway test results, should the locations and/ or depths of any soakaway drains significantly differ from those tested, Ruddlesden geotechnical should be contacted for advice on an appropriate infiltration rates for design. Additional soakaway testing would be recommended to confirm the permeability of the ground at the locations and depths of any proposed soakaway drain.

All soakaways should be designed in accordance with the recommendations provided in BRE DG 365: Soakaway Design.

No contamination testing or assessment has been undertaken as part of this investigation. However, based on site observations and as it is understood that the site has had no other use than the existing fields, no elevated levels of contamination would be expected. It is therefore considered soakaway drainage will not cause mobilisation of contaminants. However, all soakaways should be built beneath any made ground, which could potentially be generically contaminated.

From an assessment of the site’s topography, i.e. generally level, it is considered soakaway drainage will not cause slope instability.

Groundwater was encountered in two of the five trial pits, at depths of 2.00m and 2.50m. From an assessment of the site’s geomorphological setting, and that the soakaway testing was following an unusually dry summer, it is considered that the seasonal high groundwater table may be nearer the surface then it was recorded during this investigation. If soakaway drainage is to be used, it is recommended that long-term groundwater level monitoring be undertaken to confirm the season groundwater level and hence the depth of possible soakaways. The seasonal high groundwater table may preclude the use of soakaway drainage at this site.

6 REFERENCES

- Building Research Establishment (2016): DG 365: Soakaway Design.

7 TERMS AND CONDITIONS

1. This report has been prepared for the sole use of the specified client in response to an agreed brief and for the stated purpose. The recommendations used in this report should not be used for any other schemes on or adjacent to this site without further reference to this company.

2. The copyright of this report is owned by Ruddlesden geotechnical. With the exception of the named client, who may copy and distribute the report to deal with matters directly relating to its commission, this report may not be reproduced, published or adapted without written consent of the company.

3. New information, improved practices and legislation may necessitate an alteration to the report in whole or in part after its submission. Therefore, with any change in circumstances, this report should be referred to Ruddlesden geotechnical for reassessment and, if necessary, reappraisal.

4. The comments given in this report assume that ground conditions do not vary beyond the range revealed by the investigation. There may, however, be conditions at or adjacent to the site that have not been disclosed by the investigation and which, therefore, have not been considered in this report. Accordingly, a careful watch should be maintained during any future groundworks and the recommendations of this report reviewed as necessary.

5. Whilst confident in the findings of the report, the recommendations may not necessarily be accepted by other authorities without question. It is advisable that, where appropriate, the report be submitted to the relevant statutory authorities and approval obtained before detailed design, site works or other irrevocable action is undertaken.

6. All comments and recommendations are based on groundwater conditions encountered at the time of investigation. It should be noted that groundwater levels might fluctuate according to the season and from year to year. This may have implications on other recommendations, including foundations and excavations.

7. All third party data referred to in the report, e.g. environmental searches and laboratory testing, has been obtained in good faith from bona fide sources. Ruddlesden geotechnical cannot be held liable for any incorrect information supplied to us.

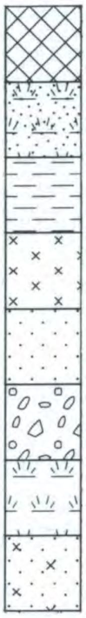
APPENDICES

APPENDIX A

TRIAL PIT LOGS

Key to Trial Pit and Borehole Logs (Common Symbols)

Strata legend



Made Ground

Topsoil

Clay

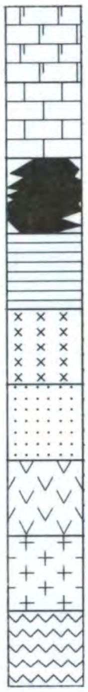
Silt

Sand

Gravel

Peat

Composite soil types will be signified by combined symbols, e.g. silty sand



Chalk

Limestone

Coal

Mudstone

Siltstone

Sandstone

Fine grained igneous rock (e.g. basalt)

Medium grained igneous rock (e.g. granite)

Fine grained metamorphic rock (e.g. slate)

Groundwater

Groundwater strike

Standing groundwater level

Installations

Cement seal

Bentonite seal

Filter pack (slotted pipe)

Samples

D	Small disturbed sample
J	Small disturbed sample (amber glass jar)
B	Disturbed bulk sample
U100	Undisturbed sample (100mm diameter)
W	Water sample

In-situ testing

SPT	Standard Penetration Test (split spoon sampler)
SPT(C)	Standard Penetration Test (solid cone)
V	Shear vane test
CBR	California Bearing Ratio

Rotary drilling

TCR	Total core recovery (%)
SCR	Solid core recovery (%)
RQD	Rock quality designation (%)
FI	Fracture index (fractures/m)
NI	Non-intact

SPT results (examples)

30	N-Value (blows recorded for 300mm penetration, following 150mm seating drive)
50/125	50 blows for 125mm penetration

Field Identification and Description of Soils (Based on Table 7 of BS 5930: 2015)

SOIL GROUP	Very coarse soils			Coarse soils						Fine soils			
PRINCIPAL SOIL TYPE	BOULDERS		COBBLES	GRAVEL			SAND			SILT			CLAY
Particle size (mm)	Large boulder	Boulder	Cobble	Coarse	Medium	Fine	Coarse	Medium	Fine	Coarse	Medium	Fine	
	>630	630-200	200-63	63-20	20-6.3	6.3-2.0	2.0-0.63	0.63-0.2	0.2-0.063	0.063-0.02	0.02-0.0063	0.0063-0.002	<0.002
Visual identification	Only seen complete in pits or exposures. Difficult to recover whole from boreholes.			Easily visible to naked eye; particle shape can be described; grading can be described.			Visible to naked eye; no cohesion when dry; grading can be described.			Only coarse silt visible with hand lens; exhibits little plasticity and marked dilatancy; slightly granular or silky to the touch; disintegrates in water; lumps dry quickly; possesses cohesion but can be powdered easily between fingers.			Dry lumps can be broken but not powdered between the fingers; dry lumps disintegrate under water but more slowly than silt; smooth to the touch; exhibits plasticity but no dilatancy; sticks to the fingers and dries slowly; shrinks appreciably on drying usually showing cracks.

Density/ Consistency	Very coarse soils	Coarse soils						
	No terms defined. Qualitative description of packing by inspection and ease of excavation.	Classification of relative density on the basis of N-value, or field assessment using hand tests may be made. SPT N-values = 0 – 4 = Very loose 4 – 10 = Loose 10 – 30 = Medium dense 30 – 50 = Dense >50 = Very dense	**Term**	Very soft	Soft	Firm	Stiff	Very stiff
			Field test	Finger easily pushed in up to 25mm. Exudes between fingers.	Fingers pushed in up to 10mm. Moulded by light finger pressure.	Thumb makes impression easily. Cannot be moulded by fingers. Rolls to thread.	Can be indented slightly by thumb. Crumbles in rolling thread. Remoulds.	Can be indented by thumb nail. Cannot be moulded, crumbles.

Discontinuities	Describe spacing of features such as fissures, shears, partings, isolated beds or laminae, desiccation cracks, rootlets, etc. Fissured: breaks into blocks along unpolished discontinuities. Sheared: breaks into blocks along polished discontinuities.	**Scale of spacing of discontinuities**	**Term**	very widely	widely	medium	closely	very closely	extremely closely	
			Mean spacing (mm)	>2000	2000-600	600-200	200-60	60-20	<20	
Bedding	Describe thickness of beds in accordance with geological definition. Alternating layers of materials are inter-bedded or inter-laminated and should be described by thickness term if in equal proportions, or by a thickness of and spacing between subordinate layers where unequal.	**Scale of bedding thickness**	**Term**	very thickly bedded	thickly bedded	medium bedded	thinly bedded	very thinly bedded	thickly laminated	thinly laminated
			Mean thickness (mm)	>2000	2000-600	600-200	200-60	60-20	20-6	<6

Colour	**HUE** can be preceded by **LIGHTNESS** and/ or **CHROMA**	Red/ Pink/ Orange/ Yellow/ Cream/ Brown/ Green/ Blue/ White/ Grey/ Black Light/ -/ Dark Reddish/ Pinkish/ Orangish/ Yellowish/ Brownish/ Greenish/ Bluish/ Greyish	Colours may be mottled More than 3 colours is multi-coloured

Secondary constituents	For mixtures including very coarse soils see section 33.4.4.2 of BS 5930 (2015).	**Terms in coarse soils**	slightly (sandy) [B)]	(sandy) [B)]	very (sandy) [B)]	SAND AND GRAVEL		**Terms in fine soil**	slightly sandy [D)]	(sandy) [D)]	very (sandy) [F)]	Silty CLAY Clayey SILT	Terms used to reflect secondary fine constituents where this is important
		Proportion secondary [A)]	<5%	5-20% [C)]	>20% [C)]	About 50%		**Proportion secondary** [A)]	<35%	35-65% [E)]	>65% [E)]		

Mineralogy	Terms can include: glauconitic/ micaceous/ shelly/ organic/ calcareous. For example: slightly (glauconitic)/ (glauconitic)/ very (glauconitic). Carbonate Content: slightly calcareous – weak or sporadic effervescence from HCl/ calcareous – clear but not sustained effervescence from HCl/ highly calcareous – strong, sustained effervescence from HCl. Organic soils contain secondary finely divided or discrete particles of organic matter often with distinctive smell, might oxidise rapidly. For example: slightly organic-grey/ organic–dark grey/ very organic–black						
Particle shape	Very angular/ Angular/ Subangular/ Subrounded/ Rounded/ Well-rounded A dominant shape can be described, for example: Cubic/ Flat/ Elongate						
PRINCIPAL SOIL TYPE	LARGE BOULDERS	BOULDERS	COBBLES	GRAVEL	SAND	SILT	CLAY
Tertiary constituents	Example terms include: shell fragments/ pockets of peat/ gypsum crystals/ pyrite nodules/ calcareous concretions/ flint gravel/ brick fragments/ rootlets/ plastic bags. Qualitative proportions can be given: with rare/ with occasional/ with numerous/ frequent/ abundant. Proportions are defined on a site or material specific basis, or subjectively.						
Geological unit	Name in accordance with published geological maps, memoirs or sheet explanations. For example: River Terrace Deposits/ Glacial Sand And Gravel/ Made Ground/ Crackington Formation/ Weathered Heavitree Breccia Formation/ Meadfoot Group/ Upper Devonian Slates/ Alluvium/ Topsoil/ Laminated Beds/ Bude Formation/ Sherwood Sandstone Group						

A) Percentage coarse or fine soil type assessed excluding cobbles and boulders
B) Gravelly or sandy and/ or silty or clayey
C) Can be described as fine soil depending on mass behaviour
D) Gravelly and/ or sandy
E) Can be described as coarse soil depending on mass behaviour
F) Gravelly or sandy

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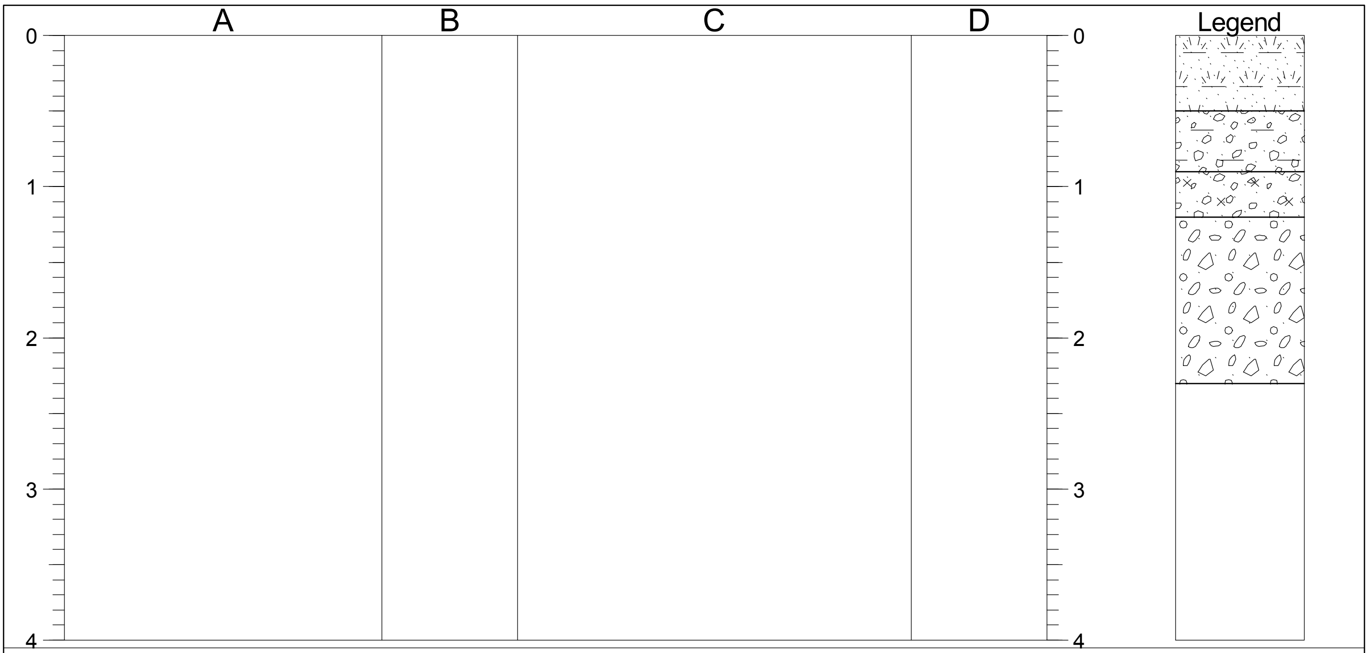
Pinhoe, Exeter EX1 3SP
Telephone: 01392 678082

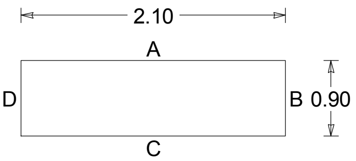
TRIAL PIT LOG

Project				TRIAL PIT No
Ridgeway Lane, Lymington, Hampshire				**SA01**
Job No: 18413	Date: 06-09-18	Ground Level (m):	Co-Ordinates (BNG): E 431840 N 094100	
Contractor:	Method/ Plant: CAT 432D	Energy Ratio:		Sheet: 1 of 1



STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.50		TOPSOIL: Blackish brown slightly sandy slightly gravelly silty clay with frequent rootlets.			
0.50-0.90		(Medium dense) dark brown sandy slightly clayey GRAVEL. Gravel is fine to coarse subrounded of mixed lithologies. (River Terrace Deposits).			
0.90-1.20		(Medium dense) brown and light grey very sandy slightly silty GRAVEL. Gravel is fine to coarse subangular to rounded of mixed lithologies. (River Terrace Deposits).	1.00	VANE	too gravelly
1.20-2.30		(Medium dense) brown and grey sandy GRAVEL. Gravel is fine to coarse subrounded to rounded of mixed lithologies. (River Terrace Deposits). 1.80 ...slightly sandy			

Shoring/Support: None.
Stability: Collapse from 2.00m due to running sand/ gravel.
Groundwater: Groundwater encountered at 2.00m.



GENERAL REMARKS

1. Density of granular deposits estimated from visual assessment only.
2. No soakaway undertaken due to groundwater being encountered.

All dimensions in metres Scale 1:50	Client: Vectos	Logged By CG

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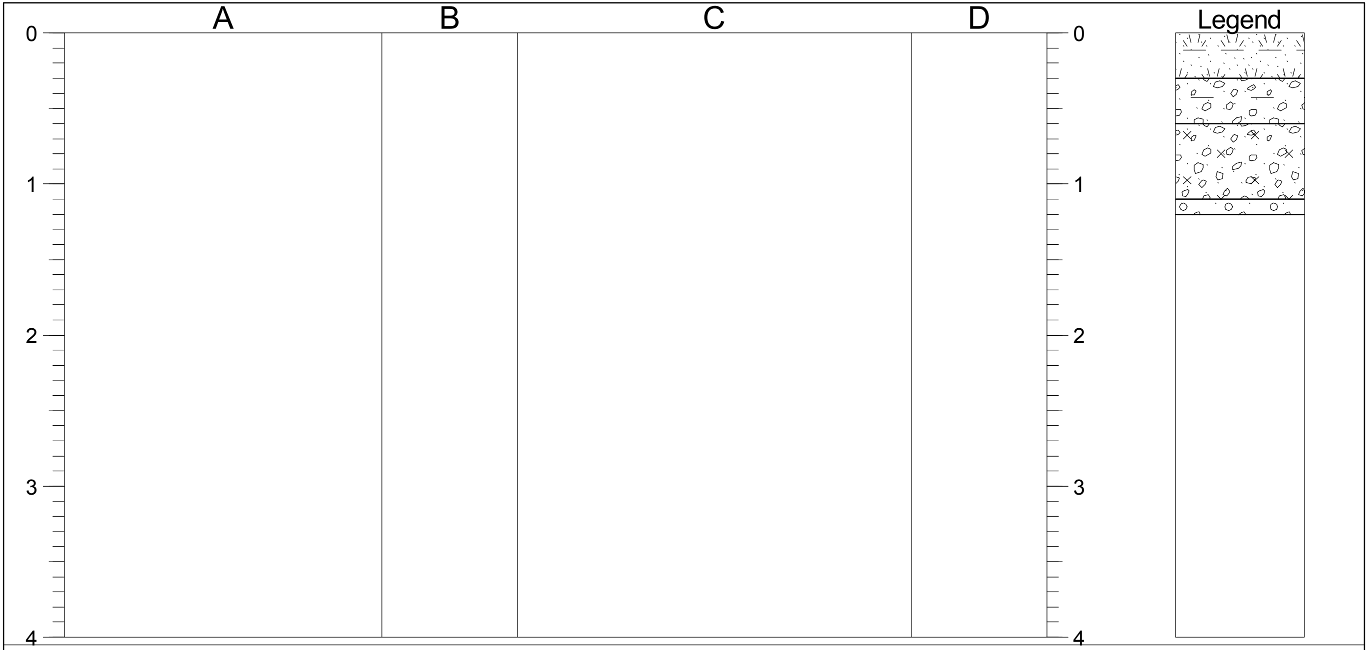
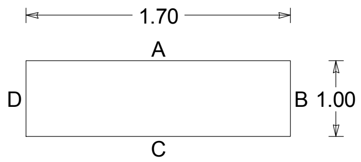
TRIAL PIT LOG

Project				TRIAL PIT No
Ridgeway Lane, Lymington, Hampshire				SA02
Job No: 18413	Date: 06-09-18	Ground Level (m)	Co-Ordinates (BNG): E 431835 N 094108	
Contractor	Method/ Plant: CAT 432D	Energy Ratio		Sheet: 1 of 1



STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.30		TOPSOIL: Blackish brown slightly sandy slightly gravelly silty clay with frequent rootlets.			
0.30-0.60		(Medium dense) dark brown sandy slightly clayey GRAVEL. Gravel is fine to coarse subrounded of mixed lithologies. (River Terrace Deposits).			
0.60-1.10		(Medium dense) brown and light grey very sandy silty GRAVEL. Gravel is fine to coarse subrounded to rounded of mixed lithologies. (River Terrace Deposits).			
1.10-1.20		(Medium dense) brown sandy GRAVEL. Gravel is fine to coarse subangular to angular of mixed lithologies. (River Terrace Deposits).			

Shoring/Support: None.
Stability: Stable.
Groundwater: None encountered.



GENERAL REMARKS

1. Density of granular deposits estimated from visual assessment only.

All dimensions in metres Scale 1:50	Client: Vectos	Logged By CG

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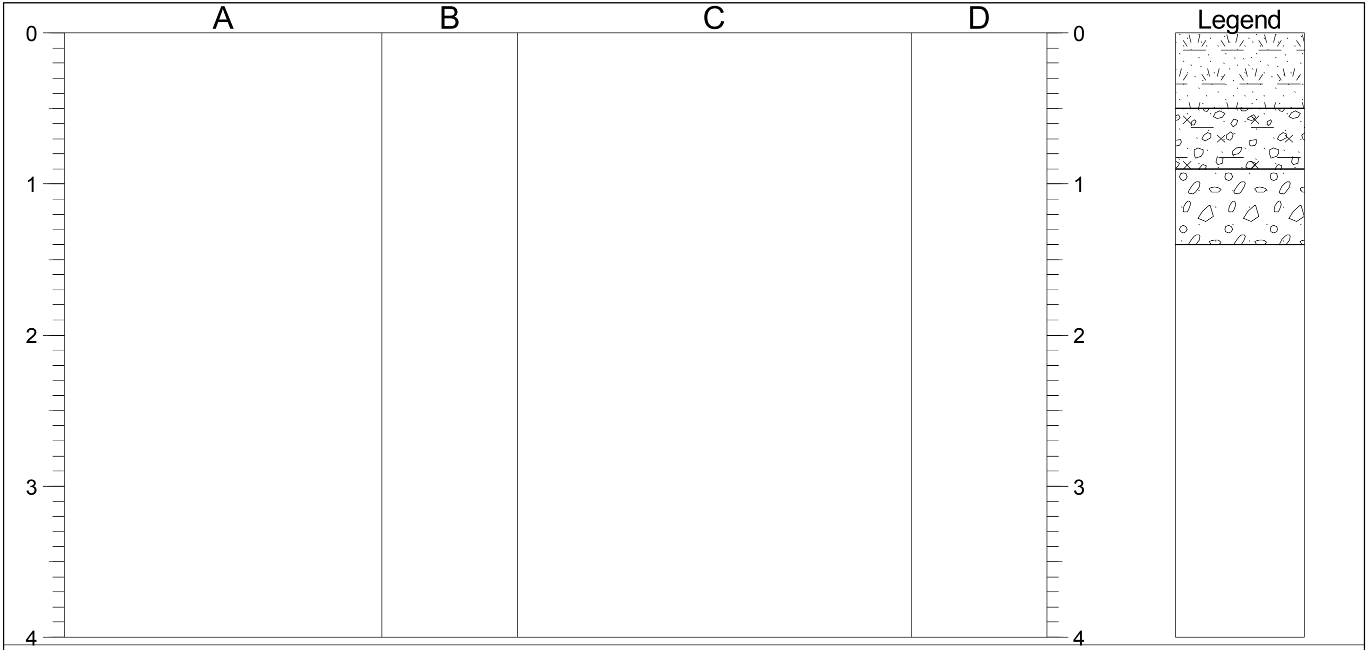
TRIAL PIT LOG

Project				TRIAL PIT No
Ridgeway Lane, Lymington, Hampshire				**SA03**
Job No 18413	Date 06-09-18	Ground Level (m)	Co-Ordinates (BNG) E 431810 N 094150	
Contractor	Method/ Plant CAT 432D	Energy Ratio		Sheet 1 of 1



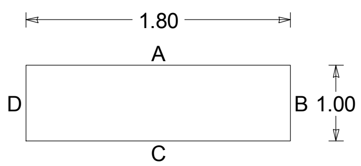
STRATA

Depth	No	DESCRIPTION
0.00-0.50		TOPSOIL: Blackish brown slightly sandy gravelly silty clay with occasional rootlets.
0.50-0.90		(Medium dense) brown and grey sandy slightly silty slightly clayey GRAVEL. Gravel is fine to coarse subangular to rounded of mixed lithologies. (River Terrace Deposits).
0.90-1.40		(Medium dense) orangish brown very sandy GRAVEL. Gravel is fine to coarse subrounded to rounded of mixed lithologies. (River Terrace Deposits).

SAMPLES & TESTS

Depth	No	Remarks/Tests

Shoring/Support: None.
Stability: Stable.
Groundwater: None encountered.



GENERAL REMARKS

1. Density of granular deposits estimated from visual assessment only.
2. Trial pit terminated at 1.40m due to near surface groundwater.
3. Trial pit re-excavated the following day for a second deeper soakaway test.

All dimensions in metres Scale 1:50	Client: Vectos	Logged By CG

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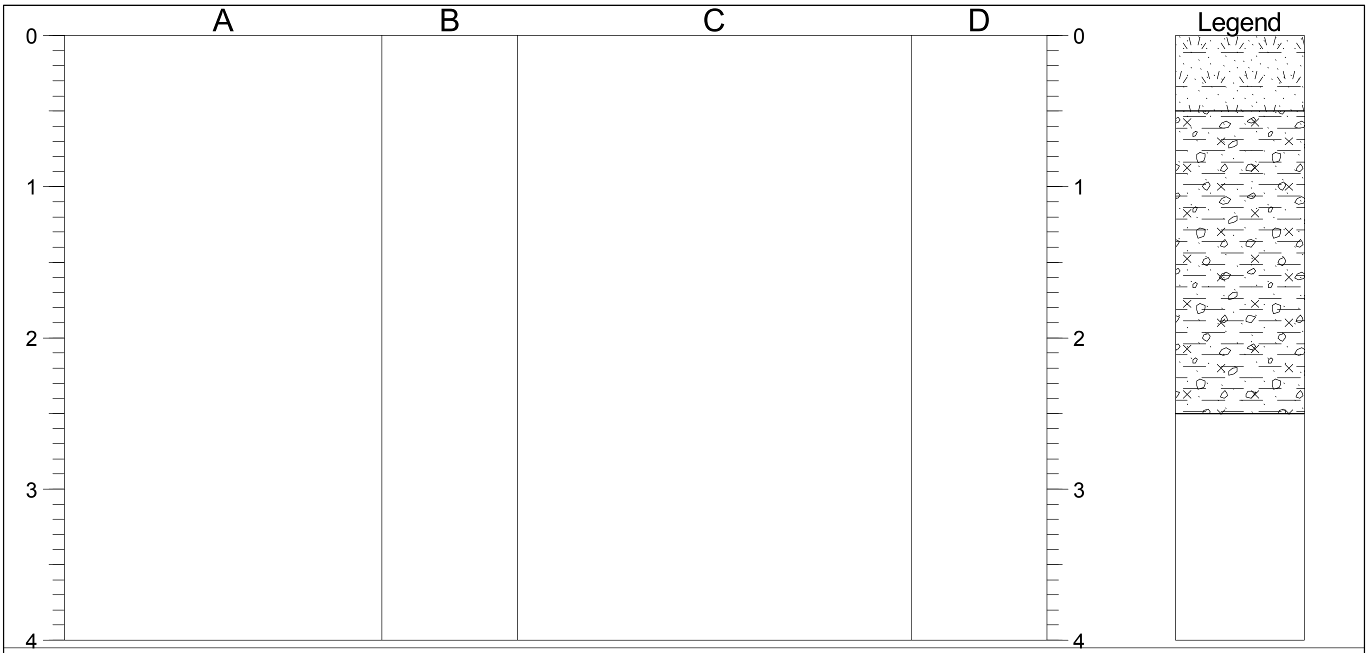
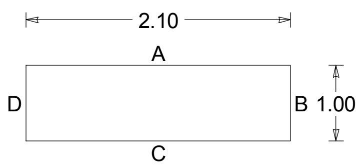
TRIAL PIT LOG

Project				TRIAL PIT No
Ridgeway Lane, Lymington, Hampshire				SA04
Job No: 18413	Date: 06-09-18	Ground Level (m)	Co-Ordinates (BNG): E 431835 N 094205	
Contractor	Method/ Plant: CAT 432D	Energy Ratio		Sheet: 1 of 1



STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.50		TOPSOIL: Blackish brown slightly sandy slightly gravelly silty clay with occasional rootlets.			
0.50-2.50		Firm orangish brown slightly gravelly sandy silty CLAY. Gravel is fine to medium subrounded to rounded of mixed lithologies. (River Terrace Deposits). 1.20 ...occasional very sandy bands 1.60 ...bluish grey patches			

Shoring/Support: None.
Stability: Stable.
Groundwater: None encountered.



GENERAL REMARKS

All dimensions in metres
Scale 1:50

Client: Vectos

Logged By CG

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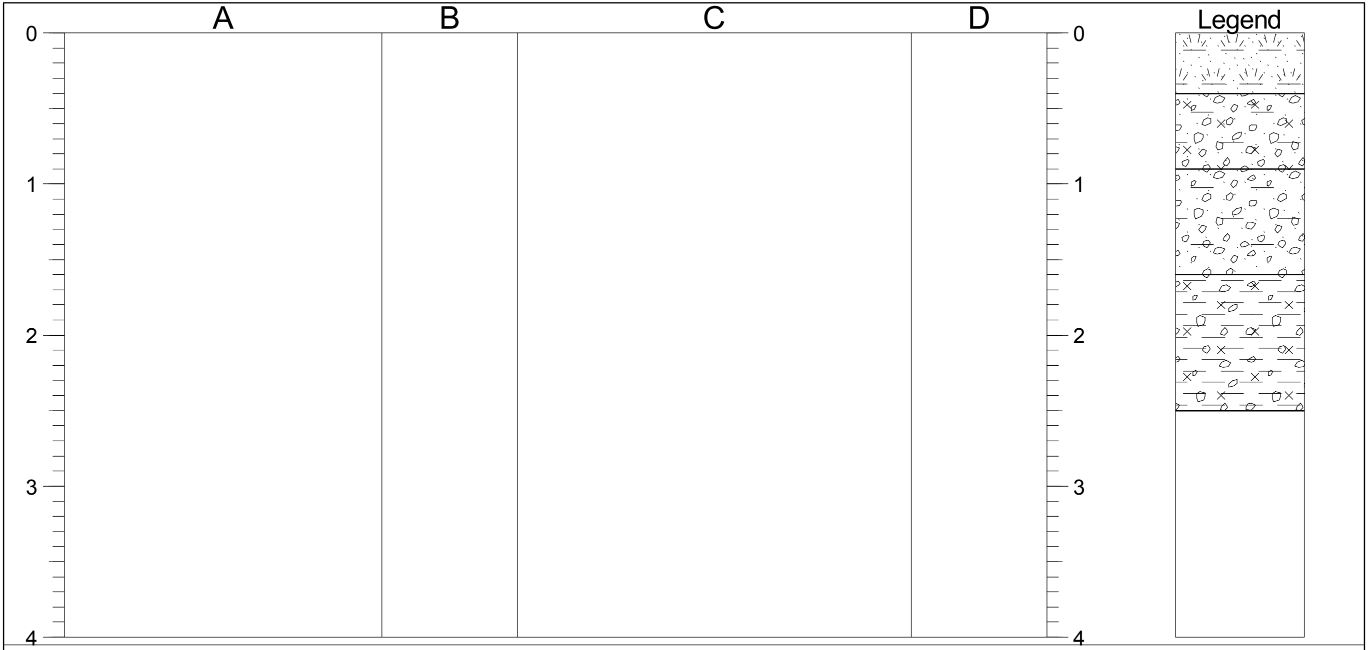
Pinhoe, Exeter EX1 3SP
Telephone: 01392 678082

TRIAL PIT LOG

Project				TRIAL PIT No
Ridgeway Lane, Lymington, Hampshire				SA05
Job No: 18413	Date: 06-09-18	Ground Level (m):	Co-Ordinates (BNG): E 431745 N 094208	
Contractor:	Method/ Plant: CAT 432D	Energy Ratio:		Sheet: 1 of 1



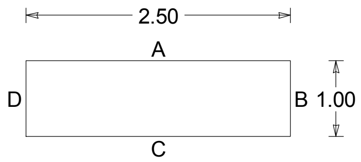
STRATA

Depth	No	DESCRIPTION
0.00-0.40		TOPSOIL: Blackish brown slightly sandy slightly gravelly silty clay with occasional rootlets.
0.40-0.90		(Medium dense) brown and grey slightly sandy slightly silty clayey GRAVEL. Gravel is fine to coarse subangular to rounded of mixed lithologies. (River Terrace Deposits).
0.90-1.60		(Medium dense) orangish brown and grey sandy very clayey GRAVEL with occasional gravelly clay on northern wall. Gravel is fine to coarse subrounded of mixed lithologies mainly flint. (River Terrace Deposits).
1.60-2.50		Stiff bluish grey slightly gravelly silty CLAY. Gravel is fine to coarse subangular to rounded of mixed lithologies mainly flint. (Headon Beds and Osborne Beds).

SAMPLES & TESTS

Depth	No	Remarks/Tests

Shoring/Support: None.
Stability: Stable.
Groundwater: Groundwater encountered in base of pit after 30 minutes.



GENERAL REMARKS

1. Density of granular deposits estimated from visual assessment only.

All dimensions in metres Scale 1:50	Client: Vectos	Logged By CG

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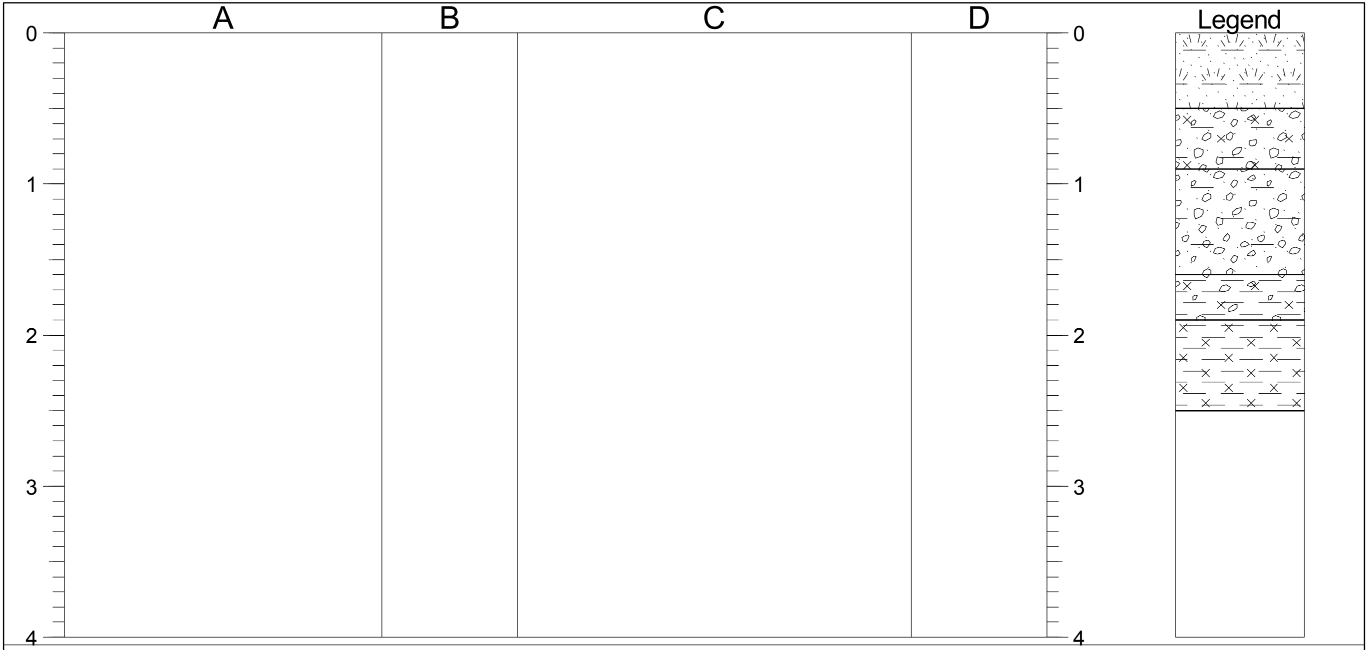
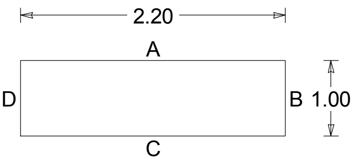
TRIAL PIT LOG

Project				TRIAL PIT No
Ridgeway Lane, Lymington, Hampshire				**SA06**
Job No: 18413	Date: 06-09-18	Ground Level (m)	Co-Ordinates (BNG): E 431738 N 094216	
Contractor	Method/ Plant: CAT 432D	Energy Ratio		Sheet: 1 of 1



STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.50		TOPSOIL: Blackish brown slightly sandy slightly gravelly silty clay with occasional rootlets.			
0.50-0.90		(Medium dense) brown and grey sandy slightly silty/ clayey GRAVEL. Gravel is fine to coarse subangular to rounded of mixed lithologies. (River Terrace Deposits). 0.80 ...orange pipe (broken)			
0.90-1.60		(Medium dense) orangish brown and grey sandy locally very sandy clayey GRAVEL. Gravel is fine to coarse subangular to rounded of mixed lithologies. (River Terrace Deposits).			
1.60-1.90		Stiff bluish grey slightly gravelly silty CLAY. Gravel is fine to medium subangular to rounded of mixed lithologies. (Headon Beds and Osborne Beds).			
1.90-2.50		Stiff bluish grey silty CLAY with frequent fossil fragments. (Headon Beds and Osborne Beds).			

Shoring/Support: None.
Stability: Stable.
Groundwater: None encountered.



GENERAL REMARKS

1. Density of granular deposits estimated from visual assessment only.

All dimensions in metres Scale 1:50	Client: Vectos	Logged By CG

AGS3 UK TP 18413 - RIDGEWAY LANE, LYMINGTON, HAMPSHIRE.GPJ AGS 3_1.GDT 19/9/18

APPENDIX B

PHOTOGRAPHS

Plate 1

The eastern field, viewed from the south.

Plate 2

The western field, viewed from the northeast.

	**Plate 3** Ground conditions encountered in SA1.
	**Plate 4** Ground conditions encountered in SA2.

	**Plate 5** Ground conditions encountered in SA3.
	**Plate 6** Ground conditions encountered in SA4.

	**Plate 7** Ground conditions encountered in SA5.
	**Plate 8** Ground conditions encountered in SA6.

APPENDIX C

SOAKAWAY TEST RESULTS

Trial observations

Site Ref No : 18413
Site Address : Ridgeway Lane, Lymington
Test Location : SA02

Total excavated depth of soakaway : 1.20 m
Ground level to invert of inflow pipe : 0.50 m

Impermeable surface area (A) : 100.00 m^2
Soil infiltration rate (f) : 1.82E-05 m/s

Rainfall ratio : 0.3
Aggregate void : 30%

Trial No. 1		Trial No. 2		Trial No. 3	
Interval (mins)	Depth (m)	Interval (mins)	Depth (m)	Interval (mins)	Depth (m)
000	0.50	000	0.50	000	0.50
001	0.51	001	0.50	001	0.53
002	0.52	004	0.52	002	0.54
003	0.53	009	0.56	003	0.55
006	0.56	015	0.85	004	0.56
024	0.66	045	0.70	005	0.57
051	0.75	058	0.74	014	0.63
071	0.82	094	0.85	037	0.73
157	0.97	129	0.95	056	0.79
187	1.04	163	1.07	072	0.83
				106	0.92
				134	0.99
				169	1.07
				200	1.08
Rate (f) = 1.82E-05 m/s		Rate (f) = 1.99E-05 m/s		Rate (f) = 2.21E-05 m/s	

NOTE: Depth is from ground level to water level

Soakaway Test Results
In Accordance with BRE 365 "Soakaway Design"

Job Title:	Ridgeway Lane, Lymington, Hampshire
Job No.:	18413
Client:	Vectos
Date:	Sep-18

Test No. SA03 - Trial 1

Trial Pit Dimensions

Length (m):	1.80
Width (m):	1.00
Depth (m):	1.40
Start Water Level (m):	0.50
Total Depth of Test	0.90

Field Results

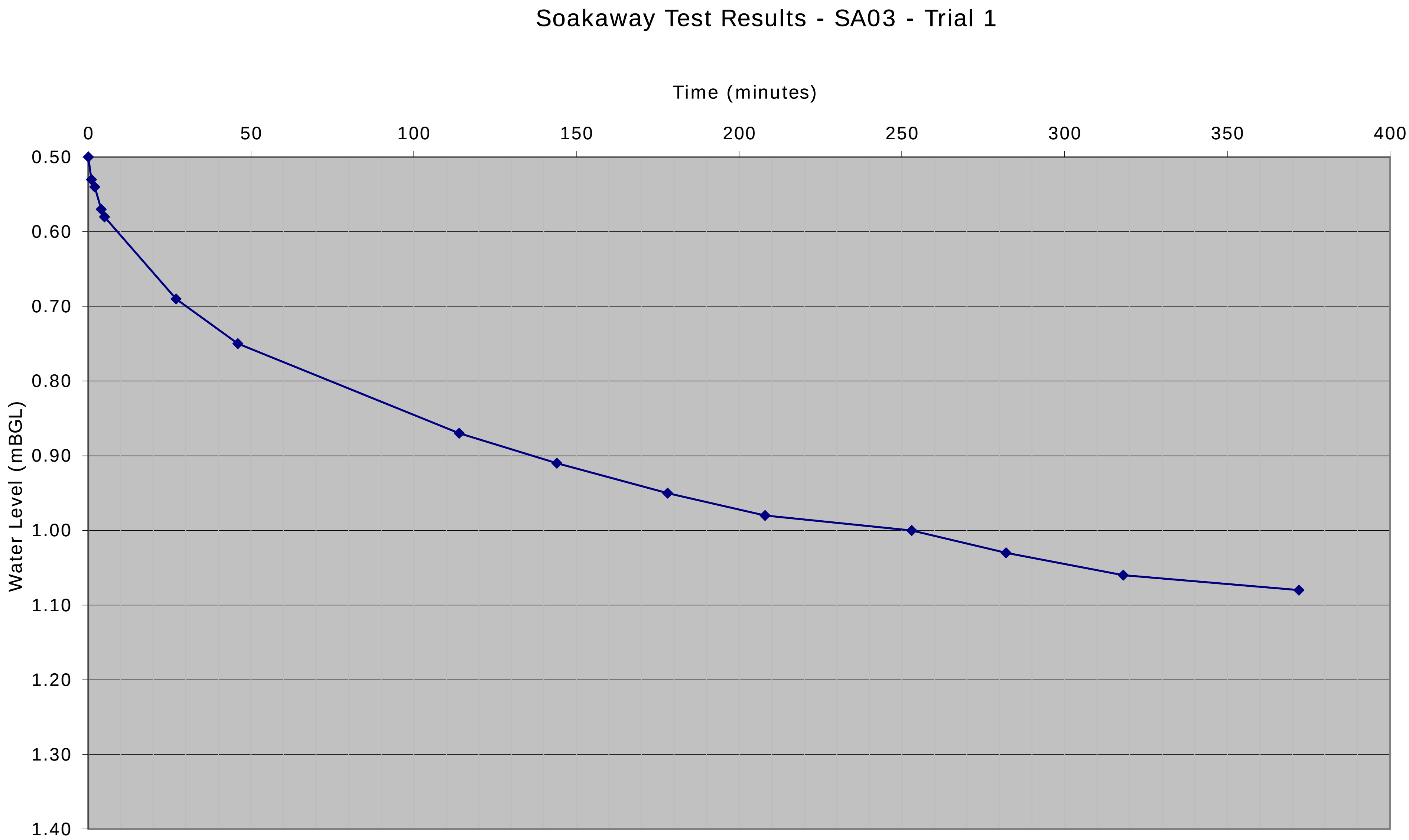
Time (minutes)	Water Level (mBGL)
0	0.50
1	0.53
2	0.54
4	0.57
5	0.58
27	0.69
46	0.75
114	0.87
144	0.91
178	0.95
208	0.98
253	1.00
282	1.03
318	1.06
372	1.08

Soakaway Test Results
In Accordance with BRE 365 "Soakaway Design"

Calculations

Soil Infiltration Rate (f)	=	$(V_{p75-25}) / (a_{p50} \times t_{p75-25})$
Where		
V_{p75-25}	=	effective storage volume of water in the trial pit between 75% and 25% effective depth
	=	1.80 x 1.00 x 0.45
	=	0.81 m^3
a_{p50}	=	internal surface area of the trial pit up to 50% effective depth and including the base area
	=	0.90 + 1.62 + 1.80
	=	4.32 m^2
t_{p75-25}	=	time for the water level to fall from 75% to 25% effective depth 25% effective depth = 0.725 75% effective depth = 1.175
	=	- mins
	=	0 mins
	=	0 secs
Soil Infiltration Rate (f)	=	$(V_{p75-25}) / (a_{p50} \times t_{p75-25})$
	=	0.81 / 4.32 x 0
	=	#DIV/0! m/s

OTHER NOTES:


Soakaway Test Results - SA03 - Trial 1
Time (minutes)
0
50
100
150
200
250
300
350
400
Water Level (mBGL)
0.50
0.60
0.70
0.80
0.90
1.00
1.10
1.20
1.30
1.40

Soakaway Test Results
In Accordance with BRE 365 "Soakaway Design"

Job Title:	Ridgeway Lane, Lymington, Hampshire
Job No.:	18413
Client:	Vectos
Date:	Sep-18

Test No. SA03 - Trial 2

Trial Pit Dimensions

Length (m):	1.80
Width (m):	1.00
Depth (m):	1.50
Start Water Level (m):	0.45
Total Depth of Test	1.05

Field Results

Time (minutes)	Water Level (mBGL)
0	0.45
1	0.47
2	0.47
3	0.48
4	0.48
6	0.48
26	0.54
45	0.57
64	0.60
99	0.65
123	0.67
161	0.70
191	0.73
223	0.76
263	0.79

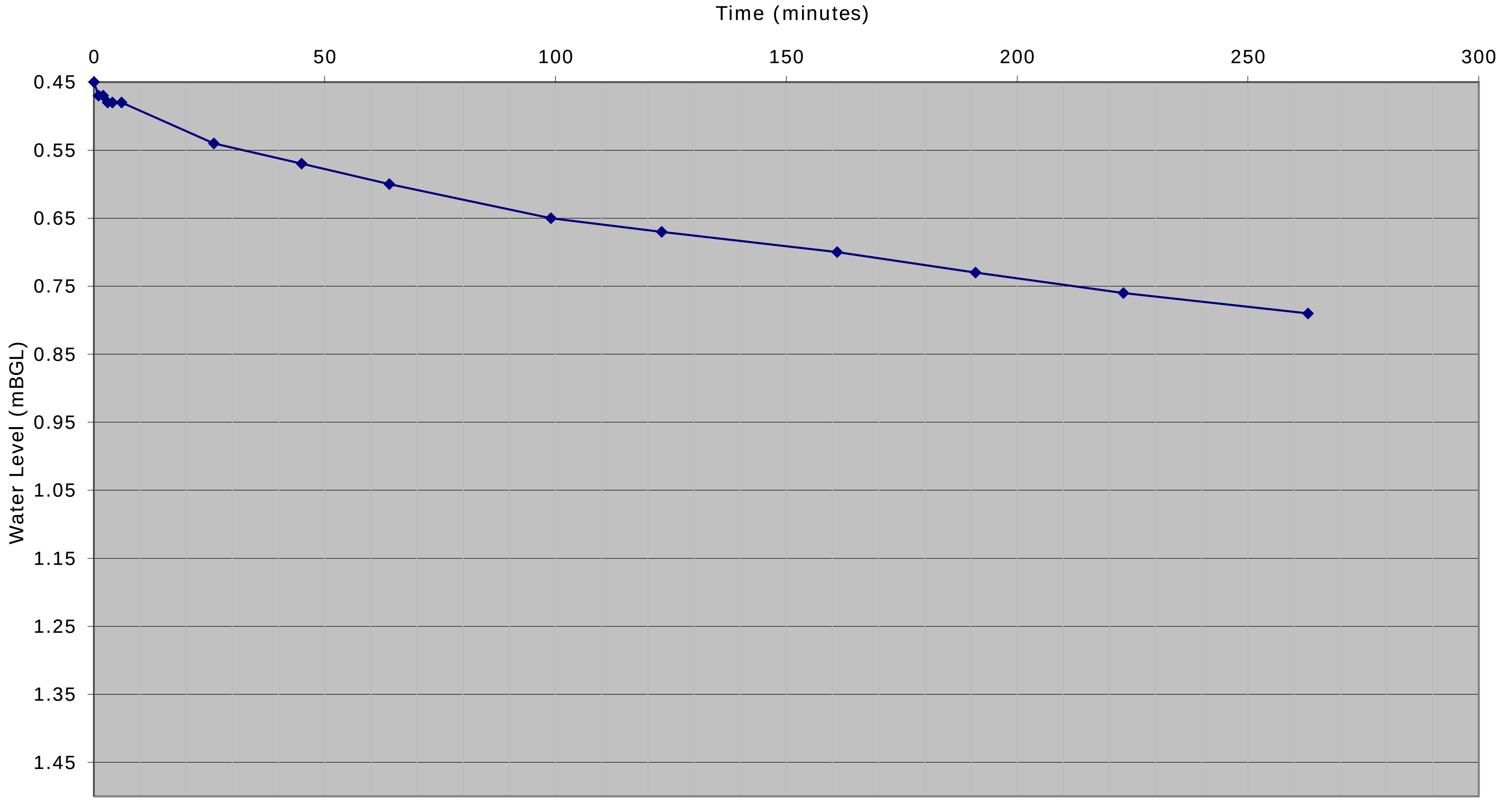
Soakaway Test Results
In Accordance with BRE 365 "Soakaway Design"

Calculations

Soil Infiltration Rate (f)	=	$(V_{p75-25}) / (a_{p50} \times t_{p75-25})$
Where		
V_{p75-25}	=	effective storage volume of water in the trial pit between 75% and 25% effective depth
	=	1.80 x 1.00 x 0.53
	=	0.945 m^3
a_{p50}	=	internal surface area of the trial pit up to 50% effective depth and including the base area
	=	1.05 + 1.89 + 1.80
	=	4.74 m^2
t_{p75-25}	=	time for the water level to fall from 75% to 25% effective depth 25% effective depth = 0.7125 75% effective depth = 1.2375
	=	- mins
	=	0 mins
	=	0 secs
Soil Infiltration Rate (f)	=	$(V_{p75-25}) / (a_{p50} \times t_{p75-25})$
	=	0.945 / 4.74 x 0
	=	#DIV/0! m/s

OTHER NOTES:

Soakaway Test Results - SA03 - Trial 2



Soakaway Test Results
In Accordance with BRE 365 "Soakaway Design"

Job Title:	Ridgeway Lane, Lymington, Hampshire
Job No.:	18413
Client:	Vectos
Date:	Sep-18

Test No.	SA04

Trial Pit Dimensions

Length (m):	2.10
Width (m):	1.00
Depth (m):	2.50
Start Water Level (m):	1.01
Total Depth of Test	1.49

Field Results

Time (minutes)	Water Level (mBGL)
0	1.01
1	1.01
2	1.02
3	1.04
5	1.04
6	1.04
22	1.07
93	1.14
124	1.15
159	1.18
189	1.20
232	1.21
263	1.23
310	1.25

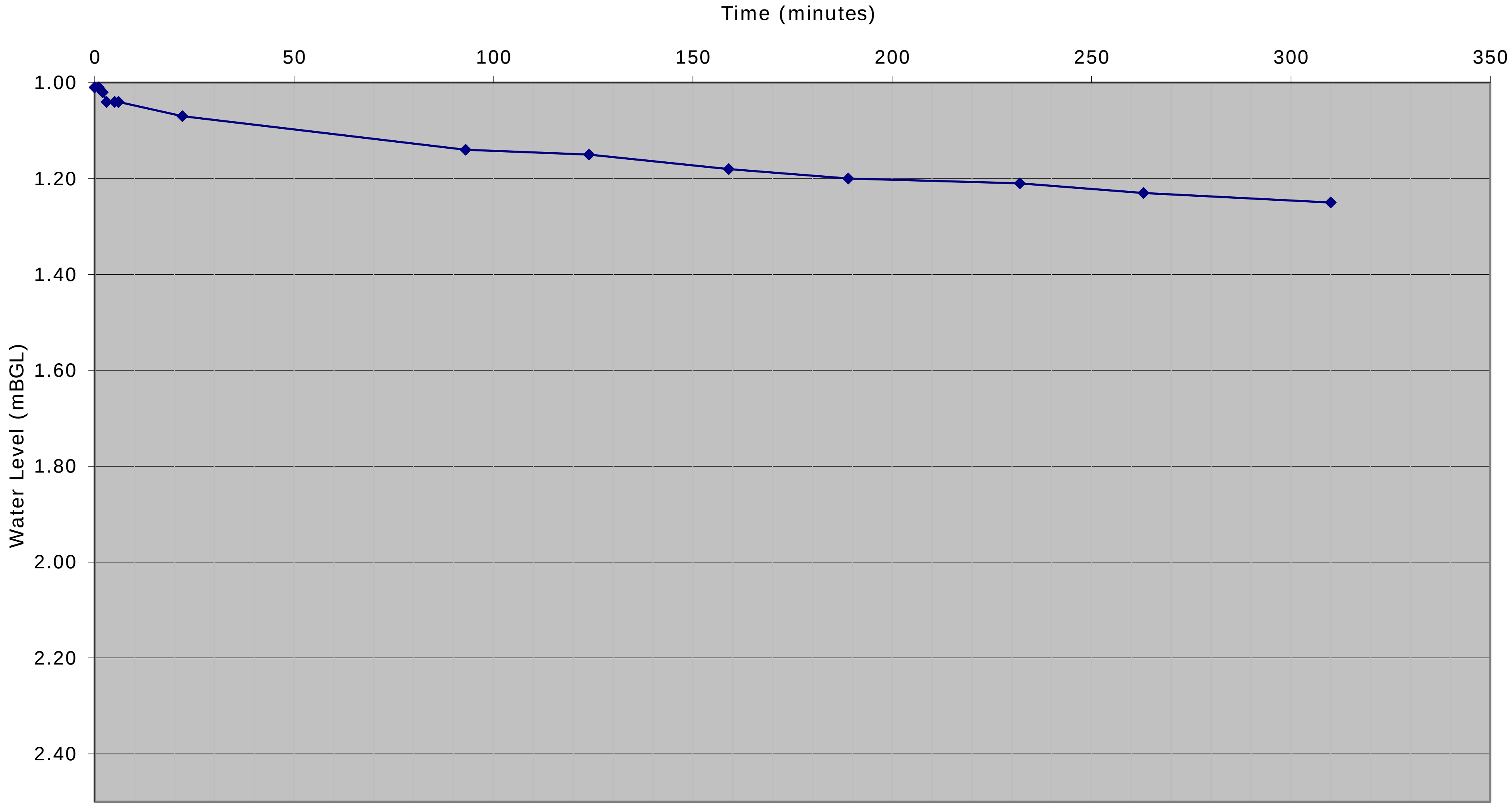
Soakaway Test Results
In Accordance with BRE 365 "Soakaway Design"

Calculations

Soil Infiltration Rate (f)	=	$(V_{p75-25}) / (a_{p50} \times t_{p75-25})$
Where		
V_{p75-25}	=	effective storage volume of water in the trial pit between 75% and 25% effective depth
	=	2.10 x 1.00 x 0.75
	=	1.5645 m^3
a_{p50}	=	internal surface area of the trial pit up to 50% effective depth and including the base area
	=	1.49 + 3.13 + 2.10
	=	6.719 m^2
t_{p75-25}	=	time for the water level to fall from 75% to 25% effective depth
		25% effective depth = 1.3825
		75% effective depth = 2.1275
	=	- mins
	=	0 mins
	=	0 secs
Soil Infiltration Rate (f)	=	$(V_{p75-25}) / (a_{p50} \times t_{p75-25})$
	=	1.5645 / 6.719 x 0
	=	#DIV/0! m/s

OTHER NOTES:

Soakaway Test Results - SA04



Soakaway Test Results
In Accordance with BRE 365 "Soakaway Design"

Job Title:	Ridgeway Lane, Lymington, Hampshire
Job No.:	18413
Client:	Vectos
Date:	Sep-18

Test No. SA06

Trial Pit Dimensions

Length (m):	2.20
Width (m):	1.00
Depth (m):	2.50
Start Water Level (m):	1.00
Total Depth of Test	1.50

Field Results

Time (minutes)	Water Level (mBGL)
0	1.00
1	1.02
2	1.02
3	1.02
4	1.02
5	1.02
14	1.02
41	1.02
64	1.03
98	1.03
125	1.03

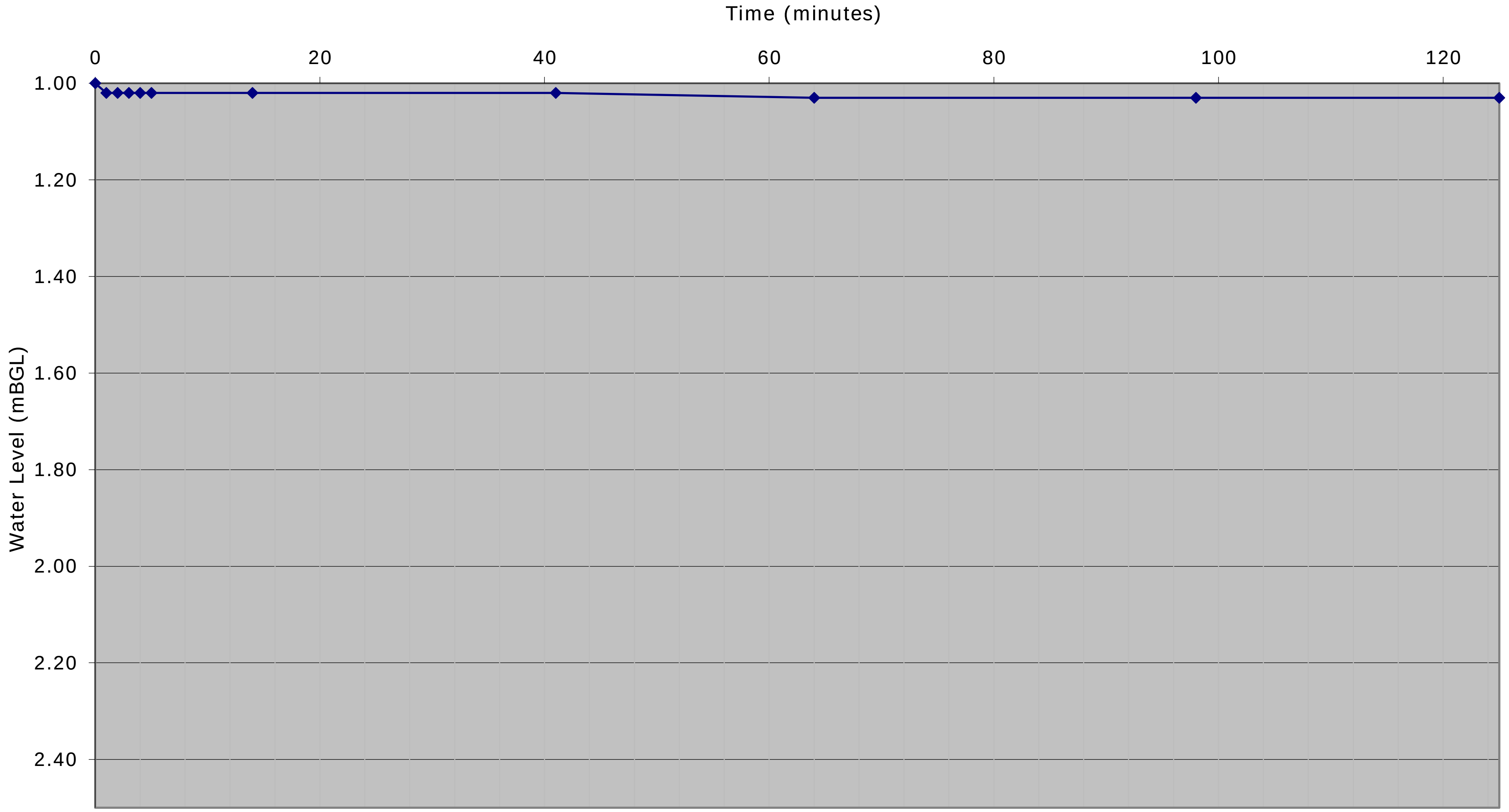
Soakaway Test Results
In Accordance with BRE 365 "Soakaway Design"

Calculations

Soil Infiltration Rate (f)	=	$(V_{p75-25}) / (a_{p50} \times t_{p75-25})$
Where		
V_{p75-25}	=	effective storage volume of water in the trial pit between 75% and 25% effective depth
	=	2.20 x 1.00 x 0.75
	=	$\underline{1.65}$ $\underline{m^3}$
a_{p50}	=	internal surface area of the trial pit up to 50% effective depth and including the base area
	=	1.50 + 3.30 + 2.20
	=	$\underline{7}$ $\underline{m^2}$
t_{p75-25}	=	time for the water level to fall from 75% to 25% effective depth 25% effective depth = 1.375 75% effective depth = 2.125
	=	- mins
	=	0 mins
	=	$\underline{0}$ $\underline{secs}$
Soil Infiltration Rate (f)	=	$(V_{p75-25}) / (a_{p50} \times t_{p75-25})$
	=	1.65 / 7 x 0
	=	<u>#DIV/0!</u> <u>m/s</u>

OTHER NOTES:

Soakaway Test Results - SA06



APPENDIX D

SITE PLANS

PROPOSED SITE LAYOUT

Site 1 = 91 Units
Site 2 = 24 Units
TOTAL = 115 Units

Rev.	Date	Details	Drawn	Checked
A	27.11.17	10 units removed, layout replanned in north part of site.	JT	ES

Issued for:

INFORMATION

Project/Client:
Land Adjoining
Ridgeway Lane

Project No: 15060

Dwg No: 001

Rev: A

Drawing:
Site Layout

Scale: 1:1000 @A1

Drawn By: JT Date: 04/07/17

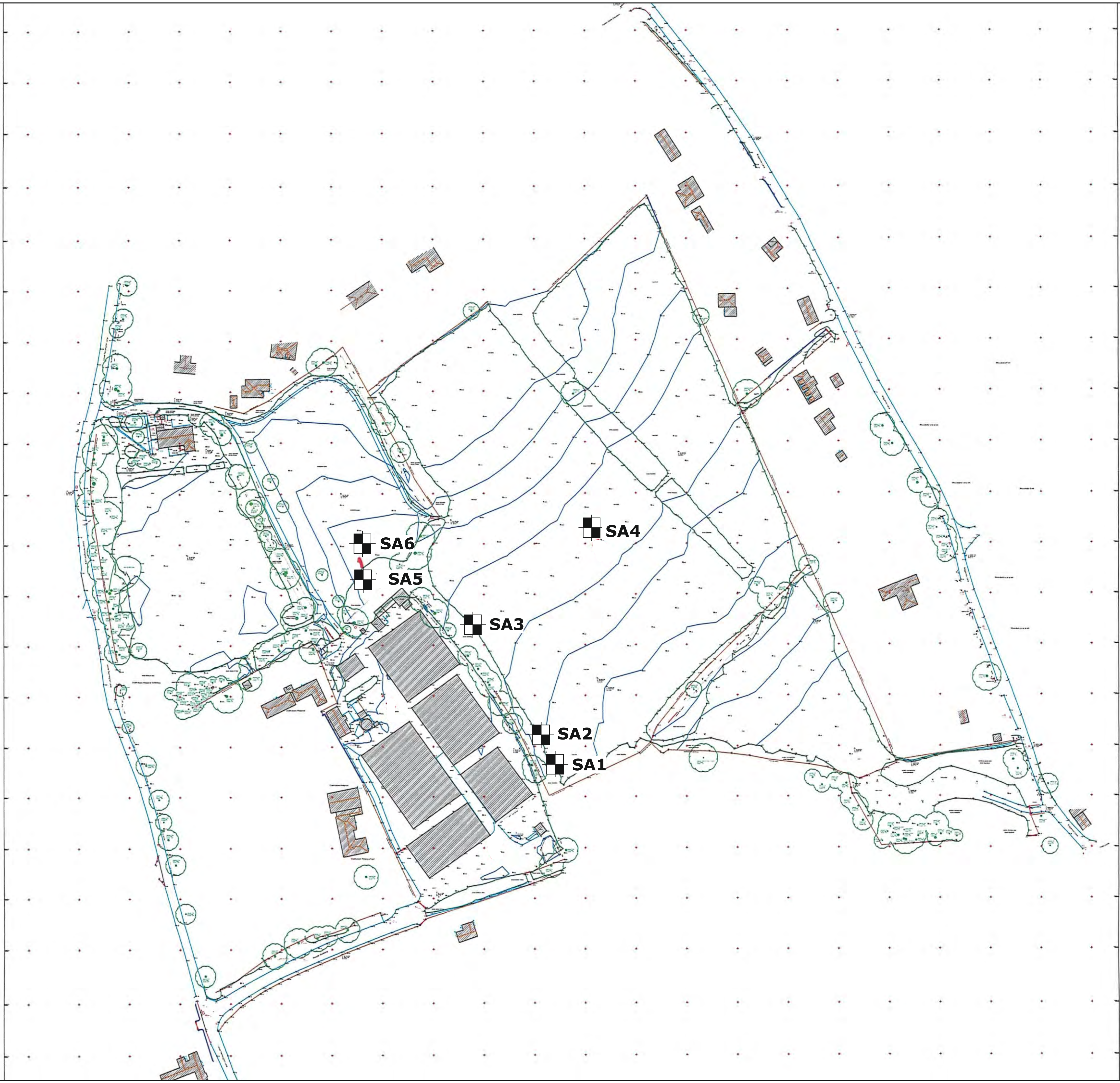
Checked By: JT Date: 04/07/17

BrightSpace architects

27 Glasshouse Studios, Fryern Court Road, Fordingbridge
Hampshire, SP6 1QX T: (01425) 655806/653639

© BrightSpace Architects Ltd. Contractors must work only to figured dimensions which are to be checked on site .
Registered Office - 17 Northover Rd, Pennington, Lymington, Hampshire, SO41 8GU. Registered Number - 07399008

SOAKAWAY TEST LOCATION PLAN



LEGEND:

Soakaway Test Location

NOTES:

Drawn on plan supplied by client

Job Title:	RIDGEWAY LANE LYMINGTON HAMPSHIRE
Drawing Title:	SOAKAWAY TEST LOCATION PLAN
Client:	VECTOS

Ruddlesden geotechnical ltd
The Stables
65 Langaton Lane
Pinhoe Exeter
EX1 3SP
www.ruddlesden.co.uk

Dwg. No:	18413/02
Date:	SEPT-18
Scale:	NTS

Appendix A. Southern Water Correspondence.

Southern Water

Mr Marcus Hunter
Vectos North Ltd
4th Floor Oxford Place
61 Oxford Street
Manchester
M1 6EQ

Developer Services
Southern Water
Sparrowgrove House
Sparrowgrove
Otterbourne
Hampshire
SO21 2SW

Tel: **0330 303 0119**
Email: ***developerservices@southernwater.co.uk***

Our Ref:
DS_CC_PDE-105342

Date:
06 November 2018

Site: Greenfield between Lower Pennington Lane & Ridgeway Lane northeast of Oakhaven Hospice, Lymington, Hampshire, SO41 8AA.

Dear Mr Hunter,

We have completed the capacity check for the above development site and the results are as follows:

Foul Water

Following initial investigations, there is currently adequate capacity in the local sewerage network to accommodate a foul flow for the above development at/downstream of manhole reference SZ3294**0001**. Please note that no surface water flows (existing or proposed) can be accommodated within the existing foul sewerage system.

There is currently inadequate capacity within the foul sewerage network to accommodate a foul flow for the above development at manhole reference SZ3193**6902**.

It should be noted that this information is only a hydraulic assessment of the existing sewerage network and does not grant approval for a connection to the public sewerage system. A formal S106 connection application is required to be completed and approved by Southern Water Services. Please see the link below:

https://developerservices.southernwater.co.uk/ConnectiontoPublicSewer/ApplicationForm

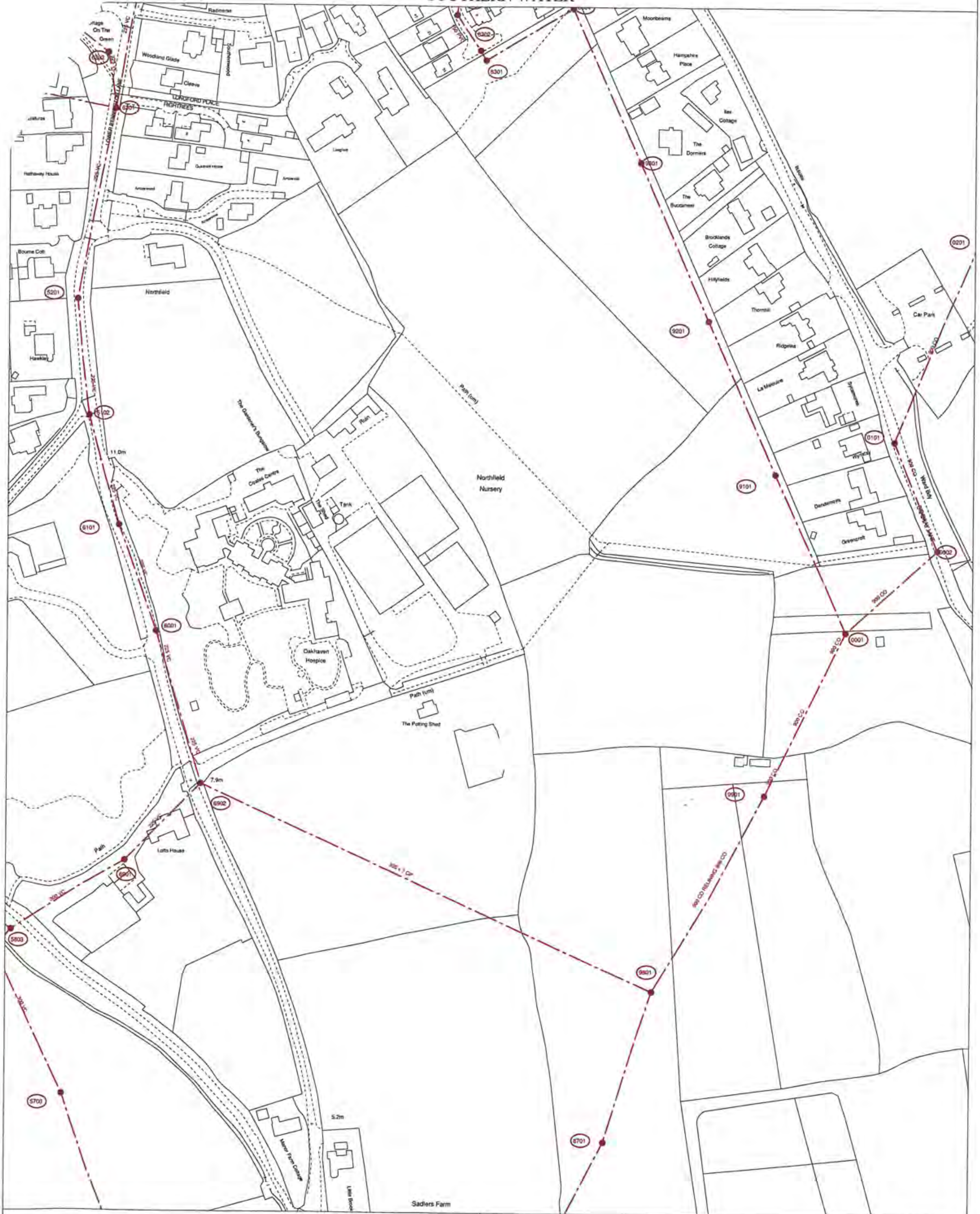
Should you require any further information, please contact us at the above mentioned phone number or address.

Yours sincerely,

Developer Services

Please note: -
The information provided above does not grant approval for any designs/drawings submitted for the capacity analysis. The results quoted above are only valid for 12 months from the date of issue of this letter.

SOUTHERN WATER



The positions of pipes shown on this plan are believed to be correct, but Southern Water Services Ltd accept no responsibility in the event of inaccuracy. The actual positions should be determined on site.

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Southern Water

O.S. REF: SZ3194SE

Scale: 1:1250

Sewer Plot

WARNING: BAC pipes are constructed of Bonded Asbestos Cement.

WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement.

N

Printed By: Roopa

Date: 26-10-2018

Site Plan

Requested By:

Tree schedule

Tree No	Species	Height (m)	Category	RPA Radius
G1	Cypress	18	C	10.2
G2	Hazel, goat willow, thorn	6	C	4.2
G3	Sycamore, cypress, lime, poplar, alder	7	C	4.2
T4	Field maple	10	C	5.4
T5	Field maple	10	B	5.4
G6	Cypress, oak, Norway maple, lime	18	C	10.2
T7	Oak	10	B	4.2
G8	Cypress, field maple	18	C	9.0
T9	Oak	8	C	7.2
G10	Cypress, alder, ash, goat willow, poplar	16	C	7.8
G11	Goat willow, hazel	6	C	7.8
T12	Oak	10	B	10.8
T13	Oak	10	B	7.8
T14	Beech	9	C	8.4
T15	Oak	10	B	6.6
T16	Hornbeam	12	B	10.8
G17	Thorn, holly, elm, goat willow	7	C	7.8
H18	Beech, ?????	3	C	2.4
T19	Willow	16	C	9.6
T20	Weeping willow	7	C	4.2
T21	Birch	10	B	5.4
H22	Cypress	2	C	3.0
G23	Poplar, holm oak, oak, thorn, silver maple, London plane, ash, lime	16	B	6.0
T24	Oak	9	B	7.8
T25	Oak	14	B	9.6
T26	Sycamore	9	B	5.4
T27	Oak	9	B	5.4
T28	Oak	12	C	6.6
T29	Oak	16	B	9.0
G30	Thorn, hazel	6	C	4.2

Tree No	Species	Height (m)	Category	RPA Radius
G30	Thorn, hazel	6	C	4.2
T31	Oak	16	C	9.0
T32	Oak	16	B	9.0
T33	Poplar	30	B	14.4
T34	Poplar	30	B	14.4
T35	Cherry	3	C	3.6
T36	Purple Norway maple	8	C	3.6
T37	Cherry	3	C	3.6
G38	Sycamore, hazel	7	C	4.2
T39	Oak	16	B	9.0
T40	Poplar	30	C	14.4
T41	Poplar	9	C	7.8
G42	Lime	8	C	4.2
T43	Poplar	18	U	7.8
T44	Poplar	30	C	15.0
T45	Horse chestnut	7	C	4.2
T46	Horse chestnut	7	C	4.2
T47	Oak	7	U	9.6
T48	Monterey cypress	12	U	8.4
T49	Monterey pine	30	B	14.4
T50	Poplar	30	C	13.2
T51	Poplar	30	C	12.0
T52	Poplar	30	C	10.8
T53	Monterey pine	30	B	15.0
T54	Beech	6	C	3.0
T55	Beech	10	B	3.6
T56	Poplar	18	U	9.6
T57	Beech	9	C	3.6
T58	Beech	7	C	3.6
T59	Monterey pine	25	B	14.4
T60	Beech	7	C	3.6
T61	Monterey pine	28	B	14.4
G62	Robinia, field maple, cherry, oak, laurel	18	B	7.2
T63	Ash	9	B	3.0
T64	Monterey pine	25	C	9.6

Tree No	Species	Height (m)	Category	RPA Radius
T65	Monterey pine	25	C	9.6
G66	Monterey pine, robinia, field maple	18	C	7.2
T67	Monterey pine	28	B	14.4
T68	Monterey cypress	24	C	8.4
T69	Monterey pine	25	C	13.2
T70	Monterey pine	30	C	14.4
T71	Monterey pine	30	C	13.2
T72	Monterey pine	0	U	12.0
T73	Monterey cypress	18	C	5.4
T74	Monterey pine	26	C	13.2
T75	Monterey cypress	16	C	7.2
T76	Oak	5	U	5.4
T77	Horse chestnut	12	C	5.4
T78	Sweet chestnut	8	B	5.4
T79	Monterey pine	25	B	7.8
T80	Monterey pine	25	C	10.2
T81	Monterey pine	30	C	12.0
G82	Field maple, oak	7	C	3.0
T83	Oak	18	A	14.4
T84	Sycamore	9	C	5.4
T85	Weeping willow	6	C	4.2
T86	Oak	23	A	14.4
T87	Oak	9	U	14.4
T88	Oak	7	B	7.2
T89	Oak	16	B	10.8
T90	Oak	7	C	4.2
T91	Oak	12	B	7.8
T92	Oak	14	B	7.8
T93	Oak	12	B	6.0
T94	Oak	12	B	8.4
T95	Oak	15	B	8.4
T96	Oak	10	B	7.2
T97	Oak	14	B	9.0
T98	Oak	14	B	8.4

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Do Not Release to Third Parties

Tree constraints plan
Location of trees, categorisation & development constraints at Lower Pennington & Ridgeway Lane, Lymington, Hampshire

Barrell Plan Ref: 18257-WIP 2018.Sept.20

Provided Plan Refs:
Lower Pennington Lane-Ridgeway Lane - TOPOGRAPHICAL.dwg

barrell TREE CONSULTANCY

Permission is granted to scale from this drawing for Local Authority Planning Approval purposes relating to tree protection measures only. Where applicable this drawing is to be read in conjunction with the arboricultural report. This drawing is the copyright of Barrell Tree Consultancy 2018. ©

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www.barrelltreecare.co.uk

TX	BS category A	Trees of high quality
TX	BS category B	Trees of moderate quality
TX	BS category C	Trees of low quality
TX	BS category U	Trees unsuitable for retention
	Estimated tree positions not included on original land survey and adjusted crown spreads	

Purpose of this plan and its annotation

This constraints plan provides sufficient information to interpret the tree constraints when designing a new layout. This guidance must be carefully reviewed with the individual tree information provided in the schedule on this plan. If there is any doubt about how to interpret this information, you must check it out with Barrell Tree Consultancy (BTC) on 01425 651470 or info@barrelltreecare.co.uk.

The number of each tree, hedge and group is highlighted in colour to enable quick identification of tree categories. Category A and B trees are green; category C and U trees are blue. The number of each A and B tree is set inside a green triangle; the number of each C and U tree is set inside a blue rectangle. Category A trees are shown with double triangles and U trees are shown with double rectangles. Zone 1, indicating the RPA where no ground disturbance should occur, is annotated with dark shading. Zone 2, indicating where shading, dominance and/or future growth may be an issue, is annotated with light shading.

How to use the constraints information

Our interpretation of the starting-point recommendations of BS 5837(2012) is that only category A and B trees are sufficiently important to influence a layout, so the category C and U trees are discounted in this constraints advice. The constraints that the A and B trees are likely to impose have been assessed as follows:

Zone 1 (dense coloured shading): This is called the root protection area (RPA) where ground disturbance must be carefully controlled. If encroachment is planned within the RPA, then this must be assessed on a tree-by-tree basis by BTC. If important trees are to be successfully retained, no significant disturbance should occur within the RPA and a high level of care is needed when working within it.

Zone 2 (light coloured shading): The second constraint is where shading/dominance/future growth may be an issue and is our estimate of how much space may be needed to retain trees after the development activity when the pressures of residential occupation come to bear. Factors such as crown density, future growth potential, orientation in relation to the sun and the number of trees in groups are considered to arrive at this second, less restrictive, constraints zone. Zone 2 is not normally suitable for occupied buildings, but uninhabited structures and hard surfacing may be acceptable within it.

Zone 3 Nominal RPA radii for category C trees:
Low quality only to be considered for retention if there is scope within the layout and they do not compromise the potential to establish new trees of higher future sustainability.

Designers should try to avoid the loss of category A and B trees because the LPA will consider them important in determining the full impact of the proposal. Category C trees can be considered for retention if there is scope within the scheme. However, their loss should not be a material constraint and layouts do not have to be designed around keeping them. As a starting point in the design process, no significant disturbance should occur within the RPA of any category A and B trees shown as zone 1. There is sometimes scope to reduce this slightly in some directions if a corresponding increase can be achieved in other directions that results in the RPA remaining the same. However, such changes should be the exception rather than the rule and must be assessed on a tree-by-tree basis by BTC.
Under some circumstances, it may be acceptable to place footpaths, roads, services (including drains and soakaways) and unoccupied buildings within zone 1, but special precautions will be required and should be detailed after consultation with BTC. However, designers should always remember that the more encroachment there is into the RPA, the more likely the LPA are to object to the layout. Further consideration is required for occupied buildings; areas within the existing or future crown spread of retained trees or in areas of excessive shade should be avoided. This is the zone 2 illustrated on the plan. Exceptionally, non-inhabited buildings such as garages may be acceptable within zone 2, but this would not normally apply to residential occupied buildings. Pruning overhanging branches may also be an option, but often prompts objections from LPAs. If such pruning is proposed, BTC must advise on the implications.

Limitations and warnings

- This plan is confidential to the client and should not be released to any third parties without authorisation
- It does not consider any ecological or other constraints that may exist on the site
- Assessing constraints is subjective, especially the zone 2 advice, and the LPA may not agree with the BTC interpretation
- The plan is based on provided information and should only be used for dealing with the tree issues
- All scaled measurements must be checked against the original documents
- This constraints guidance is preliminary and only suitable for drawing up initial design proposals
- Further consultation with BTC is essential before finalising any layout