



Drake Way Car Park Reading

Transport Statement

For Diageo Pension Trust Ltd

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1. INTRODUCTION

1.1 The Planning Application

- 1.1.1 Hydrock has been instructed by Diageo Pension Trust Ltd to prepare a Transport Statement [TS] in support of a planning application for a proposed 82-space car park off Drake Way, Reading.
- 1.1.2 The proposals are required to provide additional capacity to the local businesses, including the nearby Reading Circle Hospital.
- 1.1.3 Under Planning Application No:190374 the proposed development site has permission for 74 spaces which was classified as a new and extended surface level car sales area including landscaping and associated works.
- 1.1.4 This TS will consider the impact of the proposed development on the local highway network.

1.2 Scoping

- 1.2.1 Hydrock have undertaken pre-application scoping discussions via email with Reading Borough Council [RBC] Highways Team in September 2020. A copy of the email correspondence with RBC highways team is presented in **Appendix A** of this TS.

1.3 Site Location and Background

- 1.3.1 The application site is located south of Reading town centre, to the west of Drake Way. The site is adjacent to a BMW car dealership. The site is bound to the east by Drake Way, to the south by a site access road and to the west by the BMW car dealership building.
- 1.3.2 The location of the site is illustrated in **Figure 1.1** below.

Figure 1.1: Site Location



Source: OpenStreetMap

- 1.3.3 This TS has been developed in accordance with the now superseded DfT document "Guidance on Transport Assessment" [GoTA] (2007) and gives due regard to the NPPG "Transport Evidence in Plan Making" document. It sets out the transport matters relating to the development site and provides details of the development proposals, including an assessment of the predicted traffic flows, the corresponding impact on the surrounding highway network and matters associated with accessibility and connectivity.
- 1.3.4 The report seeks to conclude that the proposed development can be accommodated without detriment to the operational capacity or safety of the local highway network and that it can be suitably accessed on foot.

1.4 Structure of Report

- 1.4.1 This report comprises seven sections, including this introduction:
- **Section 2** offers a site description and review of the existing conditions;
 - **Section 3** considers the national and local transport policy;
 - **Section 4** assesses the sustainable accessibility of the site;
 - **Section 5** outlines the development proposals;
 - **Section 6** summarises the traffic impact of the development; and,
 - **Section 7** sets out the summary and conclusions.

2. EXISTING CONDITIONS

2.1 Site Location and Description

2.1.1 The application site is located south of Reading town centre, to the west of Drake Way. The site is adjacent to a BMW car dealership. The site is bound to the east by Drake Way, to the south by a site access road and to the west by the BMW car dealership building.

2.1.2 It is situated to a number of existing businesses including:

- Circle Reading Hospital;
- Hilton Reading;
- Multiple Car Dealerships; and
- Residential dwellings.

2.1.3 The surrounding area to the north, south and east features streets of a mix of business park and residential character

2.2 Highway Network

2.2.1 The following sub-sections offer a full description of the local highway network, including infrastructure characteristics and local highway traffic conditions.

Drake Way

2.2.2 Adjacent to the application site, Drake Way is a single 6.5m carriageway two-way road that is subject to a 30mph speed limit. Drake Way benefits from street lighting and accommodates a shared footway/cycleway on its western side, and a traditional footway on its eastern side respectively.

2.2.3 Approximately 85m to the south of the application site, the termination of Drake Way prevents a vehicular link onto Commercial Road. However, whilst the presence of numerous bollards prevent access for vehicles onto Commercial Road, access for pedestrians and cyclists is still possible.

2.2.4 Around 280m to the north of the site, Drake Way meets Lindisfarne Way at a priority-controlled T-junction.

2.2.5 Drake Way is illustrated in **Figure 2.2** below.

Figure 2.1: Drake Way (looking Northbound)



Source: GoogleMaps © - Accessed 14/10/20

Lindisfarne Way

- 2.2.6 Lindisfarne Way is a single carriageway two-way road that is subject to a 20mph speed limit.
- 2.2.7 To the east of the junction between Drake Way and Lindisfarne Way, Lindisfarne Way connects to a number of residential properties and wider residential streets located east of the application site via Whale Avenue.
- 2.2.8 Around 100m to the west of the junction between Drake Way and Lindisfarne Way, Lindisfarne Way meets the A33 and Island Road at a 4-arm traffic signal-controlled junction.
- 2.2.9 Lindisfarne Way is illustrated in **Figure 2.2** below.

Figure 2.2: Lindisfarne Way



Source: GoogleMaps © - Accessed 14/10/20

A33

- 2.2.10 The A33 forms one of the principal north-south routes through Reading and, within close vicinity of the site, is a wide dual-carriageway road that is subject to a 40mph speed limit.
- 2.2.11 To the north of the application site, the A33 forms a route toward Reading town centre via the A329, whilst to the south it connects to additional light industry and business areas before forming one of the main routes south out of Reading via the 4-arm M4 interchange junction.
- 2.2.12 **Figure 2.3** illustrates the A33's junction with Lindisfarne Way. As can be seen this is a large signalised arrangement,

Figure 2.3: A33 (North Direction)



Source: GoogleMaps © - Accessed 15/10/20

2.3 Accident Analysis

2.3.1 The DfT document “Guidance on Transport Assessment” states that:

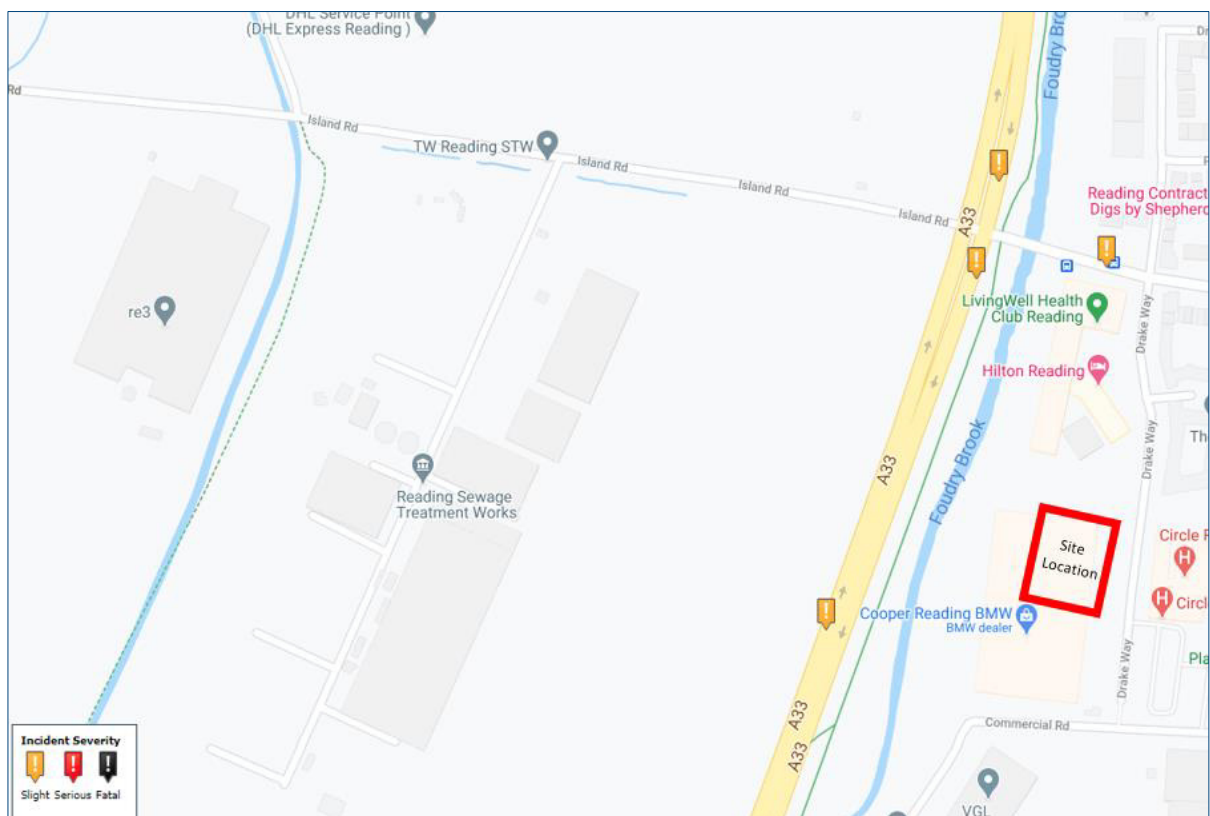
“Critical locations on the road network with poor accident records should be identified. This is to determine if the proposed development will exacerbate existing problems or, if proposed, whether highway mitigation works or traffic management measures will help to alleviate the problems”.

2.3.2 This subsection considers the accident record within the local study network to establish if there are any specific highway safety issues that need to be considered.

2.3.3 A review of the Personal-Injury Accidents (PIAs) recorded within the study area has been undertaken using the most recently available five-year data (1st January 2015 - 31st December 2019) available from the DfT. Examination of the PIA data revealed that 4 accidents have occurred within the study area during the five-year period.

2.3.4 **Figure 2.4** illustrates the accident plot for the study area for the most recent 5-year period, as obtained from Crashmap.

Figure 2.4: Study Area Collision Data Map



Source: Crashmap

2.3.5 The figure illustrates that 3 minor accidents occurred along the A33 and 1 along Lindisfarne Way. The yearly breakdown is summarised in **Table 2.1** below.

Table 2.1: Accident Data Summary

Severity	2015	2016	2017	2018	2019
Slight	0	1	1	2	0
Serious	0	0	0	0	0
Fatal	0	0	0	0	0
TOTAL	0	1	1	2	0

- 2.3.6 From the above it is evident that the accident record within the vicinity of the site is very modest, with on average less than accidents per year occurring within the study area in the last 5 years. There have been no serious or fatal accidents within the study network during the analysed period.
- 2.3.7 Whilst all accidents are unfortunate it is Hydrock's view that the occurrence is random and can be attributed to random fluctuations, circumstantial factors and driver behaviour as the main causes and therefore do not give rise to a material concern.

3. TRANSPORT POLICY CONTEXT

3.1 Preamble

- 3.1.1 In order to assess the proposals and develop a transport access strategy for the proposed development, it is necessary to review both local and national transport planning guidance.
- 3.1.2 The following sections outline the relevant policy and guidance documents in respect of the proposed development.

3.2 National Planning Policy Framework

- 3.2.1 The NPPF sets out the Government's policies for delivering sustainable development through the planning system. Local authorities are required to take these policies into account when formulating local development plans and when determining planning applications.
- 3.2.2 The most recent NPPF report was published in February 2019 and sets out the Government's planning policies for England and how these are expected to be applied at a local level. The NPPF is a significant material consideration in plan making and decision taking.
- 3.2.3 Paragraph 102 seeks to encourage opportunities to promote walking, cycling and public transport use. This is supplemented by paragraph 103 which states that development should be focused in sustainable locations and offer a genuine choice of transport modes.
- 3.2.4 Development proposals should also give priority to pedestrian and cycle movements and facilitate access to high quality public transport. The needs of people with disabilities and reduced mobility should also be addressed (paragraph 110).
- 3.2.5 Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.
- 3.2.6 Priority should be given to walking, cycling and public transport movements; conflicts between vehicles and vulnerable road users should be minimised through effective layout design.
- 3.2.7 Having regard to the above objectives, the proposed site access strategy includes measures to connect the site with the adjacent community and sustainable travel network, including existing public transport services. This TP considers the accessibility of the site by all modes and proposes a layout and access strategy that seeks to maximise the use of sustainable modes.

3.3 Planning Practice Guidance: Travel Plans, Transport Assessments and Statements in Decision-Making

- 3.3.1 In March 2014, the Department for Communities and Local Government [DCLG] in conjunction with the Department for Transport [DfT], released advice on when transport assessments and transport statements are required and what they should contain, which is intended to assist stakeholders in determining whether an assessment may be required. If an assessment is required, the level and scope of that assessment is then outlined within the document.
- 3.3.2 The advice reflects current Government policy, promoting a shift from the 'predict and provide' approach to transport planning to one more focused on sustainability. The document focuses on encouraging environmental sustainability, managing the existing network and mitigating the residual impacts of traffic from the development proposals.

3.4 Manual for Streets [MfS]

- 3.4.1 Manual for Streets (March 2007 and Sept 2010) supersedes Places Streets & Movement and Design Bulletin 32. Manual for Streets should now be used where 85th percentile monitored traffic speeds are less than 37mph.
- 3.4.2 The Manual deals with first principles in respect of what a street is for. It outlines five principle functions, namely:
- Place;
 - Movement;
 - Access;
 - Parking; and
 - Drainage and utilities.
- 3.4.3 A sense of place encompasses a number of characteristics, namely, local distinctiveness, visual quality and human interaction. Of the five functions, place and movement are the most important in determining the character of streets and should be considered together, as opposed to in isolation.
- 3.4.4 In new developments, Manual for Streets highlights that locations with a relatively high place function would be those where people are likely to gather and interact with each other, such as the town centre.
- 3.4.5 In section 3 of the document, the design process highlights that the design of a scheme should follow the user hierarchy shown in **Table 3.1**:

Table 3.1: User Hierarchy (taken from Table 3.2 of MfS, March 2007)

Consider First	Pedestrians
	Cyclists
	Public transport users
	Specialist service vehicles (e.g. emergency services, waste etc.)
Consider Last	Other motor vehicles

3.5 Guidelines for Providing Journeys on Foot

- 3.5.1 Various walking distances are quoted in the Chartered Institution of Highways and Transportation's (CIHT's) "Guidelines for Providing for Journeys on Foot". **Table 3.2** (taken from Table 3.2 of the document) sets out the acceptable walking distances in various contexts:

Table 3.2: Acceptable Walking Distances

Criteria	Town Centre (m)	School / Commuters (m)	Elsewhere (m)
Desirable	200	500	400
Acceptable	400	1,000	800
Preferred Maximum	800	2,000	1,200

3.6 Reading Borough Council Local Transport Plan (3) – 2011-2026 (Adopted April 2011)

3.6.1 Access on foot, cycle and public transport is discussed in the following section of this report. RBC Local Transport Plan (LTP) was adopted in the April 2011 and contains the objectives, policies and schemes intended to improve transport within the local area.

3.6.2 The LTP is supported by a number of additional documents such as Reading's Strategic Environmental Assessment (SEA). The LTP also has a number of 'daughter' documents which cover topics such as:

- School Travel;
- Road Safety;
- Public Transport;
- Walking;
- Cycling; and
- Network Management.

3.6.3 The policies and objectives contained within the LTP contribute towards RBC's vision that:

"Transport in Reading will better connect people to the places that they want to go: easily, swiftly, safely, sustainably and in comfort. We will meet the challenges of a dynamic, low-carbon future to promote prosperity for Reading.

Whichever way you choose to travel, by foot or bicycle, motorcycle, bus, rail, car or boat whether to work or education, to leisure or the services you need, our transport system will help you get there."

3.6.4 The strategic objectives for the LTP are split into three categories: people, place and prosperity. A number of these objectives are listed below:

- To provide affordable, accessible and inclusive travel options for everyone;
- To align transport and land use planning to enable sustainable travel choices, improve mobility, reduce the need to travel and preserve the natural environment;
- To offer sustainable transport choices for the Travel to Work Area and beyond, integrating within and between different types of transport; and
- To improve journey times, journey time reliability and the availability of information.

3.7 Reading Borough Council Local Transport Plan (4)

3.7.1 Reading Borough Council are in the process of producing an updated Local Transport Plan (LTP4).

3.7.2 LTP4 vision will seek to support healthy lifestyle choices, improve quality of life and facilitate economic growth by reducing congestion, improving air quality and promoting sustainable transport options for local journeys or as part of longer journeys.

3.7.3 This vision will be outlined in the core LTP strategy and further detailed in supporting sub-strategies that will set out our long-term goals and aspirations for a Reading that is clean, green, safety and active. As part of the Plan, we are proposing to develop a borough-wide car parking and air quality strategy to address commuter and through traffic.

- 3.7.4 This will be further complemented by ambitious improvements supporting more people to make sustainable travel choices, including the development of a new Local Cycling and Walking Infrastructure Plan that will identify new routes and improvements based on key destinations.

3.8 Reading Borough Council Local Plan

- 3.8.1 The Local Plan for Reading is the document that contains the policies for how Reading will develop up to 2036, which is the end date of the plan. It identifies the amount of development that will take place, the areas and sites where development is expected to be accommodated, and where it will be restricted, and sets out policies for how planning applications will be decided.
- 3.8.2 Within Chapter 4 General Policies, sub section 4.5 Transport of the Local Plan are a number of policies pertinent to the application site insofar as they concern transport matters.

Policy TR1: Achieving the Transport Strategy

"Proposed development should contribute appropriately to meeting the objectives of the most up-to-date Local Transport Plan or any successor document, including sub-strategies, specific projects identified and the local action plans.

Planning permission will not be granted for major development proposals unless there is a commitment to implement measures to promote and improve sustainable transport facilities, such as through provision to encourage walking, cycling and the use of public transport; and through agreed travel plans, safe routes to local facilities and services, including schools and parks, and similar measures.

Policy TR3: Access, Traffic and Highway-related Matters

"Development will only be permitted where:

ii) The development would not have a material detrimental impact on the functioning of the transport network..."

3.9 Summary

- 3.9.1 The above policy review summarises the transport policies relevant to the proposed development site. As such it sets out the context in which the proposed development needs to be compliant.
- 3.9.2 Throughout this TS it will be demonstrated that the proposed development scheme will be designed to satisfy the key policy objectives.

4. SUSTAINABLE ACCESSIBILITY

4.1 Accessibility on Foot

- 4.1.1 Pedestrian access to the site can be achieved from the access road located immediately to the north of the site, or from Drake Way to the east of the site.
- 4.1.2 Pedestrian access to the site from the access road to the north is achieved via the pedestrian footway on the southern side of the access road. The footway is wide, benefits from street lighting and is constructed with block paving that also accommodates a number of off carriageway car parking spaces. The footway provides direct access to the vehicle forecourt/car parking area located adjacent to existing site buildings.
- 4.1.3 Pedestrian access to the site from Drake Way is via the pedestrian footway located on the northern side of the site access junction onto Drake Way. Safe pedestrian access through the vehicle forecourt at the site is accommodated via zebra-style pedestrian crossings and small sections of footway which provide direct routes to the existing site building entrances. Such pedestrian facilities ensure that visitors do not need to walk between, or alongside, vehicles circulating the forecourt.
- 4.1.4 To the north of the application site on Drake Way, footways are accommodated on either side of the carriageway. The footway on the western side of the carriageway is constructed as a shared footway/cycleway and both footways benefit from street lighting.
- 4.1.5 Approximately 200m to the north of the site, the footways on either side of Drake Way merge with those provided on the southern side of Lindisfarne Way at the crossroads style junction of Drake Way with Lindisfarne Way.
- 4.1.6 To the east of the junction, the footways on Lindisfarne Way provide a route through to a nearby residential area, whilst to the west of the junction the footways provide access to two nearby bus stops, located approximately 295m north of the application site, on the northern and southern sides of Lindisfarne Way respectively.
- 4.1.7 Further to the west the footways on Lindisfarne Way merge with the footway provided on the eastern side of the A33, before forming a route toward a local bus stop, located approximately 400m to the northwest of the application site, on the eastern side of the A33.
- 4.1.8 To the south of the application site on Commercial Road, footways are provided on either side of the carriageway. The footways are of good width and benefit from street lighting. To the east, the footways form a route toward a nearby residential area, as well as additional light industrial businesses to the south east.
- 4.1.9 Overall, within close vicinity of the application site, pedestrian infrastructure is considered to be good with dropped kerb pedestrian crossings generally present where required. In addition, zebra-style crossings are present across the existing vehicle forecourt/car park at the application site and traffic signal-controlled pedestrian crossings are present across the Lindisfarne Way, A33 (South) and Island Road arms of the traffic signal-controlled junction of the A33 with Island Road and Lindisfarne Way, located to the northwest of the site.

4.2 Conclusions

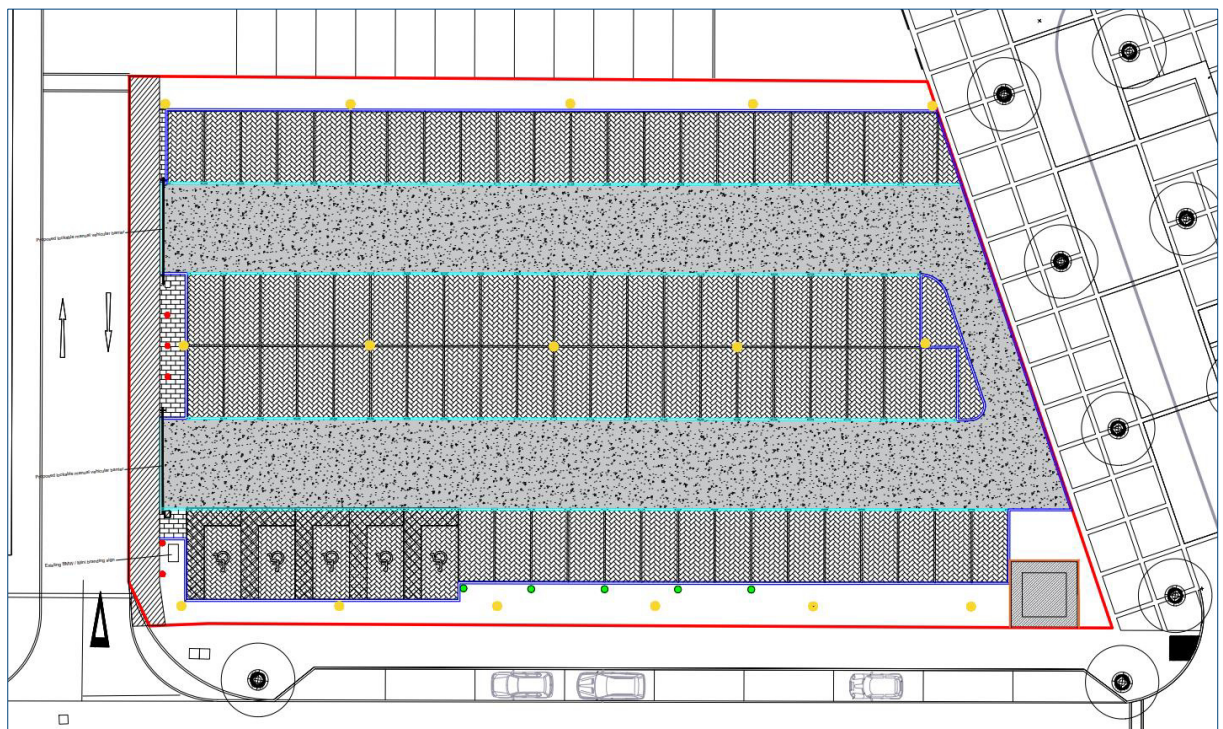
- 4.2.1 In summary, the proposed development site is located in an accessible location and is well located to make use of the existing pedestrian routes to link the site with the local businesses.

5. DEVELOPMENT PROPOSALS

5.1 Overview

- 5.1.1 This section of the TS outlines the details of the development proposal at the site.
- 5.1.2 As previously stated, the proposed planning application is for an 82-space car park, inclusive of 5 disabled, off Drake Way, Reading.
- 5.1.3 In context under Planning Application No:190374 the proposed development site has permission for 74 spaces which was classified as a new and extended surface level car sales area including landscaping and associated works.
- 5.1.4 The latest site Layout prepared by scheme architects is illustrated in **Figure 5.1**, with a copy provided in **Appendix B**.

Figure 5.1: Proposed Site Layout



Source: Davies Landscape Architects

5.2 Schedule of Parking

- 5.2.1 The following schedule of parking is proposed at the site:

- 77 x Standard Spaces (10 electric); and
- 5 x Disabled.

Total = 82 Spaces

5.3 Site Access Arrangement

Vehicular Access

- 5.3.1 The development site is to be accessed via the BMW access road which currently comprises a circa 6m carriageway width. The car park will have a circulatory one-way system served by an access and egress junction. The proposed vehicular site access arrangement comprises no anticipated change in gradient from street level.
- 5.3.2 The proposed site access will utilise the existing pedestrian footway on the BMW access road with appropriate corner radii with associated dropped kerbs and tactile paving.

5.4 Parking

Vehicle

- 5.4.1 As per the Reading Borough Local Development Framework Revised Parking Standards and Design, adopted 2011, the car parking spaces are designed to be 5.0 long x 2.5m wide.
- 5.4.2 The provision of 5 disabled spaces is compliant with the Council's guidance requirement of 3 disabled spaces or 5%, whichever is greater.
- 5.4.3 In addition, the above over >10% of spaces will be active charging points for electric vehicles (total of 10).
- 5.4.4 Swept path analysis has been undertaken with a large car to demonstrate that all parking manoeuvres can be performed safely and efficiently. The drawings are presented in **Appendix C**. The drawings demonstrate that the proposed layout is suitable and all parking manoeuvres can be safely and efficiently performed.

5.5 Letter of Support

- 5.5.1 In support of the proposed development, Reading Circle Hospital whom currently suffer car parking capacity issues have provided evidence to suggest that the proposed development would be beneficial for the existing Hospital facility.
- 5.5.2 The capacity of the hospital car park is often exceeded with staff/visitors having trouble parking at the hospital site and are therefore parking on-street. This therefore removes local parking capacity for other local businesses.
- 5.5.3 By having another designated car park within close proximity of the Hospital, the hospital could advise visitors of the option of parking at this location, therefore reducing the need to vehicles to circle around the area looking for a space.
- 5.5.4 Further to this, the additional disabled parking would be beneficial to mobility impaired visitors to the site.
- 5.5.5 A copy of this letter is included in **Appendix D** for reference.

6. TRIP GENERATION

6.1 Introduction

- 6.1.1 This section of the report considers the trip generation levels associated with the proposed development and the impact it will have on the local highway network.
- 6.1.2 Under the proposed application, the site comprises 82 car parking spaces with the primary use of the car park being used as an overspill for the Circle Reading Hospital which currently suffers capacity issues.
- 6.1.3 As previously stated, it should be noted that under Planning Application No:190374, the proposed development site already has permission for 74 spaces.

6.2 Trip Generation

- 6.2.1 This section of the report considers the trip generation levels associated with the proposed development and the impact it will have on the local highway network. Under the proposed planning application, the site comprises an 82-space car park, inclusive of 5 disabled spaces.

6.3 Trip Generation

- 6.3.1 To determine the vehicular trips in the morning and evening peaks, Hydrock have assumed that all 82 vehicle trips would enter/leave the car park within a two-hour window (i.e. incoming between 07:00-09:00 and outgoing 16:00-18:00).
- 6.3.2 Notwithstanding, in reality the parking profile is likely to fluctuate across the day, however for assessment purposes, the above methodology can be considered a reasonable worst case. The peak hour arrivals and departures is illustrated in **Table 6.1** below.

Table 6.1: Proposed Car Park Trip Generation

	Weekday AM Peak (08:00-09:00)		Weekday PM Peak (16:00-17:00)	
	Arrivals	Departures	Arrivals	Departures
Total Trips	41	0	0	41

- 6.3.3 It can be seen from the above table that the proposed car park will generate the following two-way trips:
 - 41 in the morning peak; and
 - 41 in the evening peak.

6.4 Highway Impact

- 6.4.1 Further to the above Hydrock have undertaken a turning count survey of the A33 / Lindisfarne Way / Island Road signalised junction. The survey was undertaken on the 22/10/2020 (which was outside the lockdown periods) and the raw data is located within **Appendix E** for reference and the associated Traffic flow diagrams are presented in **Figures 1 to 7**.
- 6.4.2 The proposed development traffic associated with the car park has been distributed via the proportions of the A33 north/south movements.

- 6.4.3 As can clearly be seen from **Figure 6** the proposed development flows, even with the robust assumption set out above, the additional vehicular flows will not have a material impact on the signalised A33 / Lindisfarne Way / Island Road junction.
- 6.4.4 It should also be noted that the extant permission, with only a slightly smaller car park, would have an associated level of trip generation; however, this has been discounted for robustness.

6.5 Summary

- 6.5.1 The trip generation analysis above indicates that the proposed development will not have a detrimental impact on the local highway network across the peak hour periods. Therefore, it is deemed unwarranted for any operational capacity assessments to be undertaken and the development impact can be suitably accommodated by the existing infrastructure.
- 6.5.2 As such, it is Hydrock's view that the development impact on the local network is immaterial, and does not require further consideration.

7. SUMMARY AND CONCLUSION

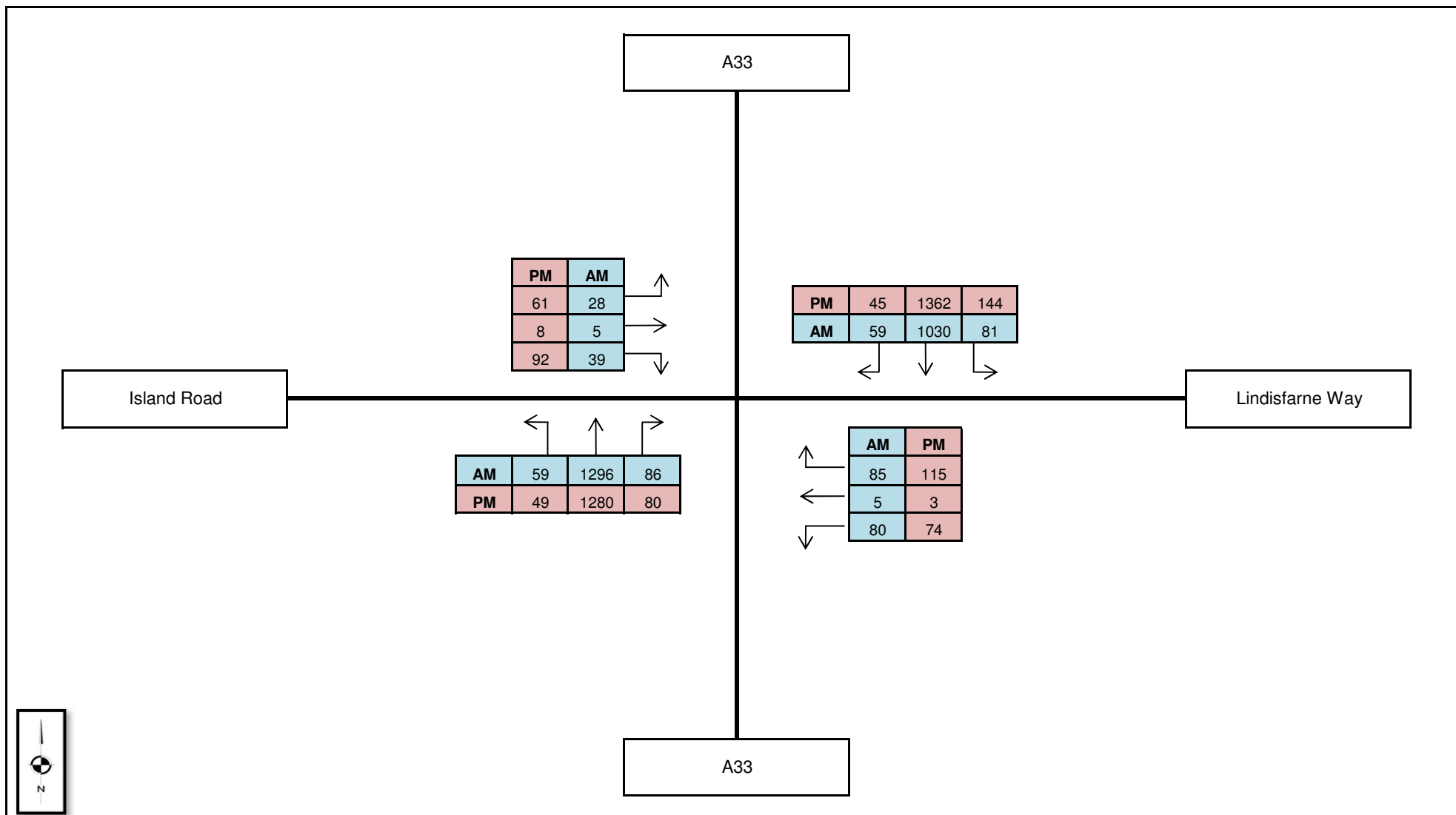
7.1 Summary

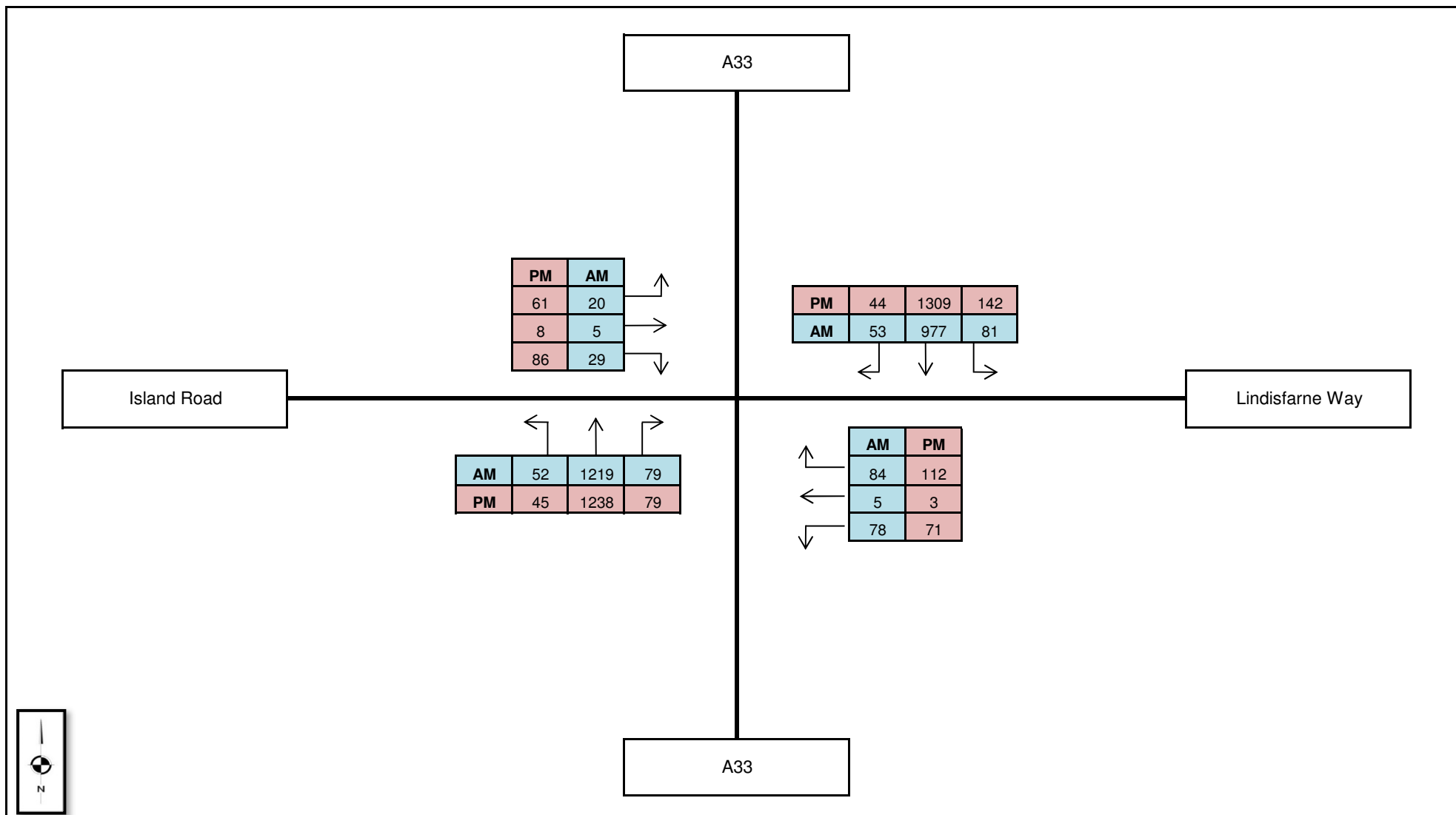
- 7.1.1 Hydrock has been instructed by Diageo Pension Trust Ltd to prepare a TS in support of a planning application for a proposed 82 space car park off Drake Way, Reading.
- 7.1.2 The proposals are required to provide additional capacity to the local businesses, including the nearby Reading Circle Hospital.
- 7.1.3 Under Planning Application No:190374 the proposed development site has permission for 74 spaces which was classified as a new and extended surface level car sales area including landscaping and associated works.
- 7.1.4 The application site is located south of Reading town centre, to the west of Drake Way. The site is adjacent a BMW car dealership. The site is bound to the east by Drake Way, to the south by a site access road and to the west by the BMW car dealership building.
- 7.1.5 The proposed development site is located in an accessible location and is well located to make use of the existing pedestrian routes to link the site with the local businesses.
- 7.1.6 The swept path analysis undertaken has demonstrated that the proposed arrangement is suitable and all turning, access, egress and parking manoeuvres can be performed safely.
- 7.1.7 NPPF (February 2019 - paragraph 109) states that:

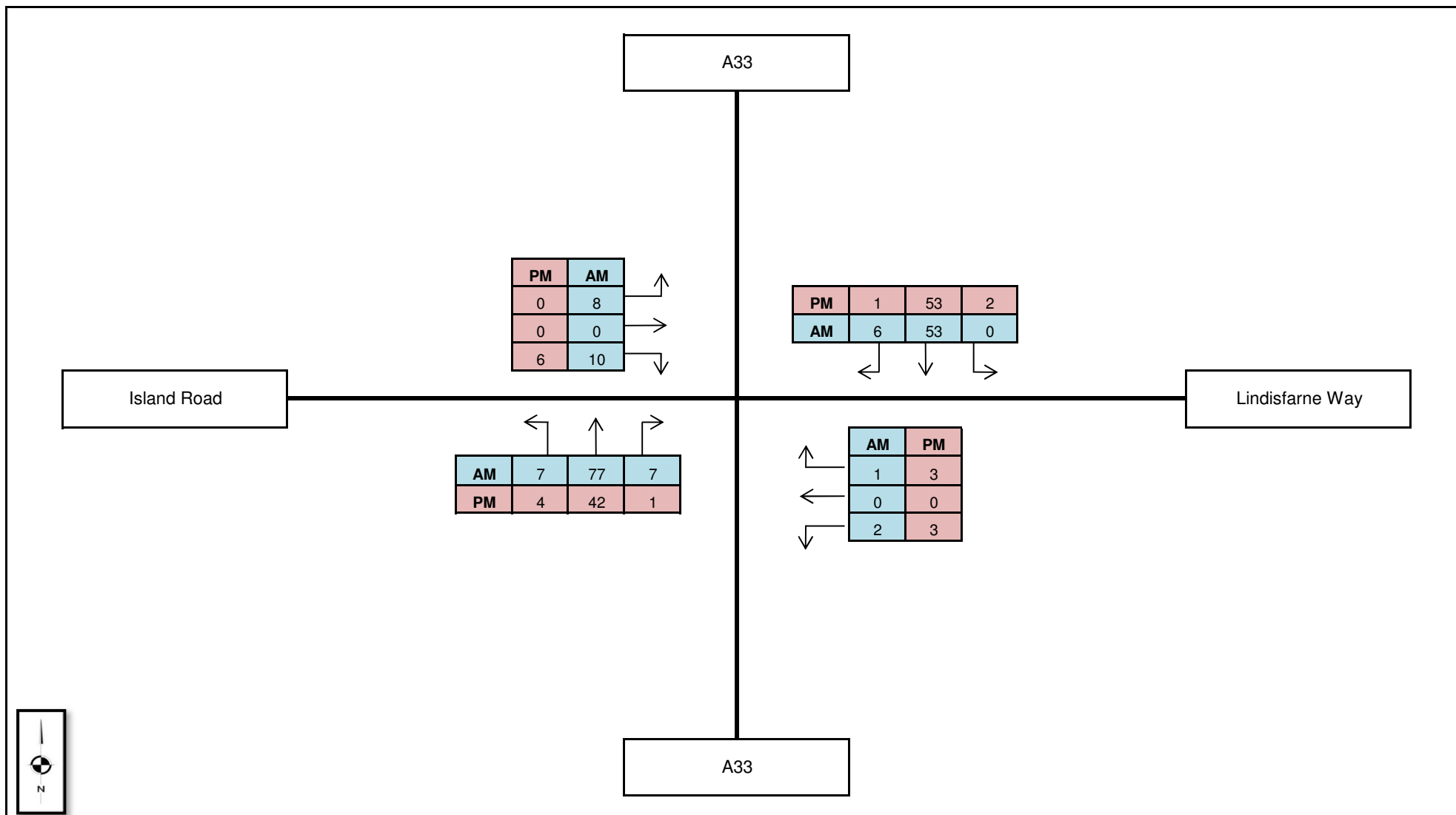
"Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe."
- 7.1.8 The trip generation analysis indicates that the proposed development will not have a detrimental impact on the local highway network across the peak hour periods. Therefore, it is deemed unwarranted for any operational capacity assessments to be undertaken and the development impact can be suitably accommodated by the existing infrastructure.
- 7.1.9 Furthermore it should also be noted that the extant permission, with only a slightly smaller car park, would have an associated level of trip generation; however, this has been discounted for robustness.
- 7.1.10 As such, it is Hydrock's view that the development impact on the local network is immaterial, and does not require further consideration.

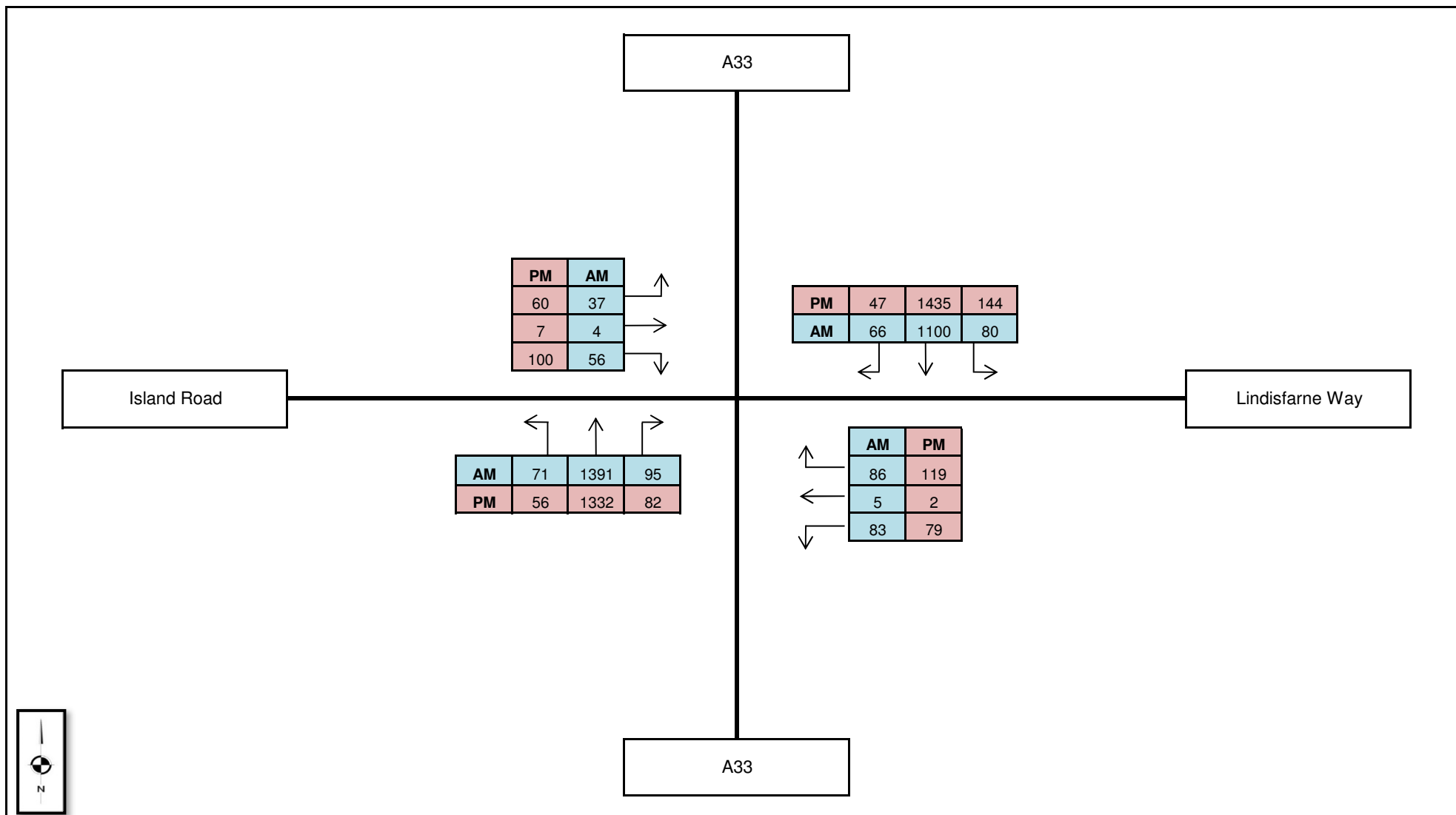
7.2 Conclusion

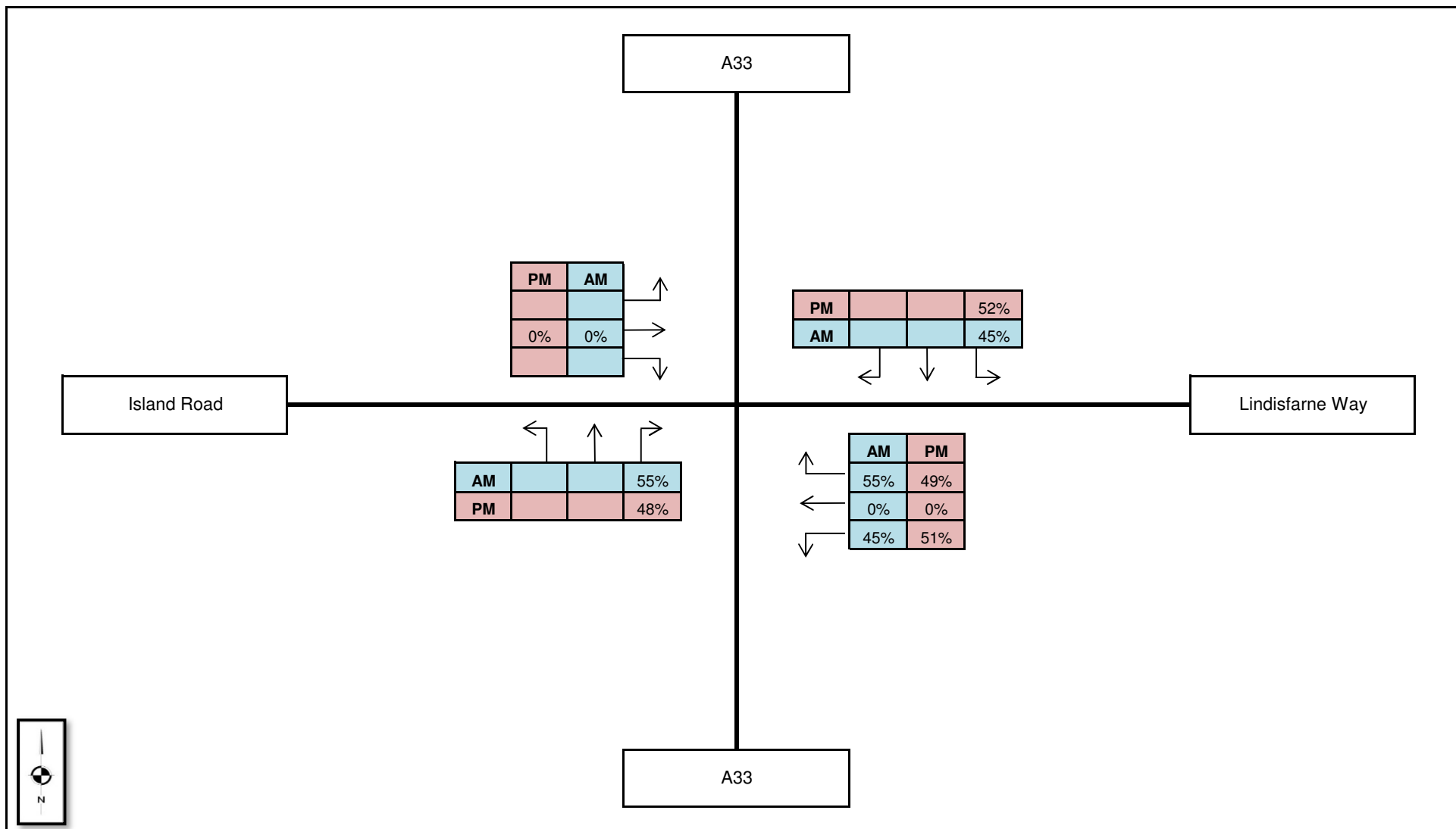
- 7.2.1 Having undertaken a comprehensive analysis of the development site and after reviewing planning policies, it has been demonstrated by this TS that the proposed development accords with highway access design recommendations and sustainable values and hence there is no basis for highway and transportation objections to the proposals.

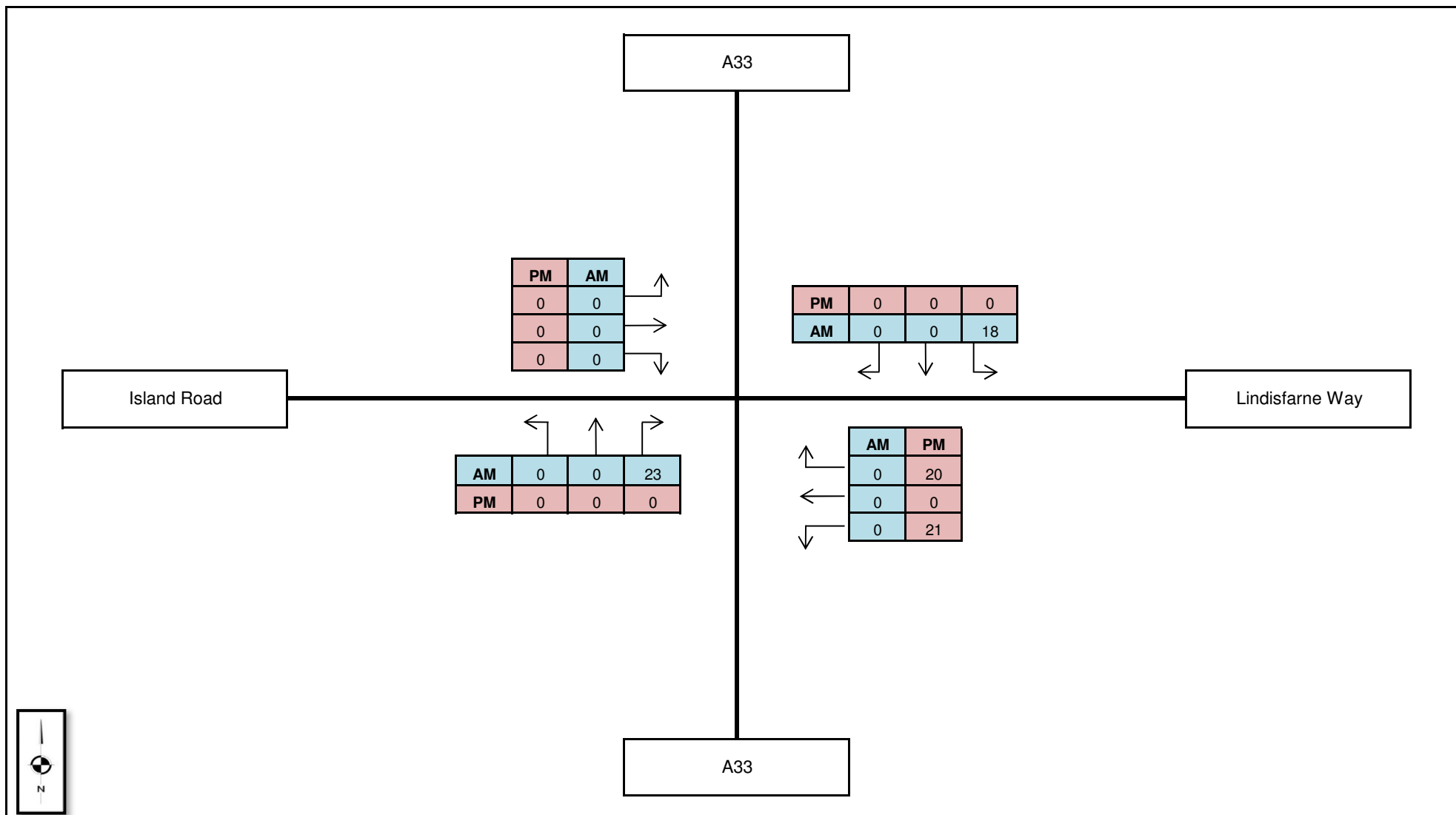


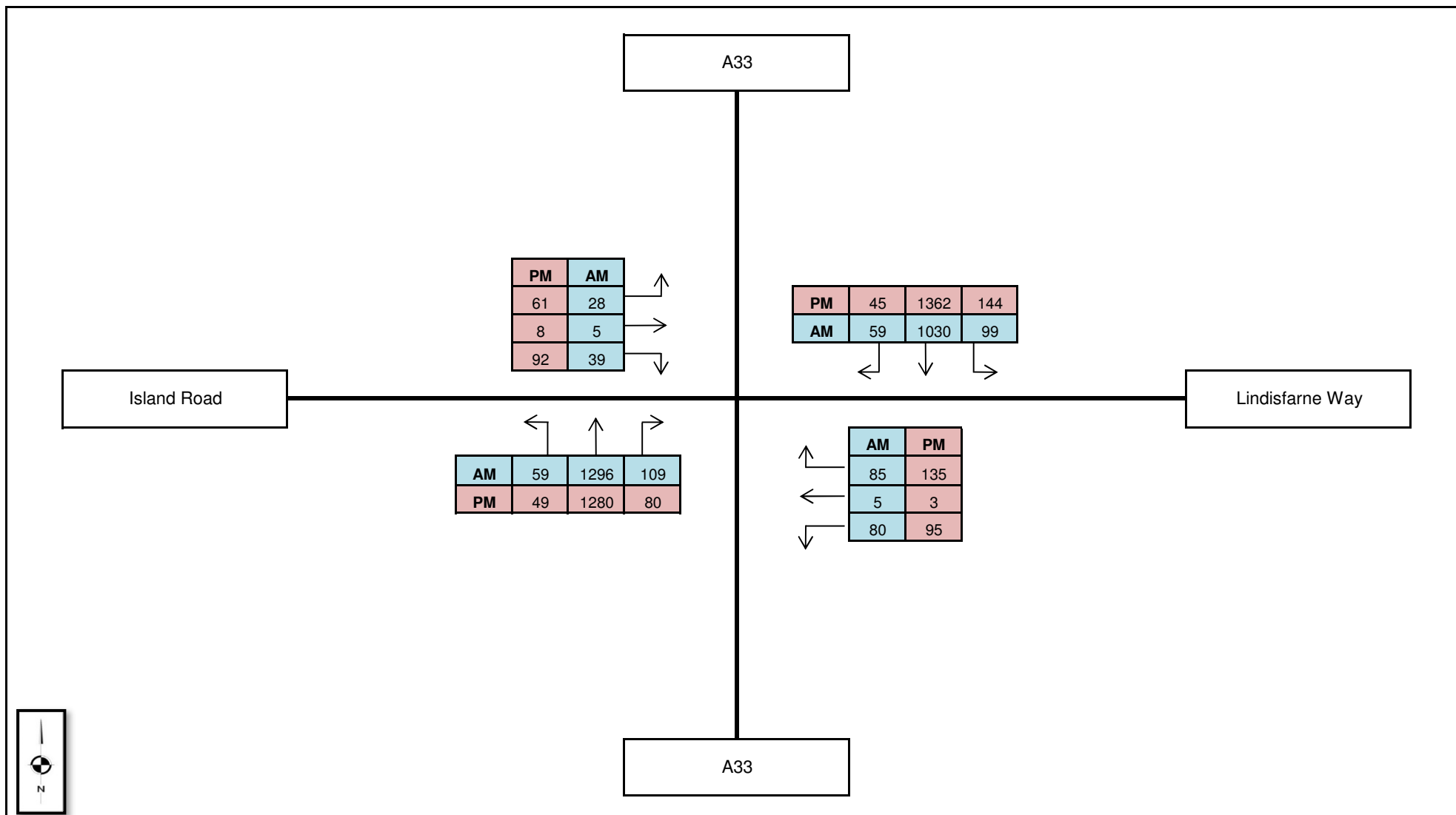


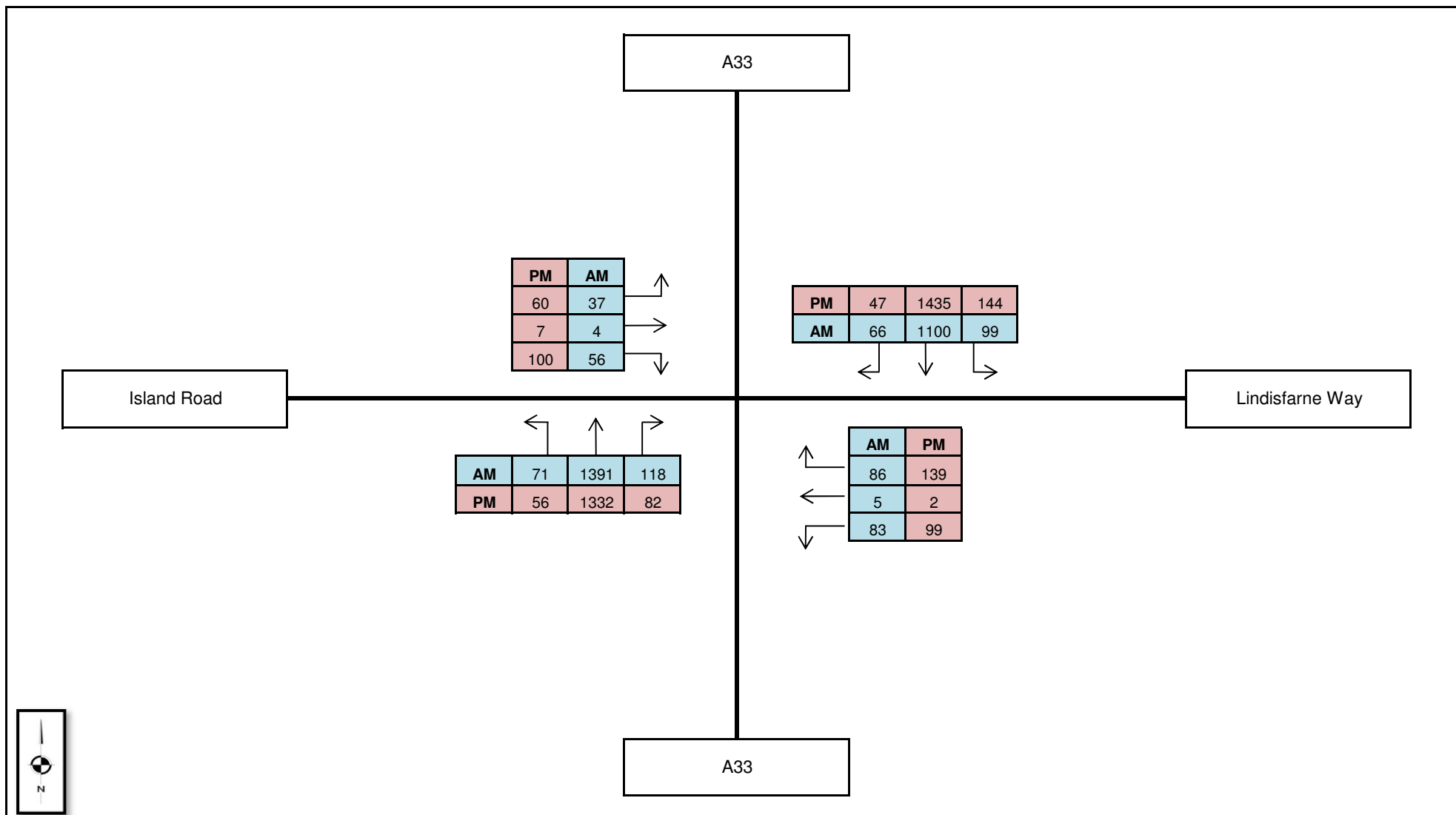












Appendix A Scoping Discussions with RBC

Sam Denby

From: Lucas, Natalie <Natalie.Lucas@reading.gov.uk> on behalf of TransportDevelopmentControl <Transport.DevelopmentControl@reading.gov.uk>
Sent: 30 September 2020 11:55
To: Sam Denby
Subject: FW: Proposed Car Park Reading

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Sam

Unfortunately, due to limited resources, officer time is prioritised to live applications. If you wish to obtain a formal response, a pre-application consultation should be made to the Council's Planning department and work will be allocated accordingly.

It is important that you say why you think the proposed development should be allowed to go ahead. Clarification should be provided regarding the future use of the spaces (who these parking spaces are for and why). If this is specifically for the hospital, then it should be assessed against the provision previously agreed as part of that permission.

In terms of the current permitted use, has the extant permission been implemented. Given the permitted use, a straight forward comparison of parking may not be appropriate given the area was for car storage and would not be generated daily trips to and from the site whereas a car park would.

I trust you will find this advice useful but please be aware that this is an officer response and is made without prejudice to the formal determination of any subsequent planning application by this Council. Unfortunately, you need to follow the formal approach and submit a pre-application enquiry if you wish to obtain further feedback on the proposal.

Kind regards

Natalie Lucas on behalf of the Transport Development Control Team
Transport Development Control Officer
Transport | Directorate for Economic Growth and Neighbourhood Services (DEGNS)

Reading Borough Council
Civic Offices, Bridge Street, Reading, RG1 2LU

email; transport.developmentcontrol@reading.gov.uk

[Website](#) | [Facebook](#) | [Twitter](#) | [YouTube](#)

From: Sam Denby <SamDenby@hydrock.com>
Sent: 24 September 2020 19:12
To: Lucas, Natalie <Natalie.Lucas@reading.gov.uk>
Cc: Chris Rushton <ChrisRushton@hydrock.com>
Subject: Proposed Car Park Reading

This is an EXTERNAL EMAIL. STOP. THINK before you CLICK links or OPEN attachments.

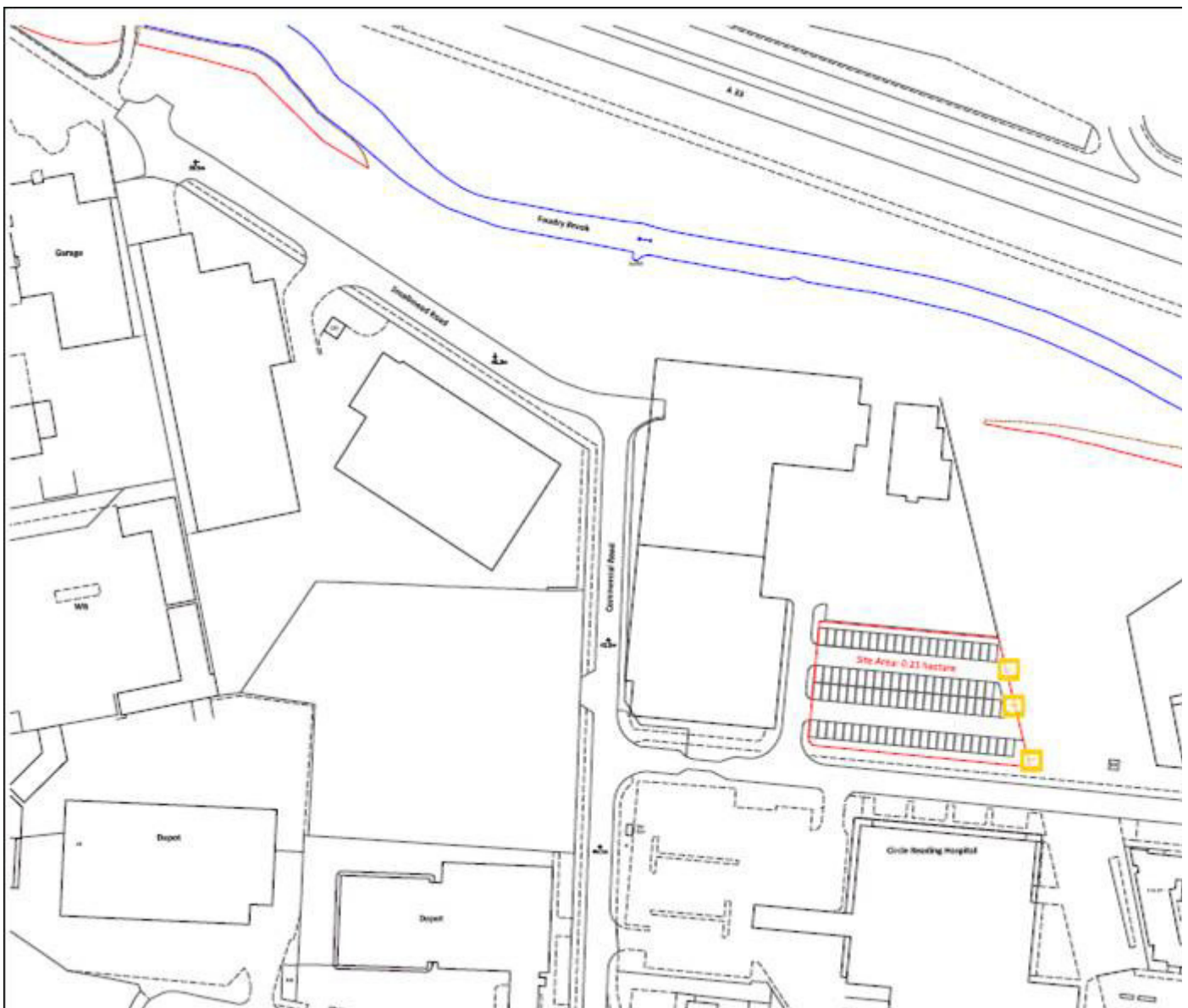
Good evening Natalie,

I have been given your name as someone who may be able to assist with regards to the scoping of a transport statement to support a temporary car park near Circle Reading Hospital.

We are at the early stages of the project however this email is looking to scope out the principals of the type of assessment Reading Borough Council would need to see to be satisfied the impact, from a transportation perspective, was acceptable.

A preliminary layout is illustrated in **Figure 1.1** below.

Figure 1.1 Proposed Site Location



The car park would have up to 88 spaces (subject to tracking and appropriate layout design). It is envisaged the car park could be used by anyone, but it is likely hospital staff and visitors would find it convenient.

Our current thought process is that the following tasks will be required to support the application:

- Provide a full description of the local highway network and existing conditions including analysis of the most recent five-year accident record.
- Consider the national and local transport-related policy documentation;
- Provide a car parking assessment and policy review;
- Provide details of the development proposals and undertake a trip generation analysis. Based on the previous site uses and any extant / lawfully permitted and proposed land use(s), we will derive the trip generation levels associated with the site during the weekday morning and evening peak hours;
- The site was previously used by the BMW car dealership located at Drake Way and had capacity for 41 spaces and was used for temporary car storage and parking. The proposed development will have up to 88 spaces (design permitting) so this would be an increase of a maximum of 47 spaces.
- In terms of the assessment given the increase in size is modest can you confirm if the LHA will accept a trip comparison calculation over the previous use? If we assumed a similar arrival and departure profile for the extant spaces with the additional 47 spaces arriving onsite between 7 and 9, the additional vehicles would be circa 24 per hour in. In the evening this profile would be reversed as the vehicle exited the site. Given the locality and the local highway network it is our view these types of trips are highly unlikely to cause a capacity issue, but would welcome your thoughts.
- Develop any site access drawings to illustrate the general arrangement design of the access junction(s), including undertaking a swept path analysis and visibility splays.

I would be most grateful for your initial thoughts on the above and be more than happy to have a discussion once you have had an opportunity to consider this scheme further.

Many thanks for your assistance and please feel free to get in touch if you have any queries.

Kind regards

Sam Denby BA (Hons) MSc CMILT
Technical Director | Transportation

Hydrock
Northern Assurance Buildings, 9-21 Princess St, Albert Square, Manchester M2 4DN

Tel: (0161) 804 5550 Internal Ext: 5014
Mobile: 07584 081 586
Email: SamDenby@hydrock.com

Following government advice, I am currently working from home. If we need to speak, drop me a line and I'll get straight back to you. For wider information on working with Hydrock during COVID-19 visit hydrock.com/coronavirus.

hydrock.com



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Before printing this e-mail, please think about the environment.

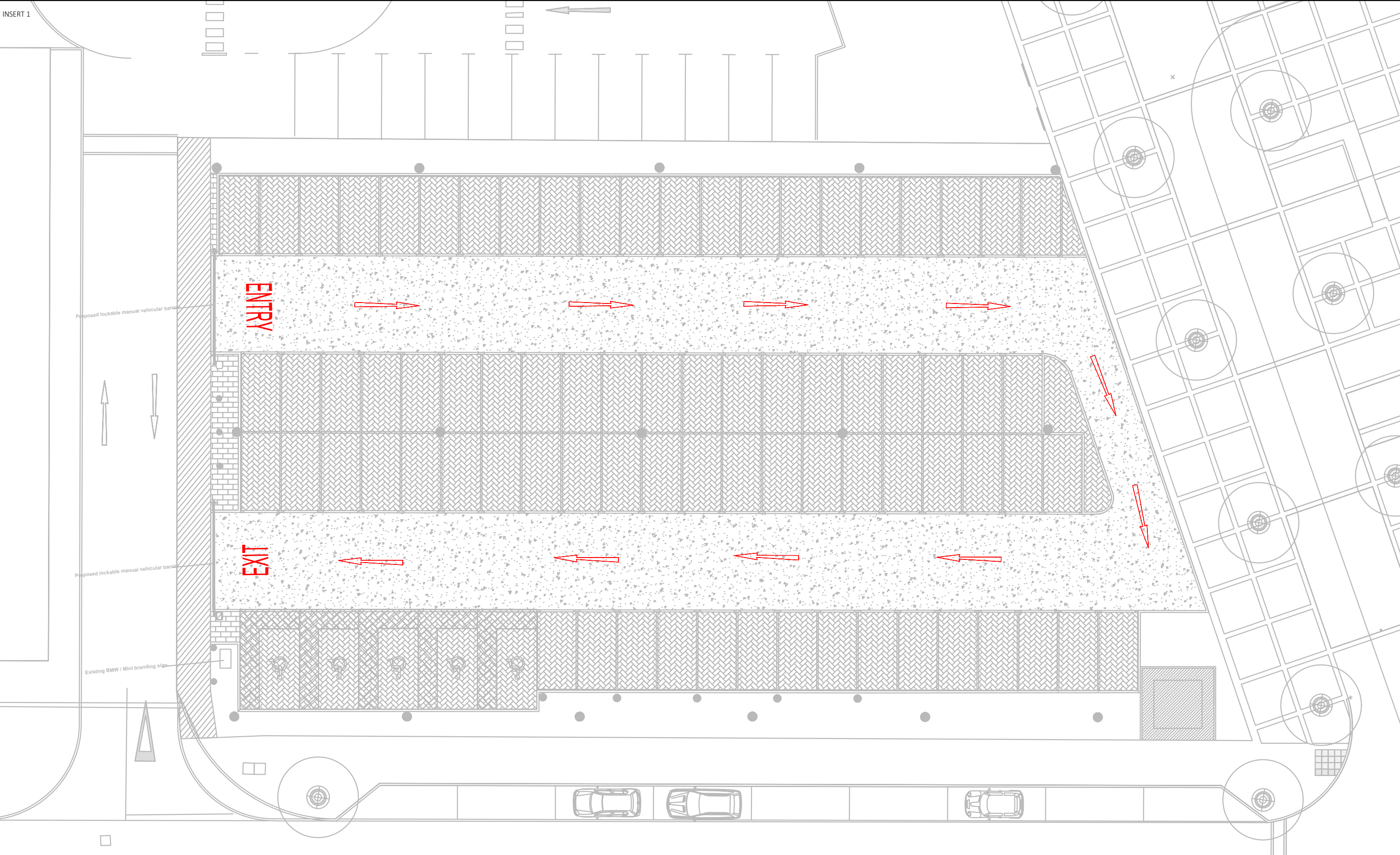
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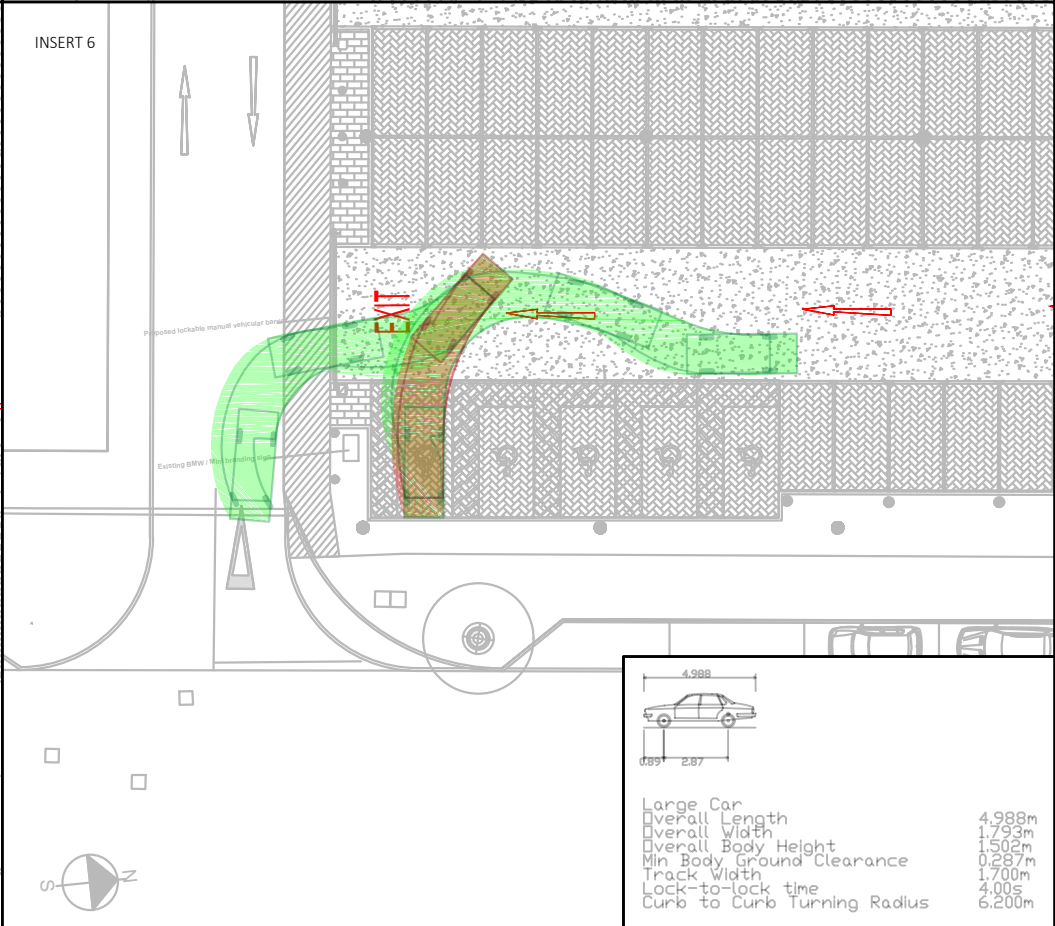
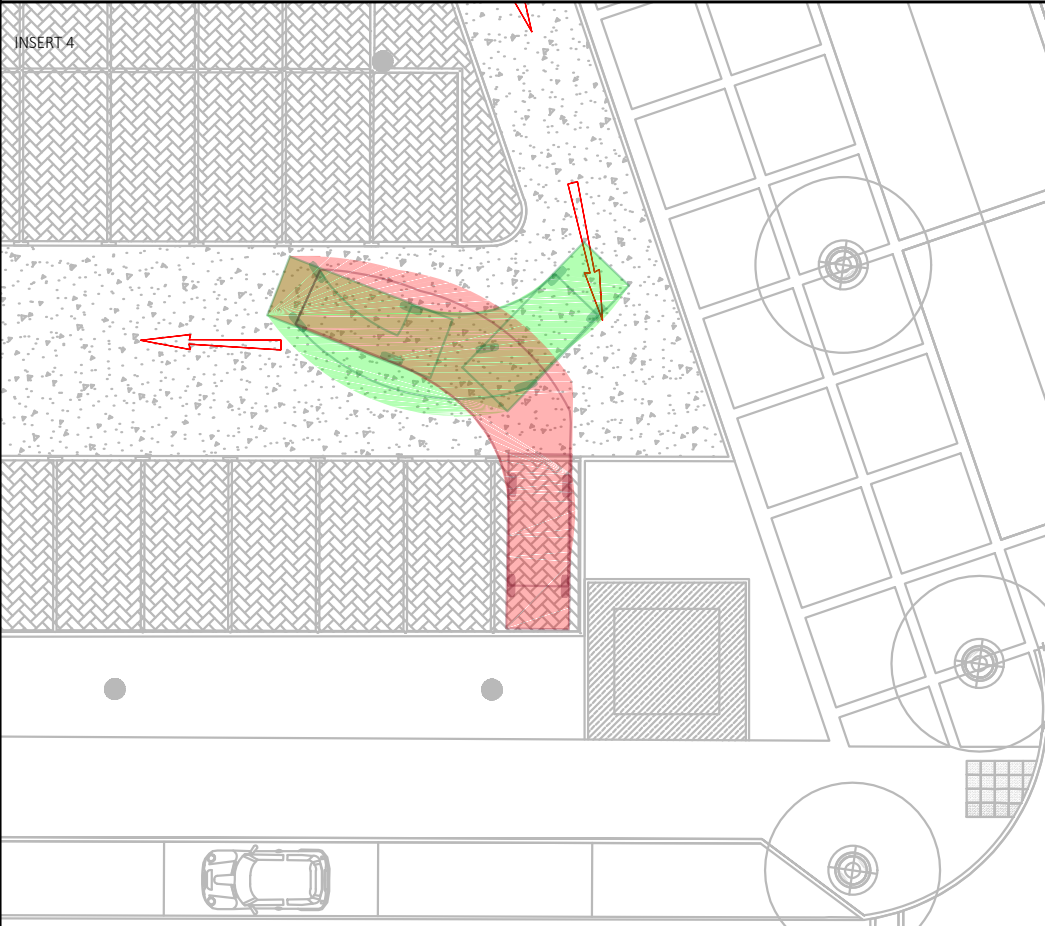
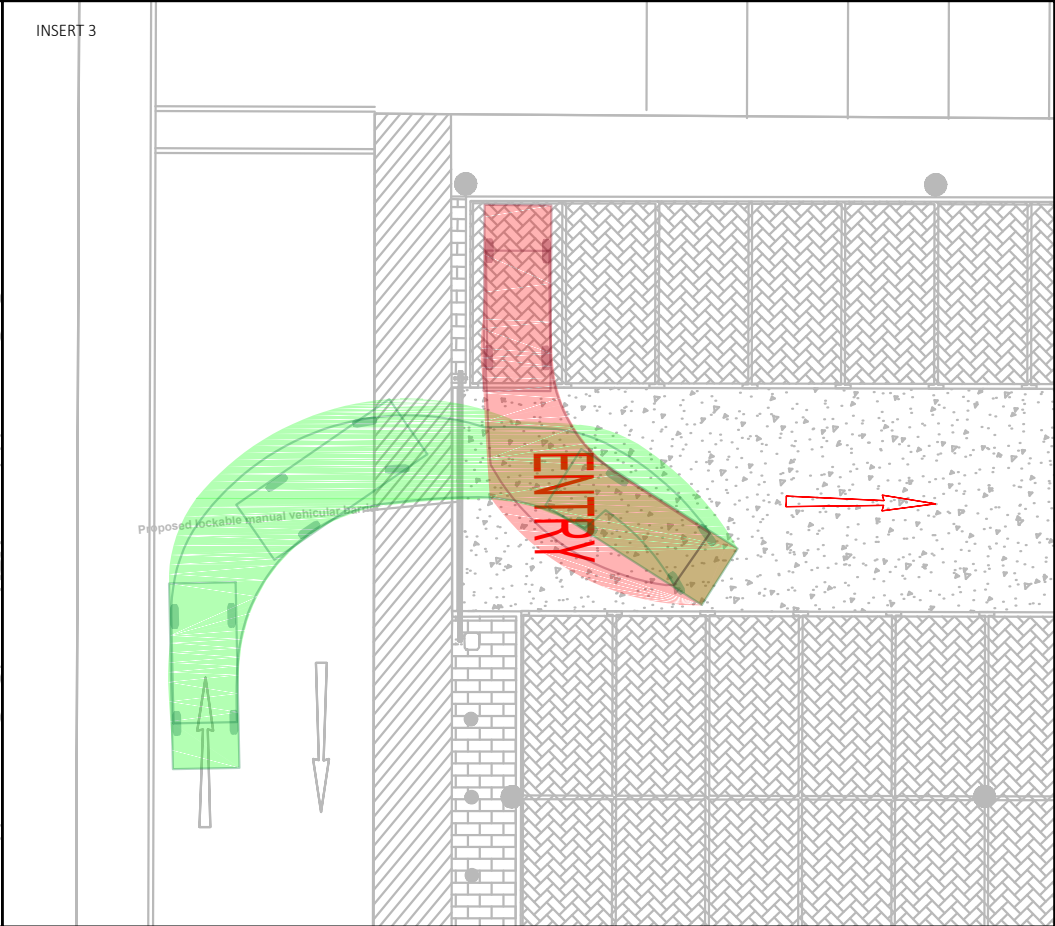
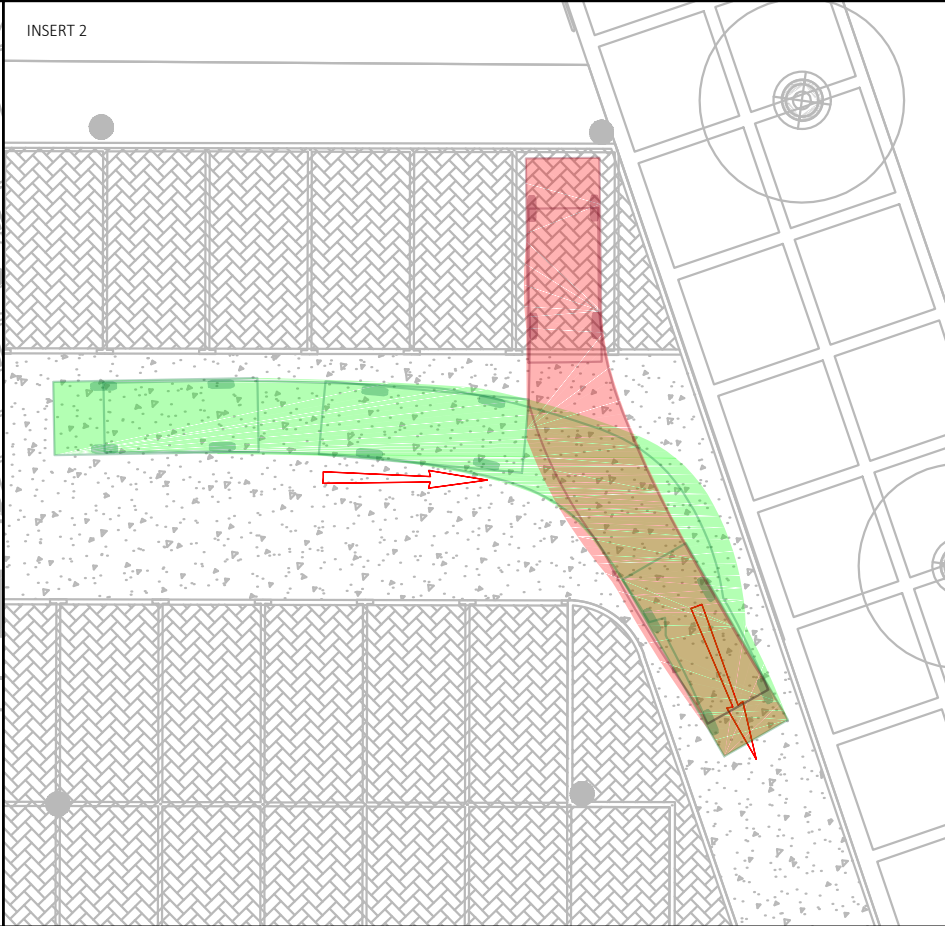
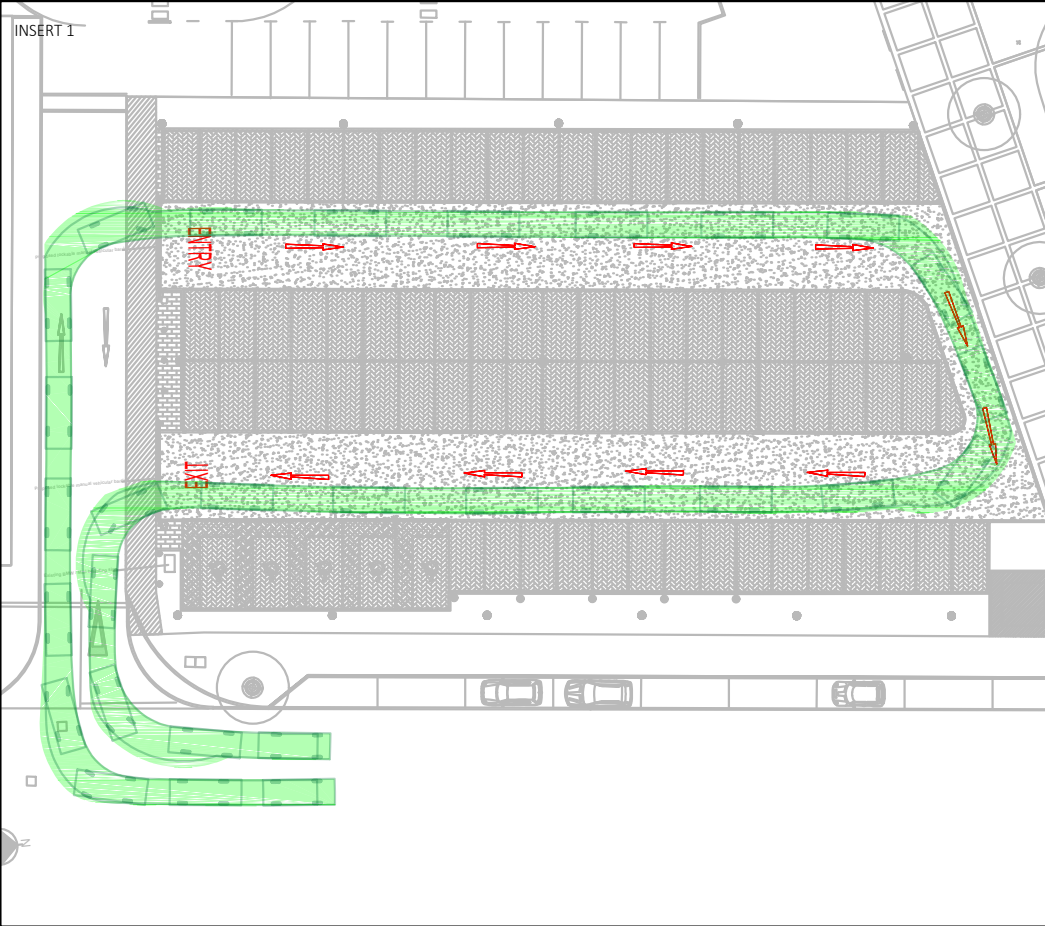
Appendix B Proposed Site Layout

INSERT 1



KEY PLAN	NOTES	NOTES (CONTINUED)	REVISIONS (CONTINUED)	REVISIONS	Hydrock		TITLE ONE-WAY CONFIGURATION	
					CLIENT		HYDROCK PROJECT NO. C-14698	
					DIAGEO PENSION TRUST		SCALE @ A3 1:500	
					PROJECT		STATUS DESCRIPTION SUITABLE FOR INFORMATION	
					READING CAR PARK		DRAWING NO. 14698-HYD-XX-XX-DR-TP-0002	
					P1.03		STATUS S0	
					REV		REVISION P1.03	
					FIRST ISSUE			
					SG		18/11/20 SD 18/11/20 SD 18/11/20	
					REVNOTES			
DRAWNBY		DATE-D						
CHKBY		DATE-C						
APPBY		DATE-A						

Appendix C Swept Path Analysis Drawing - Large Car



KEY PLAN

- VEHICLE BODY IN FORWARD GEAR
- VEHICLE BODY IN REVERSE GEAR
- VEHICLE CHASSIS IN FORWARD GEAR
- VEHICLE CHASSIS IN REVERSE GEAR

NOTES

NOTES (CONTINUED)

REVISIONS (CONTINUED)

REVISIONS						
P1.03	FIRST ISSUE					
	SG	18/11/20	SD	18/11/20	SD	18/11/20
REV	REVNOTES					
	DRAWNBY	DATE-D	CHKBY	DATE-C	APPBY	DATE-A

Hydrock

CLIENT

DIAGEO PENSION TRUST

PROJECT

READING CAR PARK

TITLE	
SWEEP PATH ANALYSIS - LARGE CAR	
HYDROCK PROJECT NO.	SCALE @ A3
C-14698	1:500
STATUS DESCRIPTION	STATUS
SUITABLE FOR INFORMATION	SO
DRAWING NO.	REVISION
14698-HYD-XX-XX-DR-TP-0001	P1.03

Appendix D Letter of Support

Lucy Winterburn
Savills Investment Management
33 Margaret Street
London
W1G 0JD

28 October 2020

Dear Lucy

PROPOSED DEVELOPMENT OF ADDITIONAL CAR PARKING LAND AT DRAKE WAY, READING

We write further to our recent conversation in respect of the operational requirements of Circle Hospital.

We understand that you are looking to submit a planning application for the creation of car parking spaces on vacant land adjacent to the Hospital.

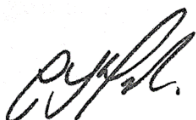
Below we summarise some of the operational issues we currently experience and benefits of the proposed works:

- The capacity of the existing car park serving the Hospital is often exceeded with staff / visitors being forced to use or look for parking 'on-street'. This reduces local parking capacity for other local businesses.
- An additional car park would help meet the demand for access to the Hospital and would reduce the need for vehicles to 'circle' the area which increases movements on the local public highway network.
- The creation of additional disabled parking would be beneficial to mobility impaired visitors to the Hospital.
- The creation of dedicated electric vehicle charging would promote the use of sustainable modes of transport to the Hospital (the nearest existing facility is on Basingstoke Road).

We trust that the above is useful to highlight some of the constraints within which the Hospital and surrounding businesses have to operate within.

We very much hope that the Local Planning Authority will decide to approve the planning application and support the delivery of additional car parking which importantly includes mobility impaired and electric charging facilities.

Yours faithfully,



Carly Hiscock
Executive Director
Circle Reading Hospital

Appendix E Raw Traffic Data

Intelligent Data Collection Limited Lindisfarne Way

Client:	Hydrock
Project Number:	ID05535
Junction Number:	Site 1
Date of Survey:	15.10.2020
Junction Name:	A33 / Lindisfarne Way / Island Road
Junction Type:	Crossroads

Quality Assurance and Issue Record

Quality Assurance

Revision	Rev A			
Date	22.10.2020			
Prepared by	Richard Collins			
Signature				
Checked by	Luke Martin			
Signature				
Project Director	Paul O'Neill			
Signature				
Project number	ID05535			
File Ref	ID05535 Lindisfarne Way - MCC Site 1 - 15.10.2020			

Issue Sheet

Issued to	Date			
	22.10.2020			
Sam Denby	E-mail			

Contents Page

Location Plan & Summary
MCC Data
PCU Data

Intelligent Data Collection Limited

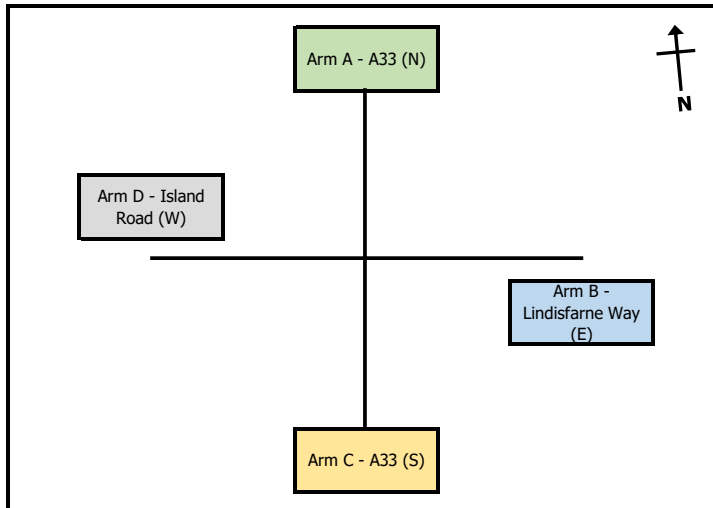
Client: Hydrock
Project Number: ID05535
Junction Number: Site 1

Date of Survey: 15.10.2020
Junction Name: A33 / Lindisfarne Way / Island Road
Junction Type: Crossroads



X Coordinate	Y Coordinate	Google Maps Link
51.431390	-0.978502	Click Here
AM Peak Conditions	PM Peak Conditions	
Sunny Intervals	Showers	

Junction Layout

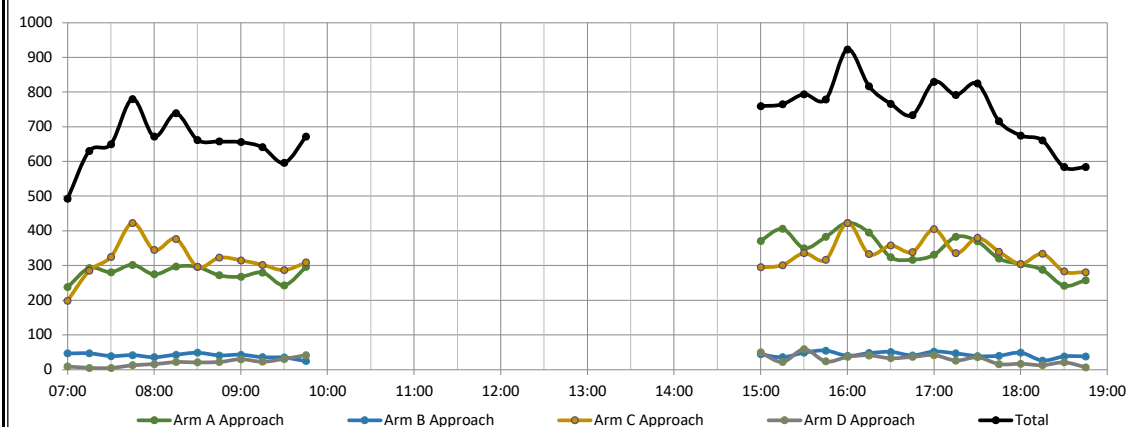


Aerial Mapping and On-site Camera View



Junction Flow Profile

Arm Approach Flows (All Vehicles)



Additional Notes (Factors which may impact on survey results such as accidents, roadworks, special events):

Intelligent Data Collection Limited

Client: Hydrock
Project Number: ID05535
Junction Number: Site 1

Date of Survey: 15.10.2020
Junction Name: A33 / Lindisfarne Way / Island Road
Junction Type: Crossroads

Arm A: A33 (N)
Arm B: Lindisfarne Way (E)

Arm C: A33 (S)
Arm D: Island Road (W)



A to A								A to D								A to C								
Time	Cars	LGV	OGV1	OGV2	Buses	M/C	Cycle	Total	Cars	LGV	OGV1	OGV2	Buses	M/C	Cycle	Total	Cars	LGV	OGV1	OGV2	Buses	M/C	Cycle	Total
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Intelligent Data Collection Limited

Client: Hydrock
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A to B									B to B									B to A													
Time	Cars	LGV	OGV1	OGV2	Buses	M/C	Cycle	Total	Cars	LGV	OGV1	OGV2	Buses	M/C	Cycle	Total	Cars	LGV	OGV1	OGV2	Buses	M/C	Cycle	Total							
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17:15	12	3	0	0	0	1	0	16	18	1	0	0	1	1	0	21															
17:30	14	3	0	0	0	1	0	18	21	0	0	0	0	1	0	22															
17:45	18	3	0	0	0	1	0	22	19	2	0	0	0	3	0	24															
18:00	19	2	0	0	0	2	0	23	21	1	0	0	1	2	0	25															
18:15	18	1	0	0	0	2	0	21	12	1	0	0	0	1	0	14															
18:30	17	1	0	0	0	0	0	18	27	0	0	0	0	0	0	27															
18:45	23	2	0	0	0	2	0	27	18	1	0	0	0	0	0	19															
Start Time	Rolling Hour							Total	Rolling Hour							Total	Rolling Hour							Total							
07:00	72	5	0	0	0	0	0	77	0	0	0	0	0	0	0	0	58	9	0	0	0	0	0	67							
07:15	73	4	0	0	0	0	0	77	0	0	0	0	0	0	0	0	61	8	1	0	0	0	0	70							
07:30	74	3	0	0	0	0	0	77	0	0	0	0	0	0	0	0	62	7	1	0	0	0	0	70							
07:45	77	3	0	0	0	1	0	81	0	0	0	0	0	0	0	0	76	8	1	0	0	0	0	85							
08:00	82	4	0	1	0	2	0	89	0	0	0	0	0	0	0	0	76	11	1	0	0	0	0	88							
08:15	88	5	0	1	0	2	0	96	0	0	0	0	0	0	0	0	77	14	0	0	0	0	0	91							
08:30	86	6	0	1	0	2	0	95	0	0	0	0	0	0	0	0	69	13	0	0	0	0	0	82							
08:45	79	8	1	1	0	1	0	90	0	0	0	0	0	0	0	0	59	12	0	0	0	0	0	71							
09:00	66	7	1	0	0	0	0	74	0	0	0	0	0	0	0	0	52	11	0	0	0	0	0	63							
15:00	80	15	0	0	0	2	0	97	0	0	0	0	0	0	0	0	93	14	0	0	0	1	0	108							
15:15	101	15	0	0	0	3	0	119	0	0	0	0	0	0	0	0	88	17	0	0	0	0	0	105							
15:30	121	17	1	0	1	4	0	144	0	0	0	0	0	0	0	0	97	15	1	0	2	0	0	115							
15:45	117	17	1	0	1	3	0	139	0	0	0	0	0	0	0	0	94	11	1	0	2	2	0	110							
16:00	114	16	1	0	1	3	0	135	0	0	0	0	0	0	0	0	87	8	1	0	3	2	0	101							
16:15	89	11	1	0	1	3	0	105	0	0	0	0	0	0	0	0	96	6	1	0	4	4	0	111							
16:30	56	7	0	0	0	2	0	65	0	0	0	0	0	0	0	0	85	5	0	0	3	5	0	98							
16:45	56	8	0	0	0	3	0	67	0	0	0	0	0	0	0	0	85	5	0	0	3	4	0	97							
17:00	57	10	0	0	0	4	0	71	0	0	0	0	0	0	0	0	83	5	0	0	2	7	0	97							
17:15	63	11	0	0	0	5	0	79	0	0	0	0	0	0	0	0	79	4	0	0	2	7	0	92							
17:30	69	9	0	0	0	6	0	84	0	0	0	0	0	0	0	0	73	4	0	0	1	7	0	85							
17:45	72	7	0	0	0	5	0	84	0	0	0	0	0	0	0	0	79	4	0	0	1	6	0	90							
18:00	77	6	0	0	0	6	0	89	0	0	0	0	0	0	0	0	78	3	0	0	1	3	0	85							

Intelligent Data Collection Limited

Client: Hydrock
Project Number: ID05535
Junction Number: Site 1

Date of Survey: 15.10.2020
Junction Name: A33 / Lindisfarne Way / Island Road
Junction Type: Crossroads

Arm A: A33 (N)
Arm B: Lindisfarne Way (E)

Arm C: A33 (S)
Arm D: Island Road (W)



	B to D								B to C								C to C							
Time	Cars	LGV	OGV1	OGV2	Buses	M/C	Cycle	Total	Cars	LGV	OGV1	OGV2	Buses	M/C	Cycle	Total	Cars	LGV	OGV1	OGV2	Buses	M/C	Cycle	Total
07:00	0	0	0	0	0	0	1	1	28	2	0	0	1	0	0	31								0
07:15	0	0	0	0	0	0	0	0	21	4	0	0	0	1	0	26								0
07:30	0	0	0	0	0	0	0	0	24	0	1	0	1	0	0	26								0
07:45	1	1	0	0	0	0	0	2	20	2	0	0	0	0	0	22								0
08:00	1	0	0	0	0	0	0	1	15	1	0	0	1	0	0	17								0
08:15	0	0	0	0	0	0	0	0	22	0	0	0	0	0	0	22								0
08:30	1	1	0	0	0	0	0	2	18	0	0	0	1	0	0	19								0
08:45	4	0	0	0	0	0	0	4	13	2	1	0	0	0	0	16								0
09:00	0	0	0	0	0	0	2	2	17	1	0	1	1	0	0	20								0
09:15	1	0	0	0	0	0	0	1	17	5	0	0	1	0	0	23								0
09:30	0	0	0	0	0	0	0	0	16	2	0	0	0	0	0	18								0
09:45	1	0	0	0	0	0	0	1	10	0	1	0	0	0	0	11								0
15:00	1	0	0	0	0	0	0	1	18	0	1	0	1	0	0	20								0
15:15	1	0	0	0	0	0	0	1	10	0	0	0	1	0	0	11								0
15:30	1	0	0	0	0	0	0	1	19	1	0	0	0	0	0	20								0
15:45	0	0	0	0	0	0	0	0	20	1	0	0	1	0	0	22								0
16:00	0	0	0	0	0	0	1	1	18	0	0	0	1	0	0	19								0
16:15	1	0	0	0	0	0	0	1	11	1	0	0	1	0	0	13								0
16:30	0	0	0	0	0	0	1	1	24	2	0	0	1	0	0	27								0
16:45	0	0	0	0	0	0	0	0	14	2	0	0	1	0	0	17								0
17:00	0	1	0	0	0	0	0	1	18	2	0	0	1	0	0	21								0
17:15	1	0	0	0	0	0	0	1	23	0	0	0	1	1	0	25								0
17:30	0	0	0	0	0	0	0	0	16	0	0	0	1	0	0	17								0
17:45	0	0	0	0	0	0	0	0	14	1	0	0	1	0	0	16								0
18:00	0	0	0	0	0	0	0	0	20	1	0	0	2	1	0	24								0
18:15	0	0	0	0	0	0	0	0	11	0	0	0	1	0	0	12								0
18:30	0	0	0	0	0	0	0	0	9	1	0	0	1	0	0	11								0
18:45	1	0	0	0	0	0	0	1	16	0	0	0	1	1	0	18								0
Start Time	Rolling Hour							Total	Rolling Hour							Total	Rolling Hour							Total
07:00	1	1	0	0	0	0	1	3	93	8	1	0	2	1	0	105	0	0	0	0	0	0	0	0
07:15	2	1	0	0	0	0	0	3	80	7	1	0	2	1	0	91	0	0	0	0	0	0	0	0
07:30	2	1	0	0	0	0	0	3	81	3	1	0	2	0	0	87	0	0	0	0	0	0	0	0
07:45	3	2	0	0	0	0	0	5	75	3	0	0	2	0	0	80	0	0	0	0	0	0	0	0
08:00	6	1	0	0	0	0	0	7	68	3	1	0	2	0	0	74	0	0	0	0	0	0	0	0
08:15	5	1	0	0	0	0	2	8	70	3	1	1	2	0	0	77	0	0	0	0	0	0	0	0
08:30	6	1	0	0	0	0	2	9	65	8	1	1	3	0	0	78	0	0	0	0	0	0	0	0
08:45	5	0	0	0	0	0	2	7	63	10	1	1	2	0	0	77	0	0	0	0	0	0	0	0
09:00	2	0	0	0	0	0	2	4	60	8	1	1	2	0	0	72	0	0	0	0	0	0	0	0
15:00	3	0	0	0	0	0	0	3	67	2	1	0	3	0	0	73	0	0	0	0	0	0	0	0
15:15	2	0	0	0	0	0	1	3	67	2	0	0	3	0	0	72	0	0	0	0	0	0	0	0
15:30	2	0	0	0	0	0	1	3	68	3	0	0	3	0	0	74	0	0	0	0	0	0	0	0
15:45	1	0	0	0	0	0	2	3	73	4	0	0	4	0	0	81	0	0	0	0	0	0	0	0
16:00	1	0	0	0	0	0	2	3	67	5	0	0	4	0	0	76	0	0	0	0	0	0	0	0
16:15	1	1	0	0	0	0	1	3	67	7	0	0	4	0	0	78	0	0	0	0	0	0	0	0
16:30	1	1	0	0	0	0	1	3	79	6	0	0	4	1	0	90	0	0	0	0	0	0	0	0
16:45	1	1	0	0	0	0	0	2	71	4	0	0	4	1	0	80	0	0	0	0	0	0	0	0
17:00	1	1	0	0	0	0	0	2	71	3	0	0	4	1	0	79	0	0	0	0	0	0	0	0
17:15	1	0	0	0	0	0	0	1	73	2	0	0	5	2	0	82	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	61	2	0	0	5	1	0	69	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	54	3	0	0	5	1	0	63	0	0	0	0	0	0	0	0
18:00	1	0	0	0	0	0	0	1	56	2	0	0	5	2	0	65	0	0	0	0	0	0	0	0

Intelligent Data Collection Limited



Client: Hydrock
Project Number: ID05535
Junction Number: Site 1
Date of Survey: 15.10.2020
Junction Name: A33 / Lindisfarne Way / Island Road
Junction Type: Crossroads

Arm A: A33 (N)
Arm B: Lindisfarne Way (E)

Arm C: A33 (S)
Arm D: Island Road (W)

	C to B								C to A								C to D							
Time	Cars	LGV	OGV1	OGV2	Buses	M/C	Cycle	Total	Cars	LGV	OGV1	OGV2	Buses	M/C	Cycle	Total	Cars	LGV	OGV1	OGV2	Buses	M/C	Cycle	Total
07:00	7	1	1	0	1	0	0	10	117	43	9	3	3	2	0	177	9	0	0	3	0	0	0	12
07:15	13	3	0	0	2	0	0	18	176	61	3	5	1	3	0	249	8	6	0	3	0	0	1	18
07:30	13	2	0	0	1	0	0	16	210	73	6	2	2	1	0	294	4	6	2	2	0	1	0	15
07:45	20	3	2	0	2	0	0	27	281	79	8	7	2	2	0	379	9	8	0	0	0	0	0	17
08:00	17	1	0	0	1	0	0	19	241	53	11	5	1	1	0	312	5	4	1	4	0	0	0	14
08:15	16	1	0	0	1	0	0	18	255	62	18	6	2	3	0	346	10	2	0	1	0	0	0	13
08:30	19	2	0	0	1	0	0	22	195	47	7	5	5	0	0	259	10	4	0	1	0	0	0	15
08:45	24	3	0	0	2	0	0	29	203	49	9	3	3	5	1	273	15	4	0	2	0	0	0	21
09:00	27	5	0	0	1	0	0	33	206	51	8	2	1	0	0	268	10	2	0	2	0	0	0	14
09:15	17	2	0	0	1	0	0	20	190	61	8	5	2	1	0	267	7	4	2	2	0	0	0	15
09:30	19	0	0	0	1	0	0	20	180	55	10	6	1	0	0	252	9	5	0	1	0	0	0	15
09:45	13	3	0	0	0	0	0	16	187	63	13	10	5	3	0	281	4	7	0	1	0	0	0	12
15:00	13	1	1	0	1	0	0	16	200	52	8	3	3	1	0	267	7	0	1	4	0	0	0	12
15:15	14	1	0	0	1	0	0	16	204	49	9	6	1	3	0	272	7	3	1	2	0	0	0	13
15:30	16	1	0	0	0	0	0	17	240	58	4	3	3	3	0	311	4	4	0	0	0	0	0	8
15:45	21	2	0	0	1	0	0	24	214	59	3	4	1	0	0	281	9	2	0	1	0	0	0	12
16:00	15	3	0	0	0	0	0	18	296	74	6	6	3	4	0	389	11	3	1	1	0	0	0	16
16:15	19	2	0	0	0	0	0	21	233	55	5	0	4	2	0	299	8	4	0	1	0	0	0	13
16:30	16	0	0	0	0	0	0	16	272	54	2	0	3	1	0	332	7	3	0	0	0	0	0	10
16:45	20	0	0	0	0	0	0	20	251	44	4	1	2	2	0	304	9	5	1	0	0	0	0	15
17:00	16	2	0	0	0	0	0	18	307	50	4	3	2	3	0	369	10	5	1	2	0	0	0	18
17:15	17	1	0	0	0	0	0	18	246	48	1	3	4	3	0	305	7	5	0	1	0	0	0	13
17:30	16	1	0	0	0	0	0	17	303	40	3	1	3	1	0	351	6	5	0	1	0	0	0	12
17:45	27	3	0	0	0	0	0	30	267	25	3	1	2	1	0	299	4	5	1	0	0	1	0	11
18:00	28	1	0	0	1	0	0	30	232	29	0	2	2	1	0	266	2	6	1	0	0	0	0	9
18:15	19	2	0	0	1	0	0	22	267	30	1	2	4	1	0	305	4	2	1	0	0	0	0	7
18:30	14	0	0	0	1	0	0	15	231	24	1	0	3	3	0	262	1	3	2	0	0	0	0	6
18:45	25	0	0	0	1	0	0	26	224	18	2	0	3	1	0	248	2	5	0	0	0	0	0	7
Start Time	Rolling Hour							Total	Rolling Hour							Total	Rolling Hour							Total
07:00	53	9	3	0	6	0	0	71	784	256	26	17	8	8	0	1099	30	20	2	8	0	1	1	62
07:15	63	9	2	0	6	0	0	80	908	266	28	19	6	7	0	1234	26	24	3	9	0	1	1	64
07:30	66	7	2	0	5	0	0	80	987	267	43	20	7	7	0	1331	28	20	3	7	0	1	0	59
07:45	72	7	2	0	5	0	0	86	972	241	44	23	10	6	0	1296	34	18	1	6	0	0	0	59
08:00	76	7	0	0	5	0	0	88	894	211	45	19	11	9	1	1190	40	14	1	8	0	0	0	63
08:15	86	11	0	0	5	0	0	102	859	209	42	16	11	8	1	1146	45	12	0	6	0	0	0	63
08:30	87	12	0	0	5	0	0	104	794	208	32	15	11	6	1	1067	42	14	2	7	0	0	0	65
08:45	87	10	0	0	5	0	0	102	779	216	35	16	7	6	1	1060	41	15	2	7	0	0	0	65
09:00	76	10	0	0	3	0	0	89	763	230	39	23	9	4	0	1068	30	18	2	6	0	0	0	56
15:00	64	5	1	0	3	0	0	73	858	218	24	16	8	7	0	1131	27	9	2	7	0	0	0	45
15:15	66	7	0	0	2	0	0	75	954	240	22	19	8	10	0	1253	31	12	2	4	0	0	0	49
15:30	71	8	0	0	1	0	0	80	983	246	18	13	11	9	0	1280	32	13	1	3	0	0	0	49
15:45	71	7	0	0	1	0	0	79	1015	242	16	10	11	7	0	1301	35	12	1	3	0	0	0	51
16:00	70	5	0	0	0	0	0	75	1052	227	17	7	12	9	0	1324	35	15	2	2	0	0	0	54
16:15	71	4	0	0	0	0	0	75	1063	203	15	4	11	8	0	1304	34	17	2	3	0	0	0	56
16:30	69	3	0	0	0	0	0	72	1076	196	11	7	11	9	0	1310	33	18	2	3	0	0	0	56
16:45	69	4	0	0	0	0	0	73	1107	182	12	8	11	9	0	1329	32	20	2	4	0	0	0	58
17:00	76	7	0	0	0	0	0	83	1123	163	11	8	11	8	0	1324	27	20	2	4	0	1	0	54
17:15	88	6	0	0	1	0	0	95	1048	142	7	7	11	6	0	1221	19	21	2	2	0	1	0	45
17:30	90	7	0	0	2	0	0	99	1069	124	7	6	11	4	0	1221	16	18	3	1	0	1	0	39
17:45	88	6	0	0	3	0	0	97	997	108	5	5	11	6	0	1132	11	16	5	0	0	1	0	33
18:00	86	3	0	0	4	0	0	93	954	101	4	4	12	6	0	1081	9	16	4	0	0	0	0	29

Intelligent Data Collection Limited

Client: Hydrock
Project Number: ID05535
Junction Number: Site 1

Date of Survey: 15.10.2020
Junction Name: A33 / Lindisfarne Way / Island Road
Junction Type: Crossroads

Arm A: A33 (N)
Arm B: Lindisfarne Way (E)

Arm C: A33 (S)
Arm D: Island Road (W)



	D to D								D to C								D to B							
Time	Cars	LGV	OGV1	OGV2	Buses	M/C	Cycle	Total	Cars	LGV	OGV1	OGV2	Buses	M/C	Cycle	Total	Cars	LGV	OGV1	OGV2	Buses	M/C	Cycle	Total
07:00								0	2	2	0	0	0	0	0	4	1	0	0	0	0	0	0	1
07:15								0	1	3	0	0	0	0	0	4	0	0	0	0	0	0	0	0
07:30								0	0	1	0	1	0	0	0	2	0	0	0	0	0	0	0	0
07:45								0	1	2	0	1	0	0	0	4	0	0	0	0	0	0	1	1
08:00								0	4	3	1	2	0	0	0	10	0	0	0	0	0	1	0	1
08:15								0	5	4	0	2	0	0	0	11	1	0	0	0	0	0	0	1
08:30								0	9	1	1	3	0	0	0	14	2	0	0	0	0	0	0	2
08:45								0	8	3	1	2	0	0	0	14	1	0	0	0	0	0	0	1
09:00								0	6	3	1	2	0	0	0	12	1	0	0	0	0	0	1	2
09:15								0	4	8	0	2	0	0	0	14	0	0	0	0	0	0	0	0
09:30								0	7	8	2	0	0	0	0	17	0	1	0	0	0	0	0	1
09:45								0	9	16	2	2	0	0	0	29	0	0	0	0	0	0	1	1
15:00								0	16	7	1	0	0	0	0	24	3	0	0	0	0	0	0	3
15:15								0	8	2	1	1	0	0	0	12	0	0	0	0	0	0	0	0
15:30								0	21	5	3	1	0	0	0	30	4	1	0	0	0	0	0	5
15:45								0	10	4	0	2	0	0	0	16	1	0	0	0	0	0	0	1
16:00								0	18	2	0	0	0	0	0	20	1	0	0	0	0	0	1	2
16:15								0	22	4	0	0	0	0	0	26	0	0	0	0	0	0	0	0
16:30								0	18	2	1	0	0	0	0	21	0	0	0	0	0	0	0	0
16:45								0	9	1	1	1	0	0	0	12	1	0	0	0	0	0	1	2
17:00								0	23	2	0	0	0	0	0	25	0	1	0	0	0	0	1	2
17:15								0	10	1	1	3	0	0	0	15	1	1	0	0	0	0	0	2
17:30								0	11	1	1	1	0	0	0	14	1	0	0	0	0	0	0	1
17:45								0	6	0	1	1	0	0	0	8	0	0	0	0	0	0	0	0
18:00								0	4	0	0	0	0	1	0	5	0	0	0	0	0	0	1	1
18:15								0	4	2	0	0	0	0	0	6	2	0	0	0	0	0	1	3
18:30								0	9	2	0	1	0	0	0	12	0	0	0	0	0	0	0	0
18:45								0	2	1	0	0	0	0	0	3	1	0	0	0	0	0	0	1
Start Time	Rolling Hour							Total	Rolling Hour							Total	Rolling Hour							Total
07:00	0	0	0	0	0	0	0	0	4	8	0	2	0	0	0	14	1	0	0	0	0	0	1	2
07:15	0	0	0	0	0	0	0	0	6	9	1	4	0	0	0	20	0	0	0	0	0	1	1	2
07:30	0	0	0	0	0	0	0	0	10	10	1	6	0	0	0	27	1	0	0	0	0	1	1	3
07:45	0	0	0	0	0	0	0	0	19	10	2	8	0	0	0	39	3	0	0	0	0	1	1	5
08:00	0	0	0	0	0	0	0	0	26	11	3	9	0	0	0	49	4	0	0	0	0	1	0	5
08:15	0	0	0	0	0	0	0	0	28	11	3	9	0	0	0	51	5	0	0	0	0	0	1	6
08:30	0	0	0	0	0	0	0	0	27	15	3	9	0	0	0	54	4	0	0	0	0	0	1	5
08:45	0	0	0	0	0	0	0	0	25	22	4	6	0	0	0	57	2	1	0	0	0	0	1	4
09:00	0	0	0	0	0	0	0	0	26	35	5	6	0	0	0	72	1	1	0	0	0	0	2	4
15:00	0	0	0	0	0	0	0	0	55	18	5	4	0	0	0	82	8	1	0	0	0	0	0	9
15:15	0	0	0	0	0	0	0	0	57	13	4	4	0	0	0	78	6	1	0	0	0	0	1	8
15:30	0	0	0	0	0	0	0	0	71	15	3	3	0	0	0	92	6	1	0	0	0	0	1	8
15:45	0	0	0	0	0	0	0	0	68	12	1	2	0	0	0	83	2	0	0	0	0	0	1	3
16:00	0	0	0	0	0	0	0	0	67	9	2	1	0	0	0	79	2	0	0	0	0	0	2	4
16:15	0	0	0	0	0	0	0	0	72	9	2	1	0	0	0	84	1	1	0	0	0	0	2	4
16:30	0	0	0	0	0	0	0	0	60	6	3	4	0	0	0	73	2	2	0	0	0	0	2	6
16:45	0	0	0	0	0	0	0	0	53	5	3	5	0	0	0	66	3	2	0	0	0	0	2	7
17:00	0	0	0	0	0	0	0	0	50	4	3	5	0	0	0	62	2	2	0	0	0	0	1	5
17:15	0	0	0	0	0	0	0	0	31	2	3	5	0	1	0	42	2	1	0	0	0	0	1	4
17:30	0	0	0	0	0	0	0	0	25	3	2	2	0	1	0	33	3	0	0	0	0	0	2	5
17:45	0	0	0	0	0	0	0	0	23	4	1	2	0	1	0	31	2	0	0	0	0	0	2	4
18:00	0	0	0	0	0	0	0	0	19	5	0	1	0	1	0	26	3	0	0	0	0	0	2	5

Intelligent Data Collection Limited

Client: Hydrack
Project Number: ID05535
Junction Number: Site 1
Date of Survey: 15.10.2020
Junction Name: A33 / Lindisfarne Way / Island Road
Junction Type: Crossroads

Arm A: A33 (N)
Arm B: Lindisfarne Way (E)

Arm C: A33 (S)
Arm D: Island Road (W)



D to A								
Time	Cars	LGV	OGV1	OGV2	Buses	M/C	Cycle	Total
07:00	4	0	0	0	0	0	0	4
07:15	1	0	0	0	0	0	0	1
07:30	1	1	0	1	0	0	0	3
07:45	3	2	3	0	0	0	0	8
08:00	2	3	0	0	0	0	0	5
08:15	4	2	2	2	0	0	0	10
08:30	3	1	1	0	0	0	0	5
08:45	6	1	0	0	0	0	0	7
09:00	9	6	1	0	0	0	0	16
09:15	3	6	0	0	0	0	0	9
09:30	5	4	3	1	0	0	0	13
09:45	5	3	4	0	0	0	0	12
15:00	20	3	0	0	0	0	0	23
15:15	9	1	0	0	0	0	0	10
15:30	18	5	0	0	0	1	0	24
15:45	5	2	0	0	0	0	0	7
16:00	15	0	0	0	0	0	0	15
16:15	13	2	0	0	0	0	0	15
16:30	11	0	0	1	0	0	0	12
16:45	19	3	0	0	0	1	0	23
17:00	13	1	0	0	0	1	0	15
17:15	8	1	0	0	0	0	0	9
17:30	20	0	0	0	0	0	1	21
17:45	8	0	0	0	0	0	0	8
18:00	9	1	0	0	0	0	1	11
18:15	2	2	0	0	0	0	0	4
18:30	7	2	0	0	0	0	0	9
18:45	3	0	0	0	0	0	0	3
Start Time	Rolling Hour							Total
07:00	9	3	3	1	0	0	0	16
07:15	7	6	3	1	0	0	0	17
07:30	10	8	5	3	0	0	0	26
07:45	12	8	6	2	0	0	0	28
08:00	15	7	3	2	0	0	0	27
08:15	22	10	4	2	0	0	0	38
08:30	21	14	2	0	0	0	0	37
08:45	23	17	4	1	0	0	0	45
09:00	22	19	8	1	0	0	0	50
15:00	52	11	0	0	0	1	0	64
15:15	47	8	0	0	0	1	0	56
15:30	51	9	0	0	0	1	0	61
15:45	44	4	0	1	0	0	0	49
16:00	58	5	0	1	0	1	0	65
16:15	56	6	0	1	0	2	0	65
16:30	51	5	0	1	0	2	0	59
16:45	60	5	0	0	0	2	1	68
17:00	49	2	0	0	0	1	1	53
17:15	45	2	0	0	0	0	2	49
17:30	39	3	0	0	0	0	2	44
17:45	26	5	0	0	0	0	1	32
18:00	21	5	0	0	0	0	1	27

Intelligent Data Collection Limited

Client: Hydrock
Project Number: ID05535
Junction Number: Site 1

Date of Survey: 15.10.2020
Junction Name: A33 / Lindsfarne Way / Island Road
Junction Type: Crossroads



Arm A Approach									Arm A Exit							
Time	Cars	LGV	OGV1	OGV2	Buses	M/C	Cycle	Total	Cars	LGV	OGV1	OGV2	Buses	M/C	Cycle	Total
07:00	173	48	6	8	2	1	0	238	135	44	9	3	3	2	0	196
07:15	219	53	7	3	6	5	0	293	194	65	3	5	1	3	0	271
07:30	203	63	6	2	3	4	0	281	221	77	6	3	2	1	0	310
07:45	222	63	7	5	3	2	0	302	301	82	11	7	2	2	0	405
08:00	220	44	7	2	2	0	0	275	260	56	12	5	1	1	0	335
08:15	219	60	5	5	6	2	0	297	277	67	20	8	2	3	0	377
08:30	213	64	6	4	7	2	0	296	222	52	8	5	5	0	0	292
08:45	202	48	10	4	4	4	0	272	226	54	9	3	3	5	1	301
09:00	196	53	9	7	3	0	0	268	233	60	9	2	1	0	0	305
09:15	206	47	14	6	6	1	0	280	203	69	8	5	2	1	0	288
09:30	177	49	7	5	3	2	0	243	199	62	13	7	1	0	0	282
09:45	222	51	12	7	2	2	0	296	202	69	17	10	5	3	0	306
15:00	286	67	7	6	5	0	0	371	241	56	8	3	3	2	0	313
15:15	305	89	5	3	1	3	0	406	233	54	9	6	1	3	0	306
15:30	258	74	5	7	2	4	0	350	282	67	4	3	3	4	0	363
15:45	296	68	10	4	4	1	0	383	247	66	3	4	1	0	0	321
16:00	333	76	2	5	4	3	0	423	327	78	6	6	3	4	0	424
16:15	309	71	3	5	5	2	0	395	275	59	6	0	6	2	0	348
16:30	252	60	2	3	3	4	0	324	304	54	2	1	3	3	0	367
16:45	269	39	4	2	2	1	0	317	291	49	4	1	3	3	0	351
17:00	280	44	2	1	2	2	0	331	345	53	4	3	3	6	0	414
17:15	313	53	2	5	3	7	0	383	272	50	1	3	5	4	0	335
17:30	325	31	3	3	3	5	0	370	344	40	3	1	3	2	1	394
17:45	276	33	3	1	3	4	0	320	294	27	3	1	2	4	0	331
18:00	266	30	3	0	3	2	0	304	262	31	0	2	3	3	1	302
18:15	251	26	1	2	2	6	0	288	281	33	1	2	4	2	0	323
18:30	224	15	1	1	1	0	0	242	265	26	1	0	3	3	0	298
18:45	239	12	0	2	3	2	0	258	245	19	2	0	3	1	0	270
Start Time	Rolling Hour							Total	Rolling Hour							Total
07:00	817	227	26	18	14	12	0	1114	851	268	29	18	8	8	0	1182
07:15	864	223	27	12	14	11	0	1151	976	280	32	20	6	7	0	1321
07:30	864	230	25	14	14	8	0	1155	1059	282	49	23	7	7	0	1427
07:45	874	231	25	16	18	6	0	1170	1060	257	51	25	10	6	0	1409
08:00	854	216	28	15	19	8	0	1140	985	229	49	21	11	9	1	1305
08:15	830	225	30	20	20	8	0	1133	958	233	46	18	11	8	1	1275
08:30	817	212	39	21	20	7	0	1116	884	235	34	15	11	6	1	1186
08:45	781	197	40	22	16	7	0	1063	861	245	39	17	7	6	1	1176
09:00	801	200	42	25	14	5	0	1087	837	260	47	24	9	4	0	1181
15:00	1145	298	27	20	12	8	0	1510	1003	243	24	16	8	9	0	1303
15:15	1192	307	22	19	11	11	0	1562	1089	265	22	19	8	11	0	1414
15:30	1196	289	20	21	15	10	0	1551	1131	270	19	13	13	10	0	1456
15:45	1190	275	17	17	16	10	0	1525	1153	257	17	11	13	9	0	1460
16:00	1163	246	11	15	14	10	0	1459	1197	240	18	8	15	12	0	1490
16:15	1110	214	11	11	12	9	0	1367	1215	215	16	5	15	14	0	1480
16:30	1114	196	10	11	10	14	0	1355	1212	206	11	8	14	16	0	1467
16:45	1187	167	11	11	10	15	0	1401	1252	192	12	8	14	15	1	1494
17:00	1194	161	10	10	11	18	0	1404	1255	170	11	8	13	16	1	1474
17:15	1180	147	11	9	12	18	0	1377	1172	148	7	7	13	13	2	1362
17:30	1118	120	10	6	11	17	0	1282	1181	131	7	6	12	11	2	1350
17:45	1017	104	8	4	9	12	0	1154	1102	117	5	5	12	12	1	1254
18:00	980	83	5	5	9	10	0	1092	1053	109	4	4	13	9	1	1193

Intelligent Data Collection Limited

Client: Hydrock
Project Number: ID05535
Junction Number: Site 1

Date of Survey: 15.10.2020
Junction Name: A33 / Lindsfarne Way / Island Road
Junction Type: Crossroads



Time	Arm B Approach								Arm B Exit							
	Cars	LGV	OGV1	OGV2	Buses	M/C	Cycle	Total	Cars	LGV	OGV1	OGV2	Buses	M/C	Cycle	Total
07:00	42	3	0	0	1	0	1	47	25	2	1	0	1	0	0	29
07:15	38	8	0	0	0	1	0	47	31	5	0	0	2	0	0	38
07:30	34	3	1	0	1	0	0	39	30	3	0	0	1	0	0	34
07:45	38	4	0	0	0	0	0	42	40	4	2	0	2	0	1	49
08:00	33	1	1	0	1	0	0	36	35	1	0	0	1	1	0	38
08:15	40	3	0	0	0	0	0	43	36	2	0	0	1	0	0	39
08:30	43	5	0	0	1	0	0	49	41	3	0	0	1	1	0	46
08:45	34	6	1	0	0	0	0	41	50	5	0	1	2	1	0	59
09:00	35	4	0	1	1	0	2	43	52	6	0	0	1	0	1	60
09:15	28	7	0	0	1	0	0	36	34	4	0	0	1	0	0	39
09:30	30	5	0	0	0	0	0	35	32	4	1	0	1	0	0	38
09:45	21	3	1	0	0	0	0	25	25	4	0	0	0	0	1	30
15:00	40	1	1	0	1	1	0	44	33	7	1	0	1	0	0	42
15:15	31	4	0	0	1	0	0	36	39	6	0	0	1	1	0	47
15:30	44	5	0	0	0	0	0	49	38	4	0	0	0	1	0	43
15:45	48	6	0	0	1	0	0	55	42	4	0	0	1	0	0	47
16:00	34	4	0	0	1	0	1	40	54	9	0	0	0	1	1	65
16:15	41	3	1	0	3	0	0	48	64	9	1	0	1	2	0	77
16:30	45	2	0	0	1	2	1	51	30	2	0	0	0	0	0	32
16:45	35	4	0	0	2	0	0	41	38	1	0	0	0	0	1	40
17:00	43	5	0	0	2	2	0	52	29	4	0	0	0	1	1	35
17:15	42	1	0	0	2	2	0	47	30	5	0	0	0	1	0	36
17:30	37	0	0	0	1	1	0	39	31	4	0	0	0	1	0	36
17:45	33	3	0	0	1	3	0	40	45	6	0	0	0	1	0	52
18:00	41	2	0	0	3	3	0	49	47	3	0	0	1	2	1	54
18:15	23	1	0	0	1	1	0	26	39	3	0	0	1	2	1	46
18:30	36	1	0	0	1	0	0	38	31	1	0	0	1	0	0	33
18:45	35	1	0	0	1	1	0	38	49	2	0	0	1	2	0	54
Start Time	Rolling Hour							Total	Rolling Hour							Total
07:00	152	18	1	0	2	1	1	175	126	14	3	0	6	0	1	150
07:15	143	16	2	0	2	1	0	164	136	13	2	0	6	1	1	159
07:30	145	11	2	0	2	0	0	160	141	10	2	0	5	1	1	160
07:45	154	13	1	0	2	0	0	170	152	10	2	0	5	2	1	172
08:00	150	15	2	0	2	0	0	169	162	11	0	1	5	3	0	182
08:15	152	18	1	1	2	0	2	176	179	16	0	1	5	2	1	204
08:30	140	22	1	1	3	0	2	169	177	18	0	1	5	2	1	204
08:45	127	22	1	1	2	0	2	155	168	19	1	1	5	1	1	196
09:00	114	19	1	1	2	0	2	139	143	18	1	0	3	0	2	167
15:00	163	16	1	0	3	1	0	184	152	21	1	0	3	2	0	179
15:15	157	19	0	0	3	0	1	180	173	23	0	0	2	3	1	202
15:30	167	18	1	0	5	0	1	192	198	26	1	0	2	4	1	232
15:45	168	15	1	0	6	2	2	194	190	24	1	0	2	3	1	221
16:00	155	13	1	0	7	2	2	180	186	21	1	0	1	3	2	214
16:15	164	14	1	0	8	4	1	192	161	16	1	0	1	3	2	184
16:30	165	12	0	0	7	6	1	191	127	12	0	0	0	2	2	143
16:45	157	10	0	0	7	5	0	179	128	14	0	0	0	3	2	147
17:00	155	9	0	0	6	8	0	178	135	19	0	0	0	4	1	159
17:15	153	6	0	0	7	9	0	175	153	18	0	0	1	5	1	178
17:30	134	6	0	0	6	8	0	154	162	16	0	0	2	6	2	188
17:45	133	7	0	0	6	7	0	153	162	13	0	0	3	5	2	185
18:00	135	5	0	0	6	5	0	151	166	9	0	0	4	6	2	187

Intelligent Data Collection Limited

Client: Hydrock
Project Number: ID05535
Junction Number: Site 1

Date of Survey: 15.10.2020
Junction Name: A33 / Lindsfarne Way / Island Road
Junction Type: Crossroads



Time	Arm C Approach								Arm C Exit							
	Cars	LGV	OGV1	OGV2	Buses	M/C	Cycle	Total	Cars	LGV	OGV1	OGV2	Buses	M/C	Cycle	Total
07:00	133	44	10	6	4	2	0	199	183	50	6	8	3	1	0	251
07:15	197	70	3	8	3	3	1	285	218	58	7	3	6	5	0	297
07:30	227	81	8	4	3	2	0	325	205	62	6	3	4	4	0	284
07:45	310	90	10	7	4	2	0	423	215	63	7	5	3	2	0	295
08:00	263	58	12	9	2	1	0	345	215	46	7	3	3	0	0	274
08:15	281	65	18	7	3	3	0	377	213	62	4	7	6	2	0	294
08:30	224	53	7	6	6	0	0	296	203	62	5	7	8	1	0	286
08:45	242	56	9	5	5	5	1	323	189	47	10	5	4	1	0	256
09:00	243	58	8	4	2	0	0	315	192	53	8	10	4	0	0	267
09:15	214	67	10	7	3	1	0	302	207	56	9	8	7	1	0	288
09:30	208	60	10	7	2	0	0	287	180	55	8	5	3	2	0	253
09:45	204	73	13	11	5	3	0	309	222	65	15	8	2	2	0	314
15:00	220	53	10	7	4	1	0	295	298	67	9	6	6	0	0	386
15:15	225	53	10	8	2	3	0	301	292	81	6	4	2	1	0	386
15:30	260	63	4	3	3	3	0	336	274	77	8	8	2	3	0	372
15:45	244	63	3	5	2	0	0	317	295	70	10	6	5	1	0	387
16:00	322	80	7	7	3	4	0	423	325	69	2	4	5	2	0	407
16:15	260	61	5	1	4	2	0	333	283	67	2	5	5	0	0	362
16:30	295	57	2	0	3	1	0	358	267	60	3	3	4	4	0	341
16:45	280	49	5	1	2	2	0	339	262	40	5	3	3	1	0	314
17:00	333	57	5	5	2	3	0	405	305	45	2	1	3	1	0	357
17:15	270	54	1	4	4	3	0	336	320	49	3	8	4	7	0	391
17:30	325	46	3	2	3	1	0	380	325	29	4	4	4	4	0	370
17:45	298	33	4	1	2	2	0	340	269	29	4	2	4	3	0	311
18:00	262	36	1	2	3	1	0	305	269	29	3	0	5	2	0	308
18:15	290	34	2	2	5	1	0	334	248	27	1	2	3	4	0	285
18:30	246	27	3	0	4	3	0	283	224	17	1	2	2	0	0	246
18:45	251	23	2	0	4	1	0	281	234	11	0	2	4	1	0	252
Start Time	Rolling Hour							Total	Rolling Hour							Total
07:00	867	285	31	25	14	9	1	1232	821	233	26	19	16	12	0	1127
07:15	997	299	33	28	12	8	1	1378	853	229	27	14	16	11	0	1150
07:30	1081	294	48	27	12	8	0	1470	848	233	24	18	16	8	0	1147
07:45	1078	266	47	29	15	6	0	1441	846	233	23	22	20	5	0	1149
08:00	1010	232	46	27	16	9	1	1341	820	217	26	22	21	4	0	1110
08:15	990	232	42	22	16	8	1	1311	797	224	27	29	22	4	0	1103
08:30	923	234	34	22	16	6	1	1236	791	218	32	30	23	3	0	1097
08:45	907	241	37	23	12	6	1	1227	768	211	35	28	18	4	0	1064
09:00	869	258	41	29	12	4	0	1213	801	229	40	31	16	5	0	1122
15:00	949	232	27	23	11	7	0	1249	1159	295	33	24	15	5	0	1531
15:15	1051	259	24	23	10	10	0	1377	1186	297	26	22	14	7	0	1552
15:30	1086	267	19	16	12	9	0	1409	1177	283	22	23	17	6	0	1528
15:45	1121	261	17	13	12	7	0	1431	1170	266	17	18	19	7	0	1497
16:00	1157	247	19	9	12	9	0	1453	1137	236	12	15	17	7	0	1424
16:15	1168	224	17	7	11	8	0	1435	1117	212	12	12	15	6	0	1374
16:30	1178	217	13	10	11	9	0	1438	1154	194	13	15	14	13	0	1403
16:45	1208	206	14	12	11	9	0	1460	1212	163	14	16	14	13	0	1432
17:00	1226	190	13	12	11	9	0	1461	1219	152	13	15	15	15	0	1429
17:15	1155	169	9	9	12	7	0	1361	1183	136	14	14	17	16	0	1380
17:30	1175	149	10	7	13	5	0	1359	1111	114	12	8	16	13	0	1274
17:45	1096	130	10	5	14	7	0	1262	1010	102	9	6	14	9	0	1150
18:00	1049	120	8	4	16	6	0	1203	975	84	5	6	14	7	0	1091

Intelligent Data Collection Limited

Client: Hydrock
Project Number: ID05535
Junction Number: Site 1

Date of Survey: 15.10.2020
Junction Name: A33 / Lindsfarne Way / Island Road
Junction Type: Crossroads



	Arm D Approach								Arm D Exit									
Time	Cars	LGV	OGV1	OGV2	Buses	M/C	Cycle	Total	Cars	LGV	OGV1	OGV2	Buses	M/C	Cycle	Total		
07:00	7	2	0	0	0	0	0	9	12	1	0	3	0	0	1	17		
07:15	2	3	0	0	0	0	0	5	13	6	0	3	0	1	1	24		
07:30	1	2	0	2	0	0	0	5	9	7	3	2	0	1	0	22		
07:45	4	4	3	1	0	0	1	13	18	12	0	1	0	0	0	31		
08:00	6	6	1	2	0	1	0	16	12	6	2	5	0	0	0	25		
08:15	10	6	2	4	0	0	0	22	24	3	1	1	0	0	0	29		
08:30	14	2	2	3	0	0	0	21	28	7	2	1	0	0	0	38		
08:45	15	4	1	2	0	0	0	22	28	8	2	2	0	2	0	42		
09:00	16	9	2	2	0	0	1	30	13	5	2	2	0	0	2	24		
09:15	7	14	0	2	0	0	0	23	11	6	7	2	0	0	0	26		
09:30	12	13	5	1	0	0	0	31	16	6	0	1	0	0	0	23		
09:45	14	19	6	2	0	0	1	42	12	8	0	2	0	0	0	22		
15:00	39	10	1	0	0	0	0	50	13	1	1	4	0	0	0	19		
15:15	17	3	1	1	0	0	0	22	14	8	1	2	0	1	0	26		
15:30	43	11	3	1	0	1	0	59	11	5	0	0	0	0	0	16		
15:45	16	6	0	2	0	0	0	24	20	3	0	1	0	0	0	24		
16:00	34	2	0	0	0	0	1	37	17	6	1	2	0	0	1	27		
16:15	35	6	0	0	0	0	0	41	23	6	0	1	0	0	0	30		
16:30	29	2	1	1	0	0	0	33	20	5	0	0	0	0	1	26		
16:45	29	4	1	1	0	1	1	37	22	6	1	0	0	0	0	29		
17:00	36	4	0	0	0	1	1	42	13	8	1	2	0	0	0	24		
17:15	19	3	1	3	0	0	0	26	22	7	0	1	0	0	0	30		
17:30	32	1	1	1	0	0	1	36	19	5	0	1	0	0	0	25		
17:45	14	0	1	1	0	0	0	16	13	7	1	0	0	1	0	22		
18:00	13	1	0	0	0	1	2	17	4	6	1	0	0	0	0	11		
18:15	8	4	0	0	0	0	1	13	4	2	1	0	0	0	0	7		
18:30	16	4	0	1	0	0	0	21	2	3	2	0	0	0	0	7		
18:45	6	1	0	0	0	0	0	7	3	5	0	0	0	0	0	8		
Start Time	Rolling Hour								Total	Rolling Hour								Total
07:00	14	11	3	3	0	0	1	32	52	26	3	9	0	2	2	94		
07:15	13	15	4	5	0	1	1	39	52	31	5	11	0	2	1	102		
07:30	21	18	6	9	0	1	1	56	63	28	6	9	0	1	0	107		
07:45	34	18	8	10	0	1	1	72	82	28	5	8	0	0	0	123		
08:00	45	18	6	11	0	1	0	81	92	24	7	9	0	2	0	134		
08:15	55	21	7	11	0	0	1	95	93	23	7	6	0	2	2	133		
08:30	52	29	5	9	0	0	1	96	80	26	13	7	0	2	2	130		
08:45	50	40	8	7	0	0	1	106	68	25	11	7	0	2	2	115		
09:00	49	55	13	7	0	0	2	126	52	25	9	7	0	0	2	95		
15:00	115	30	5	4	0	1	0	155	58	17	2	7	0	1	0	85		
15:15	110	22	4	4	0	1	1	142	62	22	2	5	0	1	1	93		
15:30	128	25	3	3	0	1	1	161	71	20	1	4	0	0	1	97		
15:45	114	16	1	3	0	0	1	135	80	20	1	4	0	0	2	107		
16:00	127	14	2	2	0	1	2	148	82	23	2	3	0	0	2	112		
16:15	129	16	2	2	0	2	2	153	78	25	2	3	0	0	1	109		
16:30	113	13	3	5	0	2	2	138	77	26	2	3	0	0	1	109		
16:45	116	12	3	5	0	2	3	141	76	26	2	4	0	0	0	108		
17:00	101	8	3	5	0	1	2	120	67	27	2	4	0	1	0	101		
17:15	78	5	3	5	0	1	3	95	58	25	2	2	0	1	0	88		
17:30	67	6	2	2	0	1	4	82	40	20	3	1	0	1	0	65		
17:45	51	9	1	2	0	1	3	67	23	18	5	0	0	1	0	47		
18:00	43	10	0	1	0	1	3	58	13	16	4	0	0	0	0	33		

Intelligent Data Collection Limited

Client: Hydrock
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Junction Number: Site 1
Date of Survey: 15.10.2020
Junction Name: A33 / Lindsfarne Way / Island Road
Junction Type: Crossroads



Total Junction Flow								
Time	Cars	LGV	OGV1	OGV2	Buses	M/C	Cycle	Total
07:00	355	97	16	14	7	3	1	493
07:15	456	134	10	11	9	9	1	630
07:30	465	149	15	8	7	6	0	650
07:45	574	161	20	13	7	4	1	780
08:00	522	109	21	13	5	2	0	672
08:15	550	134	25	16	9	5	0	739
08:30	494	124	15	13	14	2	0	662
08:45	493	114	21	11	9	9	1	658
09:00	490	124	19	14	6	0	3	656
09:15	455	135	24	15	10	2	0	641
09:30	427	127	22	13	5	2	0	596
09:45	461	146	32	20	7	5	1	672
15:00	585	131	19	13	10	2	0	760
15:15	578	149	16	12	4	6	0	765
15:30	605	153	12	11	5	8	0	794
15:45	604	143	13	11	7	1	0	779
16:00	723	162	9	12	8	7	2	923
16:15	645	141	9	6	12	4	0	817
16:30	621	121	5	4	7	7	1	766
16:45	613	96	10	4	6	4	1	734
17:00	692	110	7	6	6	8	1	830
17:15	644	111	4	12	9	12	0	792
17:30	719	78	7	6	7	7	1	825
17:45	621	69	8	3	6	9	0	716
18:00	582	69	4	2	9	7	2	675
18:15	572	65	3	4	8	8	1	661
18:30	522	47	4	2	6	3	0	584
18:45	531	37	2	2	8	4	0	584
Start Time	Rolling Hour							Total
07:00	1850	541	61	46	30	22	3	2553
07:15	2017	553	66	45	28	21	2	2732
07:30	2111	553	81	50	28	17	1	2841
07:45	2140	528	81	55	35	13	1	2853
08:00	2059	481	82	53	37	18	1	2731
08:15	2027	496	80	54	38	16	4	2715
08:30	1932	497	79	53	39	13	4	2617
08:45	1865	500	86	53	30	13	4	2551
09:00	1833	532	97	62	28	9	4	2565
15:00	2372	576	60	47	26	17	0	3098
15:15	2510	607	50	46	24	22	2	3261
15:30	2577	599	43	40	32	20	2	3313
15:45	2593	567	36	33	34	19	3	3285
16:00	2602	520	33	26	33	22	4	3240
16:15	2571	468	31	20	31	23	3	3147
16:30	2570	438	26	26	28	31	3	3122
16:45	2668	395	28	28	28	31	3	3181
17:00	2676	368	26	27	28	36	2	3163
17:15	2566	327	23	23	31	35	3	3008
17:30	2494	281	22	15	30	31	4	2877
17:45	2297	250	19	11	29	27	3	2636
18:00	2207	218	13	10	31	22	3	2504

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Arm A: A33 (N)

Arm B: Lindsfarne Way (E)

Arm C: A33 (S)

Arm D: Island Road (W)

PCU Summary																
Time	A to A	A to D	A to C	A to B	B to B	B to A	B to D	B to C	C to C	C to B	C to A	C to D	D to D	D to C	D to B	D to A
07:00	0	4	239	18	0	15	0	33	0	12	194	18	0	4	1	4
07:15	0	5	286	20	0	21	0	25	0	21	261	23	0	4	0	1
07:30	0	8	266	18	0	13	0	28	0	18	306	20	0	4	0	5
07:45	0	14	286	21	0	18	2	22	0	32	401	17	0	6	0	11
08:00	0	13	257	18	0	19	1	19	0	21	332	23	0	15	0	5
08:15	0	17	282	20	0	21	0	22	0	20	375	15	0	15	1	16
08:30	0	23	274	21	0	28	2	21	0	24	282	17	0	21	2	6
08:45	0	18	244	30	0	21	4	17	0	32	288	25	0	19	1	7
09:00	0	10	259	25	0	21	0	23	0	35	281	18	0	17	1	17
09:15	0	15	279	19	0	12	1	25	0	22	286	21	0	18	0	9
09:30	0	8	236	18	0	17	0	18	0	22	274	17	0	19	1	18
09:45	0	11	298	13	0	13	1	12	0	16	317	14	0	35	0	16
15:00	0	6	367	23	0	22	1	22	0	18	284	21	0	25	3	23
15:15	0	11	374	30	0	24	1	13	0	18	291	18	0	15	0	10
15:30	0	7	341	20	0	28	1	20	0	17	323	8	0	35	5	23
15:45	0	12	371	22	0	33	0	24	0	26	293	14	0	20	1	7
16:00	0	12	382	44	0	20	0	21	0	18	408	19	0	20	1	15
16:15	0	16	340	57	0	38	1	15	0	21	308	15	0	26	0	15
16:30	0	15	303	16	0	22	0	29	0	16	338	10	0	22	0	14
16:45	0	14	295	18	0	26	0	19	0	20	311	16	0	15	1	22
17:00	0	5	317	14	0	30	1	23	0	18	380	23	0	25	1	14
17:15	0	16	363	15	0	22	1	26	0	18	316	15	0	22	2	9
17:30	0	13	350	17	0	21	0	19	0	17	360	14	0	17	1	20
17:45	0	11	294	21	0	22	0	18	0	30	306	11	0	11	0	8
18:00	0	2	286	22	0	25	0	26	0	32	272	10	0	4	0	10
18:15	0	0	272	20	0	13	0	14	0	24	315	8	0	6	2	4
18:30	0	1	227	18	0	27	0	13	0	17	266	8	0	14	0	9
18:45	0	0	239	26	0	19	1	19	0	28	254	7	0	3	1	3
Start Time	Rolling Hour															
07:00	0	31	1077	77	0	67	2	108	0	83	1162	78	0	18	1	21
07:15	0	40	1096	77	0	71	3	94	0	91	1300	82	0	29	1	22
07:30	0	52	1092	77	0	71	3	91	0	89	1414	74	0	39	2	36
07:45	0	66	1100	80	0	86	5	83	0	95	1391	71	0	56	4	37
08:00	0	70	1058	90	0	89	7	78	0	96	1277	79	0	69	4	34
08:15	0	67	1059	97	0	91	6	83	0	110	1225	74	0	71	5	45
08:30	0	65	1056	96	0	82	7	85	0	112	1136	80	0	74	4	39
08:45	0	50	1019	92	0	71	5	83	0	110	1128	80	0	72	3	51
09:00	0	43	1072	75	0	63	2	78	0	94	1158	69	0	88	2	59
15:00	0	36	1453	96	0	107	3	78	0	78	1191	60	0	94	9	63
15:15	0	42	1468	117	0	105	2	77	0	78	1315	58	0	89	7	55
15:30	0	47	1435	144	0	119	2	79	0	82	1332	56	0	100	7	60
15:45	0	55	1396	140	0	113	1	87	0	81	1347	58	0	88	2	51
16:00	0	57	1320	136	0	105	1	82	0	75	1365	60	0	83	2	66
16:15	0	50	1255	106	0	116	2	84	0	75	1337	64	0	88	2	66
16:30	0	50	1278	64	0	100	2	95	0	72	1344	64	0	83	4	60
16:45	0	48	1325	65	0	99	2	85	0	73	1366	67	0	78	5	66
17:00	0	45	1324	69	0	96	2	84	0	83	1361	63	0	74	4	52
17:15	0	42	1293	76	0	91	1	88	0	97	1254	50	0	54	3	47
17:30	0	26	1202	80	0	82	0	76	0	102	1253	43	0	38	3	42
17:45	0	14	1080	81	0	88	0	70	0	102	1159	37	0	35	2	31
18:00	0	3	1025	85	0	85	1	71	0	99	1107	33	0	27	3	26