



Boundary Lakes Clubhouse Transport Note

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INTRODUCTION

In August 2020, WSP produced a Transport Statement in support of a planning application (ref. F/20/88655) for the erection of golf course clubhouse and ancillary facilities including a car park at the Boundary Lakes Golf Course in Southampton. The planning application for this development was granted planning consent on 30th July 2021. The previously produced Transport Statement is included in Appendix A for ease of reference.

There have since been amendments to the proposed masterplan and the internal access road layout. This Technical Note will summarise the differences between the previously proposed masterplan and the newly updated masterplan, as well as undertaking a high-level review of baseline traffic levels and local transport network to identify any changes that may have occurred since the completion of the original Transport Statement in August 2020.

UPDATED MASTERPLAN

Site Access

The proposed site access junction remains unchanged from the previously consented layout which was included in the 2021 planning permission. The proposed development will therefore be served by an existing access on A27 Moorhill Road.

There are minor amendments proposed to the internal access road. This includes minor narrowing, as well as the introduction of a layby which will act as a passing place. This layby is located approximately halfway between the site access and entry into the clubhouse car park. The layby ensures that a car entering the site can pass a refuse vehicle exiting the site, if required, noting that the access junction itself is also wide enough for two-way traffic. Swept path analysis demonstrating the ability of a refuse vehicle to pass a large car using the proposed layout is set out in drawing no. 70053691-ATR-004, which is included in Appendix B. This drawing also demonstrates the ability of a refuse vehicle to enter the site in forward gear, undertake a three point turn, and egress the site in forward gear also.

Car Parking Proposals

The previous proposals for the site included 60 car parking spaces, four of which were accessible spaces. The revised proposals includes 84 car parking spaces, four of which are accessible. This is appropriate for demand associated with the golf course.

BASELINE TRAFFIC AND TRANSPORT NETWORK

Given the relatively short period of time which has passed since the writing of the August 2020 Transport Statement, it is unlikely that considerable changes have occurred on the highway network local to the proposed site. Similarly, it is unlikely that the baseline traffic levels have altered significantly. Nonetheless, a high-level comparison of the changes in highway safety data across these time periods has been undertaken, as has a review of baseline traffic levels.

Highway Safety

The previously submitted Transport Statement included a review of Personal Injury Collision (PIC) data for the local highway network for the previous full three-year period (2017-2019).

An updated review of PIC data for the most recent full three-year period (2020 – 2022) has been undertaken to identify any potential new highway safety issues which have arisen in this time period. The updated PIC data for the local highway network is included in Figure 1.

For the purposes of comparison, Table 1 contains a comparison of the PIC data for the previously assessed period and the most recently available period. This comparison shows only minor changes in the number and locations of collisions observed, and in the majority of locations, instances of PIC's showed a decrease in the most recently available data.

In neither the previously assessed time period nor the most recently available data, were there any incidence of PIC's occurring at the access junction to the site.

Figure 1: Updated Personal Injury Collision data for Local Highway Network (2020 - 2022), Source: CrashMap

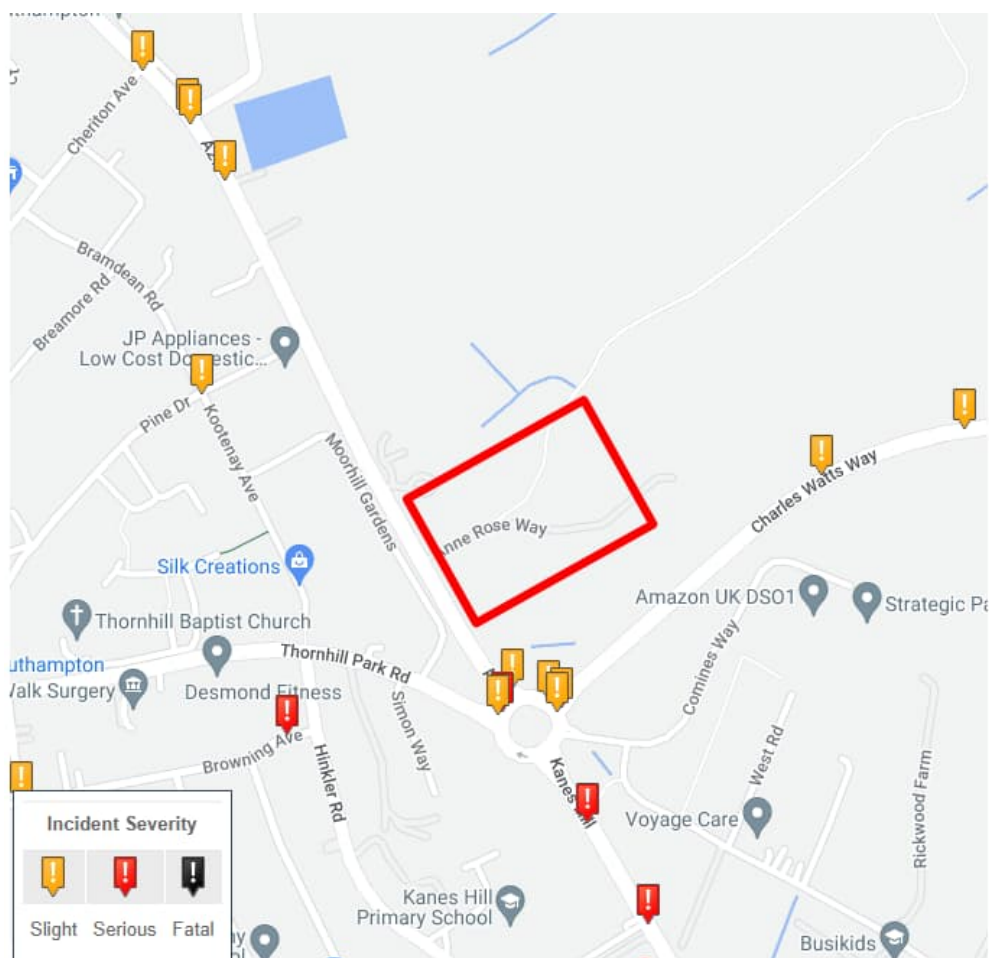


Table 1: Comparison of PIC statistics

	2017 - 2019		2020 - 2022		Net Change	
	Severity					
	Slight	Serious	Slight	Serious	Slight	Serious
Site Access Junction, A27 Moorhill Road	0	0	0	0	0	0
Kanes Hill Roundabout (all approaches)	8	2	5	1	-3	-1
Charles Watts Way	2	1	2	0	0	-1
Thornhill Park Road between Kanes Hill Rbt and Pine Drive	3	2	1	0	-2	-2
A27 Moorhill Road between Kanes Hill Rbt and Cheriton Avenue	3	0	4	0	+1	0

Baseline Traffic Conditions

As the August 2020 Transport Statement was written in the context of the movement restrictions which were in place due to the impacts of the COVID-19 pandemic, which was prevalent at the time, the traffic

levels assessed were derived from 2017 observed traffic counts which had TEMPro growth factors applied to bring the traffic up to theoretical levels for 2020.

The Department for Transport (DfT) have a regularly monitored traffic count point on A334 Charles Watts Way in the immediate vicinity of the site (ID: 7992). Observed Annual Average Daily Flow (AADF) traffic data for 2017, 2020 and 2022 have been reviewed to give an overview of the changes to traffic flow which have been occurring in the area of the site in the time since the originally reviewed traffic data was collated.

Table 2: Observed traffic flow on A334 Charles Watts Way

Year	Observed AADF	Percentage change from 2017 (%)
2017	24,632	N/A
2020	21,012	-14.7%
2022	25,345	+2.9%

The observed traffic data in the area of the site demonstrates a 2.9% increase in AADF from 2017 to 2022. This is a minor increase in traffic level equivalent to a growth factor between 2017 and 2022 of 1.0289. The August 2020 Transport Statement used a growth factor of 1.0435 for the time period between 2017 and 2020.

As such, the August 2020 Transport Statement theoretically assessed a level of traffic for 2020 higher than would be seen in 2022. This suggests that the assessment previously undertaken was robust and that the results remain valid.

In addition, the previously undertaken site access capacity assessments saw a maximum ratio of flow to capacity of 0.11, with a maximum queue on any arm of one vehicle in the peak period, it is unlikely that minor increases in baseline traffic on A27 Moorhill Road would lead to a significant impact on the operation of the access junction.

CONCLUSION

On the basis of this Transport Note, it can be concluded that the results of the August 2020 Transport Statement remain valid in respect to transport impacts of the proposed development, and that the minor amendments to the internal layout proposed pose no considerable issues relating to traffic and transport.

APPENDIX A – 2020 TRANSPORT STATEMENT



Land & Development Advisory

BOUNDARY LAKES GOLF COURSE

Transport Statement





Land & Development Advisory

BOUNDARY LAKES GOLF COURSE

Transport Statement

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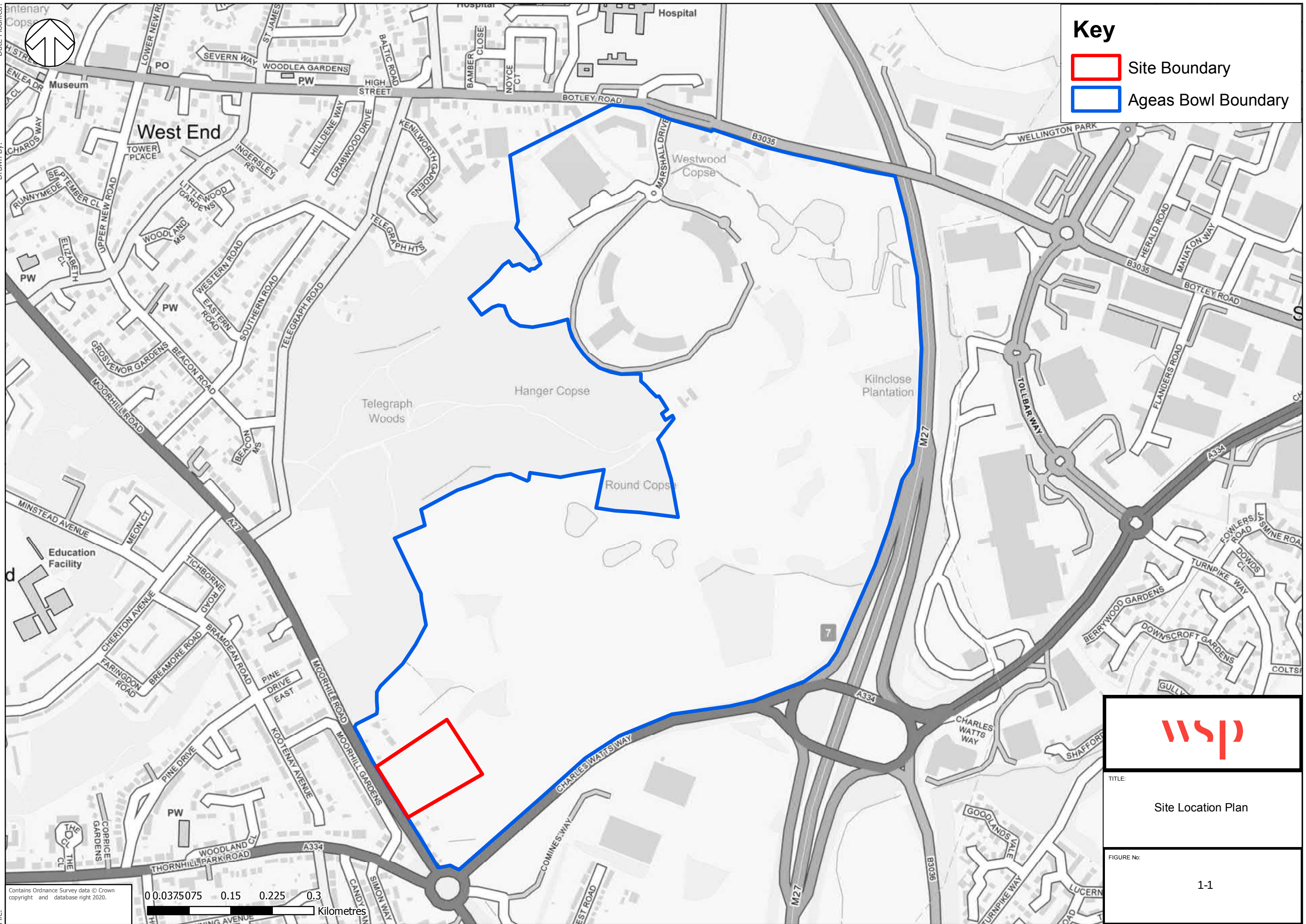
TRAFFIC SURVEYS

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JUNCTION MODEL OUTPUT

1 INTRODUCTION

- 1.1.1. WSP have been commissioned by Land & Development Advisory Ltd to provide transport planning support for development proposals at the Ageas Bowl, Eastleigh. The development proposals involve the construction of a new golf course club house and the provision of a 70-space car park (hereby referred to as the 'full application'). The location for the proposals is shown in **Figure 1-1** overleaf and the planning application Local Plan is shown in **Appendix A**.
- 1.1.2. The site forms part of the wider Ageas Bowl complex. The site is bordered to the north Botley Road, the M27 and A334 Charles Watts Way to the east, A27 Moorhill Road to the south and Telegraph Road and Telegraph Woods to the west.
- 1.1.3. This Transport Statement will cover the following elements:
- Policy review;
 - Existing site conditions;
 - Accessibility and surrounding highway network;
 - Details of the development;
 - Trip generation; and
 - Confirmation of highway impact.
- 1.1.4. The proposed development layout is shown in **Appendix B**.



2 POLICY REVIEW

2.1 INTRODUCTION

- 2.1.1. This section will summarise key policies that relate to the development site.

2.2 NATIONAL POLICY

NATIONAL PLANNING POLICY FRAMEWORK

- 2.2.1. A revised version of National Planning Policy Framework (NPPF) was published in February 2019. NPPF sets out a number of transport objectives designed to facilitate sustainable development and contribute to a wider sustainability by giving people a greater choice about how they travel.
- 2.2.2. Mindful of the early stage of the proposed scheme, NPPF states at paragraph 102 that:
- ‘Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:*
- a) the potential impacts of development on transport networks can be addressed;*
 - b) opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;*
 - c) opportunities to promote walking, cycling and public transport use are identified and pursued;*
 - d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and*
 - e) patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places’.*
- 2.2.3. In respect of considering development proposals NPPF states at paragraph 108 that:
- ‘In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:*
- a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;*
 - b) safe and suitable access to the site can be achieved for all users; and*
 - c) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree’.*
- 2.2.4. At paragraph 109 NPPF 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’.*
- 2.2.5. At paragraph 109 NPPF states that, *‘All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed’.*

2.3 LOCAL POLICY

- 2.3.1. Local policy in Eastleigh has been undergoing reforms for several years. The last adopted plan covered the years 2001-2011 and is technically still adopted. Since then, there has been one draft plan (2011-2029), which was declared unsound in 2014, and the most recent plan (2016-2036) which has been published for public consultation and will soon be submitted to the planning inspector. This section will solely look at relevant points from the emerging local plan as relevant policy from the 2001-2011 has now been declared invalid.

EASTLEIGH BOROUGH LOCAL PLAN 2016-2036

Key Issues

- 2.3.2. The emerging local plan has a large emphasis on the local environment, recognising air, water and noise pollution as a key issue derived from the location of roads such as the M27 and M3. This has been designated as **Issue G8 – Climate change and natural resources** and **Issue G9 – Air quality and other forms of pollution**. Congestion has also been recognised as a key issue in the area: **Issue G11 – Congestion on major roads through the borough**. Suggestions to tackle this specific issue have outlined as;
- *“Improving the performance of key junctions across the road network, including better provision for the movement of public transport, pedestrians and cyclists;*
 - *Decreasing road congestion and the idling of cars;*
 - *Enhancing the attractiveness and efficiency of public transport to make it more competitive with car use on many journeys and using Travel Plans to publicise these options to businesses and developers;*
 - *Providing public transport, footpath and cycleway links between homes and employment, retail, community and leisure facilities;*
 - *Improving the quality of jobs within the Borough to reduce levels of long distance out-commuting by residents;*
 - *Enabling more flexible ways of working including working from home, for example by encouraging the roll-out of high-speed broadband facilities in the Borough; and*
 - *Providing enhanced verges to absorb the pollutants from the road and also provide natural habitat to provide foraging and commuting routes for wildlife.”*
- 2.3.3. Other relevant issues and areas of improvement outlined in this section include;
- **Issue G12 – Access to new development sites**
 - **Issue G13 – Accessibility to public transport and integration of public transport and other non-motorised transport networks**
 - **Issue G16 – Footpath/Cycleway/Bridleway network**
 - **Issue G17 – Parking**

Vision and Objectives

- 2.3.4. Chapter 3 of the local plan details the vision for Eastleigh Borough. The following are relevant objectives towards achieving the vision:
- *“Tackling congestion - Tackle local traffic congestion and associated pollution by reducing car usage and improving transport infrastructure;*
 - *Developing green infrastructure – Provide green links to and between local facilities and open space and a linked habitat network to safeguard wildlife and natural resources;*

- *Encouraging a sustainable community - Ensure future development contributes to the Borough's sustainability and resilience through effective low carbon and water efficient planning and design; and*
- *Enabling healthier lifestyles / wellbeing - Facilitate better physical and mental health and wellbeing by improving the places people live, work, learn and play, meeting the challenge of the ageing population, and promoting cultural and physical activity."*

Policy WE4, Land at Ageas Bowl and Tennis Centre, Botley Road, West End

2.3.5. The following is a series of criteria that will need to be met for development of further sports and recreational facilities to be permitted at Ageas Bowl;

- *"Development must be for outdoor sport or recreational purposes, or for buildings strictly ancillary to such uses;*
- *Any buildings or structures must be appropriate in scale, form and location to the predominantly green and open character of the area and should only be visible from the surrounding area in the context of the wider landscape setting;*
- *Development must be of a high-quality layout and design, with careful attention to detailing, hard landscaping and planting;*
- *Proposals for floodlighting on any part of the site (excluding cricket) must be of a scale, form, location and luminosity that would not affect the predominantly open character of the area. The hours of use of any floodlighting may be limited in order to minimise its impact on nearby residential property;*
- *Proposals must be accompanied by satisfactory arrangements for vehicular access from Botley Road and must include provision for improved facilities for pedestrians, cyclists and public transport;*
- *Any areas of the site to be used for occasional or short-term car parking must be provided with an appropriate soft surface, be well landscaped and not be used for any purposes other than car parking;*
- *Any proposal must ensure that surface water drainage will not increase flood risks downstream and within the river corridor; and*
- *That there will be no adverse impact on the adjacent Telegraph Woods SINC where contributions will be required towards its maintenance."*

Policy DM1, General Criteria for New Development

2.3.6. This policy details the general criteria for all new development. The follow relates to transport;

- *"Provide fully connected green infrastructure that interlaces the development and connects into the wider network; and*
- *Incorporate provision for disabled people."*

Policy DM13, General Development Criteria – Transport

2.3.7. This policy outlines some key criteria that must be considered in regard to the transport aspect of all new developments.

"All new development must have safe and convenient access to the highway network and make provision for access to, and by, other transport modes including public transport and cycle and pedestrian routes as appropriate. Access arrangements to the highway network must:

- *Meet national and local guidance and standards with all highway improvements meeting the standard required to be adopted by the Highway Authority;*

- *Not cause or increase danger to road users or have a significant detrimental impact on the operation or safety of the highway network; and*
- *Be provided without unacceptable environmental impact.*

All new development will be assessed to establish whether it should contribute to off-site improvements to transport infrastructure in accordance with Hampshire County Council's Transport Contributions Policy, to the extent that these are necessitated by the development and proportionate to the scale of development.

Development proposals that will generate vehicle movements likely to have an adverse impact on traffic conditions beyond the immediate vicinity of the development site must be subject to Transport Assessment and will be required to incorporate and implement mitigation measures such as:

- *Provision of / contribution towards on and off-site highway improvements such as junction improvements and potentially new road links;*
- *On-site pedestrian, cycle and public transport infrastructure;*
- *Contributions towards relevant off-site sustainable transport infrastructure, public rights of way and service improvements where appropriate; and*
- *On-site measures aimed at increasing uptake of non-car travel options (e.g. Travel Plans) to reduce car use."*

- 2.3.8. This policy also emphasises that new developments that will accommodate larger numbers of people must have adequate road access or be served by good public transport and active travel options. It also asserts that Transport Assessments should be undertaken for development proposals and Solent Transport's Sub-Regional Transport Model should be used to ensure compatibility with other development.

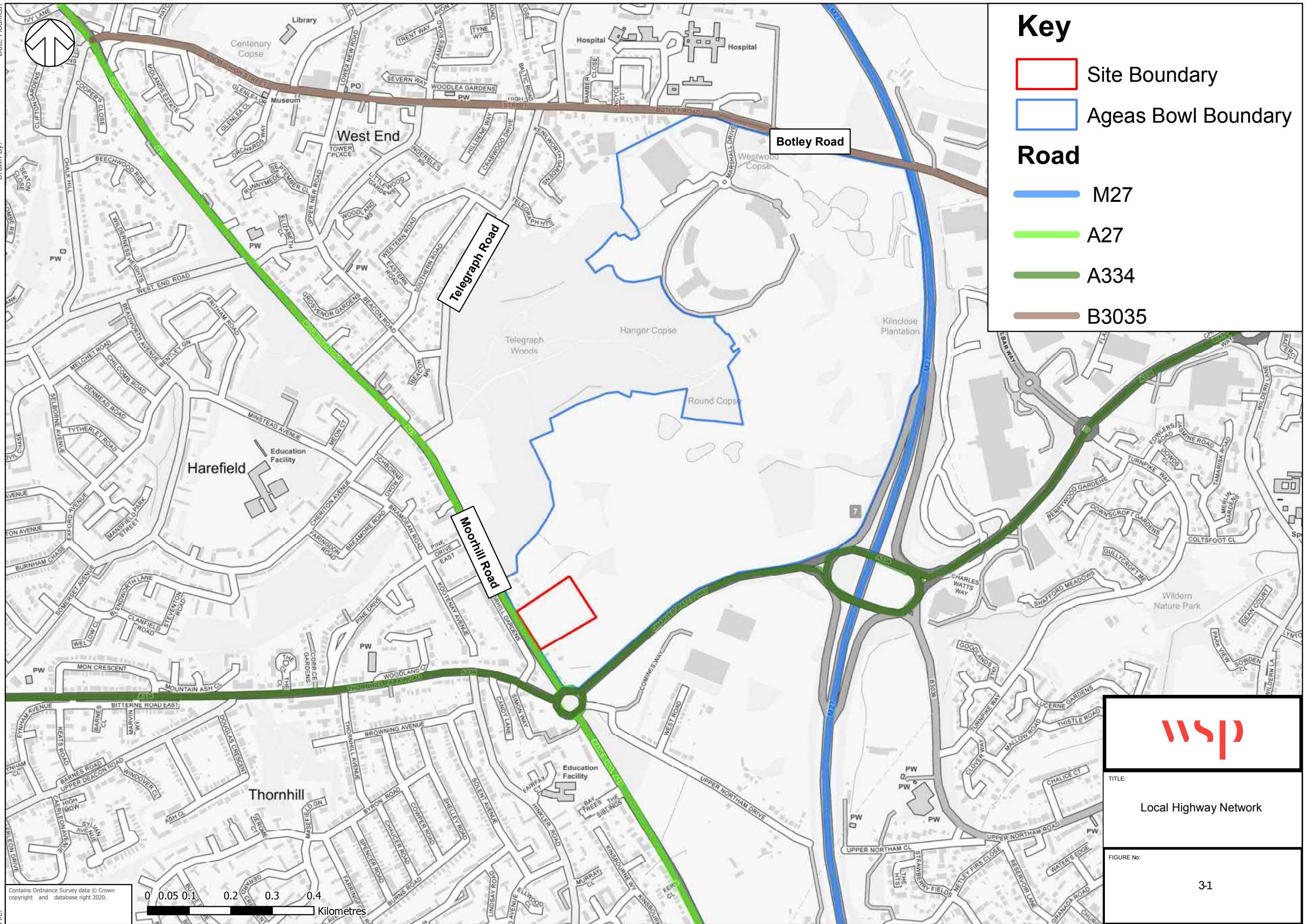
3 EXISTING CONDITIONS

3.1 EXISTING GOLF CLUB OPERATION

- 3.1.1. The existing golf club currently operates between 7.30am and 6.30pm on weekdays, and 11am to 6pm on Saturdays and Sundays. The golf course operates on a pre-booked tee-off slot basis, with a slot typically every eight minutes. Visitors are required to bring their own clubs, although a pro shop is available on site.
- 3.1.2. The current golf club currently uses the Hilton Hotel facilities and has access to 46 parking spaces. The car park is accessed from Botley Road and Marshall Drive.

3.2 SURROUNDING LOCAL HIGHWAY

- 3.2.1. The Ageas Bowl, and Boundary Lakes Golf Course, is situated on the south-east periphery of West End Village. The M27 runs north-south alongside the eastern flank of the site. The site is otherwise surrounded by the residential areas of West End, Harefield and Thornhill. These areas are also made up of some small retail/convenience facilities and several schools.
- 3.2.2. The golf course is bordered by the following roads;
- B3035 Botley Road to the north. This is the current access road to Marshall Drive;
 - M27 to the east;
 - Charles Watts Way to the south east. This road provides access to both the M27 northbound and southbound;
 - A27 Moorhill Road to the south west; and
 - Telegraph Road to the west. This is a residential road.
- 3.2.3. The proposals front onto A27 Moorhill Road. This road comprises a single carriageway that is subject to a 40mph speed limit. In the vicinity of the site, there are no footways on either side of the carriageway, and the carriageway is instead flanked by a soft verge and hedgerows.
- 3.2.4. The existing access (which the proposals will make use of) comprises a large bellmouth priority junction with a kerbed central island to prevent vehicles undertaking a right turn manoeuvre from the access onto the A27 Moorhill Road. This access benefits from an existing planning permission which is discussed in **Section 4.2**.
- 3.2.5. Kanes Hill Roundabout is located approximately 175m to the south east of the site access and benefits from with streetlights and a pedestrian footway on at least one side of the road.
- 3.2.6. The local highway network surrounding the site is shown in **Figure 3-1** overleaf.



3.3 ACCESSIBILITY

WALKABILITY AND PUBLIC RIGHTS OF WAY

- 3.3.1. There is limited pedestrian infrastructure in the immediate area around the proposed development site. The footway on A27 Moorhill Road diverts away from the road side as it approaches Telegraph Woods, it then becomes a segregated public footpath, route 506, separated from the road by vegetation.
- 3.3.2. The proposals will allow for internal permeability with the surrounding facilities at the Ageas Bowl, and it is possible to walk from the main entrance on Marshall Drive to the site, over a 1.5KM distance.
- 3.3.3. A number of Public Rights of Way (PRoW) exist in the vicinity of the site. In particular, PRoW 509 routes through the site and connects to Telegraph Wood (although it does not tie into a formal PRoW). The proposals will not affect this PRoW 509. The PRoWs in the vicinity of the site are shown in **Figure 3-2** overleaf.

EXISTING CYCLE INFRASTRUCTURE

- 3.3.4. Cycle infrastructure is limited in the immediate area of the site. A27 Moorhill Road has no dedicated cycling facilities but has not had any recorded cycle-related collisions in the vicinity of the proposed development in the last three years. Moorhill Road is relatively wide and straight and as such features safe overtaking opportunities. In addition, the number of side turnings and private accesses is limited, reducing the potential for collisions.
- 3.3.5. Given that visitors to the site will need to bring their own golf clubs, which are large and bulky, it is unlikely that visitors to the site will be able to cycle to play golf. However, travel by cycle for staff is considered to be a reasonable alternative to the private vehicle, and all of western Southampton is within reasonable cycle distance. A plan showing cycle accessibility and journey times is shown in **Figure 3-3** overleaf.

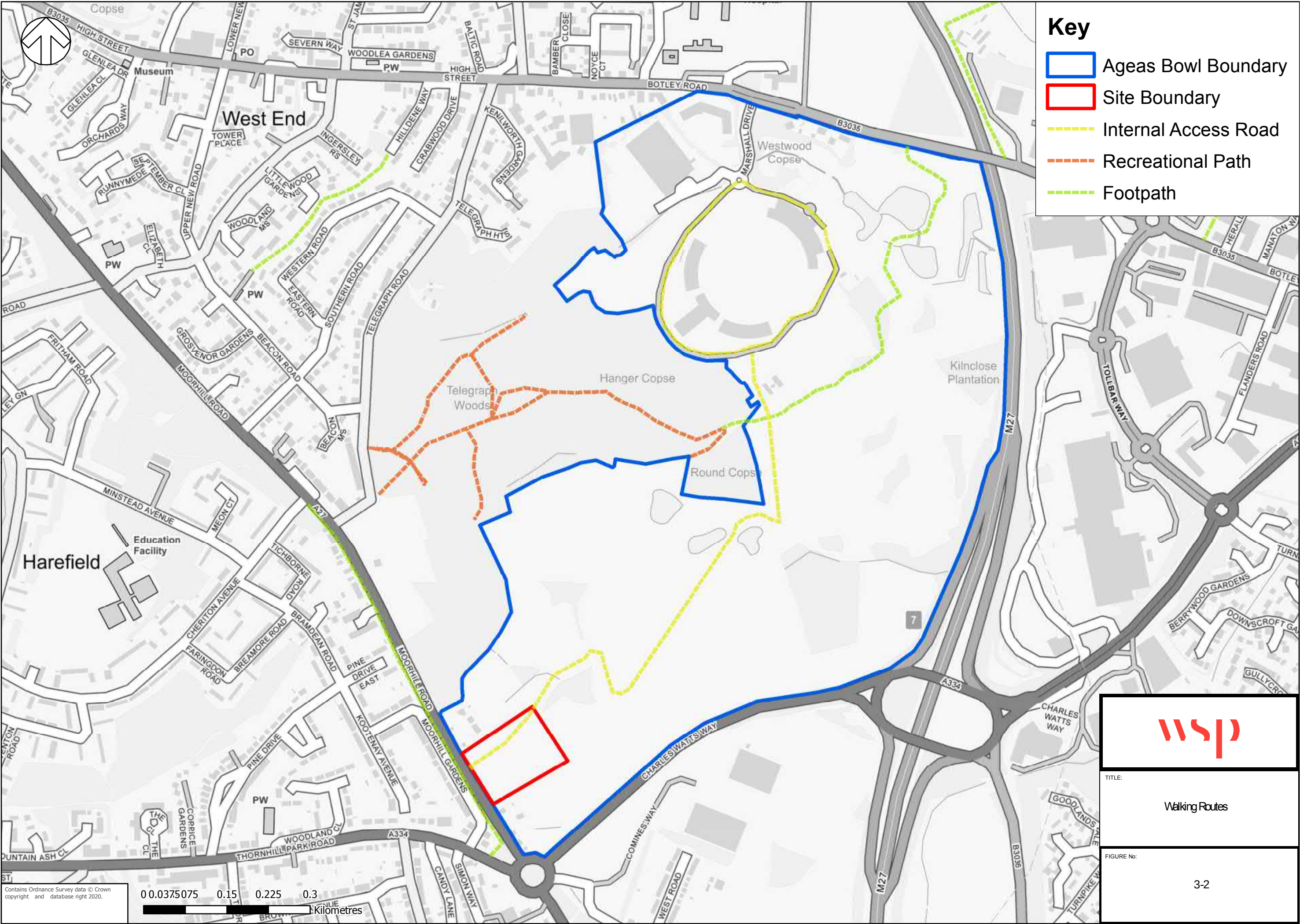
BUS ACCESSIBILITY

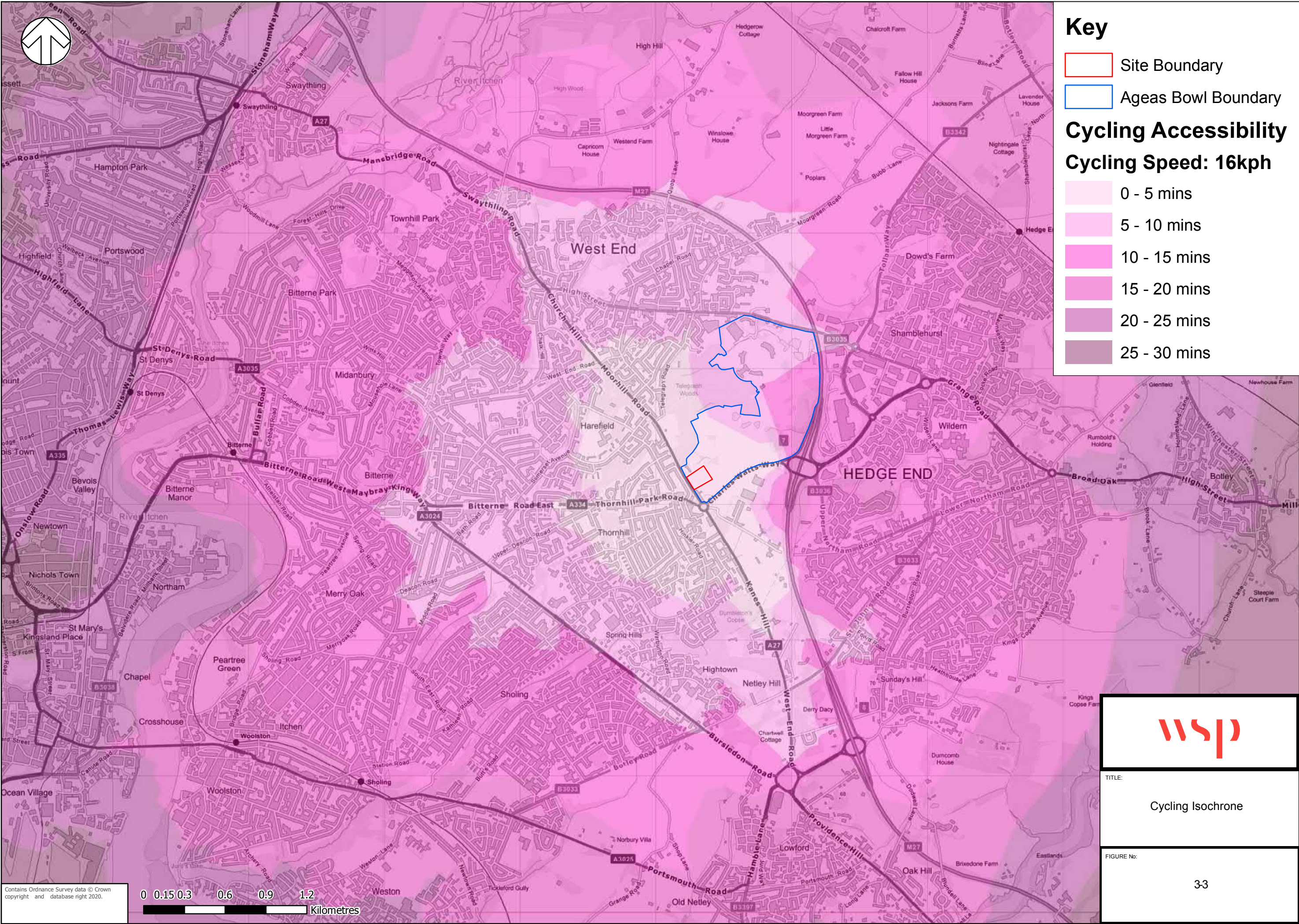
- 3.3.6. Two bus stops are available in close proximity to the site, which provide access to two bus services. One bus stop (Thornhill Avenue) is available on Bitterne Road East, 600m to the west of the site, and the second bus stop is at Moorhill Gardens, 650m to the north west of the site. These services are summarised in **Table 3-1** and routes in the vicinity of the site are shown in **Figure 3-4** overleaf:

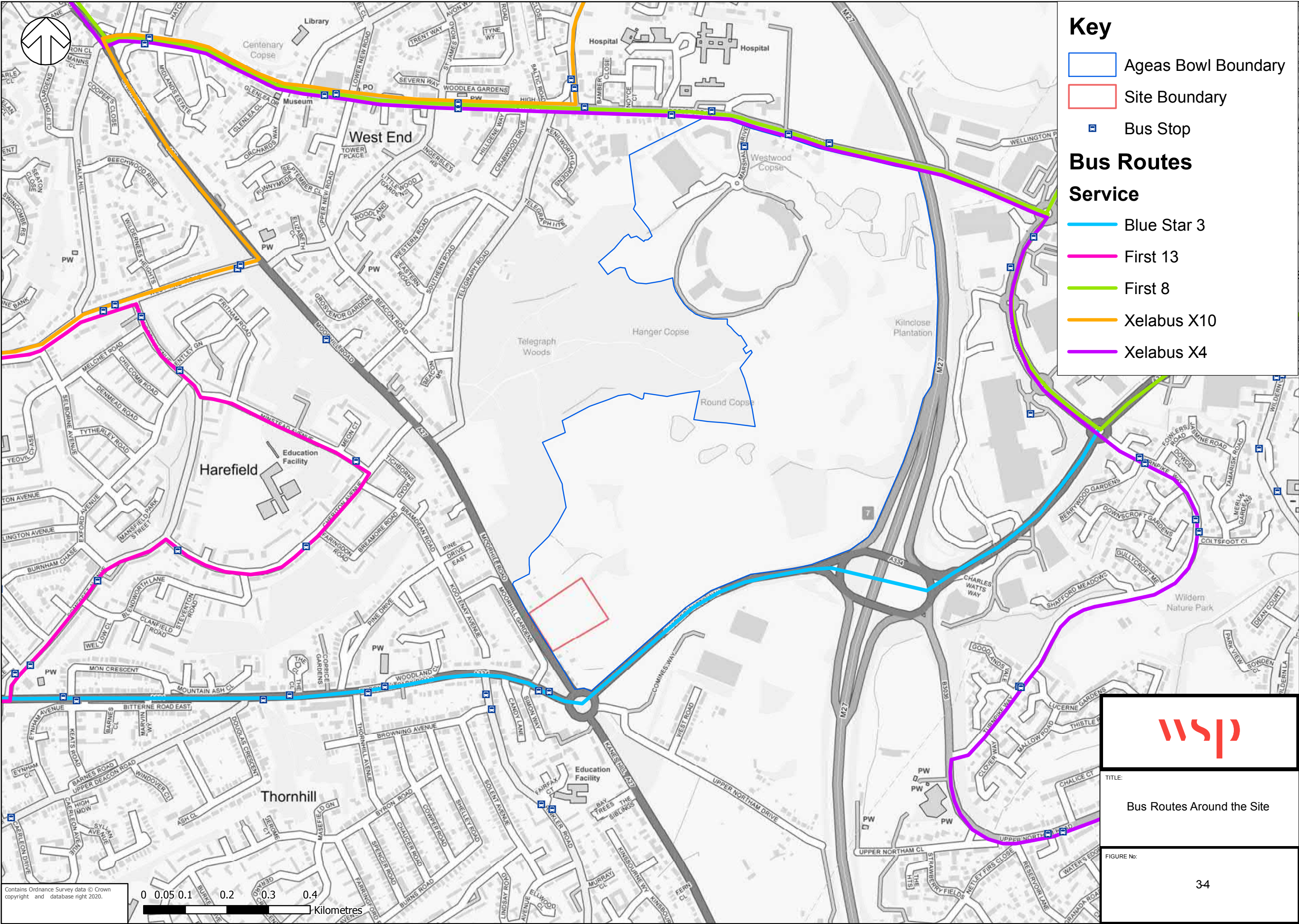
Table 3-1 – Accessible Bus Services

Bus Stop	Bus Service Provider	Bus Service Number	Route	Weekday Frequency	Saturday Frequency	Sunday Frequency
Thornhill Avenue	Bluestar	3	Southampton – Eastleigh	Hourly	Hourly	~ 2 Hours
Moorhill Gardens	First	13	Southampton City Centre – Harefield	Half Hourly	Hourly	No Service

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RAIL ACCESSIBILITY

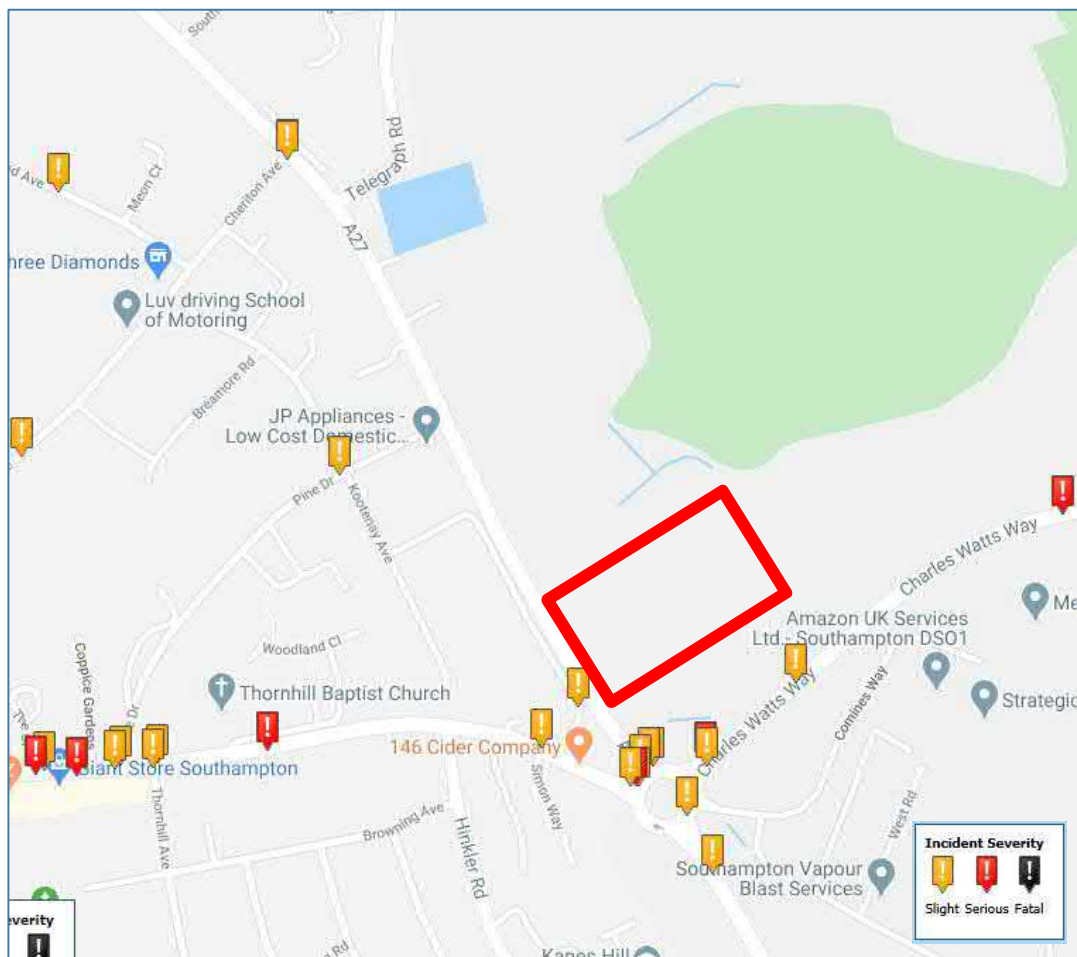
- 3.3.7. The closest train stations are Bitterne and Hedge End which are both approximately 3 miles from the proposed access point. Both are operated by South Western Railway, and have services running to the wider Southampton area. Hedge End also has additional services running to Portsmouth Harbour and London Waterloo.
- 3.3.8. The Bluestar 3 bus service stops at Bitterne Railway station at a regular frequency and as such it is reasonable to travel to the Golf Course from beyond Southampton by public transport.

HIGHWAY ASSESSMENT AND SAFETY

Personal Injury Collision Data

- 3.3.9. The figure below shows the Personal Injury Collision data for the local highway network in the most recent three-year period, with the site shown in red.

Figure 3-5 - Personal Injury Collision Data for Local Highway Network



- 3.3.10. There is a cluster of six collisions at / between the A334 Townhill Park Road and A27 Moorhill Road arms of the junction, comprises five slight and a single serious collision. In this cluster, two collisions involved powered two-wheeler casualties. It is observed that the A334 Townhill Park Road and A27 Moorhill Road junction arms are located in close proximity to one another resulting in reduced gap

and reaction time and the radius of the roundabout results in vehicles travelling around the roundabout travelling exiting at relatively high speed.

- 3.3.11. There is also a cluster of collisions on A334 Bitterne Road East in the vicinity of the local centre. This is likely reflective of the high level of activity and range of users in this area presenting a high potential for conflict, including buses, pedestrians and cyclists, who are both travelling through the local centre to and from Southampton as well as local residents accessing the various services.
- 3.3.12. There have been no collisions recorded at the site access in the last three-year period.
- 3.3.13. The development proposals are unlikely to result in a significant increase in traffic flows on either the A27 or the A334 during the peak periods, particularly given that trips that already used either road (i.e. travel to the golf course from Southampton) would already be travelling through this junction to access the existing golf course.

4 PROPOSED DEVELOPMENT

4.1 PROPOSALS

- 4.1.1. The development proposes the construction of a club house and 60-space car park access via the A27 Moorhill Road in the vicinity of Kanesh Hill Roundabout. This club house development will provide the following:
- Changing facilities;
 - Bar and kitchen;
 - Steward's apartment;
 - 60 vehicle parking spaces;
 - 14 golf buggy spaces (and storage for a further 20); and
 - Realignment of internal access road.
- 4.1.2. The club house has a GEA of 460m². The club house is anticipated to employ less than eight staff, across kitchen and bar staff, the steward and assistant and professional. The proposed layout is shown in **Appendix B**.
- 4.1.3. The operation and management of the golf course is not anticipated to change through this application (see **Section 4.3 Trip Generation** for more details) and the facilities will not be used for events.
- 4.1.4. The proposed development will be serviced by an existing access onto Moorhill Road. This access prohibits right turn egress manoeuvres but allows left-in and right-in manoeuvres. (see **Section 4.5 Access** for more details)

PARKING

- 4.1.5. EBC does not have any adopted non-residential parking standards, instead referring to HCC's Parking Strategy and Standards (2002). However, HCC have withdrawn these parking standards, with boroughs detailing their own non-residential parking standards.
- 4.1.6. The applicant currently has access to 46 parking spaces at the existing car park located to the south of the Hilton Hotel entrance and this has never been observed to be over capacity. The applicant has provided a letter setting out their parking supply and this is shown in **Appendix C**.
- 4.1.7. In the absence of adopted non-residential parking standards, 60 spaces have been proposed as the maximum that can be provided on this relatively level section of the Ageas site. Whilst the proposals are not resulting in a direct increase in golf course size or facilities, the proposals seek to make the golf course more attractive to members and as such an increase in car park available has been proposed to accommodate any future demand increase.
- 4.1.8. Given the undulating nature of the site, significant earthworks (with subsequent landscape, amenity and cost implications) would be required to provide a larger level surface on which to provide parking. It should be noted that this loosely accords with the HCC 2002 parking standards, which require 72 spaces (4 per hole).
- 4.1.9. Given the need for visitors to the golf course to bring their own clubs, cycle parking for visitors has not been provided. However, two Sheffield stands are provided in the service area for staff to use. Whilst there are no relevant cycle parking standards for staff at golf courses, the two Sheffield

stands equates to four cycle parking spaces which is considered to be appropriate for the c. 8 staff that will be on site.

- 4.1.10. Whilst EBC does not have an adopted policy position on the provision of electric vehicle charging points at a leisure use, the proposals will incorporate five vehicle charging stations, with a further 15 spaces of the parking provision proposed to be passive charging bays that can be brought on-line when required.
- 4.1.11. A vehicle tracking exercise has been undertaken to ensure that the parking bays are accessible. This is shown in **Appendix D**.

SERVICING

- 4.1.12. The golf course's existing servicing strategy is to be maintained. It has been assumed that the following service vehicles visit to the site:
- Commercial waste – private collection (alternate days);
 - Catering delivery (daily);
 - Fairway treatment (daily);
 - Hedgerow/tree treatment (weekly); and
 - Water treatment (weekly).
- 4.1.13. A vehicle tracking exercise has been undertaken for a large refuse vehicle to ensure that this vehicle can safely enter and exit the highway. Vehicle tracking is shown in **Appendix D**.

OPERATION DURING EVENTS

- 4.1.14. The Ageas Bowl benefits from a 1,300-space event day car park on Thorneydown ("Park and Walk") which can be used approximately 12 times per year for events that attract over 15,000 people. When the car park is in use a large number of vehicles will be use the golf course site access and internal road network and people will be required to walk from the event car park through the golf course and into the Ageas Bowl. In addition, the golf course will not have all 18 holes available to golfers. As such, the golf course is anticipated to be closed or have reduced operating hours on event days.
- 4.1.15. The golf course will be remain fully operational for all events that attract less than 15,000 as these do not make use of the Thorneydown Park and Walk site.

4.2 ACCESS

- 4.2.1. The proposed development accesses the highway network via an existing priority bellmouth onto A27 Moorhill Road. The suitability of this accesses has been assessed through two planning applications.
- 4.2.2. A 2007 planning permission (F/07/61192) granted permission for the access onto the A27 Moorhill Road, for use on event days only. The number of vehicles that could use the access was not capped but was limited to entry only prior to an event and egress only after an event. Right turns are prohibited out of the site.
- 4.2.3. A 2018 planning permission F/18/83908 granted permission for the use of the of the A27 Moorhill Road junction for access to the Thorneydown event car park. Through this permission, the A27 Moorhill Road can accommodate 400 arriving to the site but does not have a vehicle cap for vehicles leaving the site after an event.

- 4.2.4. Despite its irregular usage, the access is constructed to a high standard, being mettled and kerbed, with a central island to enforce the banned right turn manoeuvre for vehicles exiting the junction.
- 4.2.5. The 2007 permission required that visibility splays of 2.4m x 120m are achievable and this is maintained through the management of highway vegetation on the highway verge. This visibility requirement is in accordance with DMRB design guidance that was relevant at the time of construction for a priority junction onto a road with a 40mph speed restriction.

4.3 TRIP GENERATION

- 4.3.1. It is acknowledged that the proposed development will not result in any increase in golf course capacity (and therefore trip generation), given that the operation of the golf course will not be changing.
- 4.3.2. In the first instance, the use of the TRICS database to determine the trip rate of the golf course was investigated. However, this trip rate to trip generation calculation is based on the site area. This is not considered to be a factor of trip generation when the number of tees and tee-off schedule will control how many golfers can be active at any one time. As such, a first principles approach has been used to determine the trip generation of the site.
- 4.3.3. The capacity of the golf course is determined by the tee-off schedule, which is every 8 minutes between 0730 and 1830. This equates to 83 tee-off slots per day. However, trip generation (particularly TRICS) seeks to understand the trip generation of a “typical” day.
- 4.3.4. To identify the demand for a typical day, the available slots available each morning has been observed over a two-week weekday period from the 10th to 21st of August 2020. Over much of this period the weather was hot and sunny, although the second week was overcast with rain showers. There were no local lockdowns in force due to the COVID-19 pandemic – the golf course was open and operating as usual. Based on this review, on average 77% (64 slots) of the slots were booked at the start of each weekday. This is considered to be robust given the seasonal nature of golf courses and relatively warm weather during the two weeks observed.
- 4.3.5. Each timeslot can be booked up a party of up to 4 golfers. Rather than take a median value (2) a more robust value of 2.5 has been used. As such, 160 golfers visit the site on a typical day.
- 4.3.6. It is unlikely that every visitor to the site would drive their own car, although it is accepted that the majority would do given the requirement to carry golf clubs. Given the ongoing COVID-19 pandemic, it has not been possible to collect data on the occupancy of vehicles, and this is likely to be skewed by visitors not wishing to car share for public health reasons. In the absence of this data, a robust assumption has been made that typically 85% of visitors arrive in their own vehicle, and 15% arrive as passengers. As such, 136 visitors drive to the site each day, resulting in 272 daily vehicle trips.
- 4.3.7. Whilst the golf course has tee-off slots available over an 11-hour period, golfers who tee-off at 18:30 will need several hours to complete the course. It has therefore been assumed that visitors will arrive and depart the site over a 14-hour day of 07:30 to 21:30. Given that tee-off slots are spread evenly over the day, this equates to approximately 1 vehicle every 3 minutes and 5 seconds, or 20 vehicles per hour.
- 4.3.8. In addition to visitor trips, a number of staff and services are anticipated to attend the site over the course of the day. It is anticipated that two shifts of staff will occur. As a result, 16 staff trips have been assumed. Based on the 07:30 – 18:30 operational hours of the site, none of these staff trips

are anticipated to occur during peak hours. This assumes all staff will drive to the site for trip generation purposes.

4.3.9. With the services that frequently visit the site identified above, it has been assumed that 3 service trips occur at the site per day, throughout the day.

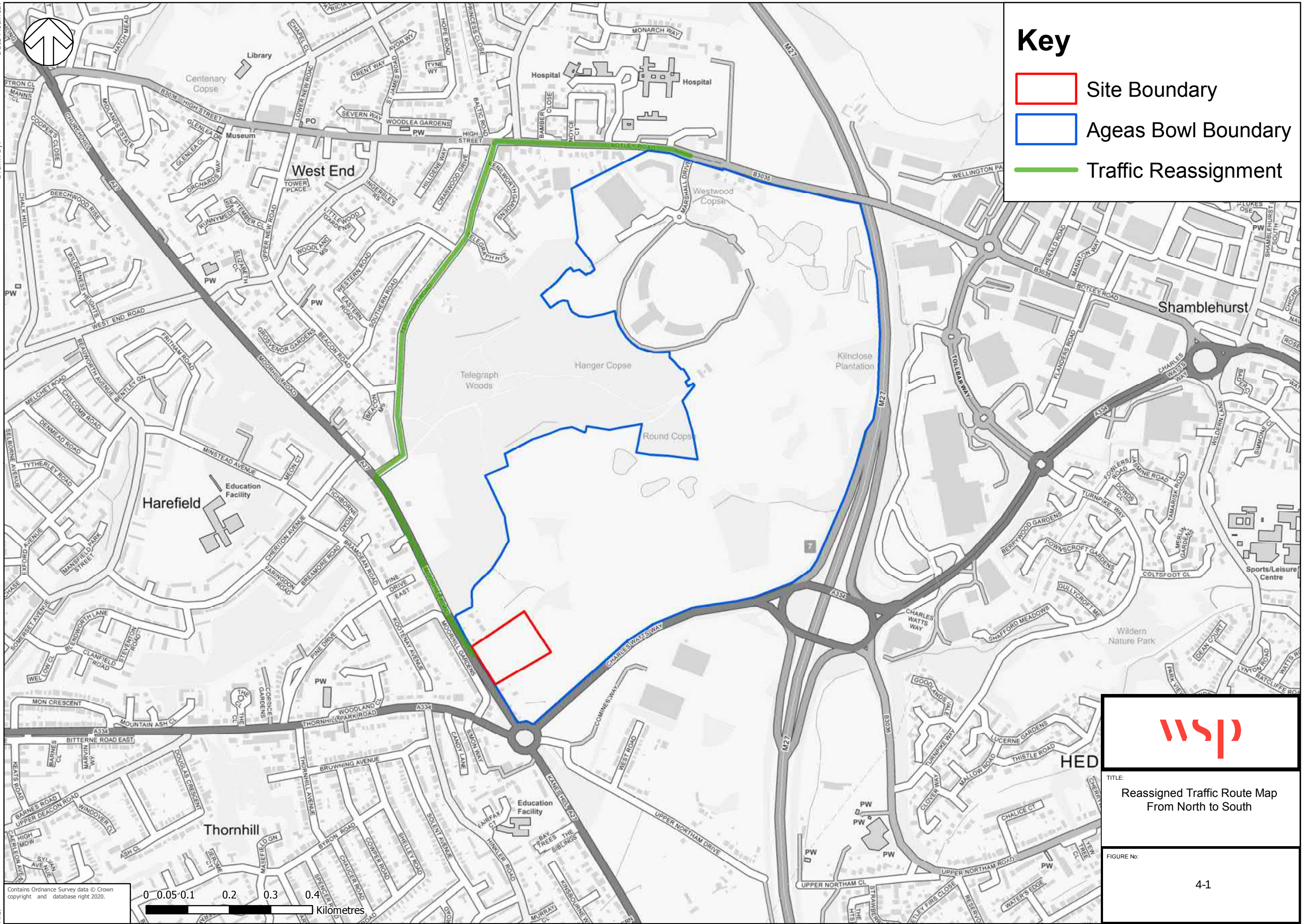
4.3.10. **Table 4-1** summarises the proposed trip generation for the golf course:

Table 4-1 – Proposed development trip generation

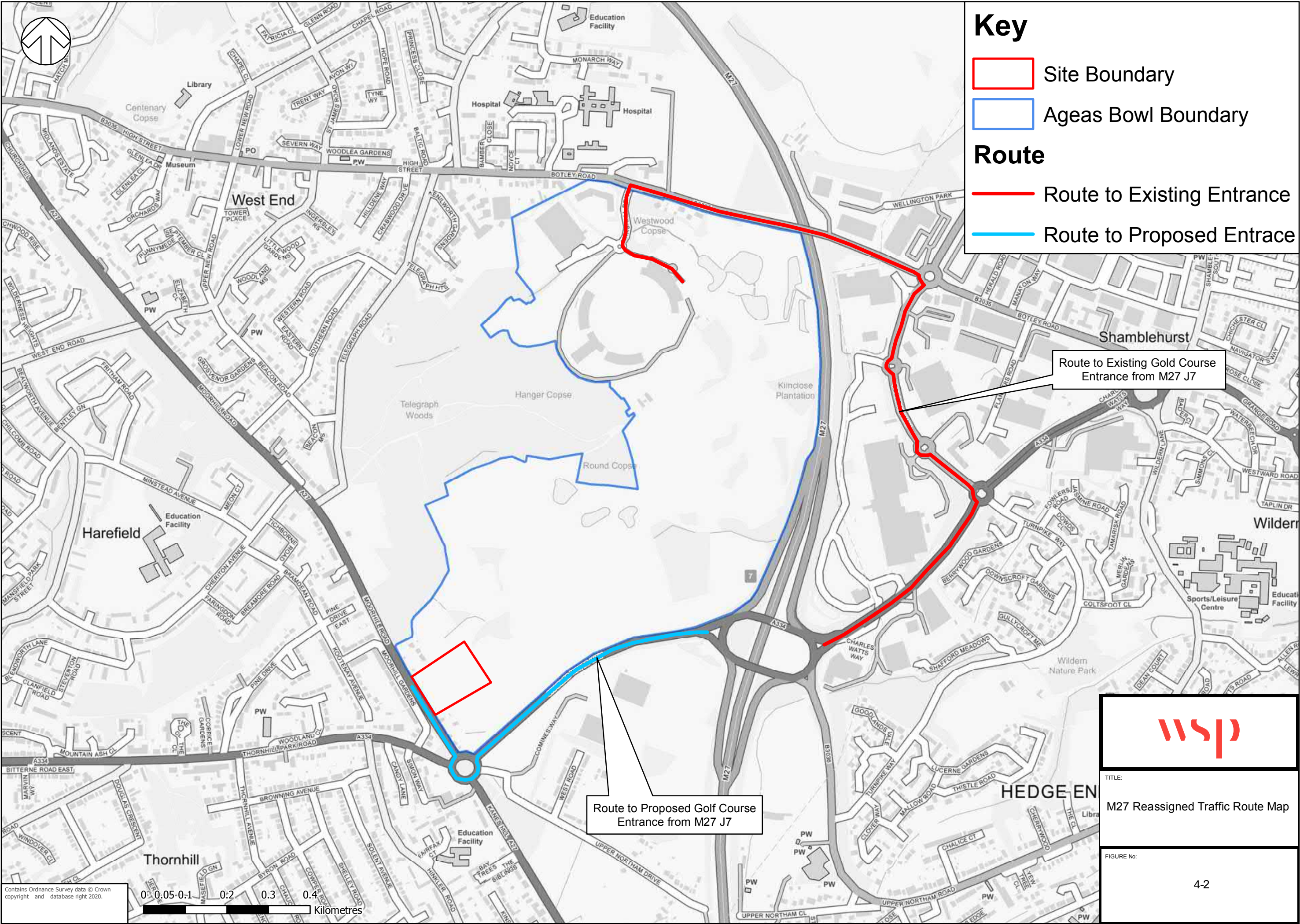
Two- Way trips	Visitors	Staff	Services	Combined
08:00 – 09:00	20	0	0	20
17:00 – 18:00	20	0	0	20
07:30 – 18:30	272	16	3	291

HIGHWAY ASSIGNMENT

- 4.3.11. The proposed development will not directly result in additional trips onto the highway network beyond some new staff trips. However, it is acknowledged that the proposals will result in the rerouting of trips from B3035 Botley Road, the existing access, to A27 Moorhill Road, the proposed access.
- 4.3.12. It is anticipated that traffic will route from the existing access to the proposed access via Telegraph Road to avoid delay at the M27 Junction 7 roundabout and turn left into the site. **Figure 4-1** overleaf shows this route. However, trips from the south and west will not have to travel as far to reach the proposed golf course entrance and no longer have to use Telegraph Road.
- 4.3.13. It is anticipated that trips from further afield travelling on the M27 currently route through Hedge End to reach the golf course. This is a distance of approximately 2.2KM. The proposals would result in these vehicles instead routing via Charles Watts Way, Pine Drive, Cheriton Drive before turning left into the site on Moorhill Road. This is a distance of approximately 1KM, representing a mileage saving of 1.2KM for traffic arriving from the motorway. The change in route is shown in **Figure 4-2** overleaf, with the old route to the existing access shown in red and the new route to the proposed access shown in blue.
- 4.3.14. It is worth noting that there is a larger number of settlements (and therefore trip origins) to the south and west of the proposed site with the majority of the Southampton urban area located in this direction.
- 4.3.15. No data is available (mindful of GDPR) on the specific addresses of visitors to the site and as such it is not possible to quantify the proportion of trips that originate from the north, east and M27, and from the south and west.
- 4.3.16. In the absence of this data, a worst-case assessment has been undertaken that assumes all trips on the A27 Moorhill Road are new.



Date Modified: Drawn By: File:



5 HIGHWAY IMPACT

- 5.1.1. Whilst the number of new trips on the highway network is considered to be minimal (staff only), an assessment of the proportional increase of traffic on Moorhill Road has been undertaken, given that traffic is being rerouted onto this road.

5.2 BASELINE TRAFFIC CONDITIONS

- 5.2.1. Due to the ongoing COVID-19 pandemic, it is not possible to collect representative traffic data on the A27 Moorhill Road through the use of ATC surveys. As such, traffic flows from the 2018 Thorneydown event car park (planning reference F/18/83908) have been used. Two sets of relevant data are available:
- MCC Survey on Kanes Hill Roundabout 29/09/2017 at various times of the day; and
 - ATC Survey on Charles Watts Way 29/09/2017 to Sunday 6/10/2017.
- 5.2.2. From the MCC data, traffic data for the Moorhill Road arm of the roundabout has been extracted. There are no junctions between Kanes Hill Roundabout and the site access so all traffic that enters and exits the roundabout via the A27 Moorhill Road will have passed the site access. As such, traffic entering and exiting the junction can be considered southbound and northbound traffic past the site access, respectively.
- 5.2.3. These traffic flows were used as the baseline for an event-based assessment and as a result the traffic surveys do not include data for the AM peak period or the daily total. This data is shown in **Table 5-1** and **Appendix D**.

Table 5-1 – MCC traffic survey data

Time Period	Northbound (%)	Southbound (%)	Total
1000 - 1100	564 (53%)	493 (47%)	1,057
1100 – 1200	802 (61%)	519 (39%)	1321
1700 – 1800	670 (47%)	745 (53%)	1,415
1800 – 1900	644 (49%)	655 (51%)	1,299

- 5.2.4. To calculate an AM peak period and daily traffic flow, an hourly profile has been constructed using the ATC data for 29/09/2017 on Charles Watts Way, shown in **Table 5-2** and **Appendix D**. A full day's ATC data is not available, and as such the 14-hour (07:30 – 21:30) that encompasses the site's trip generating time has been used.

Table 5-2 – ATC 29/07/2017 traffic flows comparison

Time period	ATC Volume	Proportion
0700 – 0800	1705	7%
0800 – 0900	1713	7%
0900 – 1000	1742	7%
1000 – 1100	1820	7%
1100 – 1200	1246	5%
1200 – 1300	1412	6%
1300 – 1400	1812	7%
1400 – 1500	1980	8%
1500 – 1600	1925	8%
1600 – 1700	1695	7%
1700 – 1800	1702	7%
1800 – 1900	1718	7%
1900 – 2000	1817	7%
2000 – 2100	1607	7%
2100 – 2200	708	3%
15h	24,602	100%

- 5.2.5. **Table 5-2** identifies that 7% of all daily traffic occurs between 1700 and 1800 and 7% of all daily traffic occurs between 0800 and 0900. **Table 5-1** identifies that, outside the site on Moorhill Road, 1,415 vehicles were observed between 1700 and 1800. With **Table 5-2** identifying this volume as 7% of daily traffic, the 0800 to 0900 (and daily) traffic volumes can be calculated. The resultant 0800 to 0900 and daily traffic flows are shown in **Table 5-3**.

DIRECTIONAL SPLIT

- 5.2.6. To determine the directional split of traffic on A27 Moorhill Road, the observed northbound / southbound split of traffic for the 1700 – 1800 MCC traffic data shown in **Table 5-1** has also been used to determine both the 0800 – 0900 and daily northbound / southbound split of traffic. The observed directional split has been mirrored to reflect the tidal nature of the AM and PM peak periods.
- 5.2.7. The calculated traffic flows and directional split is shown in **Table 5-3**:

Table 5-3 – A27 Moorhill Road calculated traffic flows

Traffic flow time period	Northbound	Southbound	Total
0800 – 0900 Calculated	745 (53%)	670 (47%)	1,415 (7% of daily)
1700 – 1800 Observed	670 (47%)	745 (53%)	1,415 (7% of daily)
17H Calculated	10,107 (50%)	10,107 (50%)	20,214 (100% of daily)

TEMPRO

5.2.8. Given the age of the data, a TEMPRO growth factor has been calculated to factor up the traffic from 2017 to 2020 levels using TEMPro 7.2. The following criteria were applied:

- Eastleigh geographic area;
- Car driver, for all purposes;
- AM peak, interpeak and PM peak for weekday and weekend;
- Origin / Destination trip end type; and
- Urban and rural locations.

5.2.9. This resulted in the following TEMPro growth rates (**Table 5-4**):

Table 5-4 – TEMPro Growth Rates

Time period	Growth Rate
Weekday AM peak period	1.0472
Weekday PM peak period	1.0437
Weekday day	1.0435

5.2.10. Given that COVID-19 and the economic impact is likely to result in reduced traffic growth (or negative traffic growth), the use of TEMPro to increase the traffic flows is considered to be robust. The above growth factors result in the following calculated traffic flows on A27 Moorhill Road in 2020 (**Table 5-5**):

Table 5-5 – A27 Moorhill Road

	Calculated 2020 Northbound Traffic Flows	Calculated 2020 Southbound Traffic Flows	Calculated 2020 Two-Way Traffic Flows
0800 – 0900	780	675	1,456
1700 – 1800	699	778	1,477
Weekday Day	10,562	10,562	21,124

5.3 TRAFFIC FLOW IMPACT

- 5.3.1. The trip generation of the site has been added to the 2020 baseline traffic flows on the A27 Moorhill Road in **Table 5-6**:

Table 5-6 – A27 Moorhill Road development traffic impact

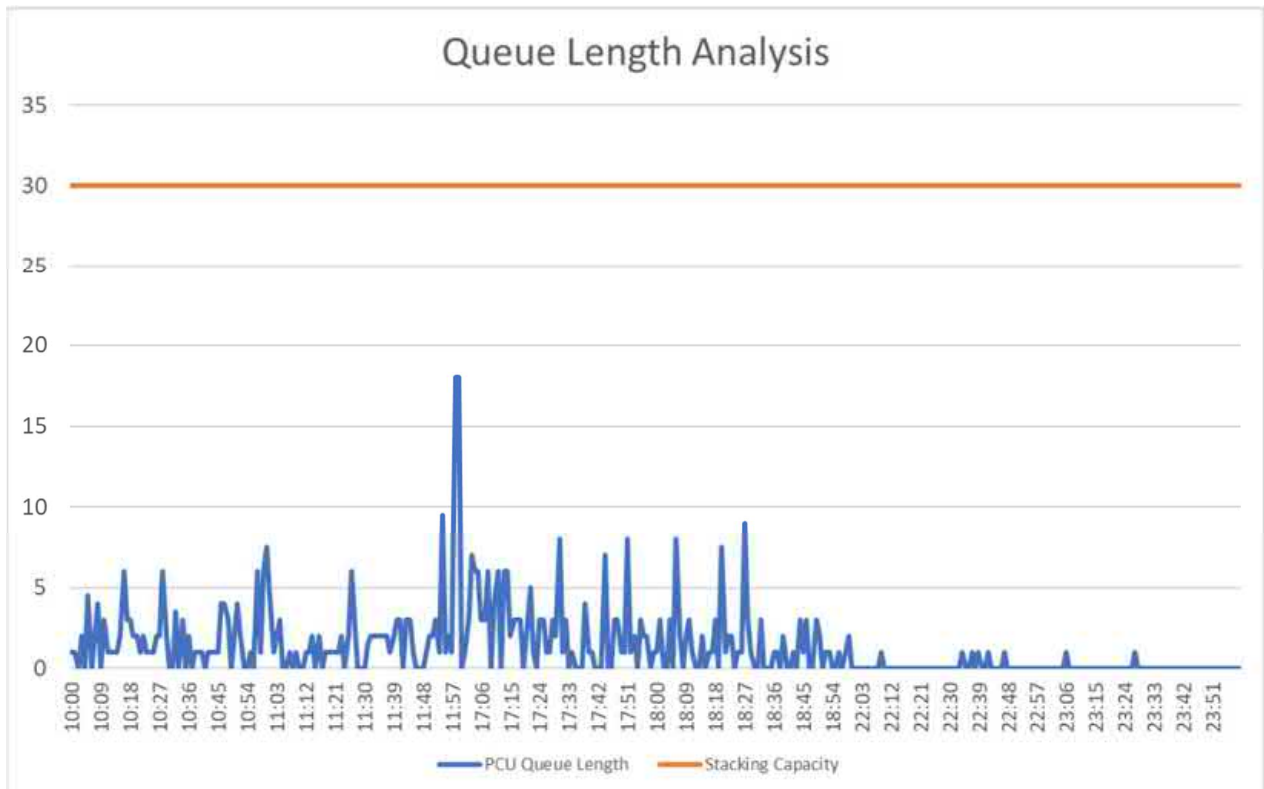
	Baseline traffic flows	Development traffic flows	Proportional increase
0800 – 0900	1,456	20	1.4%
1700 – 1800	1,477	20	1.4%
Weekday	21,124	291	1.4%

- 5.3.2. **Table 5.6** identifies that the proposed development will have a very minor increase in traffic flows on the A27 Moorhill Road. The increase in 20 vehicles in the peak periods is unlikely to be discernible behind daily fluctuations in traffic flows.
- 5.3.3. It is important to note that some traffic may have already used the A27 Moorhill Road to access the golf course and these vehicles would already be in the “baseline” scenario. In the interests of providing a robust assessment, it has been assumed that all trips onto the A27 Moorhill Road are new.
- 5.3.4. Given the very minor increase in traffic flows, the proposed development is not considered to have a significant impact on the operation, or safety, of the highway network.

QUEUE LENGTH ANALYSIS

- 5.3.5. Pre-application discussions with the highway authority suggested a need to consider queue length surveys on A27 Moorhill road. This data has been analysed to determine whether the queue from Kanes Hill Roundabout reaches back to the proposed access, potentially blocking vehicles wishing to turn right into the access.
- 5.3.6. A queue length survey was undertaken for Kanes Hill Roundabout in 2017 in support of the Thorneydown event car park and this is shown in **Appendix E**. The longest queue at the Kanes Hill Roundabout on the A27 Moorhill Road arm was 18 PCUs. This is double the second highest queue “peak” and only lasted two minutes, so whilst it is likely anomalous, it can be used as a robust worst case. There is 175m of queue stacking space between the roundabout and the development’s access. This is equivalent to 30 vehicles.
- 5.3.7. A comparison between the observed queue and the available stacking space is shown in **Figure 5-1**:

Figure 5-1 - A27 Moorhill Road Queue Capacity



- 5.3.8. **Figure 5-1** demonstrates that vehicle queues do not stack back towards the site access so it is unlikely that the site access would be obstructed by queuing vehicles.

SITE ACCESS CAPACITY

- 5.3.9. A capacity analysis has been undertaken for the site access to ensure that any queue for vehicles turning right into the site does not tail back into Kanes Hill Roundabout.
- 5.3.10. A Junctions 9 capacity assessment has been undertaken using the estimated 2020 traffic flows on the A27 Moorhill Road and the trip generation identified in this section. The results of this capacity assessment are shown in **Table 5-7** and the full modelling output is contained in **Appendix F**:

Table 5-7 - Site Access Capacity Assessment

Junction Arm	AM Peak 0800 – 0900			PM Peak 1700 - 1800		
	RFC	Queue	Delay	RFC	Queue	Delay
A27 Moorhill Road	0.09	1	4	0.09	1	4
Site Access	0.10	1	19	0.11	1	20

- 5.3.11. The junction capacity assessment has identified that the site access would operate within capacity and a queue of one vehicle would form behind a vehicle seeking to turn right into the site. Whilst there is a moderate delay for vehicles wishing to egress the site, this delay is not occurring on the main road and is not causing inconvenience to through traffic, only visitors egressing from the site.

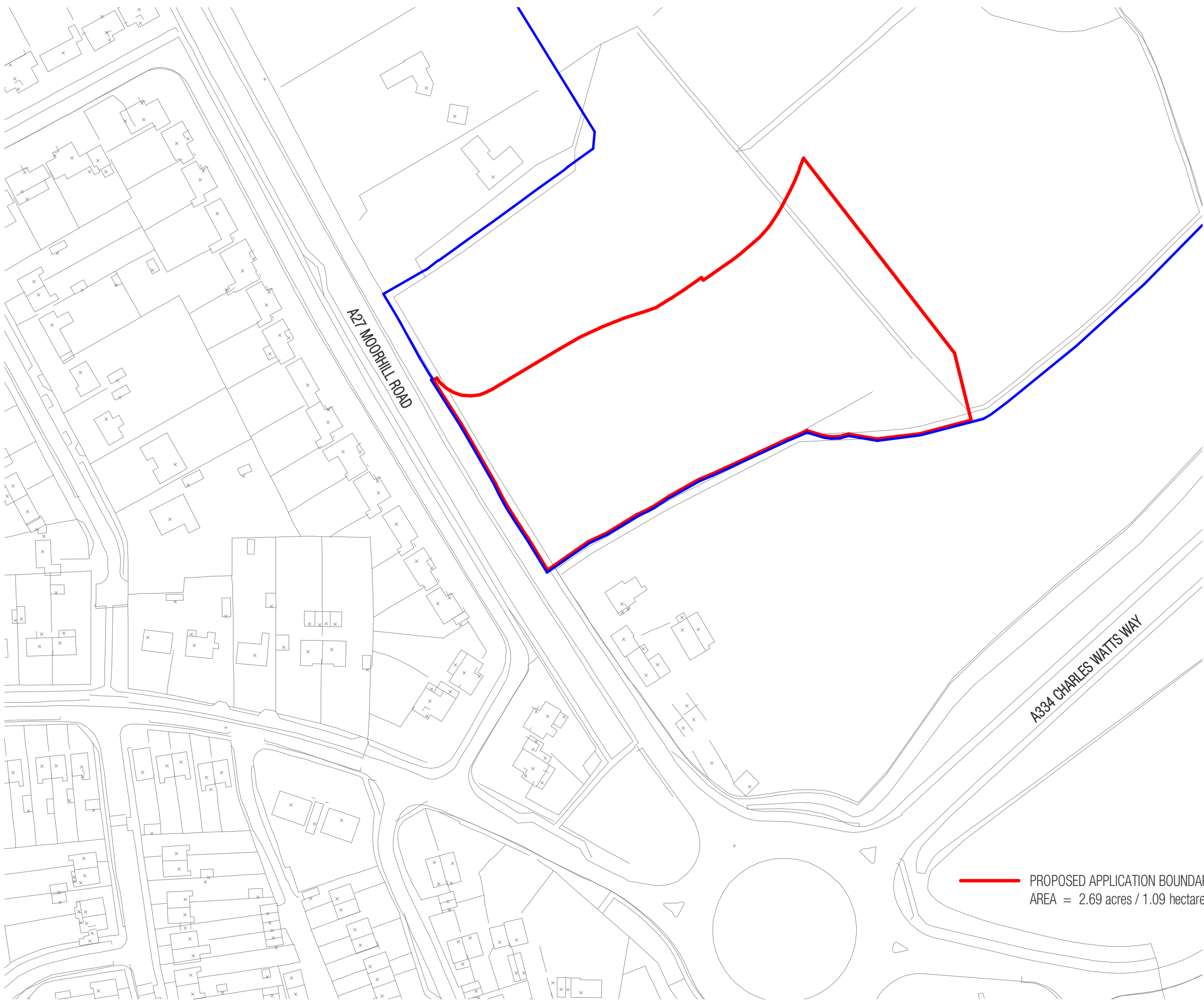
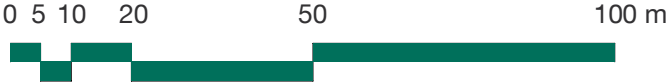
6 CONCLUSION

- 6.1.1. WSP have been commissioned by Land & Development Advisory Ltd to prepare a Transport Statement in support of the development of a new golf course club house at the A27 Moorhill Road.
- 6.1.2. The golf course currently shares facilities with the Hilton Hotel. The proposals seek to provide a dedicated club house and does not result in the direct expansion of the golf club's facilities.
- 6.1.3. The site is located in a reasonably sustainable location, with two frequent bus services into Southampton City centre located within walking distance of the site. These bus routes also stop at local railway station. Whilst it is unlikely visitors to the site will cycle, staff may cycle to work at the site. The A27 Moorhill Road is relatively wide to enable safe passing of cyclists and it is possible to cycle through the site when approaching from the North, if cyclists do not wish to cycle over the M27 Junction 7 roundabout.
- 6.1.4. The proposed development would retain the operation of the existing golf course, with operating hours and golf course configuration remaining unchanged.
- 6.1.5. The proposed development features an existing access onto the highway network which benefits from two previous planning permissions for a capped number of vehicles to use the access on event days (400 vehicle arriving and uncapped departures). Suitable visibility from the access onto the A27 Moorhill Road can be achieved and was assessed in the previous permissions. The proposals are anticipated to generate 291 vehicles onto the highway network on a typical day but given that the access will not be in use for golf visits on event days that use the Thorneydown car park, the proposals will not result in an increase in vehicles using the access per day.
- 6.1.6. The applicant has advised that the current golf course club house has access to a 46-space car park which has been sufficient through the life of the golf course. With the proposals seeking to improve the golf experience to appeal to new members, an expanded car park of 60 spaces is proposed.
- 6.1.7. The proposed development would result in 291 vehicles being generated by the site on a typical week day, although it should be noted that these are not "new" trips onto the highway network, just reassigned trips.
- 6.1.8. The development proposals would result in a 1.4% increase in traffic on the A27 Moorhill Road in the AM peak period, PM peak period and across a 15h day (the time period for which the site will likely generate trips).
- 6.1.9. The site access junction would operate within capacity with queues of one vehicle on the A27 Moorhill Road, when a vehicle wishes to turn right into the site. Queues at Kanes Hill Roundabout do not tail back into the junction and as such, the junction is unlikely to be obstructed.
- 6.1.10. This Transport Statement has demonstrated that the proposed development would not have a significant impact on the operation or safety of the highway network.

Appendix A

SITE LOCATION PLAN





REVISIONS

No.	DESCRIPTION	DATE
A	DRAFT PLANNING ISSUE	31/07/20 AS JK
B	RED LINE BOUNDARY AMENDED TO SUIT BOYER MARK UP DATED 04/08/20.	05/08/20 AS JK
C	RED LINE BOUNDARY AMENDED TO SUIT DLA MARK UP DATED 11/08/20.	14/08/20 AS JK
D	PLANNING ISSUE	19/08/20 AS JK

DISCLAIMER

This drawing is for design intent purposes only and is based on Ordnance survey data supplied by the client. Drawing is subject to further topographical information and further design development.

It is also subject to confirmation of legal ownership boundaries, approvals and agreements of all statutory authorities and undertakers necessary for all supplies, way leaves and diversions, all of which are unknown at the time of preparing this drawing. The design information on this drawing is also subject to review by a client appointed Principal Designer, who will have overall responsibility for the coordination of the construction (design and management) regulations 2015

The drawing is subject to design development and to Local Authority Planning Department and Building Control/Approved Inspector approvals/comments.

Do not scale off this drawing. Work to figured dimensions only. Any discrepancies should be brought to the attention of DLA Architecture immediately. All dimensions are in millimetres, unless otherwise stated.

NORTH



ARCHITECTURE

No.86 King Street | Manchester | M2 4WQ
0161 834 4550 www.dla-design.co.uk

PROJECT
GOLF CLUBHOUSE
AGEAS BOWL HAMPSHIRE

TITLE
LOCATION PLAN

SCALE 1 : 1250 @ A3	DATE 07/21/20
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DRAWN AS	REVIEWED JK
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DLA REF 2020-050	NUMBER 102	REVISION D
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STATUS
PLANNING

Appendix B

PROPOSED SITE LAYOUT



REVISIONS

No.	DESCRIPTION	DATE
A	SITE LAYOUT AMENDED TO SUIT APPROXIMATE LOCATION OF PISCES.	14/07/20 AS JK
B	BUILDING LAYOUT TO SUIT DESIGN TEAM COMMENTS. ATTENUATION POND ADDED.	20/07/20 AS JK
C	DRAFT PLANNING ISSUE	21/07/20 AS JK
D	DRAWINGS AMENDED TO SUIT TOPOGRAPHICAL DATA PROVIDED BY STERLING SURVEYS VIA CLIENT.	14/08/20 AS JK
E	PLANNING ISSUE	18/08/20 AS JK

DISCLAIMER

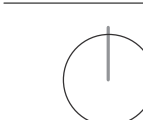
This drawing is for design intent purposes only and is based on Ordnance survey data supplied by the client. Drawing is subject to further topographical information and further design development.

It is also subject to confirmation of legal ownership boundaries, approvals and agreements of all statutory authorities and undertakers necessary for all supplies, key levels and dimensions, all of which are unknown at the time of preparing this drawing. The design information on this drawing is also subject to review by a client approved Principal Designer, who will have overall responsibility for the coordination of the construction design and management regulations 2015.

The drawing is subject to design development and to Local Authority Planning Department and Building Control/Approved Inspector approvals/comments.

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NORTH



ARCHITECTURE

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PROJECT
GOLF CLUBHOUSE
AGEAS BOWL HAMPSHIRE

TITLE
PROPOSED SITE PLAN

SCALE
1 : 200 @ A0

DATE
06/25/20

DRAWN
AS

REVIEWED
JK

DLA REF
2020-050

NUMBER
006

REVISION
E

STATUS
PLANNING

0 5 10 20 50 m

Appendix C

AGEAS BOWL PARKING LETTER





18th August 2020

Planning Department
Eastleigh Borough Council
Eastleigh House
Upper Market Street
Eastleigh
SO50 9YN

Dear Sir/Madam

Full Application - New Clubhouse, Boundary Lakes Golf Course

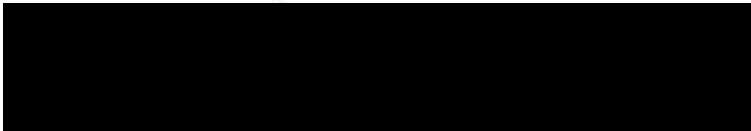
I write regarding our planning application for a new clubhouse, which will service the existing Boundary Lakes Golf Course.

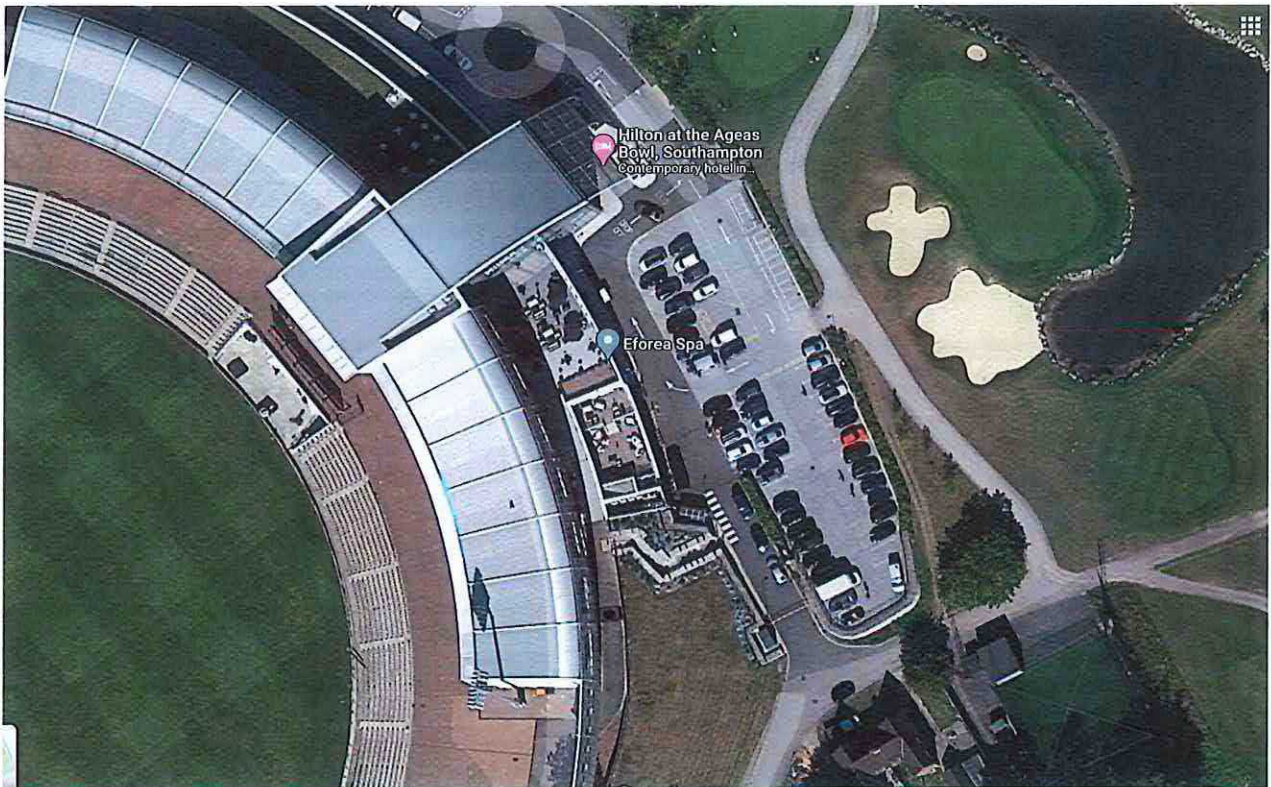
We have been asked to provide information regarding the parking facilities that are currently used by those visiting the golf course. At present, the golf course uses a discrete car park beyond the Hilton Hotel entrance, as shown overleaf. This car park provides 46 car spaces and 12 buggy spaces which has to date proved adequate for golfing requirements.

Our proposed new clubhouse will be served by 60 car parking spaces, with 14 separate dedicated bays for buggies, together with a secure storage facility for 20 buggies. We are accommodating 4 disabled spaces and 5 electric vehicle charge points, with infrastructure for a further 15.

The new clubhouse is not designed or large enough to accommodate functions or events, it will simply be a golf facility, and we are therefore confident that the additional 14 parking spaces will be sufficient to meet the expected golf demand.

Yours faithfully


David Mann
Chief Executive Officer
RB Sport & Leisure Holdings Ltd



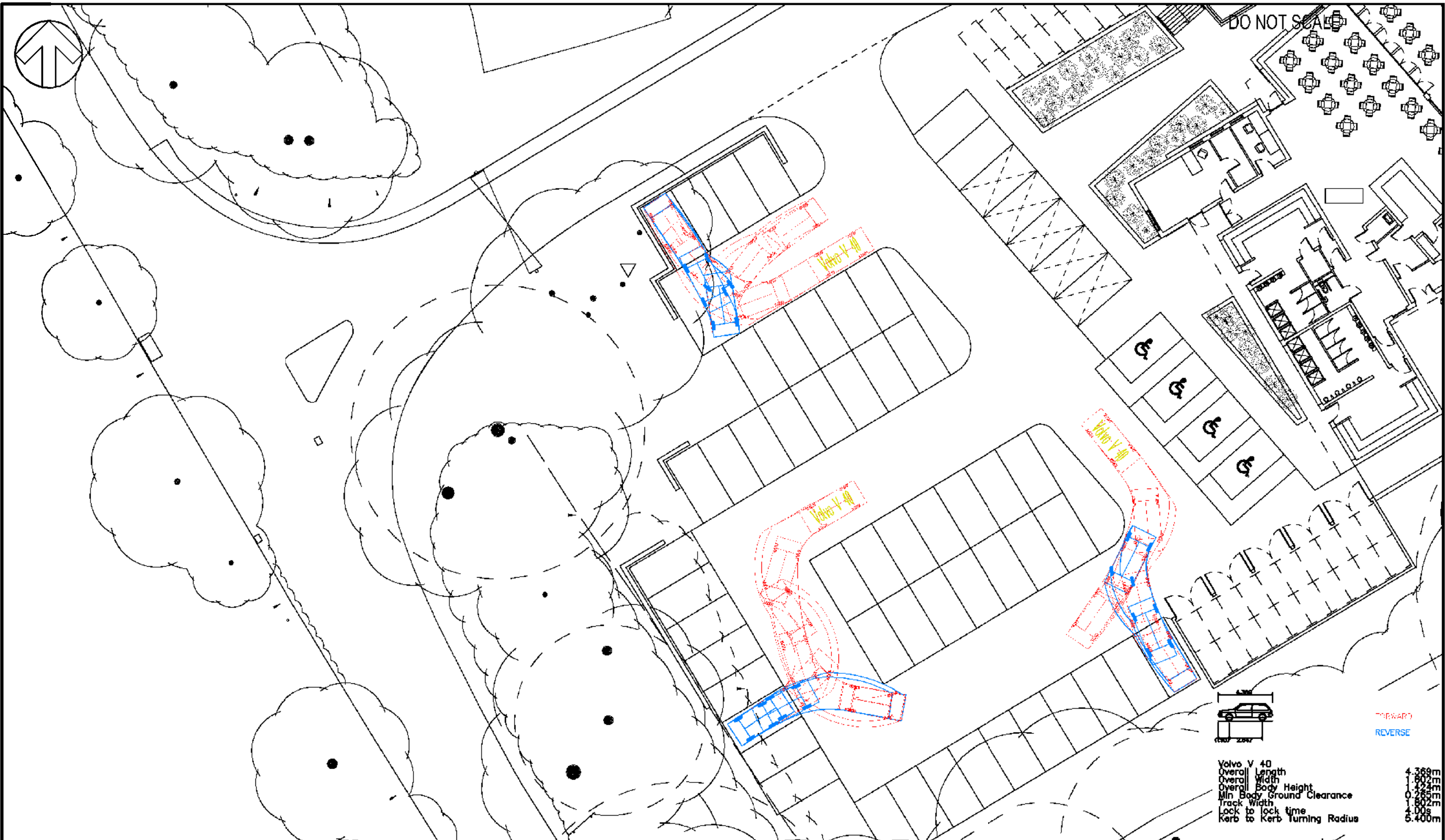
Current Parking for the Golf Course

Appendix D

VEHICLE TRACKING



File name: \\UK.WSPGROUP.COM\CENTRAL_DATA\PROJECTS\700735\XVT0073579 - AGEAS BOWL MASTERPLAN\03 WIPTP TRANSPORT PLANNING\03 DRAWINGS\ATR\70053691-ATR-001.DWG, printed on 20 August 2020 15:27:35, by Rose, Stewart



REV	DATE	BY	DESCRIPTION	CHK	APP
B	20/08/2020	SR	AMENDED SITE LAYOUT	CW	CW
A	05/08/2020	RJ	FIRST ISSUE	JK	JK

DRAWING STATUS: S0 - WORK IN PROGRESS



Mountbatten House
Basing View
Basingstoke
RG21 4HJ, UK

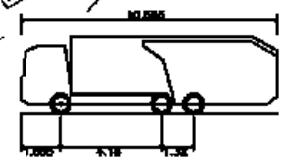
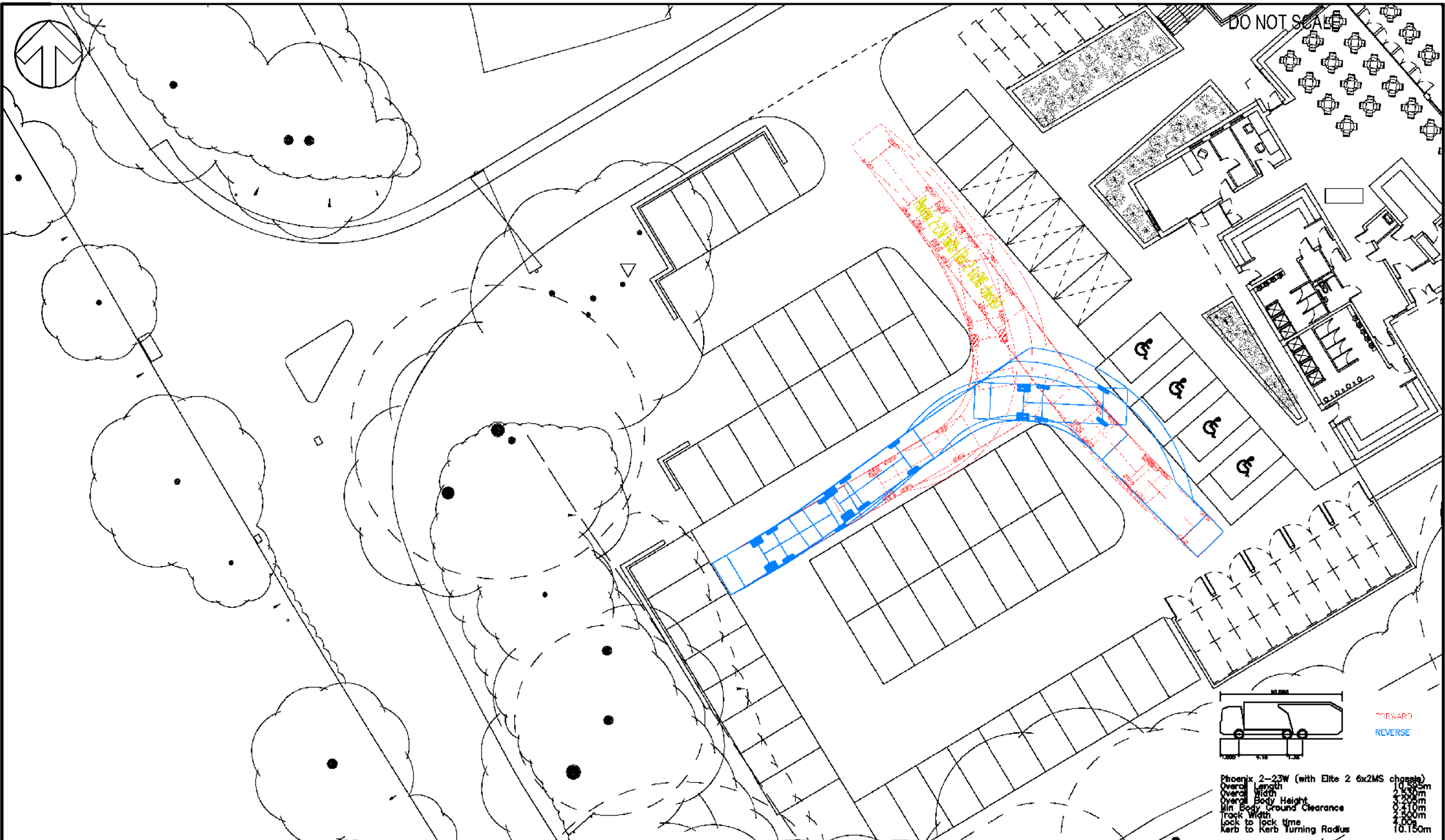
T+44 (0) 1256 318 800
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wsp.com

CLIENT:	AGEAS BOWL
ARCHITECT:	DLA DESIGN

PROJECT:	AGEAS BOWL MASTERPLAN
TITLE:	SWEPT PATH ANALYSIS FAMILY CAR

SCALE: 1:250	CHECKED: SR	APPROVED: SR
PROJECT No: 70053691	DESIGNED: RJ	DRAWN: RJ
DRAWING No: 70053691-ATR-001		REV: B
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File name: \\UK\WSPGROUP\COMP\CENTRAL DATA\PROJECTS\700735\XVT0073579 - AGEAS BOWL MASTERPLAN\03 WIP\TP TRANSPORT PLANNING\03 DRAWINGS\ATR\70053691-ATR-002.DWG, printed on 20 August 2020 14:29:52, by Rose, Stewart



Phoenix 2-23W (with Elite 2 6x2MS chassis)
Overall Length 10.50m
Overall Width 2.50m
Overall Body Height 2.20m
Min Body Ground Clearance 0.410m
Track Width 2.50m
Lock to lock time 10.150m
Kerb to kerb turning Radius 10.150m

REV	DATE	BY	DESCRIPTION	CHK	APP
B	20/08/2020	SR	AMENDED SITE LAYOUT	CW	CW
A	05/08/2020	RJ	FIRST ISSUE	JK	JK

DRAWING STATUS: S0 - WORK IN PROGRESS

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CLIENT:	AGEAS BOWL
ARCHITECT:	DLA DESIGN

PROJECT:	AGEAS BOWL MASTERPLAN
TITLE:	SWEPT PATH ANALYSIS REFUSE VEHICLE

SCALE: 1:250	CHECKED: SR	APPROVED: SR
PROJECT No: 70053691	DESIGNED: RJ	DRAWN: RJ
DRAWING No: 70053691-ATR-002		REV: B
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Appendix E

TRAFFIC SURVEYS





Client: WSP

Project Number: TSP13466

Project Name: Ageas Bowl Surveys, Southampton

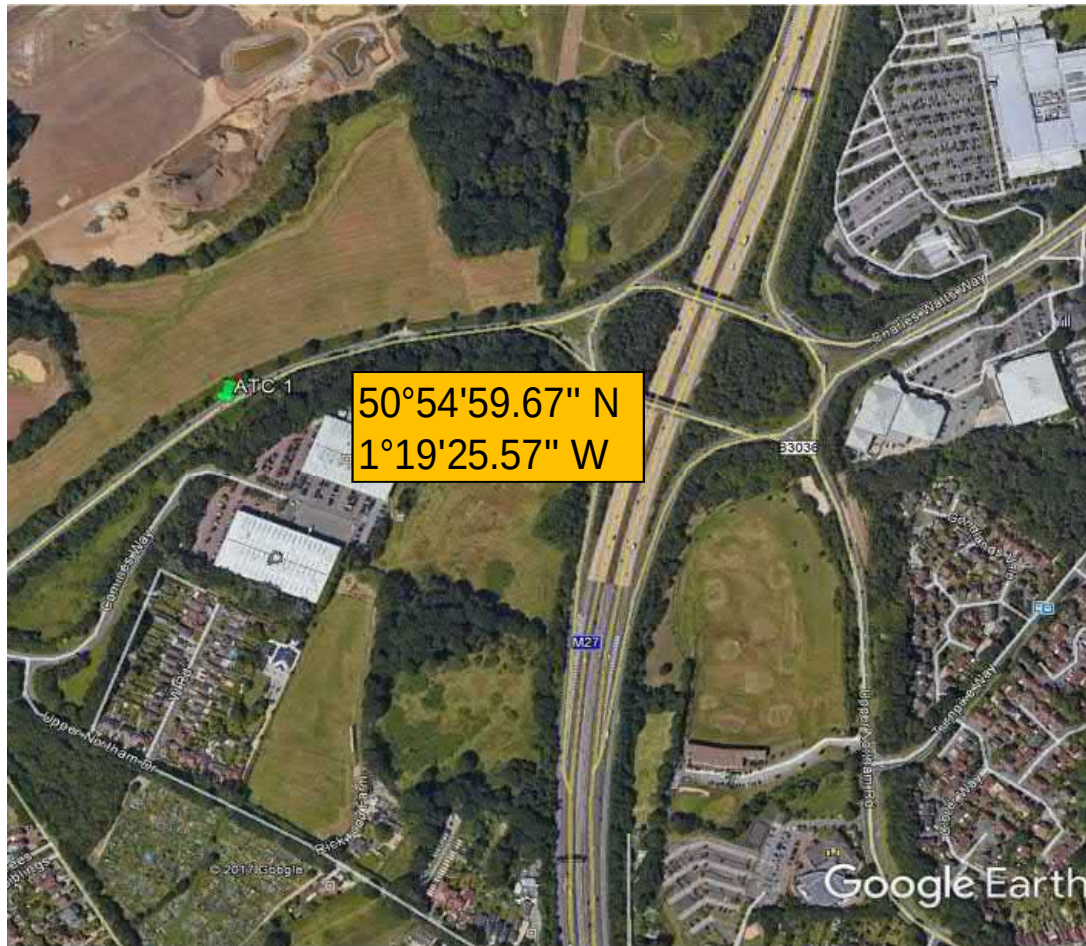
Survey Type: ATC

Survey Date: From 30/09/2017

Survey Time: 24 Hours x 7 Days

Weather: Dry

Comments:



TSP Class Profile All Days 15 Mins

Report Id - CustomList-136
Site Name - Southampton 001
Description - Charles Watts Way [60M]
Direction - South

29 September 2017

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1	Time	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 60 130	Mean	Vpp 85	JPSL 60	JSL1 68 ACPO	JSL1% 68 ACPO	JSL2 75 DFT	JSL2% 75 DFT	
0200	10	0	8	0	1	0	0	0	0	0	1	0	0200	0	0	0	0	0	1	0	1	0	4	2	1	0	45.7		0	0	0	0	0	0
0215	10	1	9	0	0	0	0	0	0	0	0	0	0215	0	0	0	0	0	0	1	6	2	0	1	0	43.5			0	0	0	0	0	
0230	6	0	6	0	0	0	0	0	0	0	0	0	0230	0	0	0	0	0	0	1	5	0	0	0	0	40.3			0	0	0	0	0	
0245	6	0	6	0	0	0	0	0	0	0	0	0	0245	0	0	0	0	0	0	4	1	1	0	0	0	35.9			0	0	0	0	0	
0300	10	0	8	1	1	0	0	0	0	0	0	0	0300	0	0	0	0	0	0	2	2	2	1	3	0	42.7			0	0	0	0	0	
0315	6	0	4	0	2	0	0	0	0	0	0	0	0315	0	0	0	0	0	0	0	2	2	0	2	0	44.6			0	0	0	0	0	
0330	9	1	7	0	0	0	0	0	0	0	1	0	0330	0	0	0	0	0	0	2	2	2	2	1	0	41.1			0	0	0	0	0	
0345	10	0	9	0	1	0	0	0	0	0	0	0	0345	0	0	0	0	0	0	1	1	4	3	0	1	0	44.1			0	0	0	0	0
0400	7	0	7	0	0	0	0	0	0	0	0	0	0400	0	0	0	0	0	0	0	0	5	1	1	0	44.9			0	0	0	0	0	
0415	10	0	5	0	4	0	0	0	1	0	0	0	0415	0	0	0	0	0	0	0	1	4	4	1	0	0	44.1			0	0	0	0	0
0430	23	0	15	0	7	0	0	0	0	0	1	0	0430	0	0	0	0	0	1	1	3	10	4	3	1	1	43.7	50.8		1	4.3	0	0	0
0445	12	0	5	0	6	0	0	0	1	0	0	0	0445	0	0	0	0	0	0	0	2	4	4	1	0	1	45.7	48.1		1	8.3	0	0	0
0500	5	0	2	0	3	0	0	0	0	0	0	0	0500	0	0	0	0	0	0	0	0	0	1	2	1	1	55.6		1	20	0	0	0	0
0515	22	0	10	0	12	0	0	0	0	0	0	0	0515	0	0	0	0	0	0	0	0	2	1	3	8	8	58.5	65.8	8	36.4	3	13.6	1	4.5
0530	37	1	29	0	6	1	0	0	0	0	0	0	0530	0	0	0	0	0	0	4	4	10	8	7	1	3	46.1	51.9	3	8.1	0	0	0	0
0545	56	1	48	0	6	0	0	0	0	0	1	0	0545	0	0	0	0	0	0	4	17	18	10	3	2	2	43	47.9	2	3.6	0	0	0	0
0600	49	1	43	1	4	0	0	0	0	0	0	0	0600	0	0	0	0	0	0	2	8	24	12	2	1	0	43.2	46.1	0	0	0	0	0	0
0615	98	1	90	0	7	0	0	0	0	0	0	0	0615	0	0	0	0	0	1	11	41	31	12	1	1	0	39.8	44.3	0	0	0	0	0	0
0630	152	4	137	0	10	1	0	0	0	0	0	0	0630	0	0	0	0	2	13	26	66	26	15	2	1	1	38	43.2	1	0.7	0	0	0	0
0645	154	3	139	0	9	1	0	0	1	0	1	0	0645	1	1	1	0	0	11	56	53	21	6	1	3	0	35.9	41.2	0	0	0	0	0	0
0700	159	0	141	0	17	0	0	0	0	0	0	1	0700	0	2	2	2	2	6	38	59	40	7	1	0	0	36.6	42.3	0	0	0	0	0	0
0715	194	2	172	1	17	0	2	0	0	0	0	0	0715	6	1	0	0	1	7	47	74	45	14	1	0	0	36.9	42.7	0	0	0	0	0	0
0730	182	2	172	0	8	0	0	0	0	0	0	0	0730	0	1	1	0	3	7	24	83	44	16	2	0	1	38.2	43.2	1	0.5	0	0	0	0
0745	188	1	173	1	10	2	0	1	0	0	0	0	0745	0	9	7	0	0	19	71	60	17	4	1	0	0	33.2	39.4	0	0	0	0	0	0
0800	212	1	187	1	21	0	0	0	0	0	2	0	0800	1	1	1	0	2	10	50	103	35	6	3	0	0	36.6	40.9	0	0	0	0	0	0
0815	188	0	168	1	16	0	1	1	1	0	0	0	0815	0	0	0	0	0	3	27	81	65	9	3	0	0	39	42.3	0	0	0	0	0	0
0830	156	1	141	2	11	1	0	0	0	0	0	0	0830	0	0	0	0	0	3	30	69	45	7	1	1	0	38.3	42.1	0	0	0	0	0	0
0845	212	3	191	1	17	0	0	0	0	0	0	0	0845	3	0	0	0	0	1	66	79	51	15	0	0	0	37.9	42.1	0	0	0	0	0	0
0900	226	1	203	2	17	0	2	0	1	0	0	0	0900	0	1	23	0	7	2	51	77	49	15	1	0	0	34.7	41.8	0	0	0	0	0	0
0915	212	0	181	1	28	1	1	0	0	0	0	0	0915	0	0	0	0	0	5	33	102	54	14	4	0	0	38.8	42.7	0	0	0	0	0	0
0930	223	1	203	0	16	0	0	0	0	1	0	2	0930	0	0	0	0	0	7	54	101	51	8	2	0	0	37.6	41.8	0	0	0	0	0	0
0945	210	0	186	2	18	0	1	0	2	0	1	0	0945	0	0	0	0	0	12	63	87	41	5	1	1	0	36.8	40.9	0	0	0	0	0	0
1000	219	0	193	1	24	0	0	0	1	0	0	0	1000	0	0	0	0	0	20	57	94	35	9	4	0	0	36.8	40.9	0	0	0	0	0	0
1015	243	3	223	0	15	0	1	0	0	0	0	1	1015	0	0	0	0	0	6	73	115	41	6	1	0	1	37.1	41.2	1	0.4	0	0	0	0
1030	216	1	196	1	17	0	1	0	0	0	0	0	1030	0	0	1	0	0	8	35	116	46	10	0	0	0	37.7	41.6	0	0	0	0	0	0
1045	235	1	213	2	19	0	0	0	0	0	0	0	1045	0	0	0	0	0	0	48	107	56	19	5	0	0	38.8	43.8	0	0	0	0	0	0
1100	233	1	210	4	16	1	0	0	1	0	0	0	1100	0	0	0	0	0	23	60	81	59	7	3	0	0	37.1	41.8	0	0	0	0	0	0
1115	146	5	128	2	9	2	0	0	0	0	0	0	1115	0	1	0	0	0	7	38	71	32	11	0	0	0	31.8	37.6	0	0	0	0	0	0
1130	153	1	139	2	9	0	1	0	0	0	0	1	1130	1	4	1	0	4	19	80	30	13	1	0	0	0	32.5	38.9	0	0	0	0	0	0
1145	161	5	147	0	8	1	0	0	0	0	0	0	1145	3	7	5	1	4	34	60	34	11	2	0	0	0	30.9	37.8	0	0	0	0	0	0
1200	151	5	138	1	5	2	0	0	0	0	0	0	1200	5	4	0	7	2	11	67	44	10	1	0	0	0	31.7	37.1	0	0	0	0	0	0
1215	159	5	141	3	8	1	0	1	0	0	0	0	1215	4	4	0	1	1	22	67	48	10	2	0	0	0	32.5	38	0	0	0	0	0	0
1230	177	2	166	0	9	0	0	0	0	0	0	0	1230	1	3	2	3	0	3	47	88	23	4	3	0	0	35.8	40.3	0	0	0	0	0	0
1245	288	0	266	2	17	0	3	0	0	0	0	0	1245	0	0	0	0	0	1	25	66	131	55	6	4	0	36.8	41.2	0	0	0	0	0	0
1300	252	0	231	2	15	2	1	0	0	0	0	1	1300	0	0	0	0	0	2	50	123	69	7	1	0	0	38.1	42.1	0	0	0	0	0	0
1315	263	1	242	2	14	0	3	0	0	0	1	0	1315	0	0	0	0	0	16	52	114	58	16	6	1	0	38.1	43.2	0	0	0	0	0	0
1330	237	0	217	1	16	2	1	0	0	0	0	0	1330	0	0	0	0	0	11	89	88	36	10	1	1	1	36.5	40.3	1	0.4	0	0	0	0
1345	235	3	211	1	16	0	2	0	0	0	0	2	1345	0	0	0	0	3	8	40	109	59	12	4	0	0	38.2	42.1	0	0	0	0	0	0
1400	227	1	216	1	9	0	0	0	0	0	0	0	1400	0	2	2	3	0	13	66	131	55	6	4	0	0	37.1	41.4	0	0	0	0	0	0
1415	253	3	228	0	20	1	1	0	0	0	0	0	1415	0	0	0	0	0	10	71	107	57	6	2	0	0	37.1	41.6	0	0	0	0	0	0
1430	250	3	223	2	21	0	0	0	0	0	0	1	1430	0	1	2	0	0	7	59	124	47	8	2	0	0	36.9	40.9	0	0	0	0	0	0
1445	303	3	274	2	21	0	2	0	1	0	0	0	1445	0	0	0	0																	

TSP Class Profile All Days 15 Mins

Report Id - CustomList-136
Site Name - Southampton 001
Description - Charles Watts Way [60M]
Direction - North

29 September 2017

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1	Time	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 60 130	Mean	Vpp 85	JPSL 60	JPSL% 60	JSL1 68 ACPO	JSL1% 68 ACPO	JSL2 75 DFT	JSL2% 75 DFT	
0200	11	0	7	0	3	0	0	0	0	1	0		0200	0	0	0	0	0	0	3	2	6	0	0	0	0	39.8	44.1	0	0	0	0	0	0	
0215	6	0	5	0	0	0	0	0	0	1	0		0215	0	0	0	0	0	0	1	3	1	1	0	0	0	39		0	0	0	0	0	0	
0230	14	0	10	0	4	0	0	0	0	0	0		0230	0	0	1	0	0	2	5	1	5	0	0	0	0	33.9	42.1	0	0	0	0	0	0	
0245	10	1	8	0	1	0	0	0	0	0	0		0245	0	0	0	0	0	0	3	2	2	1	1	1	0	40.8		0	0	0	0	0	0	
0300	8	0	6	0	1	0	0	0	1	0	0		0300	0	0	0	0	0	0	0	2	5	0	1	0	0	42.2		0	0	0	0	0	0	
0315	14	1	9	0	4	0	0	0	0	0	0		0315	0	0	0	0	0	0	1	6	3	4	0	0	0	41.6	47.9	0	0	0	0	0	0	
0330	13	0	10	0	3	0	0	0	0	0	0		0330	0	0	0	0	0	0	0	2	9	1	0	1	0	42.8	44.5	0	0	0	0	0	0	
0345	19	0	13	0	5	0	0	0	0	1	0		0345	0	0	0	0	0	0	1	5	7	4	1	1	0	42.9	47.6	0	0	0	0	0	0	
0400	14	0	11	0	2	0	0	0	0	0	1		0400	0	0	0	0	0	0	1	3	2	5	3	0	0	40.4	45.9	0	0	0	0	0	0	
0415	16	0	14	0	2	0	0	0	0	0	0		0415	0	0	0	0	0	0	1	4	6	5	0	0	0	41.6	46.8	0	0	0	0	0	0	
0430	23	1	19	0	3	2	0	0	0	0	0		0430	0	0	1	0	0	1	1	9	5	4	0	3	0	42.4	48.3	0	0	0	0	0	0	
0445	33	1	29	0	1	0	0	0	1	1	0		0445	0	0	0	0	0	0	0	6	13	9	4	1	0	44.8	49.9	0	0	0	0	0	0	
0500	32	0	26	0	5	0	1	0	0	0	0		0500	0	0	0	0	0	0	2	6	15	5	4	0	0	43	48.3	0	0	0	0	0	0	
0515	58	0	48	0	8	0	0	0	0	0	1		0515	0	0	0	0	0	1	2	15	20	15	3	1	1	43.2	48.5	1	1.7	0	0	0	0	
0530	113	0	103	0	9	1	0	0	0	0	0		0530	0	0	0	0	0	0	5	36	57	14	1	0	0	41.2	44.3	0	0	0	0	0	0	
0545	106	0	97	1	7	1	0	0	0	0	0		0545	0	0	0	0	0	0	1	41	44	11	7	2	0	42	47	0	0	0	0	0	0	
0600	125	0	114	0	11	0	0	0	0	0	0		0600	0	0	0	0	0	0	0	9	47	54	12	2	1	0	40.5	43.8	0	0	0	0	0	0
0615	184	3	155	0	24	0	1	0	0	0	1		0615	0	0	0	0	0	2	45	86	37	12	0	2	0	38.2	42.5	0	0	0	0	0	0	
0630	252	2	223	3	23	0	0	0	0	1	0		0630	0	0	1	22	61	79	51	31	6	0	0	0	1	33	39.8	1	0.4	0	0	0	0	
0645	259	3	225	2	24	1	1	2	1	0	0		0645	2	54	78	23	43	38	15	6	0	0	0	0	0	17.5	26.8	0	0	0	0	0	0	
0700	265	3	239	5	16	0	0	1	1	0	0		0700	0	31	83	39	18	35	35	23	1	0	0	0	0	20.2	32.7	0	0	0	0	0	0	
0715	248	1	204	5	33	2	1	1	0	0	1		0715	0	68	39	14	9	22	65	19	4	0	0	0	0	23.5	38.5	0	0	0	0	0	0	
0730	246	5	221	3	16	0	1	0	0	0	0		0730	0	36	9	8	4	13	53	99	21	2	1	0	0	30.4	39.1	0	0	0	0	0	0	
0745	223	1	203	3	13	0	2	1	0	0	0		0745	0	79	96	33	4	1	5	3	2	0	0	0	0	12.9	17	0	0	0	0	0	0	
0800	221	5	194	3	15	1	2	0	0	0	1		0800	0	17	19	44	11	23	33	45	24	4	1	0	0	27.2	39.6	0	0	0	0	0	0	
0815	232	2	208	0	21	0	0	0	0	0	1		0815	0	0	0	0	0	8	48	106	61	8	1	0	0	38	41.8	0	0	0	0	0	0	
0830	242	4	213	5	18	1	0	0	1	0	0		0830	0	0	0	0	0	3	49	124	56	7	3	0	0	38	42.1	0	0	0	0	0	0	
0845	250	1	225	0	21	0	3	0	0	0	0		0845	0	0	0	0	0	6	20	82	98	38	5	1	0	35.6	40.3	0	0	0	0	0	0	
0900	216	0	202	3	11	0	0	0	0	0	0		0900	0	0	1	0	1	0	39	86	68	19	1	1	0	39.2	43.8	0	0	0	0	0	0	
0915	234	0	212	1	20	1	0	0	0	0	0		0915	0	0	0	0	0	9	47	119	53	6	0	0	0	37.4	40.9	0	0	0	0	0	0	
0930	205	1	183	0	21	0	0	0	0	0	0		0930	0	0	0	0	0	0	33	98	58	13	3	0	0	38.8	42.9	0	0	0	0	0	0	
0945	216	0	197	0	15	1	1	1	1	0	0		0945	0	38	0	0	0	5	33	109	53	14	2	0	0	38.5	42.1	0	0	0	0	0	0	
1000	216	1	197	0	16	1	0	0	0	0	1		1000	0	1	0	0	0	1	45	100	53	17	0	0	0	38.3	42.5	0	0	0	0	0	0	
1015	246	0	226	6	14	0	0	0	0	0	0		1015	0	0	0	0	0	5	58	135	38	9	1	0	0	37.3	40.7	0	0	0	0	0	0	
1030	217	1	194	1	21	0	0	0	0	0	0		1030	0	0	0	0	0	7	44	103	49	12	2	0	0	38.2	41.8	0	0	0	0	0	0	
1045	228	1	207	4	14	0	1	0	1	0	0		1045	0	0	0	0	0	1	38	125	56	6	2	0	0	38.2	41.8	0	0	0	0	0	0	
1100	207	2	180	5	18	1	1	0	0	0	0		1100	0	0	0	0	0	7	31	125	32	9	3	0	0	38	40.7	0	0	0	0	0	0	
1115	109	3	99	1	2	2	1	0	0	0	1		1115	4	72	10	6	0	11	2	3	1	0	0	0	11.8	27.5	6	0	0	0	0	0		
1130	123	0	115	0	6	0	1	0	0	0	1		1130	5	97	11	0	1	3	2	1	2	1	0	0	0	9.8	10.3	0	0	0	0	0	0	
1145	114	0	104	0	6	1	2	1	0	0	0		1145	1	75	27	5	1	1	0	3	1	0	0	0	0	10.5	11.6	0	0	0	0	0	0	
1200	91	1	87	0	2	1	0	0	0	0	0		1200	4	65	10	2	1	1	7	1	0	0	0	0	0	10.4	12.3	0	0	0	0	0	0	
1215	113	2	107	1	2	0	0	0	0	0	1		1215	2	88	17	1	0	0	2	2	1	0	0	0	0	9.6	11.2	0	0	0	0	0	0	
1230	224	0	211	1	7	2	2	0	1	1	0		1230	0	75	77	34	21	2	7	5	3	0	0	0	0	14.2	20.6	0	0	0	0	0	0	
1245	209	1	188	1	19	0	0	0	0	0	1		1245	0	0	0	0	0	2	15	103	62	22	2	1	0	40	44.5	1	0.5	0	0	0	0	
1300	174	0	151	4	18	0	1	0	0	0	0		1300	0	0	0	0	0	2	17	77	57	14	4	1	2	40.2	44.3	2	1.1	0	0	0	0	
1315	203	1	177	2	22	0	1	0	0	0	0		1315	0	0	4	6	3	8	29	93	45	9	5	1	0	37	42.1	0	0	0	0	0	0	
1330	221	1	202	2	16	0	0	0	0	0	0		1330	0	0	0	0	0	0	28	115	66	11	1	0	0	39	41.8	0	0	0	0	0	0	
1345	227	1	209	2	14	0	0	0	0	0	1		1345	0	0	0	0	0	8	27	99	79	12	1	0	1	39.1	42.7	1	0.4	1	0.4	0	0	
1400	230	0	207	3	17	2	0	0	0	0	1		1400	1	29	13	5	19	21	42	51	29	10	0	0	0	29.8	40.3	0	0	0	0	0	0	
1415	240	1	215	1	20	0	0	0	1	1	1		1415	0	0	0	0	1	7	51	105	61	13	2	0	0	38	41.8	0	0	0	0	0	0	
1430	246	2	226	3	11	1	1	1	0	0	1		1430	0	1	17	16	7	11	25	98	58	12	1	0	0	34.7	41.8	0	0	0	0	0	0	
1445	231	1	212	2	15	0	1	0	0	0	0		1445	0																					



Client: WSP

Project Number: TSP13466

Project Name: Ageas Bowl, Southampton

Survey Type: Manual Classified Turning Count

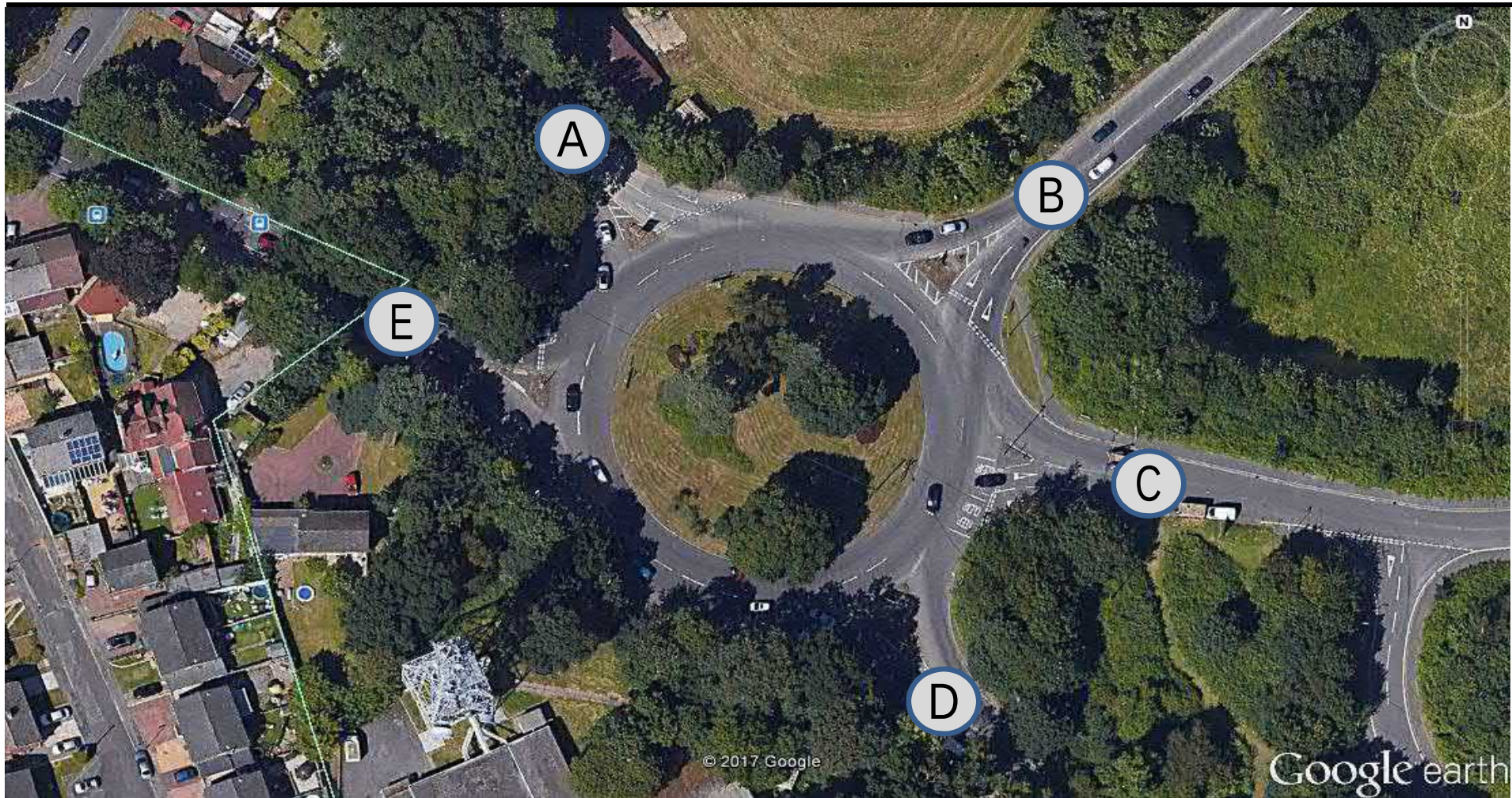
Survey Date: 29 Sep 2017, Friday

Survey Time: 10:00-12:00, 17:00-19:00, 22:00-00:00

Weather: Dry

Comments:

Project Number: **TSP13466**
Project Name: **Ageas Bowl, Southampton**
Survey Type: **Manual Classified Turning Count**
Site No: **2**
Location: **Kanes Hill Roundabout**



Project Number: **TSP13466**
Project Name: **Ageas Bowl, Southampton**
Survey Type: **Manual Classified Turning Count**
Site No: **2**
Location: **Kanes Hill Roundabout**
Date: **29 September 2017, Friday**



	1	1	1.5	2.3	2	2	0.4	0.2												
Time	A - A										A - B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
10:00									0	0	51	6							57	57
10:15									0	0	56	9	1						66	66.5
10:30									0	0	39	10	1				1		51	50.9
10:45									0	0	45	4				1			50	51
H/Total	0	0	0	0	0	0	0	0	0	0	191	29	2	0	0	1	1	0	224	225.4
11:00									0	0	47	9	2						58	59
11:15									0	0	35	2							37	37
11:30	1								1	1	26	8							34	34
11:45	1	2							3	3	40	5	1						46	46.5
H/Total	2	2	0	0	0	0	0	0	4	4	148	24	3	0	0	0	0	0	175	176.5
Total	2	2	0	0	0	0	0	0	4	4	339	53	5	0	0	1	1	0	399	401.9

Time	A - A										A - B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
17:00									0	0	61	6		1	1				69	71.3
17:15									0	0	51	7			1		1		60	60.4
17:30									0	0	45	5					1		51	50.4
17:45									0	0	52	6				1			59	60
H/Total	0	0	0	0	0	0	0	0	0	0	209	24	0	1	2	1	2	0	239	242.1
18:00									0	0	50	3			1				54	55
18:15									0	0	48	9	1			1	1		60	60.9
18:30	1					1			2	3	57			2			3		62	62.8
18:45									0	0	54	5		1					60	61.3
H/Total	1	0	0	0	0	1	0	0	2	3	209	17	1	3	1	1	4	0	236	240
Total	1	0	0	0	0	1	0	0	2	3	418	41	1	4	3	2	6	0	475	482.1

Time	A - A										A - B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
22:00									0	0	23								23	23
22:15									0	0	14								14	14
22:30									0	0	13						1		14	13.4
22:45									0	0	16						1		17	16.4
H/Total	0	0	0	0	0	0	0	0	0	0	66	0	0	0	0	0	2	0	68	66.8
23:00									0	0	21	1							22	22
23:15									0	0	12								12	12
23:30									0	0	9								9	9
23:45									0	0	13								13	13
H/Total	0	0	0	0	0	0	0	0	0	0	55	1	0	0	0	0	0	0	56	56
Total	0	0	0	0	0	0	0	0	0	0	121	1	0	0	0	0	2	0	124	122.8

Project Number: **TSP13466**
Project Name: **Ageas Bowl, Southampton**
Survey Type: **Manual Classified Turning Count**
Site No: **2**
Location: **Kanes Hill Roundabout**
Date: **29 September 2017, Friday**



Time	A - C										A - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
10:00	4	3							7	7	54	6	1						61	61.5
10:15	2	4							6	6	35	8				1			44	45
10:30		2							2	2	49	3							52	52
10:45	1	4							5	5	44	3		1			1		49	49.7
H/Total	7	13	0	0	0	0	0	0	20	20	182	20	1	1	0	1	1	0	206	208.2
11:00	2	2							4	4	47	6	1	1					55	56.8
11:15	1	1			1				3	4	61	10	2				1		74	74.4
11:30	2	3							5	5	55	5	2	1			1		64	65.7
11:45	1	1							2	2	61	10	1						72	72.5
H/Total	6	7	0	0	1	0	0	0	14	15	224	31	6	2	0	0	2	0	265	269.4
Total	13	20	0	0	1	0	0	0	34	35	406	51	7	3	0	1	3	0	471	477.6

Time	A - C										A - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
17:00	1								1	1	75	13					2		90	88.8
17:15	1	4						1	6	5.2	93	9					1		103	102.4
17:30	4	1							5	5	91	6						2	99	97.4
17:45	2	2				1			5	6	96	10					2	1	109	107
H/Total	8	7	0	0	0	1	0	1	17	17.2	355	38	0	0	0	0	5	3	401	395.6
18:00	1								1	1	98	5	1	1					105	106.8
18:15	3								3	3	78	4	2				2	1	87	86
18:30	1						1		2	1.4	70	8						1	79	78.2
18:45									0	0	49	5							54	54
H/Total	5	0	0	0	0	0	1	0	6	5.4	295	22	3	1	0	0	2	2	325	325
Total	13	7	0	0	0	1	1	1	23	22.6	650	60	3	1	0	0	7	5	726	720.6

Time	A - C										A - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
22:00									0	0	12	1					1		14	13.4
22:15									0	0	17								17	17
22:30	1								1	1	22								22	22
22:45									0	0	14								14	14
H/Total	1	0	0	0	0	0	0	0	1	1	65	1	0	0	0	0	1	0	67	66.4
23:00	1								1	1	10								10	10
23:15							1		1	0.4	10								10	10
23:30									0	0	9								9	9
23:45	1								1	1	13						1		14	13.4
H/Total	2	0	0	0	0	0	1	0	3	2.4	42	0	0	0	0	0	1	0	43	42.4
Total	3	0	0	0	0	0	1	0	4	3.4	107	1	0	0	0	0	2	0	110	108.8

Project Number: **TSP13466**
 Project Name: **Ageas Bowl, Southampton**
 Survey Type: **Manual Classified Turning Count**
 Site No: **2**
 Location: **Kanes Hill Roundabout**
 Date: **29 September 2017, Friday**



Time	A - E										B - A									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
10:00	7	2							9	9	42	4	2						48	49
10:15	10	3							13	13	58	6	2	1					67	69.3
10:30	6	3							9	9	52	7	1			1			61	62.5
10:45	7	2	1				2		12	11.3	68	5			1				74	75
H/Total	30	10	1	0	0	0	2	0	43	42.3	220	22	5	1	1	1	0	0	250	255.8
11:00	13	1							14	14	73	12	1	1					87	88.8
11:15	21								21	21	85	10		1		1			97	99.3
11:30	12	2							14	14	84	13	1	1		1			100	102.8
11:45	9	2	1						12	12.5	78	14	3				1		96	96.9
H/Total	55	5	1	0	0	0	0	0	61	61.5	320	49	5	3	0	2	1	0	380	387.8
Total	85	15	2	0	0	0	2	0	104	103.8	540	71	10	4	1	3	1	0	630	643.6

Time	A - E										B - A									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
17:00	16	5							21	21	74	12					2		88	86.8
17:15	24	1					1		26	25.4	71	9	1						81	81.5
17:30	22	2							24	24	63	6							69	69
17:45	16	1							17	17	58	3		2			1		64	66
H/Total	78	9	0	0	0	0	1	0	88	87.4	266	30	1	2	0	0	3	0	302	303.3
18:00	23	3					1		27	26.4	66	8					2		76	74.8
18:15	24	1							25	25	68	9							77	77
18:30	21	5					1		27	26.4	82	6					1		89	88.4
18:45	5	1							6	6	85	4					2		91	89.8
H/Total	73	10	0	0	0	0	2	0	85	83.8	301	27	0	0	0	0	5	0	333	330
Total	151	19	0	0	0	0	3	0	173	171.2	567	57	1	2	0	0	8	0	635	633.3

Time	A - E										B - A									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
22:00	4								4	4	29	1					1		31	30.4
22:15	6								6	6	20	1	1						22	22.5
22:30	3								3	3	24	3							27	27
22:45	2								2	2	27								27	27
H/Total	15	0	0	0	0	0	0	0	15	15	100	5	1	0	0	0	1	0	107	106.9
23:00	5								5	5	13						1		14	13.4
23:15	7								7	7	10	3							13	13
23:30	8								8	8	10								10	10
23:45	4								4	4	15	2	1						18	18.5
H/Total	24	0	0	0	0	0	0	0	24	24	48	5	1	0	0	0	1	0	55	54.9
Total	39	0	0	0	0	0	0	0	39	39	148	10	2	0	0	0	2	0	162	161.8

Project Number: **TSP13466**
 Project Name: **Ageas Bowl, Southampton**
 Survey Type: **Manual Classified Turning Count**
 Site No: **2**
 Location: **Kanes Hill Roundabout**
 Date: **29 September 2017, Friday**



Time	B - B										B - C									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
10:00									0	0	8	11	1						20	20.5
10:15	1								1	1	4	12							16	16
10:30									0	0	9	4							13	13
10:45	1								1	1	5	12	2						19	20
H/Total	2	0	0	0	0	0	0	0	2	2	26	39	3	0	0	0	0	0	68	69.5
11:00	1								1	1	4	9	1						14	14.5
11:15									0	0	3	4							7	7
11:30									0	0	6								6	6
11:45									0	0	7	2				1			10	11
H/Total	1	0	0	0	0	0	0	0	1	1	20	15	1	0	0	1	0	0	37	38.5
Total	3	0	0	0	0	0	0	0	3	3	46	54	4	0	0	1	0	0	105	108

Time	B - B										B - C									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
17:00	2								2	2	7	4				1			12	13
17:15	1						1		2	1.4	2	2	1						5	5.5
17:30	1								1	1	2	3	1			1			7	8.5
17:45	1								1	1	4	5	2						11	12
H/Total	5	0	0	0	0	0	1	0	6	5.4	15	14	4	0	0	2	0	0	35	39
18:00									0	0	5	2				1			8	9
18:15									0	0	5	6		1					12	13.3
18:30									0	0	4	8							12	12
18:45									0	0	4	7							11	11
H/Total	0	0	0	0	0	0	0	0	0	0	18	23	0	1	0	1	0	0	43	45.3
Total	5	0	0	0	0	0	1	0	6	5.4	33	37	4	1	0	3	0	0	78	84.3

Time	B - B										B - C									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
22:00									0	0	2								2	2
22:15									0	0									0	0
22:30									0	0	1								1	1
22:45									0	0		1							1	1
H/Total	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	4	4
23:00									0	0	1								1	1
23:15									0	0	1								1	1
23:30									0	0			2						2	4.6
23:45									0	0	1								1	1
H/Total	0	0	0	0	0	0	0	0	0	0	3	0	0	2	0	0	0	0	5	7.6
Total	0	0	0	0	0	0	0	0	0	0	6	1	0	2	0	0	0	0	9	11.6

Project Number: **TSP13466**
Project Name: **Ageas Bowl, Southampton**
Survey Type: **Manual Classified Turning Count**
Site No: **2**
Location: **Kanes Hill Roundabout**
Date: **29 September 2017, Friday**



Time	B - D										B - E									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
10:00	8								8	8	113	23	4						140	142
10:15	7	2							9	9	125	21	3		1		3		153	153.7
10:30	9	1		1					11	12.3	120	14	4						138	140
10:45	10								10	10	112	15	3				1		131	131.9
H/Total	34	3	0	1	0	0	0	0	38	39.3	470	73	14	0	1	0	4	0	562	567.6
11:00	9	2	1						12	12.5	97	17	8				1		123	126.4
11:15	7								7	7	87	18	3	1	1	1	1		112	116.2
11:30	5								5	5	84	16	1				1		102	101.9
11:45	9	1							10	10	92	13	5				1	2	113	113.3
H/Total	30	3	1	0	0	0	0	0	34	34.5	360	64	17	1	1	1	4	2	450	457.8
Total	64	6	1	1	0	0	0	0	72	73.8	830	137	31	1	2	1	8	2	1012	1025.4

Time	B - D										B - E									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
17:00	13	1							14	14	108	20					4		132	129.6
17:15	8	1							9	9	112	21	1				1		135	134.9
17:30	18	1					2		21	19.8	134	24	1		1		3		163	162.7
17:45	25	1					1		27	26.4	140	18	1				1		160	159.9
H/Total	64	4	0	0	0	0	3	0	71	69.2	494	83	3	0	1	0	9	0	590	587.1
18:00	23	2		1					26	27.3	162	10					4		176	173.6
18:15	13	1							14	14	109	14	1				3	1	128	125.9
18:30	7	1							8	8	125	11	2			1	2		141	141.8
18:45	11								11	11	130	20					1		151	150.4
H/Total	54	4	0	1	0	0	0	0	59	60.3	526	55	3	0	0	1	10	1	596	591.7
Total	118	8	0	1	0	0	3	0	130	129.5	1020	138	6	0	1	1	19	1	1186	1178.8

Time	B - D										B - E									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
22:00	1								1	1	58	2							60	60
22:15	4								4	4	57	3	1					1	62	61.7
22:30	4	1	1						6	6.5	33	2							35	35
22:45	4						1		5	4.4	50	2							52	52
H/Total	13	1	1	0	0	0	1	0	16	15.9	198	9	1	0	0	0	0	1	209	208.7
23:00	2								2	2	40	3		1			1		45	45.7
23:15	2								2	2	49	3							52	52
23:30	1								1	1	44	1							45	45
23:45	1								1	1	22	2							24	24
H/Total	6	0	0	0	0	0	0	0	6	6	155	9	0	1	0	0	1	0	166	166.7
Total	19	1	1	0	0	0	1	0	22	21.9	353	18	1	1	0	0	1	1	375	375.4

Project Number: **TSP13466**
 Project Name: **Ageas Bowl, Southampton**
 Survey Type: **Manual Classified Turning Count**
 Site No: **2**
 Location: **Kanes Hill Roundabout**
 Date: **29 September 2017, Friday**



Time	C - C										C - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
10:00									0	0		7	1						8	8.5
10:15									0	0	3	3							6	6
10:30									0	0	4	3							7	7
10:45									0	0	3	6							9	9
H/Total	0	0	0	0	0	0	0	0	0	0	10	19	1	0	0	0	0	0	30	30.5
11:00									0	0		3							3	3
11:15									0	0	6	2							8	8
11:30									0	0	6	4					1		11	10.4
11:45									0	0	9	3				1			13	14
H/Total	0	0	0	0	0	0	0	0	0	0	21	12	0	0	0	1	1	0	35	35.4
Total	0	0	0	0	0	0	0	0	0	0	31	31	1	0	0	1	1	0	65	65.9

Time	C - C										C - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
17:00									0	0	12	2						1	15	14.2
17:15									0	0	16	1							17	17
17:30									0	0	7	1							8	8
17:45									0	0	4								4	4
H/Total	0	0	0	0	0	0	0	0	0	0	39	4	0	0	0	0	0	1	44	43.2
18:00									0	0	9	5							14	14
18:15									0	0	5	1							6	6
18:30									0	0	7	2							9	9
18:45									0	0	2	1							3	3
H/Total	0	0	0	0	0	0	0	0	0	0	23	9	0	0	0	0	0	0	32	32
Total	0	0	0	0	0	0	0	0	0	0	62	13	0	0	0	0	0	1	76	75.2

Time	C - C										C - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
22:00									0	0		2							2	2
22:15									0	0									0	0
22:30									0	0									0	0
22:45									0	0									0	0
H/Total	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	2
23:00									0	0	1								1	1
23:15									0	0									0	0
23:30									0	0									0	0
23:45									0	0									0	0
H/Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	3	3

Project Number: **TSP13466**
 Project Name: **Ageas Bowl, Southampton**
 Survey Type: **Manual Classified Turning Count**
 Site No: **2**
 Location: **Kanes Hill Roundabout**
 Date: **29 September 2017, Friday**



Time	C - E										D - A									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
10:00	2	2							4	4	54	14					1		69	68.4
10:15	1								1	1	38	6	1	1					46	47.8
10:30	1	1	1						3	3.5	51	5	1						57	57.5
10:45									0	0	48	9	1				1		59	58.9
H/Total	4	3	1	0	0	0	0	0	8	8.5	191	34	3	1	0	0	2	0	231	232.6
11:00	3	2	1						6	6.5	52	3	1						56	56.5
11:15	3	1							4	4	64	9		1			2		76	76.1
11:30		2							2	2	76	10	1						87	87.5
11:45	1	5					1	1	8	6.6	69	5	1	1			2		78	78.6
H/Total	7	10	1	0	0	0	1	1	20	19.1	261	27	3	2	0	0	4	0	297	298.7
Total	11	13	2	0	0	0	1	1	28	27.6	452	61	6	3	0	0	6	0	528	531.3

Time	C - E										D - A									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
17:00	16	1				1			18	19	53	8	2	1		1	6		71	70.7
17:15	7							1	8	7.2	57	6				1	2		66	65.8
17:30	2								2	2	75	1							76	76
17:45	8	2							10	10	58	3						1	62	61.2
H/Total	33	3	0	0	0	1	0	1	38	38.2	243	18	2	1	0	2	8	1	275	273.7
18:00	6							1	7	6.2	57	1	1					1	60	59.7
18:15	2	3							5	5	42	6							48	48
18:30	2	6							8	8	58	2							60	60
18:45	2	1							3	3	65								65	65
H/Total	12	10	0	0	0	0	0	1	23	22.2	222	9	1	0	0	0	0	1	233	232.7
Total	45	13	0	0	0	1	0	2	61	60.4	465	27	3	1	0	2	8	2	508	506.4

Time	C - E										D - A									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
22:00	1	1							2	2	18	1							19	19
22:15		1							1	1	22								22	22
22:30	1								1	1	18								18	18
22:45									0	0	14	1							15	15
H/Total	2	2	0	0	0	0	0	0	4	4	72	2	0	0	0	0	0	0	74	74
23:00									0	0	20						1		21	20.4
23:15	1								1	1	14	1							15	15
23:30	1							1	2	1.2	17								17	17
23:45	1								1	1	11								11	11
H/Total	3	0	0	0	0	0	0	1	4	3.2	62	1	0	0	0	0	1	0	64	63.4
Total	5	2	0	0	0	0	0	1	8	7.2	134	3	0	0	0	0	1	0	138	137.4

Project Number: **TSP13466**
Project Name: **Ageas Bowl, Southampton**
Survey Type: **Manual Classified Turning Count**
Site No: **2**
Location: **Kanes Hill Roundabout**
Date: **29 September 2017, Friday**



Time	D - D										D - E									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
10:00									0	0	13	6							19	19
10:15	1								1	1	27	5							32	32
10:30	1								1	1	24	1	1						26	26.5
10:45									0	0	25	3	2						30	31
H/Total	2	0	0	0	0	0	0	0	2	2	89	15	3	0	0	0	0	0	107	108.5
11:00									0	0	19	3							22	22
11:15	2	1							3	3	24		1				1		26	25.9
11:30	1								1	1	22	4							26	26
11:45									0	0	34	1							35	35
H/Total	3	1	0	0	0	0	0	0	4	4	99	8	1	0	0	0	1	0	109	108.9
Total	5	1	0	0	0	0	0	0	6	6	188	23	4	0	0	0	1	0	216	217.4

Time	D - D										D - E									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
17:00	1								1	1	37	5				1	1		44	44.4
17:15	1								1	1	36	7							43	43
17:30	1								1	1	35	3					1		39	38.4
17:45	1								1	1	26	2					1		29	28.4
H/Total	4	0	0	0	0	0	0	0	4	4	134	17	0	0	0	1	3	0	155	154.2
18:00									0	0	36						1		37	36.4
18:15	1								1	1	33	3	1				1		38	37.9
18:30	1								1	1	36						1		37	36.4
18:45	1								1	1	31	2	1				1		35	34.9
H/Total	3	0	0	0	0	0	0	0	3	3	136	5	2	0	0	0	4	0	147	145.6
Total	7	0	0	0	0	0	0	0	7	7	270	22	2	0	0	1	7	0	302	299.8

Time	D - D										D - E									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
22:00									0	0	11	1							12	12
22:15	1								1	1	15	1					1		17	16.4
22:30									0	0	12	1							13	13
22:45									0	0	12								12	12
H/Total	1	0	0	0	0	0	0	0	1	1	50	3	0	0	0	0	1	0	54	53.4
23:00									0	0	5								5	5
23:15									0	0	3								3	3
23:30									0	0	6								6	6
23:45									0	0	6						1		7	6.4
H/Total	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	1	0	21	20.4
Total	1	0	0	0	0	0	0	0	1	1	70	3	0	0	0	0	2	0	75	73.8

Project Number: **TSP13466**
 Project Name: **Ageas Bowl, Southampton**
 Survey Type: **Manual Classified Turning Count**
 Site No: **2**
 Location: **Kanes Hill Roundabout**
 Date: **29 September 2017, Friday**



Time	E - A										E - B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
10:00	11	3							14	14	115	15	1		1		1		133	133.9
10:15	13	4							17	17	117	30	2	1		1			151	154.3
10:30	20	2						1	23	22.2	112	23	2						137	138
10:45	18	1							19	19	111	18	2	1		1	1		134	136.7
H/Total	62	10	0	0	0	0	0	1	73	72.2	455	86	7	2	1	2	2	0	555	562.9
11:00	9	4							13	13	104	17	2		1		1		125	126.4
11:15	14	2	1						17	17.5	77	15	5						97	99.5
11:30	25	2					1		28	27.4	67	8							75	75
11:45	24	1					1		26	25.4	80	8	2				2		92	91.8
H/Total	72	9	1	0	0	0	2	0	84	83.3	328	48	9	0	1	0	3	0	389	392.7
Total	134	19	1	0	0	0	2	1	157	155.5	783	134	16	2	2	2	5	0	944	955.6

Time	E - A										E - B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
17:00	14	1							15	15	127	20	2						149	150
17:15	9	3							12	12	113	21	1				5		140	137.5
17:30	19	3							22	22	128	9					1		138	137.4
17:45	21	2							23	23	107	5	2		1		1	1	117	117.6
H/Total	63	9	0	0	0	0	0	0	72	72	475	55	5	0	1	0	7	1	544	542.5
18:00	13	1							14	14	126	8	1			1	2	1	139	138.5
18:15	12				1				13	14	129	10			1		2		142	141.8
18:30	13				1				14	15	100	6	1			1	1	1	110	110.1
18:45	18						1		19	18.4	127	8	2						137	138
H/Total	56	1	0	0	2	0	1	0	60	61.4	482	32	4	0	1	2	5	2	528	528.4
Total	119	10	0	0	2	0	1	0	132	133.4	957	87	9	0	2	2	12	3	1072	1070.9

Time	E - A										E - B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
22:00	3								3	3	56	3					3		62	60.2
22:15	11								11	11	51	1	1						53	53.5
22:30	8				1				9	10	57	2	2						61	62
22:45	3								3	3	49								49	49
H/Total	25	0	0	0	1	0	0	0	26	27	213	6	3	0	0	0	3	0	225	224.7
23:00	1								1	1	54	1				1			56	57
23:15	6						1		7	6.4	40	1							41	41
23:30	3				1		1	1	6	5.6	30						1		31	30.4
23:45	2								2	2	22	1							23	23
H/Total	12	0	0	0	1	0	2	1	16	15	146	3	0	0	0	1	1	0	151	151.4
Total	37	0	0	0	2	0	2	1	42	42	359	9	3	0	0	1	4	0	376	376.1

Project Number: **TSP13466**
 Project Name: **Ageas Bowl, Southampton**
 Survey Type: **Manual Classified Turning Count**
 Site No: **2**
 Location: **Kanes Hill Roundabout**
 Date: **29 September 2017, Friday**



Time	E - C										E - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
10:00	1	8							9	9	18	2	1						21	21.5
10:15	3	13				2			18	20	24	4	3						31	32.5
10:30	1								1	1	24	1	2						27	28
10:45	2	6							8	8	34	1							35	35
H/Total	7	27	0	0	0	2	0	0	36	38	100	8	6	0	0	0	0	0	114	117
11:00	2	2							4	4	27	4					2		33	31.8
11:15								1	1	0.2	37	6							43	43
11:30									0	0	36	7		1					44	45.3
11:45	2	1							3	3	37	5							42	42
H/Total	4	3	0	0	0	0	0	1	8	7.2	137	22	0	1	0	0	2	0	162	162.1
Total	11	30	0	0	0	2	0	1	44	45.2	237	30	6	1	0	0	2	0	276	279.1

Time	E - C										E - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
17:00	4	1							5	5	37	6	1						44	44.5
17:15		1					1		2	1.4	32	3					1		36	35.4
17:30	1								1	1	31	5							36	36
17:45	4								4	4	31	5							36	36
H/Total	9	2	0	0	0	0	1	0	12	11.4	131	19	1	0	0	0	1	0	152	151.9
18:00		1				1			2	3	32	3							35	35
18:15	2							1	3	2.2	32	1							33	33
18:30	2	1							3	3	42	2							44	44
18:45	1								1	1	32	1							33	33
H/Total	5	2	0	0	0	1	0	1	9	9.2	138	7	0	0	0	0	0	0	145	145
Total	14	4	0	0	0	1	1	1	21	20.6	269	26	1	0	0	0	1	0	297	296.9

Time	E - C										E - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
22:00									0	0	16								16	16
22:15	1								1	1	18								18	18
22:30									0	0	11								11	11
22:45									0	0	12								12	12
H/Total	1	0	0	0	0	0	0	0	1	1	57	0	0	0	0	0	0	0	57	57
23:00									0	0	11								11	11
23:15	1								1	1	10								10	10
23:30									0	0	4						1		5	4.4
23:45	2							1	3	2.2	6								6	6
H/Total	3	0	0	0	0	0	0	1	4	3.2	31	0	0	0	0	0	1	0	32	31.4
Total	4	0	0	0	0	0	0	1	5	4.2	88	0	0	0	0	0	1	0	89	88.4

[illegible]

Time	E - E									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
17:00			1						1	1.5
17:15									0	0
17:30									0	0
17:45									0	0
H/Total	0	0	1	0	0	0	0	0	1	1.5
18:00									0	0
18:15									0	0
18:30									0	0
18:45									0	0
H/Total	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	0	0	0	0	1	1.5

[illegible]

Project Number: **TSP13466**
Project Name: **Ageas Bowl, Southampton**
Survey Type: **Manual Classified Turning Count**
Site No: **2**
Location: **Kanes Hill Roundabout**
Date: **29 September 2017, Friday**



Time	From A										To A									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
10:00	116	17	1	0	0	0	0	0	134	134.5	108	21	2	0	0	0	2	0	133	132.8
10:15	103	24	1	0	0	1	0	0	129	130.5	111	17	3	2	0	0	0	0	133	137.1
10:30	94	18	1	0	0	0	1	0	114	113.9	124	16	2	0	0	1	0	1	144	145.2
10:45	97	13	1	1	0	1	3	0	116	117	134	17	1	0	1	0	1	0	154	154.9
H/Total	410	72	4	1	0	2	4	0	493	495.9	477	71	8	2	1	1	3	1	564	570
11:00	109	18	3	1	0	0	0	0	131	133.8	137	21	2	1	0	0	2	0	163	164.1
11:15	118	13	2	0	1	0	1	0	135	136.4	168	22	2	2	0	1	2	1	198	200.6
11:30	96	18	2	1	0	0	1	0	118	119.7	195	30	2	1	0	1	1	0	230	232.7
11:45	112	20	3	0	0	0	0	0	135	136.5	176	26	4	1	0	0	4	0	211	211.9
H/Total	435	69	10	2	1	0	2	0	519	526.4	676	99	10	5	0	2	9	1	802	809.3
Total	845	141	14	3	1	2	6	0	1012	1022.3	1153	170	18	7	1	3	12	2	1366	1379.3

Time	From A										To A									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
17:00	153	24	0	1	1	0	2	0	181	182.1	147	21	2	1	0	1	9	0	181	178.9
17:15	169	21	0	0	1	0	3	1	195	193.4	143	18	1	0	1	1	2	0	166	167.3
17:30	162	14	0	0	0	0	1	2	179	176.8	159	10	0	0	0	0	0	0	169	169
17:45	166	19	0	0	0	2	2	1	190	190	139	10	0	2	0	0	1	2	154	154.4
H/Total	650	78	0	1	2	2	8	4	745	742.3	588	59	3	3	1	2	12	2	670	669.6
18:00	172	11	1	1	1	0	1	0	187	189.2	138	10	1	0	0	0	3	1	153	150.9
18:15	153	14	3	0	0	1	3	1	175	174.9	125	15	0	0	1	0	1	0	142	142.4
18:30	150	13	0	2	0	1	5	1	172	171.8	157	10	0	0	1	1	1	0	170	171.4
18:45	108	11	0	1	0	0	0	0	120	121.3	168	7	0	0	0	0	3	0	178	176.2
H/Total	583	49	4	4	1	2	9	2	654	657.2	588	42	1	0	2	1	8	1	643	640.9
Total	1233	127	4	5	3	4	17	6	1399	1399.5	1176	101	4	3	3	3	20	3	1313	1310.5

Time	From A										To A									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
22:00	39	1	0	0	0	0	1	0	41	40.4	50	3	0	0	0	0	1	0	54	53.4
22:15	37	0	0	0	0	0	0	0	37	37	53	2	1	0	0	0	0	0	56	56.5
22:30	39	0	0	0	0	0	1	0	40	39.4	51	3	0	0	1	0	0	0	55	56
22:45	32	0	0	0	0	0	1	0	33	32.4	44	1	0	0	0	0	0	0	45	45
H/Total	147	1	0	0	0	0	3	0	151	149.2	198	9	1	0	1	0	1	0	210	210.9
23:00	37	1	0	0	0	0	0	0	38	38	34	0	0	0	0	0	2	0	36	34.8
23:15	29	0	0	0	0	0	1	0	30	29.4	30	4	0	0	0	0	1	0	35	34.4
23:30	26	0	0	0	0	0	0	0	26	26	30	0	0	0	1	0	1	1	33	32.6
23:45	31	0	0	0	0	0	1	0	32	31.4	28	2	1	0	0	0	0	0	31	31.5
H/Total	123	1	0	0	0	0	2	0	126	124.8	122	6	1	0	1	0	4	1	135	133.3
Total	270	2	0	0	0	0	5	0	277	274	320	15	2	0	2	0	5	1	345	344.2

Project Number: **TSP13466**
 Project Name: **Ageas Bowl, Southampton**
 Survey Type: **Manual Classified Turning Count**
 Site No: **2**
 Location: **Kanes Hill Roundabout**
 Date: **29 September 2017, Friday**



Time	From B										To B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
10:00	171	38	7	0	0	0	0	0	216	219.5	183	40	1	0	1	0	1	0	226	226.9
10:15	195	41	5	1	1	0	3	0	246	249	190	49	3	1	0	1	0	0	244	247.8
10:30	190	26	5	1	0	1	0	0	223	227.8	171	52	3	0	0	0	1	0	227	227.9
10:45	196	32	5	0	1	0	1	0	235	237.9	171	45	3	1	0	2	1	0	223	227.2
H/Total	752	137	22	2	2	1	4	0	920	934.2	715	186	10	2	1	3	3	0	920	929.8
11:00	184	40	11	1	0	0	1	0	237	243.2	169	38	6	1	1	1	2	0	218	223.1
11:15	182	32	3	2	1	2	1	0	223	229.5	134	32	6	1	0	1	1	0	175	179.7
11:30	179	29	2	1	0	1	1	0	213	215.7	104	22	0	0	0	0	0	0	126	126
11:45	186	30	8	0	0	1	2	2	229	231.2	136	26	4	0	1	0	3	0	170	171.2
H/Total	731	131	24	4	1	4	5	2	902	919.6	543	118	16	2	2	2	6	0	689	700
Total	1483	268	46	6	3	5	9	2	1822	1853.8	1258	304	26	4	3	5	9	0	1609	1629.8

Time	From B										To B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
17:00	204	37	0	0	0	1	6	0	248	245.4	221	26	2	1	1	0	1	0	252	254.7
17:15	194	33	3	0	0	0	2	0	232	232.3	187	29	1	0	1	0	8	0	226	222.7
17:30	218	34	2	0	1	1	5	0	261	261	187	17	0	0	0	0	2	0	206	204.8
17:45	228	27	3	2	0	0	3	0	263	265.3	176	14	2	0	1	1	1	1	196	197.6
H/Total	844	131	8	2	1	2	16	0	1004	1004	771	86	5	1	3	1	12	1	880	879.8
18:00	256	22	0	1	0	1	6	0	286	284.7	193	12	1	0	1	1	2	1	211	211.5
18:15	195	30	1	1	0	0	3	1	231	230.2	194	20	2	0	1	1	3	0	221	222.2
18:30	218	26	2	0	0	1	3	0	250	250.2	171	8	1	2	0	1	4	1	188	188.9
18:45	230	31	0	0	0	0	3	0	264	262.2	192	14	2	1	0	0	0	0	209	211.3
H/Total	899	109	3	2	0	2	15	1	1031	1027.3	750	54	6	3	2	3	9	2	829	833.9
Total	1743	240	11	4	1	4	31	1	2035	2031.3	1521	140	11	4	5	4	21	3	1709	1713.7

Time	From B										To B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
22:00	90	3	0	0	0	0	1	0	94	93.4	81	3	0	0	0	0	3	0	87	85.2
22:15	81	4	2	0	0	0	0	1	88	88.2	70	2	1	0	0	0	0	0	73	73.5
22:30	62	6	1	0	0	0	0	0	69	69.5	79	2	2	0	0	0	1	0	84	84.4
22:45	81	3	0	0	0	0	1	0	85	84.4	71	0	0	0	0	0	1	0	72	71.4
H/Total	314	16	3	0	0	0	2	1	336	335.5	301	7	3	0	0	0	5	0	316	314.5
23:00	56	3	0	1	0	0	2	0	62	62.1	80	2	0	0	0	1	0	0	83	84
23:15	62	6	0	0	0	0	0	0	68	68	57	1	0	0	0	0	0	0	58	58
23:30	55	1	0	2	0	0	0	0	58	60.6	42	0	0	0	0	0	1	0	43	42.4
23:45	39	4	1	0	0	0	0	0	44	44.5	36	1	0	0	0	0	0	0	37	37
H/Total	212	14	1	3	0	0	2	0	232	235.2	215	4	0	0	0	1	1	0	221	221.4
Total	526	30	4	3	0	0	4	1	568	570.7	516	11	3	0	0	1	6	0	537	535.9

Project Number: **TSP13466**
Project Name: **Ageas Bowl, Southampton**
Survey Type: **Manual Classified Turning Count**
Site No: **2**
Location: **Kanes Hill Roundabout**
Date: **29 September 2017, Friday**



Time	From C										To C									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
10:00	6	26	1	0	0	0	1	0	34	33.9	16	22	1	0	0	0	0	0	39	39.5
10:15	7	12	0	0	0	0	0	0	19	19	9	29	0	0	0	2	0	0	40	42
10:30	8	25	1	0	0	0	0	0	34	34.5	10	7	0	0	0	0	0	0	17	17
10:45	4	30	1	0	0	0	0	0	35	35.5	9	23	2	0	0	0	0	0	34	35
H/Total	25	93	3	0	0	0	1	0	122	122.9	44	81	3	0	0	2	0	0	130	133.5
11:00	14	18	3	0	0	1	3	0	39	39.7	9	14	1	0	0	0	0	0	24	24.5
11:15	21	17	1	0	0	1	1	1	42	42.1	4	5	0	0	1	0	0	1	11	11.2
11:30	17	16	0	0	0	0	1	0	34	33.4	9	4	1	0	0	0	0	0	14	14.5
11:45	18	25	1	0	1	1	2	1	49	49.5	12	5	0	0	0	1	0	0	18	19
H/Total	70	76	5	0	1	3	7	2	164	164.7	34	28	2	0	1	1	0	1	67	69.2
Total	95	169	8	0	1	3	8	2	286	287.6	78	109	5	0	1	3	0	1	197	202.7

Time	From C										To C									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
17:00	58	3	0	0	0	1	1	1	64	63.6	15	5	0	0	0	1	0	0	21	22
17:15	43	2	0	0	1	0	1	1	48	47.6	6	7	1	0	0	0	1	1	16	15.1
17:30	15	3	0	0	0	0	0	0	18	18	9	5	1	0	0	1	0	0	16	17.5
17:45	22	7	0	0	0	0	0	1	30	29.2	13	7	3	0	0	1	0	0	24	26.5
H/Total	138	15	0	0	1	1	2	3	160	158.4	43	24	5	0	0	3	1	1	77	81.1
18:00	27	6	0	0	0	0	1	1	35	33.6	6	3	0	0	0	2	0	0	11	13
18:15	16	4	1	0	0	0	1	0	22	21.9	10	6	0	1	0	0	0	1	18	18.5
18:30	18	11	0	0	0	0	0	0	29	29	10	9	0	0	0	0	1	0	20	19.4
18:45	8	5	0	0	0	0	0	0	13	13	5	7	0	0	0	0	0	0	12	12
H/Total	69	26	1	0	0	0	2	1	99	97.5	31	25	0	1	0	2	1	1	61	62.9
Total	207	41	1	0	1	1	4	4	259	255.9	74	49	5	1	0	5	2	2	138	144

Time	From C										To C									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
22:00	1	4	0	0	0	0	0	0	5	5	3	0	0	0	0	0	0	0	3	3
22:15	0	2	0	0	0	0	0	0	2	2	1	0	0	0	0	0	0	0	1	1
22:30	2	0	0	0	0	0	0	0	2	2	3	0	0	0	0	0	0	0	3	3
22:45	1	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	1	1
H/Total	4	6	0	0	0	0	0	0	10	10	7	1	0	0	0	0	0	0	8	8
23:00	2	0	0	0	0	0	0	0	2	2	2	0	0	0	0	0	0	0	2	2
23:15	1	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	1	0	3	2.4
23:30	1	0	0	0	0	0	0	1	2	1.2	0	0	0	2	0	0	0	0	2	4.6
23:45	1	0	0	0	0	0	0	0	1	1	4	0	0	0	0	0	0	1	5	4.2
H/Total	5	0	0	0	0	0	0	1	6	5.2	8	0	0	2	0	0	1	1	12	13.2
Total	9	6	0	0	0	0	0	1	16	15.2	15	1	0	2	0	0	1	1	20	21.2

Project Number: **TSP13466**
Project Name: **Ageas Bowl, Southampton**
Survey Type: **Manual Classified Turning Count**
Site No: **2**
Location: **Kanes Hill Roundabout**
Date: **29 September 2017, Friday**



Time	From D										To D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
10:00	84	22	0	0	0	0	1	0	107	106.4	80	15	3	0	0	0	0	0	98	99.5
10:15	81	13	1	1	0	0	0	0	96	97.8	70	17	3	0	0	1	0	0	91	93.5
10:30	94	7	2	0	0	0	0	0	103	104	87	8	2	1	0	0	0	0	98	100.3
10:45	87	14	3	0	0	0	1	0	105	105.9	91	10	0	1	0	0	1	0	103	103.7
H/Total	346	56	6	1	0	0	2	0	411	414.1	328	50	8	2	0	1	1	0	390	397
11:00	81	8	1	1	0	0	0	0	91	92.8	83	15	2	1	0	0	2	0	103	104.1
11:15	105	12	2	2	0	0	3	0	124	125.8	113	19	2	0	0	0	1	0	135	135.4
11:30	109	16	2	0	0	0	0	0	127	128	103	16	2	2	0	0	2	0	125	127.4
11:45	117	7	1	1	0	0	2	0	128	128.6	116	19	1	0	0	1	0	0	137	138.5
H/Total	412	43	6	4	0	0	5	0	470	475.2	415	69	7	3	0	1	5	0	500	505.4
Total	758	99	12	5	0	0	7	0	881	889.3	743	119	15	5	0	2	6	0	890	902.4

Time	From D										To D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
17:00	101	13	2	1	0	2	8	0	127	126.5	138	22	1	0	0	0	2	1	164	162.5
17:15	105	13	0	0	0	1	2	0	121	120.8	150	14	0	0	0	0	2	0	166	164.8
17:30	122	6	0	0	0	0	1	0	129	128.4	148	13	0	0	0	0	2	2	165	162.2
17:45	96	5	1	0	0	0	1	1	104	103.1	157	16	0	0	0	0	3	1	177	174.4
H/Total	424	37	3	1	0	3	12	1	481	478.8	593	65	1	0	0	0	9	4	672	663.9
18:00	100	1	1	0	0	0	1	1	104	103.1	162	15	1	2	0	0	0	0	180	183.1
18:15	87	10	1	0	0	0	1	0	99	98.9	129	7	2	0	0	0	2	1	141	140
18:30	106	3	0	0	0	0	1	0	110	109.4	127	13	0	0	0	0	0	1	141	140.2
18:45	104	3	1	0	0	0	1	0	109	108.9	95	7	0	0	0	0	0	0	102	102
H/Total	397	17	3	0	0	0	4	1	422	420.3	513	42	3	2	0	0	2	2	564	565.3
Total	821	54	6	1	0	3	16	2	903	899.1	1106	107	4	2	0	0	11	6	1236	1229.2

Time	From D										To D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
22:00	32	2	0	0	0	0	0	0	34	34	29	3	0	0	0	0	1	0	33	32.4
22:15	43	2	0	0	0	0	1	0	46	45.4	40	0	0	0	0	0	0	0	40	40
22:30	40	1	0	0	0	0	0	0	41	41	37	1	1	0	0	0	0	0	39	39.5
22:45	31	1	0	0	0	0	0	0	32	32	30	0	0	0	0	0	1	0	31	30.4
H/Total	146	6	0	0	0	0	1	0	153	152.4	136	4	1	0	0	0	2	0	143	142.3
23:00	29	0	0	0	0	0	1	0	30	29.4	24	0	0	0	0	0	0	0	24	24
23:15	22	1	0	0	0	0	0	0	23	23	22	0	0	0	0	0	0	0	22	22
23:30	26	0	0	0	0	0	0	0	26	26	14	0	0	0	0	0	1	0	15	14.4
23:45	18	0	0	0	0	0	1	0	19	18.4	20	0	0	0	0	0	1	0	21	20.4
H/Total	95	1	0	0	0	0	2	0	98	96.8	80	0	0	0	0	0	2	0	82	80.8
Total	241	7	0	0	0	0	3	0	251	249.2	216	4	1	0	0	0	4	0	225	223.1

Project Number: **TSP13466**
Project Name: **Ageas Bowl, Southampton**
Survey Type: **Manual Classified Turning Count**
Site No: **2**
Location: **Kanes Hill Roundabout**
Date: **29 September 2017, Friday**



Time	From E										To E									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
10:00	145	28	2	0	1	0	1	0	177	178.4	135	33	4	0	0	0	0	0	172	174
10:15	157	51	5	1	0	3	0	0	217	223.8	163	29	3	0	1	0	3	0	199	199.7
10:30	157	26	4	0	0	0	0	1	188	189.2	151	19	6	0	0	0	0	0	176	179
10:45	165	26	2	1	0	1	1	0	196	198.7	144	20	6	0	0	0	3	0	173	174.2
H/Total	624	131	13	2	1	4	2	1	778	790.1	593	101	19	0	1	0	6	0	720	726.9
11:00	142	27	2	0	1	0	3	0	175	175.2	132	23	9	0	0	0	1	0	165	168.9
11:15	129	23	6	0	0	0	0	1	159	161.2	136	19	4	1	1	1	2	0	164	168.1
11:30	128	17	0	1	0	0	1	0	147	147.7	118	24	1	0	0	0	1	0	144	143.9
11:45	143	15	2	0	0	0	3	0	163	162.2	136	21	6	0	0	0	2	3	168	167.4
H/Total	542	82	10	1	1	0	7	1	644	646.3	522	87	20	1	1	1	6	3	641	648.3
Total	1166	213	23	3	2	4	9	2	1422	1436.4	1115	188	39	1	2	1	12	3	1361	1375.2

Time	From E										To E									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
17:00	182	28	4	0	0	0	0	0	214	216	177	31	1	0	0	2	5	0	216	215.5
17:15	154	28	1	0	0	0	7	0	190	186.3	179	29	1	0	0	0	2	1	212	210.5
17:30	179	17	0	0	0	0	1	0	197	196.4	193	29	1	0	1	0	4	0	228	227.1
17:45	163	12	2	0	1	0	1	1	180	180.6	190	23	1	0	0	0	2	0	216	215.3
H/Total	678	85	7	0	1	0	9	1	781	779.3	739	112	4	0	1	2	13	1	872	868.4
18:00	171	13	1	0	0	2	2	1	190	190.5	227	13	0	0	0	0	6	1	247	242.6
18:15	175	11	0	0	2	0	2	1	191	191	168	21	2	0	0	0	4	1	196	193.8
18:30	157	9	1	0	1	1	1	1	171	172.1	184	22	2	0	0	1	4	0	213	212.6
18:45	178	9	2	0	0	0	1	0	190	190.4	168	24	1	0	0	0	2	0	195	194.3
H/Total	681	42	4	0	3	3	6	3	742	744	747	80	5	0	0	1	16	2	851	843.3
Total	1359	127	11	0	4	3	15	4	1523	1523.3	1486	192	9	0	1	3	29	3	1723	1711.7

Time	From E										To E									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
22:00	75	3	0	0	0	0	3	0	81	79.2	74	4	0	0	0	0	0	0	78	78
22:15	81	1	1	0	0	0	0	0	83	83.5	78	5	1	0	0	0	1	1	86	85.1
22:30	76	2	2	0	1	0	0	0	81	83	49	3	0	0	0	0	0	0	52	52
22:45	64	0	0	0	0	0	0	0	64	64	64	2	0	0	0	0	0	0	66	66
H/Total	296	6	3	0	1	0	3	0	309	309.7	265	14	1	0	0	0	1	1	282	281.1
23:00	66	1	0	0	0	1	0	0	68	69	50	3	0	1	0	0	1	0	55	55.7
23:15	57	1	0	0	0	0	1	0	59	58.4	60	3	0	0	0	0	0	0	63	63
23:30	37	0	0	0	1	0	3	1	42	40.4	59	1	0	0	0	0	0	1	61	60.2
23:45	32	1	0	0	0	0	0	1	34	33.2	33	2	0	0	0	0	1	0	36	35.4
H/Total	192	3	0	0	1	1	4	2	203	201	202	9	0	1	0	0	2	1	215	214.3
Total	488	9	3	0	2	1	7	2	512	510.7	467	23	1	1	0	0	3	2	497	495.4

Project Number: **TSP13466**
 Project Name: **Ageas Bowl, Southampton**
 Survey Type: **Manual Classified Turning Count**
 Site No: **2**
 Location: **Kanes Hill Roundabout**
 Date: **29 September 2017, Friday**



Time	Whole Junction									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
10:00	522	131	11	0	1	0	3	0	668	672.7
10:15	543	141	12	3	1	4	3	0	707	720.1
10:30	543	102	13	1	0	1	1	1	662	669.4
10:45	549	115	12	2	1	2	6	0	687	695
H/Total	2157	489	48	6	3	7	13	1	2724	2757.2
11:00	530	111	20	3	1	1	7	0	673	684.7
11:15	555	97	14	4	2	3	6	2	683	695
11:30	529	96	6	3	0	1	4	0	639	644.5
11:45	576	97	15	1	1	2	9	3	704	708
H/Total	2190	401	55	11	4	7	26	5	2699	2732.2
Total	4347	890	103	17	7	14	39	6	5423	5489.4

Peak Hours	Totals
10:00 11:00	2724
10:15 11:15	2729
10:30 11:30	2705
10:45 11:45	2682

11:00 12:00	673
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Time	Whole Junction									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
17:00	698	105	6	2	1	4	17	1	834	833.6
17:15	665	97	4	0	2	1	15	2	786	780.4
17:30	696	74	2	0	1	1	8	2	784	780.6
17:45	675	70	6	2	1	2	7	4	767	768.2
H/Total	2734	346	18	4	5	8	47	9	3171	3162.8
18:00	726	53	3	2	1	3	11	3	802	801.1
18:15	626	69	6	1	2	1	10	3	718	716.9
18:30	649	62	3	2	1	3	10	2	732	732.5
18:45	628	59	3	1	0	0	5	0	696	695.8
H/Total	2629	243	15	6	4	7	36	8	2948	2946.3
Total	5363	589	33	10	9	15	83	17	6119	6109.1

Peak Hours	Totals
17:00 18:00	3171
17:15 18:15	3139
17:30 18:30	3071
17:45 18:45	3019

18:00 19:00	802
-------------	-----

Time	Whole Junction									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
22:00	237	13	0	0	0	0	5	0	255	252
22:15	242	9	3	0	0	0	1	1	256	256.1
22:30	219	9	3	0	1	0	1	0	233	234.9
22:45	209	4	0	0	0	0	2	0	215	213.8
H/Total	907	35	6	0	1	0	9	1	959	956.8
23:00	190	5	0	1	0	1	3	0	200	200.5
23:15	171	8	0	0	0	0	2	0	181	179.8
23:30	145	1	0	2	1	0	3	2	154	154.2
23:45	121	5	1	0	0	0	2	1	130	128.5
H/Total	627	19	1	3	1	1	10	3	665	663
Total	1534	54	7	3	2	1	19	4	1624	1619.8

Peak Hours	Totals
22:00 23:00	959
22:15 23:15	904
22:30 23:30	829
22:45 23:45	750

23:00 00:00	200
-------------	-----



Client: WSP

Project Number: TSP13466

Project Name: Ageas Bowl, Southampton

Survey Type: Queue Length Survey

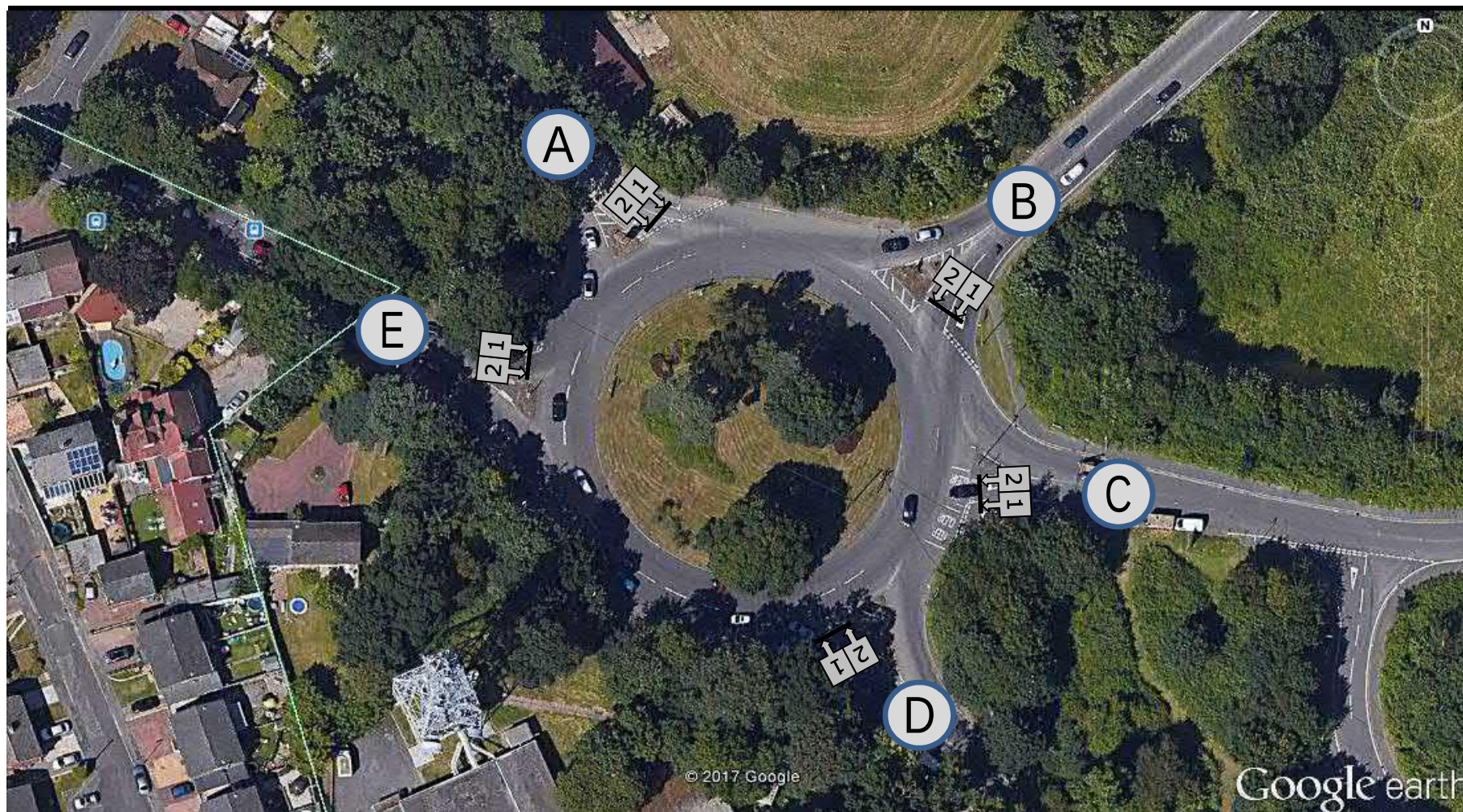
Survey Date: 29 Sep 2017, Friday

Survey Time: 10:00-12:00, 17:00-19:00, 22:00-00:00

Weather: Dry

Comments:

Project Number: TSP13466
Project Name: Ageas Bowl, Southampton
Survey Type: Queue Length Survey
Site No: 2
Location: Kanes Hill Roundabout



Project Number: TSP15466
Project Name: Agnes Bowl, Southampton
Survey Type: Queue Length Survey
Site No: 2
Location: Kanes Hill Roundabout
Date: 29 September 2017, Friday



1 1.5 2												Arm A												Arm B												Arm C												Arm D												Arm E																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1			Lane 2			PCU			Time			Lane 1					

18:33			0	1	1.5	18:33	8		8	0	18:33	1		1	1	0	18:33	1		0	1	1	1	18:33	1		1	2		2
18:34			0	1	0	18:34	10		10	0	18:34	1		1	1	0	18:34	1		0	1	1	1	18:34	1		1	1		0
18:35	1		1	1	1.5	18:35	2	2	2	0	18:35	0		0	1	0	18:35	0		0	1	1	1	18:35	1		1	1		0
18:36			1	1	1.5	18:36	2		2	5	18:36	5		5	0	0	18:36	5		0	0	0	0	18:36	3		3	0		0
18:37	1		1	1	0	18:37	0		0	0	18:37	0		0	1	0	18:37	0		0	0	0	0	18:37	0		0	3		0
18:38			2	4	4.5	18:38	0	4	4	0	18:38	4		4	1	0	18:38	2		2	1	4	1	18:38	3		3	0		0
18:39			0	0	6	18:39	0		0	0	18:39	4		4	1	0	18:39	1		1	0	0	0	18:39	2		2	0		0
18:40			0	0	0	18:40	14		14	0	18:40	0		0	1	0	18:40	1		1	1	1	1	18:40	3		3	3		0
18:41			0	0	1.5	18:41	0		0	0	18:41	0		0	0	0	18:41	0		0	0	0	0	18:41	2		2	2		0
18:42	1		1	1	1.5	18:42	0		0	0	18:42	0		0	1	0	18:42	1		1	1	4	1	18:42	2		2	2		0
18:43			0	0	1.5	18:43	0	3	3	0	18:43	0		0	0	0	18:43	0		0	0	0	0	18:43	3		3	3		0
18:44	3		3	3	0	18:44	0		0	0	18:44	0		0	1	0	18:44	2		2	2	2	2	18:44	3		3	3		0
18:45	1		1	1	4.5	18:45	8	1	1	0	18:45	0		0	0	0	18:45	3		3	2	2	2	18:45	6		6	1		0
18:46	3		3	3	4.5	18:46	15	15	15	0	18:46	1		1	1	0	18:46	3		3	3	1	3	18:46	3		3	3		0
18:47			0	0	0	18:47	7	7	7	0	18:47	0		0	0	0	18:47	1		1	0	0	0	18:47	3		3	3		0
18:48			0	0	0	18:48	6	6	6	0	18:48	0		0	1	0	18:48	1		1	1	3	3	18:48	3		3	3		0
18:49	2		2	2	3	18:49	5	5	5	0	18:49	0		0	0	0	18:49	3		3	0	3	3	18:49	2		2	2		0
18:50			0	0	1.5	18:50	5	5	5	0	18:50	0		0	0	0	18:50	0		0	0	1	1	18:50	4		4	4		0
18:51	2		2	2	0	18:51	3	3	3	0	18:51	0		0	0	0	18:51	2		2	0	2	2	18:51	3		3	3		0
18:52	1		1	1	3	18:52	16	16	16	0	18:52	0		0	0	0	18:52	0		0	0	0	0	18:52	3		3	3		0
18:53	1		1	1	1.5	18:53	0		0	0	18:53	1		1	0	0	18:53	1		1	1	2	2	18:53	3		3	3		0
18:54			0	0	0	18:54	0	2	2	0	18:54	0		0	0	0	18:54	2		2	2	1	1	18:54	1		1	1		0
18:55			0	0	0	18:55	0		0	0	18:55	0		0	0	0	18:55	0		0	0	1	1	18:55	3		3	3		0
18:56	1		1	1	3	18:56	4	4	4	0	18:56	1		1	0	0	18:56	2		2	2	5	5	18:56	2		2	2		0
18:57			0	0	0	18:57	0	1	1	0	18:57	1		1	0	0	18:57	0		0	0	0	0	18:57	3		3	3		0
18:58			0	0	1.5	18:58	0	0	0	0	18:58	0		0	0	0	18:58	0		0	0	0	0	18:58	3		3	3		0
18:59	2		2	2	0	18:59	0	0	0	0	18:59	2		2	0	0	18:59	2		2	2	2	2	18:59	5		5	5		0
22:00-24:00																														
22:00			0	0	0	22:00	0		0	0	22:00	0		0	0	0	22:00	0		0	0	0	0	22:00	0		0	0		0
22:01			0	0	0	22:01	0		0	0	22:01	0		0	0	0	22:01	0		0	0	0	0	22:01	0		0	0		0
22:02			0	0	0	22:02	0		0	0	22:02	0		0	0	0	22:02	0		0	0	0	0	22:02	0		0	0		0
22:03			0	0	0	22:03	0		0	0	22:03	0		0	0	0	22:03	0		0	0	0	0	22:03	0		0	0		0
22:04			0	0	0	22:04	0		0	0	22:04	0		0	0	0	22:04	0		0	0	0	0	22:04	0		0	0		0
22:05			0	0	0	22:05	0		0	0	22:05	0		0	0	0	22:05	0		0	0	0	0	22:05	0		0	0		0
22:06			0	0	0	22:06	0		0	0	22:06	0		0	0	0	22:06	0		0	0	0	0	22:06	0		0	0		0
22:07			0	0	0	22:07	0		0	0	22:07	0		0	0	0	22:07	0		0	0	0	0	22:07	0		0	0		0
22:08			0	0	0	22:08	0		0	0	22:08	0		0	0	0	22:08	0		0	0	0	0	22:08	0		0	0		0
22:09	1		1	1	0	22:09	0		0	0	22:09	0		0	0	0	22:09	0		0	0	0	0	22:09	0		0	0		0
22:10			0	0	0	22:10	0		0	0	22:10	0		0	0	0	22:10	0		0	0	0	0	22:10	0		0	0		0
22:11			0	0	1.5	22:11	1		1	1	22:11	1		1	1	0	22:11	0		0	0	0	0	22:11	0		0	0		0
22:12			0	0	0	22:12	0		0	0	22:12	0		0	0	0	22:12	0		0	0	0	0	22:12	0		0	0		0
22:13			0	0	0	22:13	0		0	0	22:13	0		0	0	0	22:13	0		0	0	0	0	22:13	1		1	1		0
22:14			0	0	0	22:14	0		0	0	22:14	0		0	0	0	22:14	0		0	0	0	0	22:14	0		0	0		0
22:15			0	0	0	22:15	0		0	0	22:15	0		0	0	0	22:15	0		0	0	0	0	22:15	3		3	3		0
22:16			0	0	0	22:16	0		0	0	22:16	0		0	0	0	22:16	0		0	0	0	0	22:16	0		0	0		0
22:17			0	0	0	22:17	0		0	0	22:17	0		0	0	0	22:17	0		0	0	0	0	22:17	0		0	0		0
22:18			0	0	0	22:18	0		0	0	22:18	0		0	0	0	22:18	0		0	0	0	0	22:18	0		0	0		0
22:19			0	0	1.5	22:19	0		0	0	22:19	0		0	0	0	22:19	0		0	0	0	0	22:19	0		0	0		0
22:20			0	0	0	22:20	0		0	0	22:20	0		0	0	0	22:20	0		0	0	0	0	22:20	2		2	2		0
22:21			0	0	0	22:21	0		0	1	22:21	1		1	0	0	22:21	0		0	0	0	0	22:21	1		1	1		0
22:22			0	0	0	22:22	0		0	0	22:22	0		0	0	0	22:22	0		0	0	0	0	22:22	0		0	0		0
22:23			0	0	0	22:23	0		0	0	22:23	0		0	0	0	22:23	0		0	0	0	0	22:23	0		0	0		0
22:24			0	0	0	22:24	0		0	0	22:24	0		0	0	0	22:24	0		0	0	0	0	22:24	0		0	0		0
22:25			0	0	0	22:25	0		0	0	22:25	0		0	0	0	22:25	0		0	0	0	0	22:25	0		0	0		0
22:26			0	0	1.5	22:26	0		0	0	22:26	0		0	0	0	22:26	0		0	0	0	0	22:26	0		0	0		0
22:27			0	0	0	22:27	0		0	0	22:27	0		0	0	0	22:27	0		0	0	0	0	22:27	0		0	0		0
22:28			0	0	0	22:28	0		0	0	22:28	0		0	0	0	22:28	0		0	0	0	0	22:28	0		0	0		0
22:29			0	0	1.5	22:29	0		0	0	22:29	0		0	0	0	22:29	0		0	0	0	0	22:29	1		1	1		0
22:30			0	0	0	22:30	0		0	0	22:30	0		0	0	0	22:30	0		0	0	0	0	22:30	0		0	0		0
22:31			0	0	0	22:31	0		0	0	22:31	0		0	0	0	22:31	0		0	0	0	0	22:31	0		0	0		0
22:32			0	0	0	22:32	0		0	0	22:32	0		0	0	0	22:32	0		0	0	0	0	22:32	0		0	0		0
22:33			0	0	0	22:33	0		0	0	22:33	0		0	0	0	22:33	0		0	0	0	0	22:33	0		0	0		0
22:34	1		1	1	0</																									

Appendix F

JUNCTION MODEL OUTPUT



Junctions 9				
PICADY 9 - Priority Intersection Module				
Version: 9.5.0.6896				
© Copyright TRL Limited, 2018				
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk				
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution				

Filename: Proposed A27 Moorhill Road Access SG.j9

Path: \\uk.wspgroup.com\central data\Projects\700735xx\70073579 - Ageas Bowl Masterplan\03 WIP\TP Transport Planning\01 Analysis & Calcs

Report generation date: 21/08/2020 10:21:50

»2020 Baseline + Development, AM

»2020 Baseline + Development, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2020 Baseline + Development								
Stream B-C	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Stream B-A	0.1	18.84	0.10	C	0.1	20.28	0.11	C
Stream C-AB	0.2	3.99	0.09	A	0.2	4.24	0.09	A

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

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

File summary

File Description

Title	Ageas Golf Course Access Model
Location	Ageas Bowl
Site number	
Date	07/02/2018
Version	1
Status	Proposed
Identifier	
Client	Ageas Bowl
Jobnumber	70073579
Enumerator	CORP\UKSXG008
Description	

Units

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2020 Baseline + Development	AM	ONE HOUR	09:45	11:15	15
D2	2020 Baseline + Development	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2020 Baseline + Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A27 Moorhill Road (North)		Major
B	Proposed Car Park Access		Minor
C	A27 Moorhill Road (South)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A27 Moorhill Road (South)	6.50			140.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane Width (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)
B - Proposed Car Park Access	Two lanes	3.50	3.50	23	26

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	523	0.093	0.235	0.148	0.336
1	B-C	672	0.101	0.255	-	-
1	C-B	655	0.248	0.248	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2020 Baseline + Development	AM	ONE HOUR	09:45	11:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A27 Moorhill Road (North)		✓	675	100.000
B - Proposed Car Park Access		✓	20	100.000
C - A27 Moorhill Road (South)		✓	800	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A27 Moorhill Road (North)	B - Proposed Car Park Access	C - A27 Moorhill Road (South)
From	A - A27 Moorhill Road (North)	0	0	675
	B - Proposed Car Park Access	20	0	0
	C - A27 Moorhill Road (South)	780	20	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A27 Moorhill Road (North)	B - Proposed Car Park Access	C - A27 Moorhill Road (South)
From	A - A27 Moorhill Road (North)	0	0	0
	B - Proposed Car Park Access	0	0	0
	C - A27 Moorhill Road (South)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.00	0.00	0.0	A
B-A	0.10	18.84	0.1	C
C-AB	0.09	3.99	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

09:45 - 10:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	0	536	0.000	0	0.0	0.000	A
B-A	15	311	0.048	15	0.1	12.146	B
C-AB	40	944	0.042	40	0.1	3.983	A
C-A	562			562			
A-B	0			0			
A-C	508			508			

10:00 - 10:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	0	509	0.000	0	0.0	0.000	A
B-A	18	270	0.067	18	0.1	14.279	B
C-AB	59	1009	0.059	59	0.1	3.788	A
C-A	660			660			
A-B	0			0			
A-C	607			607			

10:15 - 10:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	0	470	0.000	0	0.0	0.000	A
B-A	22	213	0.103	22	0.1	18.807	C
C-AB	99	1105	0.090	99	0.2	3.578	A
C-A	782			782			
A-B	0			0			
A-C	743			743			

10:30 - 10:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	0	470	0.000	0	0.0	0.000	A
B-A	22	213	0.103	22	0.1	18.844	C
C-AB	99	1105	0.090	99	0.2	3.580	A
C-A	781			781			
A-B	0			0			
A-C	743			743			

10:45 - 11:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	0	509	0.000	0	0.0	0.000	A
B-A	18	270	0.067	18	0.1	14.311	B
C-AB	59	1009	0.059	60	0.1	3.794	A
C-A	660			660			
A-B	0			0			
A-C	607			607			

11:00 - 11:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	0	536	0.000	0	0.0	0.000	A
B-A	15	311	0.048	15	0.1	12.173	B
C-AB	40	944	0.042	40	0.1	3.988	A
C-A	562			562			
A-B	0			0			
A-C	508			508			

2020 Baseline + Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2020 Baseline + Development	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A27 Moorhill Road (North)		✓	778	100.000
B - Proposed Car Park Access		✓	20	100.000
C - A27 Moorhill Road (South)		✓	719	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A27 Moorhill Road (North)	B - Proposed Car Park Access	C - A27 Moorhill Road (South)
From	A - A27 Moorhill Road (North)	0	0	778
	B - Proposed Car Park Access	20	0	0
	C - A27 Moorhill Road (South)	699	20	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A27 Moorhill Road (North)	B - Proposed Car Park Access	C - A27 Moorhill Road (South)
From	A - A27 Moorhill Road (North)	0	0	0
	B - Proposed Car Park Access	0	0	0
	C - A27 Moorhill Road (South)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.00	0.00	0.0	A
B-A	0.11	20.28	0.1	C
C-AB	0.09	4.24	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	0	517	0.000	0	0.0	0.000	A
B-A	15	302	0.050	15	0.1	12.535	B
C-AB	37	887	0.042	37	0.1	4.234	A
C-A	504			504			
A-B	0			0			
A-C	586			586			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	0	485	0.000	0	0.0	0.000	A
B-A	18	259	0.069	18	0.1	14.932	B
C-AB	54	942	0.058	54	0.1	4.055	A
C-A	592			592			
A-B	0			0			
A-C	699			699			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	0	441	0.000	0	0.0	0.000	A
B-A	22	200	0.110	22	0.1	20.227	C
C-AB	89	1023	0.087	89	0.2	3.855	A
C-A	702			702			
A-B	0			0			
A-C	857			857			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	0	441	0.000	0	0.0	0.000	A
B-A	22	200	0.110	22	0.1	20.276	C
C-AB	89	1023	0.087	89	0.2	3.857	A
C-A	702			702			
A-B	0			0			
A-C	857			857			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	0	485	0.000	0	0.0	0.000	A
B-A	18	259	0.069	18	0.1	14.969	B
C-AB	54	942	0.058	55	0.1	4.080	A
C-A	592			592			
A-B	0			0			
A-C	699			699			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	0	516	0.000	0	0.0	0.000	A
B-A	15	302	0.050	15	0.1	12.563	B
C-AB	37	887	0.042	37	0.1	4.237	A
C-A	504			504			
A-B	0			0			
A-C	588			588			



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SO15 2BE

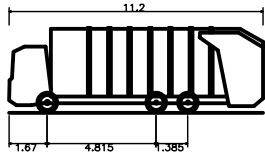
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APPENDIX B - DRAWINGS

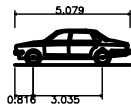
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VEHICLE PROFILE



FORWARD MANOEUVRE
REVERSE MANOEUVRE

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



FORWARD MANOEUVRE

Large Car (2006)
Overall Length 5.079m
Overall Width 1.872m
Overall Body Height 1.525m
Min Body Ground Clearance 0.310m
Max Track Width 1.831m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 5.900m



DO NOT SCALE

NOTES:

1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
2. ALL VEHICLES ARE TRACKED AT A DESIGN SPEED OF 5mph.

B	28/11/2023	RJ	MASTERPLAN UPDATED	SG	SG
A	29/09/2023	RJ	FIRST ISSUE	CW	CW
REV	DATE	BY	DESCRIPTION	CHK	APP

DRAWING STATUS: S2 - FOR INFORMATION



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CLIENT: LAND DEVELOPMENT AND ADVISORY LTD

ARCHITECT: -

PROJECT: AGEAS BOWL MASTERPLAN

TITLE: MASTERPLAN SWEEP PATH ANALYSIS
(REFUSE VEHICLE)

SCALE @ A3: 1:250	CHECKED: CW	APPROVED: CW
PROJECT No: 70073579	DESIGNED: RJ	DRAWN: RJ
DATE: September 23		REV: B

70073579-ATR-004

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